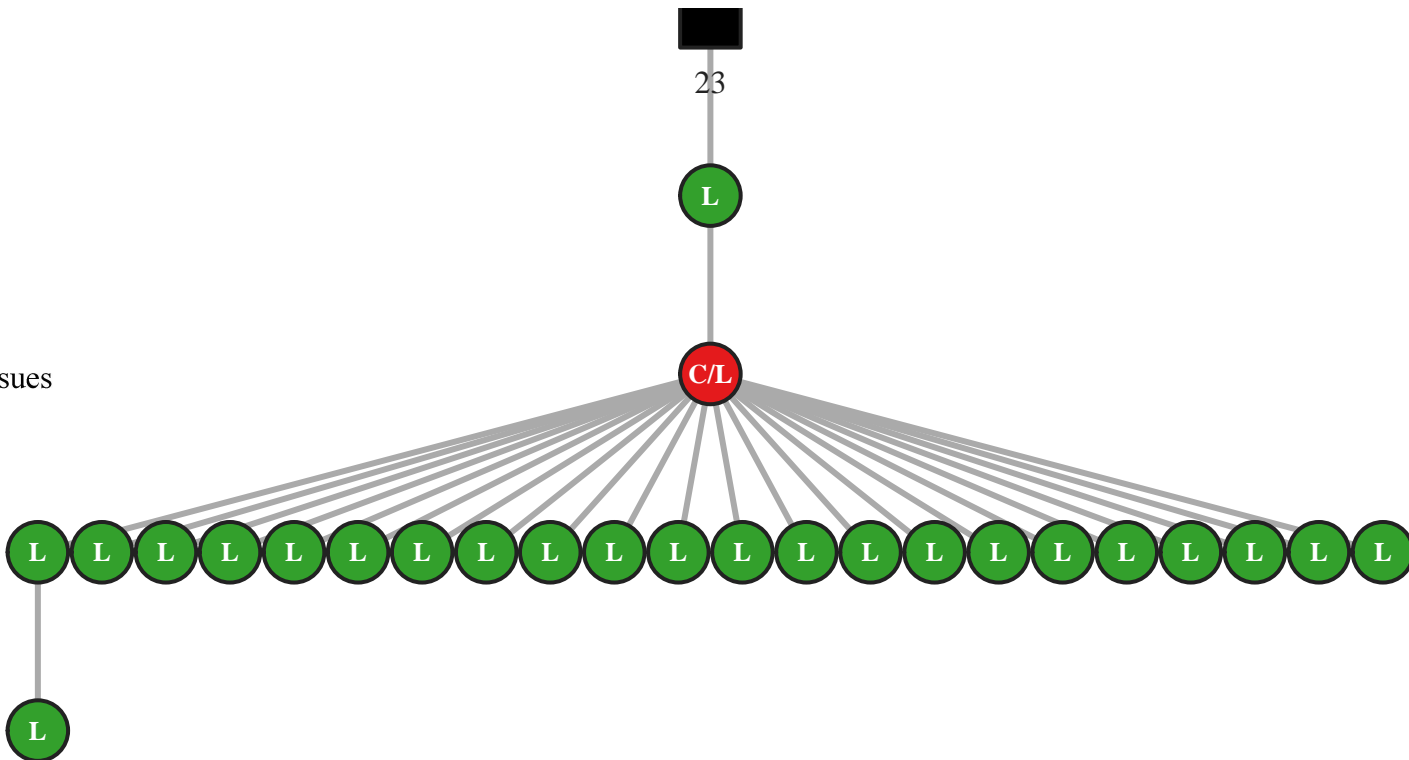
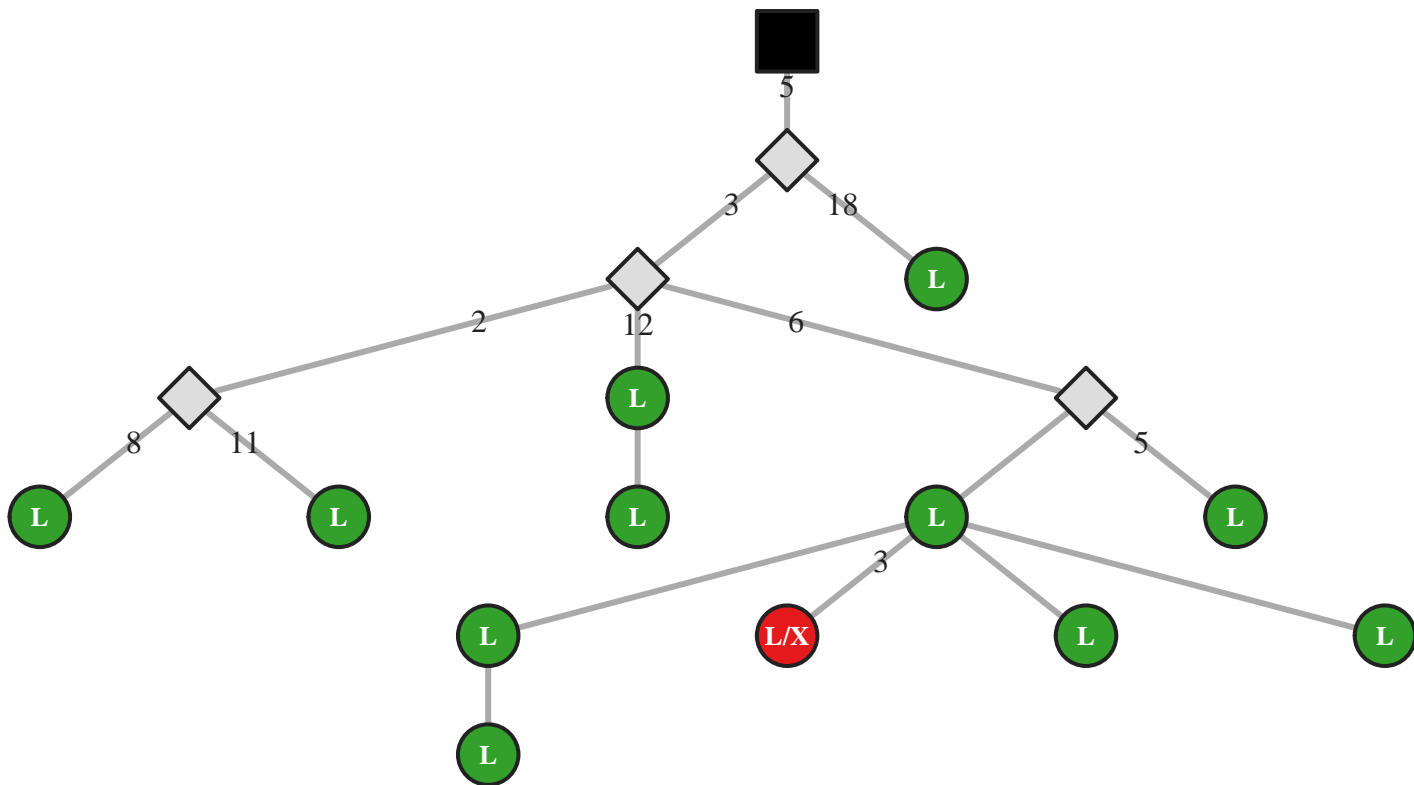


M5 IgA IGHV1-18/J1 51bp (2156)

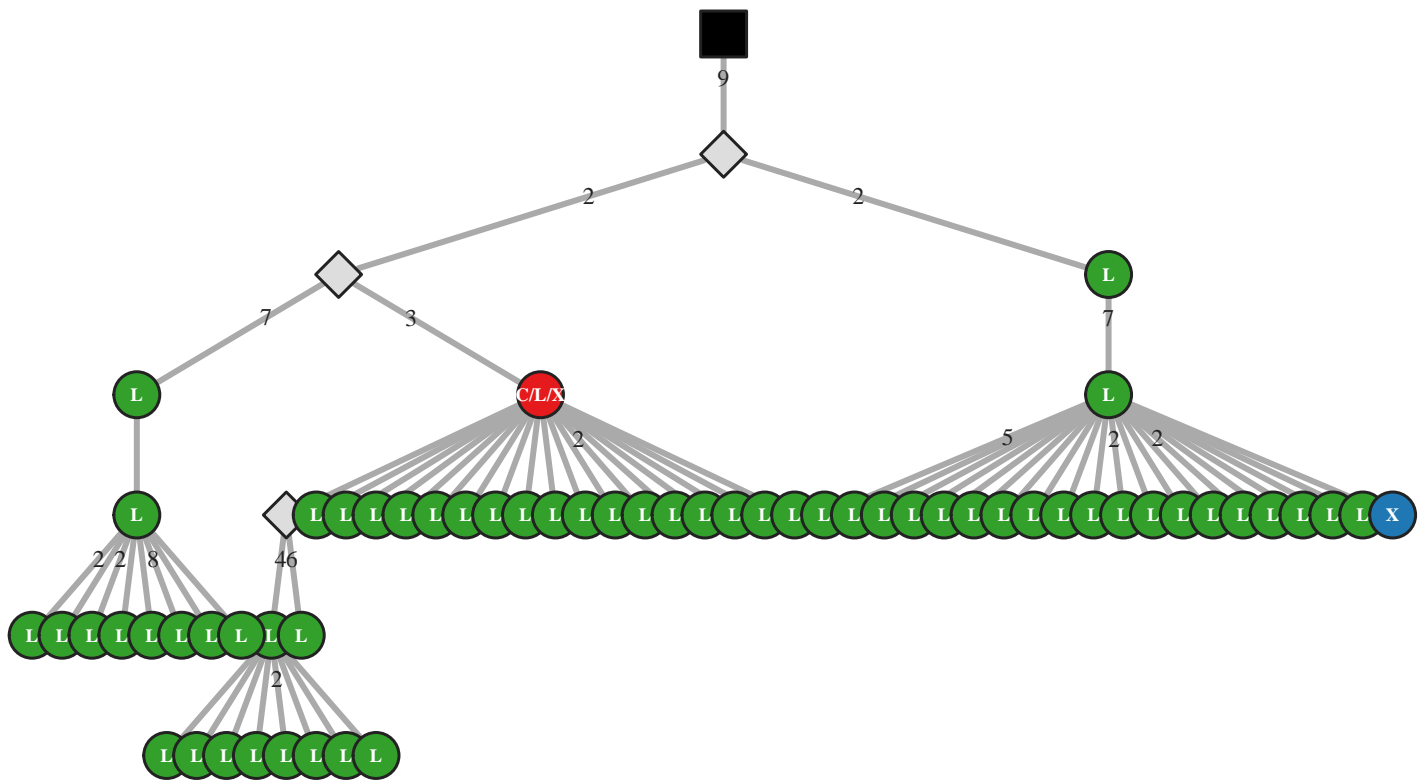
- Germline
- Inferred
- Choroid plexus
- Pia mater
- Cortex
- Lesion
- CLN
- Spleen
- Multiple CNS tissues
- Peripheral and CNS tissues



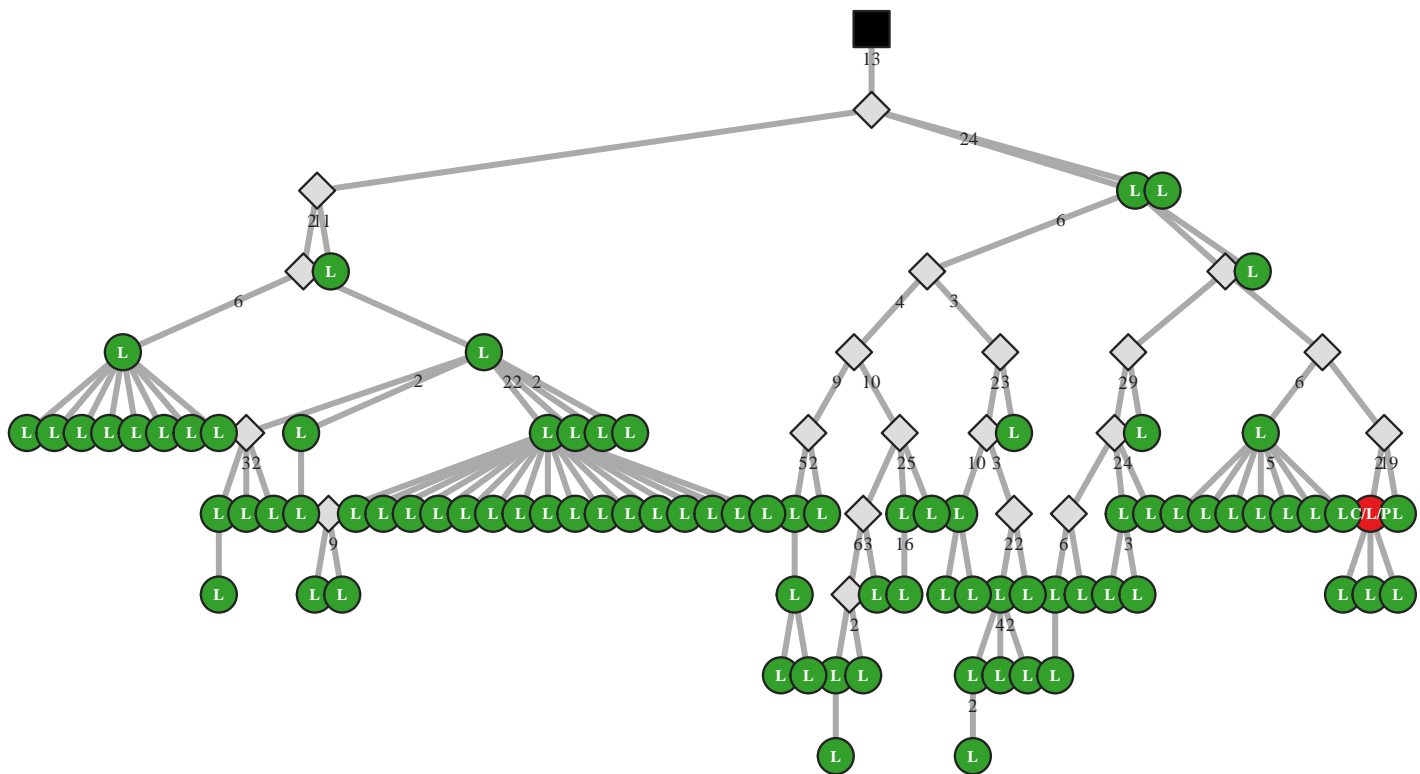
M5 IgG IGHV1-18/J2 39bp (49388)



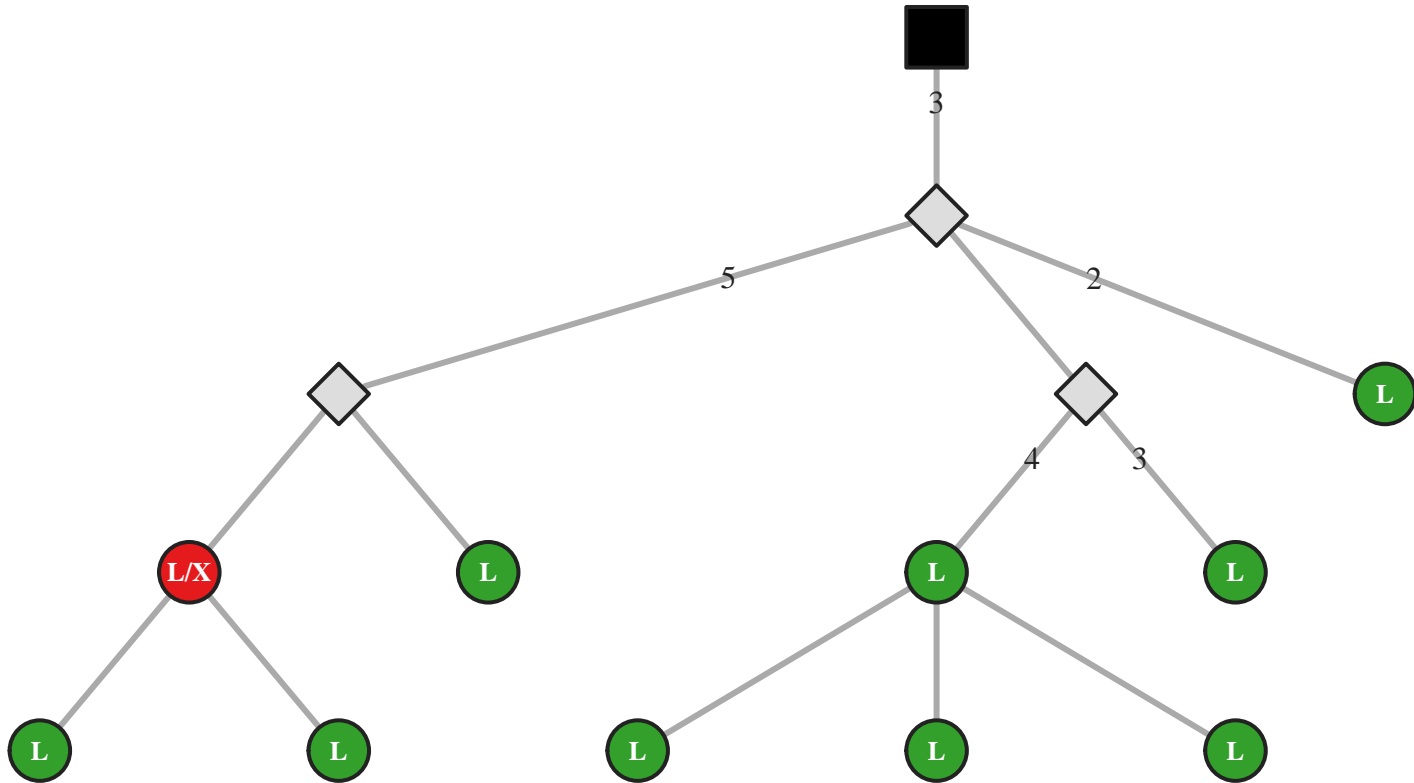
M5 IgG IGHV1-18/J2 48bp (13466)



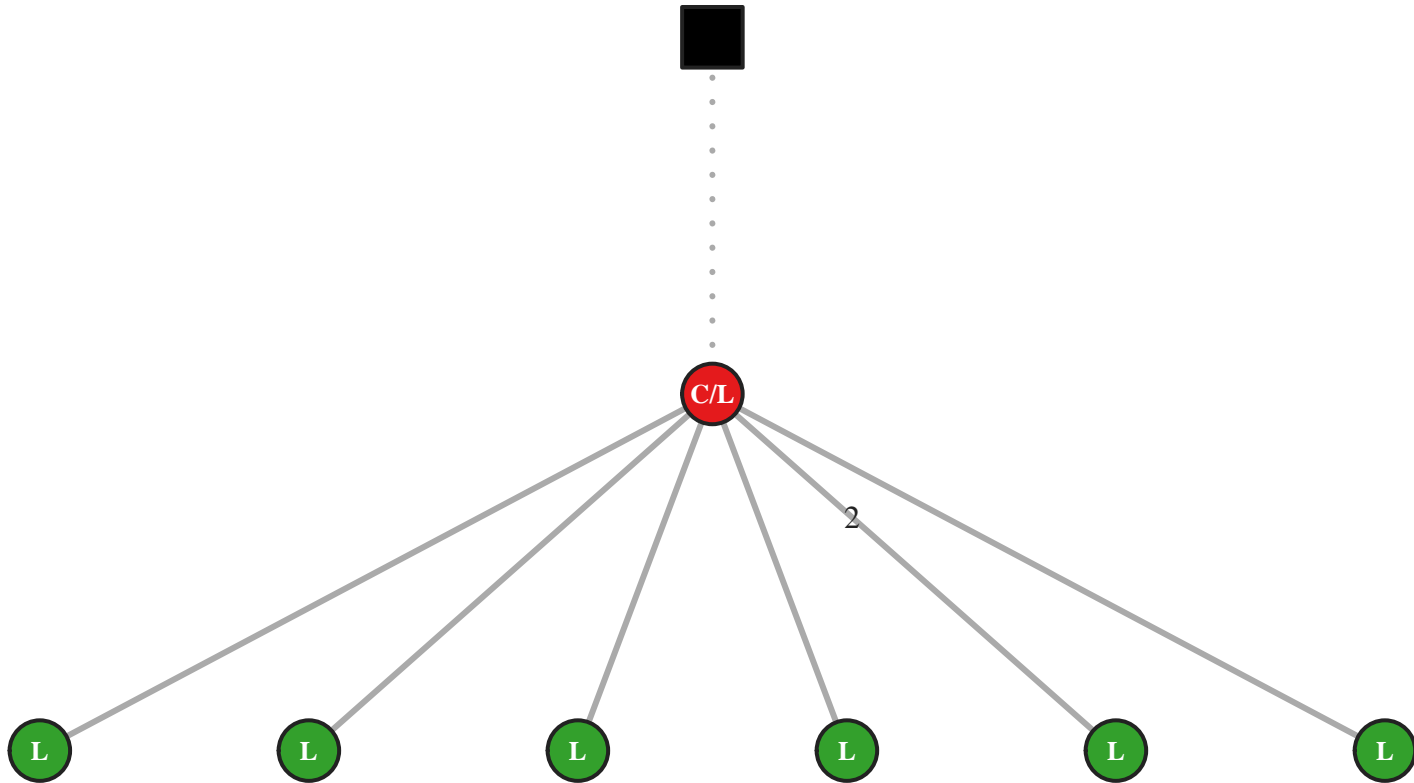
M5 IgG IGHV1-18/J3 33bp (13473)



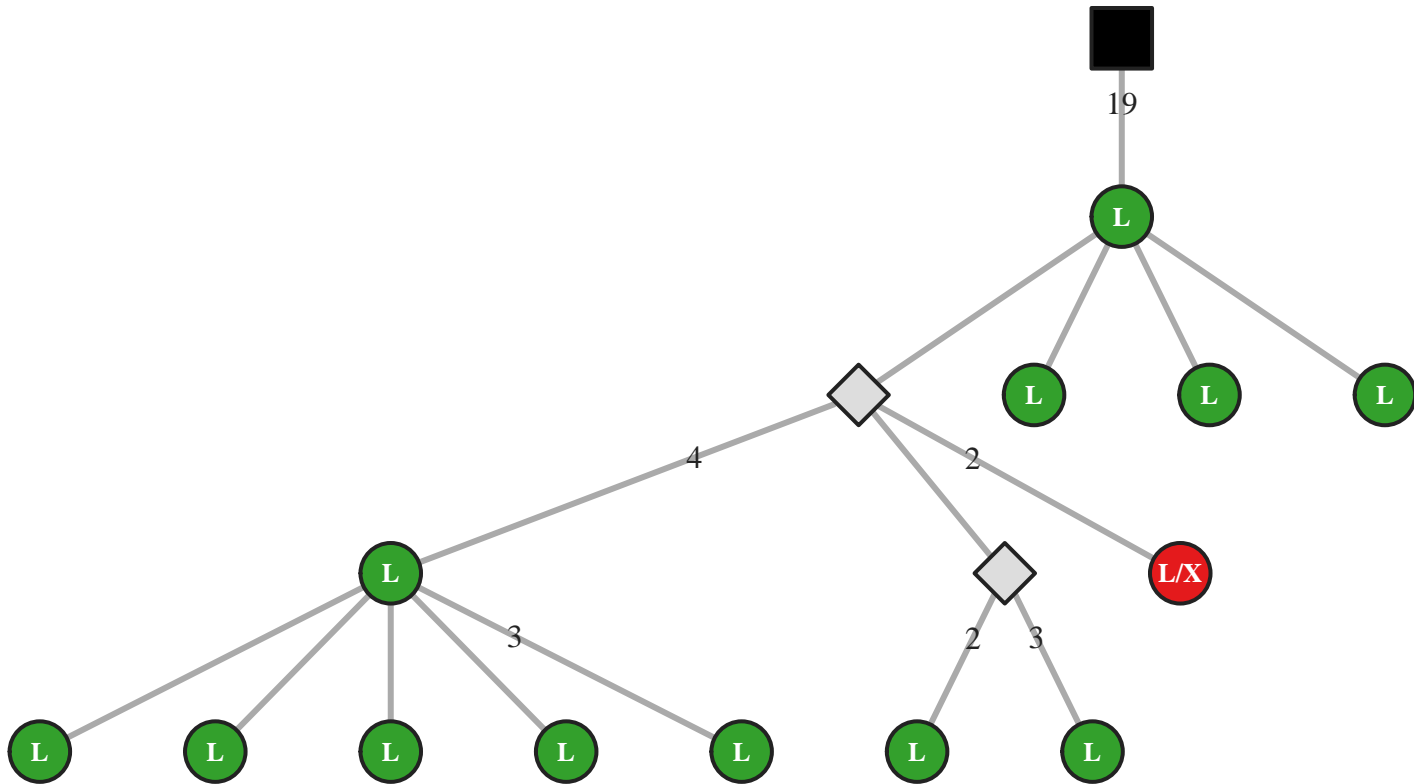
M5 IgM IGHV1-18/J3 39bp (37325)



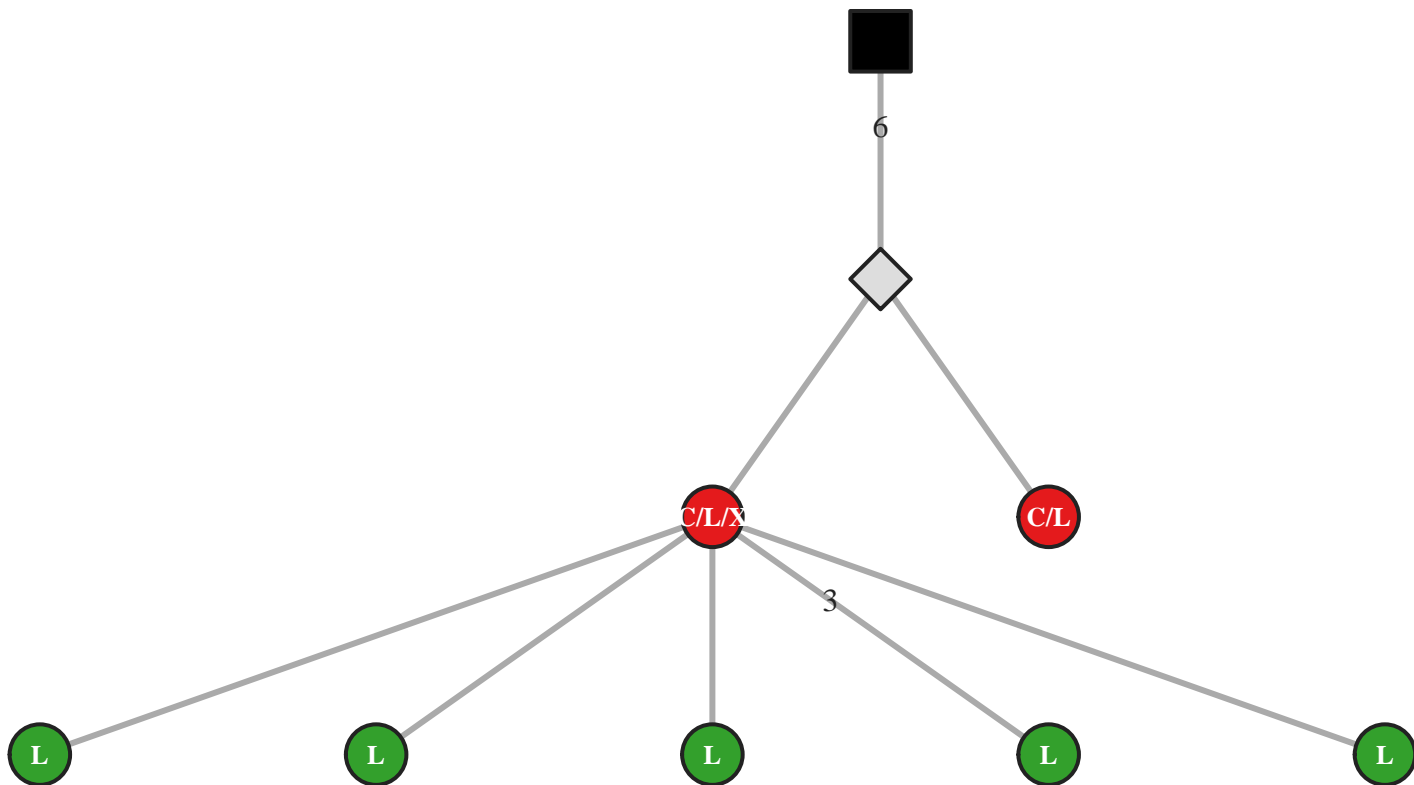
M5 IgM IGHV1-18/J3 45bp (29072)



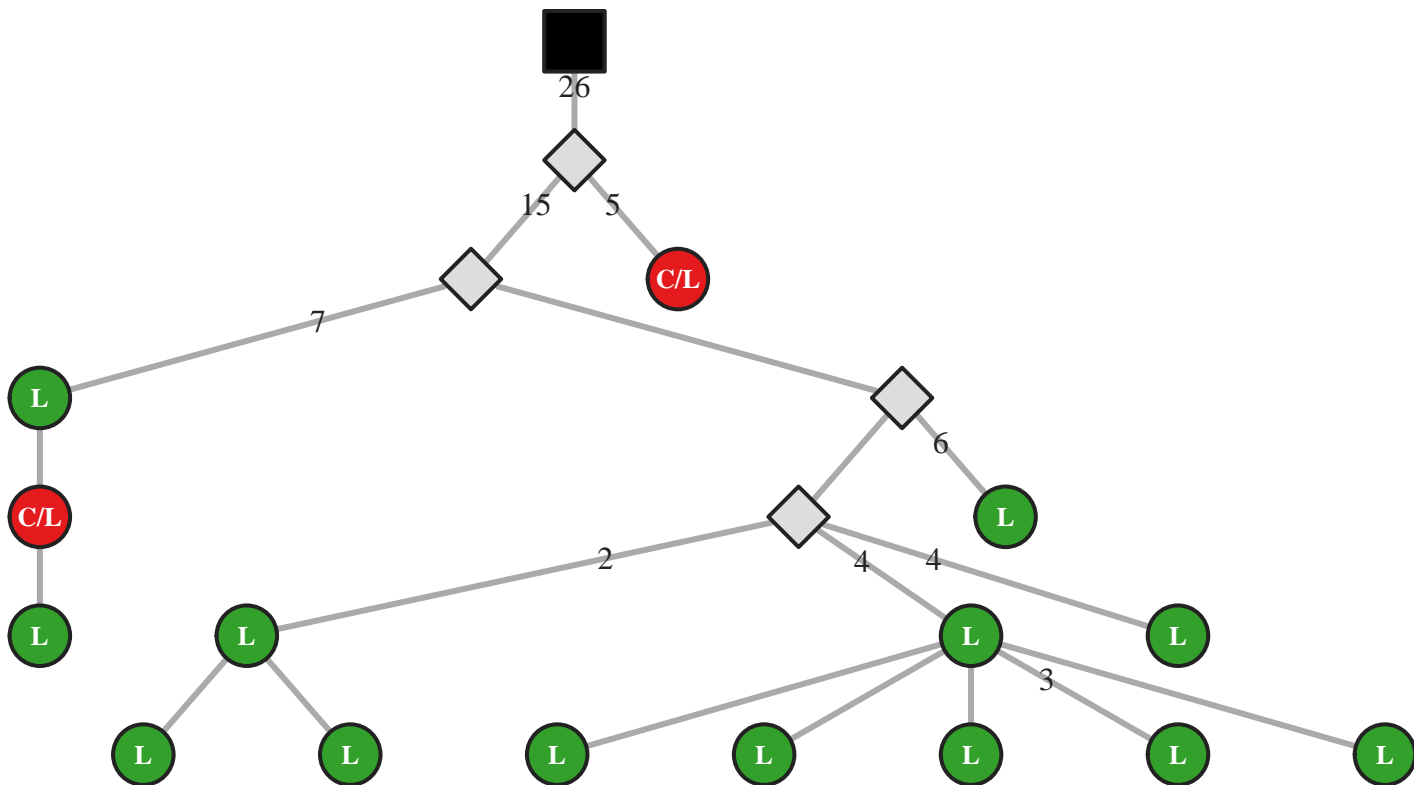
M5 IgG IGHV1-18/J3 51bp (22686)



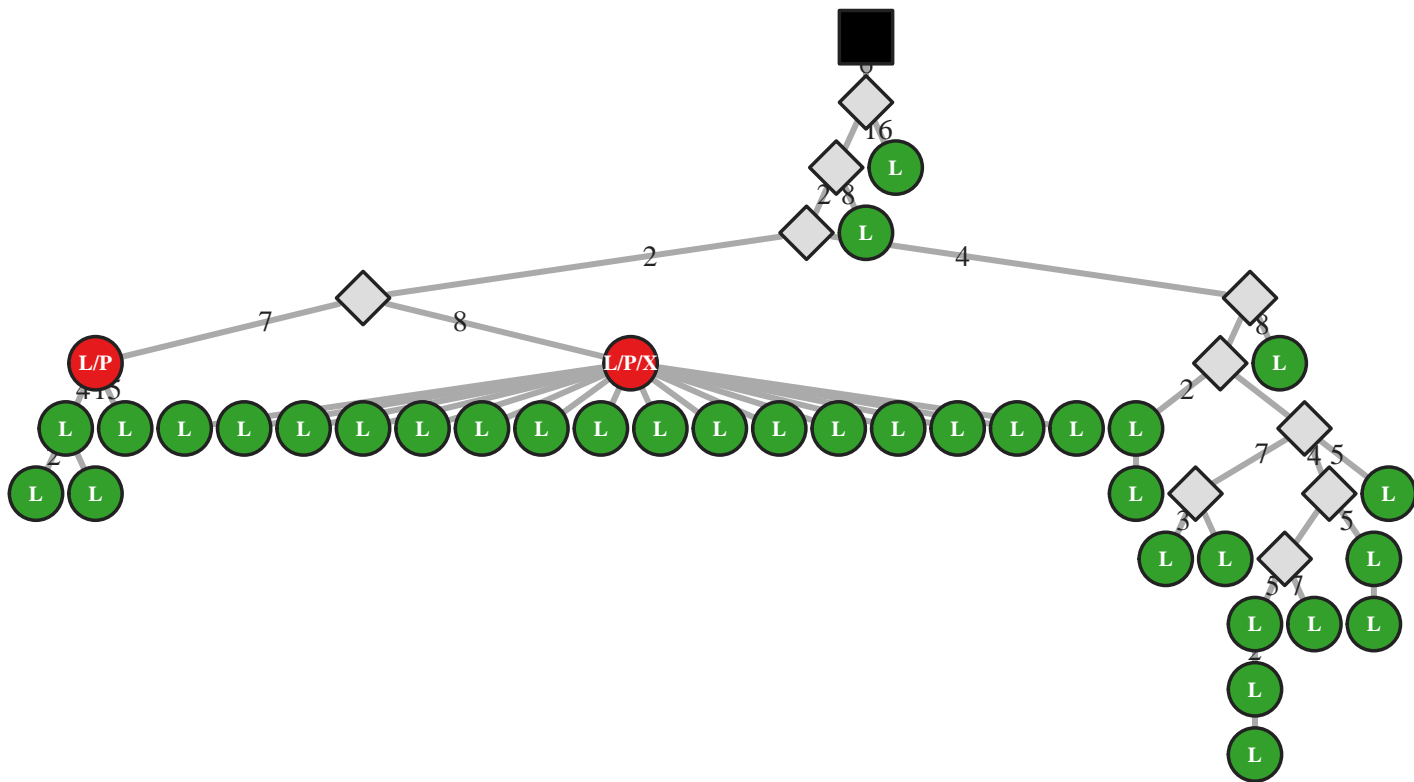
M5 IgG IGHV1-18/J3 57bp (31424)



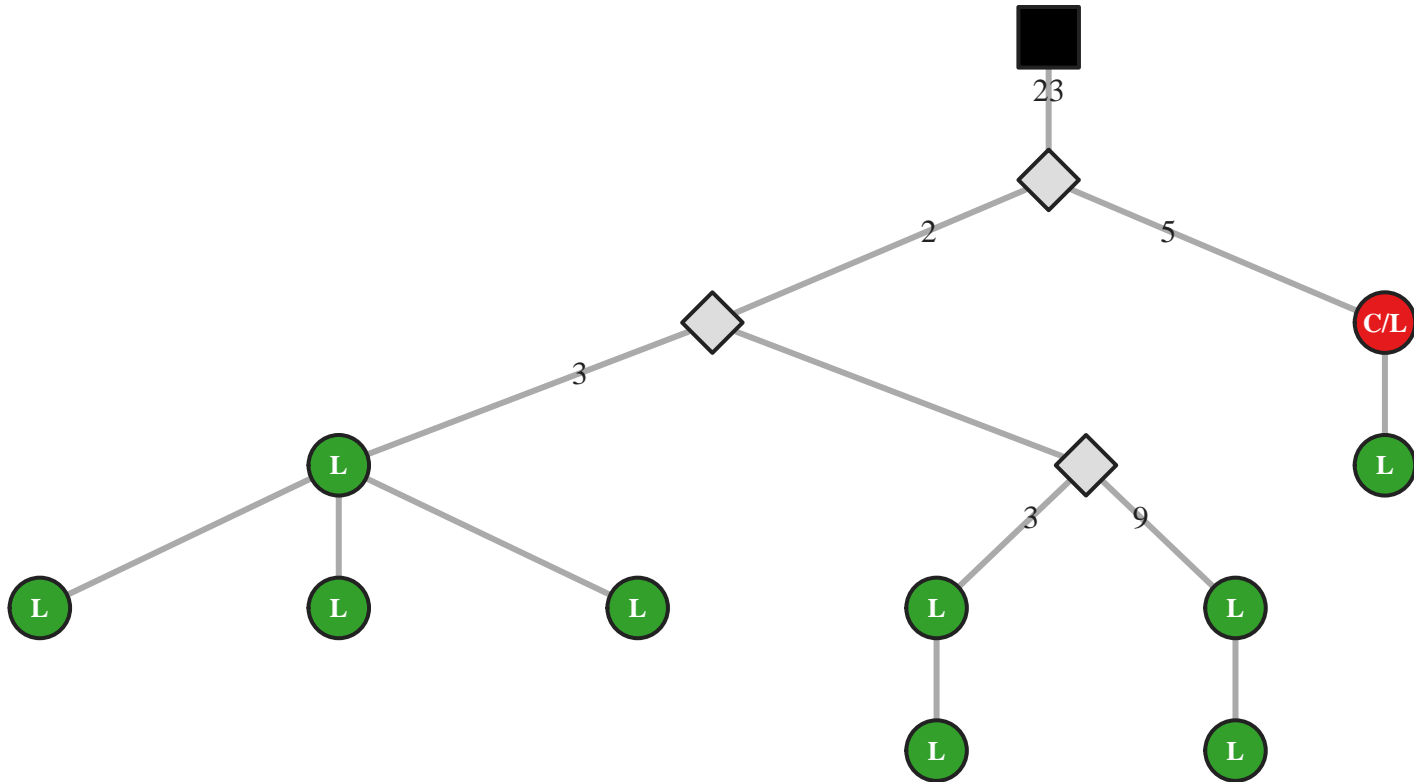
M5 IgG IGHV1-18/J3 60bp (22692)



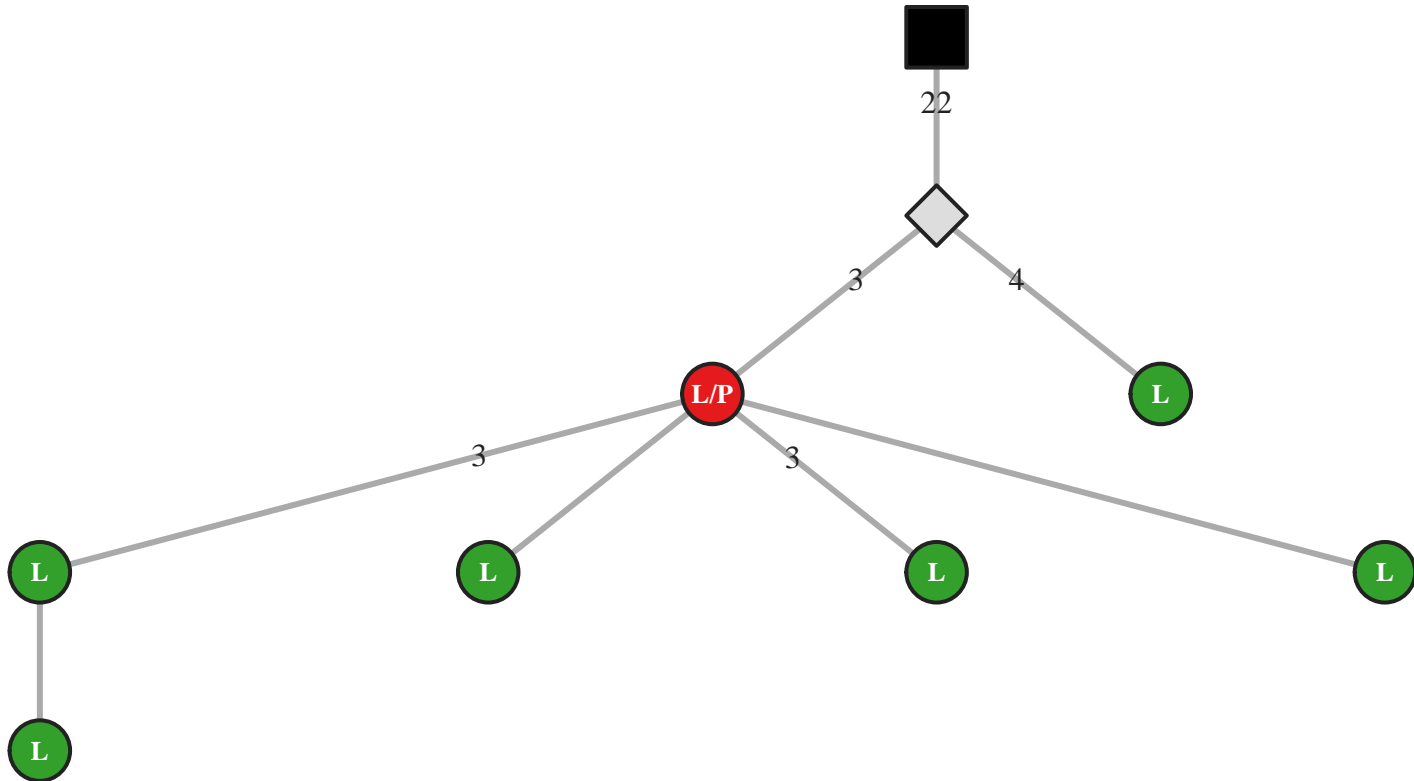
M5 IgG IGHV1-18/J4 33bp (13493)



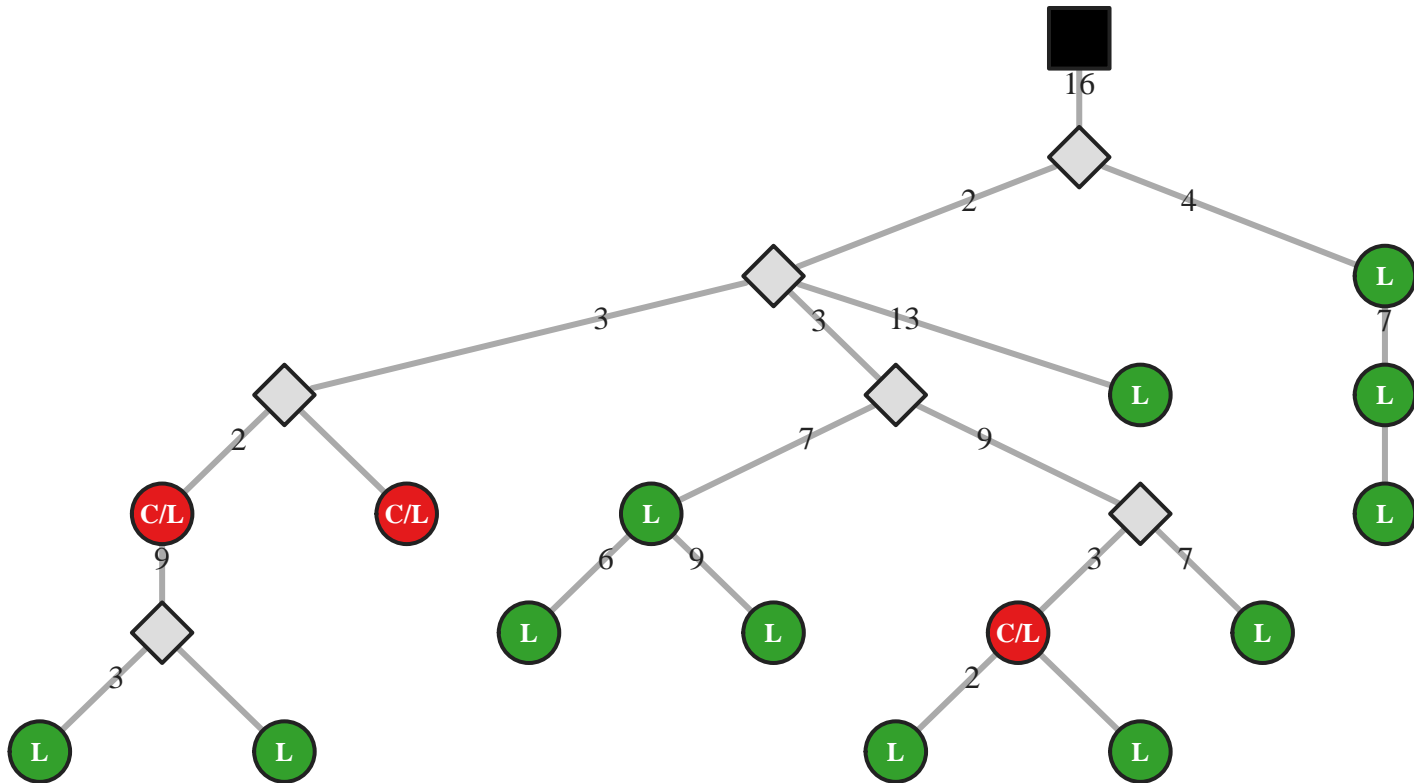
M5 IgA IGHV1-18/J4 36bp (11789)



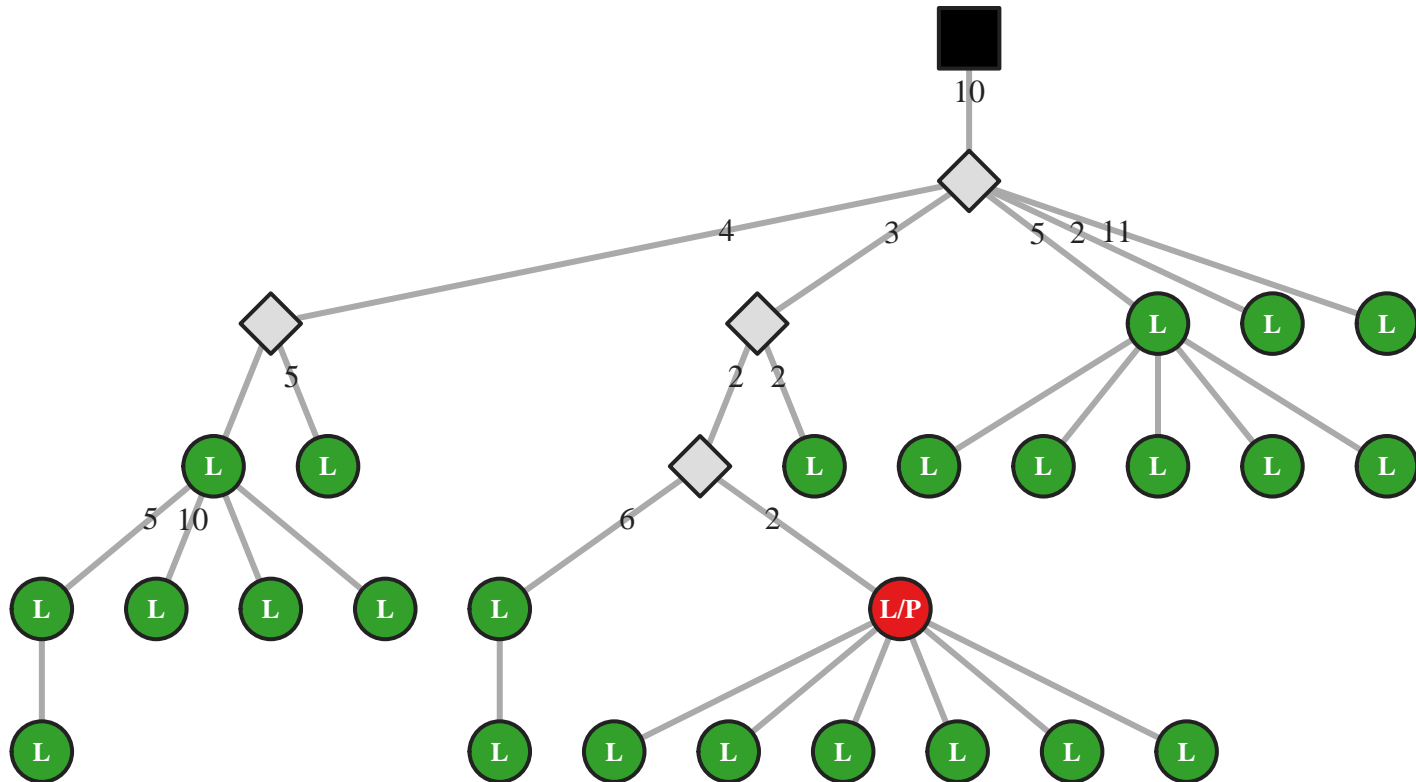
M5 IgG IGHV1-18/J4 36bp (31447)



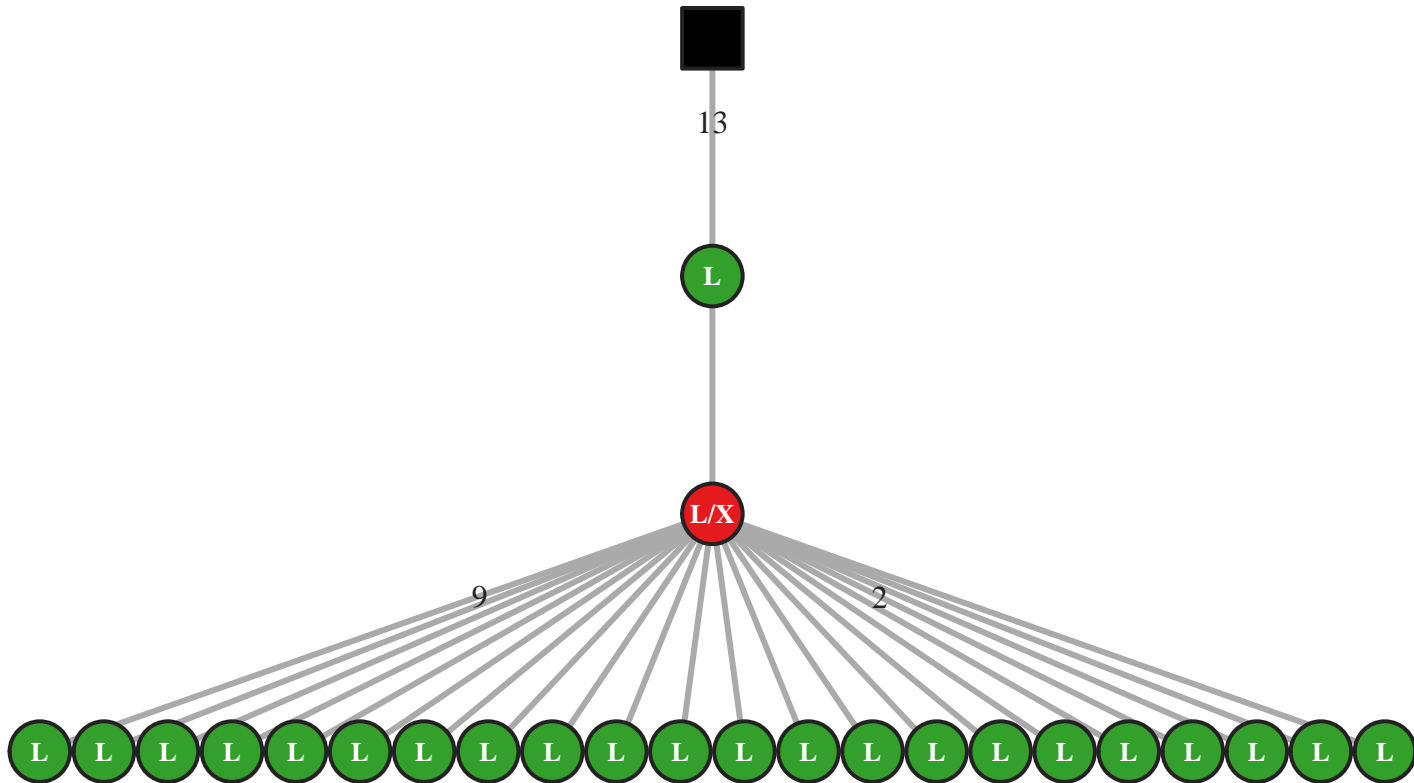
M5 IgG IGHV1-18/J4 36bp (31461)



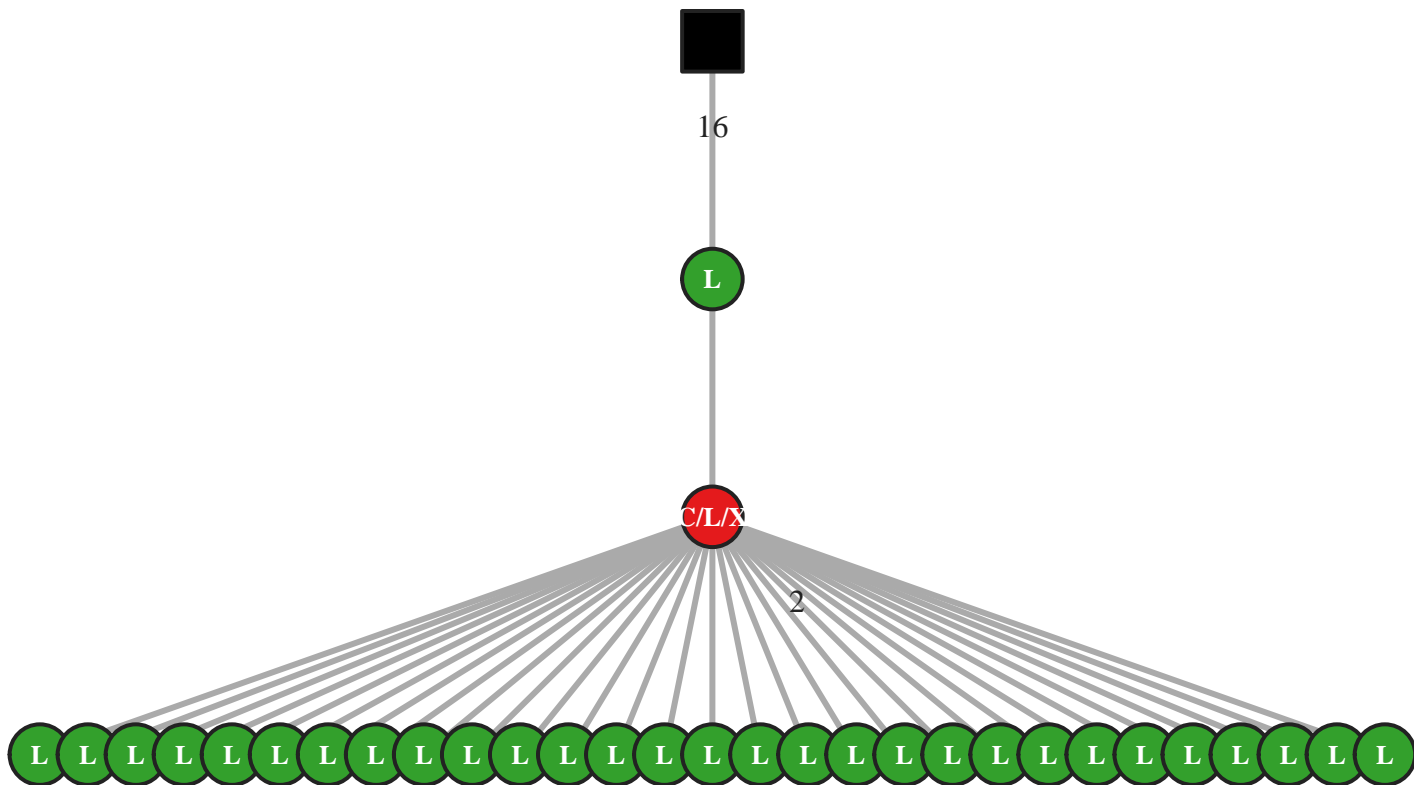
M5 IgG IGHV1-18/J4 36bp (31473)



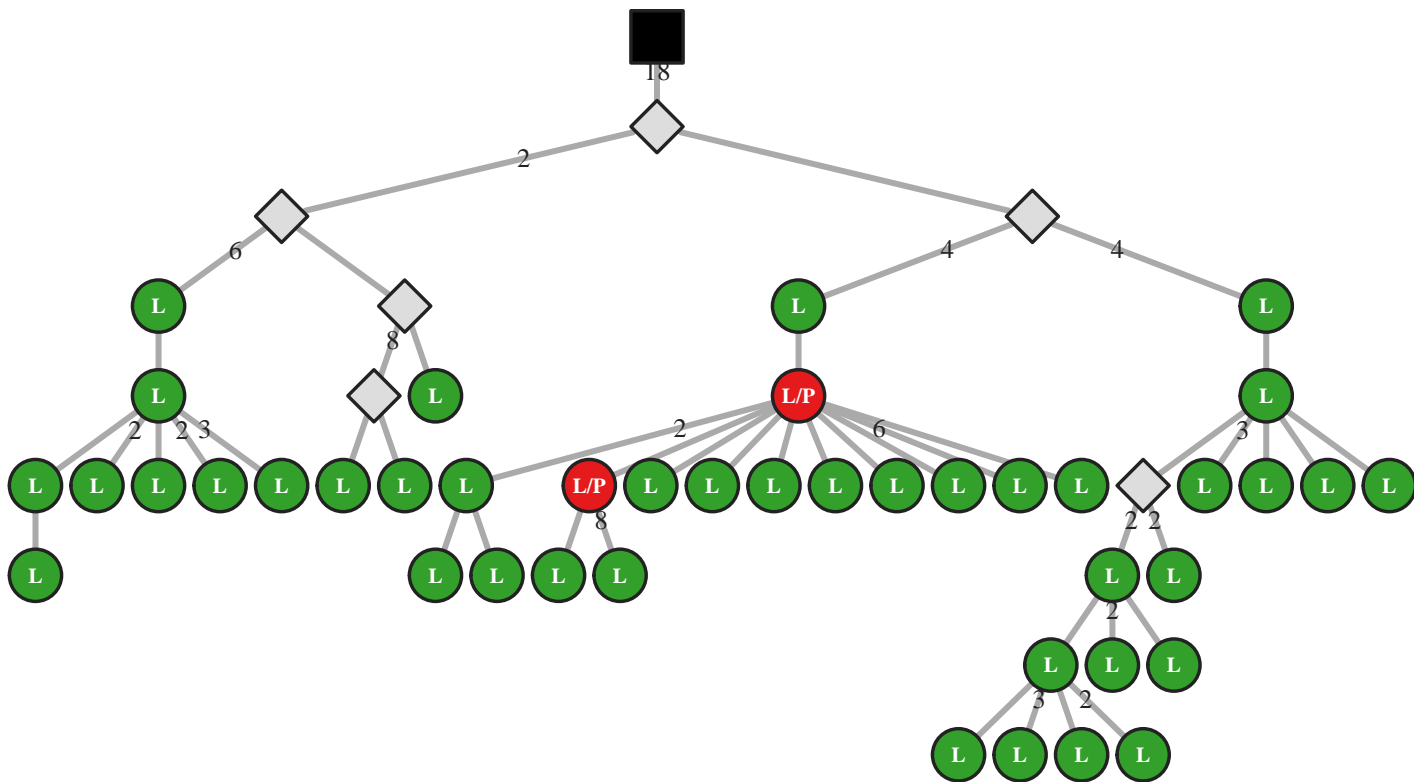
M5 IgA IGHV1-18/J4 39bp (29974)



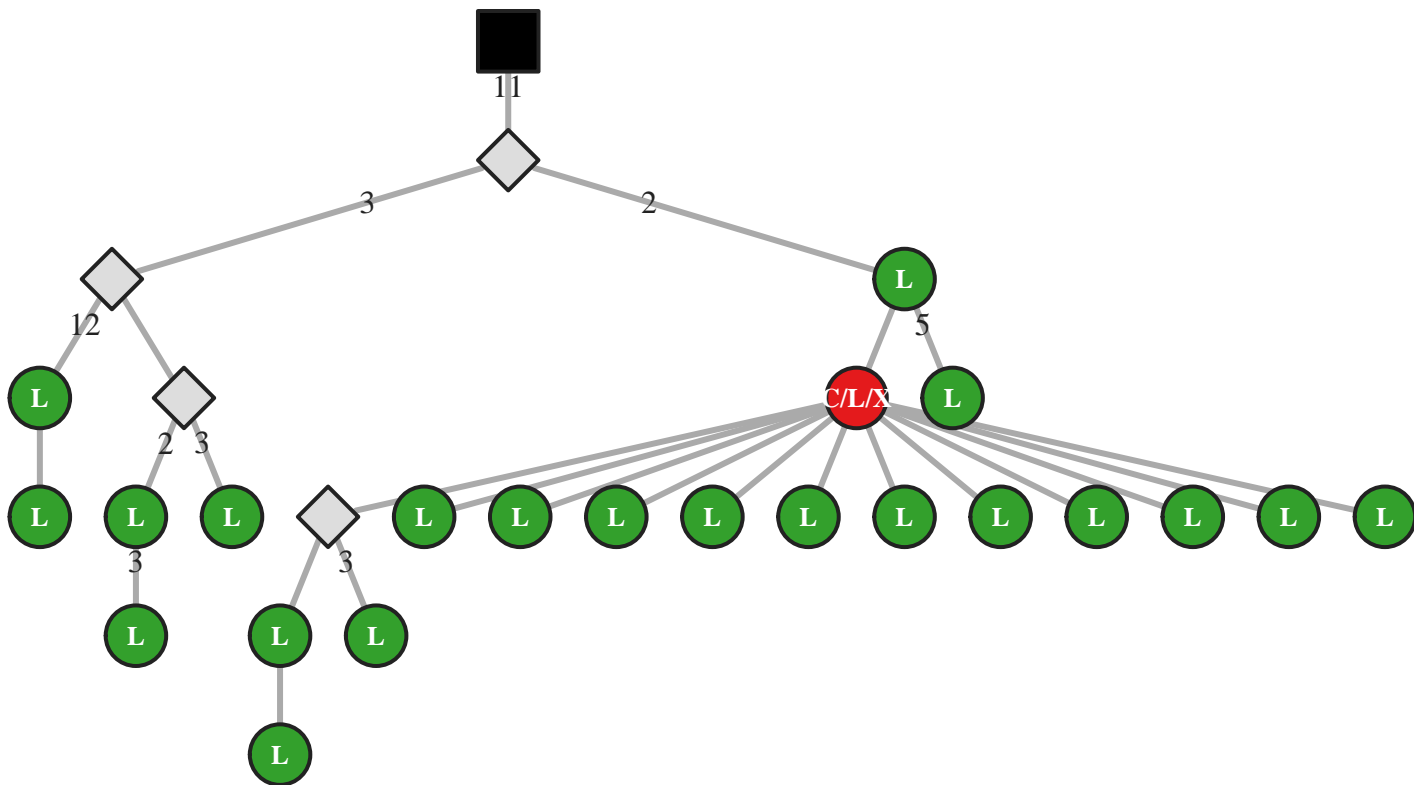
M5 IgG IGHV1-18/J4 39bp (39601)



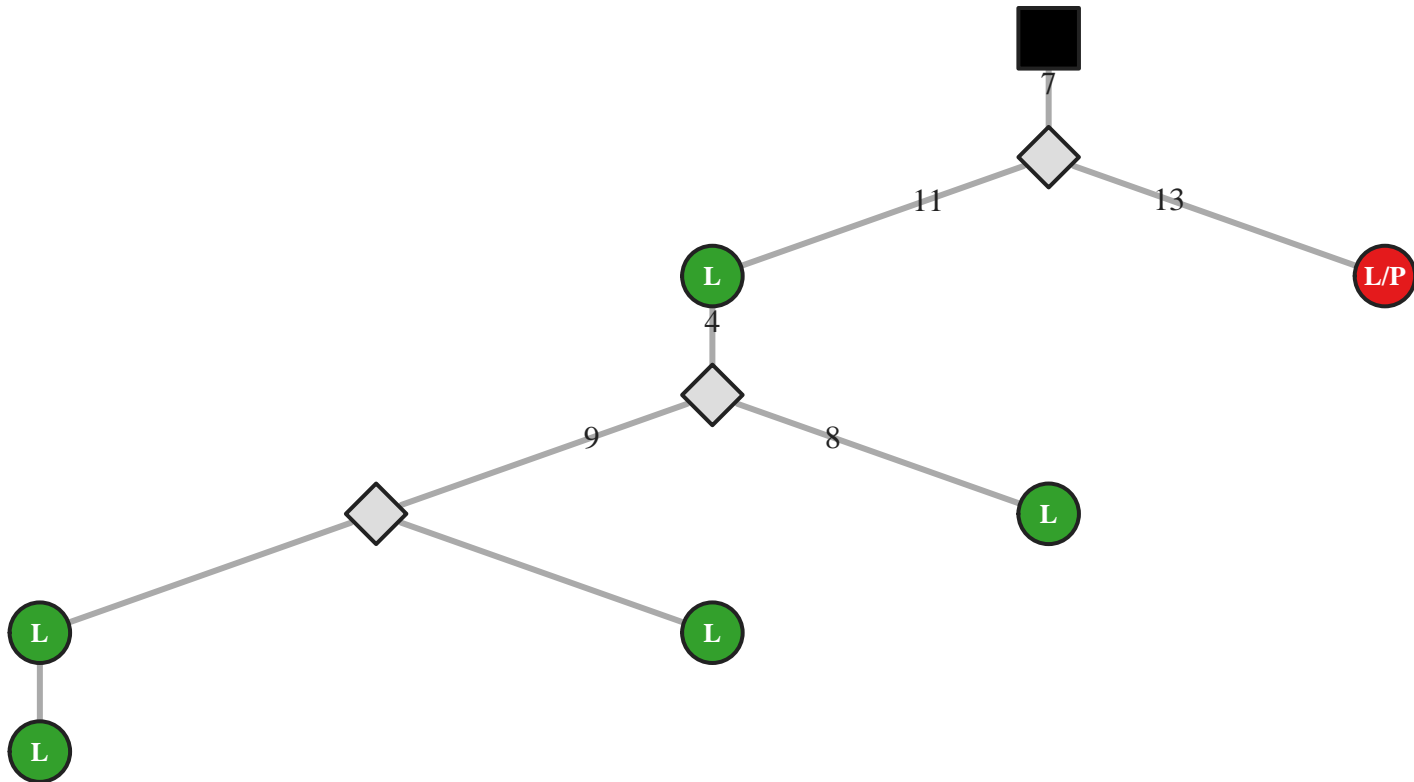
M5 IgG IGHV1-18/J4 39bp (39606)



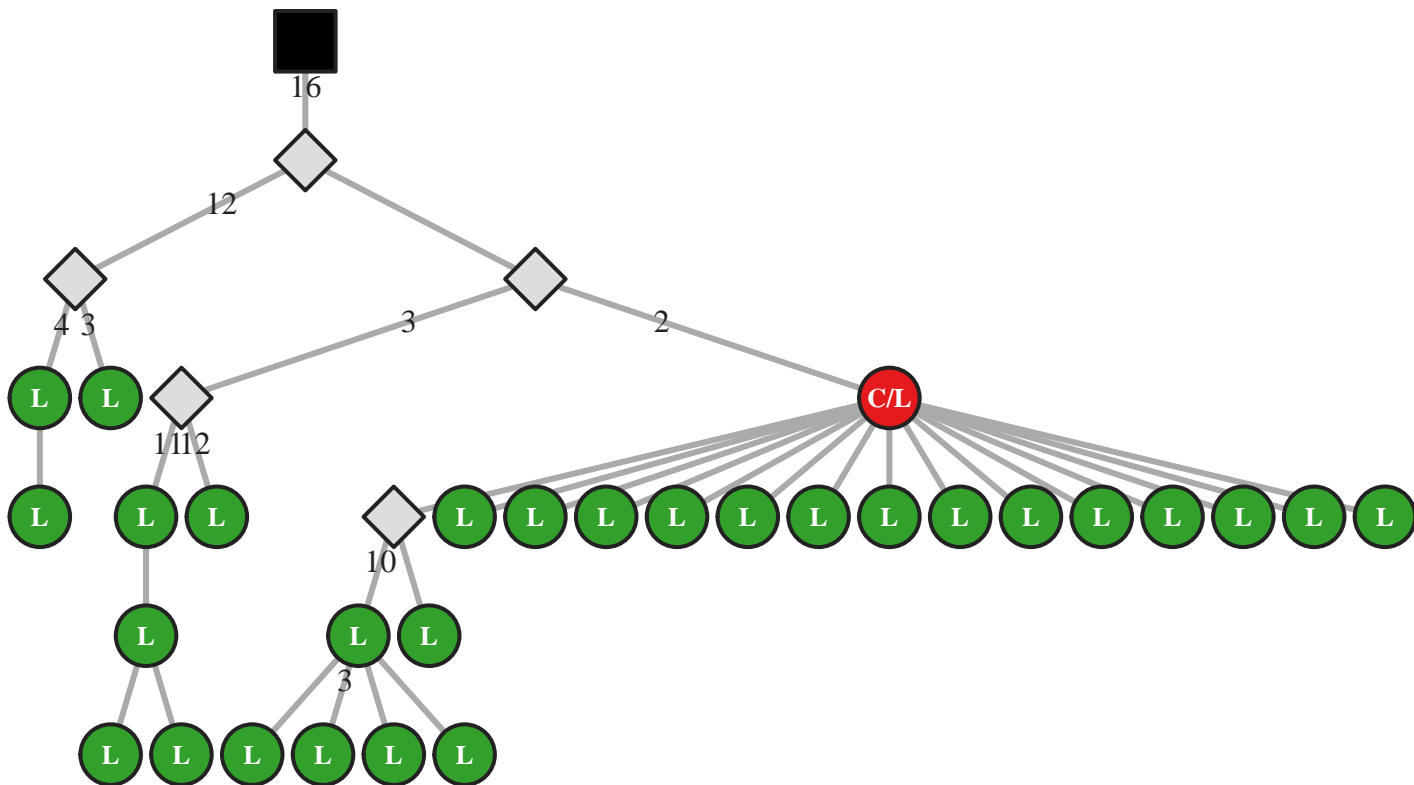
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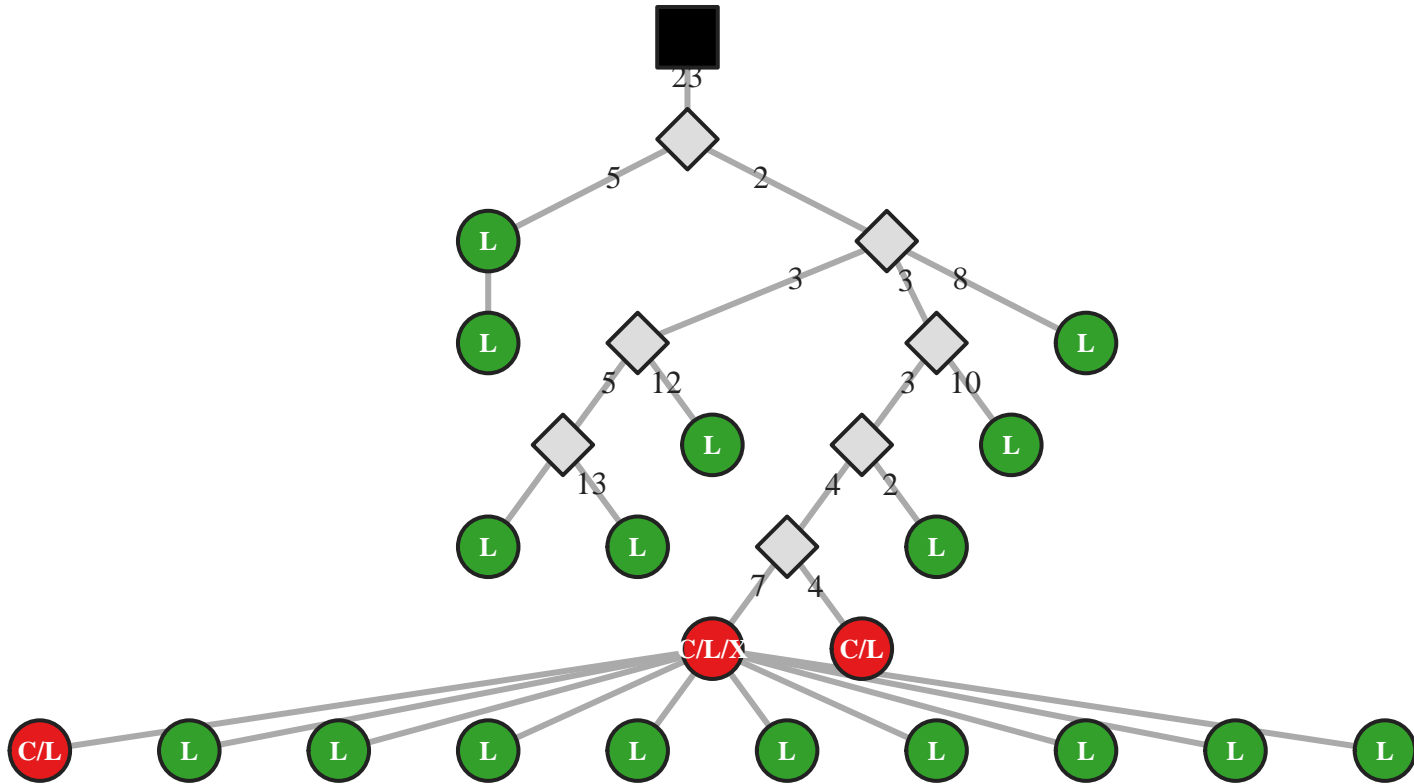
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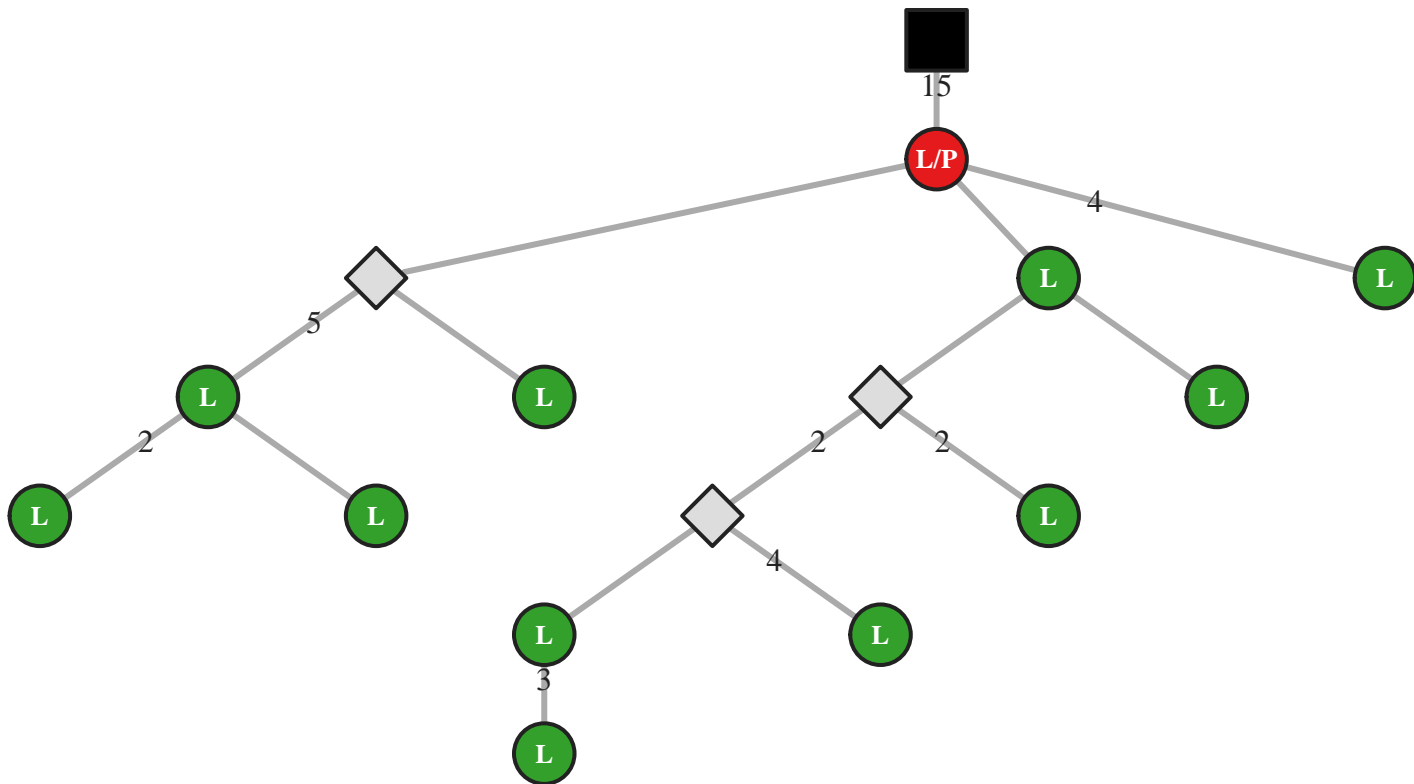
M5 IgG IGHV1-18/J4 39bp (39634)



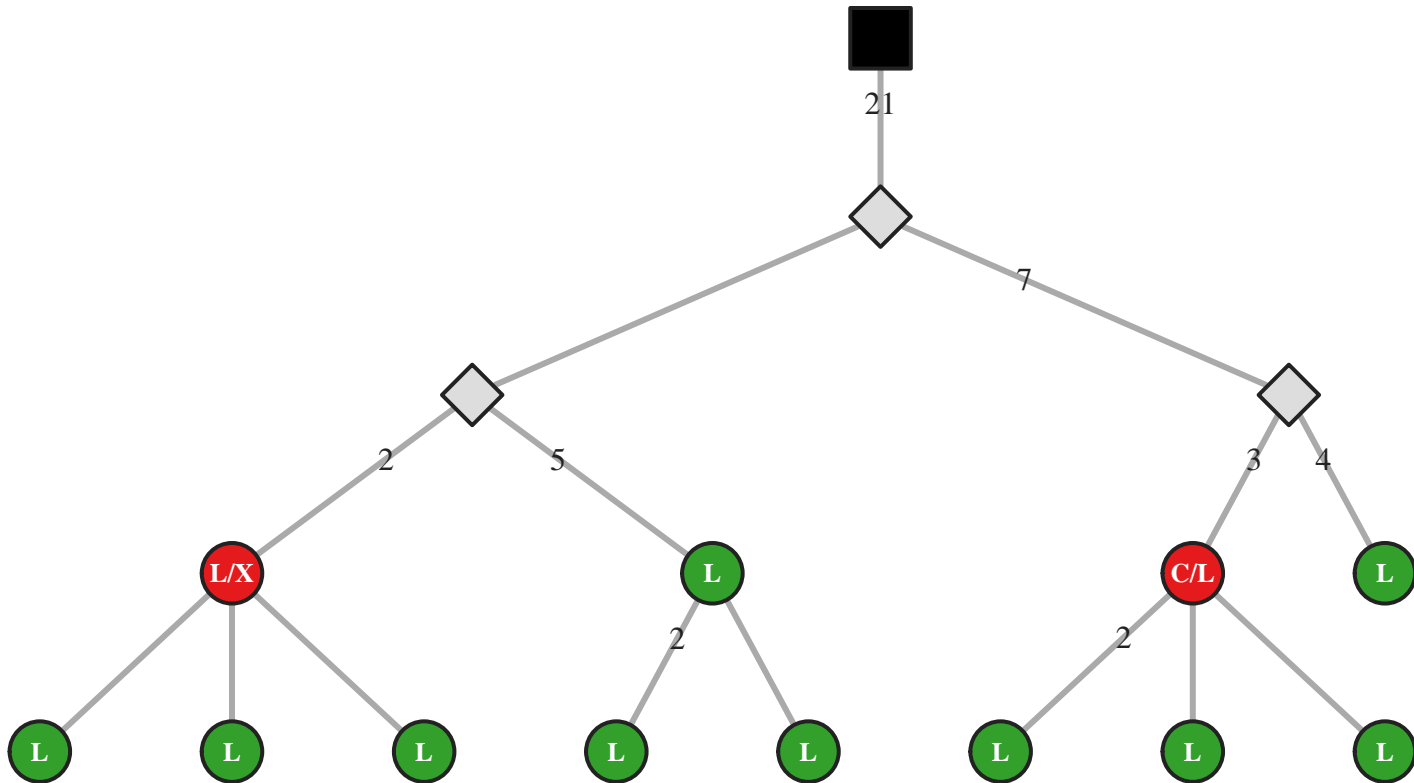
M5 IgA IGHV1-18/J4 42bp (11805)



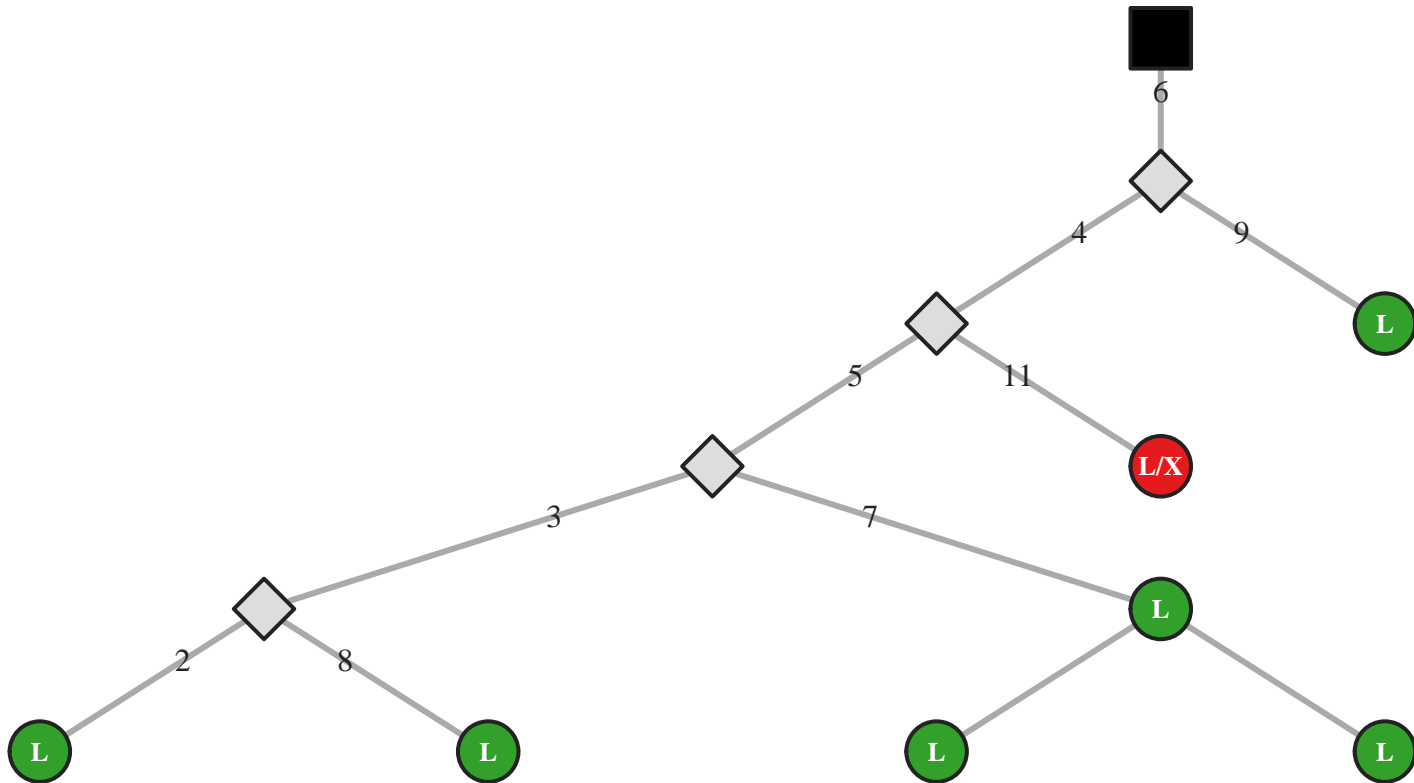
M5 IgG IGHV1-18/J4 42bp (31481)



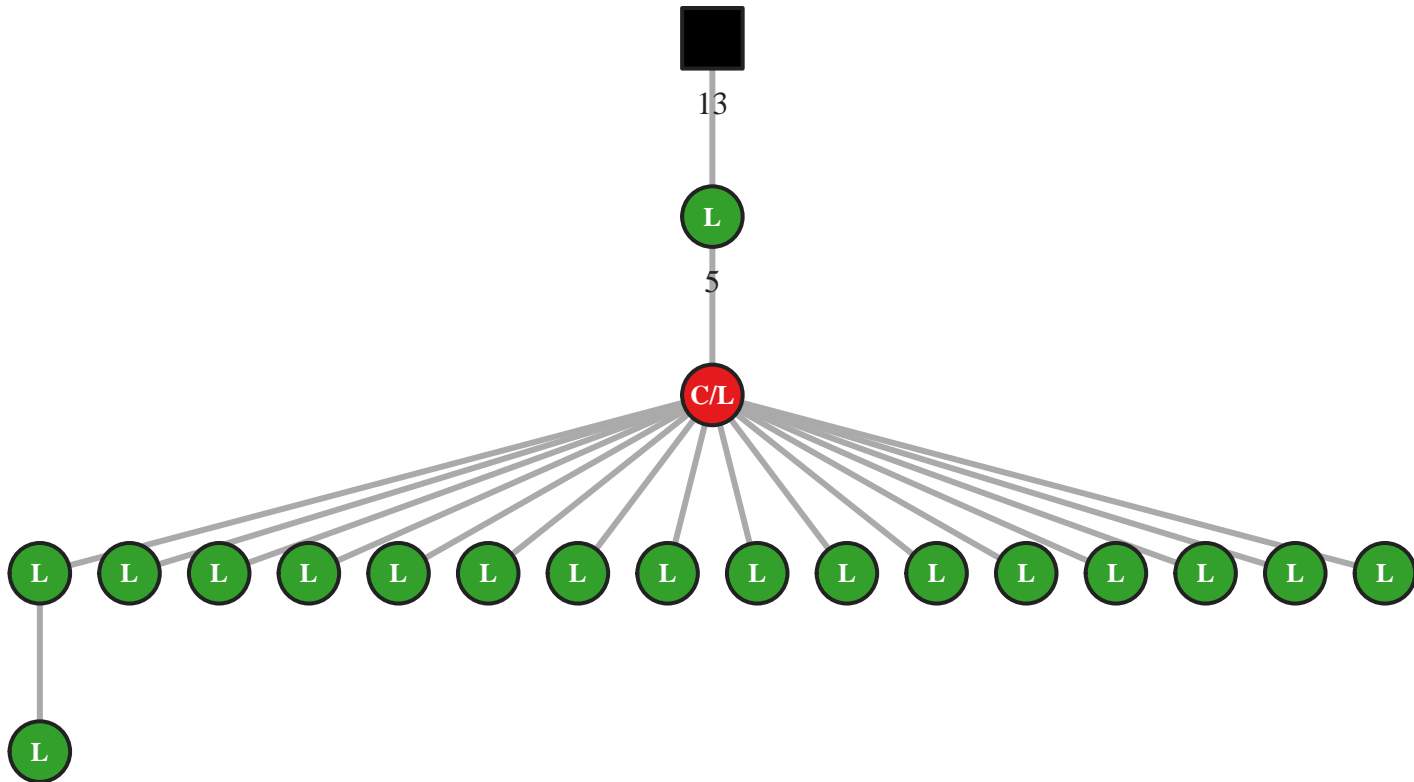
M5 IgG IGHV1-18/J4 42bp (31549)



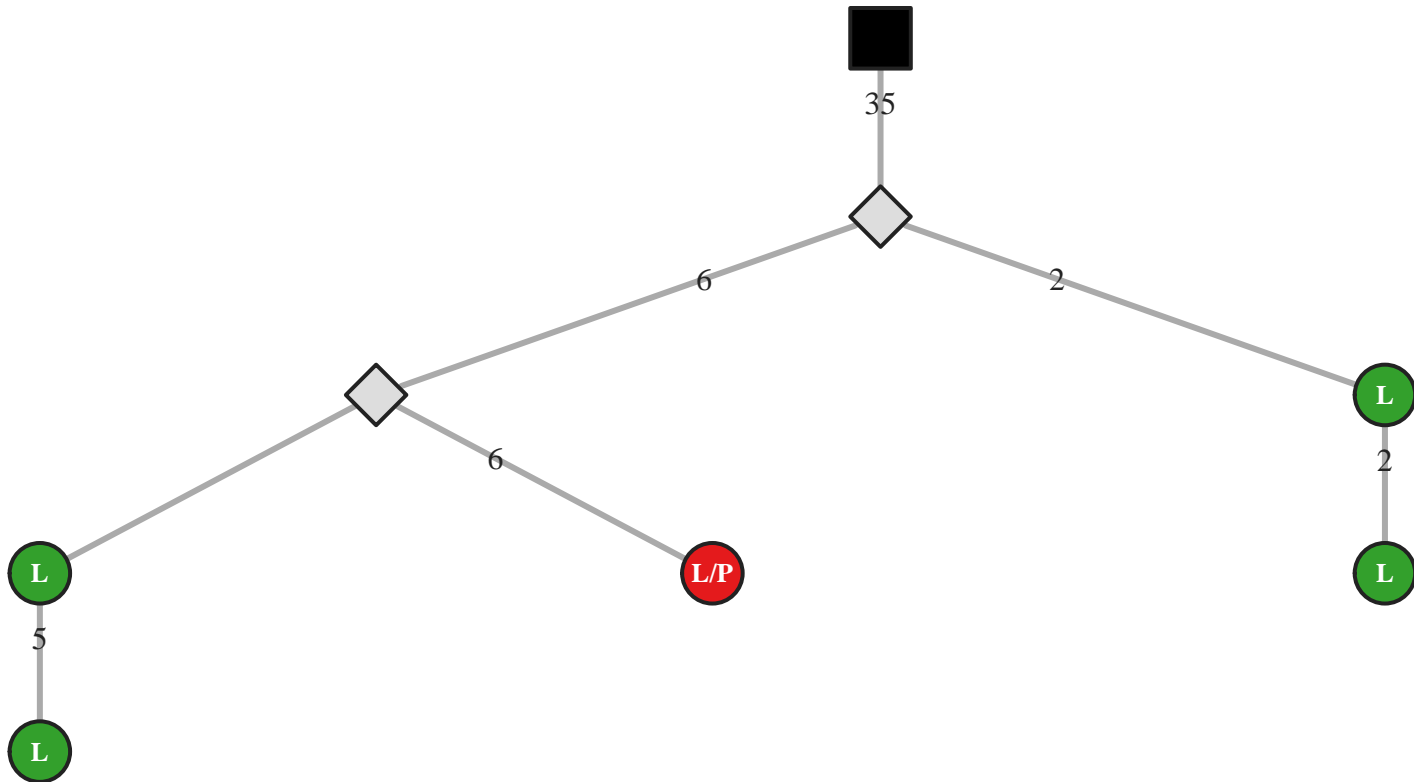
M5 IgG IGHV1-18/J4 45bp (3687)



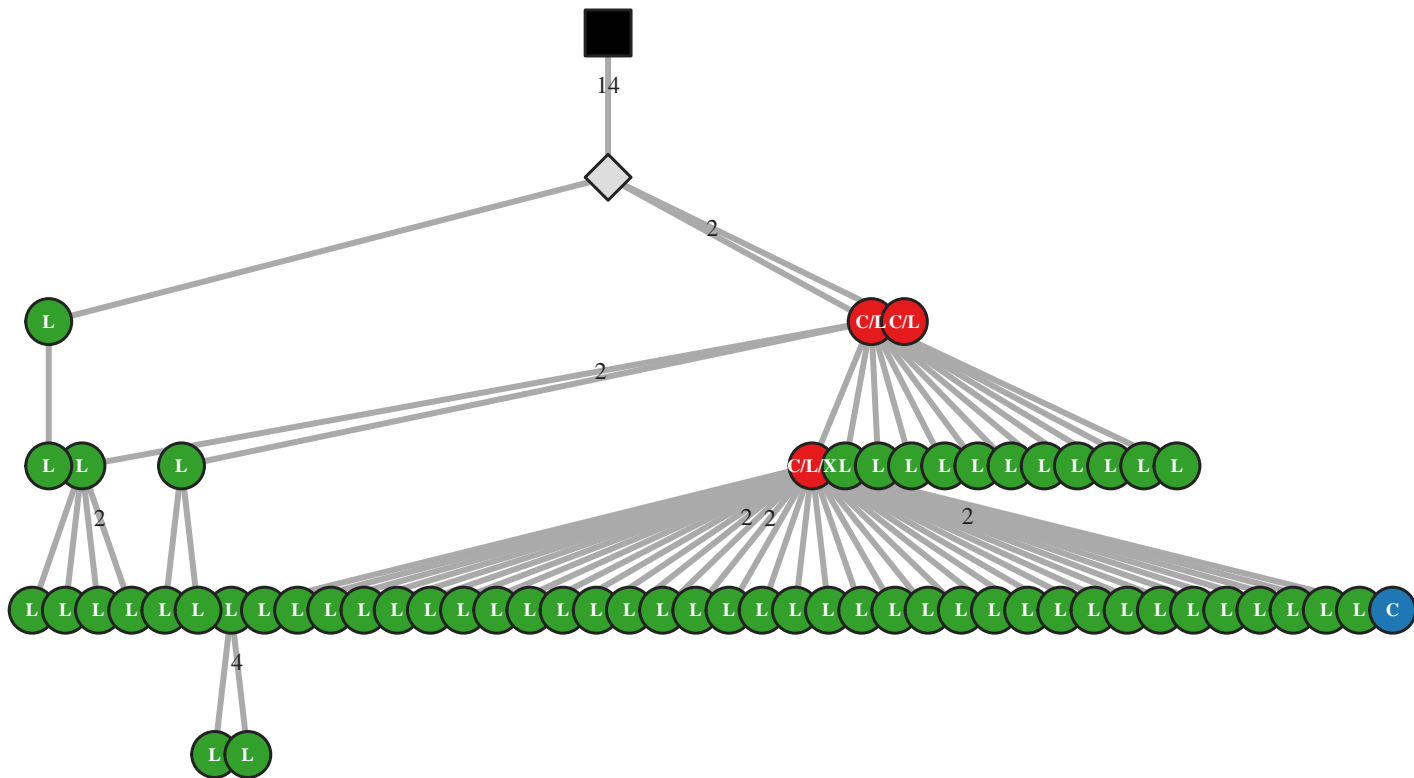
M5 IgG IGHV1-18/J4 45bp (3688)



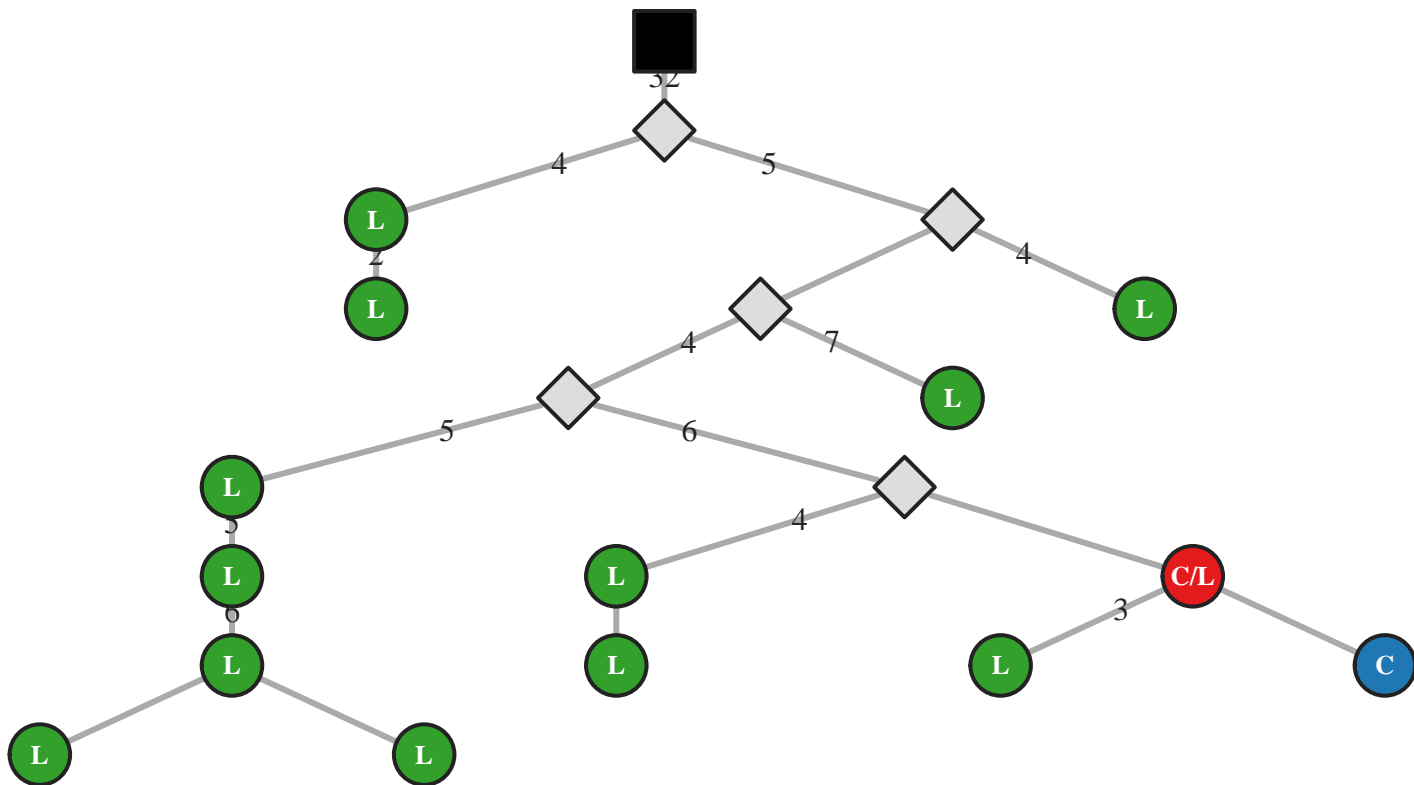
M5 IgG IGHV1-18/J4 45bp (3710)



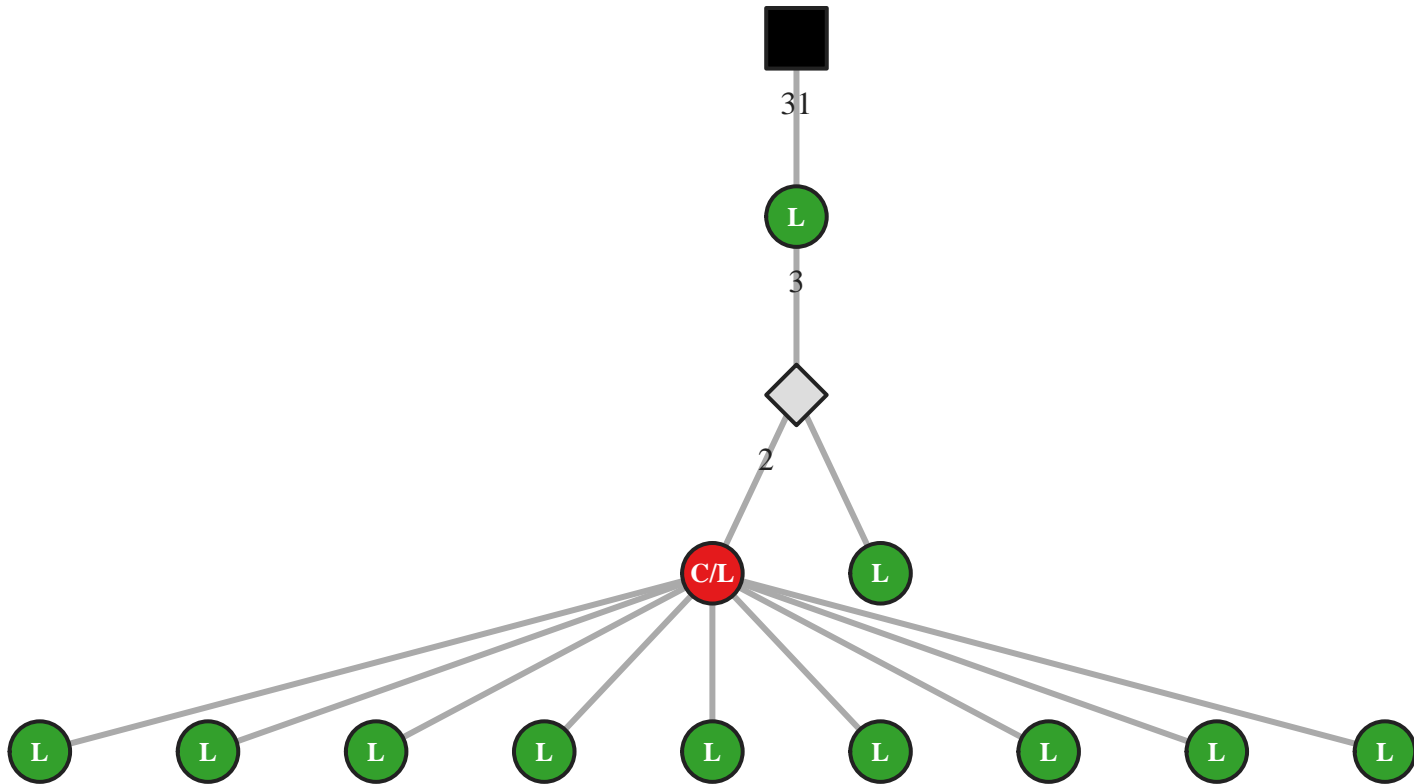
M5 IgG IGHV1-18/J4 45bp (3712)



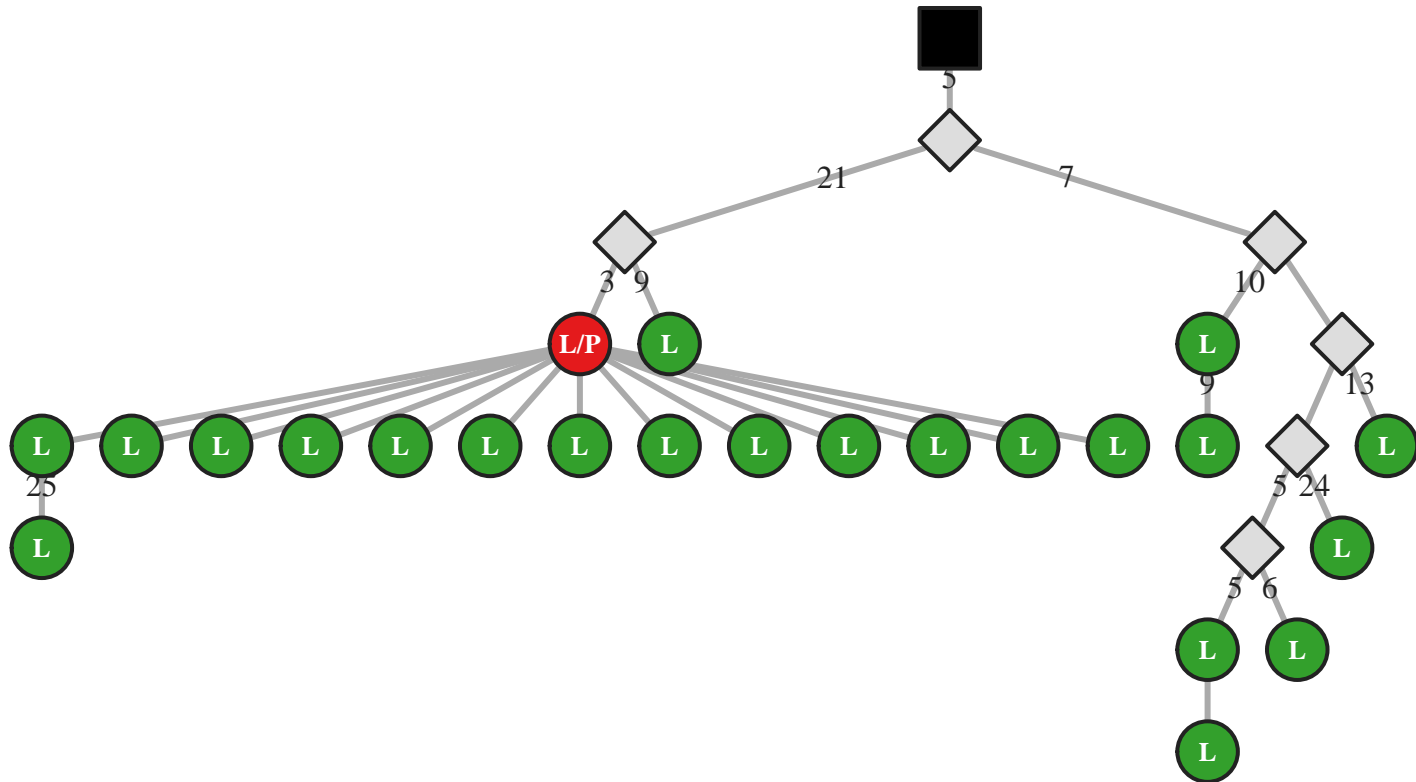
M5 IgA IGHV1-18/J4 48bp (48306)



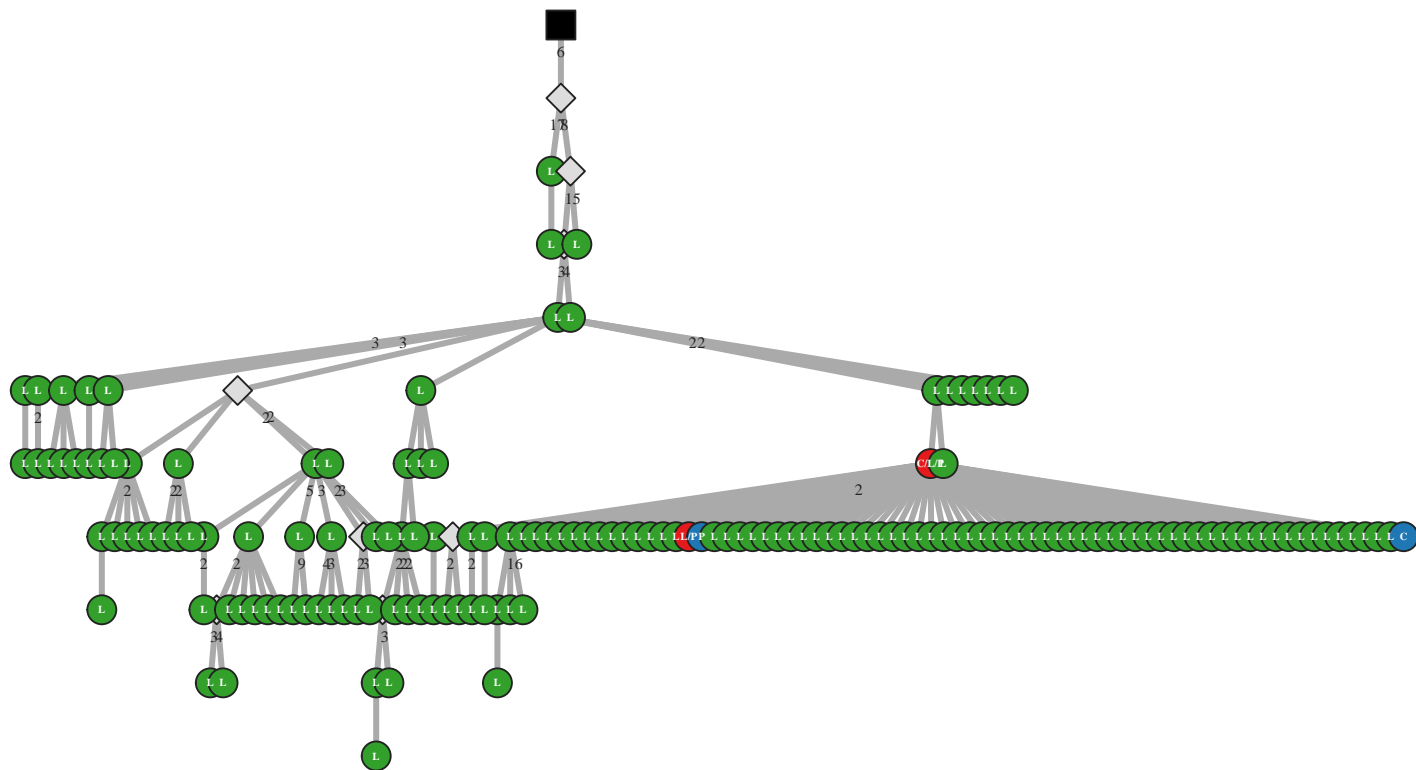
M5 IgA IGHV1-18/J4 48bp (48308)



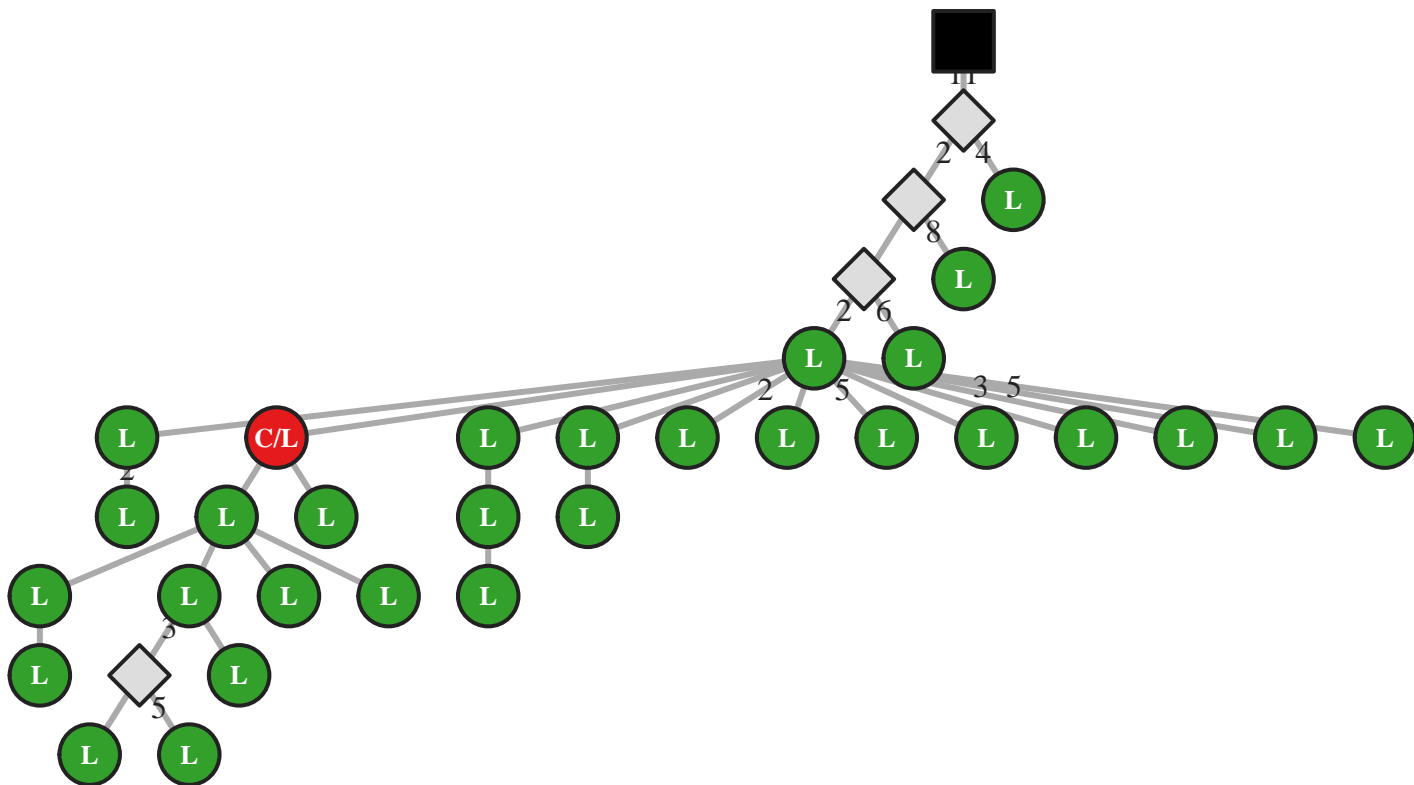
M5 IgG IGHV1-18/J4 48bp (3827)



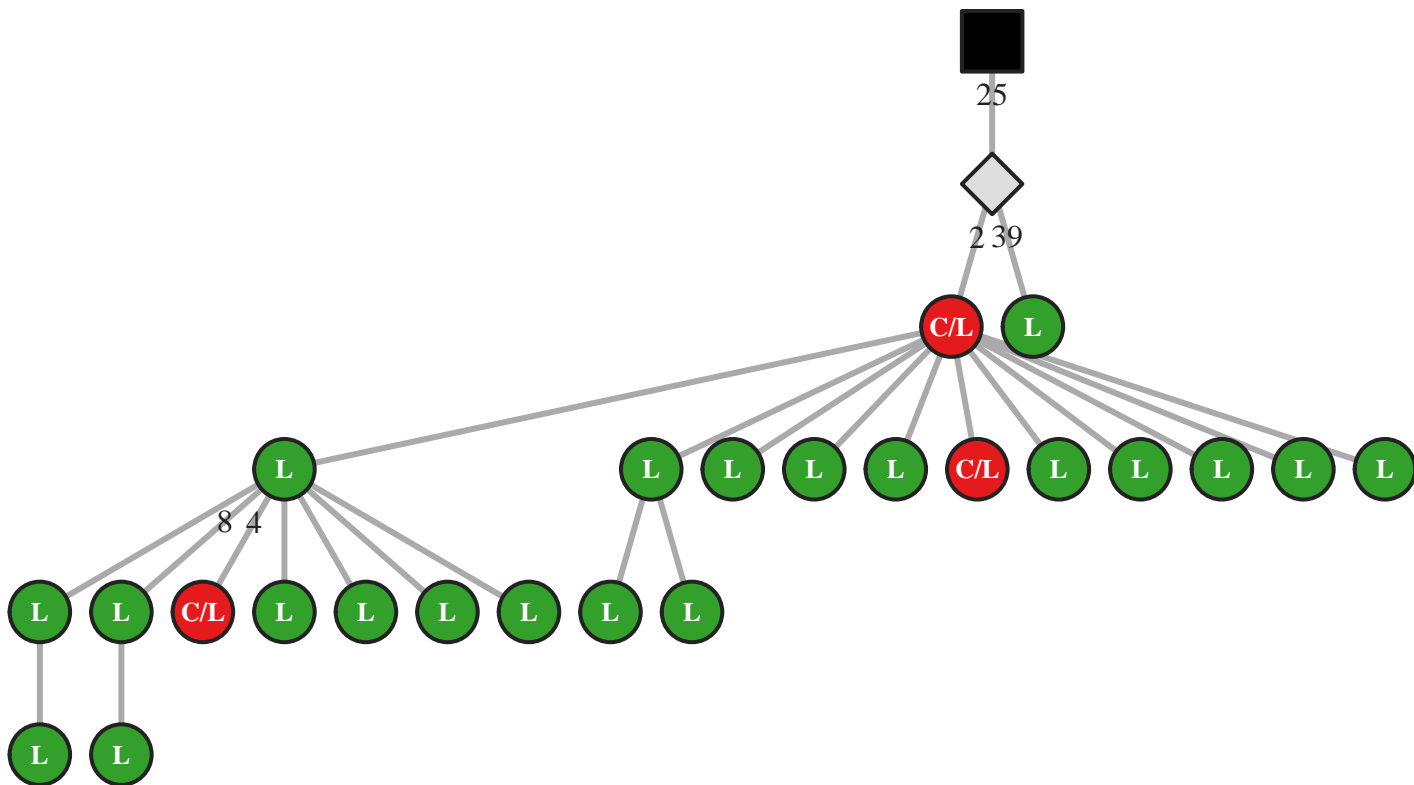
M5 IgA IGHV1-18/J4 51bp (48333)



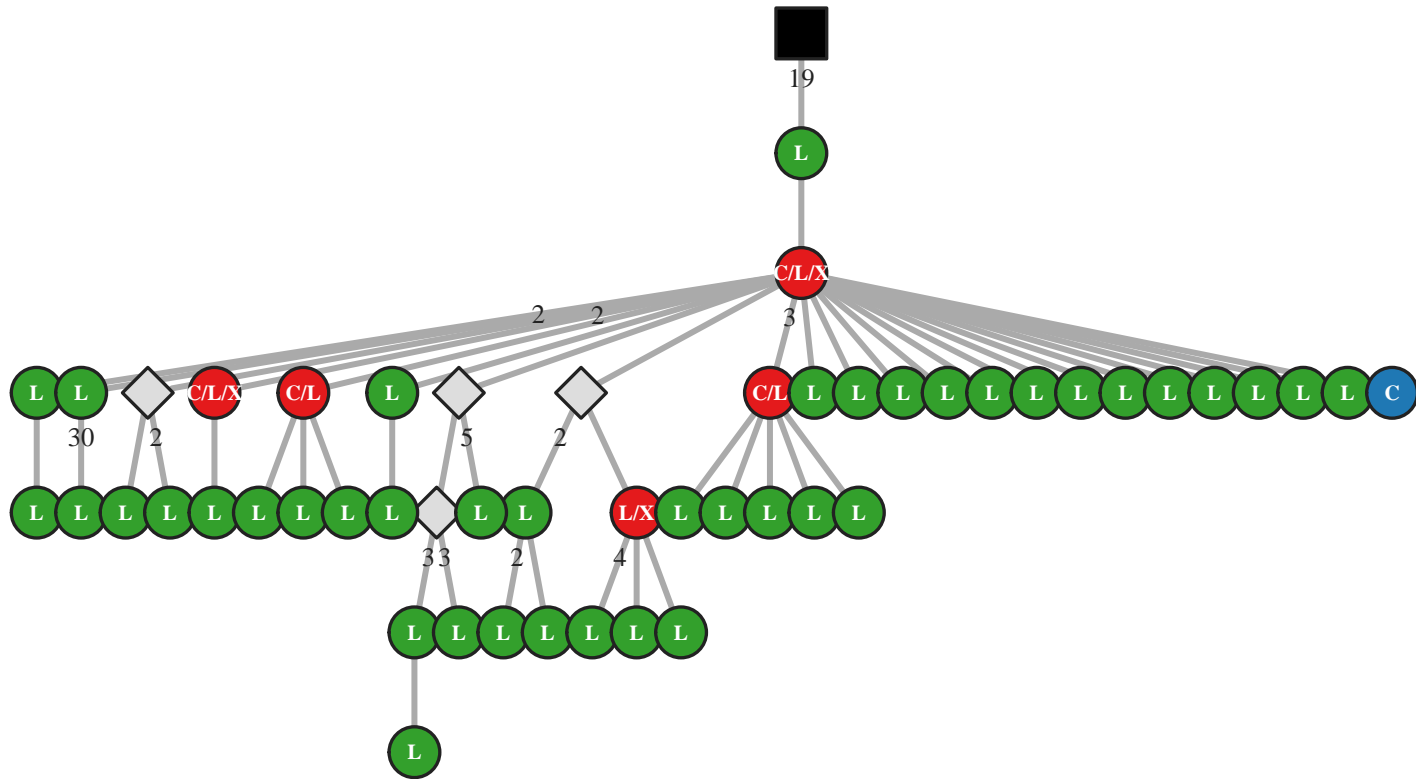
M5 IgG IGHV1-18/J4 51bp (22712)



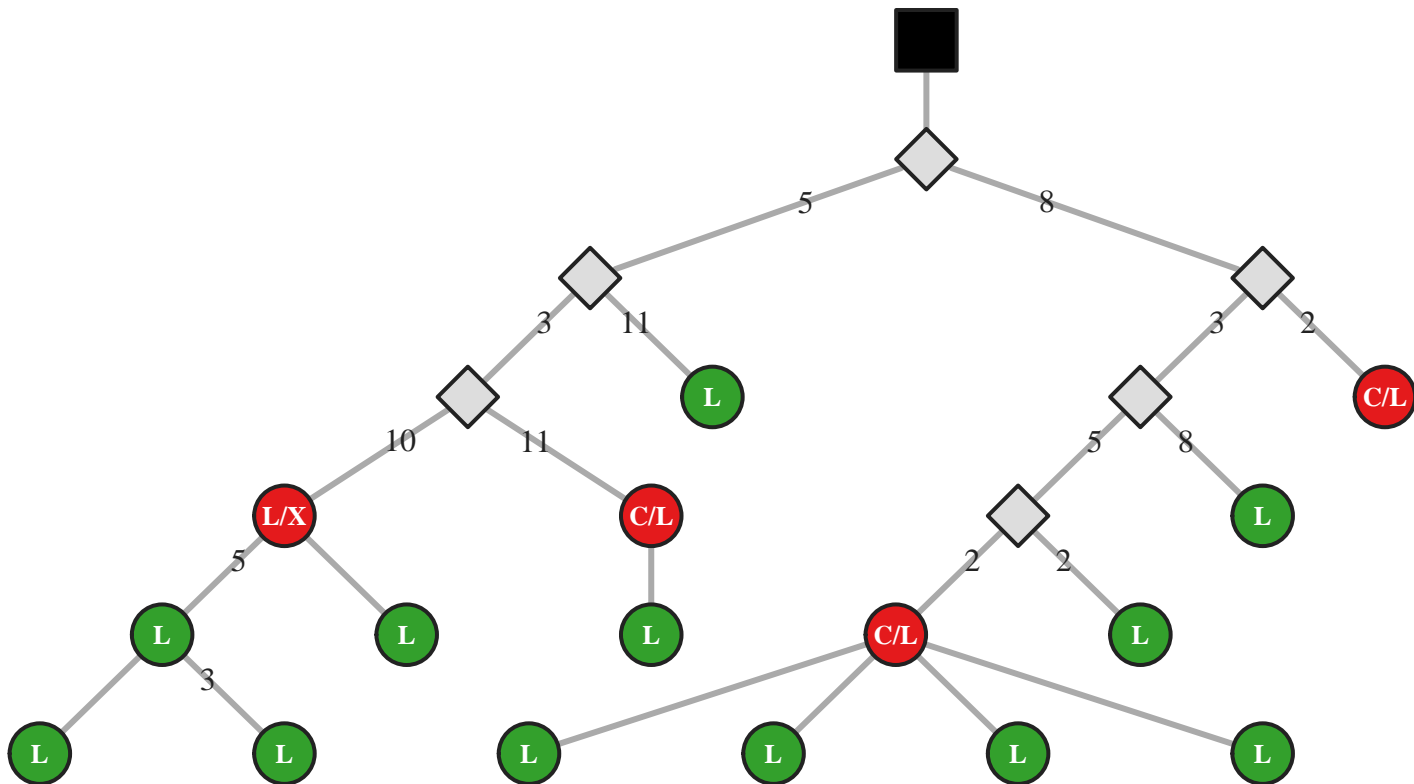
M5 IgG IGHV1-18/J4 51bp (22735)



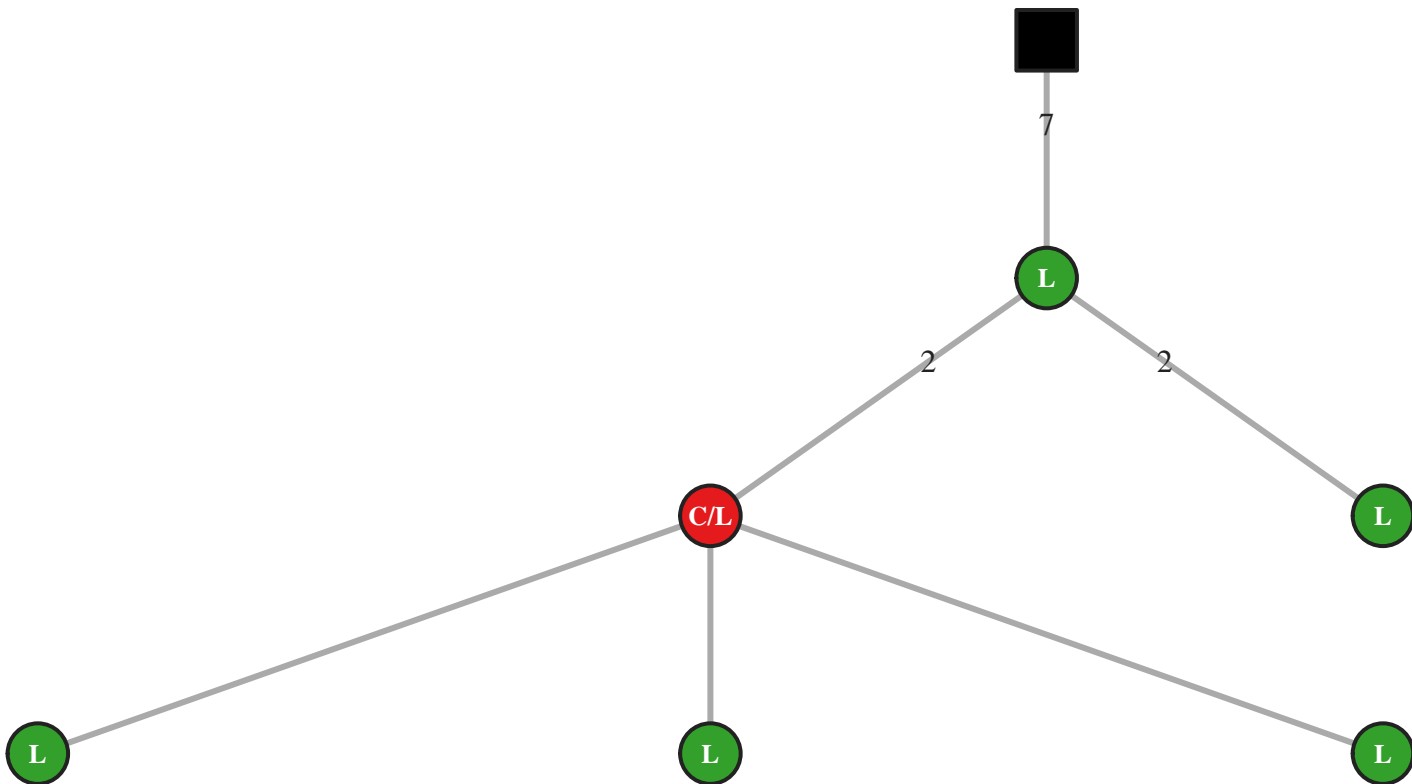
M5 IgG IGHV1-18/J4 51bp (22739)



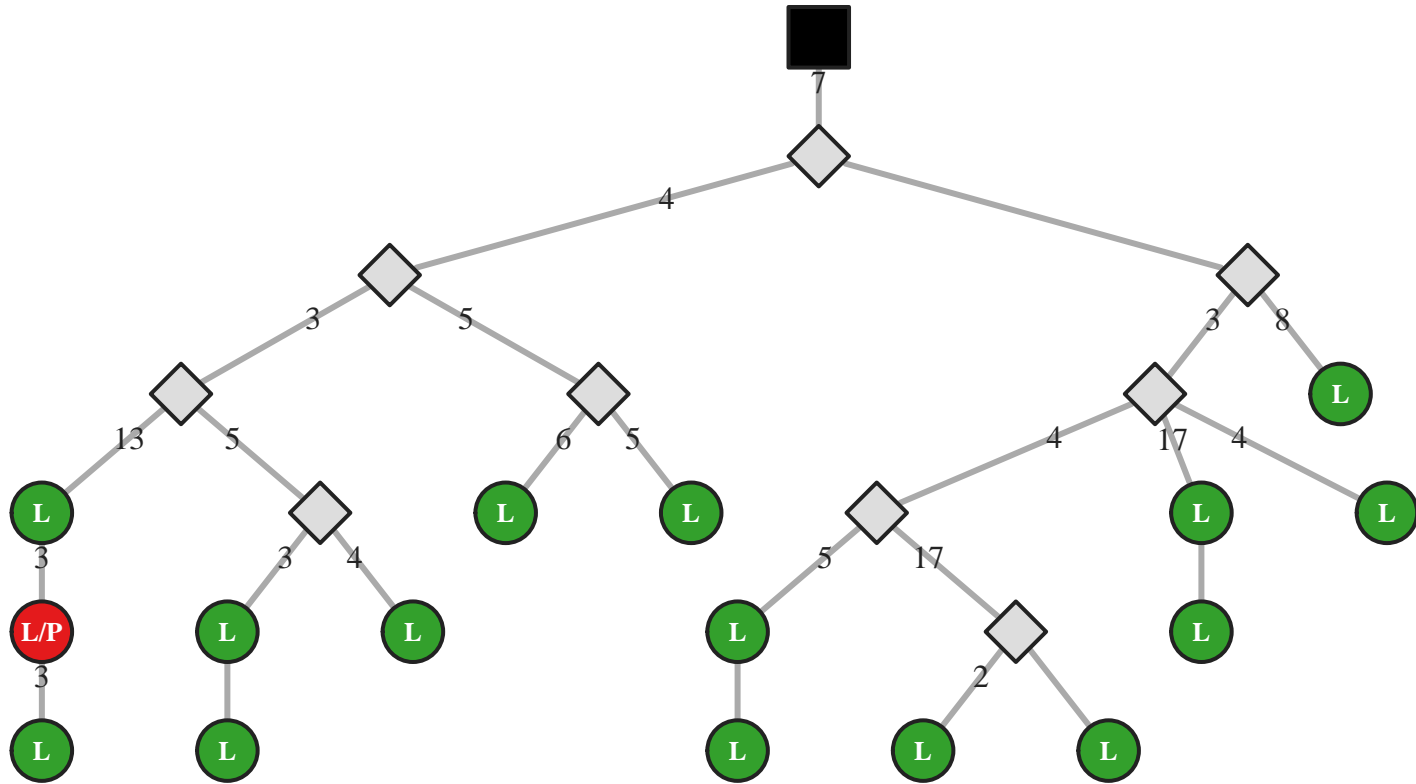
M5 IgG IGHV1-18/J4 51bp (22740)



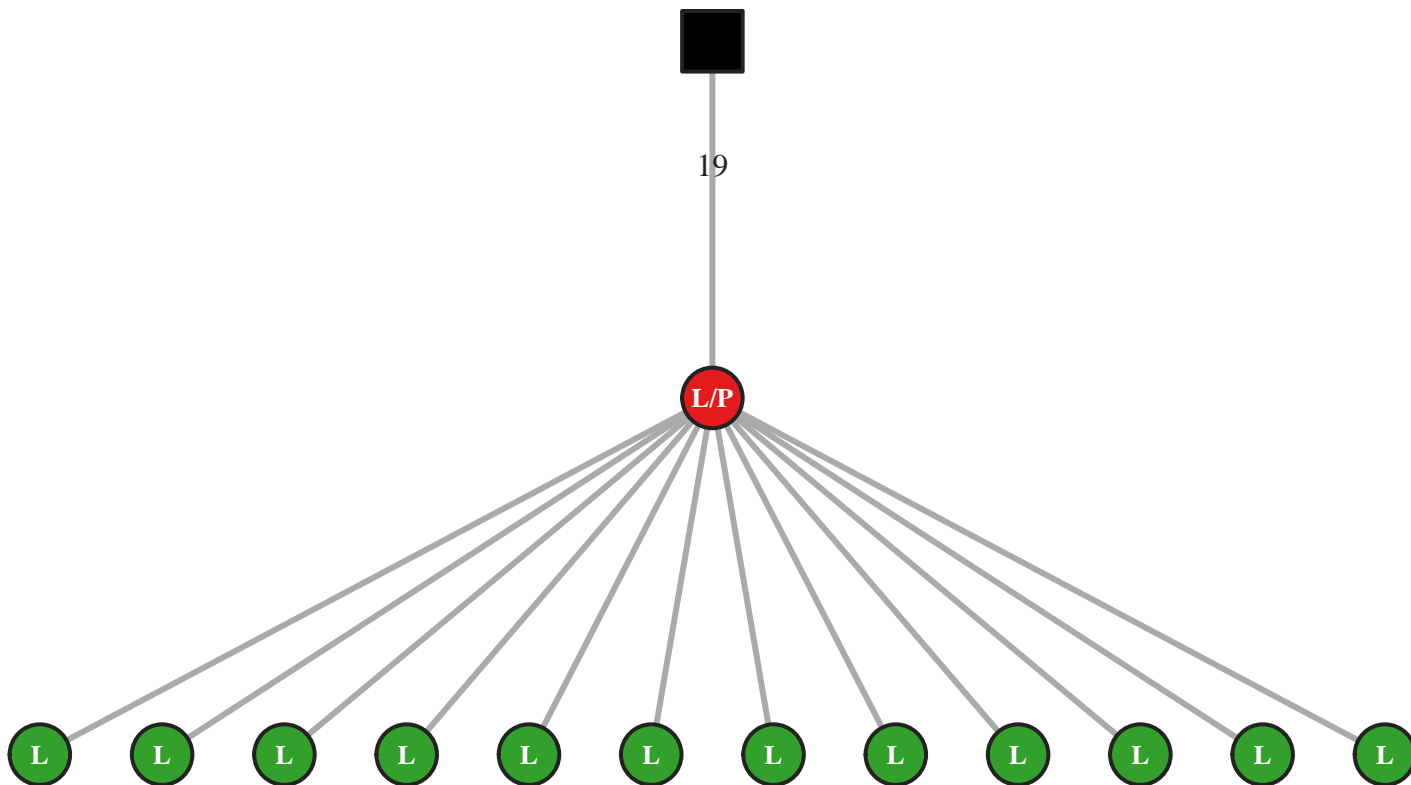
M5 IgG IGHV1-18/J4 51bp (22781)



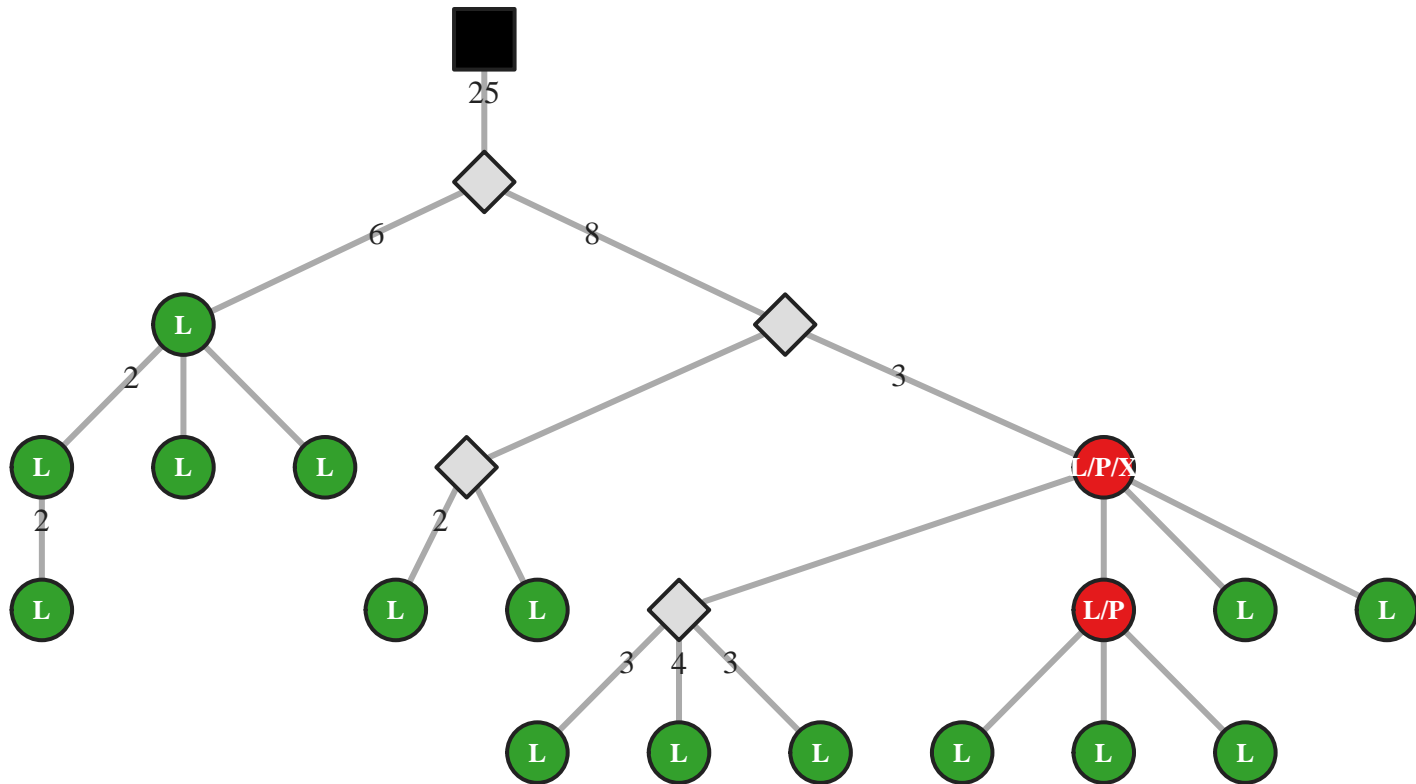
M5 IgG IGHV1-18/J4 54bp (3888)



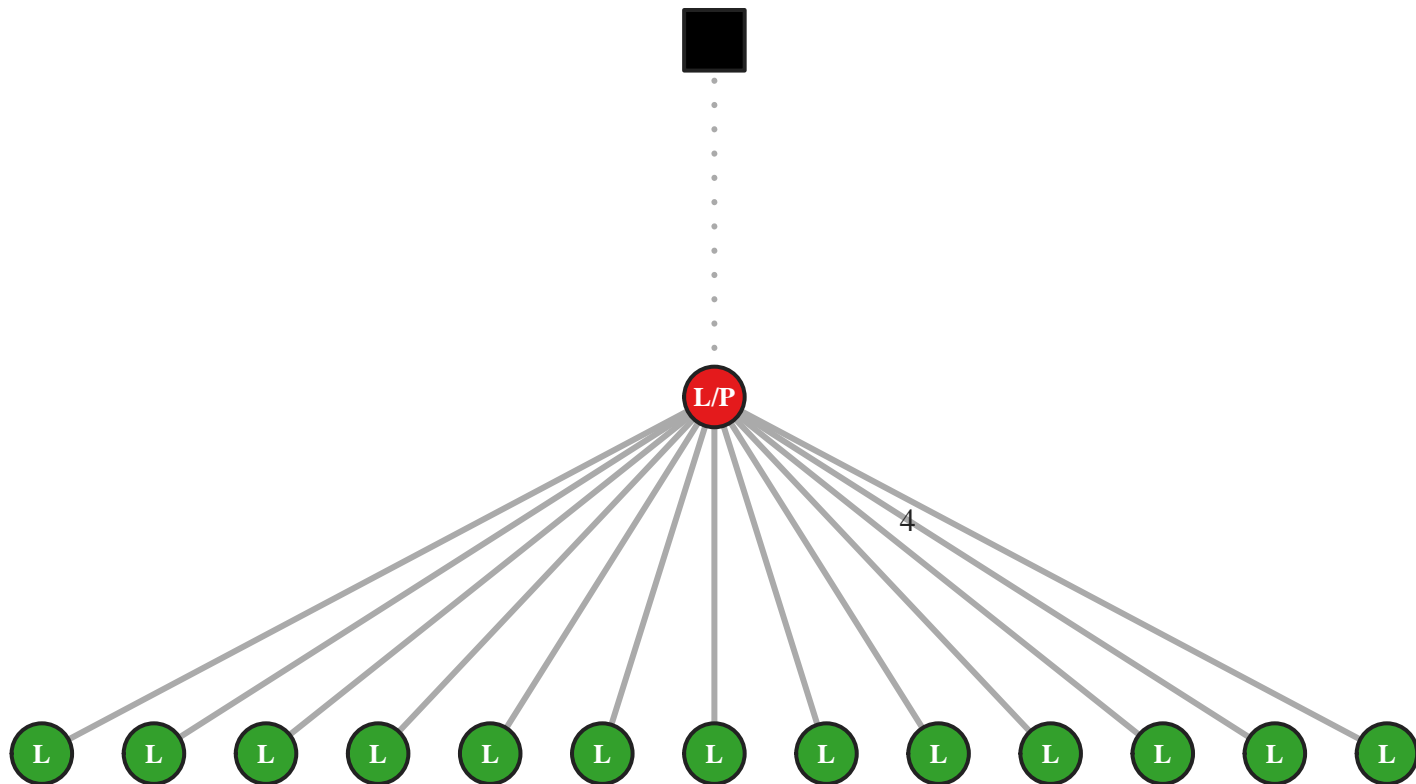
M5 IgG IGHV1-18/J4 54bp (3935)



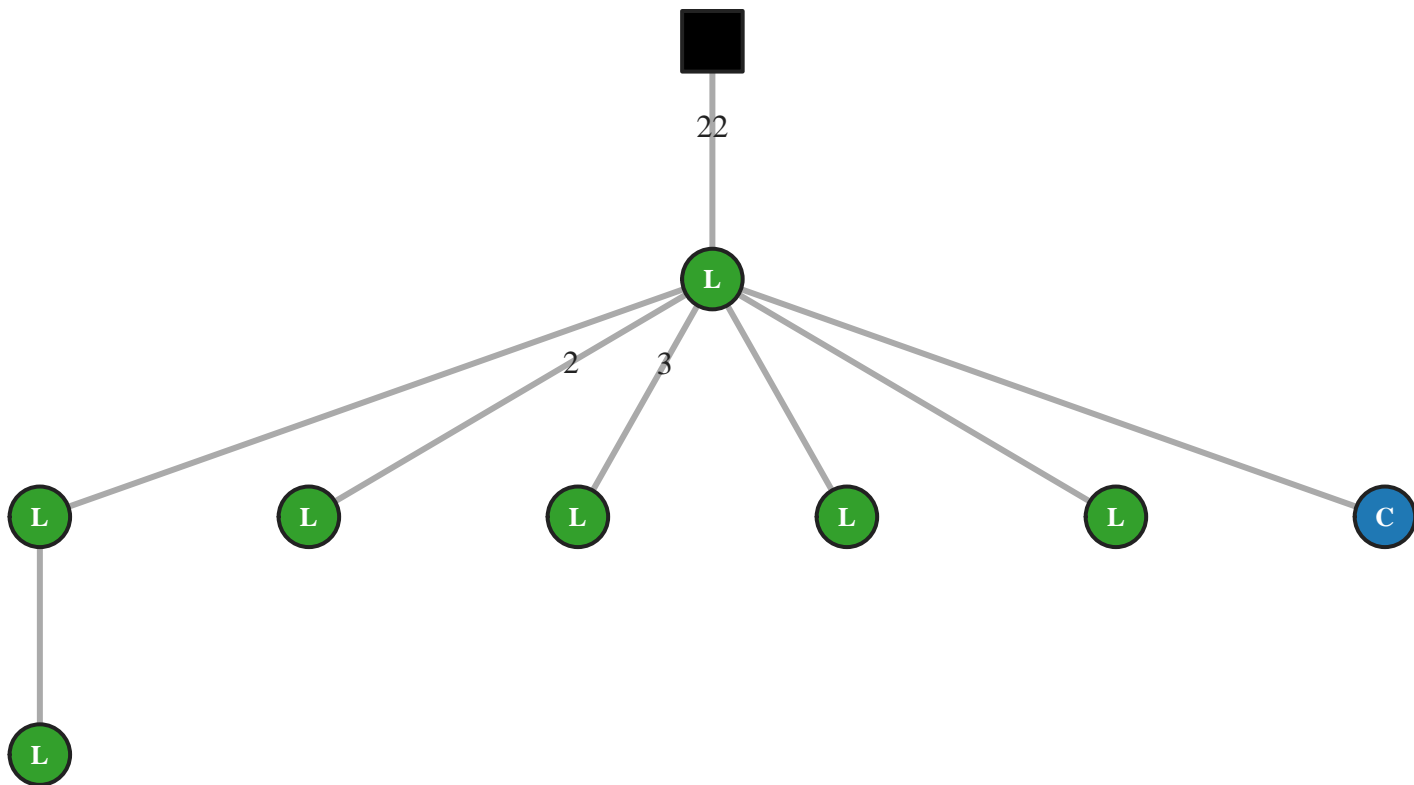
M5 IgG IGHV1-18/J4 57bp (3998)



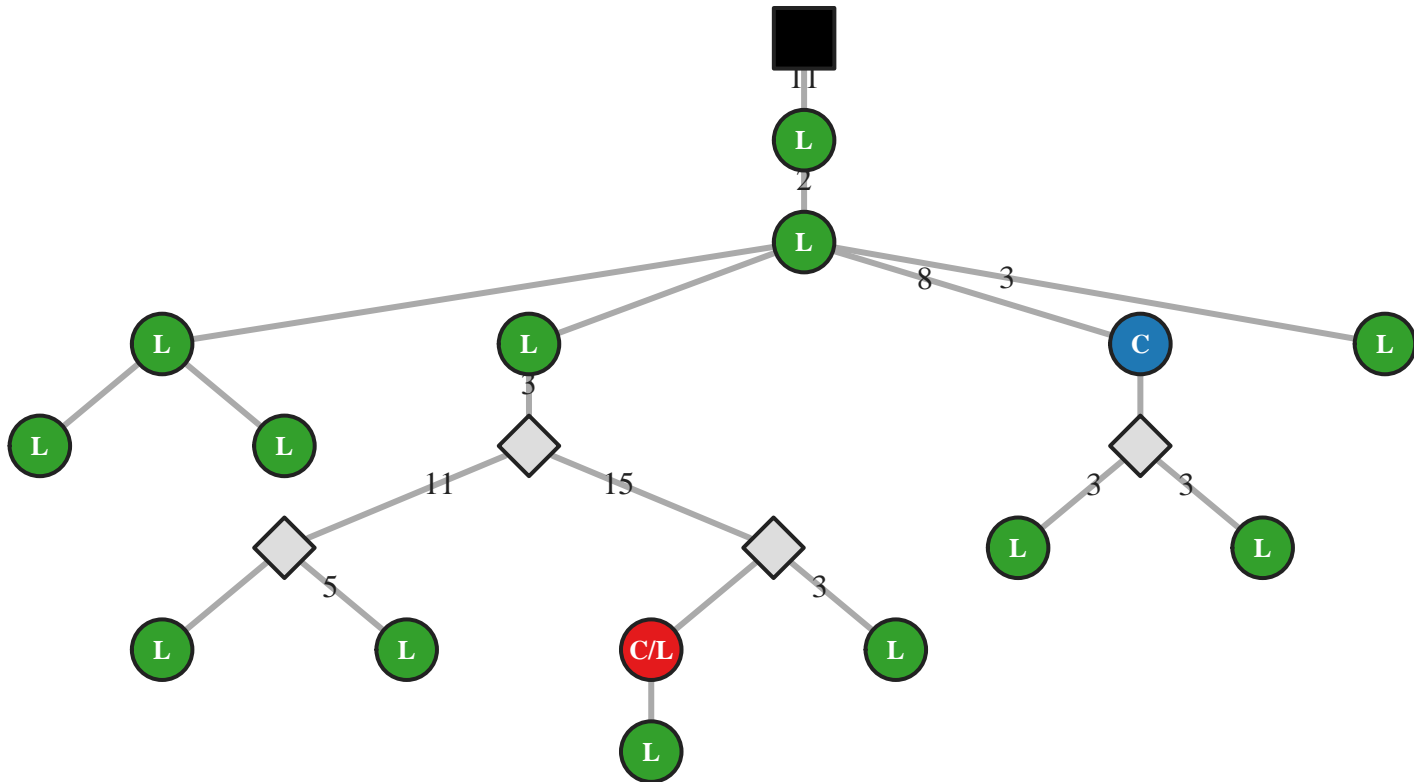
M5 IgG IGHV1-18/J4 57bp (4034)



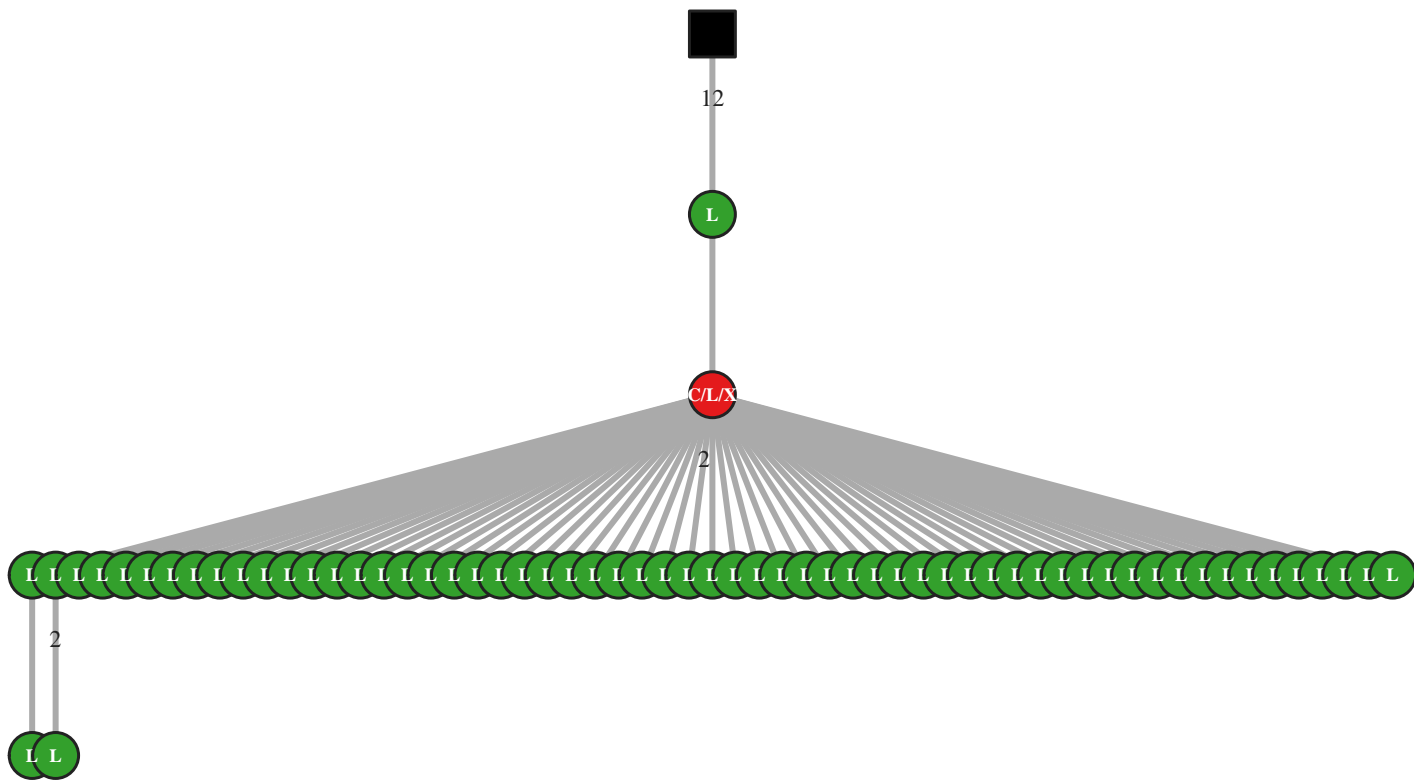
M5 IgG IGHV1-18/J4 63bp (31591)



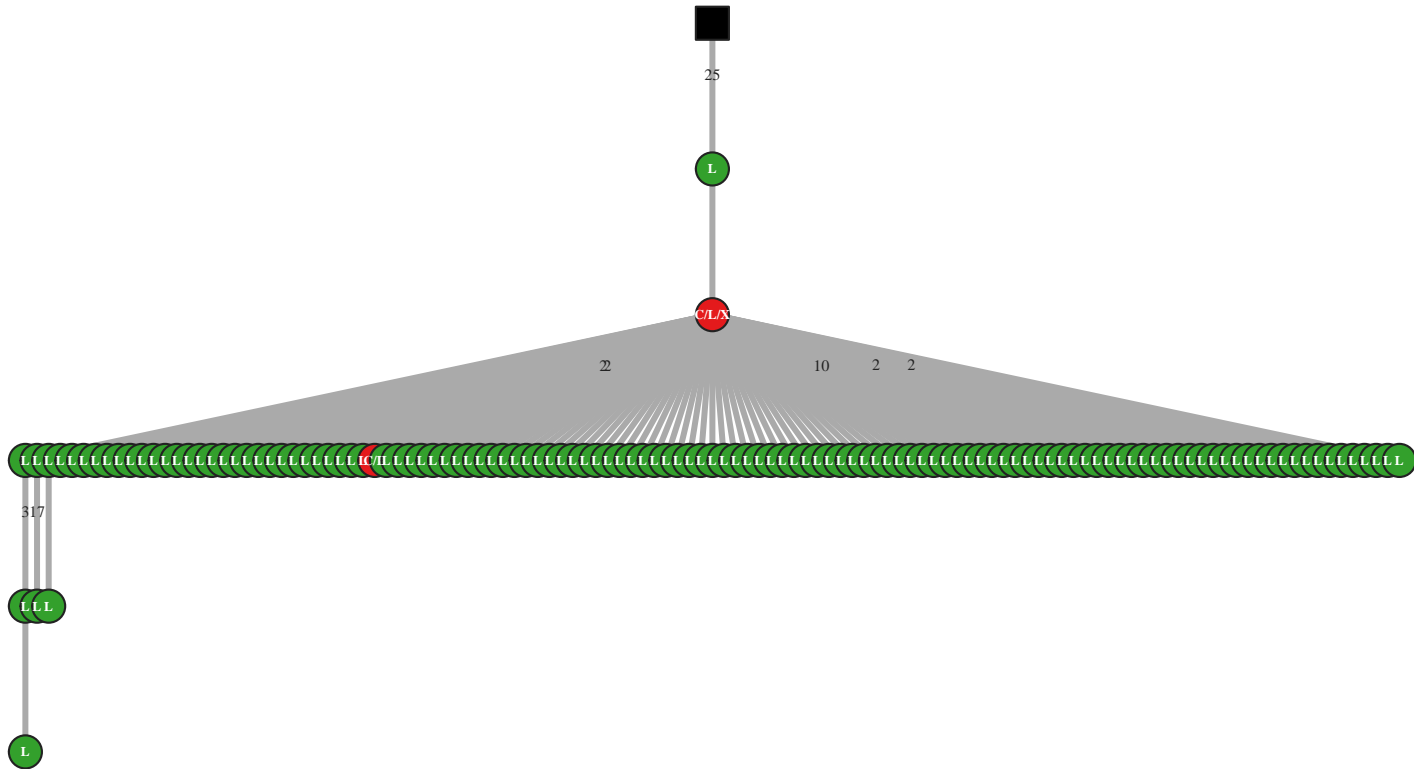
M5 IgG IGHV1-18/J4 63bp (31620)



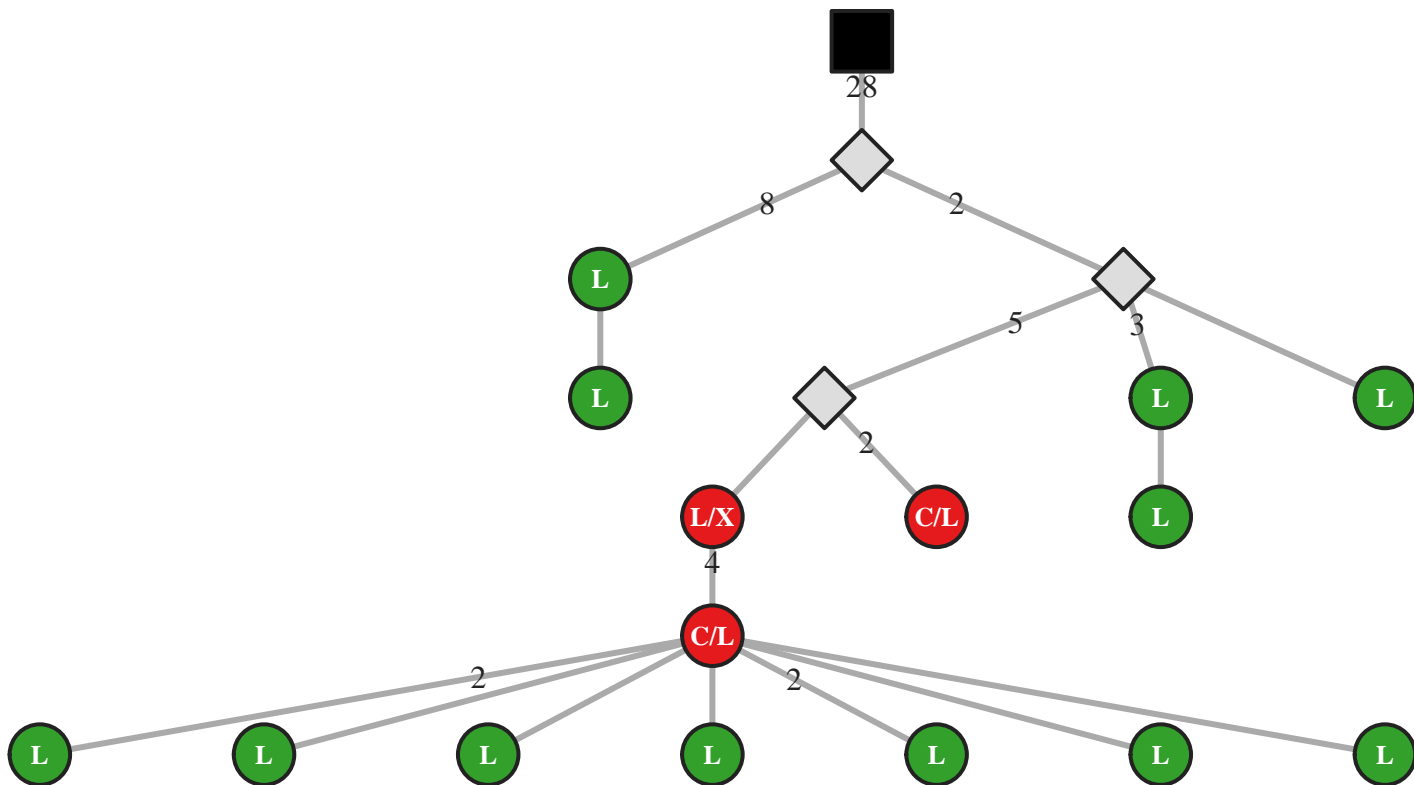
M5 IgG IGHV1-18/J5 27bp (22807)



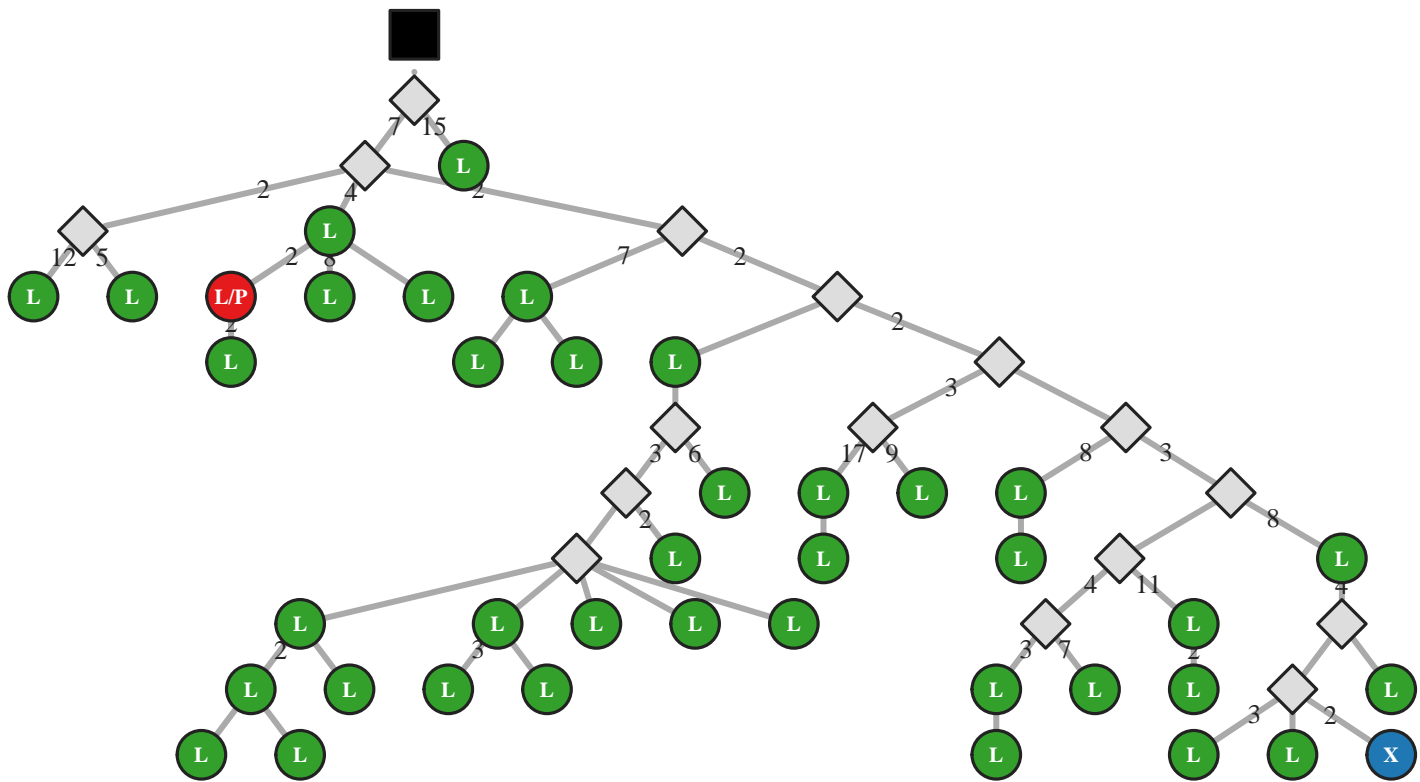
M5 IgG IGHV1-18/J5 45bp (49471)



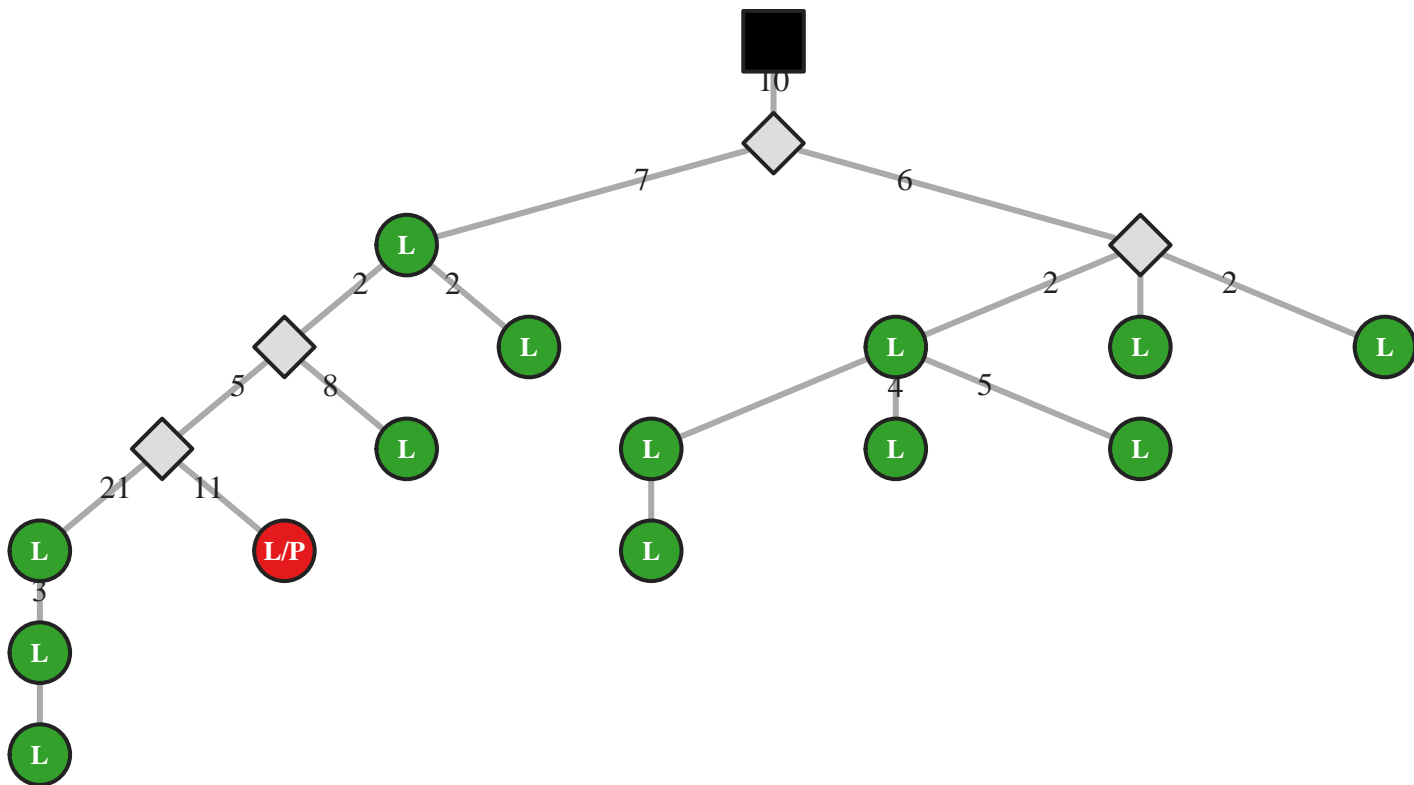
M5 IgG IGHV1-18/J5 48bp (22823)



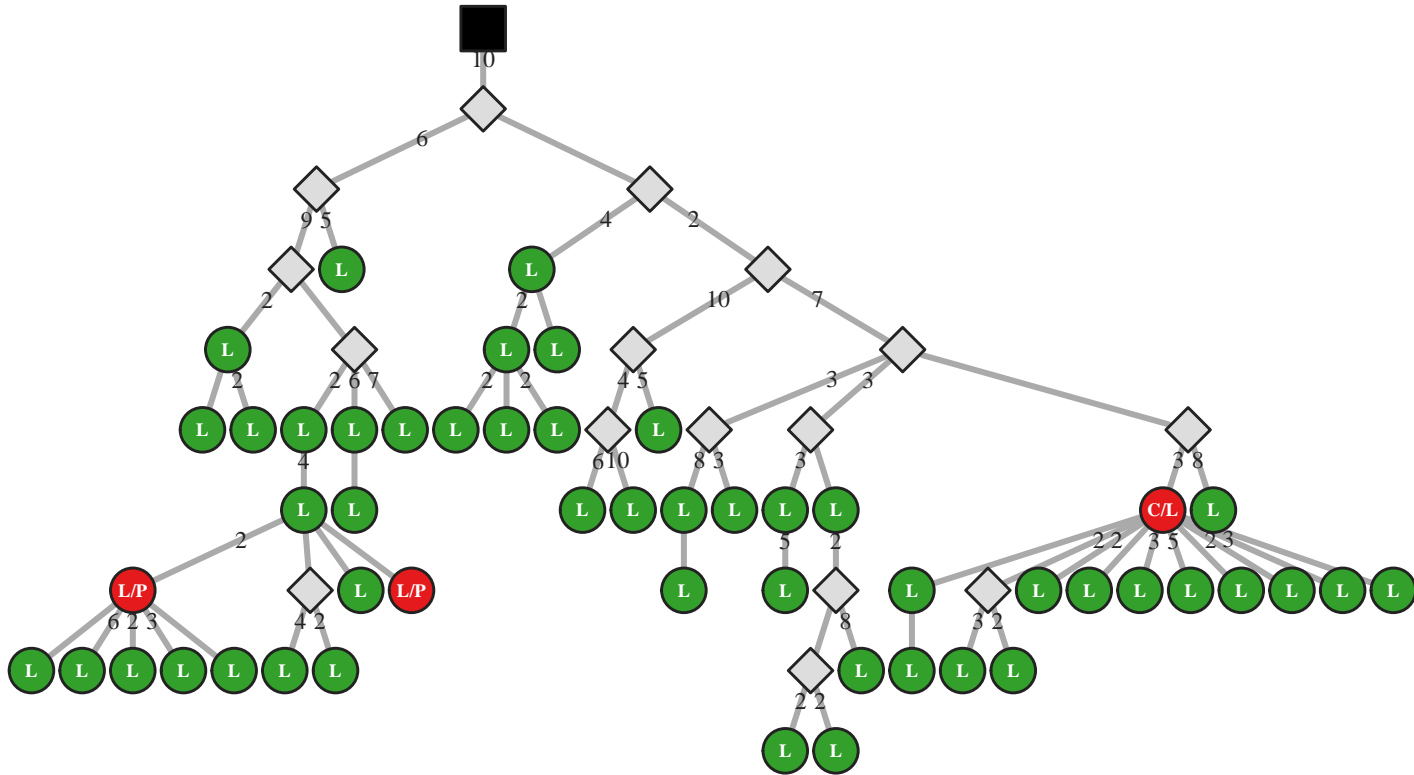
M5 IgG IGHV1-18/J5 51bp (22868)



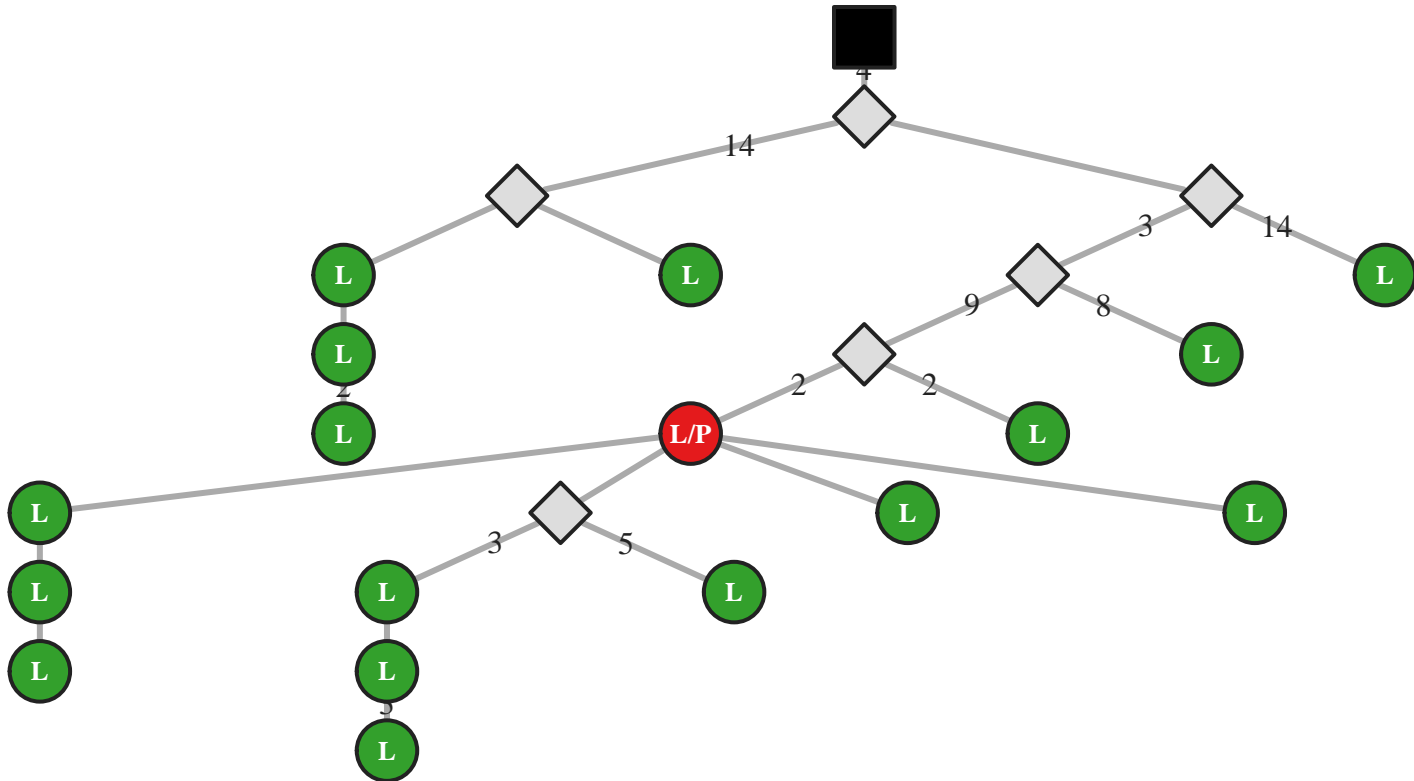
M5 IgG IGHV1-18/J5 63bp (22906)



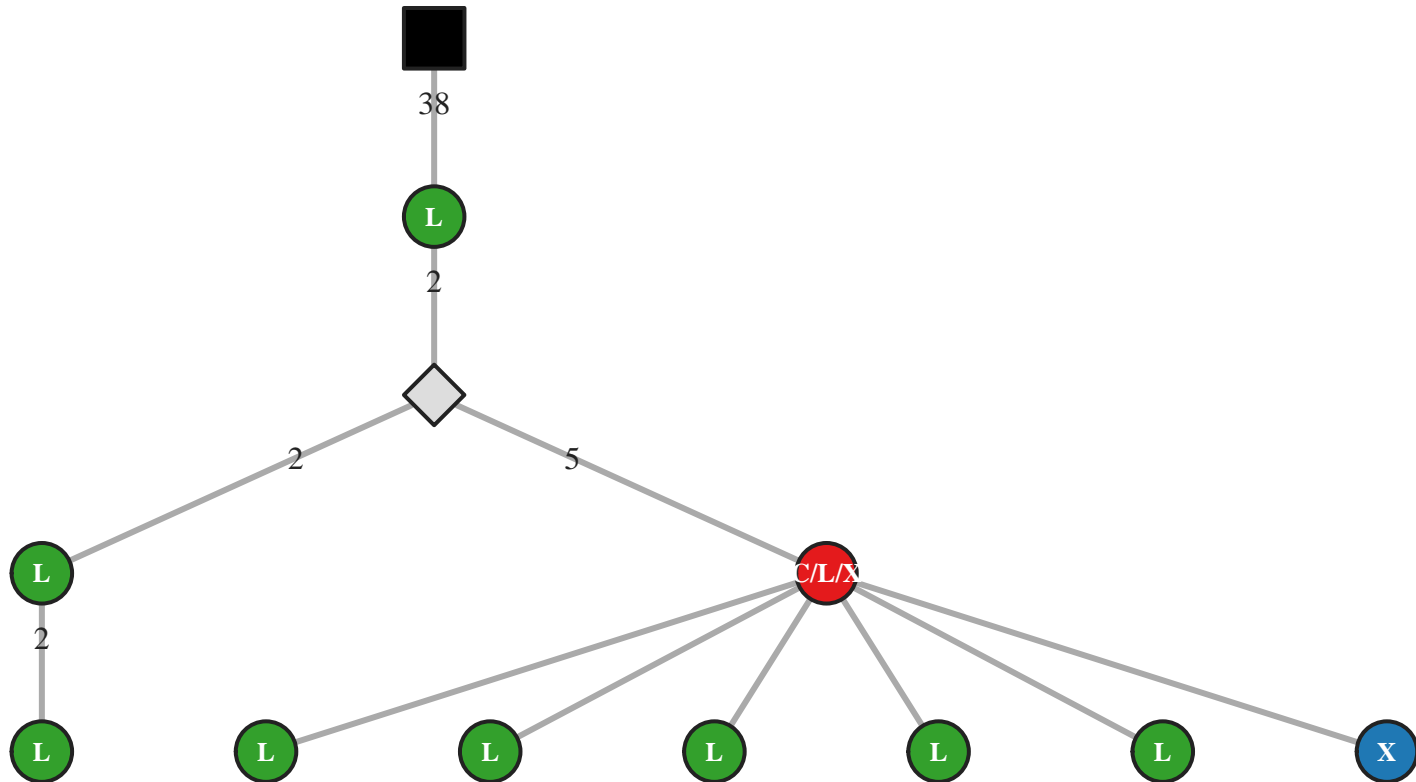
M5 IgG IGHV1-18/J5 66bp (31644)



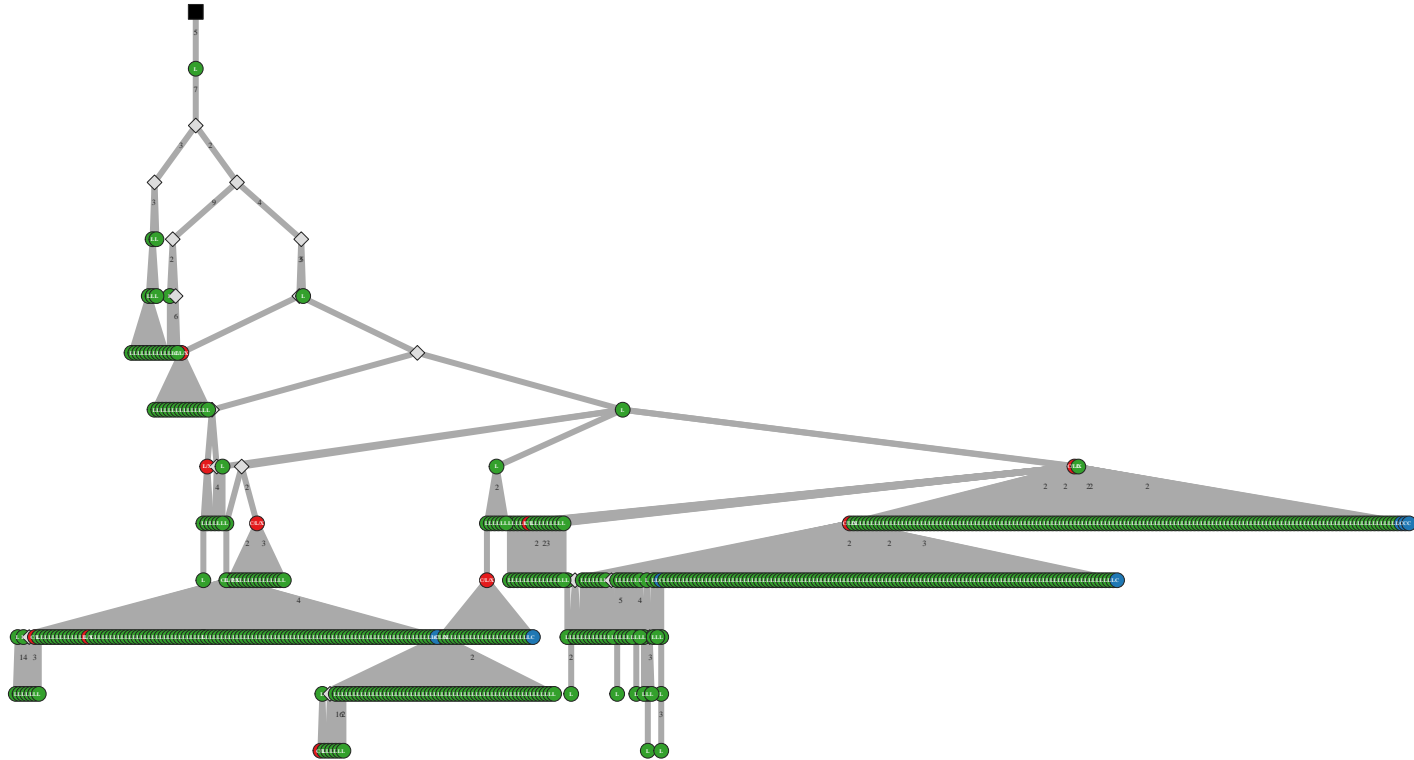
M5 IgG IGHV1-18/J6 30bp (49480)



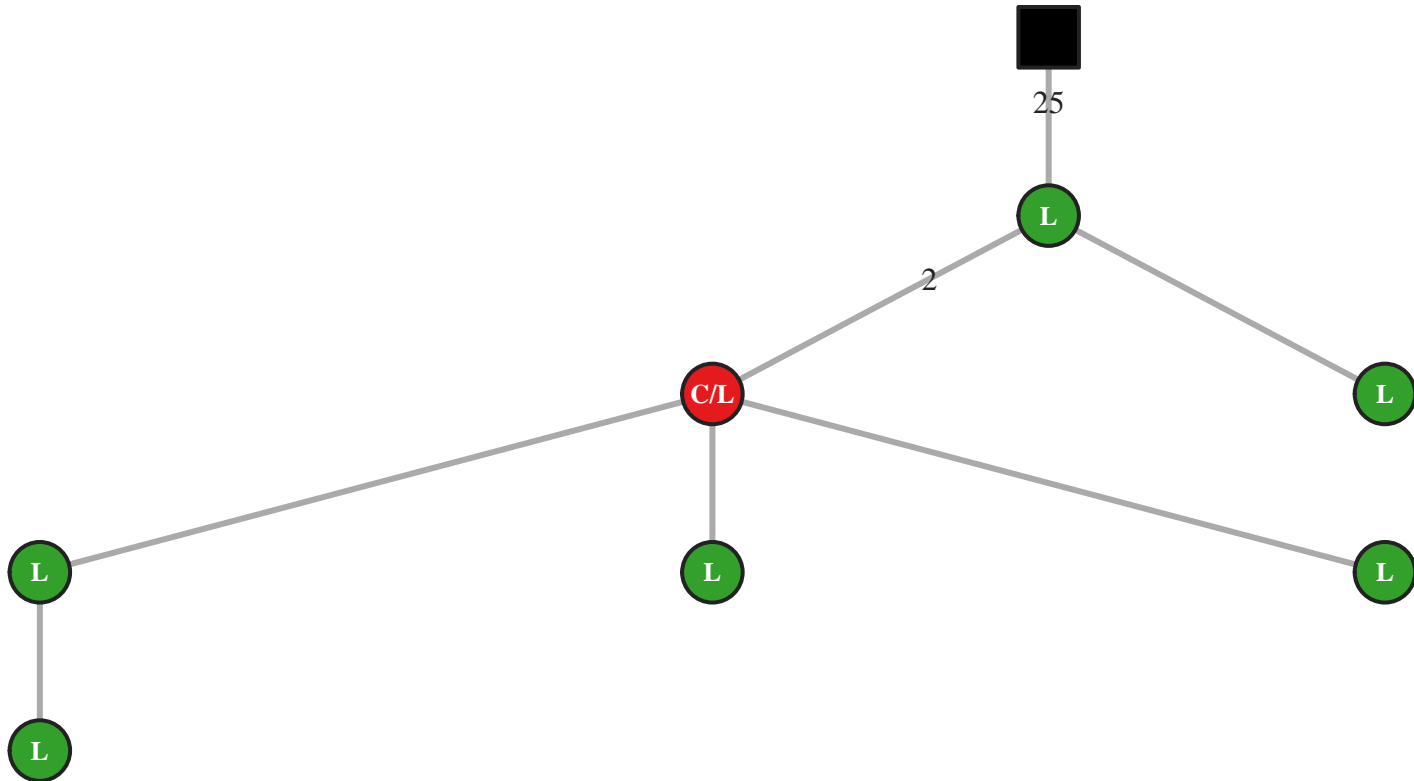
M5 IgG IGHV1-18/J6 36bp (4074)



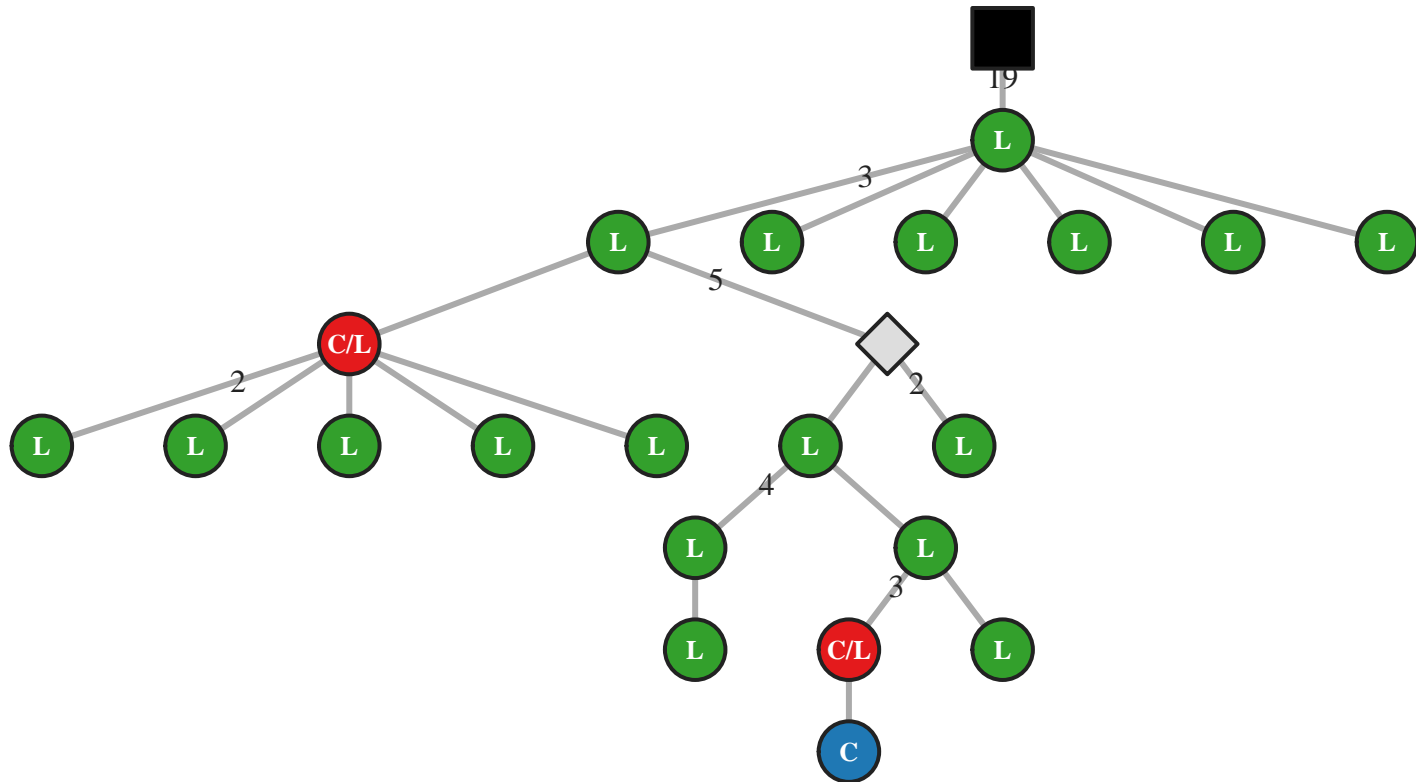
M5 IgG IGHV1-18/J6 48bp (22941)



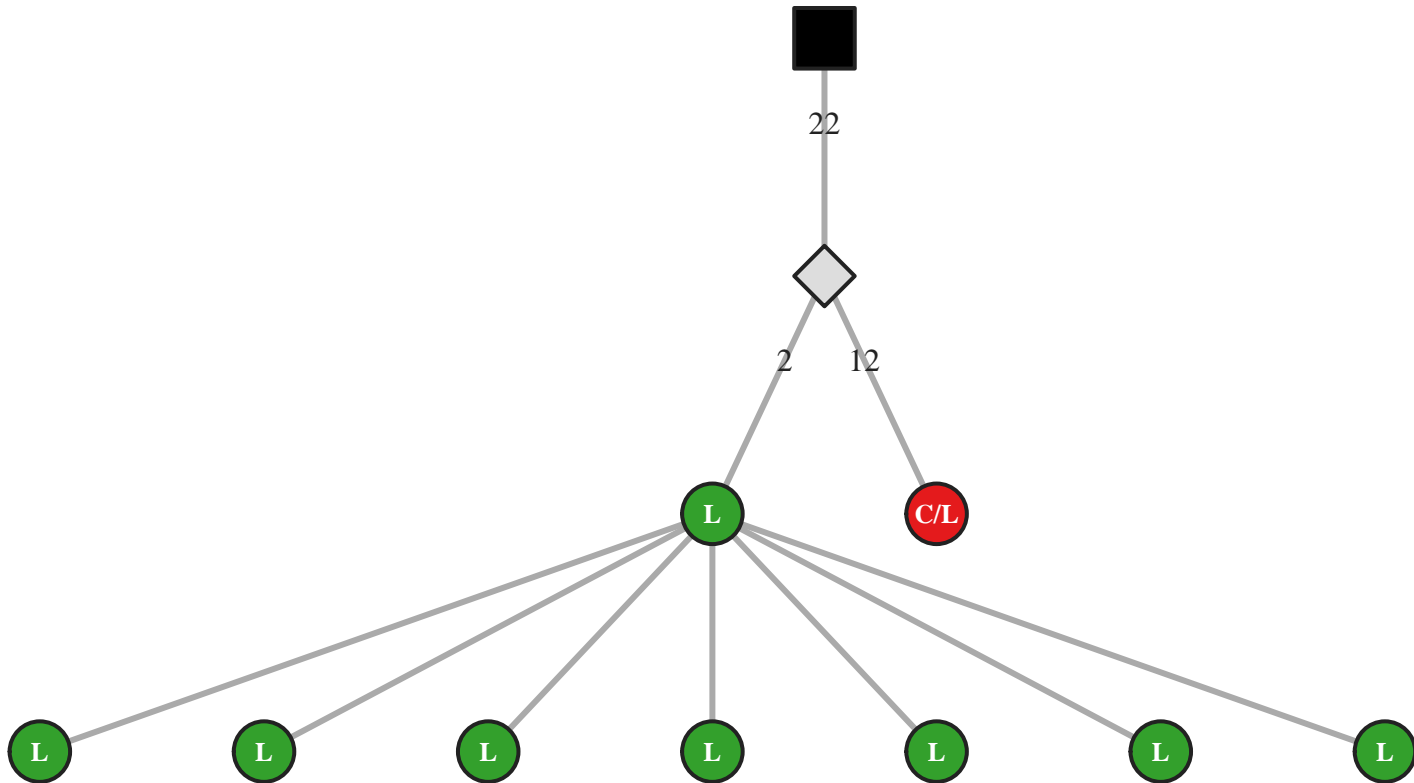
M5 IgG IGHV1-18/J6 51bp (13592)



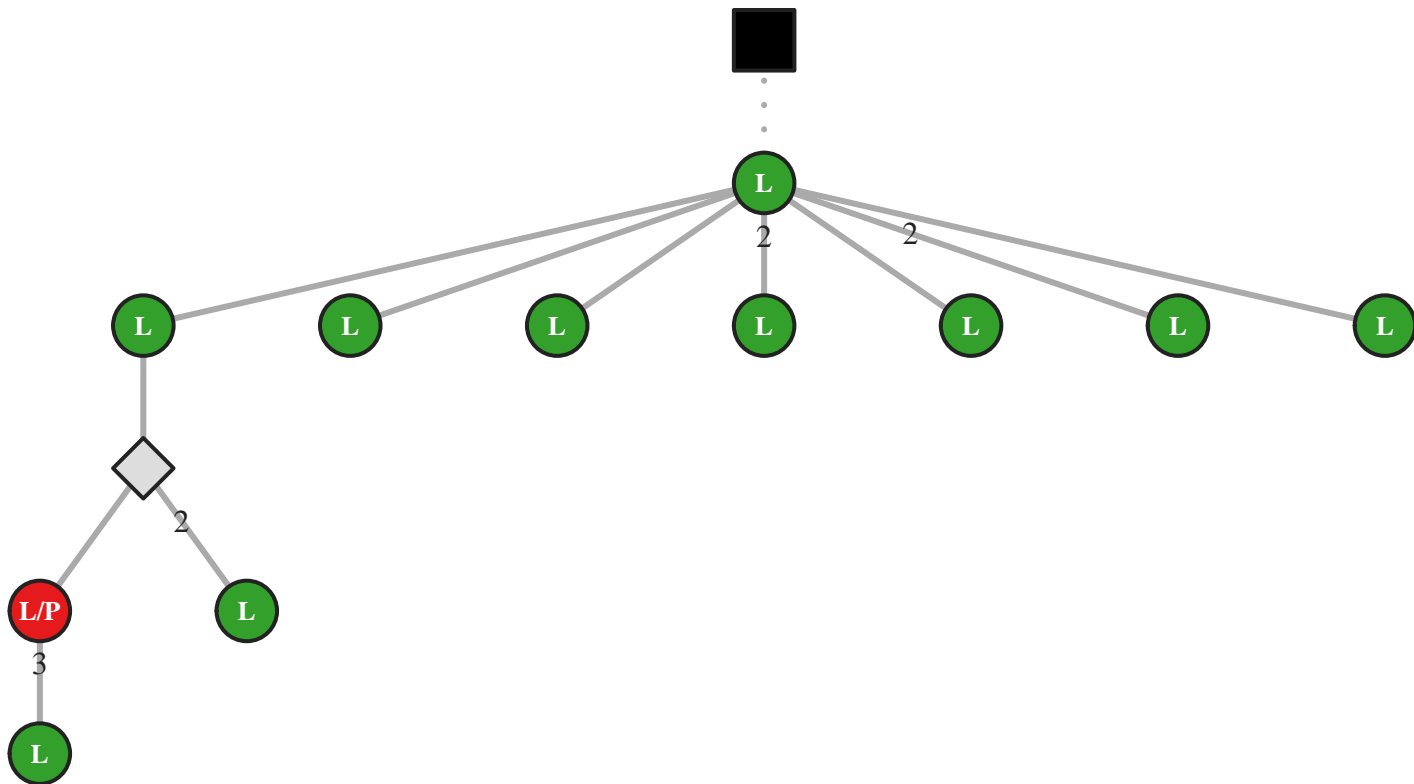
M5 IgG IGHV1-18/J6 54bp (49505)



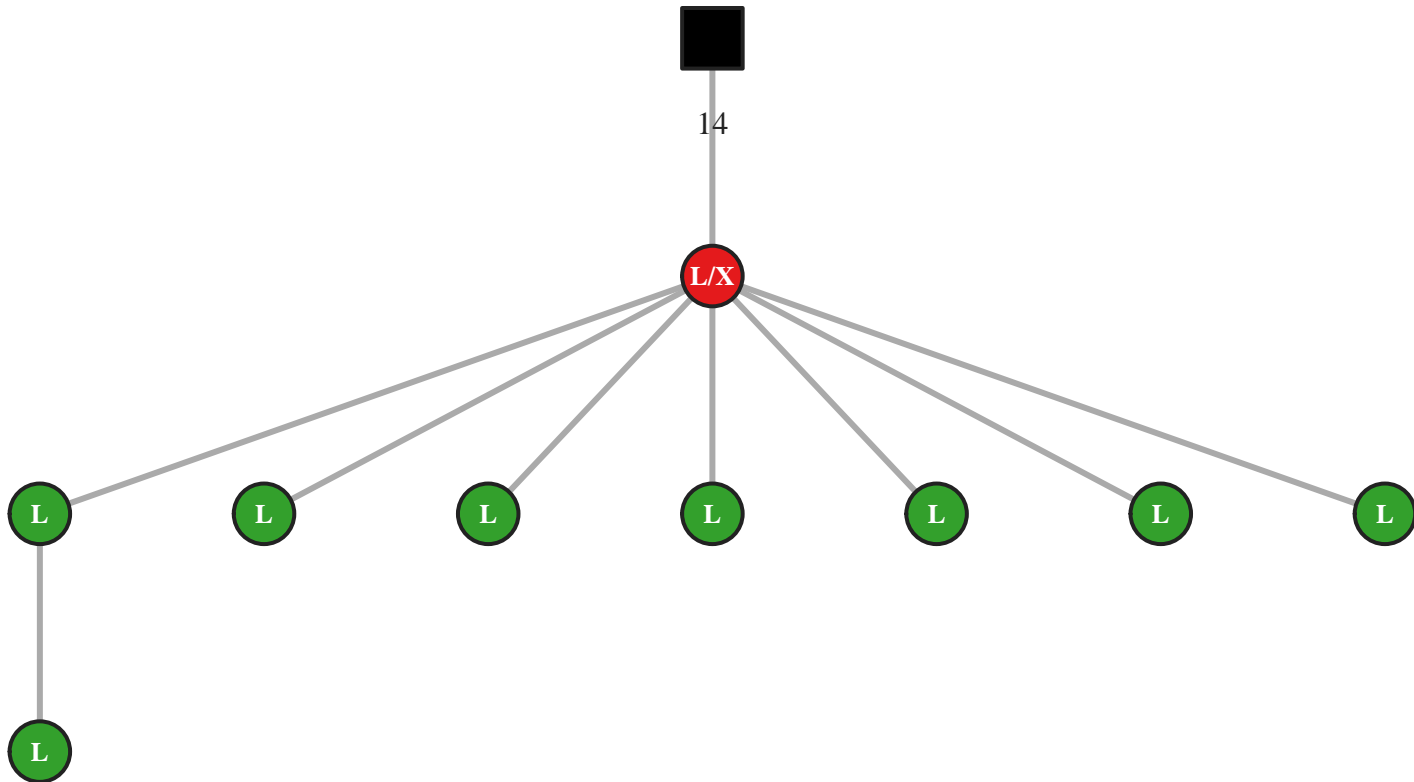
M5 IgA IGHV1-18/J6 60bp (38157)



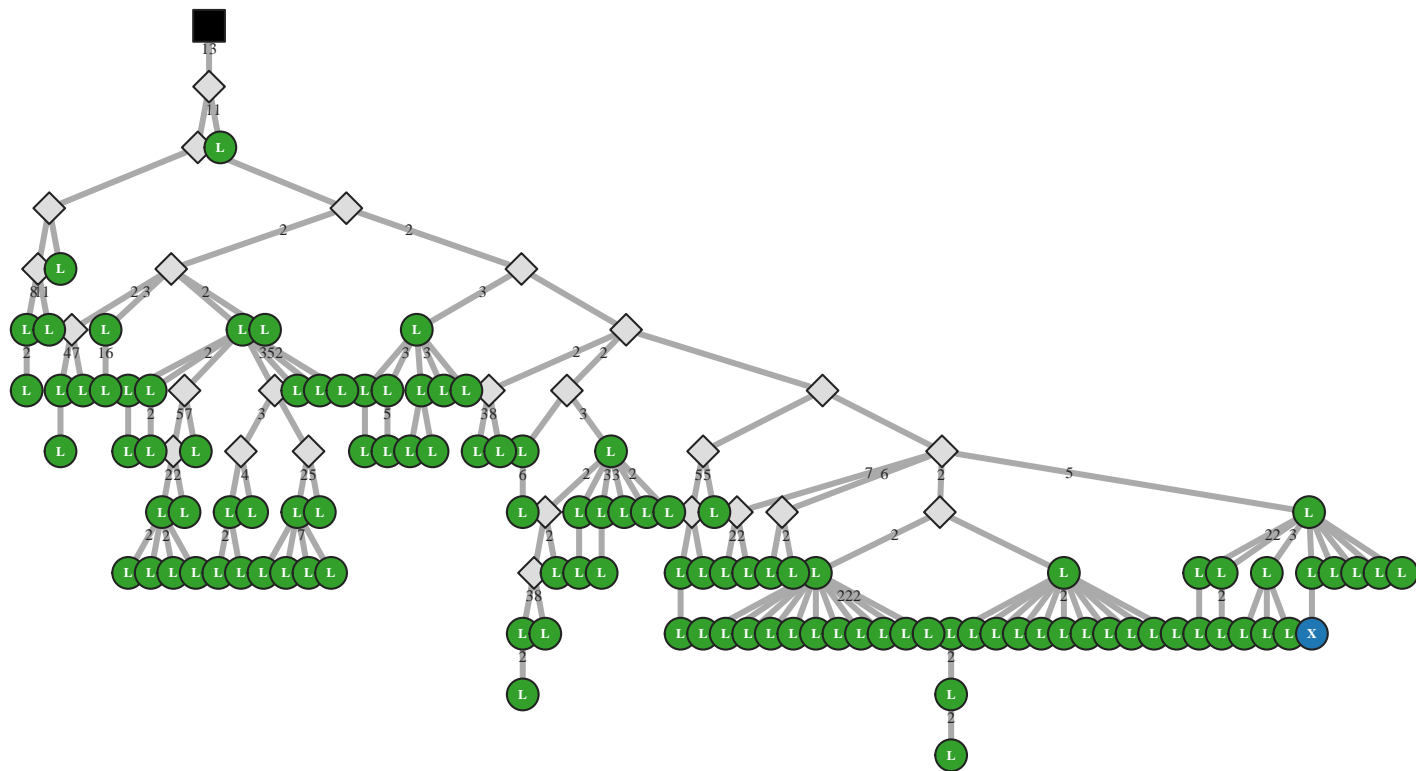
M5 IgG IGHV1-18/J6 60bp (13631)



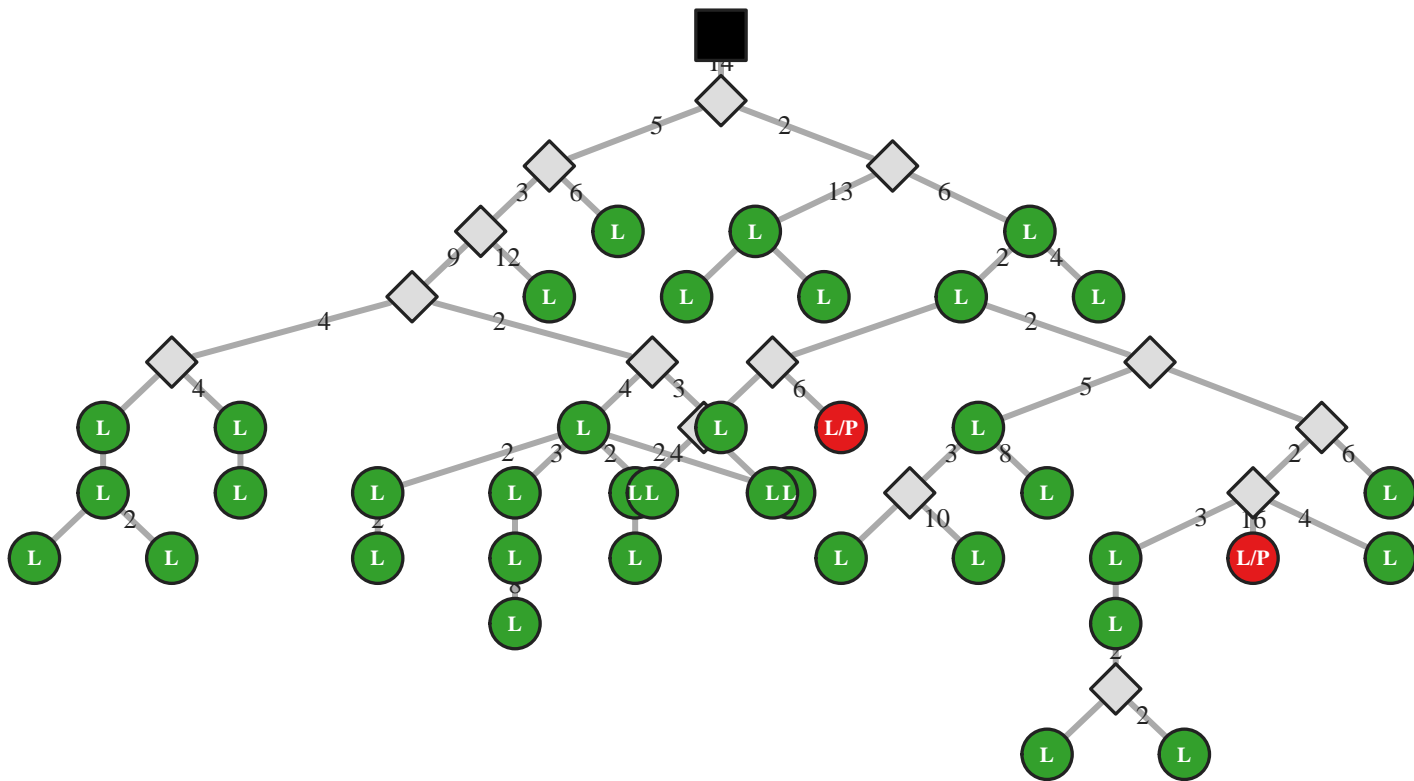
M5 IgG IGHV1-18/J6 63bp (22991)



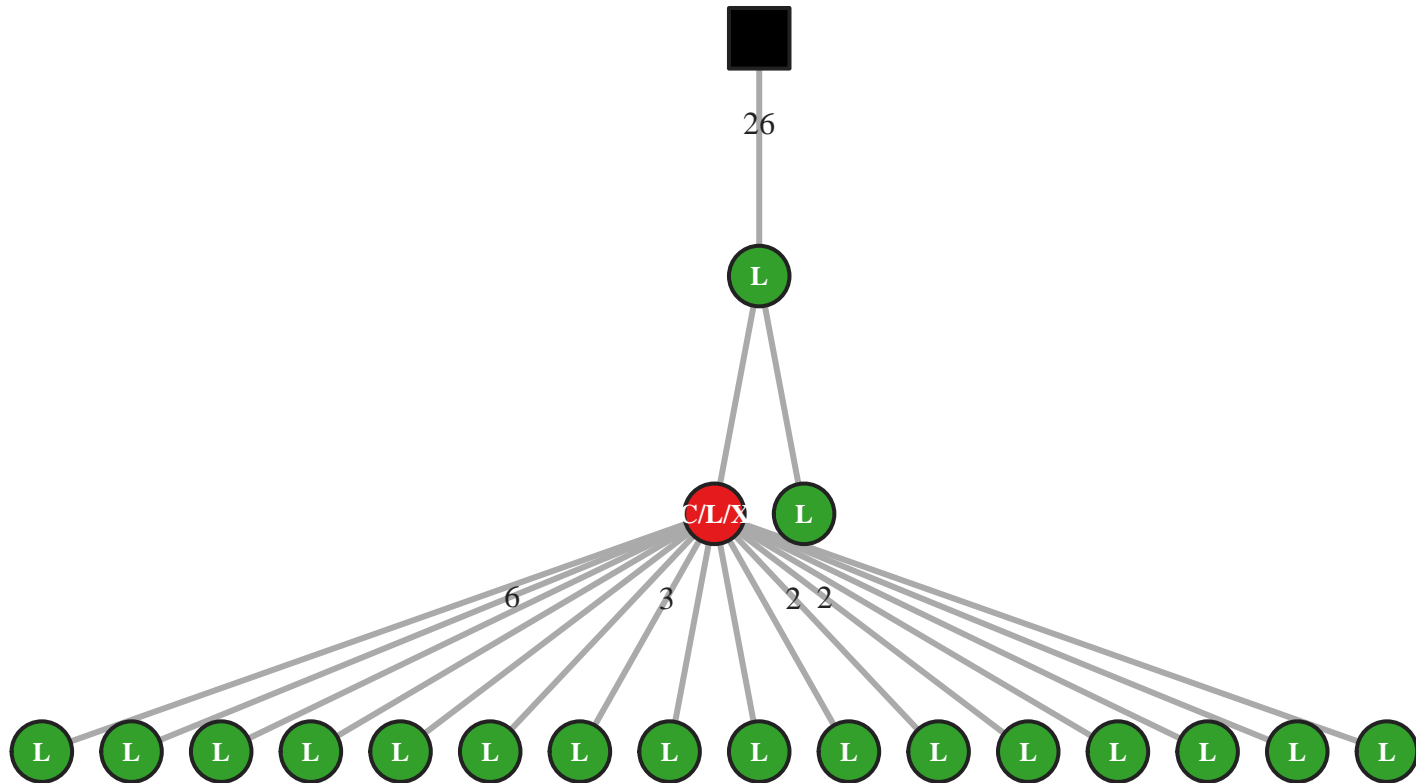
M5 IgG IGHV1-18/J6 75bp (39783)



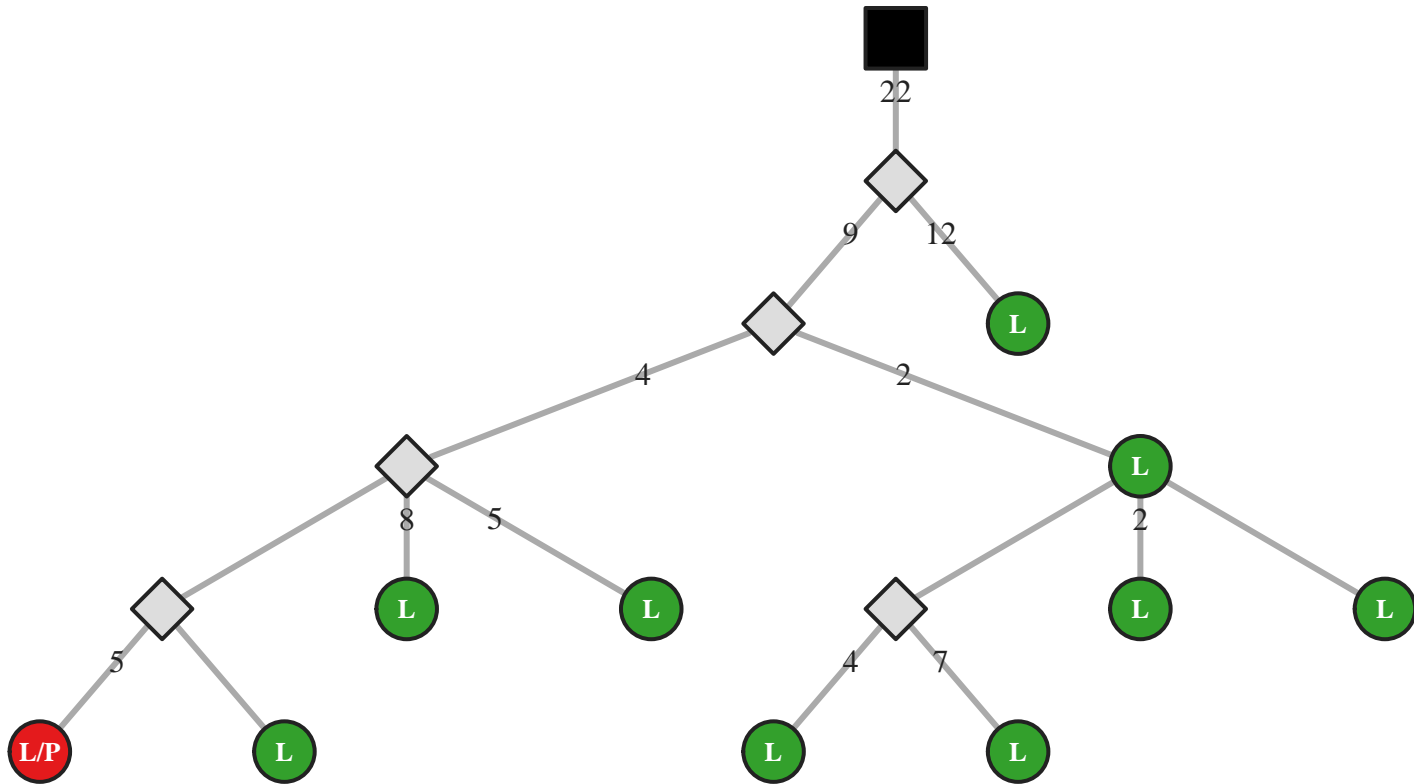
M5 IgG IGHV1-2/J3 39bp (13731)



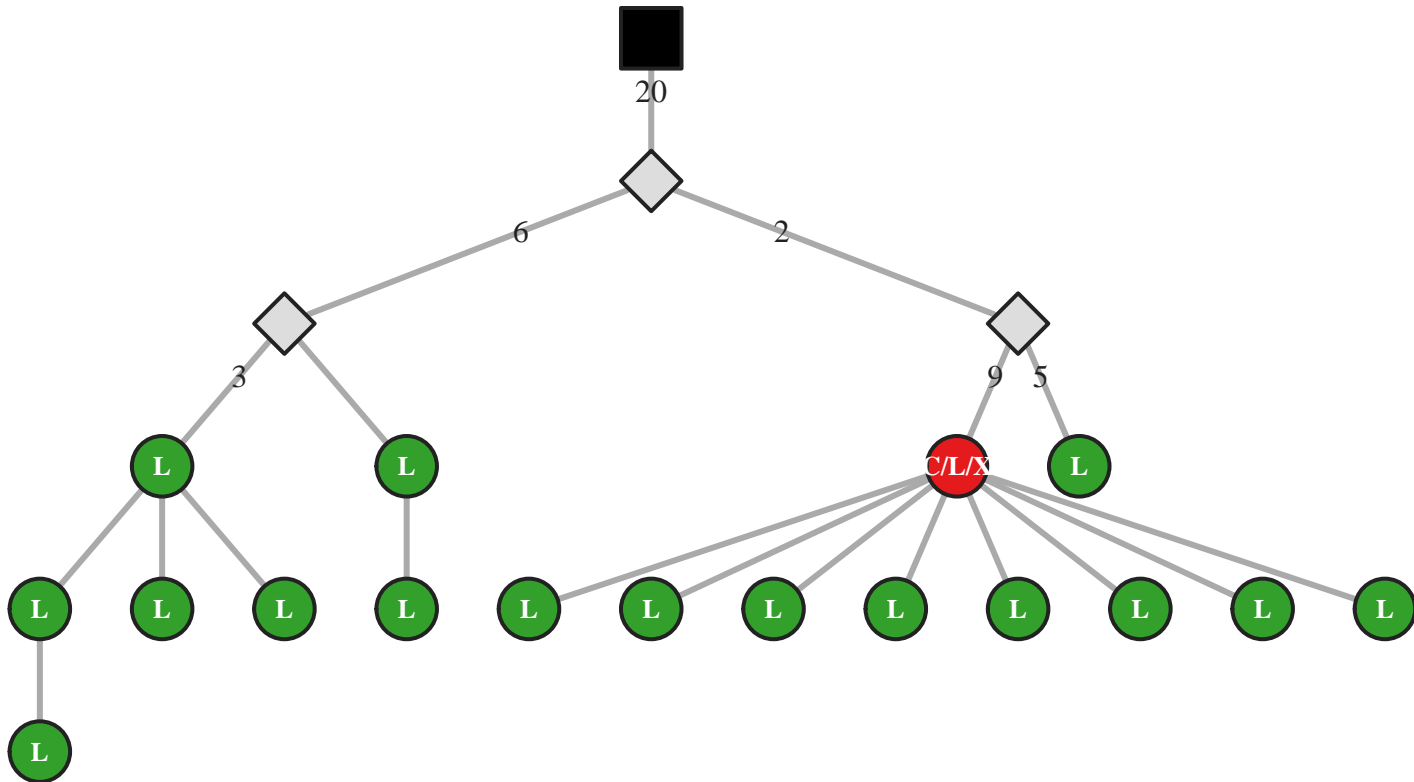
M5 IgG IGHV1-2/J3 45bp (31760)



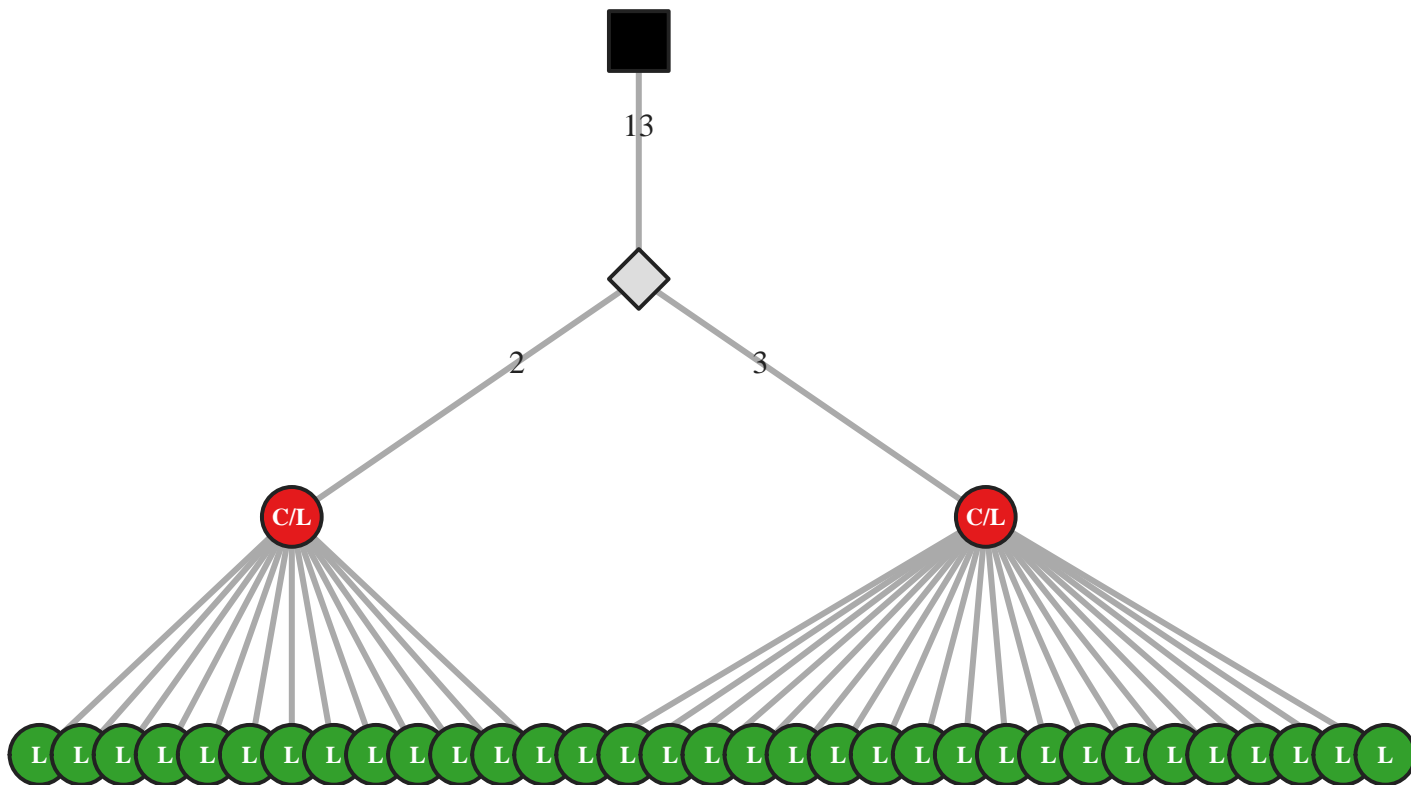
M5 IgG IGHV1-2/J3 51bp (4250)



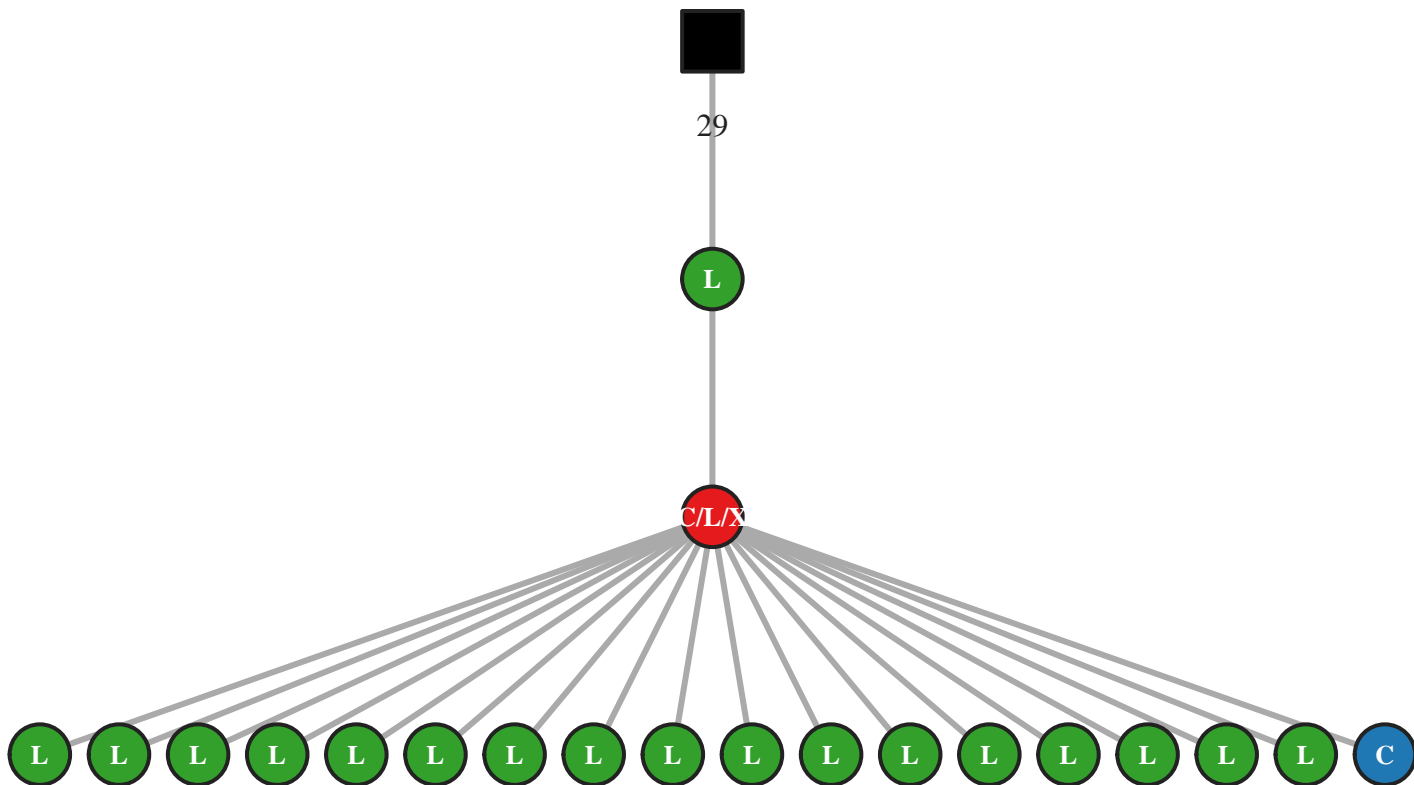
M5 IgG IGHV1-2/J3 51bp (4255)



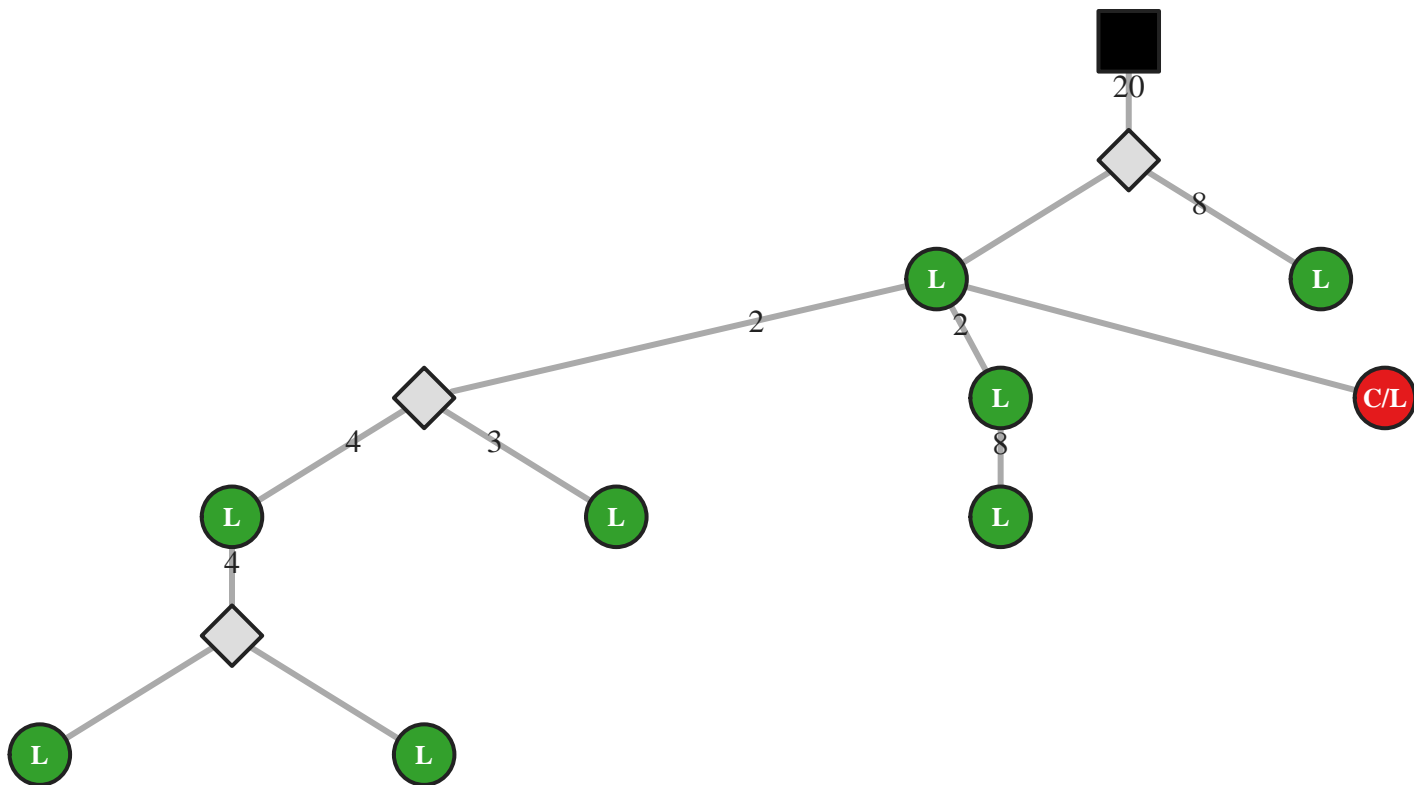
M5 IgA IGHV1-2/J3 57bp (30058)



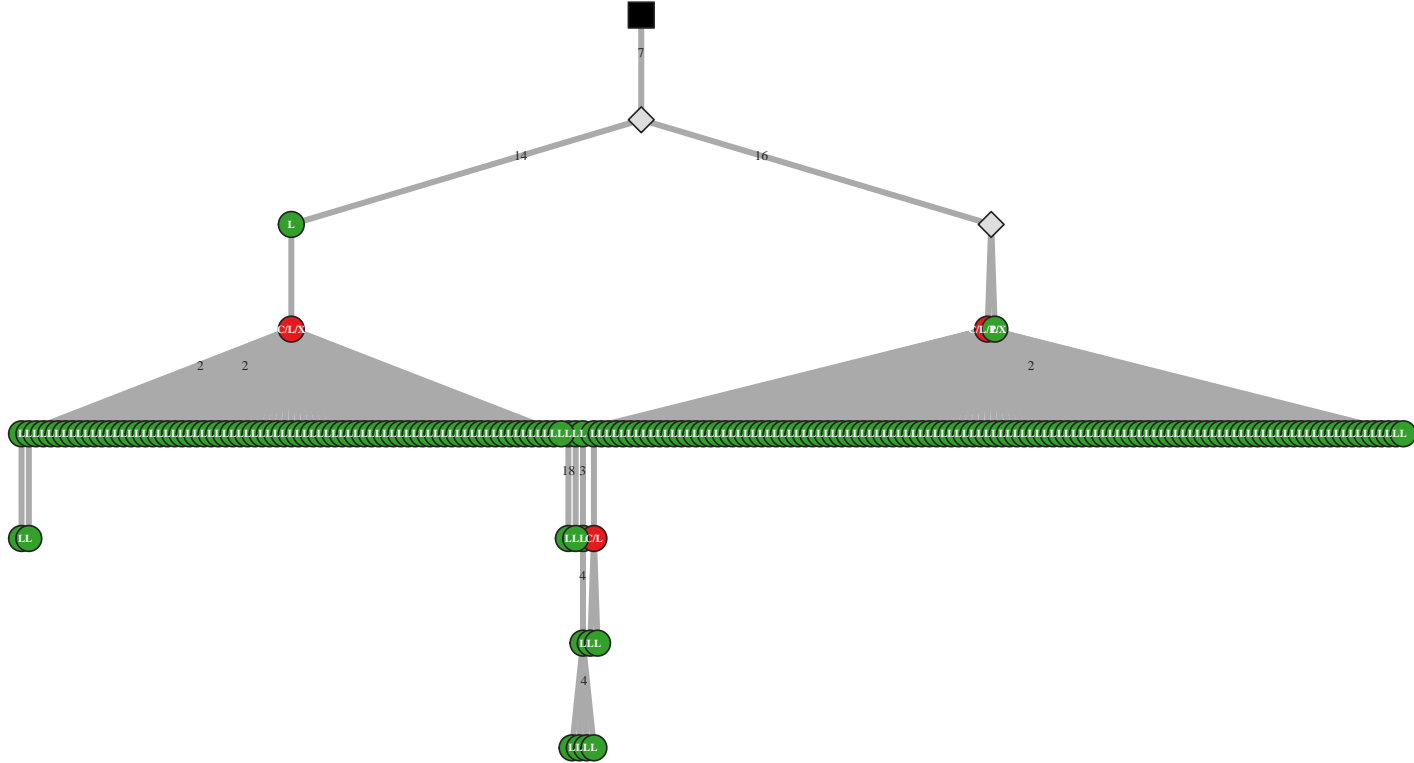
M5 IgG IGHV1-2/J4 24bp (23162)



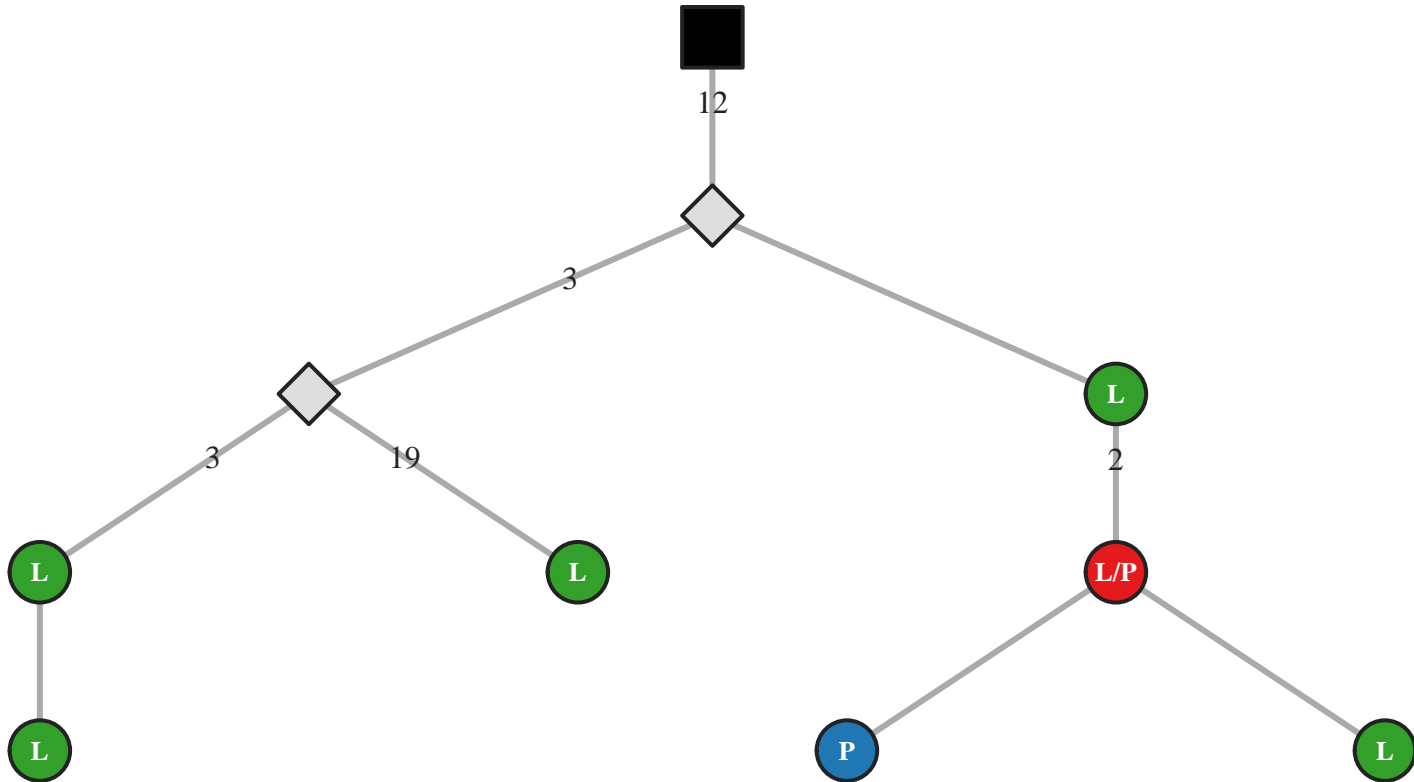
M5 IgM IGHV1-2/J4 33bp (20270)



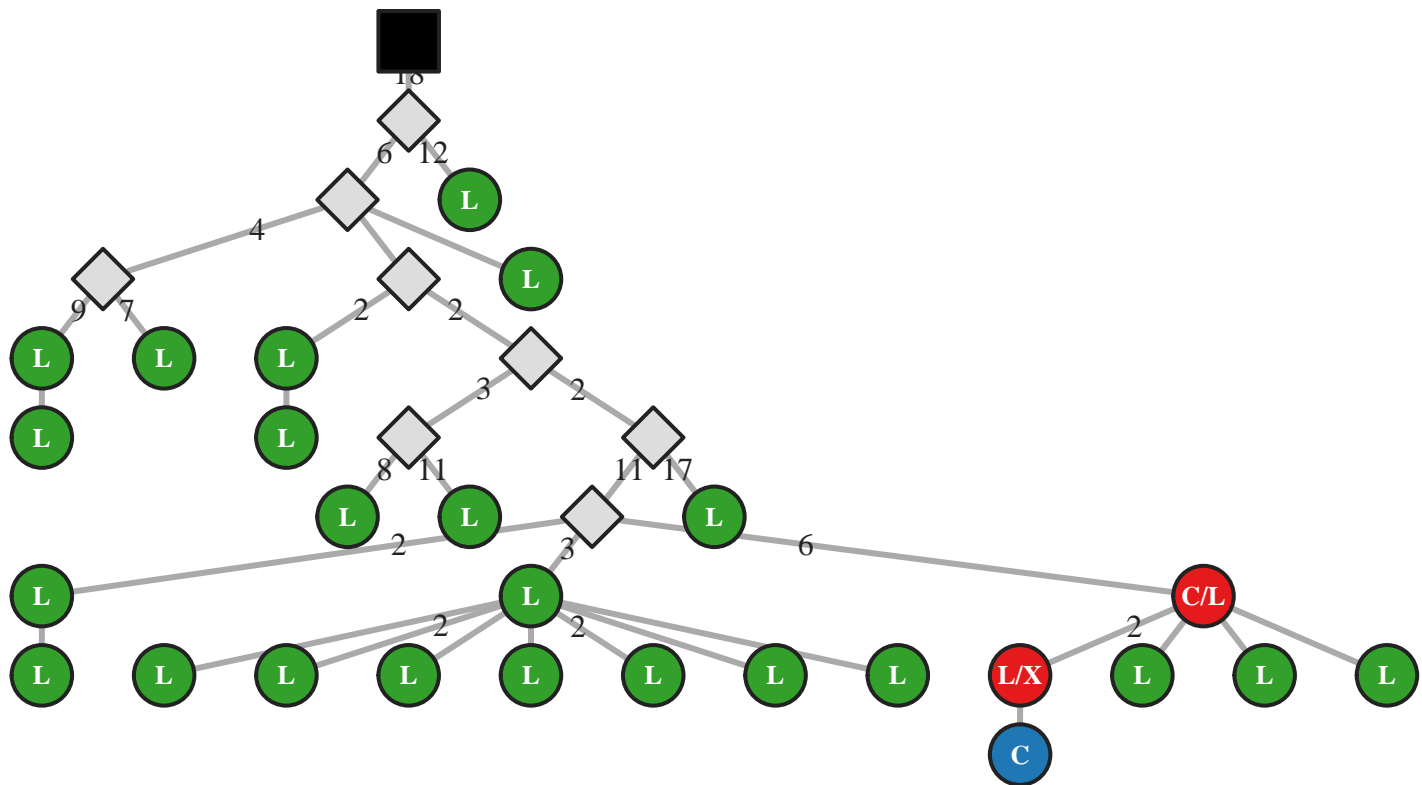
M5 IgG IGHV1-2/J4 36bp (4289)



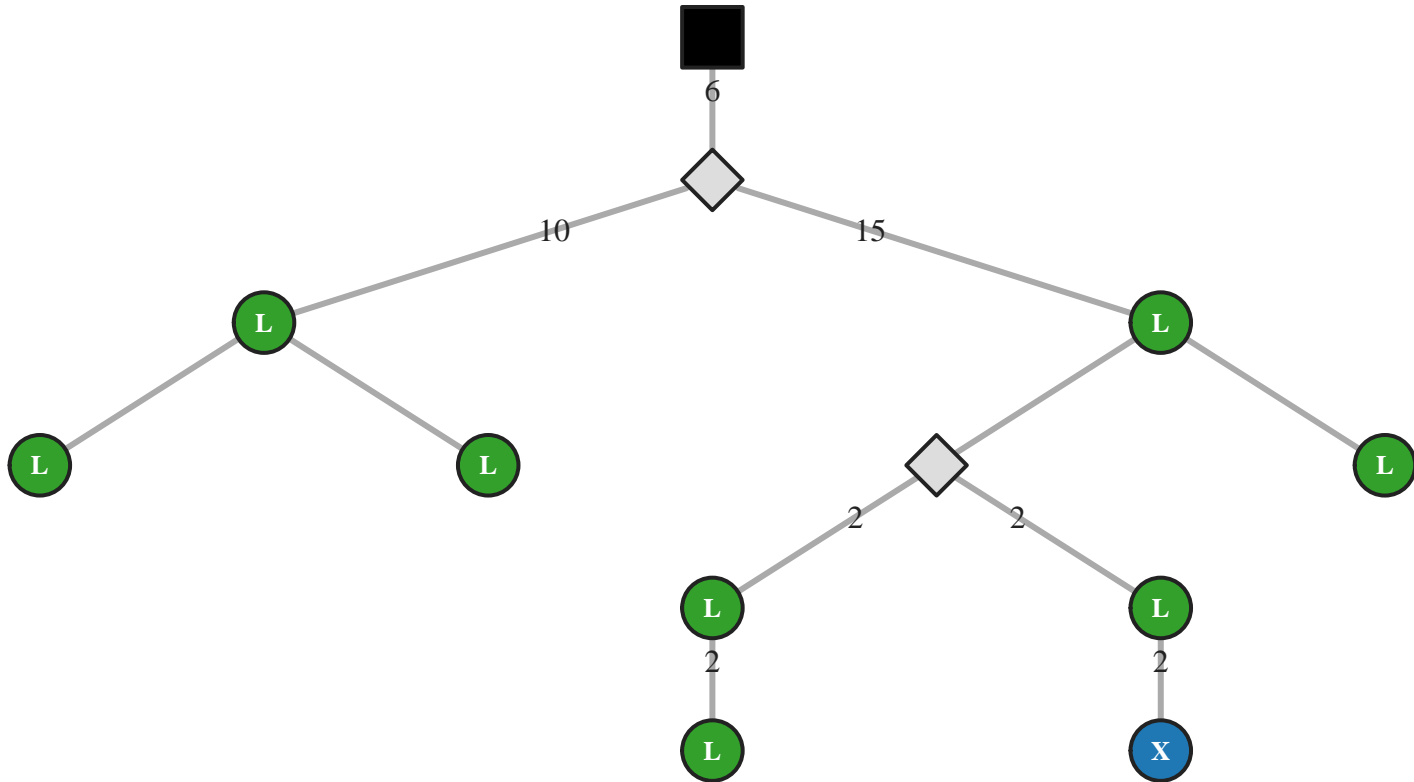
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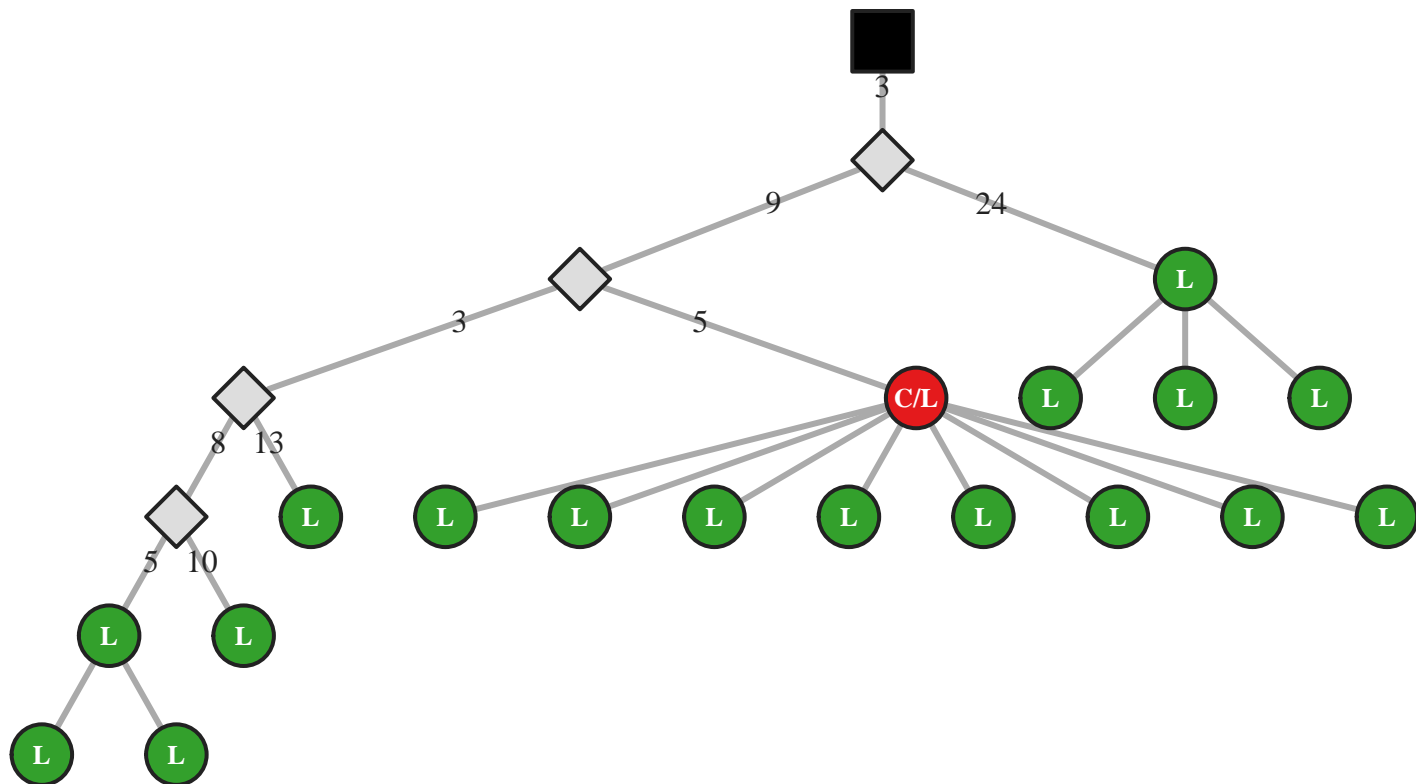
M5 IgG IGHV1-2/J4 39bp (13795)



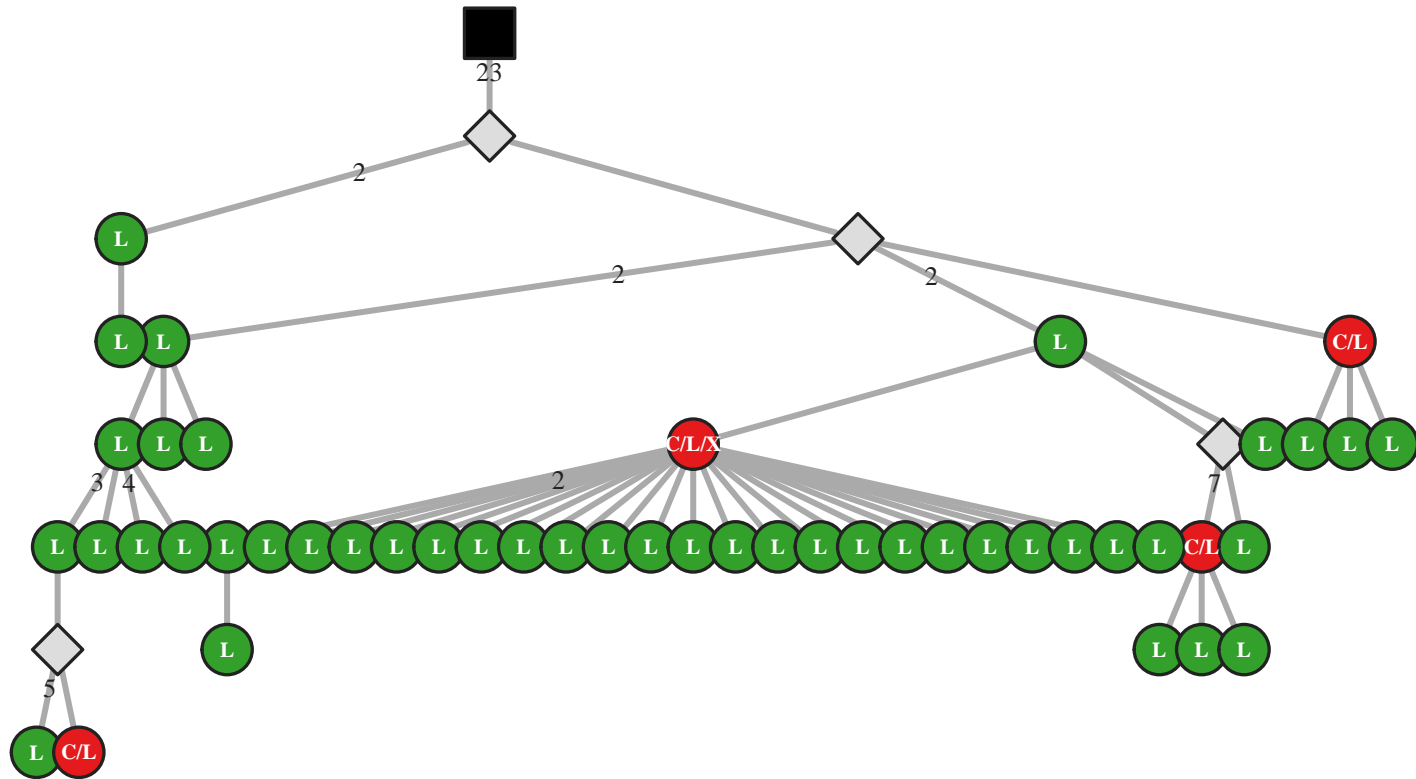
M5 IgG IGHV1-2/J4 39bp (13796)



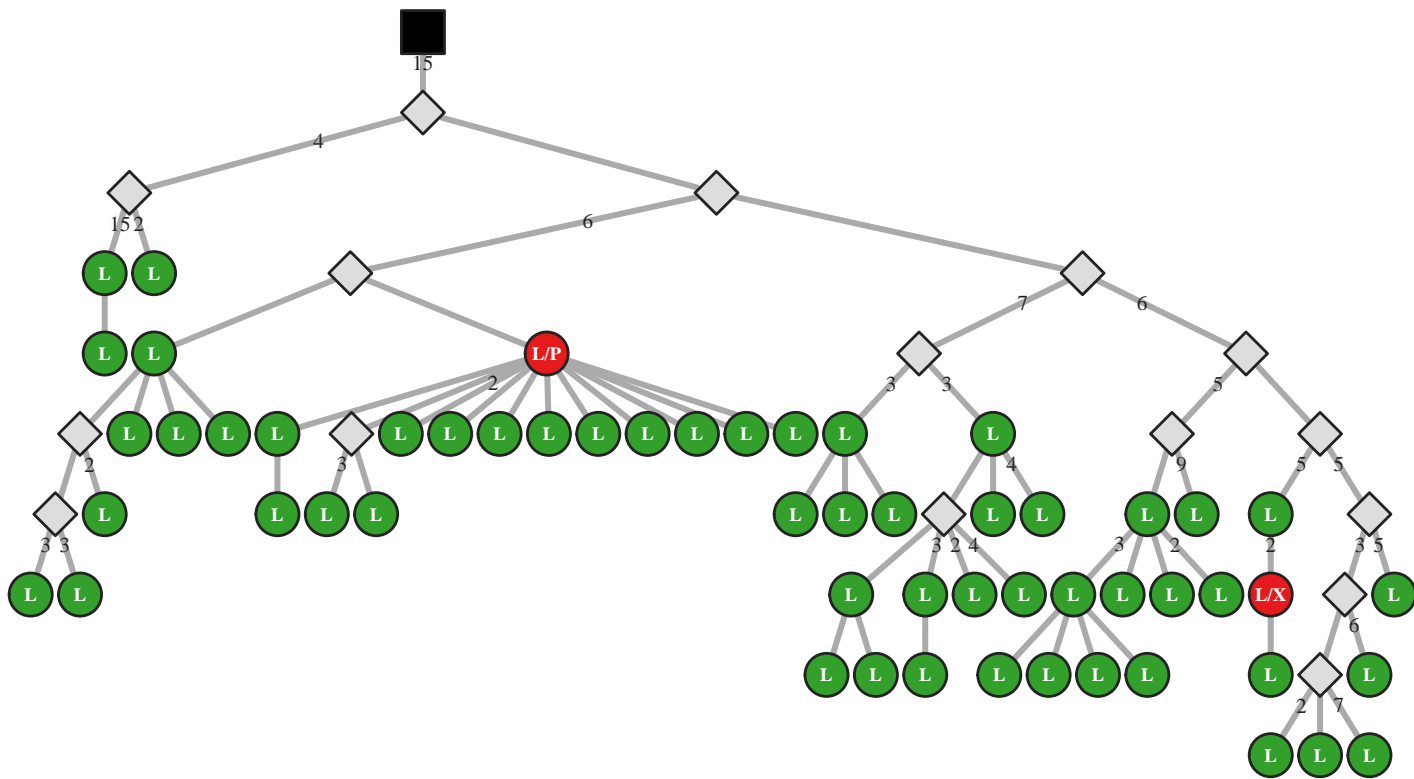
M5 IgG IGHV1-2/J4 39bp (13801)



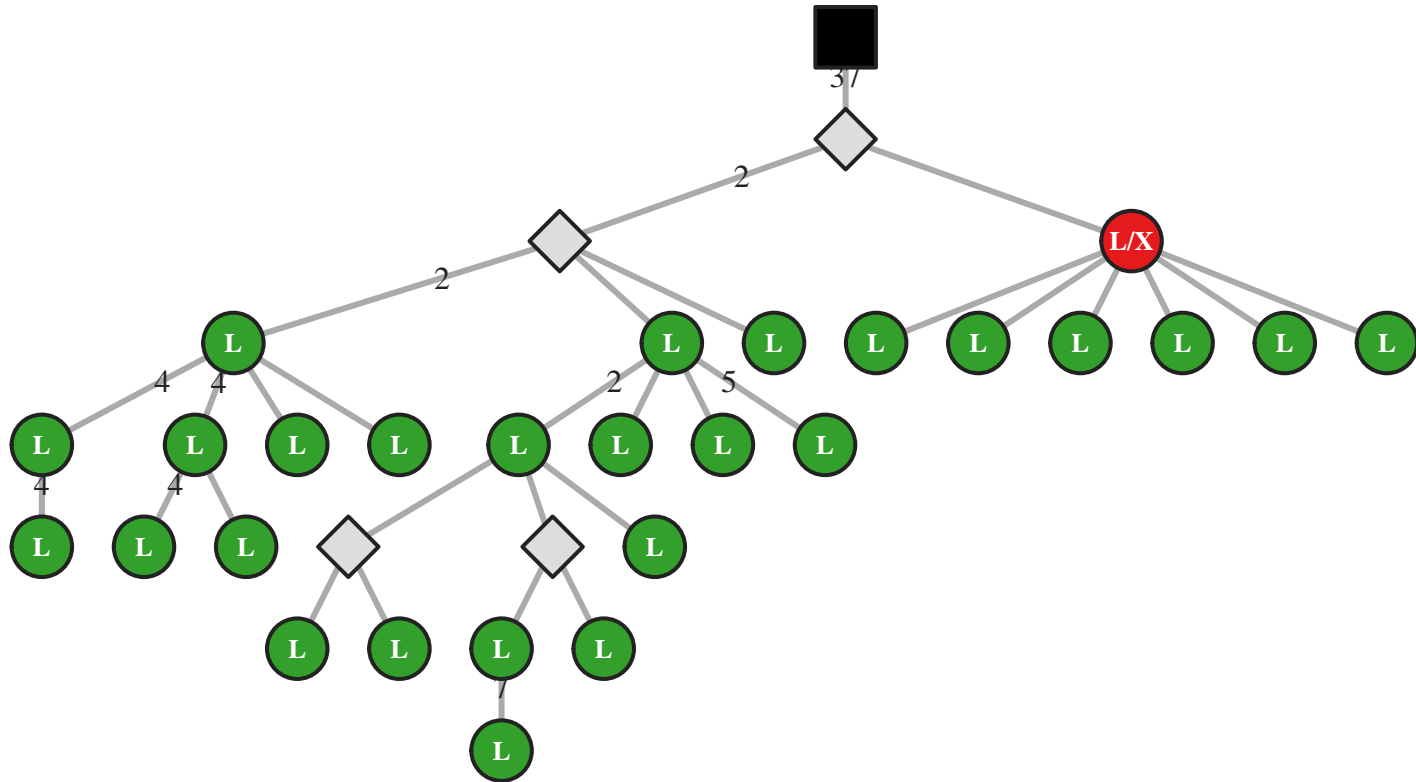
M5 IgG IGHV1-2/J4 39bp (13803)



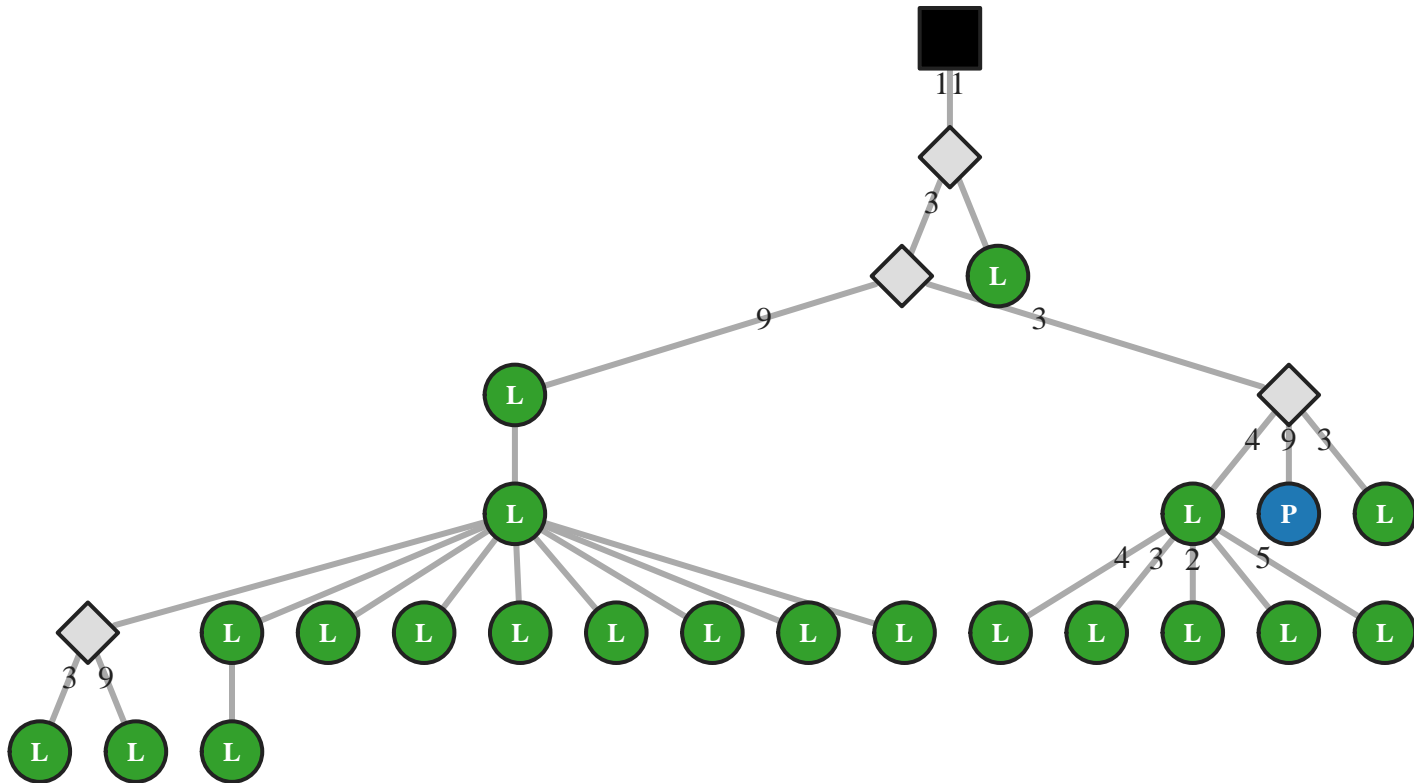
M5 IgG IGHV1-2/J4 39bp (13831)



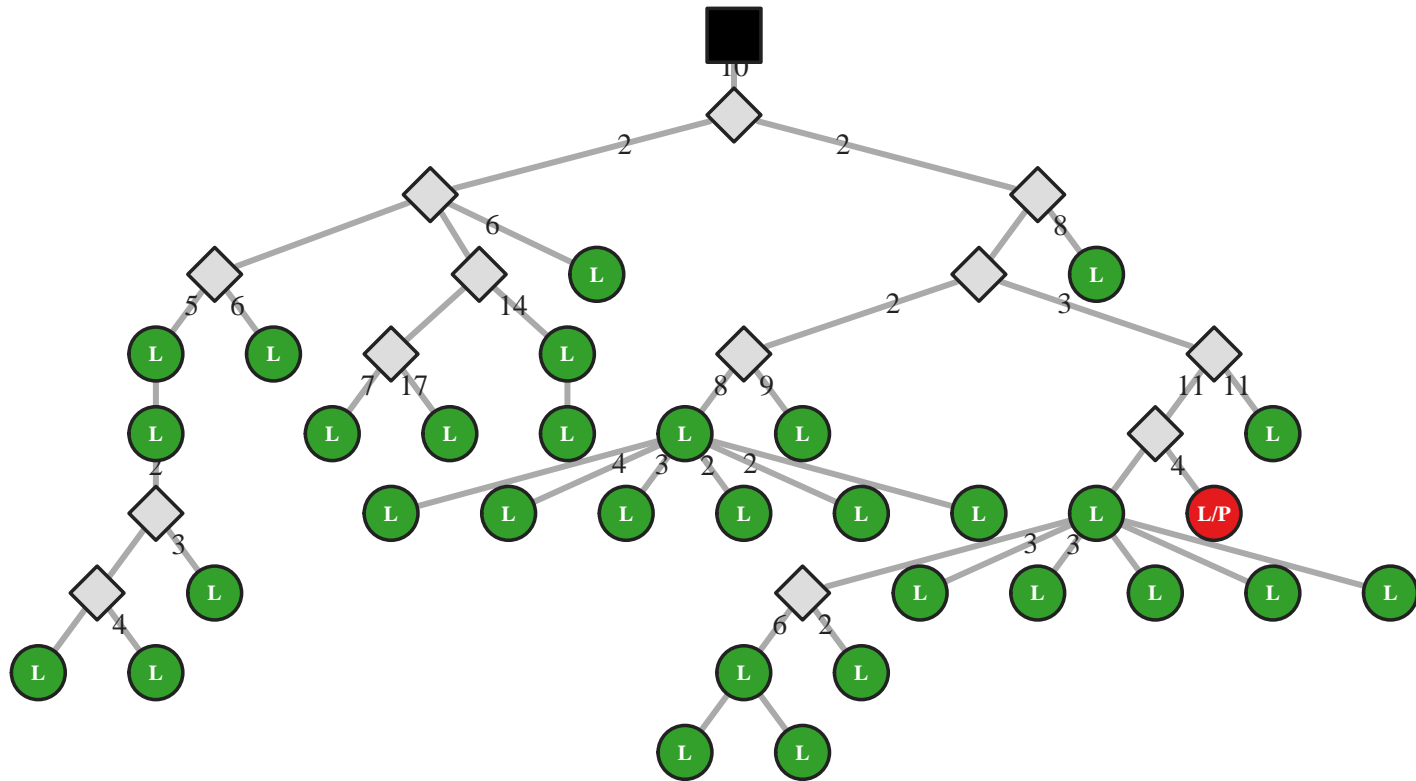
M5 IgG IGHV1-2/J4 42bp (31823)



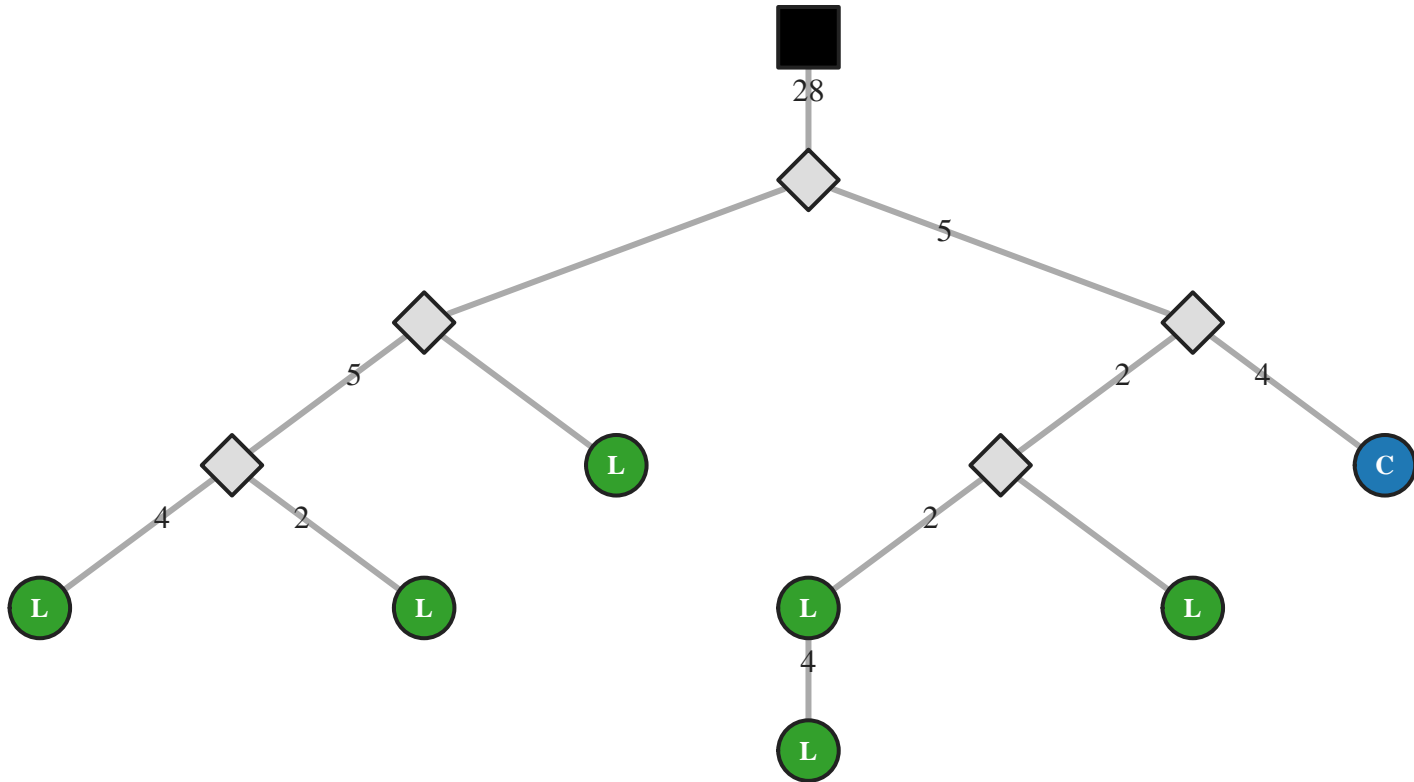
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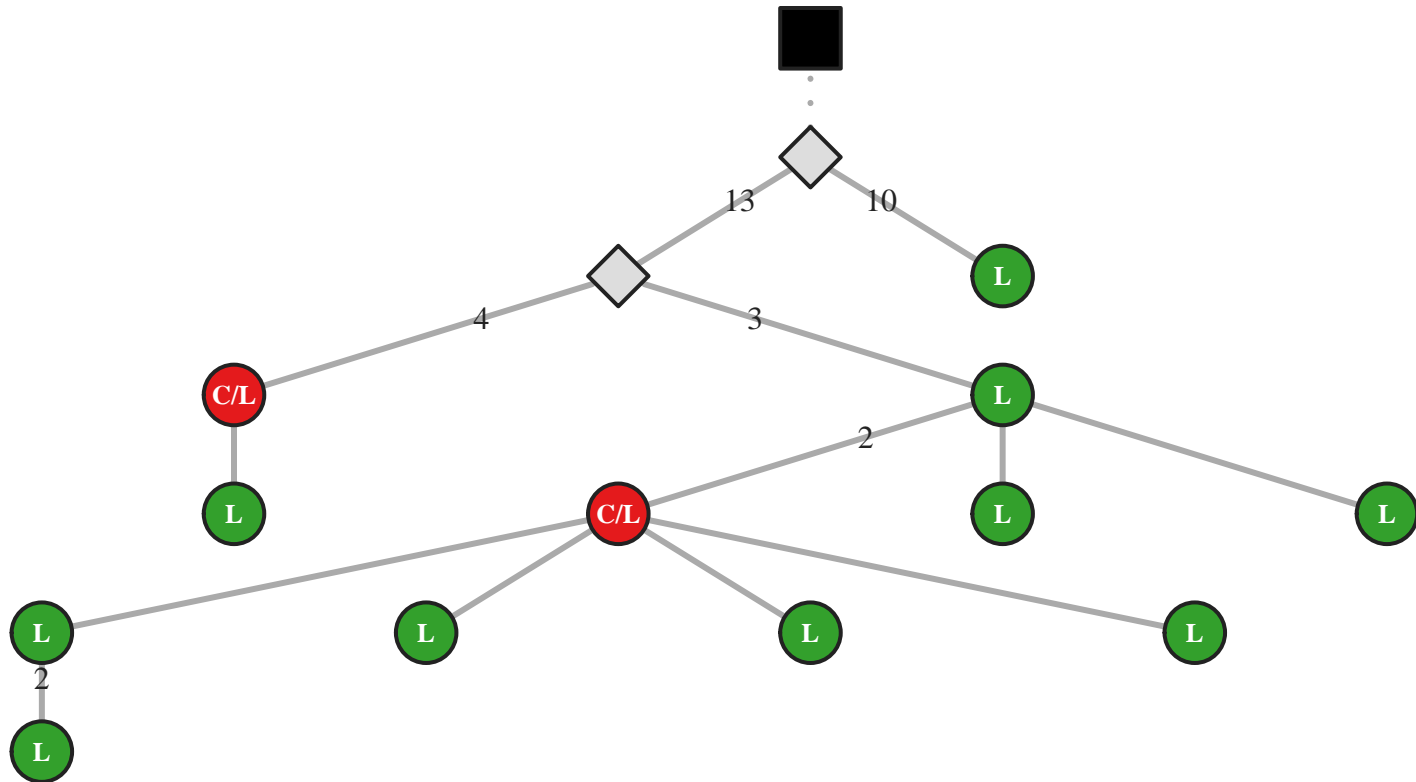
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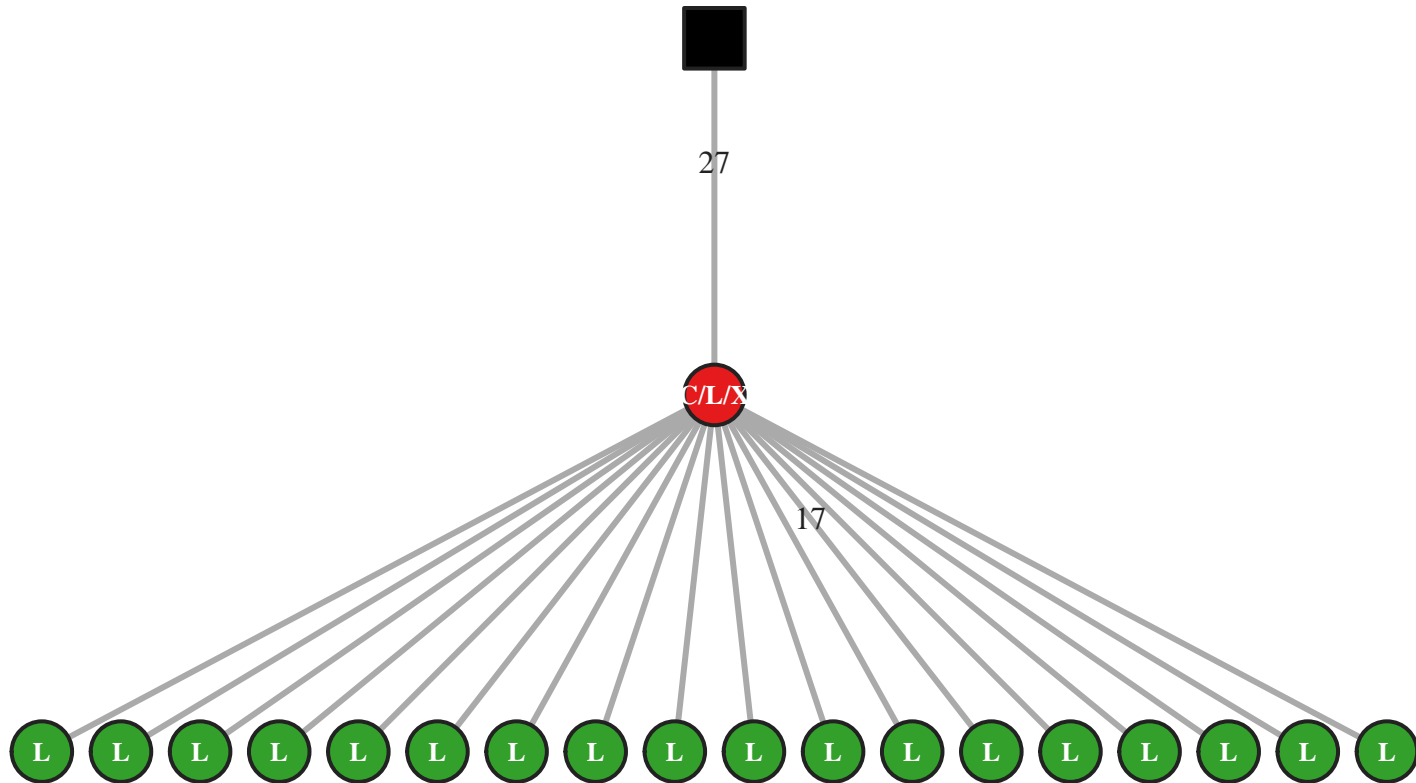
M5 IgG IGHV1-2/J4 42bp (31881)



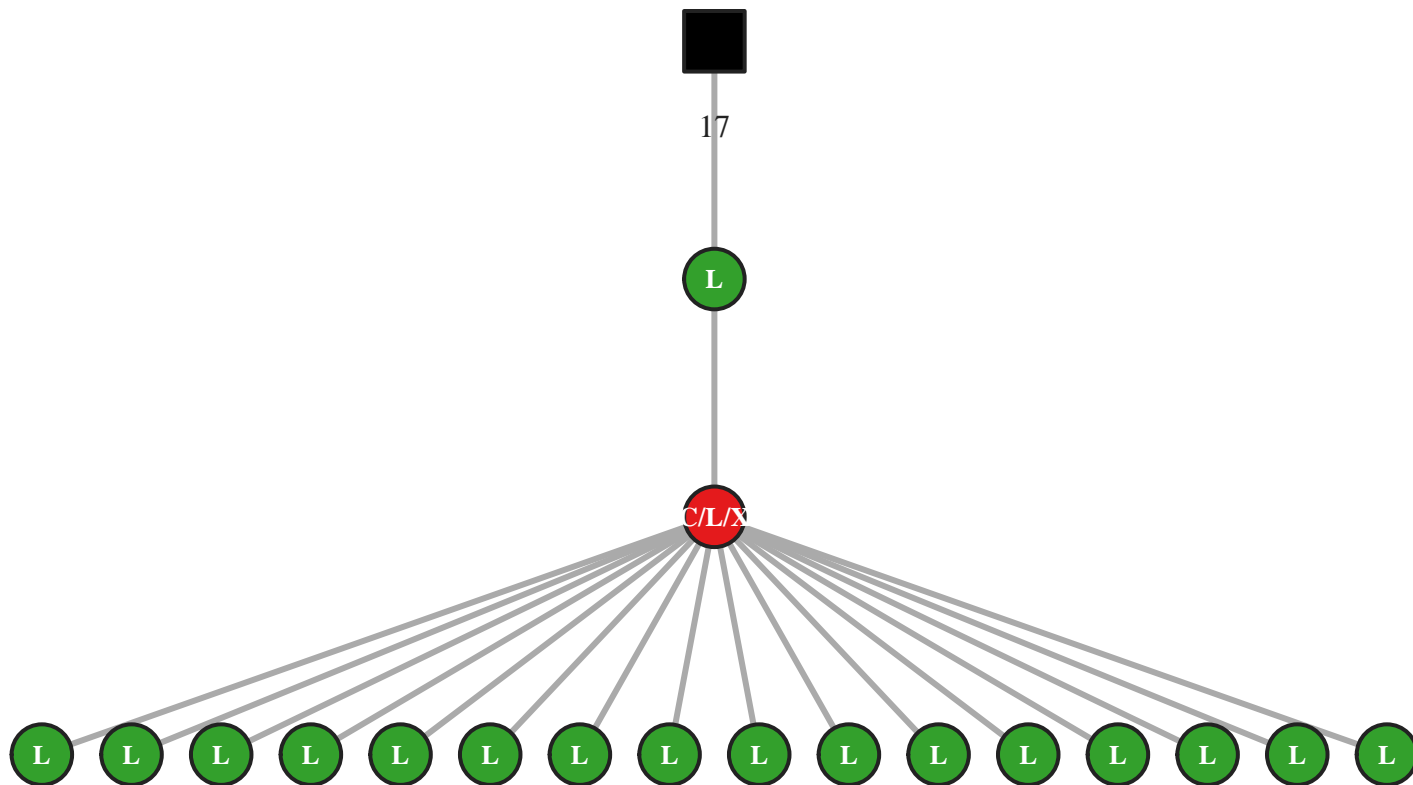
M5 IgM IGHV1-2/J4 42bp (20292)



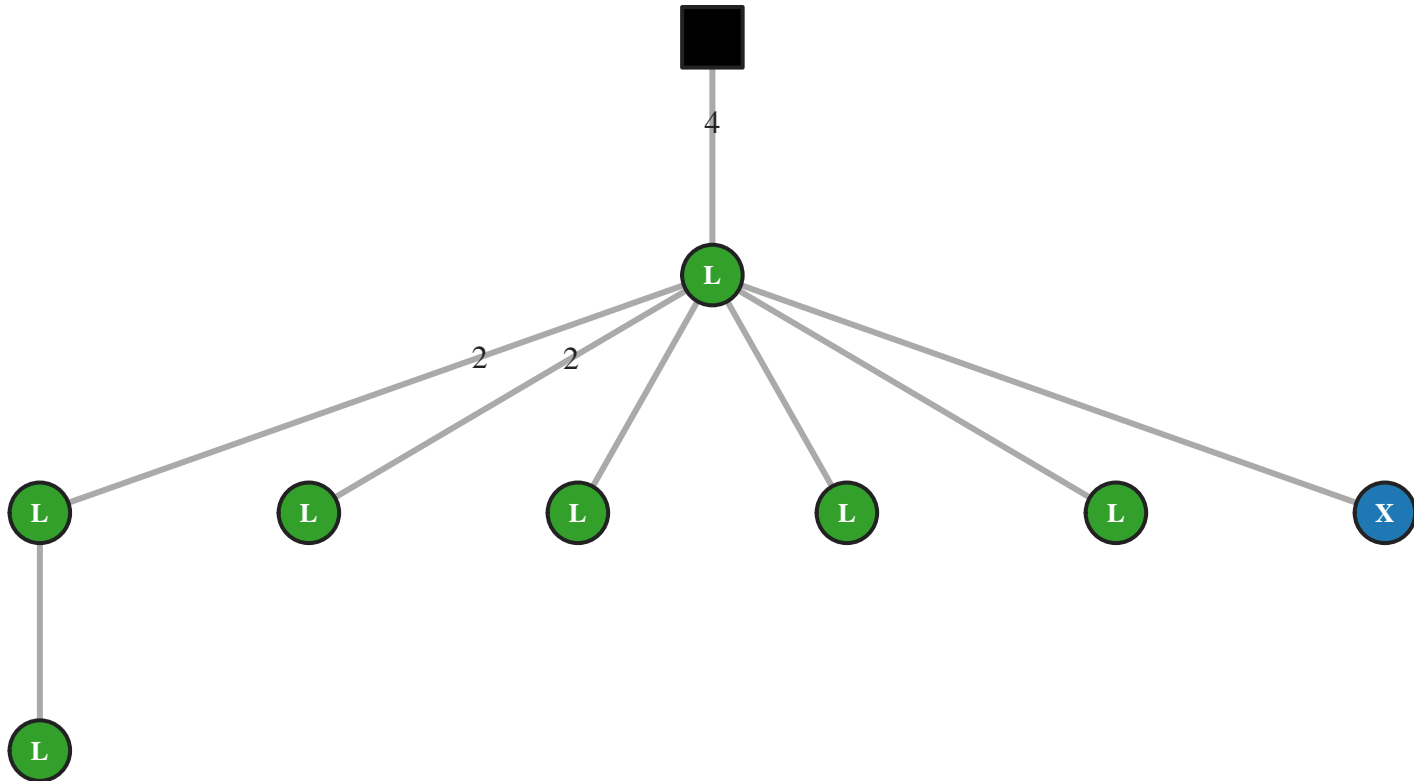
M5 IgA IGHV1-2/J4 45bp (30078)



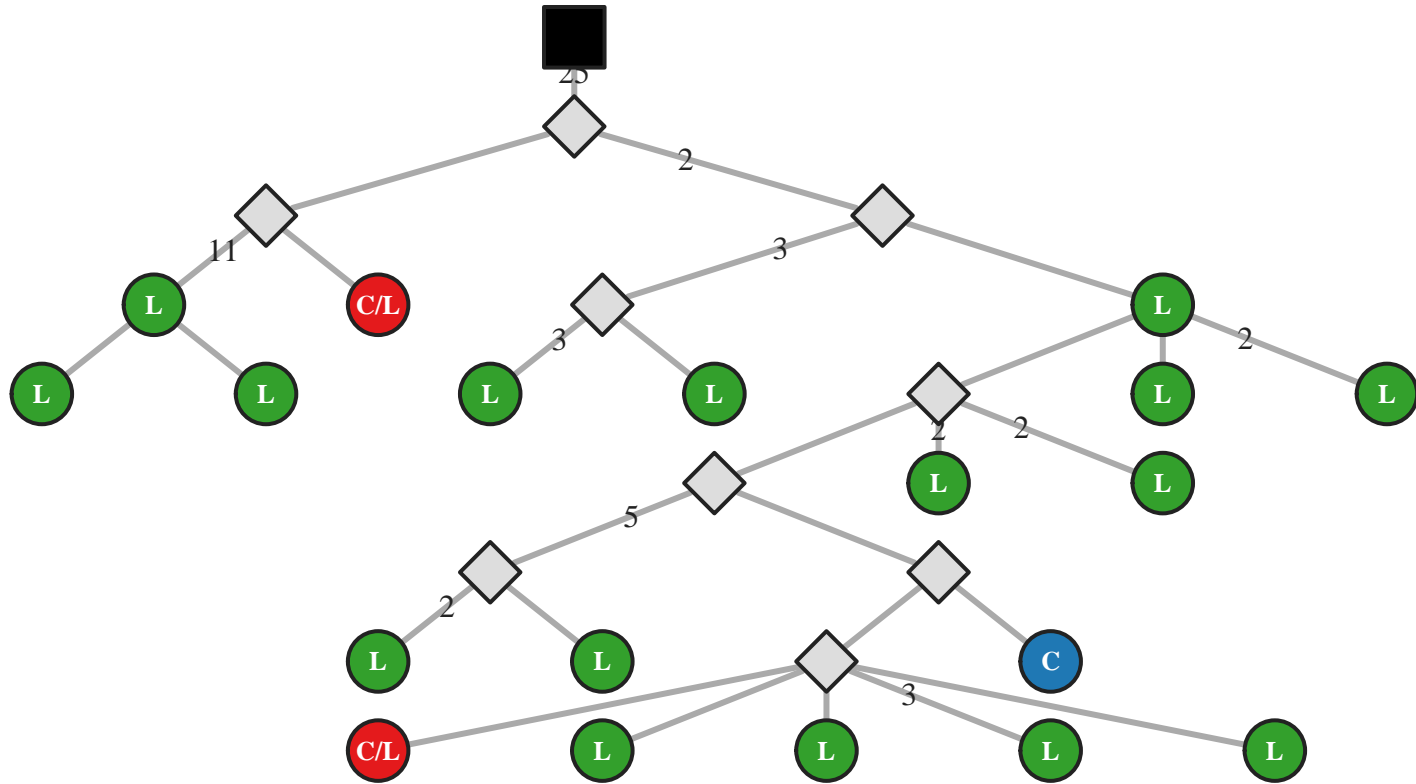
M5 IgA IGHV1-2/J4 45bp (30112)



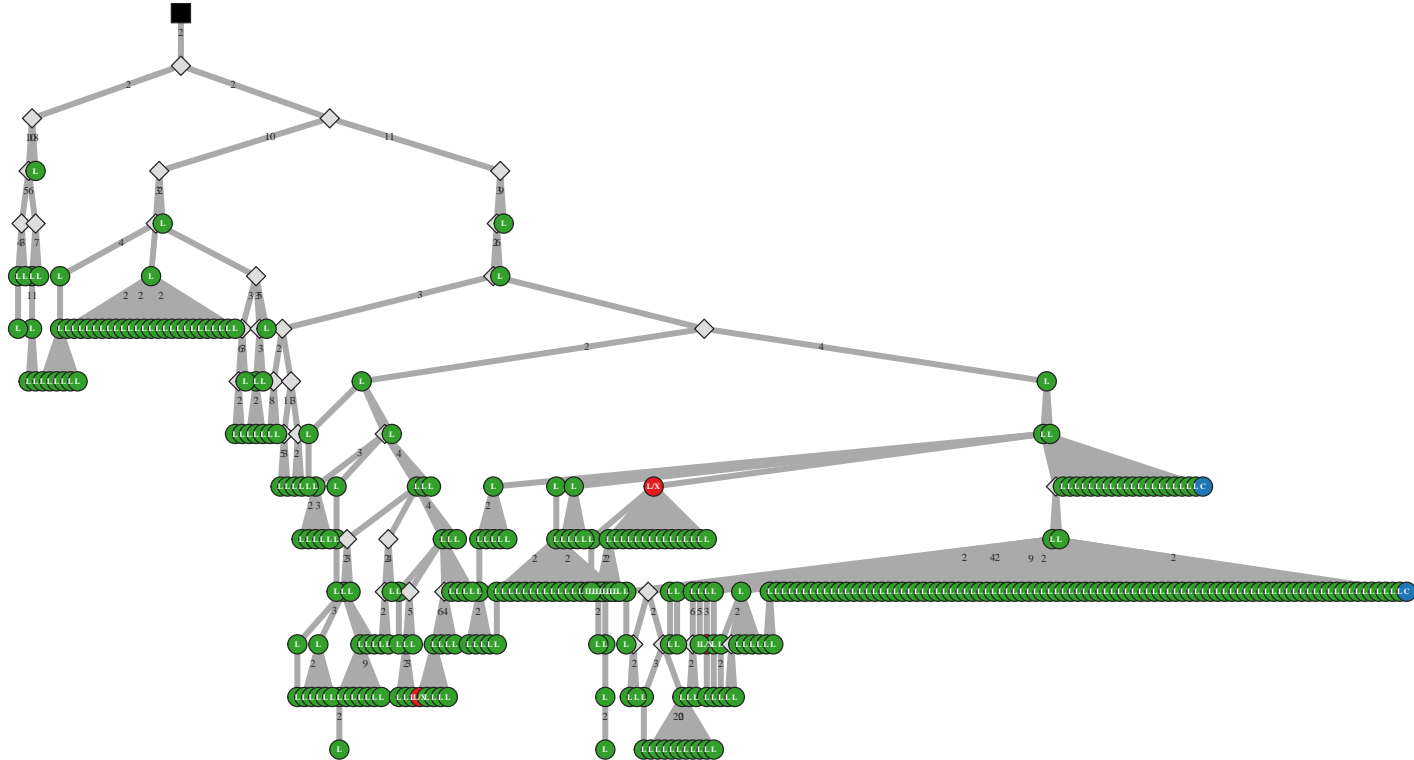
M5 IgG IGHV1-2/J4 45bp (4330)



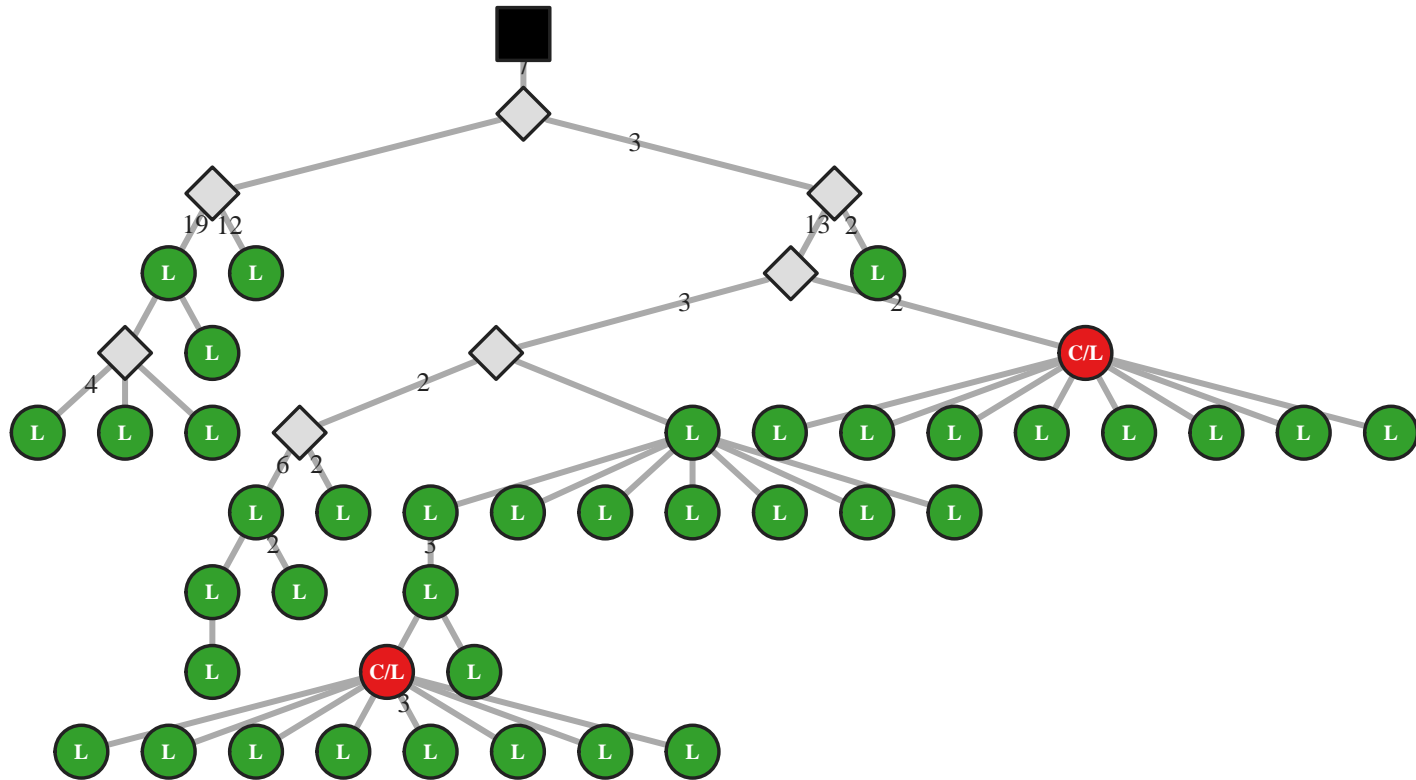
M5 IgG IGHV1-2/J4 45bp (4341)



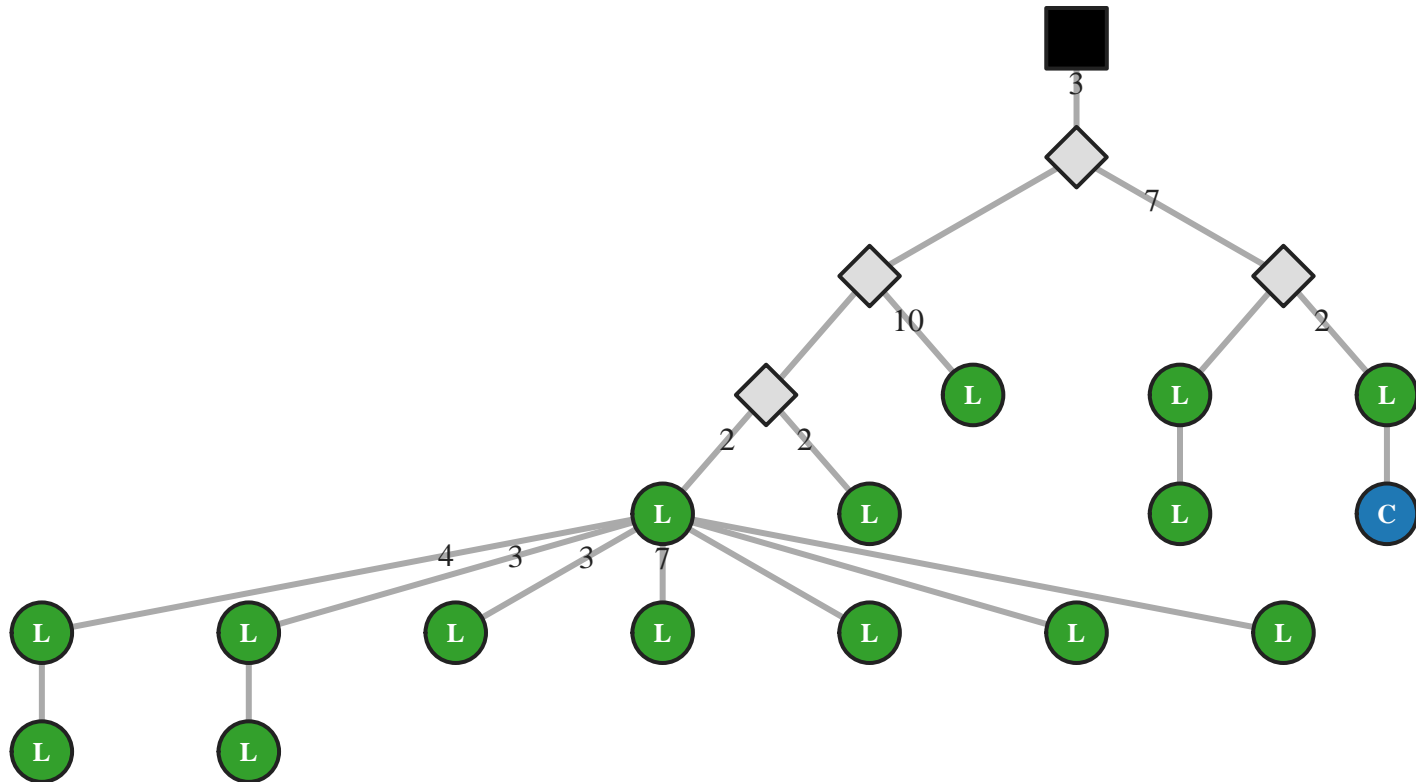
M5 IgG IGHV1-2/J4 45bp (4345)



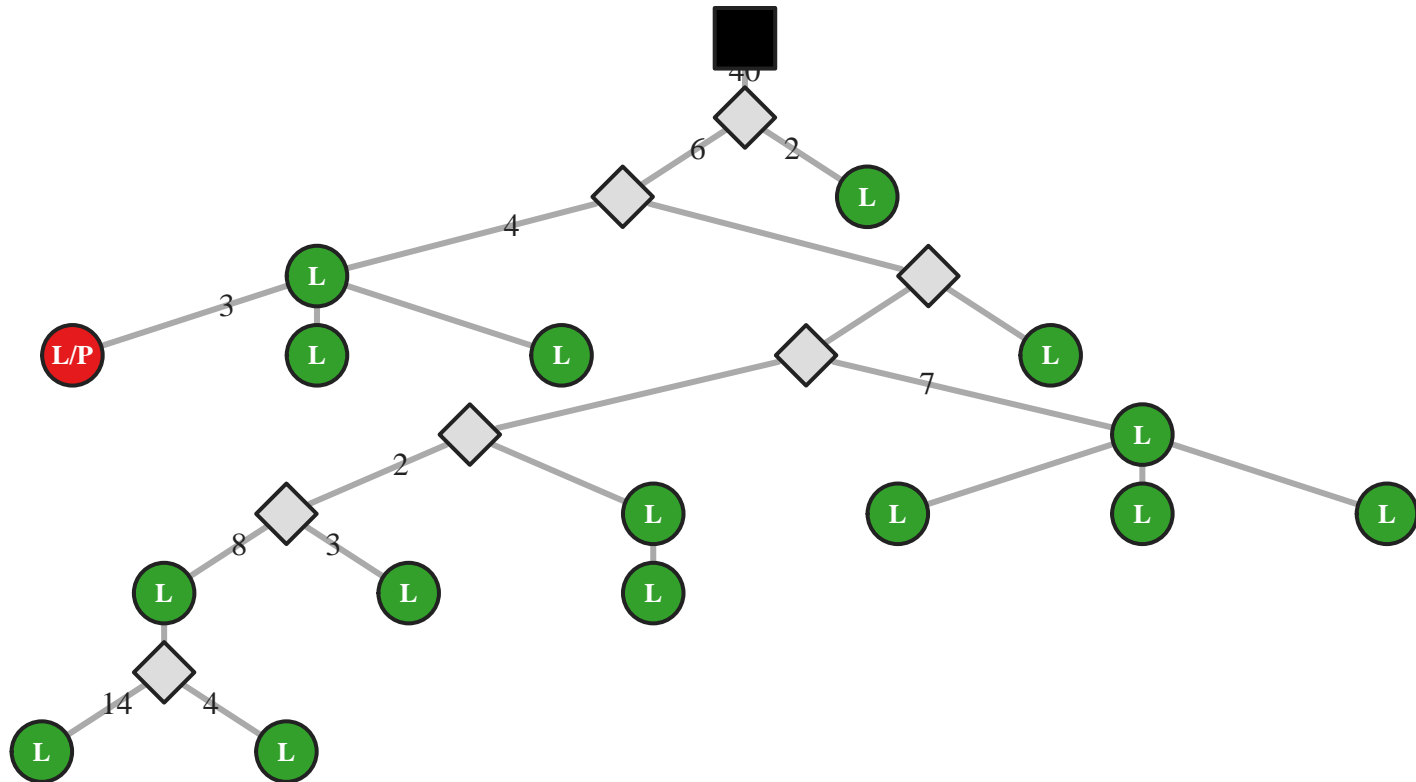
M5 IgG IGHV1-2/J4 45bp (4349)



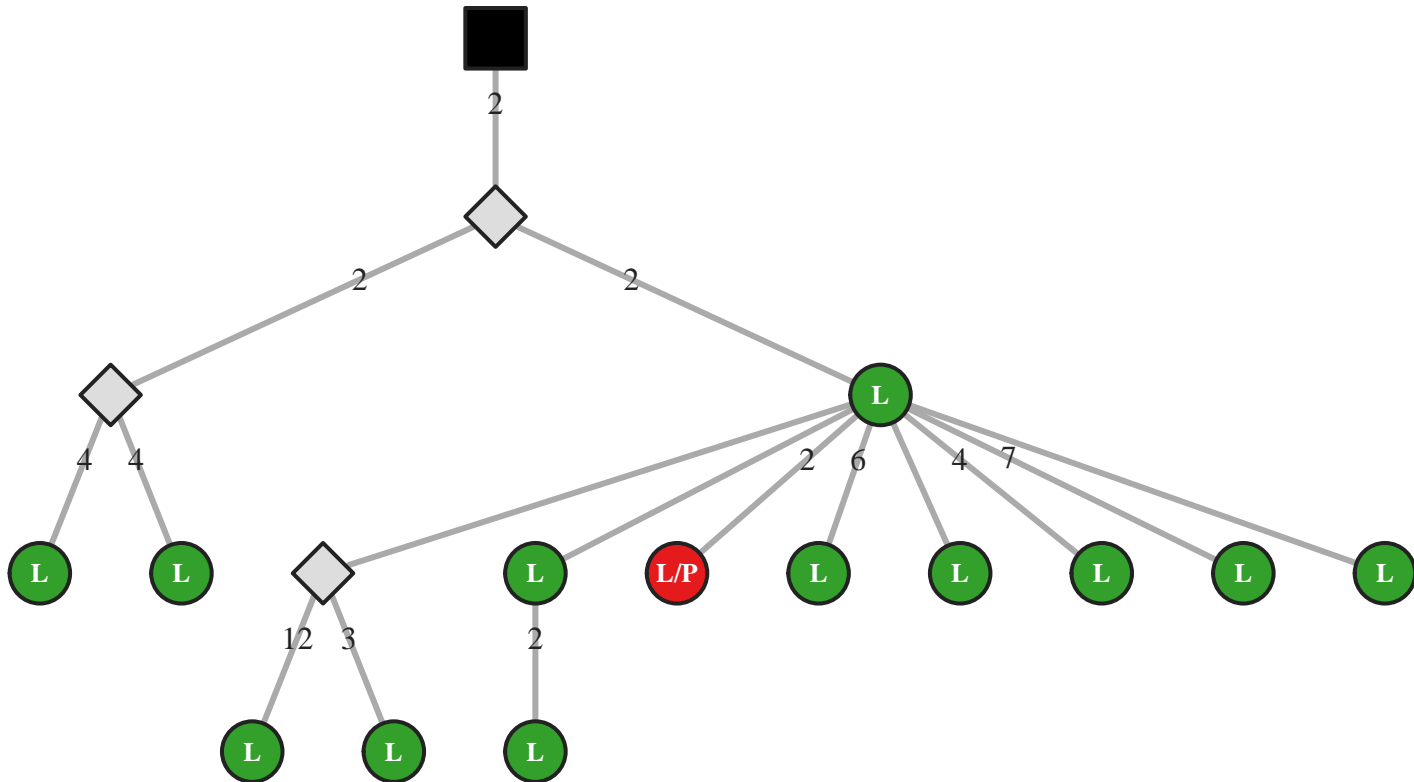
M5 IgA IGHV1-2/J4 48bp (11847)



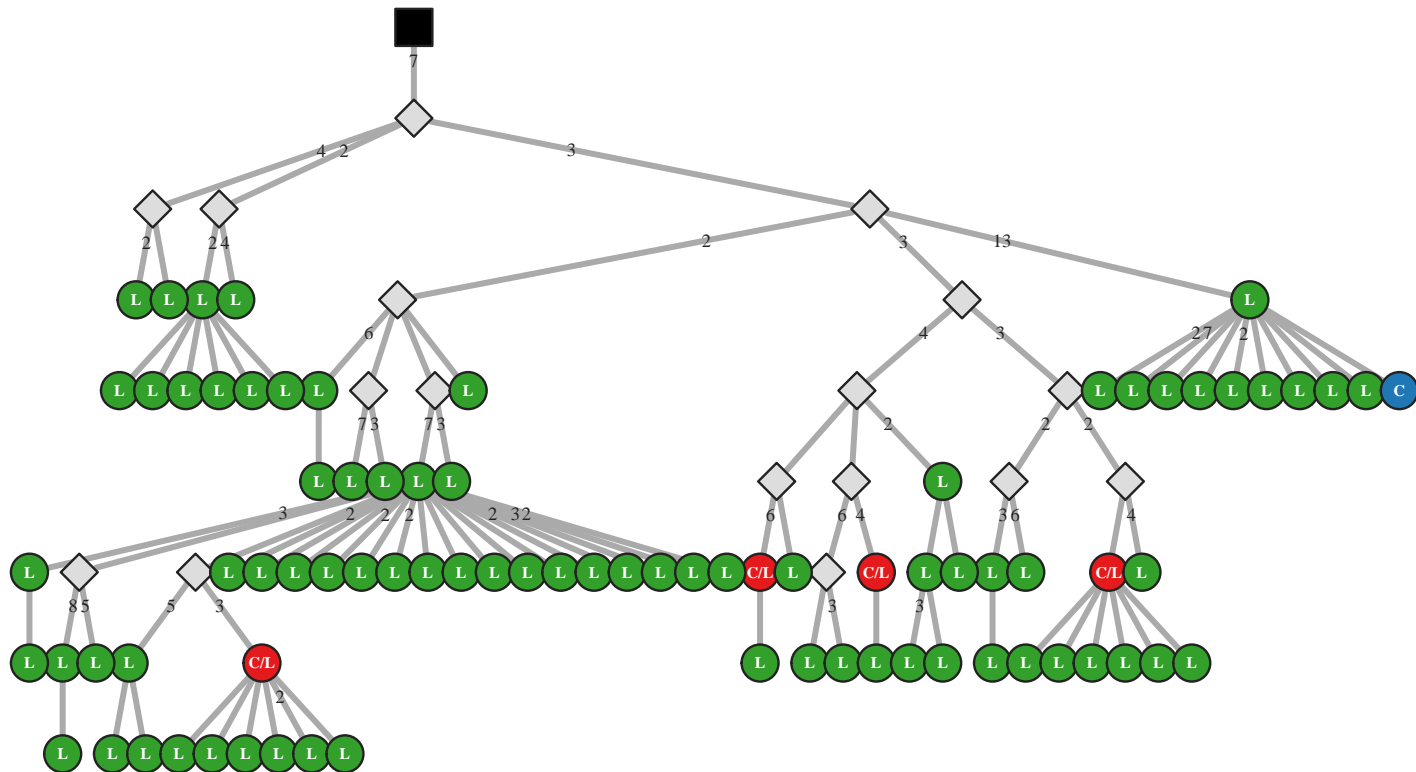
M5 IgA IGHV1-2/J4 48bp (11883)



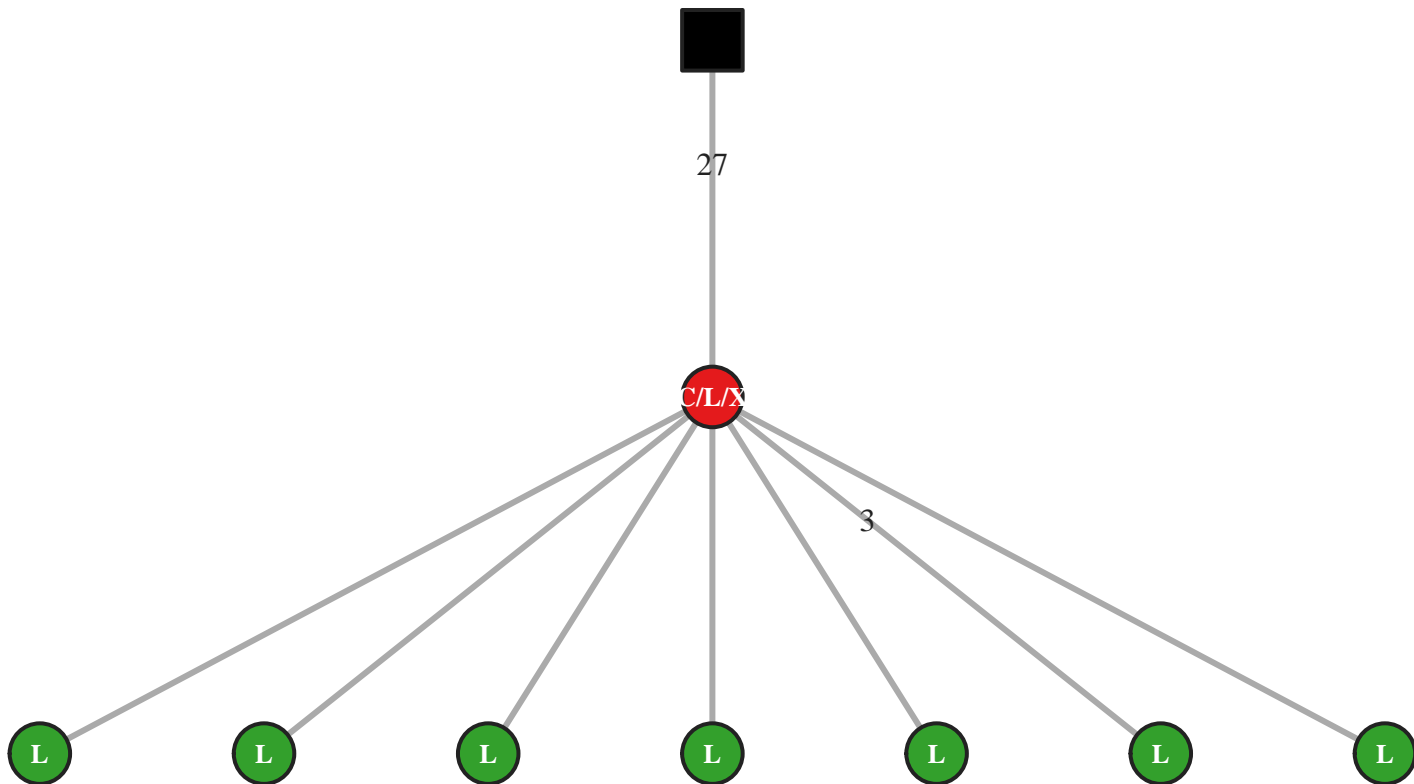
M5 IgG IGHV1-2/J4 48bp (39951)



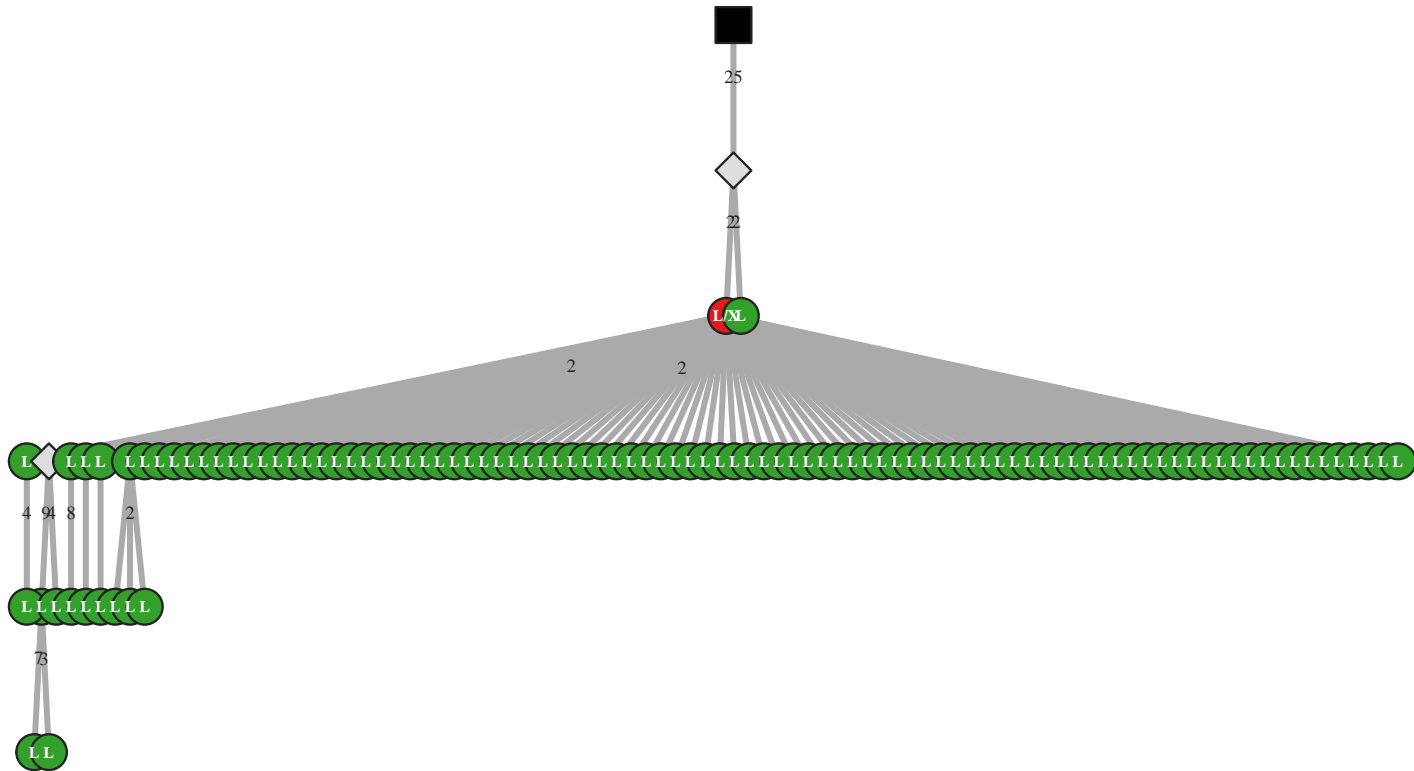
M5 IgG IGHV1-2/J4 48bp (39962)



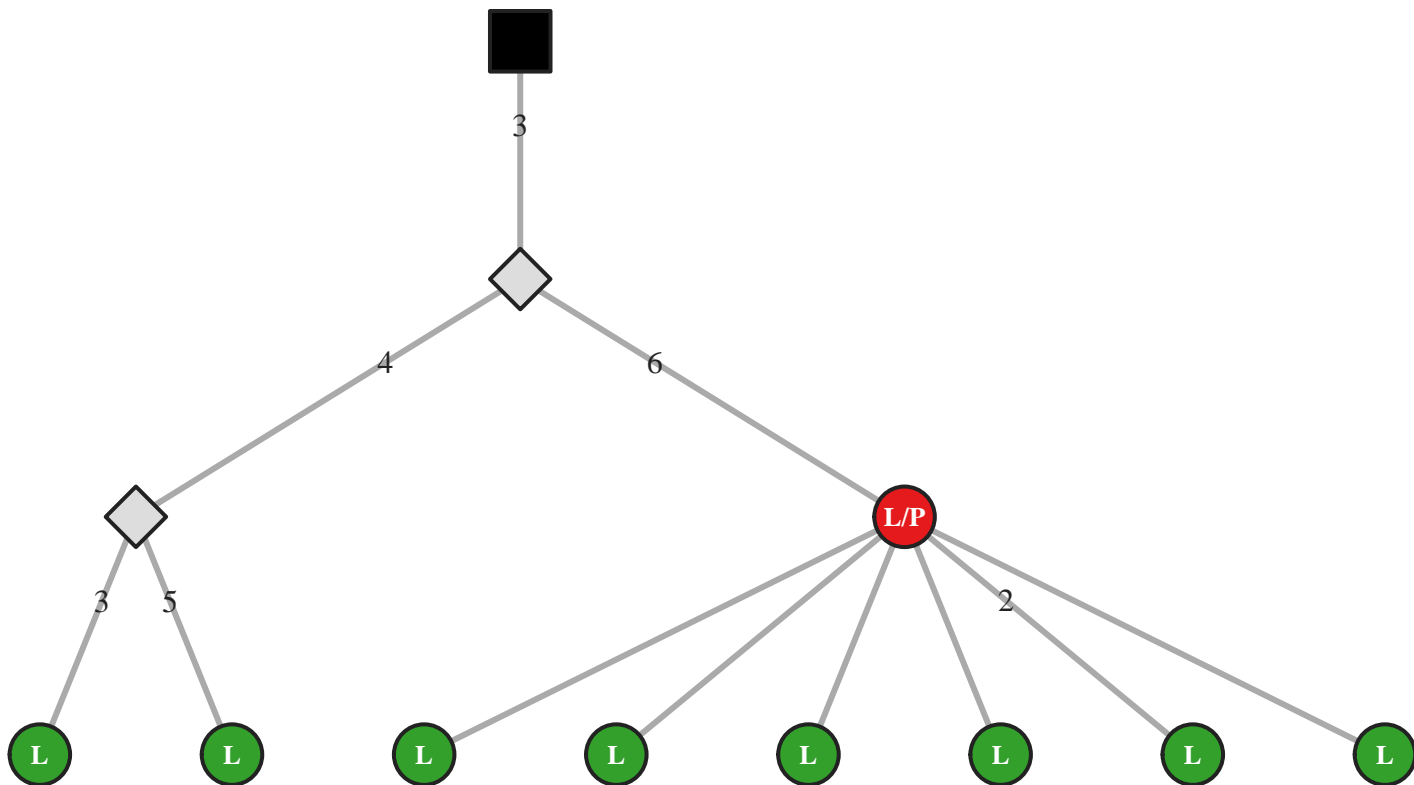
M5 IgA IGHV1-2/J4 51bp (11892)



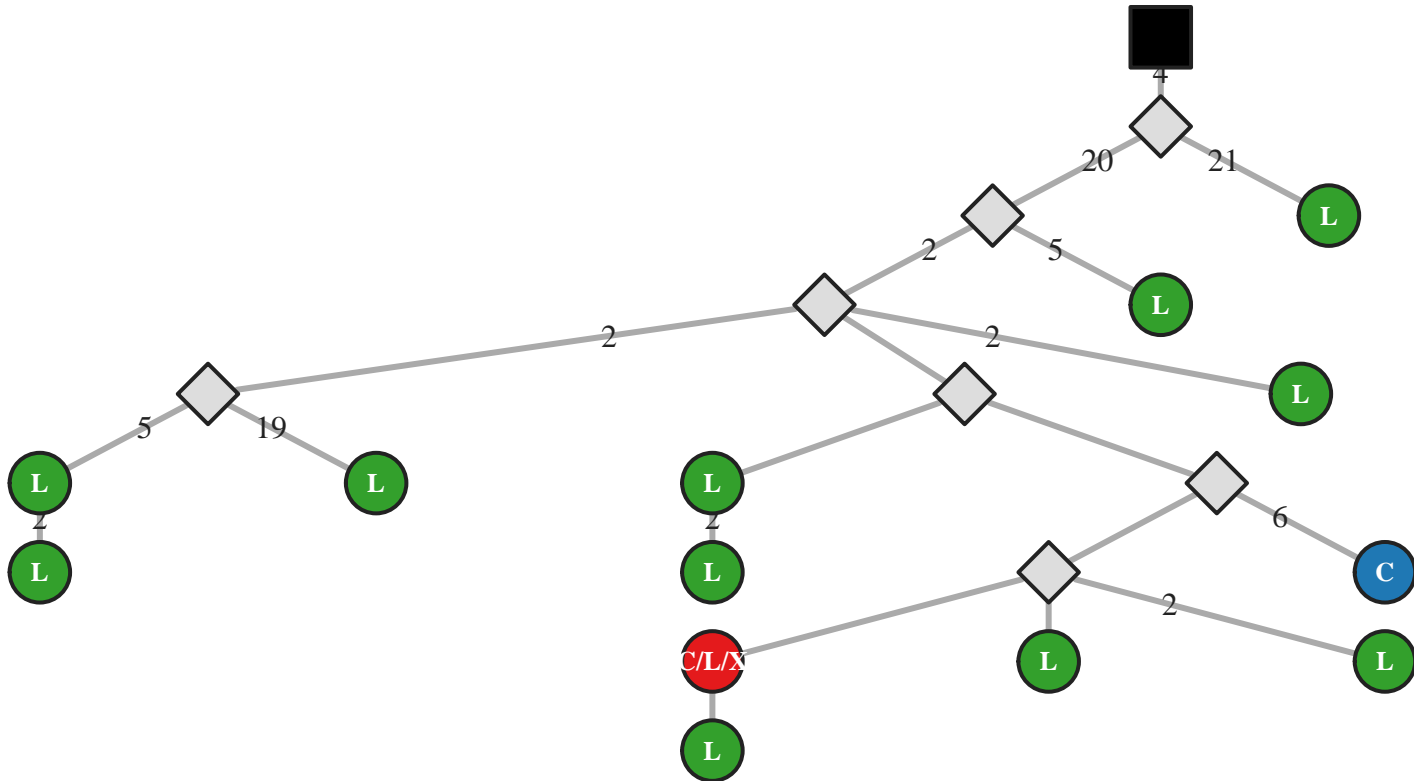
M5 IgG IGHV1-2/J4 51bp (40084)



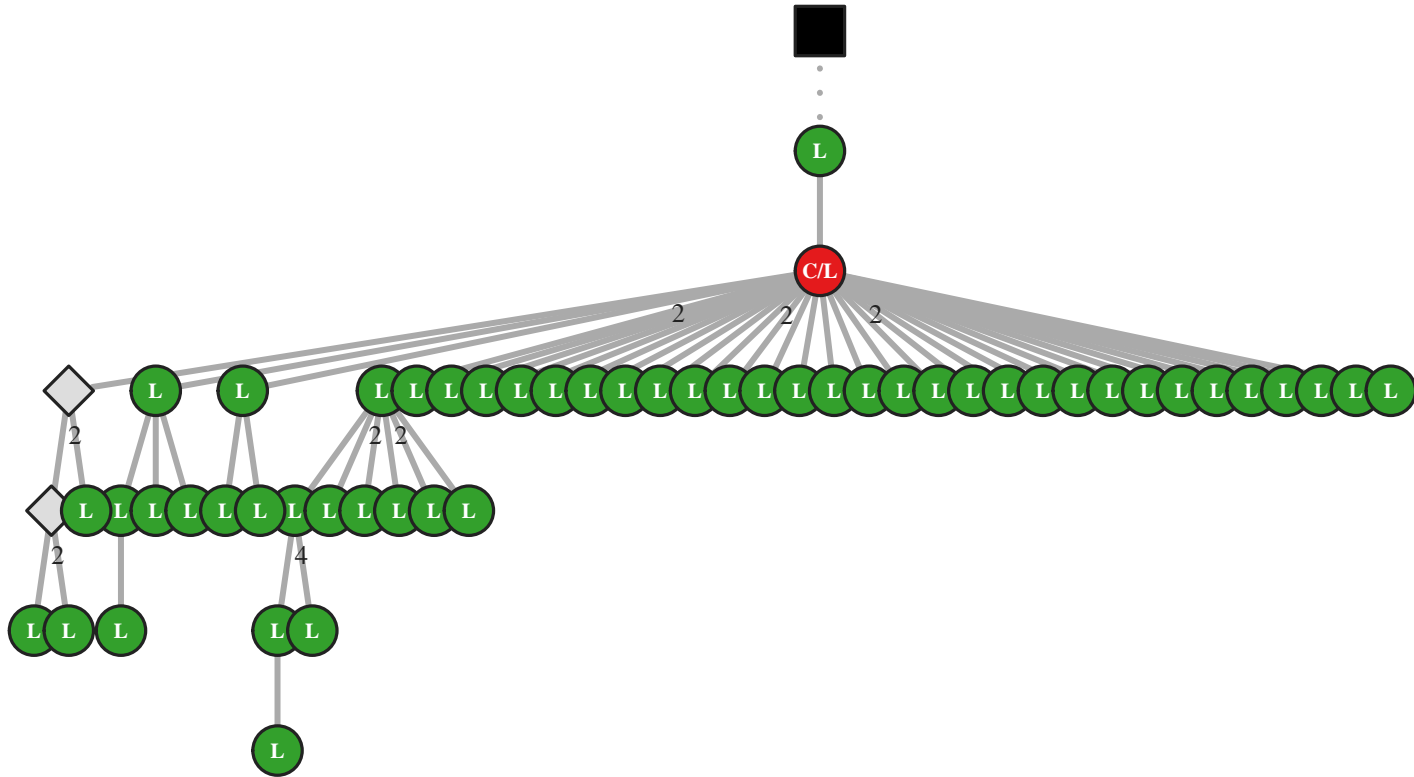
M5 IgG IGHV1-2/J4 51bp (40091)



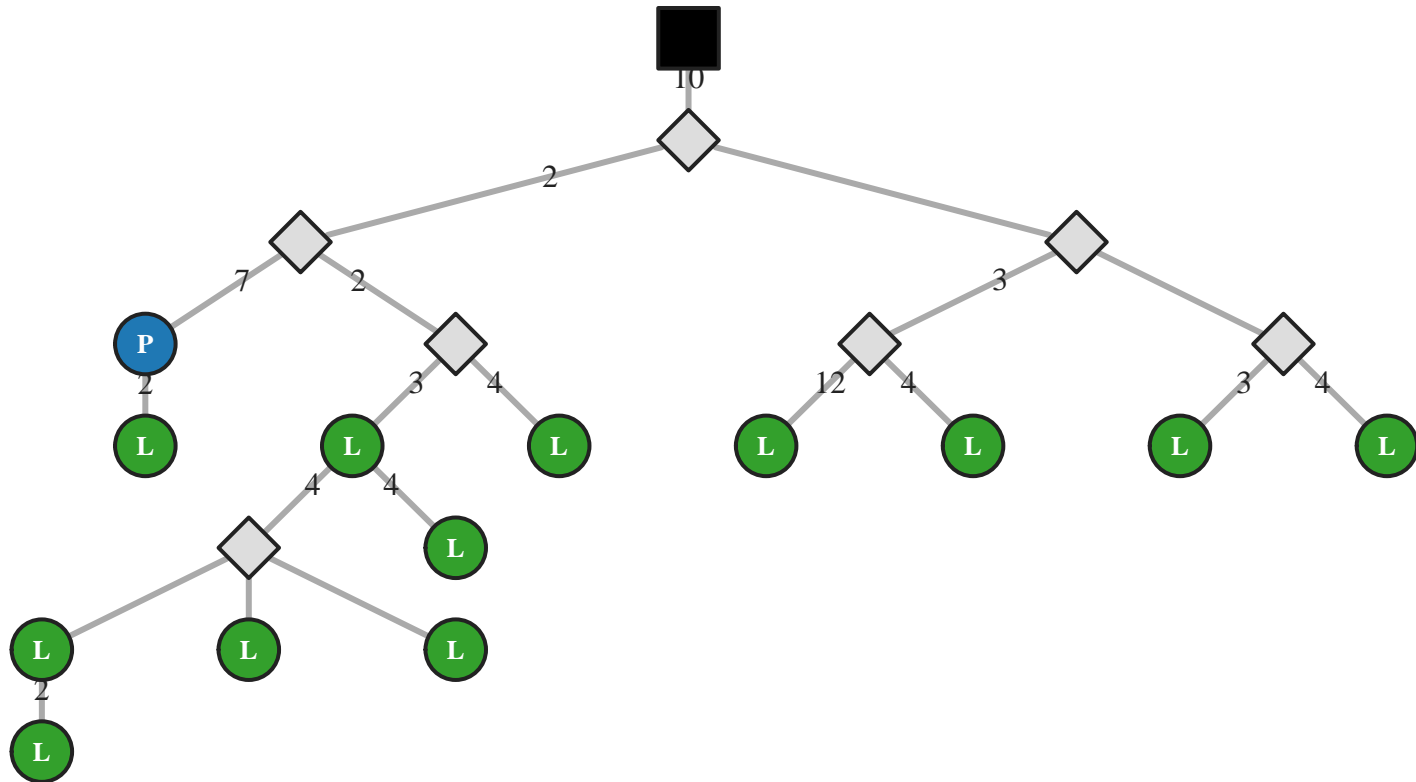
M5 IgG IGHV1-2/J4 51bp (40093)



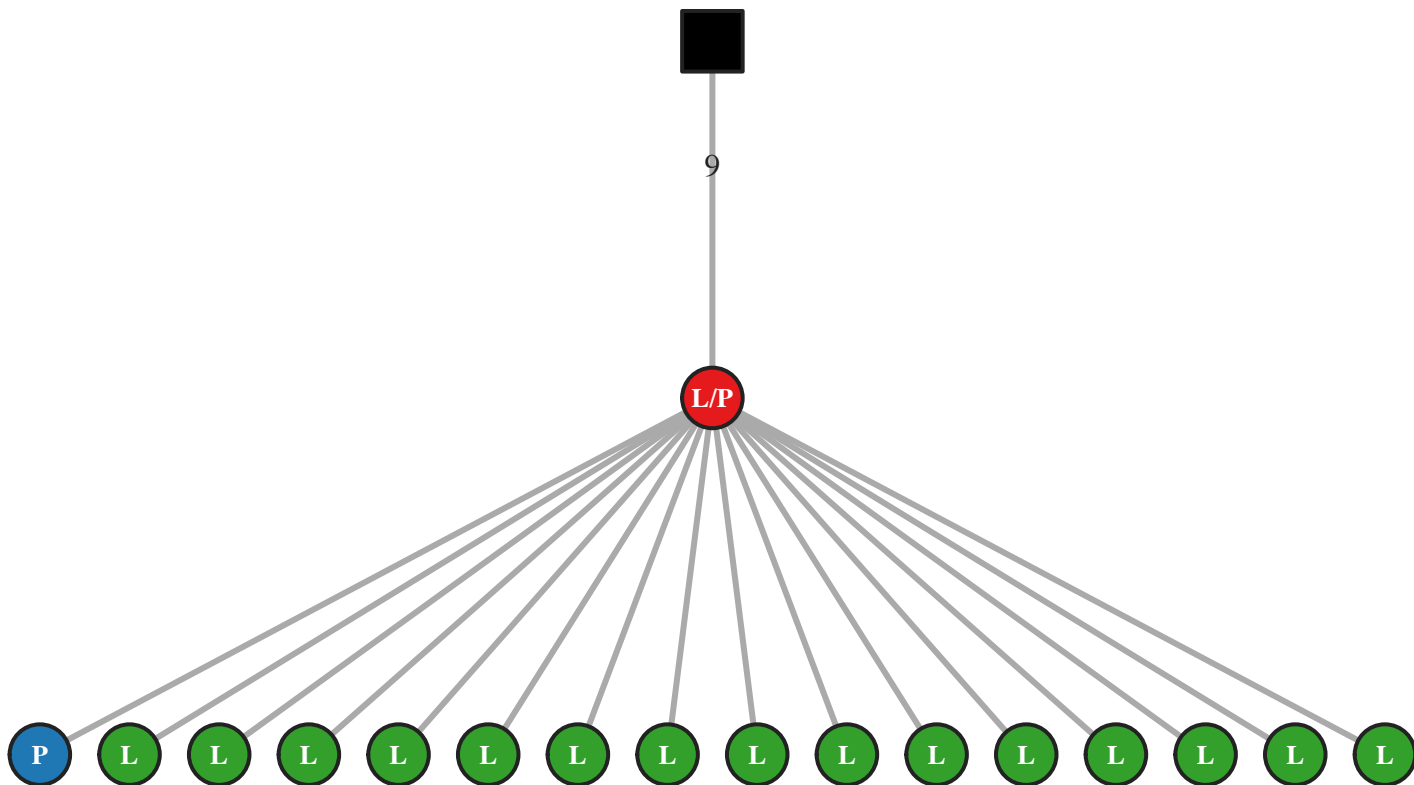
M5 IgG IGHV1-2/J4 51bp (40101)



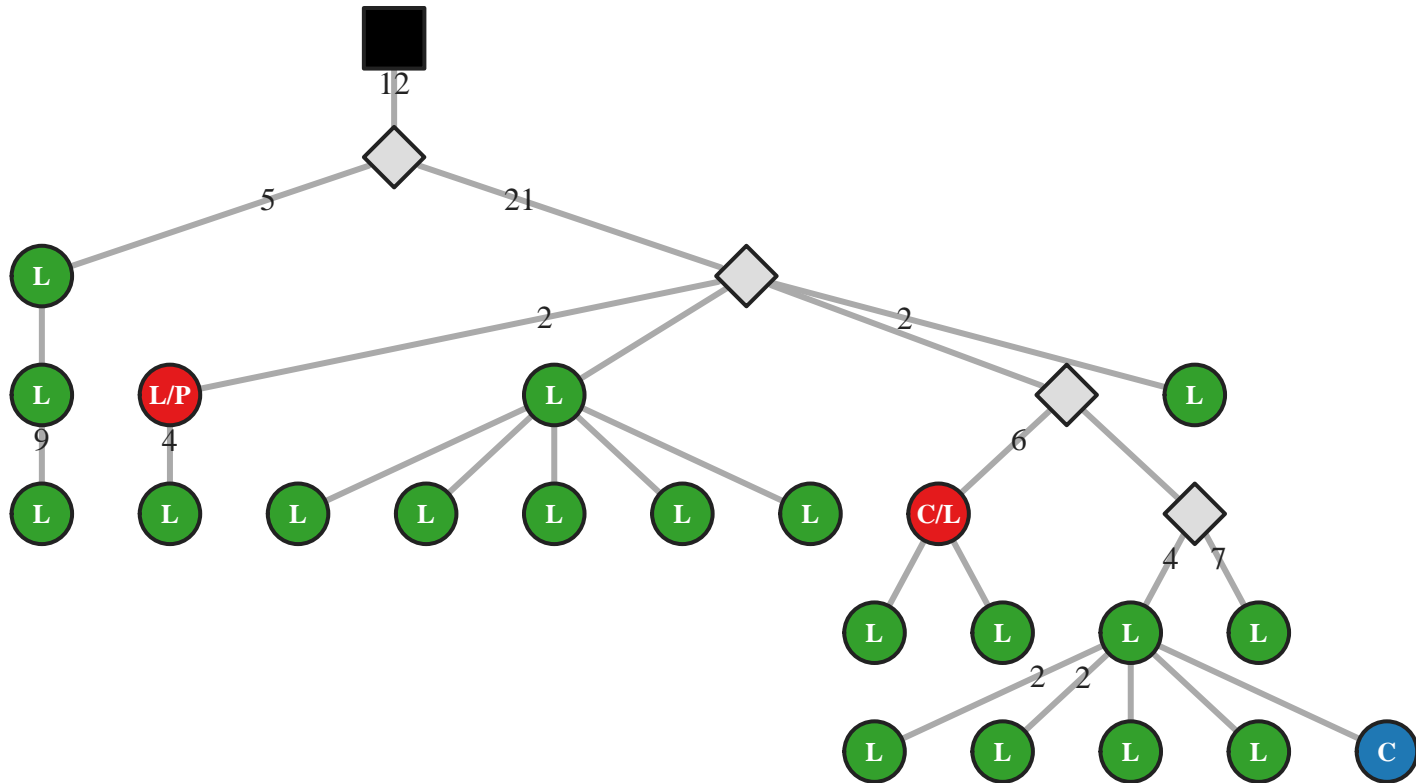
M5 IgM IGHV1-2/J4 51bp (10907)



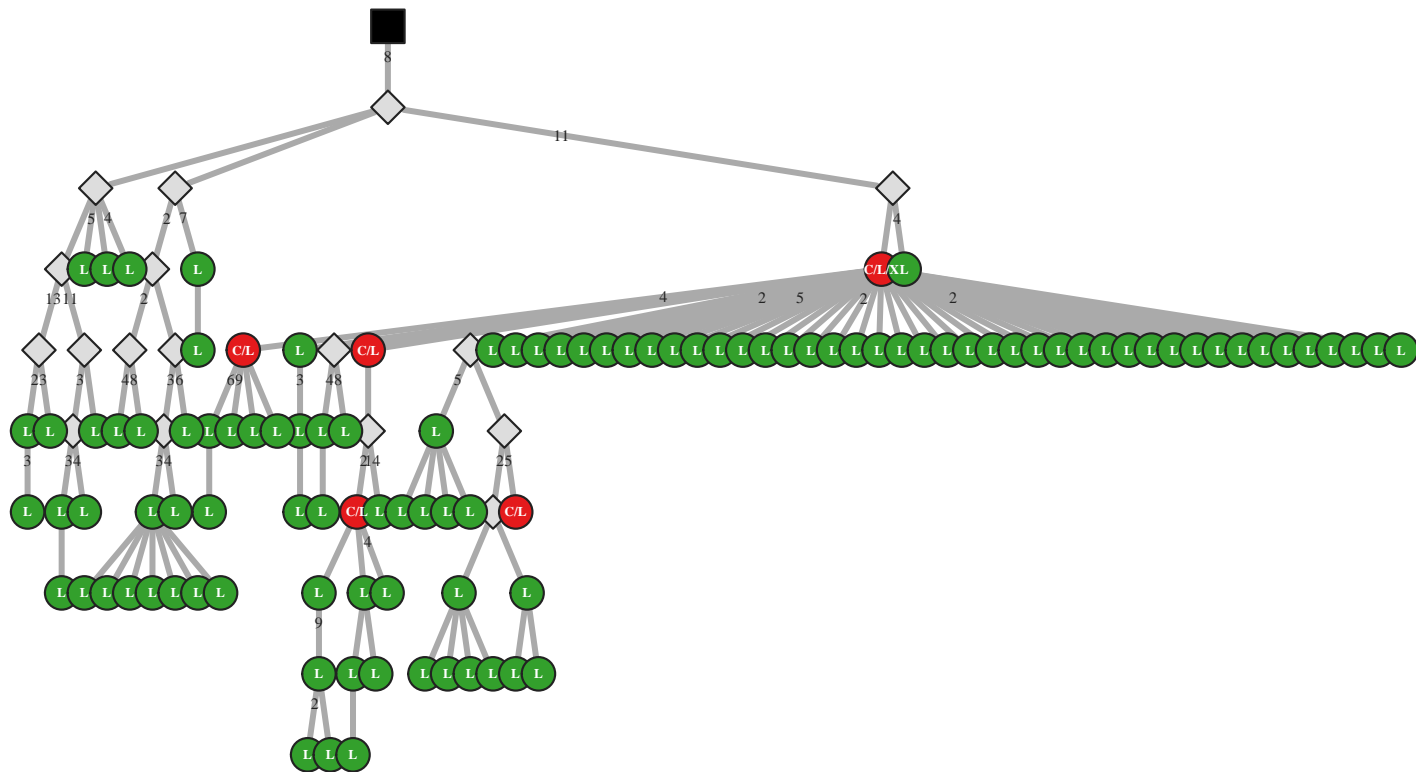
M5 IgM IGHV1-2/J4 51bp (10910)



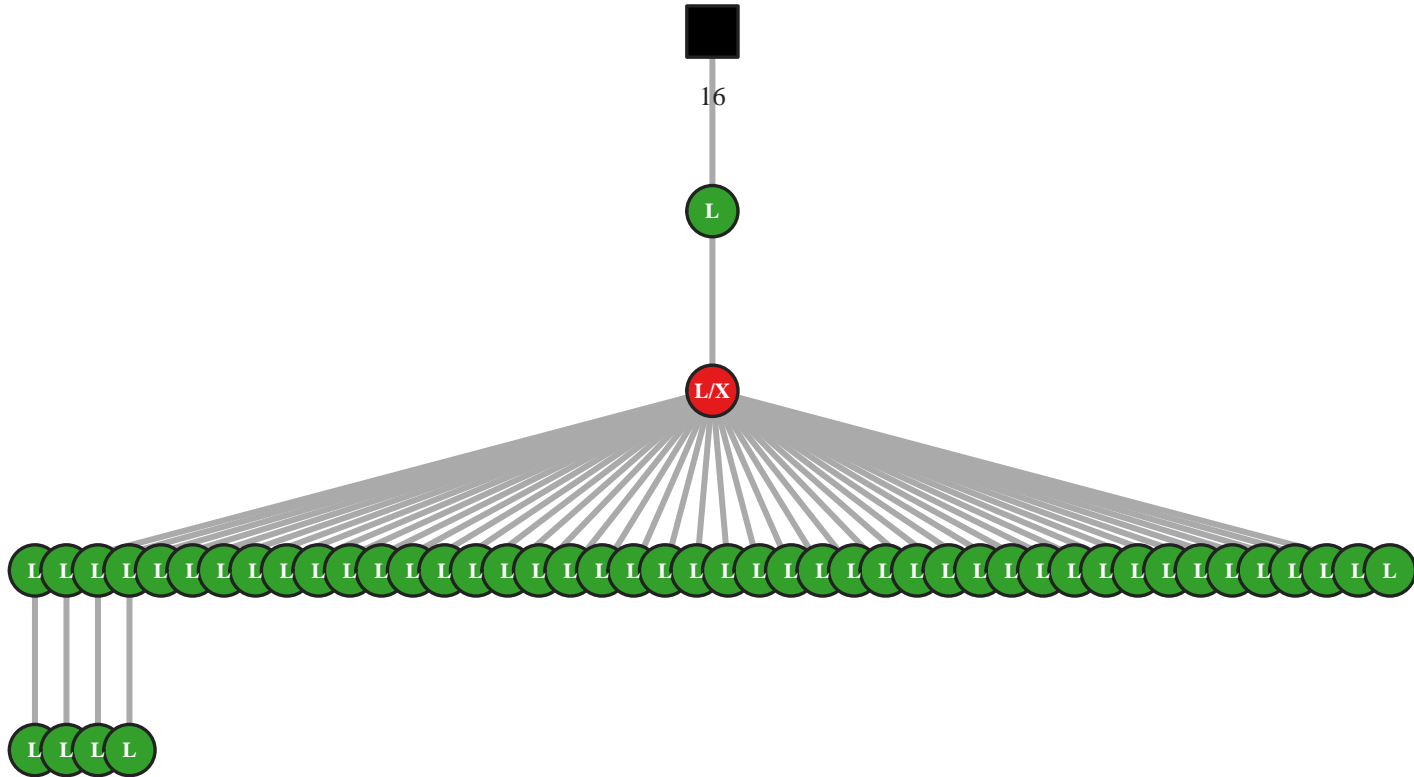
M5 IgA IGHV1-2/J4 54bp (38239)



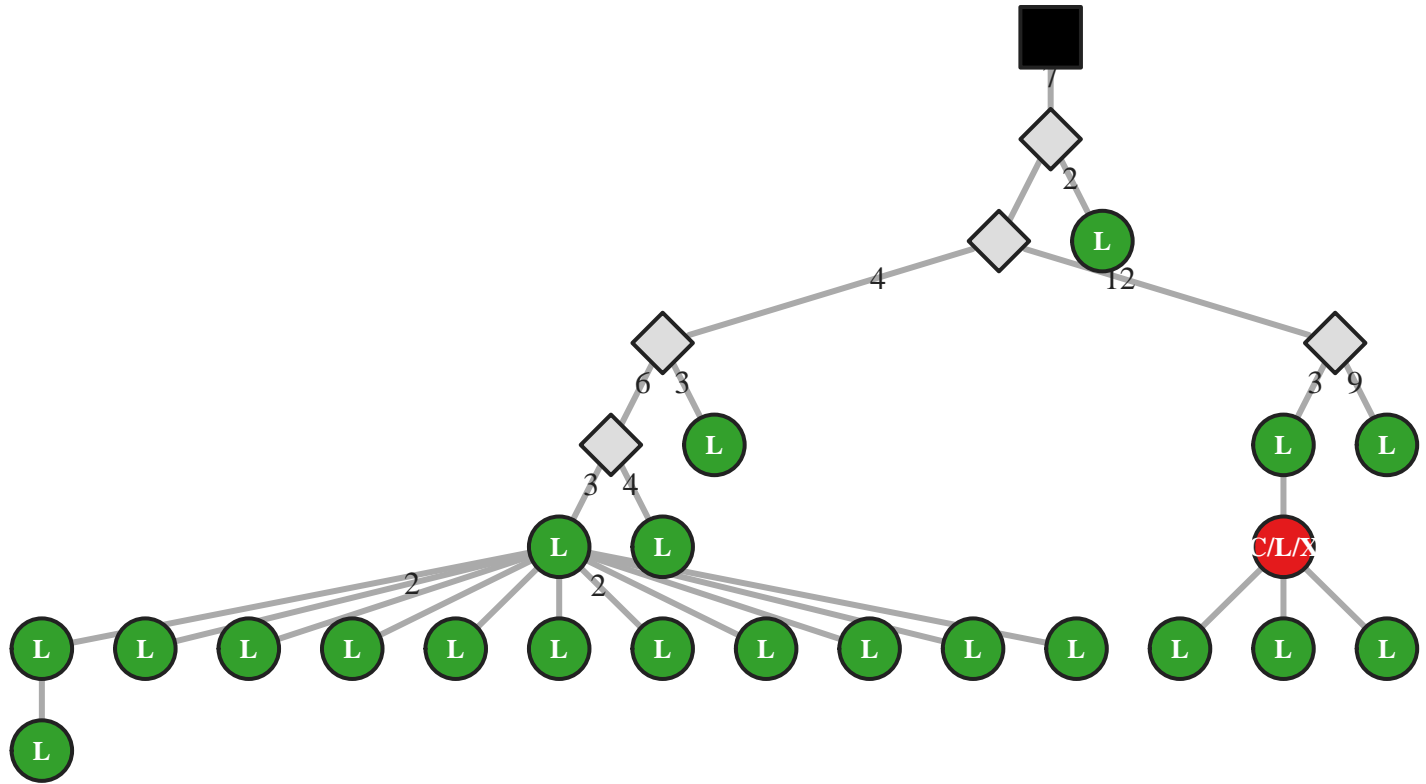
M5 IgG IGHV1-2/J4 54bp (23220)



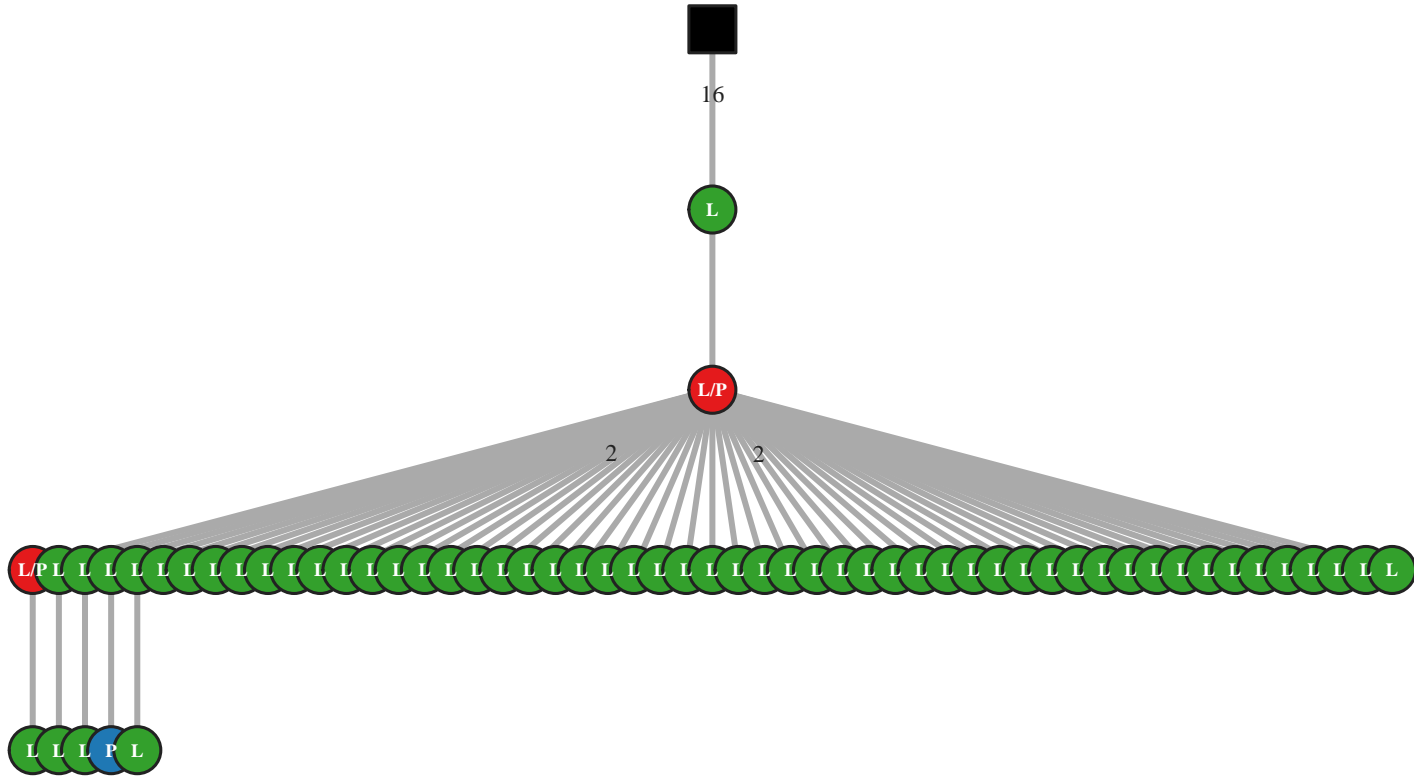
M5 IgA IGHV1-2/J4 57bp (2252)



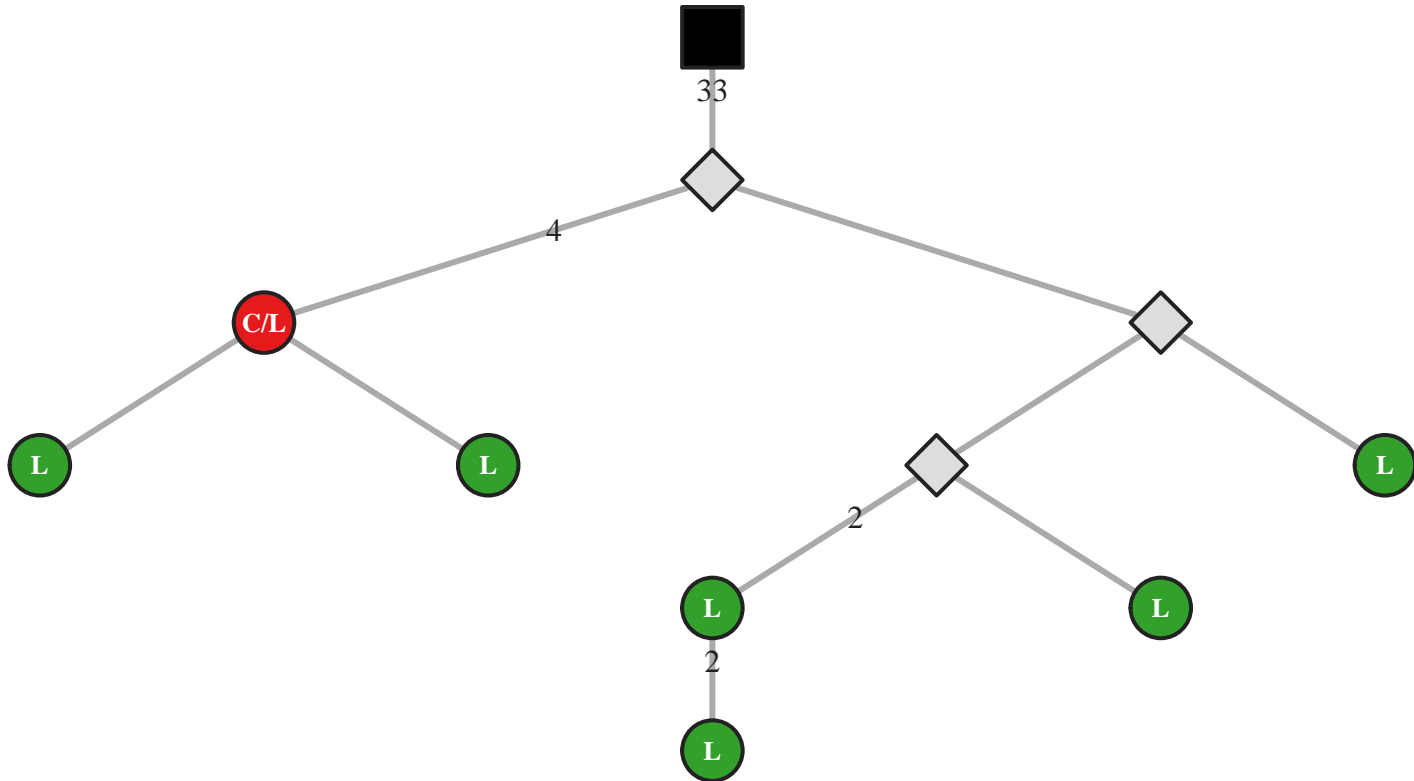
M5 IgG IGHV1-2/J4 57bp (13884)



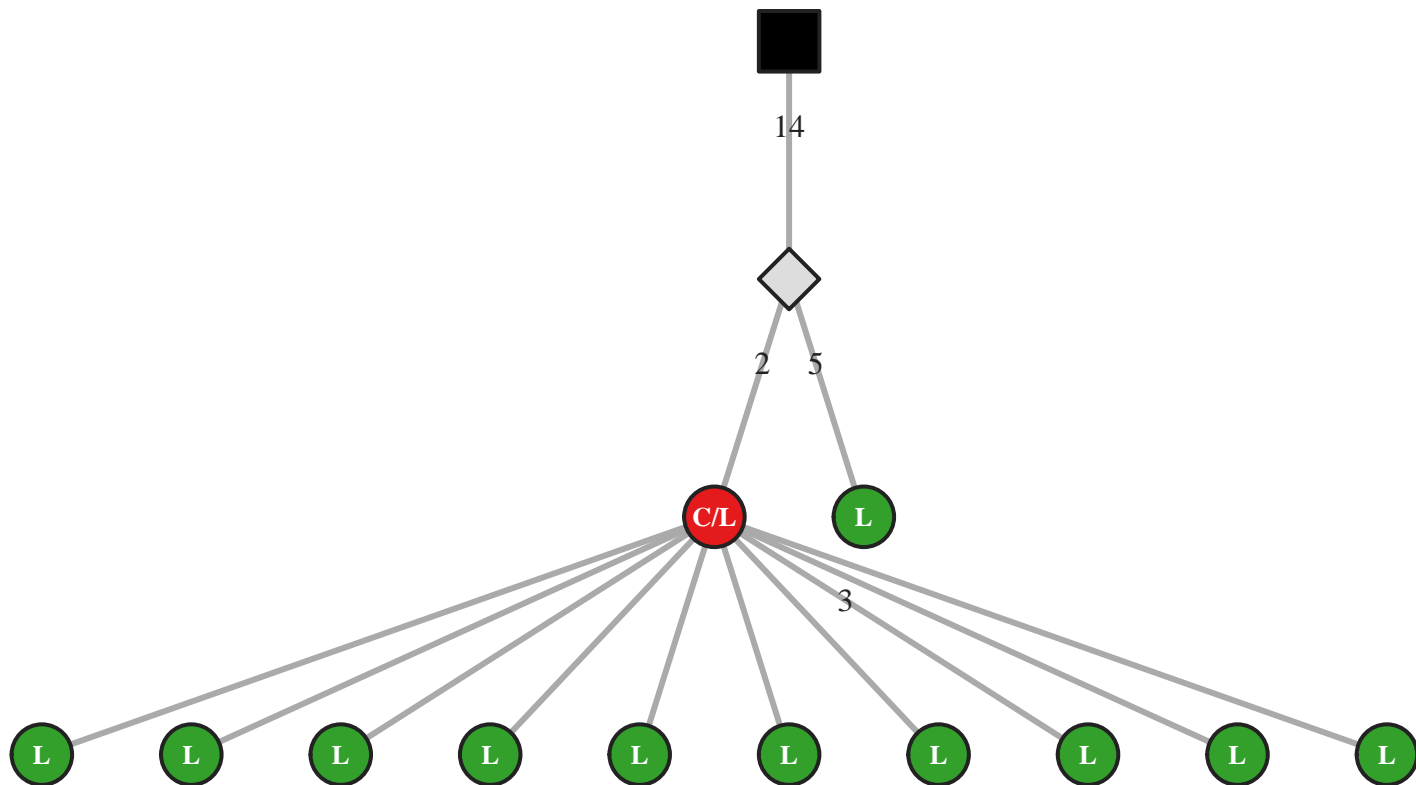
M5 IgG IGHV1-2/J4 57bp (13935)



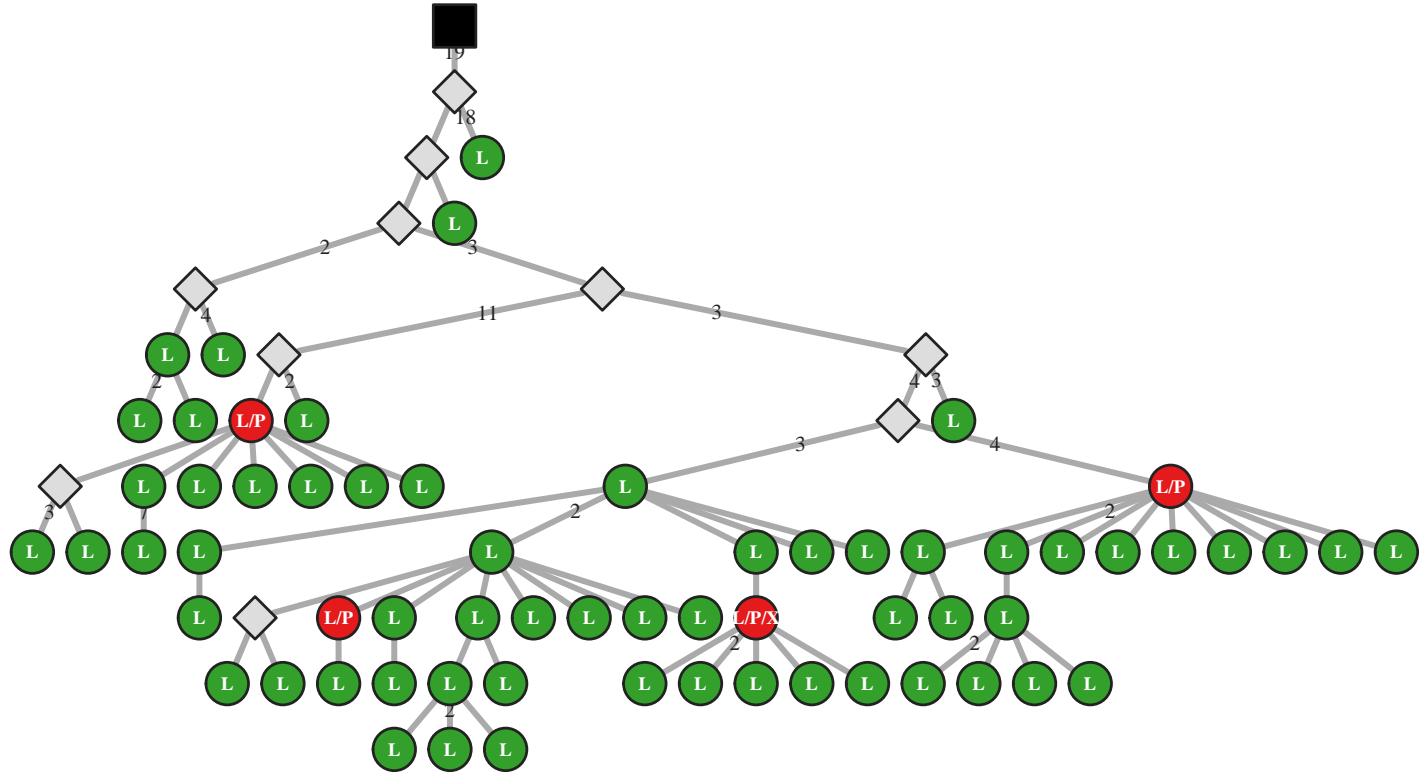
M5 IgA IGHV1-2/J4 60bp (48404)



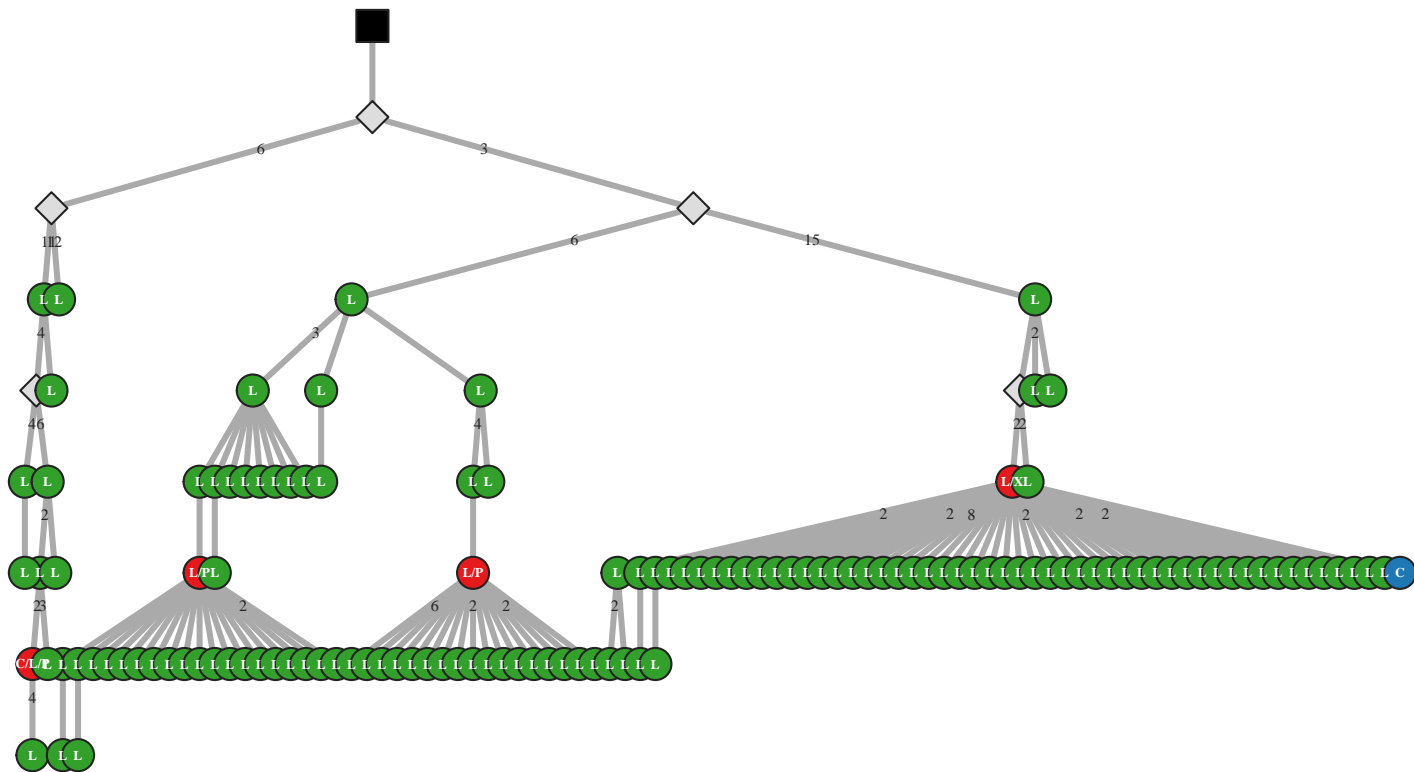
M5 IgG IGHV1-2/J4 60bp (13943)



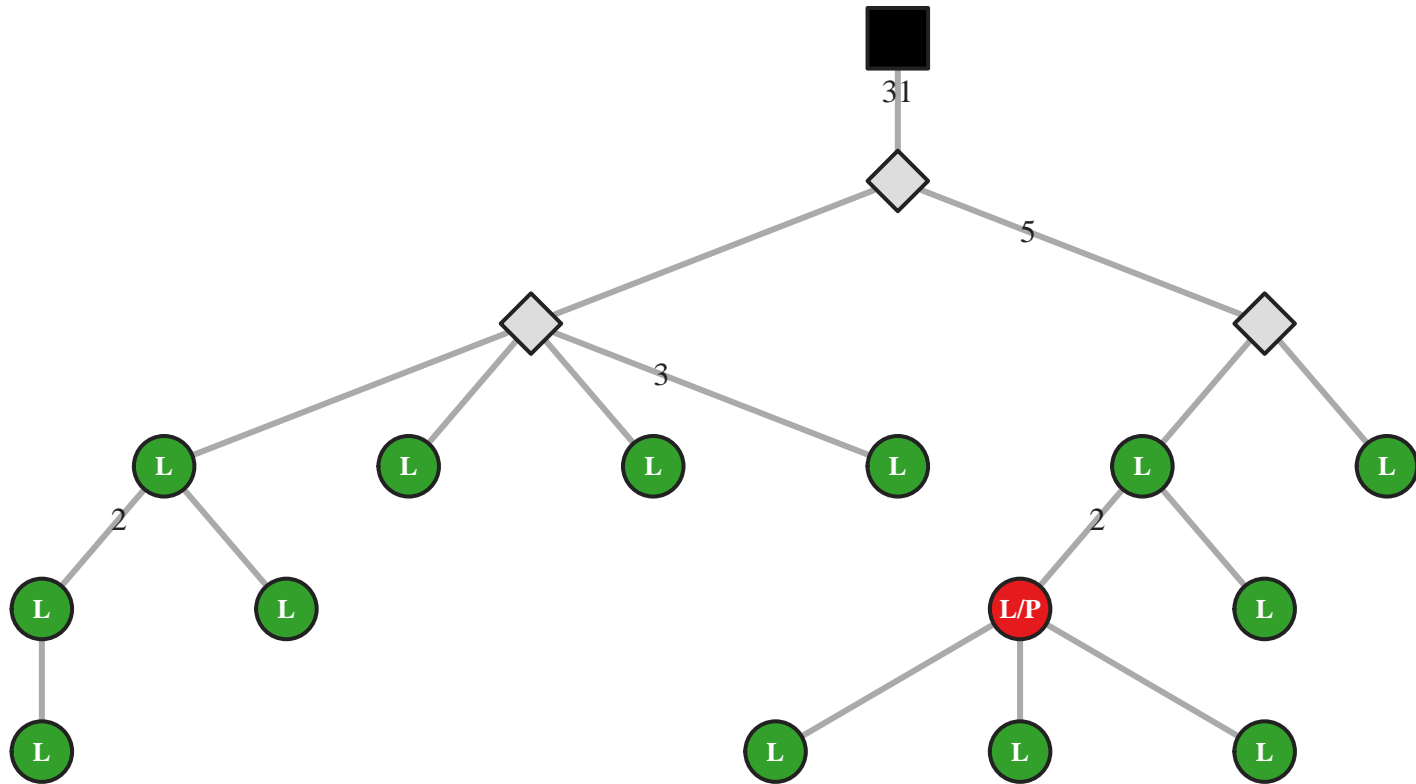
M5 IgG IGHV1-2/J4 60bp (13950)



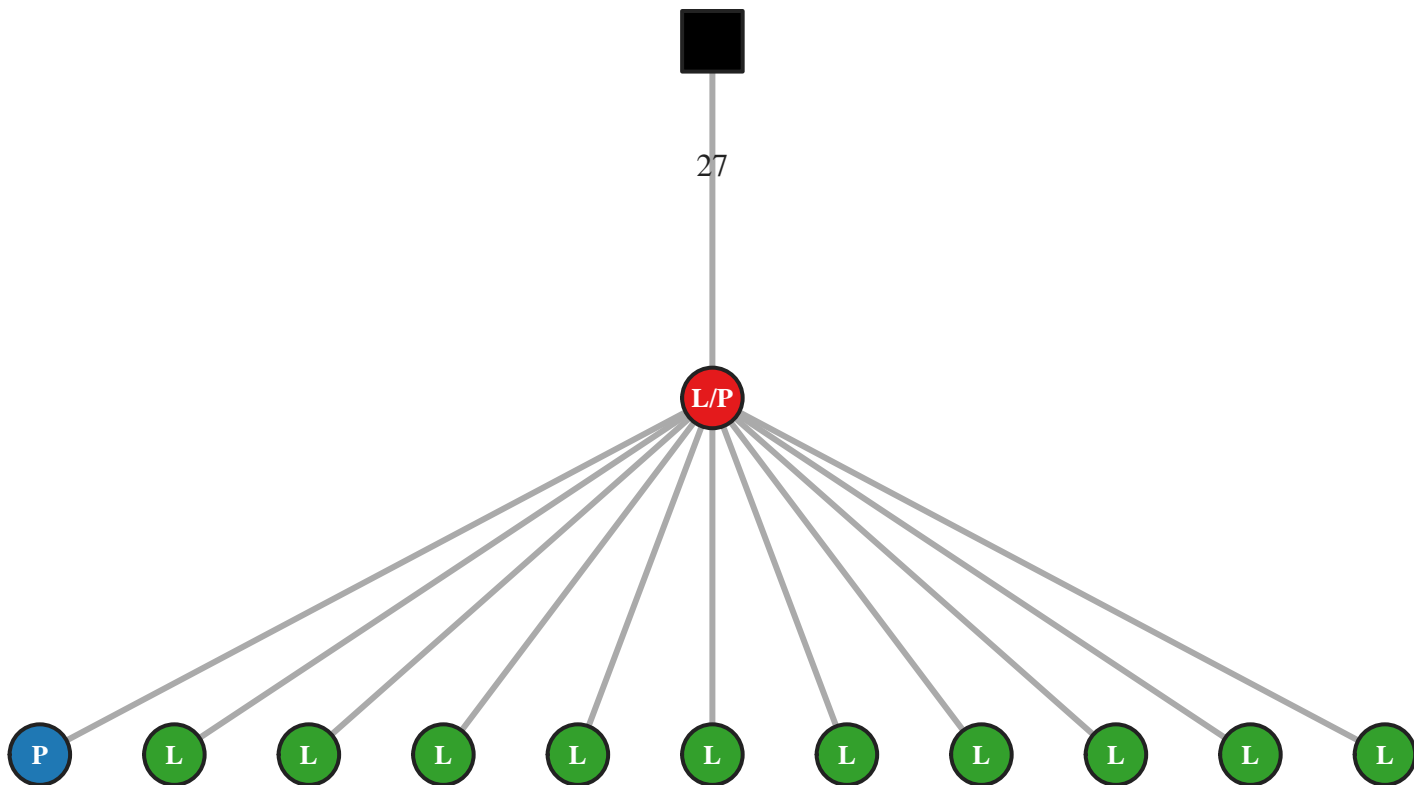
M5 IgG IGHV1-2/J4 60bp (13972)



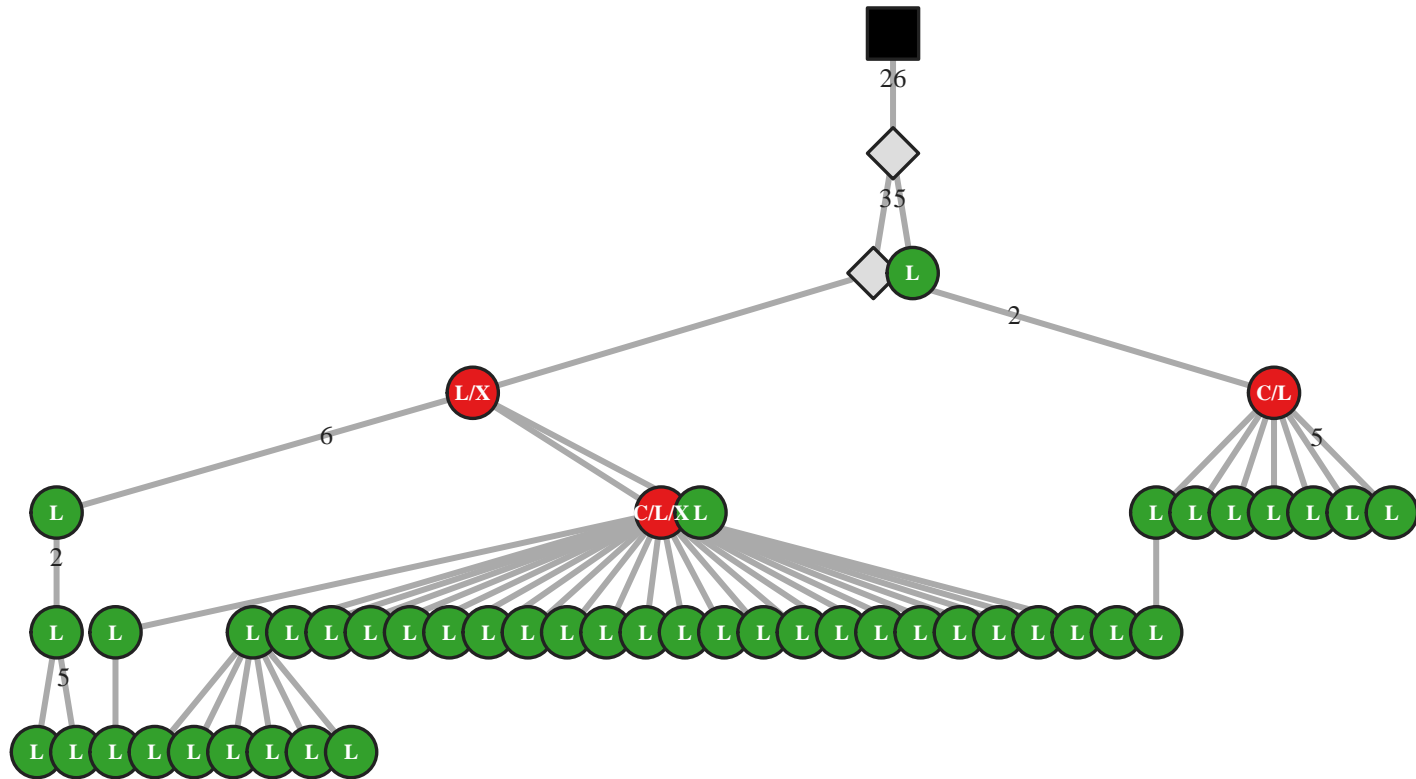
M5 IgG IGHV1-2/J4 60bp (13983)



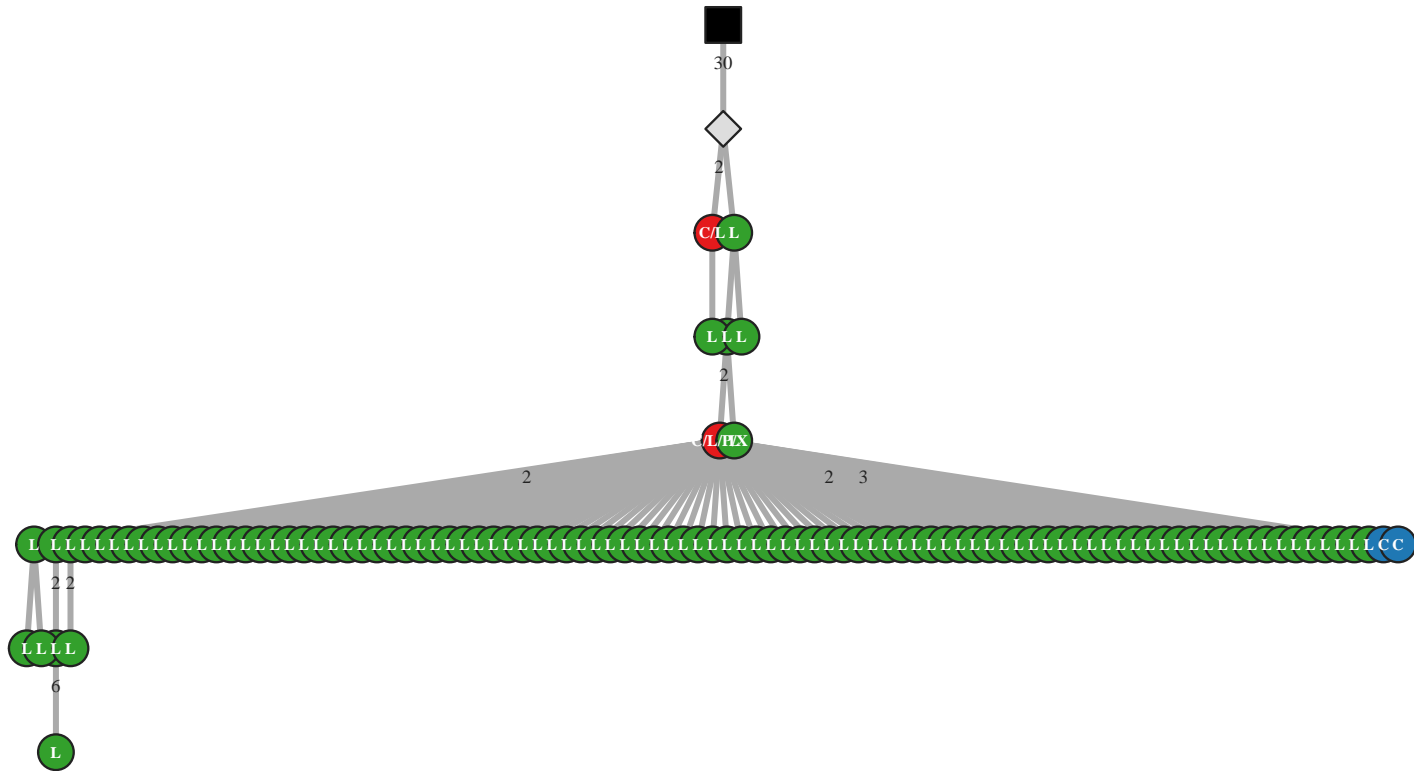
M5 IgA IGHV1-2/J4 63bp (2260)



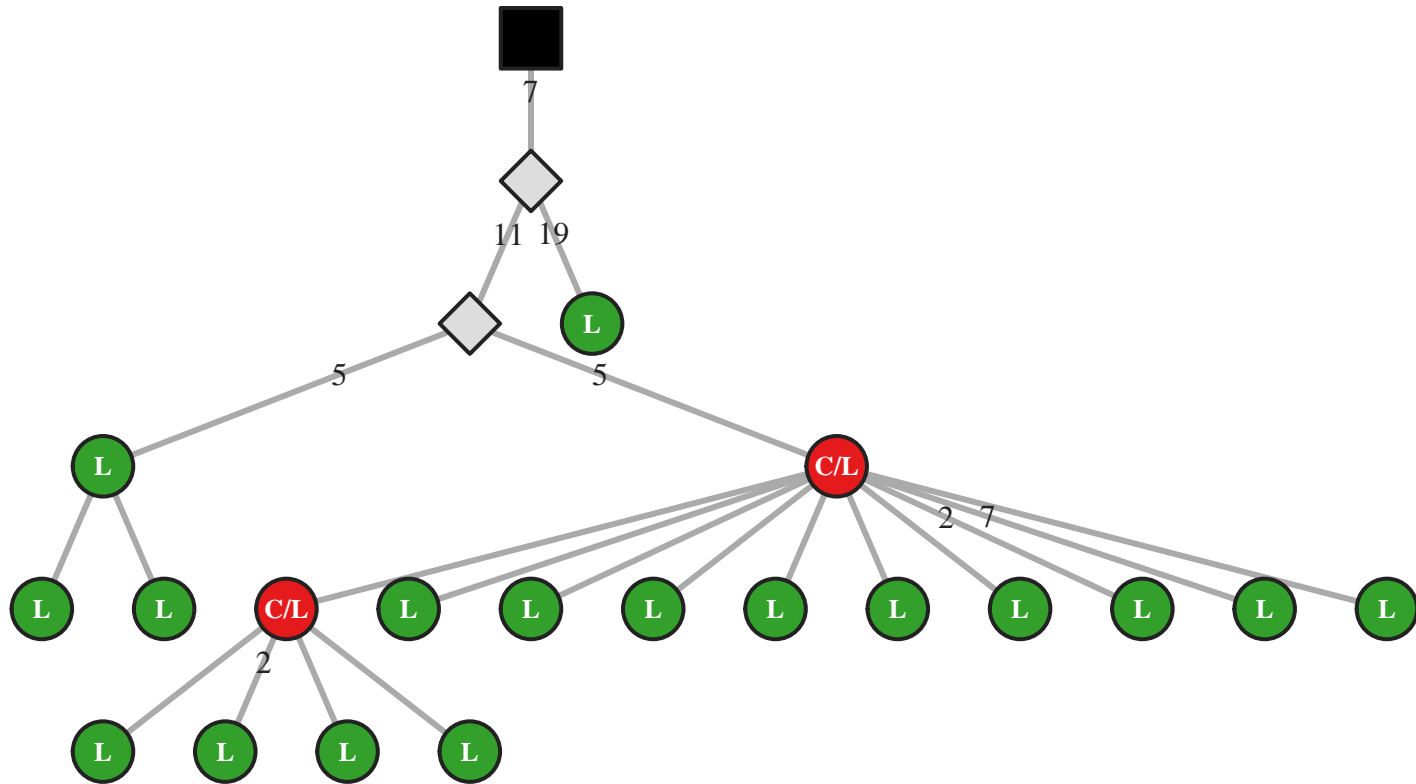
M5 IgG IGHV1-2/J4 66bp (23253)



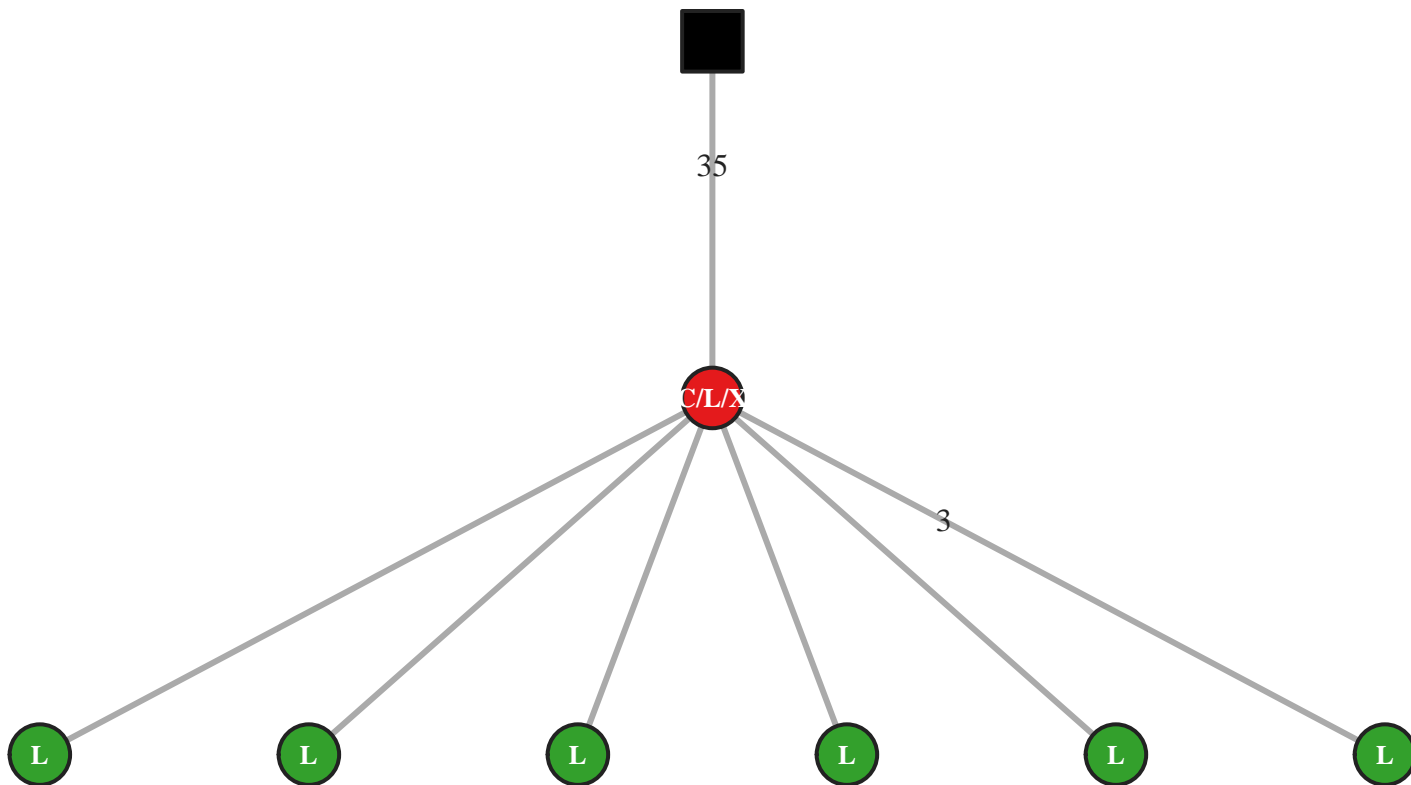
M5 IgG IGHV1-2/J4 66bp (23260)



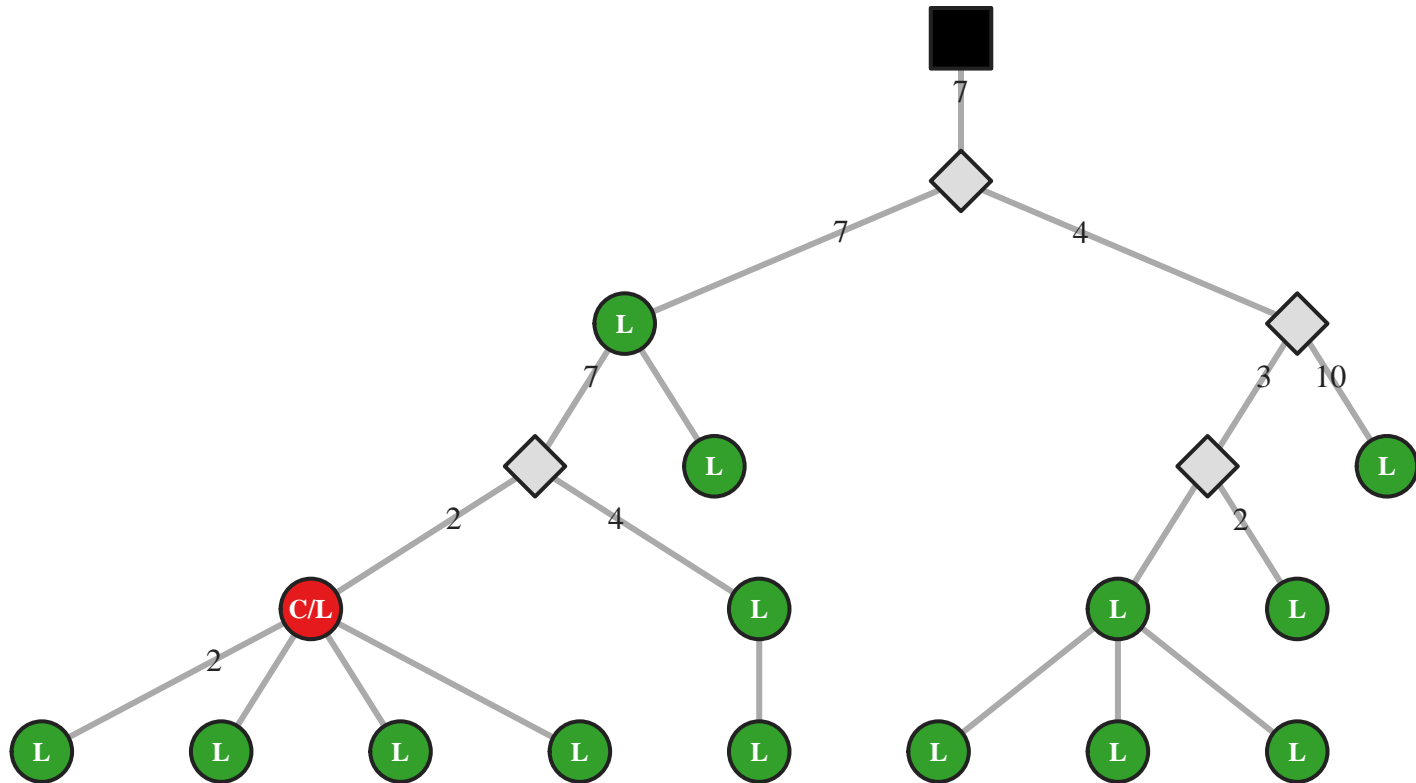
M5 IgG IGHV1-2/J5 33bp (31932)



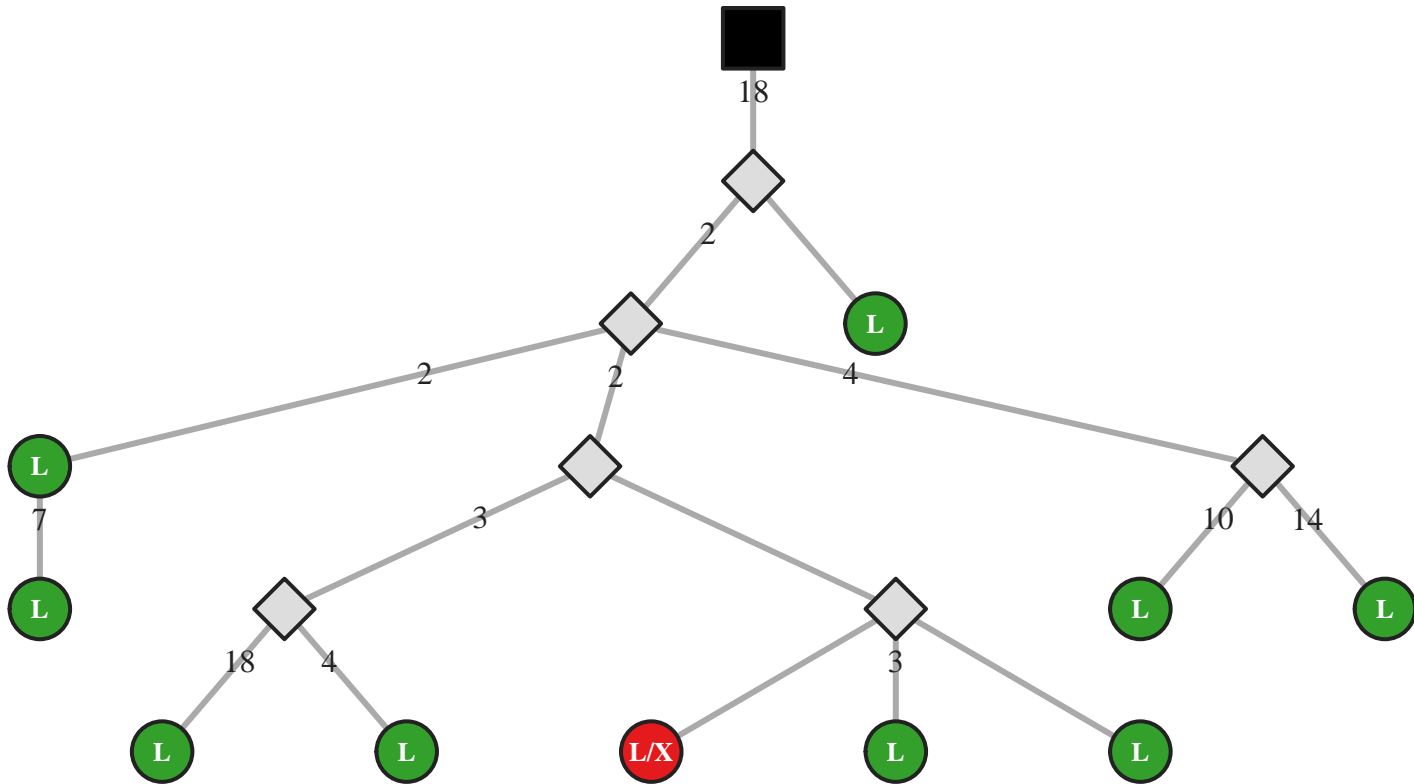
M5 IgG IGHV1-2/J5 39bp (40184)



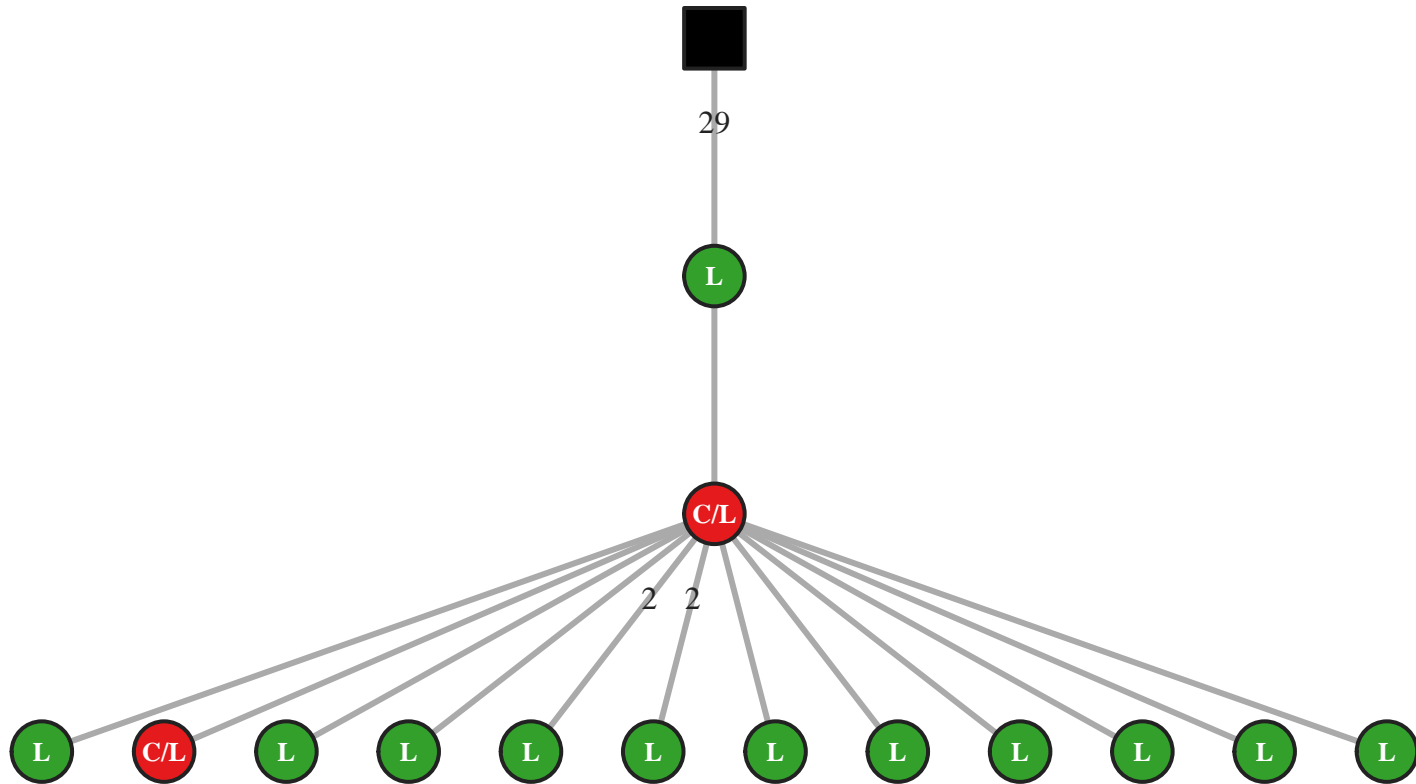
M5 IgG IGHV1-2/J5 39bp (40192)



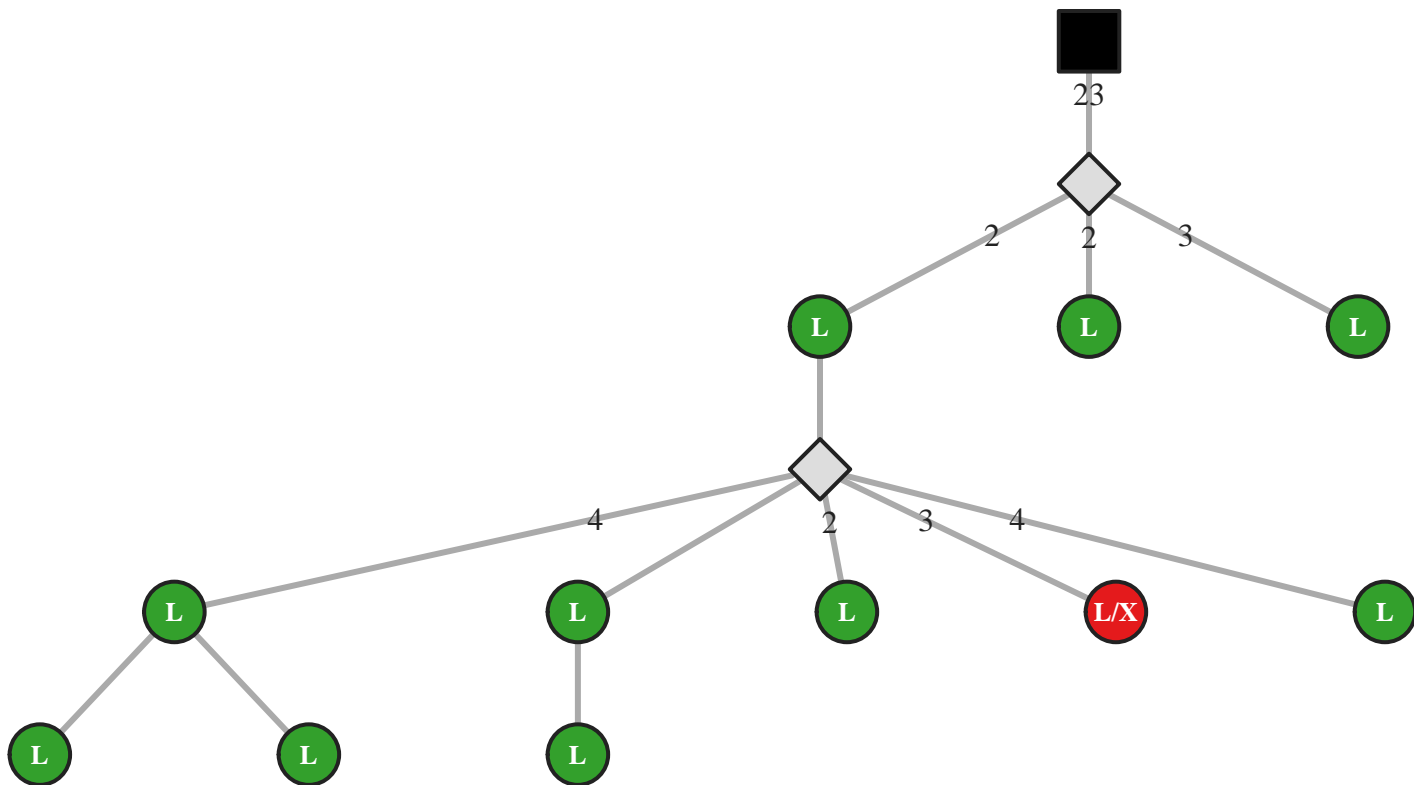
M5 IgG IGHV1-2/J5 42bp (14009)



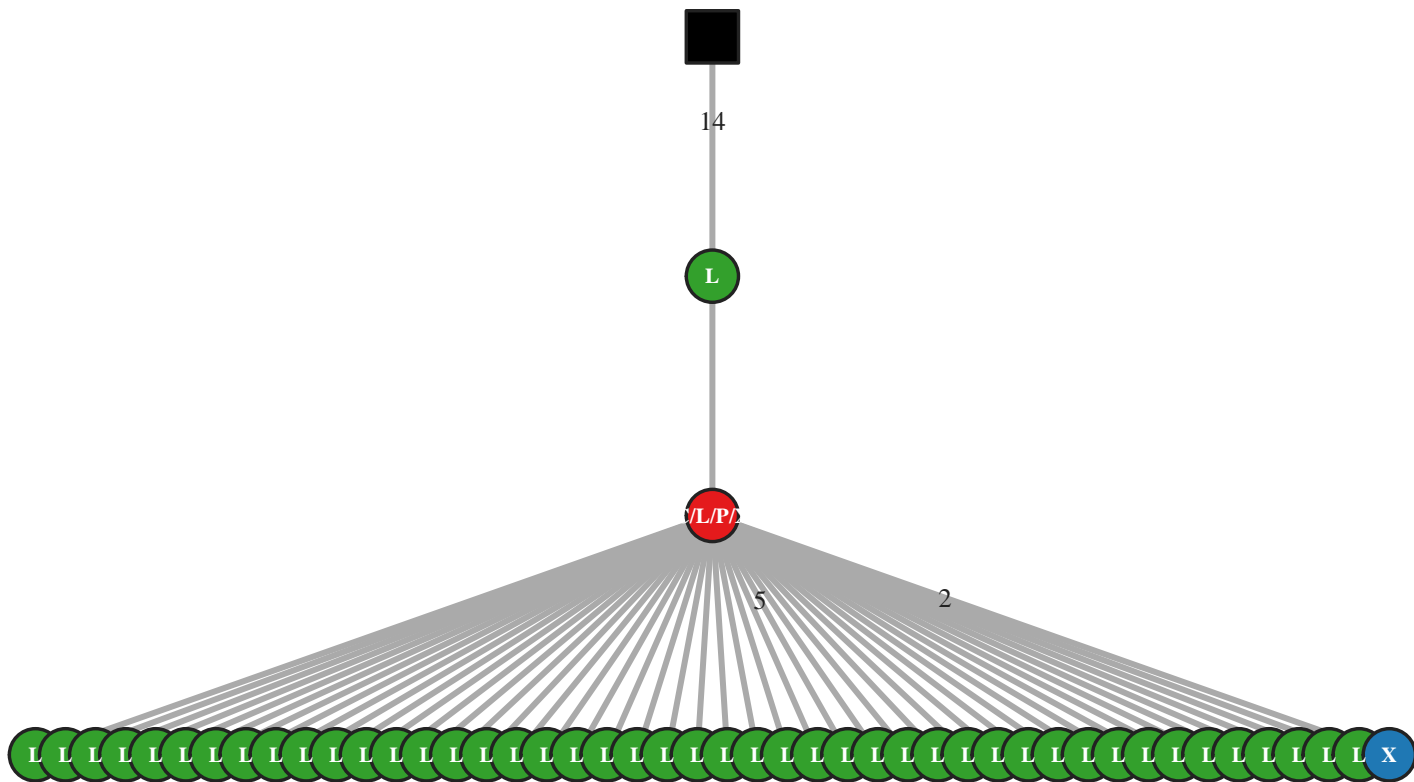
M5 IgA IGHV1-2/J5 48bp (2270)



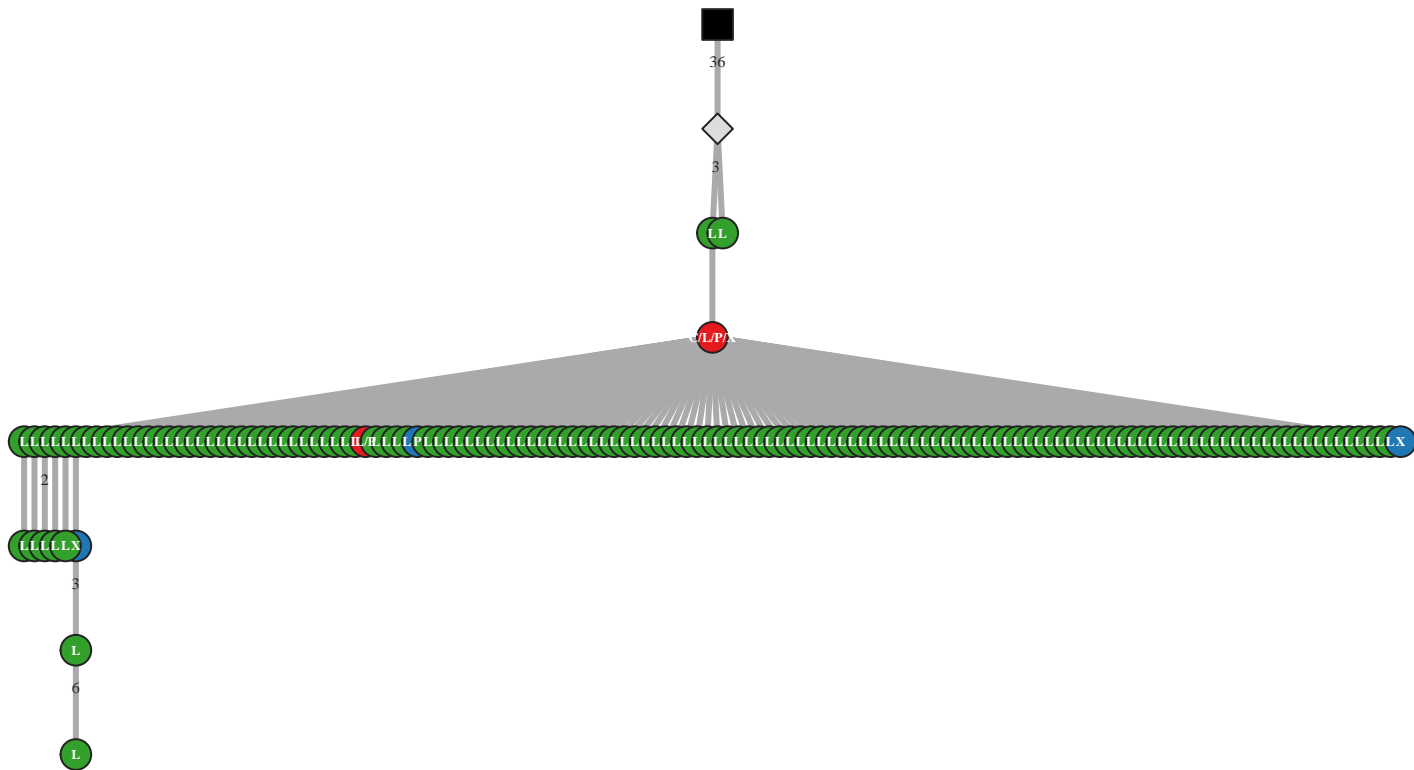
M5 IgG IGHV1-2/J5 48bp (23281)



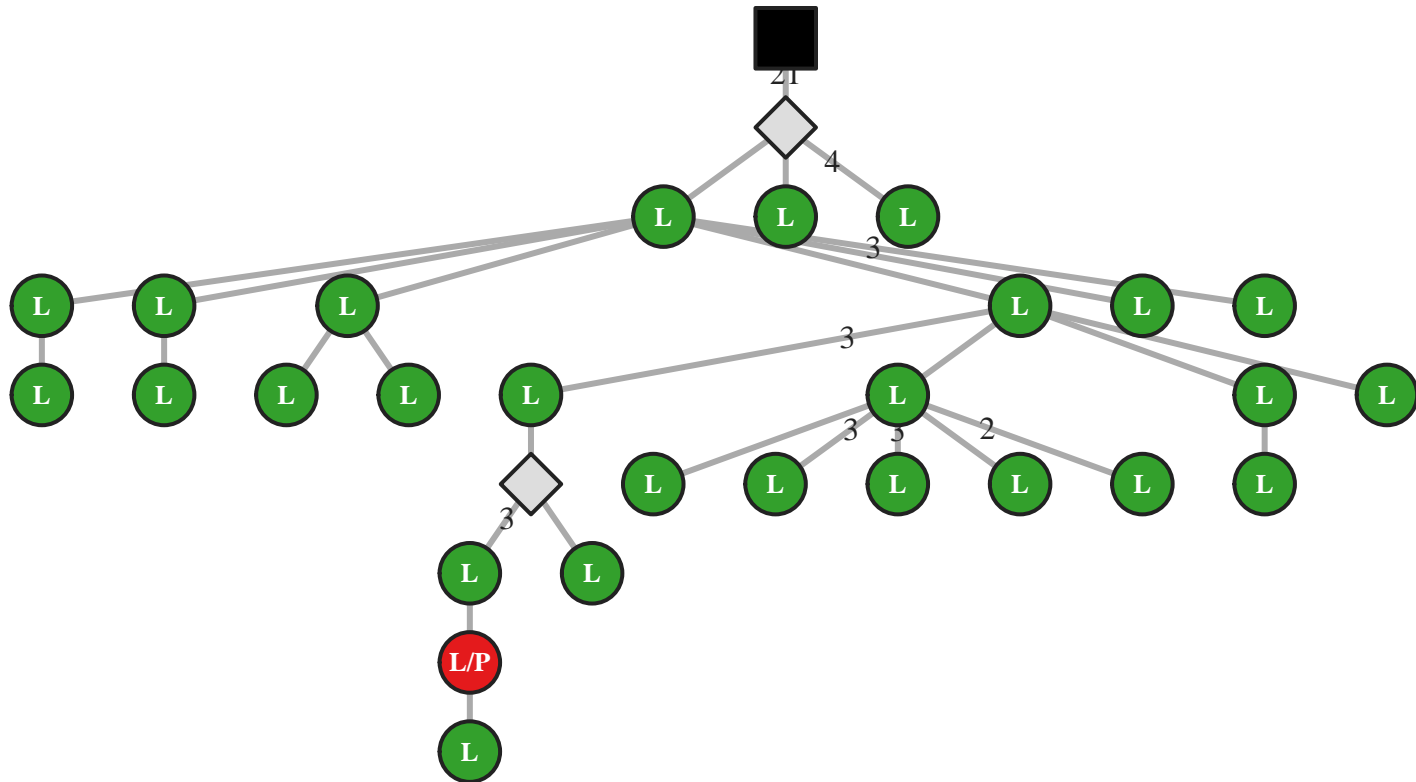
M5 IgG IGHV1-2/J5 48bp (23298)



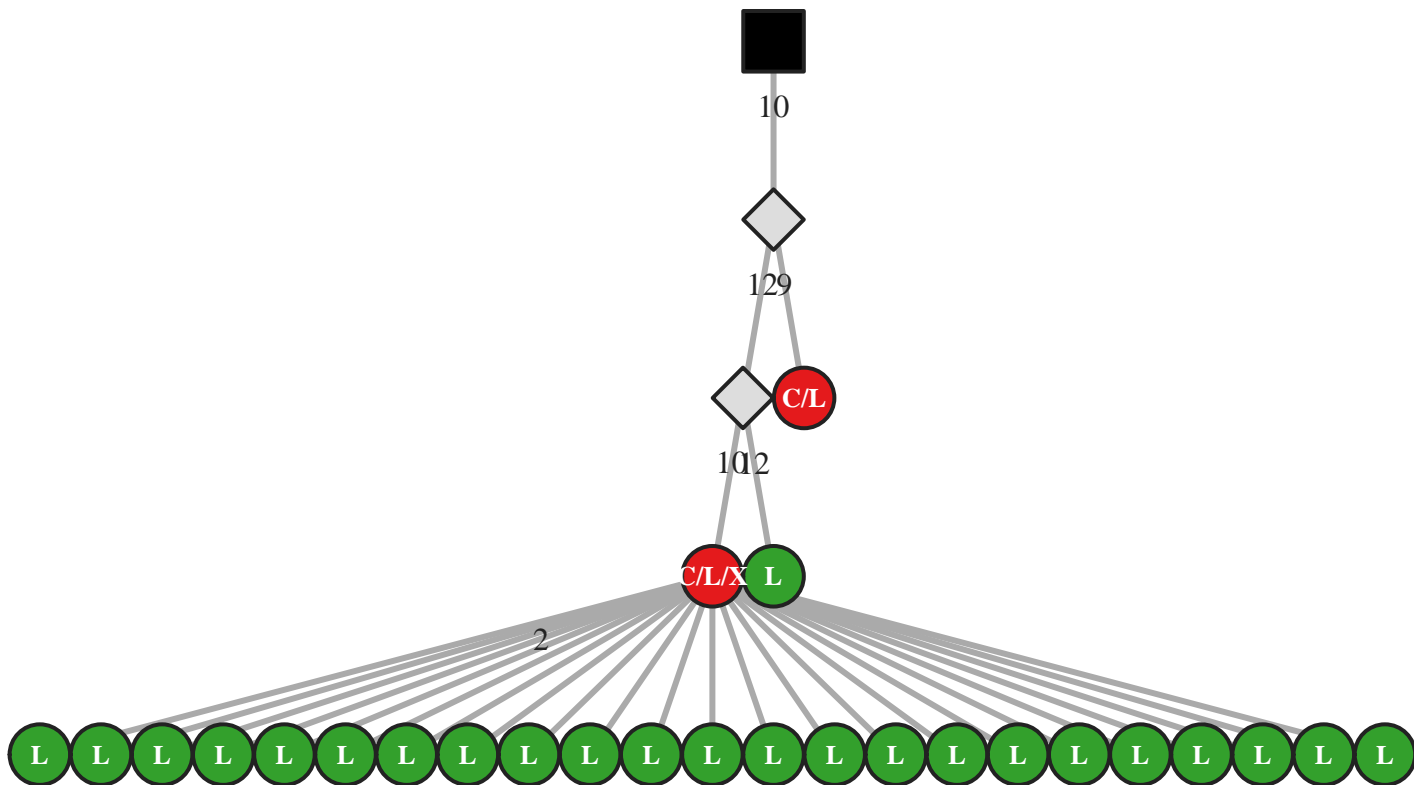
M5 IgG IGHV1-2/J5 54bp (40249)



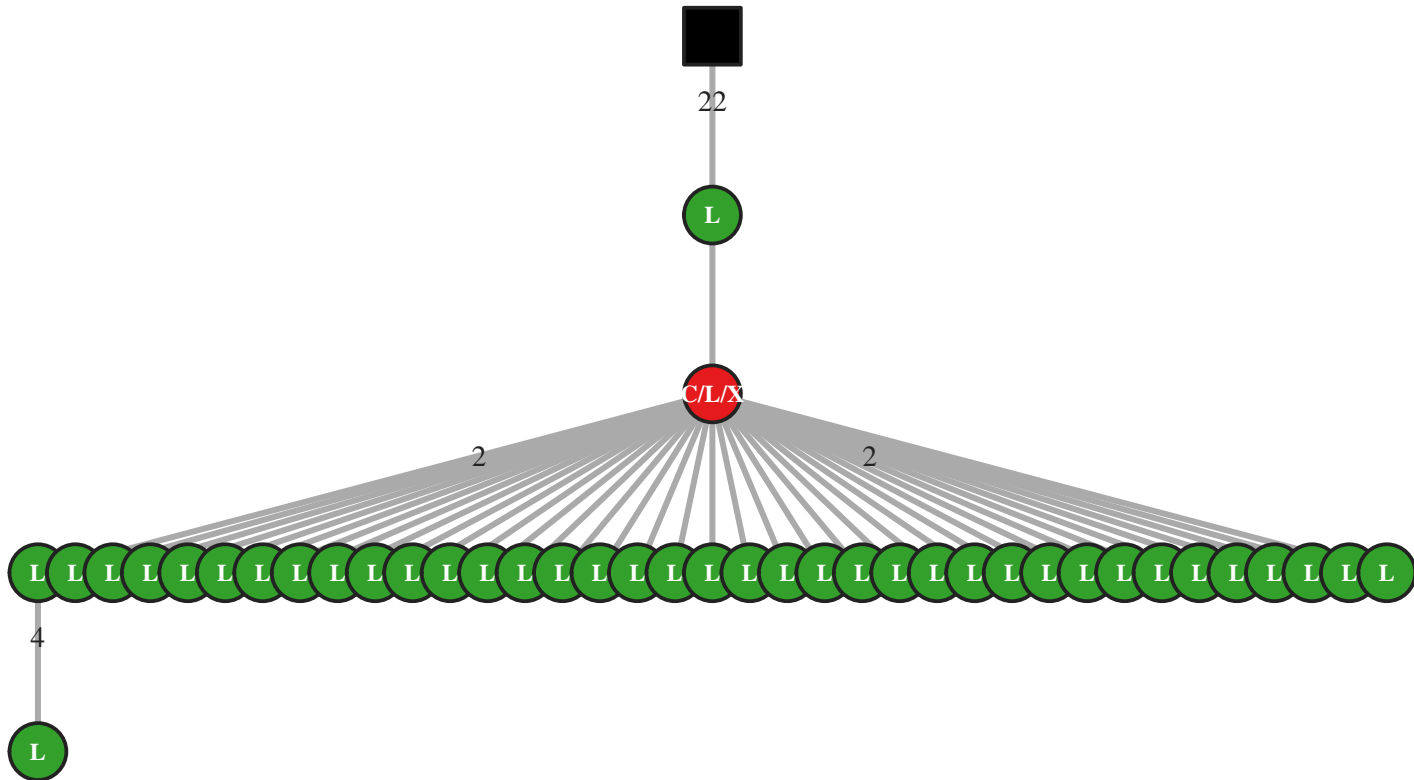
M5 IgG IGHV1-2/J5 57bp (31948)



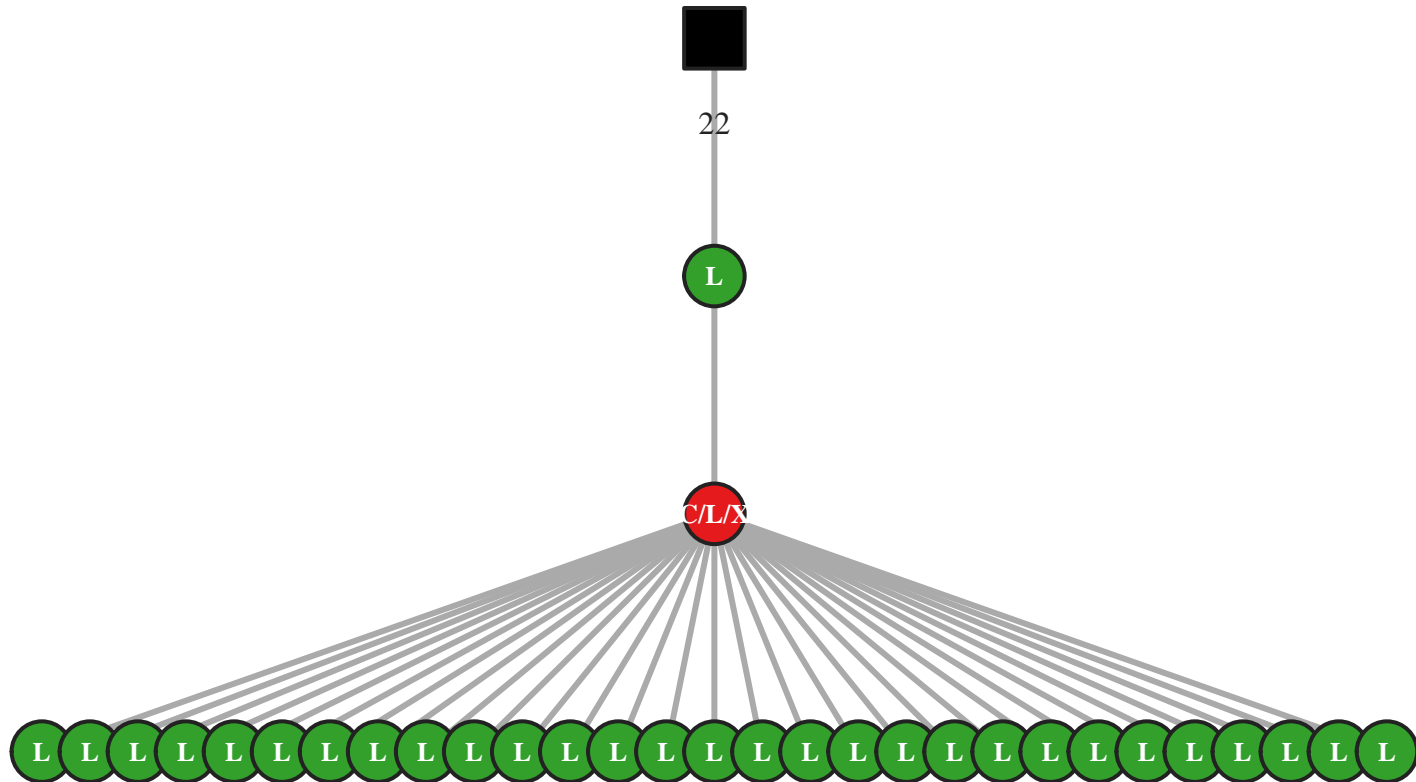
M5 IgA IGHV1-2/J5 60bp (2297)



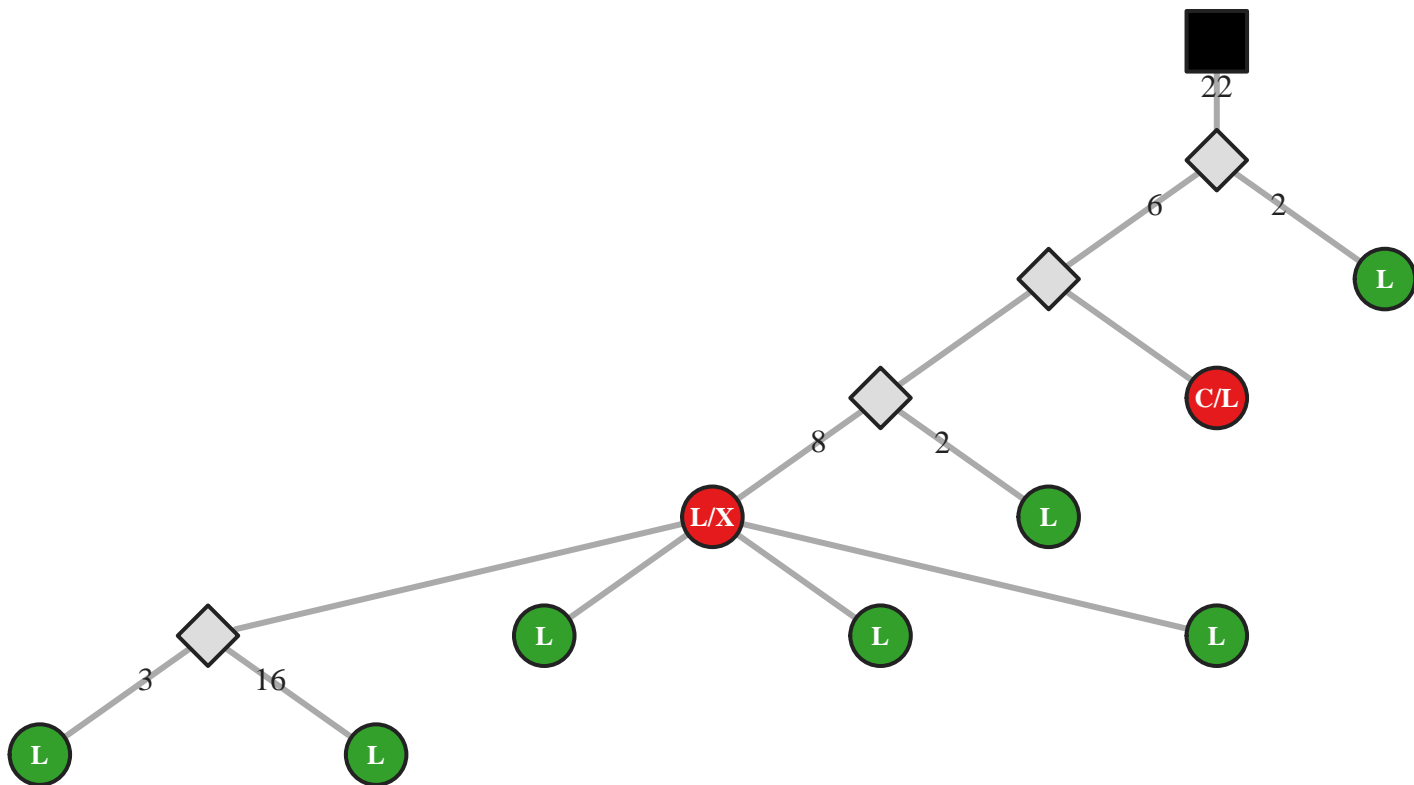
M5 IgG IGHV1-2/J5 63bp (14023)



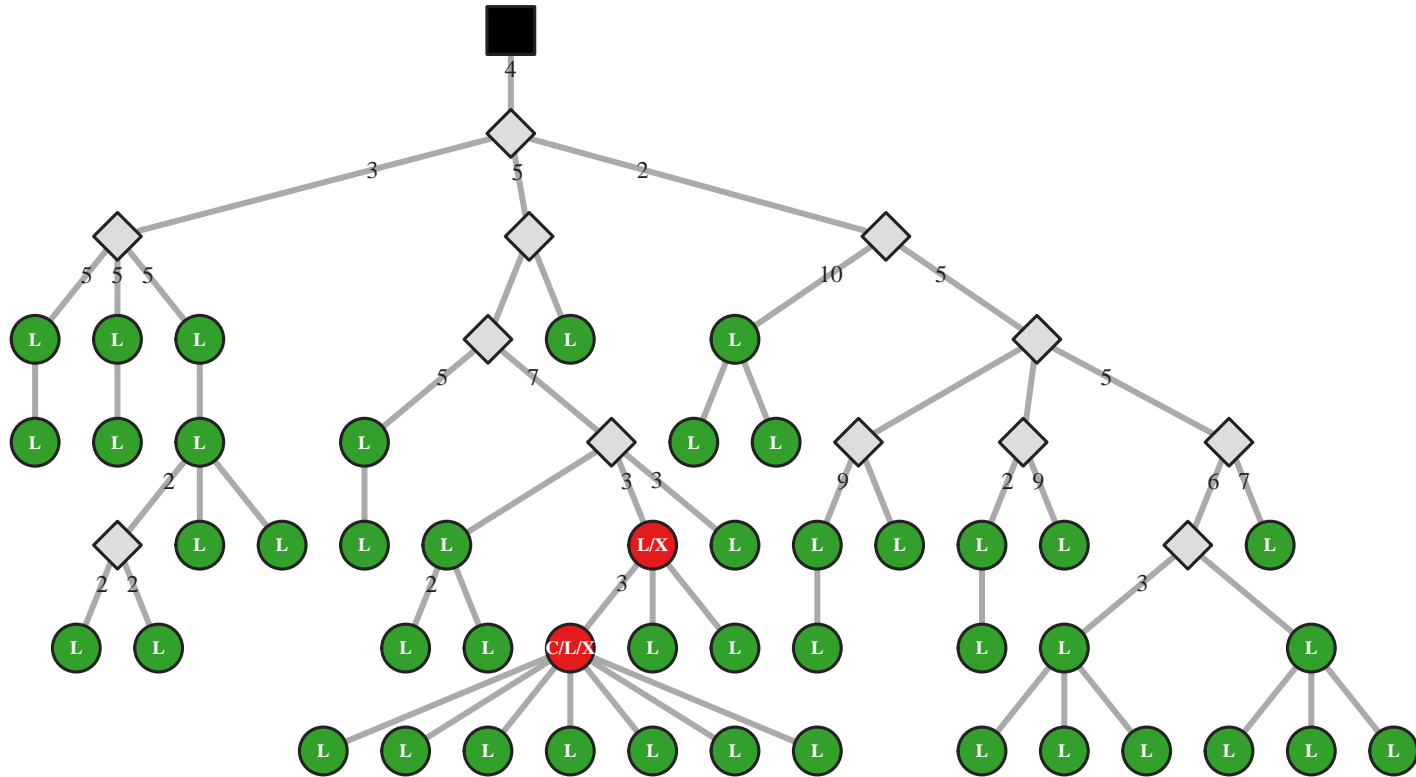
M5 IgA IGHV1-2/J6 33bp (38256)



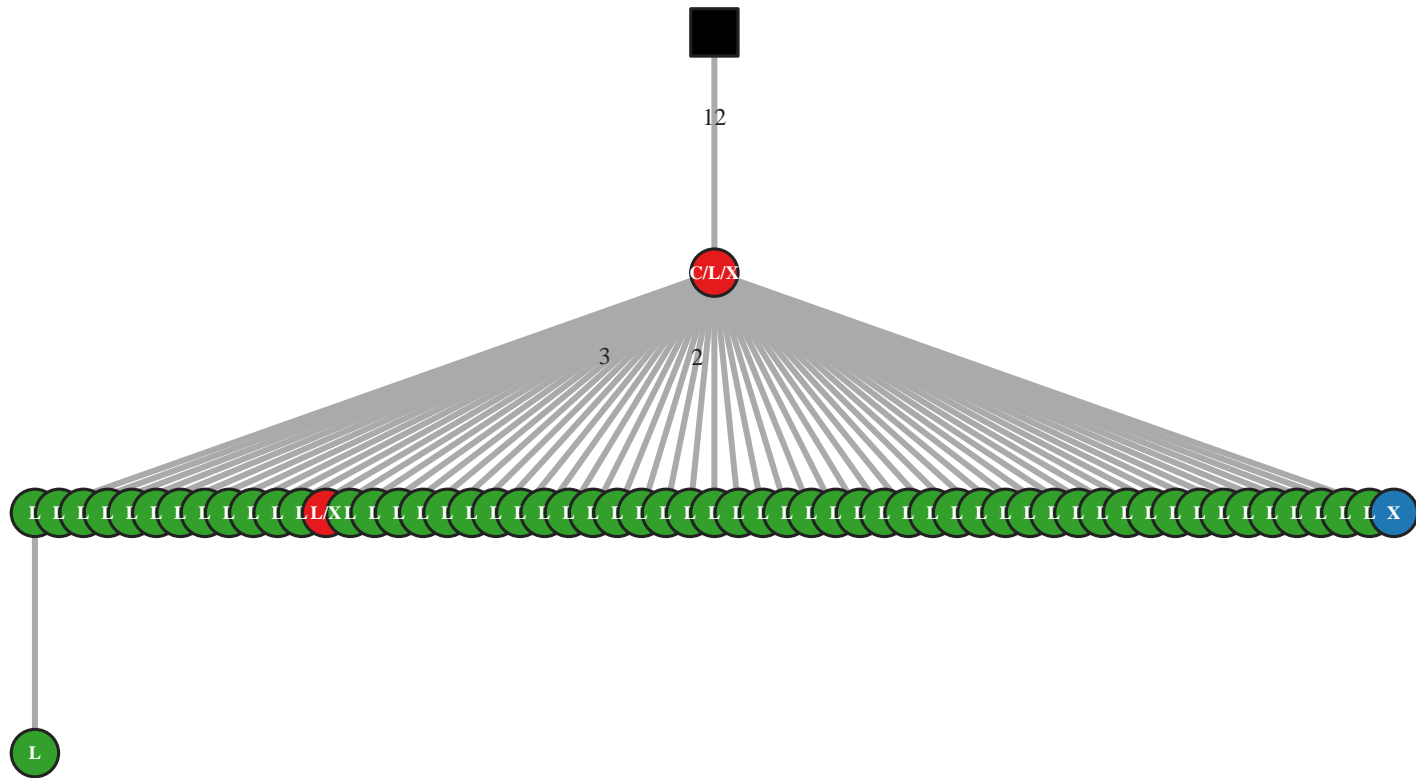
M5 IgG IGHV1-2/J6 42bp (23340)



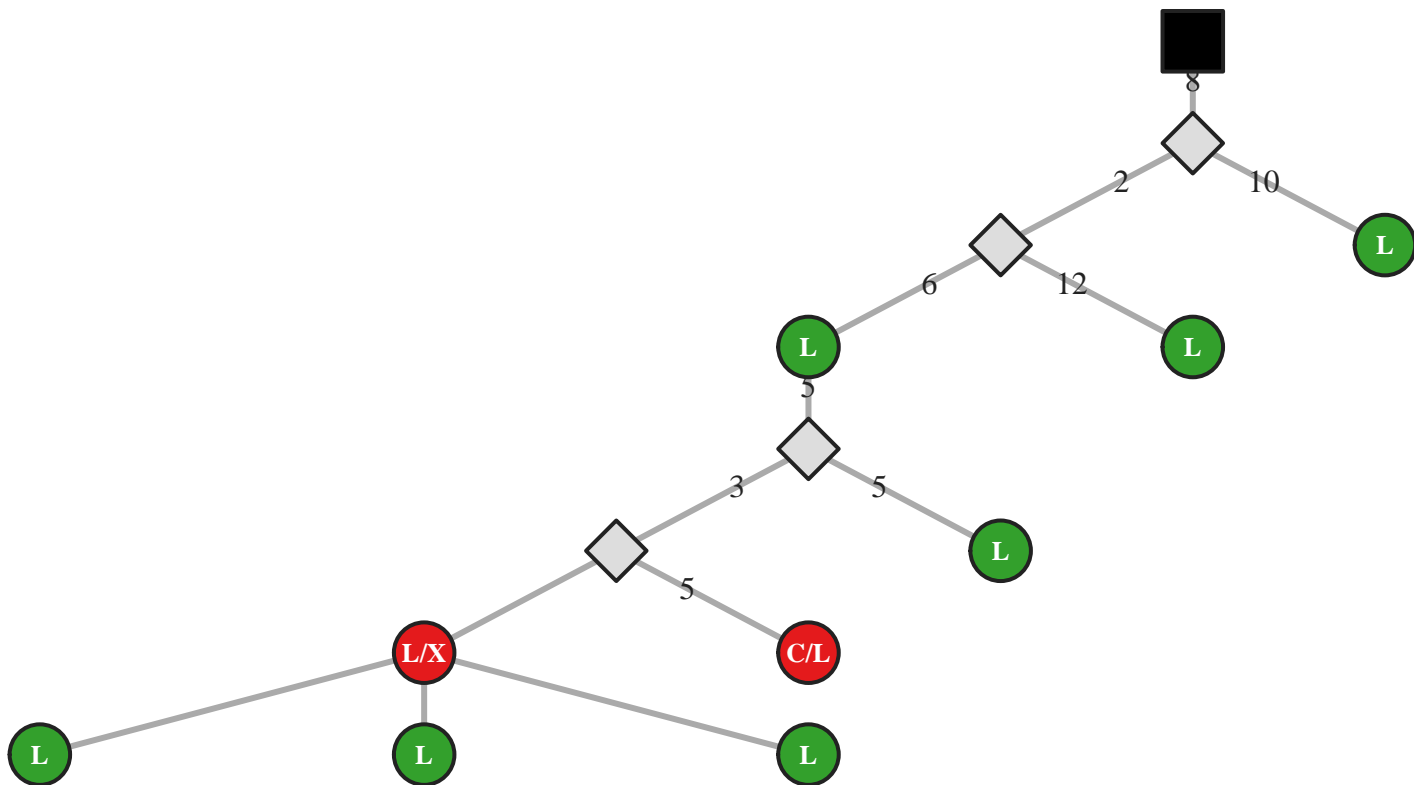
M5 IgG IGHV1-2/J6 45bp (4503)



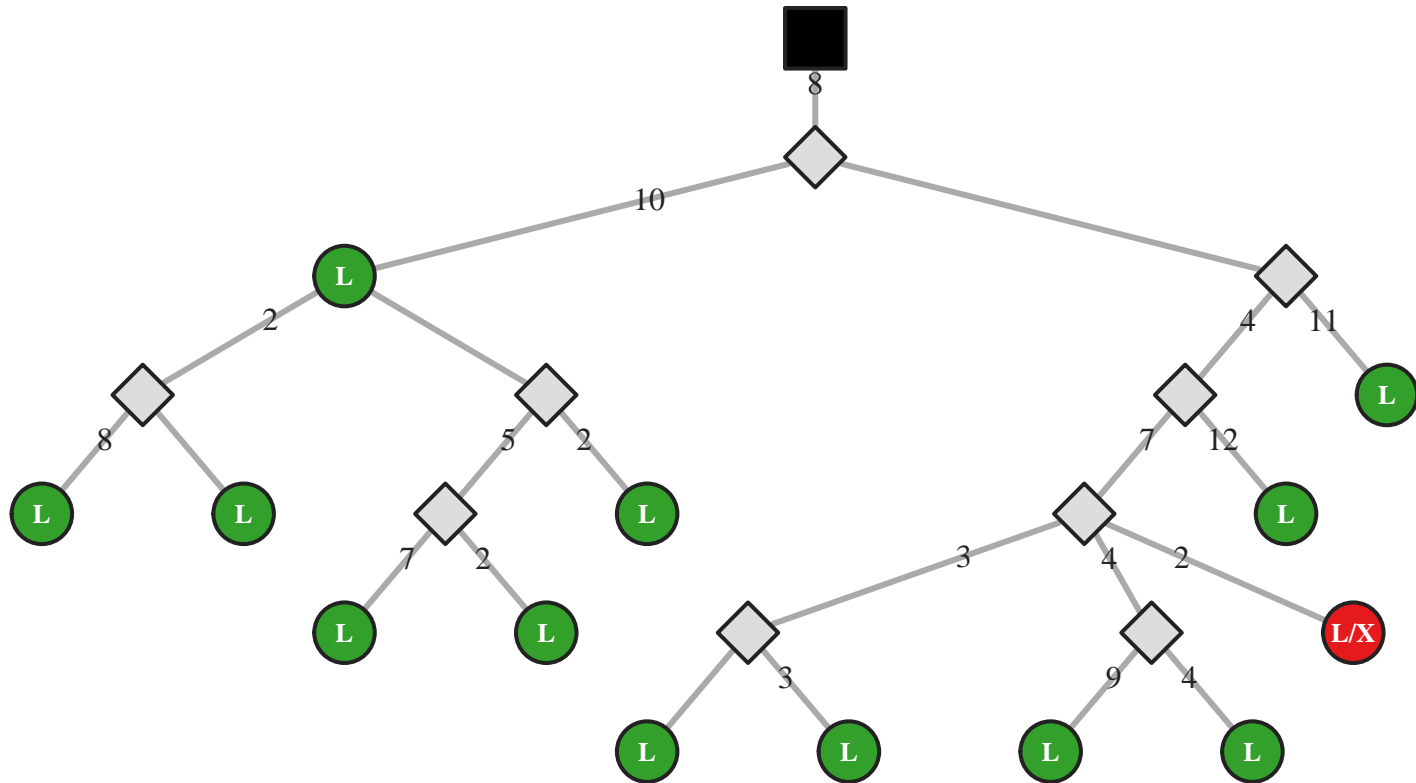
M5 IgA IGHV1-2/J6 48bp (38262)



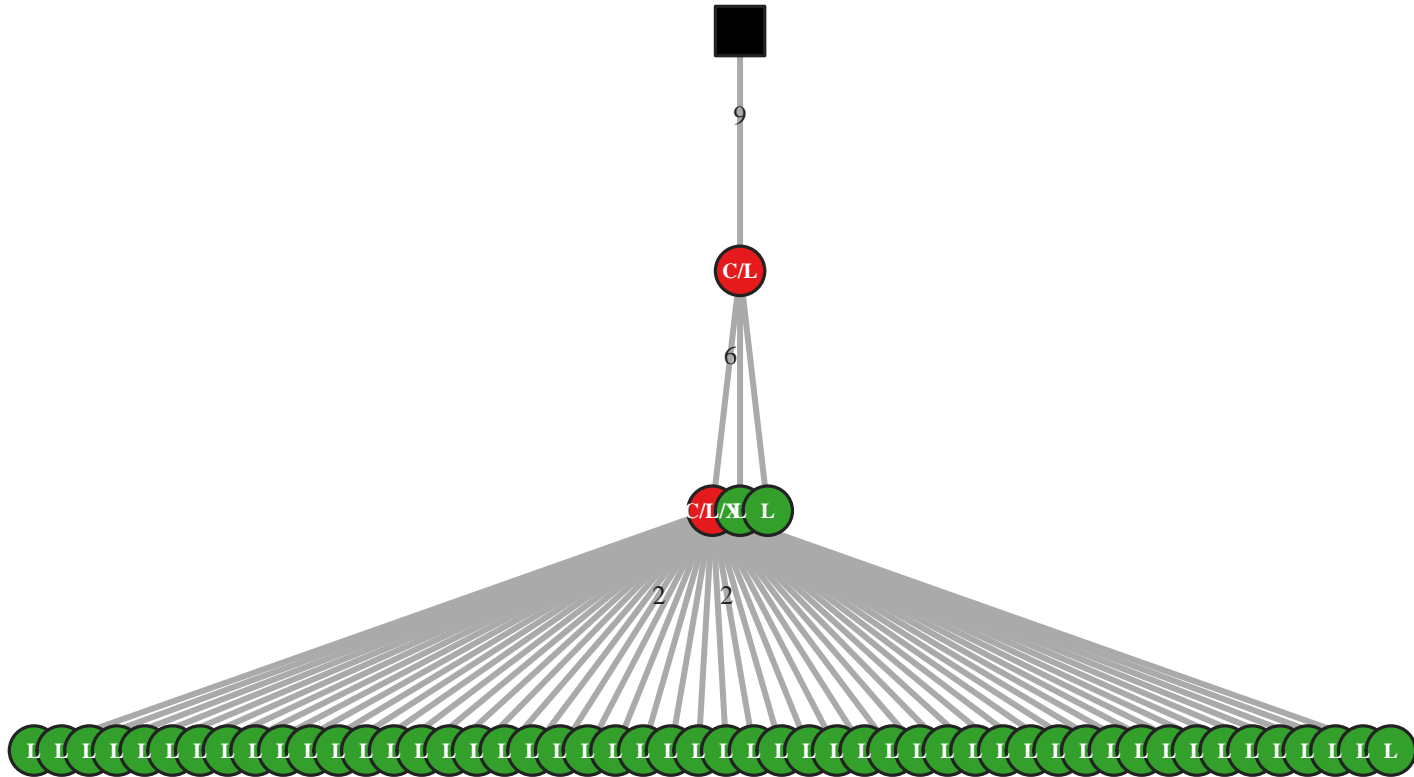
M5 IgG IGHV1-2/J6 51bp (32009)



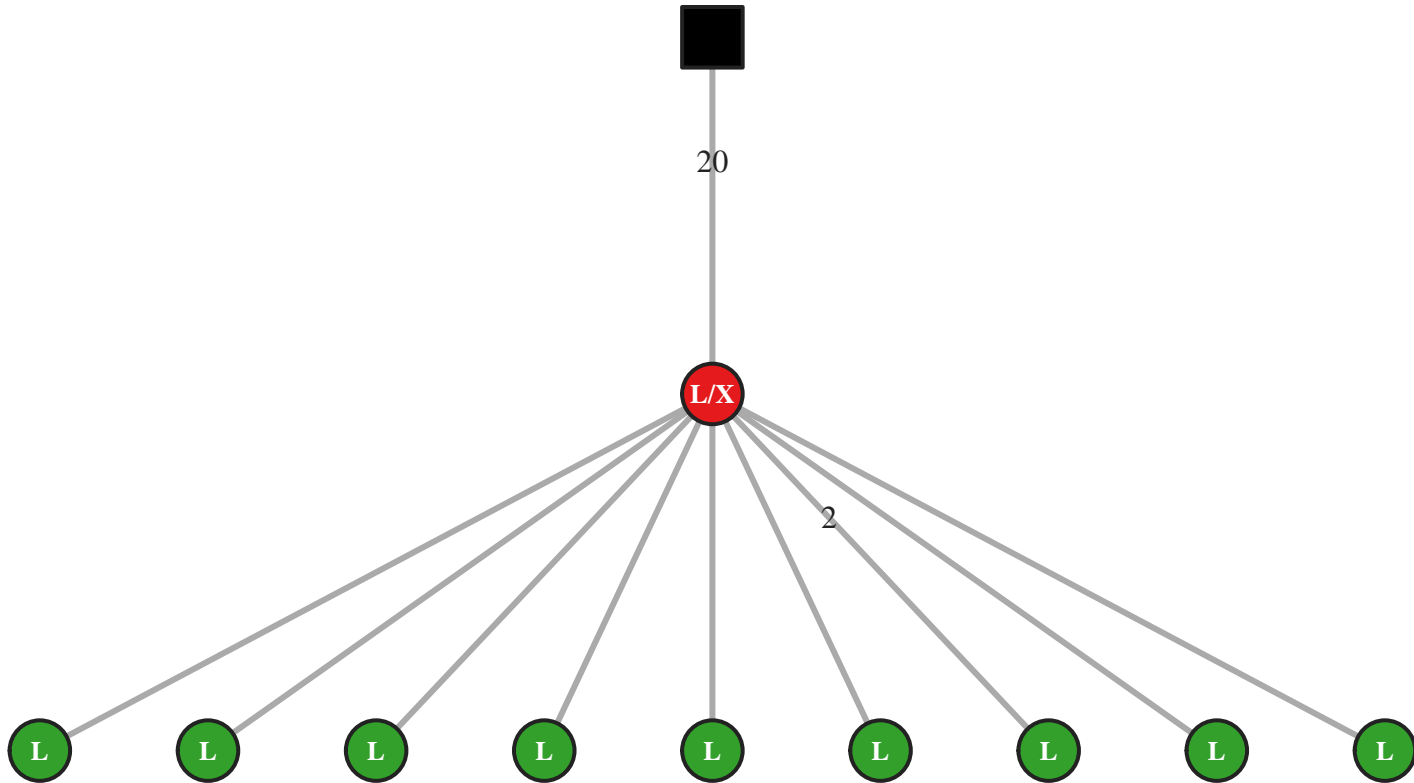
M5 IgA IGHV1-2/J6 54bp (21187)



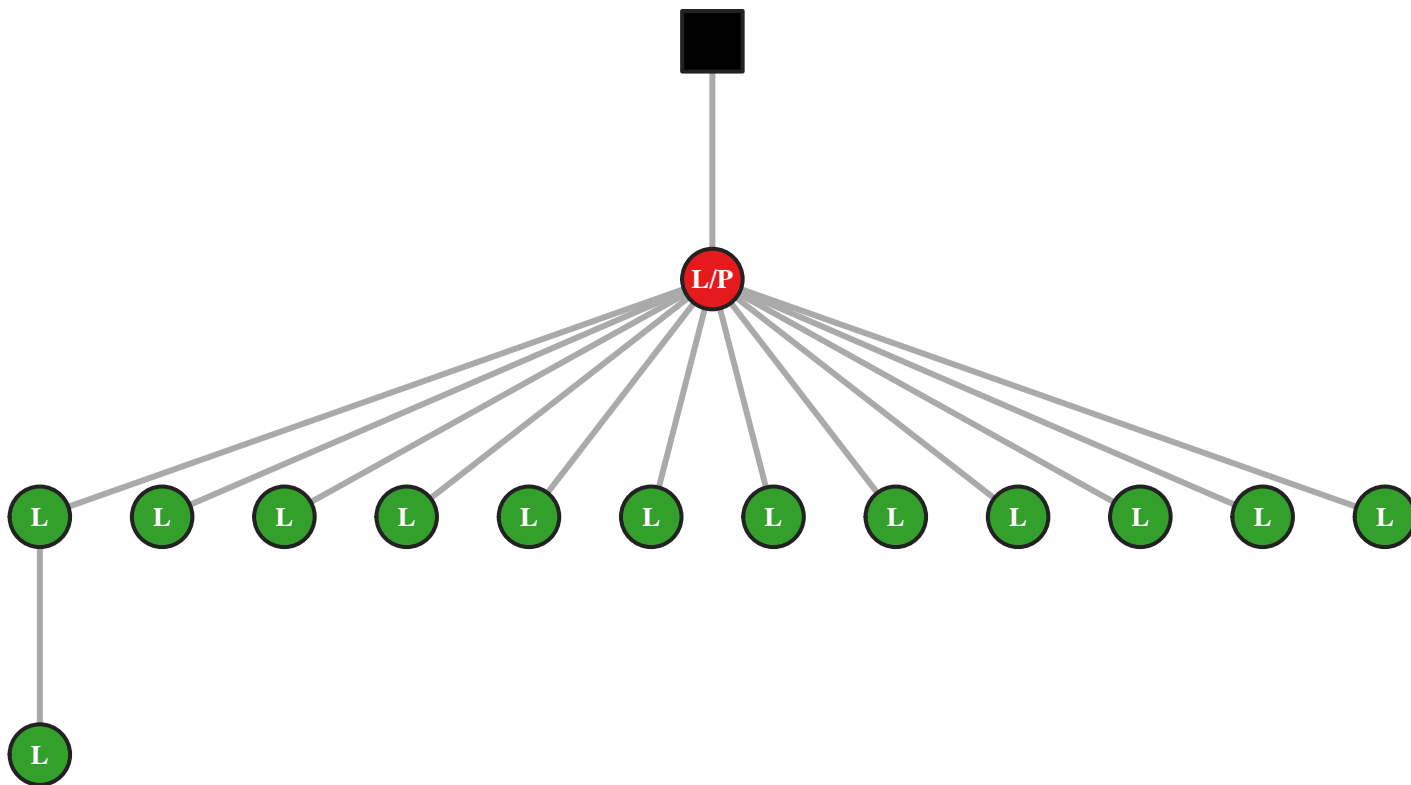
M5 IgM IGHV1-2/J6 54bp (47604)



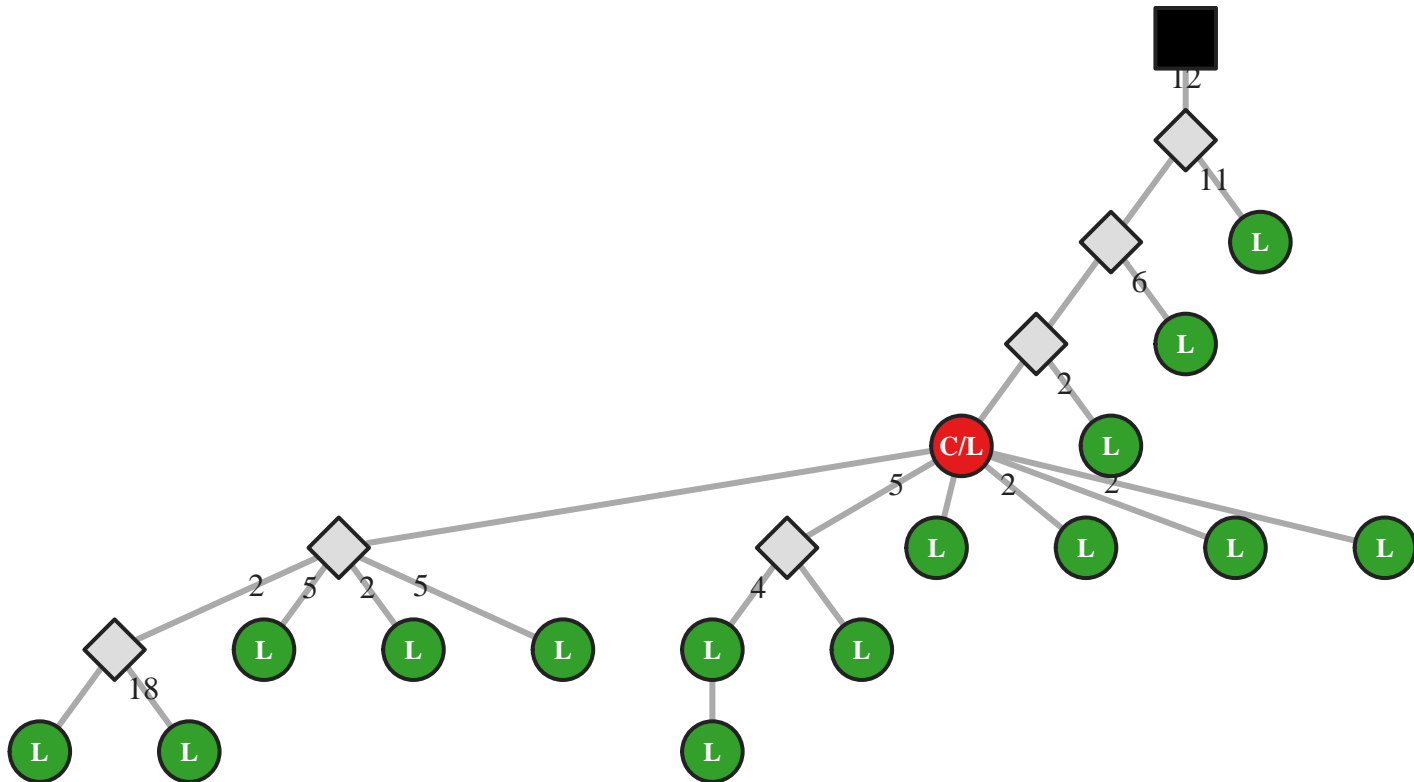
M5 IgA IGHV1-2/J6 57bp (2319)



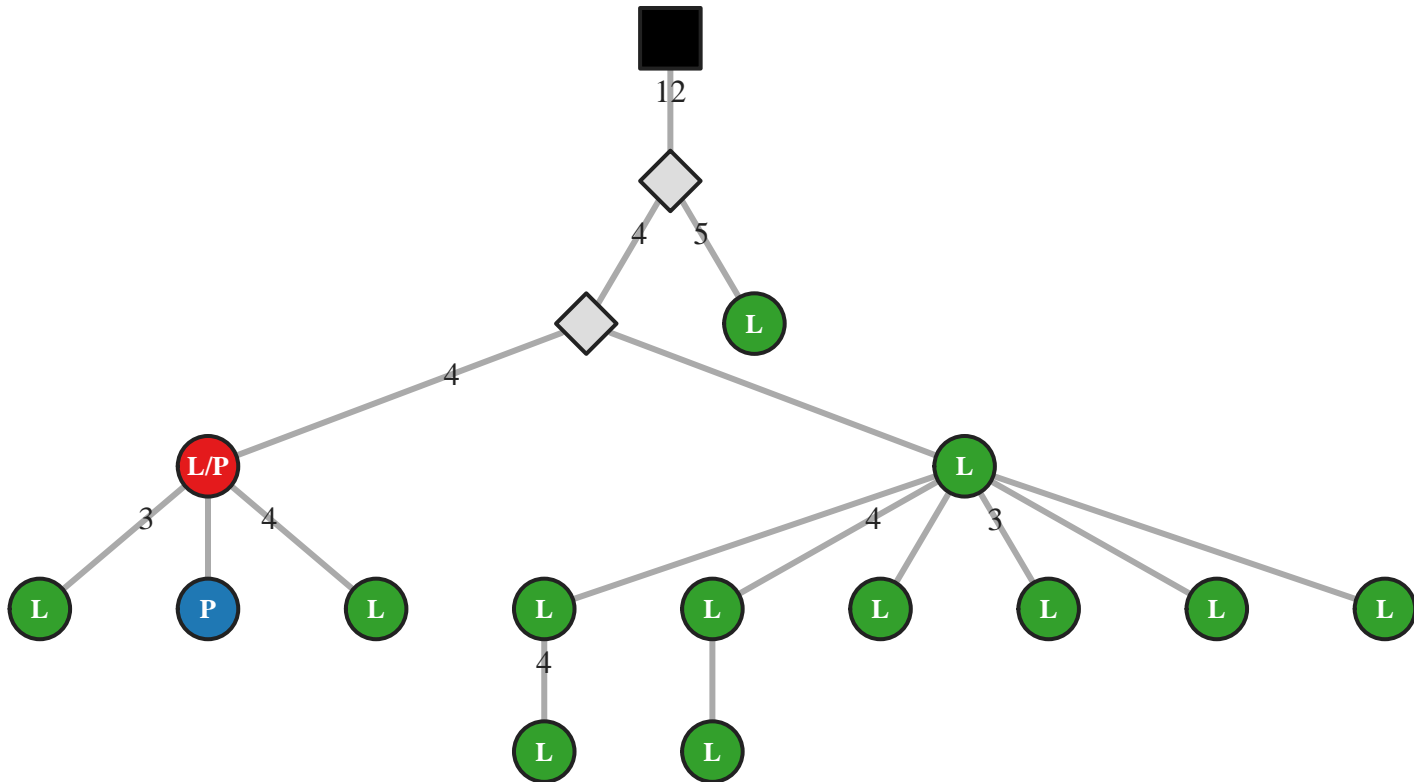
M5 IgG IGHV1-2/J6 63bp (23387)



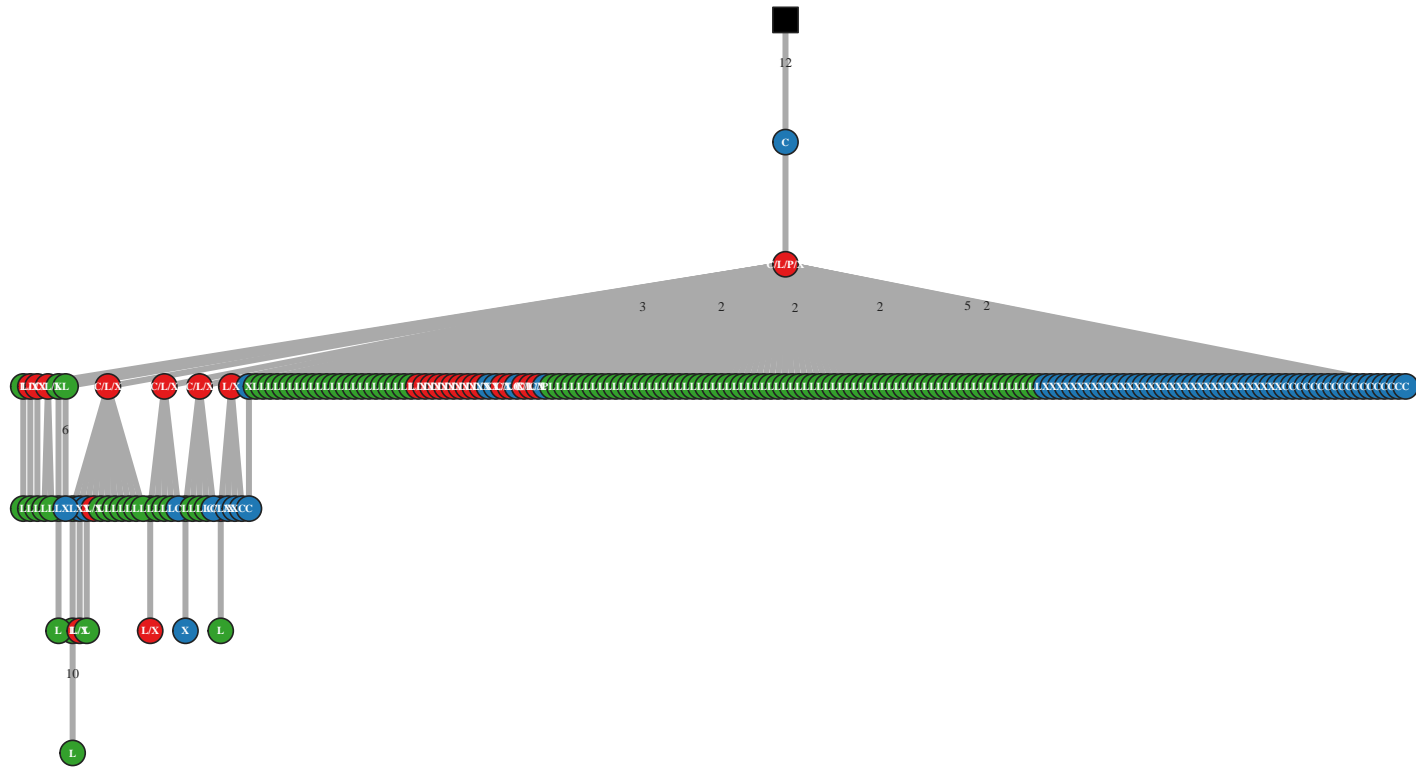
M5 IgG IGHV1-2/J6 72bp (32040)



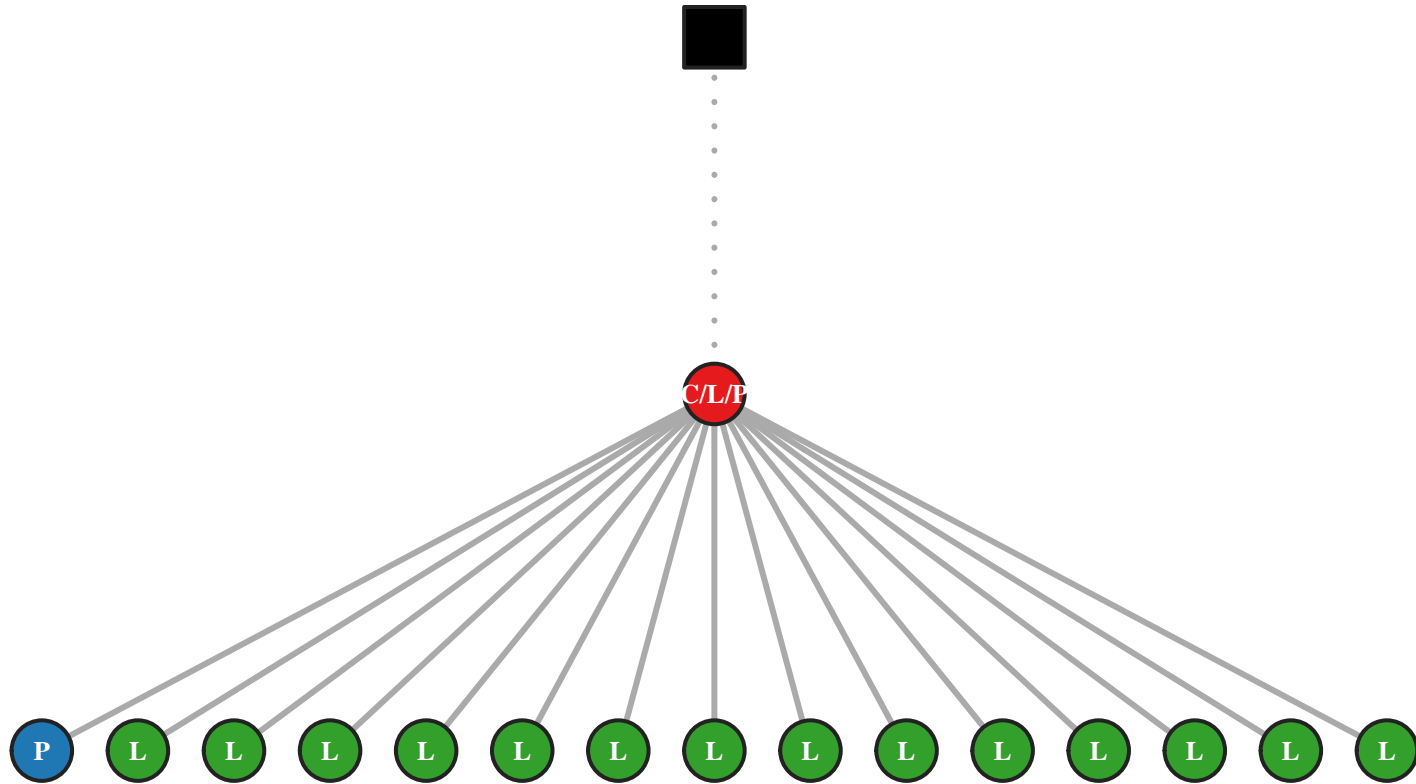
M5 IgG IGHV1-2/J6 72bp (32042)



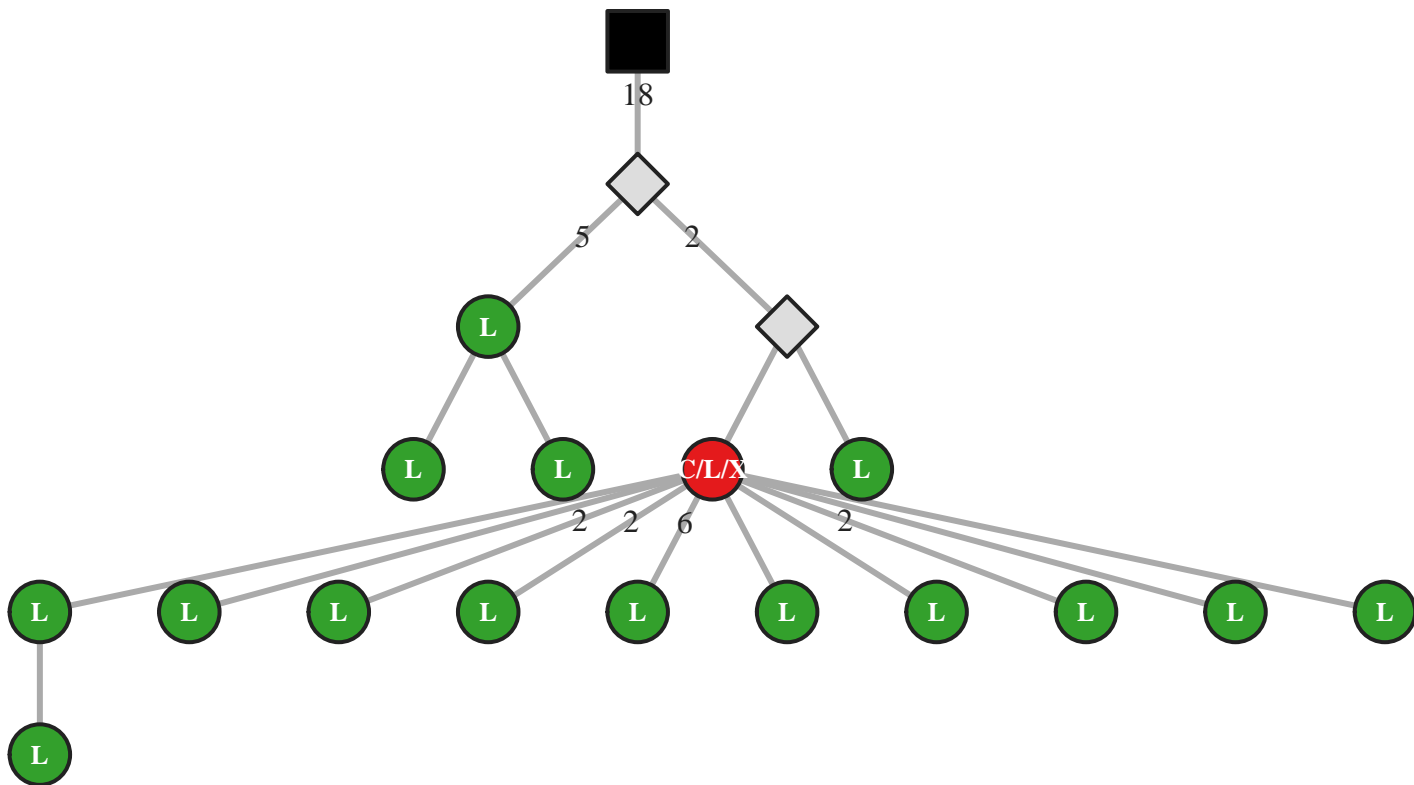
M5 IgG IGHV1-2/J6 75bp (23399)



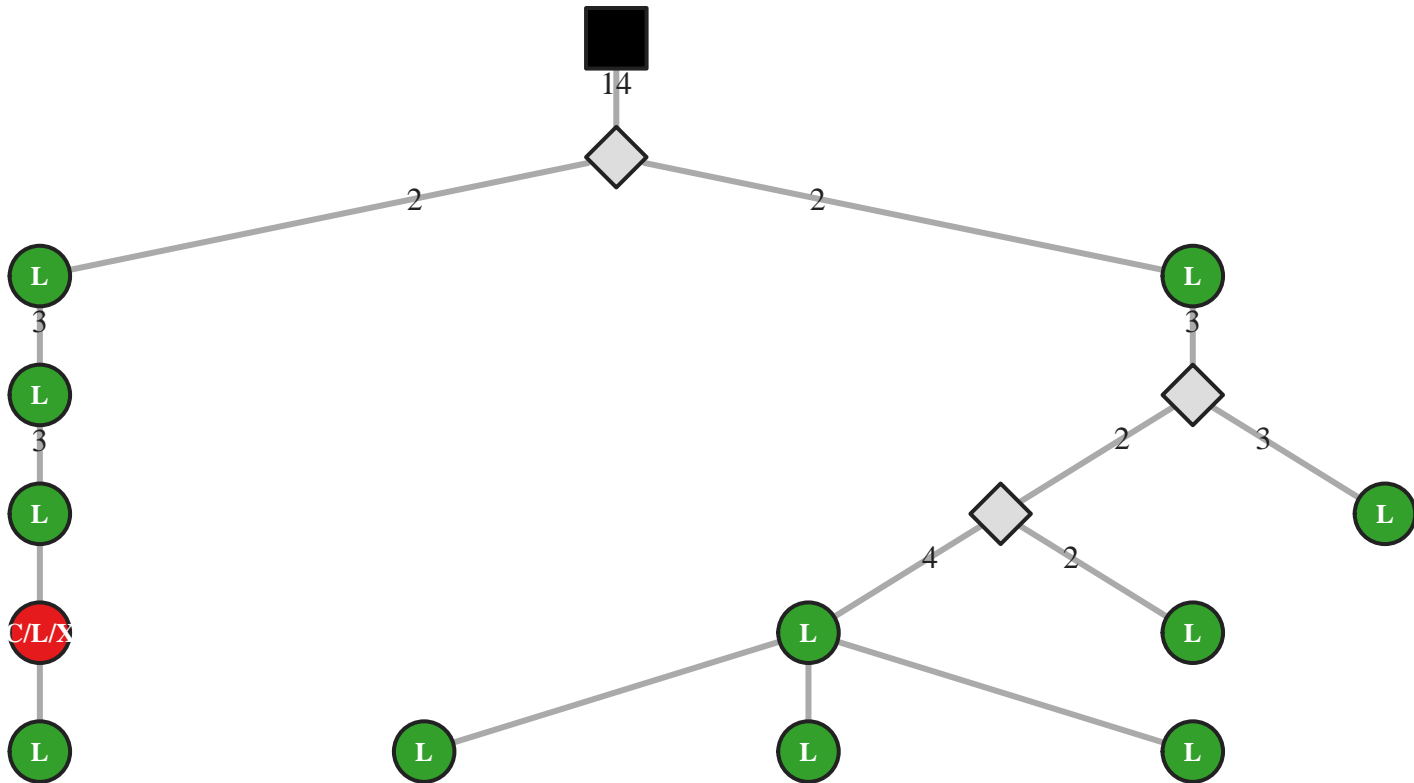
M5 IgG IGHV1-24/J2 42bp (13635)



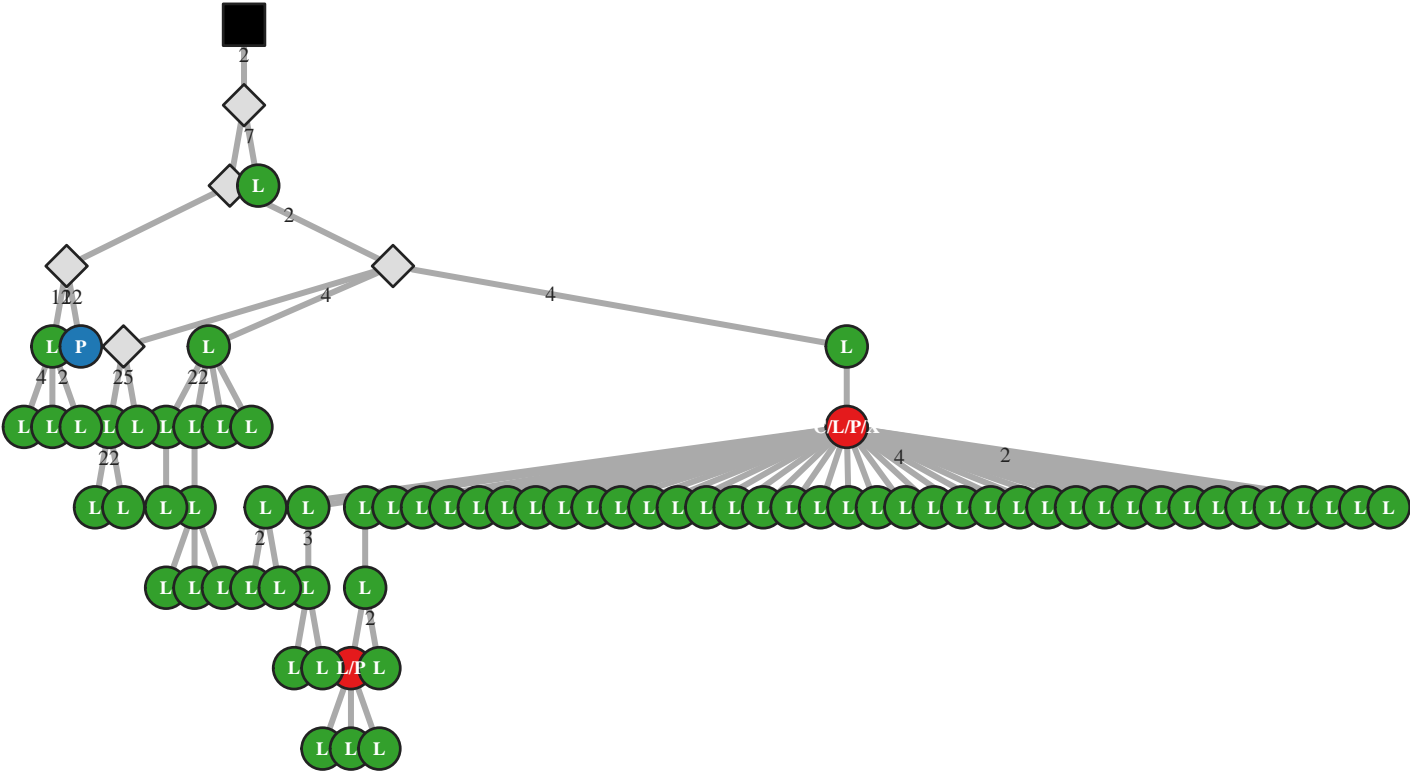
M5 IgG IGHV1-24/J3 33bp (39808)



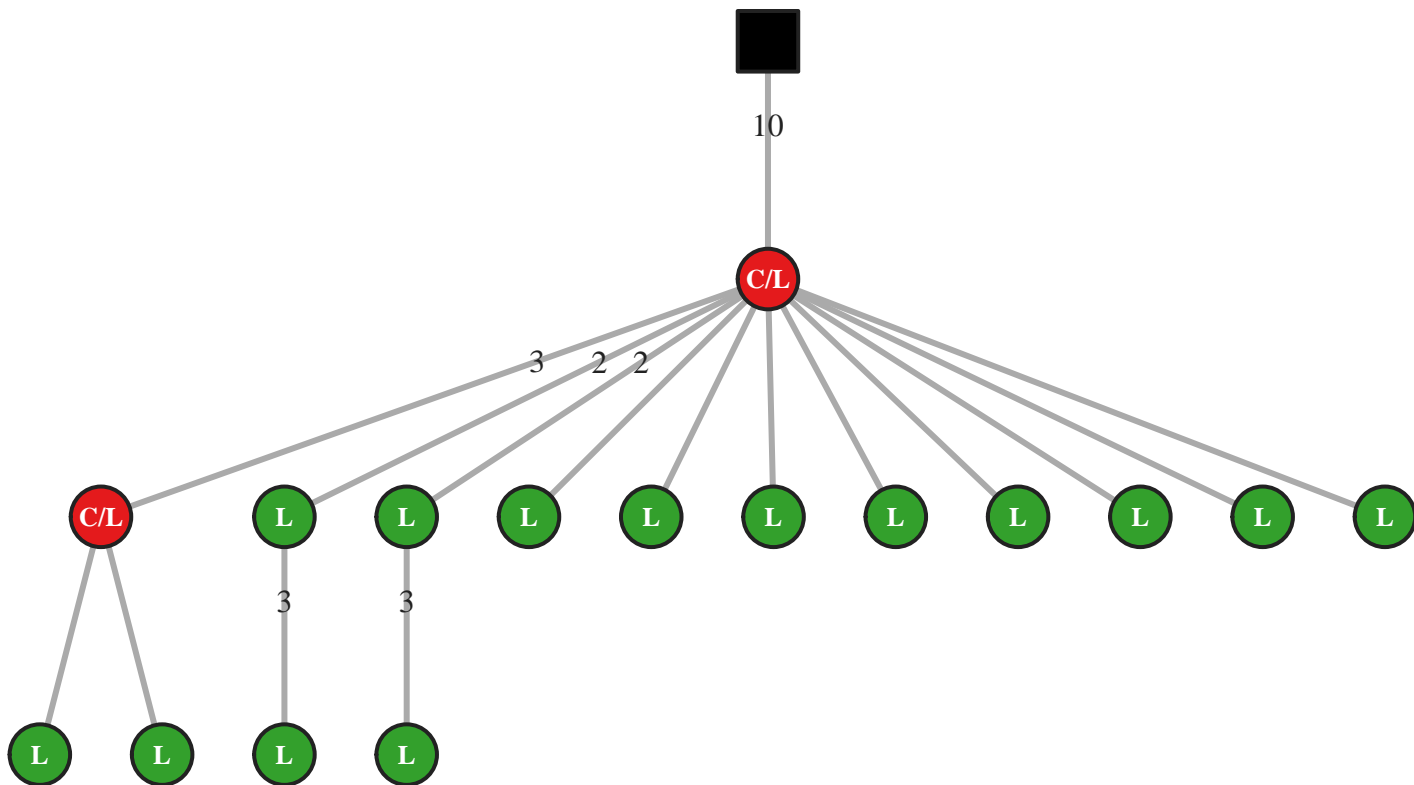
M5 IgG IGHV1-24/J3 42bp (23044)



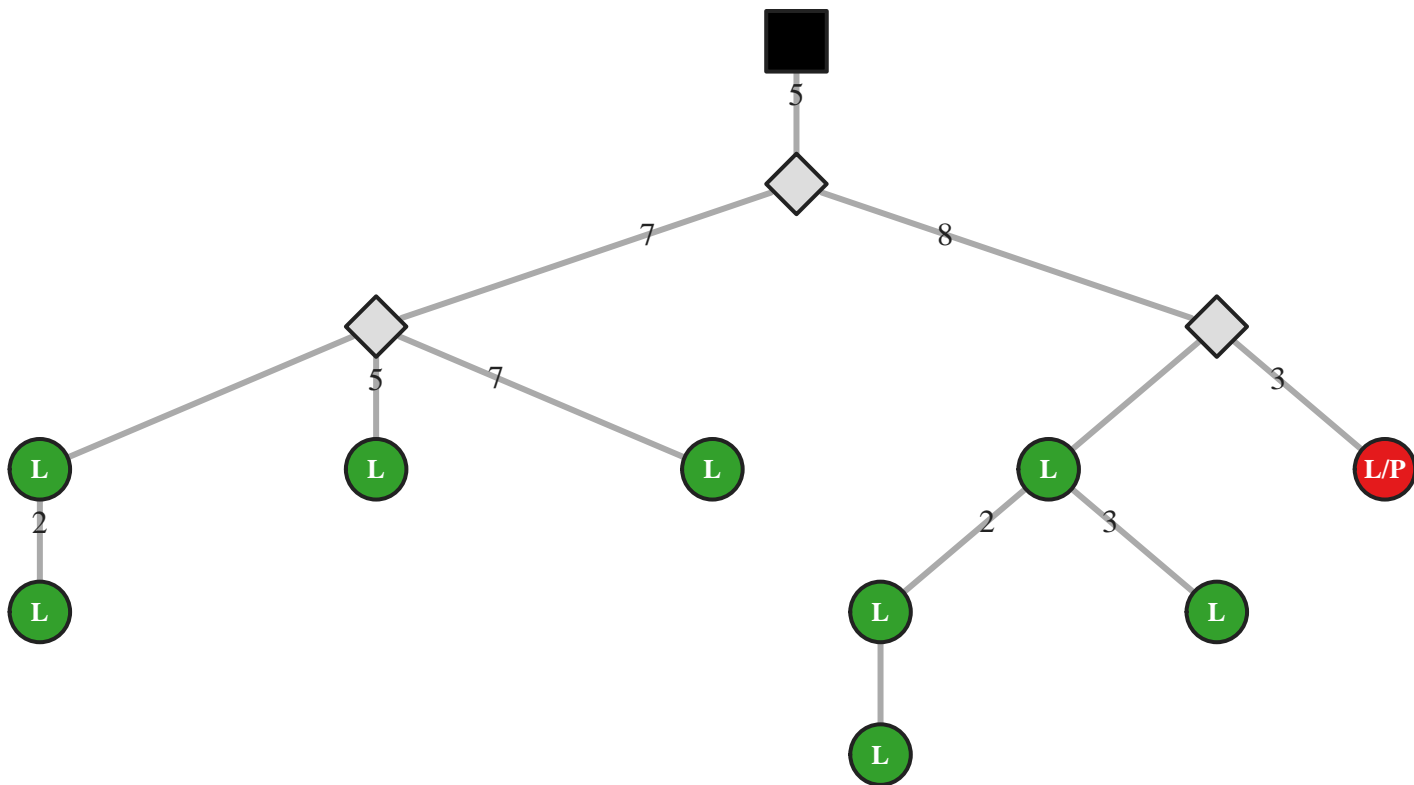
M5 IgG IGHV1-24/J4 24bp (13644)



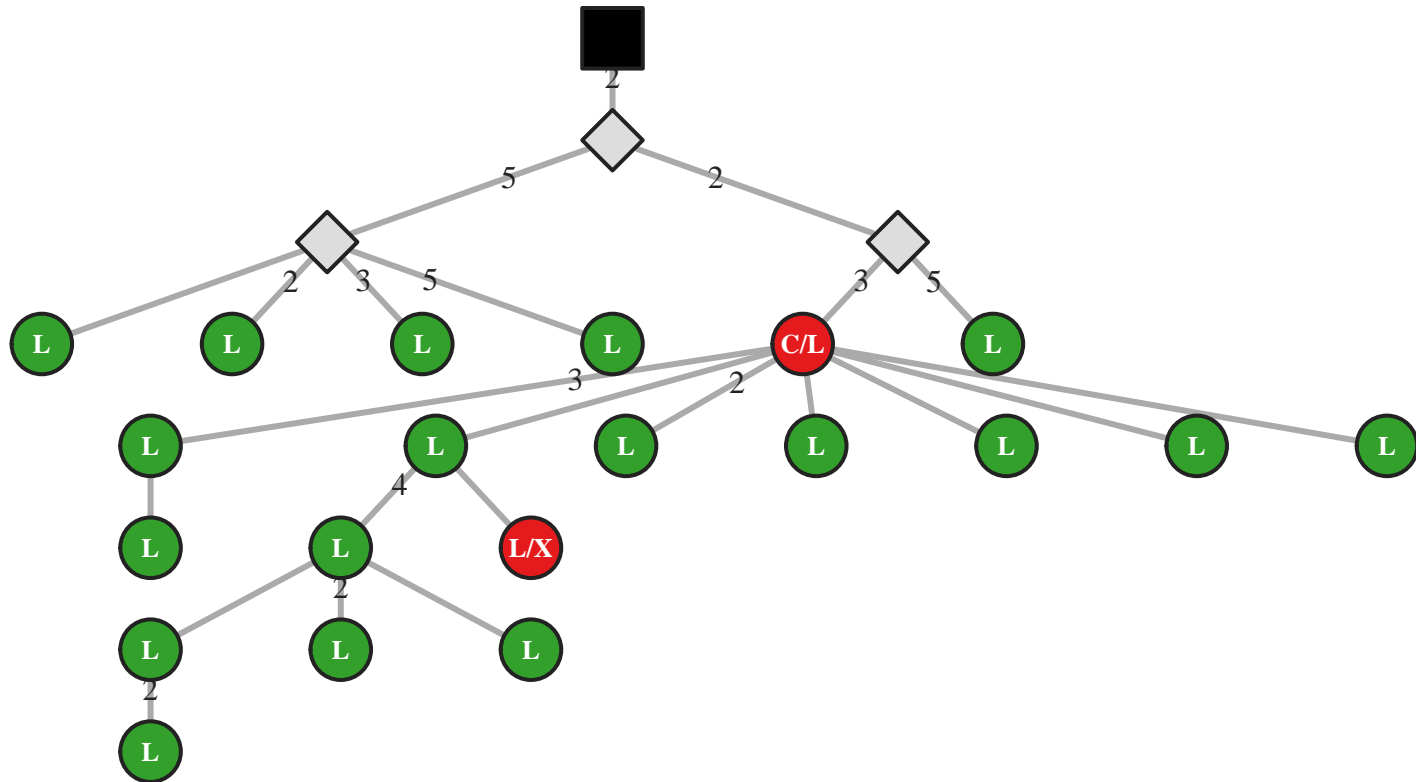
M5 IgG IGHV1-24/J4 39bp (49578)



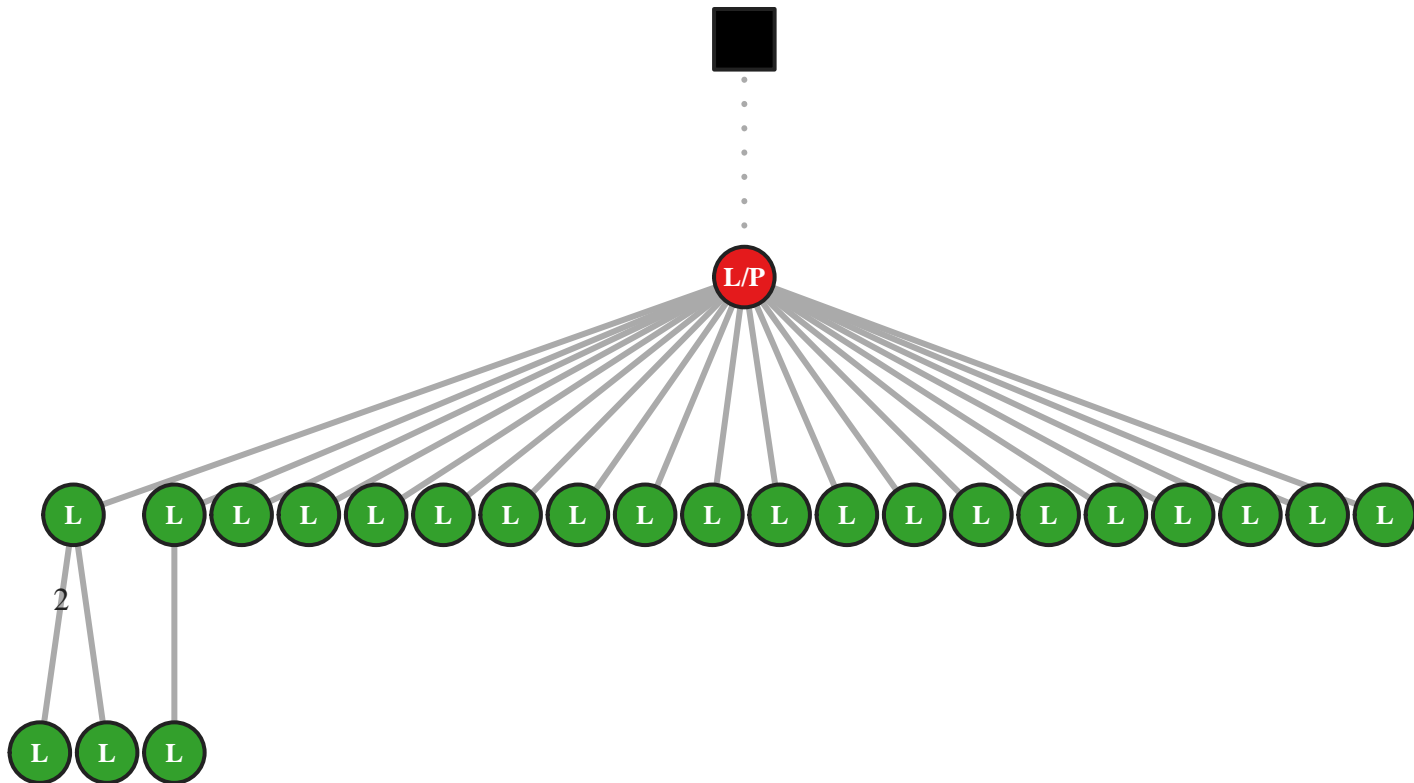
M5 IgG IGHV1-24/J4 39bp (49589)



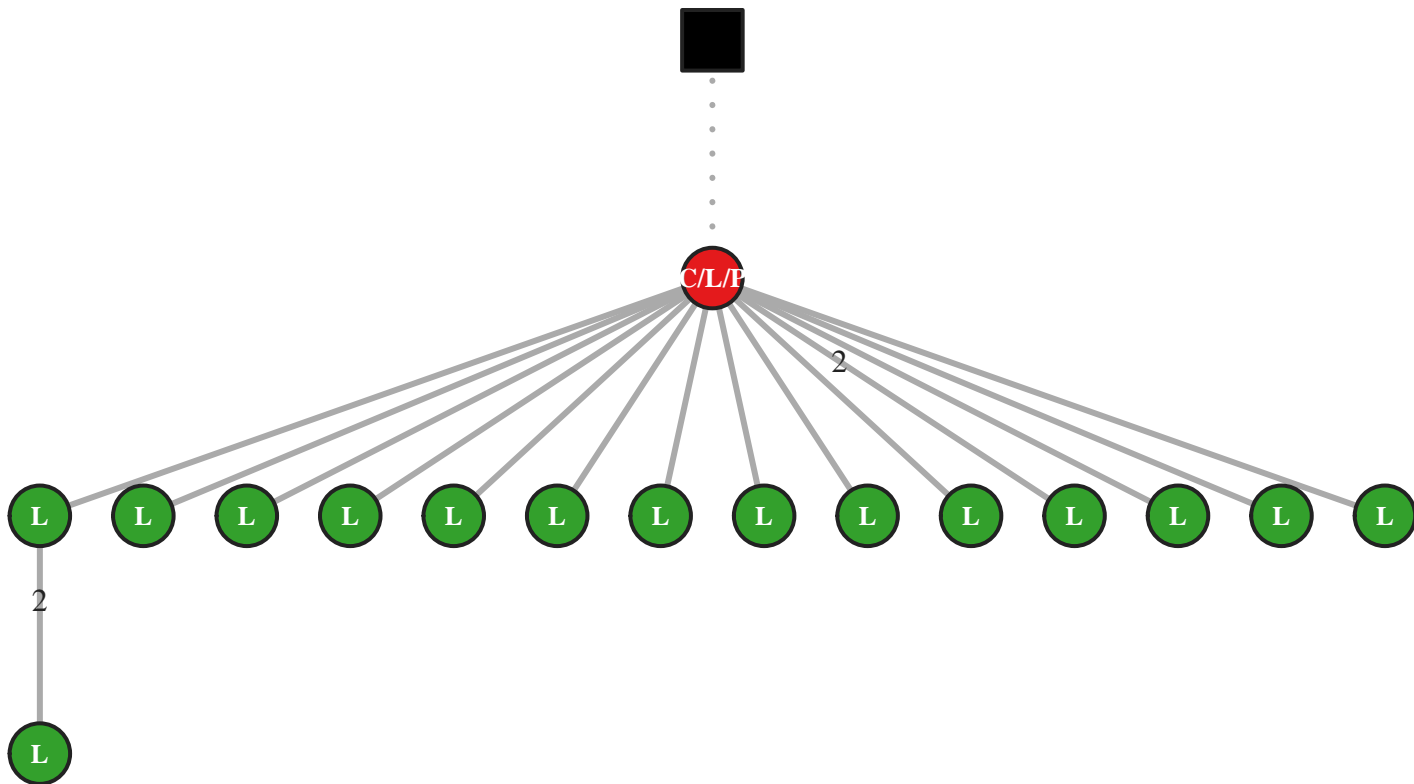
M5 IgG IGHV1-24/J4 45bp (4144)



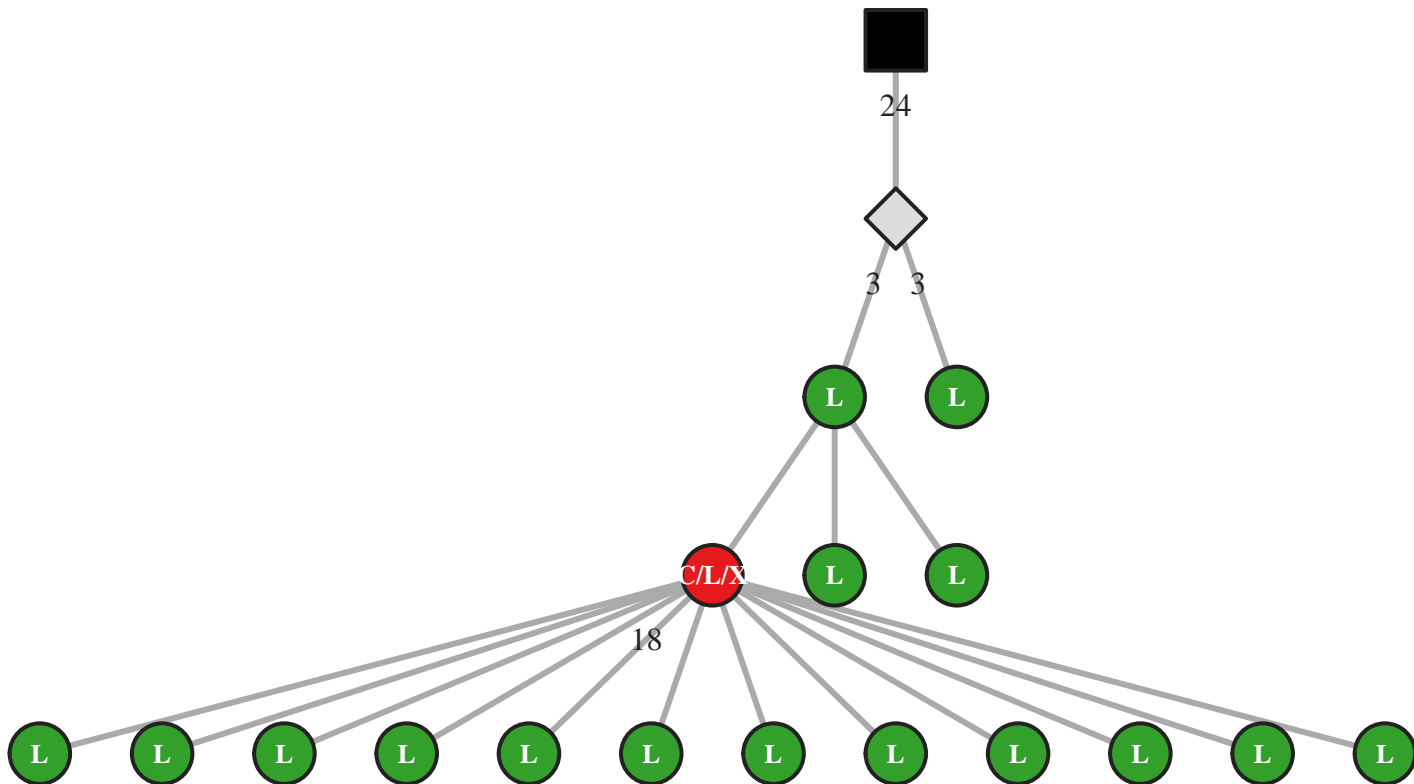
M5 IgG IGHV1-24/J4 45bp (4145)



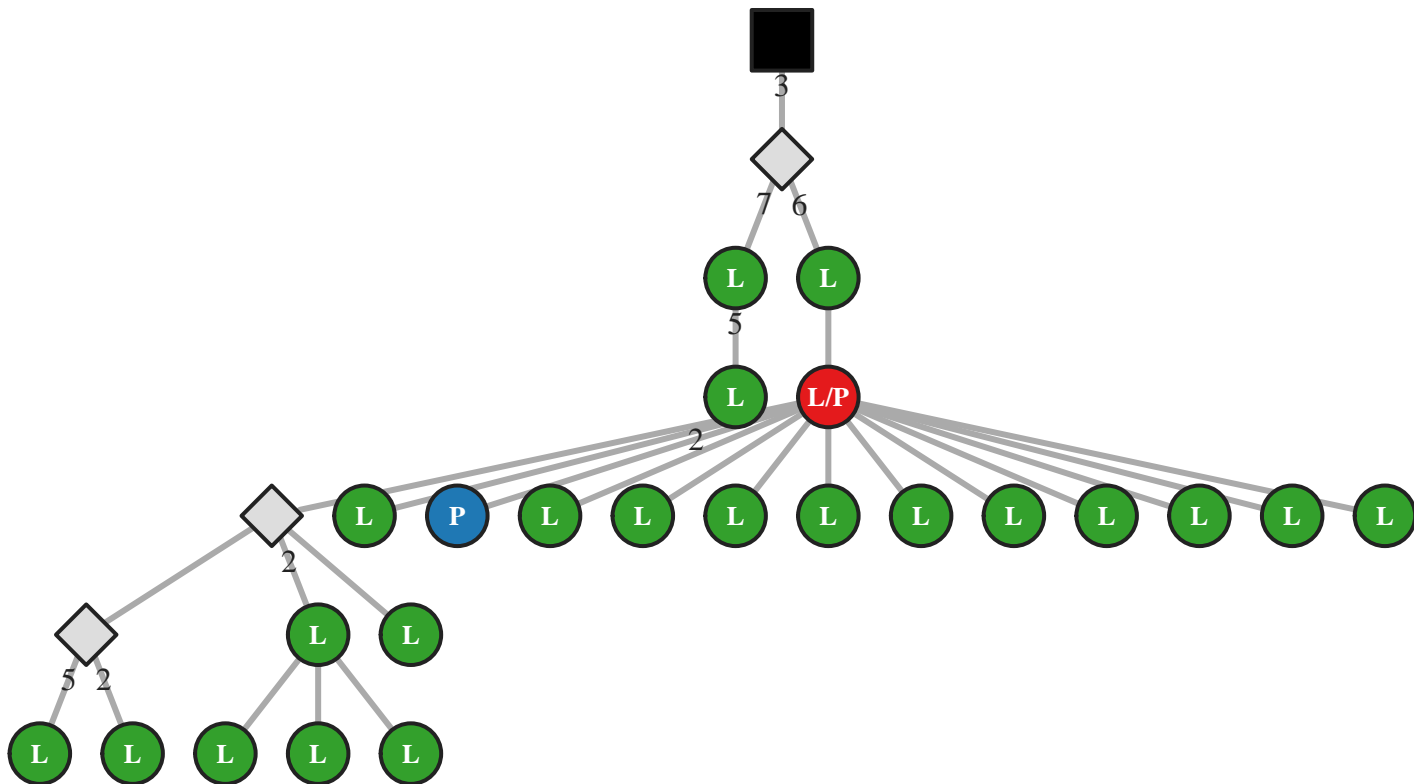
M5 IgG IGHV1-24/J4 48bp (39852)



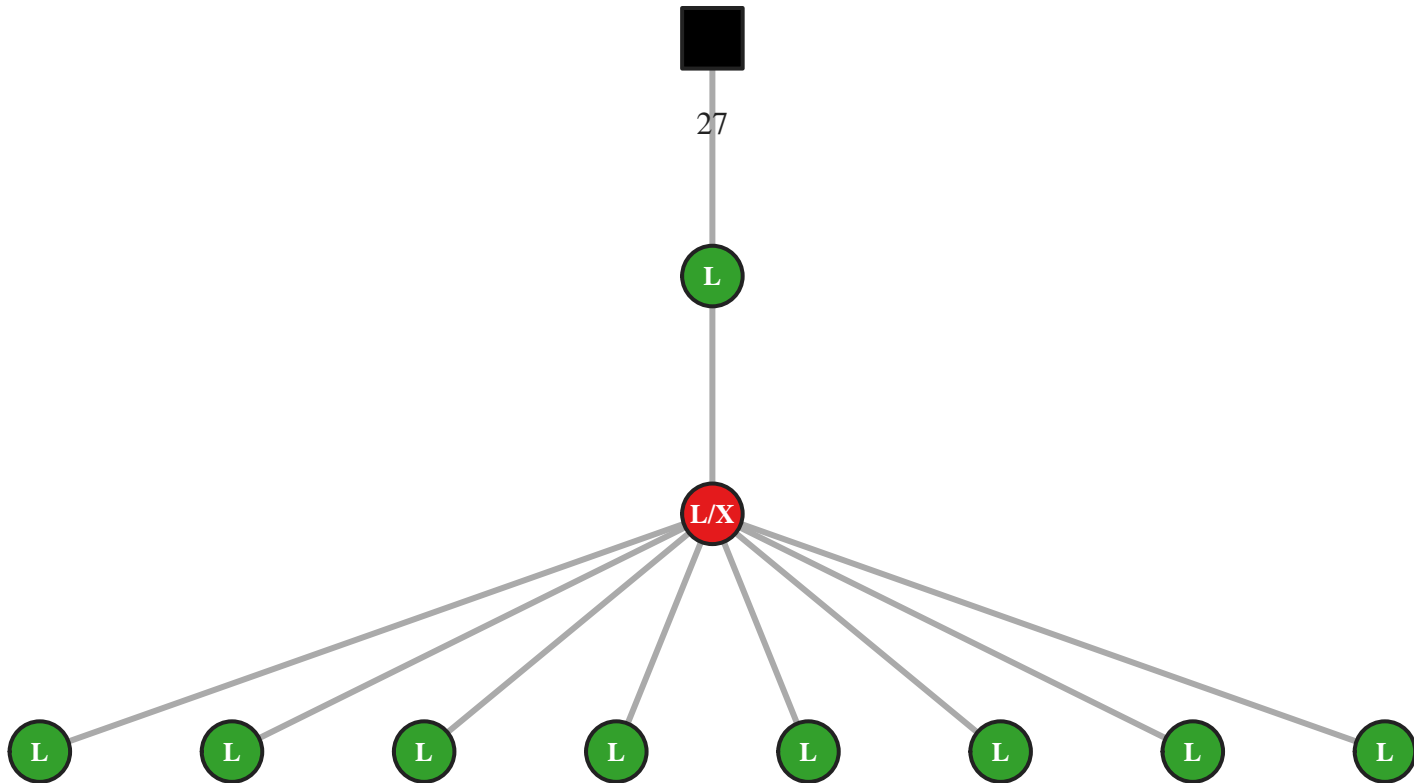
M5 IgG IGHV1-24/J4 57bp (23078)



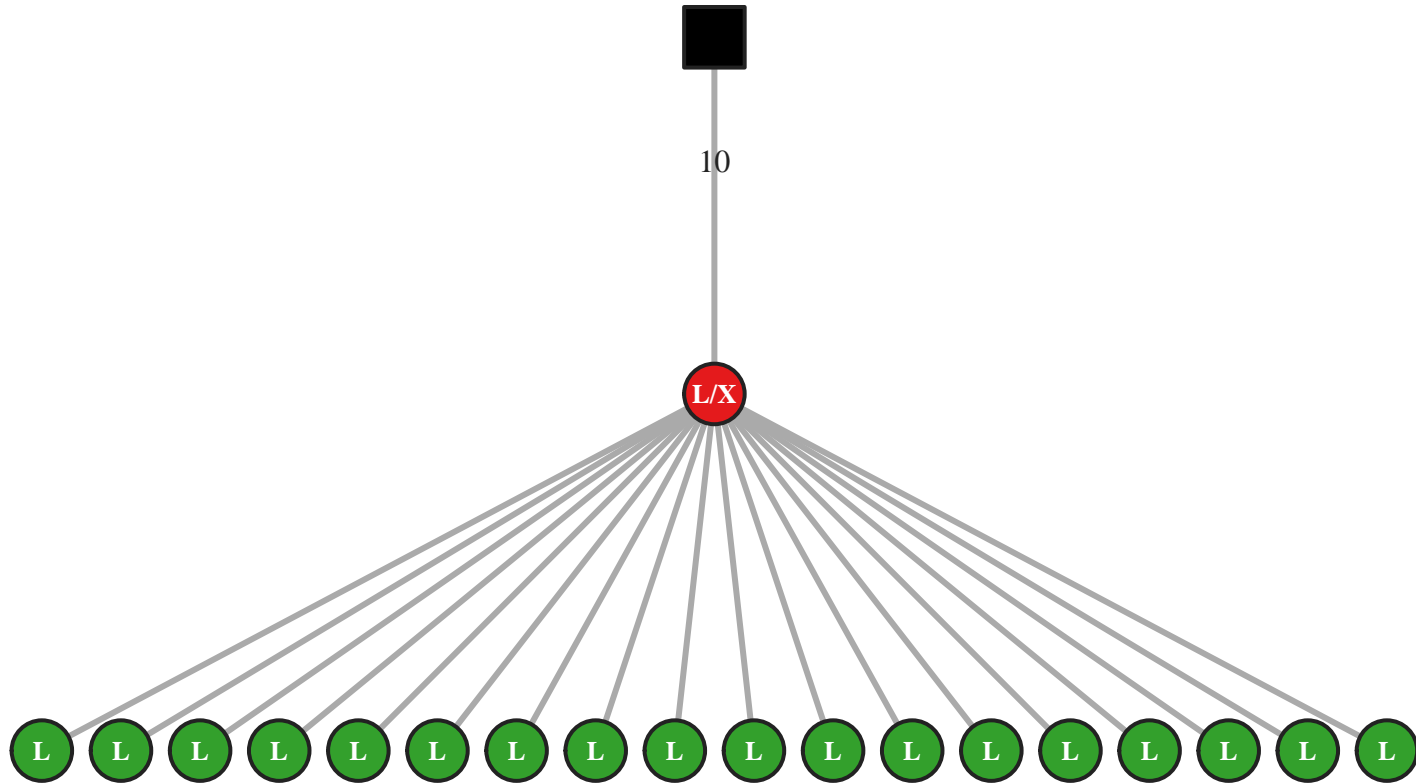
M5 IgG IGHV1-24/J4 60bp (13683)



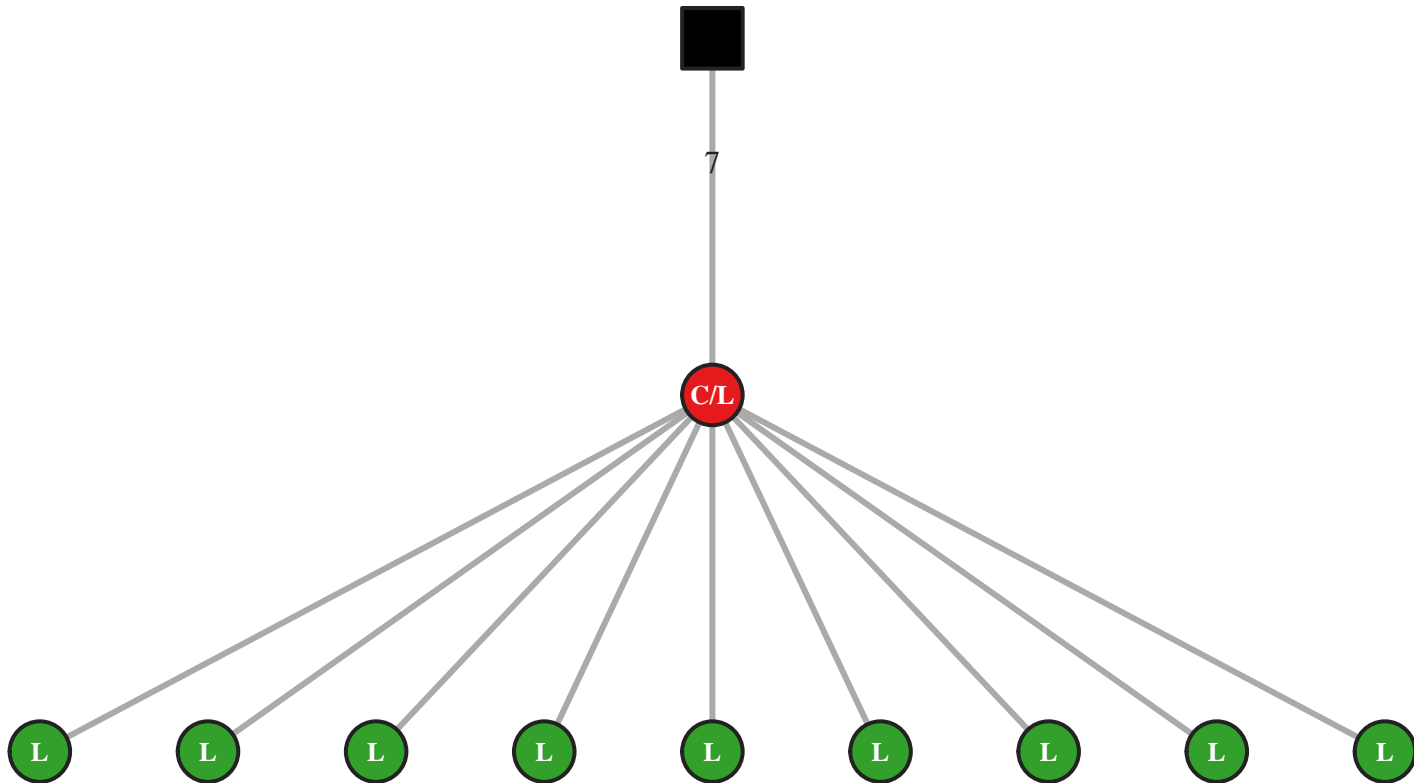
M5 IgG IGHV1-24/J4 63bp (39866)



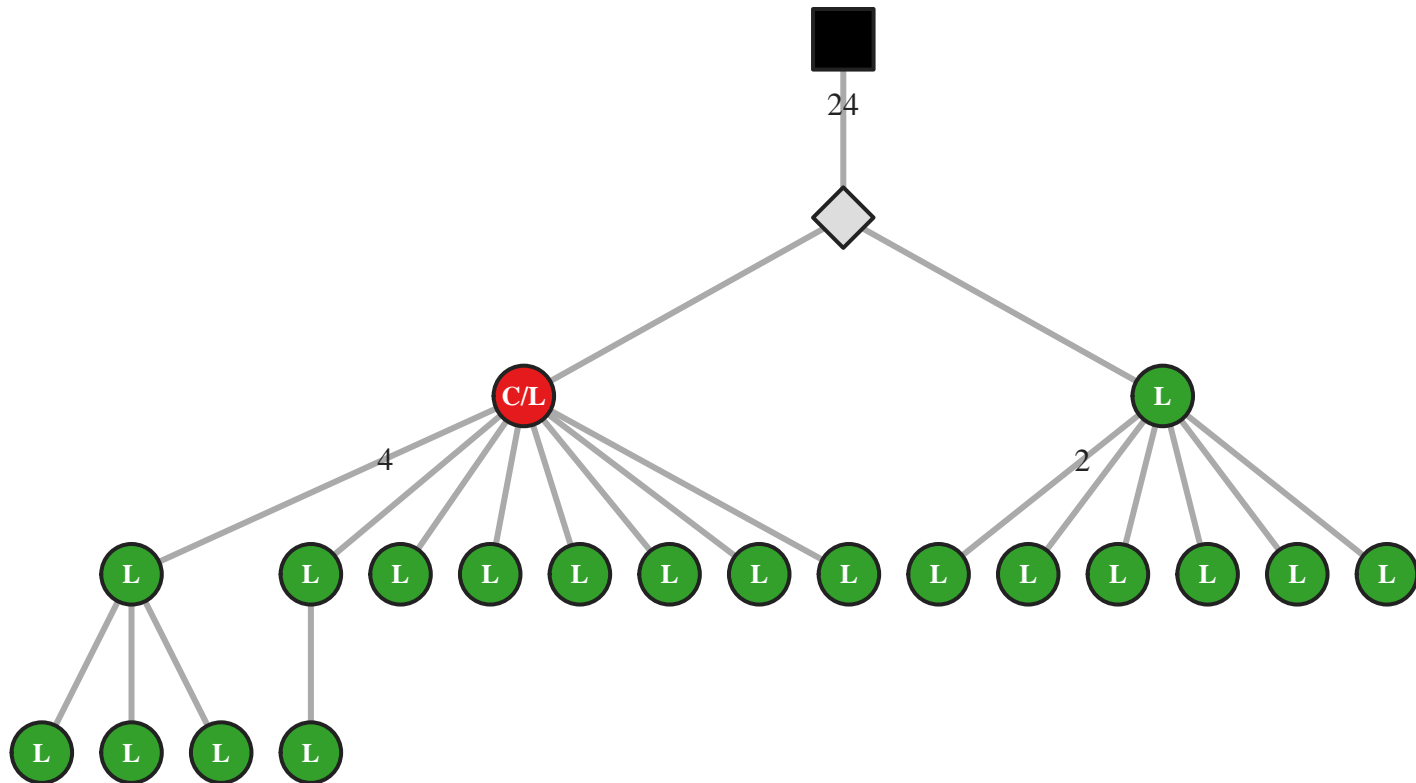
M5 IgG IGHV1-24/J5 42bp (49595)



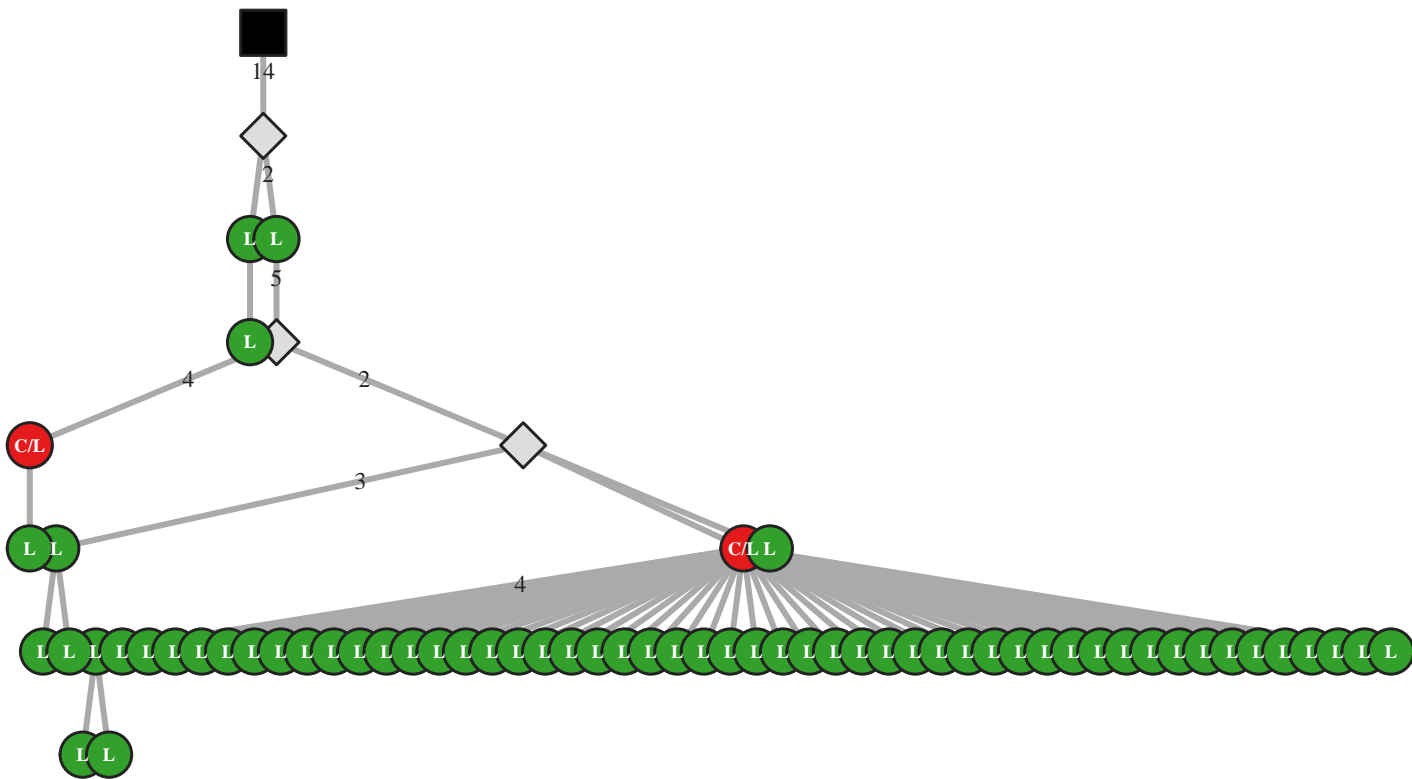
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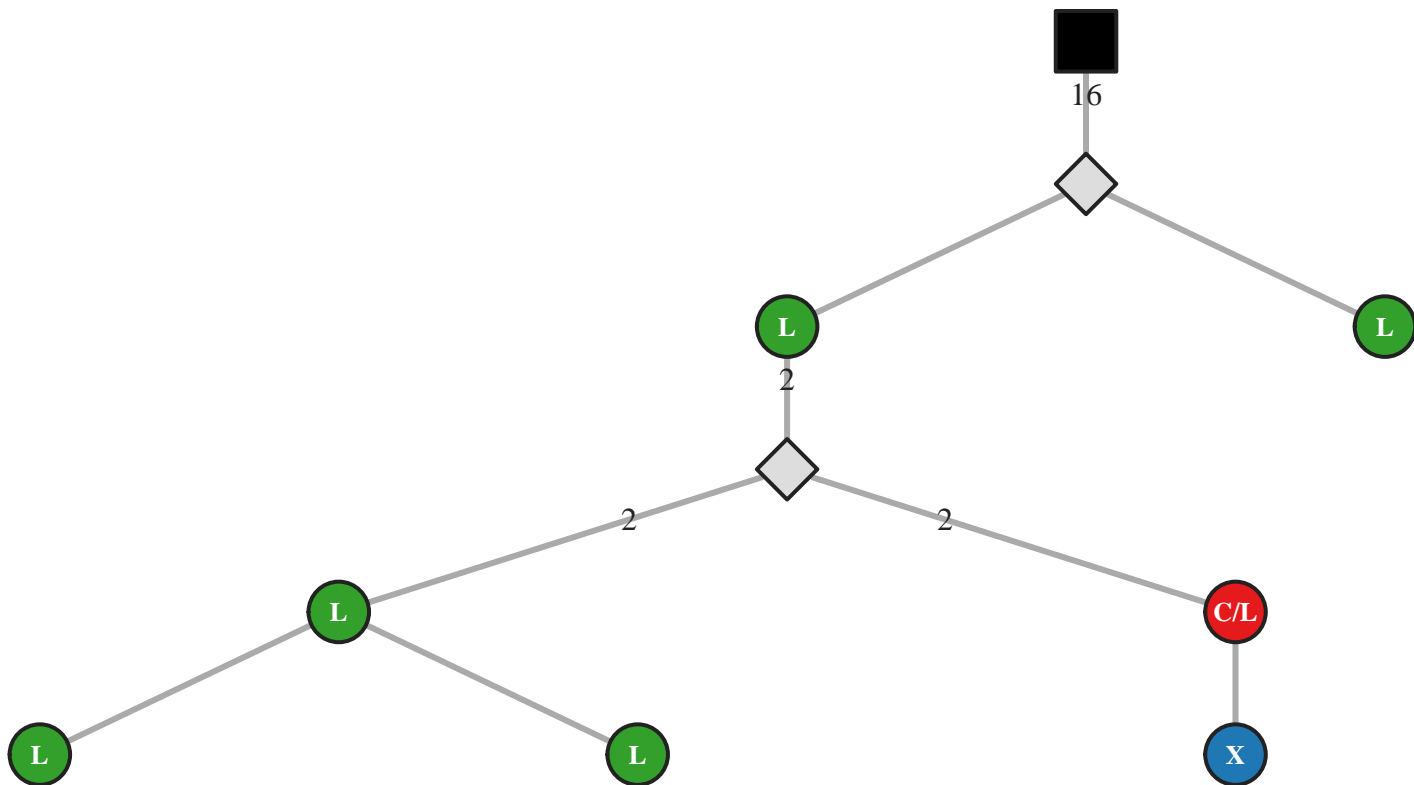
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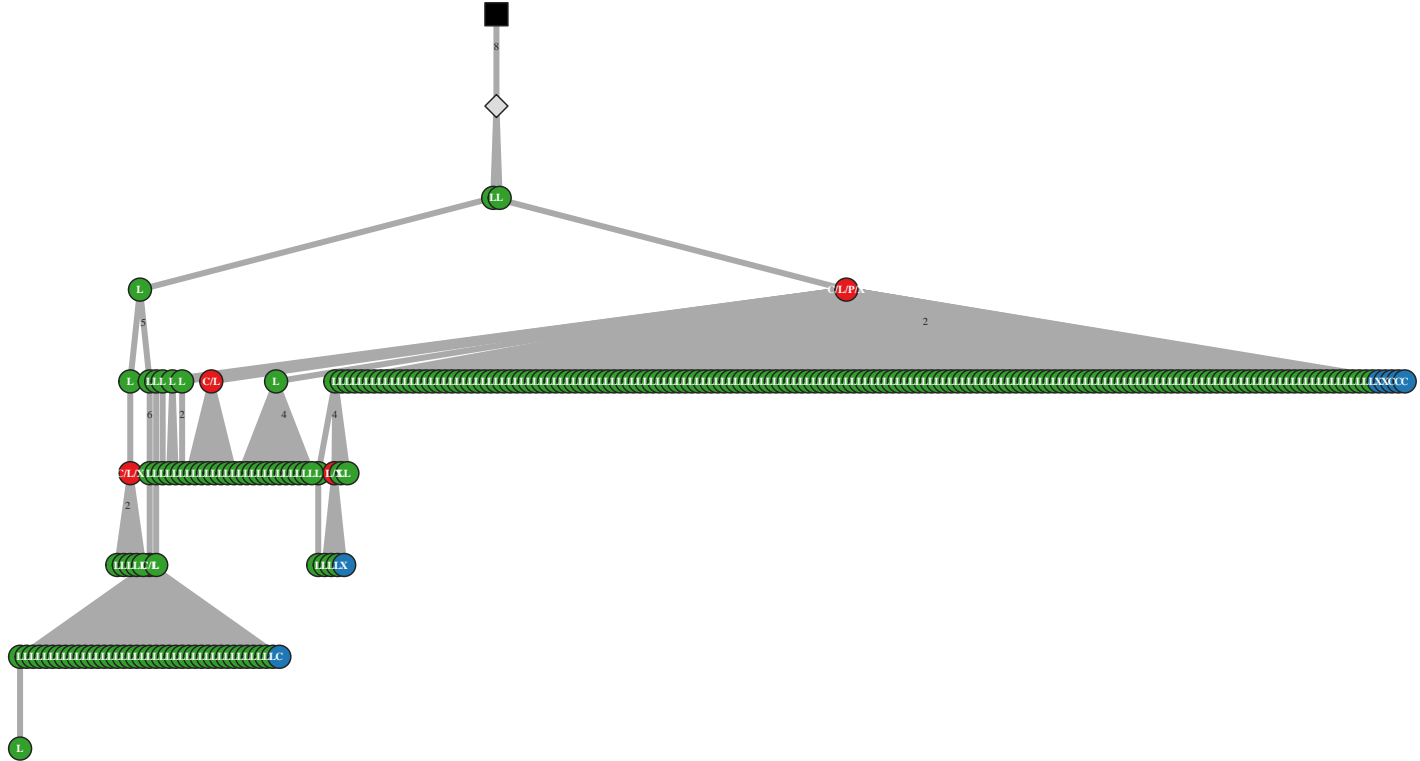
M5 IgG IGHV1-24/J6 39bp (39879)



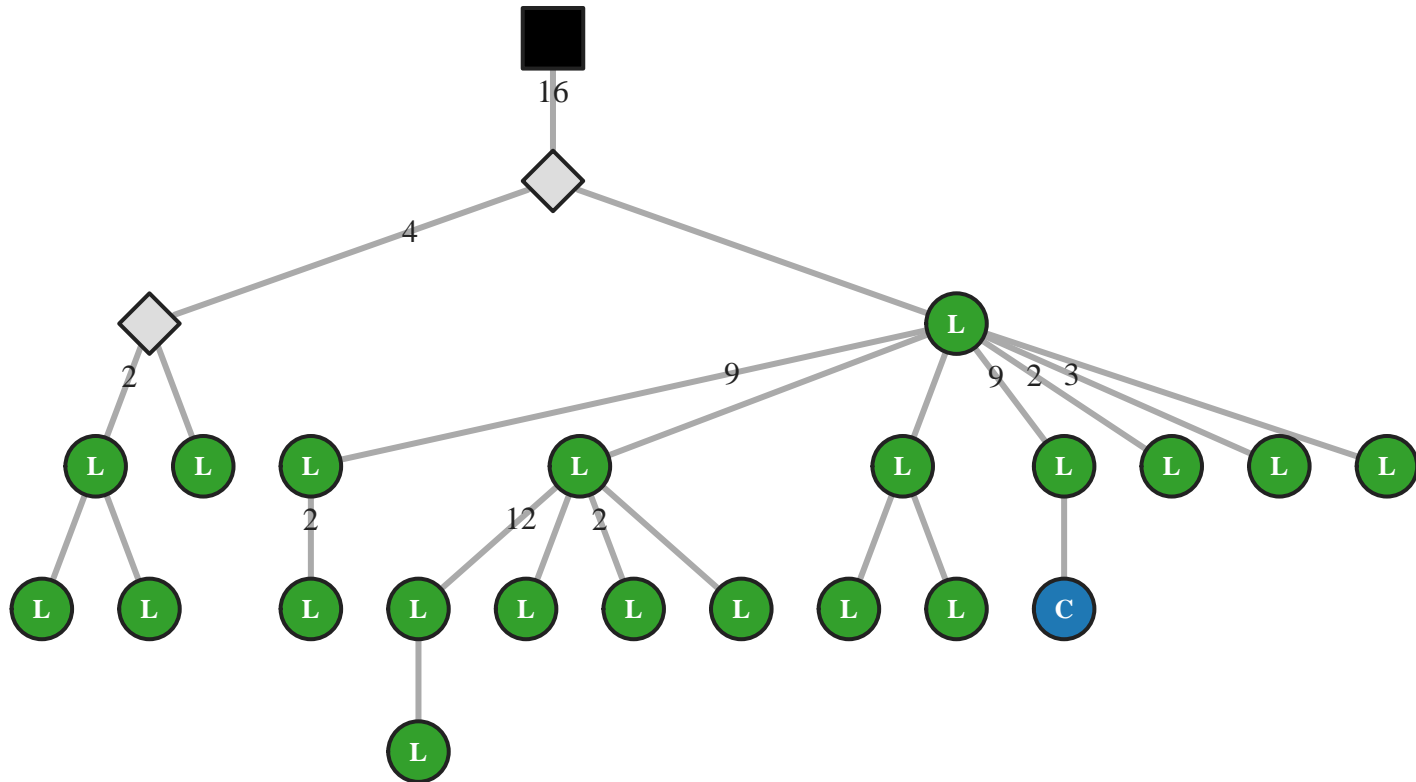
M5 IgG IGHV1-24/J6 45bp (31705)



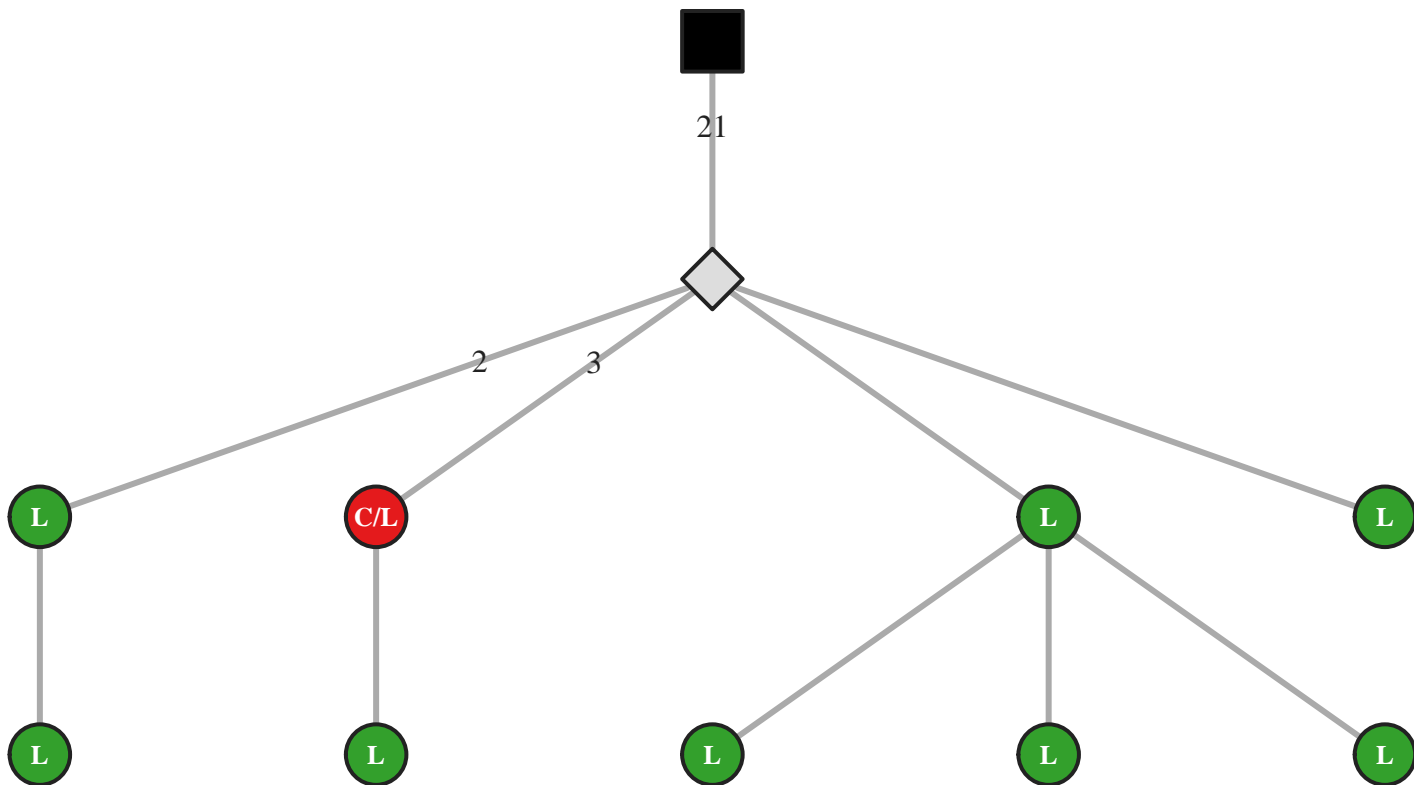
M5 IgG IGHV1-24/J6 51bp (31707)



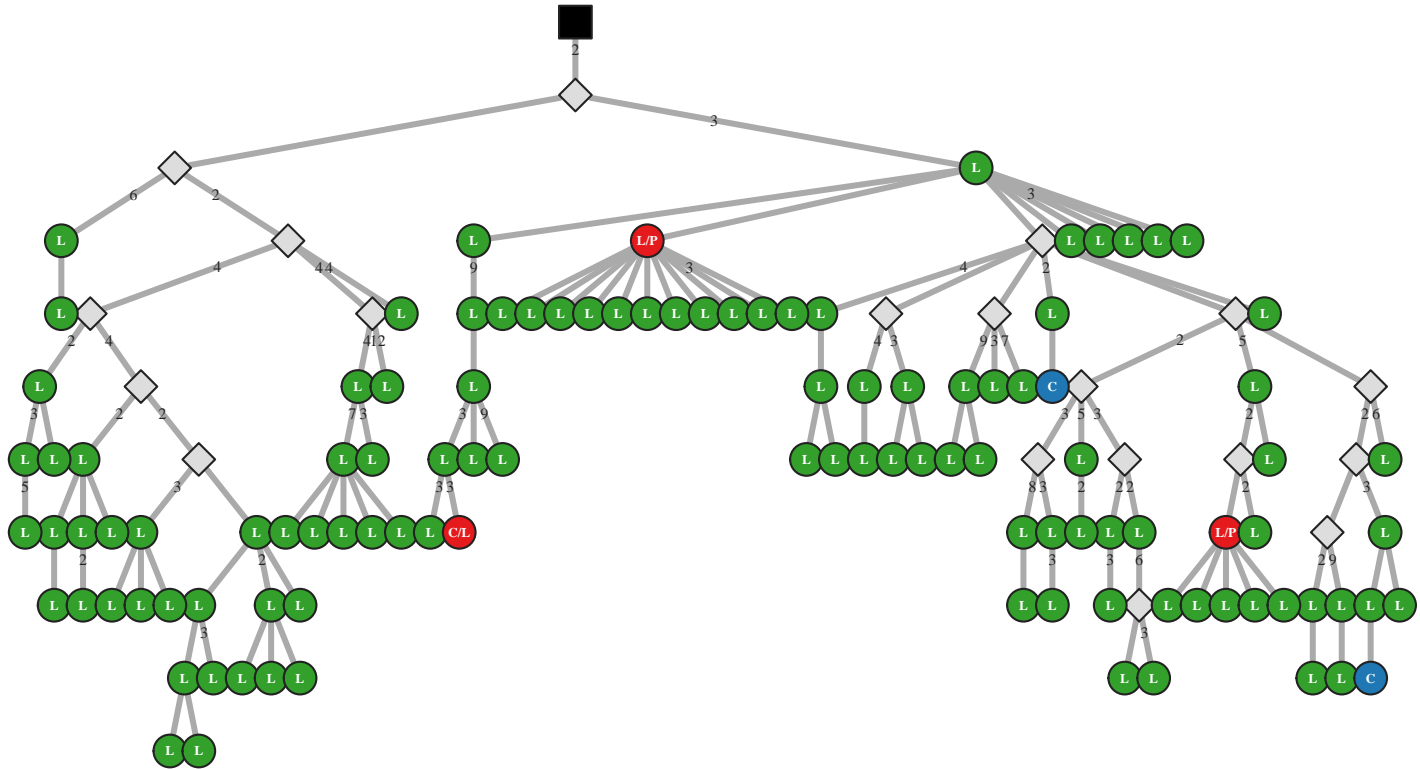
M5 IgA IGHV1-24/J6 66bp (2203)



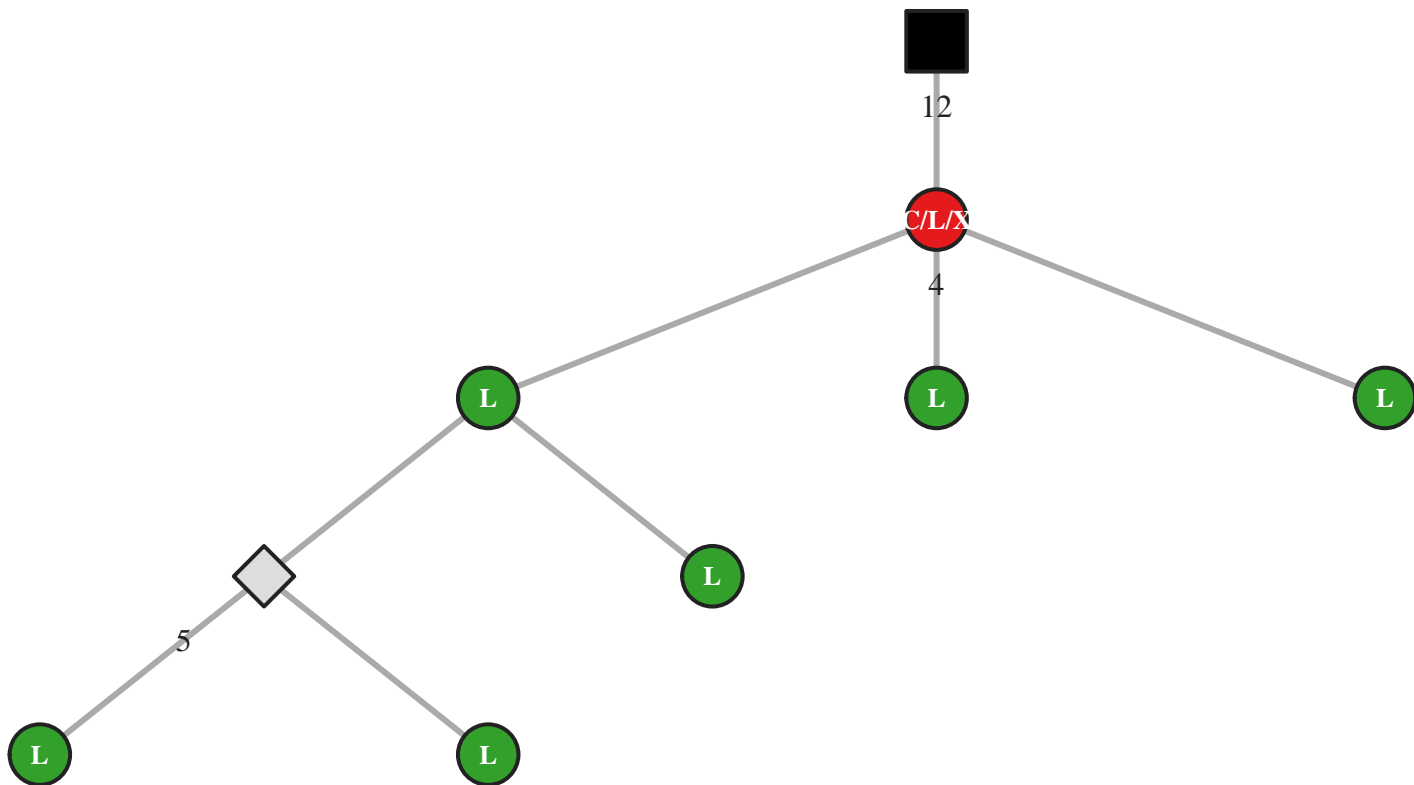
M5 IgG IGHV1-24/J6 72bp (31714)



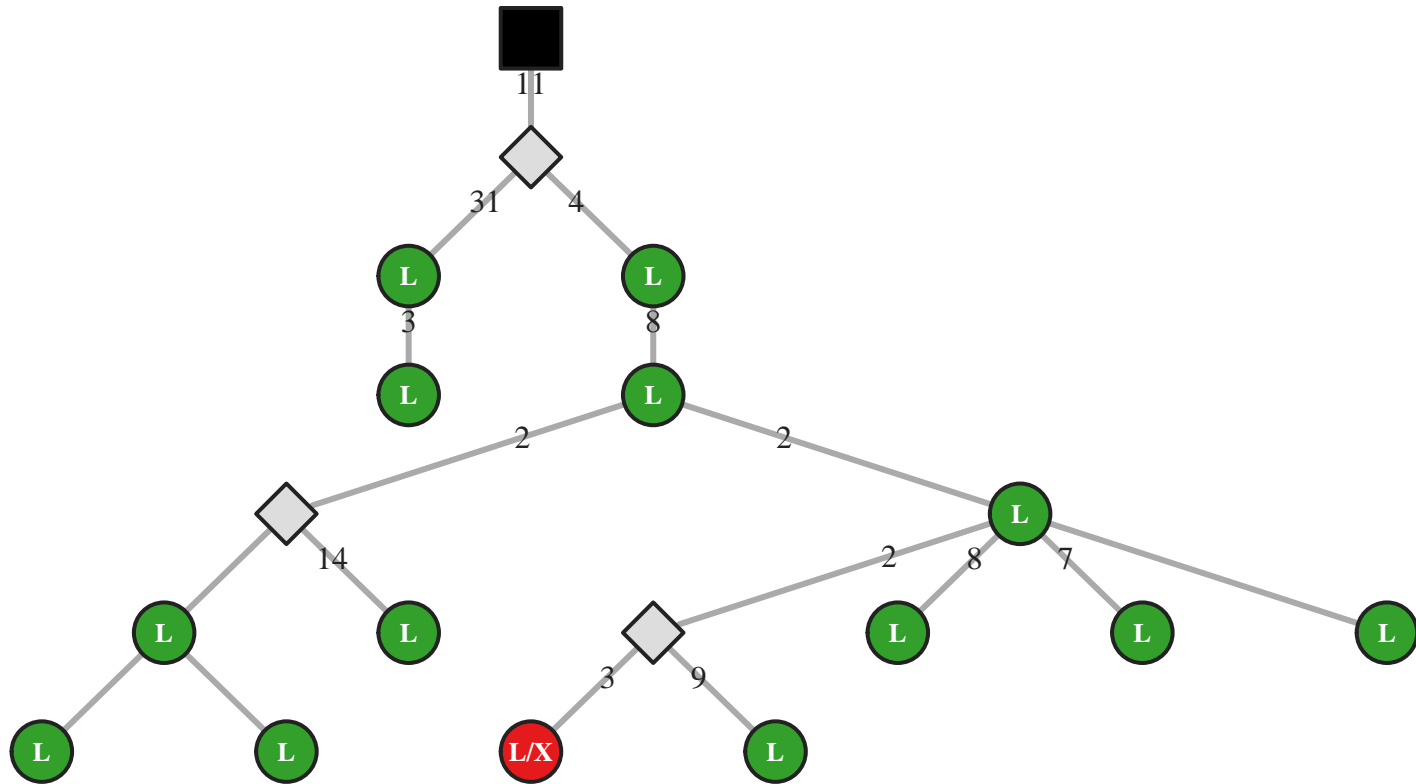
M5 IgG IGHV1-3/J1 45bp (49757)



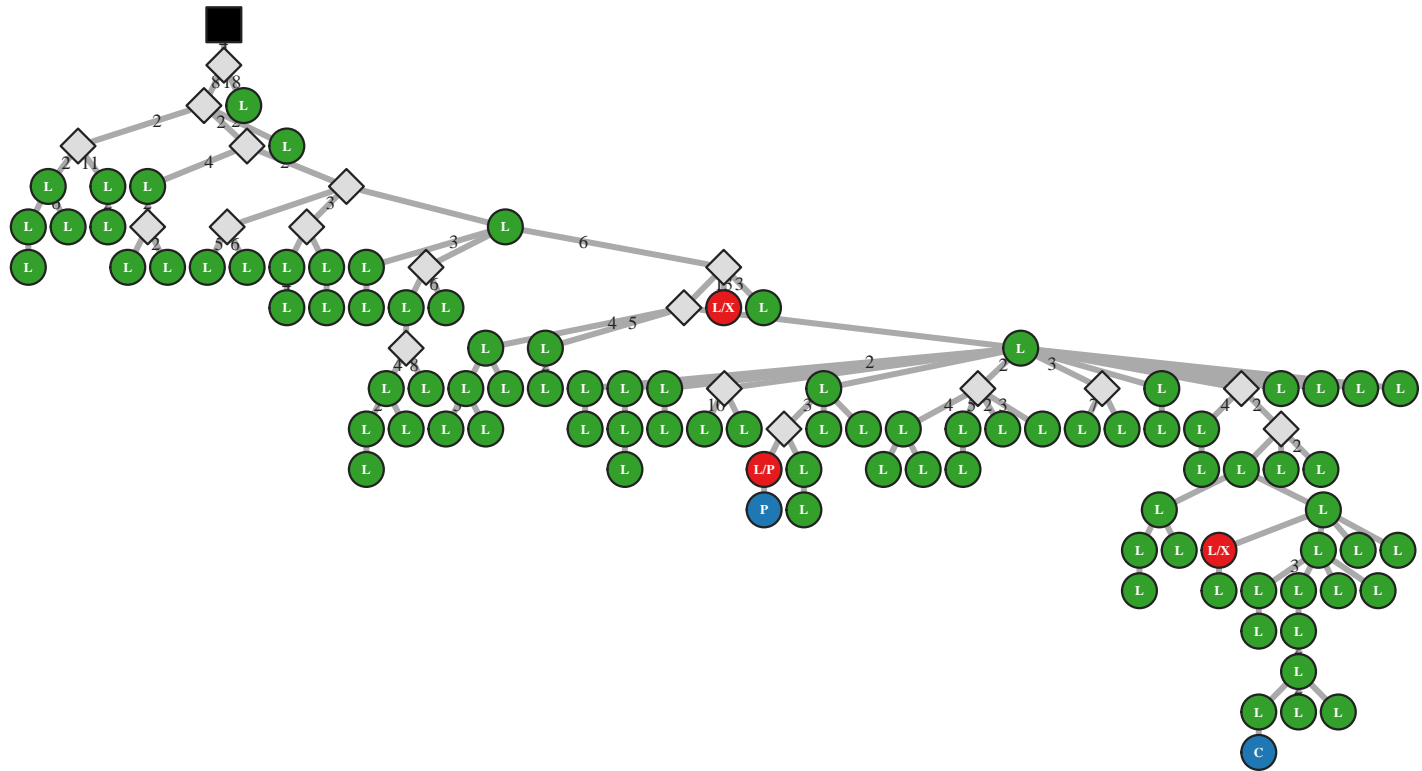
M5 IgG IGHV1-3/J1 57bp (32047)



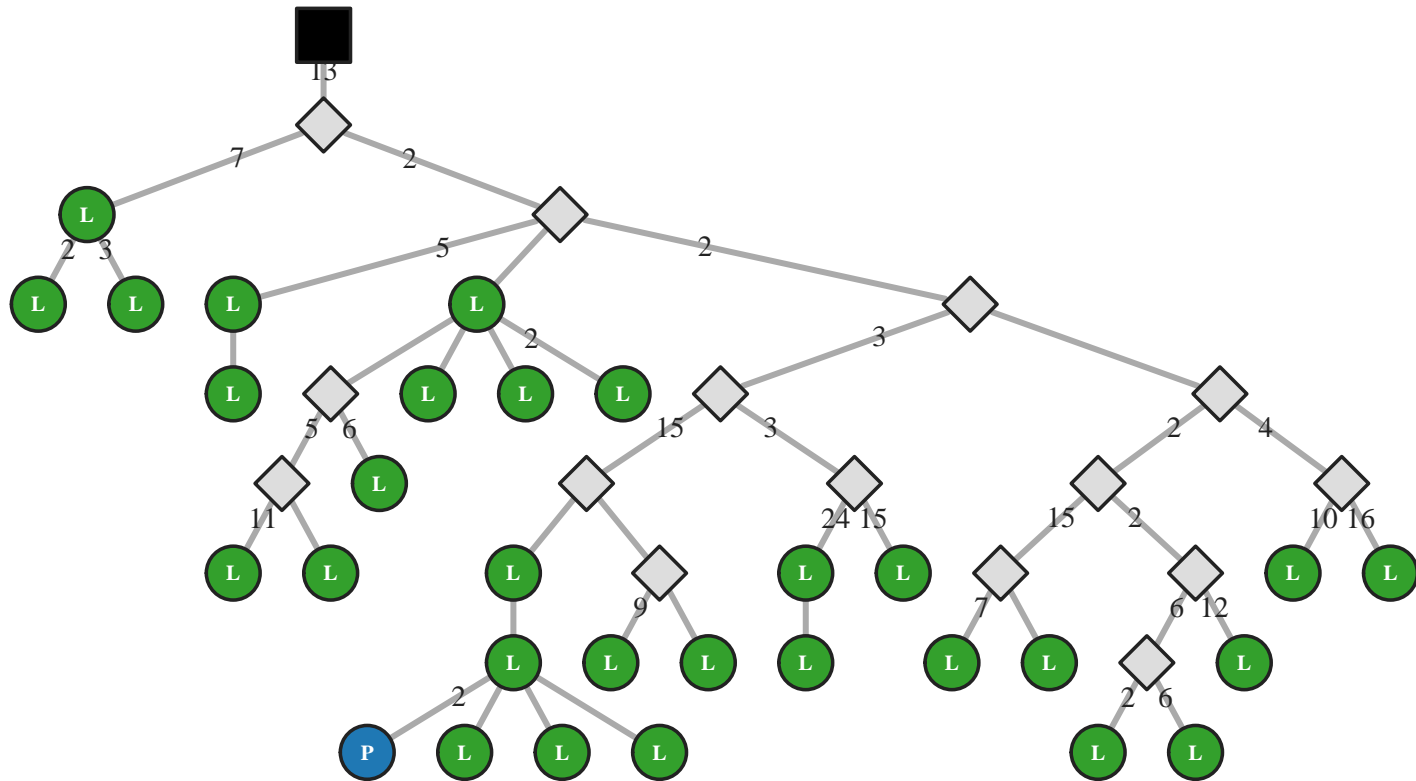
M5 IgA IGHV1-3/J3 30bp (30137)



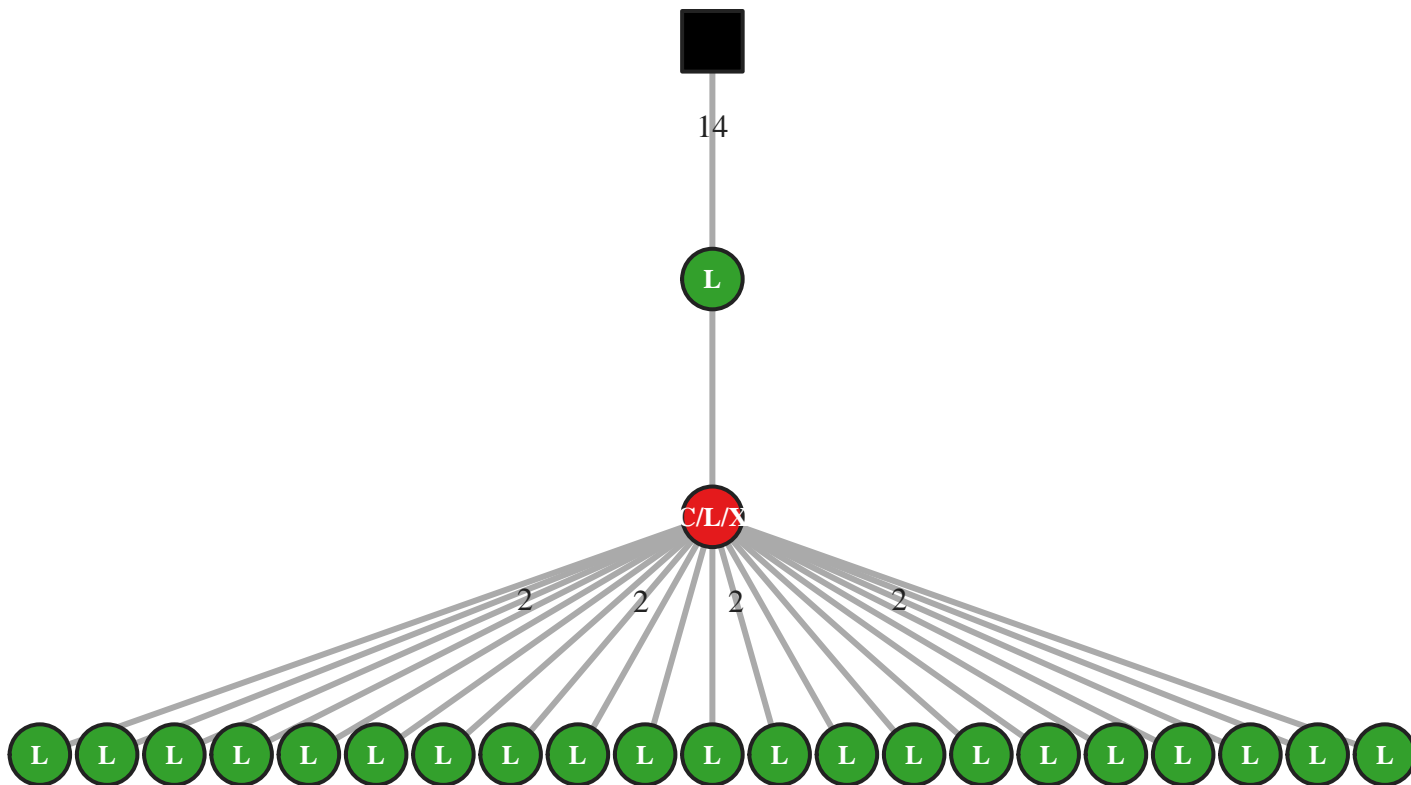
M5 IgG IGHV1-3/J4 24bp (23440)



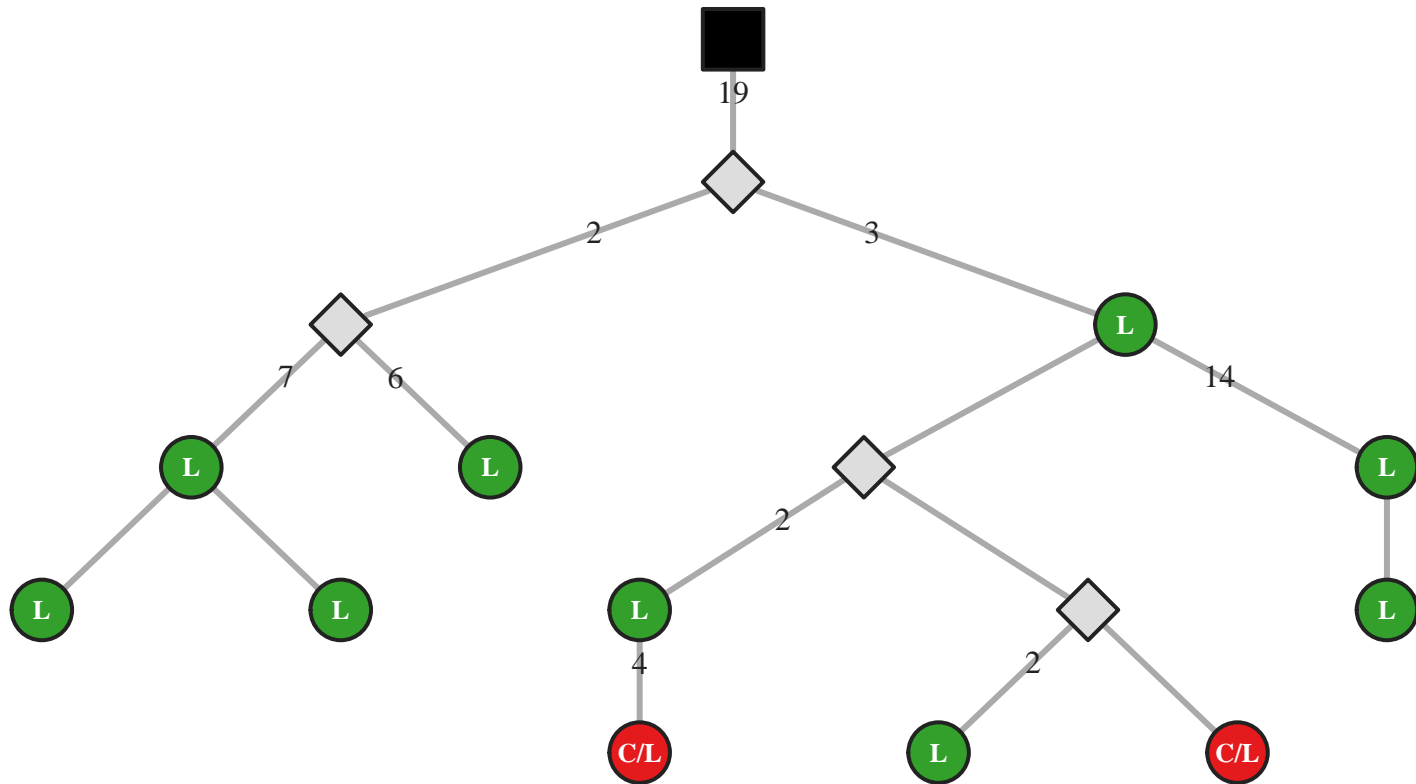
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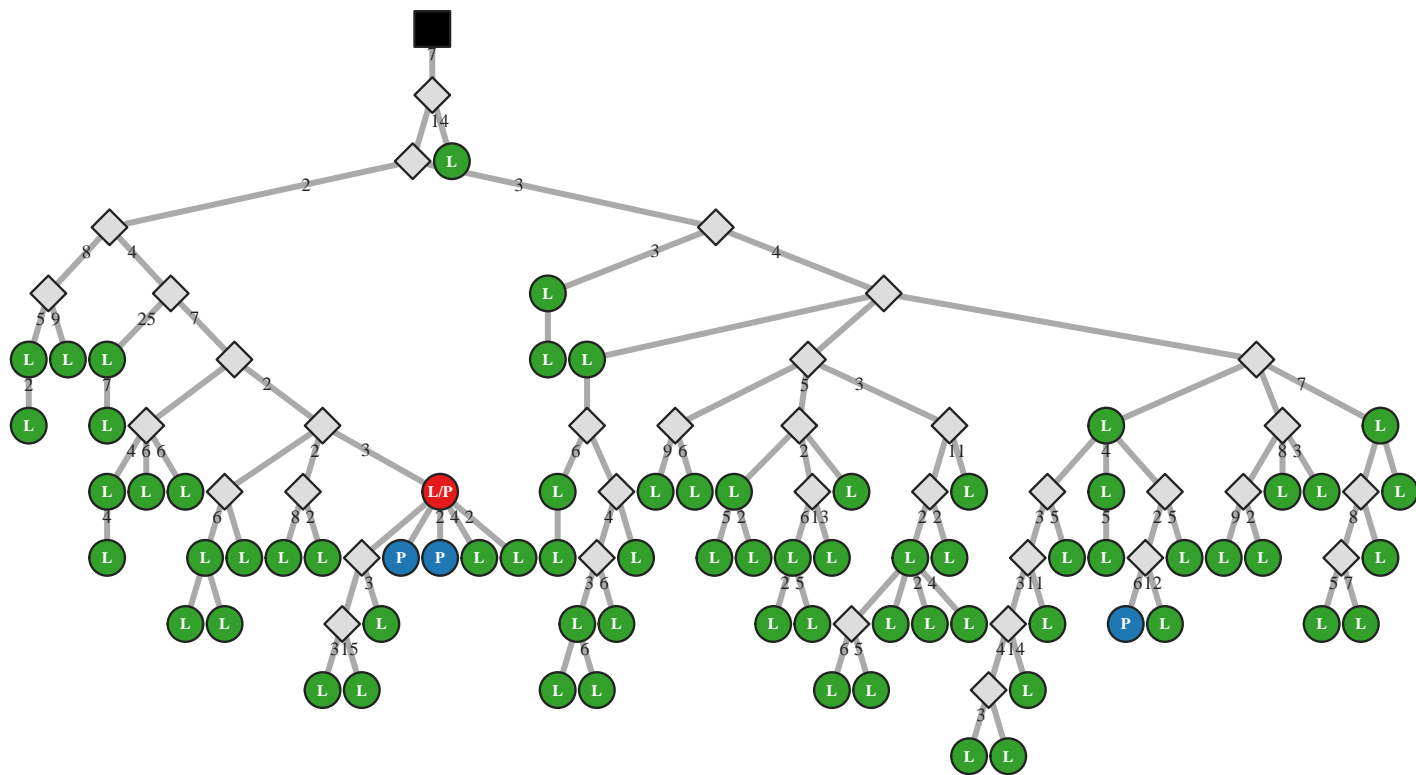
M5 IgG IGHV1-3/J4 33bp (14121)



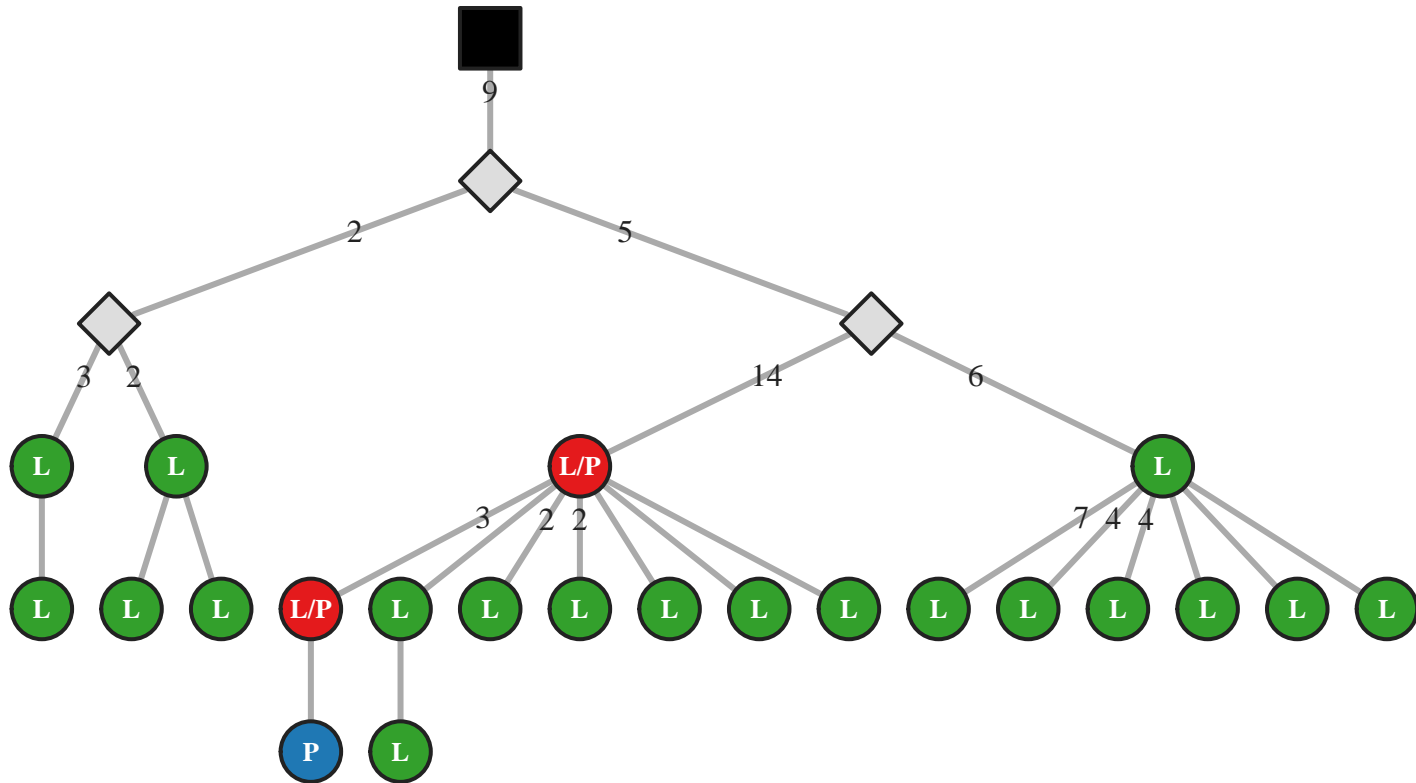
M5 IgG IGHV1-3/J4 39bp (40321)



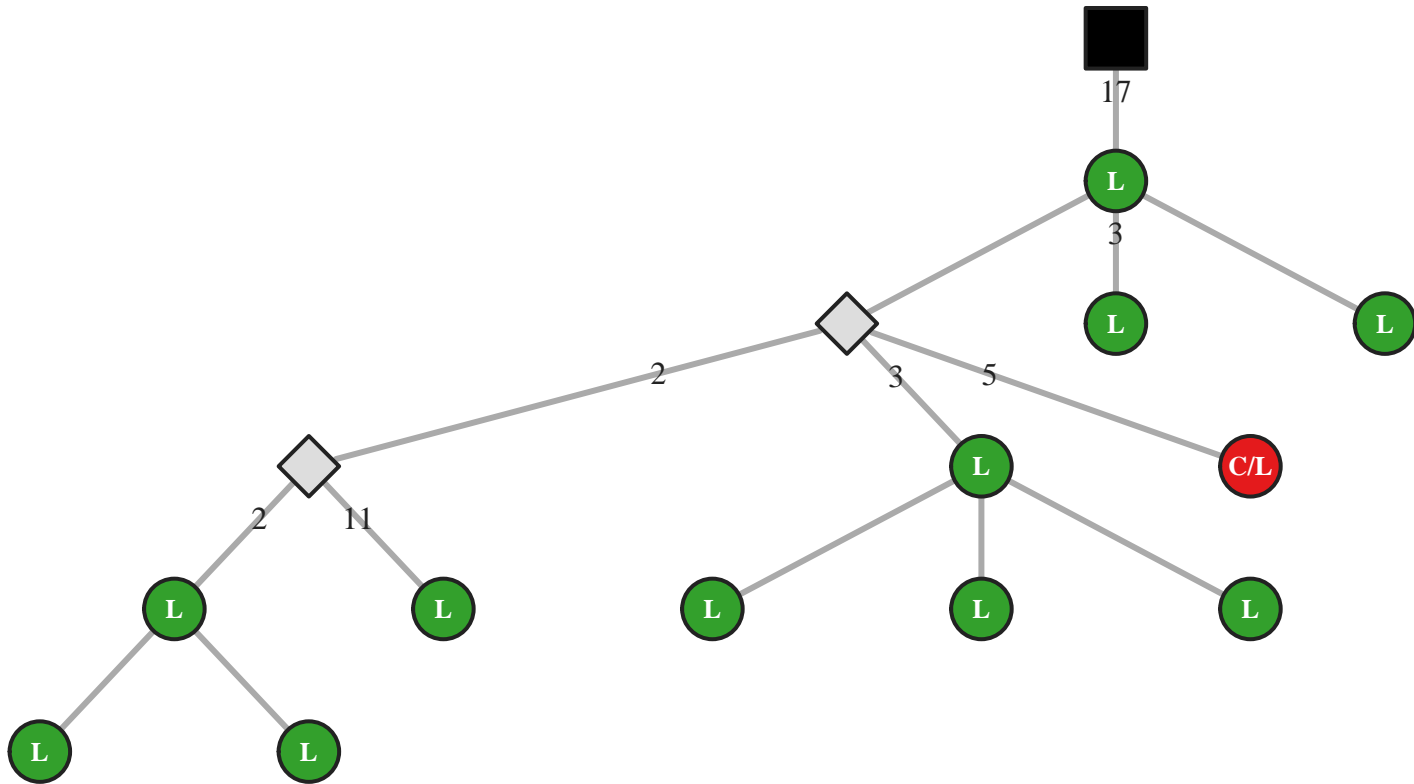
M5 IgG IGHV1-3/J4 39bp (40324)



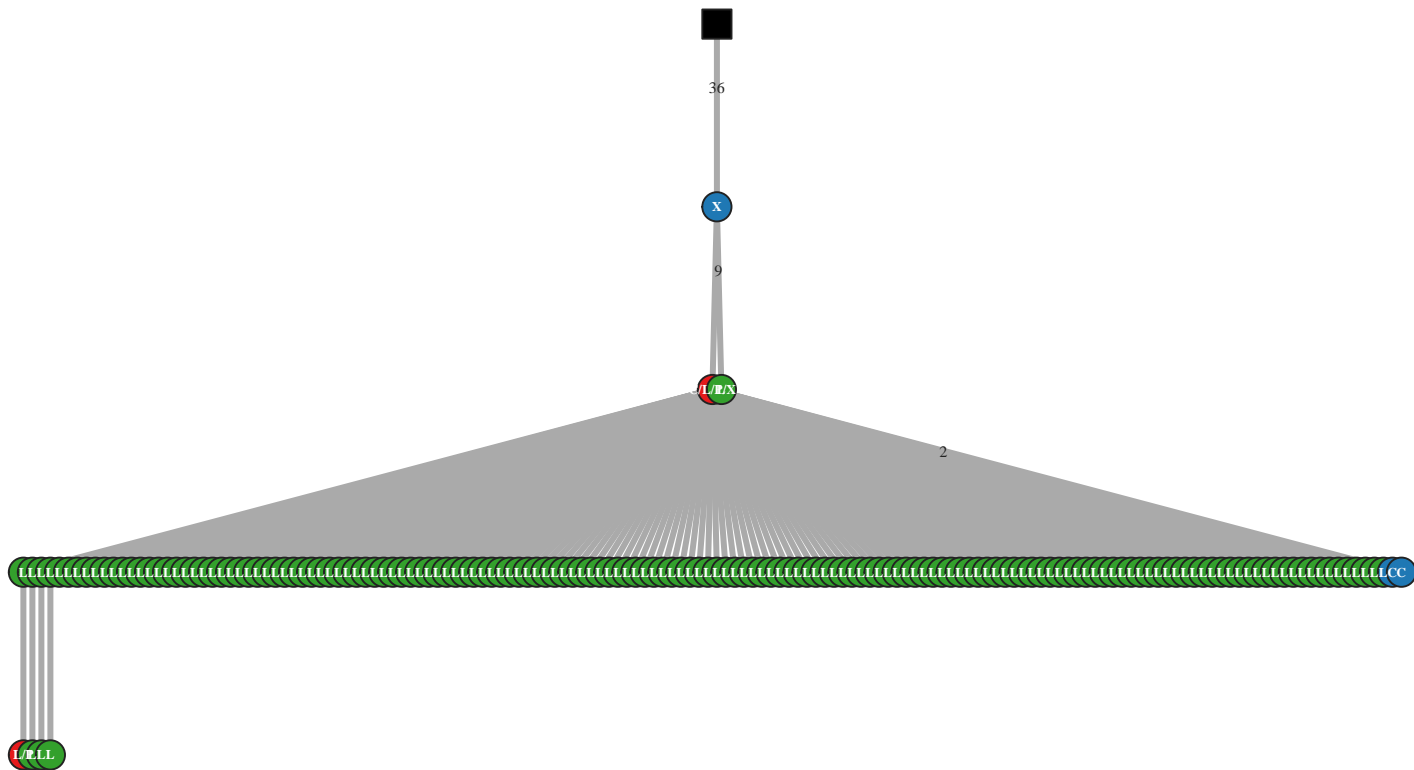
M5 IgG IGHV1-3/J4 39bp (40346)



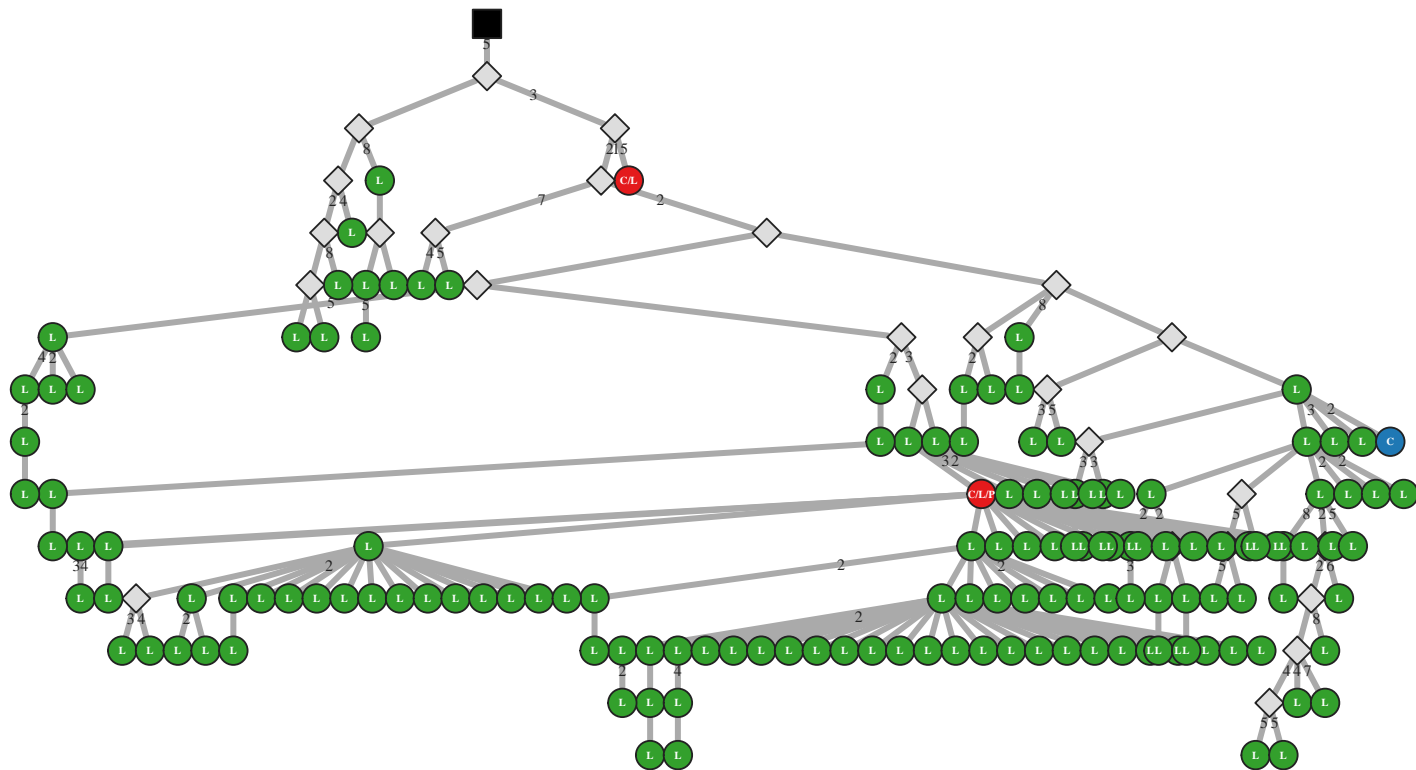
M5 IgG IGHV1-3/J4 39bp (40348)



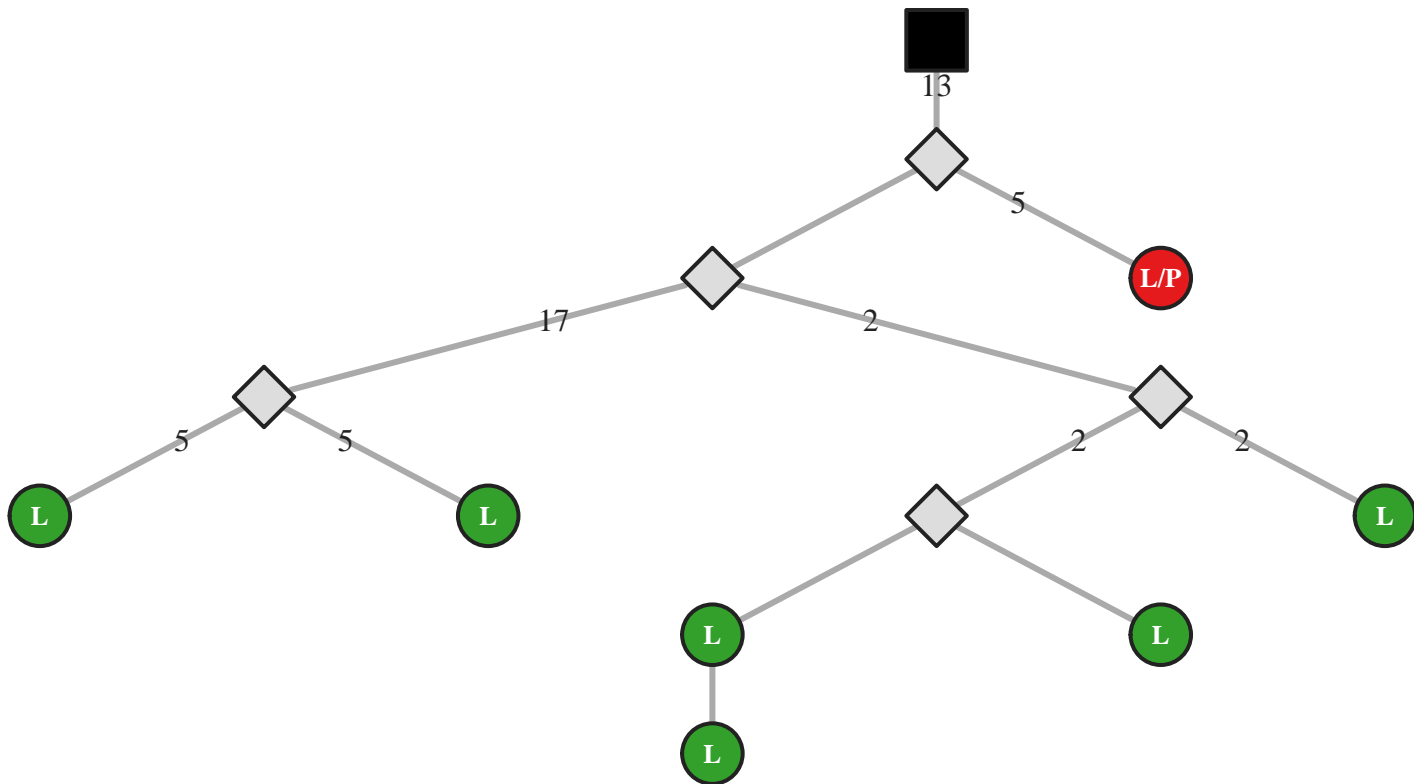
M5 IgG IGHV1-3/J4 42bp (32115)



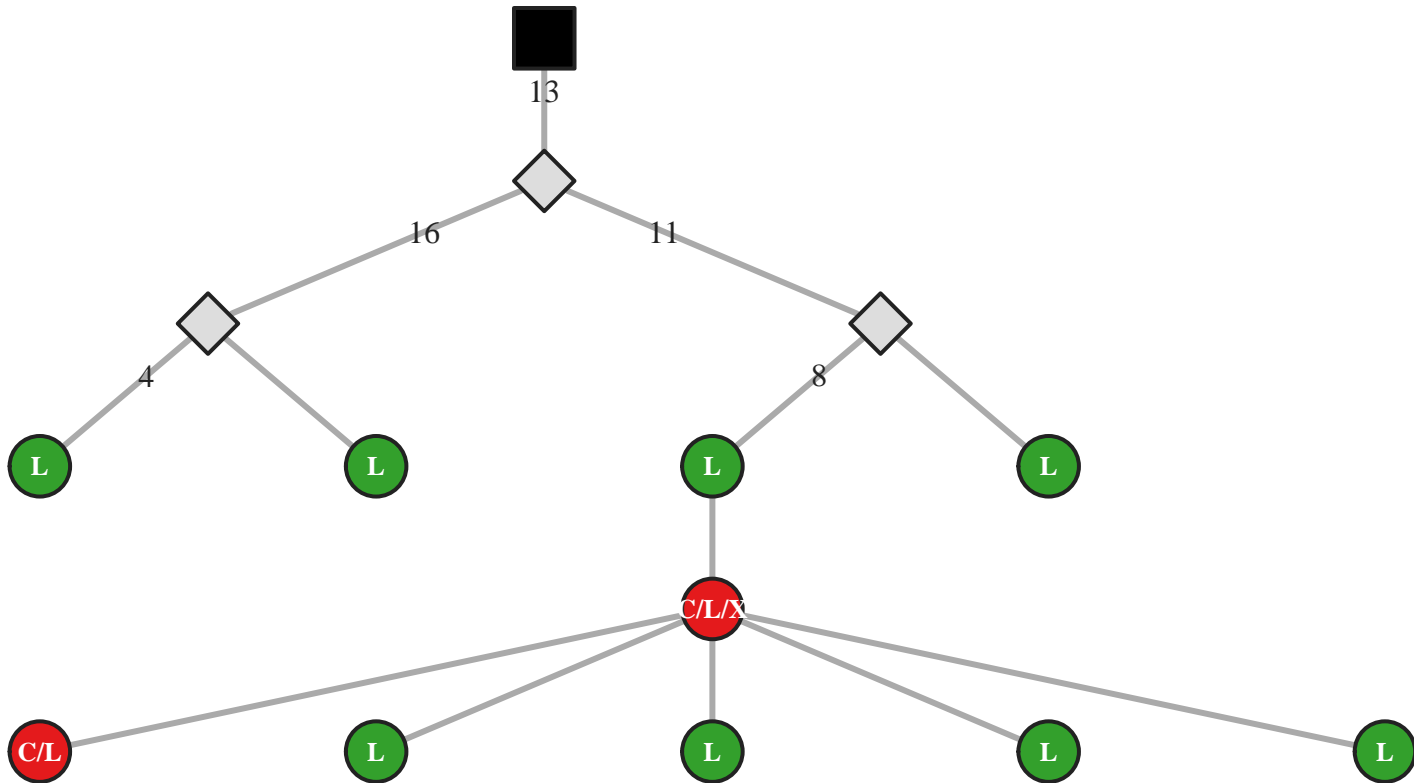
M5 IgG IGHV1-3/J4 45bp (49792)



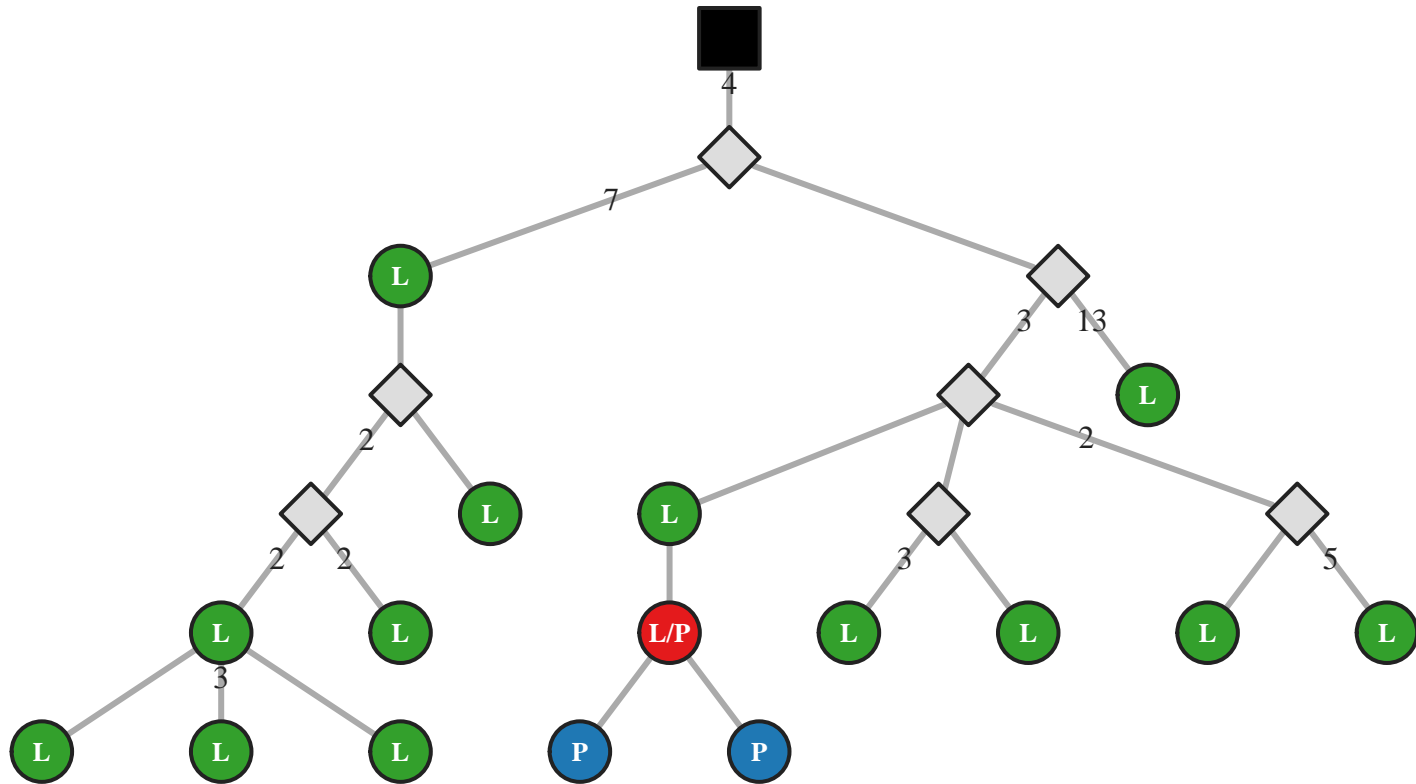
M5 IgG IGHV1-3/J4 45bp (49799)



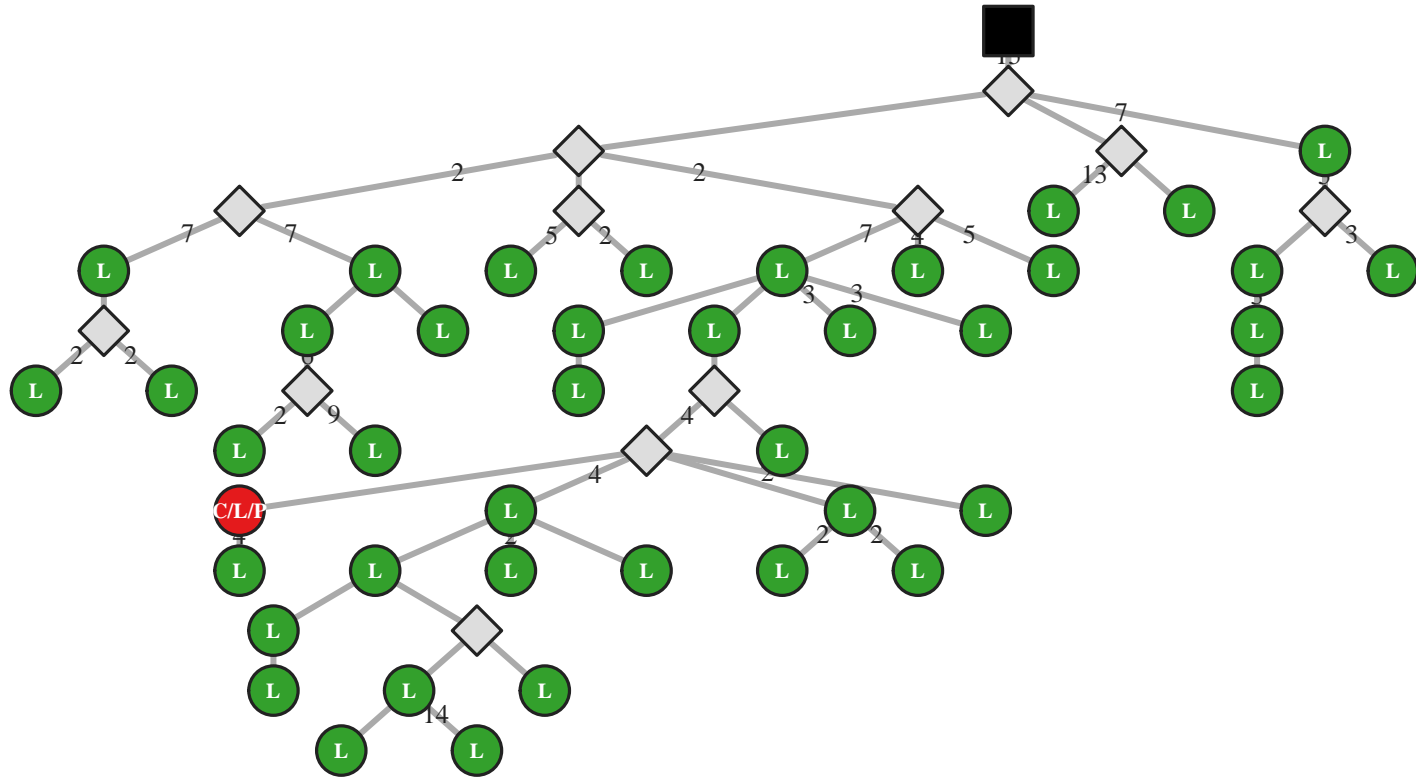
M5 IgG IGHV1-3/J4 45bp (49813)



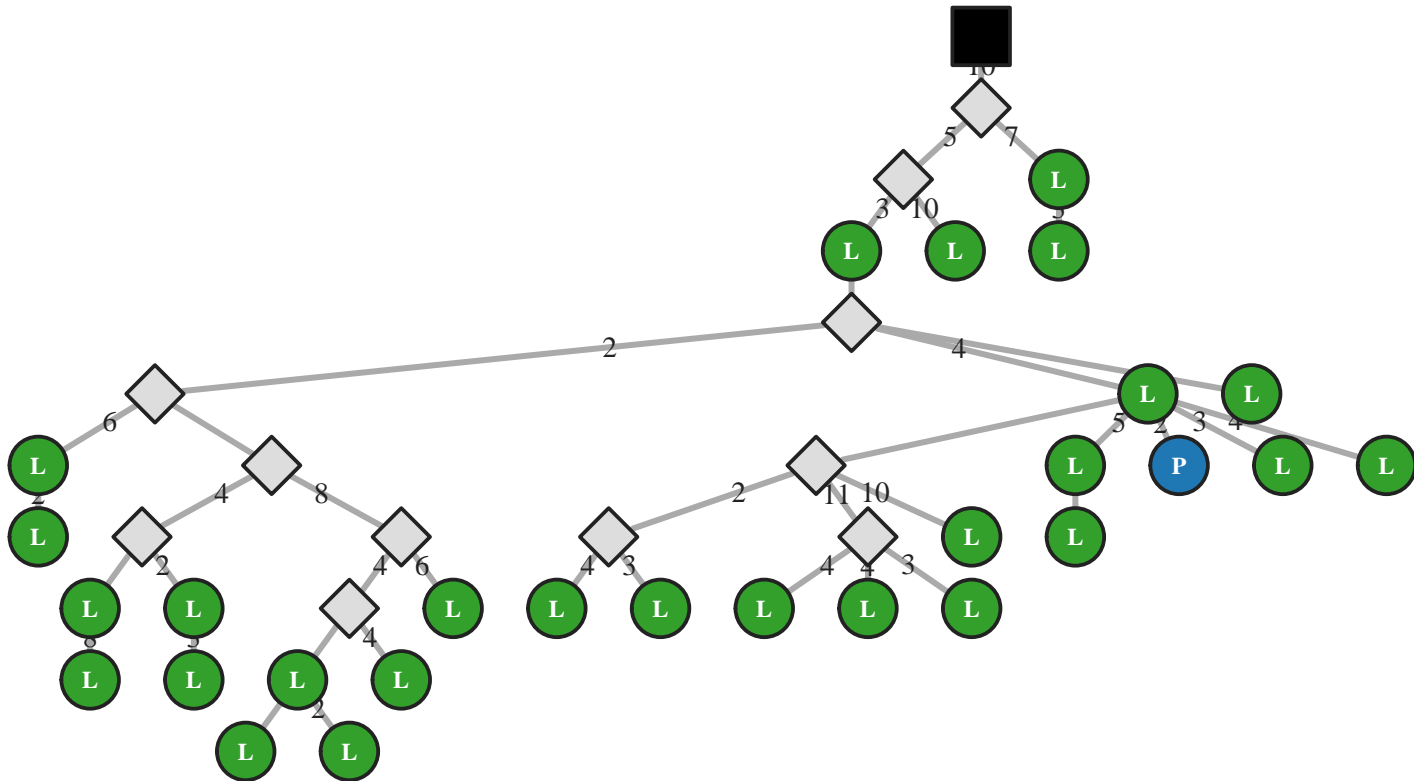
M5 IgG IGHV1-3/J4 45bp (49842)



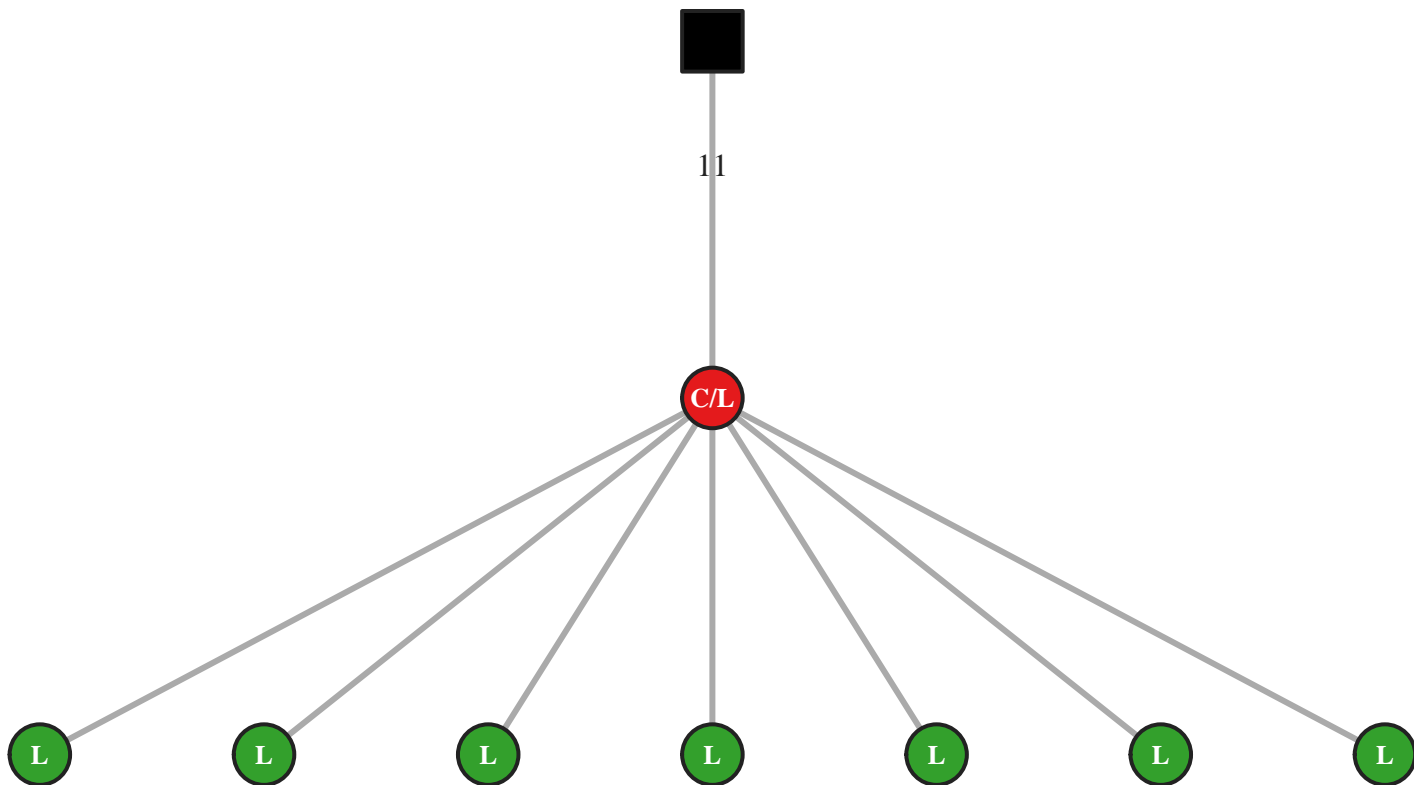
M5 IgG IGHV1-3/J4 48bp (4539)



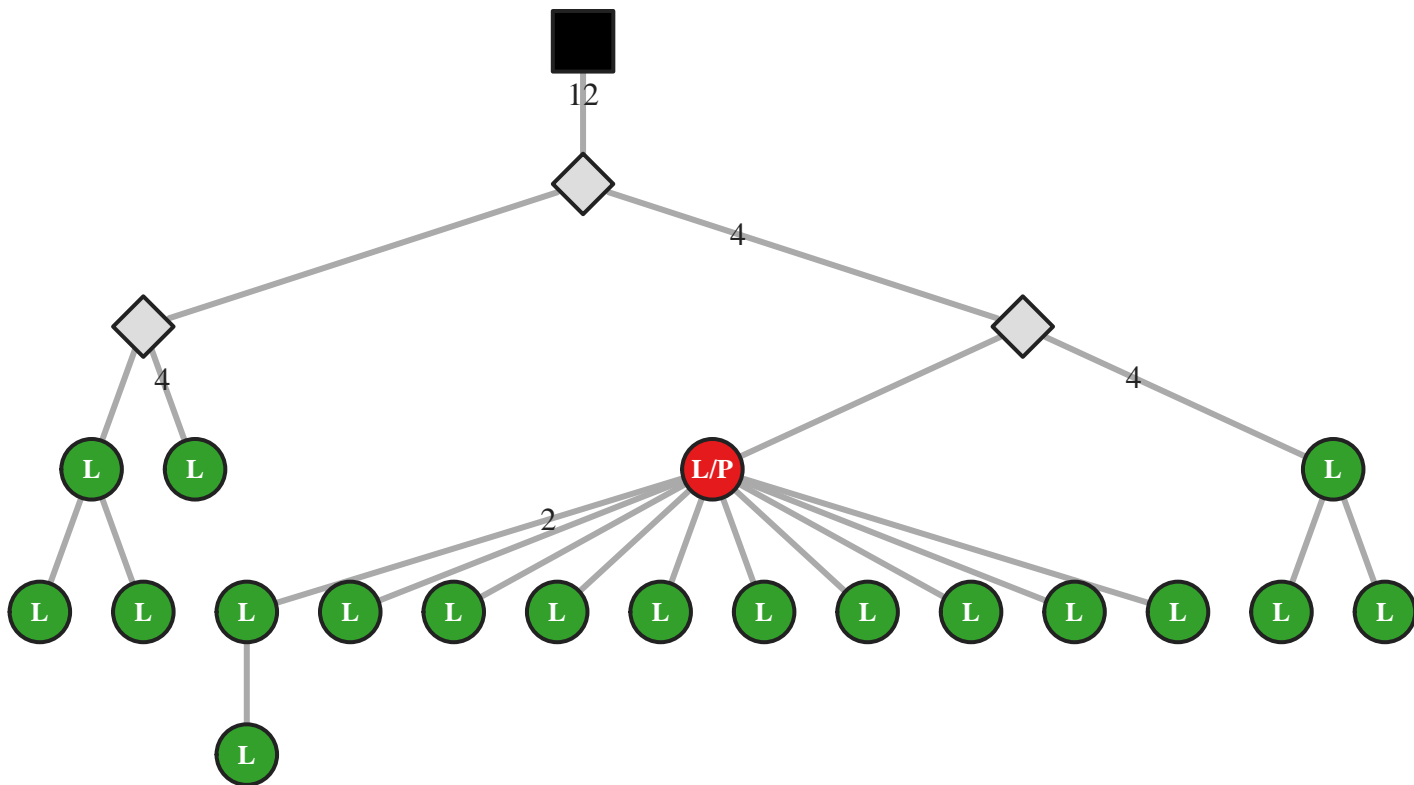
M5 IgG IGHV1-3/J4 48bp (4559)



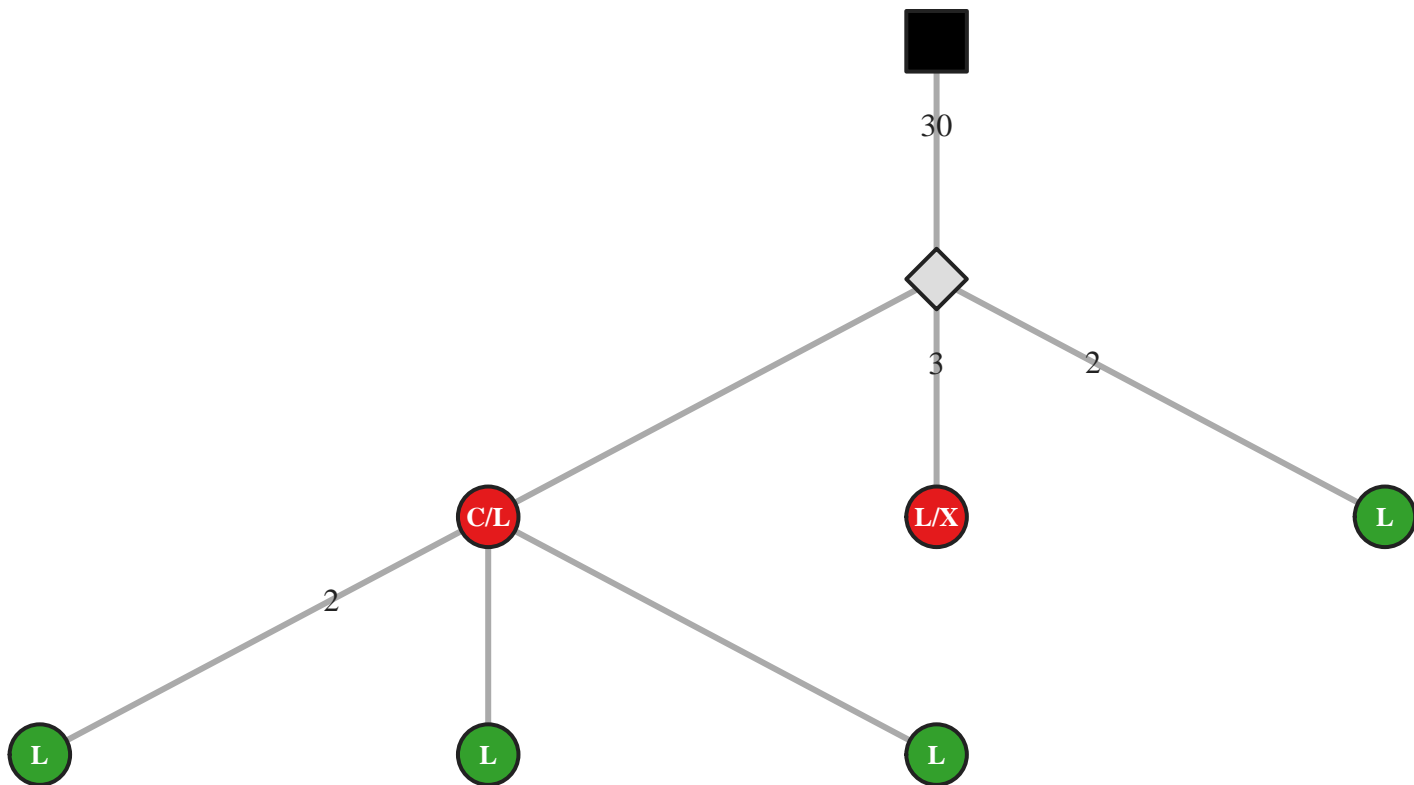
M5 IgG IGHV1-3/J4 51bp (40364)



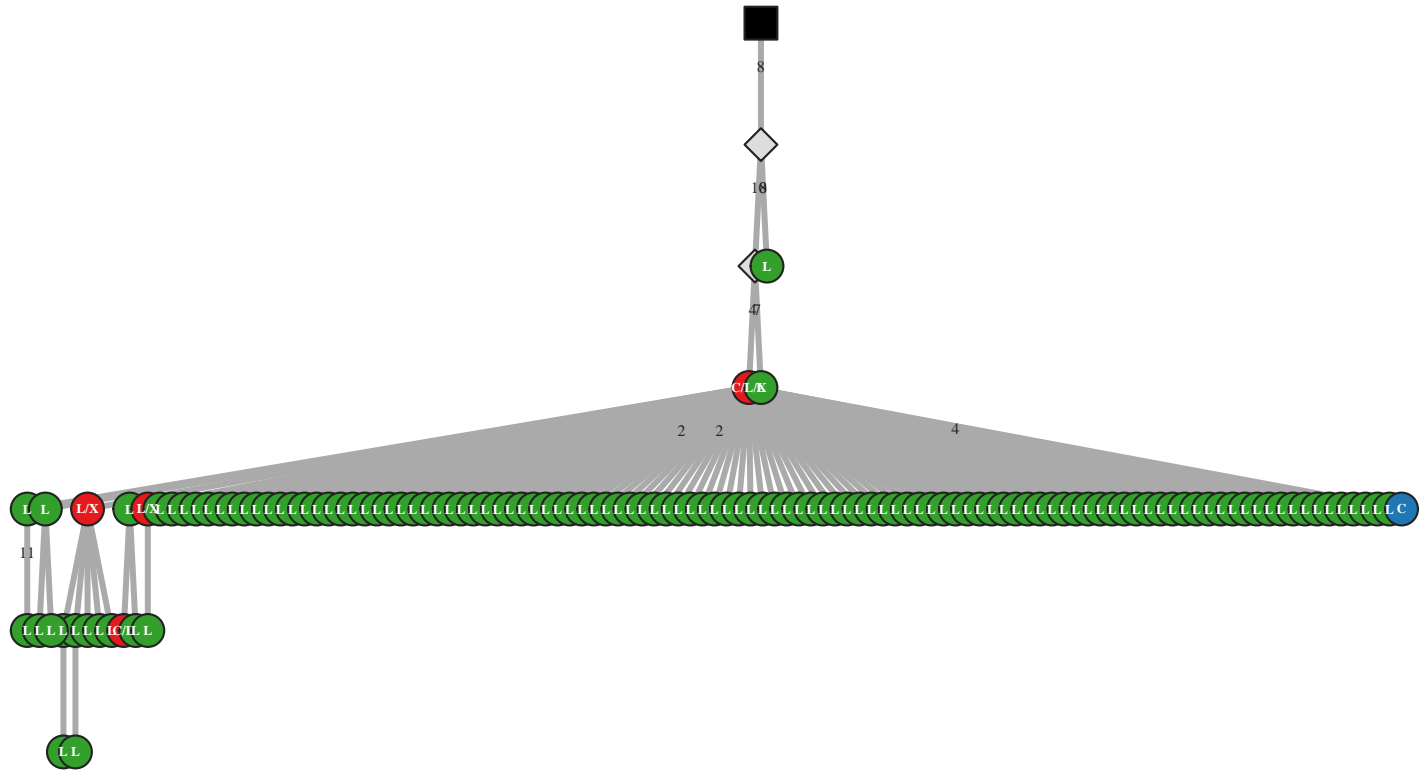
M5 IgG IGHV1-3/J4 51bp (40380)



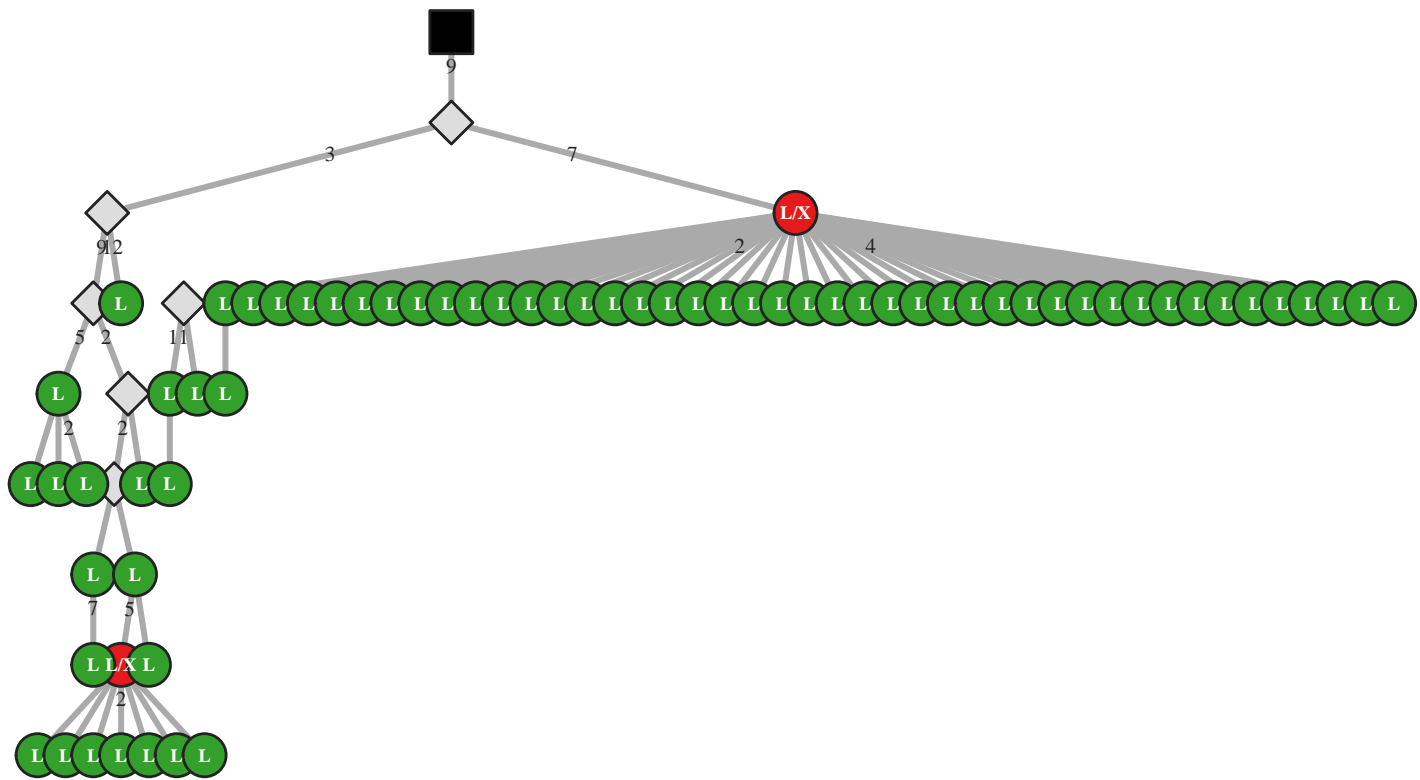
M5 IgG IGHV1-3/J4 57bp (14141)



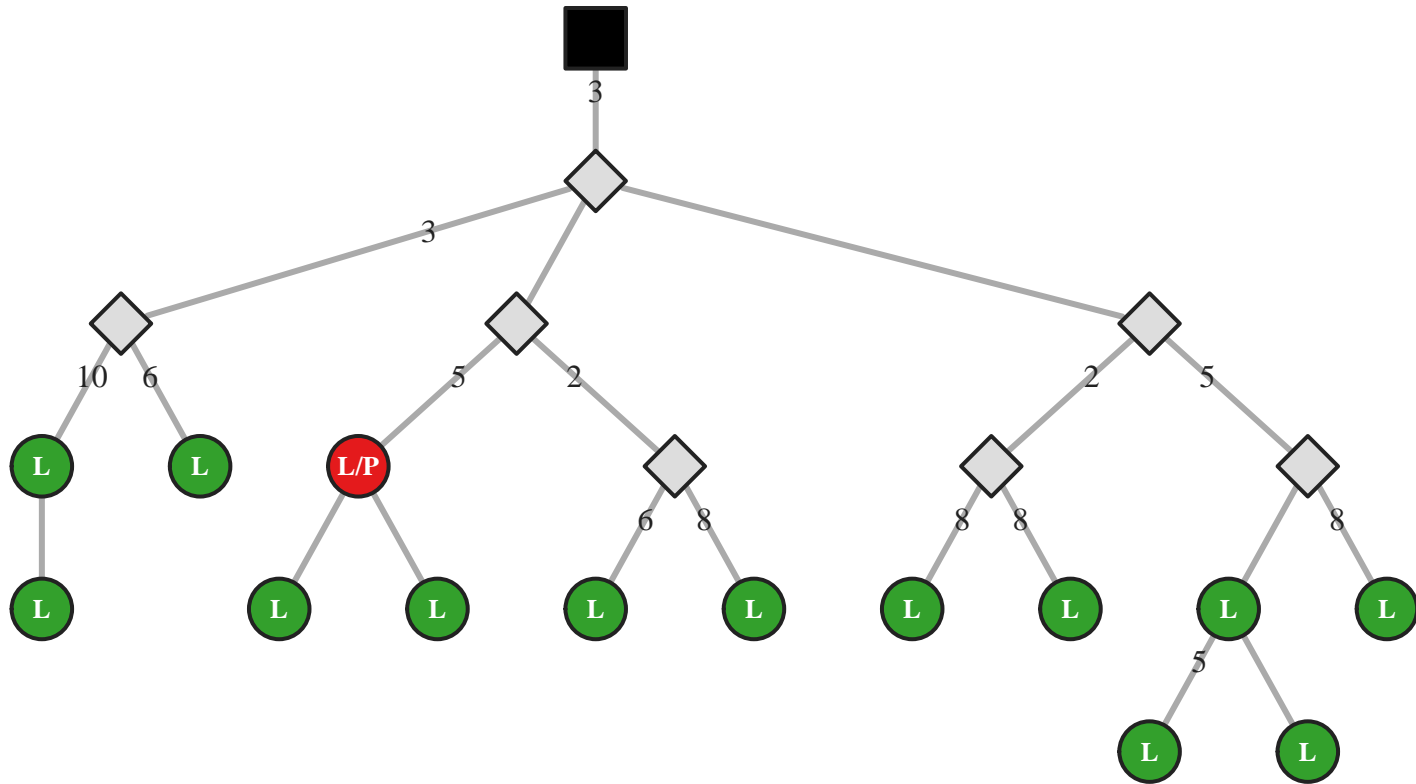
M5 IgG IGHV1-3/J4 57bp (14158)



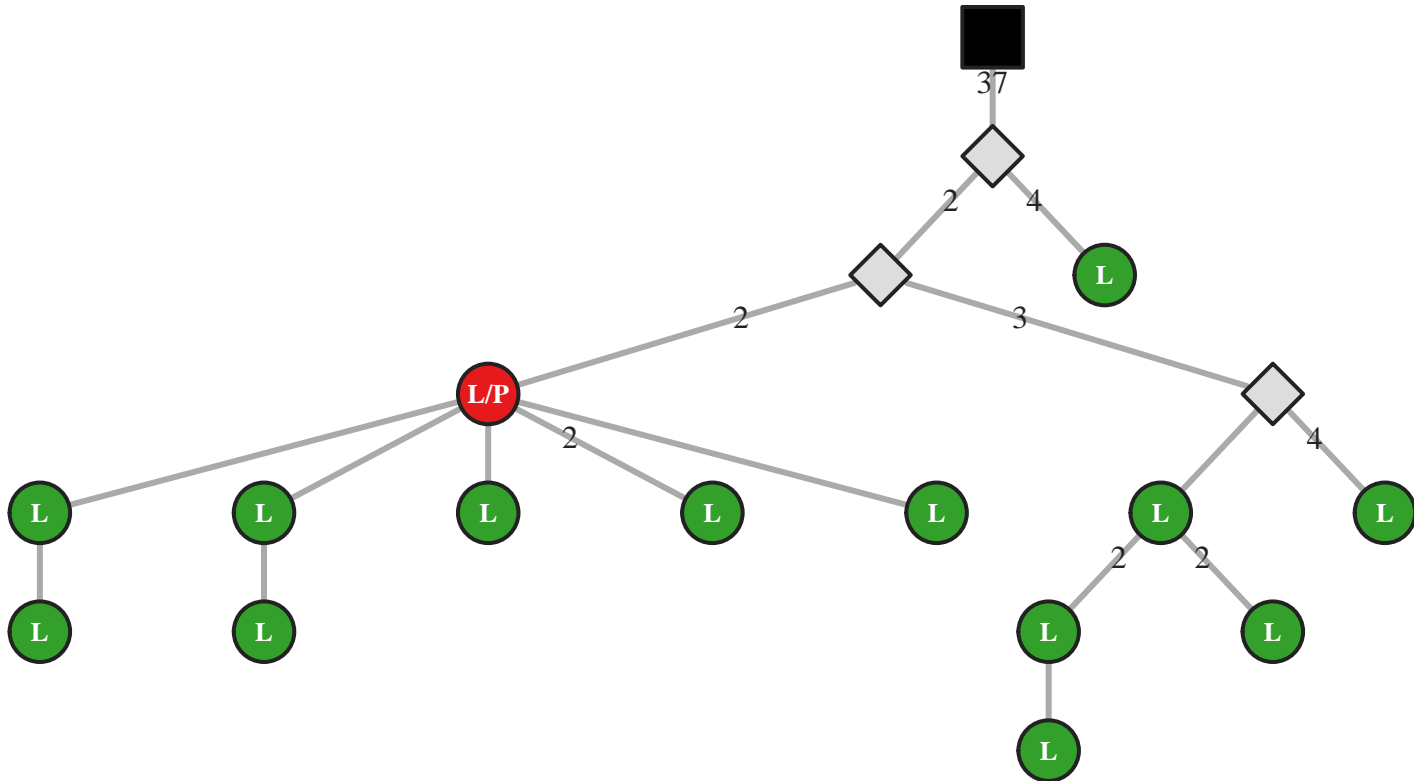
M5 IgG IGHV1-3/J5 42bp (32123)



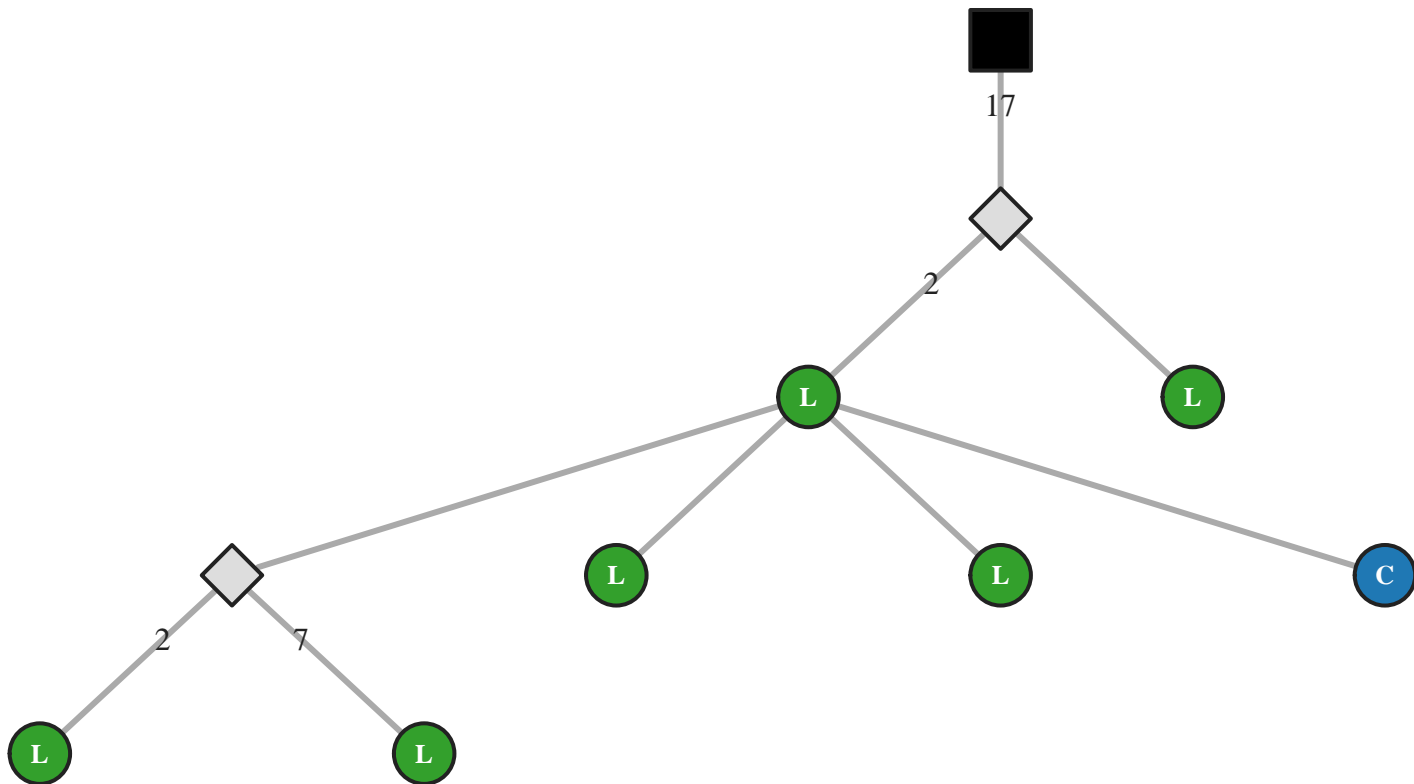
M5 IgG IGHV1-3/J5 45bp (4575)



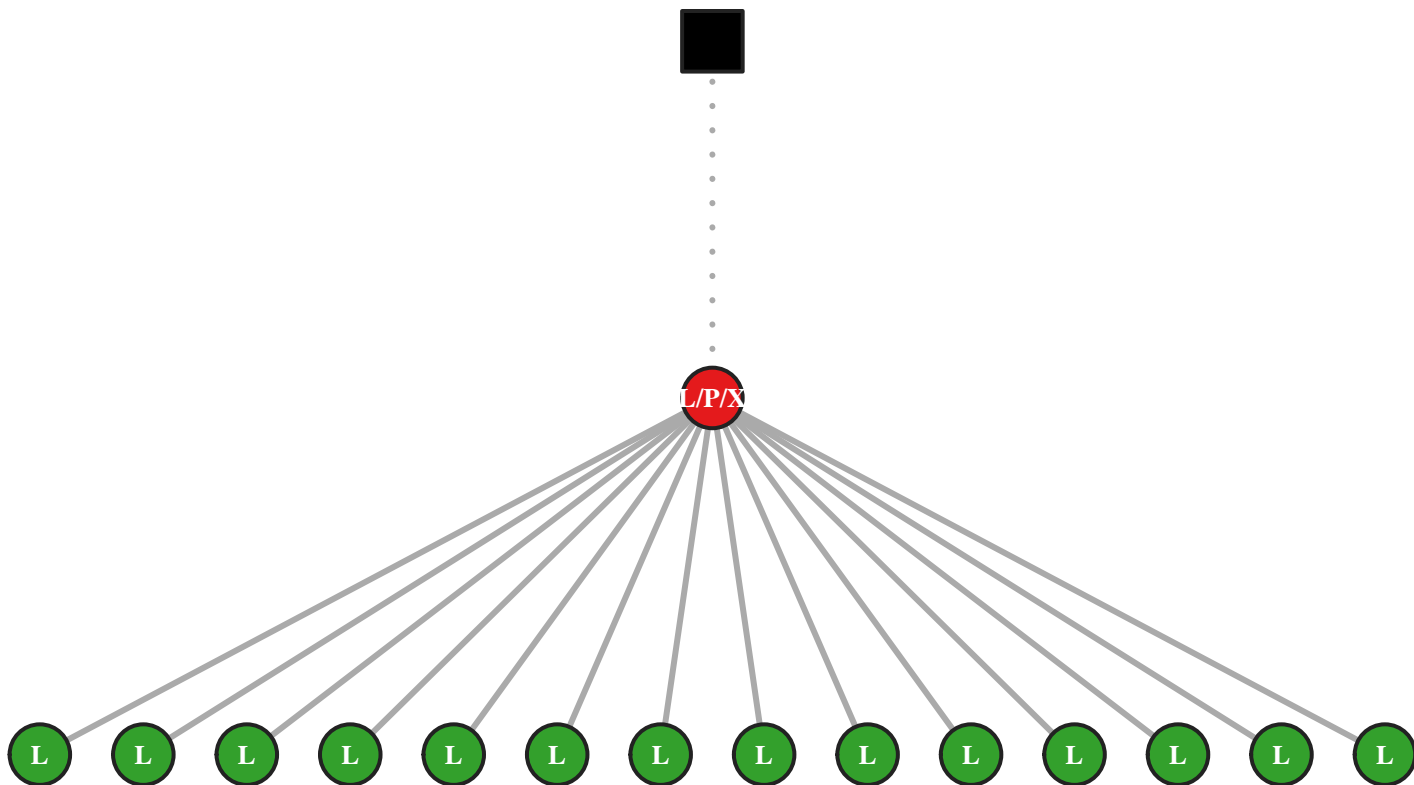
M5 IgG IGHV1-3/J5 54bp (4585)



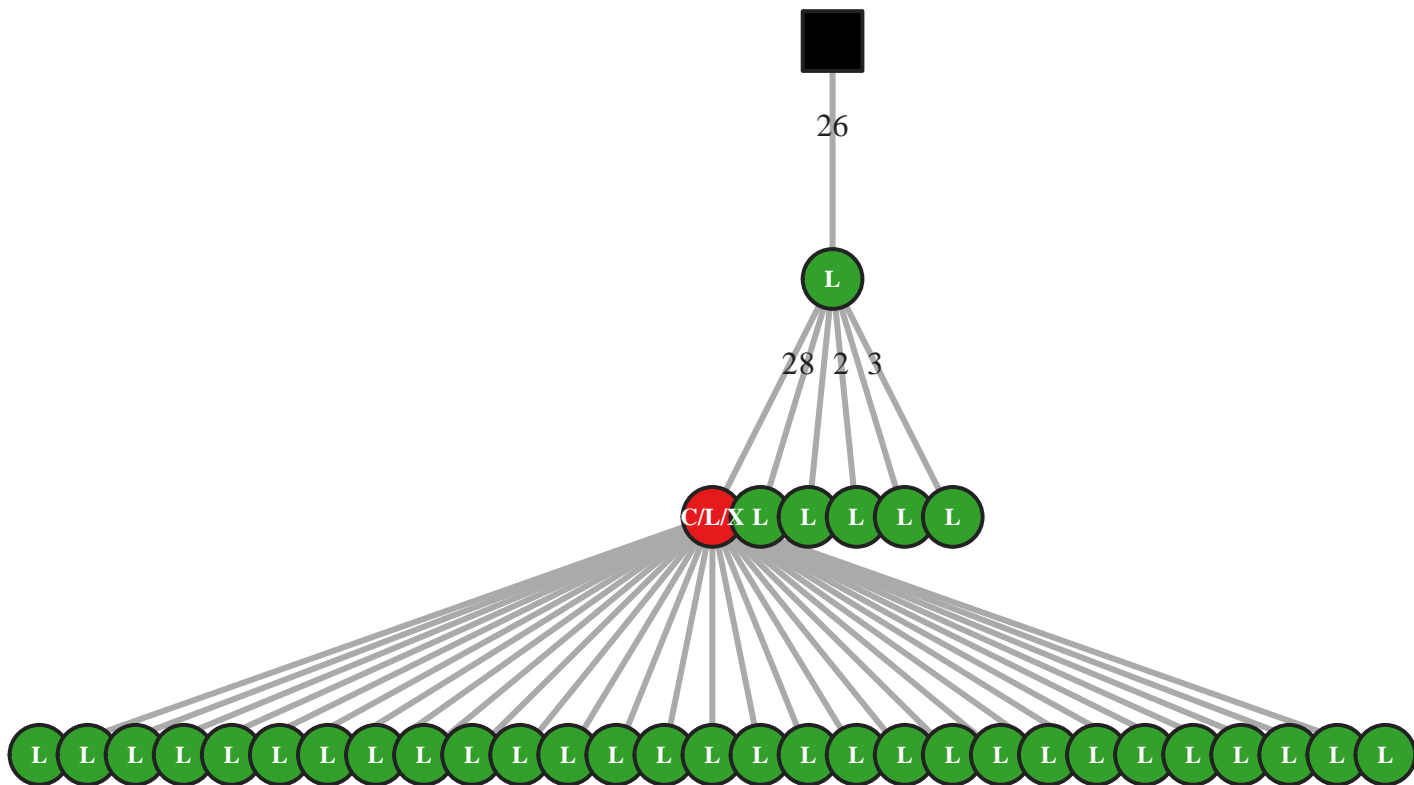
M5 IgG IGHV1-3/J5 60bp (32153)



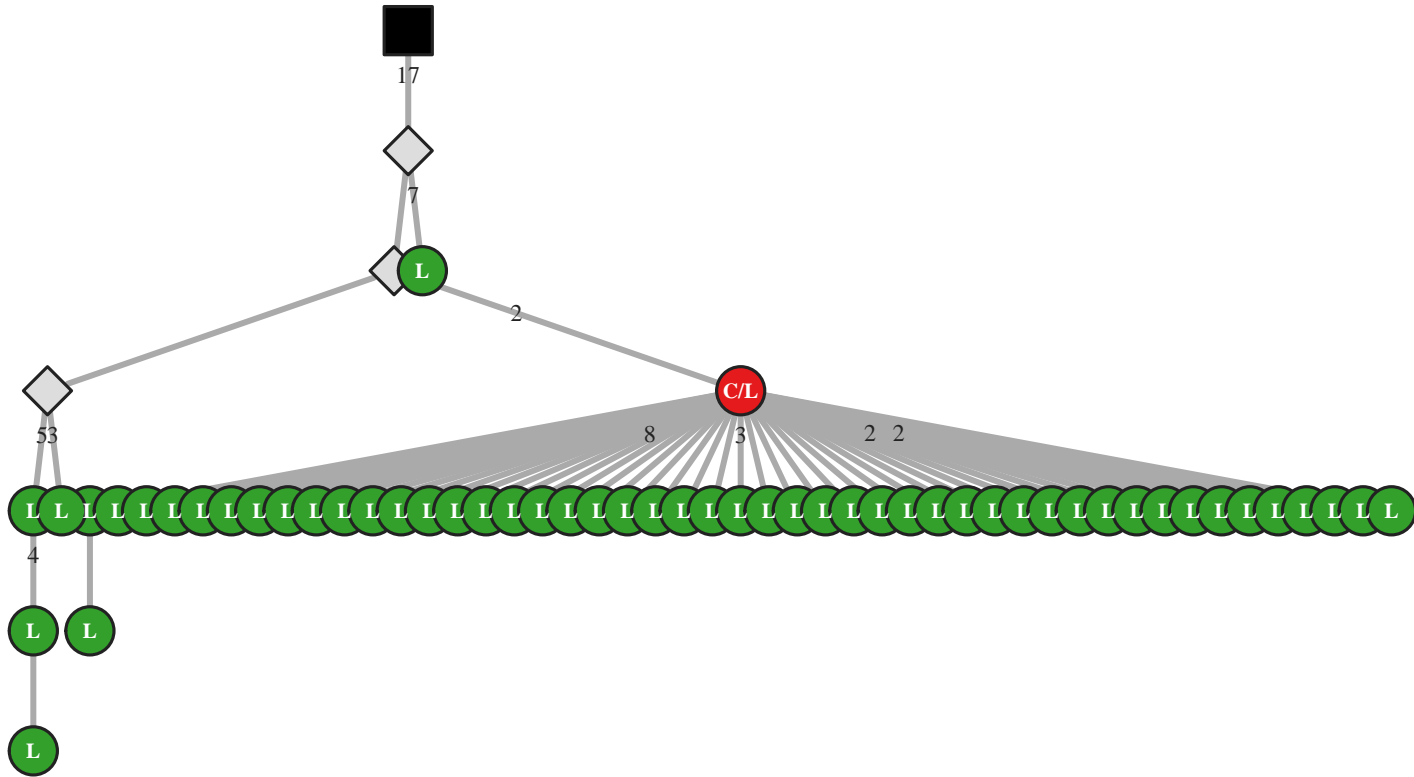
M5 IgG IGHV1-3/J6 51bp (23483)



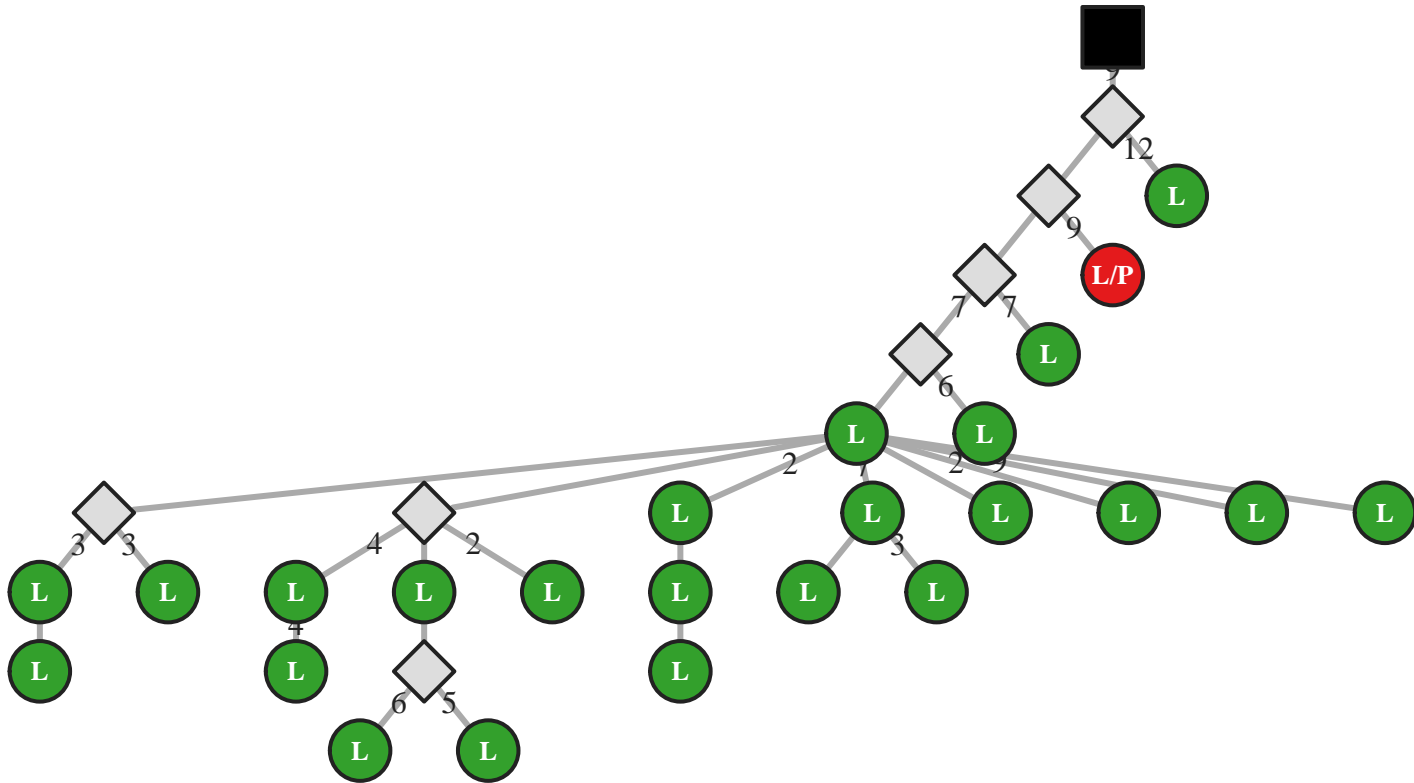
M5 IgG IGHV1-3/J6 57bp (14181)



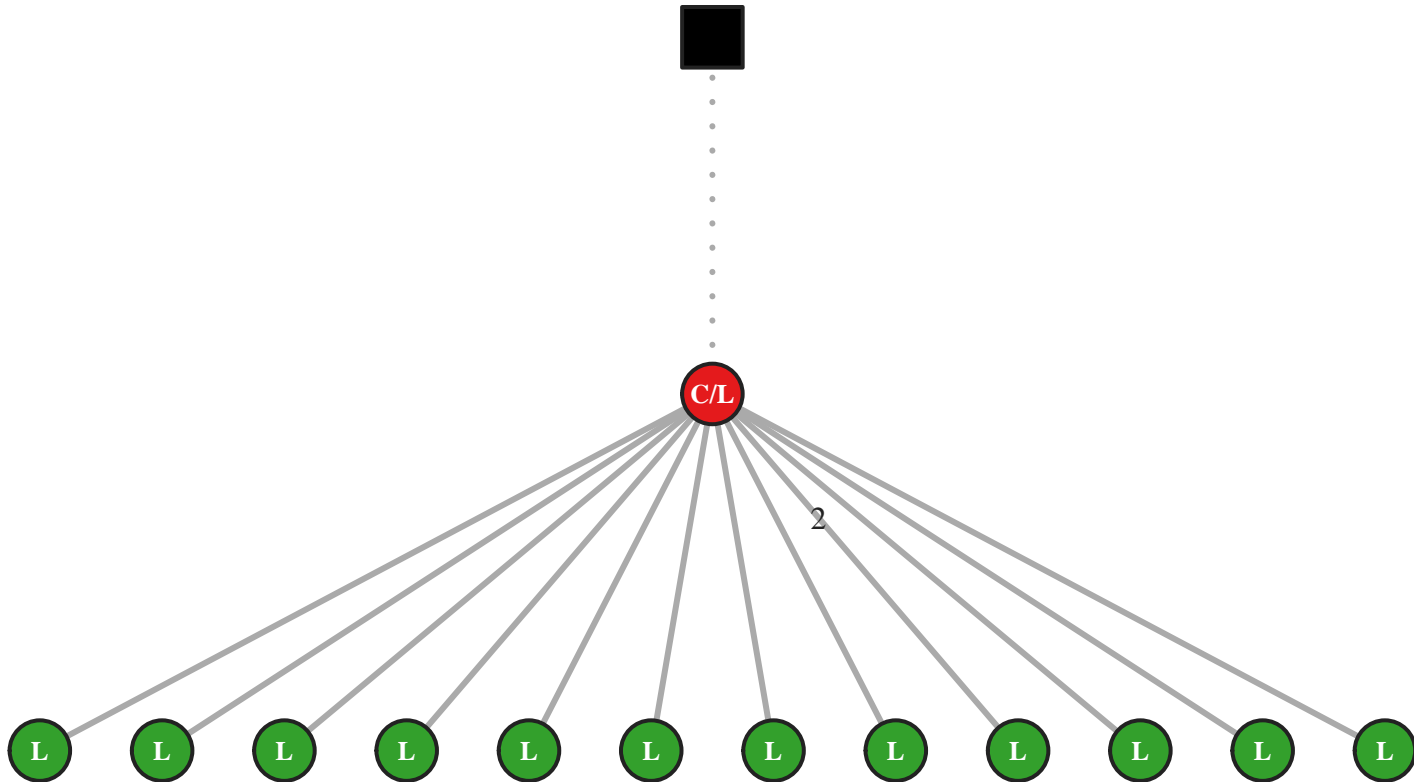
M5 IgG IGHV1-3/J6 57bp (14187)



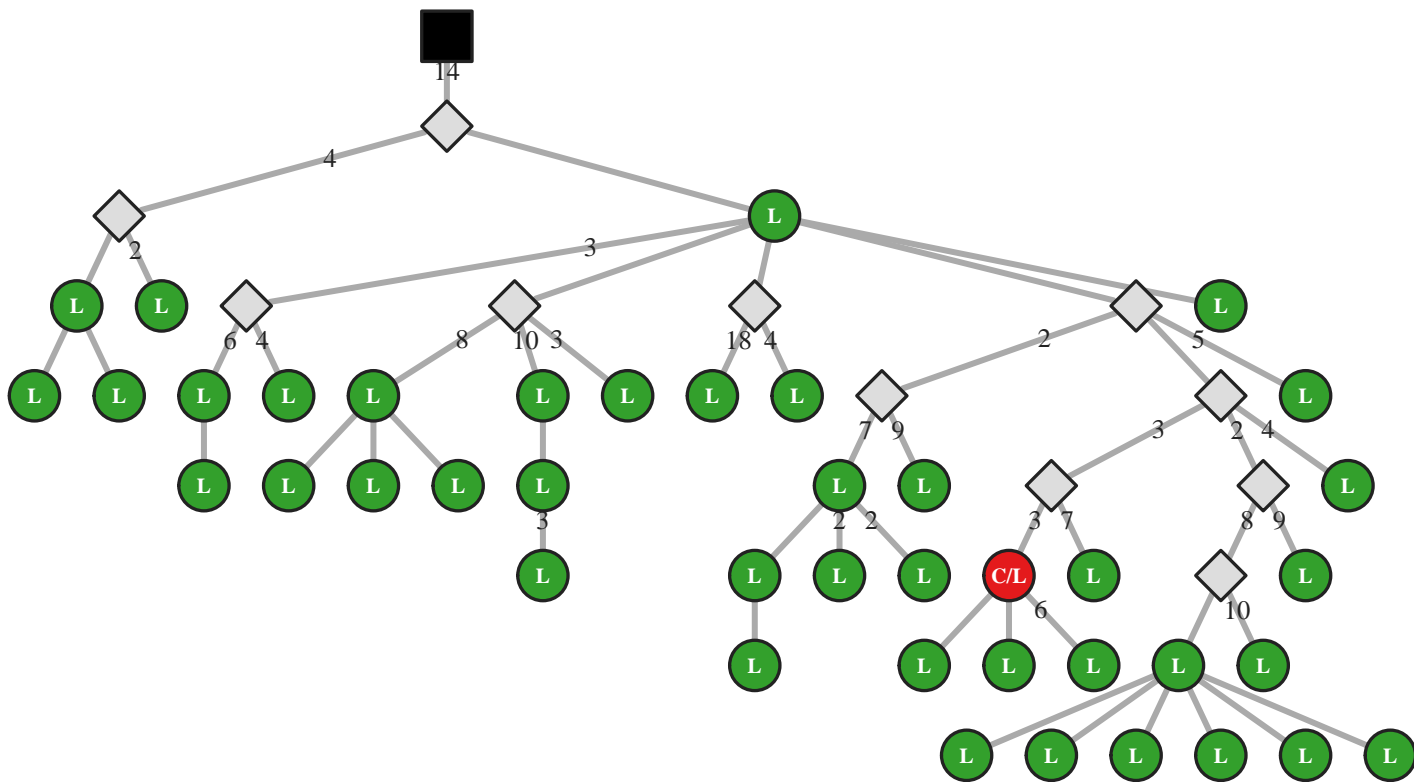
M5 IgG IGHV1-3/J6 57bp (14194)



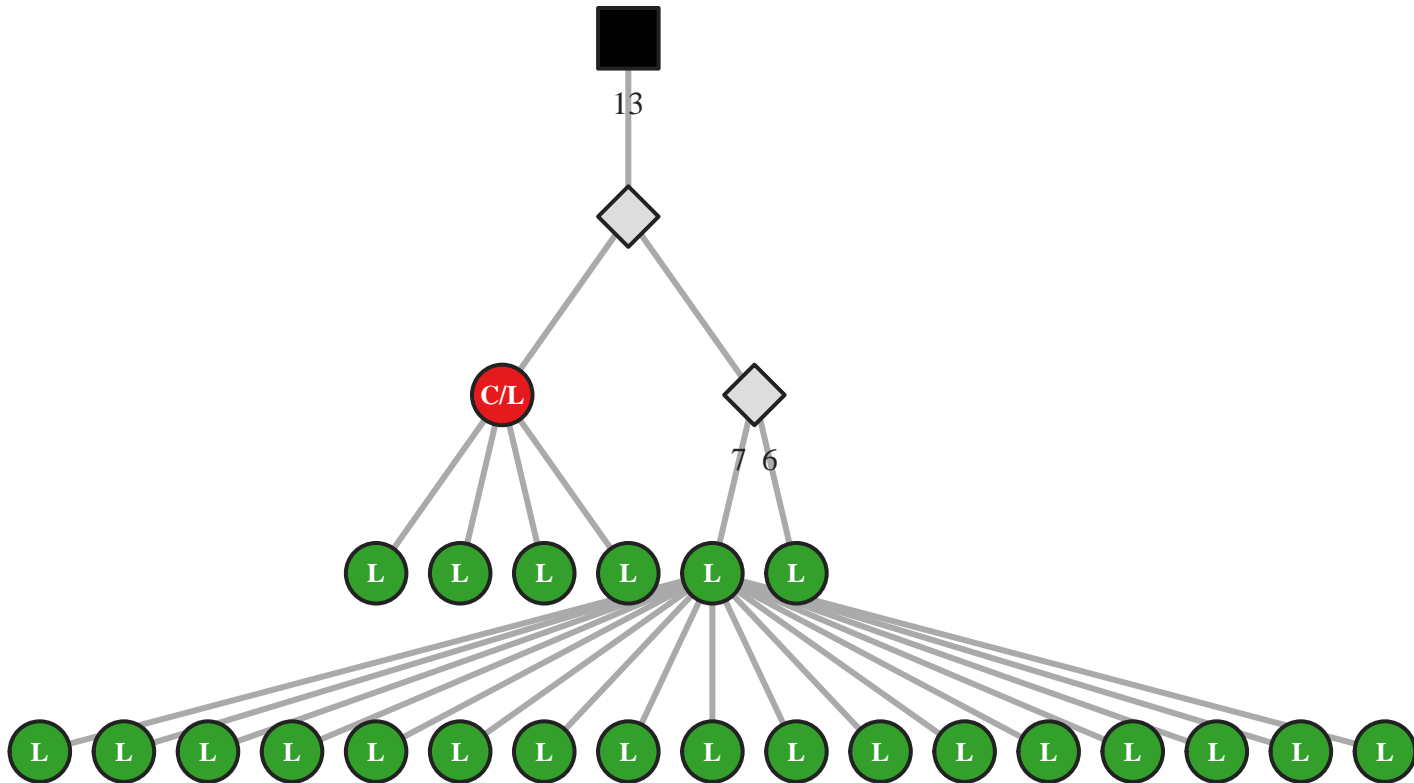
M5 IgG IGHV1-46/J3 45bp (49896)



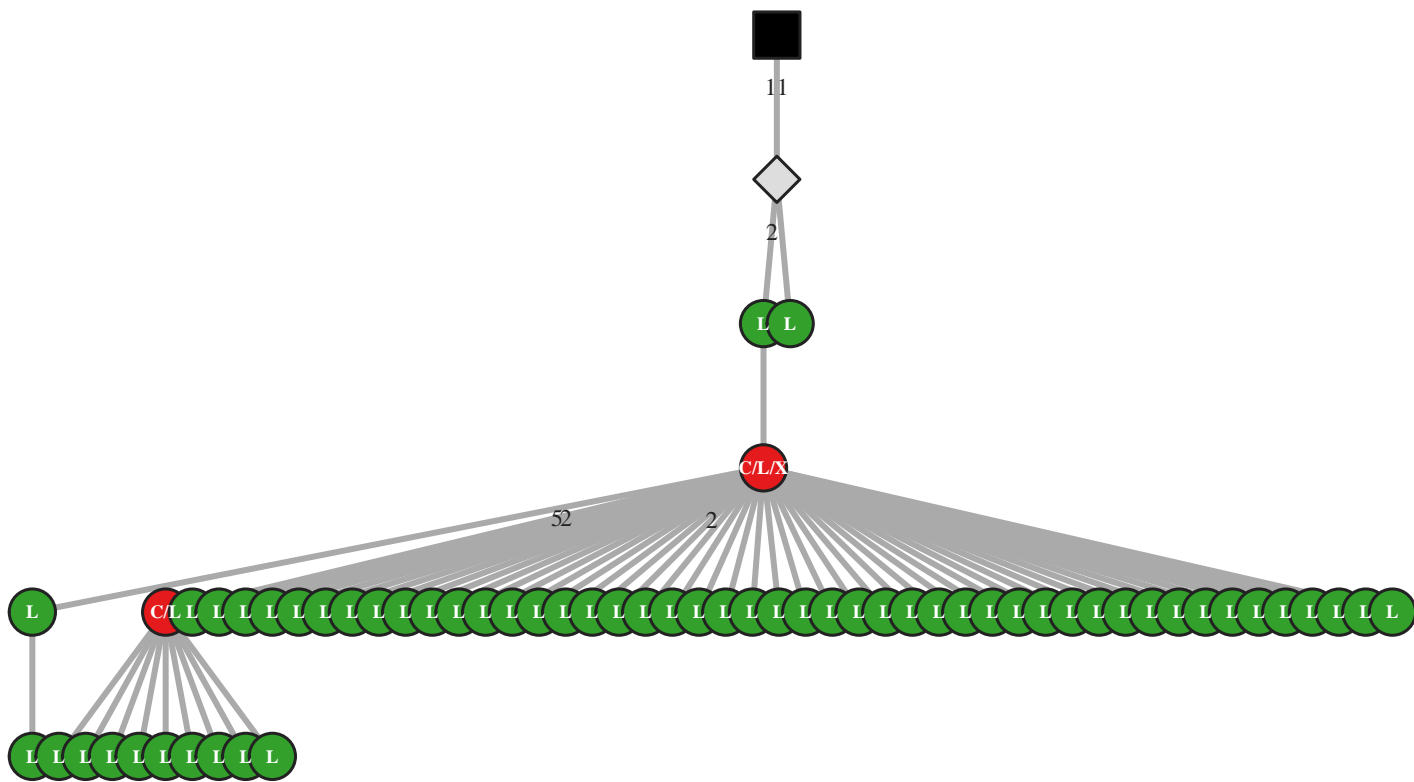
M5 IgG IGHV1-46/J3 51bp (49914)



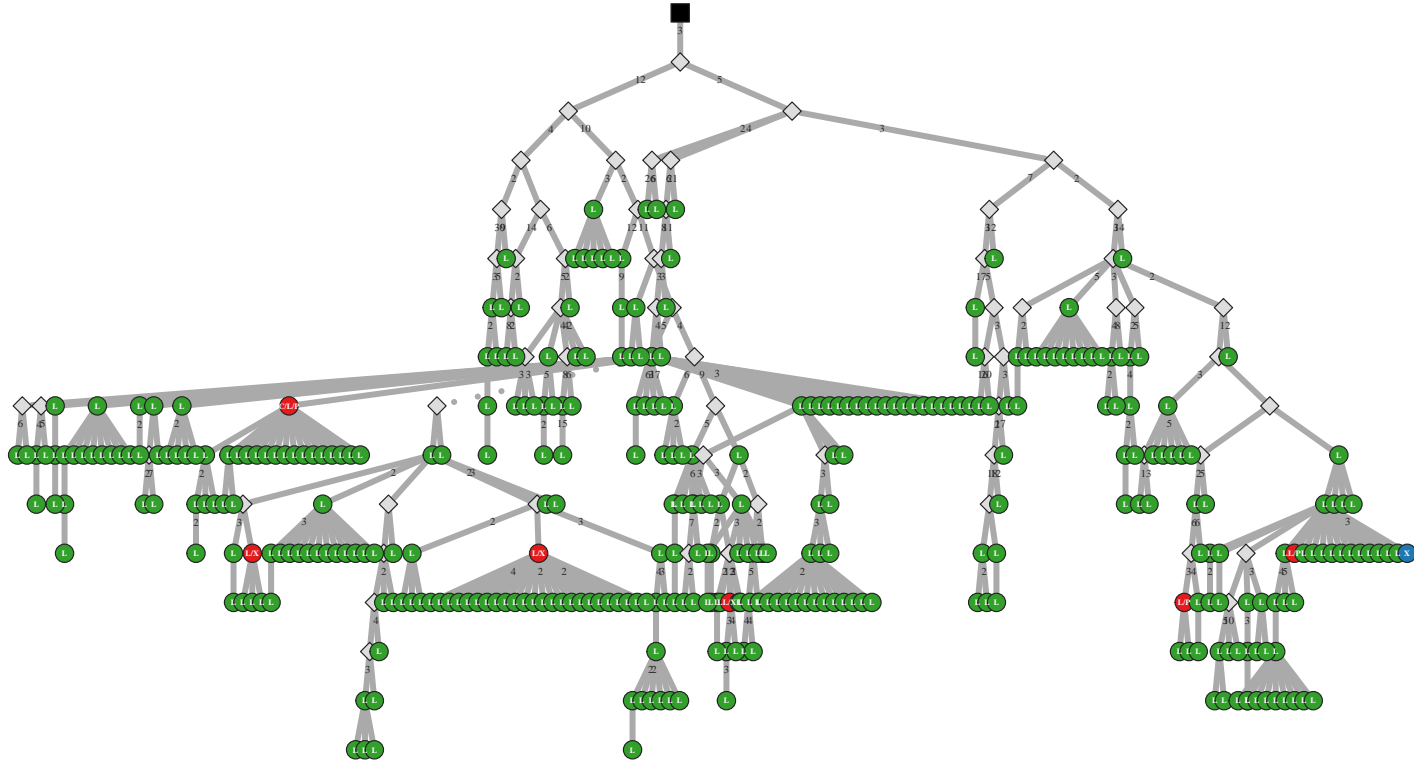
M5 IgA IGHV1-46/J3 54bp (2346)



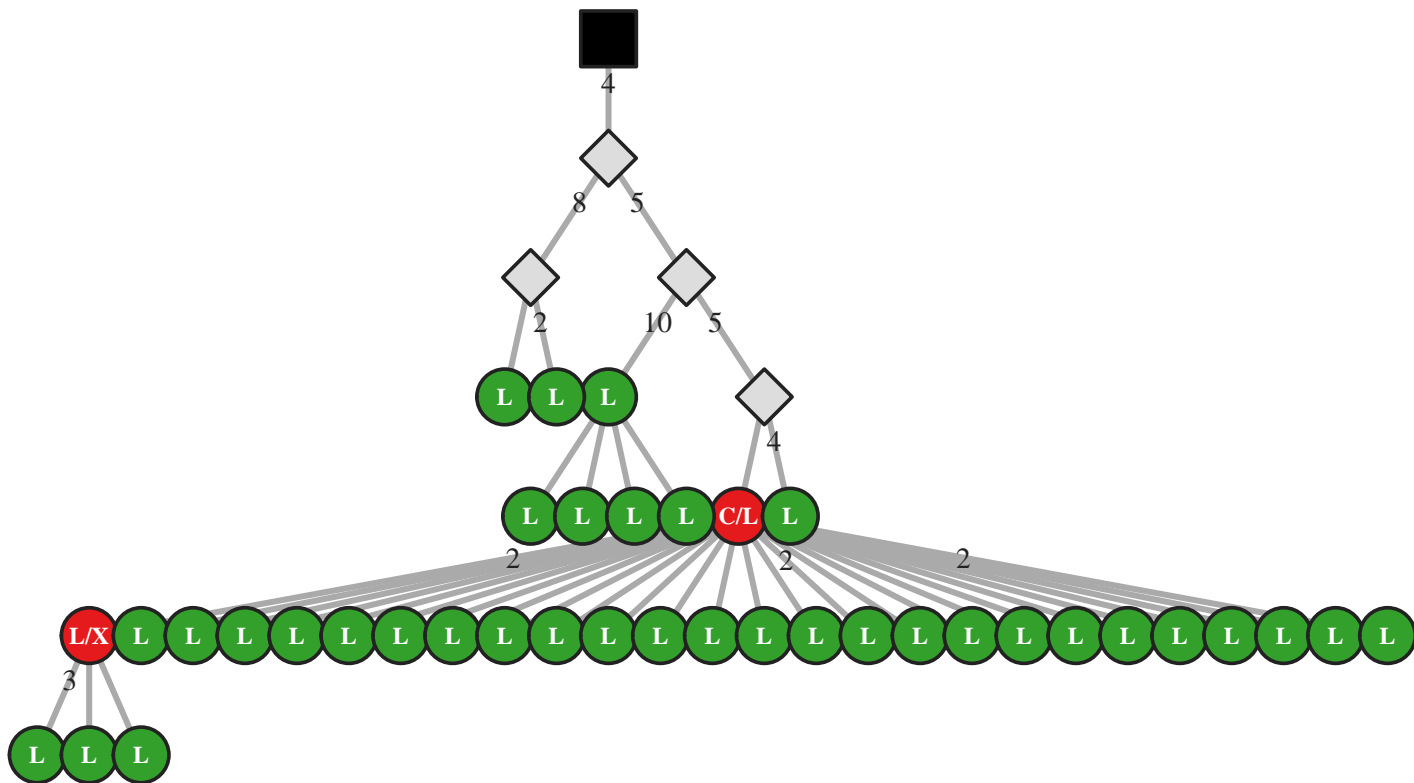
M5 IgG IGHV1-46/J4 30bp (23016)



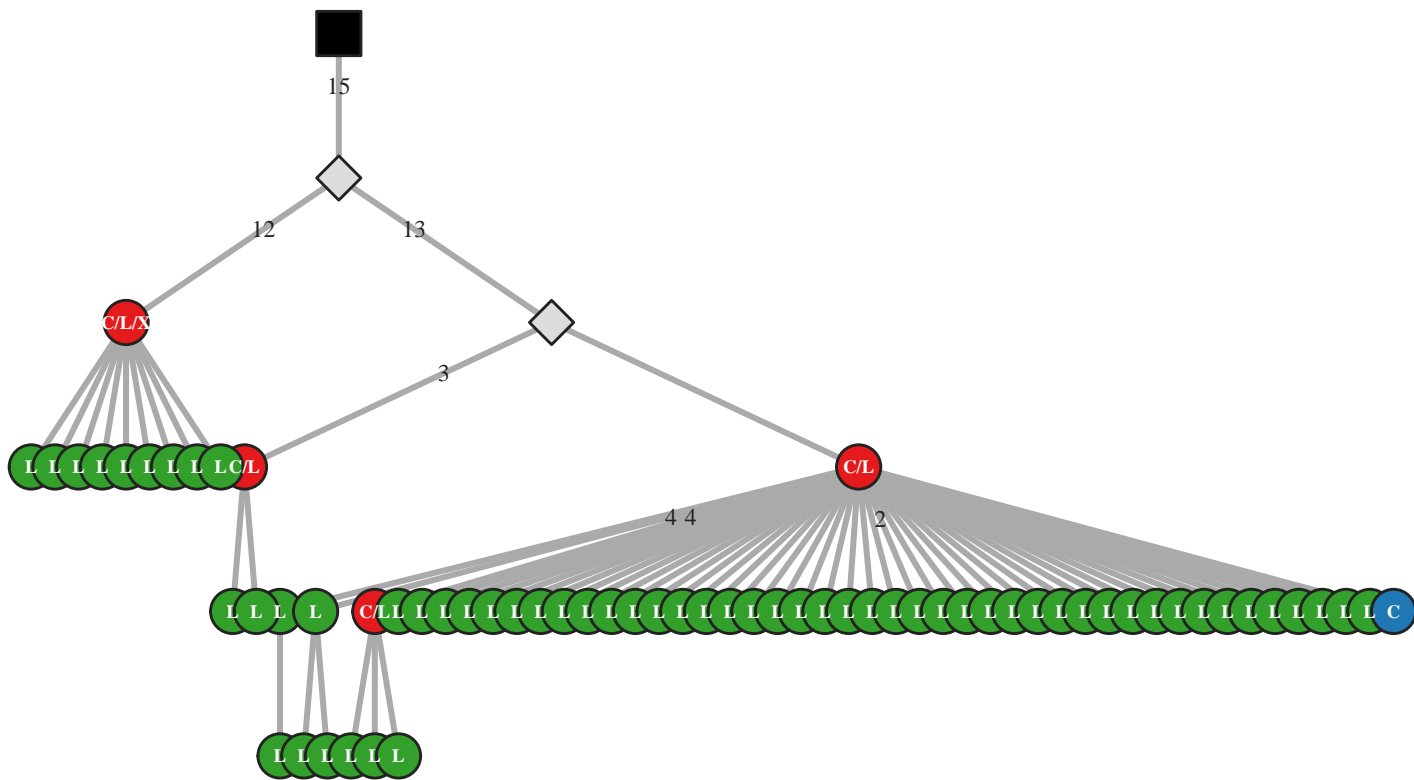
M5 IgG IGHV1-46/J4 30bp (23027)



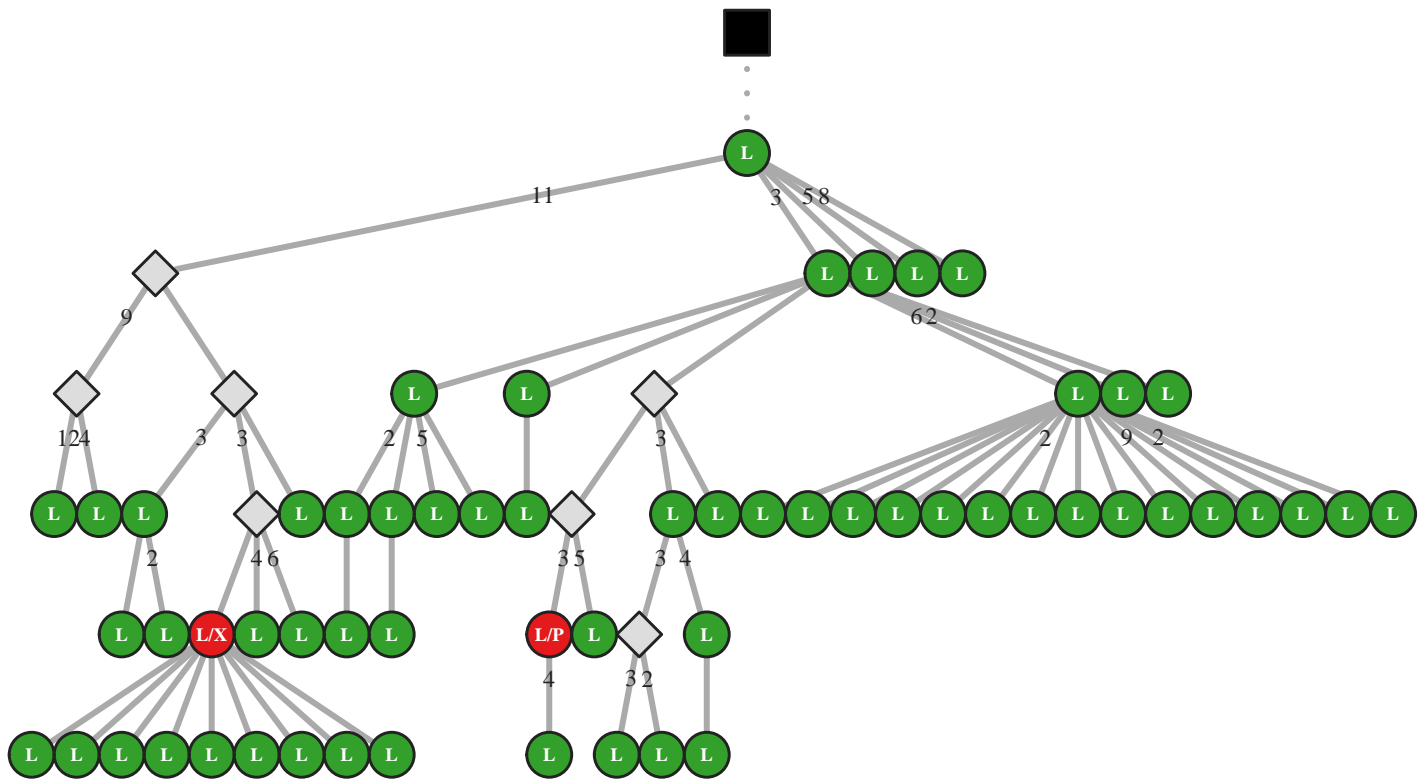
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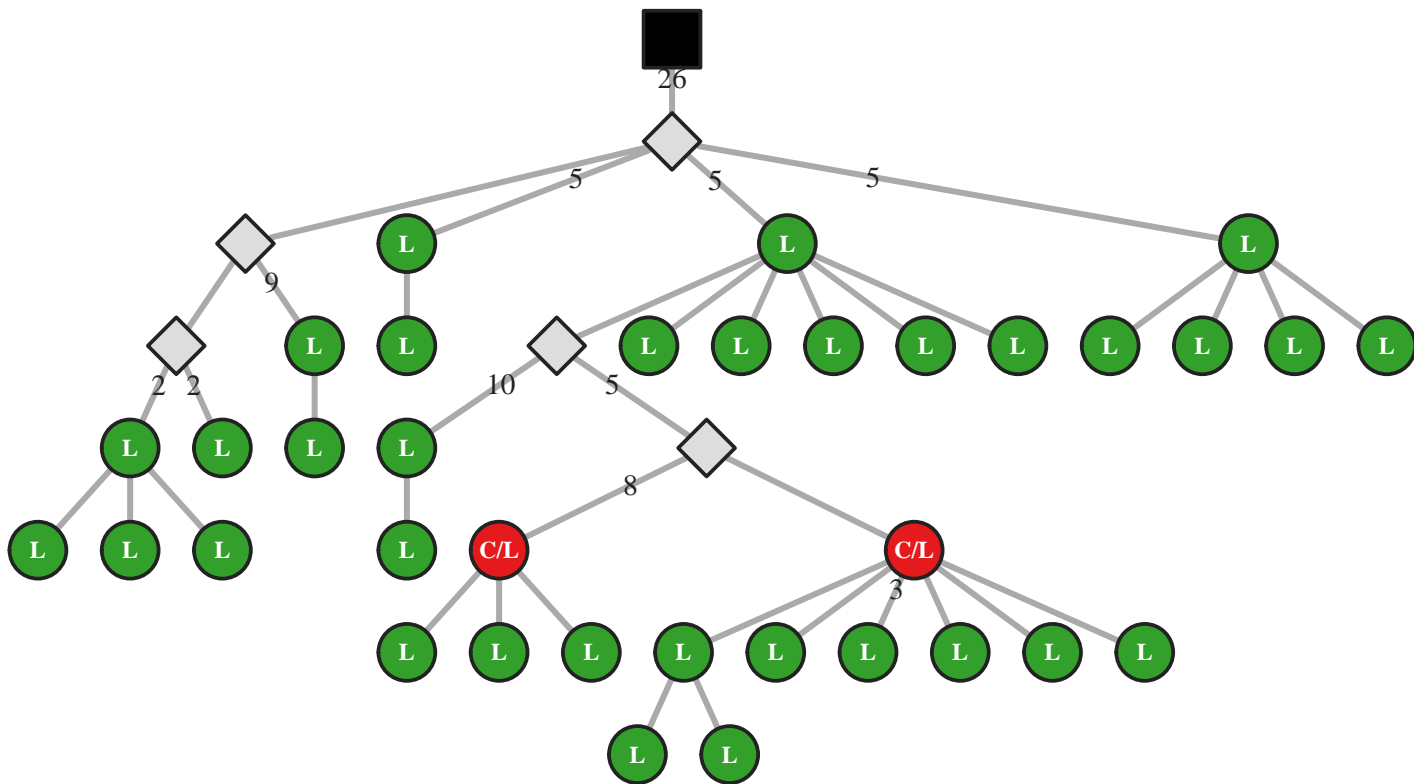
M5 IgG IGHV1-46/J4 39bp (32257)



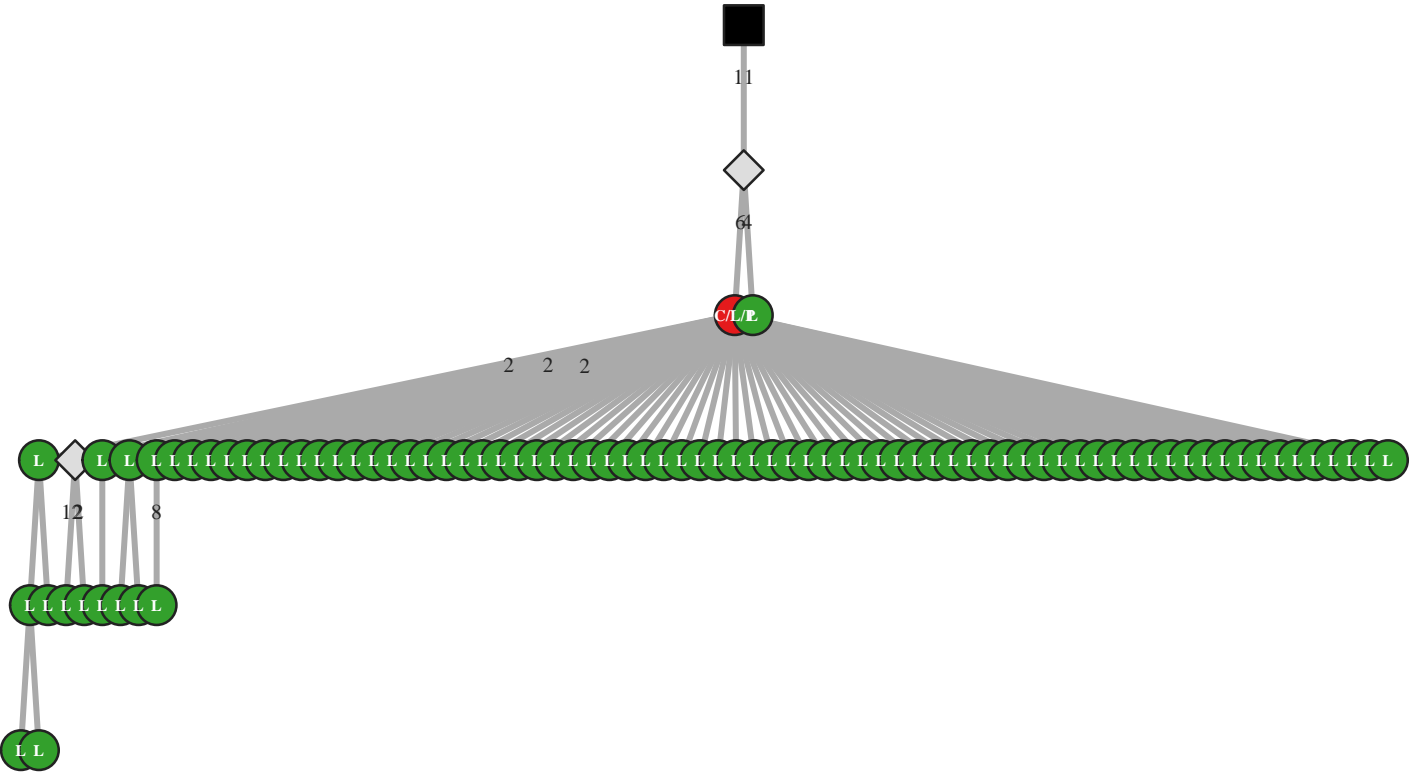
M5 IgG IGHV1-46/J4 39bp (32273)



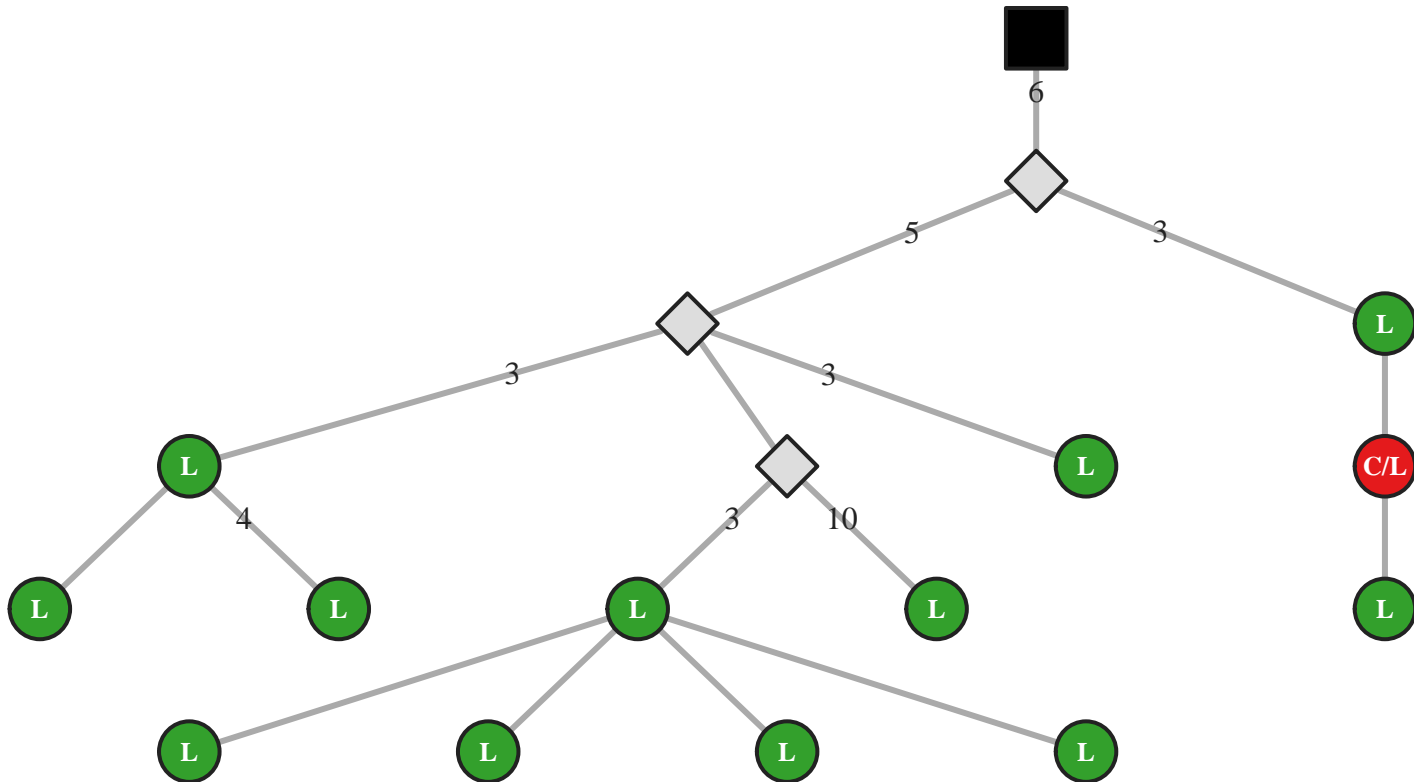
M5 IgG IGHV1-46/J4 39bp (32283)



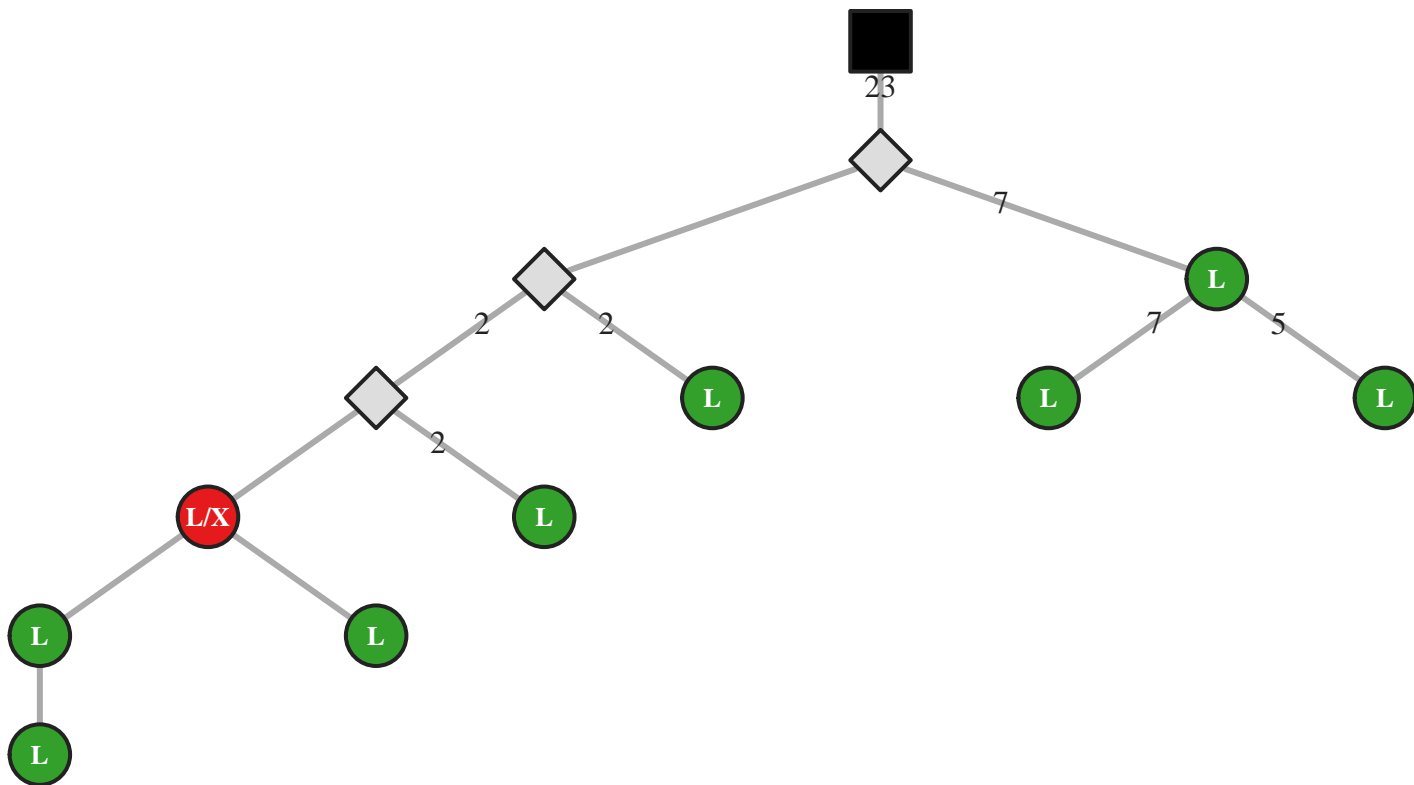
M5 IgG IGHV1-46/J4 39bp (32306)



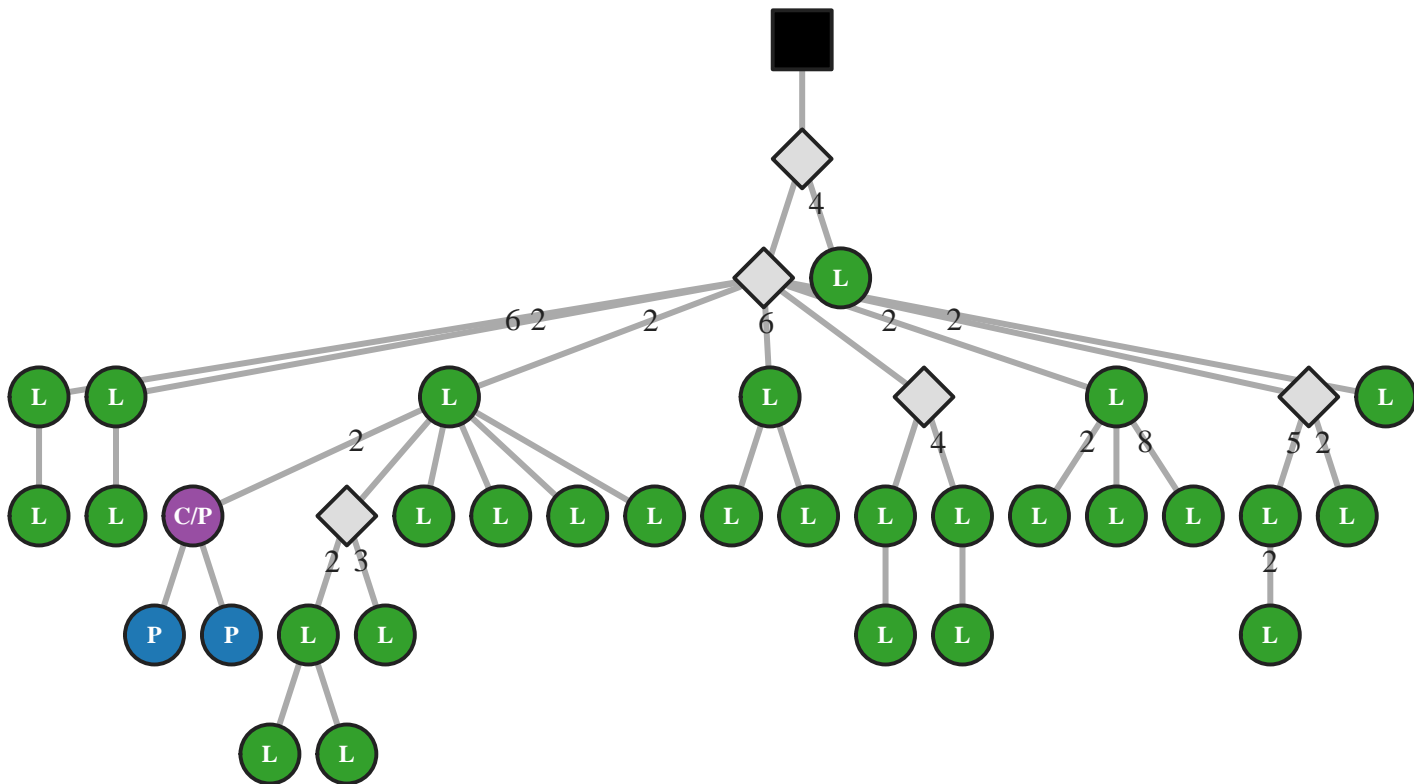
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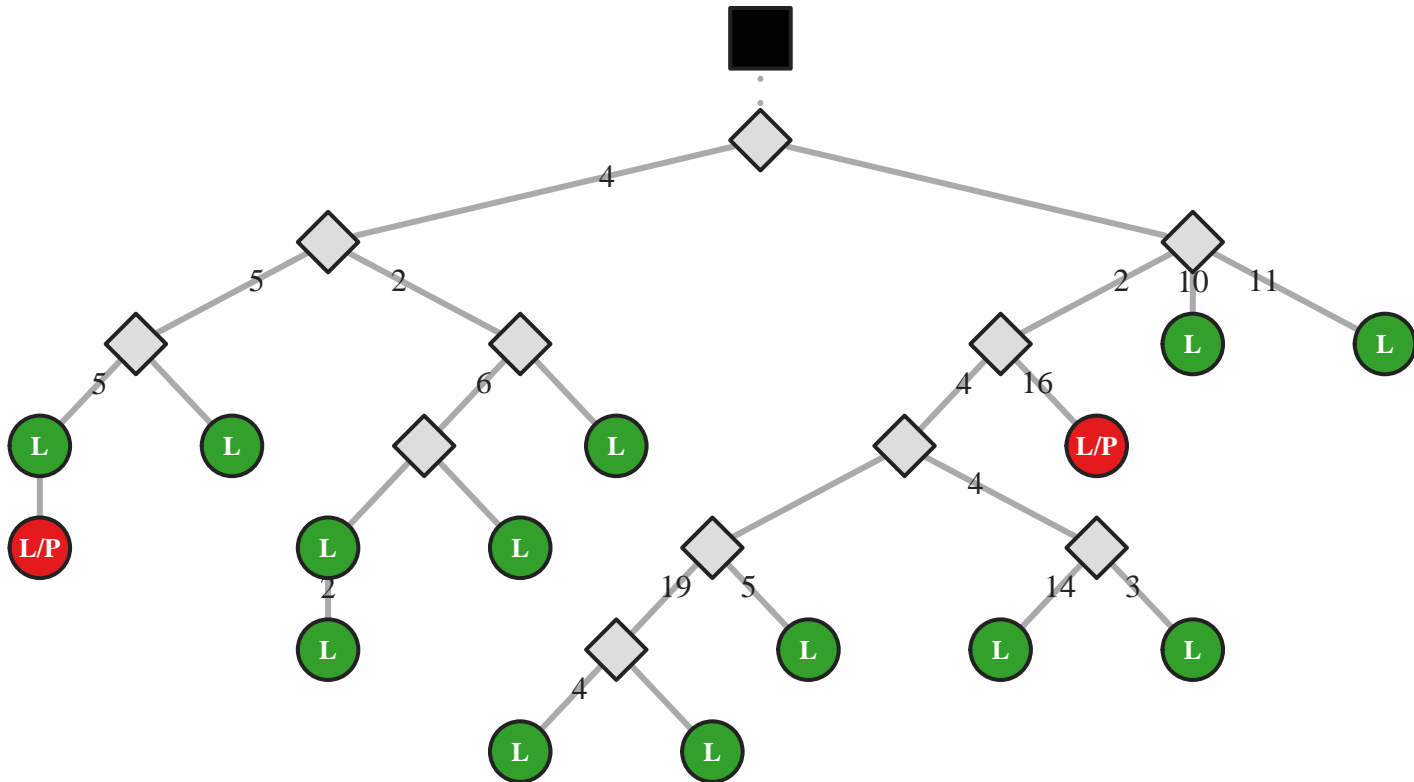
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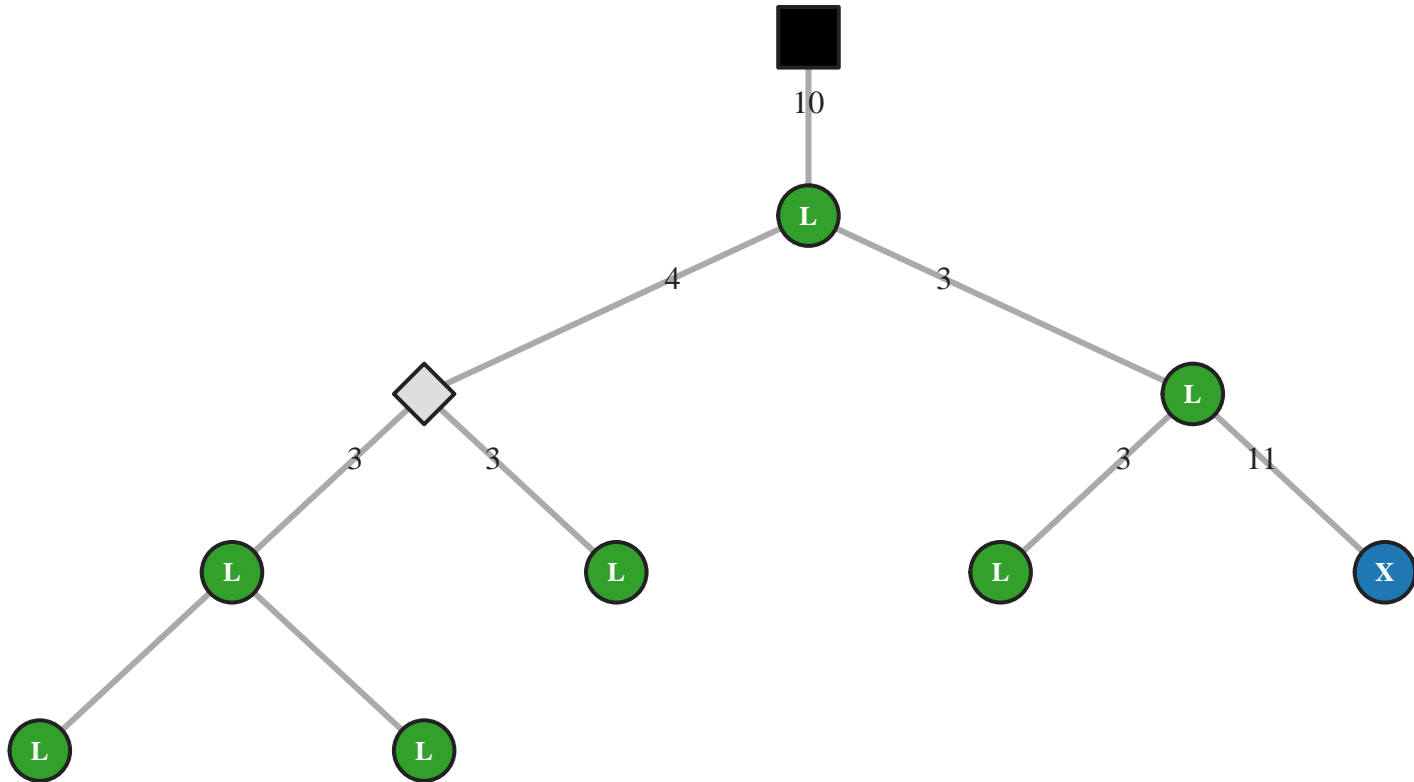
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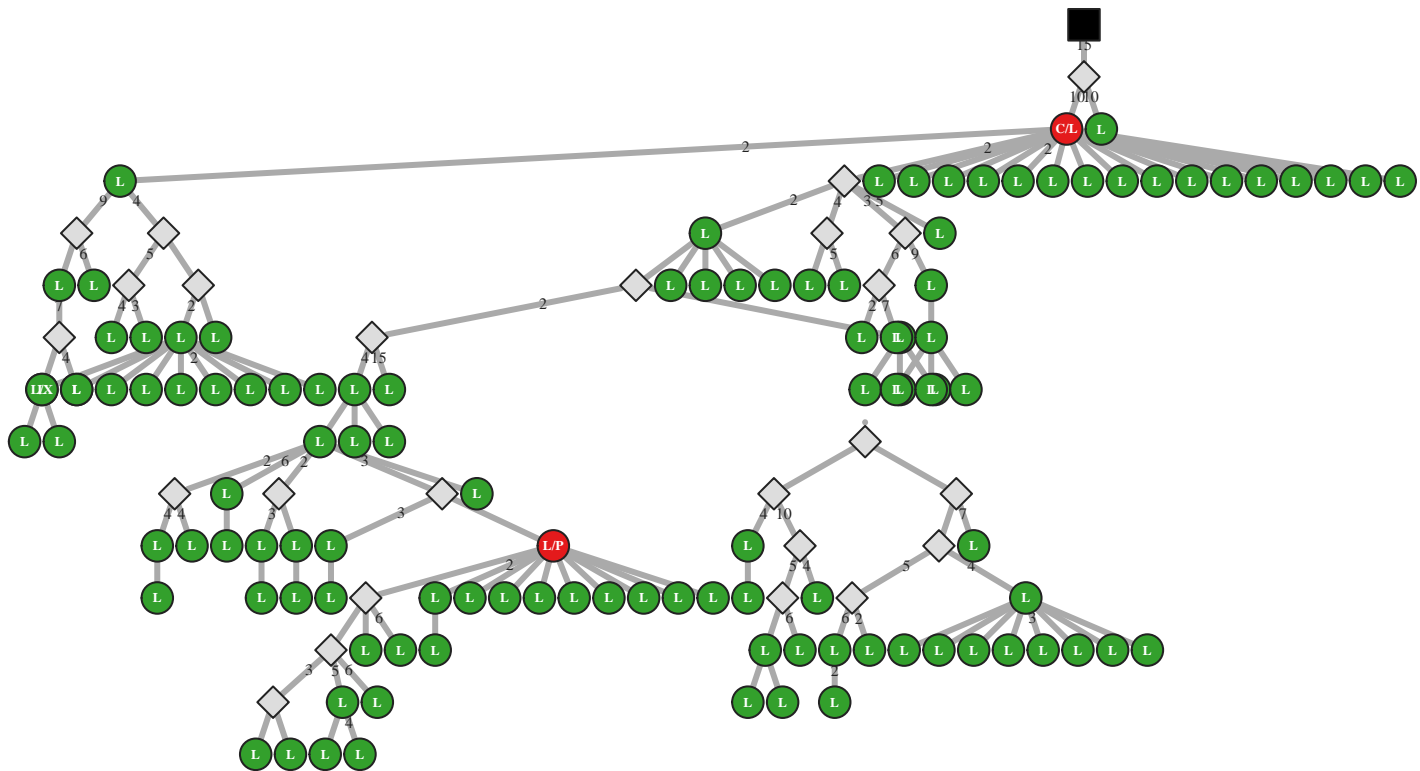
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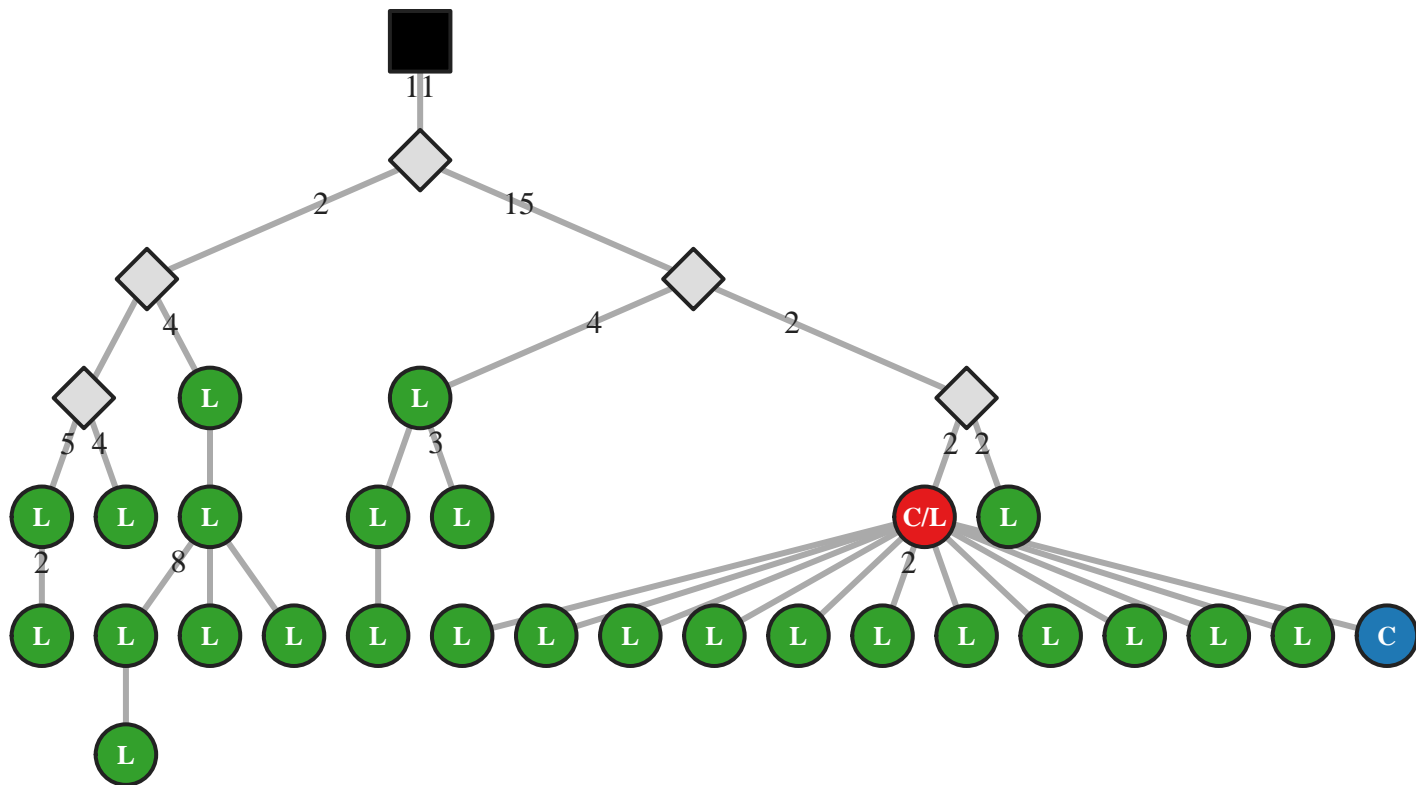
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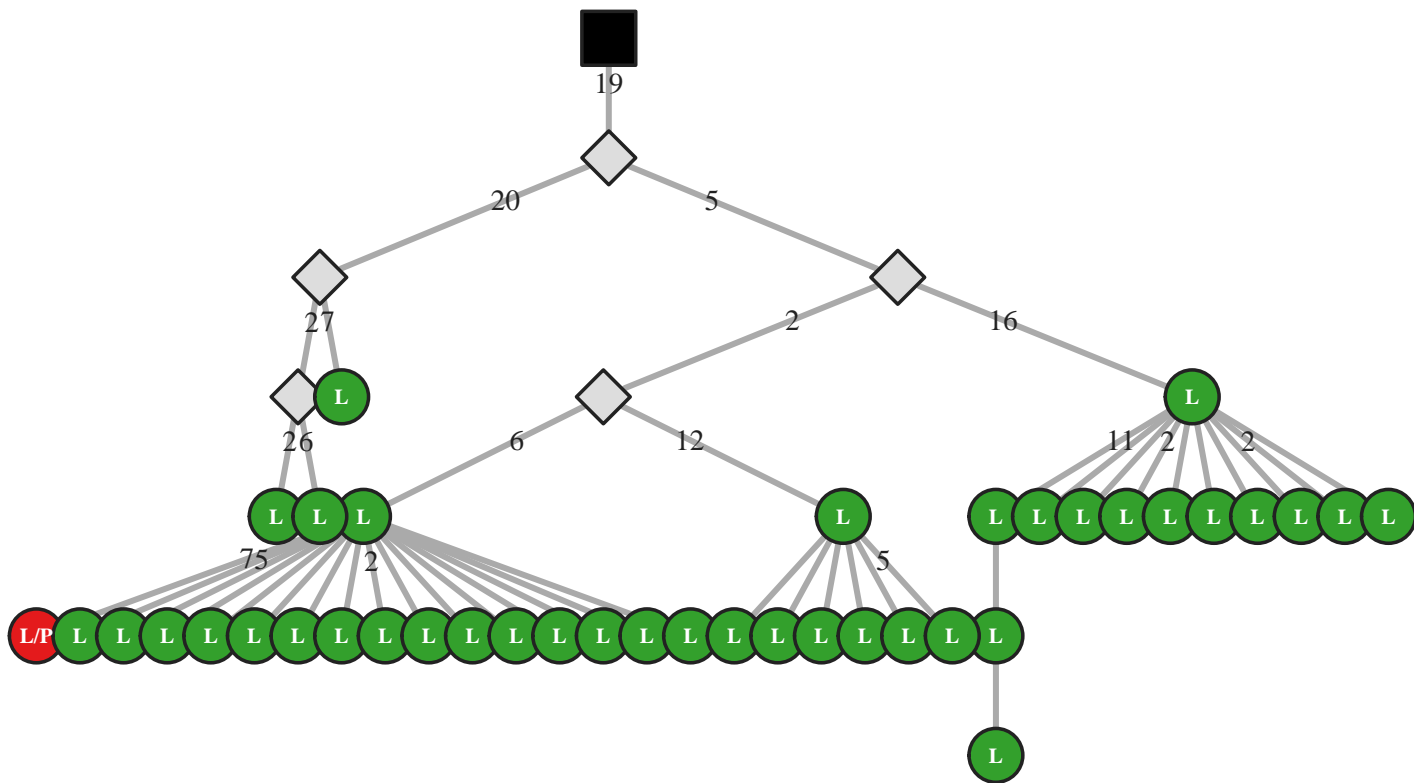
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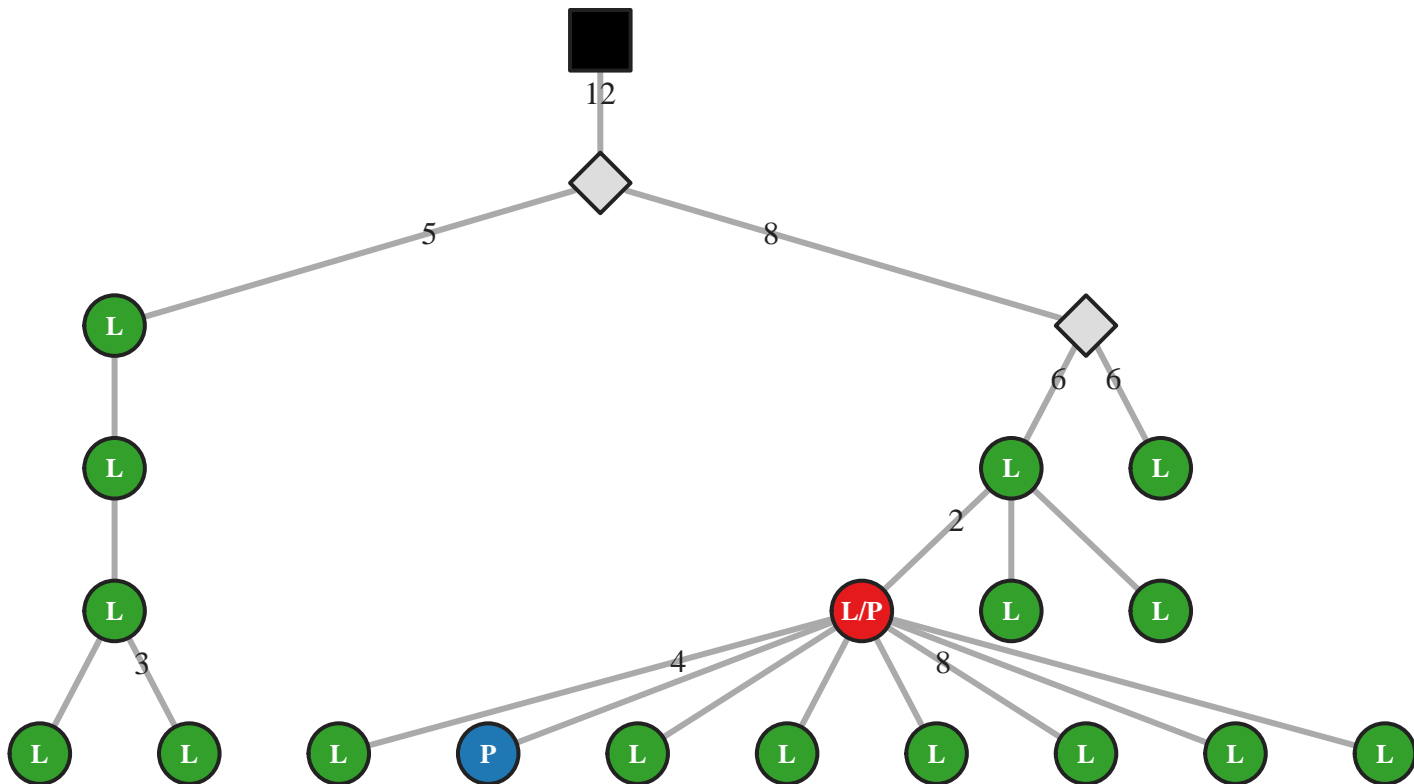
M5 IgG IGHV1-46/J4 42bp (40564)



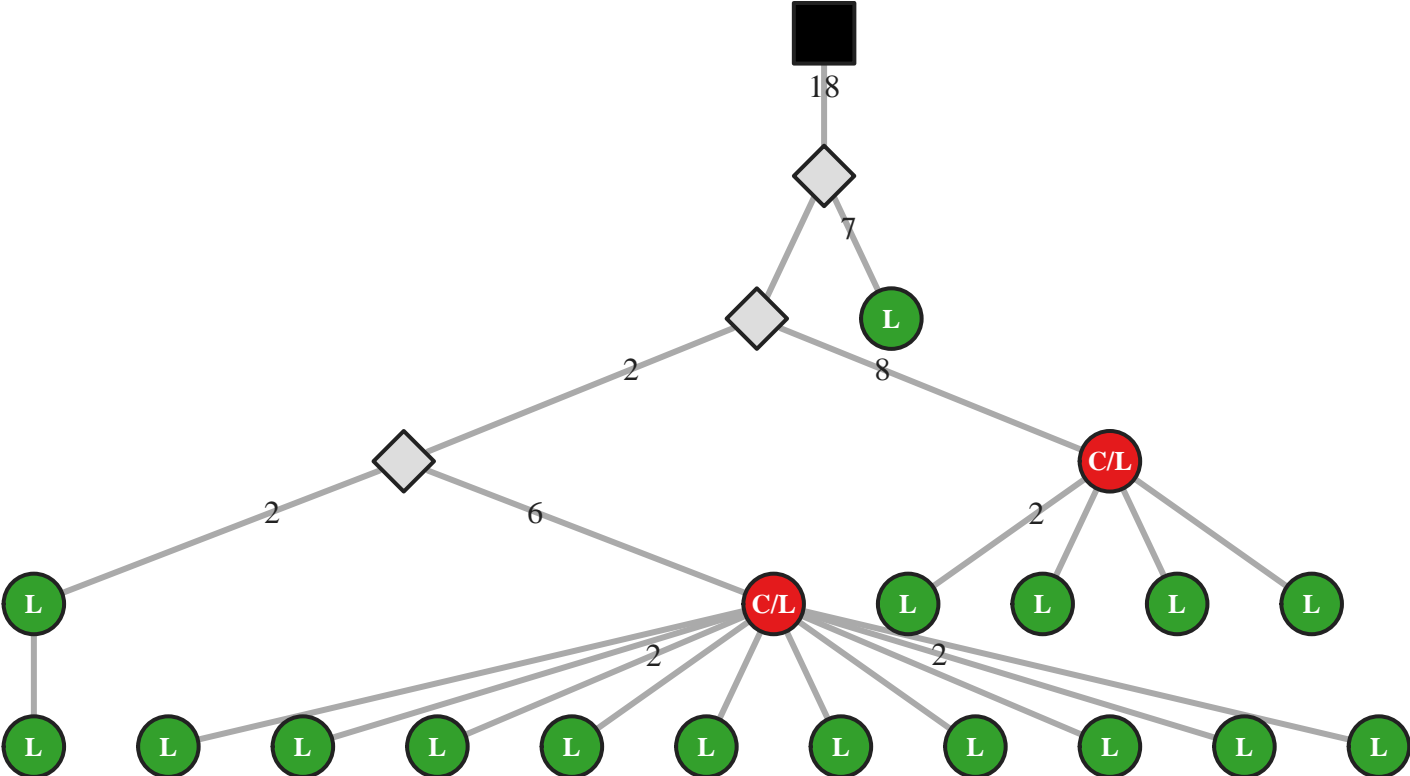
M5 IgG IGHV1-46/J4 45bp (14238)



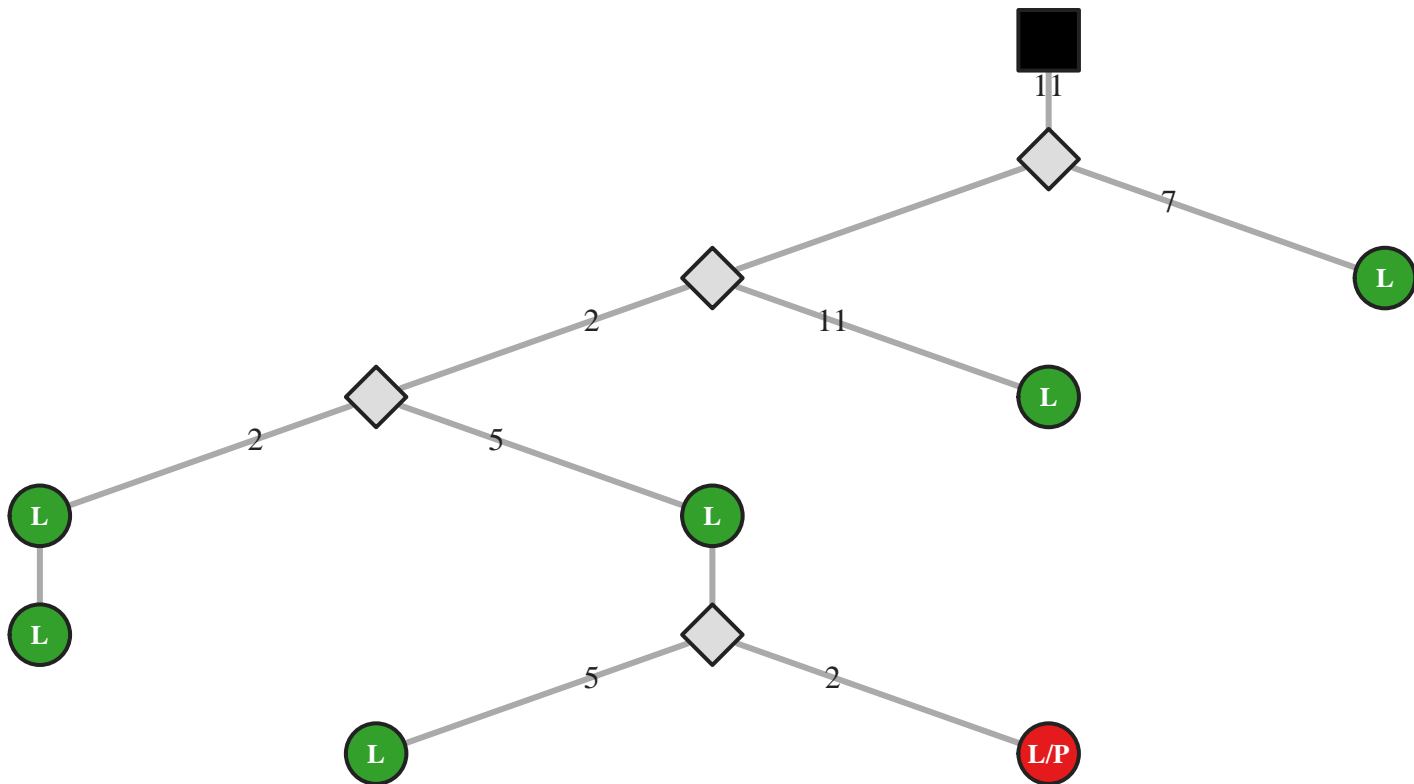
M5 IgG IGHV1-46/J4 45bp (14244)



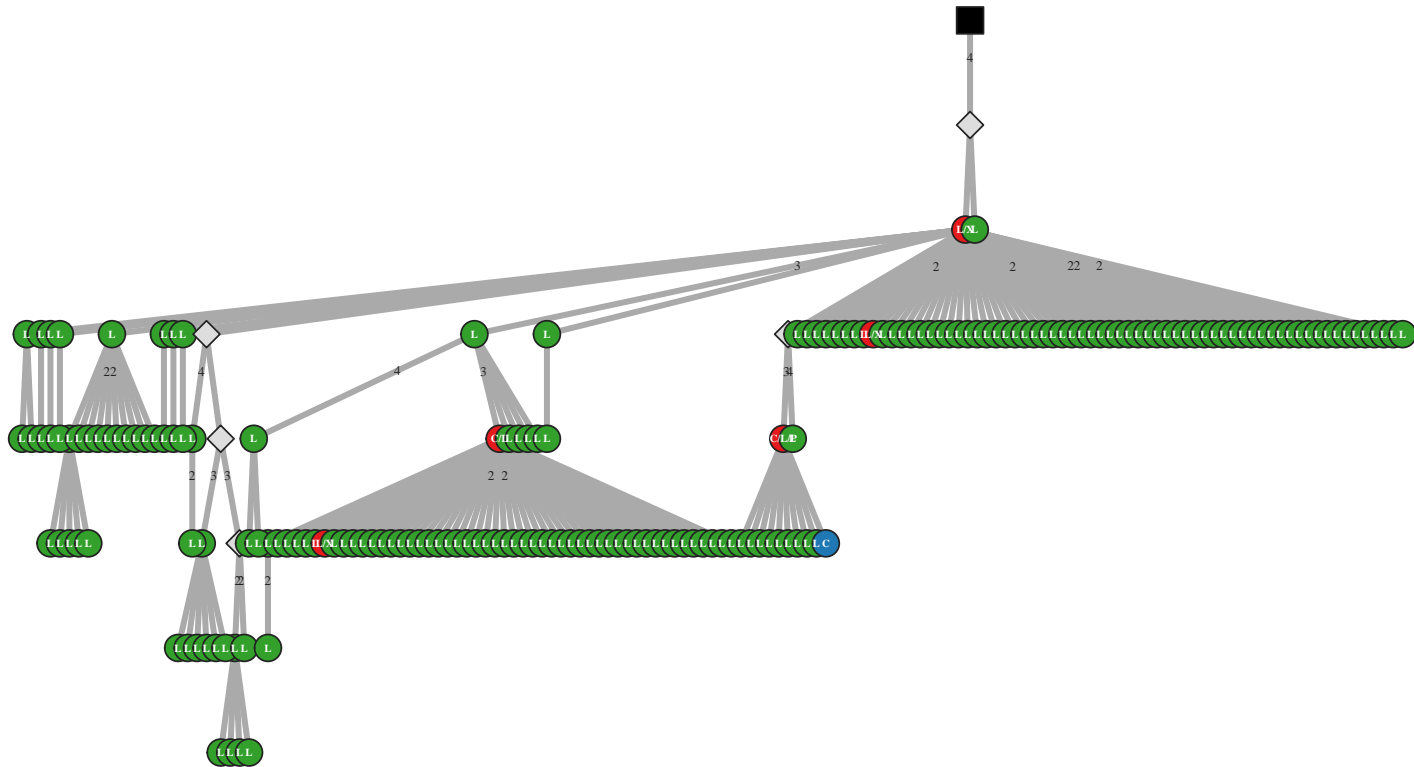
M5 IgG IGHV1-46/J4 45bp (14246)



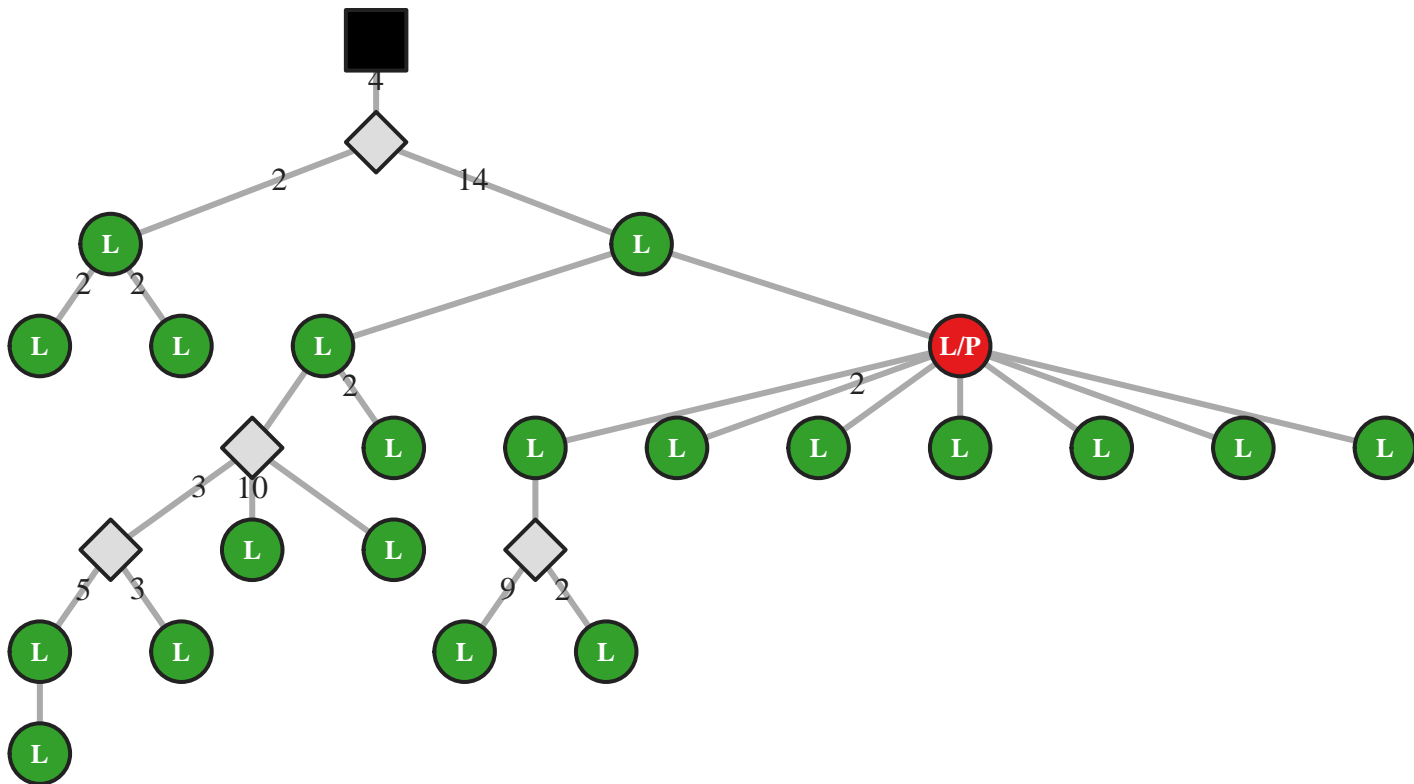
M5 IgG IGHV1-46/J4 45bp (14251)



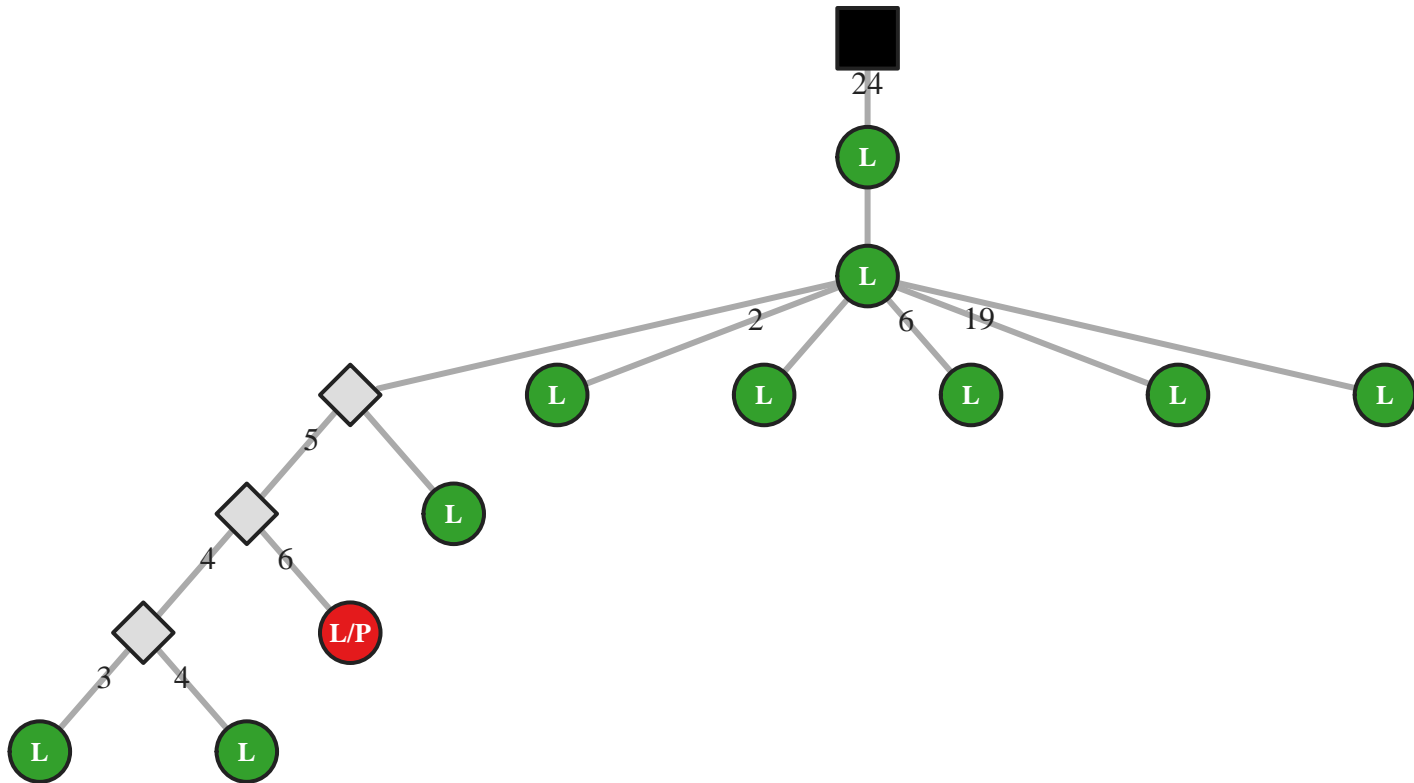
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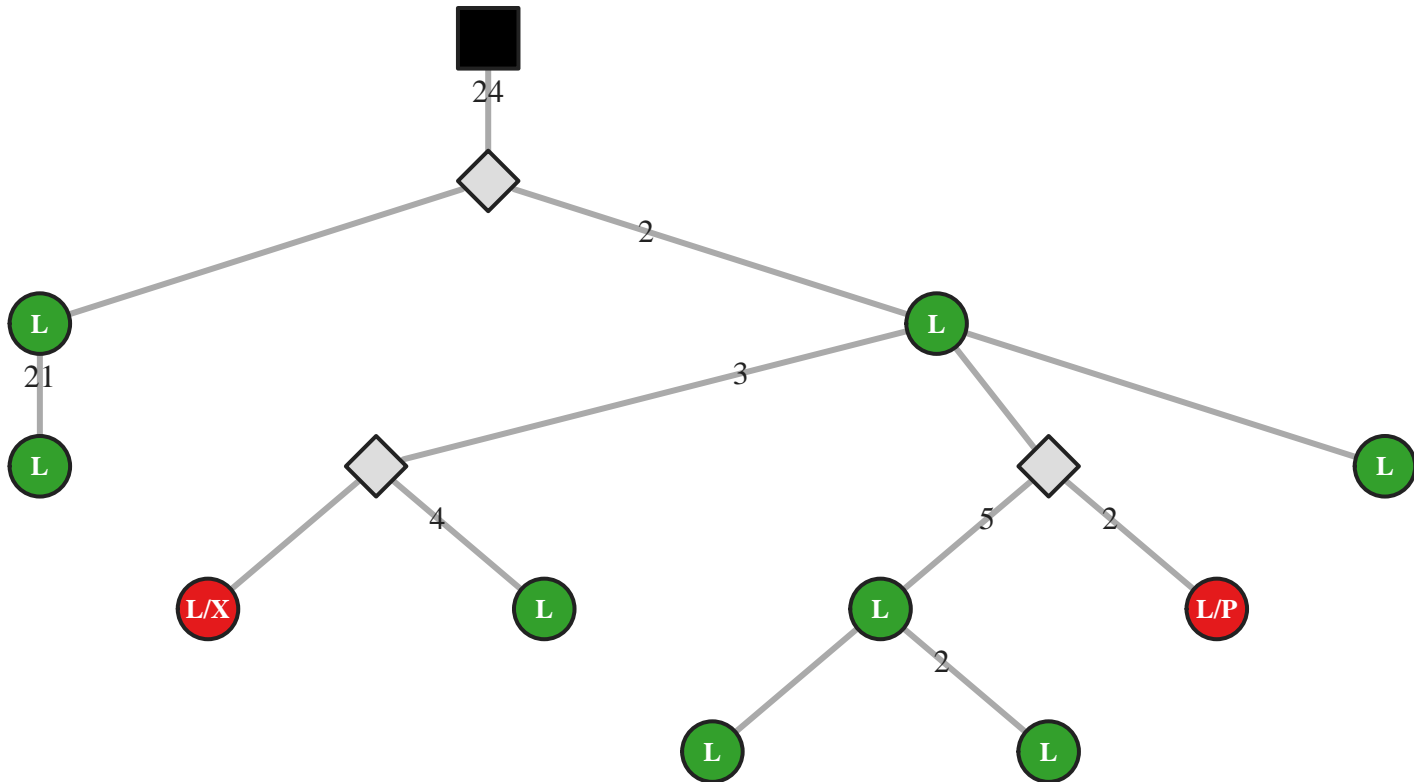
M5 IgA IGHV1-46/J4 48bp (30178)



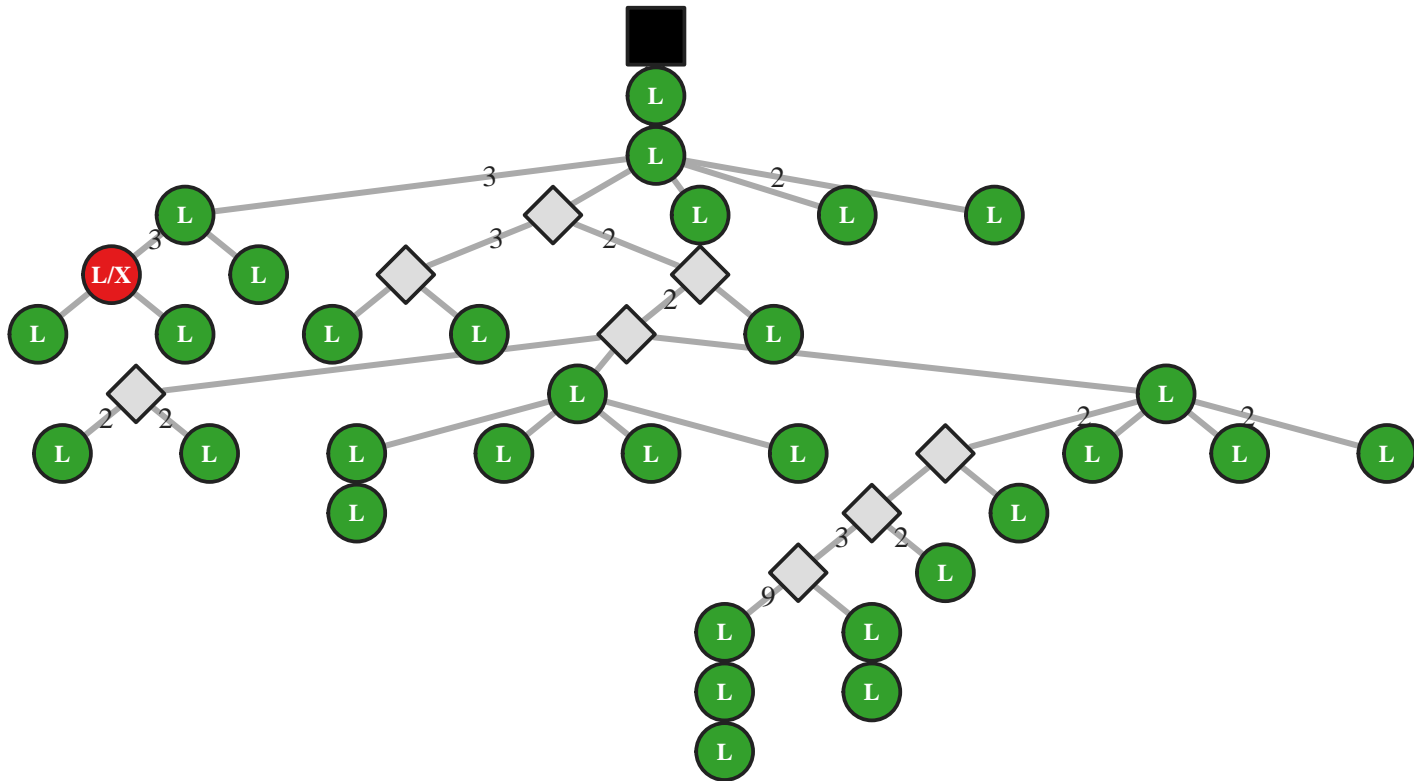
M5 IgG IGHV1-46/J4 48bp (49942)



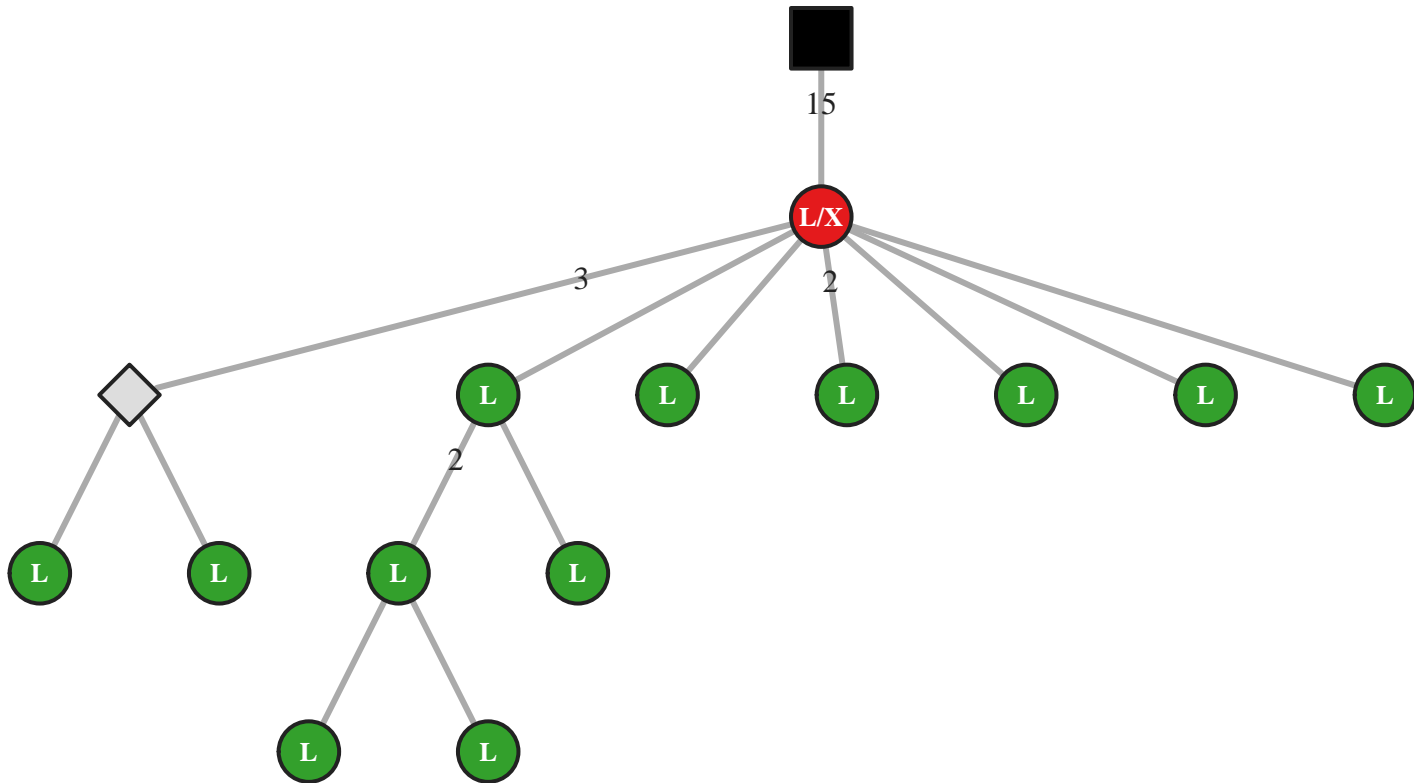
M5 IgG IGHV1-46/J4 48bp (49946)



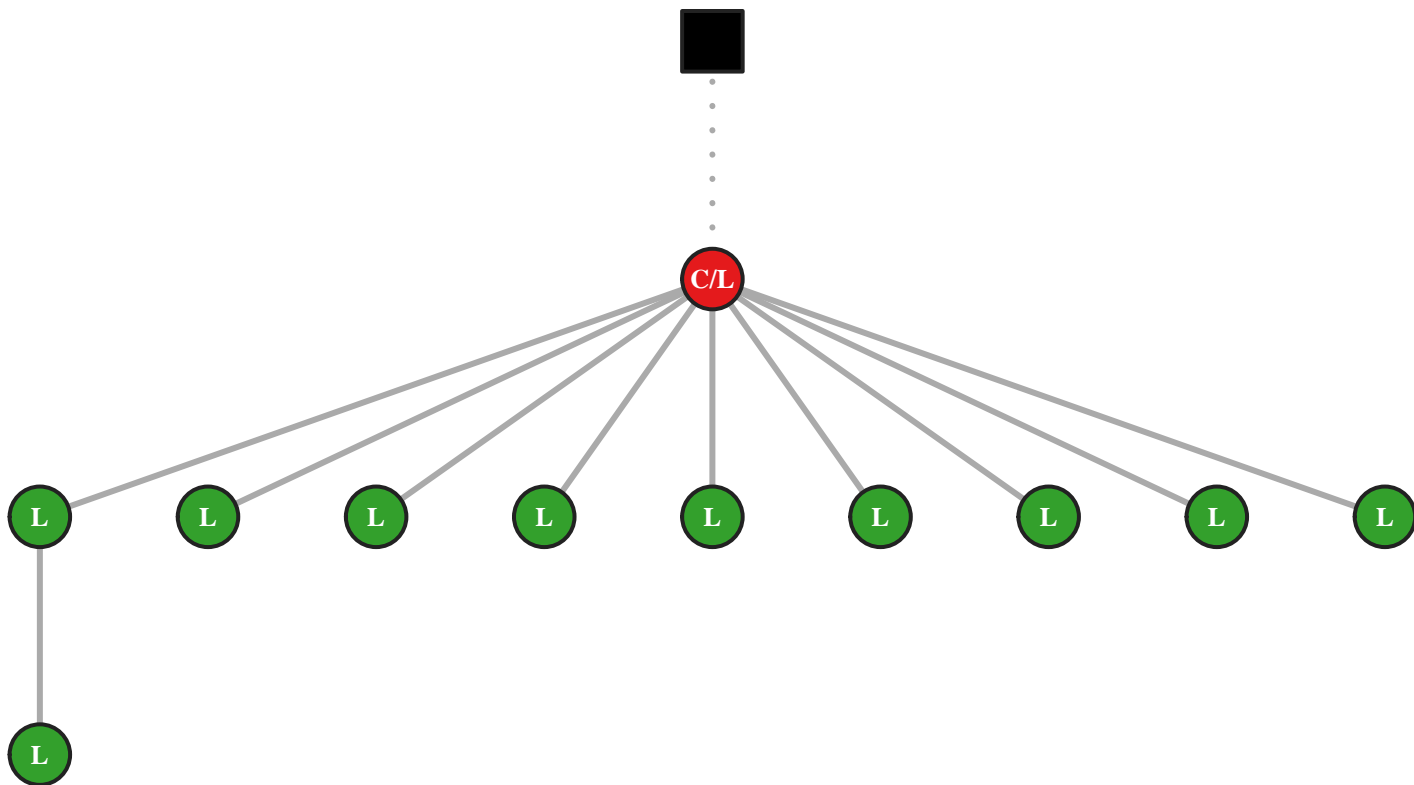
M5 IgG IGHV1-46/J4 48bp (49947)



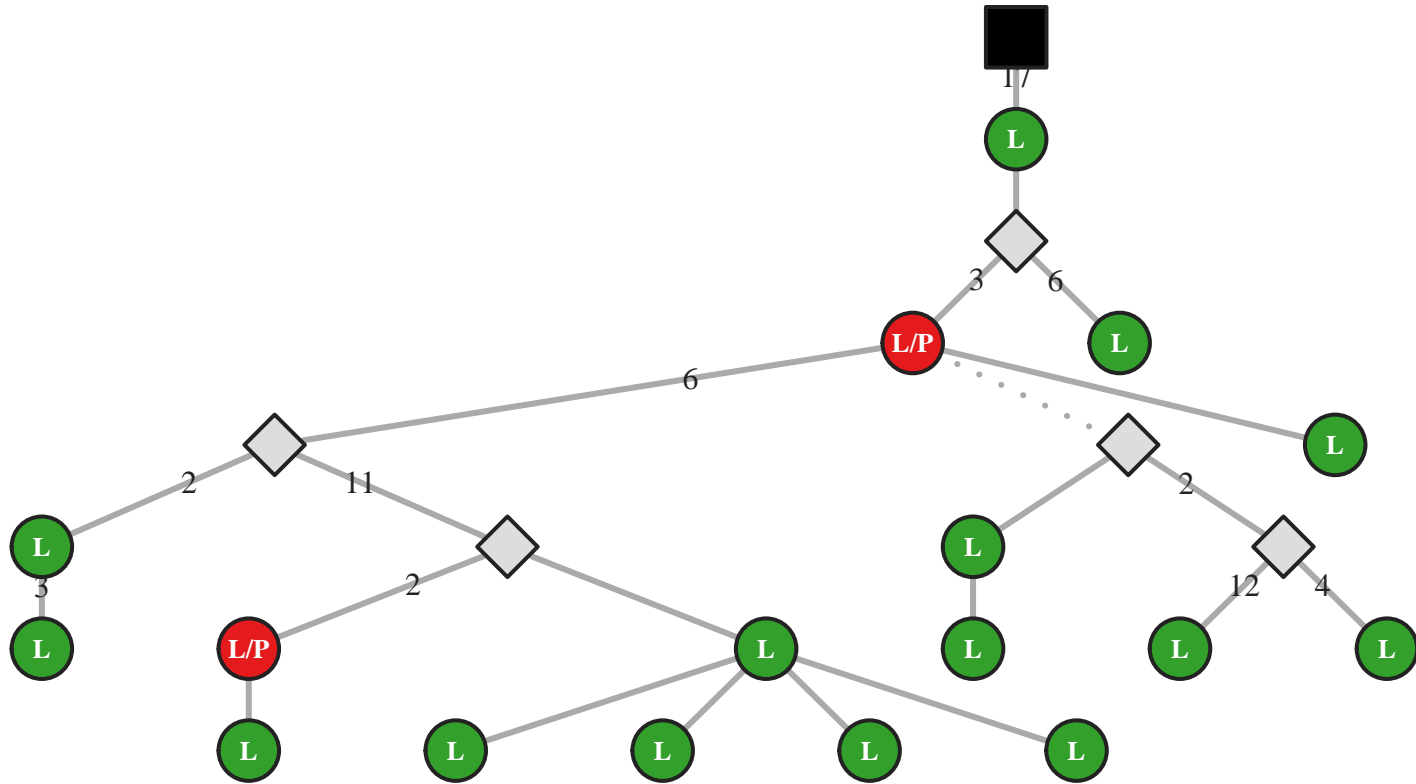
M5 IgG IGHV1-46/J4 48bp (49949)



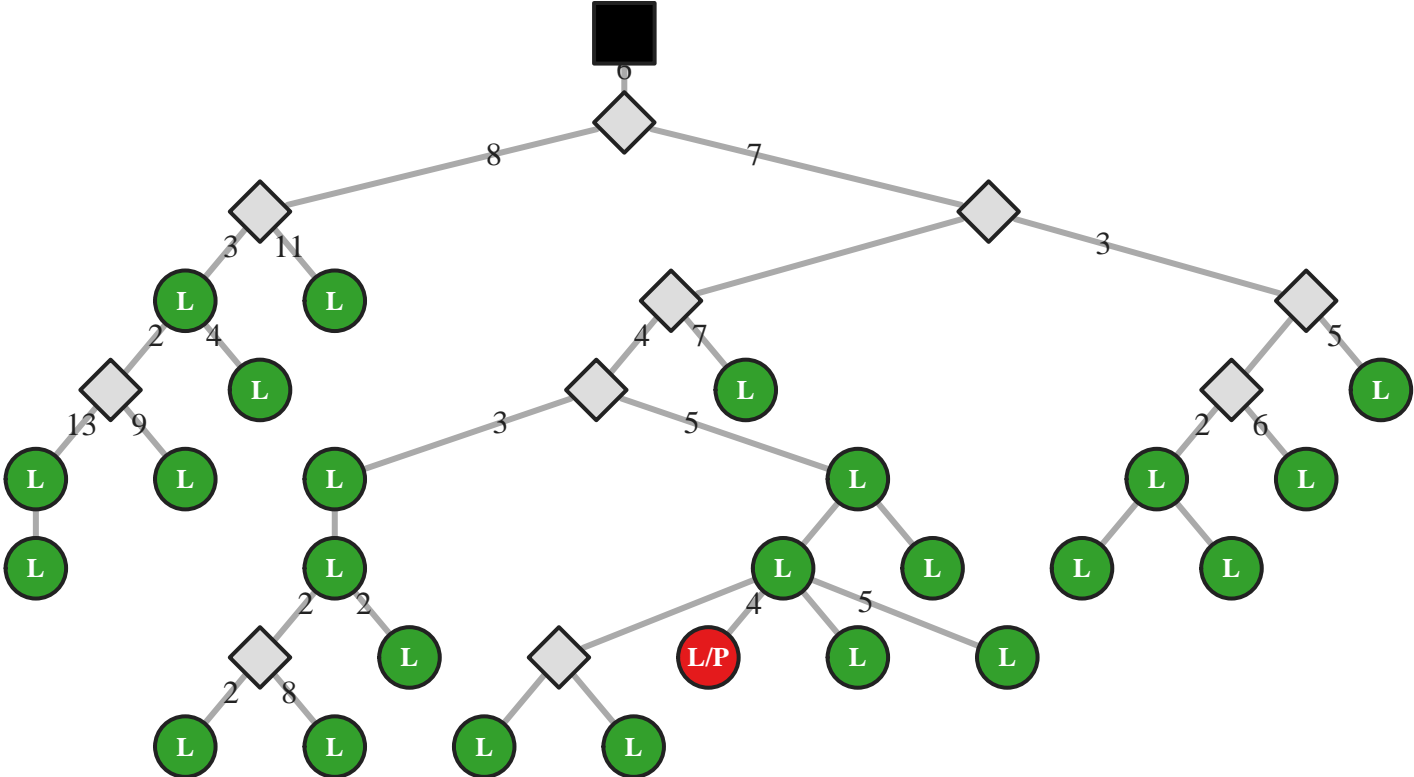
M5 IgG IGHV1-46/J4 48bp (49961)



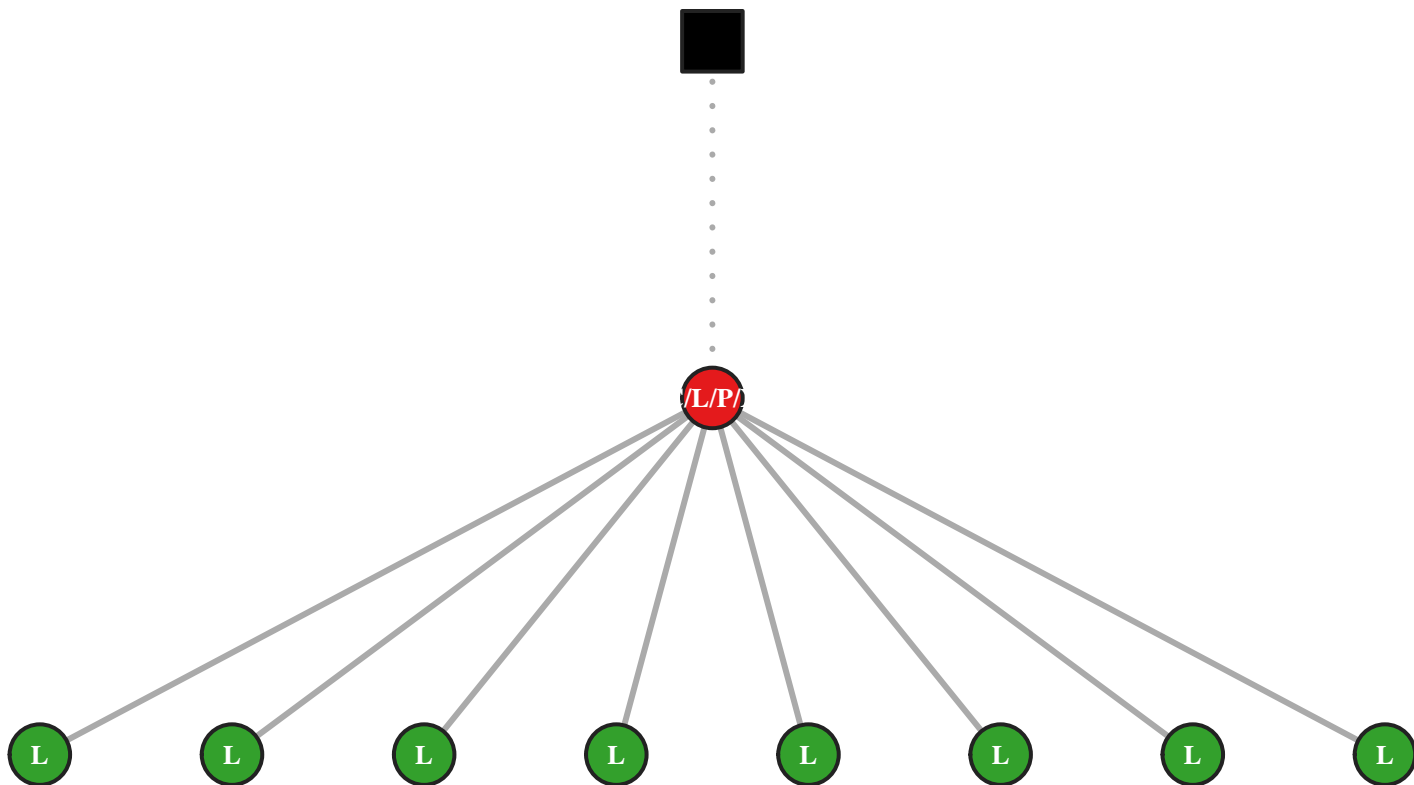
M5 IgG IGHV1-46/J4 48bp (49983)



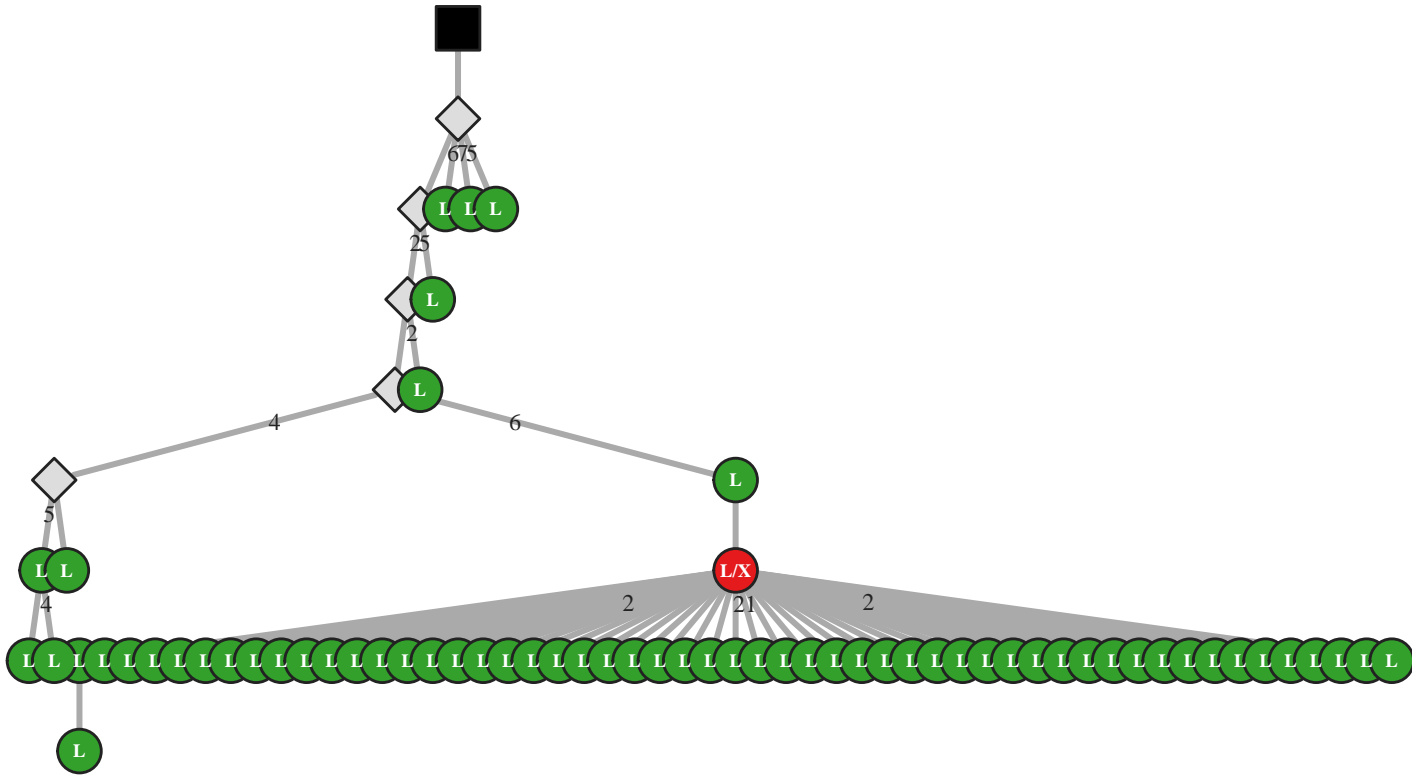
M5 IgG IGHV1-46/J4 48bp (49994)



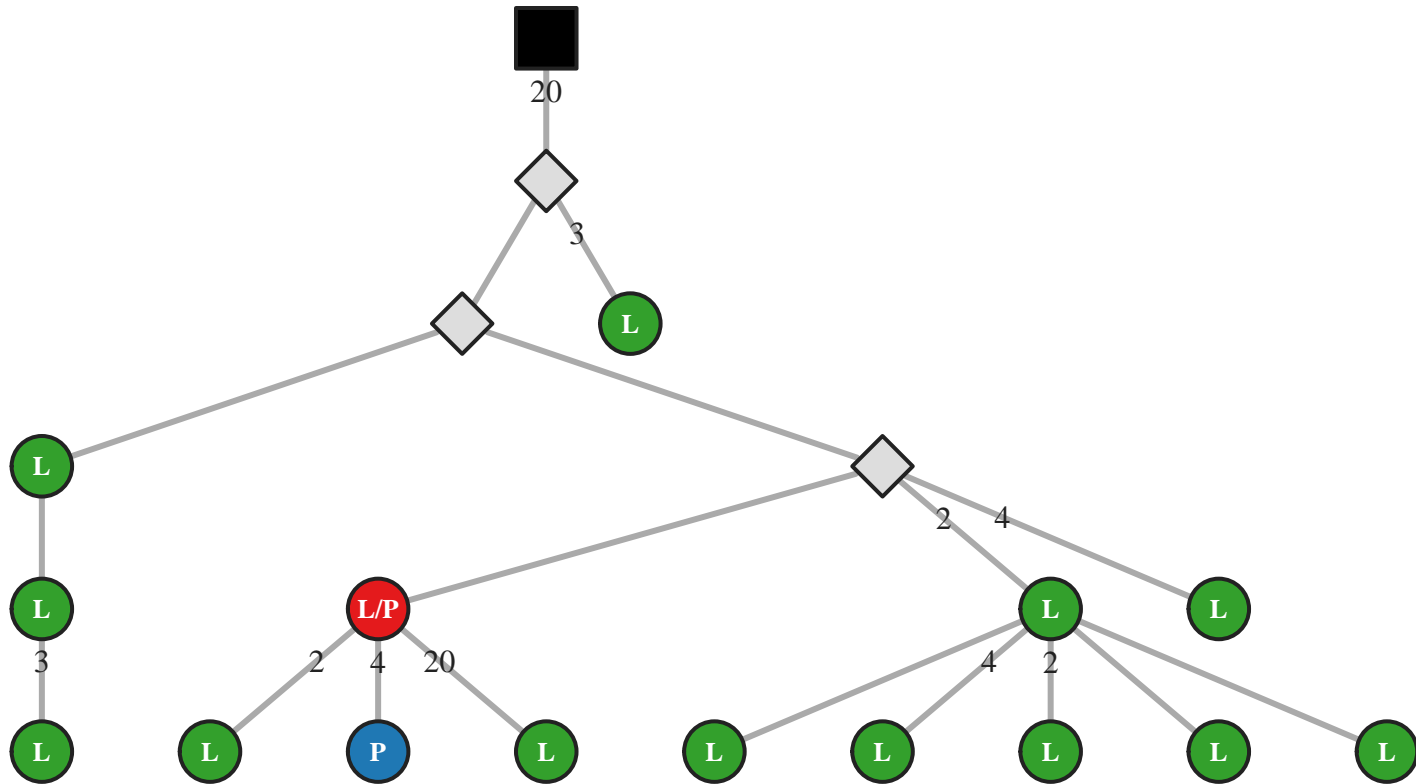
M5 IgA IGHV1-46/J4 51bp (48509)



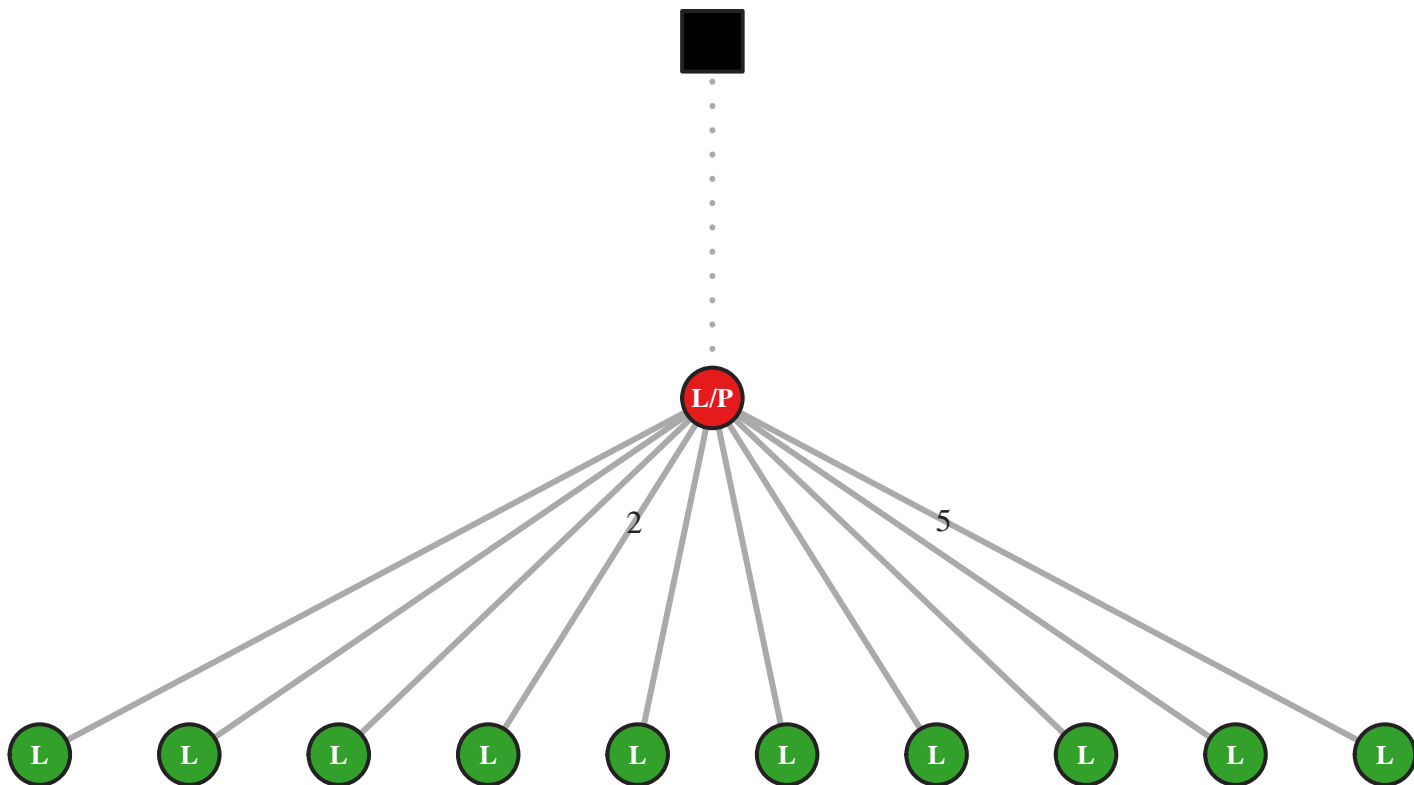
M5 IgG IGHV1-46/J4 51bp (4667)



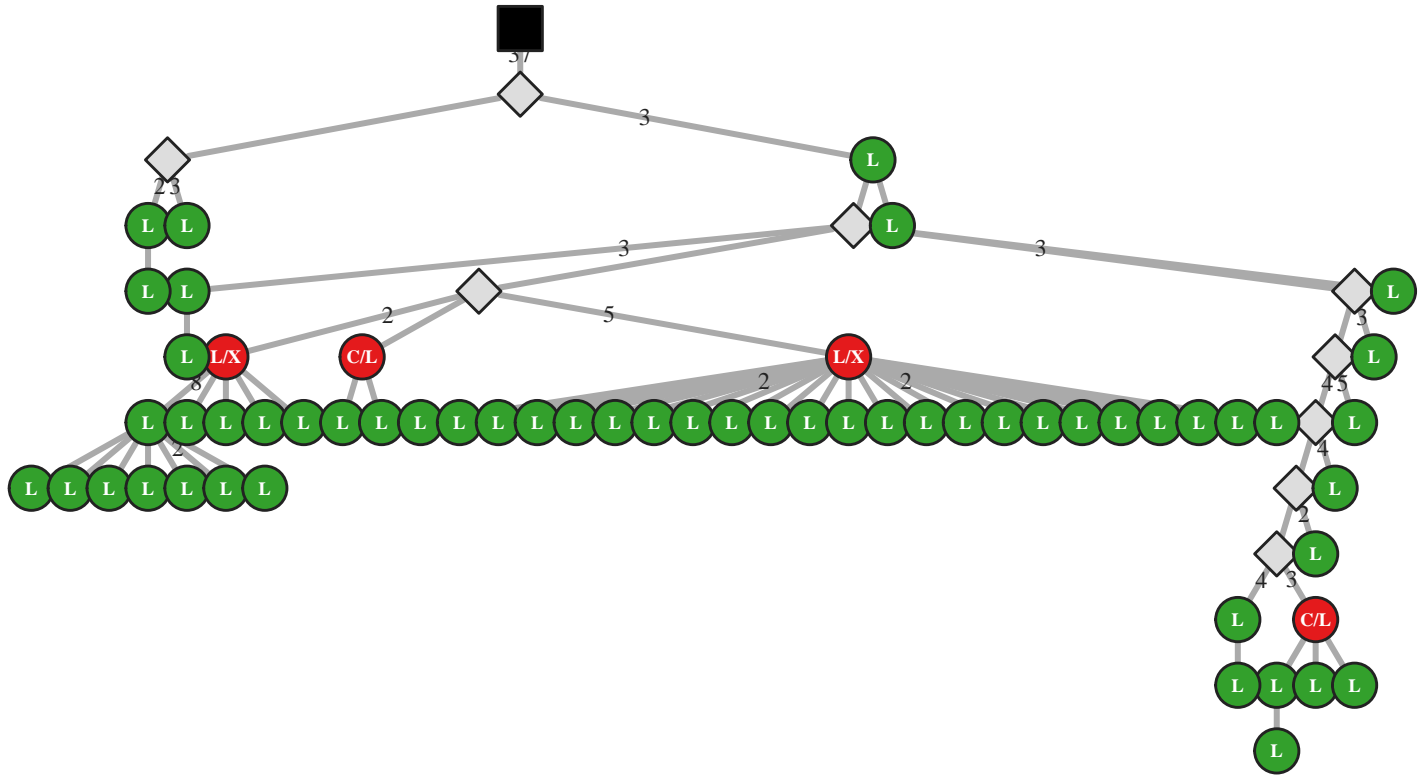
M5 IgG IGHV1-46/J4 51bp (4671)



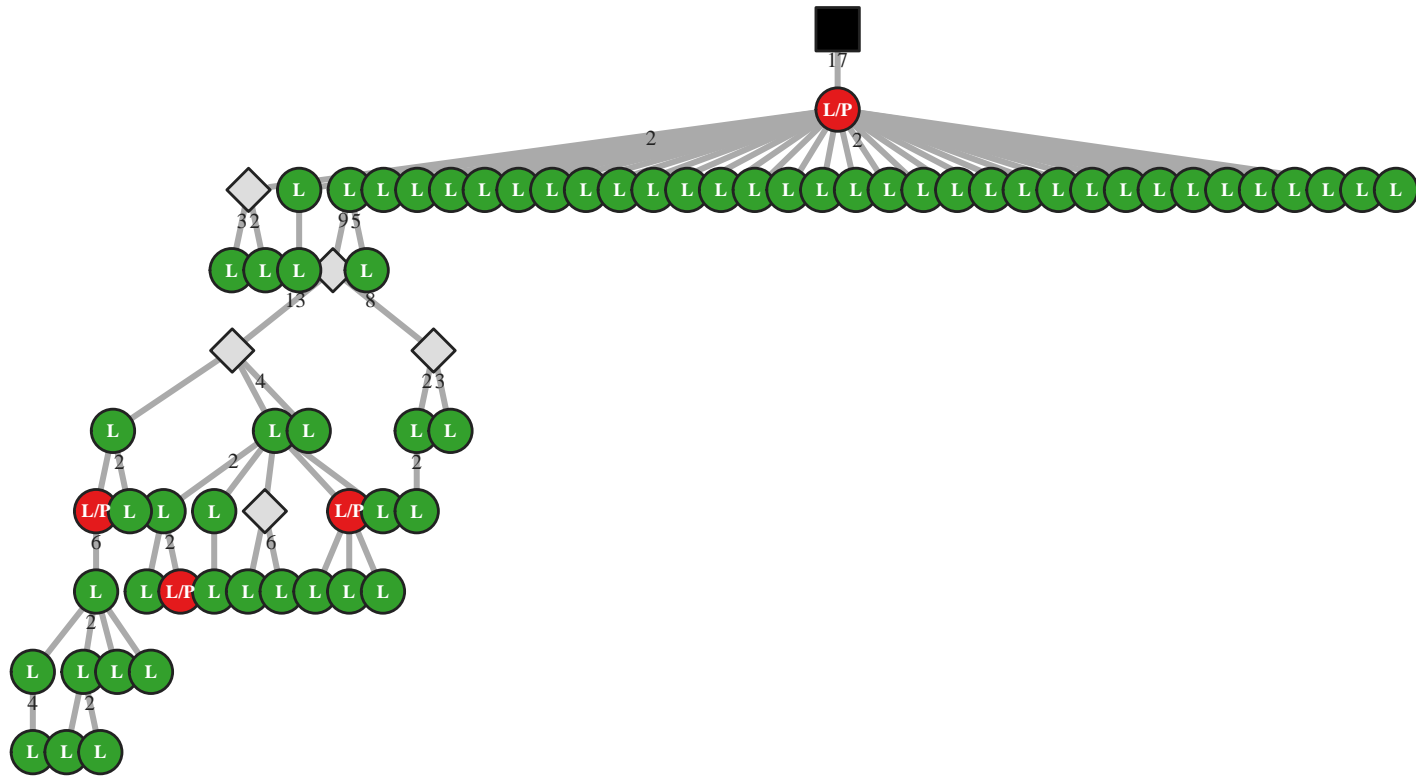
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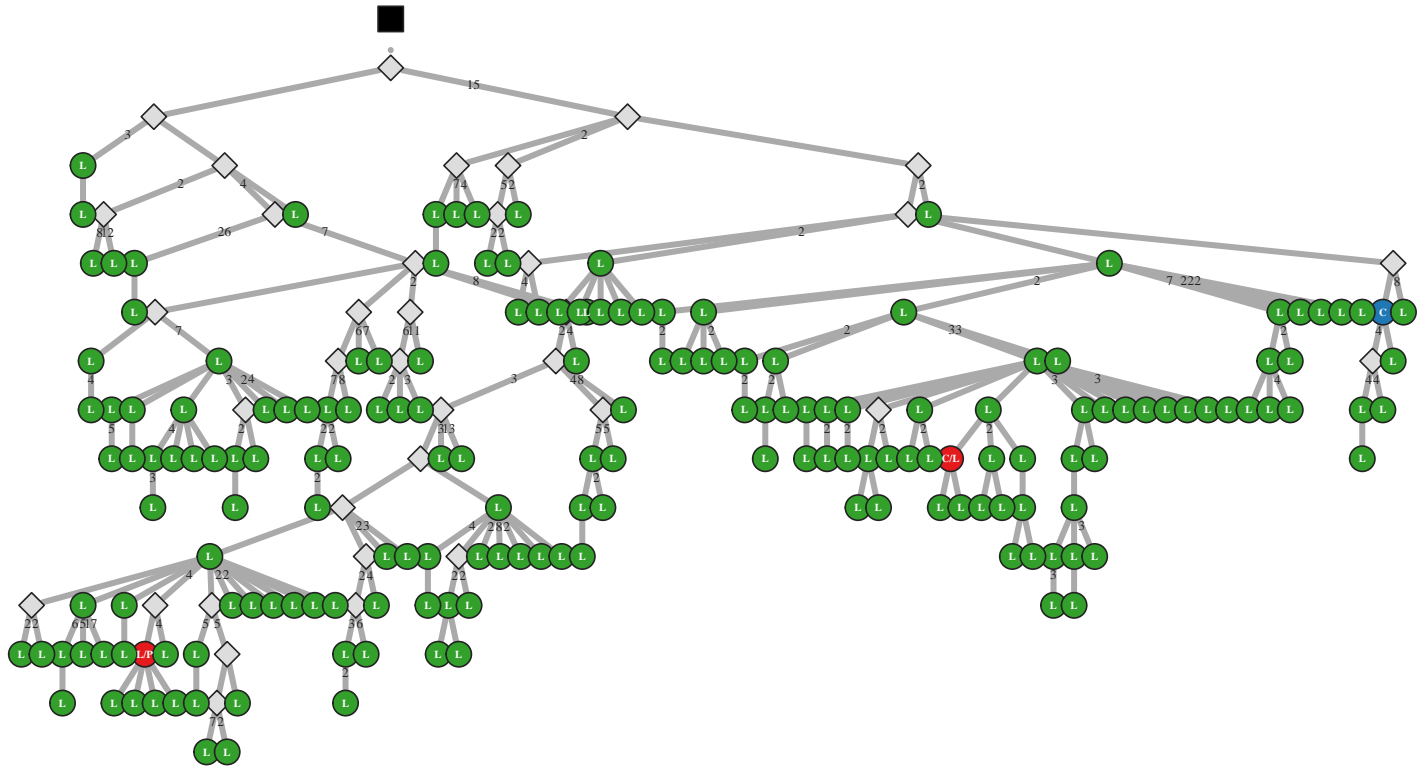
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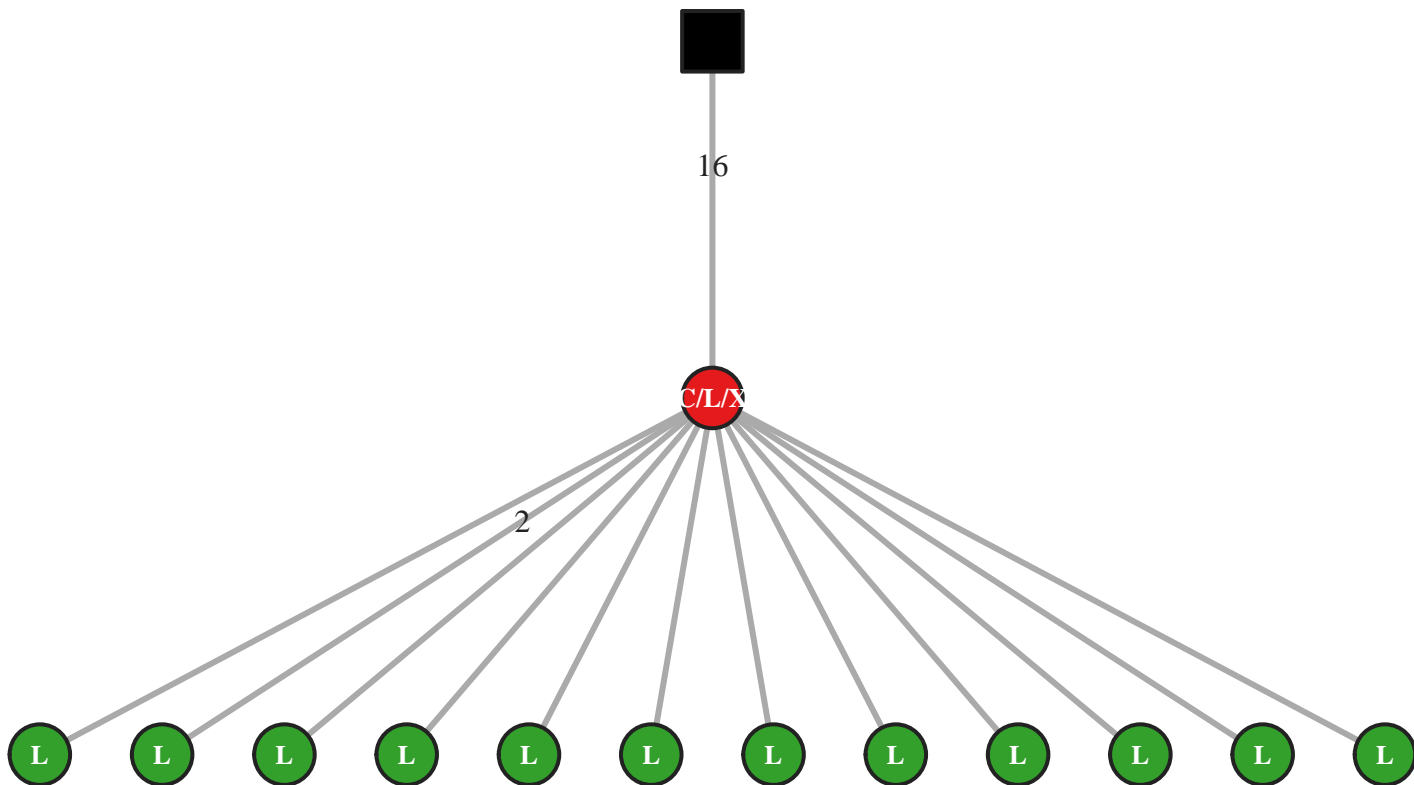
M5 IgG IGHV1-46/J4 51bp (4717)



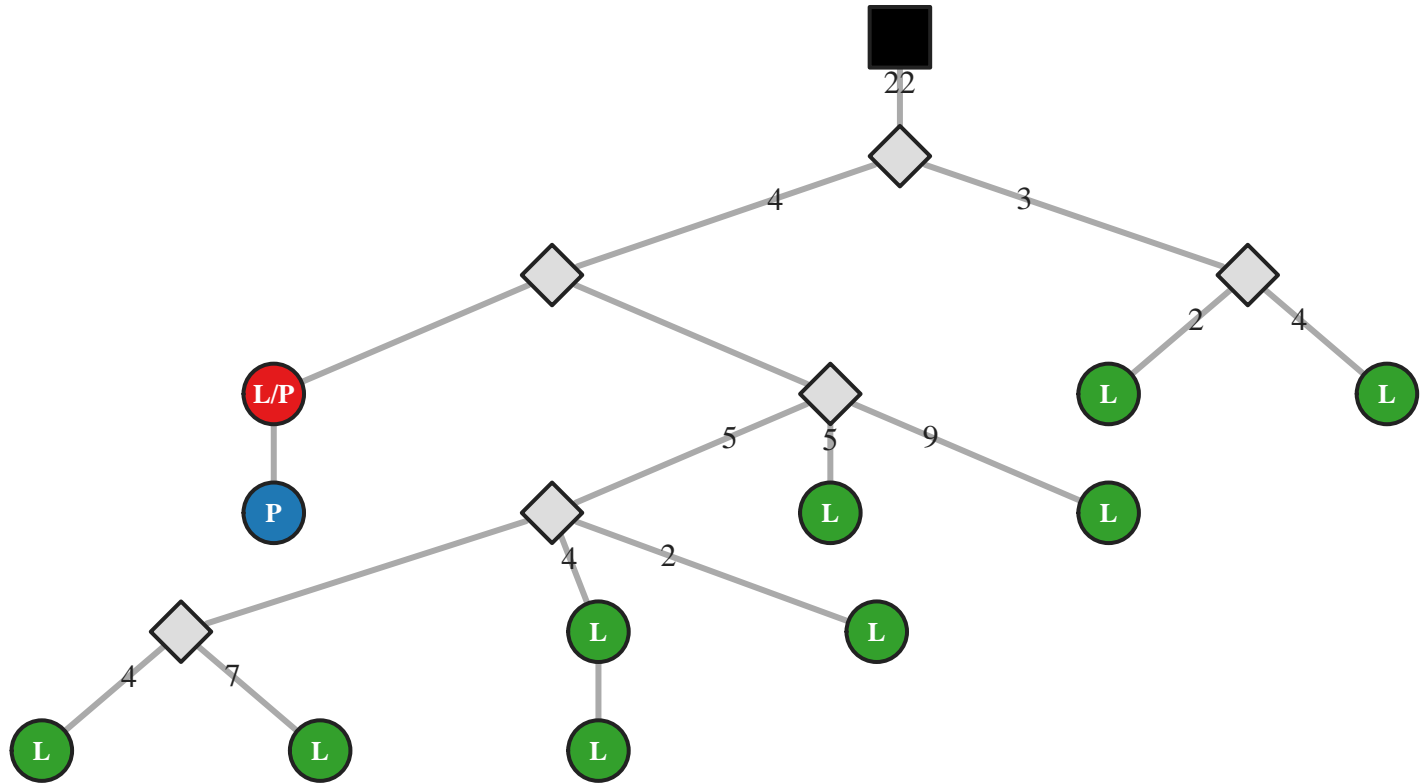
M5 IgG IGHV1-46/J4 54bp (50050)



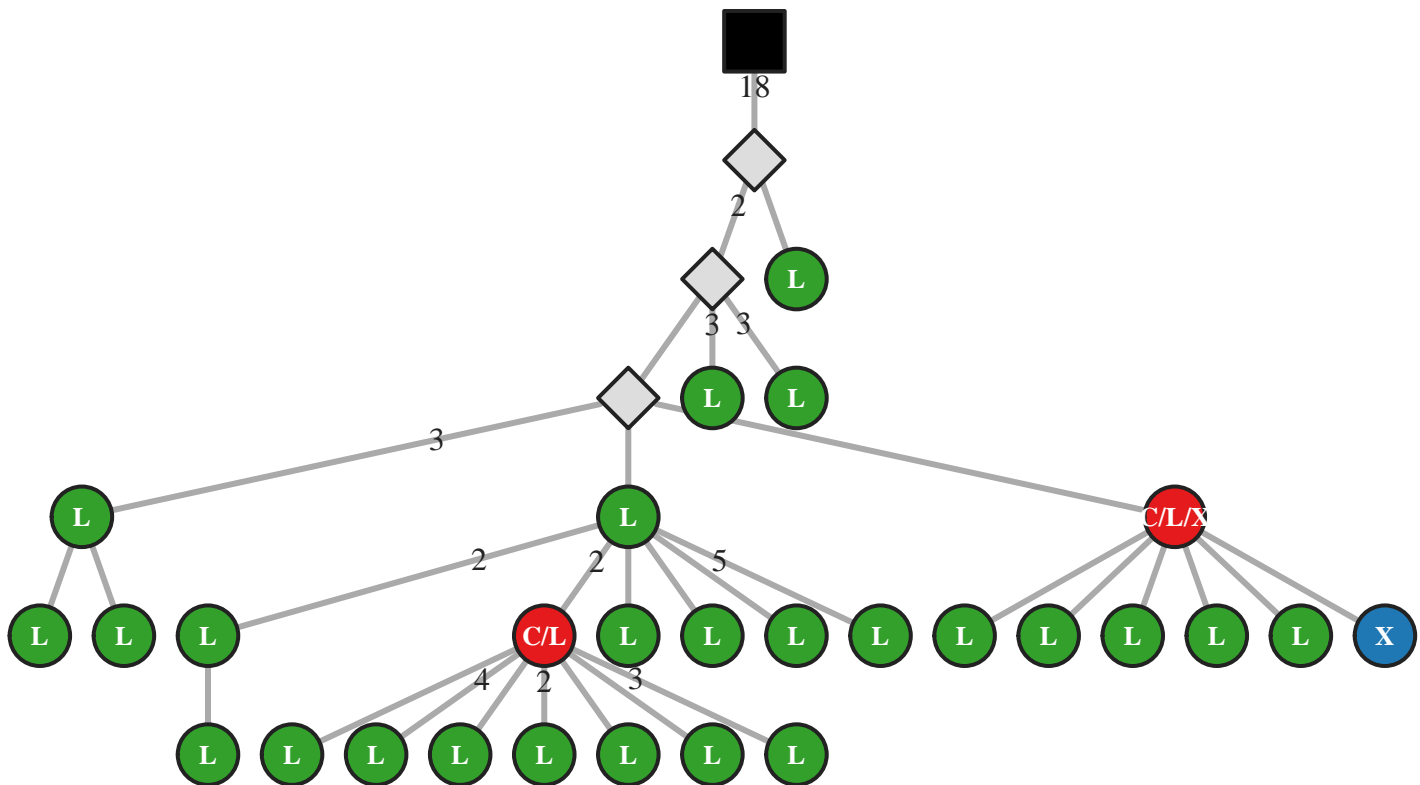
M5 IgA IGHV1-46/J4 57bp (38359)



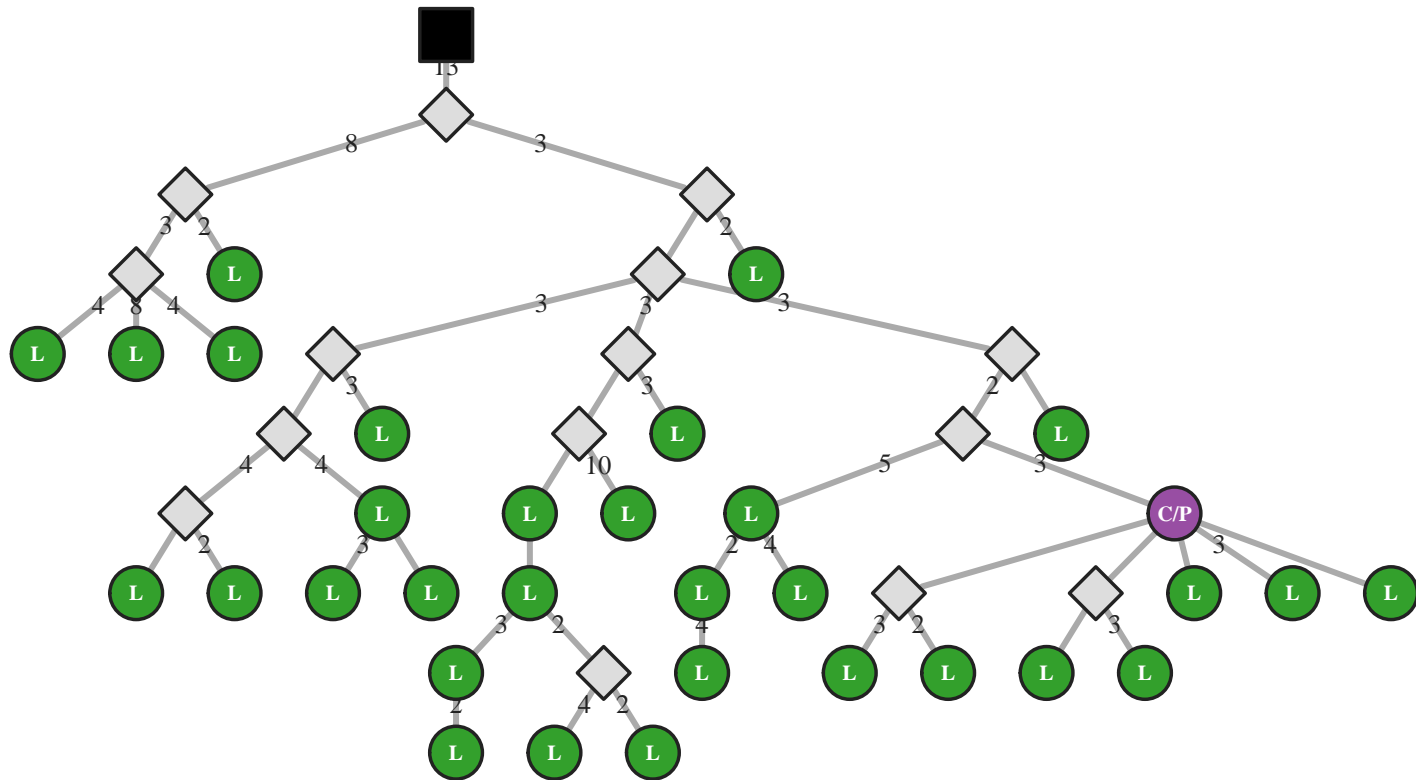
M5 IgG IGHV1-46/J4 57bp (40606)



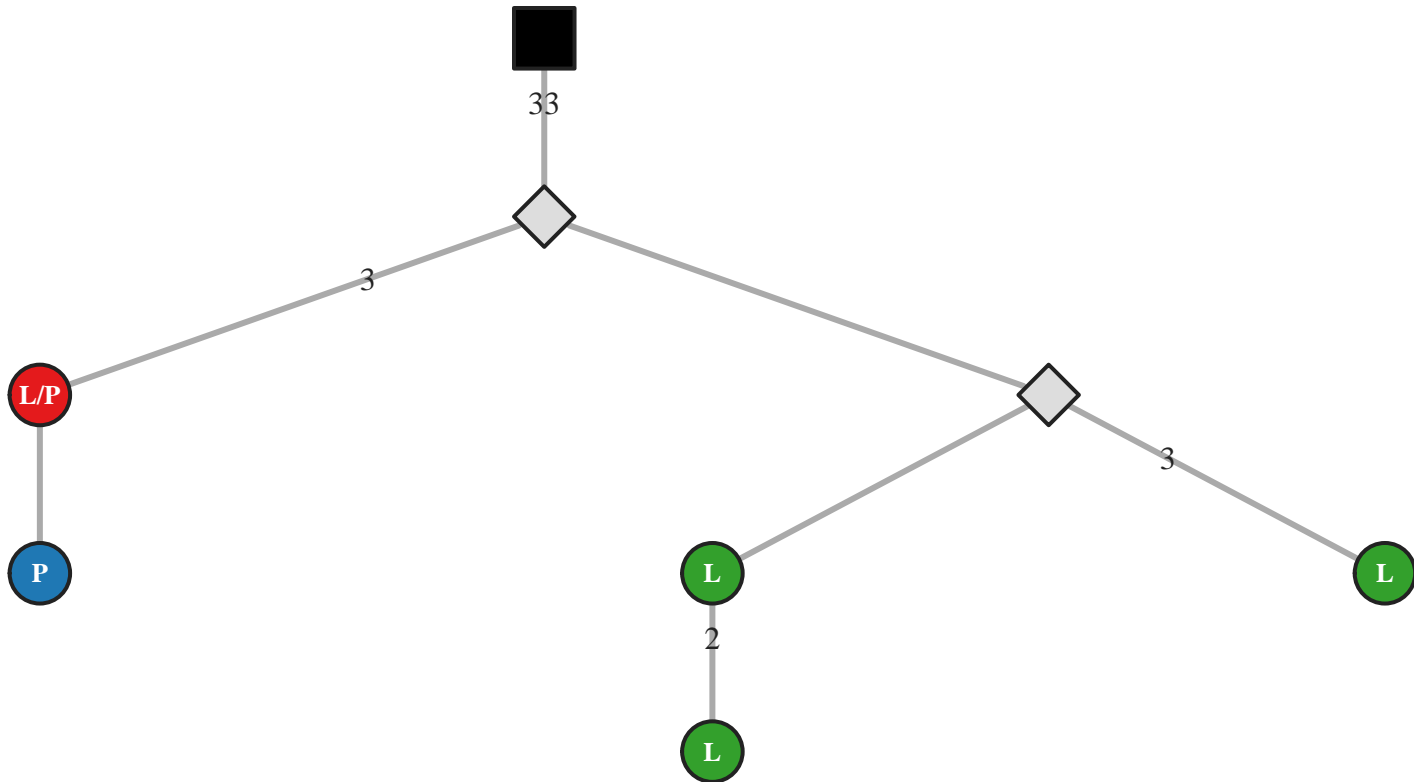
M5 IgG IGHV1-46/J4 60bp (32320)



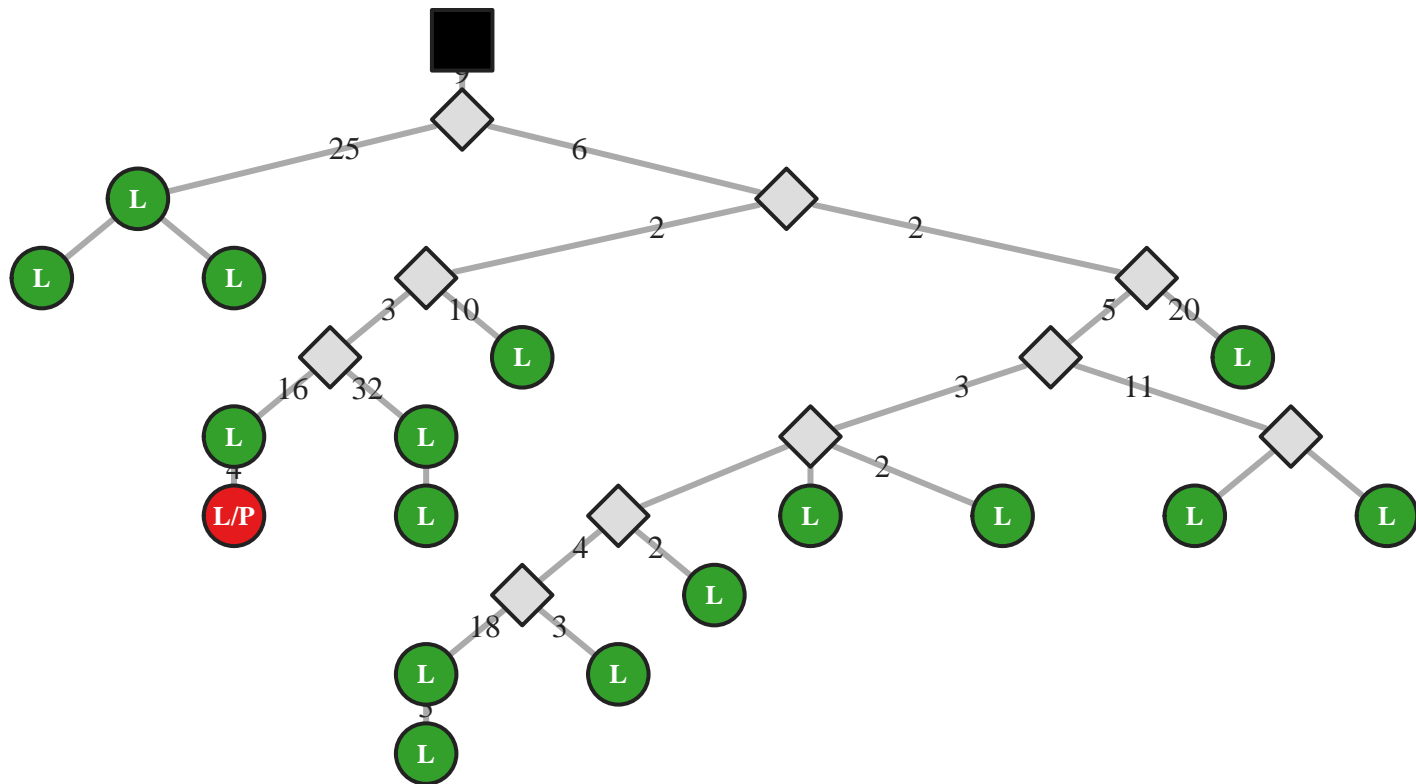
M5 IgG IGHV1-46/J4 69bp (14341)



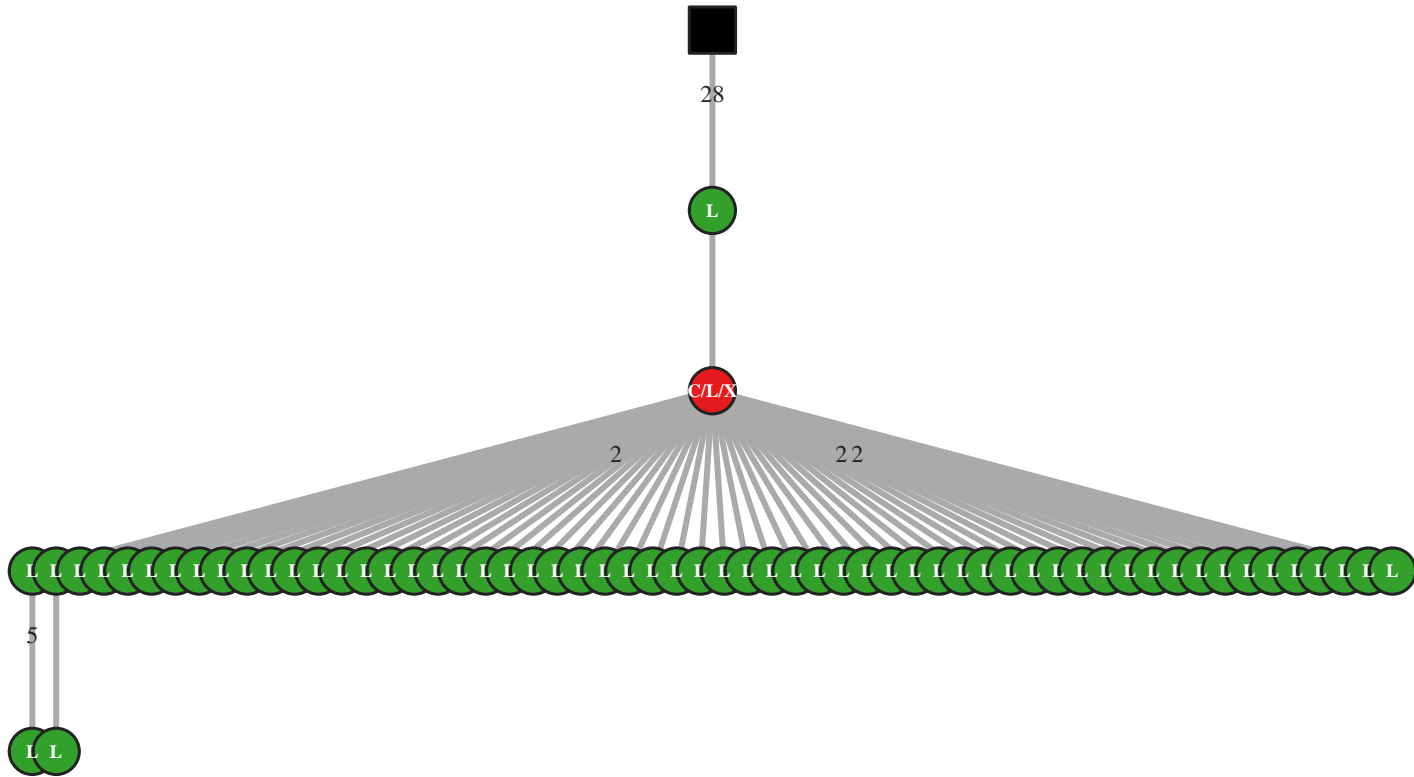
M5 IgG IGHV1-46/J4 75bp (40633)



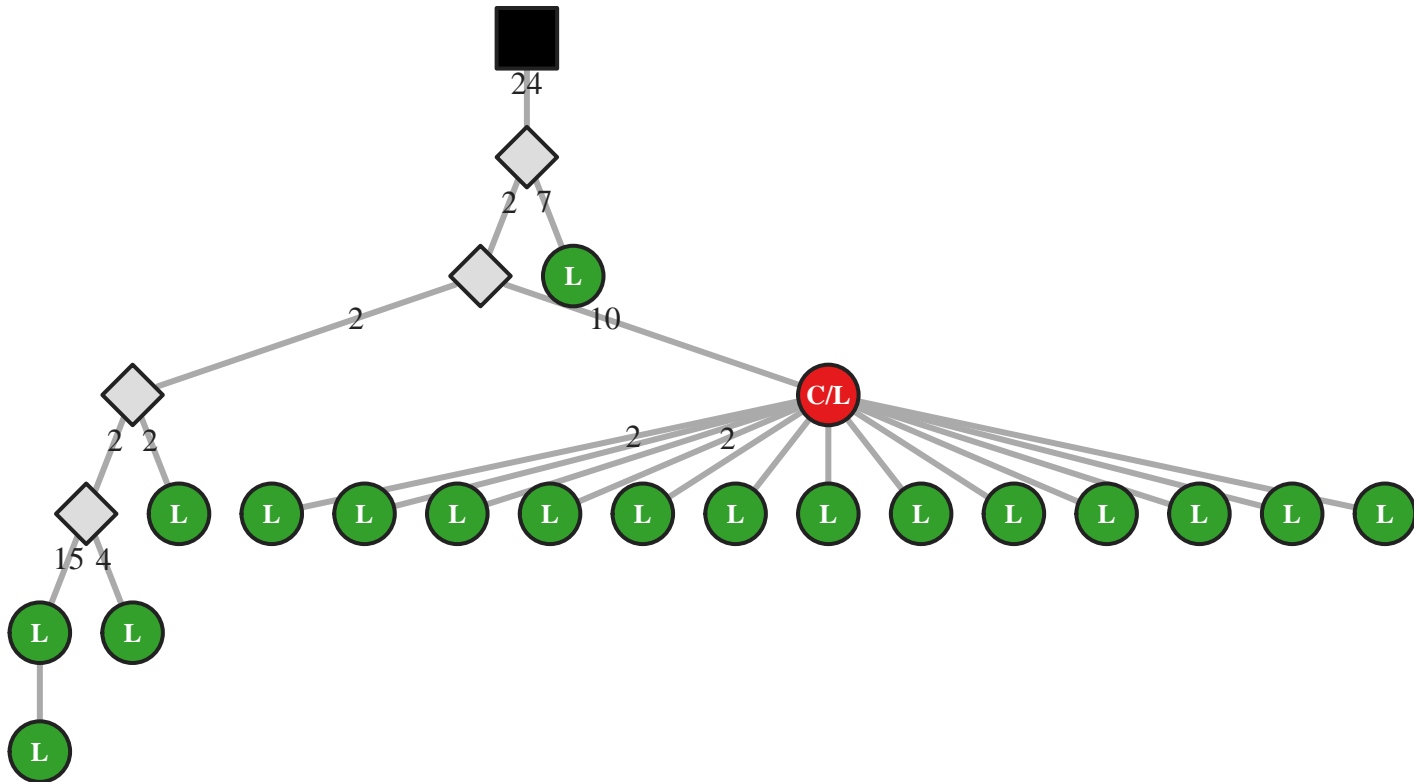
M5 IgG IGHV1-46/J5 30bp (14358)



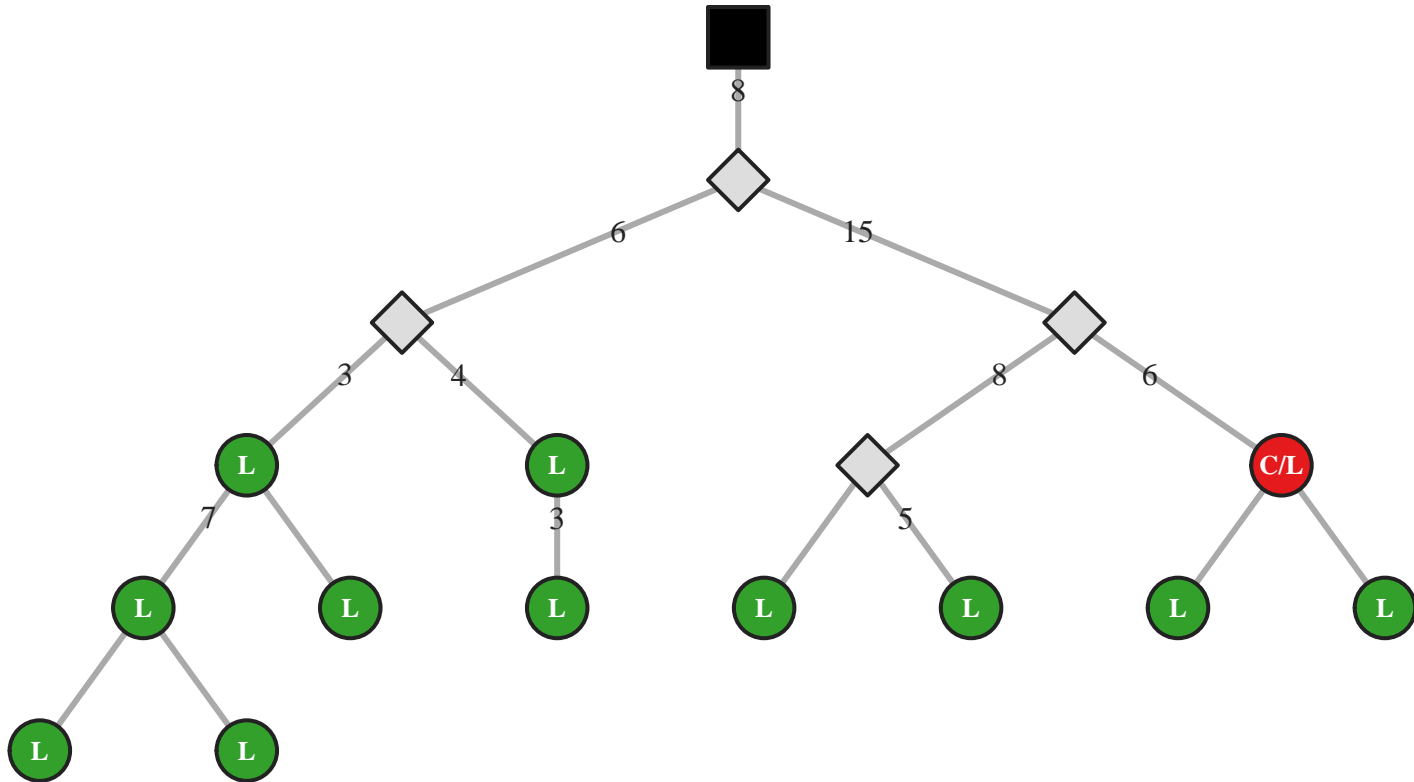
M5 IgA IGHV1-46/J5 45bp (48536)



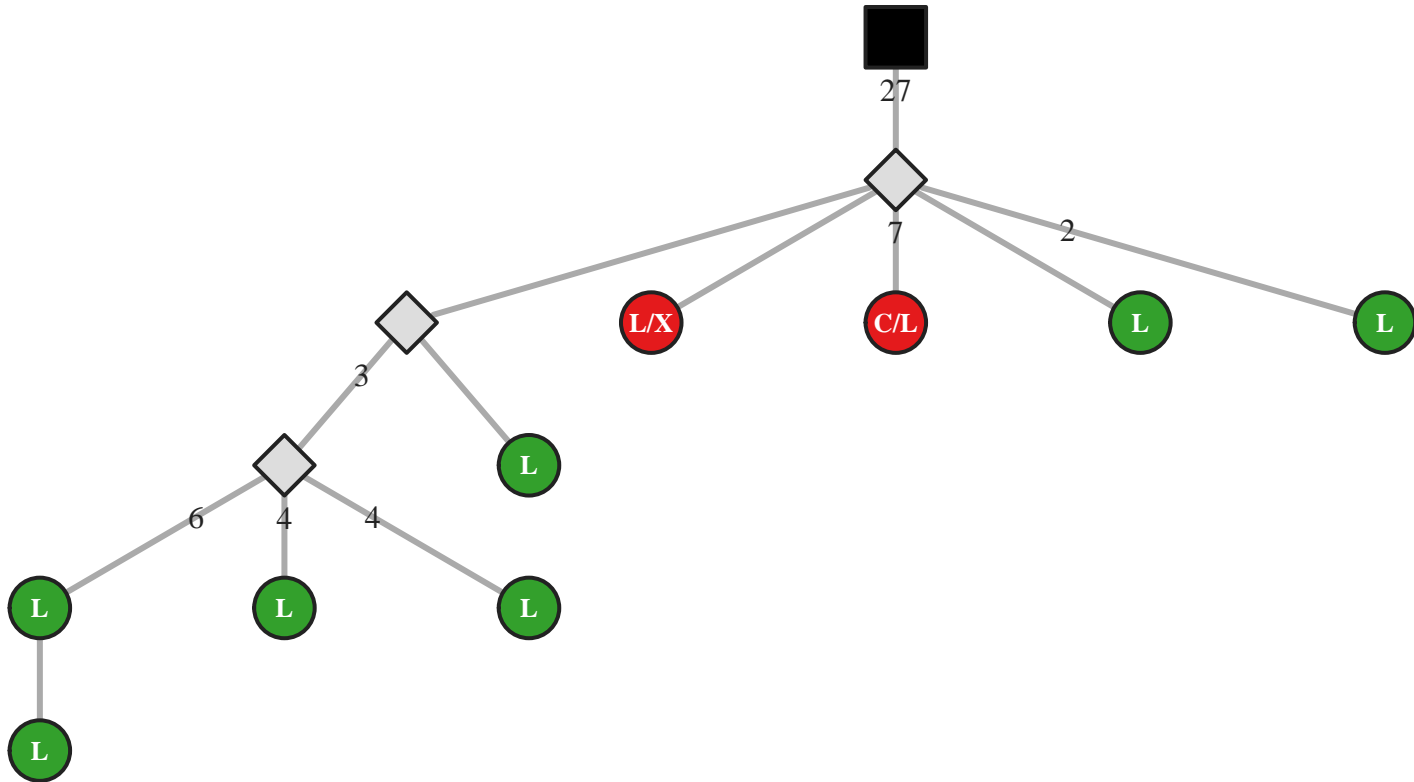
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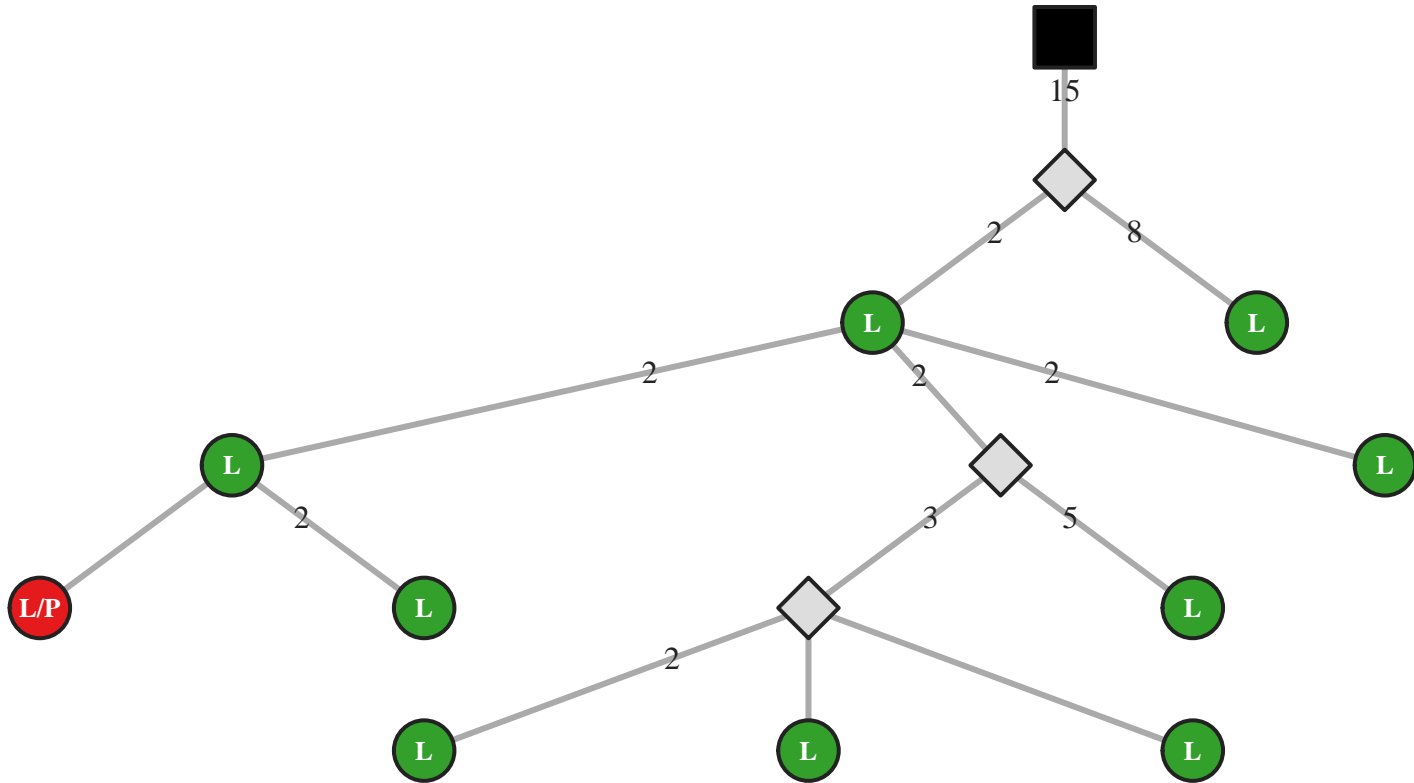
M5 IgA IGHV1-46/J5 45bp (48538)



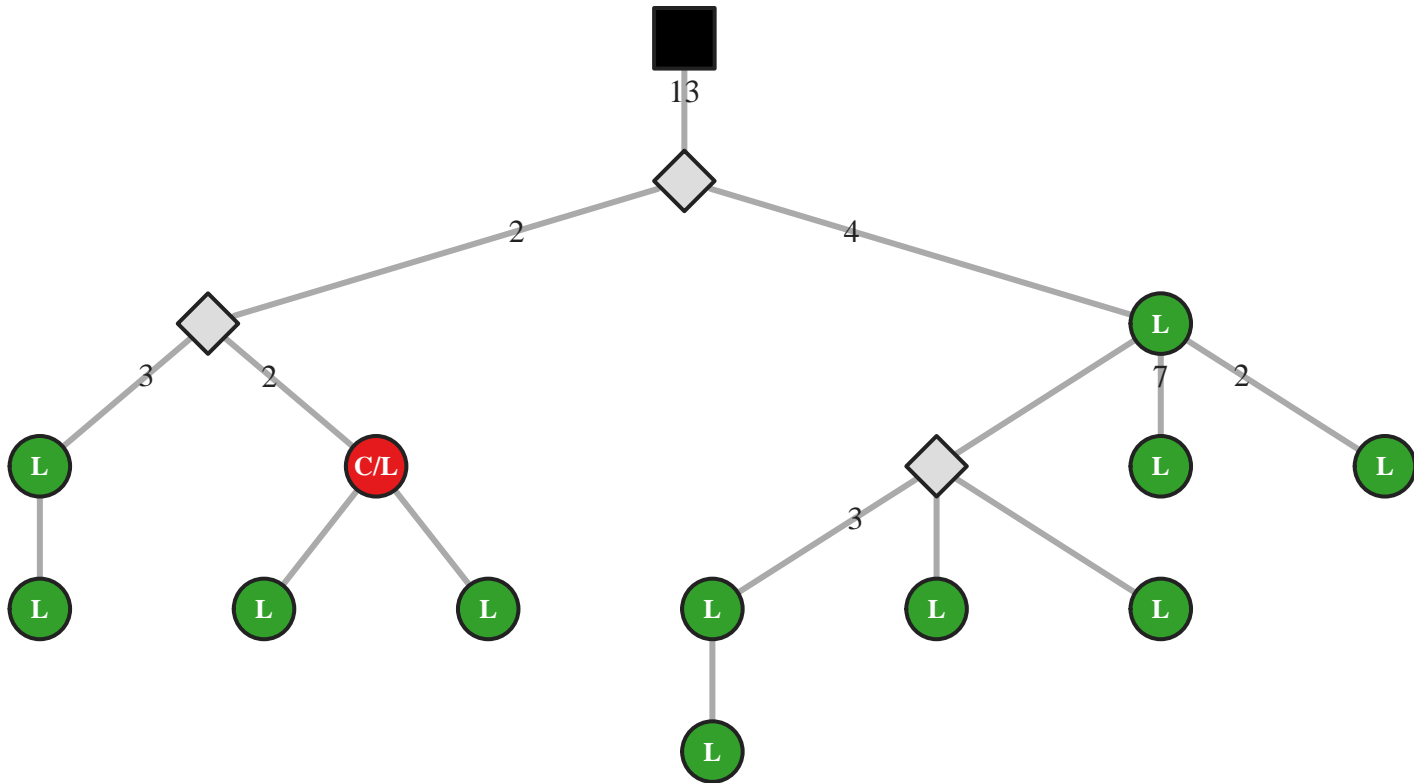
M5 IgG IGHV1-46/J5 54bp (14372)



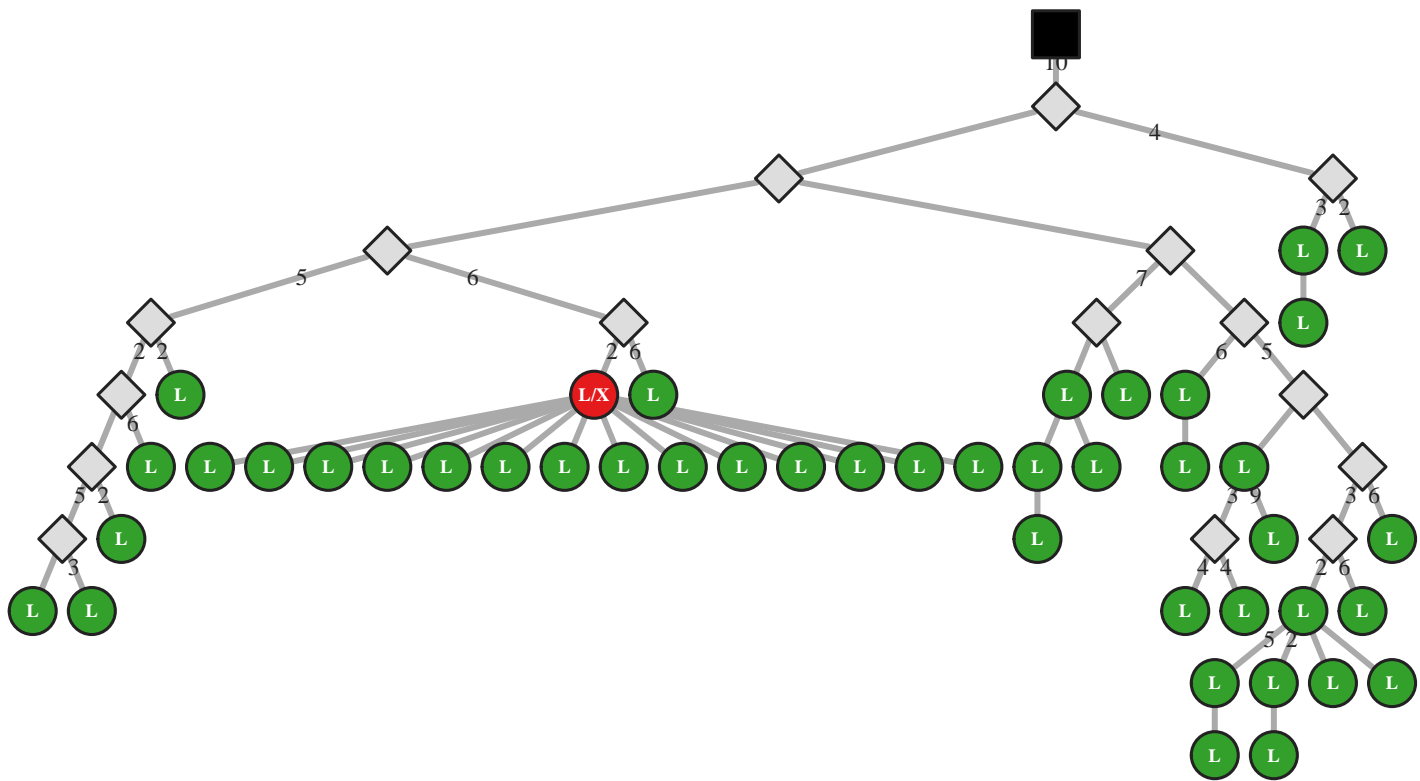
M5 IgG IGHV1-46/J5 57bp (4723)



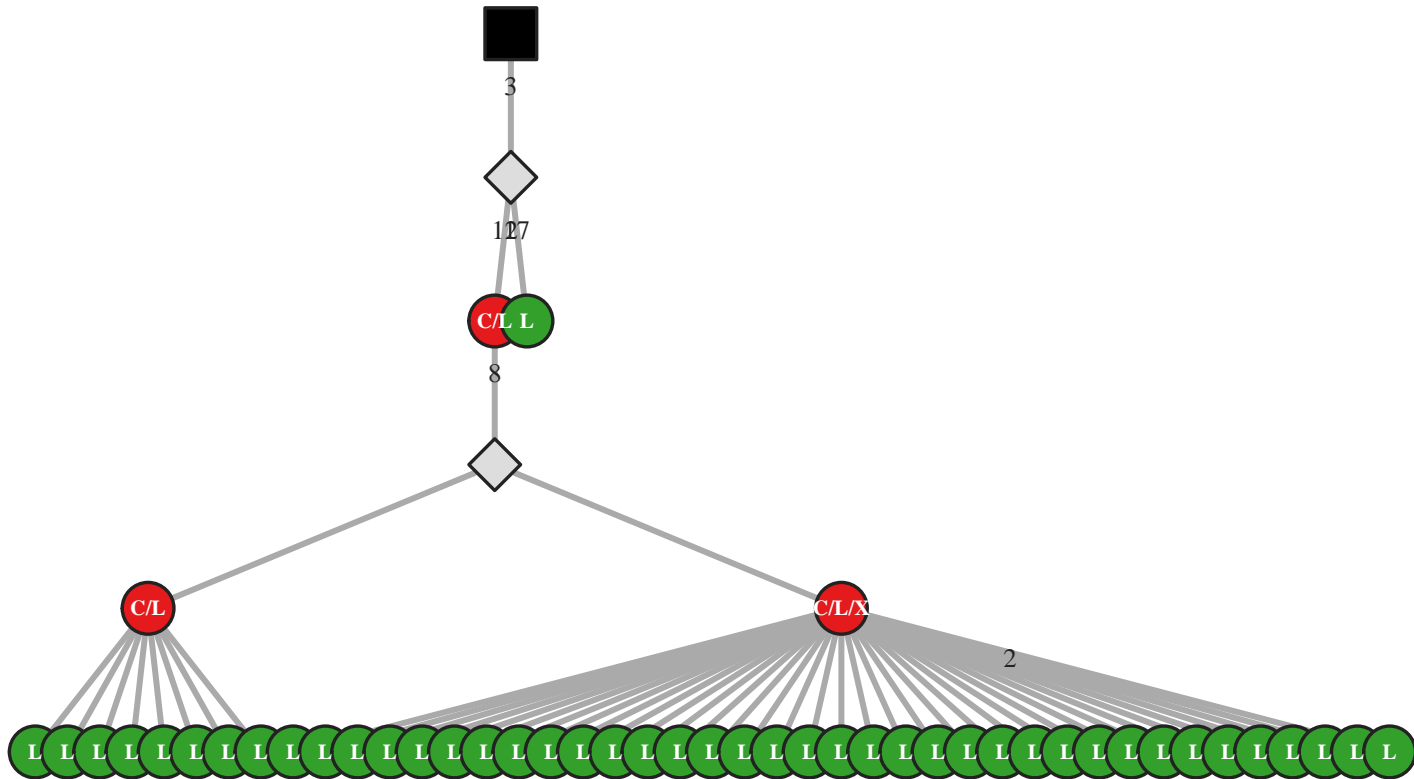
M5 IgG IGHV1-46/J5 57bp (4730)



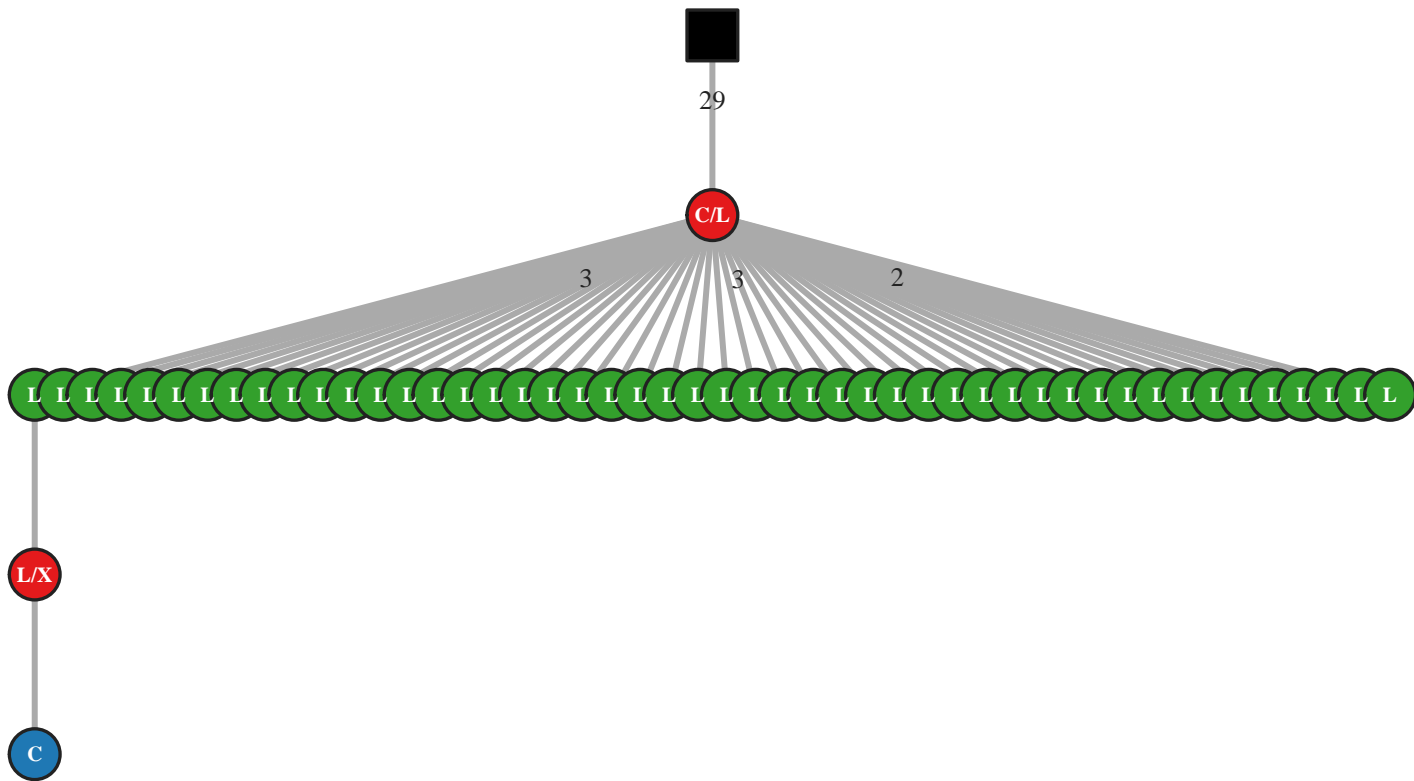
M5 IgG IGHV1-46/J6 39bp (32411)



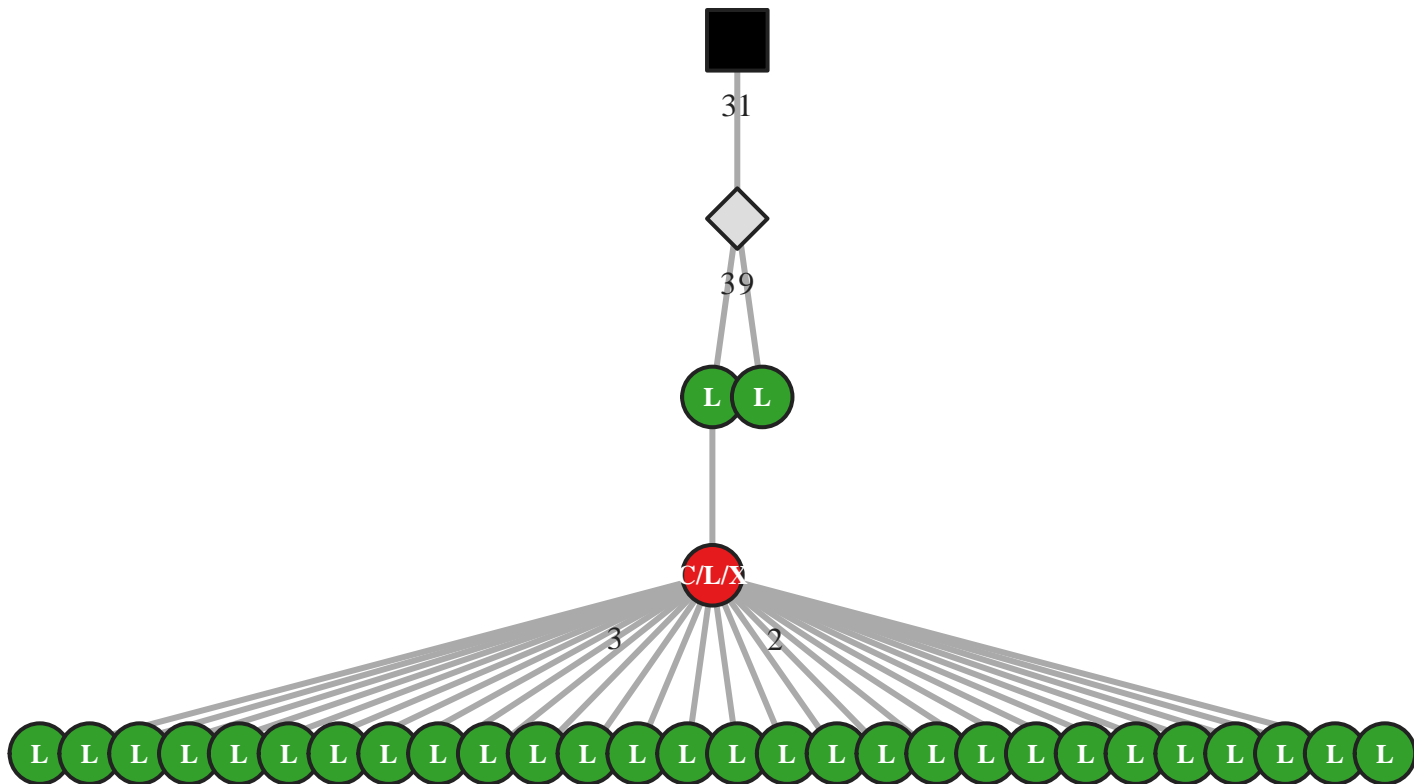
M5 IgG IGHV1-46/J6 48bp (4760)



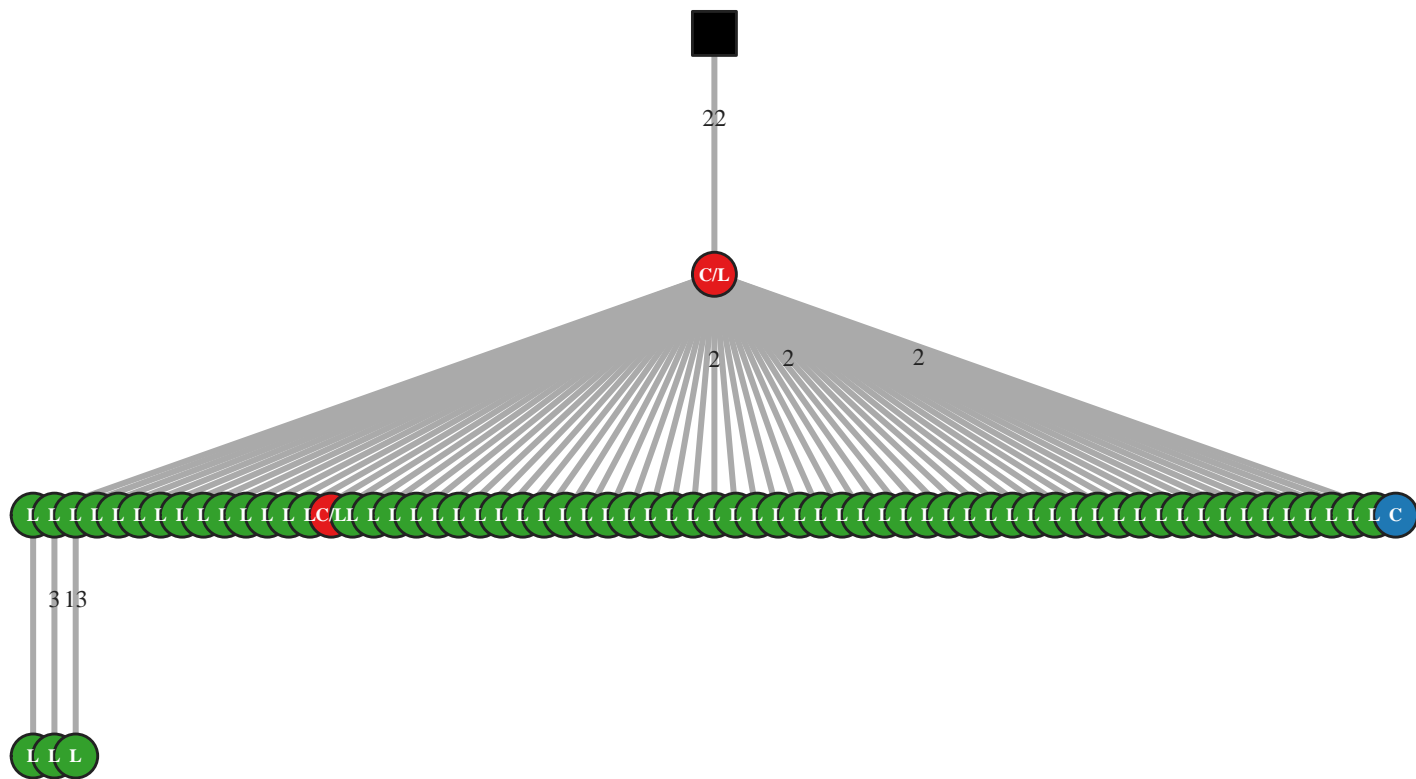
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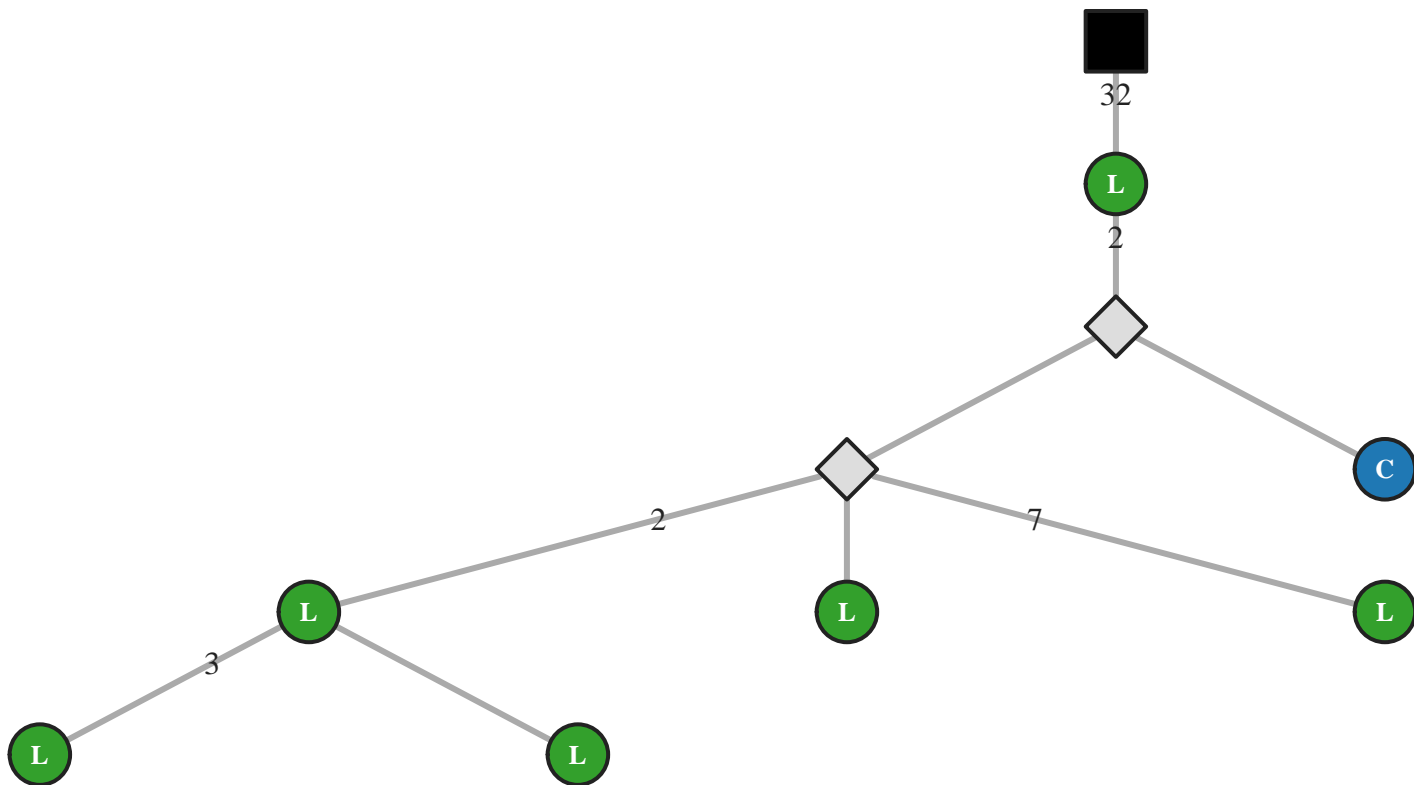
M5 IgG IGHV1-46/J6 57bp (23655)



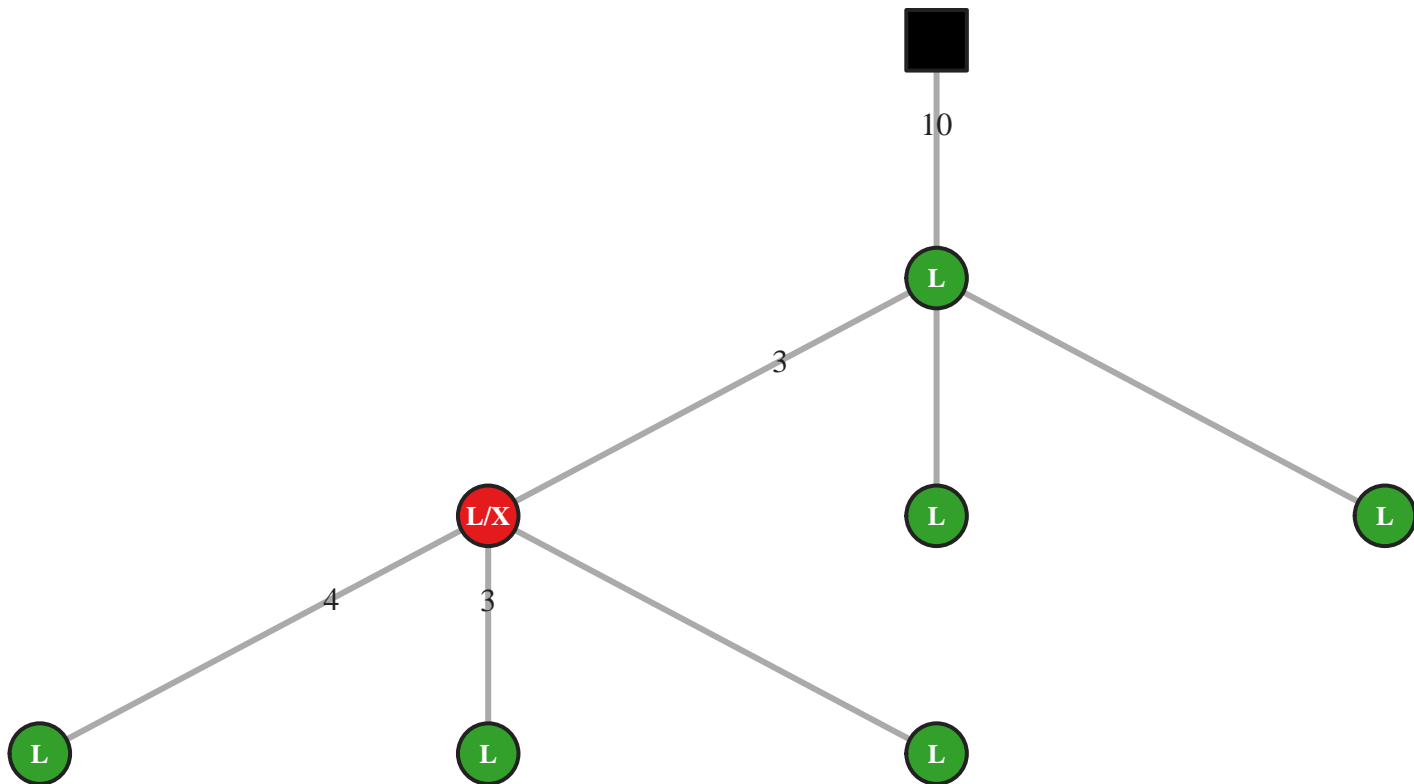
M5 IgG IGHV1-46/J6 60bp (4783)



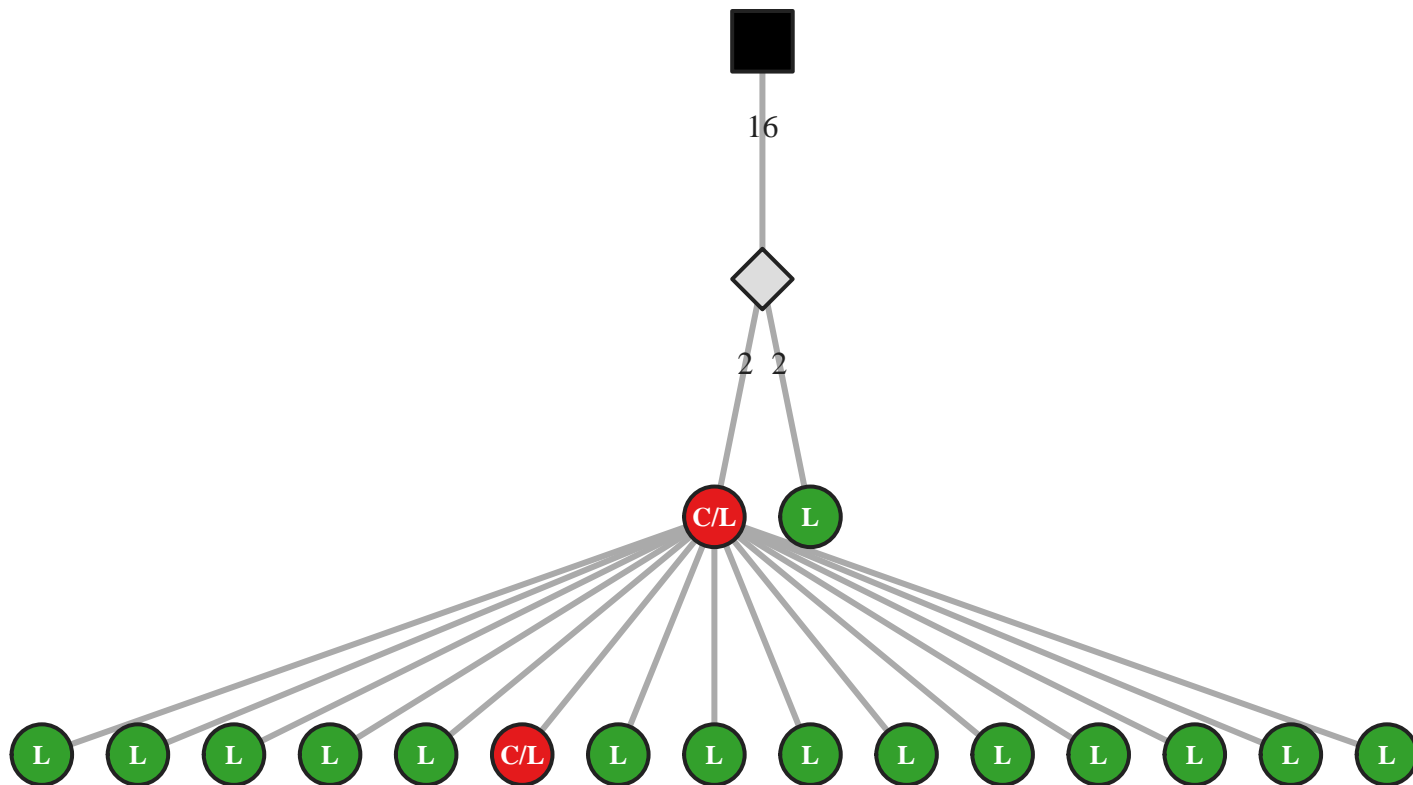
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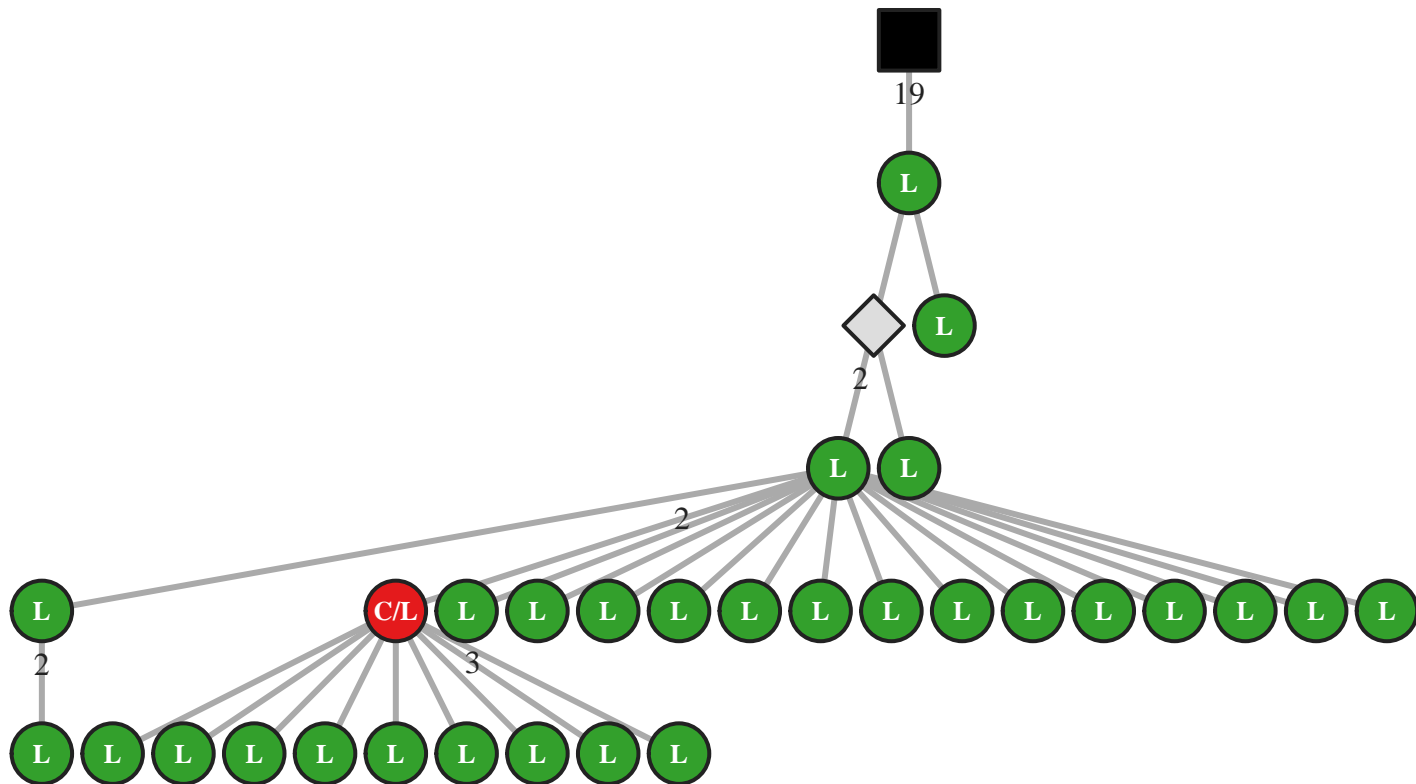
M5 IgG IGHV1-46/J6 69bp (14429)



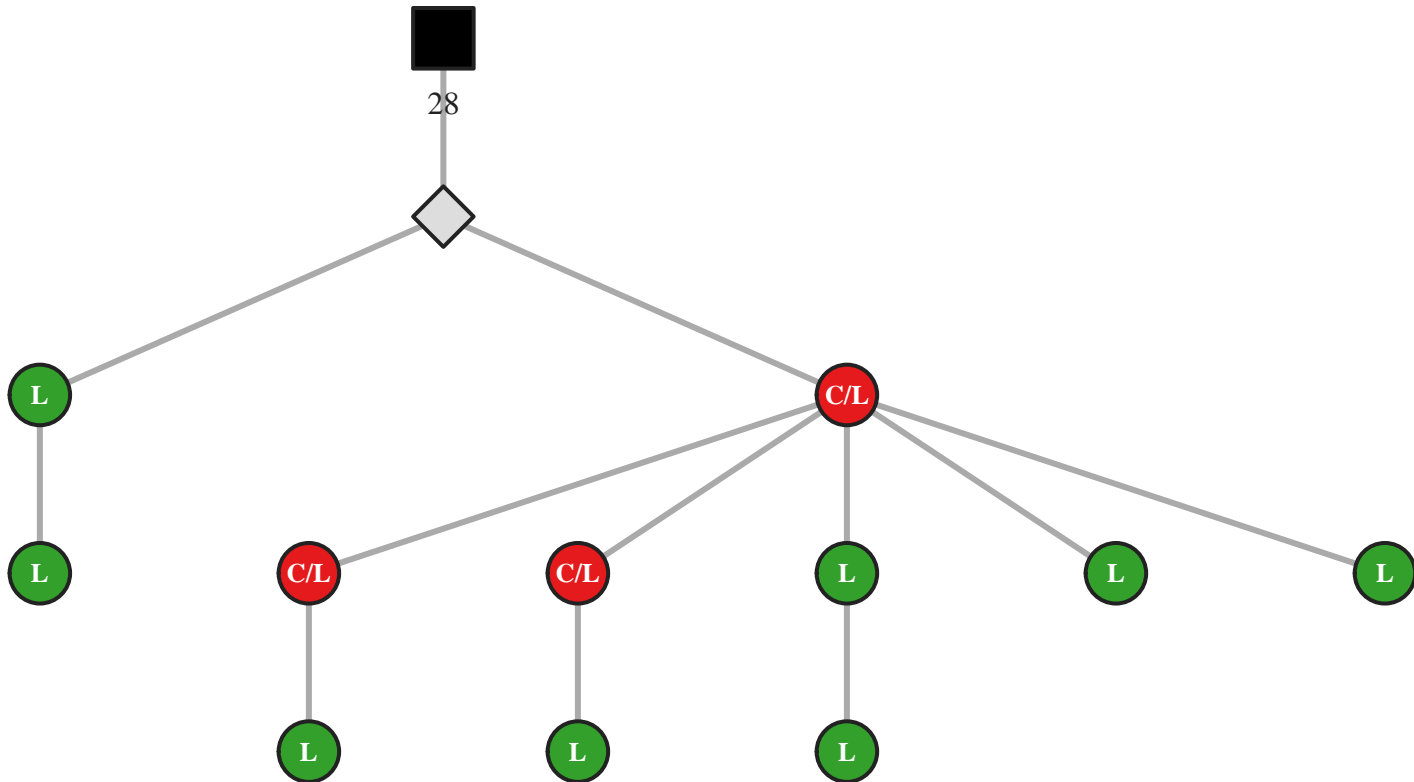
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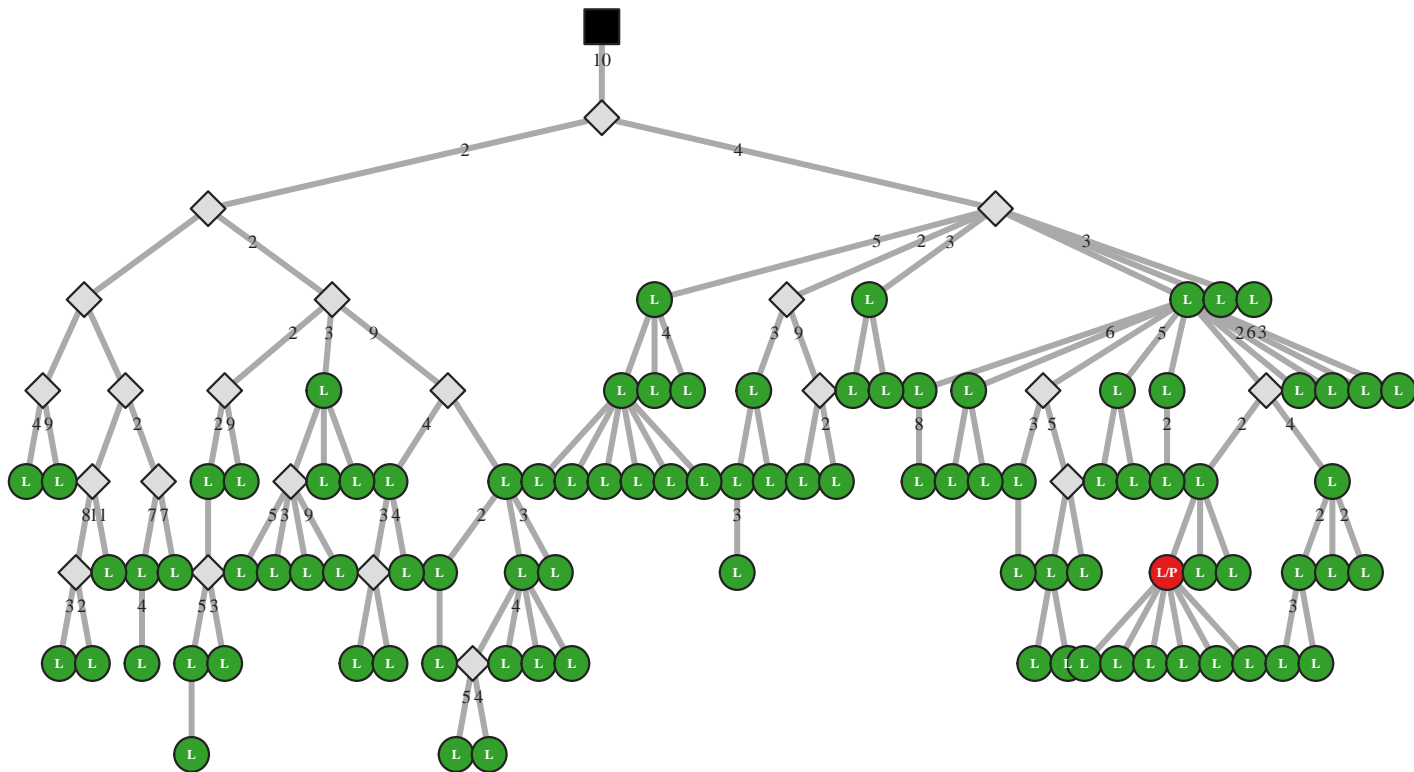
M5 IgA IGHV1-46/J6 75bp (21284)



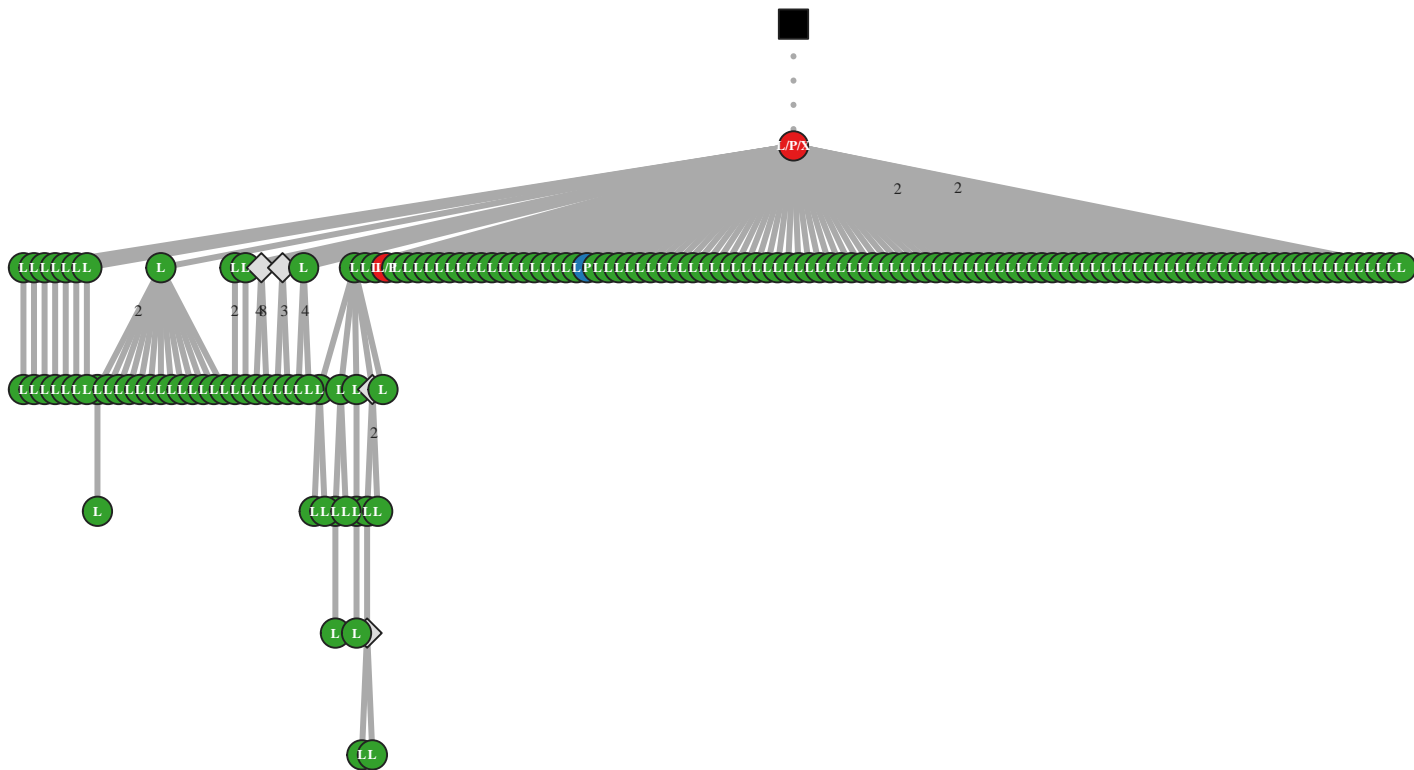
M5 IgG IGHV1-46/J6 78bp (50118)



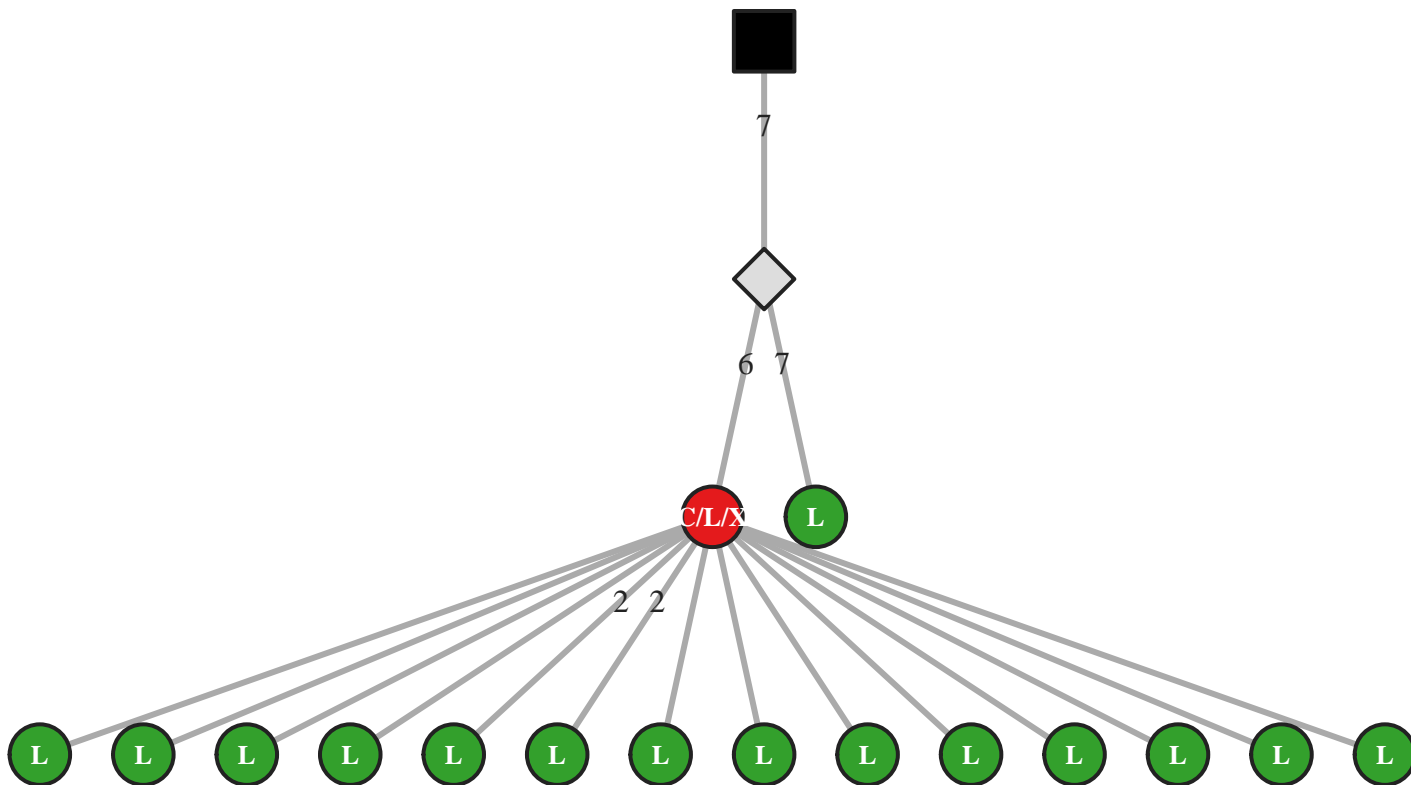
M5 IgG IGHV1-58/J3 45bp (23686)



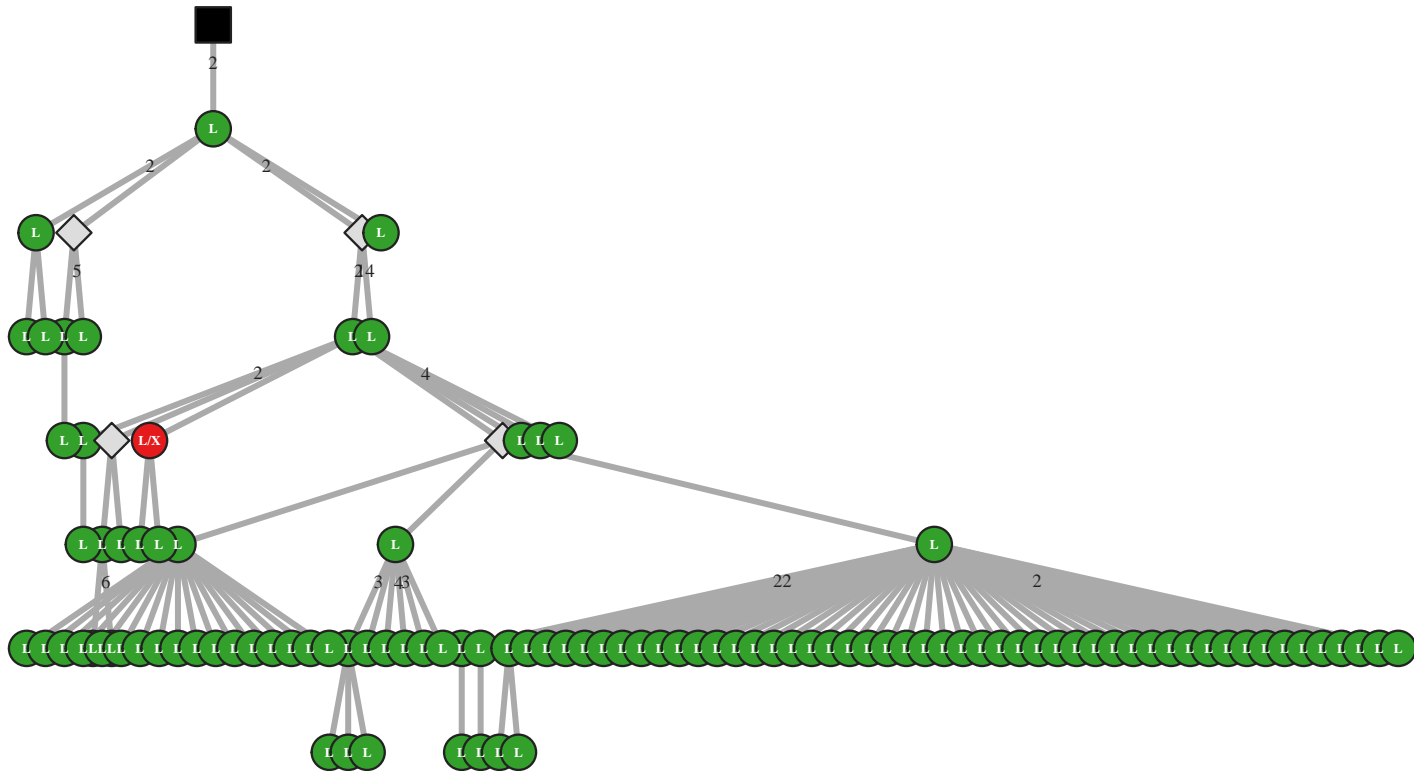
M5 IgG IGHV1-58/J3 54bp (14434)



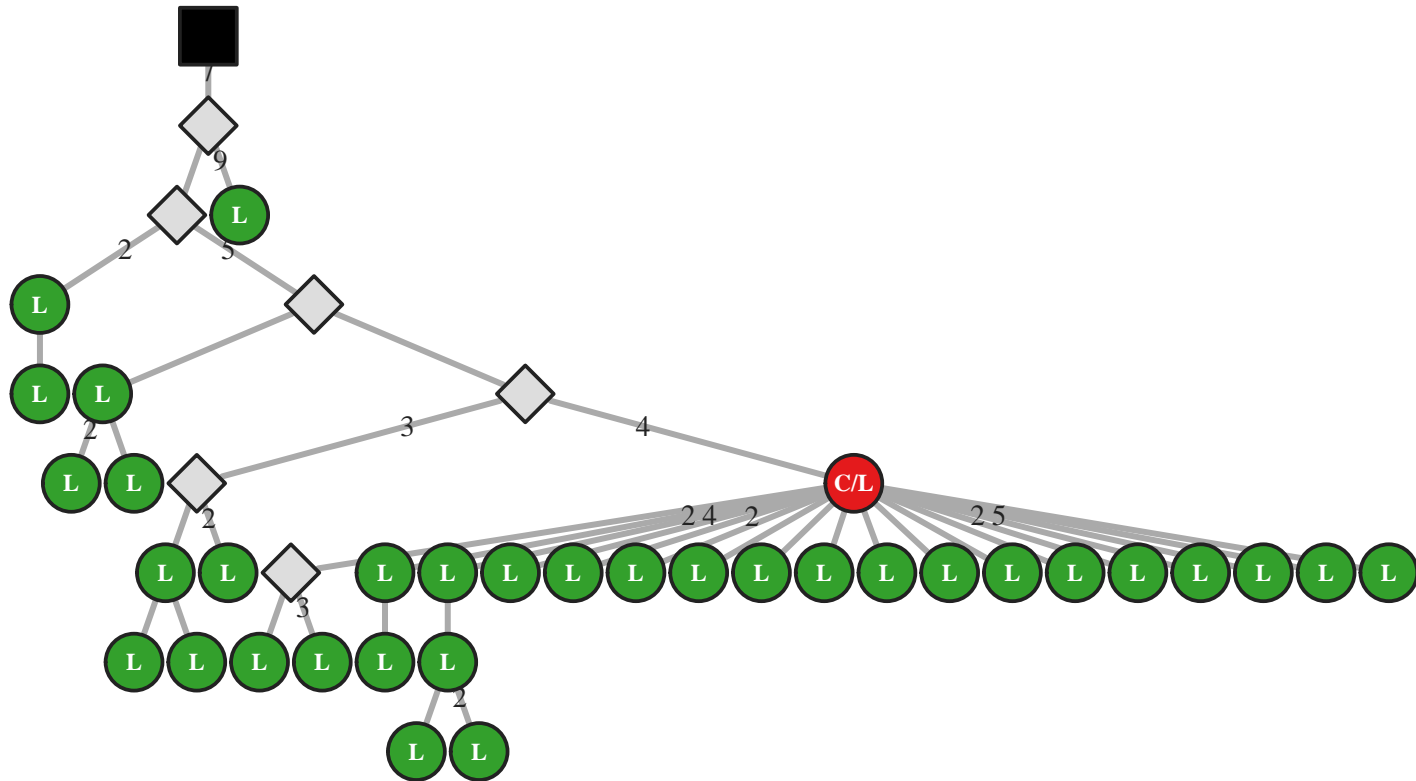
M5 IgG IGHV1-58/J3 60bp (4820)



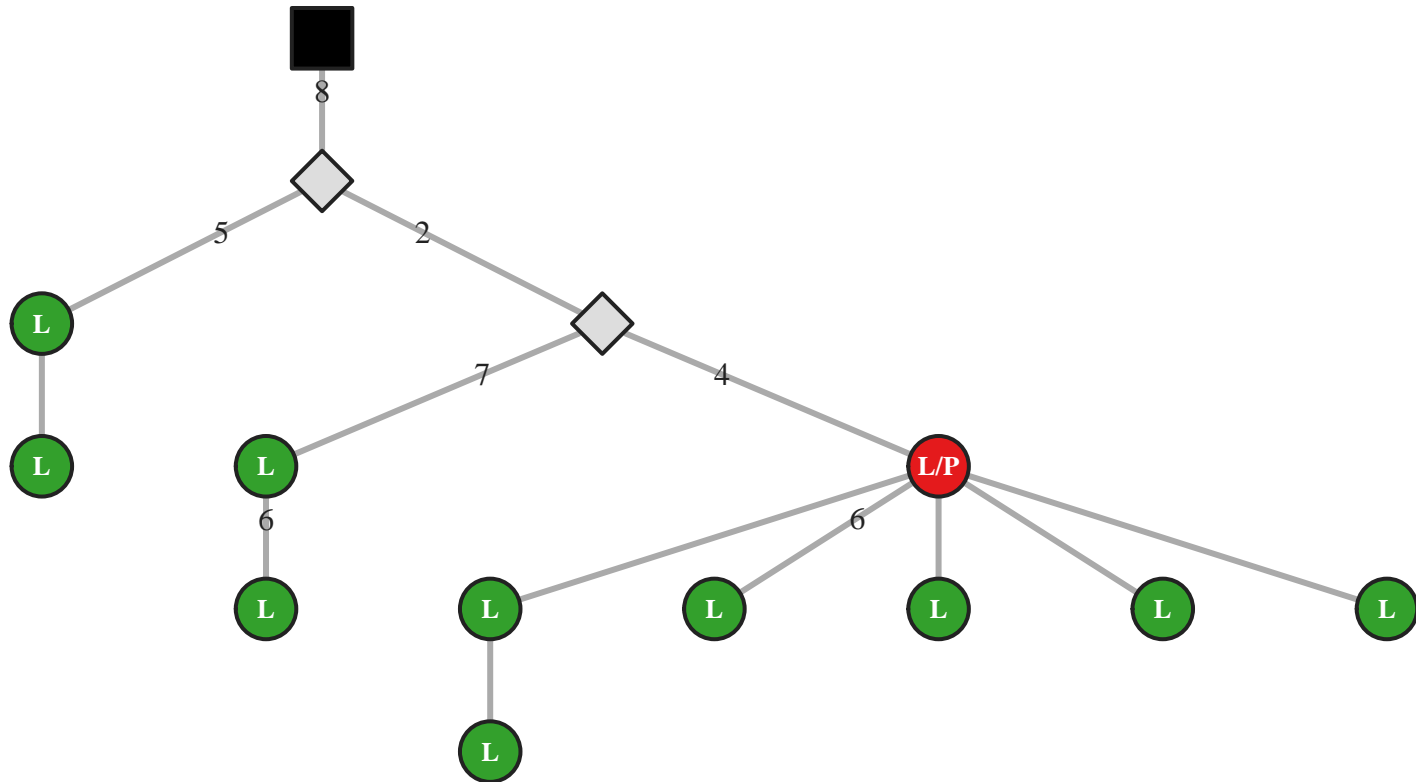
M5 IgG IGHV1-58/J4 42bp (14464)



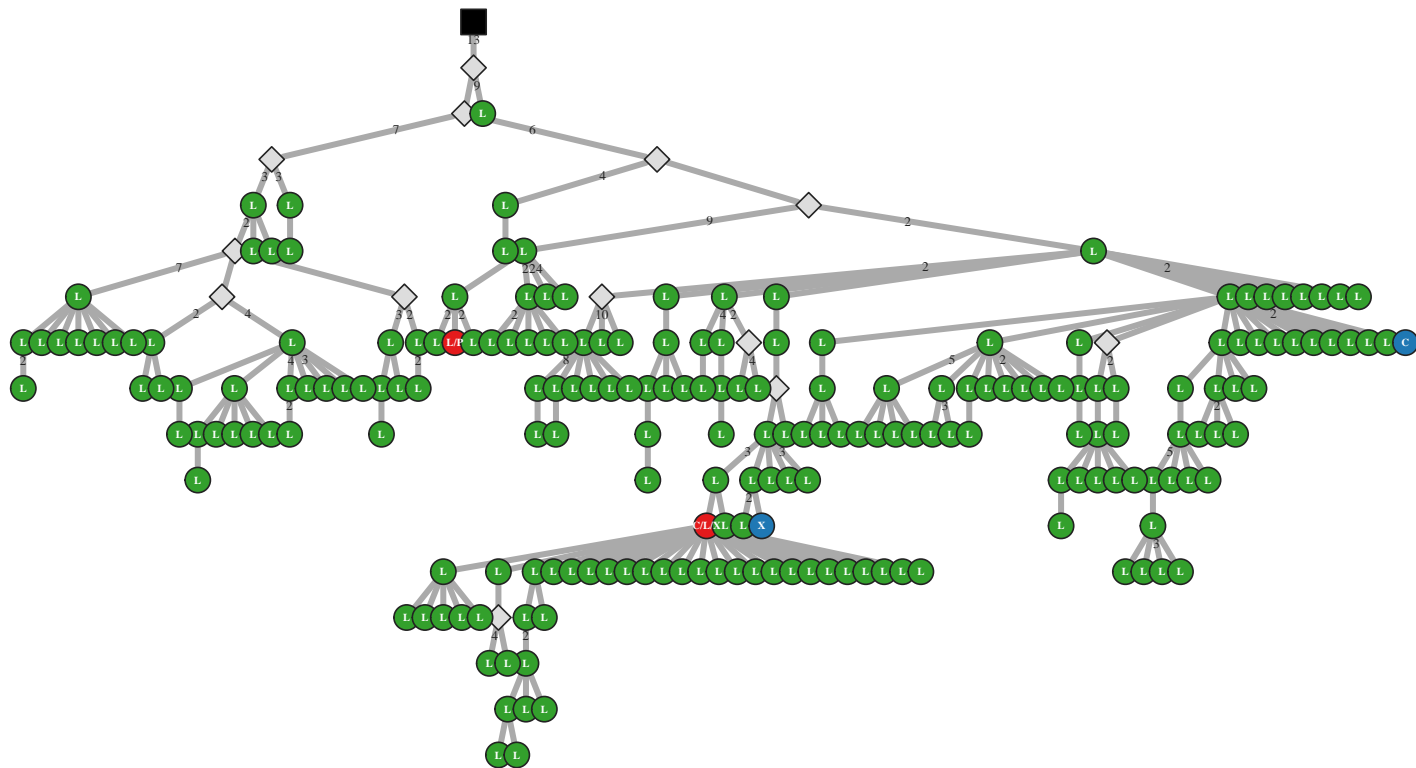
M5 IgG IGHV1-58/J4 45bp (23698)



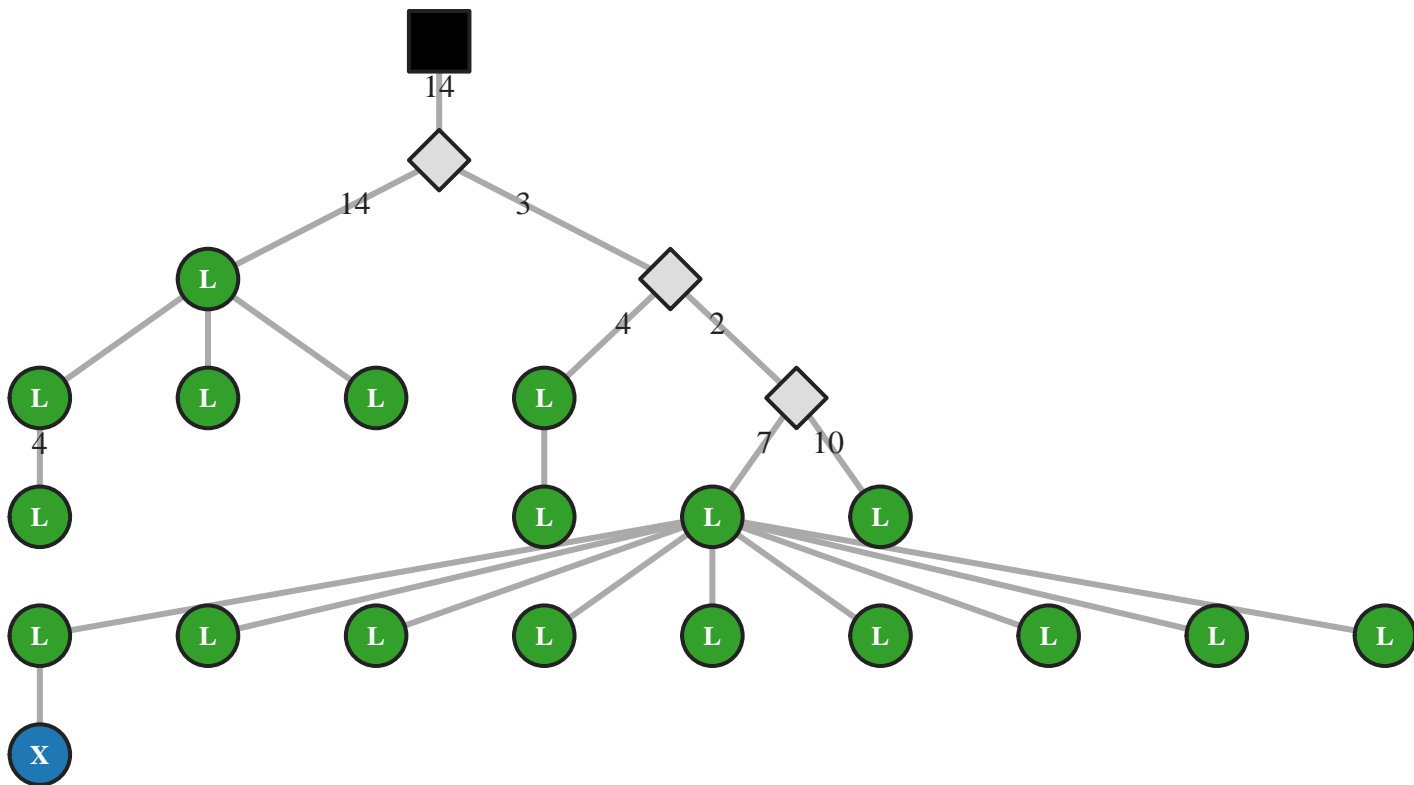
M5 IgG IGHV1-58/J4 72bp (4835)



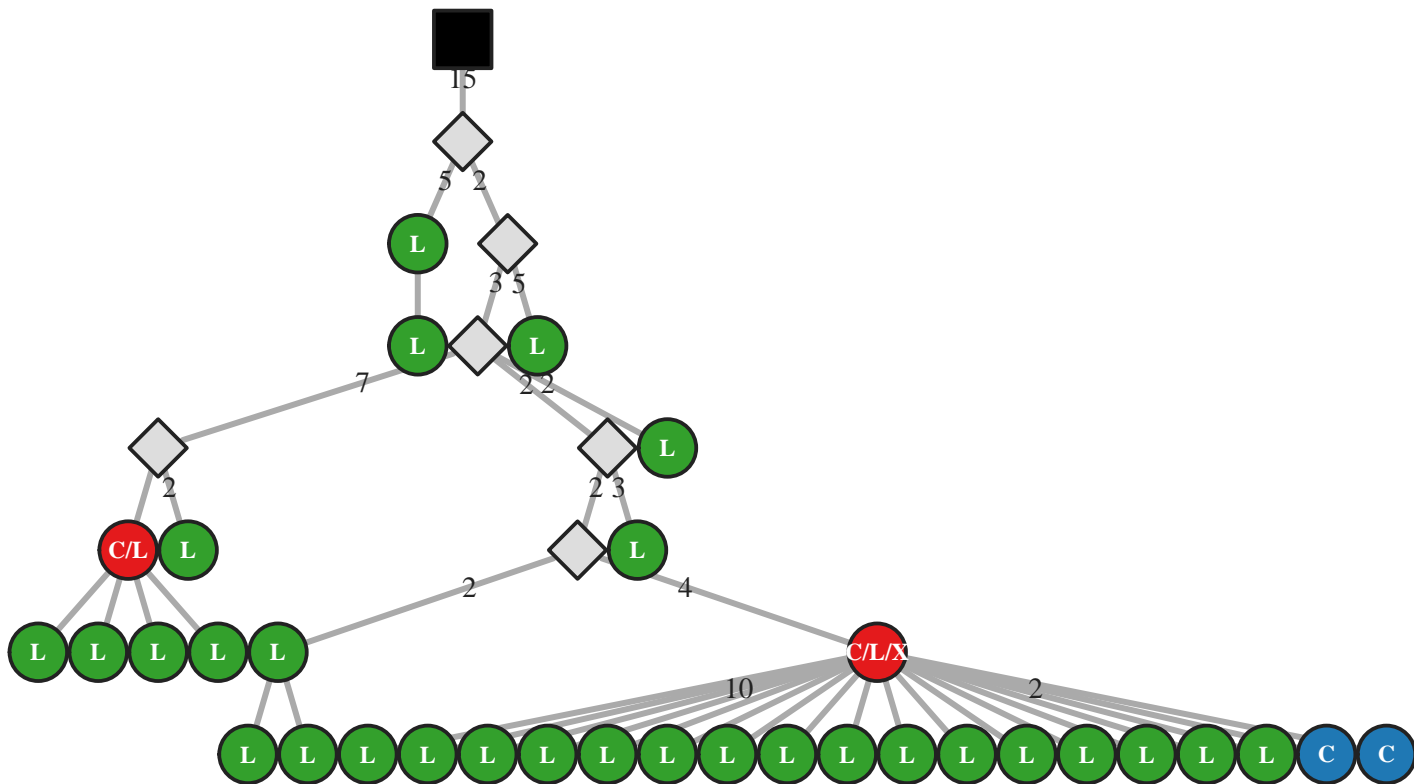
M5 IgG IGHV1-58/J5 63bp (4839)



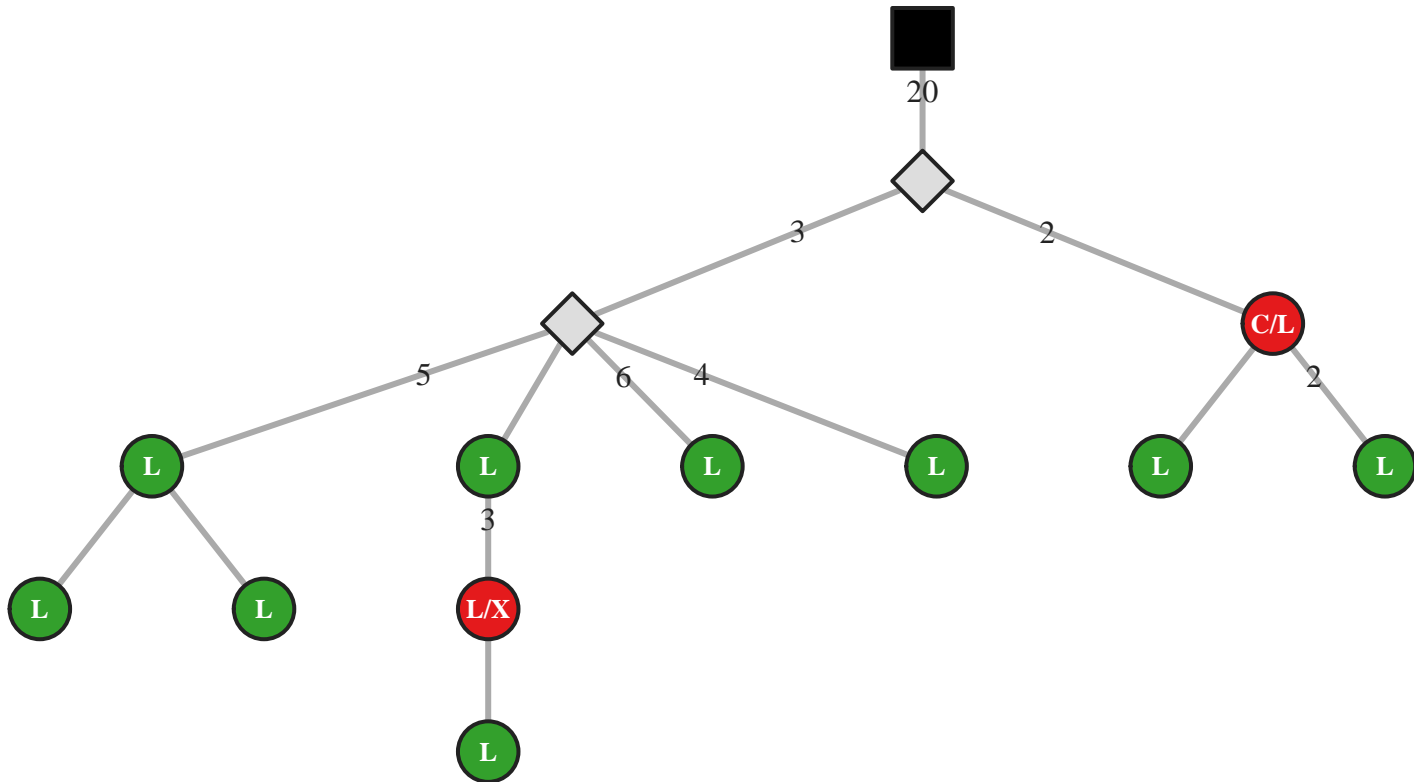
M5 IgG IGHV1-58/J6 69bp (14478)



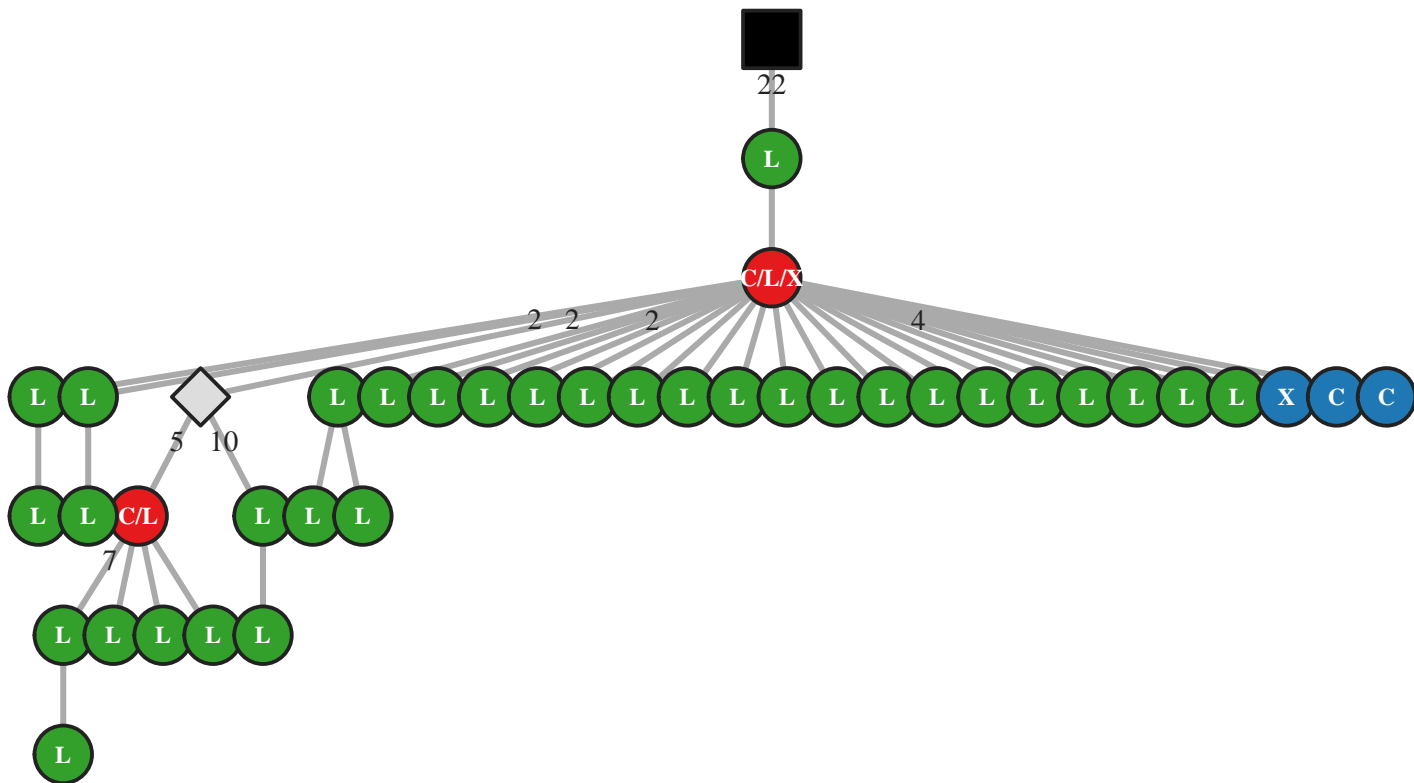
M5 IgG IGHV1-69/J1 39bp (40675)



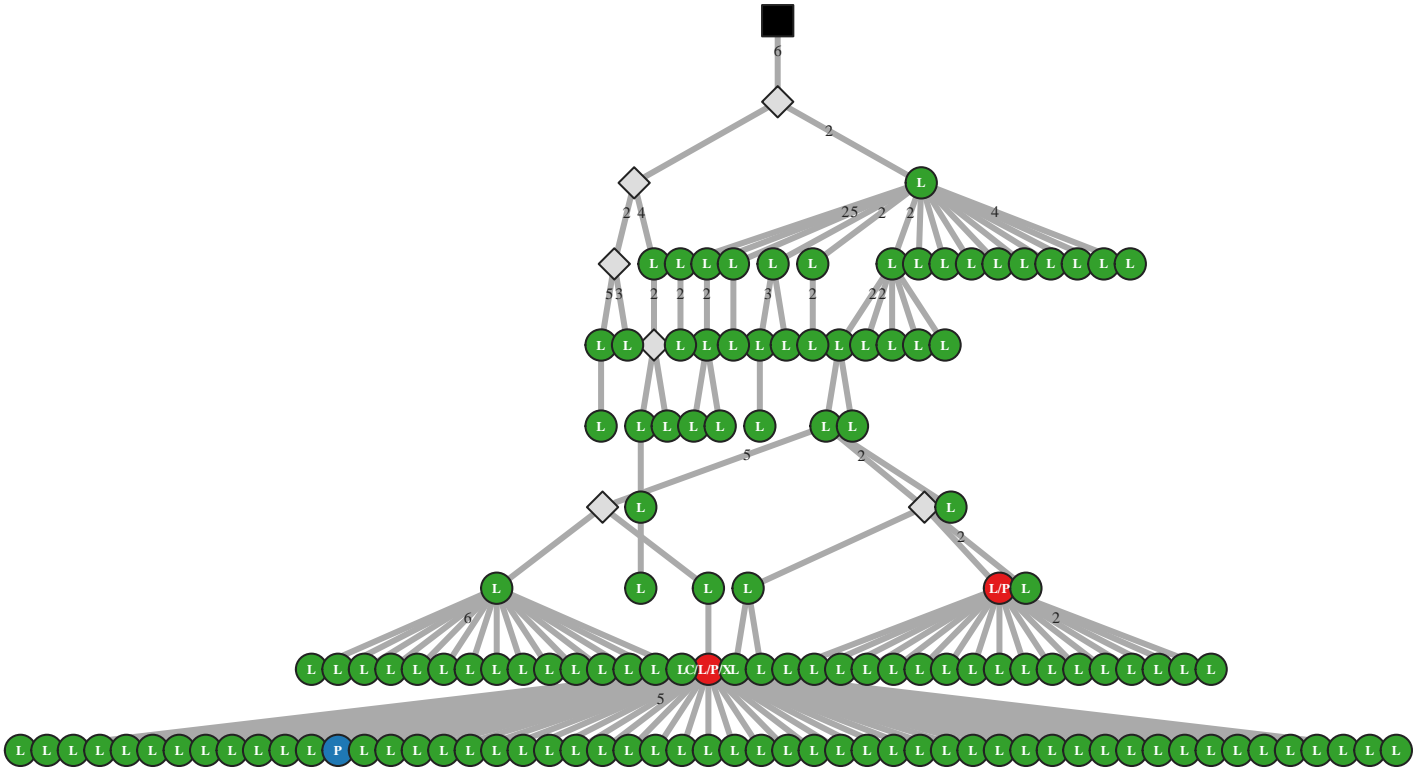
M5 IgG IGHV1-69/J1 42bp (4857)



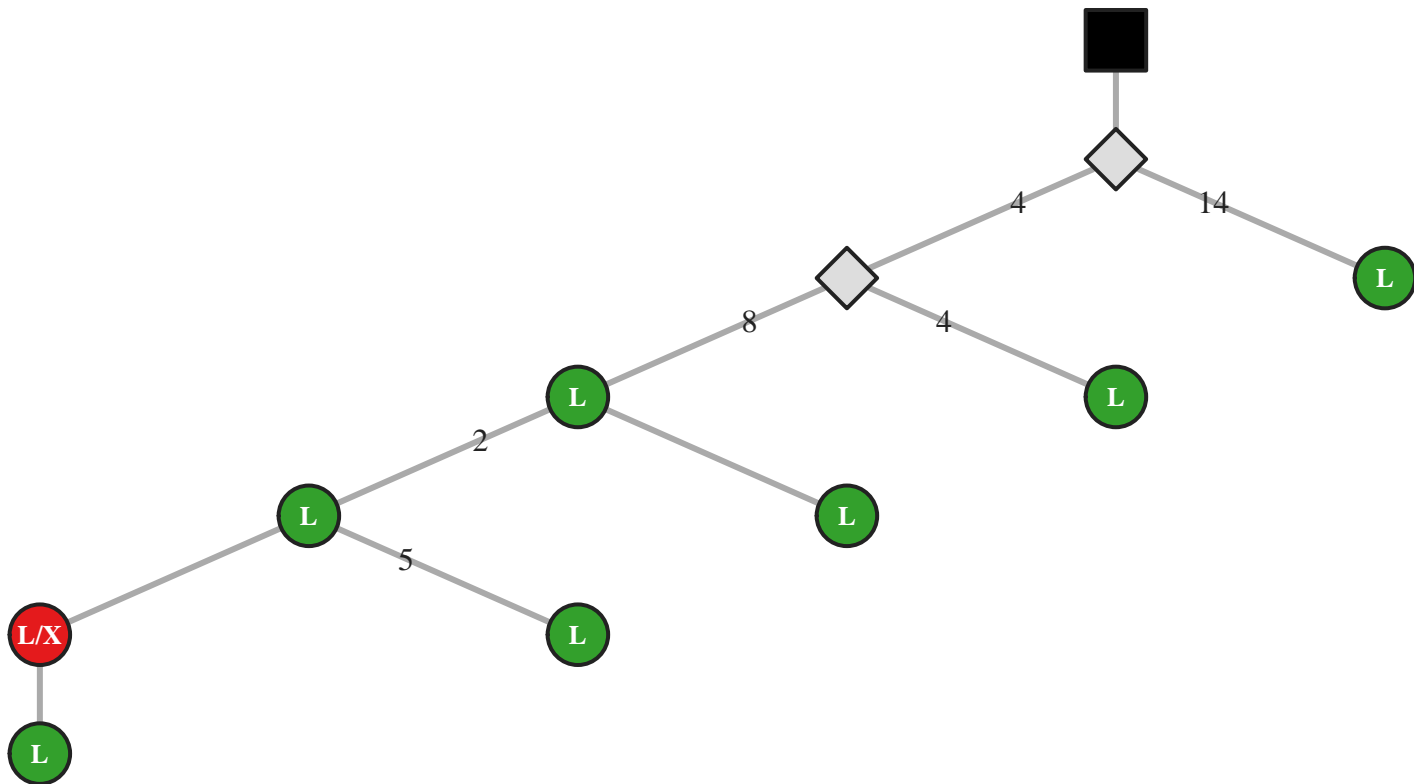
M5 IgG IGHV1-69/J1 51bp (50145)



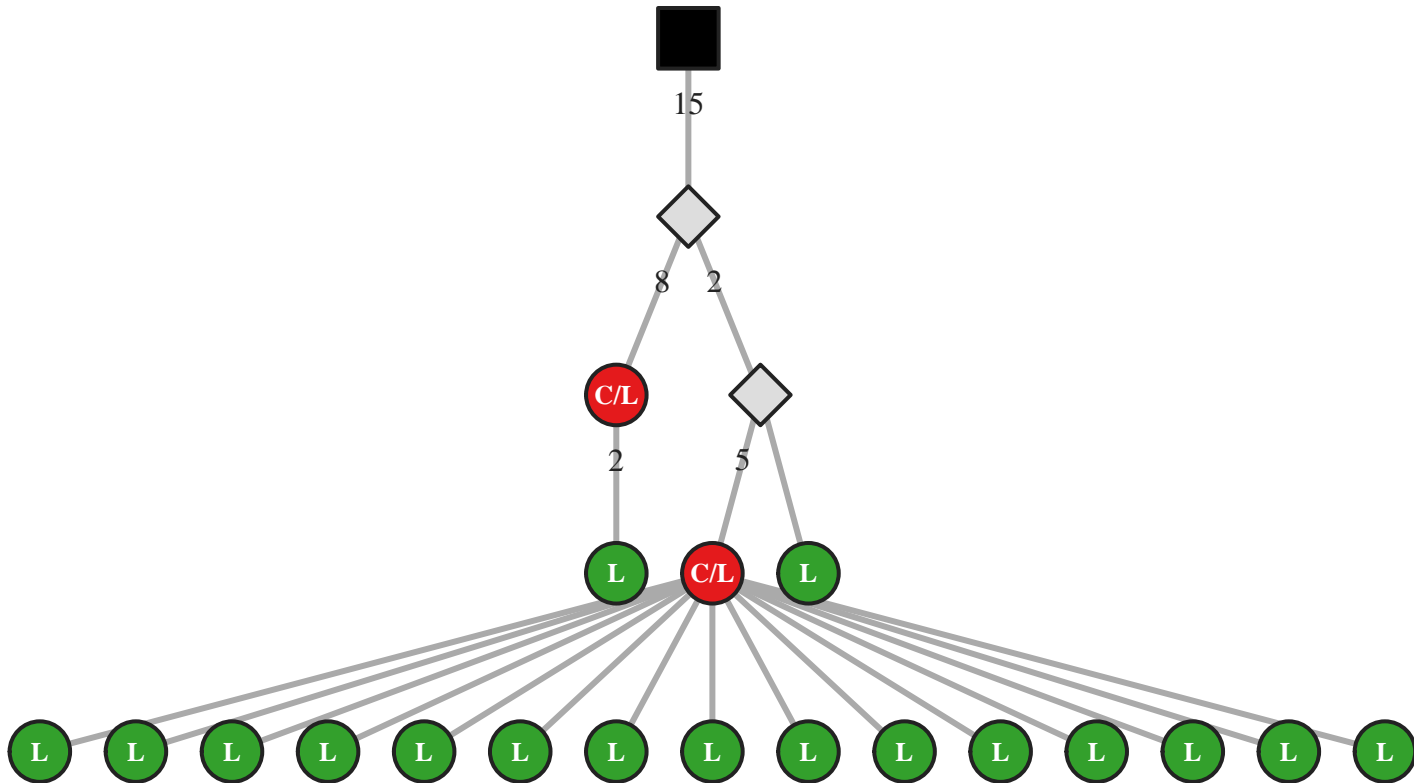
M5 IgG IGHV1-69/J1 54bp (14506)



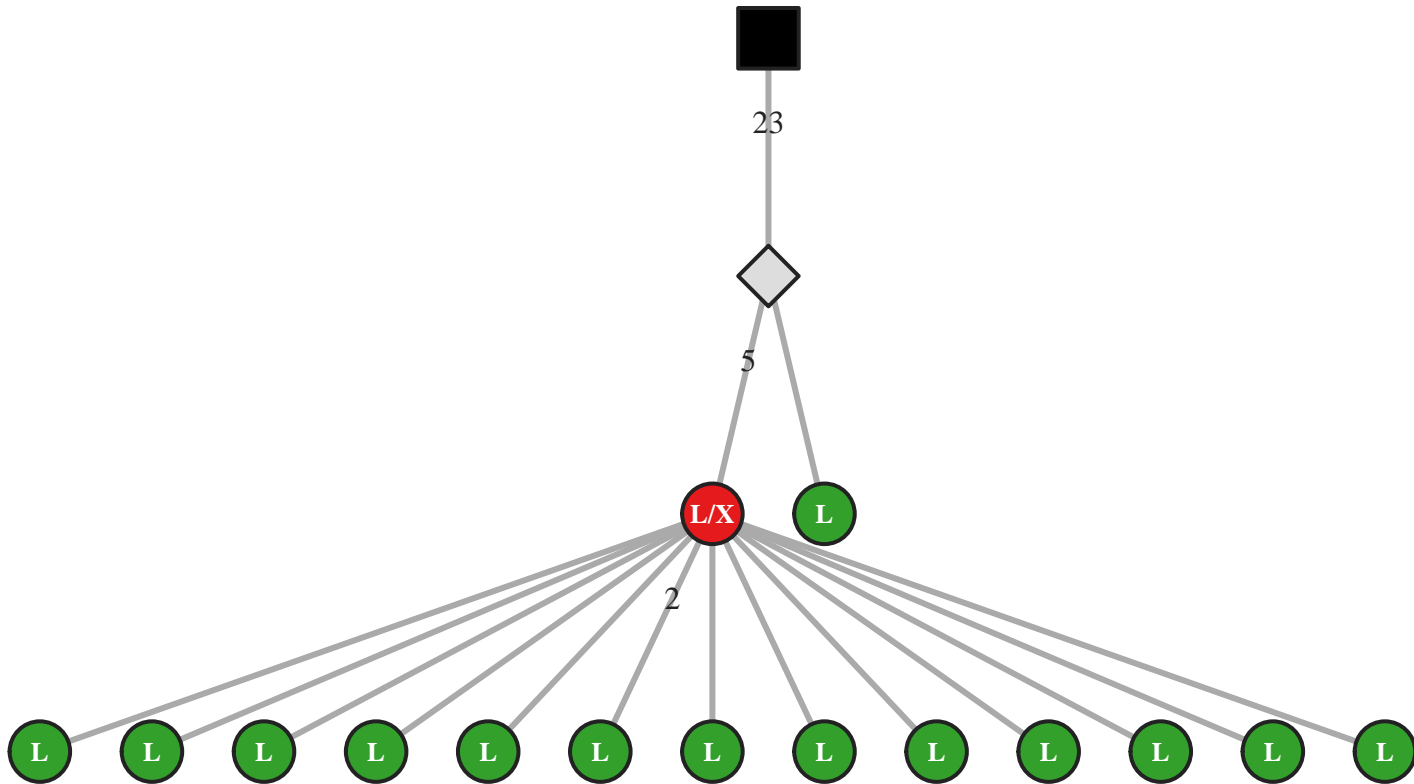
M5 IgG IGHV1-69/J2 36bp (23733)



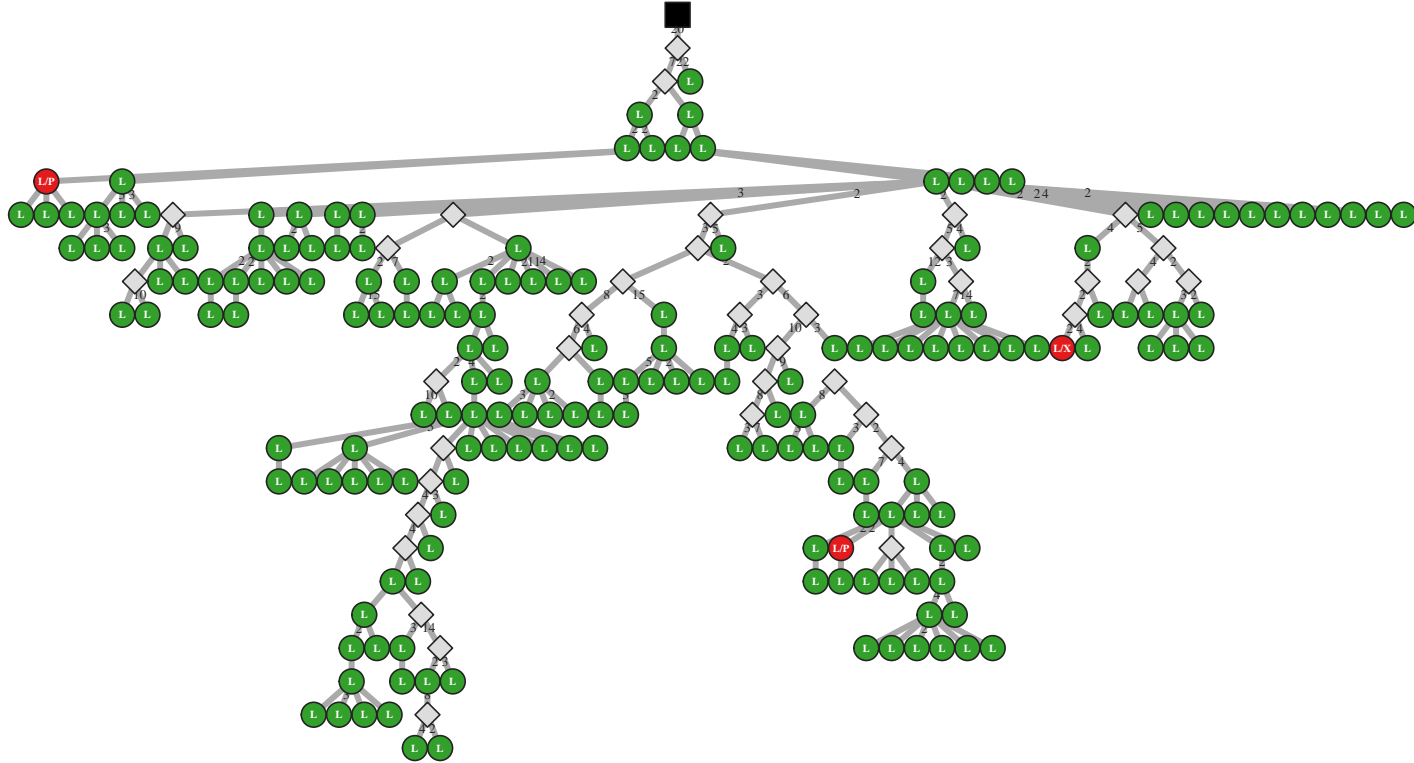
M5 IgG IGHV1-69/J2 45bp (32475)



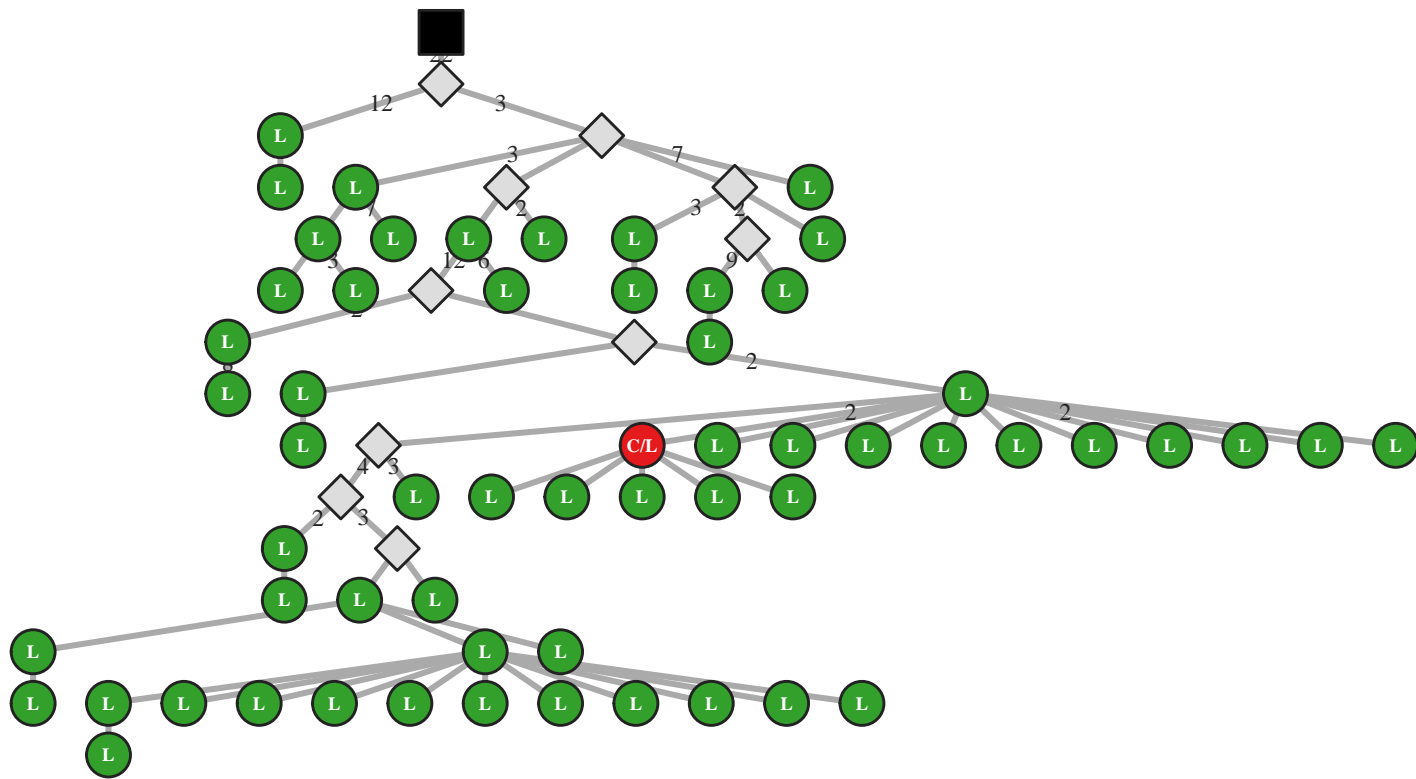
M5 IgG IGHV1-69/J2 45bp (32478)



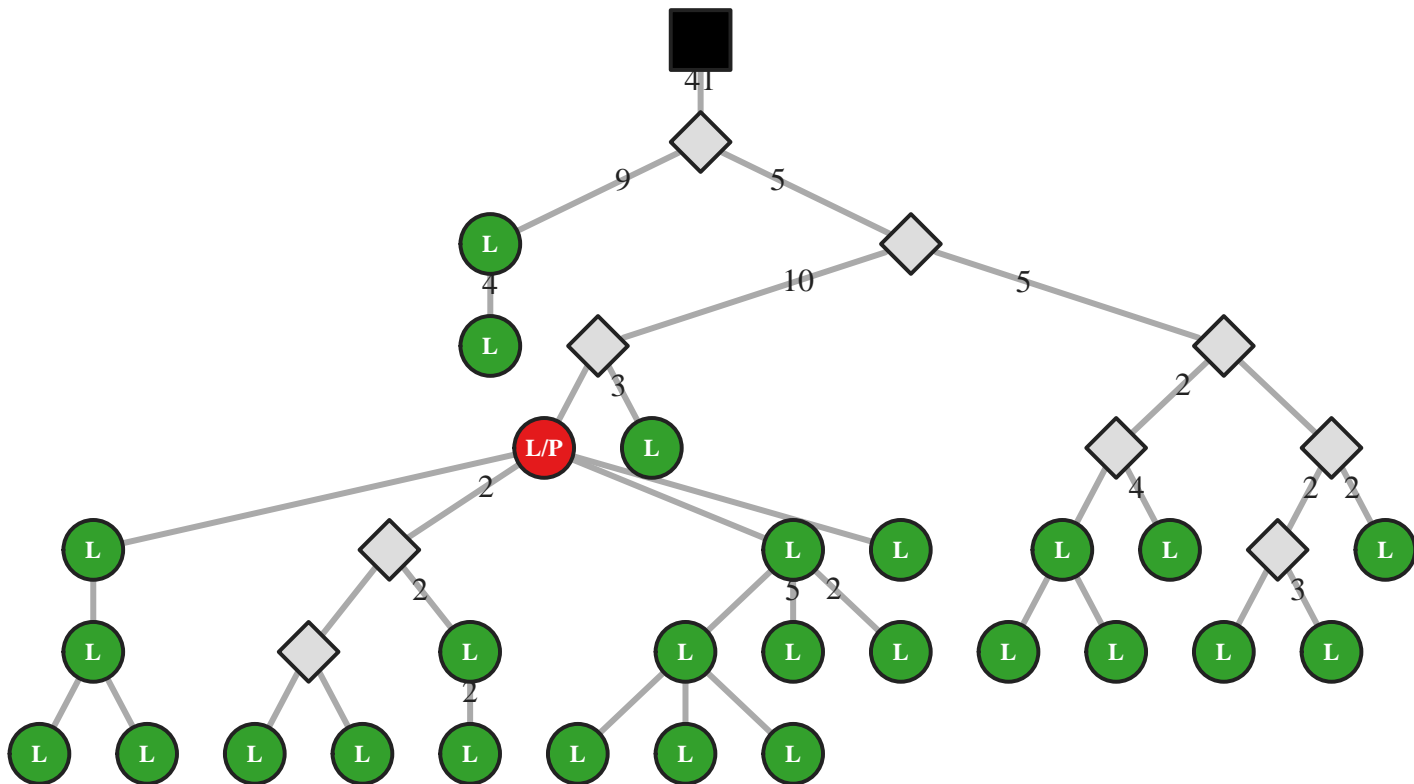
M5 IgG IGHV1-69/J2 48bp (50158)



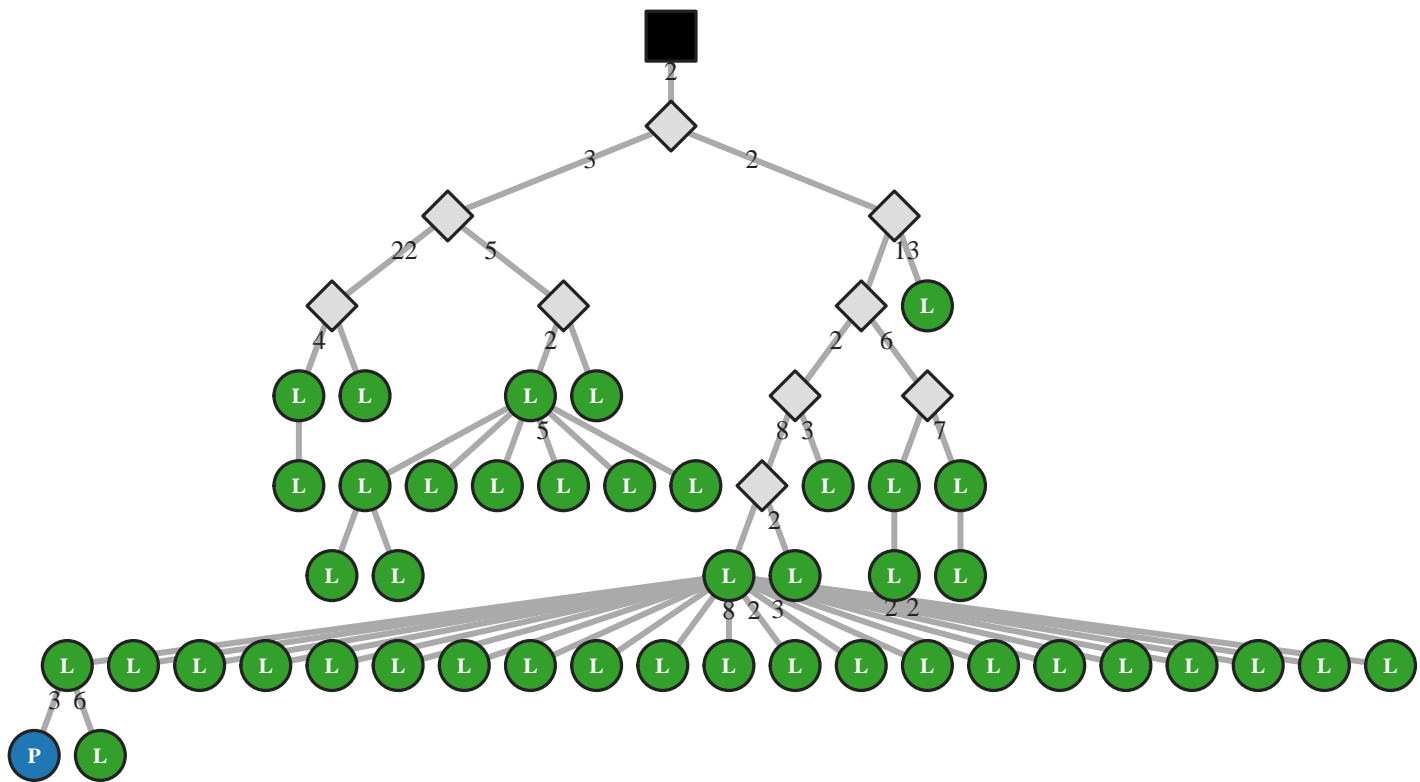
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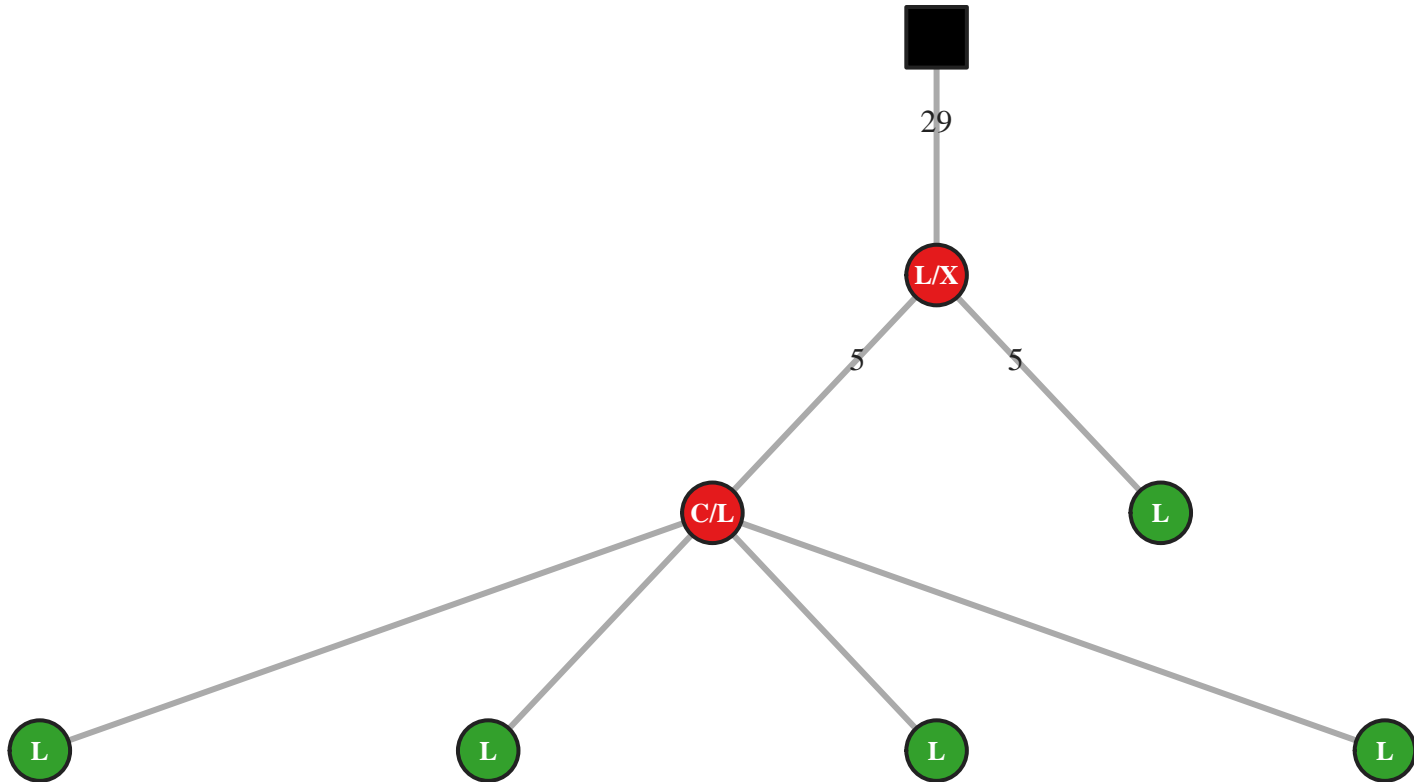
M5 IgG IGHV1-69/J2 60bp (50169)



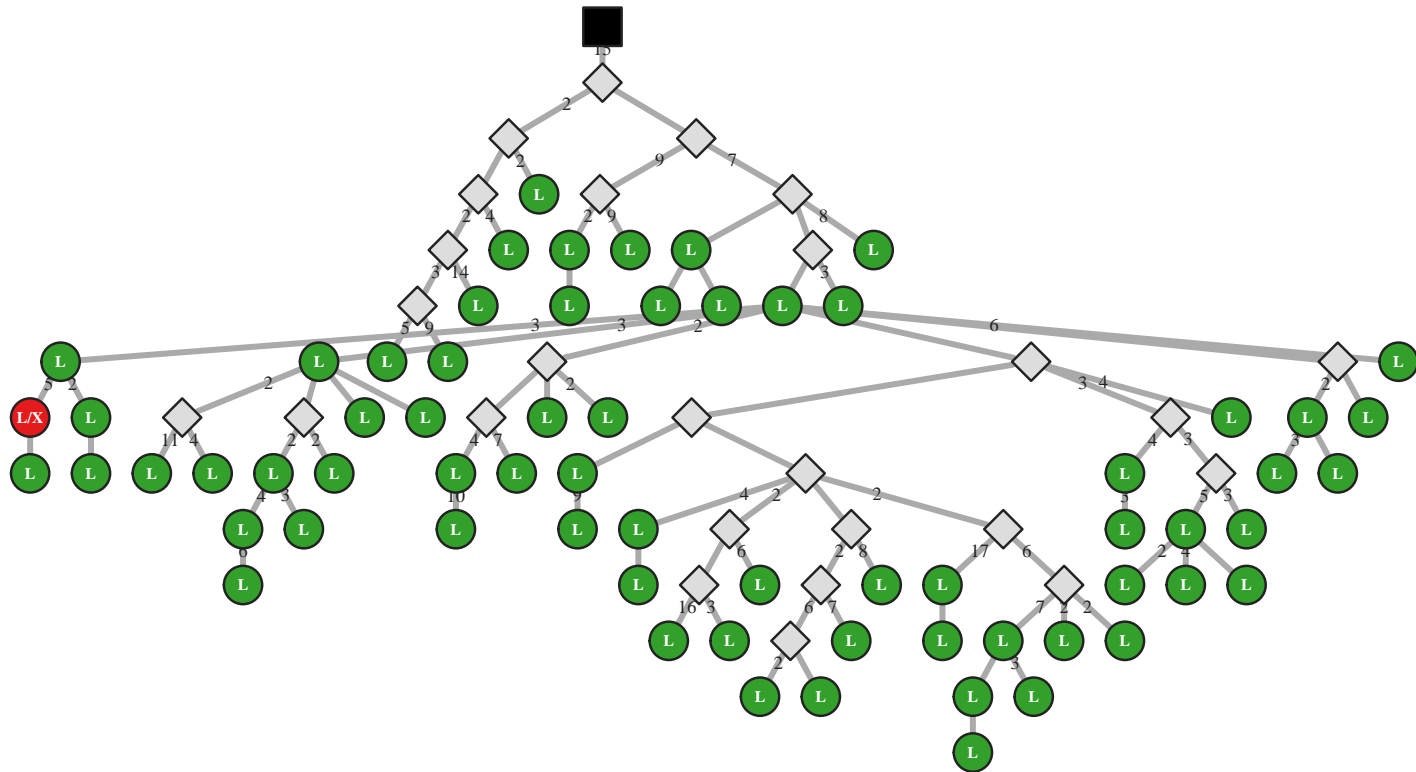
M5 IgG IGHV1-69/J3 33bp (50184)



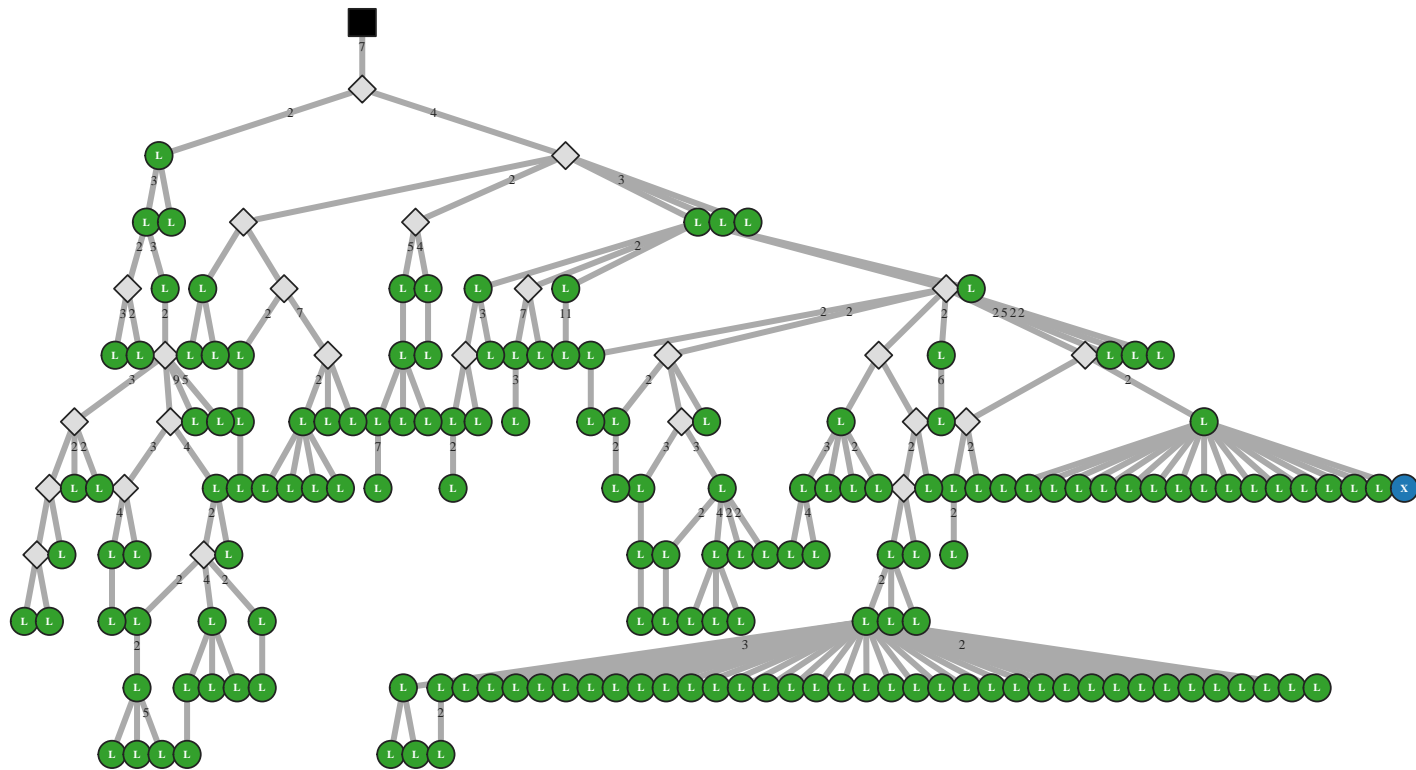
M5 IgG IGHV1-69/J3 36bp (40698)



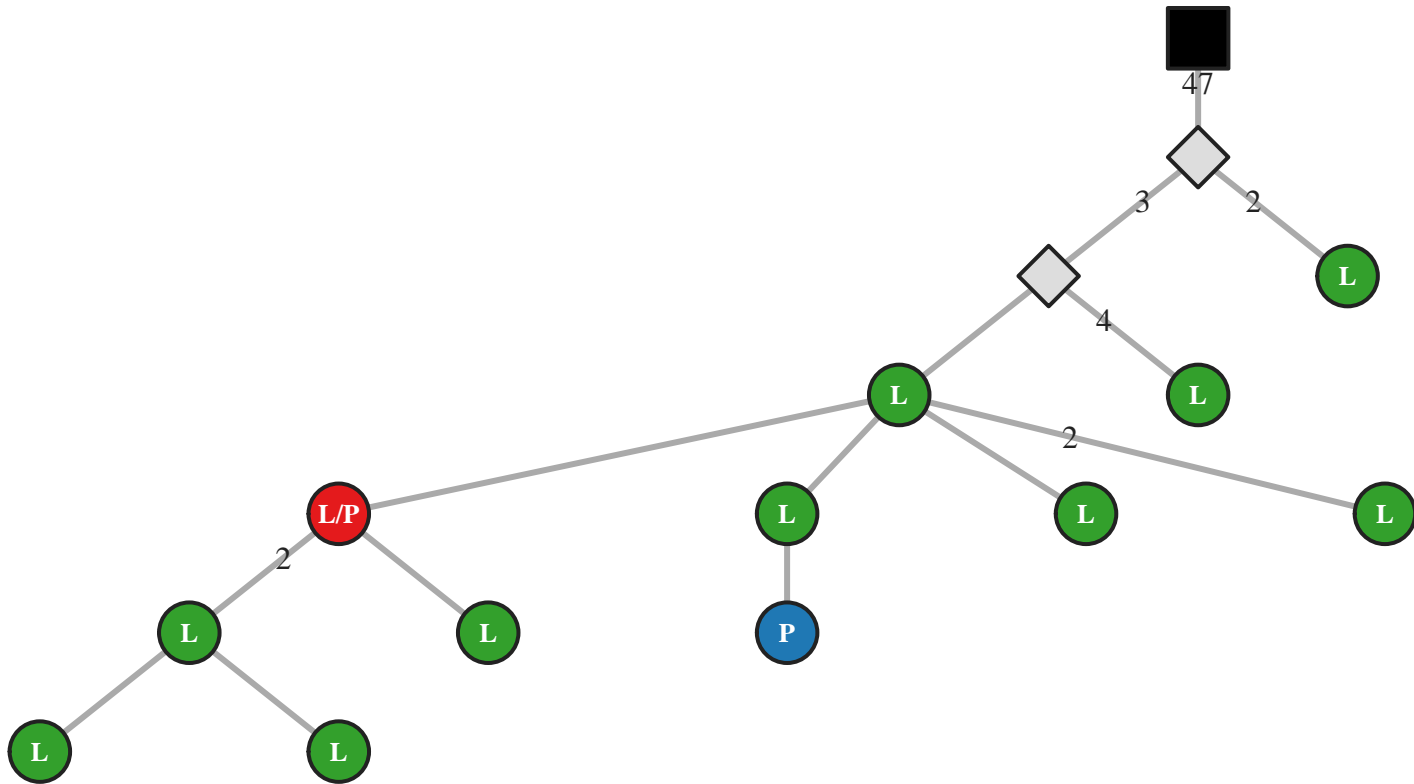
M5 IgG IGHV1-69/J3 42bp (4931)



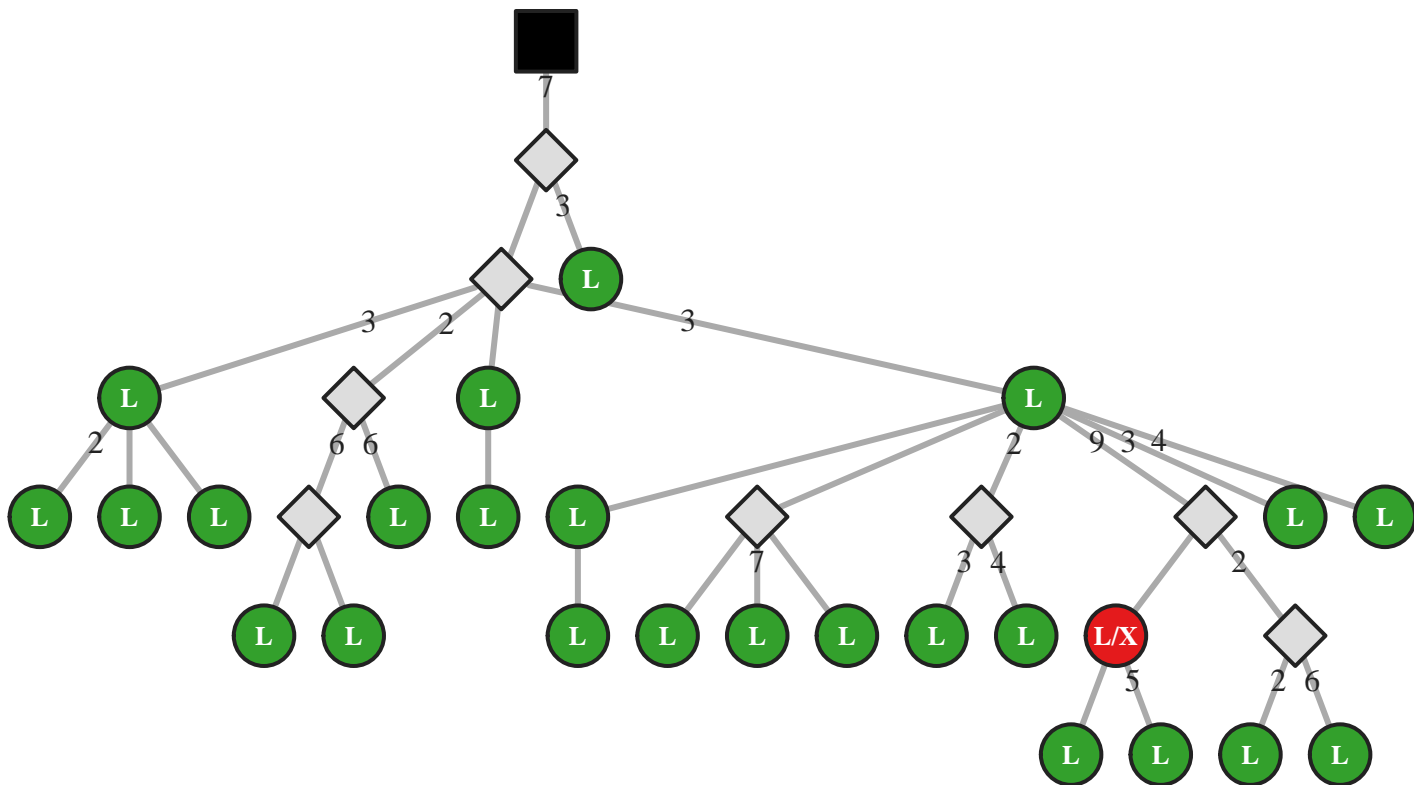
M5 IgG IGHV1-69/J3 42bp (4964)



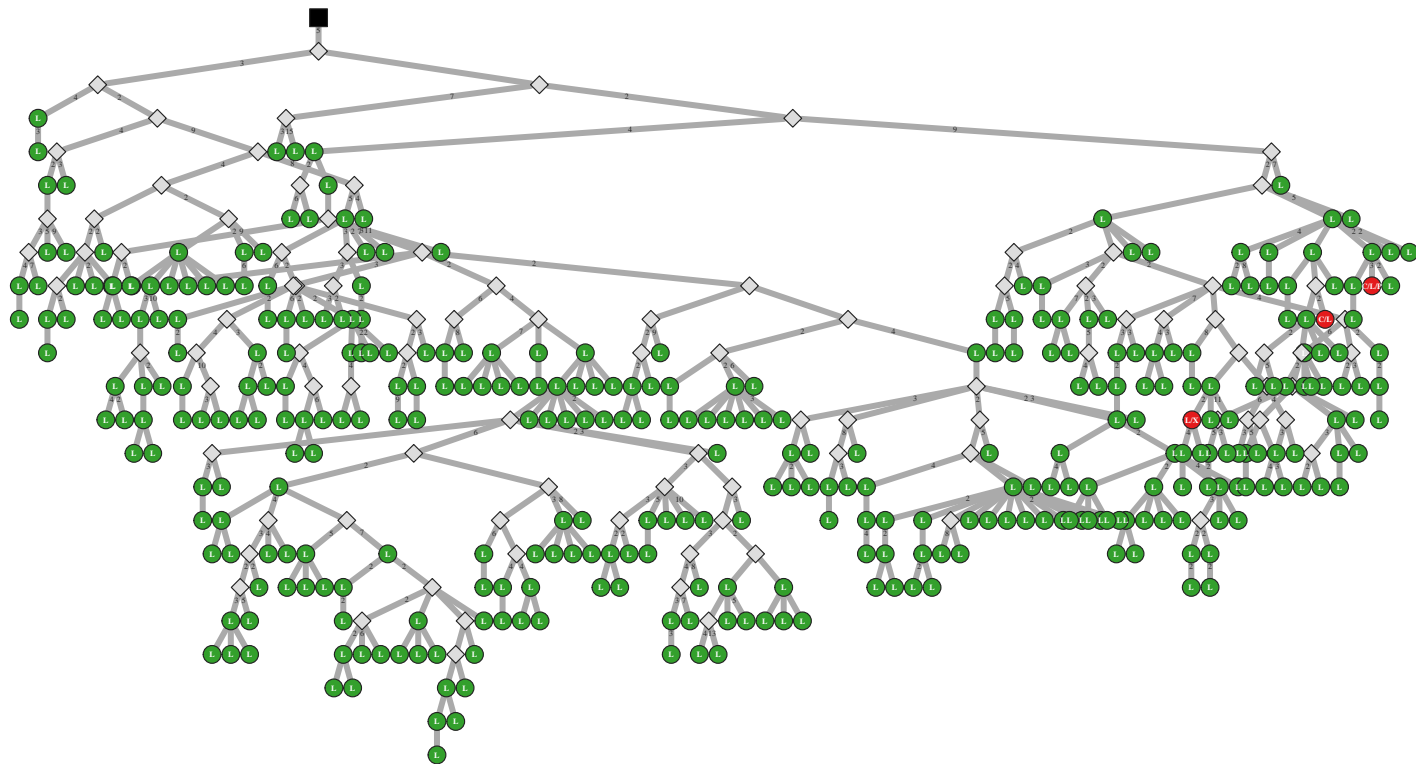
M5 IgG IGHV1-69/J3 42bp (4966)



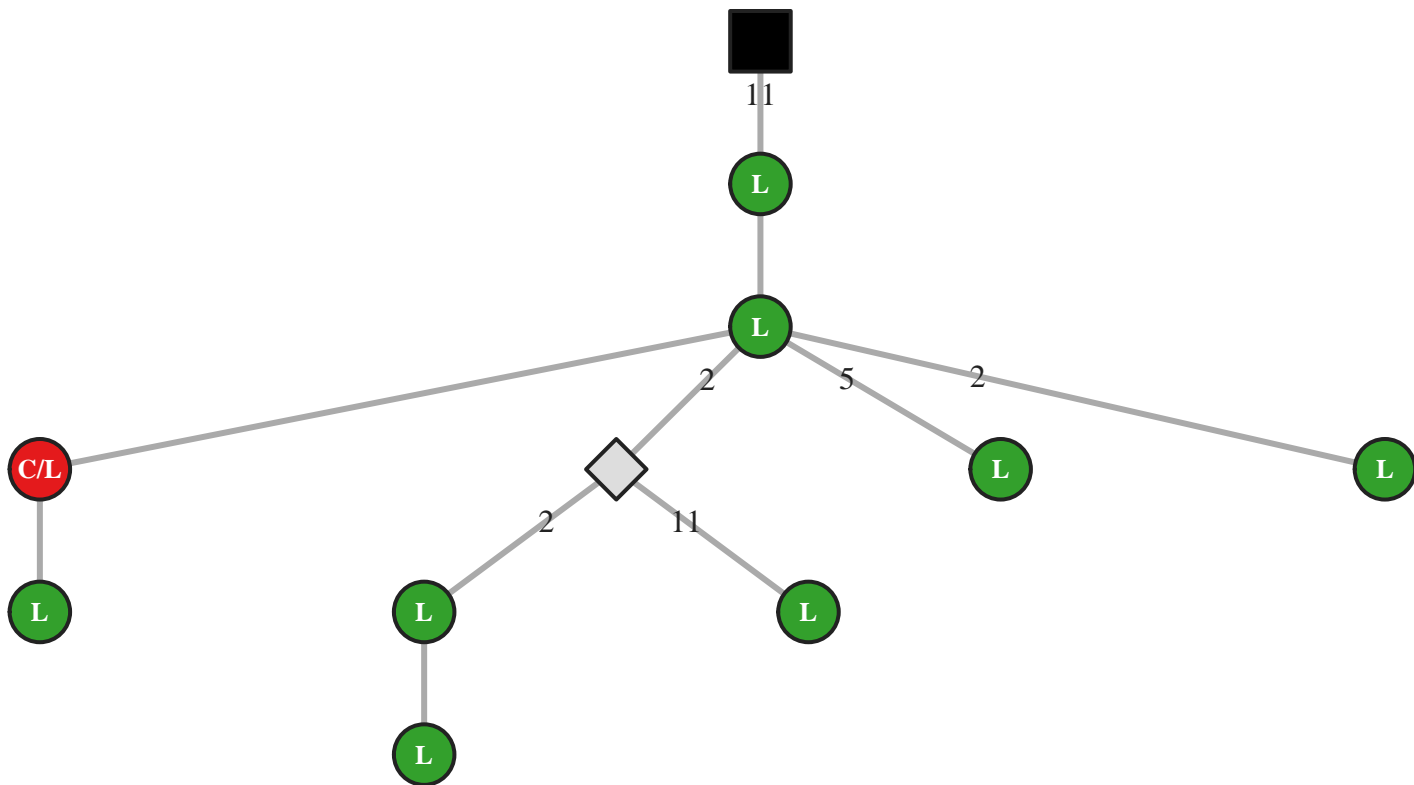
M5 IgG IGHV1-69/J3 45bp (23753)



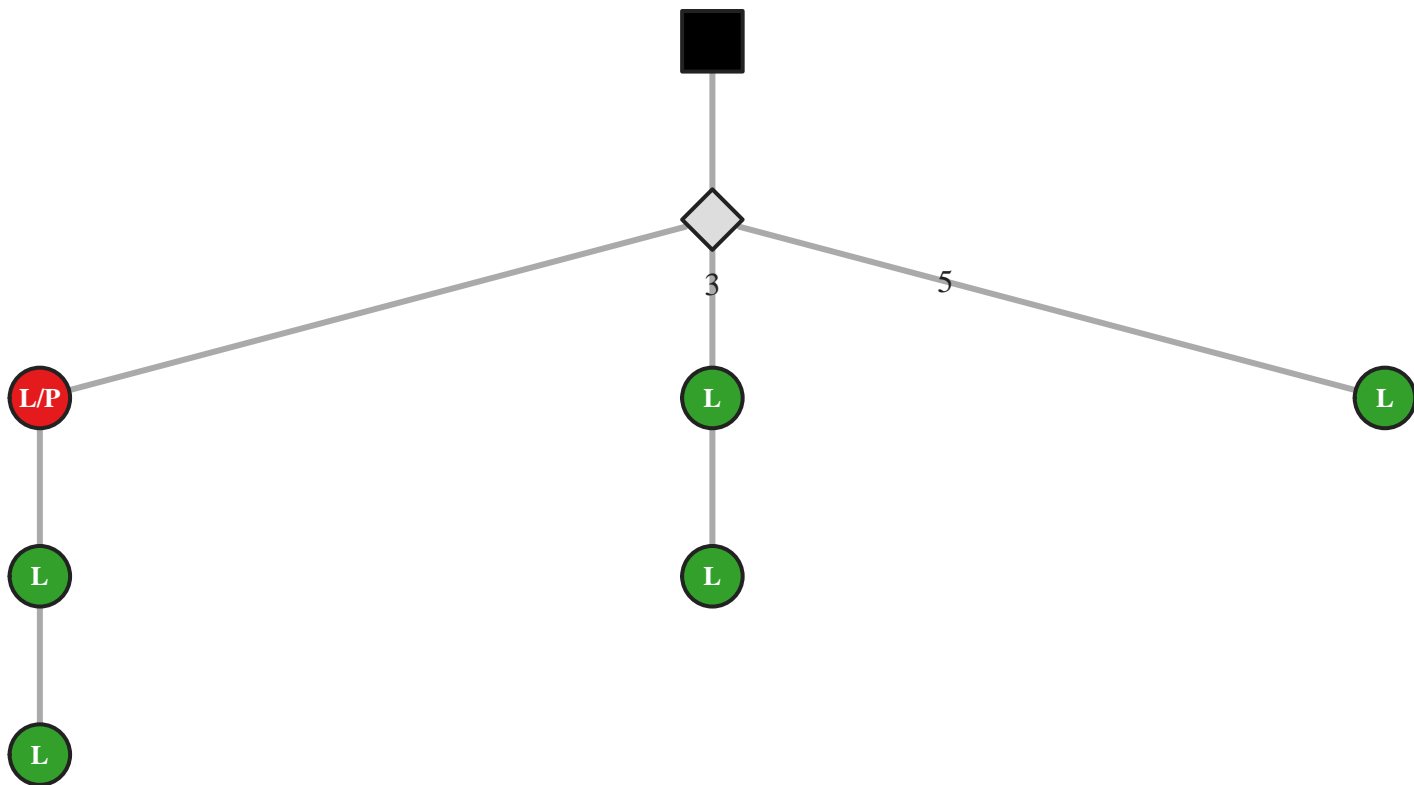
M5 IgG IGHV1-69/J3 45bp (23781)



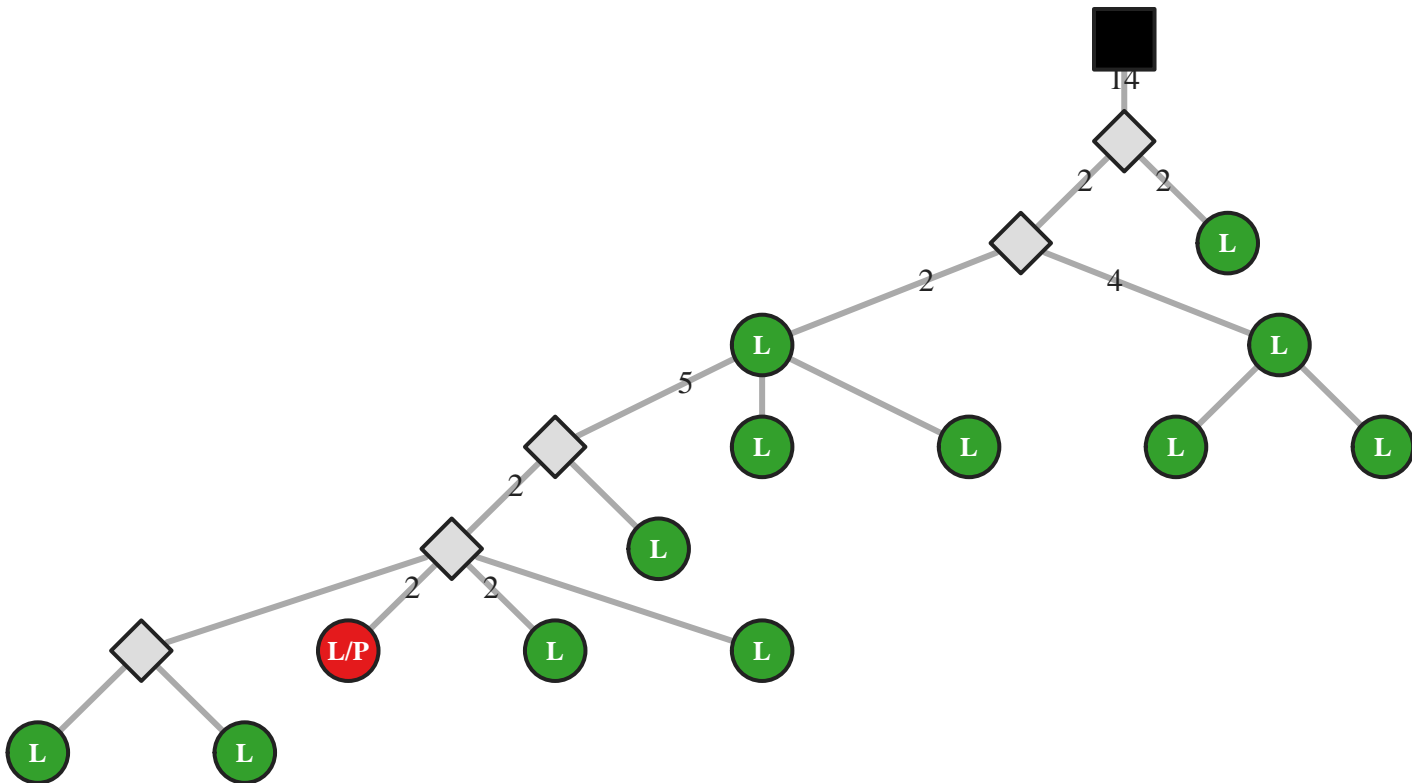
M5 IgG IGHV1-69/J3 51bp (40761)



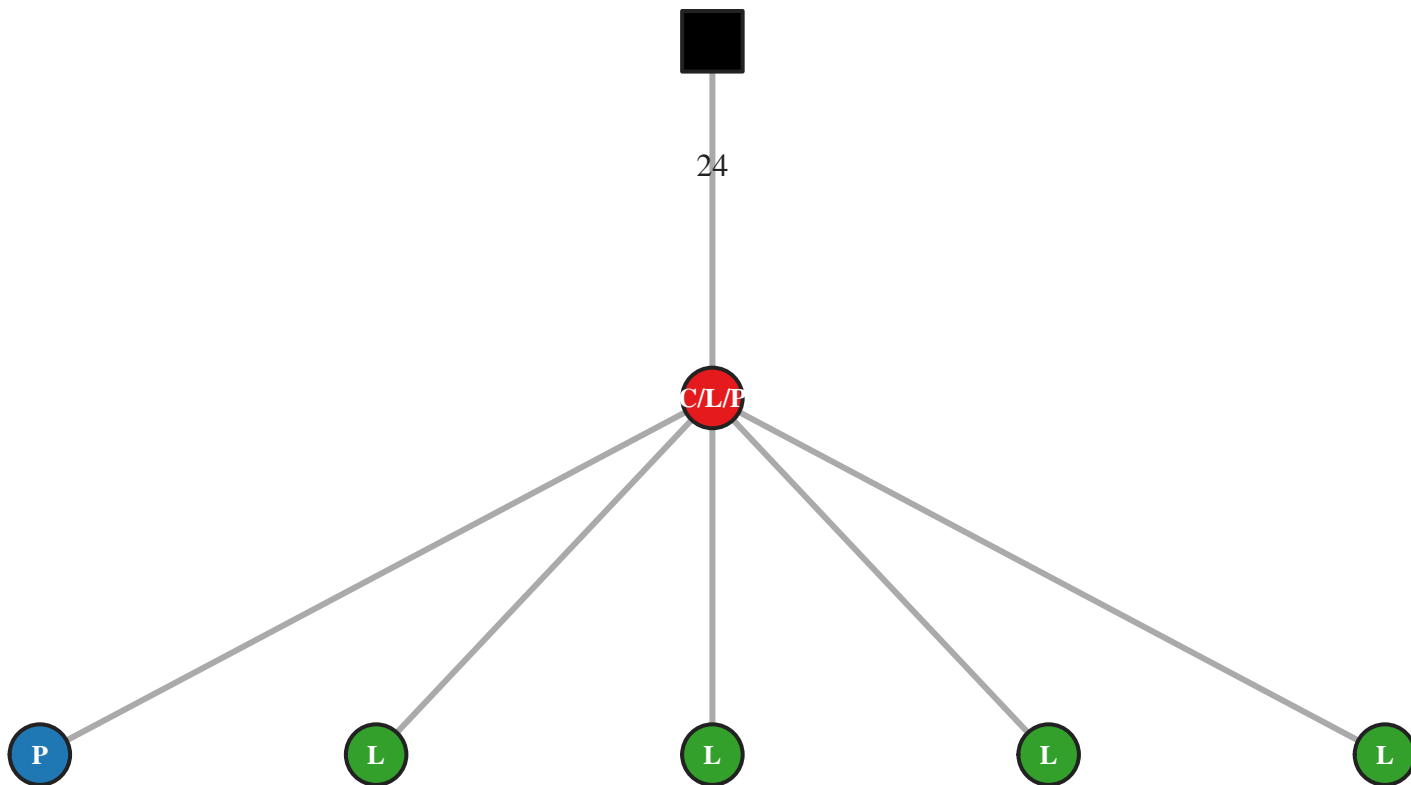
M5 IgG IGHV1-69/J3 51bp (40784)



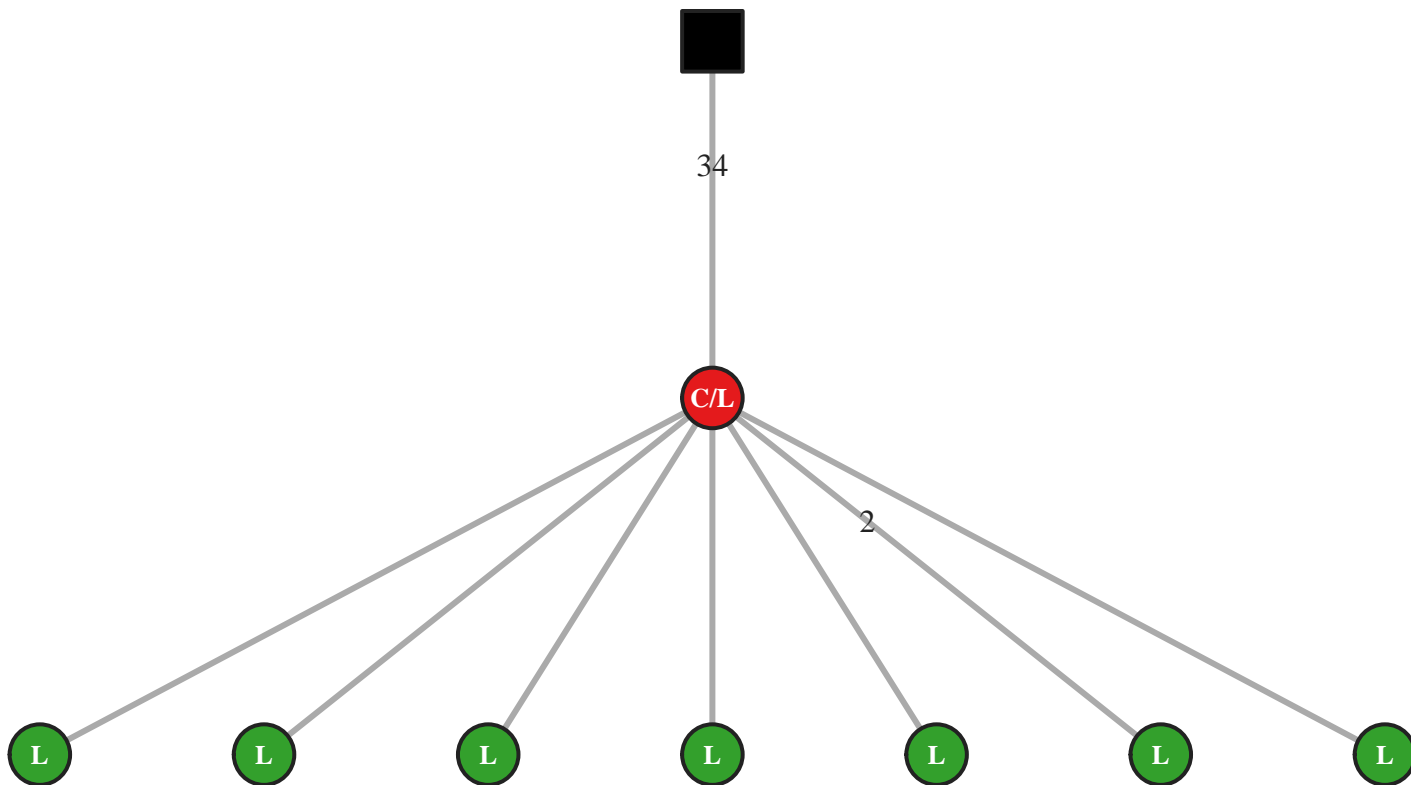
M5 IgA IGHV1-69/J3 54bp (48561)



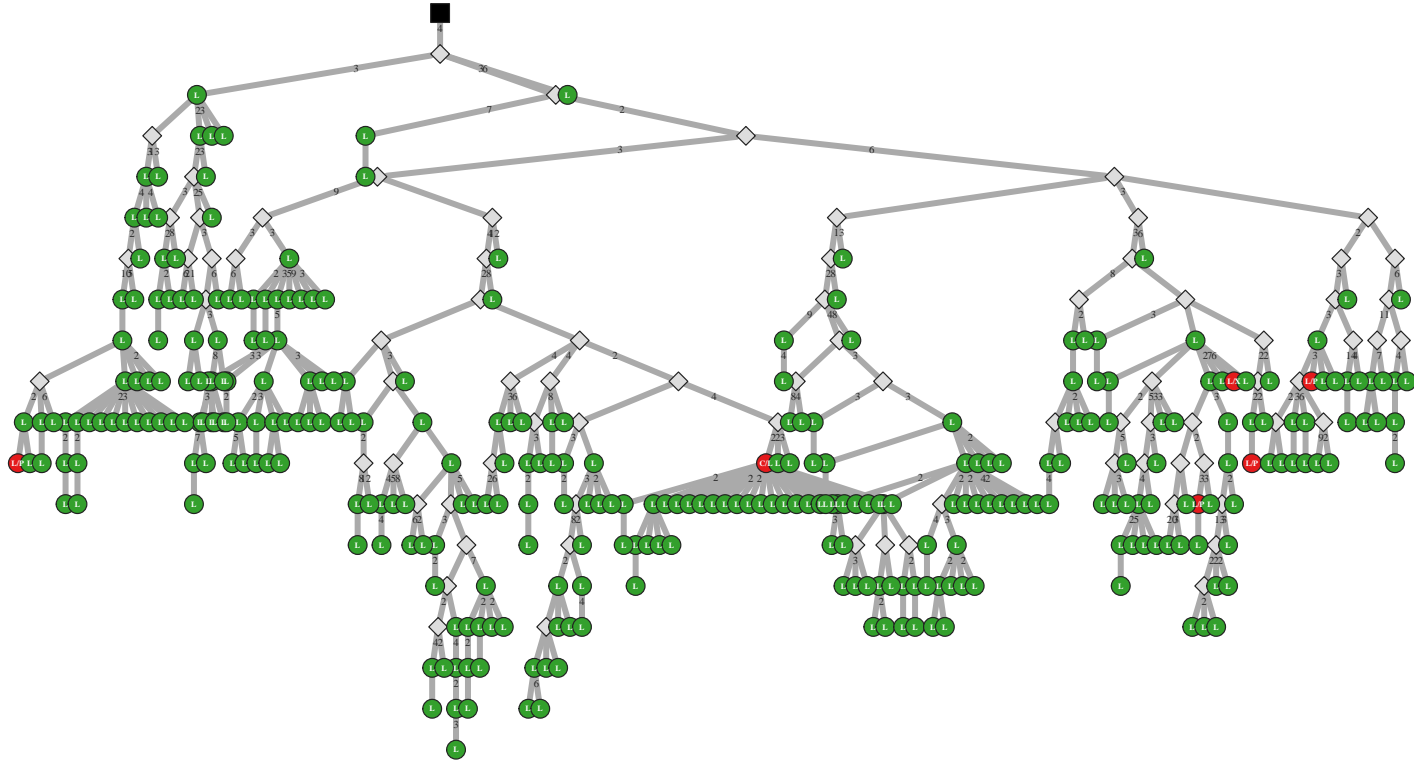
M5 IgG IGHV1-69/J3 54bp (4970)



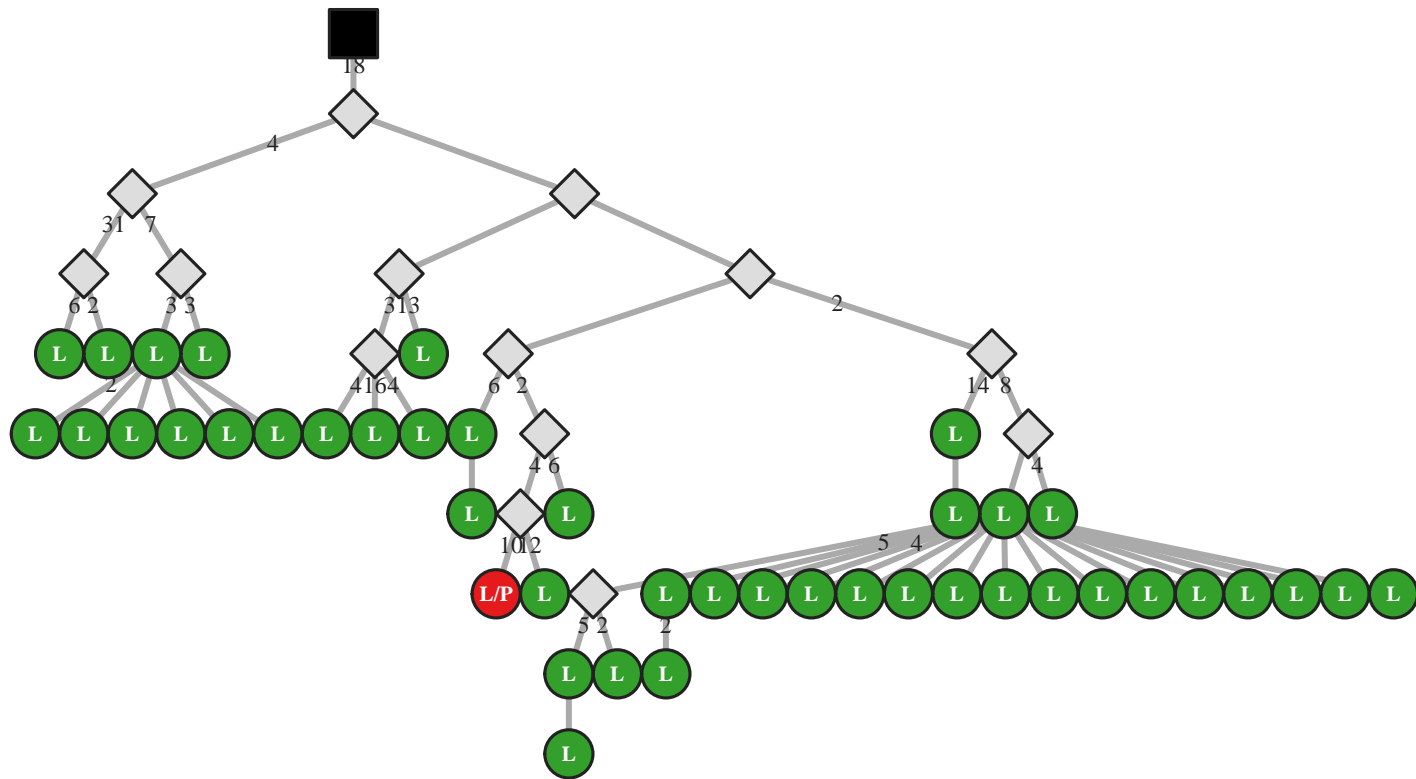
M5 IgG IGHV1-69/J3 54bp (4971)



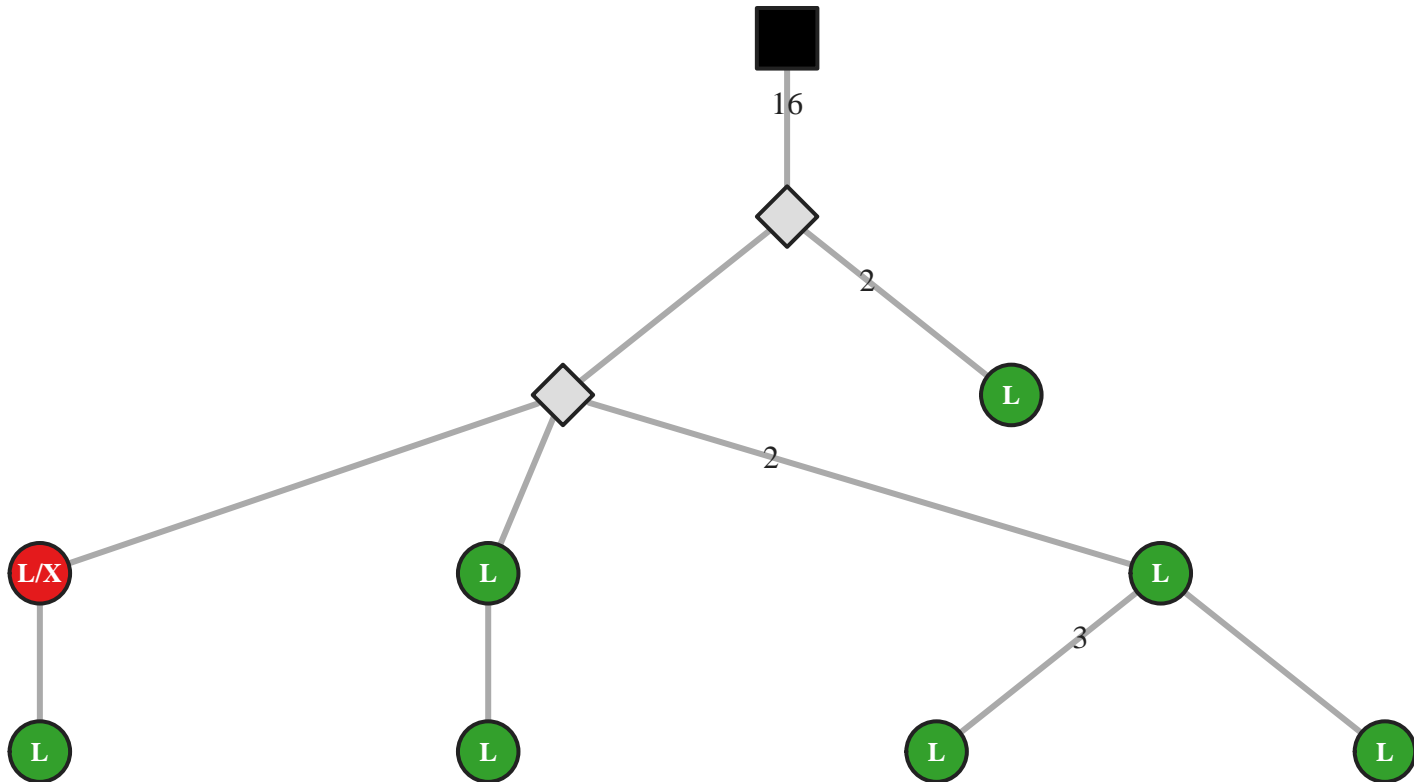
M5 IgG IGHV1-69/J3 54bp (4980)



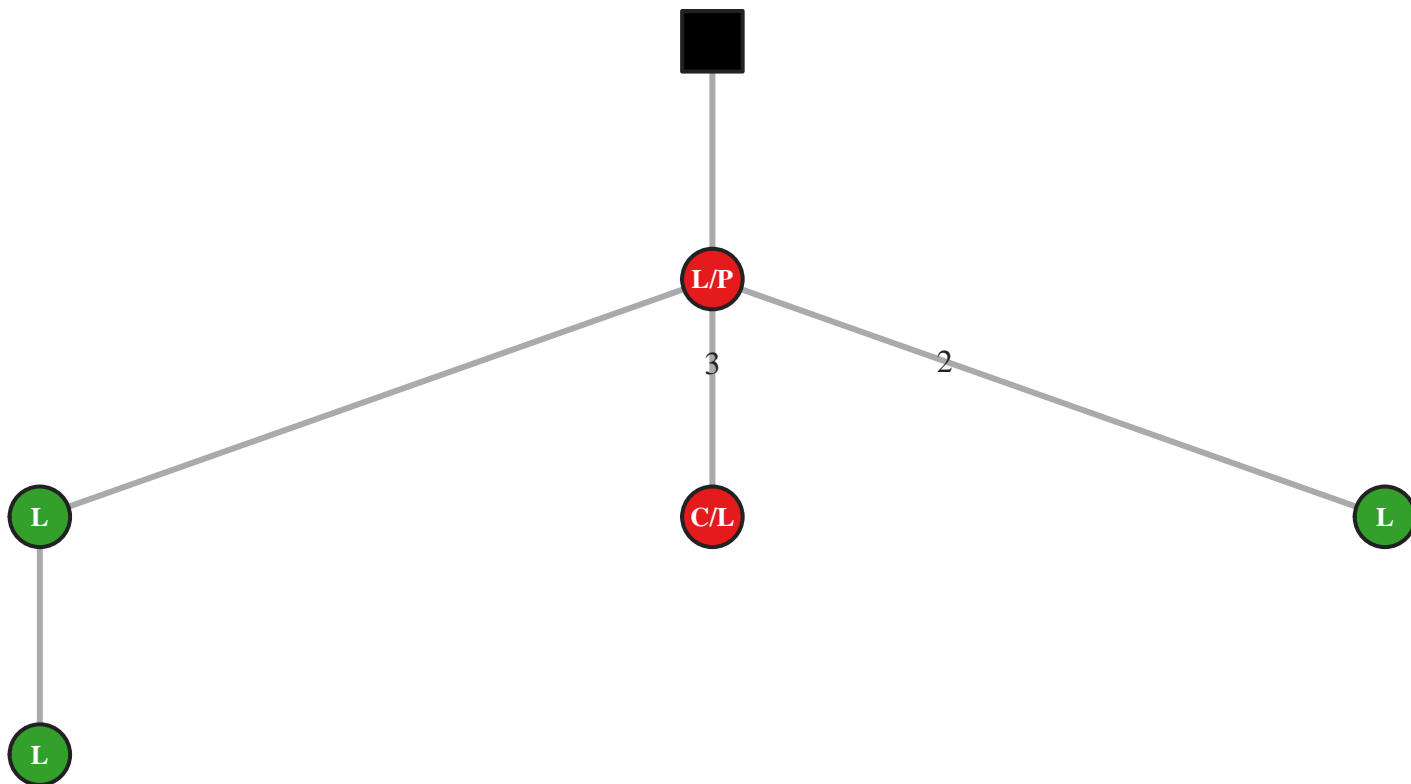
M5 IgG IGHV1-69/J3 54bp (4991)



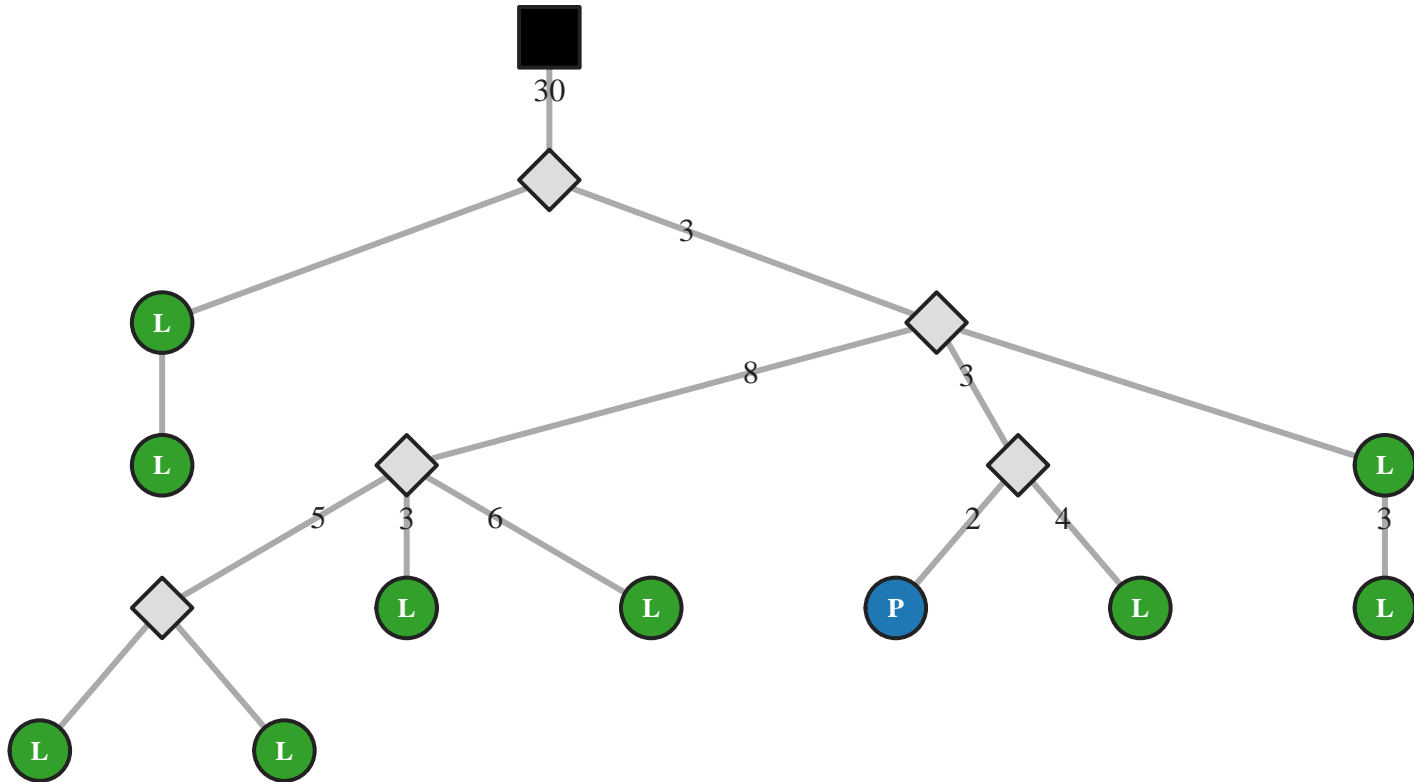
M5 IgG IGHV1-69/J3 54bp (4995)



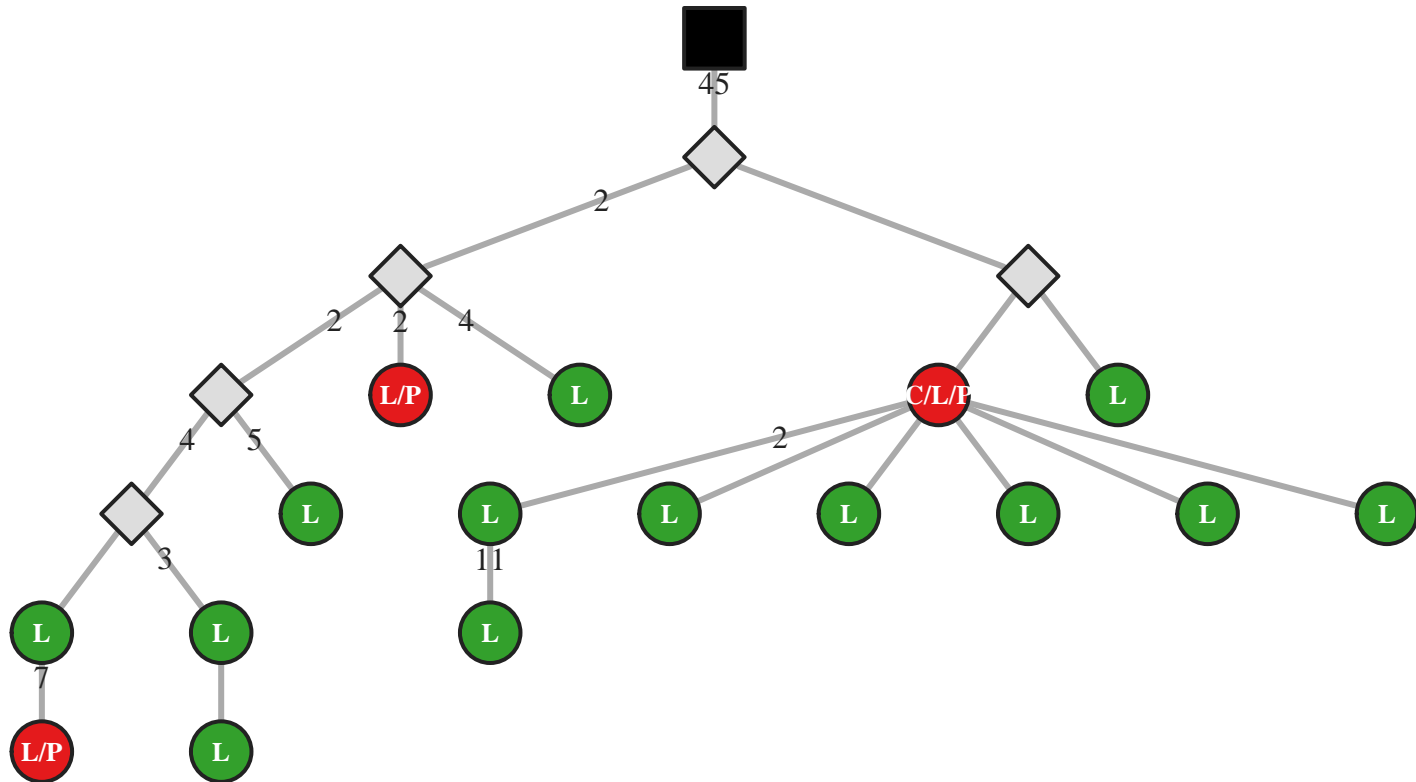
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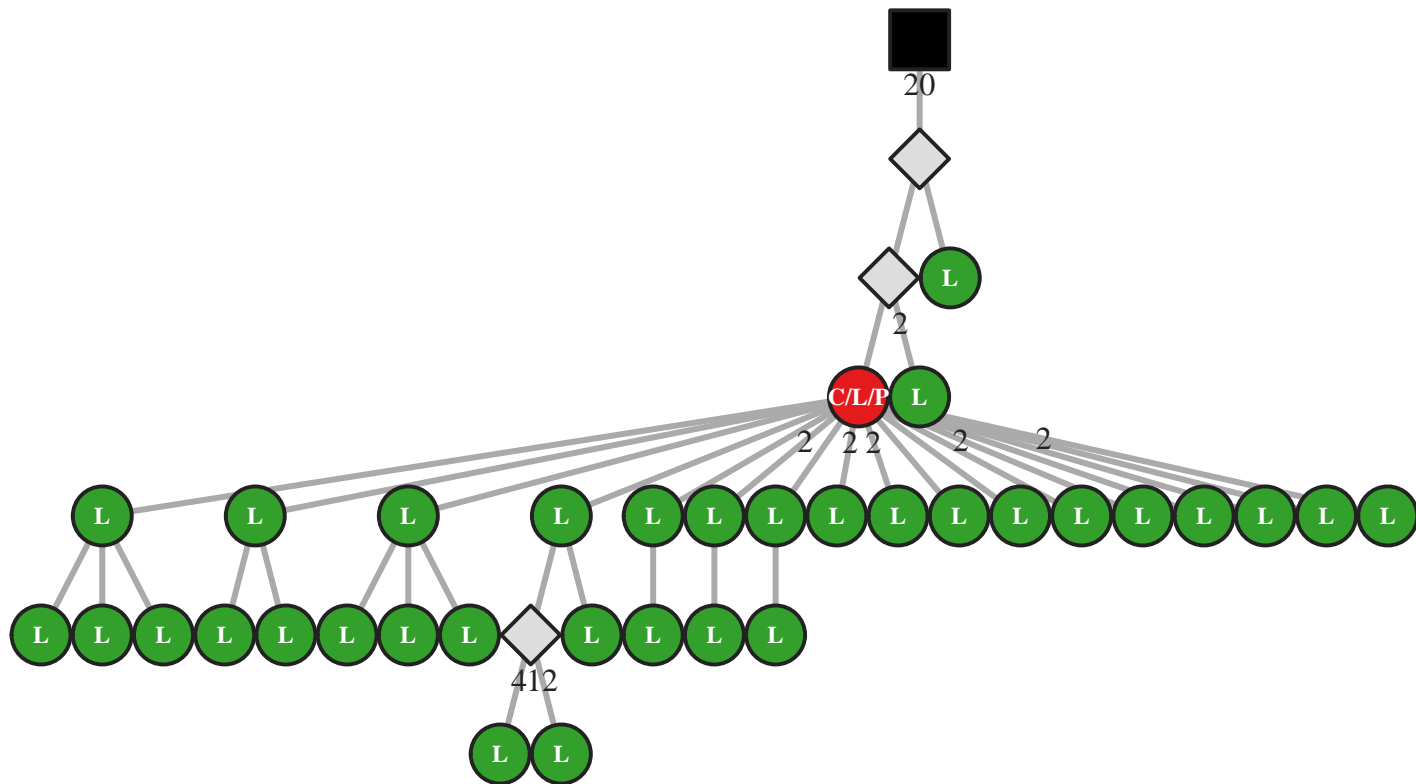
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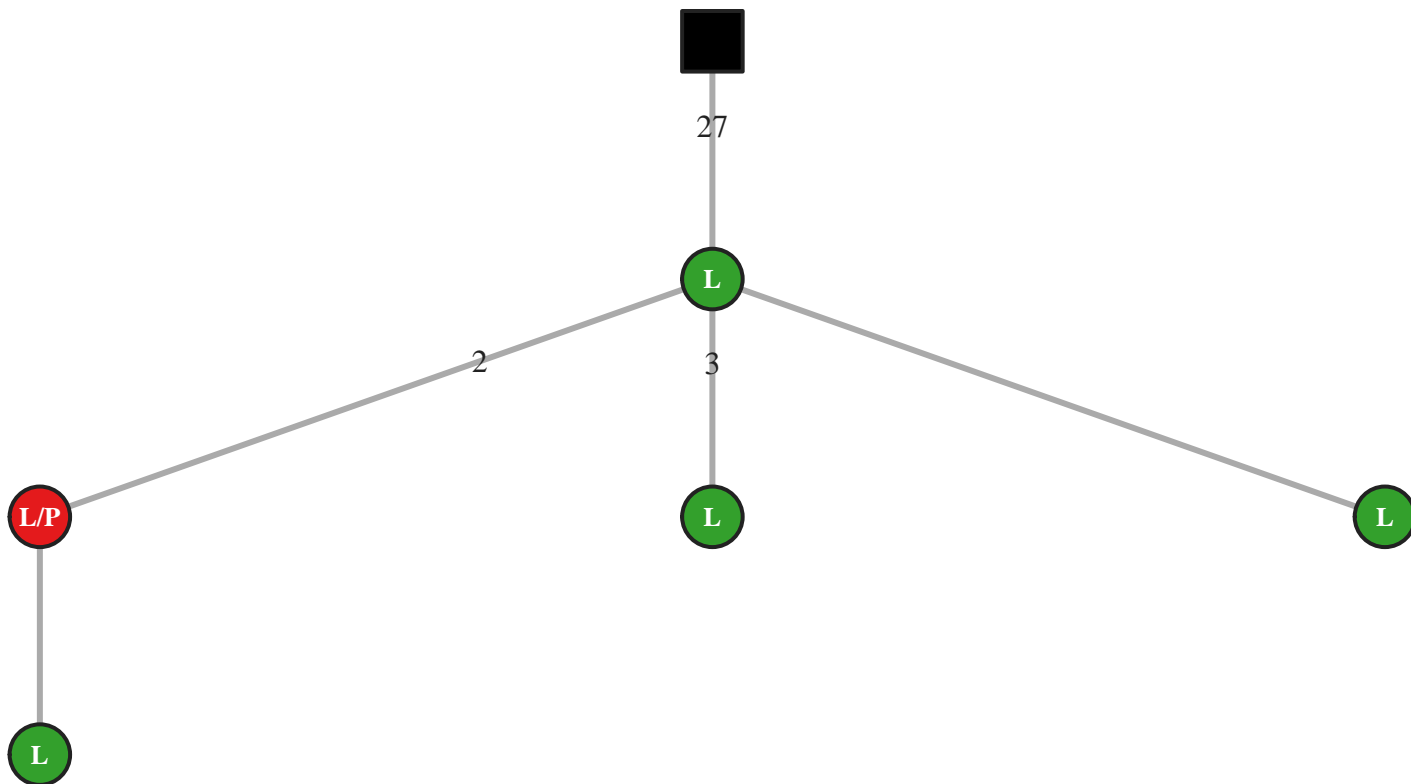
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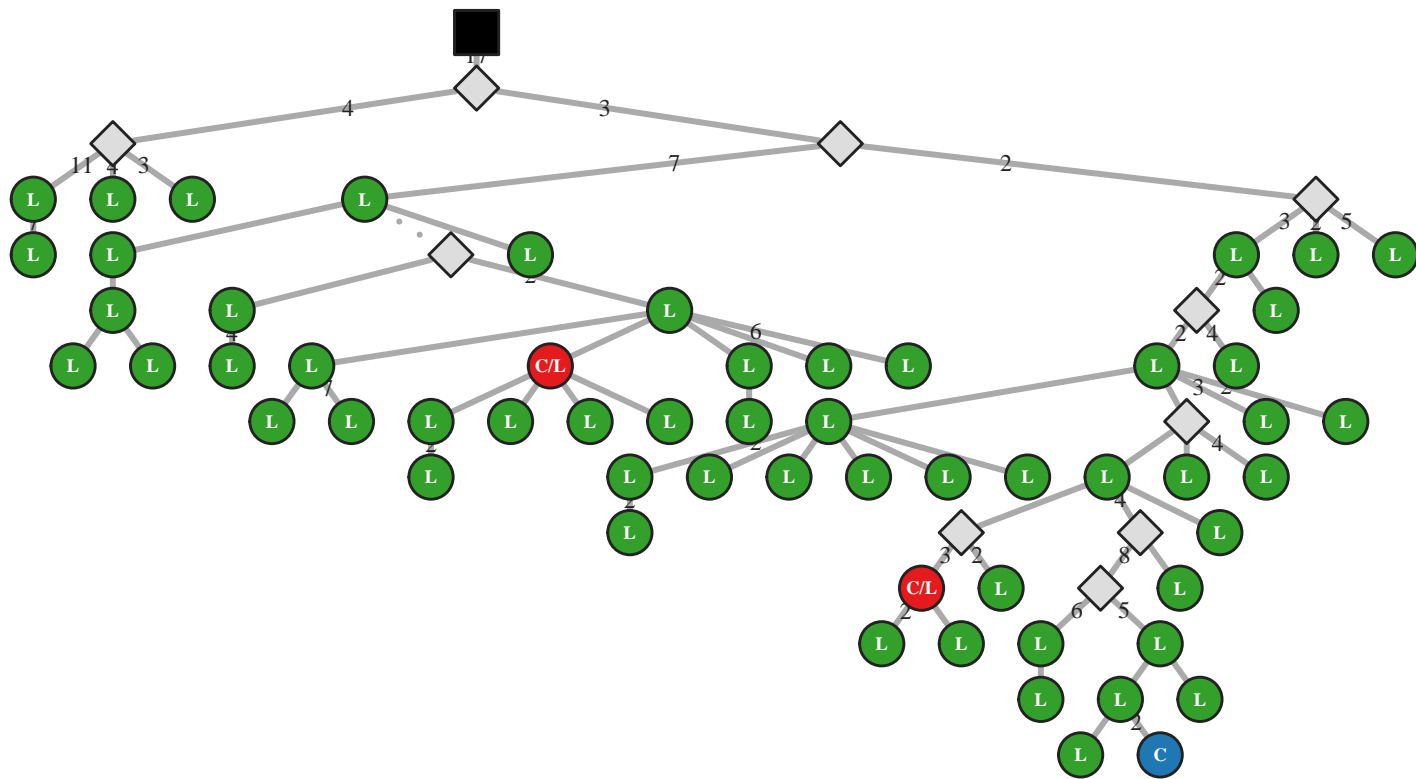
M5 IgG IGHV1-69/J3 57bp (14589)



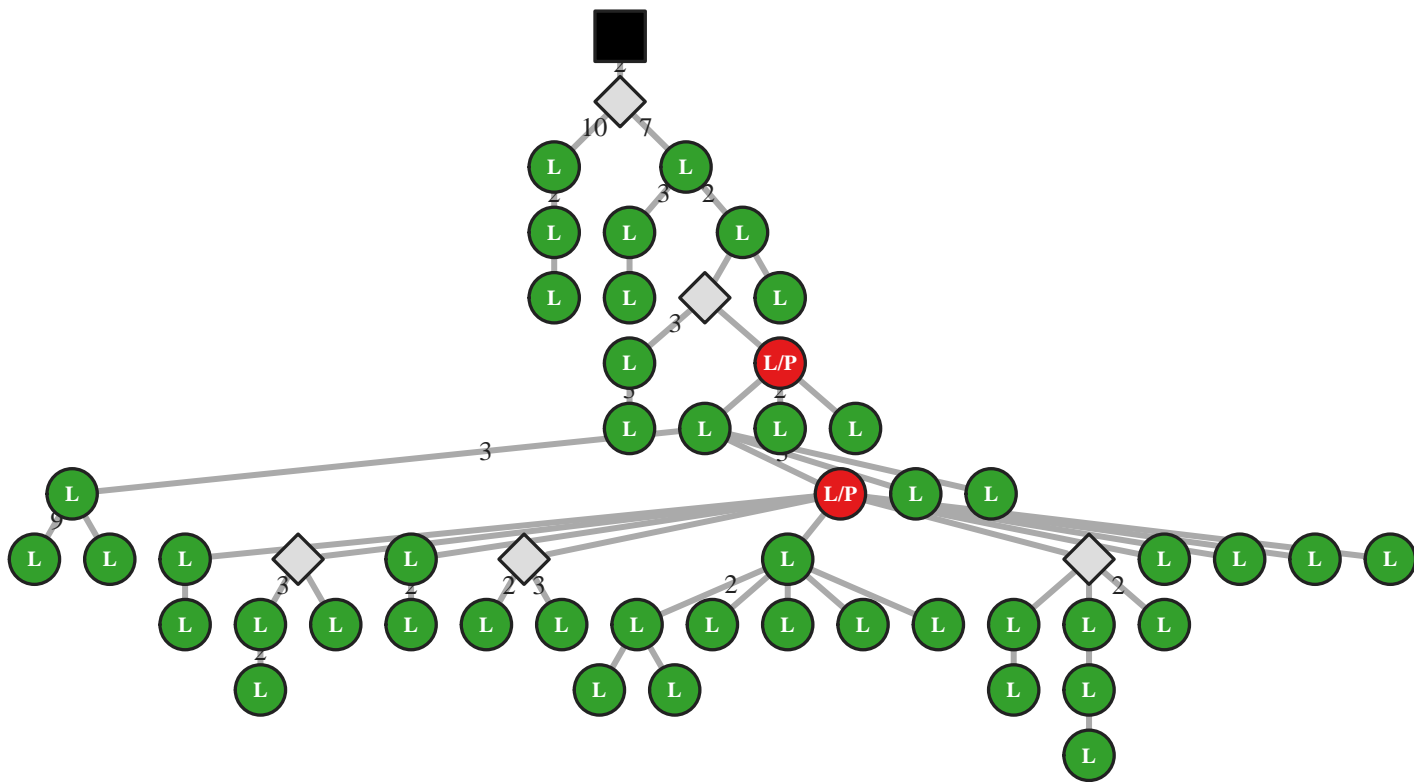
M5 IgG IGHV1-69/J3 57bp (14591)



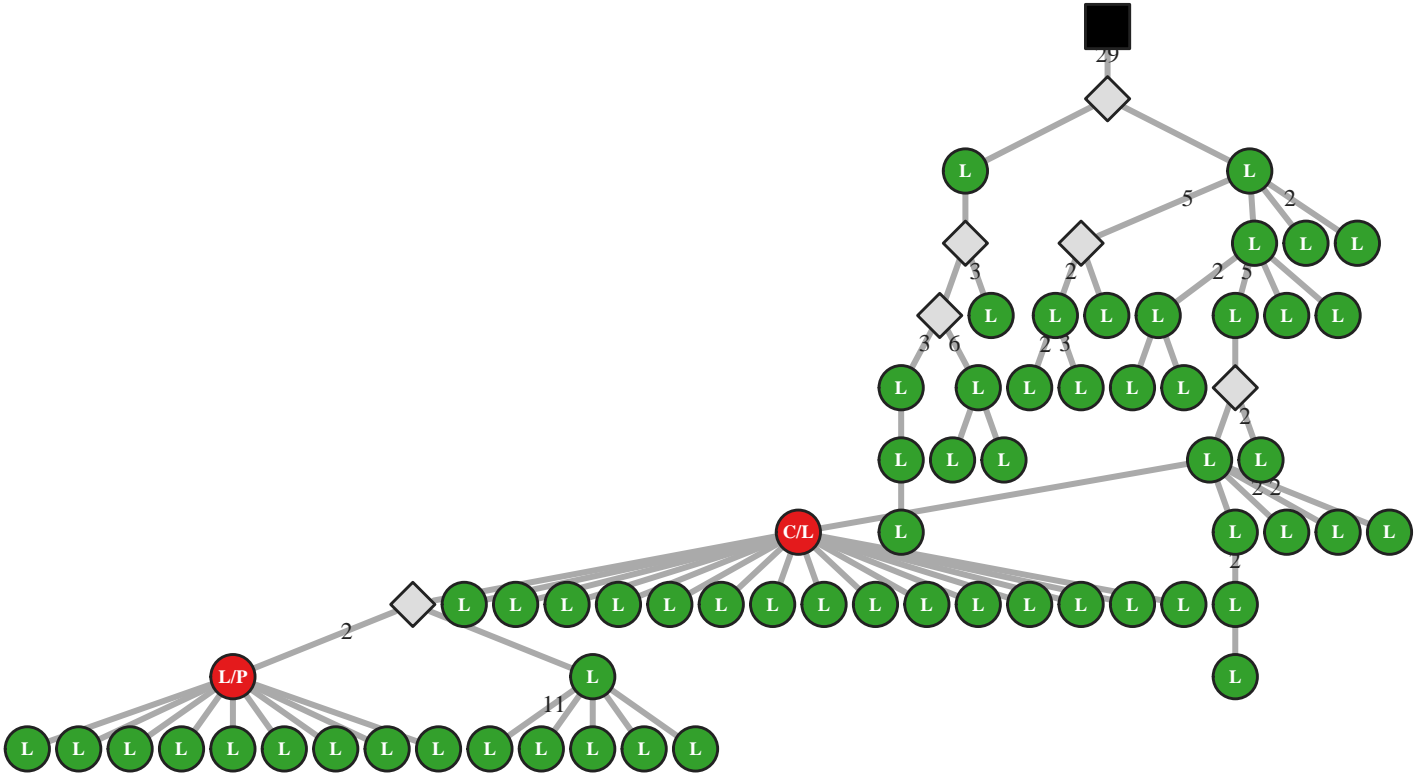
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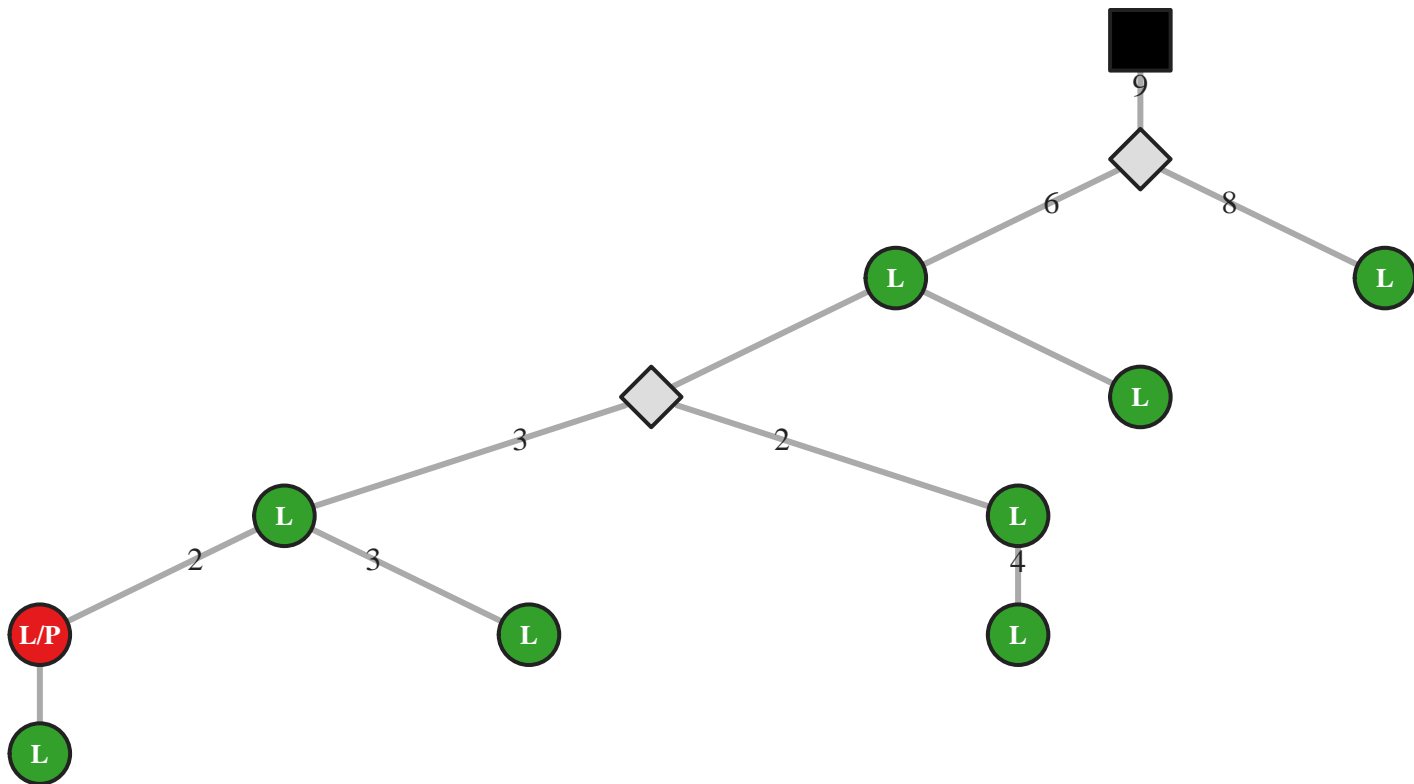
M5 IgG IGHV1-69/J3 60bp (14636)



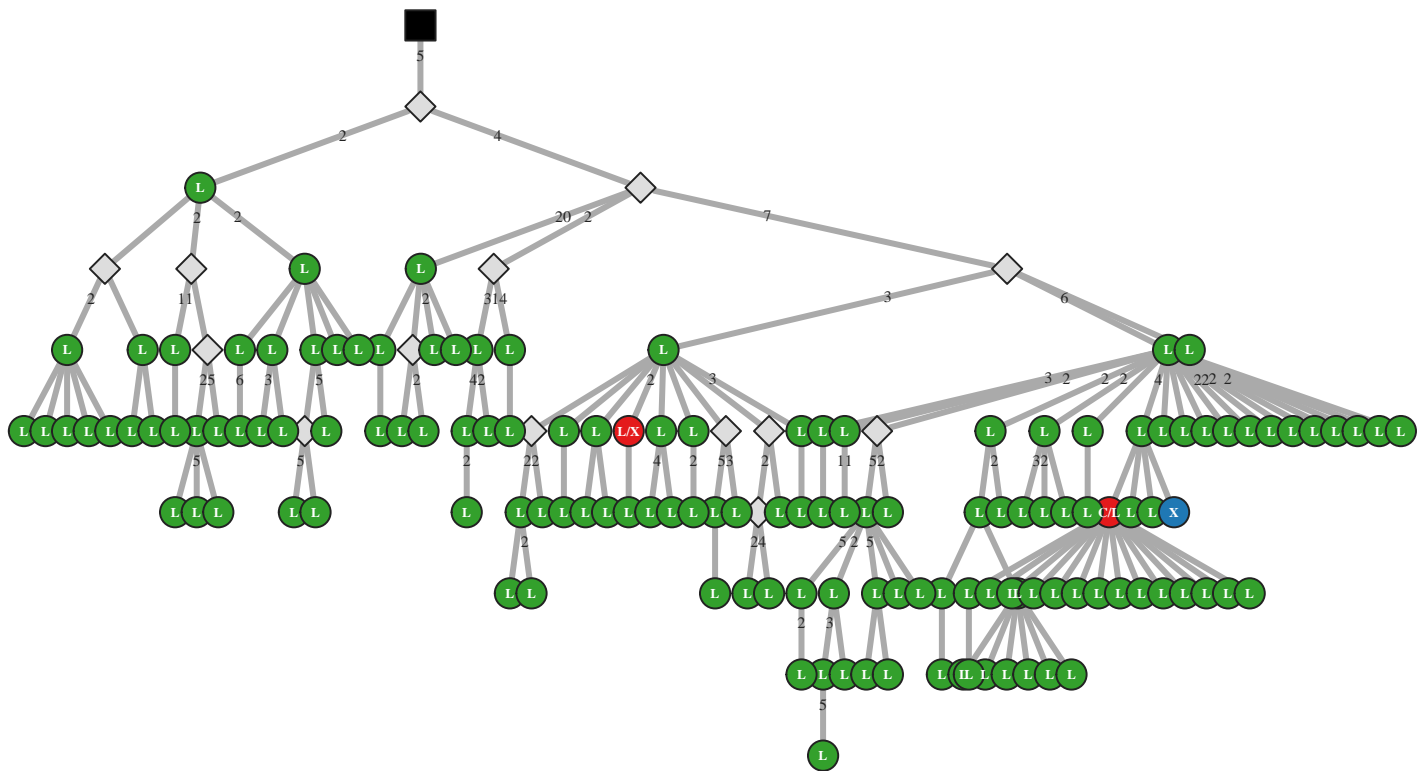
M5 IgG IGHV1-69/J3 63bp (23823)



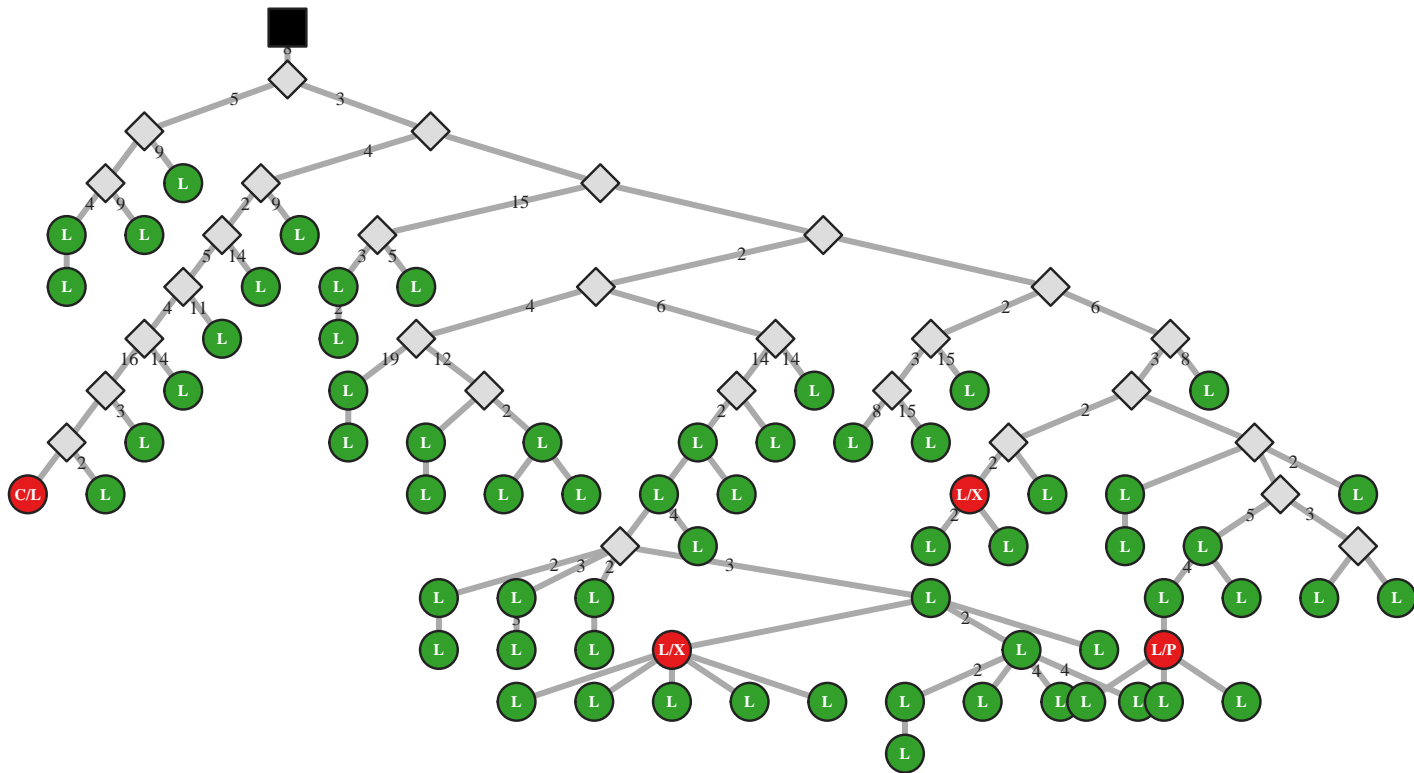
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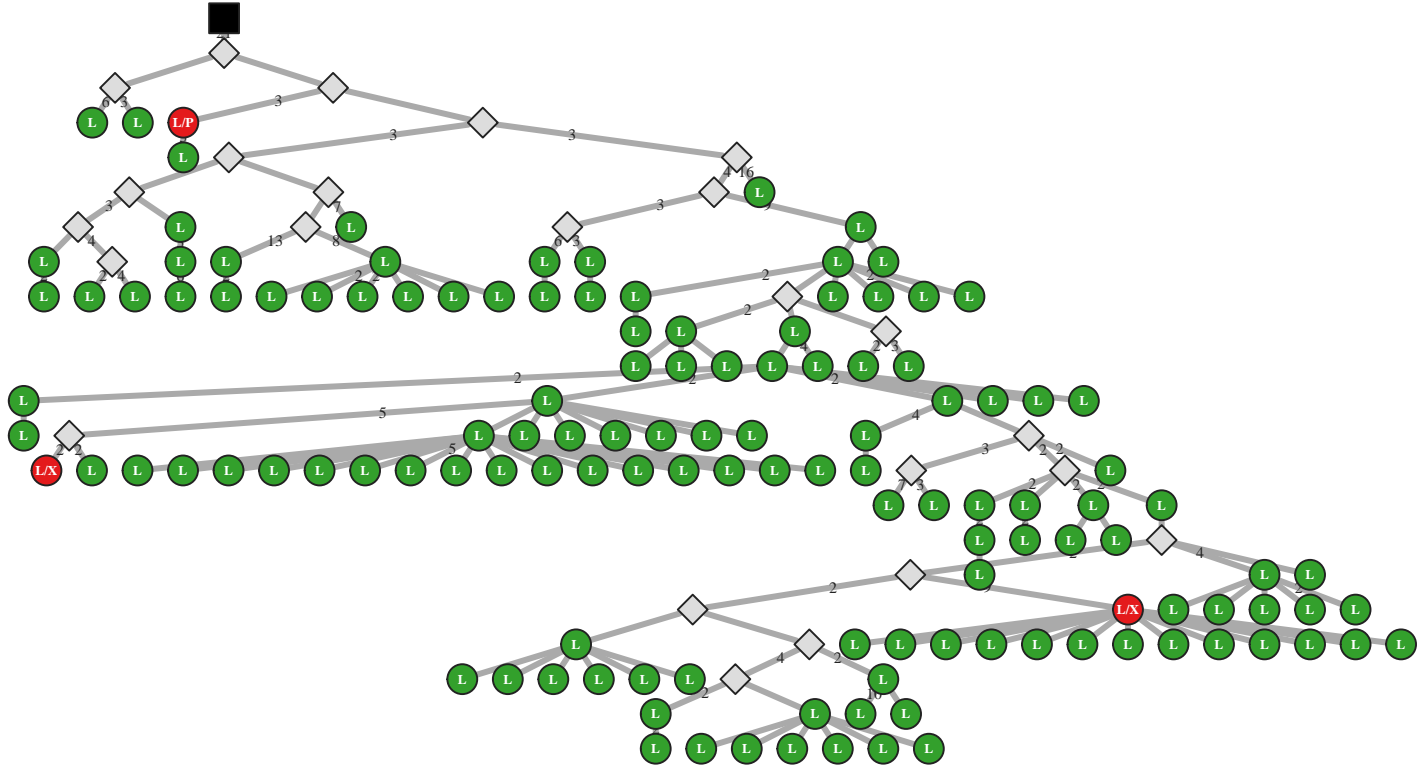
M5 IgG IGHV1-69/J4 21bp (14642)



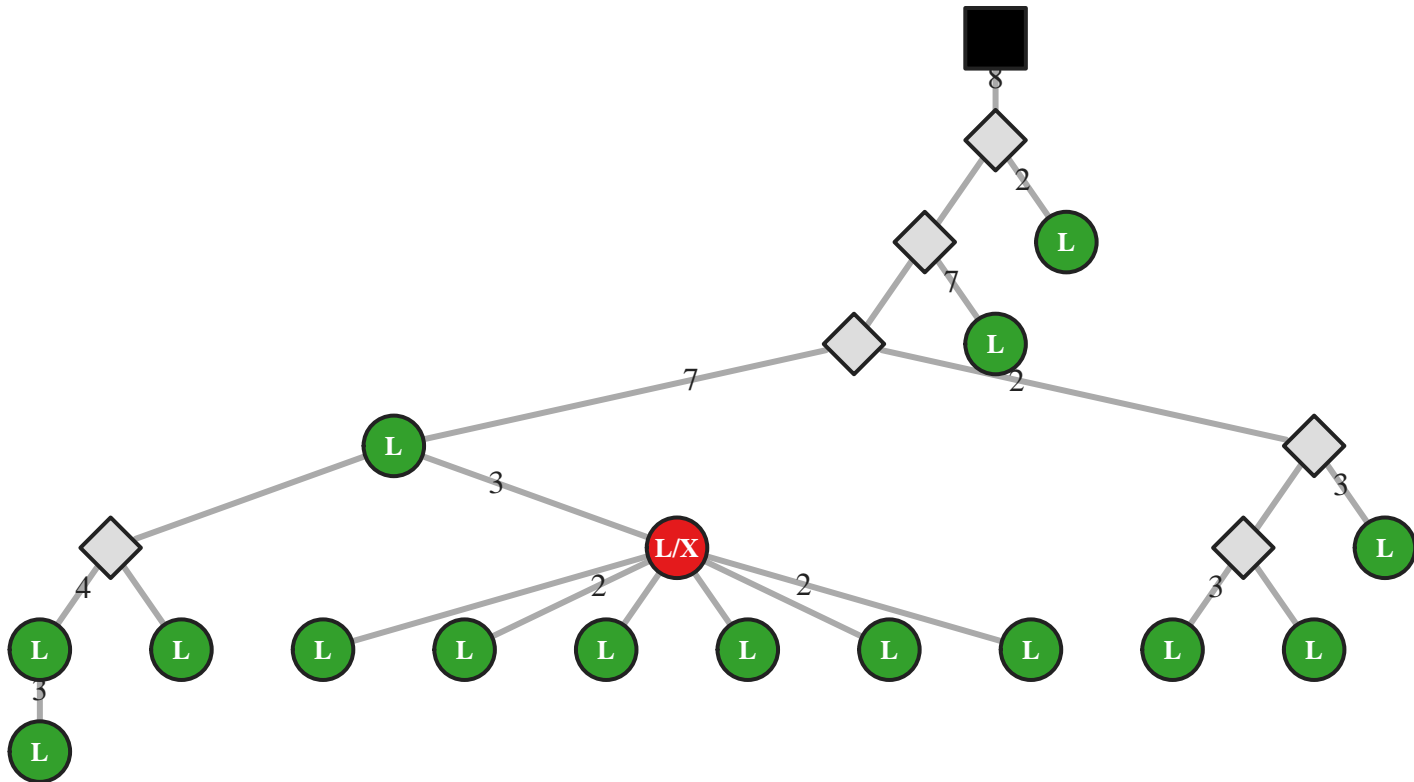
M5 IgG IGHV1-69/J4 27bp (32512)



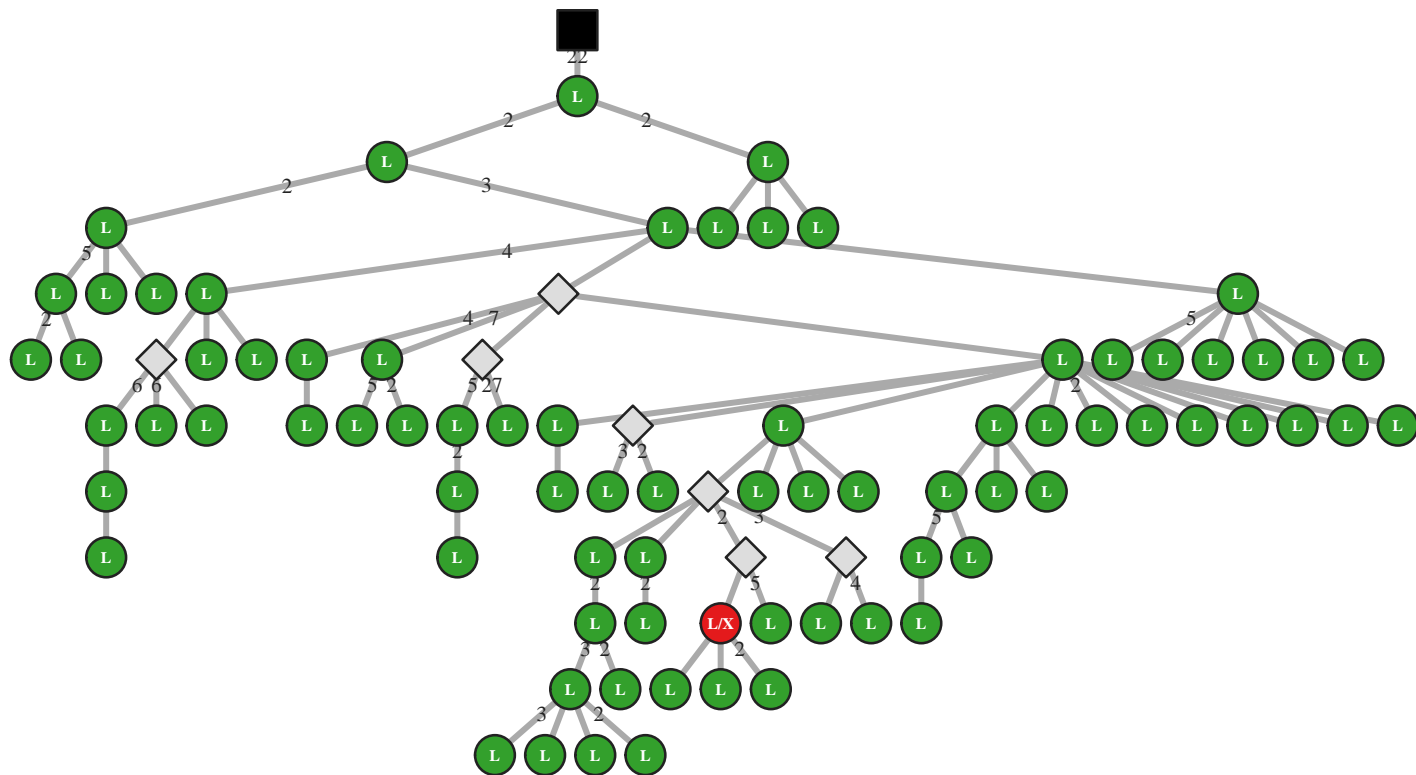
M5 IgG IGHV1-69/J4 33bp (32535)



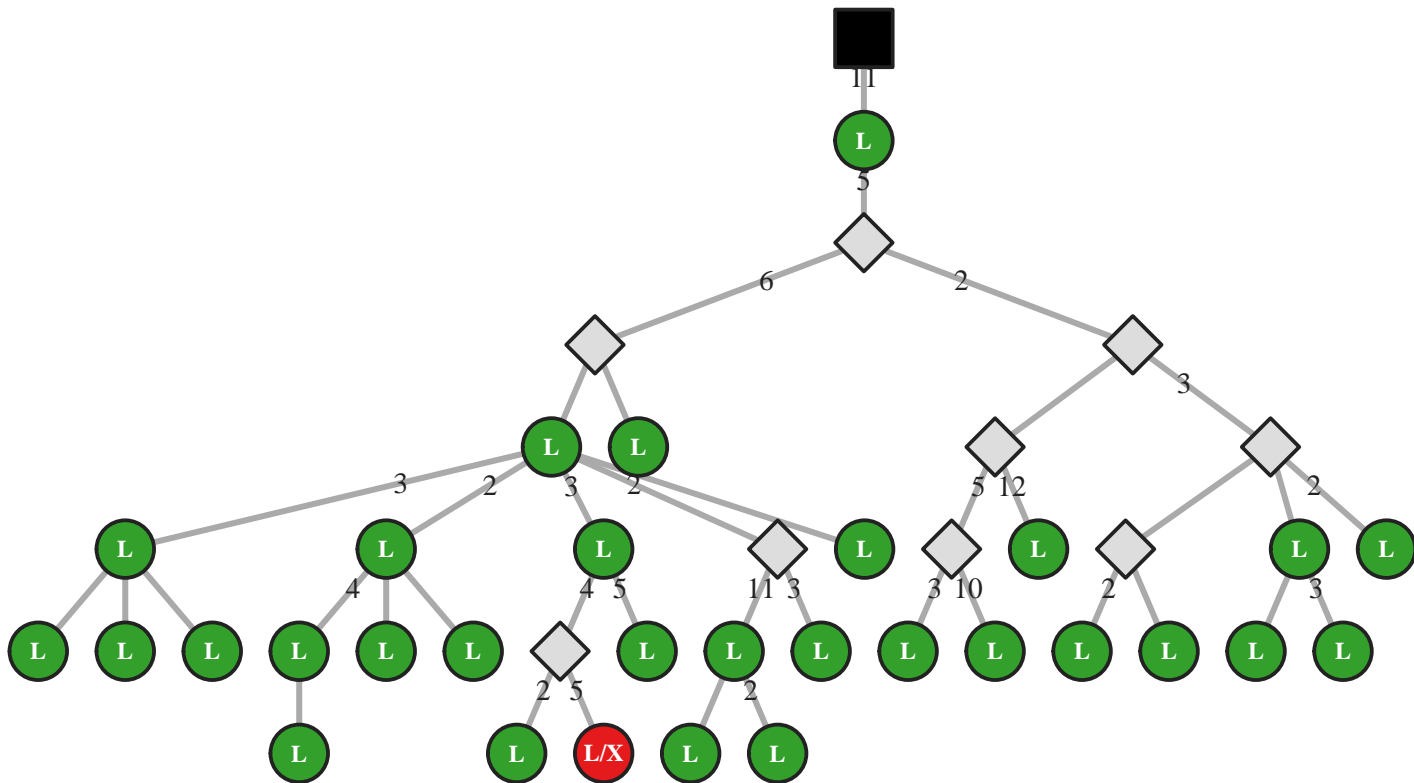
M5 IgG IGHV1-69/J4 33bp (32537)



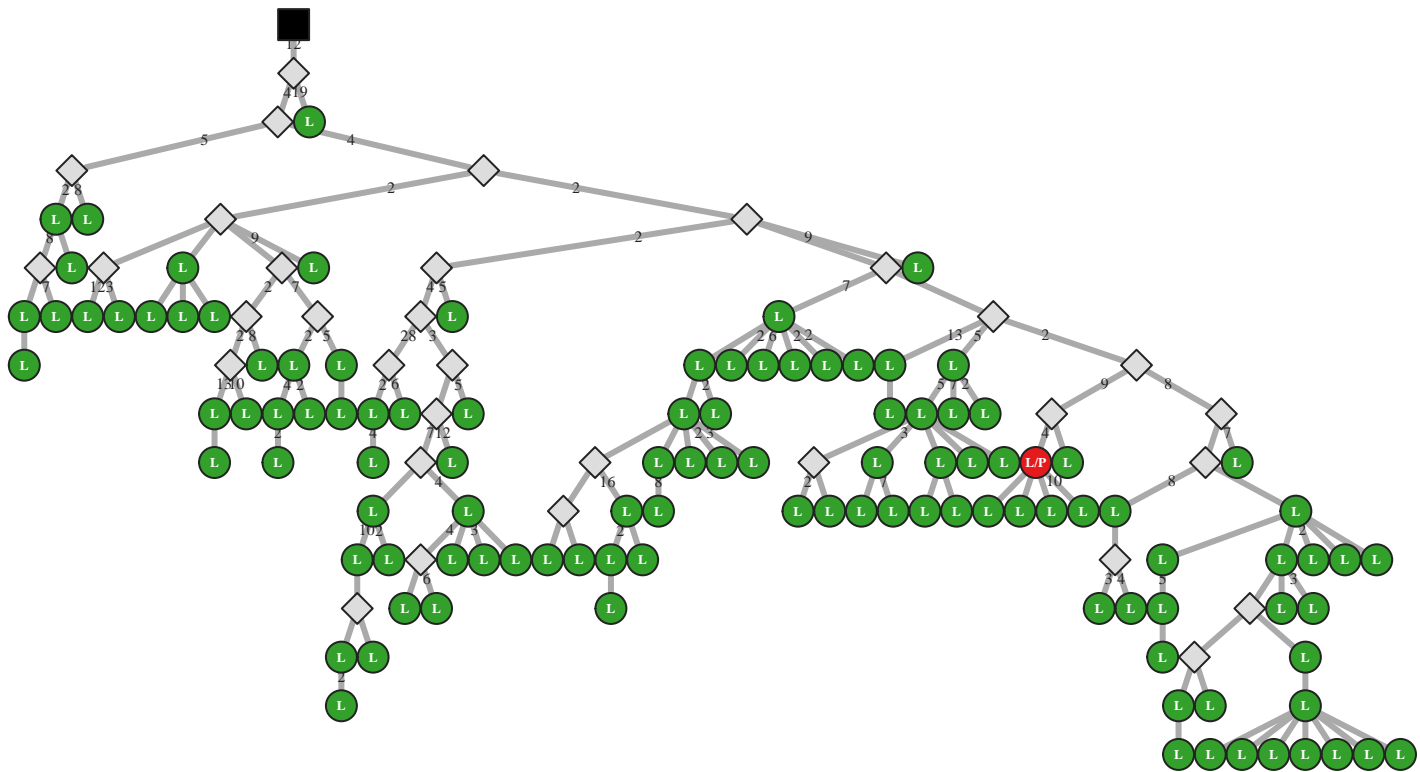
M5 IgG IGHV1-69/J4 33bp (32545)



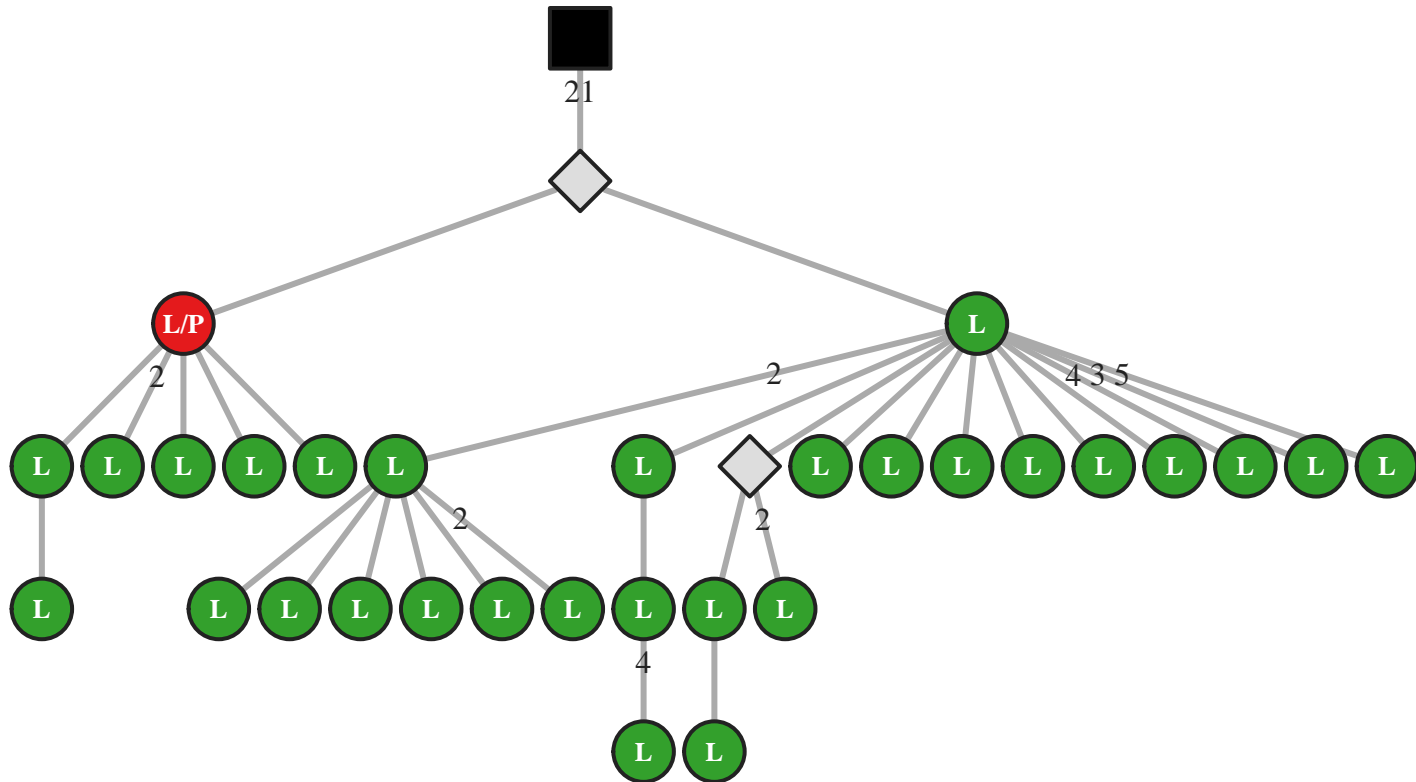
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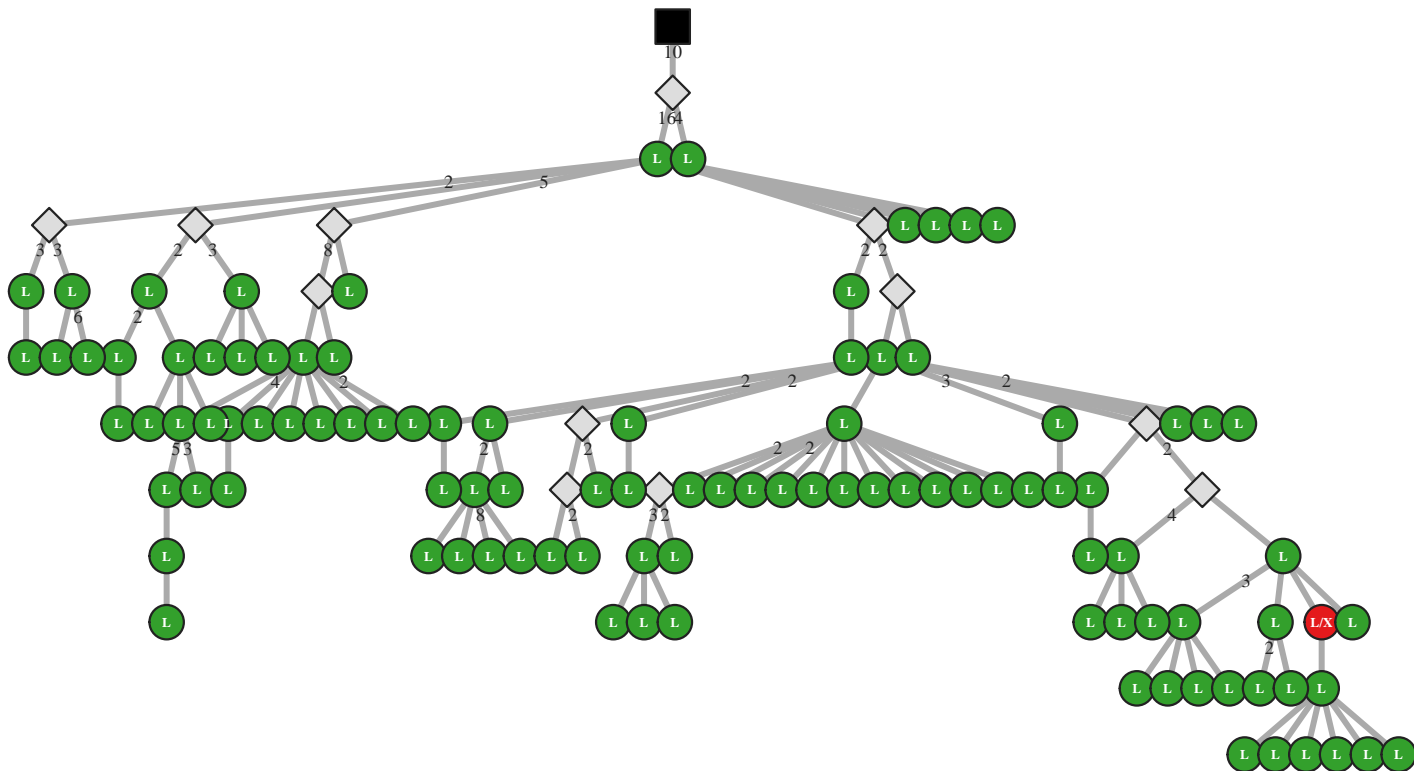
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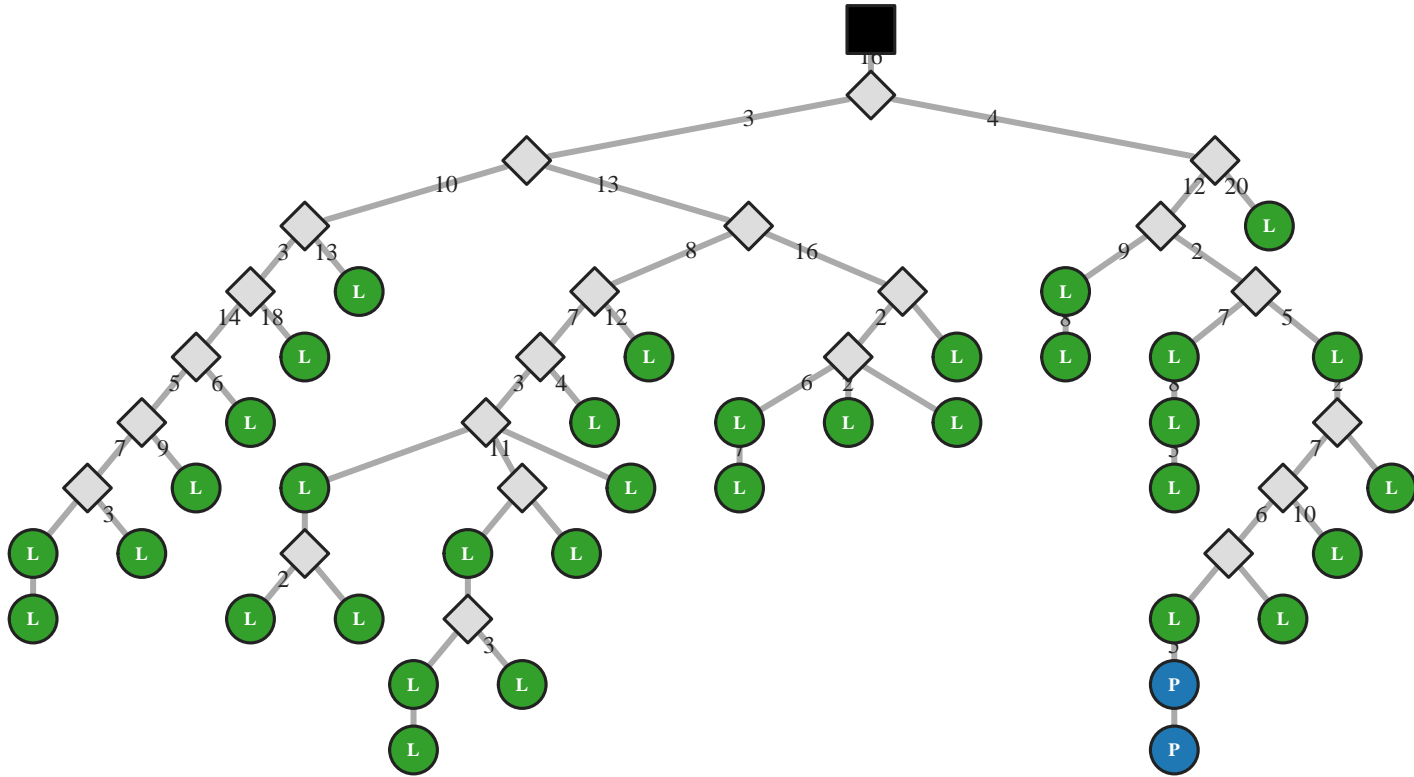
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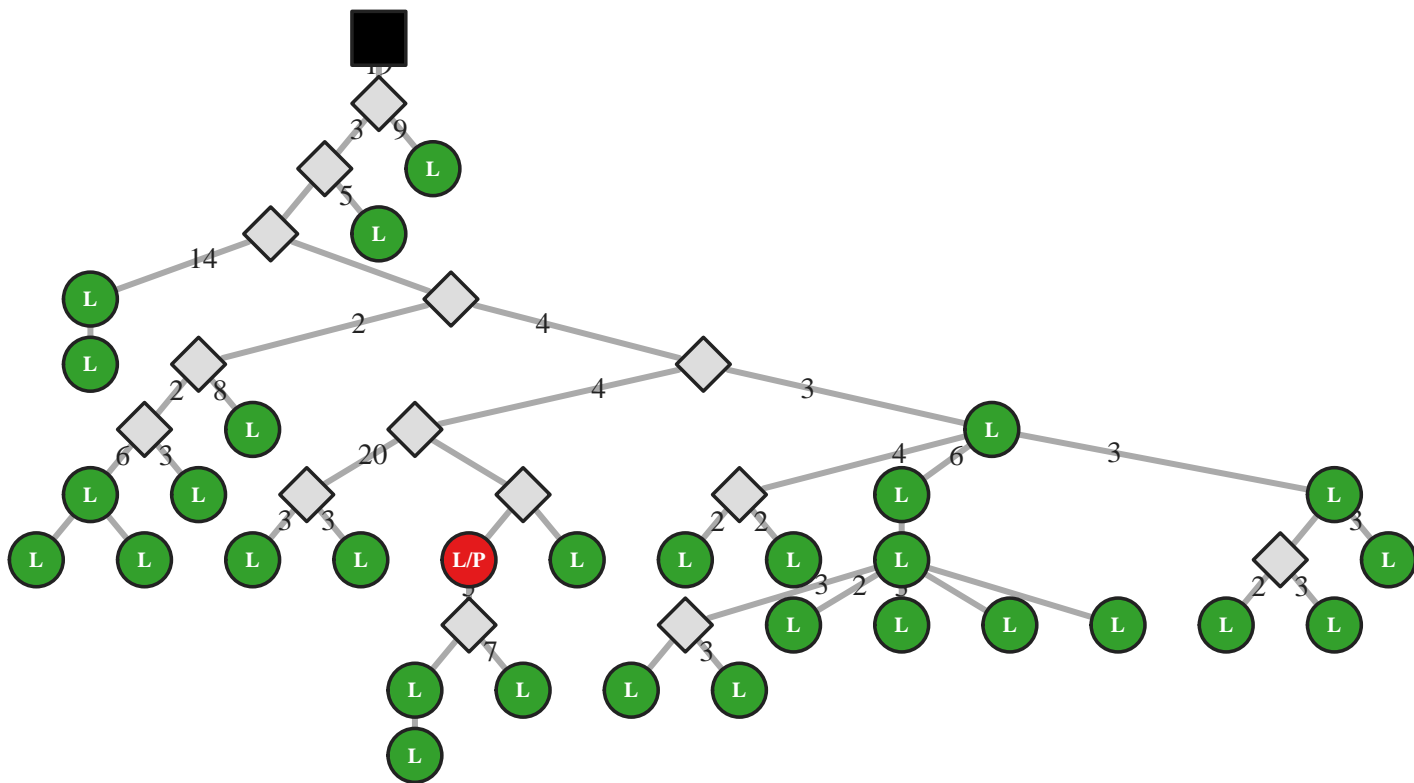
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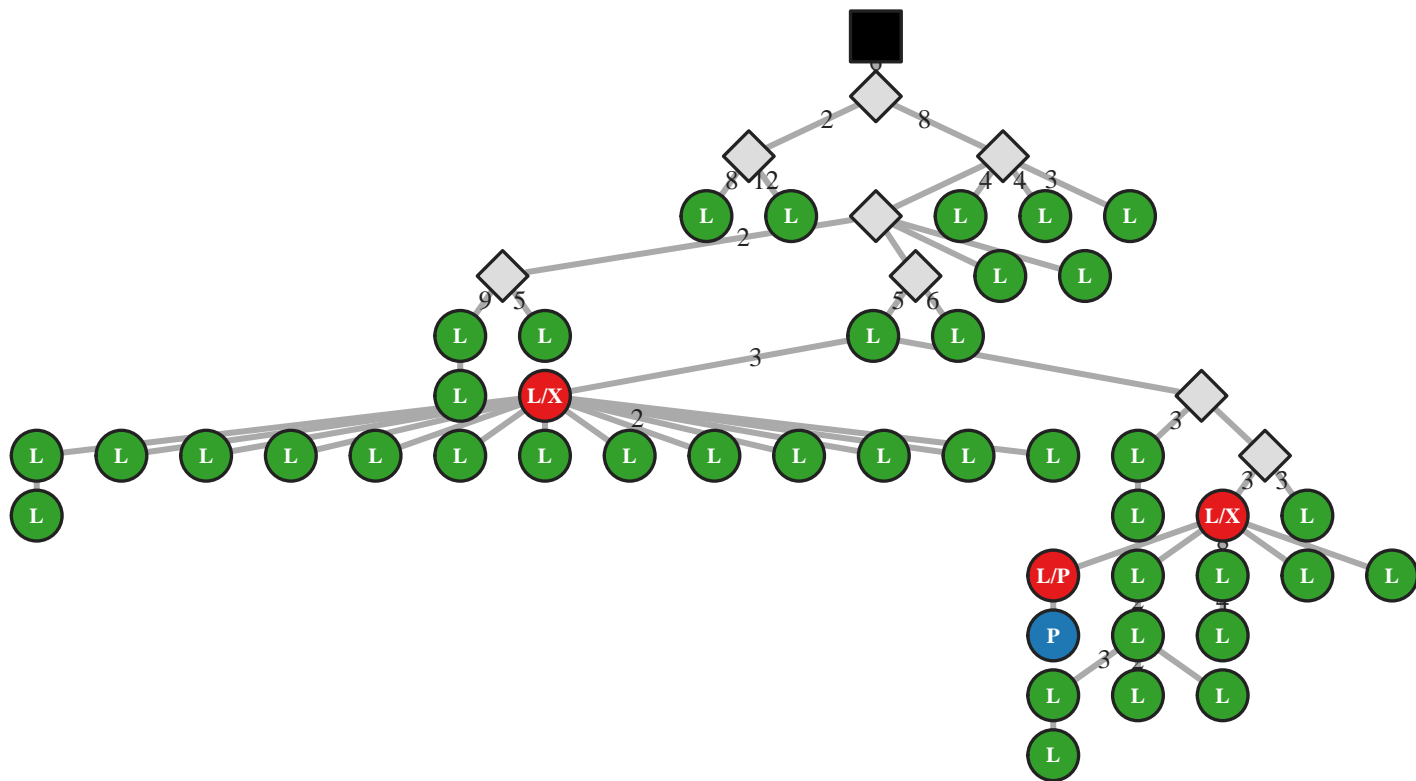
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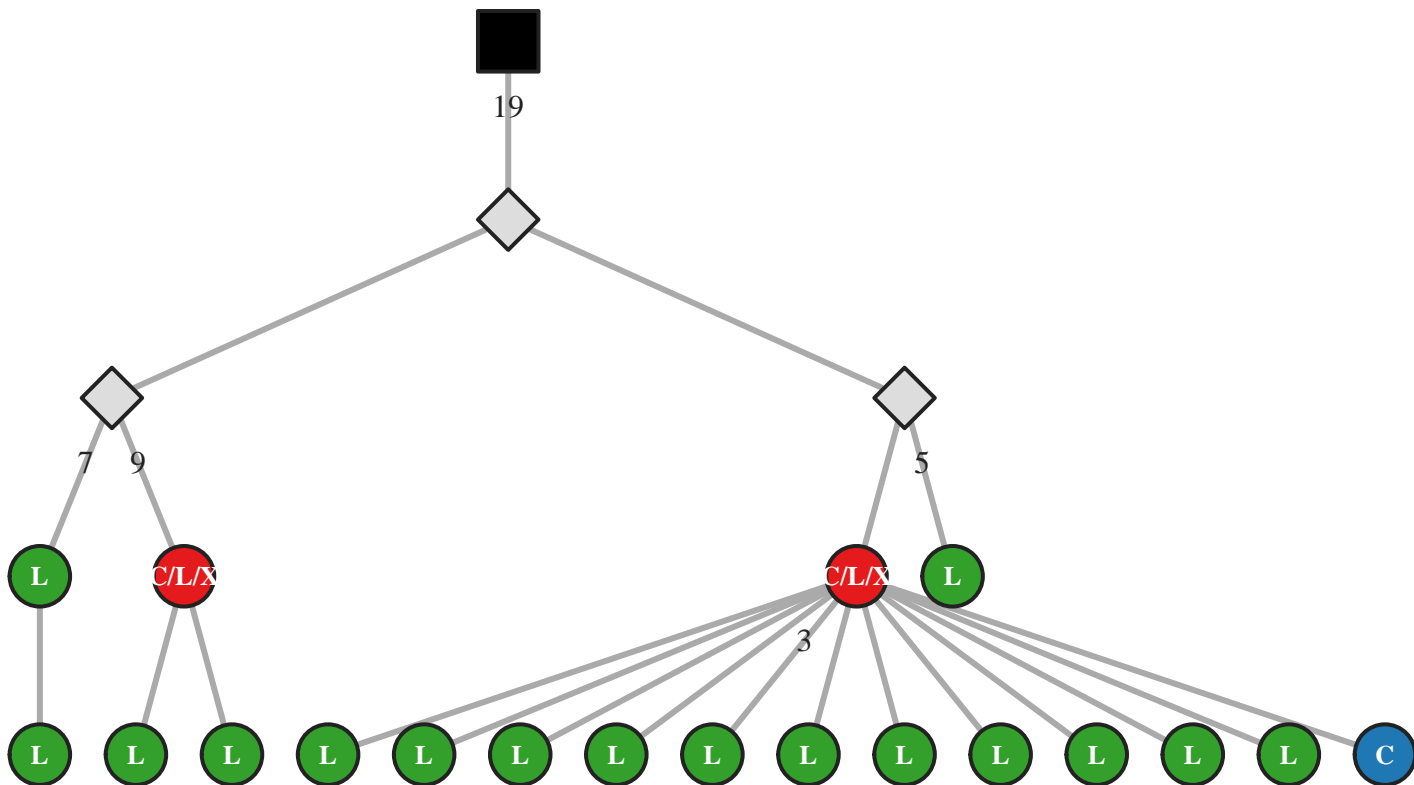
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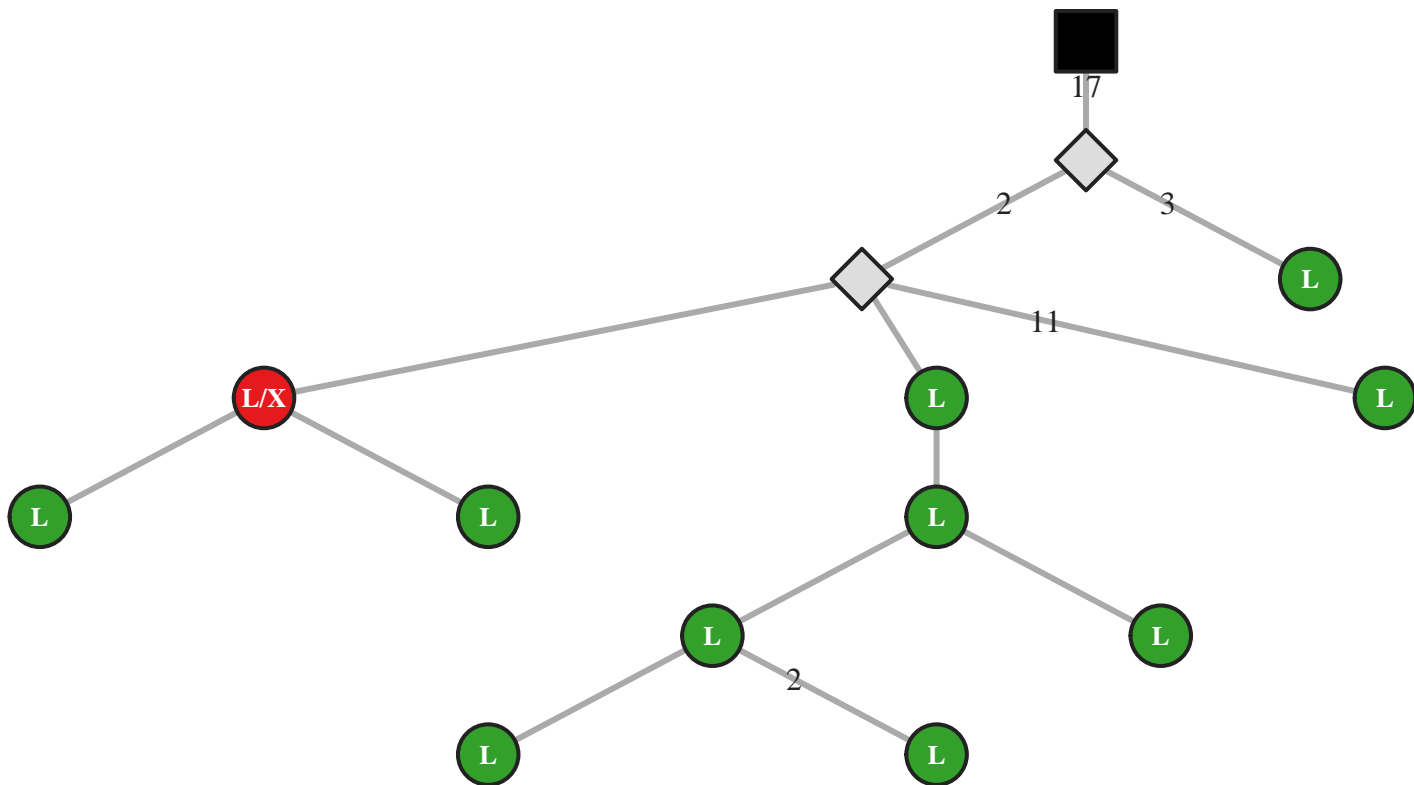
M5 IgG IGHV1-69/J4 39bp (40912)



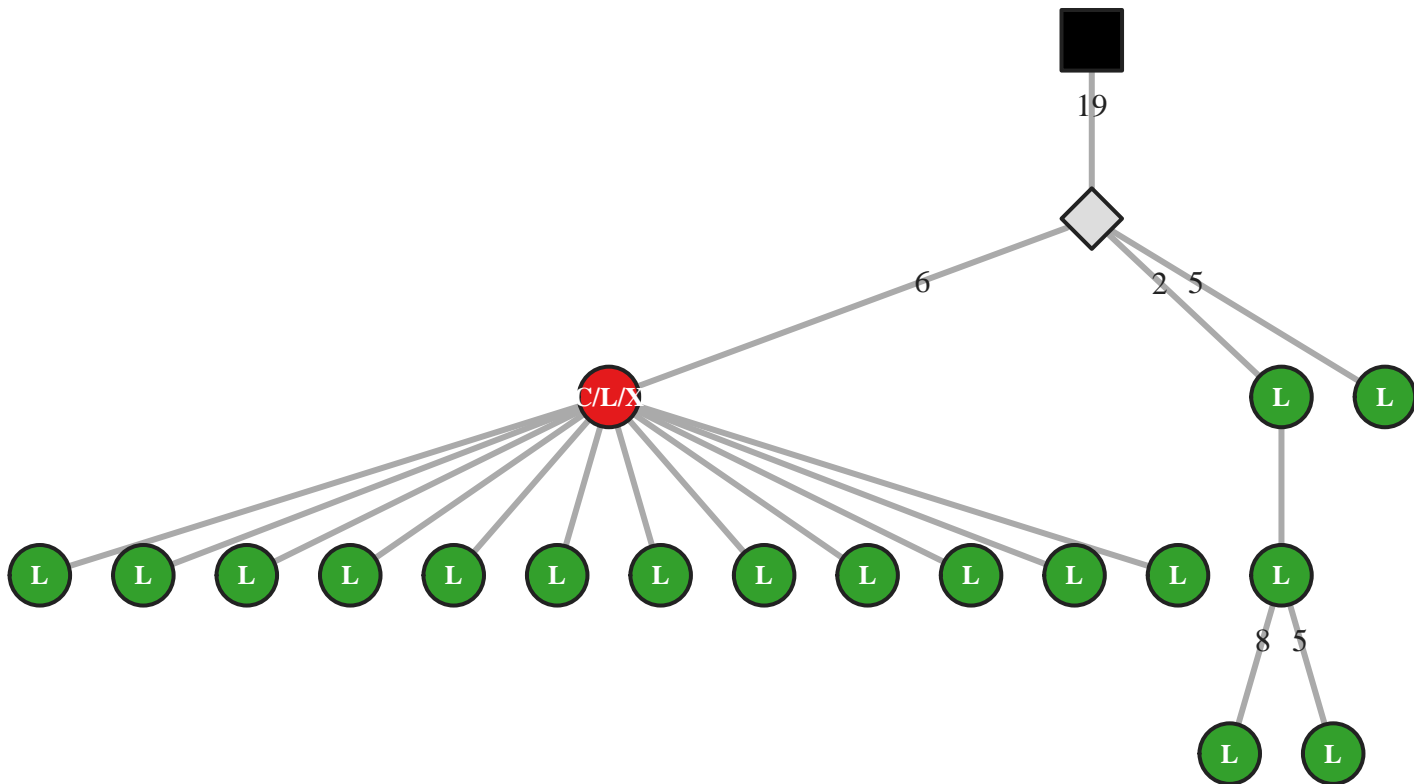
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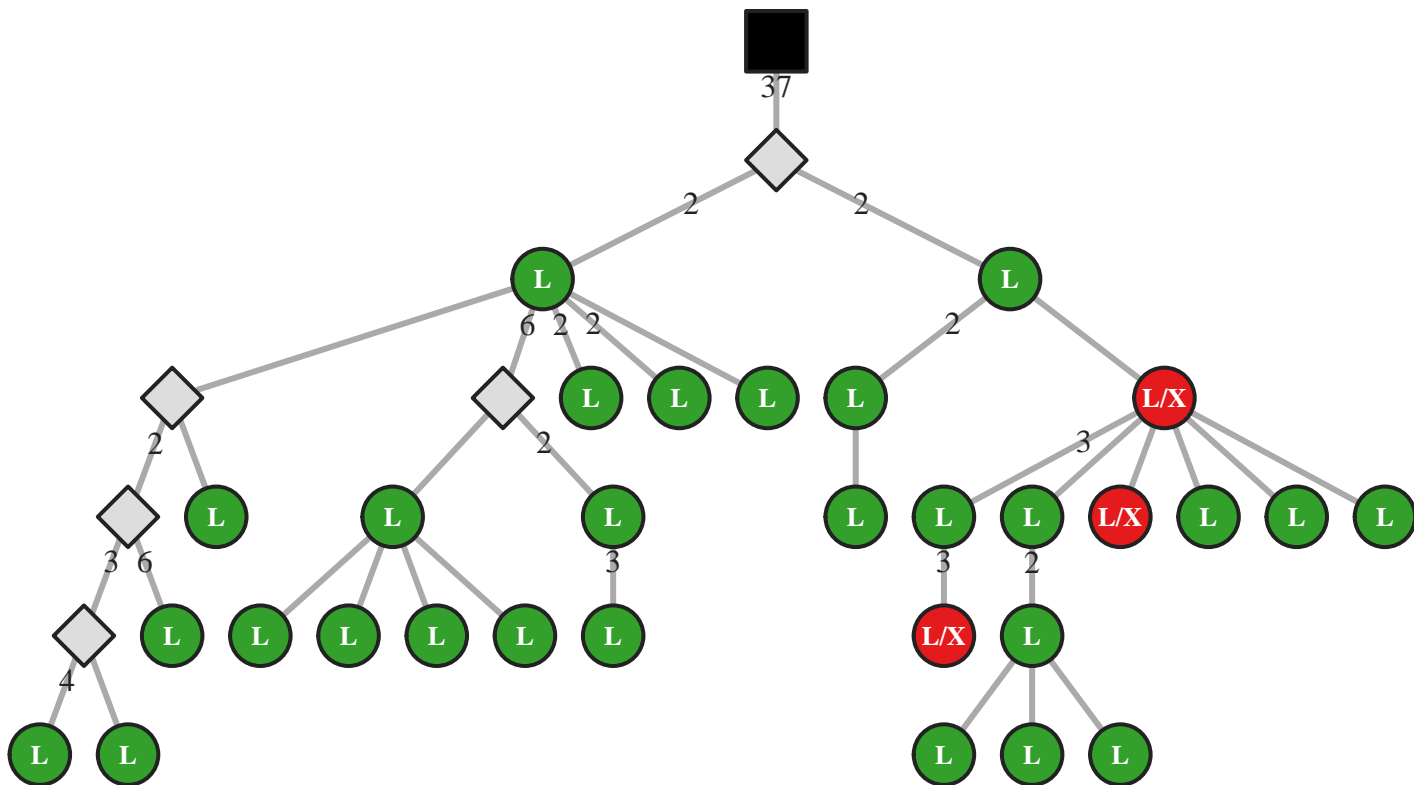
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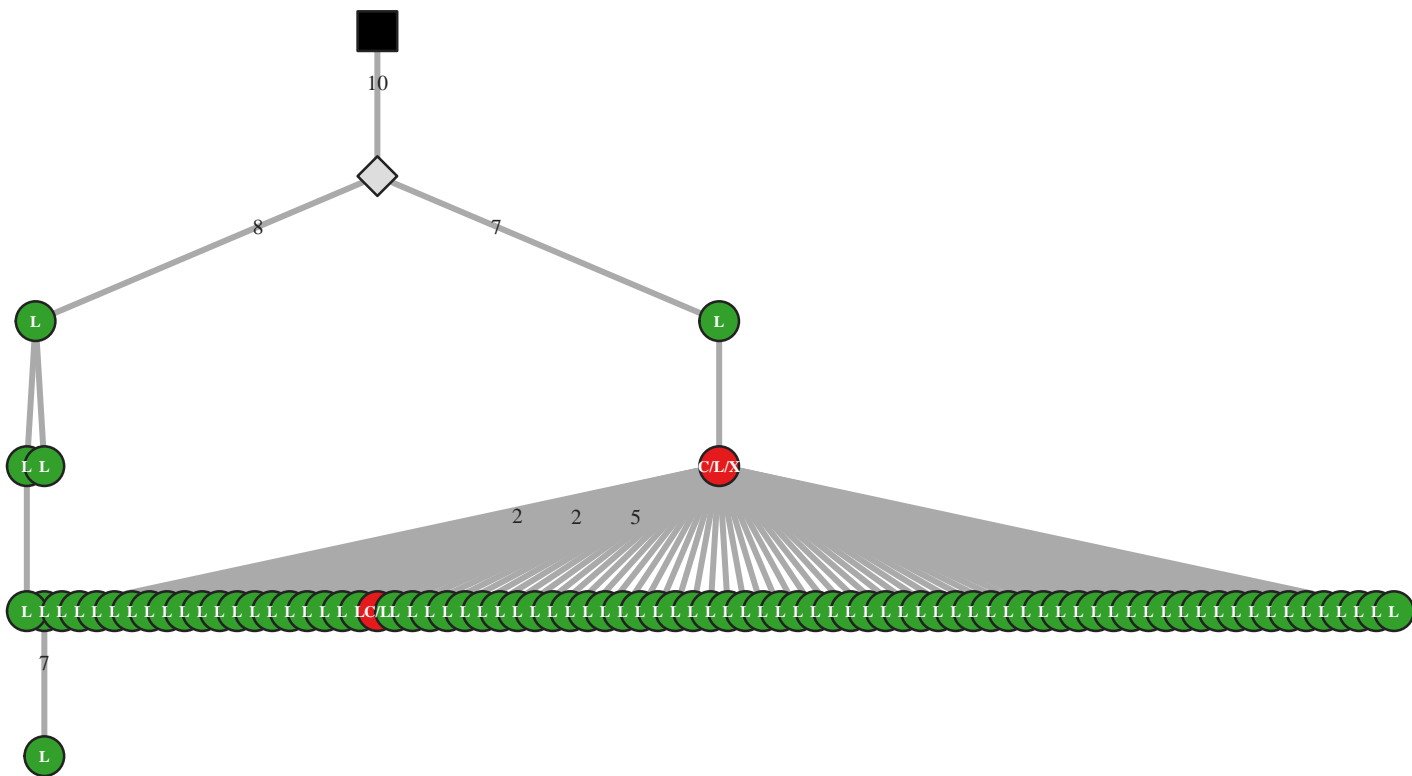
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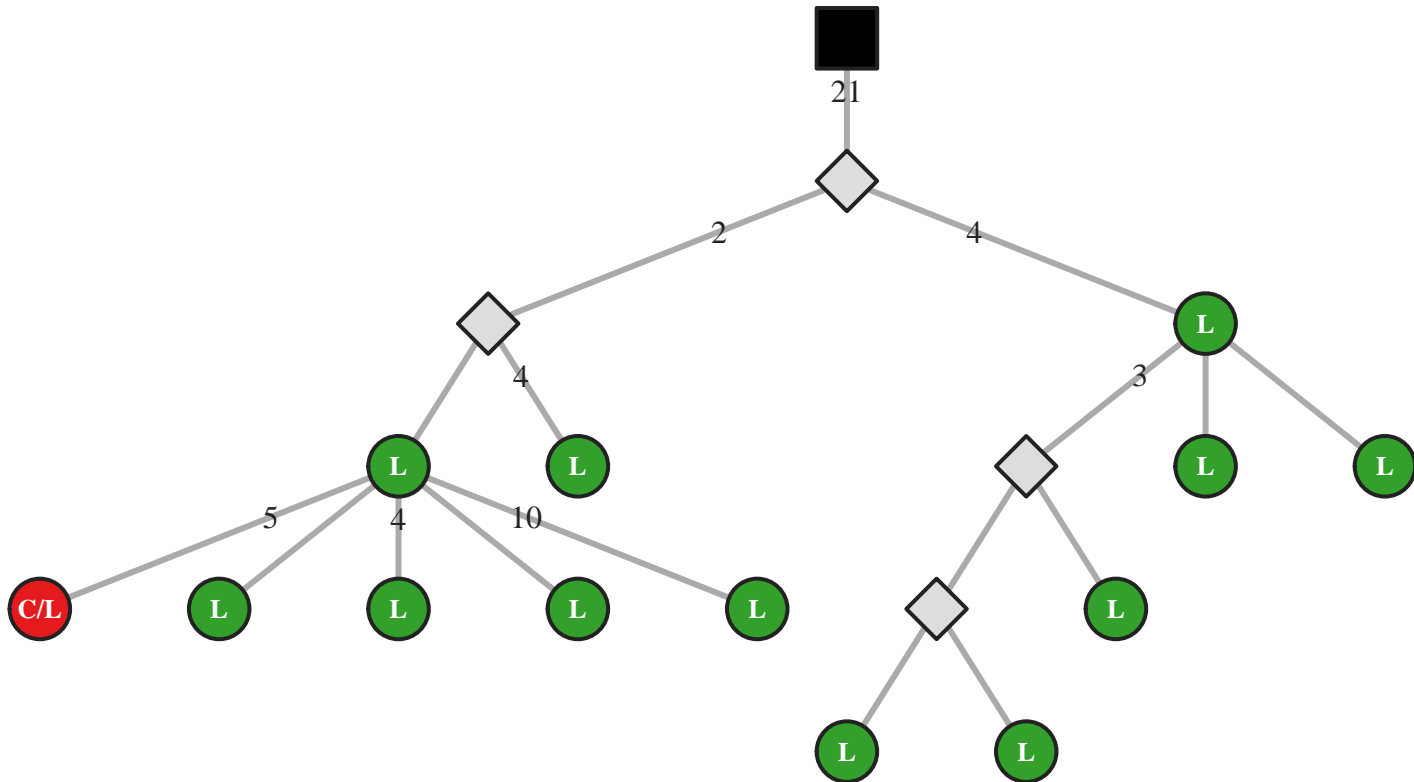
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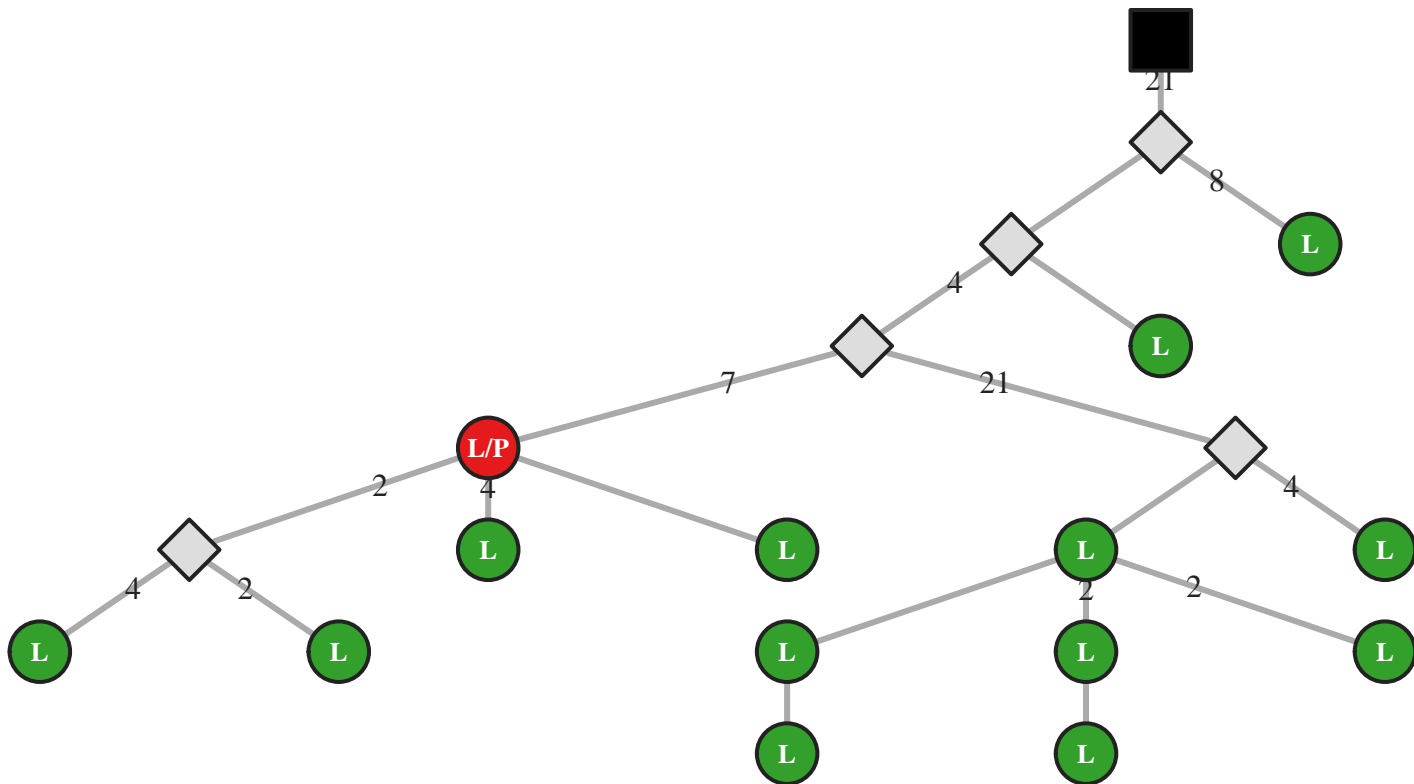
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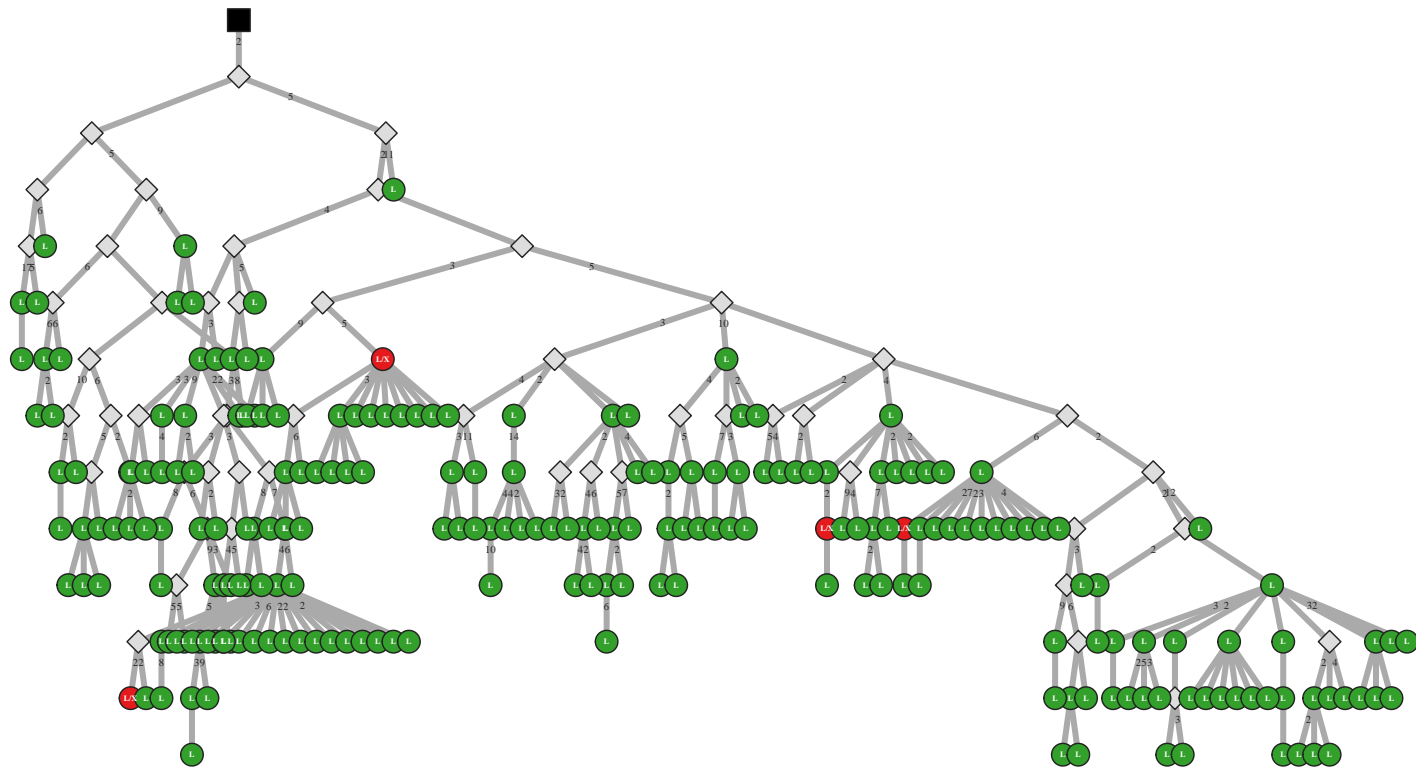
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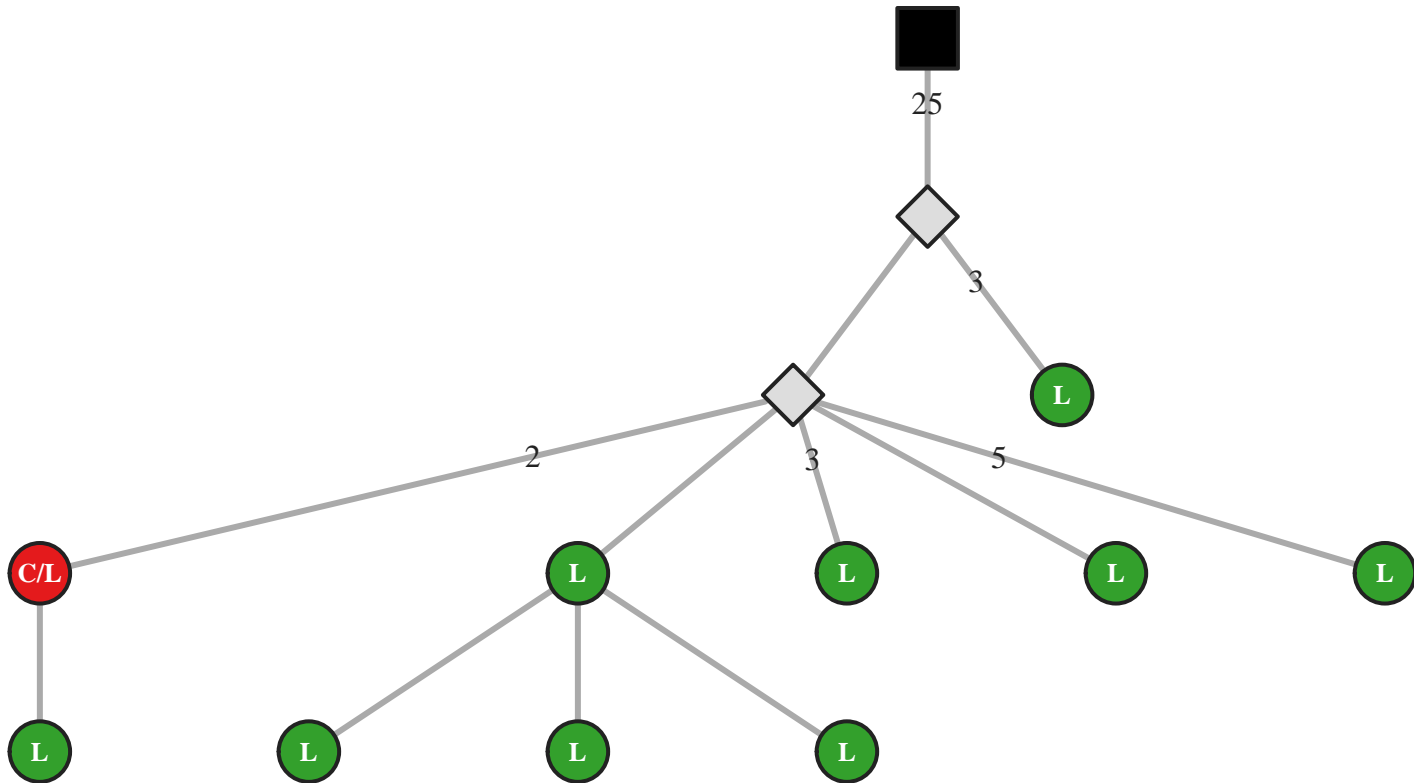
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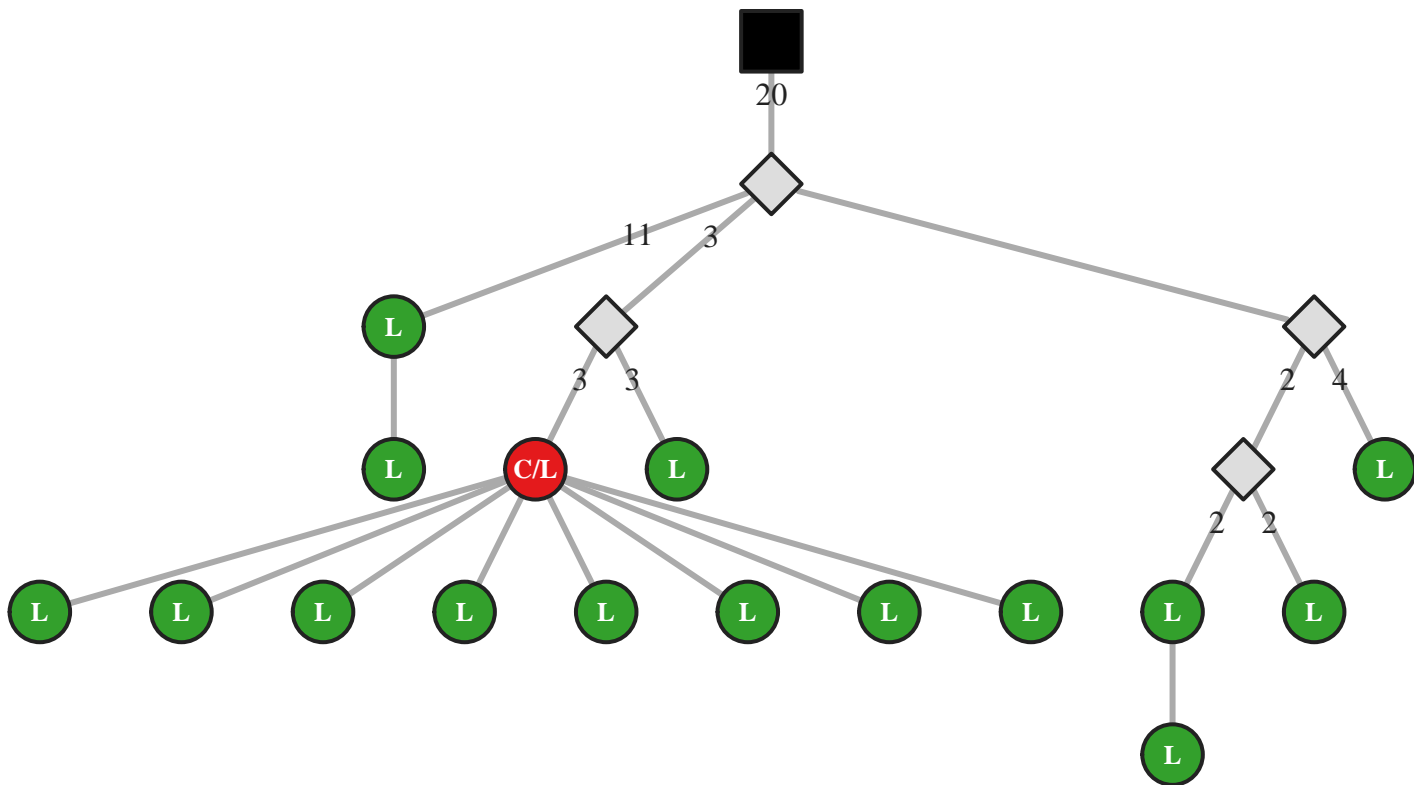
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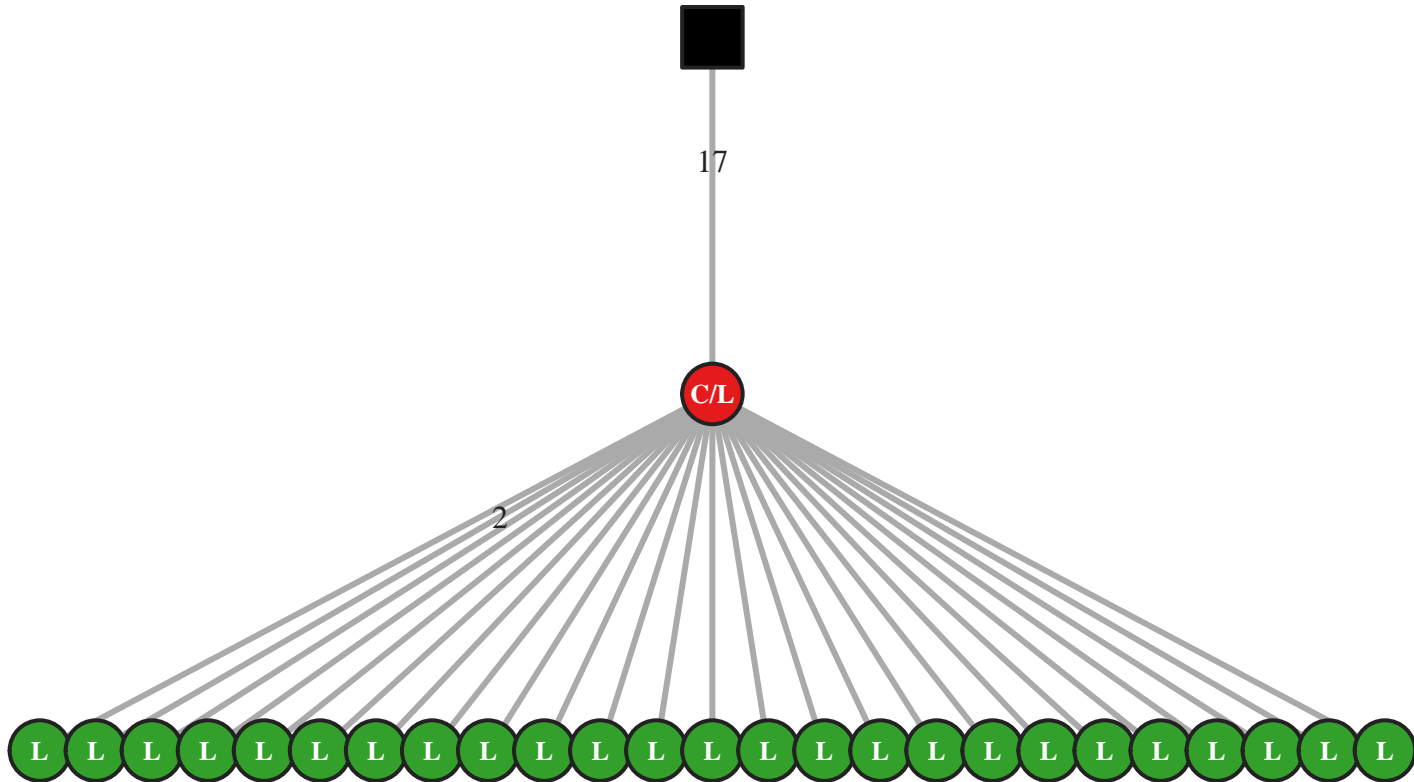
M5 IgA IGHV1-69/J4 42bp (12010)



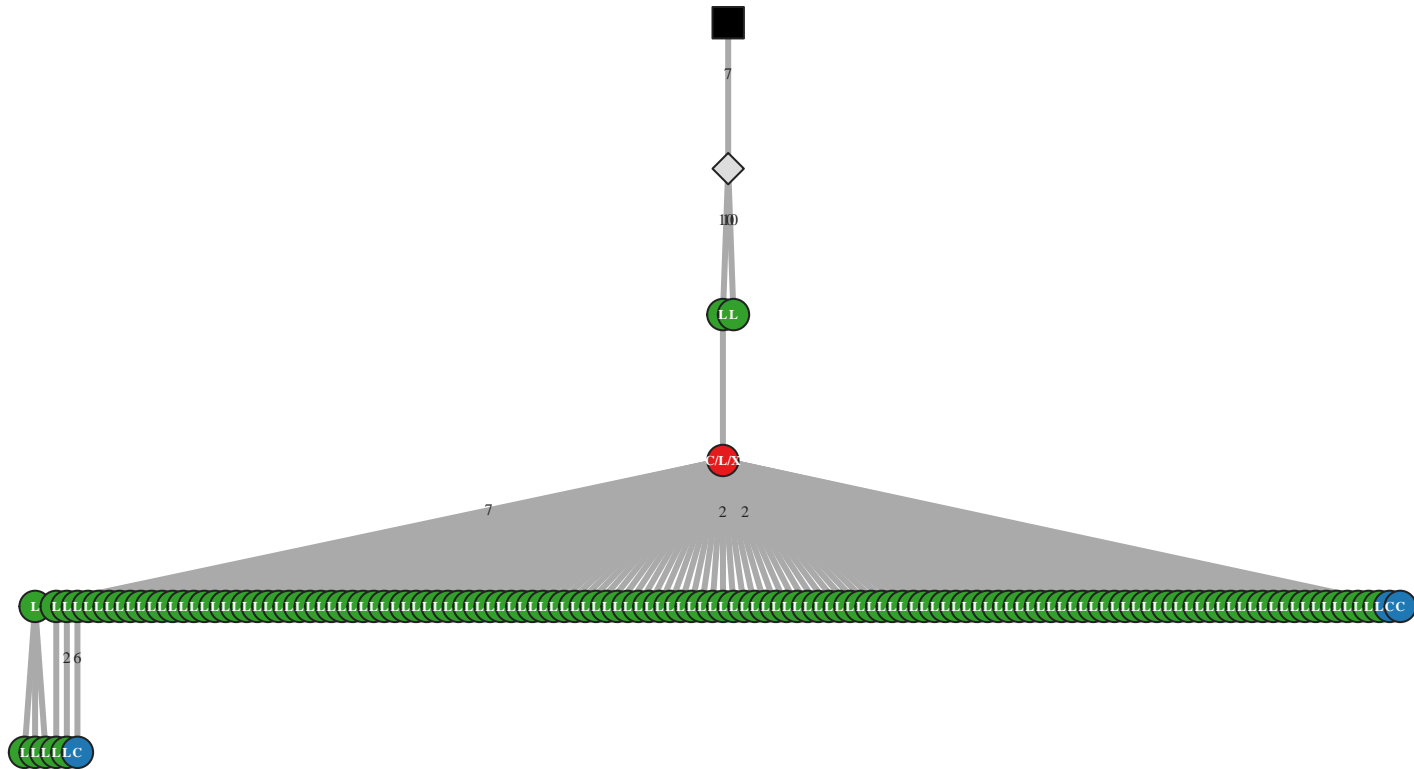
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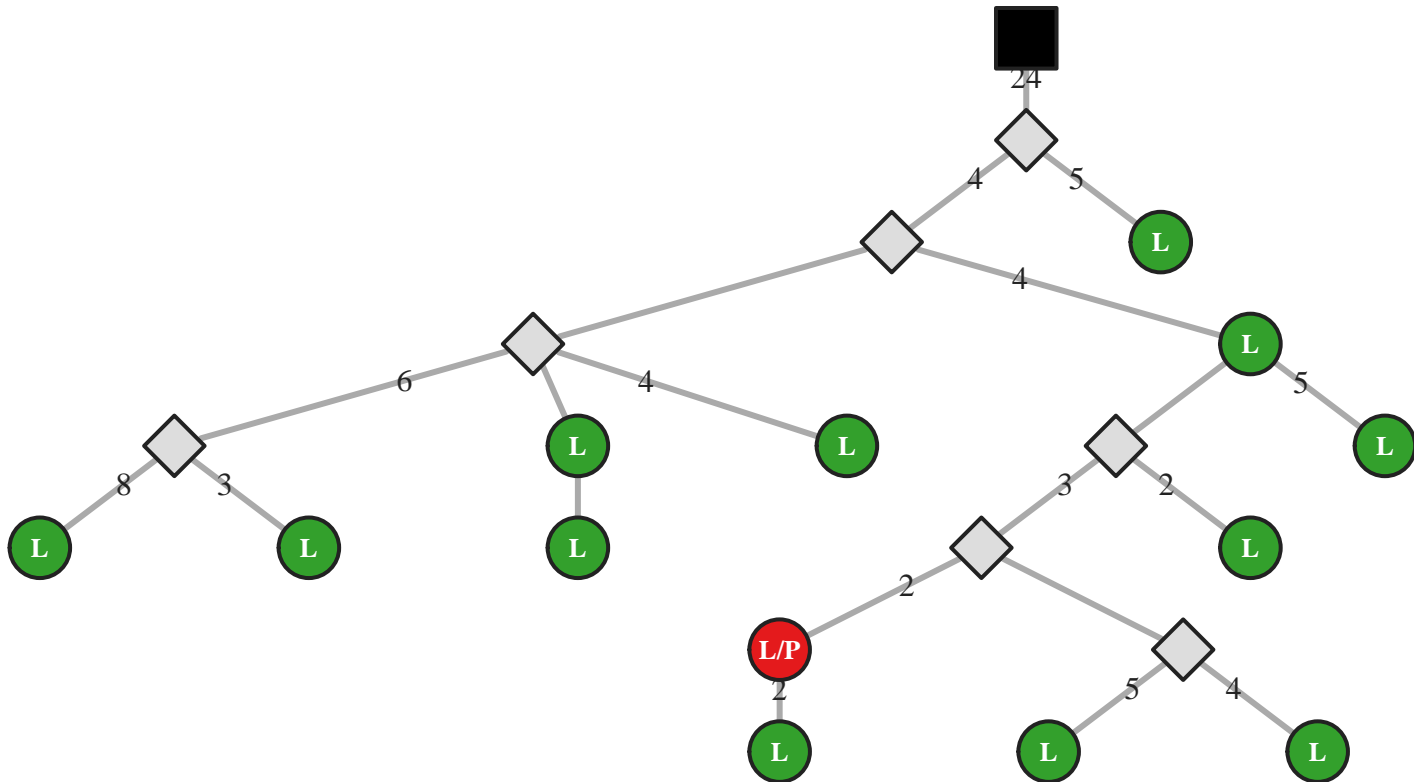
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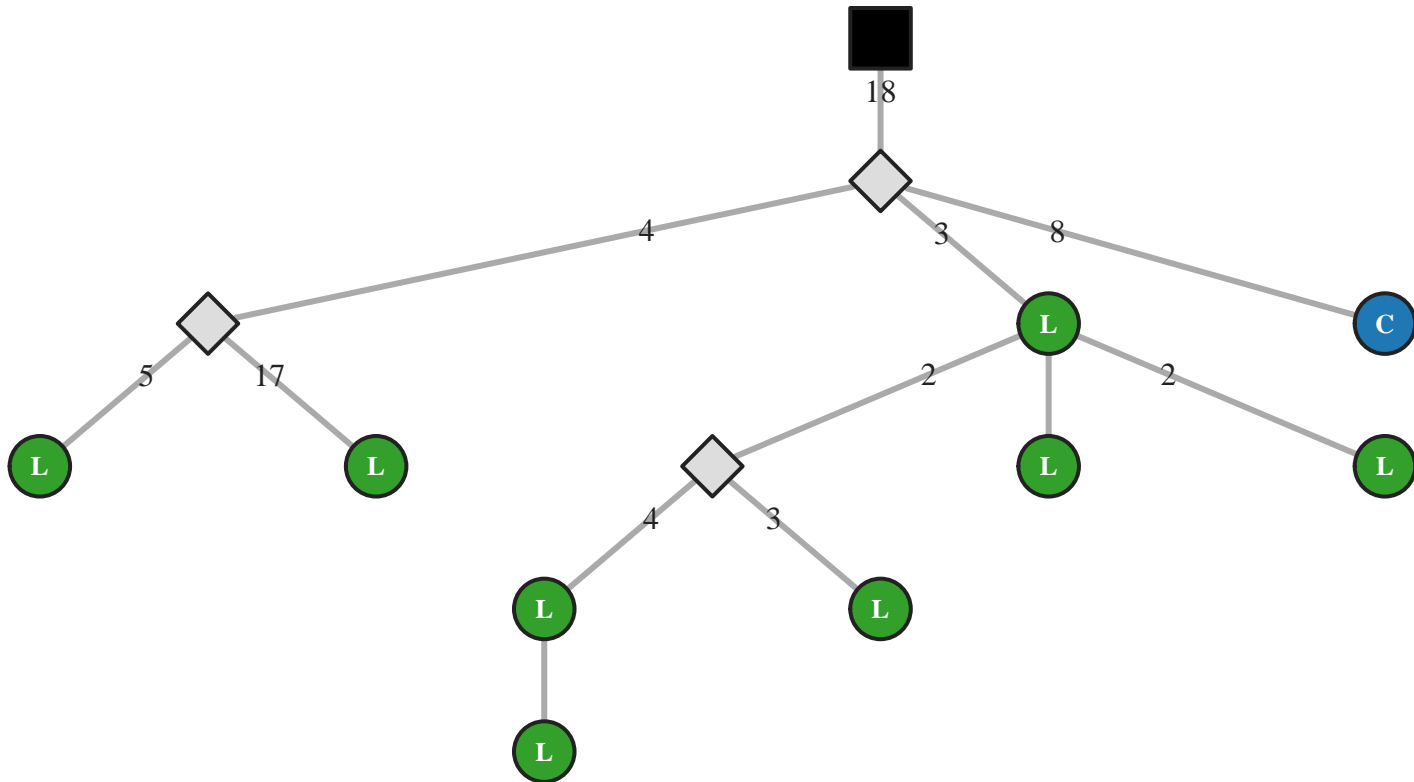
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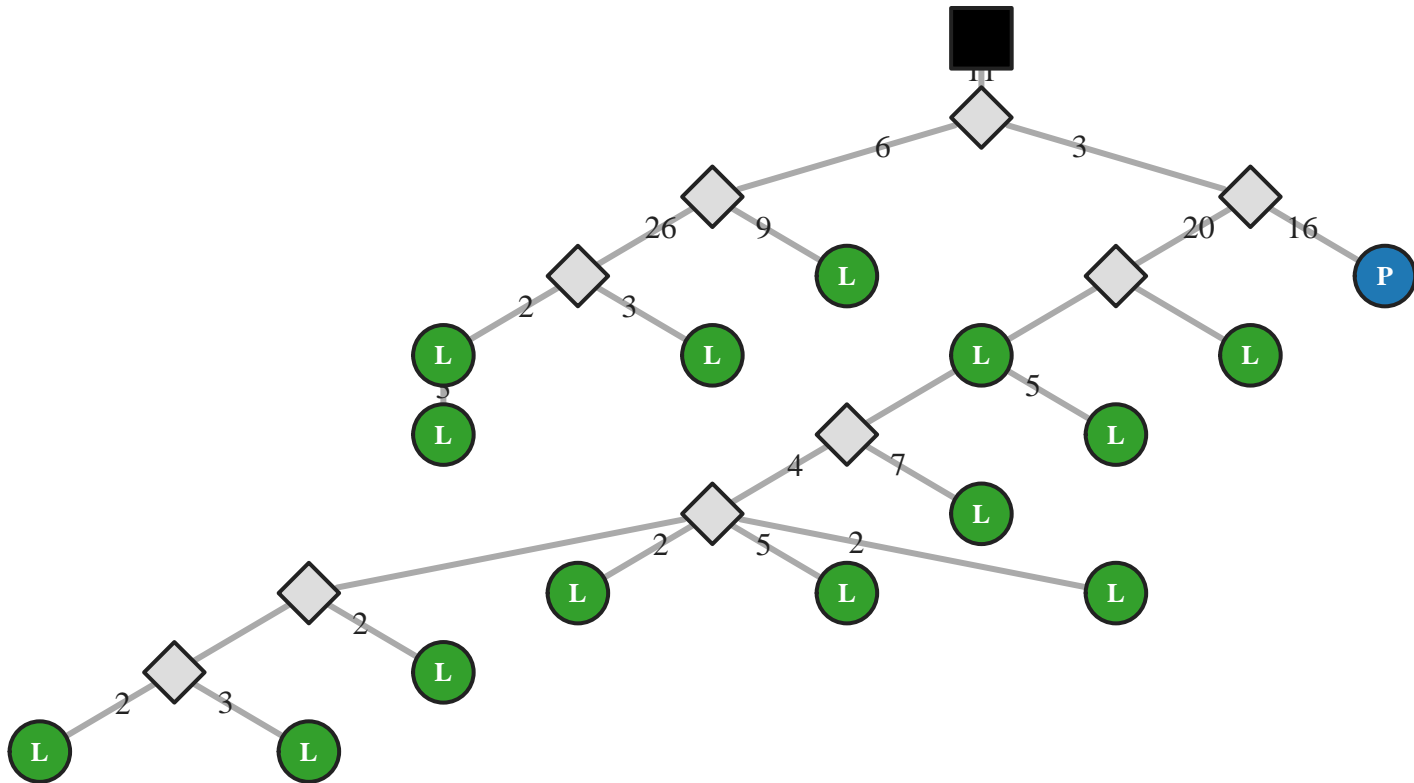
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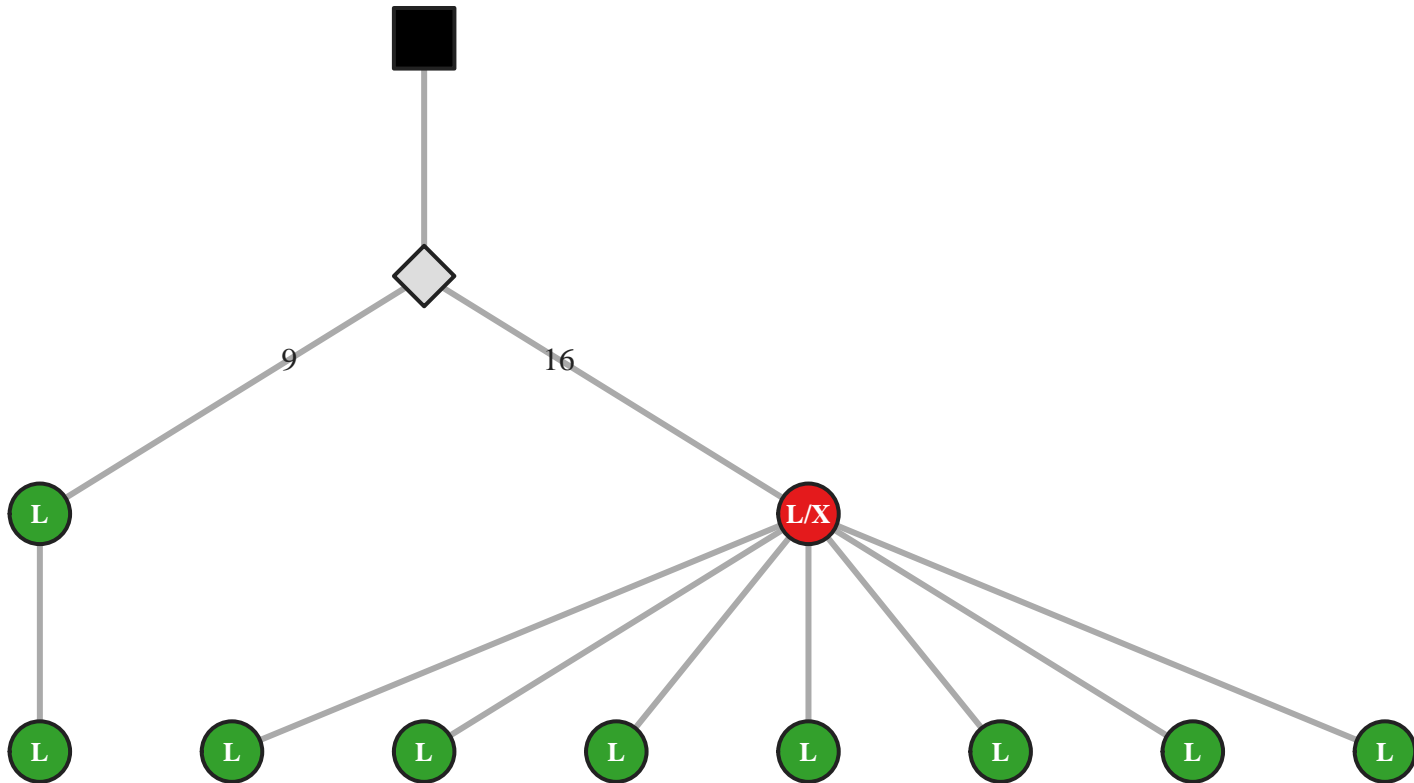
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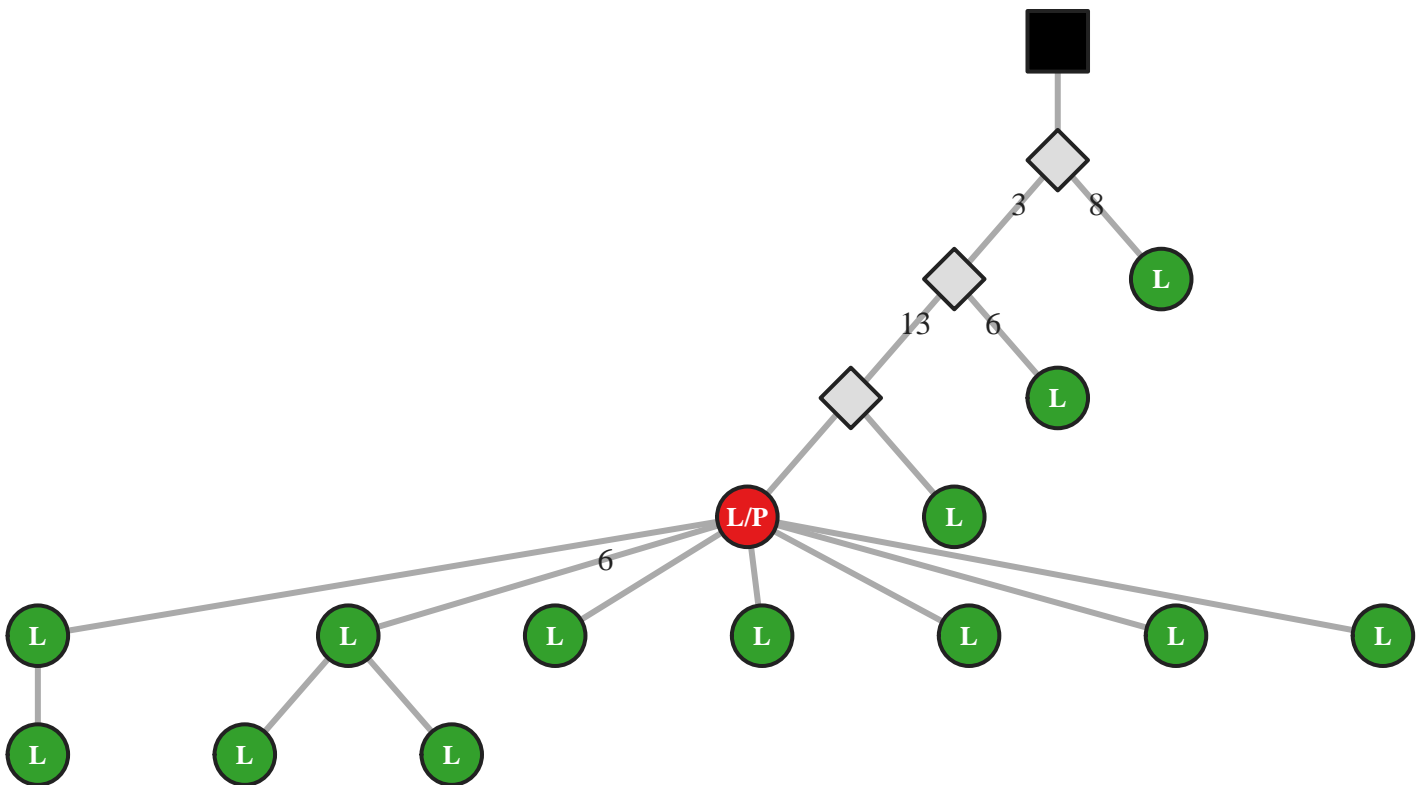
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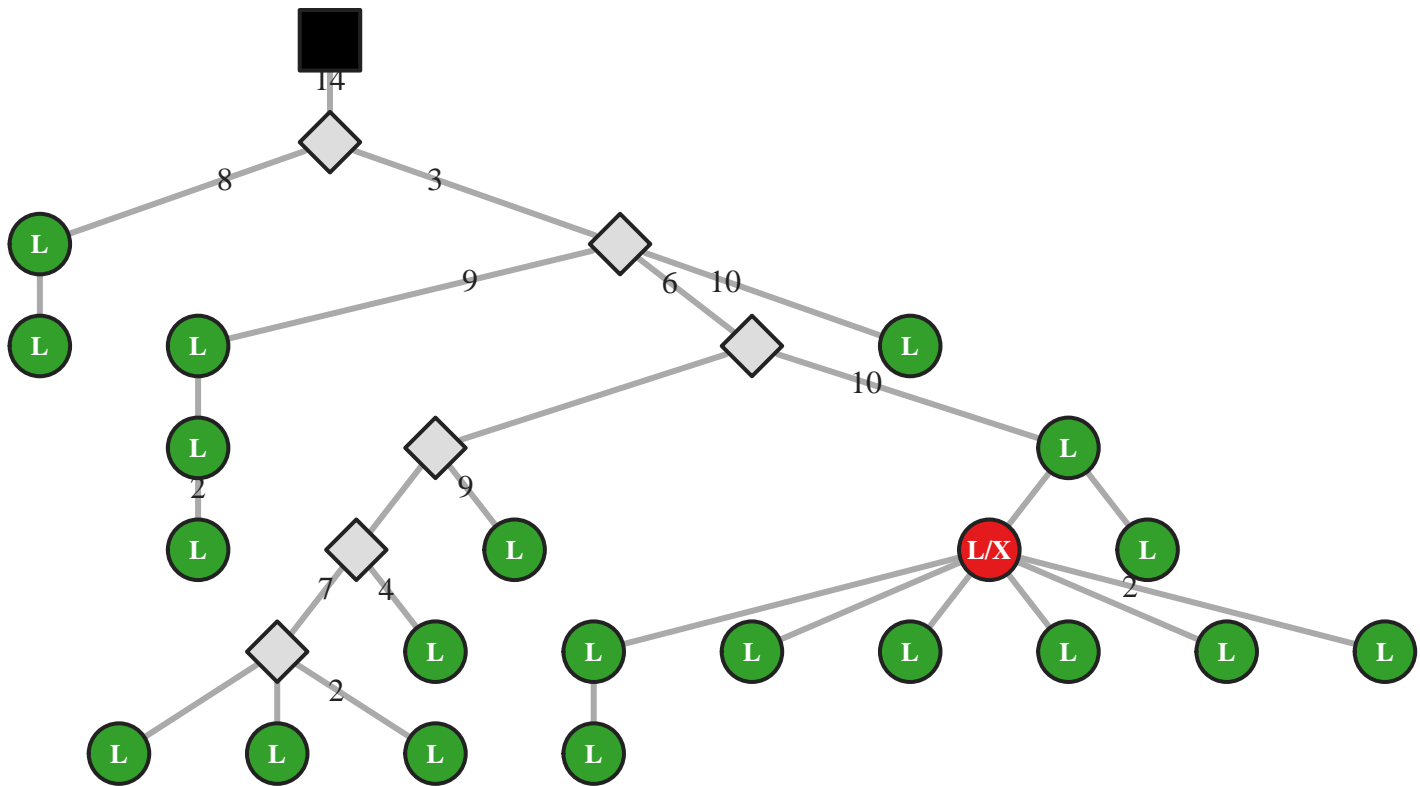
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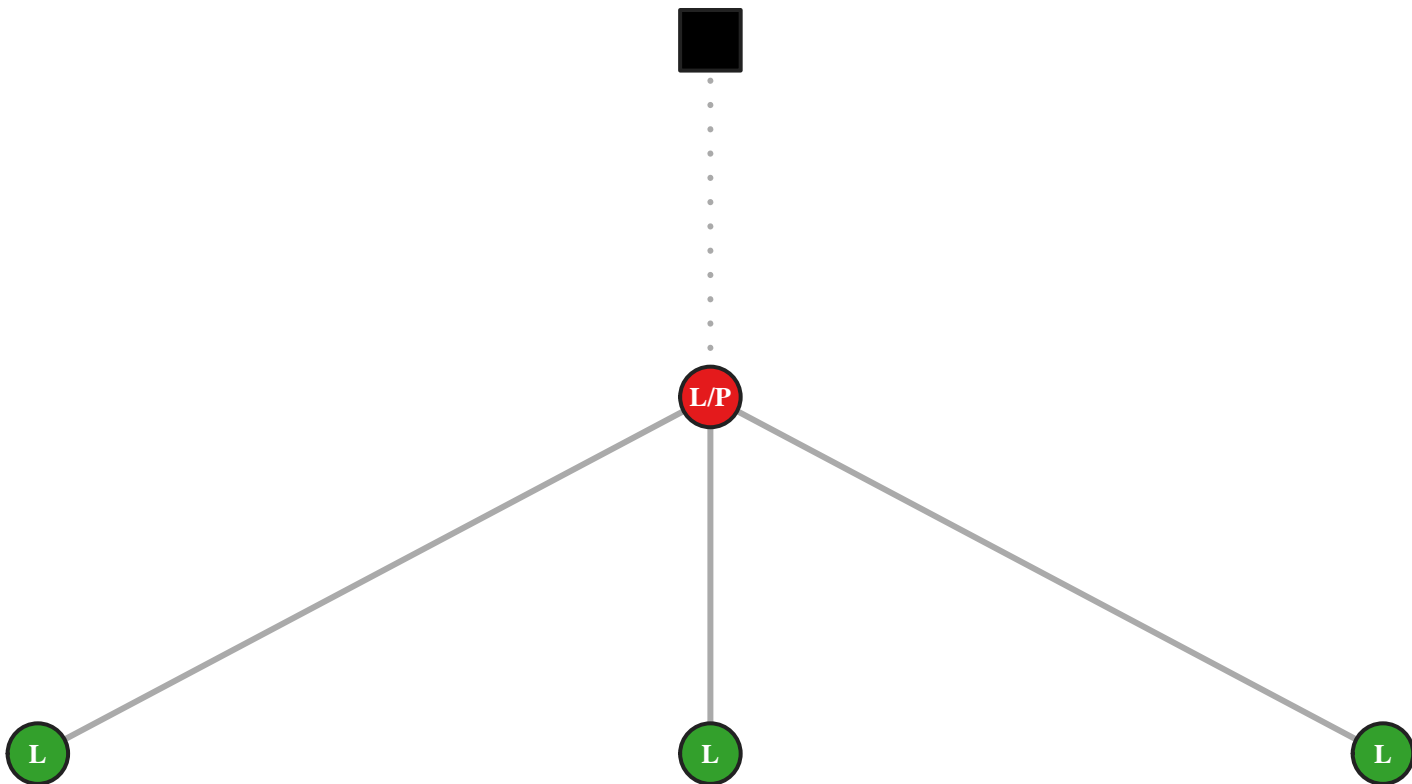
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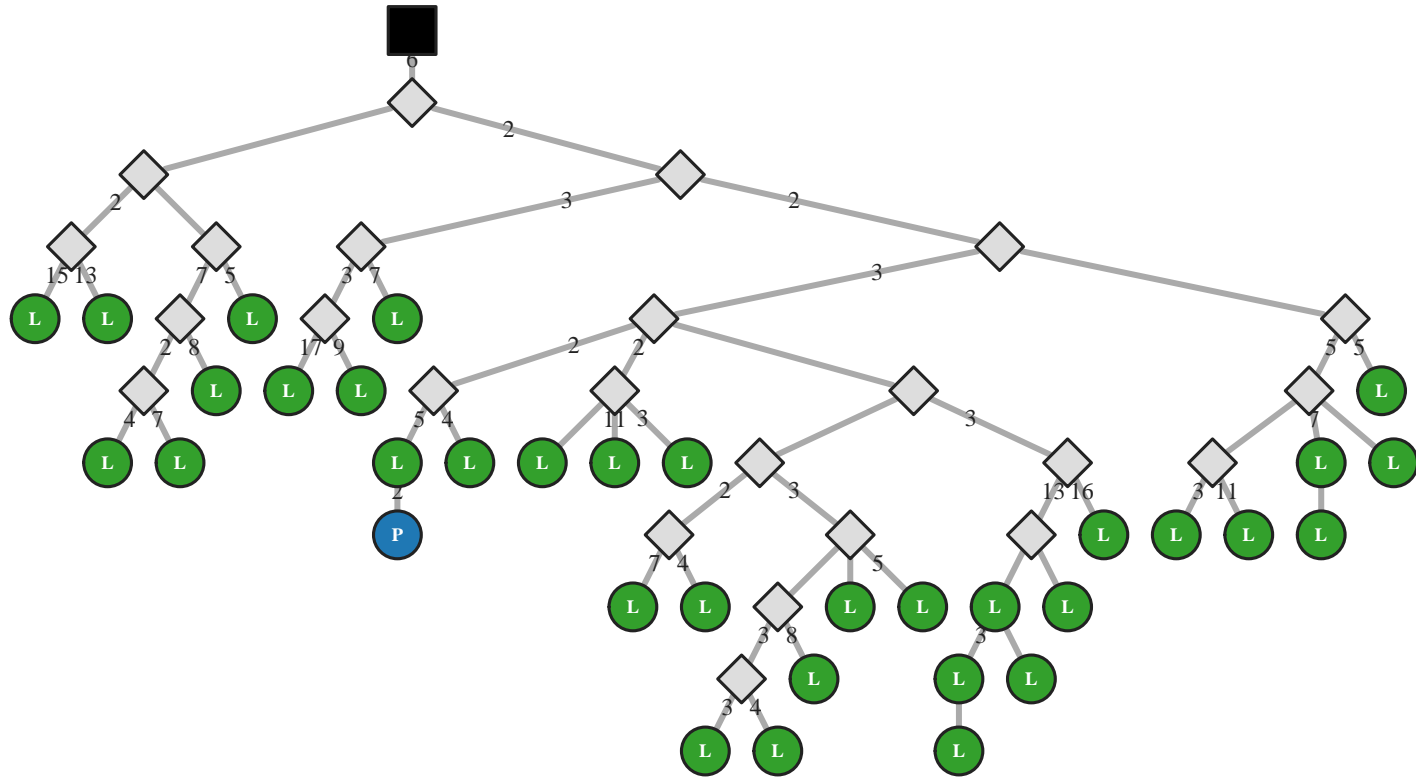
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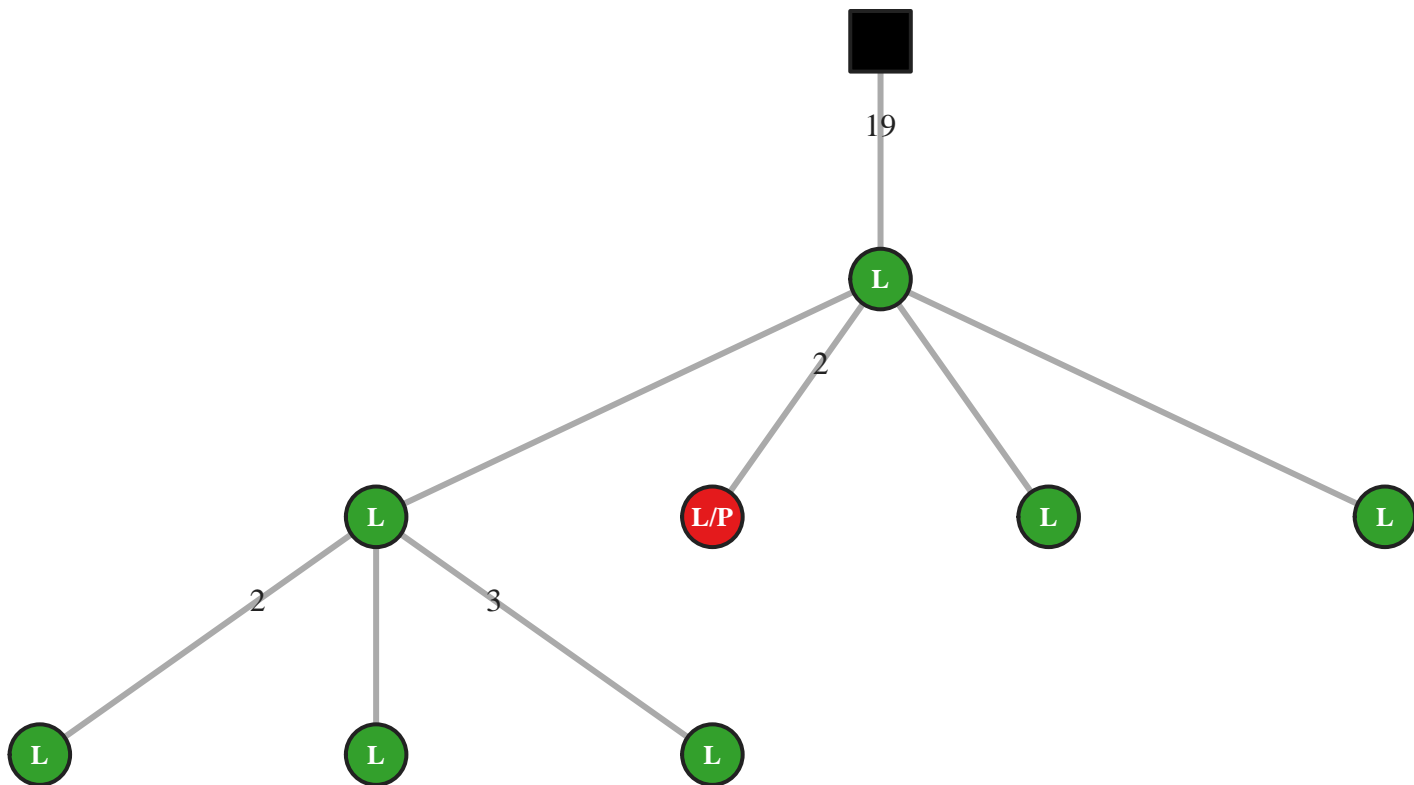
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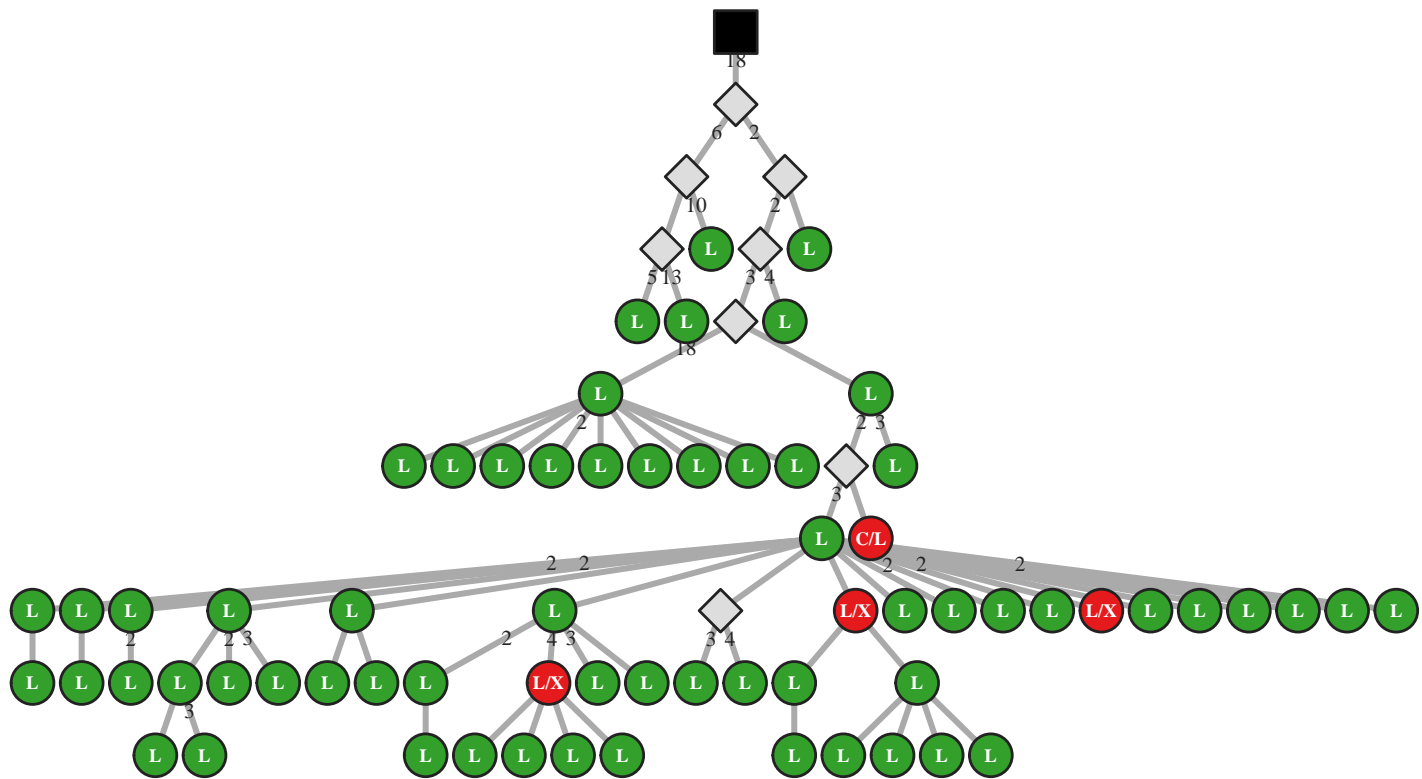
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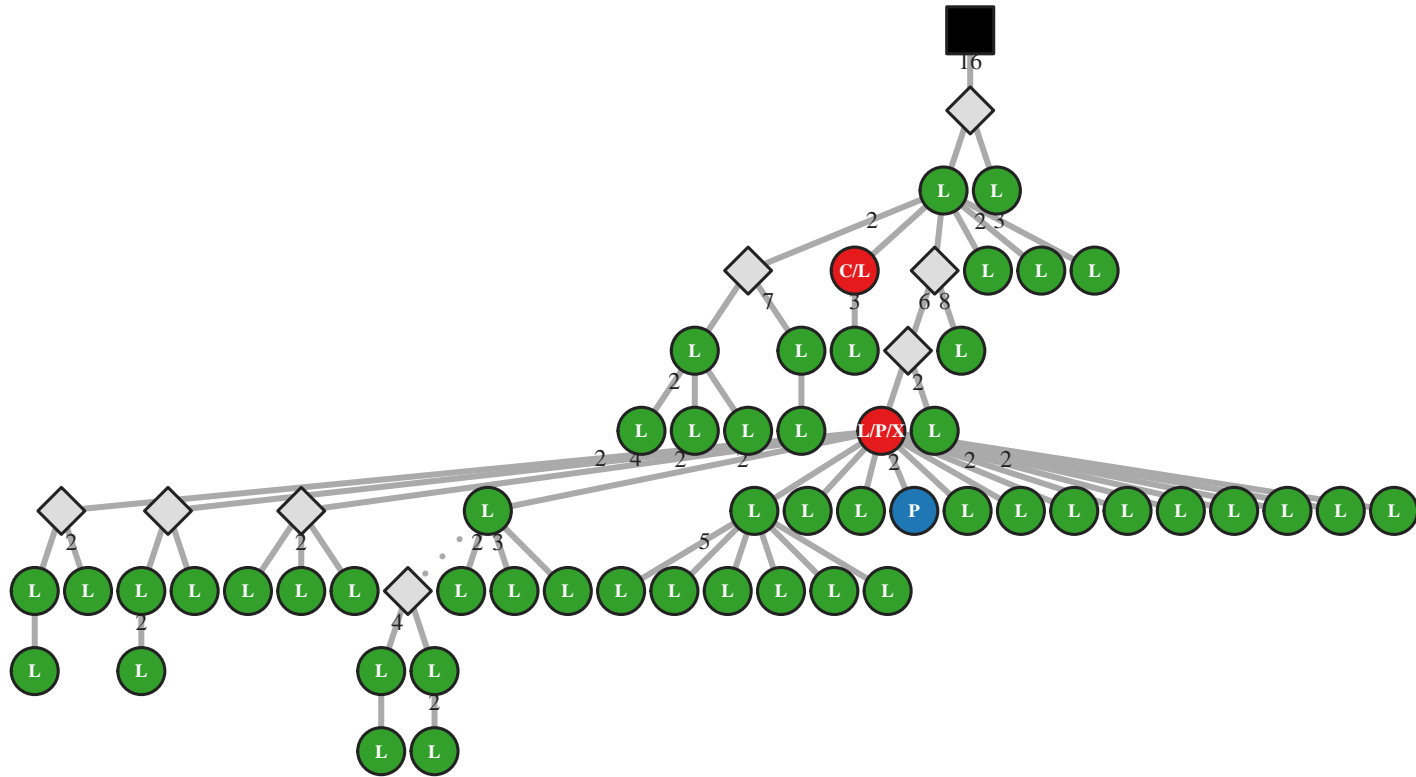
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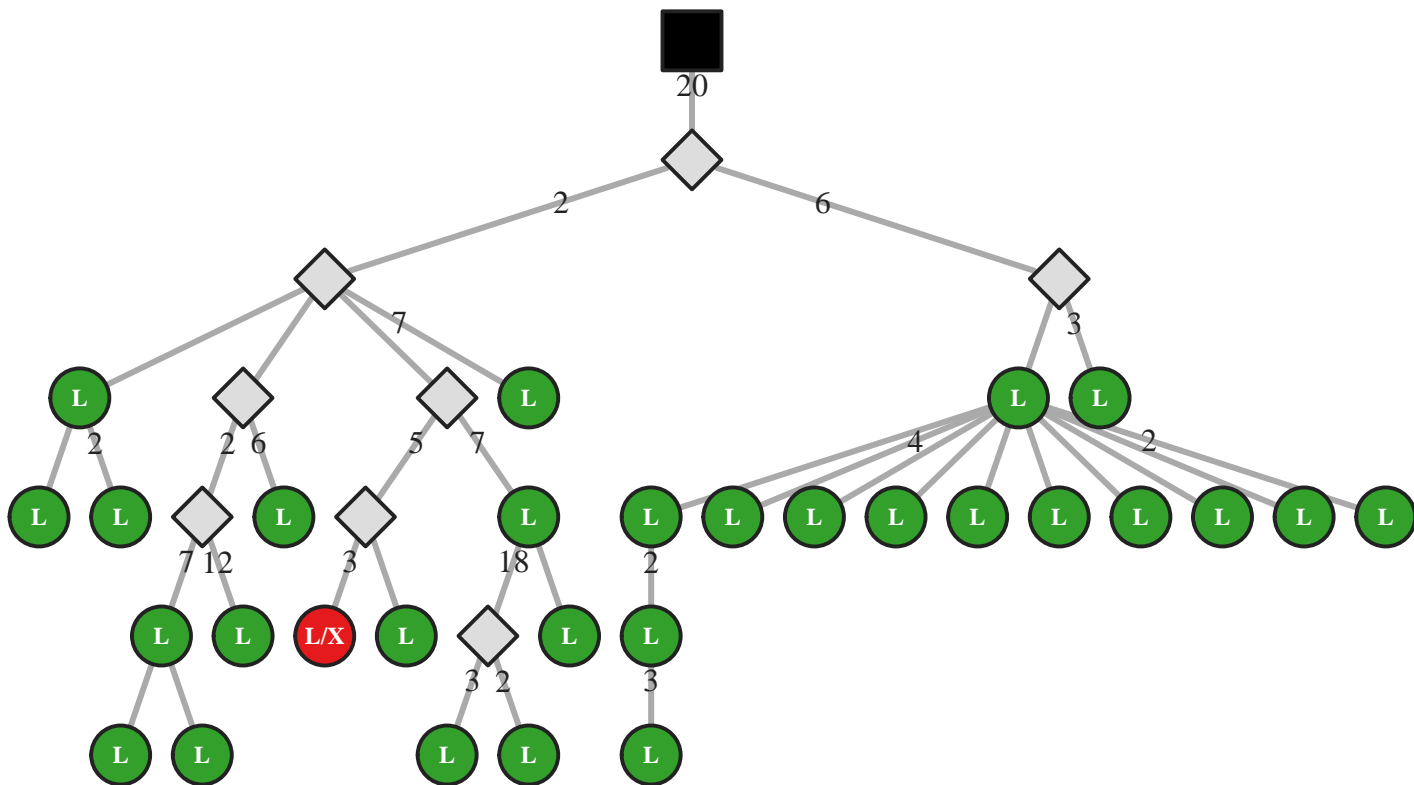
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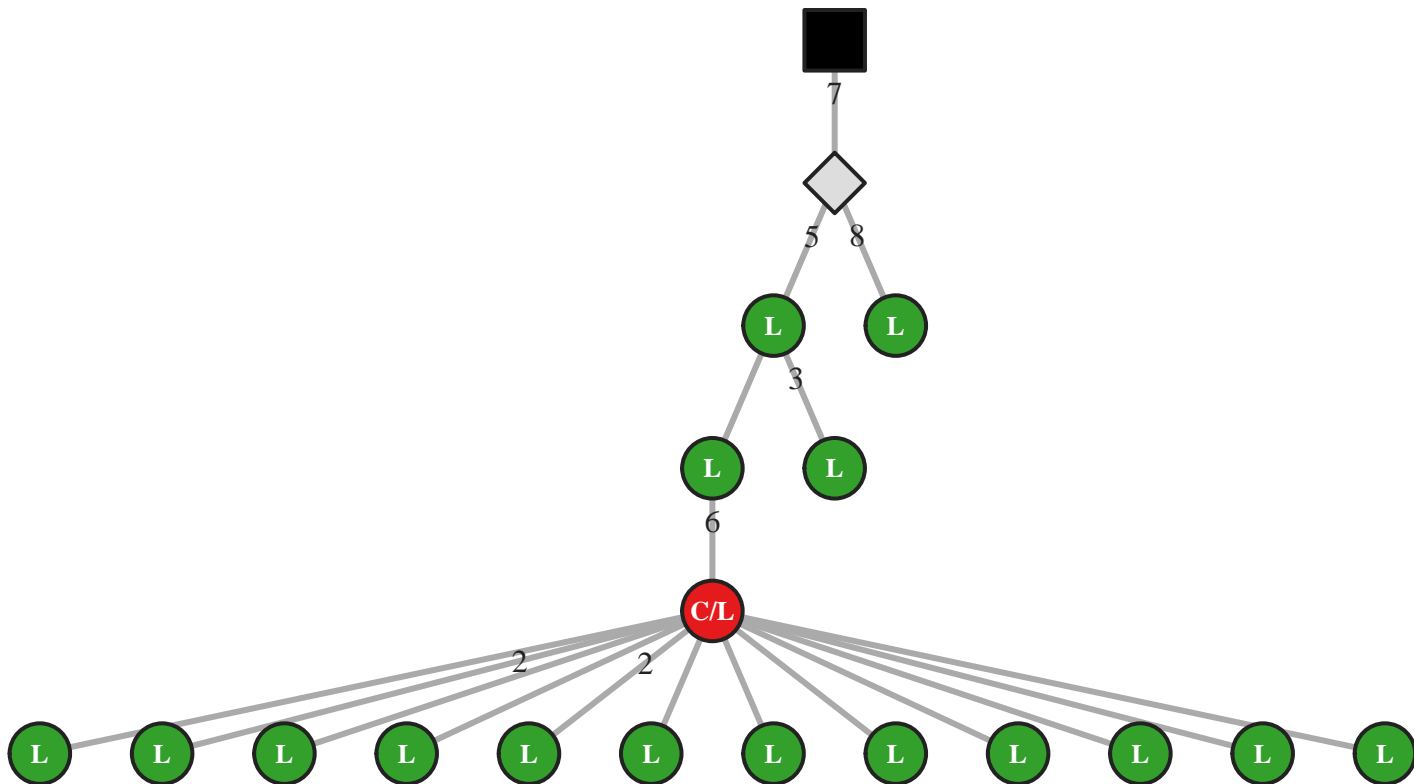
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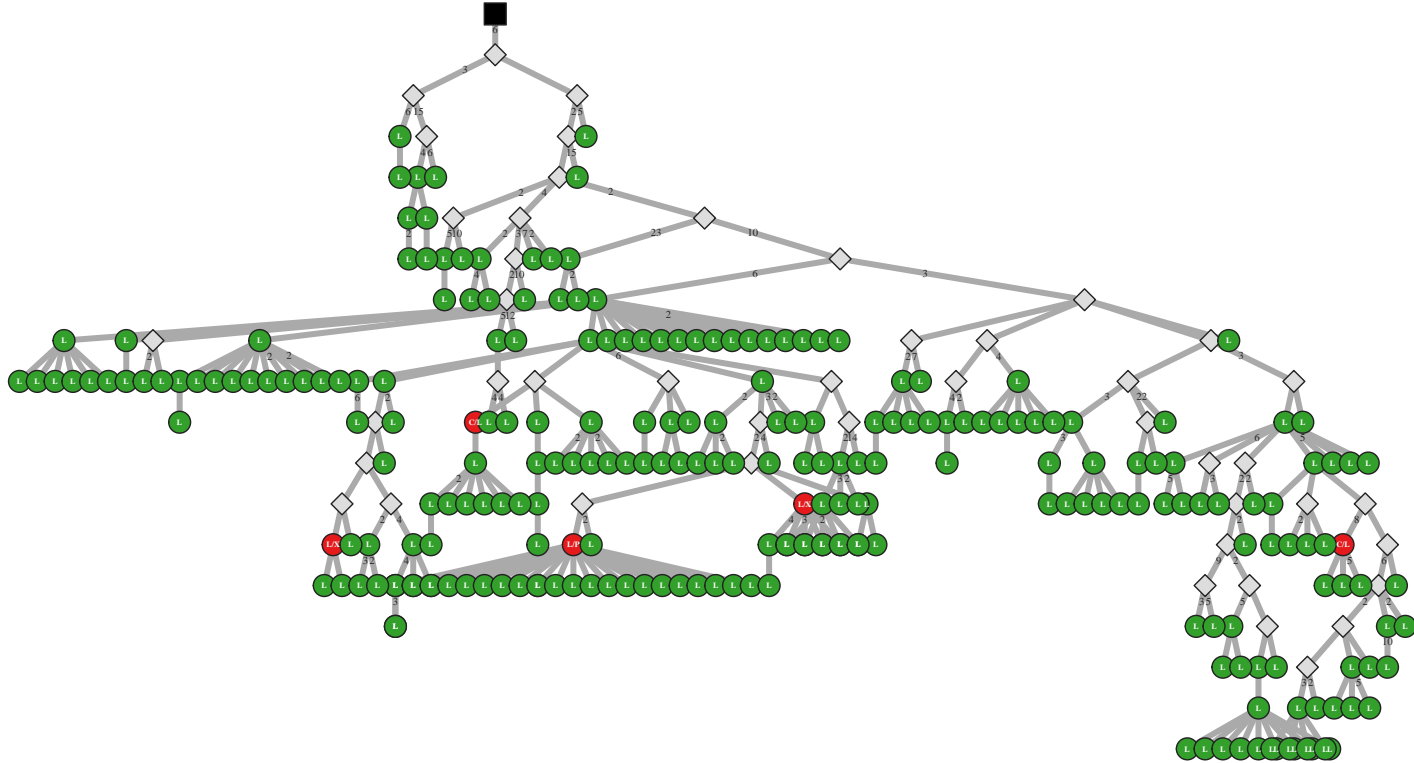
M5 IgG IGHV1-69/J4 45bp (41149)



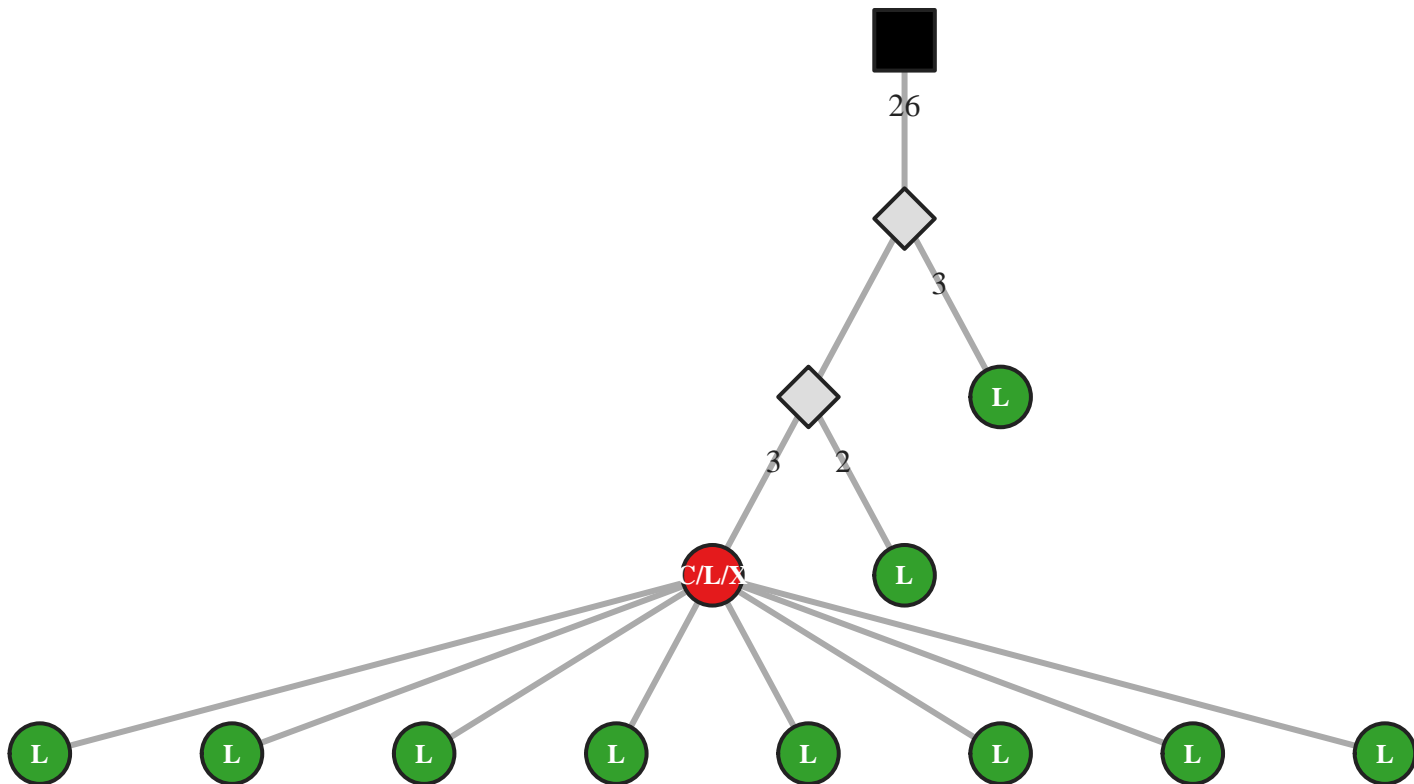
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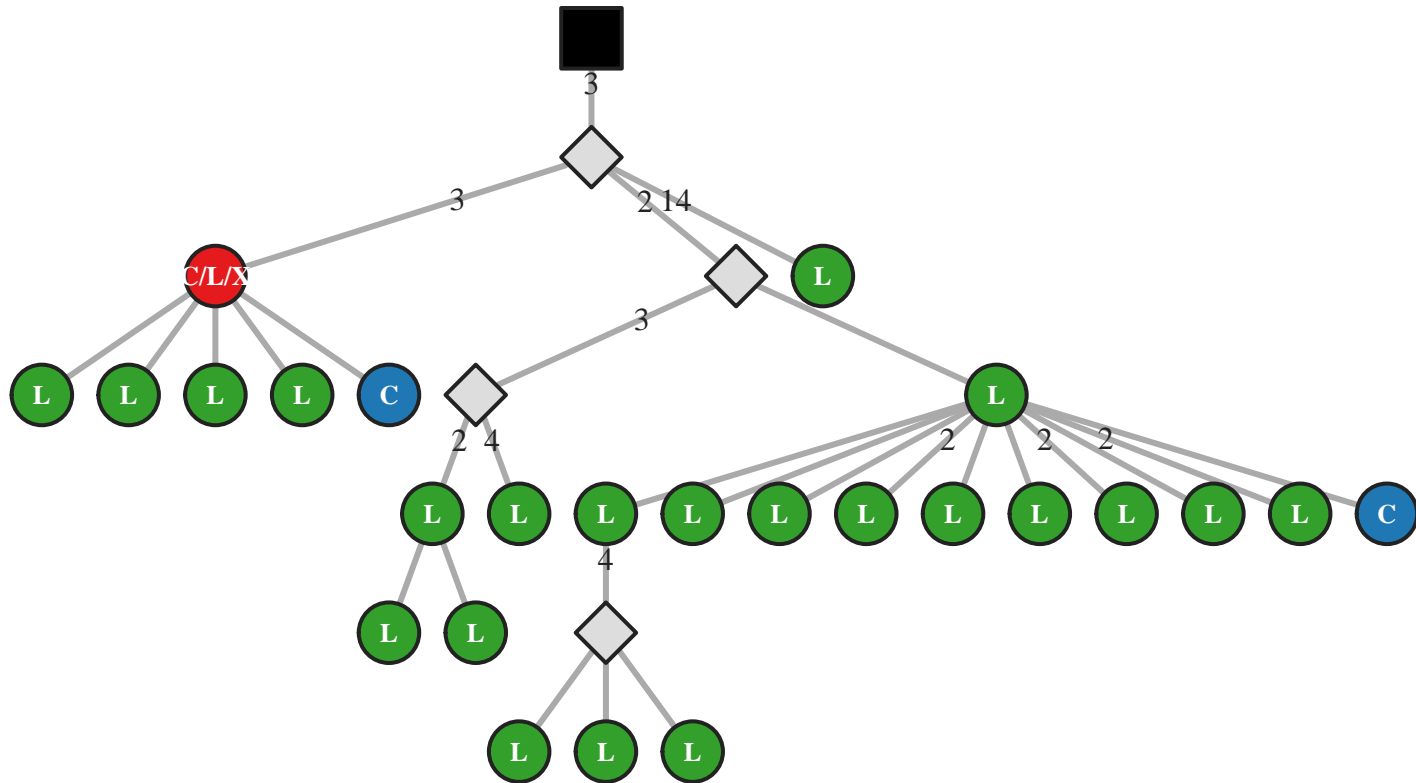
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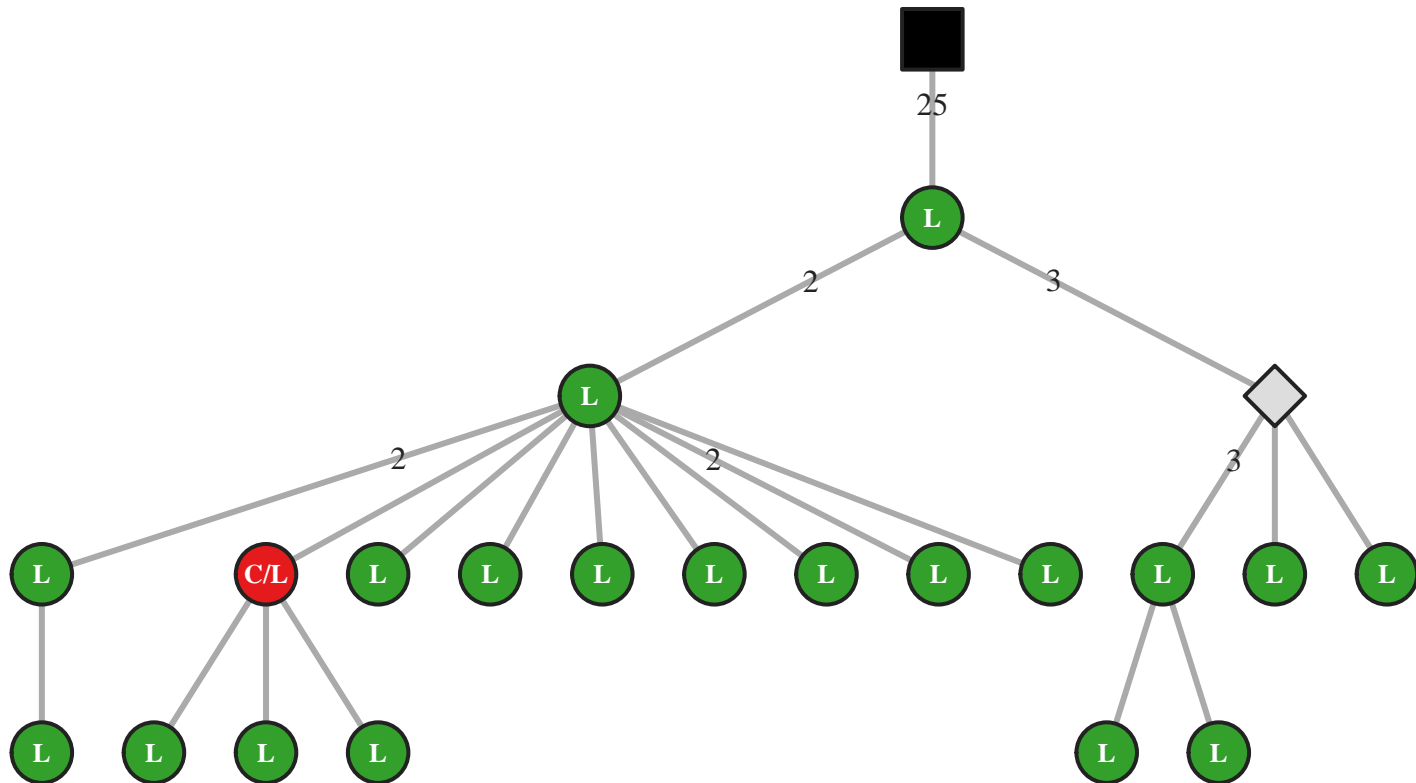
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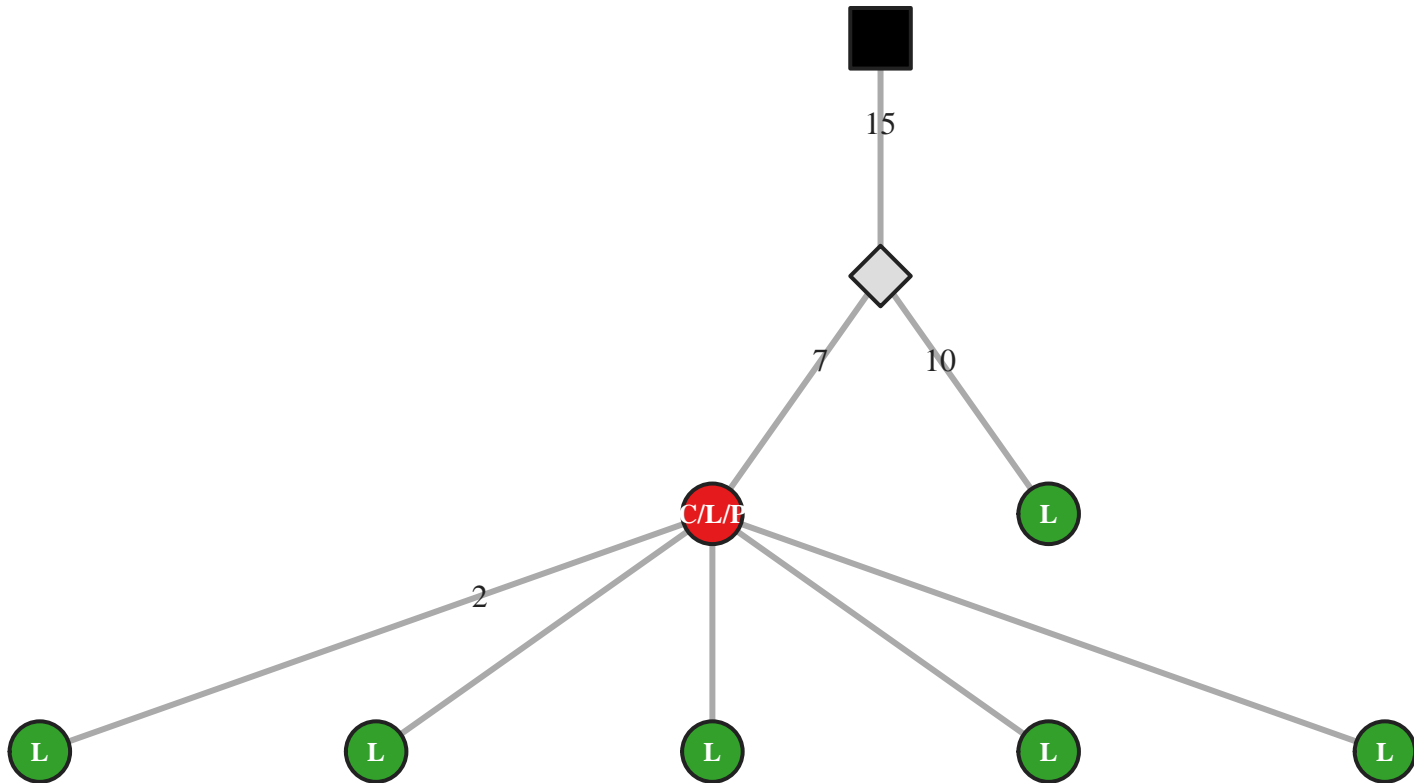
M5 IgG IGHV1-69/J4 48bp (41237)



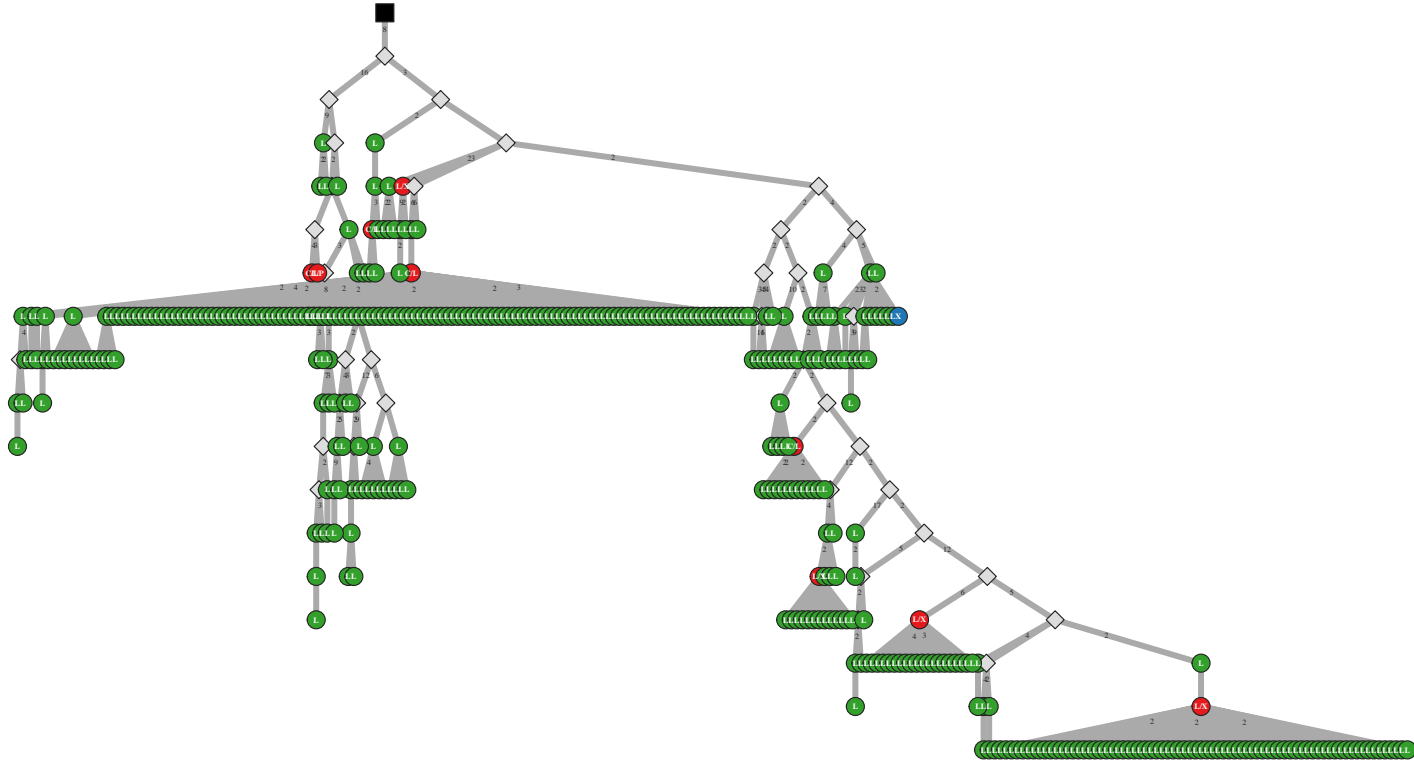
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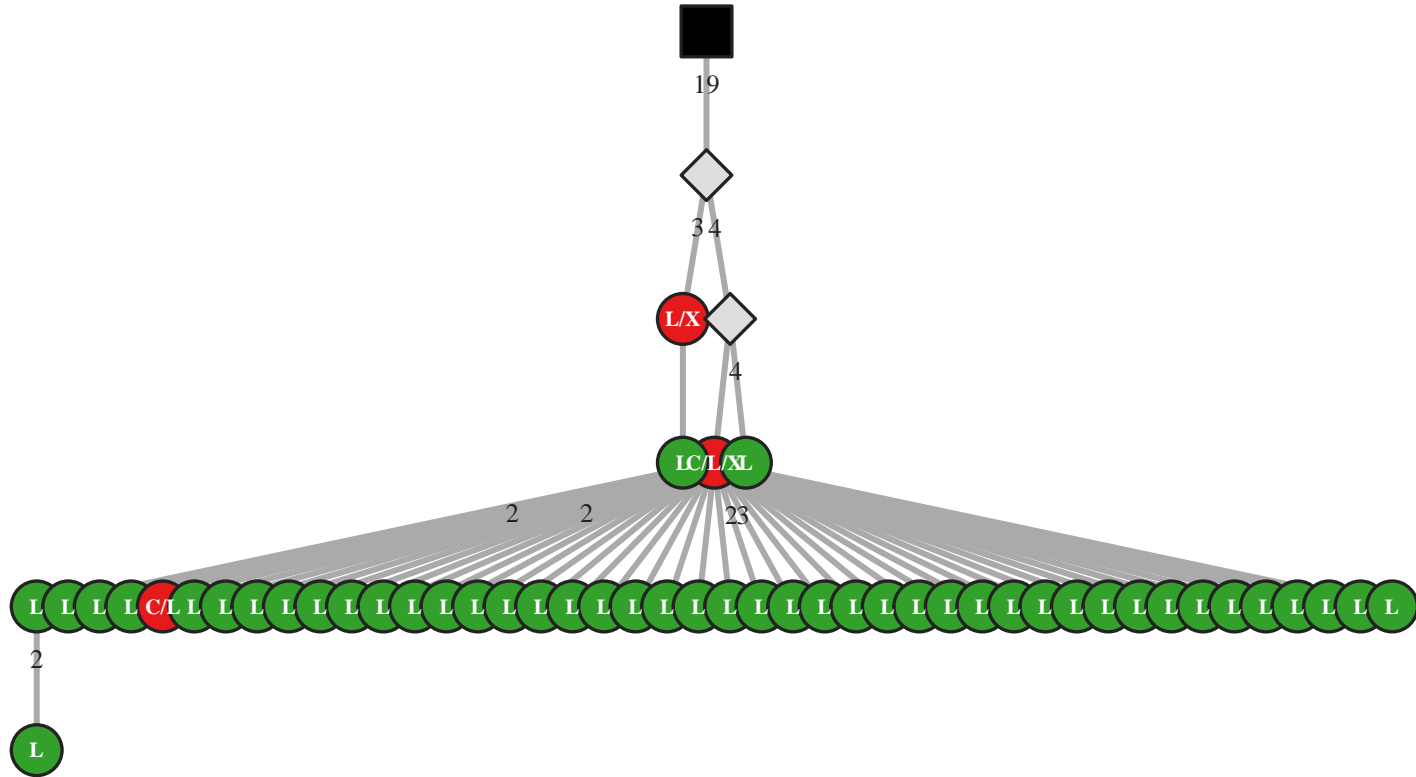
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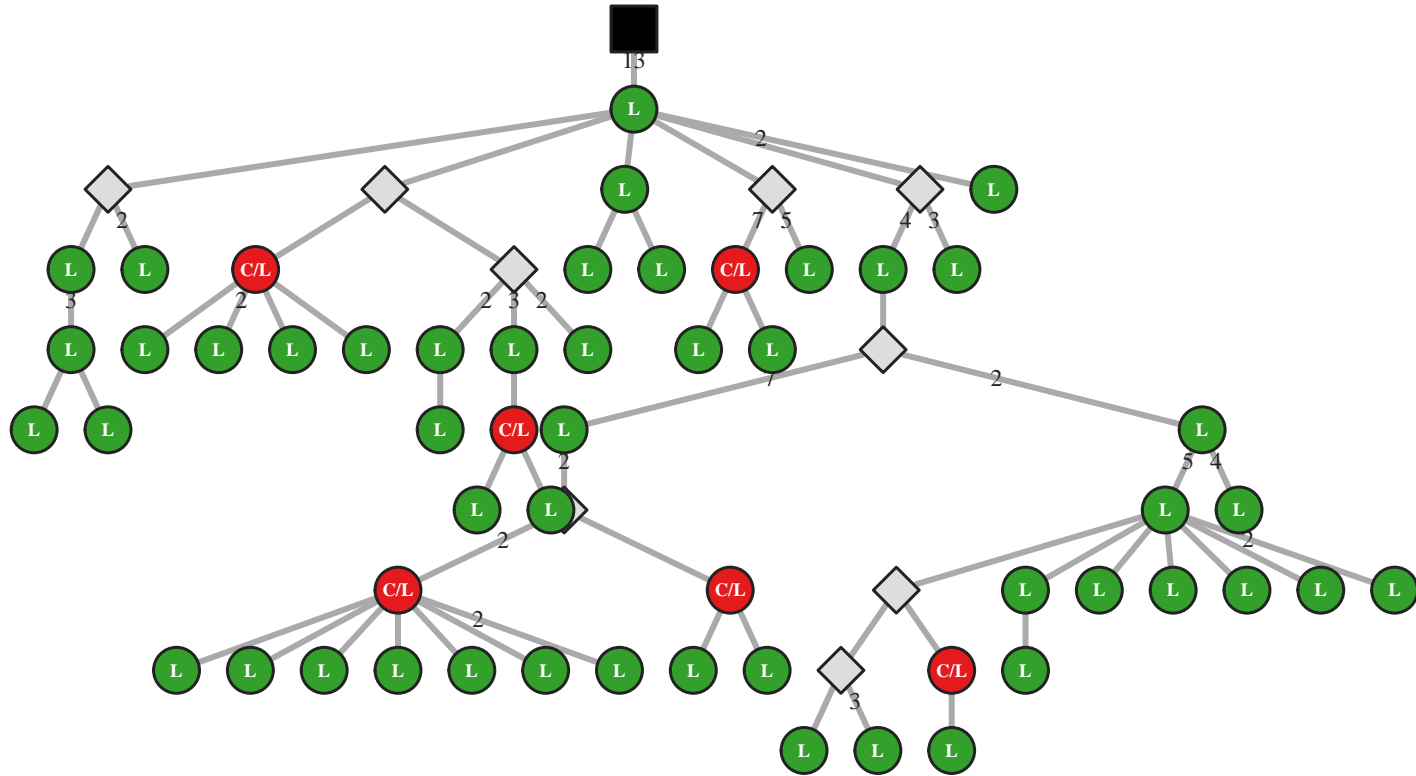
M5 IgG IGHV1-69/J4 48bp (41334)



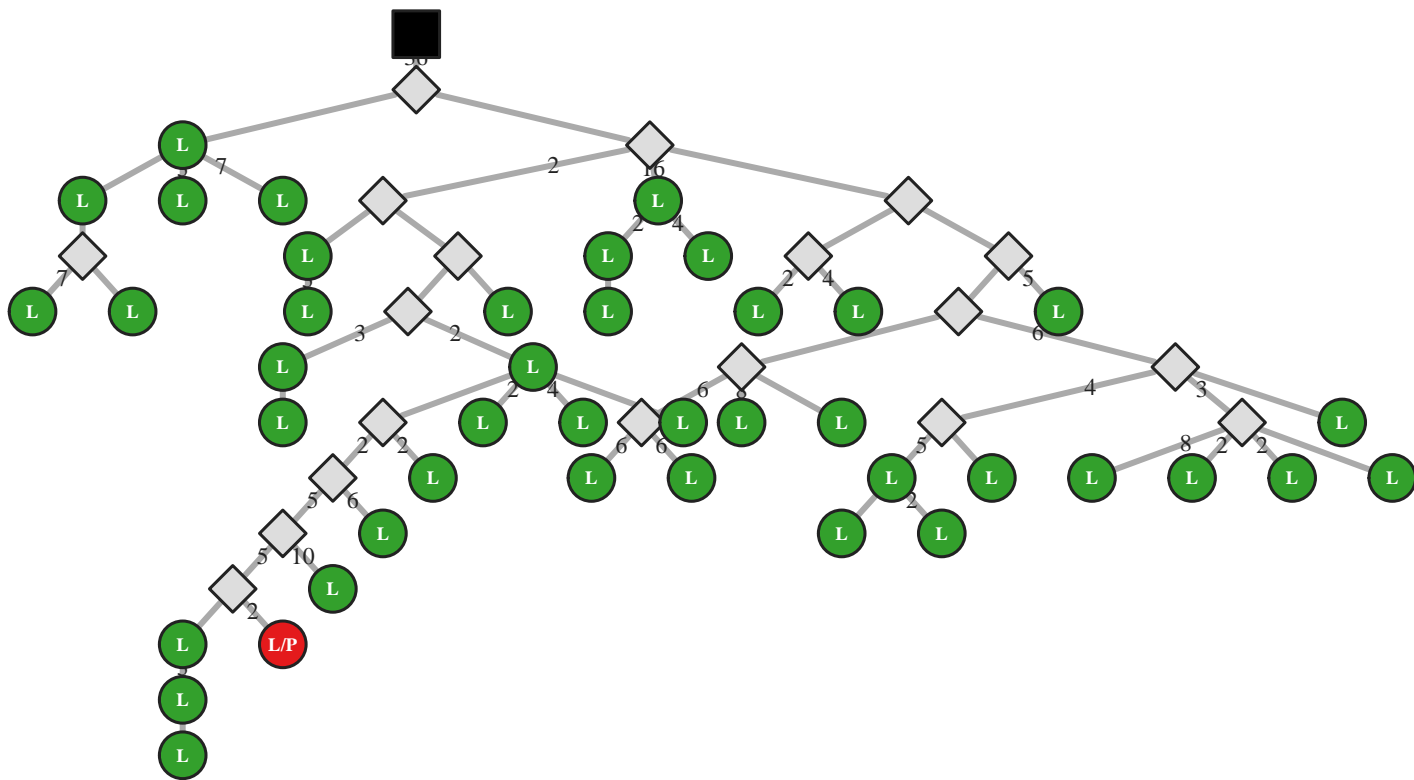
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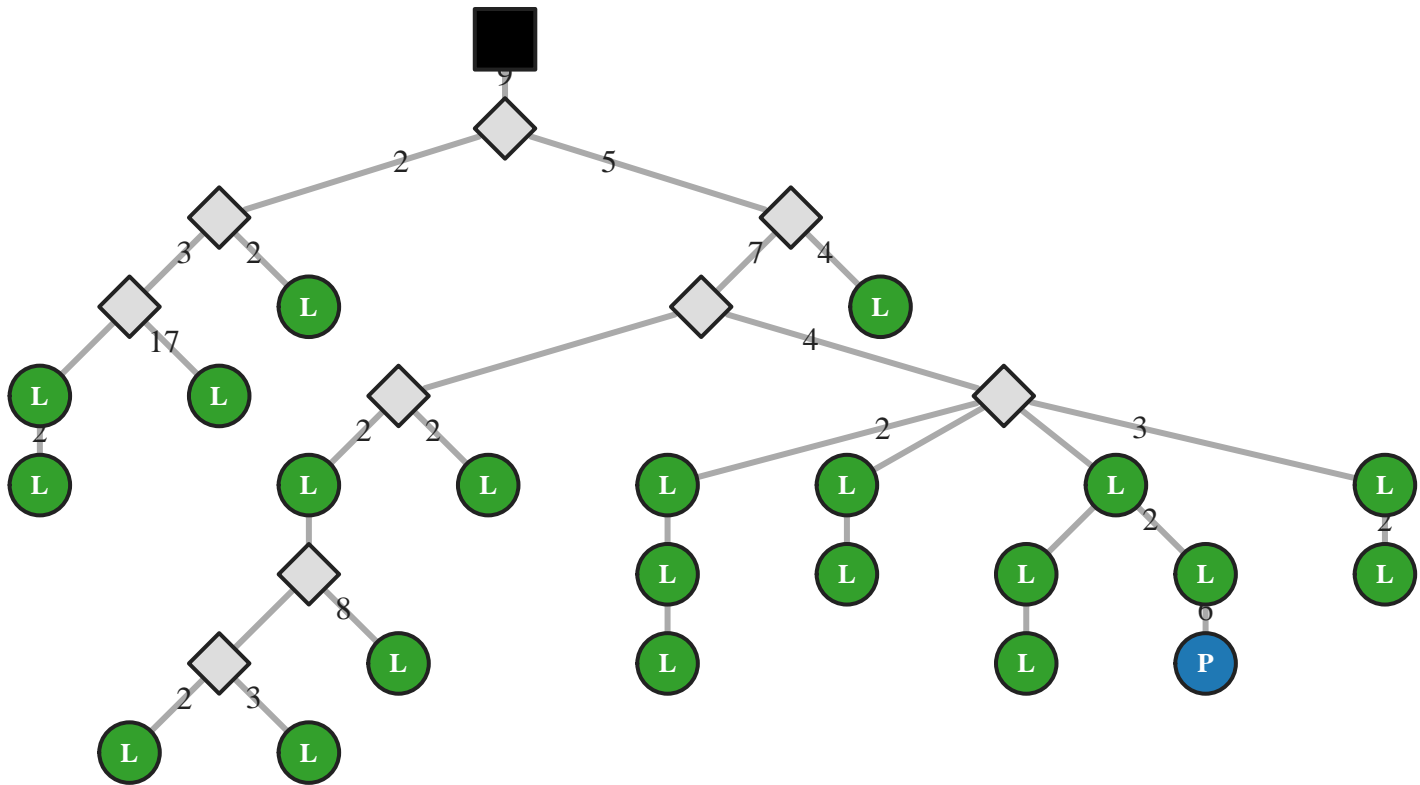
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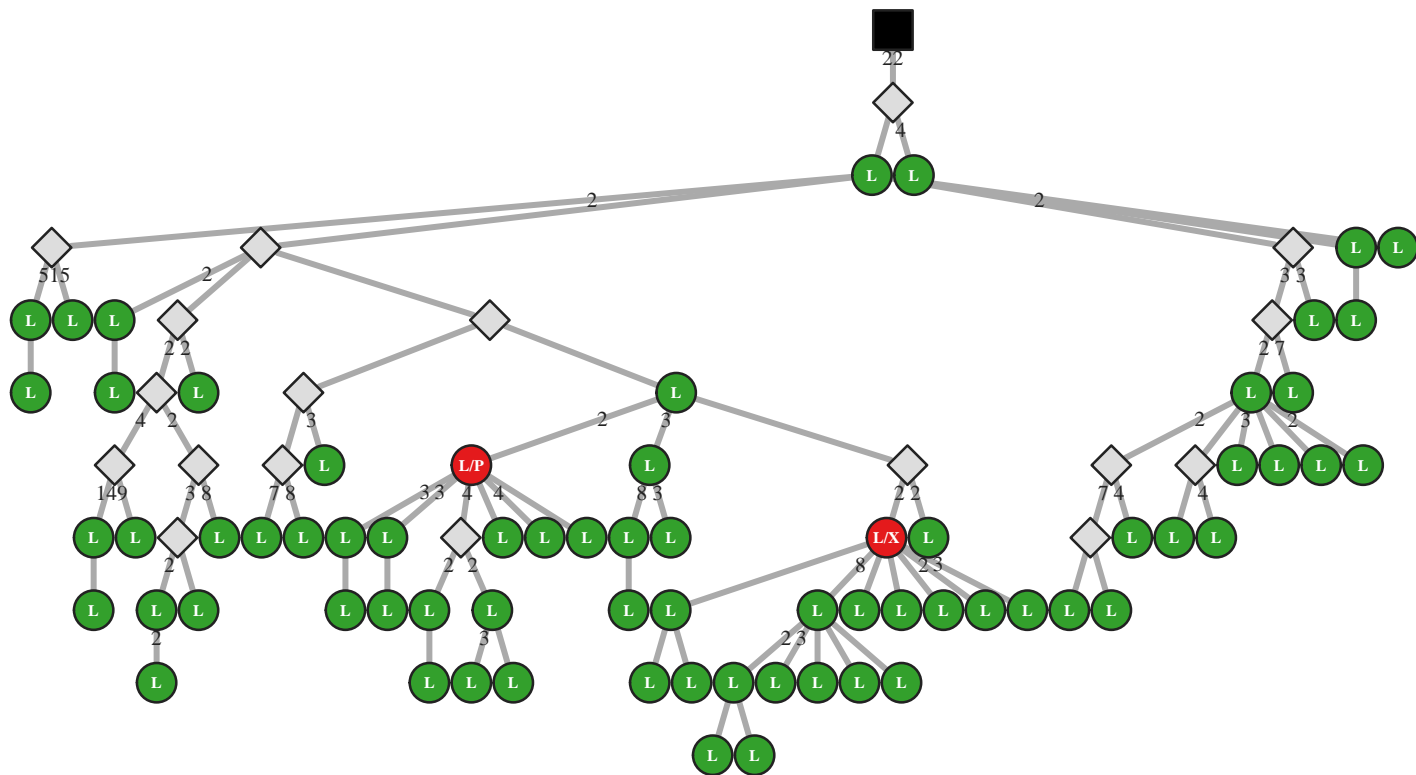
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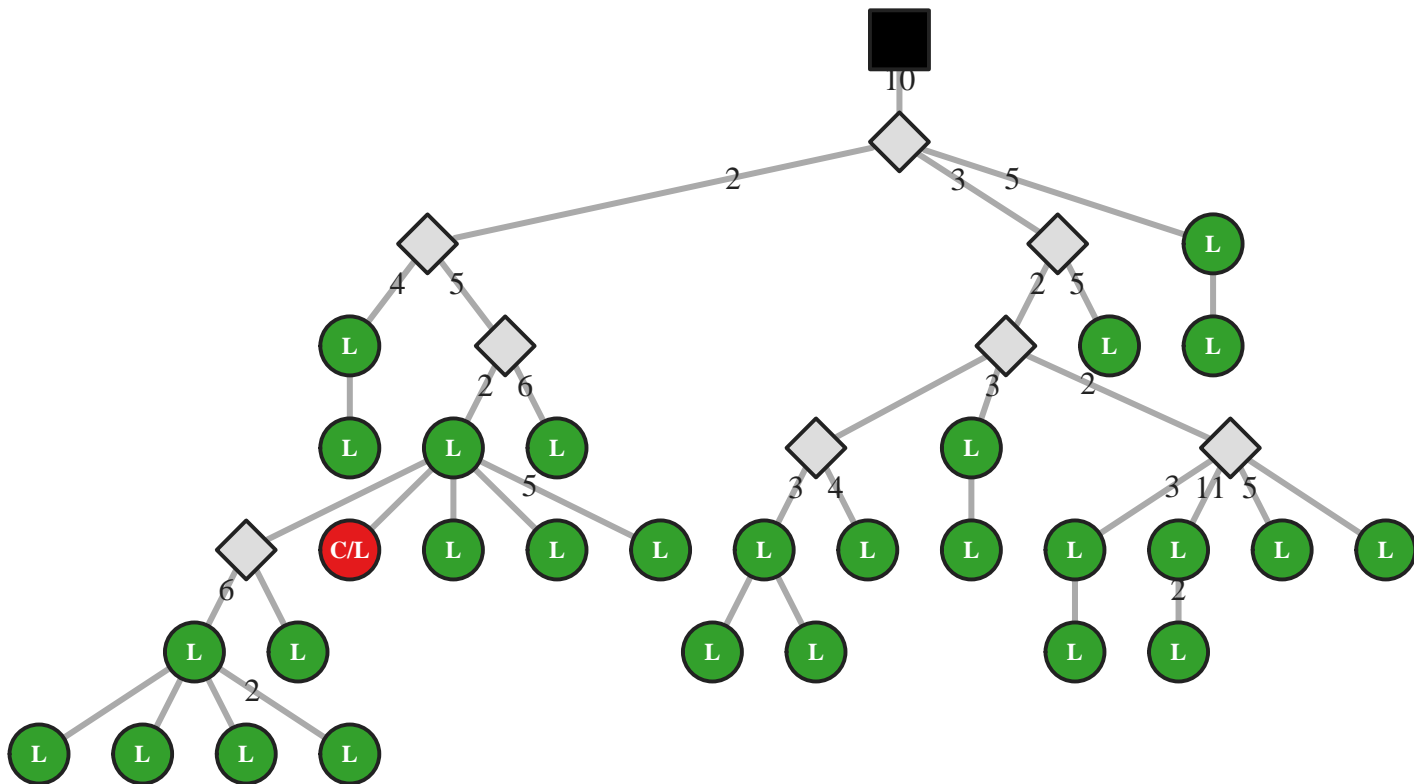
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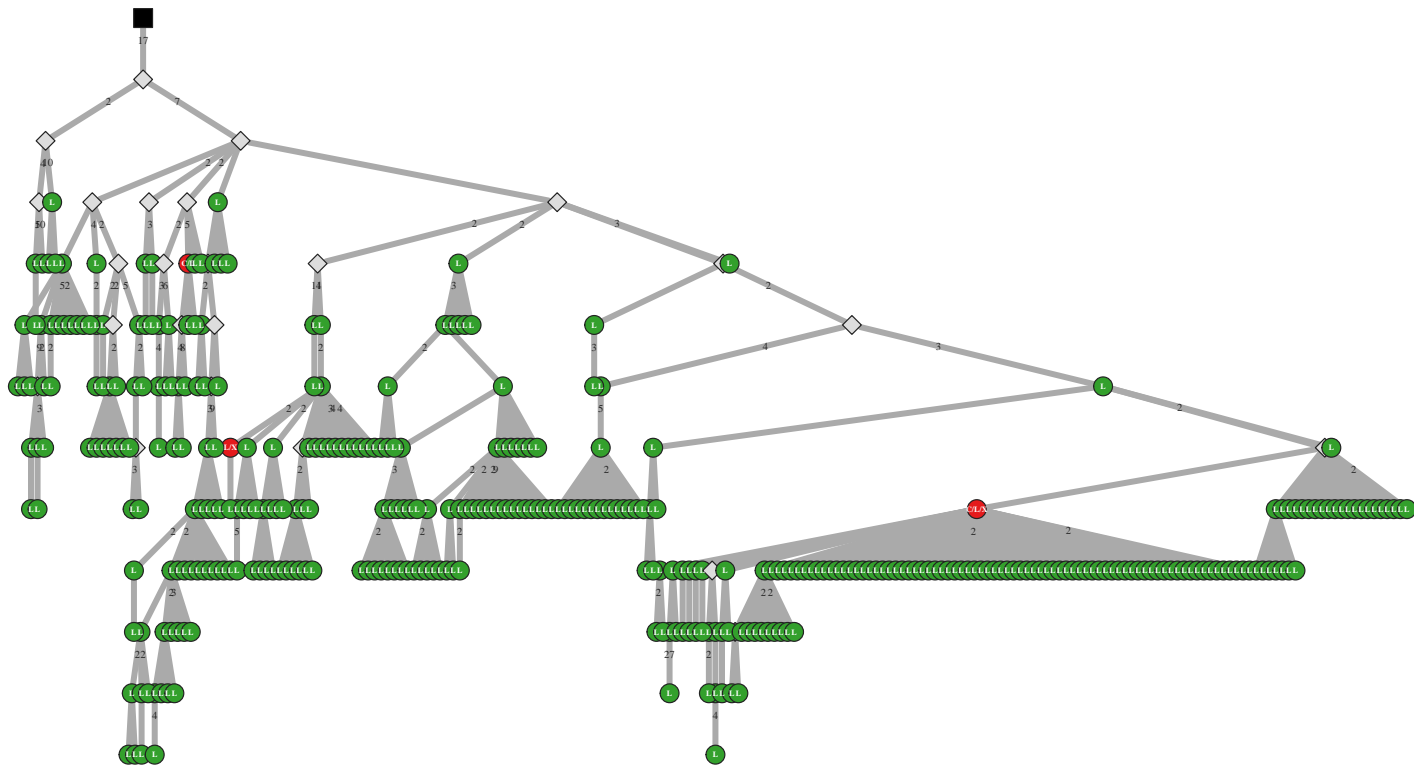
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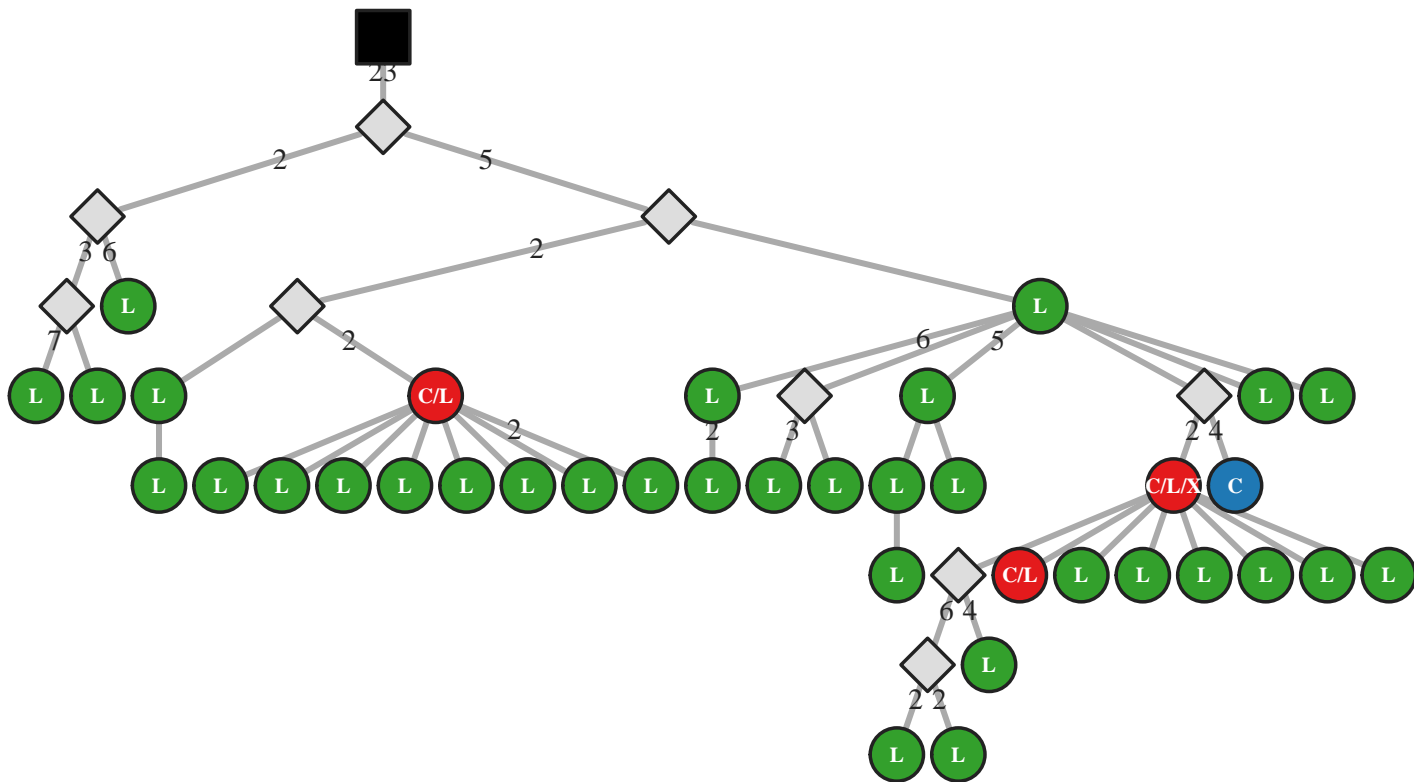
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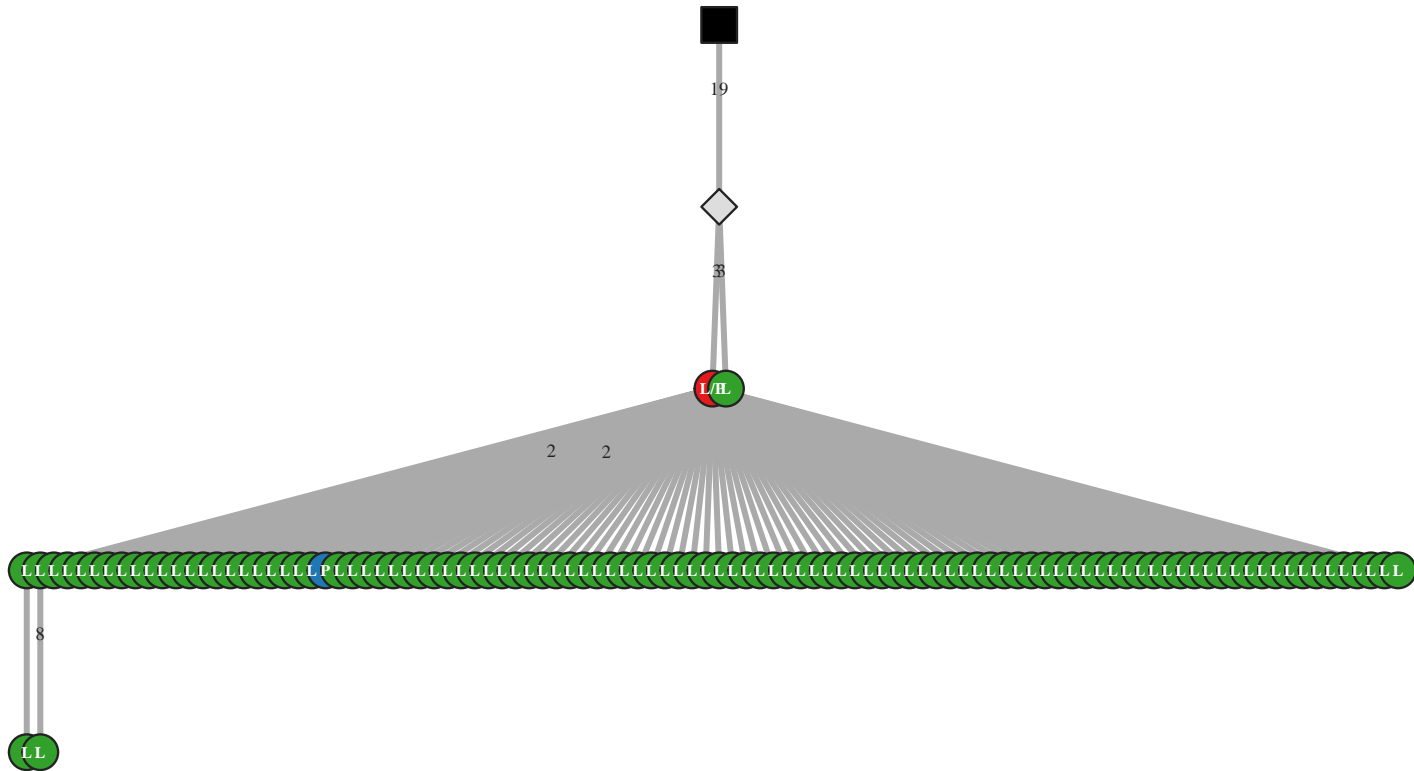
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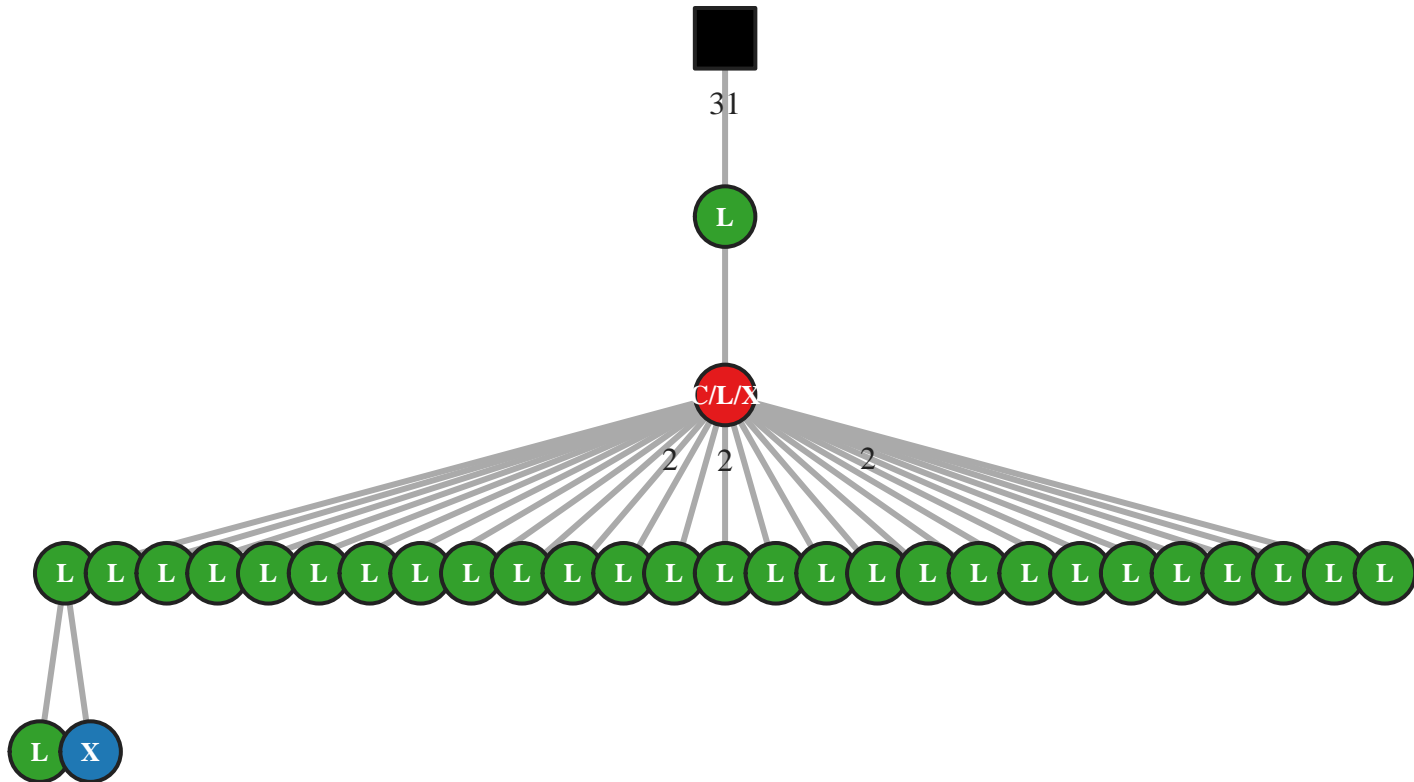
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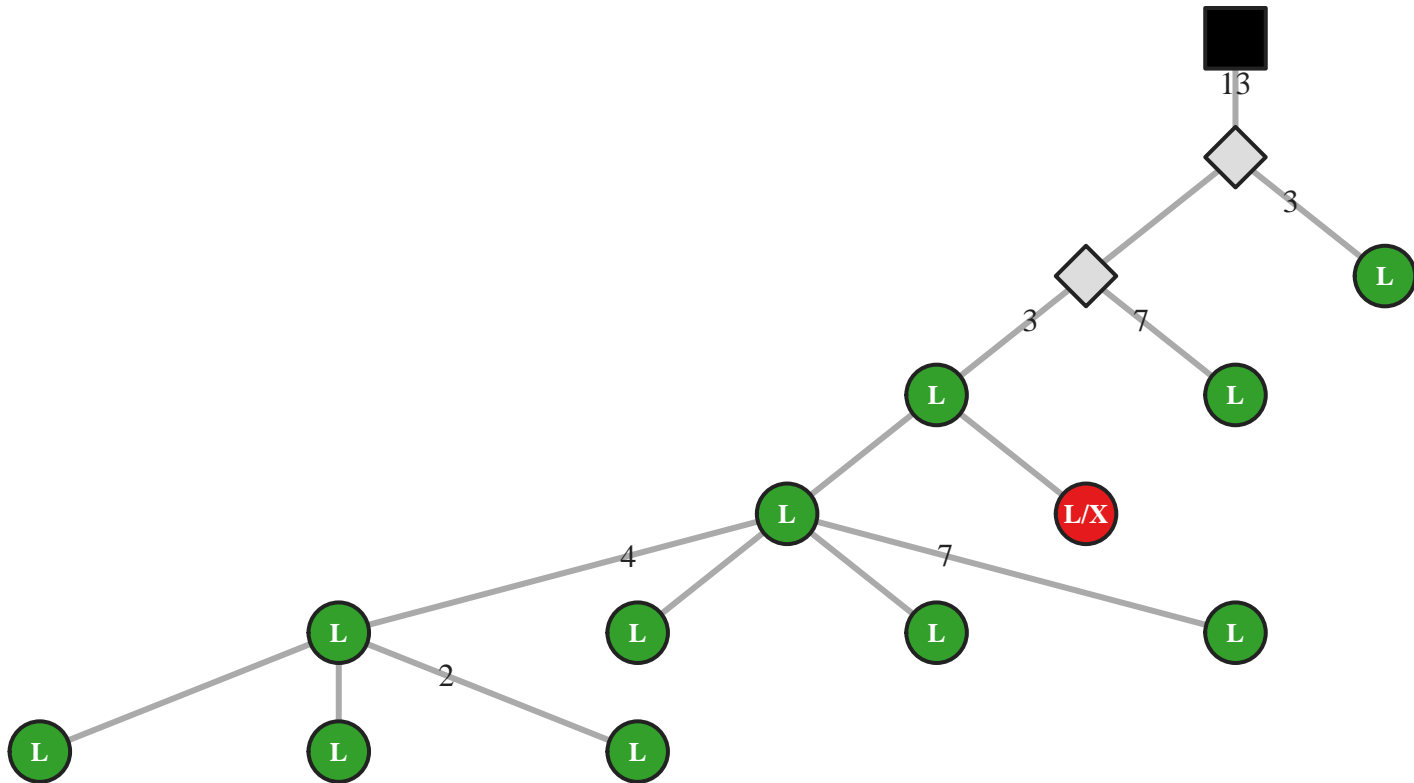
M5 IgA IGHV1-69/J4 51bp (38409)



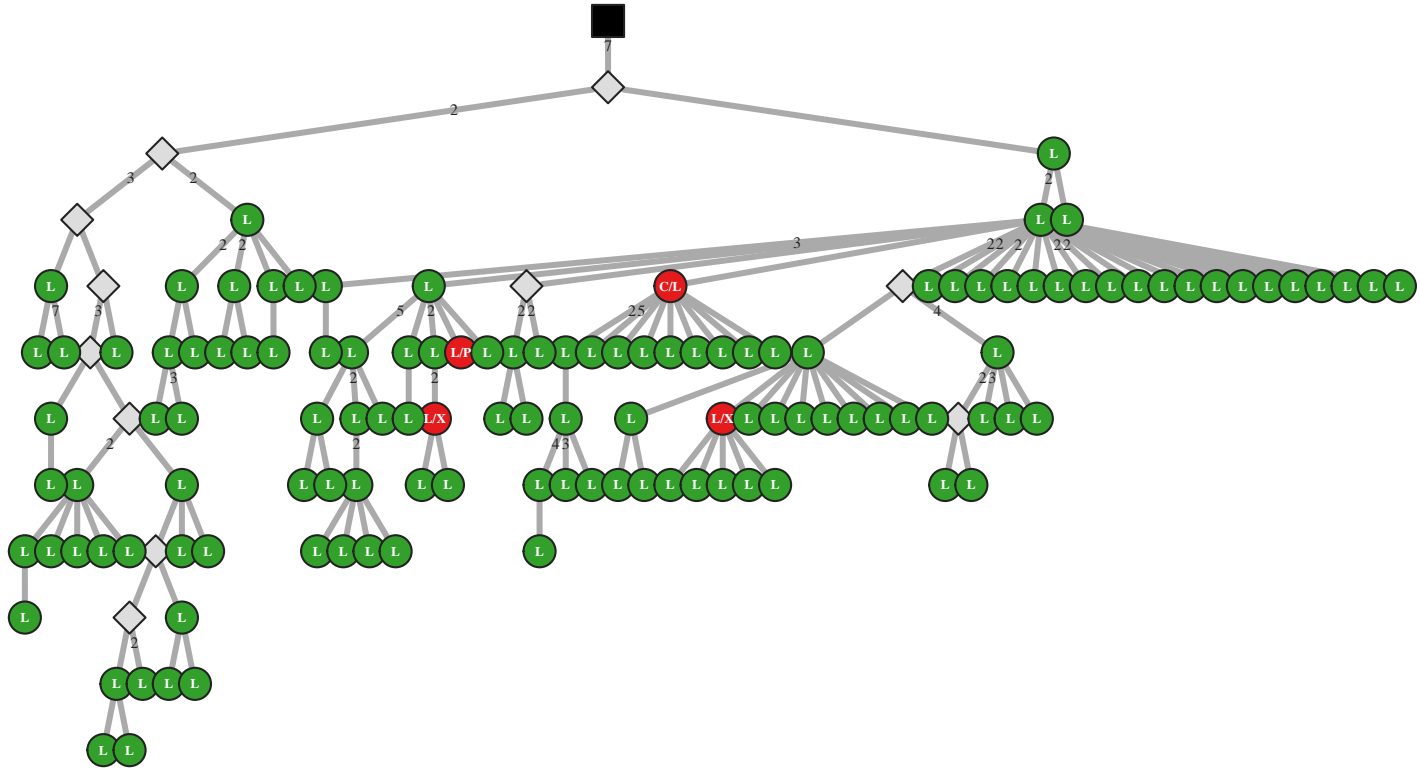
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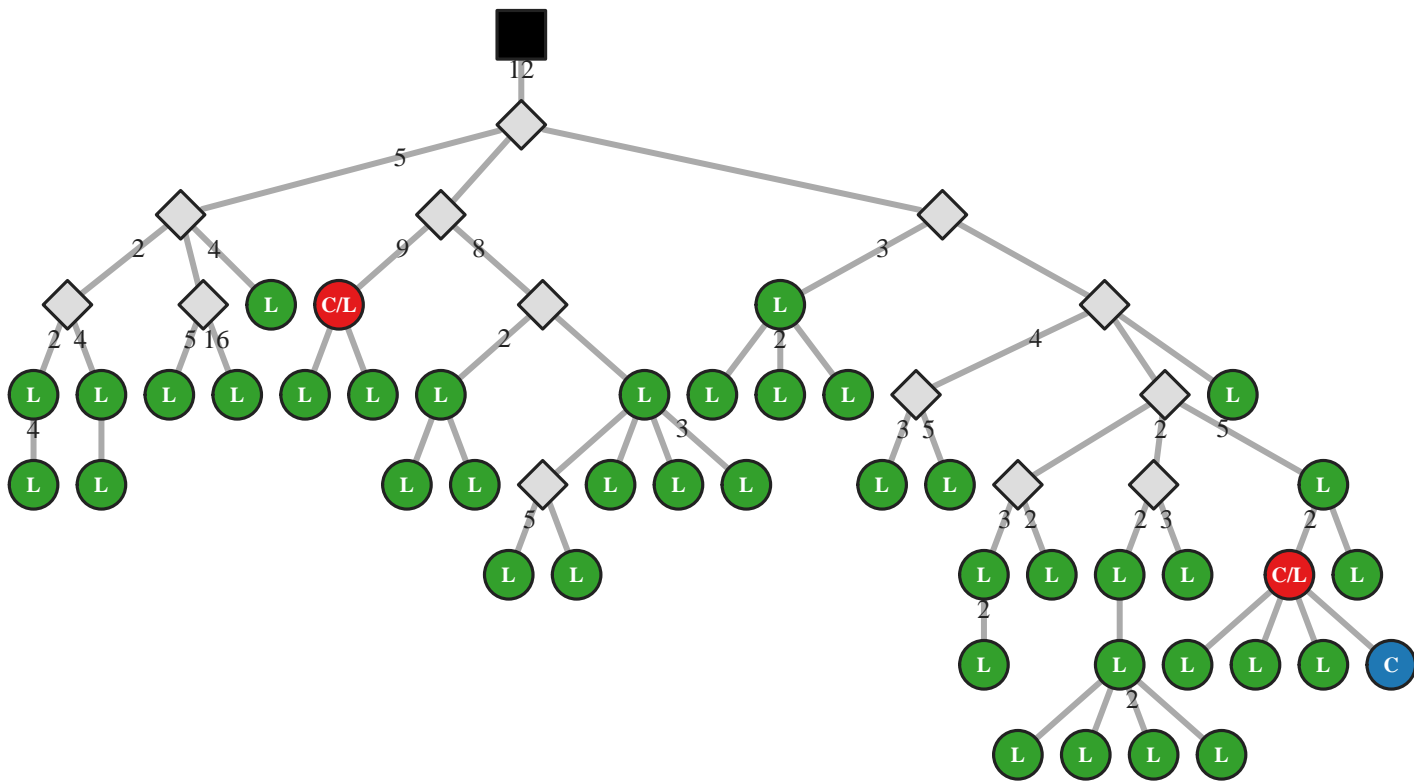
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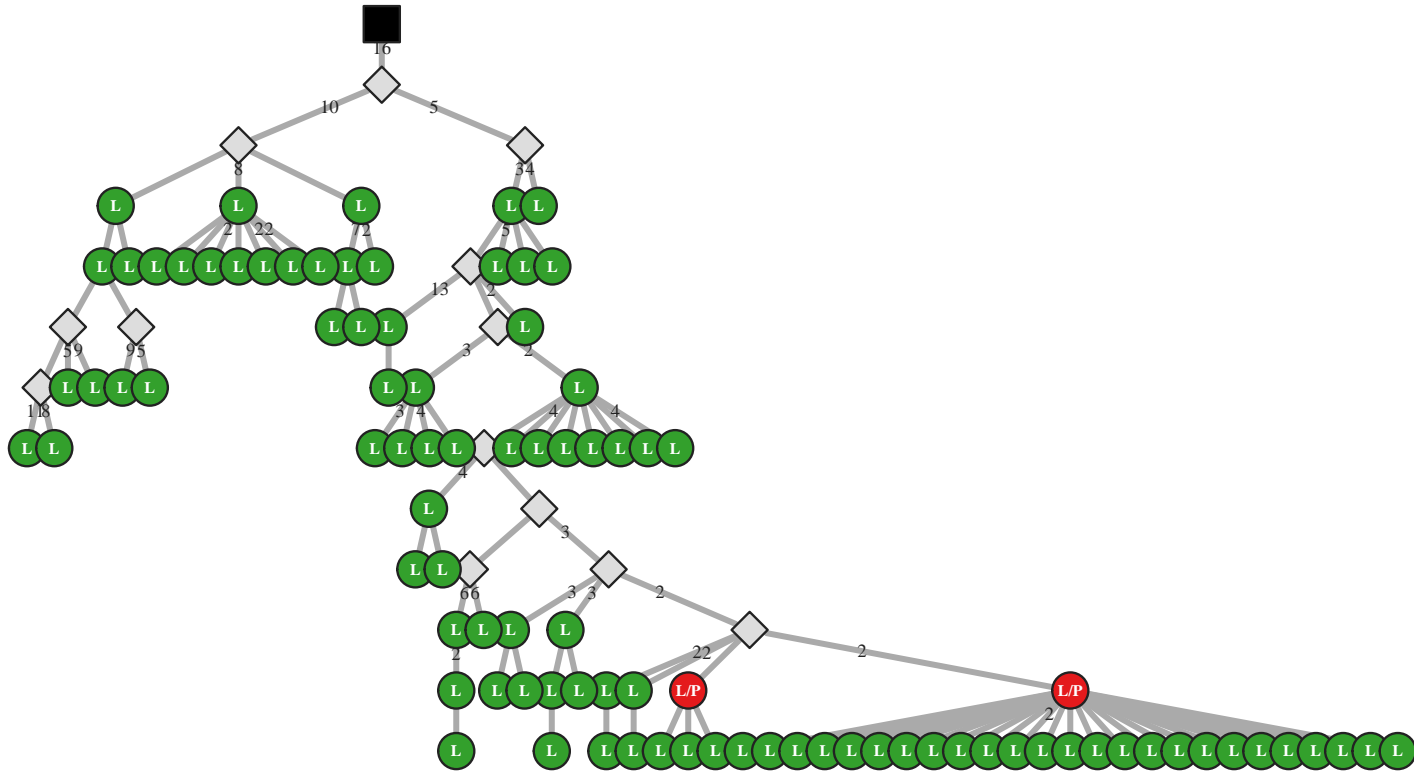
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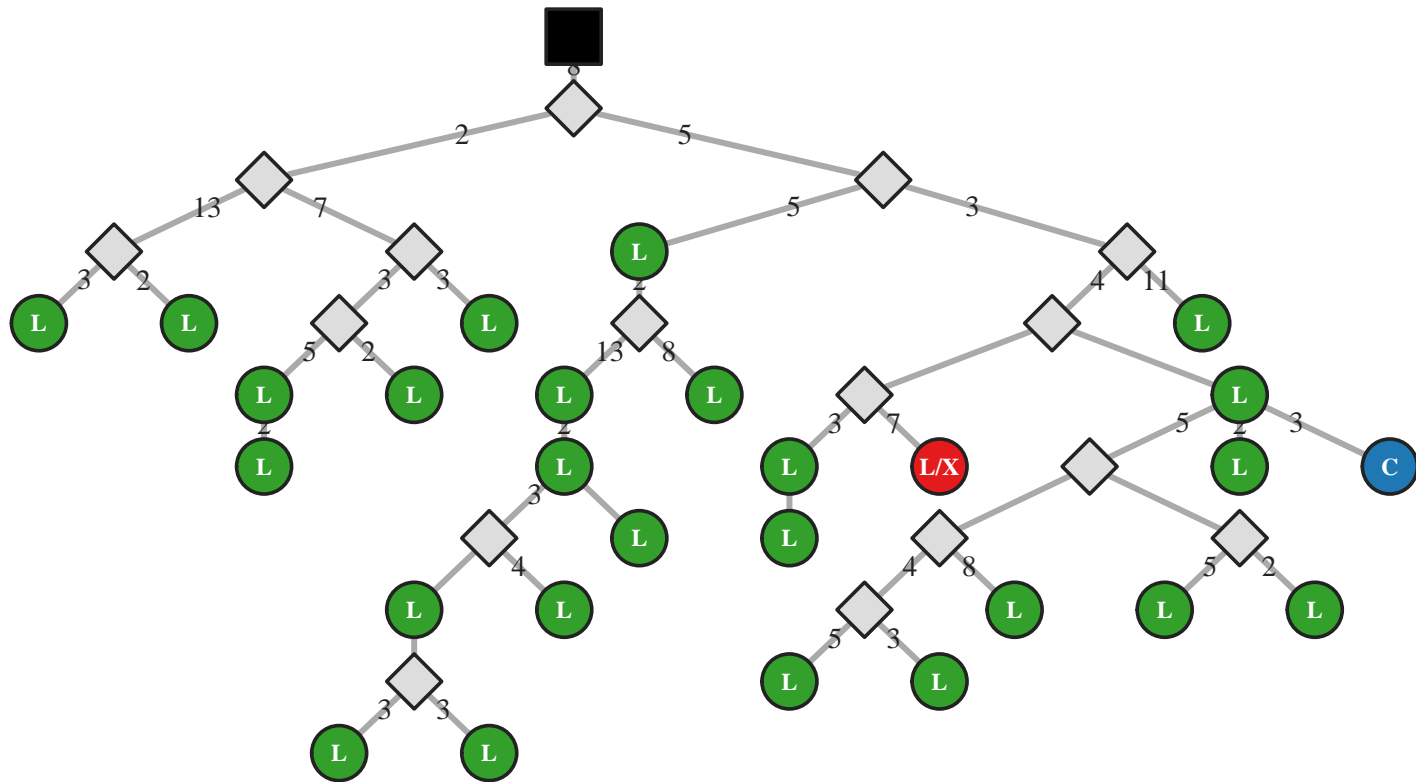
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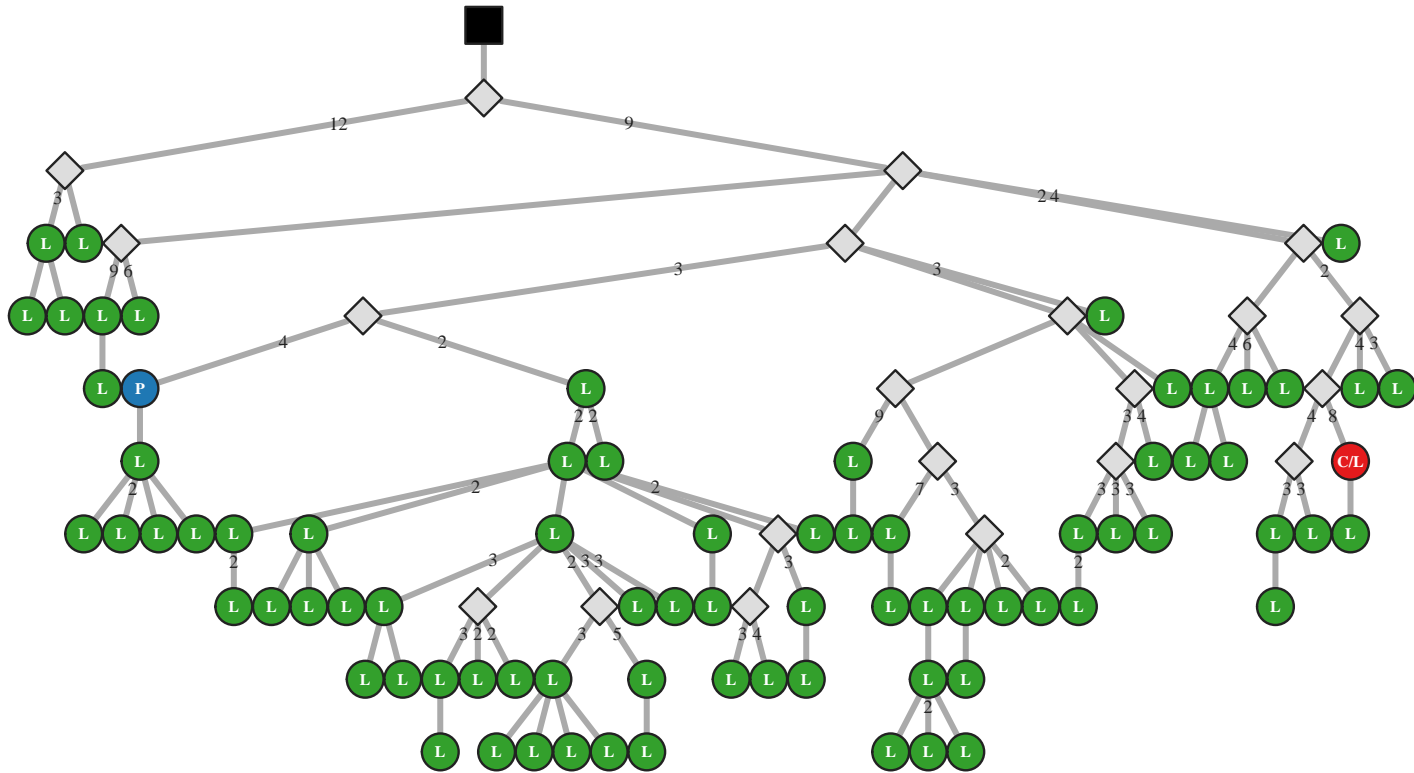
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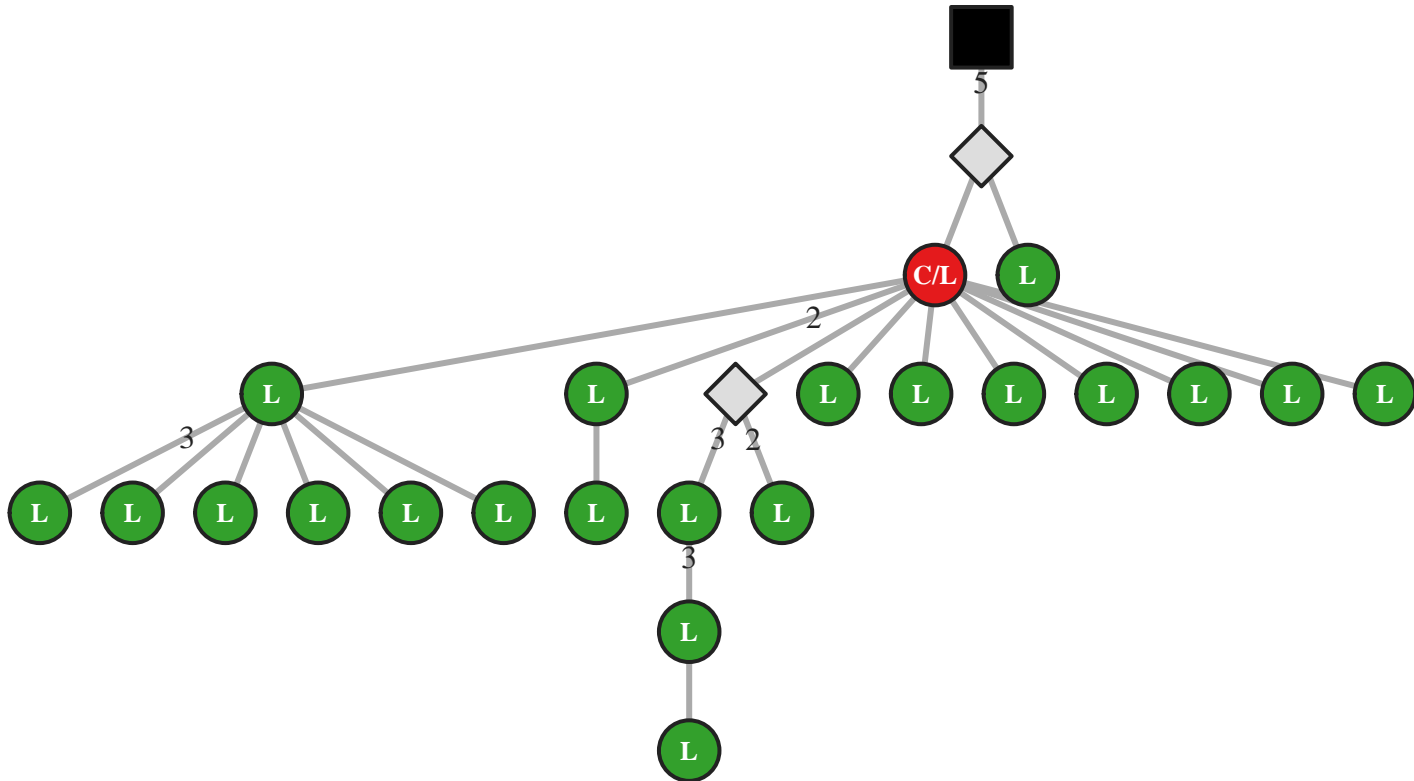
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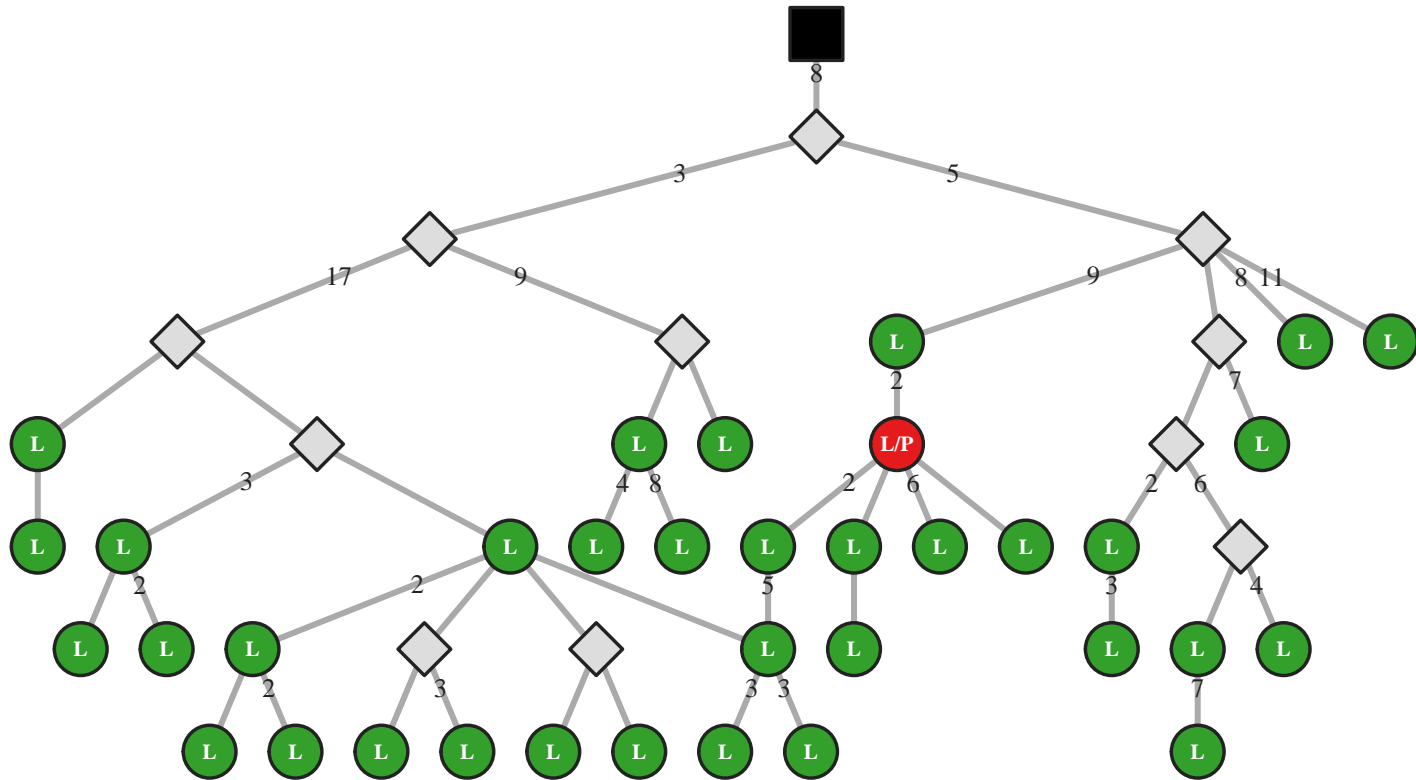
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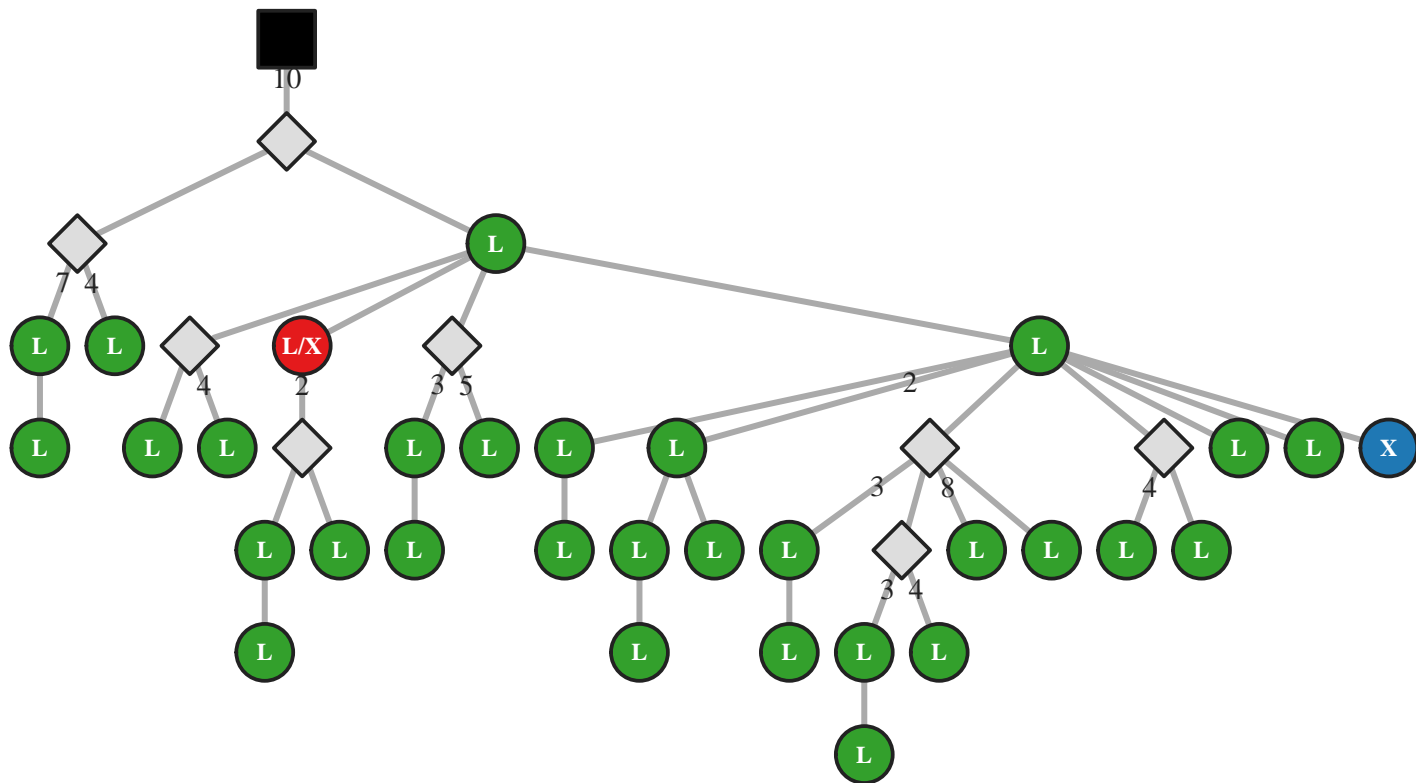
M5 IgG IGHV1-69/J4 51bp (5232)



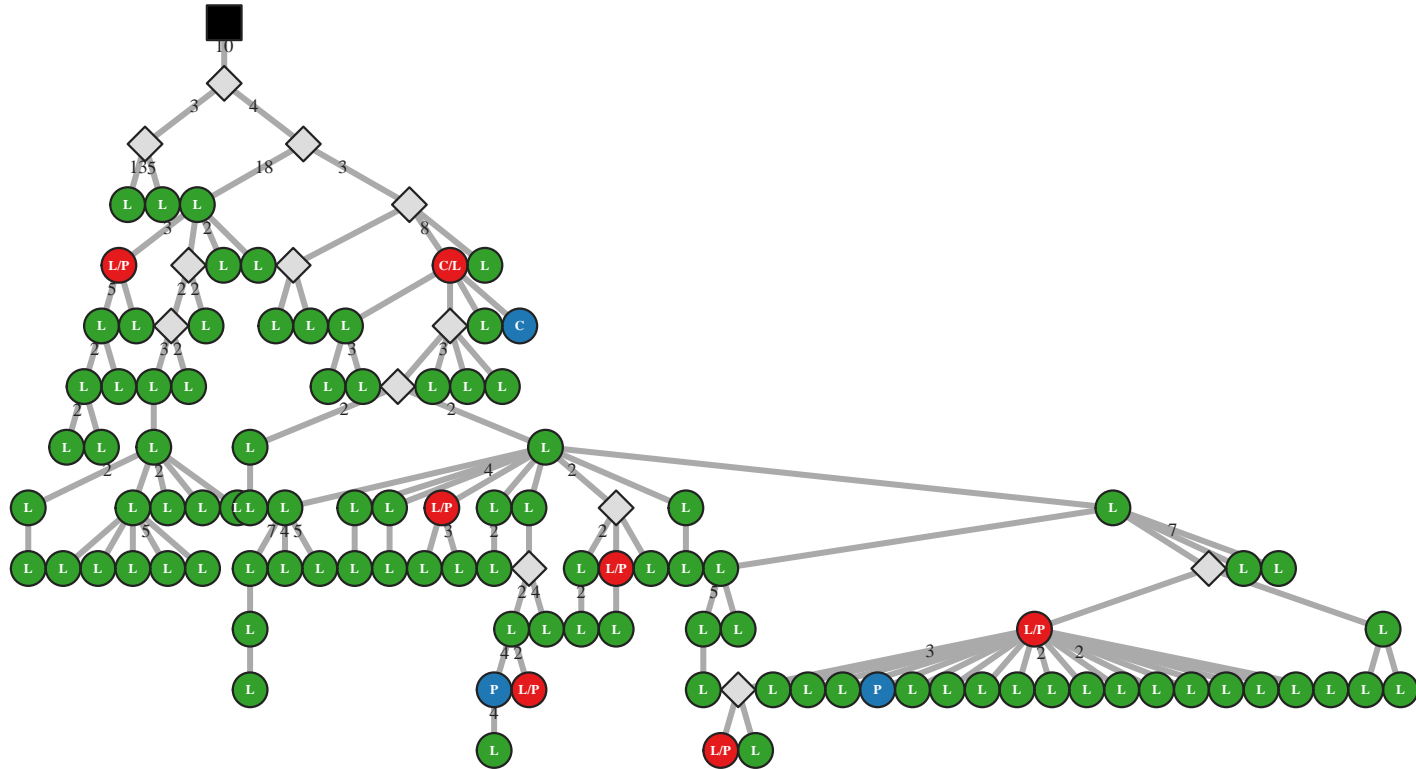
M5 IgG IGHV1-69/J4 51bp (5245)



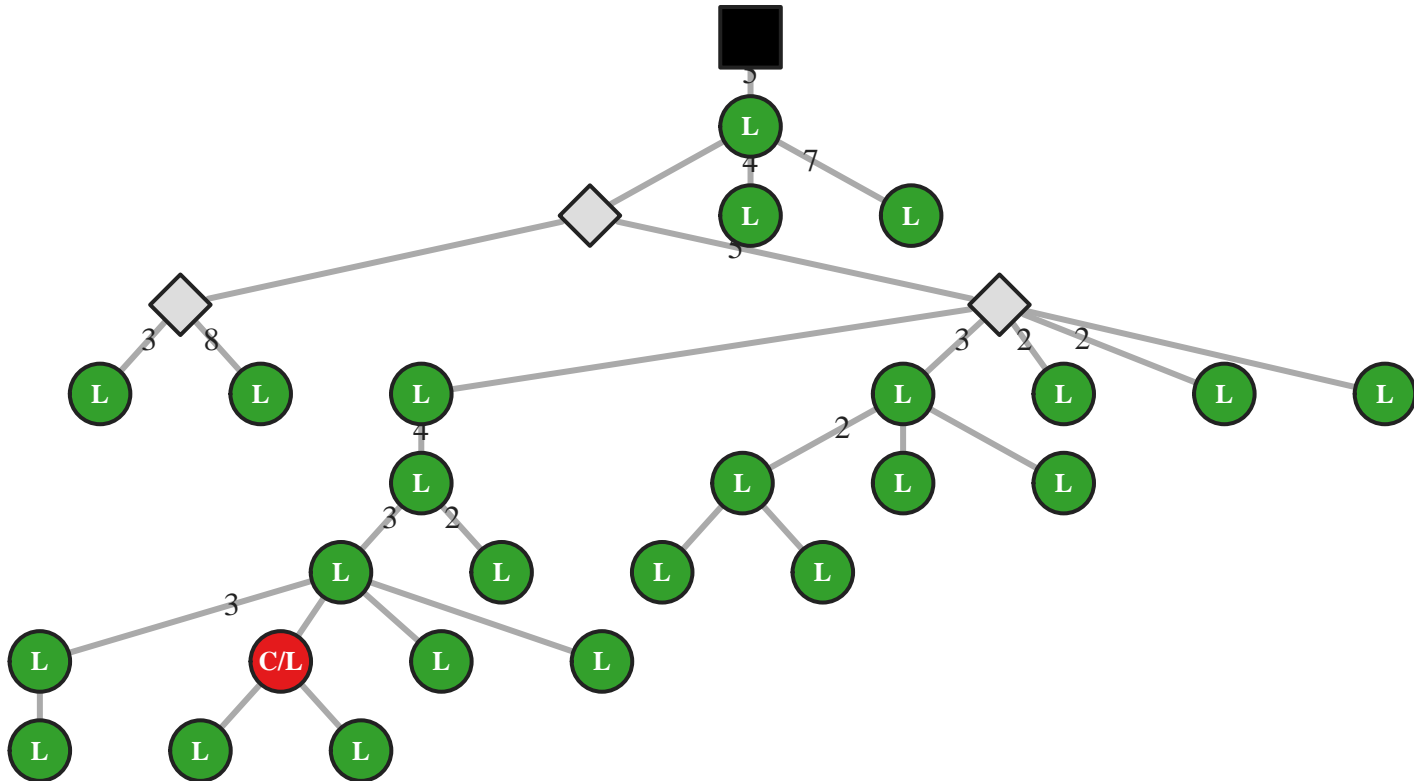
M5 IgG IGHV1-69/J4 54bp (41439)



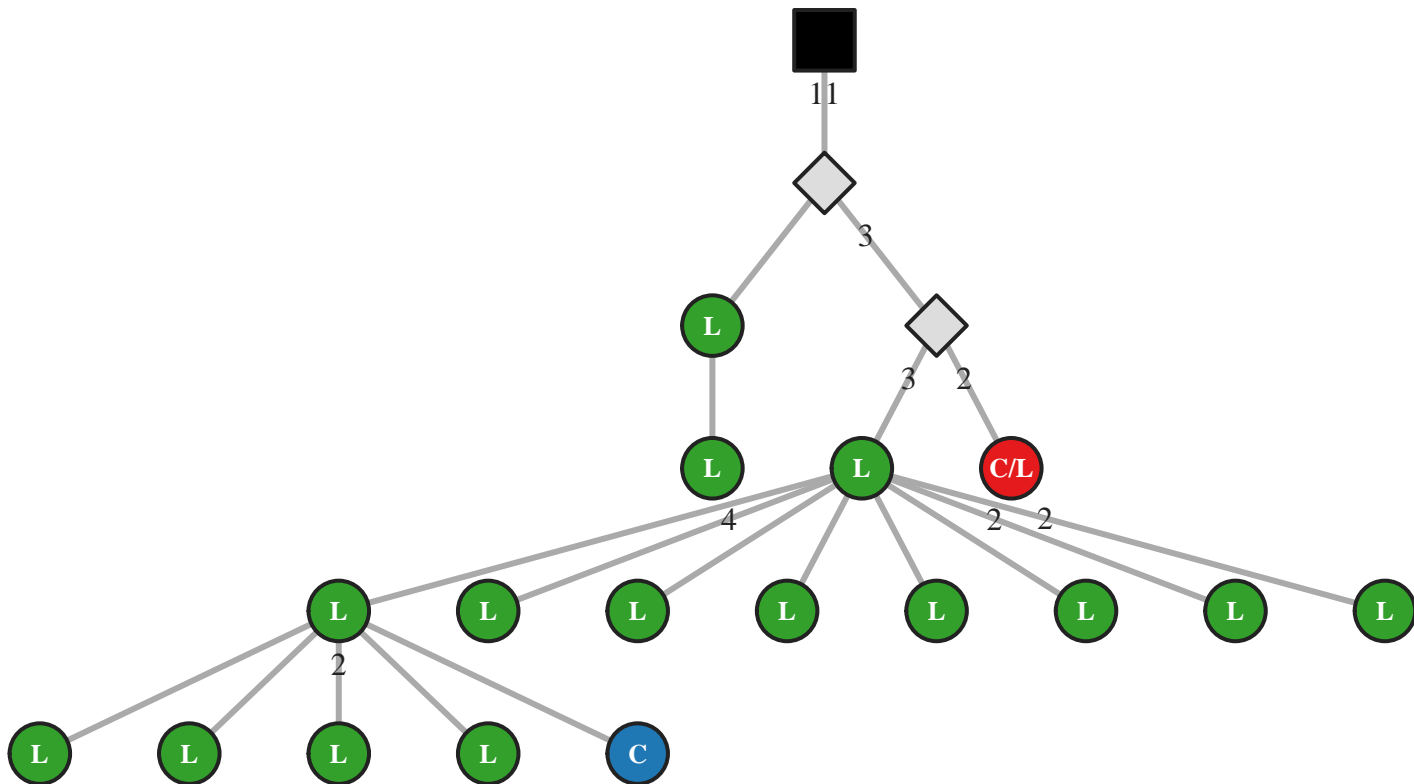
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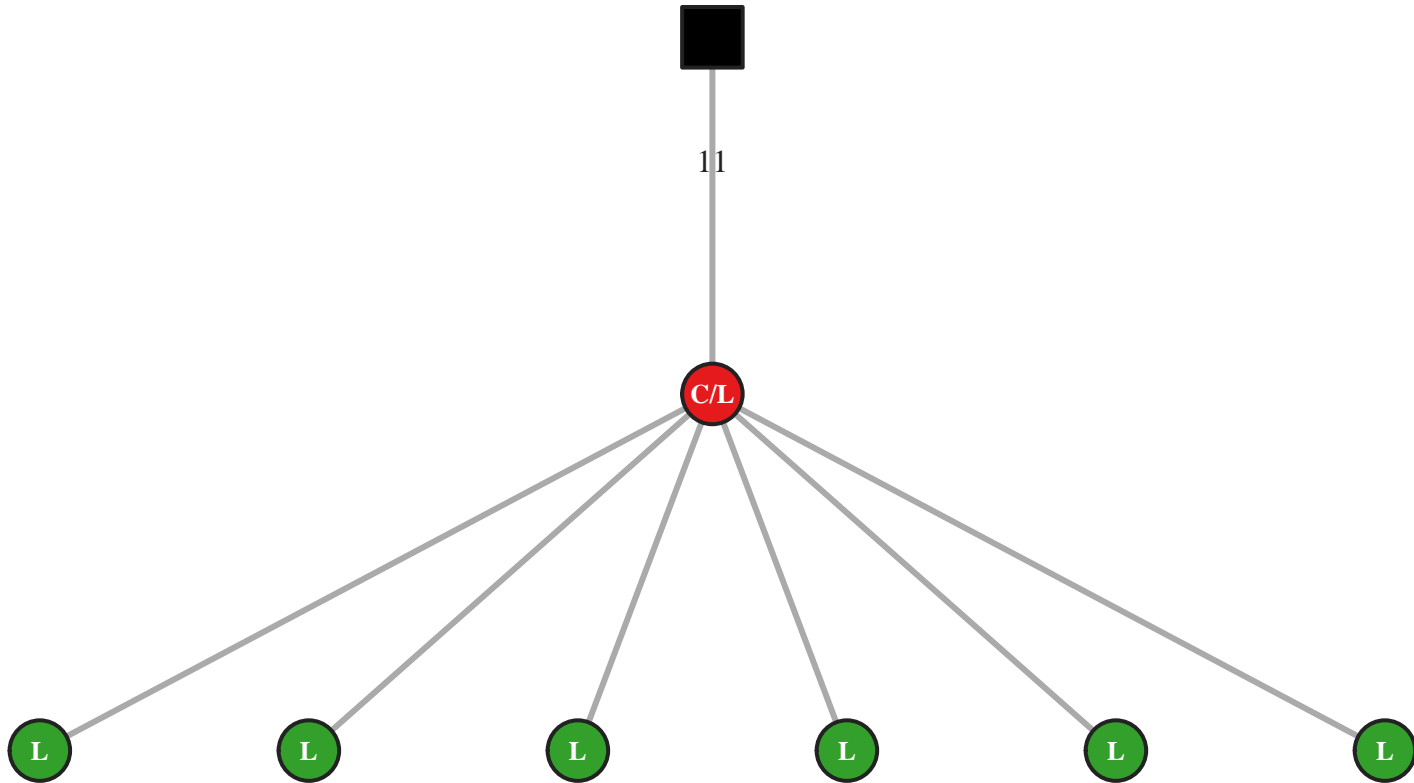
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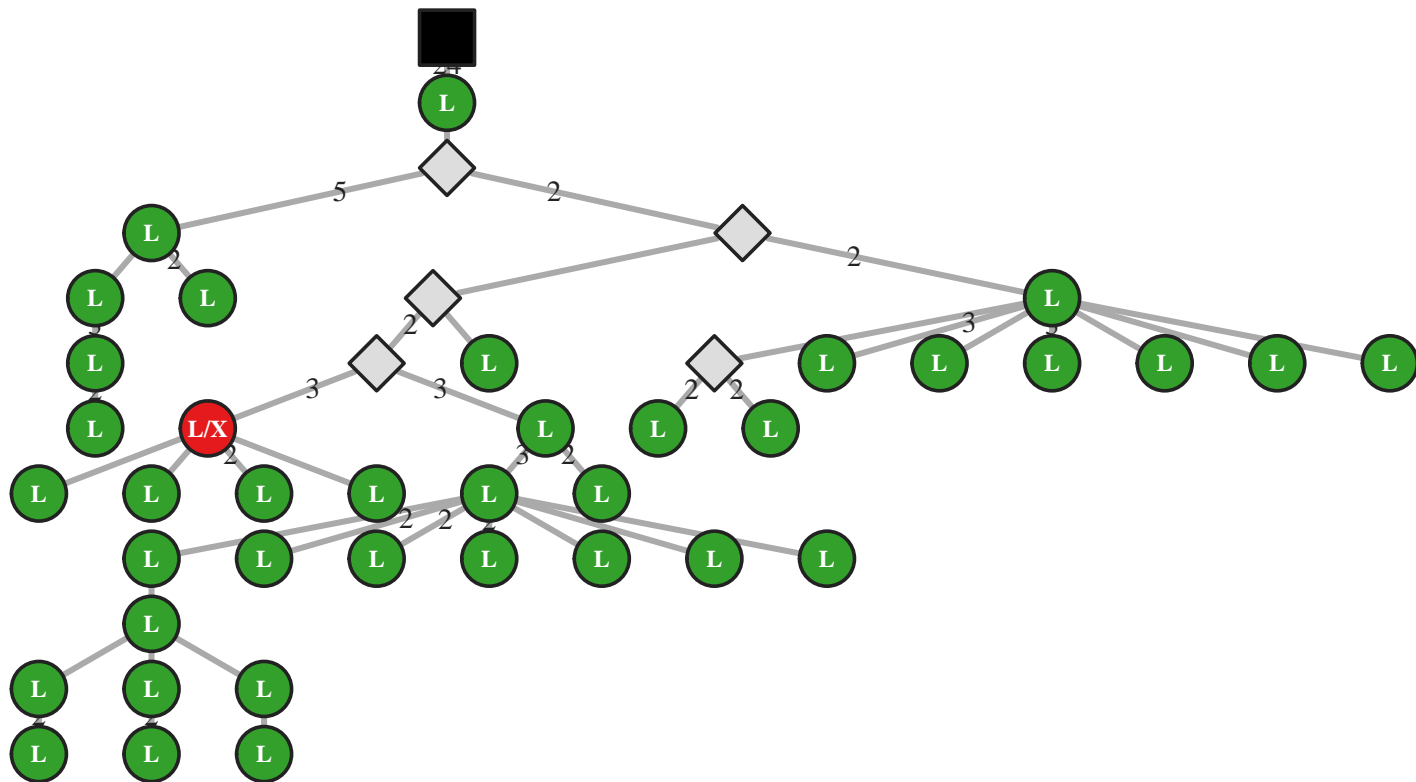
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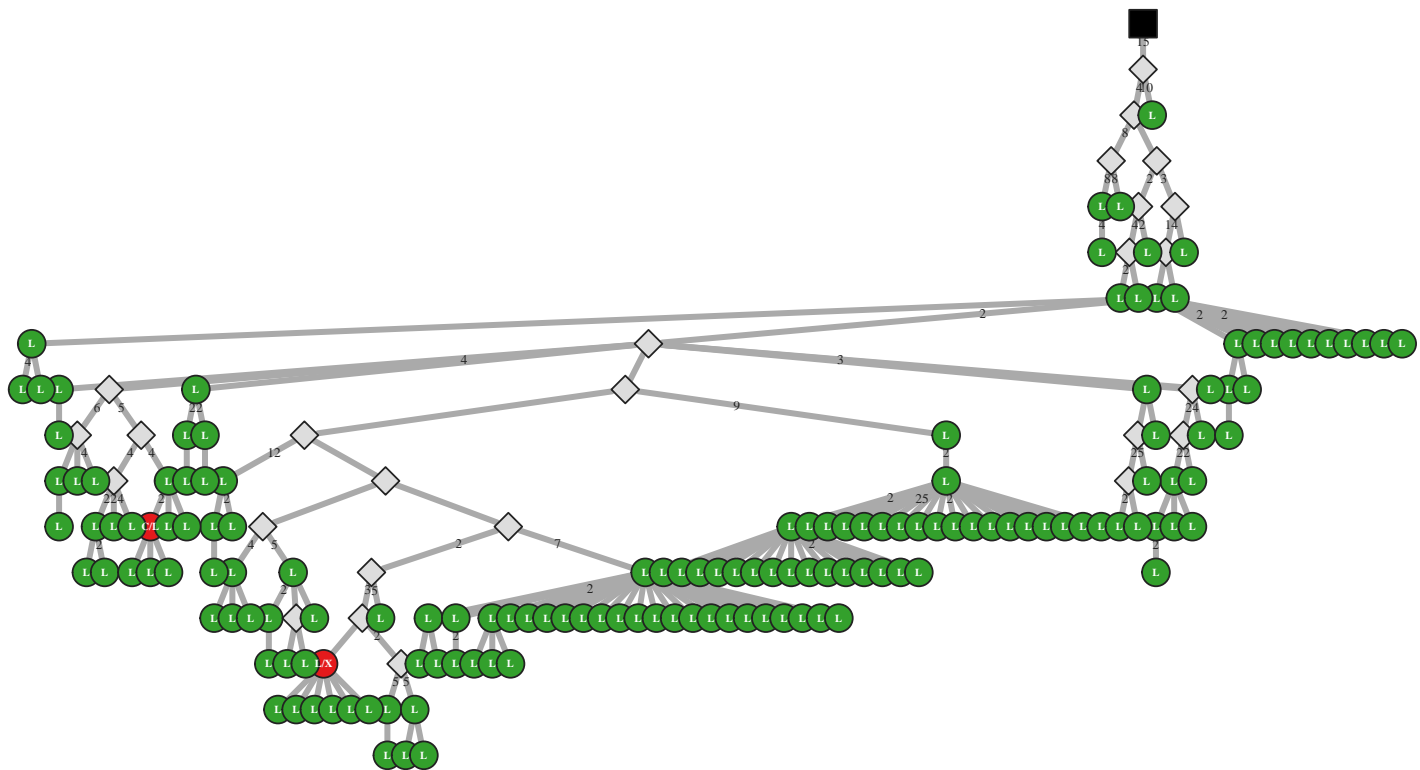
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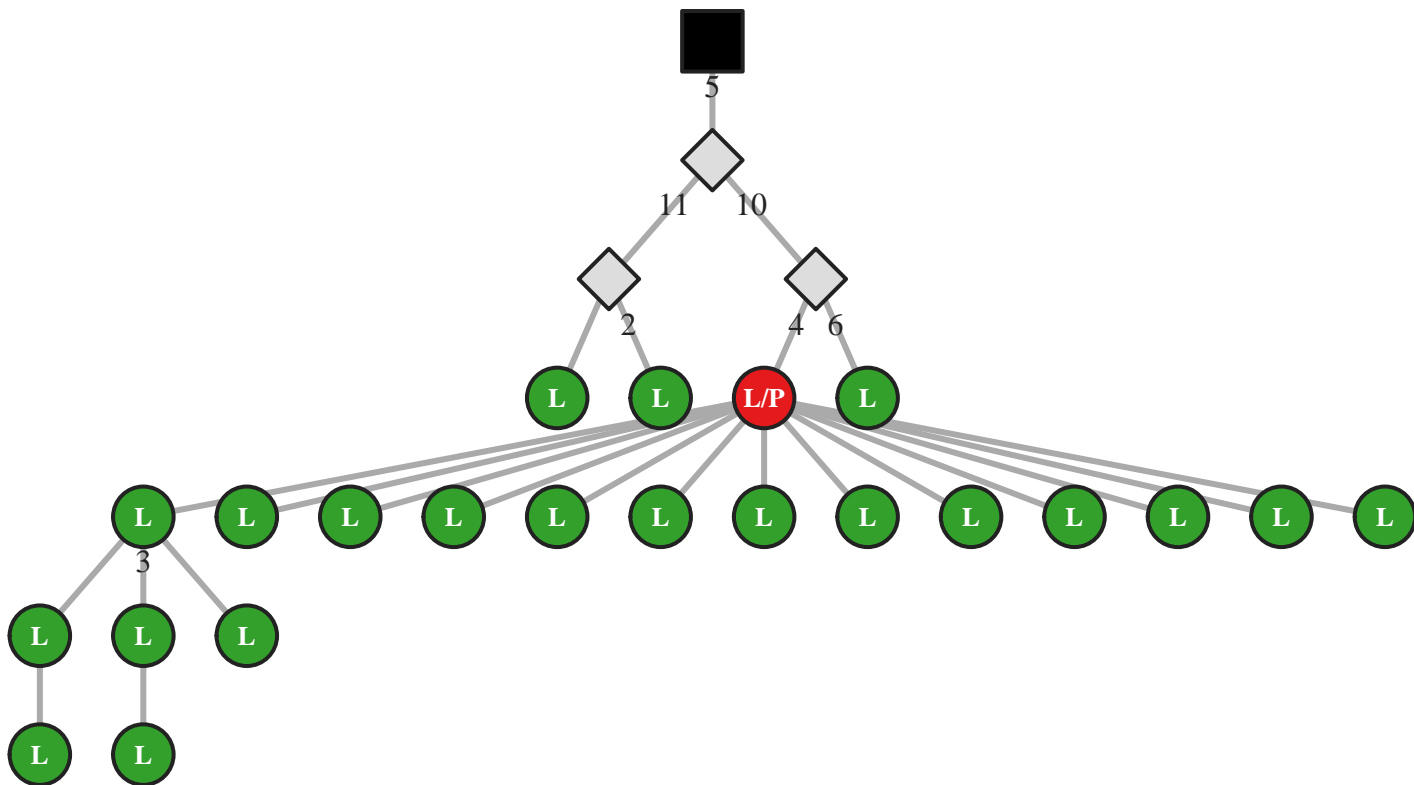
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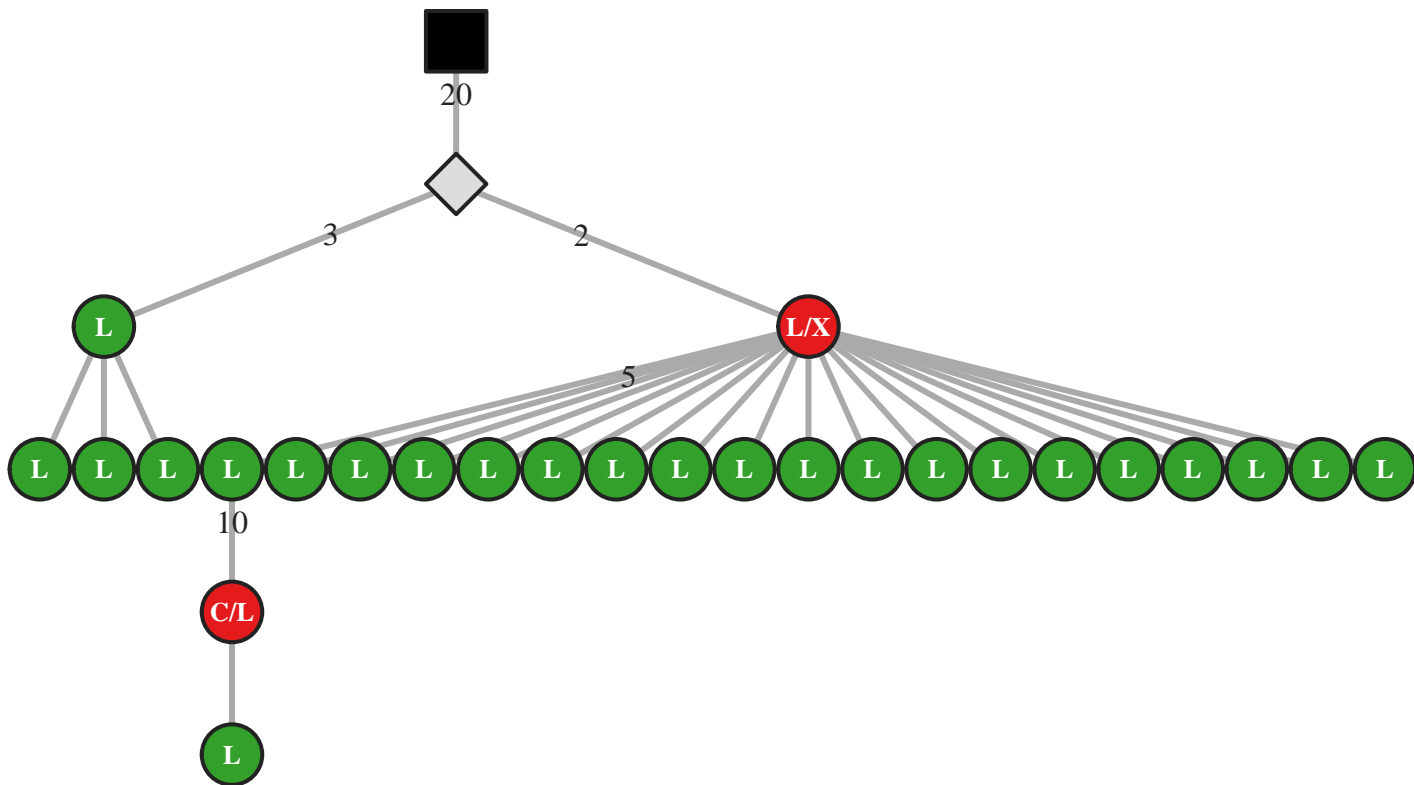
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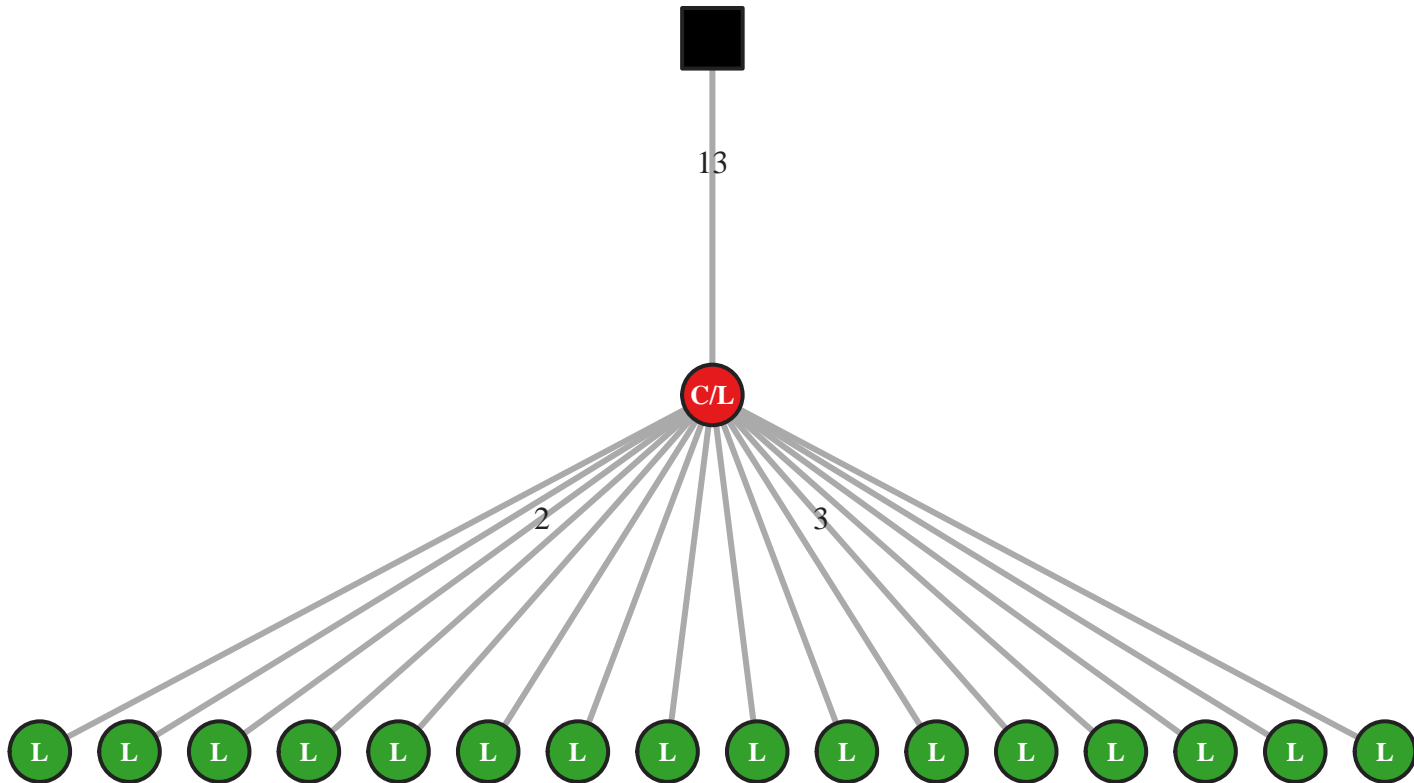
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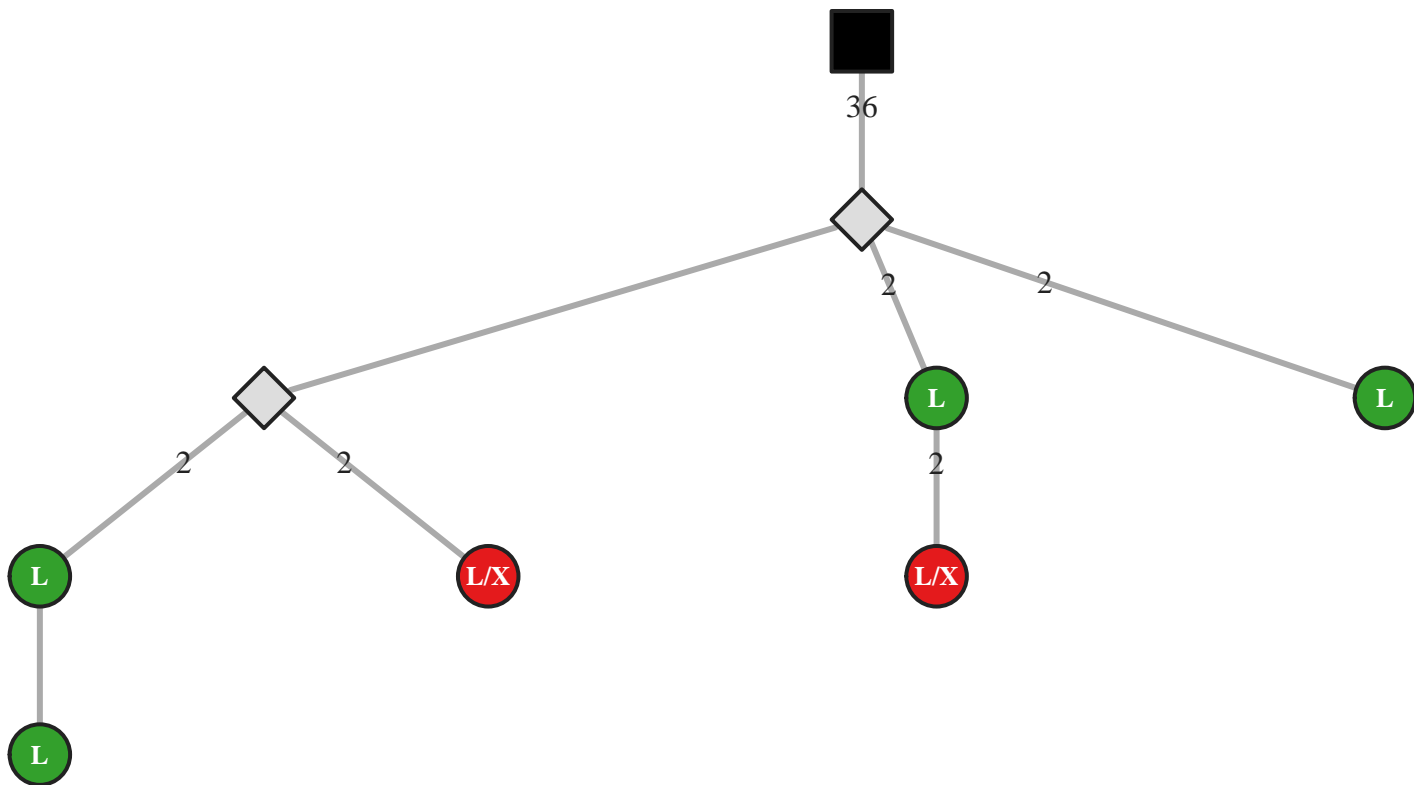
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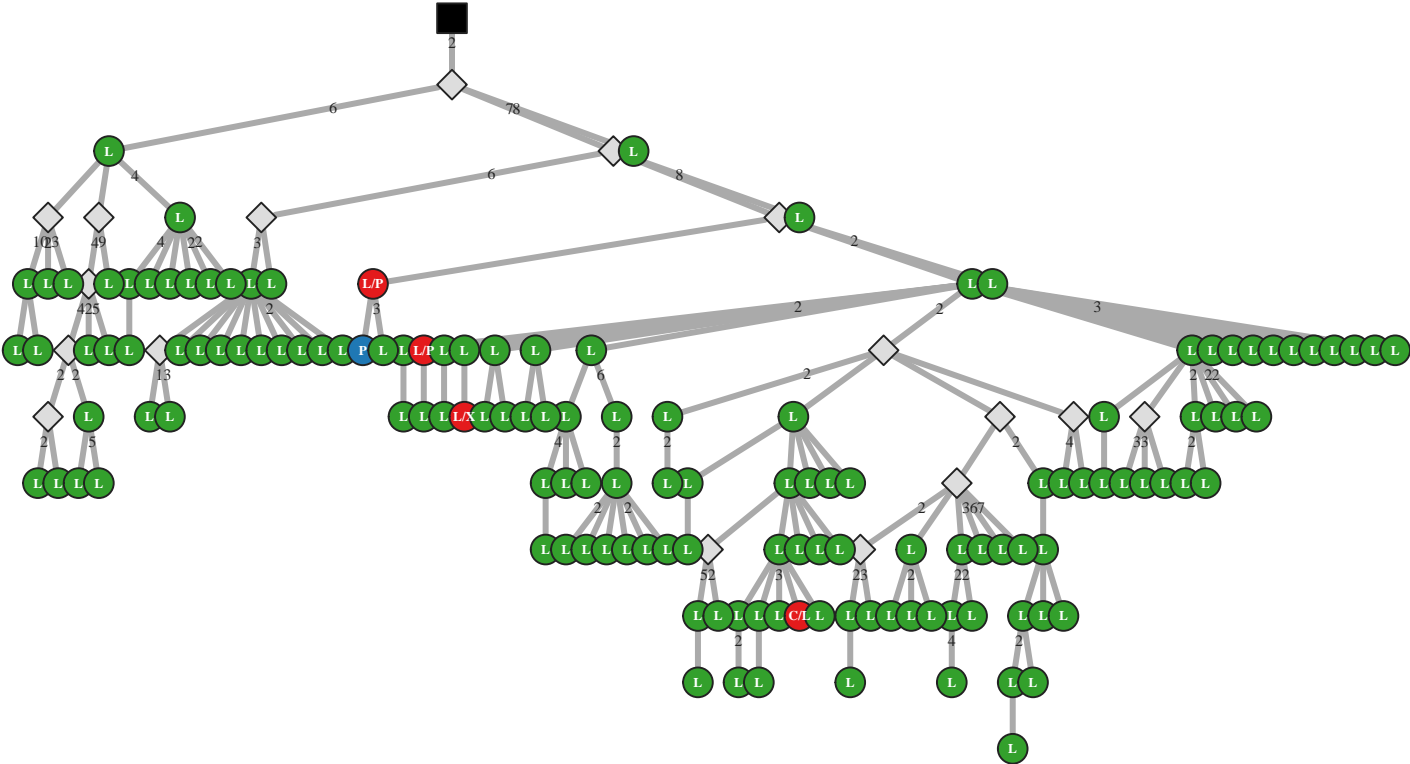
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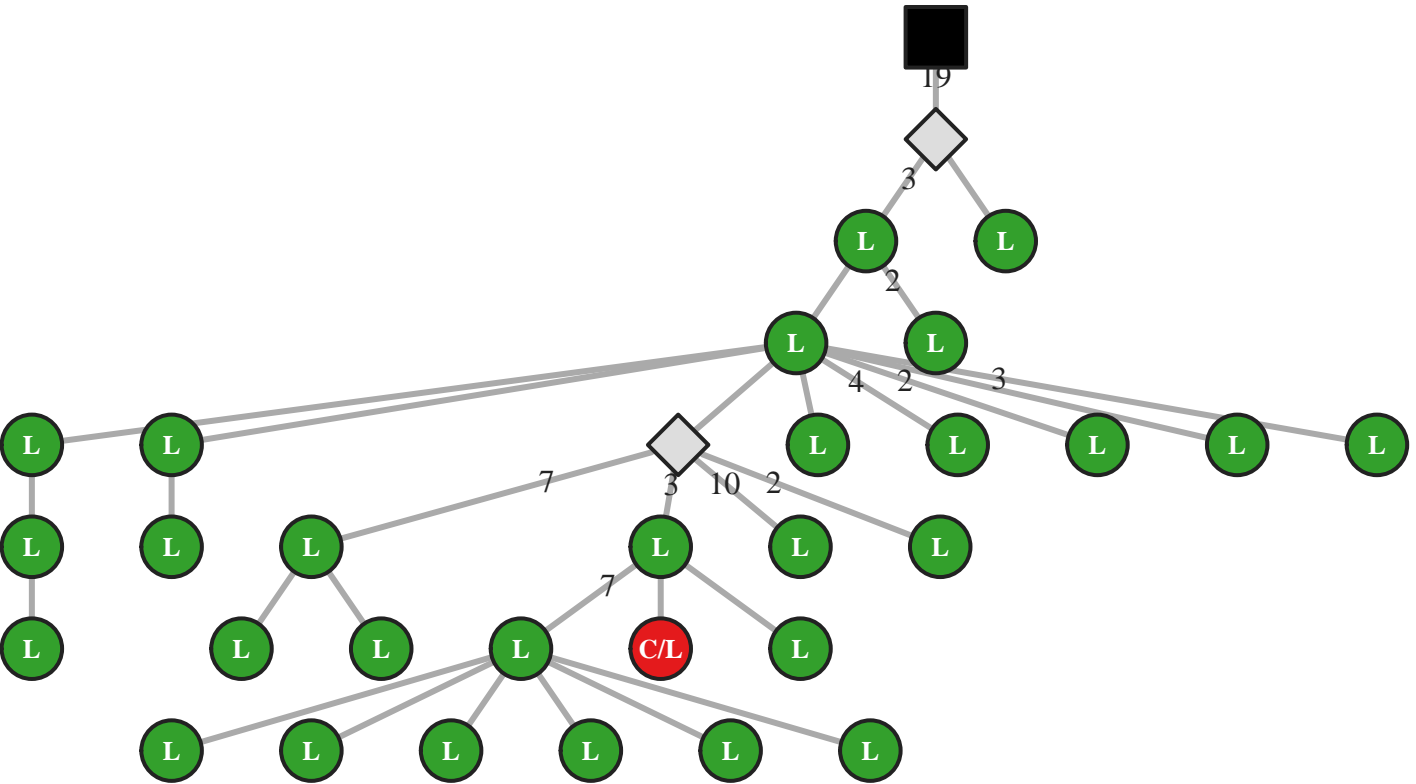
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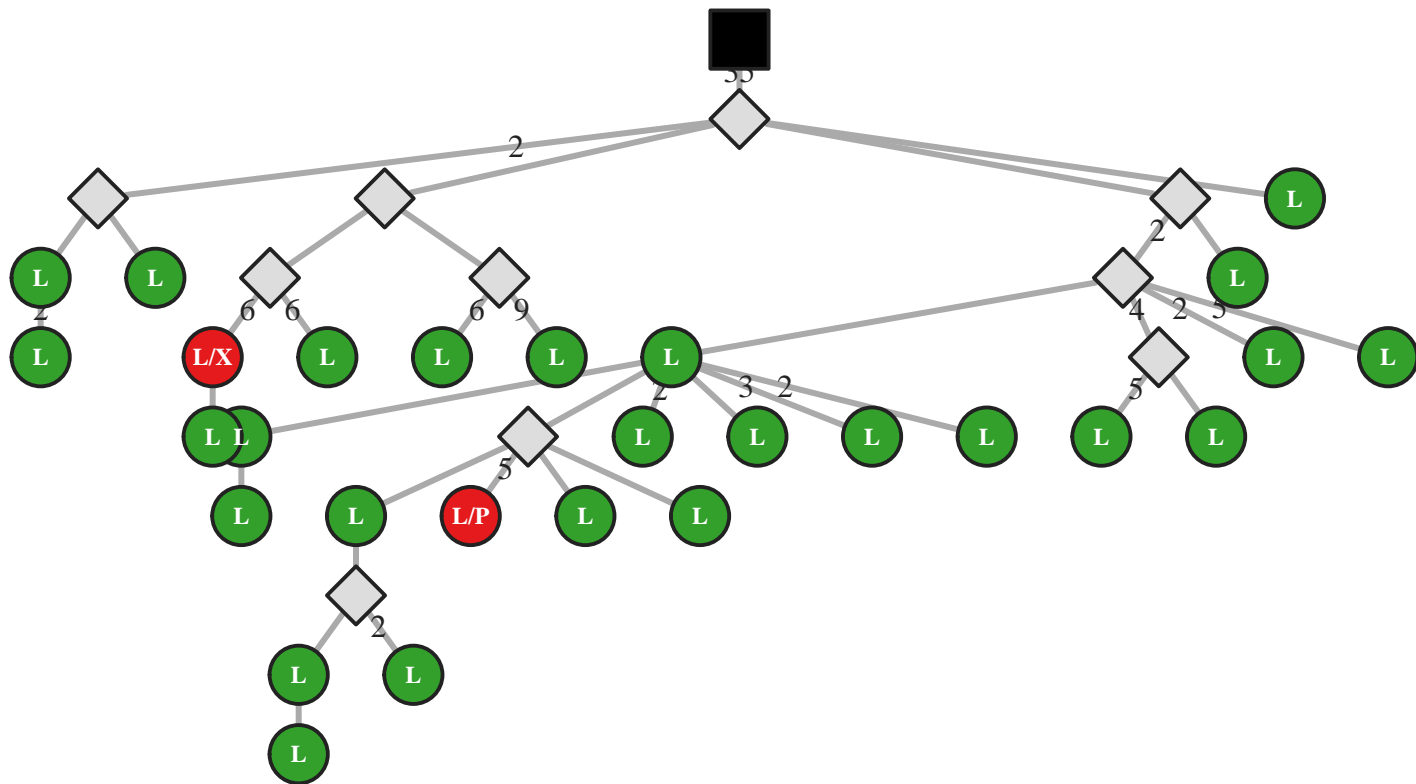
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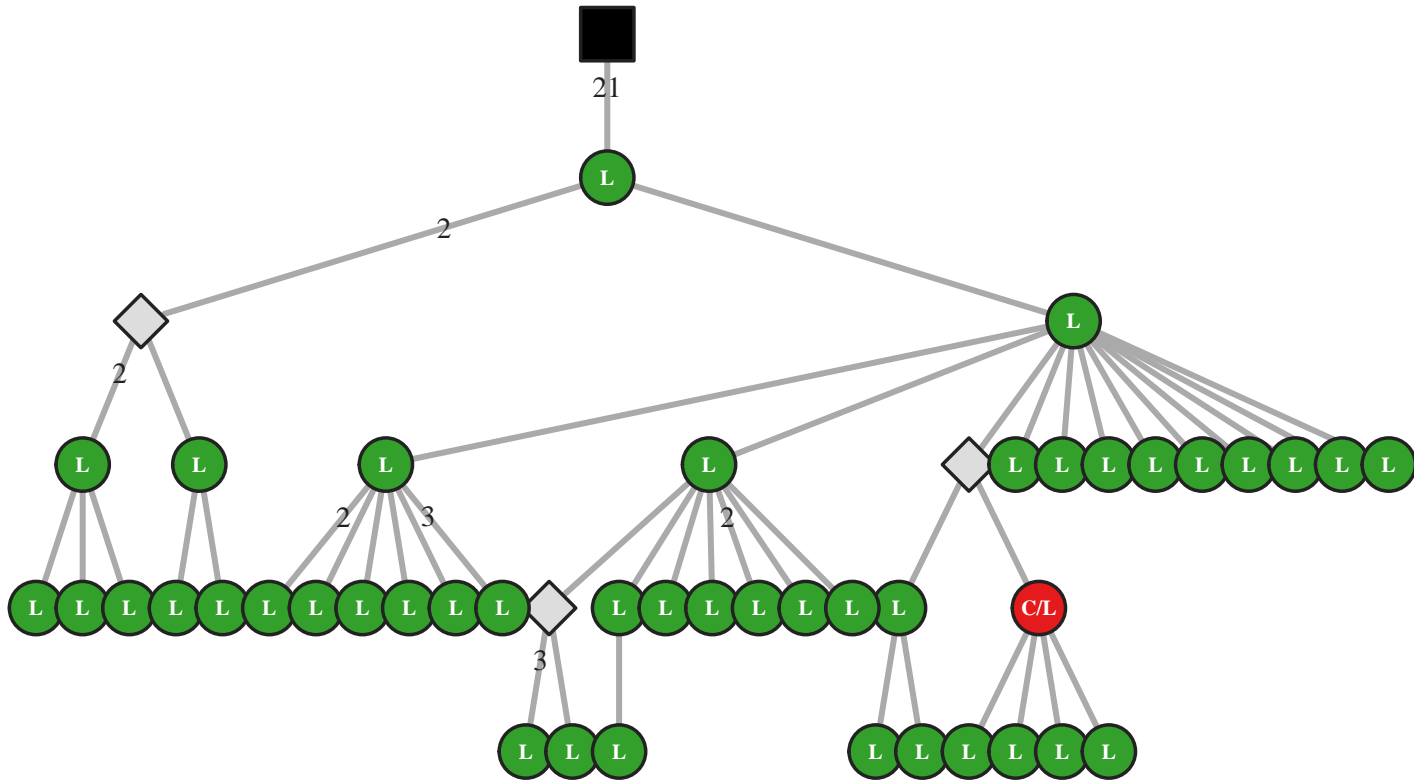
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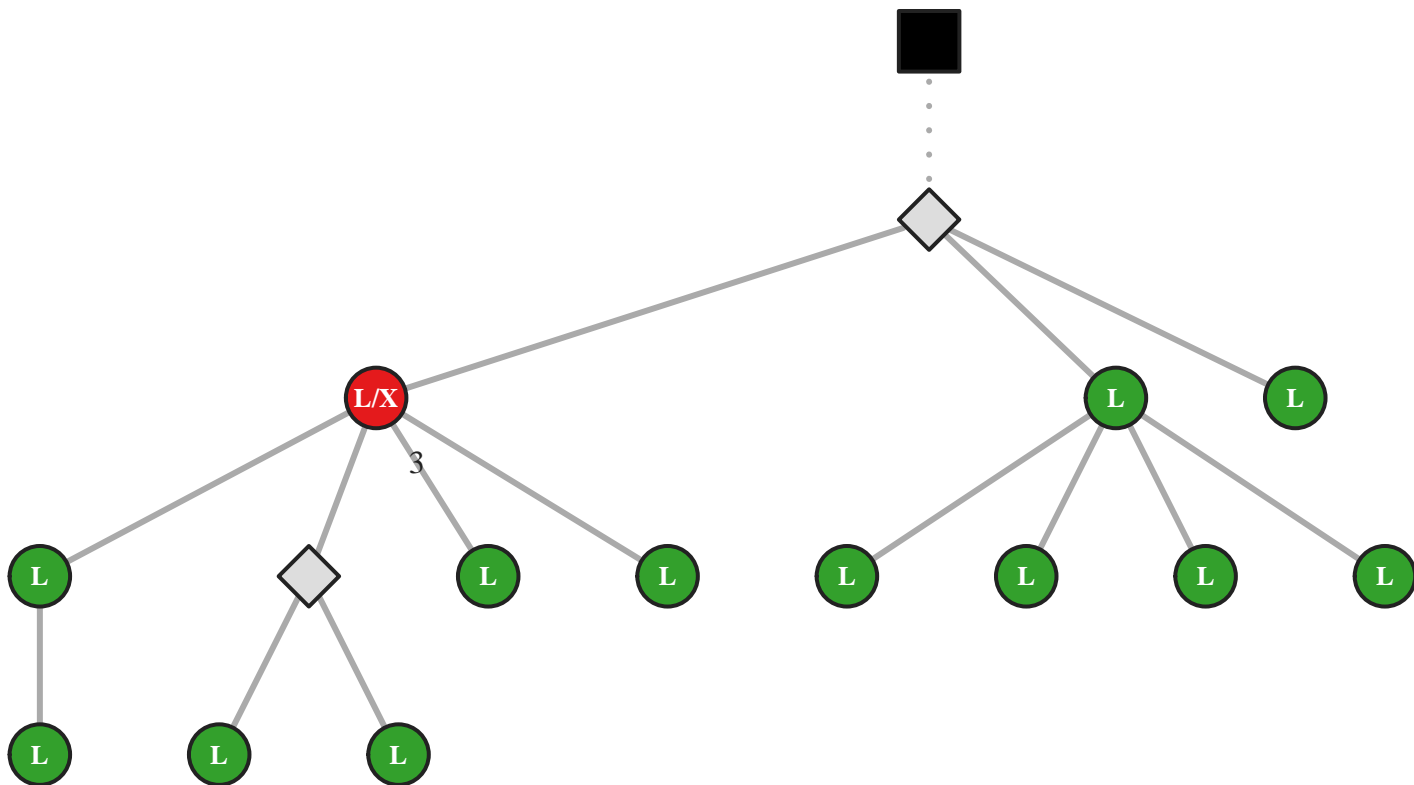
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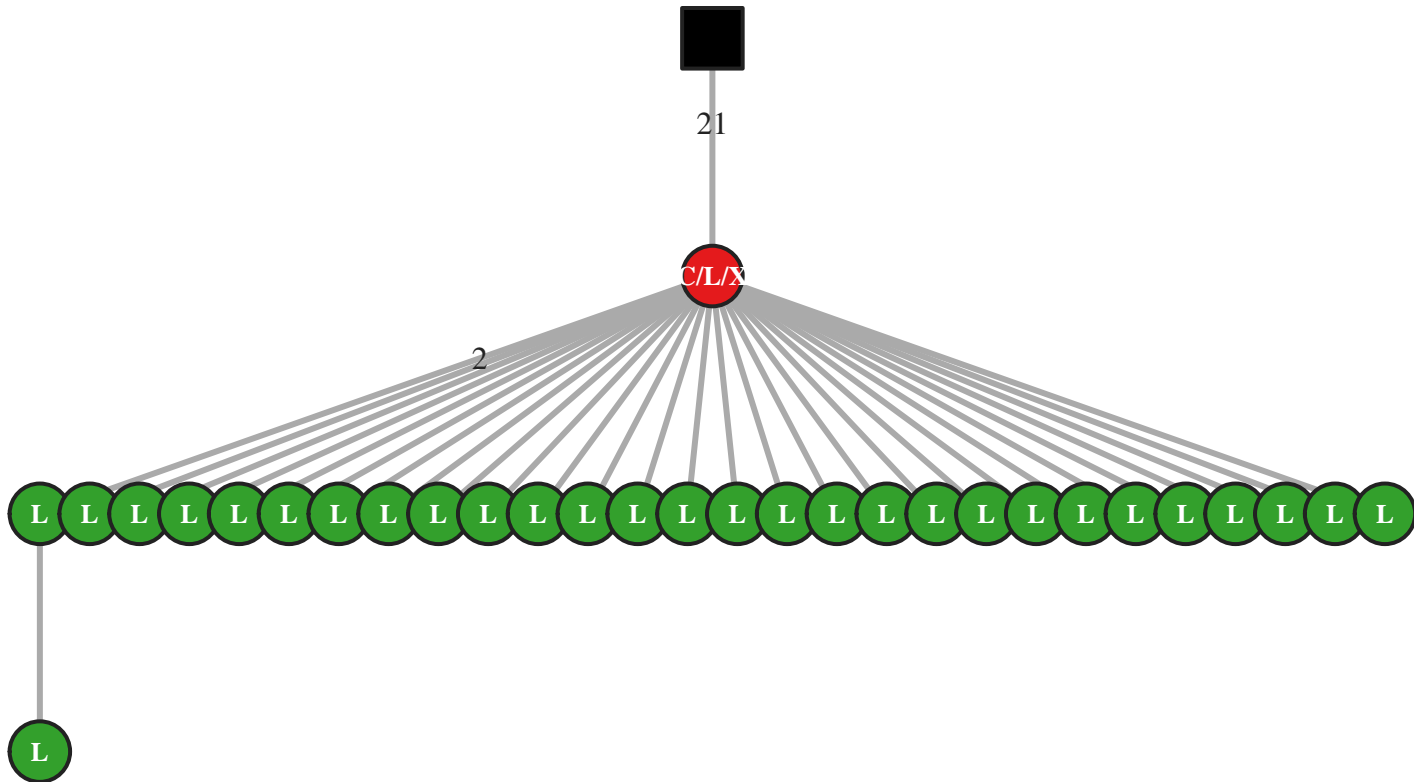
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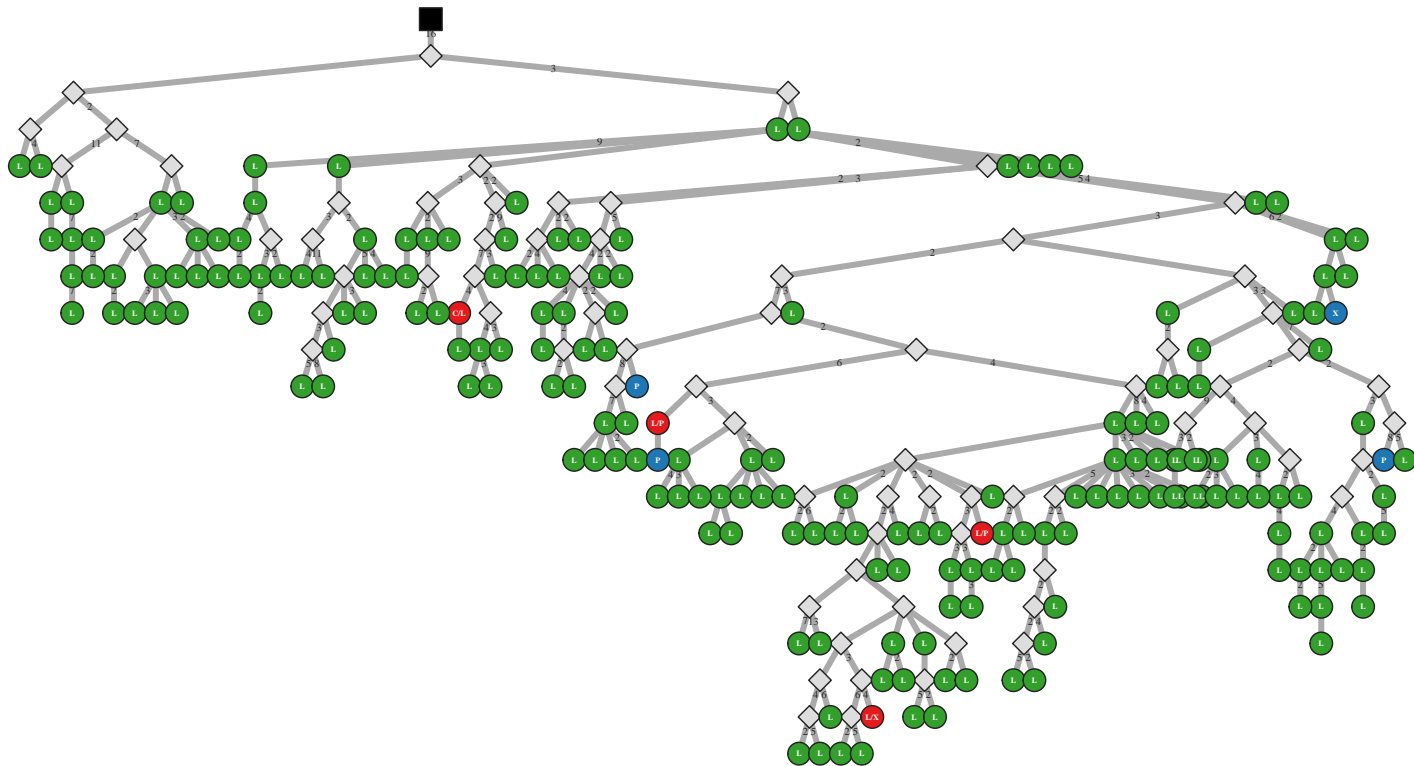
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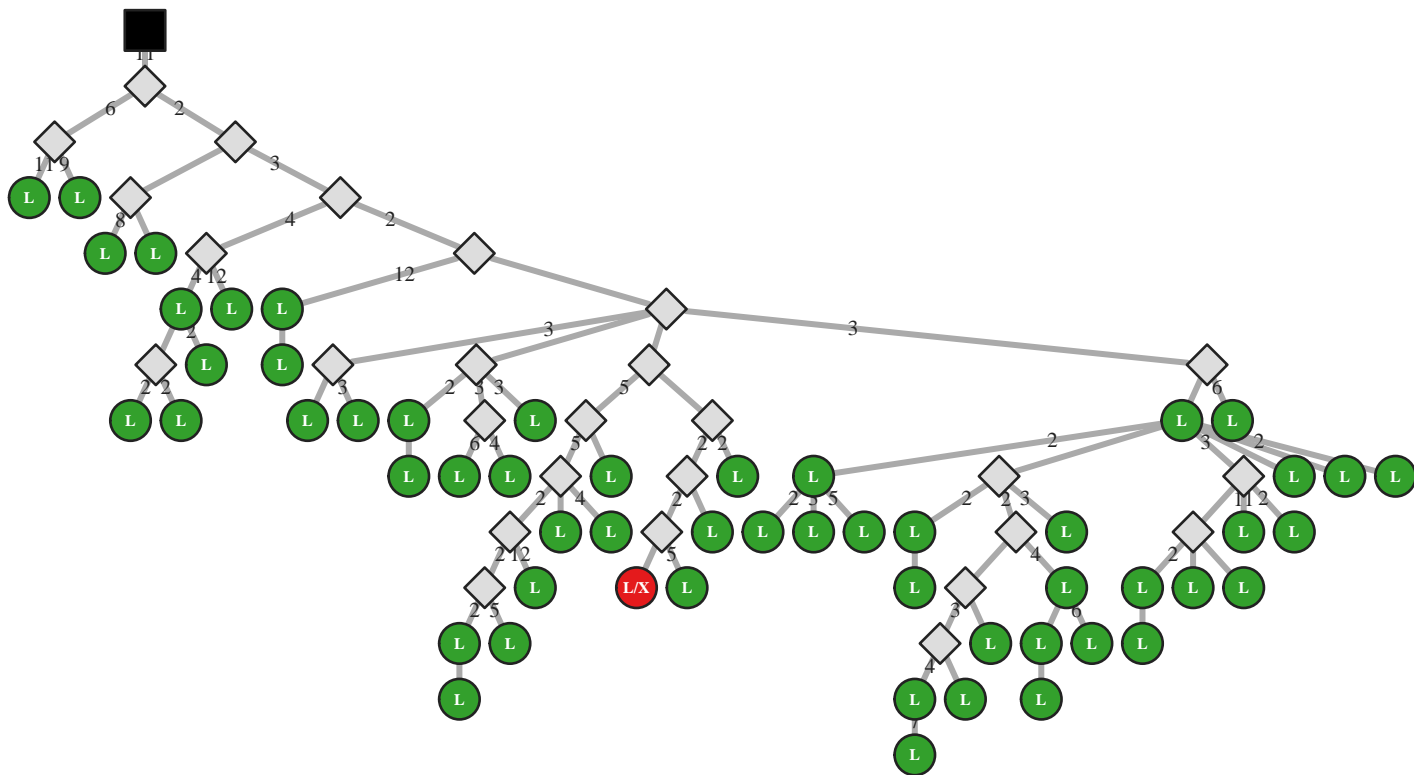
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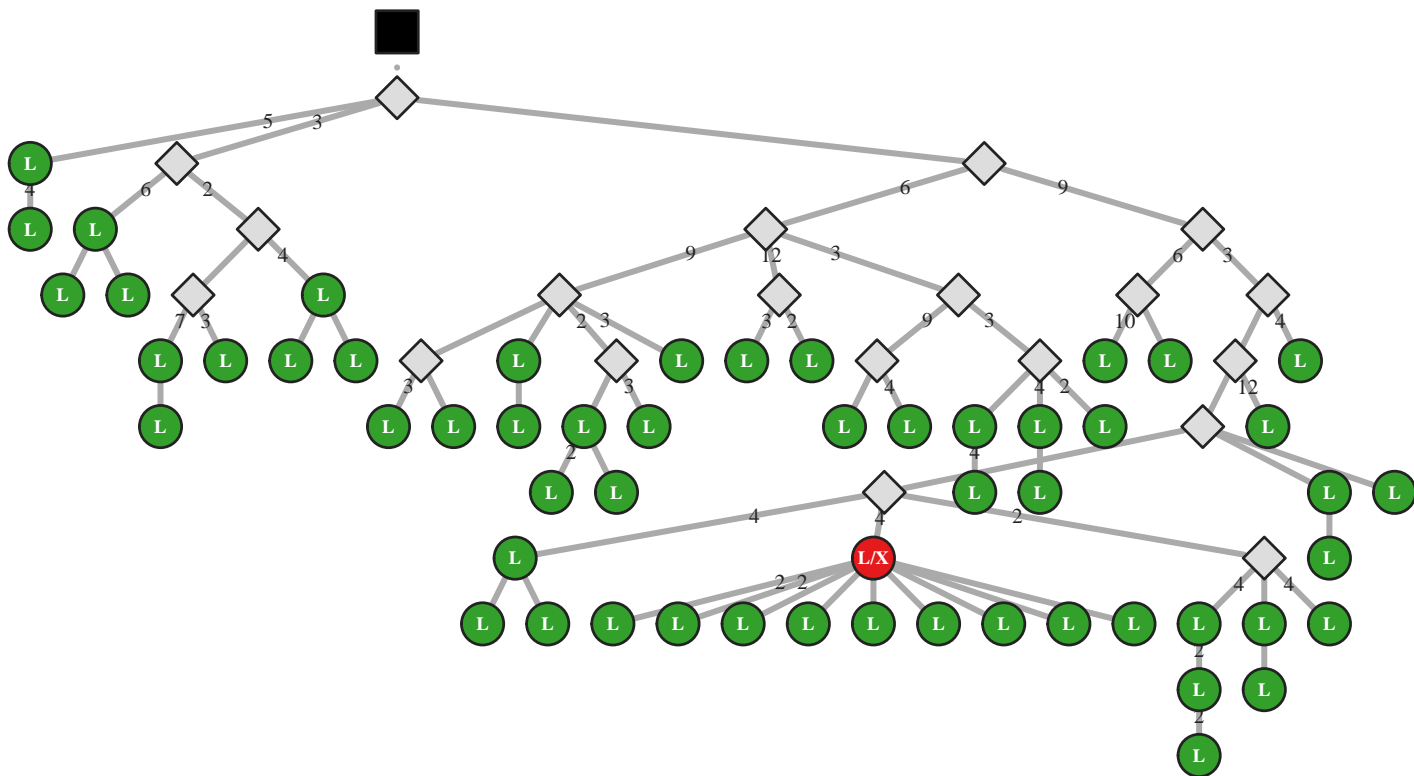
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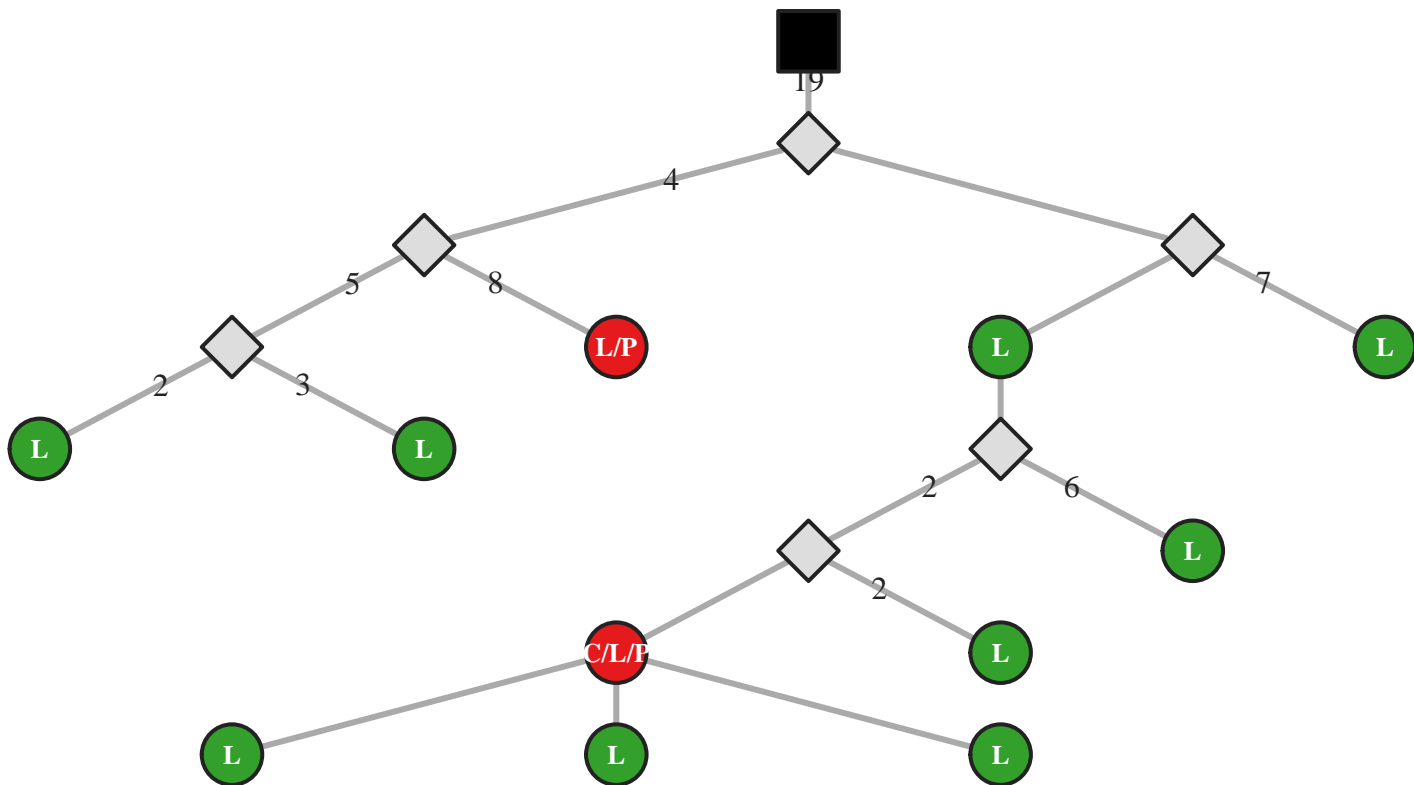
M5 IgG IGHV1-69/J4 60bp (32562)



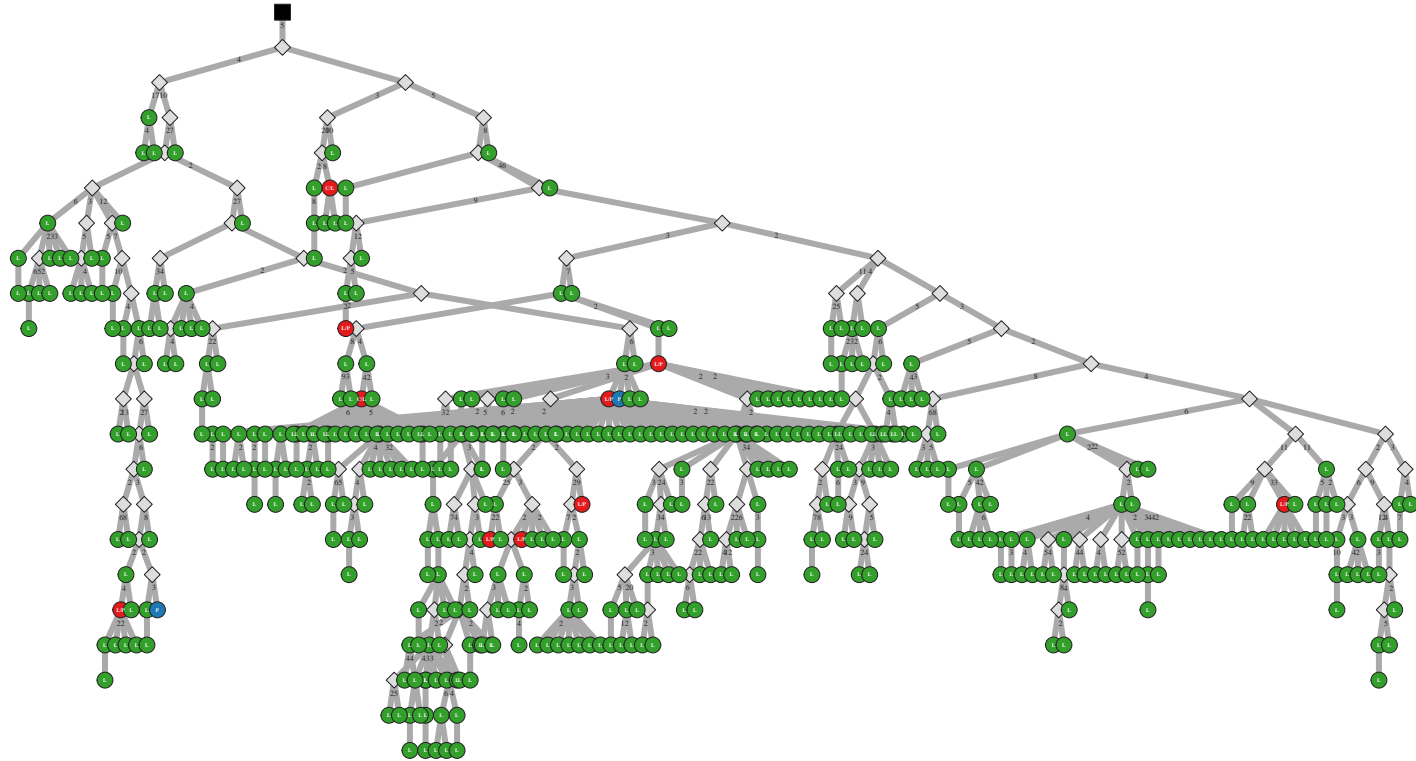
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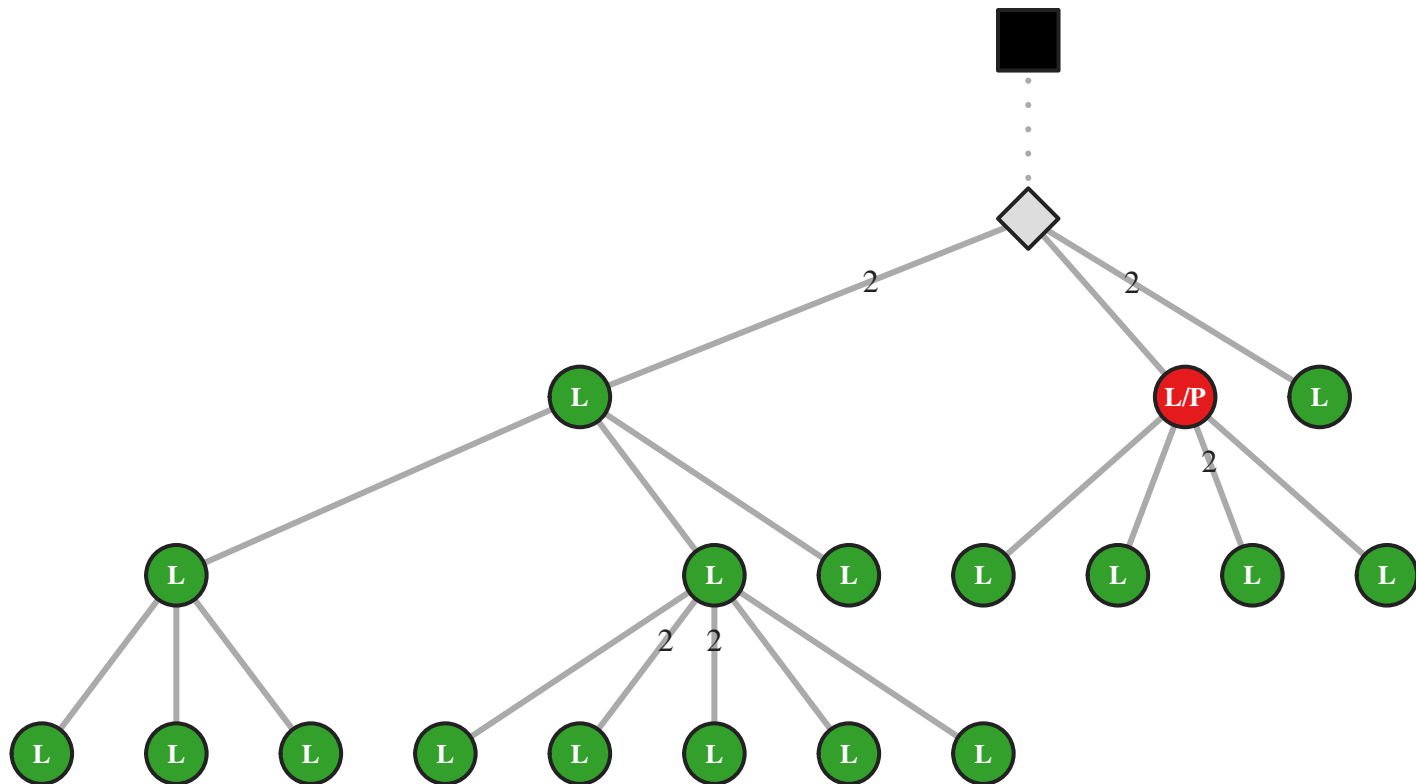
M5 IgG IGHV1-69/J4 63bp (41719)



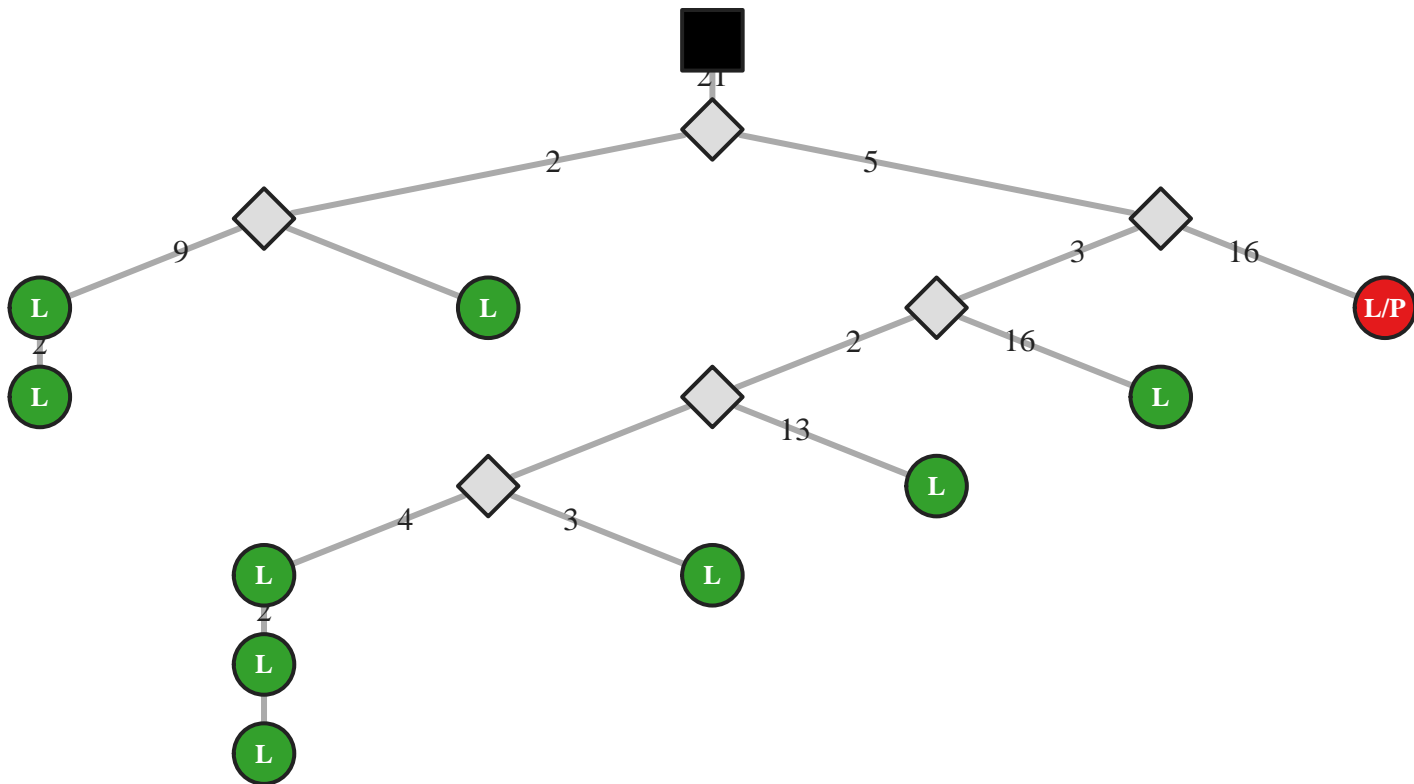
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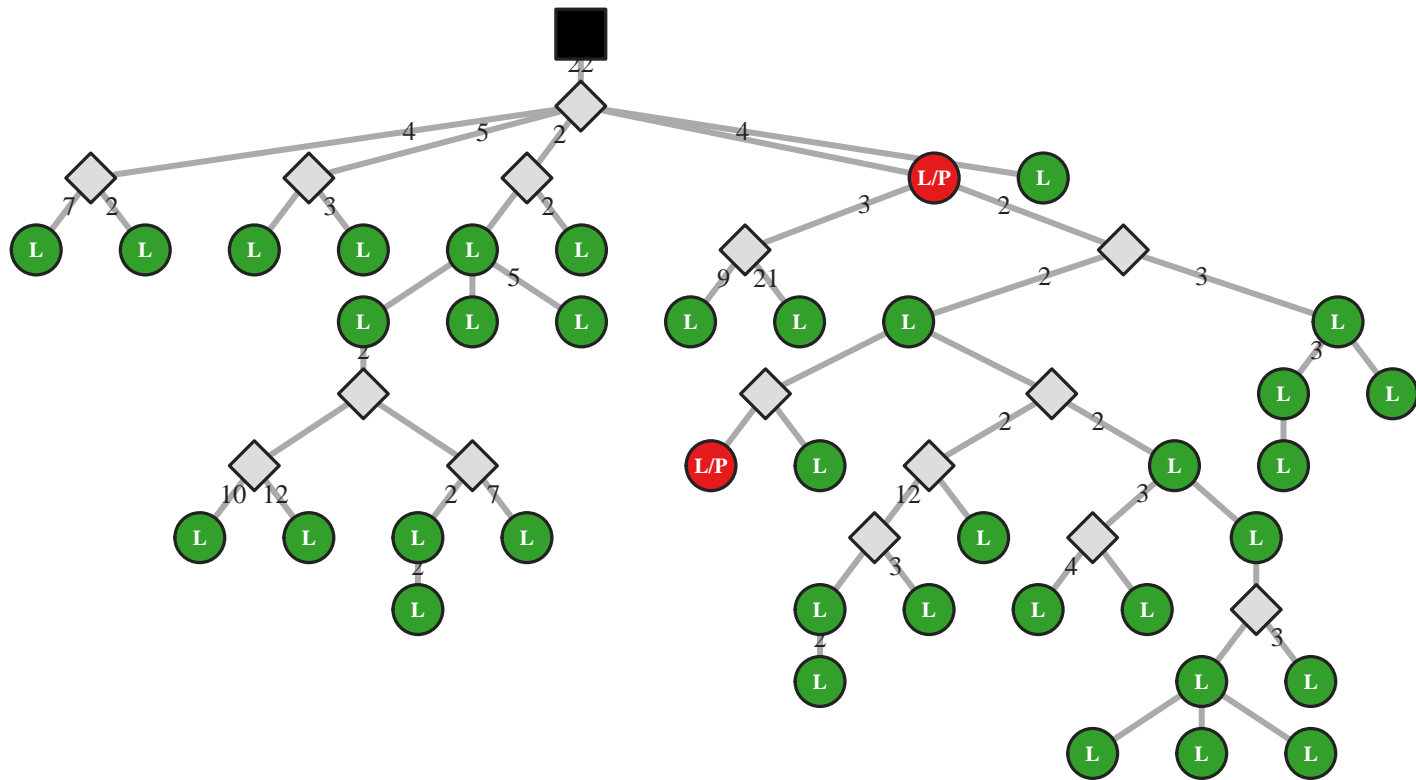
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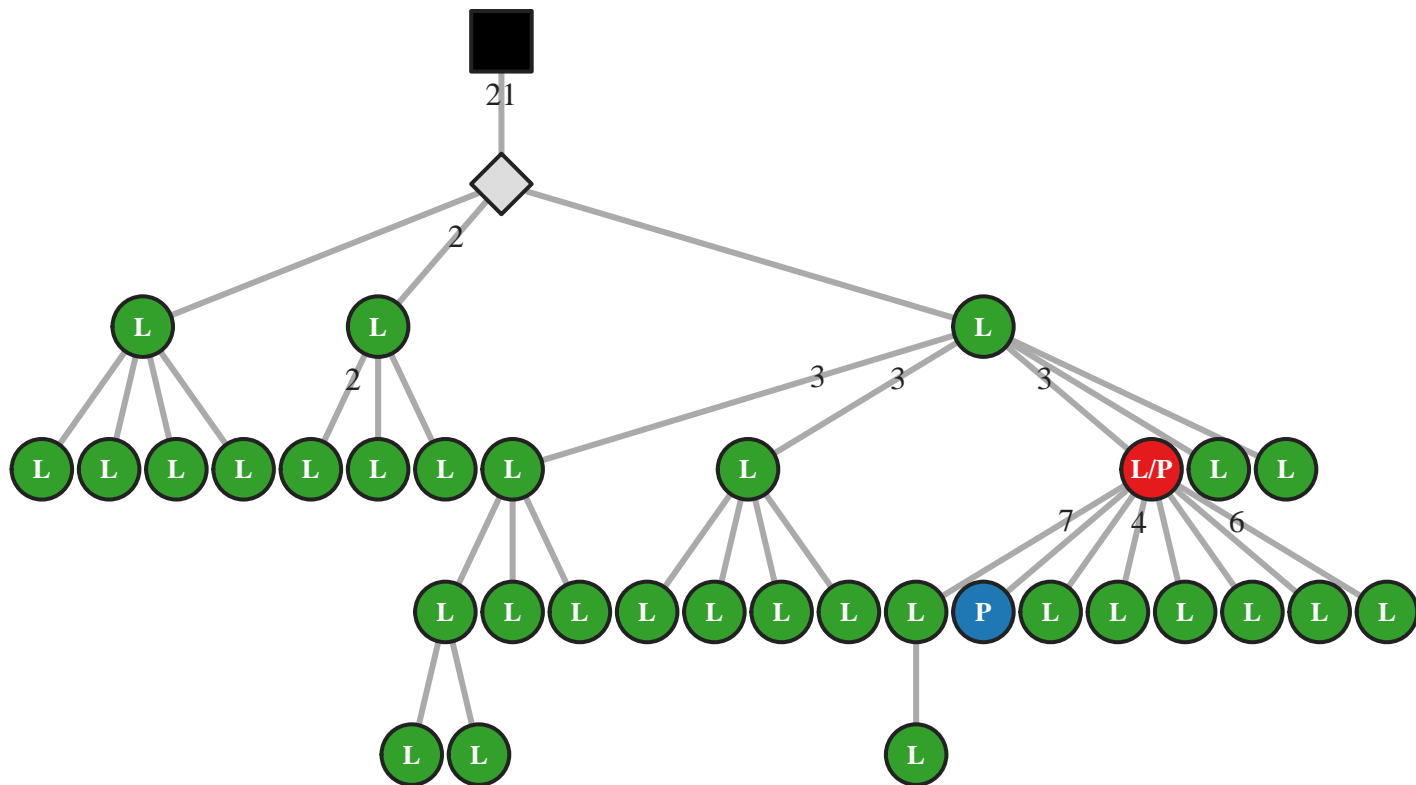
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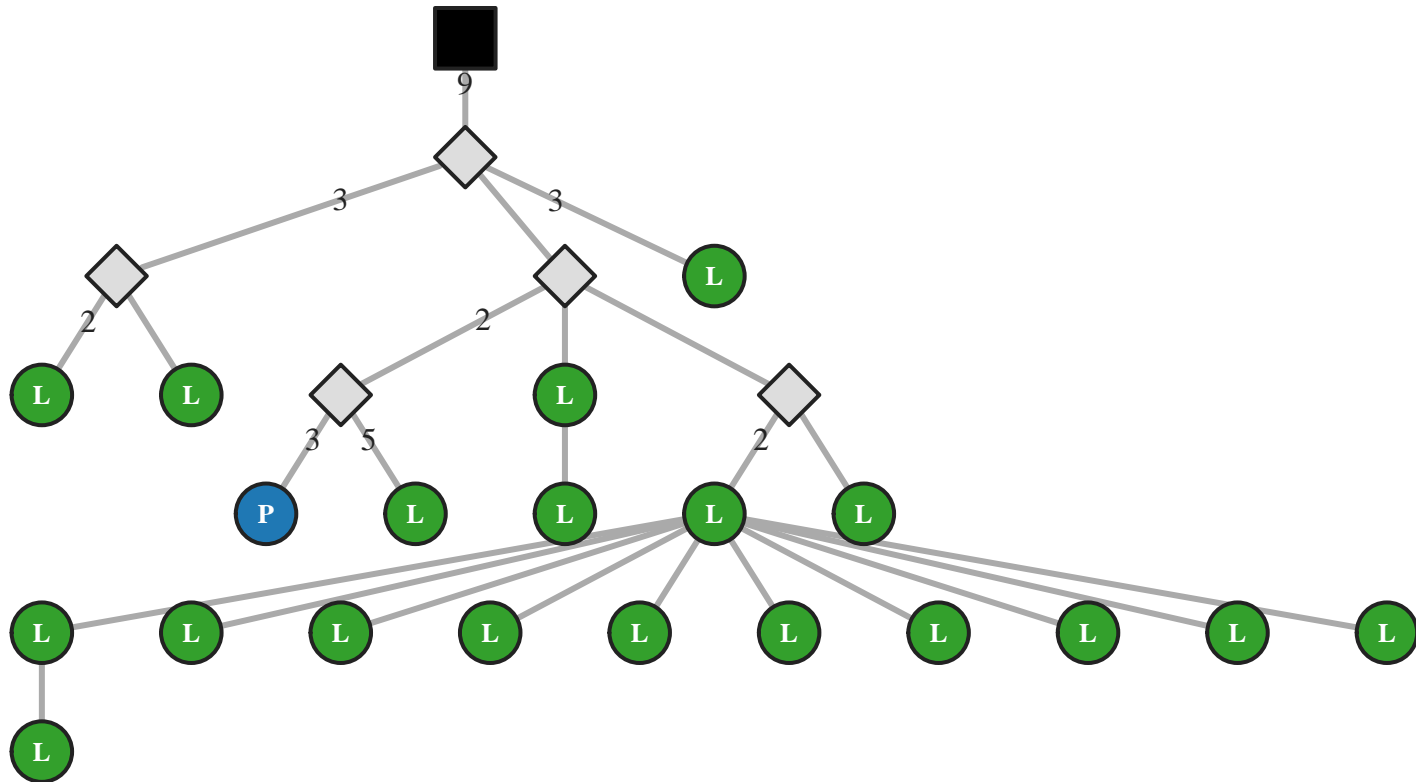
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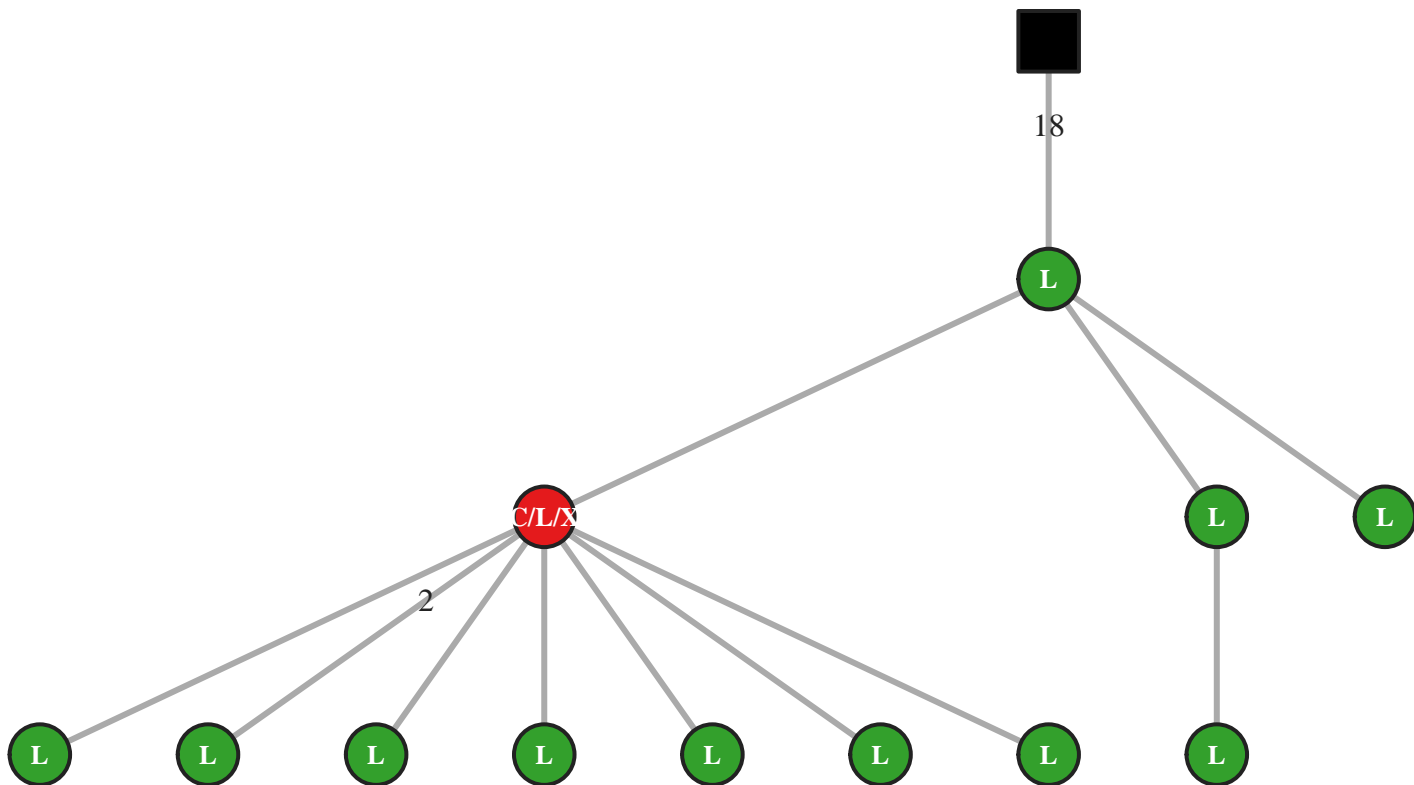
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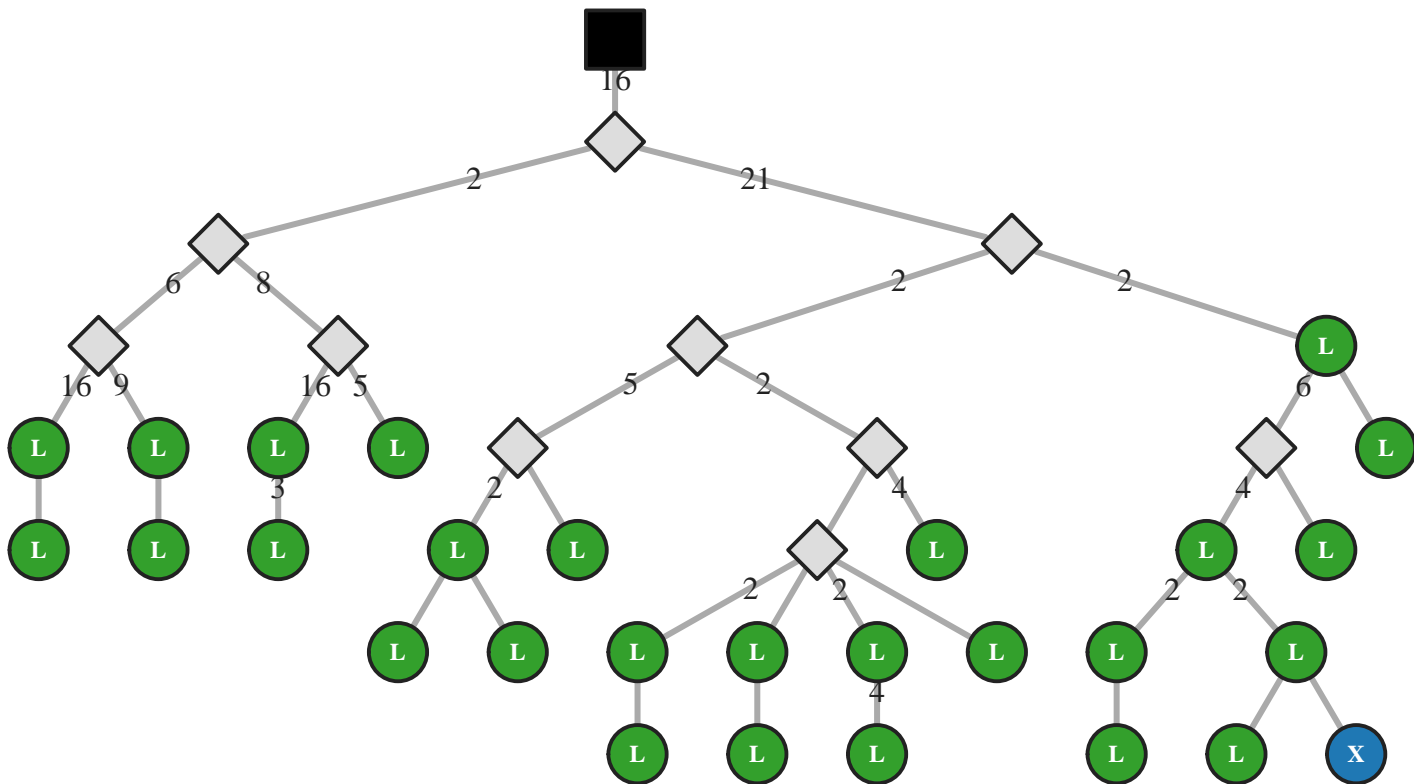
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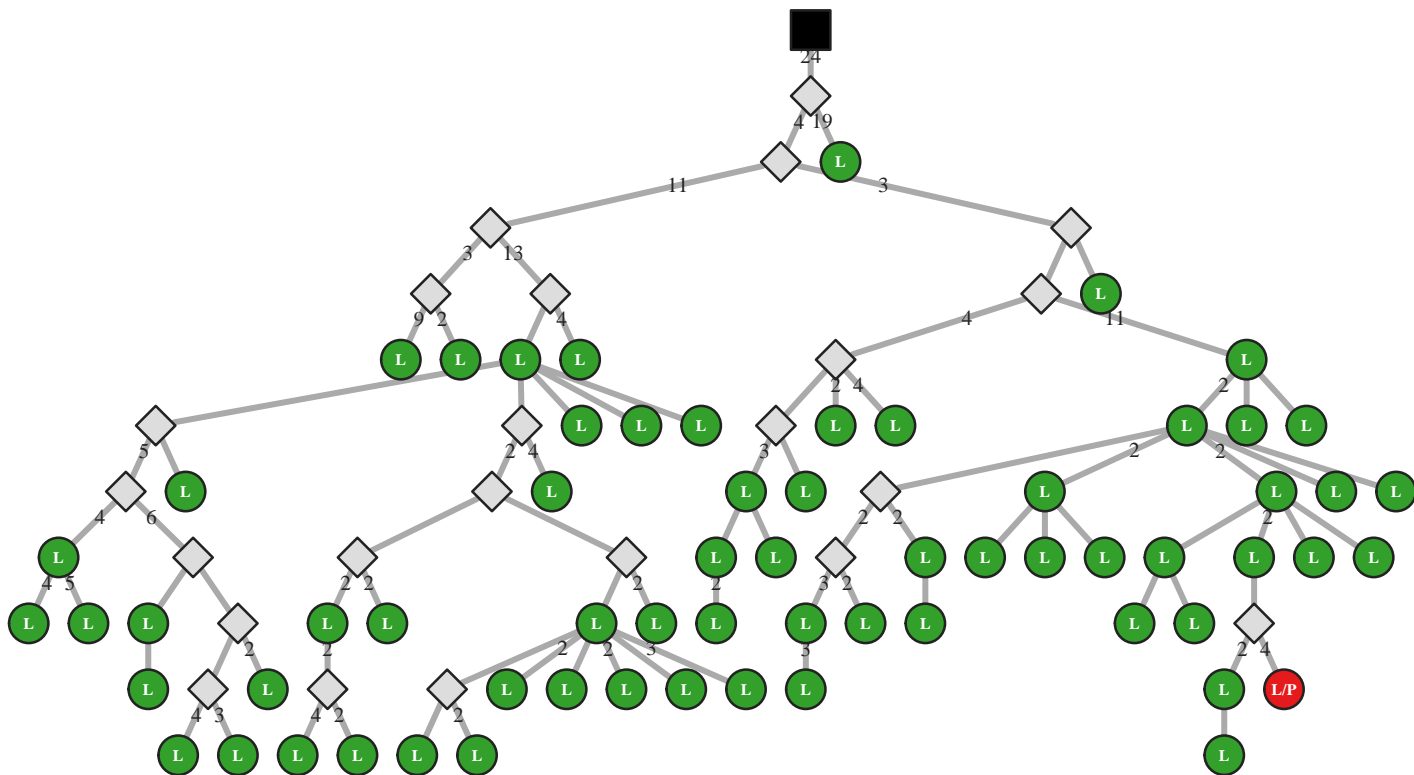
M5 IgG IGHV1-69/J5 30bp (14822)



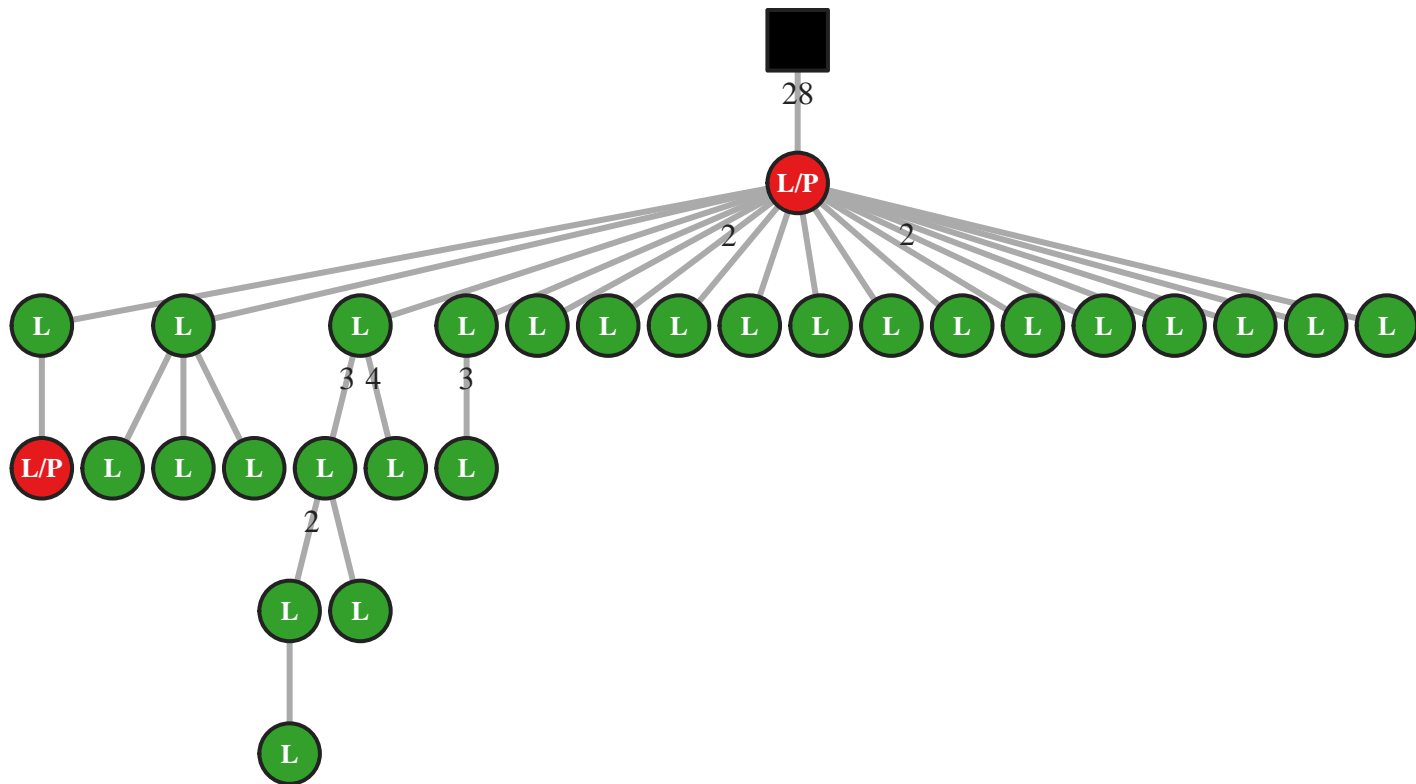
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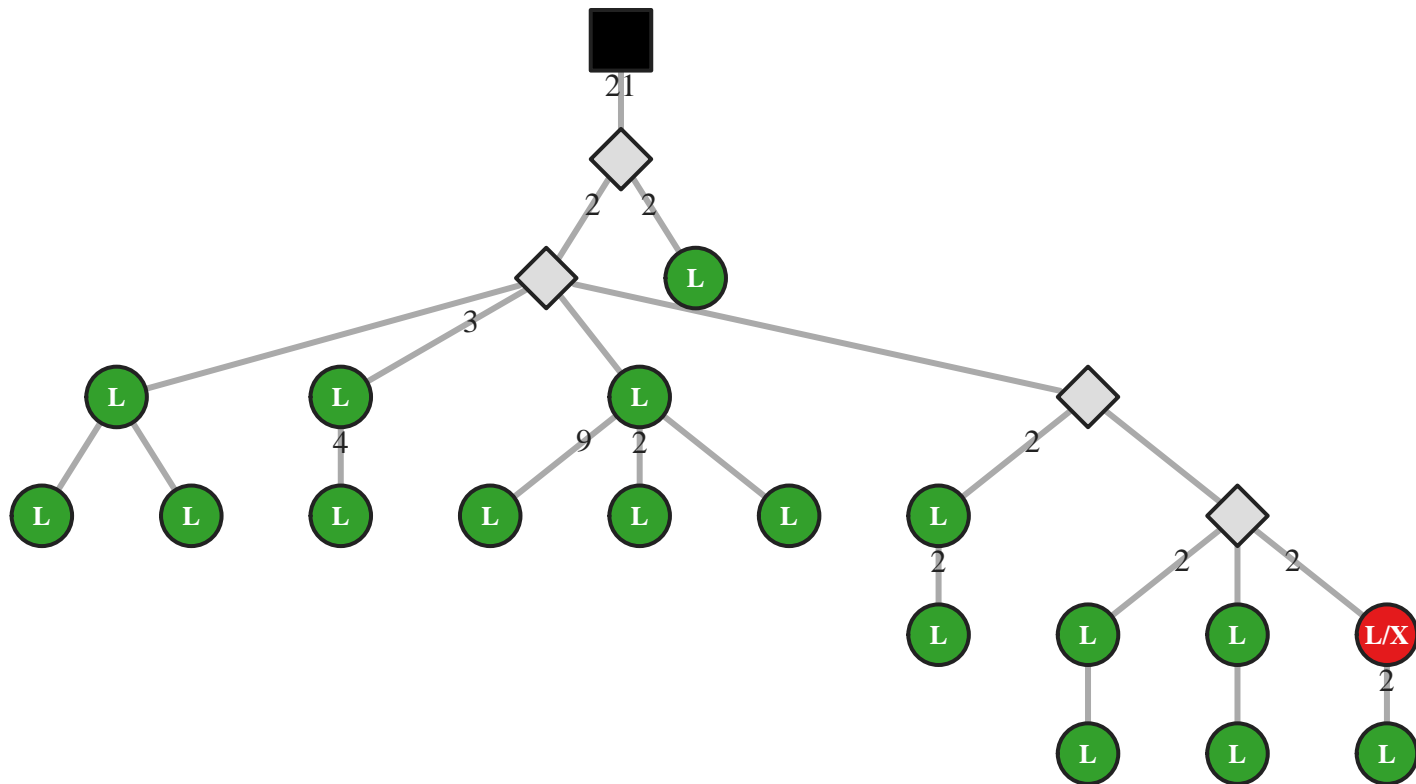
M5 IgG IGHV1-69/J5 36bp (41831)



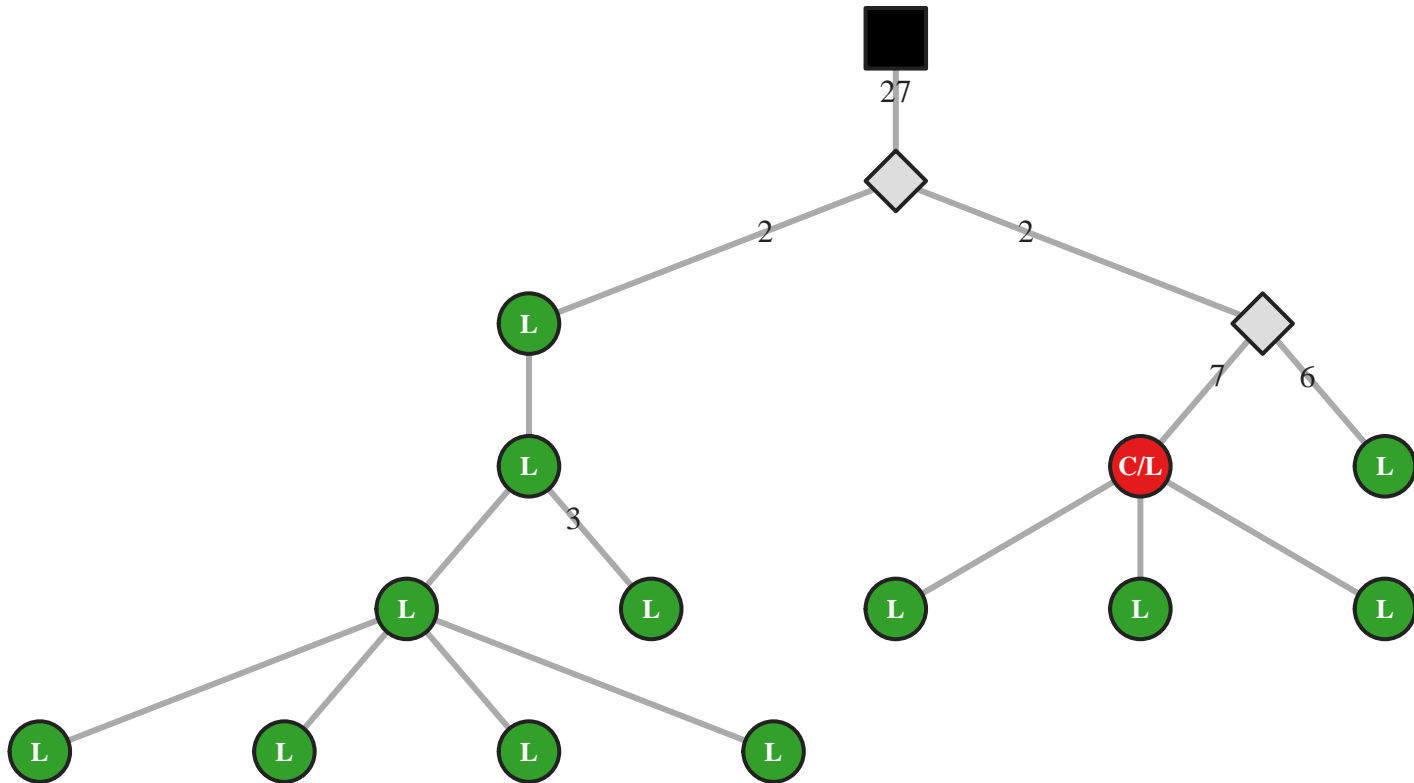
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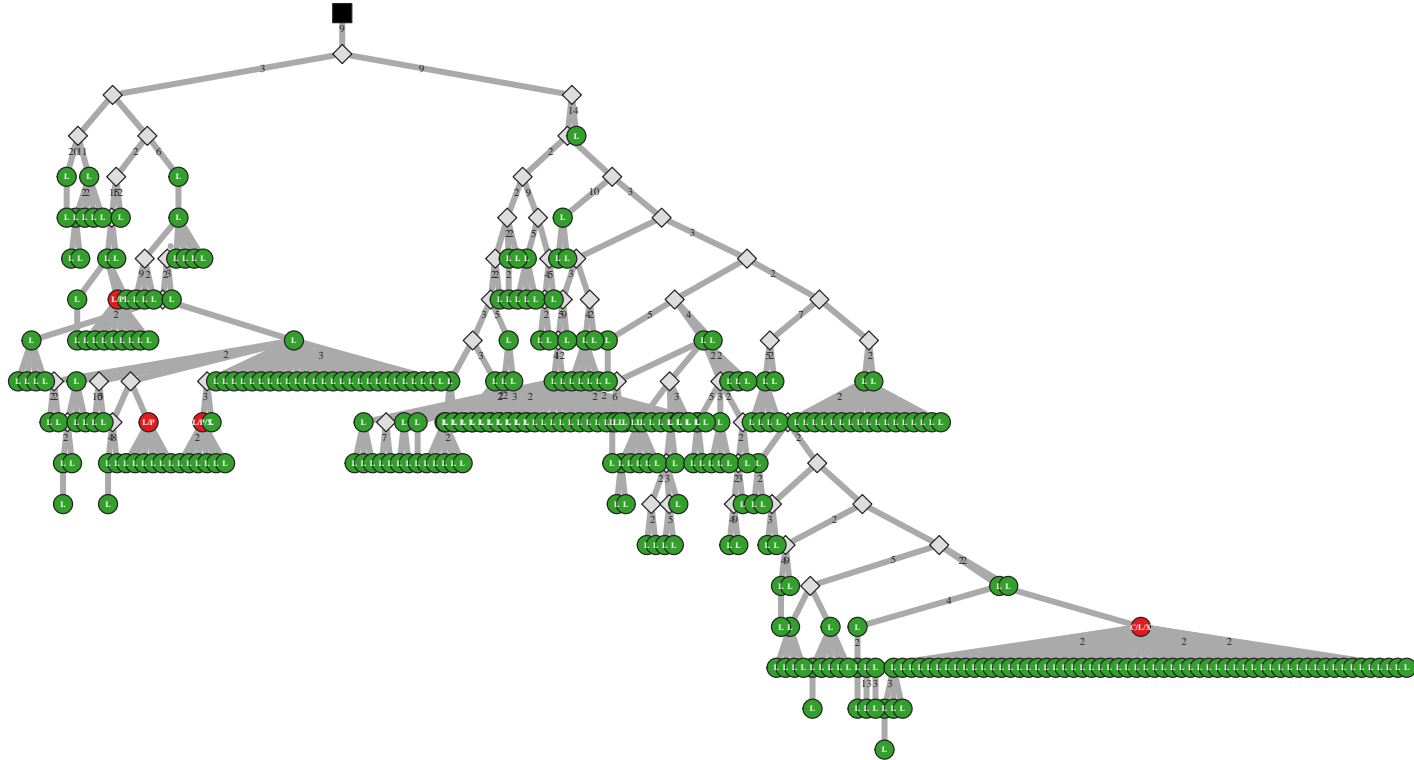
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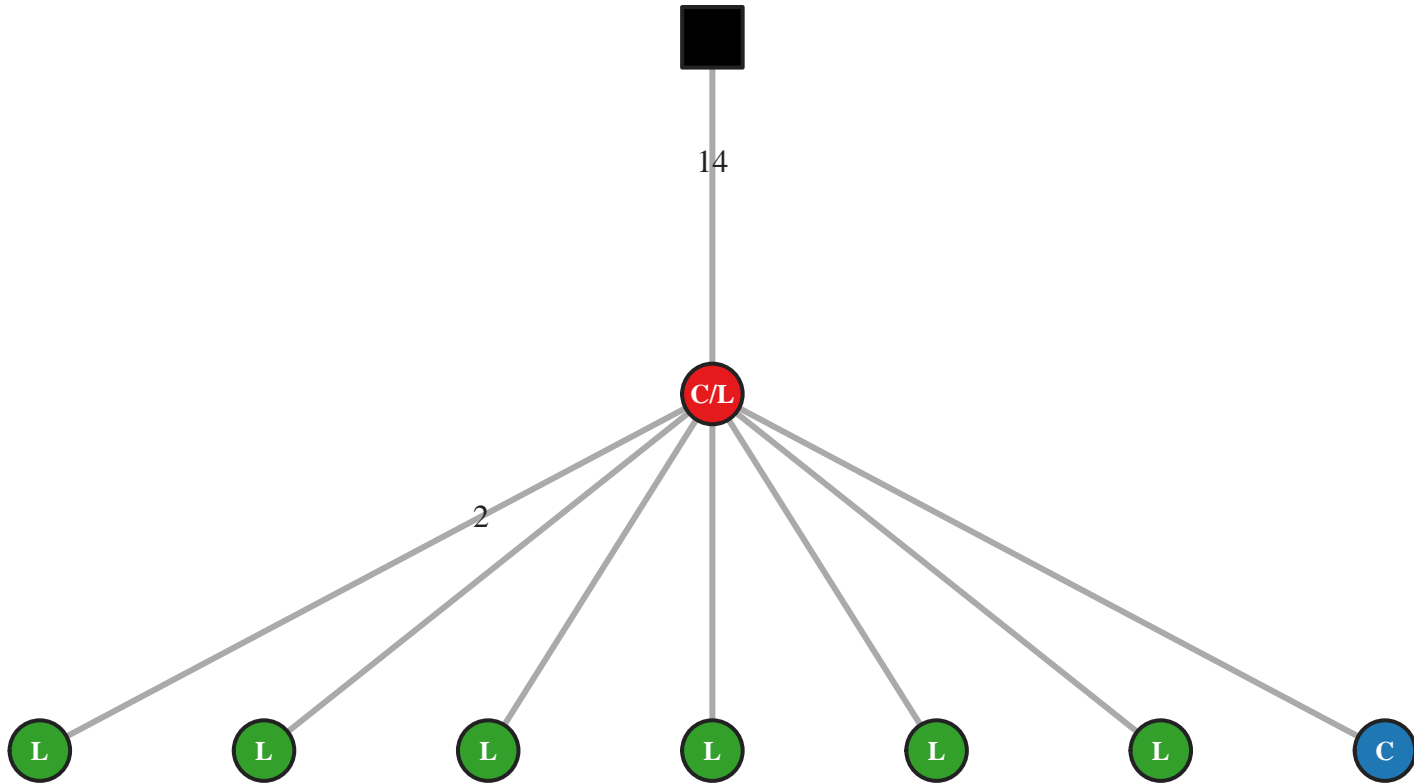
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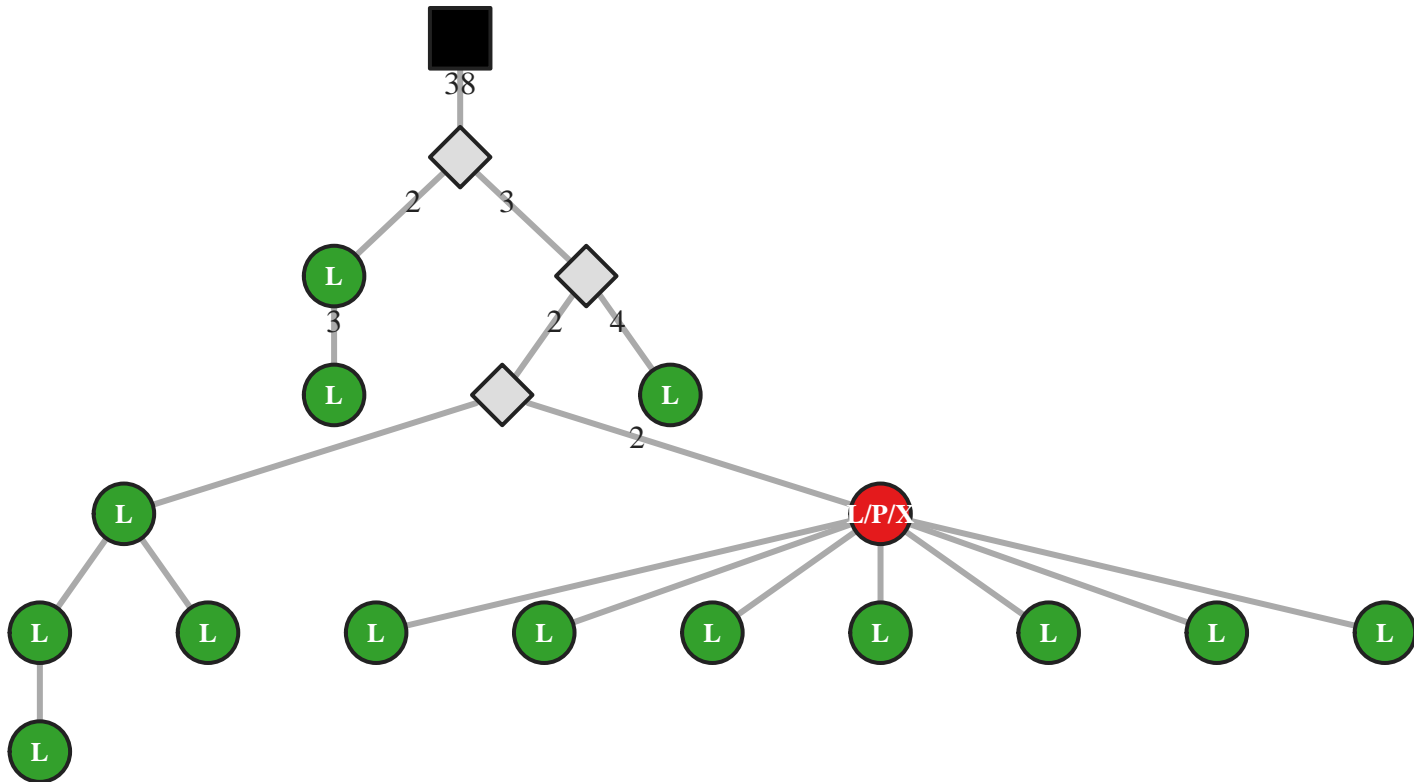
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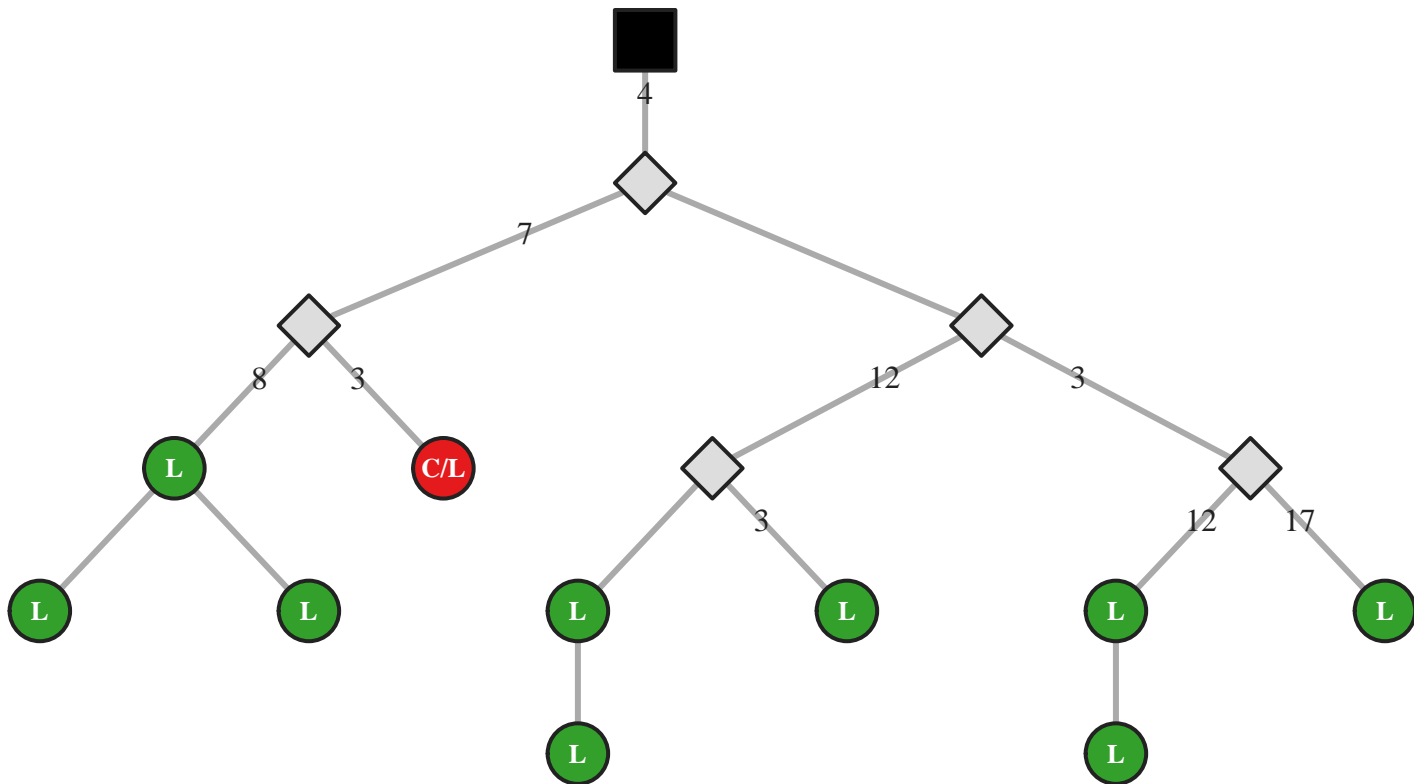
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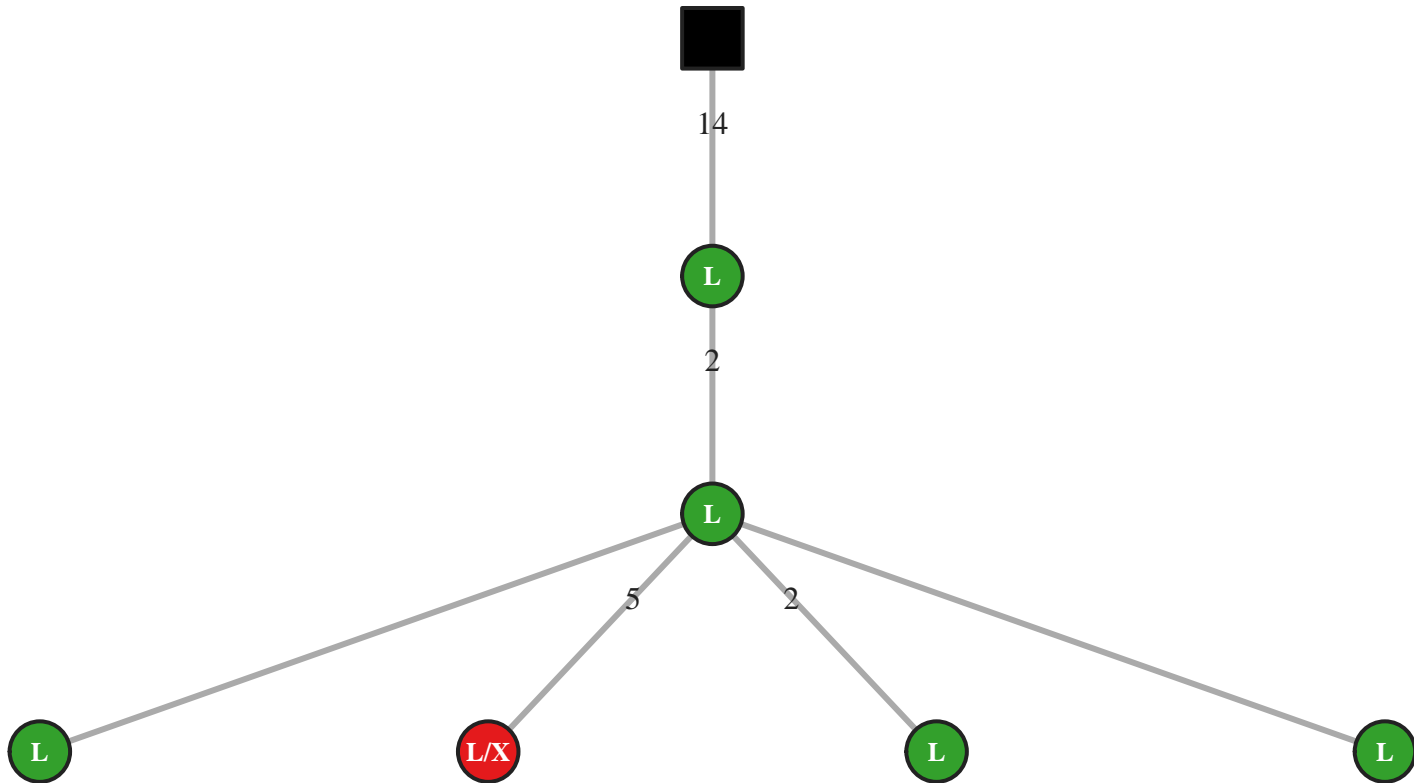
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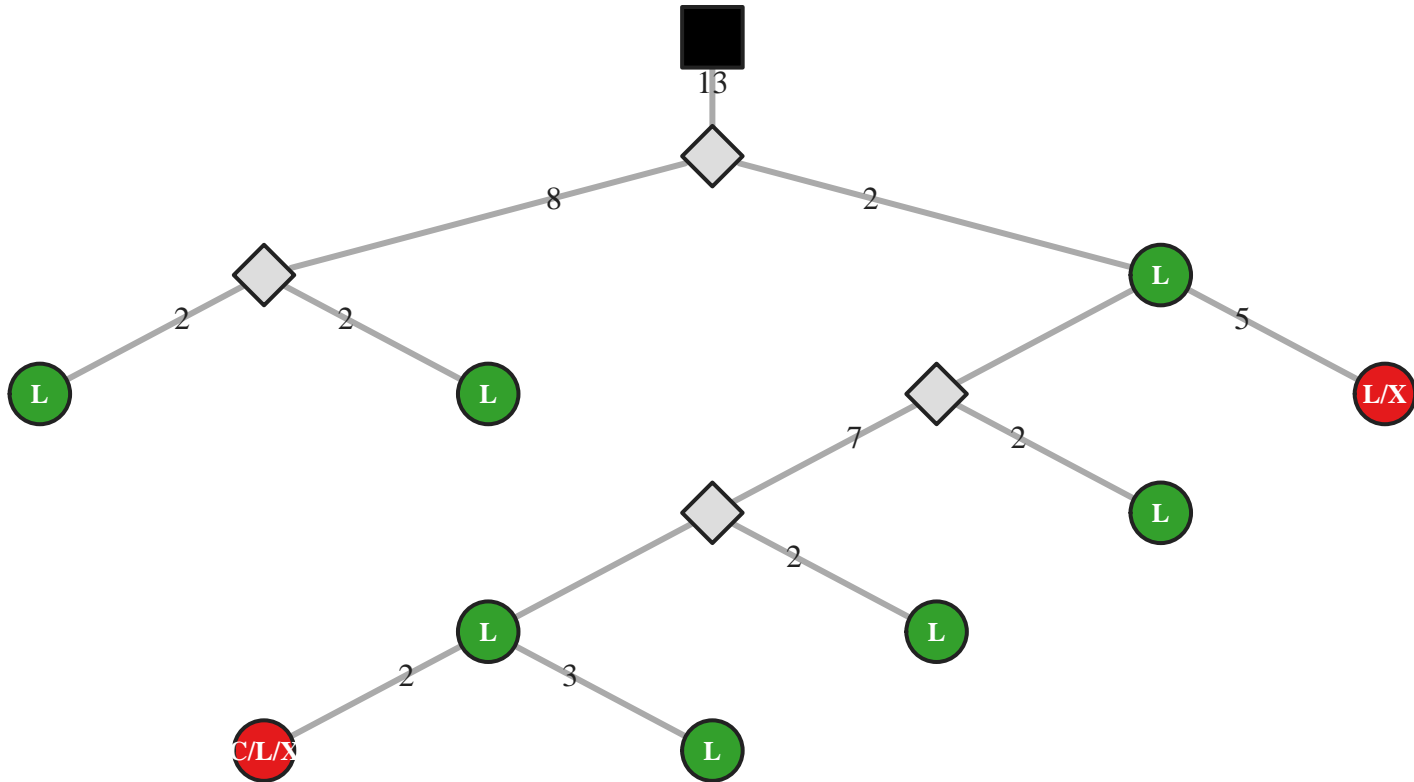
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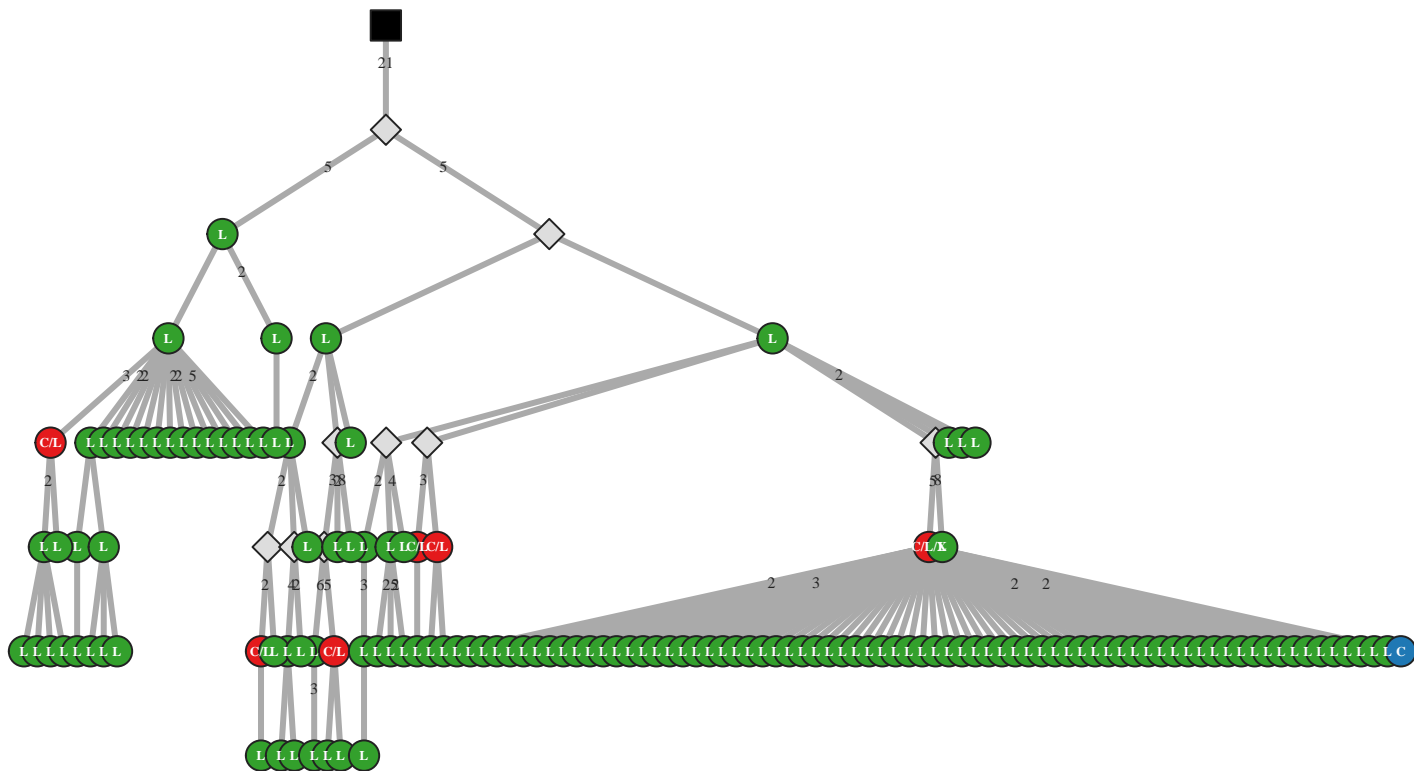
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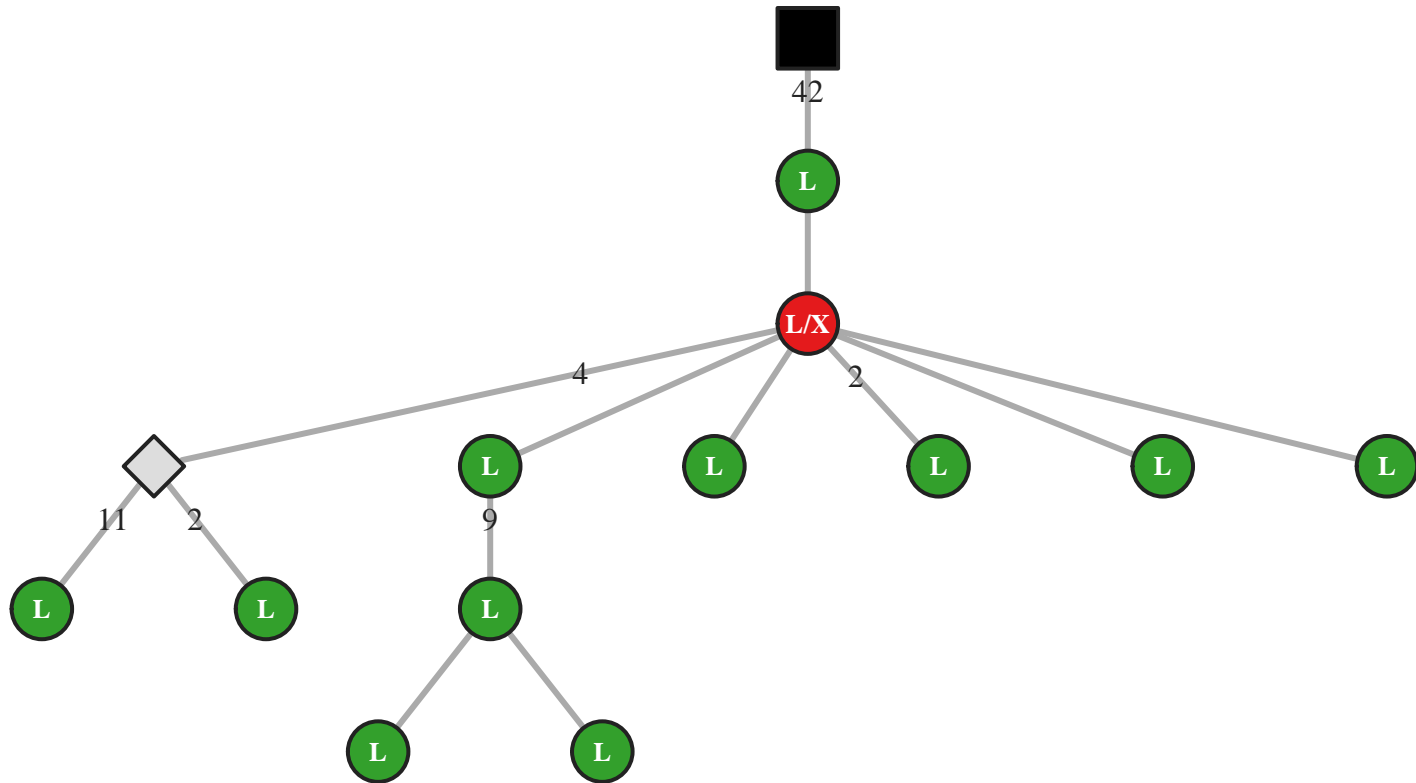
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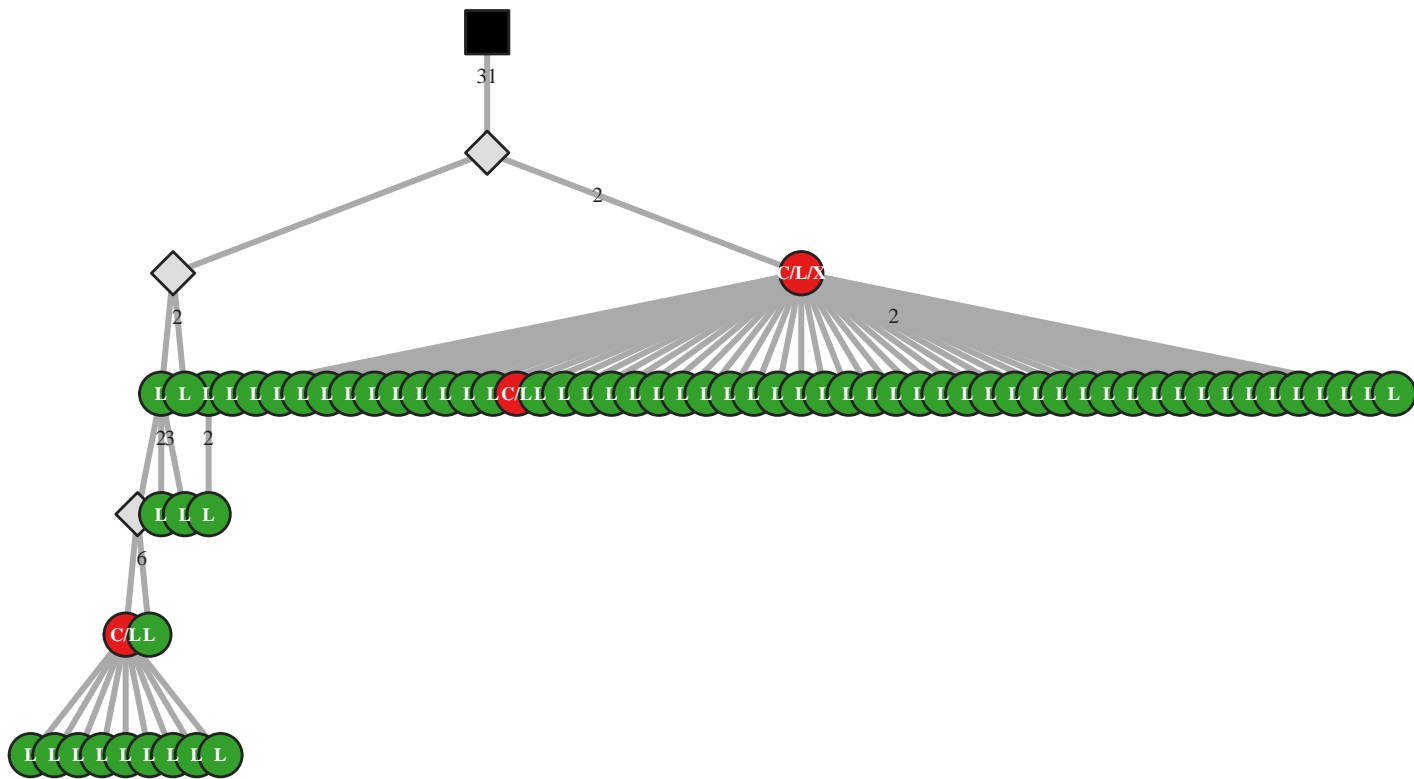
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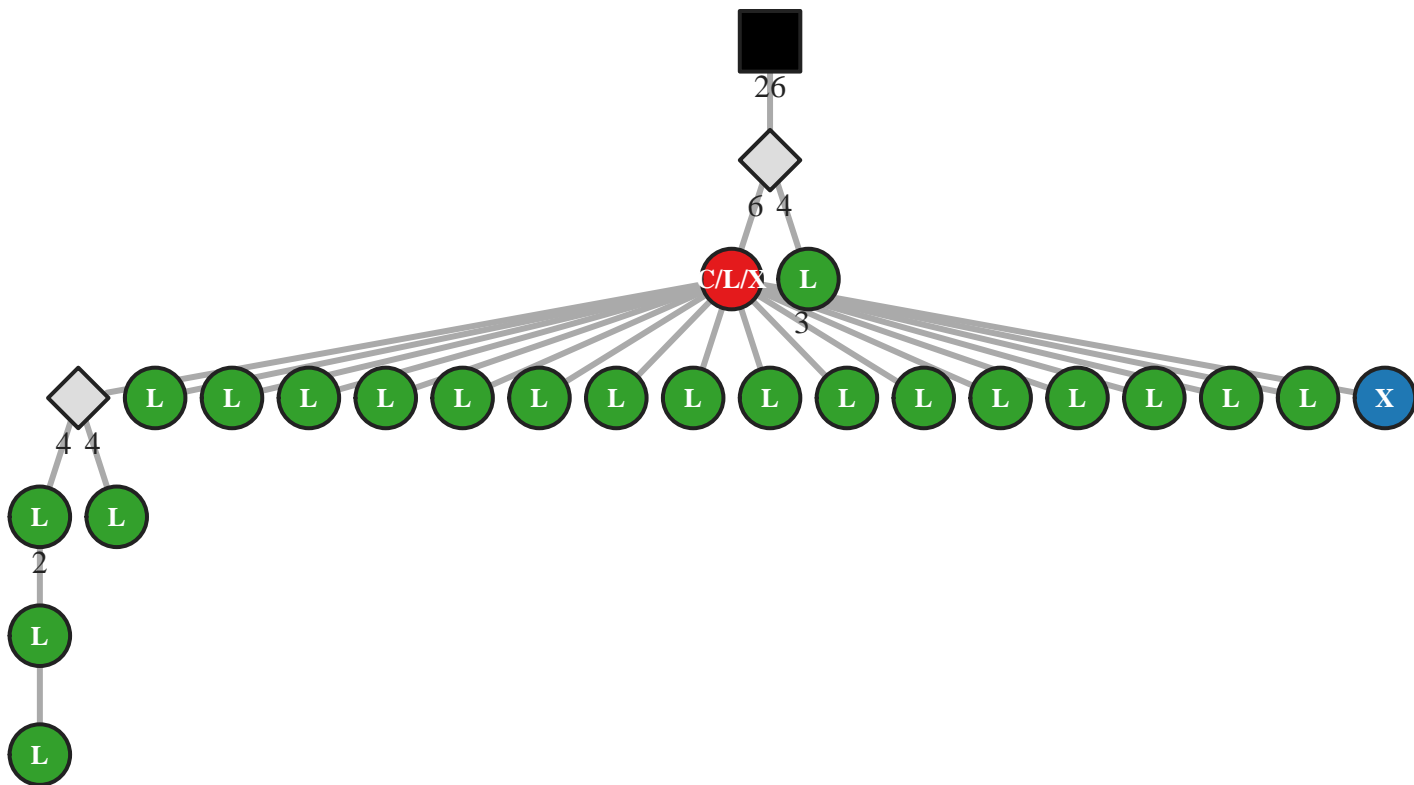
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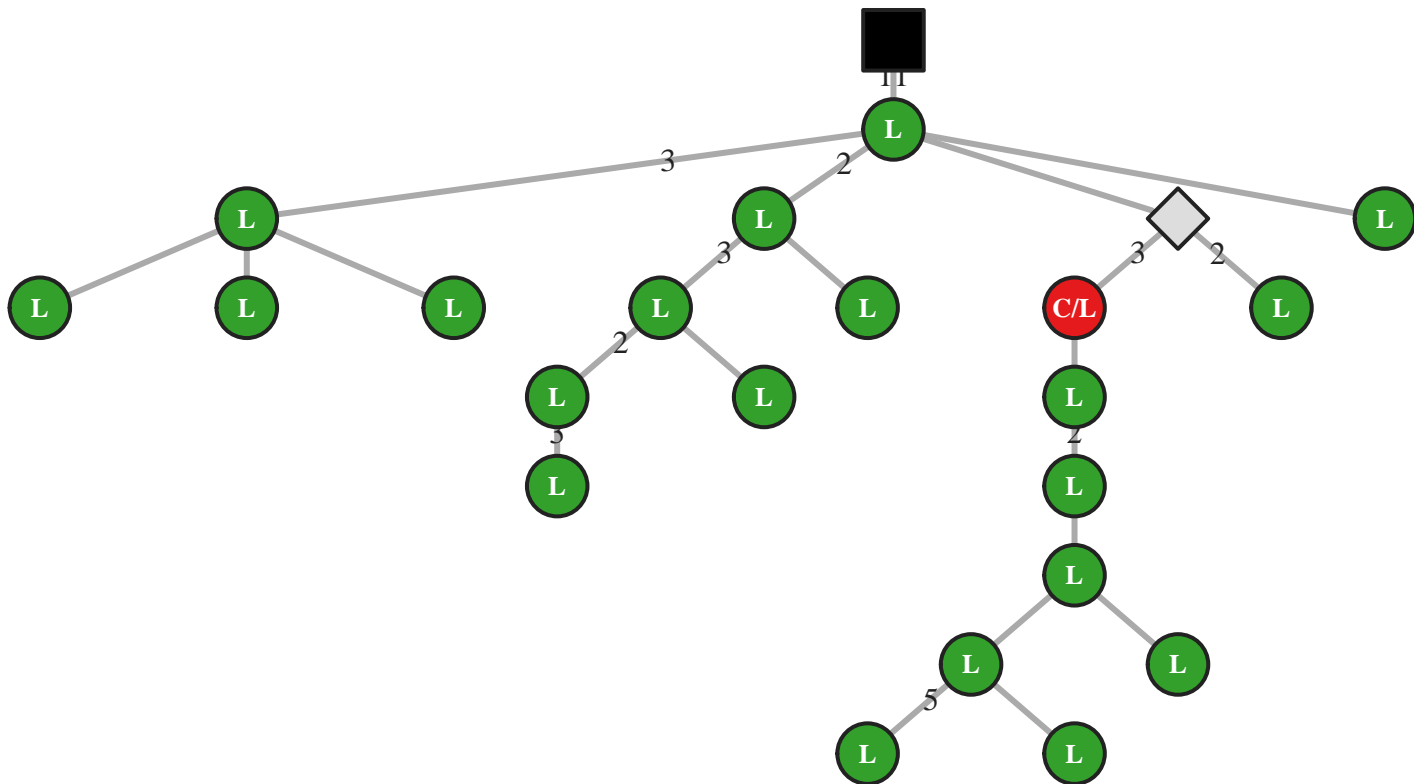
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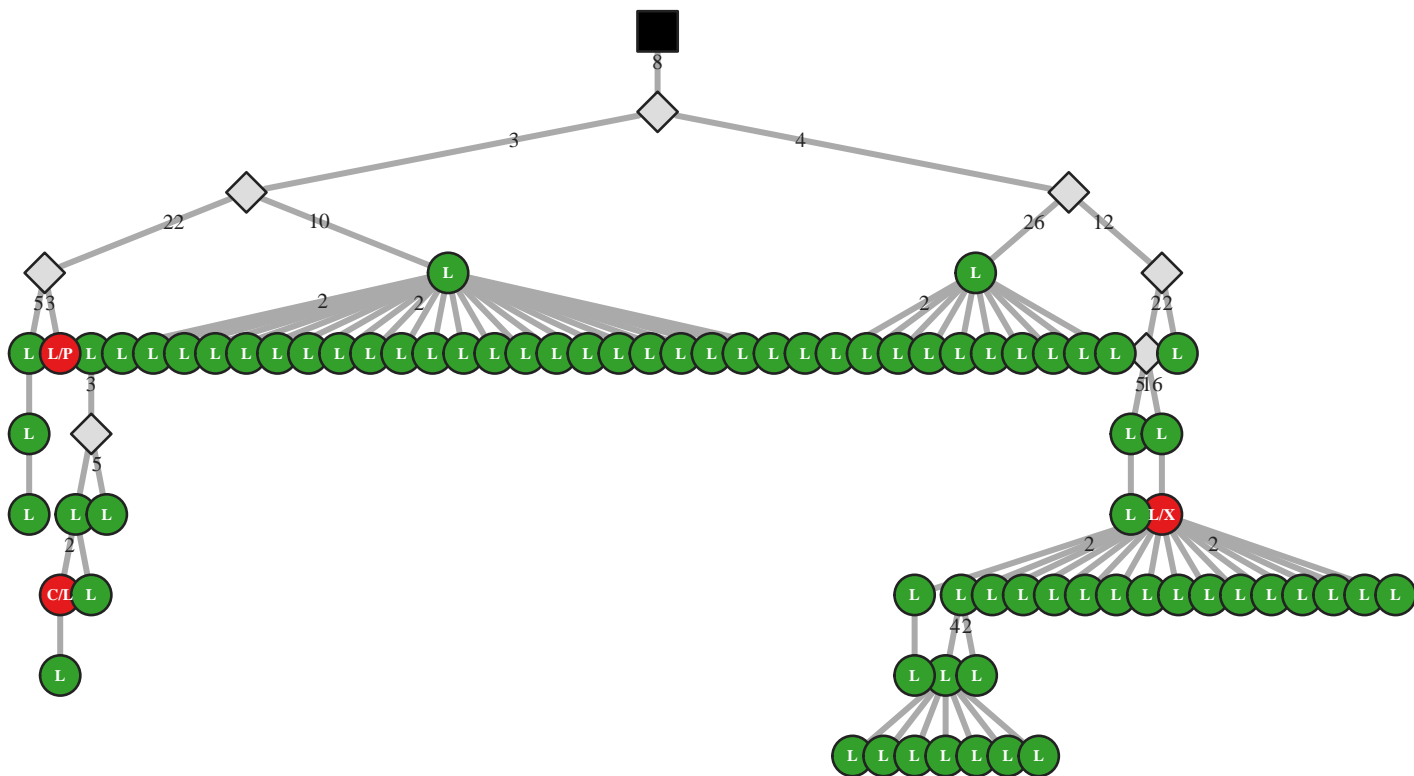
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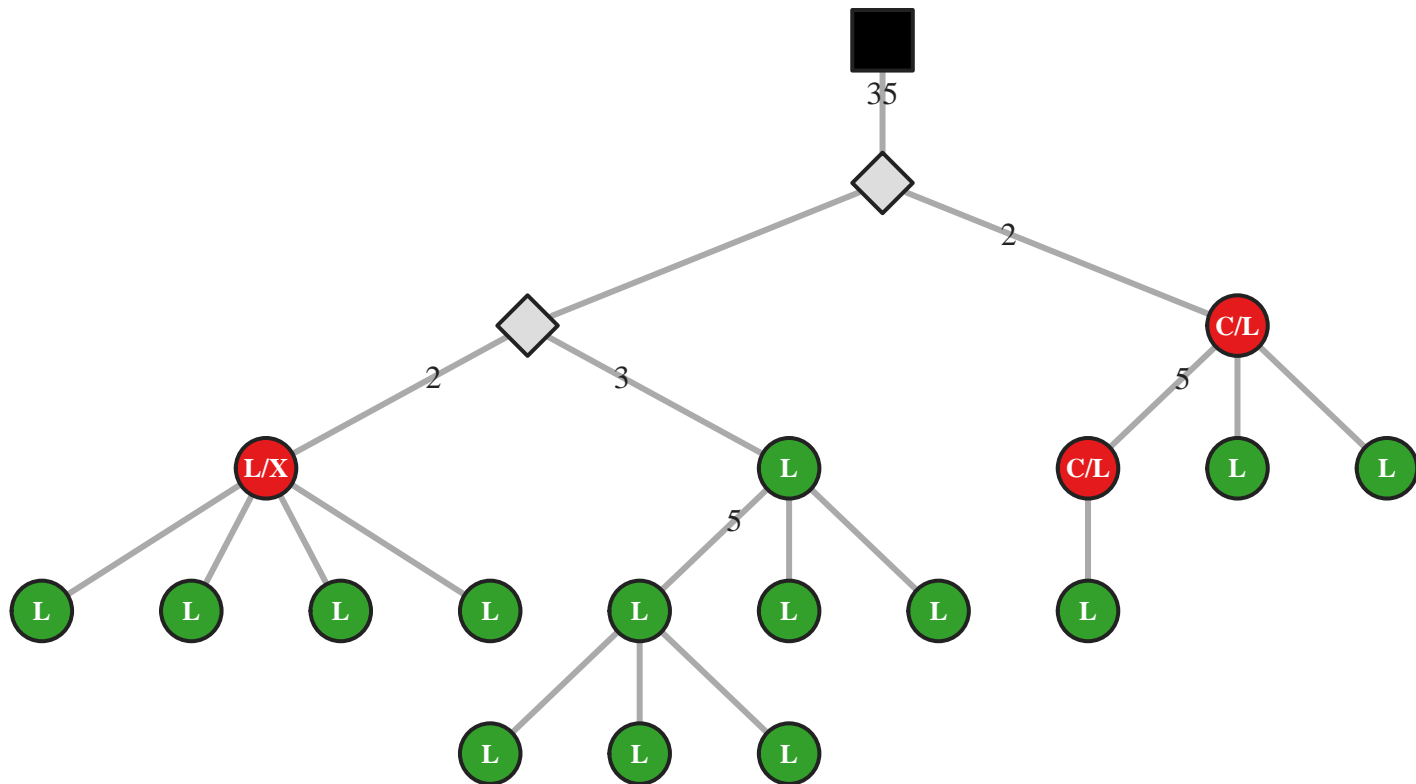
M5 IgG IGHV1-69/J5 48bp (41913)



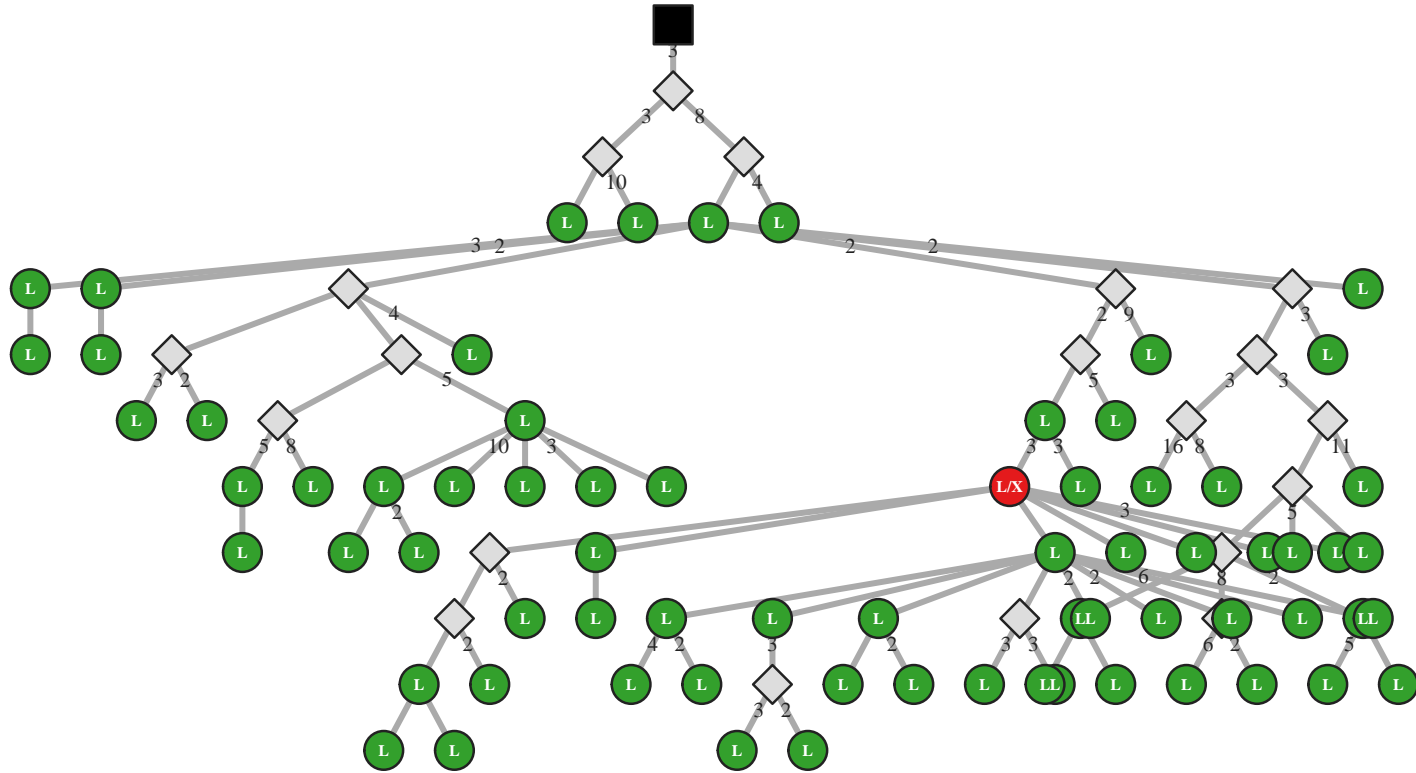
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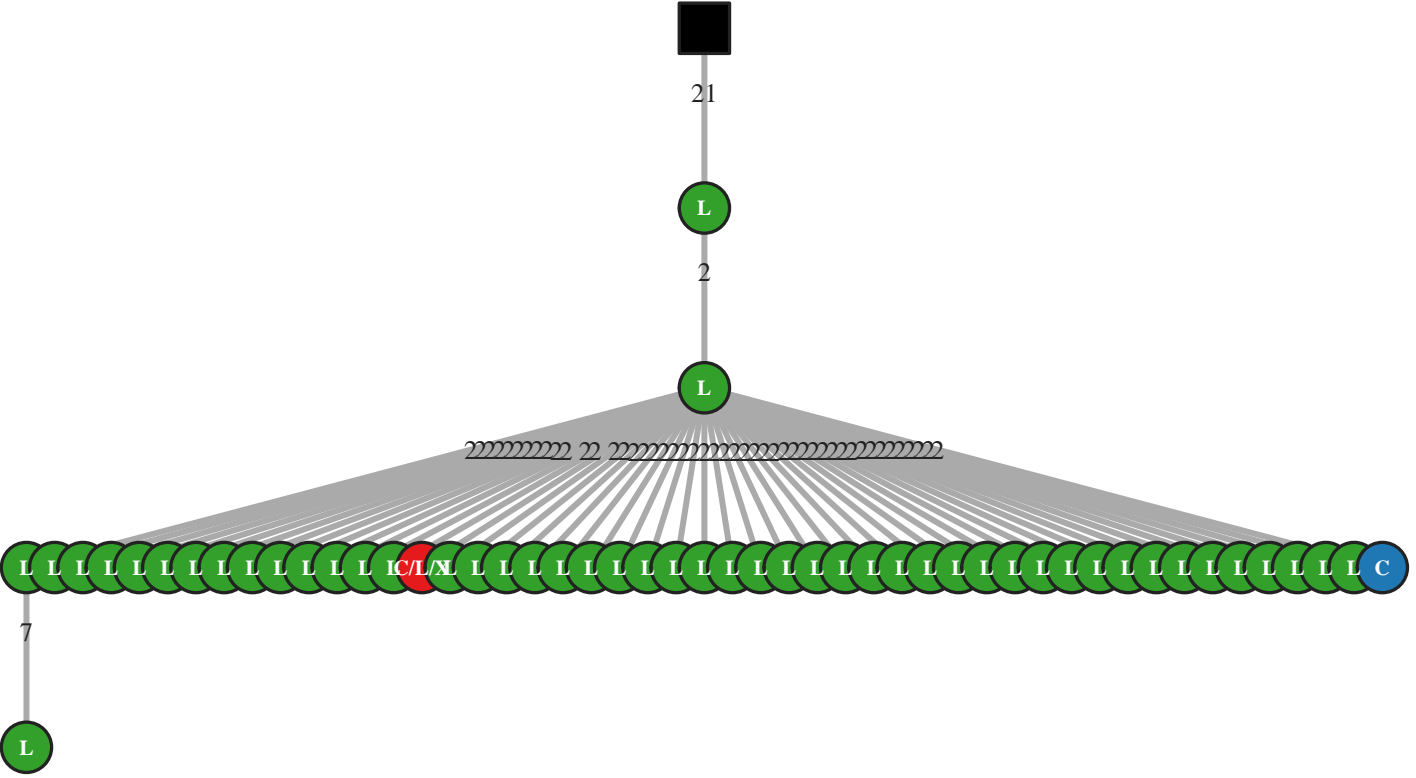
M5 IgG IGHV1-69/J5 54bp (41943)



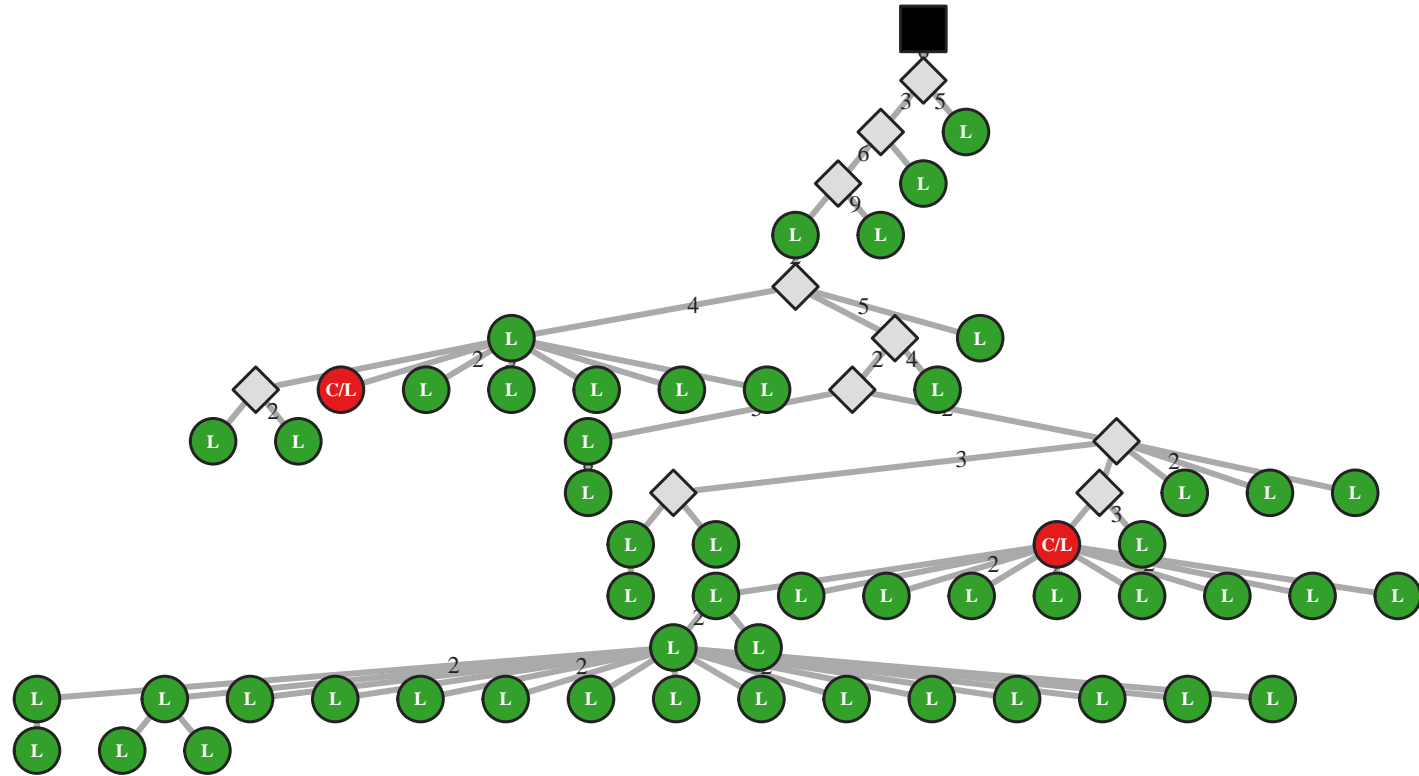
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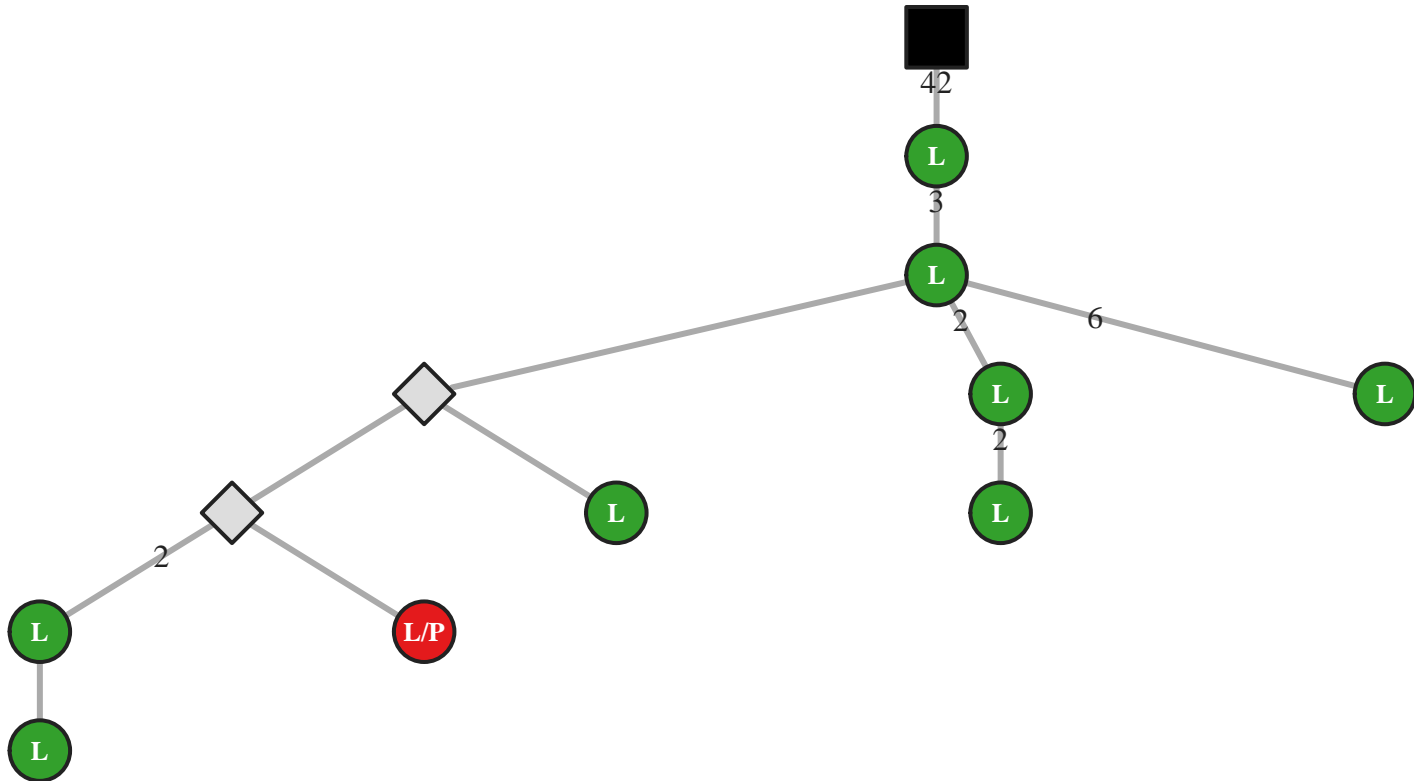
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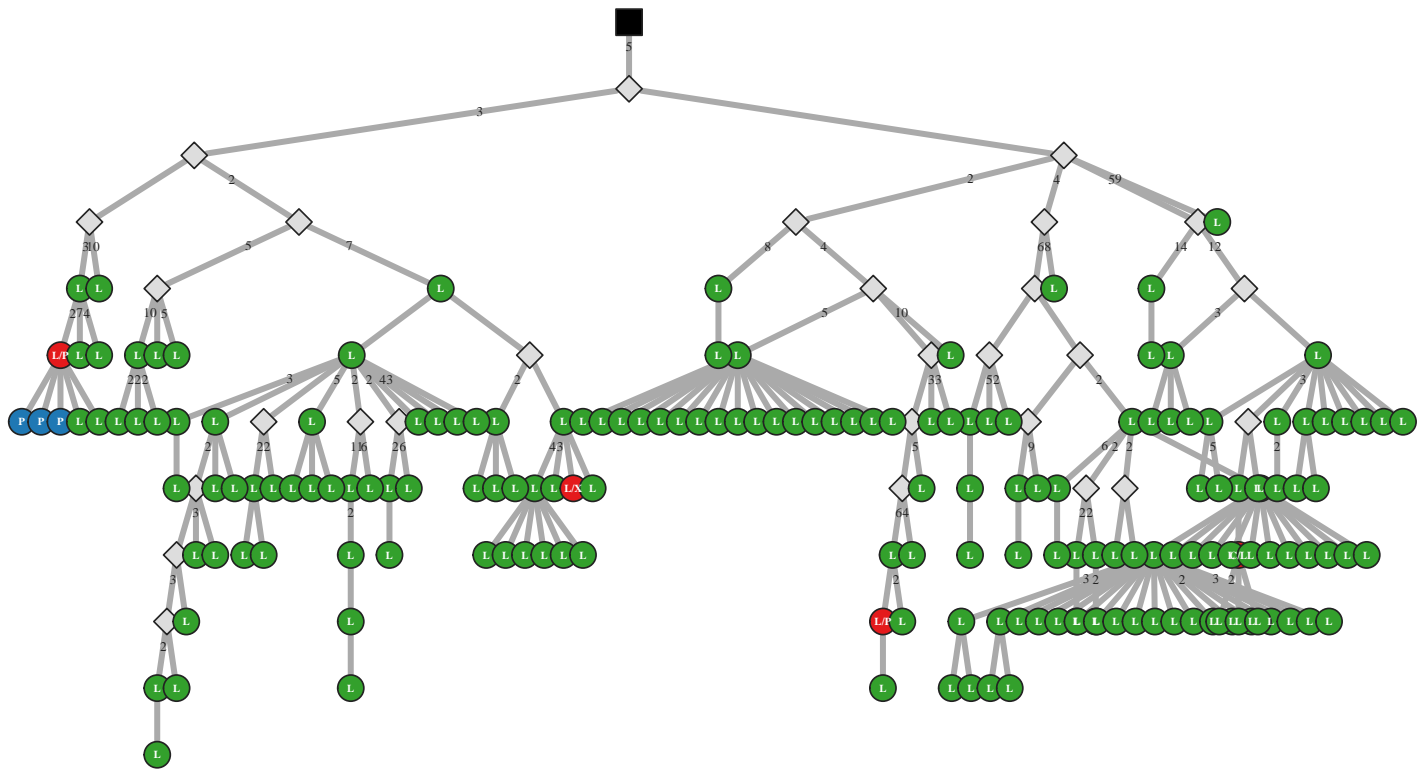
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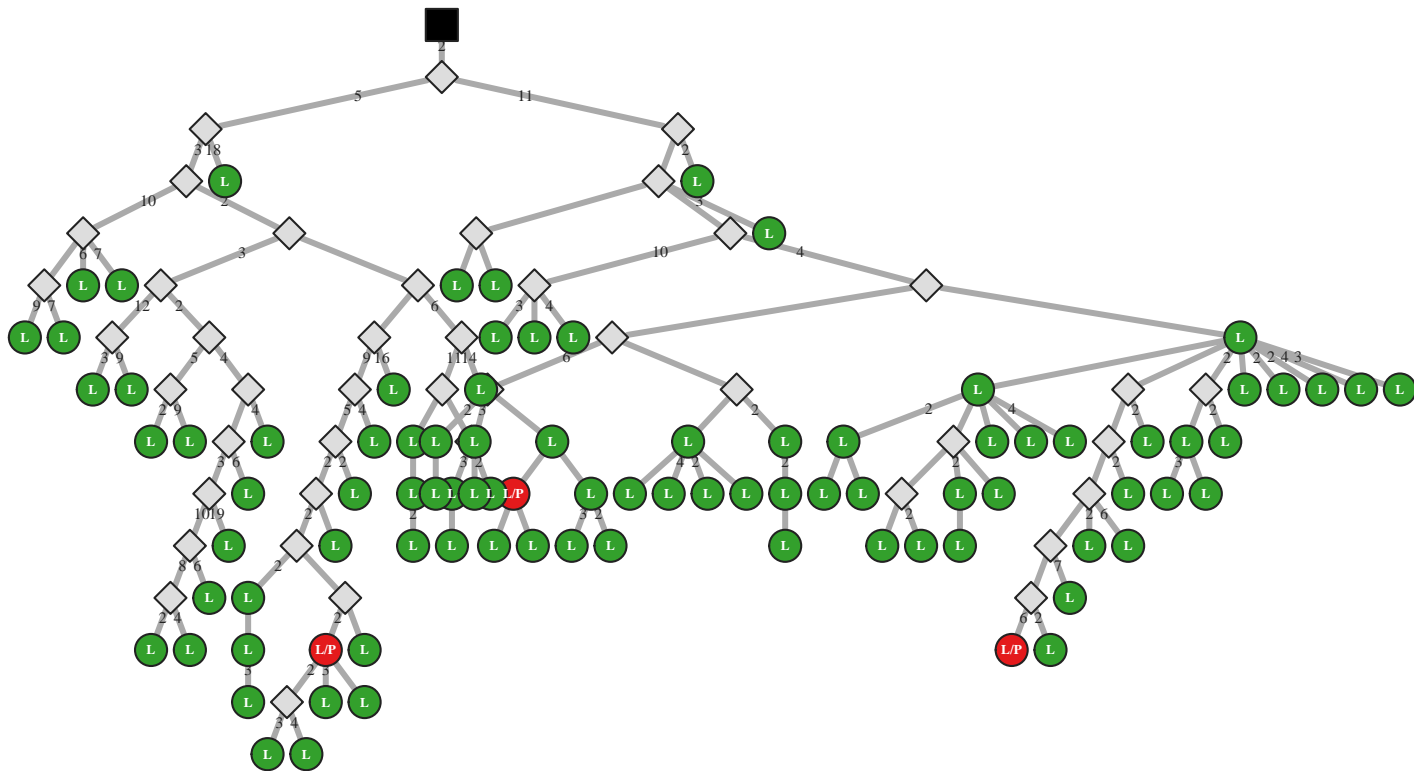
M5 IgG IGHV1-69/J5 57bp (23933)



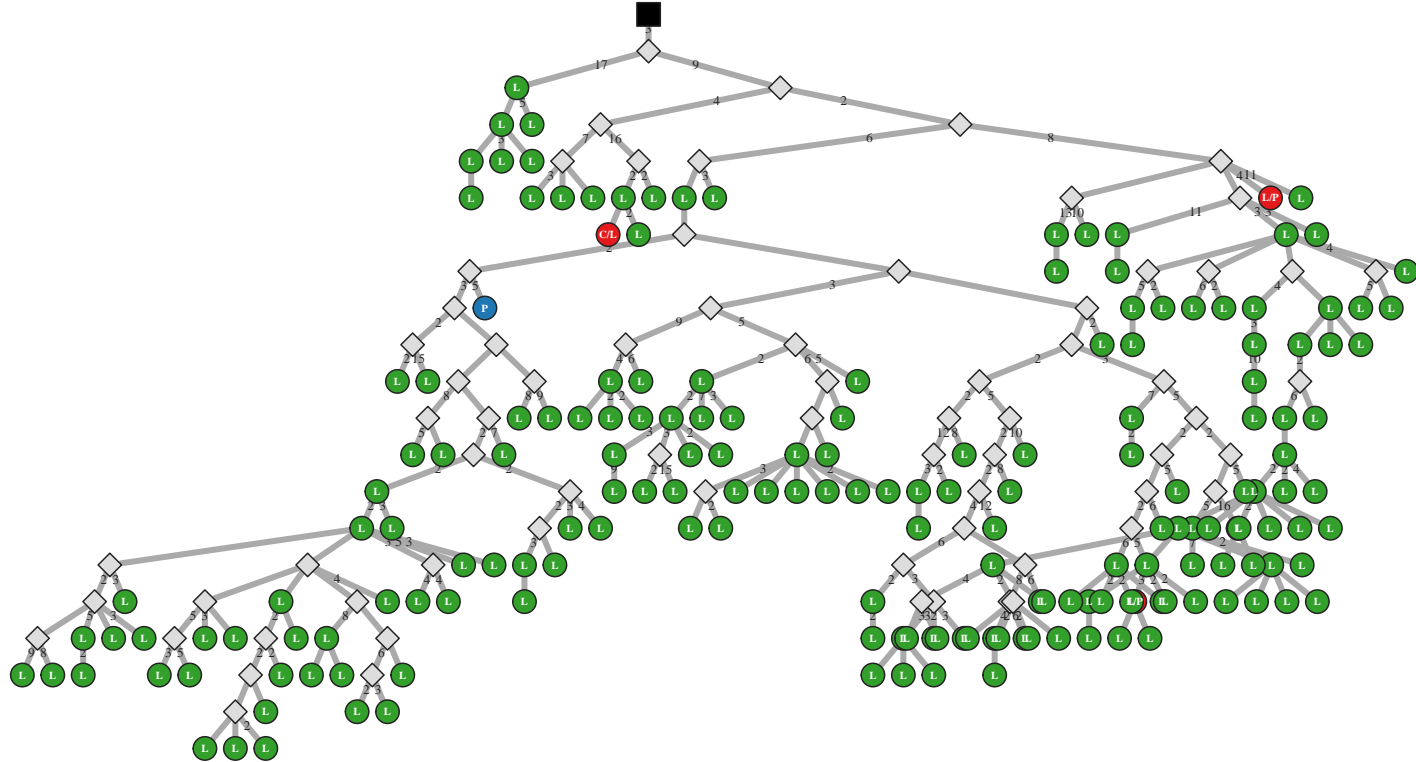
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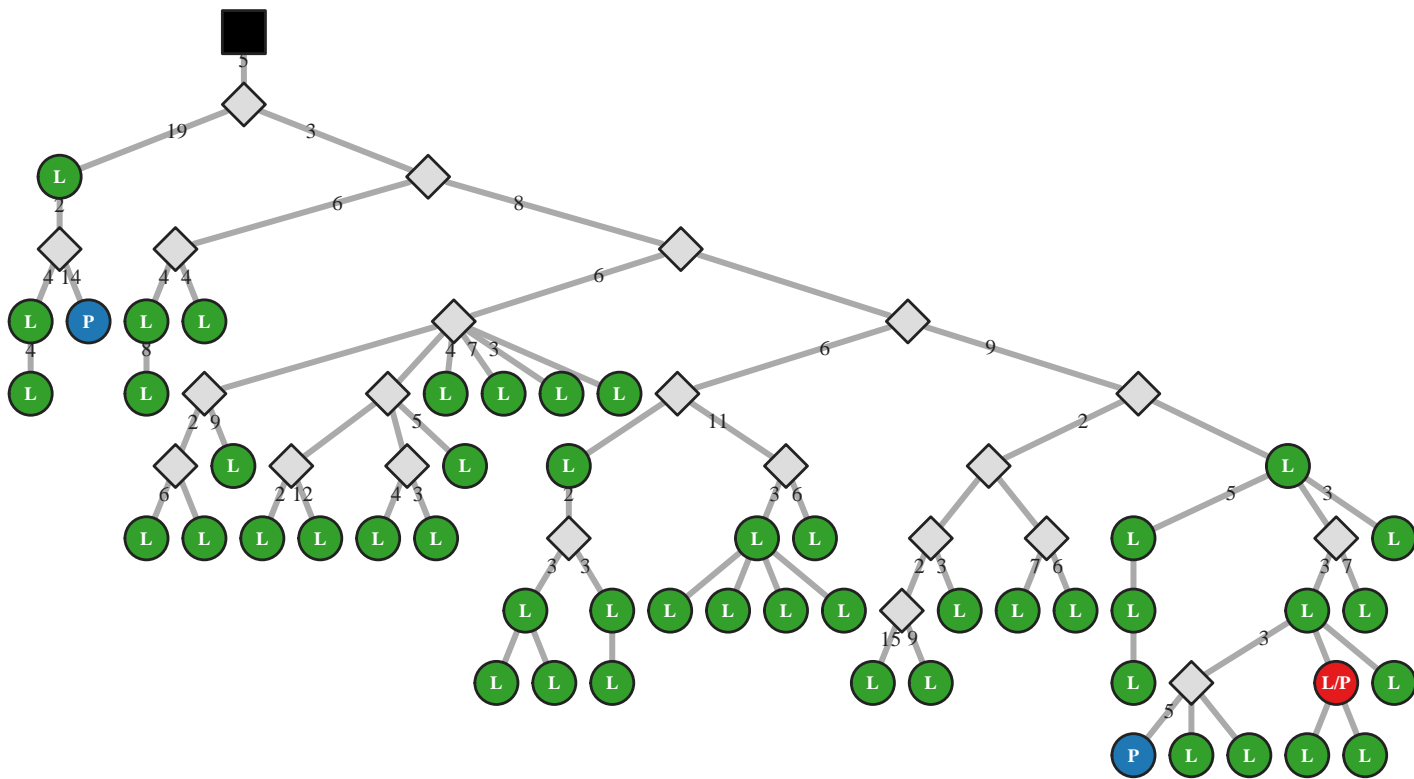
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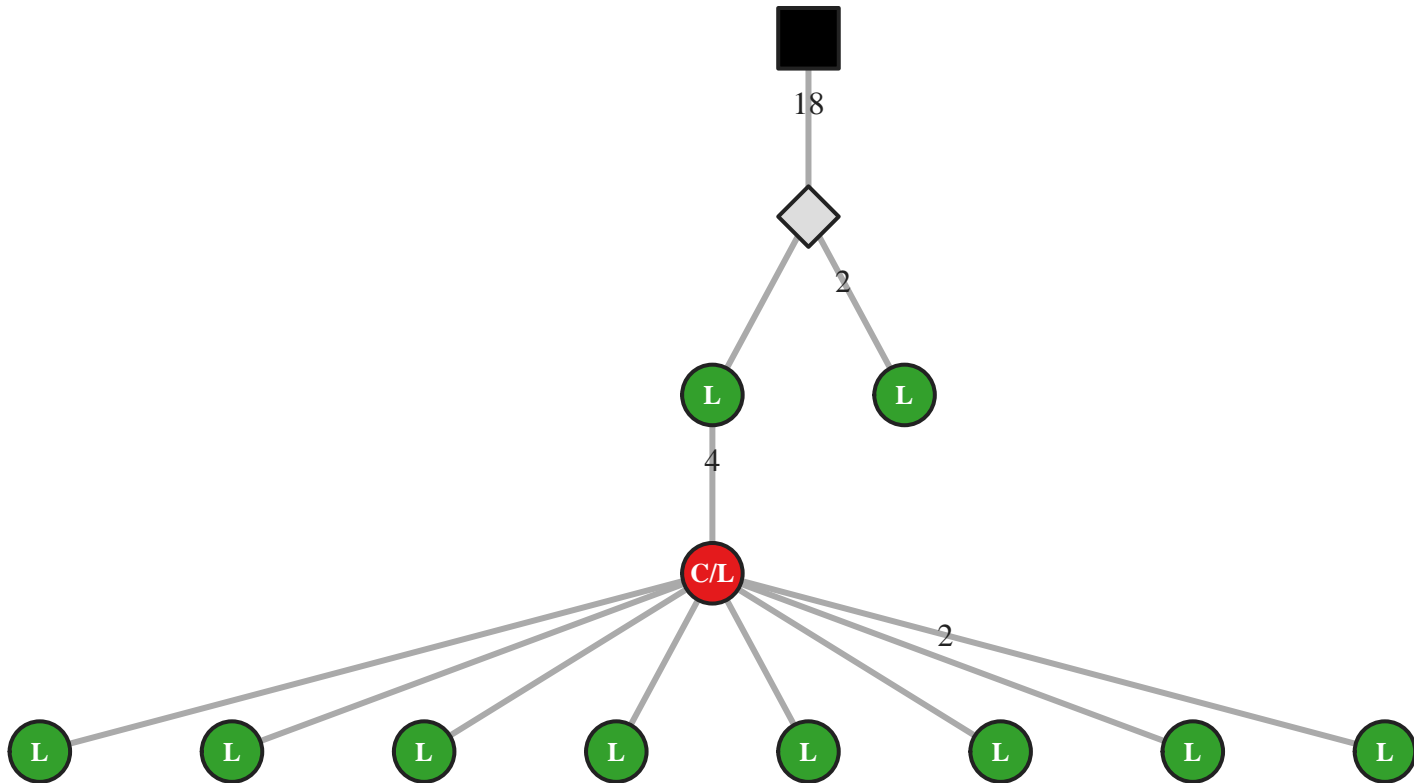
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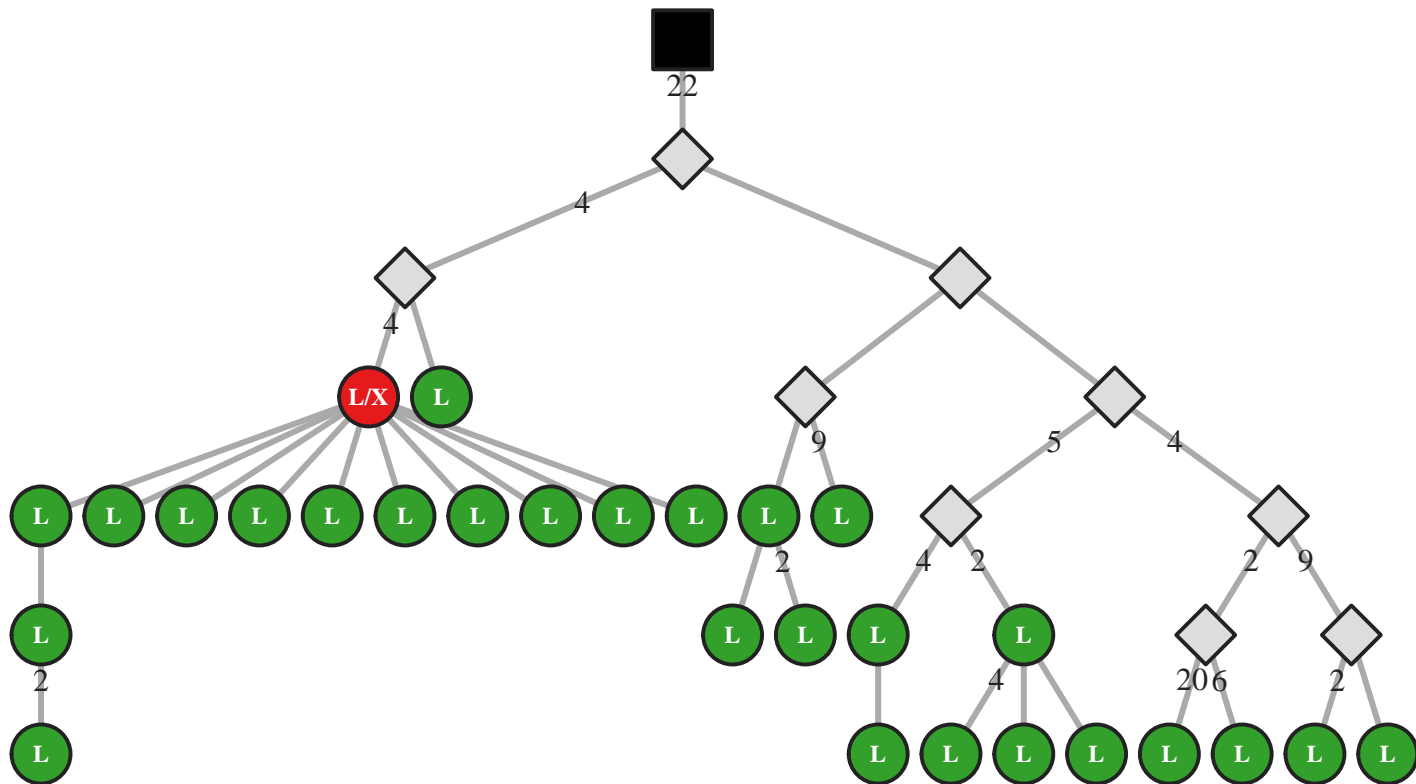
M5 IgG IGHV1-69/J5 60bp (32689)



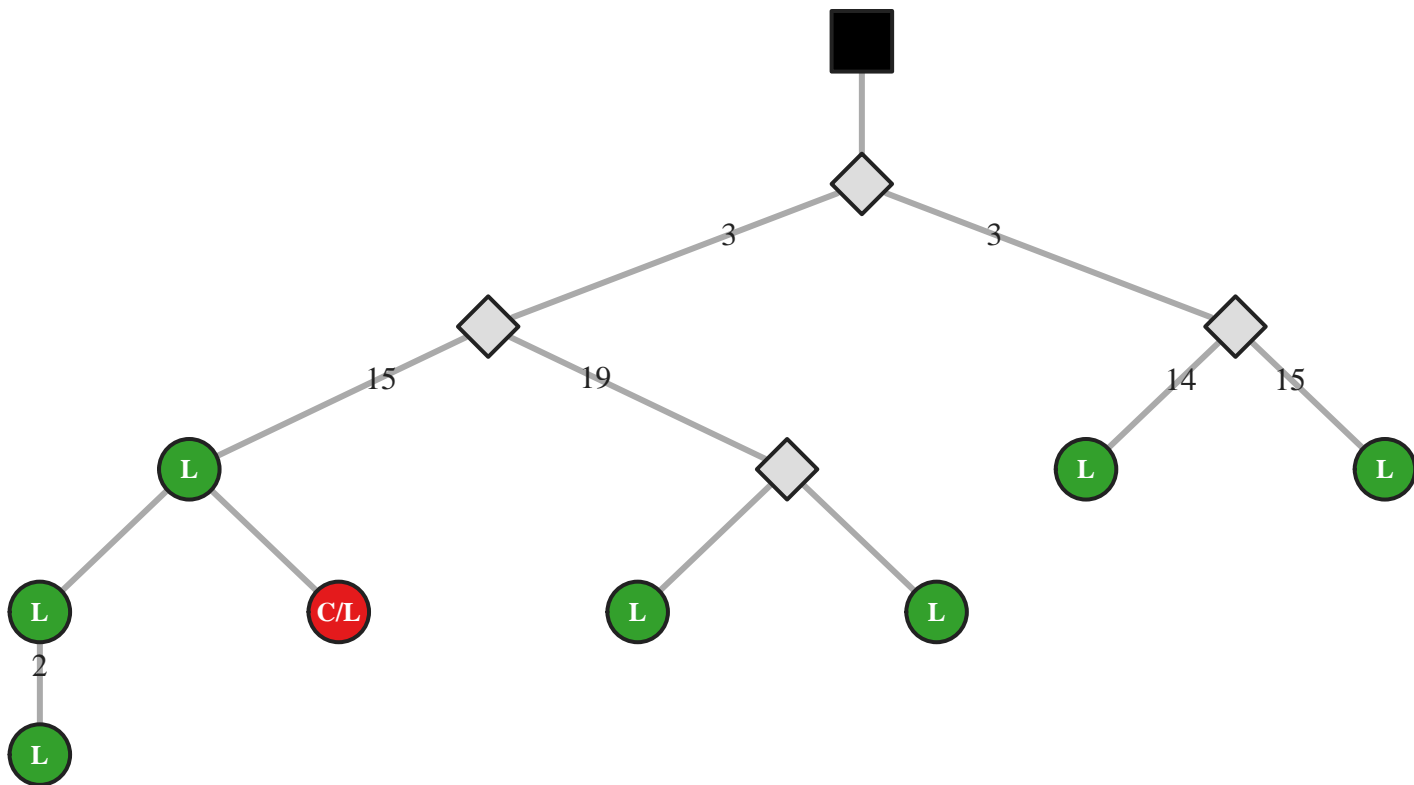
M5 IgA IGHV1-69/J5 63bp (38436)



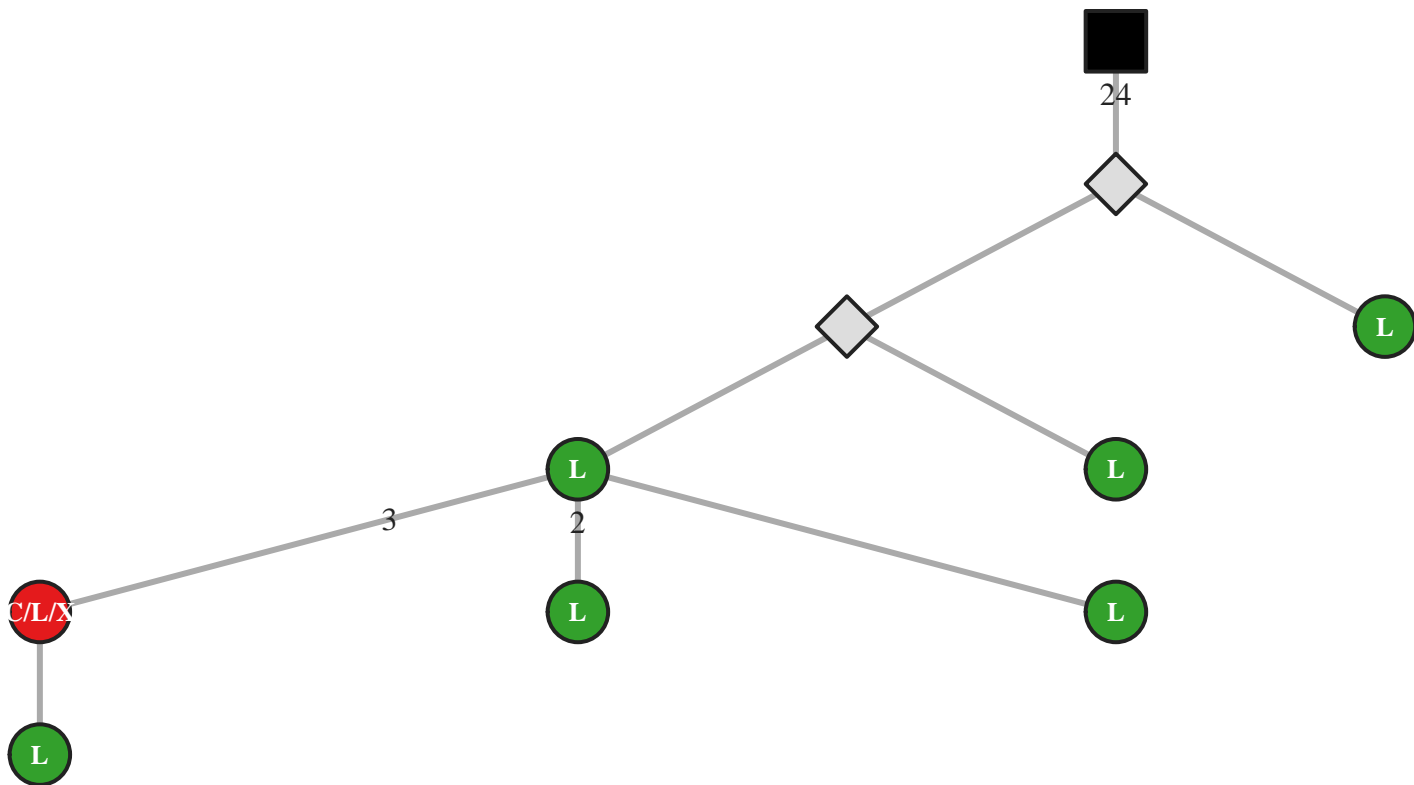
M5 IgG IGHV1-69/J5 63bp (32728)



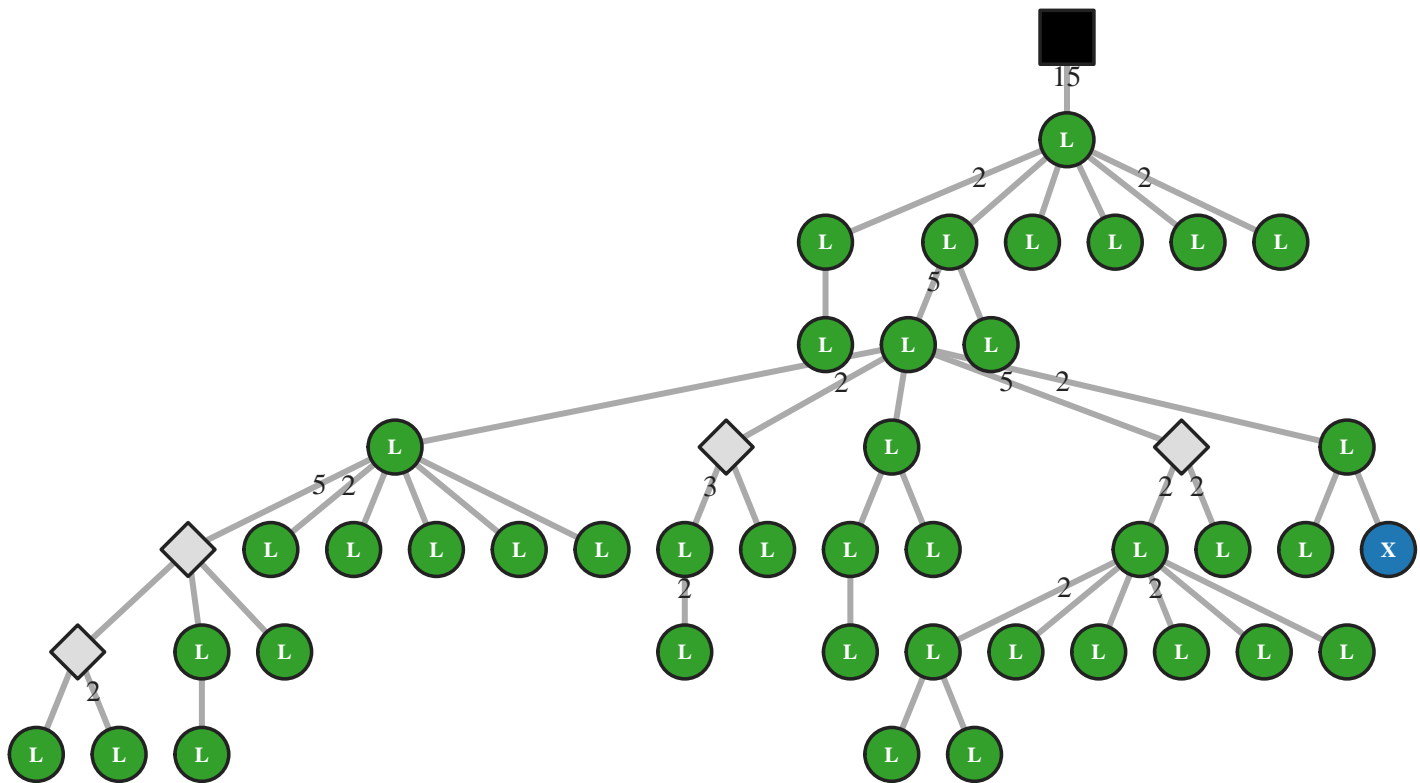
M5 IgG IGHV1-69/J5 66bp (42011)



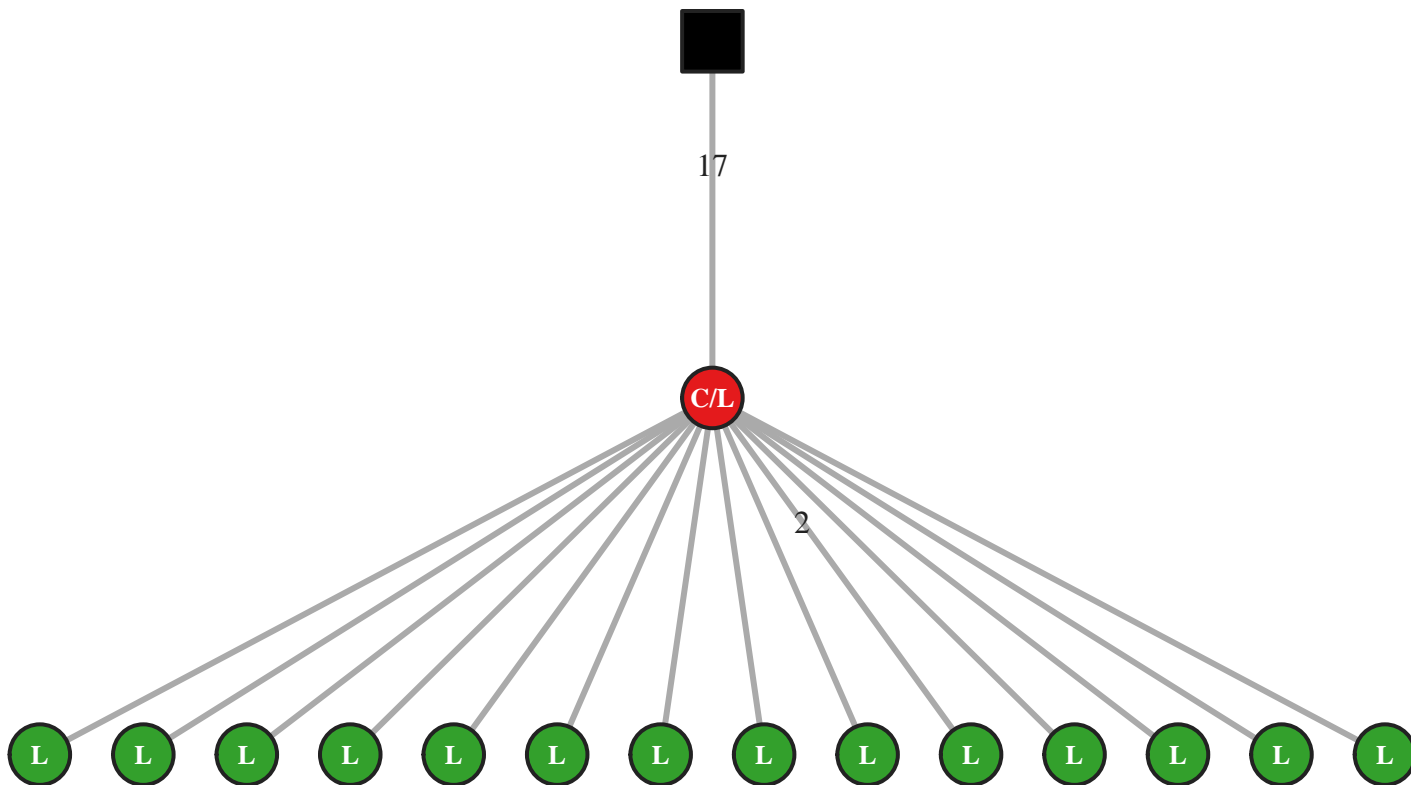
M5 IgG IGHV1-69/J5 72bp (23969)



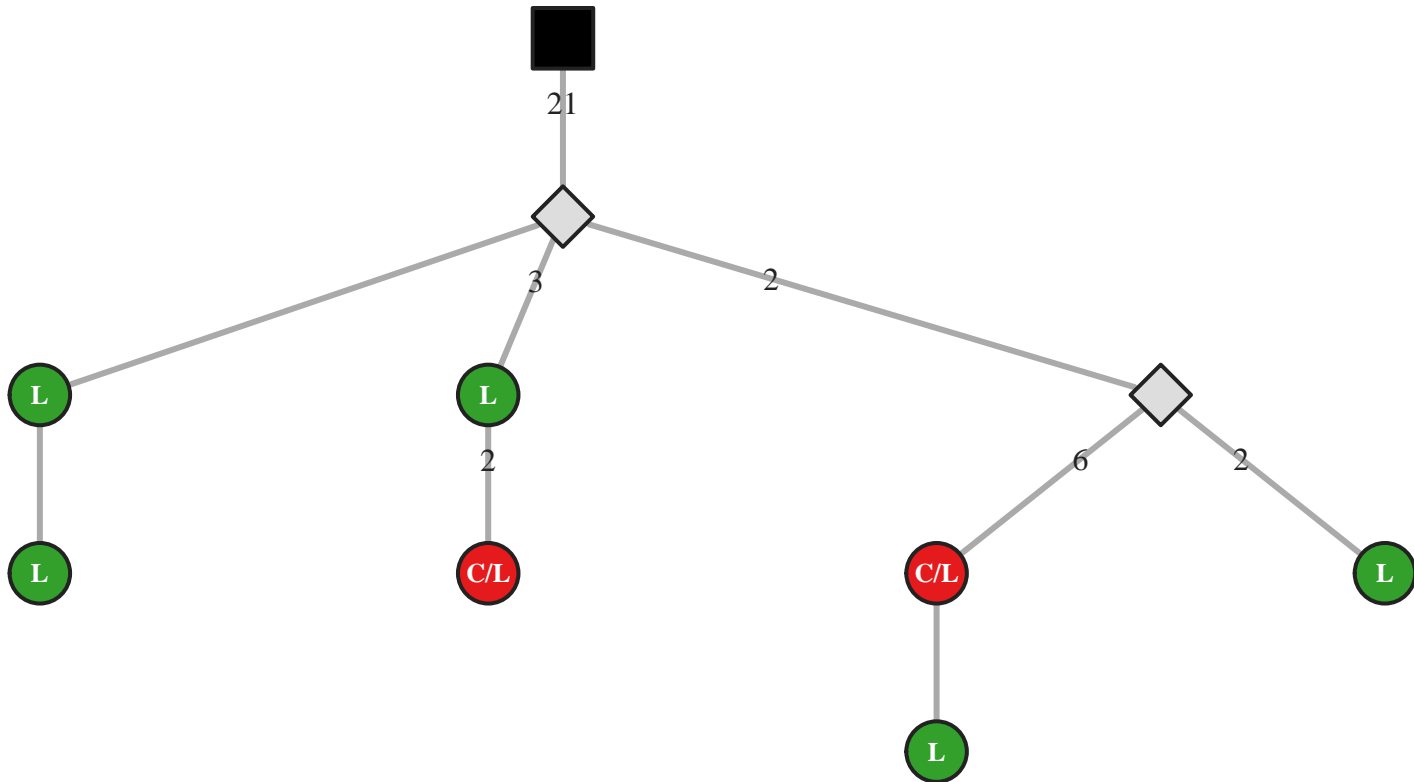
M5 IgG IGHV1-69/J6 33bp (32748)



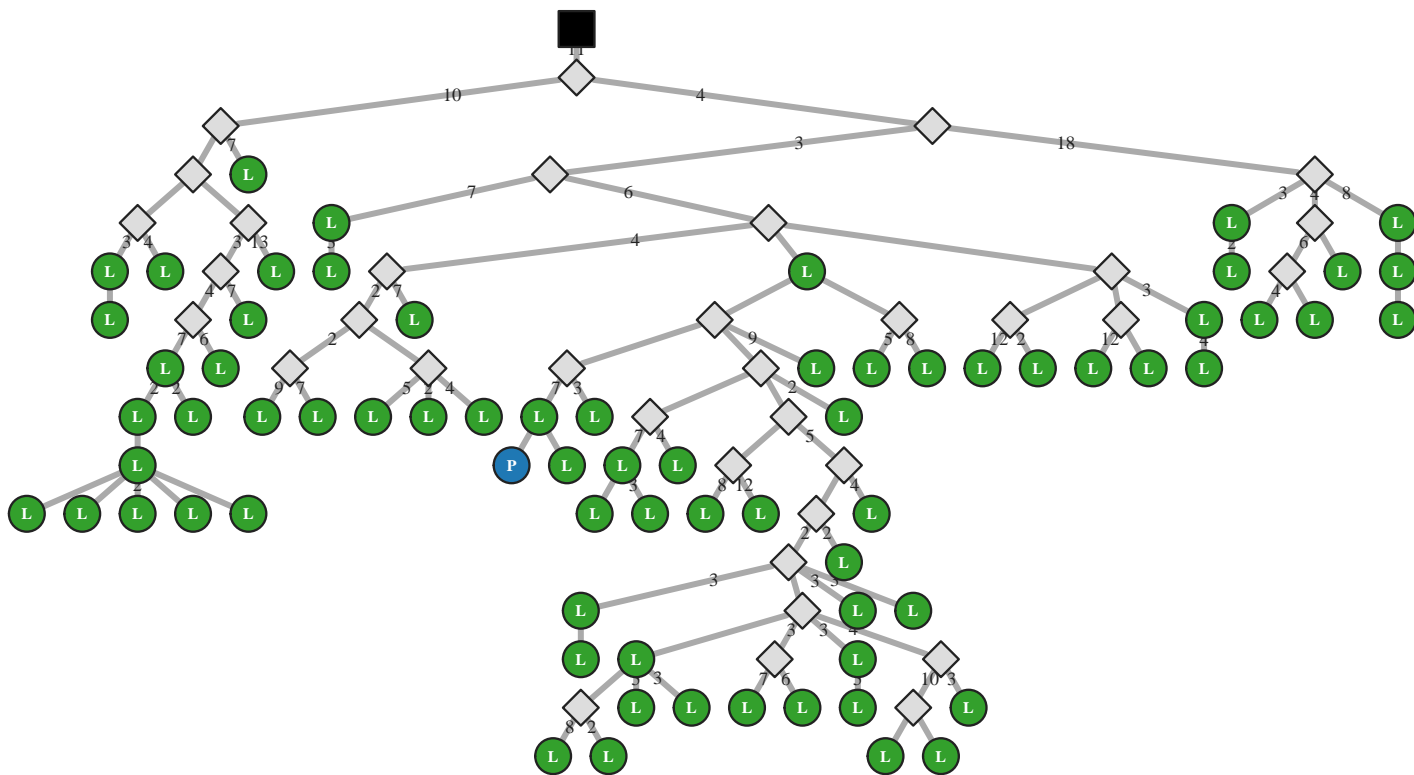
M5 IgG IGHV1-69/J6 36bp (5369)



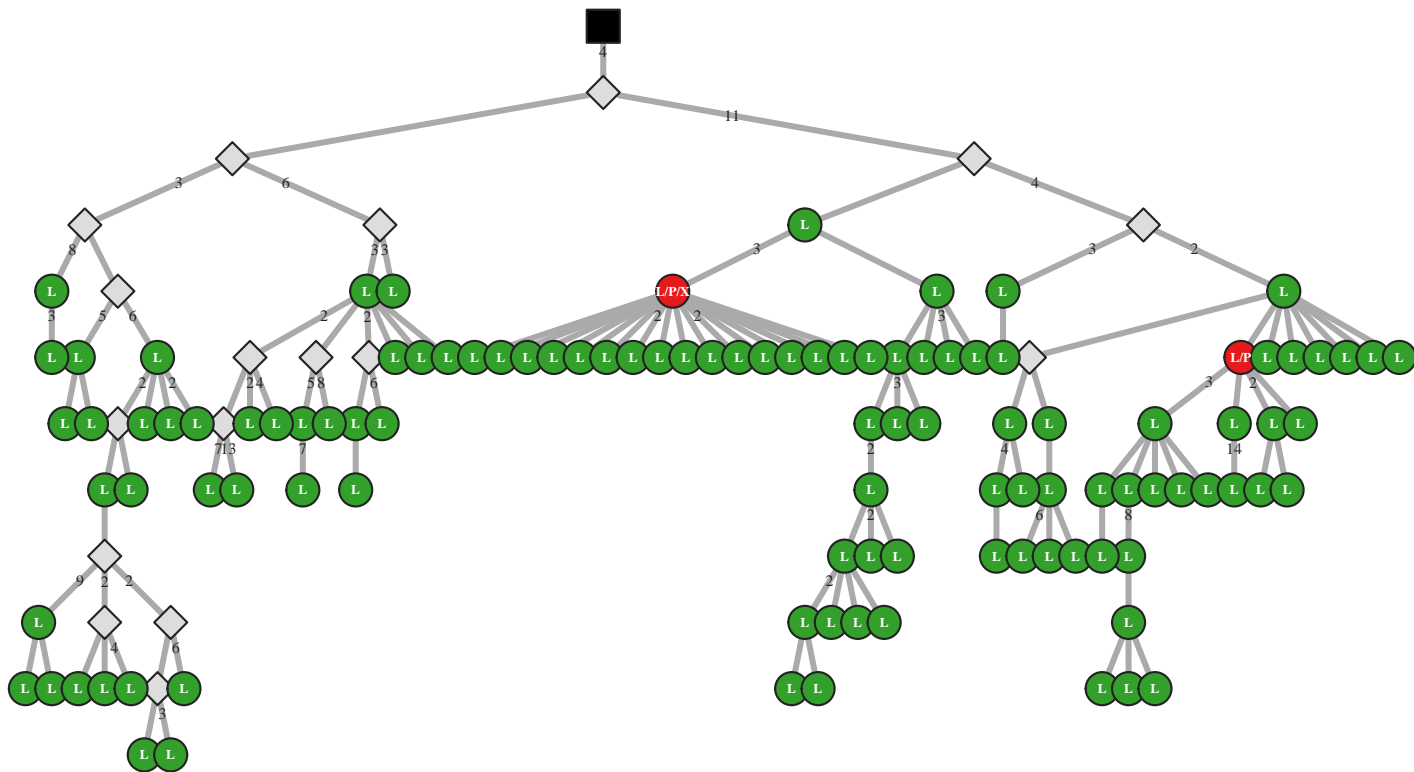
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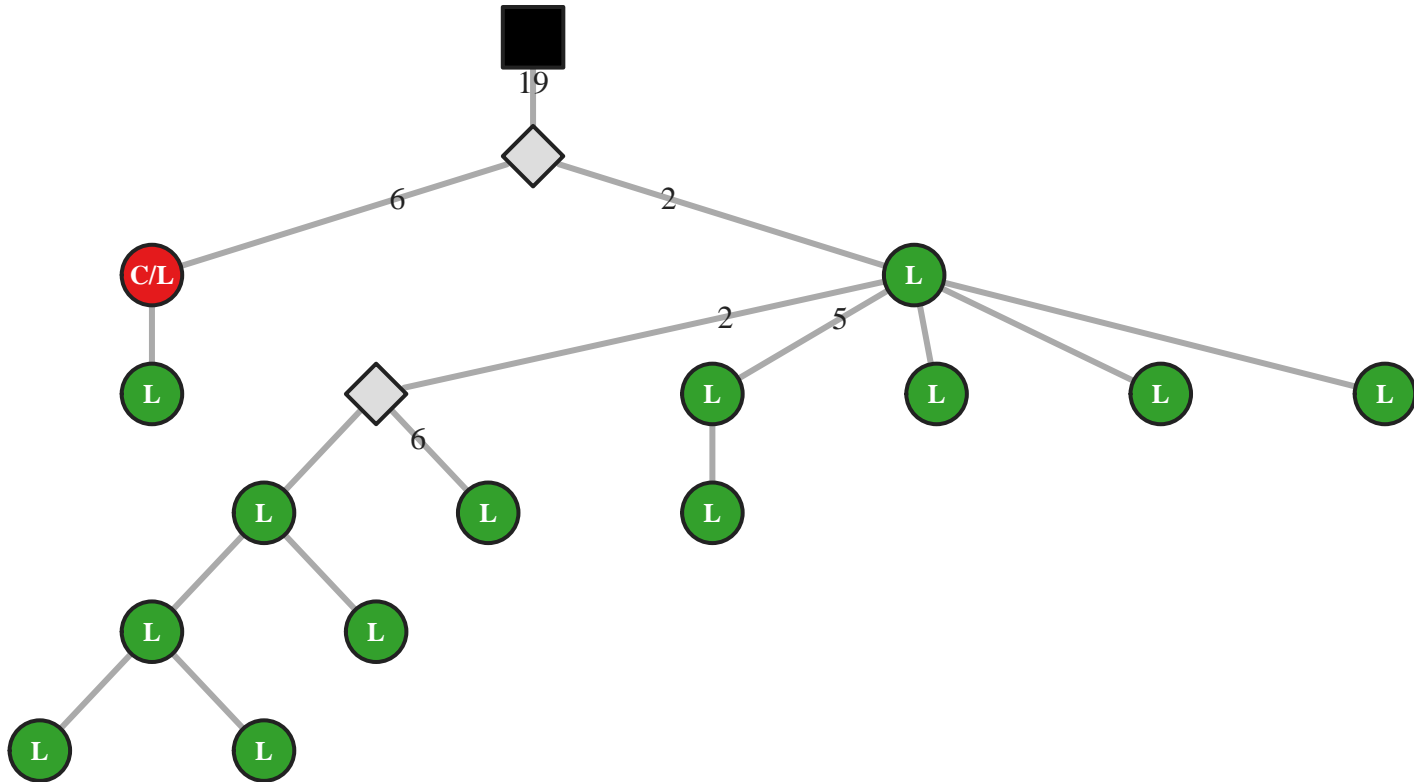
M5 IgG IGHV1-69/J6 39bp (14848)



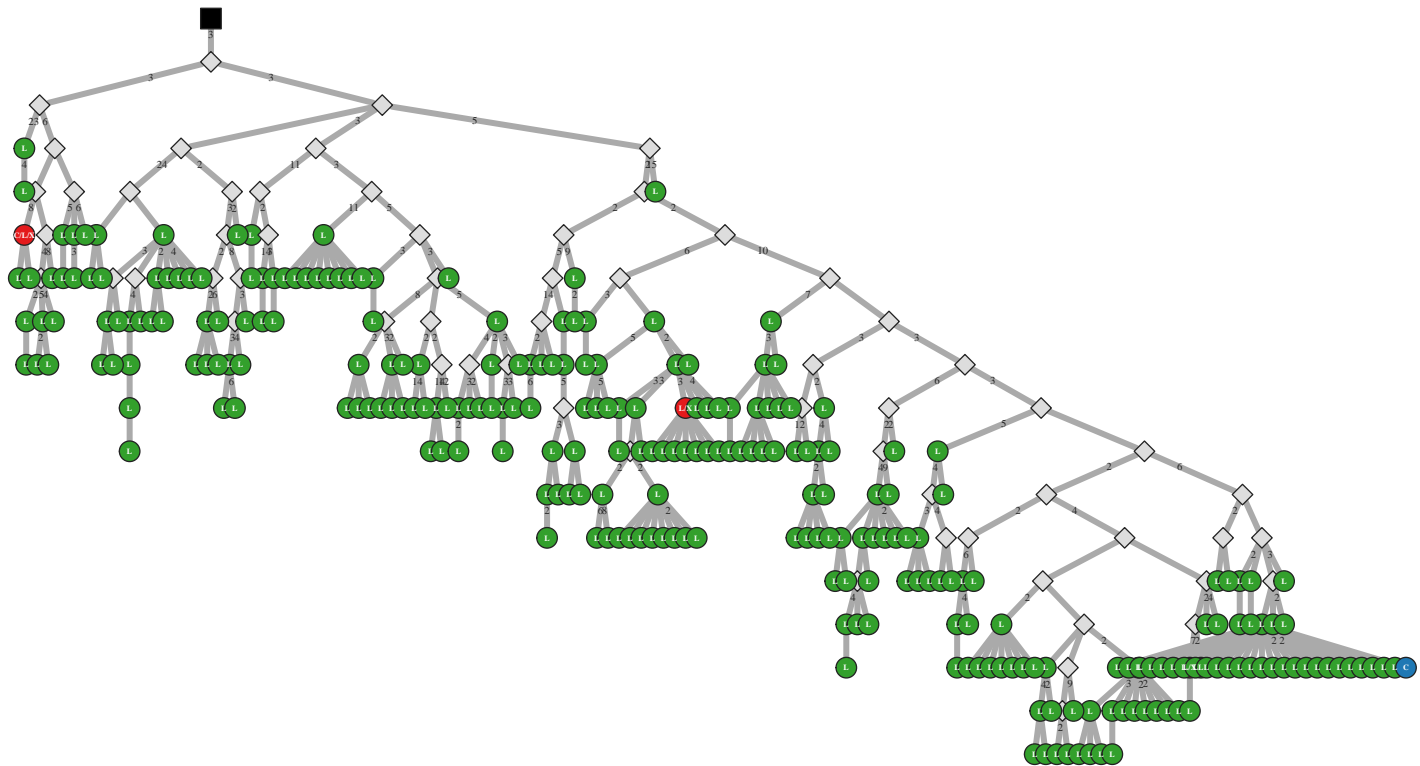
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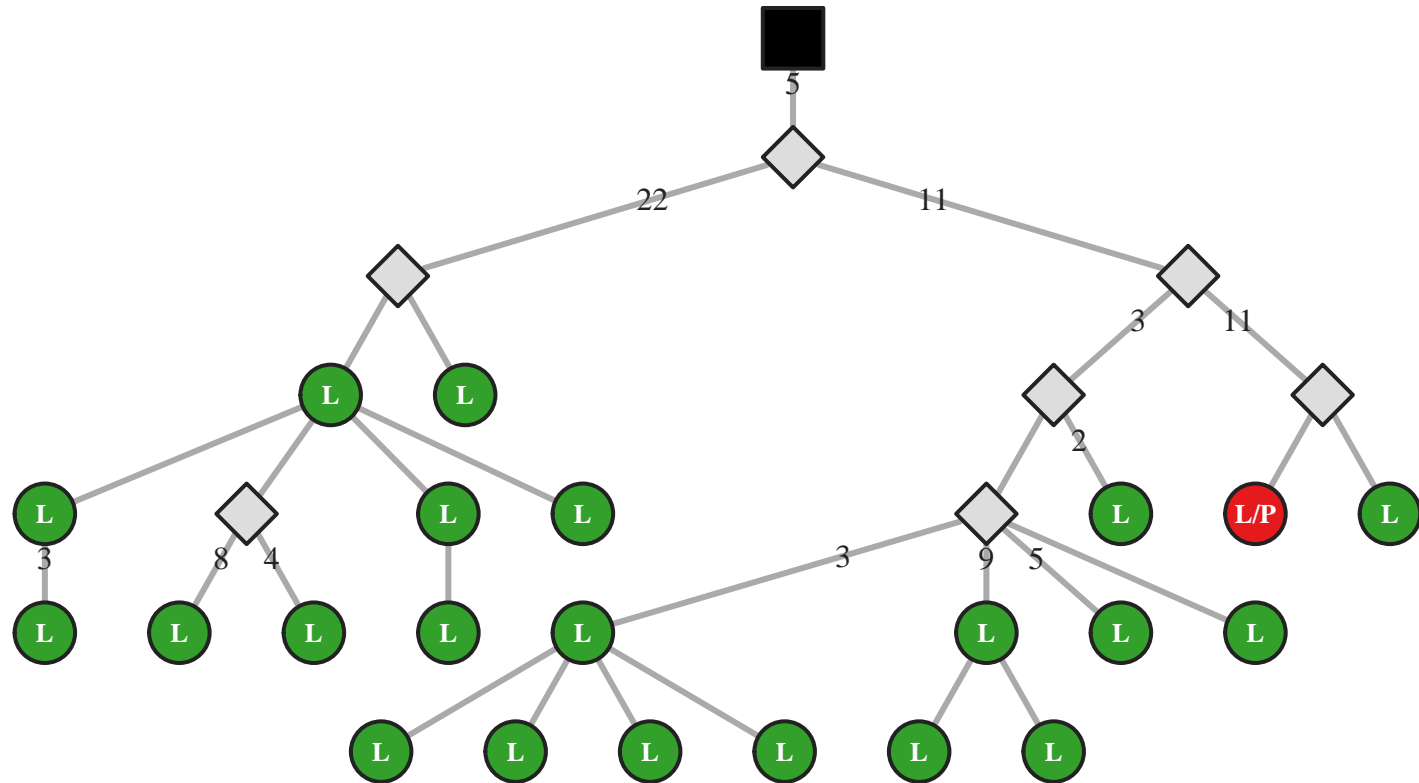
M5 IgG IGHV1-69/J6 39bp (14851)



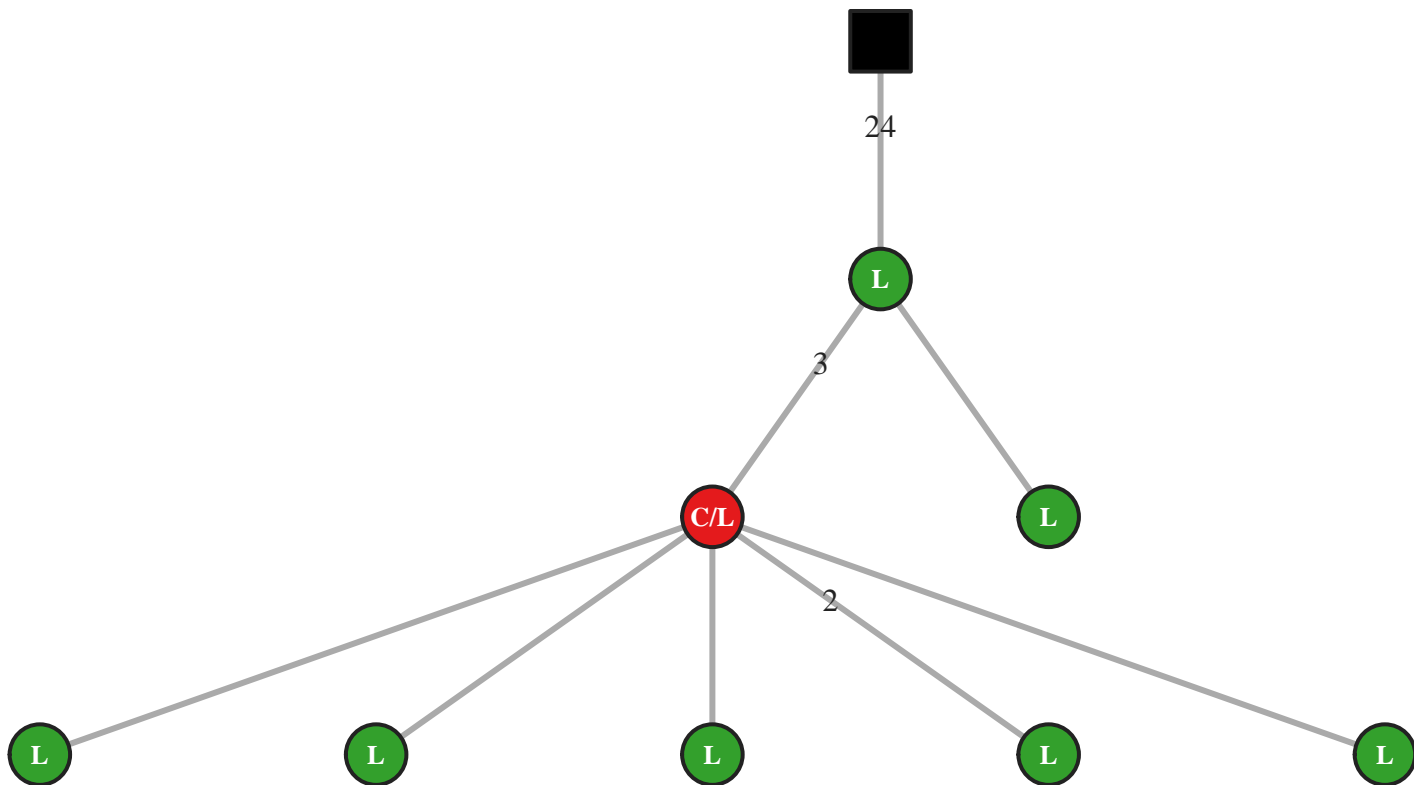
M5 IgG IGHV1-69/J6 39bp (14852)



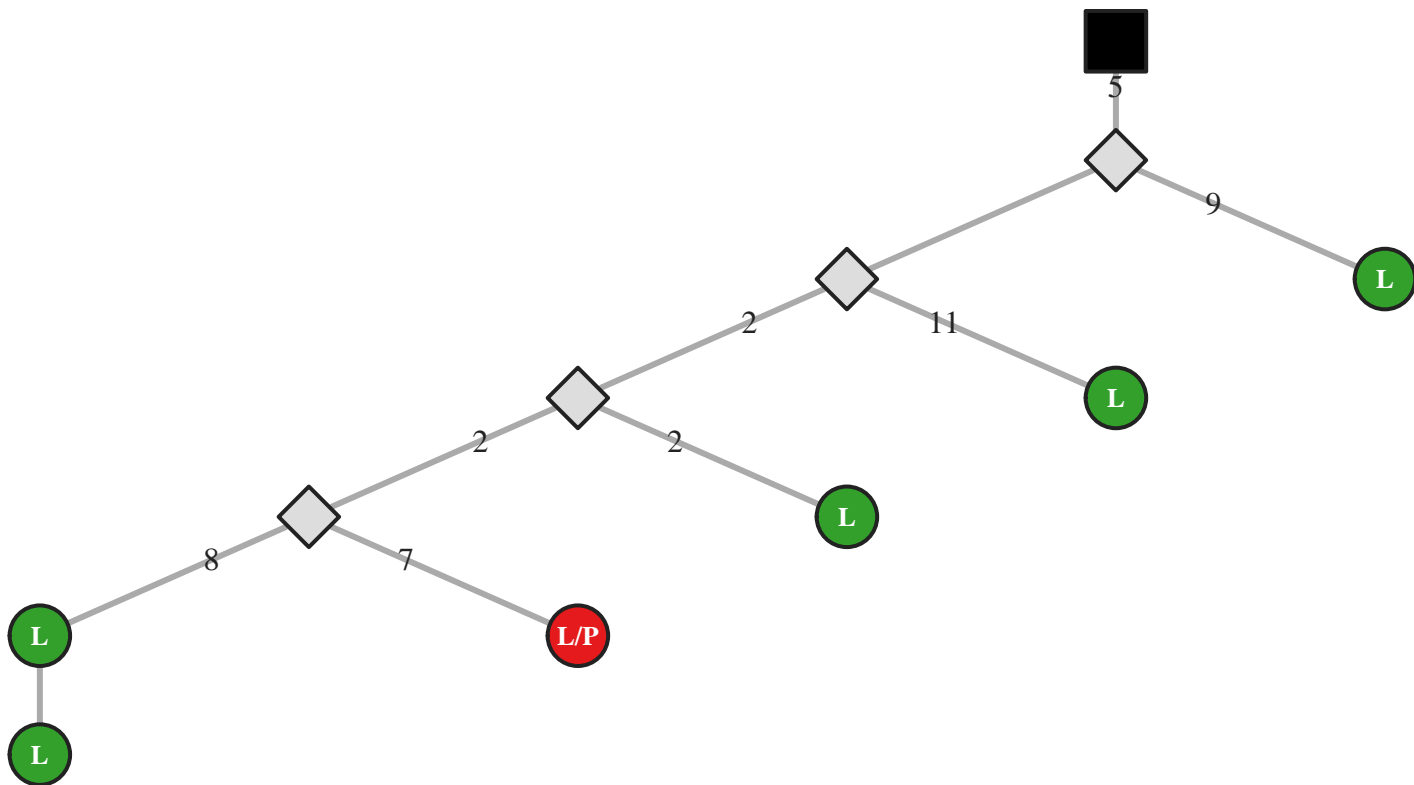
M5 IgG IGHV1-69/J6 42bp (5378)



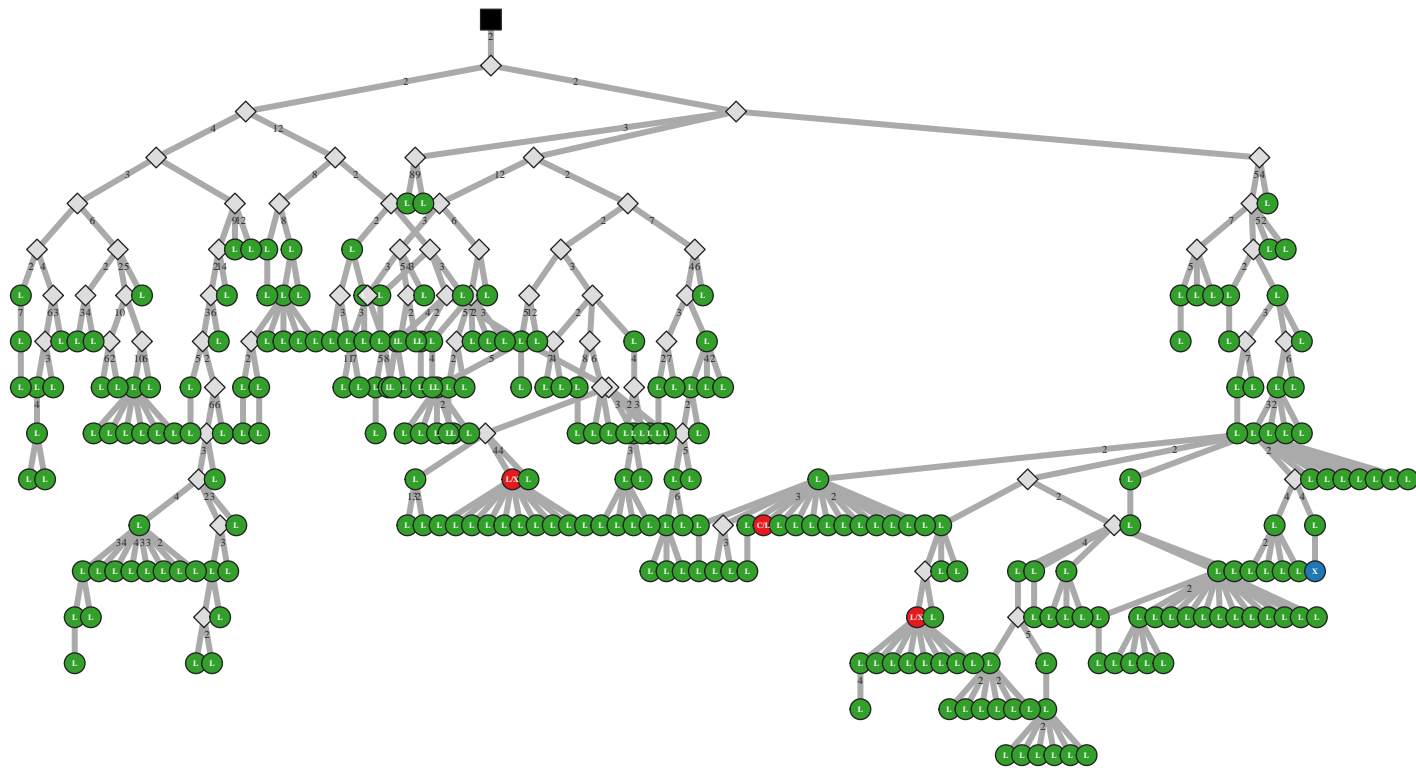
M5 IgG IGHV1-69/J6 42bp (5391)



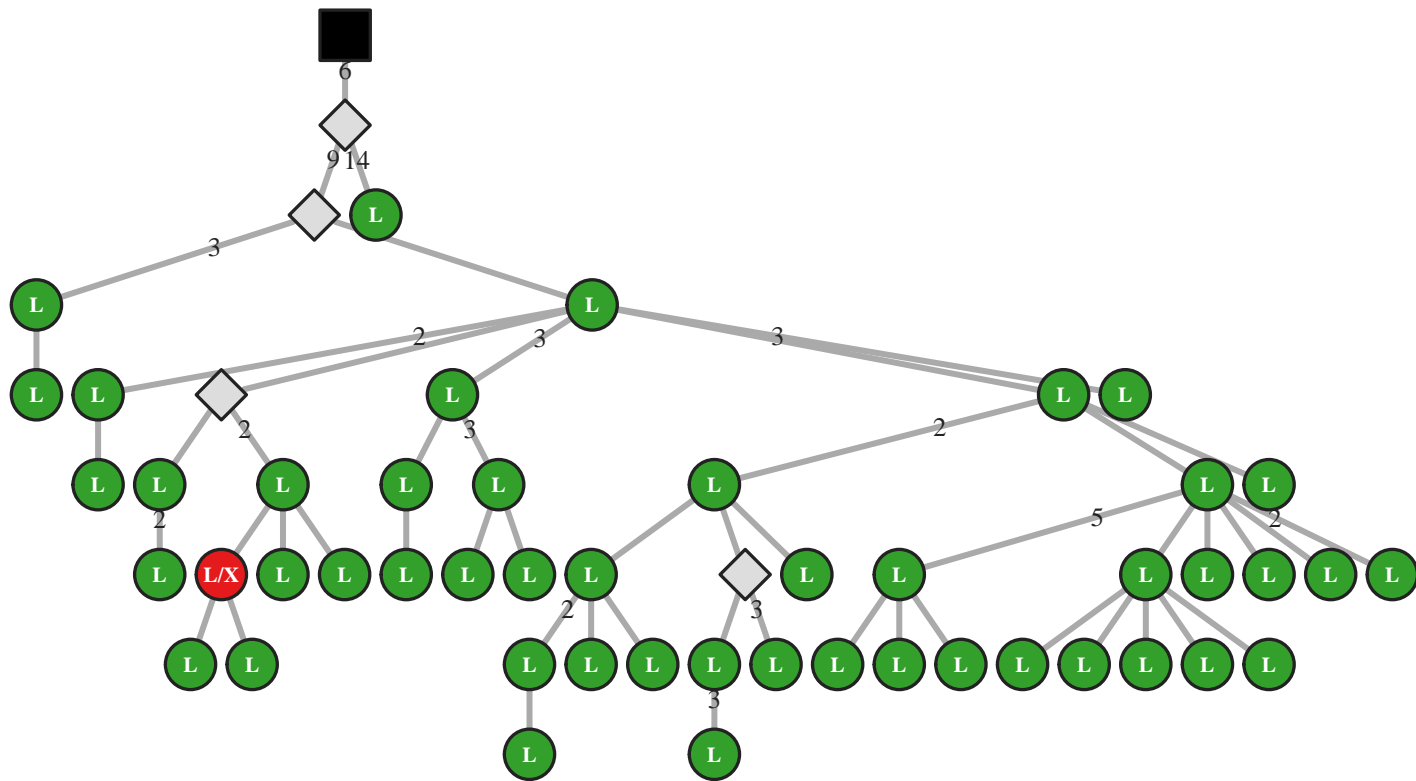
M5 IgG IGHV1-69/J6 45bp (42040)



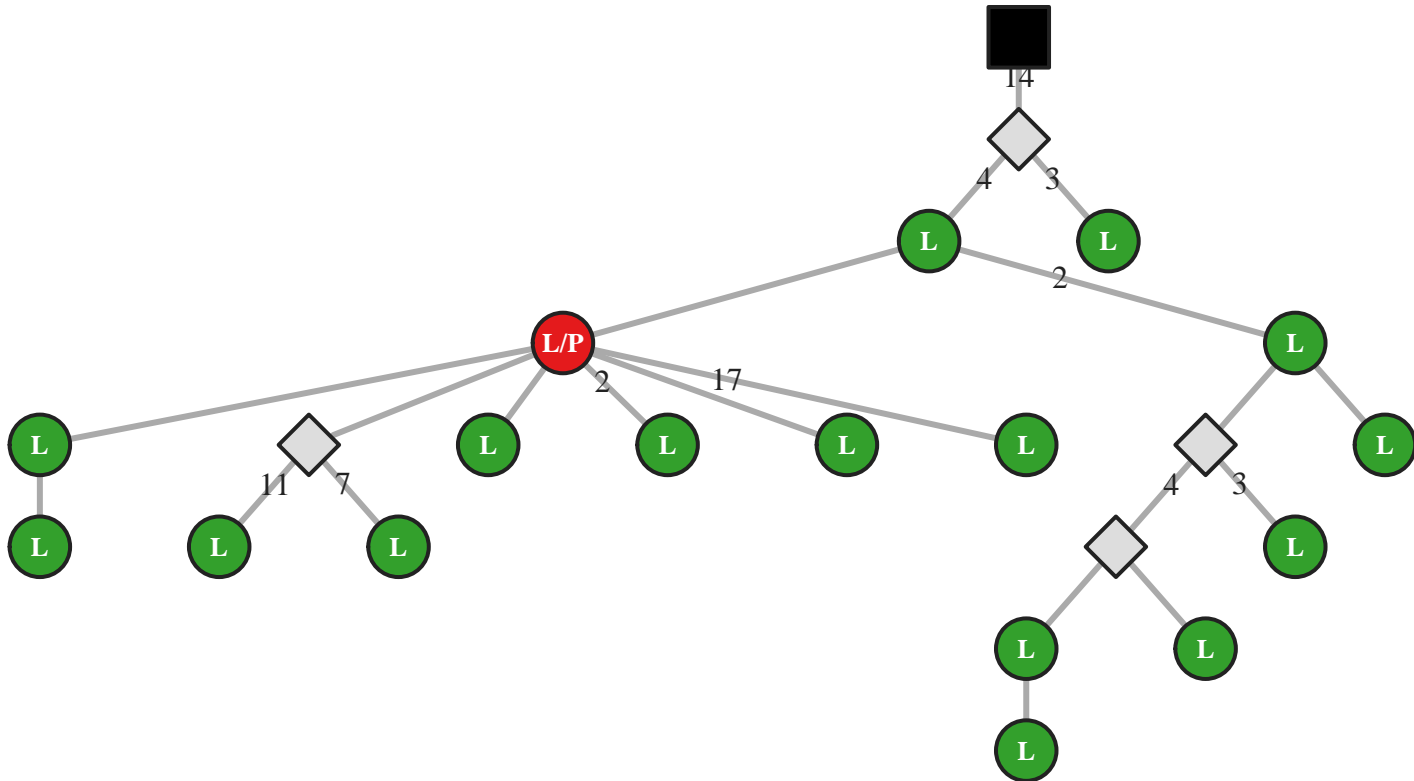
M5 IgG IGHV1-69/J6 45bp (42064)



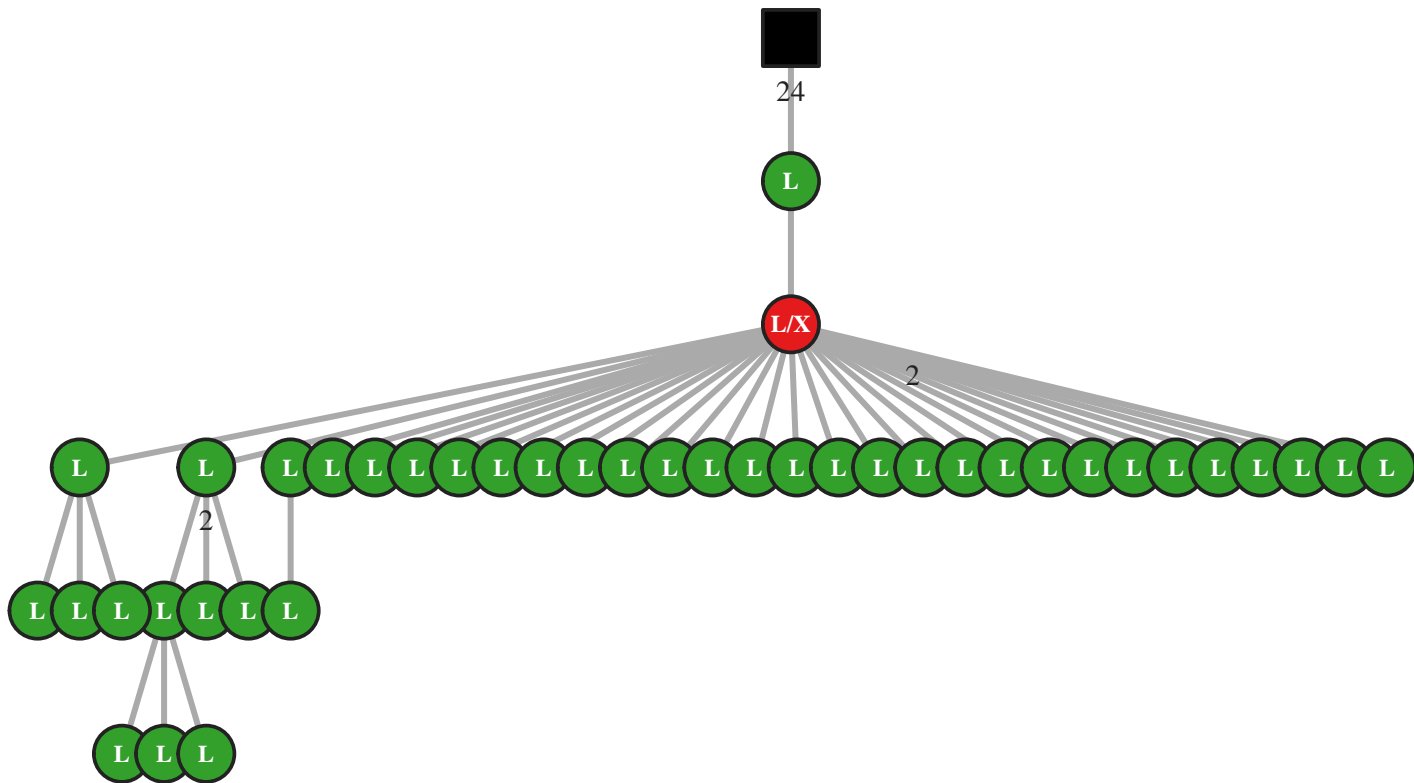
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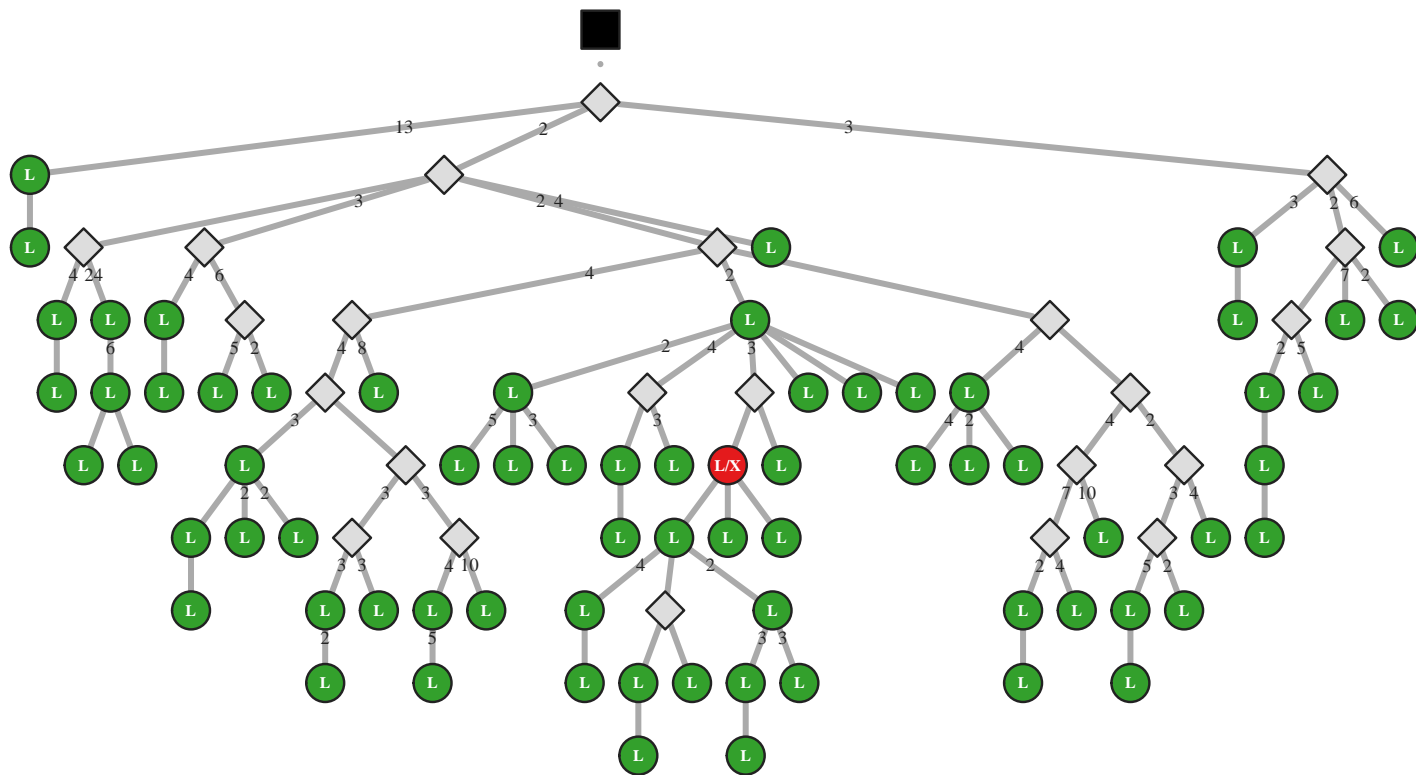
M5 IgG IGHV1-69/J6 45bp (42083)



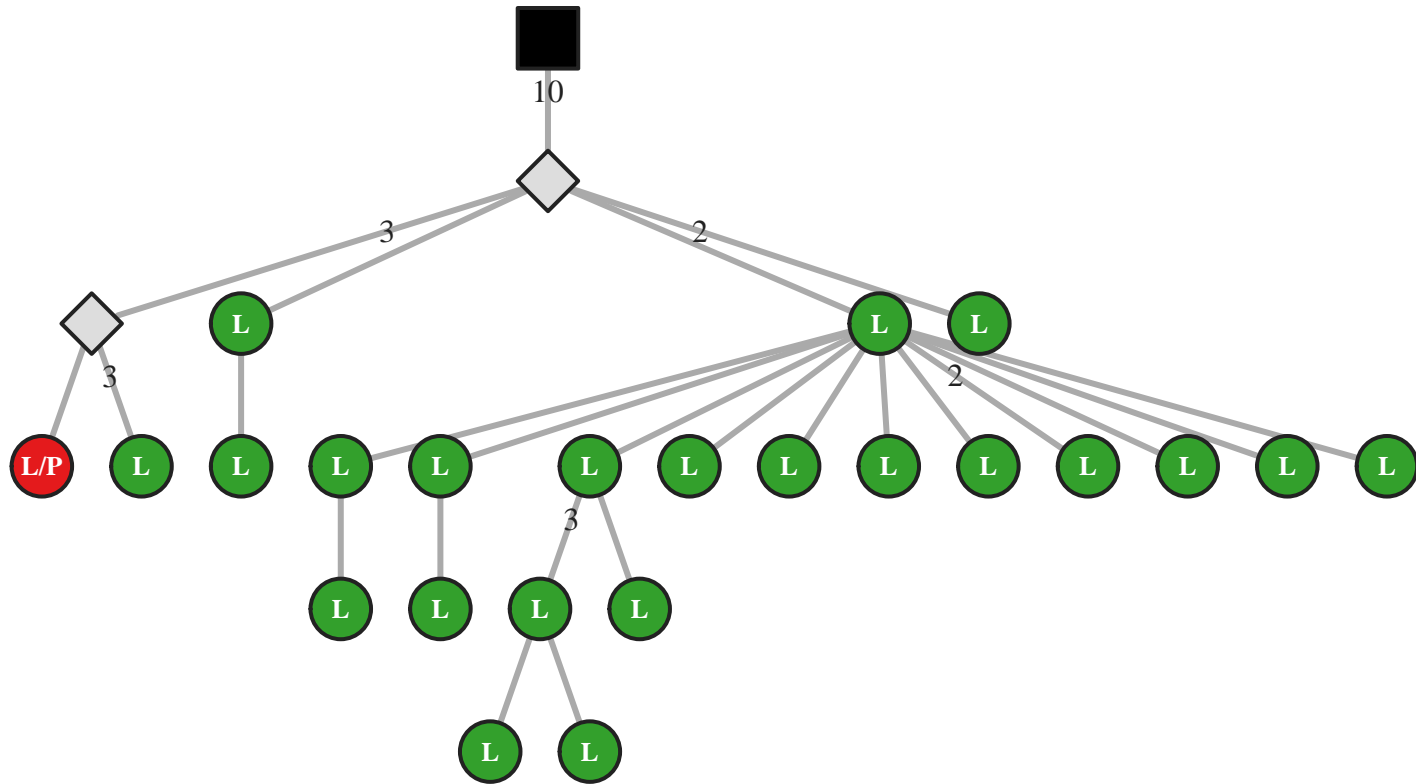
M5 IgG IGHV1-69/J6 48bp (42085)



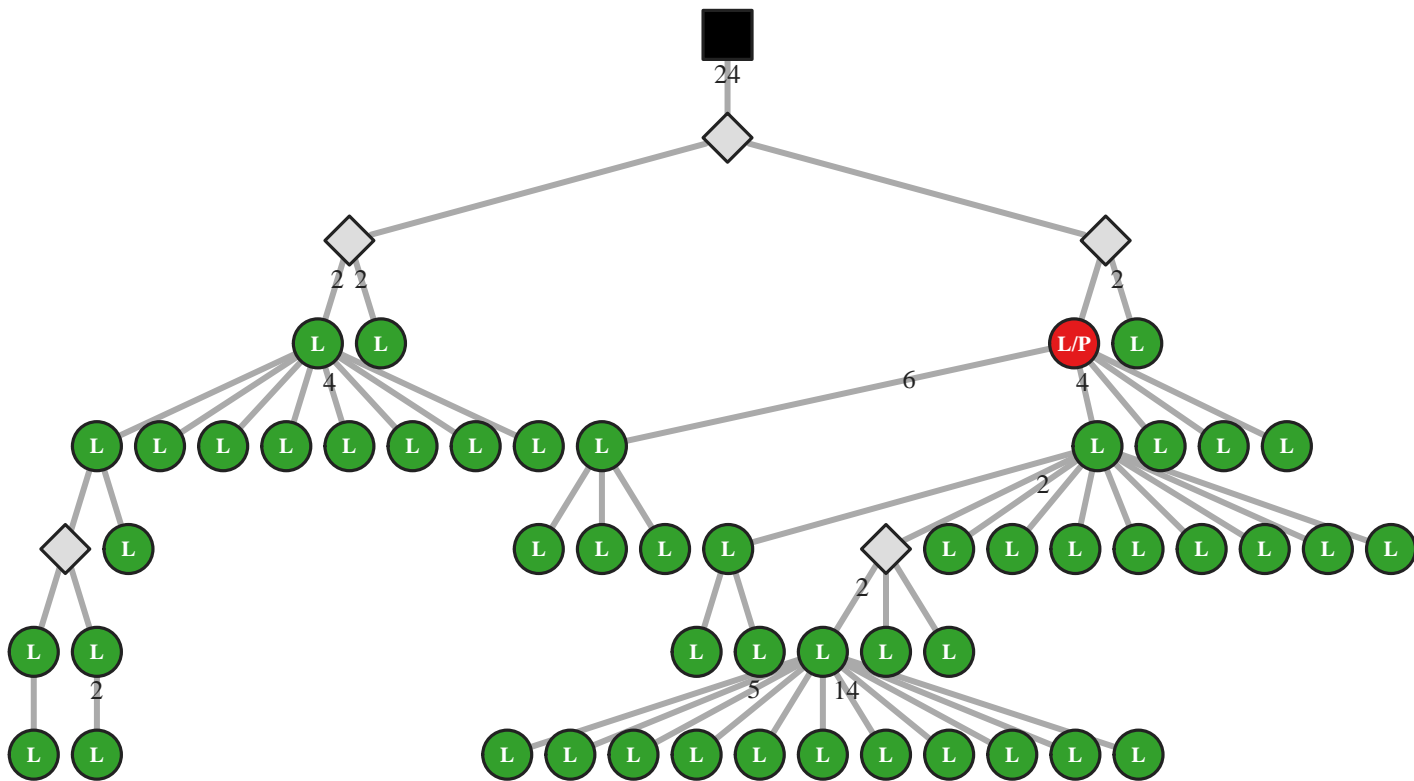
M5 IgG IGHV1-69/J6 48bp (42086)



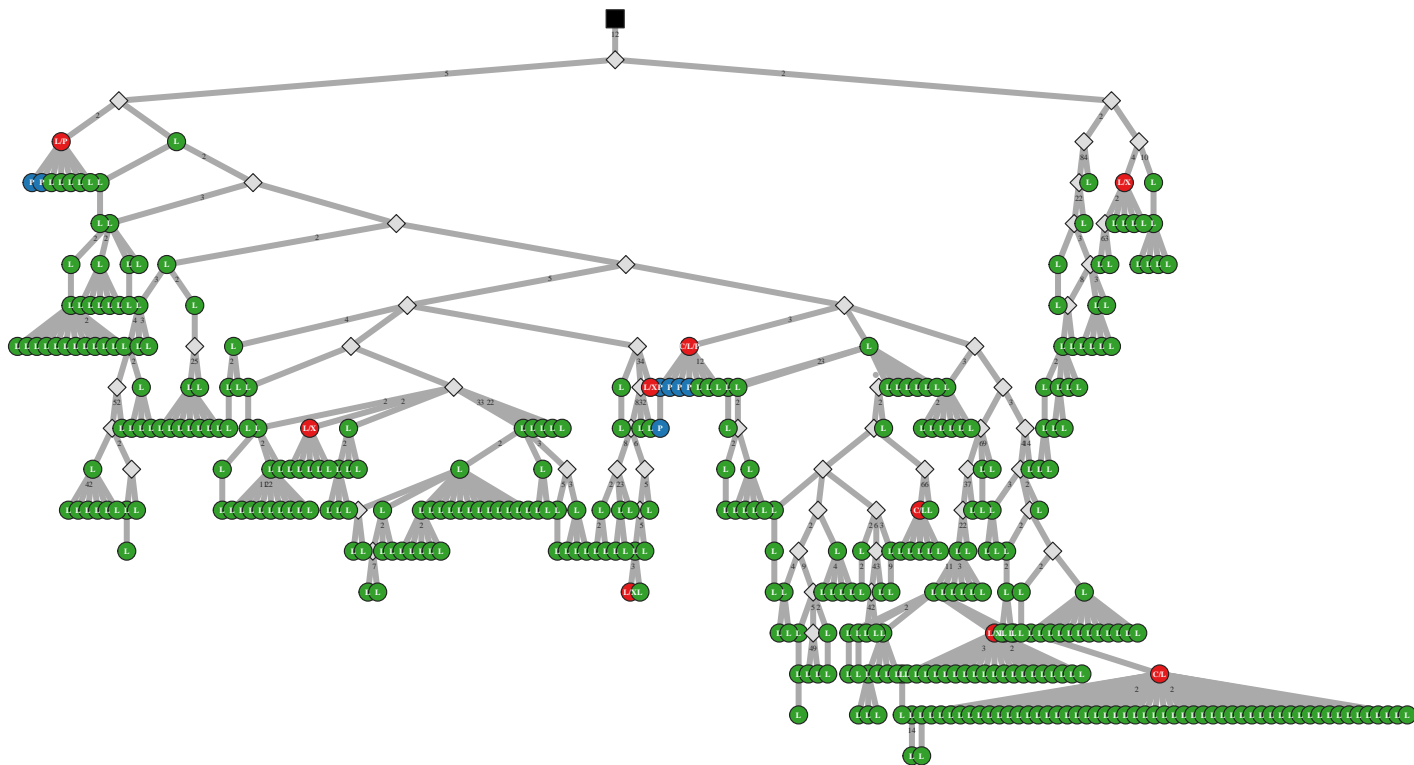
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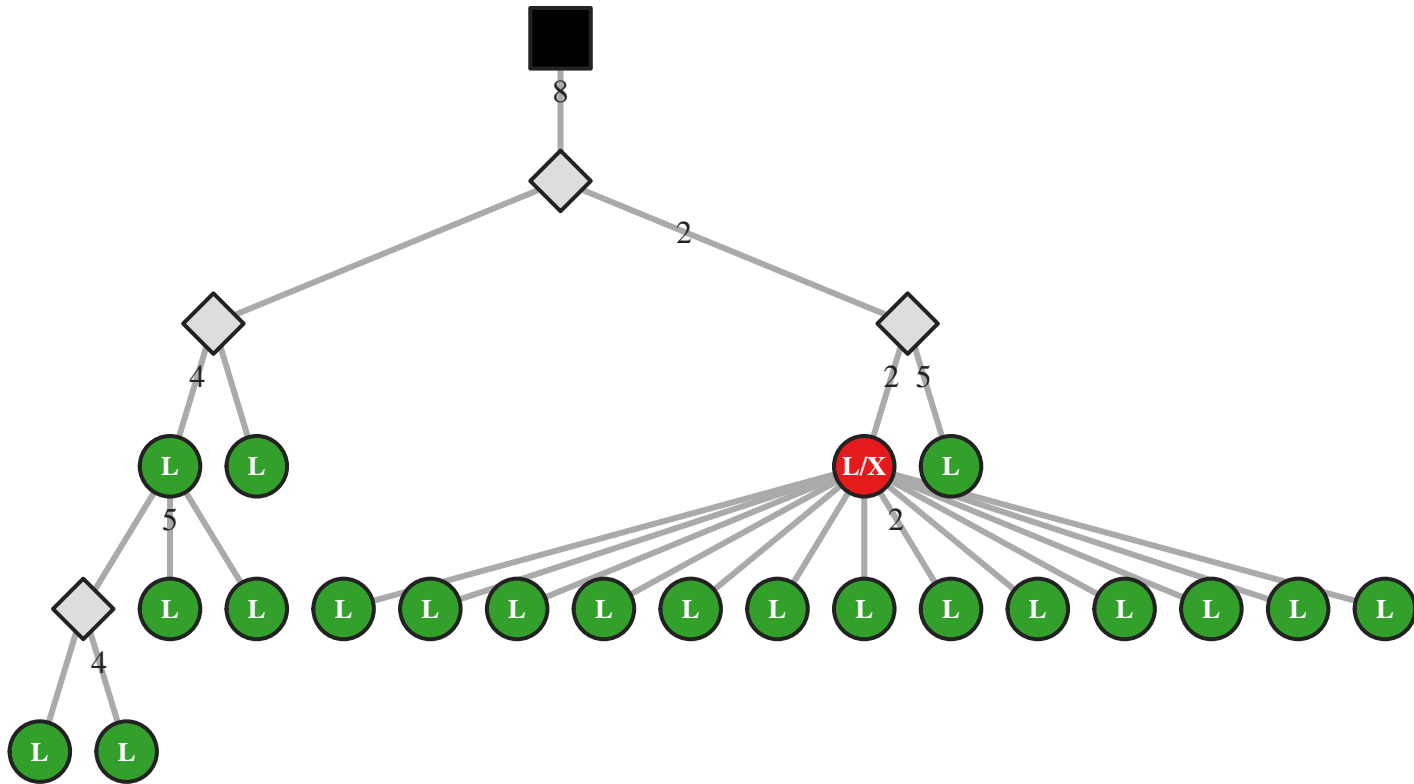
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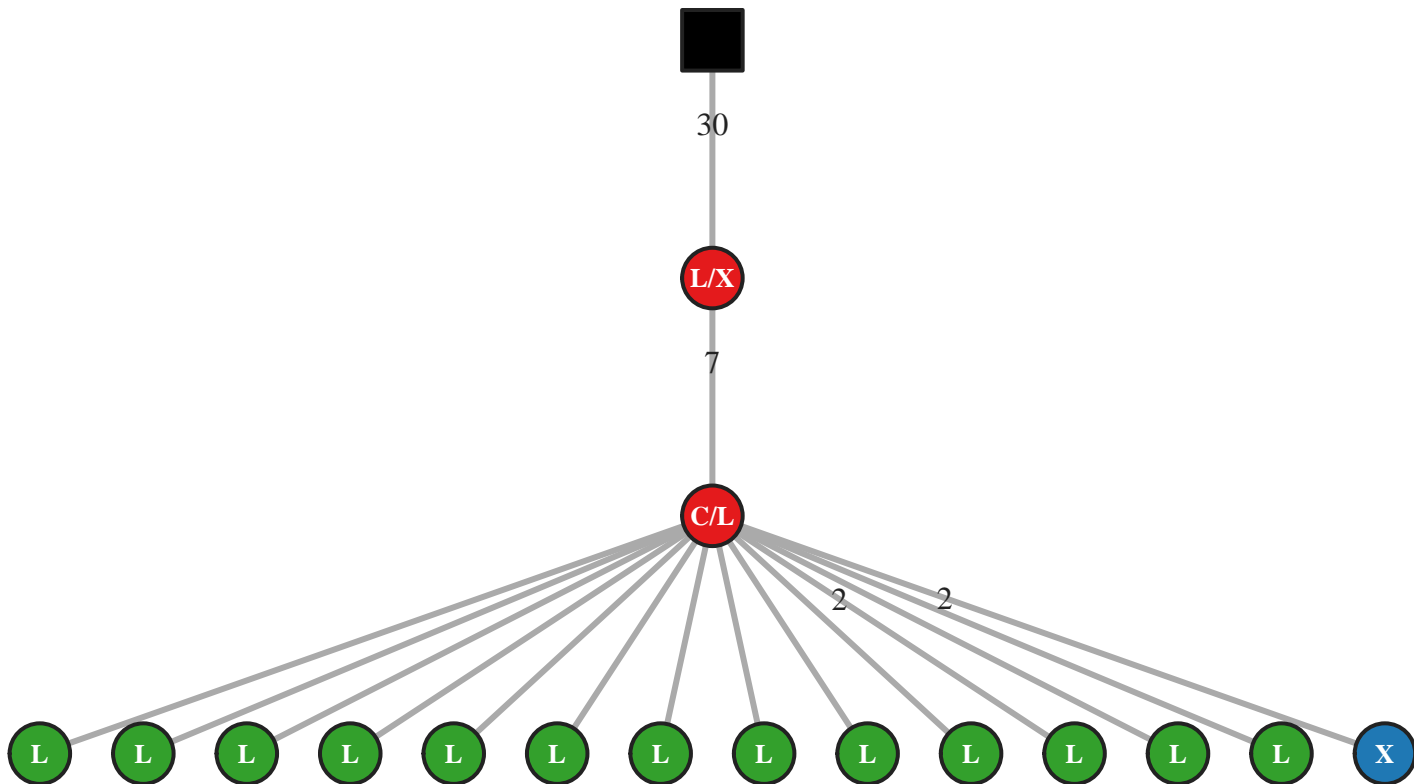
M5 IgG IGHV1-69/J6 48bp (42127)



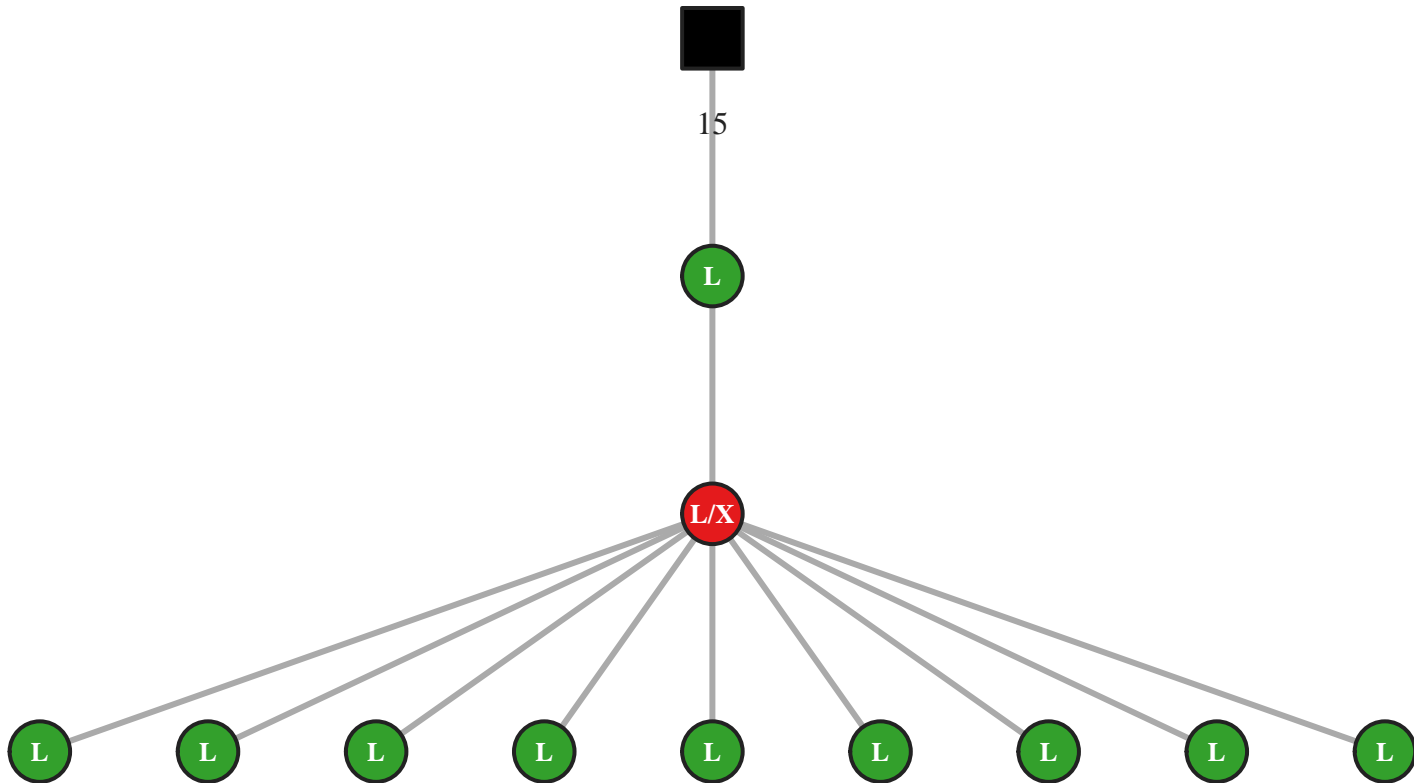
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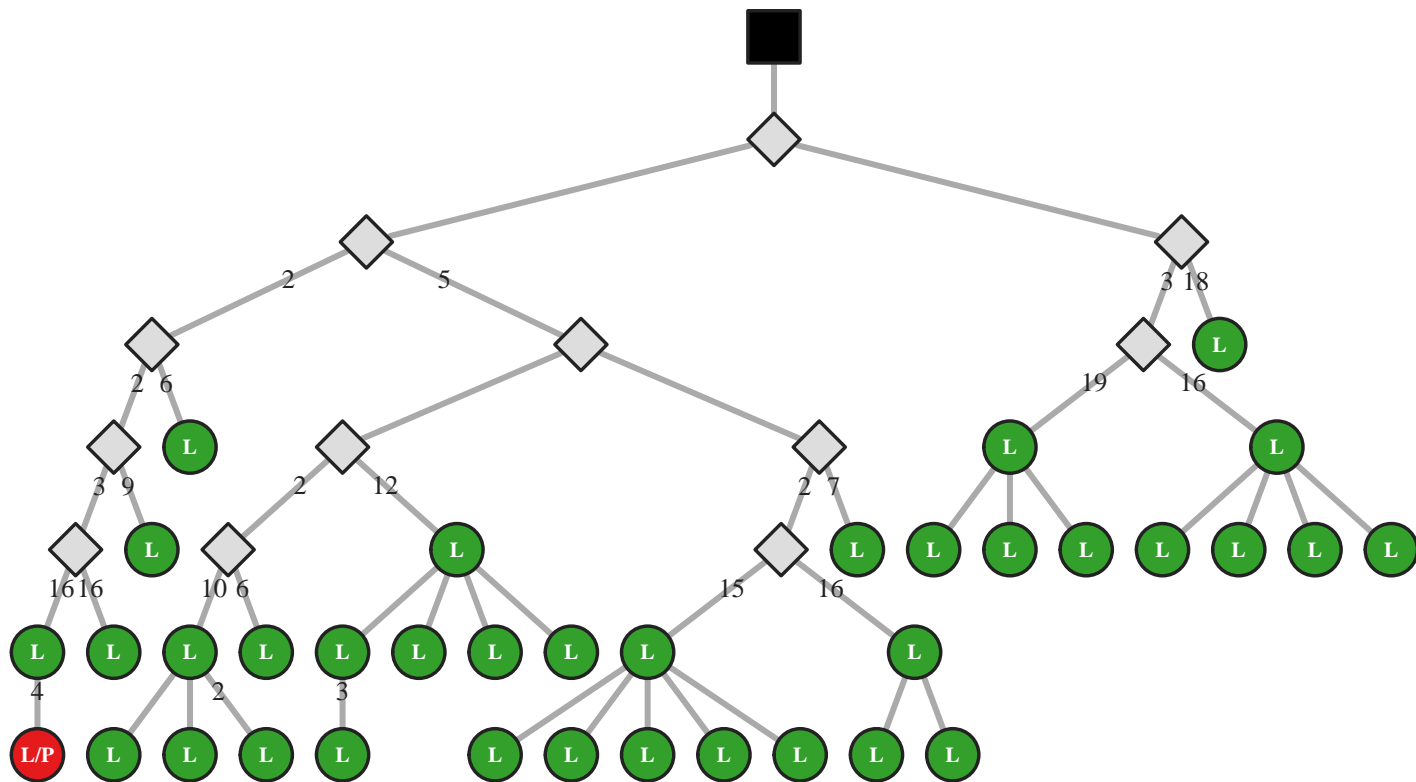
M5 IgG IGHV1-69/J6 48bp (42142)



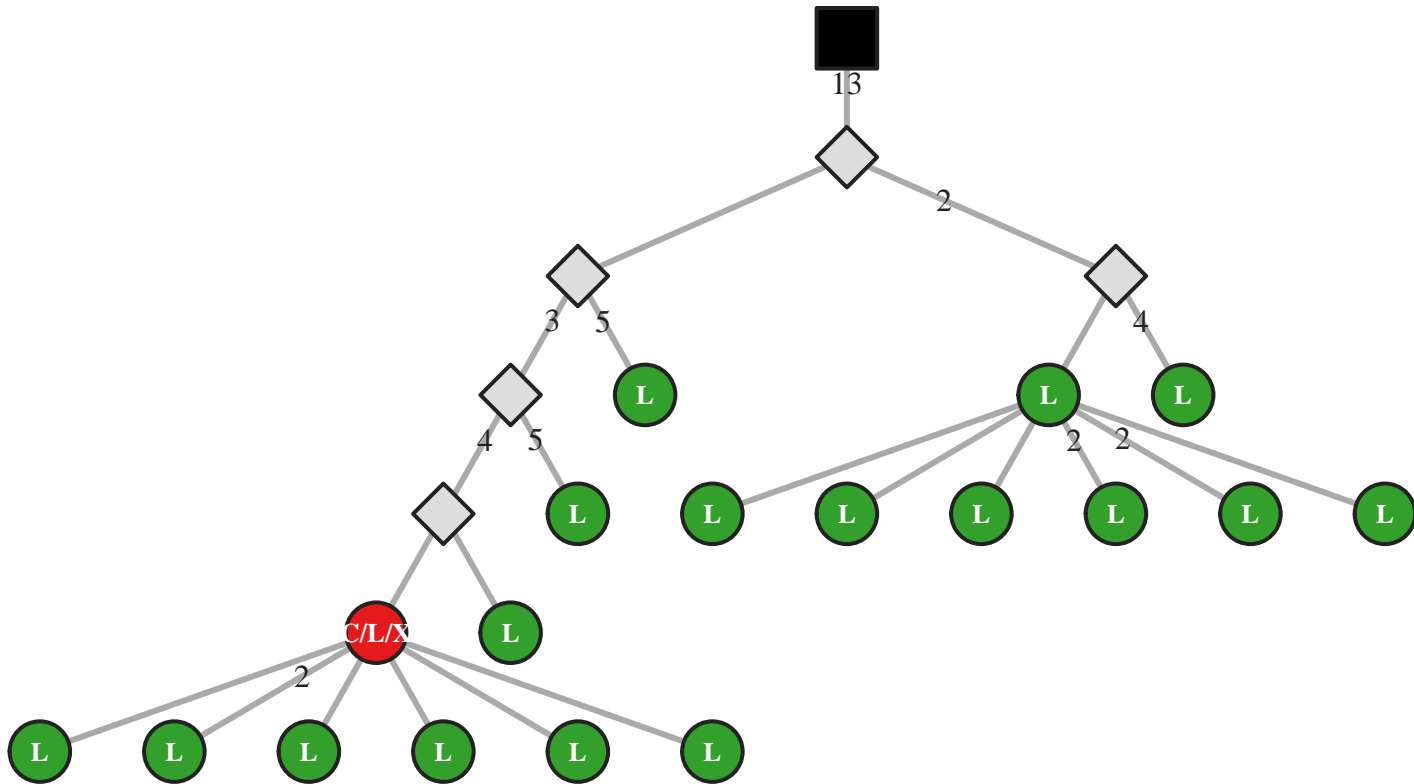
M5 IgG IGHV1-69/J6 48bp (42160)



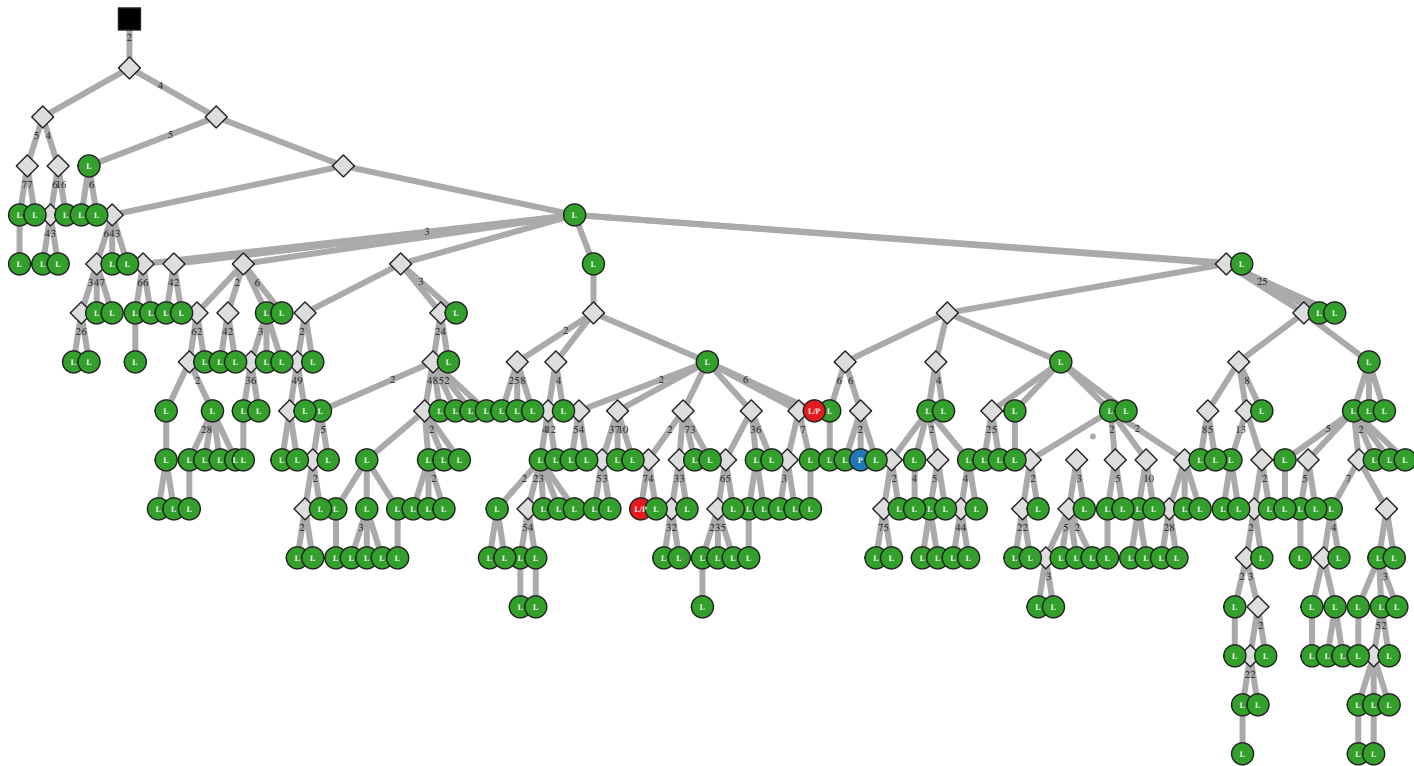
M5 IgG IGHV1-69/J6 48bp (42179)



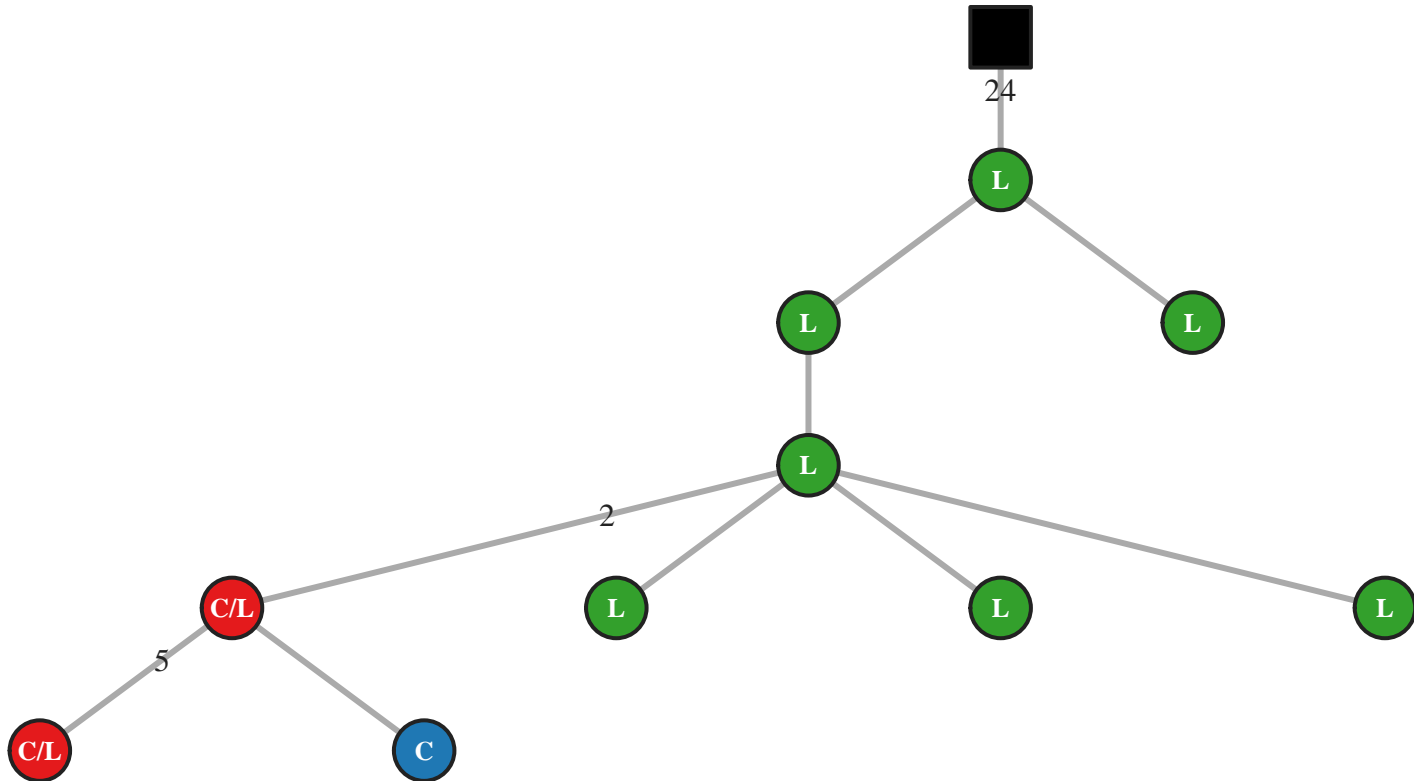
M5 IgG IGHV1-69/J6 51bp (32757)



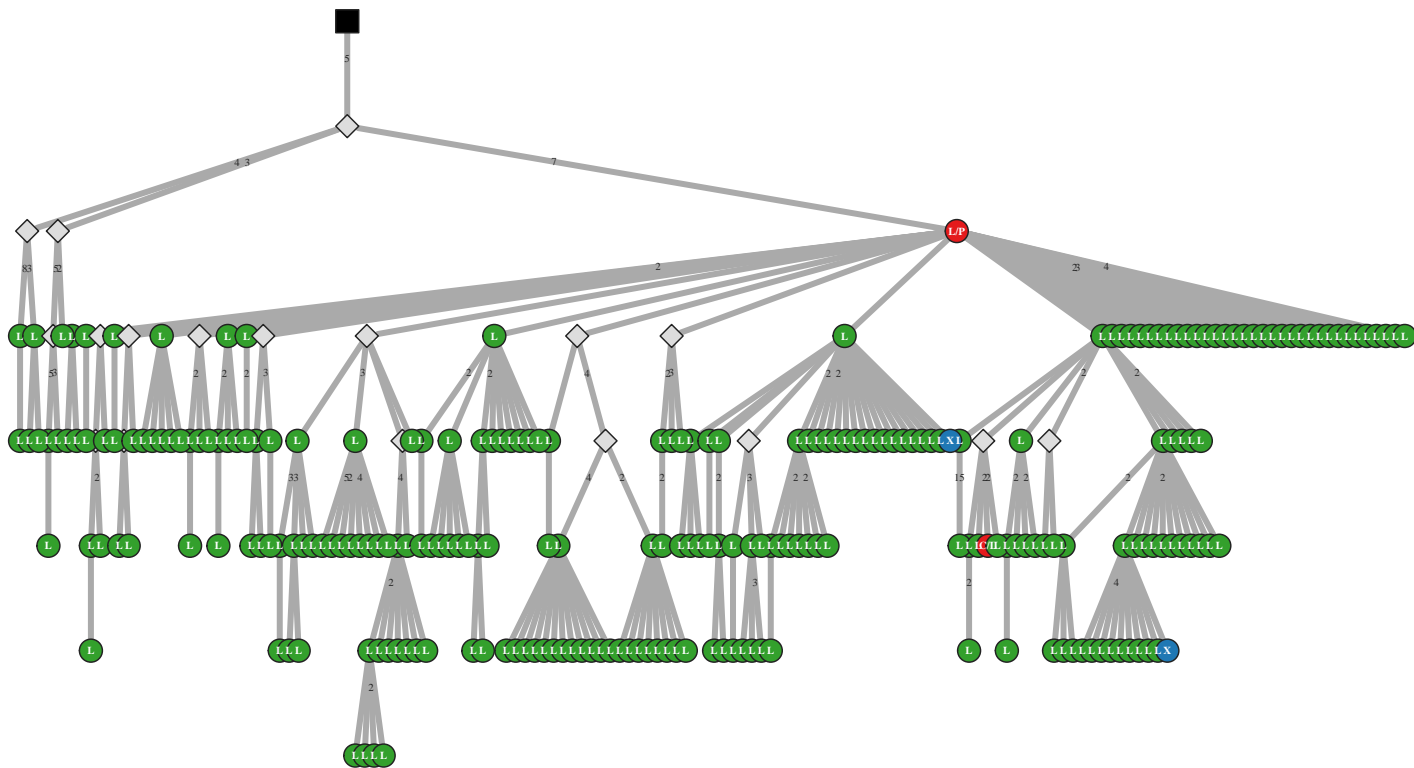
M5 IgG IGHV1-69/J6 51bp (32774)



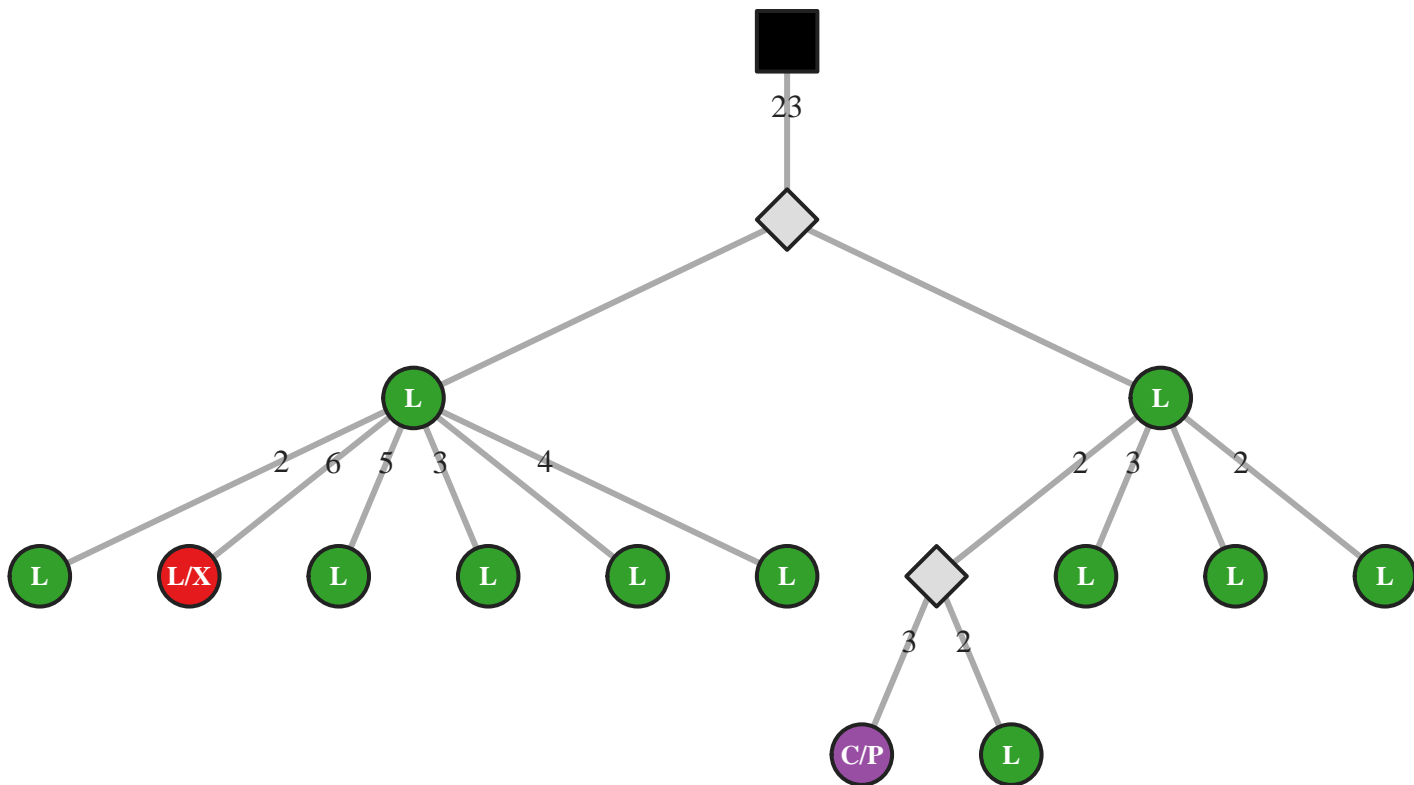
M5 IgG IGHV1-69/J6 51bp (32777)



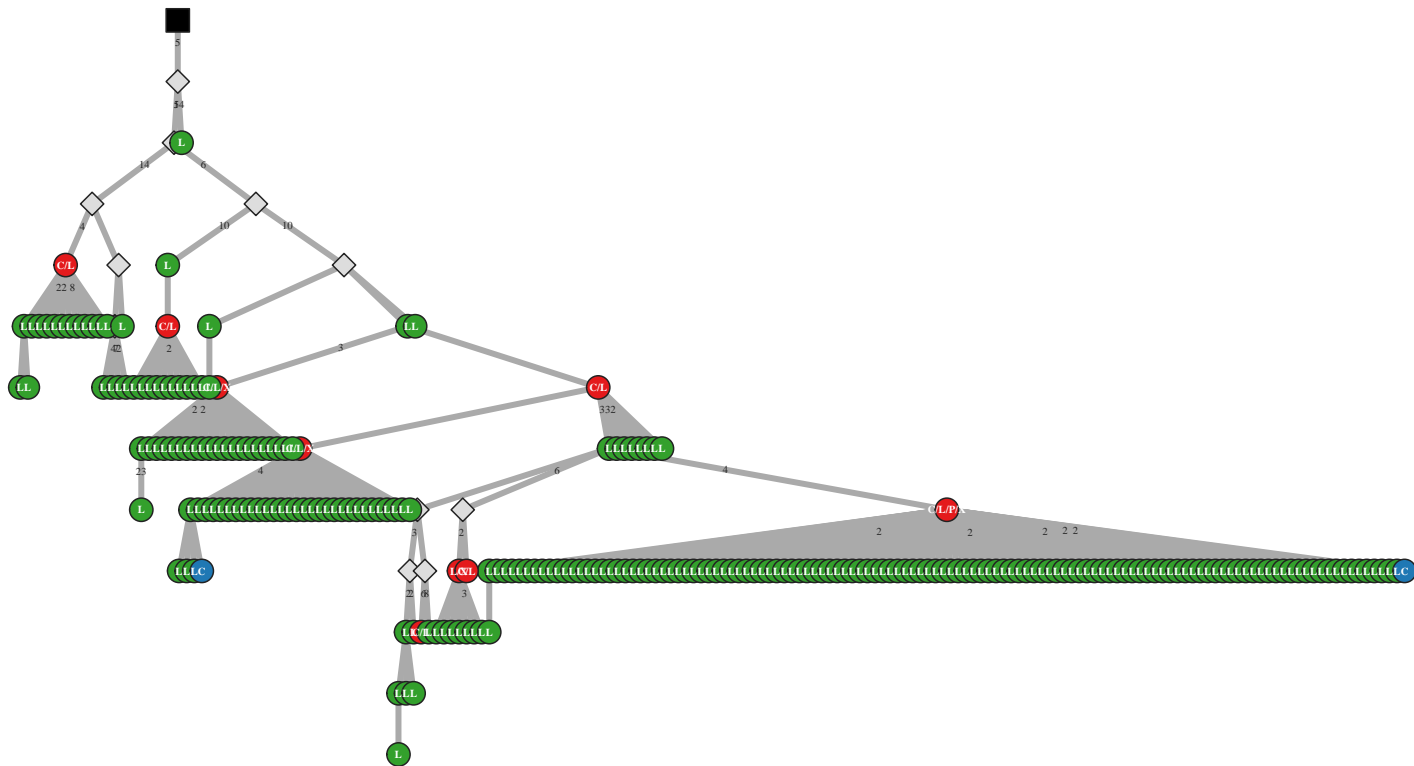
M5 IgG IGHV1-69/J6 51bp (32818)



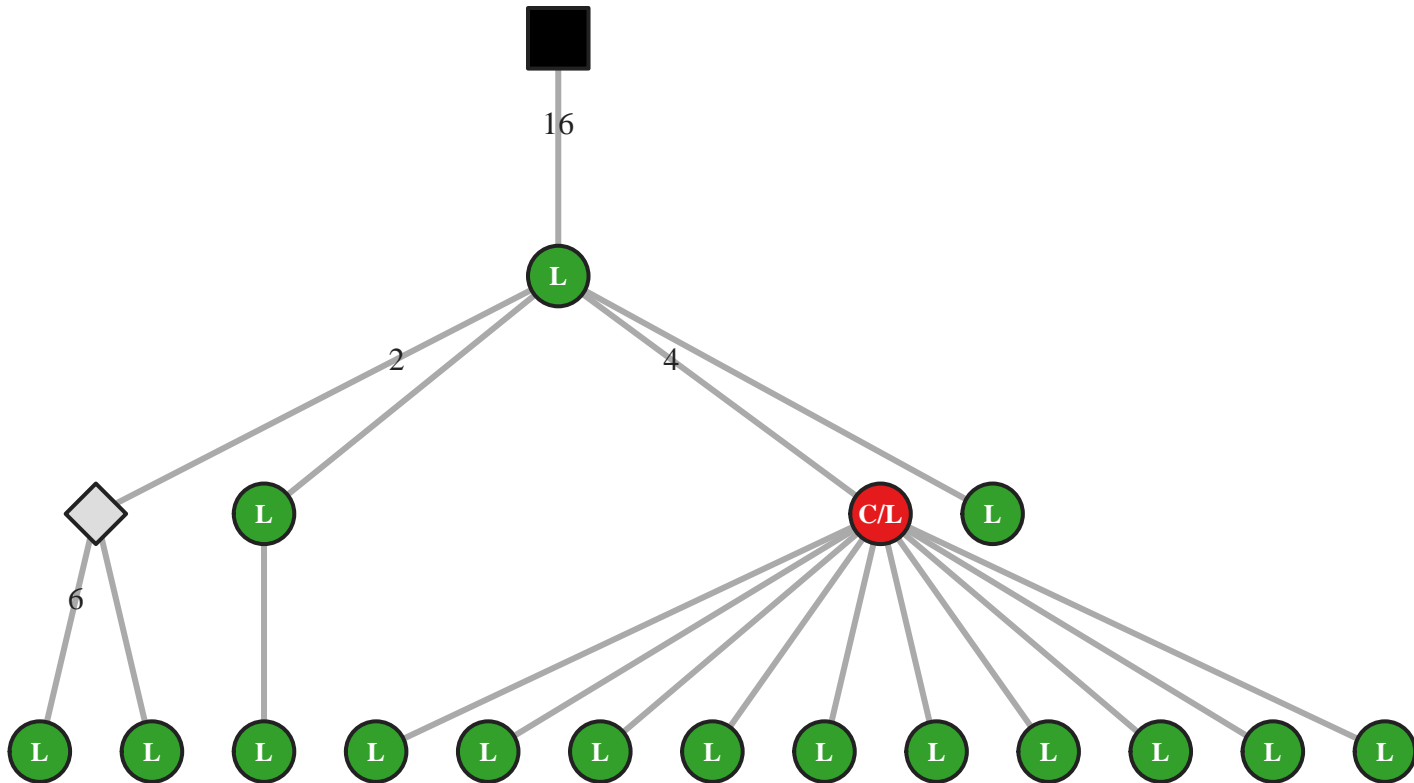
M5 IgG IGHV1-69/J6 54bp (14866)



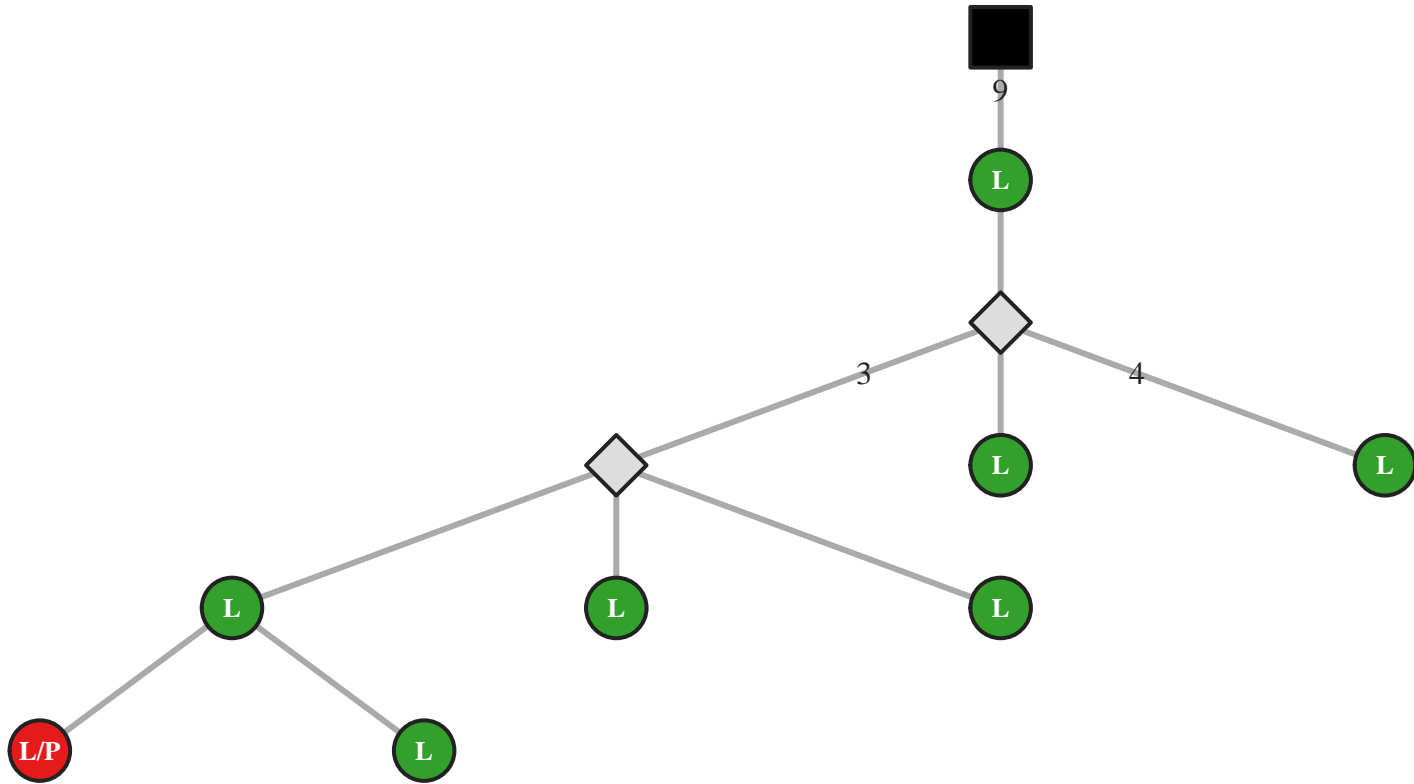
M5 IgG IGHV1-69/J6 54bp (14872)



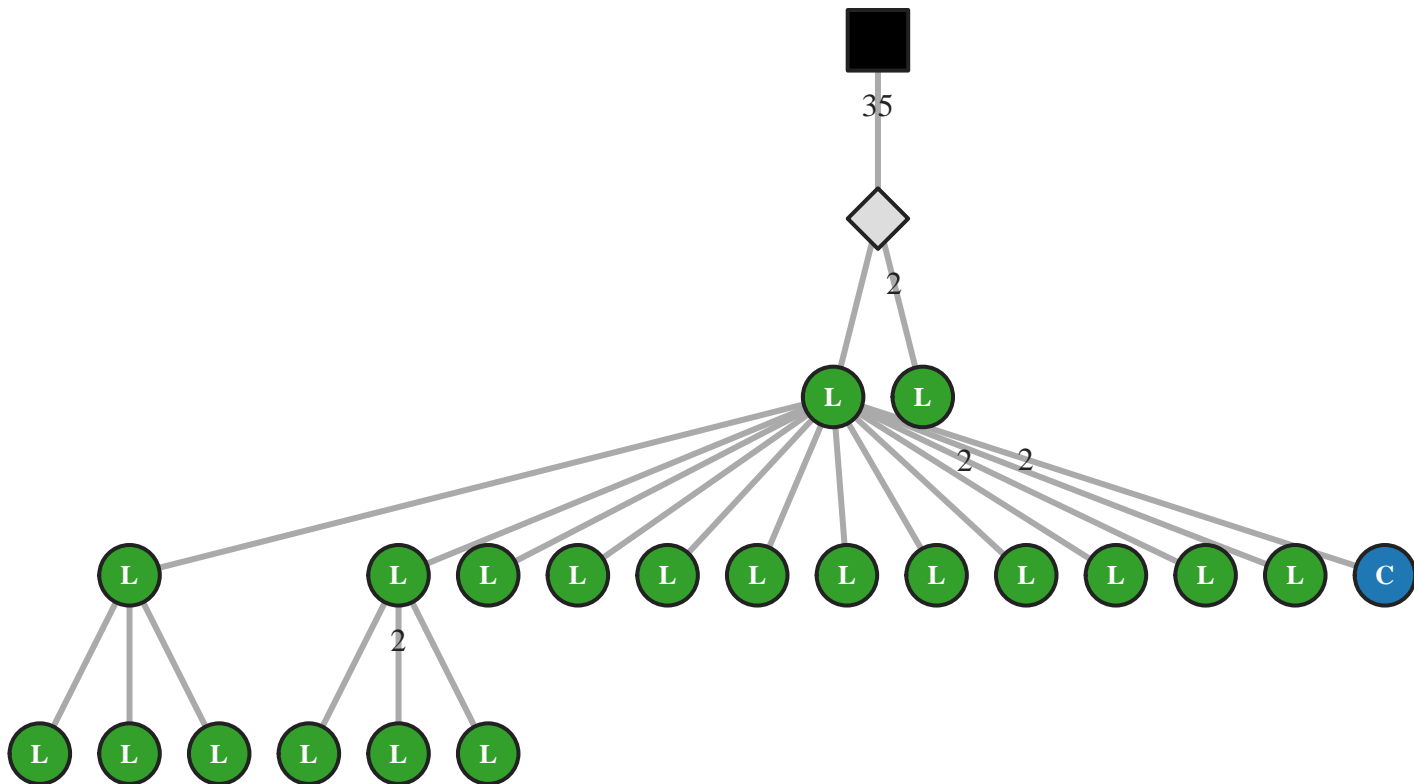
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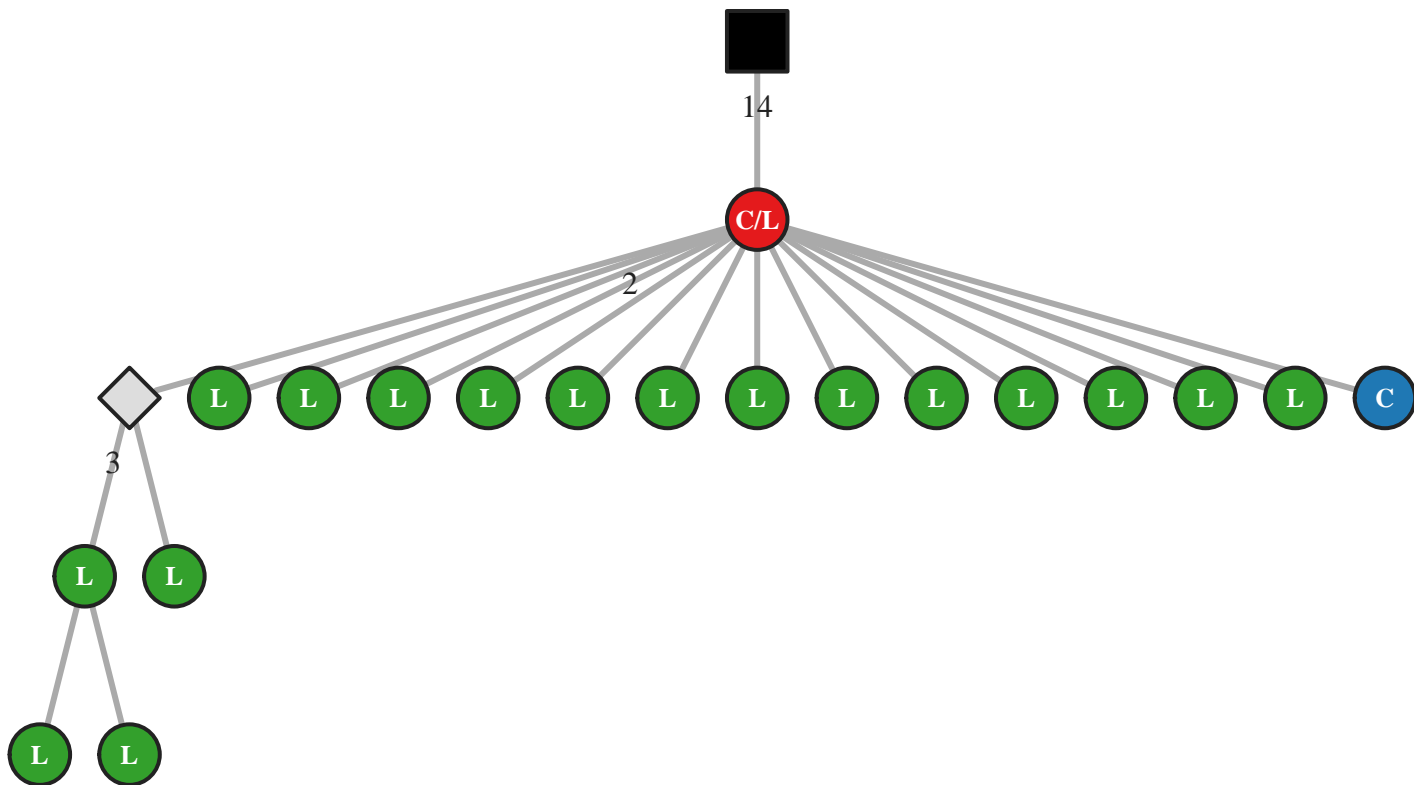
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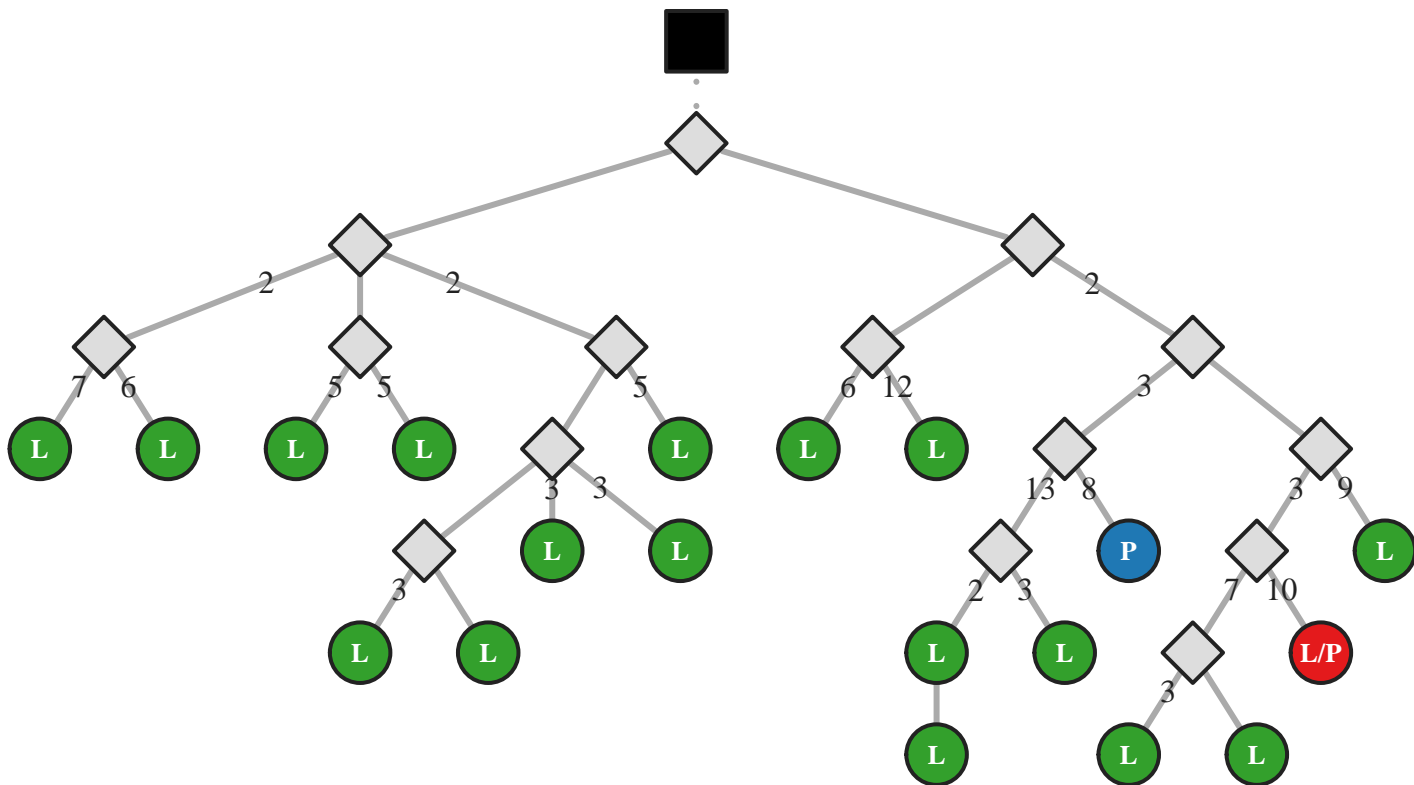
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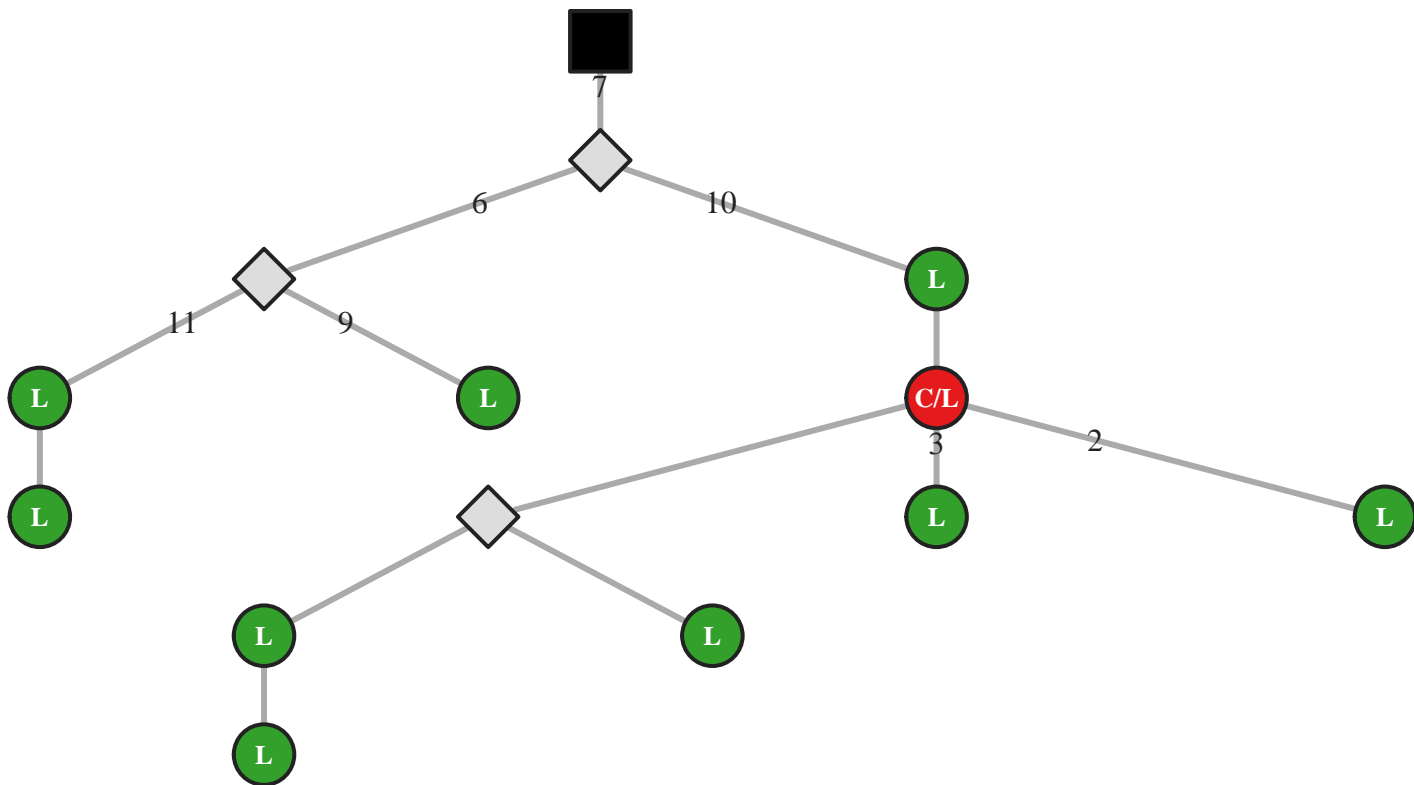
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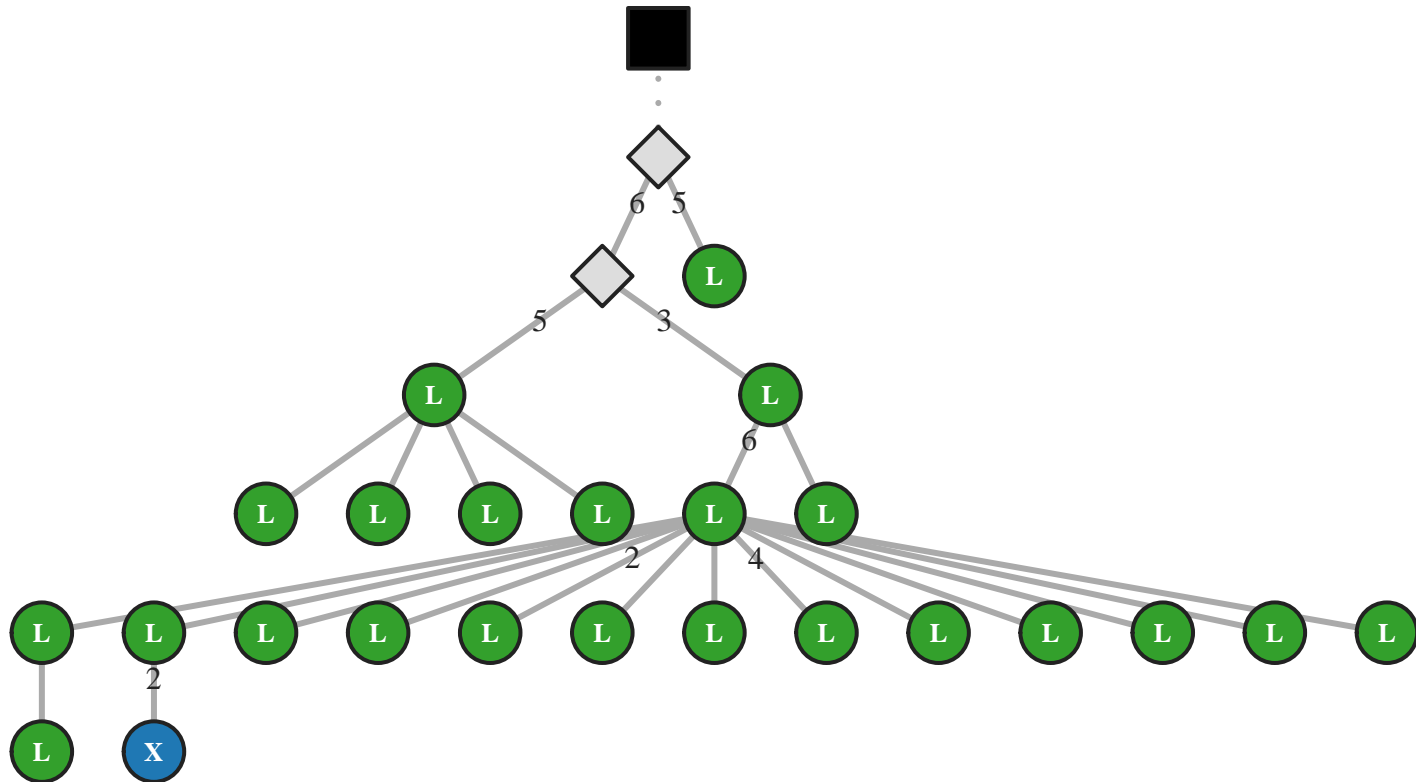
M5 IgG IGHV1-69/J6 57bp (24040)



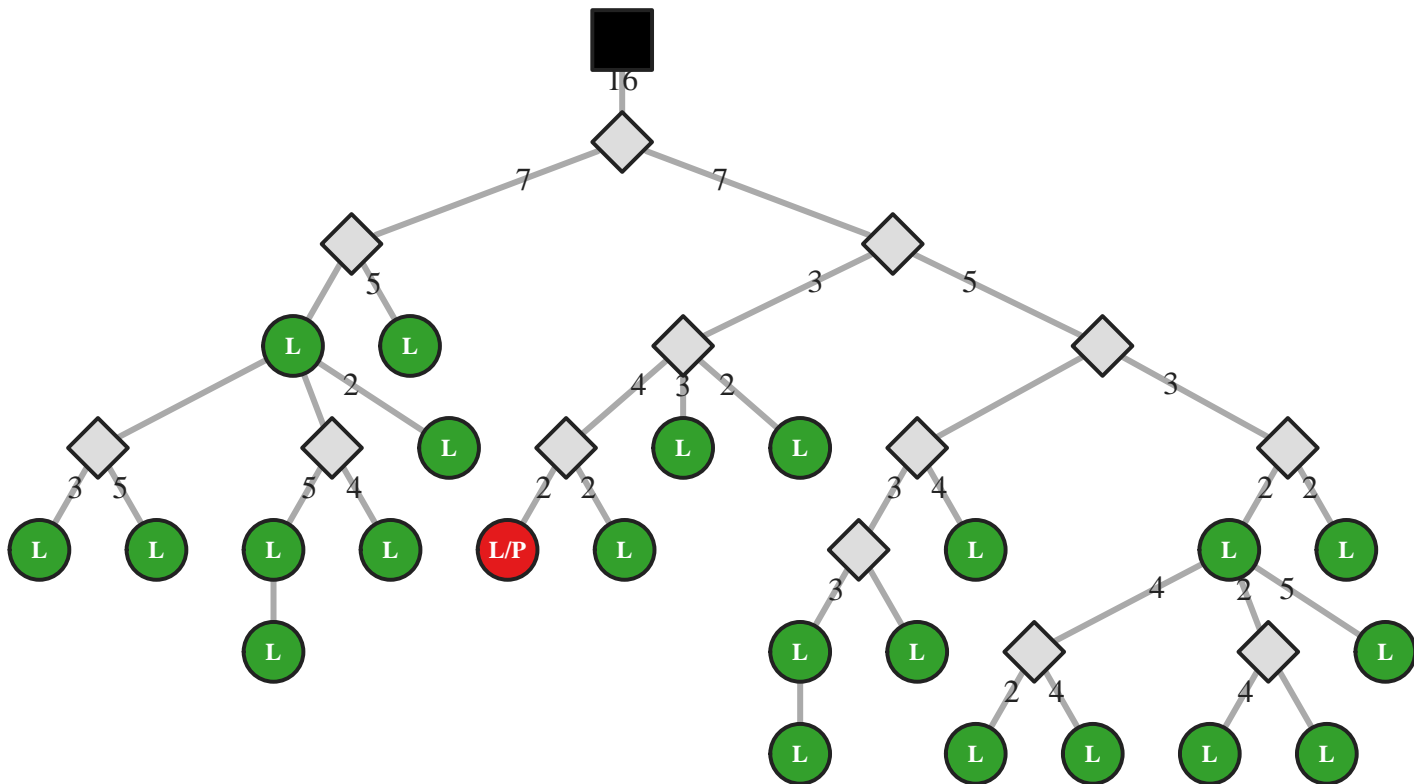
M5 IgG IGHV1-69/J6 57bp (24047)



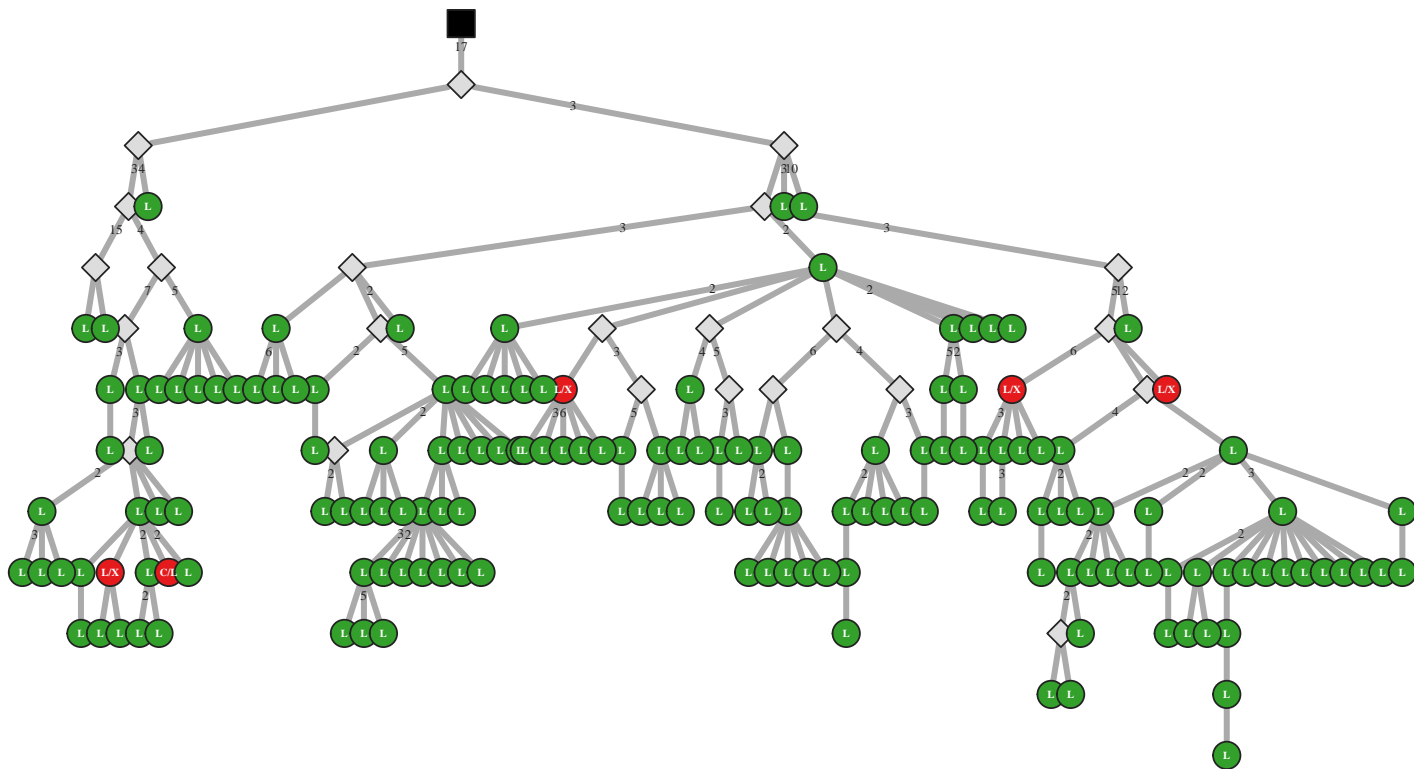
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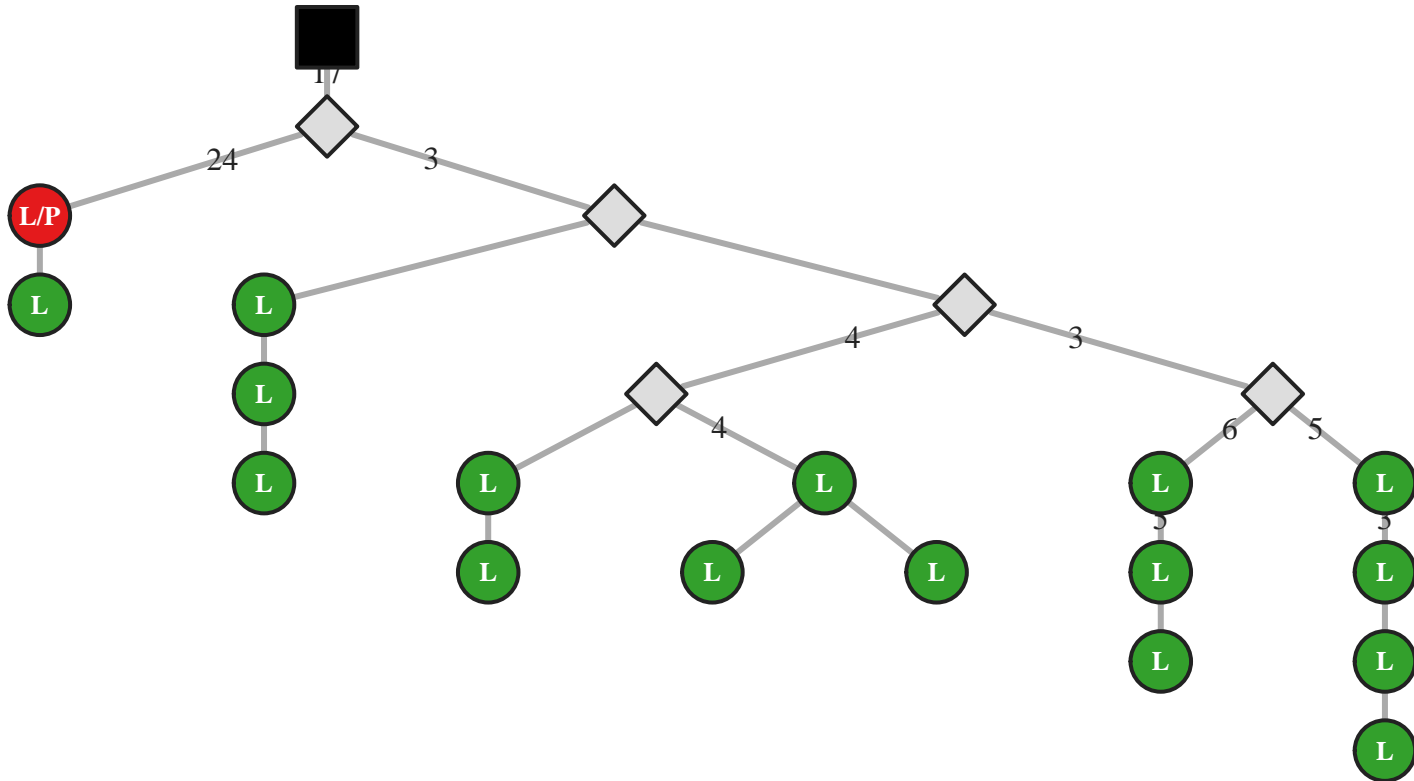
M5 IgG IGHV1-69/J6 60bp (24189)



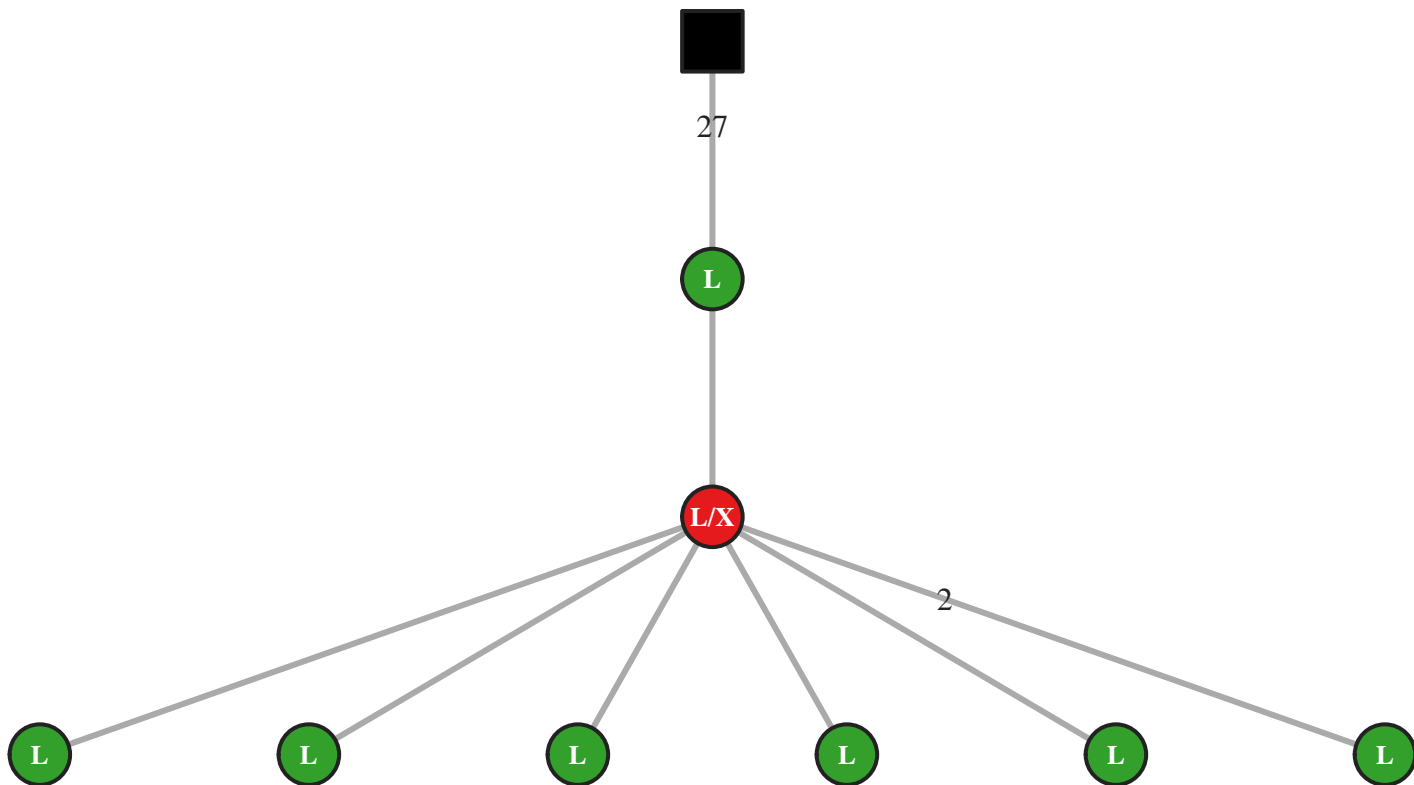
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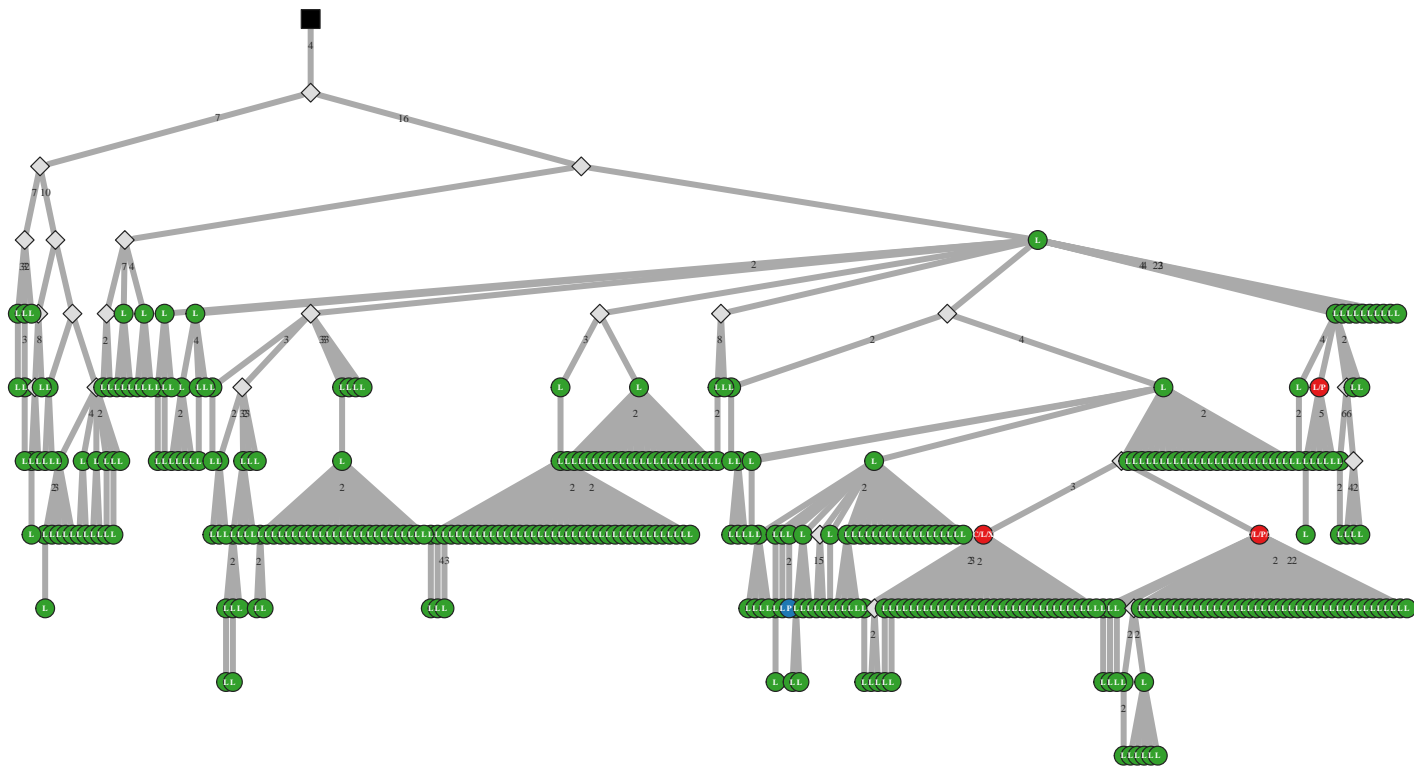
M5 IgG IGHV1-69/J6 60bp (24207)



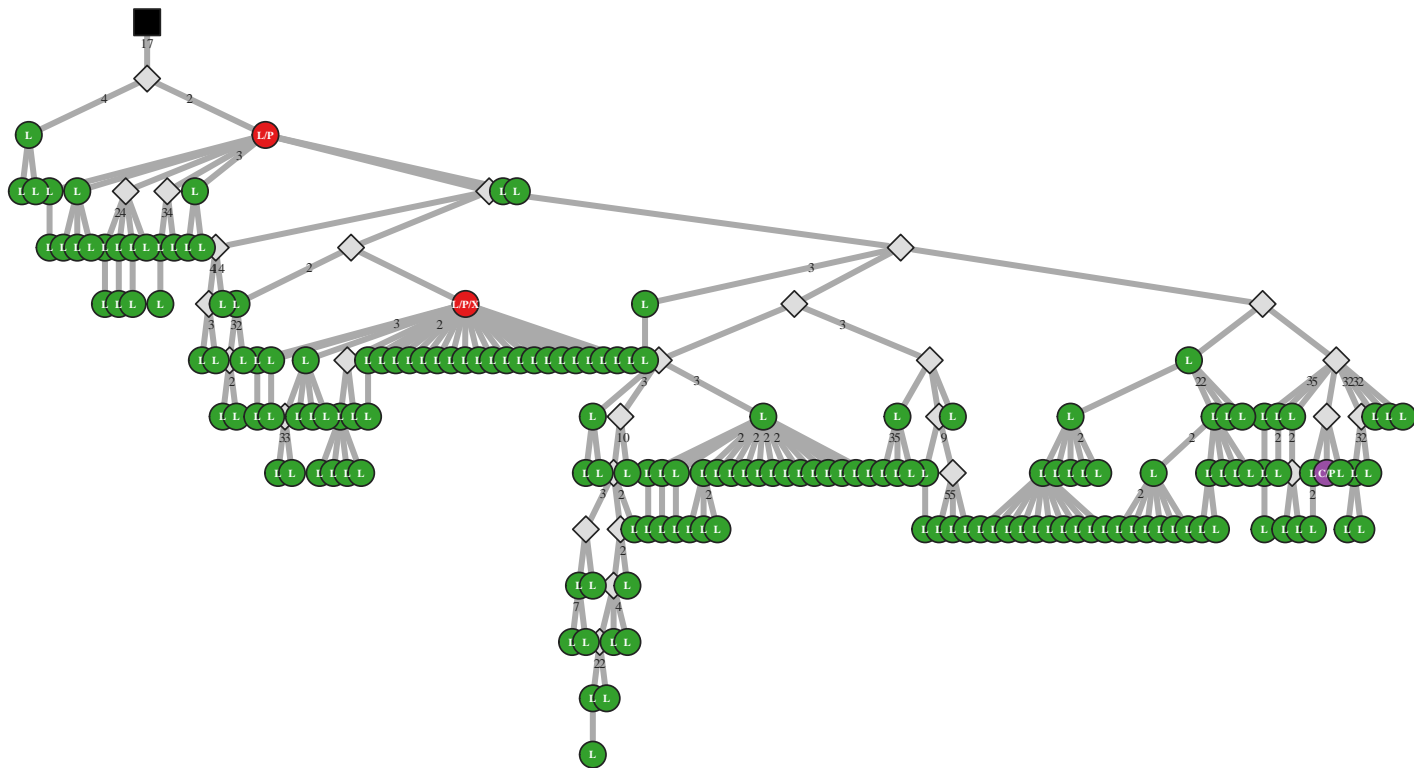
M5 IgG IGHV1-69/J6 60bp (24208)



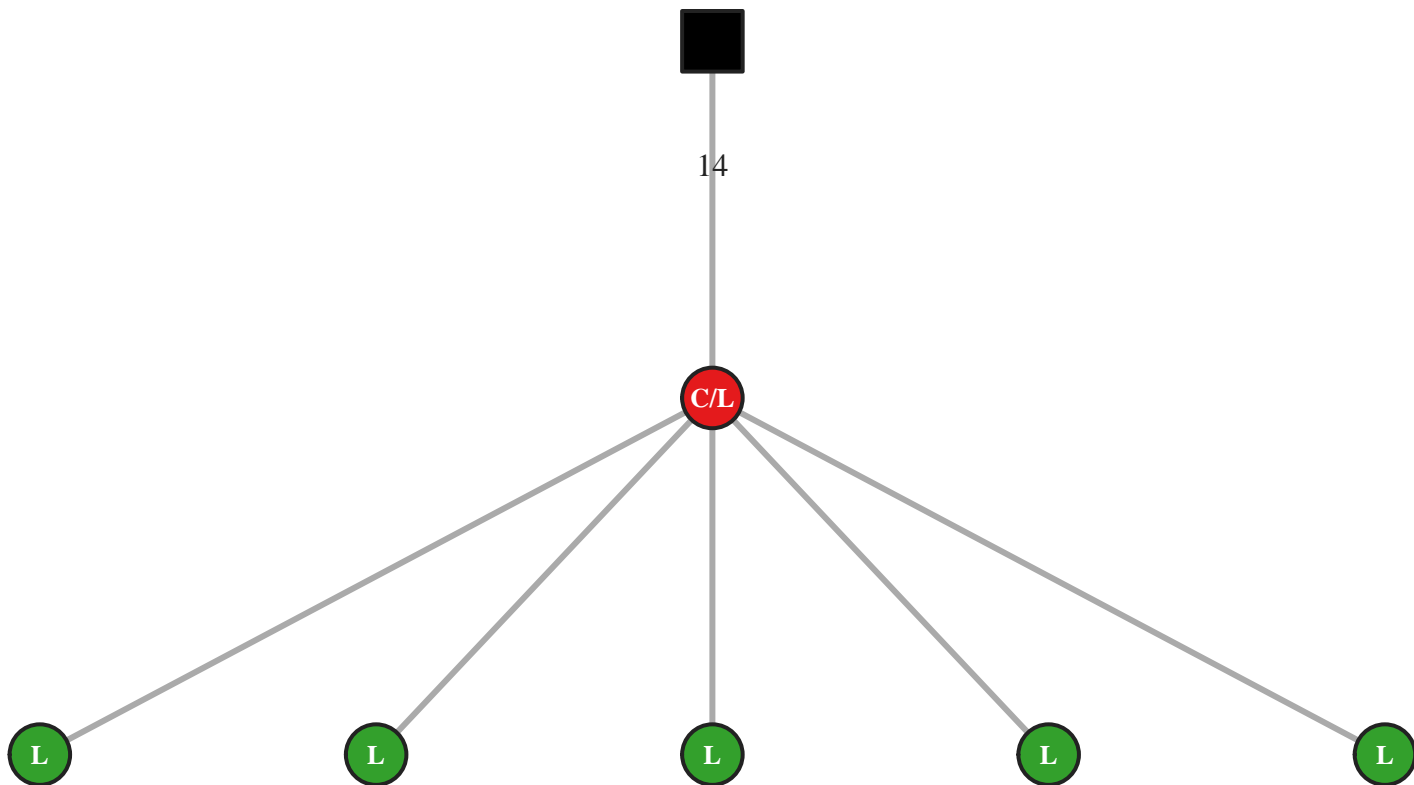
M5 IgG IGHV1-69/J6 60bp (24218)



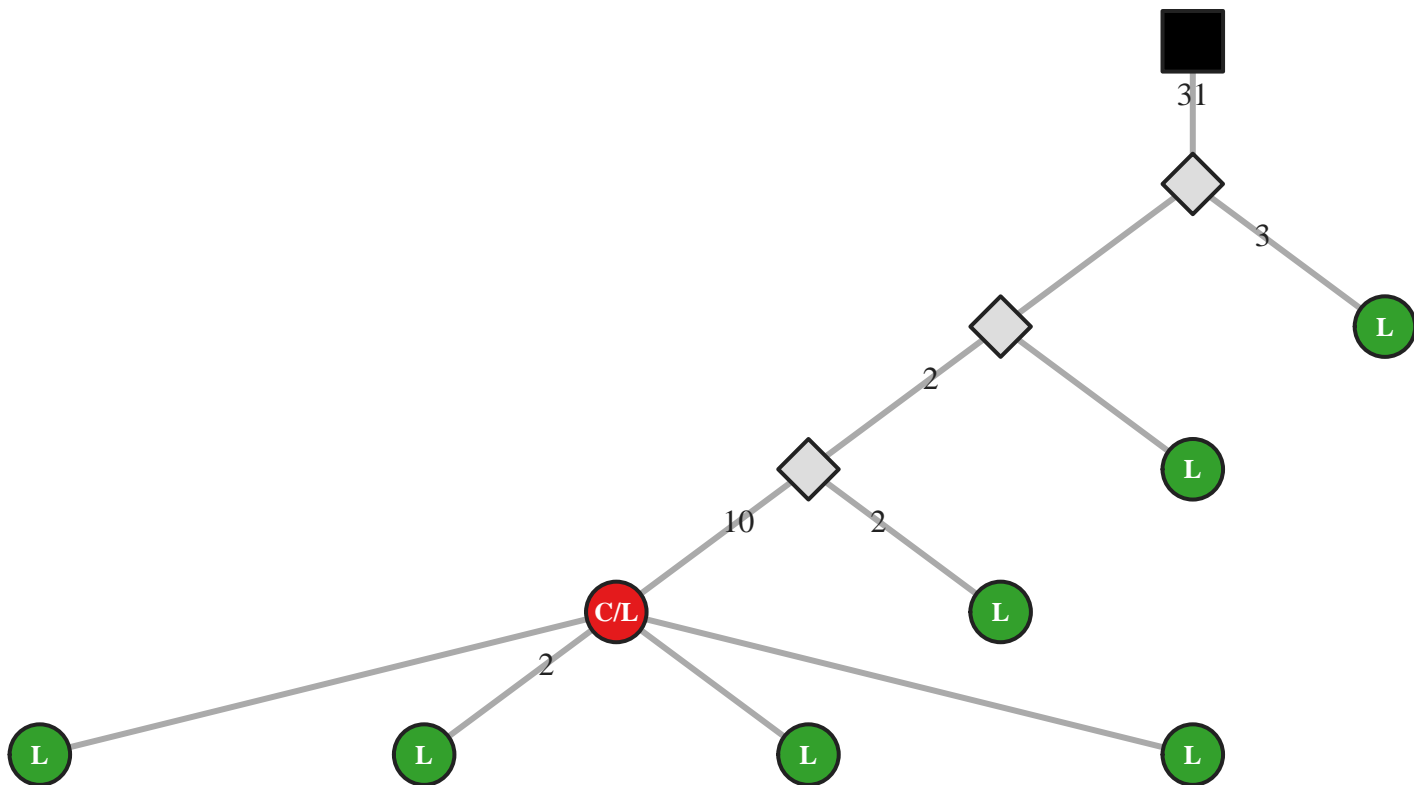
M5 IgG IGHV1-69/J6 60bp (24229)



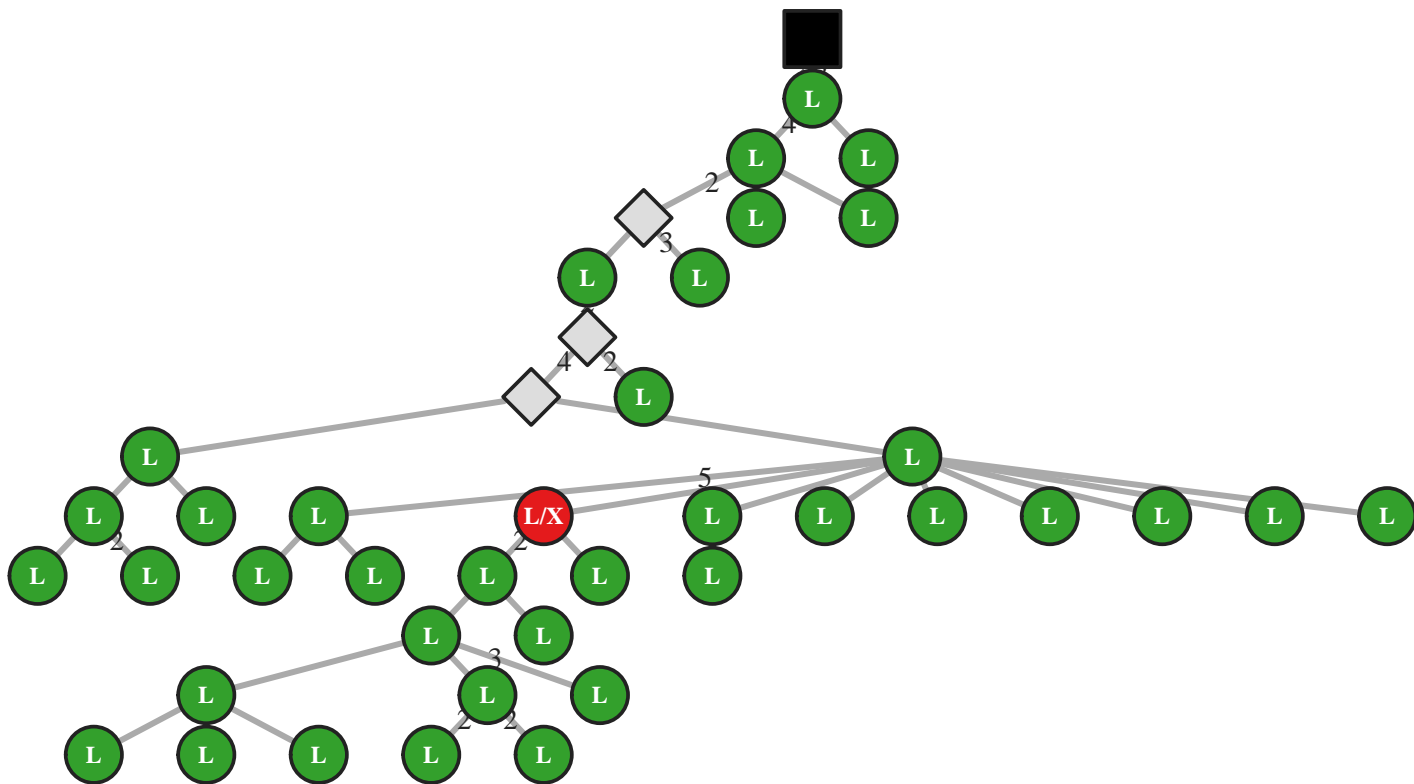
M5 IgG IGHV1-69/J6 63bp (32839)



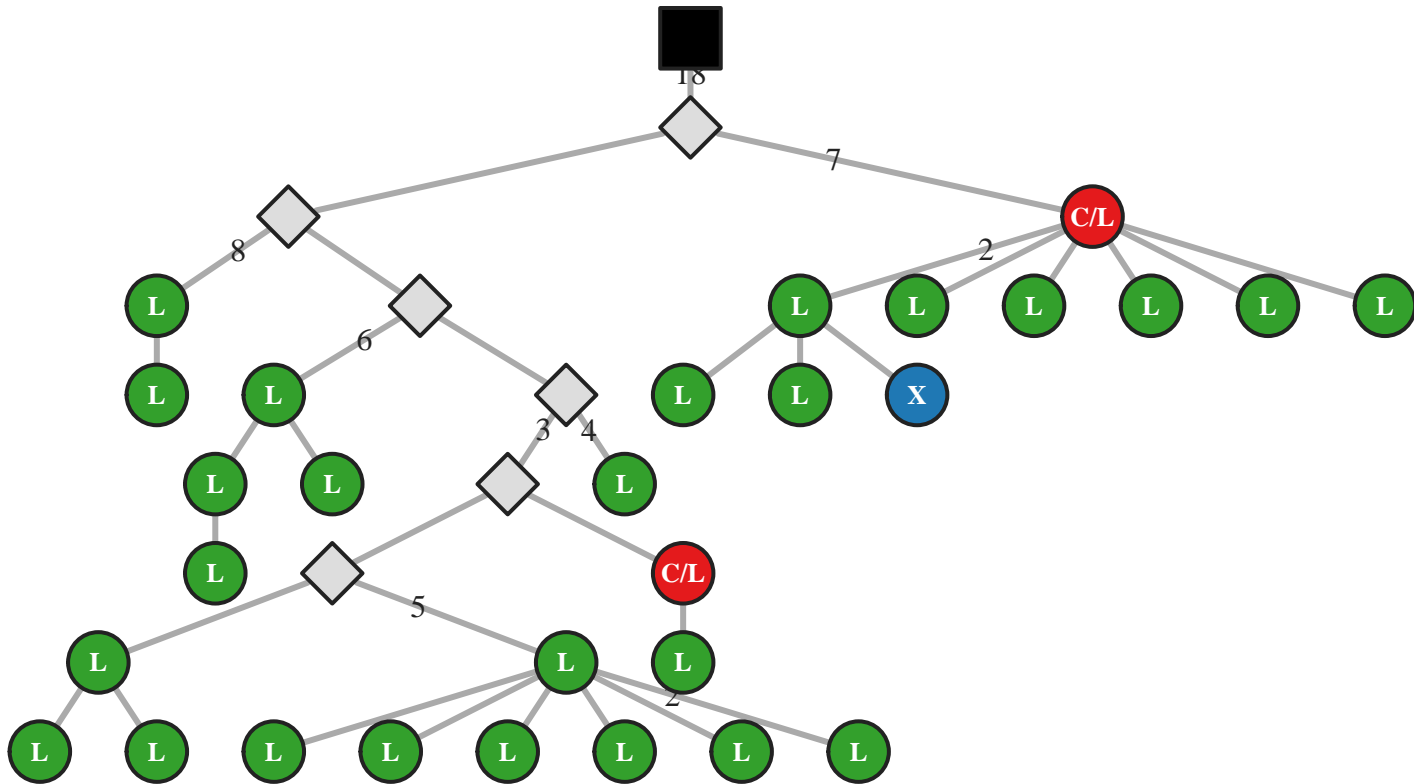
M5 IgG IGHV1-69/J6 63bp (32928)



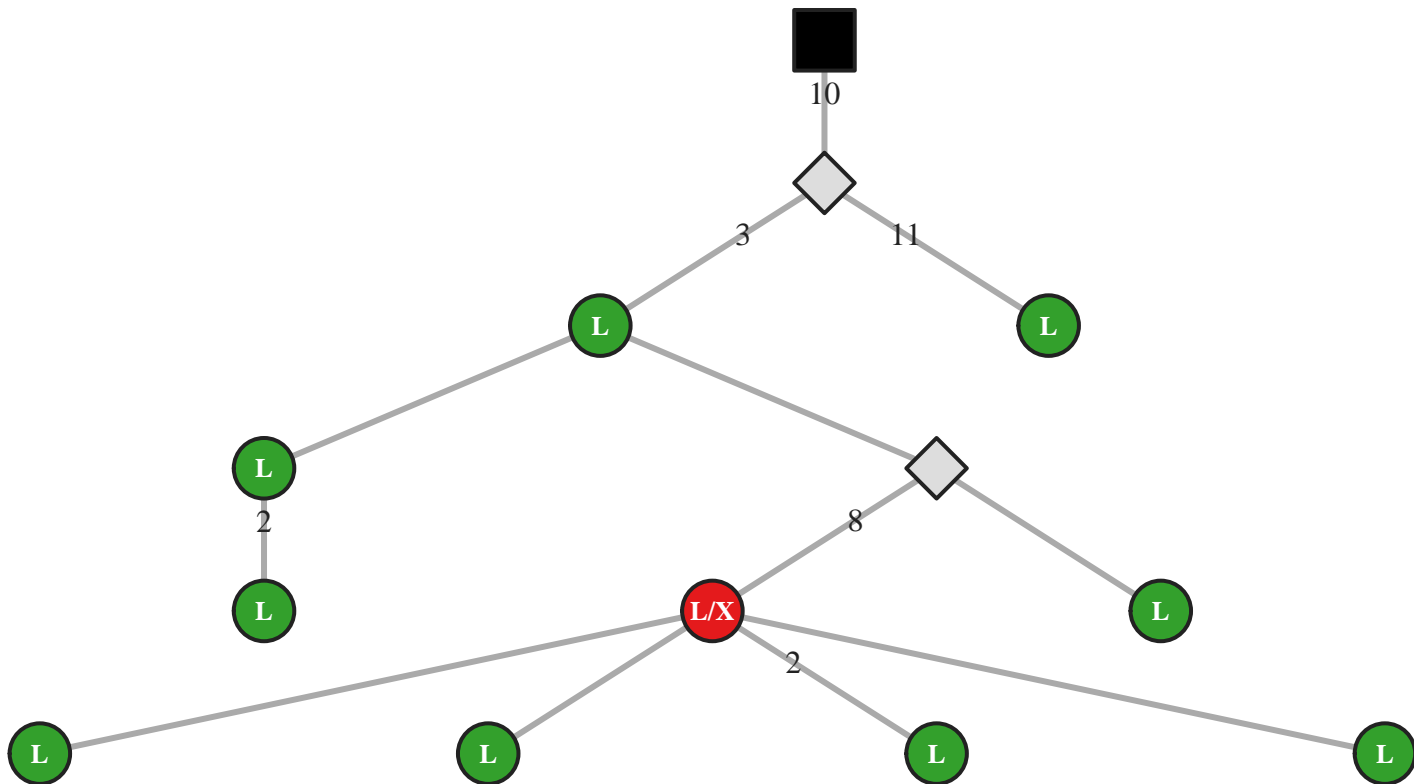
M5 IgG IGHV1-69/J6 66bp (50360)



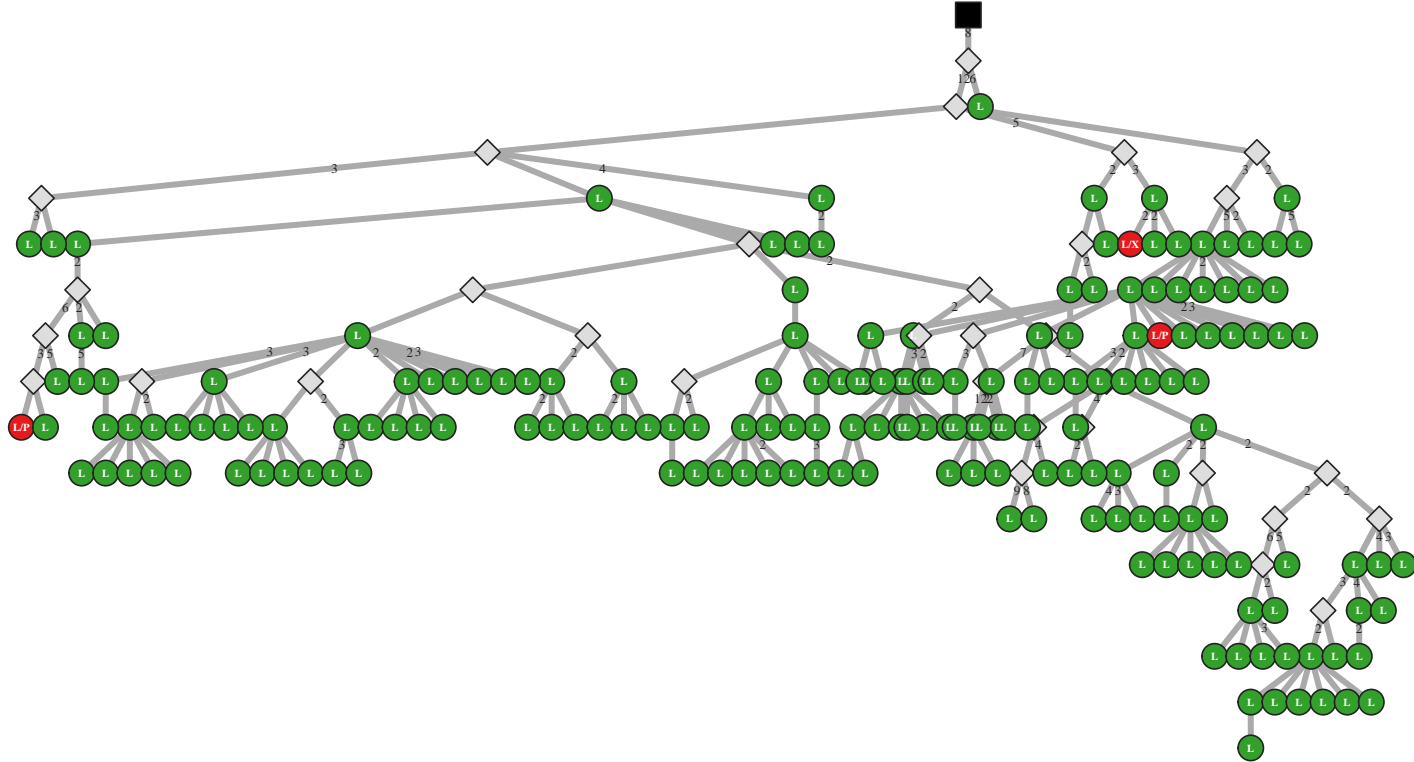
M5 IgG IGHV1-69/J6 66bp (50379)



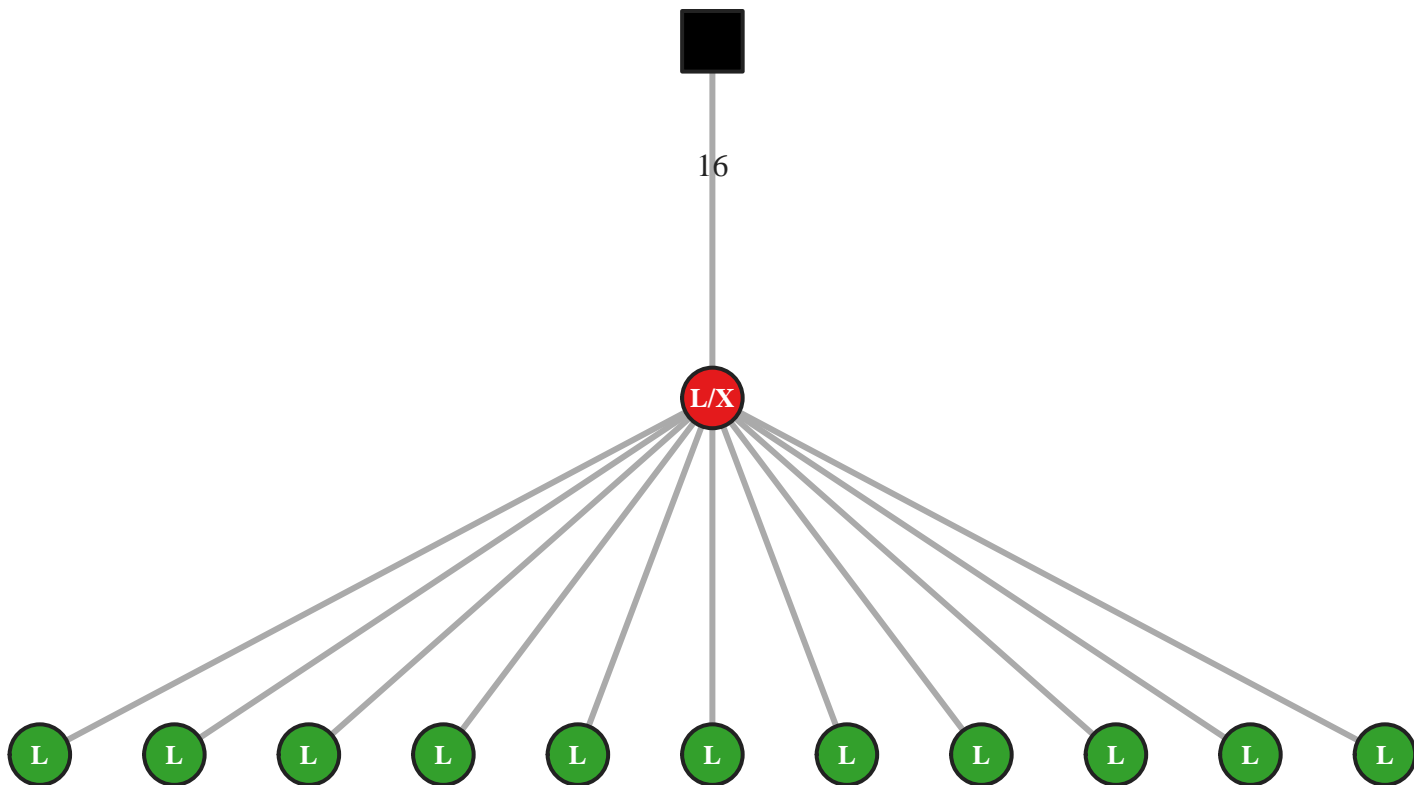
M5 IgG IGHV1-69/J6 66bp (50434)



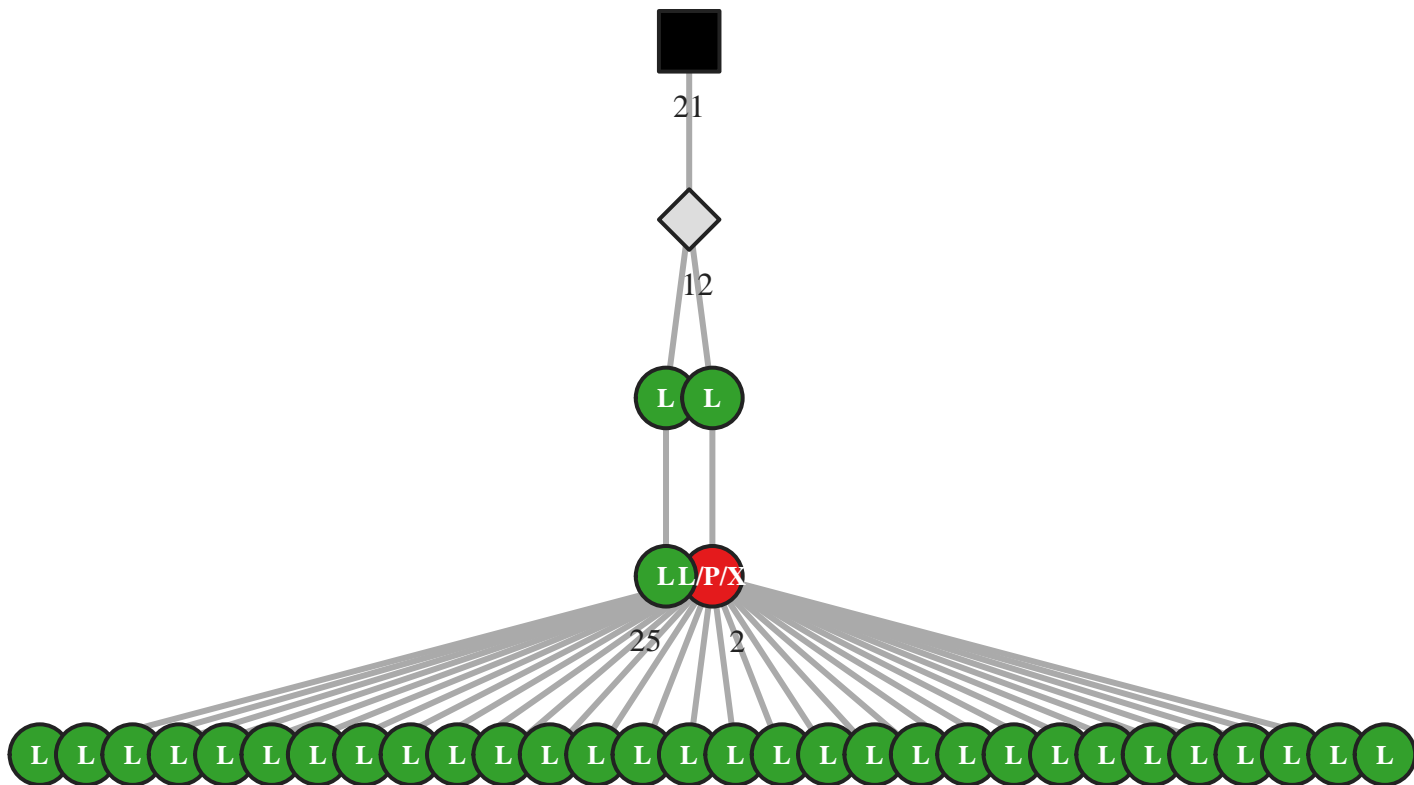
M5 IgG IGHV1-69/J6 69bp (42190)



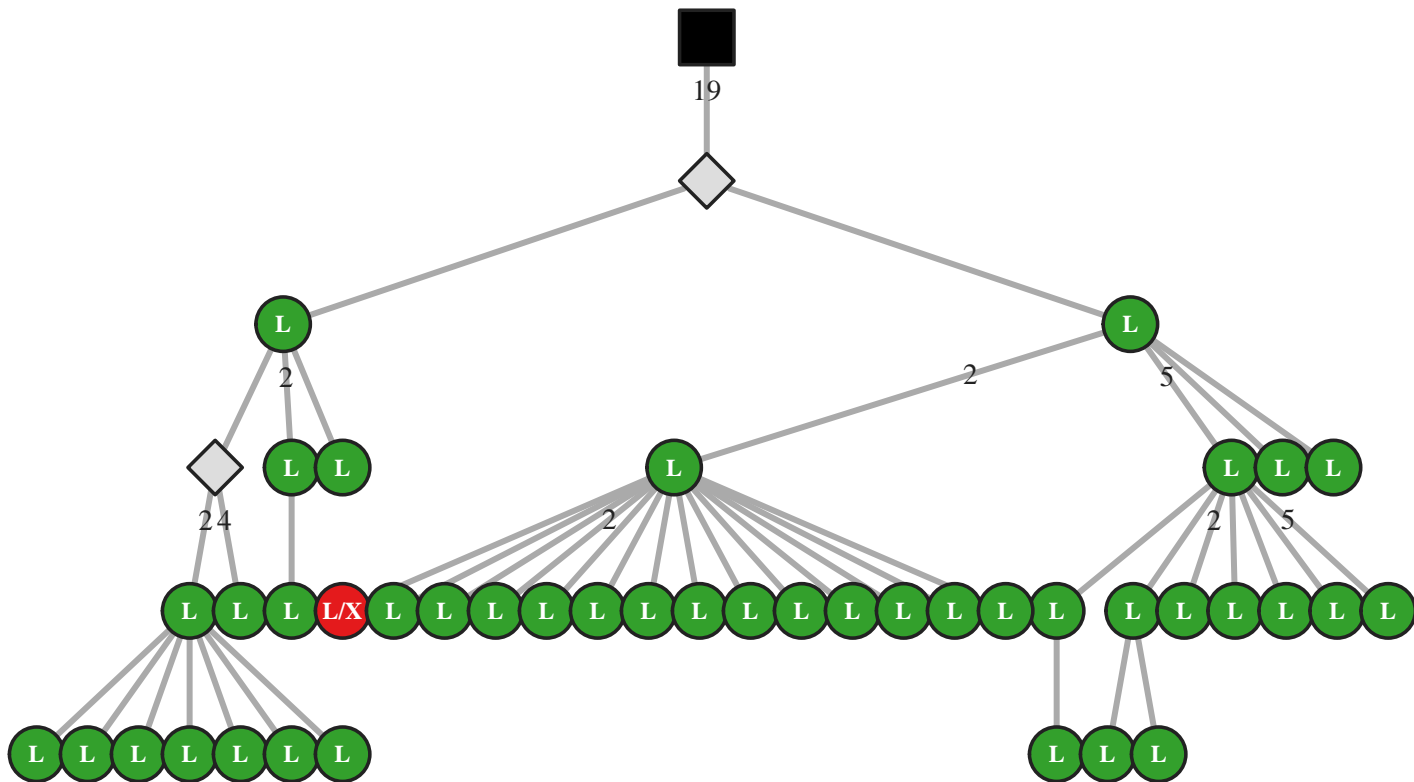
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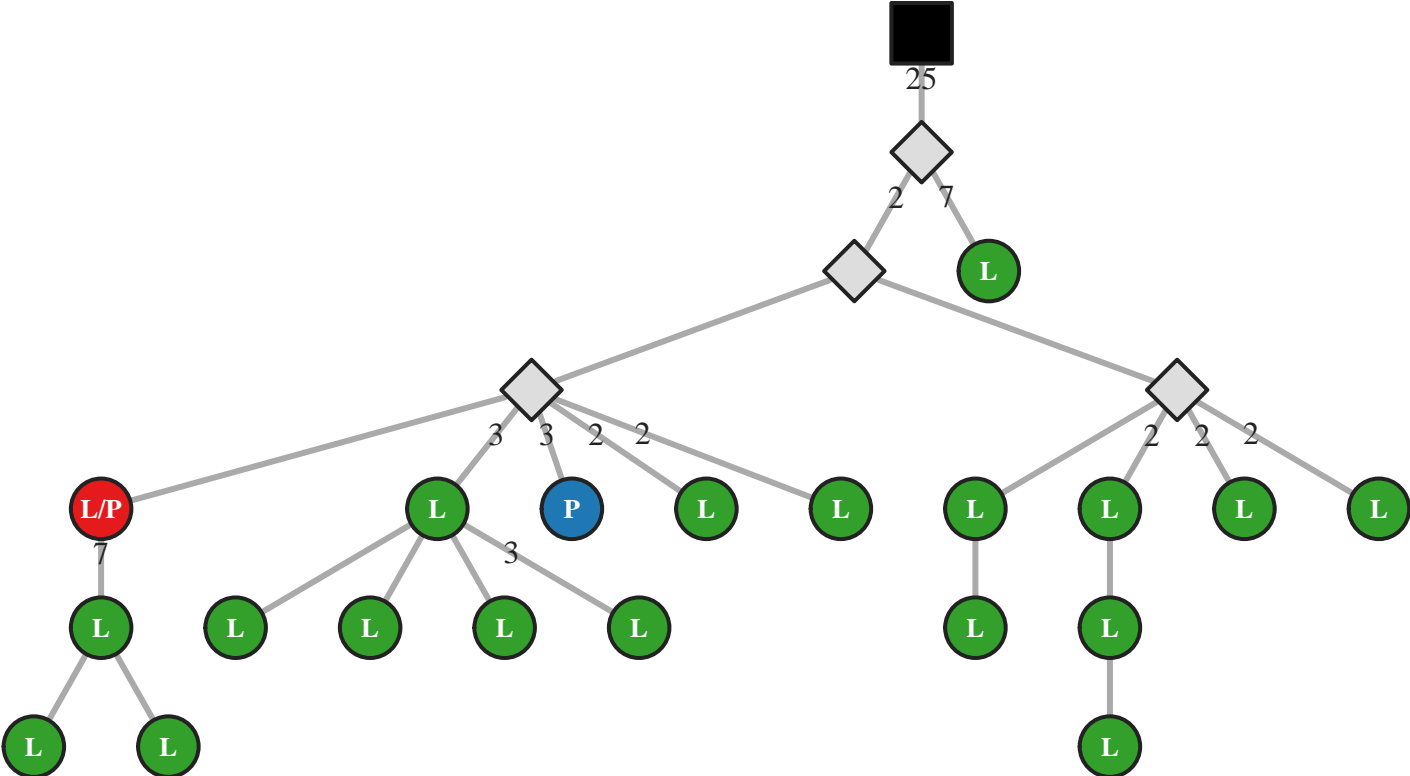
M5 IgG IGHV1-69/J6 72bp (42300)



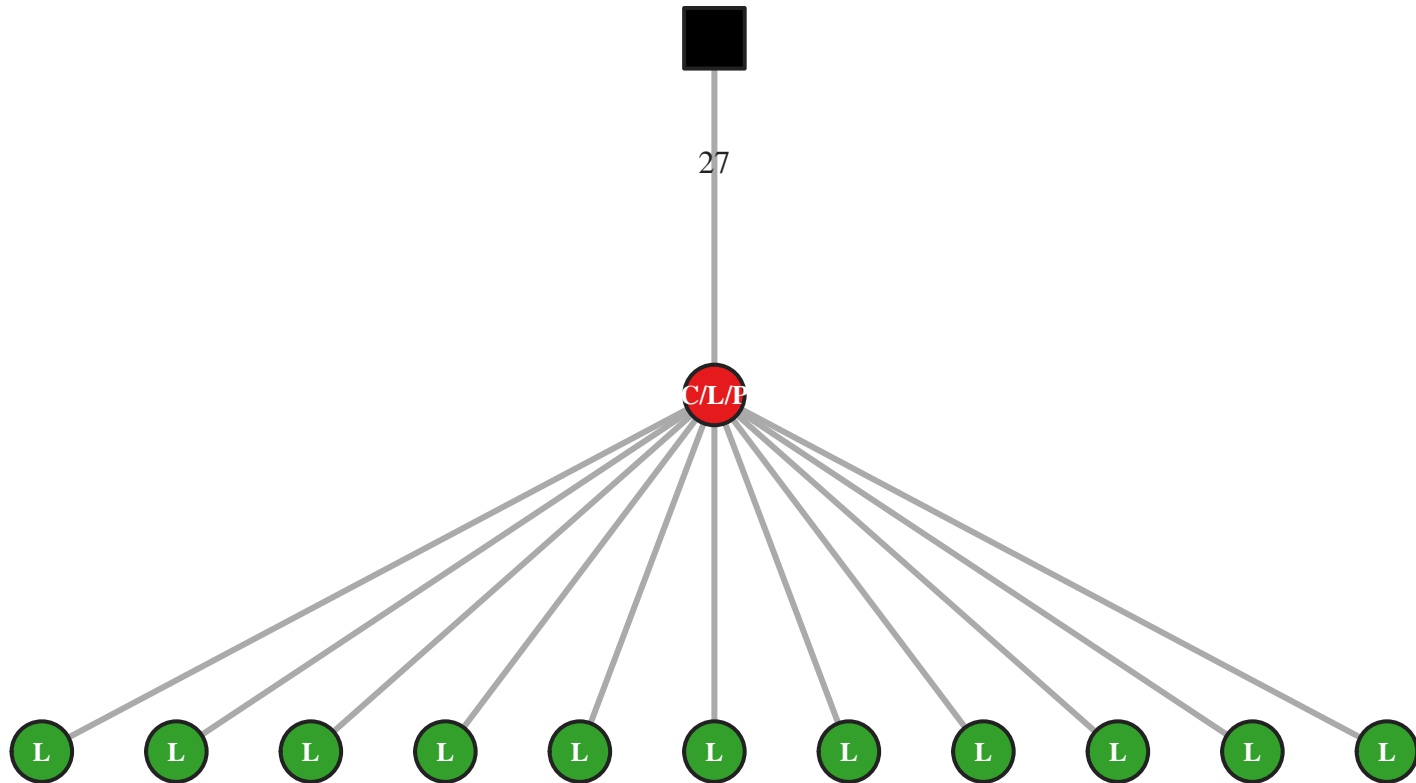
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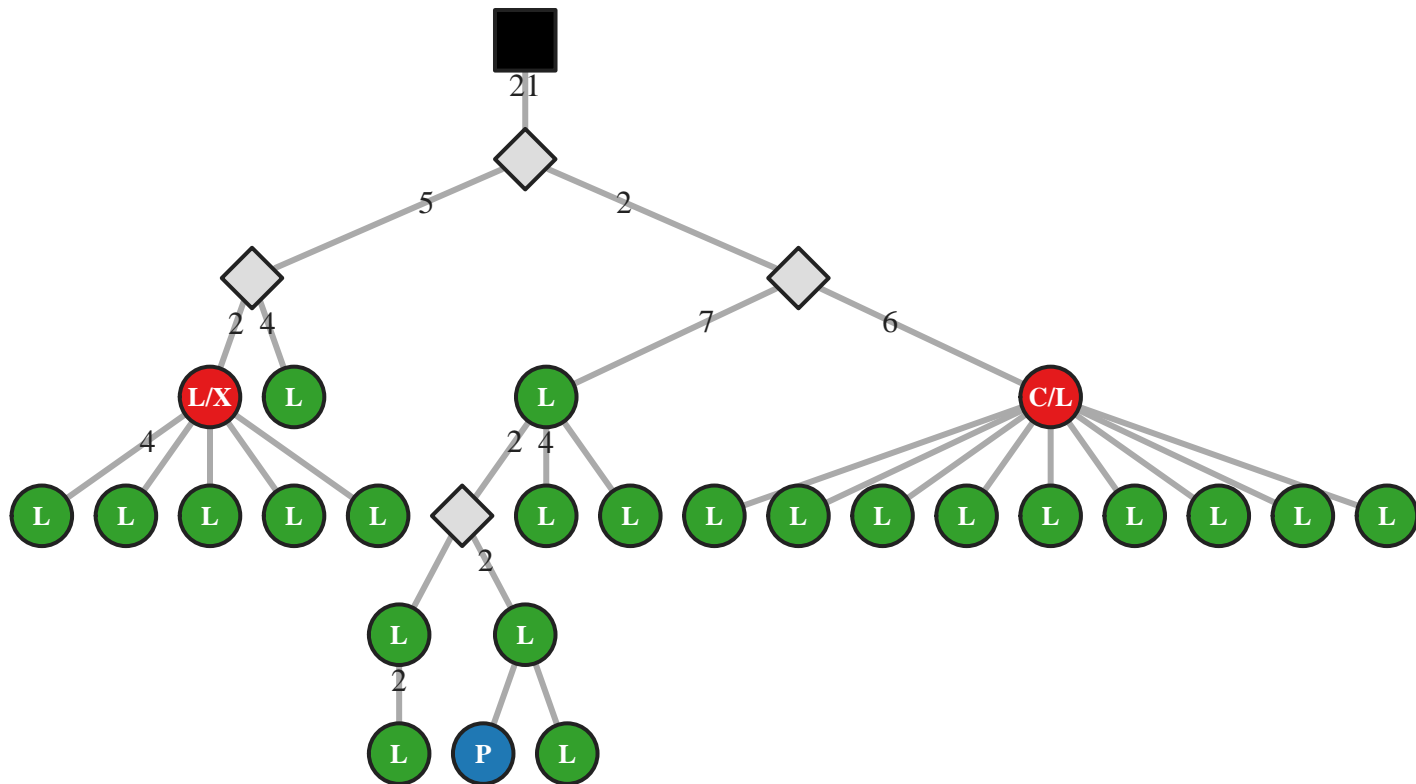
M5 IgG IGHV1-69/J6 75bp (33004)



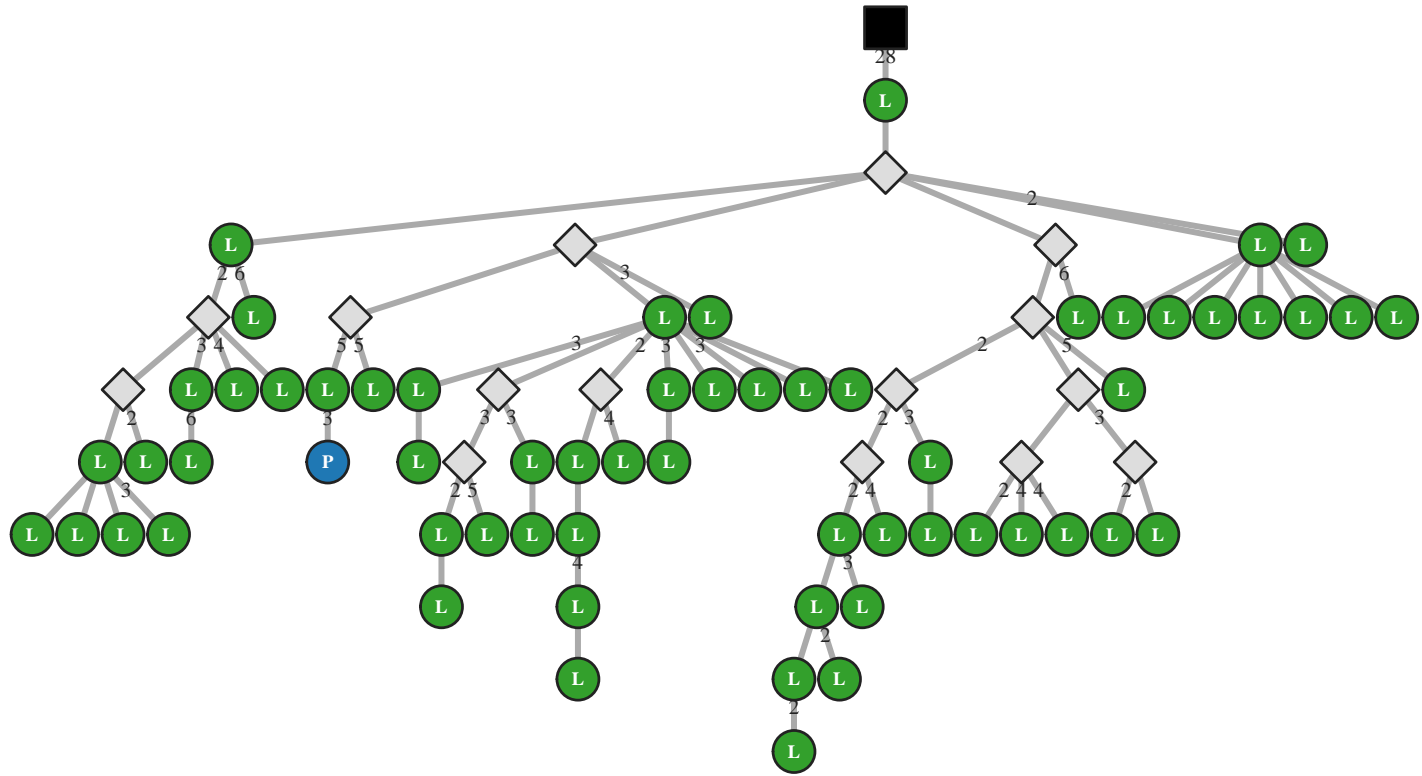
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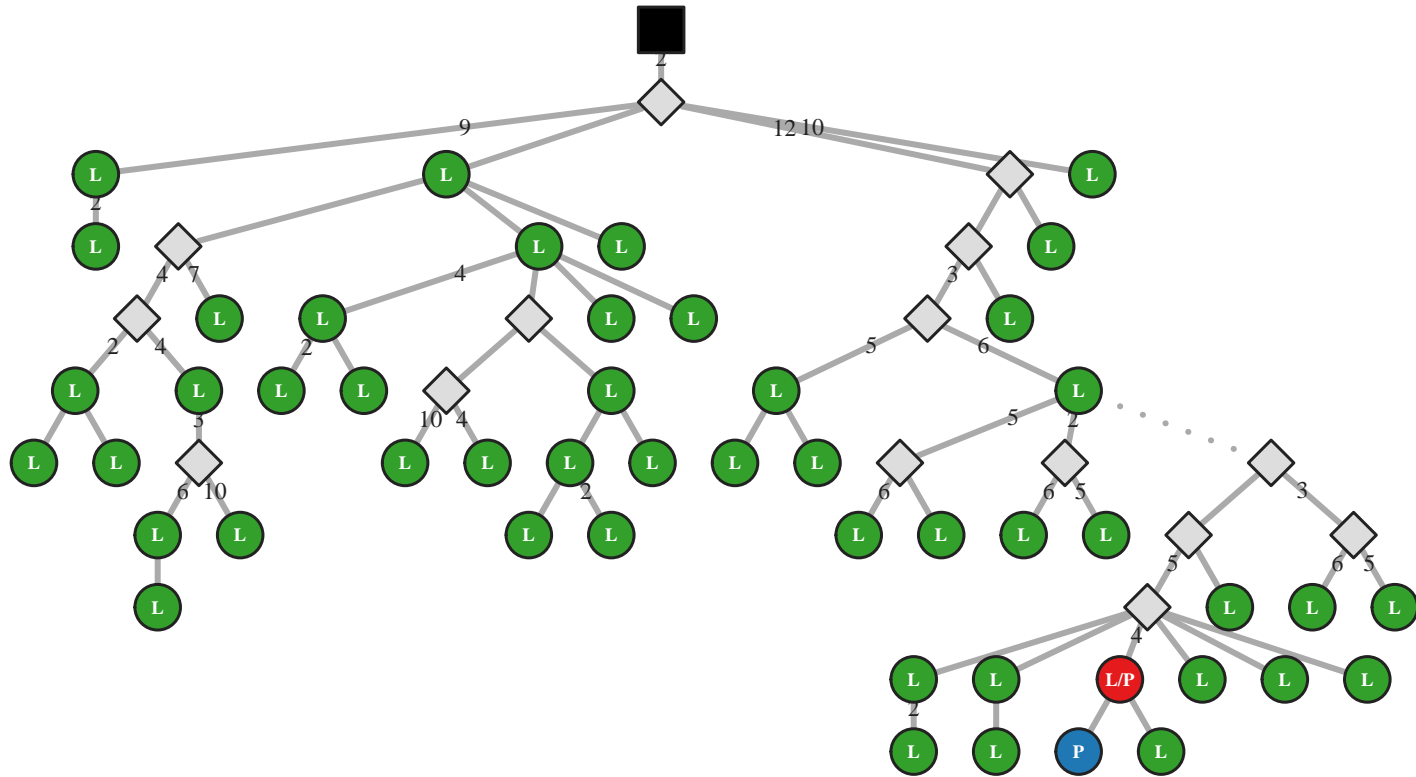
M5 IgG IGHV1-69/J6 75bp (33048)



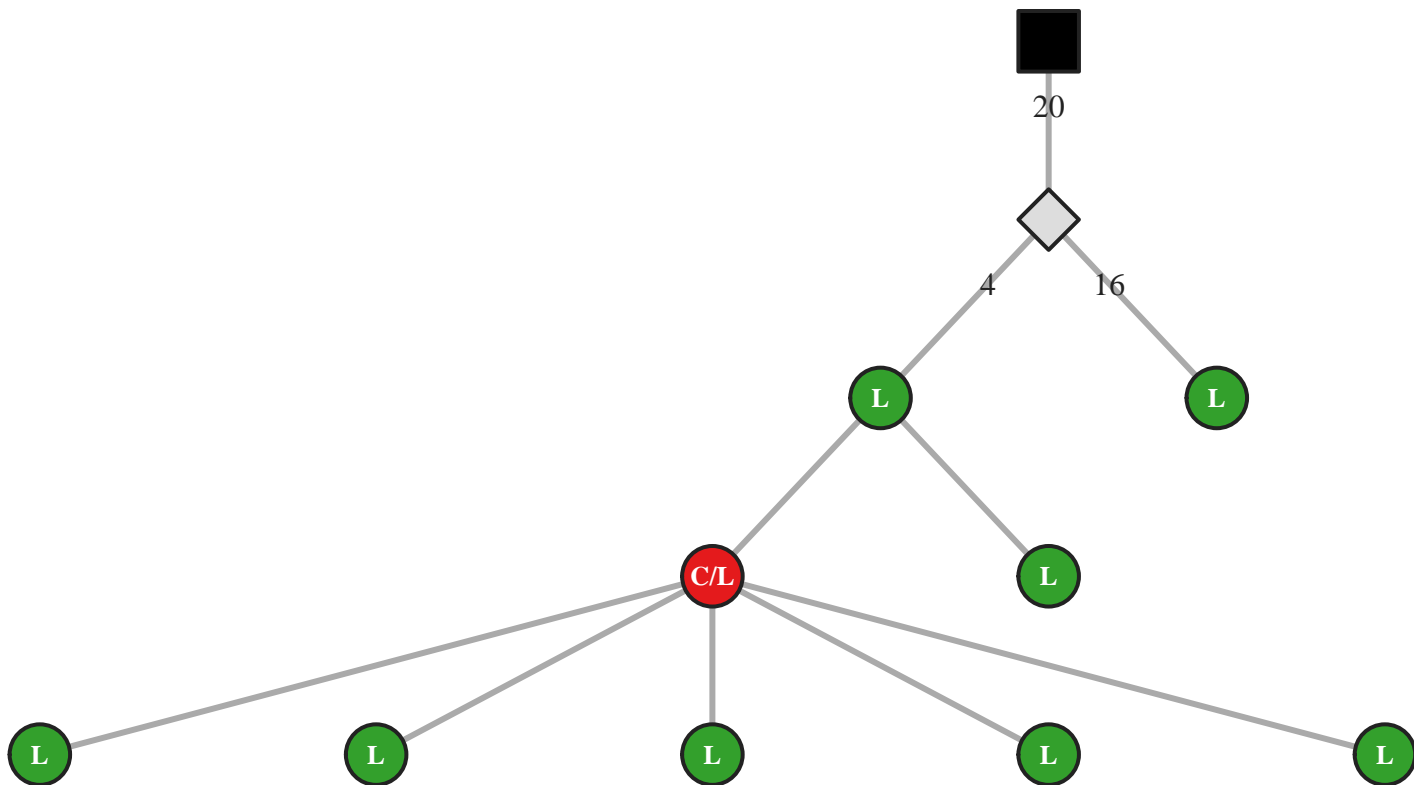
M5 IgG IGHV1-69/J6 81bp (5432)



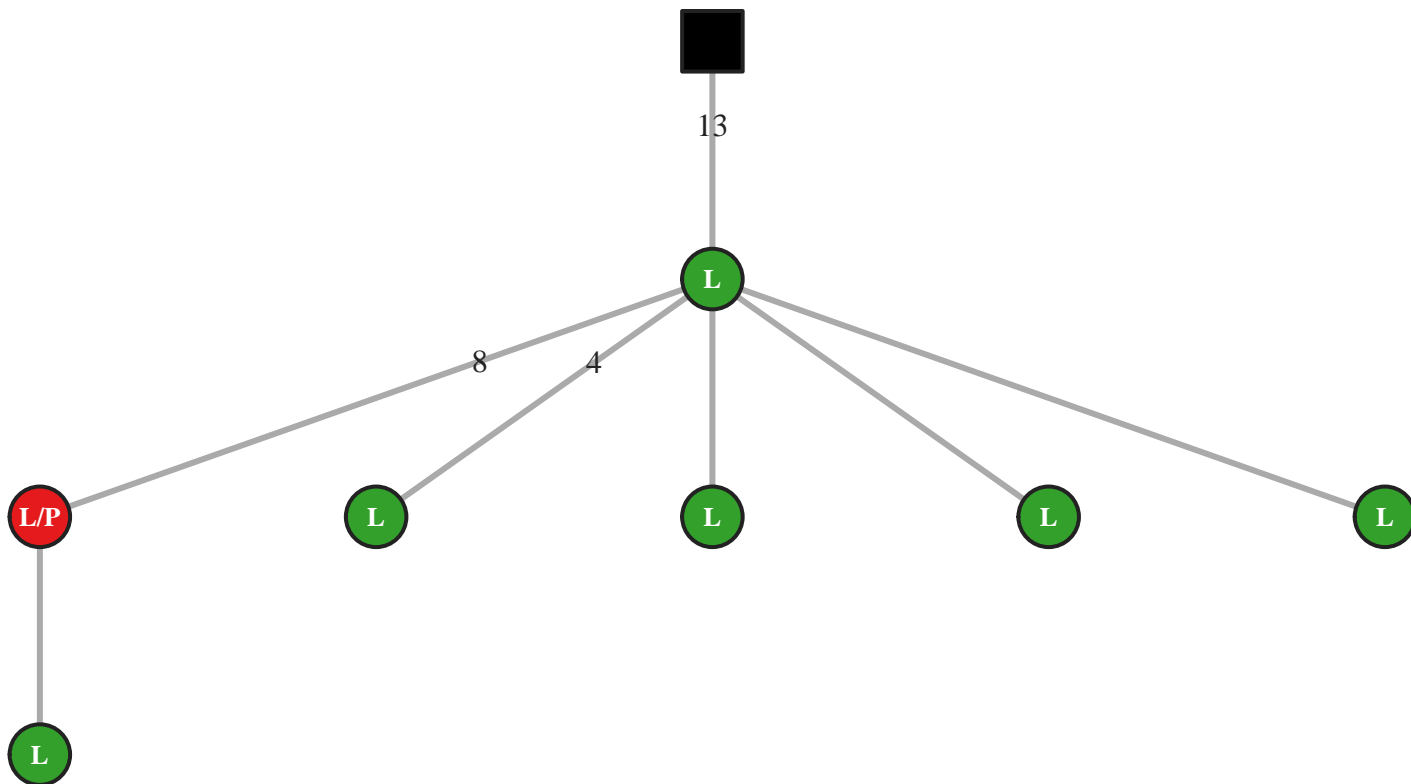
M5 IgG IGHV1-8/J1 24bp (15028)



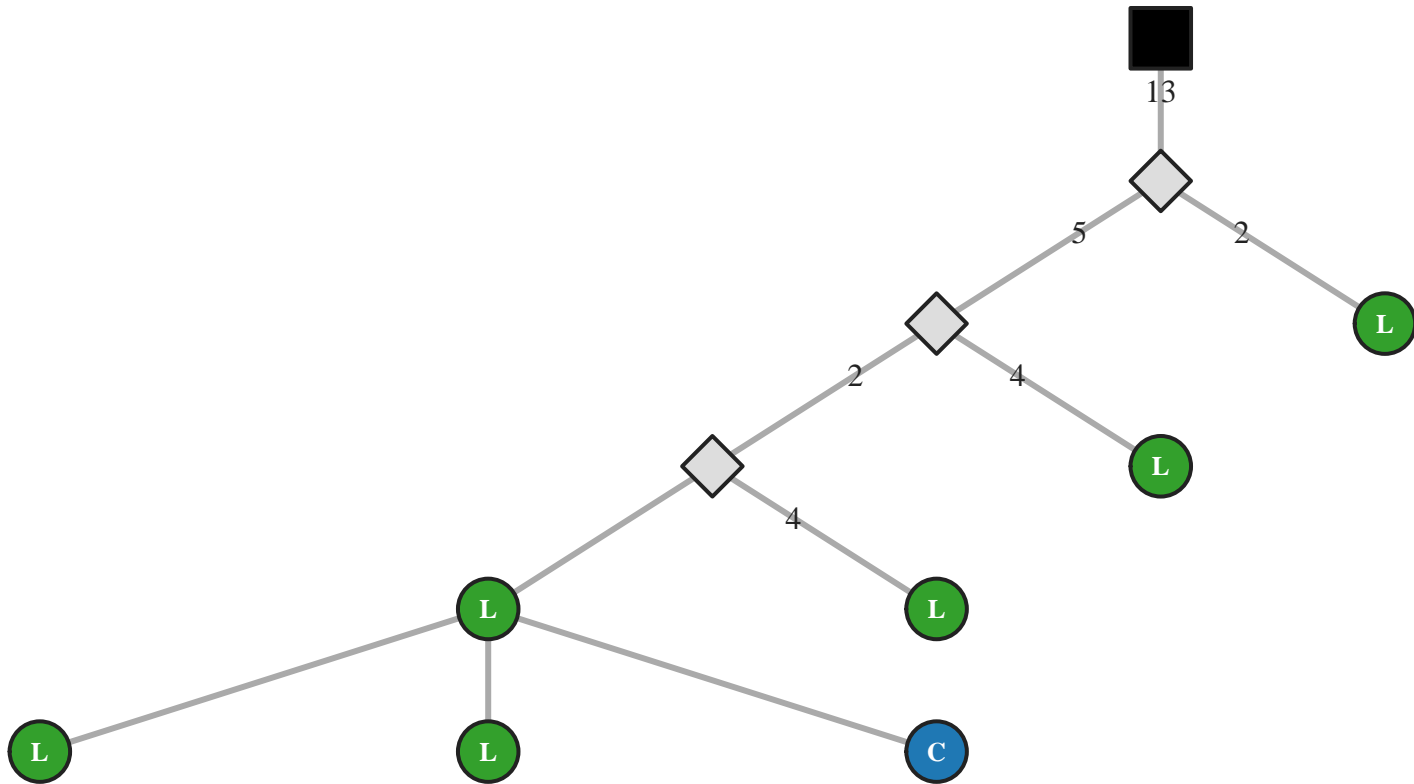
M5 IgG IGHV1-8/J3 33bp (33057)



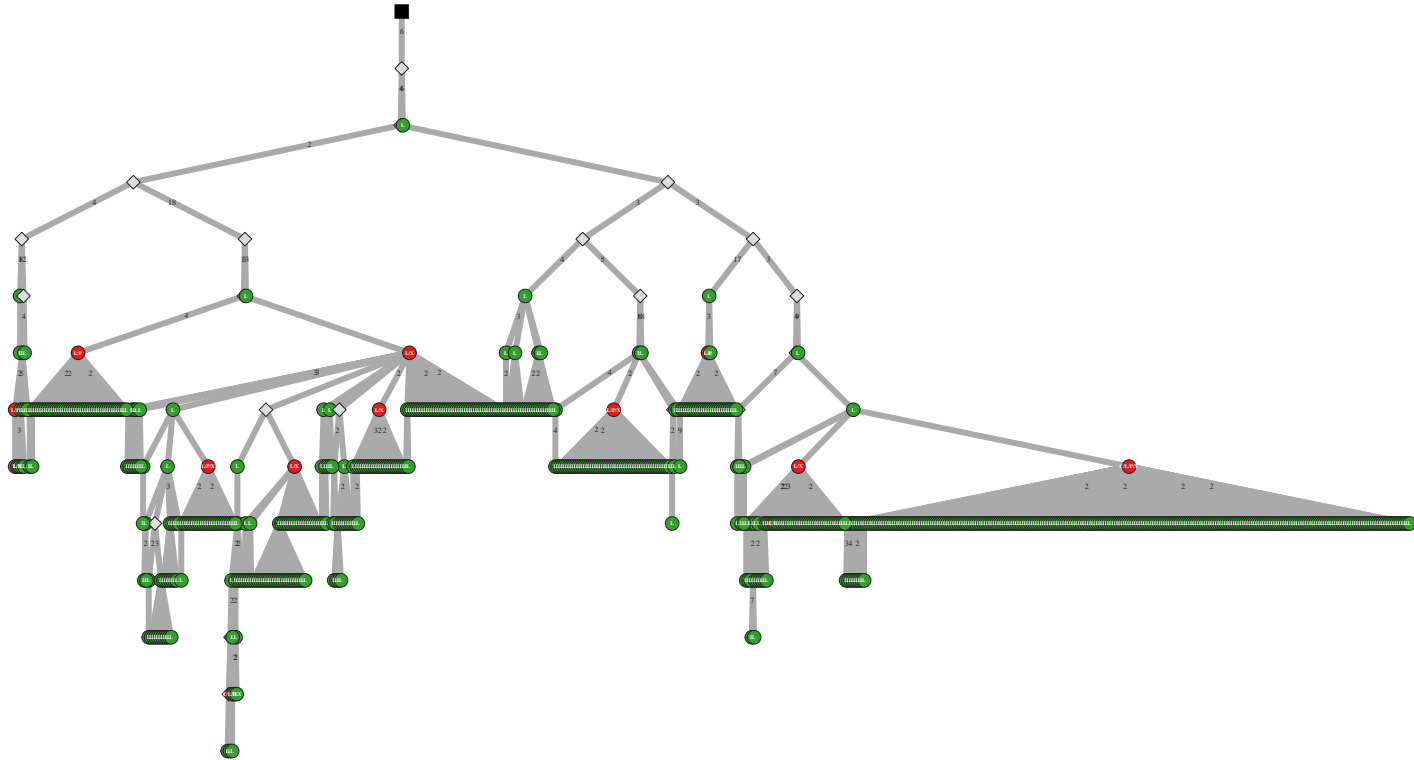
M5 IgG IGHV1-8/J3 42bp (24292)



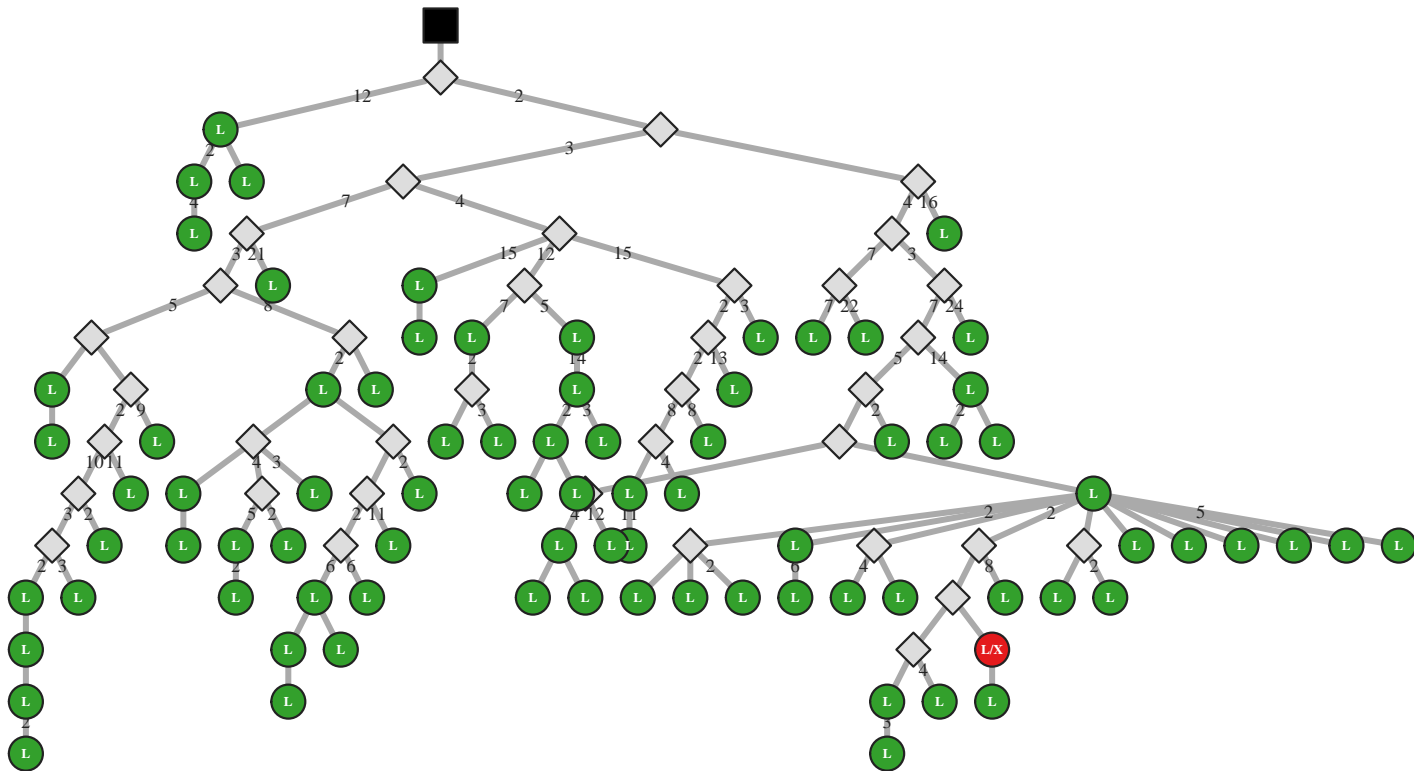
M5 IgA IGHV1-8/J3 60bp (30275)



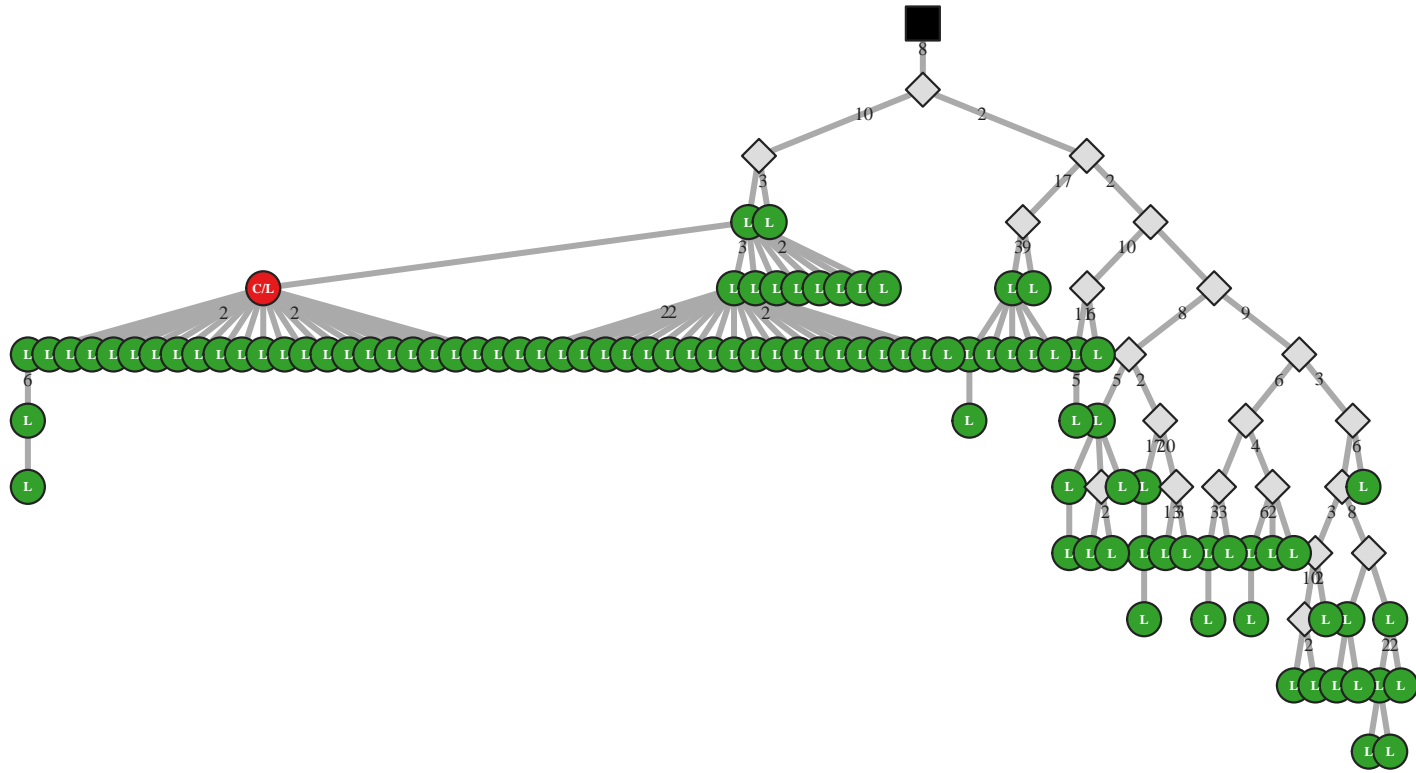
M5 IgG IGHV1-8/J4 24bp (15025)



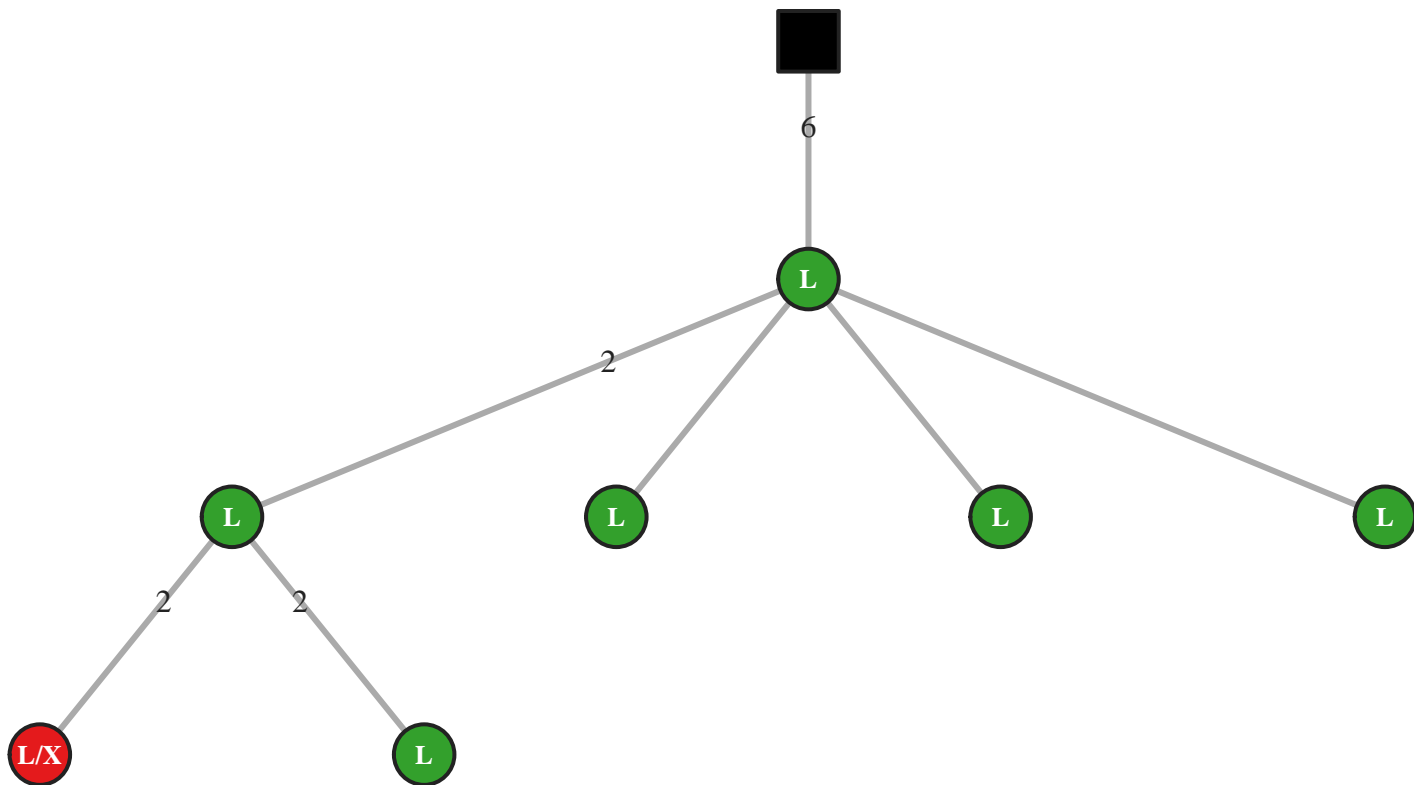
M5 IgG IGHV1-8/J4 27bp (24312)



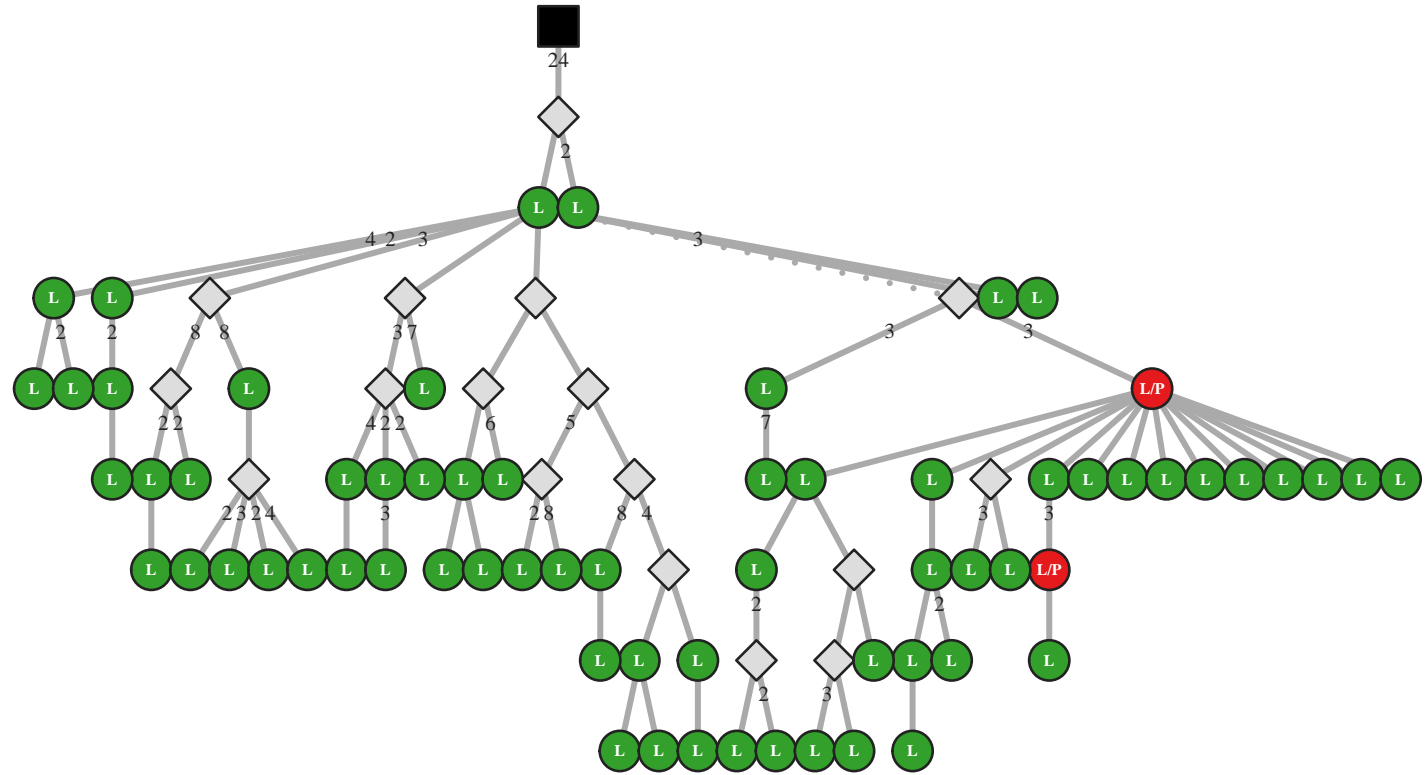
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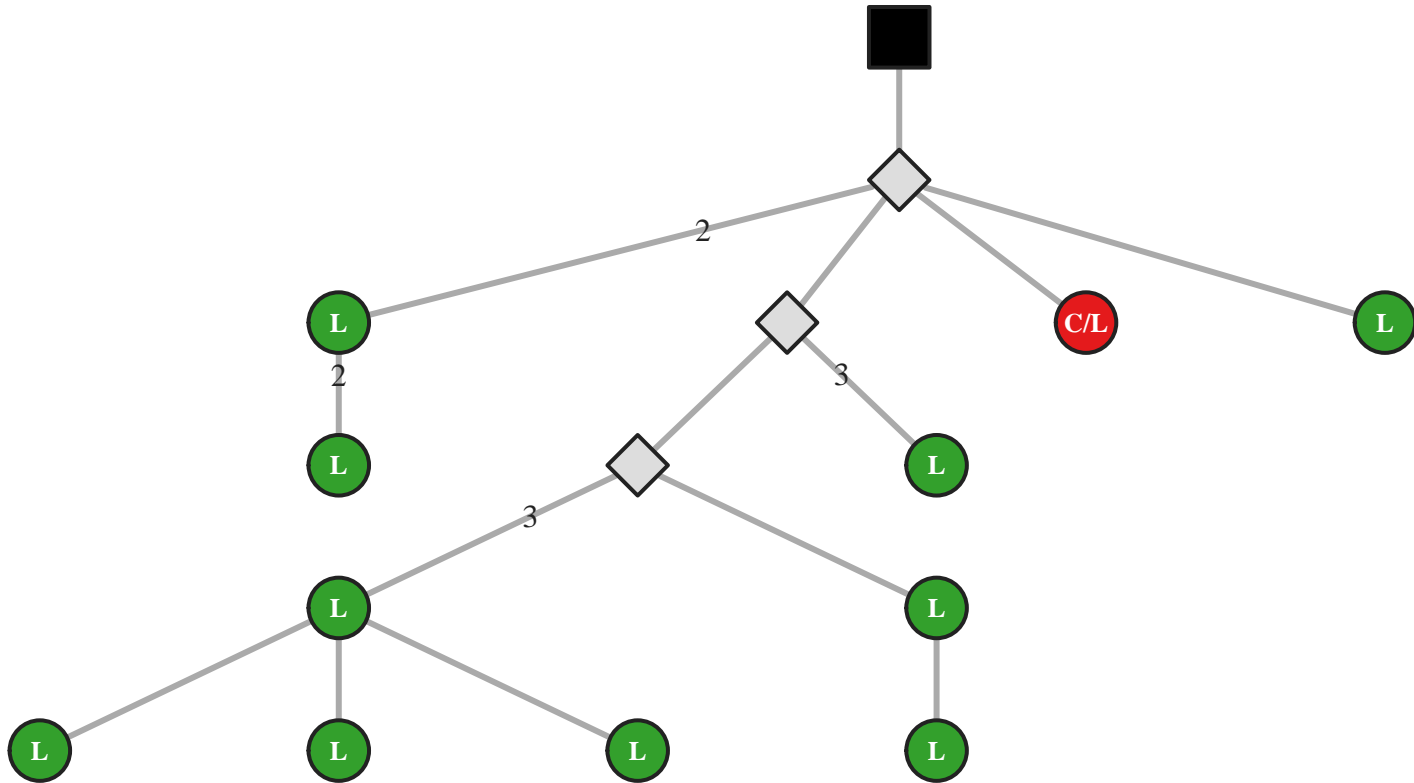
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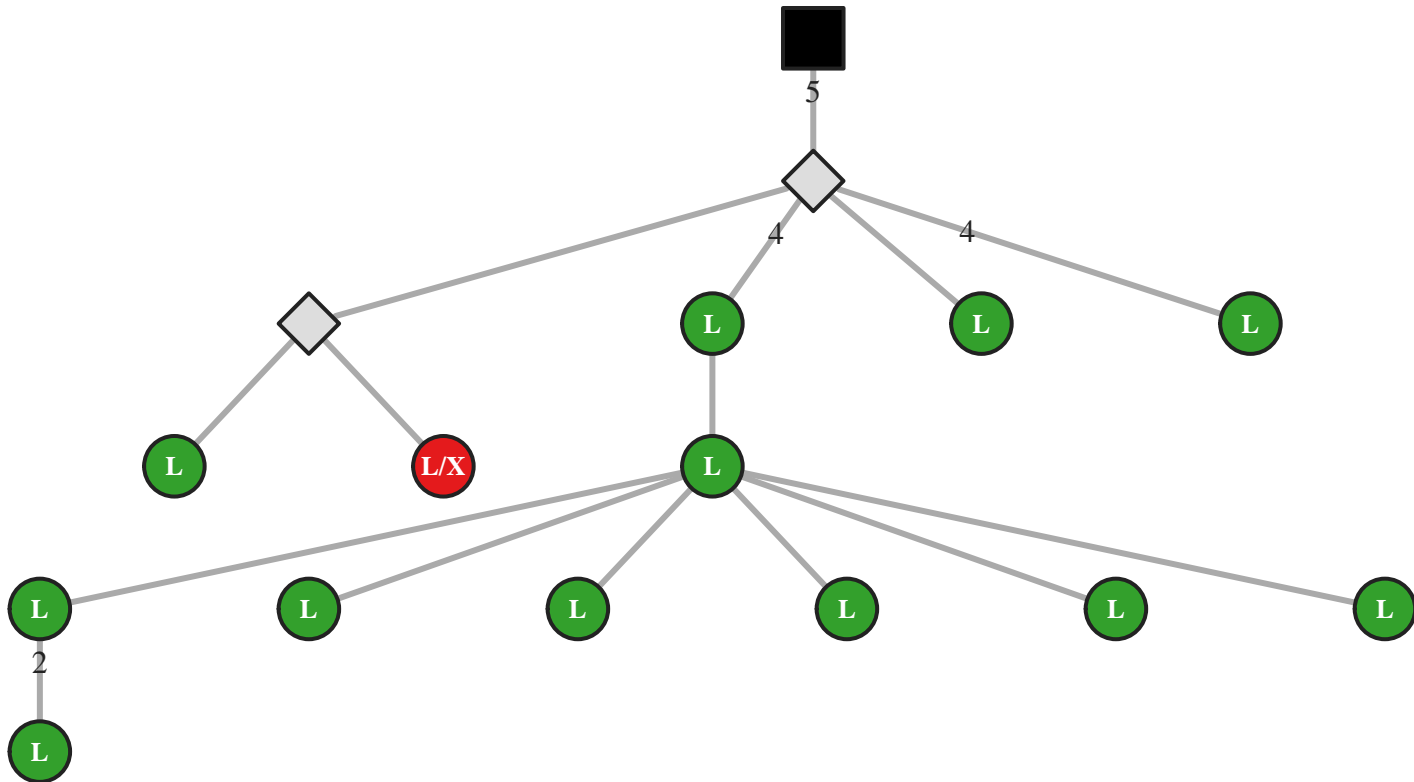
M5 IgG IGHV1-8/J4 45bp (33142)



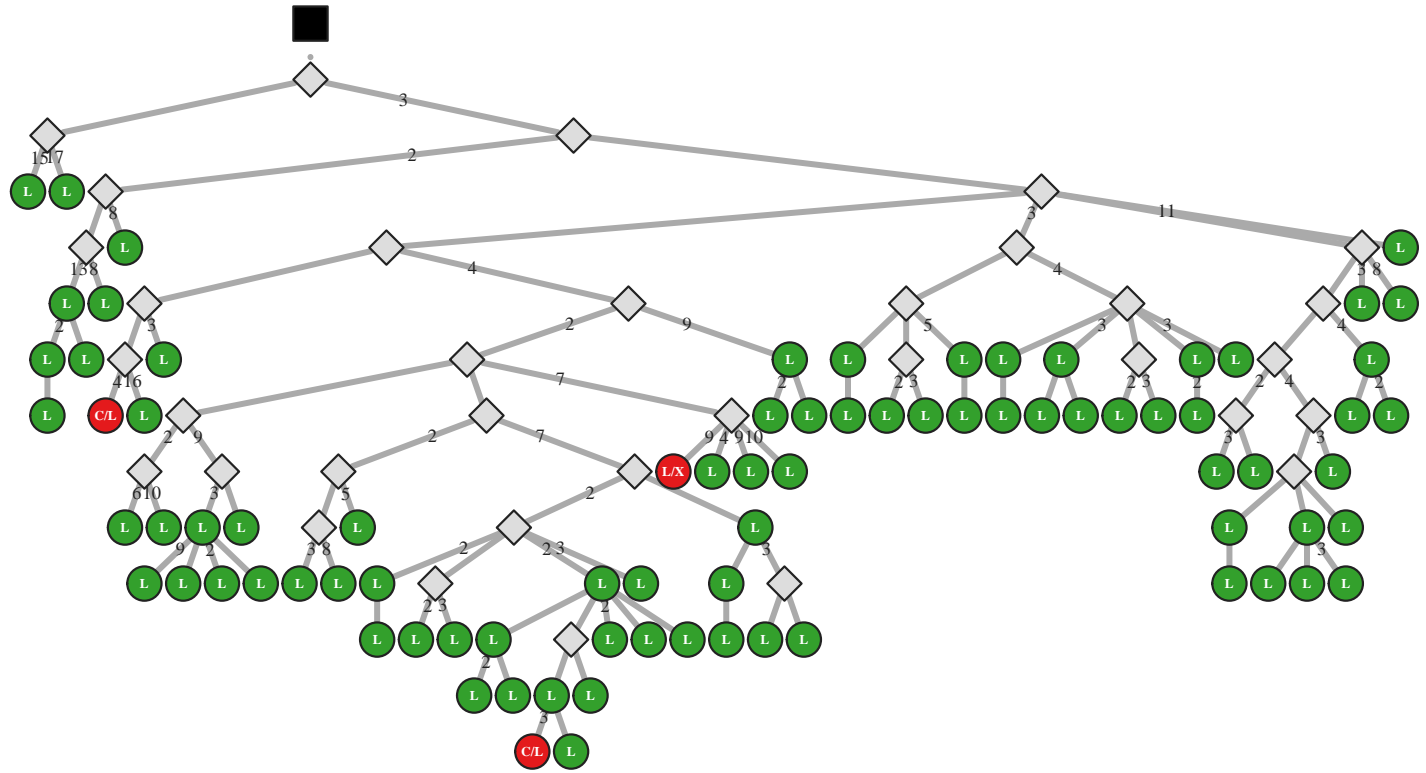
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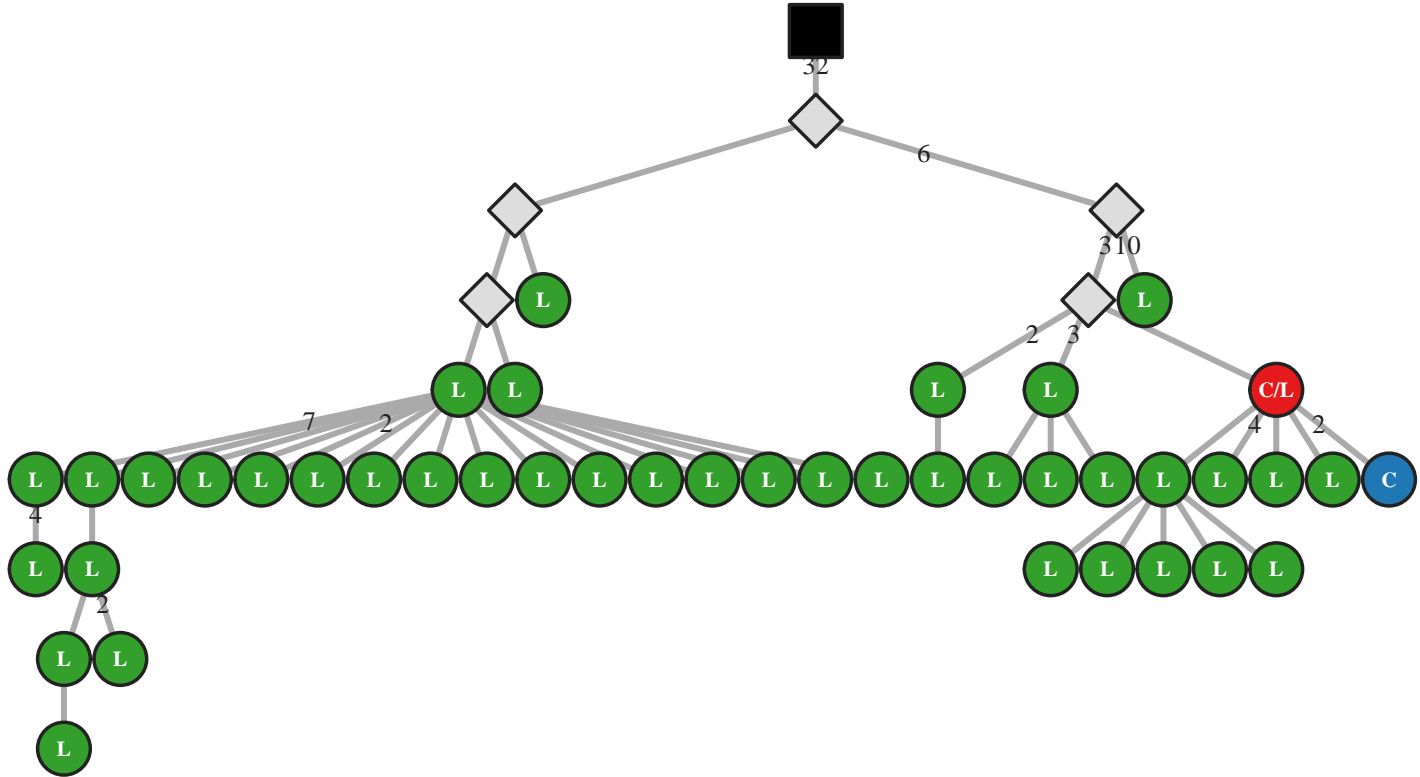
M5 IgG IGHV1-8/J4 48bp (24321)



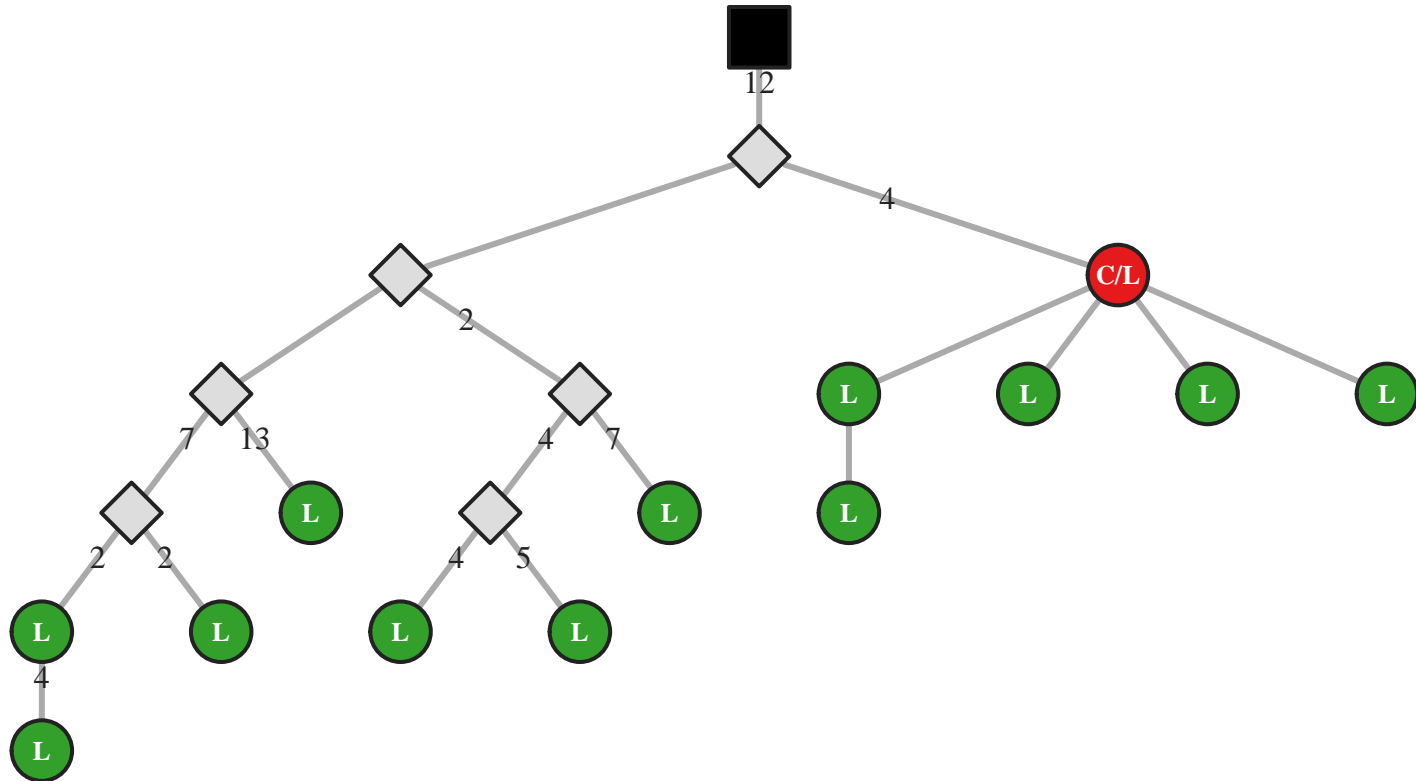
M5 IgG IGHV1-8/J4 48bp (24353)



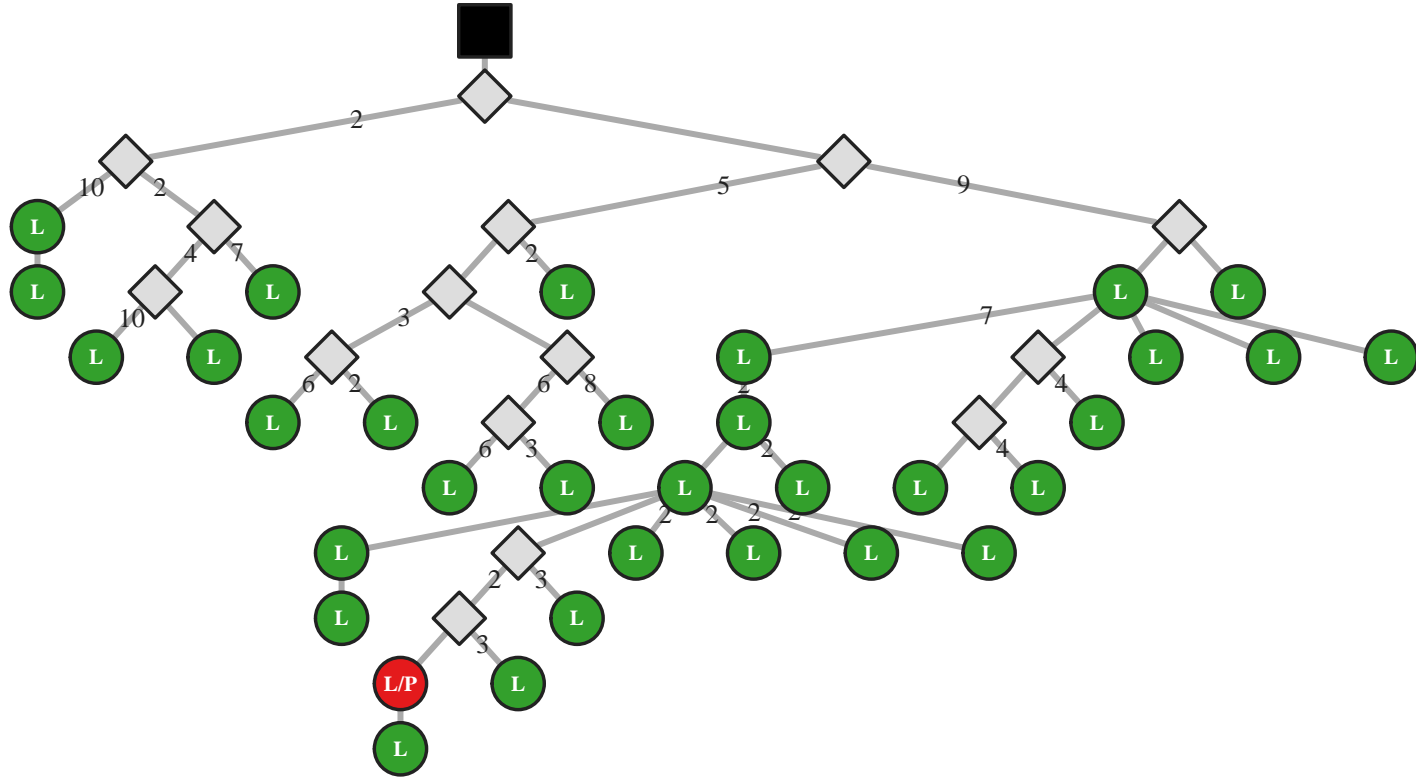
M5 IgG IGHV1-8/J4 48bp (24359)



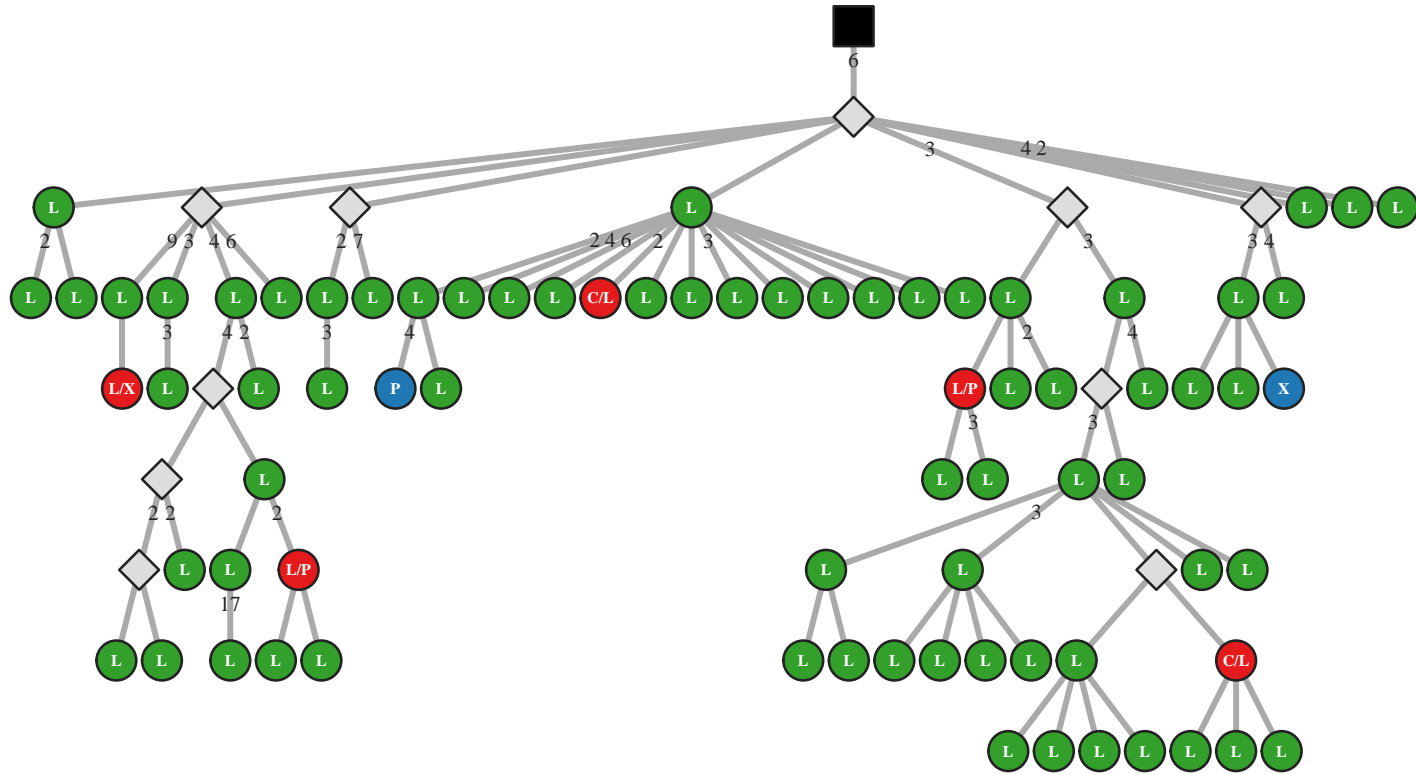
M5 IgG IGHV1-8/J4 51bp (33199)



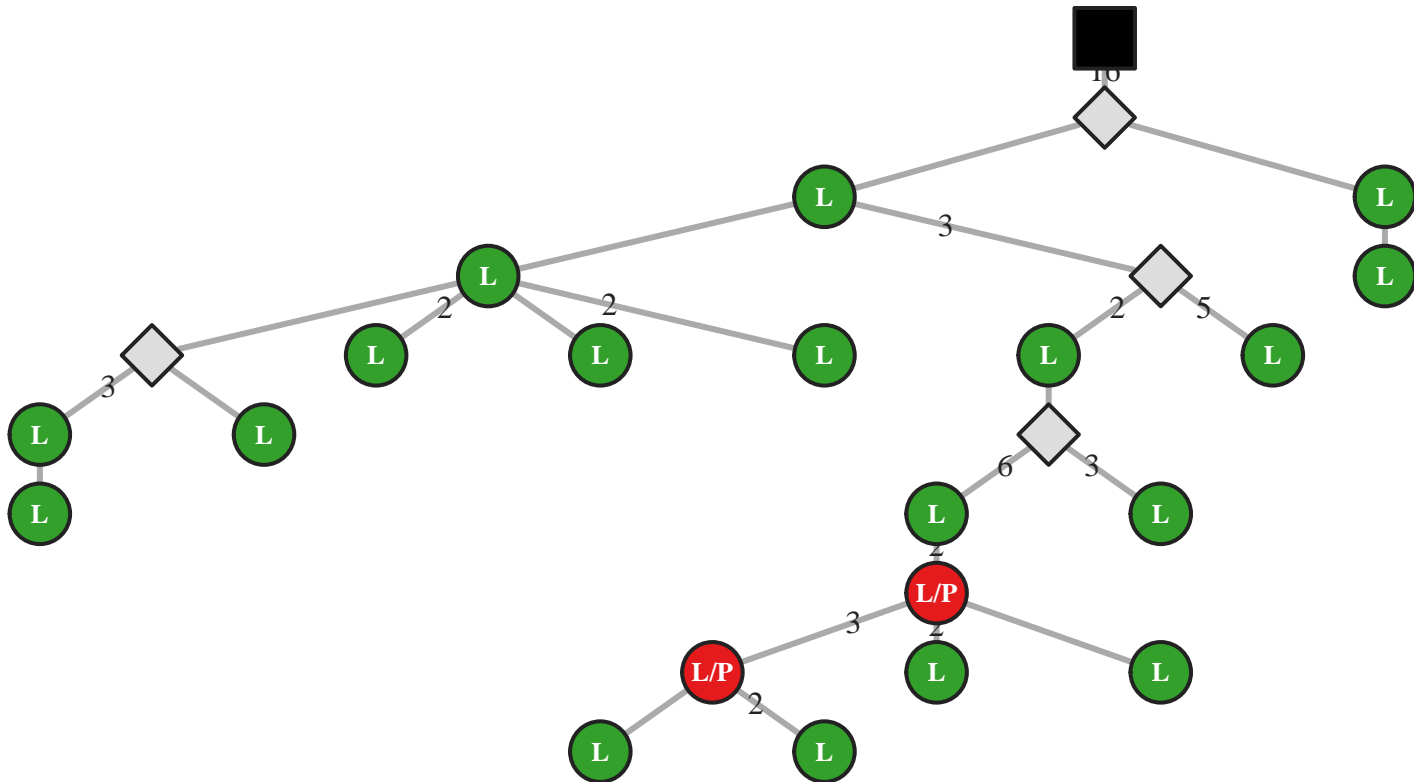
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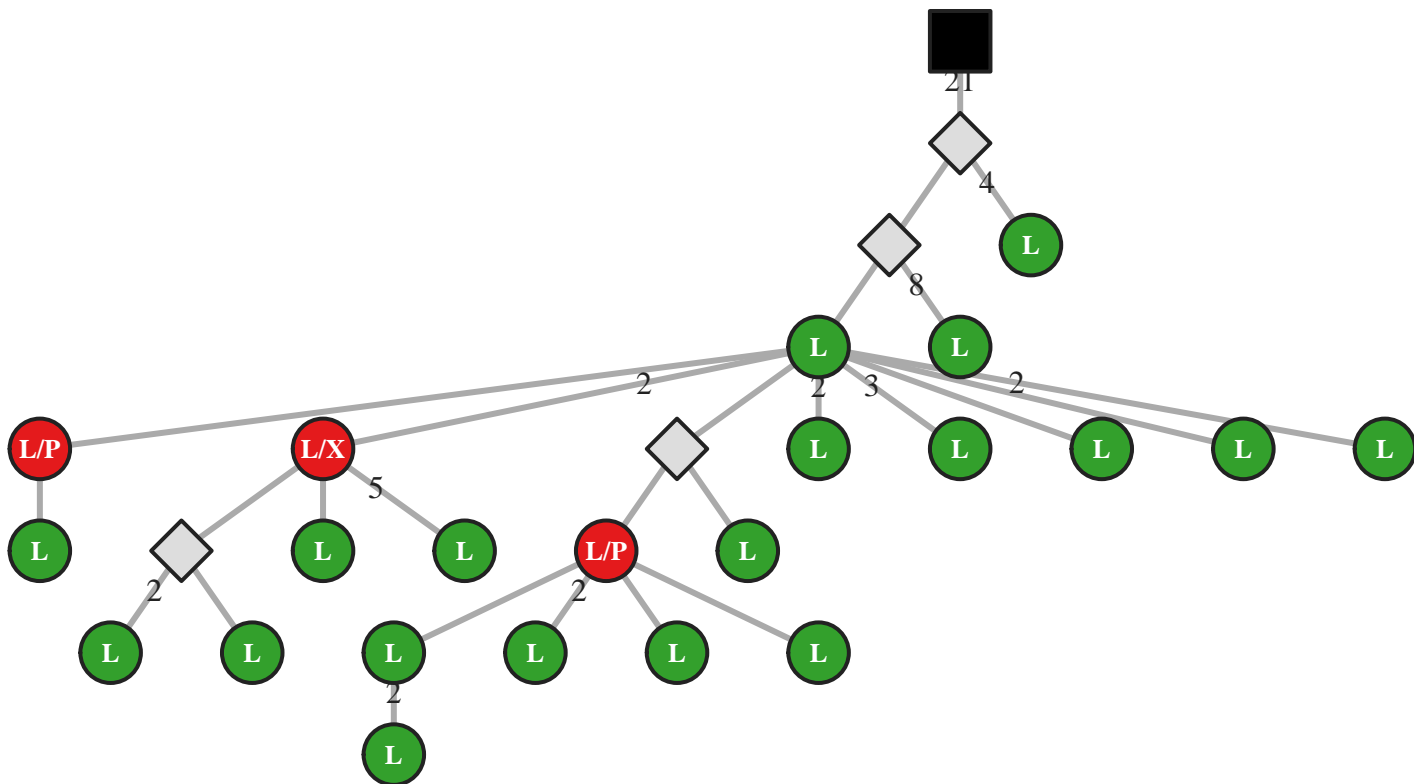
M5 IgG IGHV1-8/J4 63bp (33215)



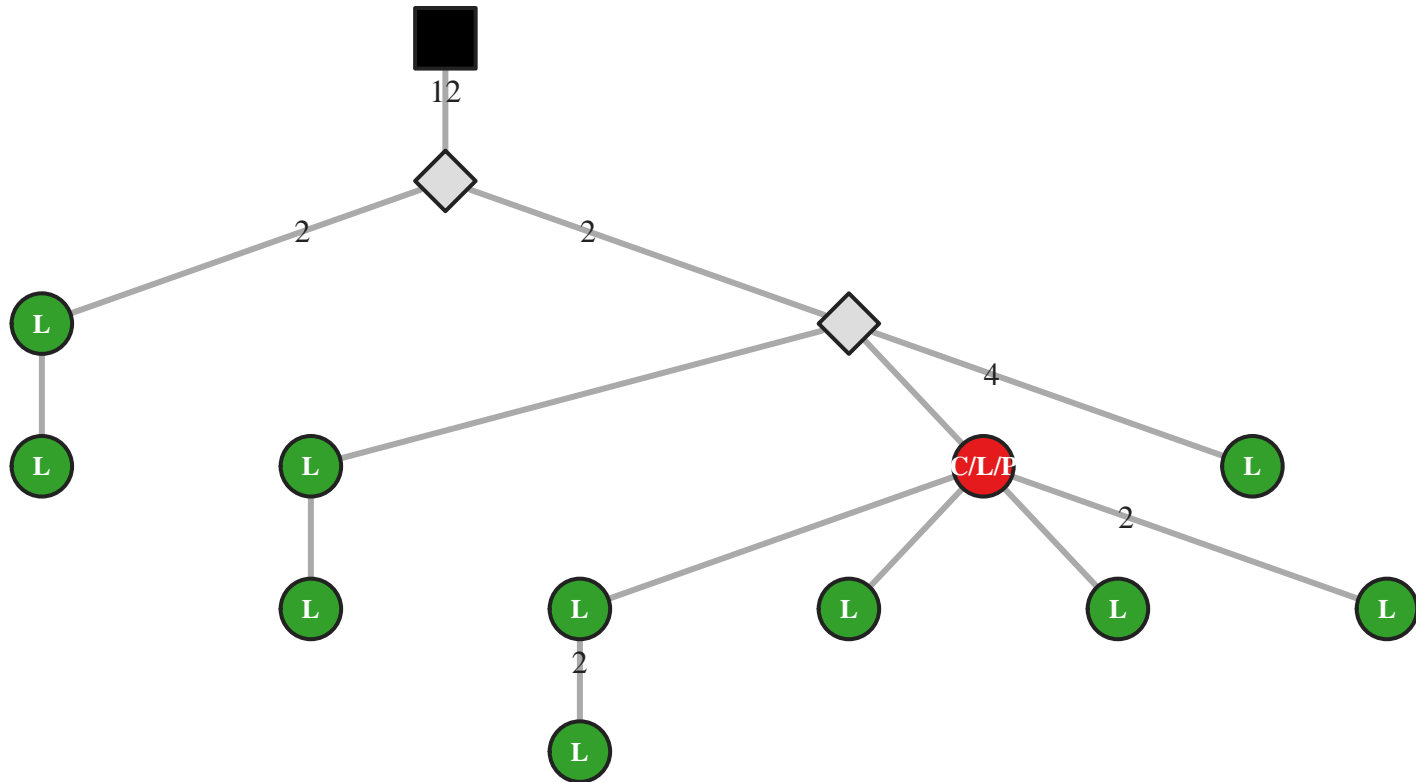
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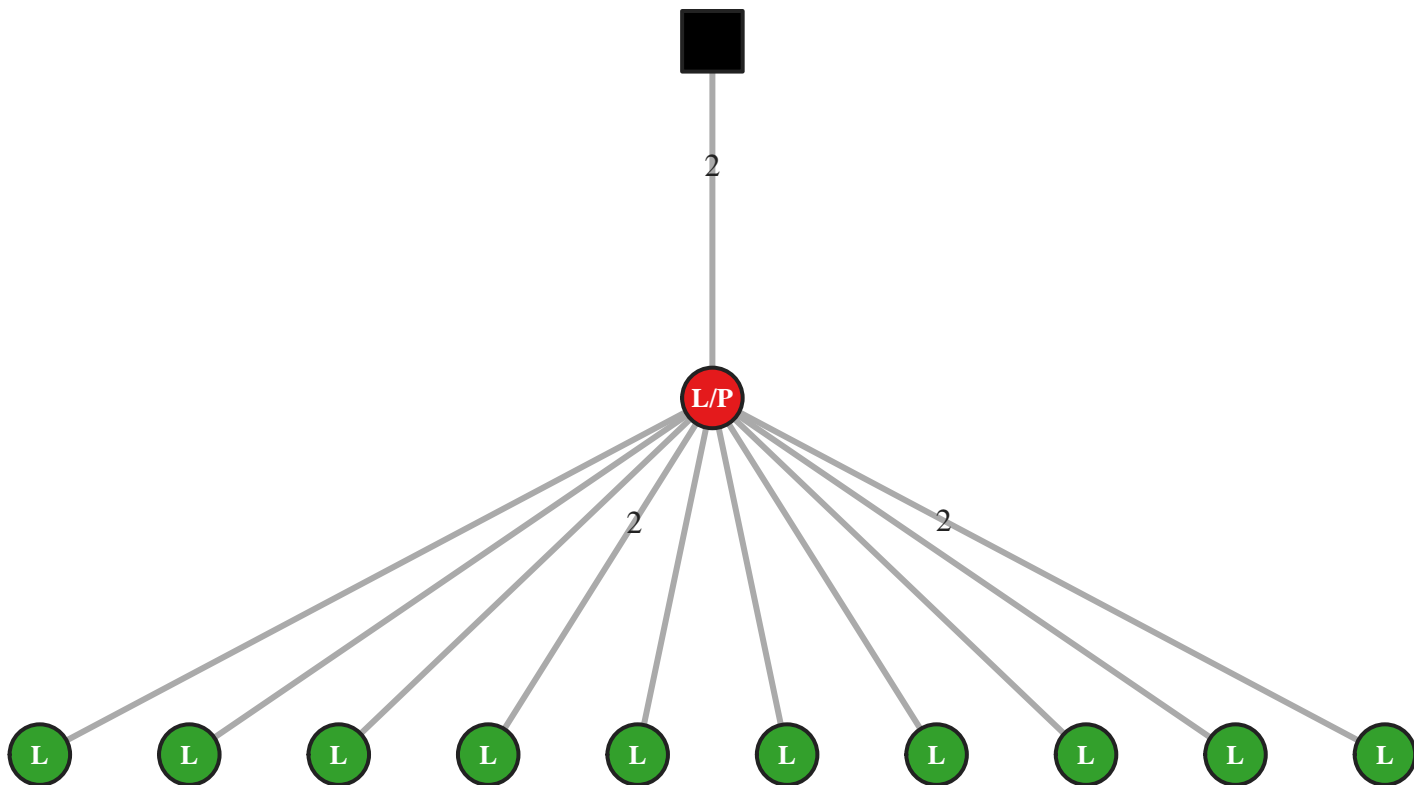
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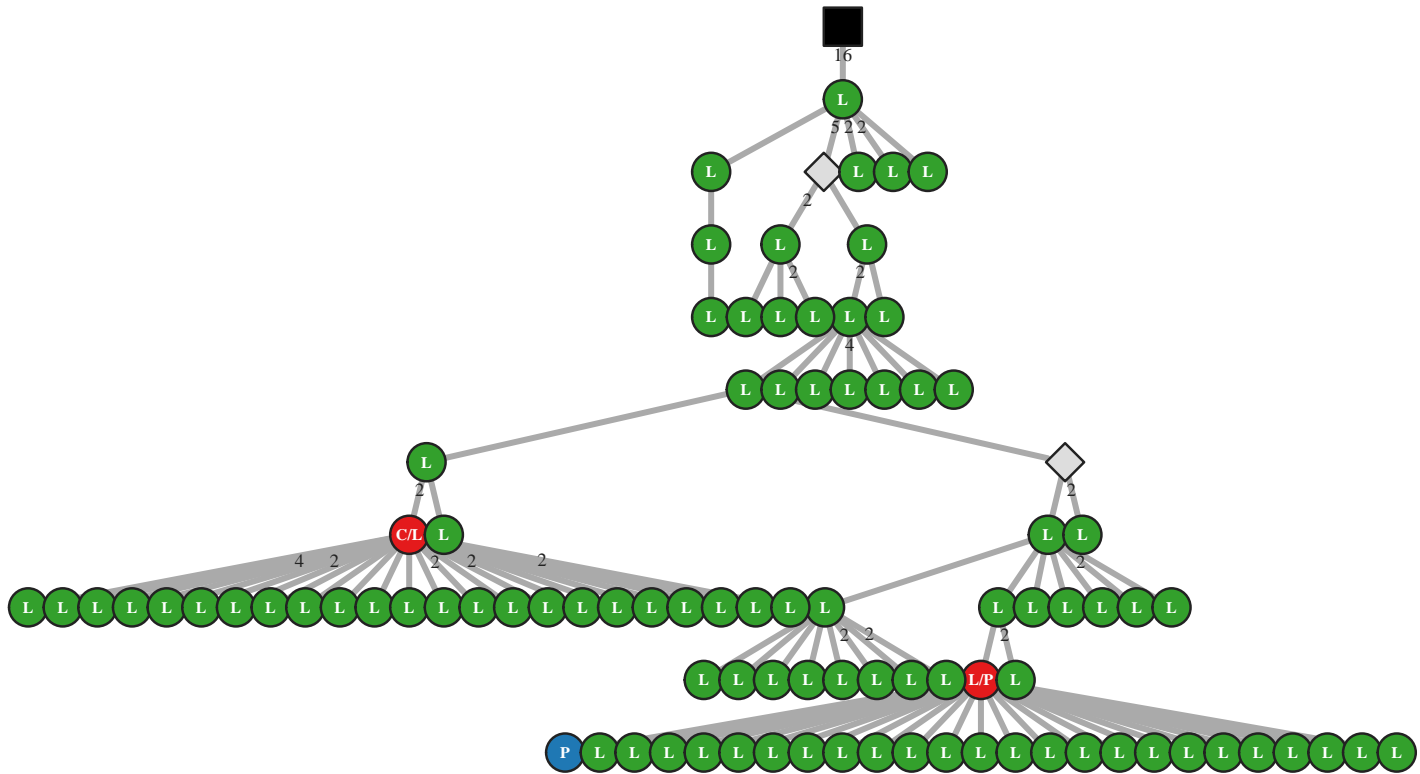
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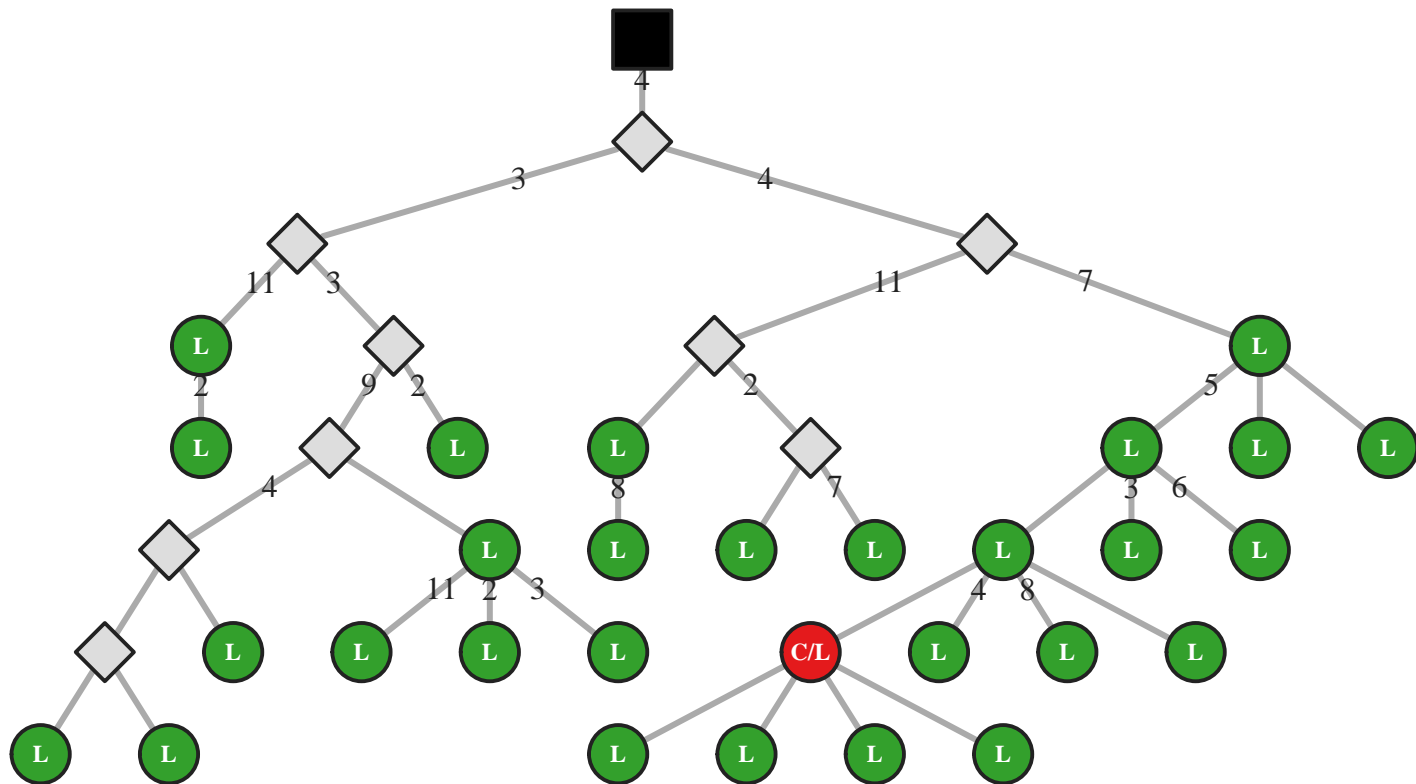
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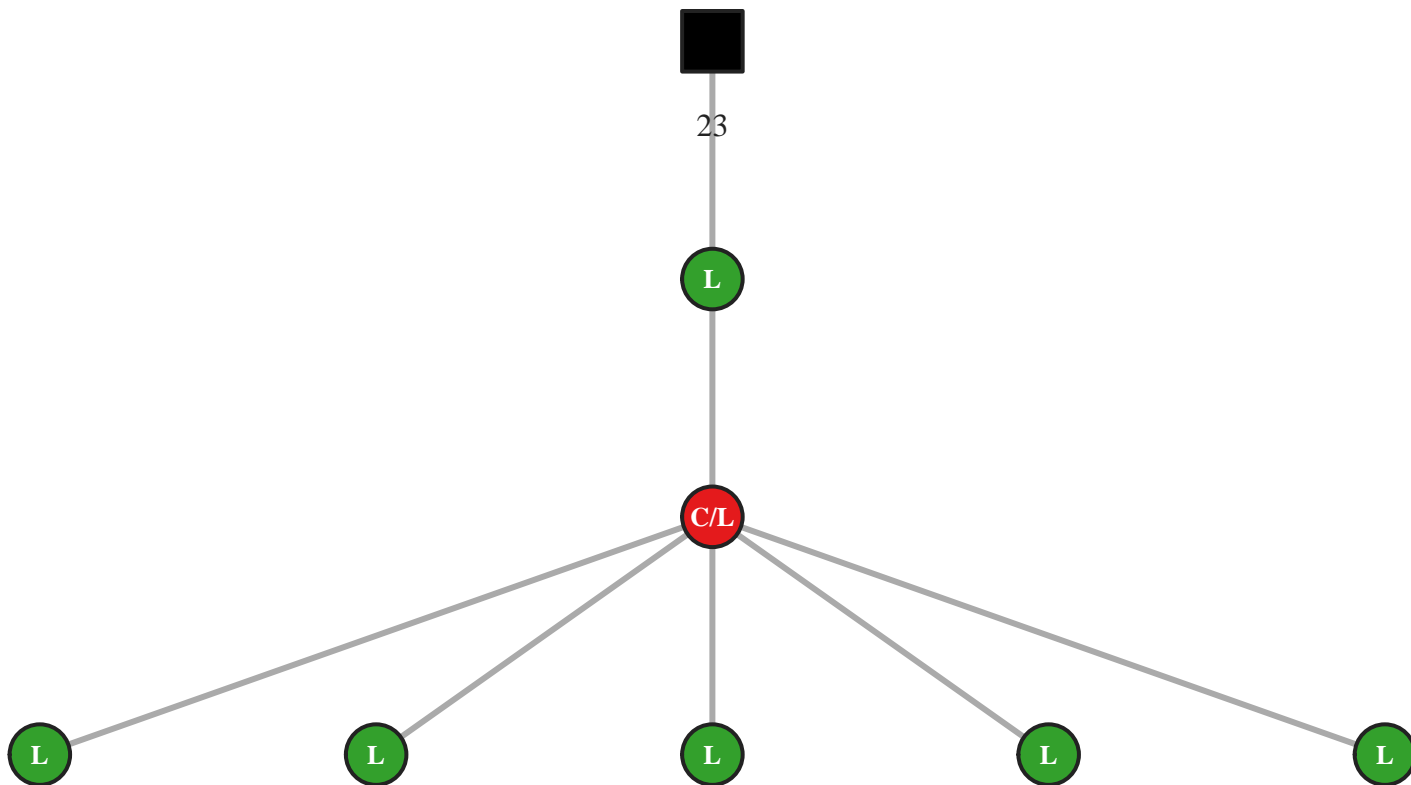
M5 IgG IGHV1-8/J6 45bp (24424)



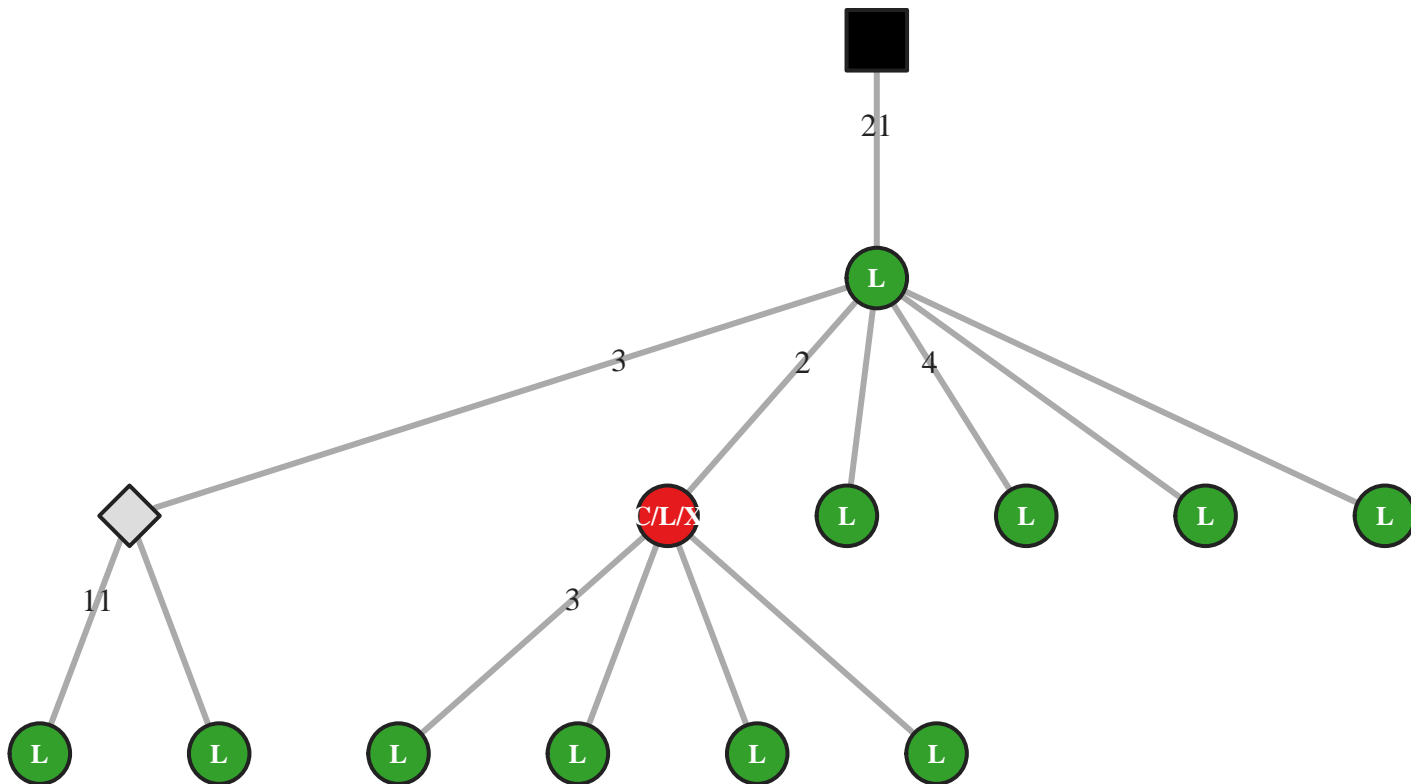
M5 IgG IGHV1-8/J6 45bp (24428)



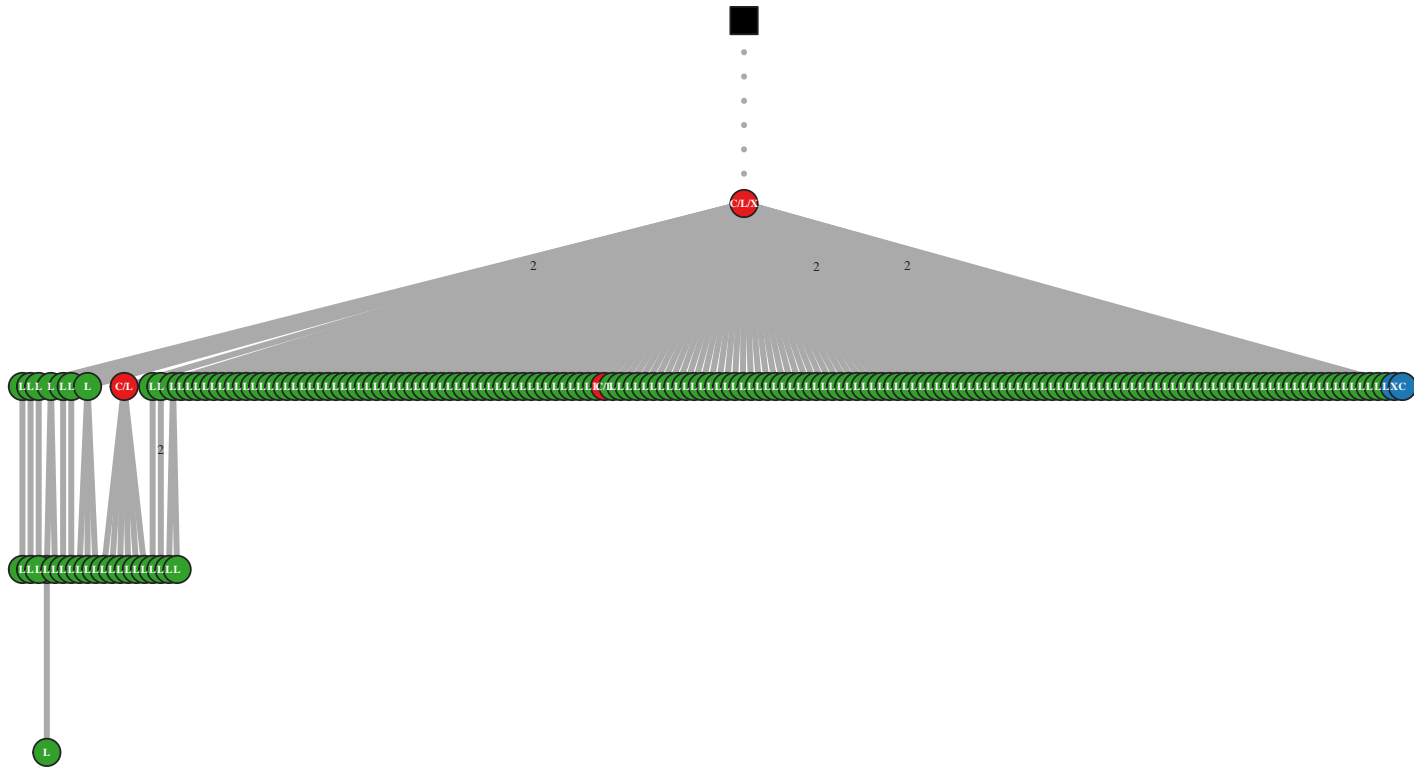
M5 IgG IGHV1-8/J6 69bp (50543)



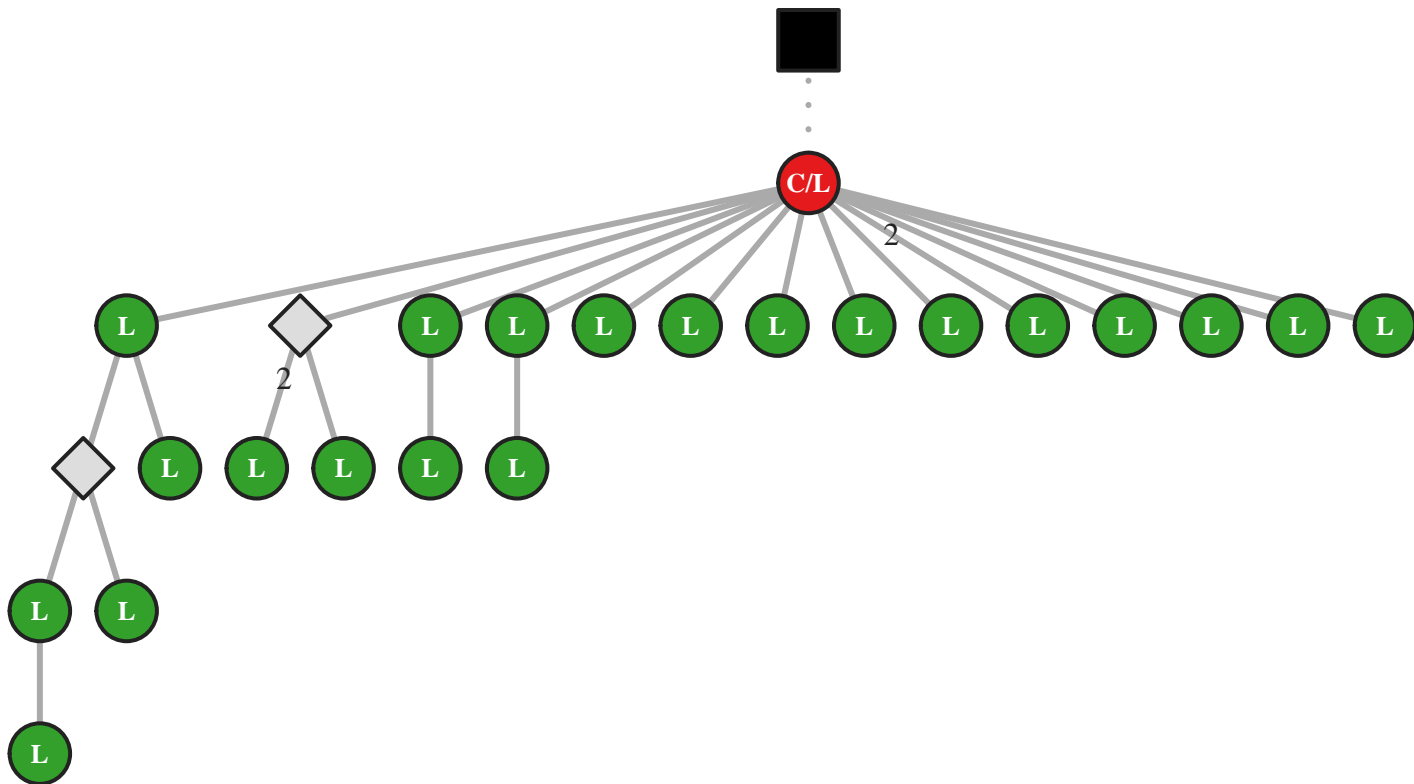
M5 IgG IGHV1-8/J6 69bp (50552)



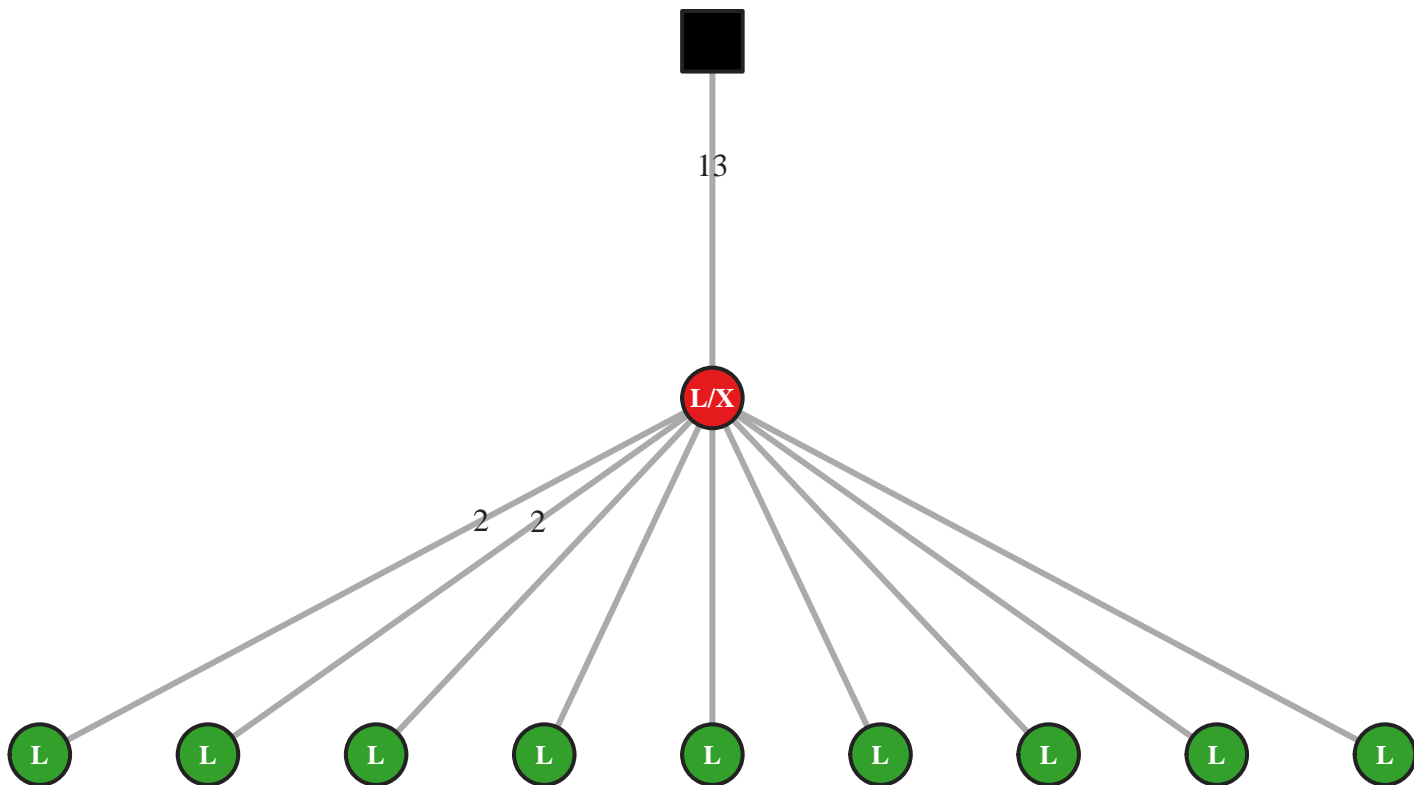
M5 IgG IGHV1-8/J6 72bp (15106)



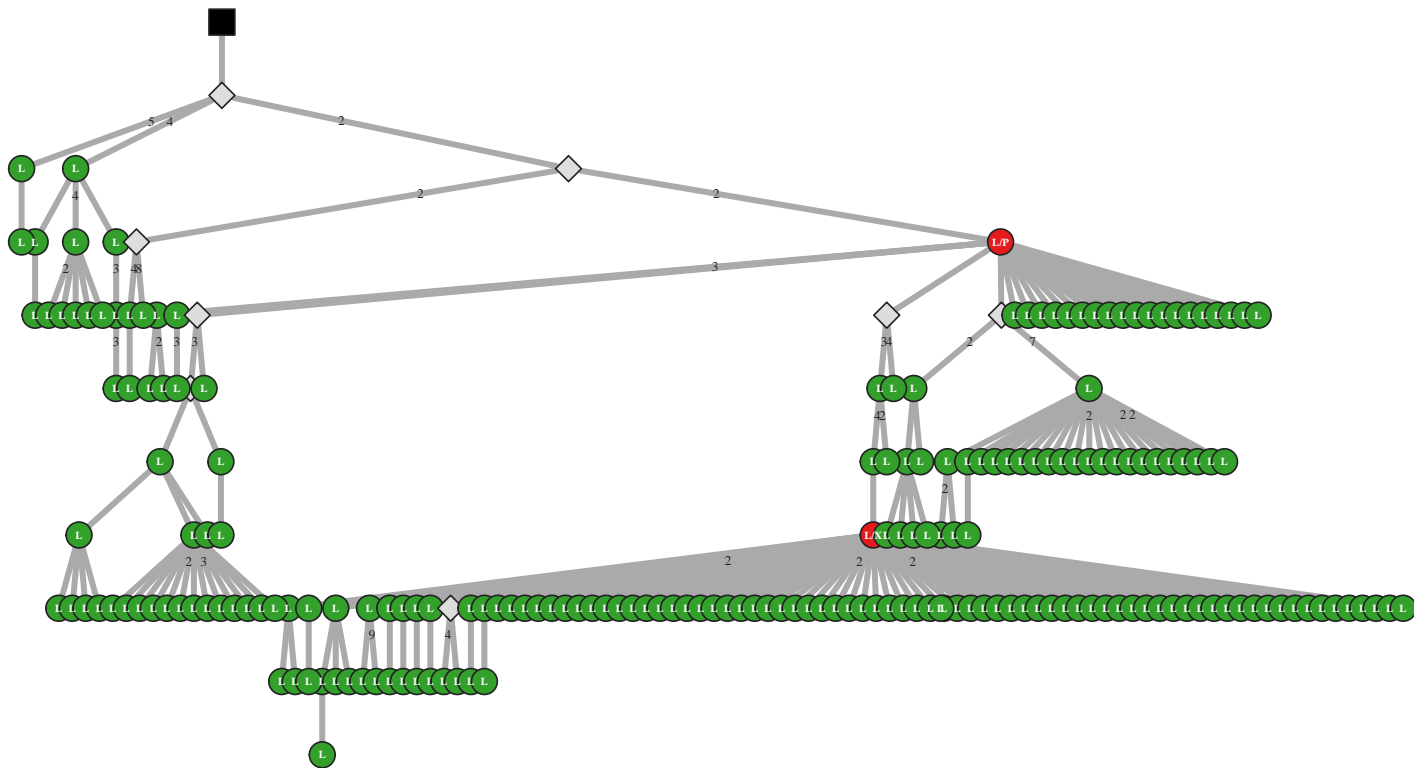
M5 IgG IGHV2-26/J2 57bp (33291)



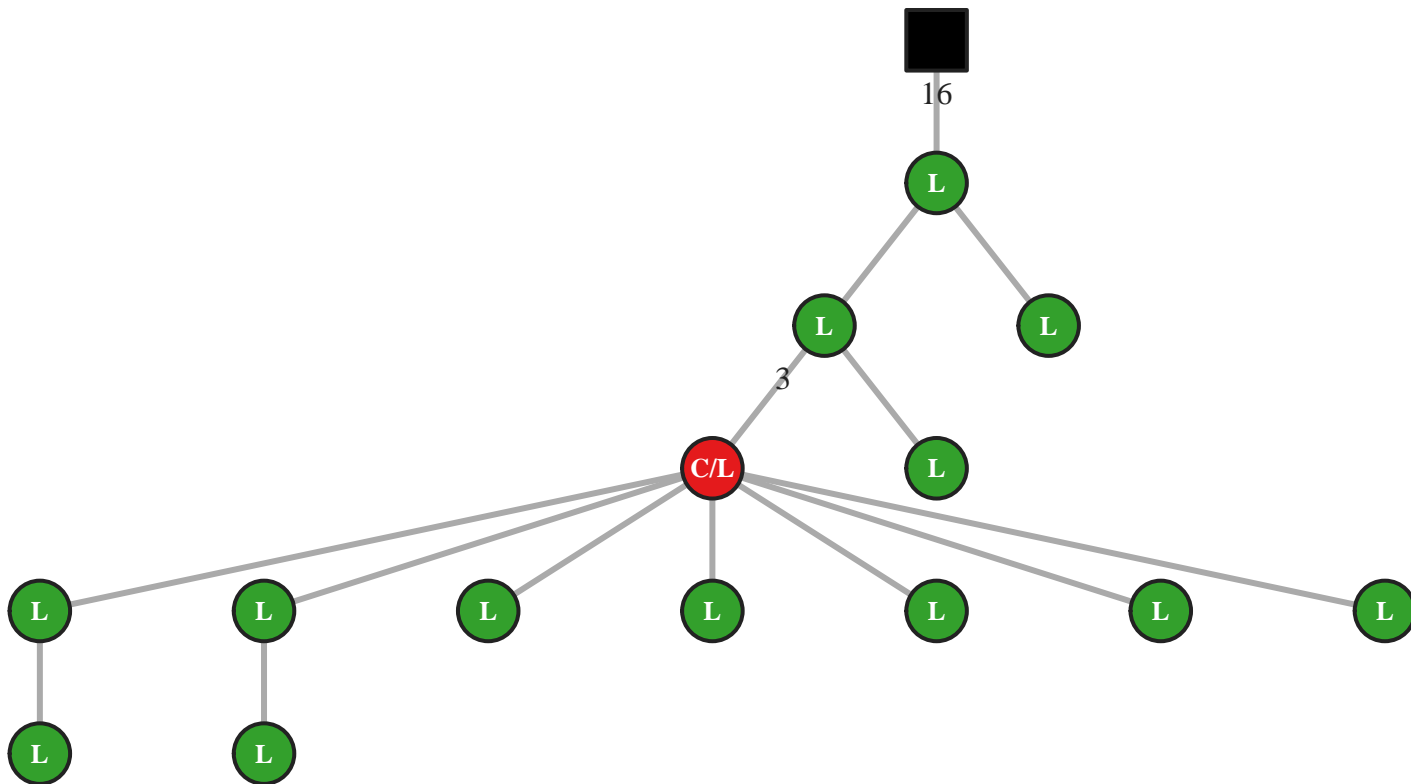
M5 IgG IGHV2-26/J3 42bp (50584)



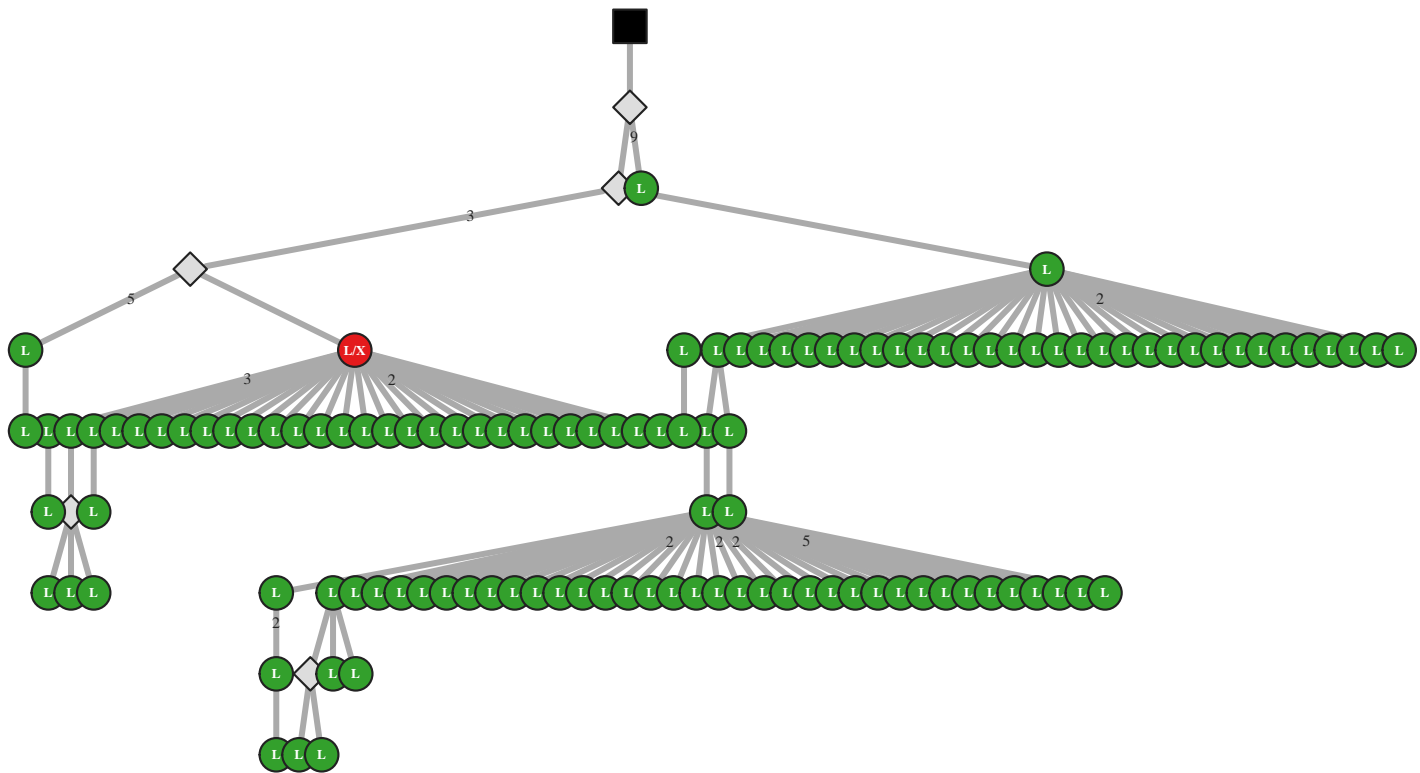
M5 IgG IGHV2-26/J3 48bp (15147)



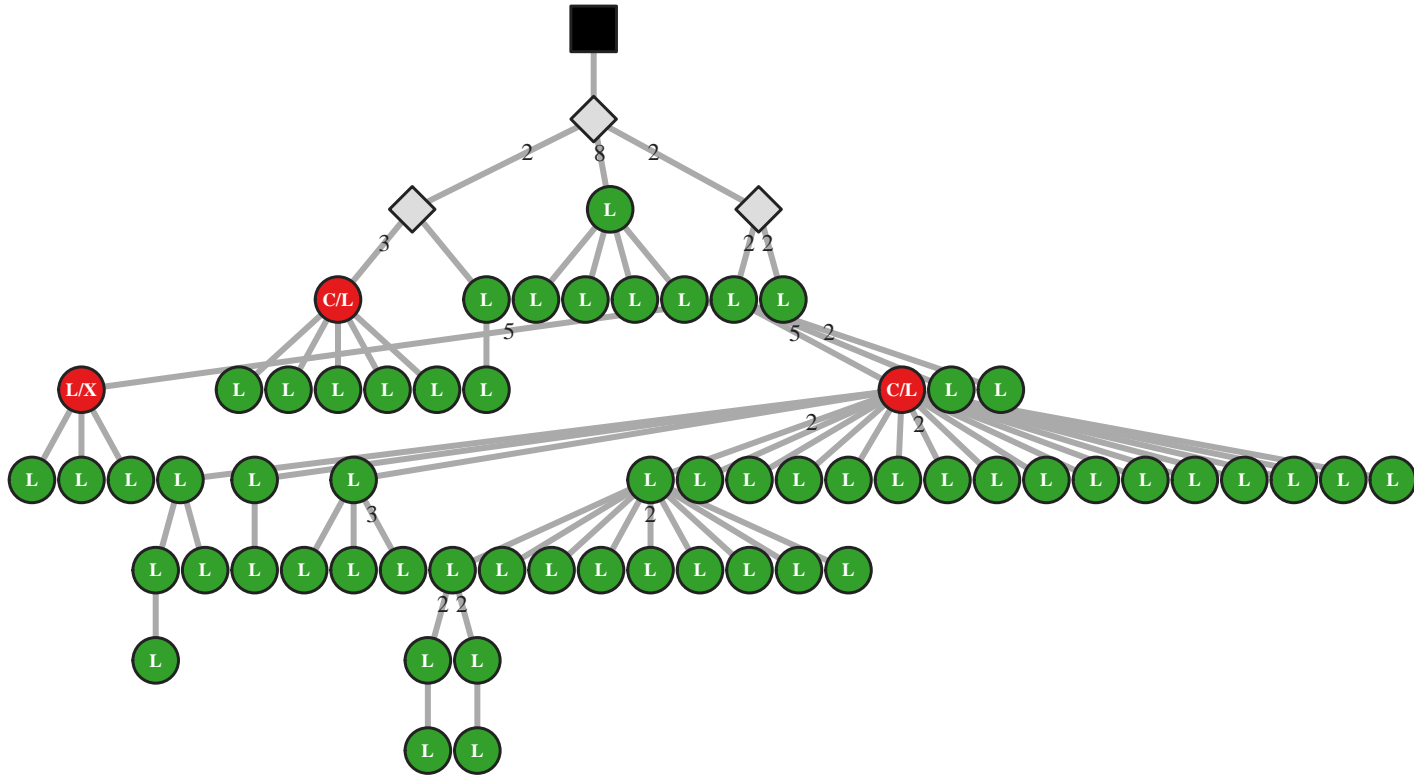
M5 IgG IGHV2-26/J3 51bp (42504)



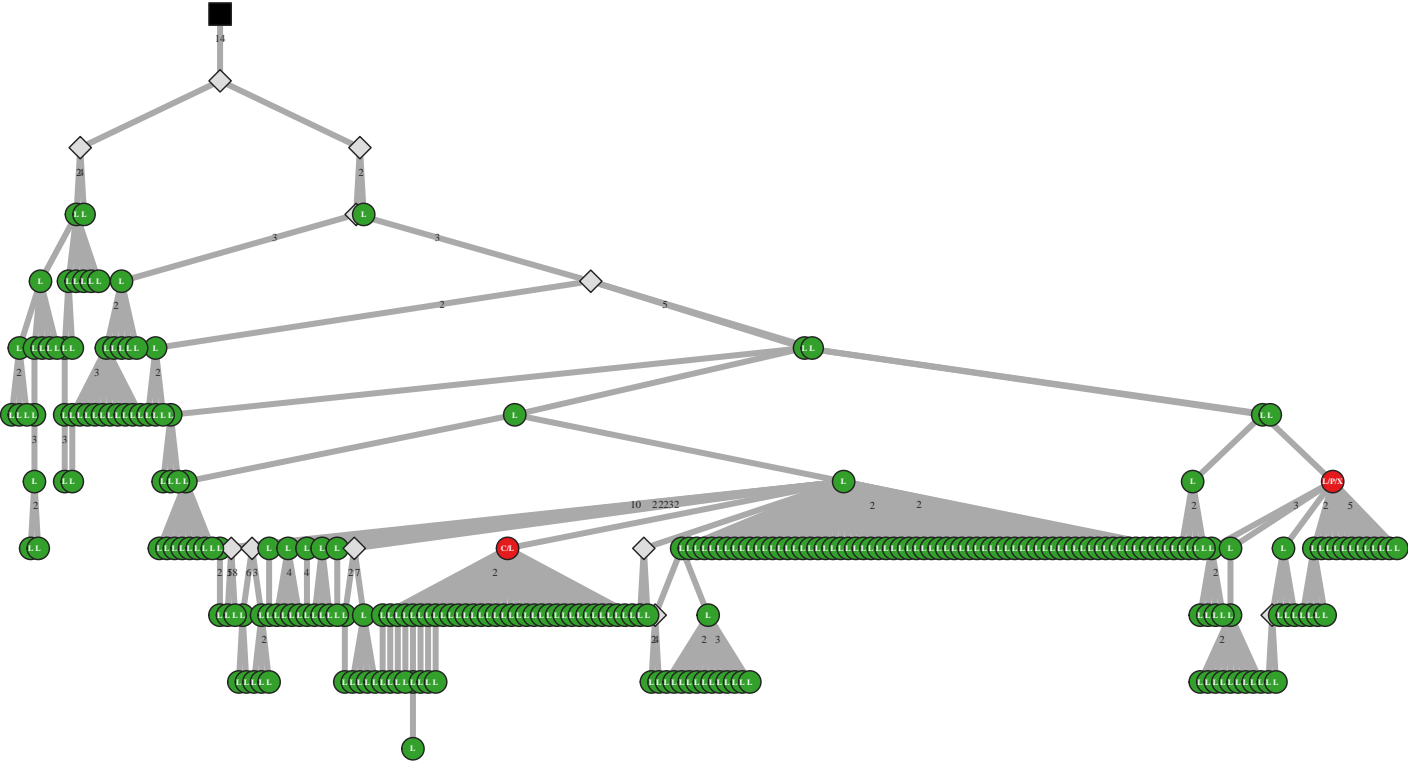
M5 IgG IGHV2-26/J4 45bp (15172)



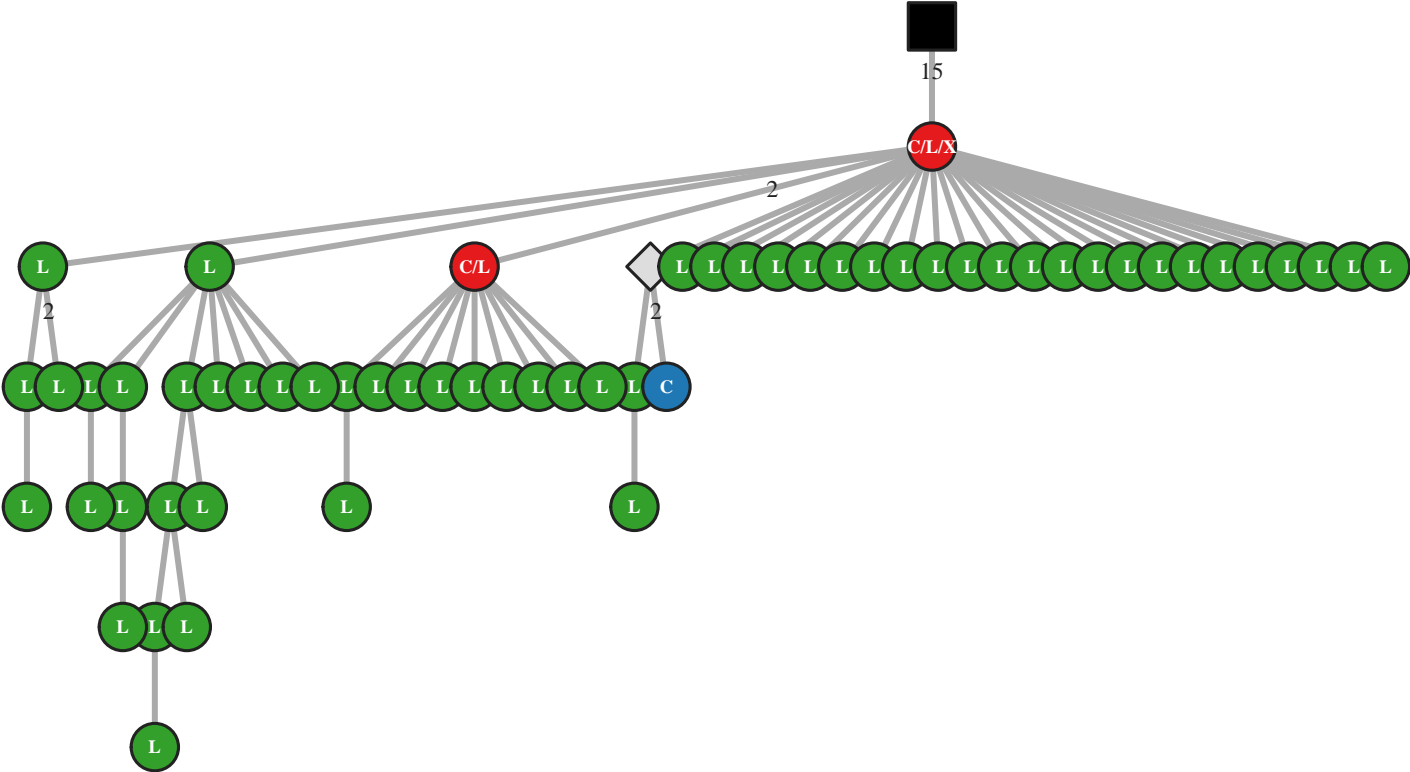
M5 IgG IGHV2-26/J4 51bp (5519)



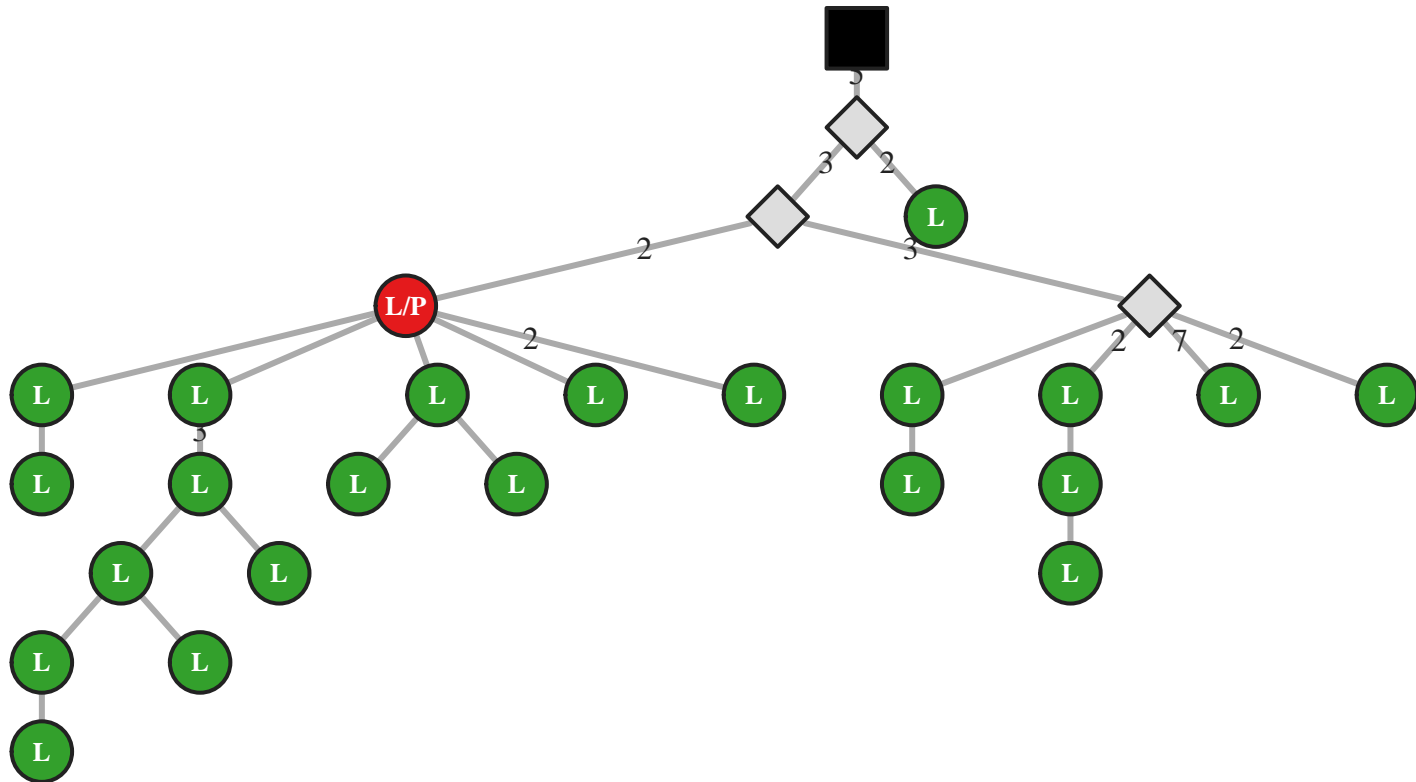
M5 IgG IGHV2-26/J4 51bp (5521)



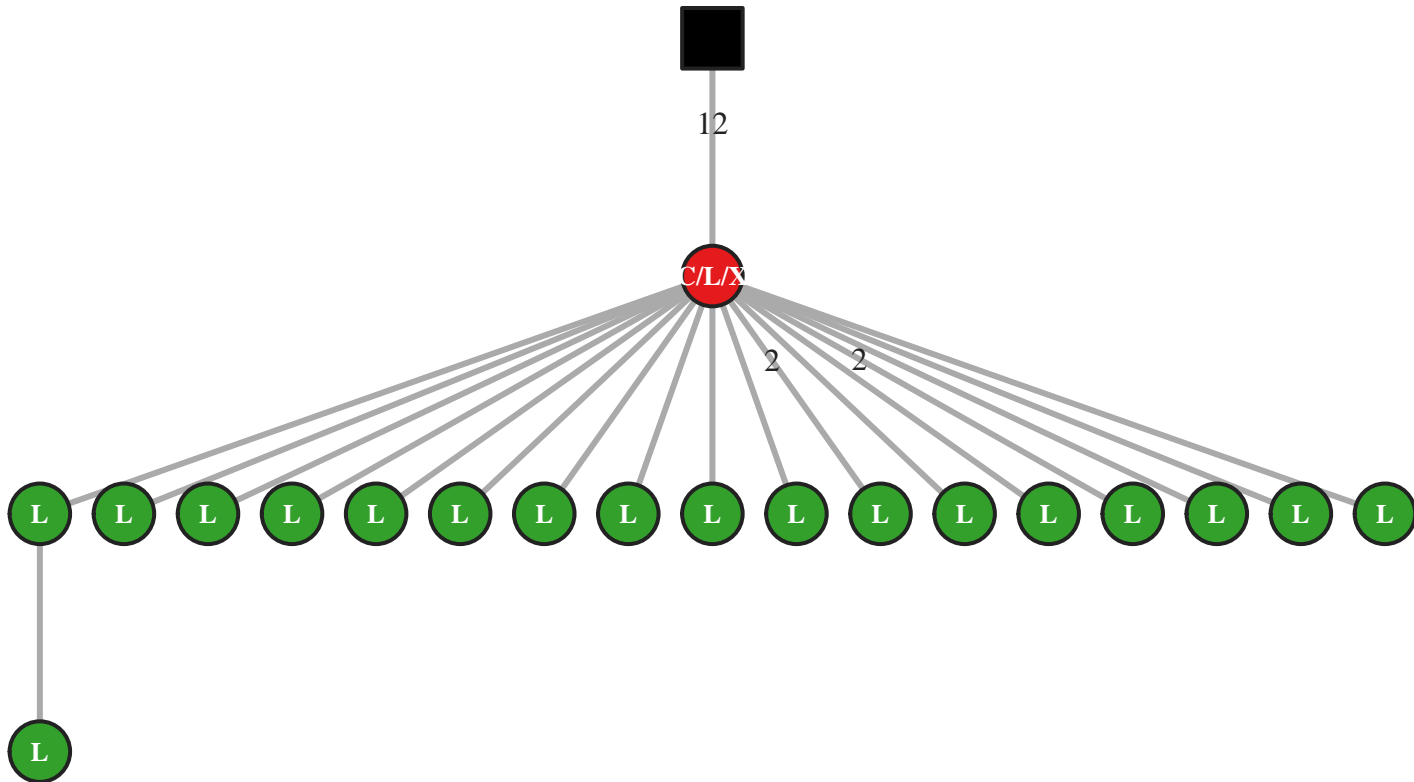
M5 IgG IGHV2-26/J4 54bp (15182)



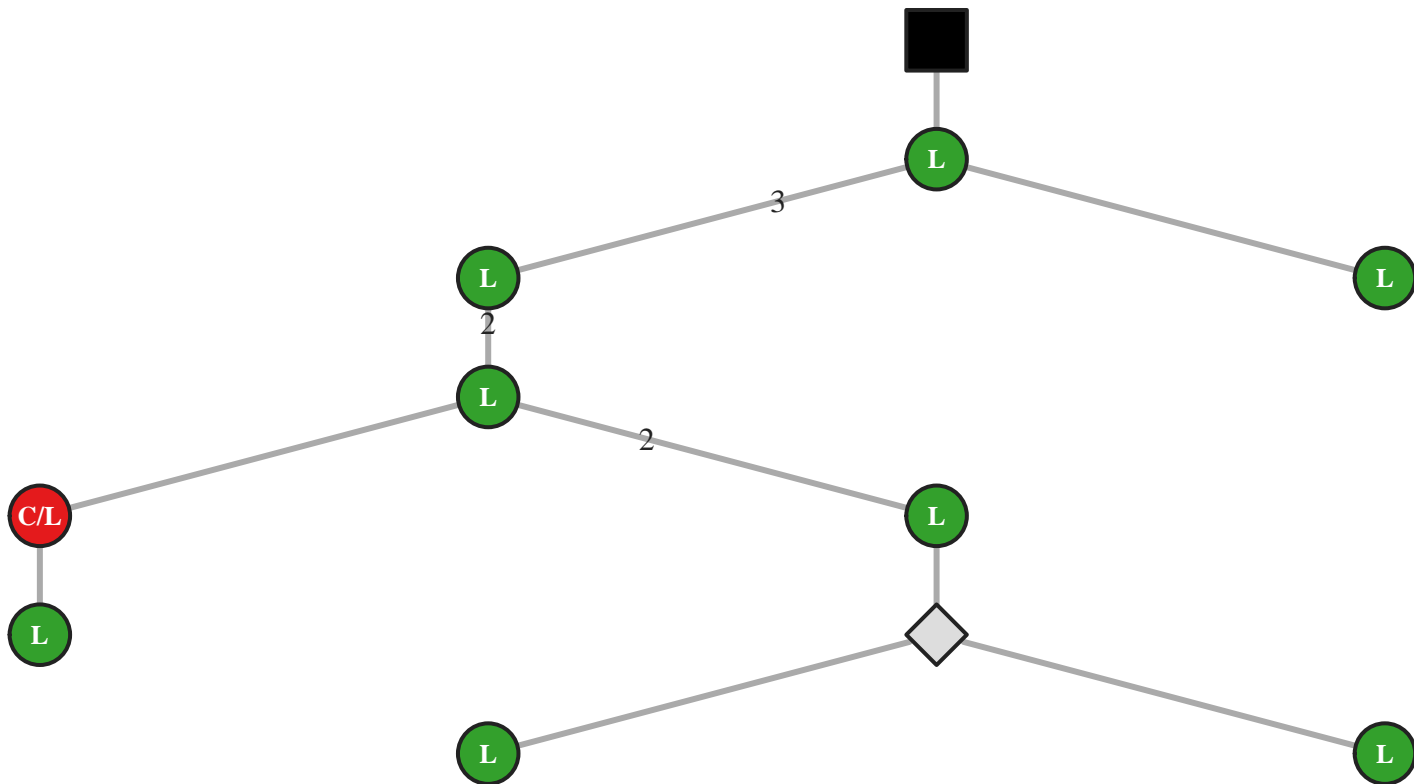
M5 IgG IGHV2-26/J4 54bp (15195)



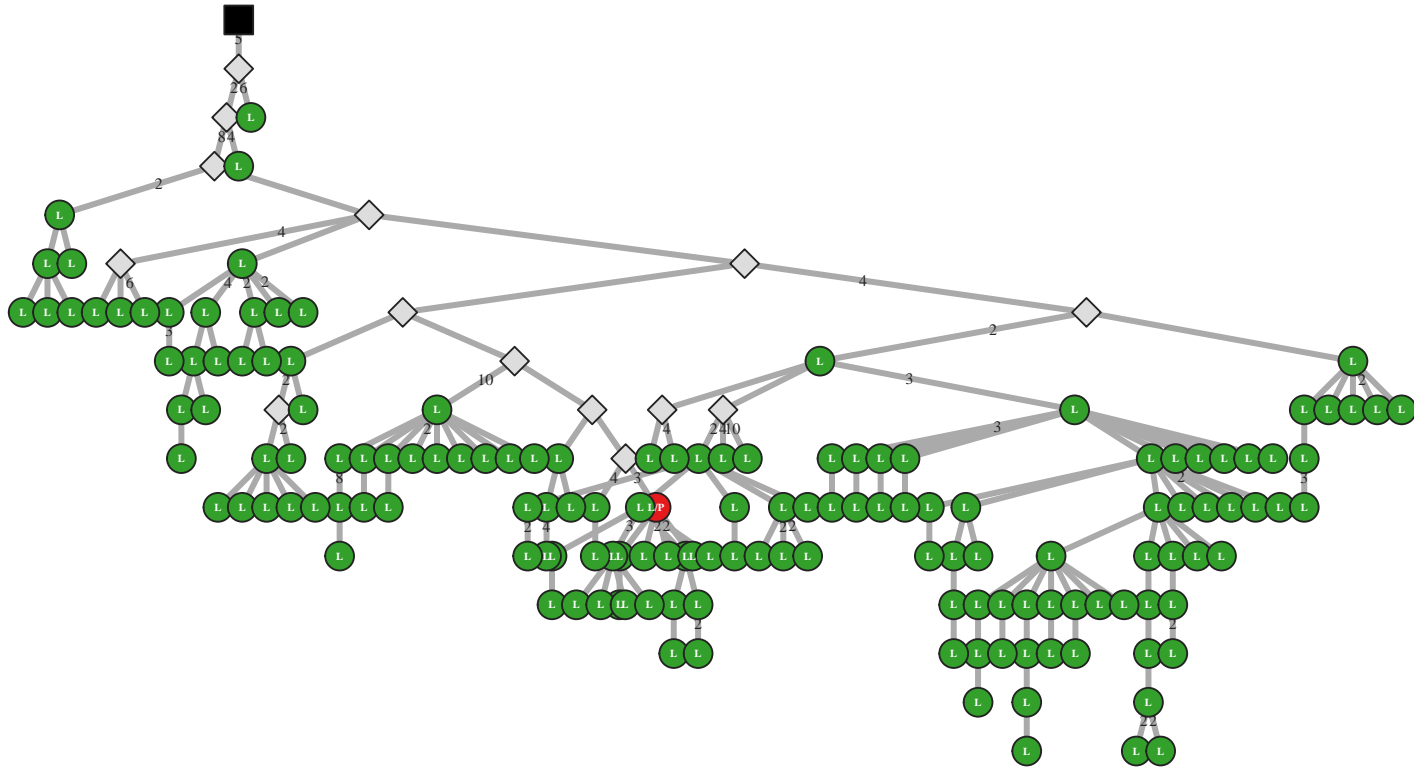
M5 IgG IGHV2-26/J5 39bp (5534)



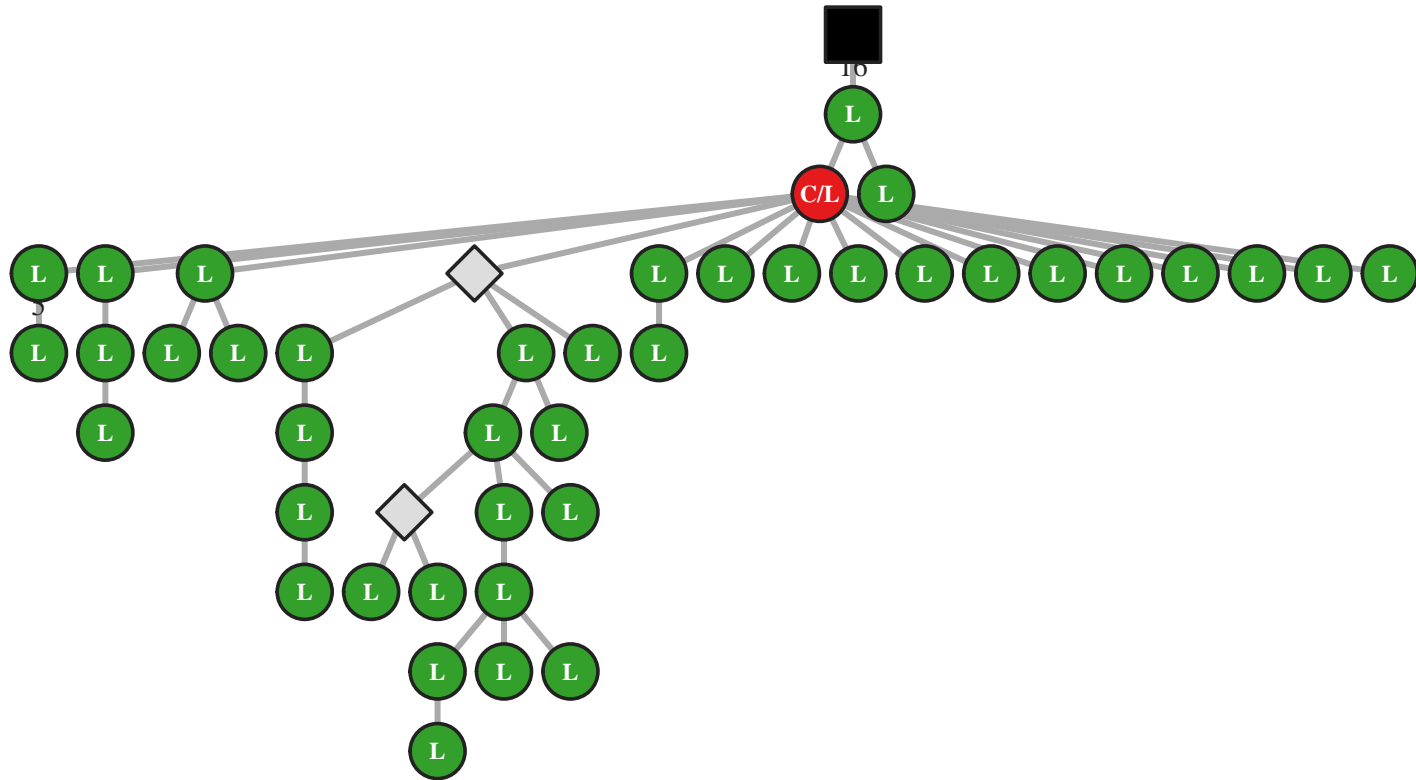
M5 IgG IGHV2-26/J5 57bp (42522)



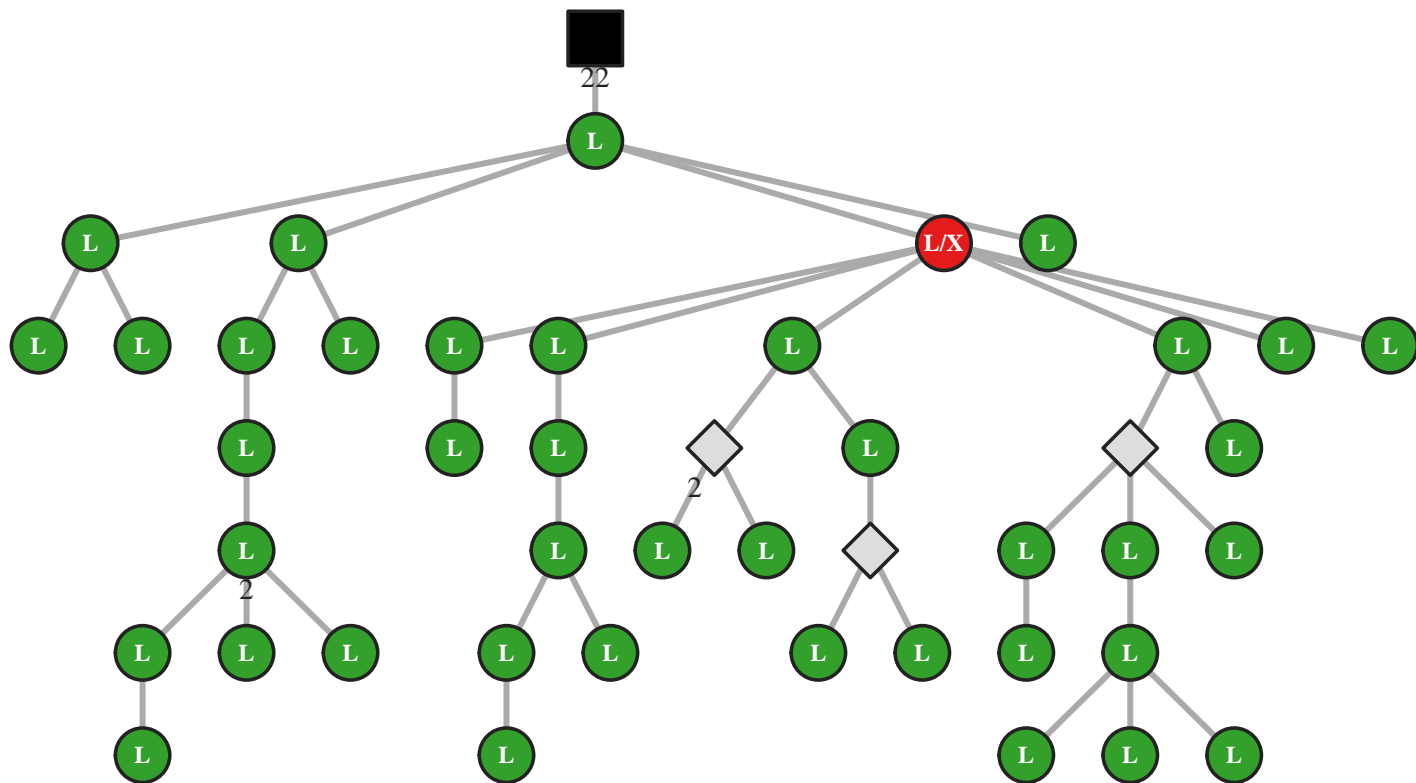
M5 IgG IGHV2-26/J5 66bp (5544)



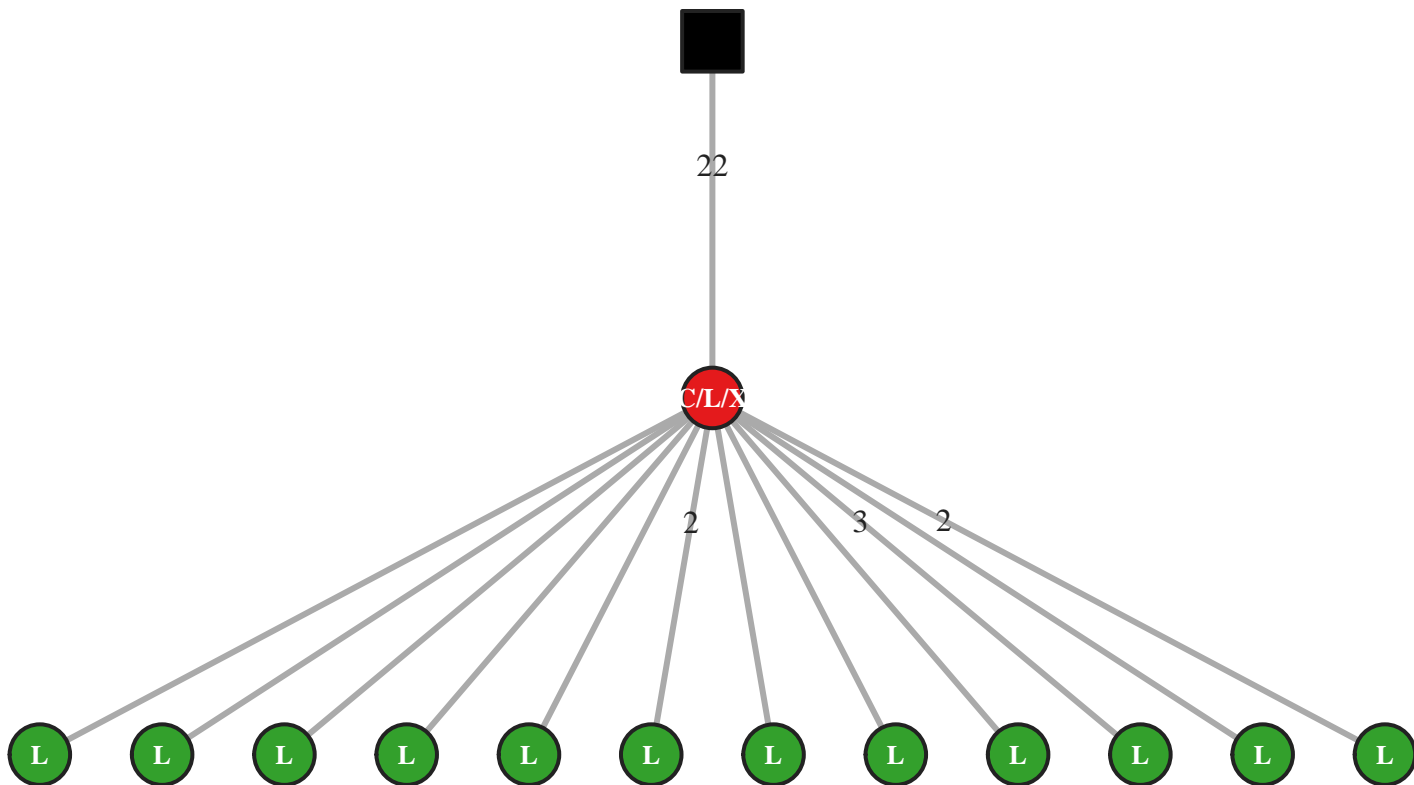
M5 IgA IGHV2-26/J5 72bp (30306)



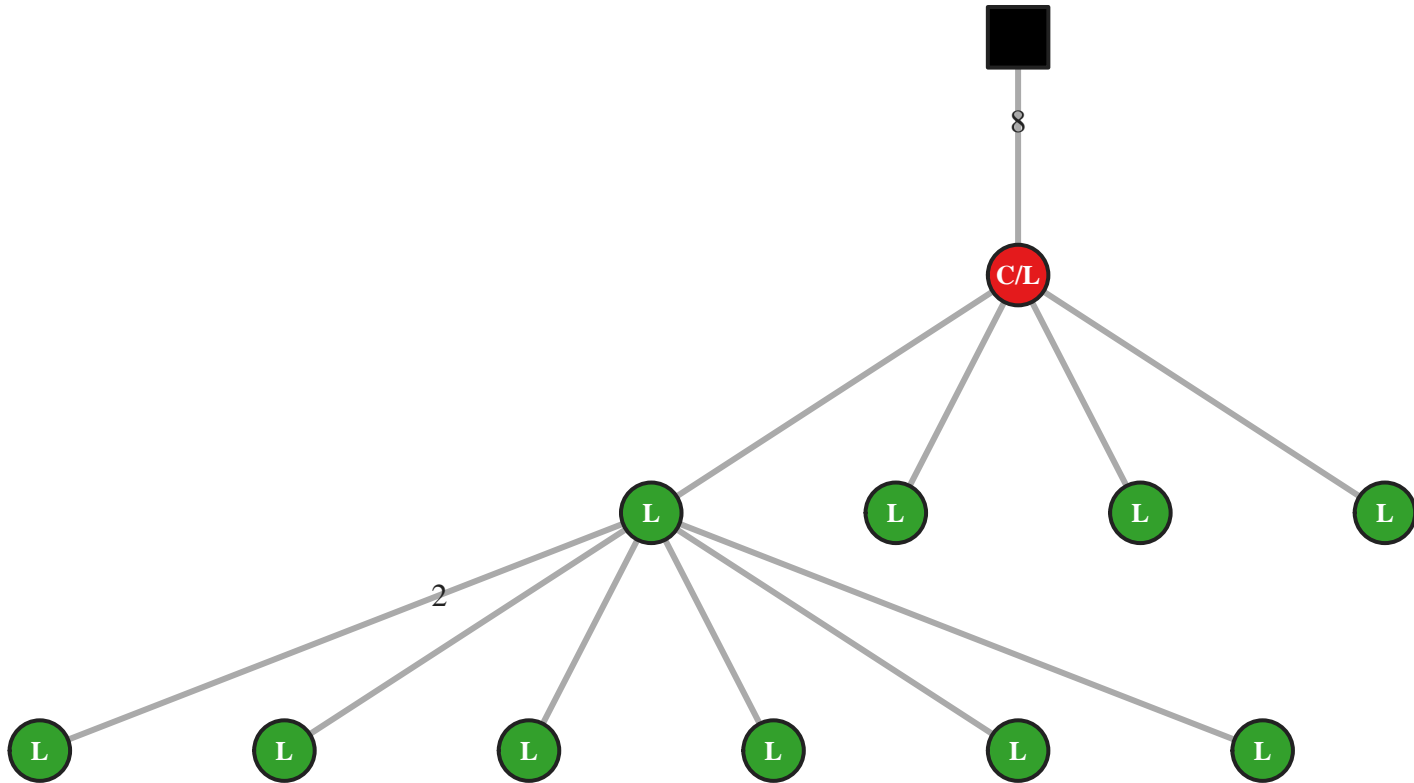
M5 IgG IGHV2-26/J6 60bp (15242)



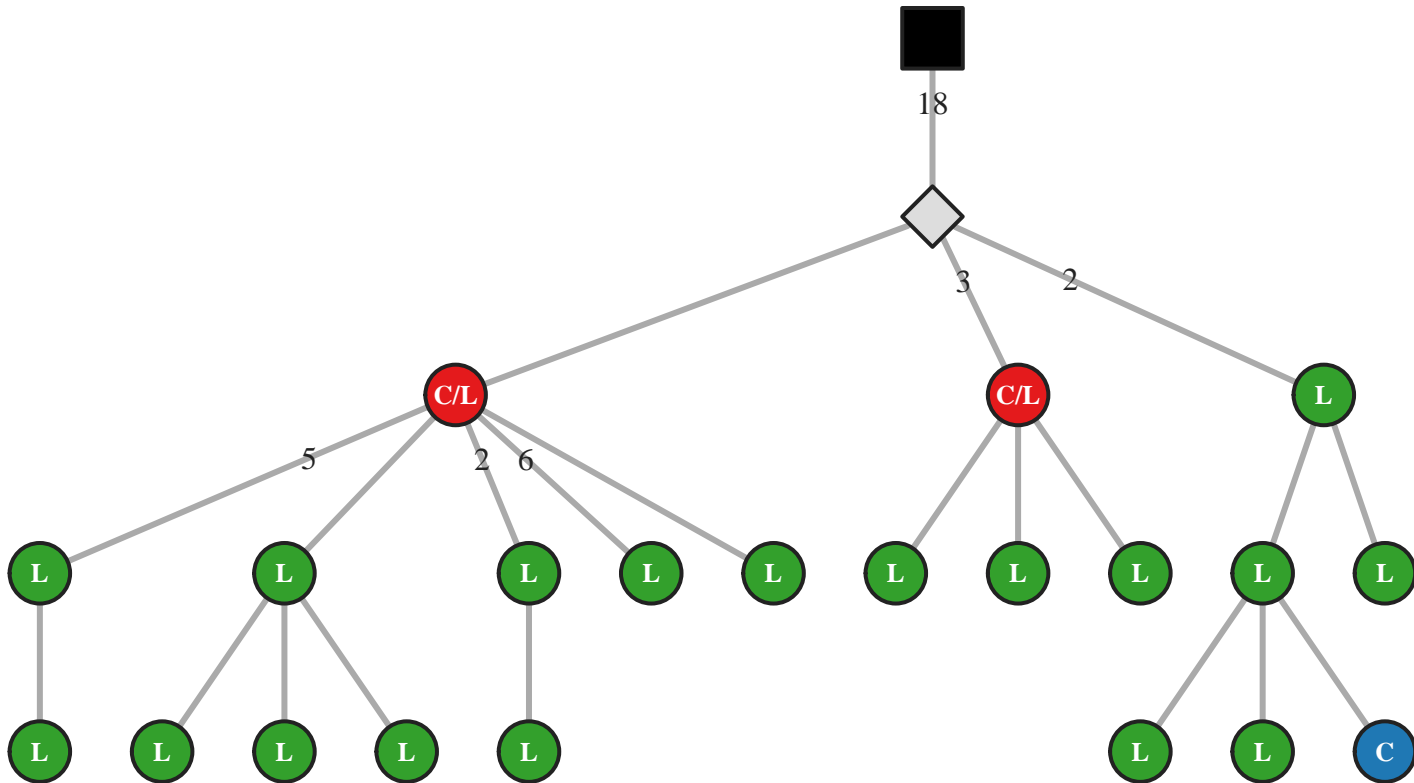
M5 IgG IGHV2-5/J1 36bp (33338)



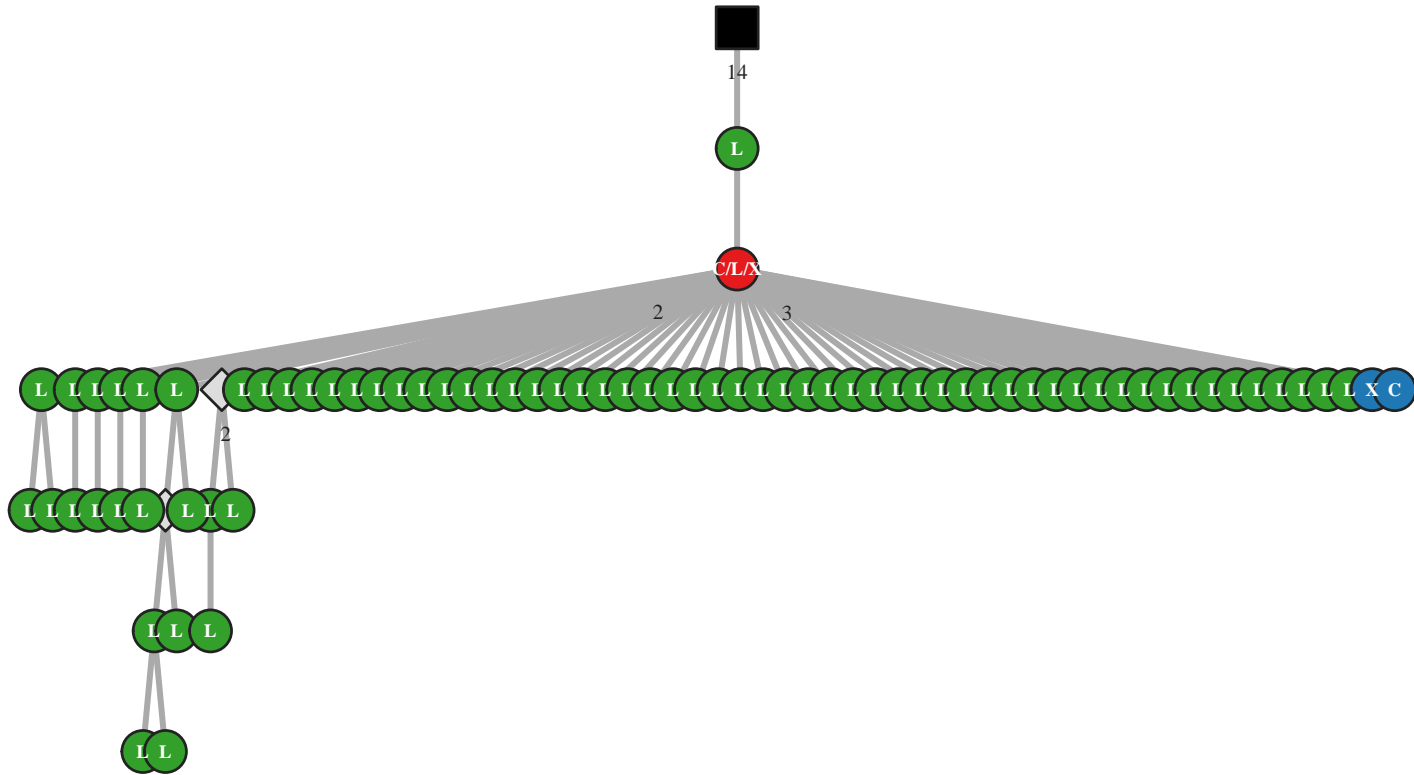
M5 IgA IGHV2-5/J1 51bp (38482)



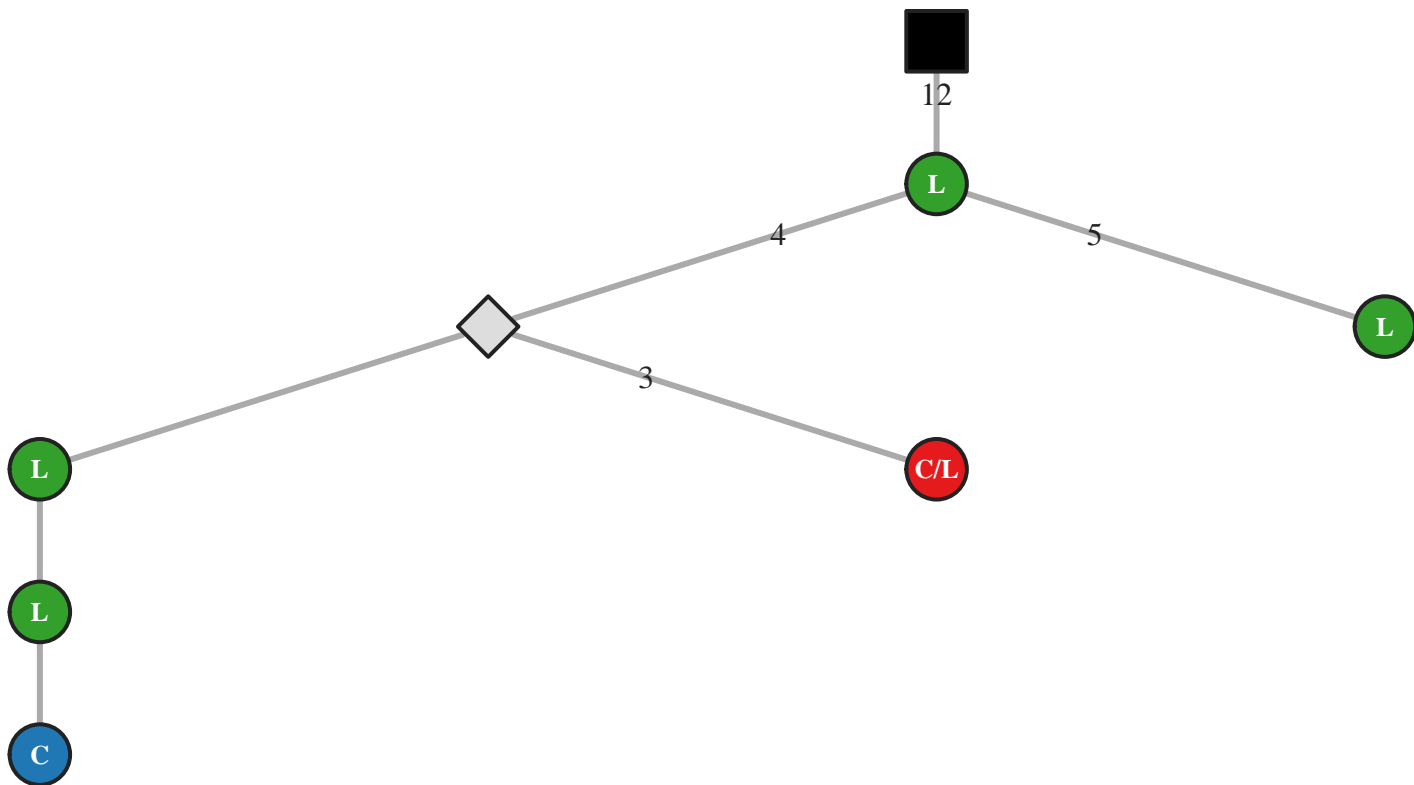
M5 IgA IGHV2-5/J1 63bp (2458)



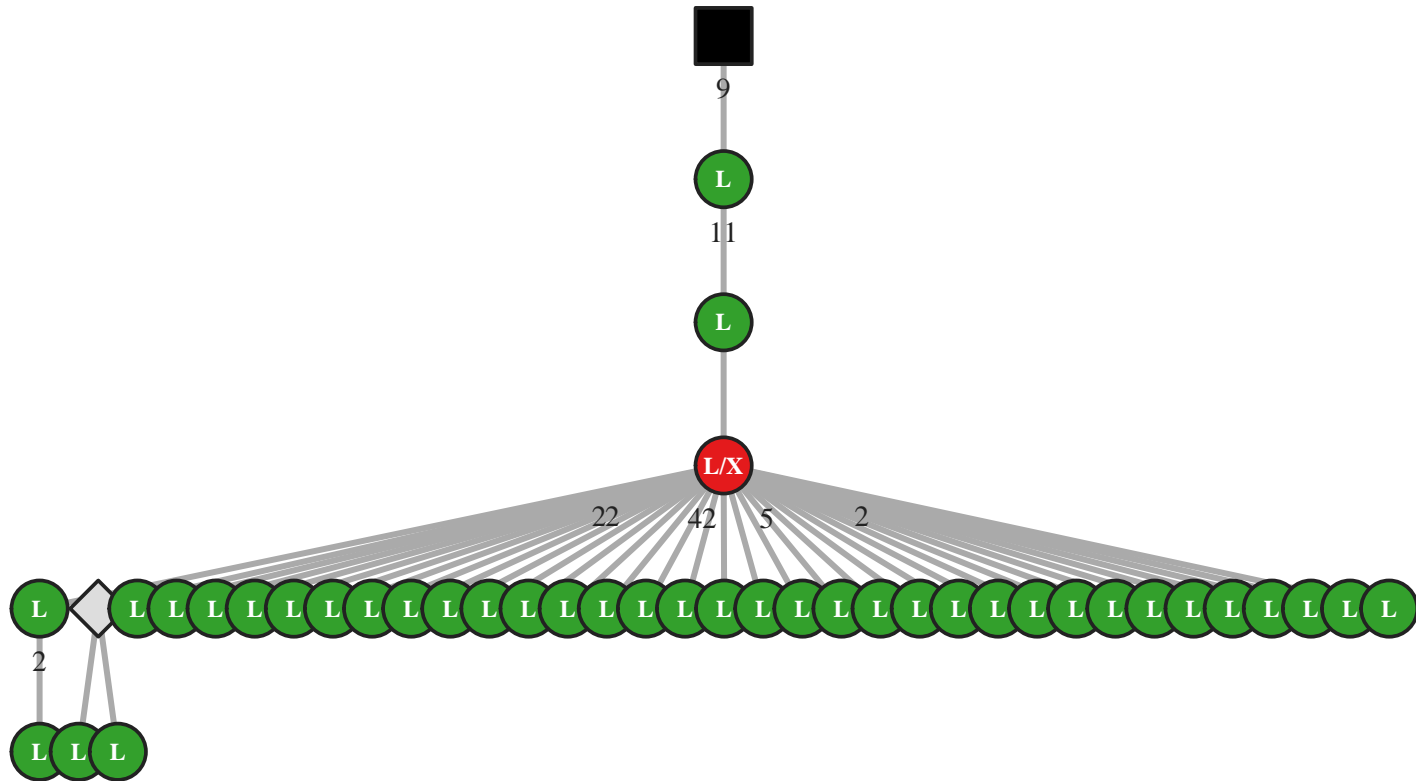
M5 IgG IGHV2-5/J1 63bp (33340)



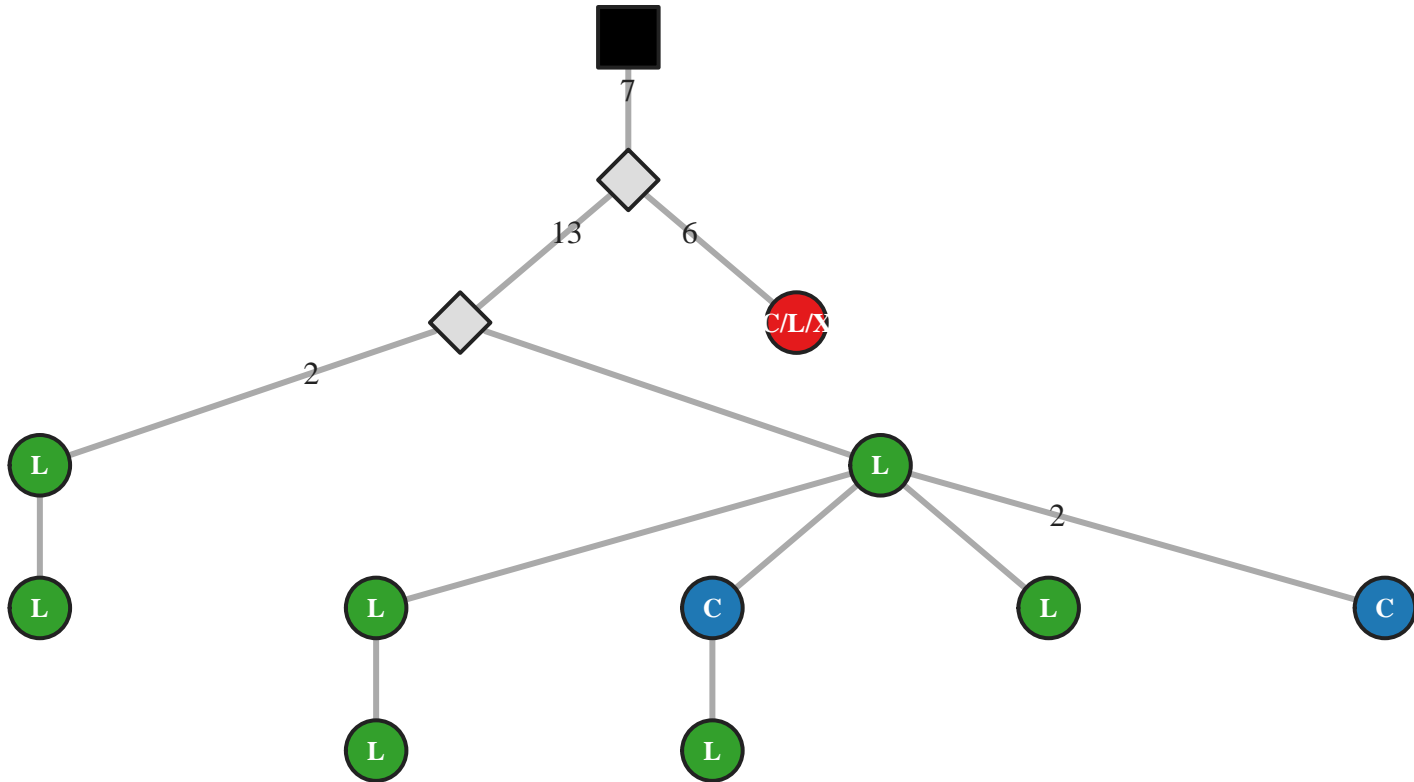
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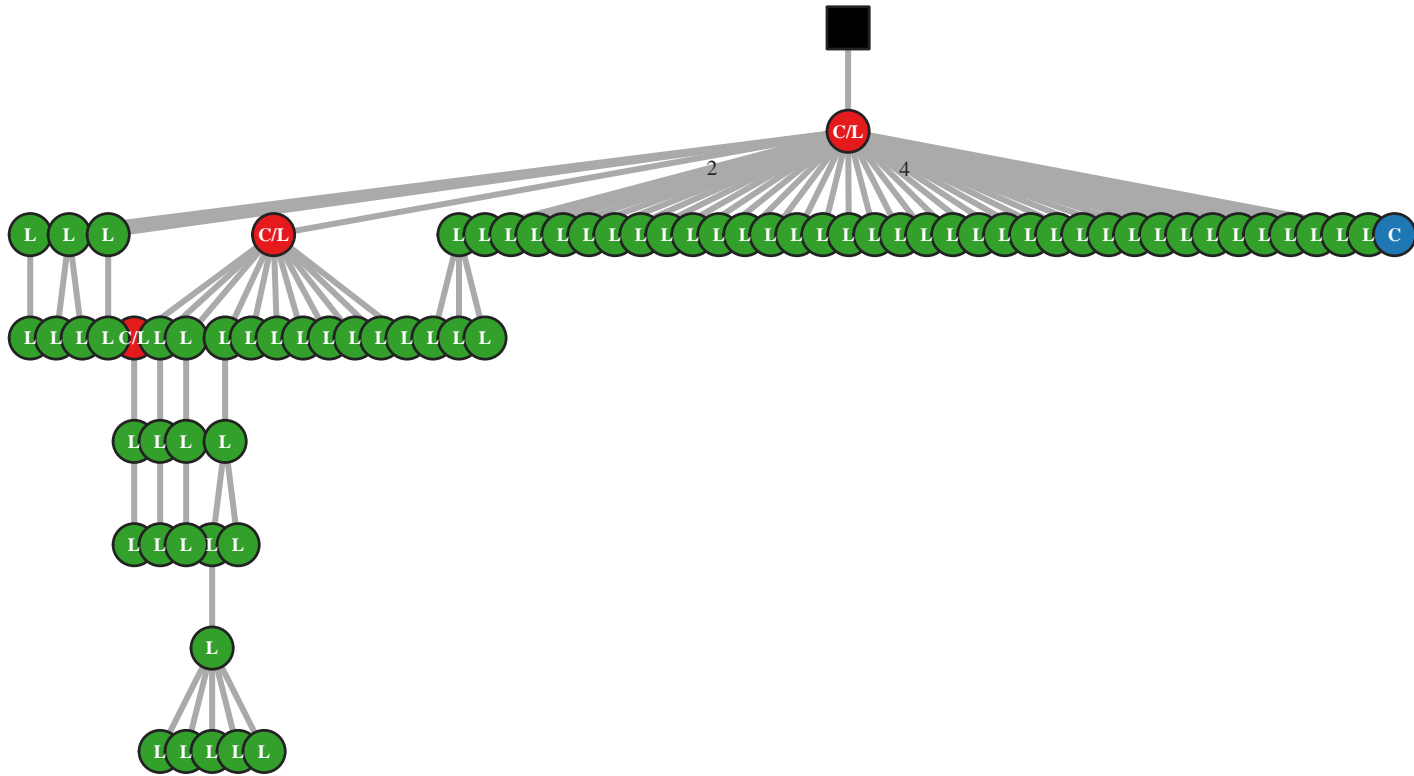
M5 IgG IGHV2-5/J3 45bp (42589)



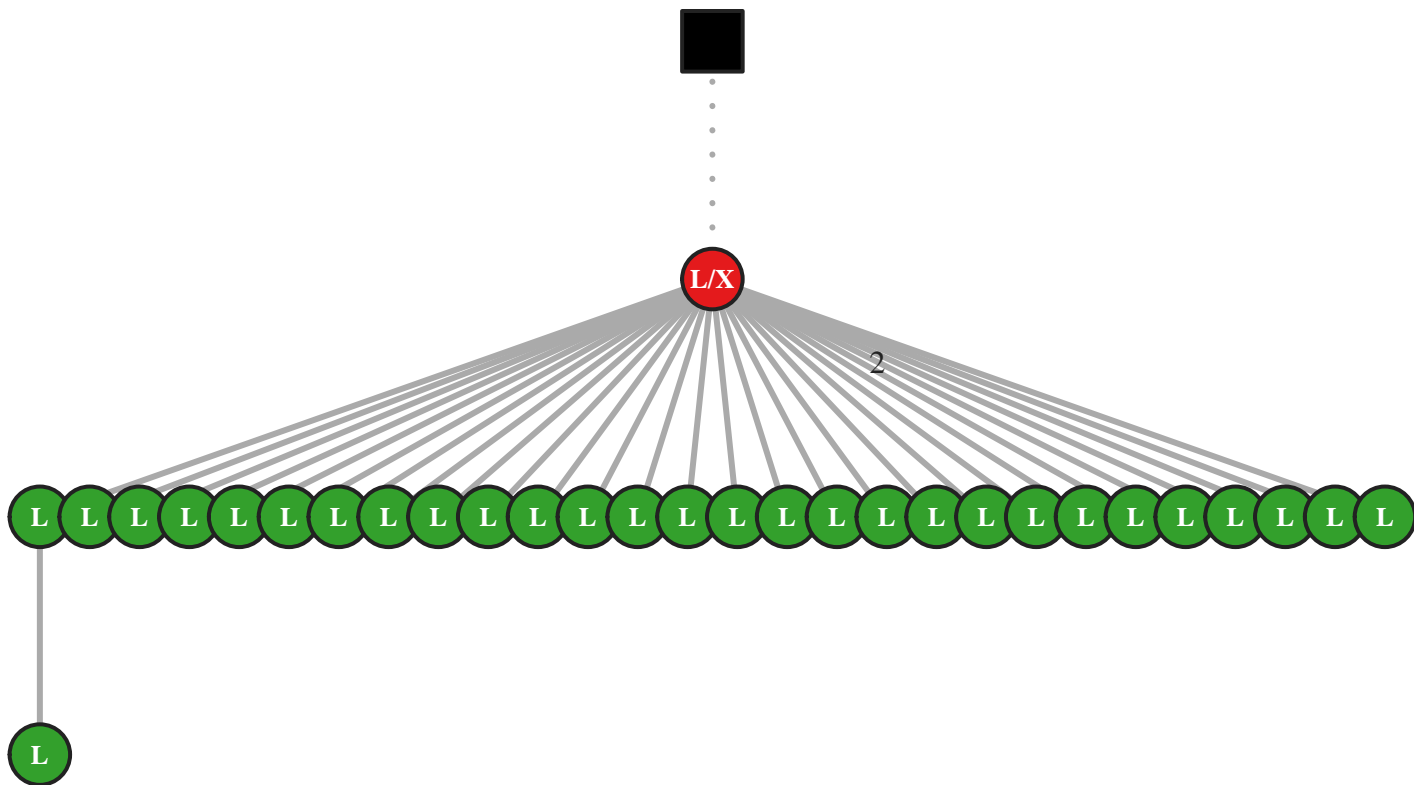
M5 IgG IGHV2-5/J3 54bp (42603)



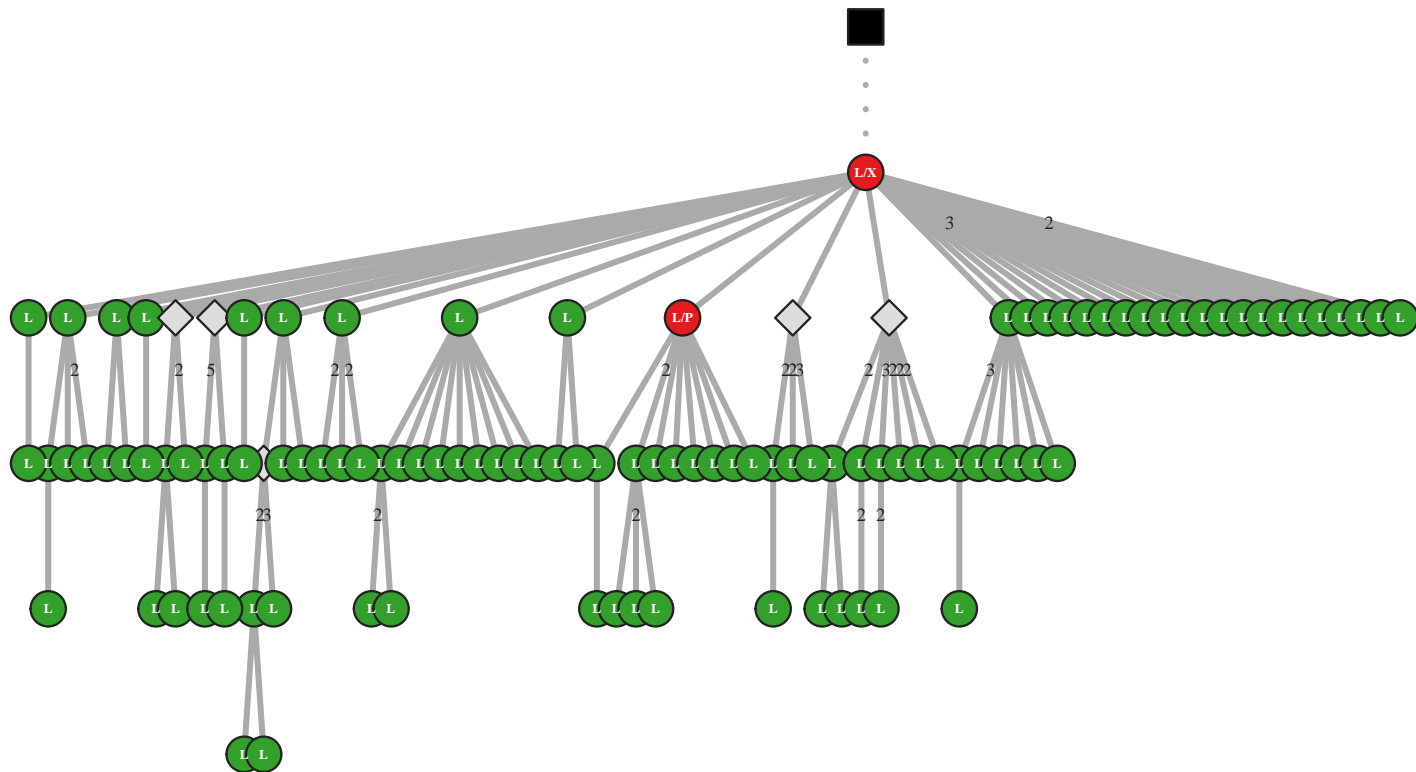
M5 IgG IGHV2-5/J3 54bp (42604)



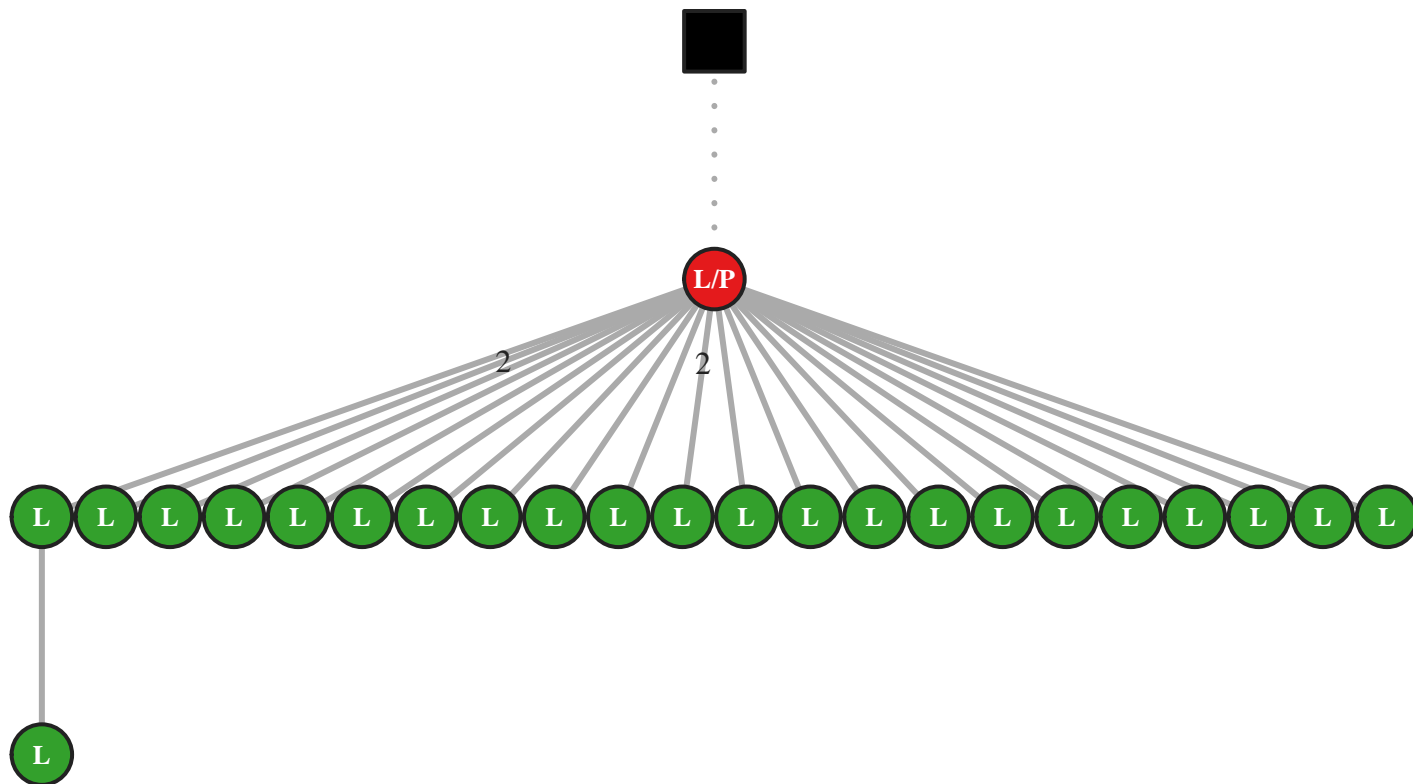
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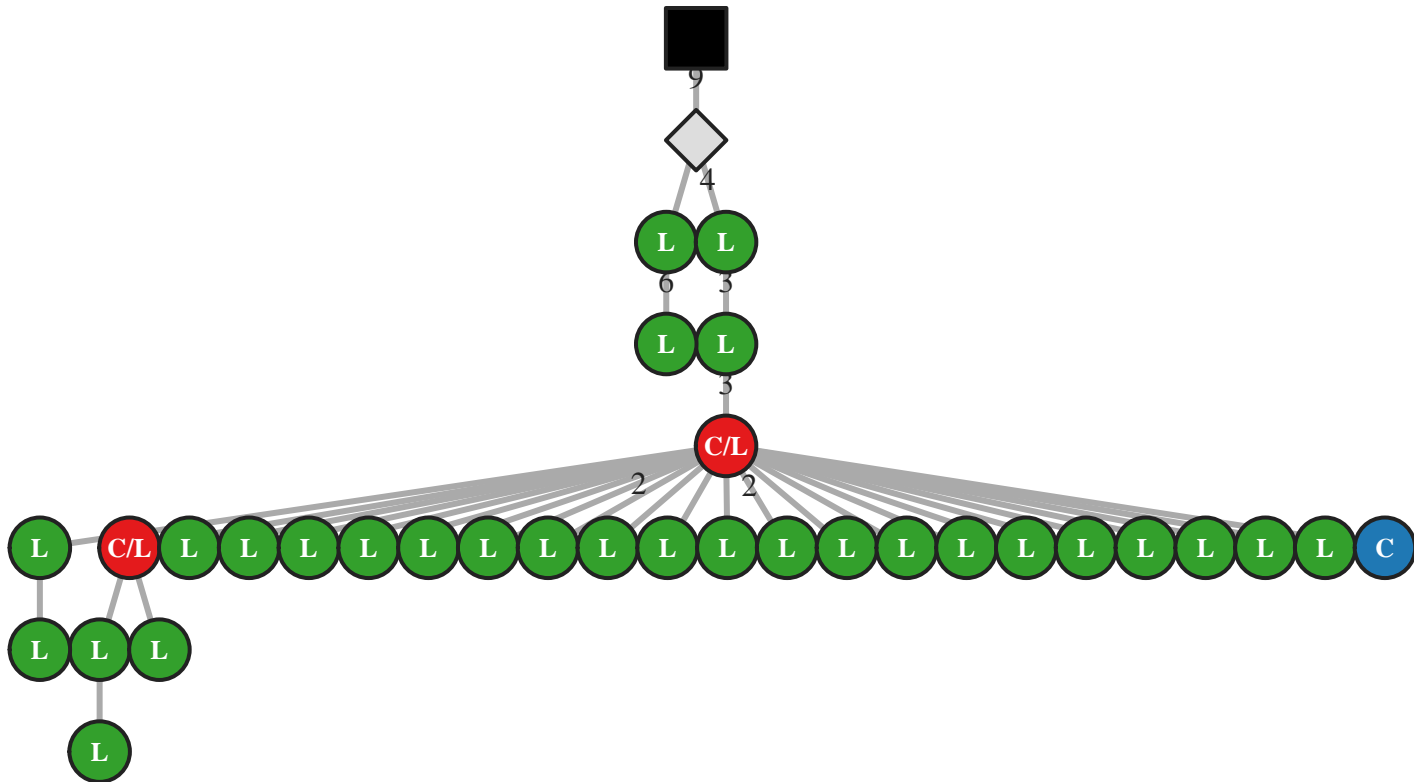
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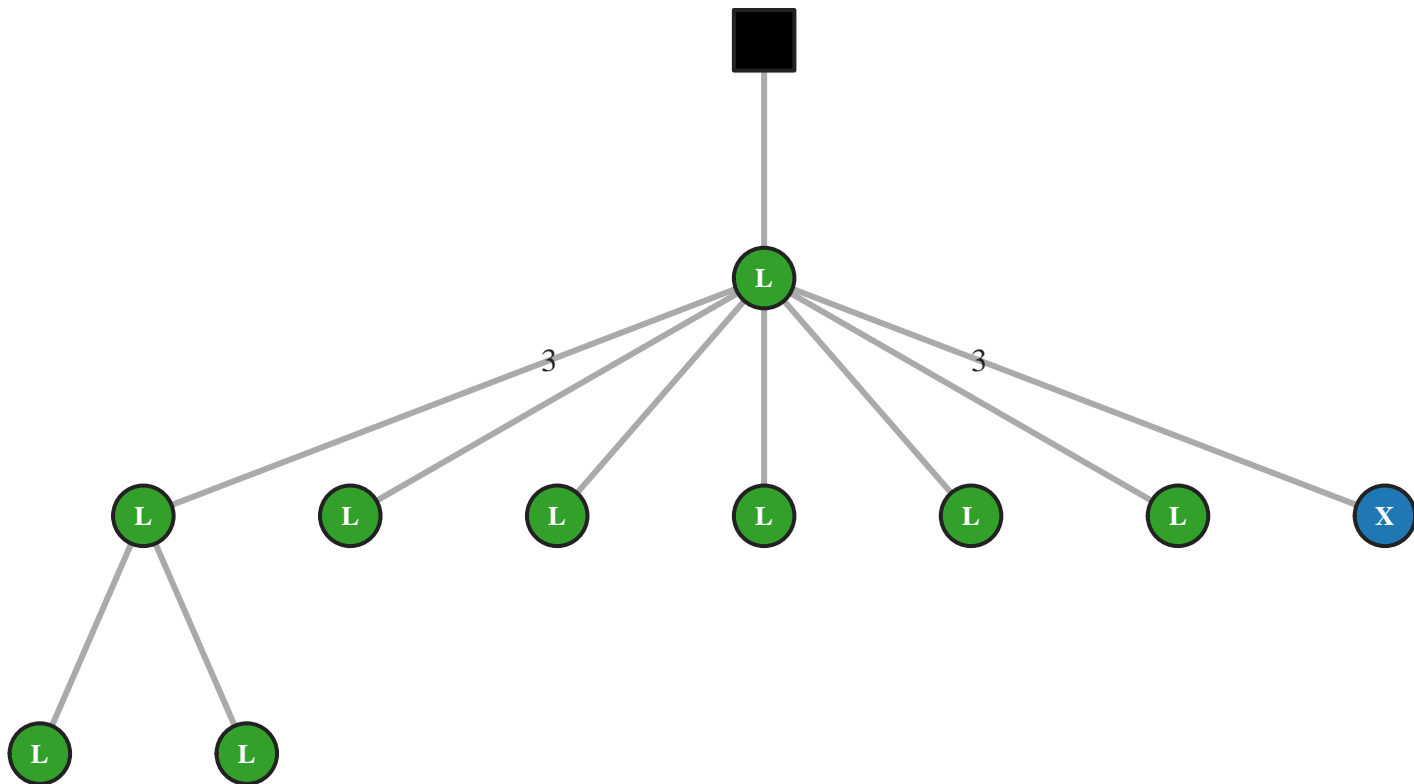
M5 IgG IGHV2-5/J3 57bp (50616)



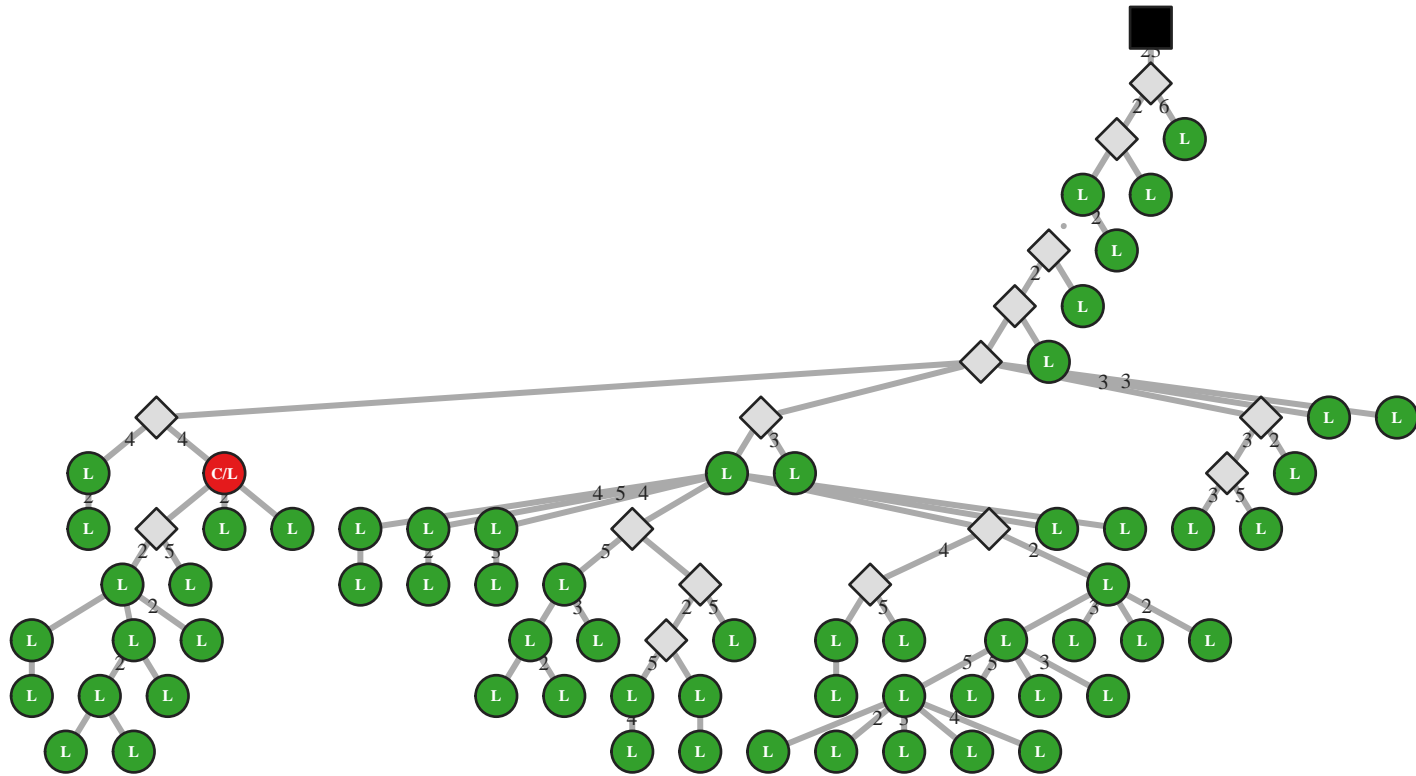
M5 IgG IGHV2-5/J3 60bp (33360)



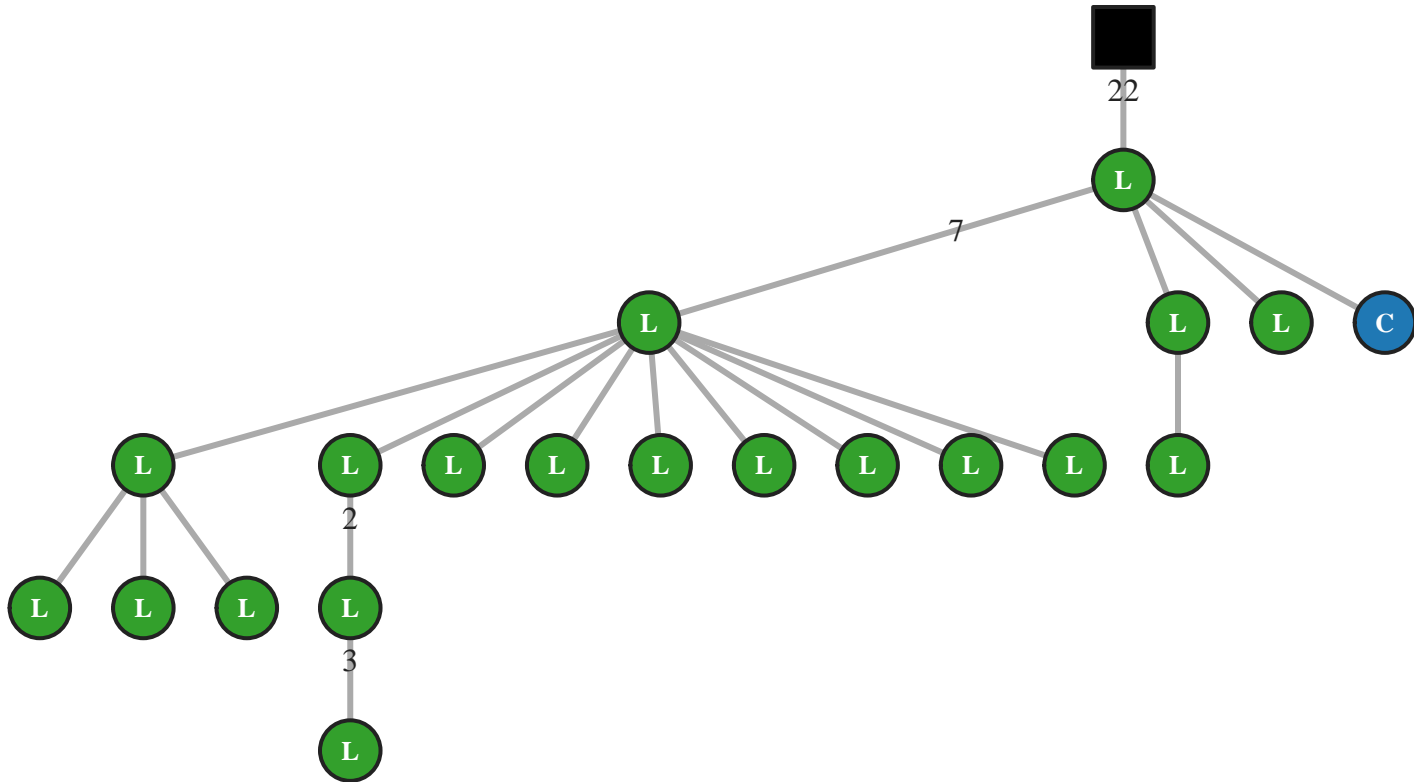
M5 IgG IGHV2-5/J3 60bp (33362)



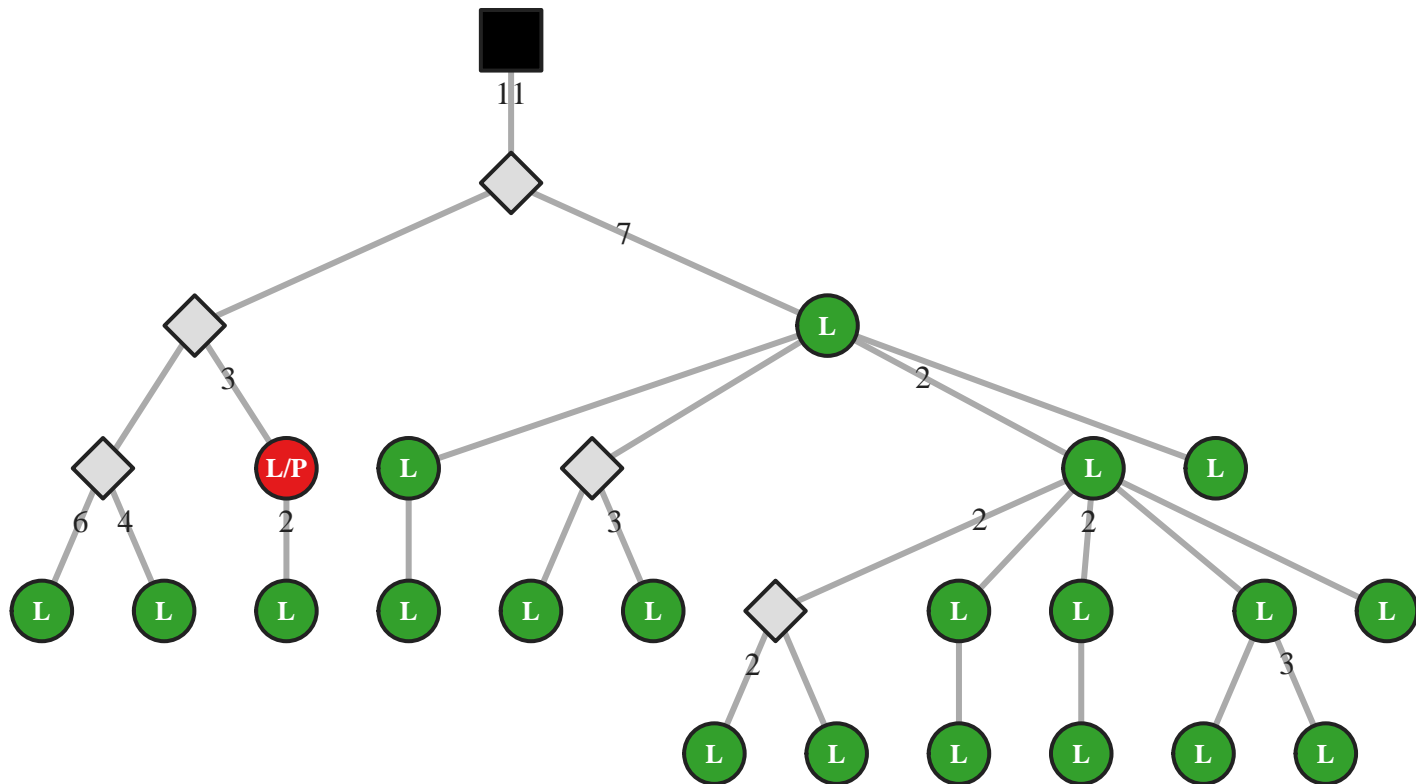
M5 IgG IGHV2-5/J3 60bp (33389)



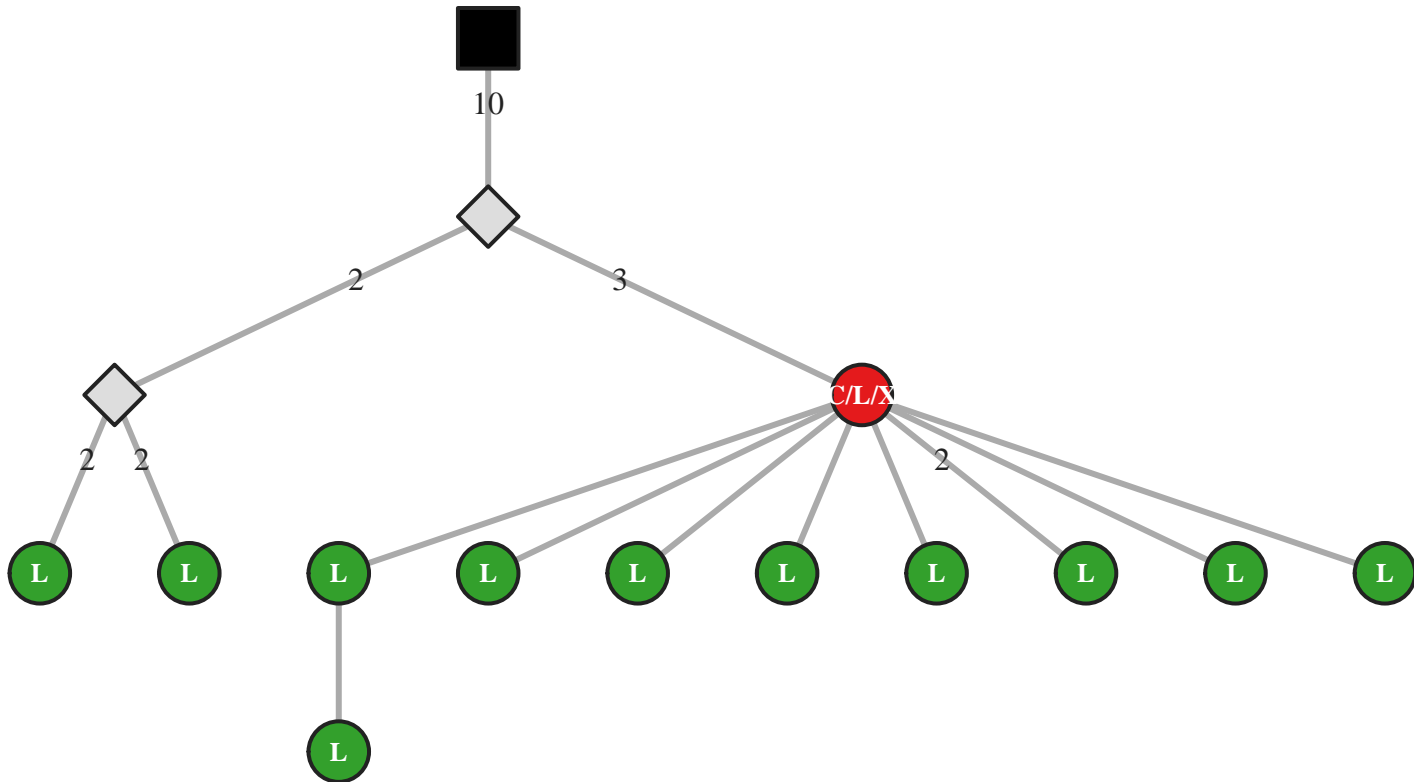
M5 IgG IGHV2-5/J3 63bp (42633)



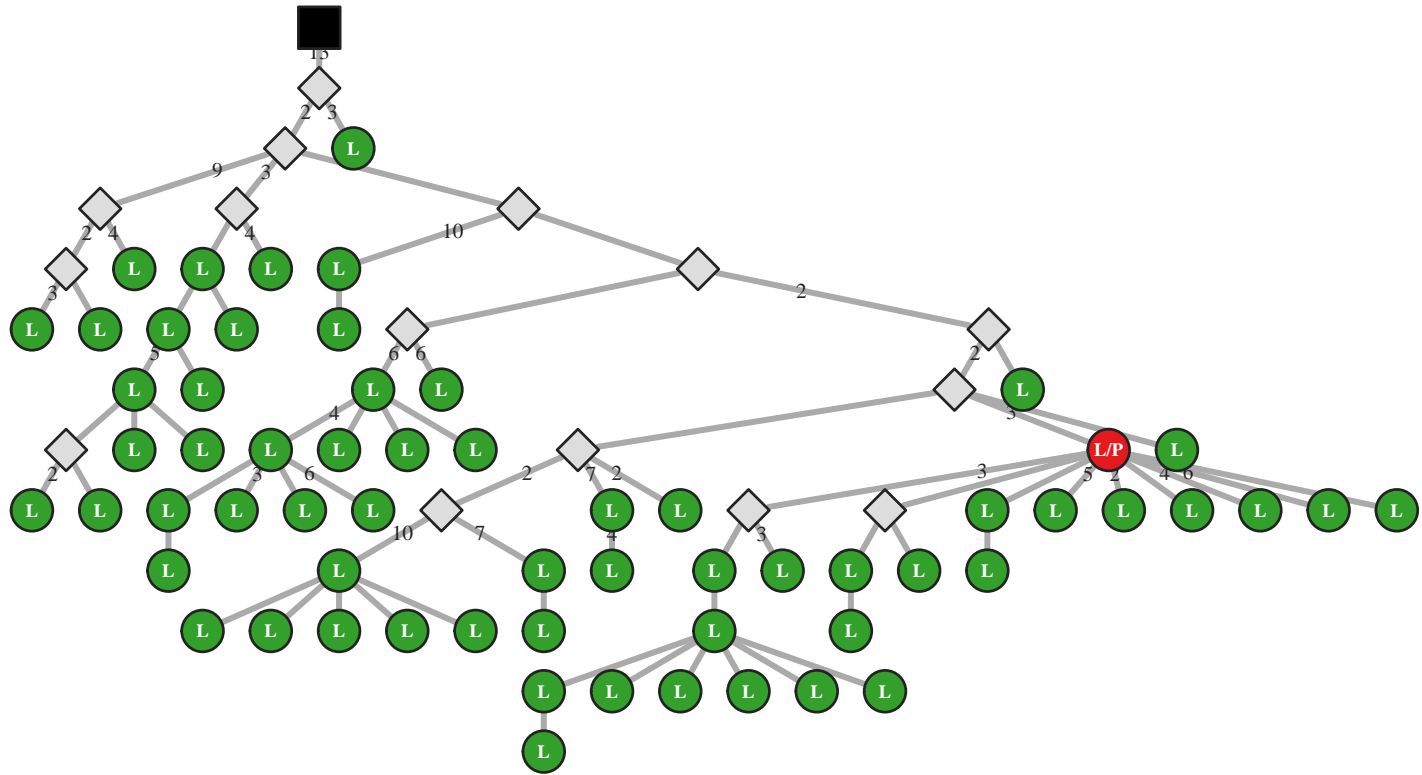
M5 IgG IGHV2-5/J3 69bp (15275)



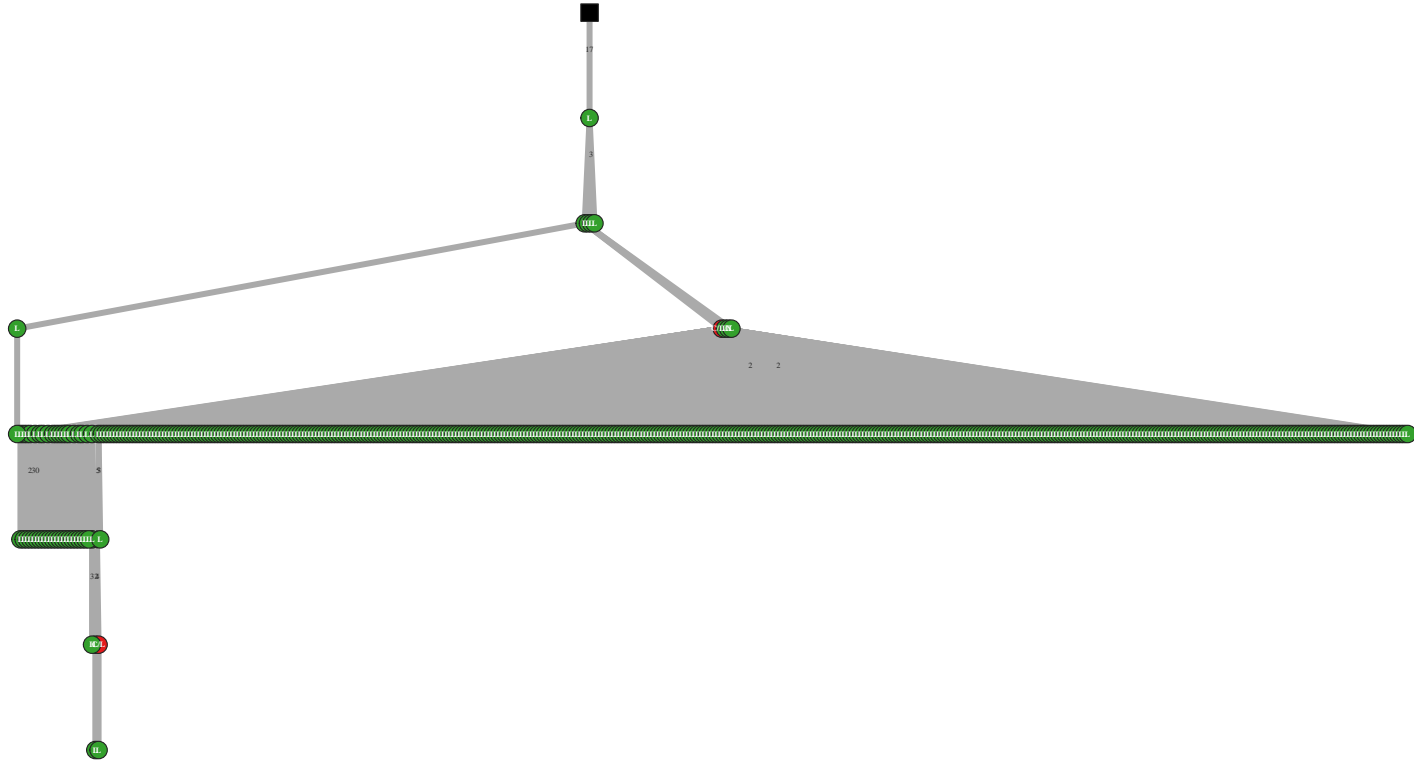
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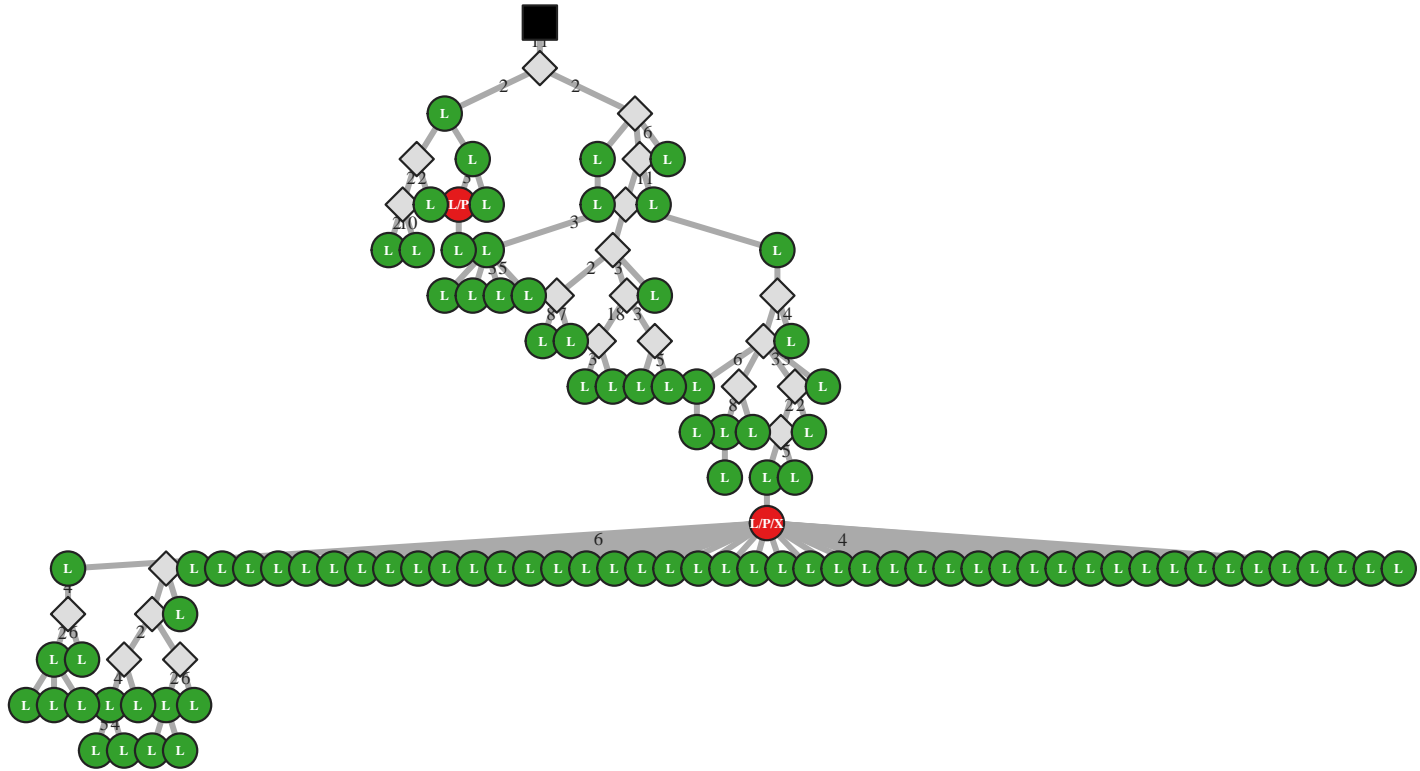
M5 IgG IGHV2-5/J4 24bp (50628)



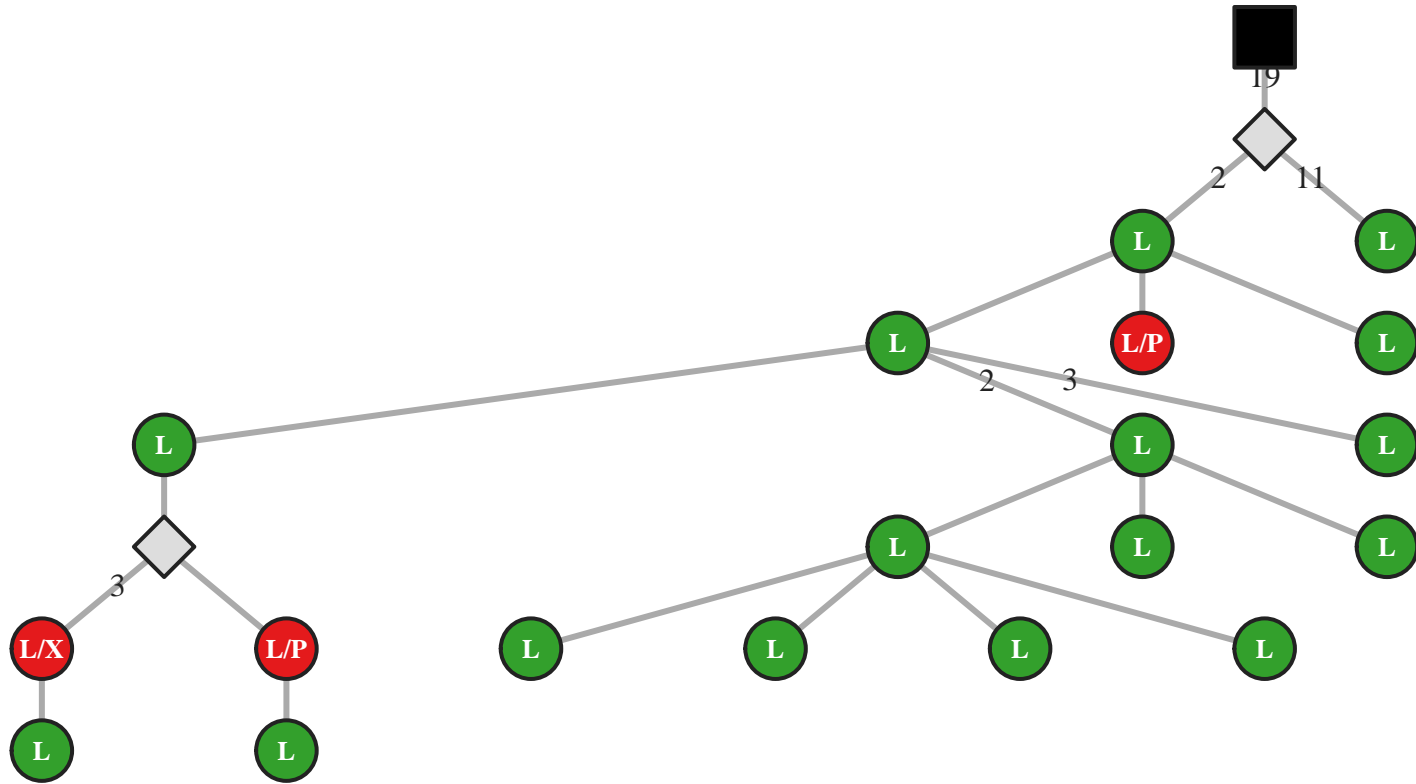
M5 IgG IGHV2-5/J4 36bp (42649)



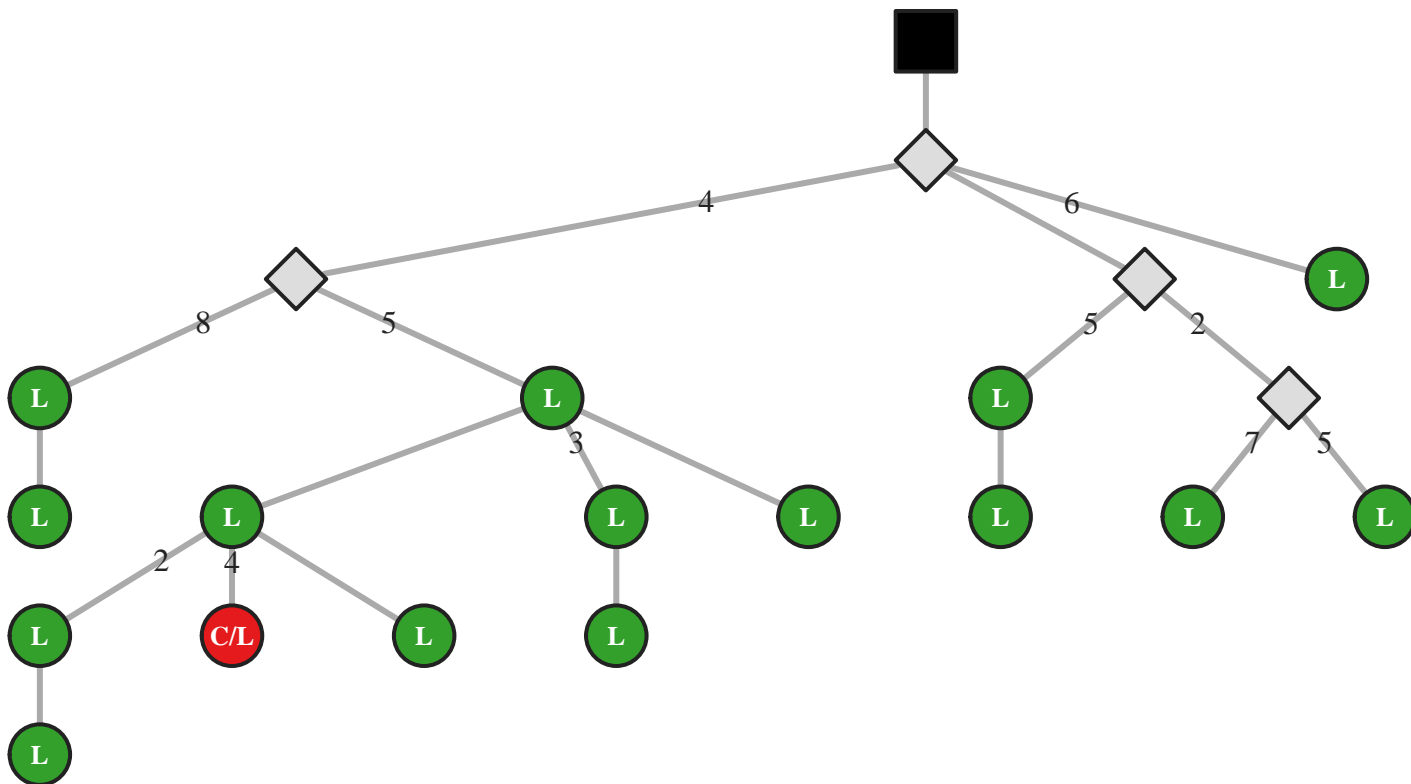
M5 IgG IGHV2-5/J4 36bp (42669)



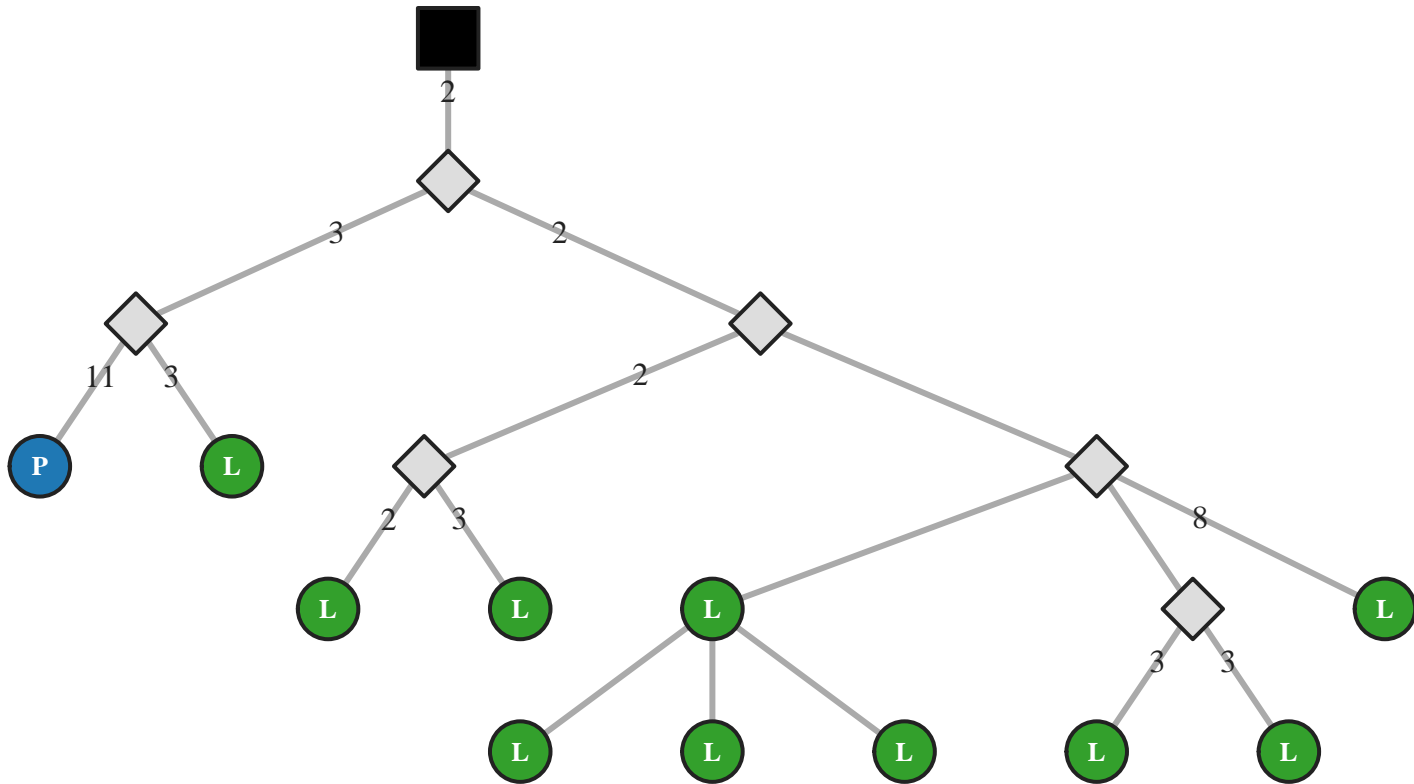
M5 IgG IGHV2-5/J4 39bp (33400)



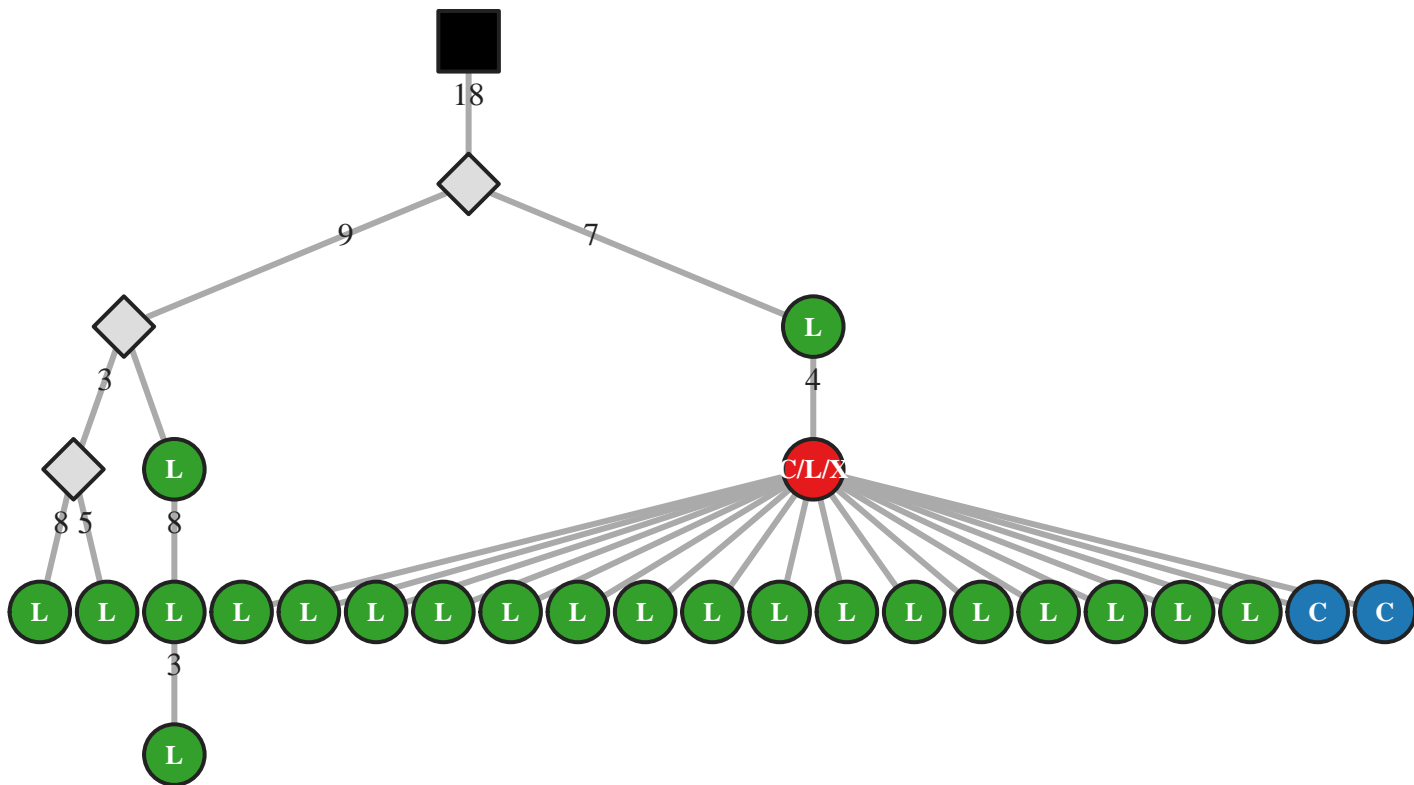
M5 IgG IGHV2-5/J4 39bp (33429)



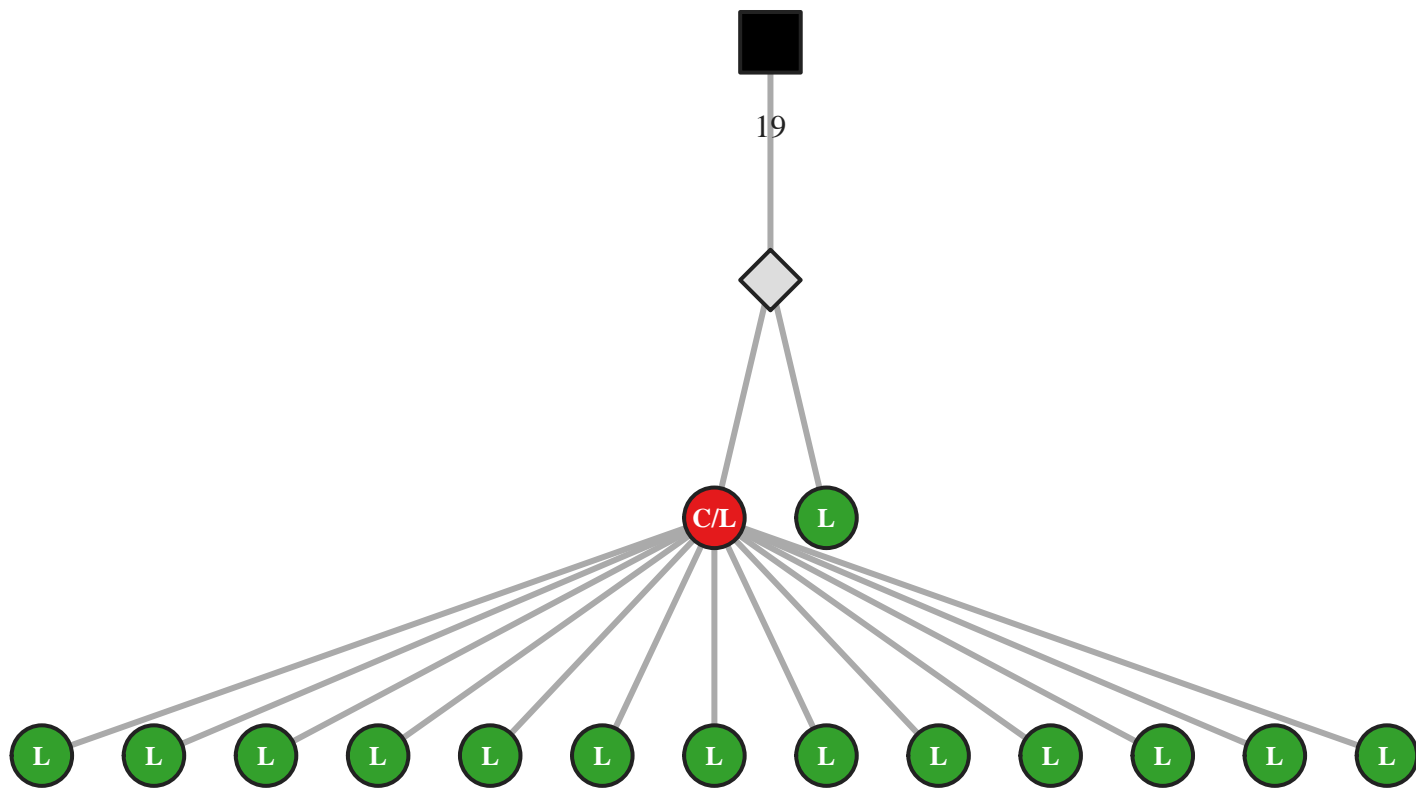
M5 IgA IGHV2-5/J4 42bp (21440)



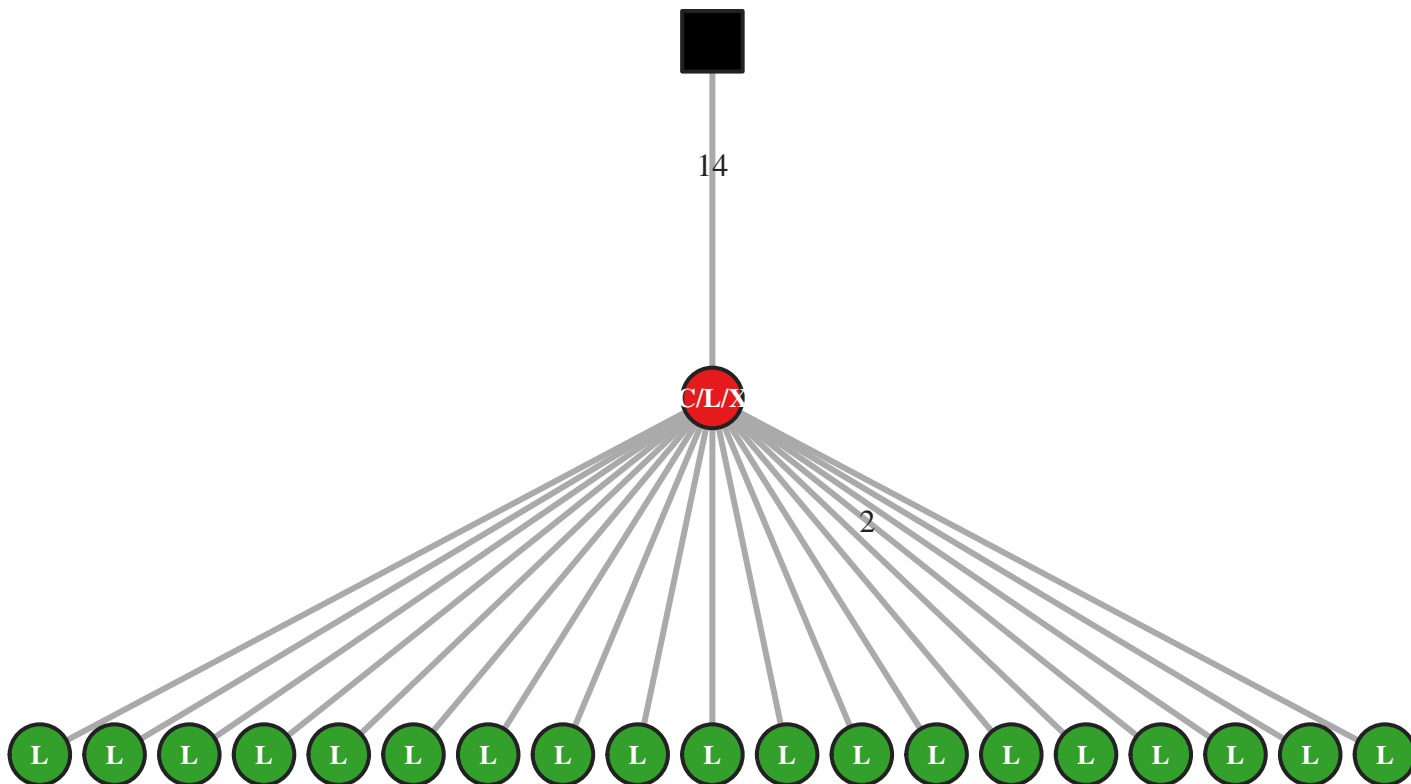
M5 IgA IGHV2-5/J4 42bp (21450)



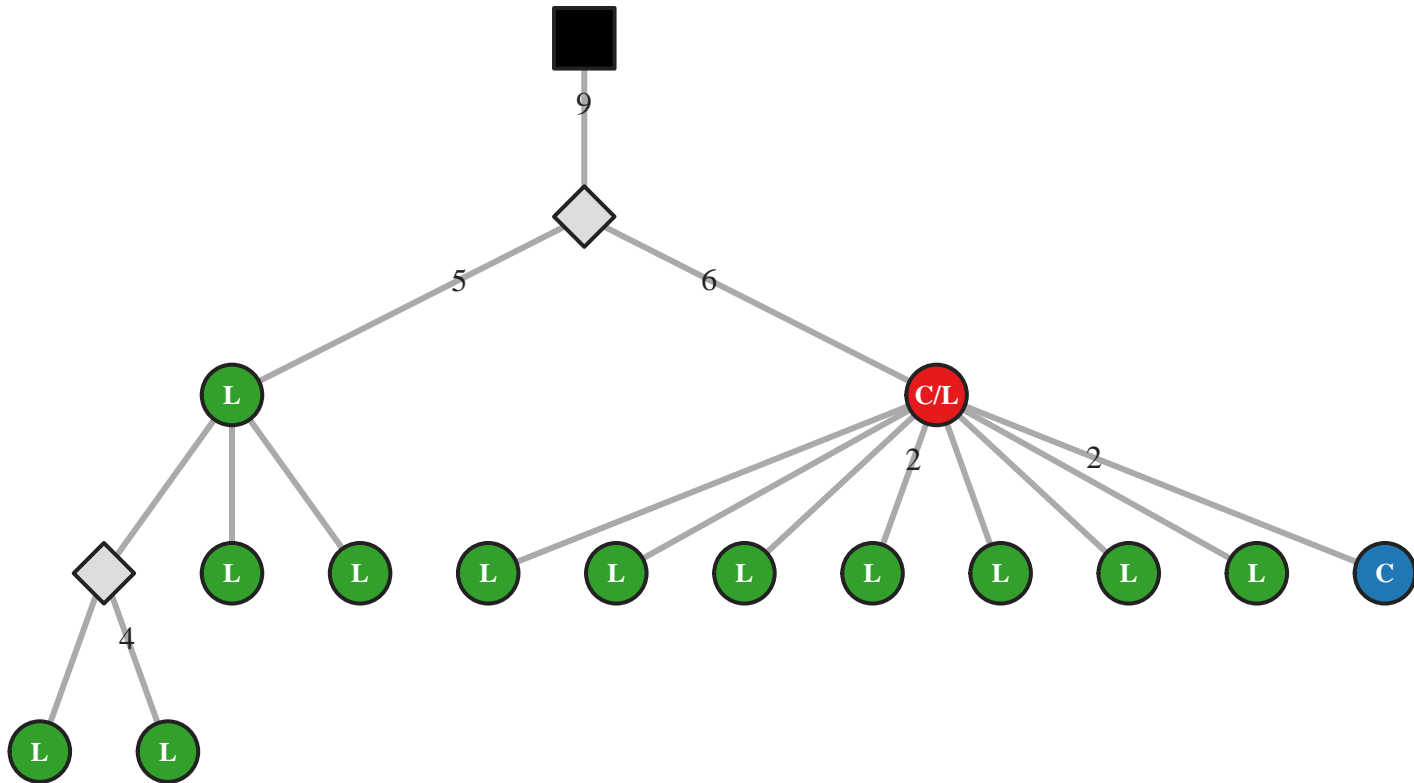
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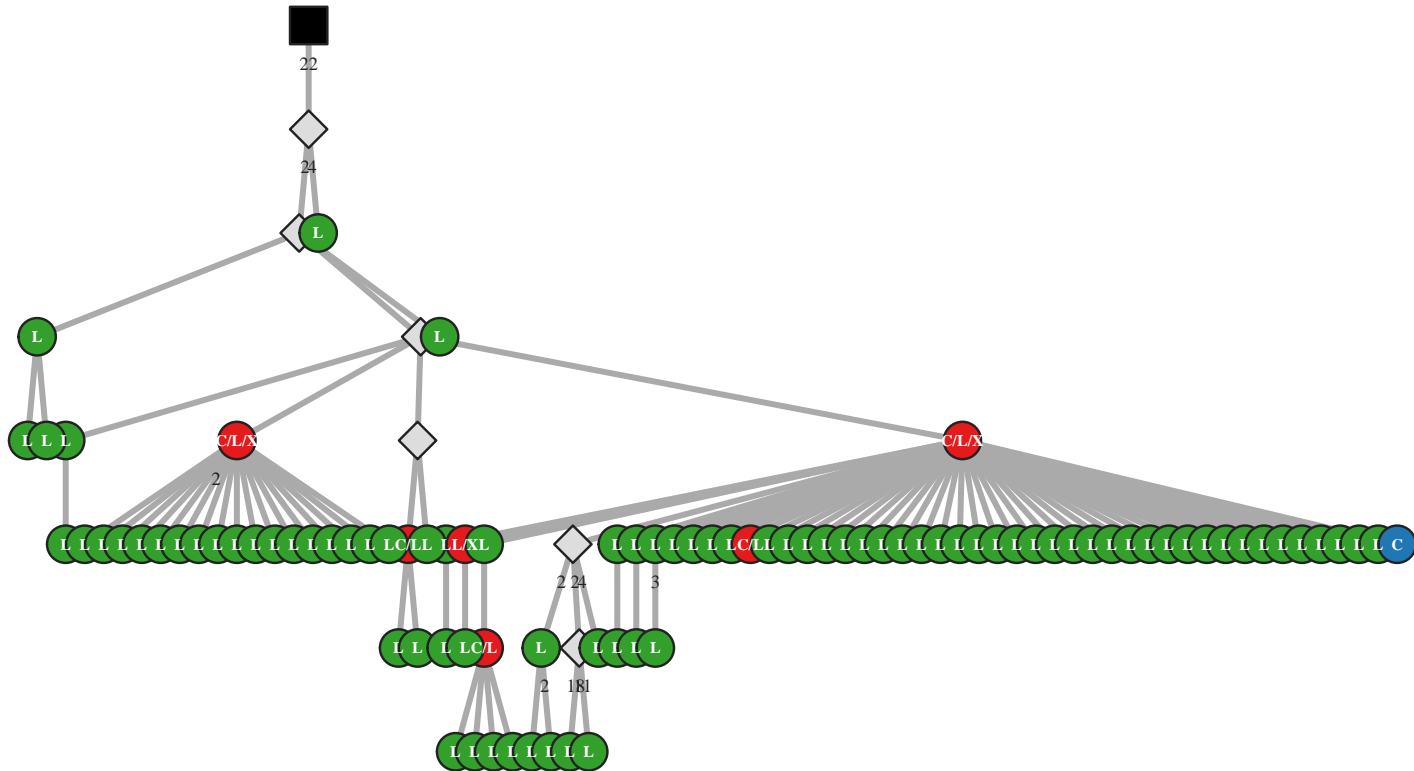
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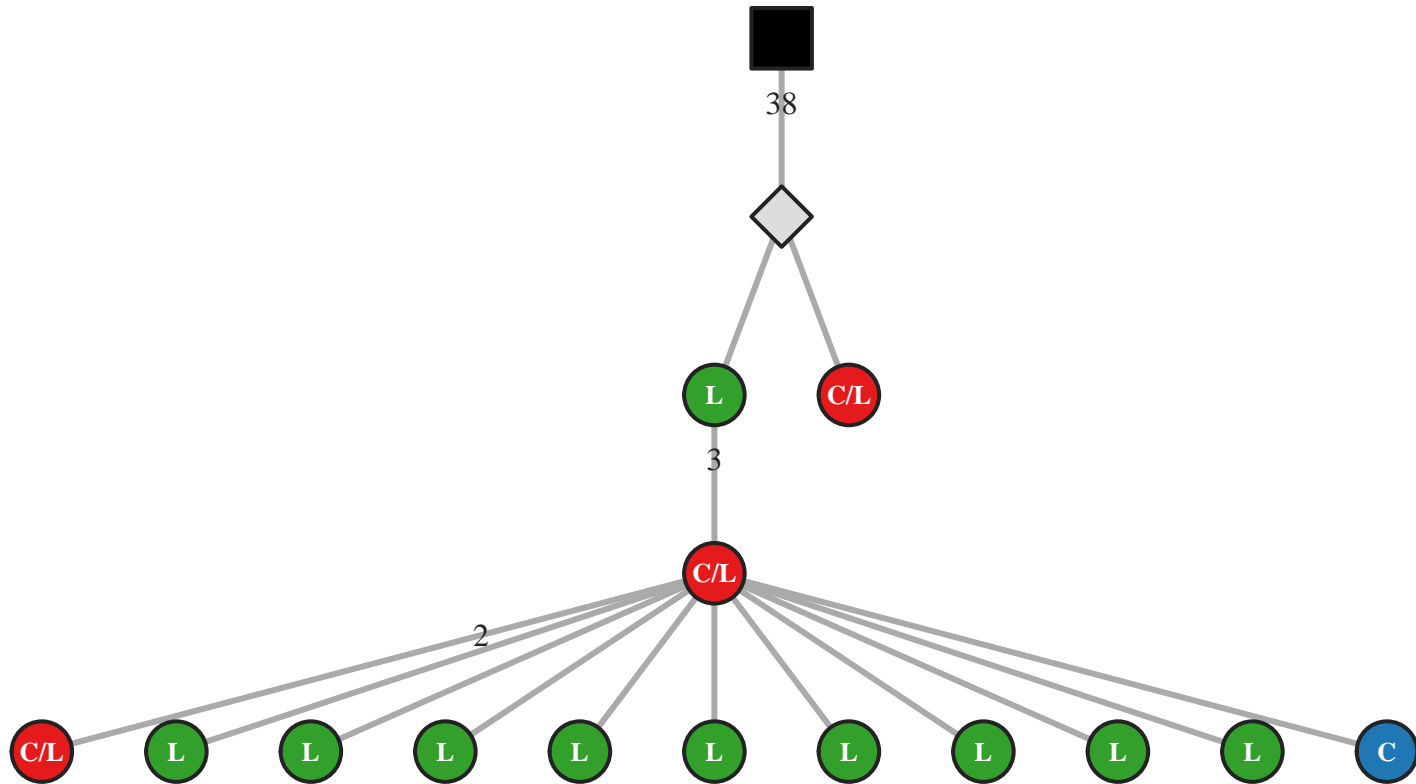
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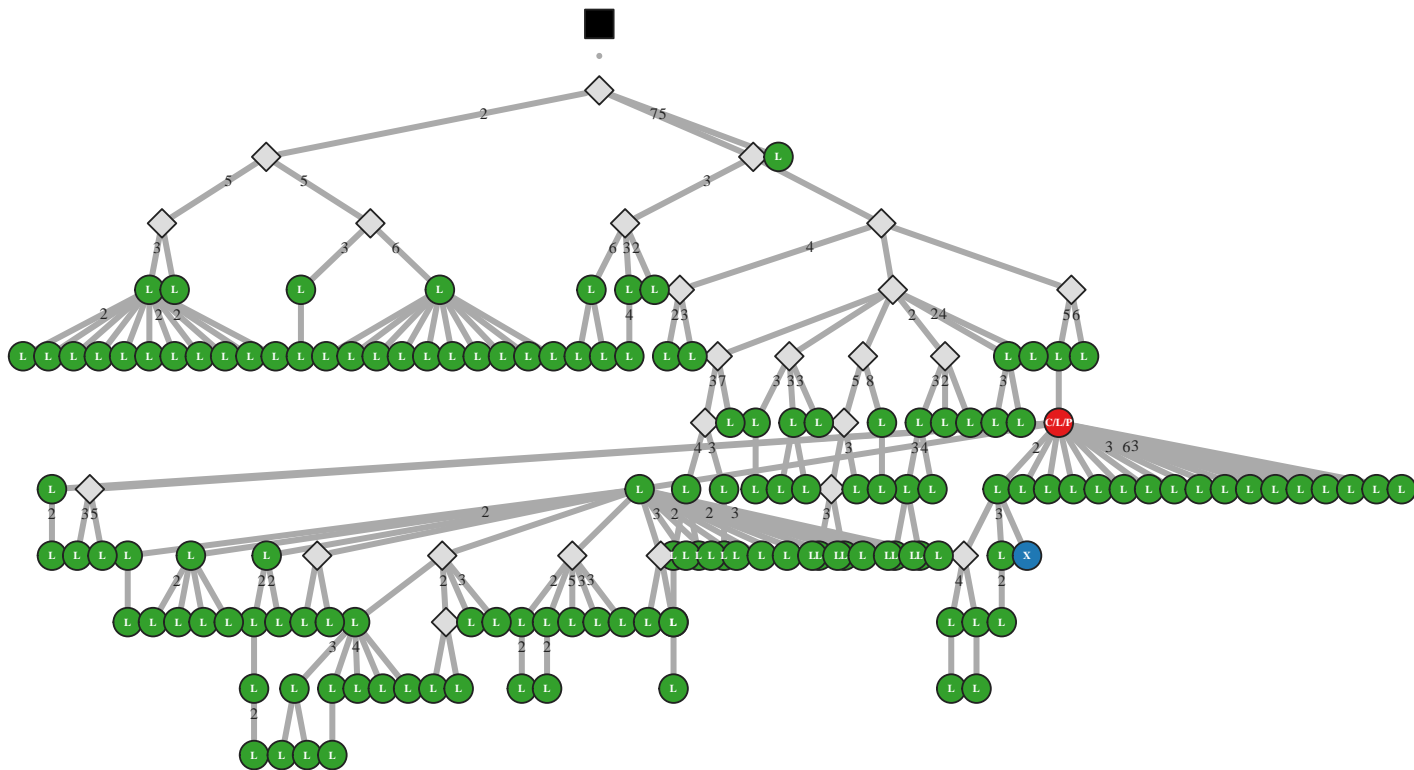
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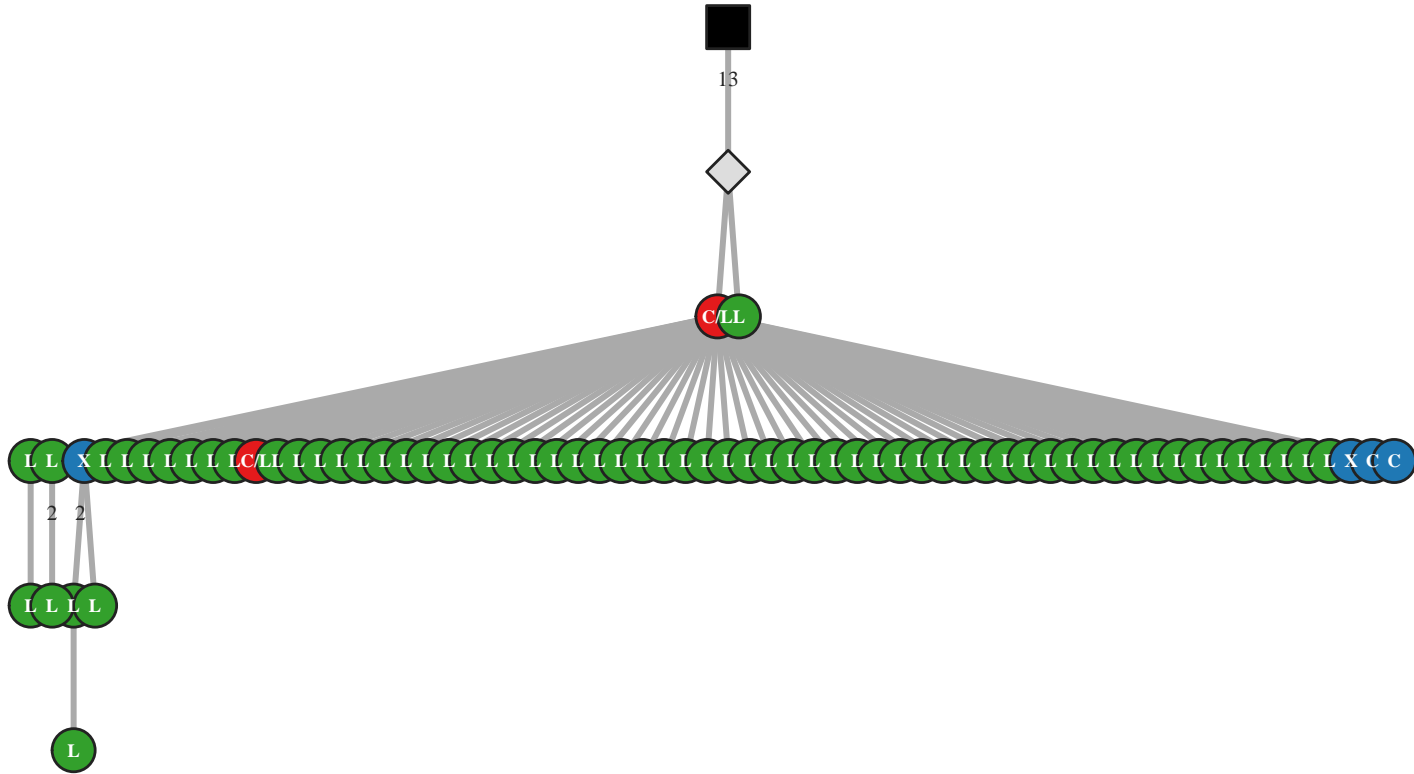
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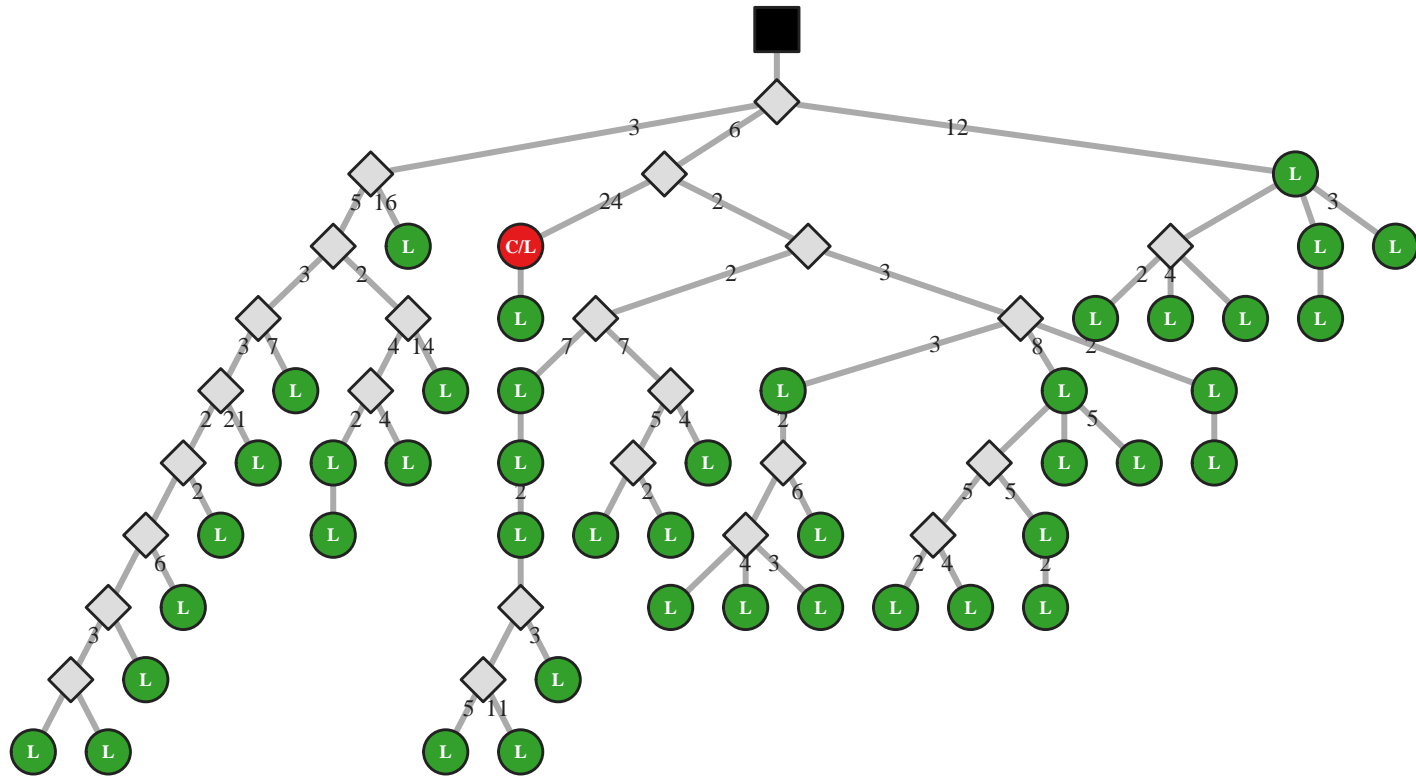
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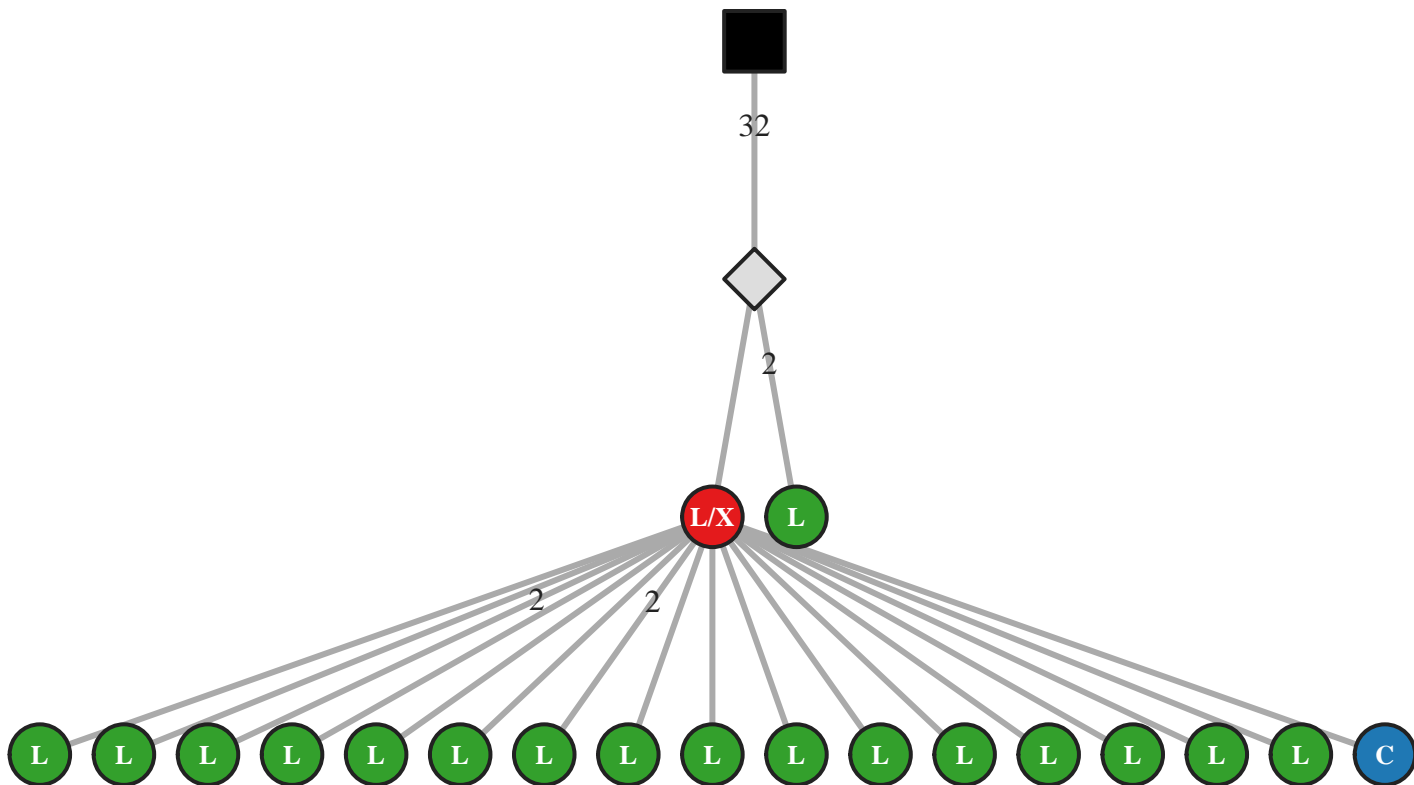
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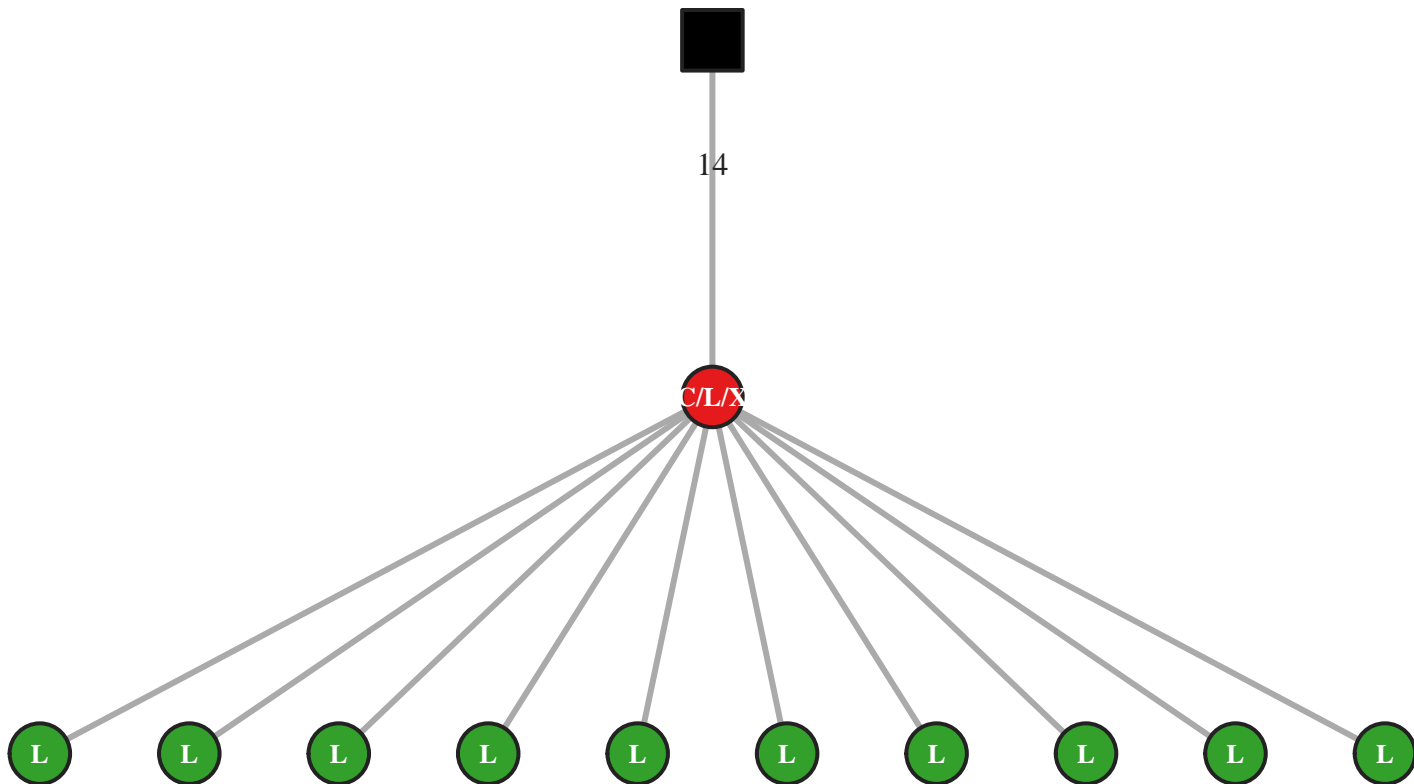
M5 IgG IGHV2-5/J4 42bp (15359)



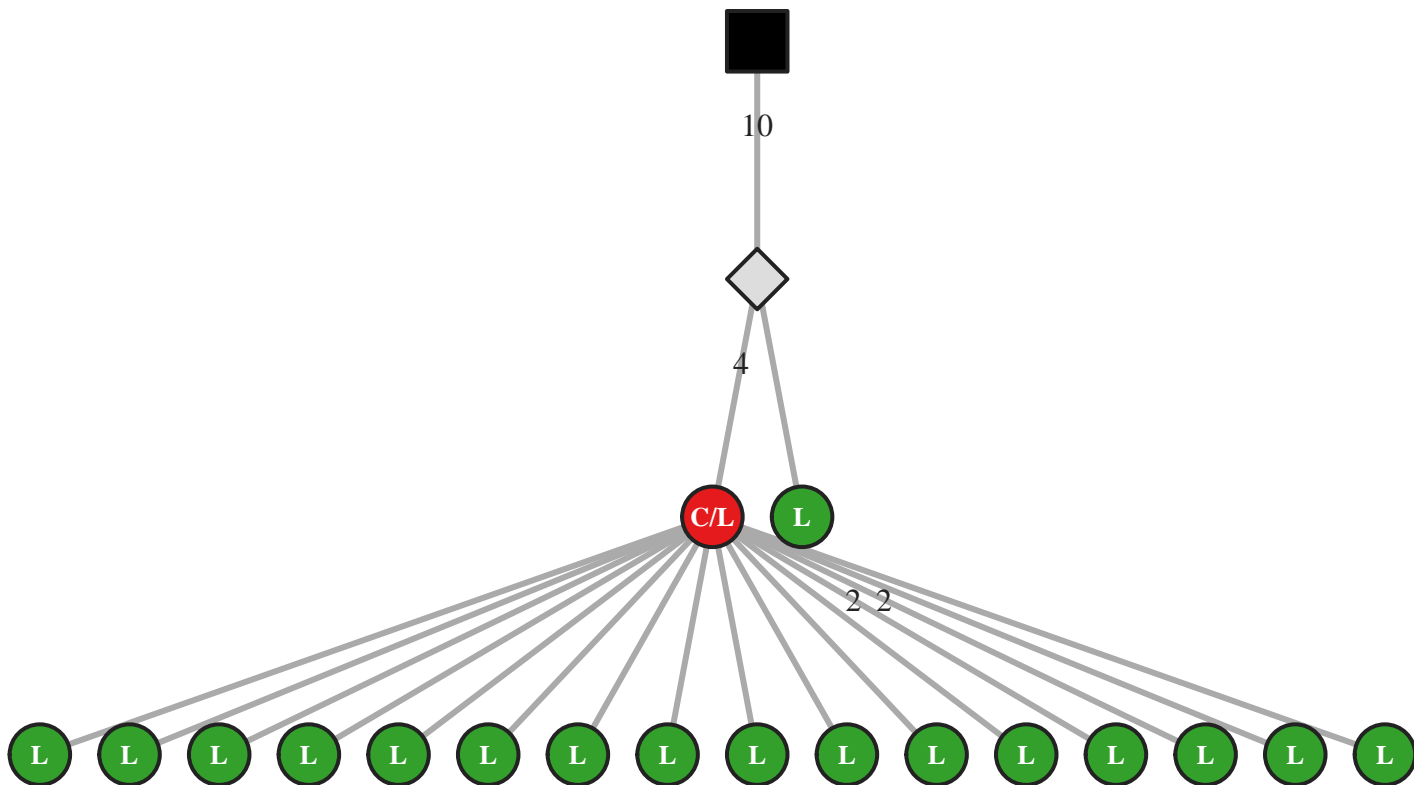
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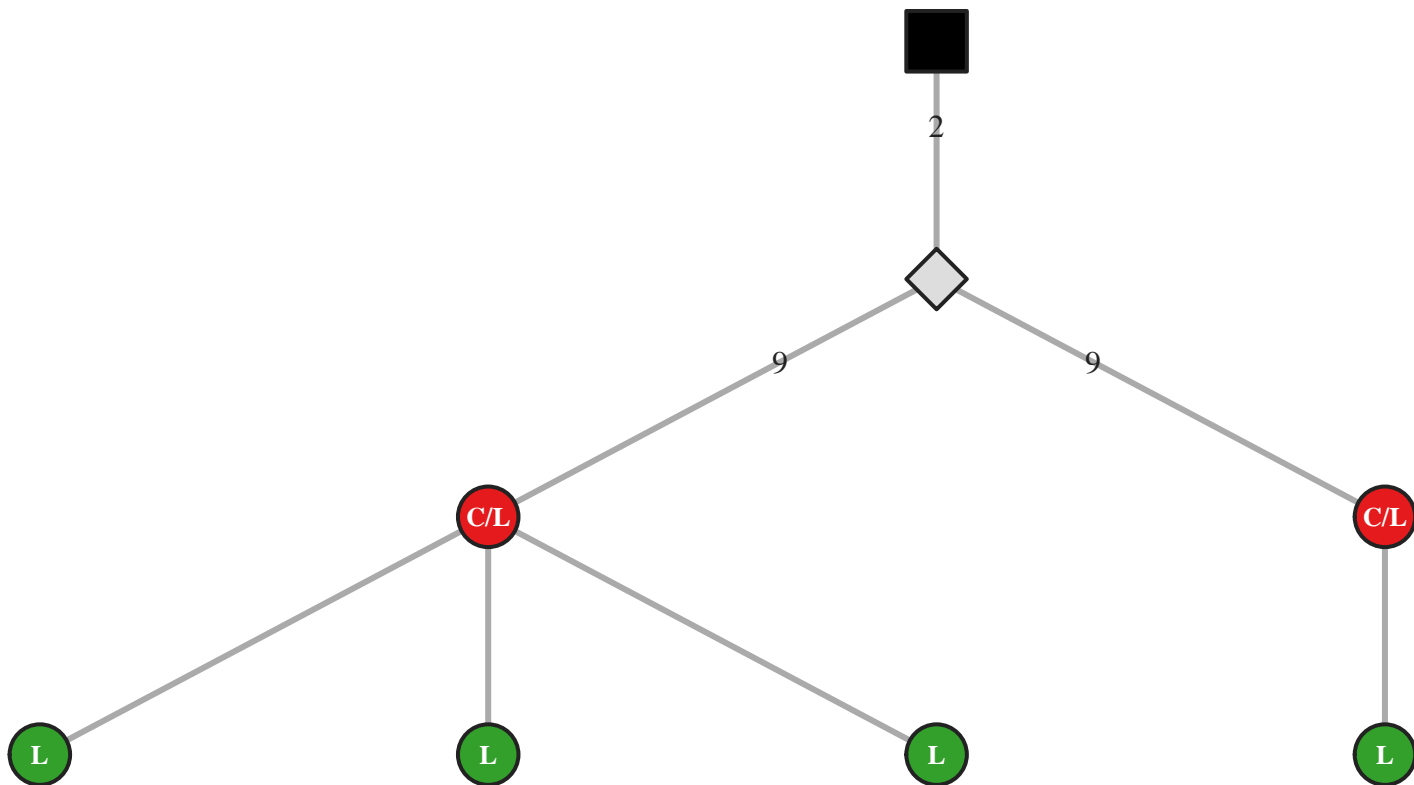
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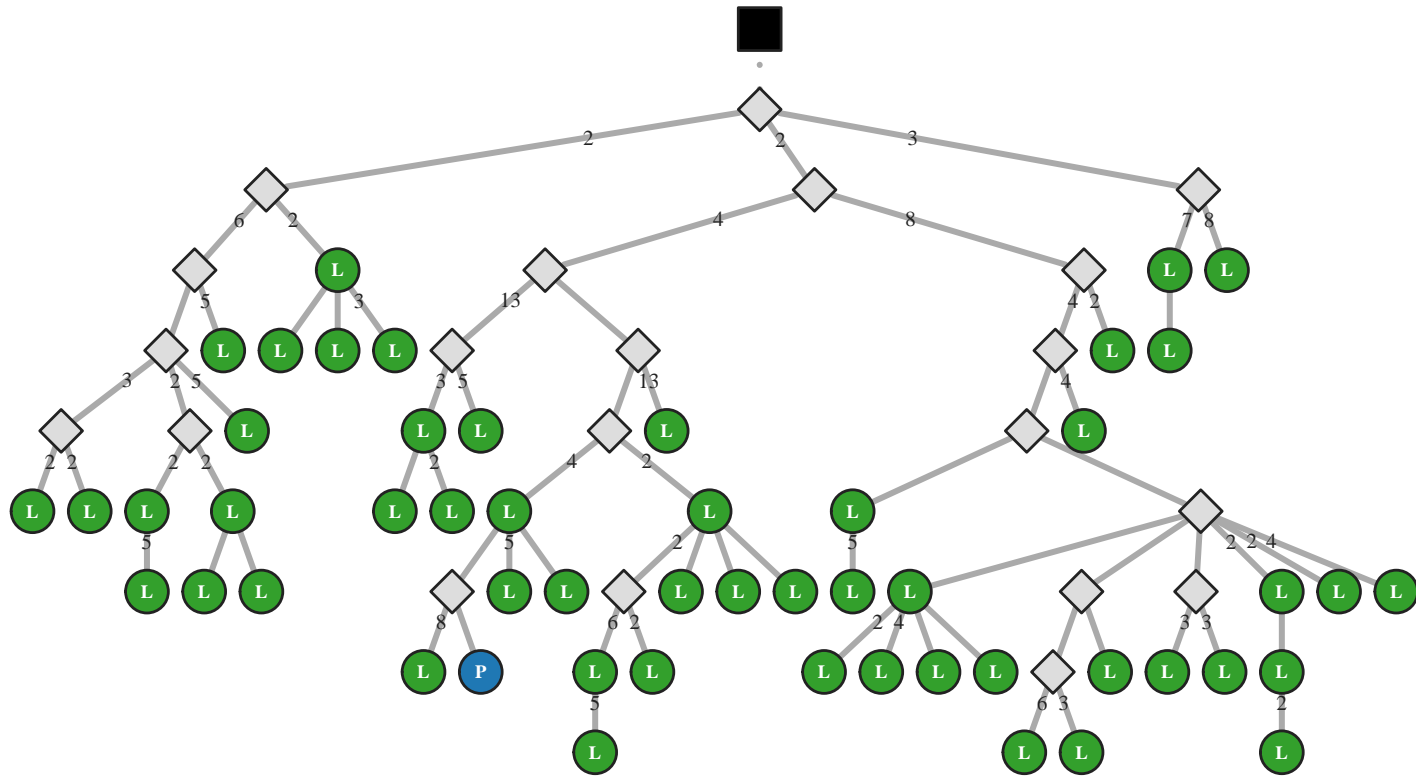
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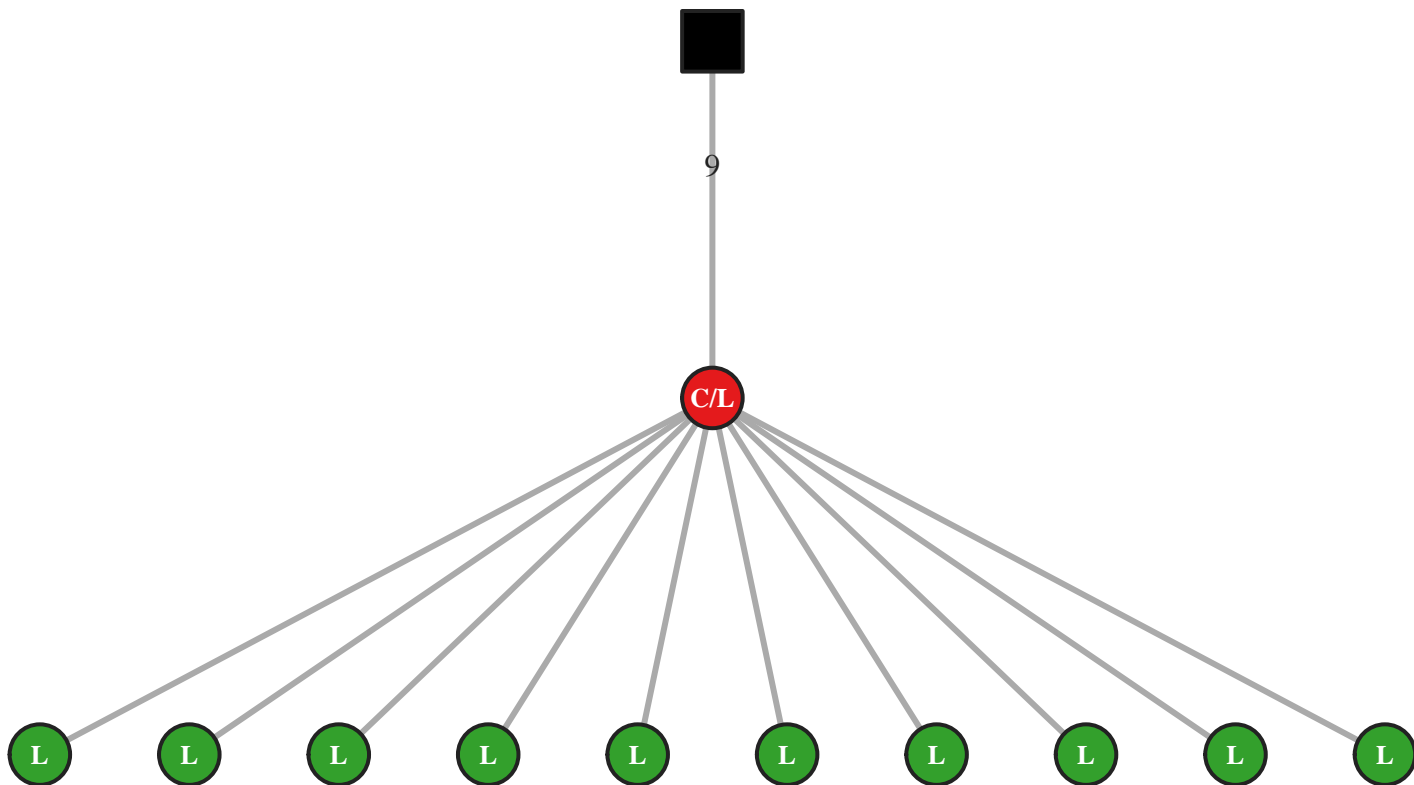
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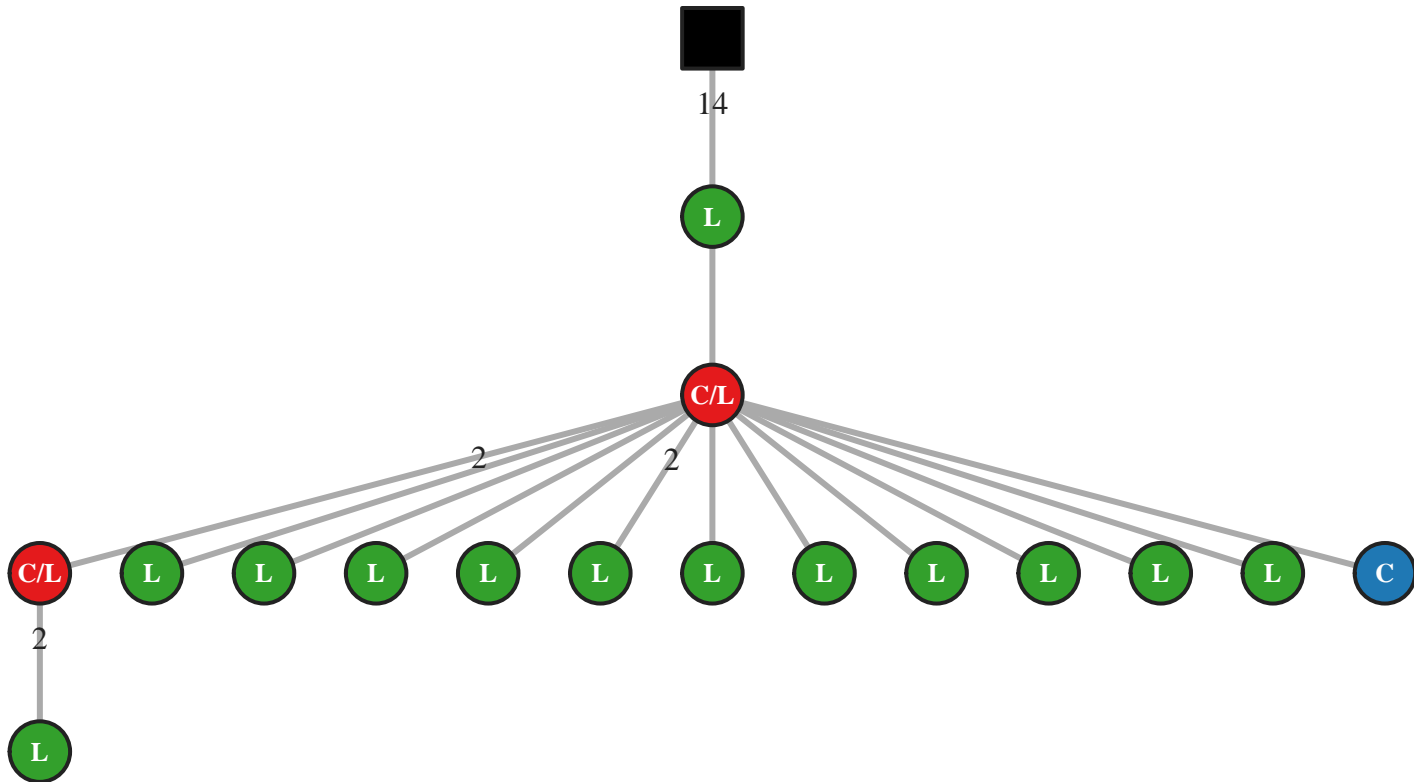
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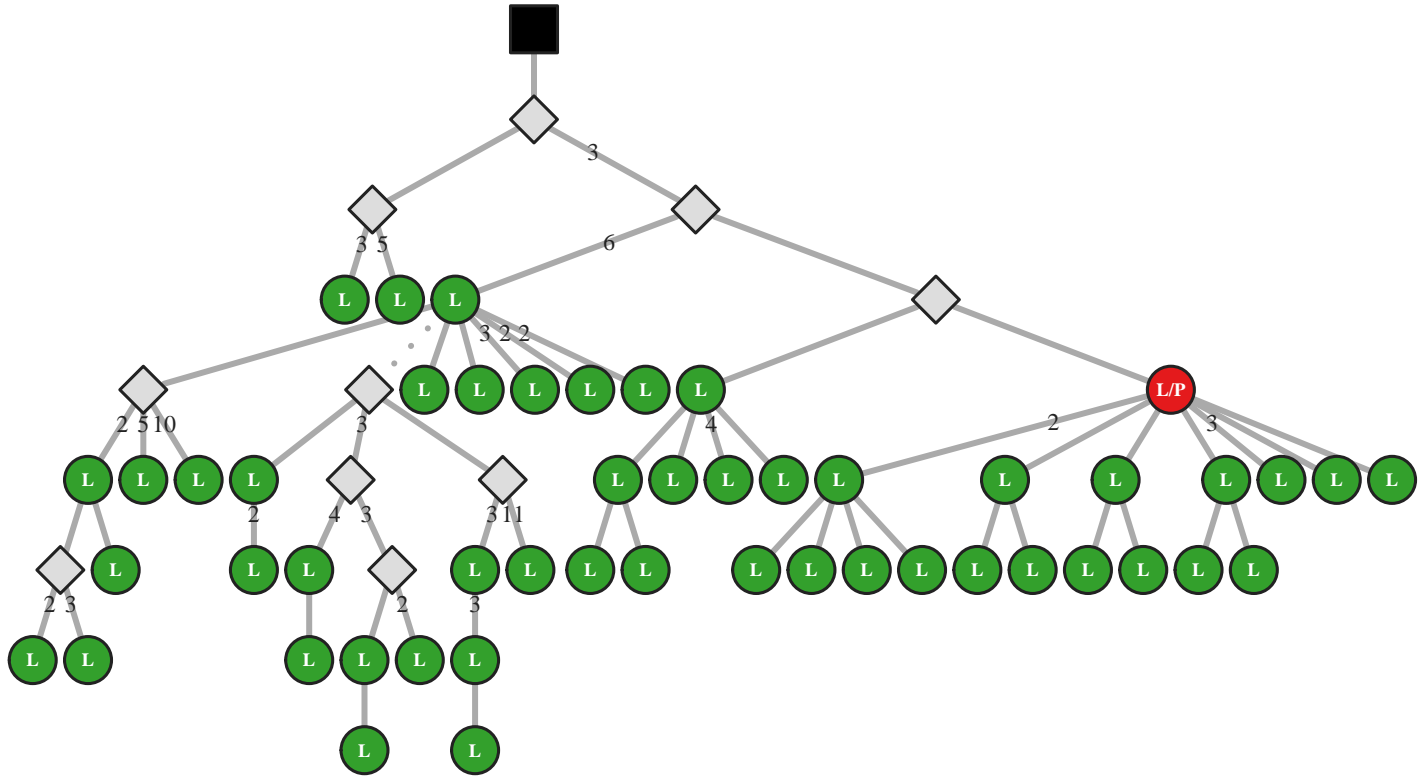
M5 IgM IGHV2-5/J4 42bp (37621)



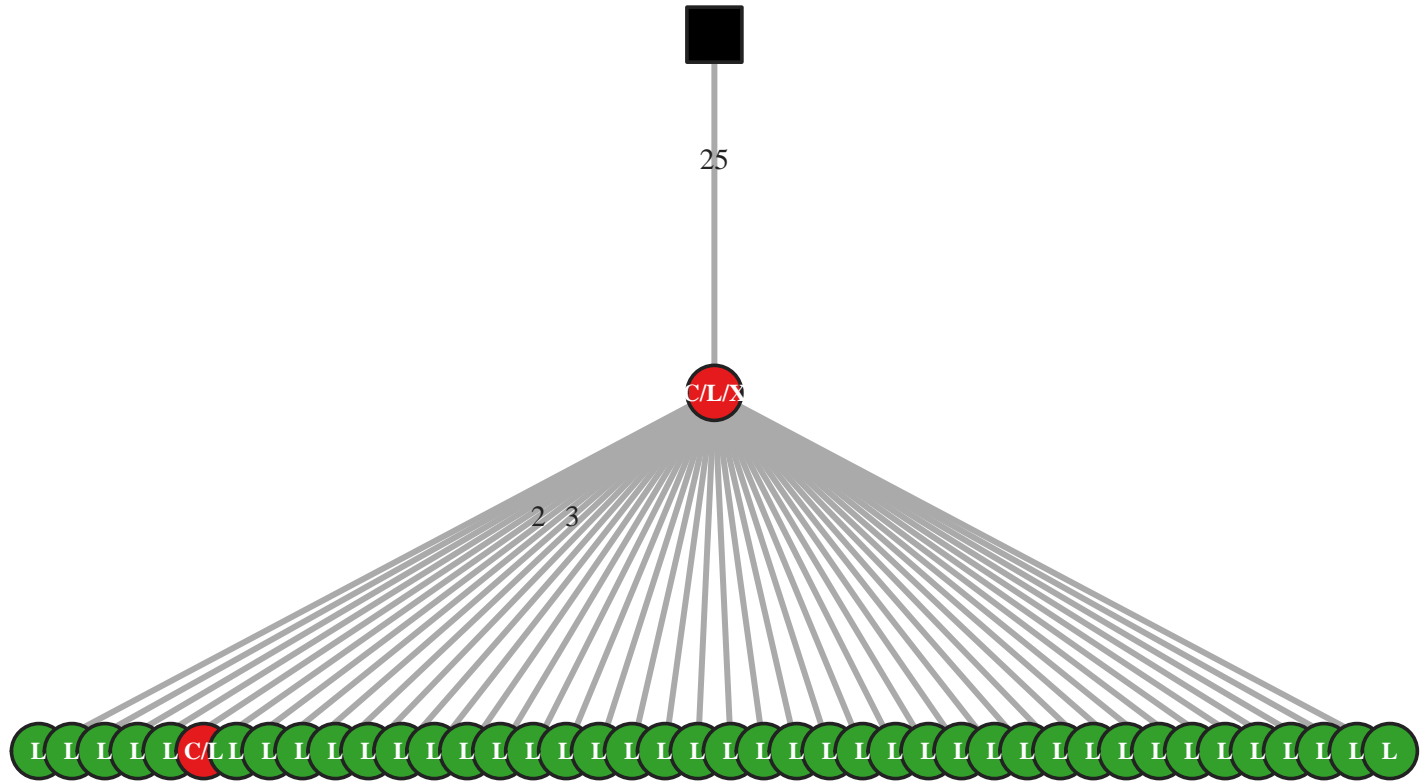
M5 IgG IGHV2-5/J4 45bp (15417)



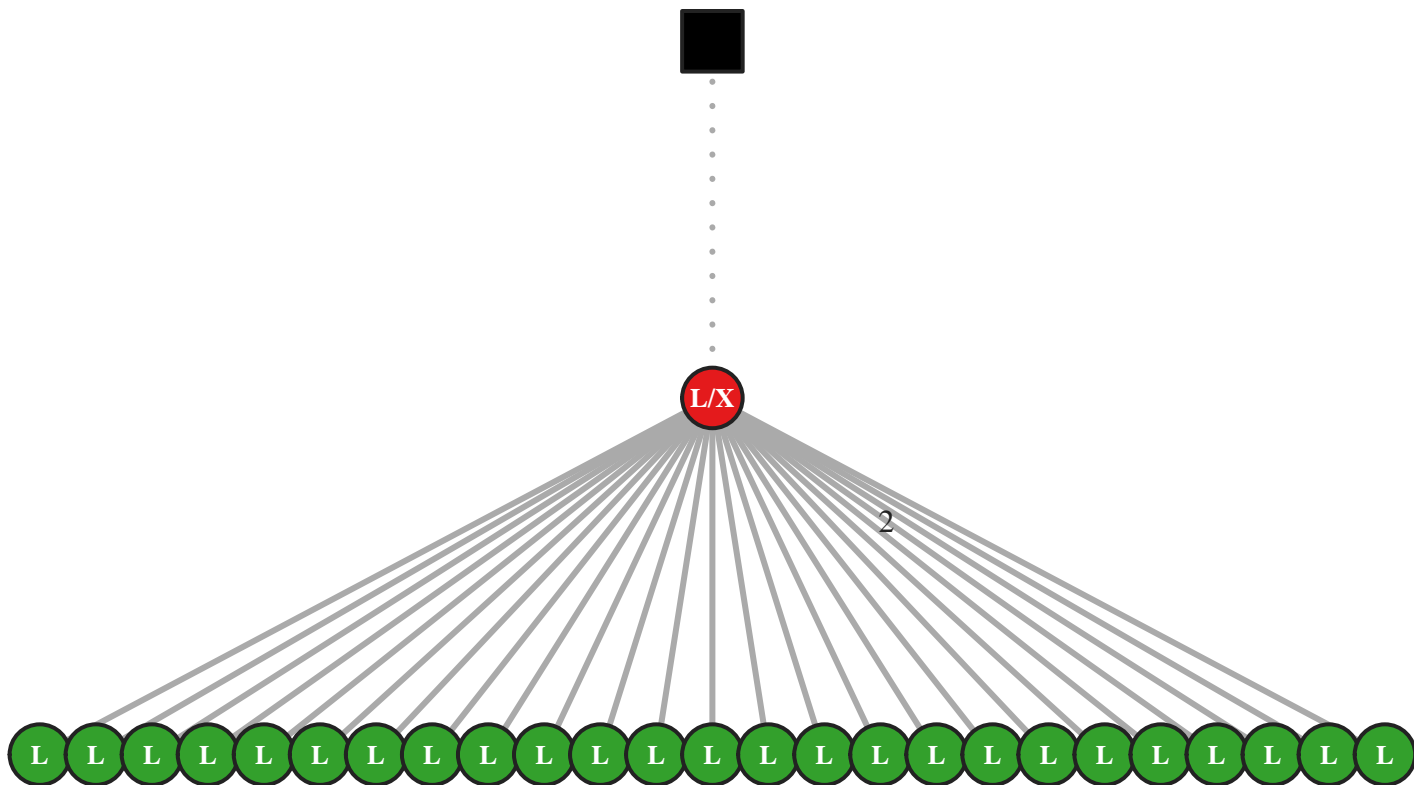
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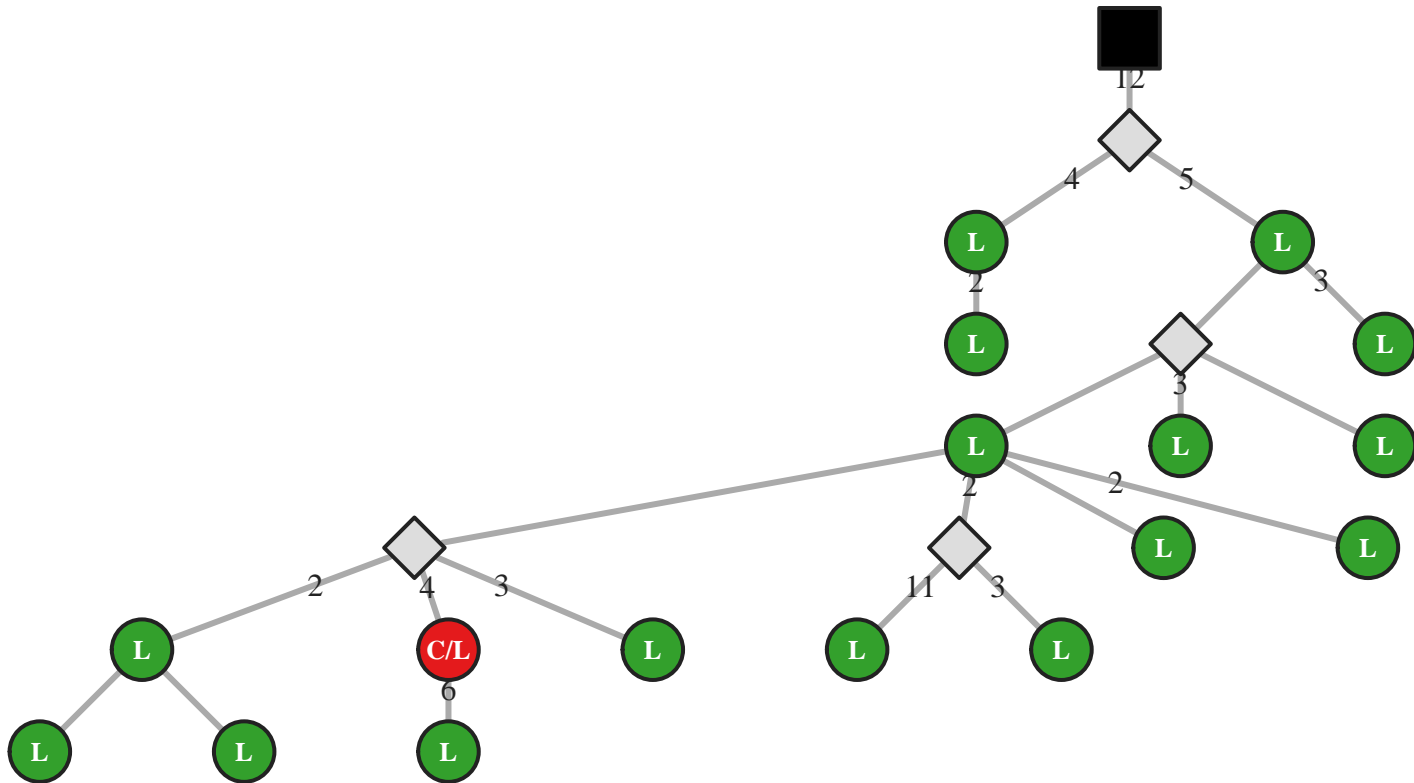
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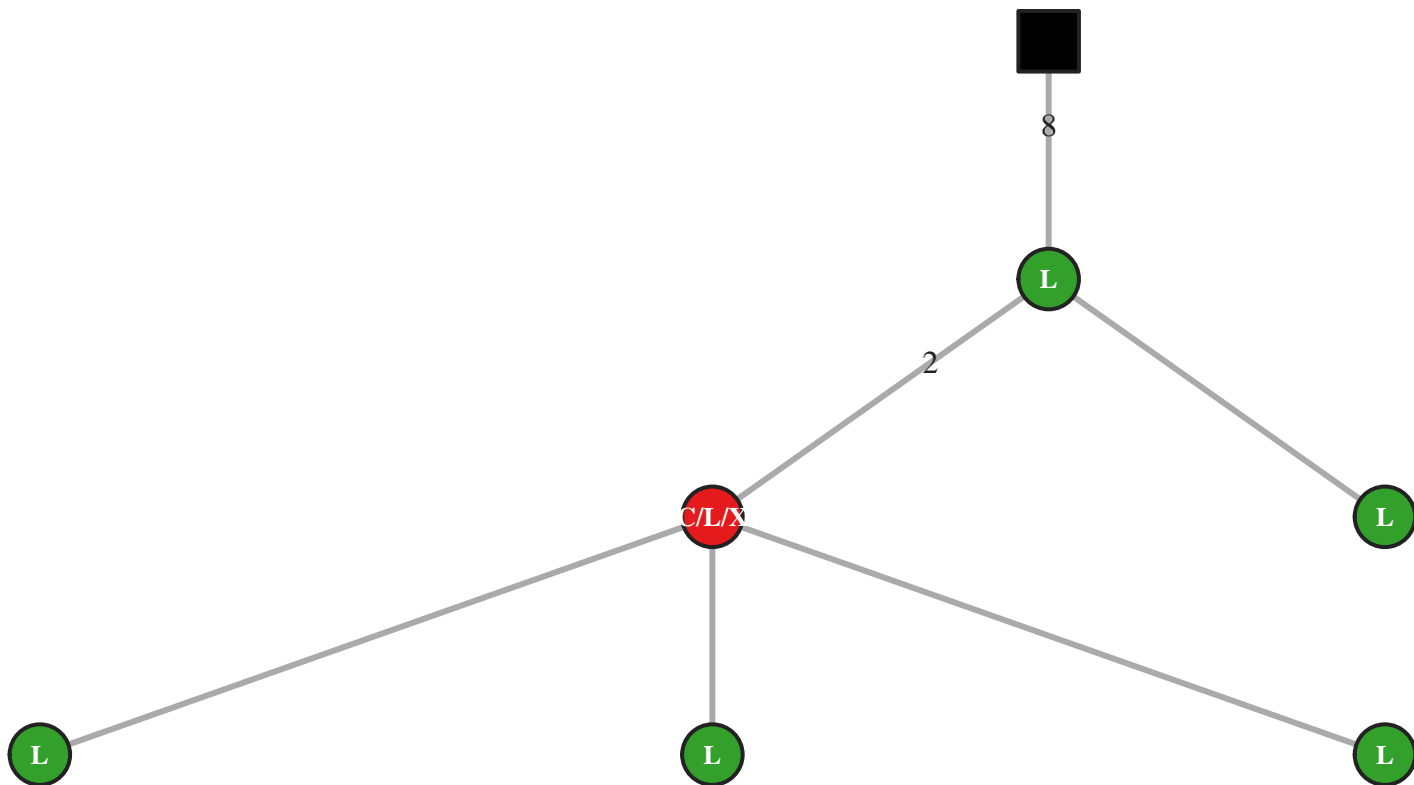
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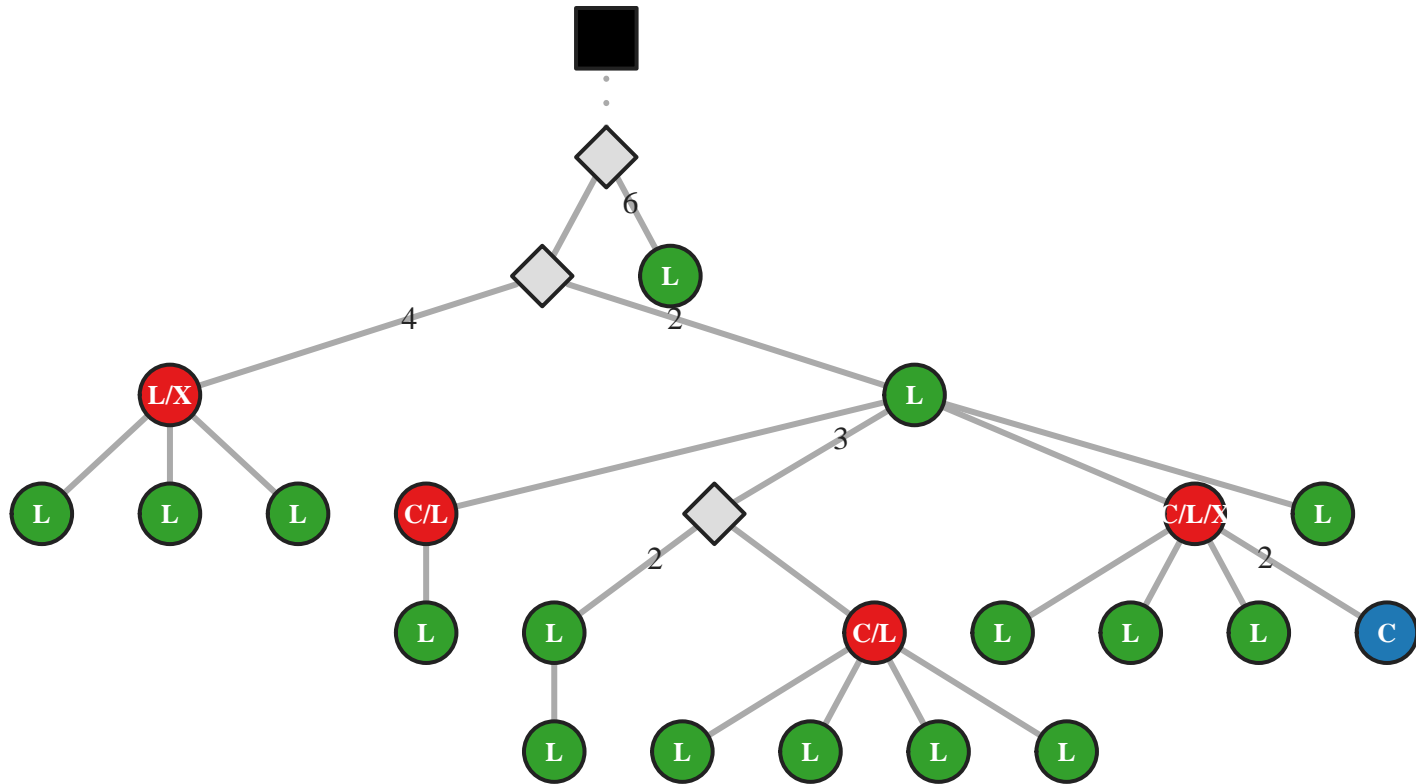
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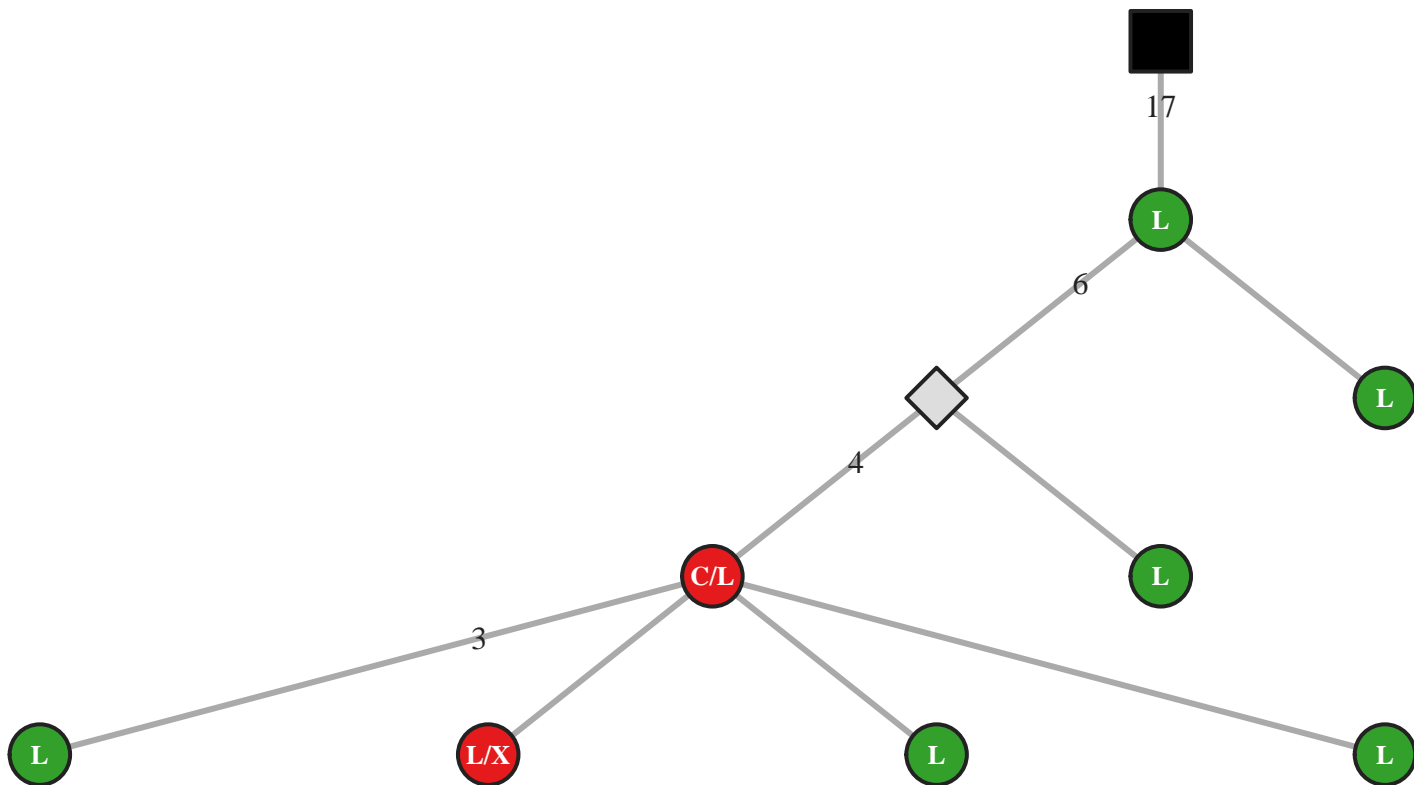
M5 IgG IGHV2-5/J4 45bp (15482)



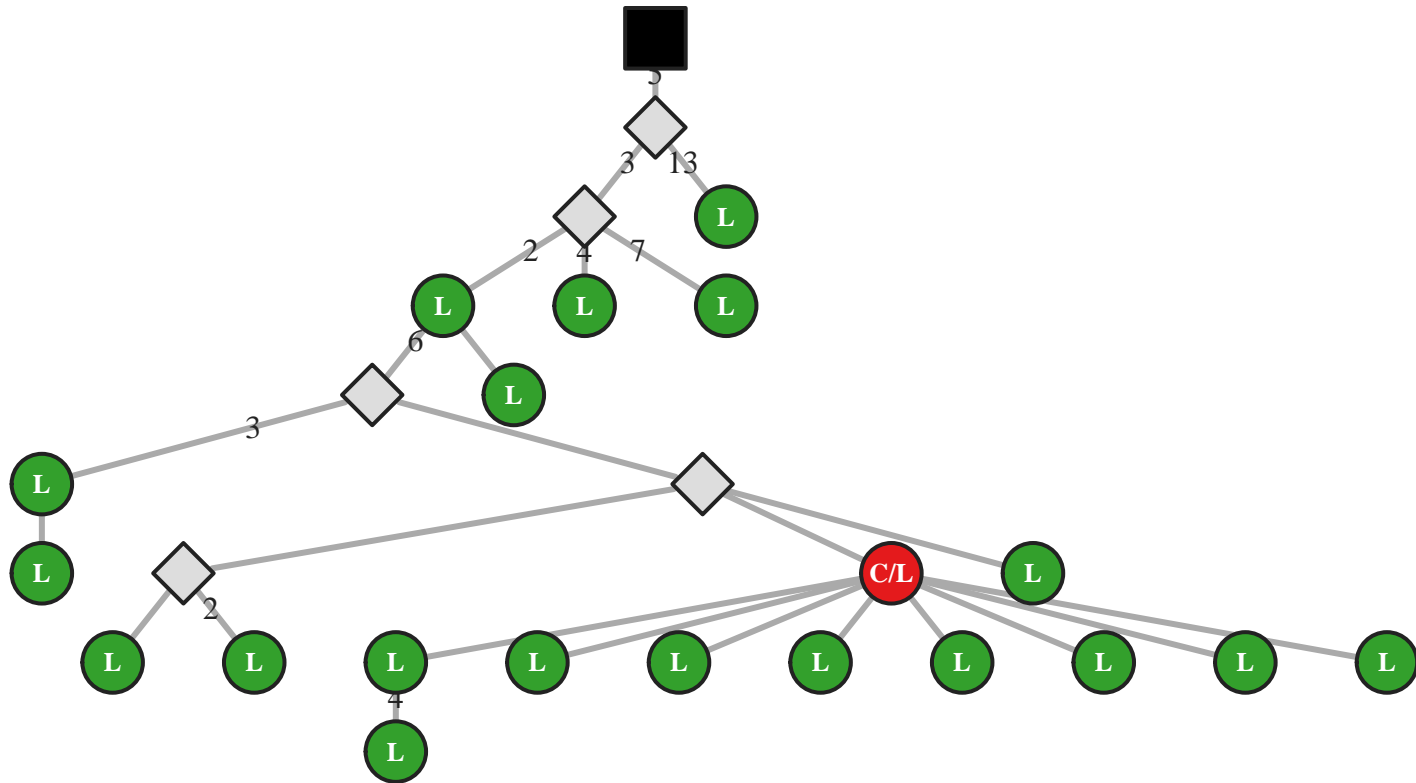
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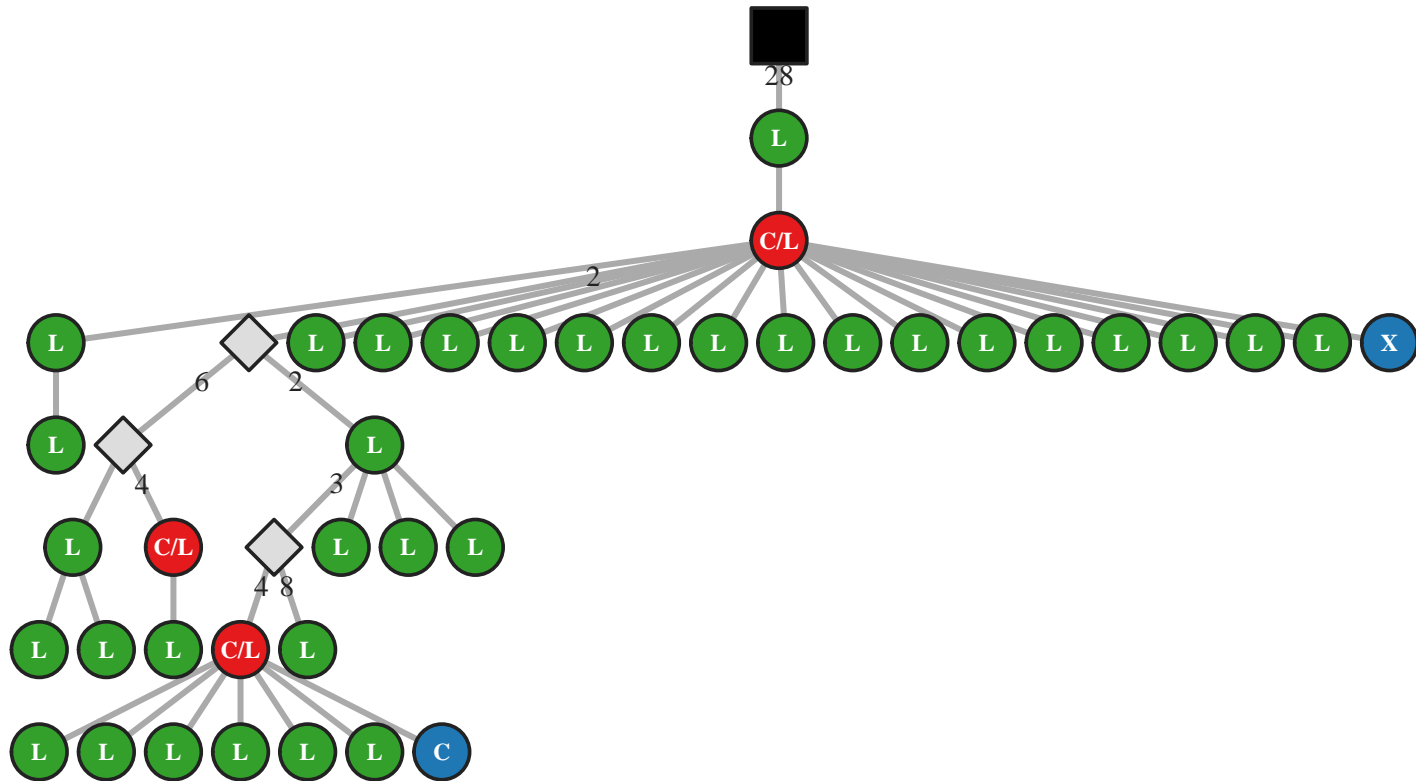
M5 IgG IGHV2-5/J4 45bp (15486)



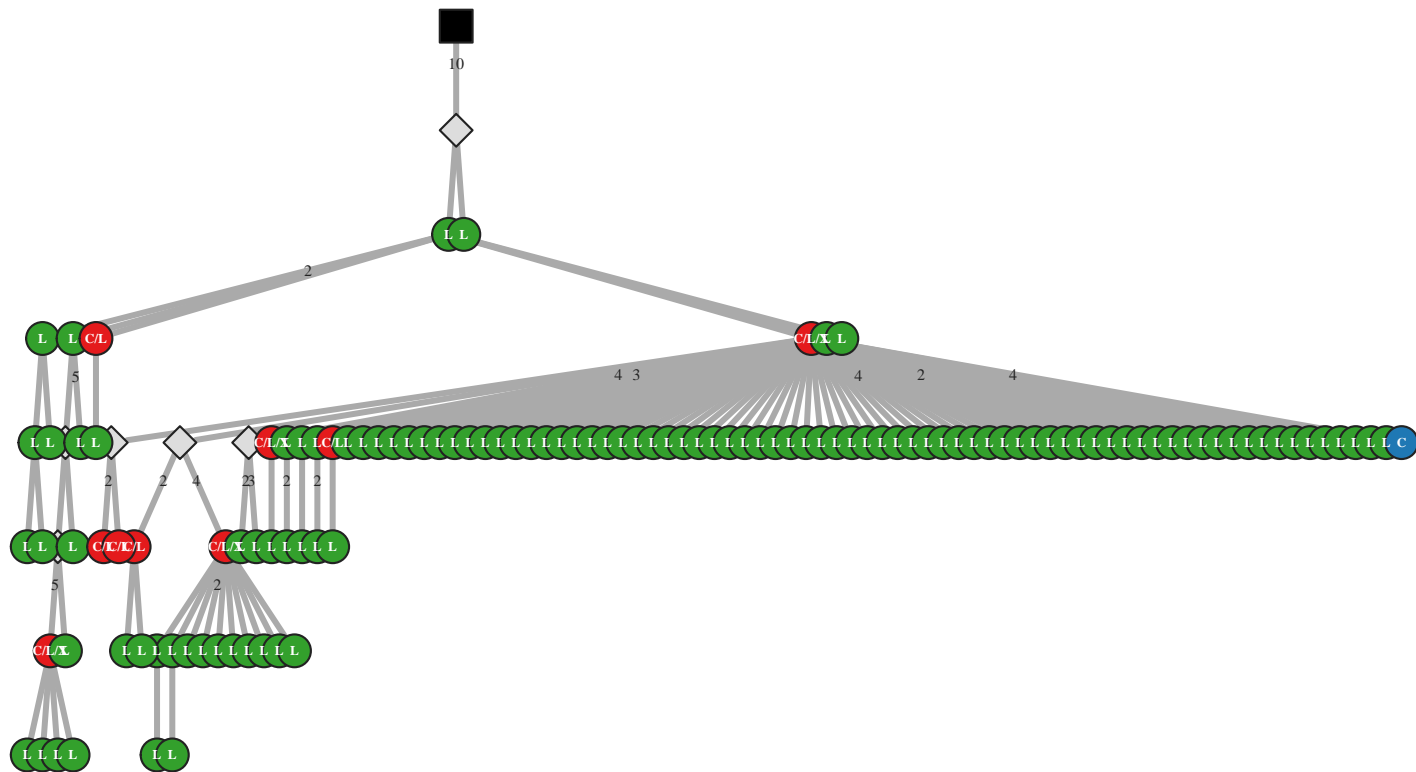
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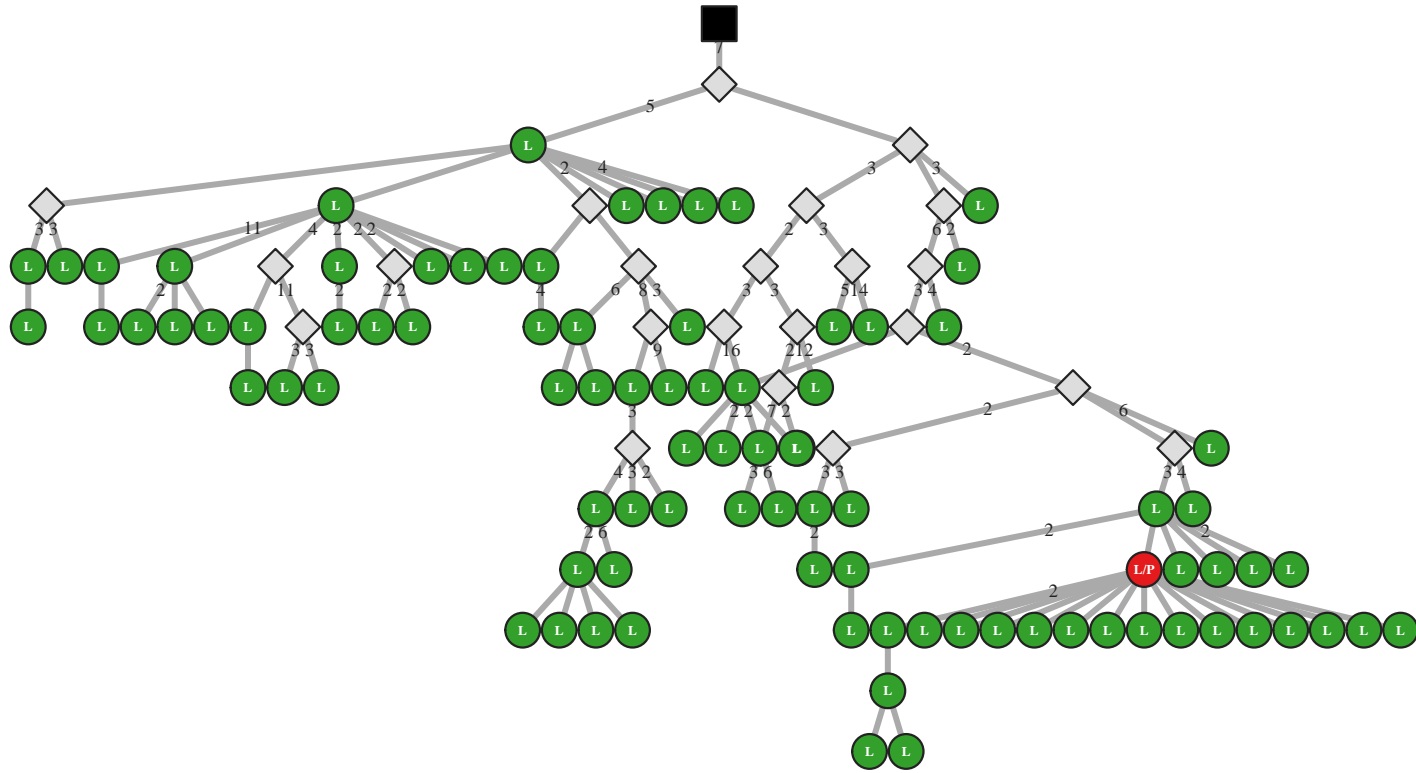
M5 IgA IGHV2-5/J4 48bp (12091)



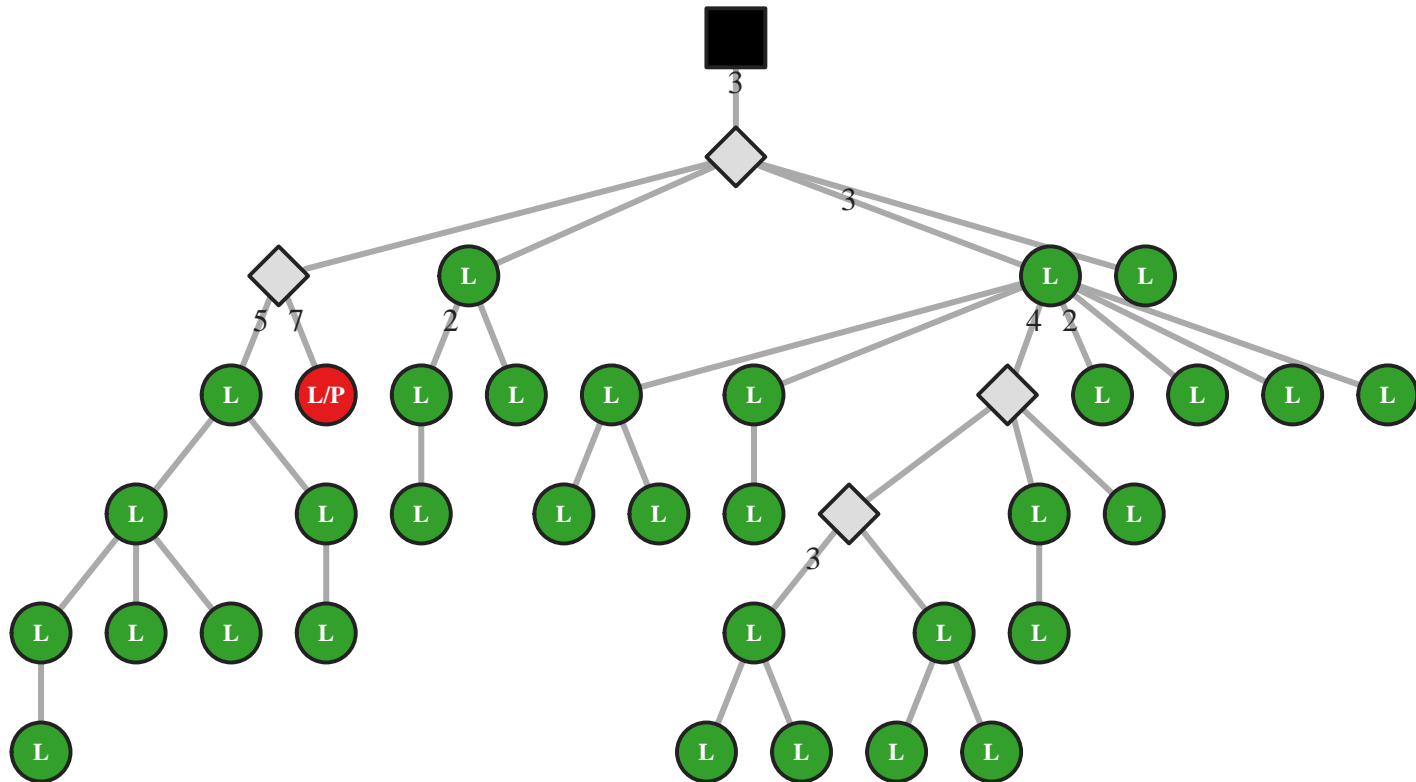
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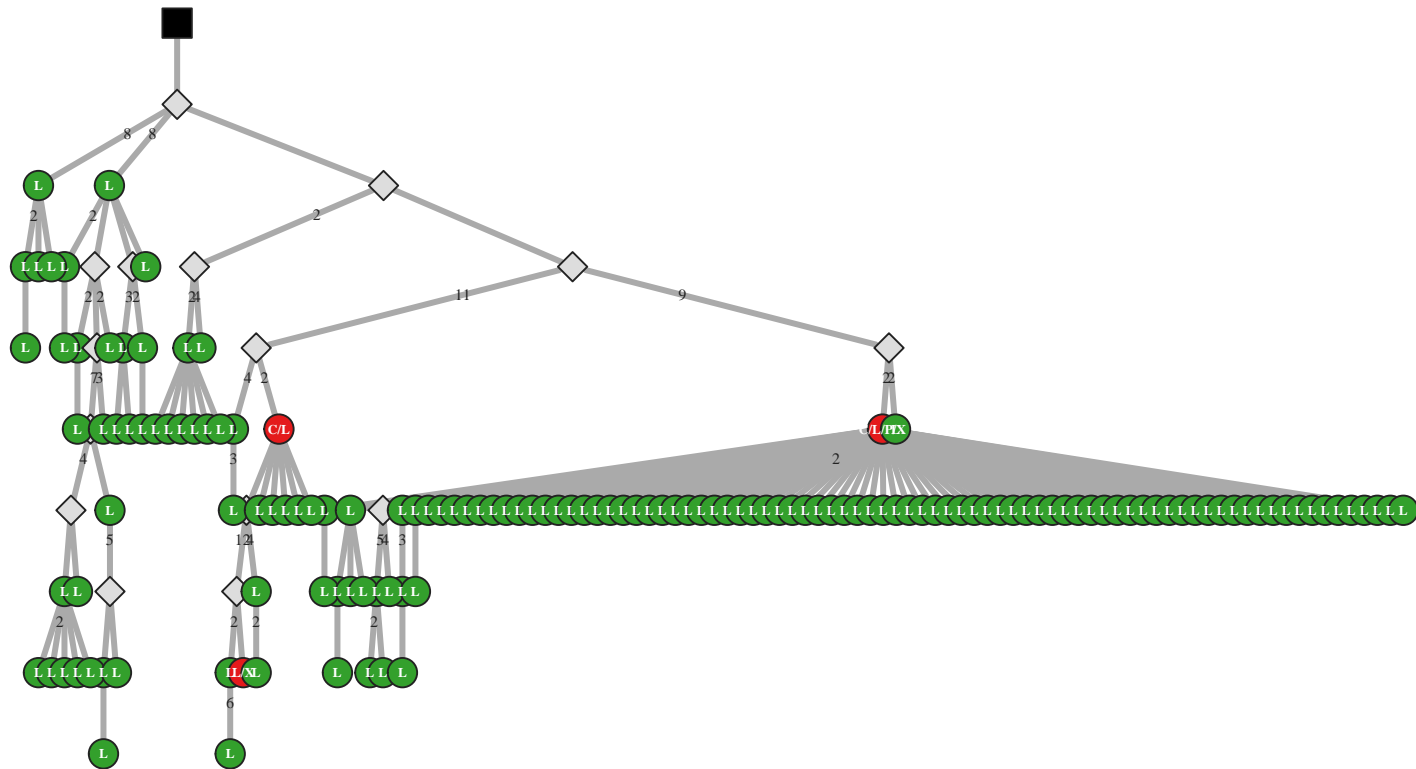
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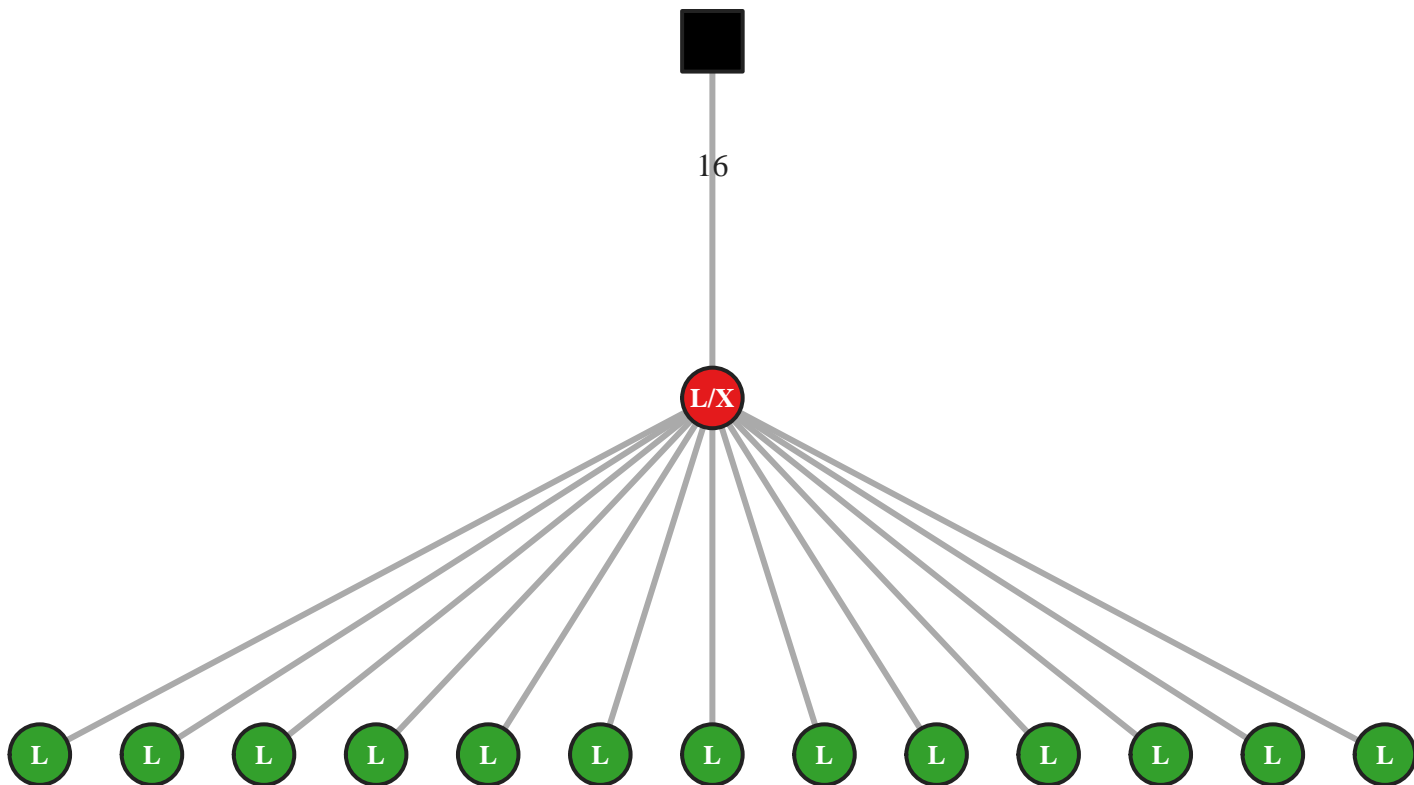
M5 IgG IGHV2-5/J4 51bp (33470)



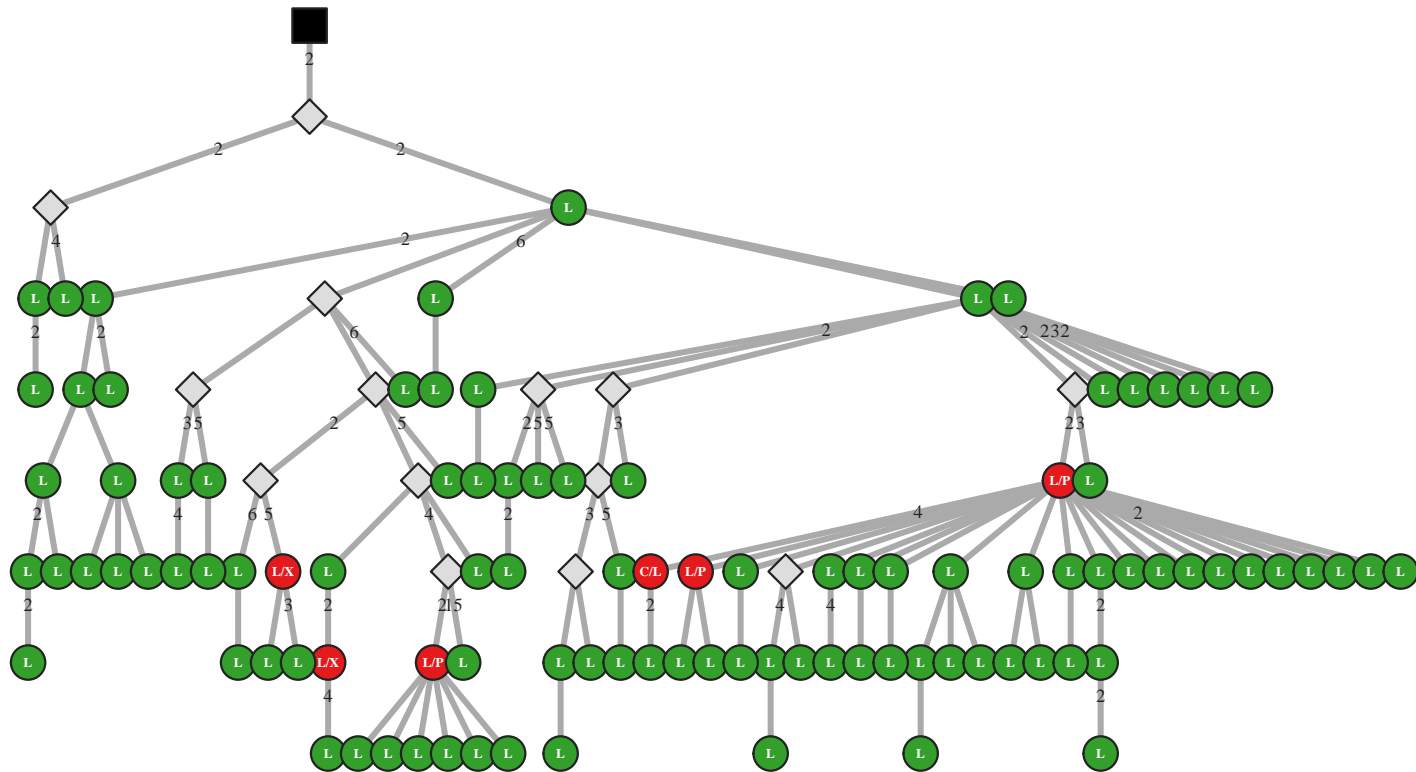
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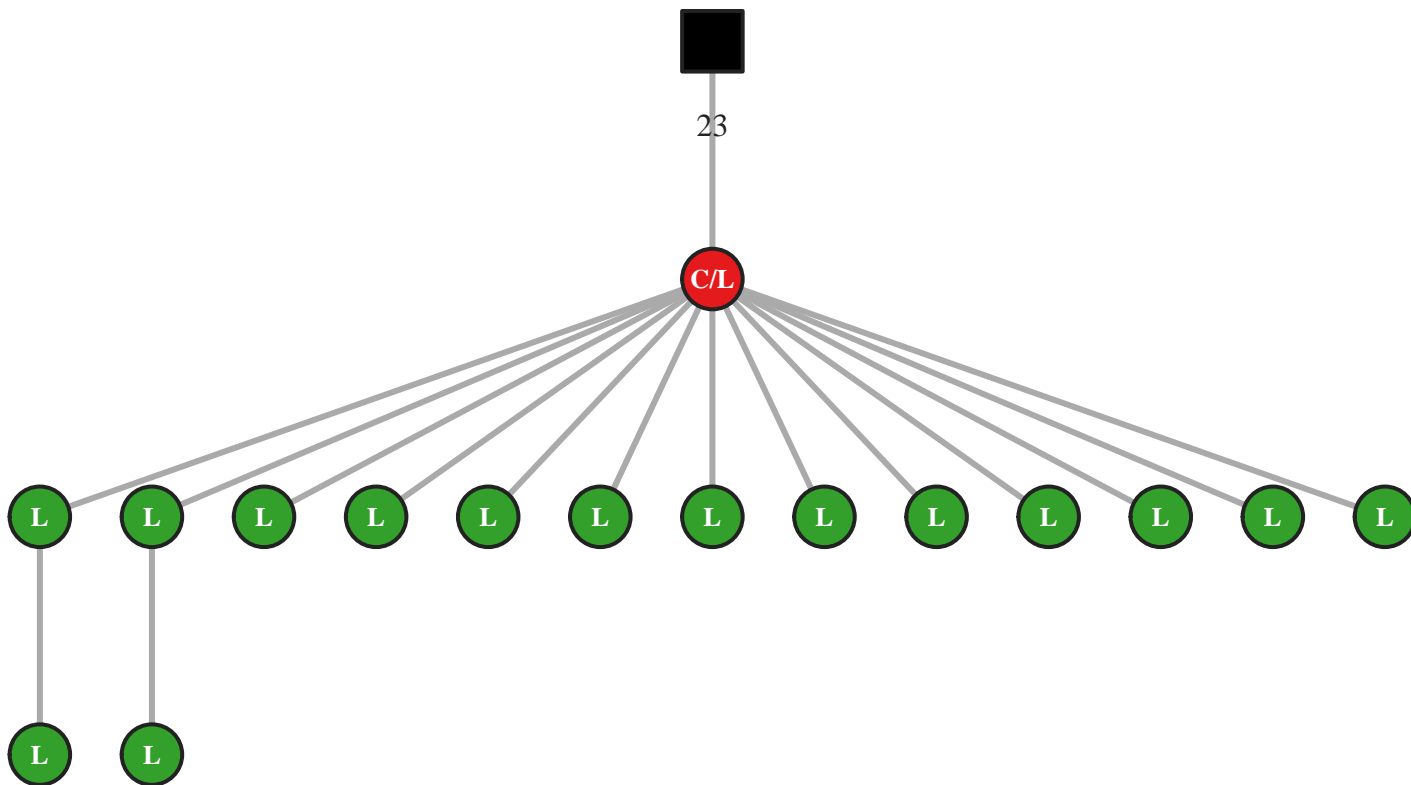
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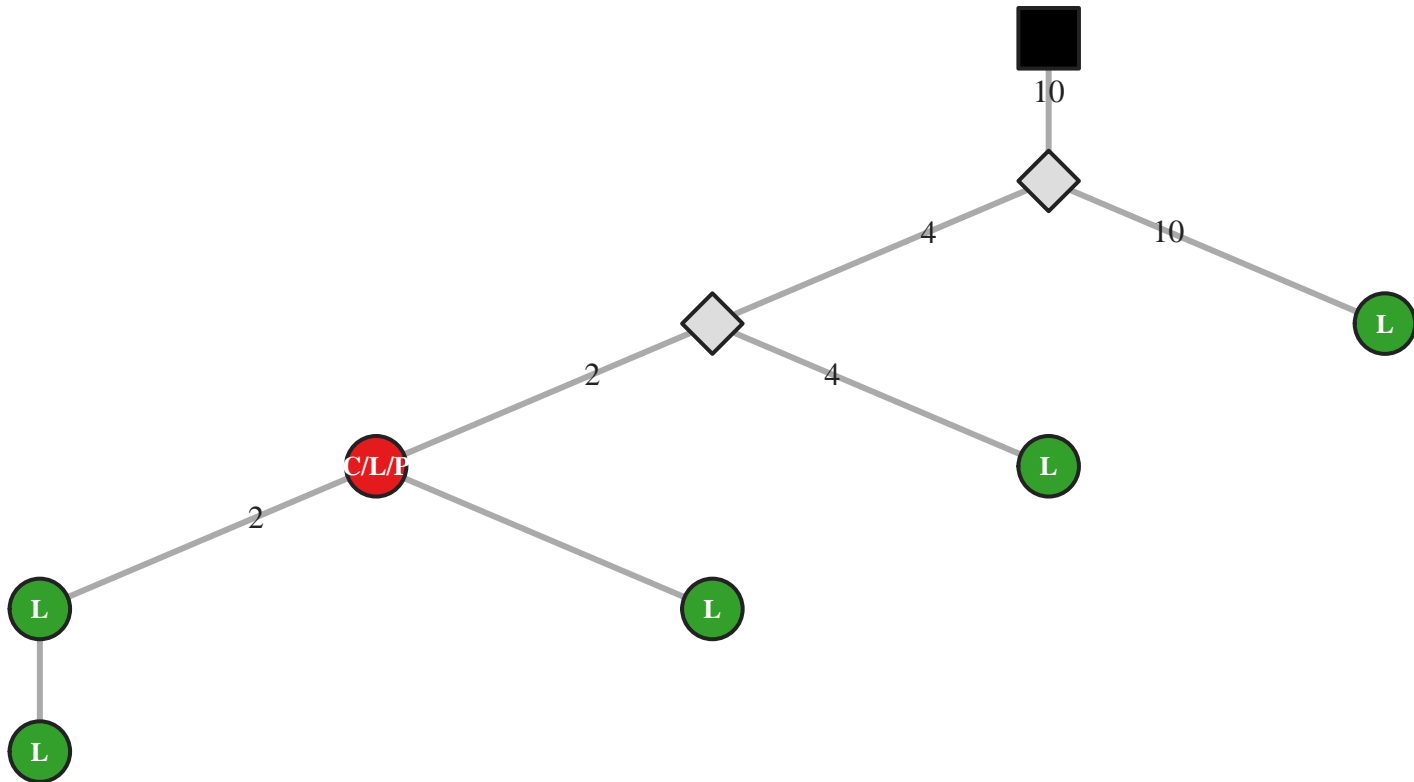
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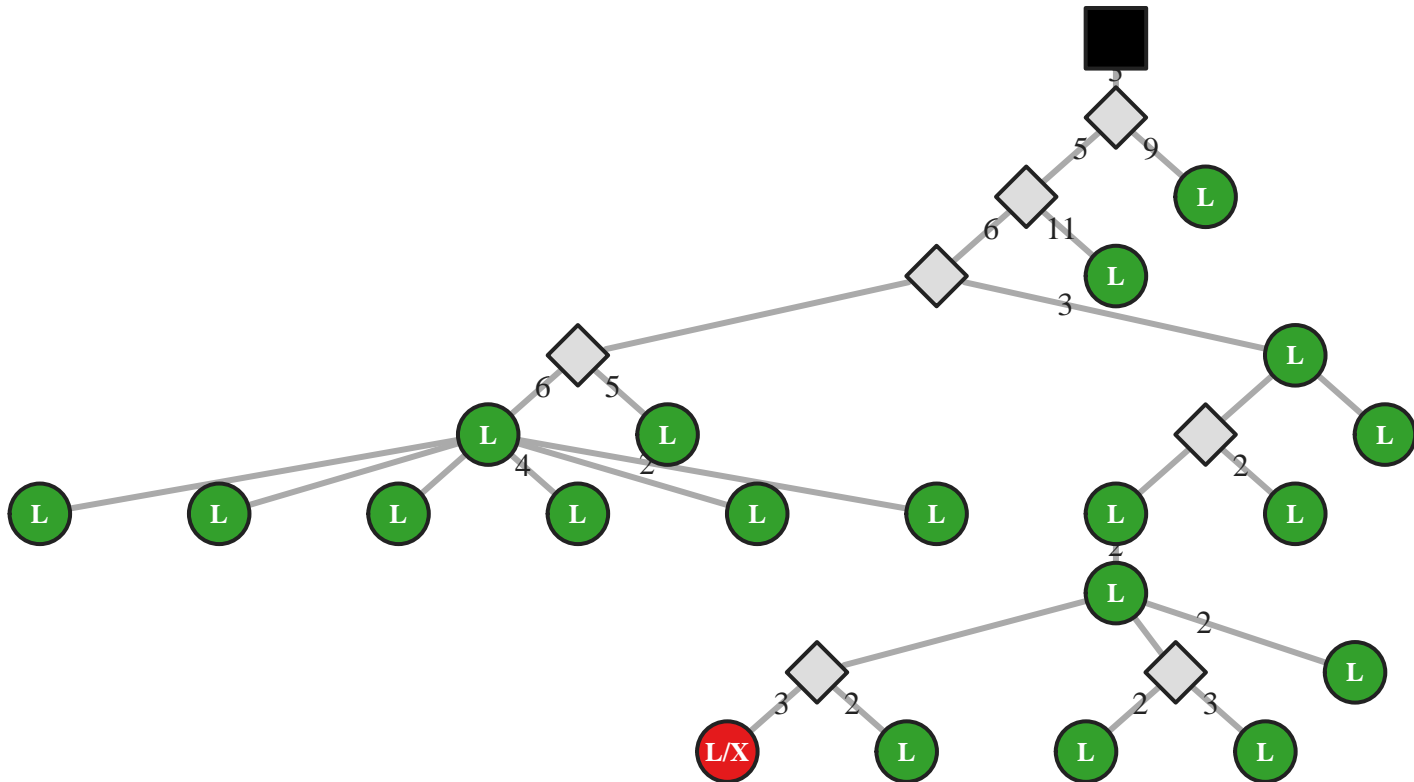
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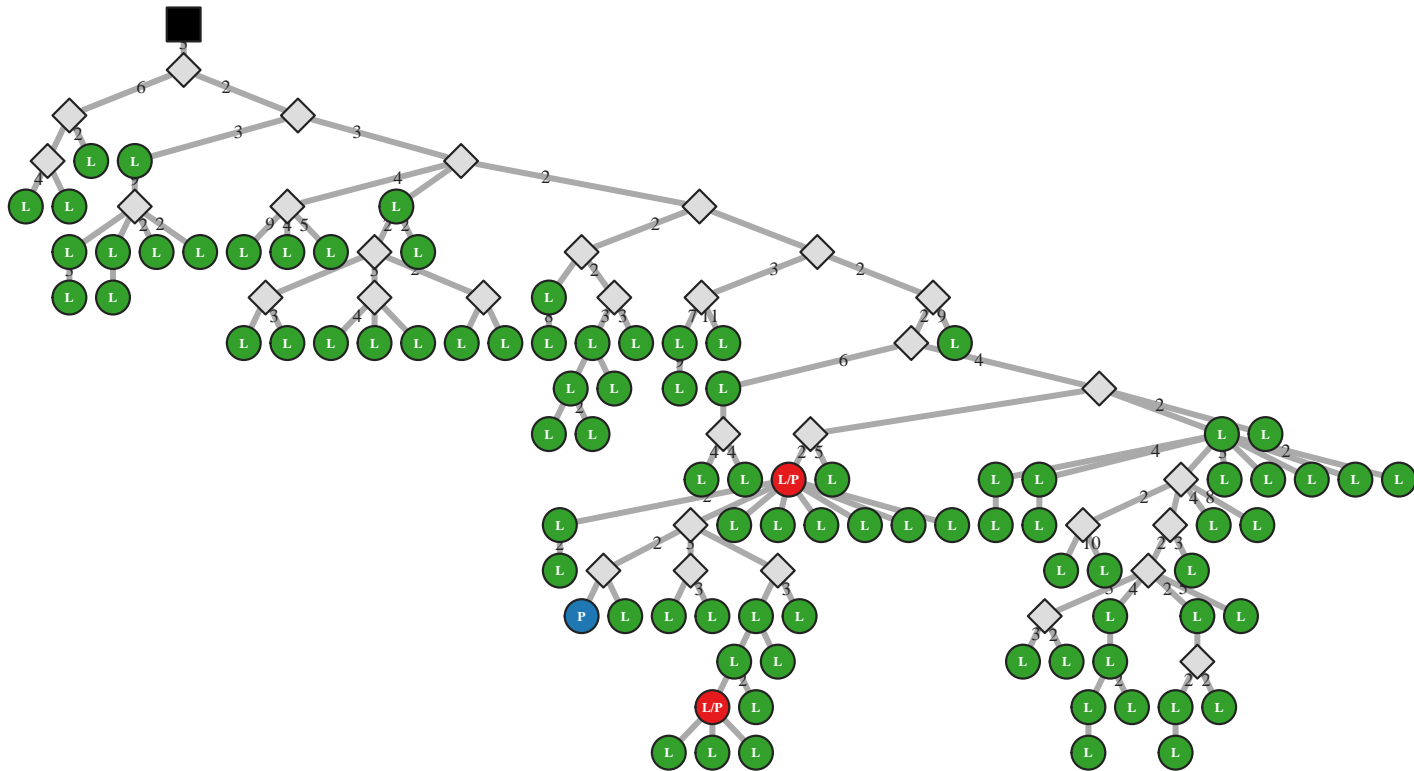
M5 IgA IGHV2-5/J4 54bp (38534)



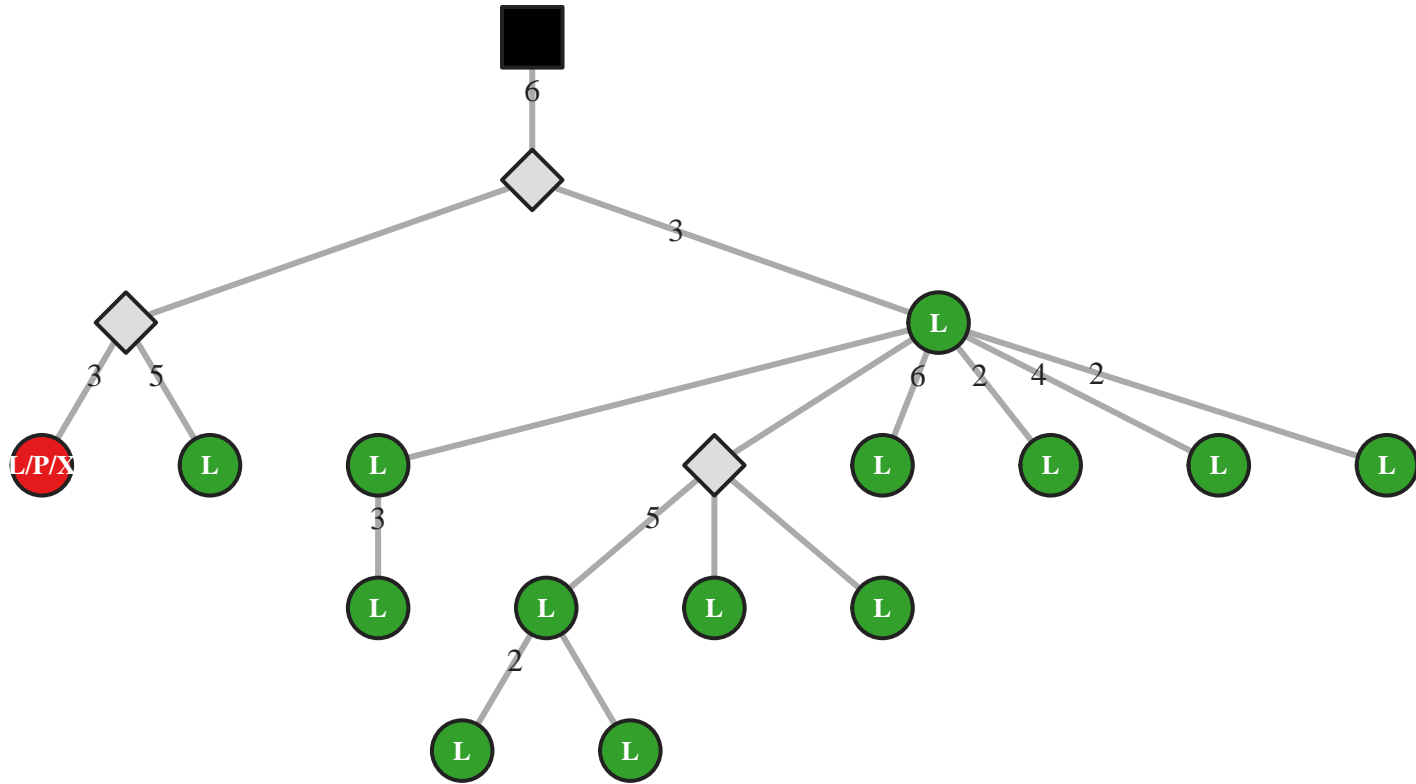
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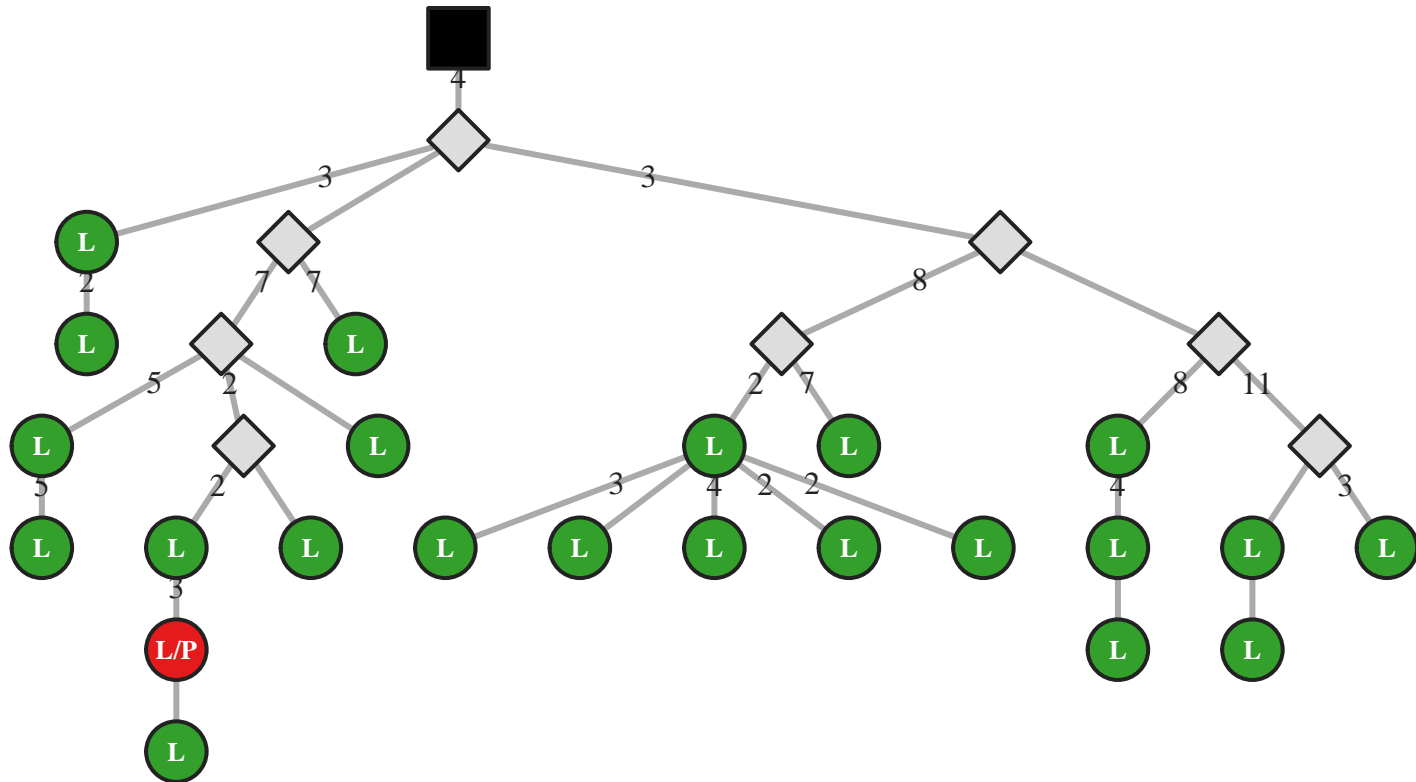
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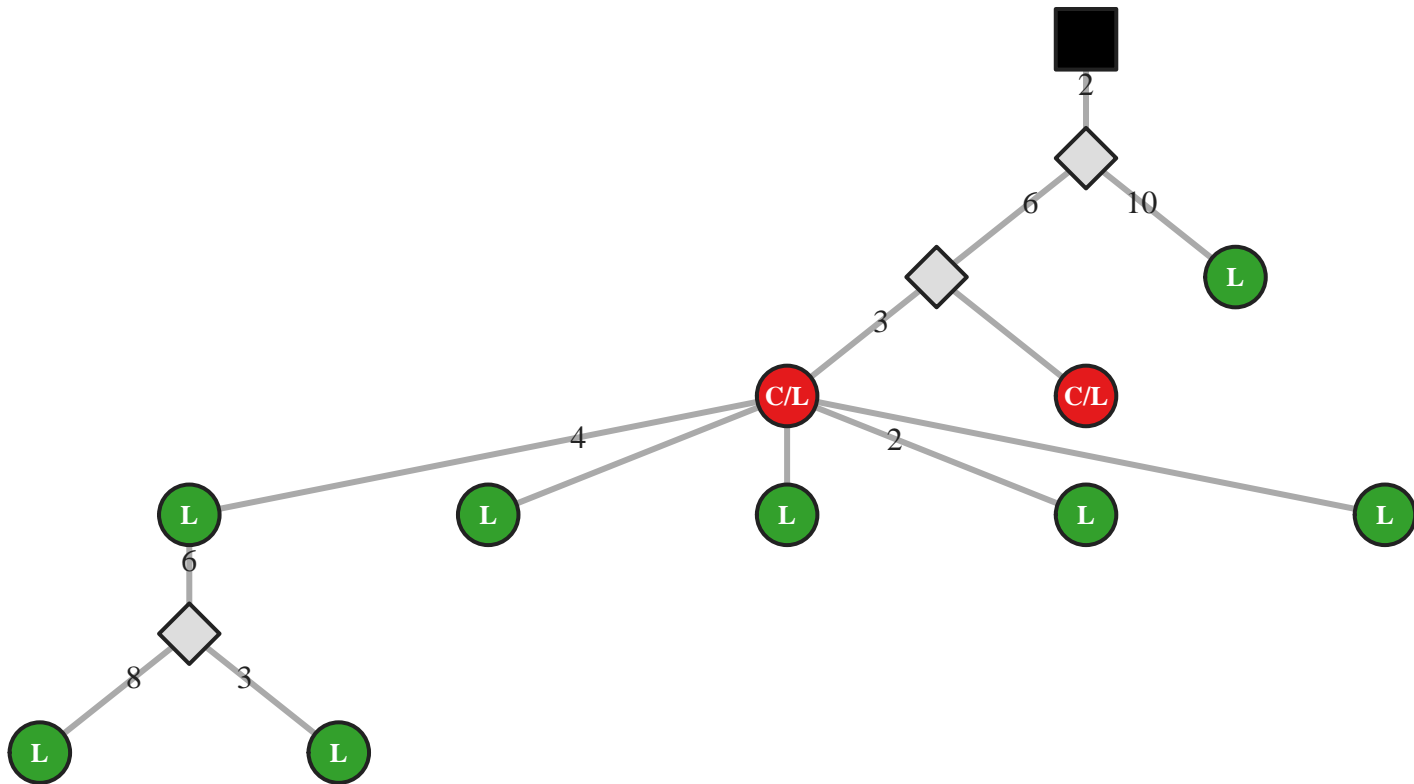
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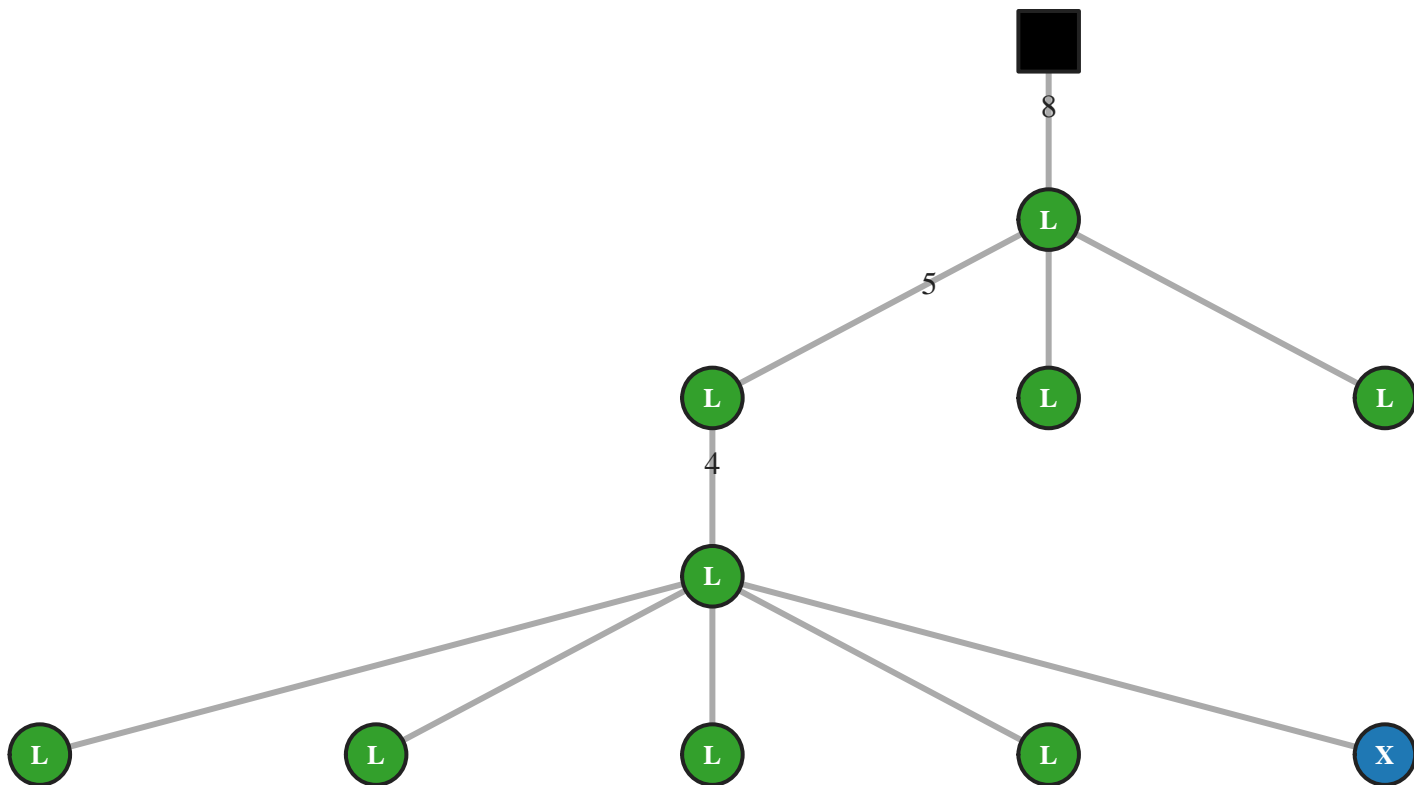
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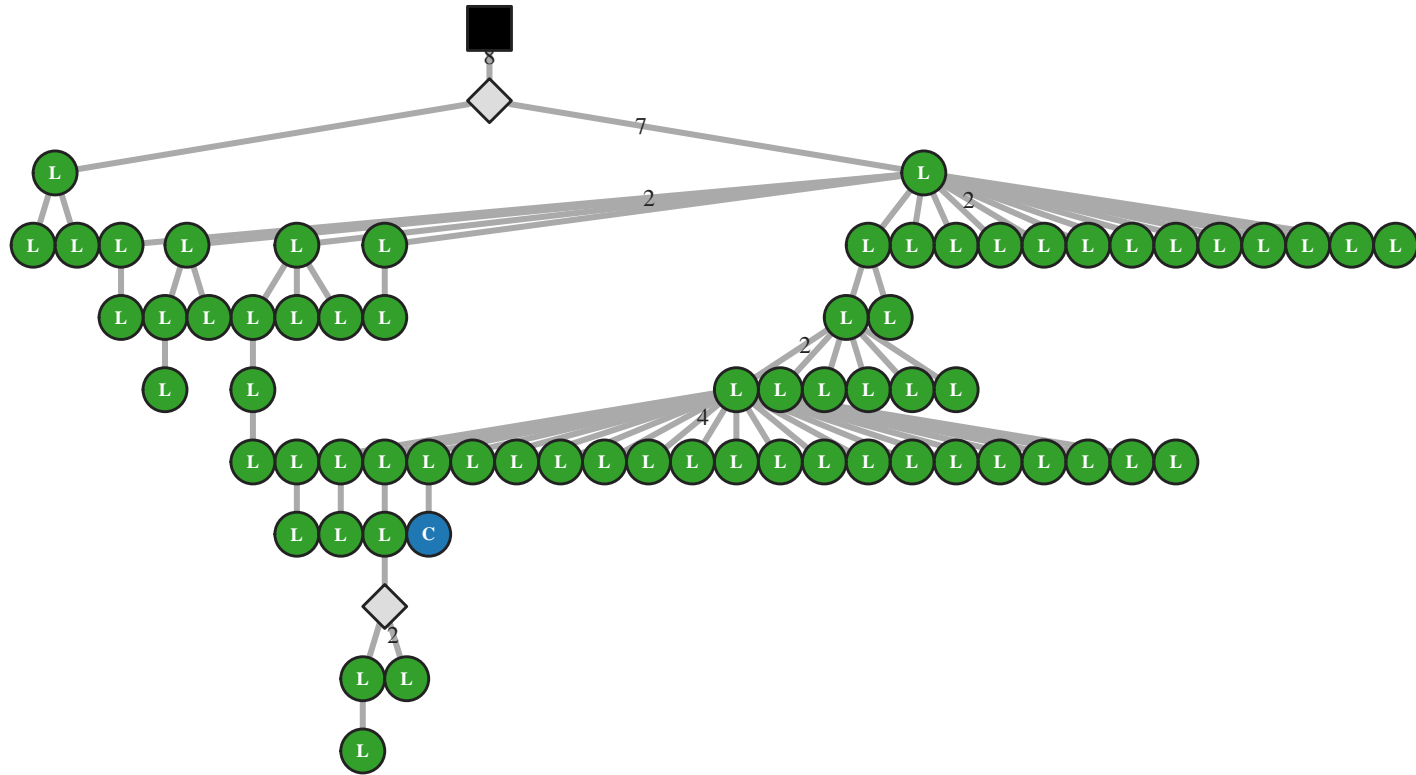
M5 IgA IGHV2-5/J4 57bp (48658)



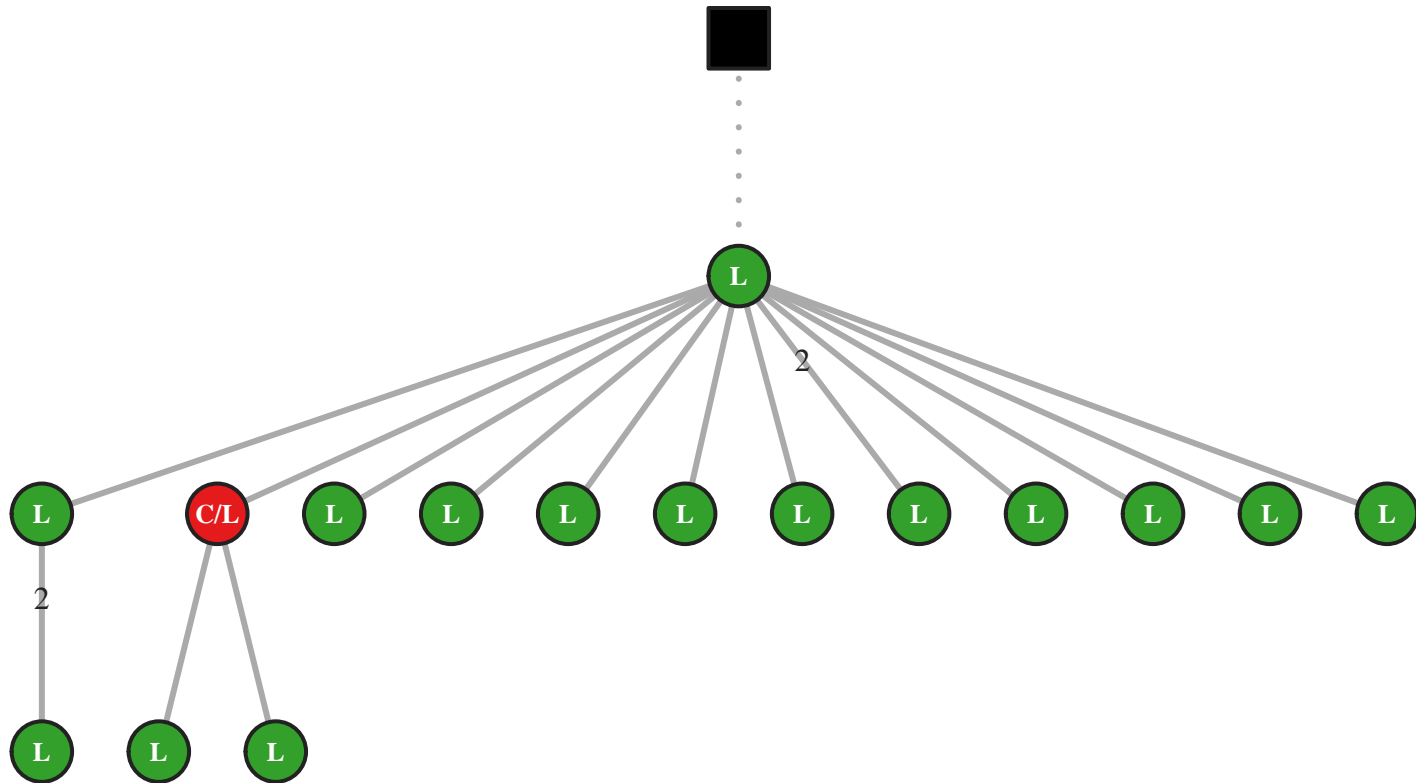
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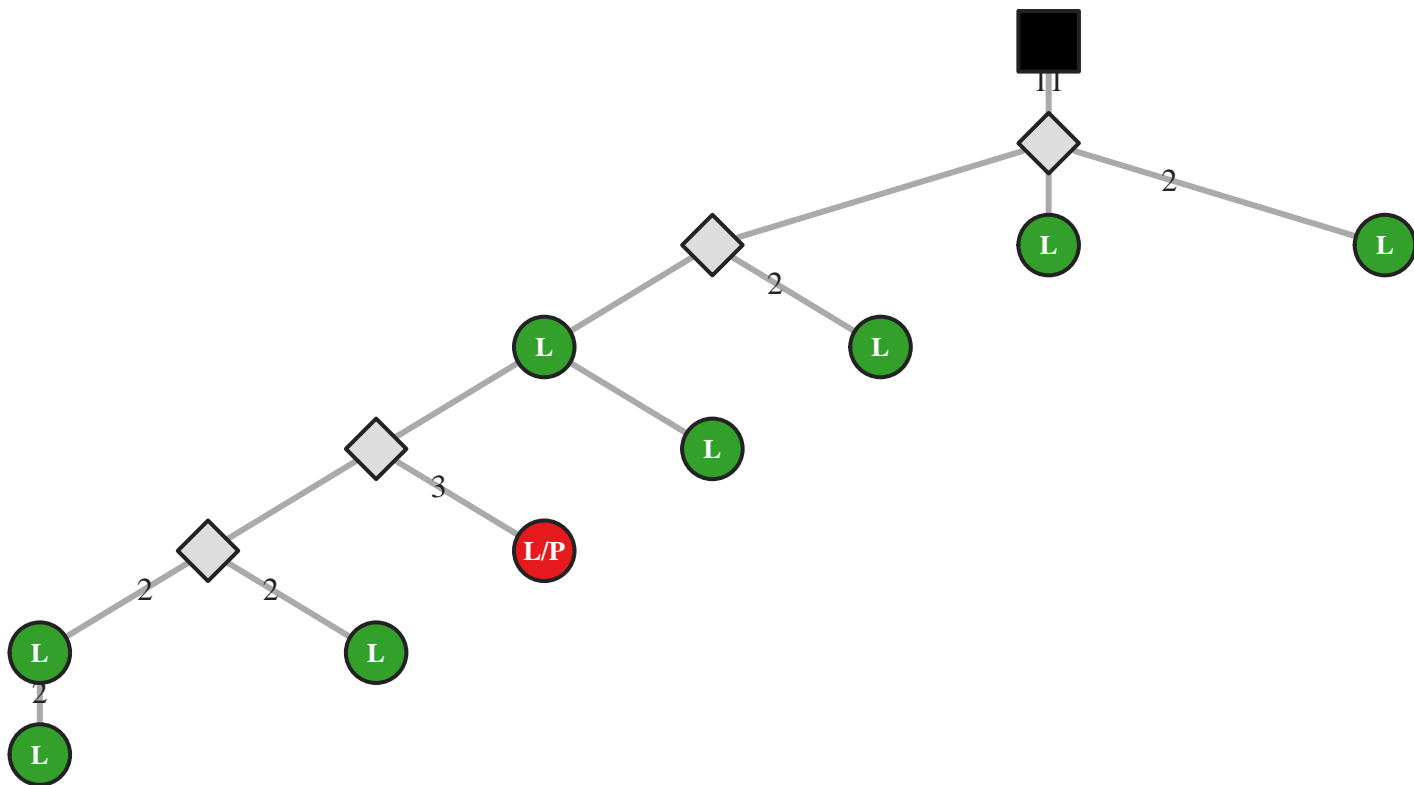
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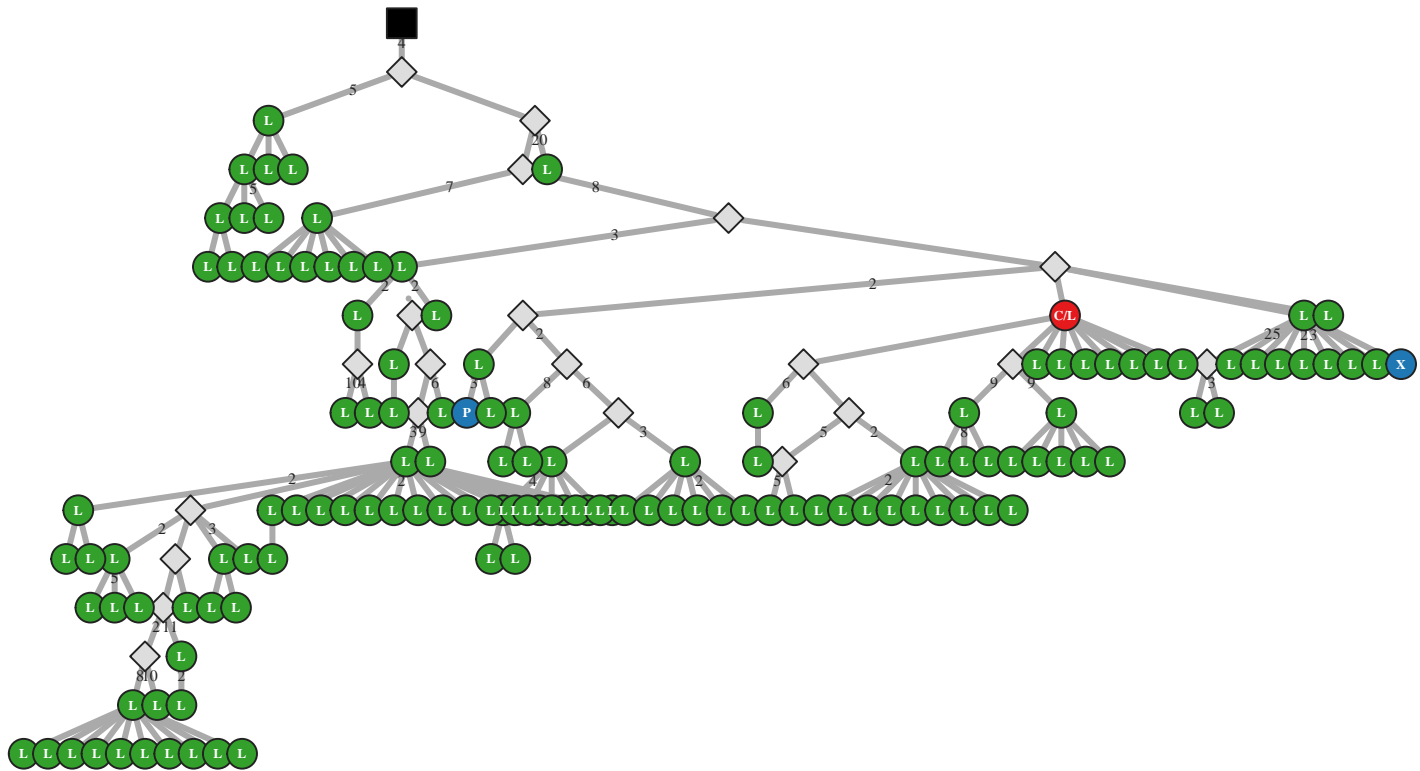
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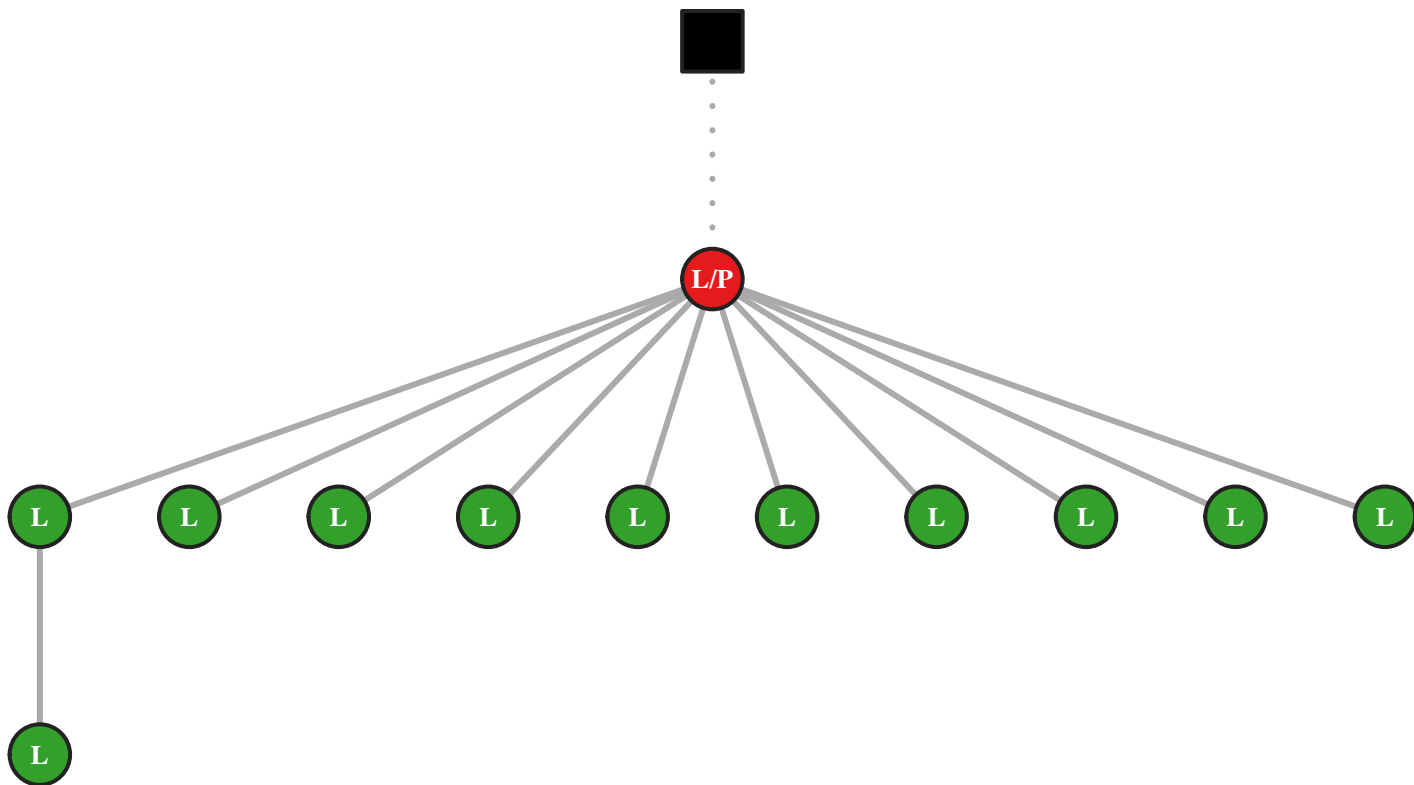
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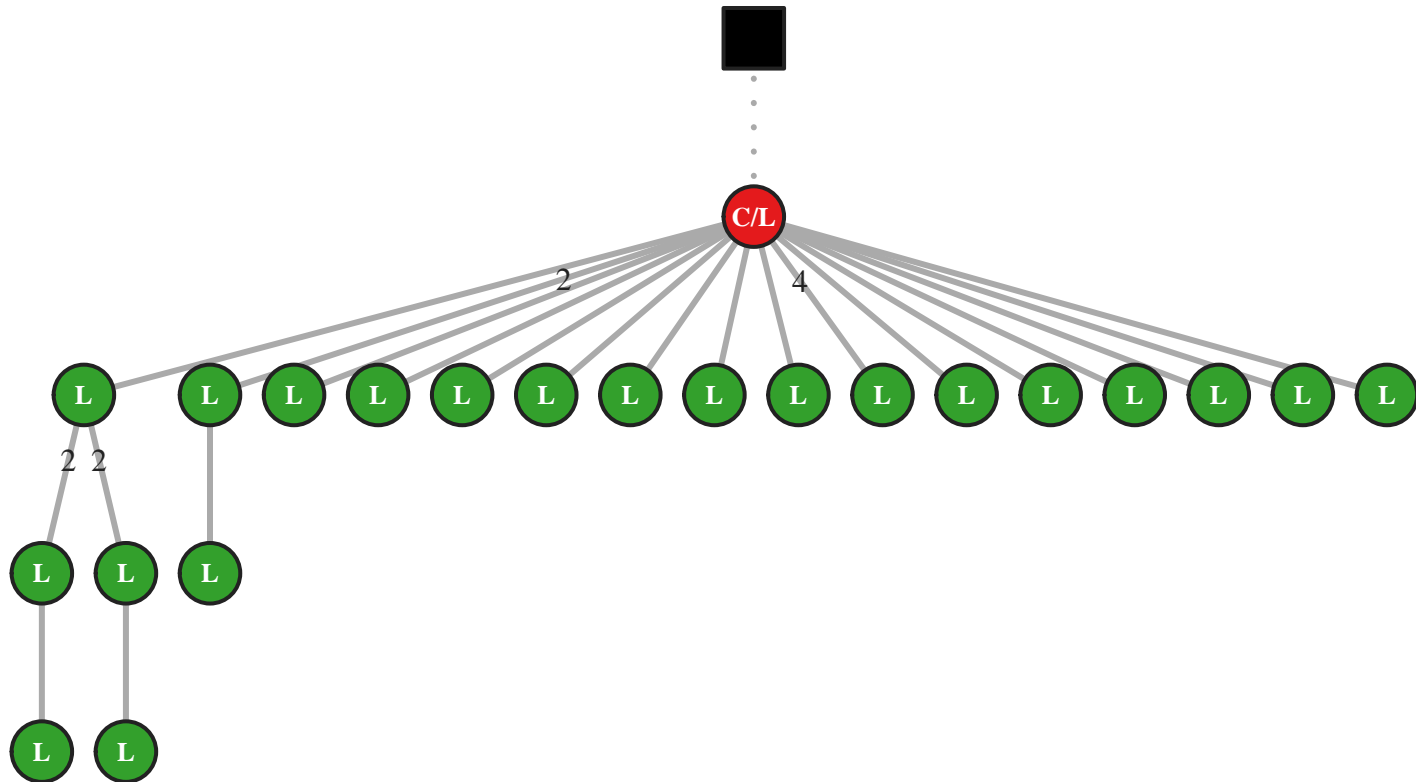
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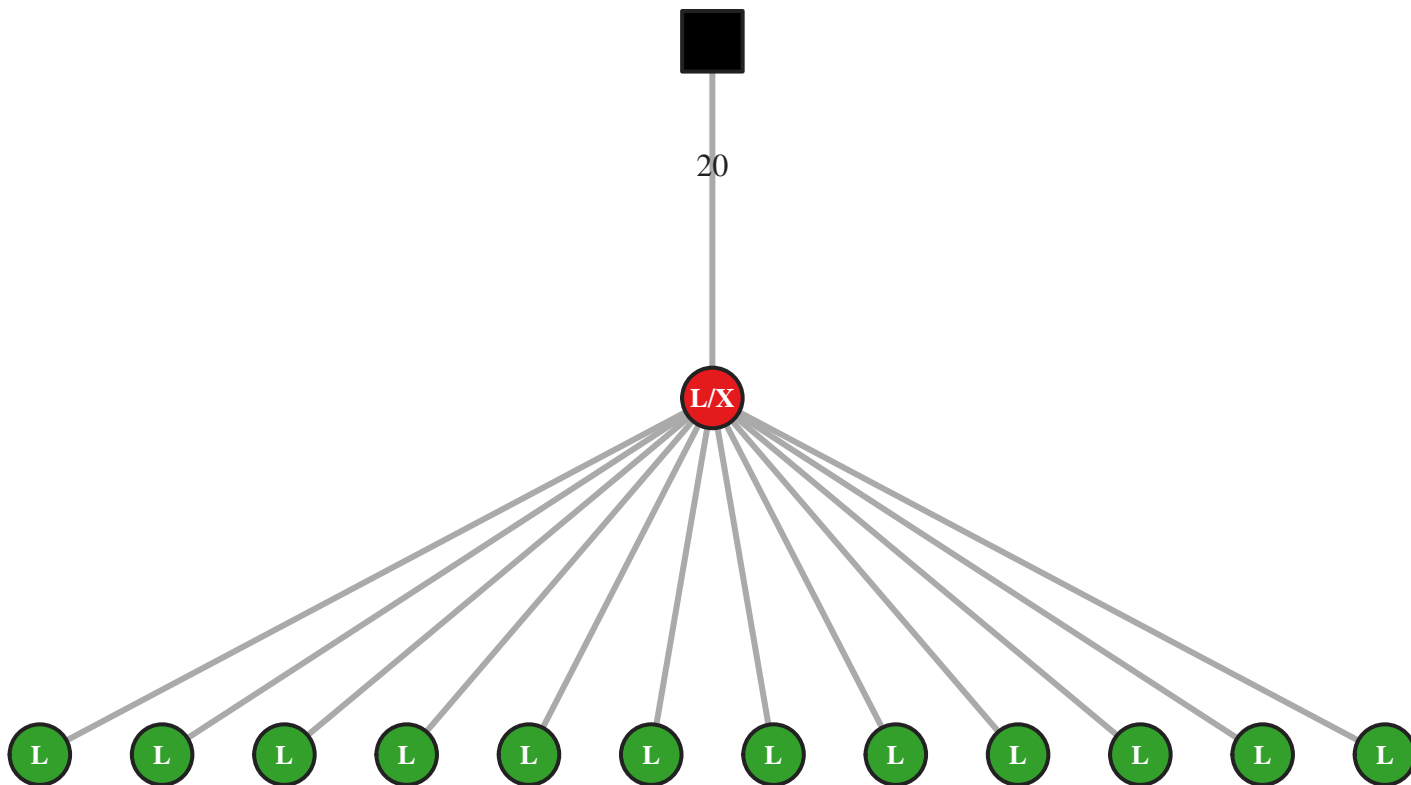
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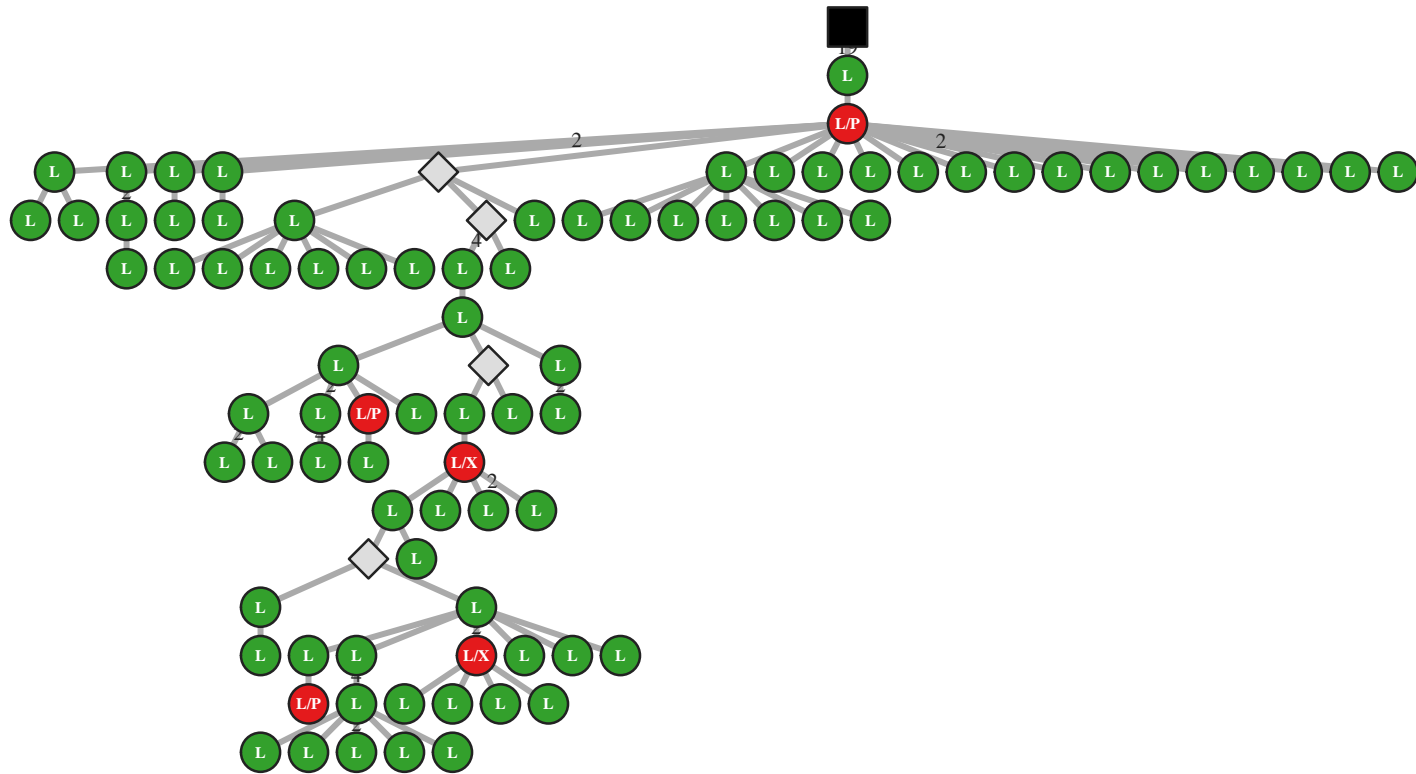
M5 IgG IGHV2-5/J4 60bp (24562)



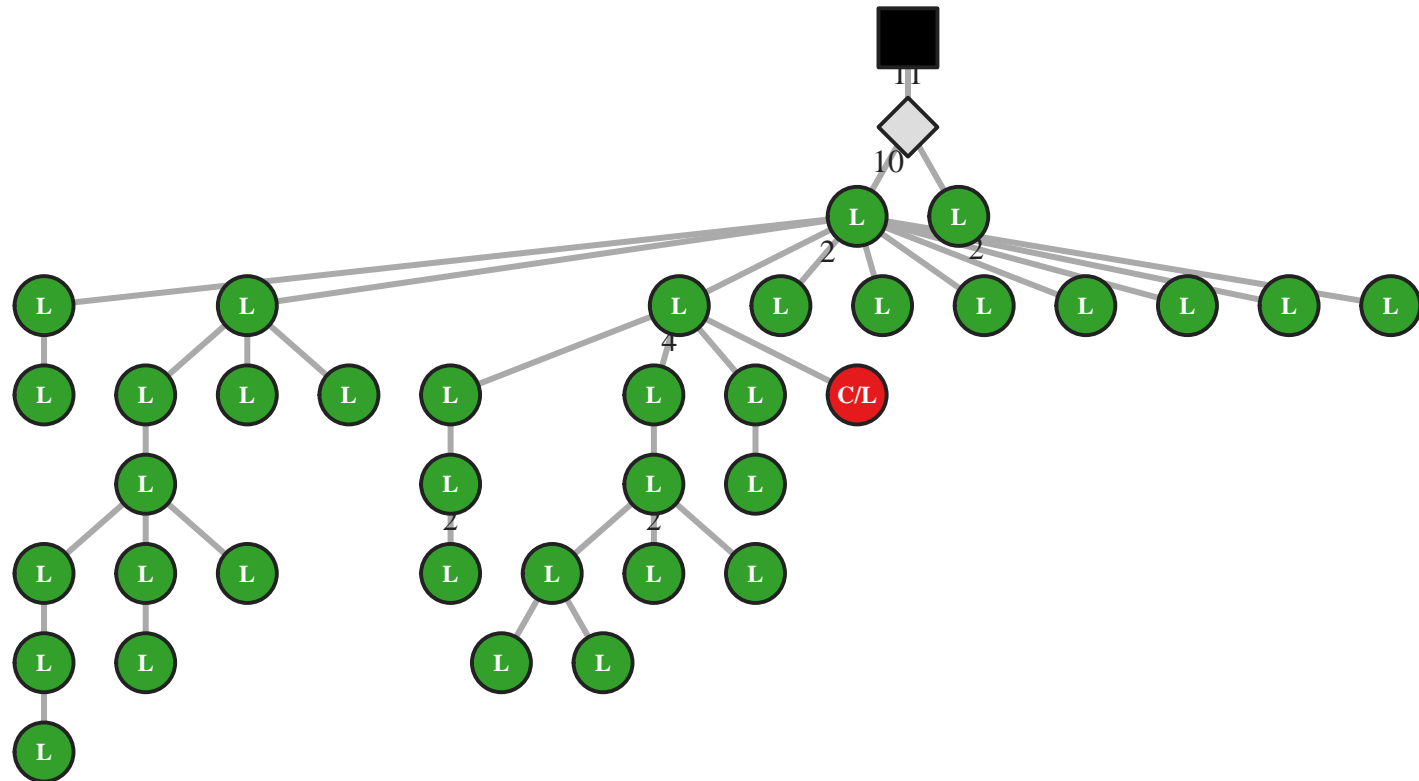
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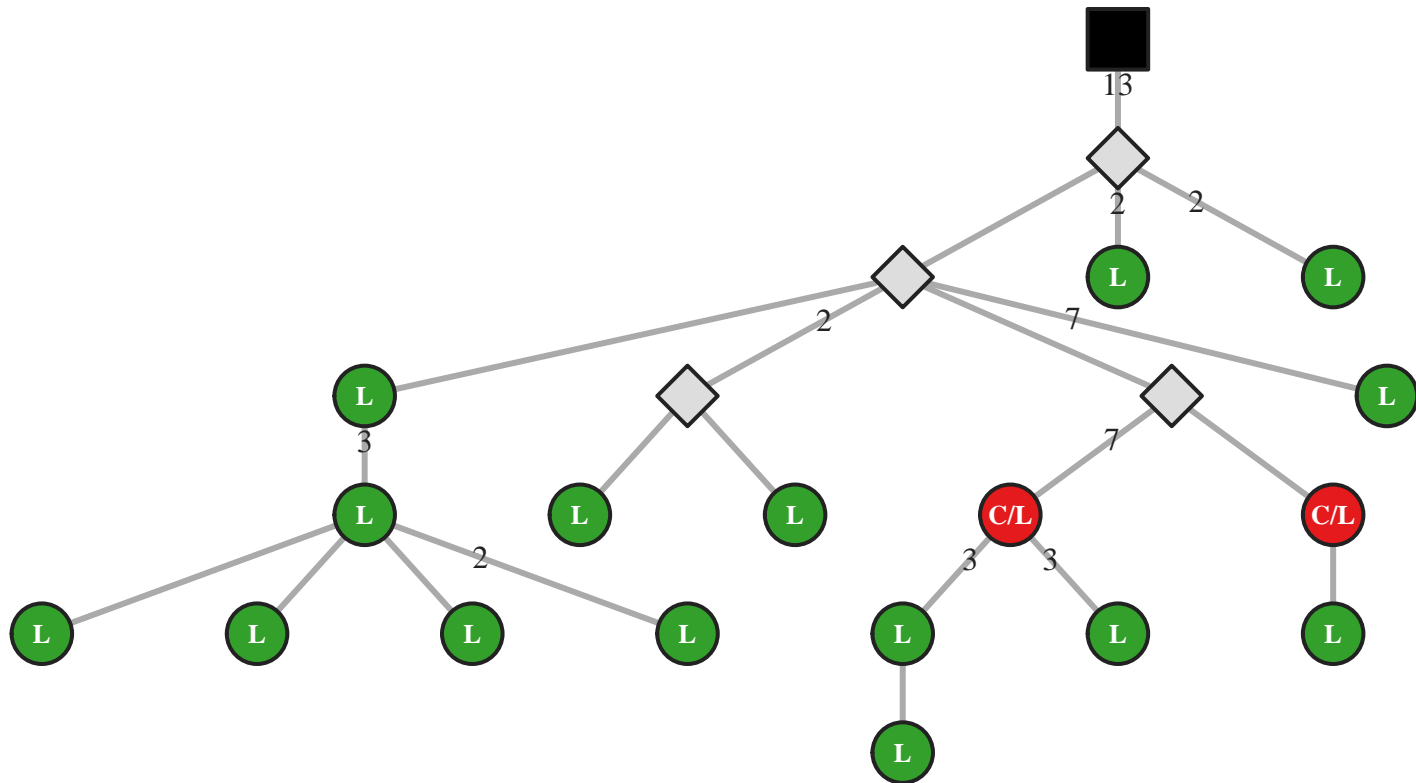
M5 IgG IGHV2-5/J4 63bp (15575)



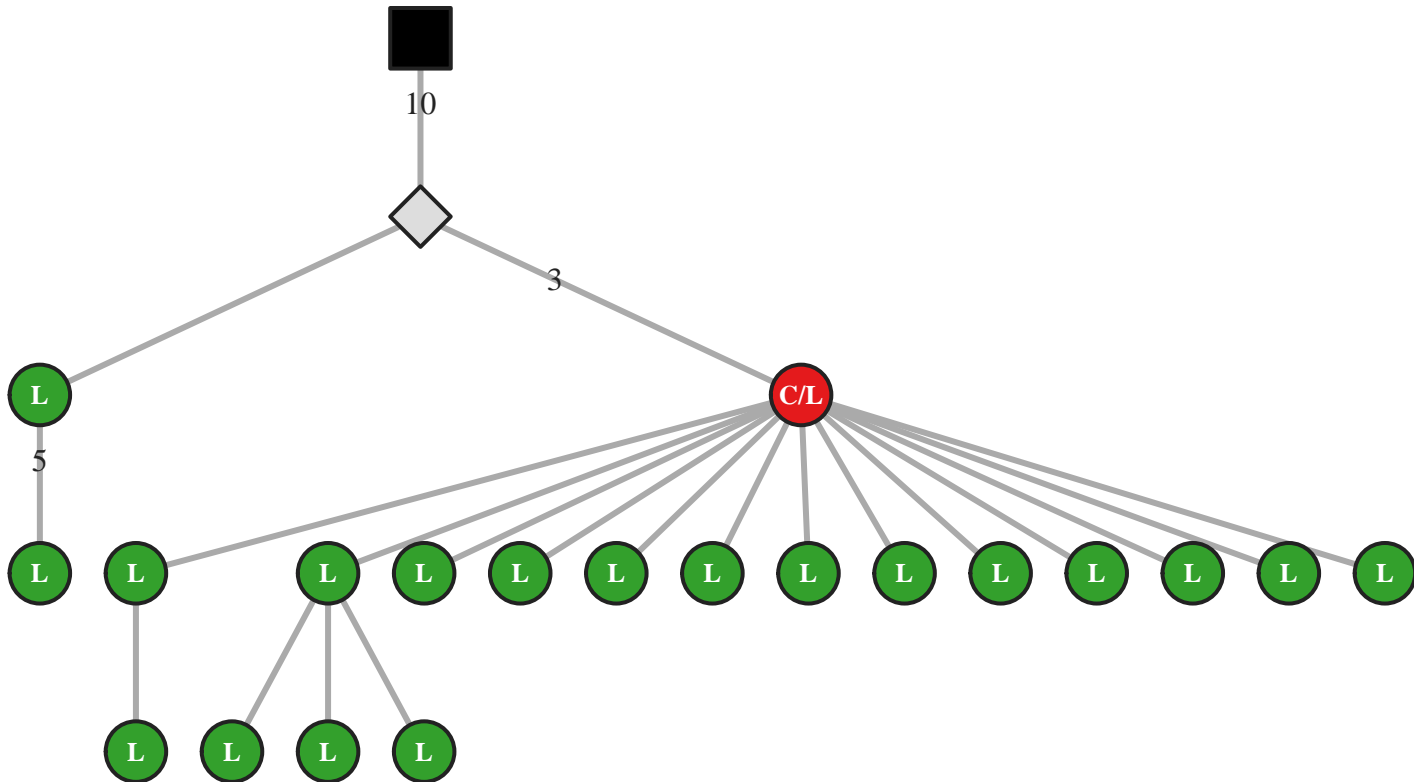
M5 IgG IGHV2-5/J4 63bp (15591)



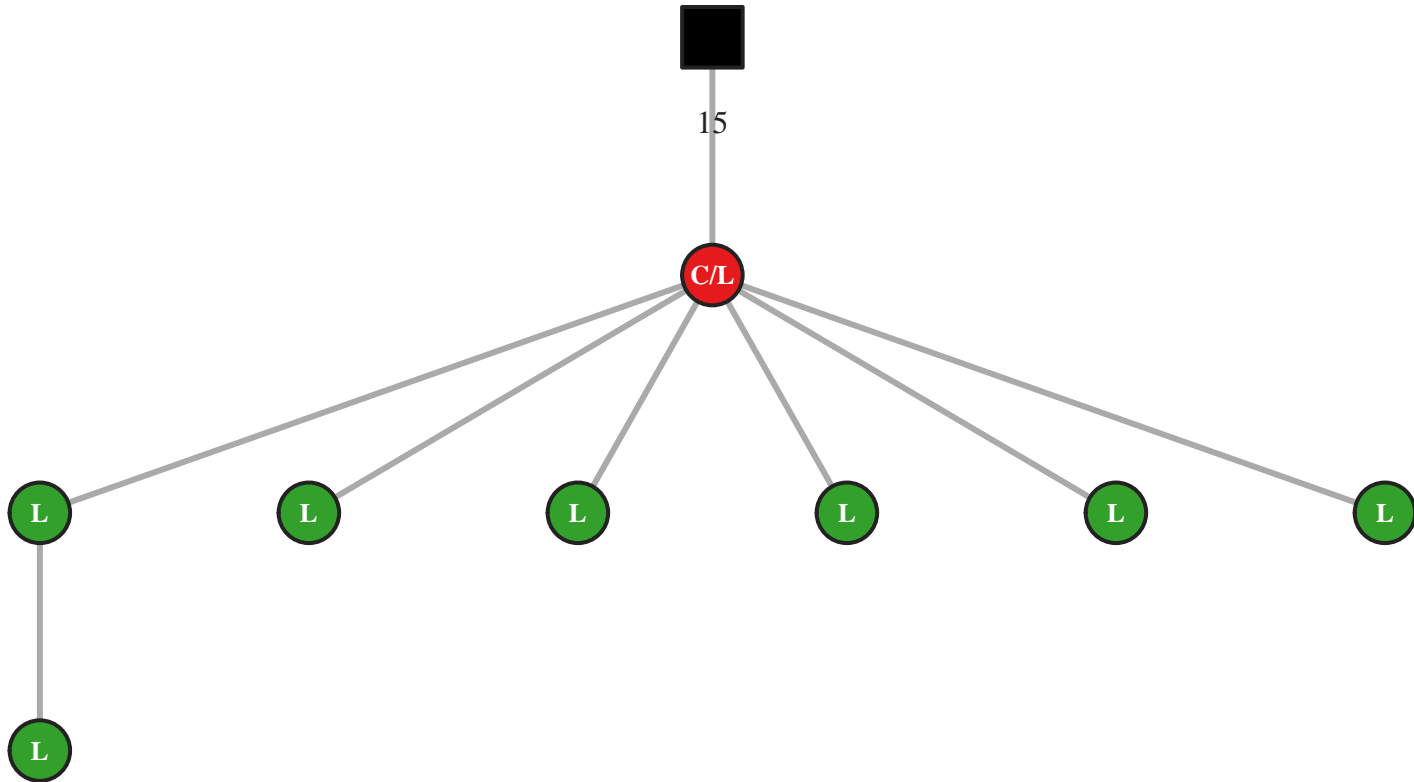
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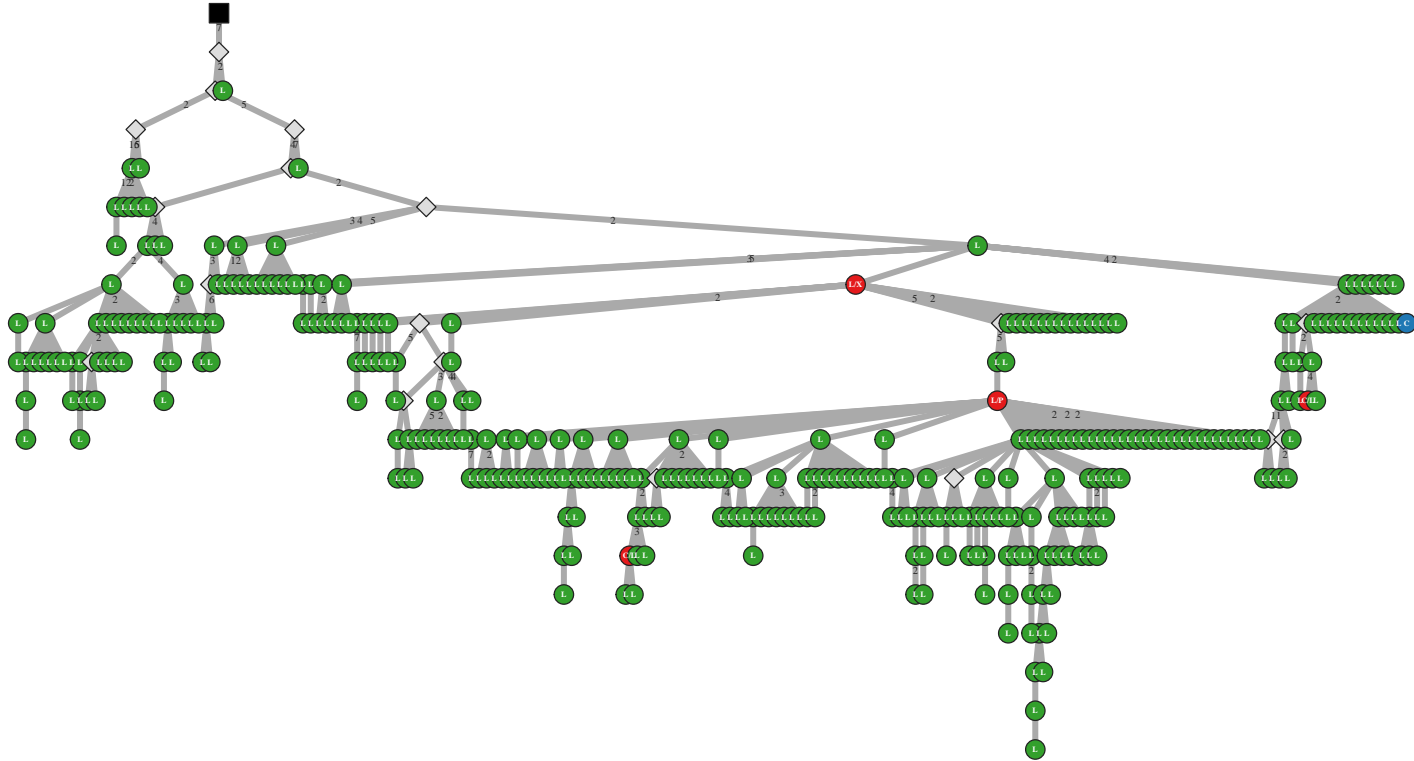
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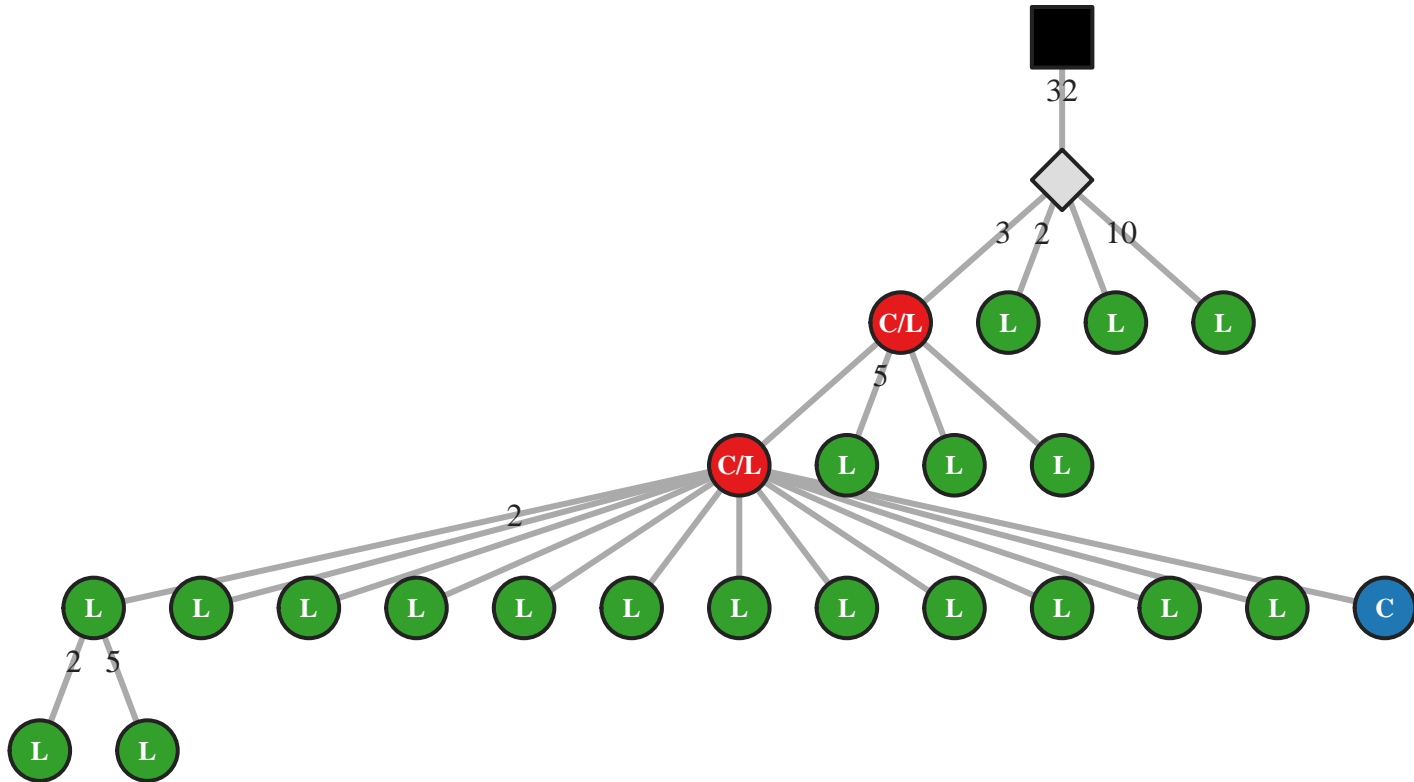
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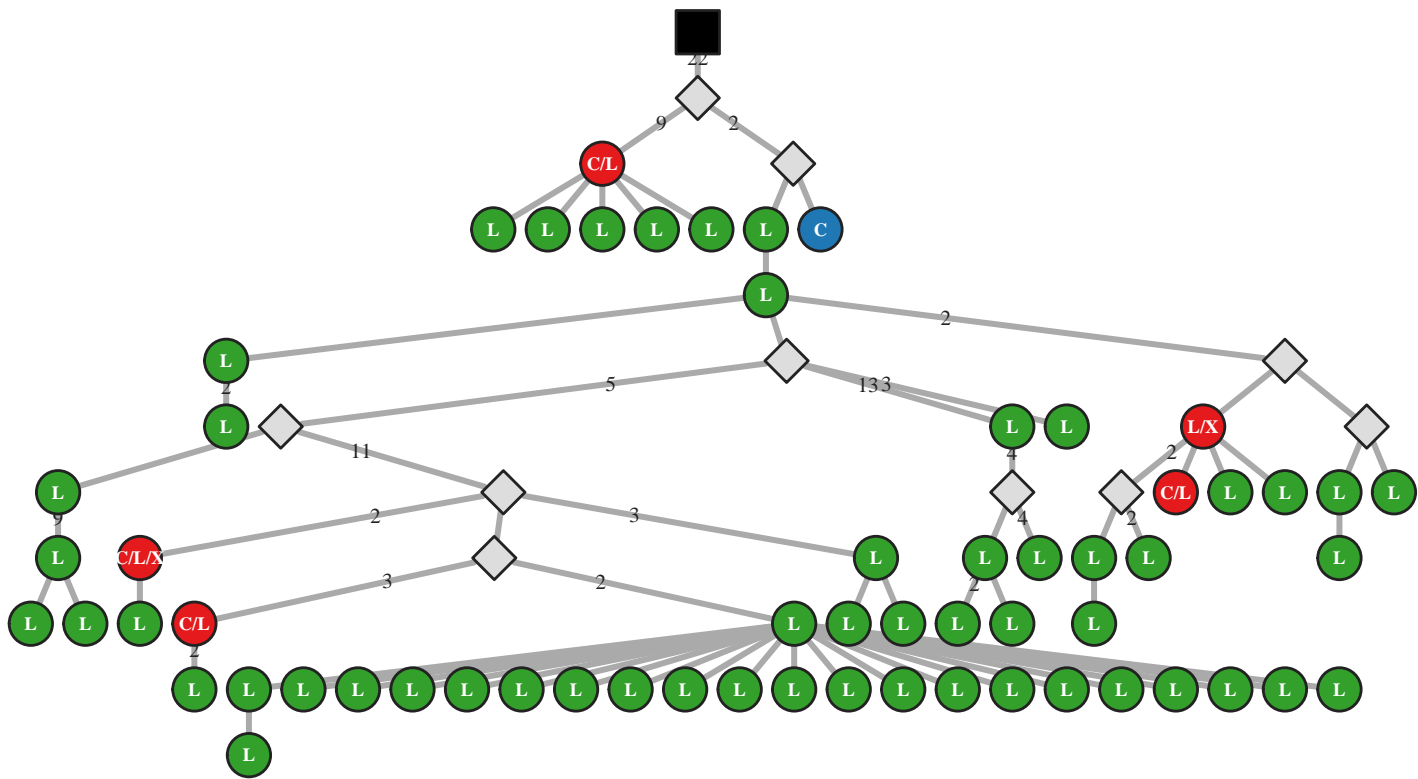
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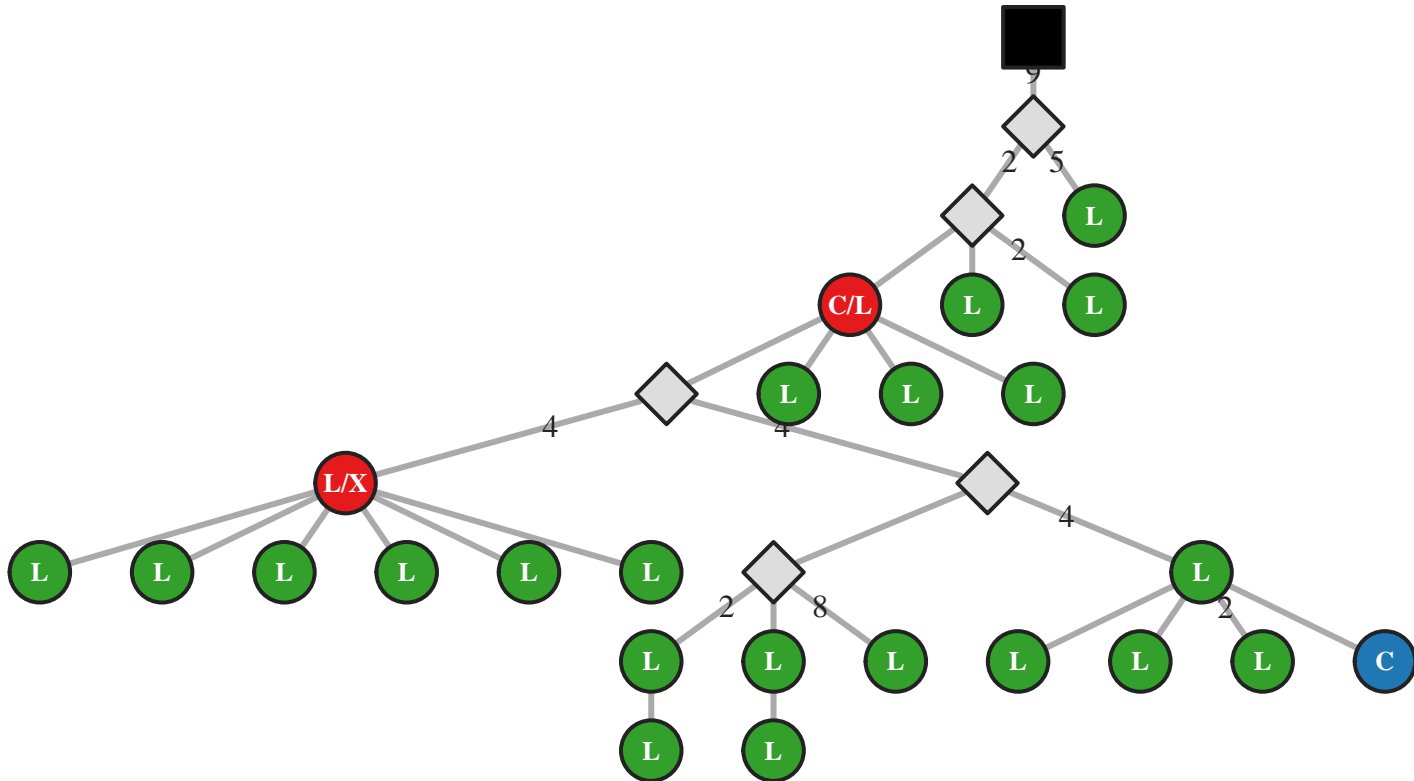
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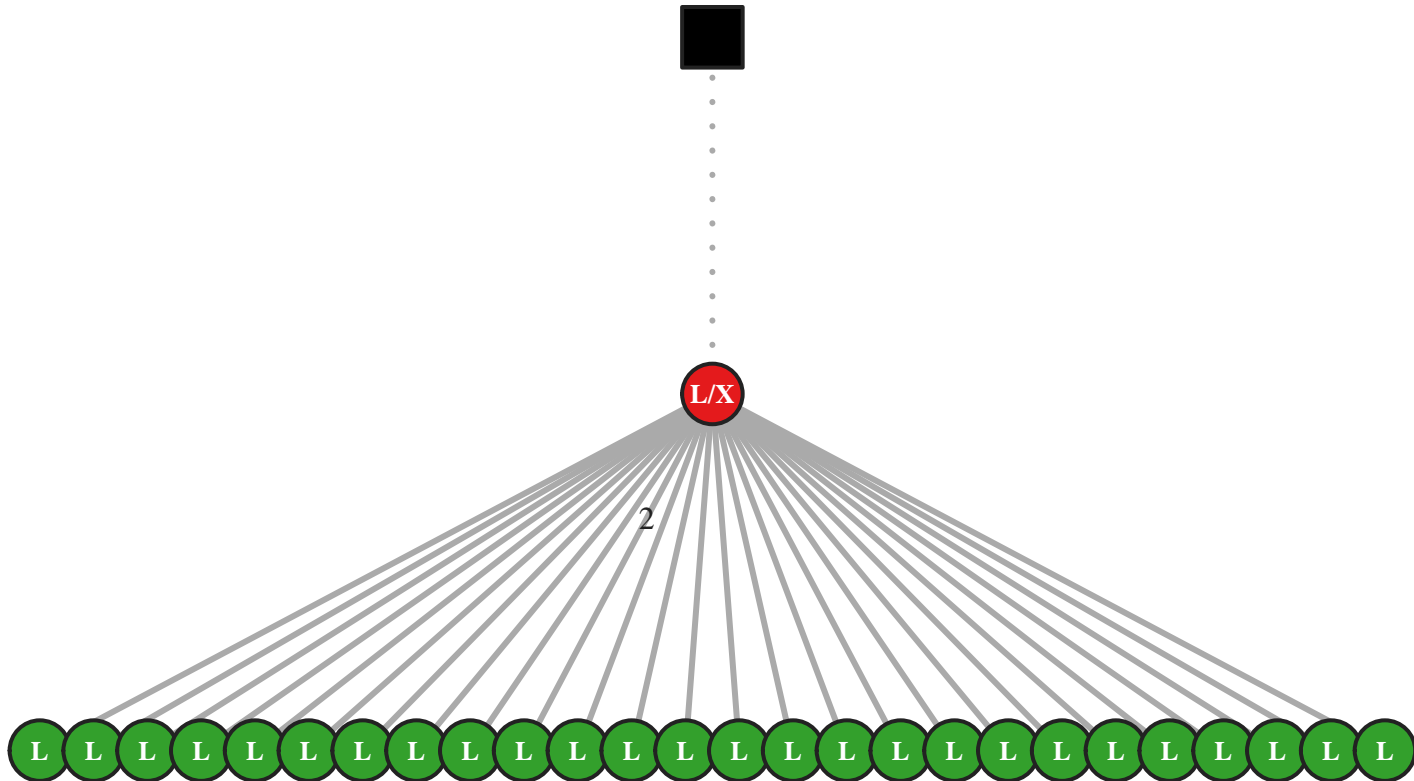
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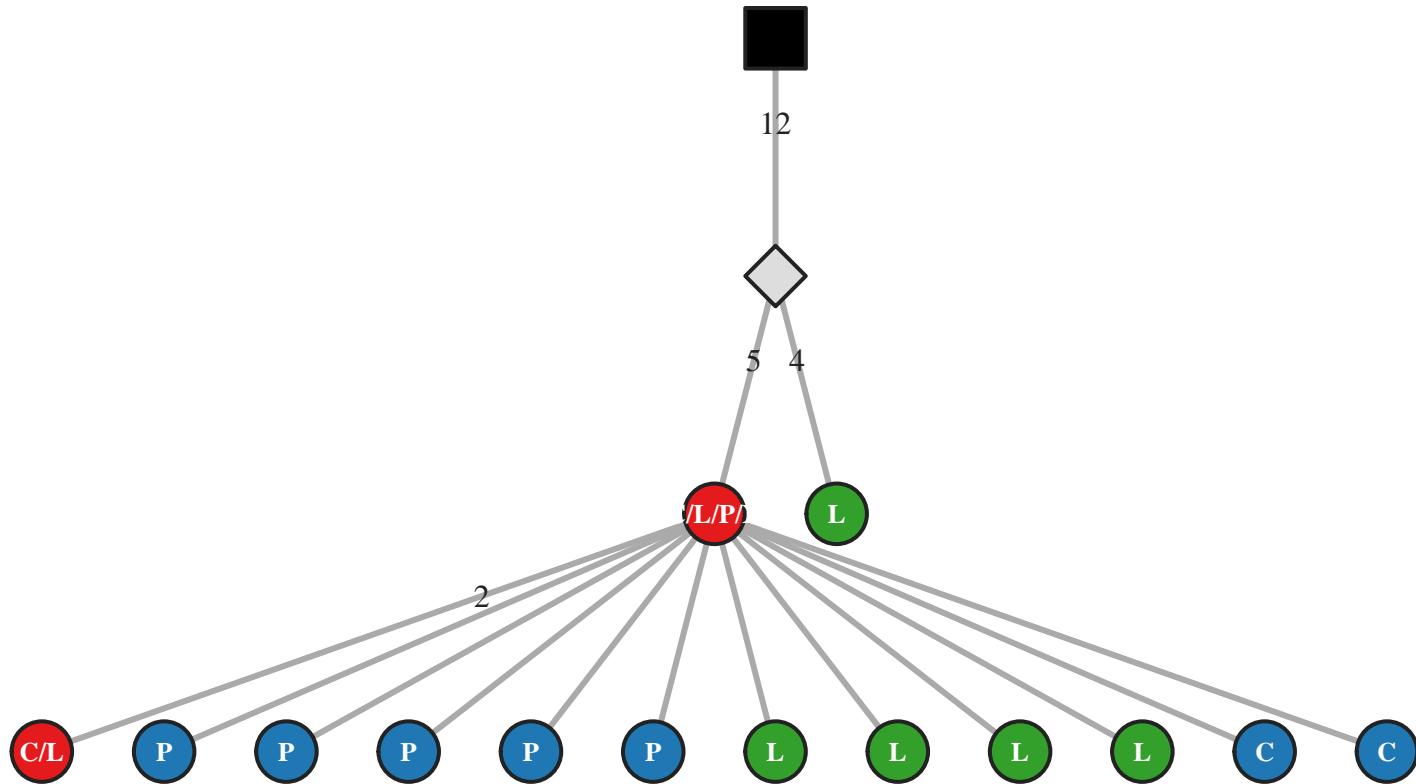
M5 IgA IGHV2-5/J5 45bp (38572)



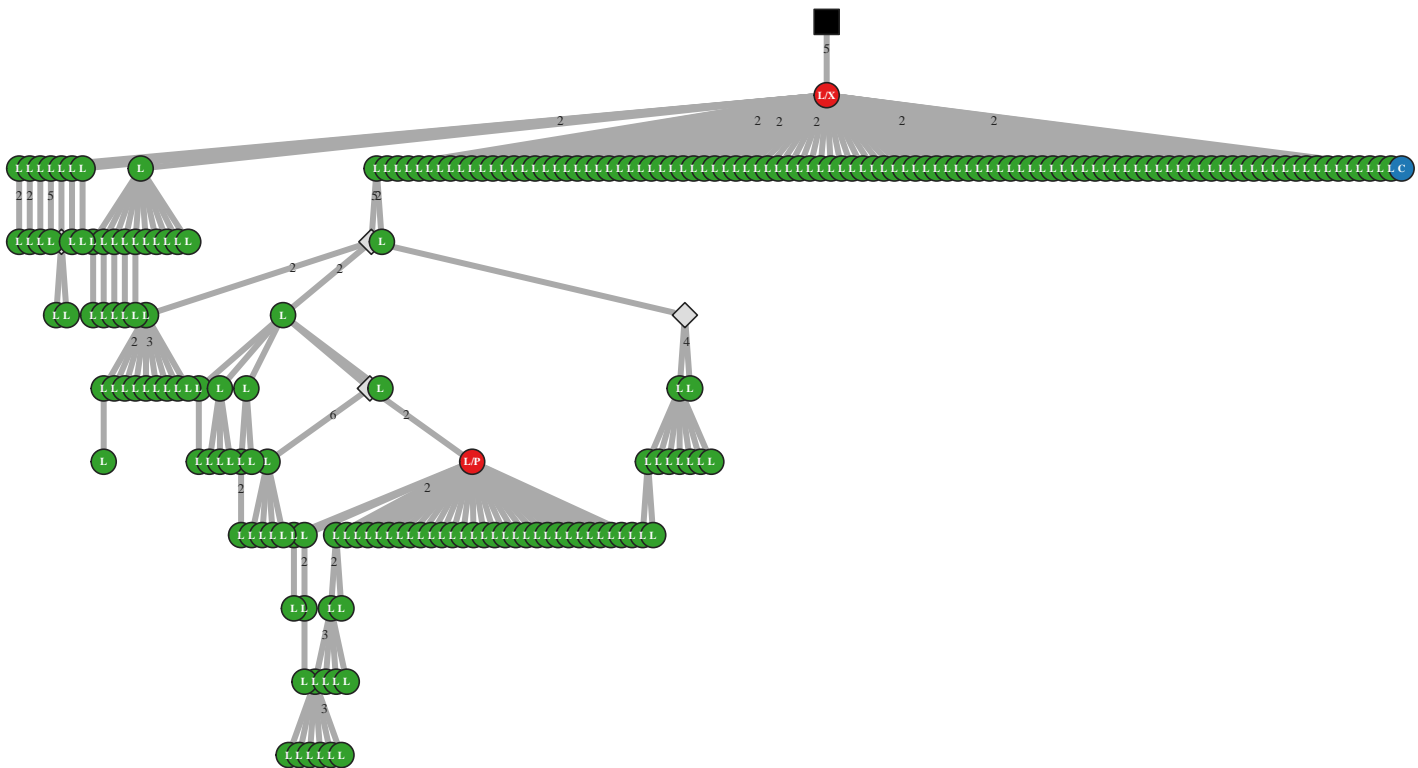
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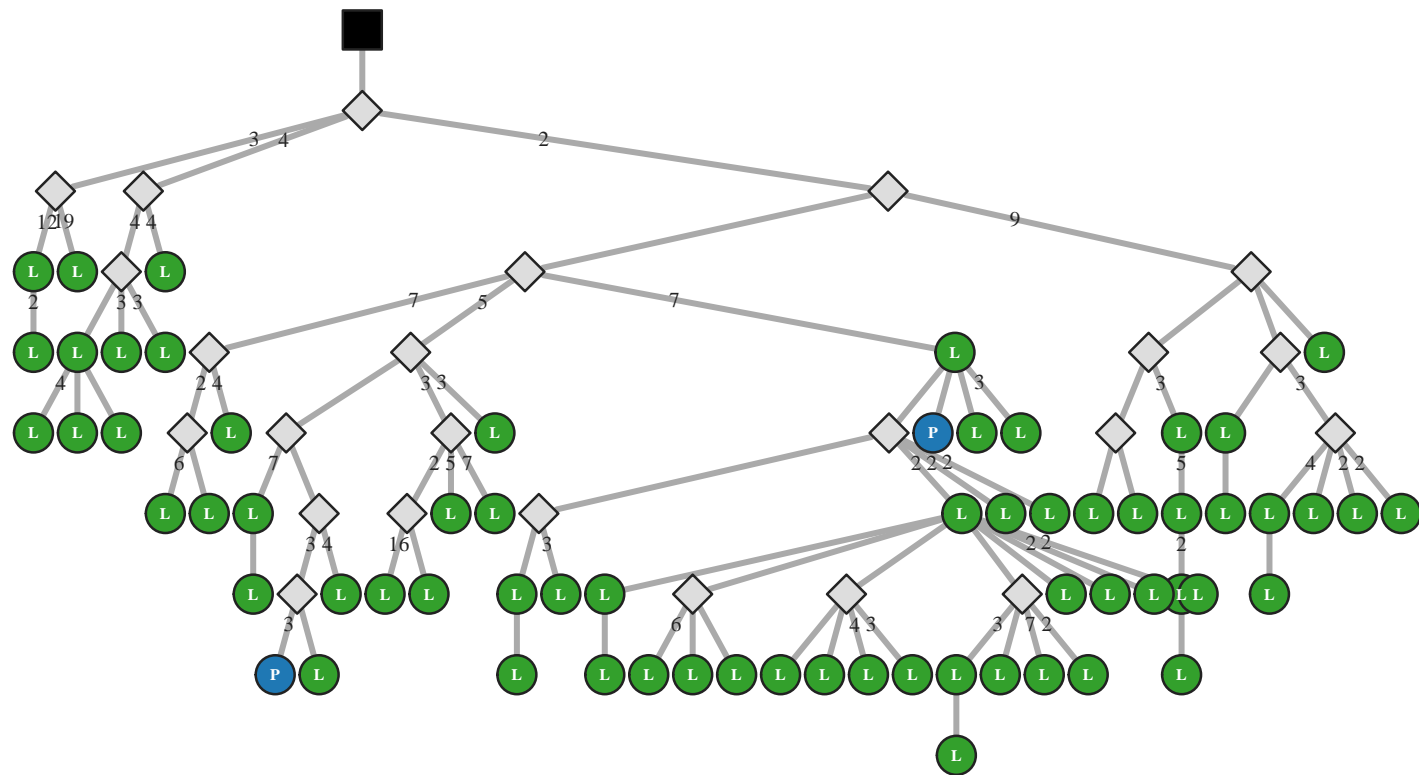
M5 IgA IGHV2-5/J5 48bp (48663)



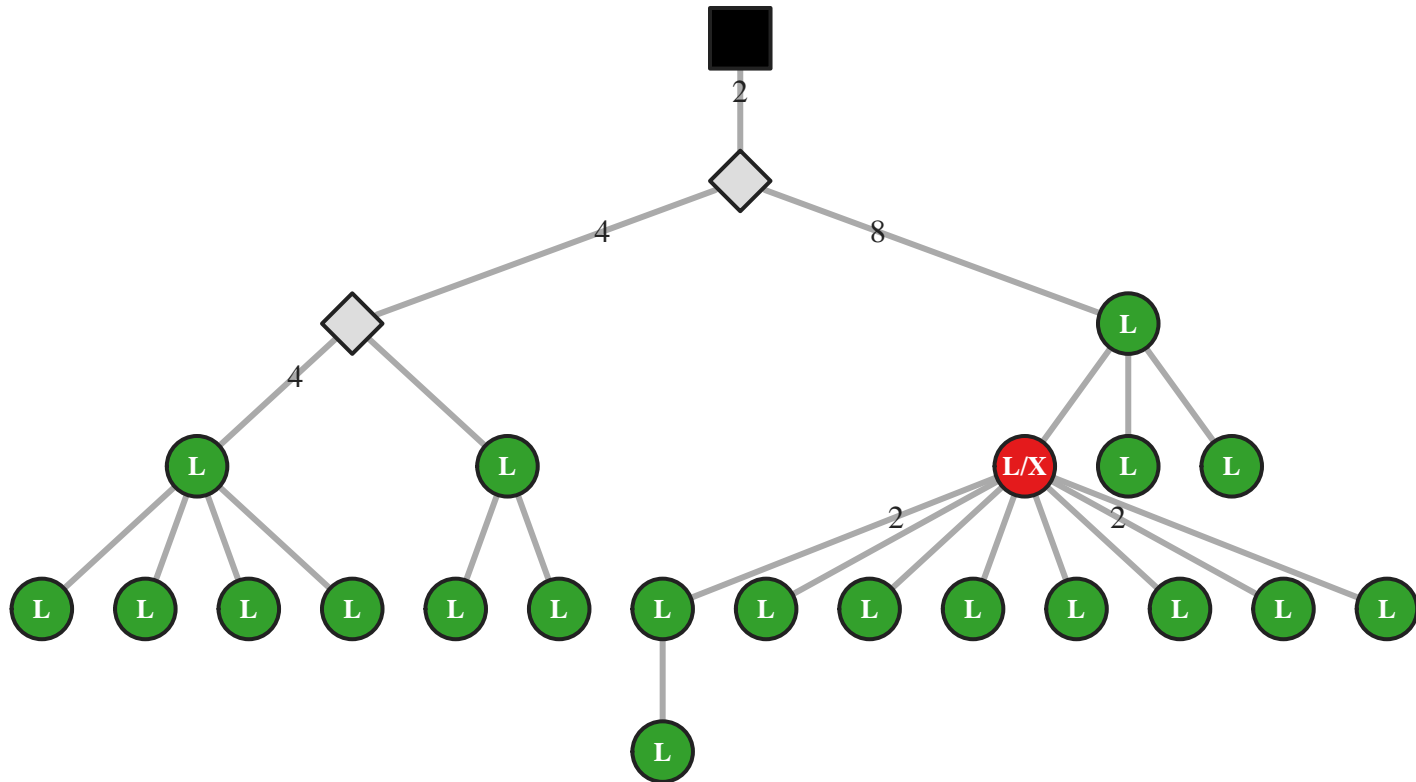
M5 IgG IGHV2-5/J5 54bp (24612)



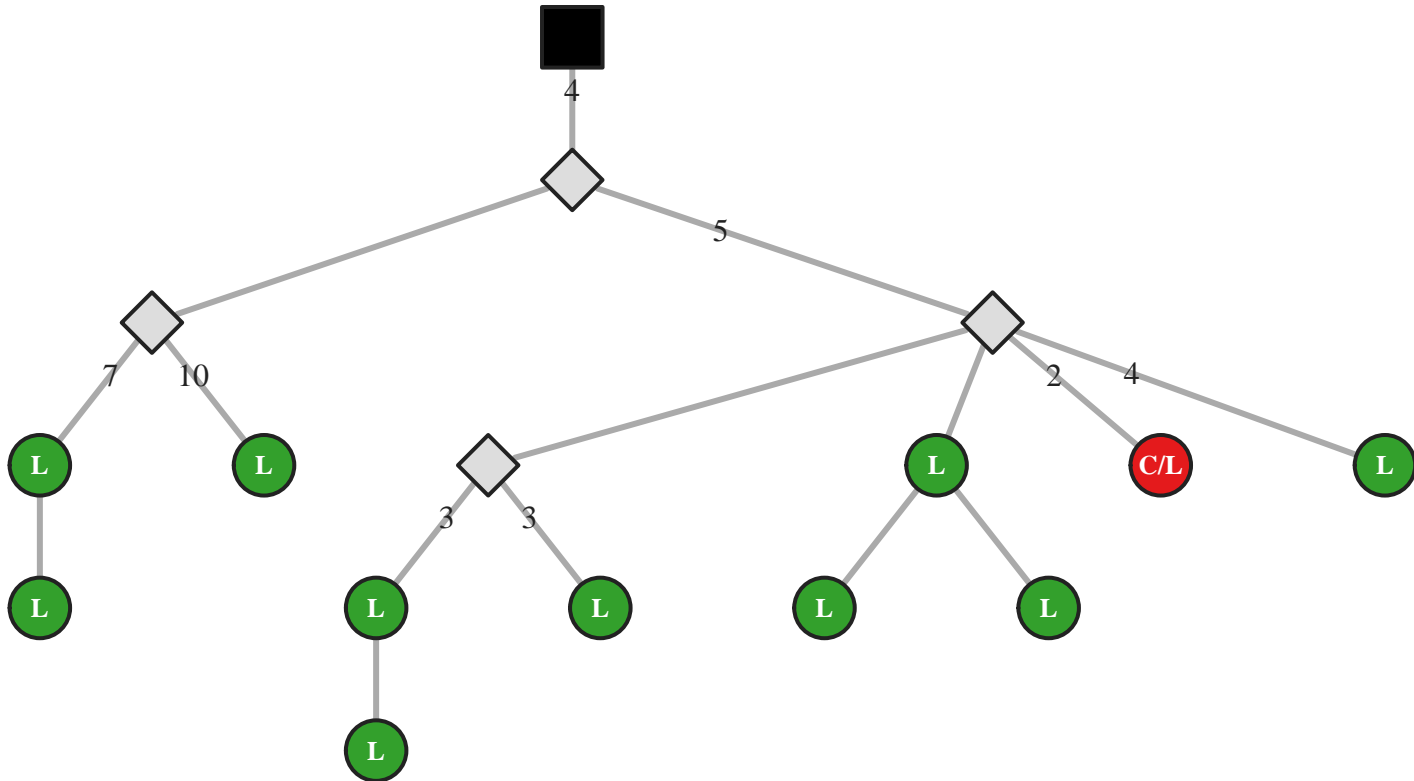
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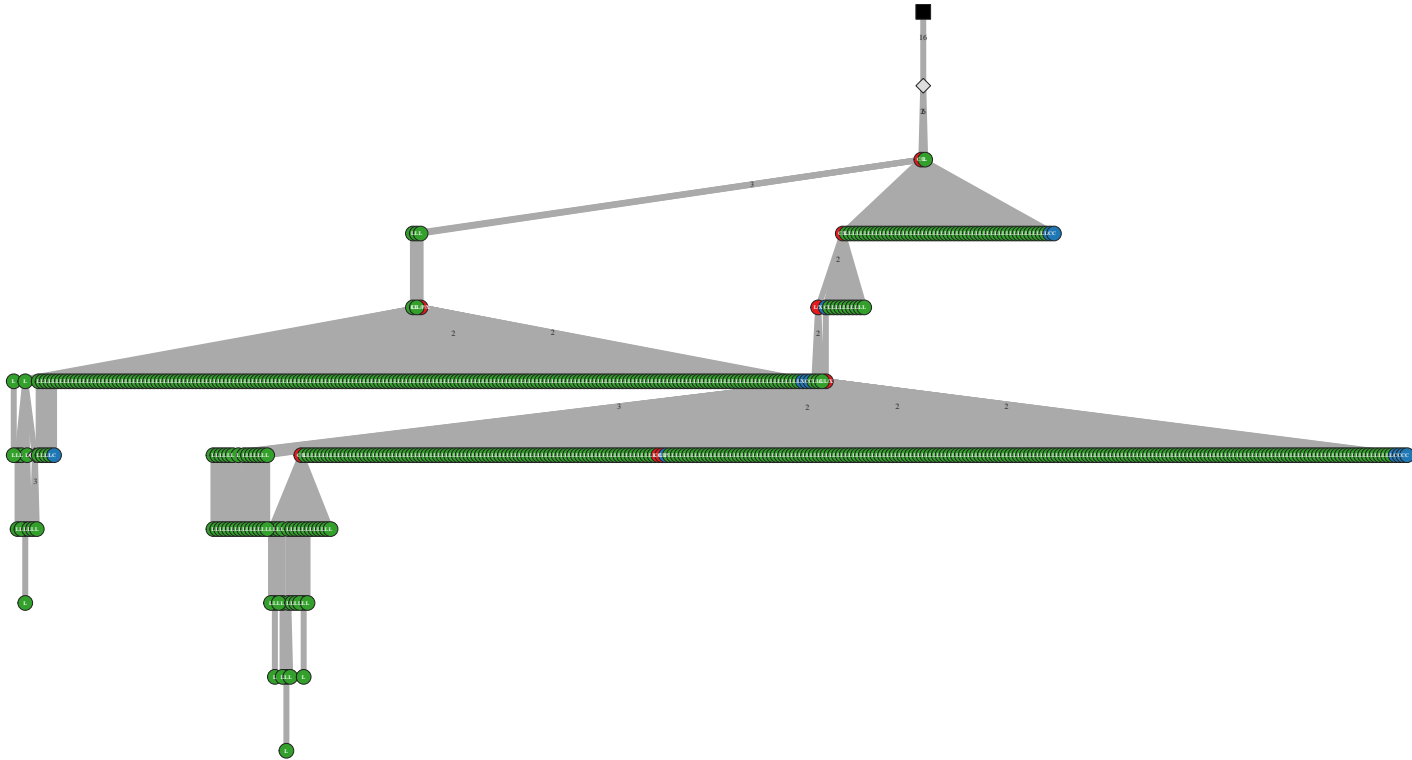
M5 IgG IGHV2-5/J5 54bp (24644)



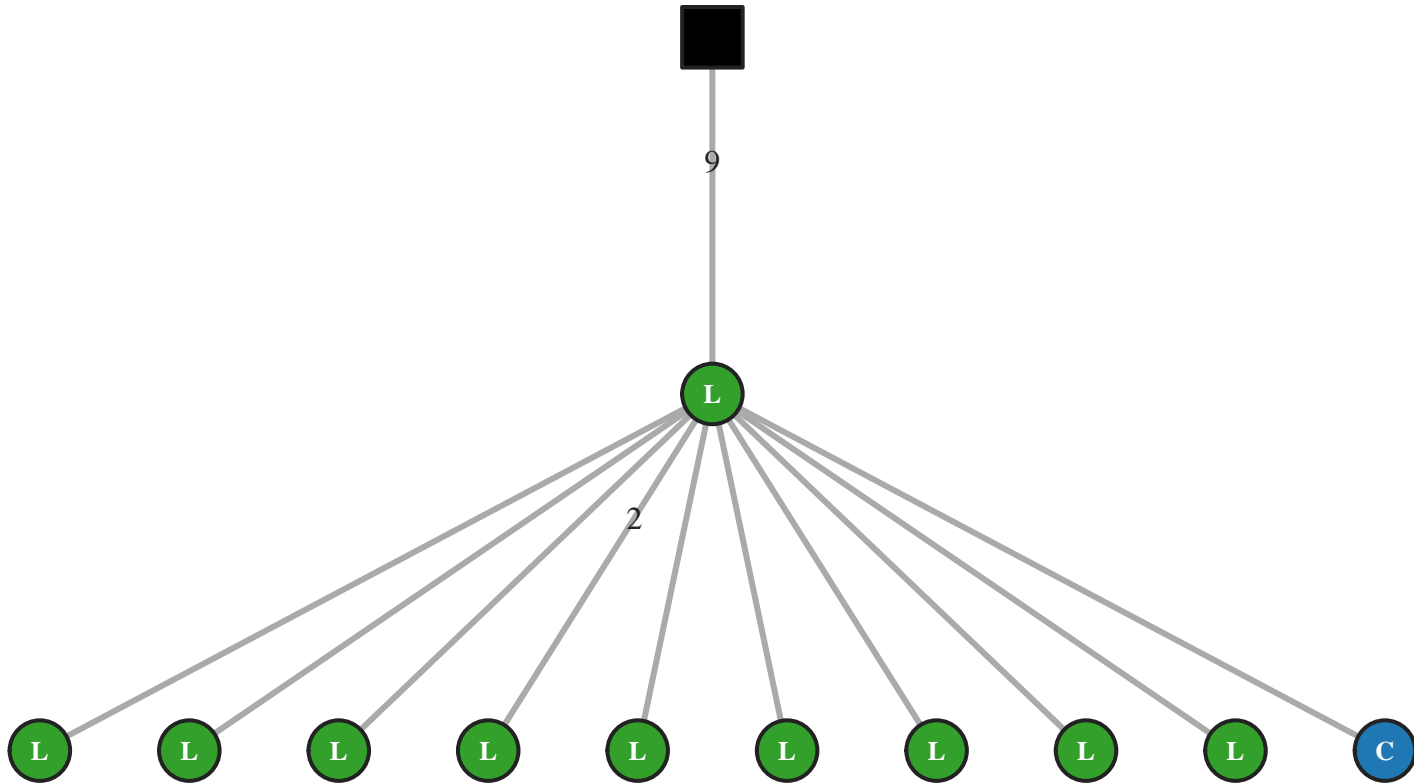
M5 IgG IGHV2-5/J5 57bp (5800)



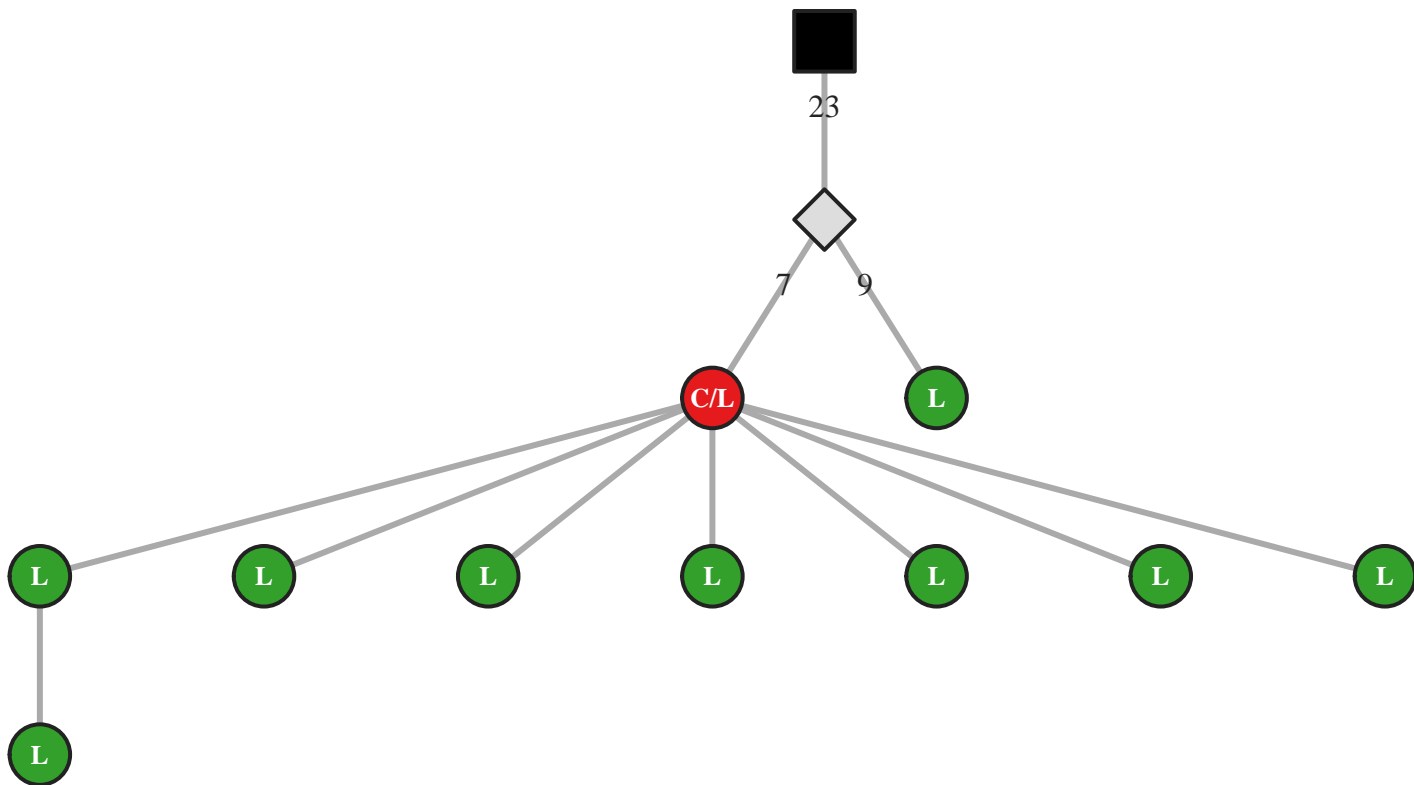
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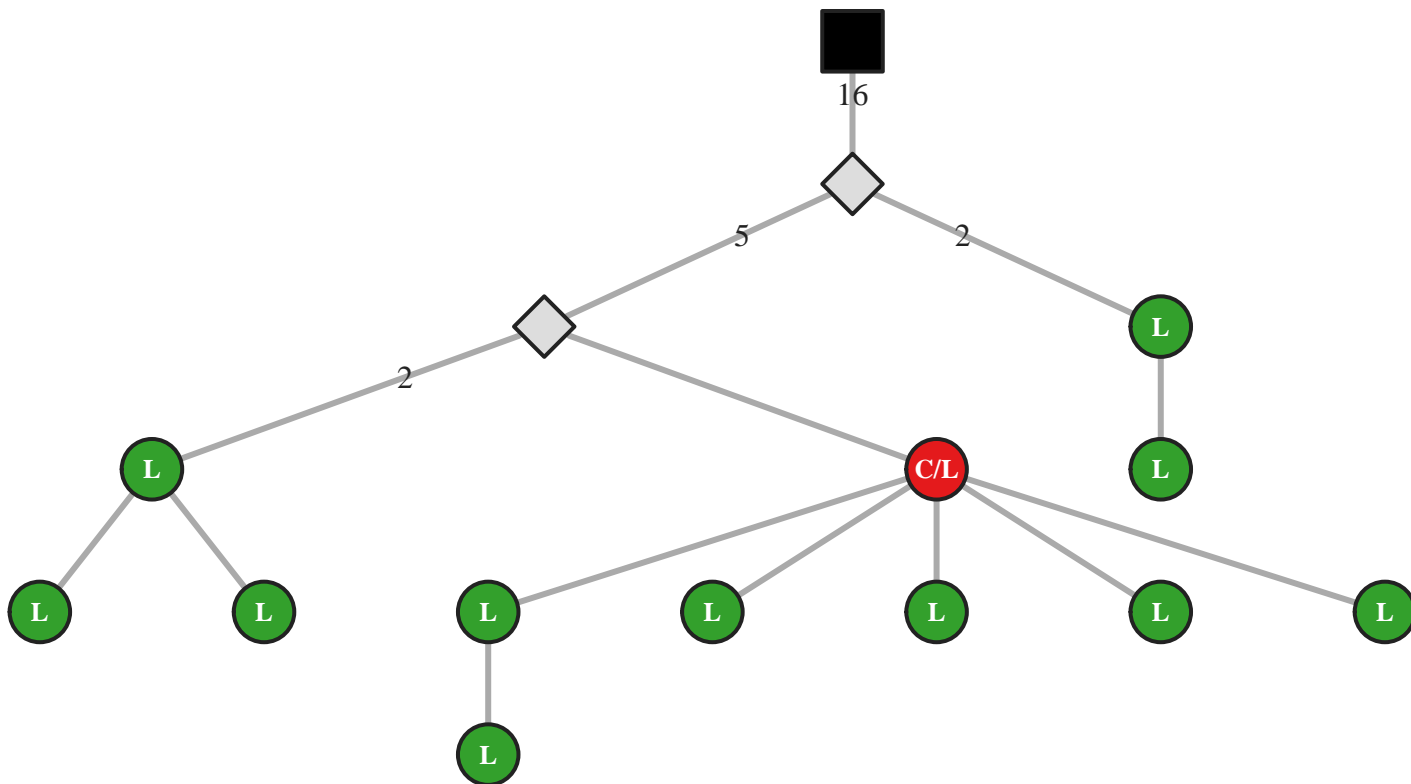
M5 IgG IGHV2-5/J5 57bp (5826)



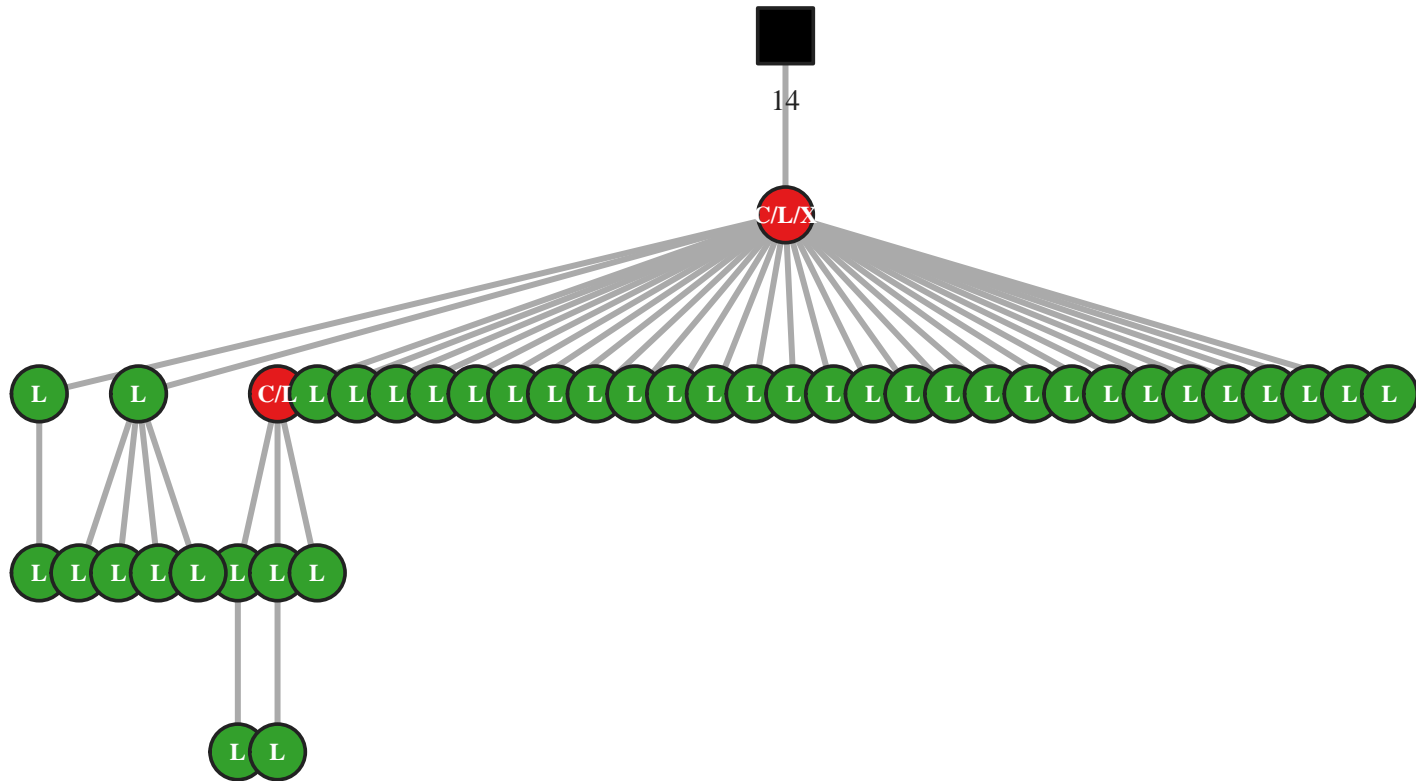
M5 IgM IGHV2-5/J5 57bp (20534)



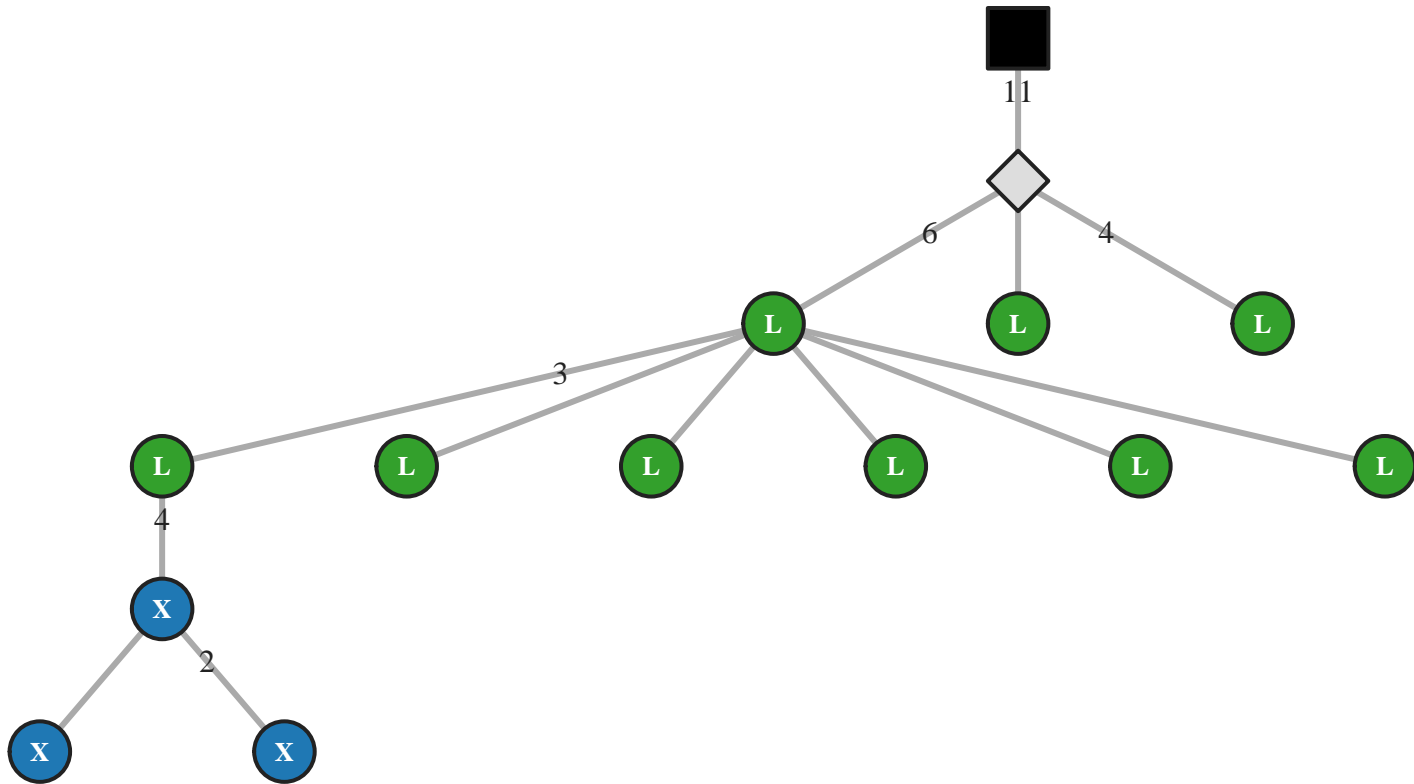
M5 IgA IGHV2-5/J5 60bp (30344)



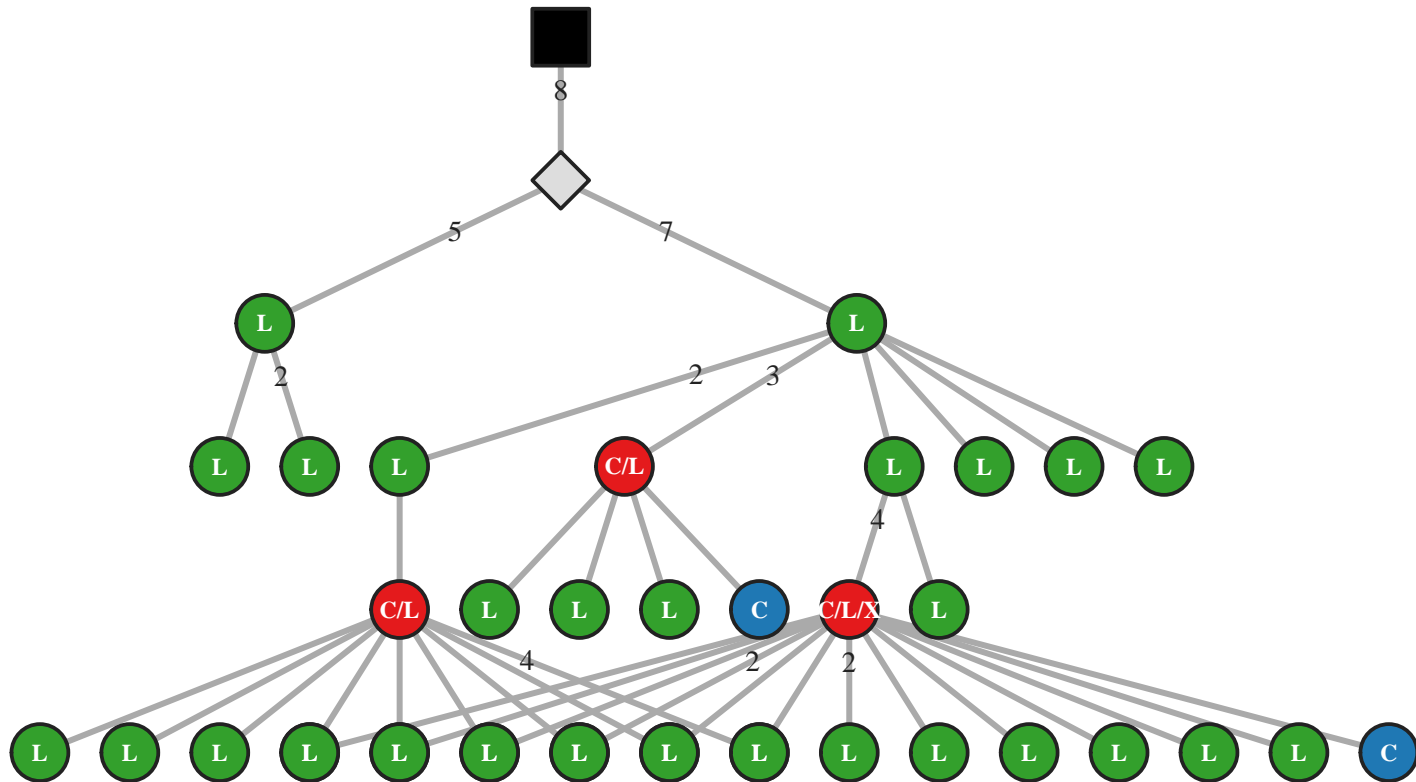
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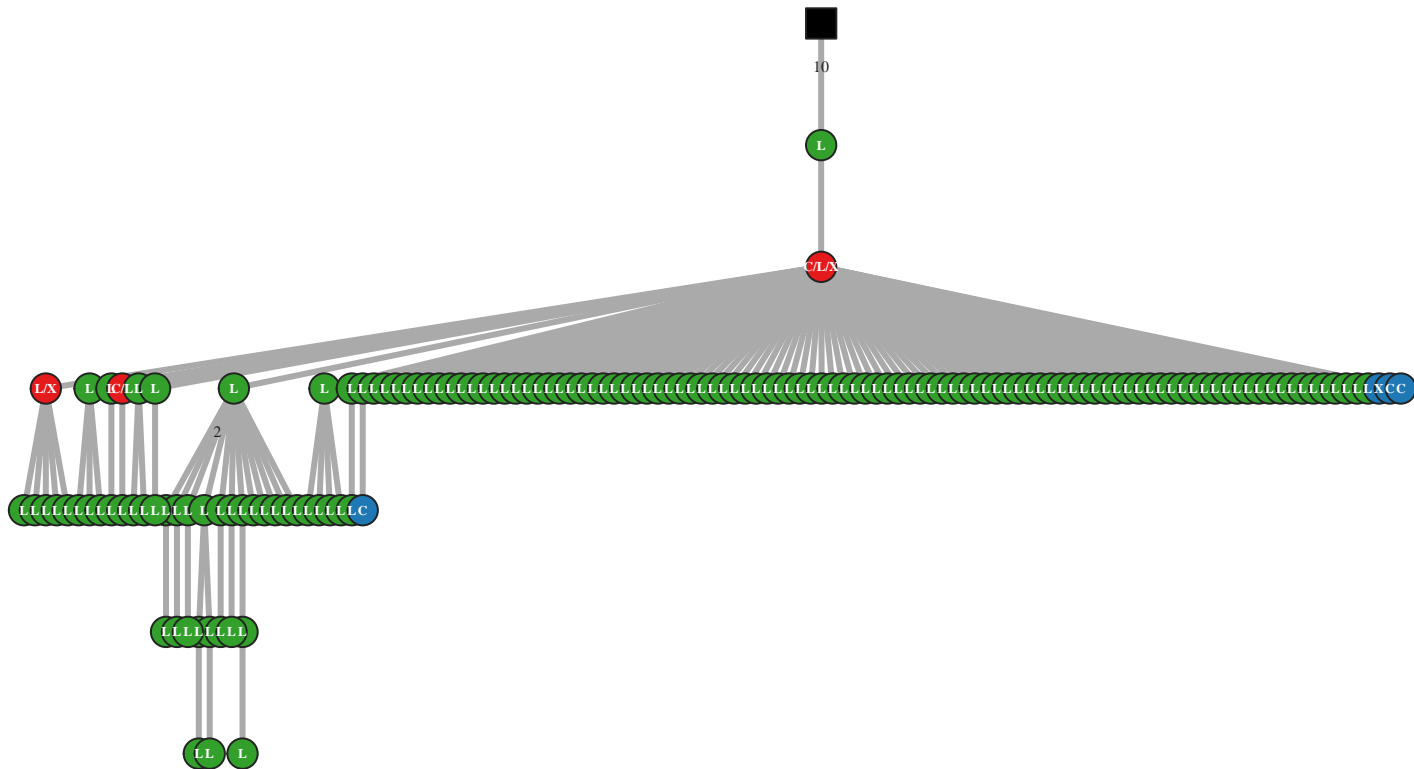
M5 IgG IGHV2-5/J5 60bp (33584)



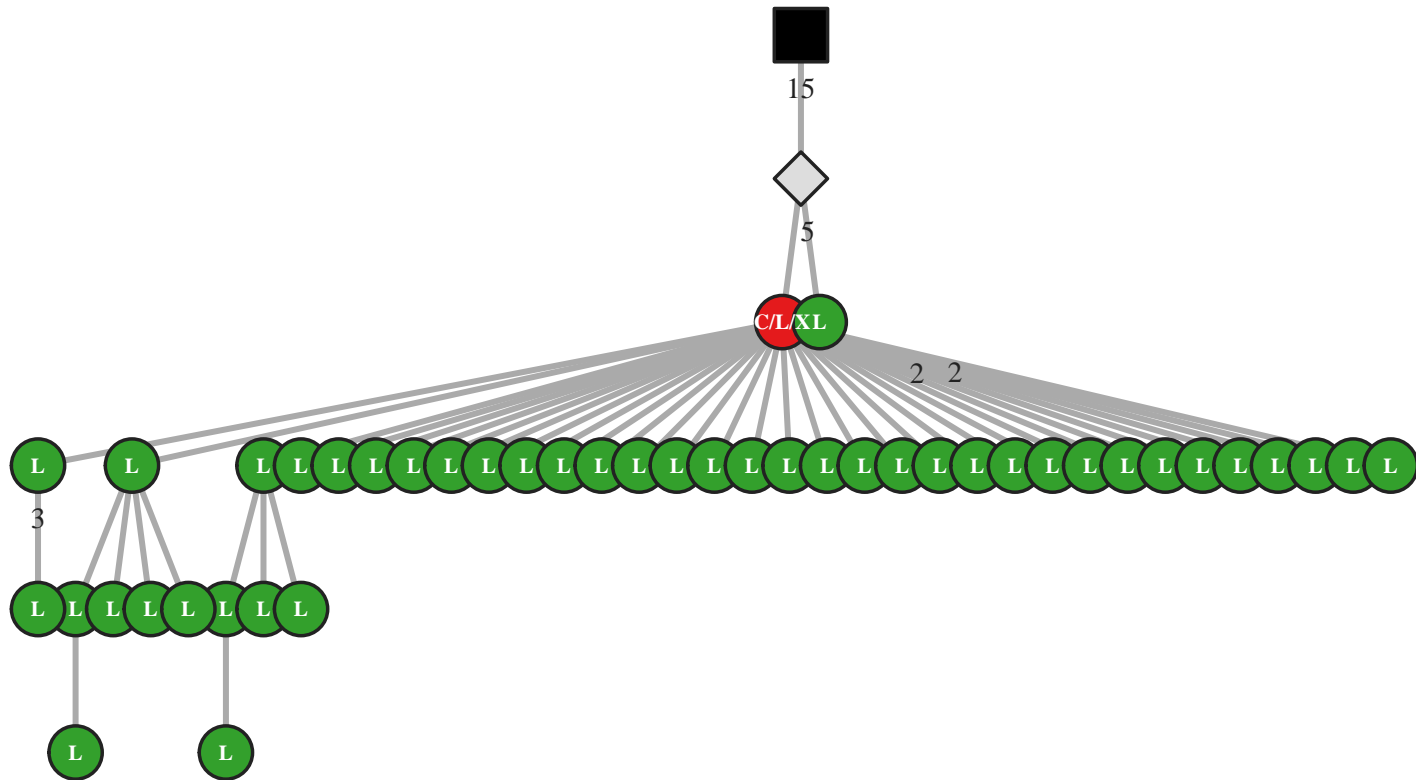
M5 IgG IGHV2-5/J5 60bp (33591)



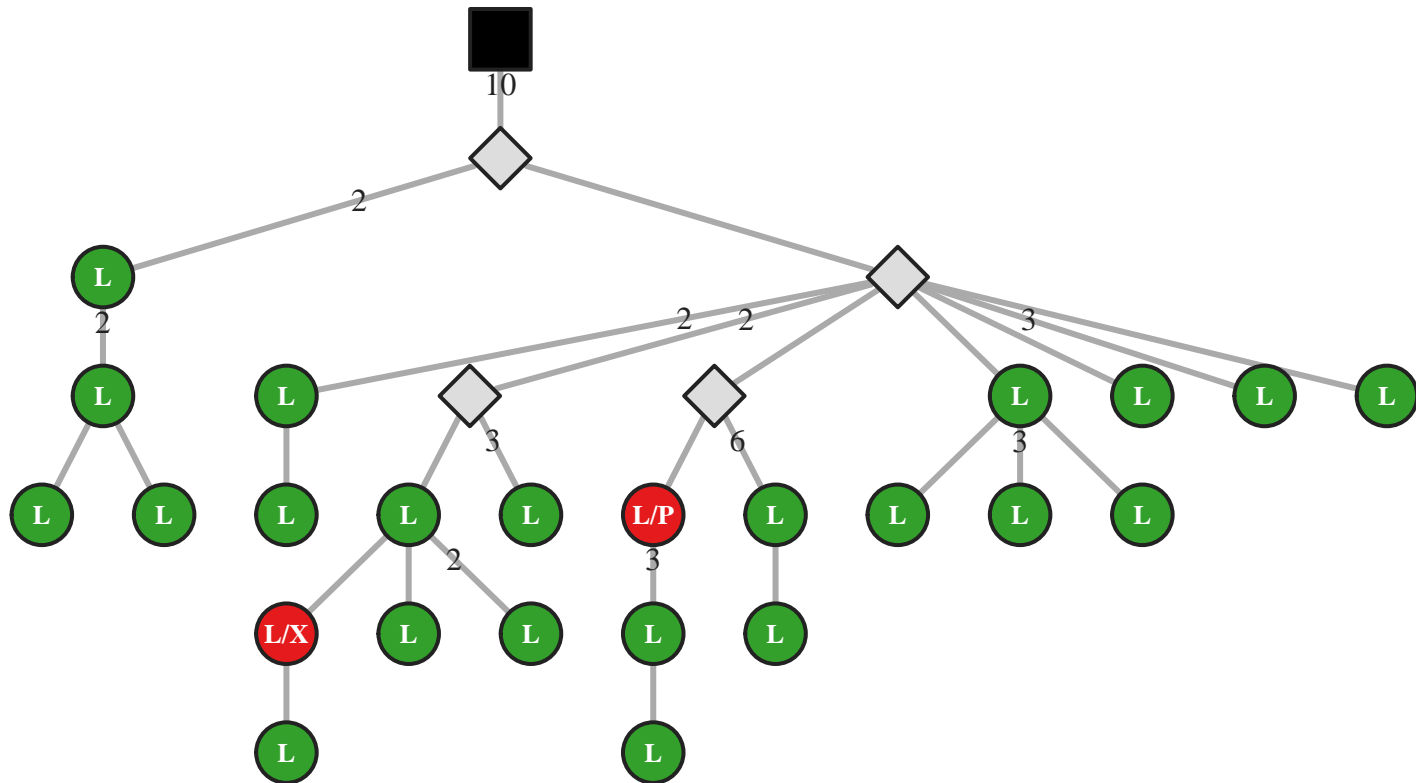
M5 IgG IGHV2-5/J5 60bp (33602)



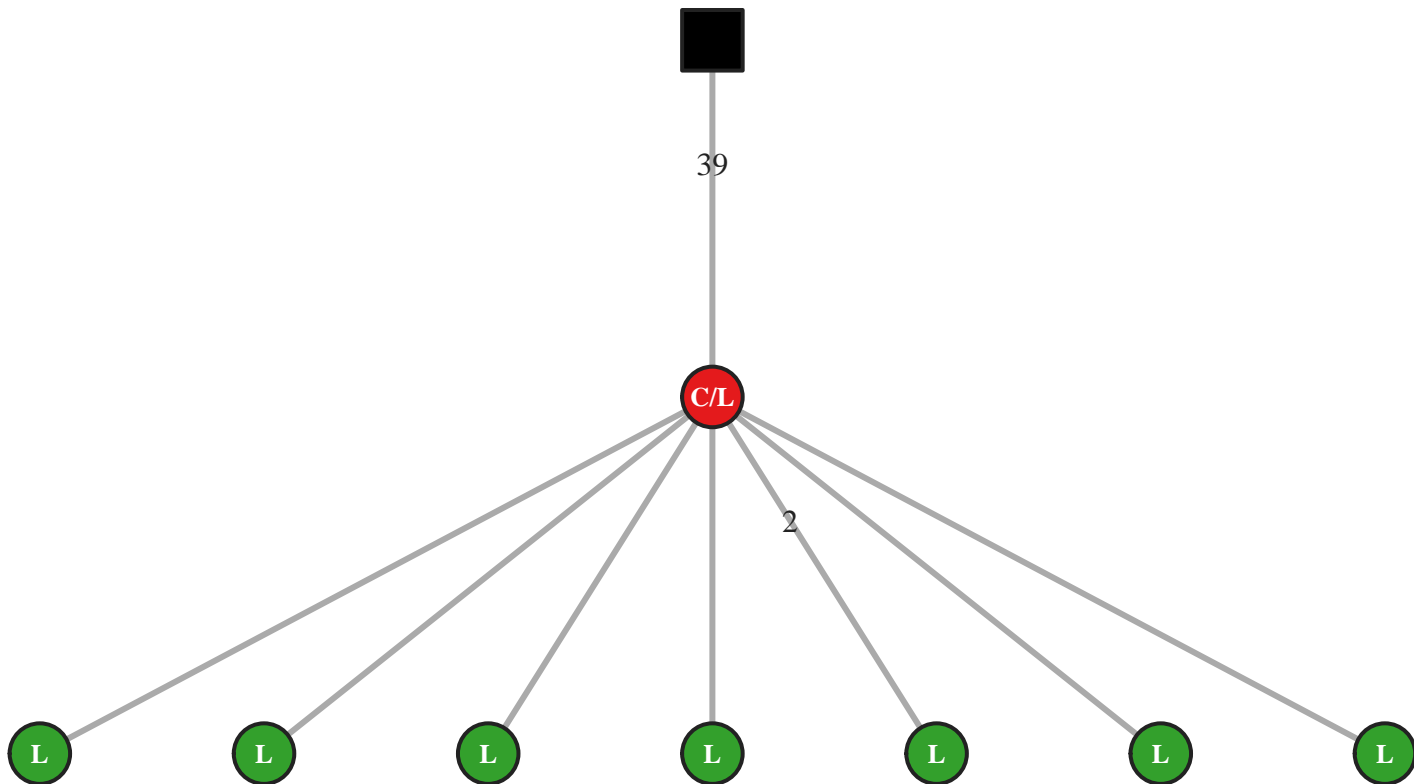
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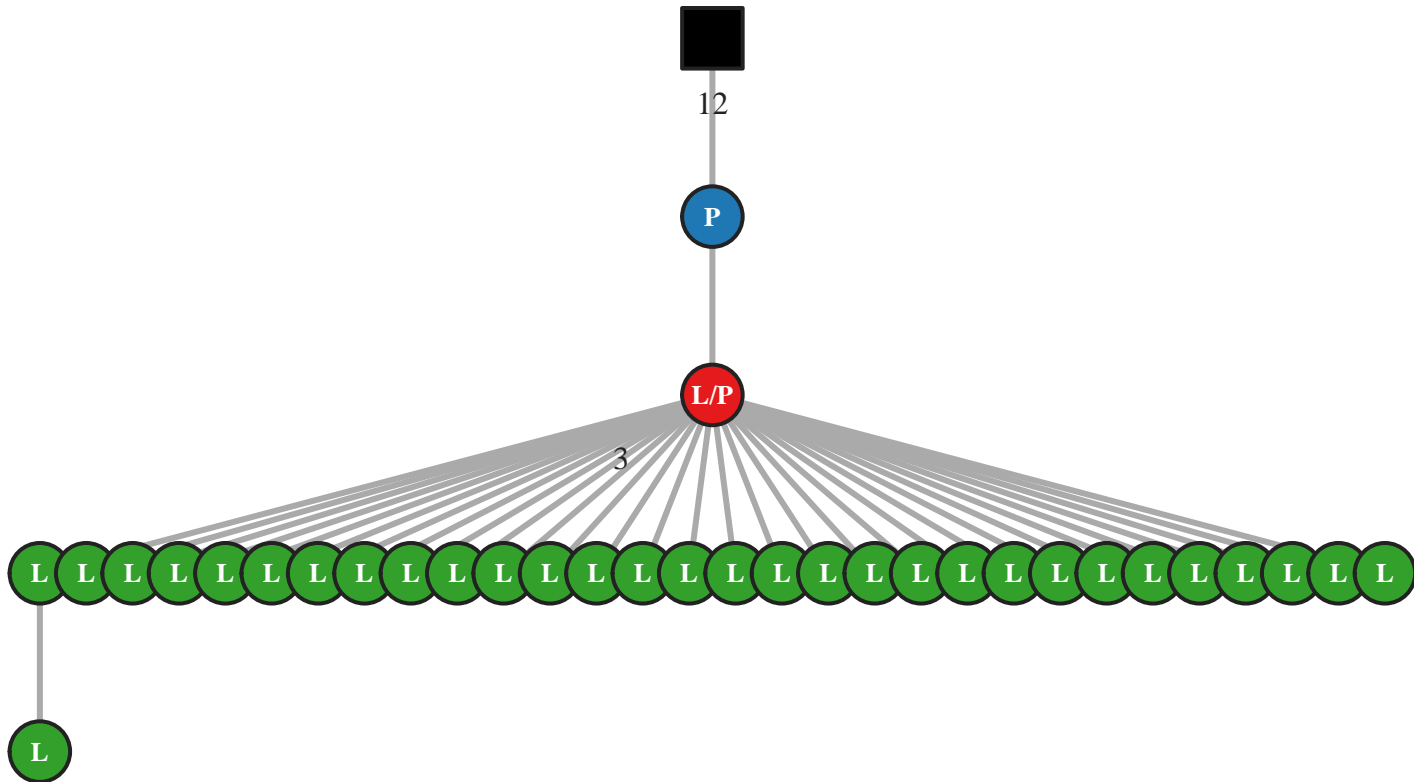
M5 IgG IGHV2-5/J5 60bp (33610)



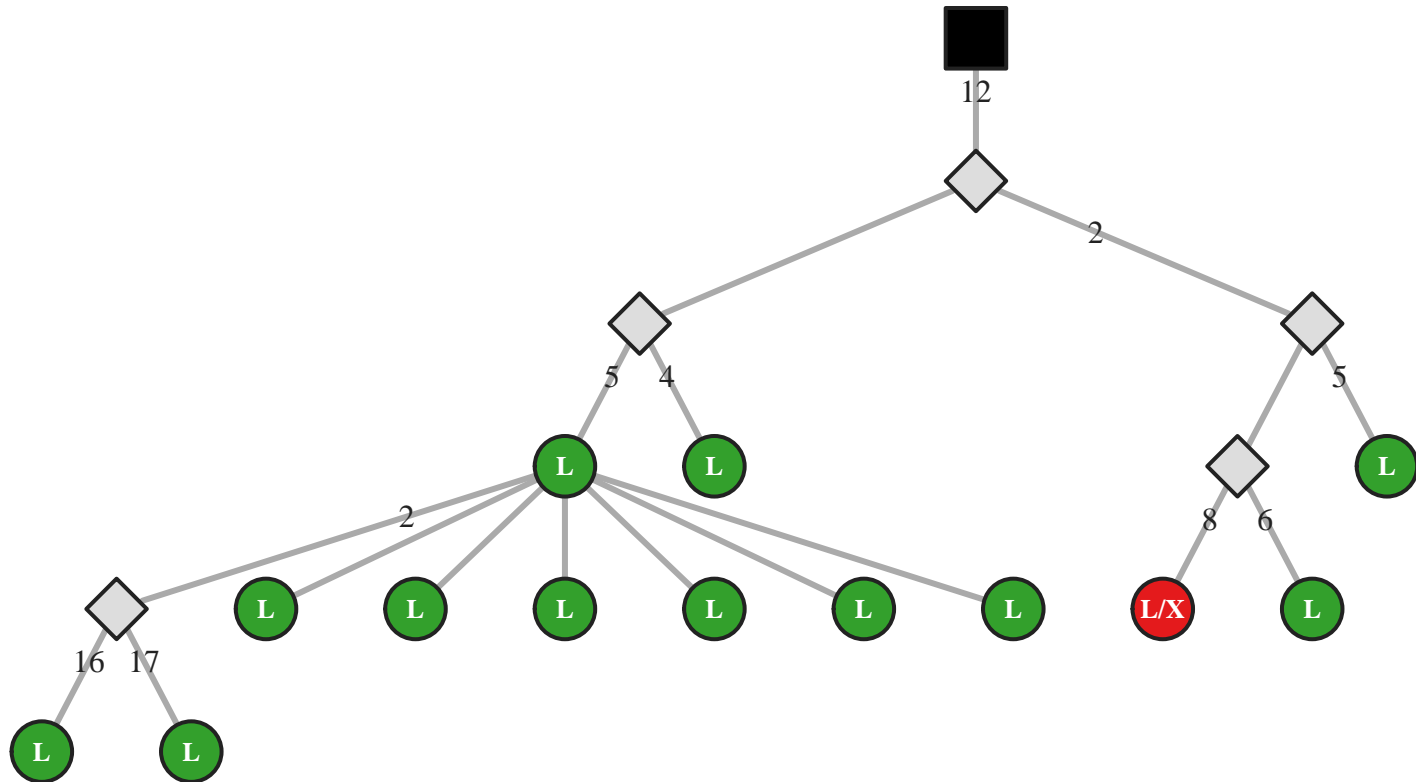
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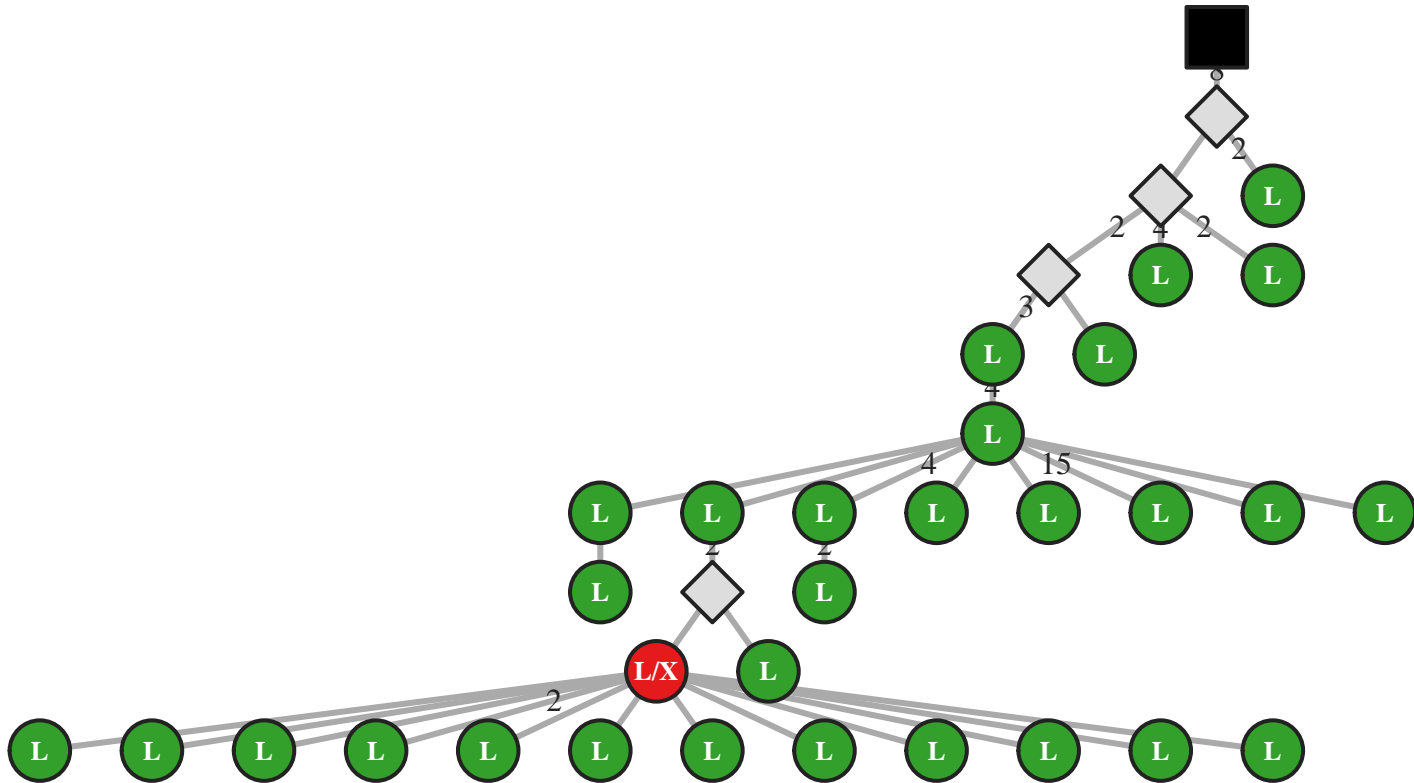
M5 IgG IGHV2-5/J5 66bp (24682)



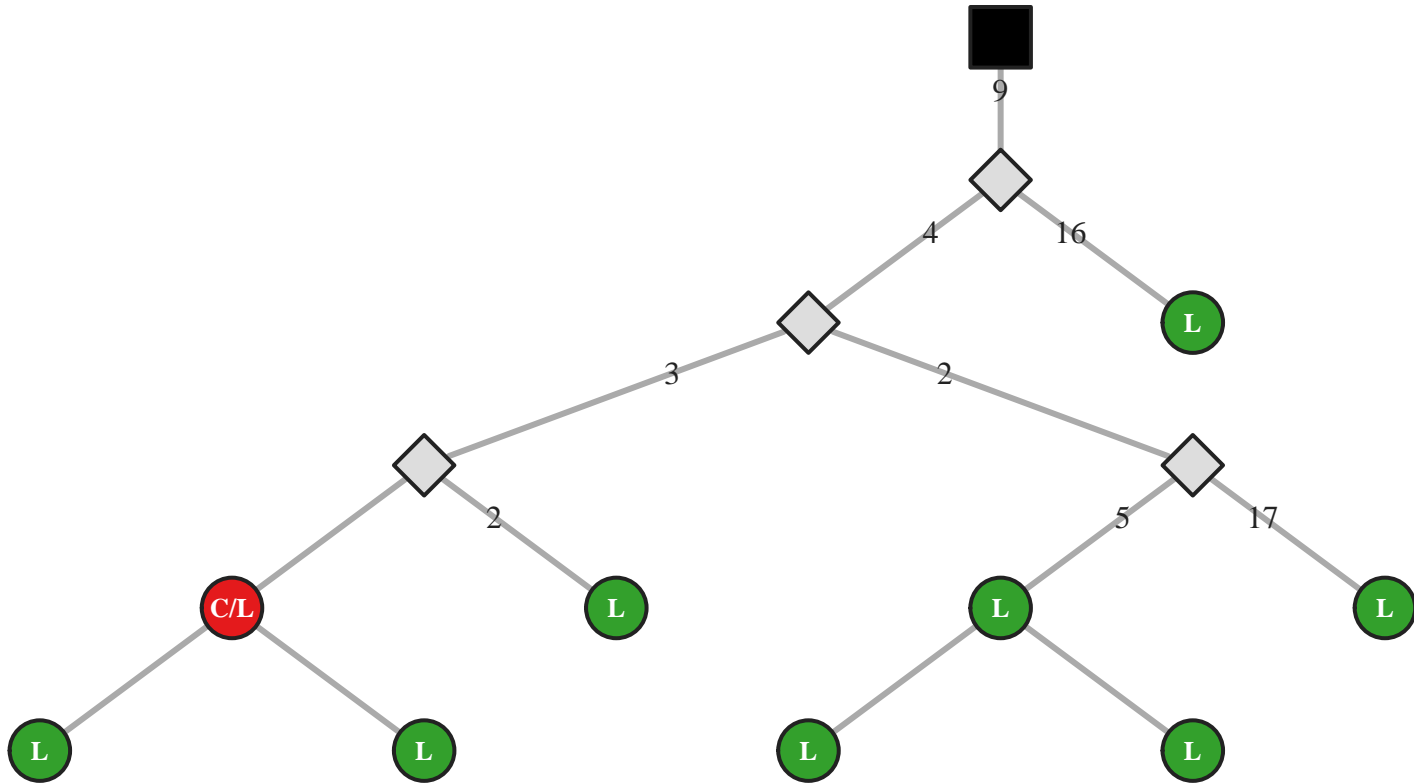
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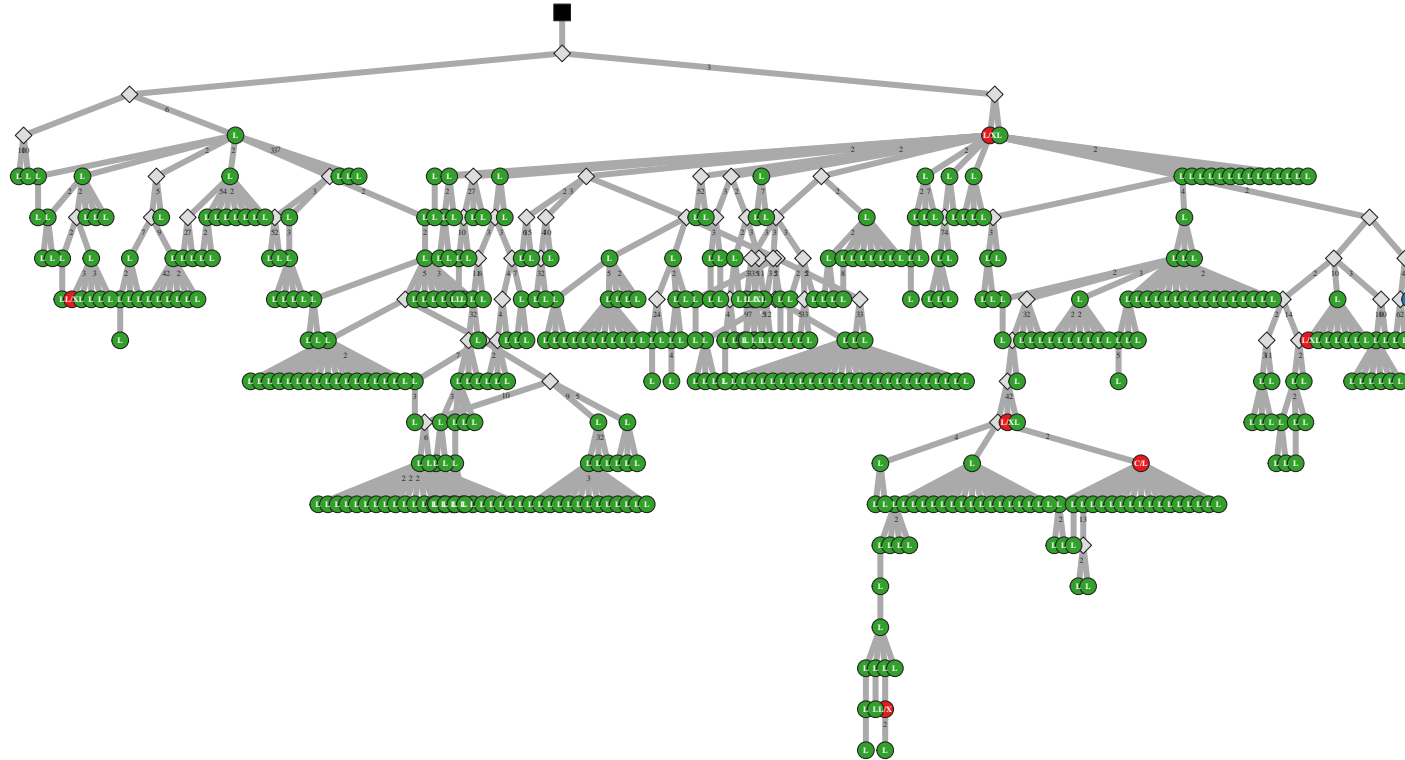
M5 IgG IGHV2-5/J6 39bp (15634)



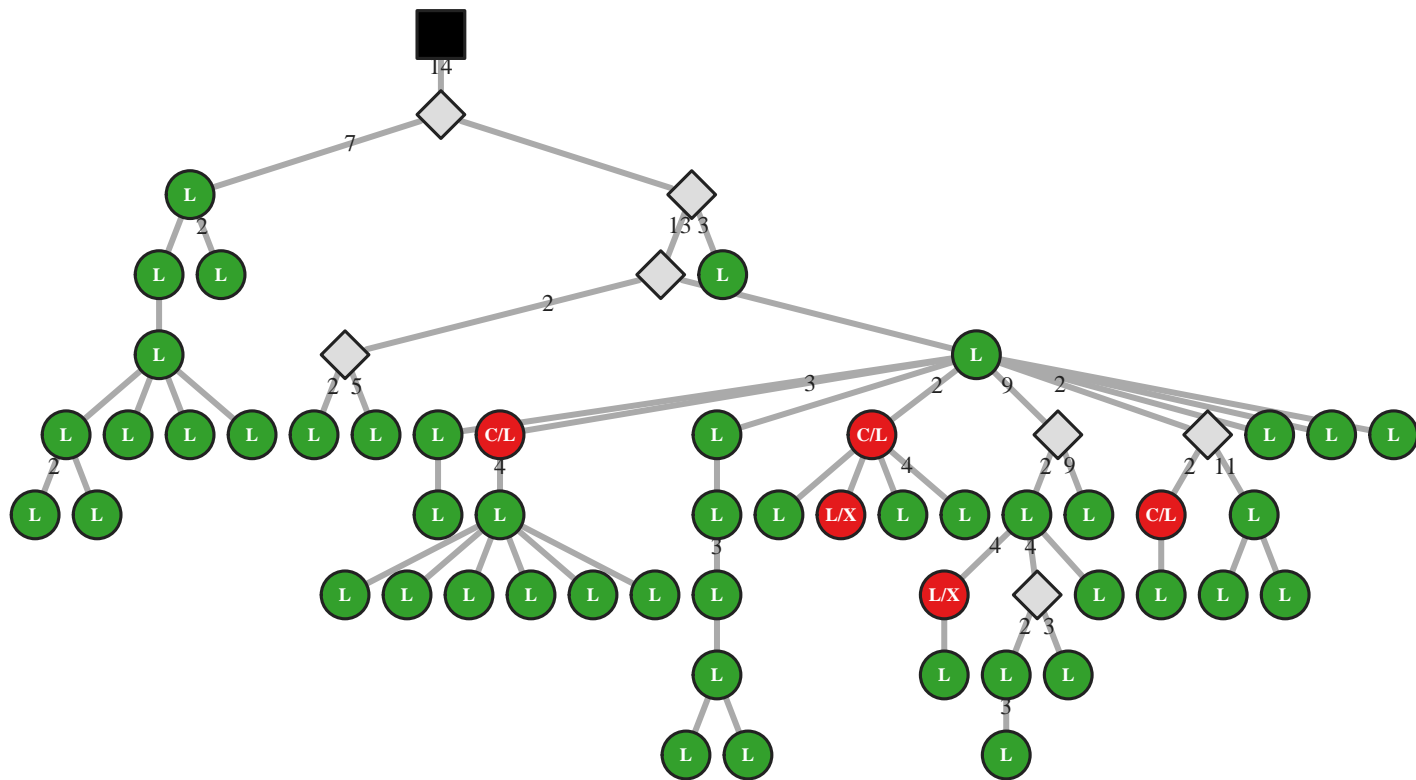
M5 IgG IGHV2-5/J6 45bp (50665)



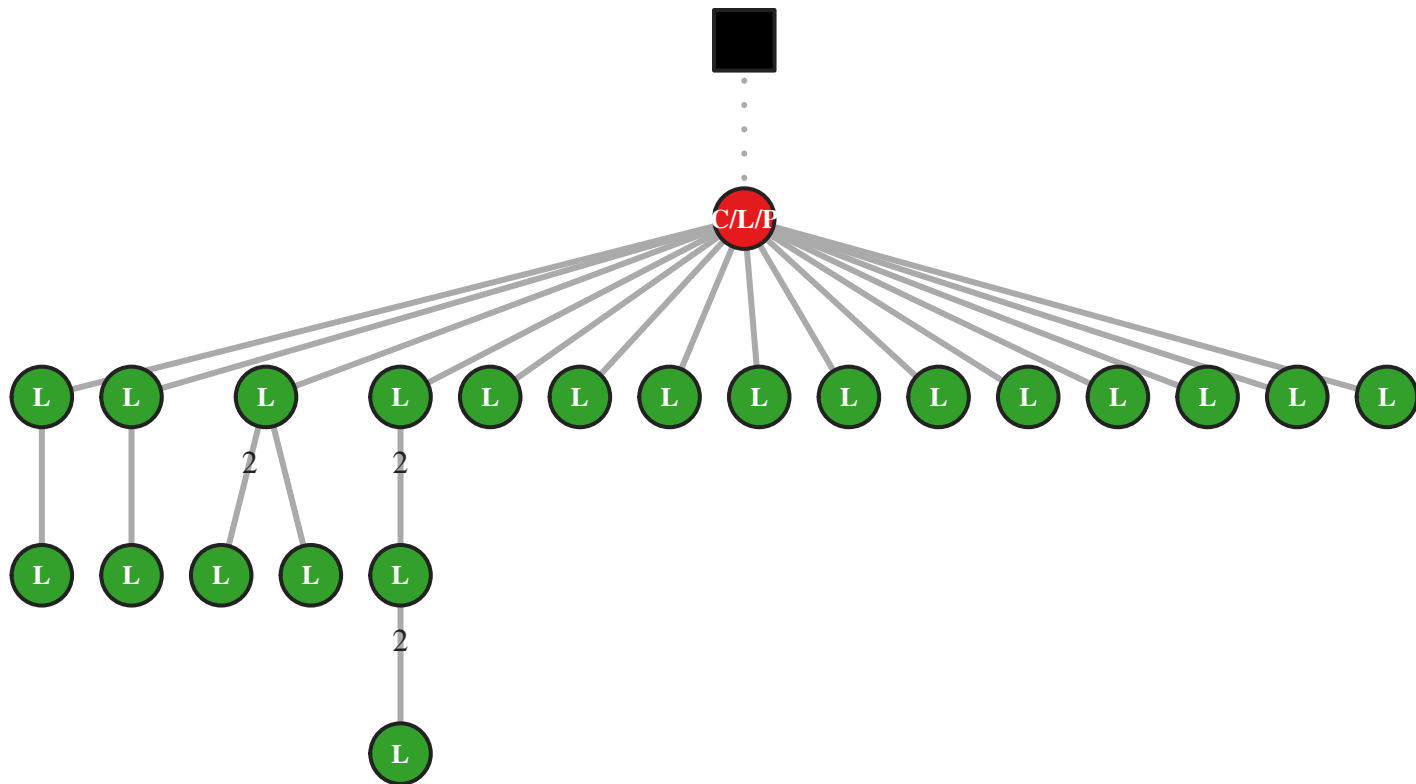
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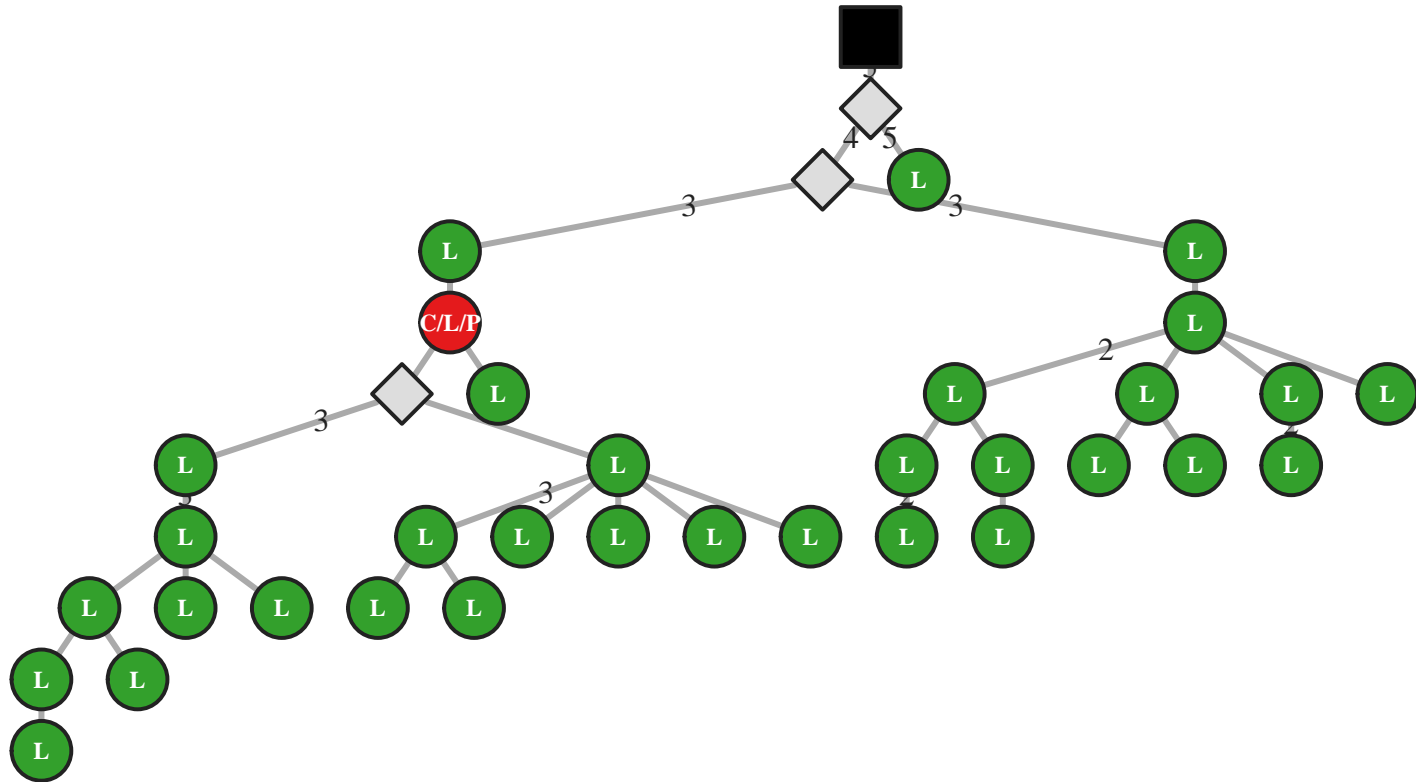
M5 IgG IGHV2-5/J6 54bp (24702)



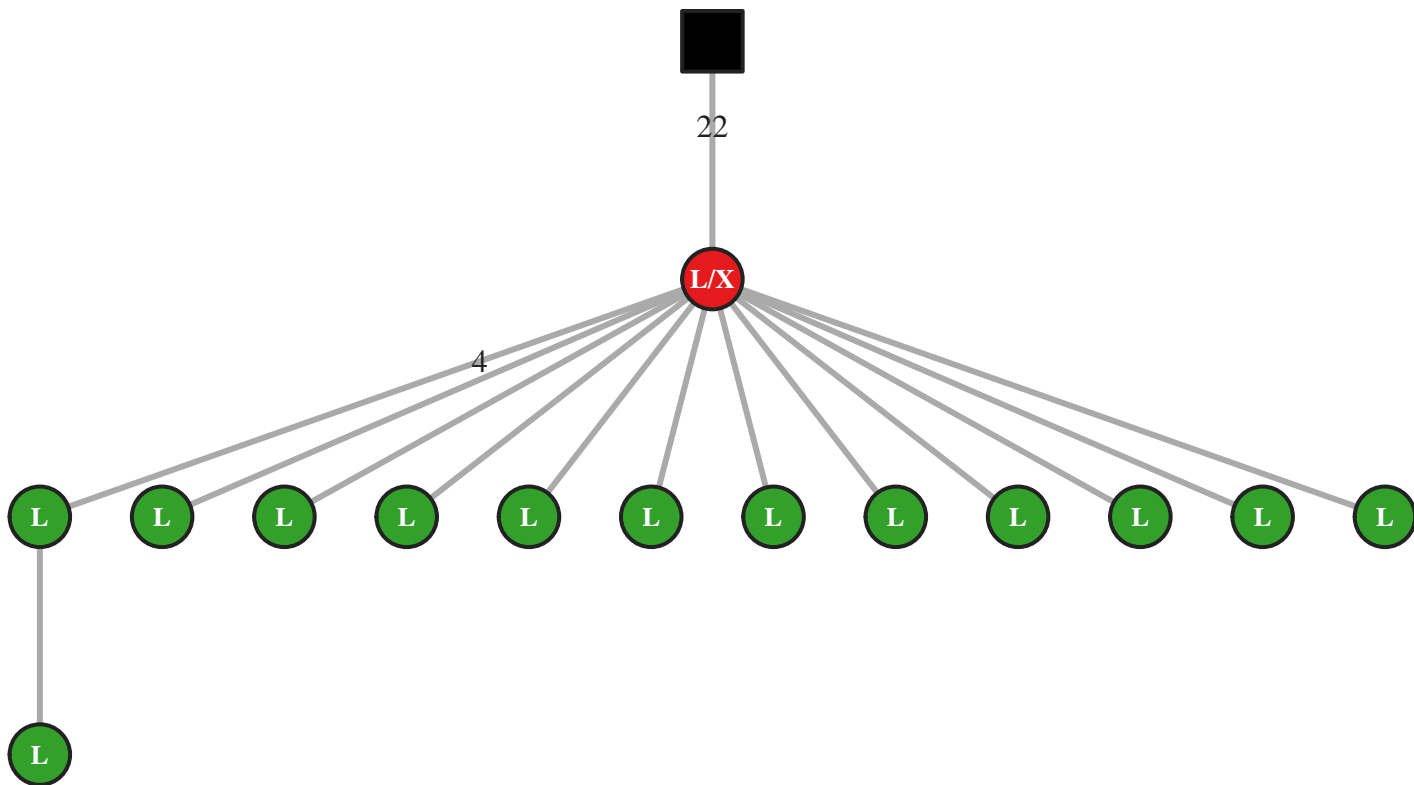
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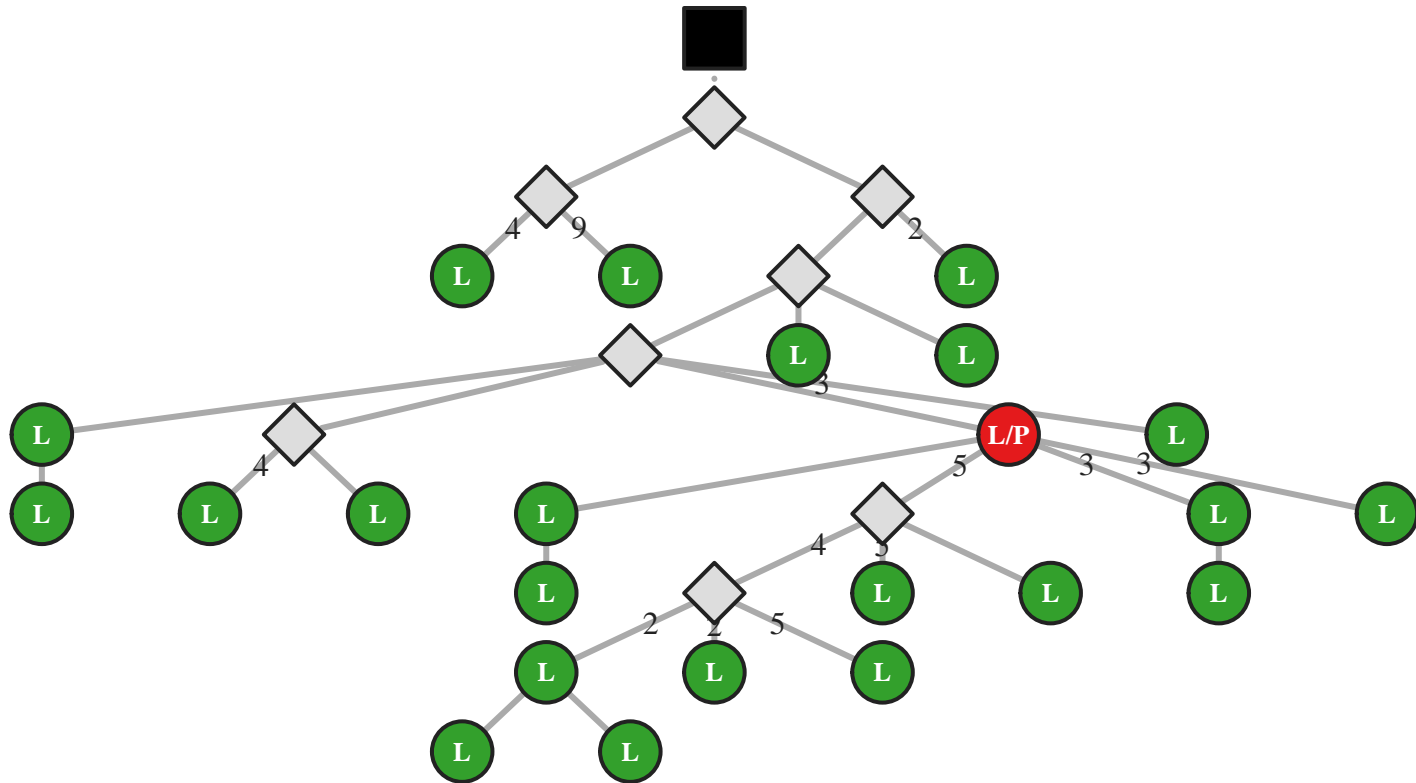
M5 IgG IGHV2-70/J3 33bp (33662)



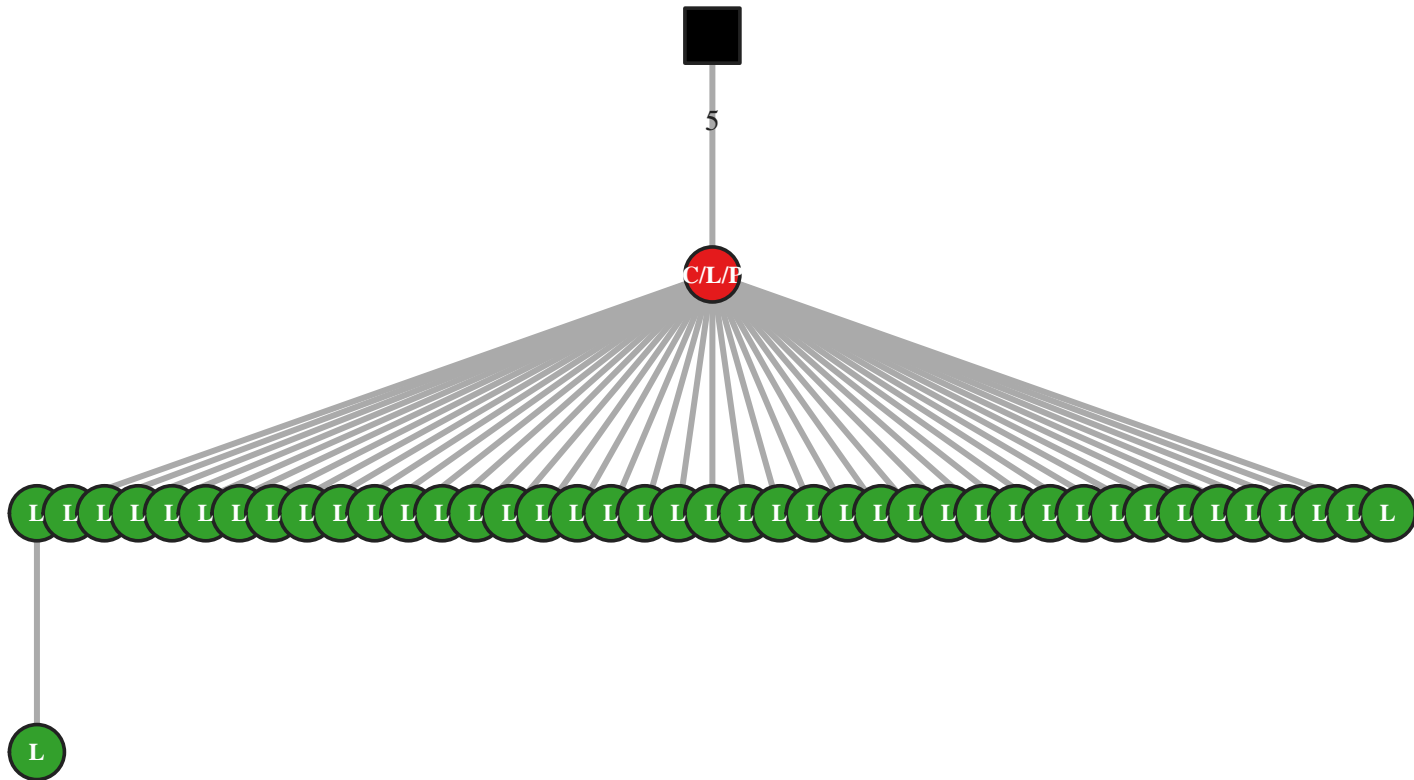
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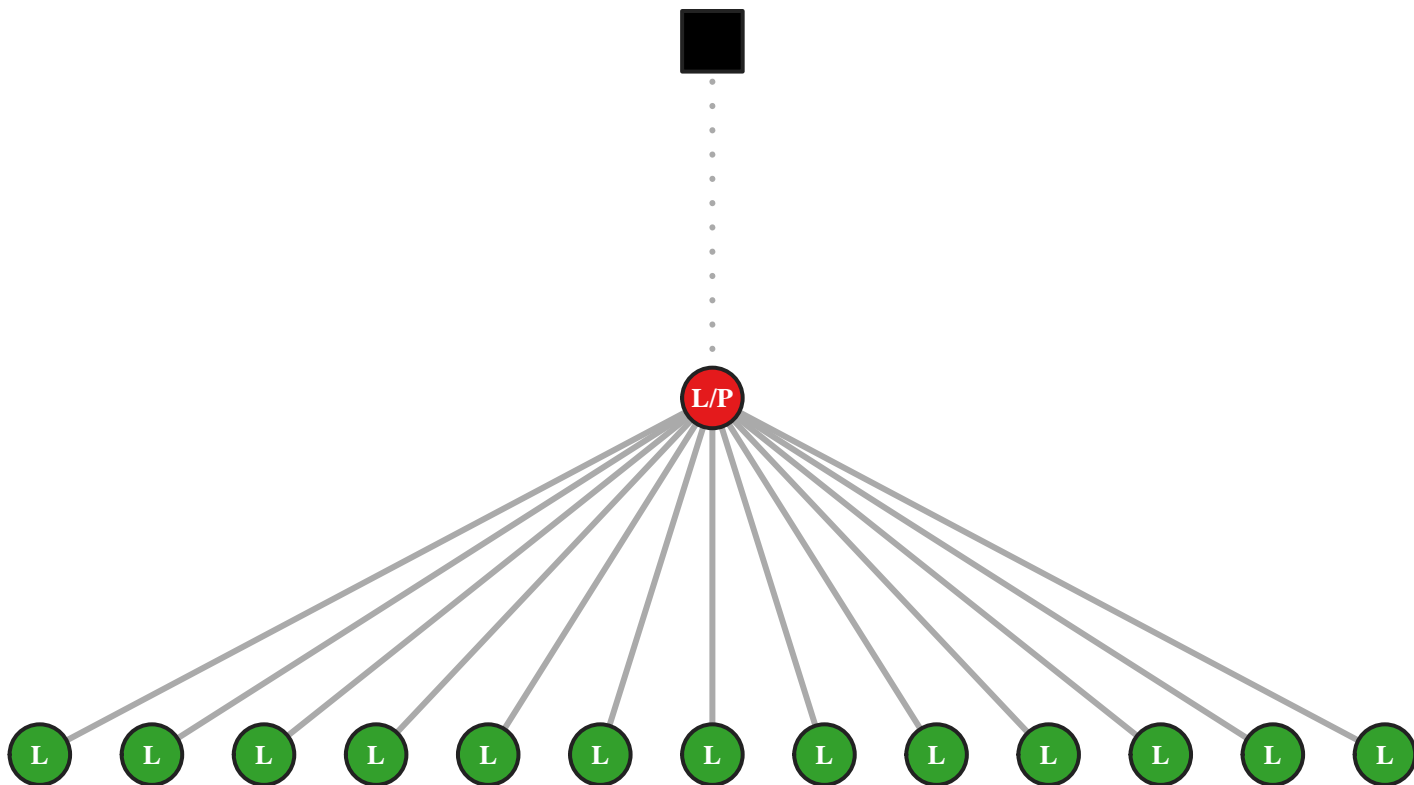
M5 IgG IGHV2-70/J3 45bp (5870)



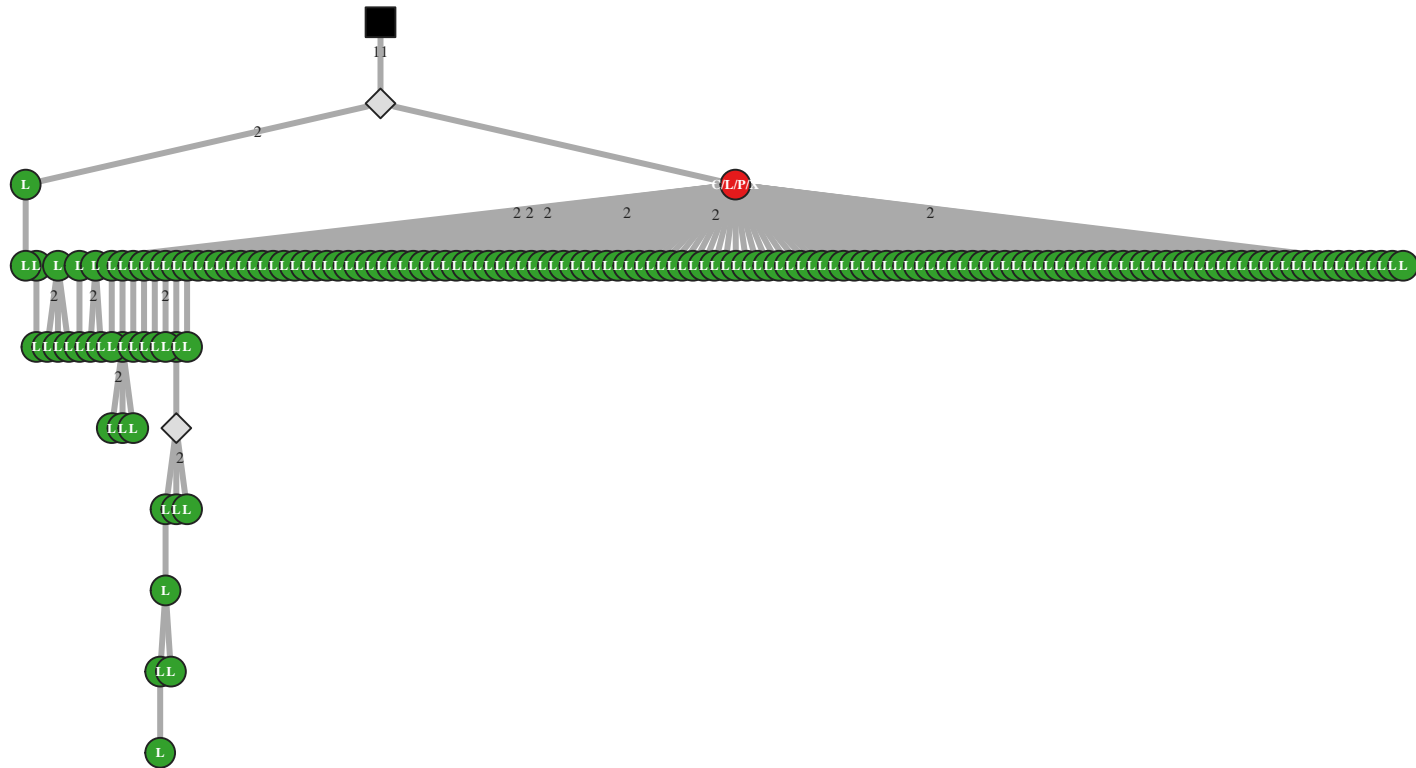
M5 IgG IGHV2-70/J3 48bp (5878)



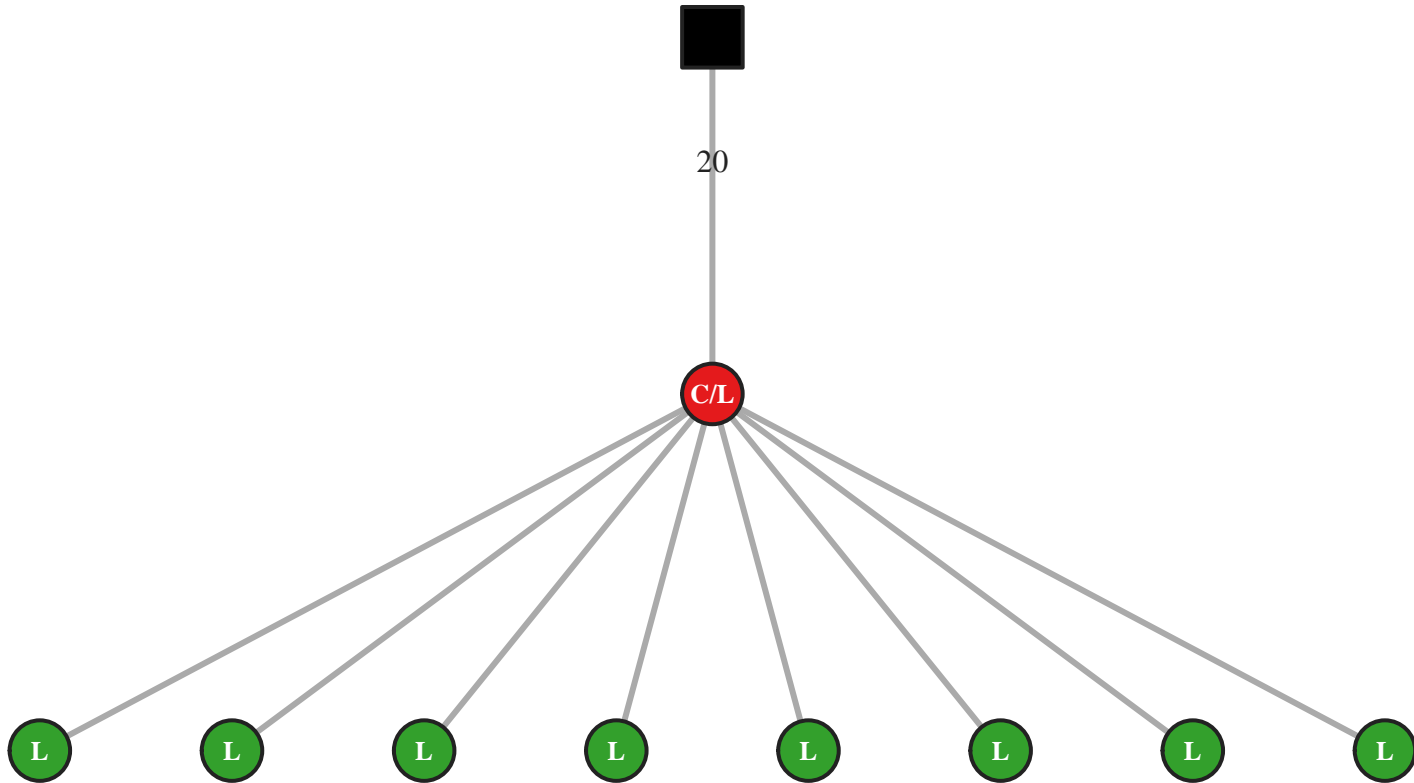
M5 IgG IGHV2-70/J3 48bp (5899)



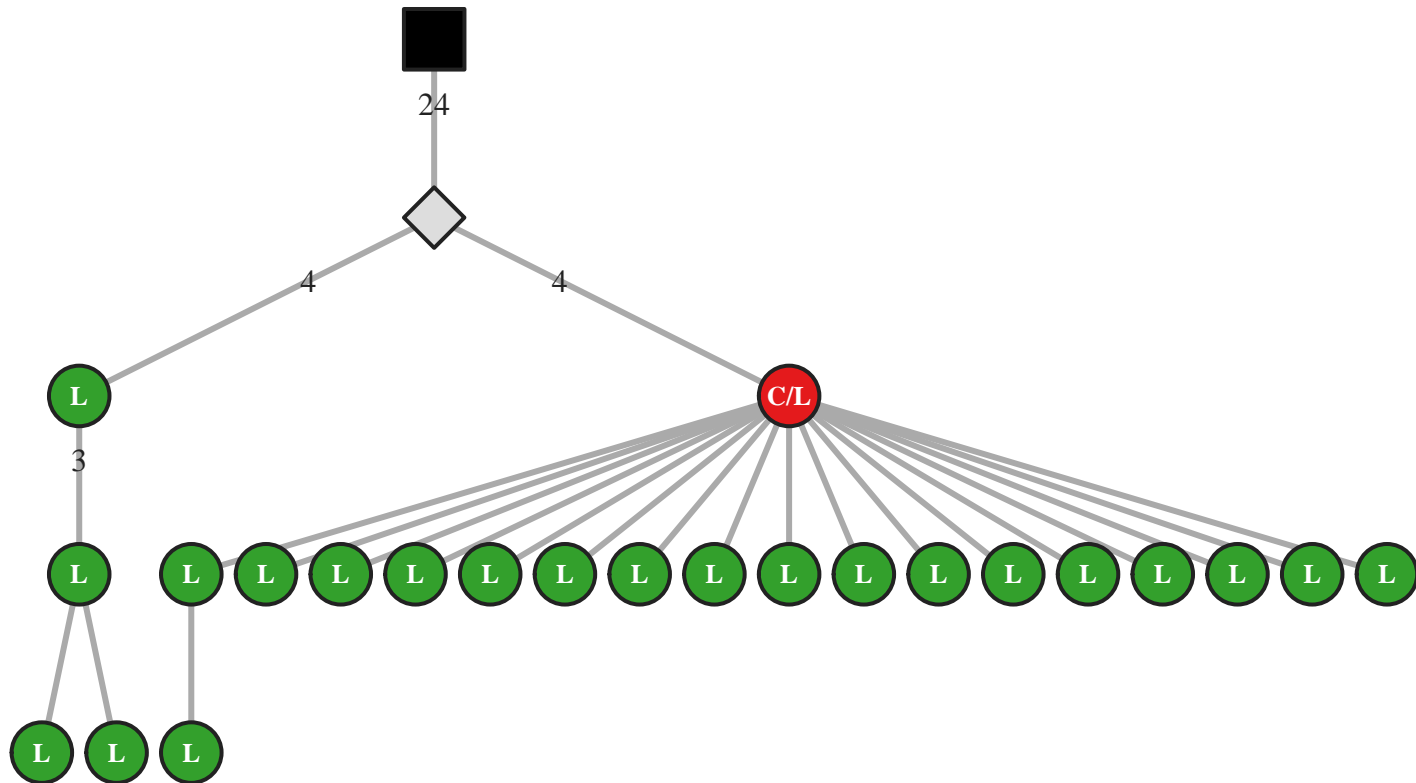
M5 IgG IGHV2-70/J3 48bp (5918)



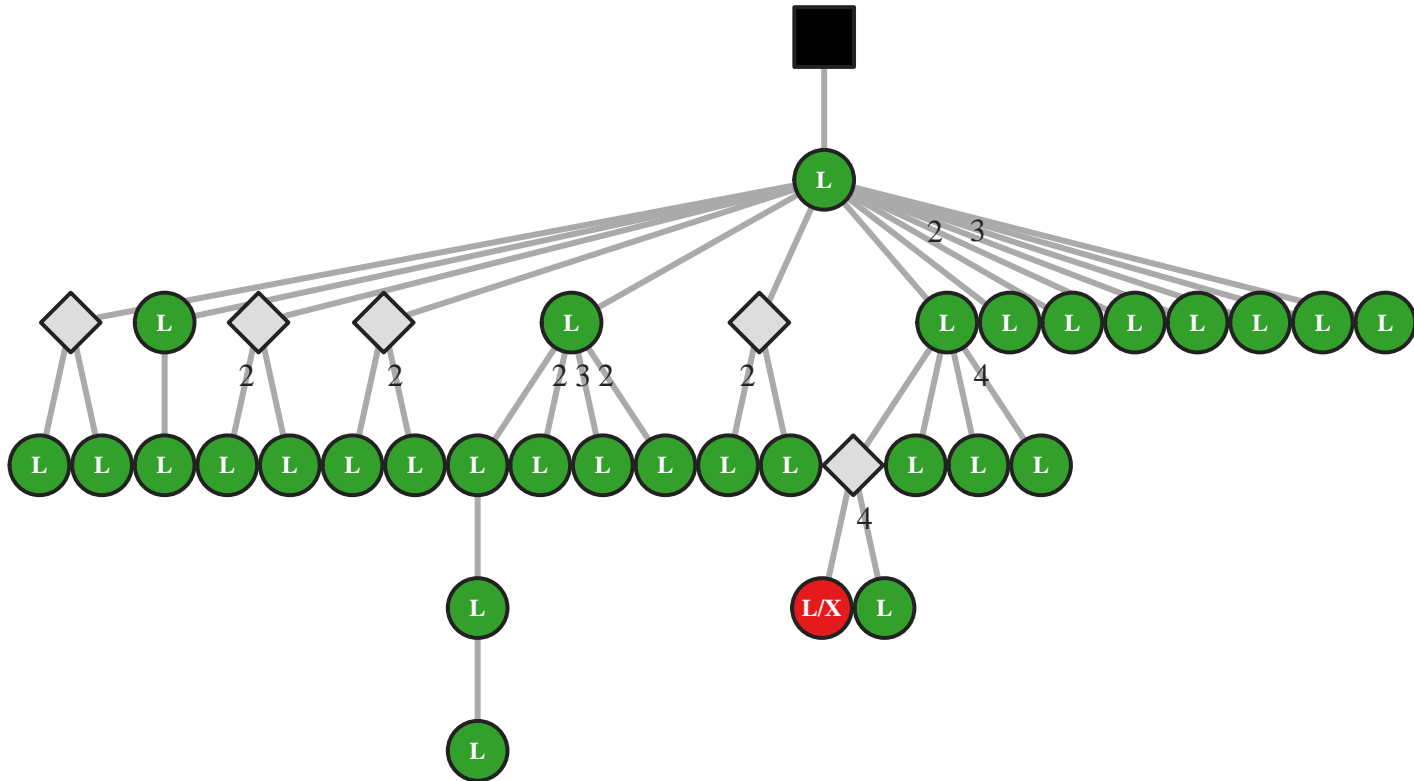
M5 IgG IGHV2-70/J3 54bp (15666)



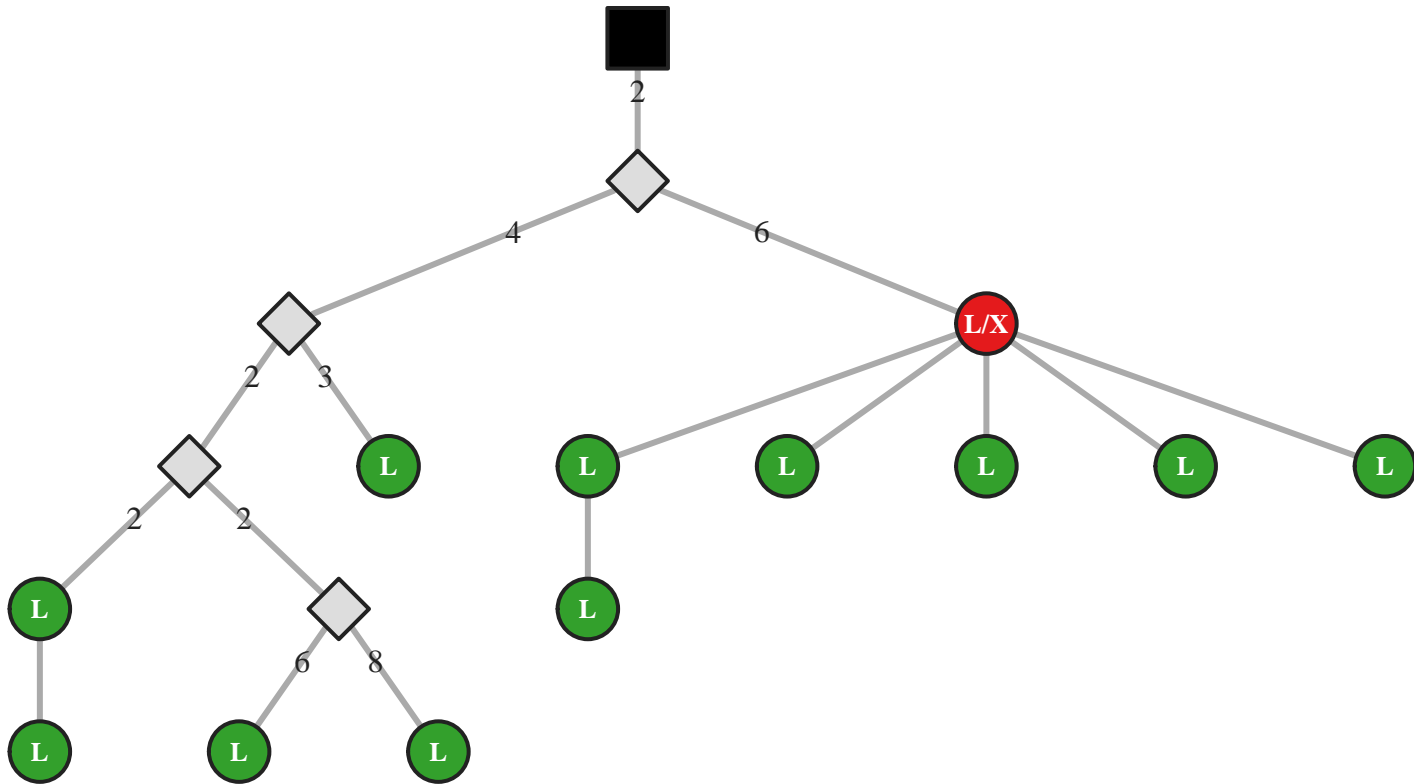
M5 IgG IGHV2-70/J3 57bp (5926)



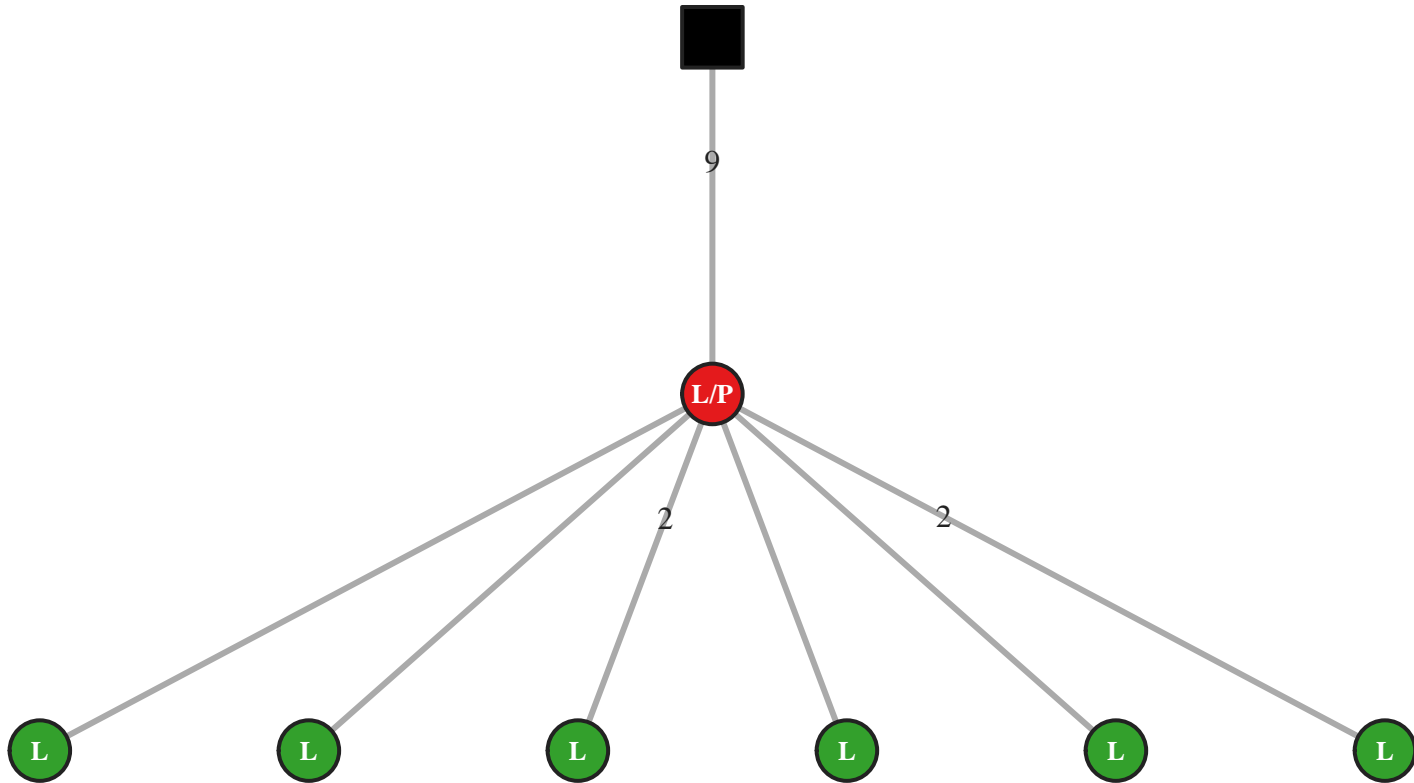
M5 IgG IGHV2-70/J3 60bp (24755)



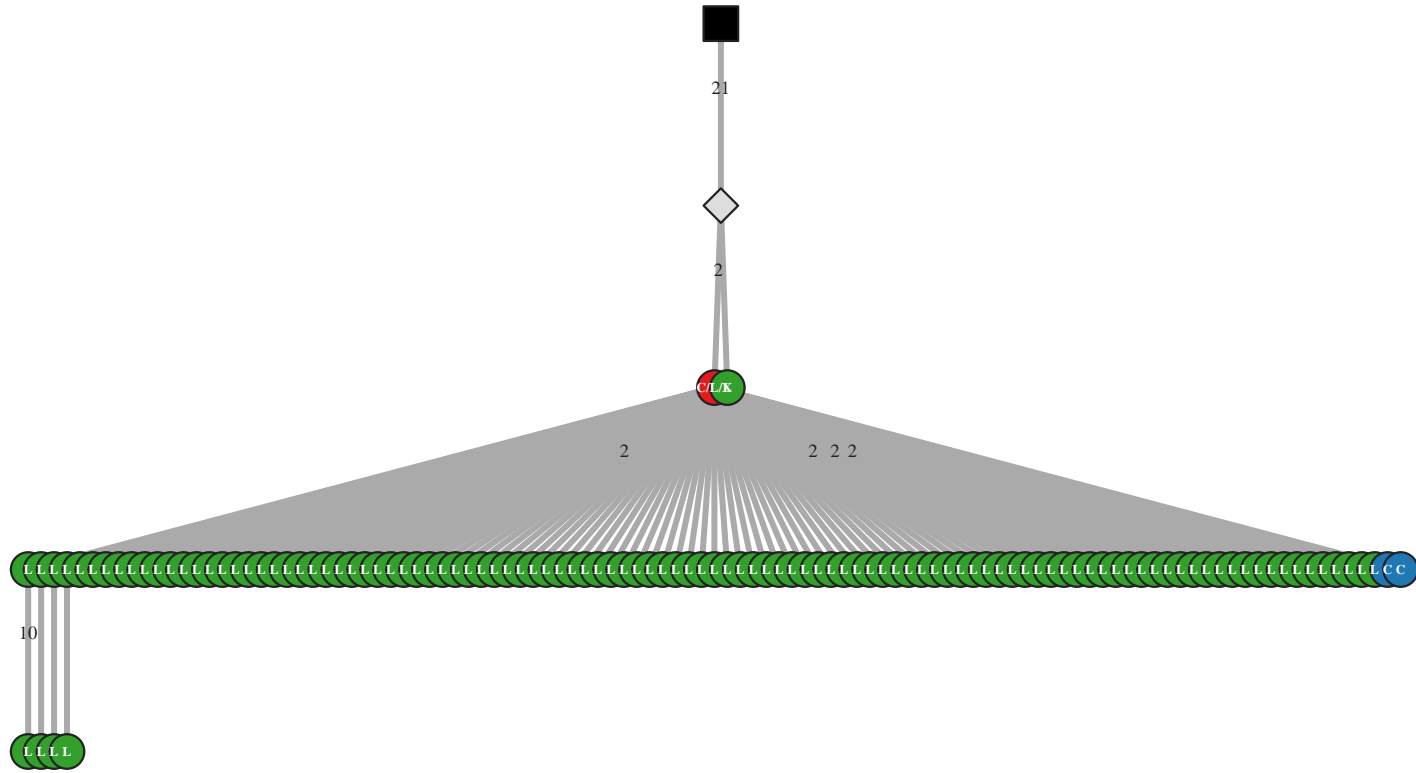
M5 IgG IGHV2-70/J3 60bp (24759)



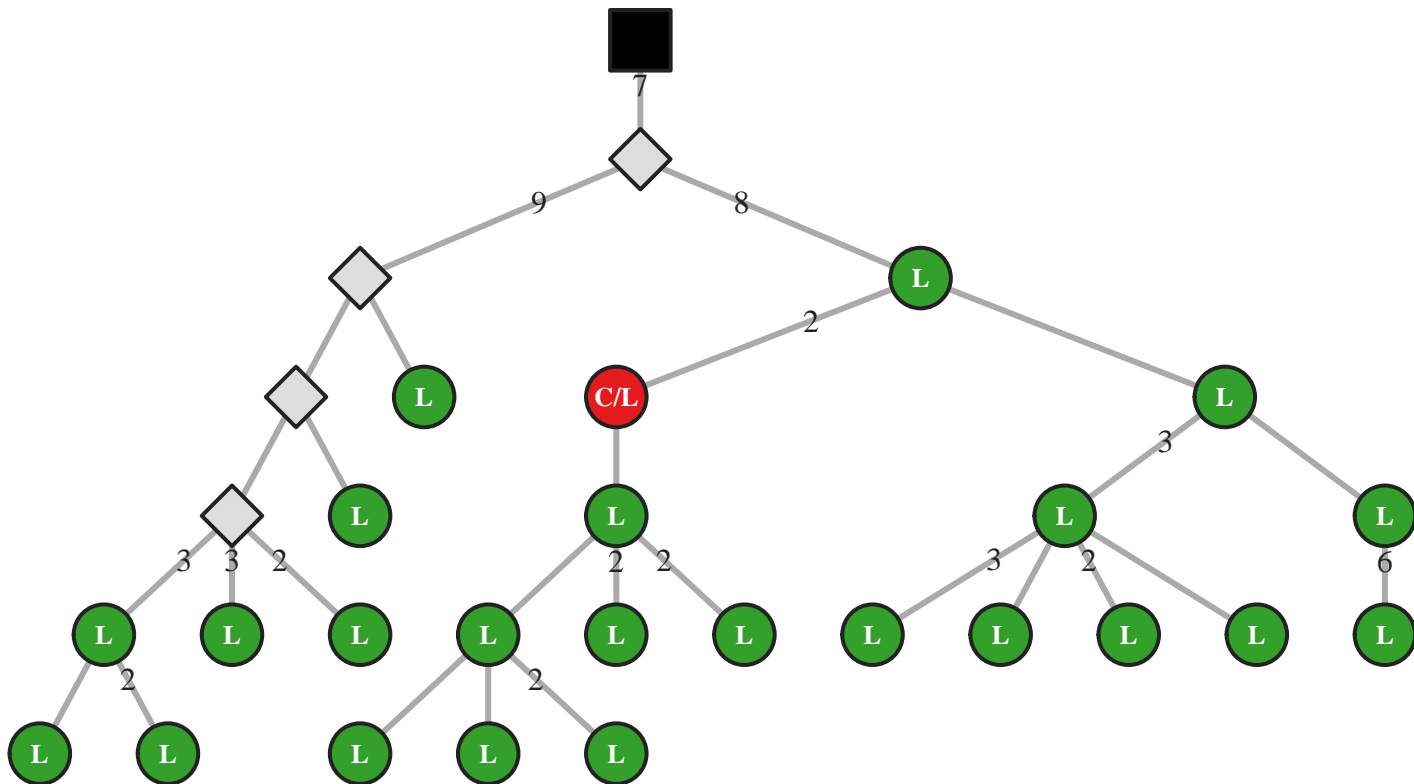
M5 IgG IGHV2-70/J3 63bp (42928)



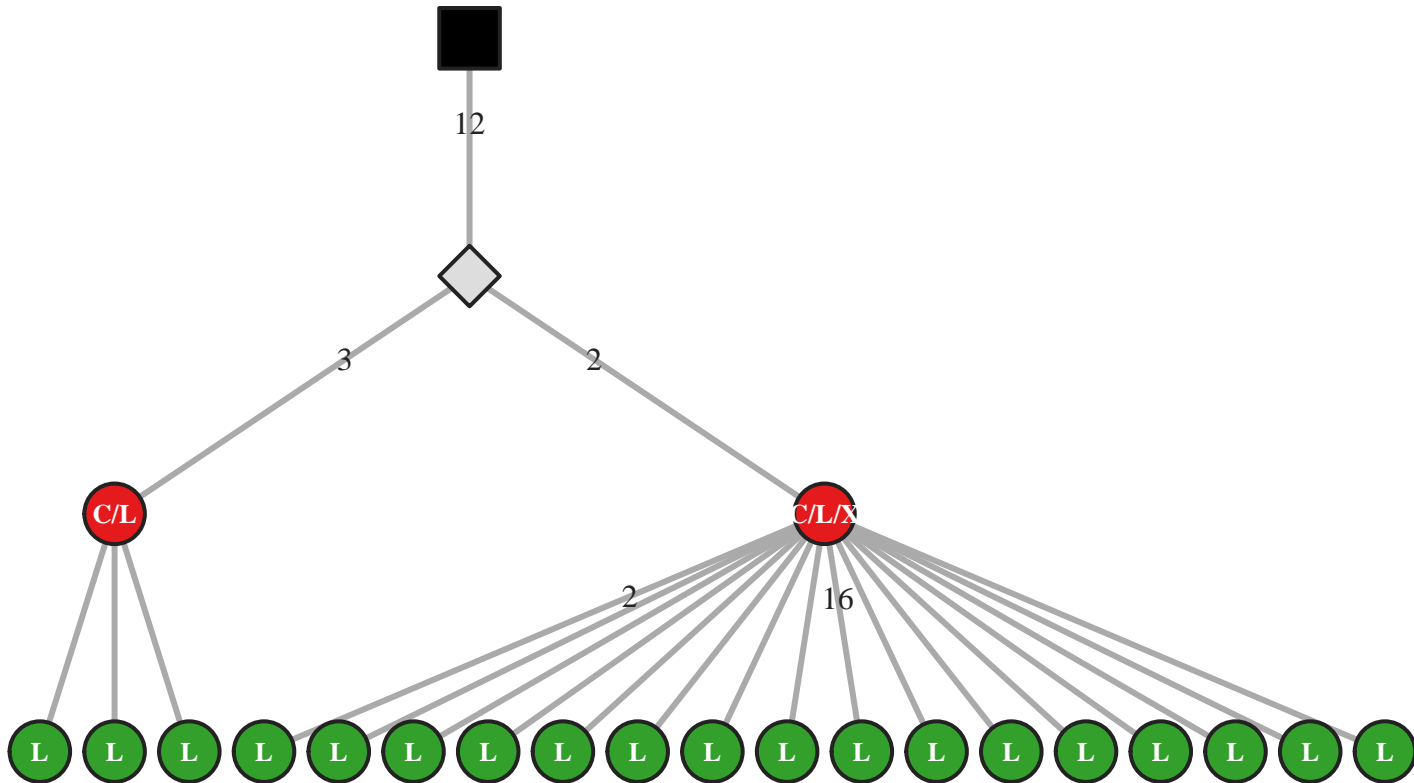
M5 IgG IGHV2-70/J4 39bp (50713)



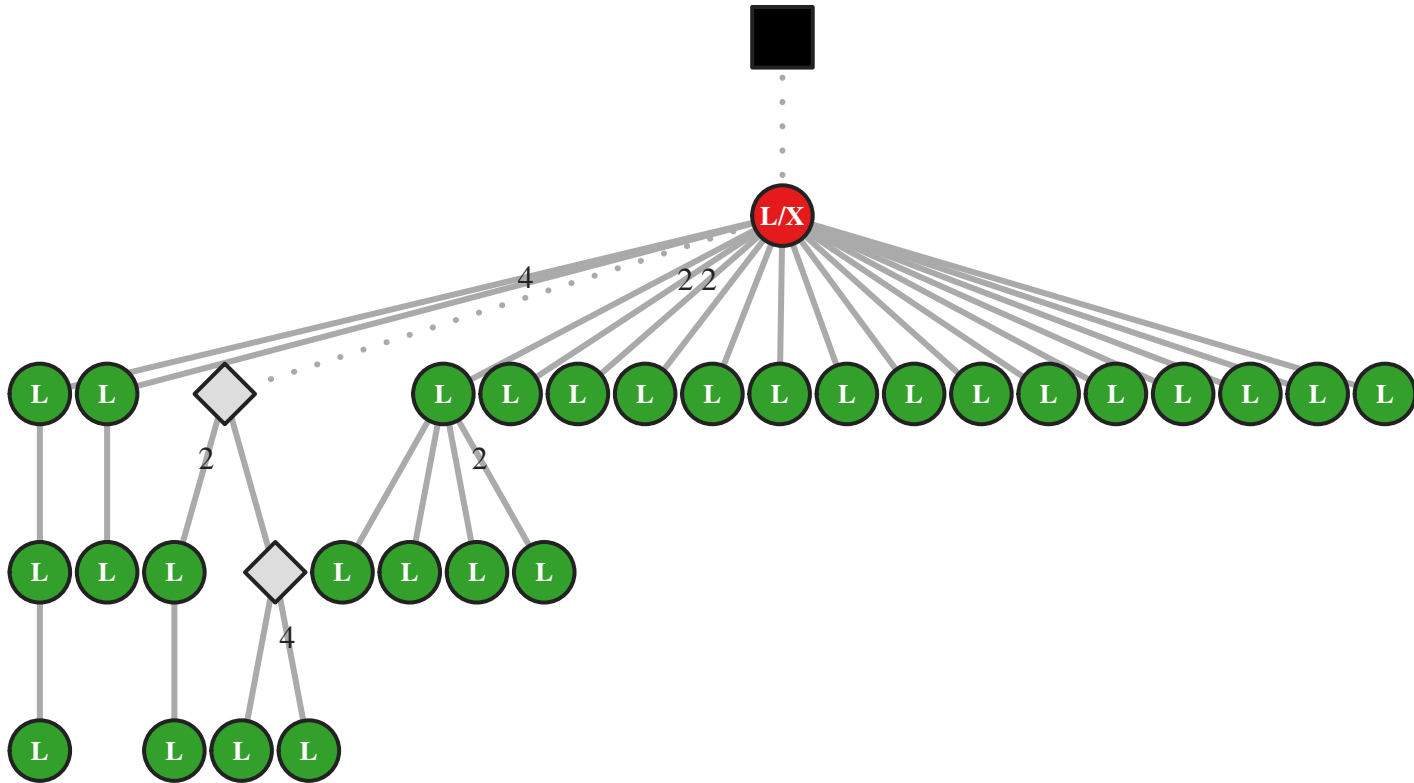
M5 IgG IGHV2-70/J4 39bp (50716)



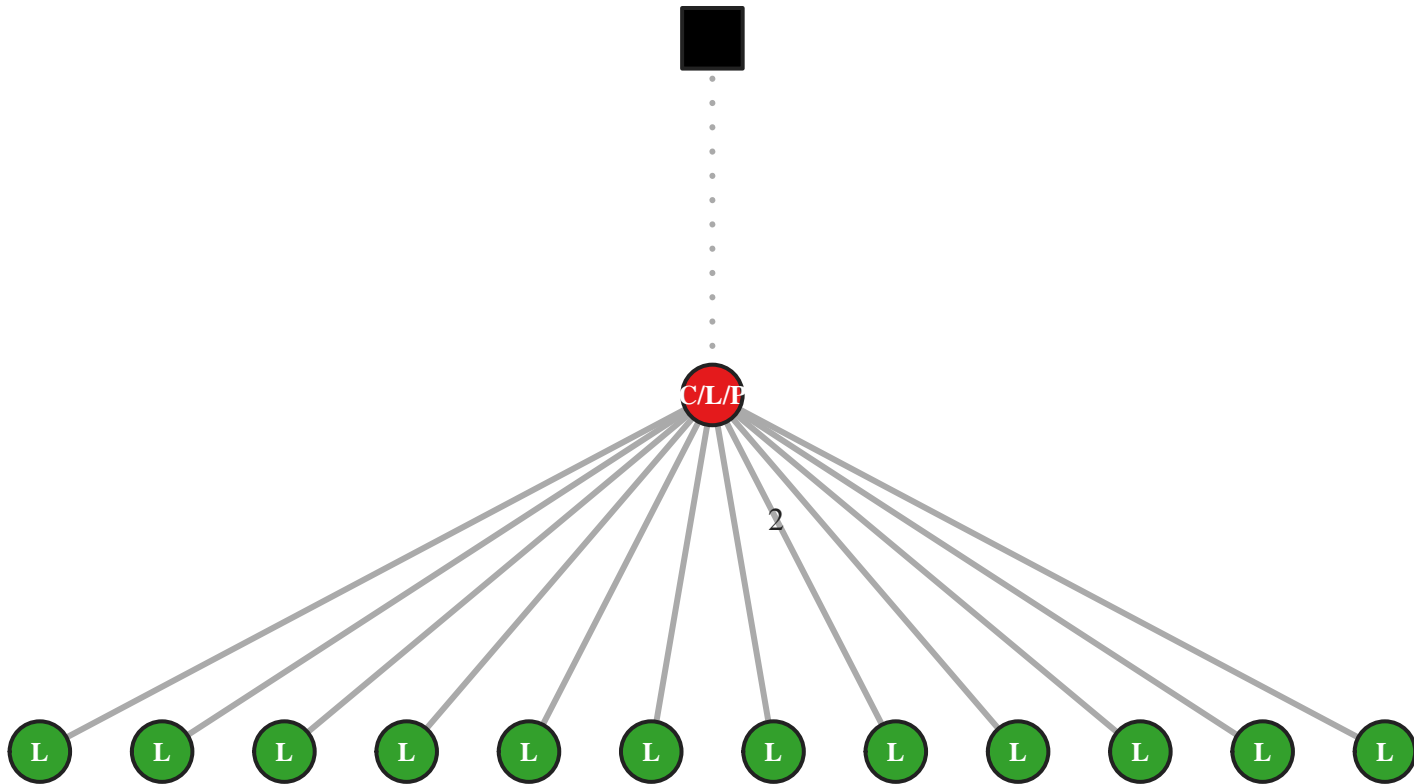
M5 IgG IGHV2-70/J4 42bp (33732)



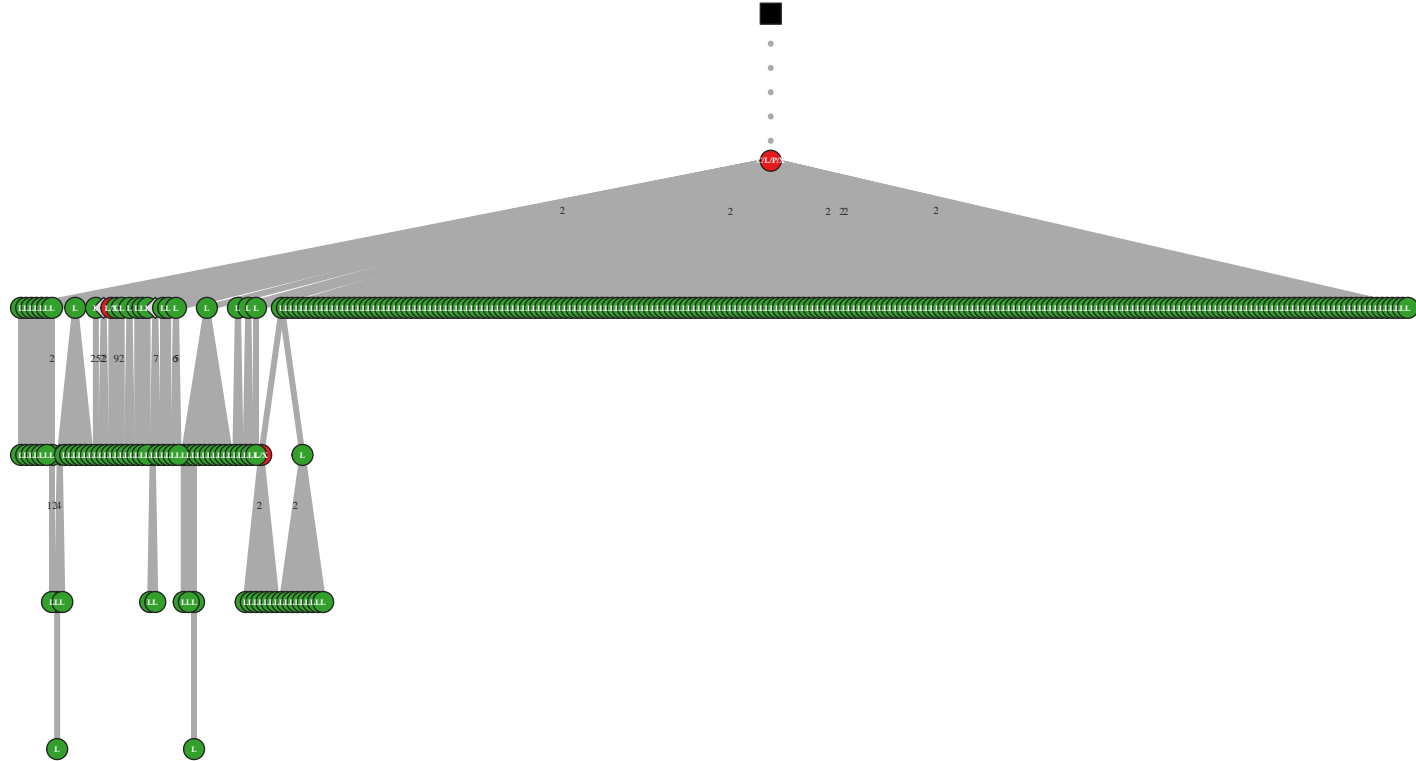
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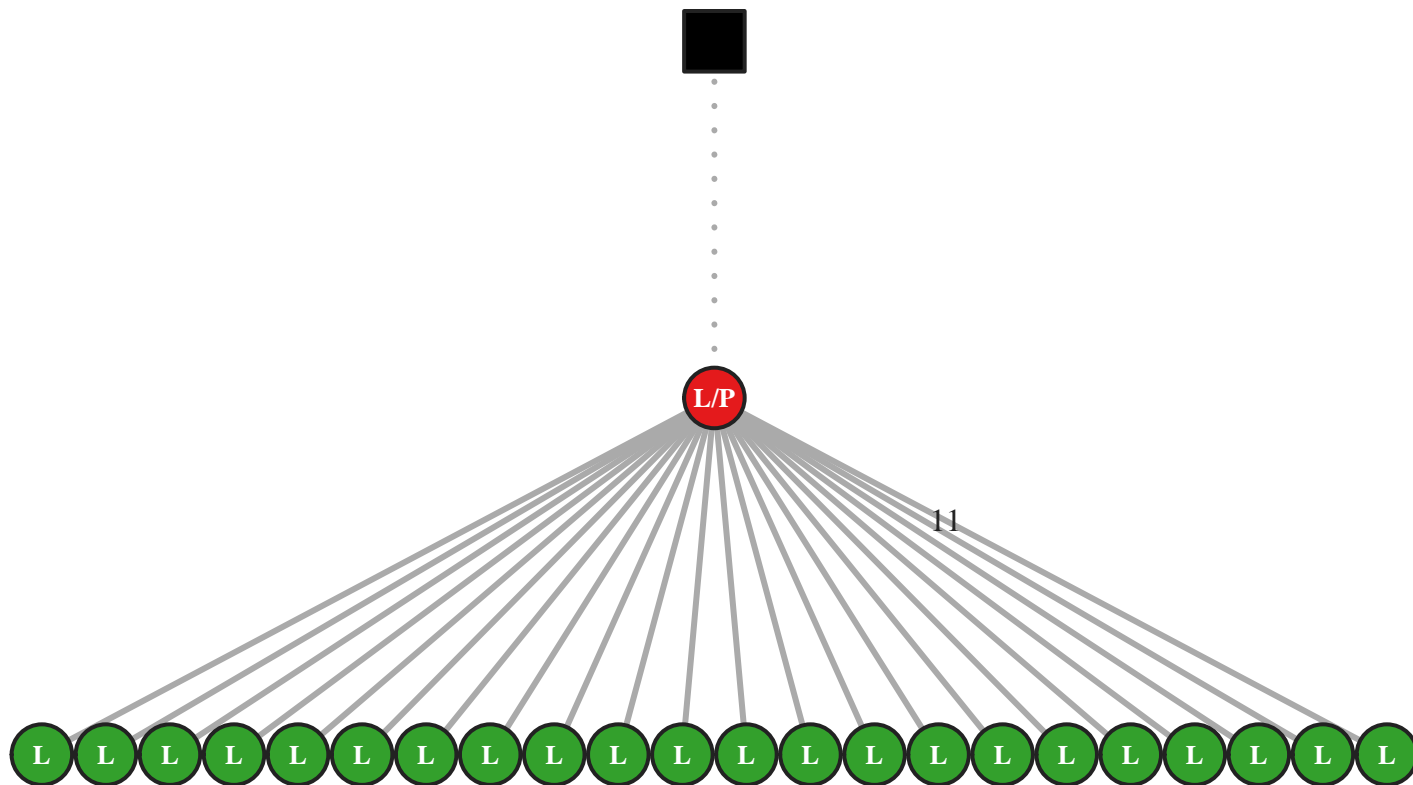
M5 IgA IGHV2-70/J4 45bp (30367)



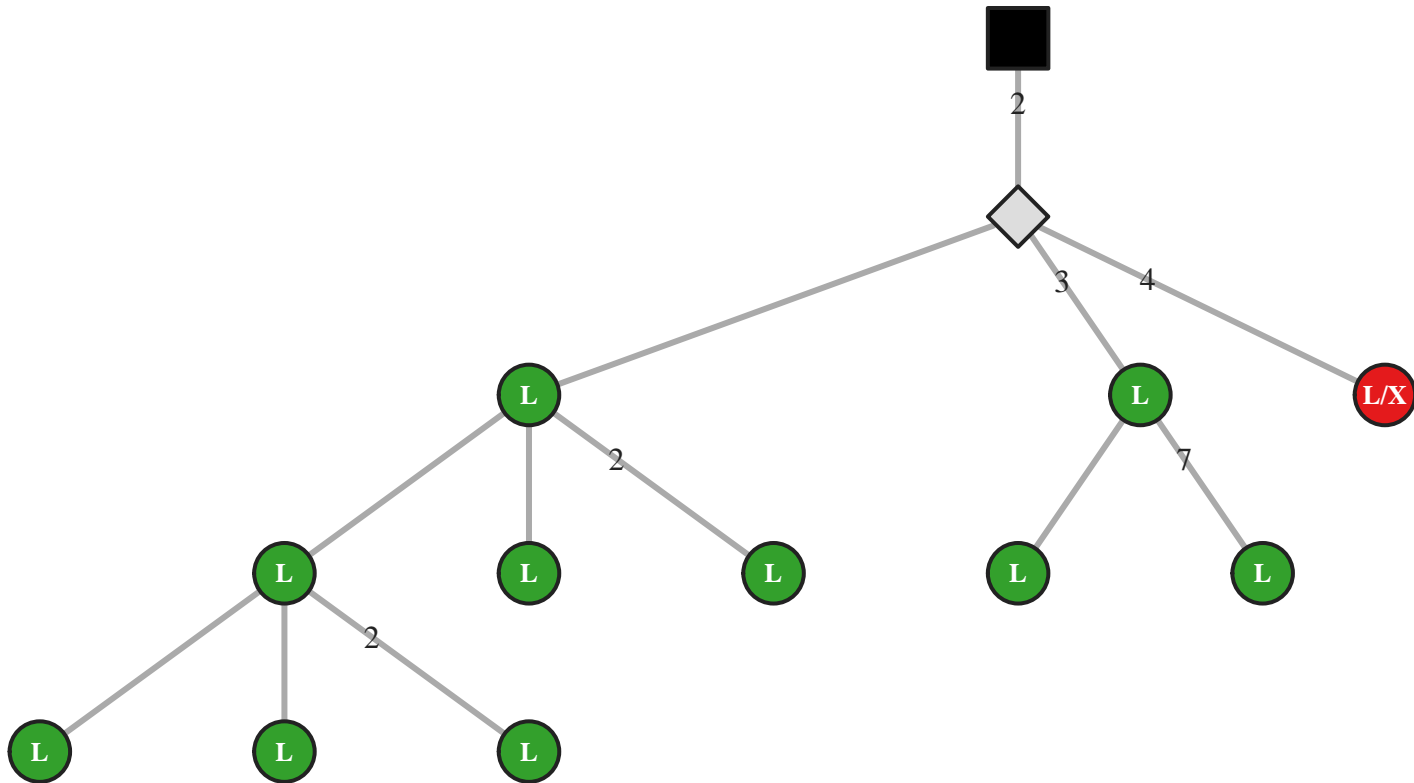
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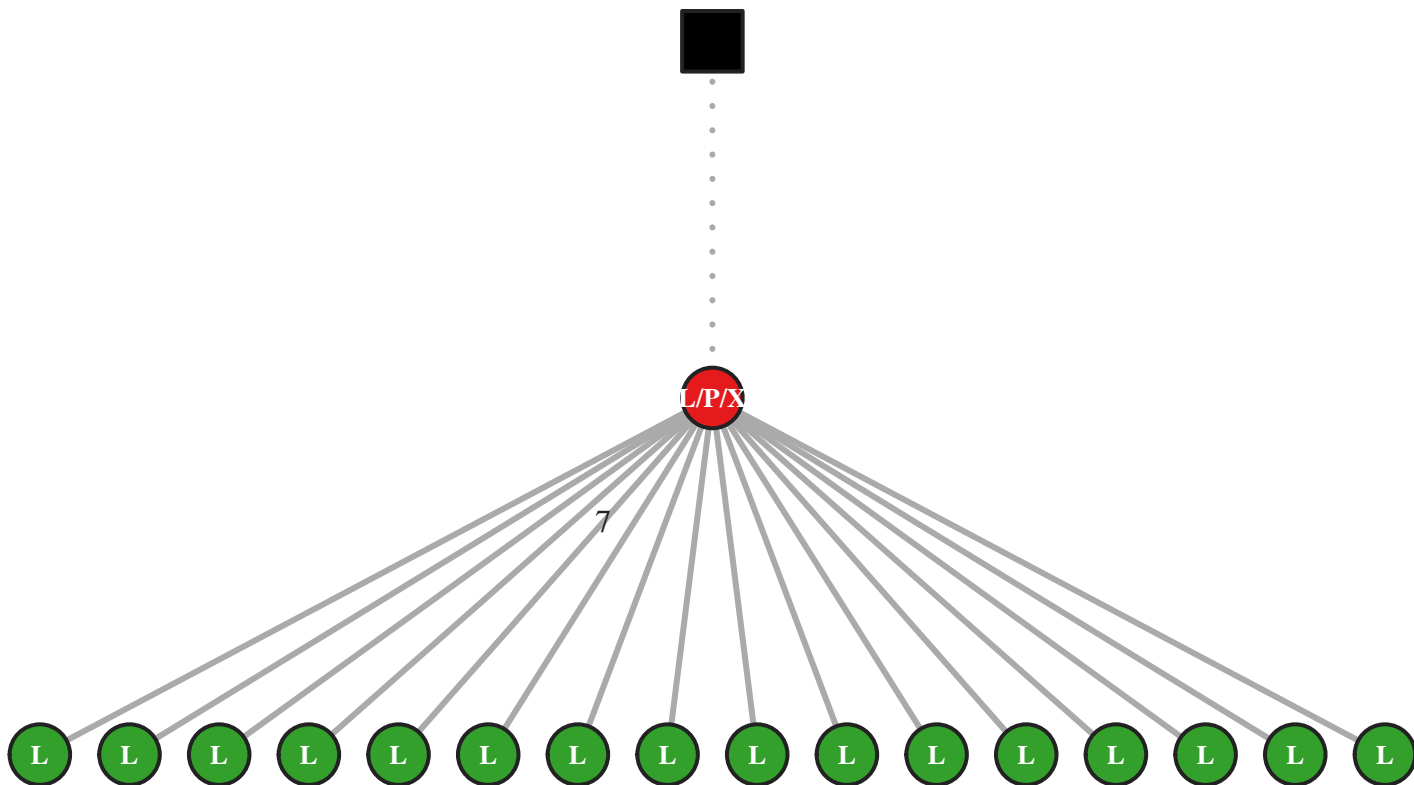
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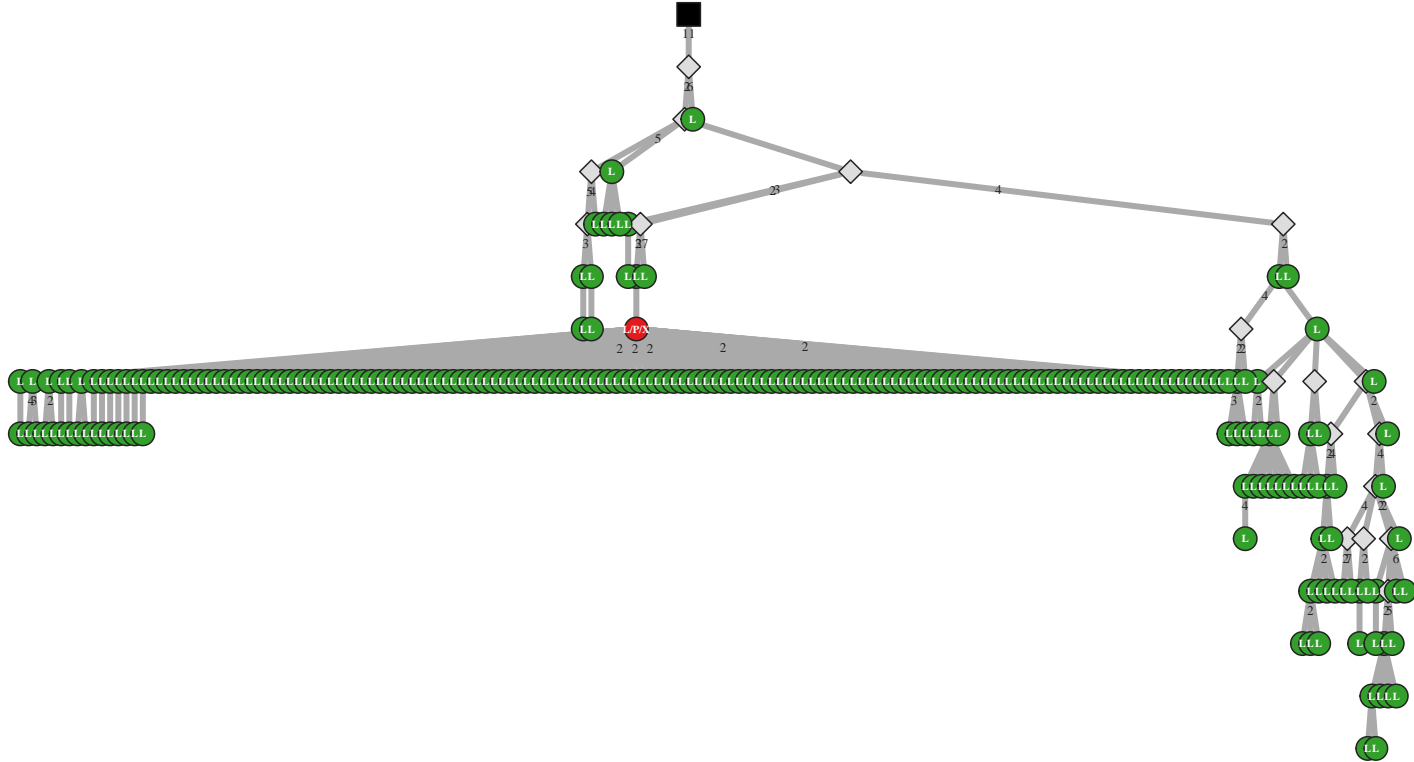
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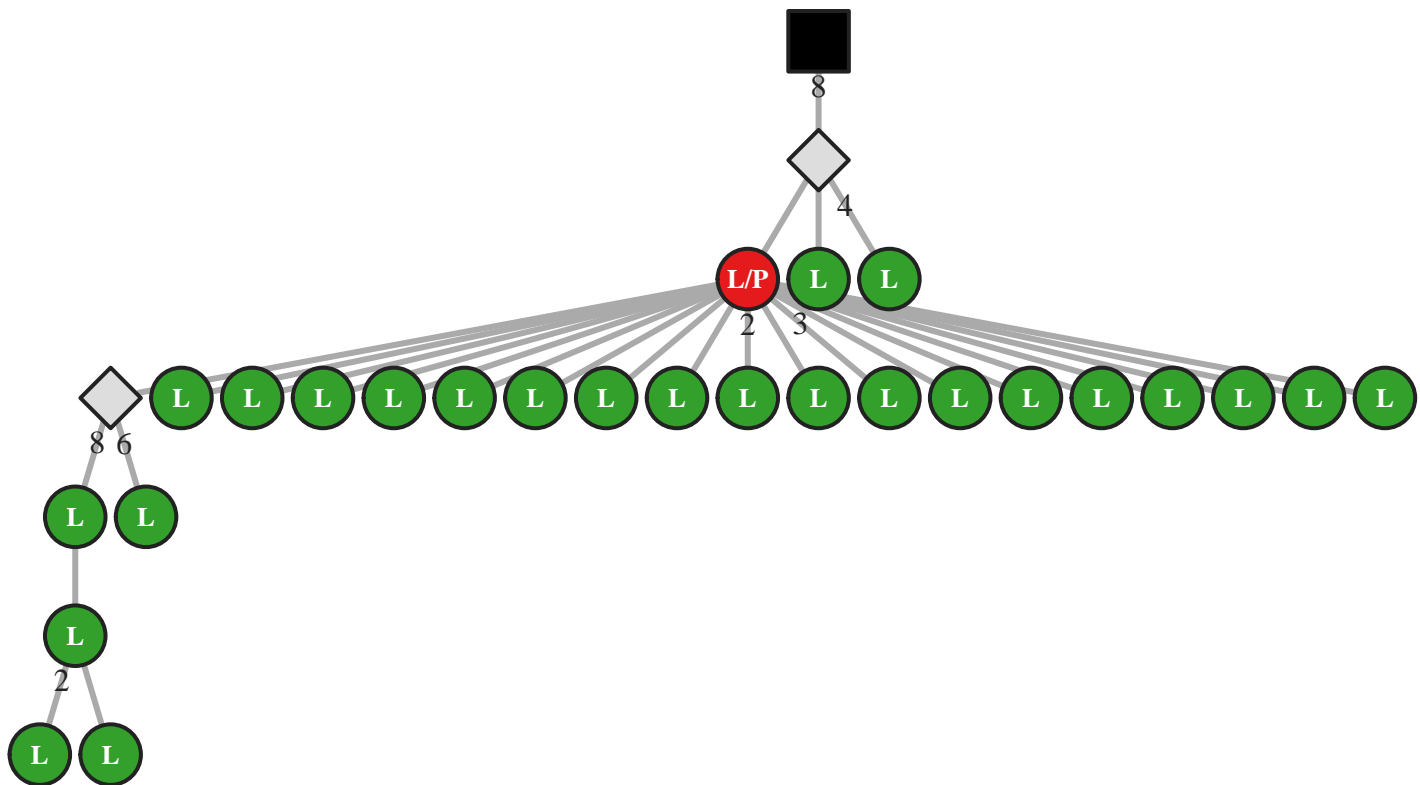
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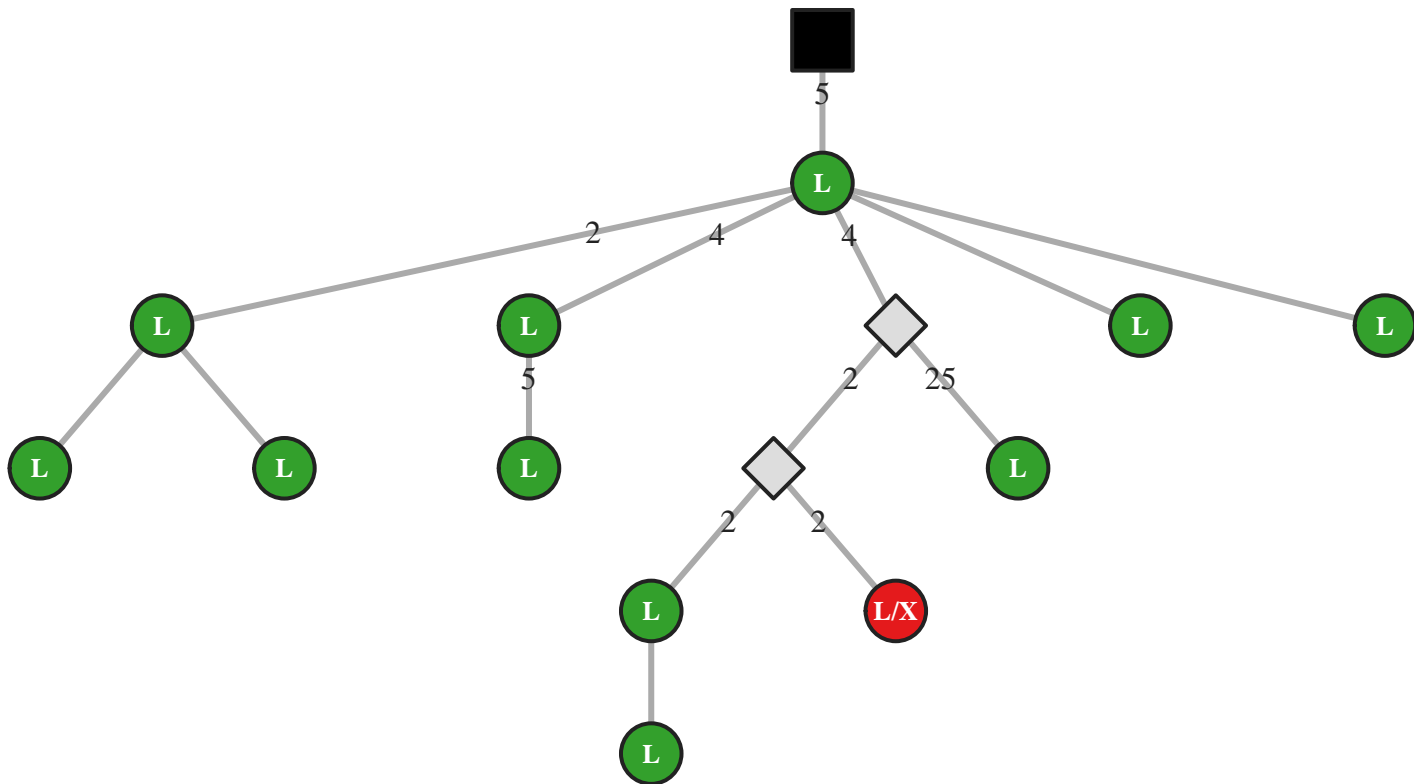
M5 IgG IGHV2-70/J4 48bp (15687)



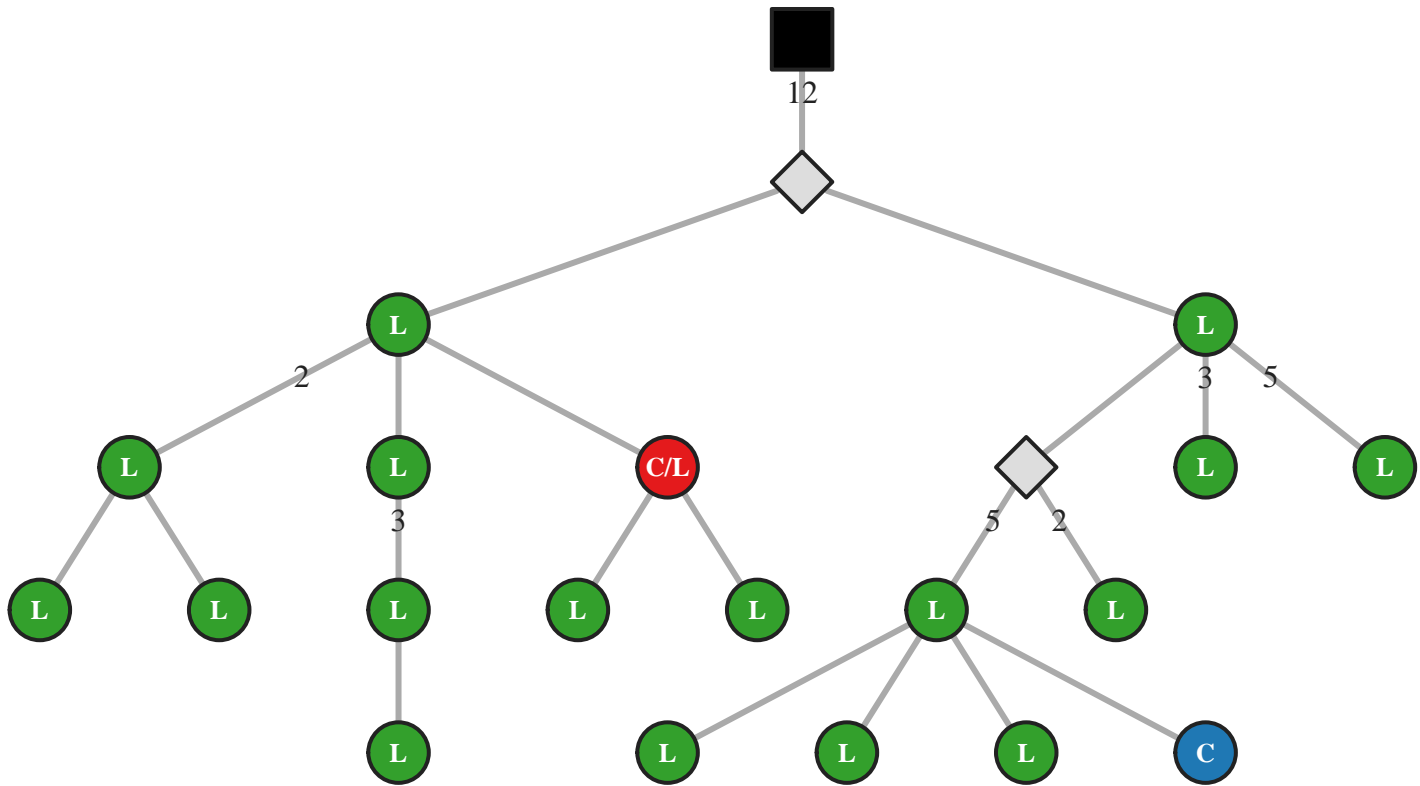
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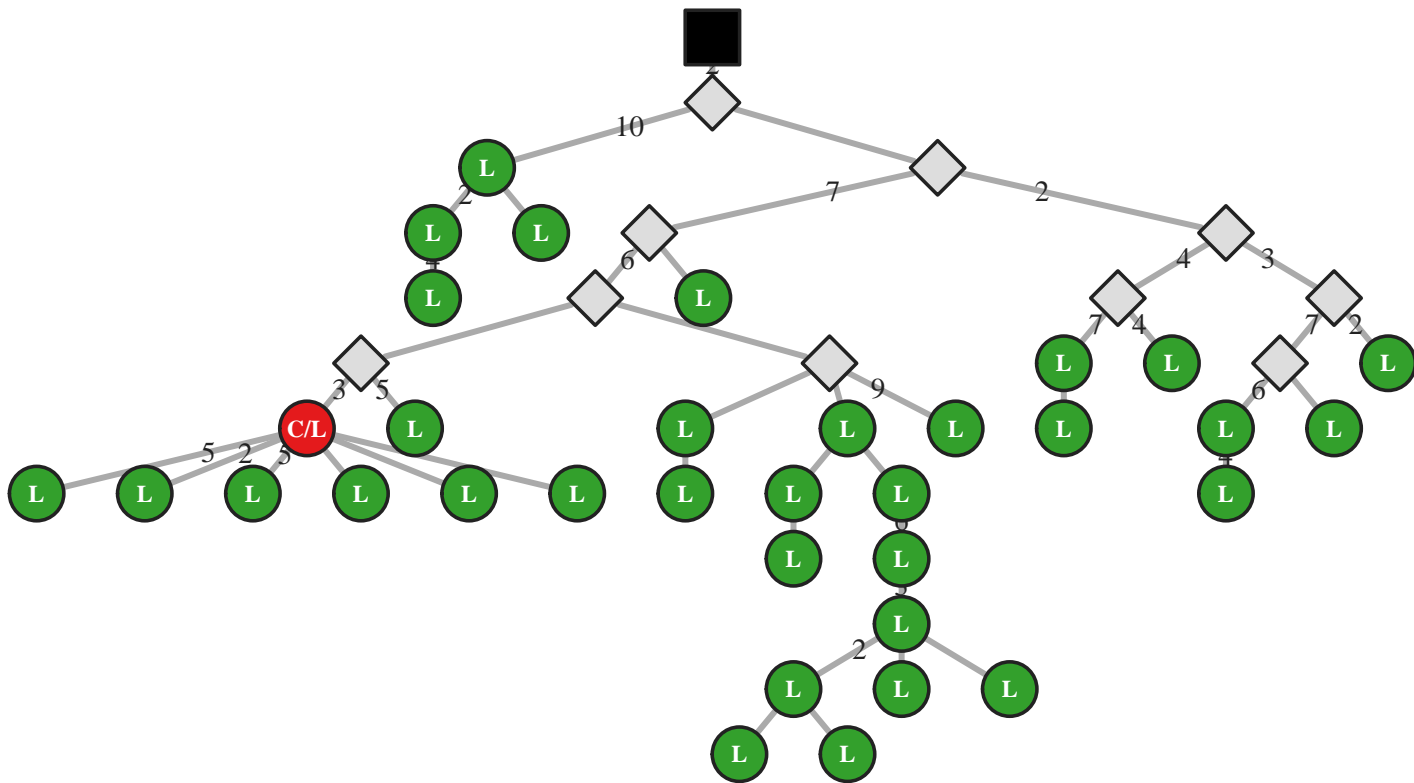
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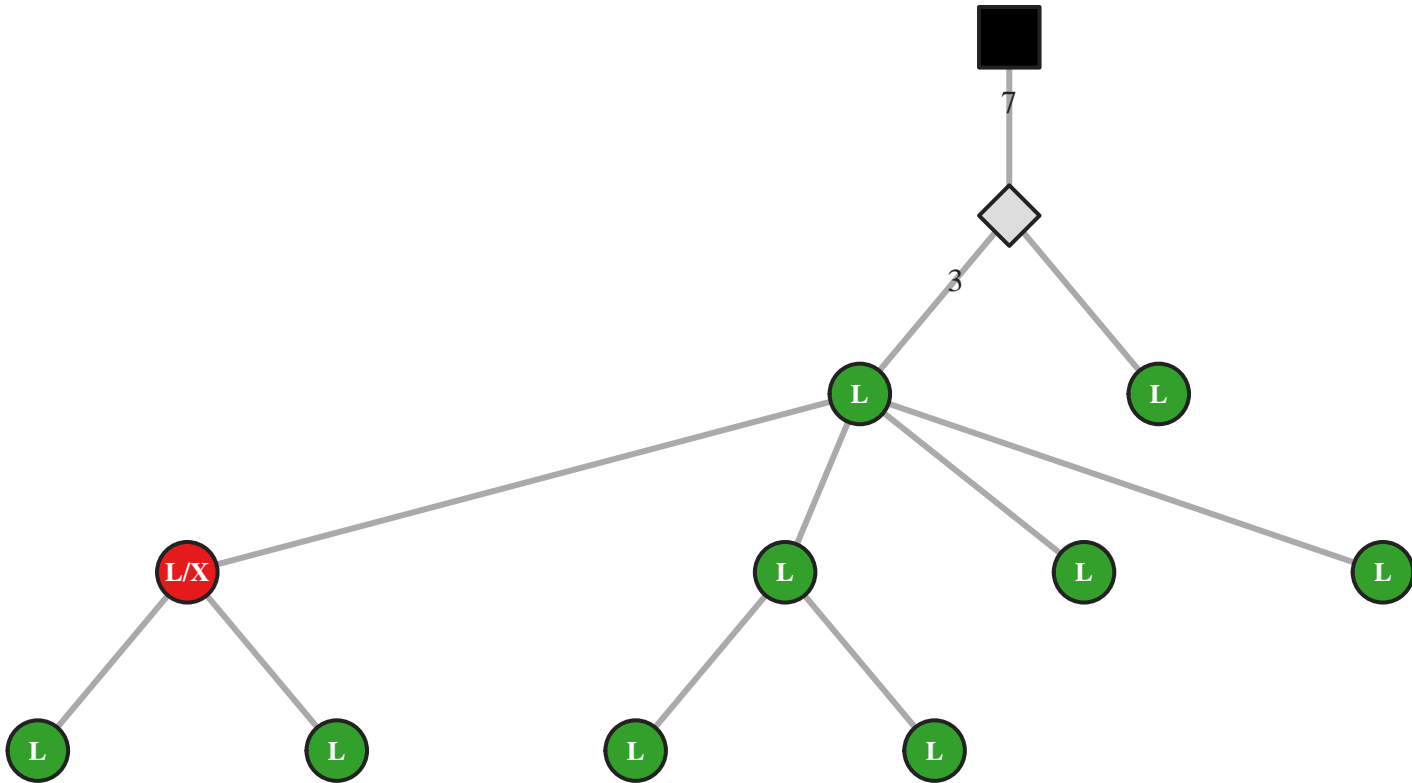
M5 IgG IGHV2-70/J4 48bp (15702)



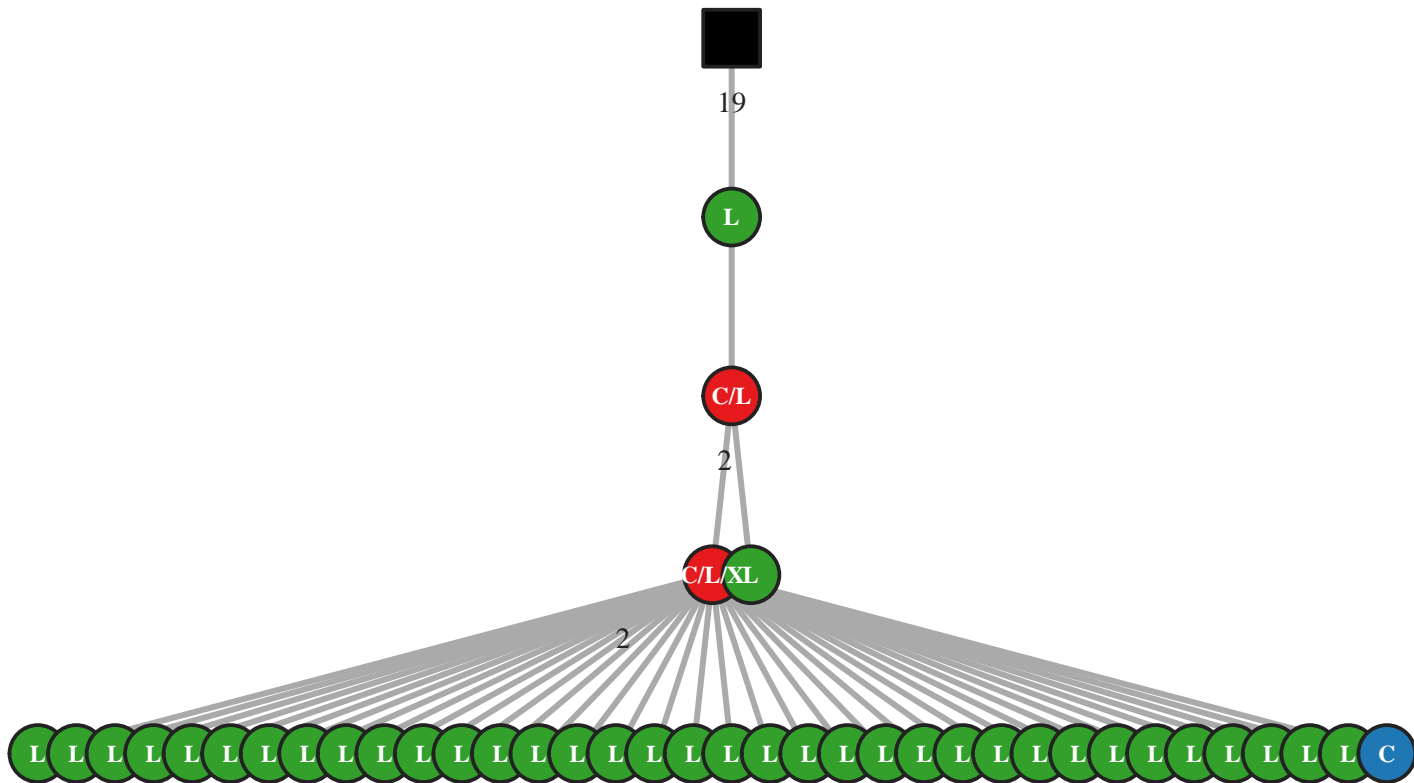
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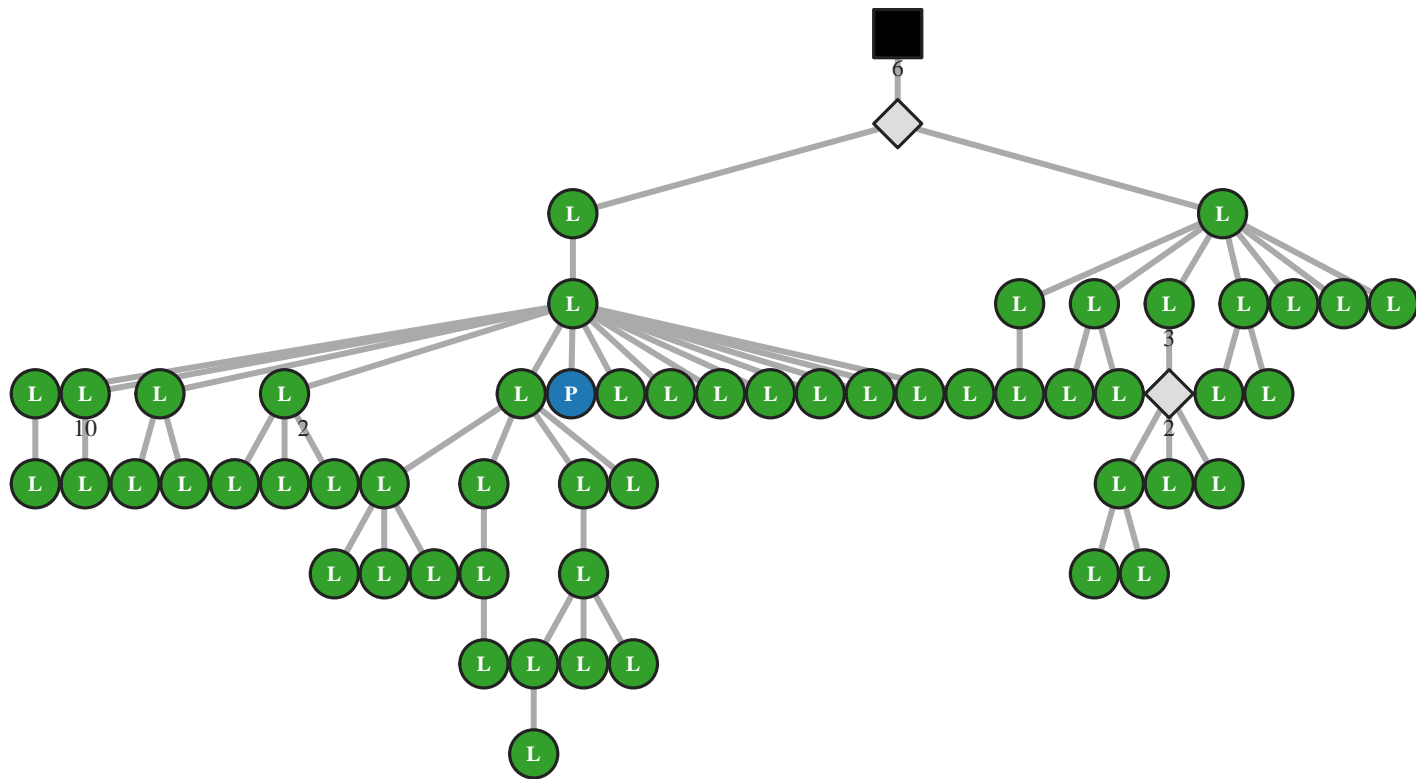
M5 IgG IGHV2-70/J4 51bp (42958)



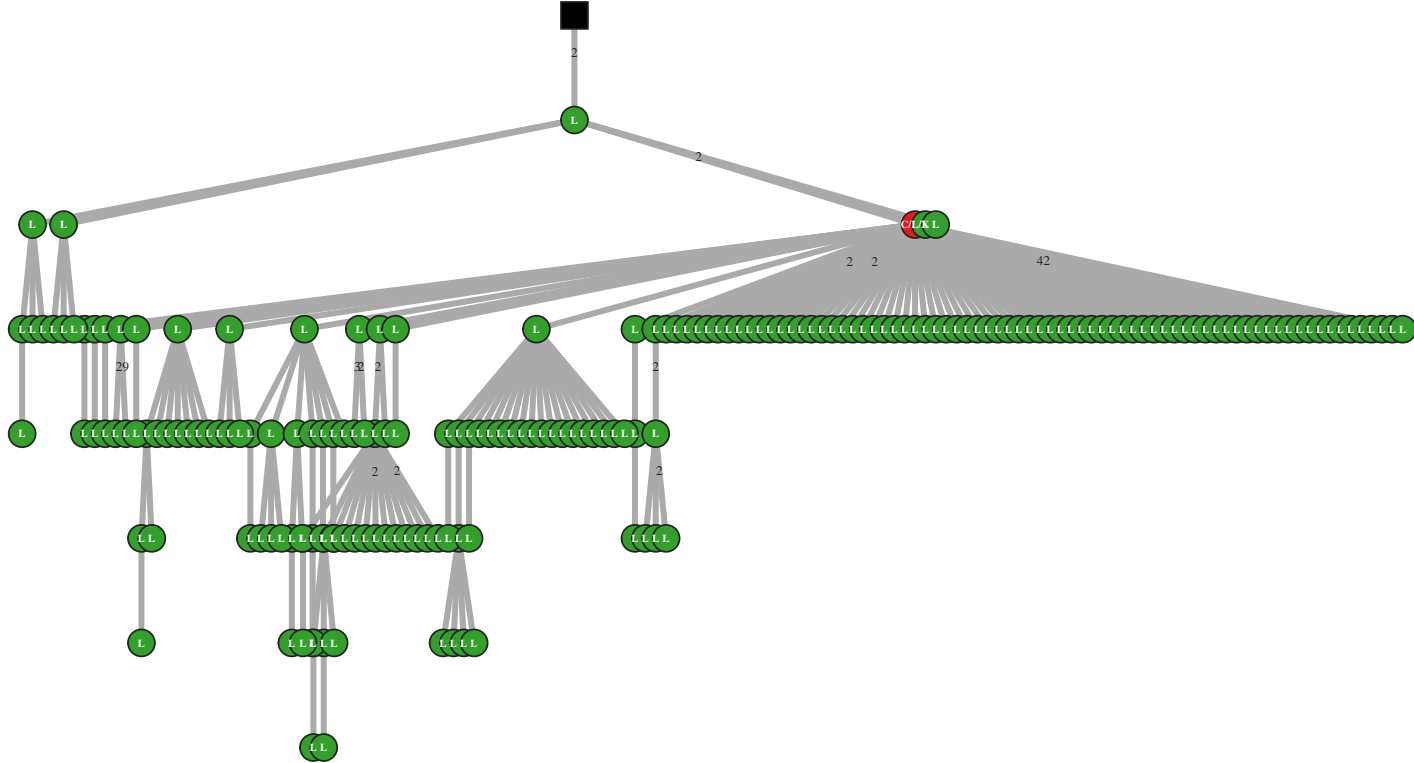
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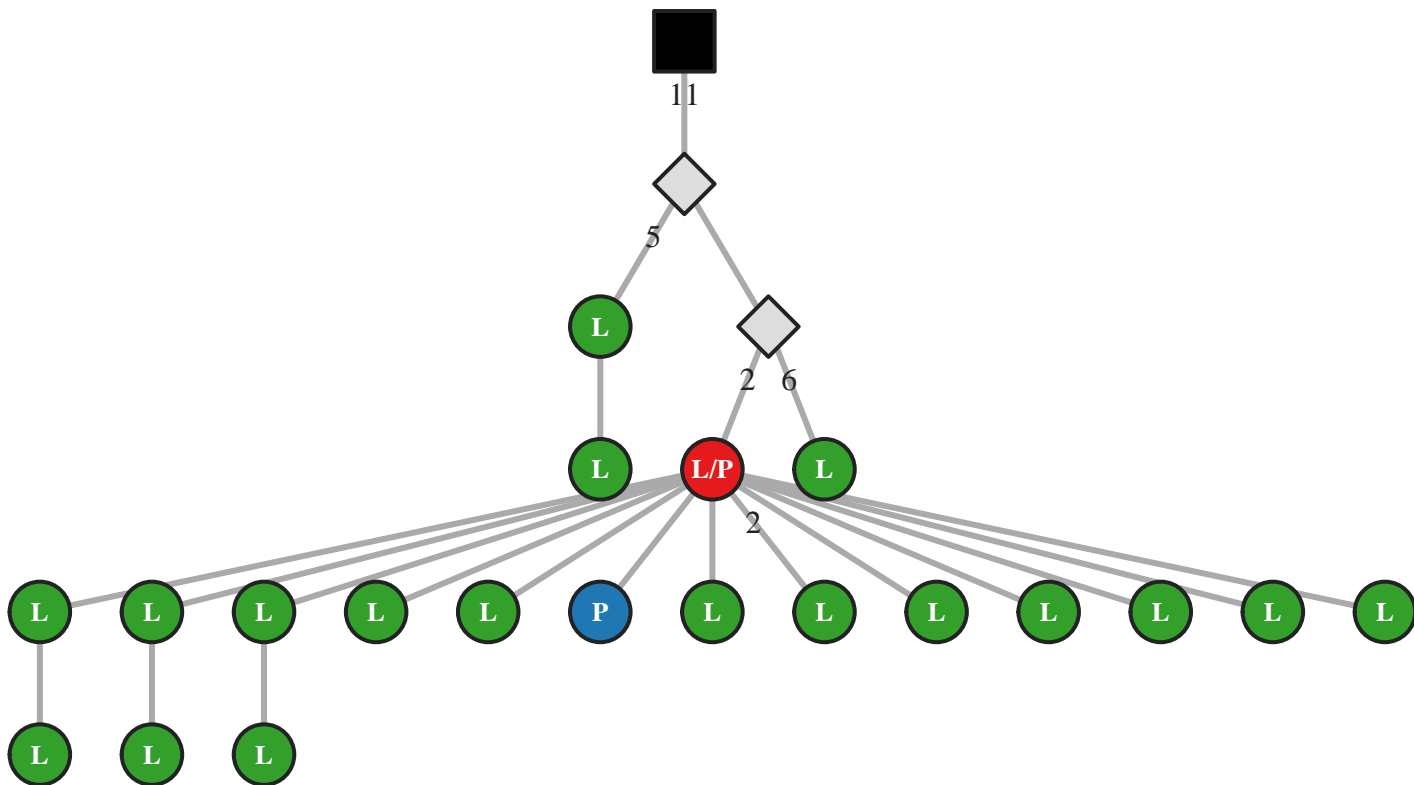
M5 IgG IGHV2-70/J4 57bp (15802)



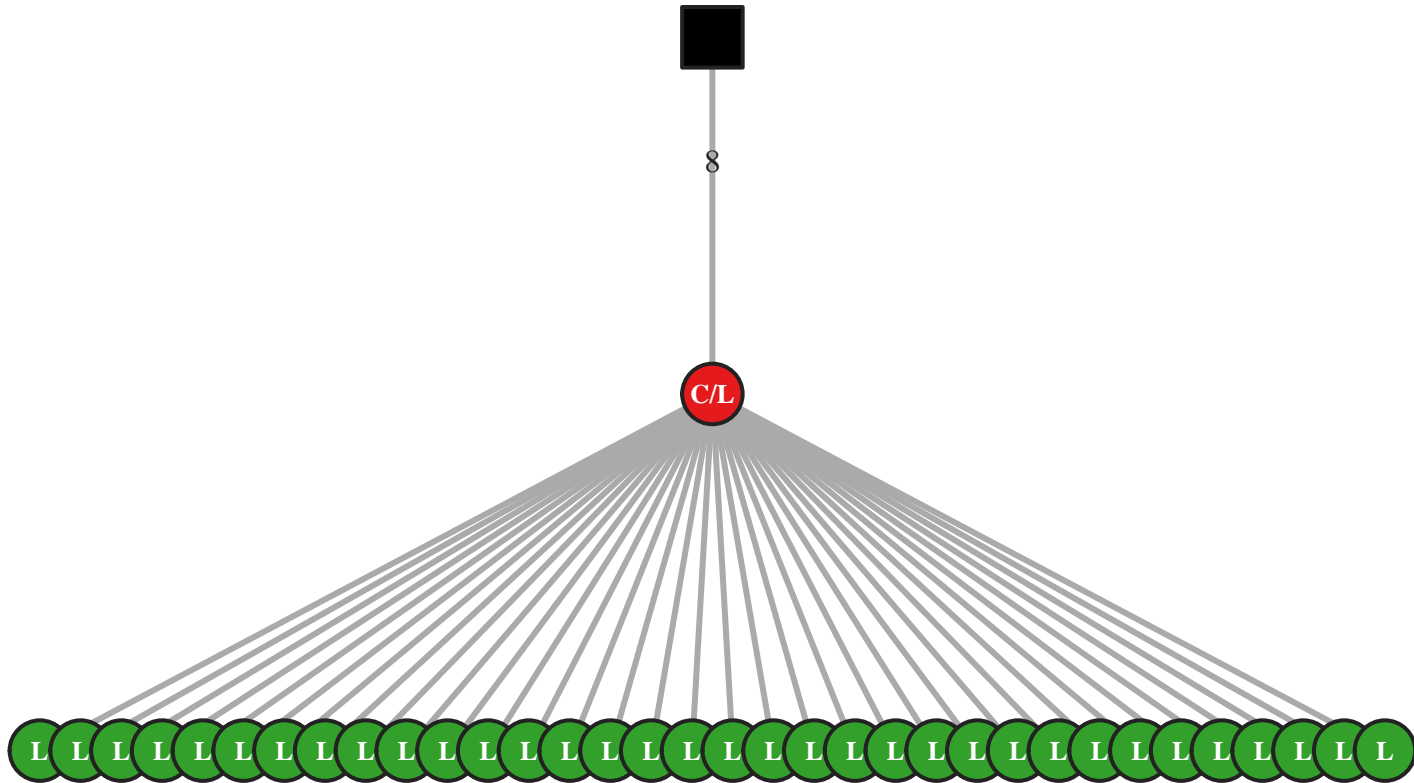
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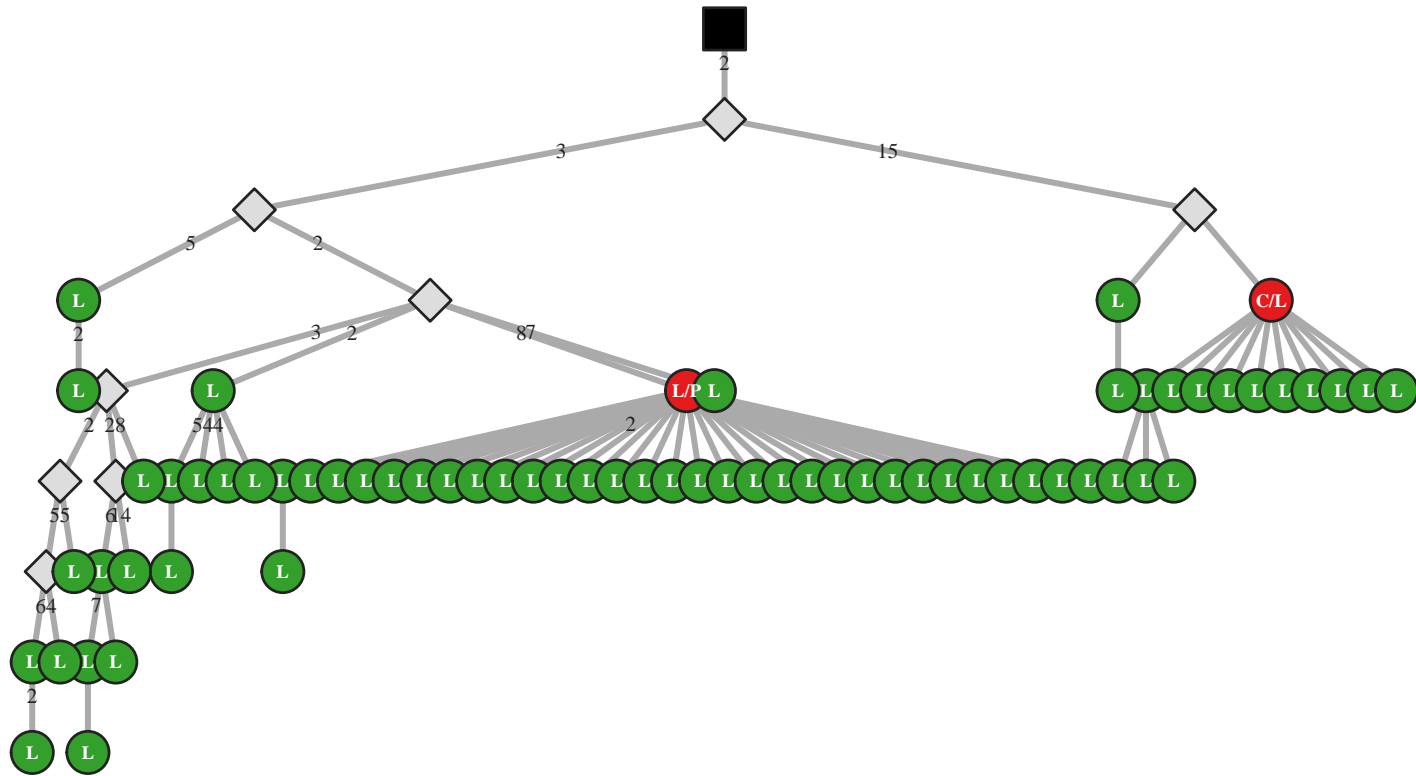
M5 IgG IGHV2-70/J4 57bp (15813)



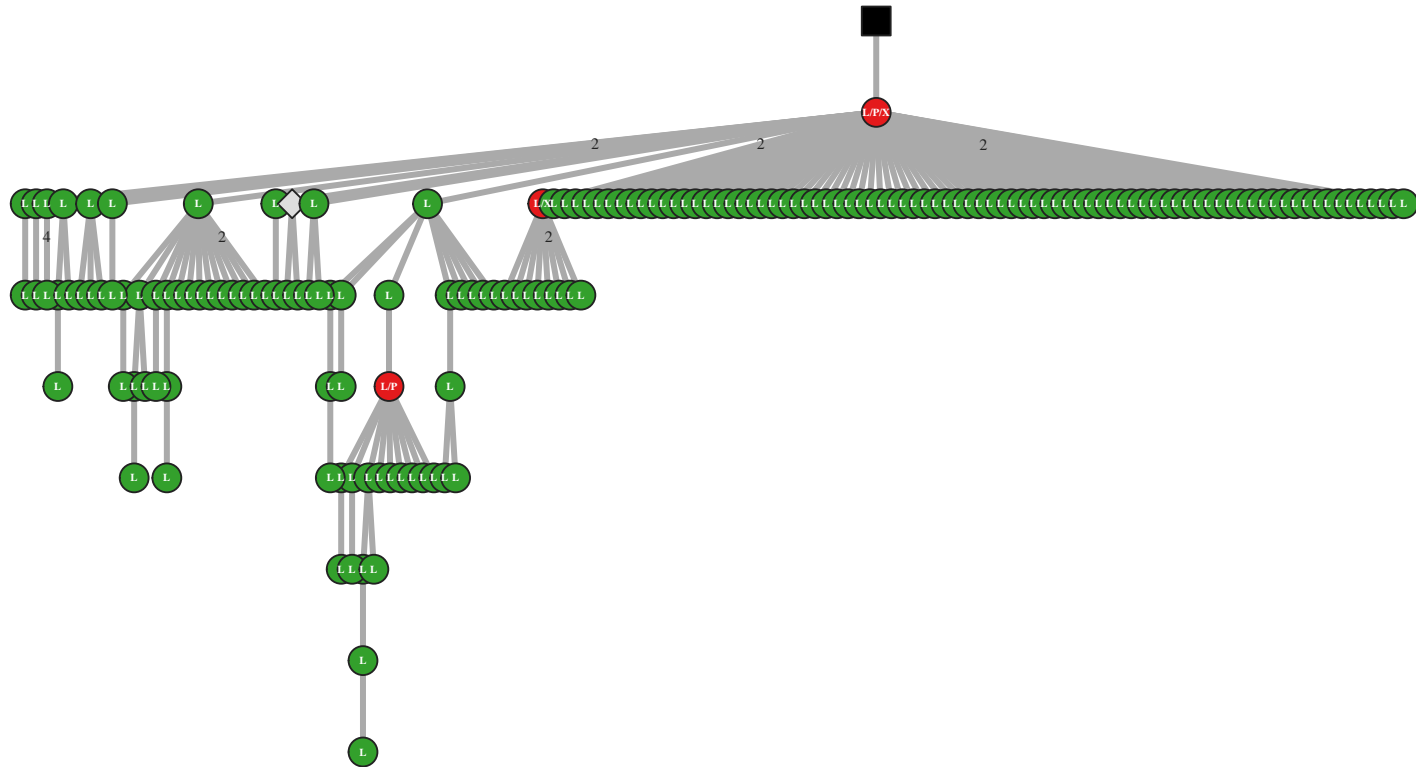
M5 IgM IGHV2-70/J4 57bp (54010)



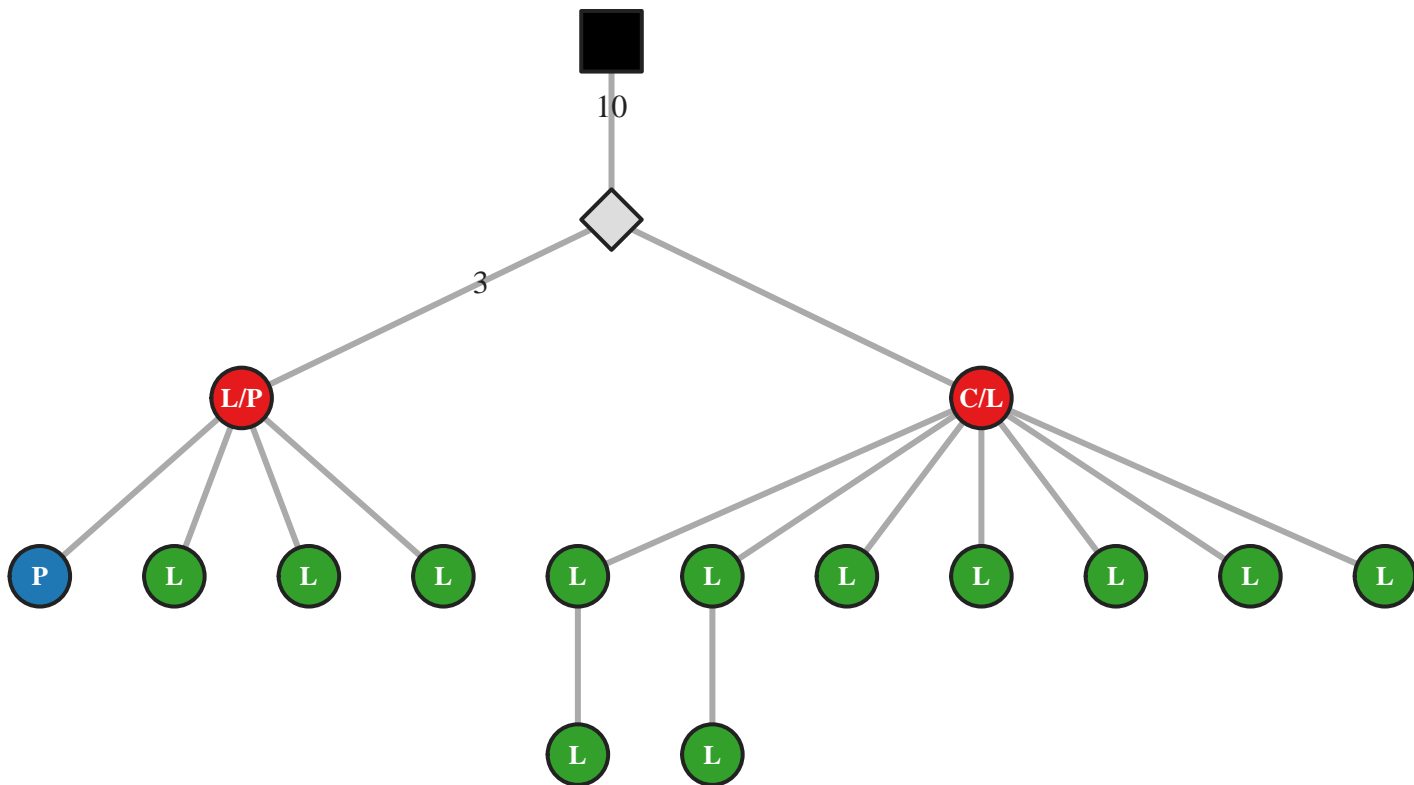
M5 IgG IGHV2-70/J4 60bp (6088)



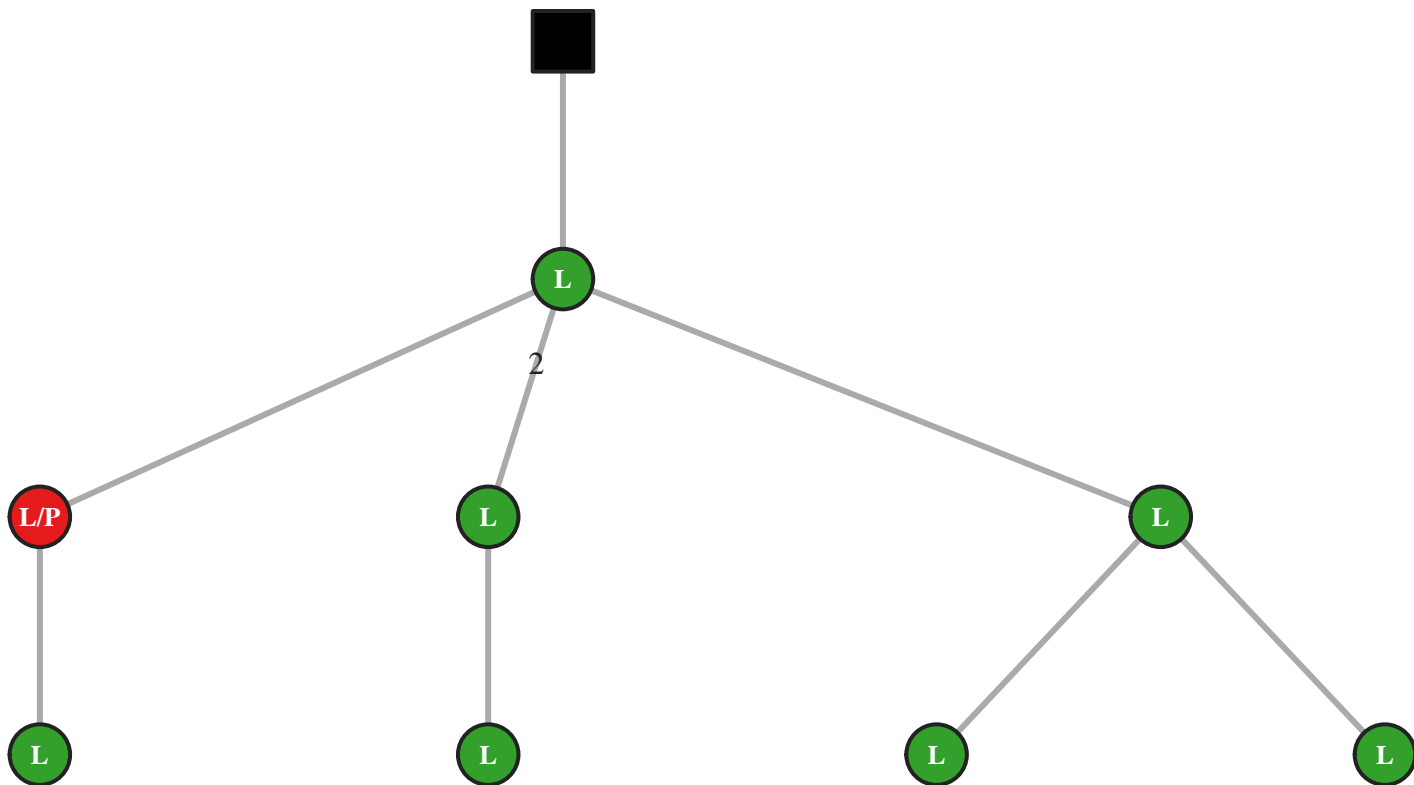
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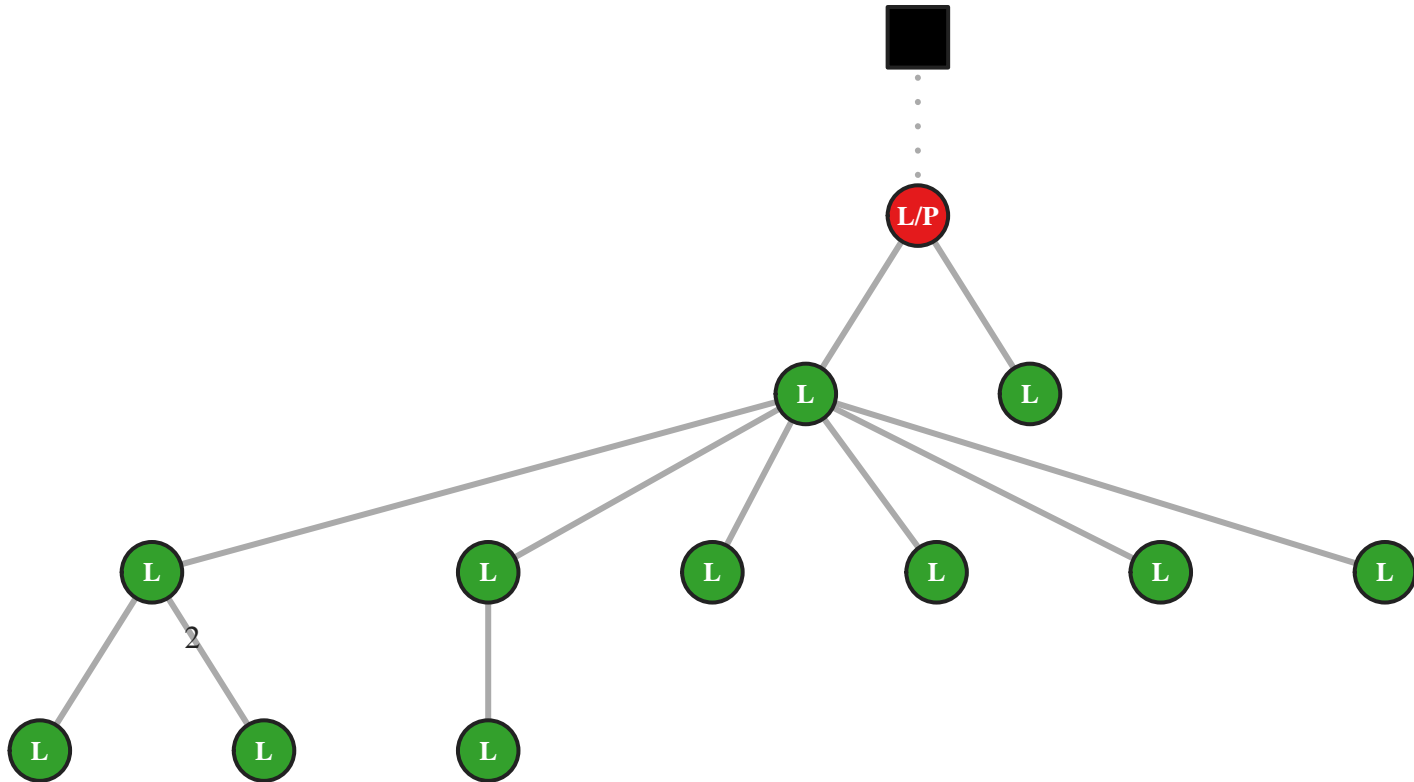
M5 IgG IGHV2-70/J4 63bp (15836)



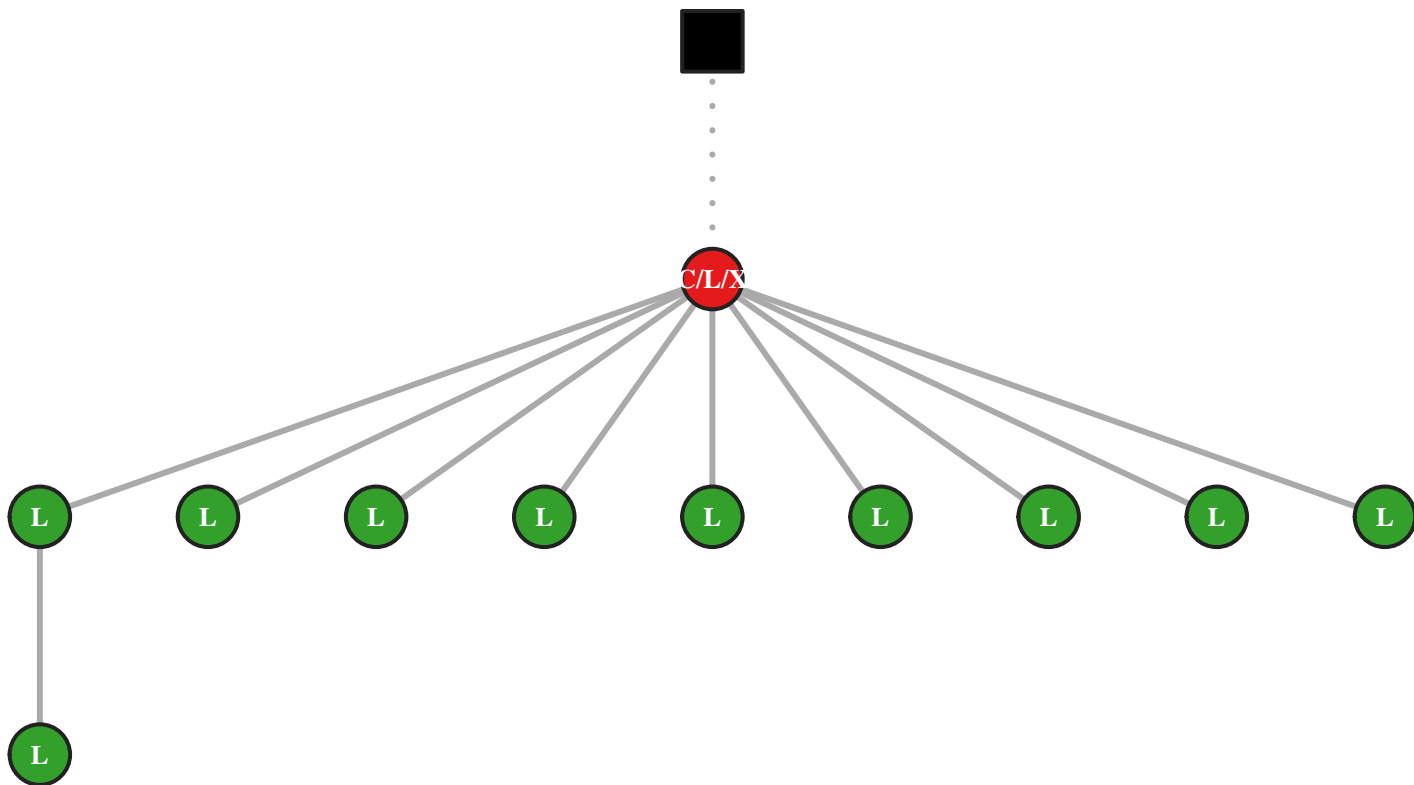
M5 IgG IGHV2-70/J6 45bp (43010)



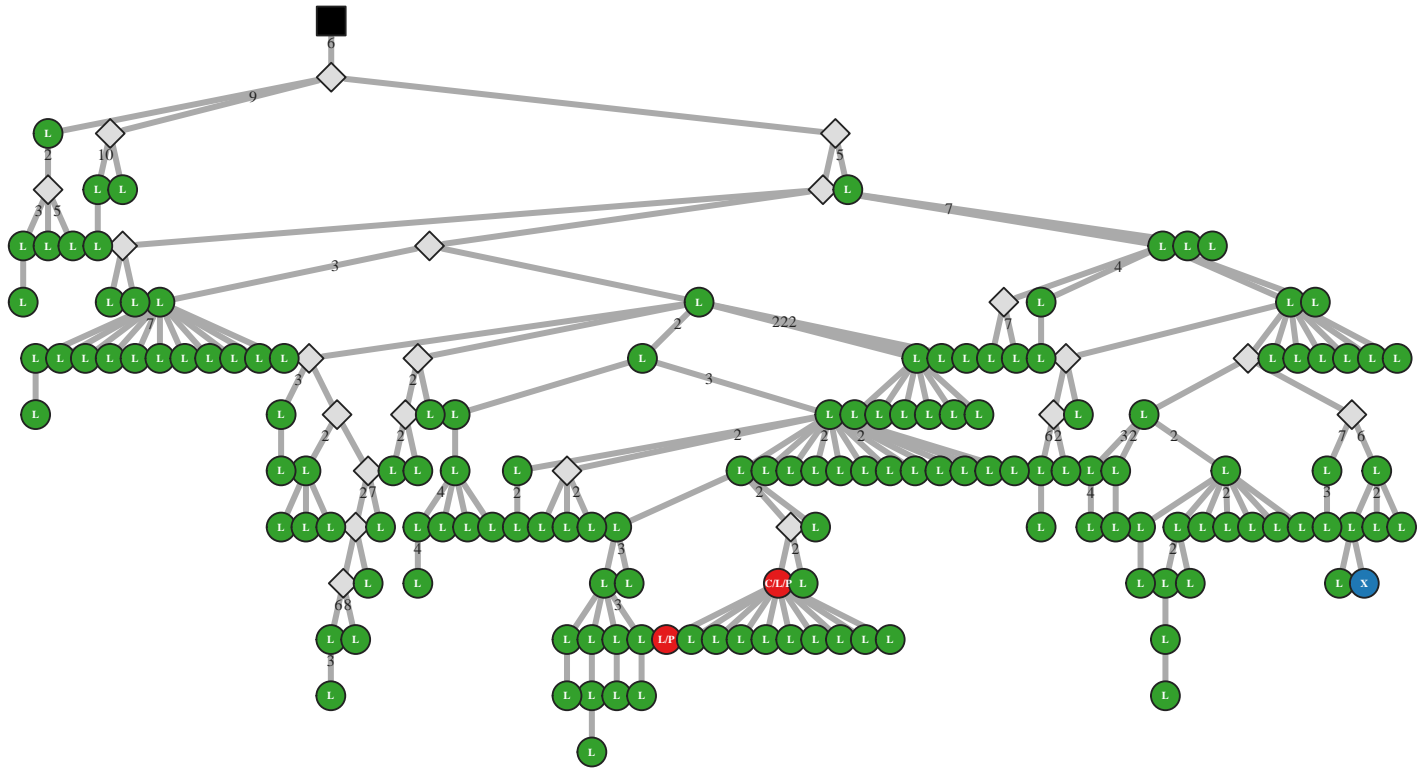
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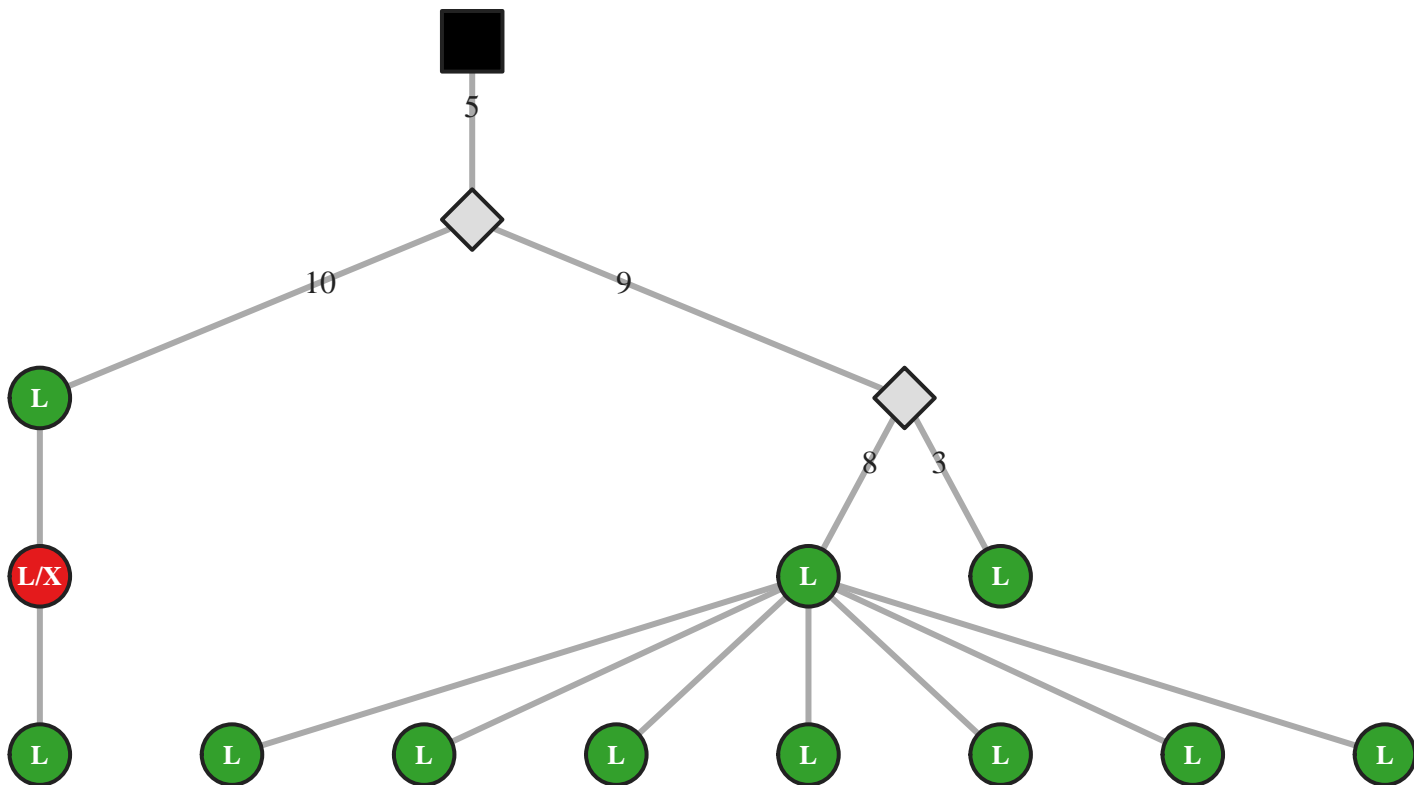
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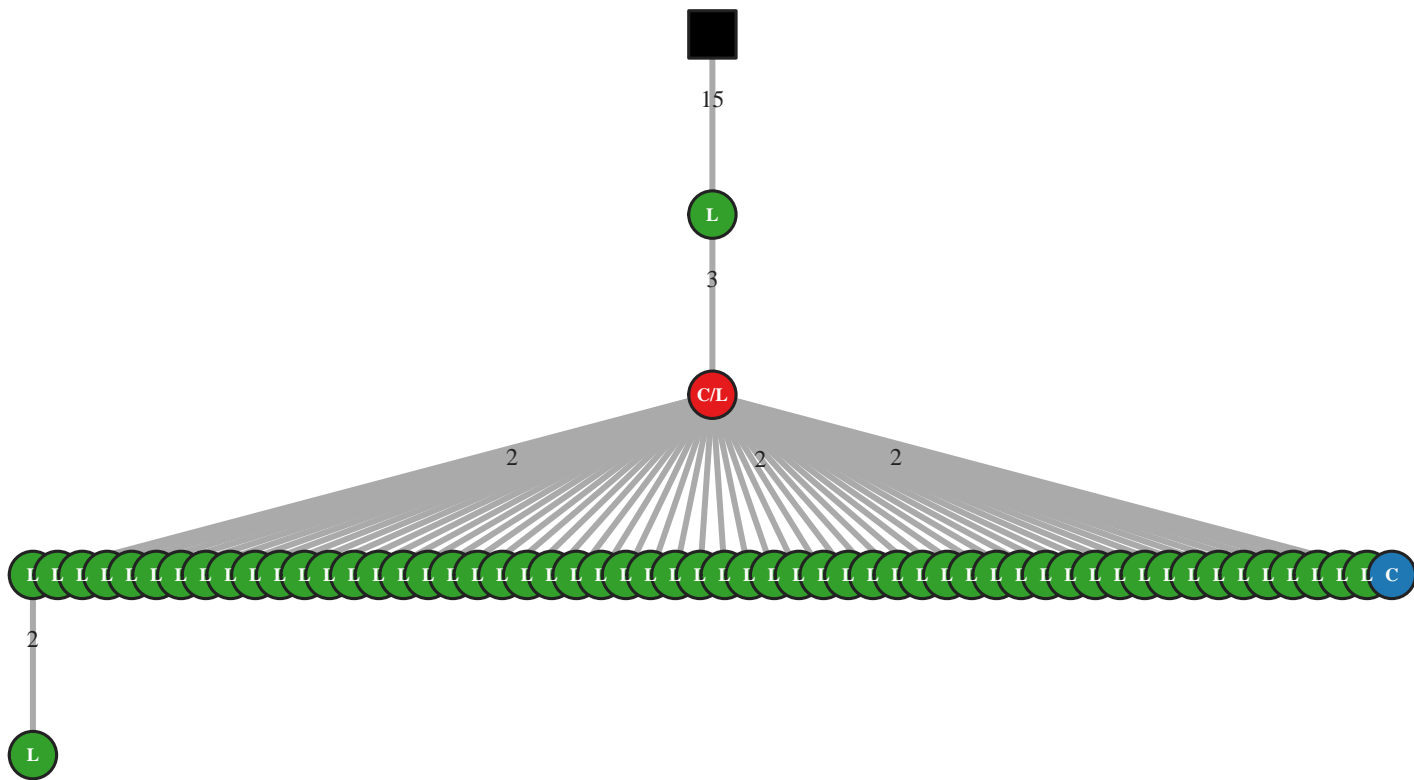
M5 IgG IGHV2-70/J6 57bp (33804)



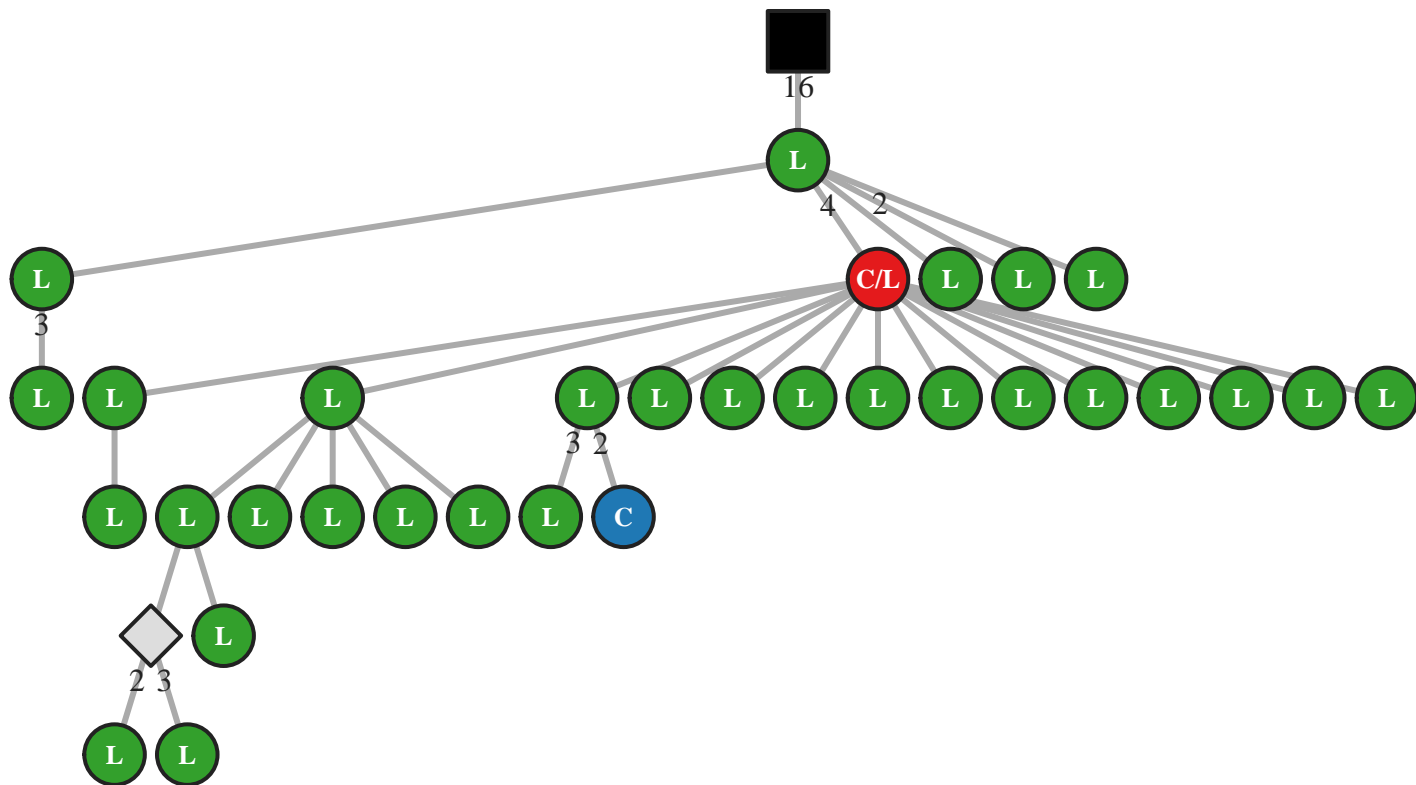
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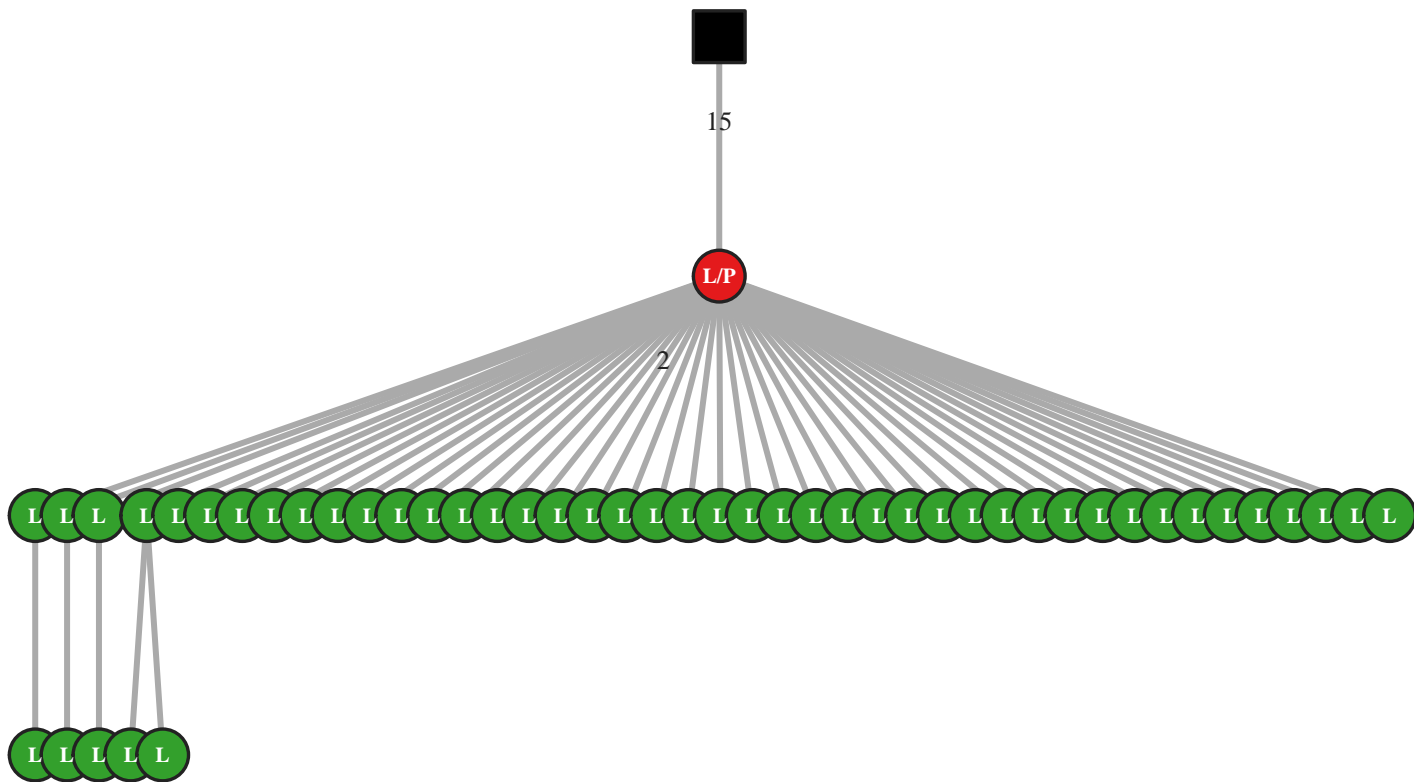
M5 IgG IGHV2-70/J6 60bp (15861)



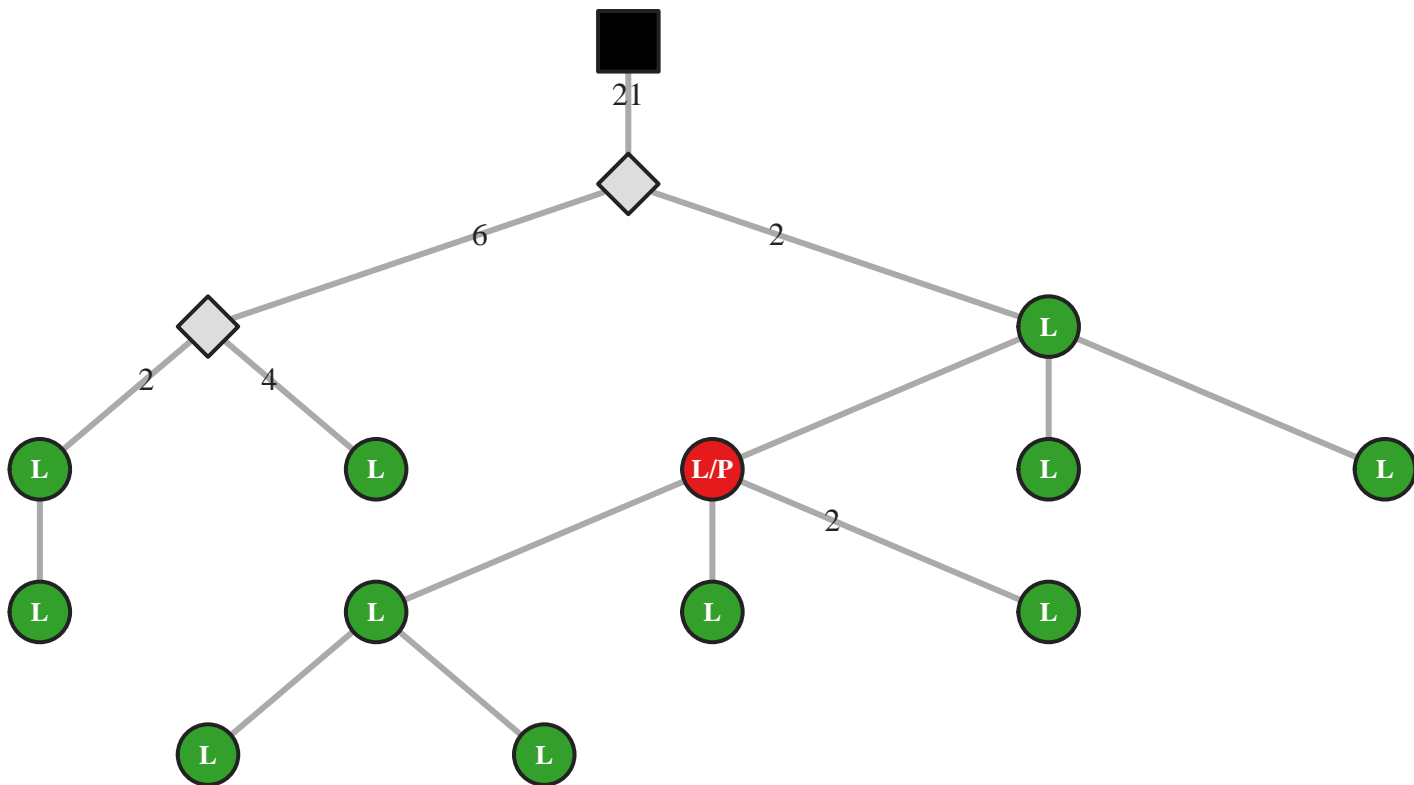
M5 IgG IGHV2-70/J6 63bp (6143)



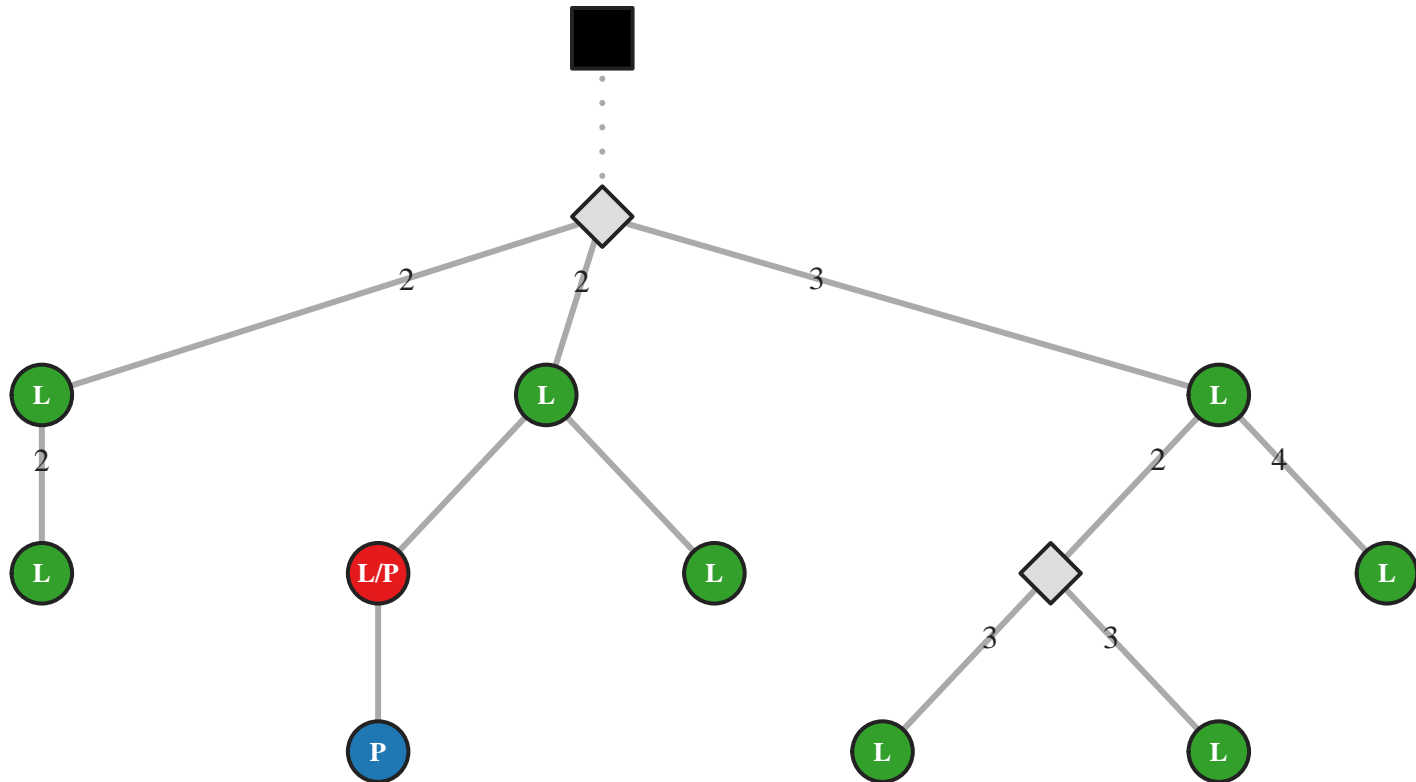
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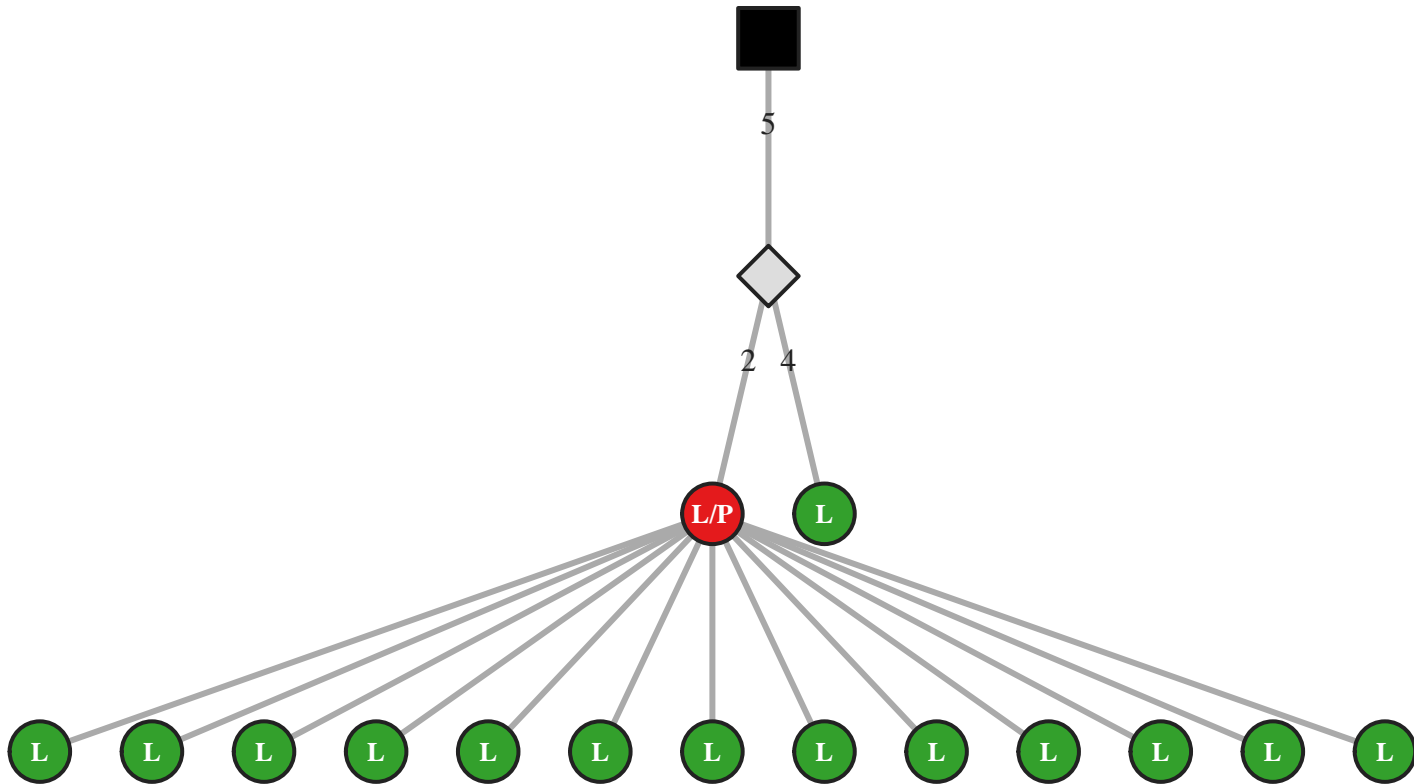
M5 IgG IGHV3-11/J1 45bp (24808)



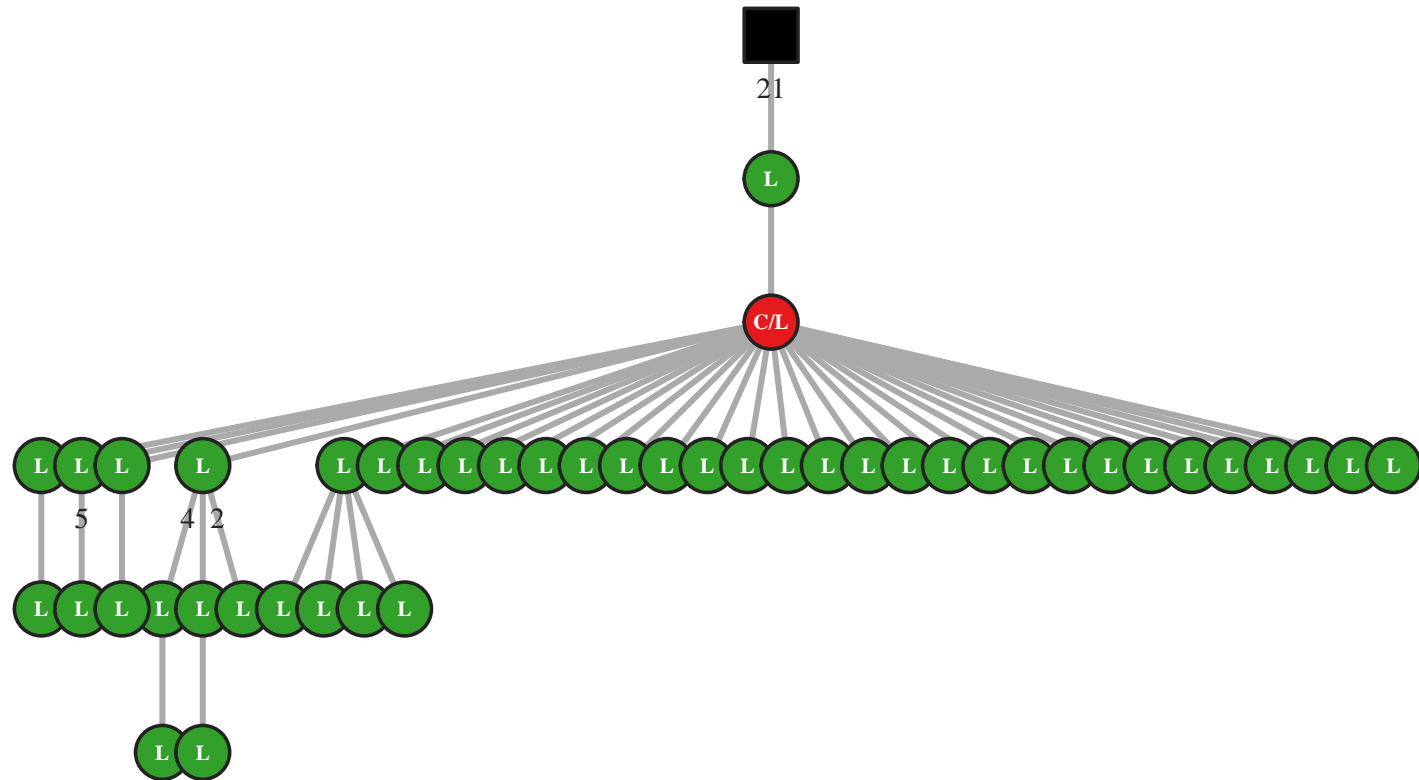
M5 IgG IGHV3-11/J3 51bp (6178)



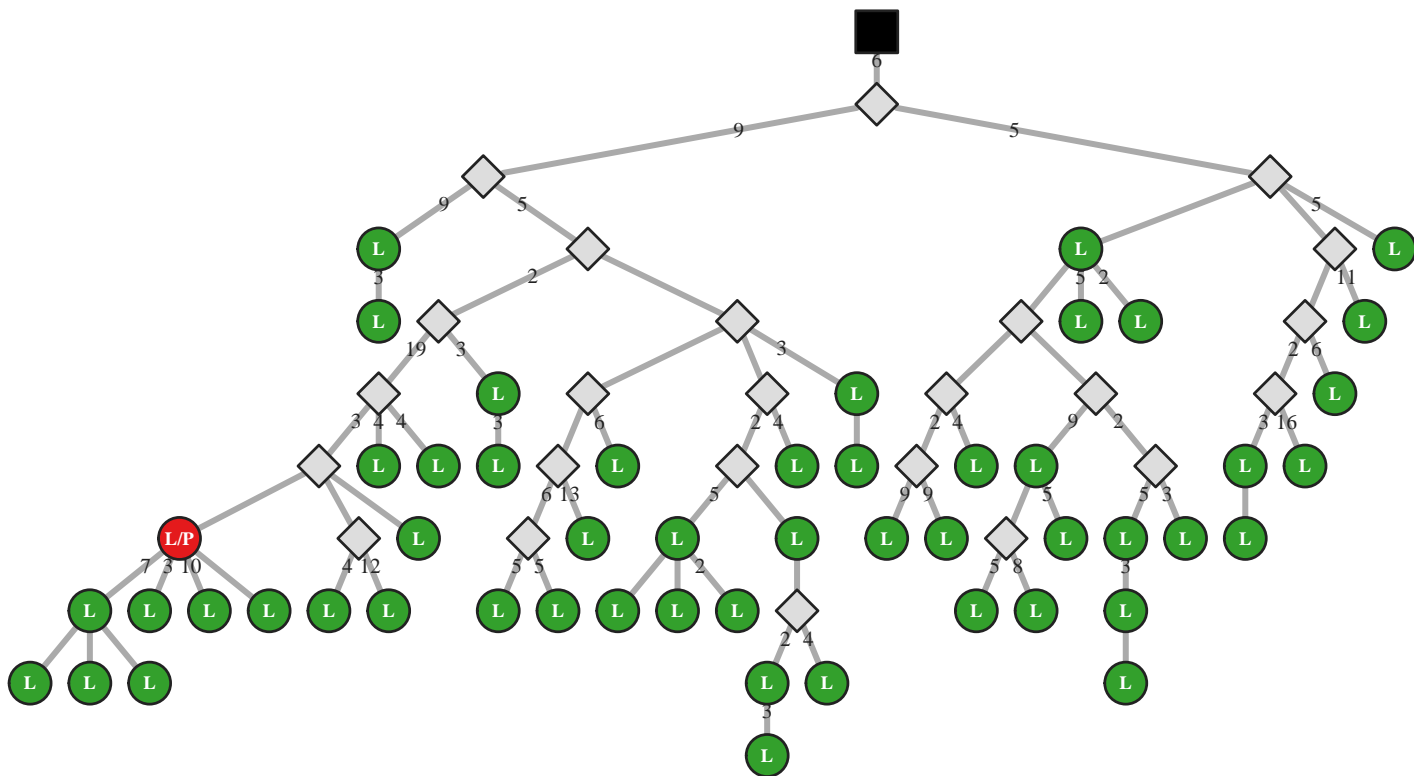
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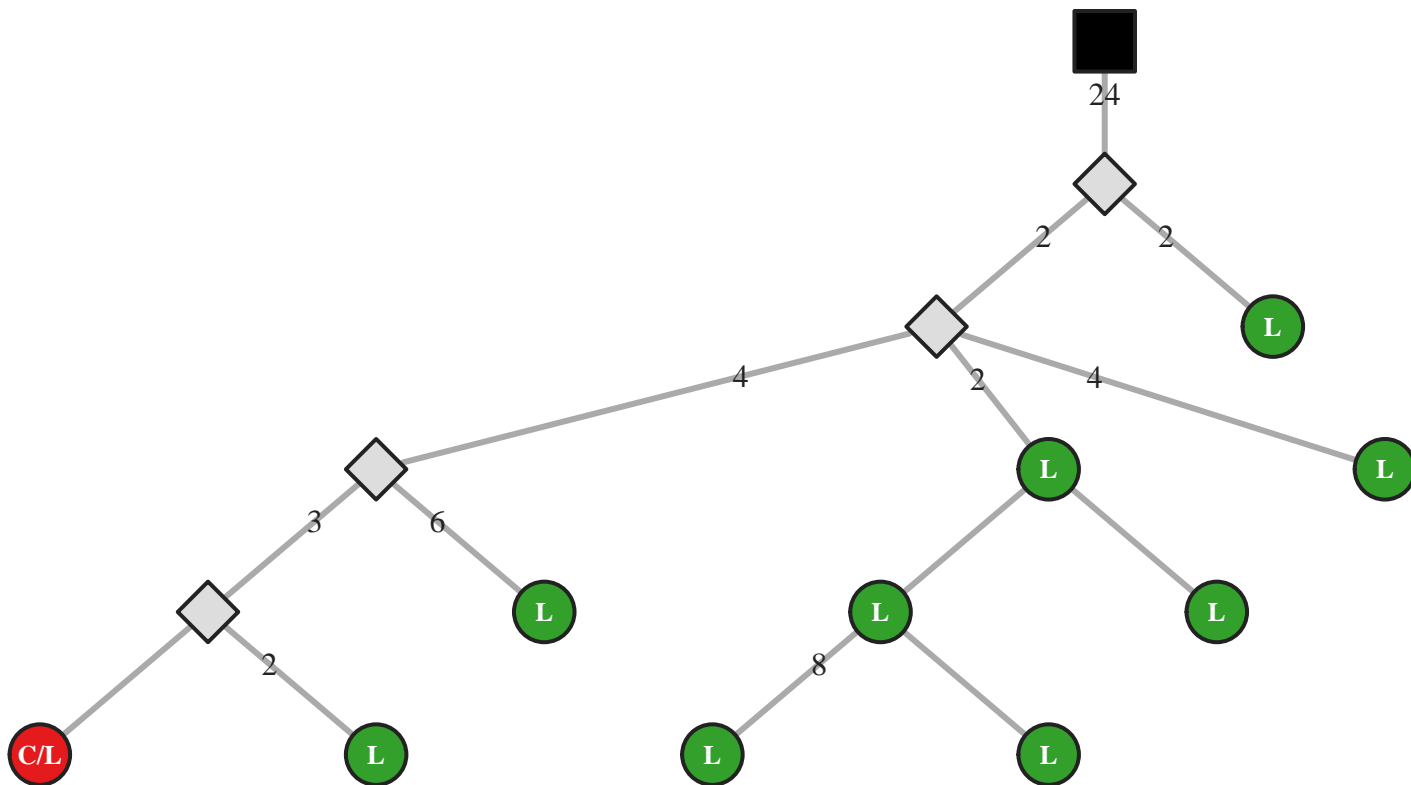
M5 IgG IGHV3-11/J3 69bp (33842)



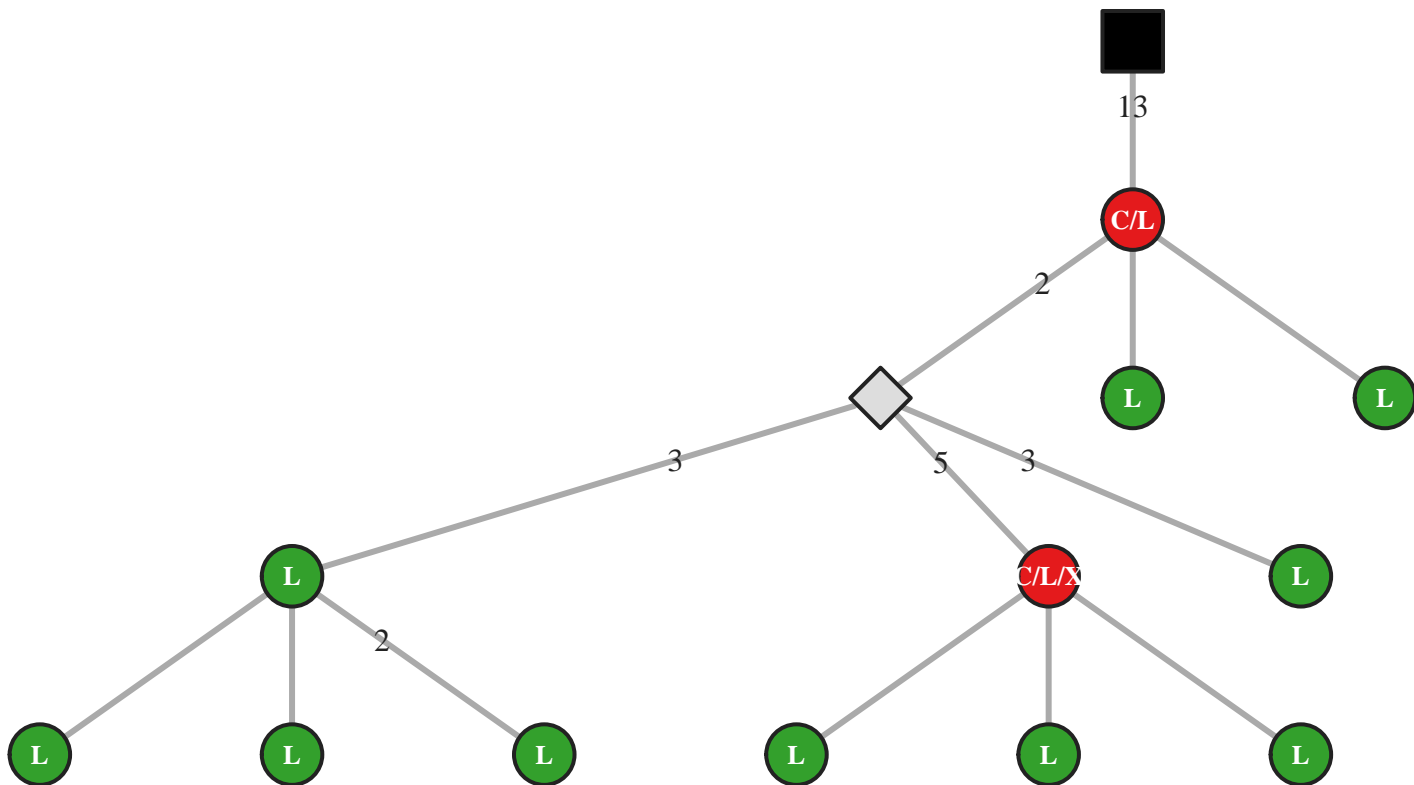
M5 IgG IGHV3-11/J4 24bp (50759)



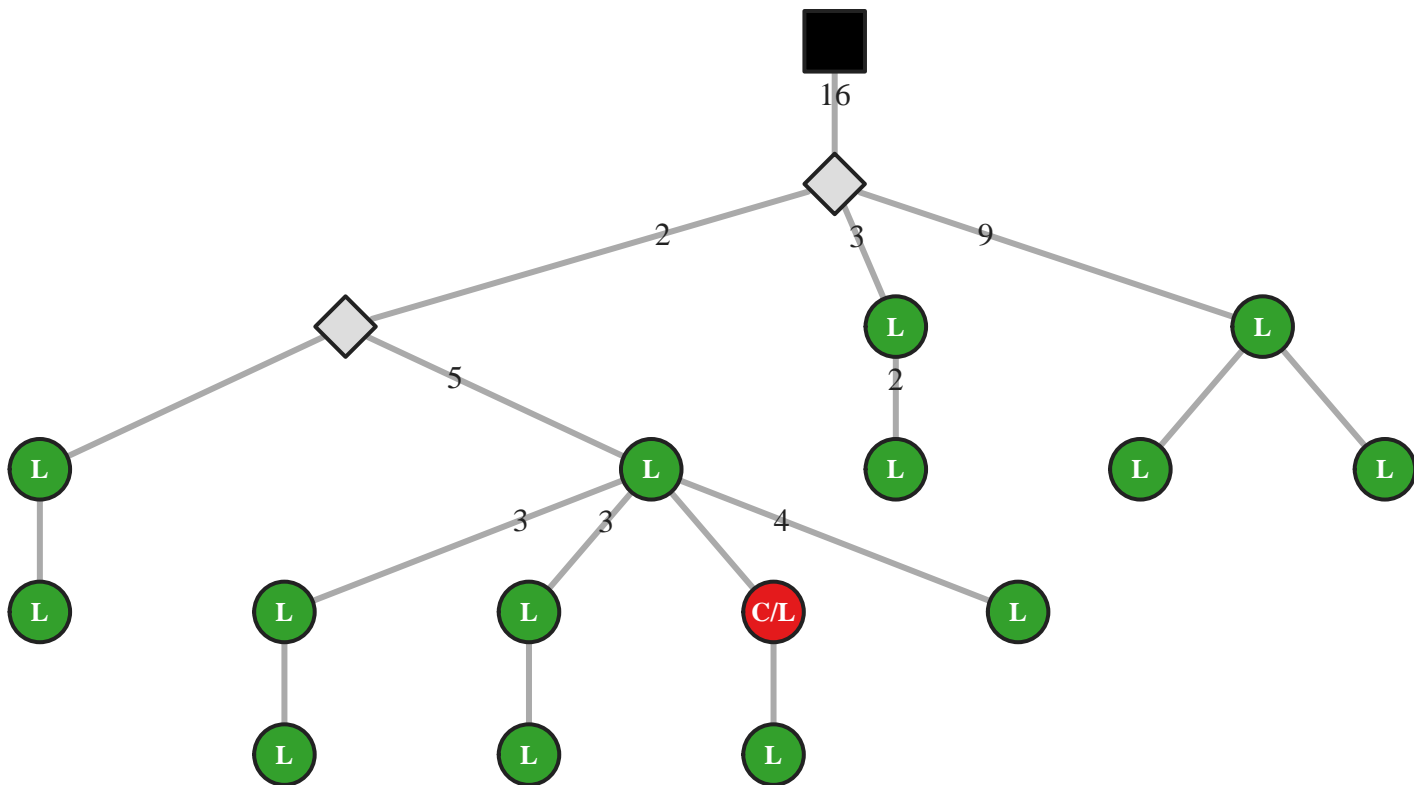
M5 IgG IGHV3-11/J4 33bp (24836)



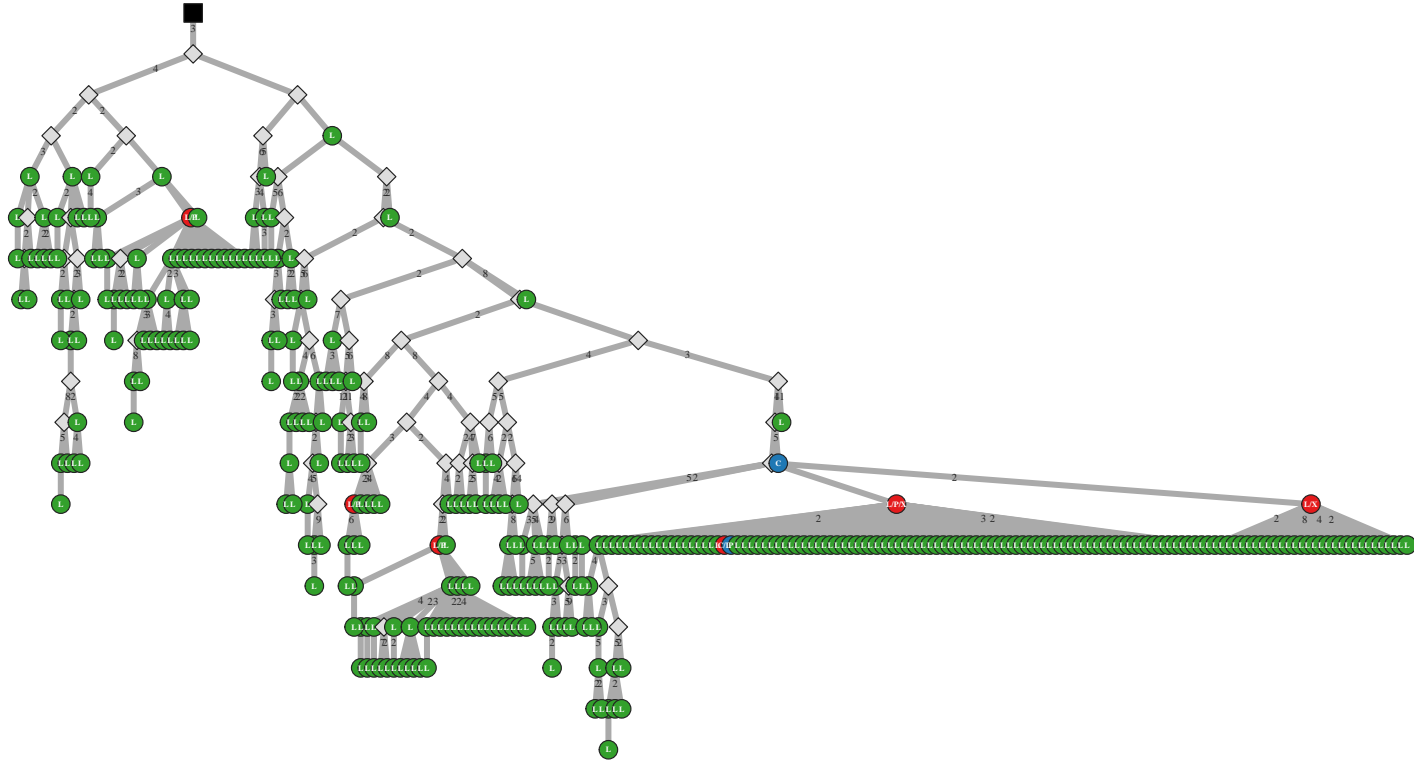
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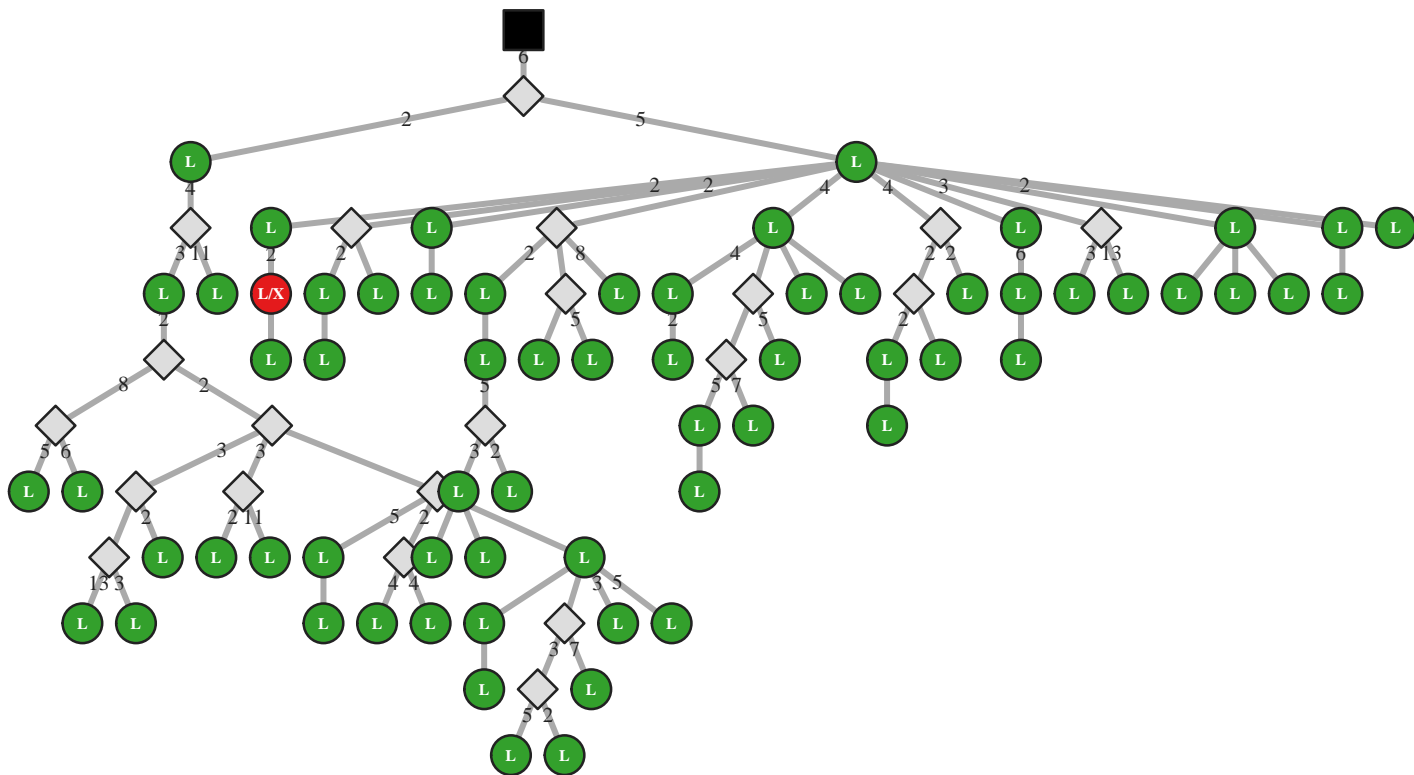
M5 IgG IGHV3-11/J4 36bp (15903)



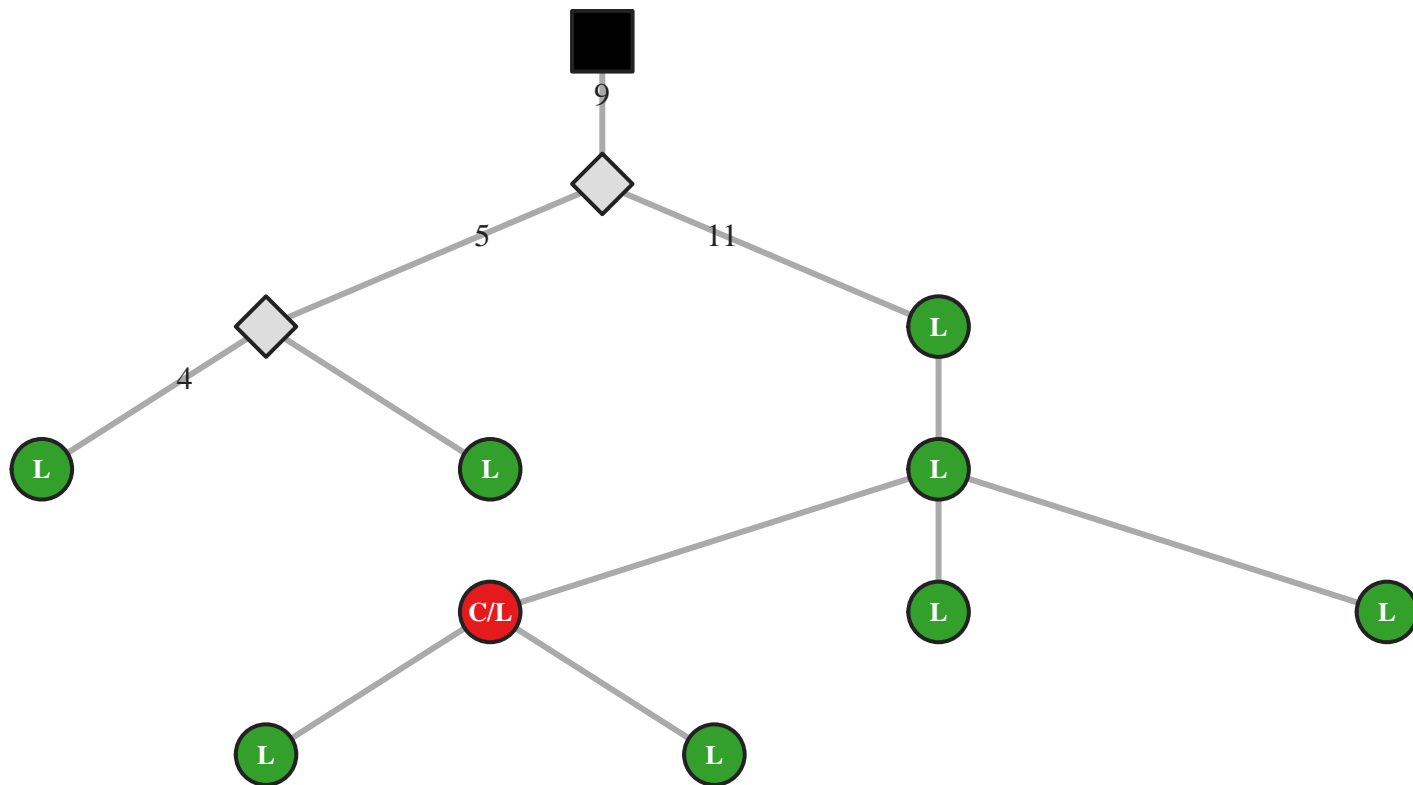
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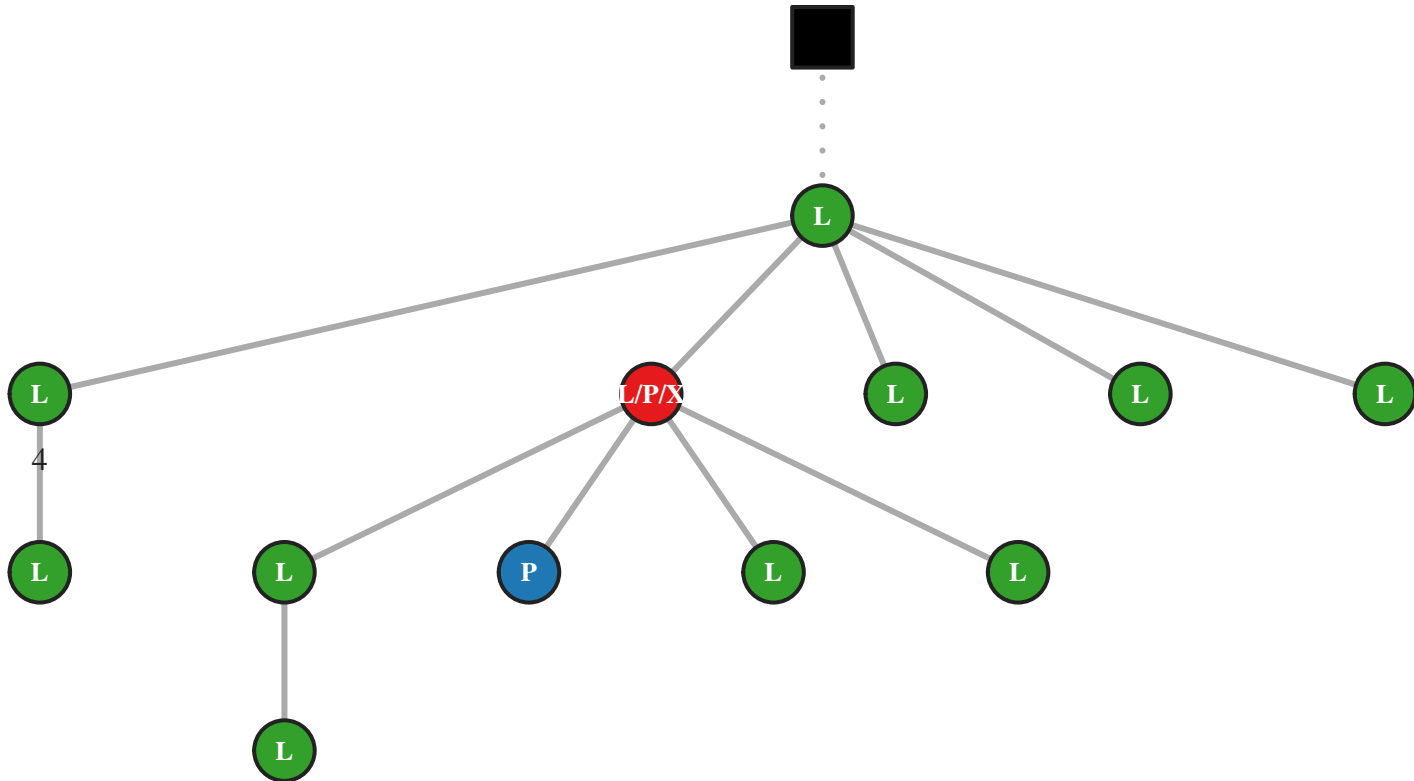
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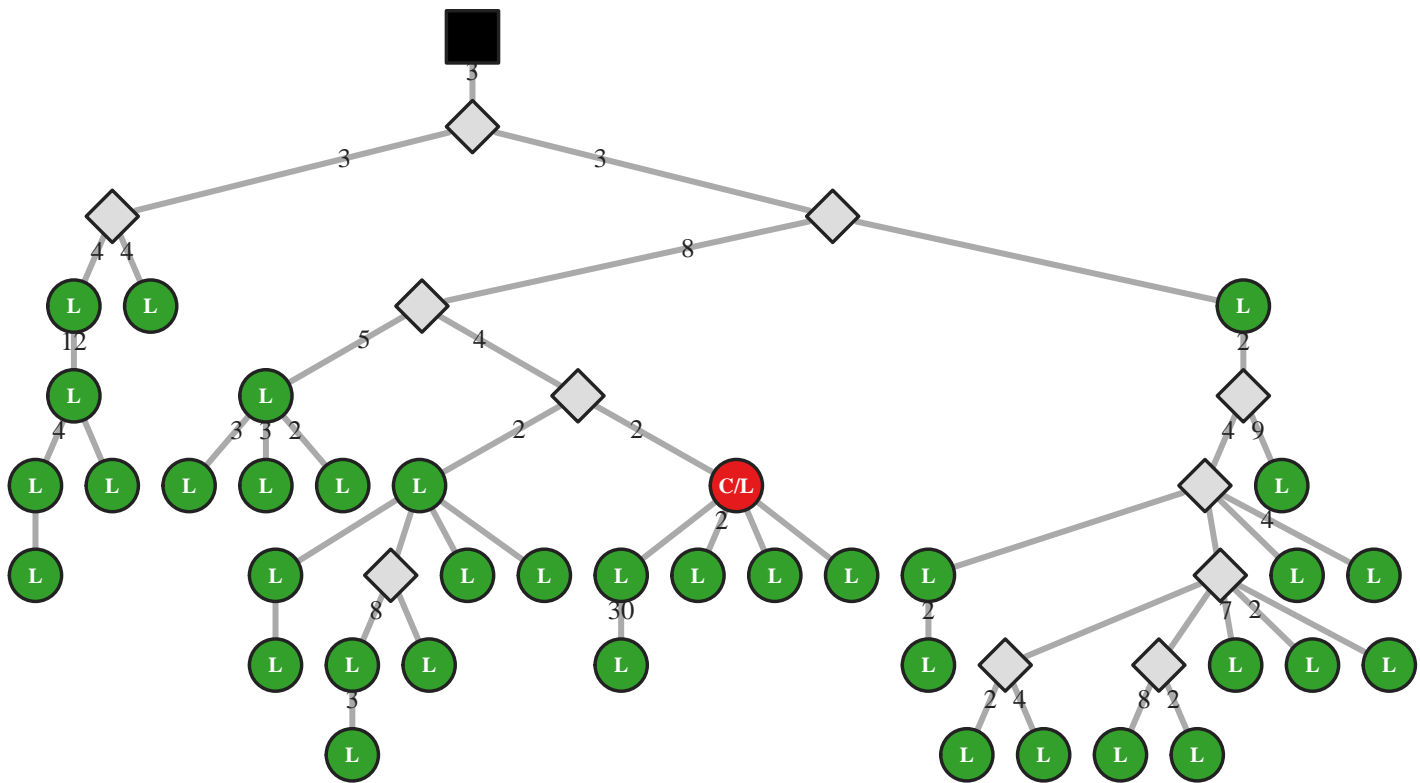
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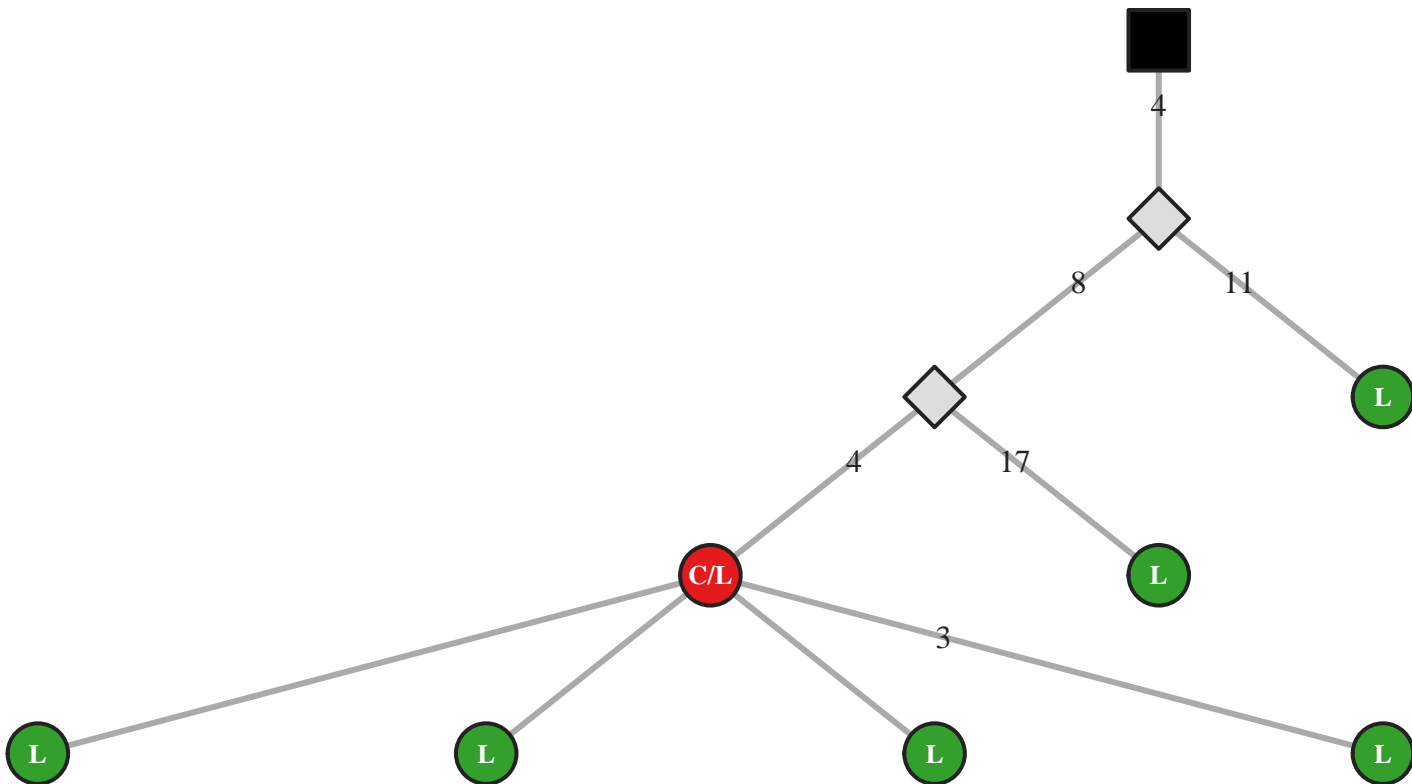
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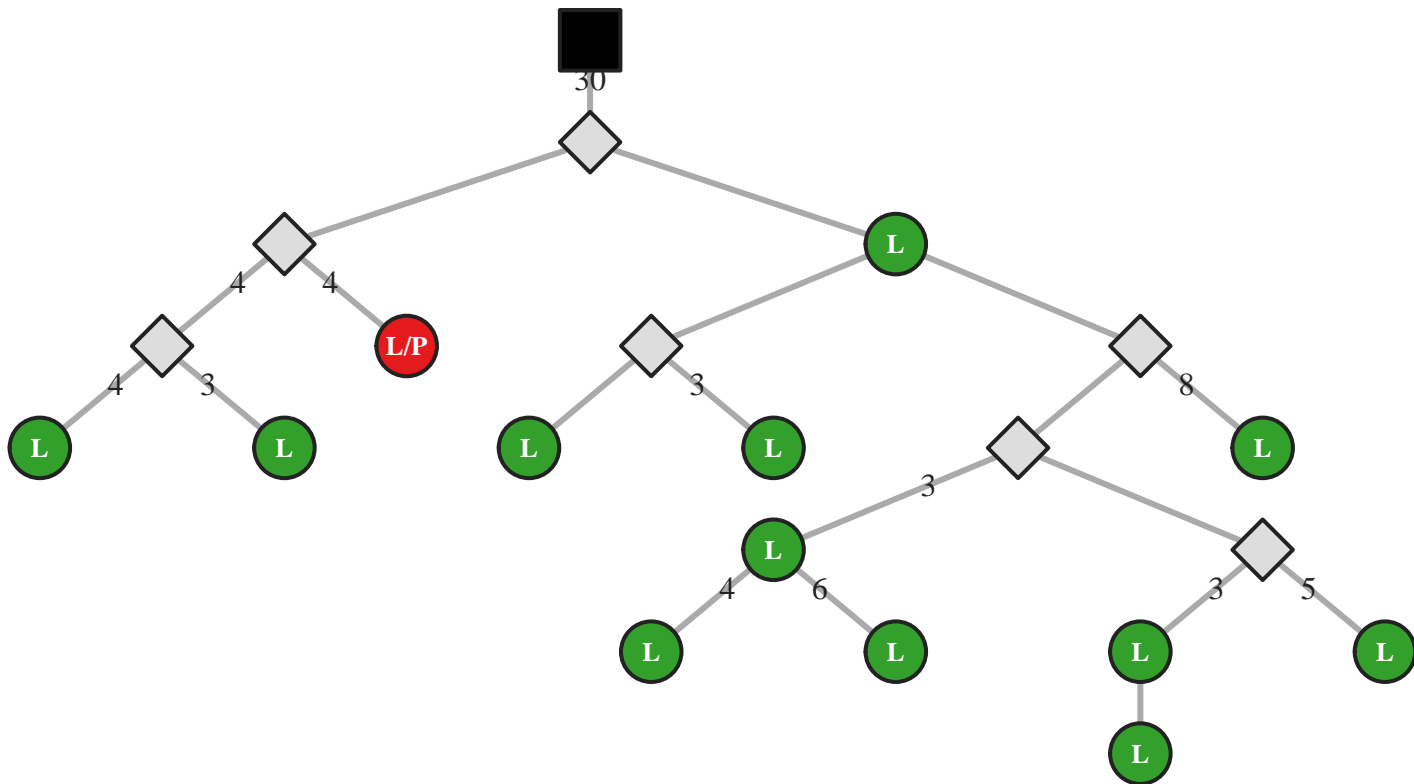
M5 IgG IGHV3-11/J4 39bp (50822)



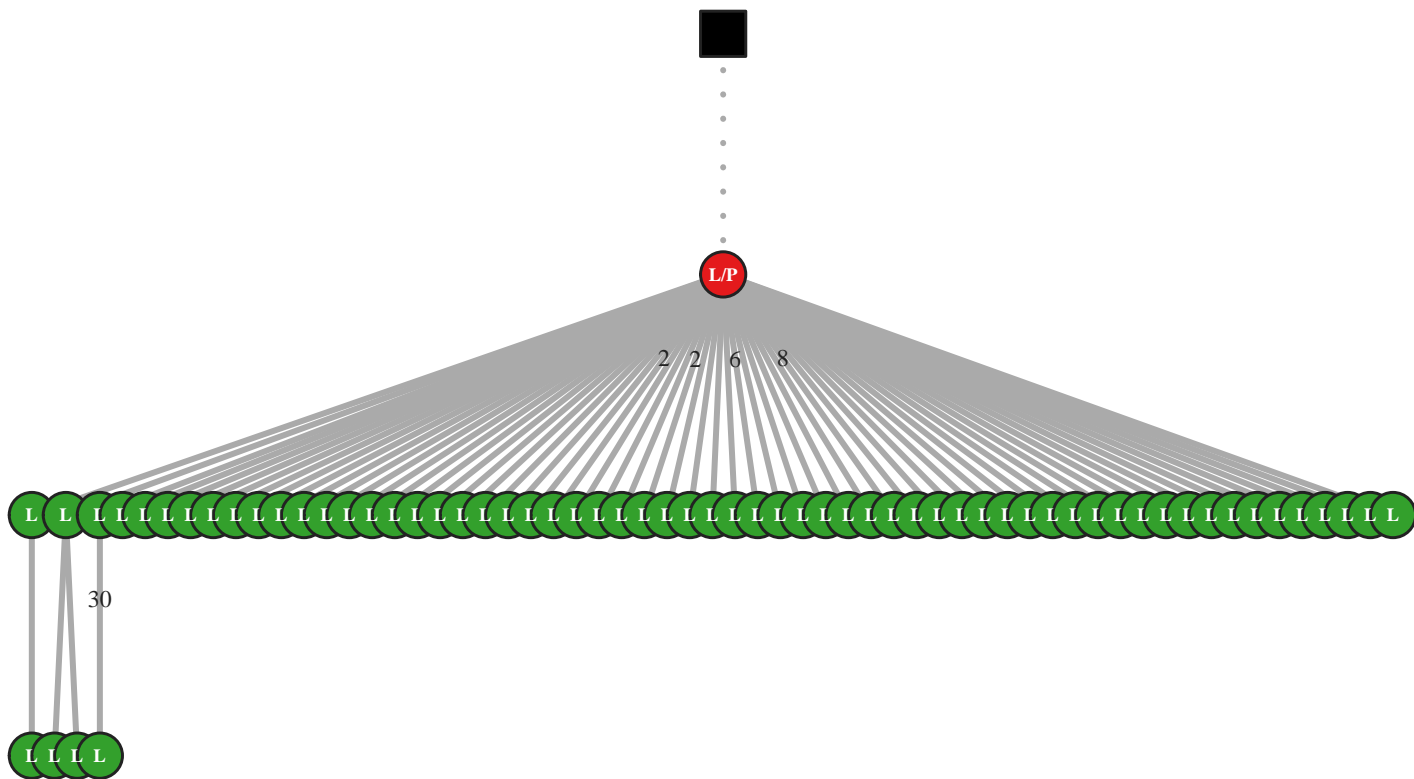
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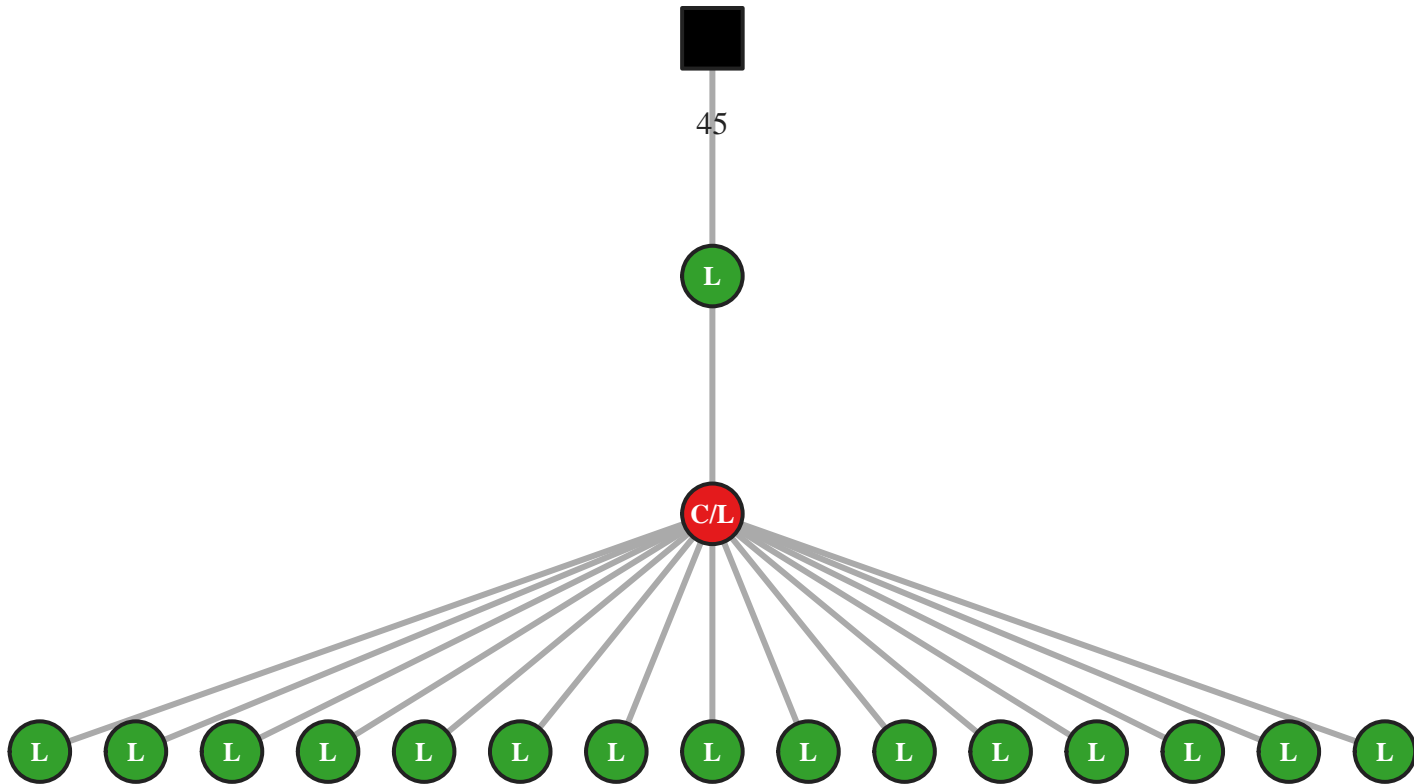
M5 IgG IGHV3-11/J4 42bp (24967)



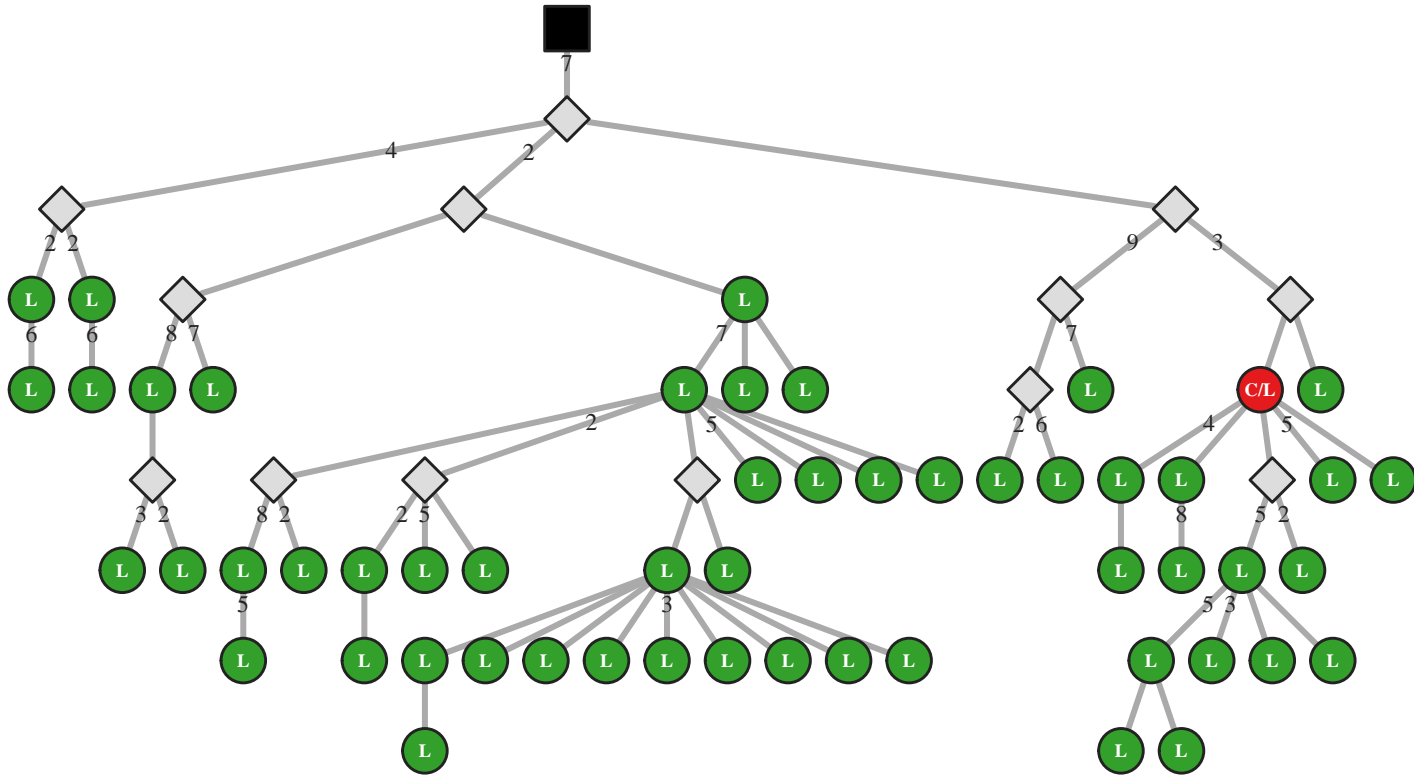
M5 IgG IGHV3-11/J4 45bp (50825)



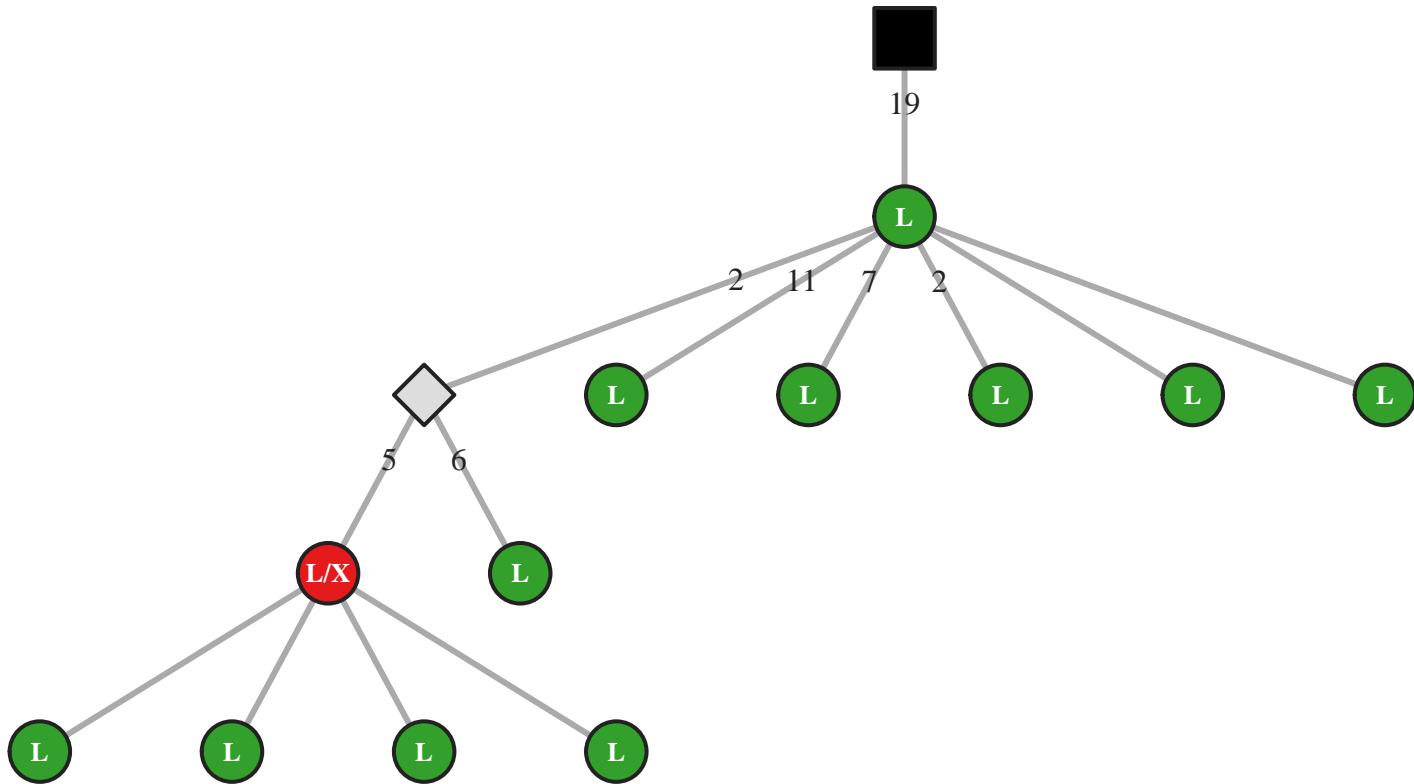
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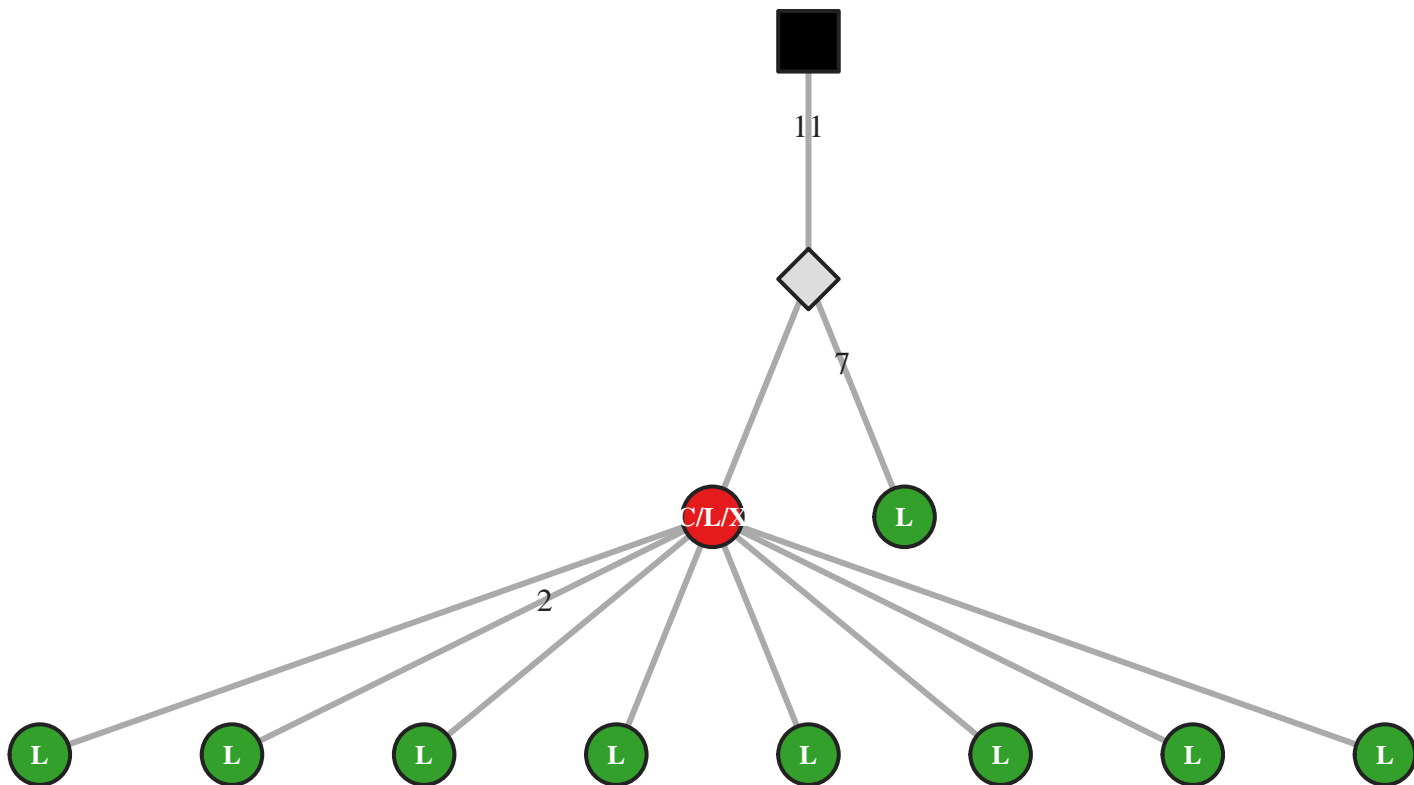
M5 IgA IGHV3-11/J4 48bp (21587)



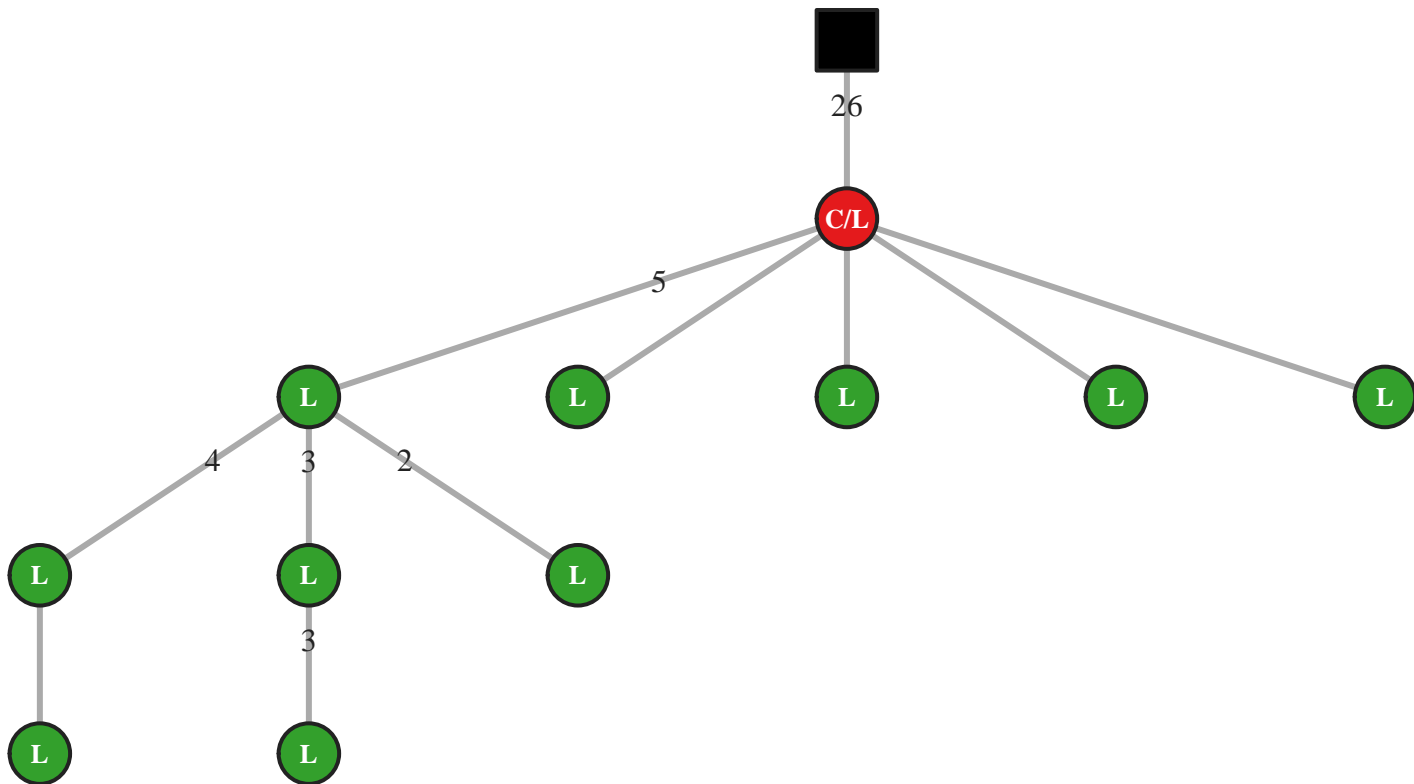
M5 IgG IGHV3-11/J4 48bp (50901)



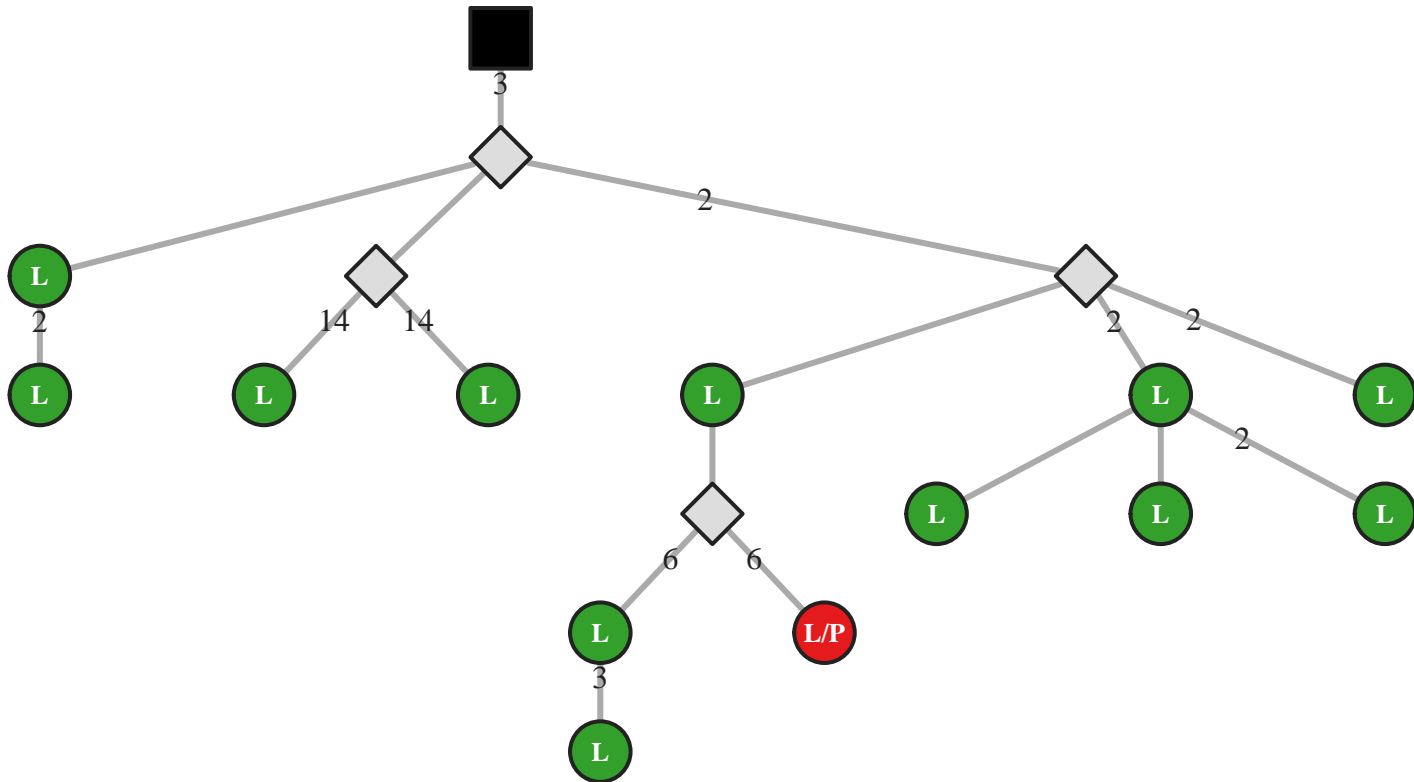
M5 IgG IGHV3-11/J4 51bp (43100)



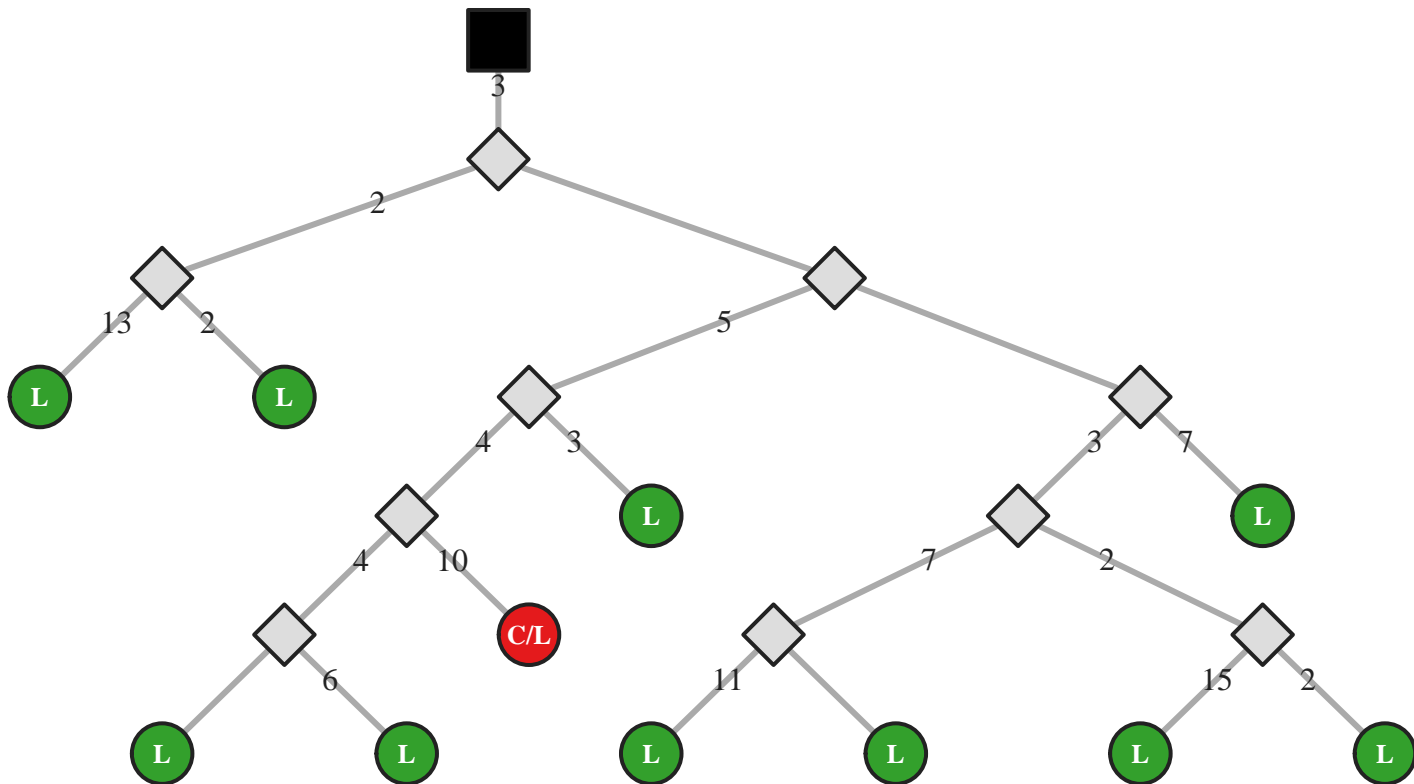
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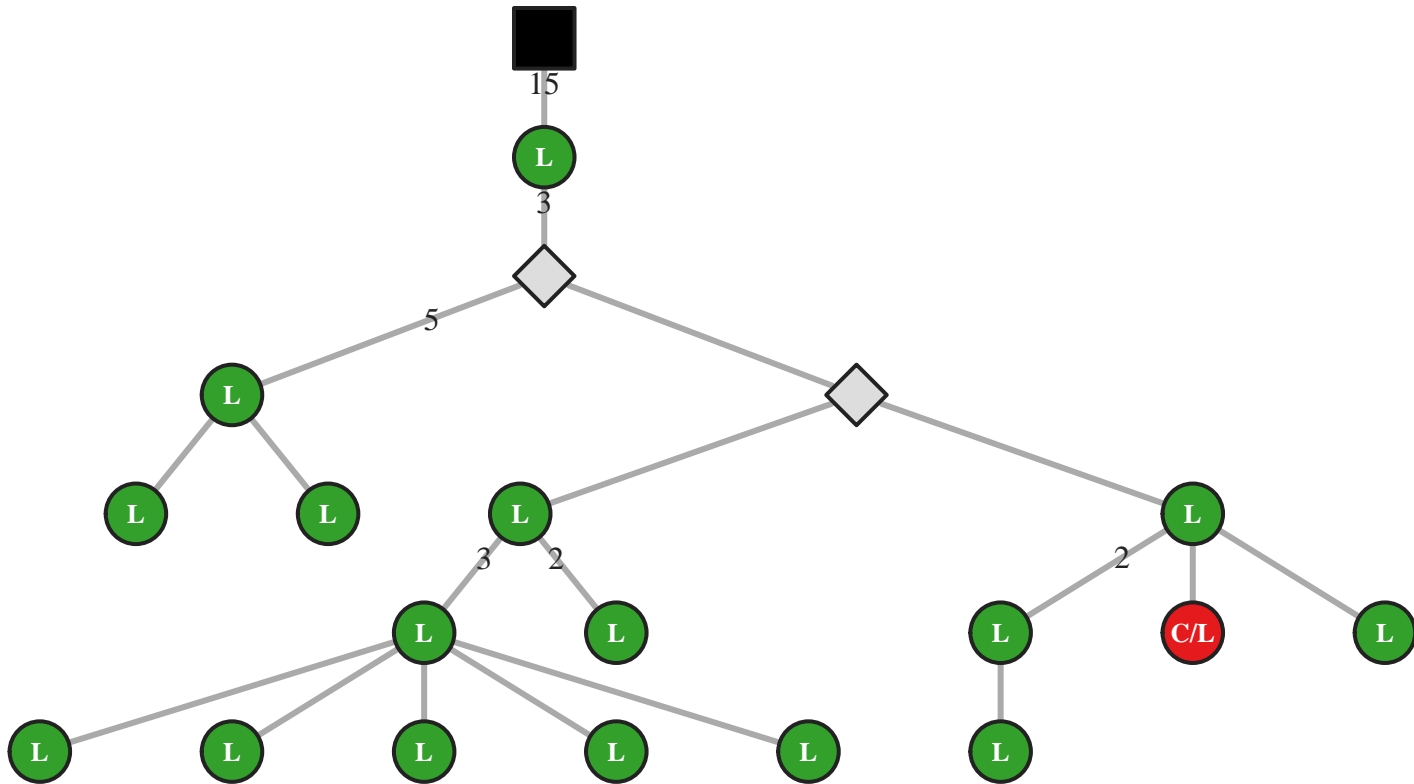
M5 IgG IGHV3-11/J4 51bp (43166)



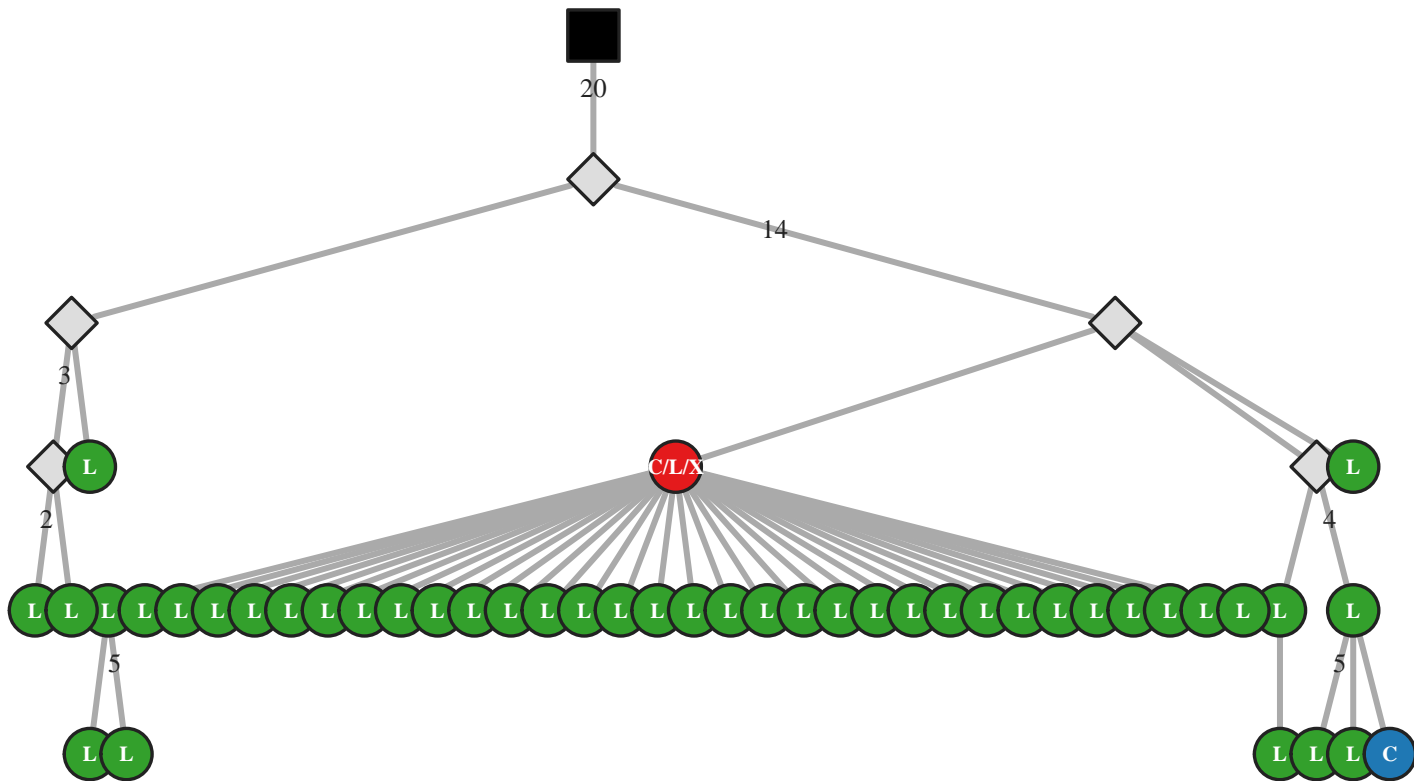
M5 IgA IGHV3-11/J4 54bp (2540)



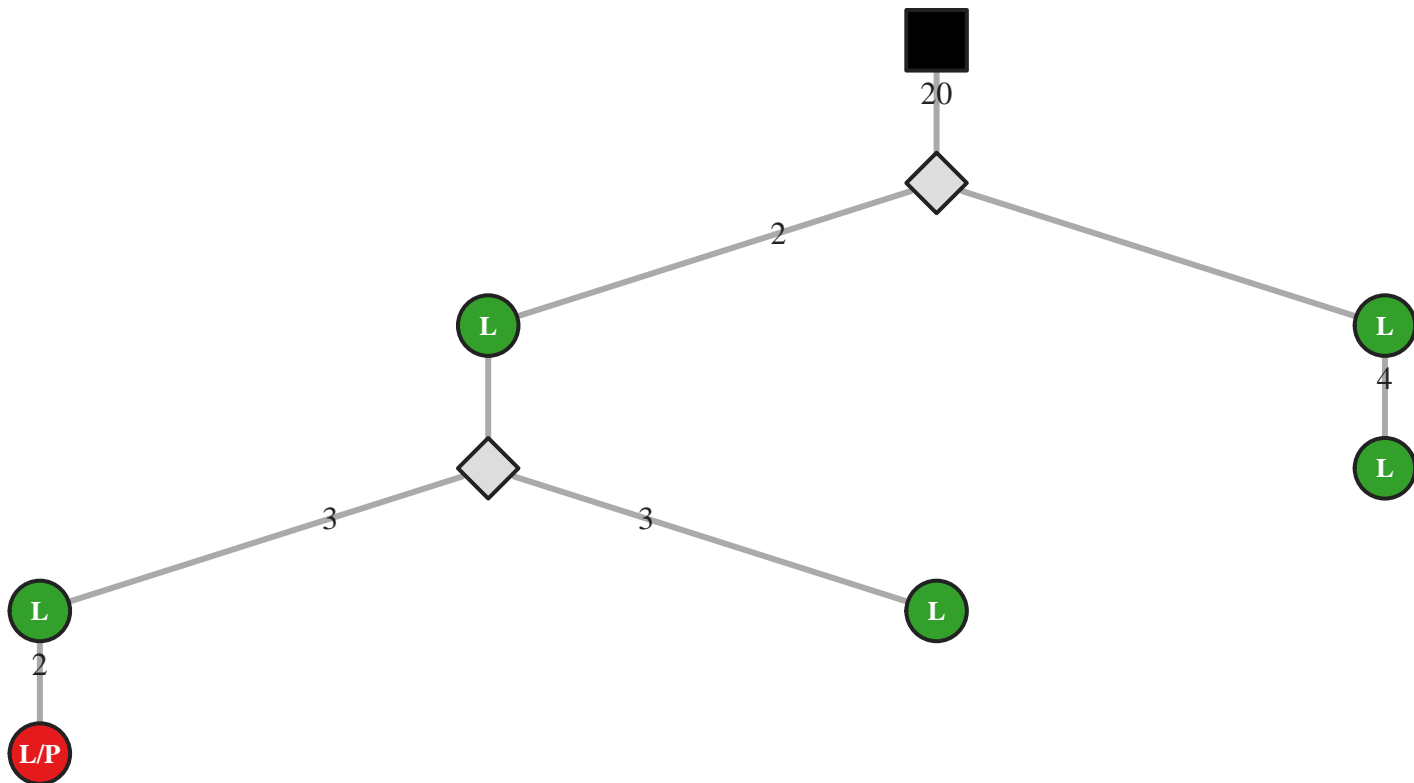
M5 IgG IGHV3-11/J4 54bp (15950)



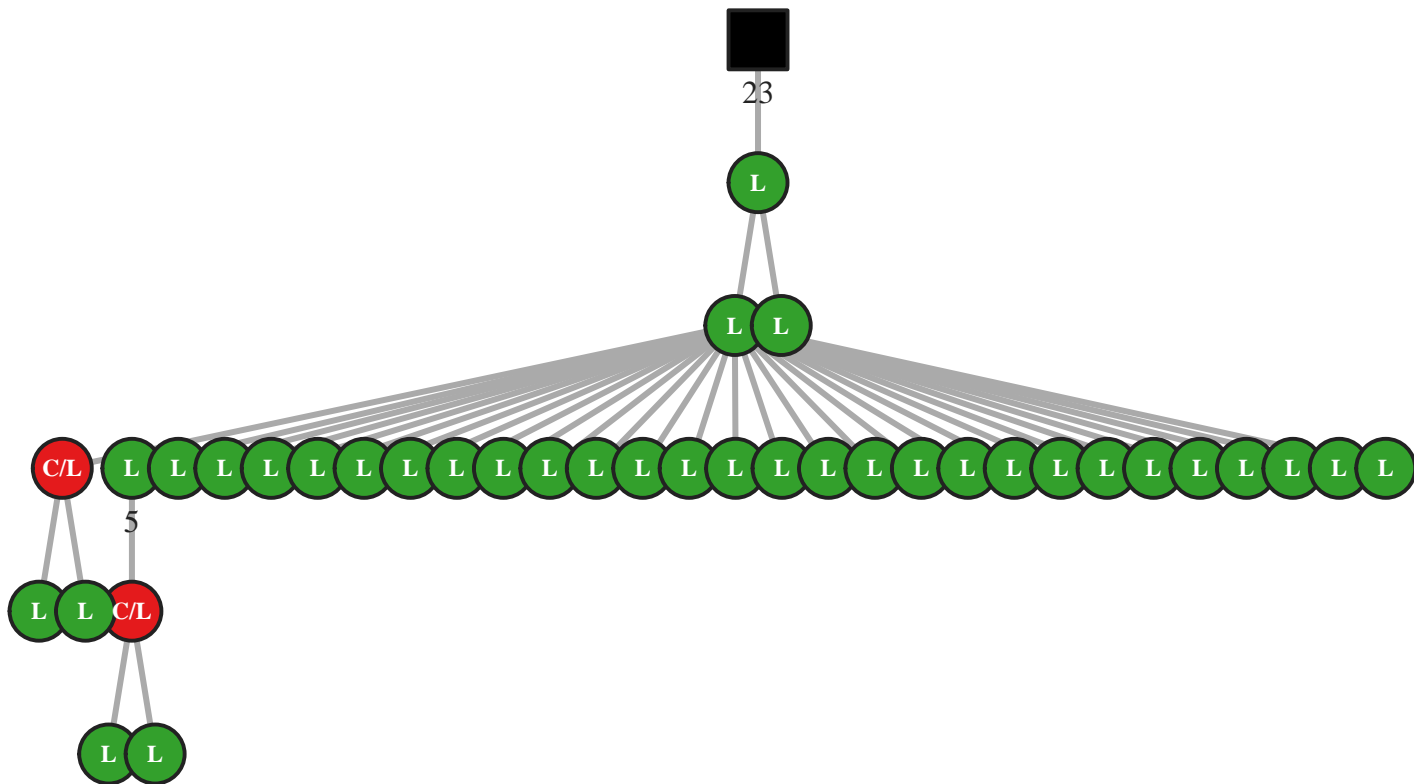
M5 IgG IGHV3-11/J4 54bp (15985)



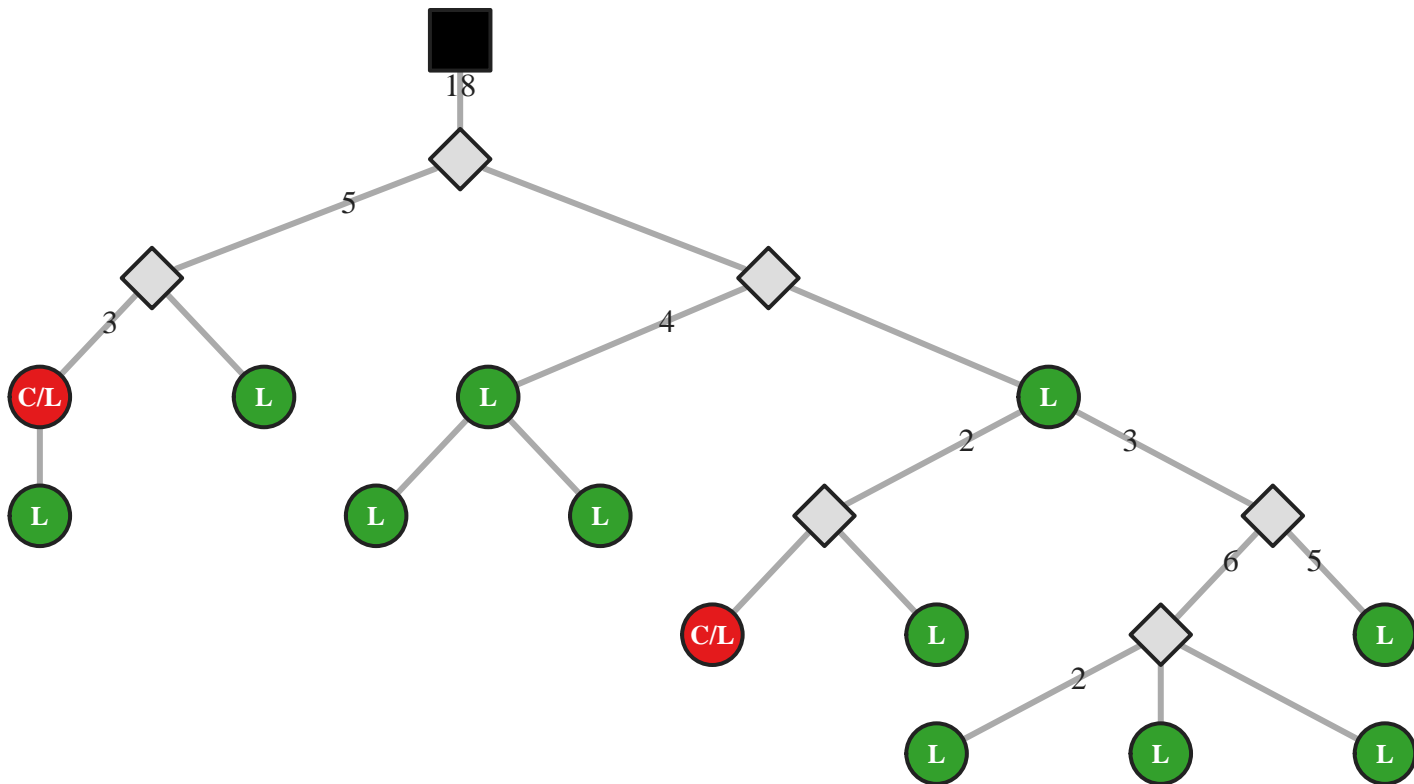
M5 IgG IGHV3-11/J4 63bp (16021)



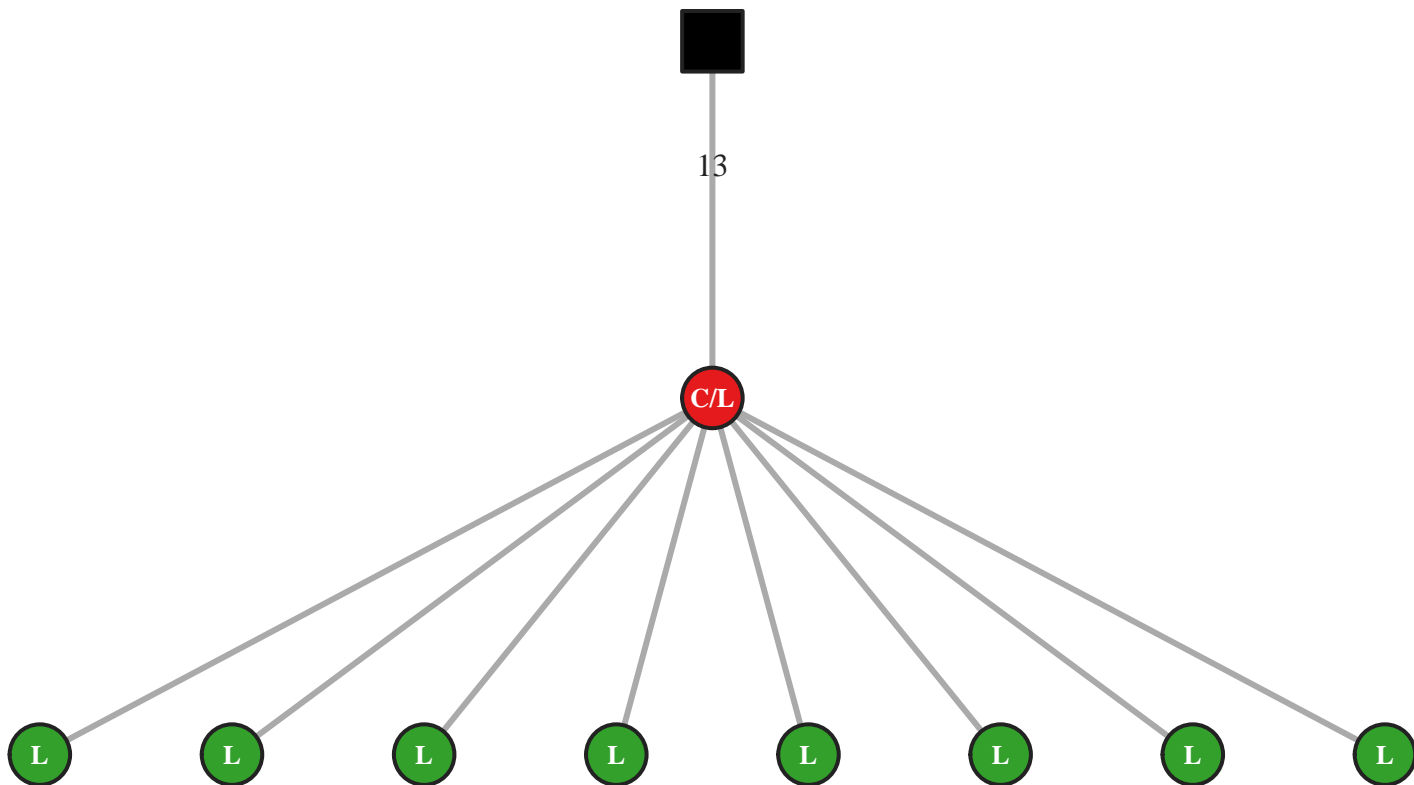
M5 IgG IGHV3-11/J4 66bp (50976)



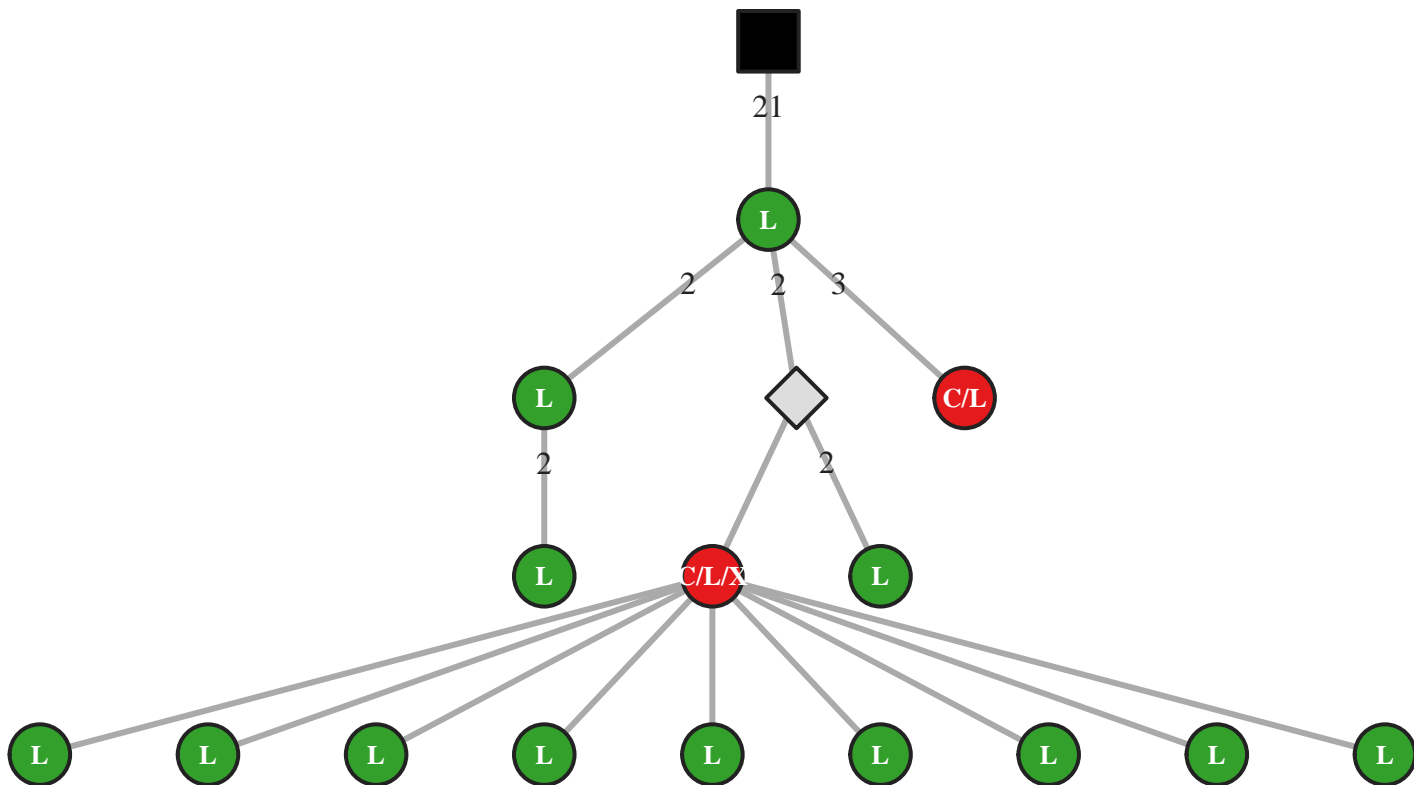
M5 IgG IGHV3-11/J5 51bp (43230)



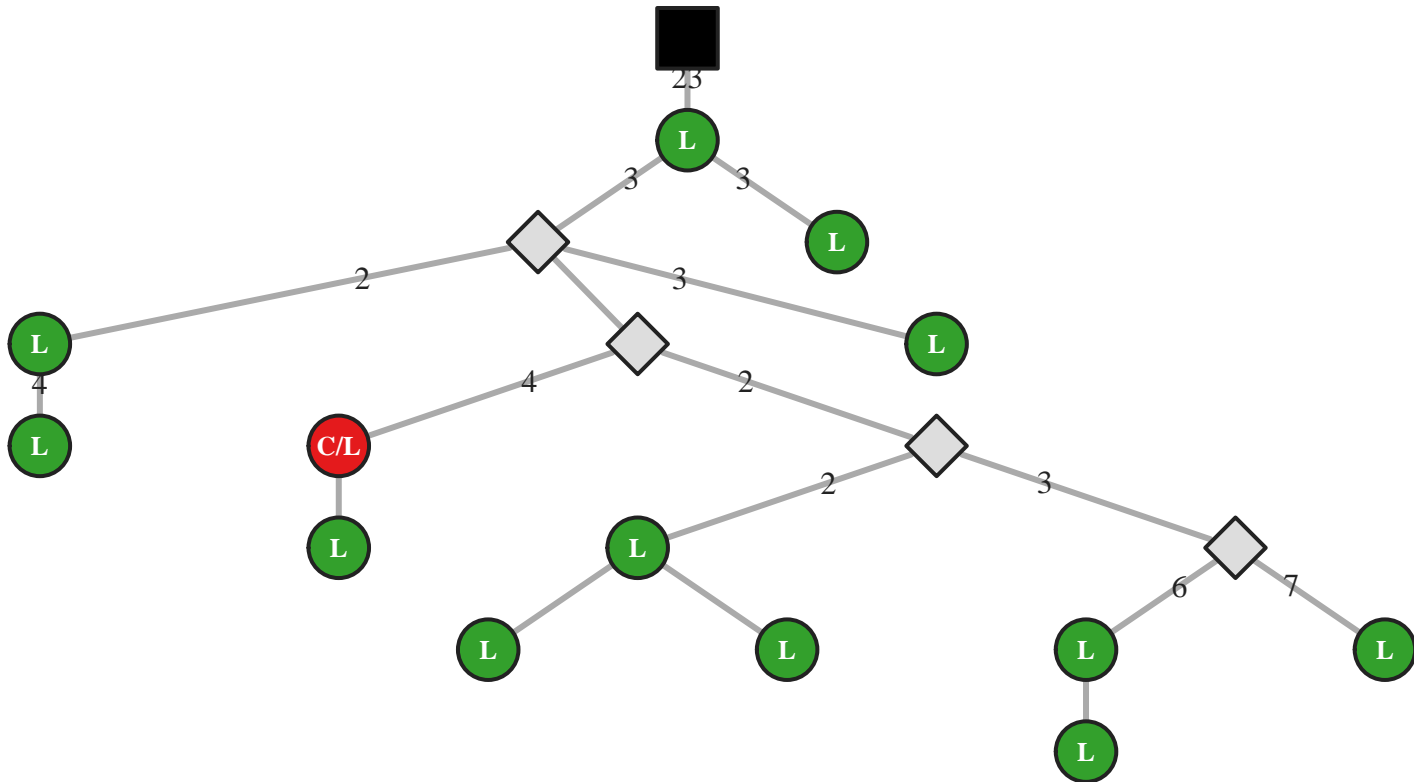
M5 IgG IGHV3-11/J5 60bp (33872)



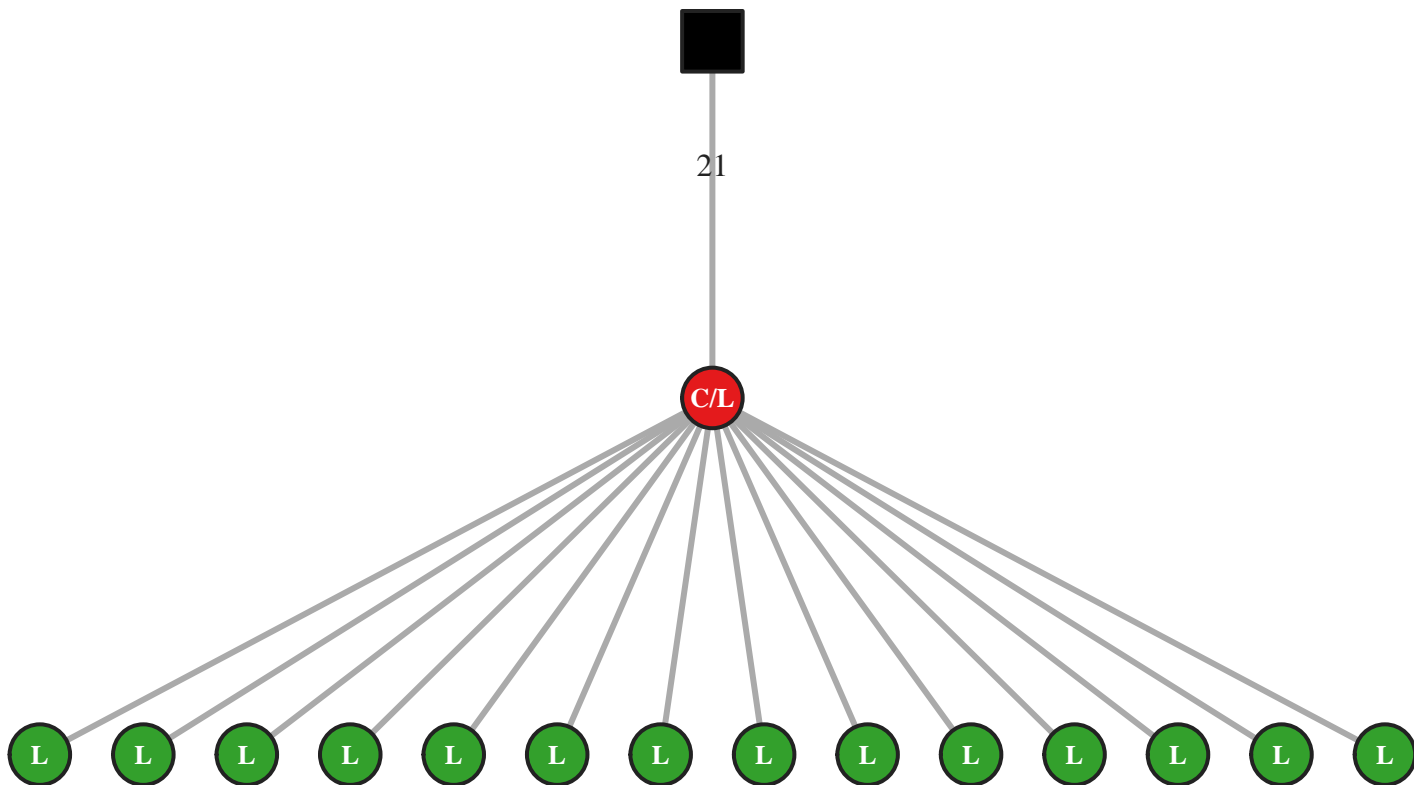
M5 IgG IGHV3-11/J6 48bp (50987)



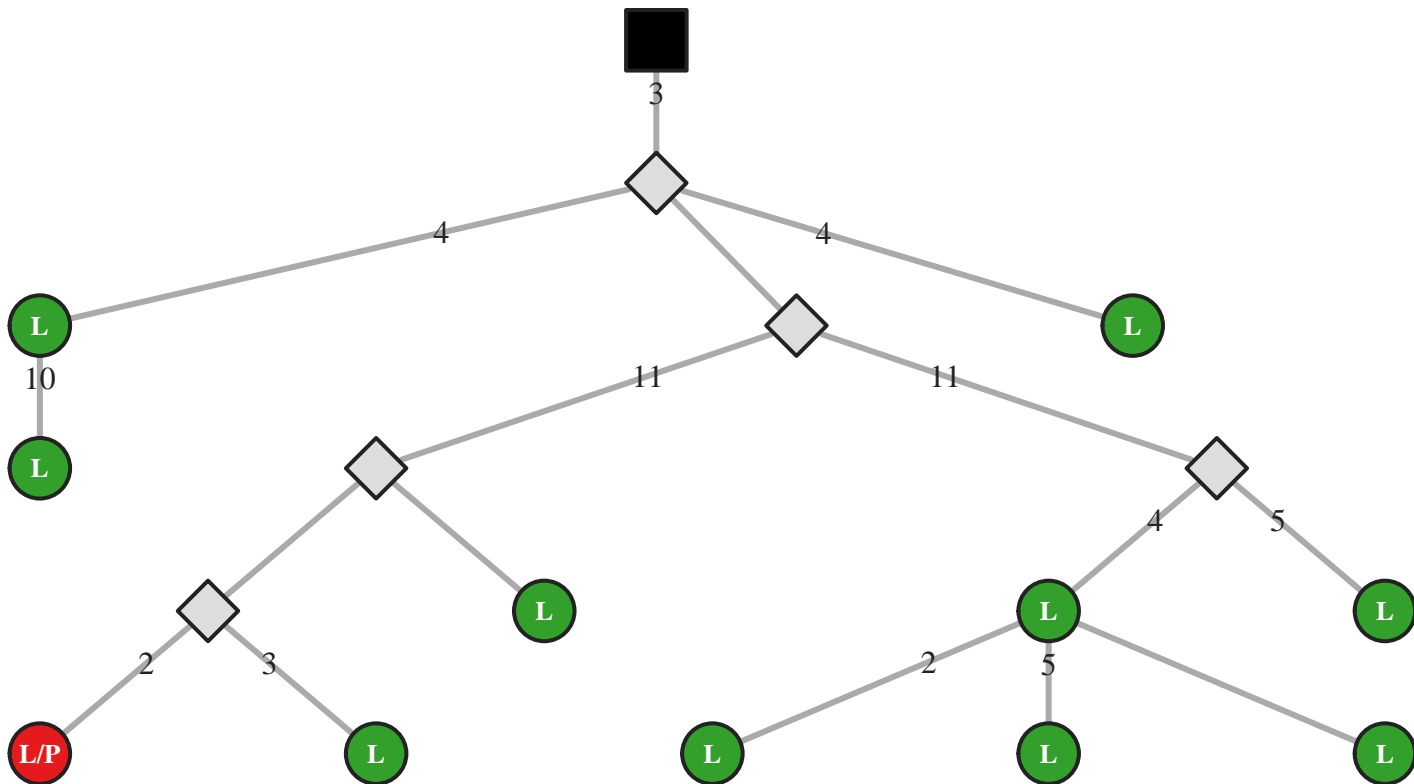
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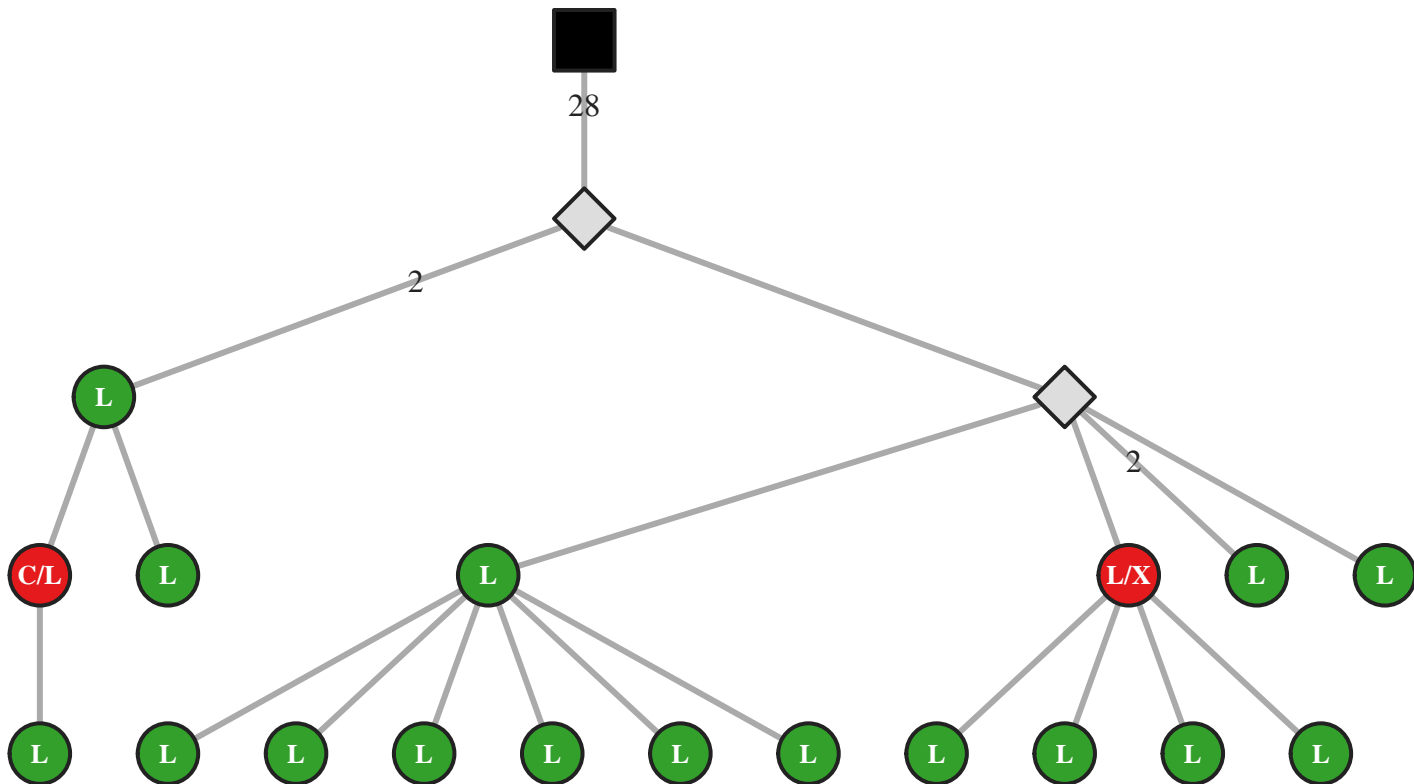
M5 IgG IGHV3-11/J6 60bp (16035)



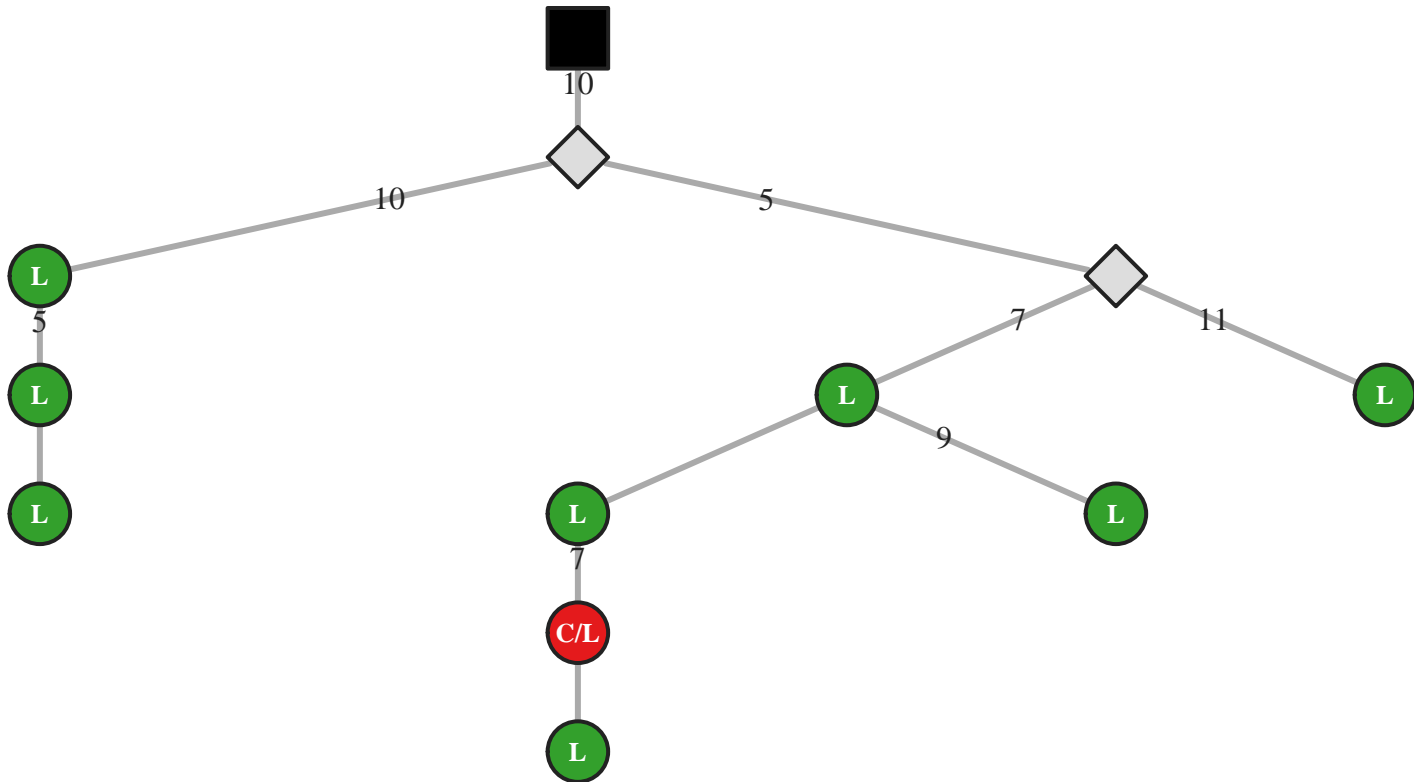
M5 IgG IGHV3-11/J6 60bp (16047)



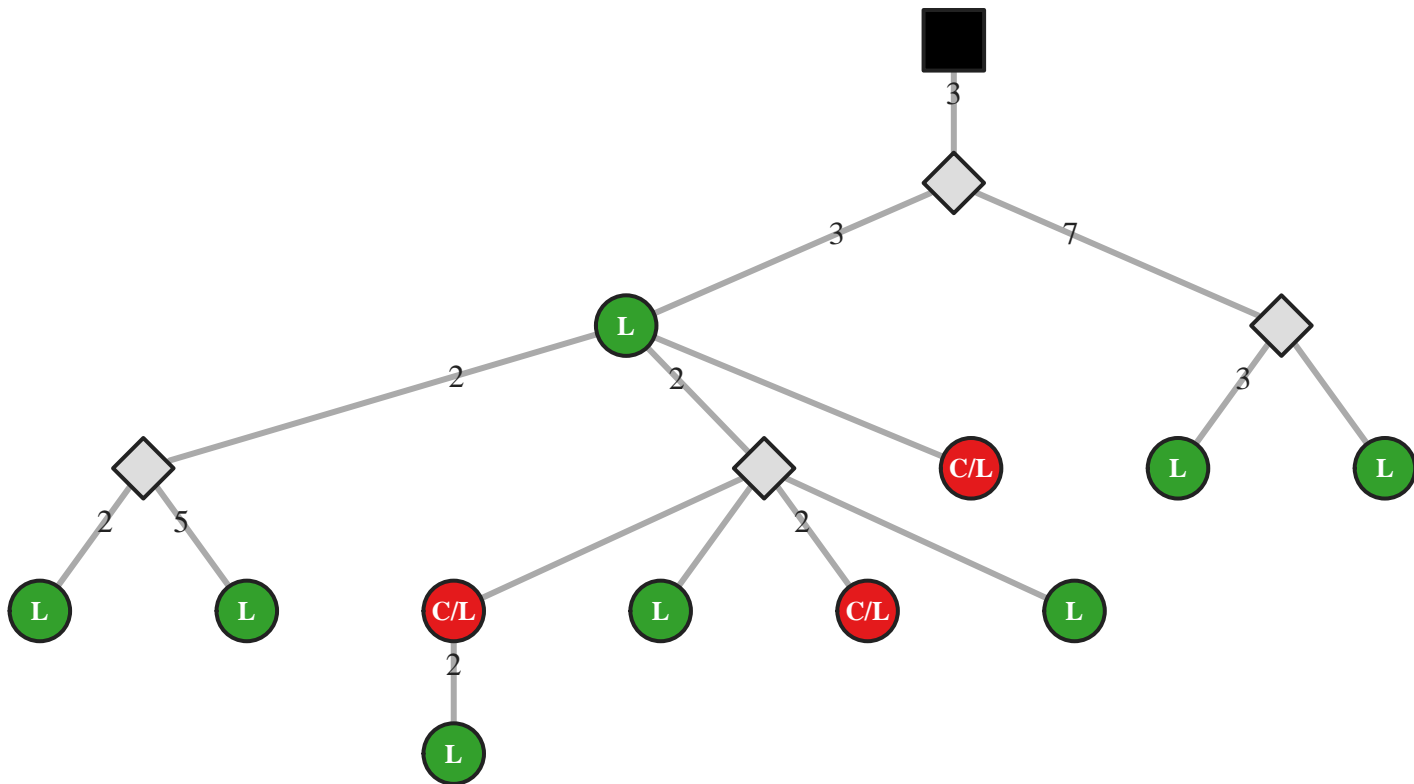
M5 IgG IGHV3-11/J6 63bp (16085)



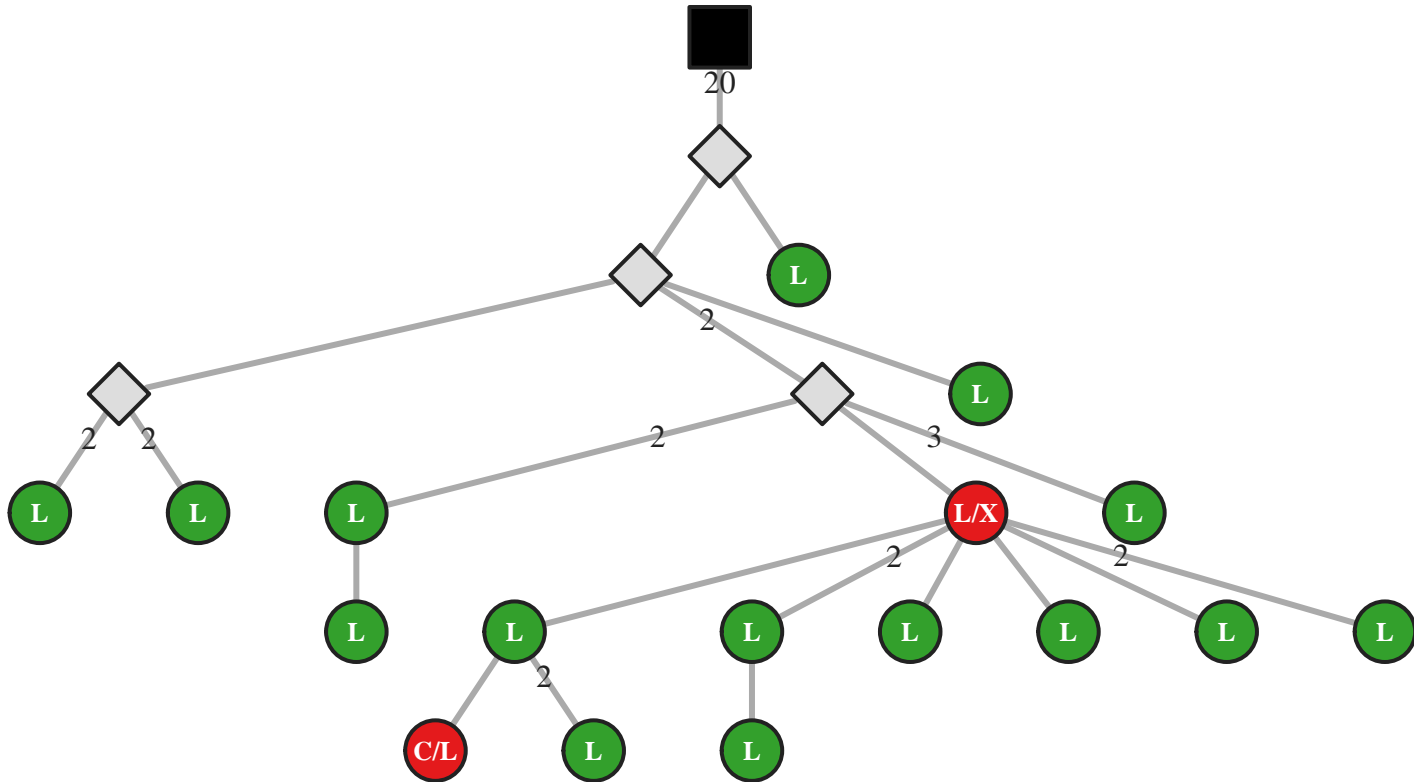
M5 IgG IGHV3-11/J6 63bp (16098)



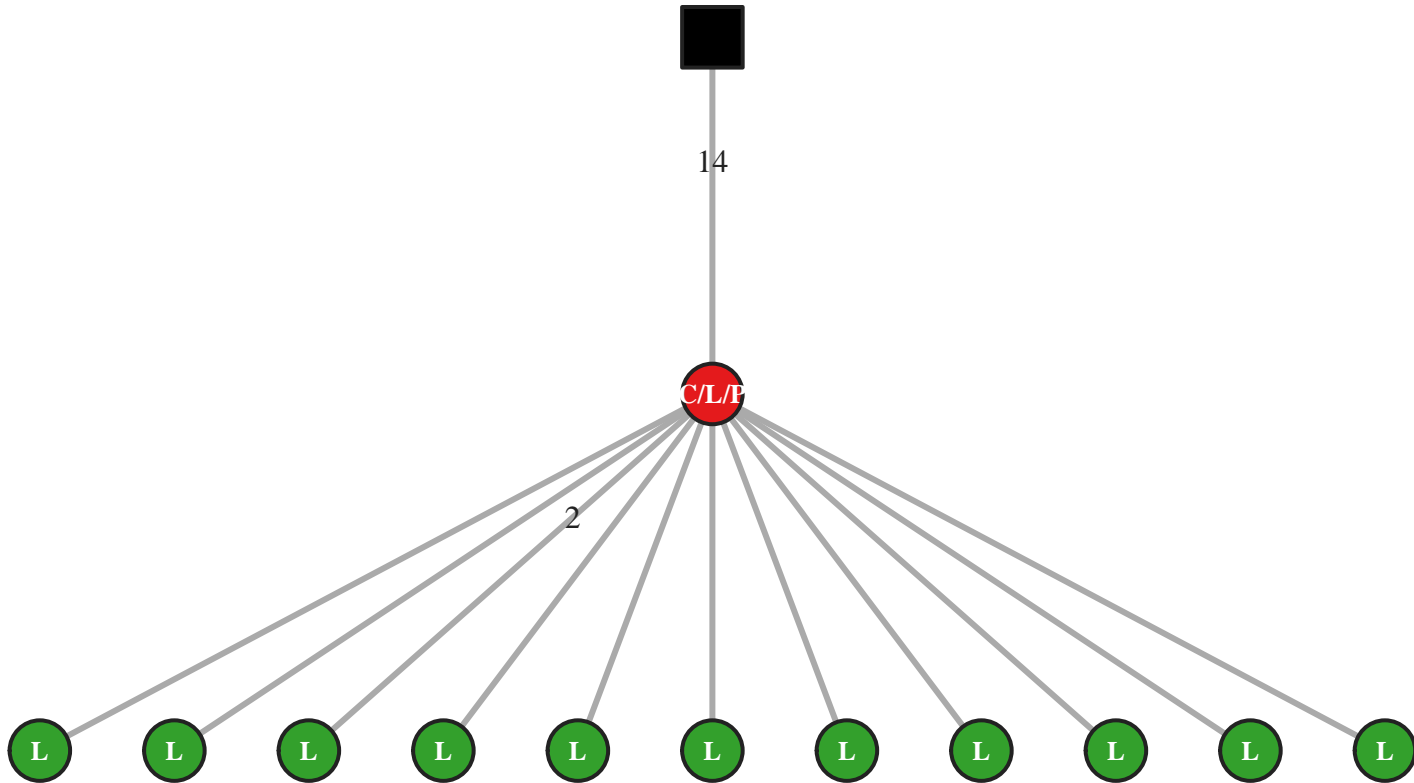
M5 IgM IGHV3-13/J4 39bp (11271)



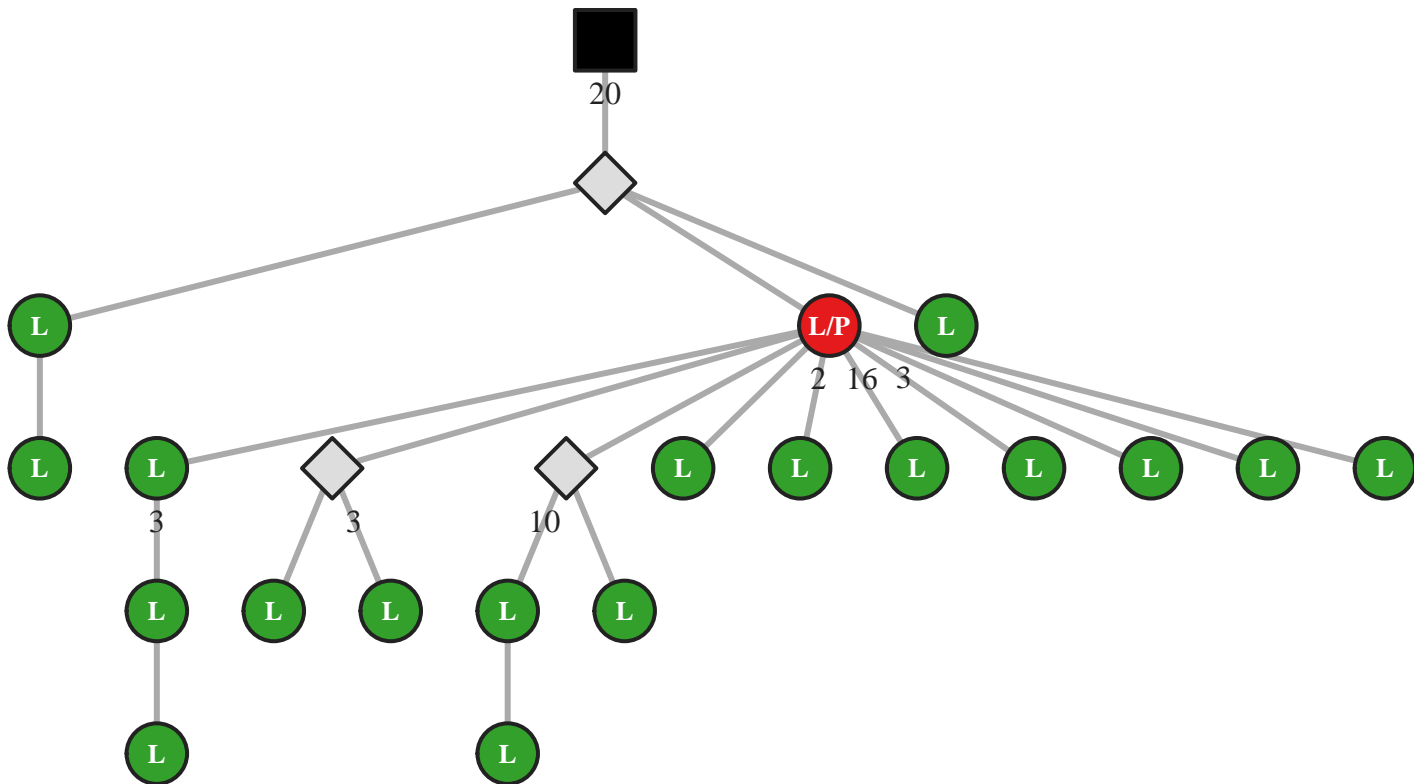
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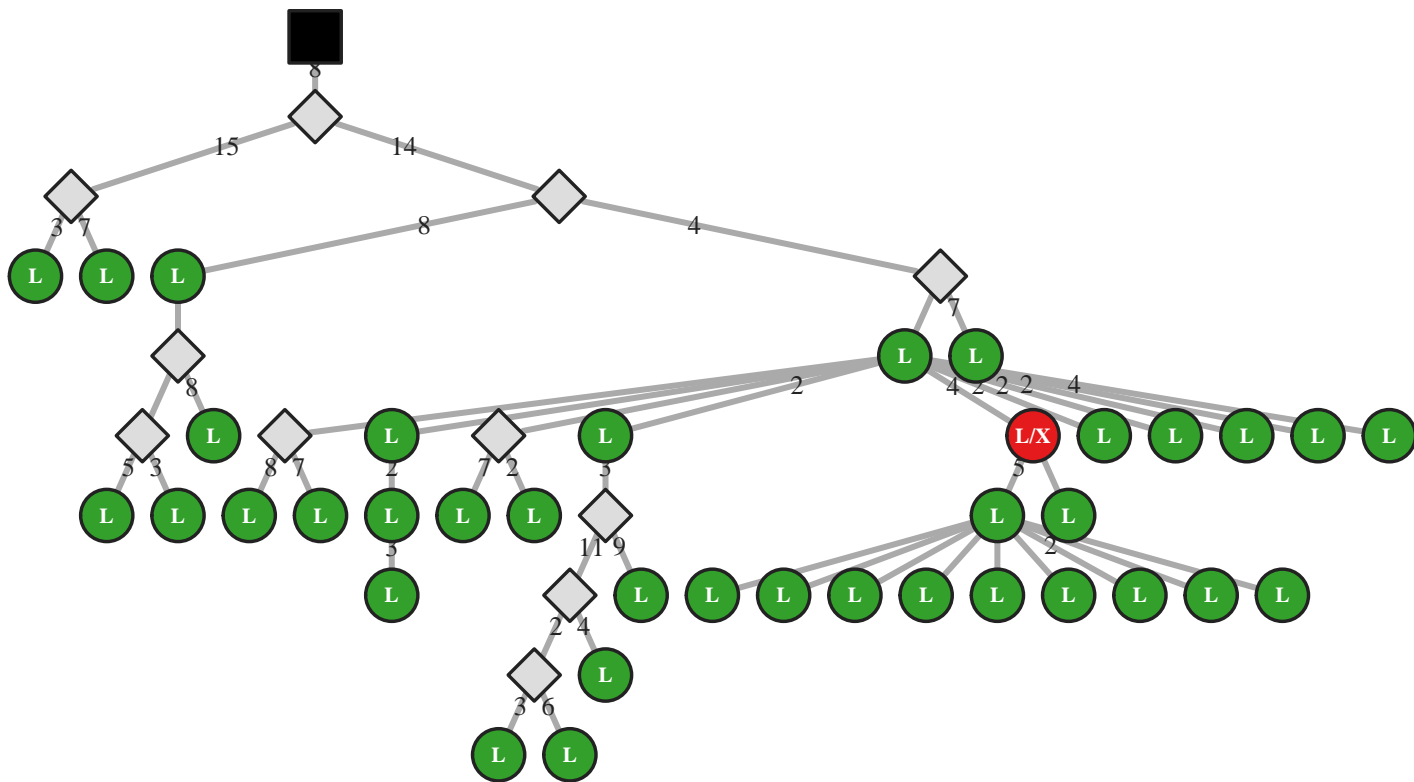
M5 IgM IGHV3-13/J6 57bp (20588)



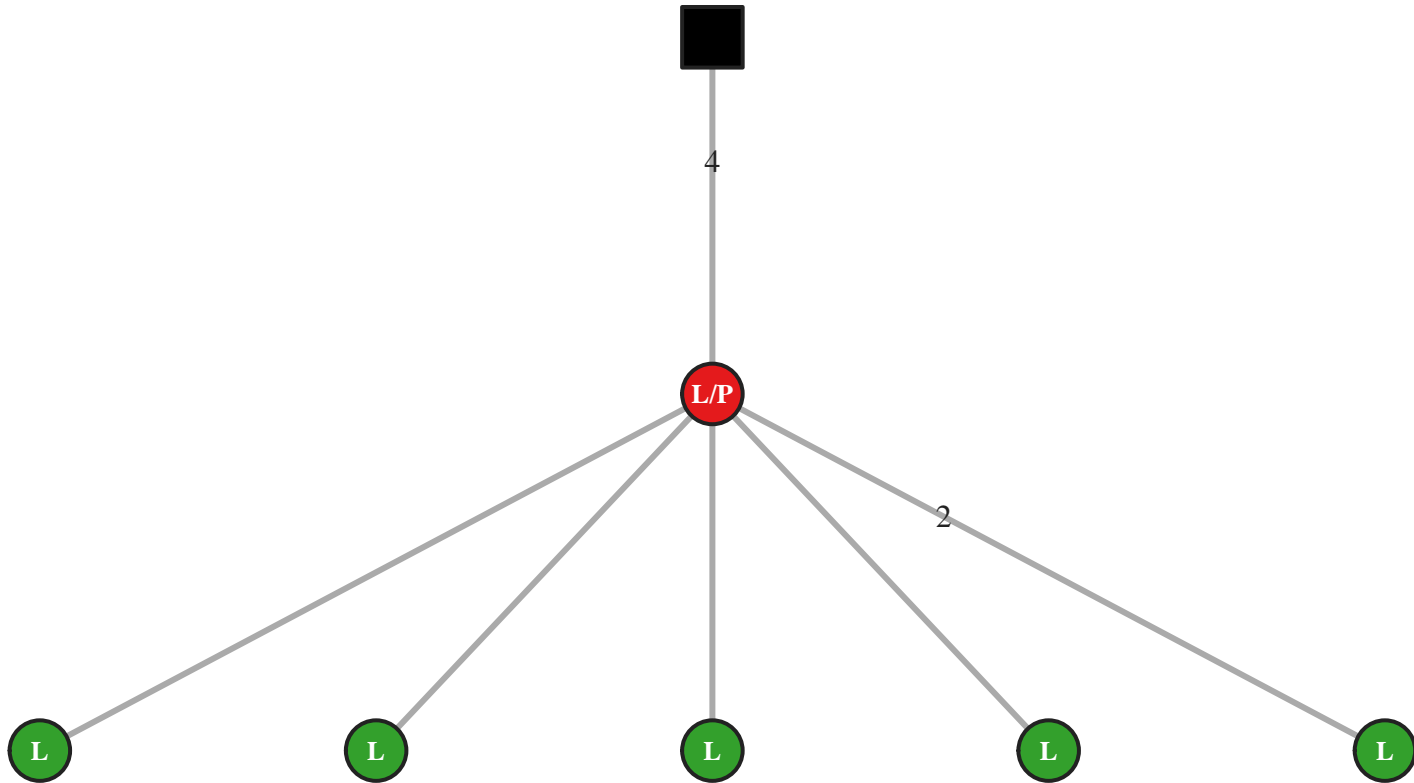
M5 IgG IGHV3-15/J3 30bp (25035)



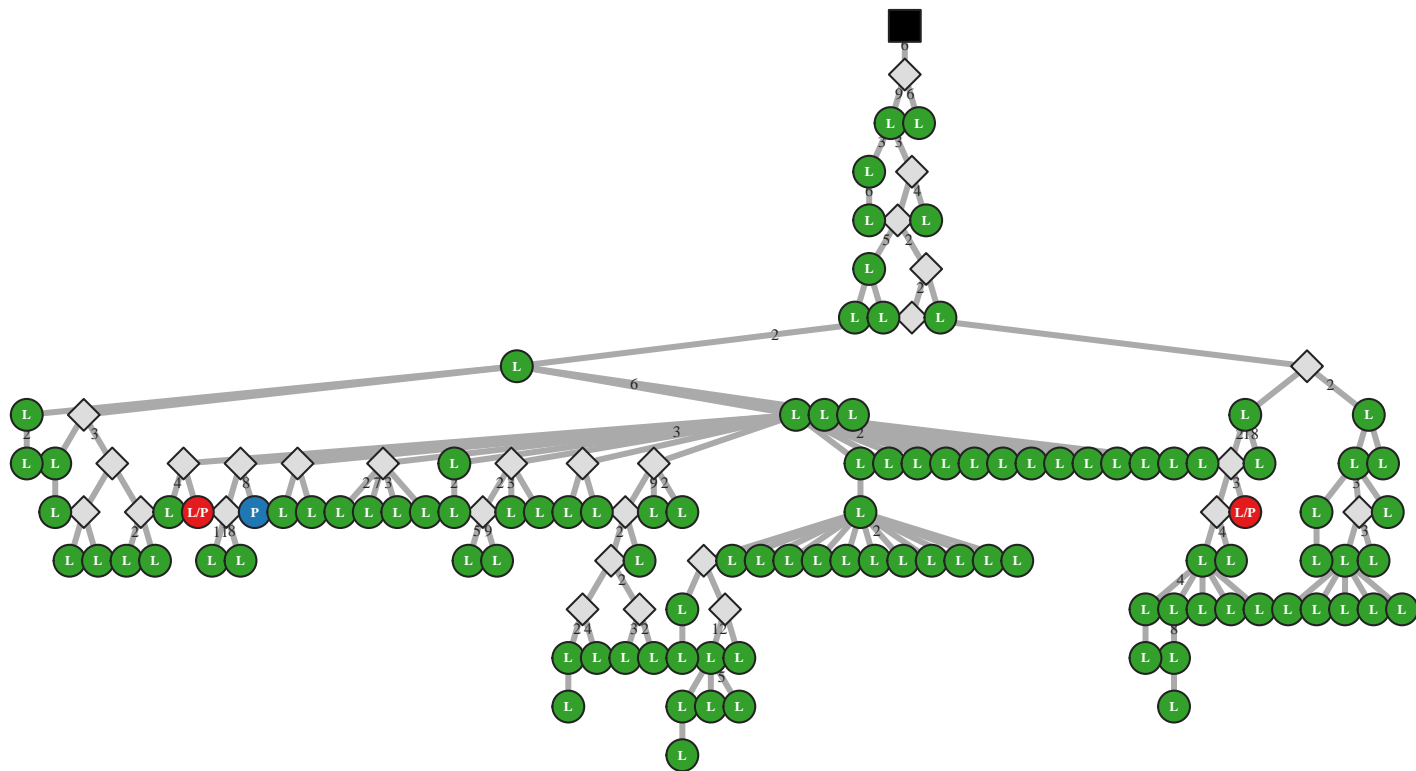
M5 IgG IGHV3-15/J4 27bp (25051)



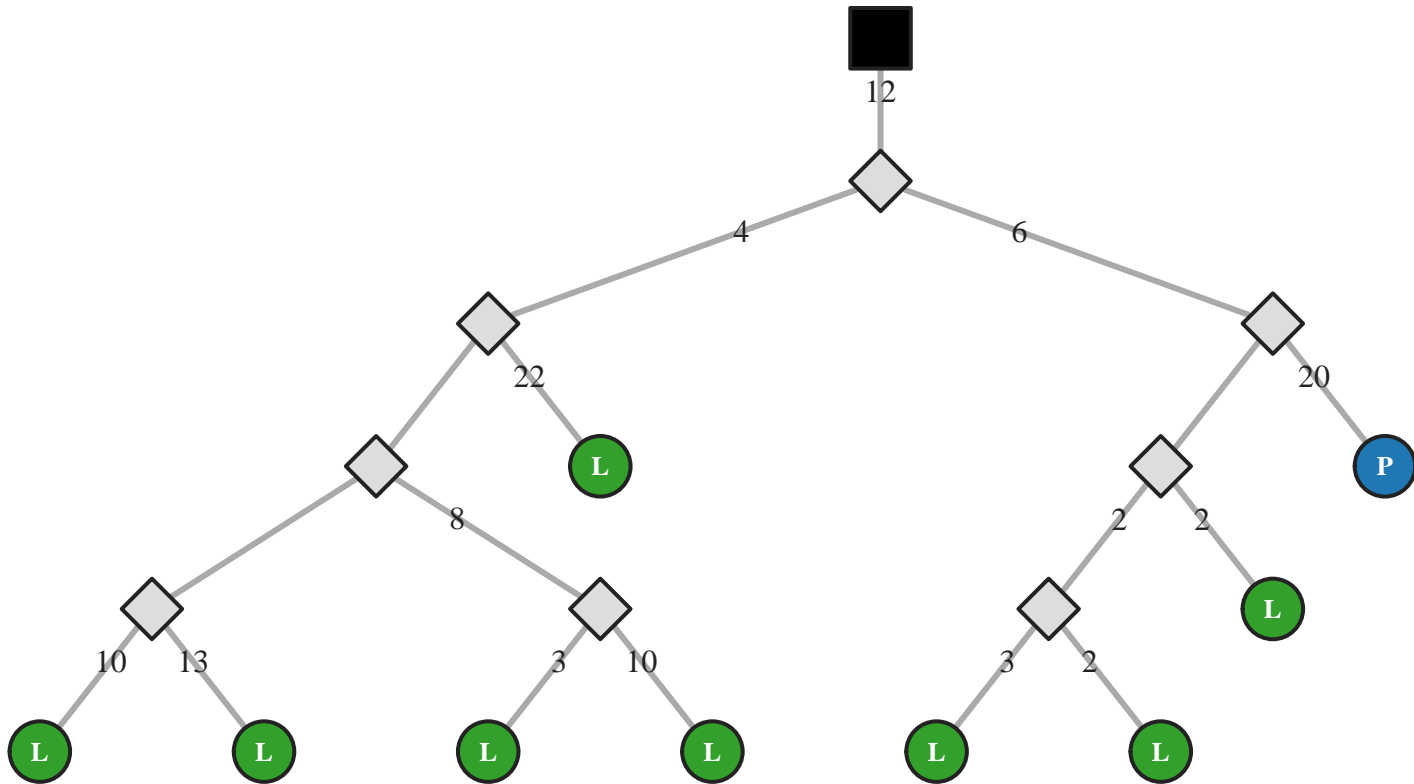
M5 IgA IGHV3-15/J4 33bp (12207)



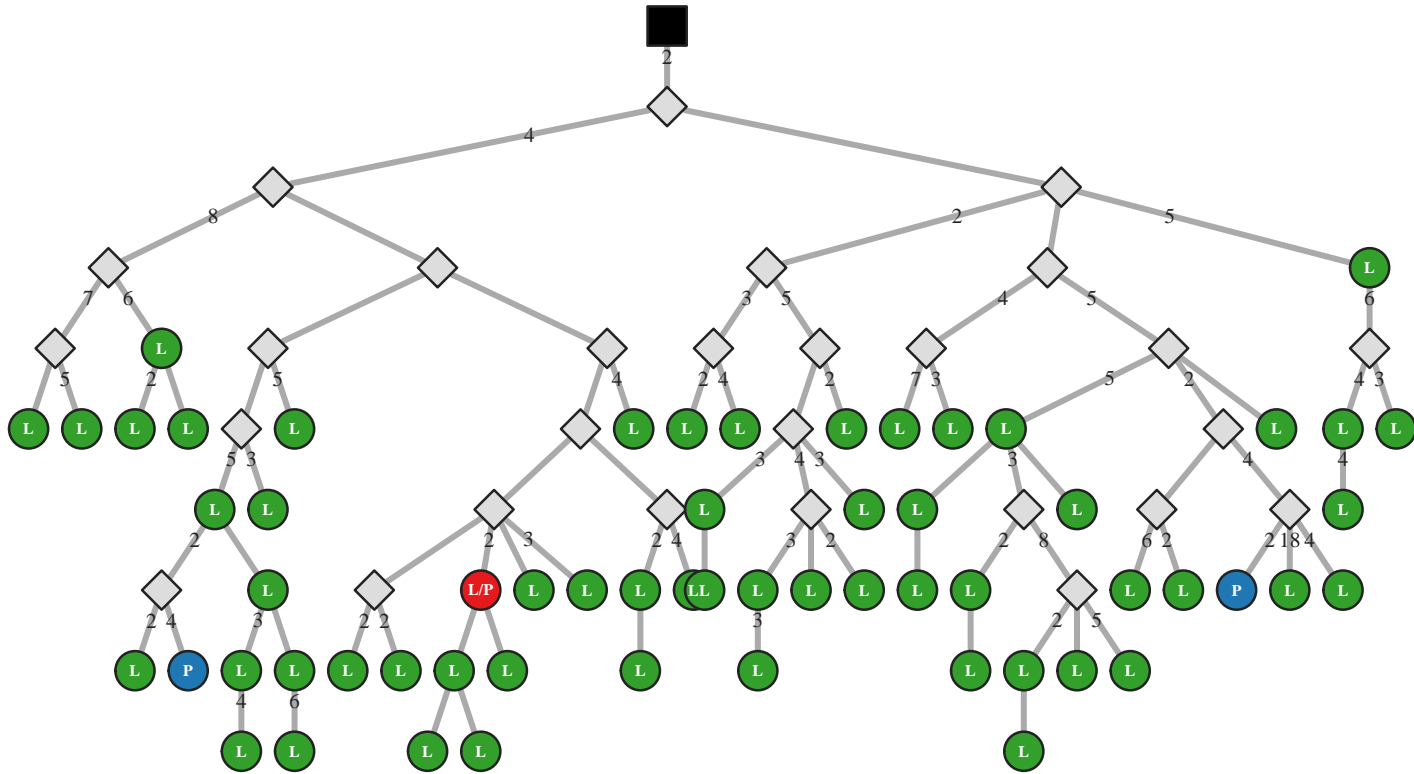
M5 IgG IGHV3-15/J4 36bp (16183)



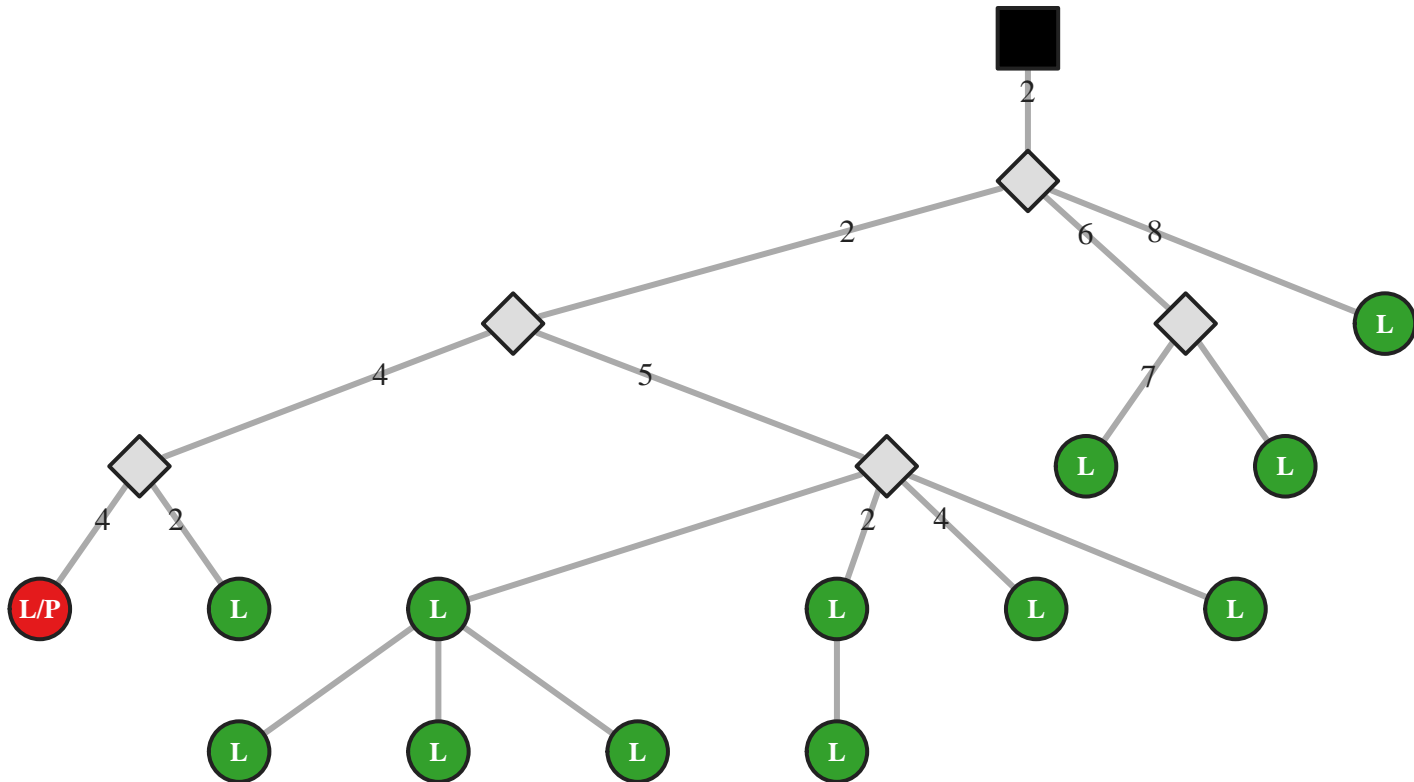
M5 IgG IGHV3-15/J4 39bp (25065)



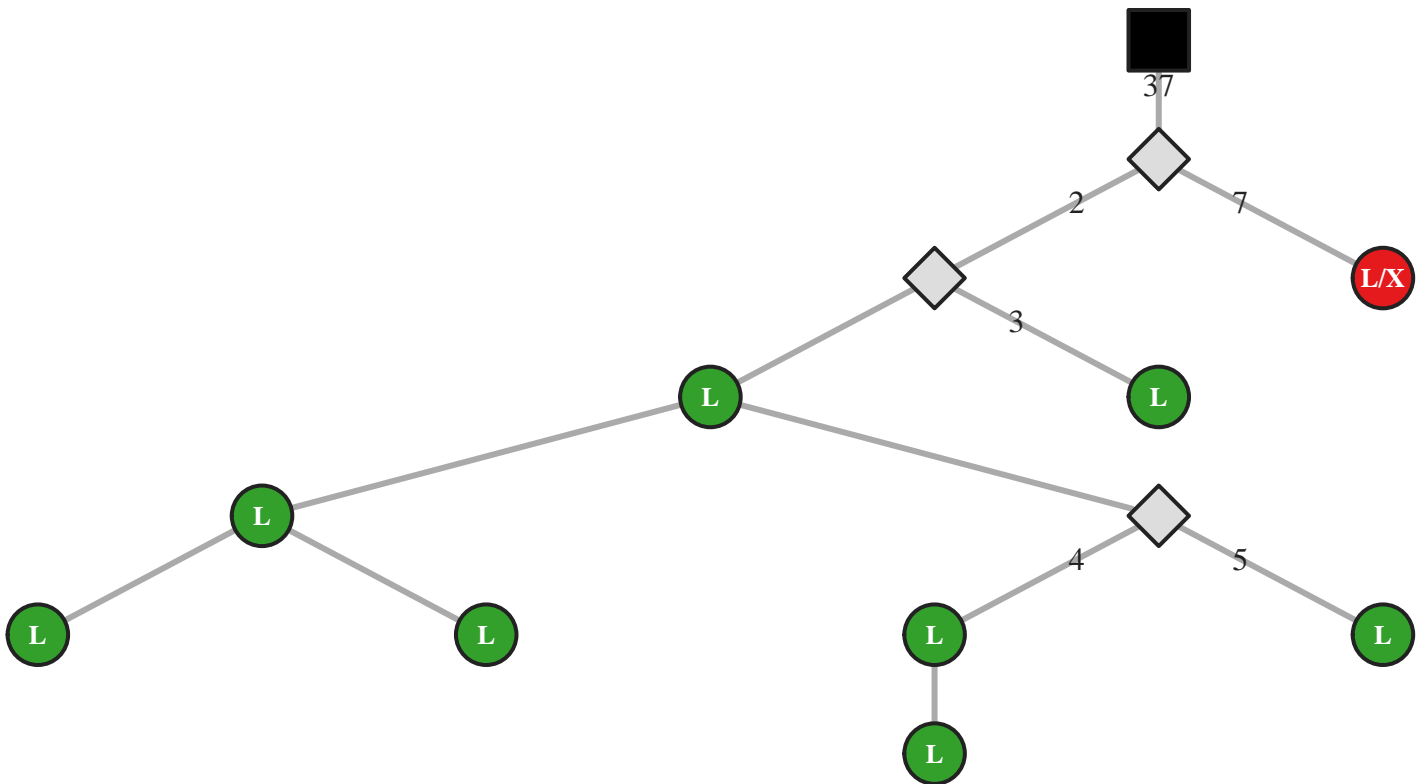
M5 IgG IGHV3-15/J4 42bp (16193)



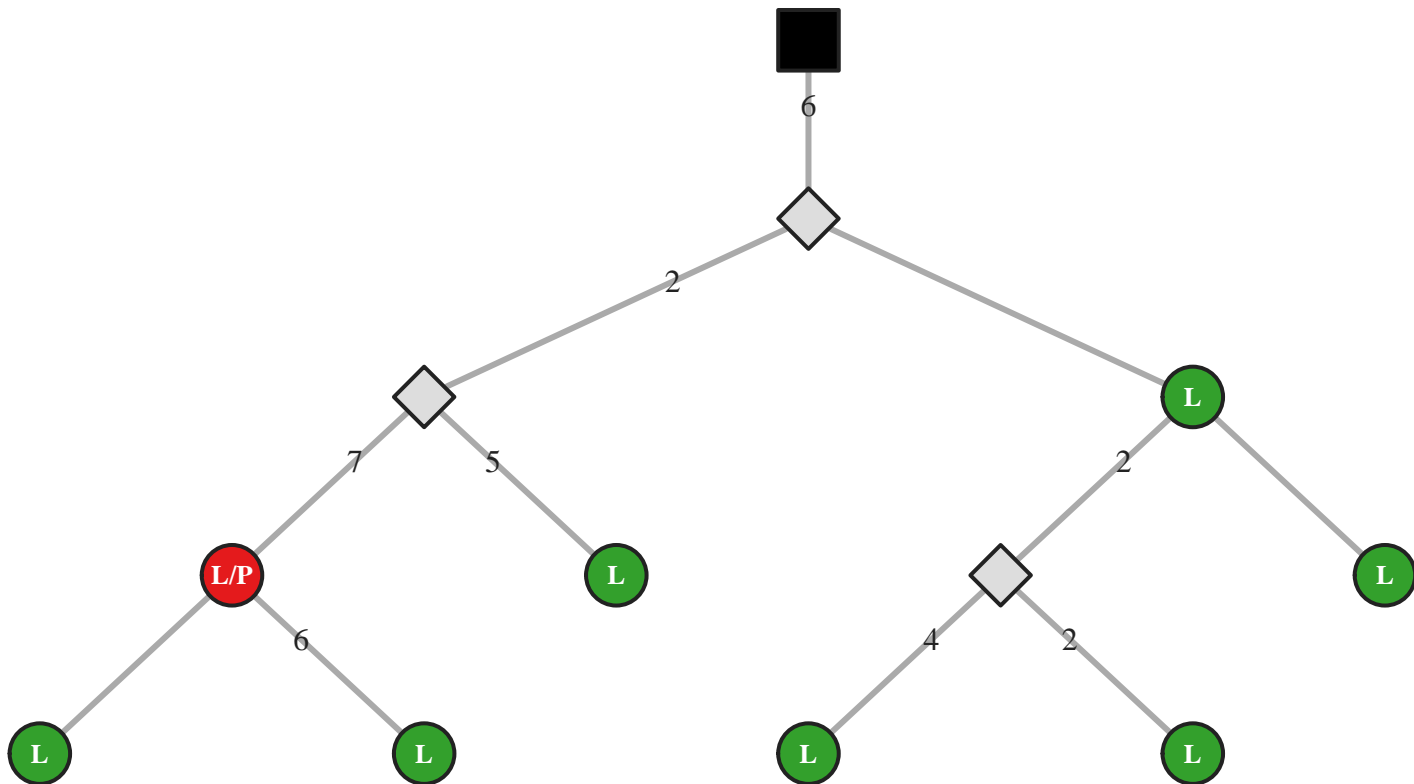
M5 IgG IGHV3-15/J4 42bp (16235)



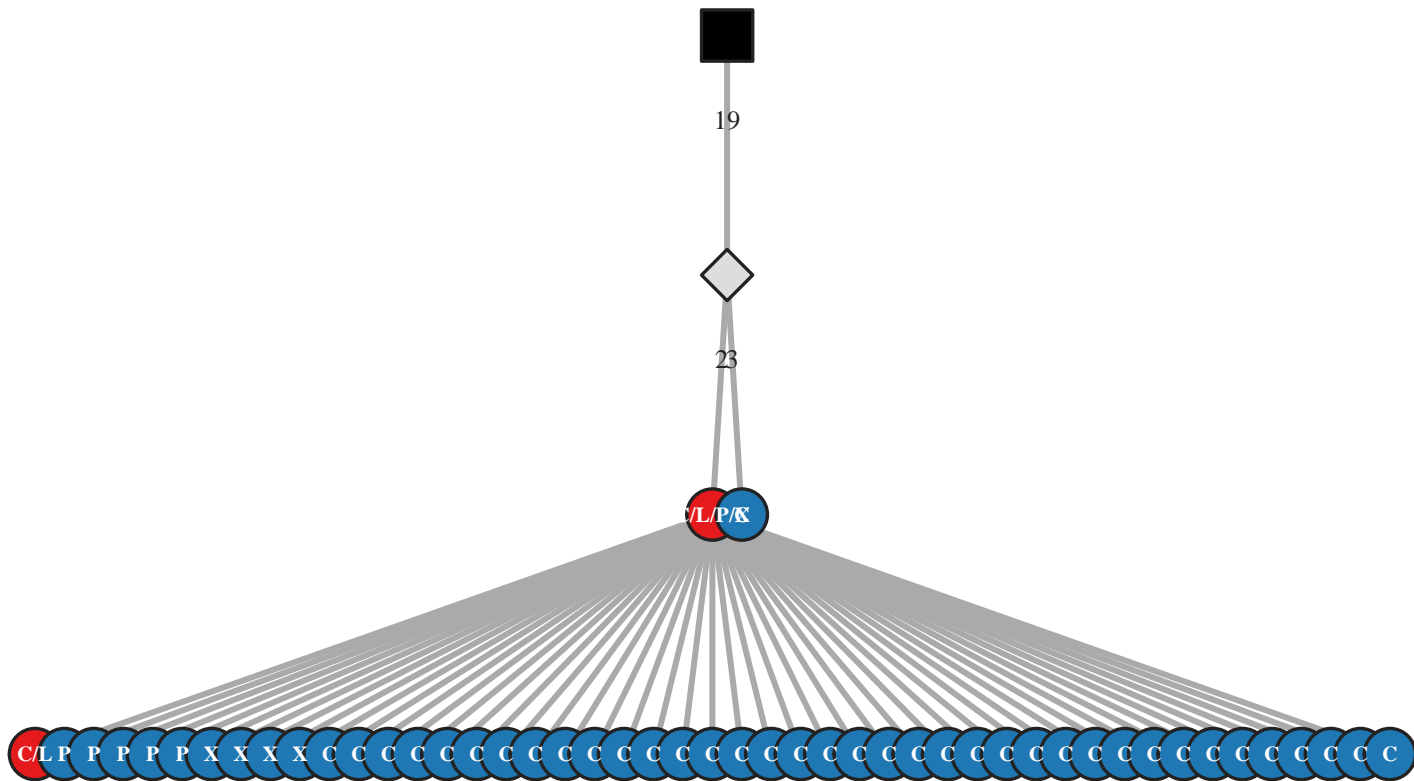
M5 IgA IGHV3-15/J4 45bp (12218)



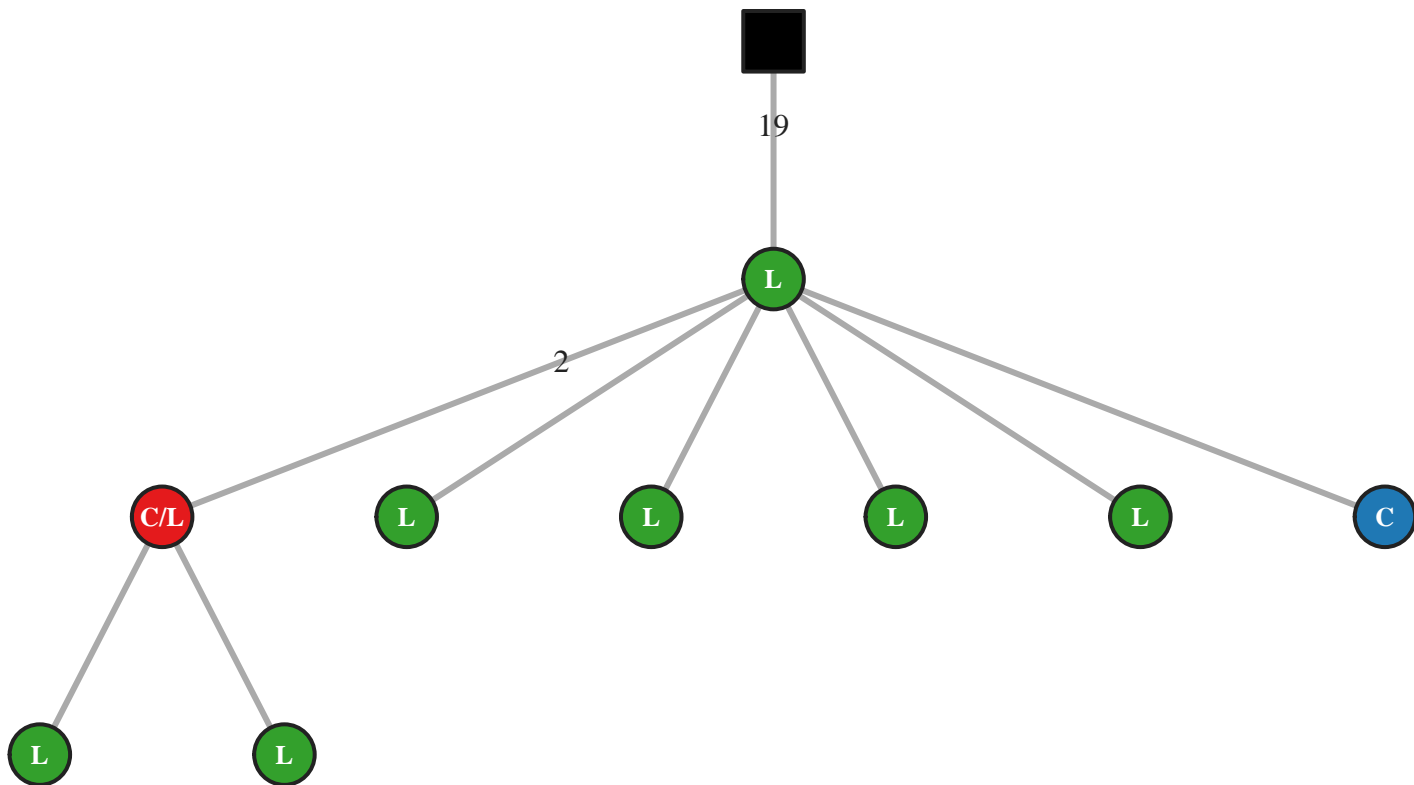
M5 IgG IGHV3-15/J4 45bp (16259)



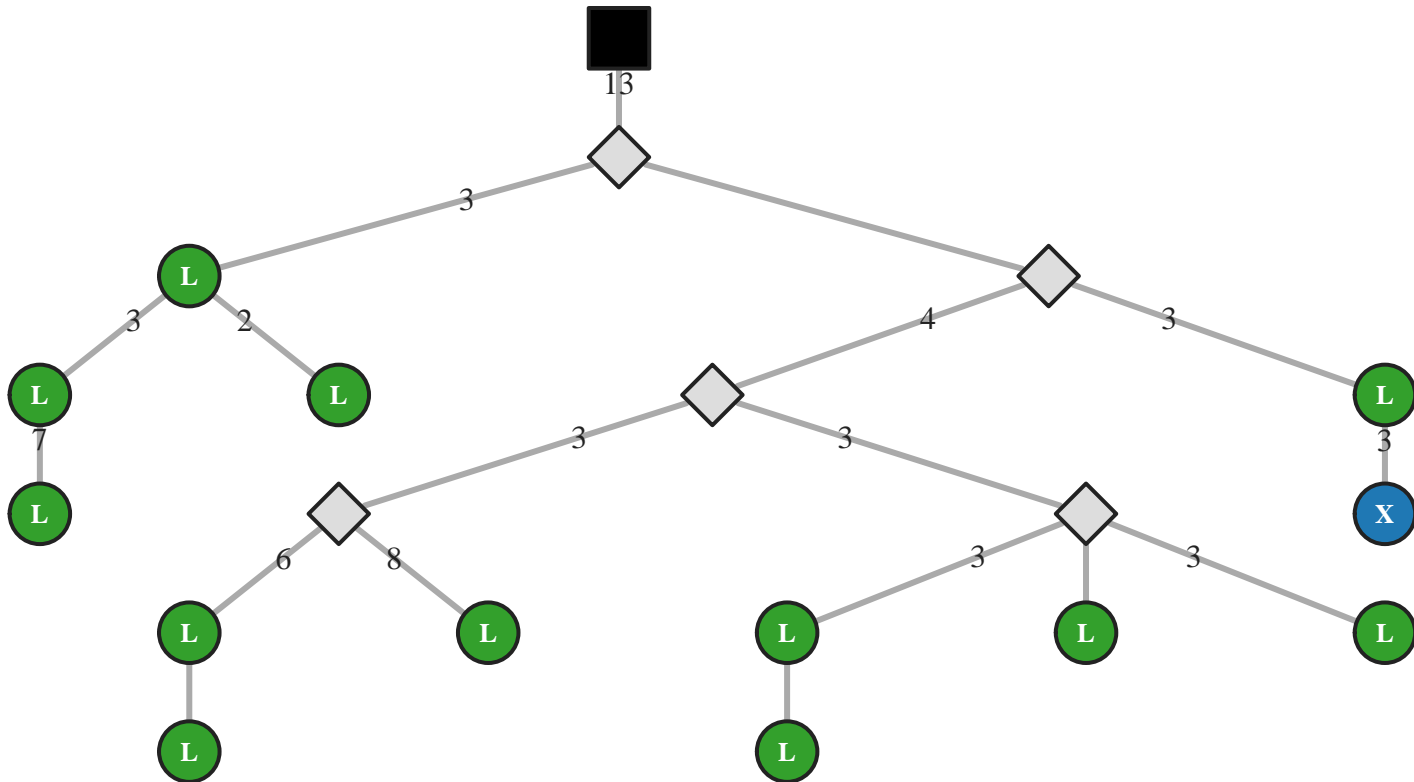
M5 IgA IGHV3-15/J4 48bp (48716)



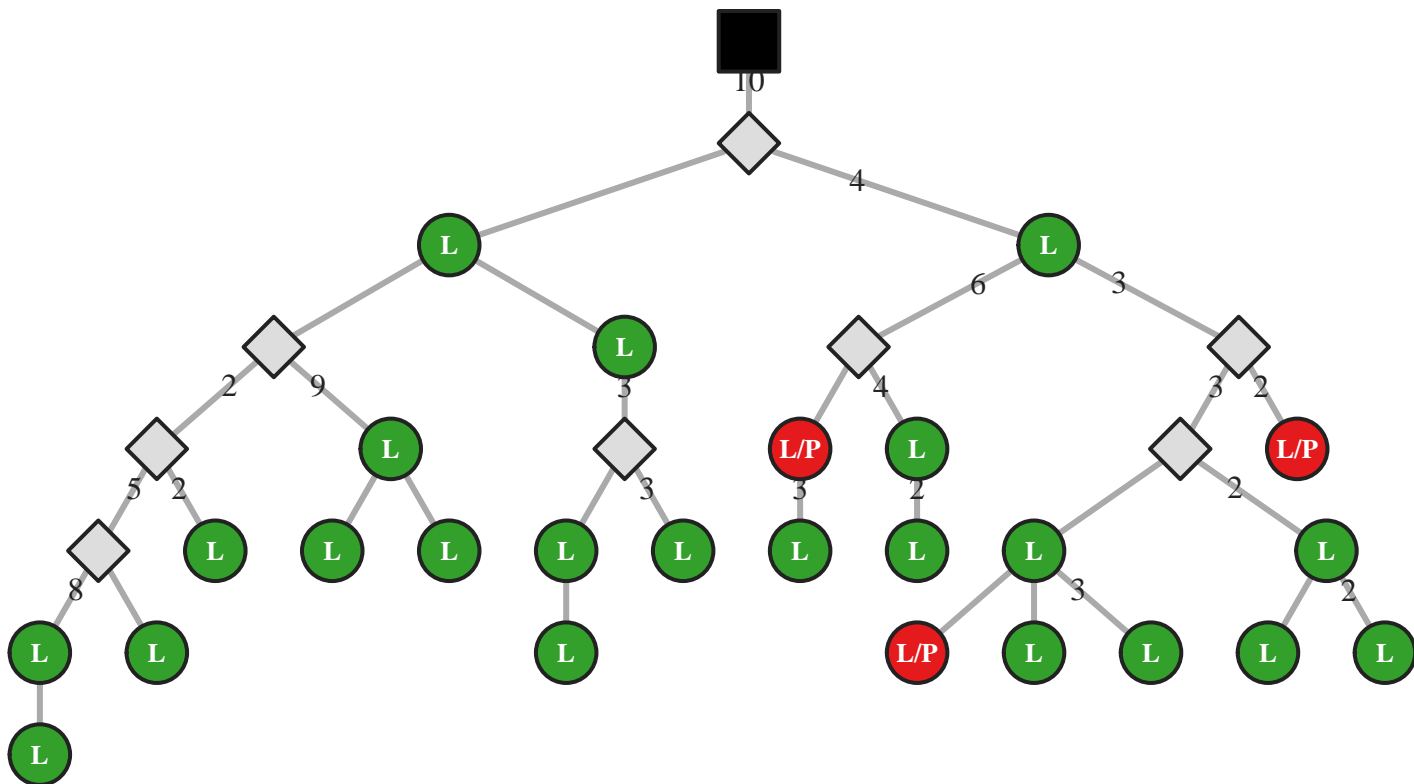
M5 IgA IGHV3-15/J4 48bp (48720)



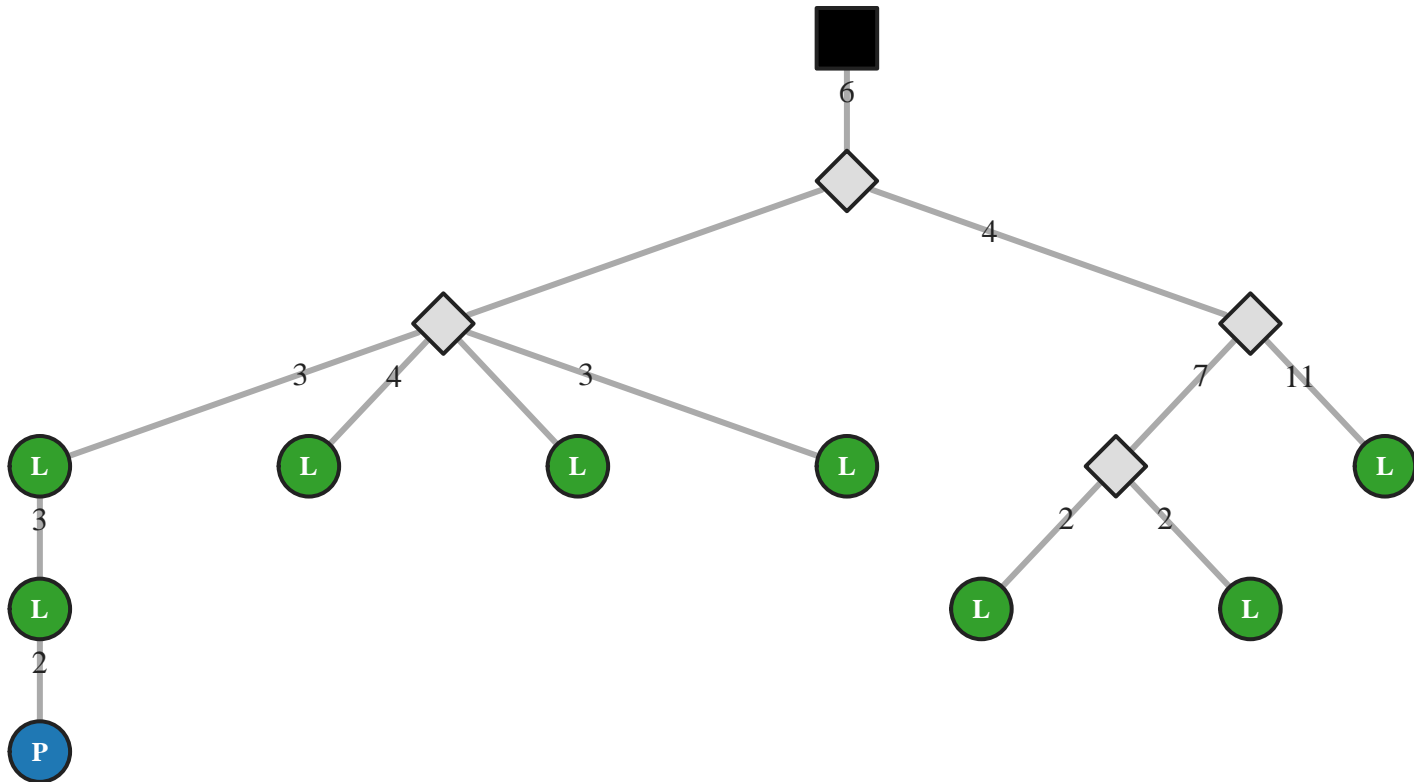
M5 IgG IGHV3-15/J4 48bp (51124)



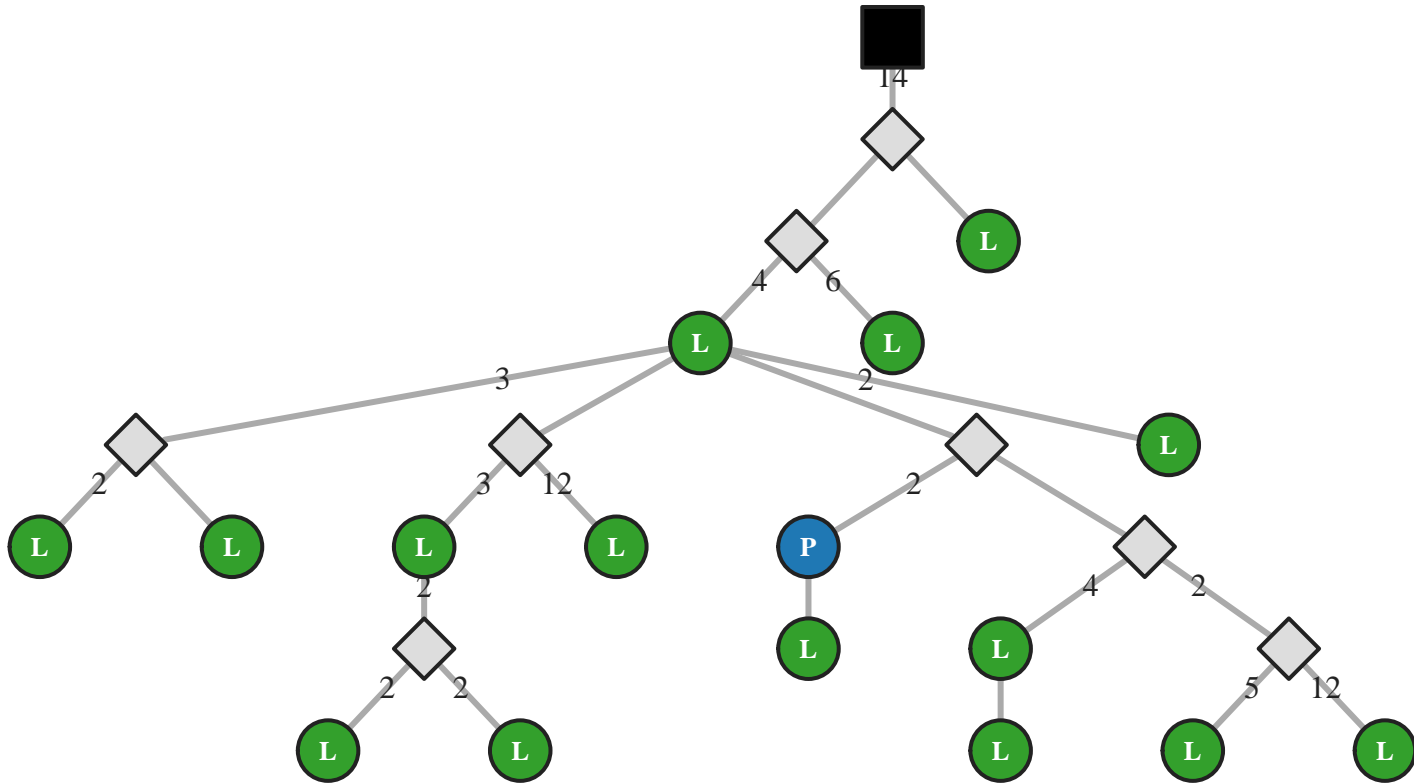
M5 IgG IGHV3-15/J4 51bp (51148)



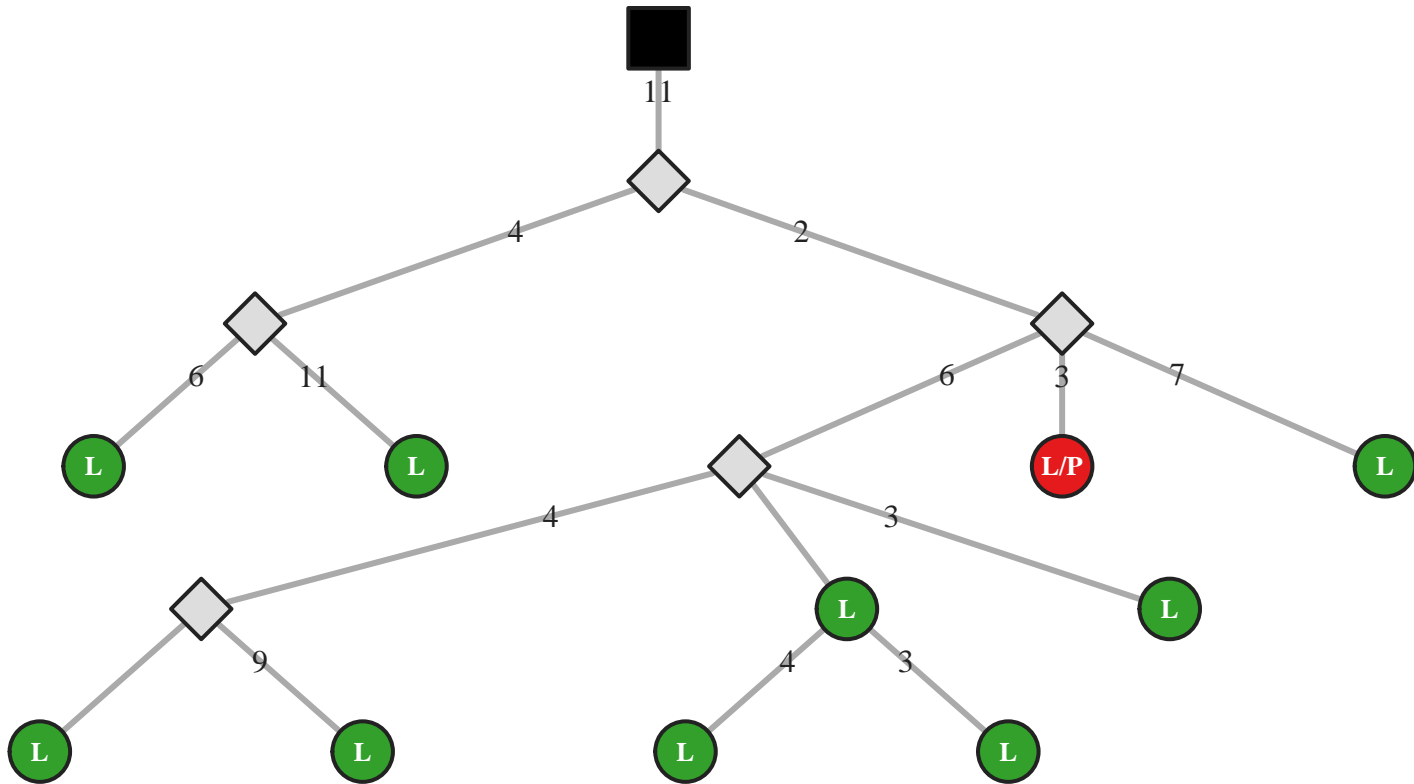
M5 IgG IGHV3-15/J4 54bp (43384)



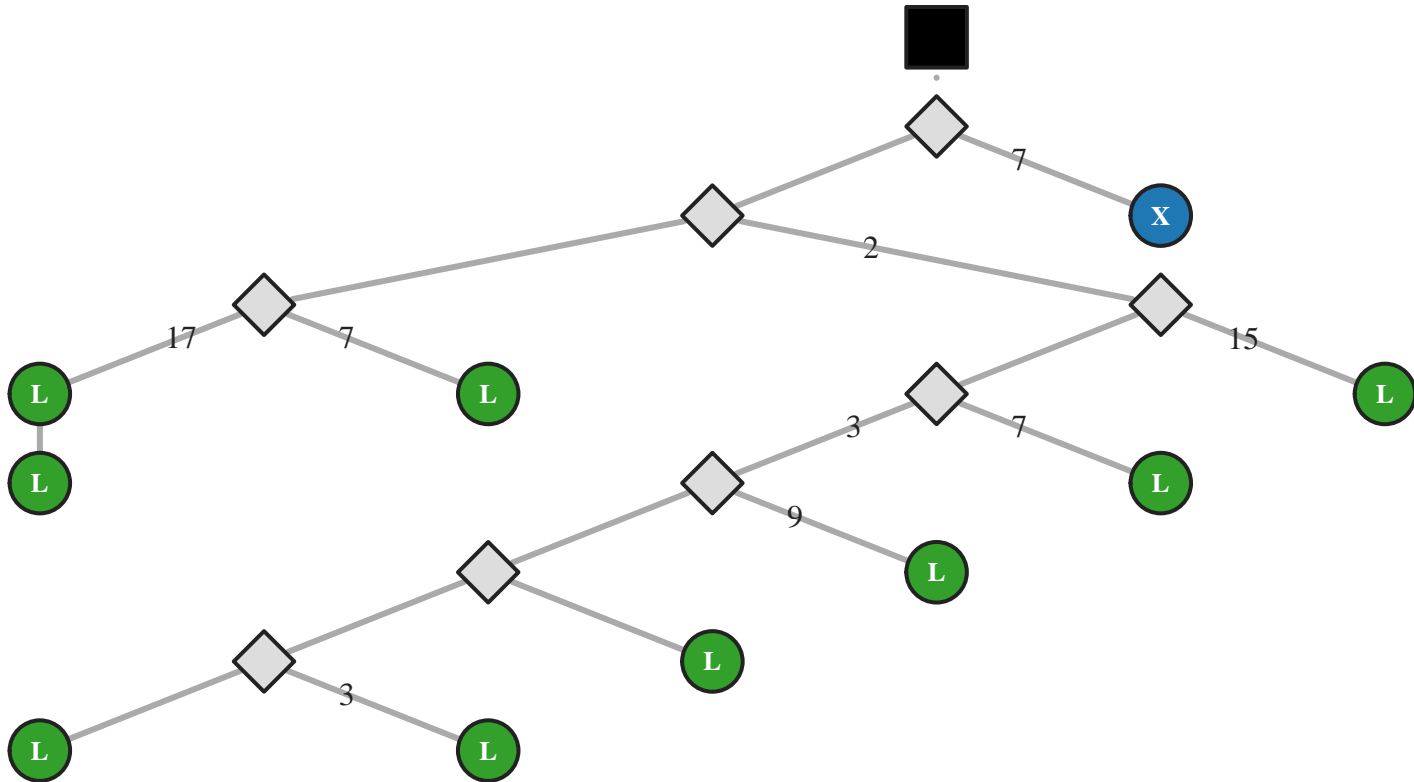
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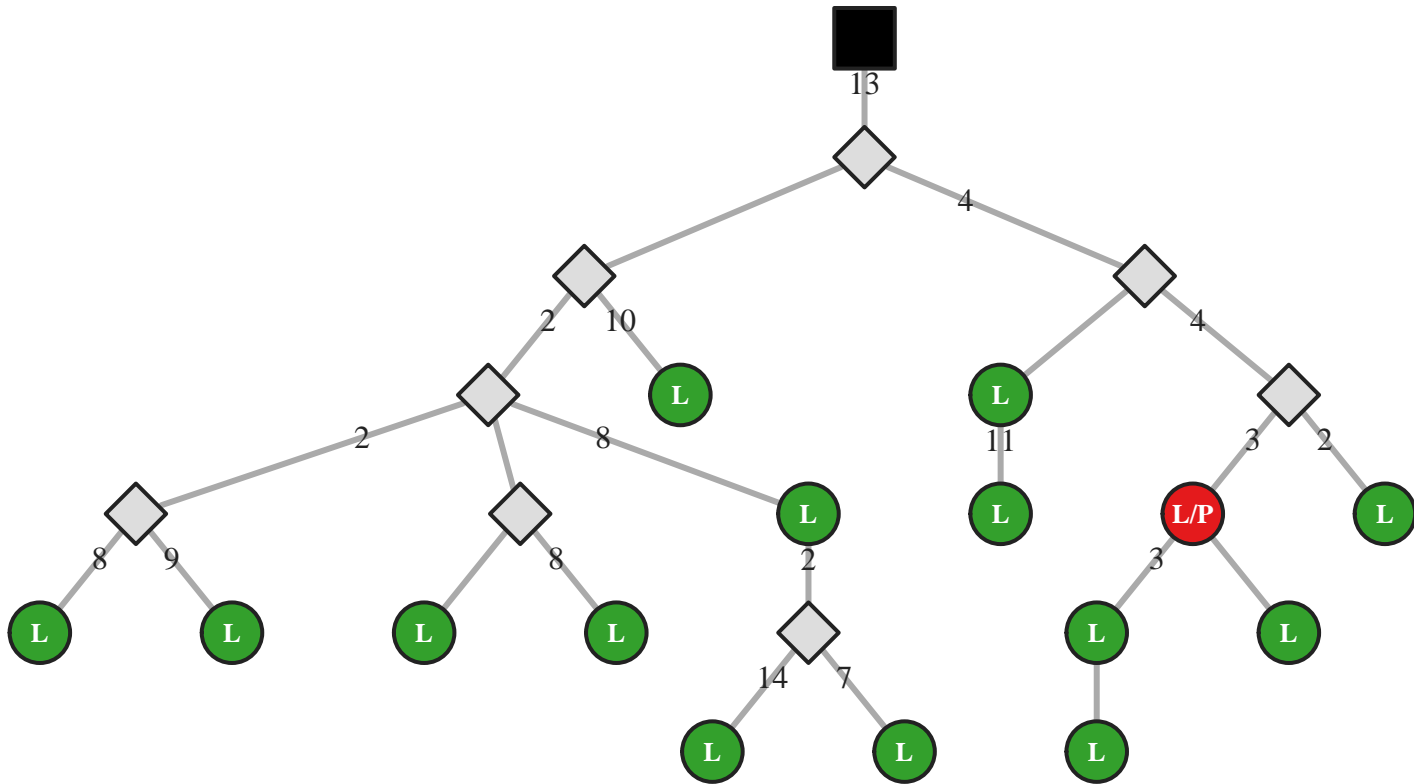
M5 IgG IGHV3-15/J4 60bp (6412)



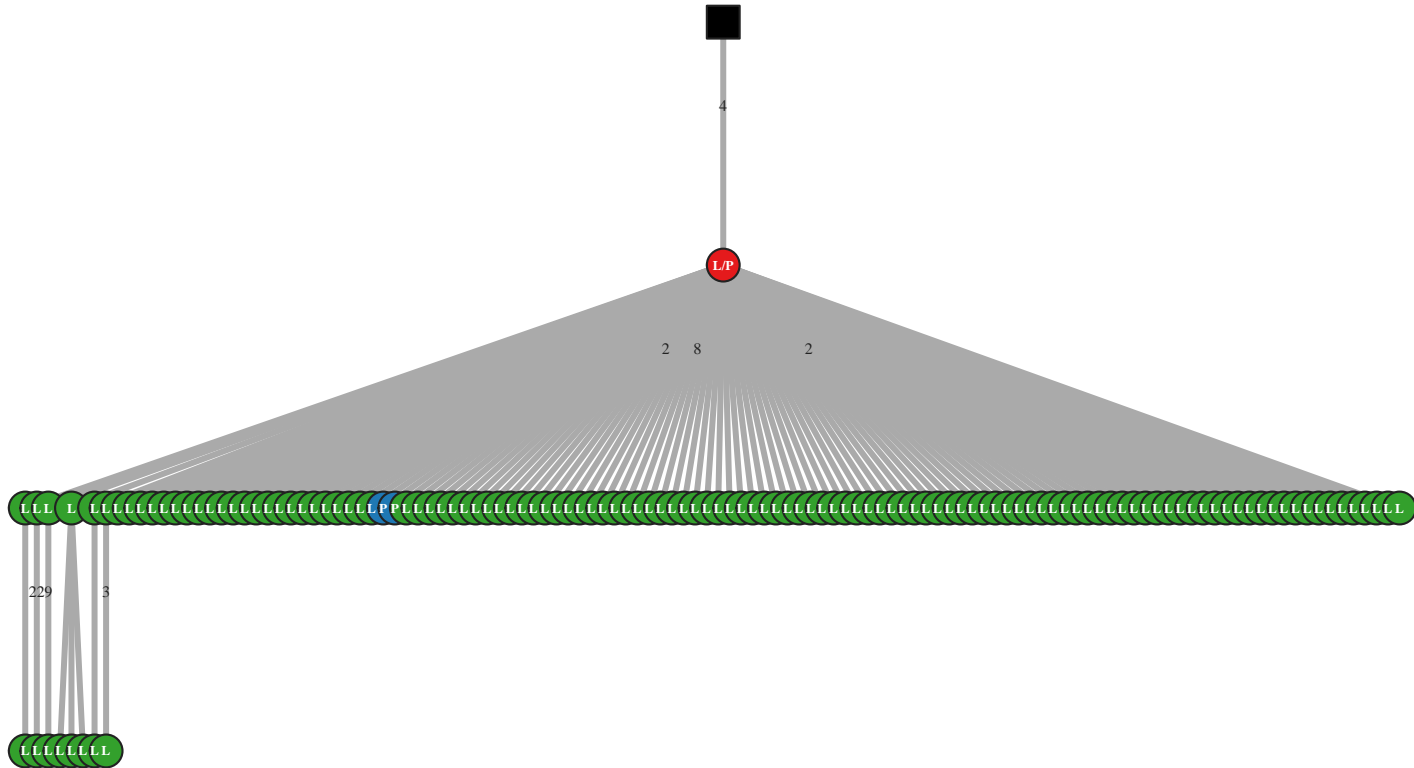
M5 IgG IGHV3-15/J6 45bp (34010)



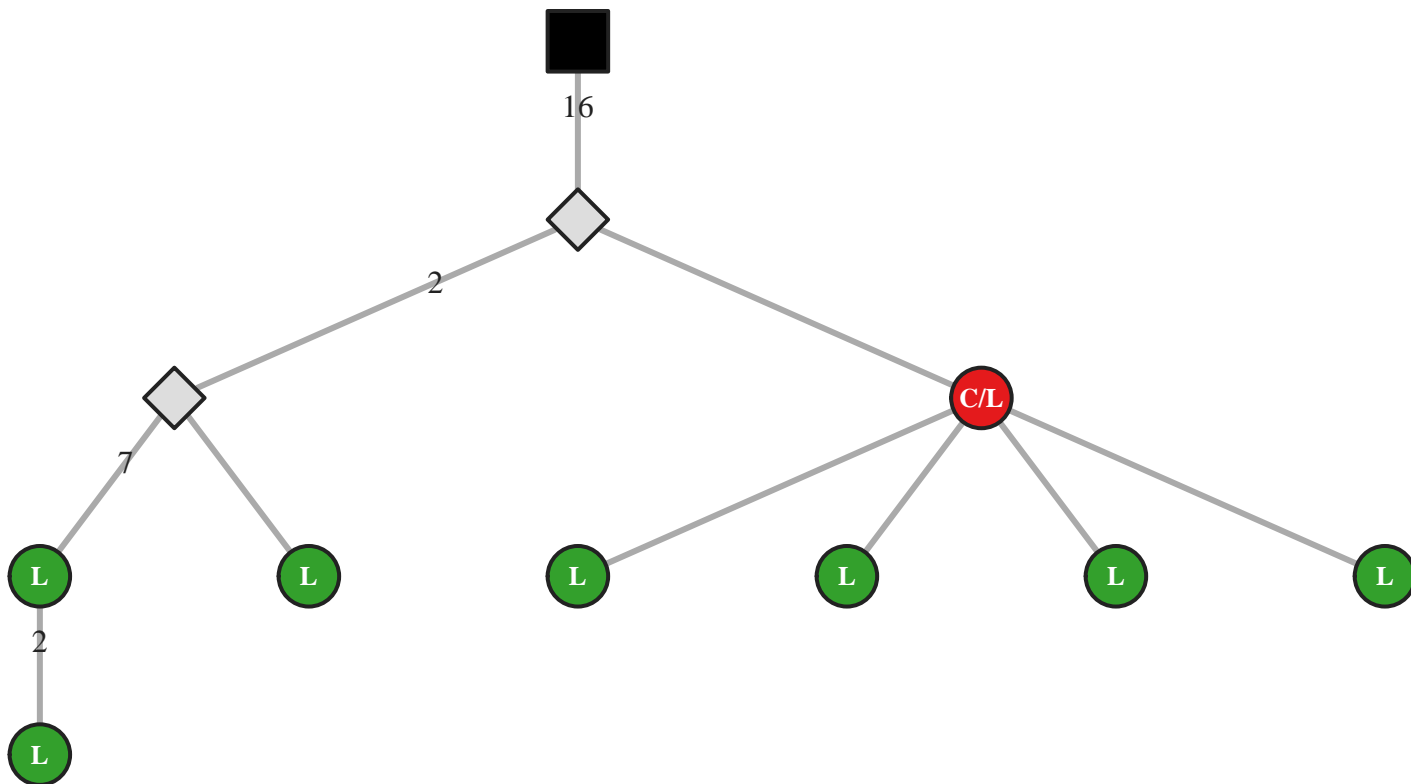
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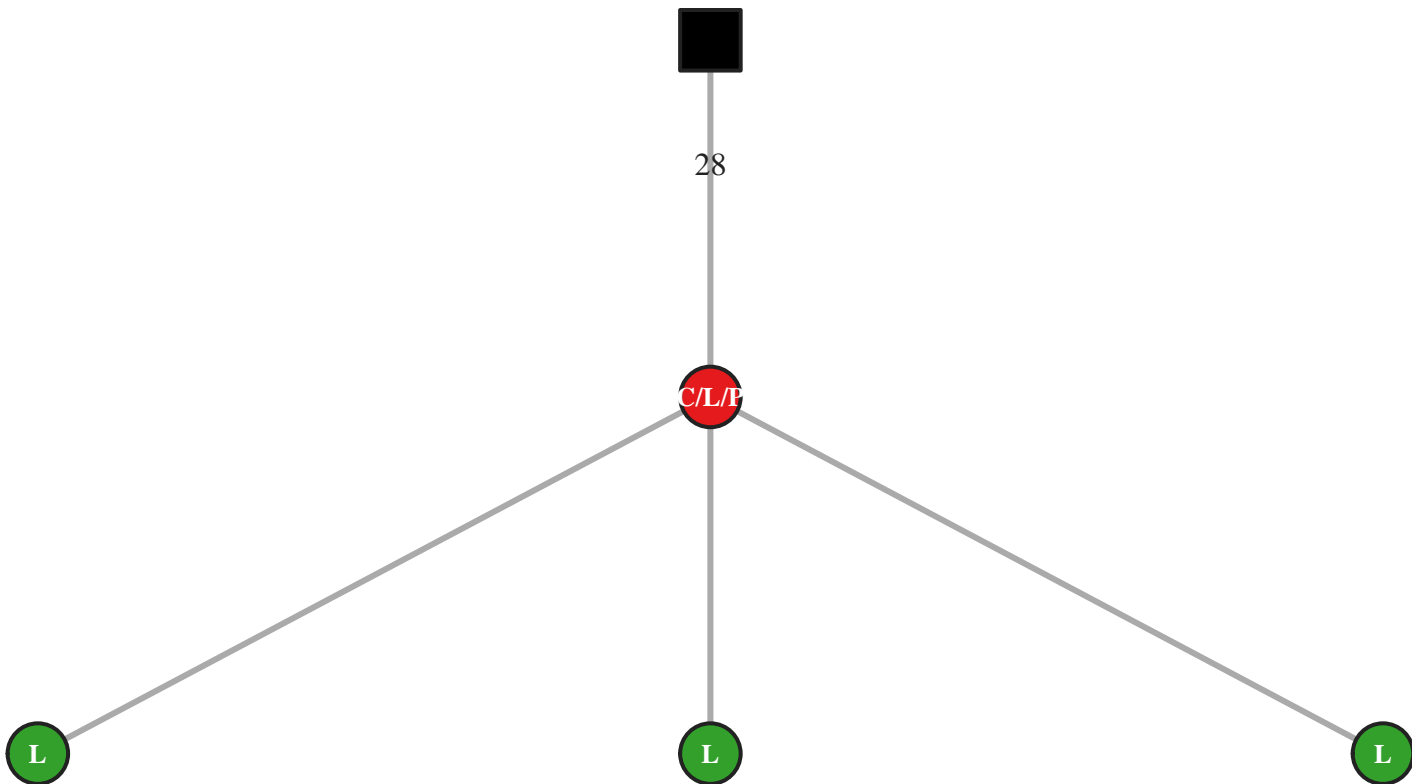
M5 IgG IGHV3-15/J6 54bp (6451)



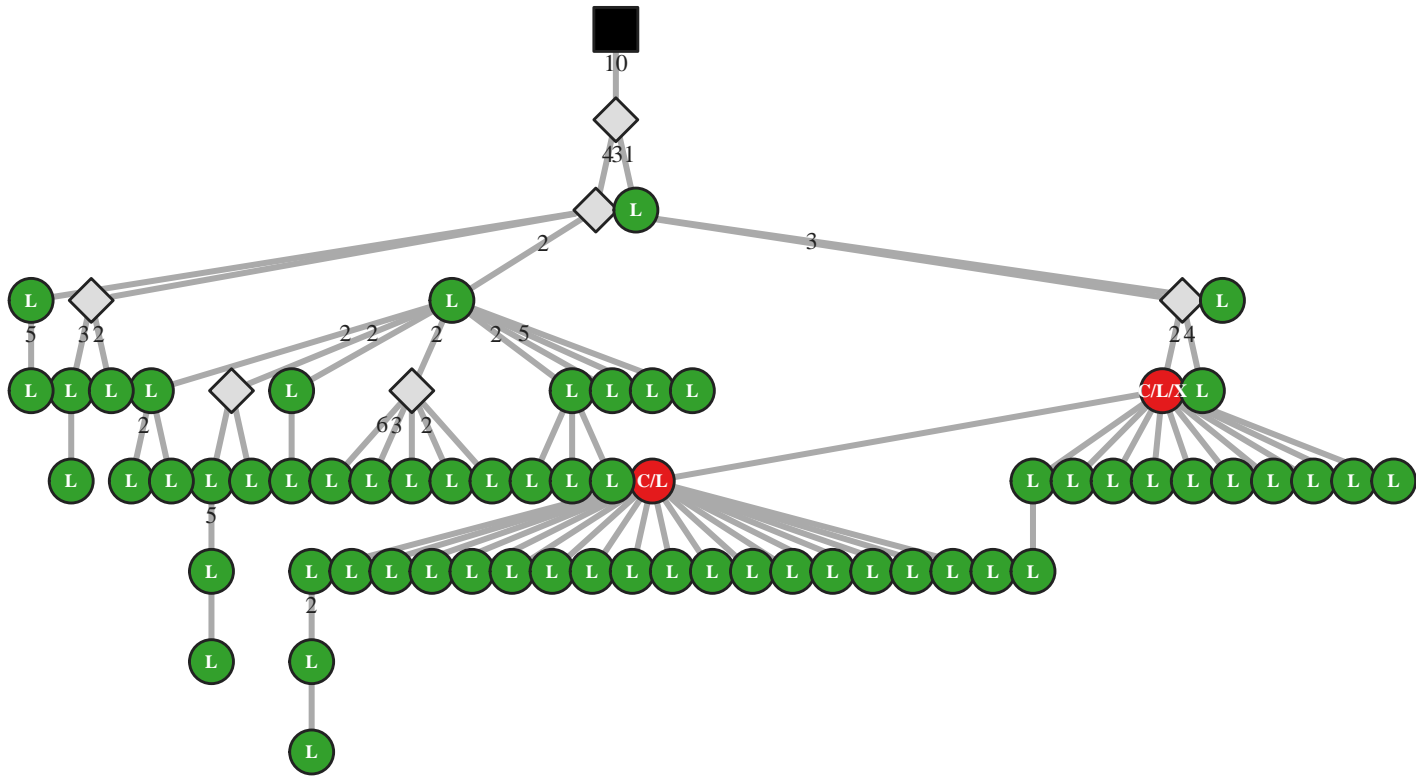
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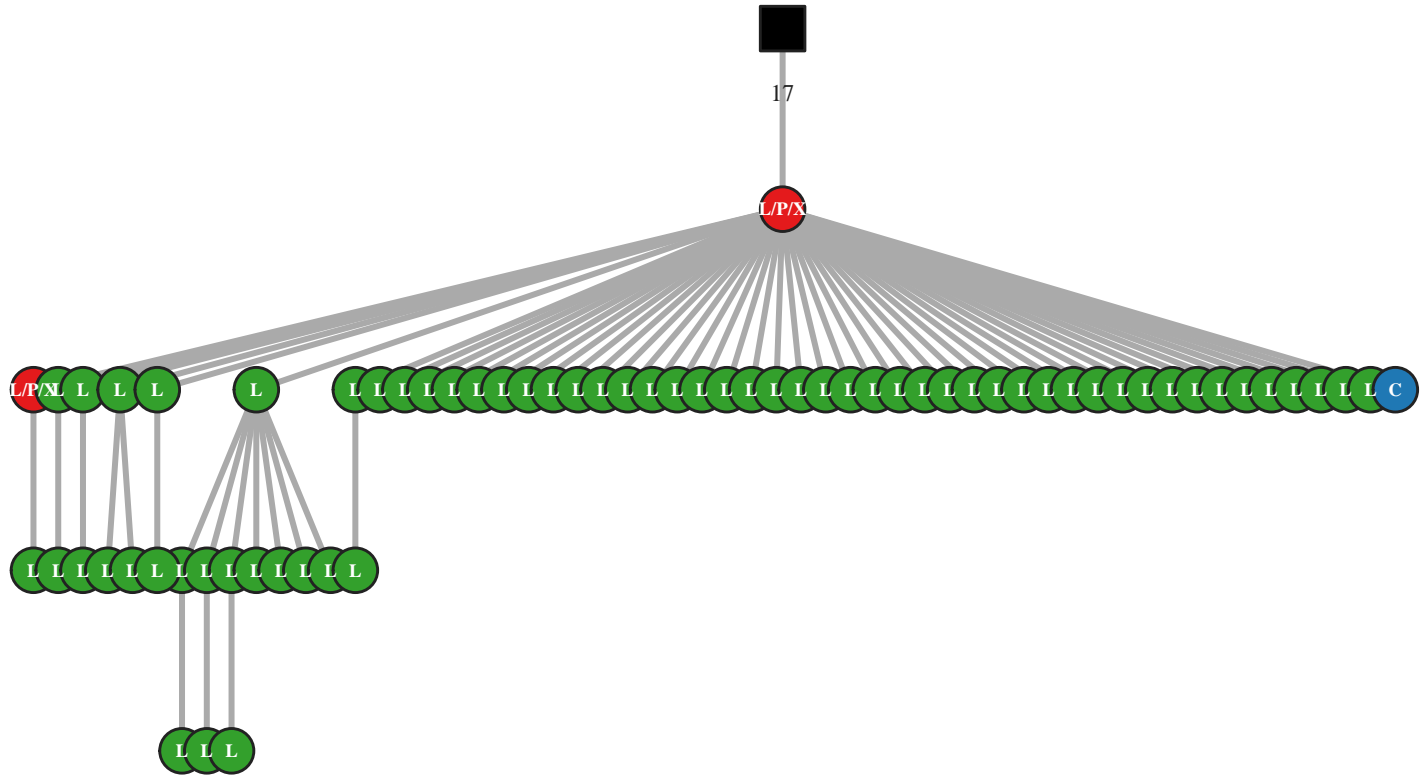
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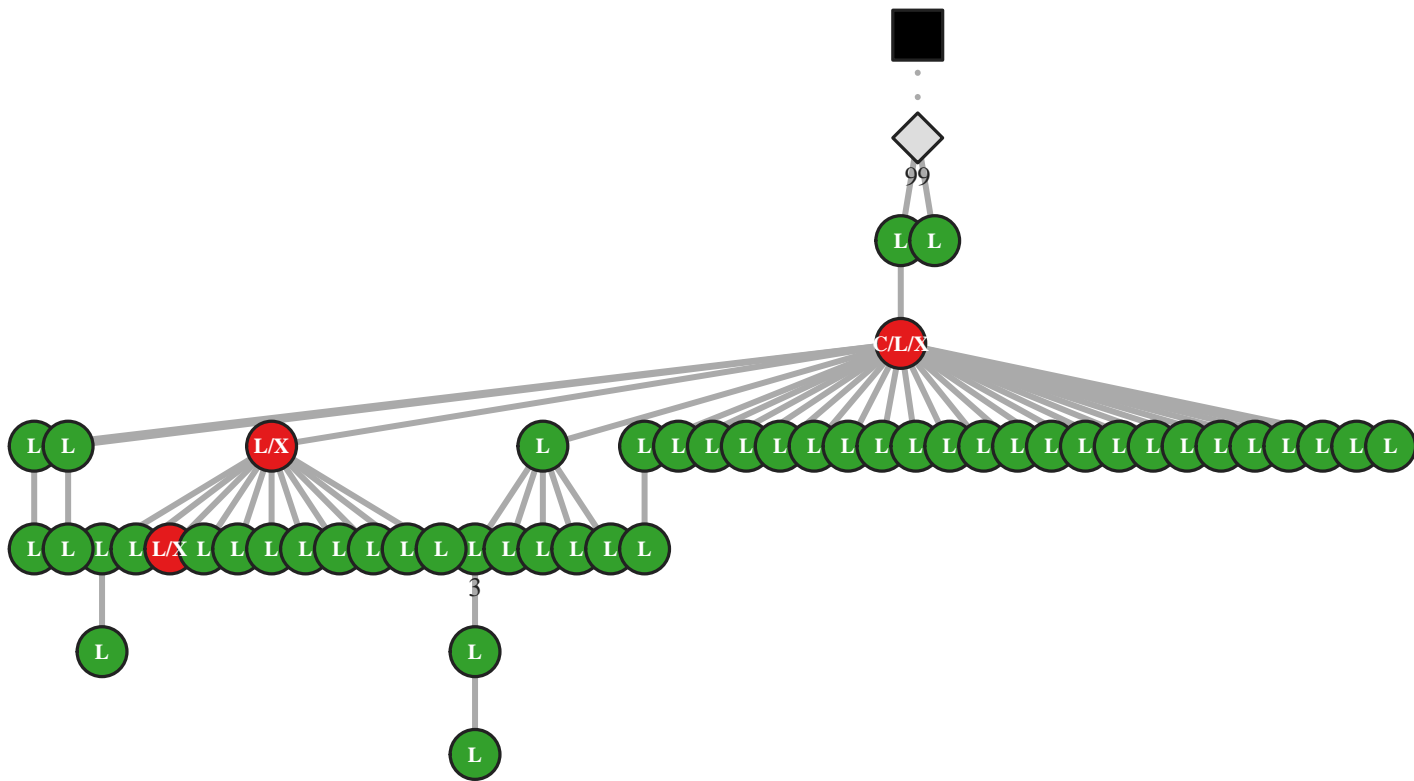
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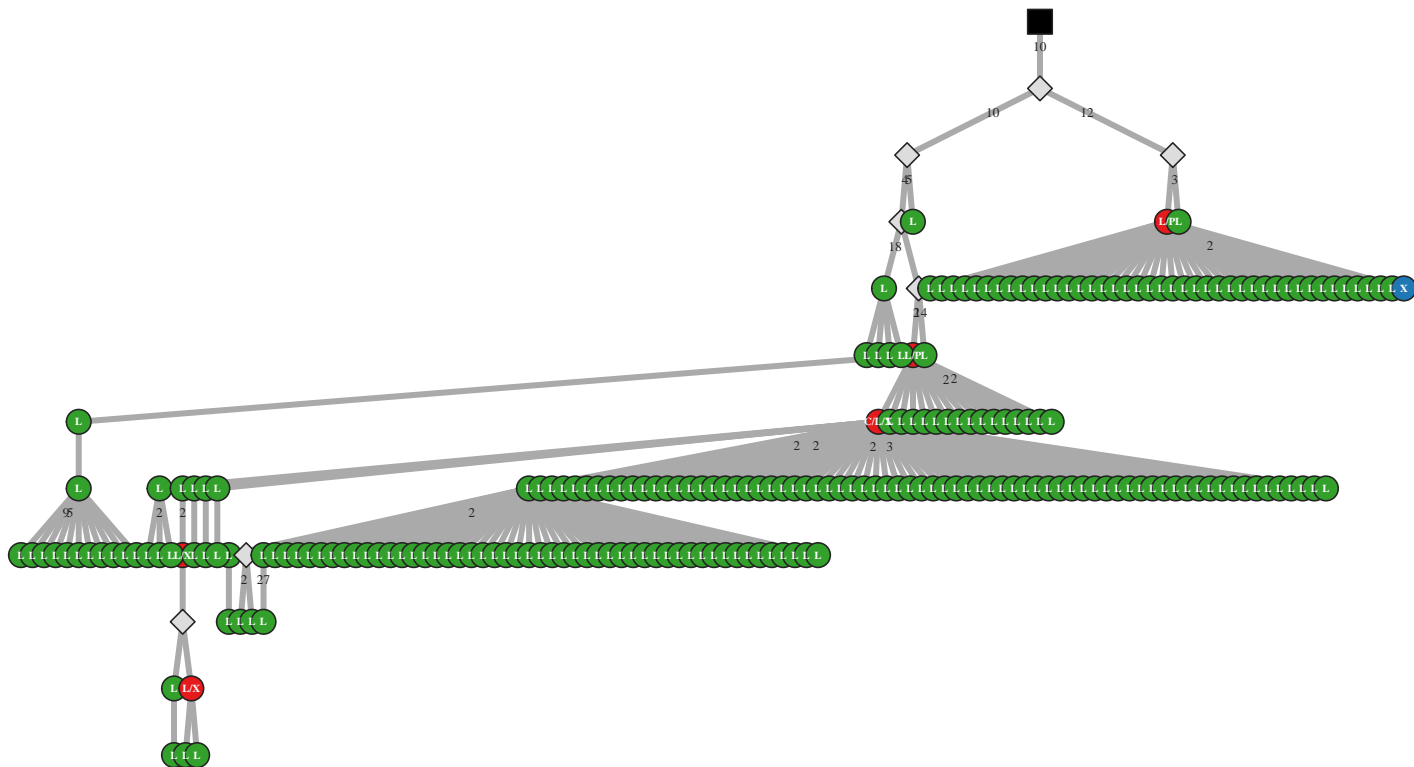
M5 IgG IGHV3-20/J6 66bp (43479)



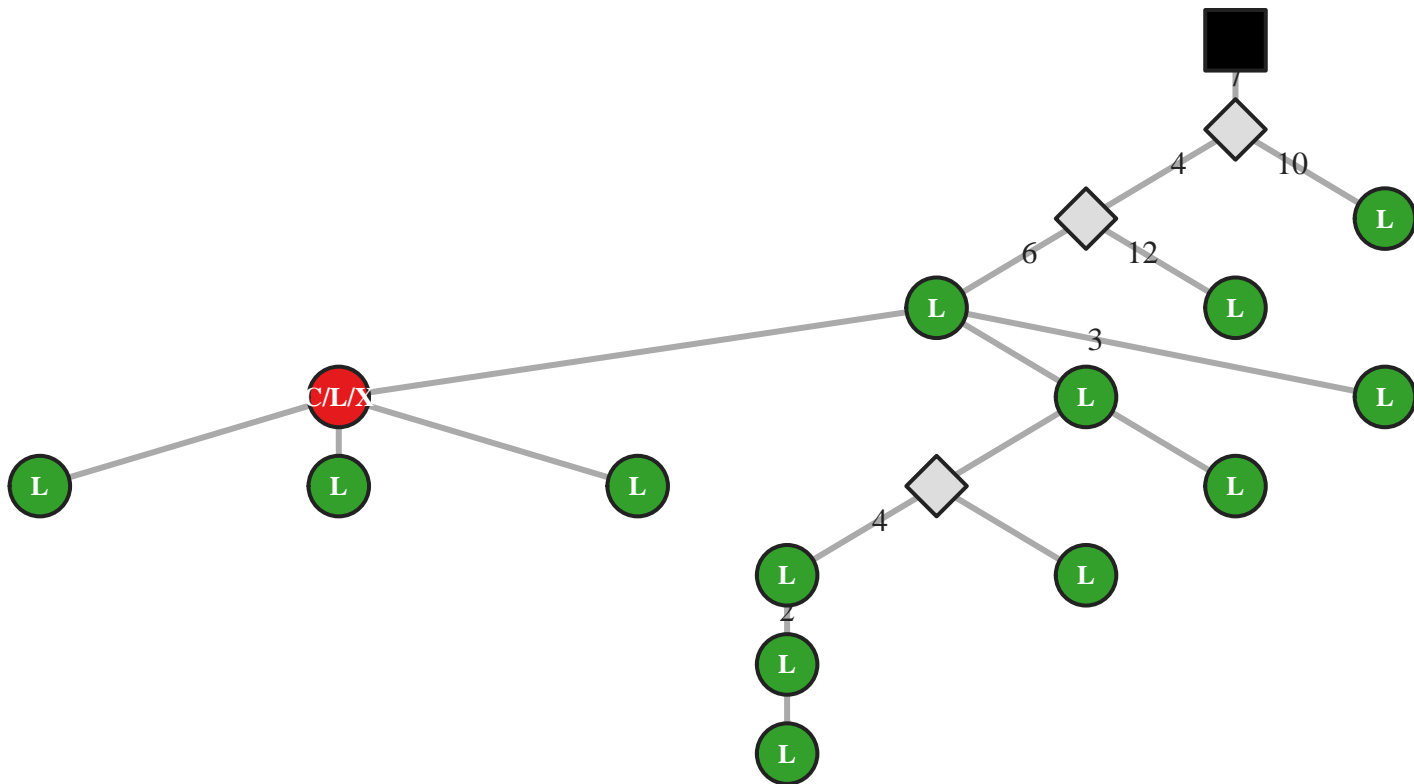
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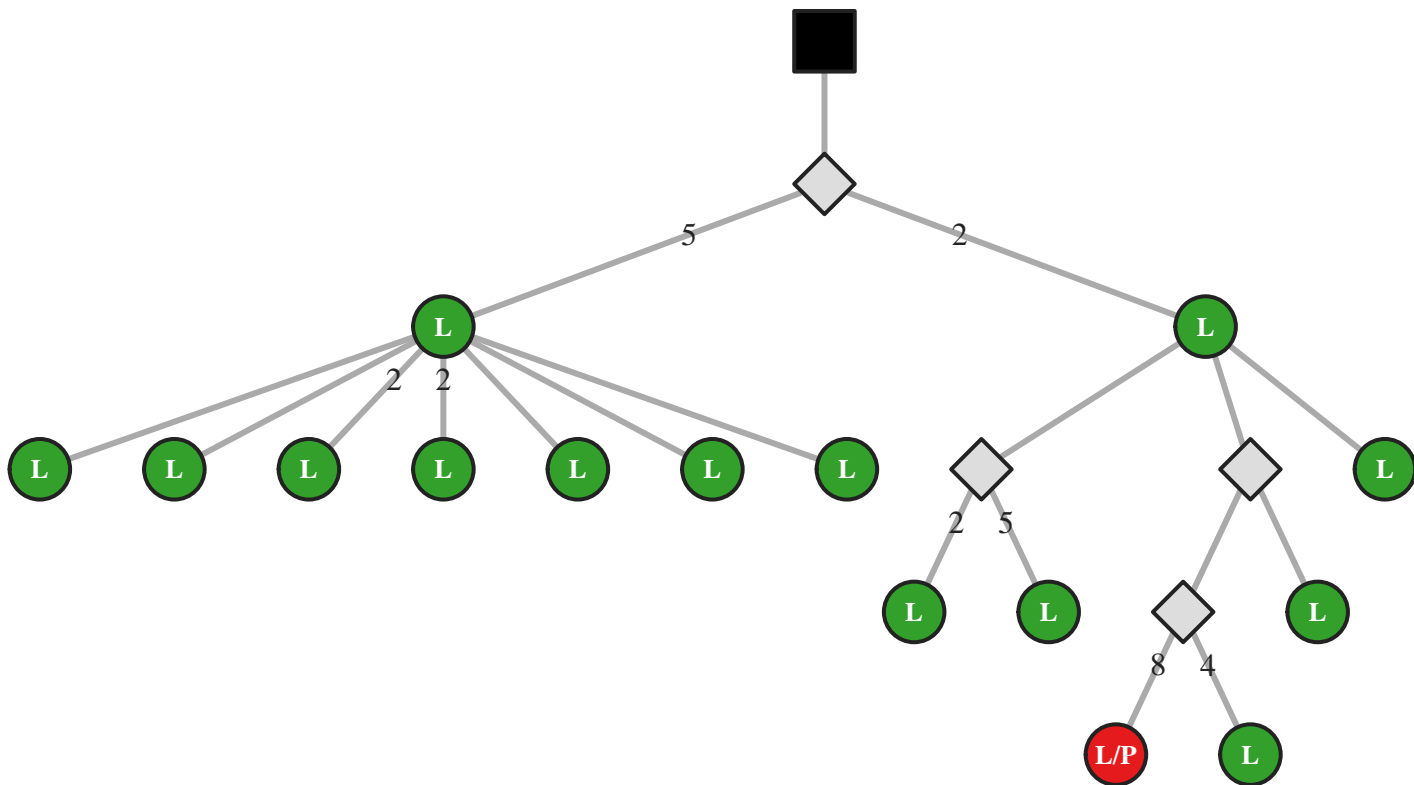
M5 IgG IGHV3-21/J1 36bp (16335)



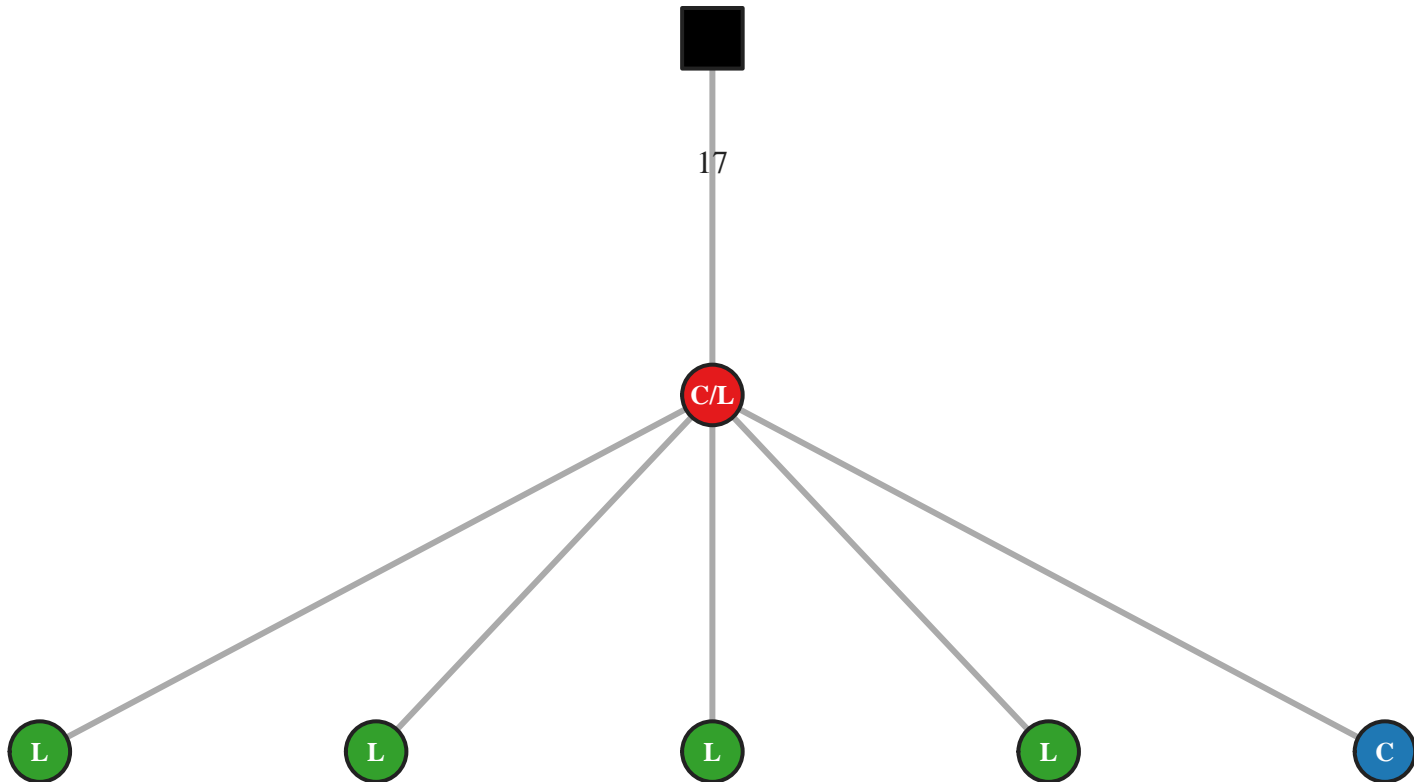
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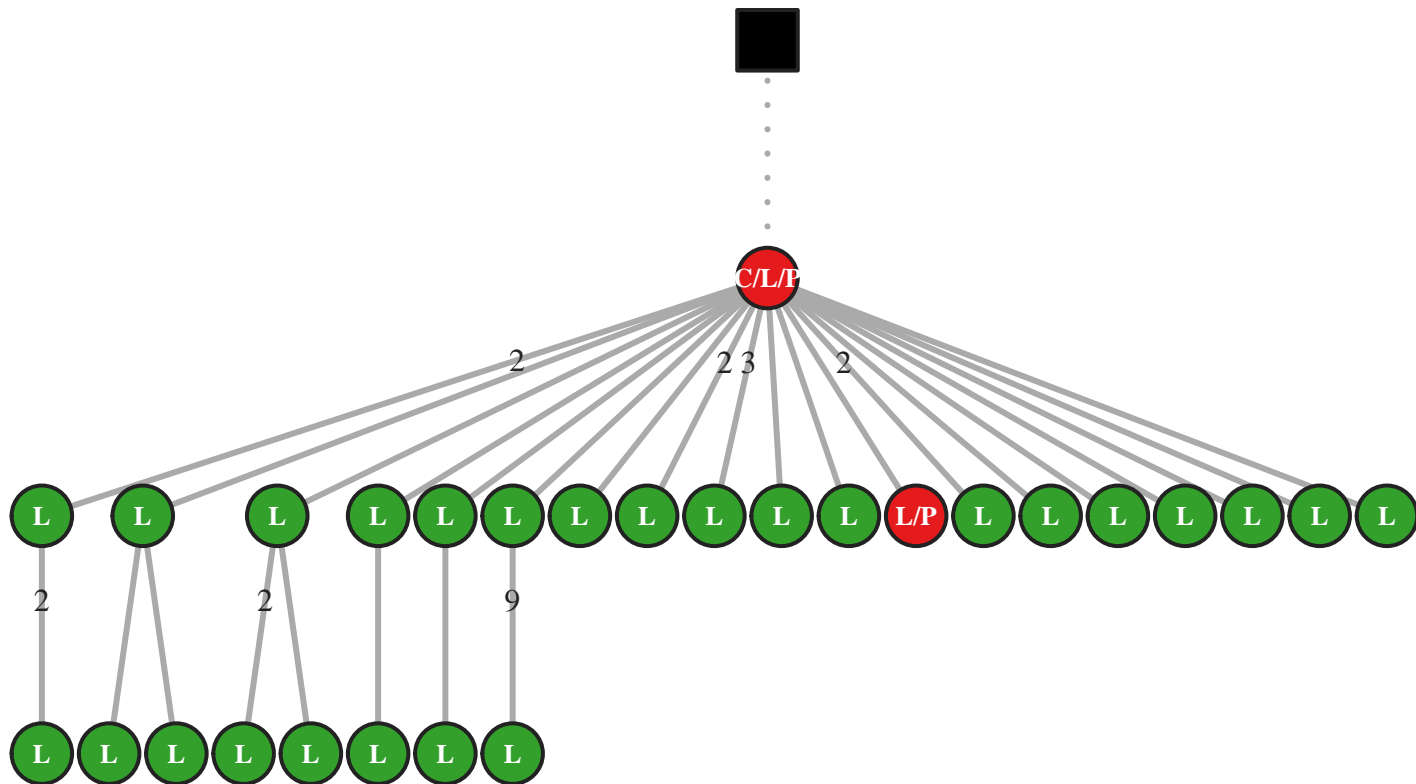
M5 IgG IGHV3-21/J3 33bp (34051)



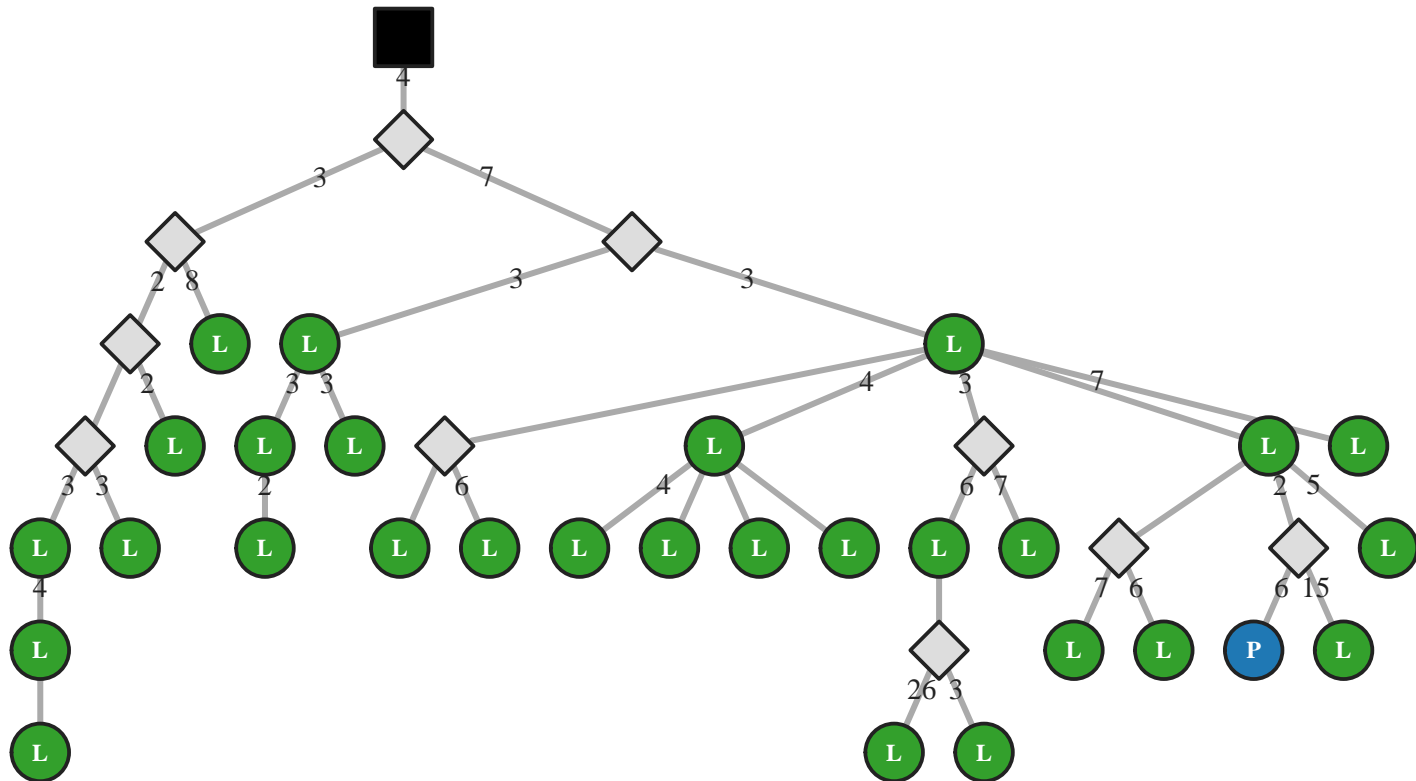
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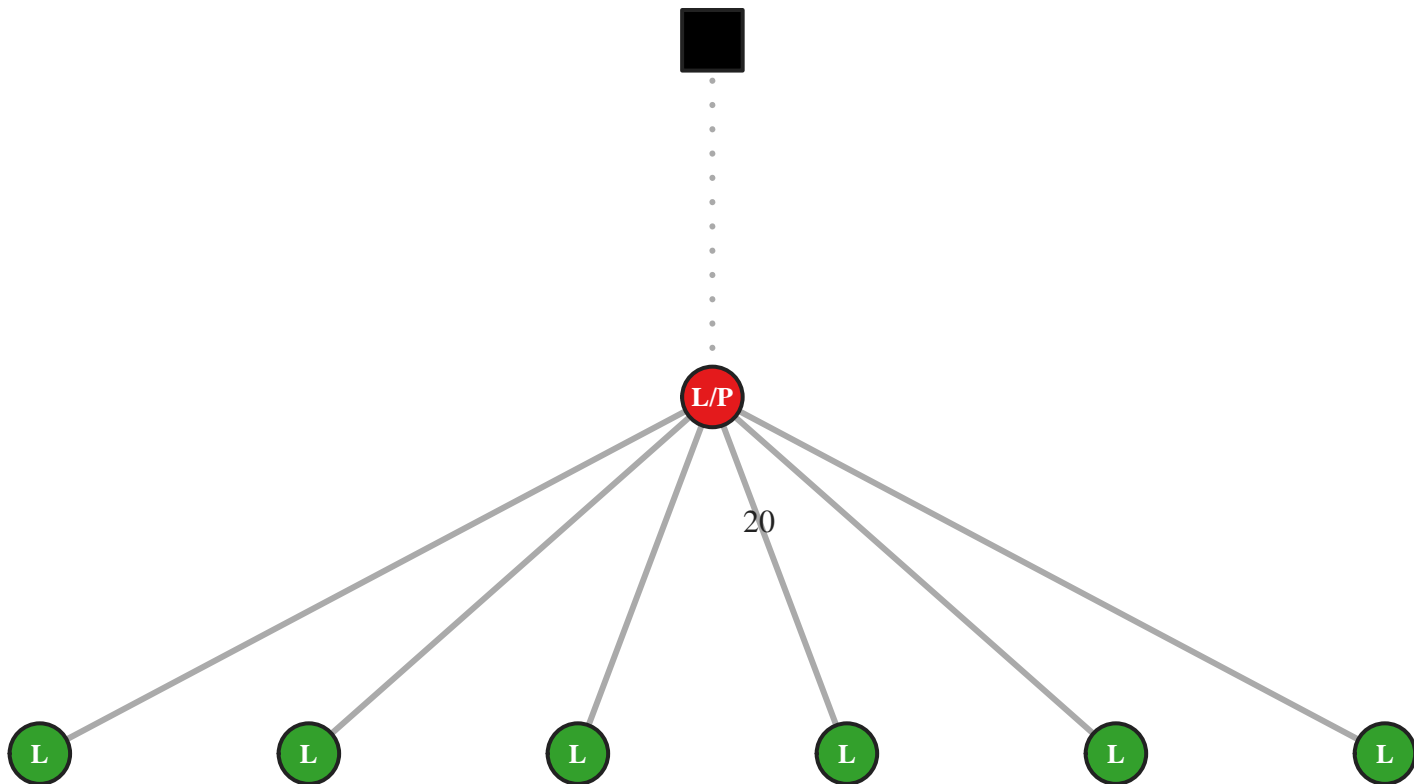
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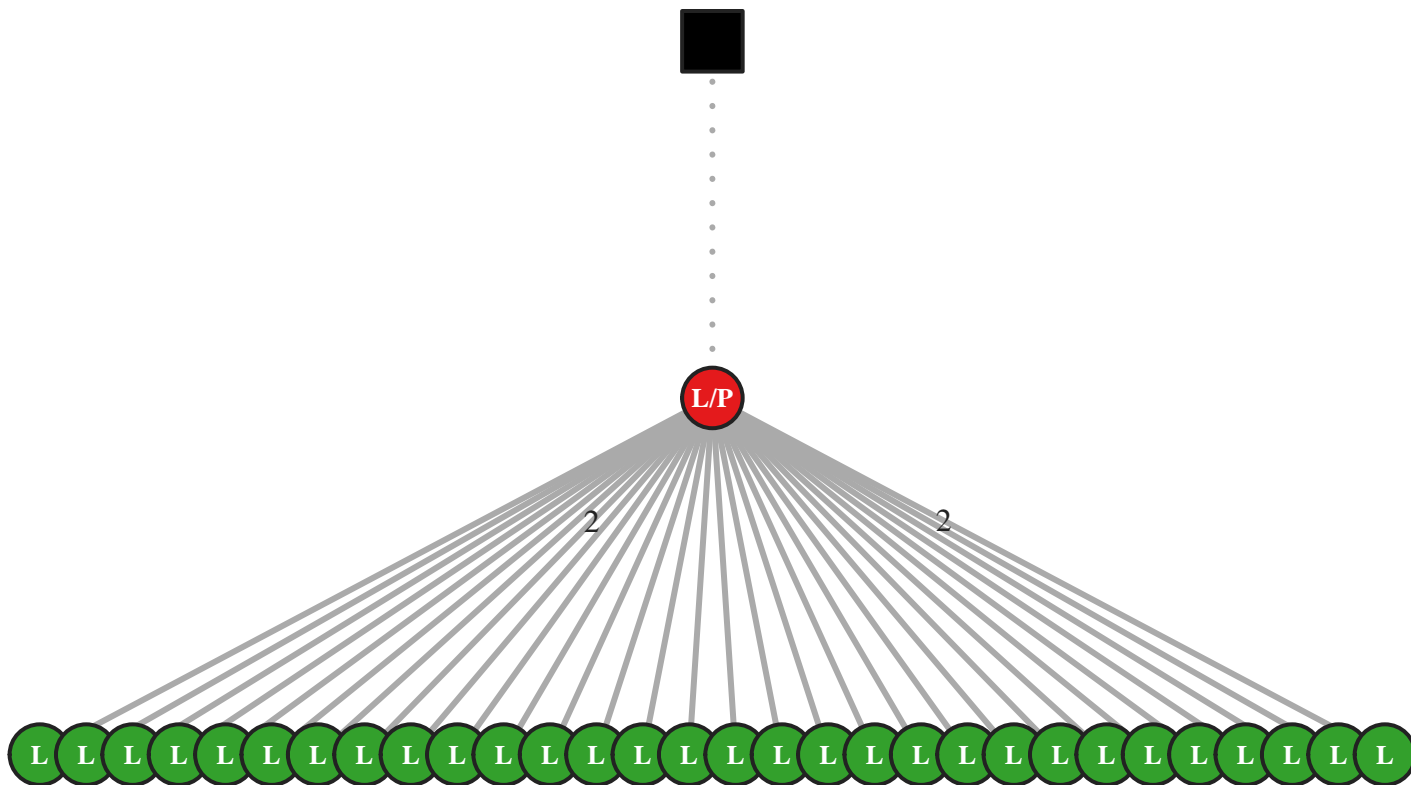
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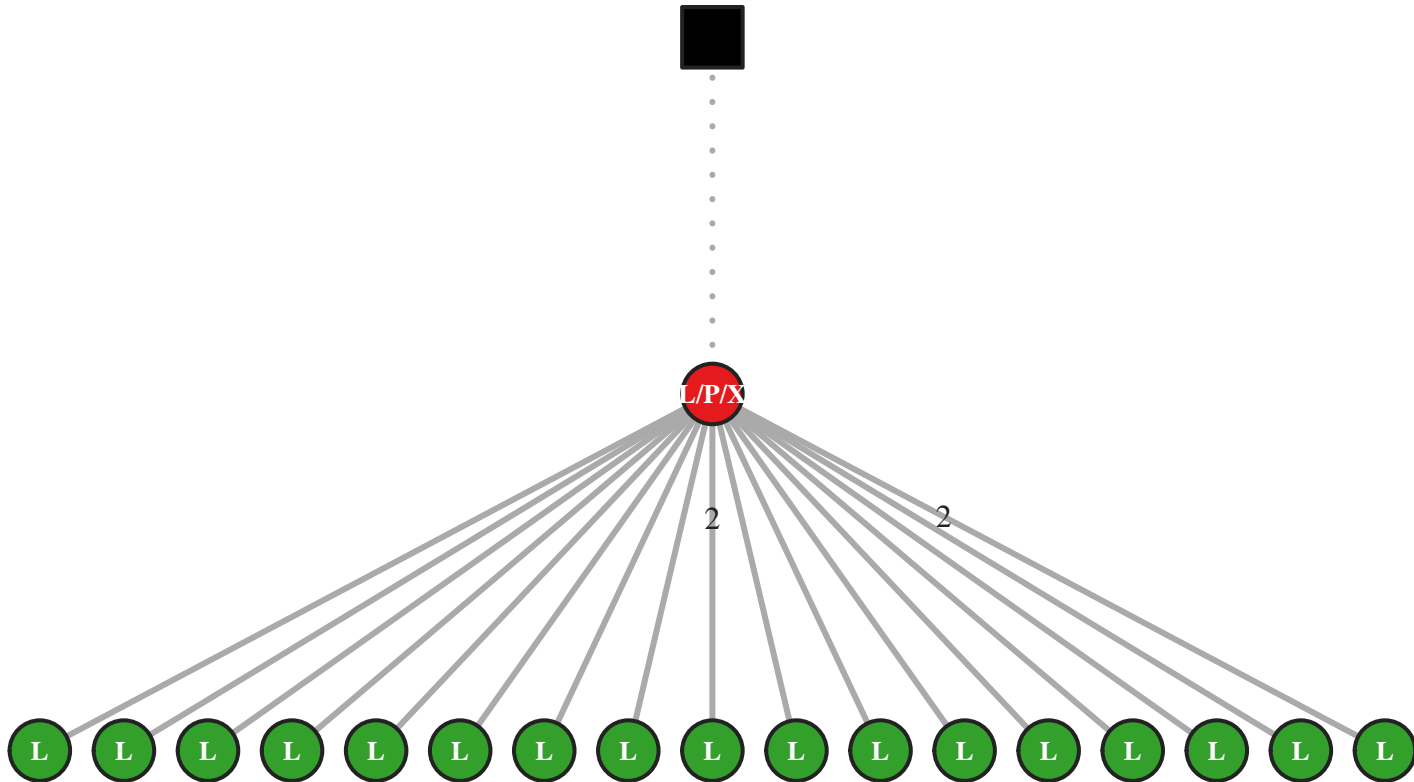
M5 IgG IGHV3-21/J3 63bp (6485)



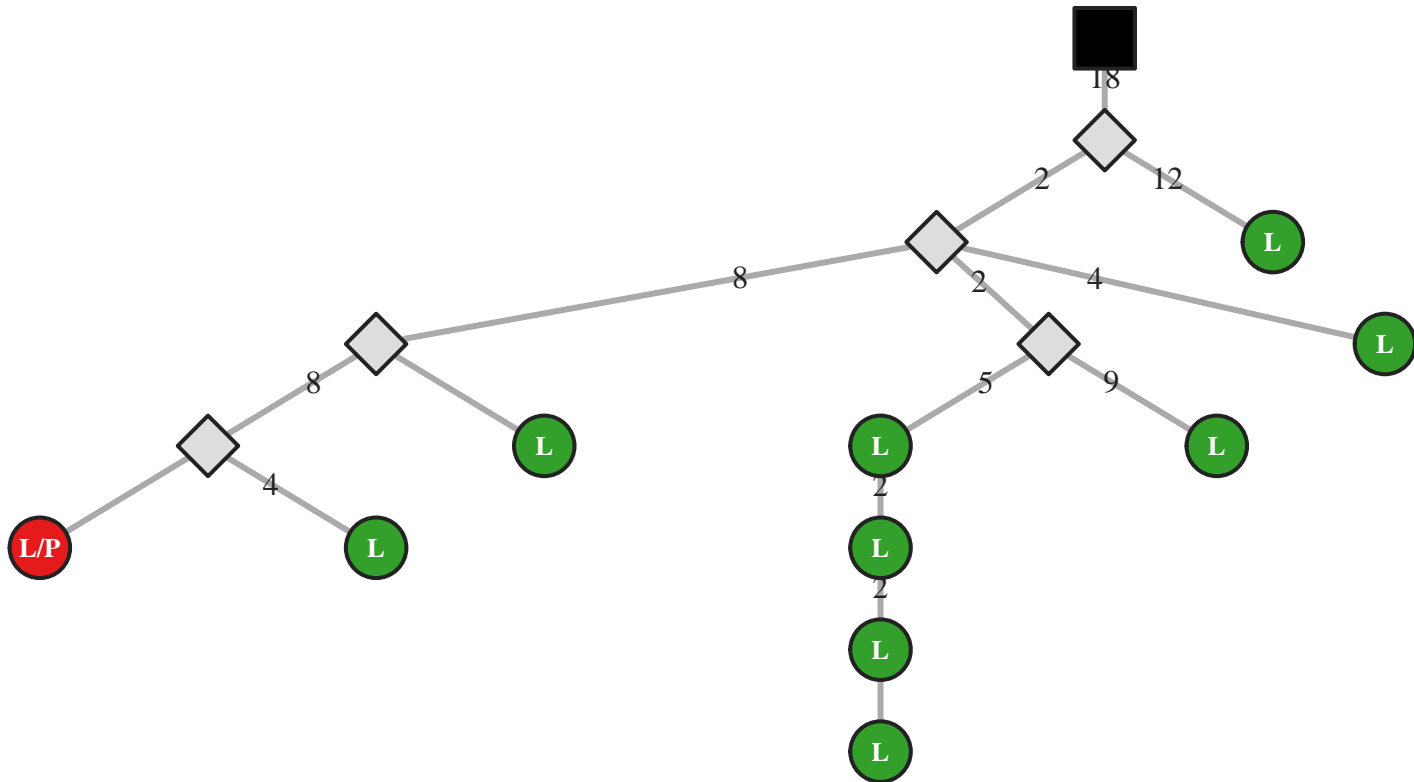
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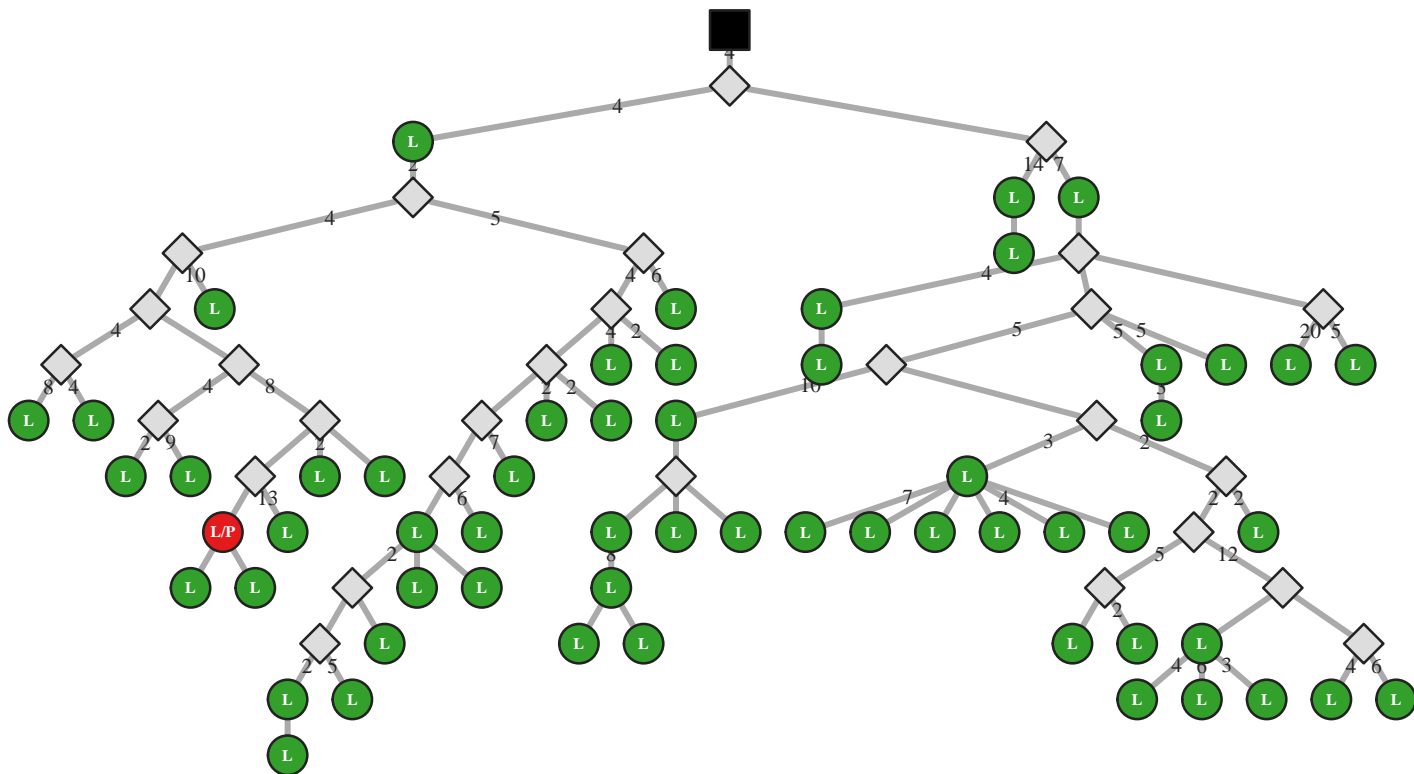
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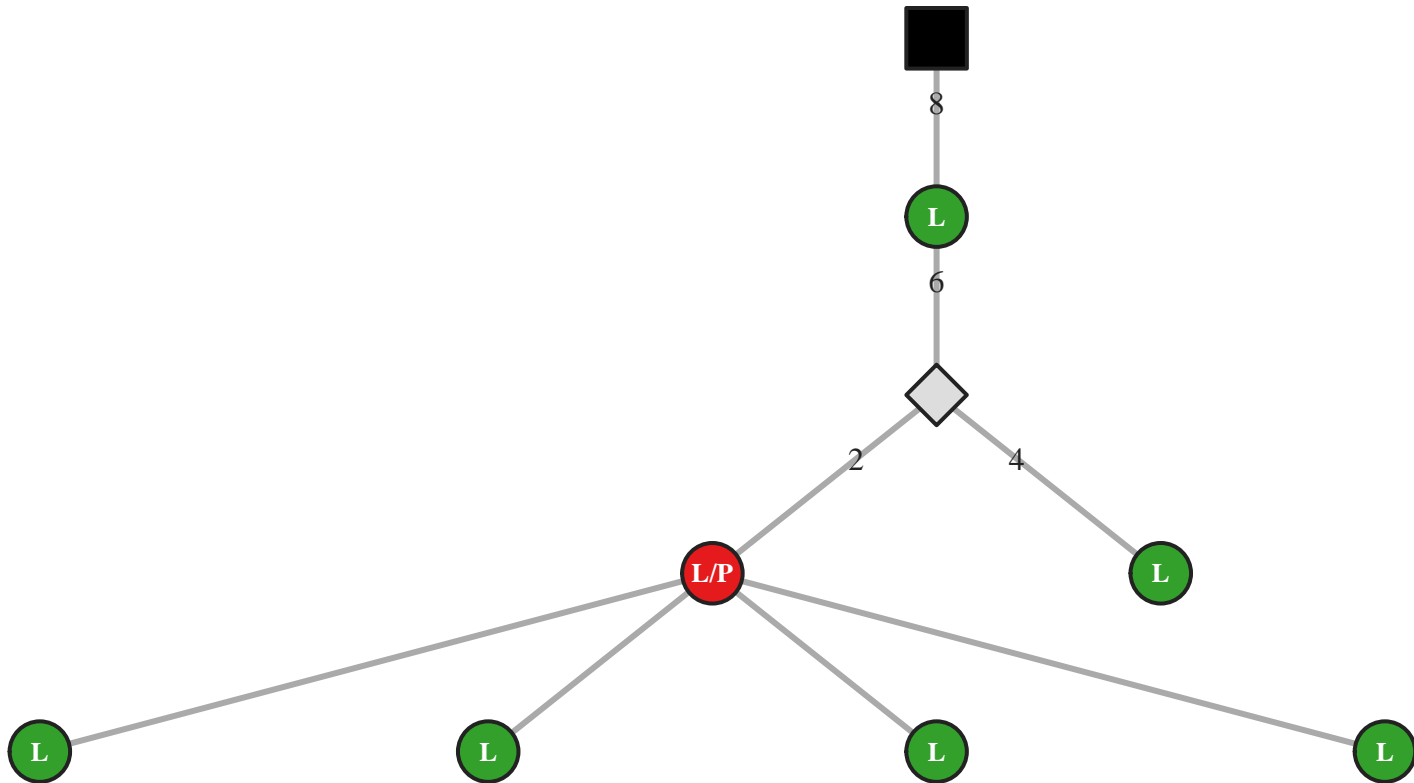
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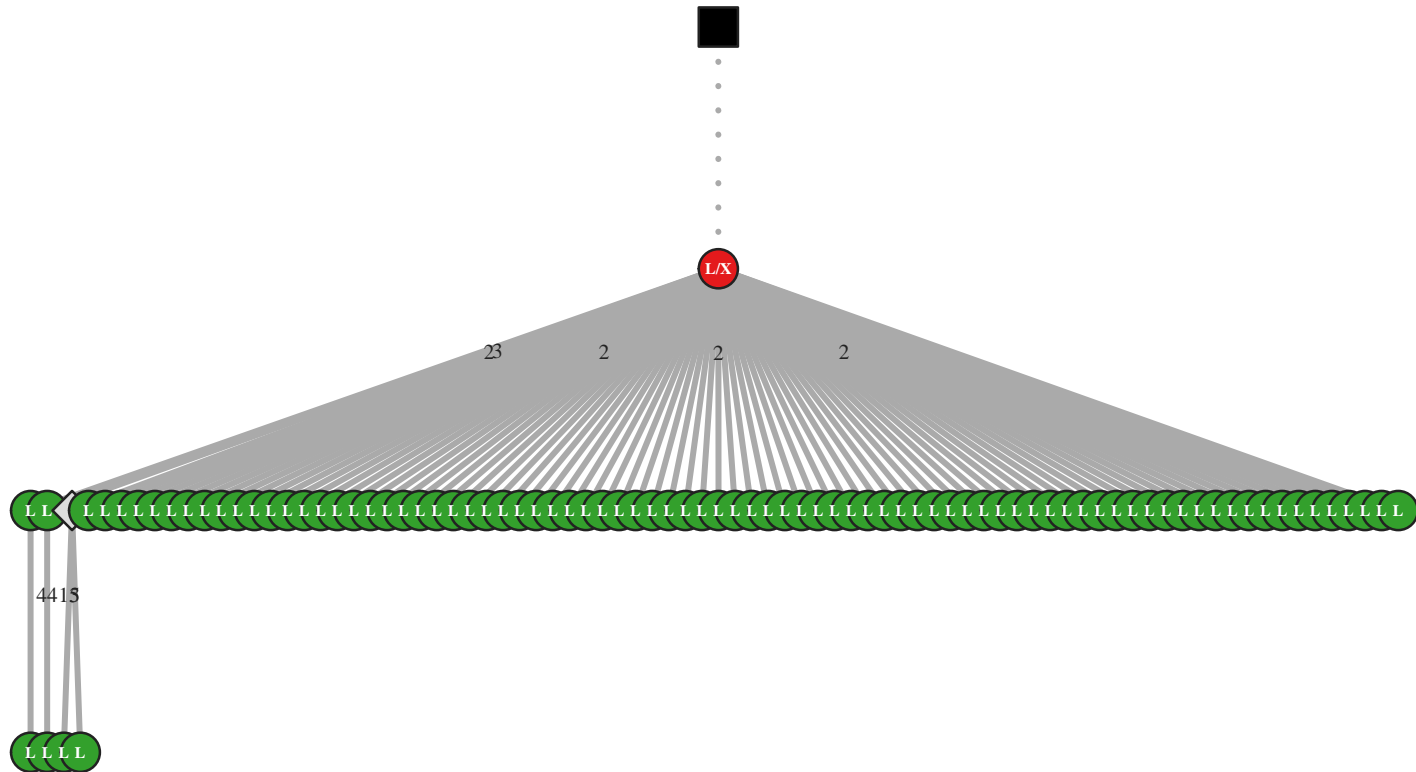
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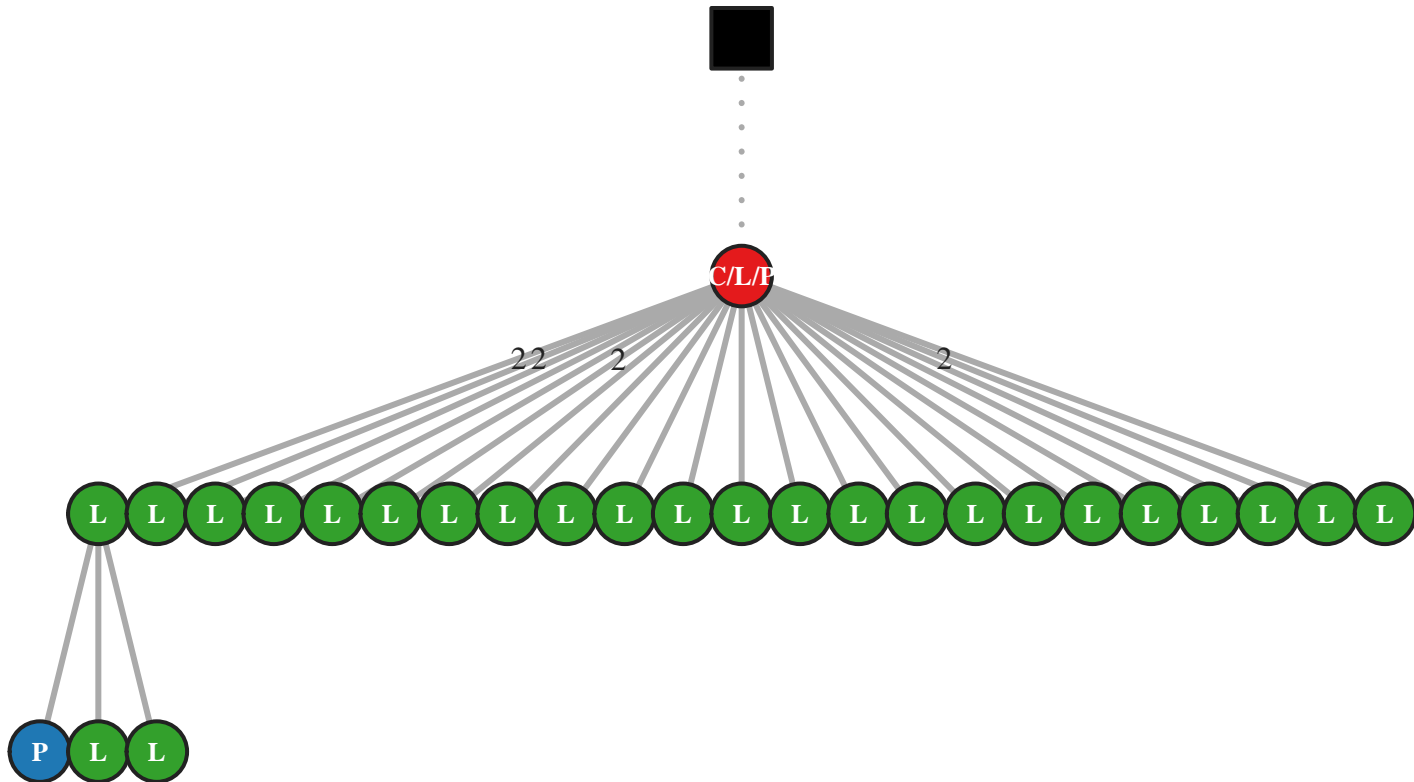
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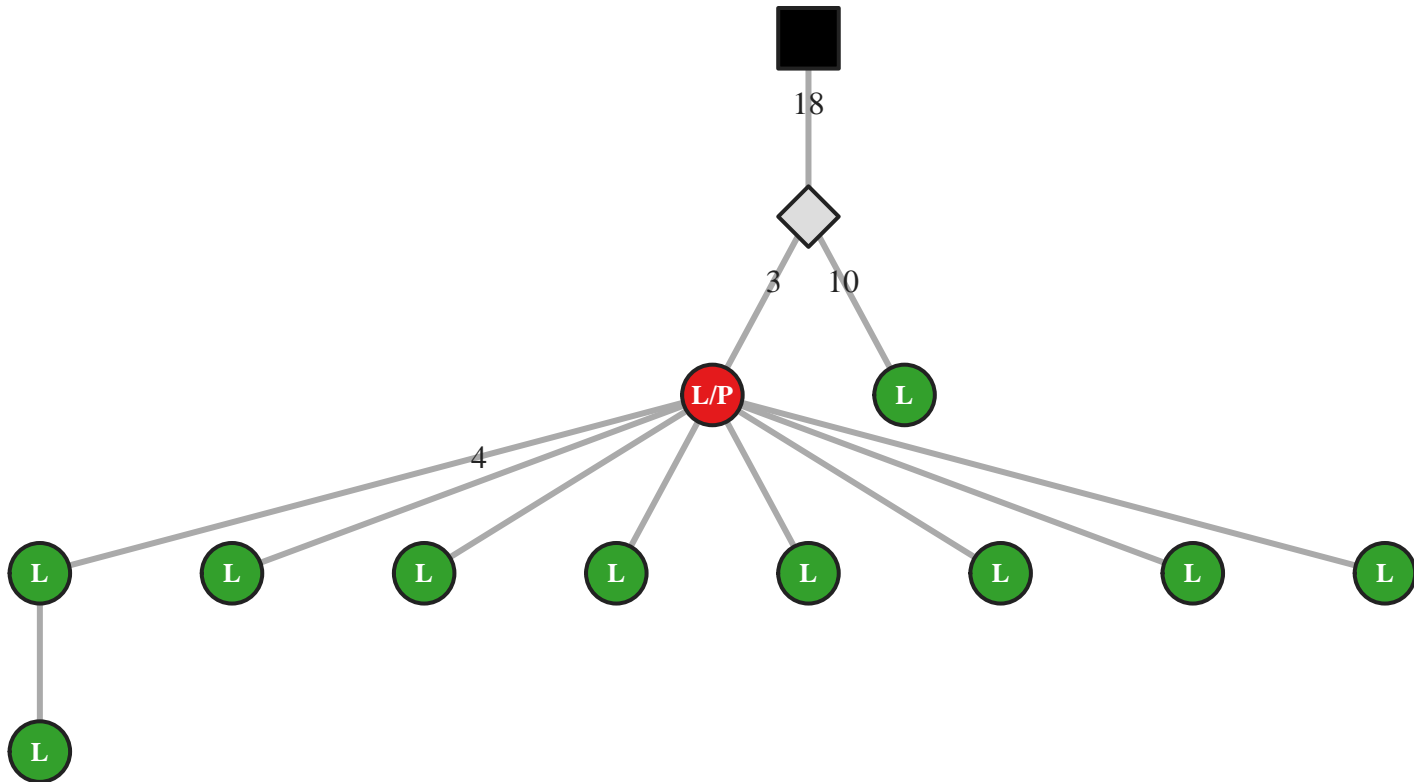
M5 IgG IGHV3-21/J4 42bp (51291)



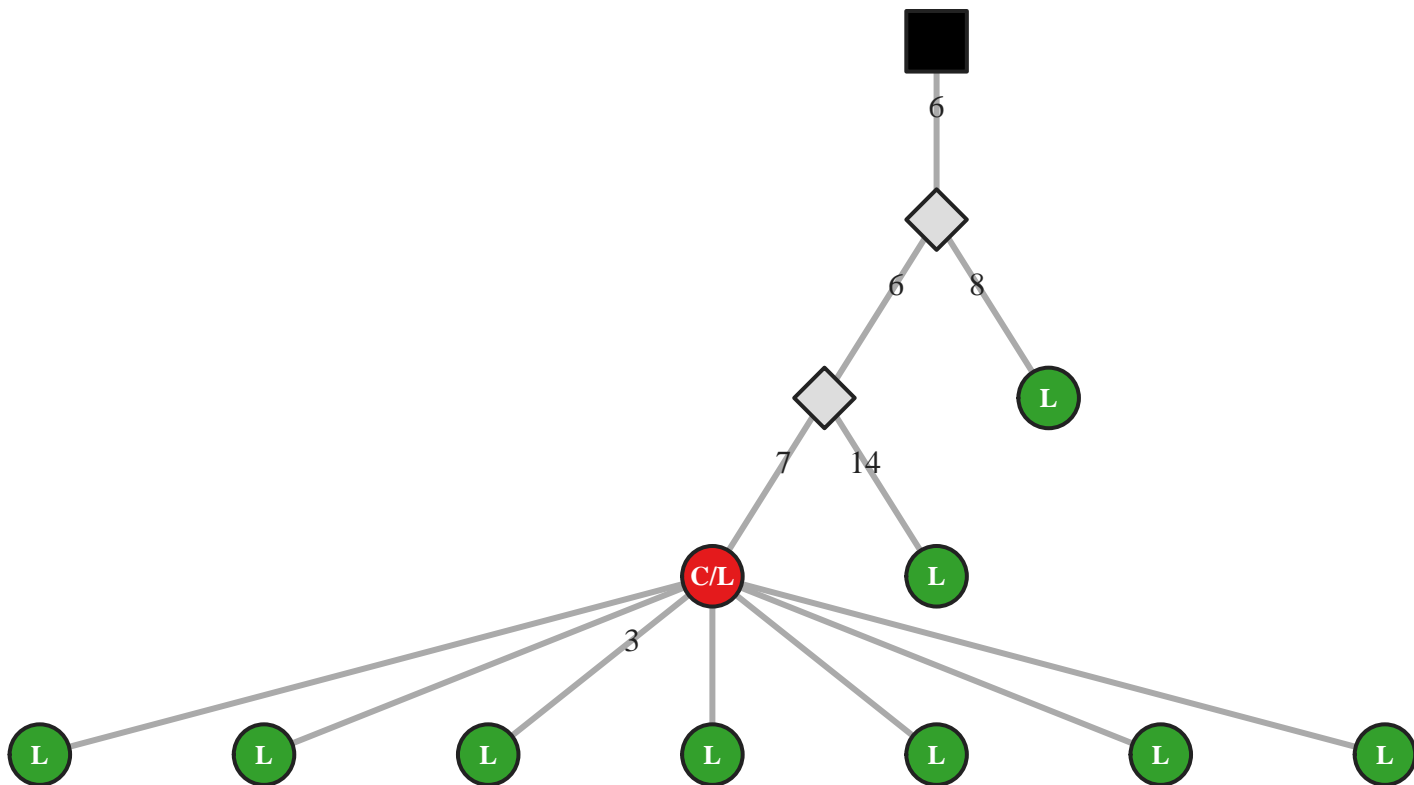
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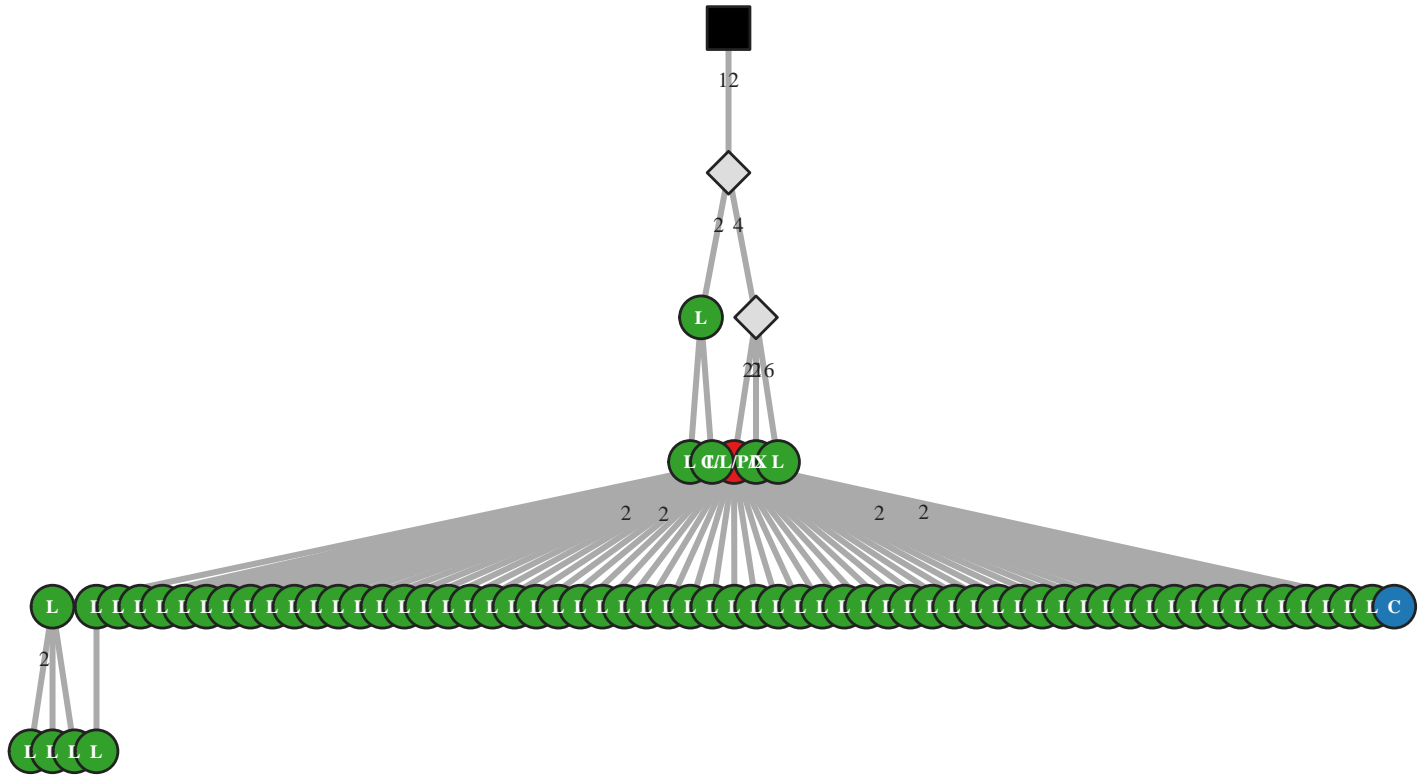
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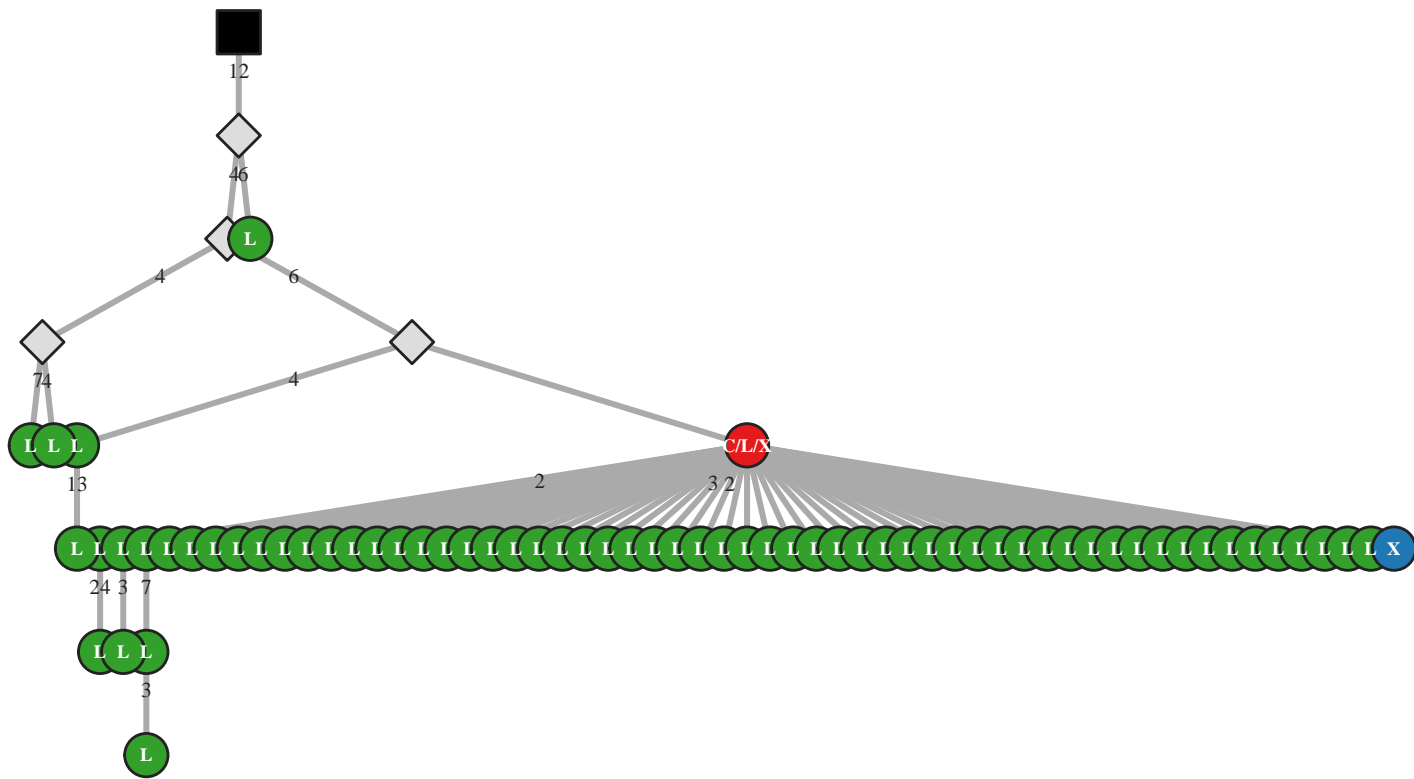
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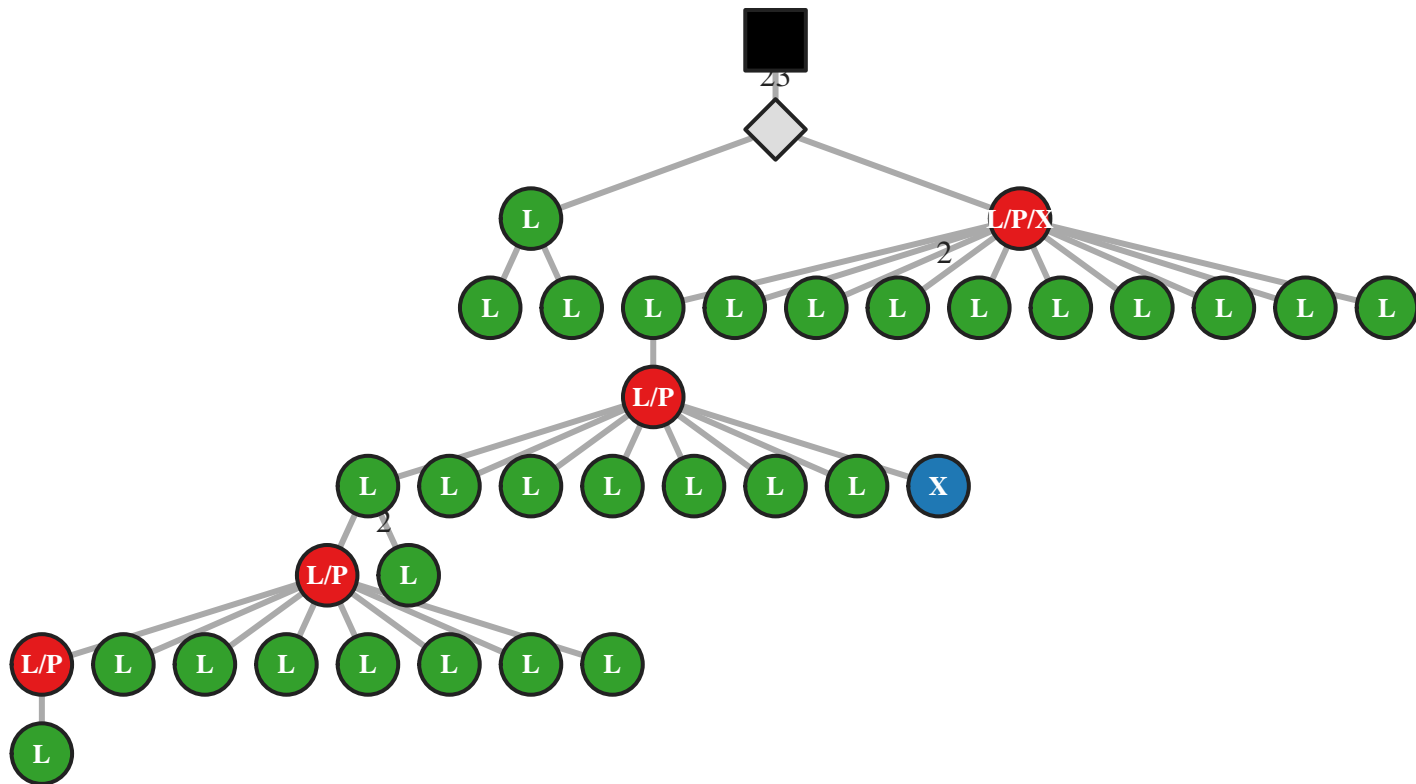
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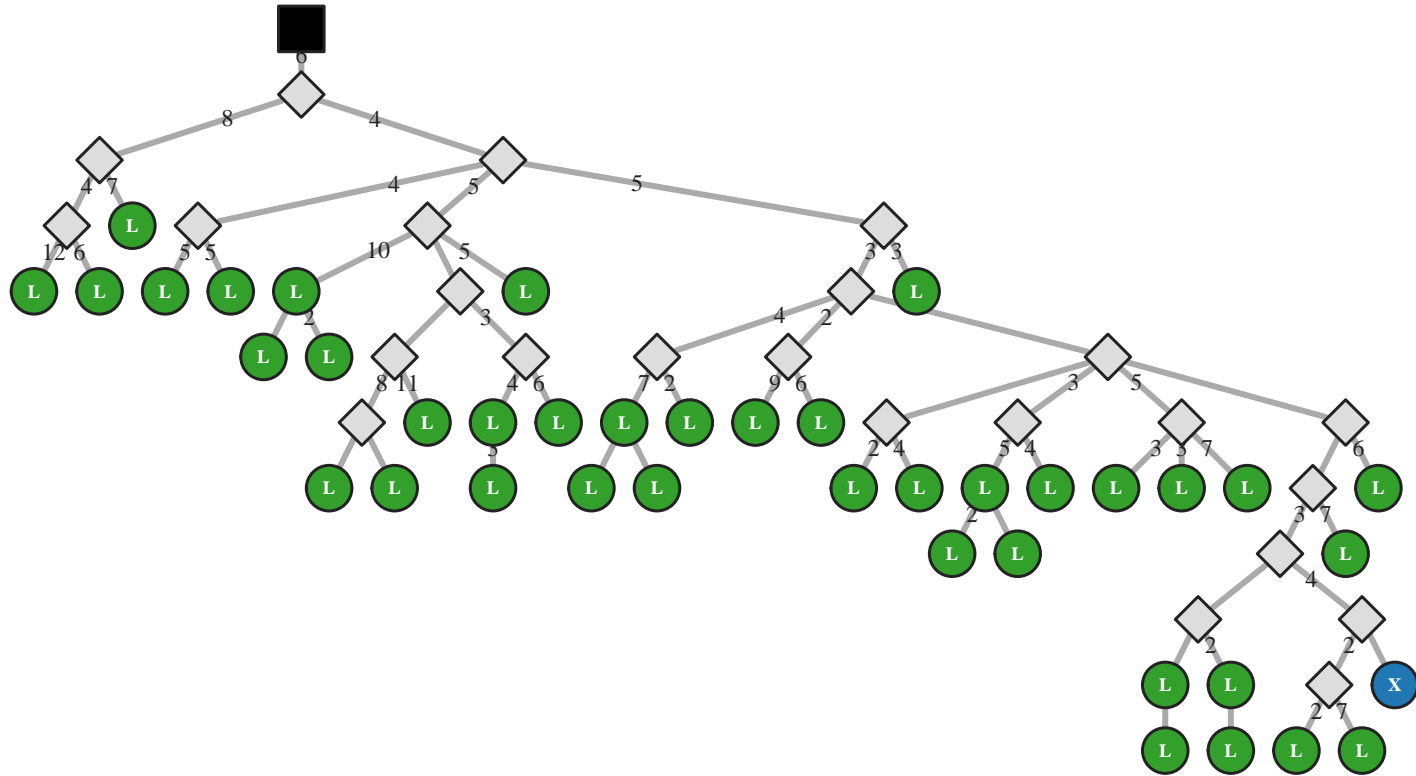
M5 IgG IGHV3-21/J4 45bp (16426)



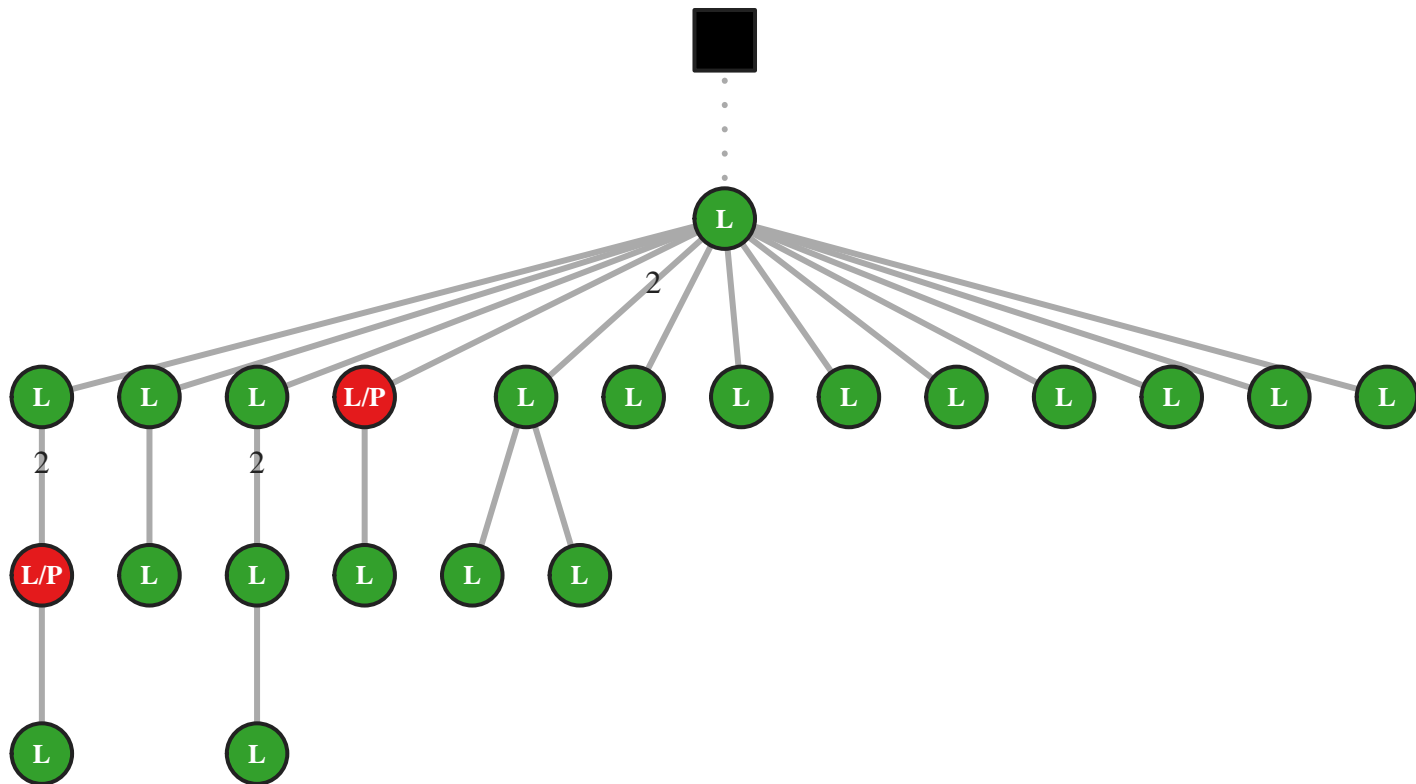
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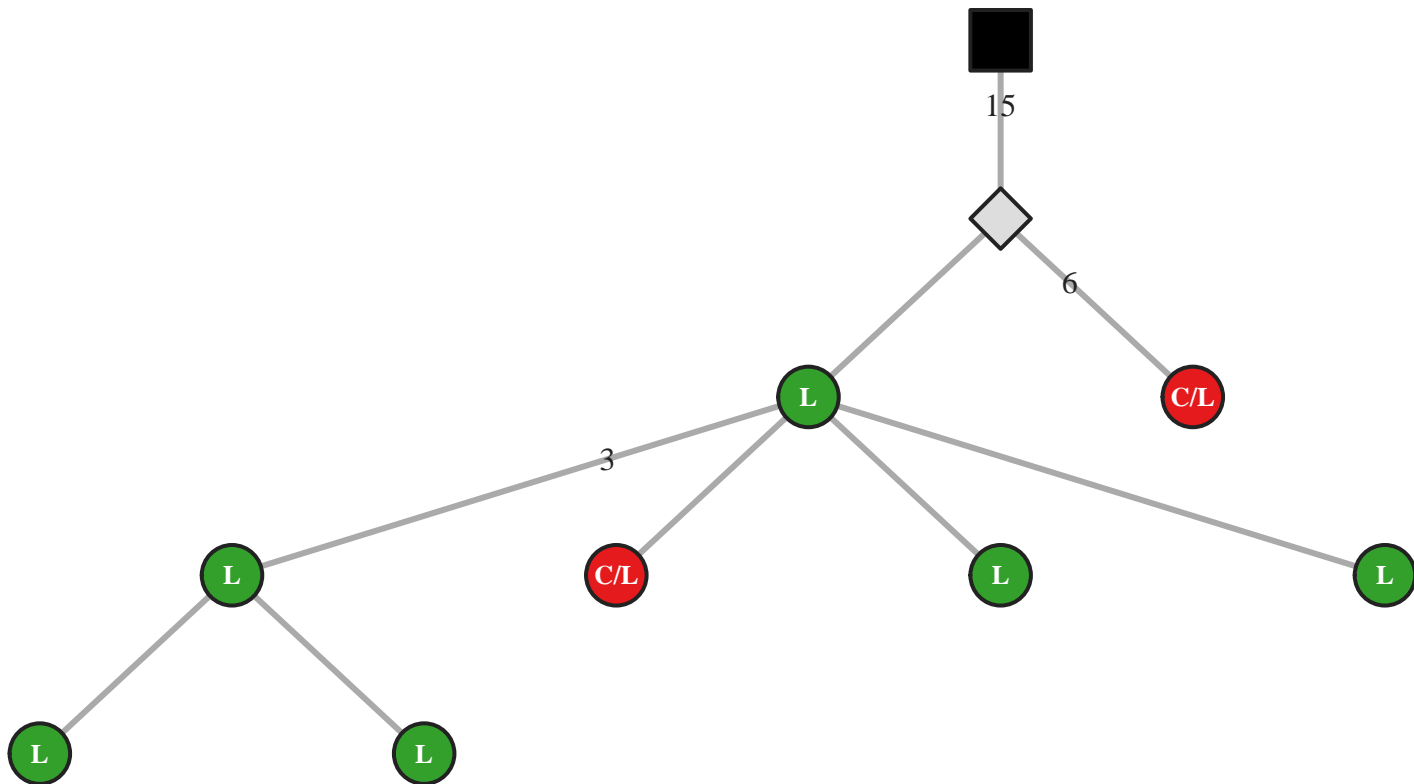
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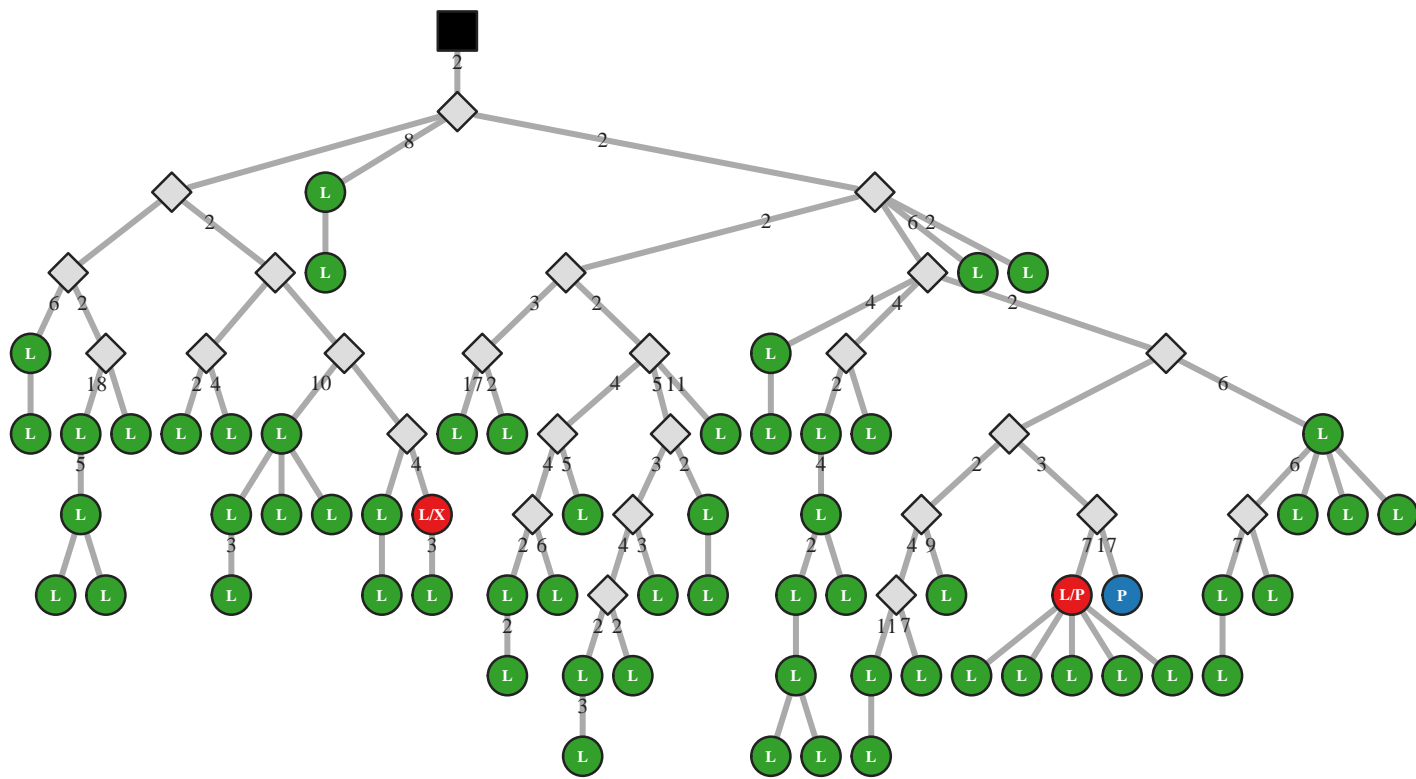
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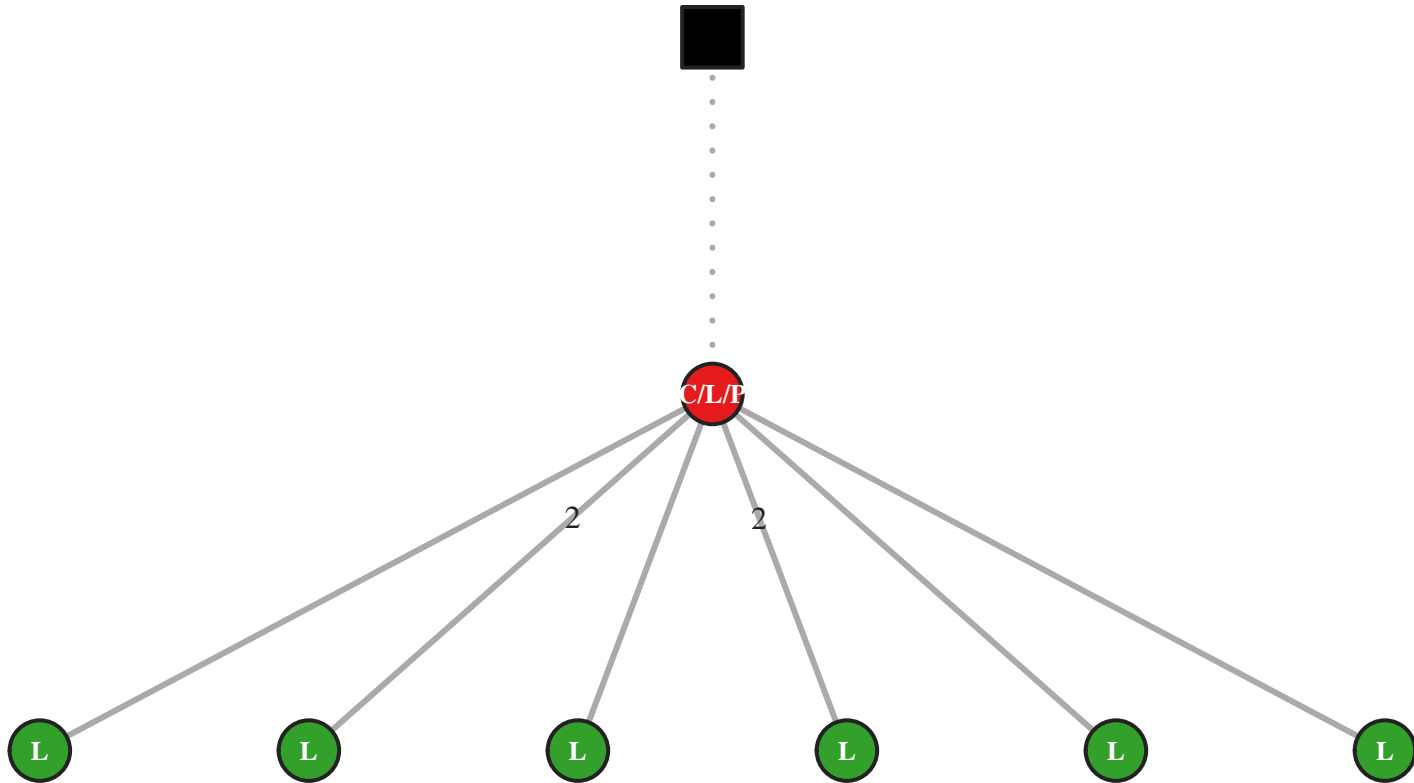
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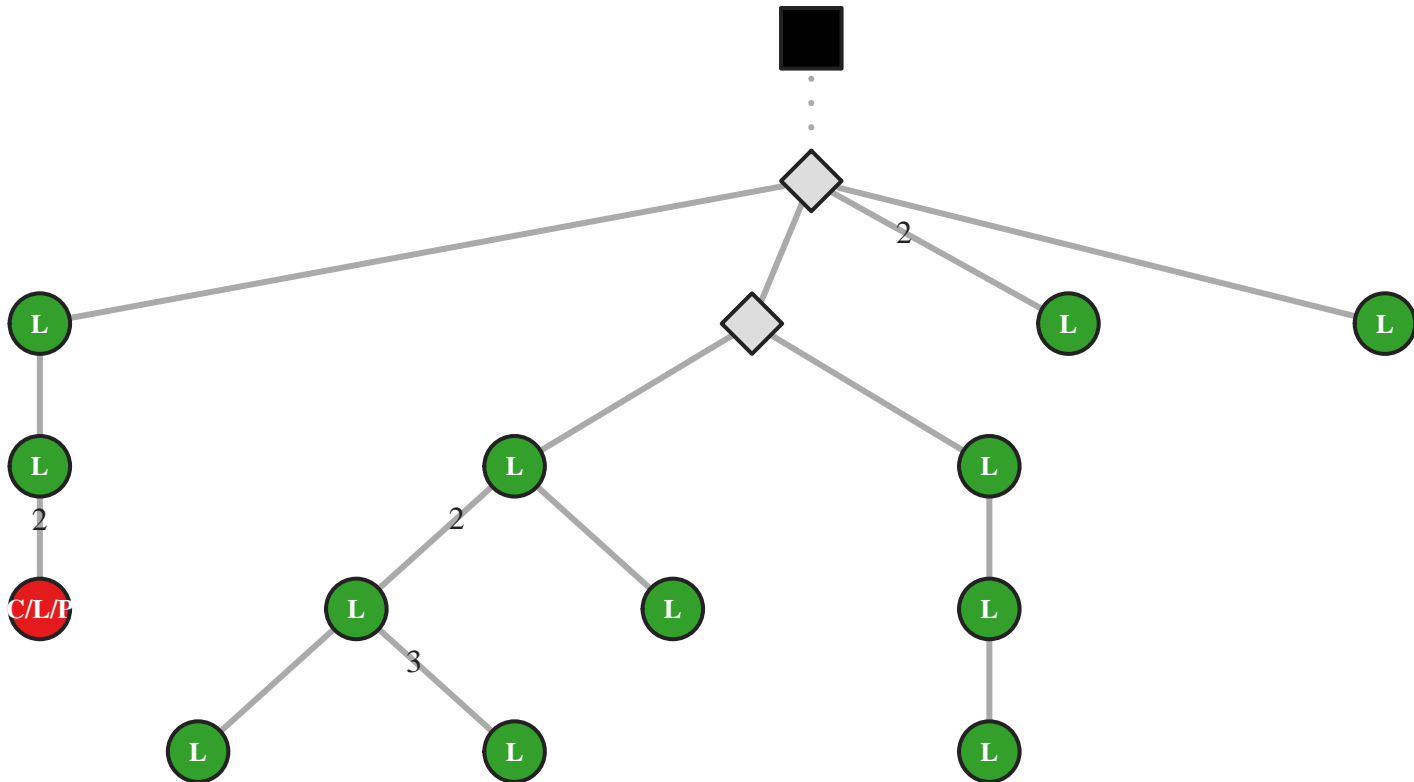
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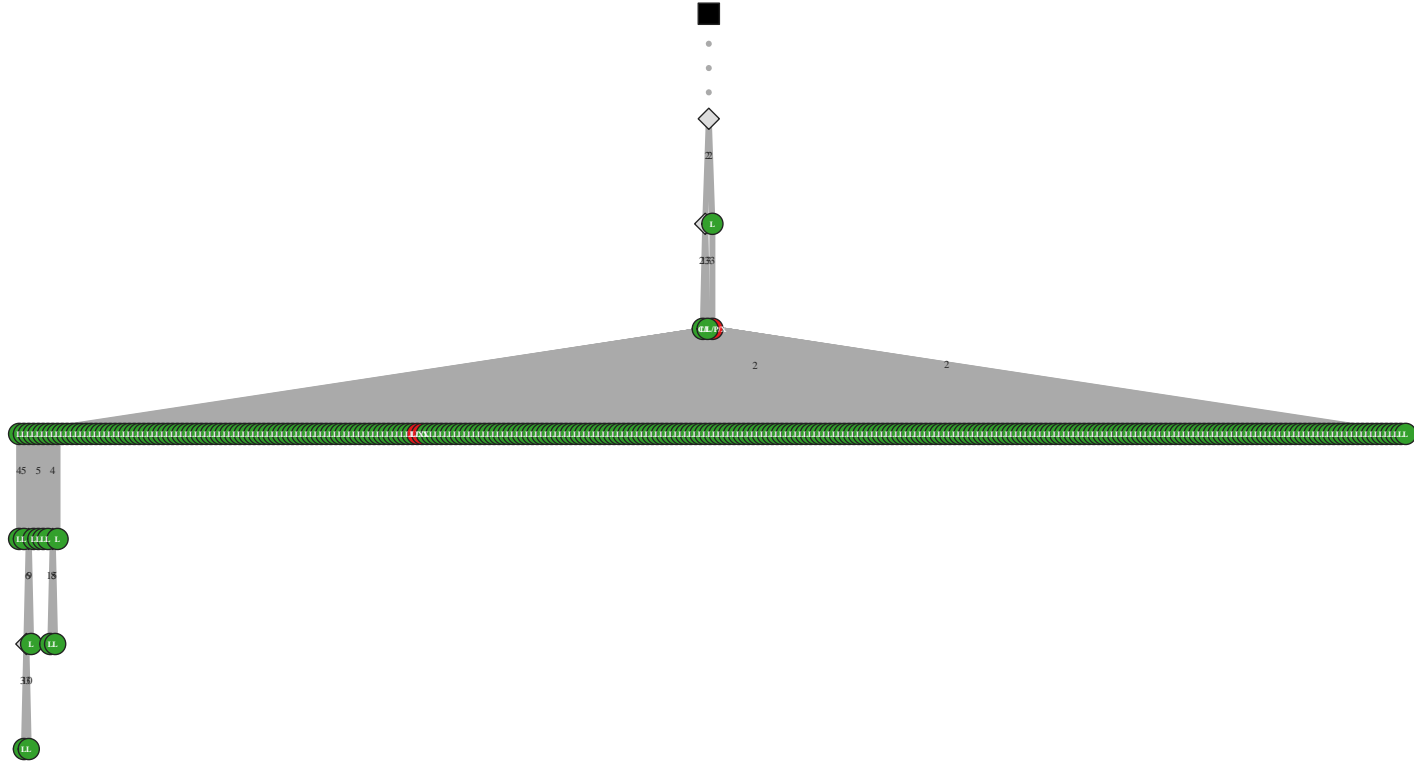
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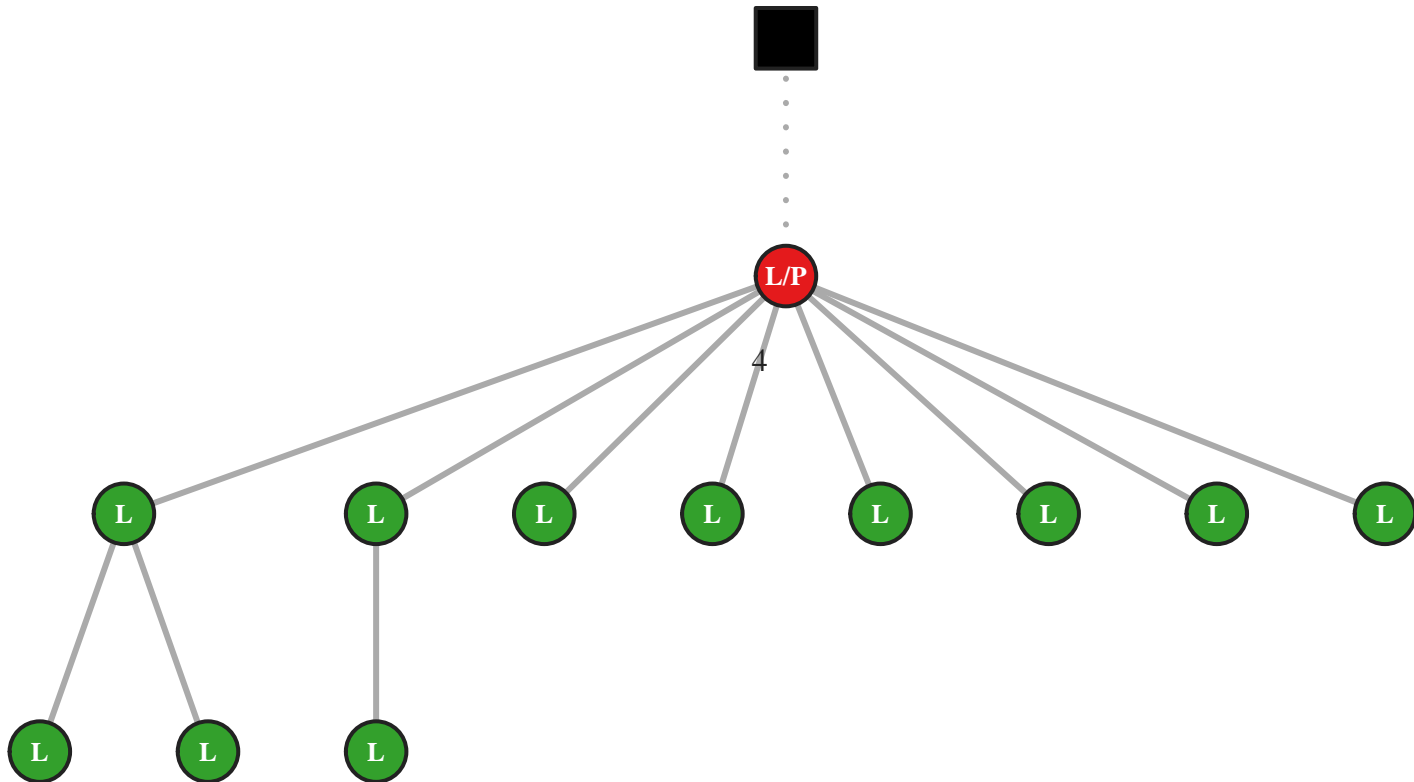
M5 IgG IGHV3-21/J4 48bp (25344)



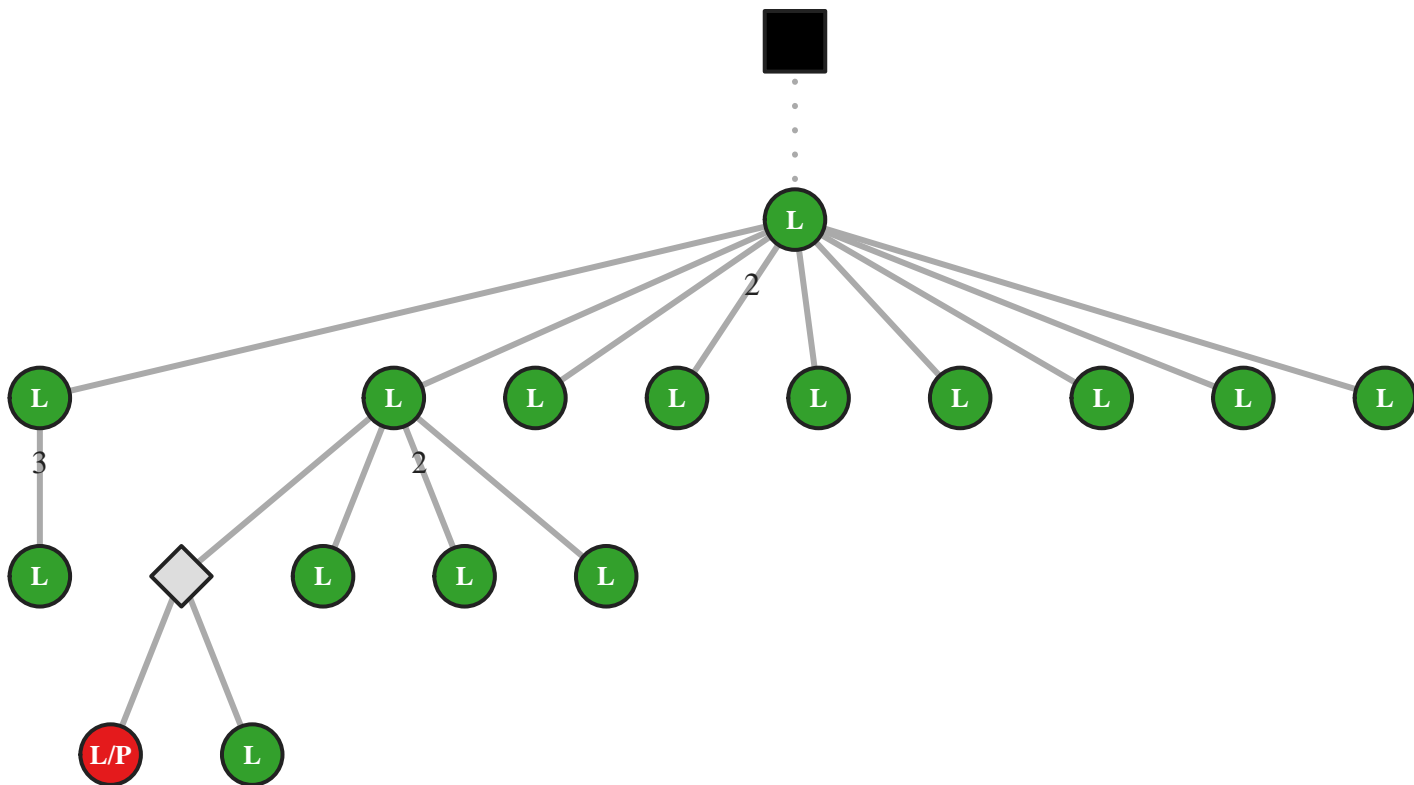
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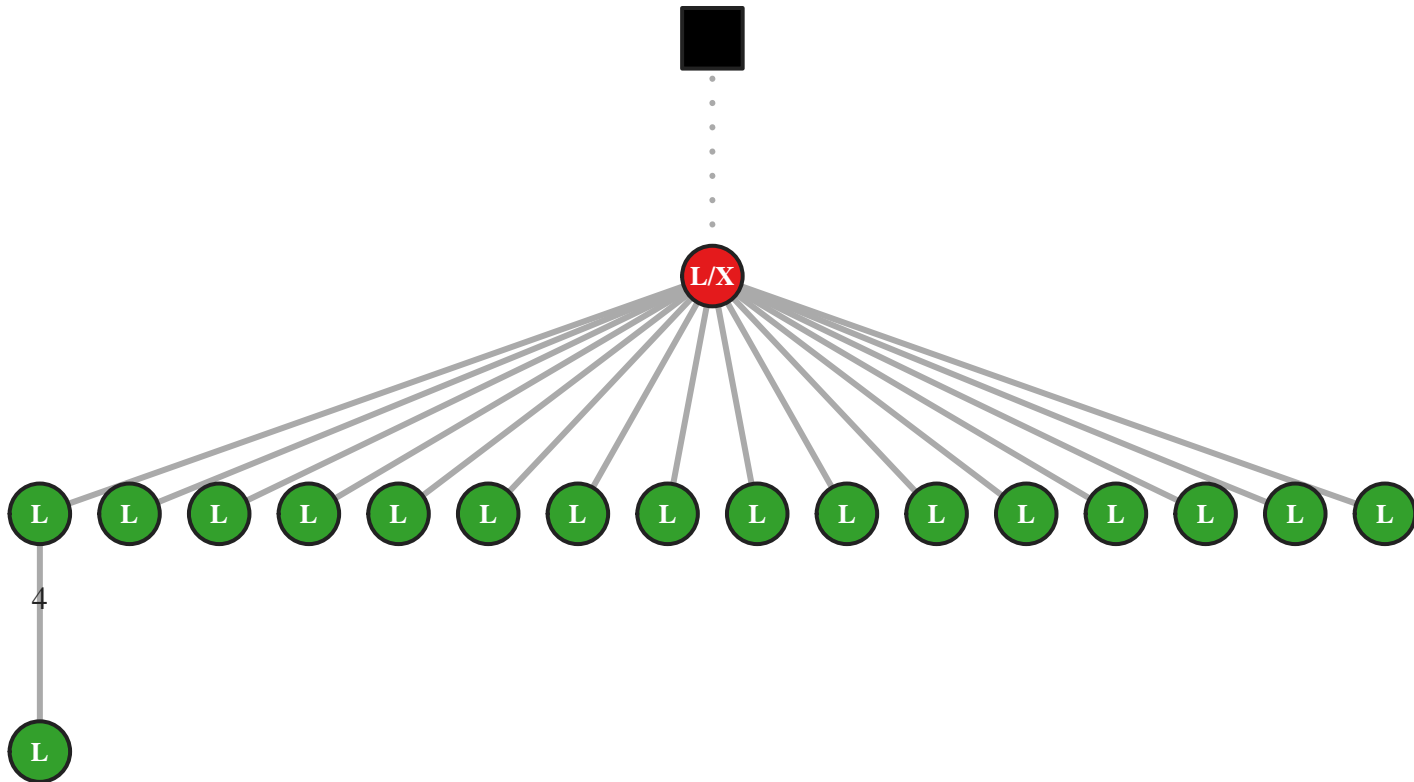
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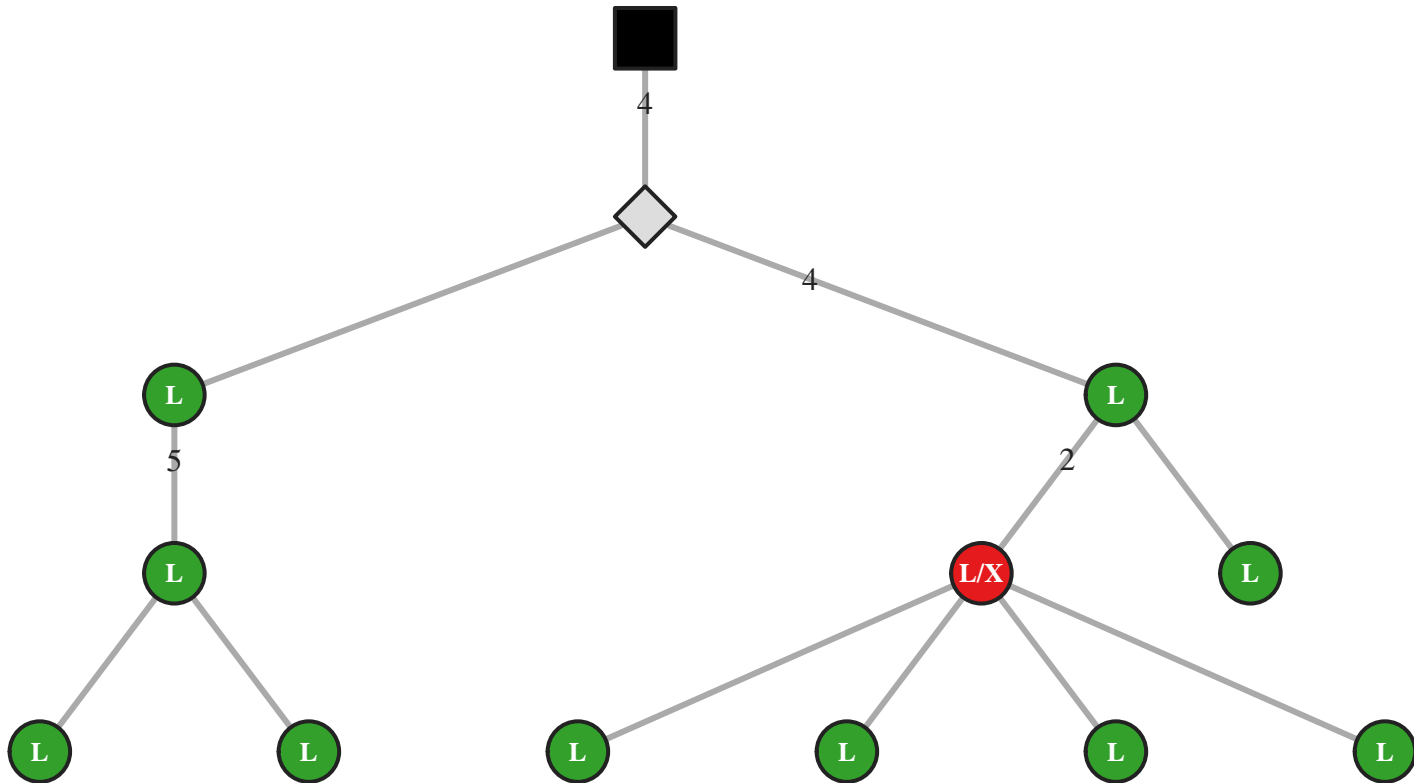
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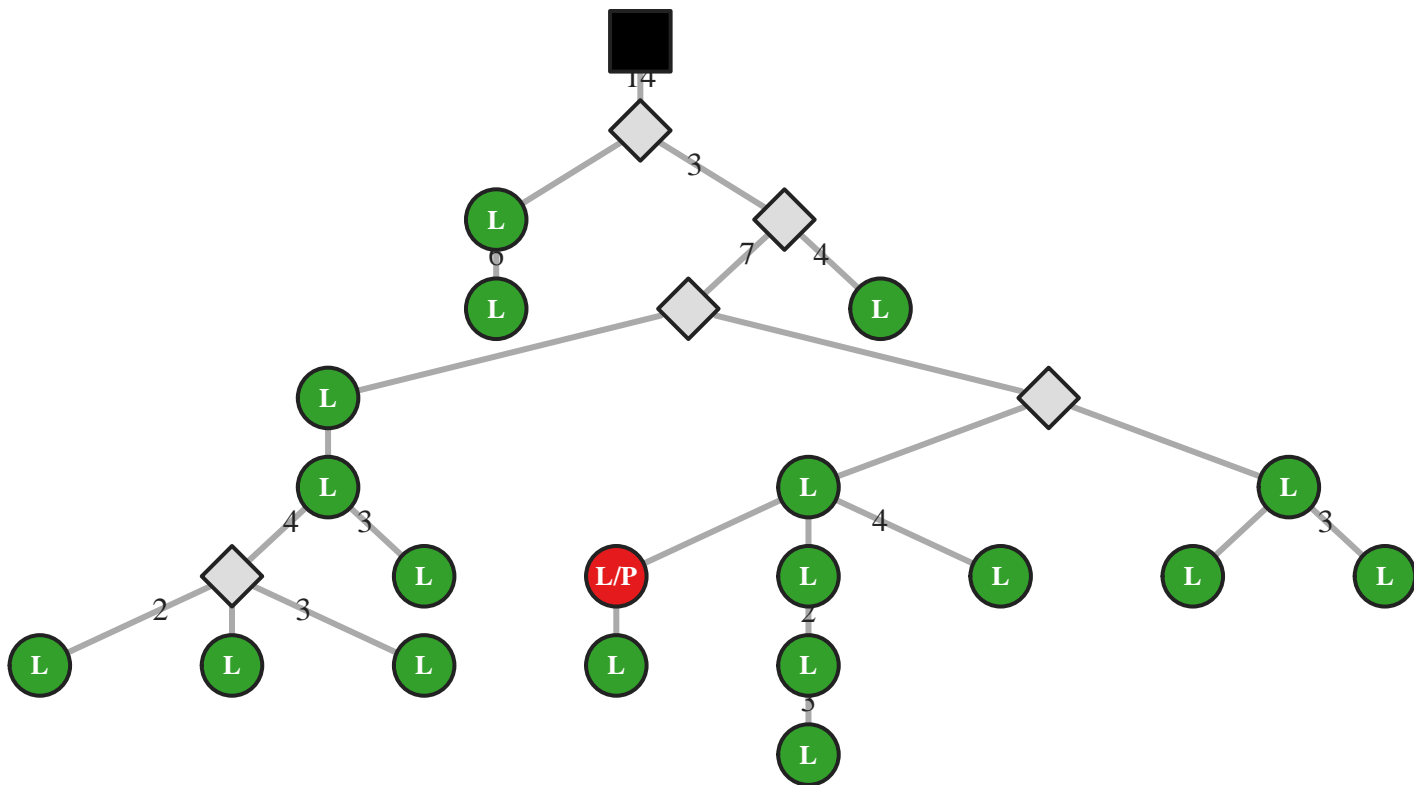
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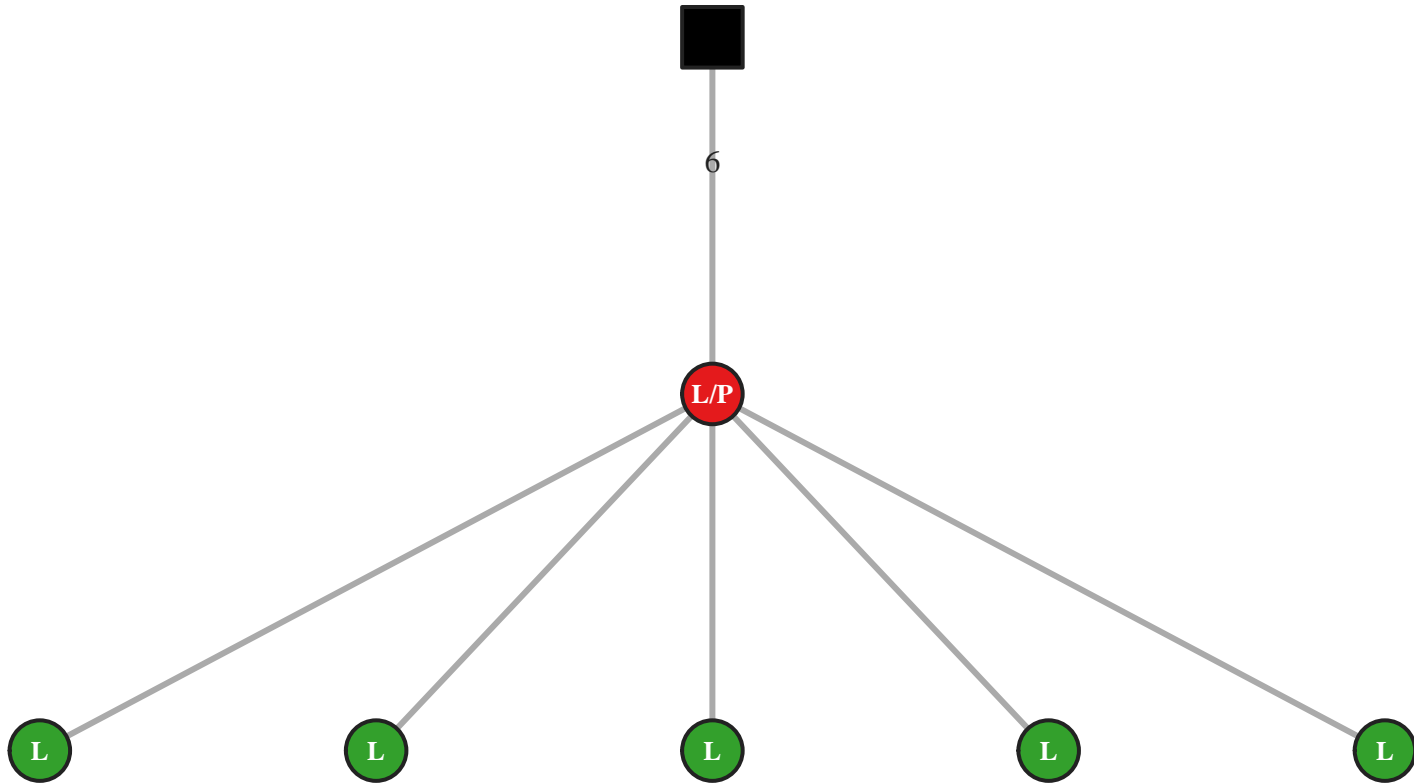
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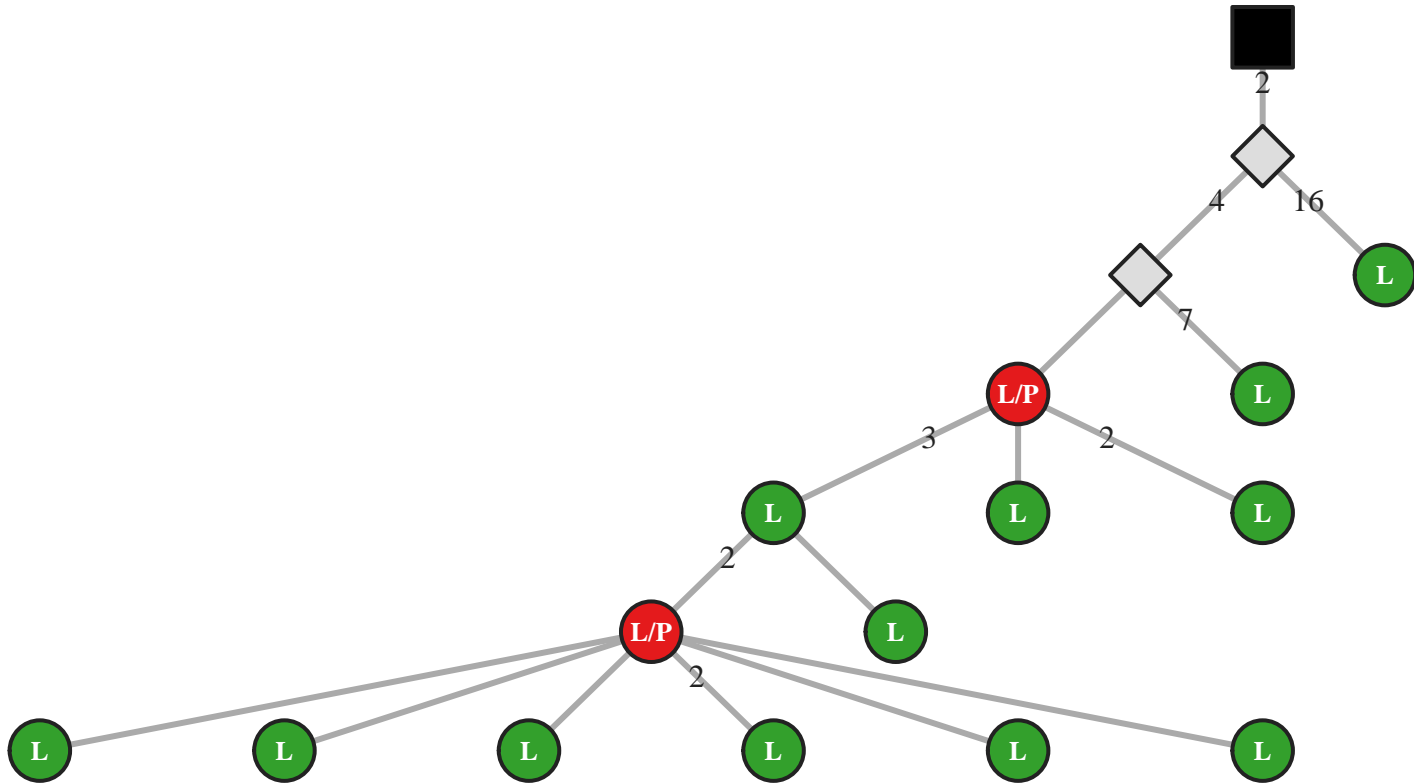
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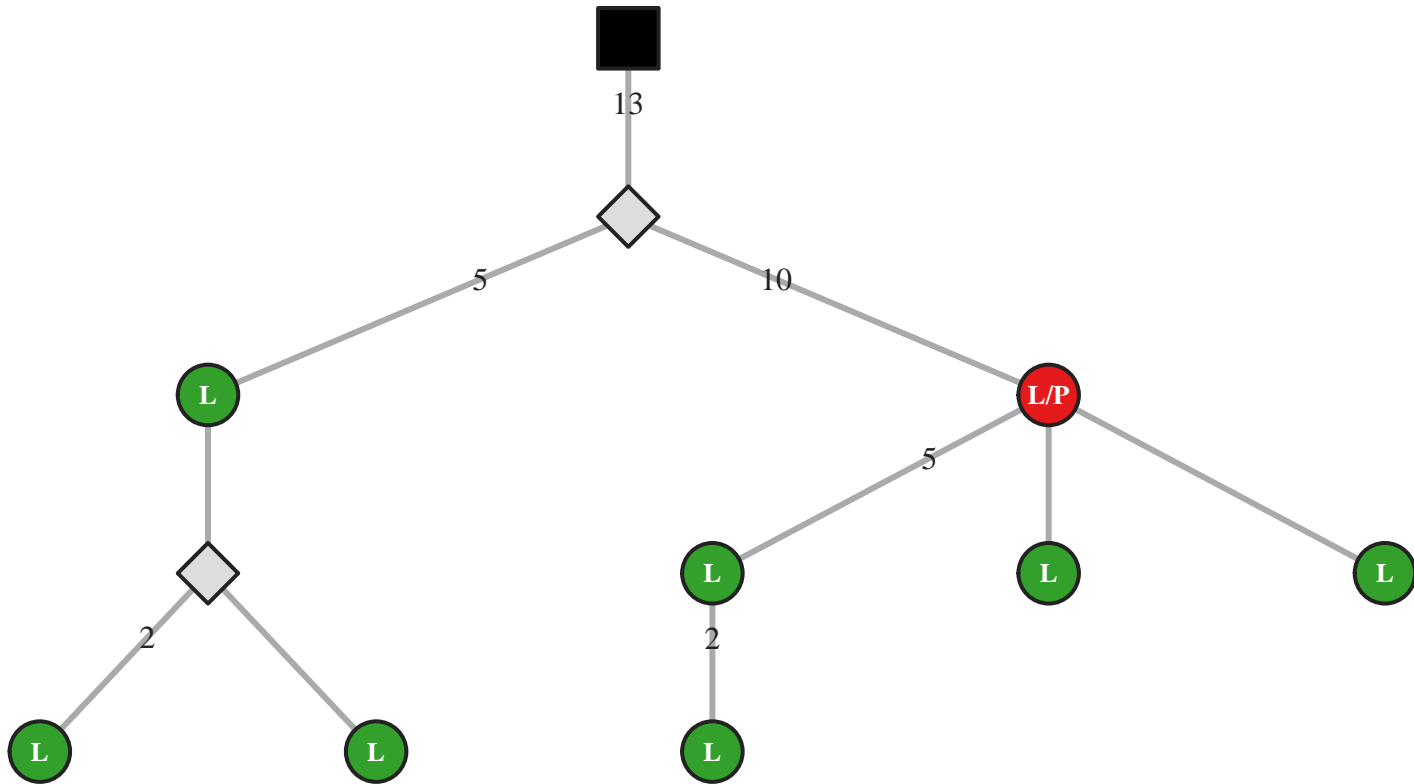
M5 IgM IGHV3-21/J4 48bp (37741)



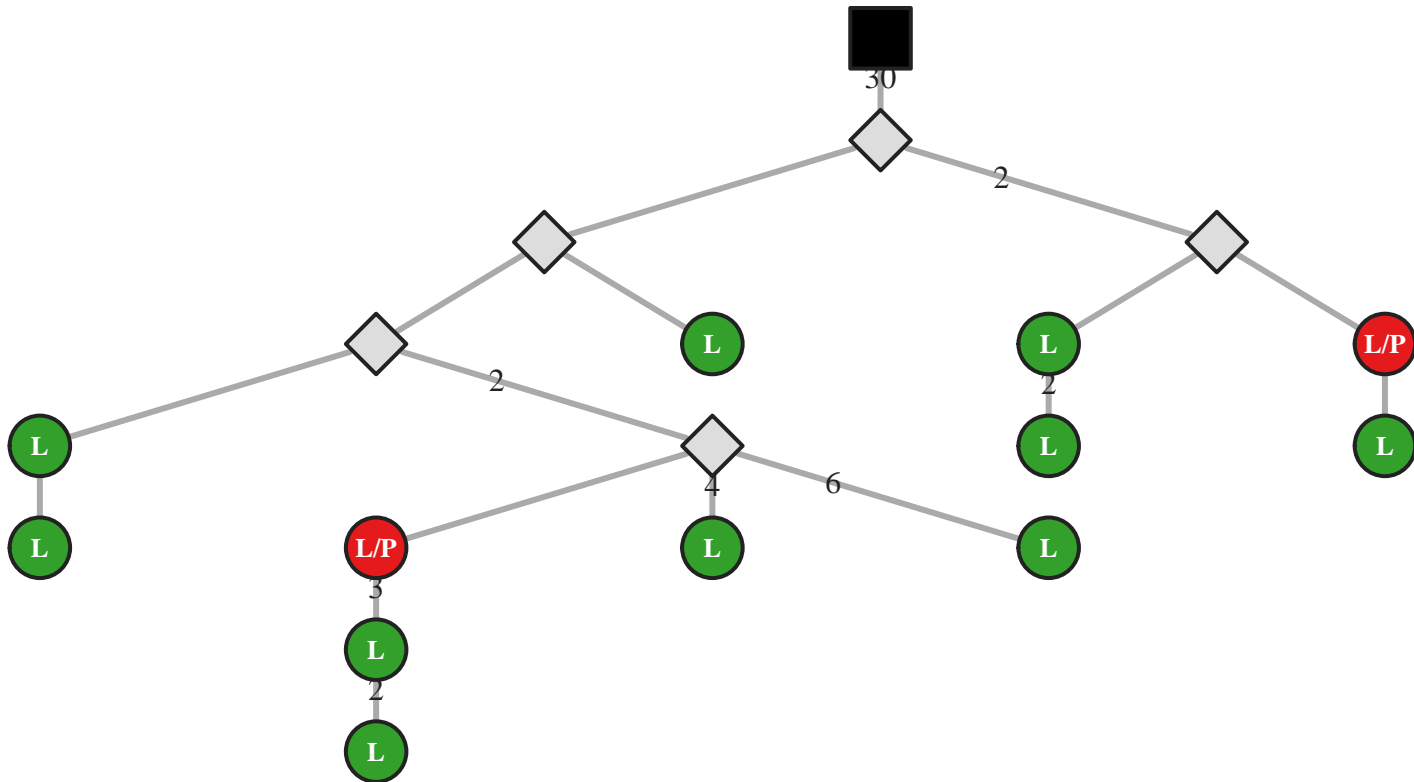
M5 IgA IGHV3-21/J4 51bp (48728)



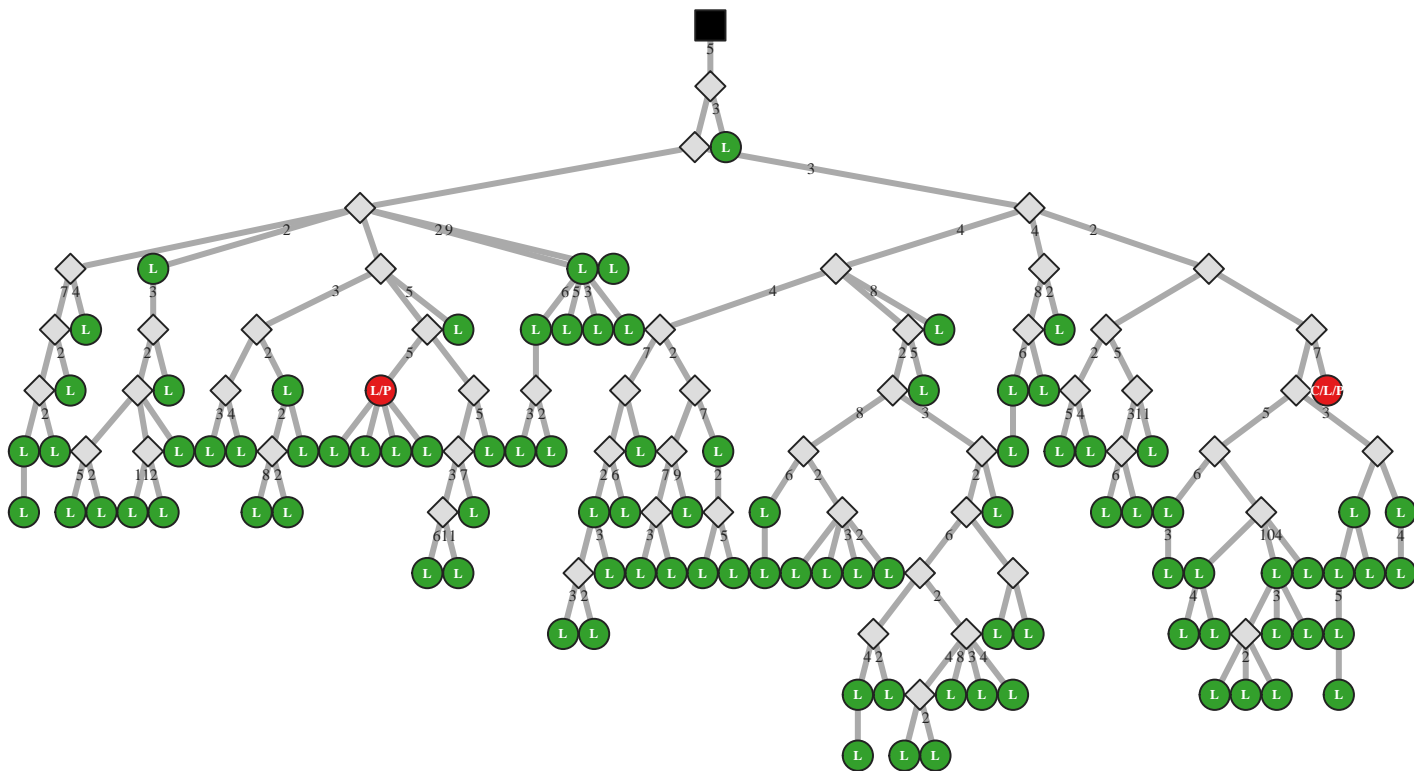
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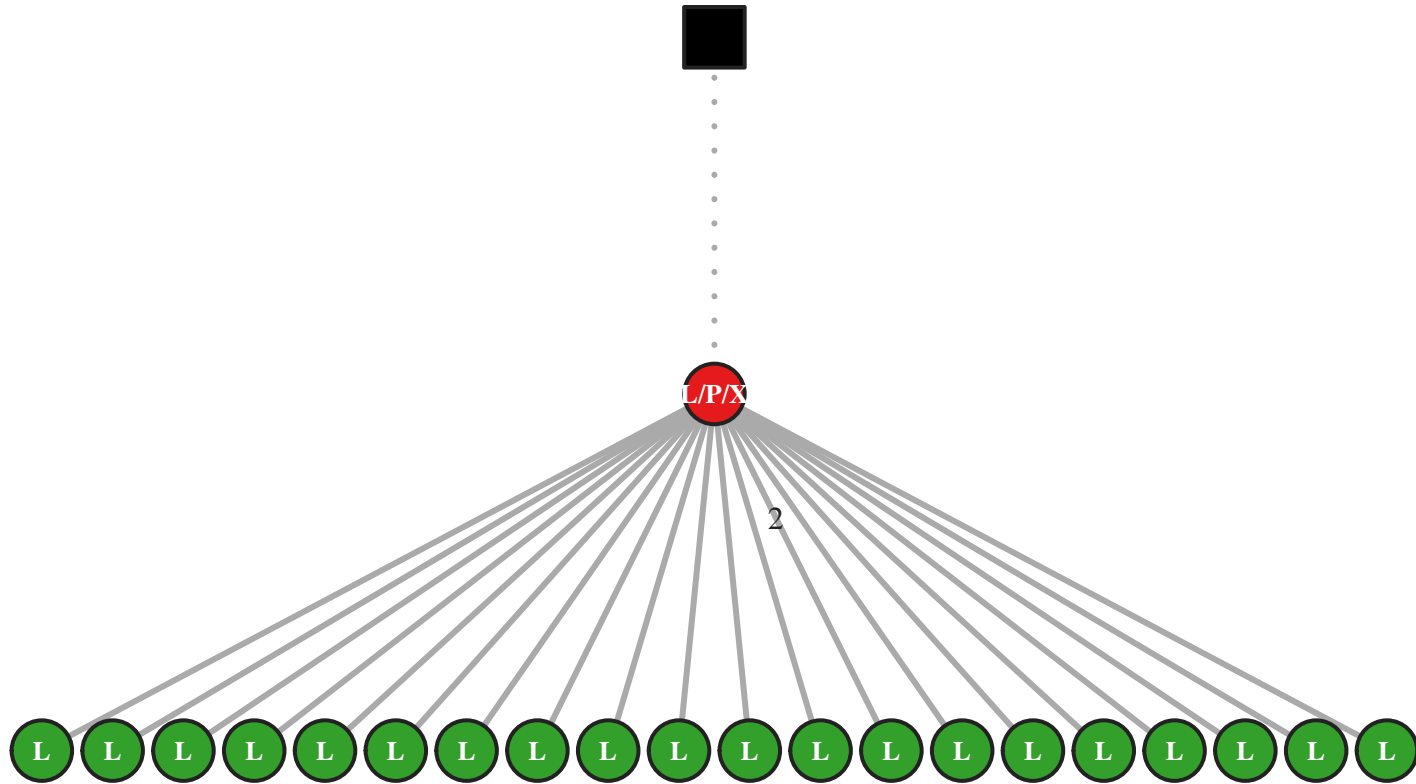
M5 IgG IGHV3-21/J4 51bp (16581)



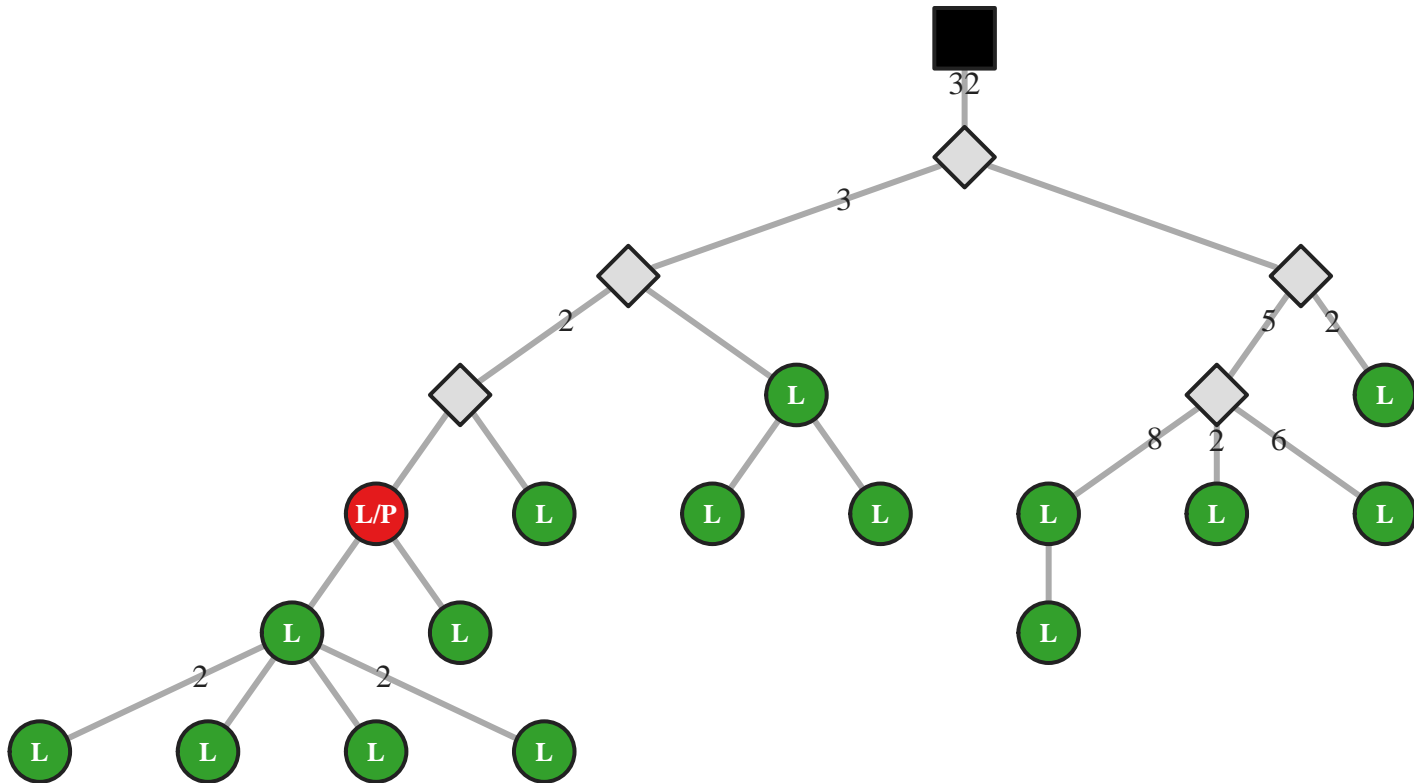
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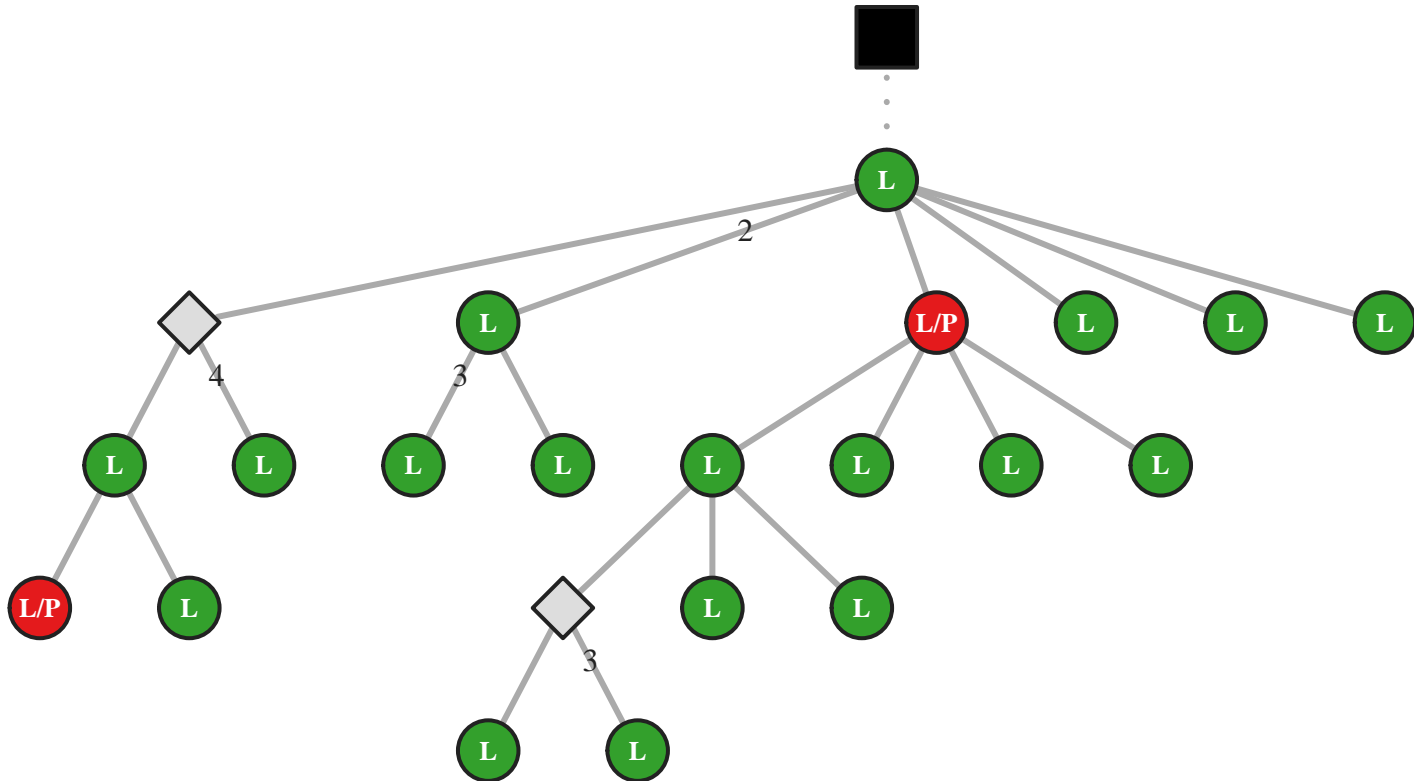
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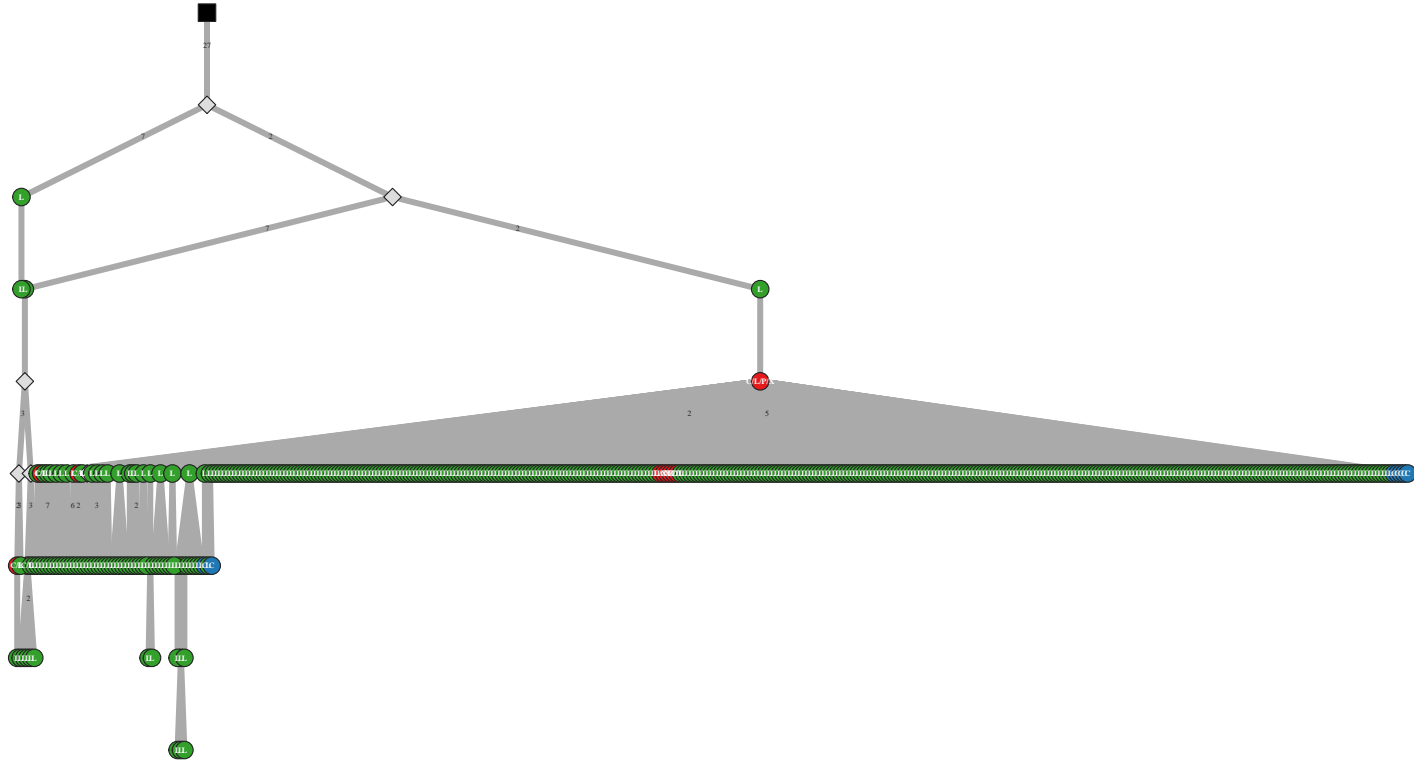
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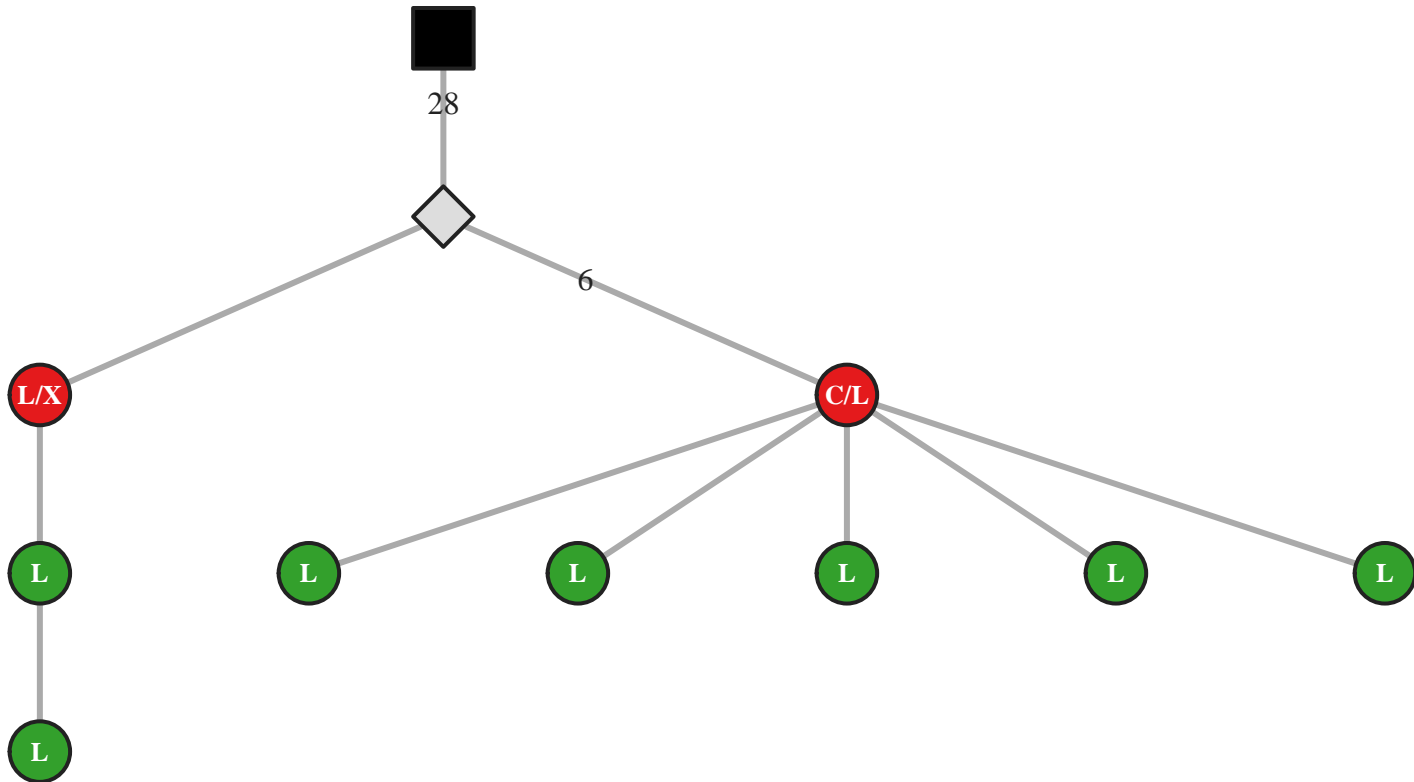
M5 IgG IGHV3-21/J4 54bp (25427)



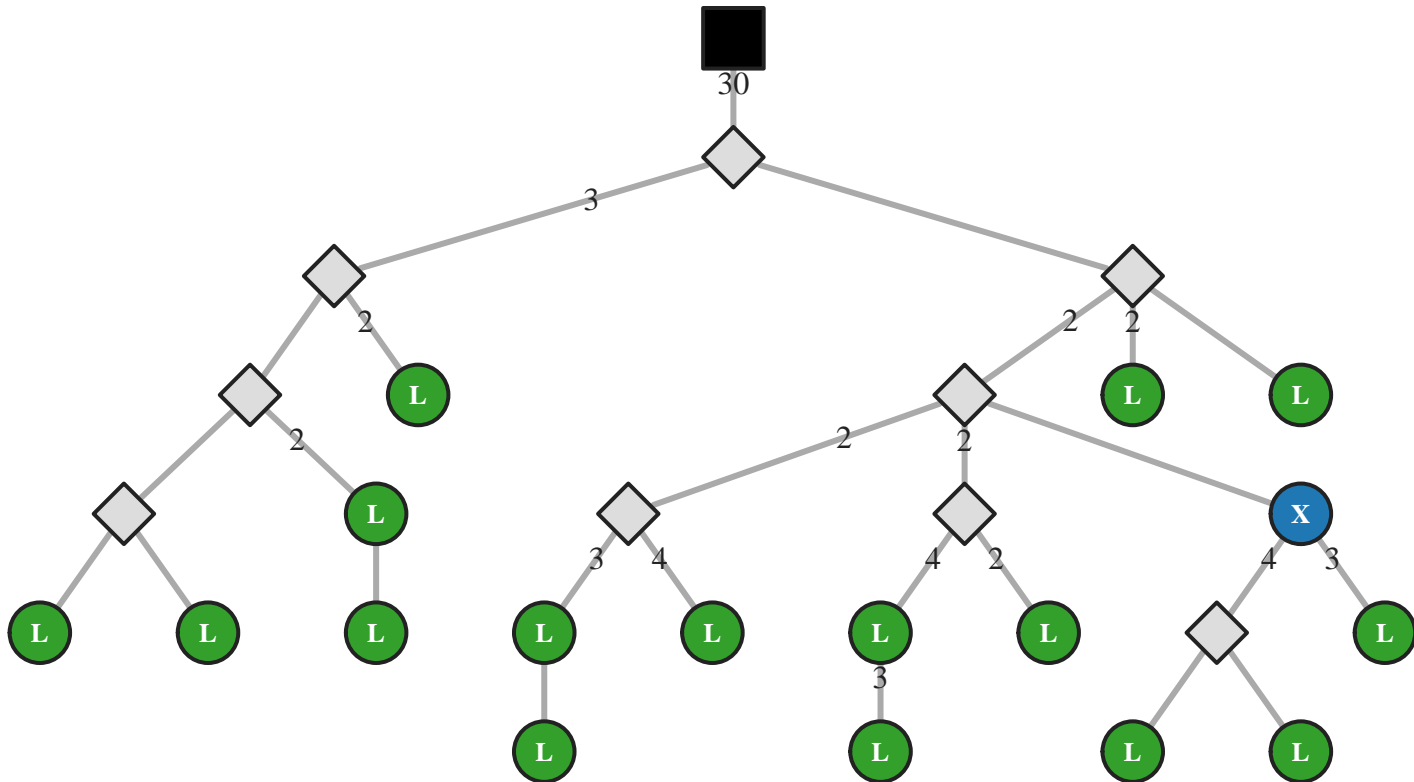
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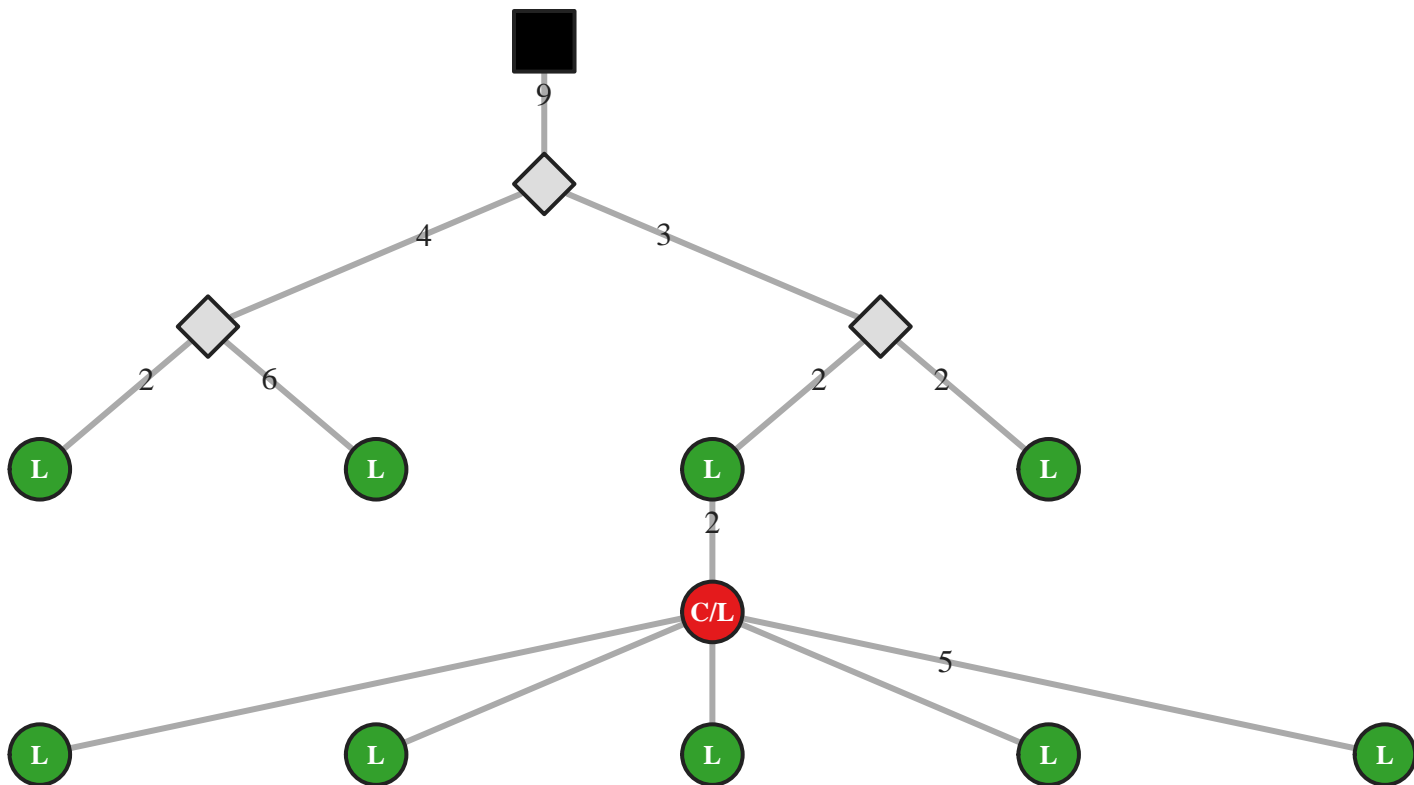
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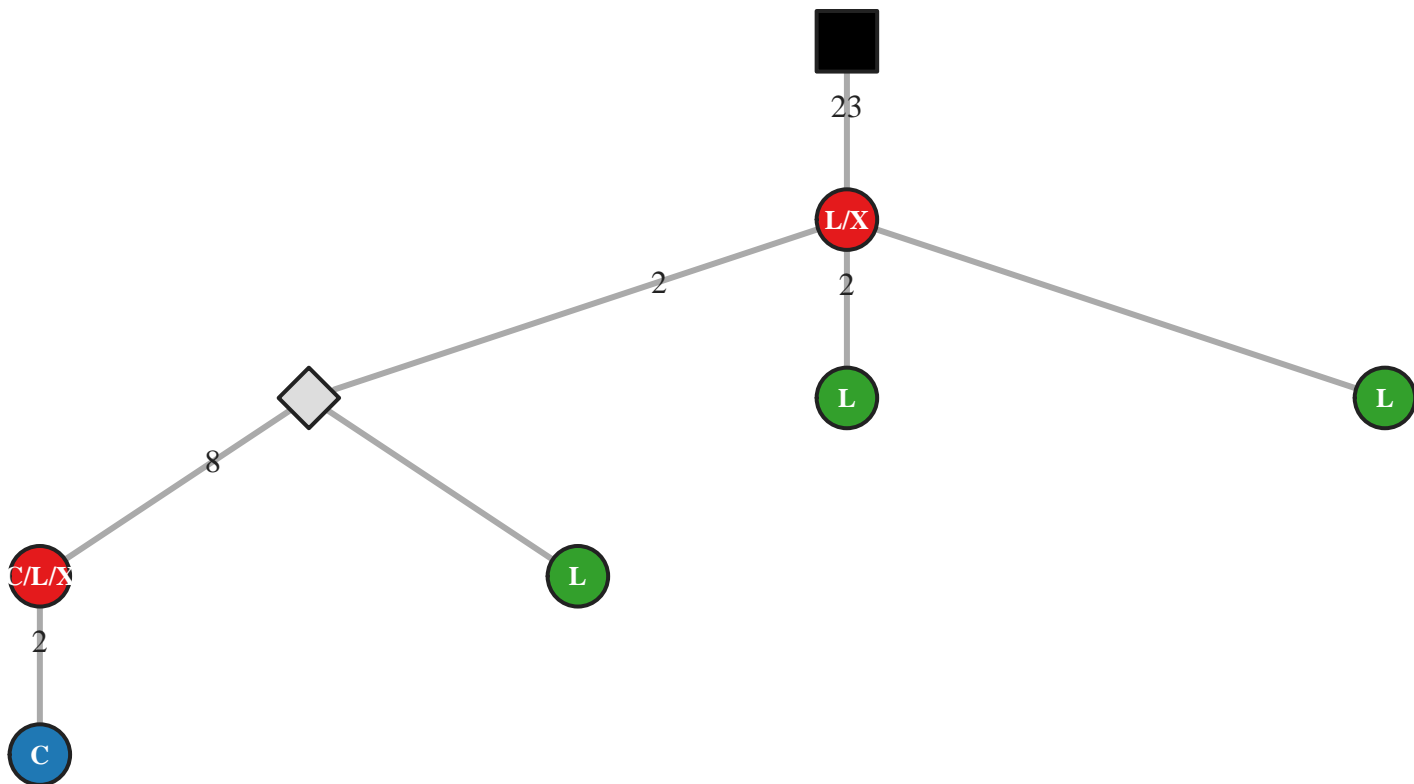
M5 IgG IGHV3-21/J4 63bp (51443)



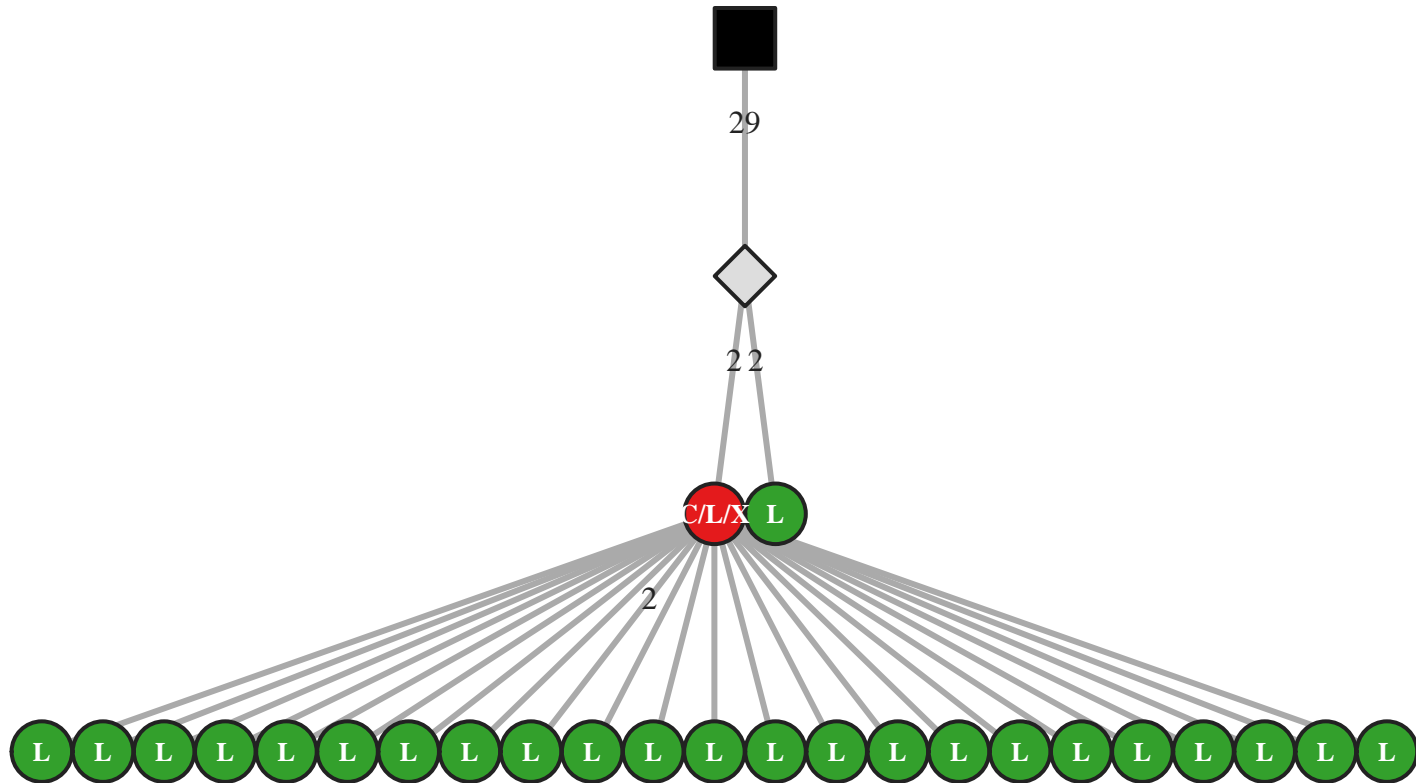
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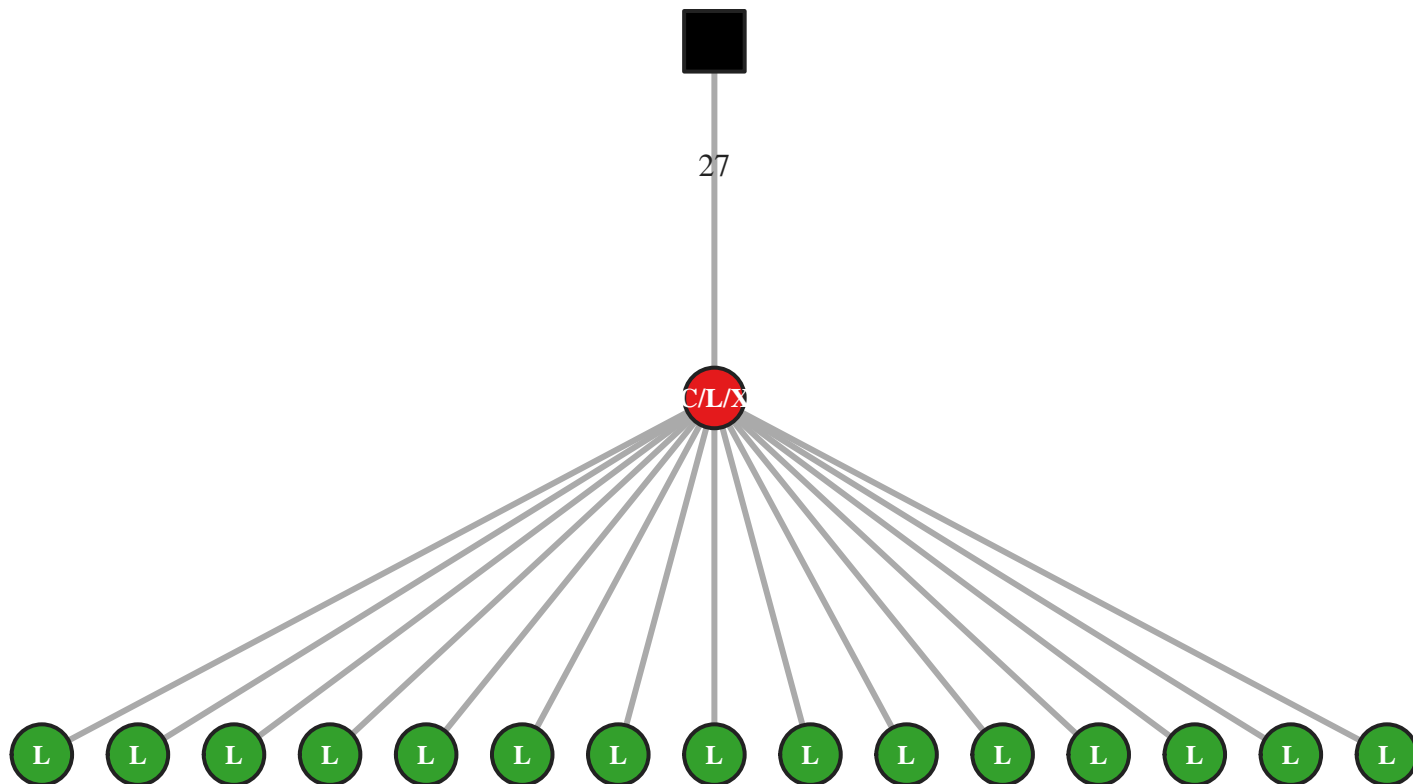
M5 IgG IGHV3-21/J5 33bp (51453)



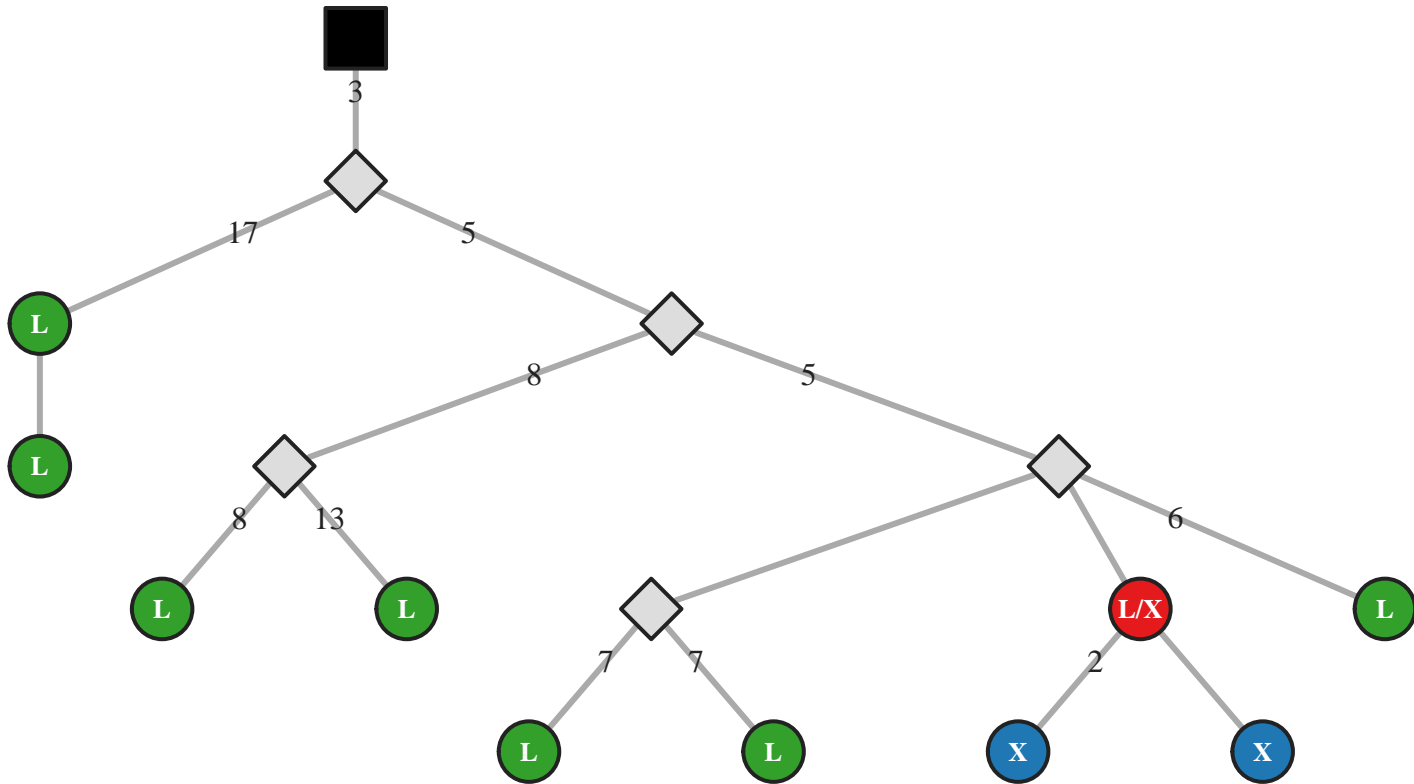
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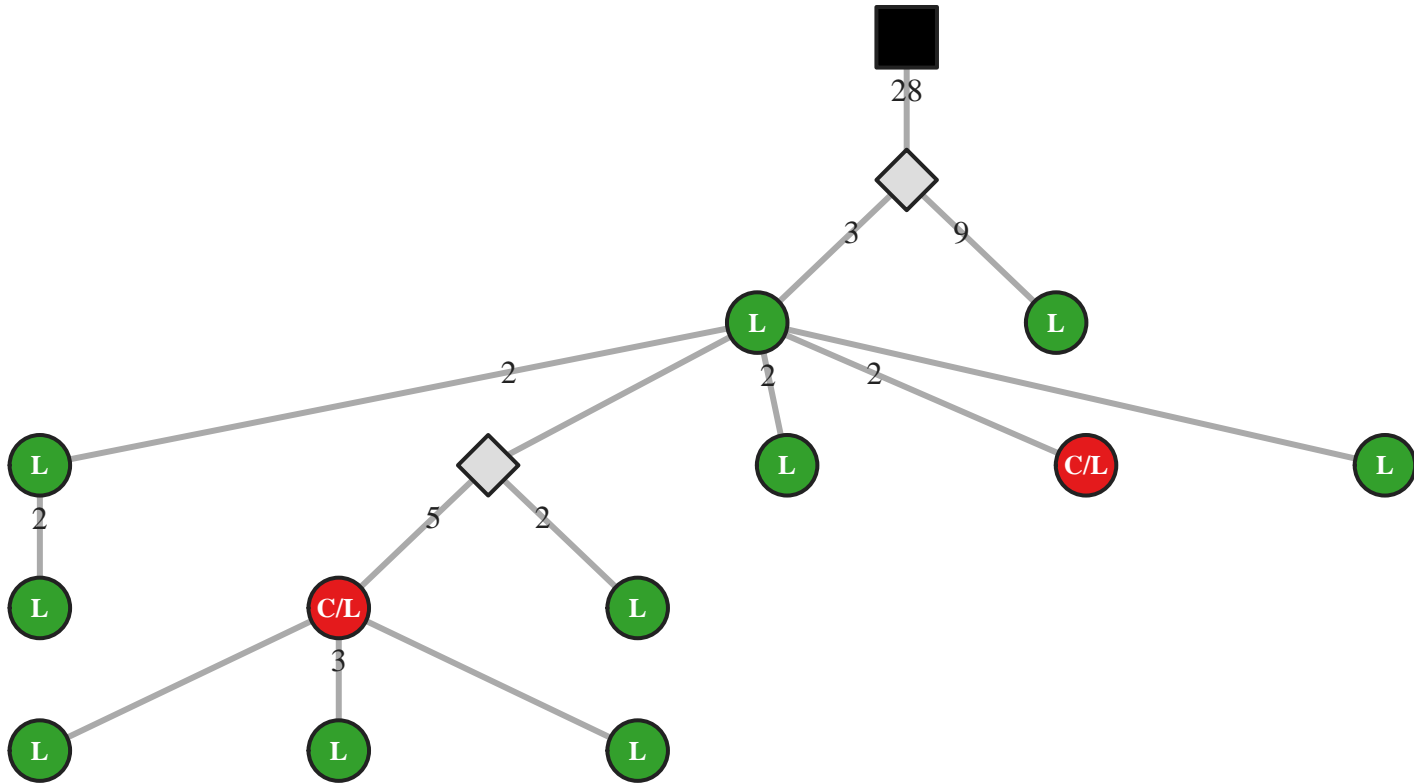
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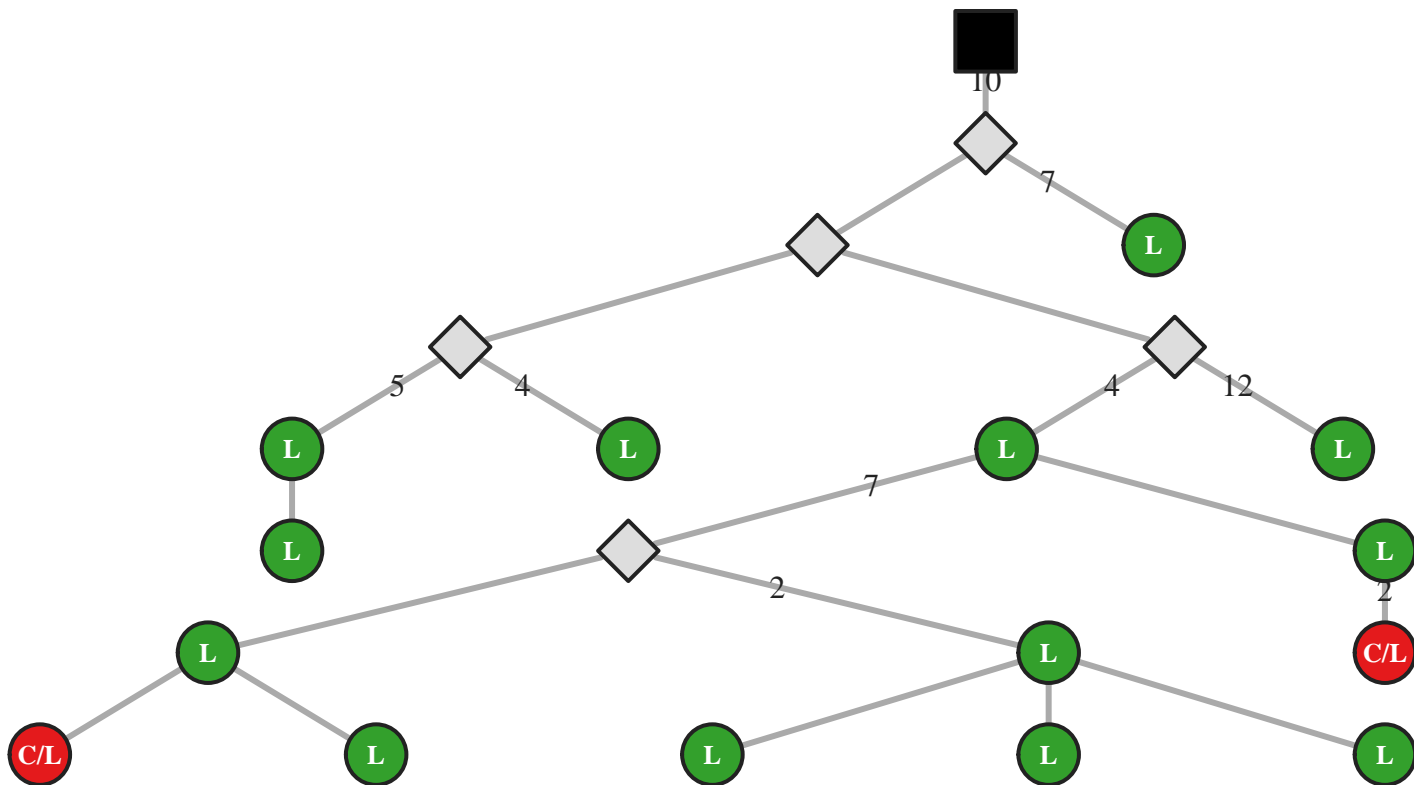
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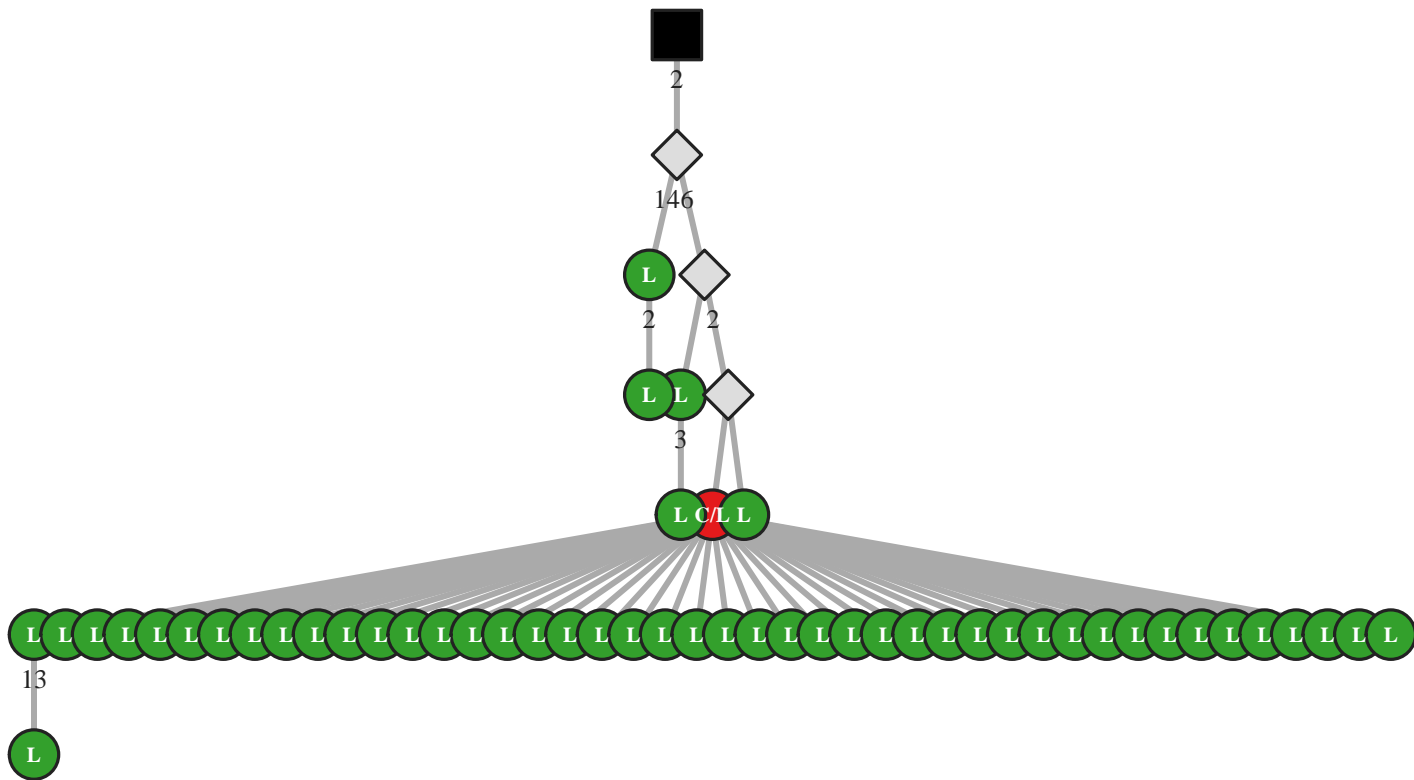
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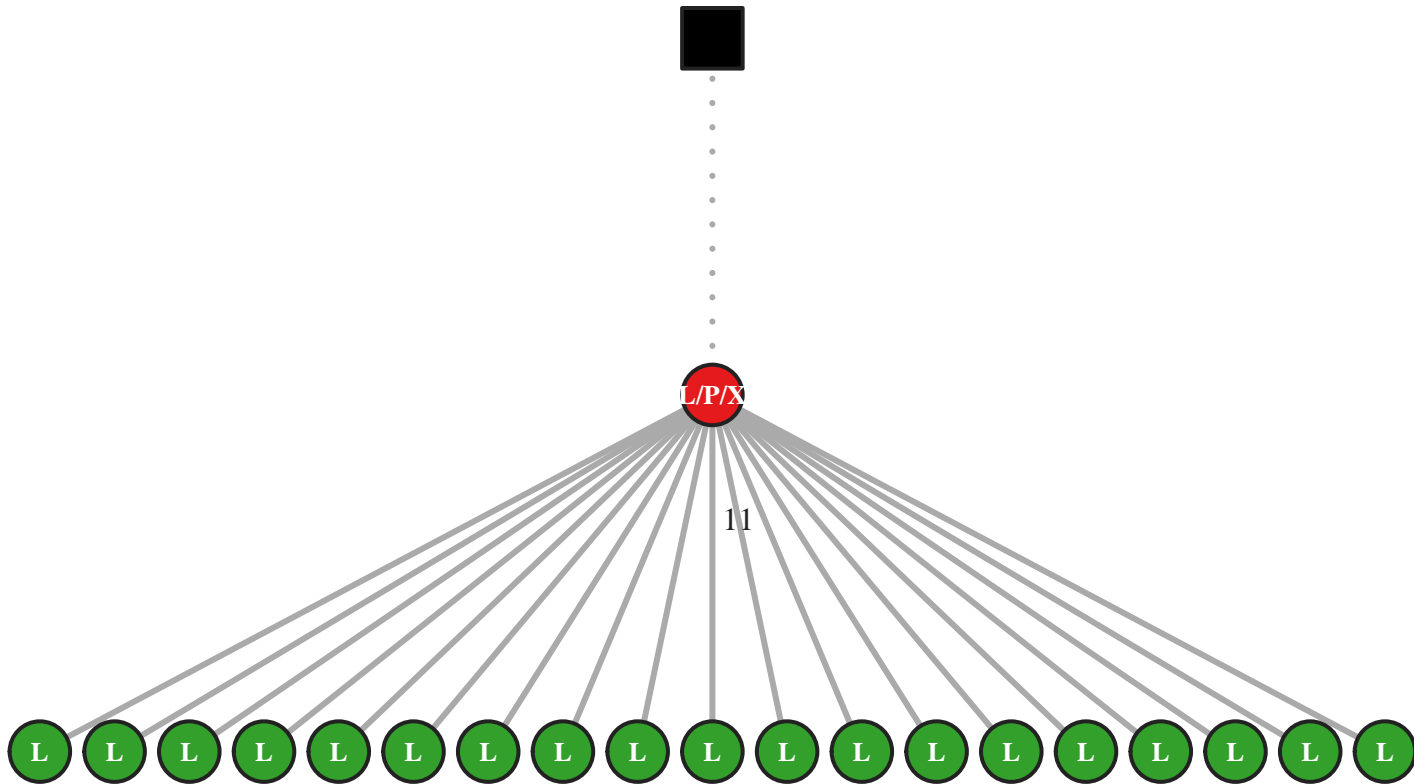
M5 IgG IGHV3-21/J6 36bp (34155)



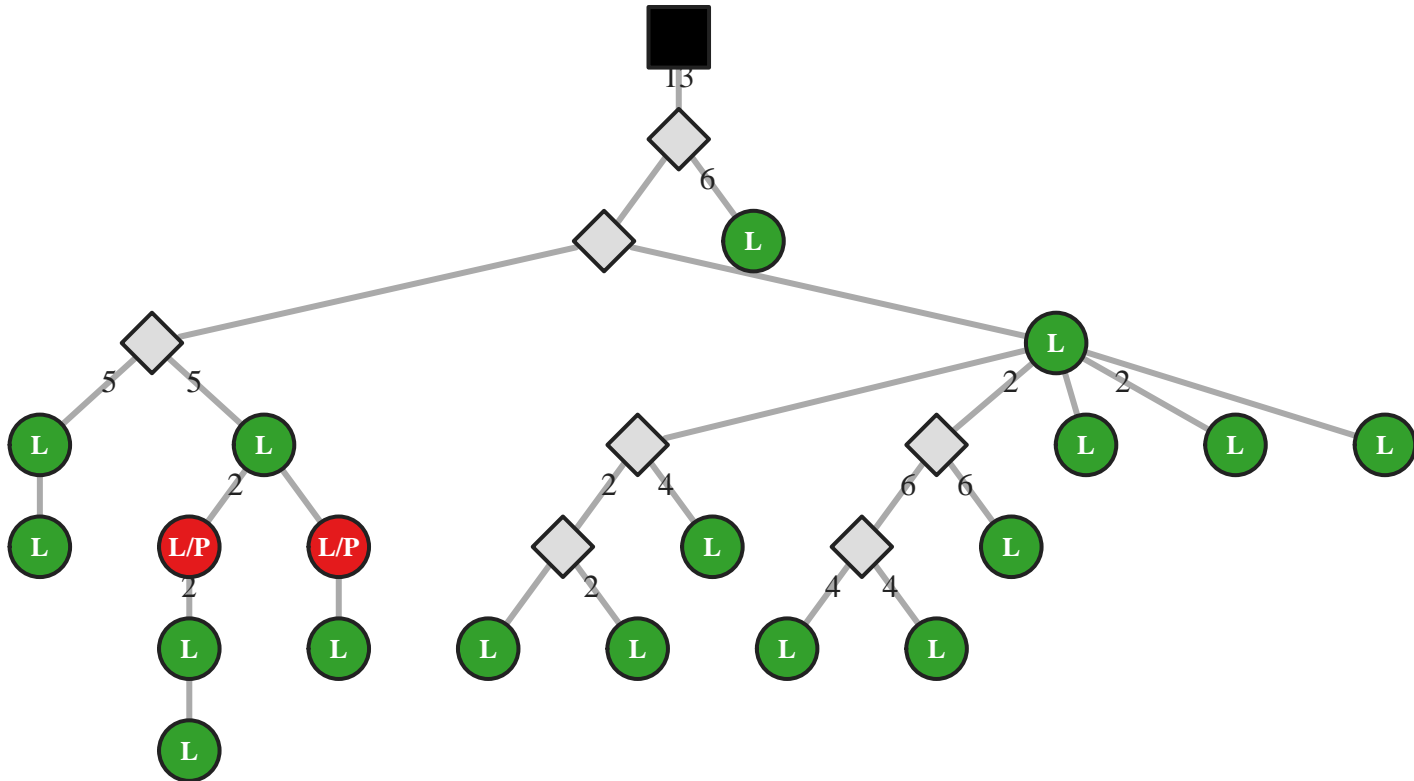
M5 IgG IGHV3-21/J6 48bp (34185)



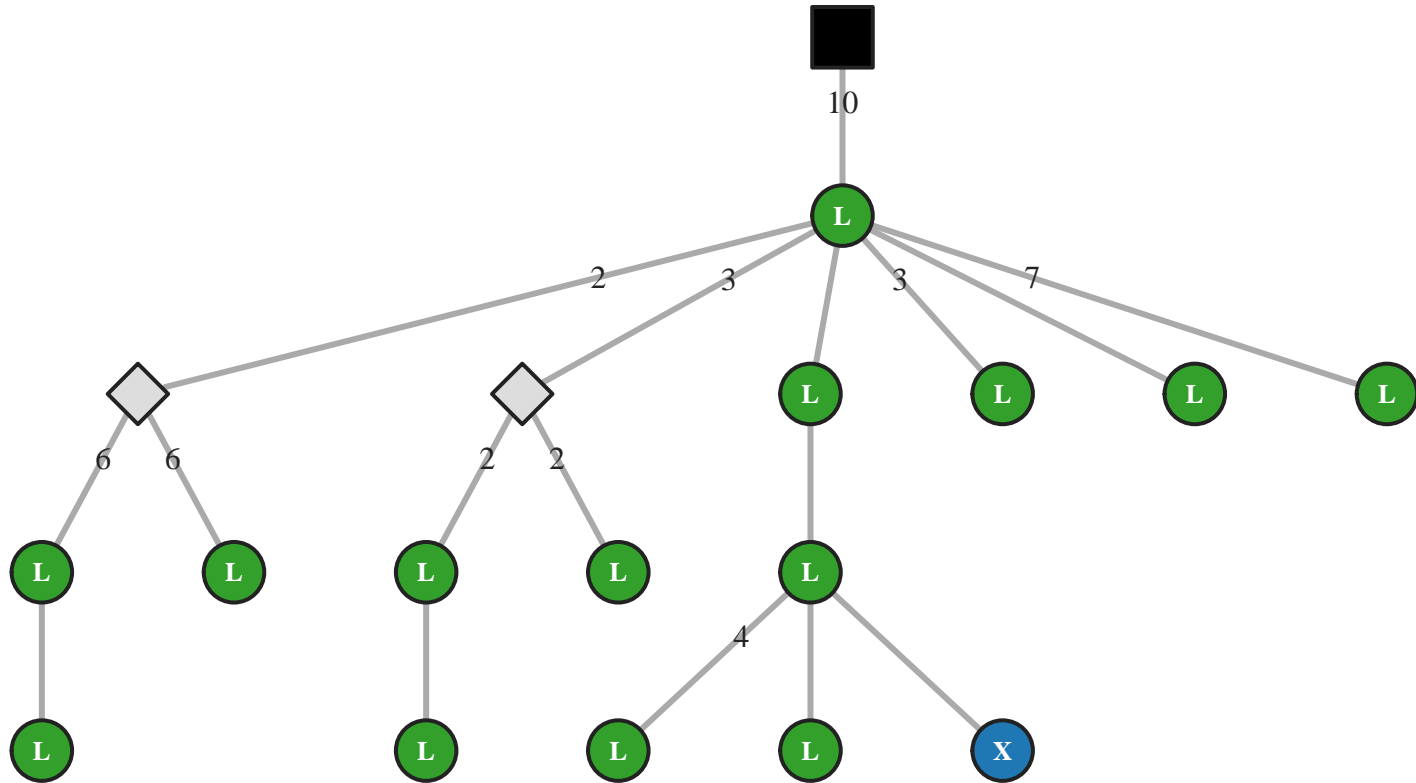
M5 IgG IGHV3-21/J6 57bp (25644)



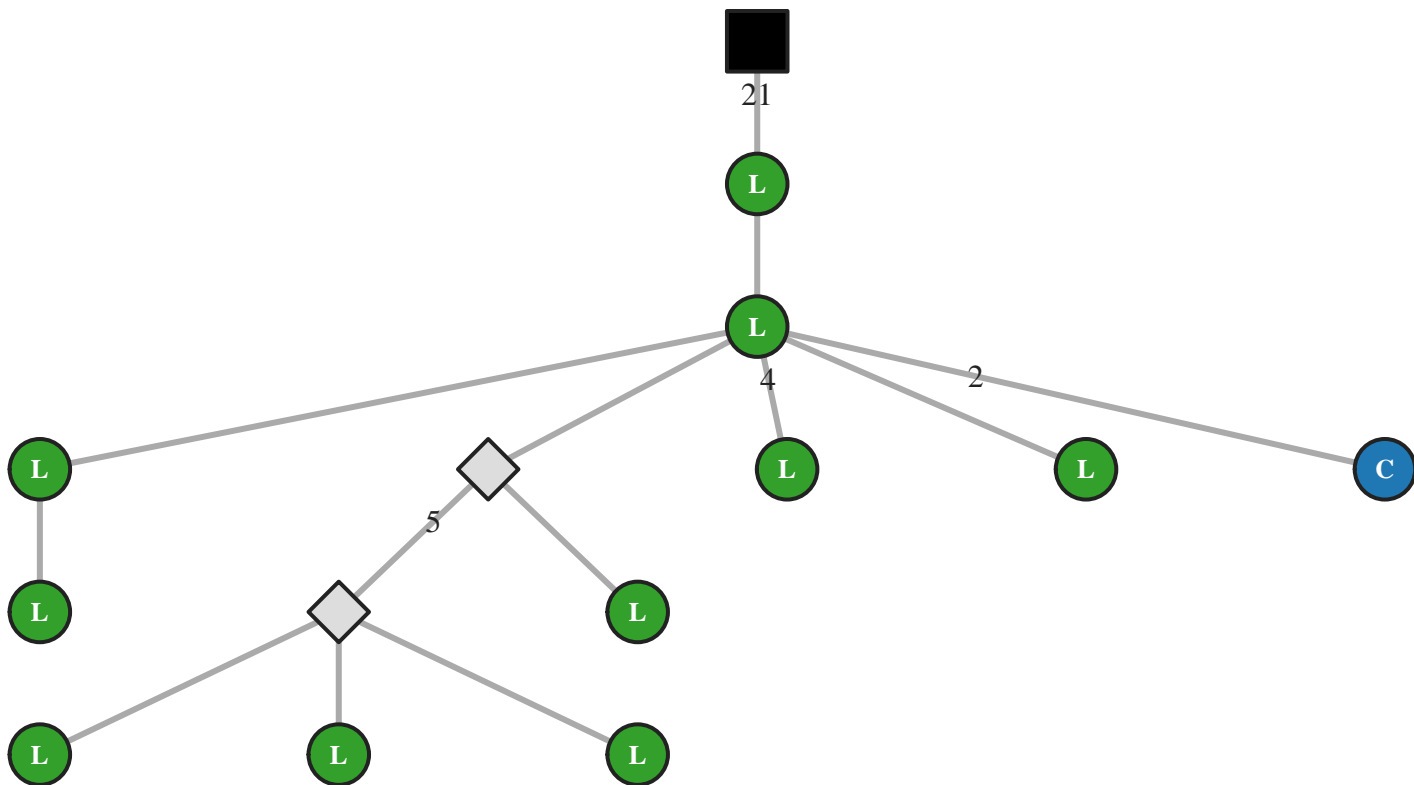
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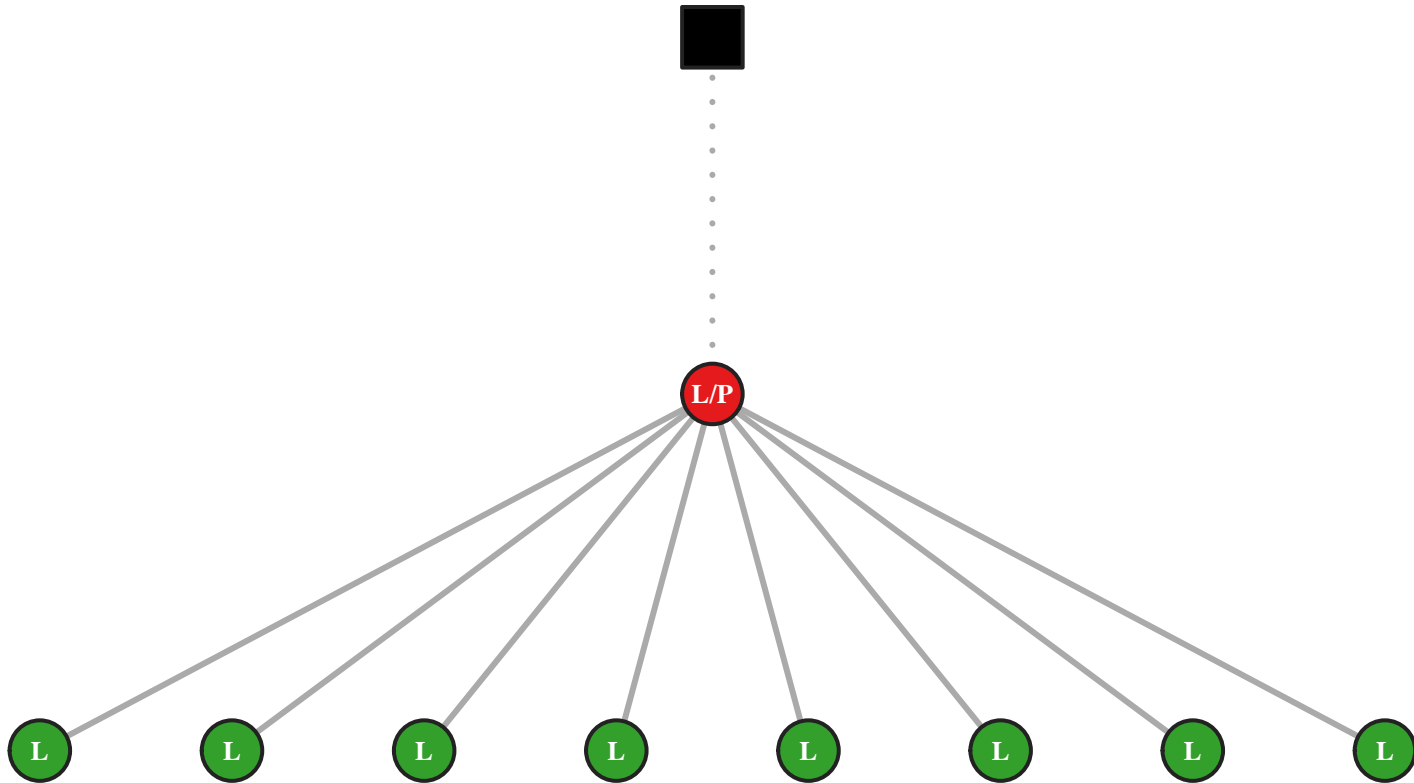
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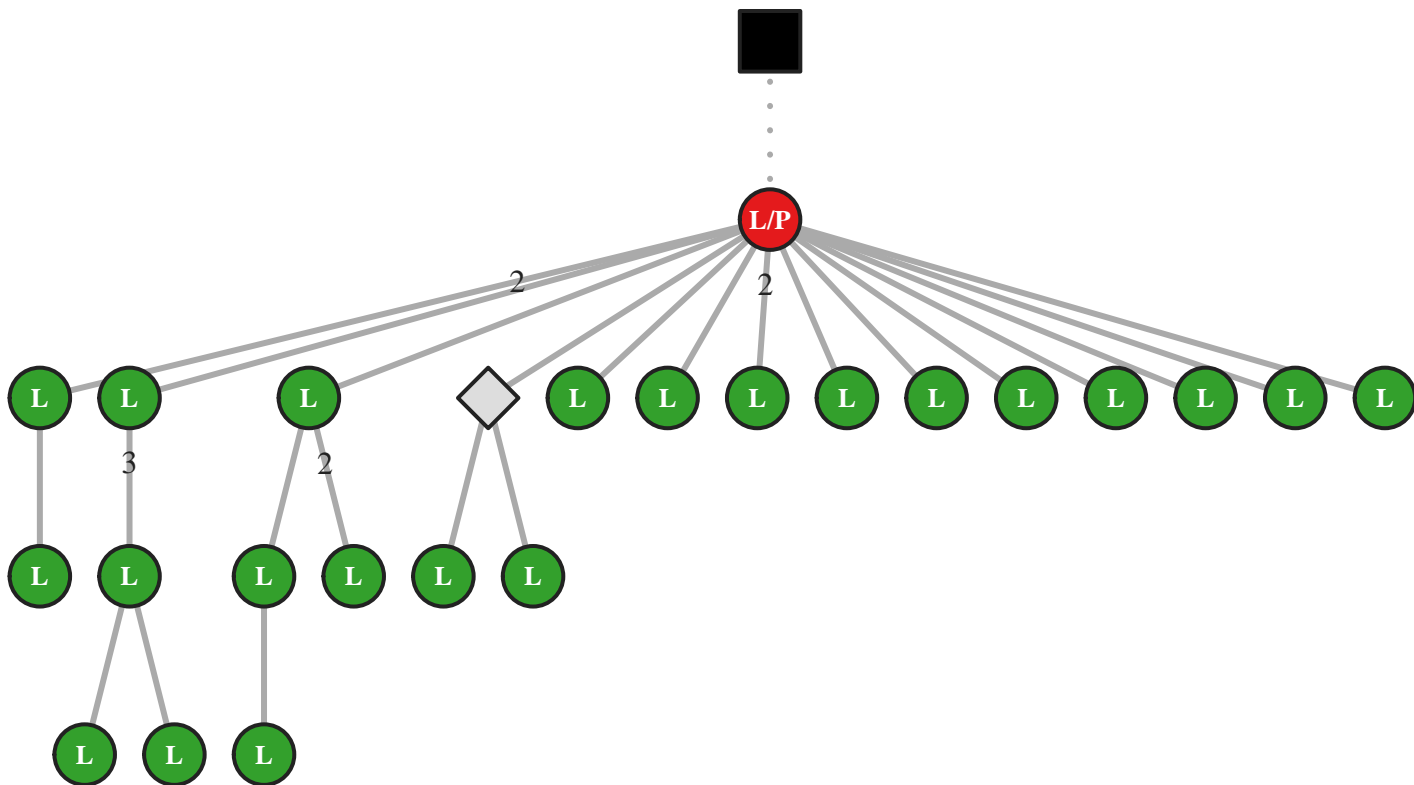
M5 IgG IGHV3-21/J6 63bp (43601)



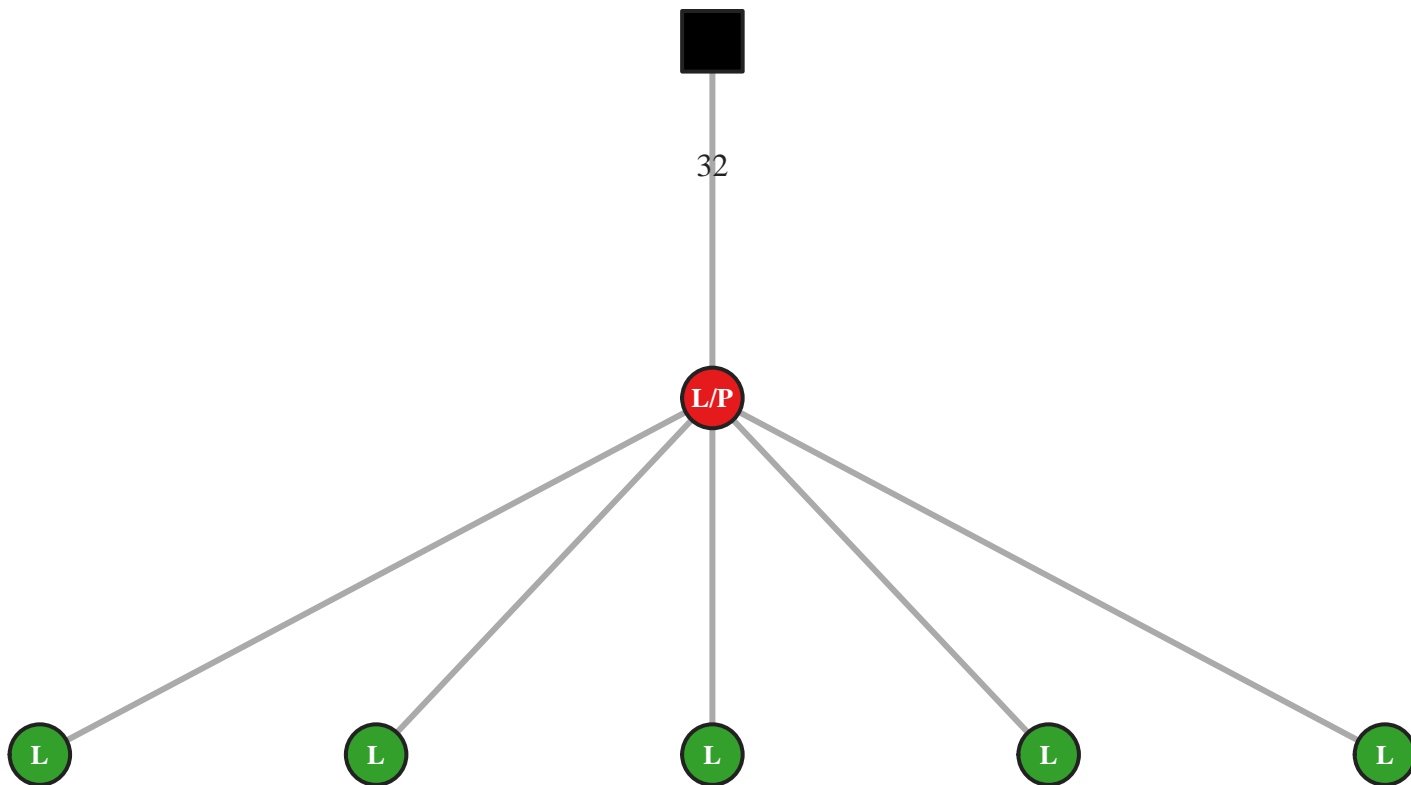
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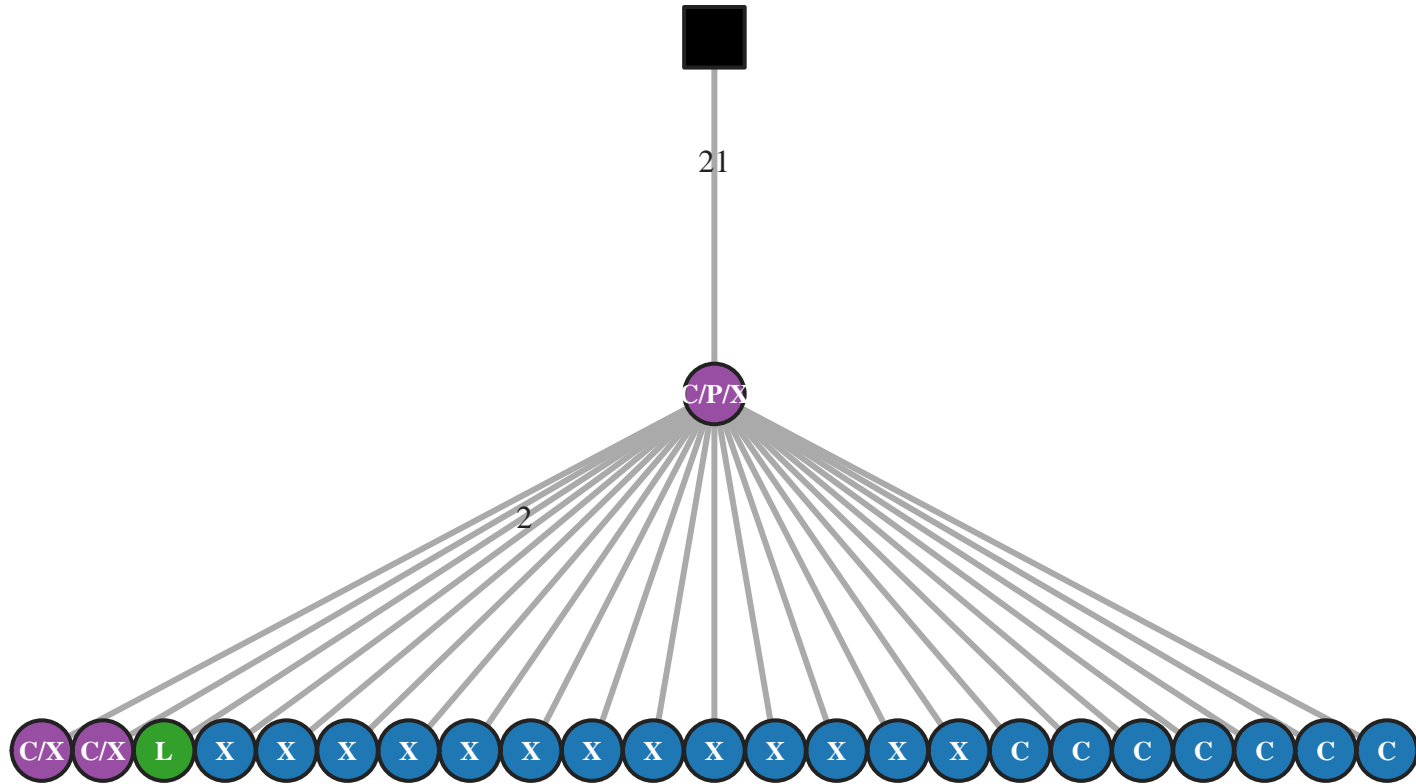
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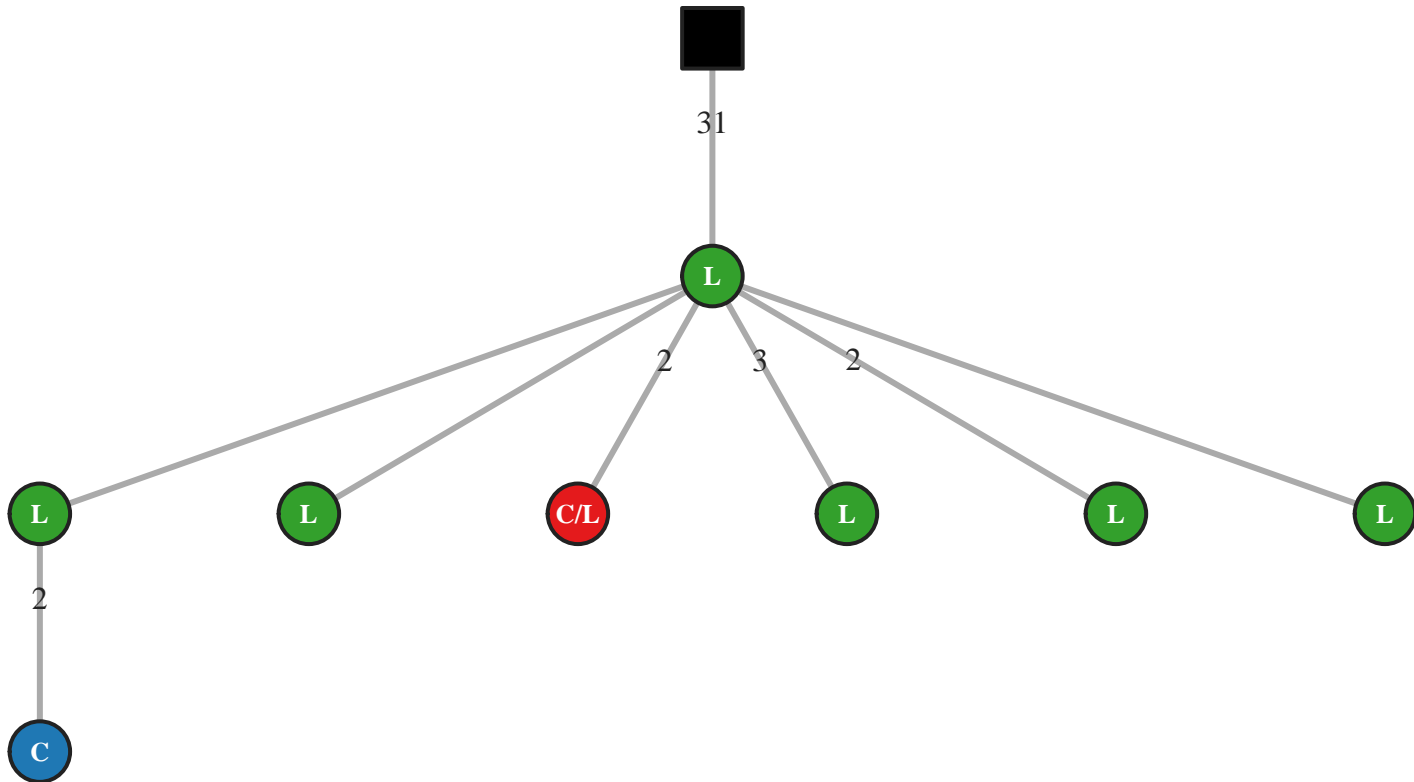
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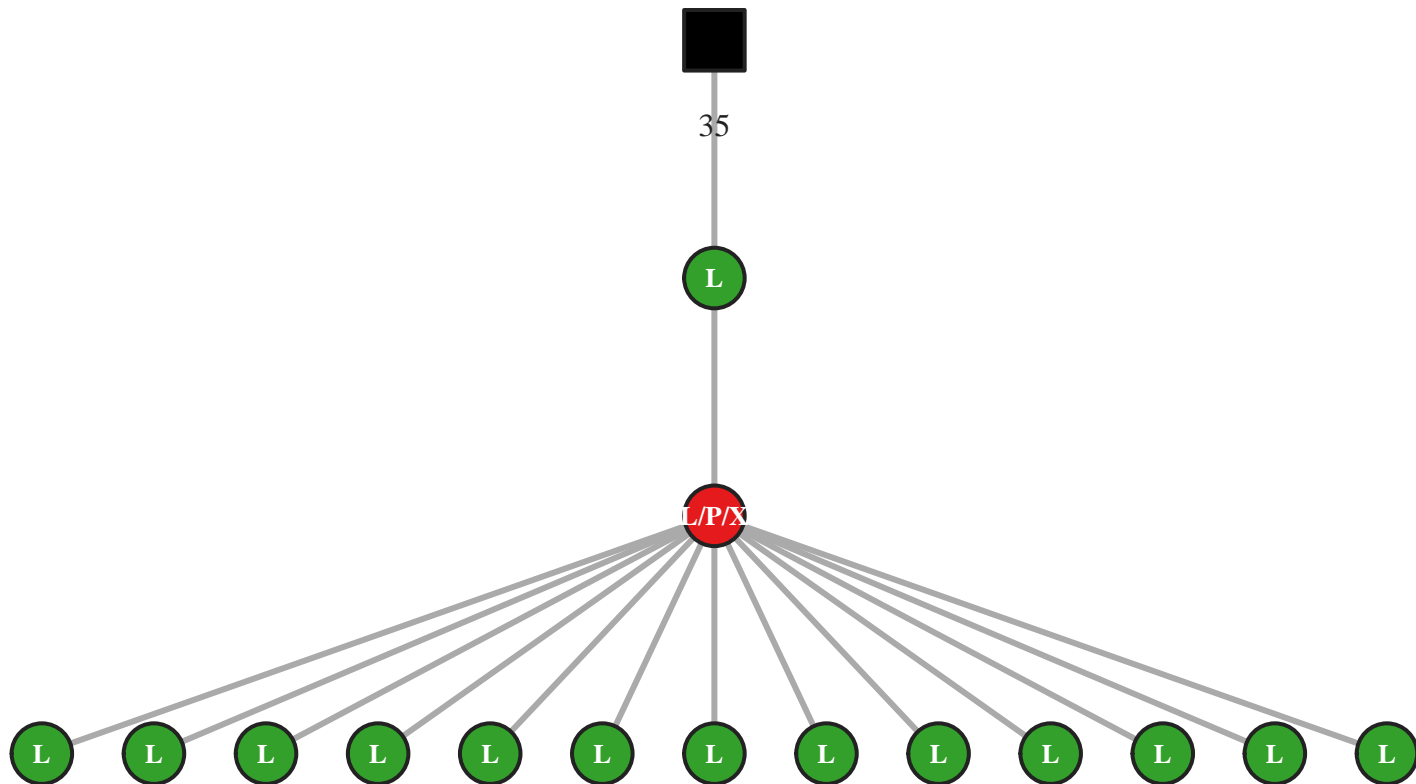
M5 IgG IGHV3-23/J1 57bp (51478)



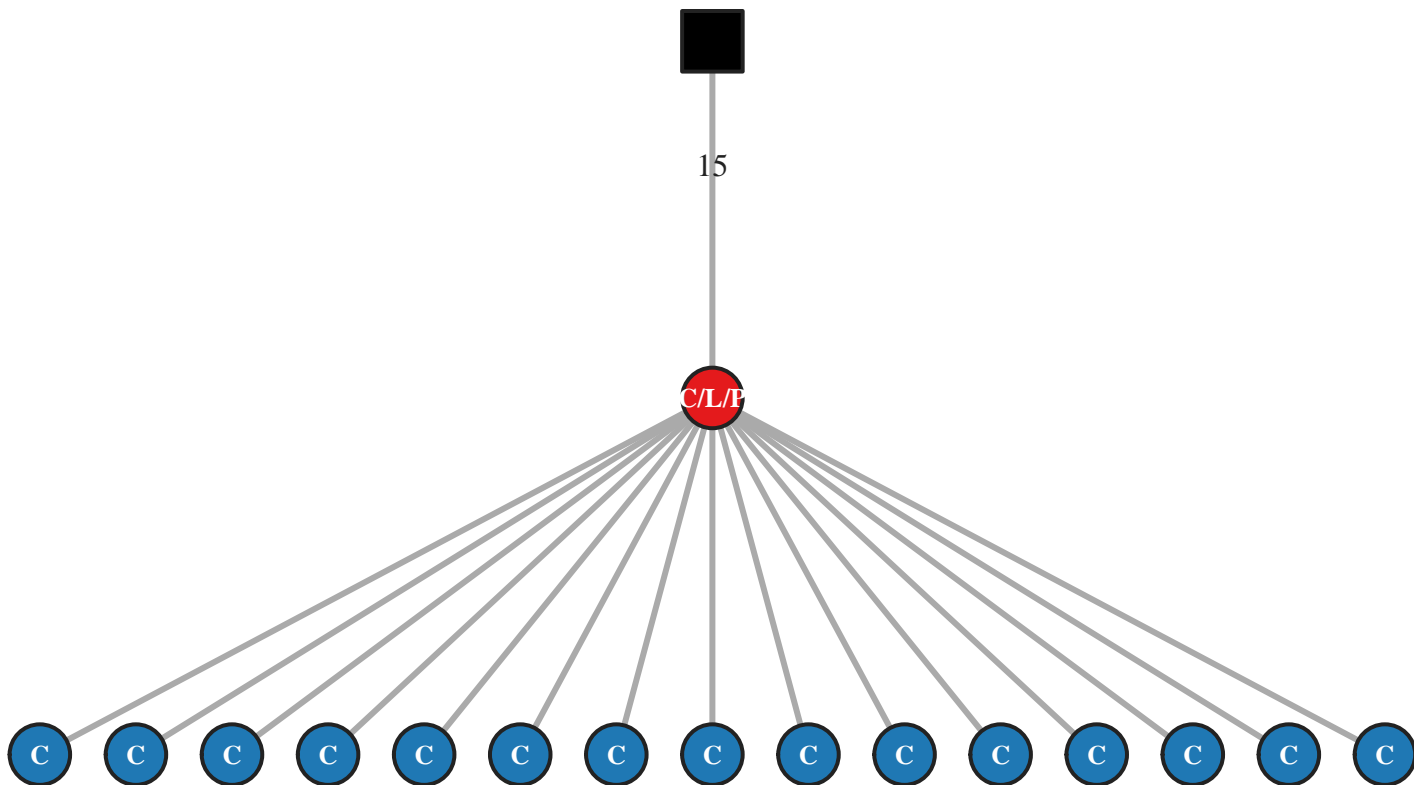
M5 IgG IGHV3-23/J2 51bp (6592)



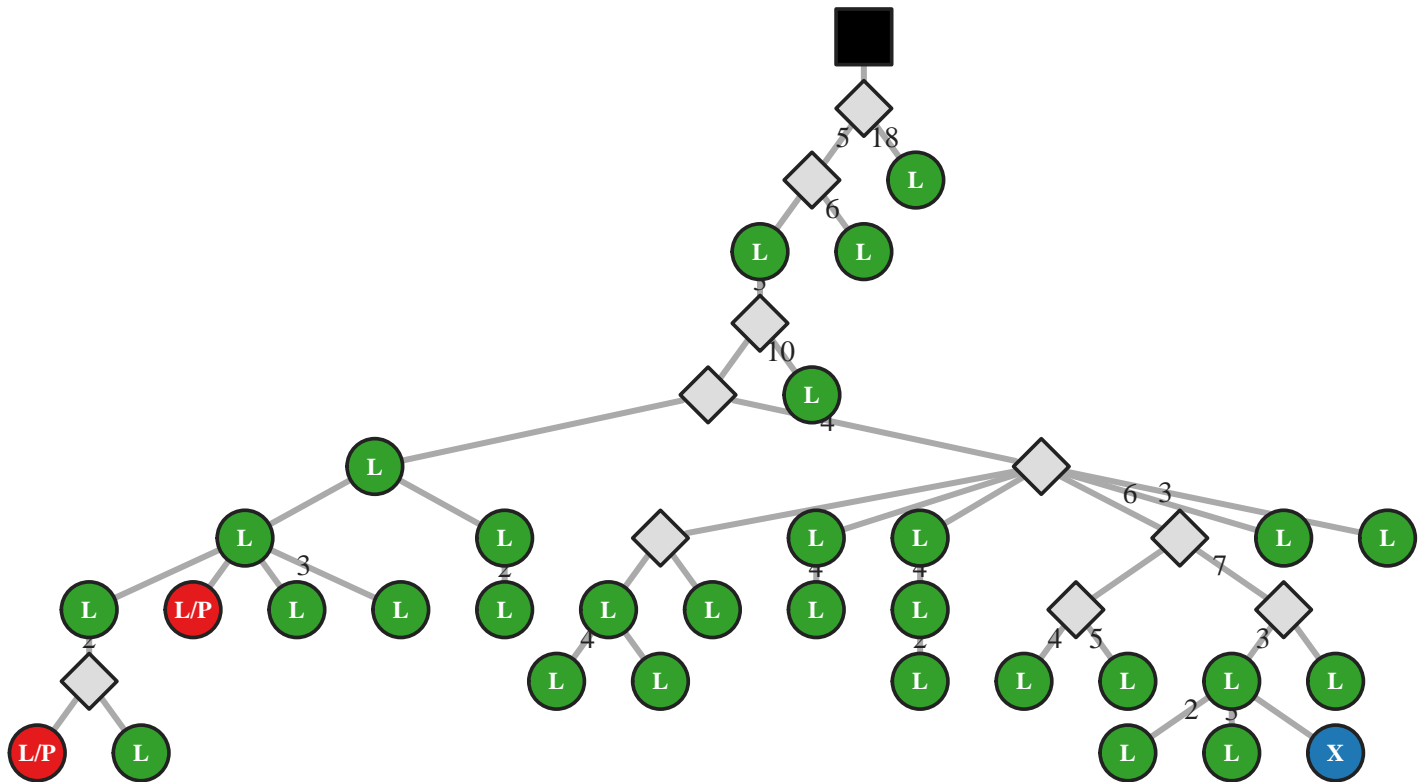
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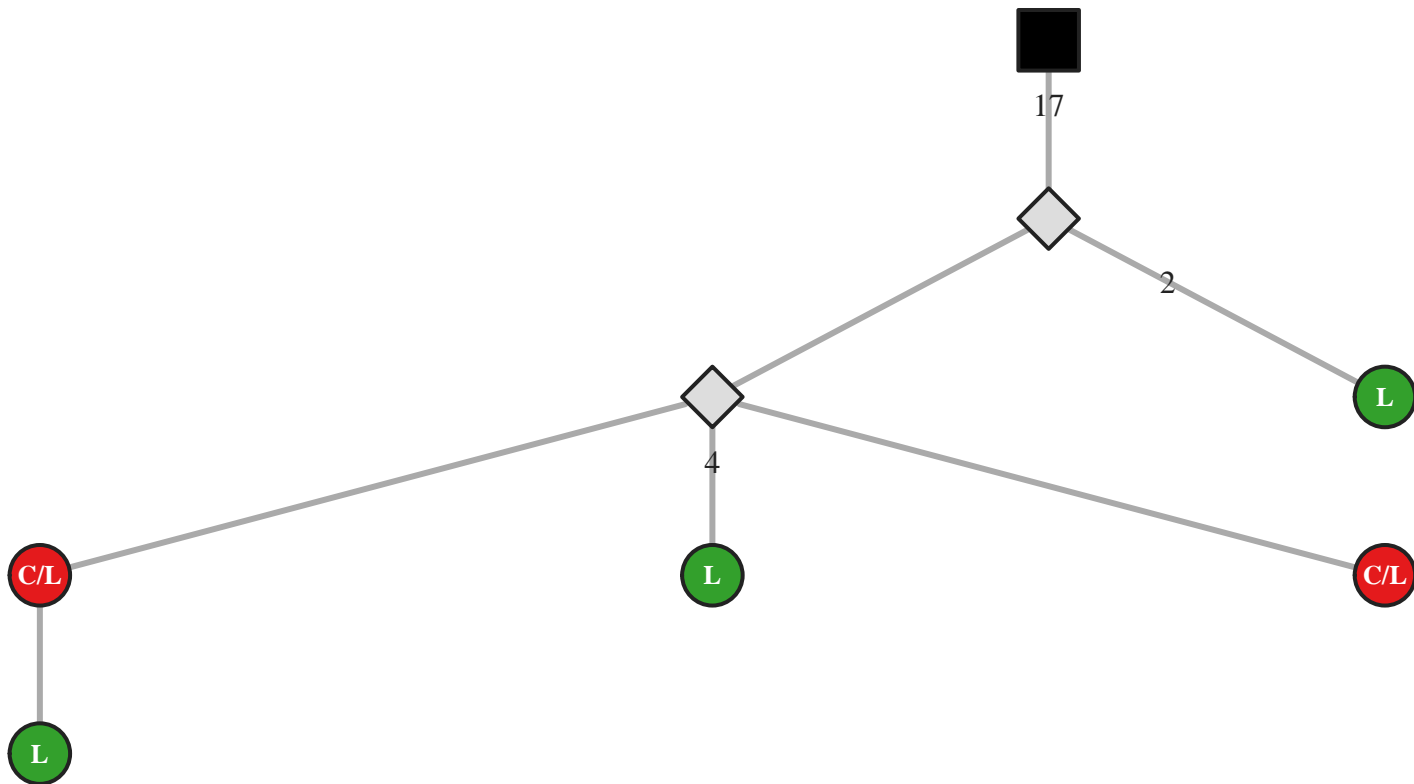
M5 IgG IGHV3-23/J3 63bp (43666)



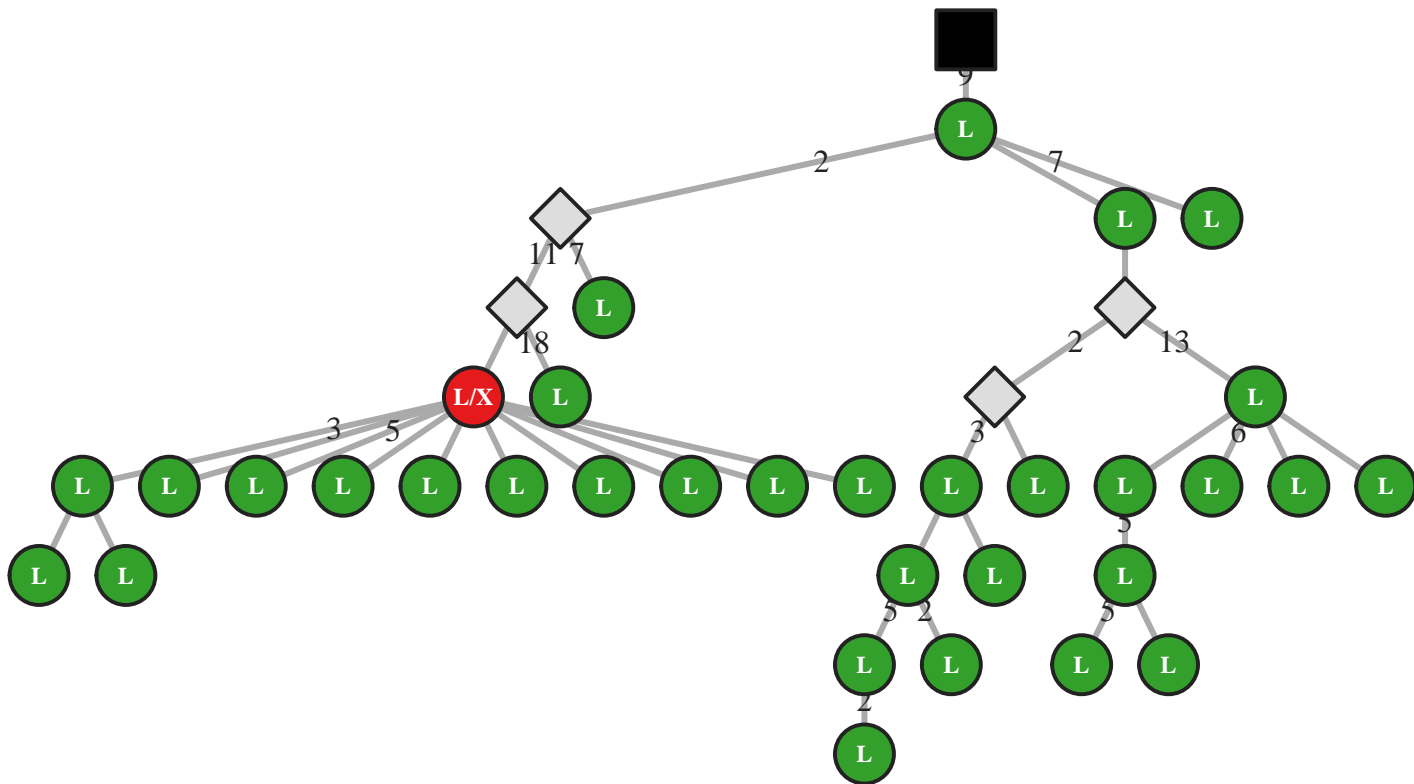
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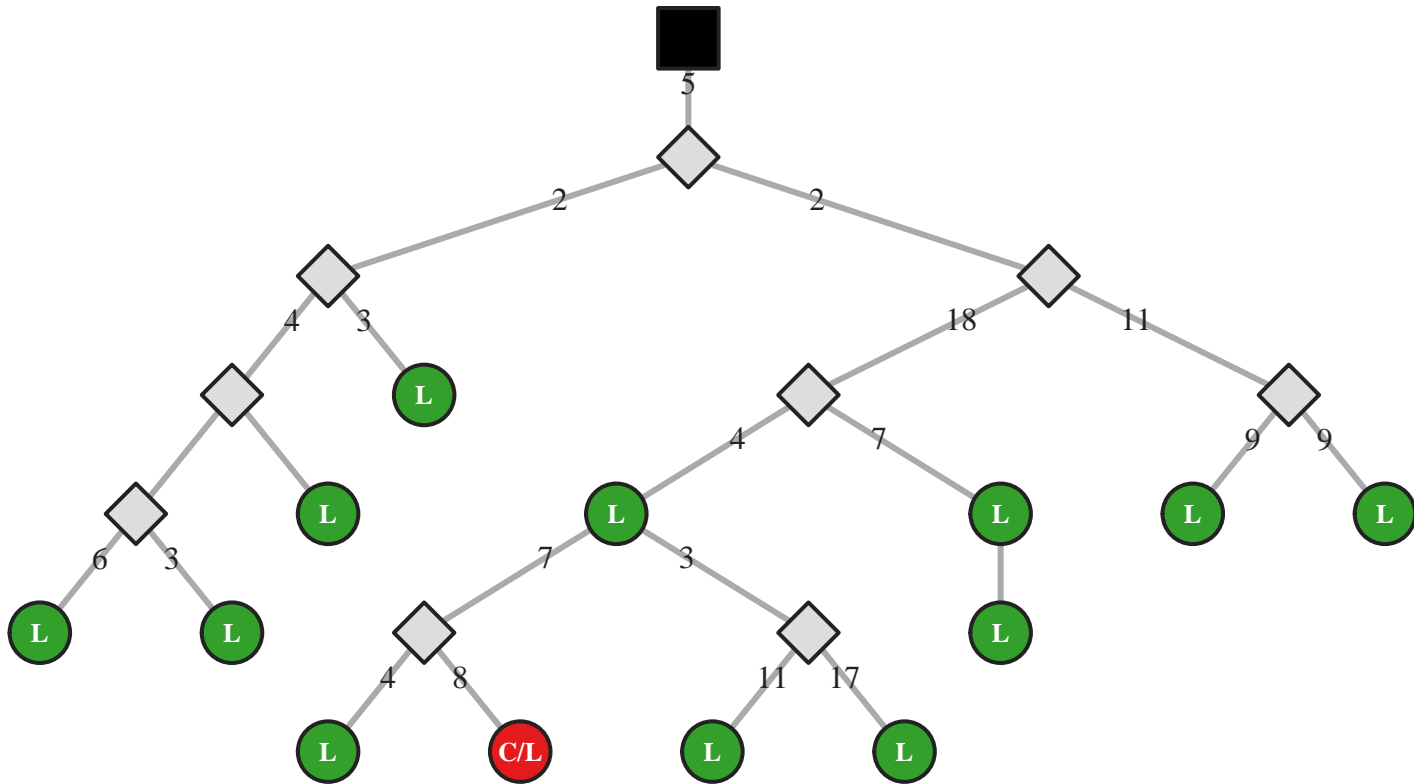
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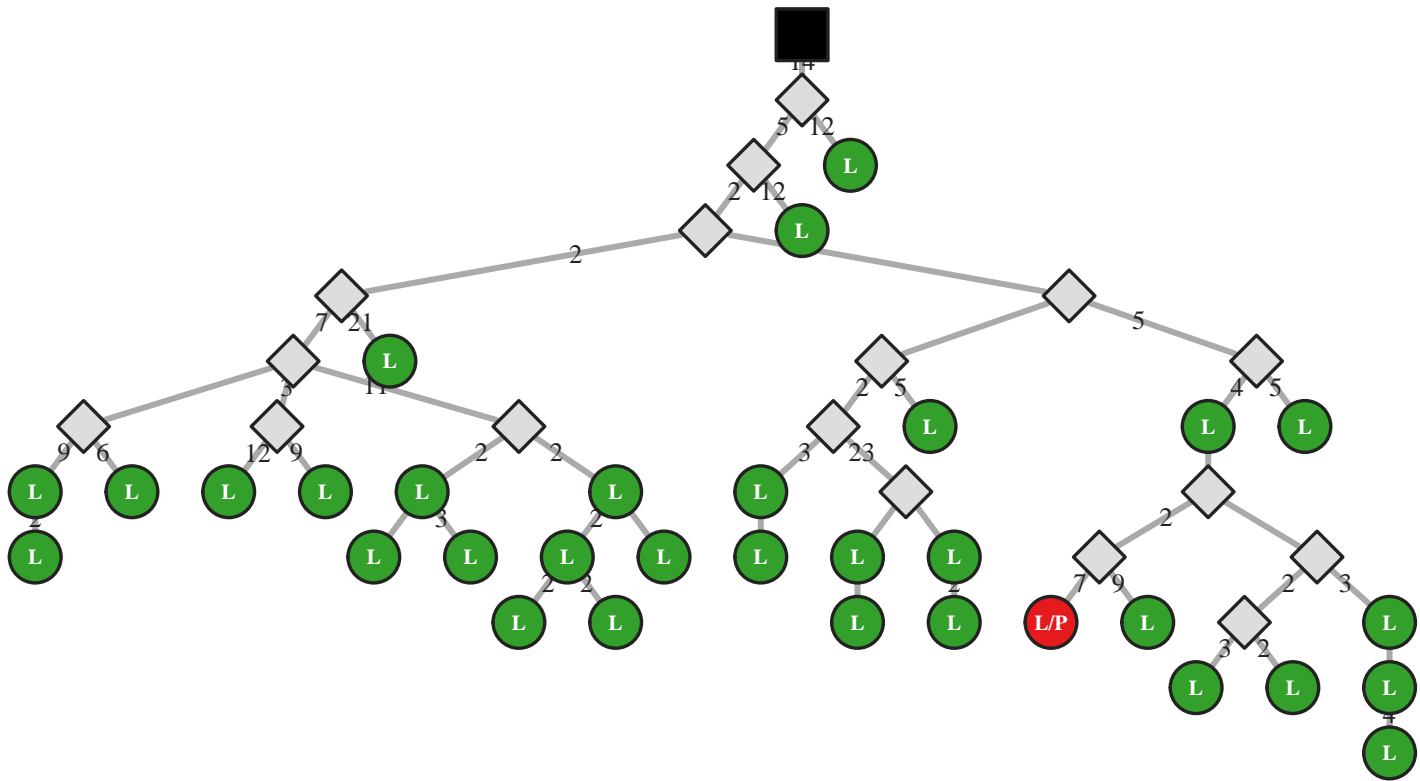
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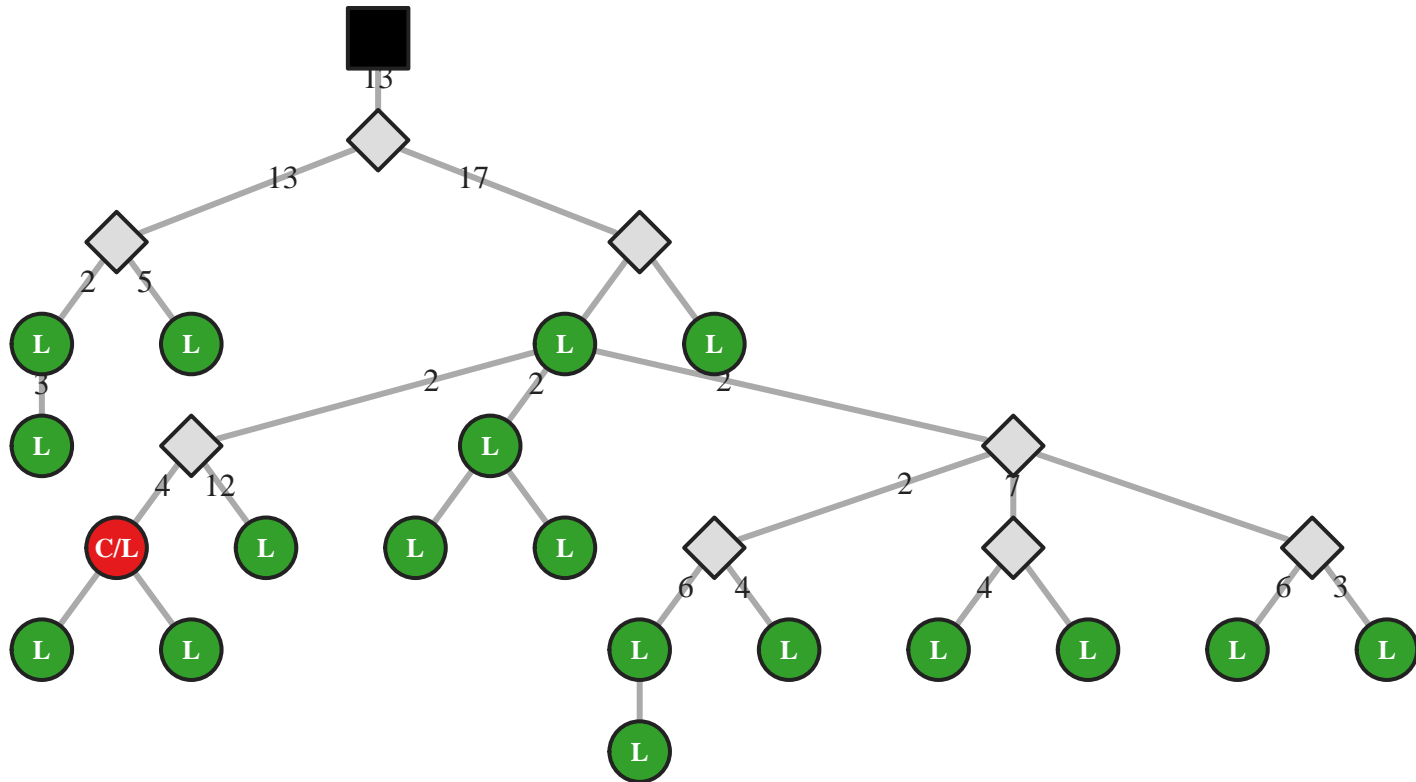
M5 IgG IGHV3-23/J4 33bp (25710)



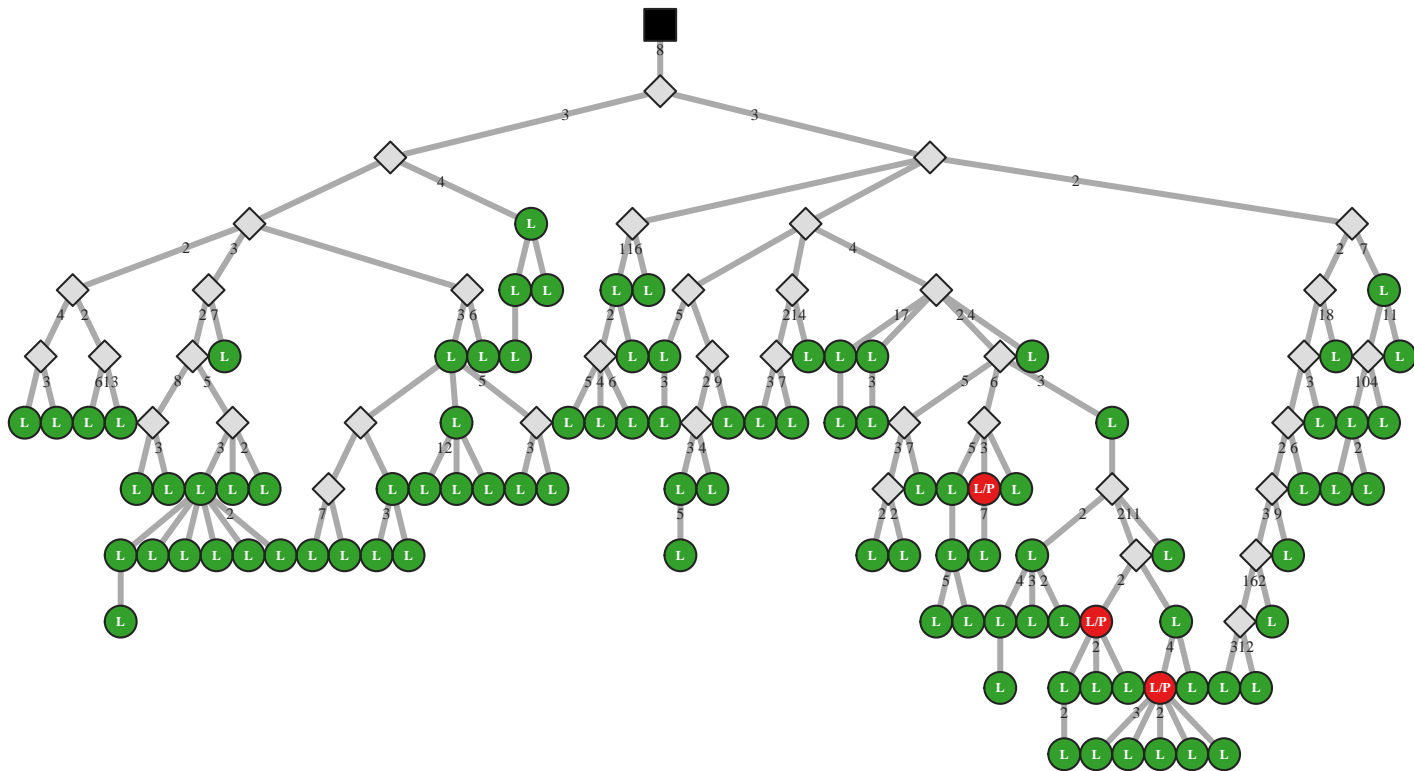
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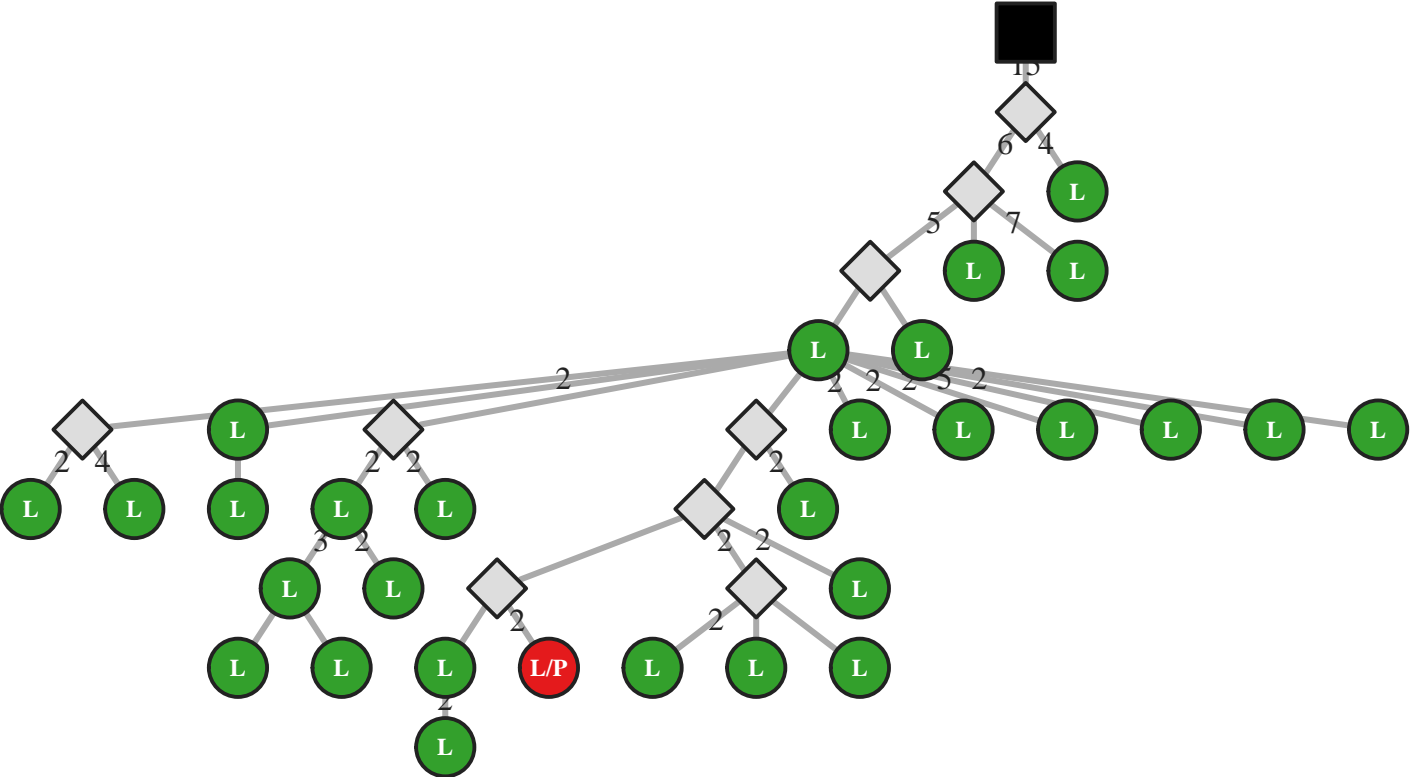
M5 IgA IGHV3-23/J4 36bp (12307)



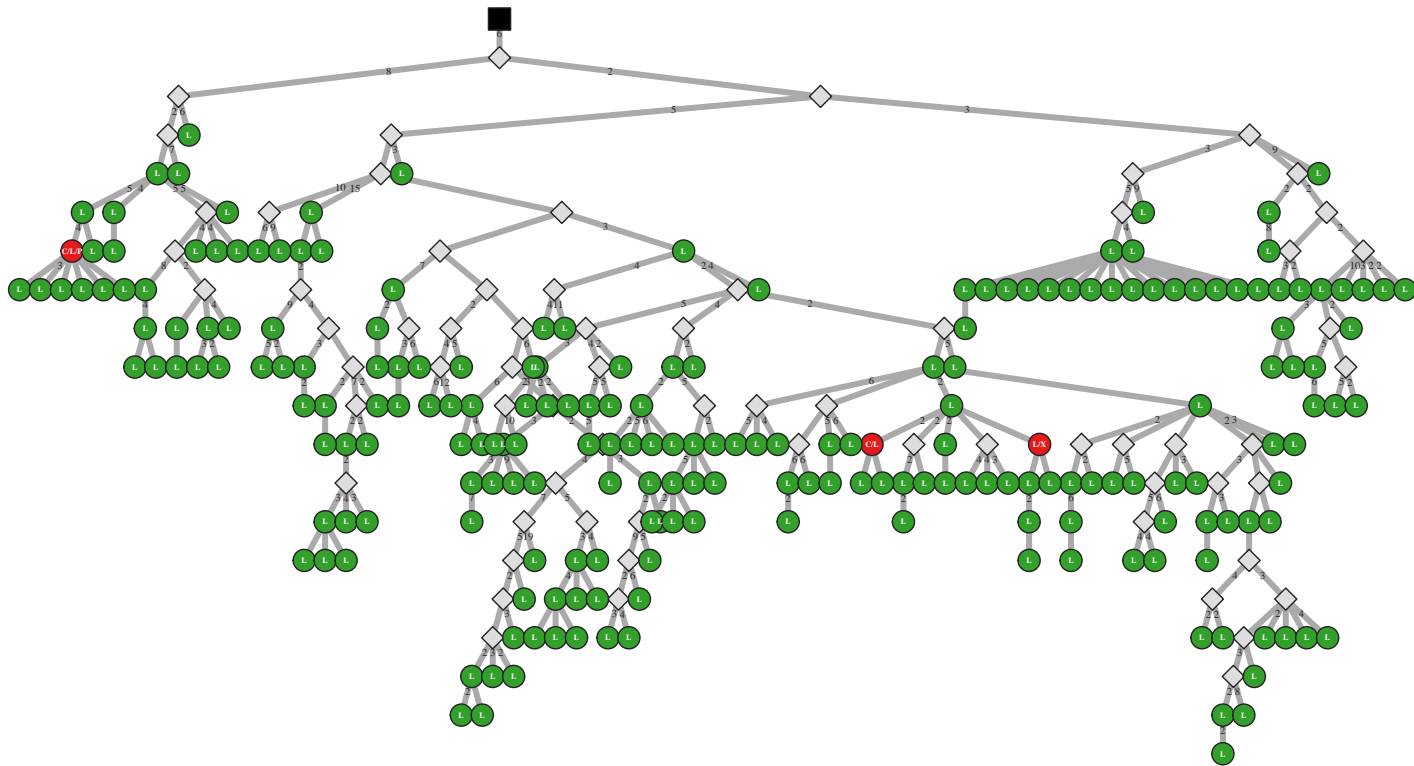
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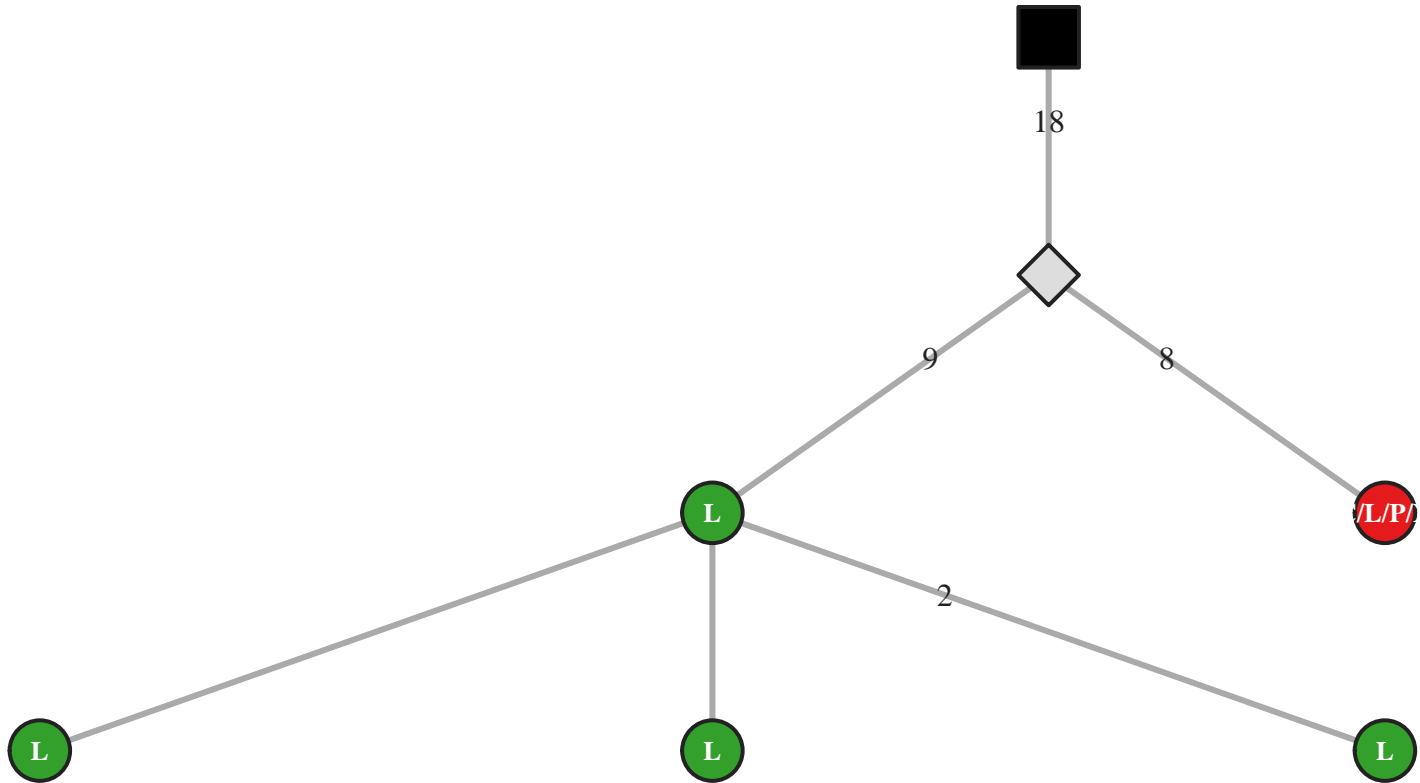
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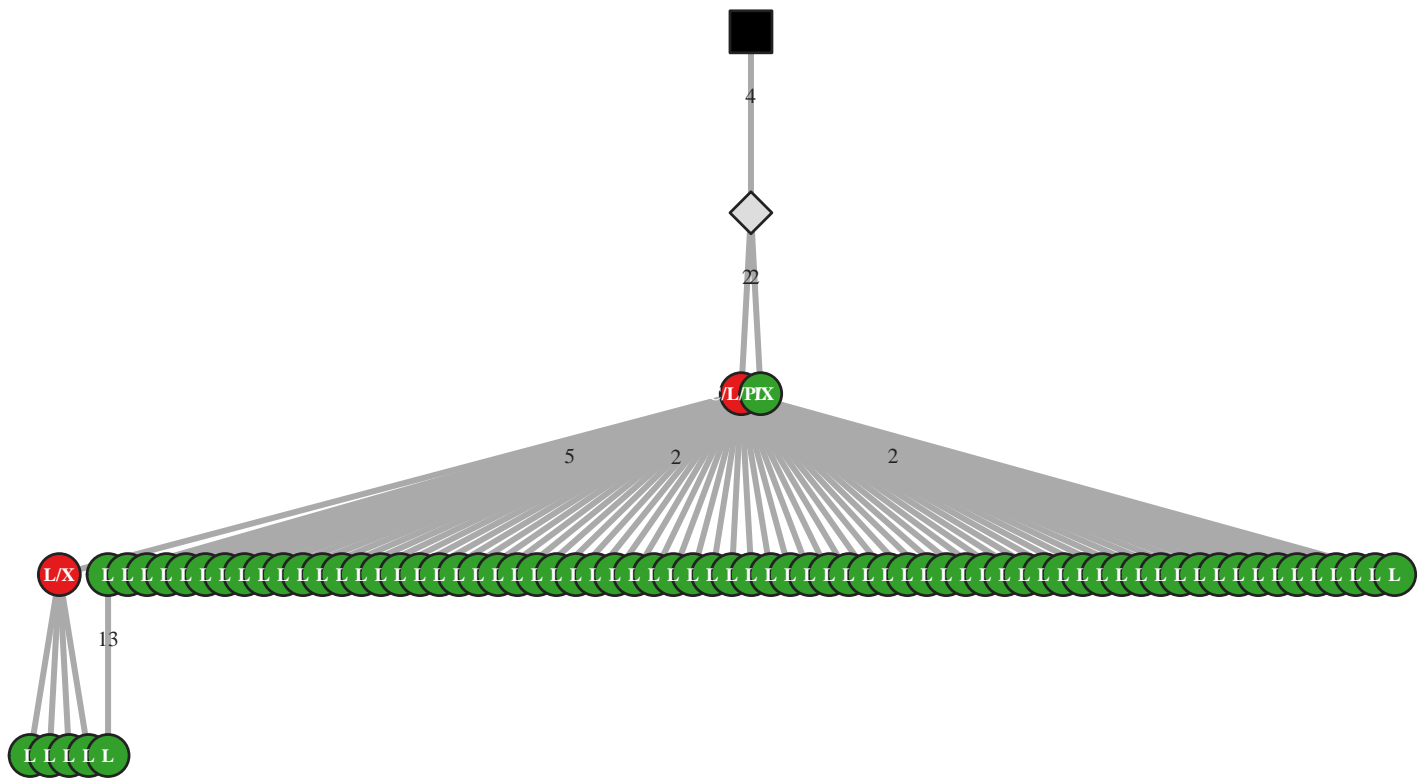
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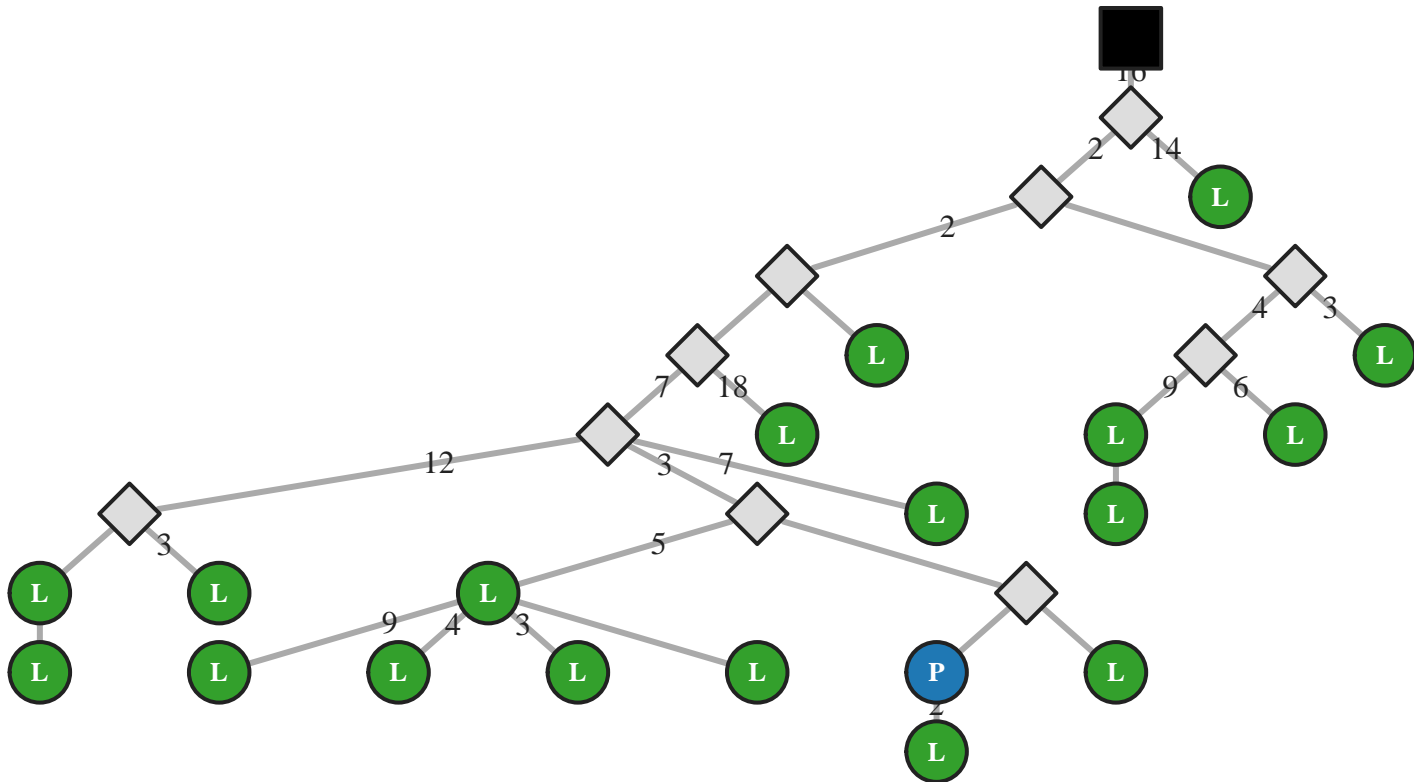
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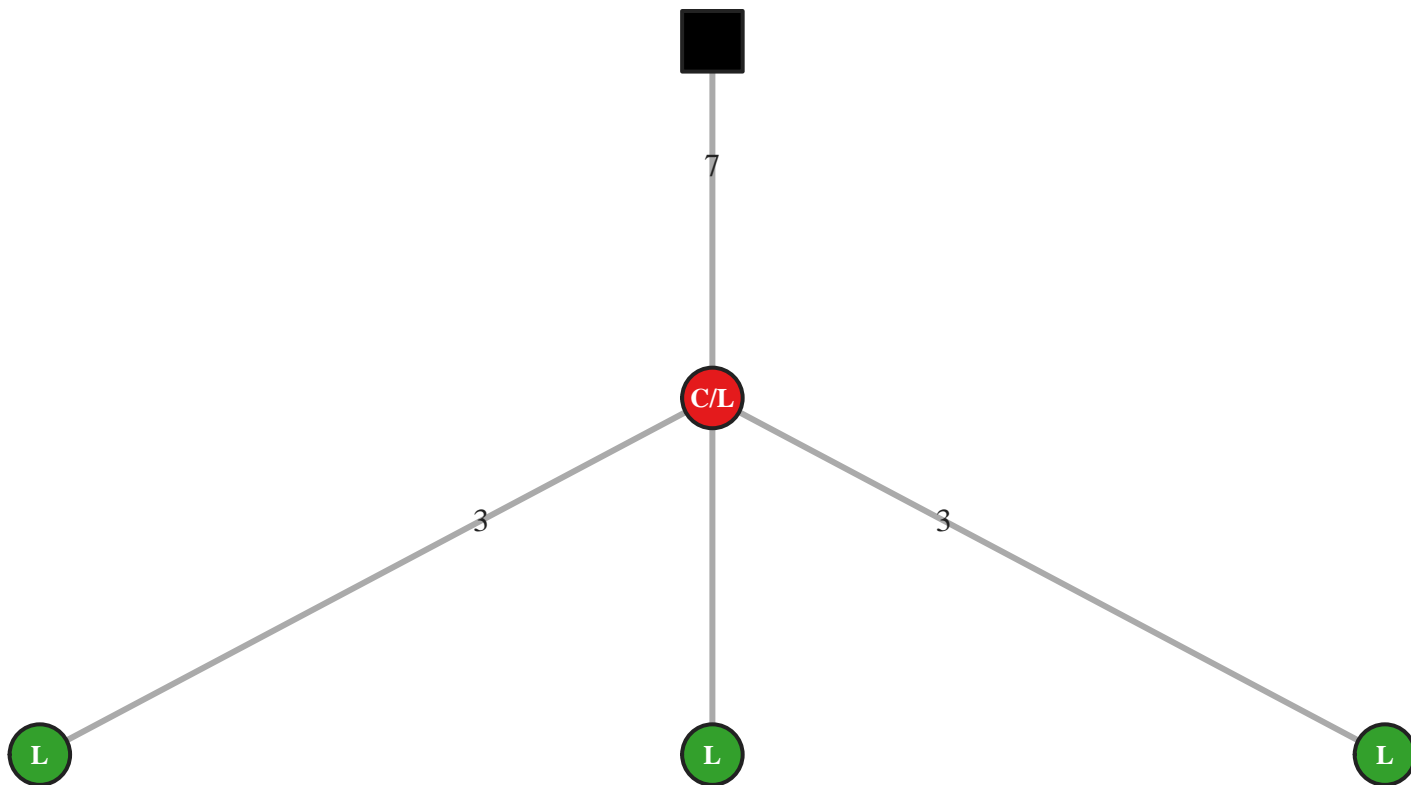
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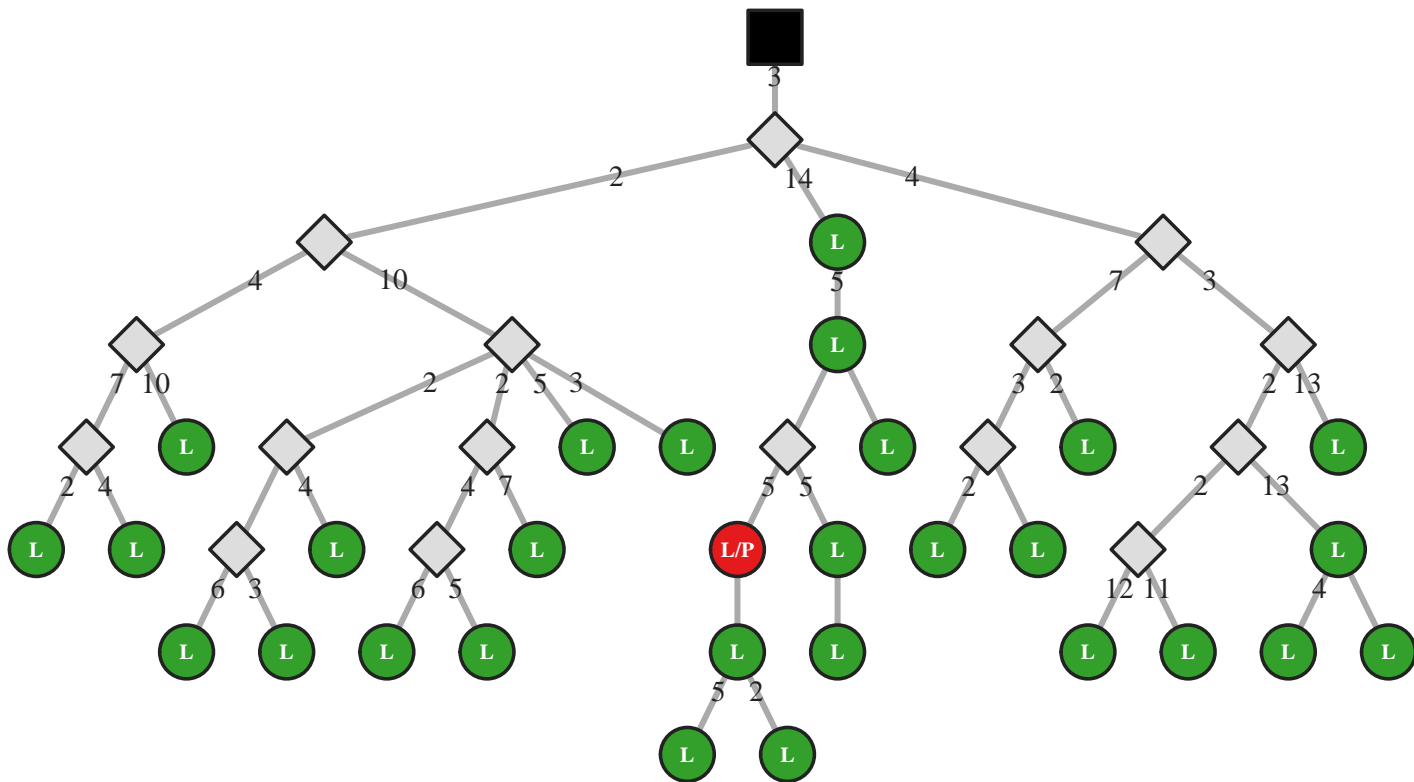
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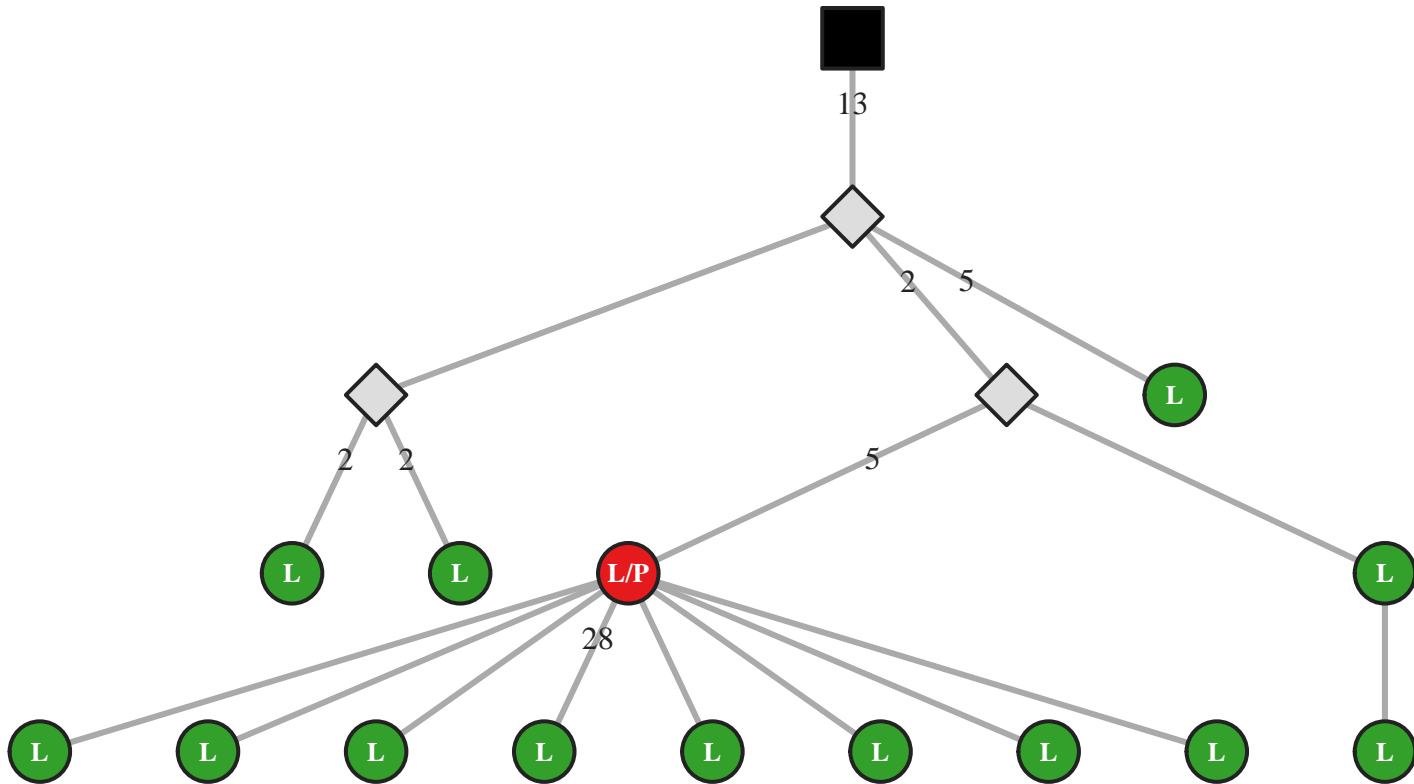
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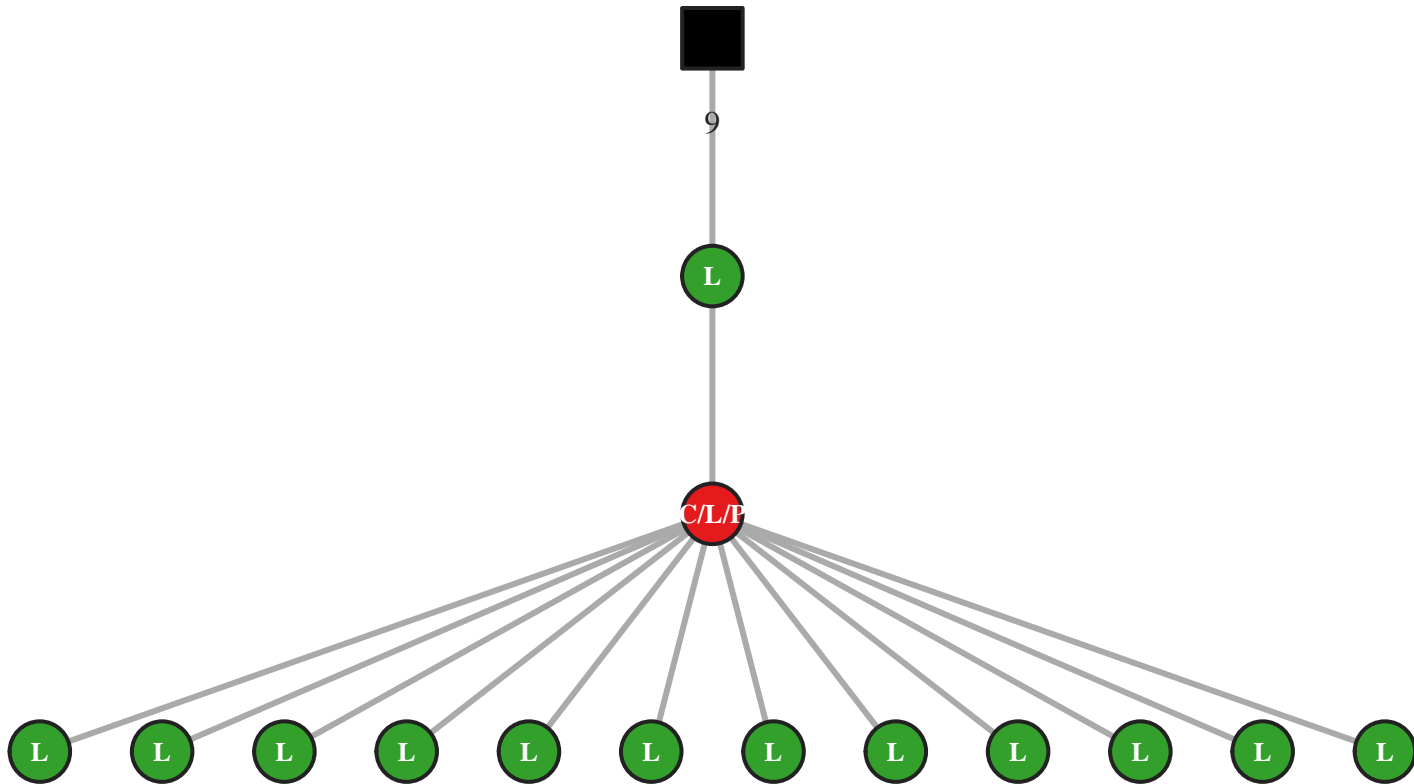
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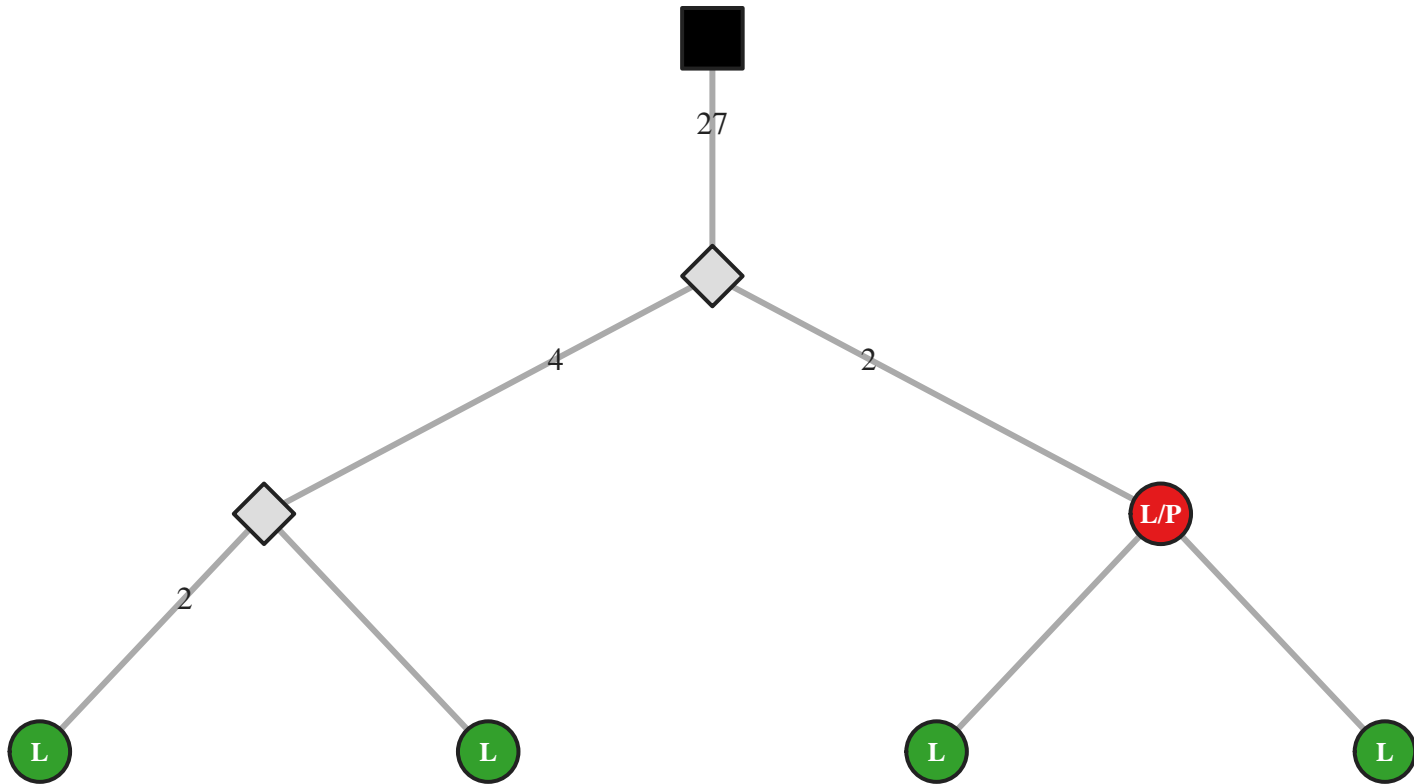
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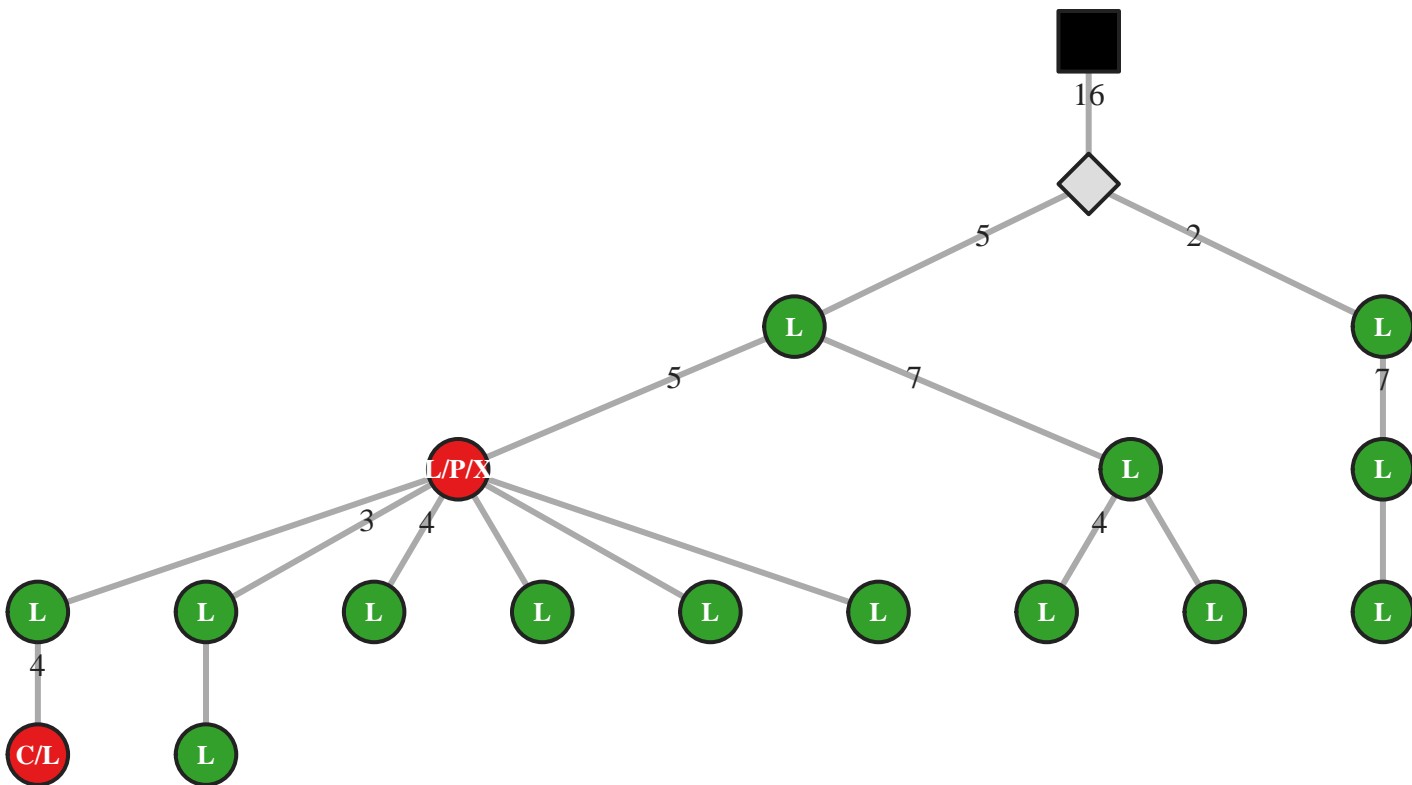
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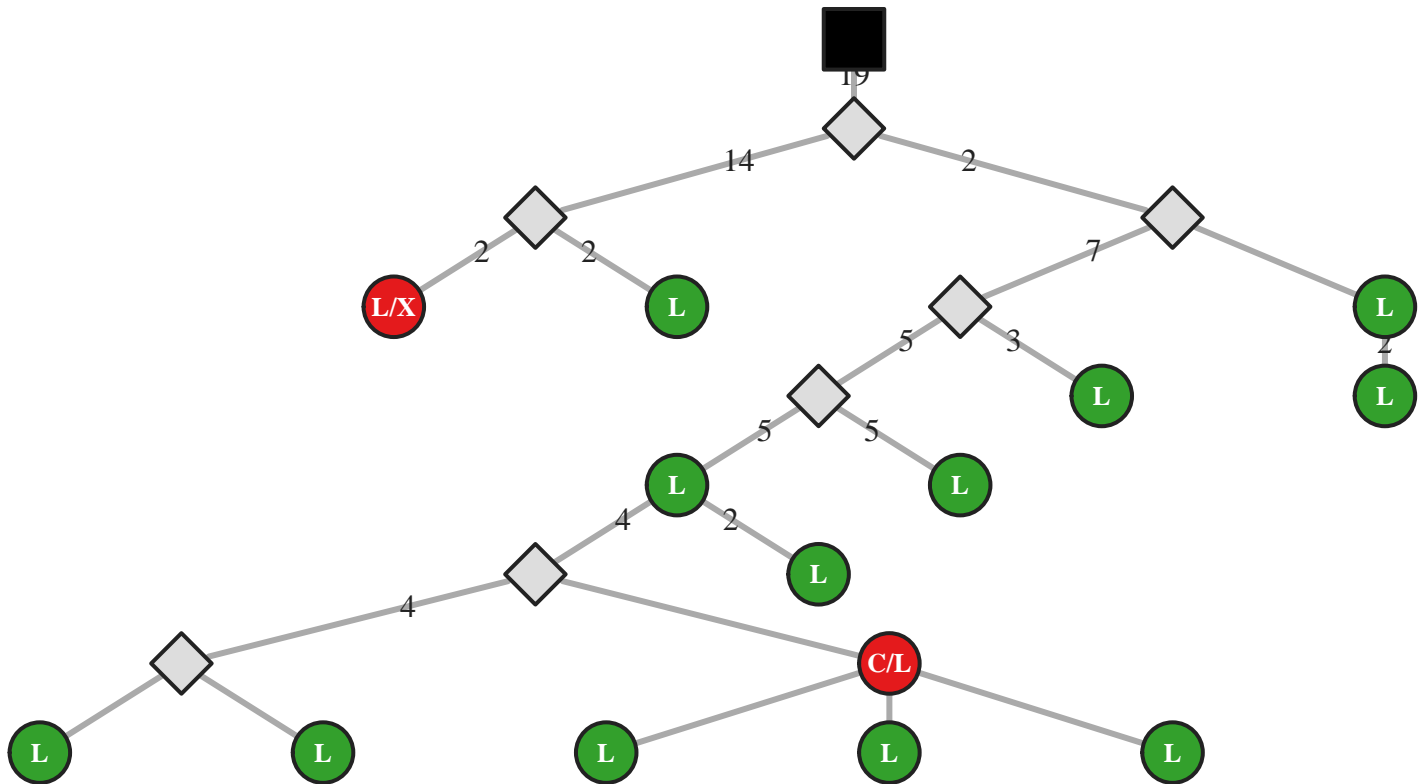
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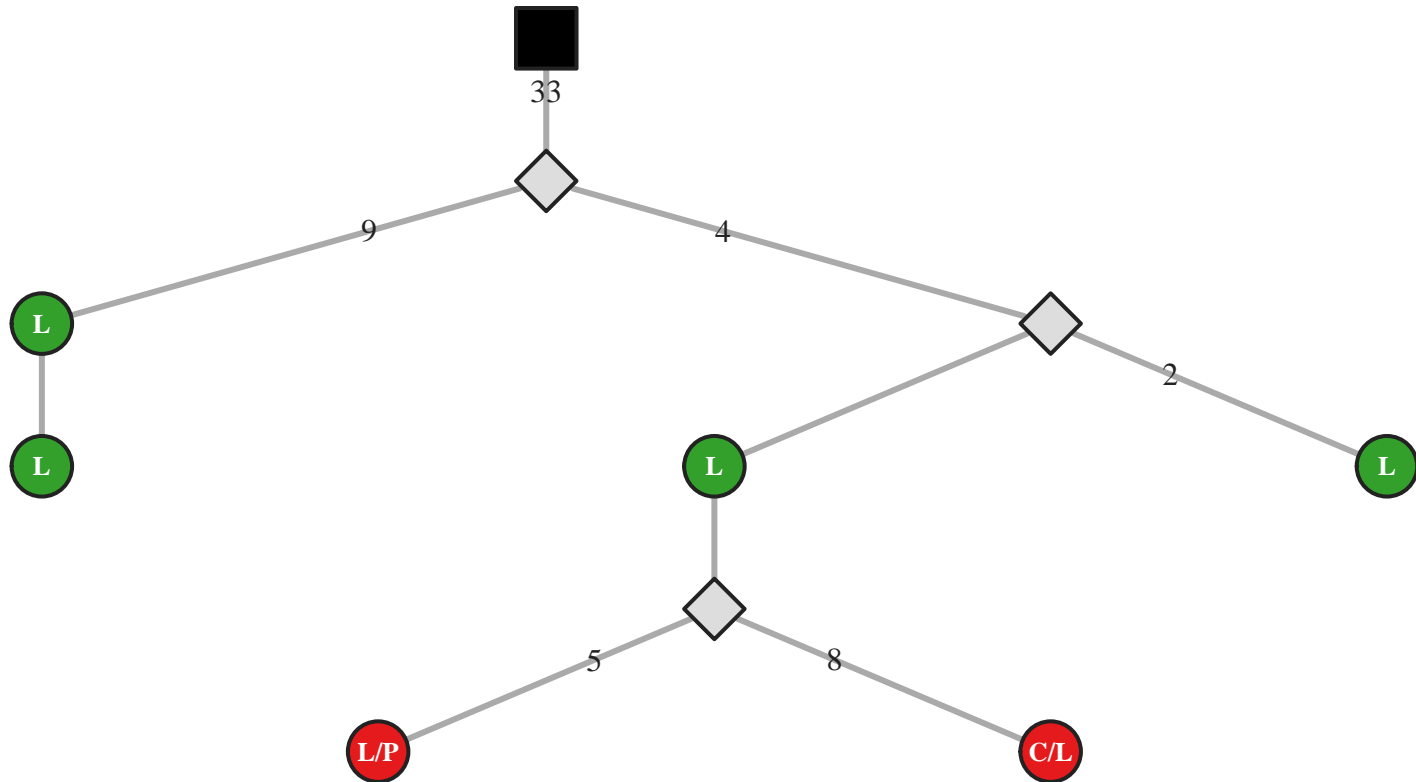
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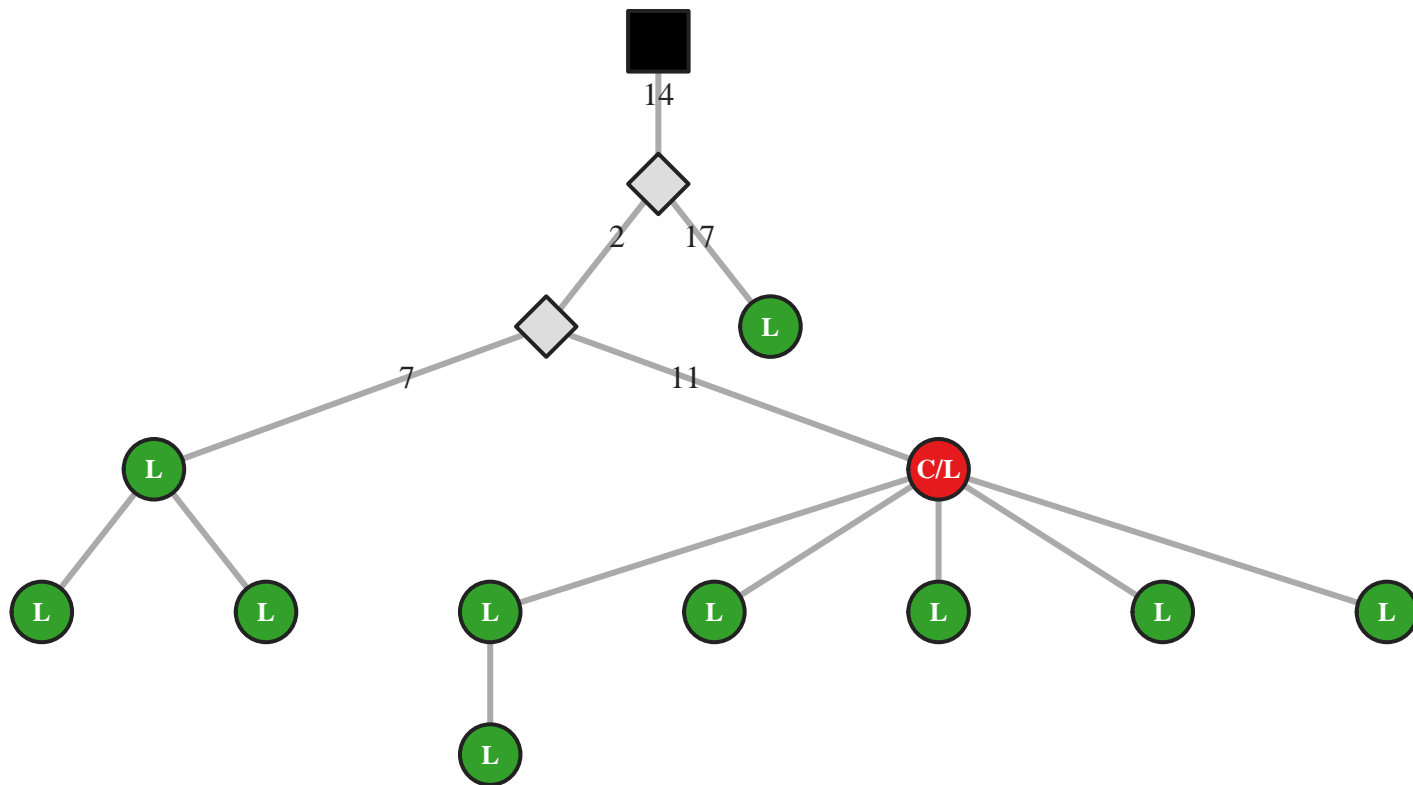
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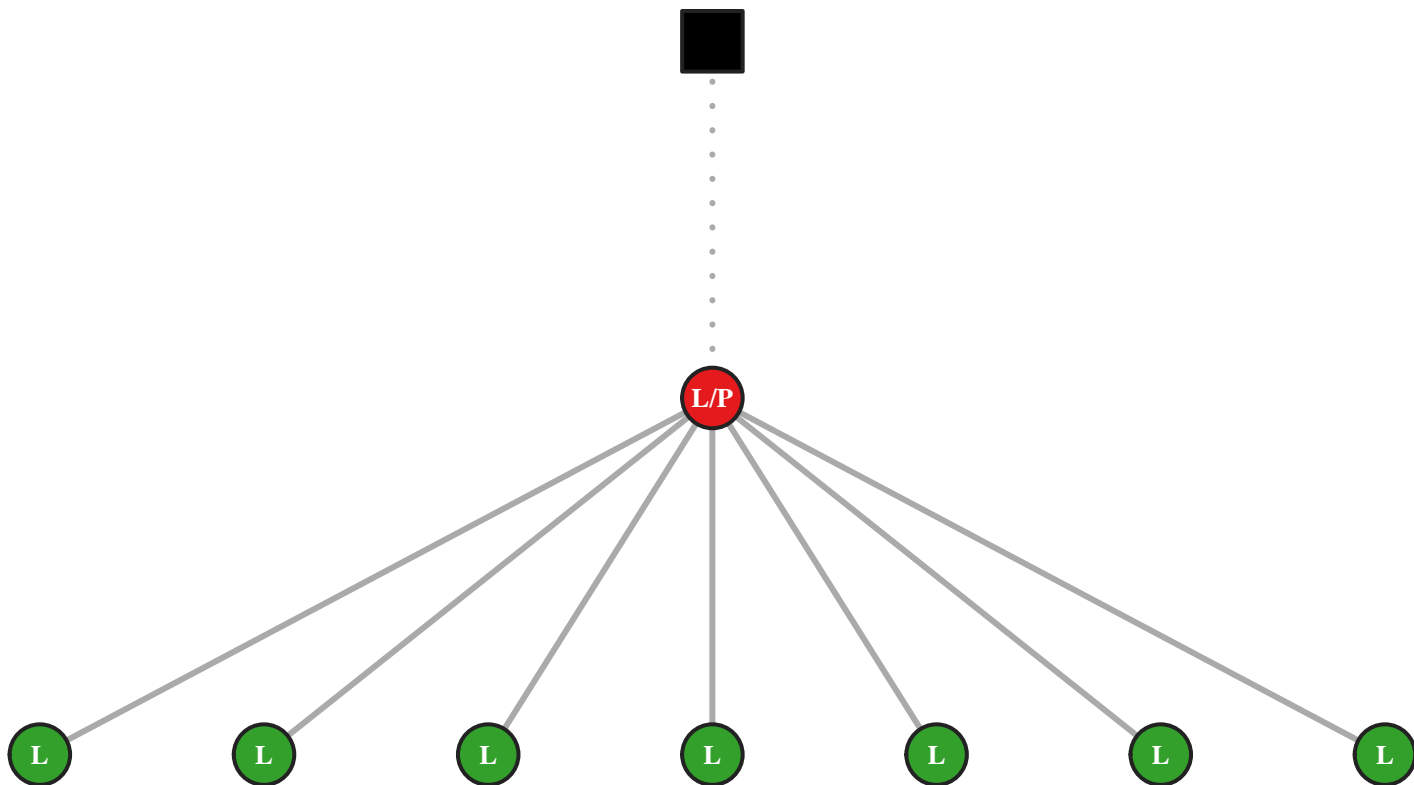
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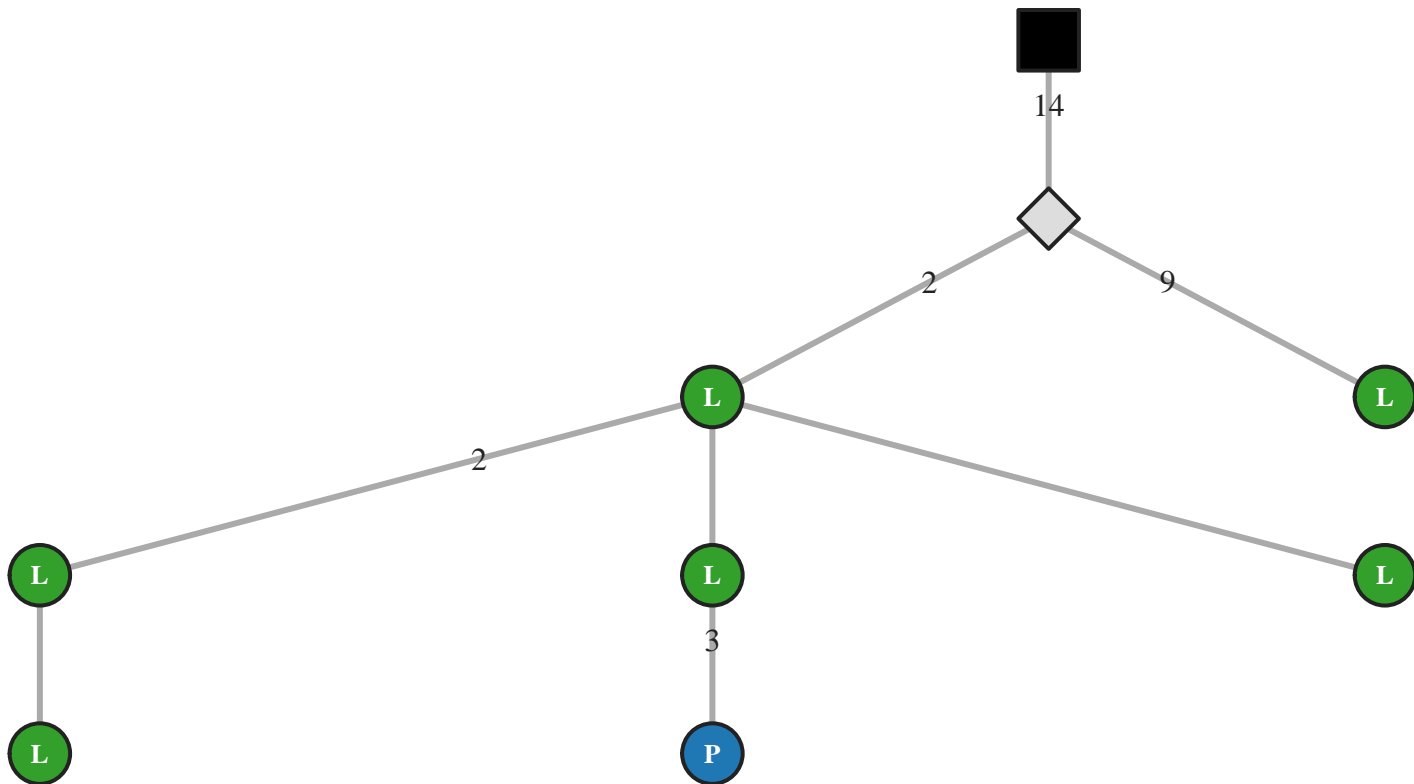
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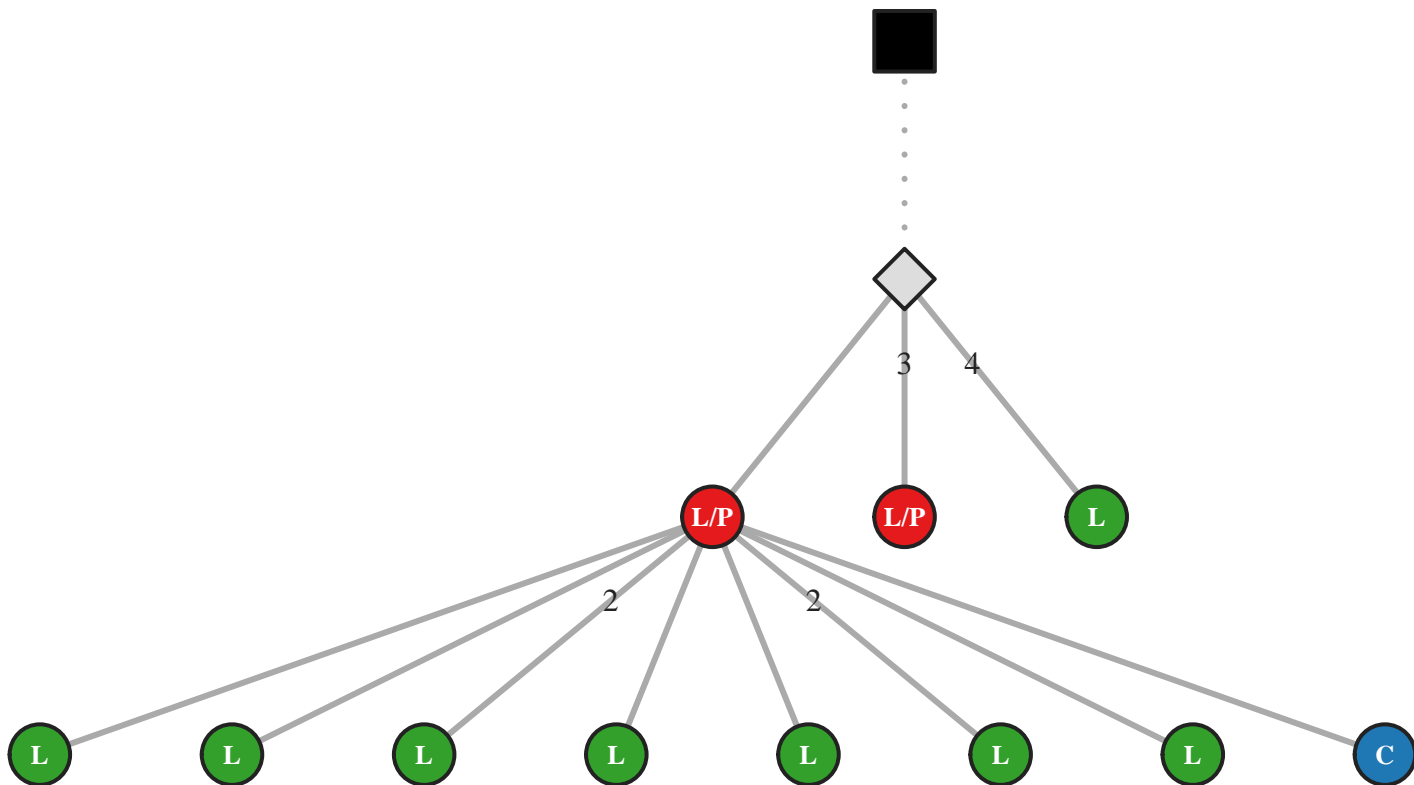
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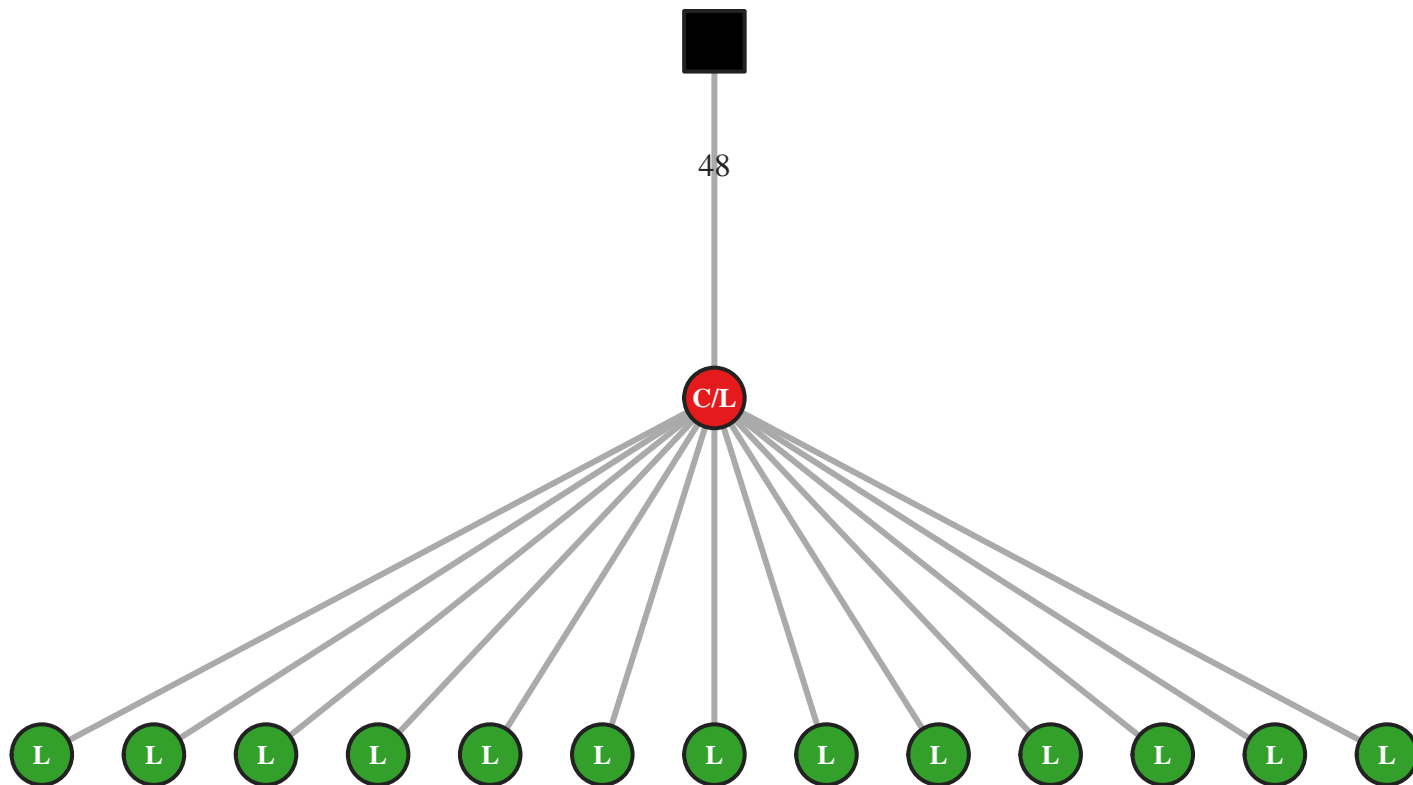
M5 IgG IGHV3-23/J4 54bp (25788)



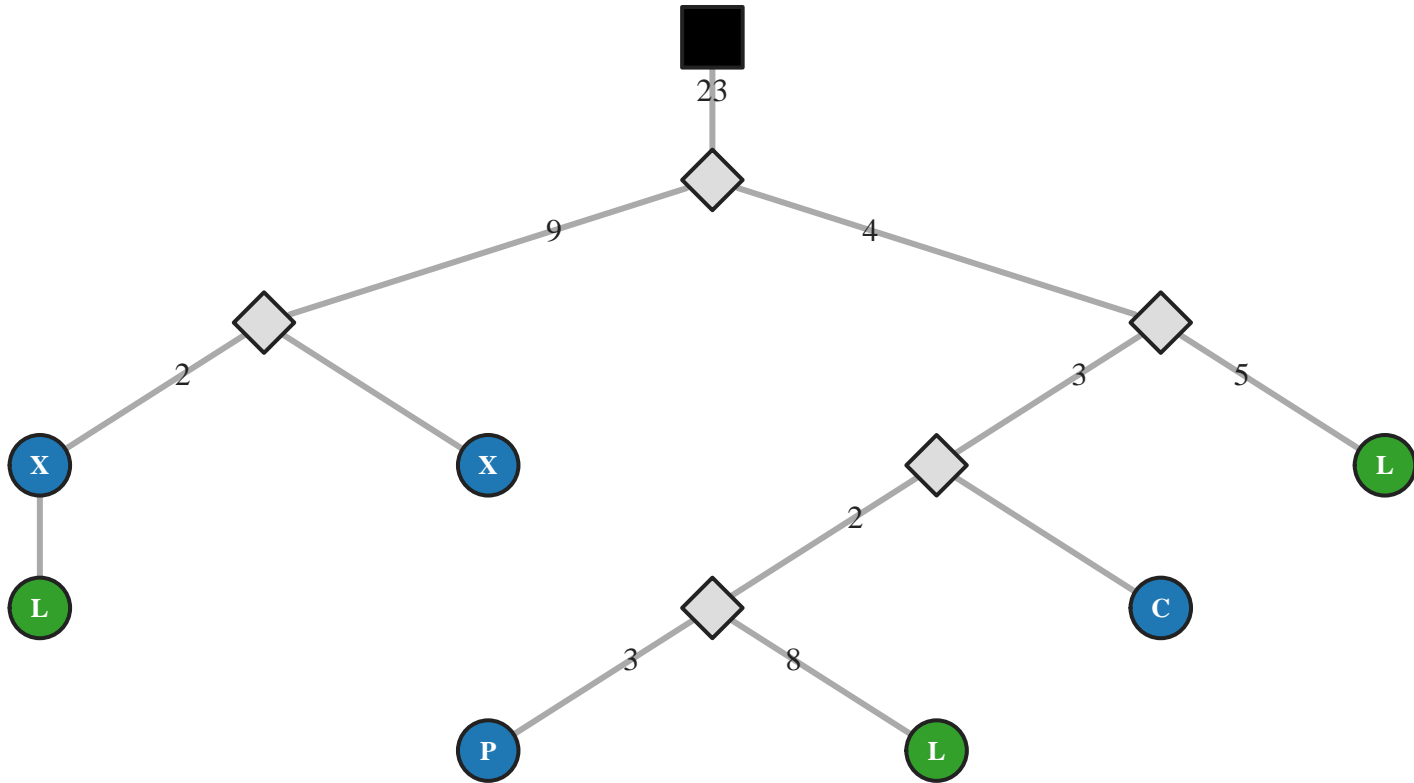
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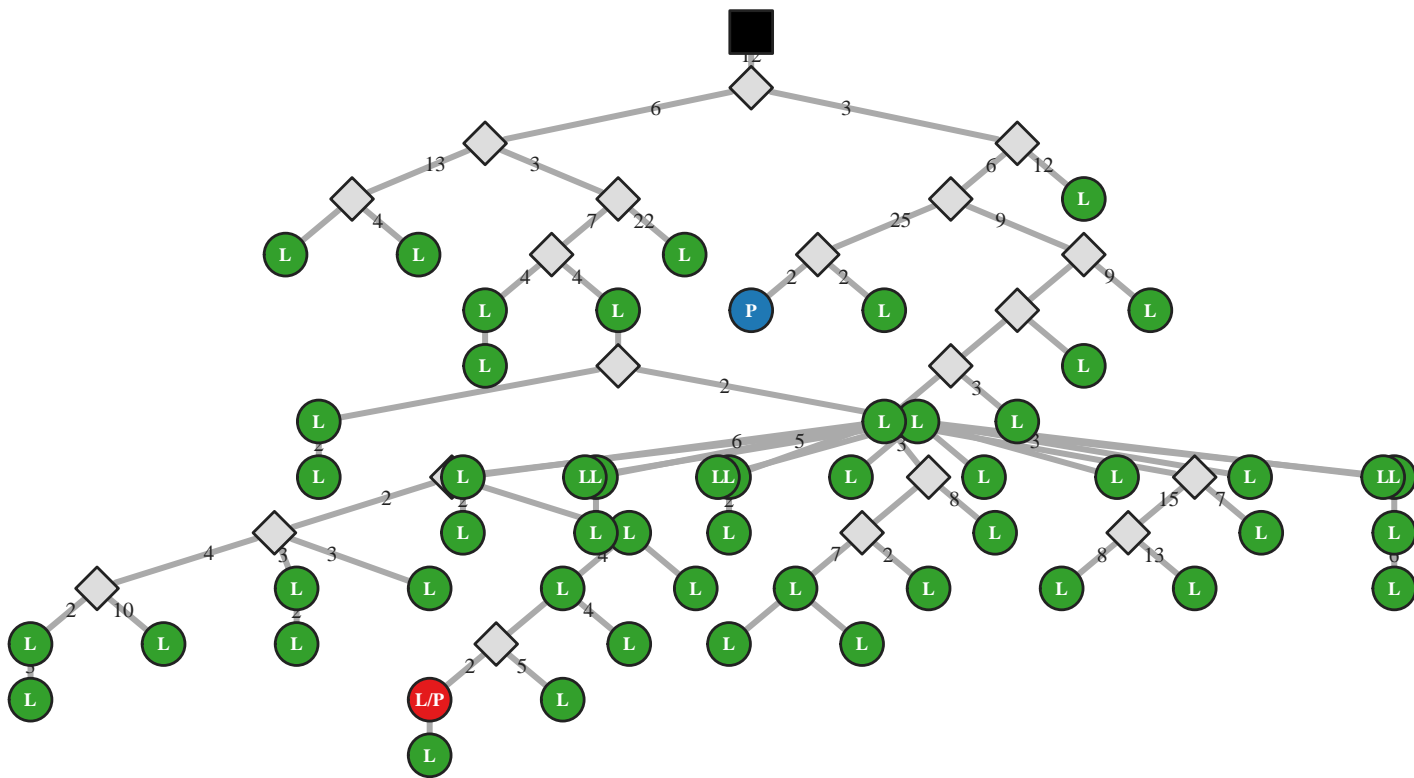
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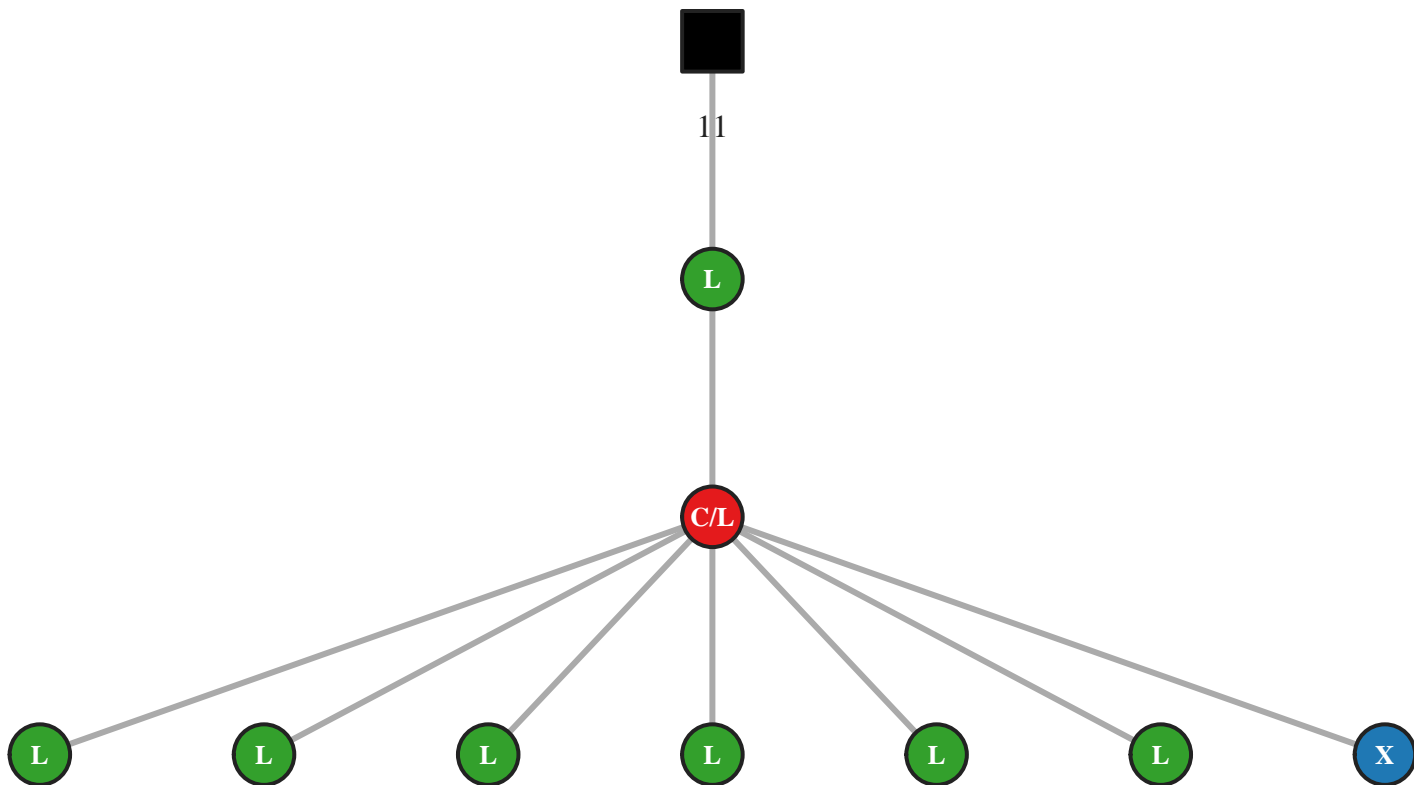
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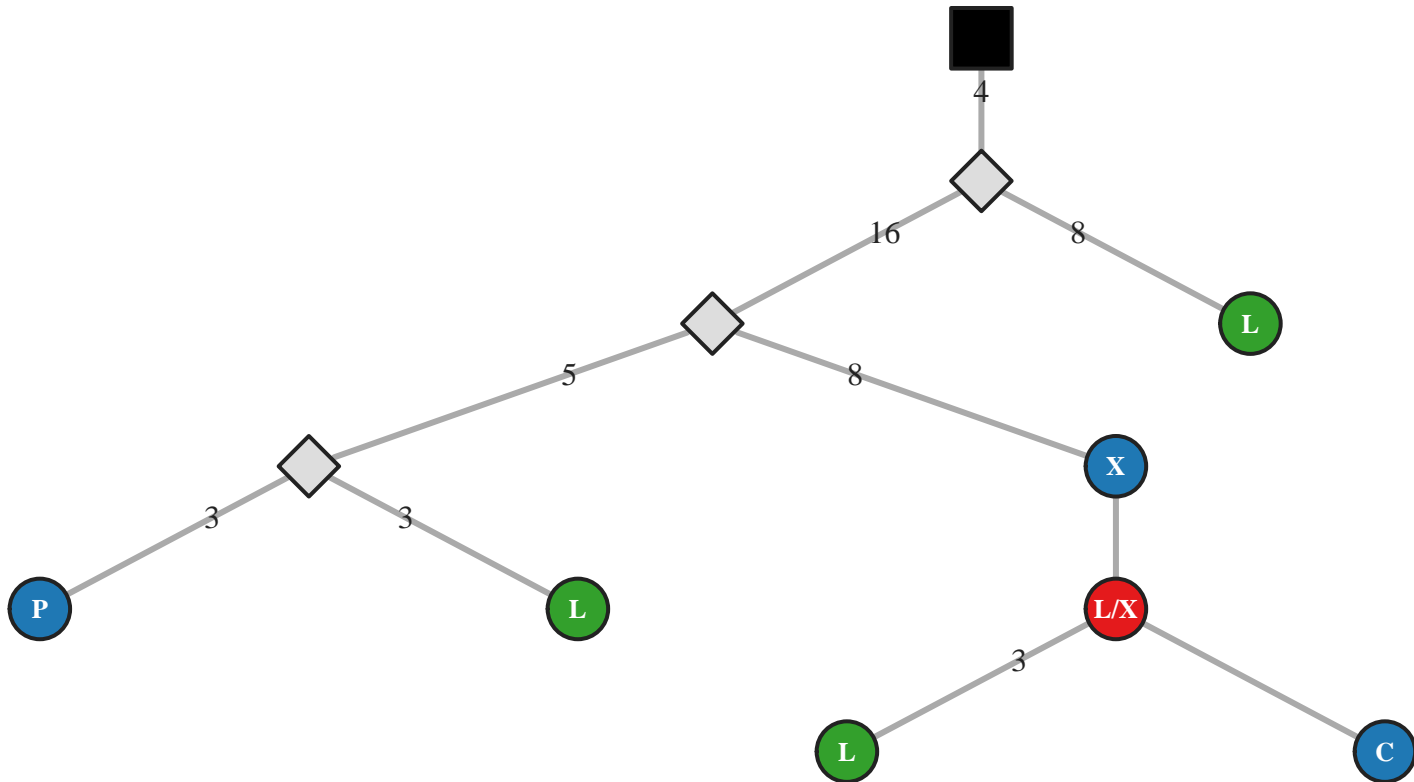
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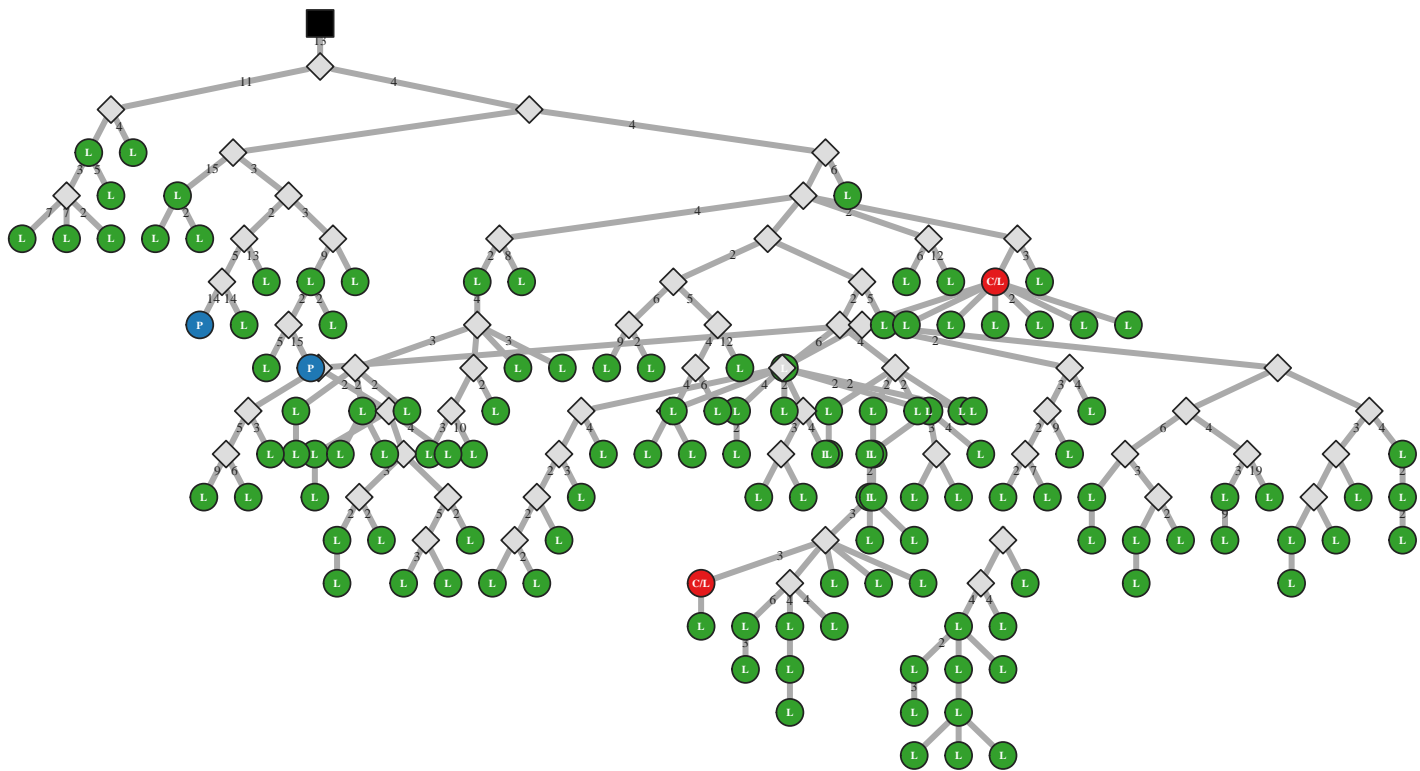
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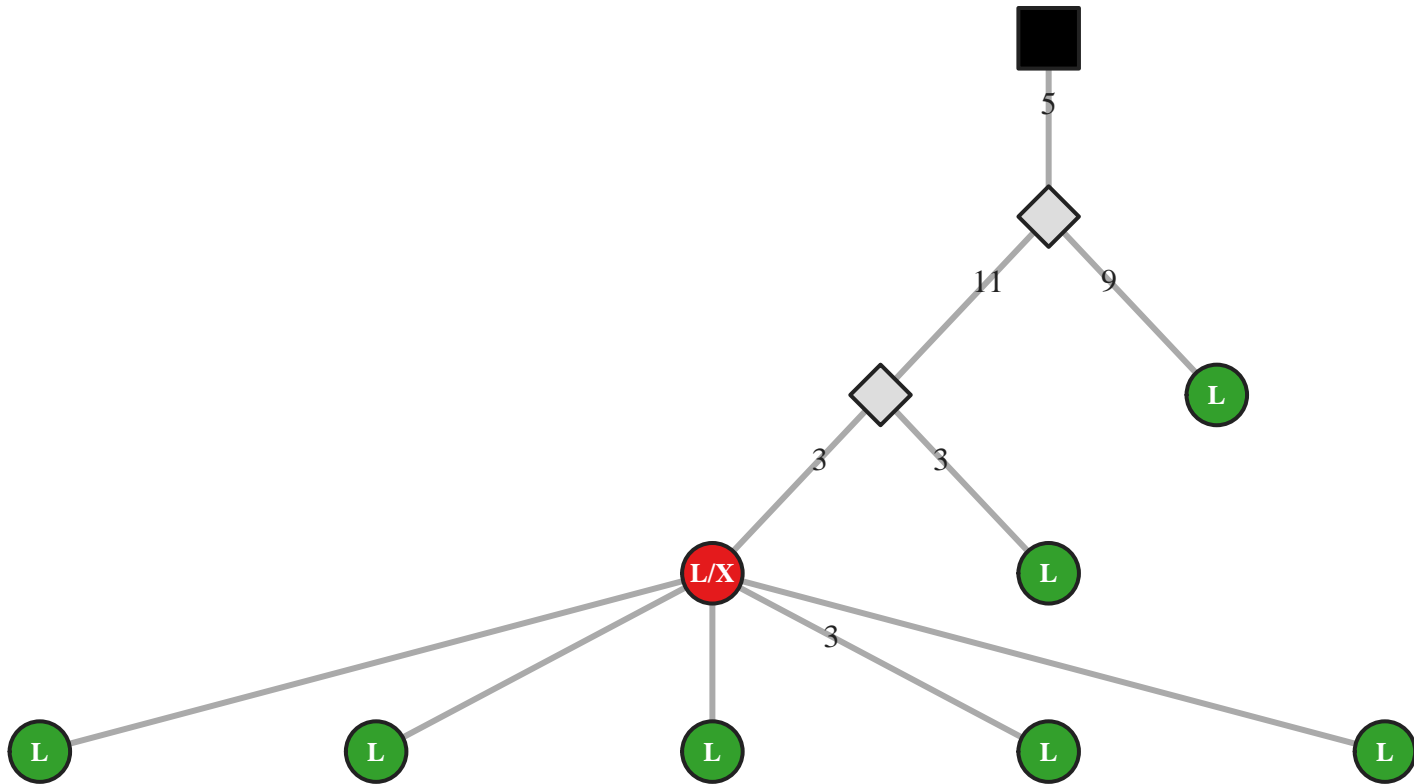
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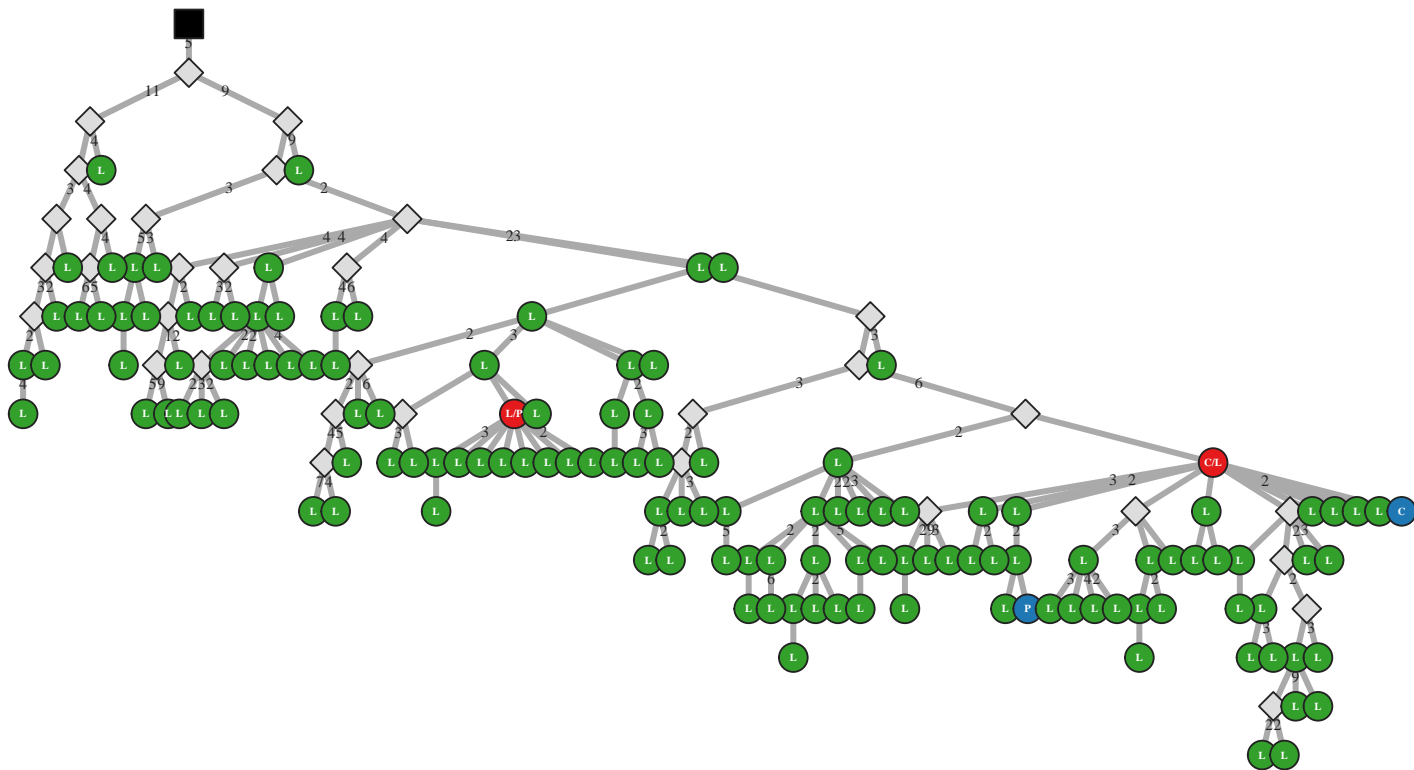
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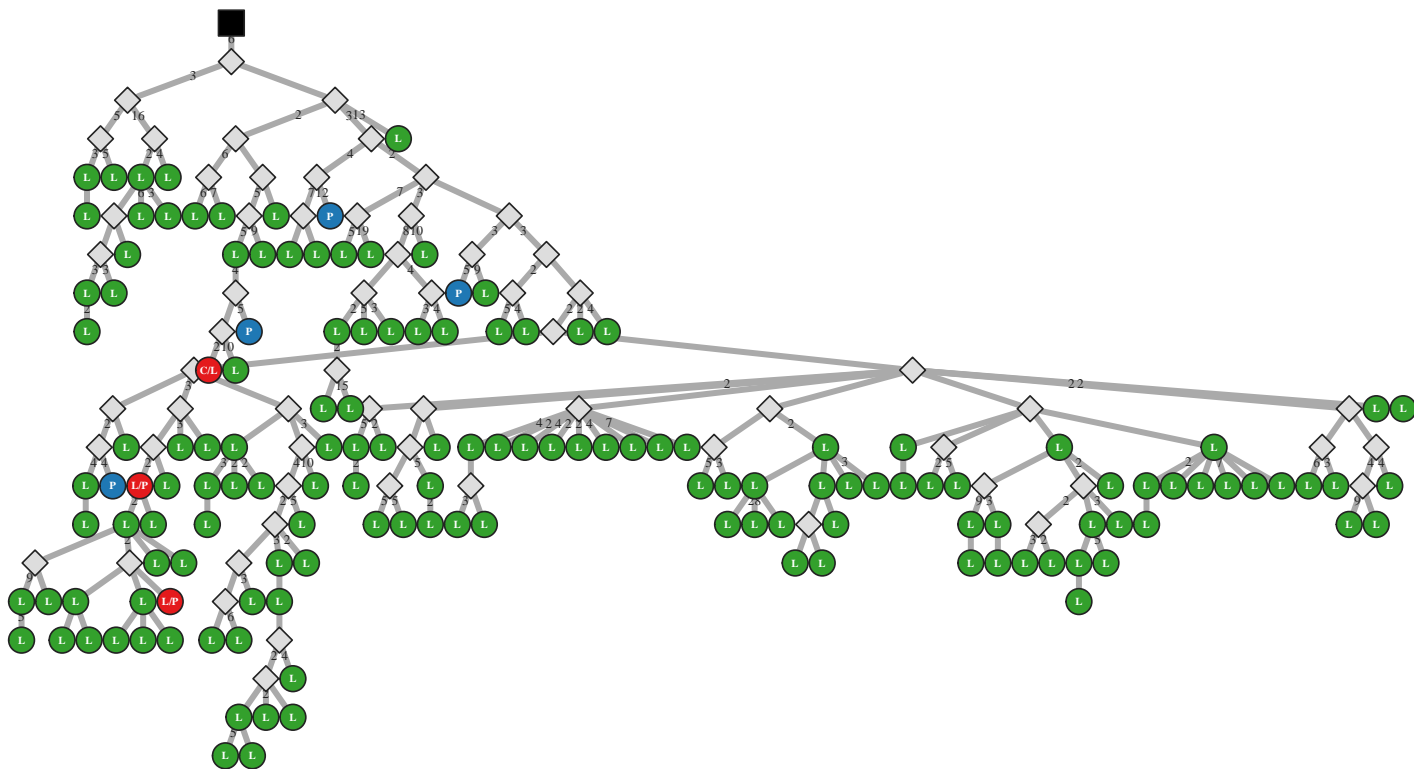
M5 IgG IGHV3-23/J6 45bp (7033)



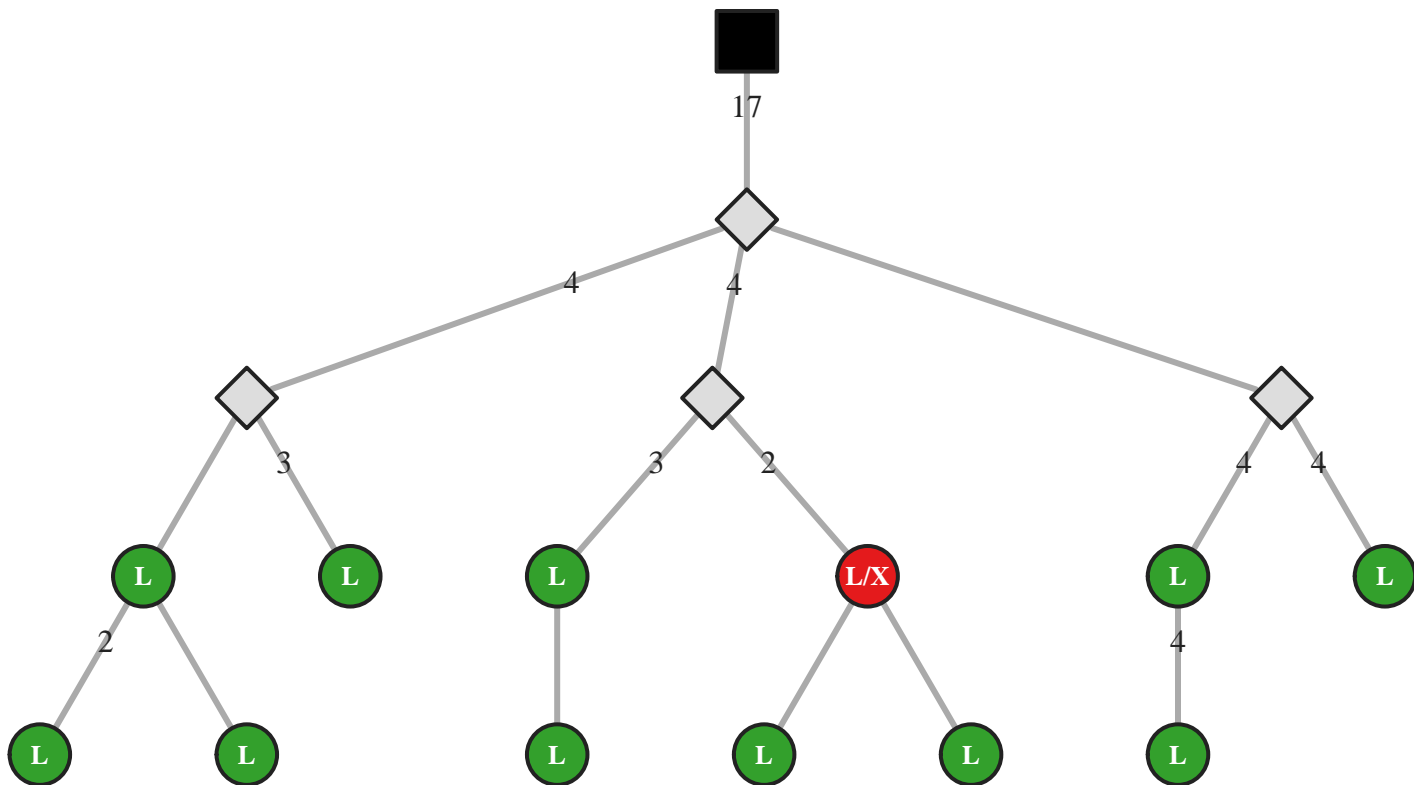
M5 IgG IGHV3-23/J6 51bp (43850)



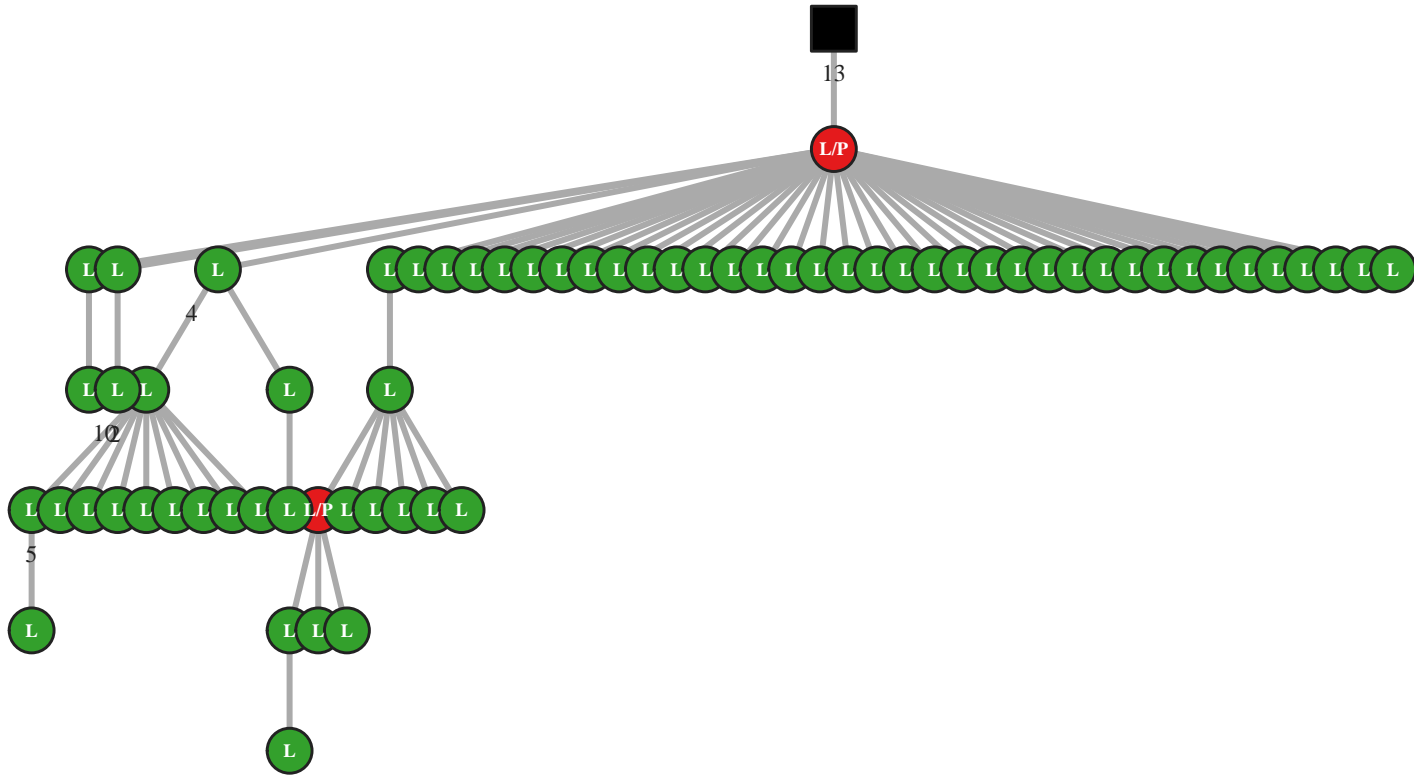
M5 IgG IGHV3-23/J6 51bp (43865)



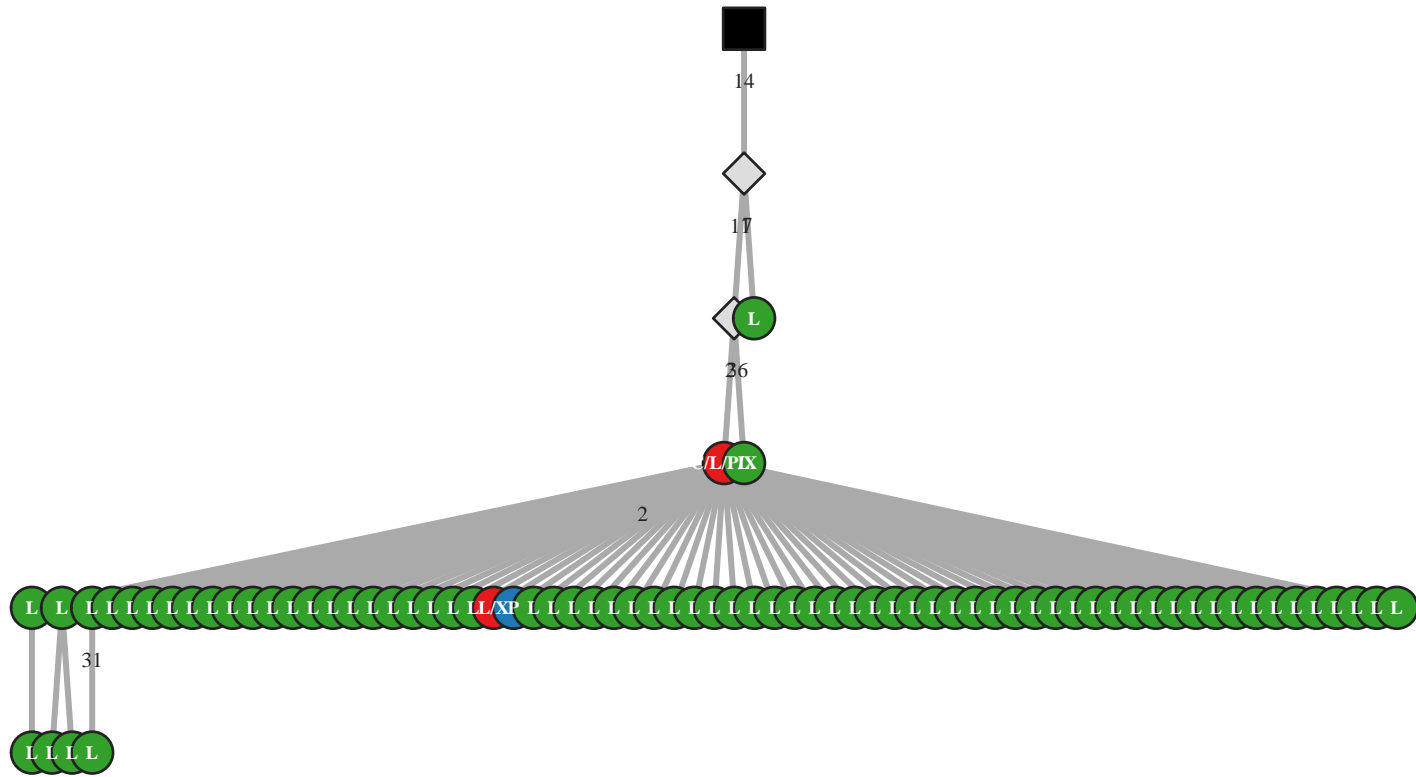
M5 IgG IGHV3-23/J6 57bp (16872)



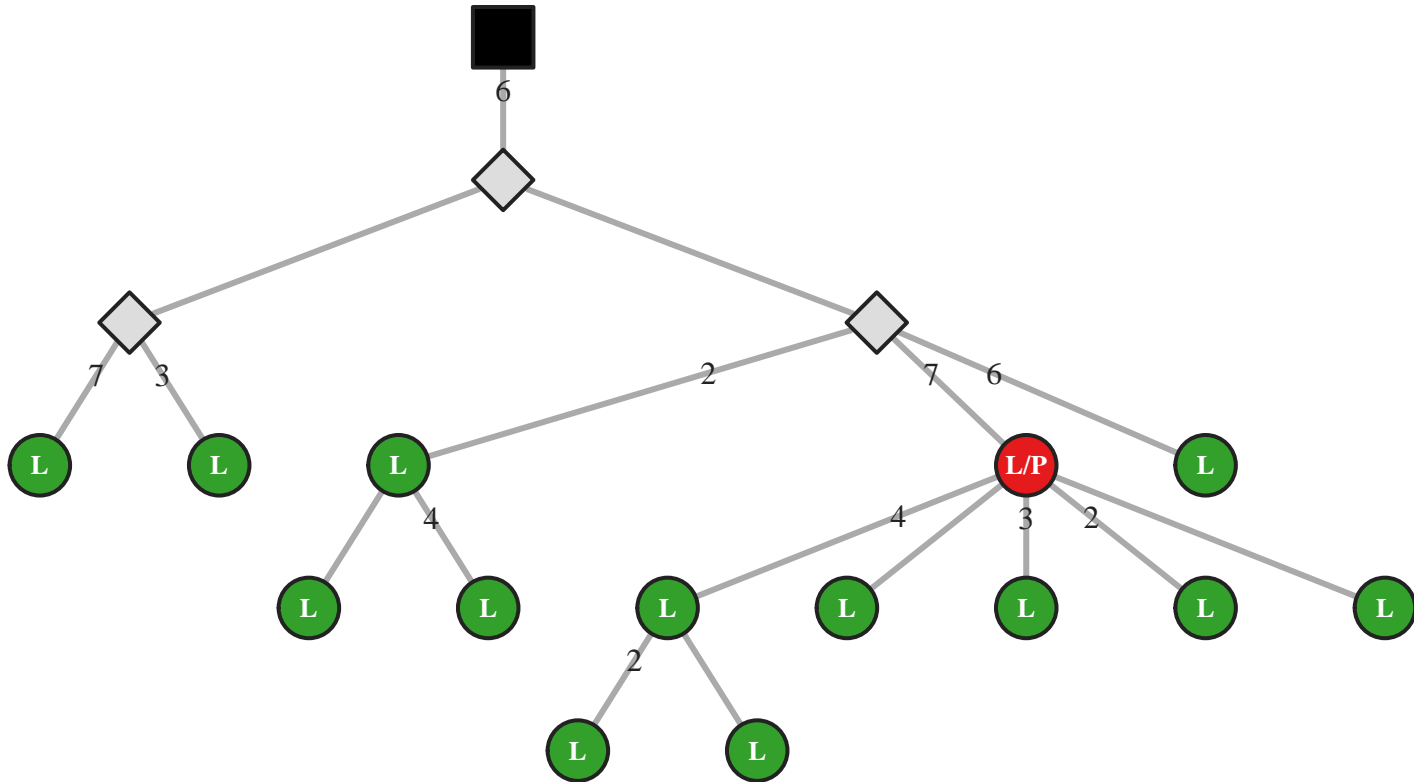
M5 IgA IGHV3-23/J6 60bp (38715)



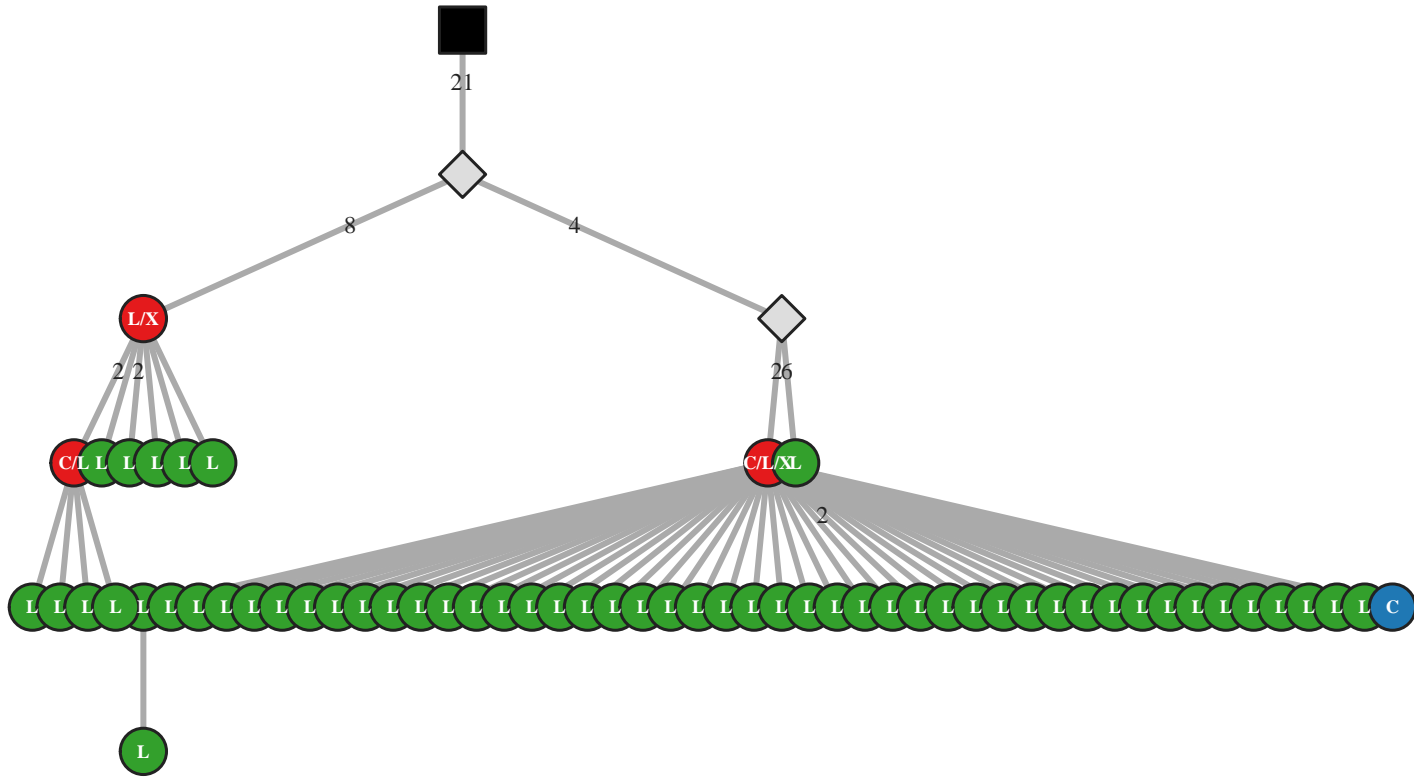
M5 IgG IGHV3-23/J6 60bp (43877)



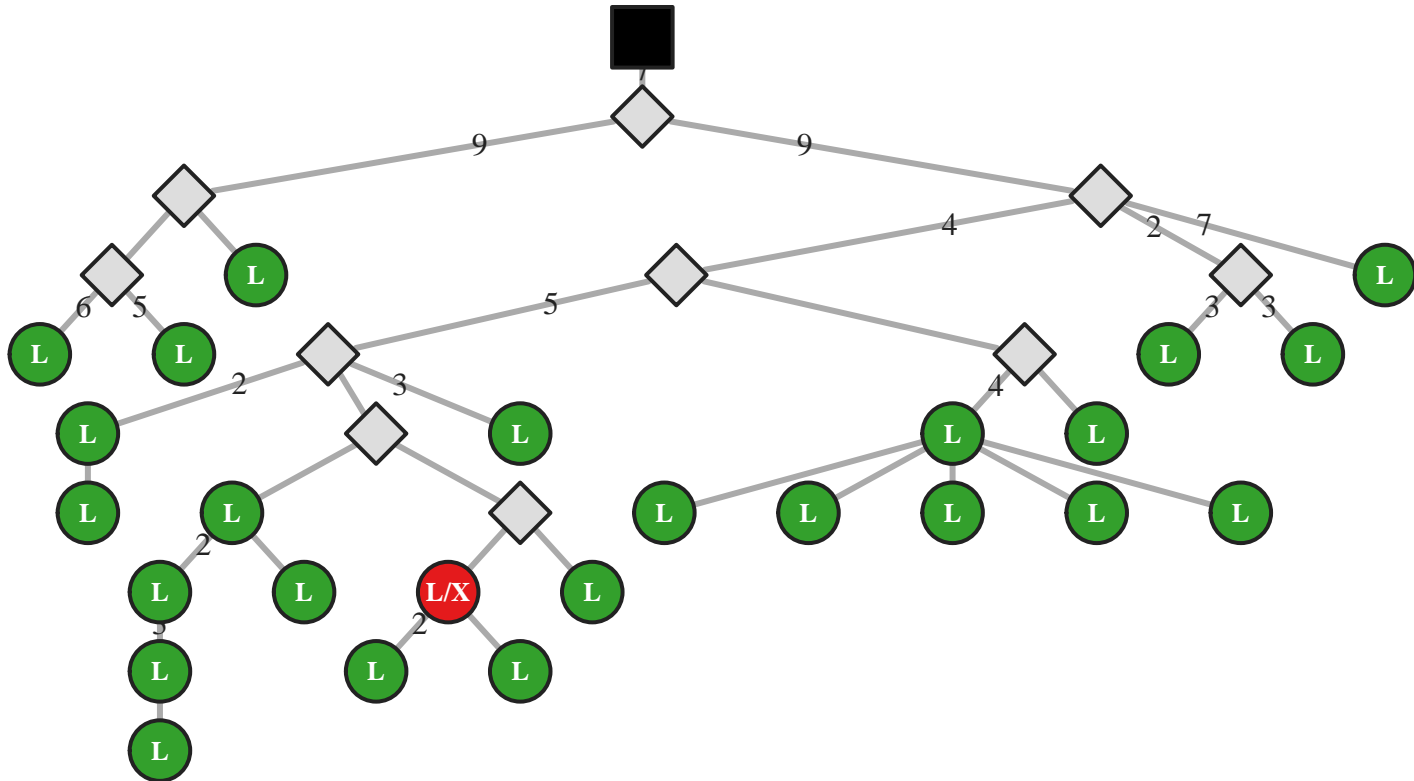
M5 IgA IGHV3-23/J6 69bp (12362)



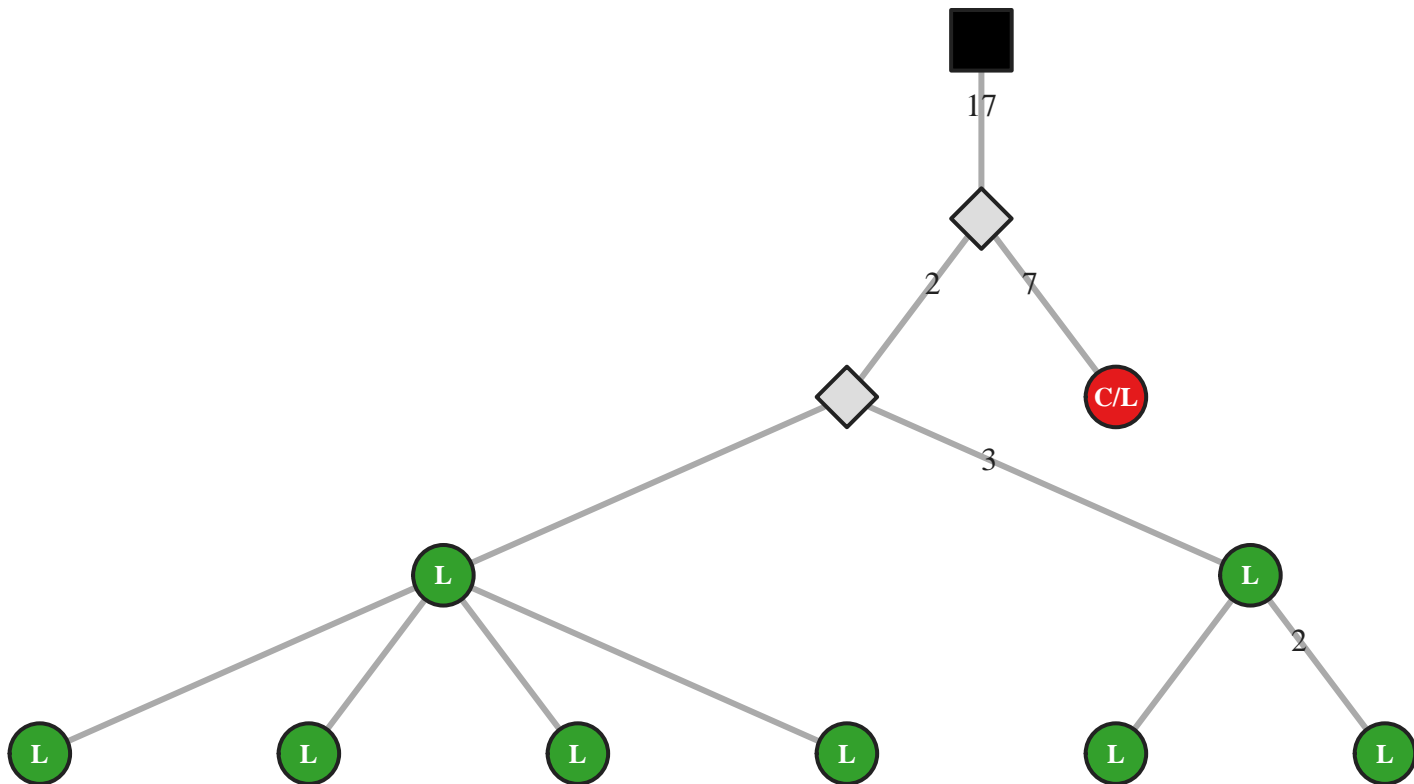
M5 IgA IGHV3-30/J1 36bp (21685)



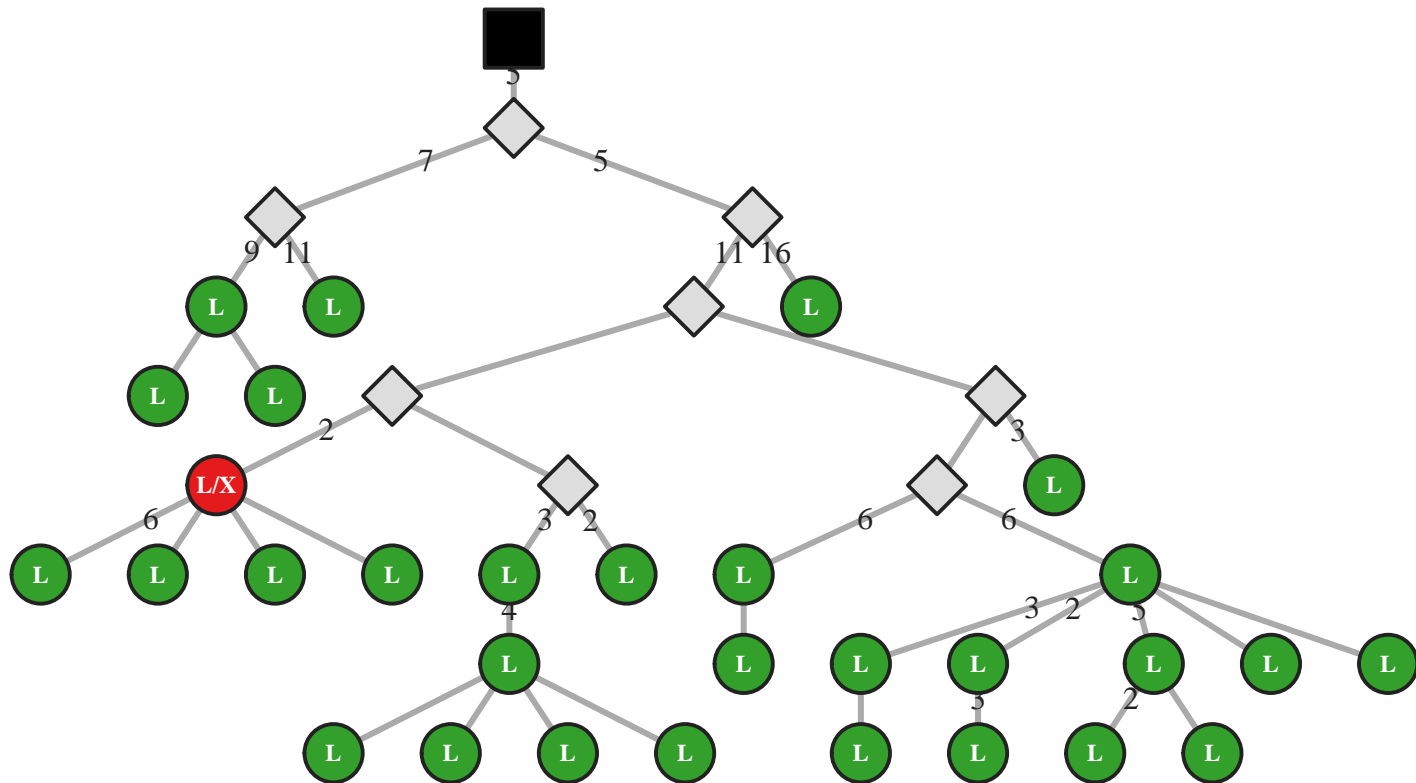
M5 IgG IGHV3-30/J1 48bp (35045)



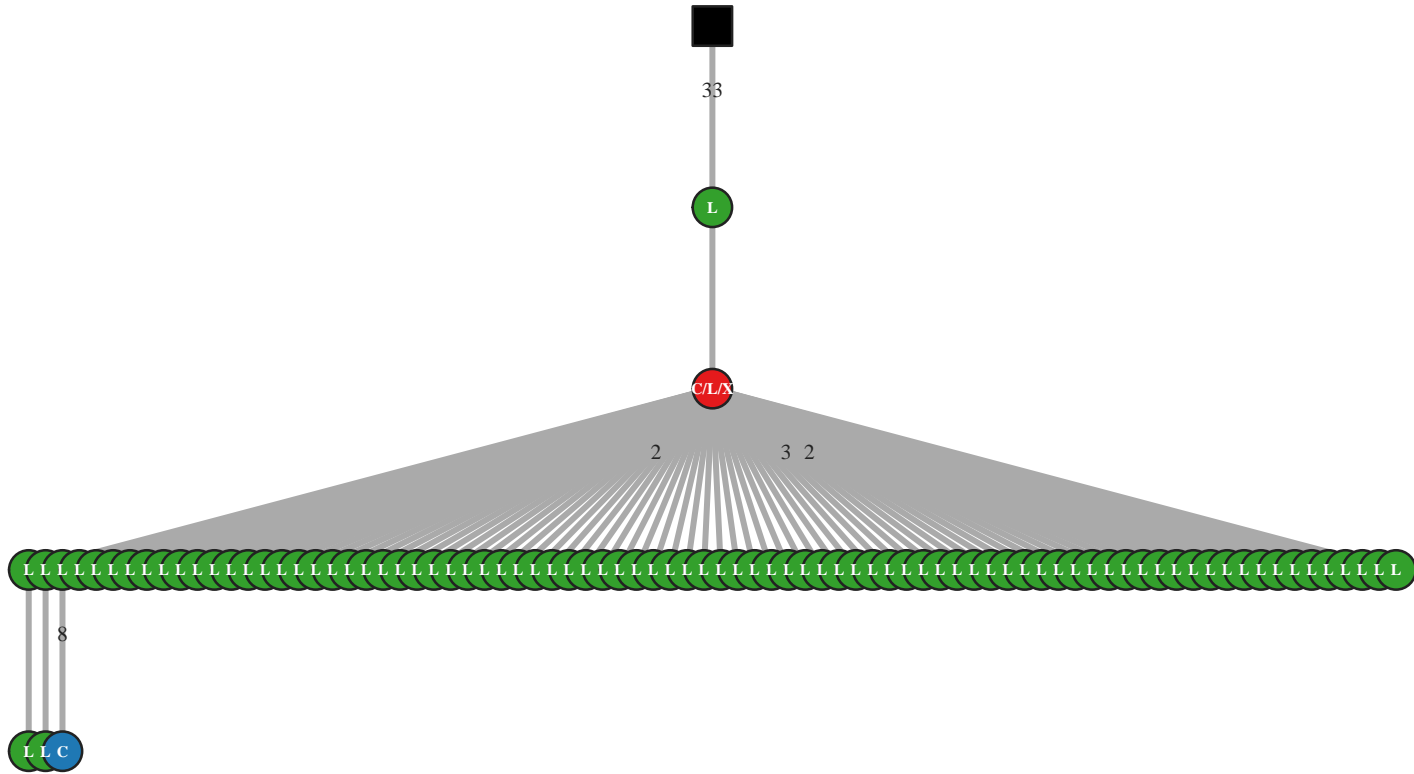
M5 IgG IGHV3-30/J2 54bp (35072)



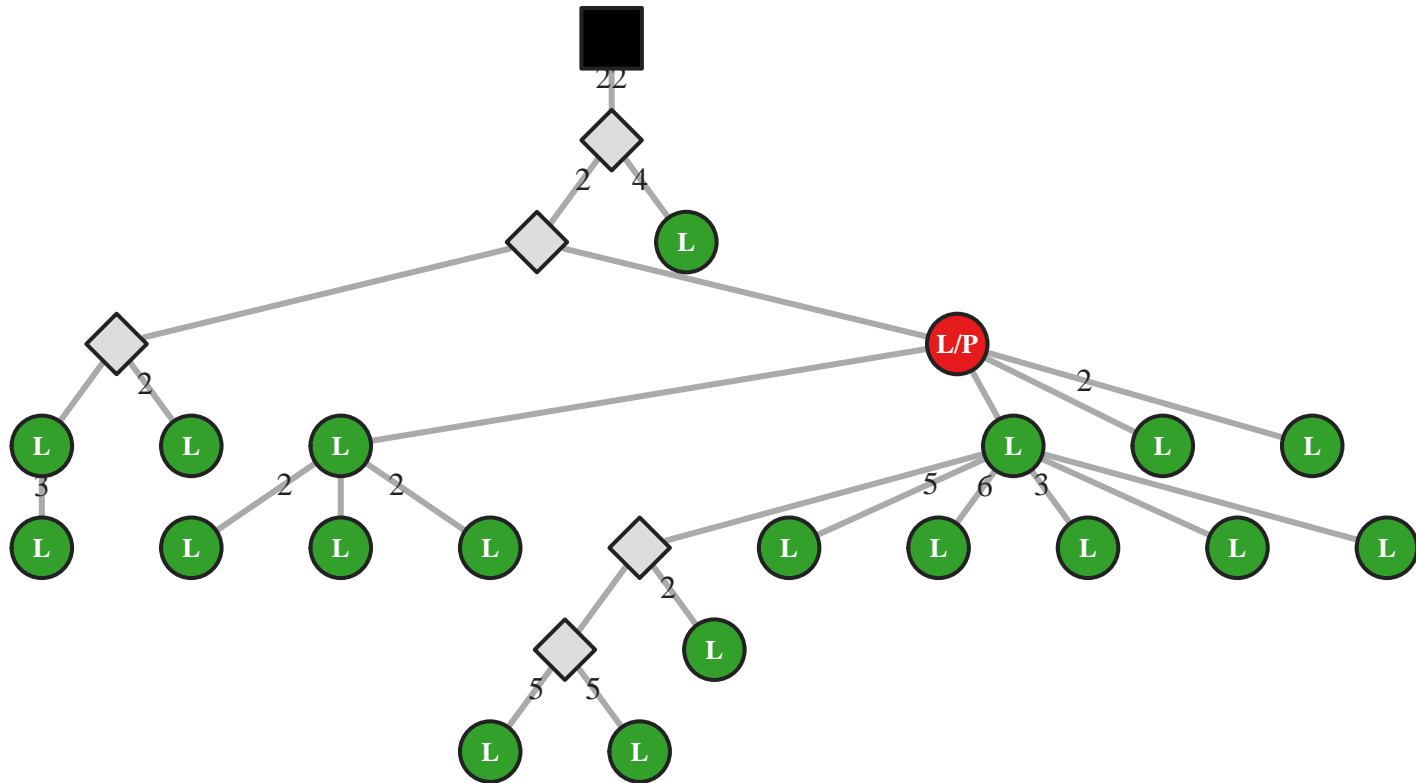
M5 IgG IGHV3-30/J3 39bp (34753)



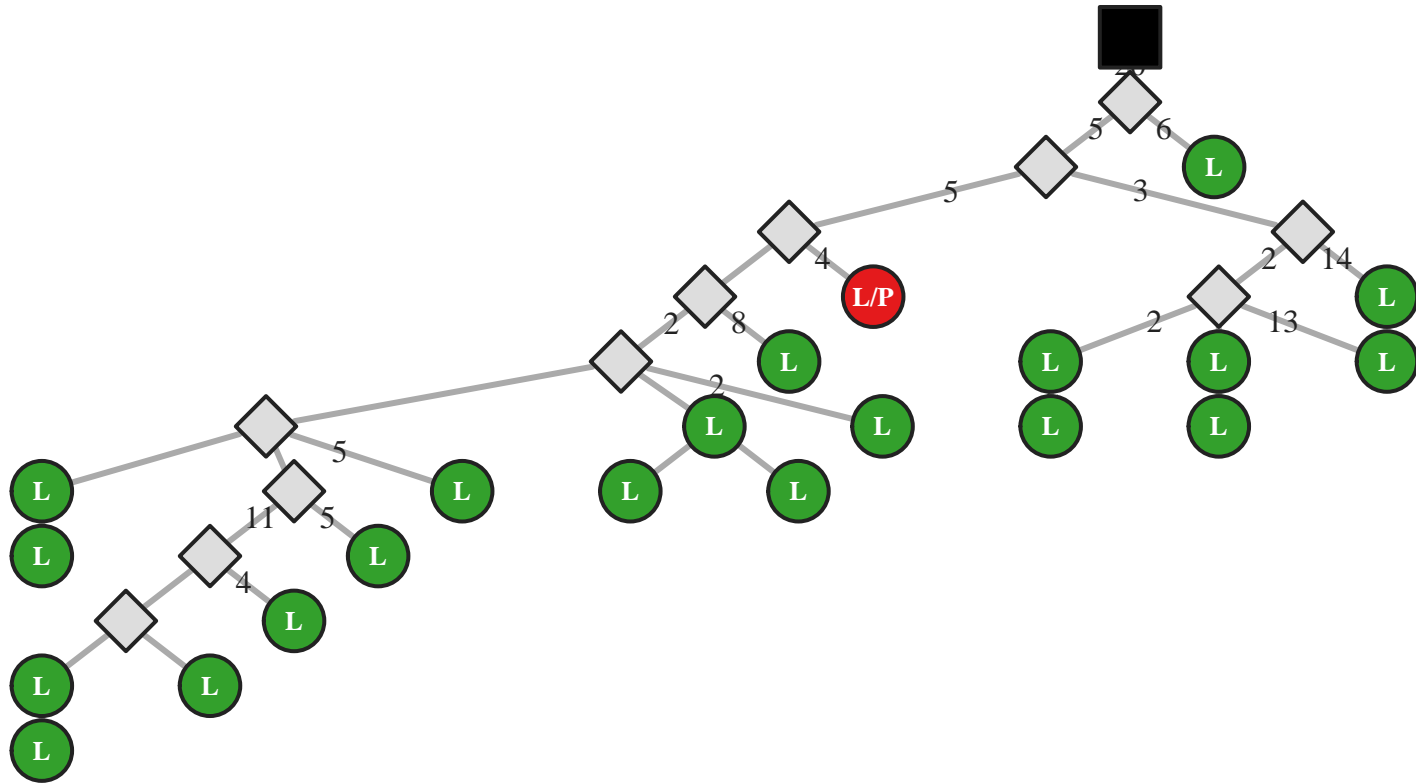
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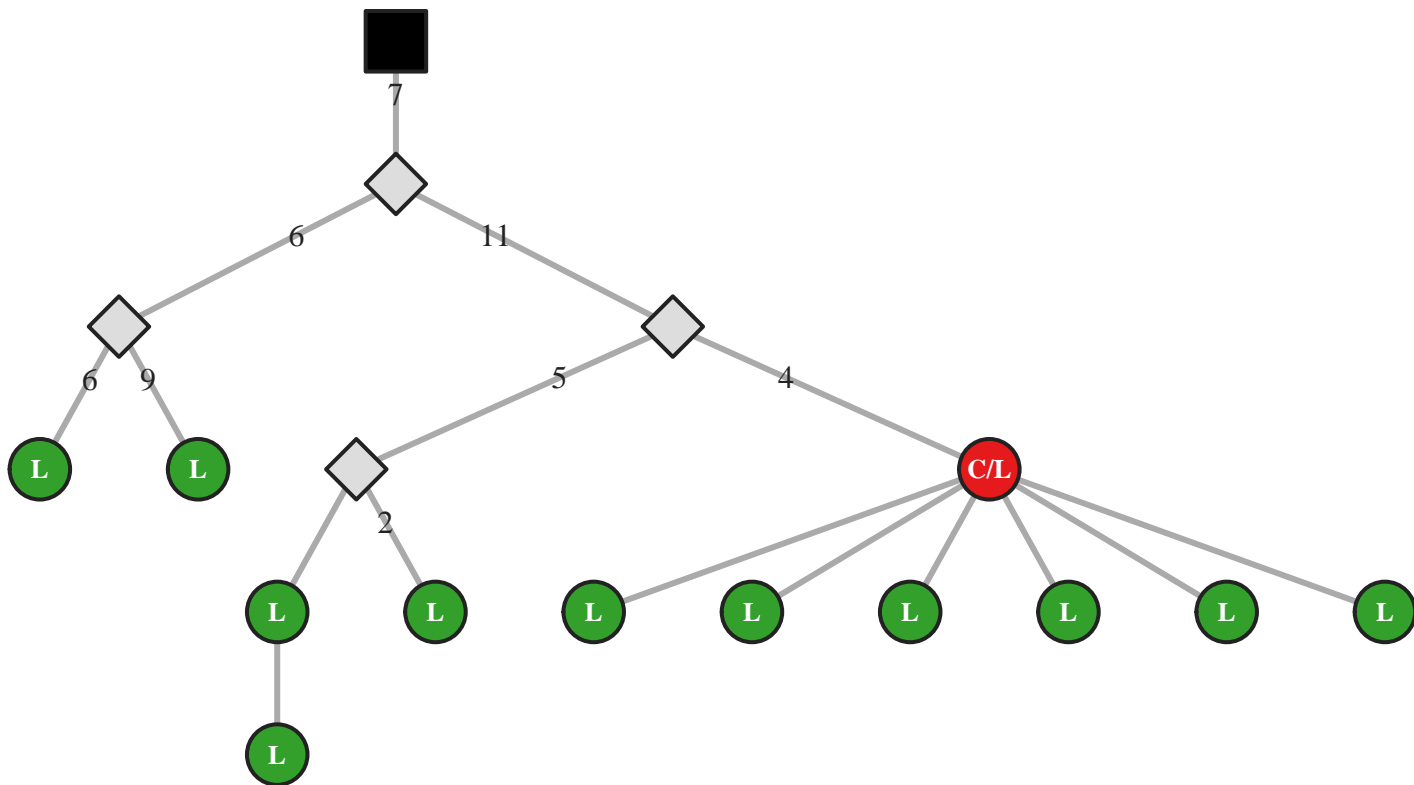
M5 IgG IGHV3-30/J3 48bp (7103)



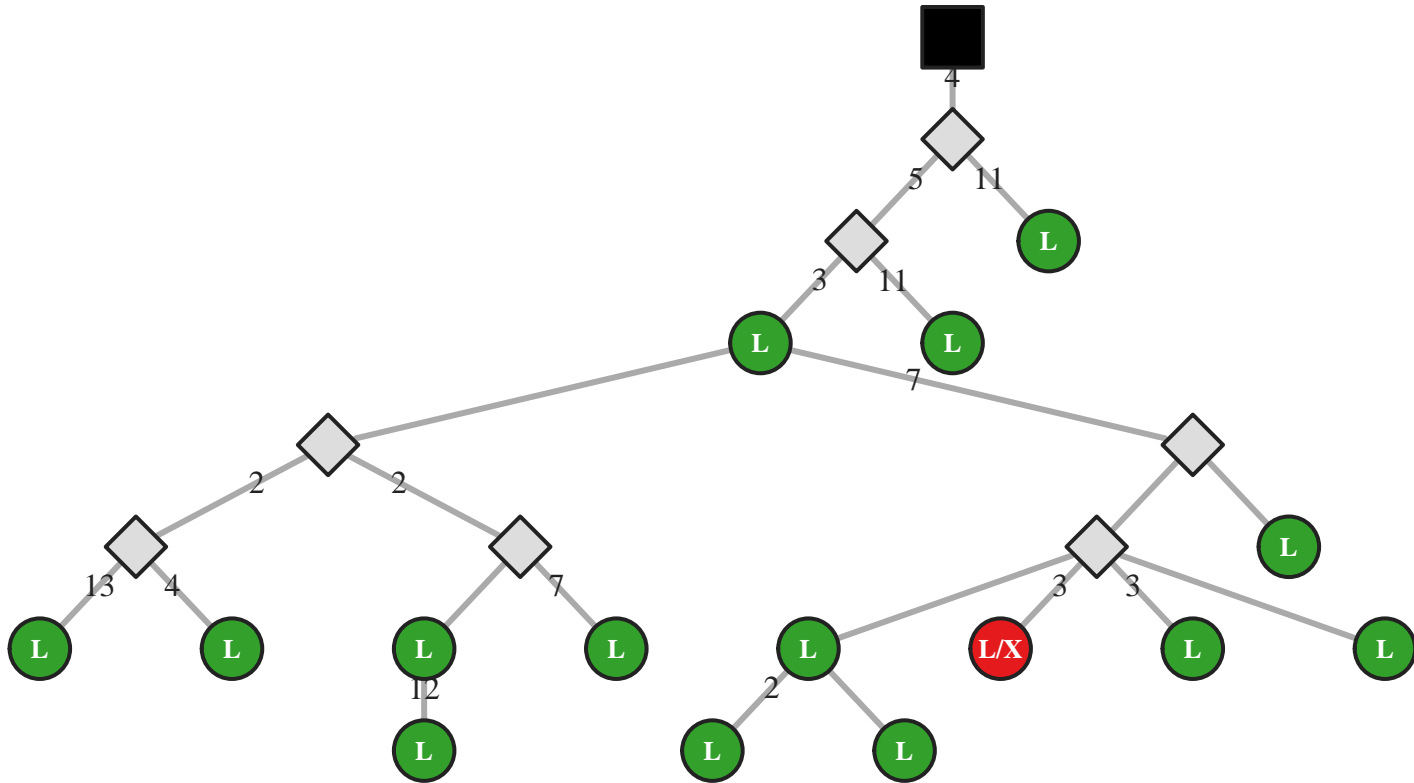
M5 IgG IGHV3-30/J3 51bp (34766)



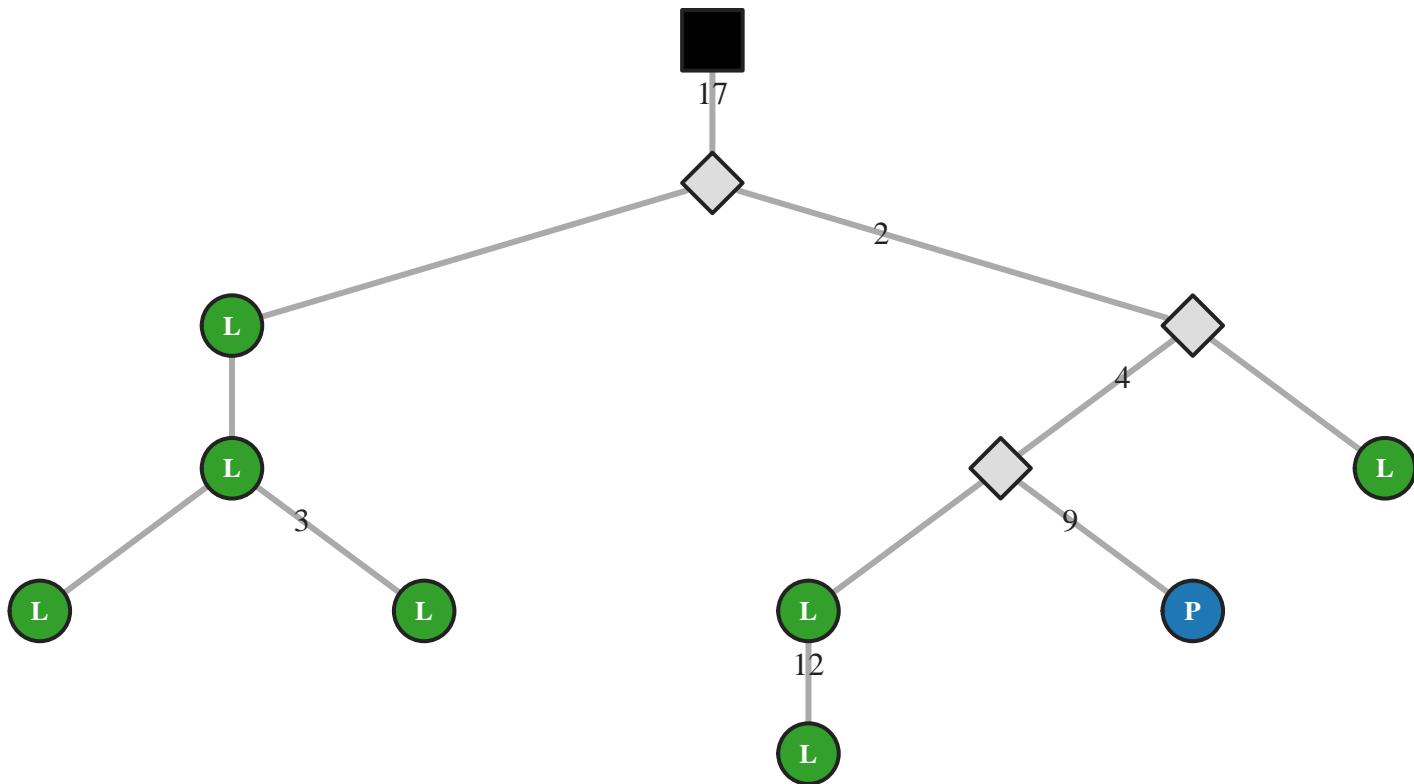
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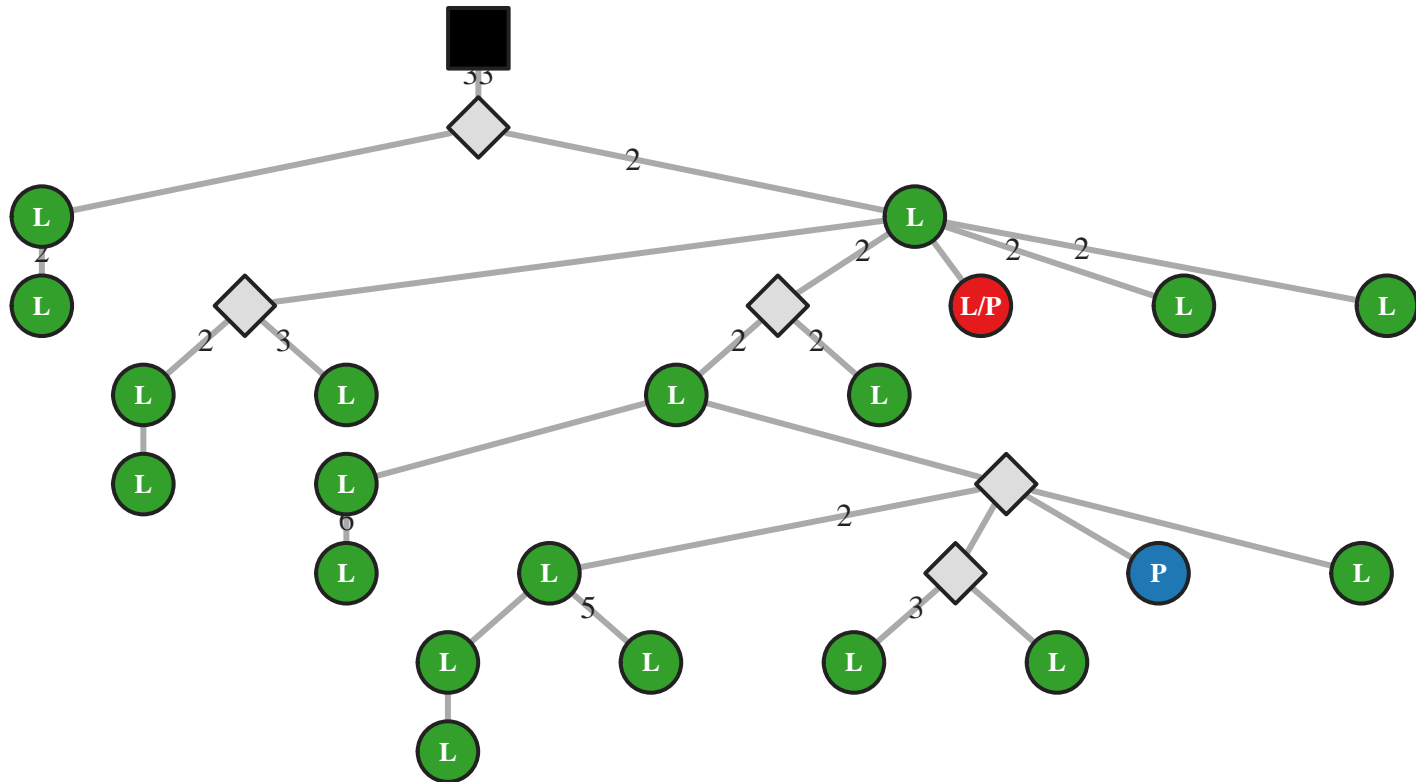
M5 IgG IGHV3-30/J3 51bp (34768)



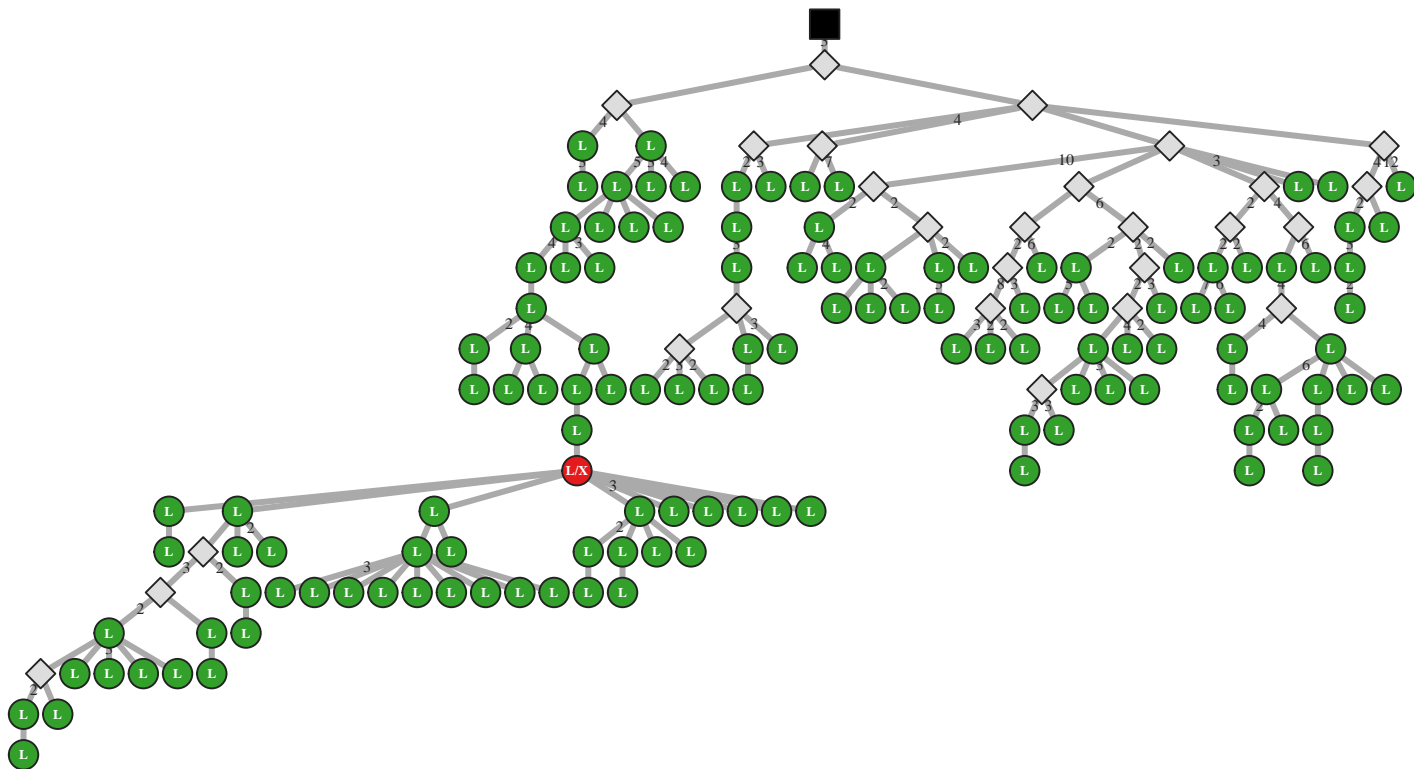
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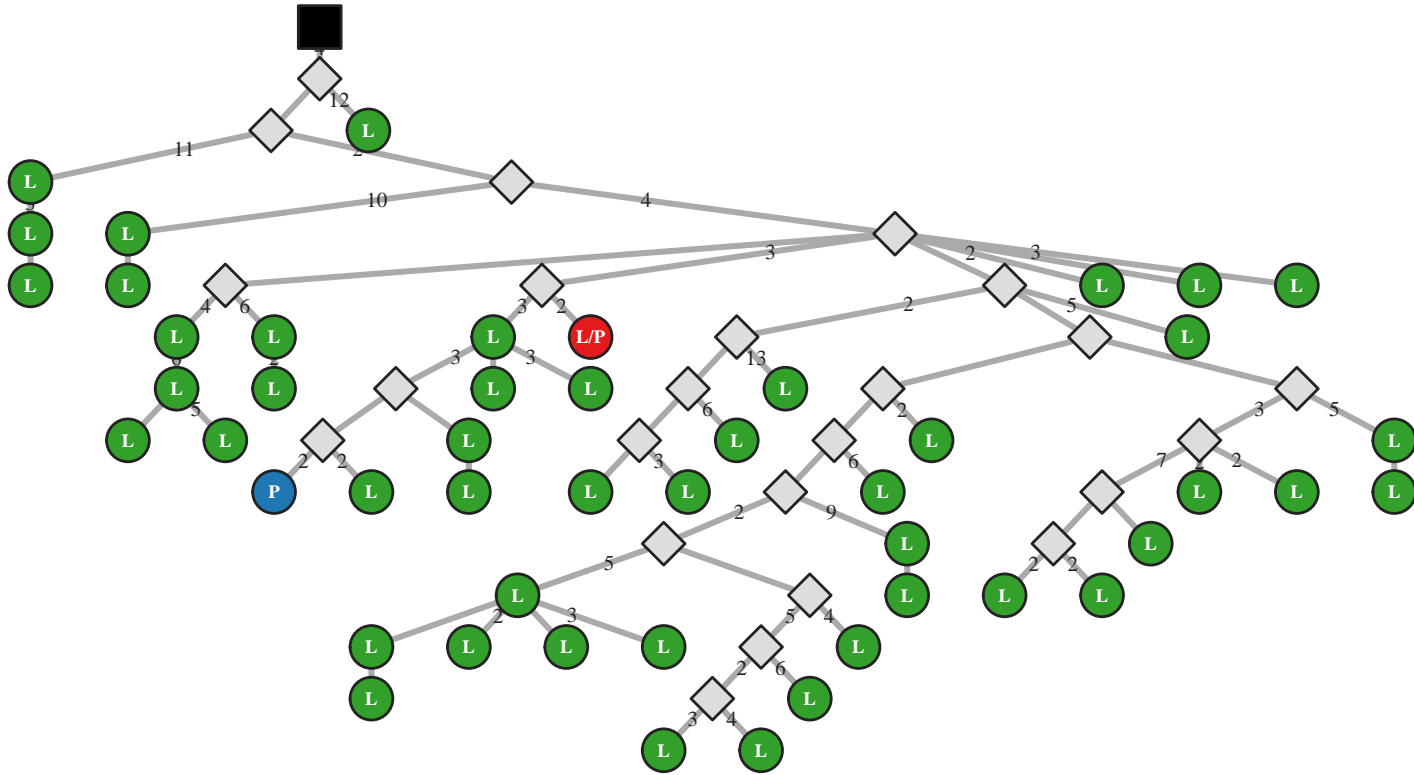
M5 IgG IGHV3-30/J3 51bp (34815)



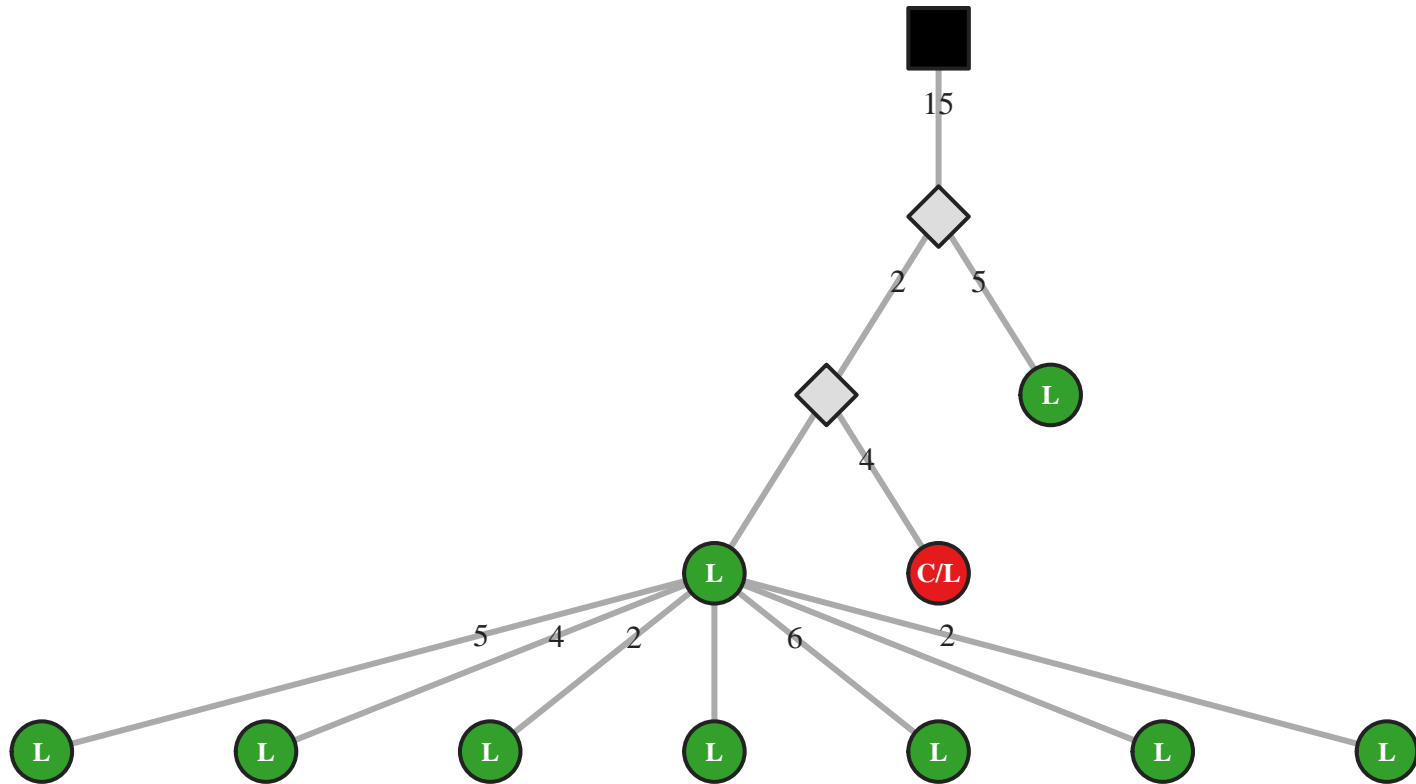
M5 IgG IGHV3-30/J3 54bp (26427)



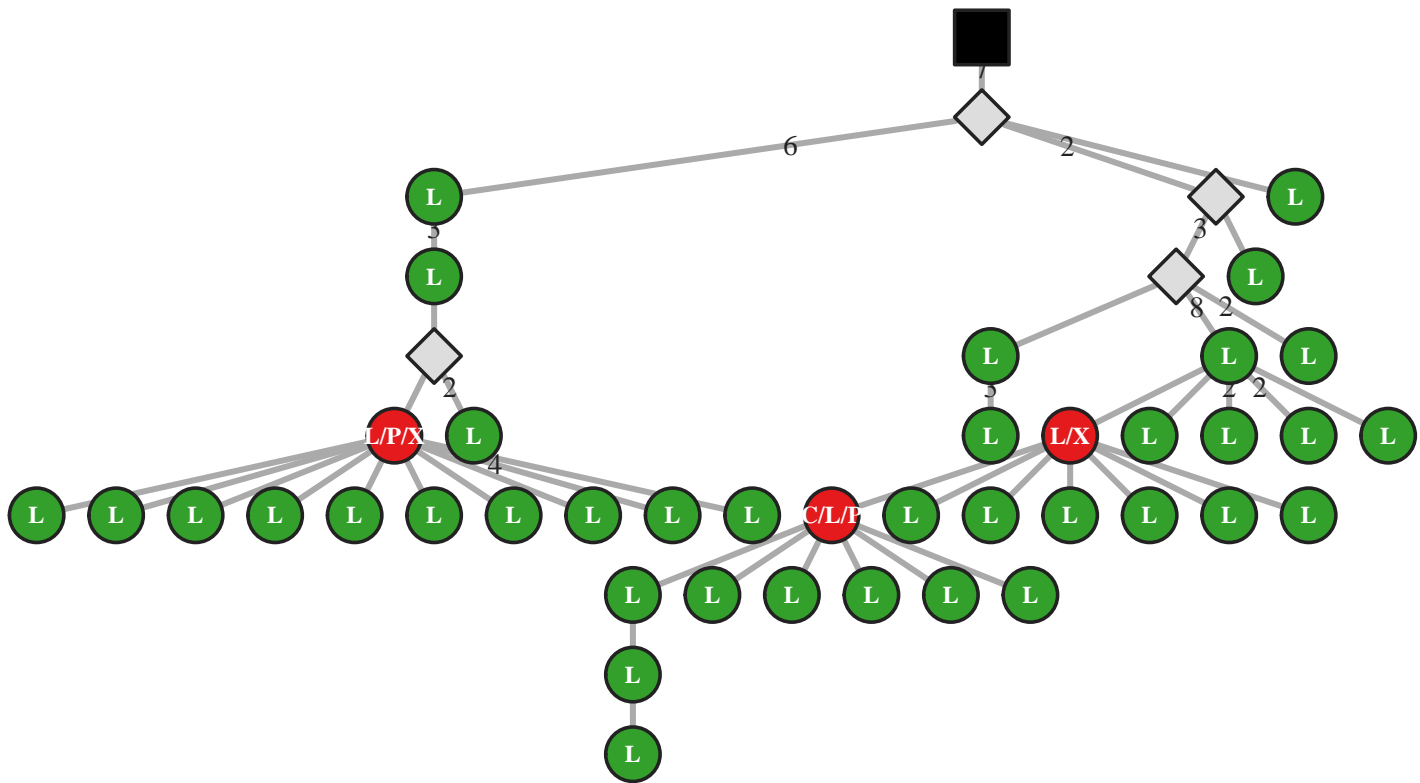
M5 IgG IGHV3-30/J3 57bp (26445)



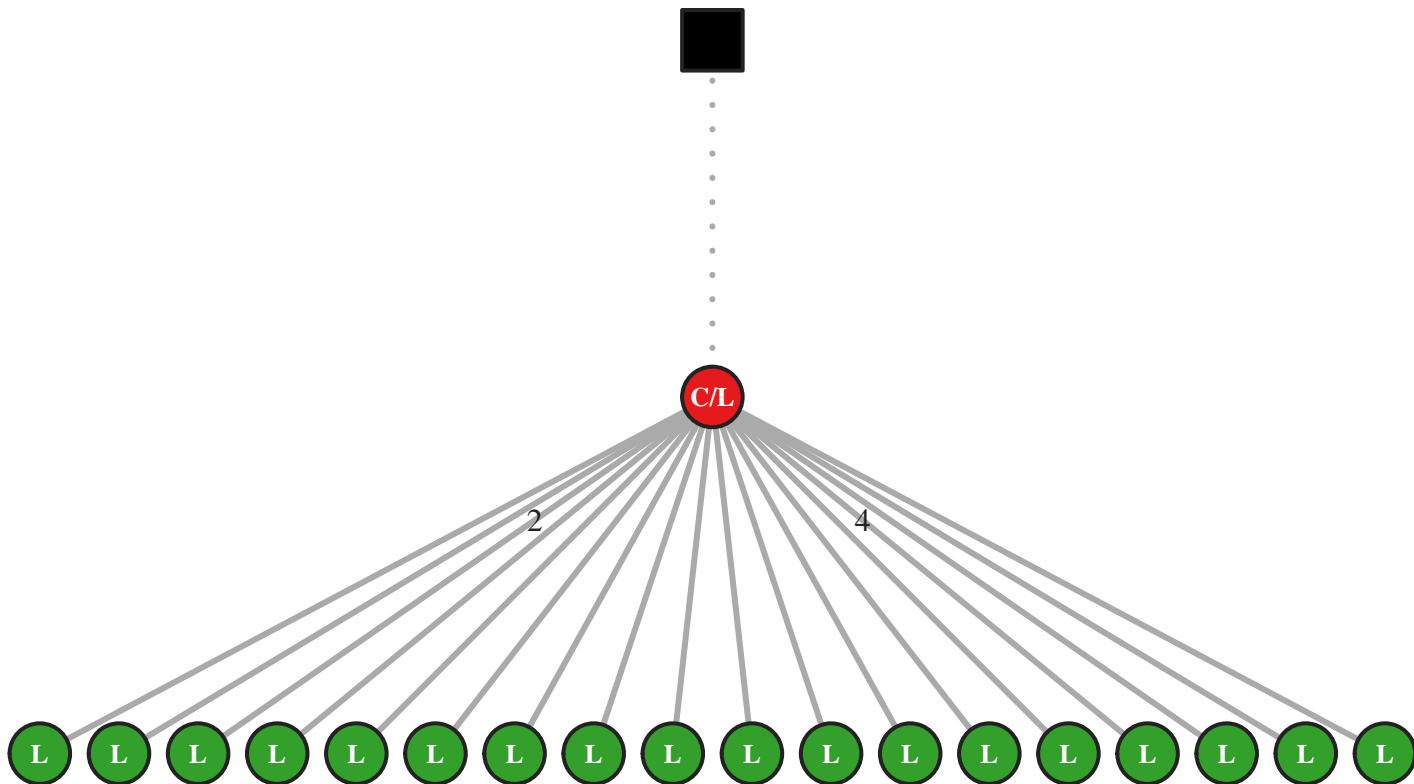
M5 IgG IGHV3-30/J3 63bp (8013)



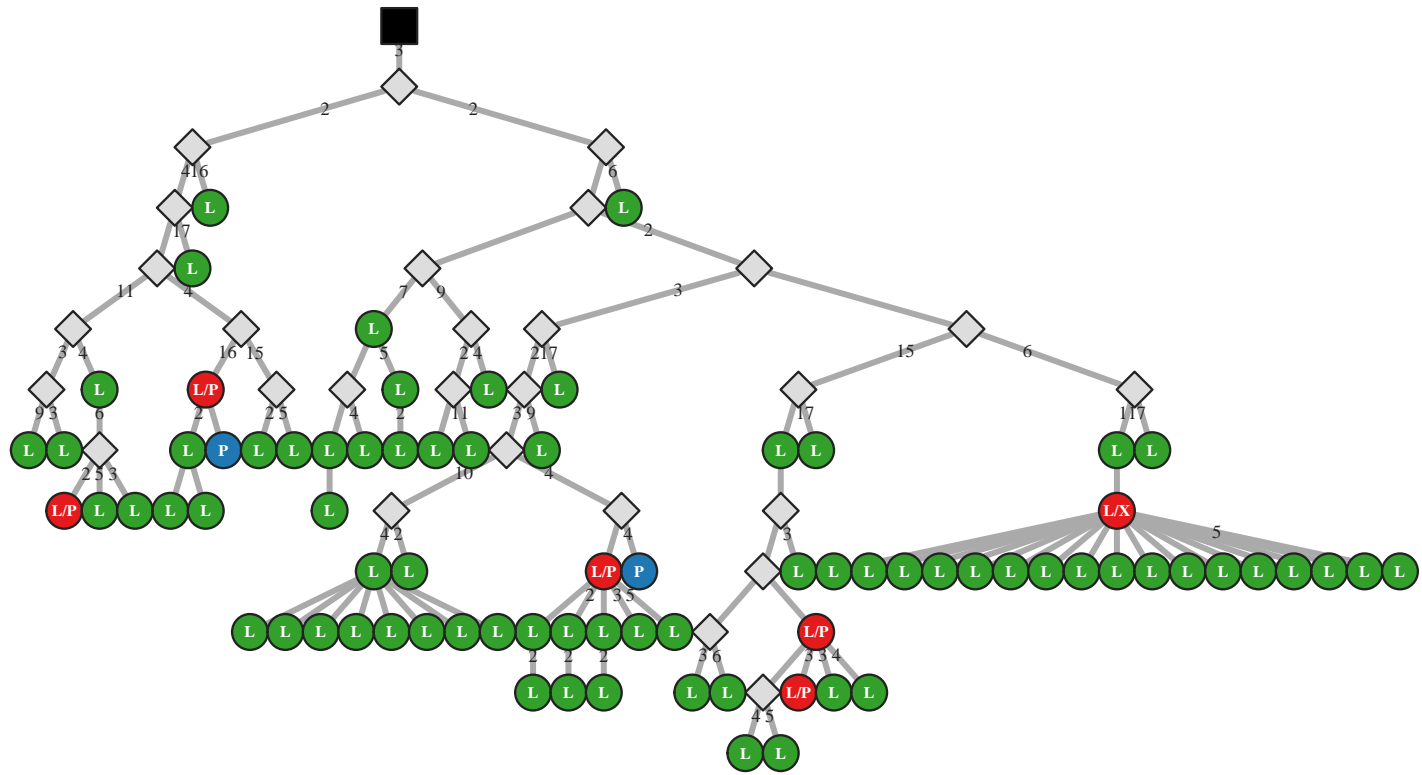
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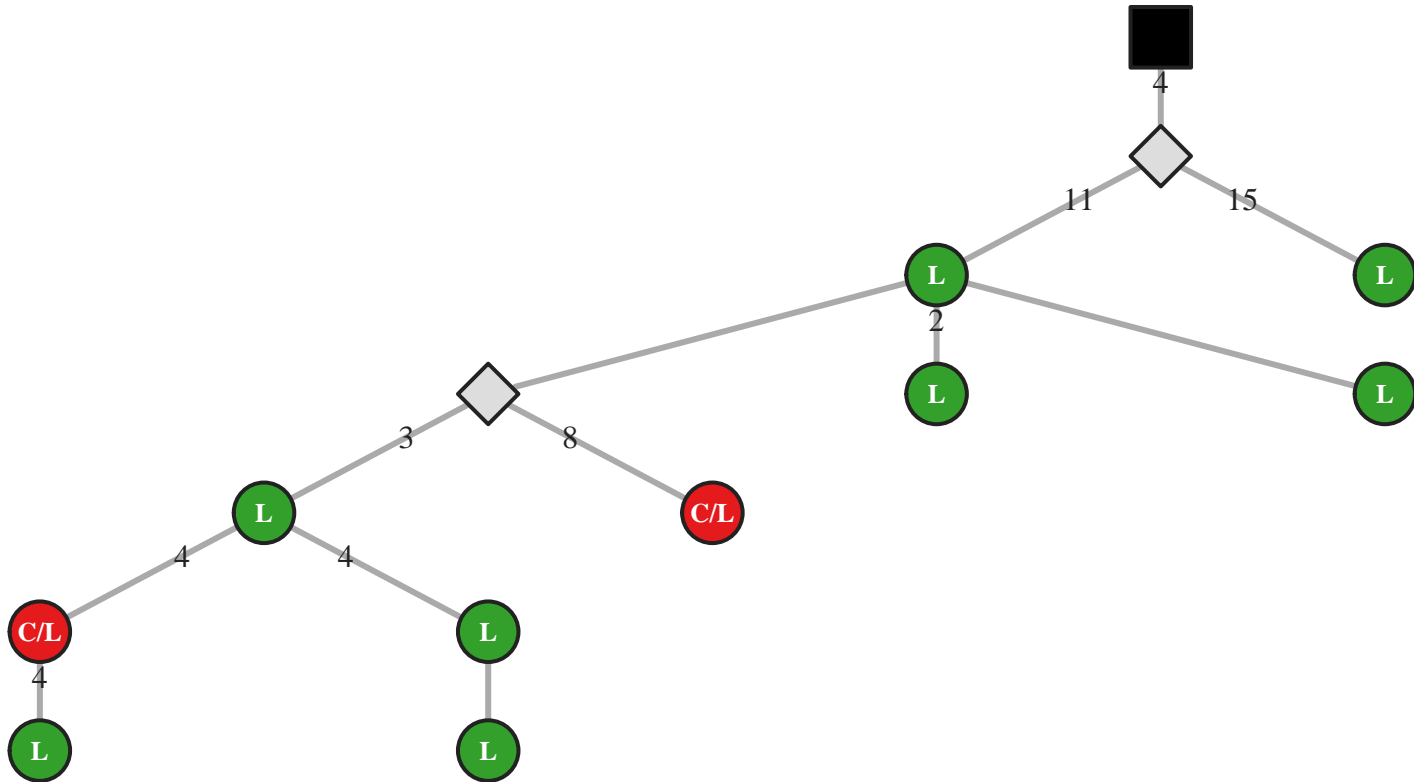
M5 IgG IGHV3-30/J4 27bp (26474)



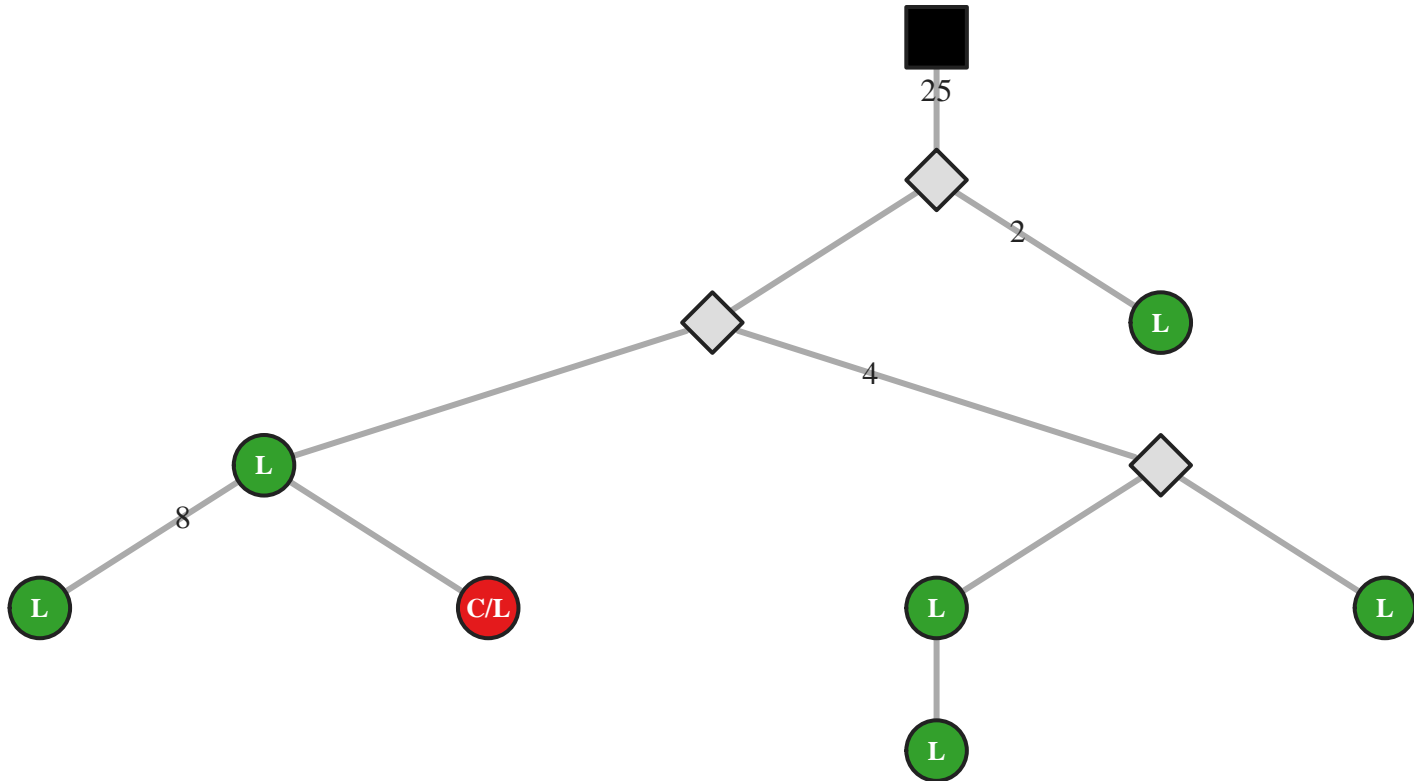
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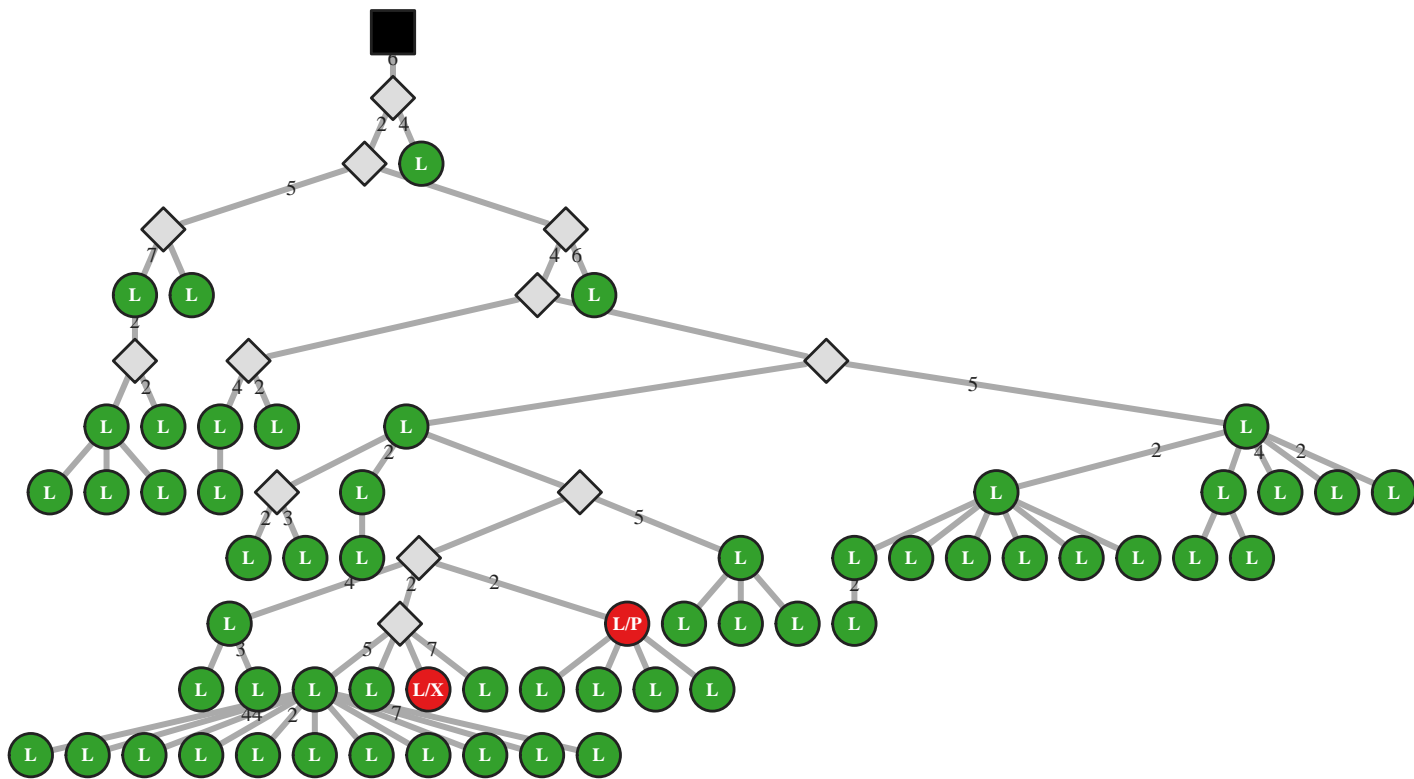
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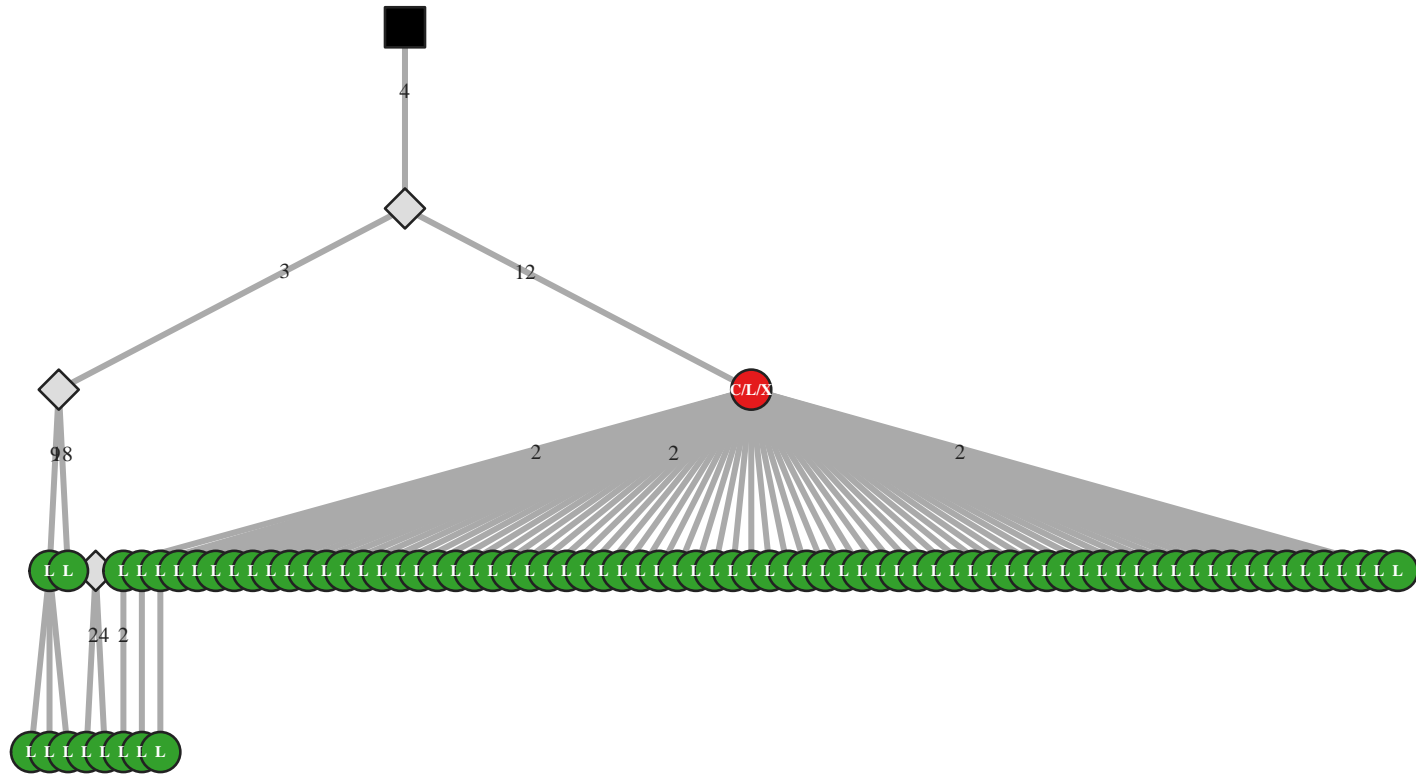
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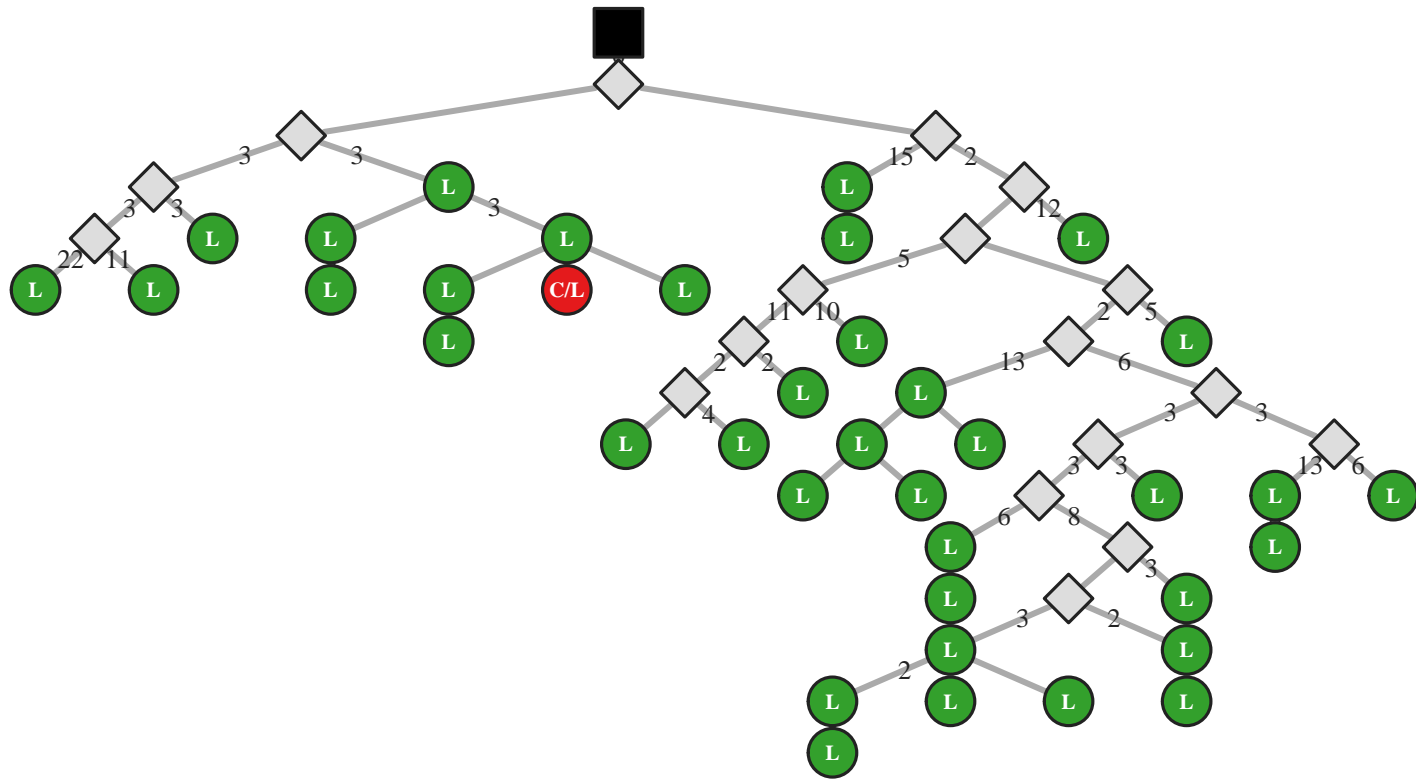
M5 IgG IGHV3-30/J4 39bp (7198)



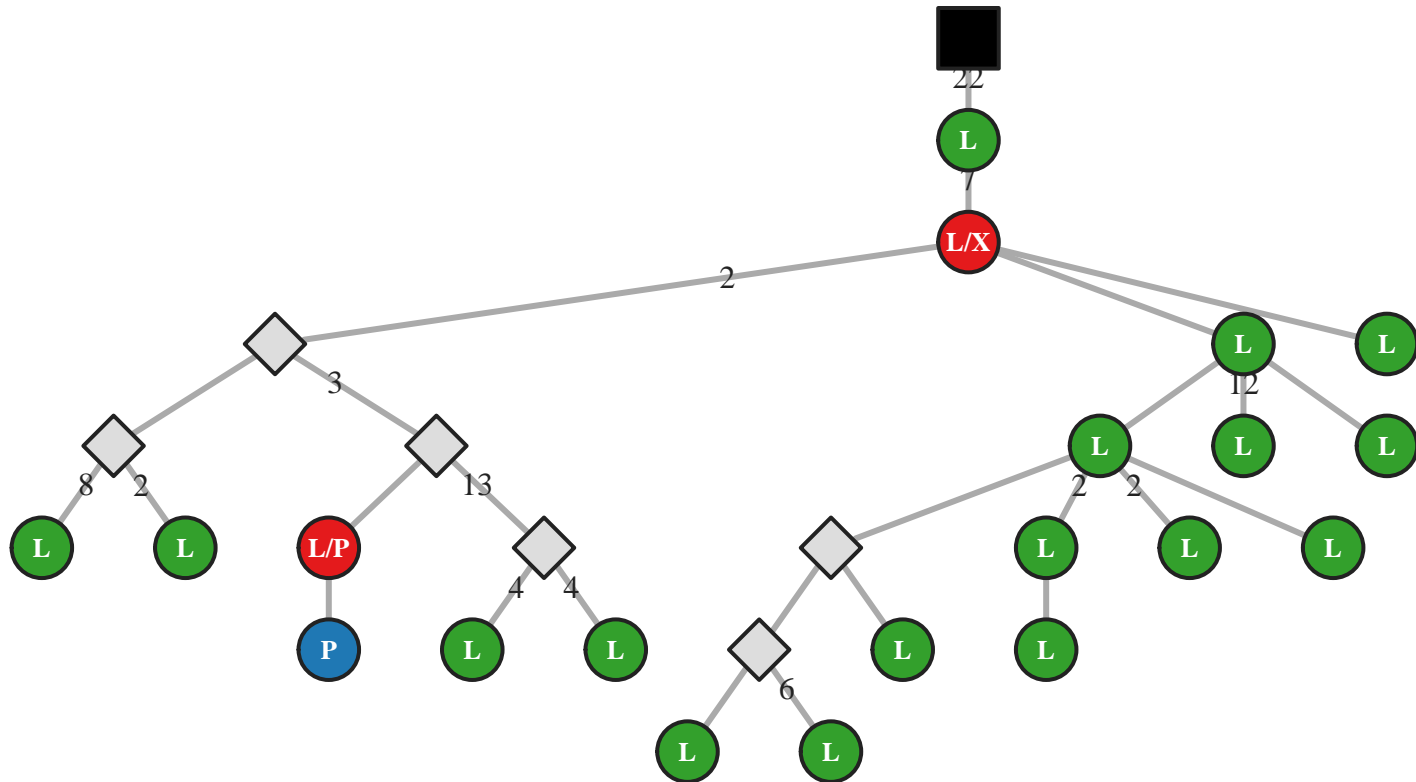
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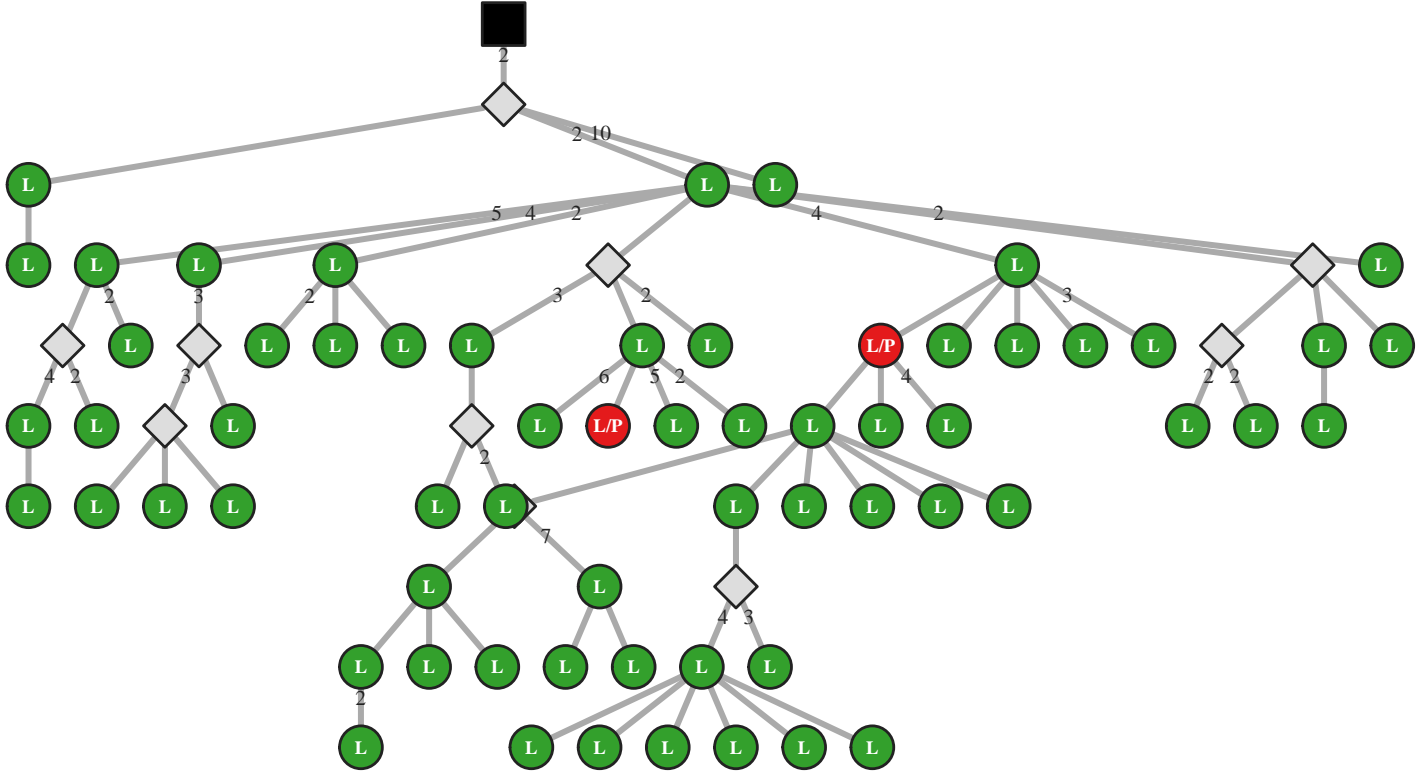
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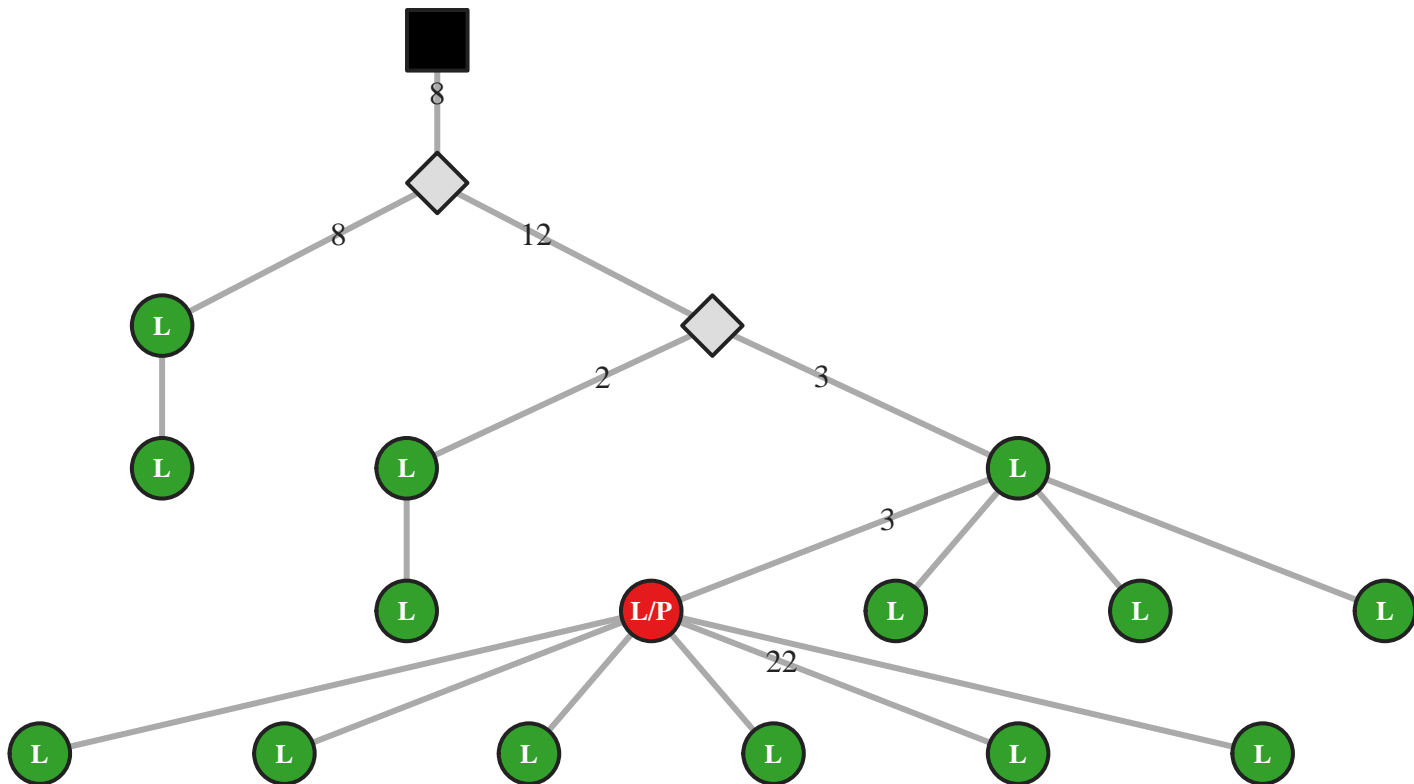
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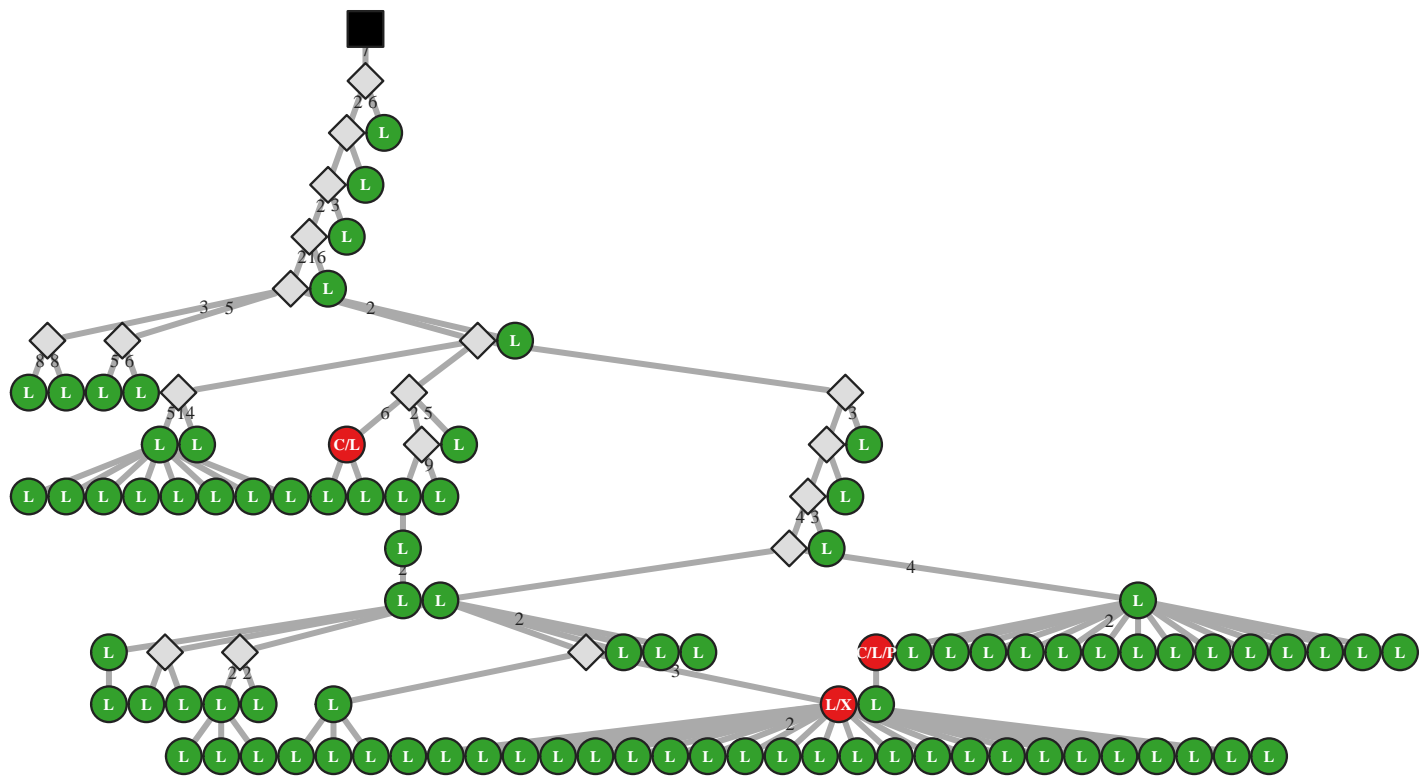
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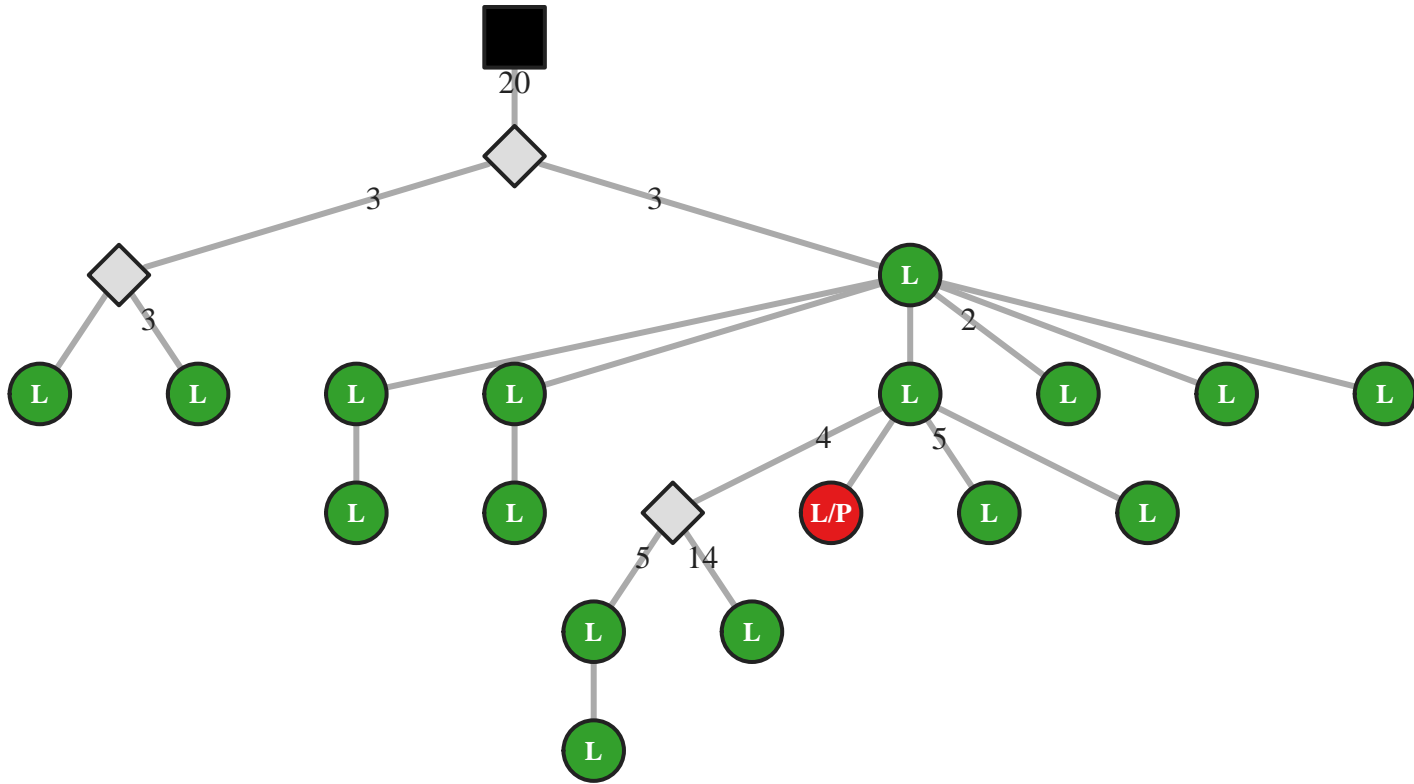
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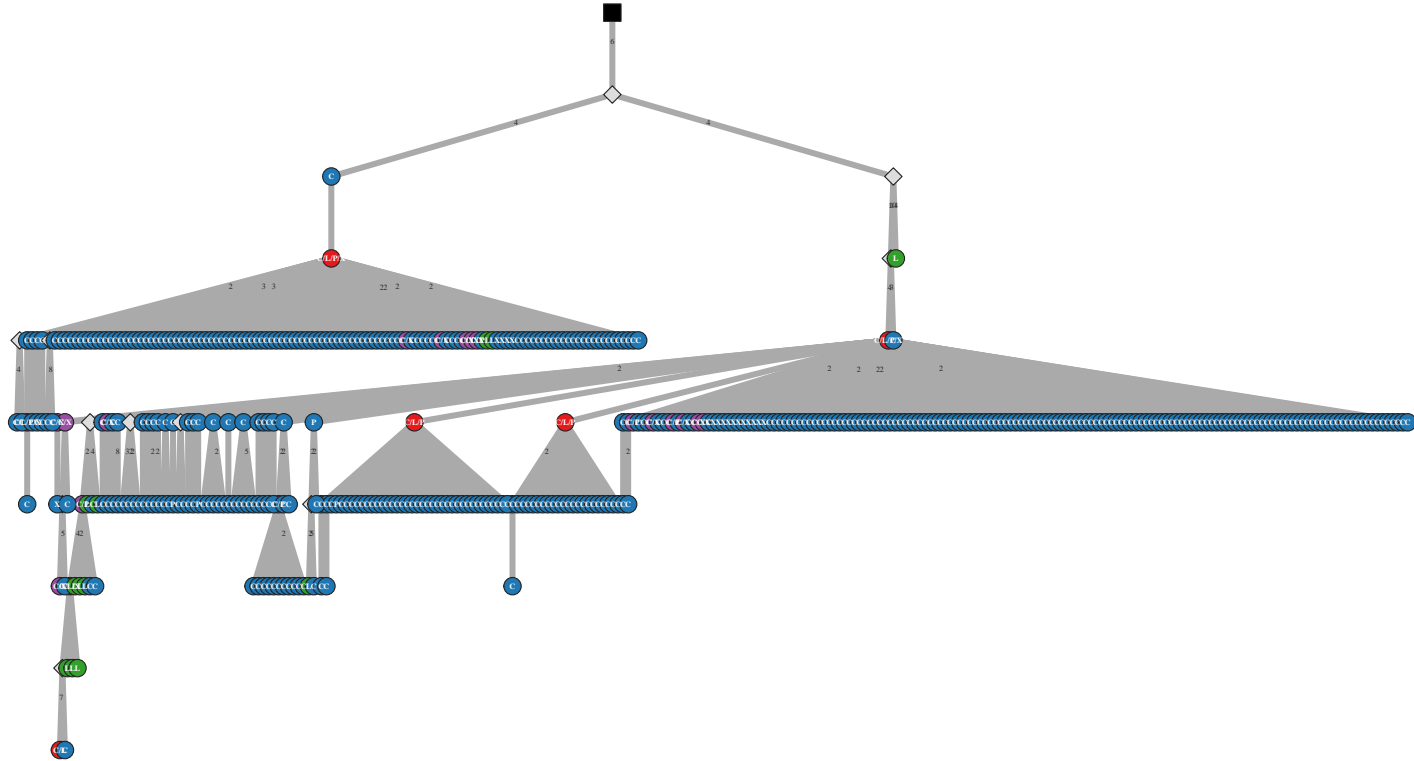
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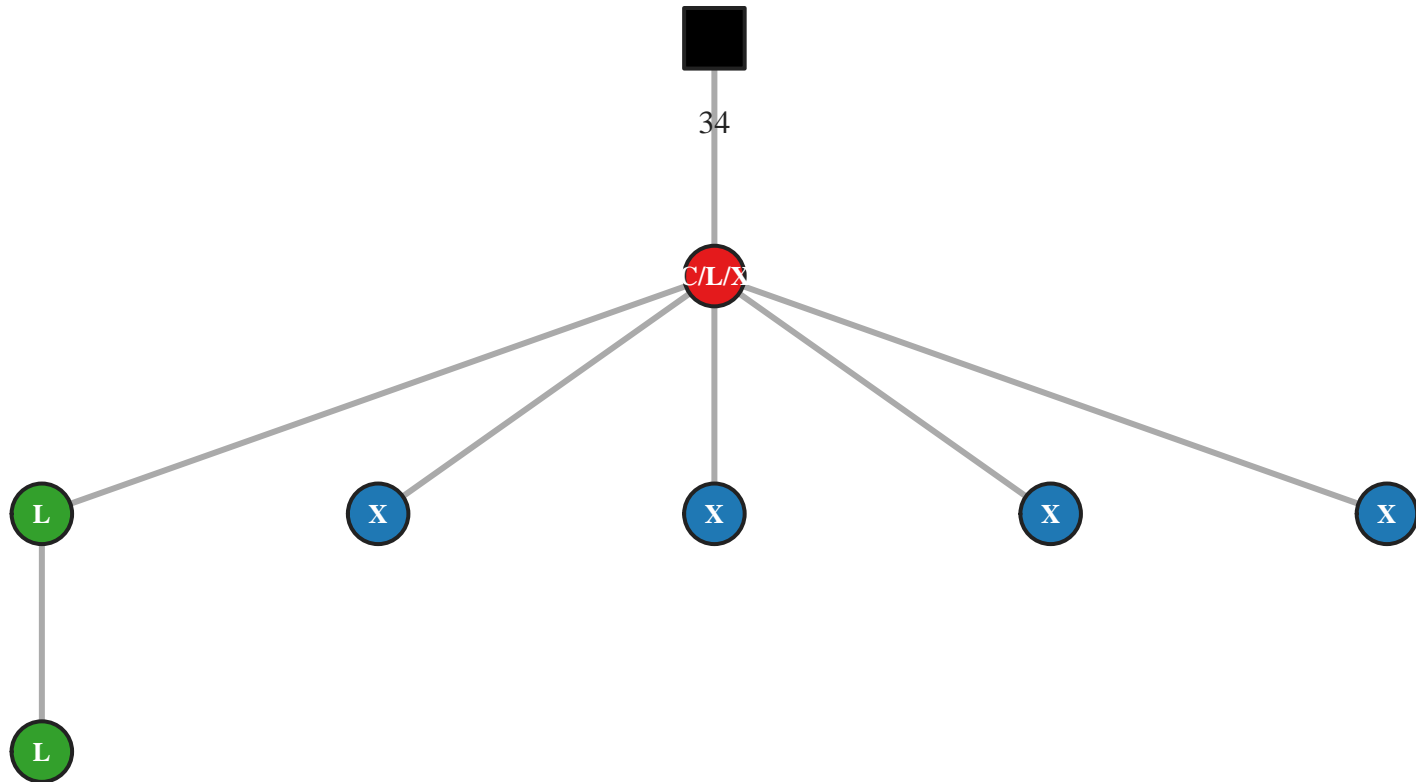
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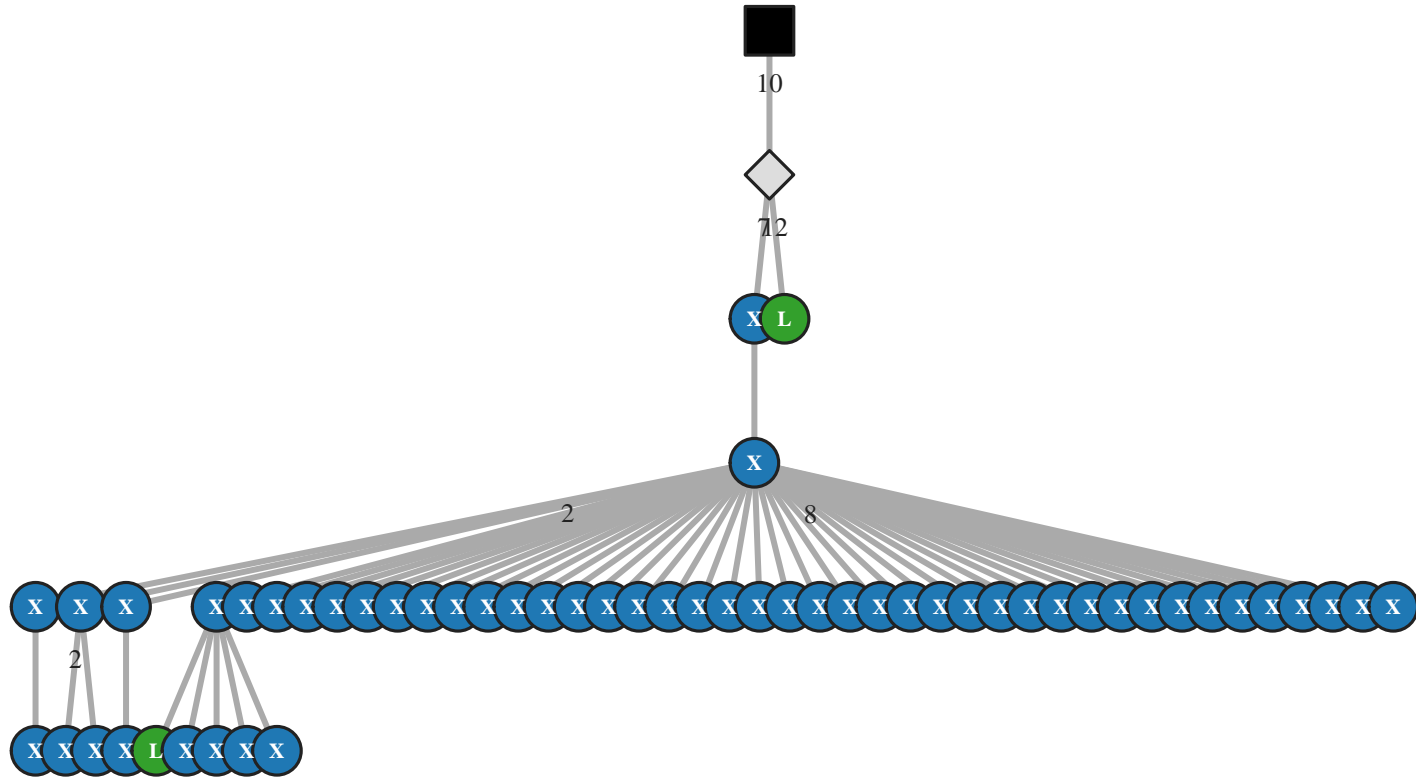
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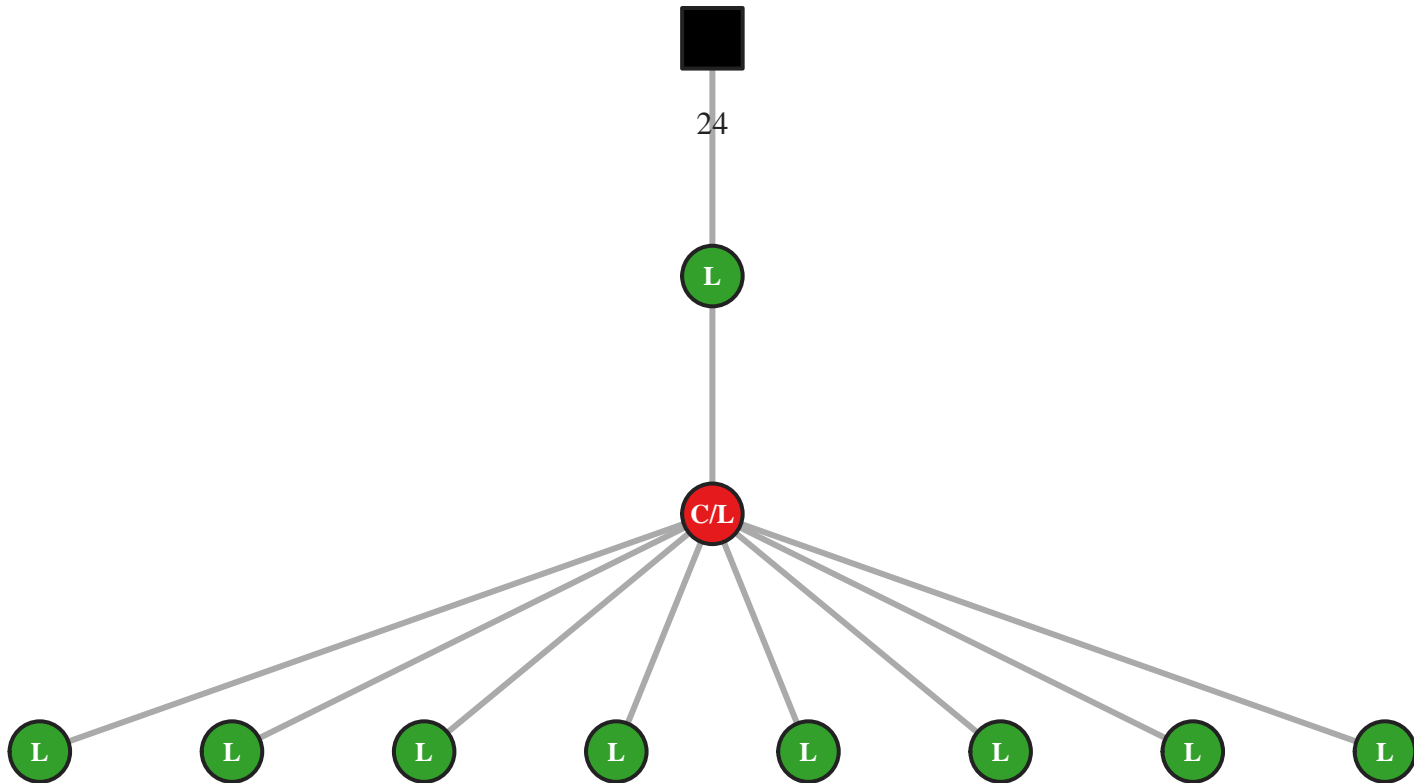
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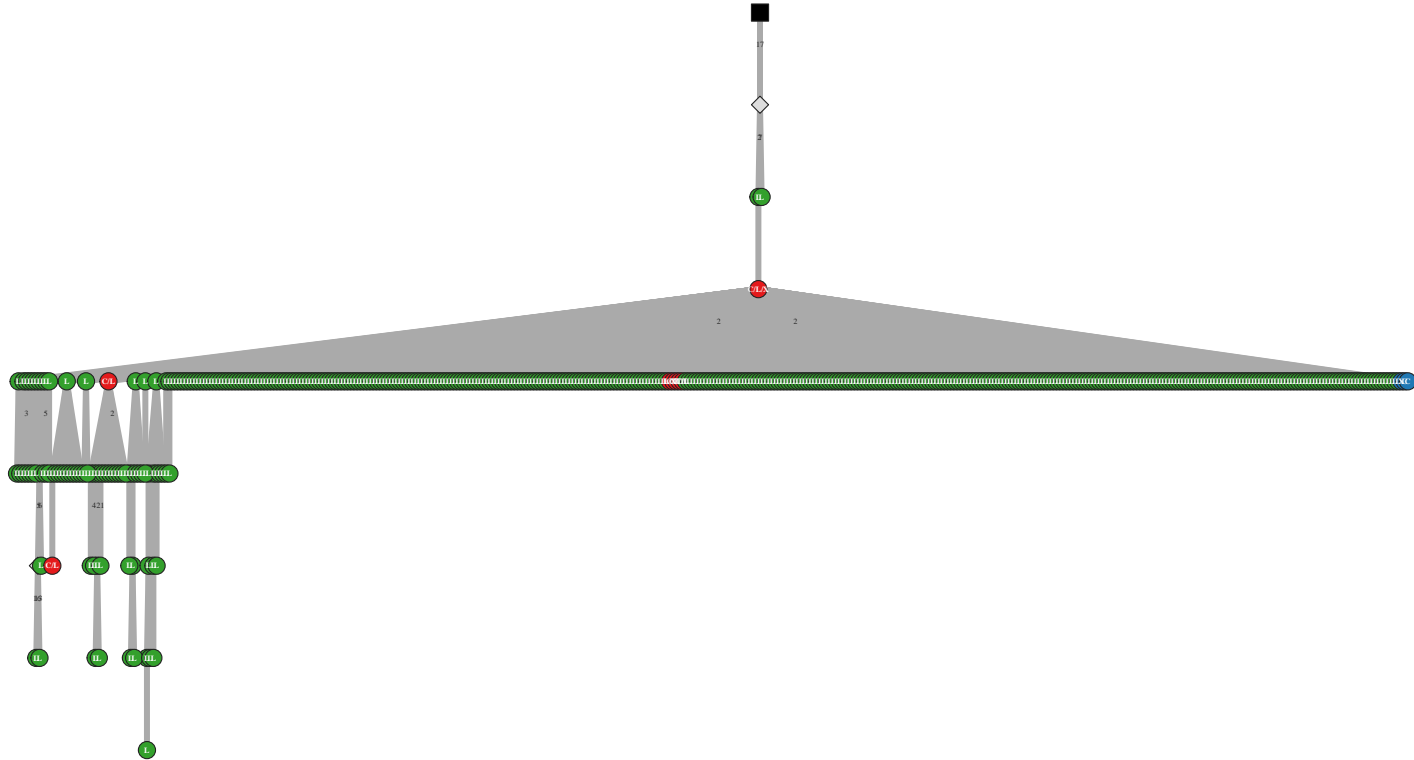
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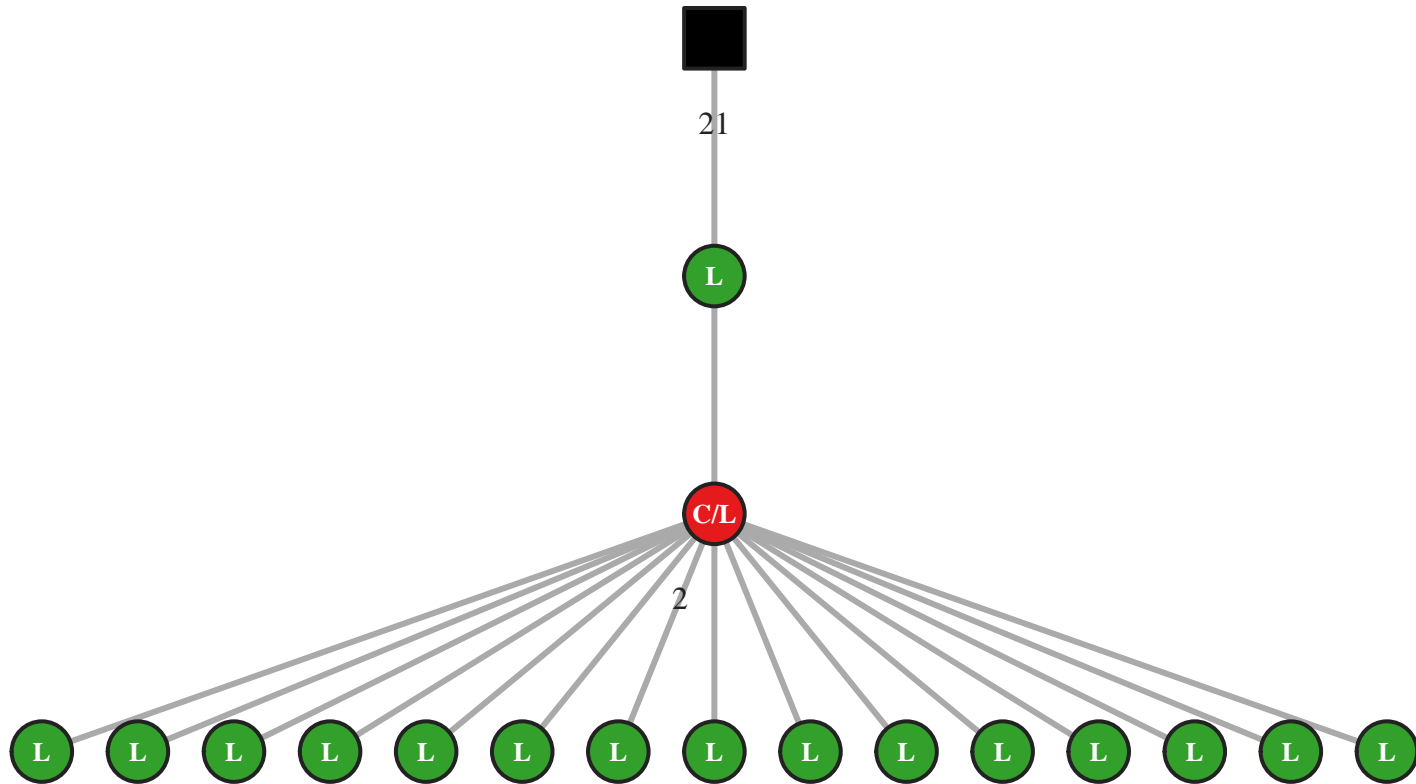
M5 IgG IGHV3-30/J4 45bp (16930)



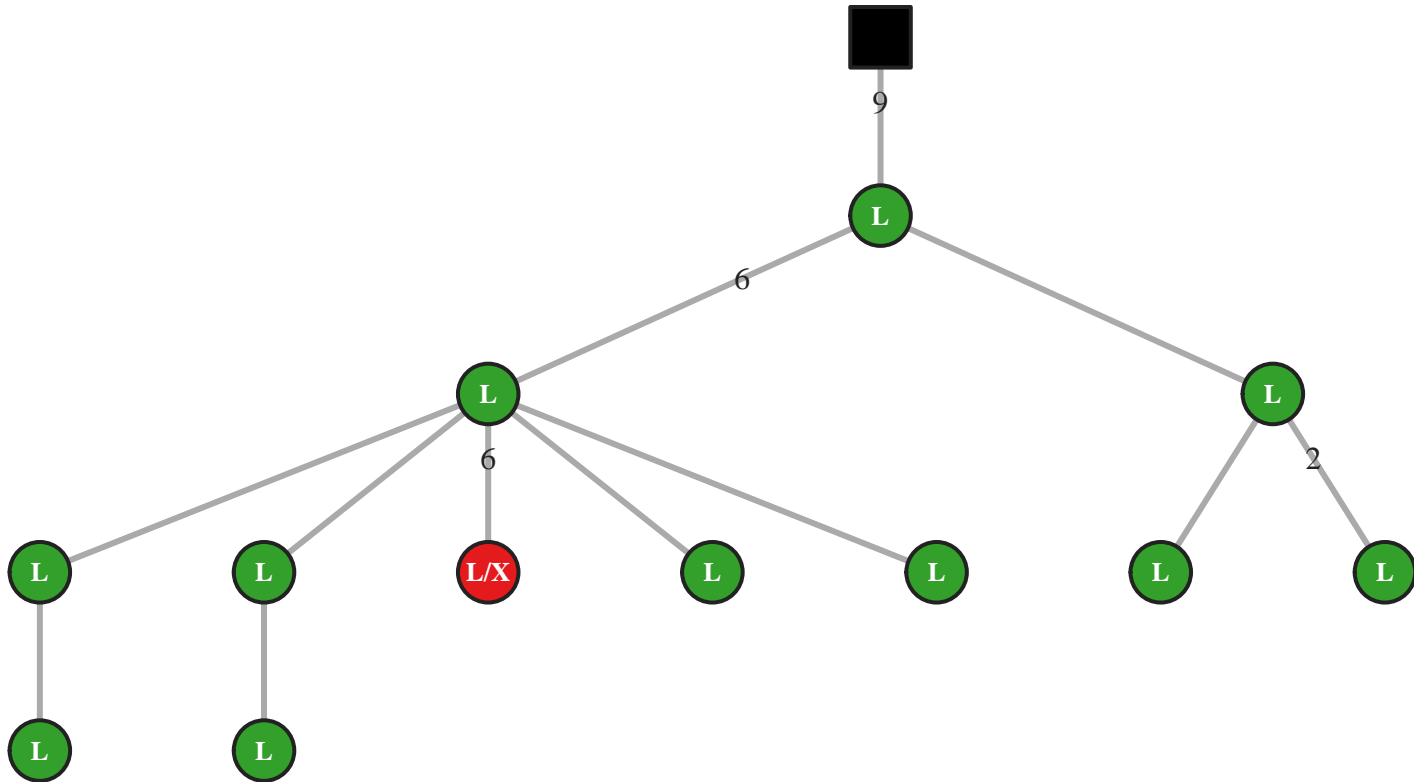
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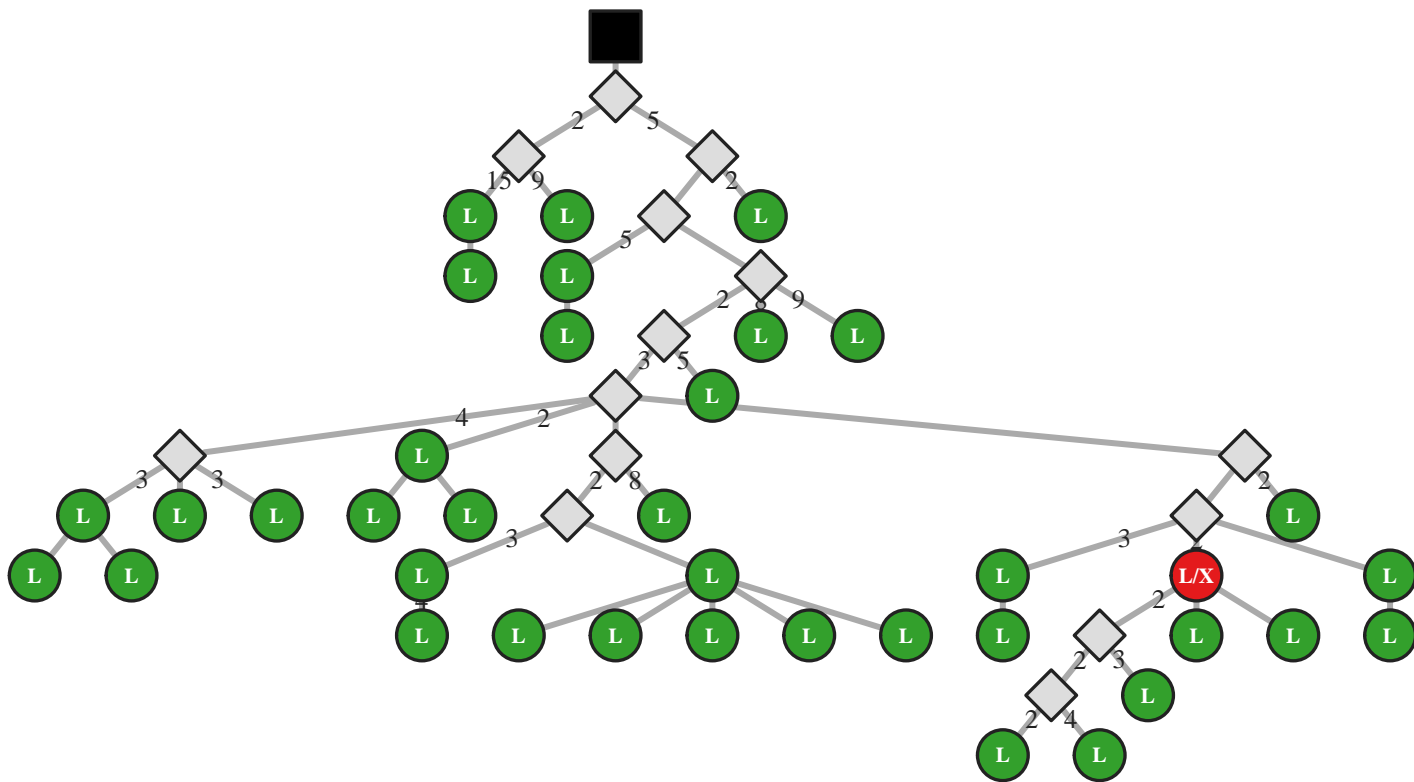
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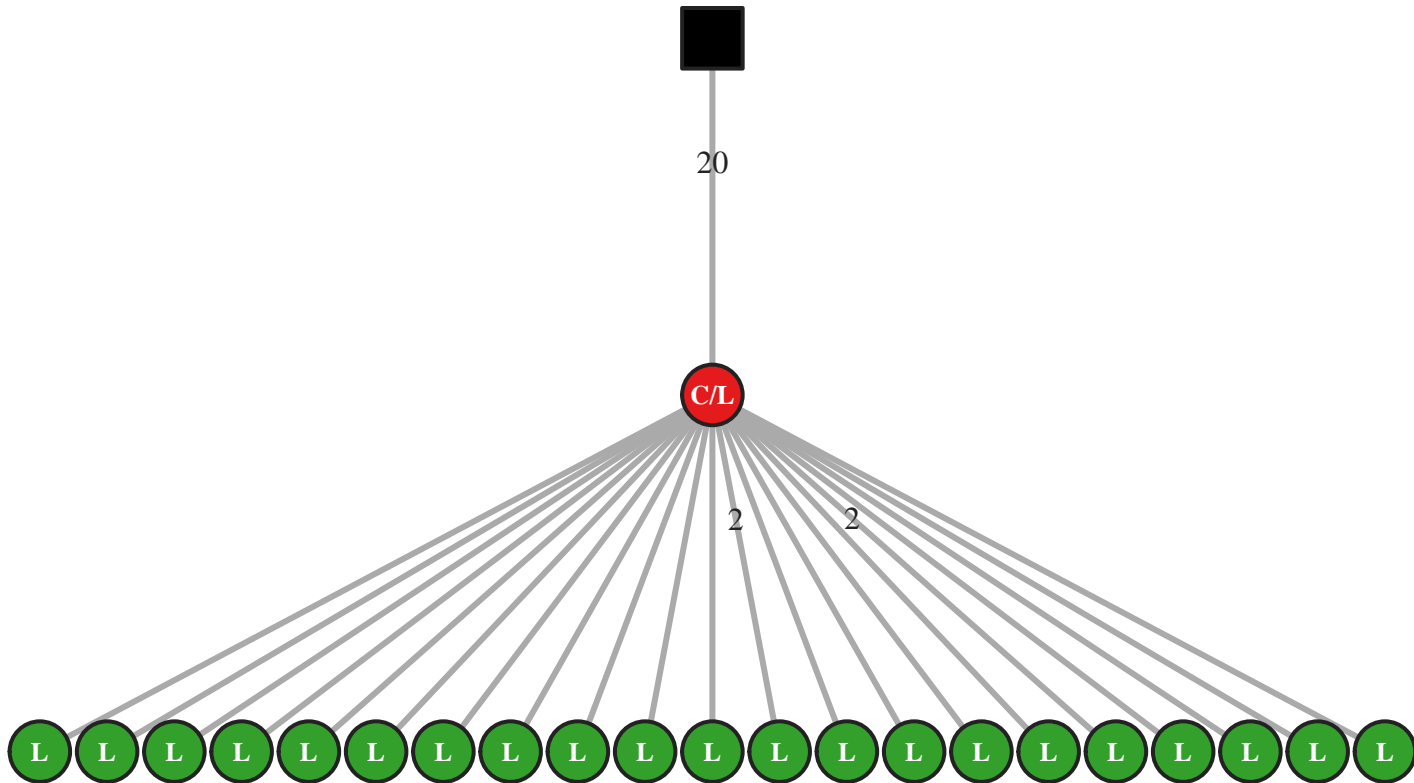
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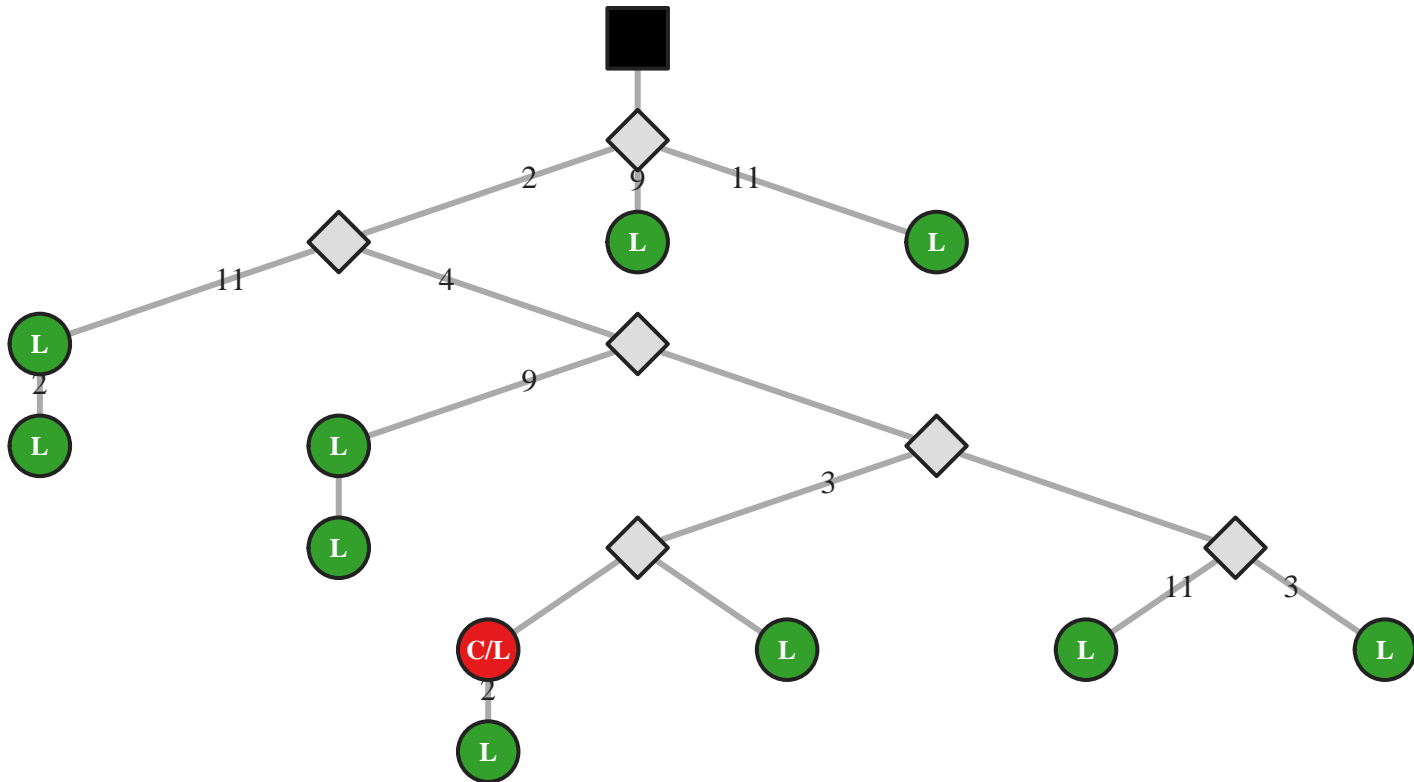
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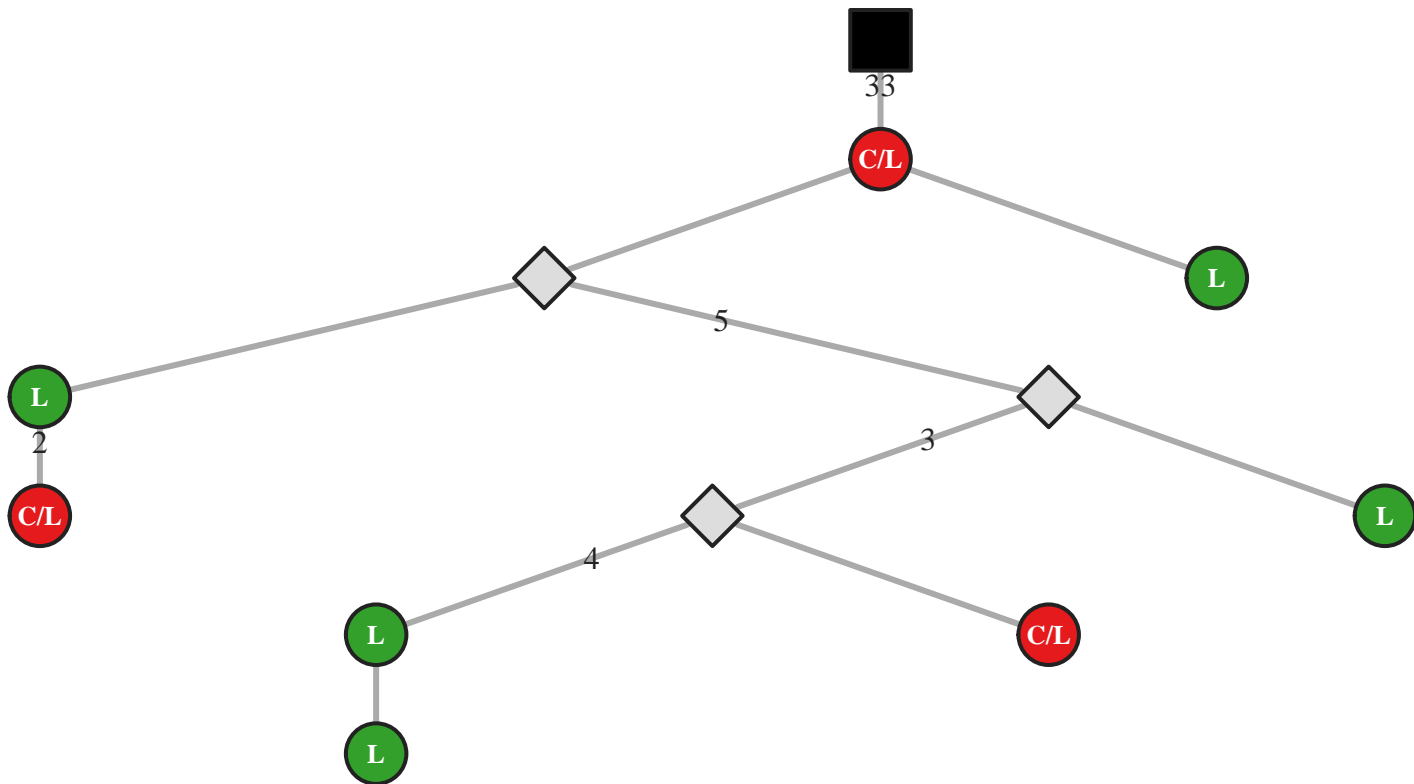
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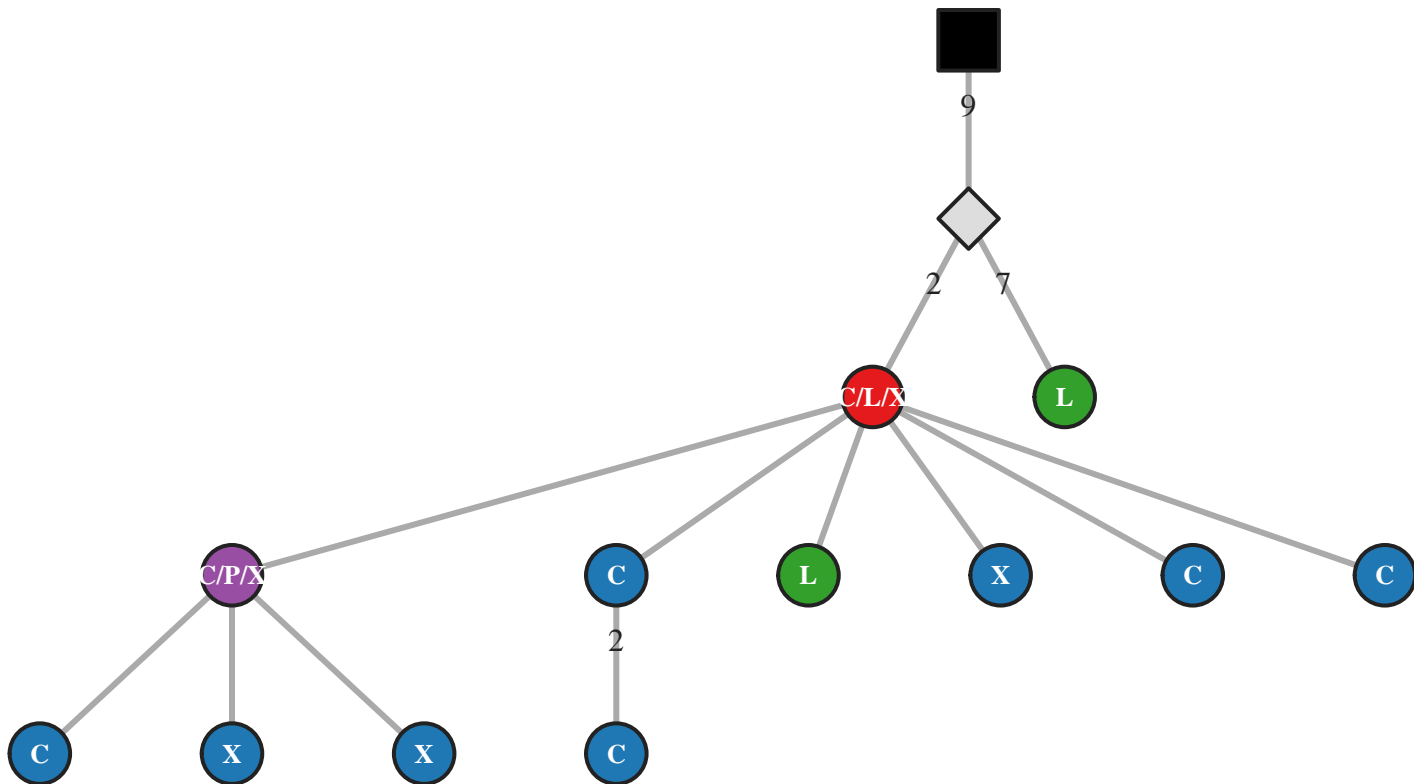
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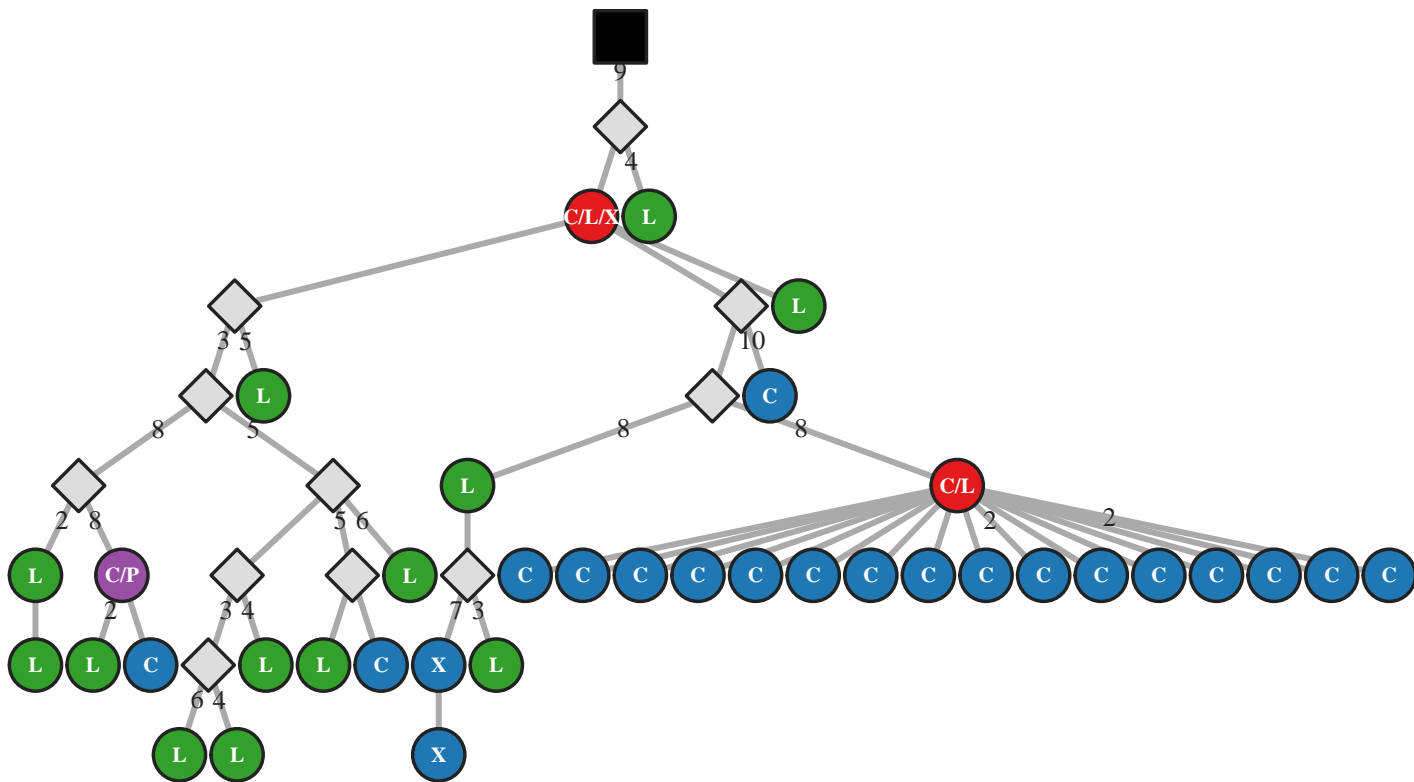
M5 IgG IGHV3-30/J4 45bp (17287)



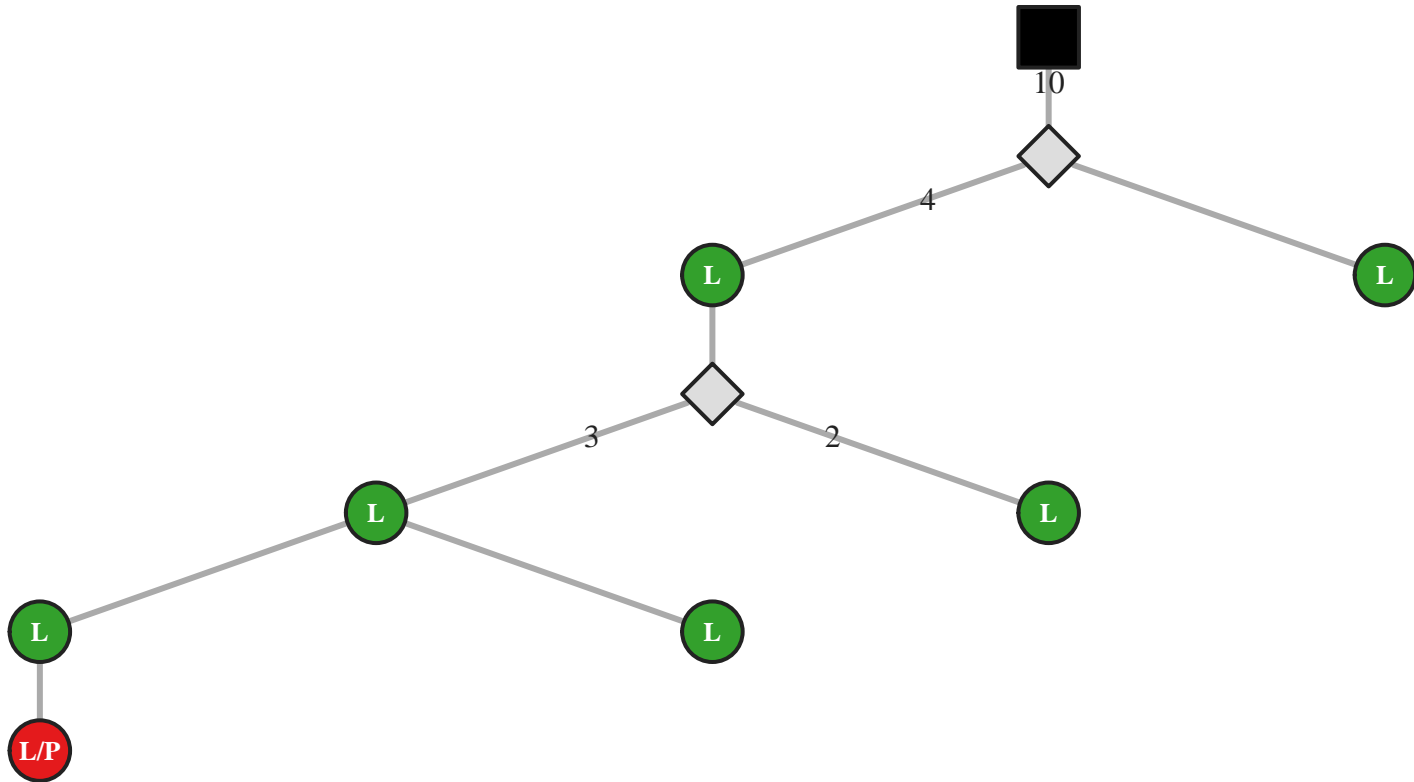
M5 IgG IGHV3-30/J4 45bp (17290)



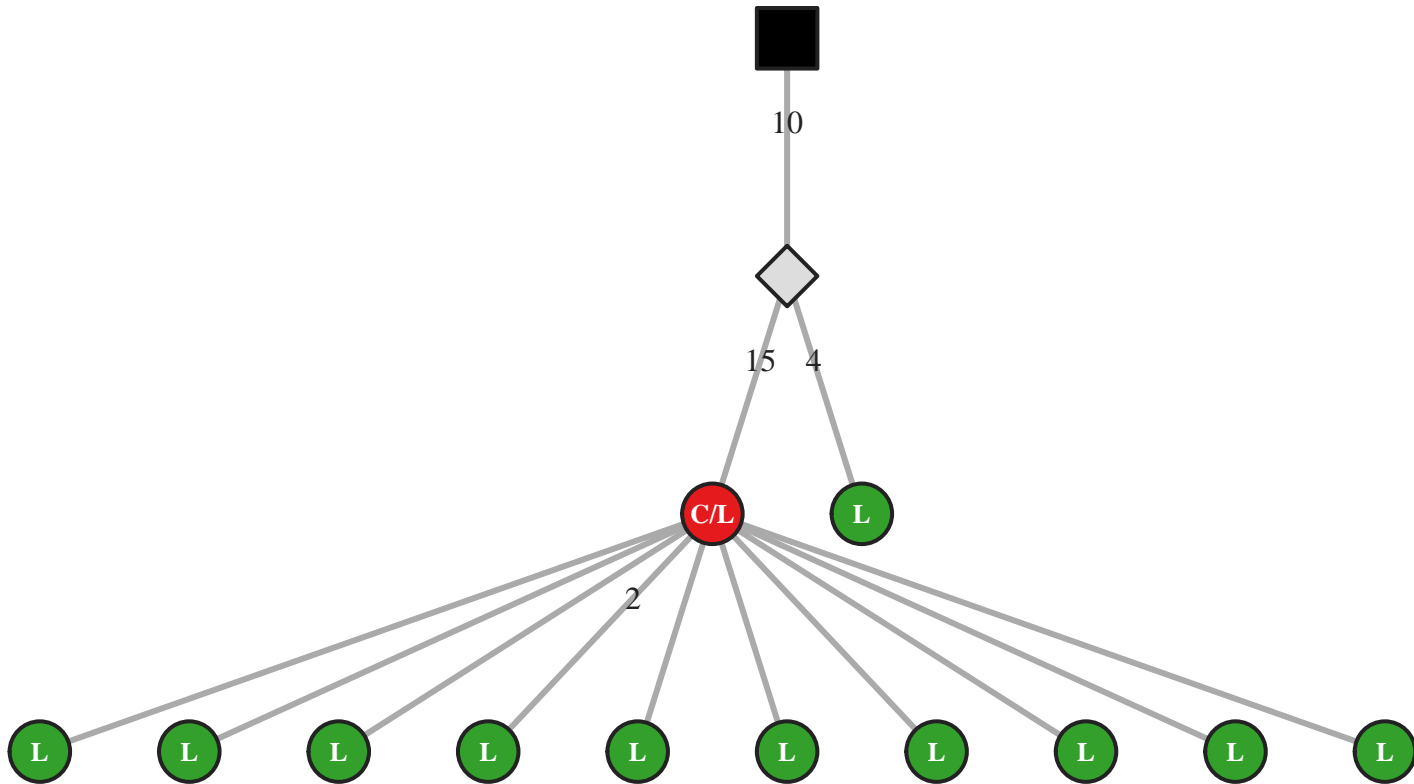
M5 IgM IGHV3-30/J4 45bp (11365)



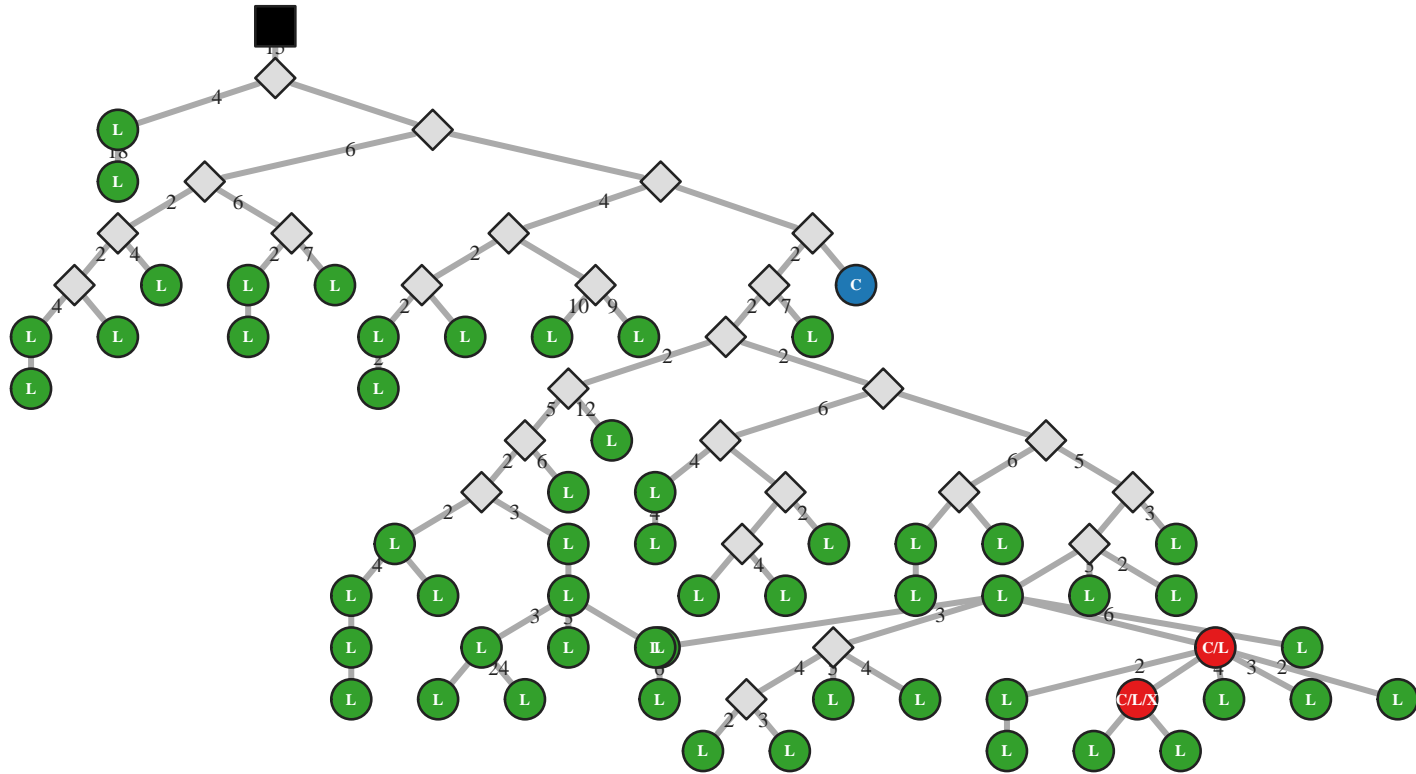
M5 IgA IGHV3-30/J4 48bp (2753)



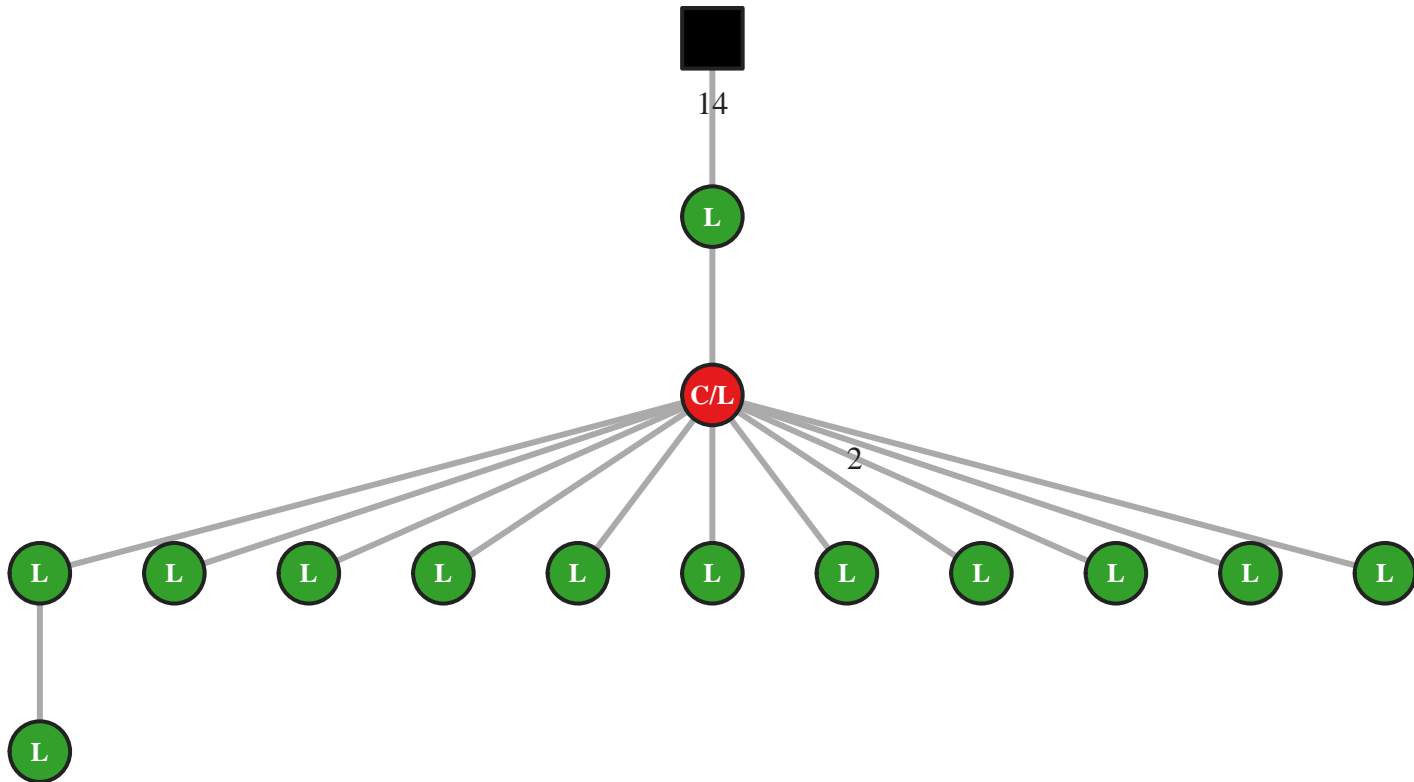
M5 IgG IGHV3-30/J4 48bp (7373)



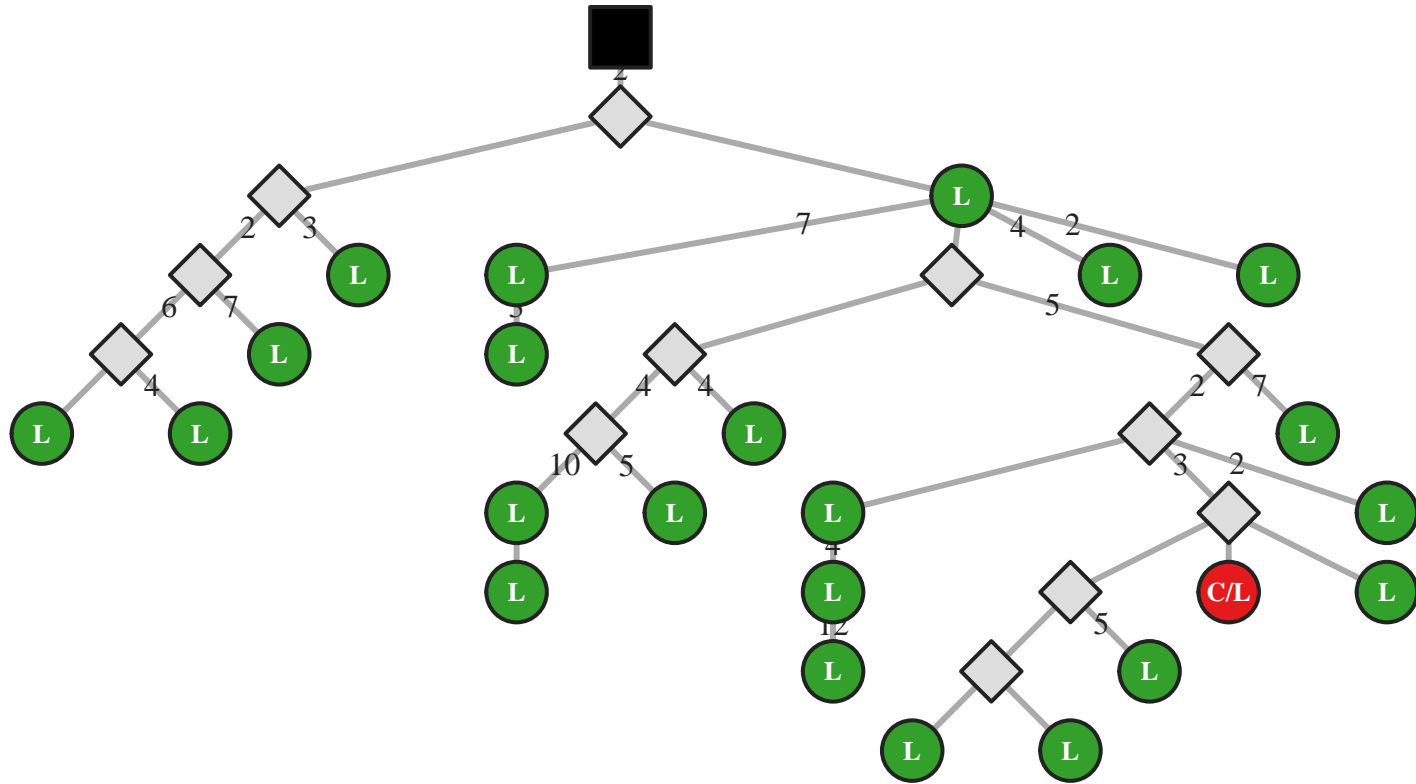
M5 IgG IGHV3-30/J4 48bp (7411)



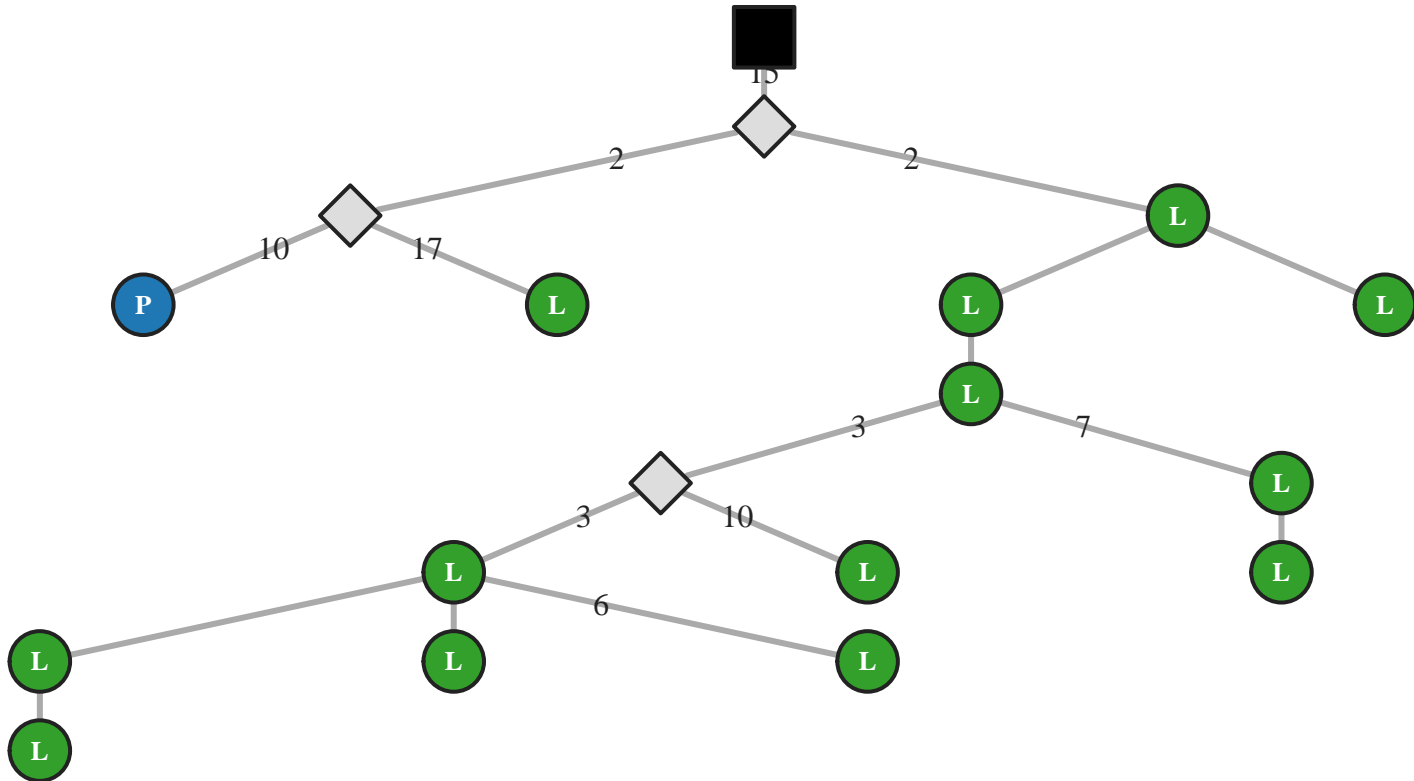
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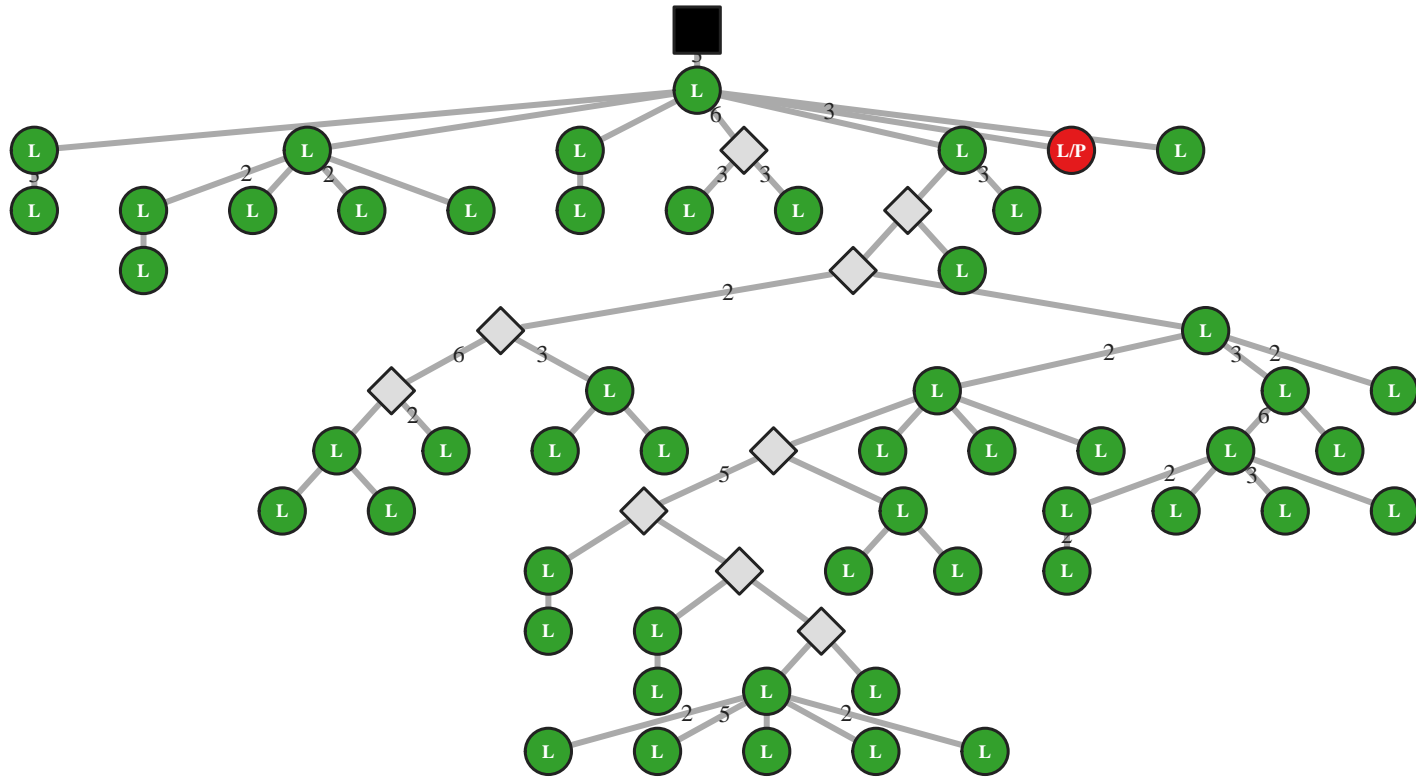
M5 IgG IGHV3-30/J4 48bp (7683)



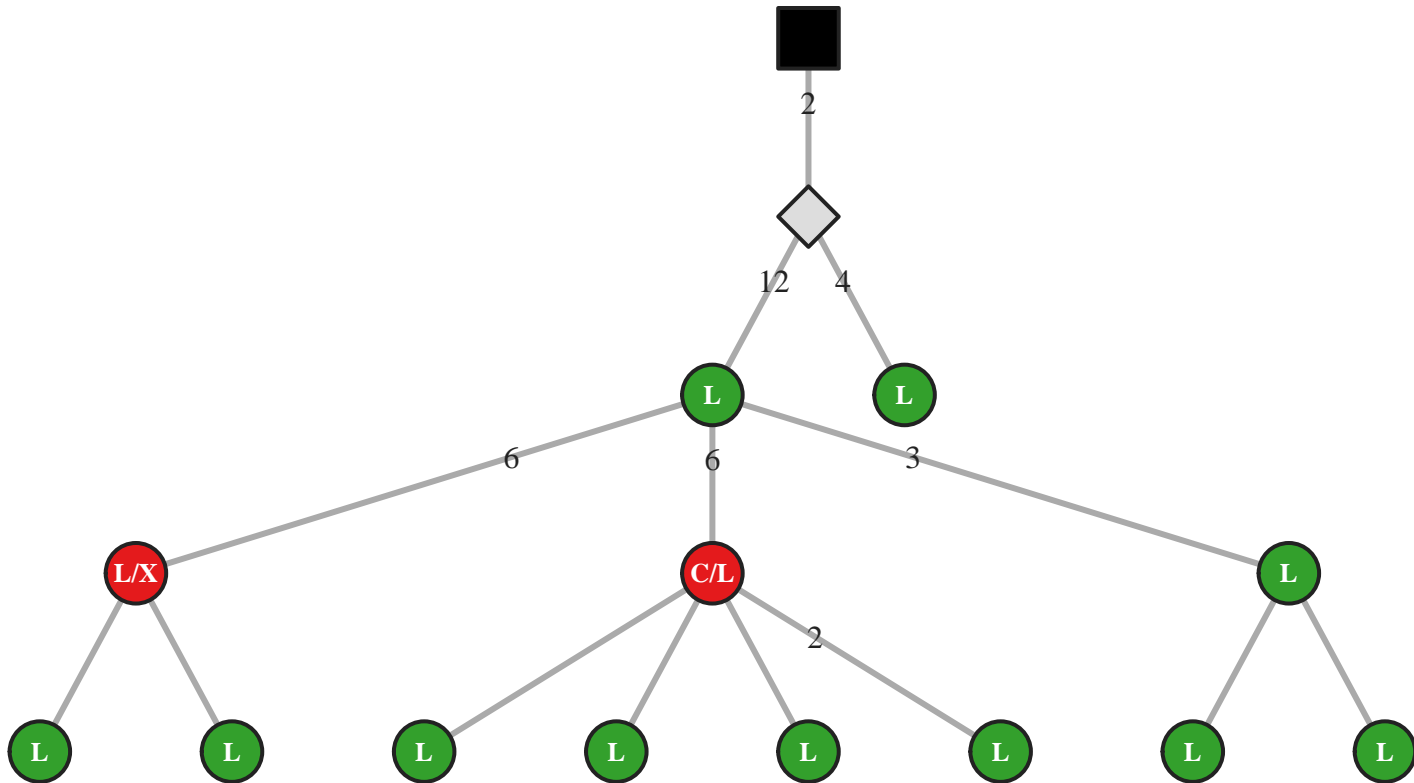
M5 IgA IGHV3-30/J4 51bp (21694)



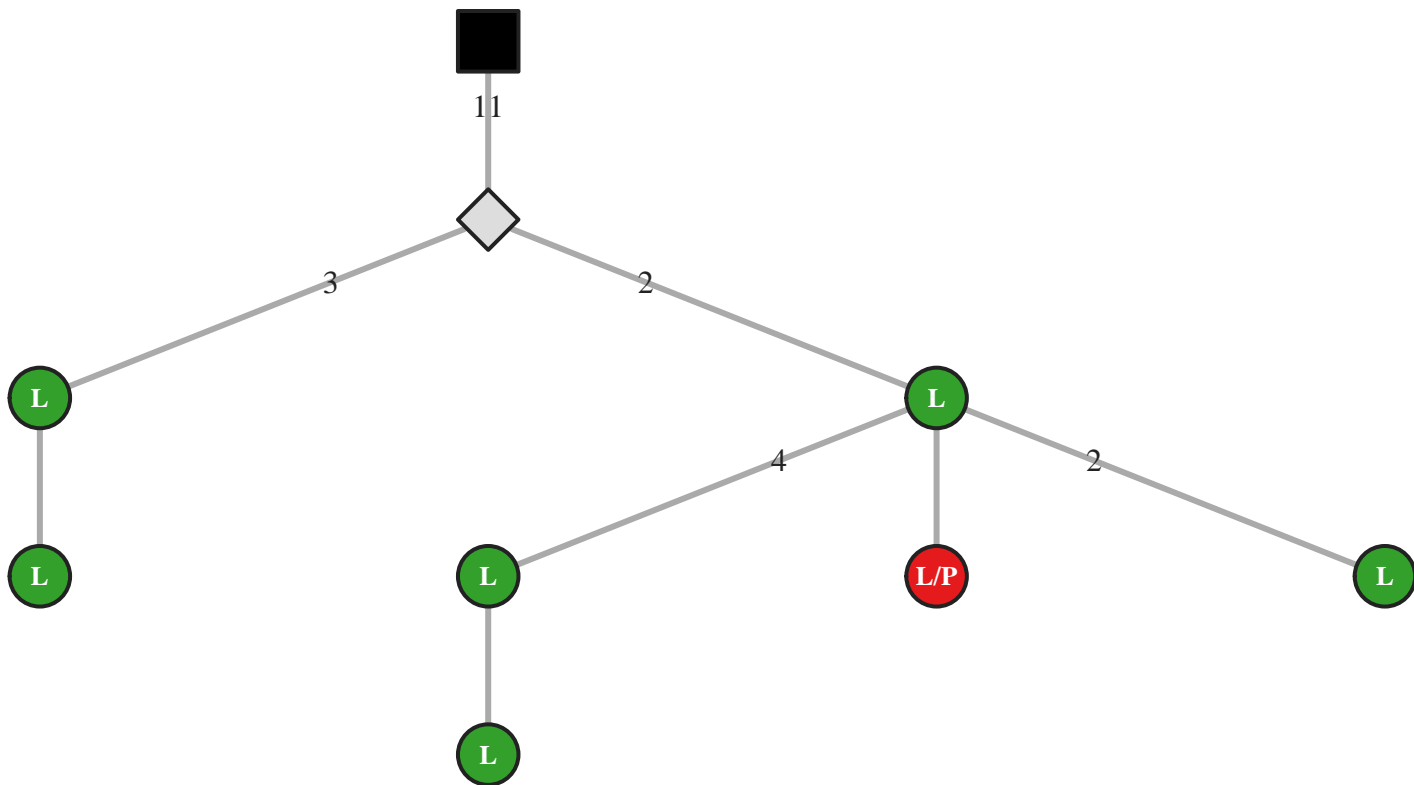
M5 IgA IGHV3-30/J4 51bp (21696)



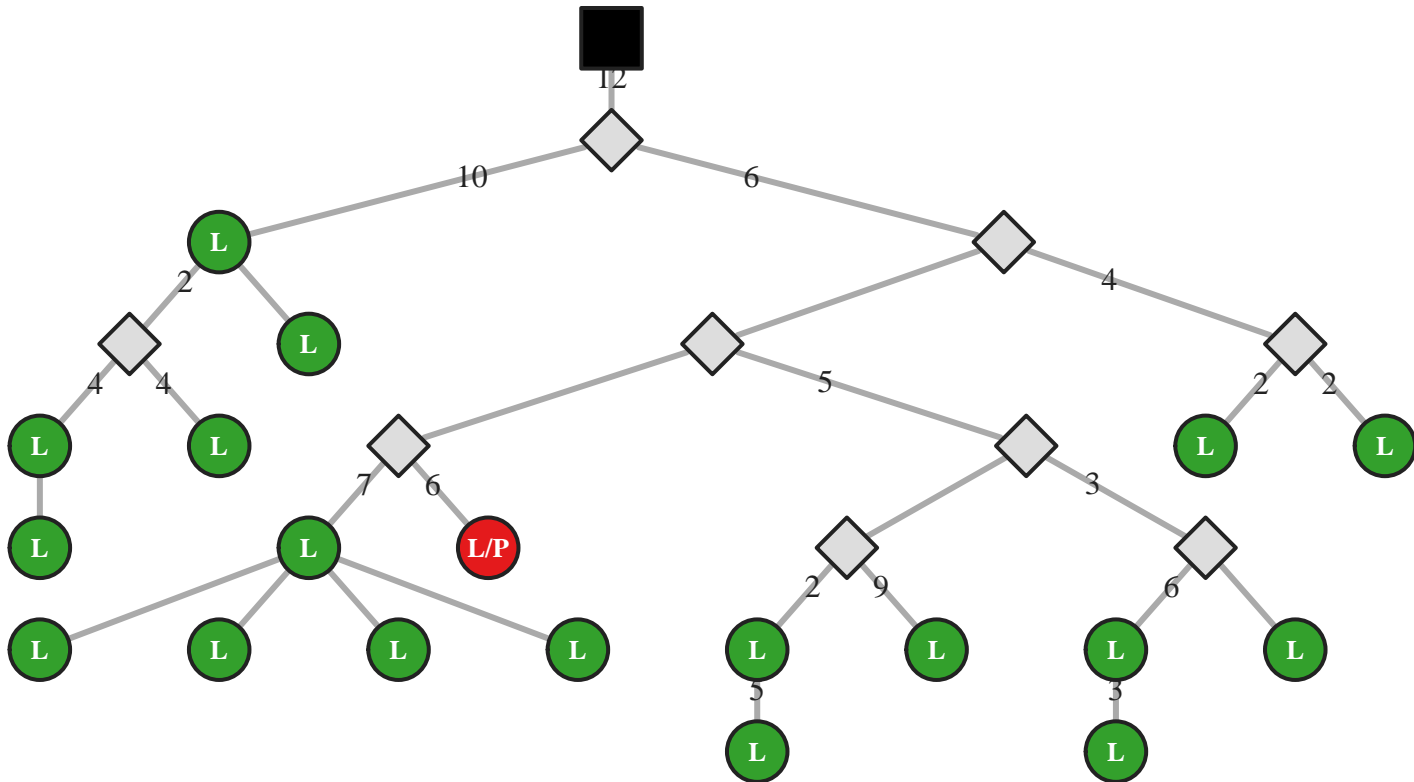
M5 IgG IGHV3-30/J4 51bp (44165)



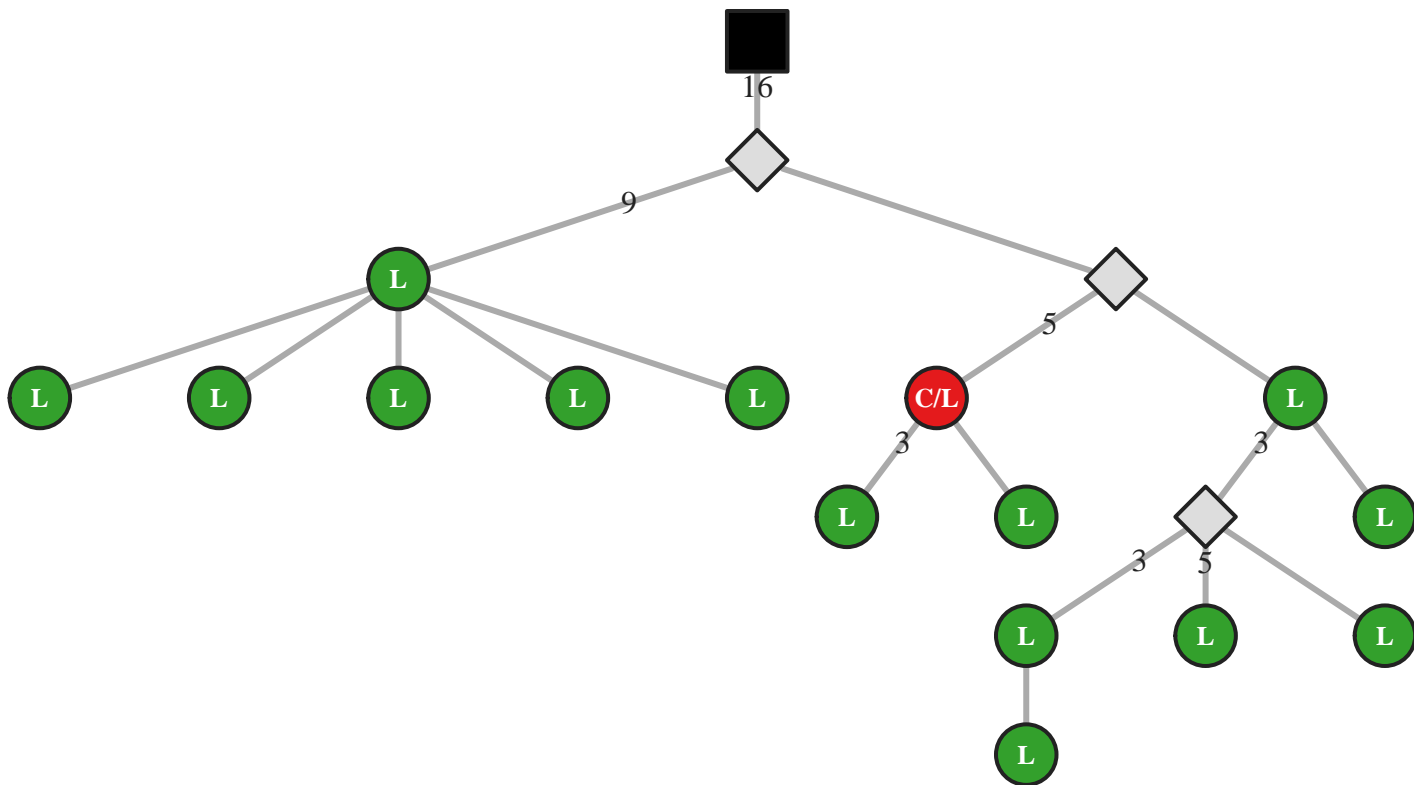
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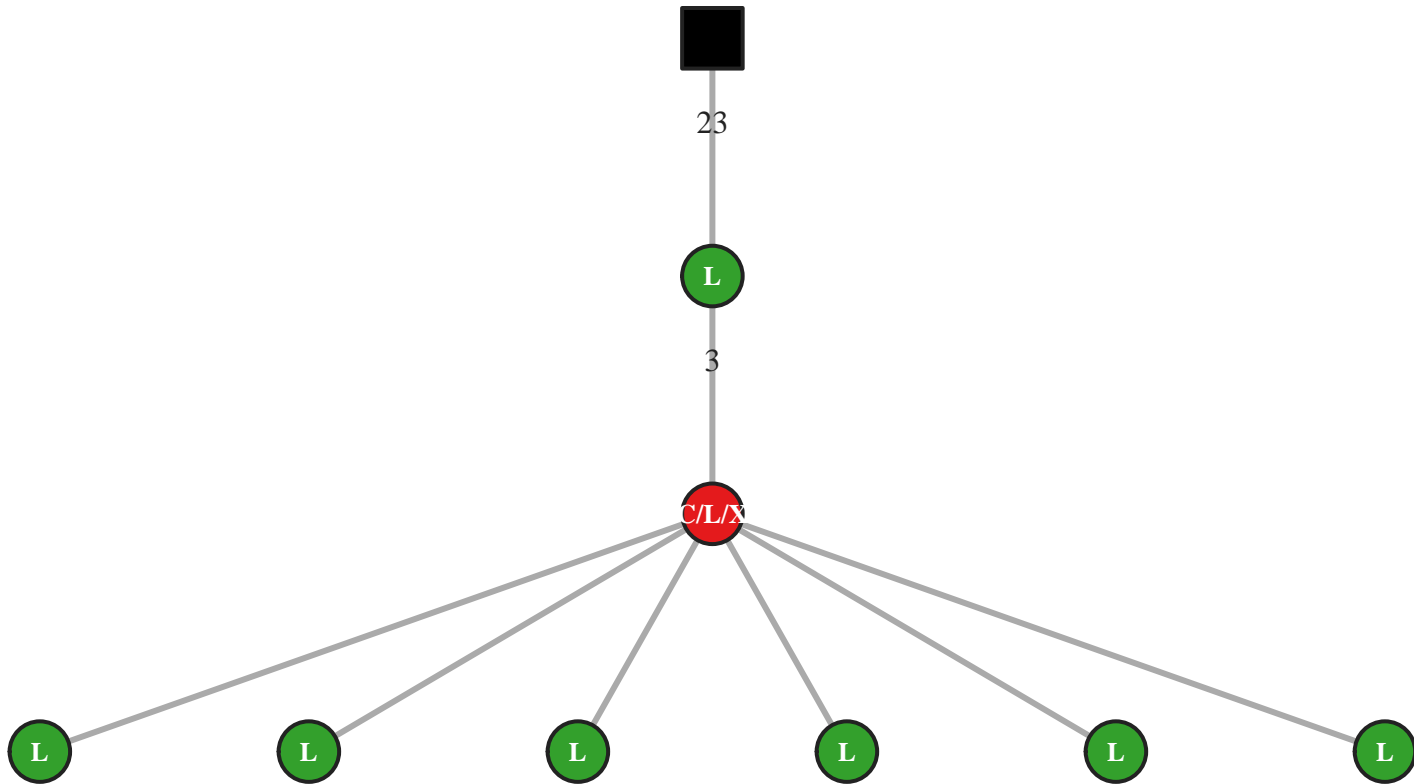
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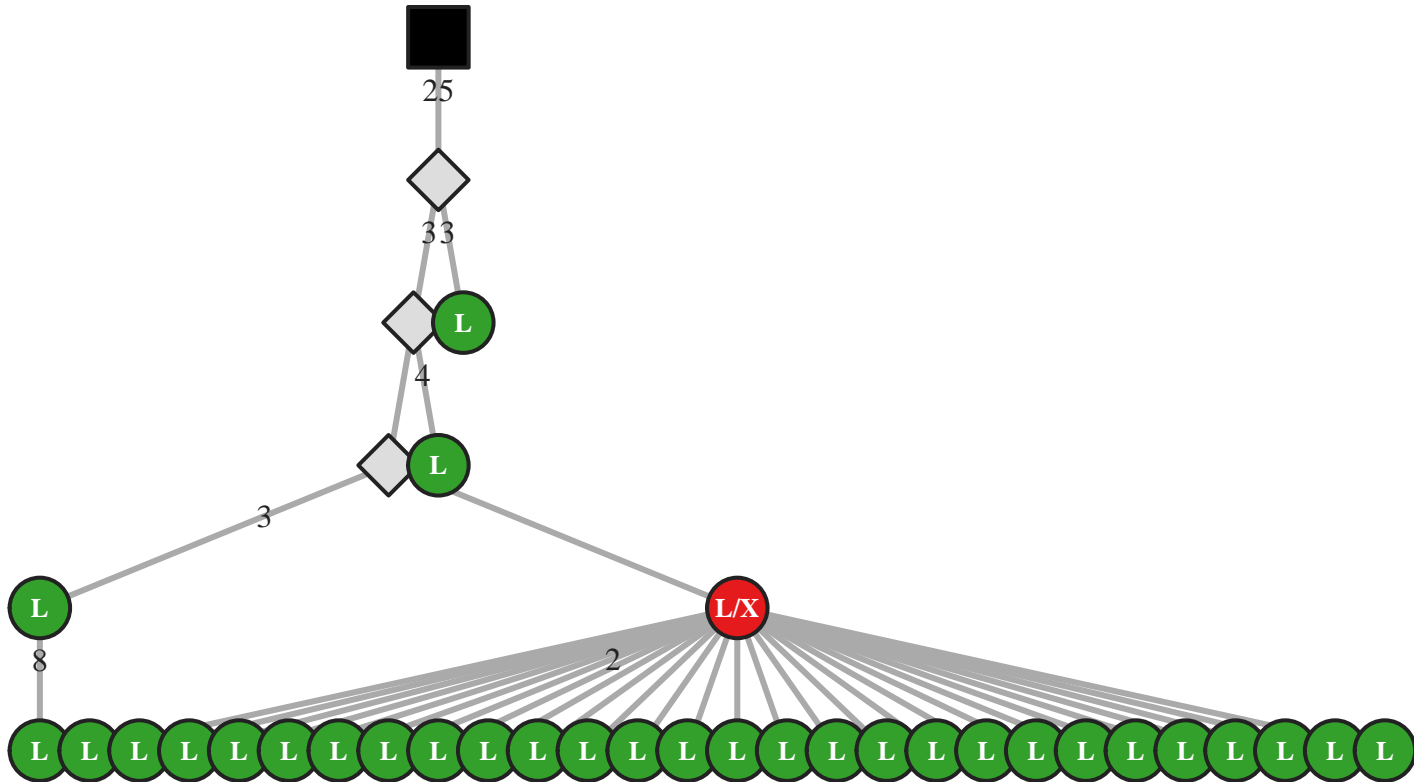
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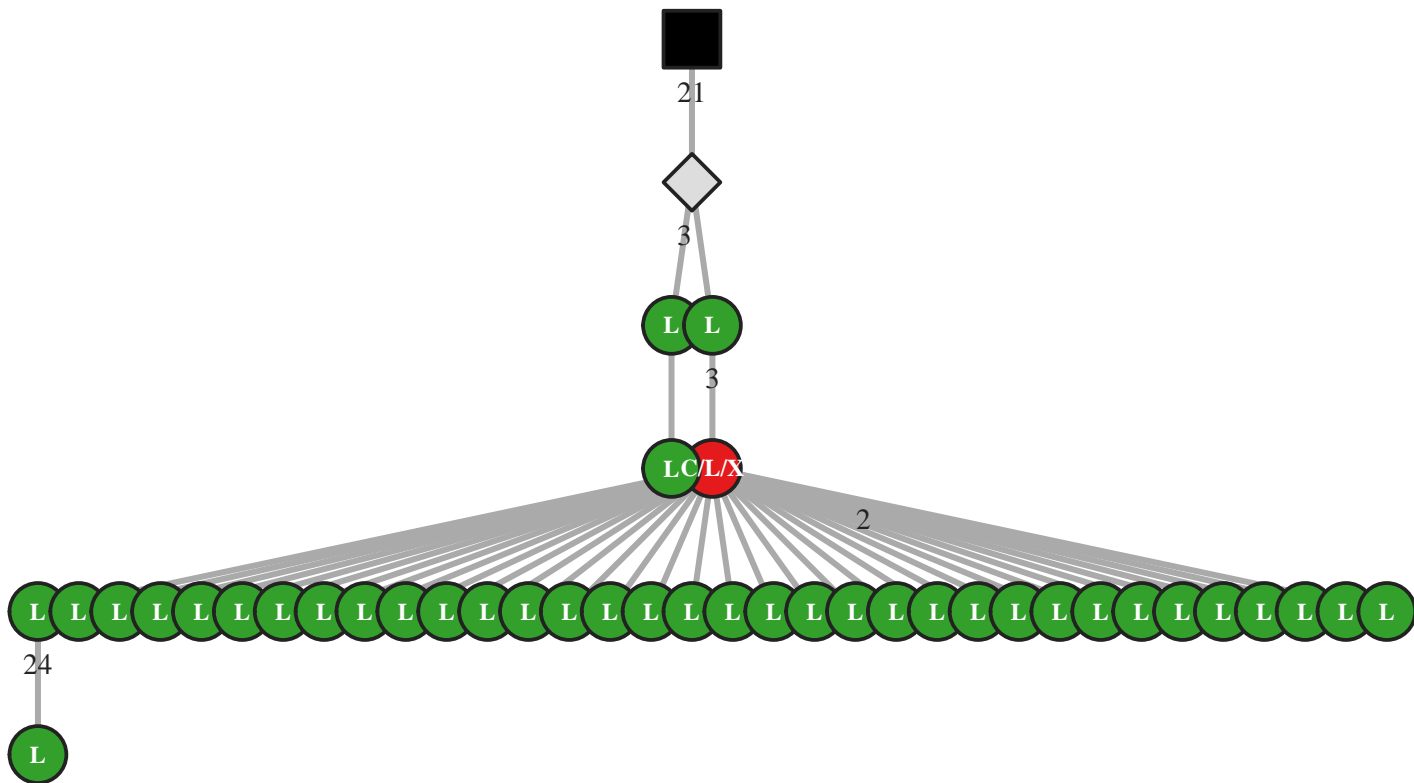
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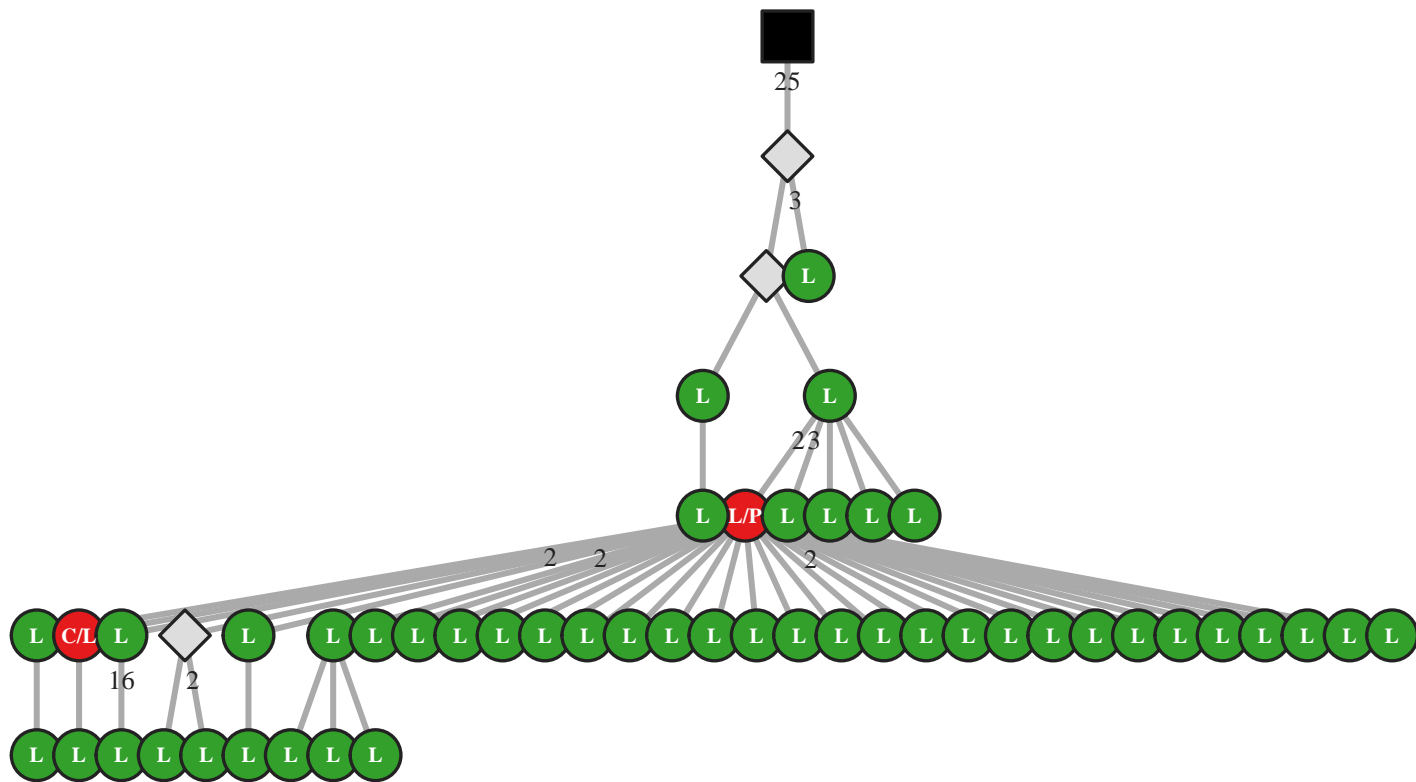
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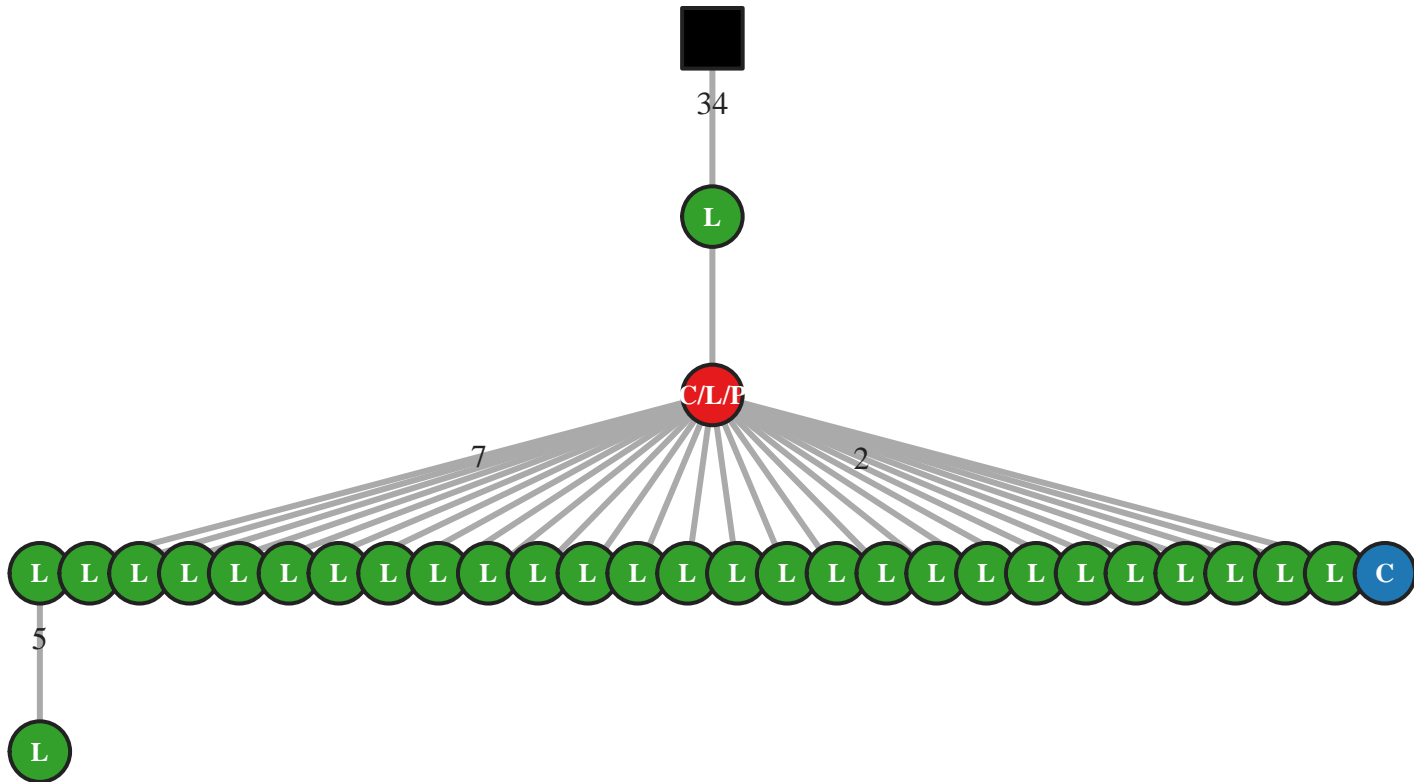
M5 IgG IGHV3-30/J4 54bp (34513)



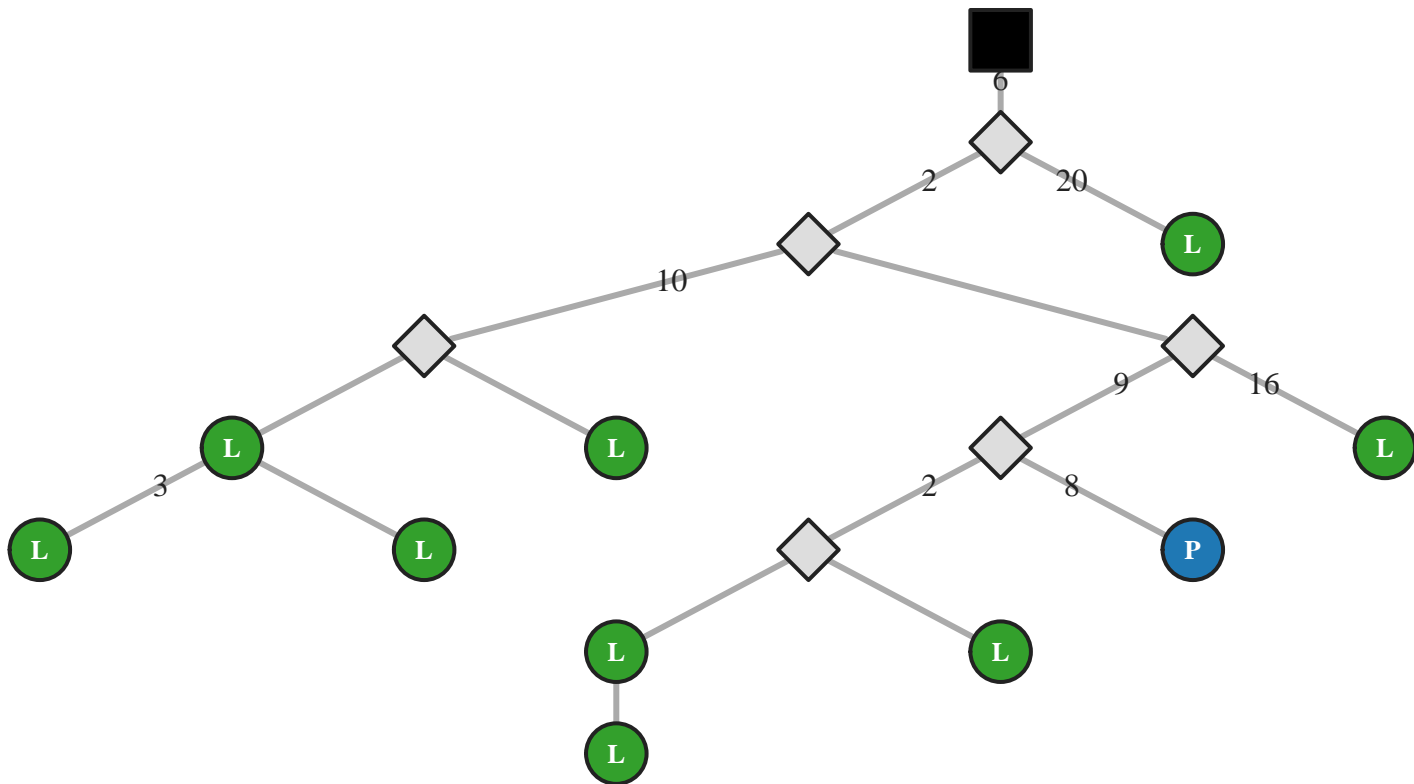
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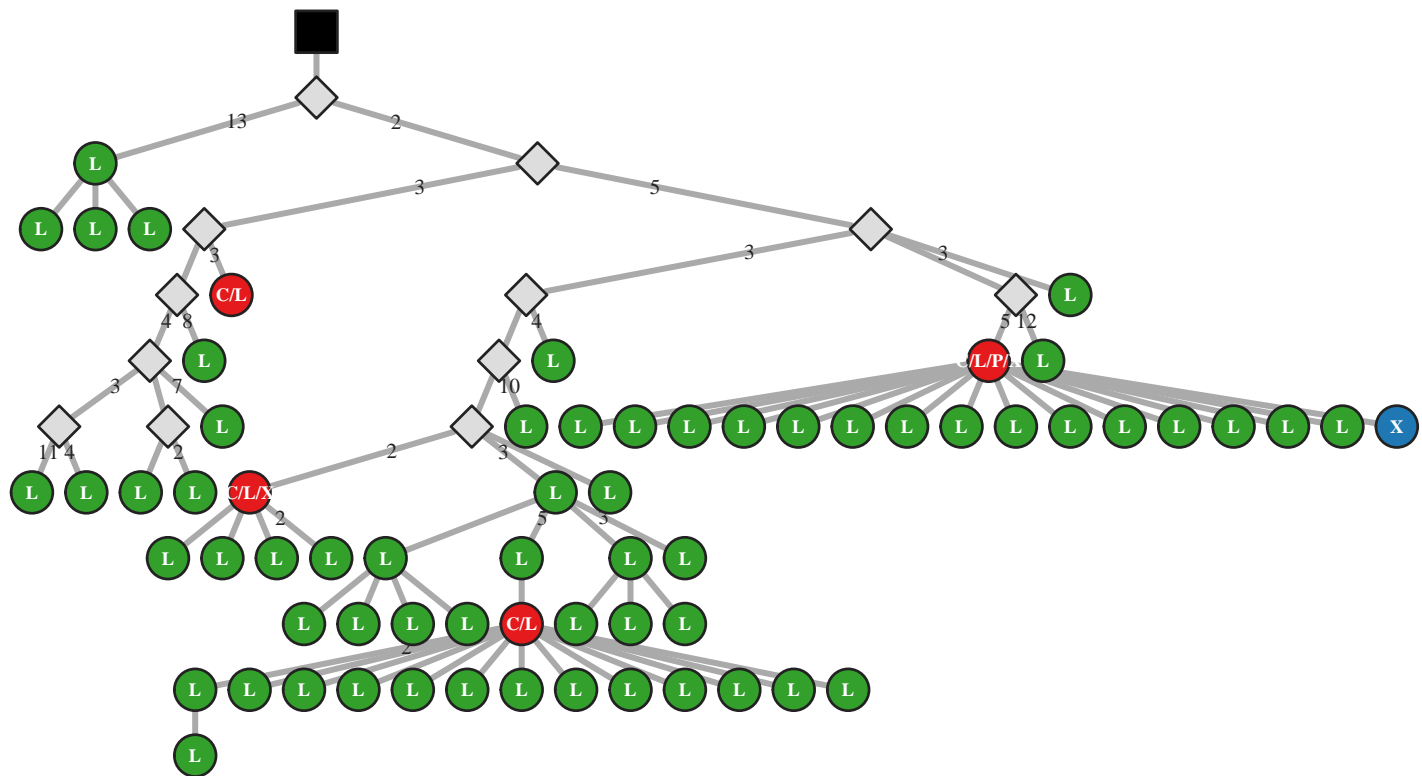
M5 IgG IGHV3-30/J4 54bp (34632)



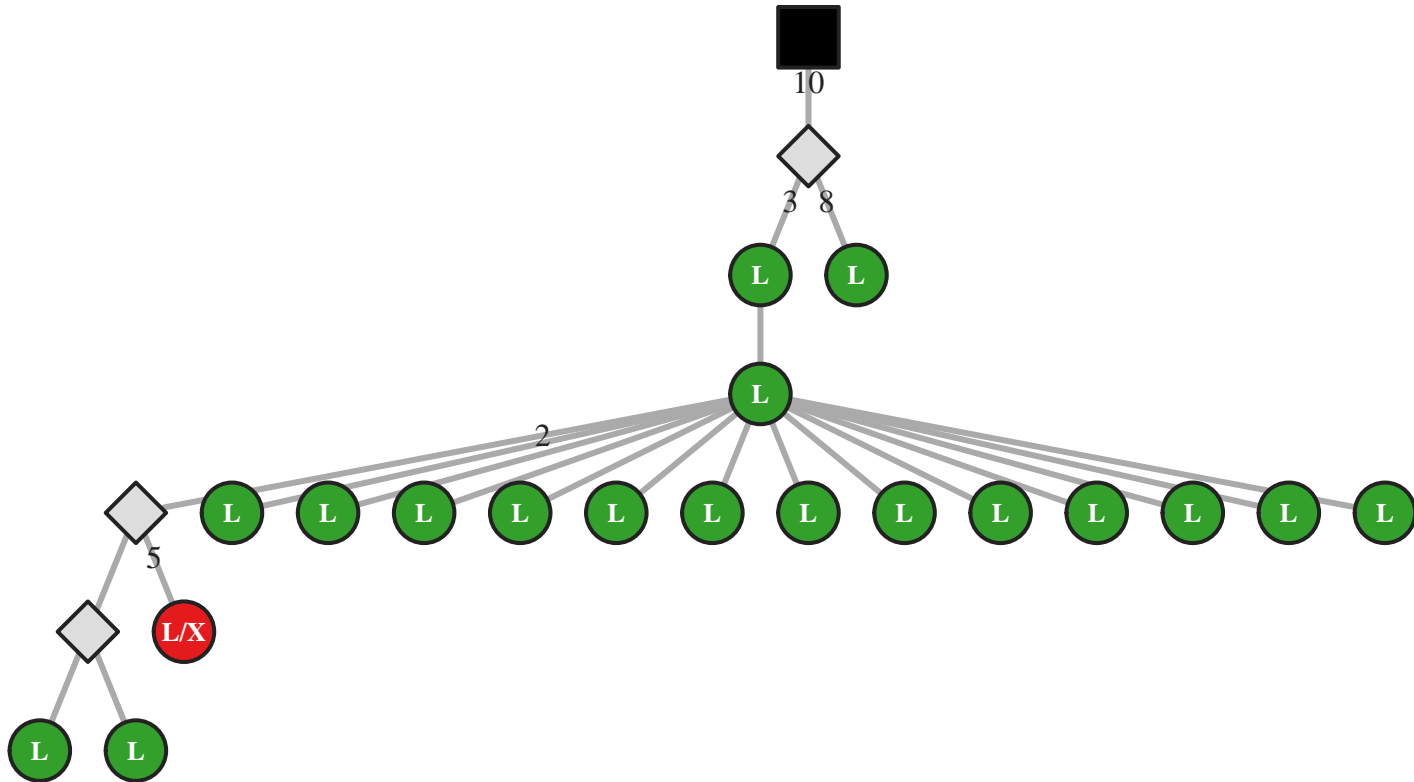
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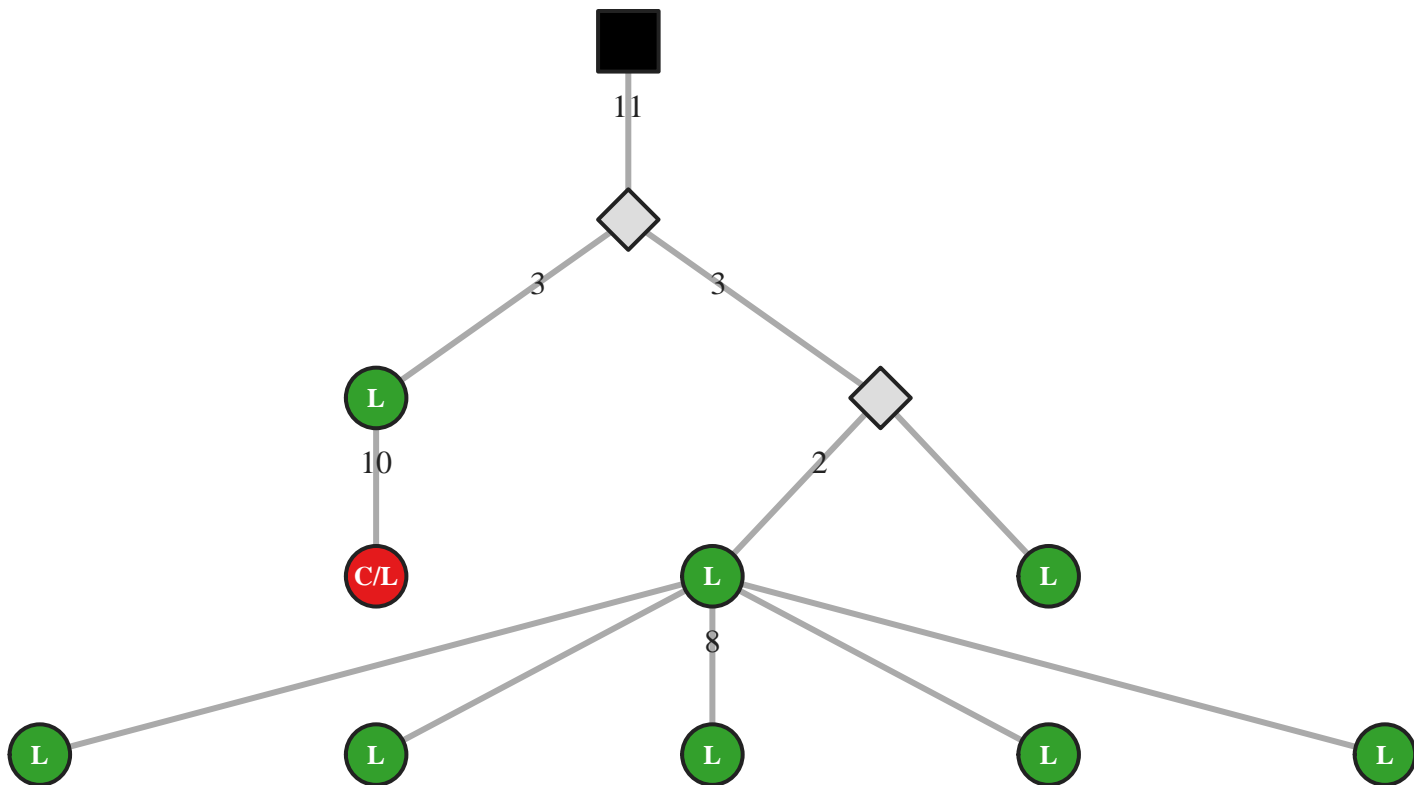
M5 IgG IGHV3-30/J4 54bp (34661)



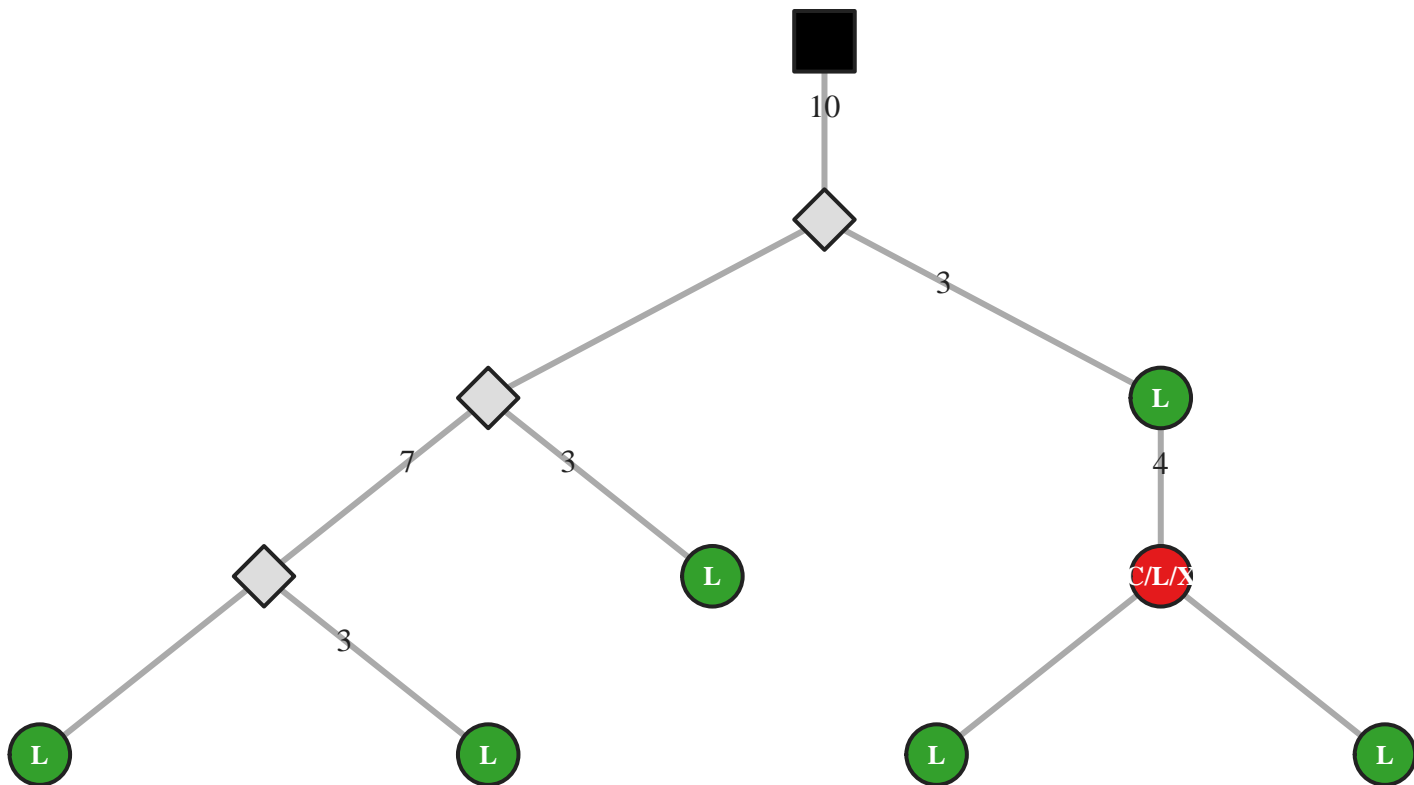
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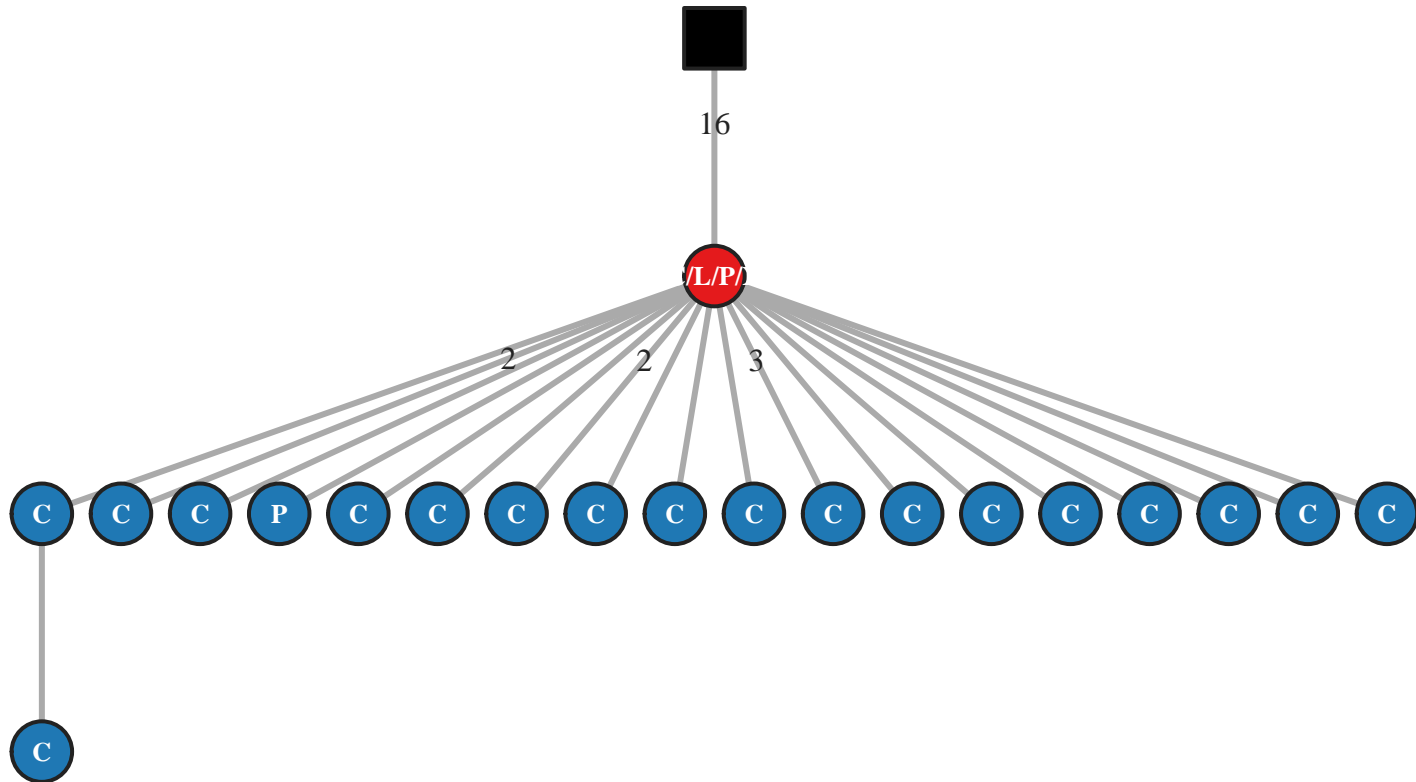
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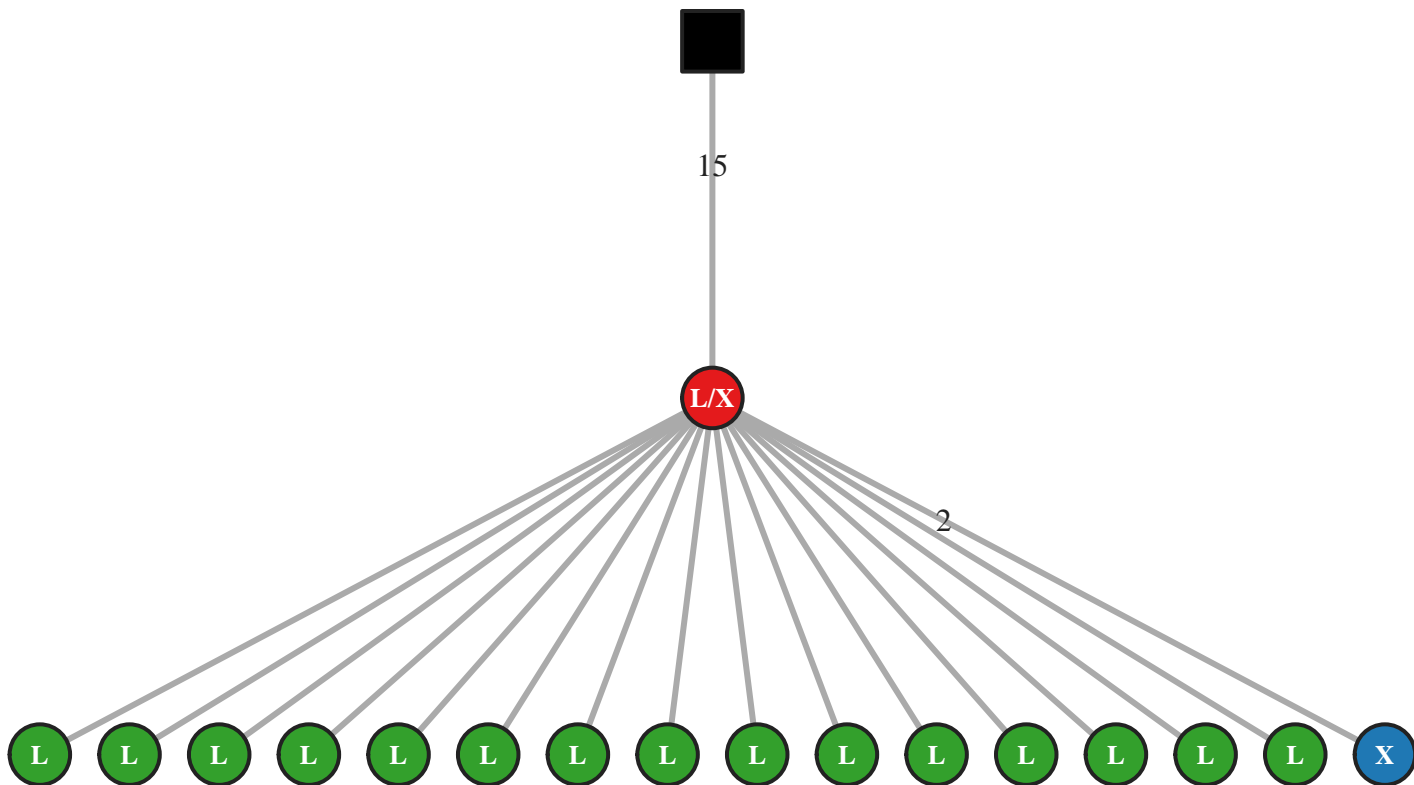
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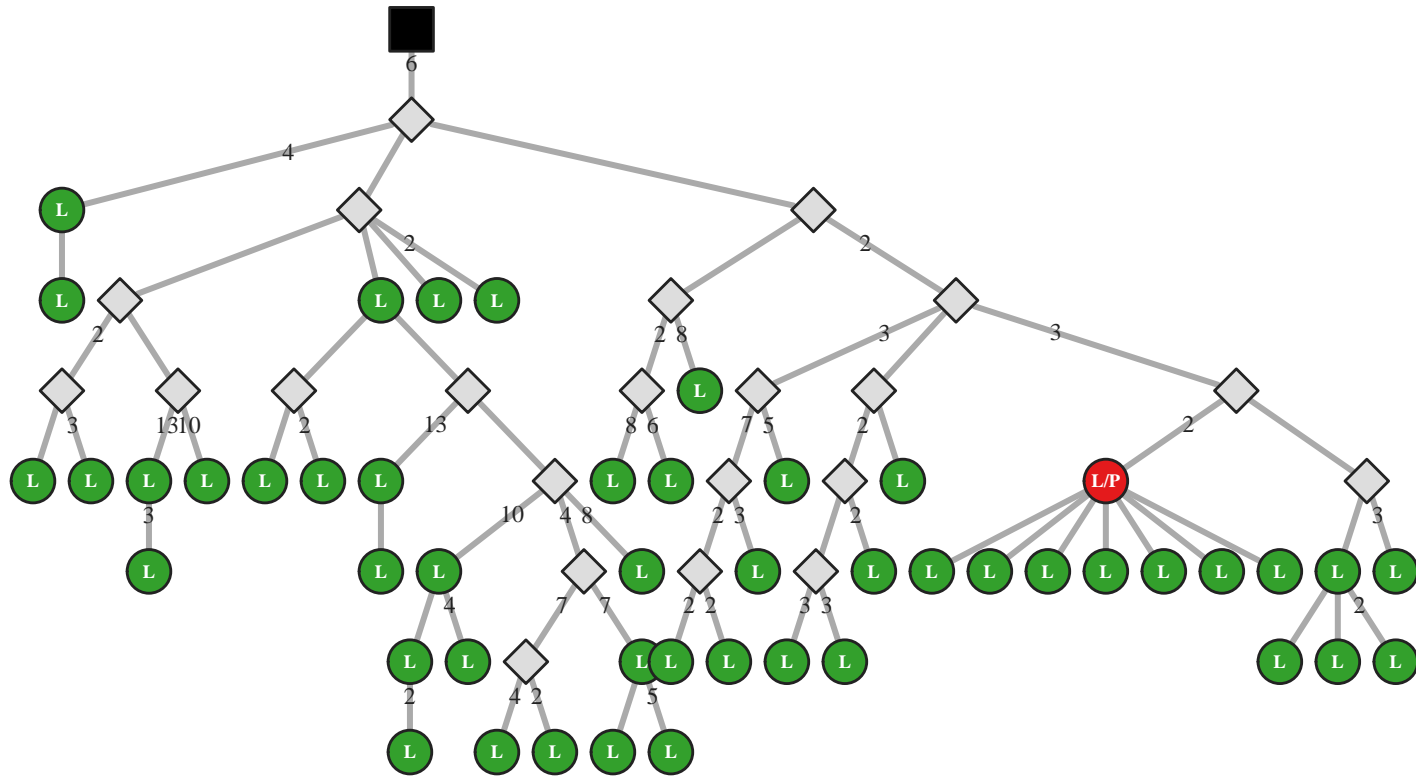
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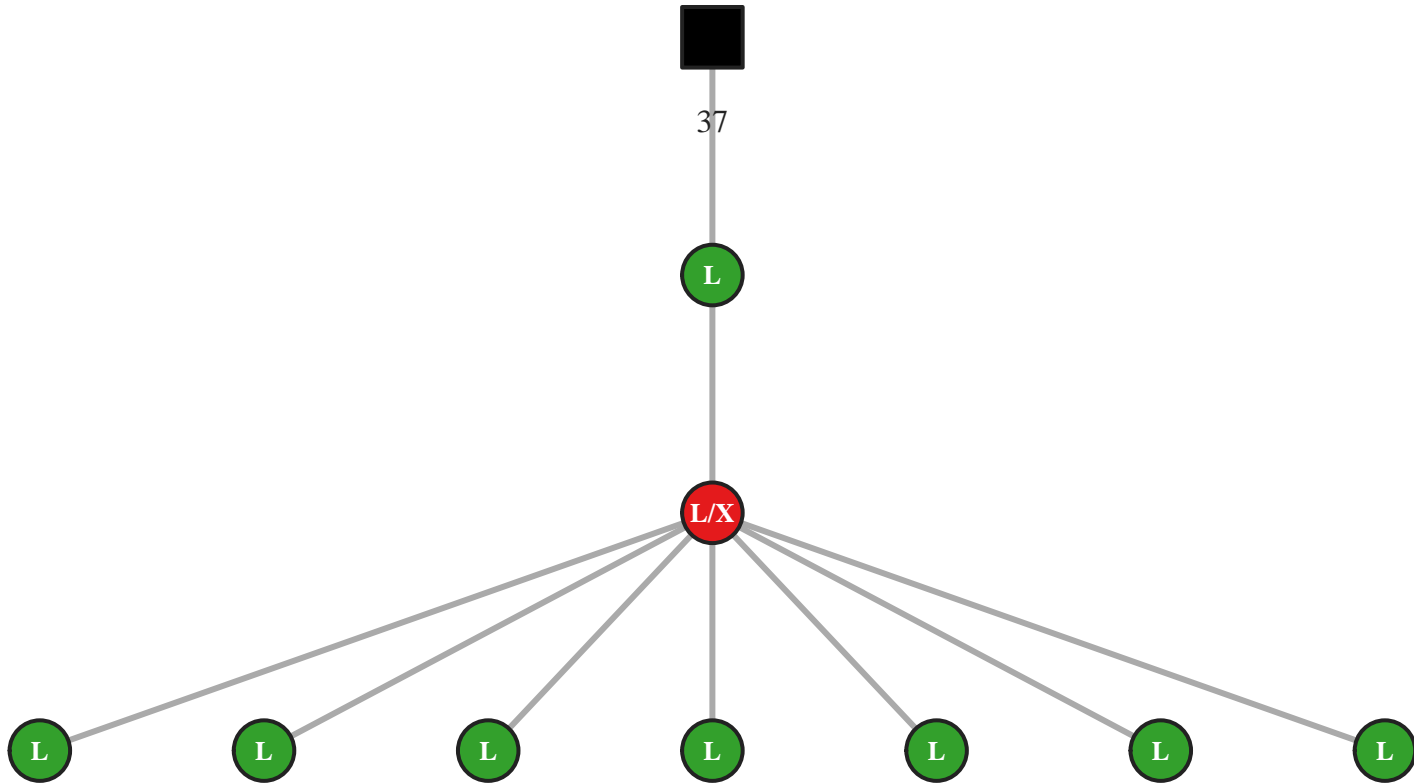
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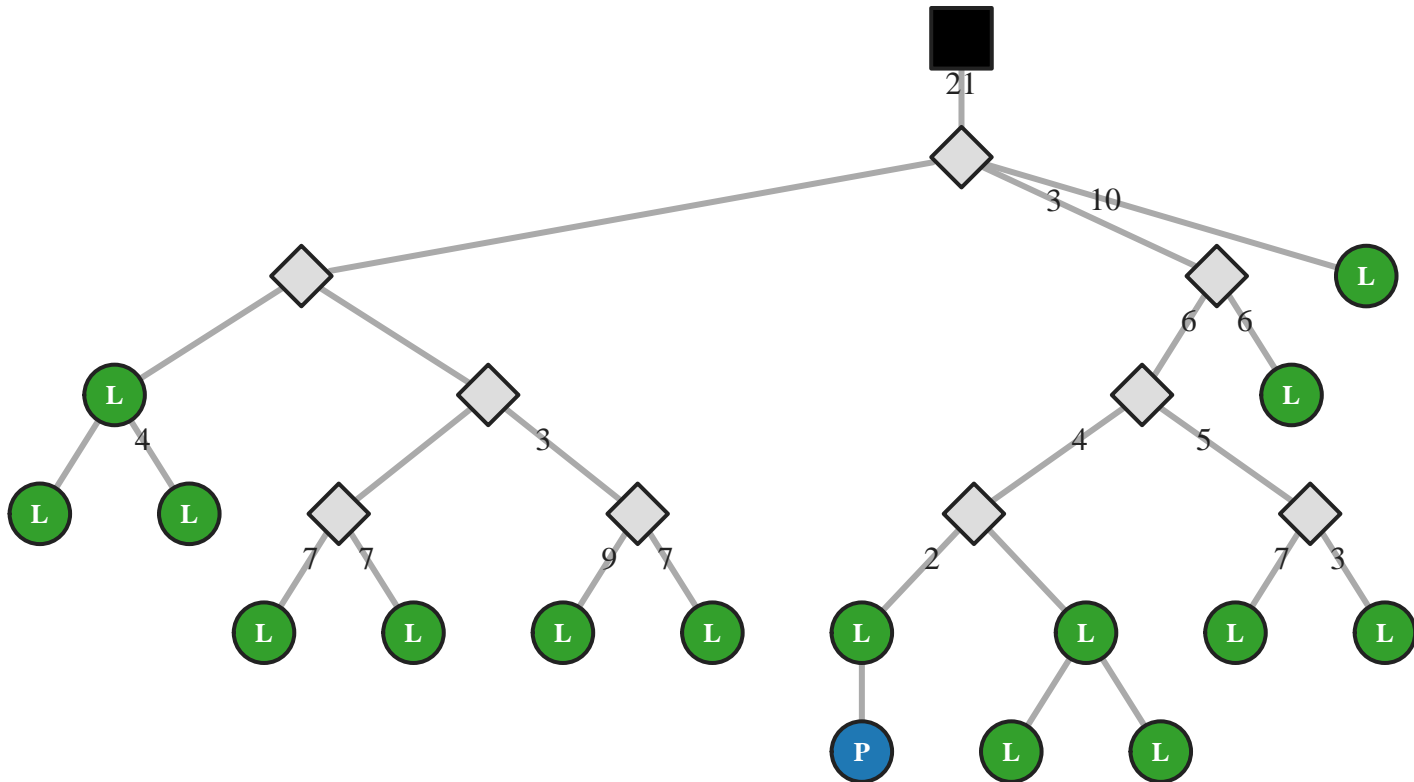
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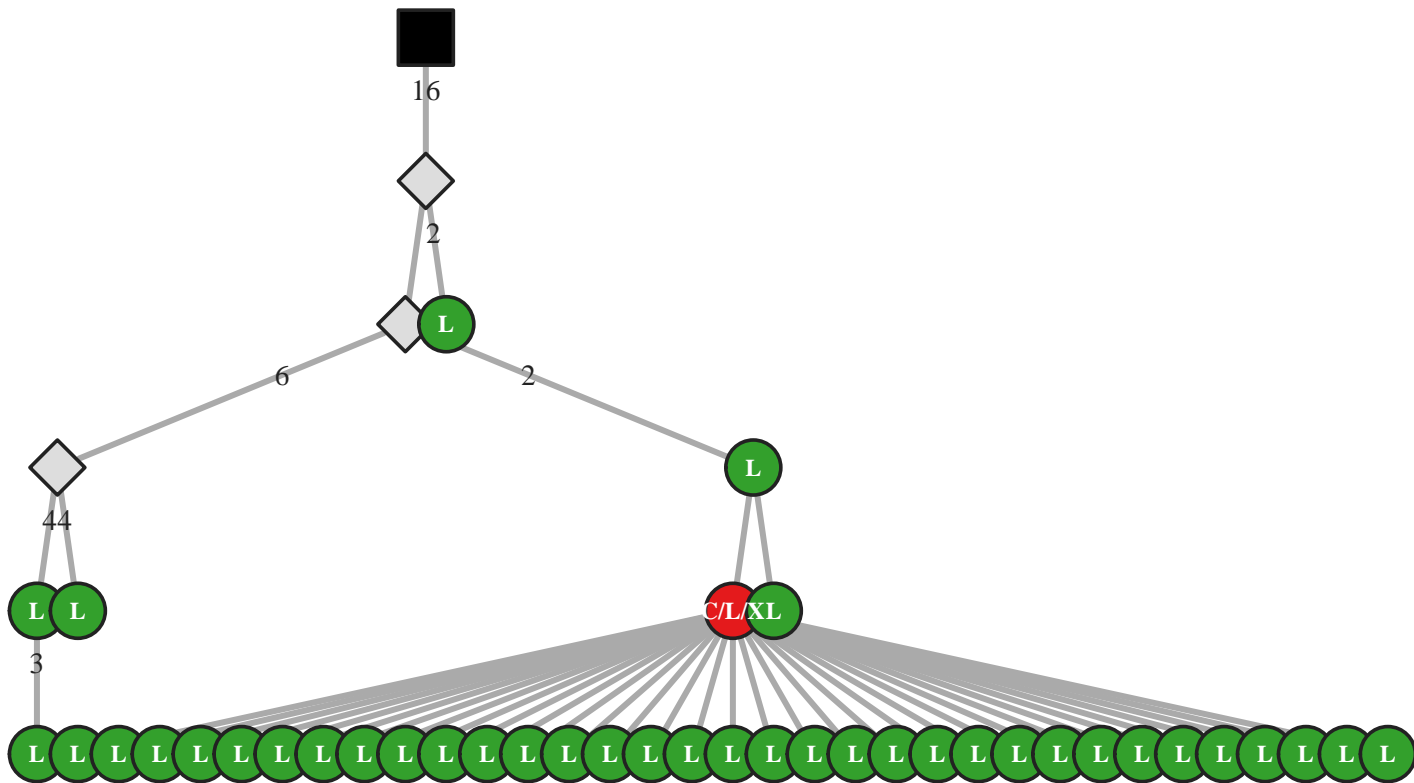
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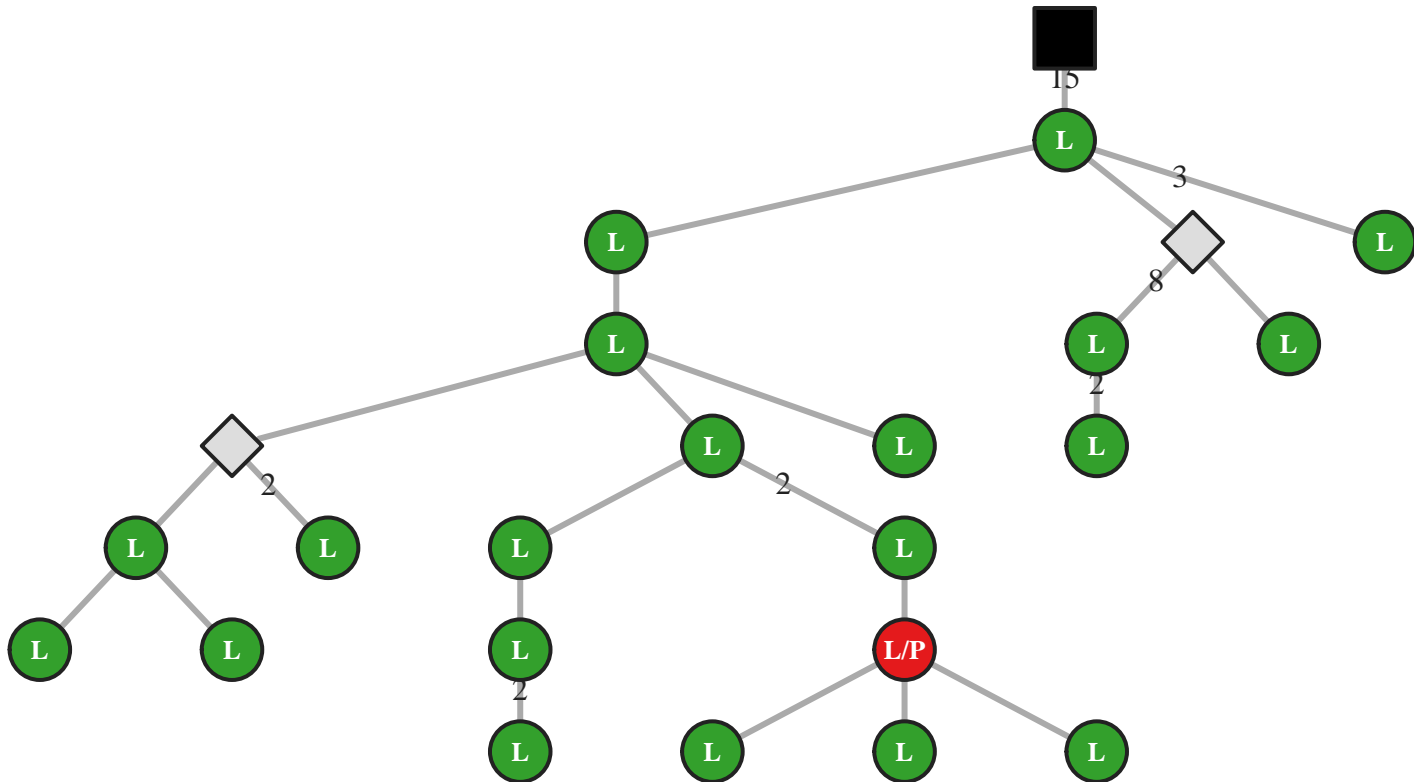
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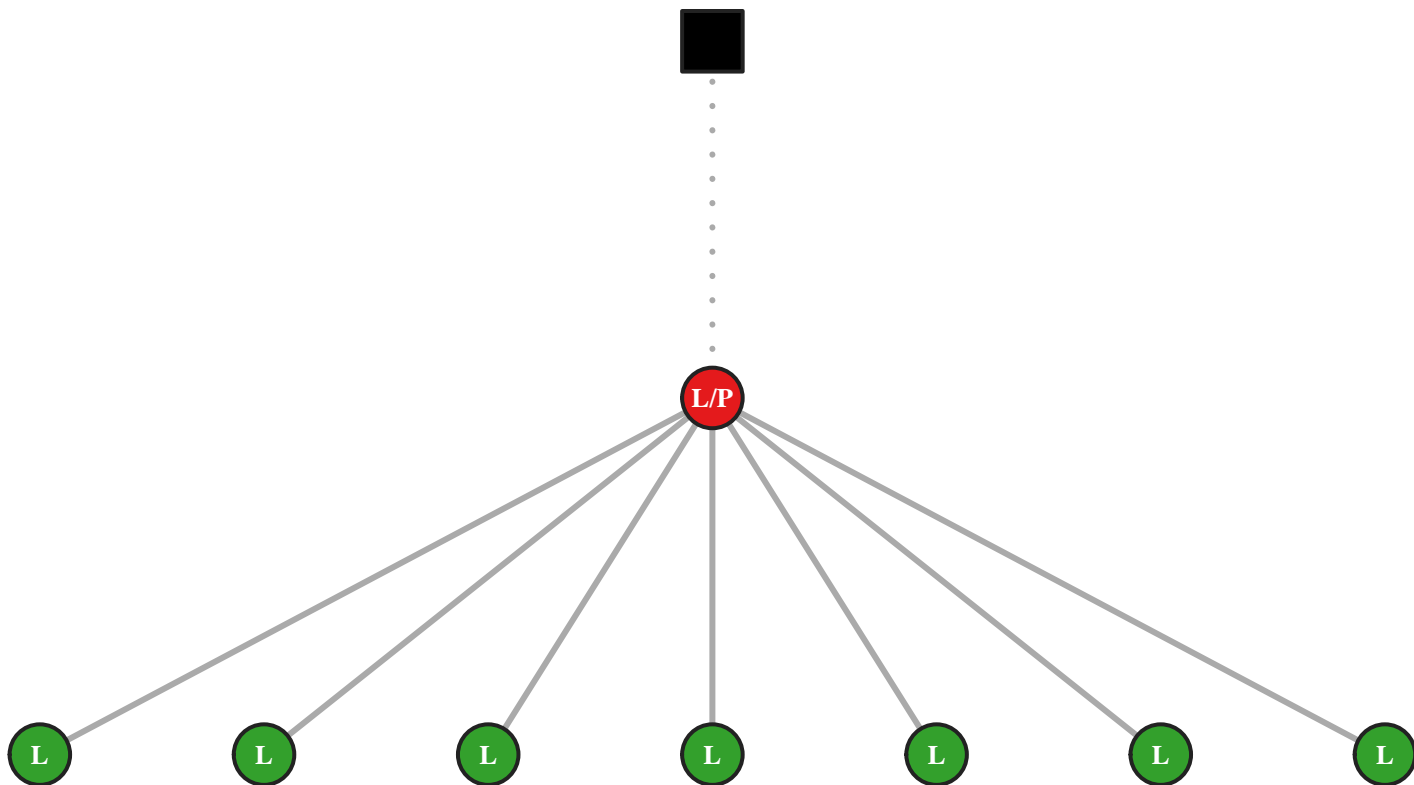
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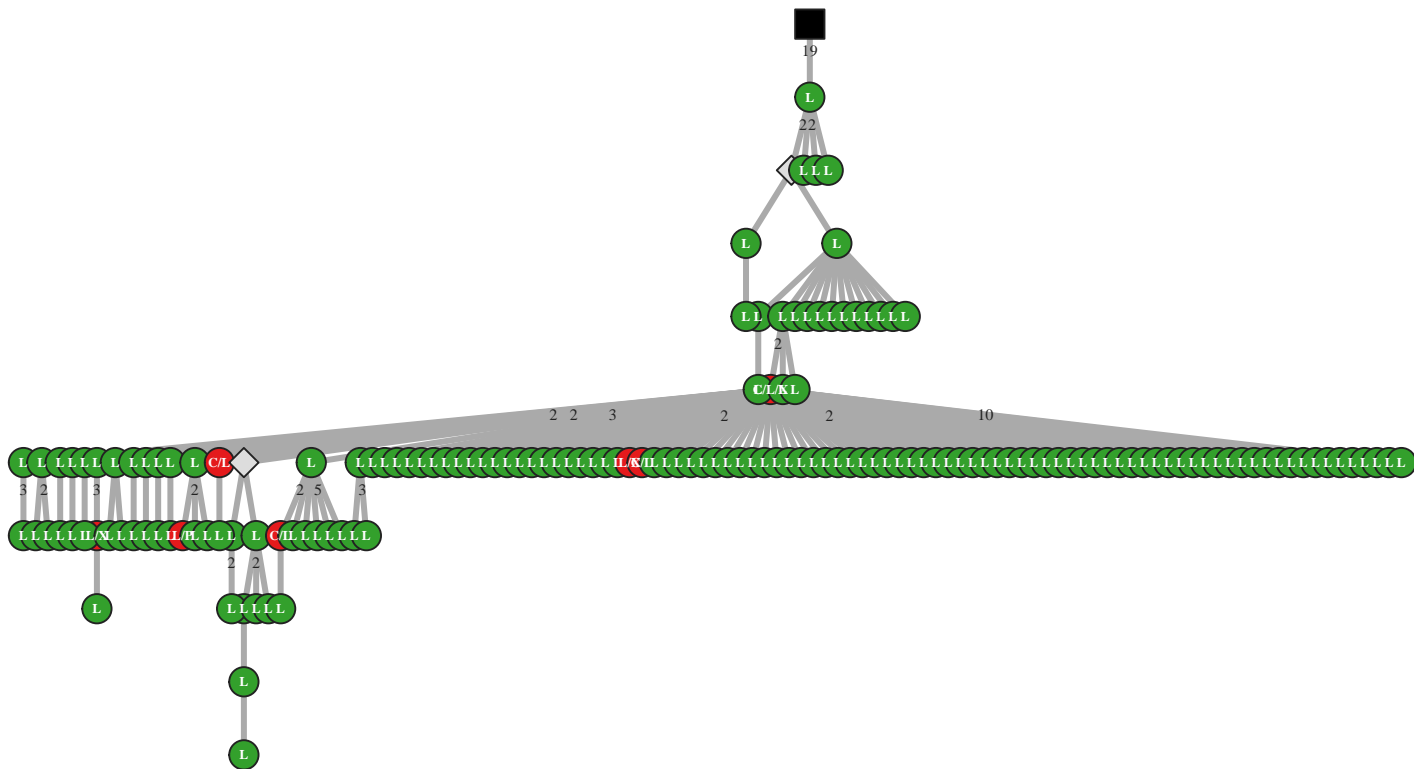
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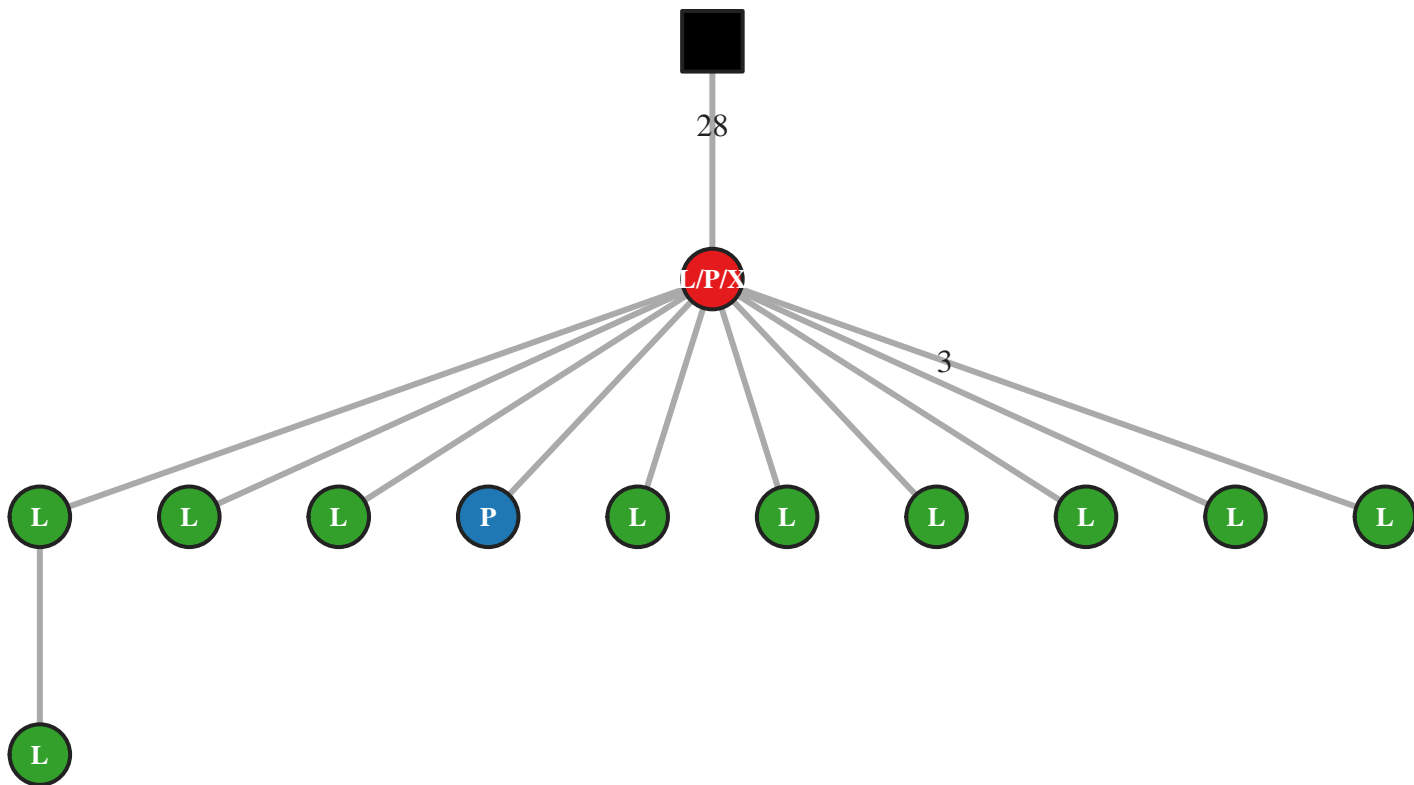
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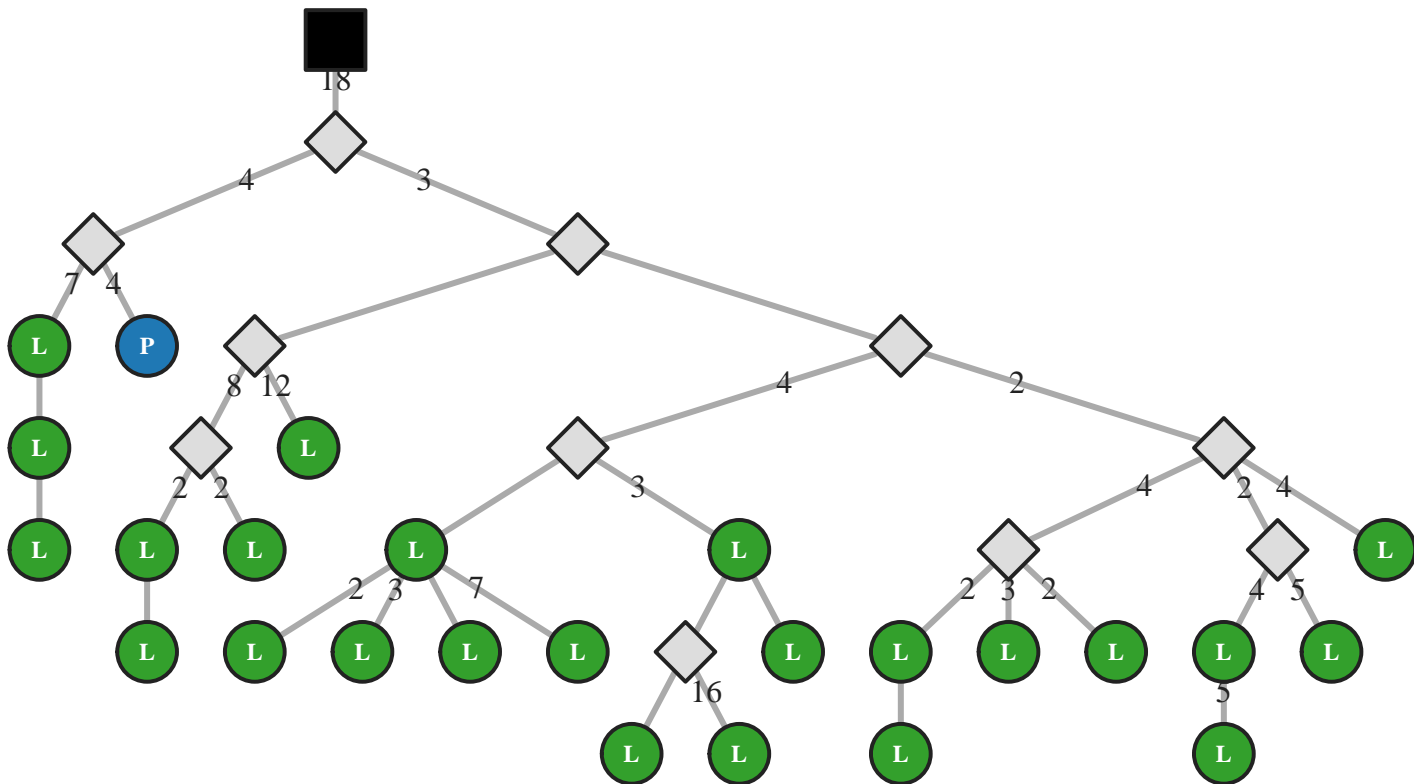
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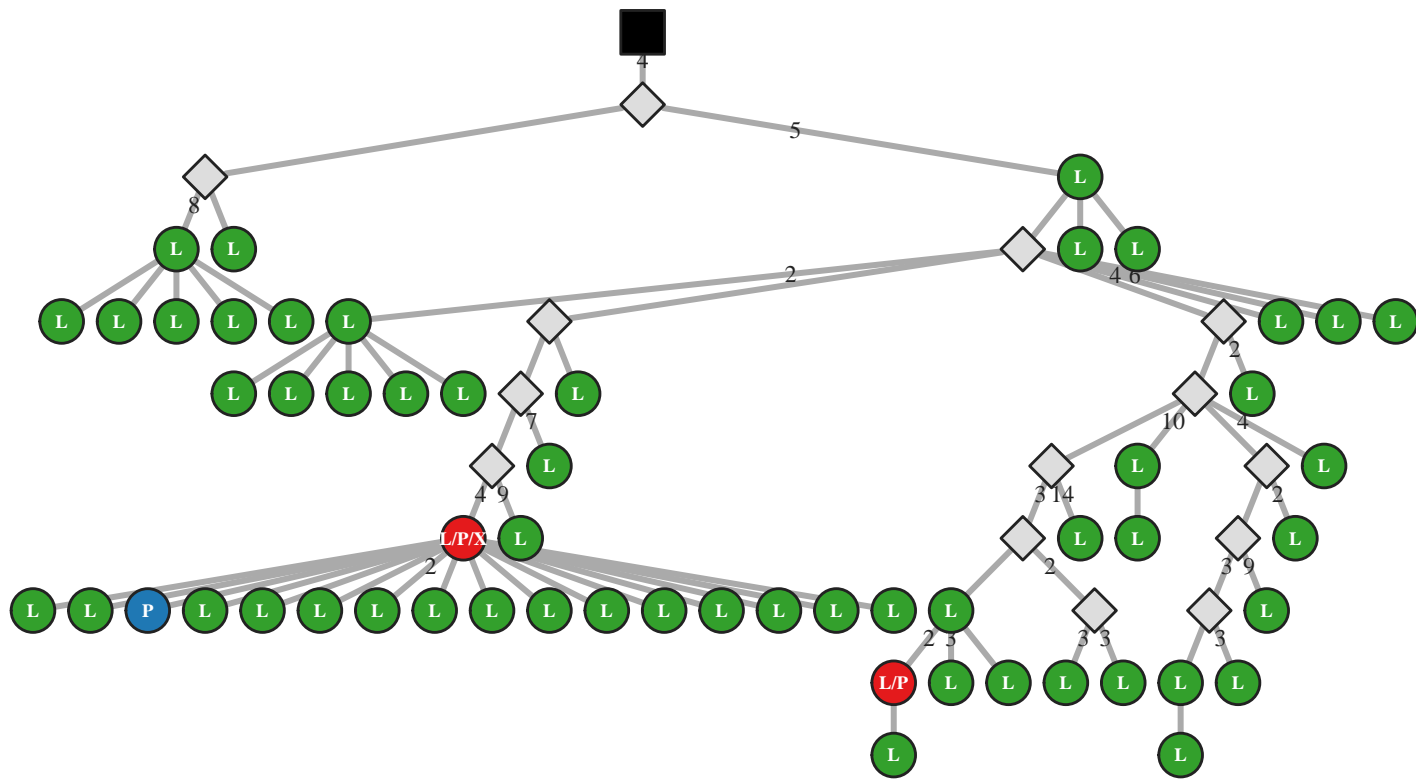
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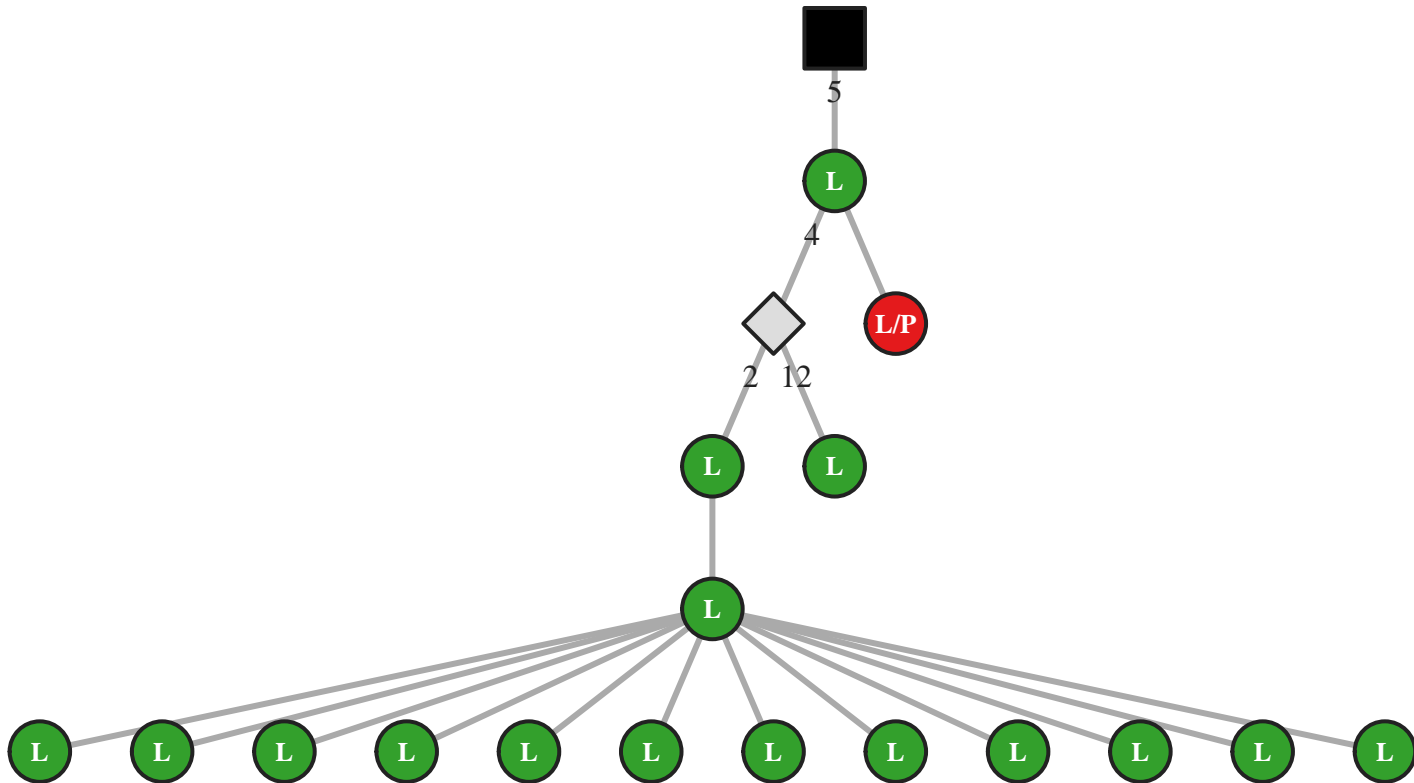
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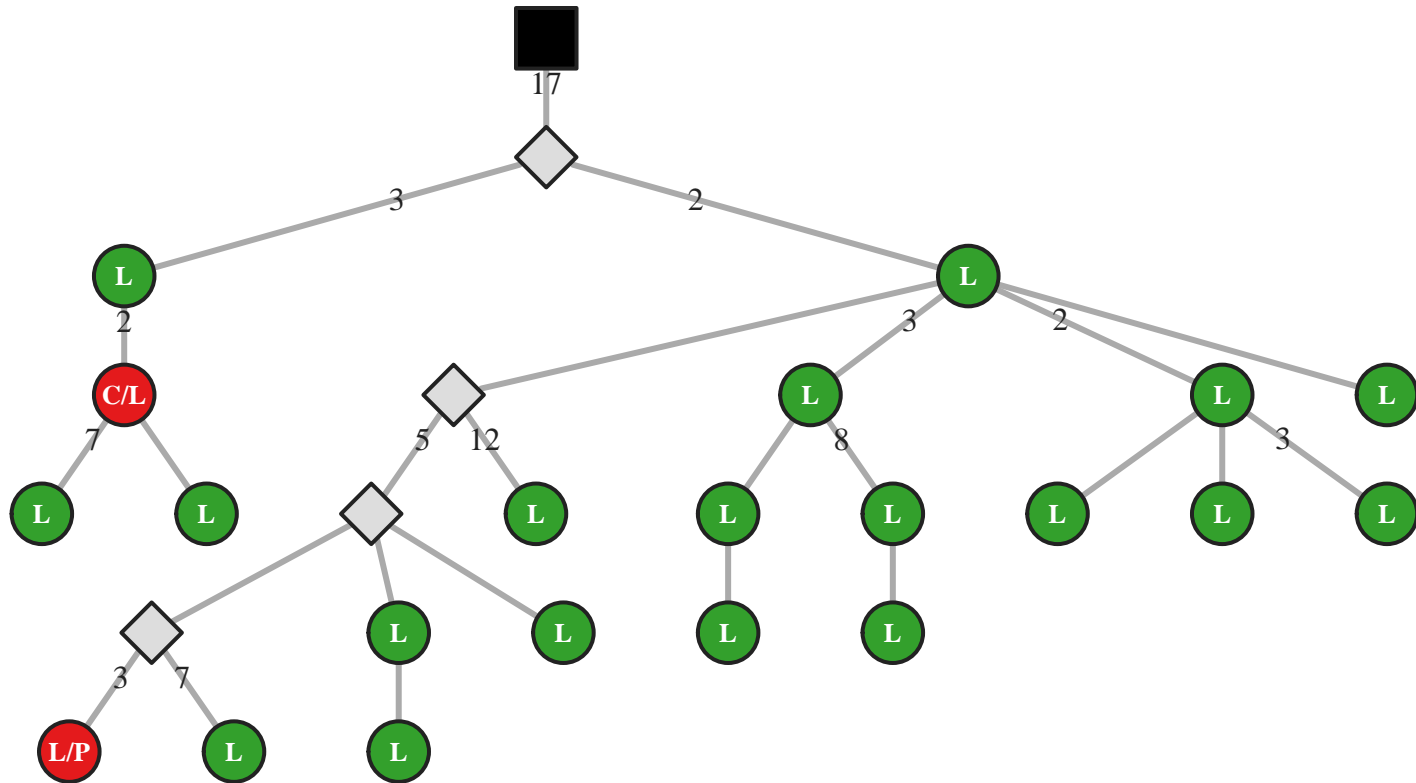
M5 IgG IGHV3-30/J4 63bp (7766)



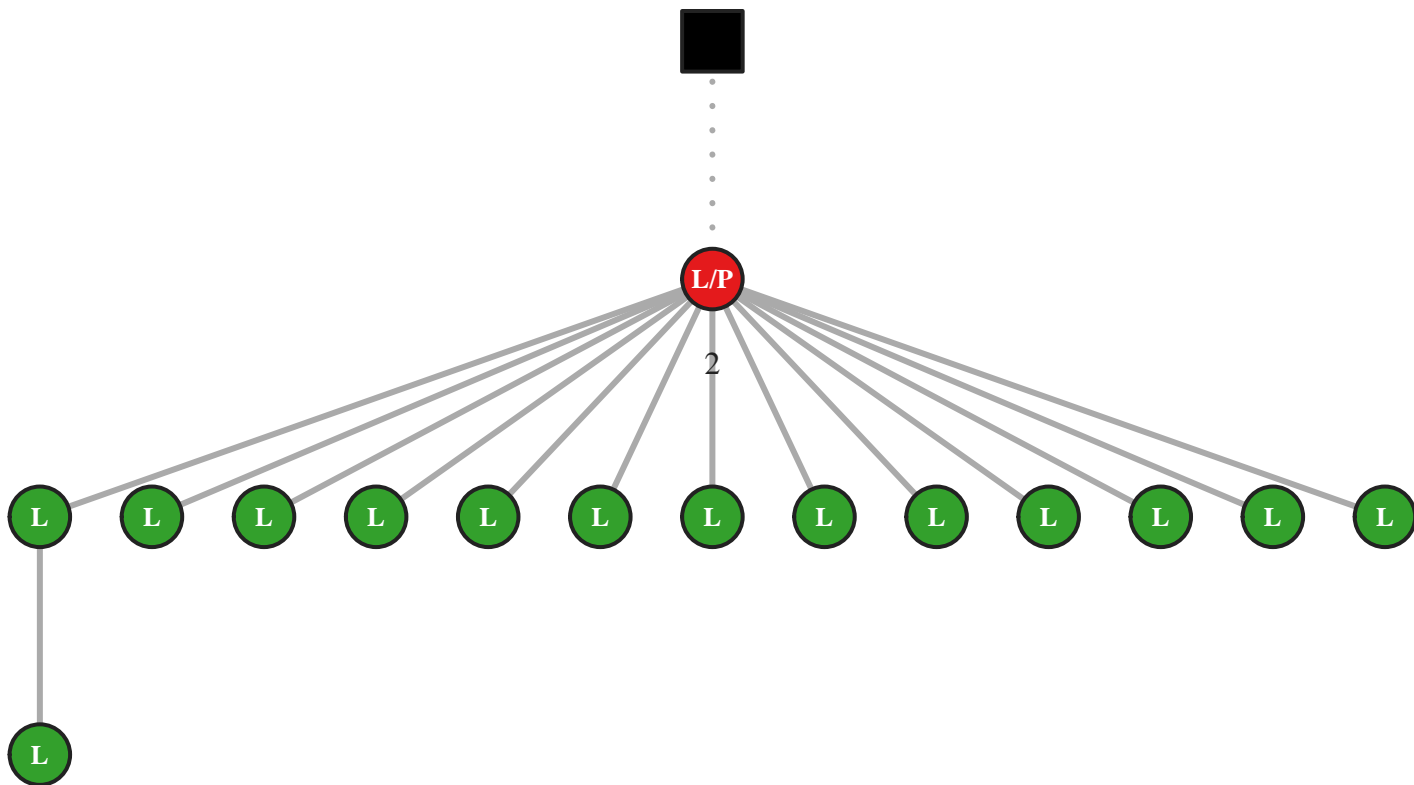
M5 IgG IGHV3-30/J4 63bp (7786)



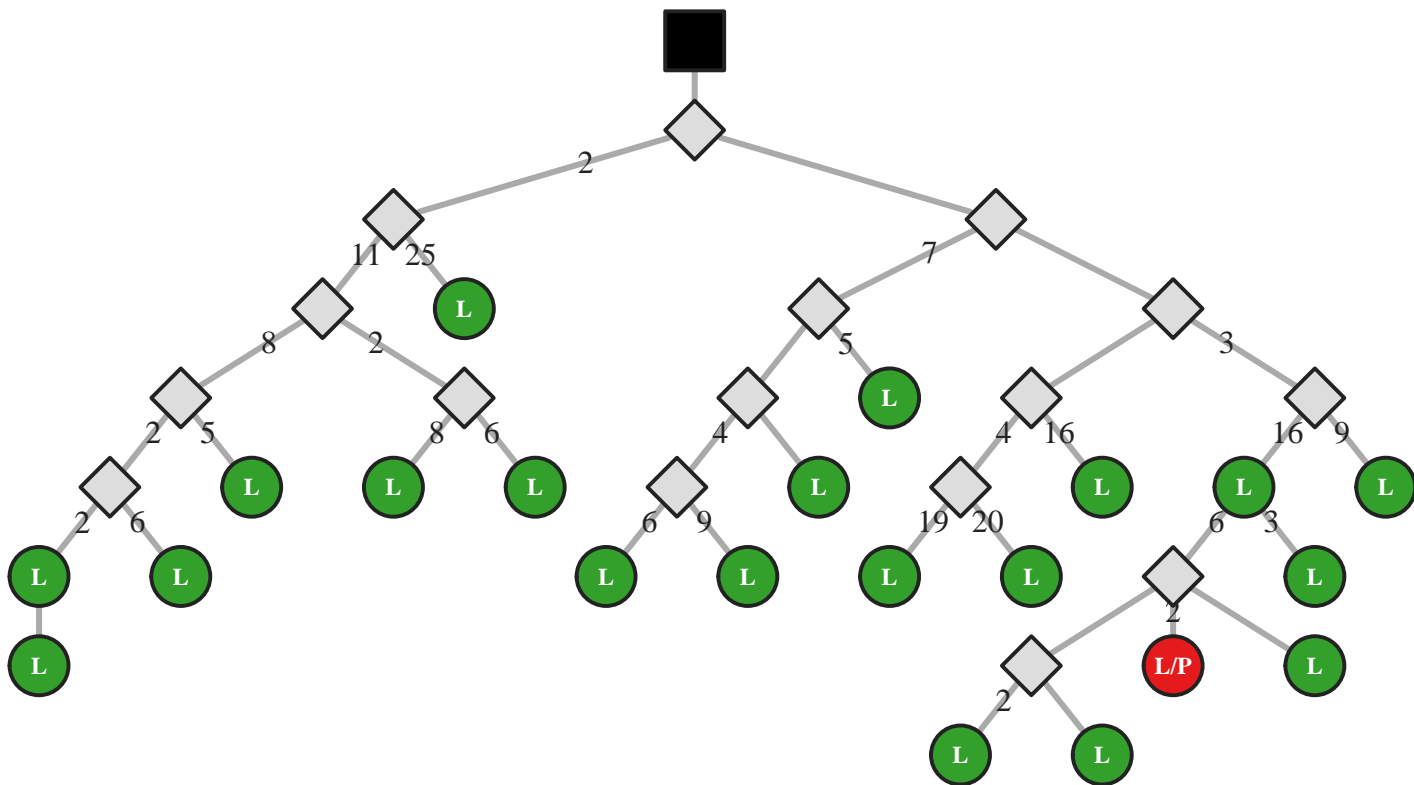
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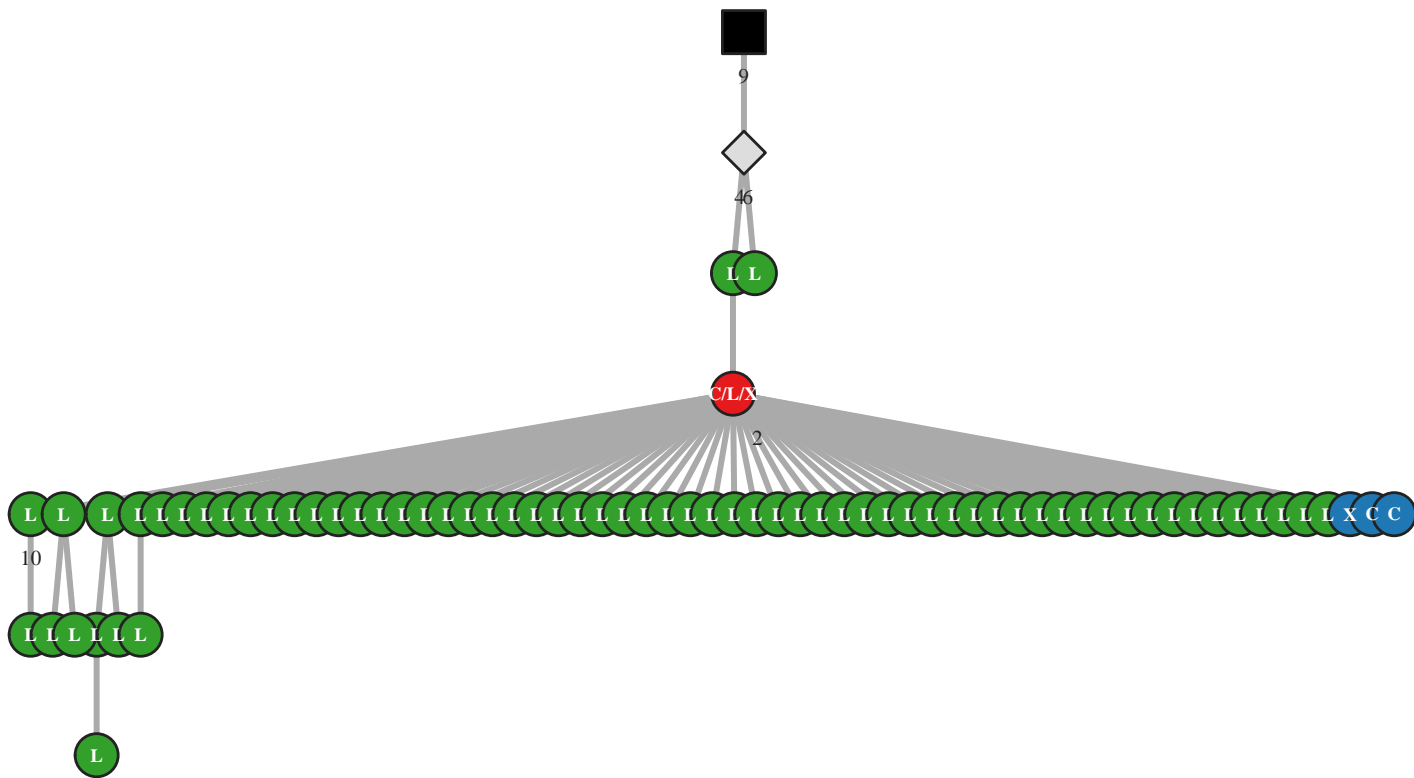
M5 IgG IGHV3-30/J4 66bp (26498)



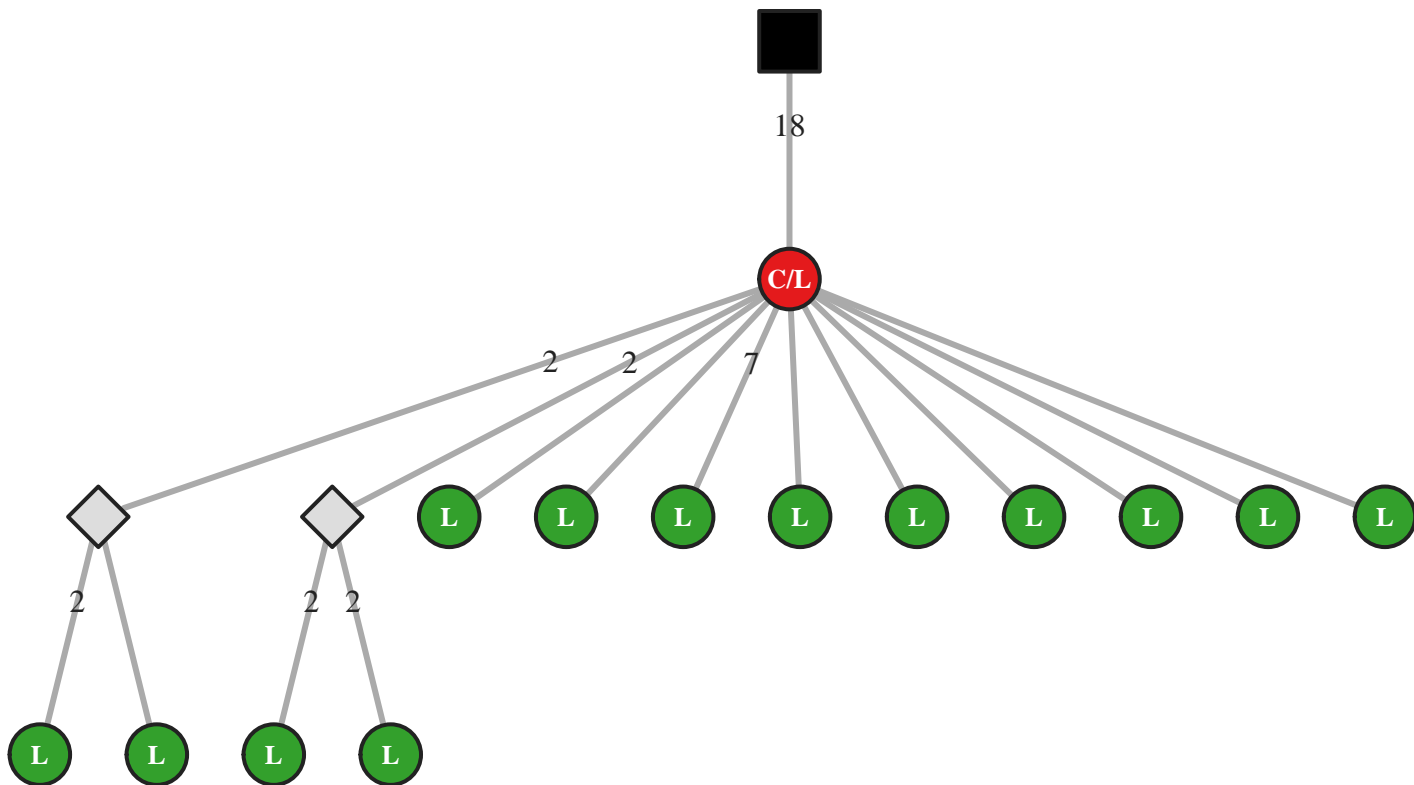
M5 IgG IGHV3-30/J4 66bp (26521)



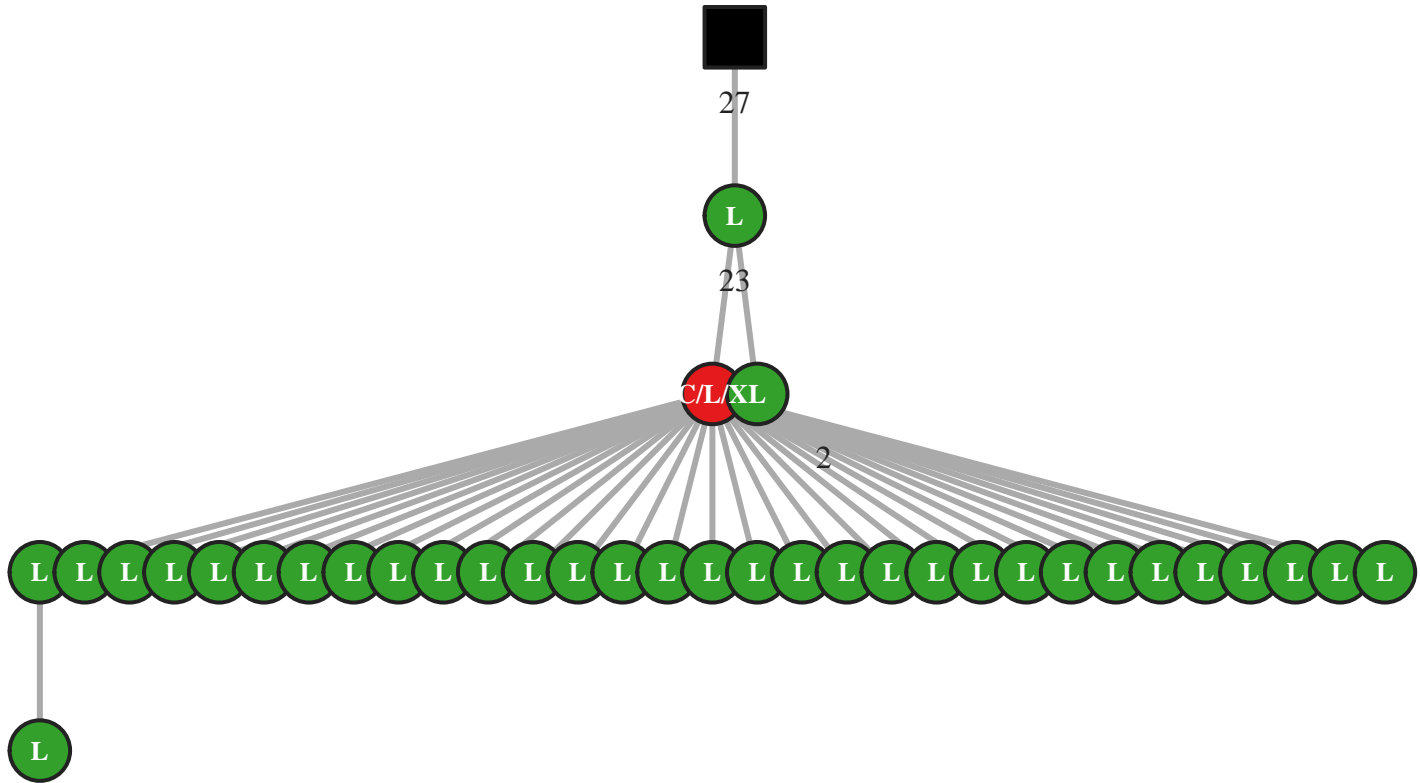
M5 IgG IGHV3-30/J4 69bp (17477)



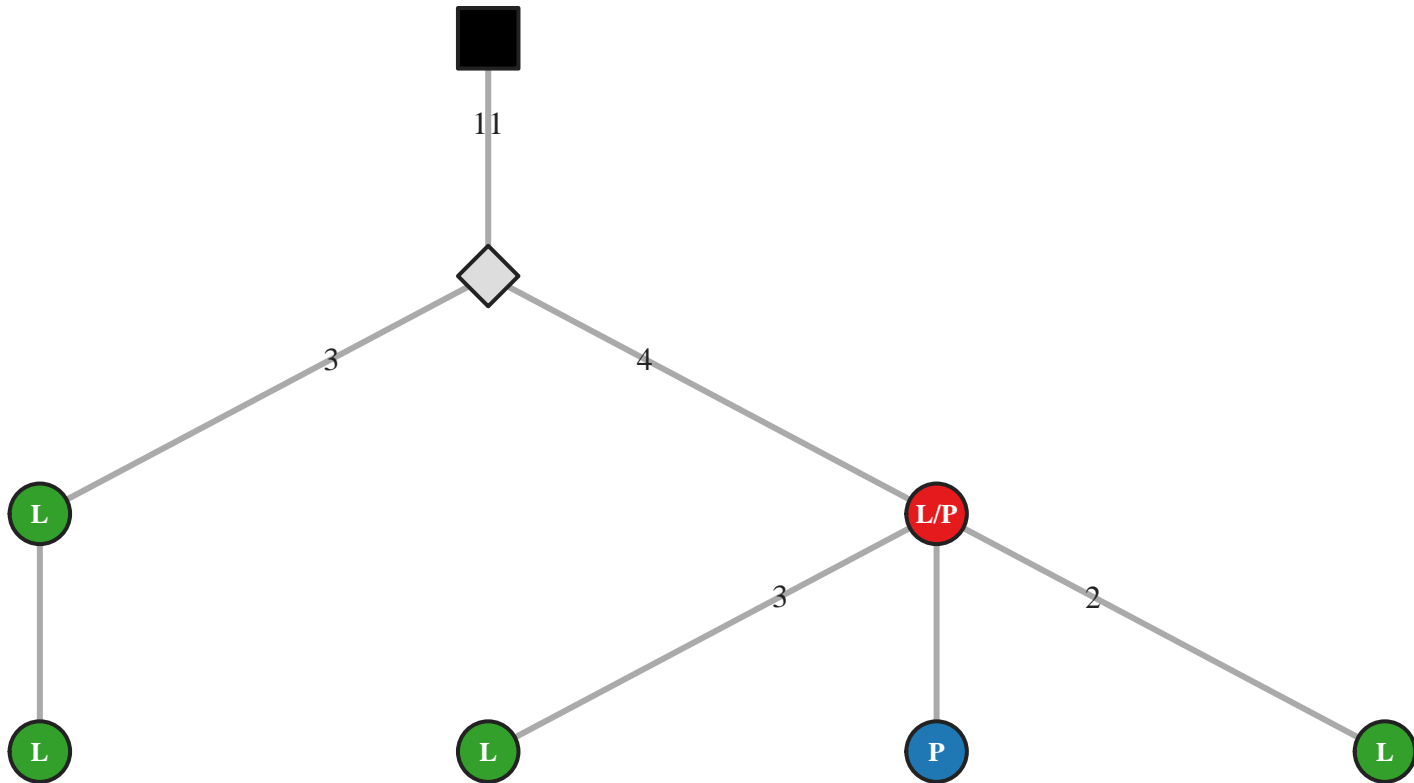
M5 IgG IGHV3-30/J5 21bp (35084)



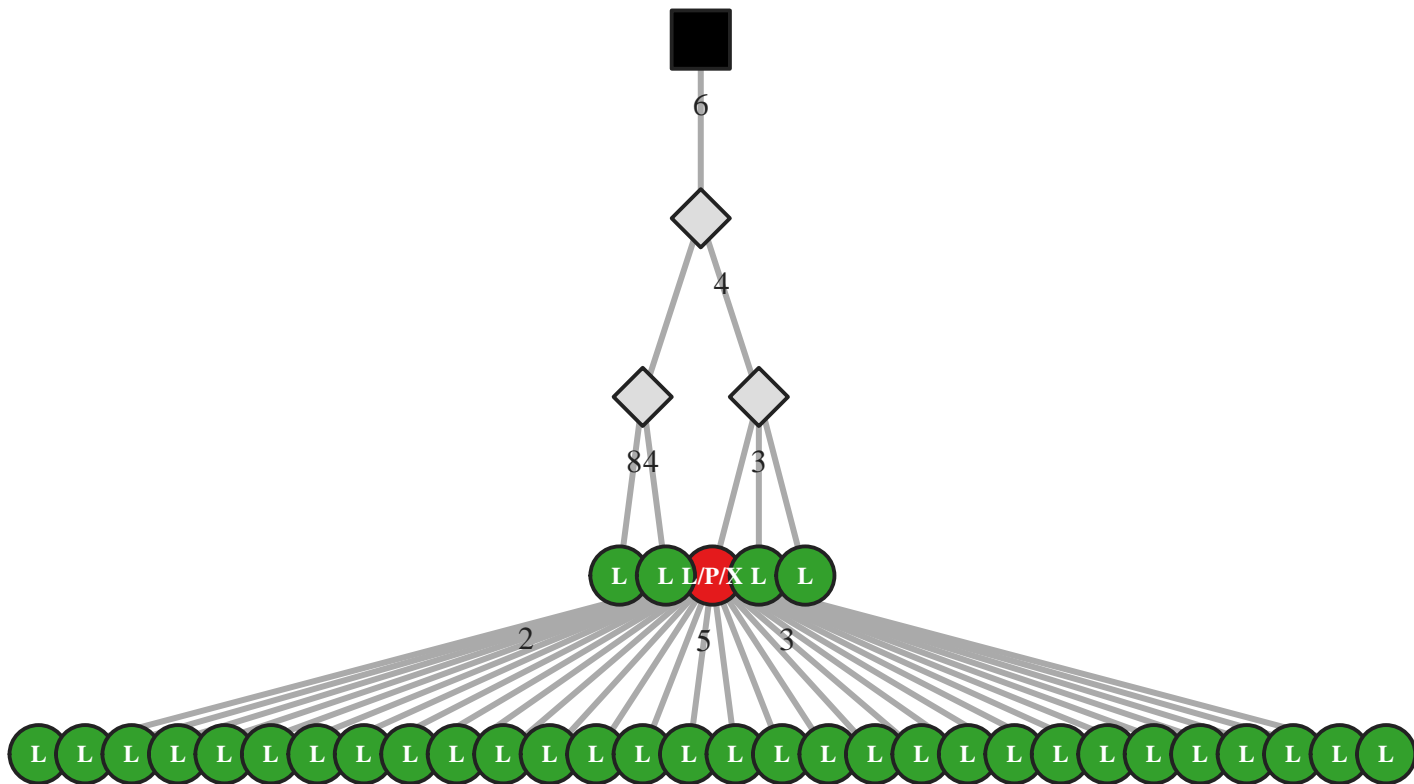
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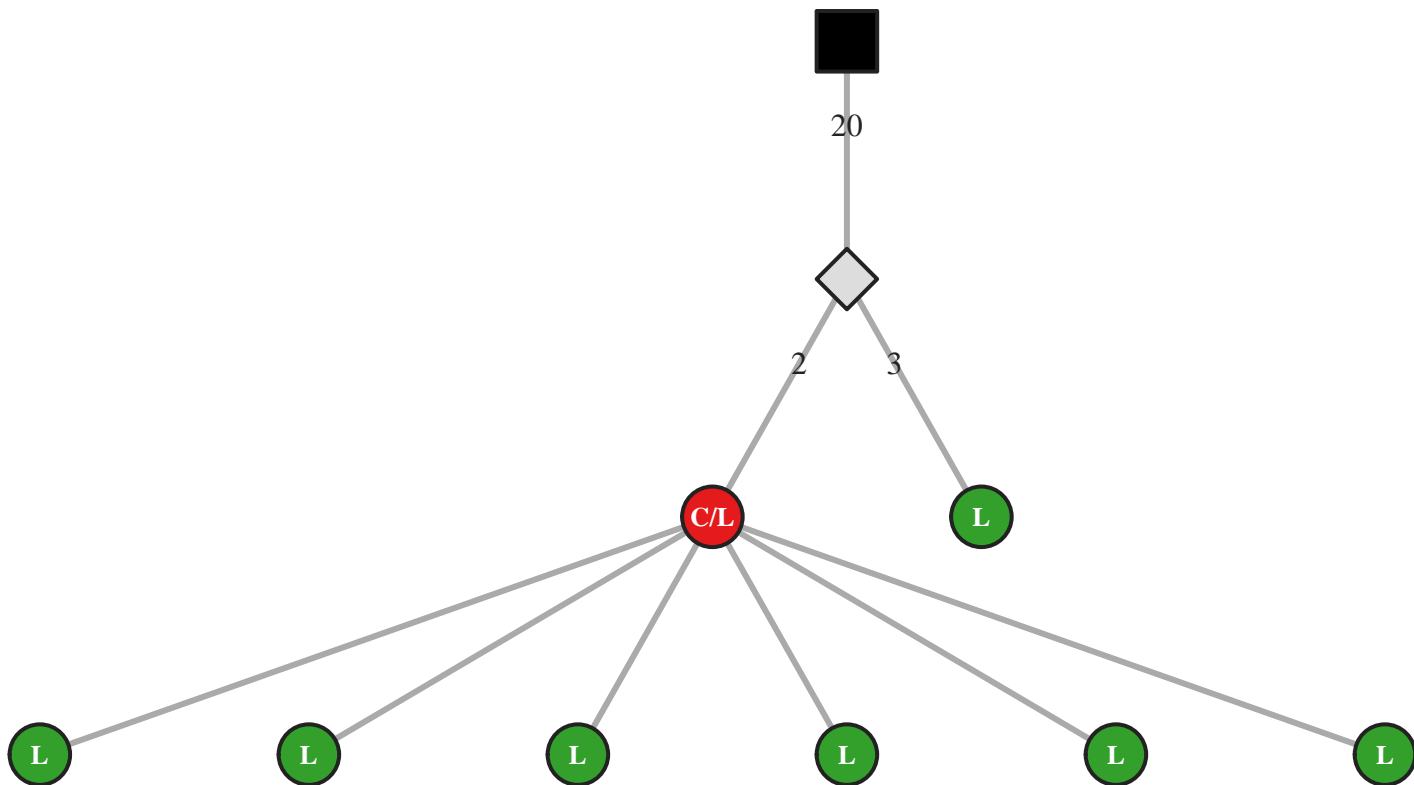
M5 IgG IGHV3-30/J5 39bp (17661)



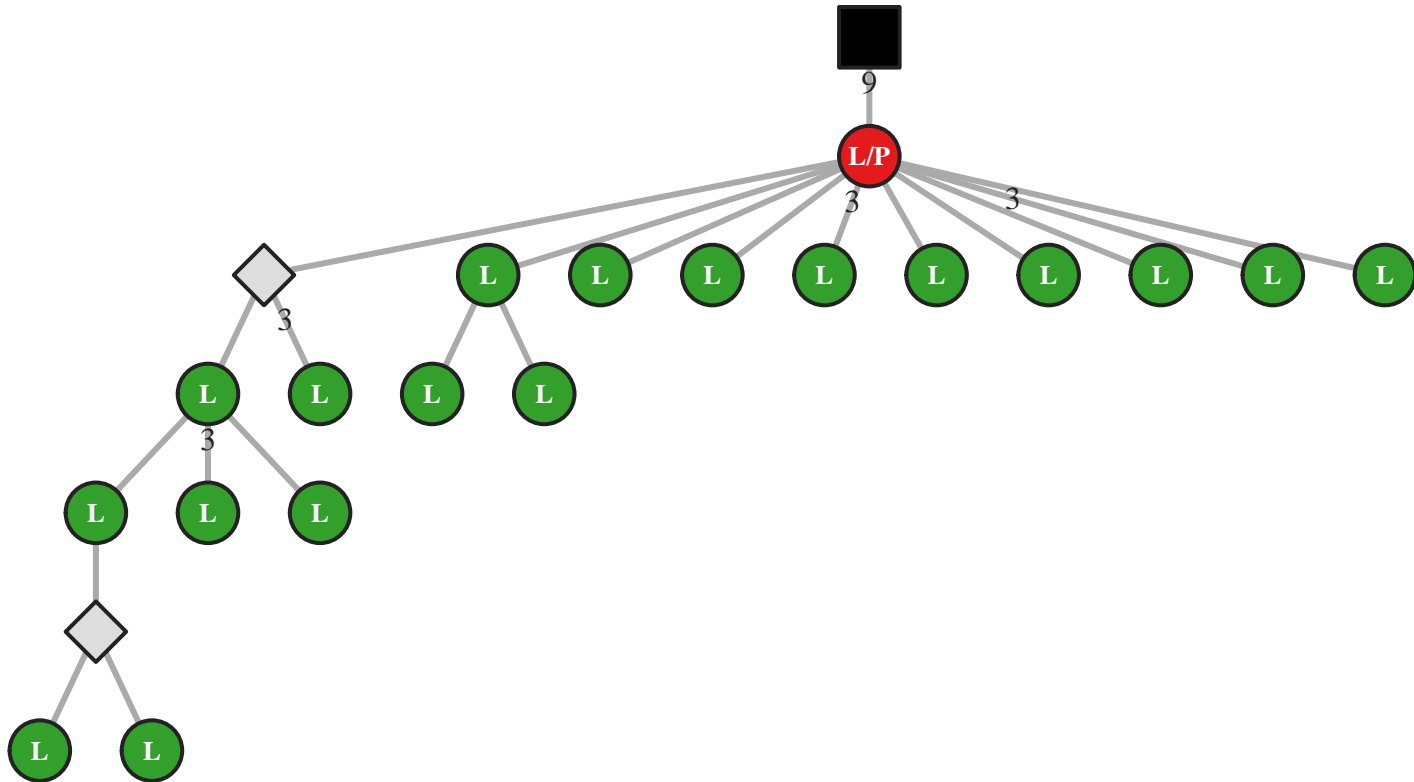
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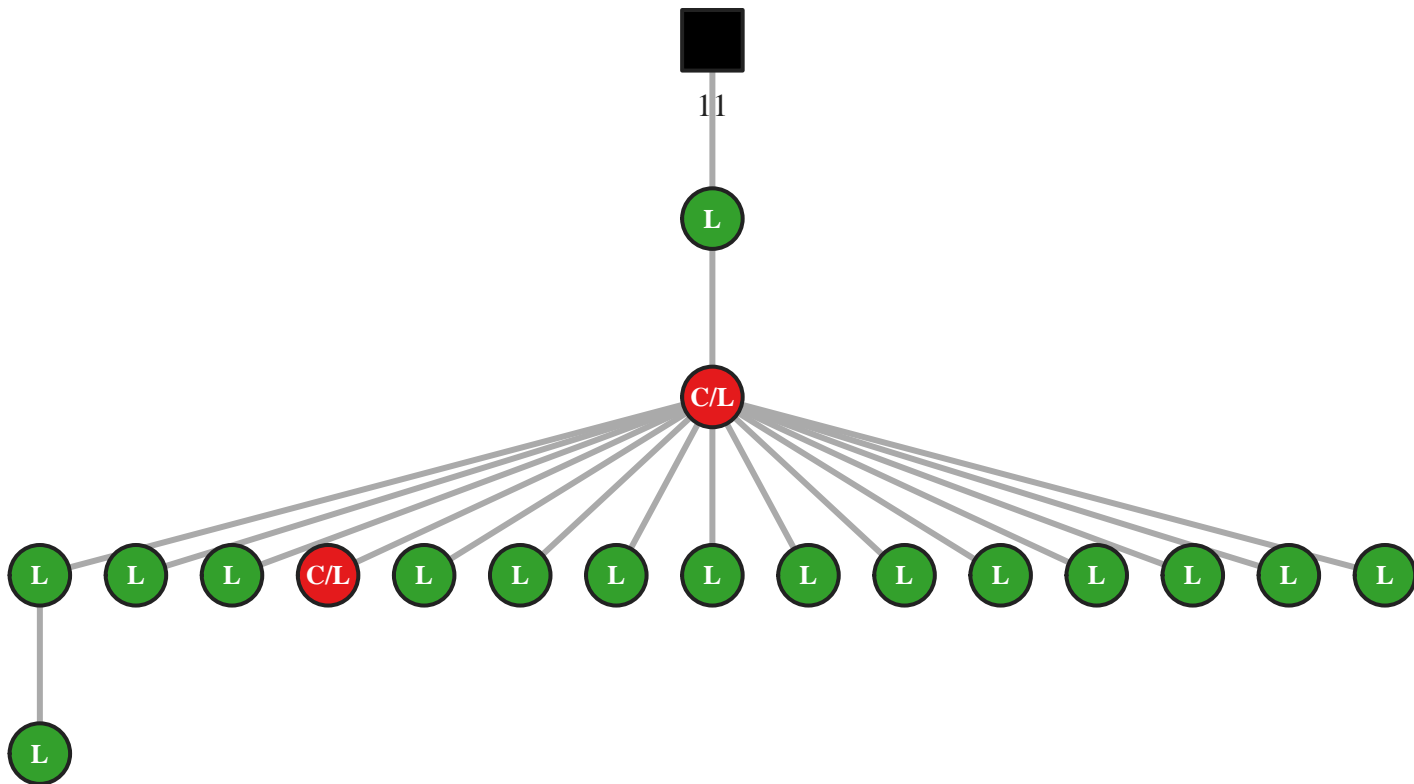
M5 IgG IGHV3-30/J5 42bp (35002)



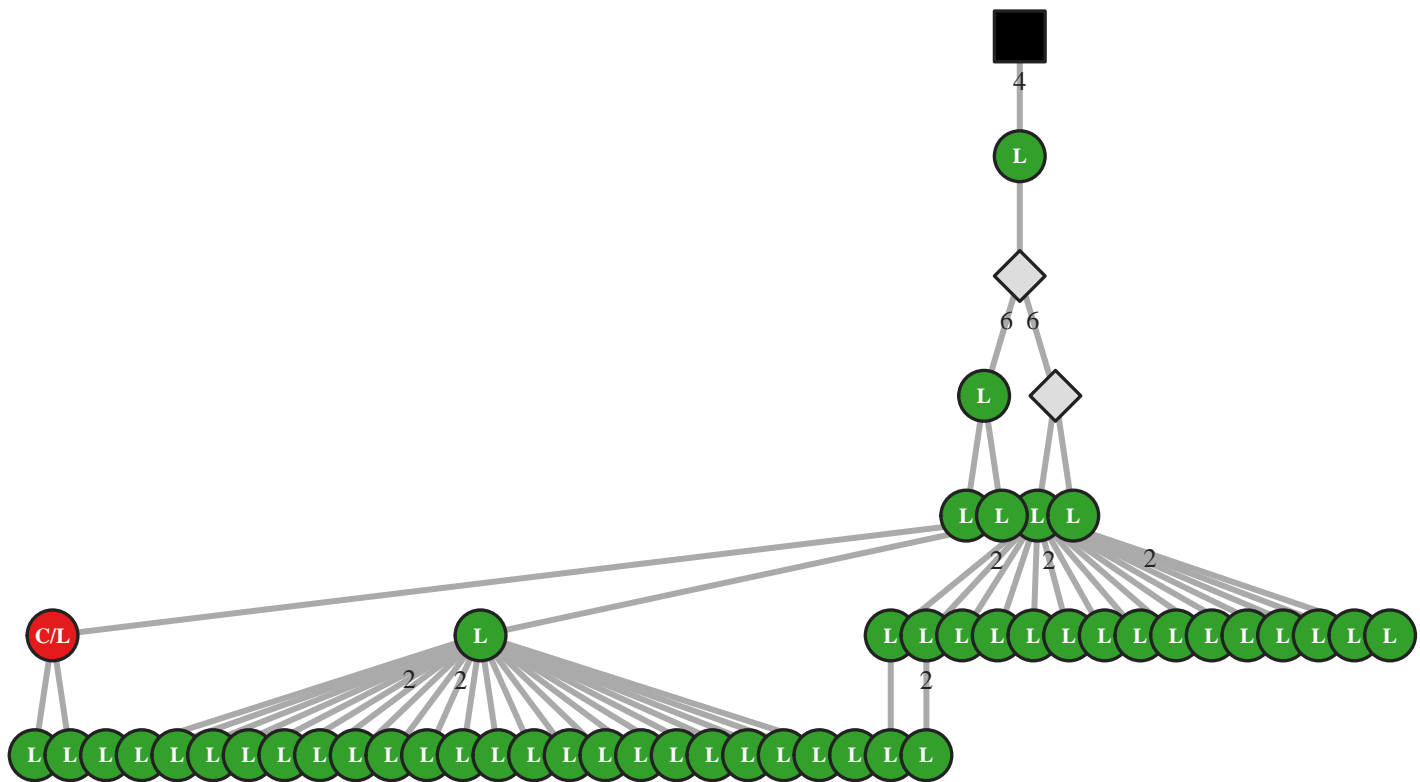
M5 IgG IGHV3-30/J5 48bp (44593)



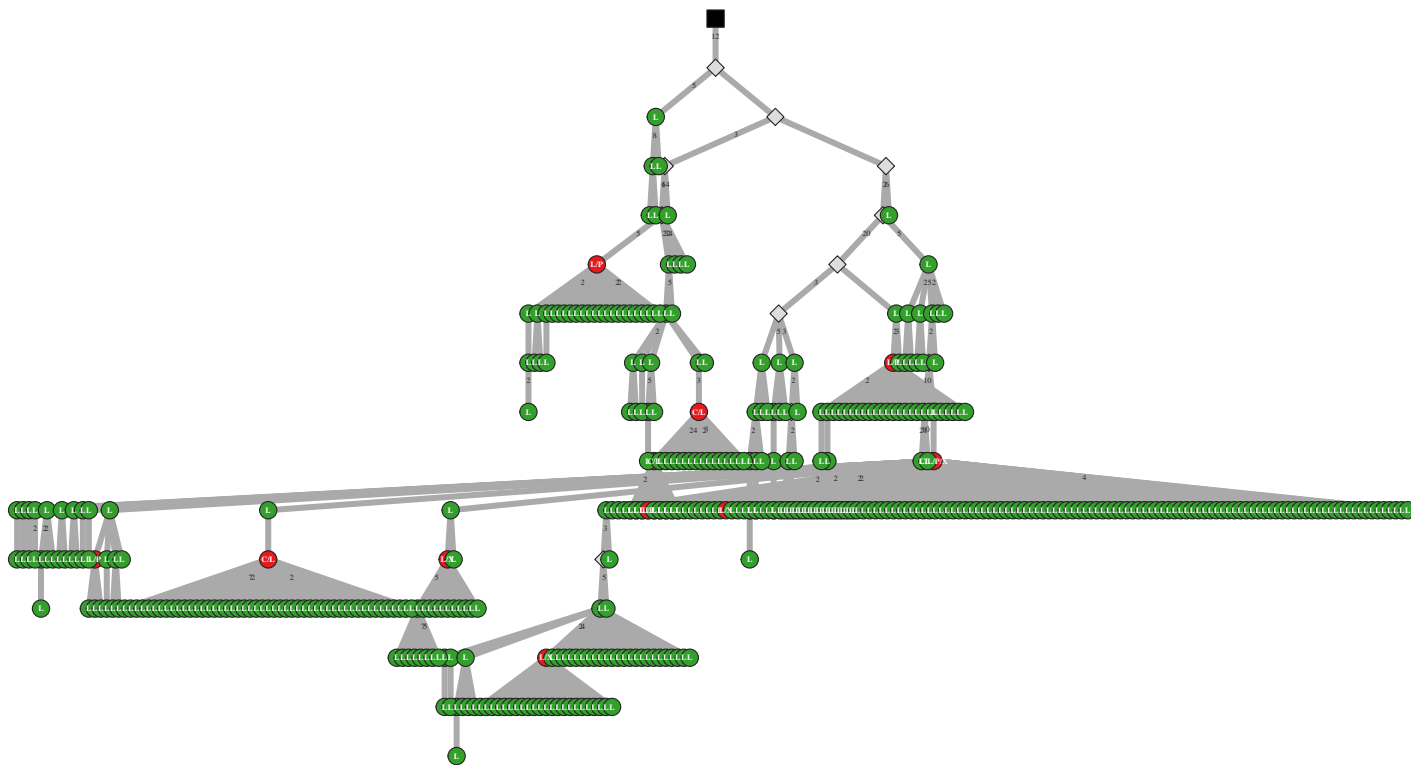
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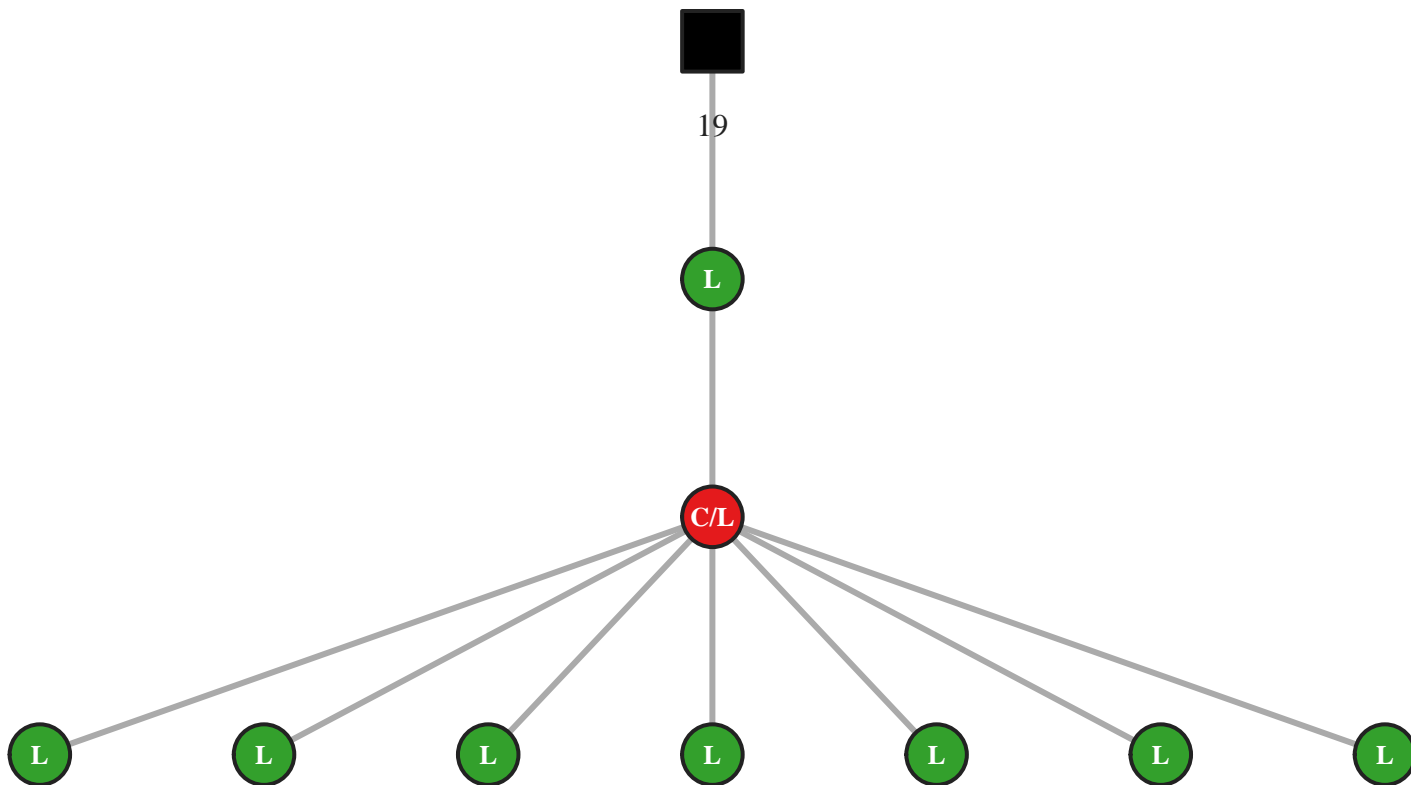
M5 IgG IGHV3-30/J5 54bp (26184)



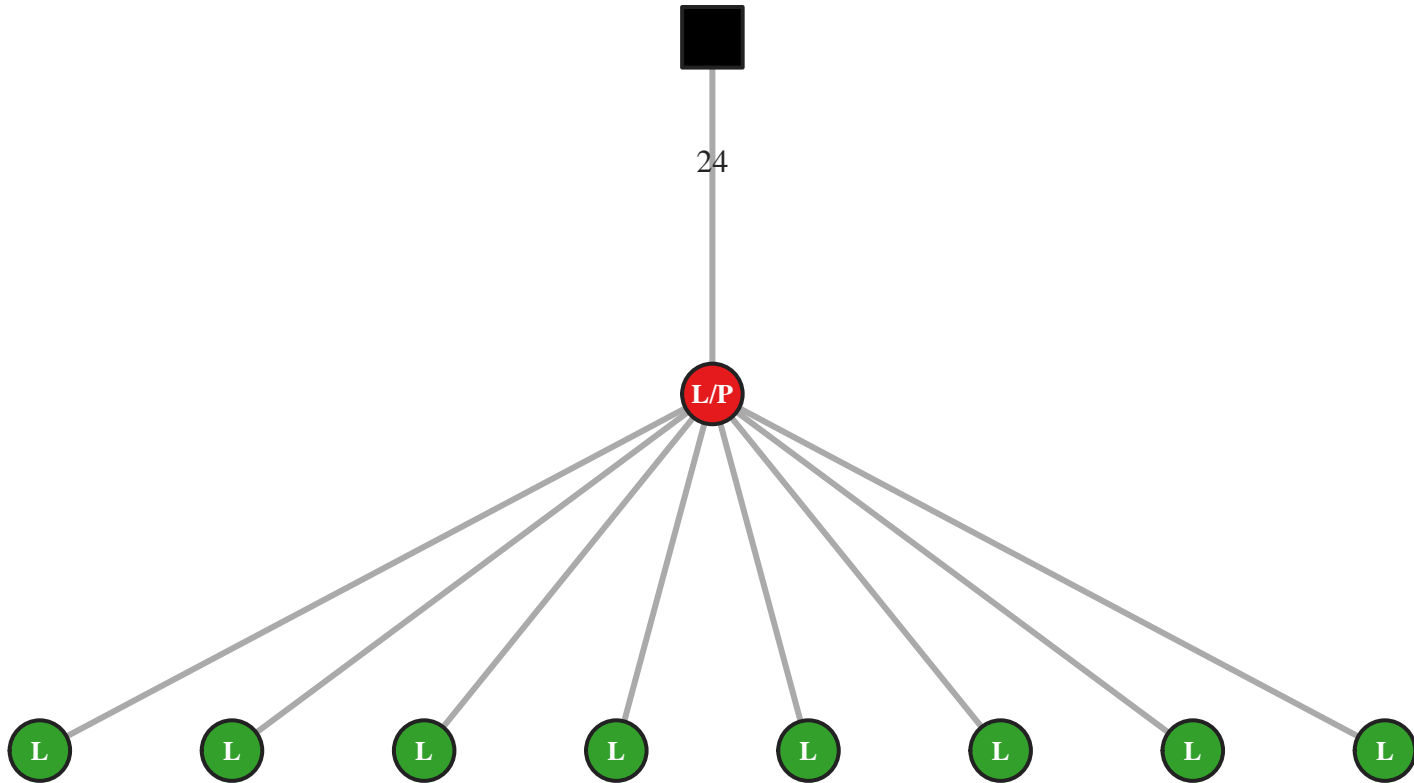
M5 IgG IGHV3-30/J6 33bp (8029)



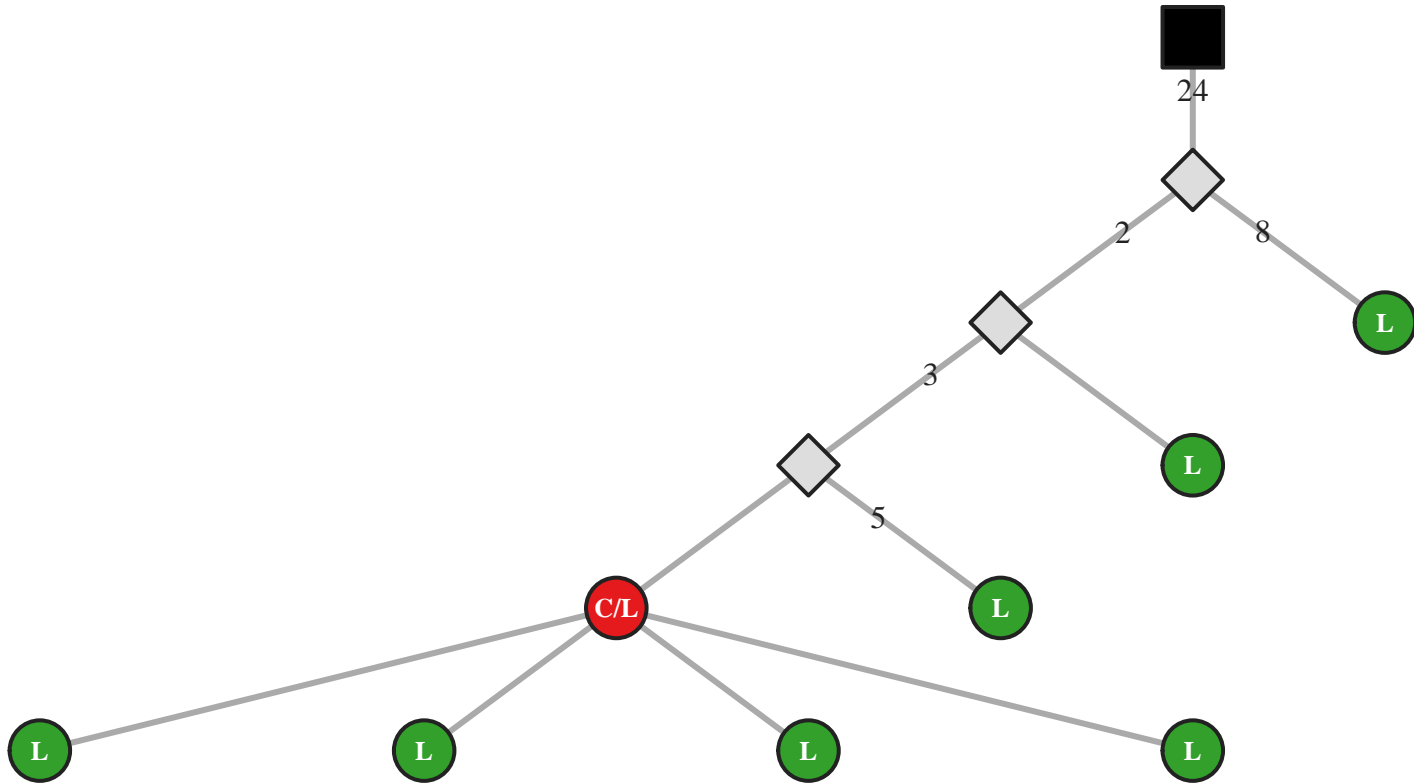
M5 IgA IGHV3-30/J6 39bp (30566)



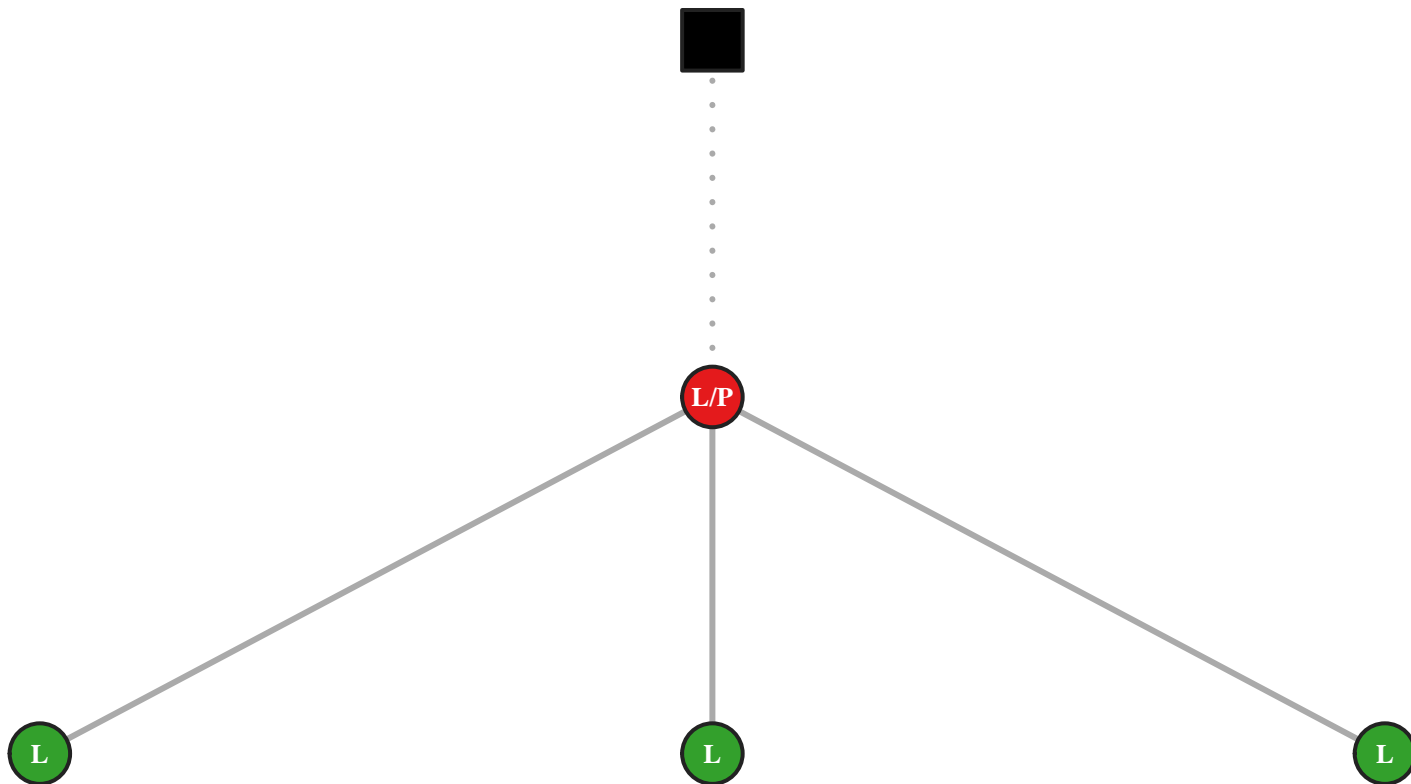
M5 IgG IGHV3-30/J6 48bp (26544)



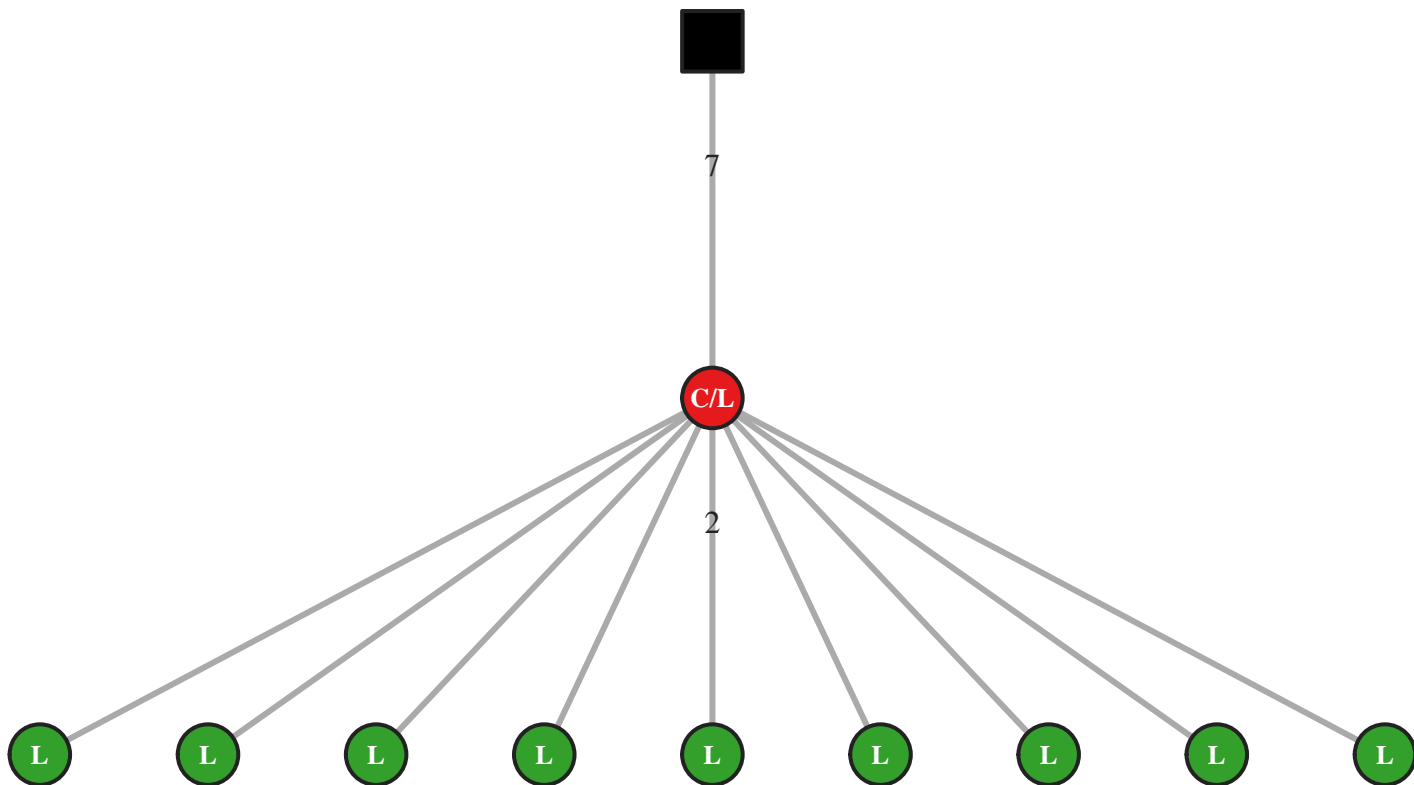
M5 IgA IGHV3-30/J6 51bp (2903)



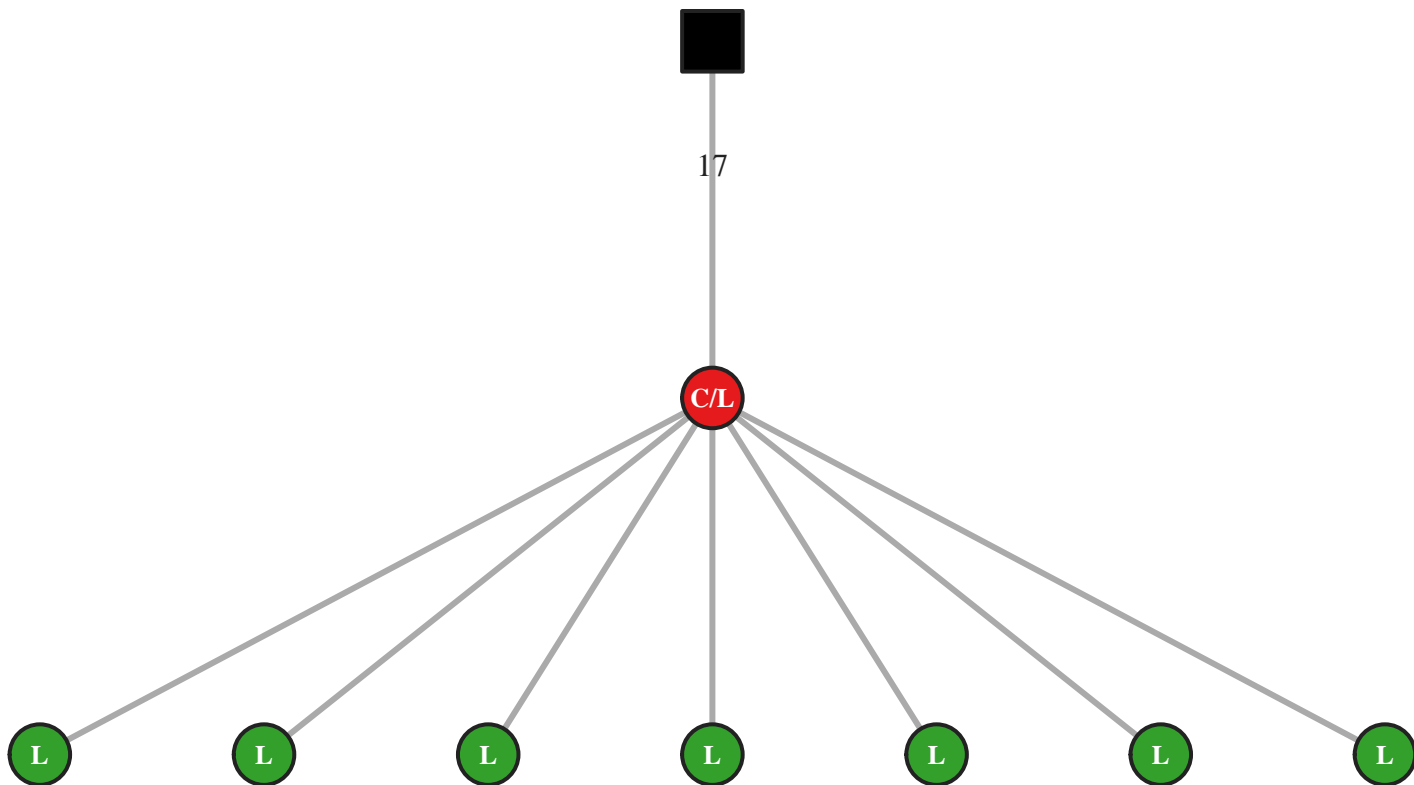
M5 IgA IGHV3-30/J6 51bp (2904)



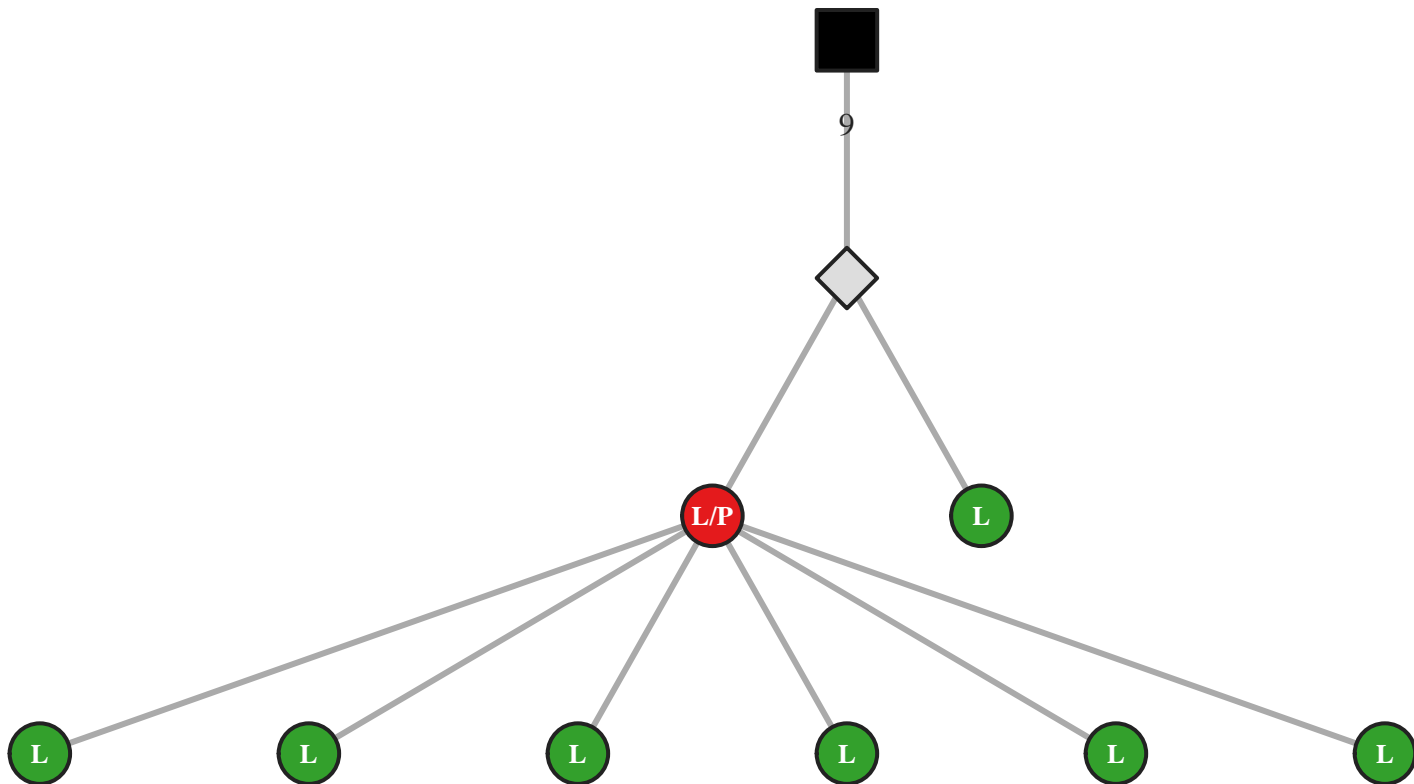
M5 IgG IGHV3-30/J6 51bp (44815)



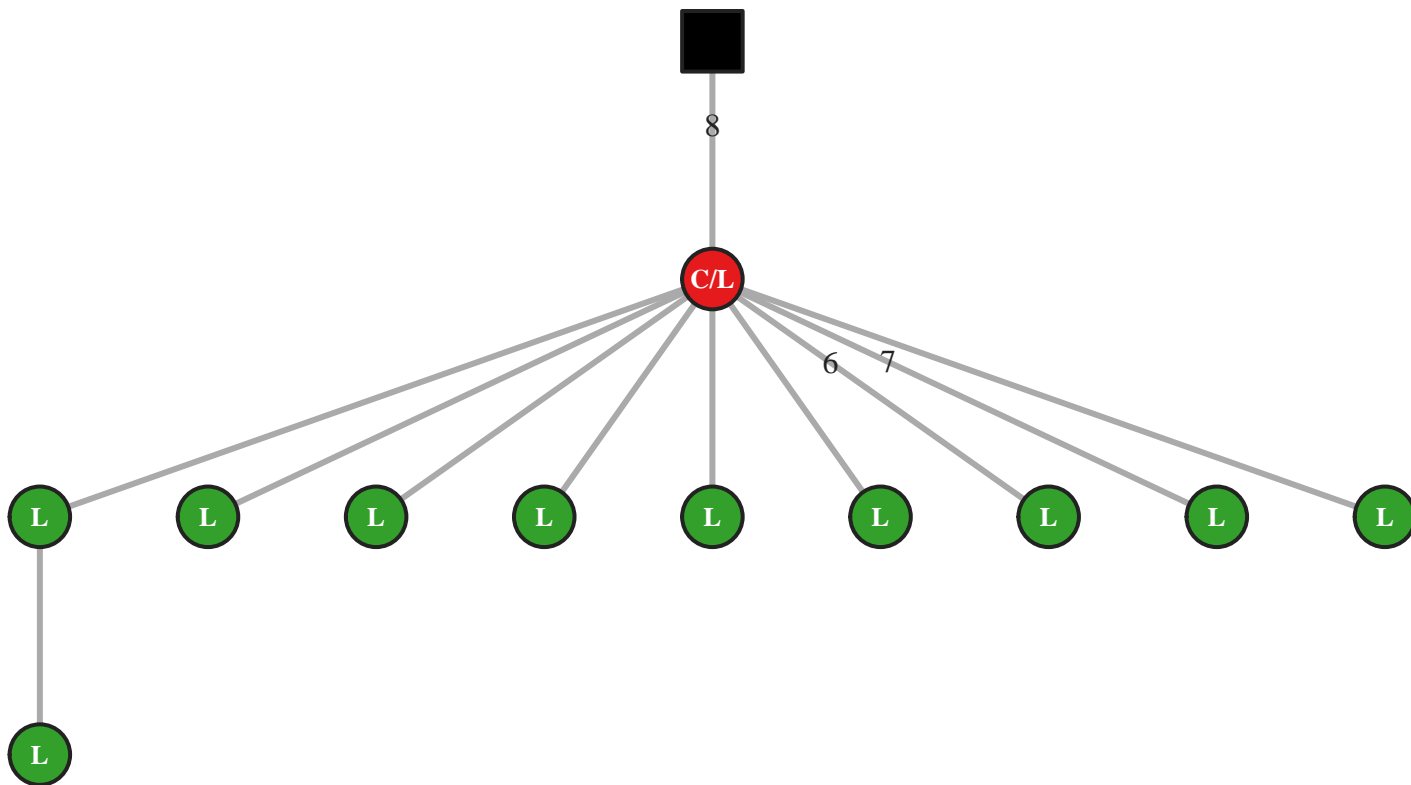
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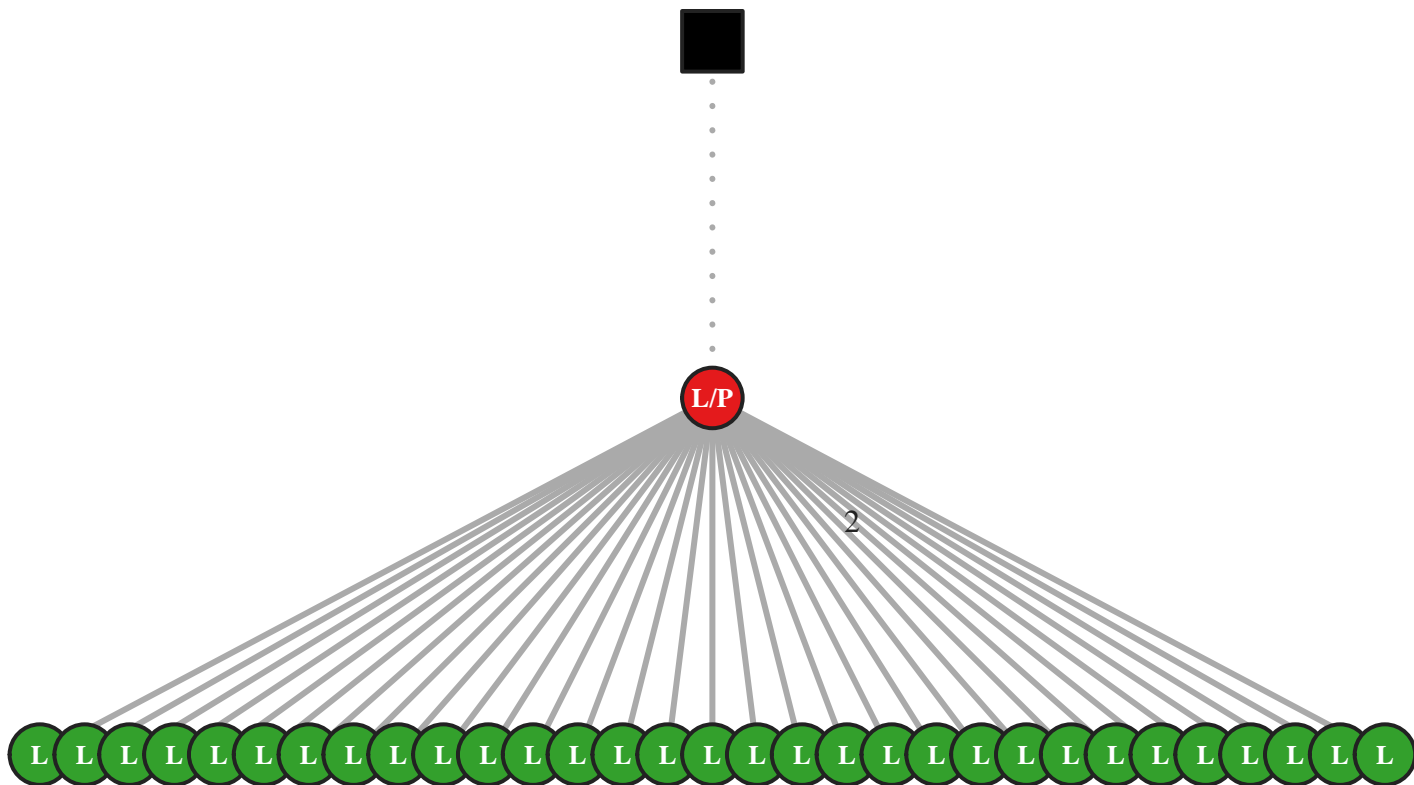
M5 IgG IGHV3-30/J6 54bp (51667)



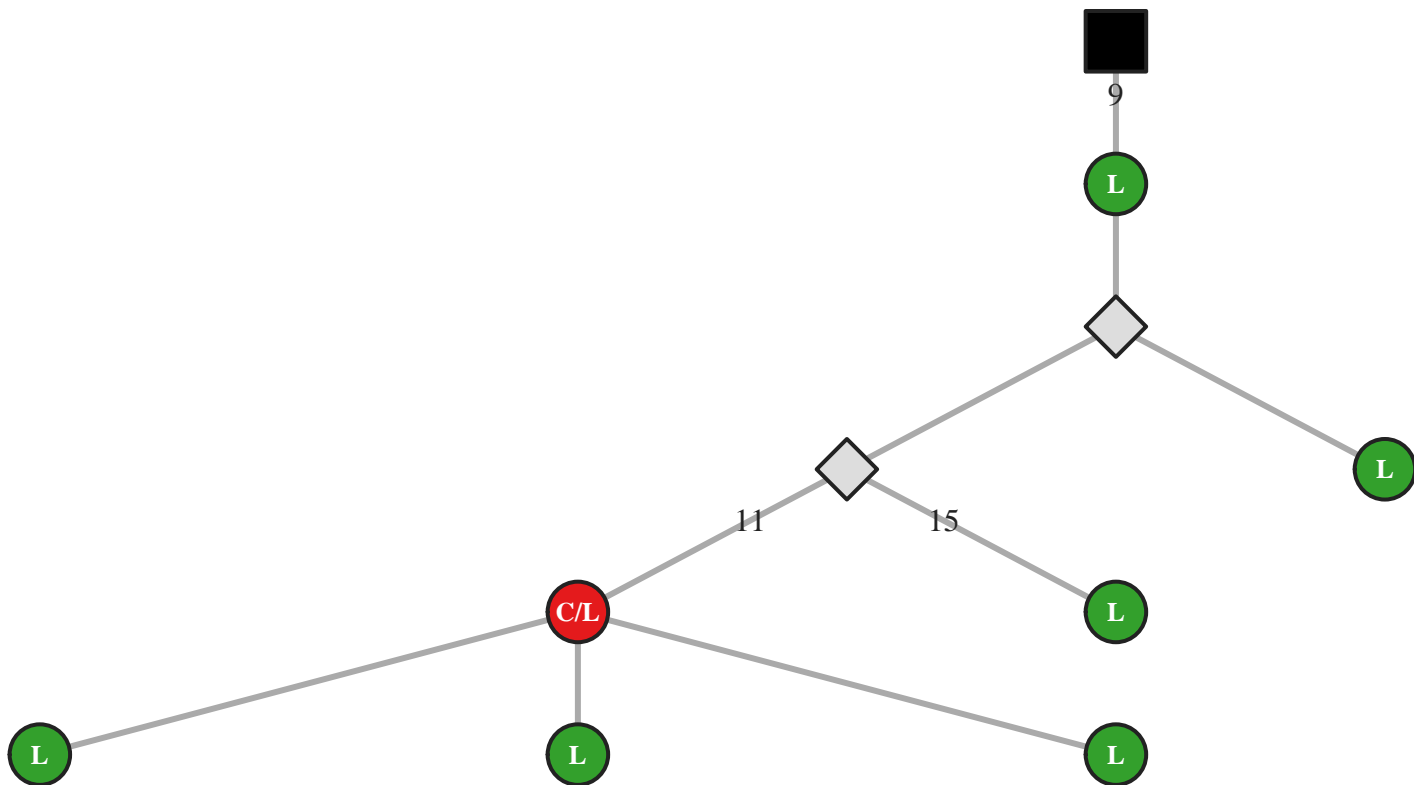
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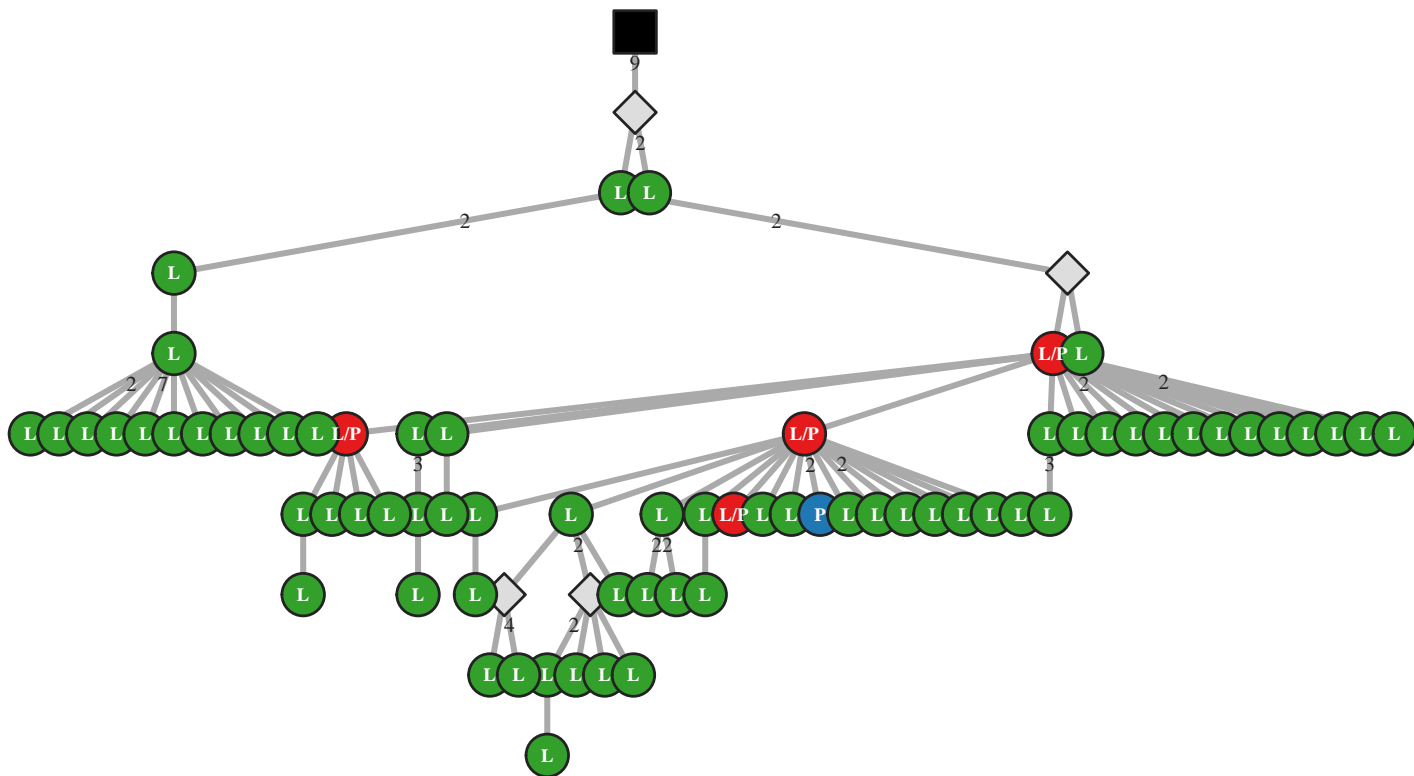
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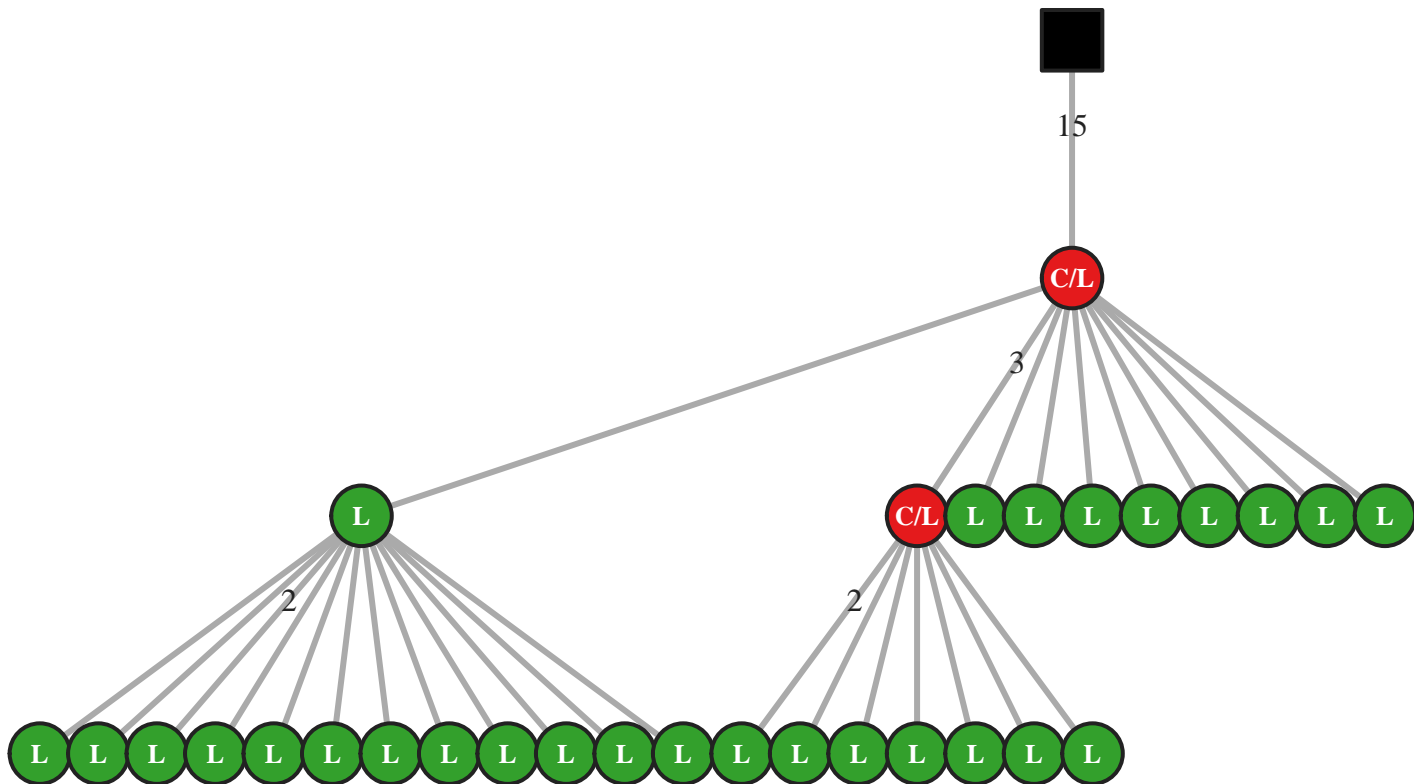
M5 IgG IGHV3-30/J6 54bp (51777)



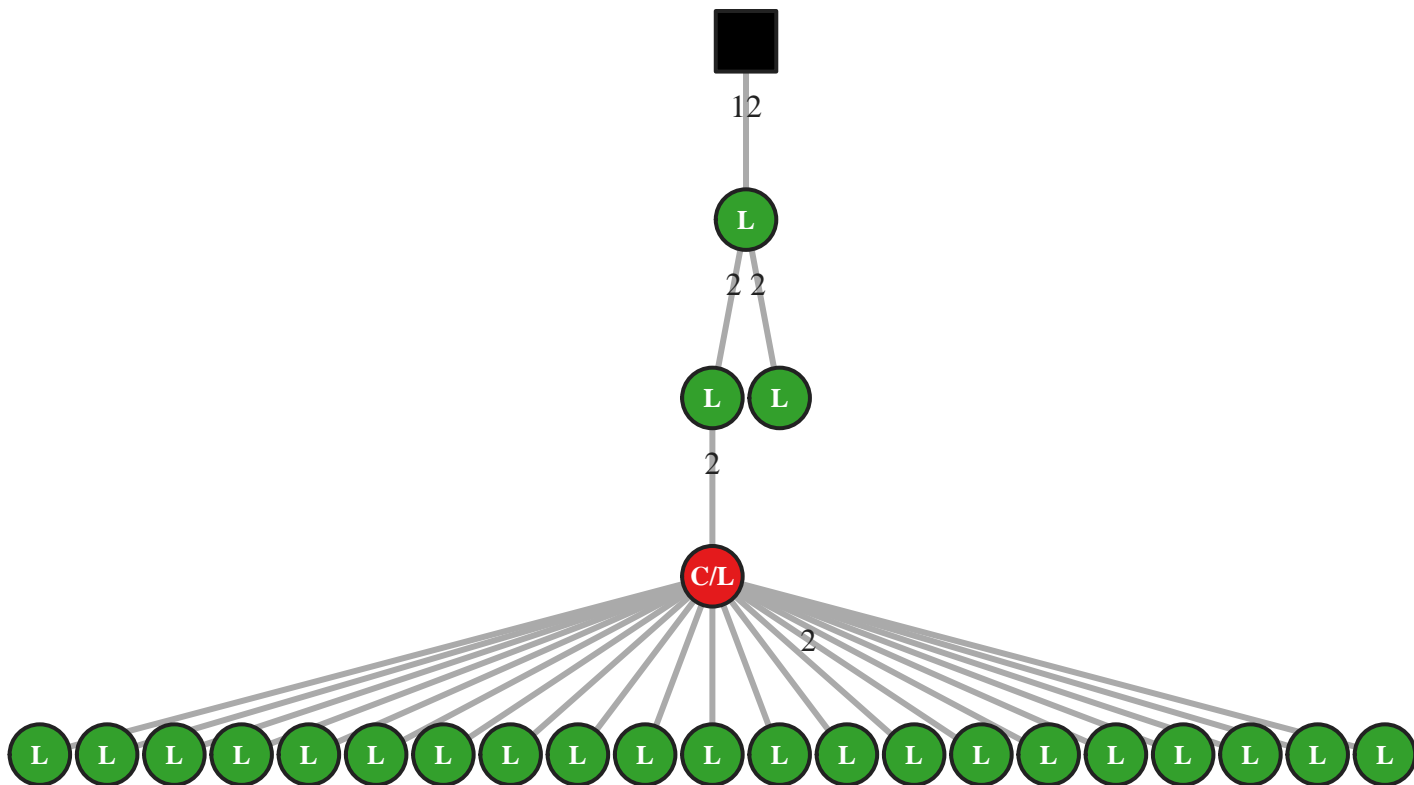
M5 IgG IGHV3-30/J6 57bp (26057)



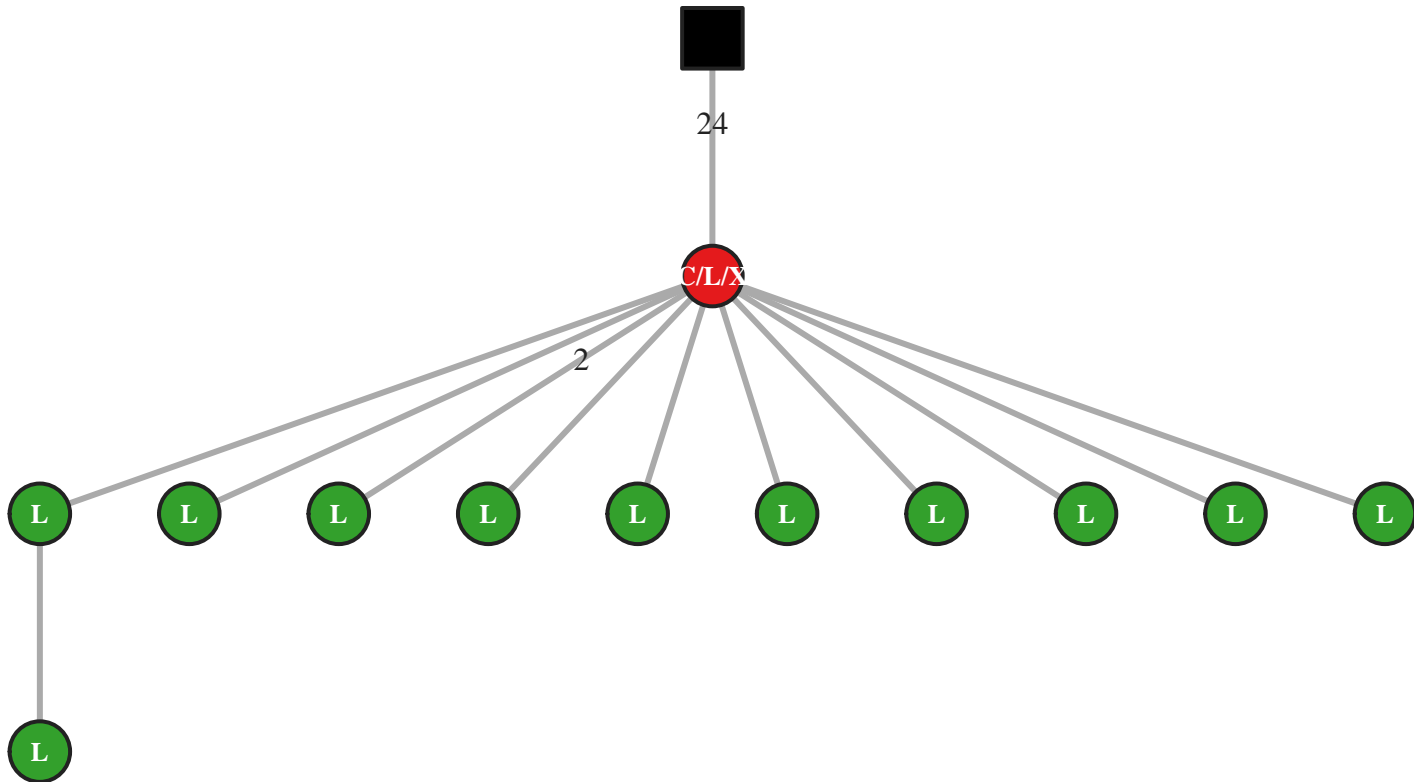
M5 IgG IGHV3-30/J6 57bp (26100)



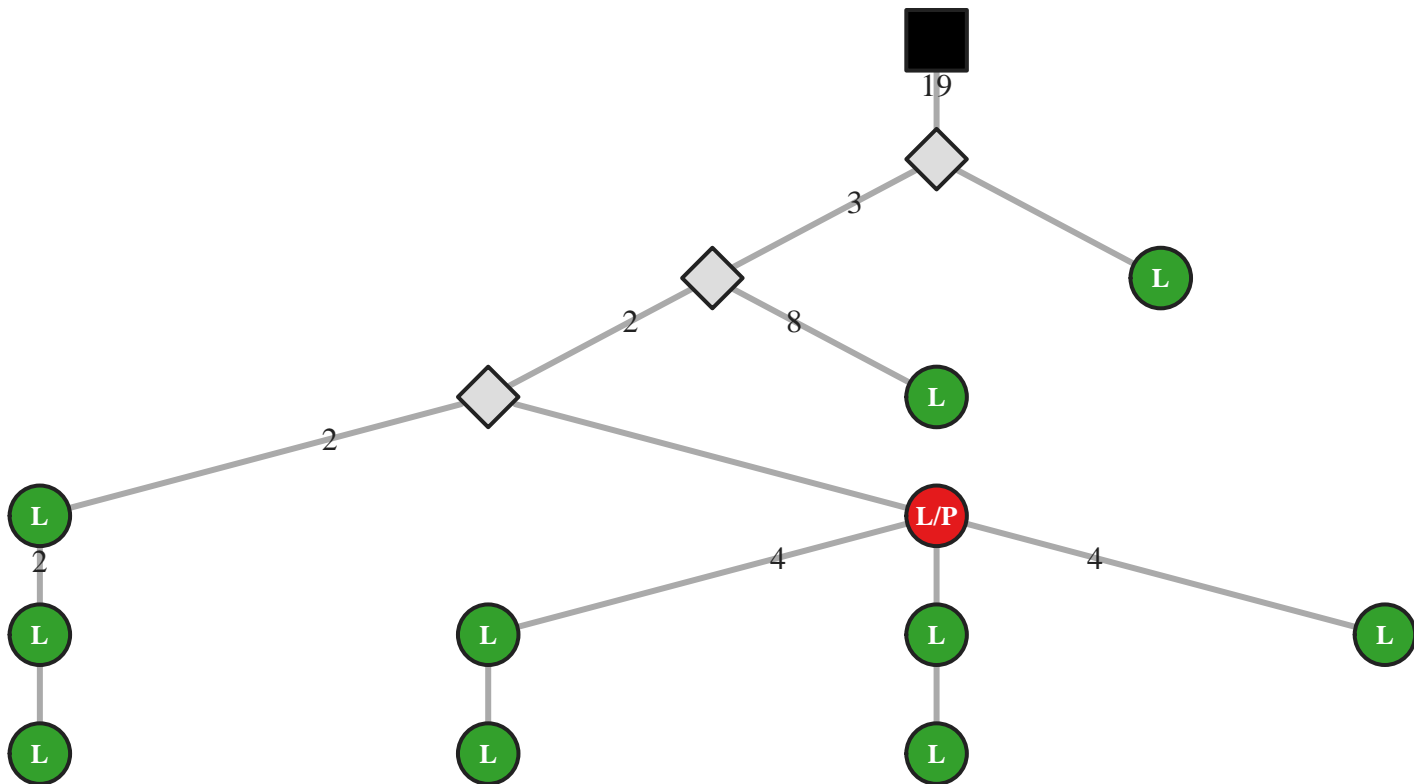
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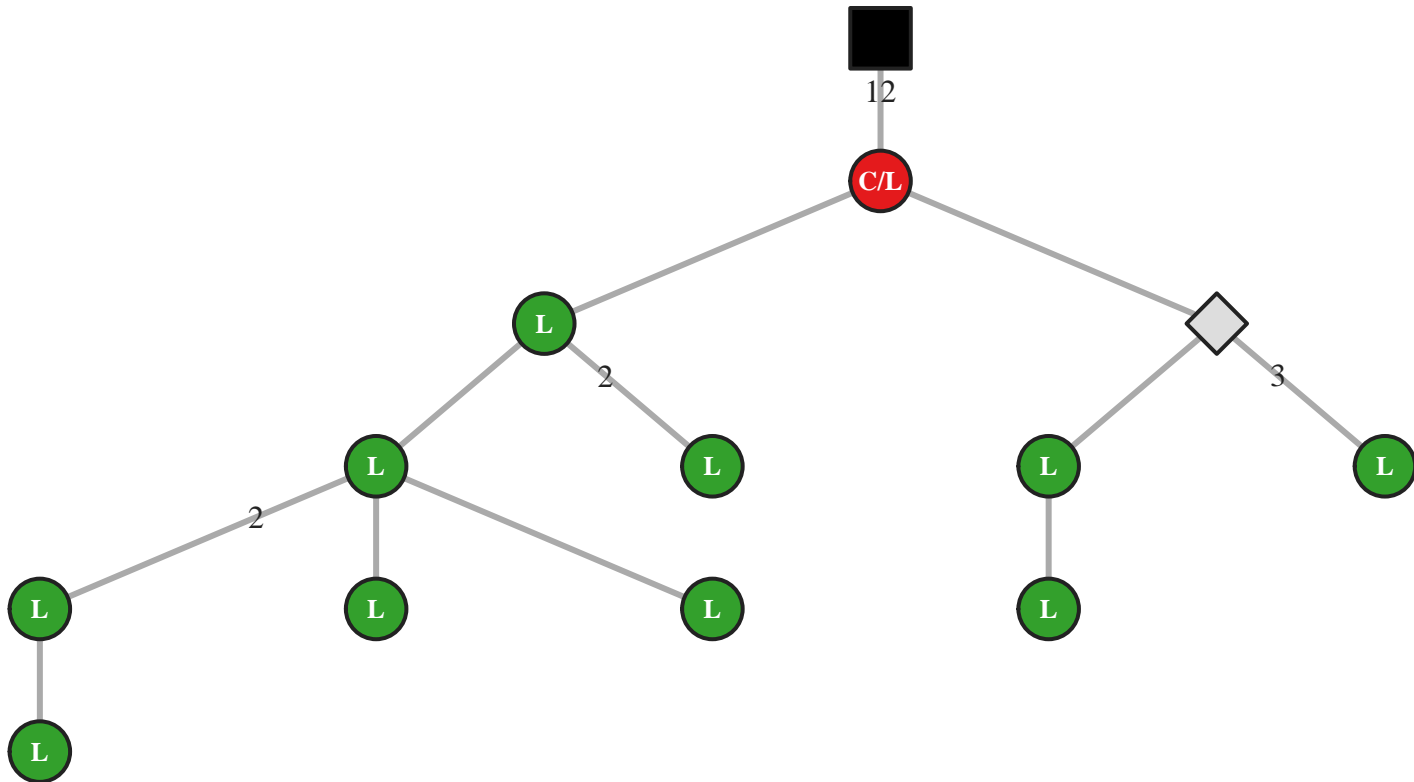
M5 IgA IGHV3-30/J6 60bp (12437)



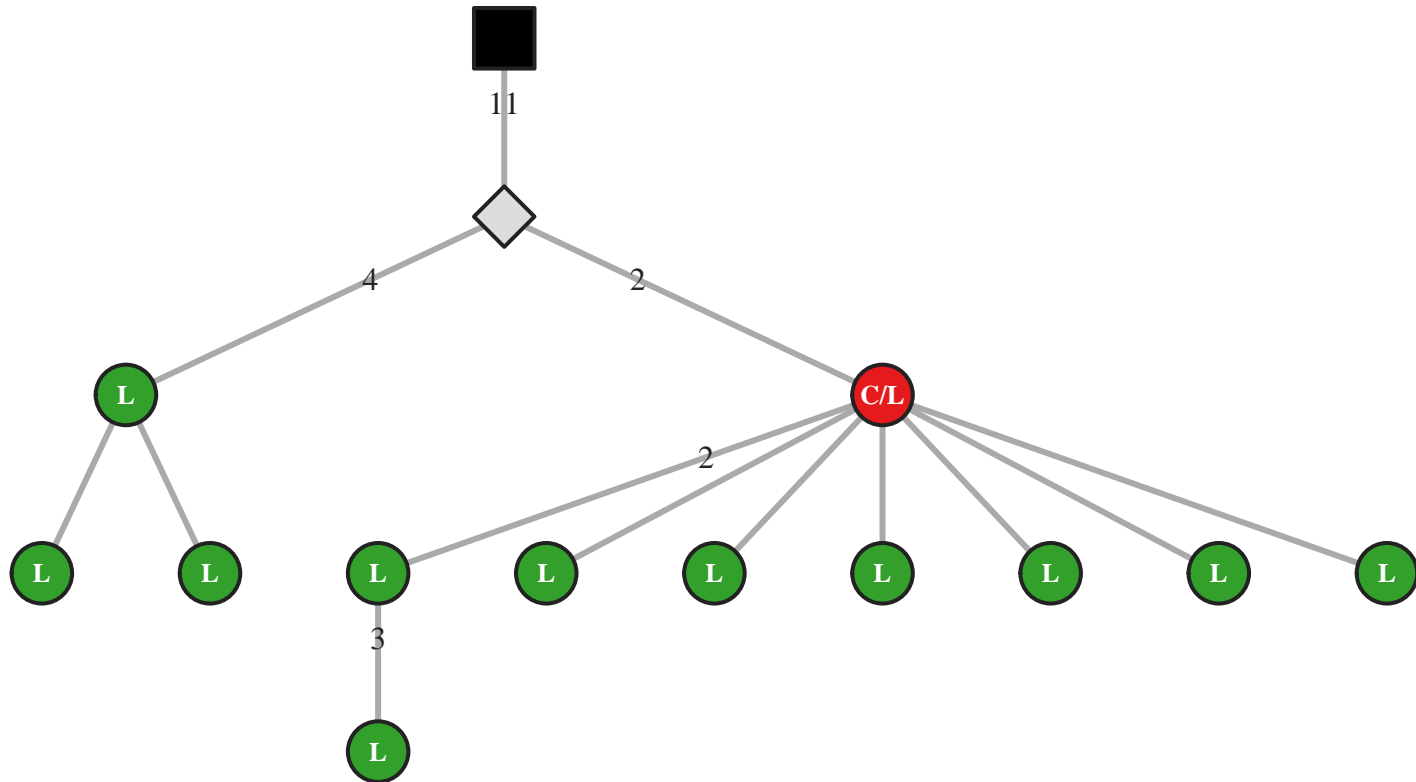
M5 IgG IGHV3-30/J6 60bp (26235)



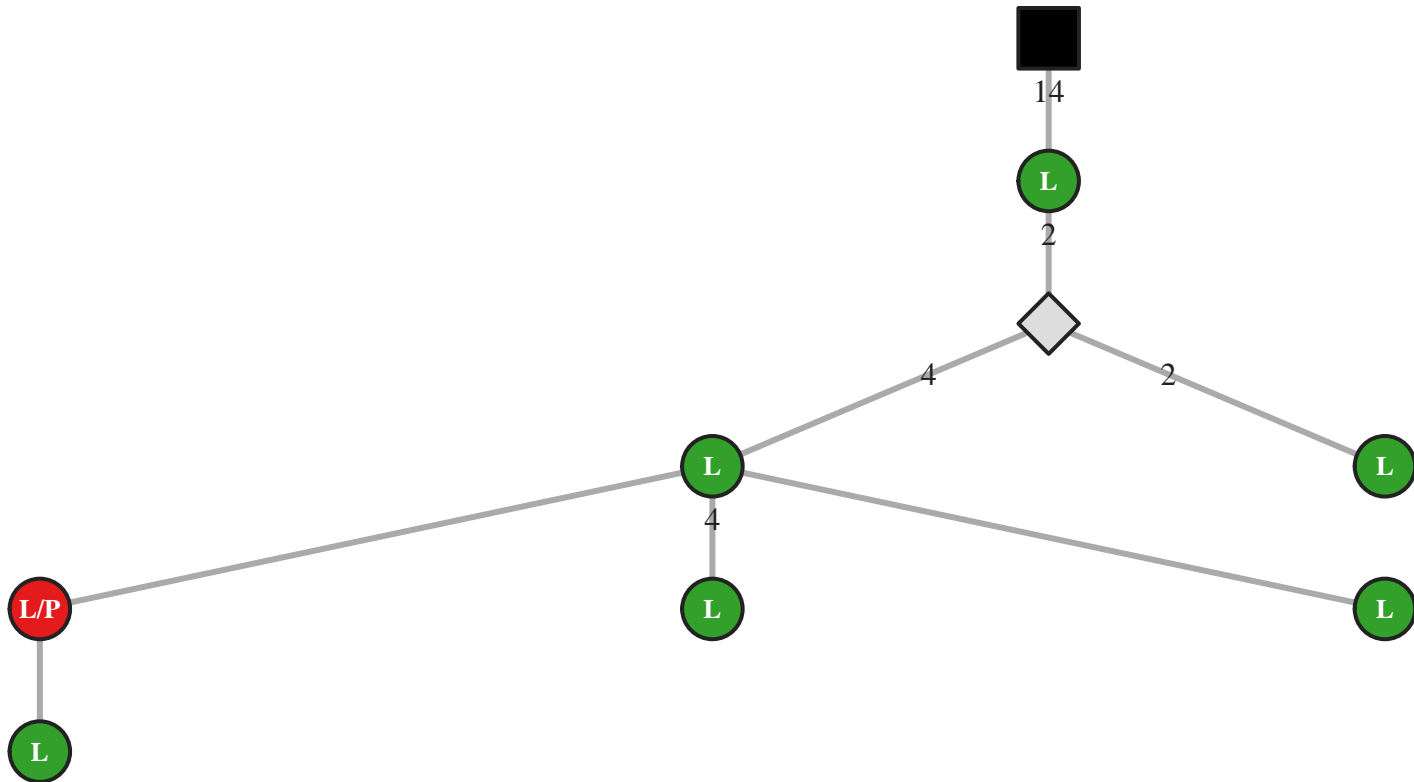
M5 IgG IGHV3-30/J6 63bp (44736)



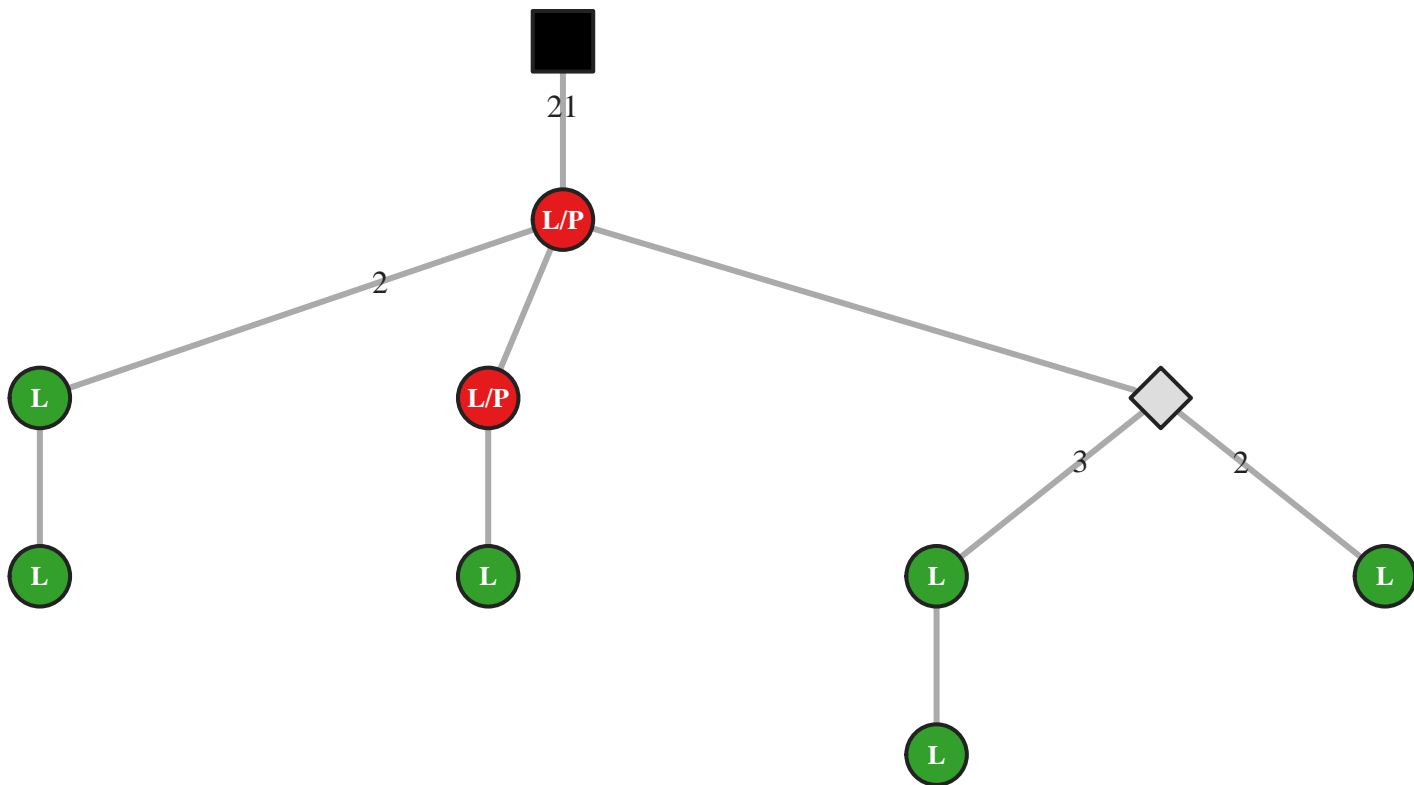
M5 IgA IGHV3-30/J6 66bp (2843)



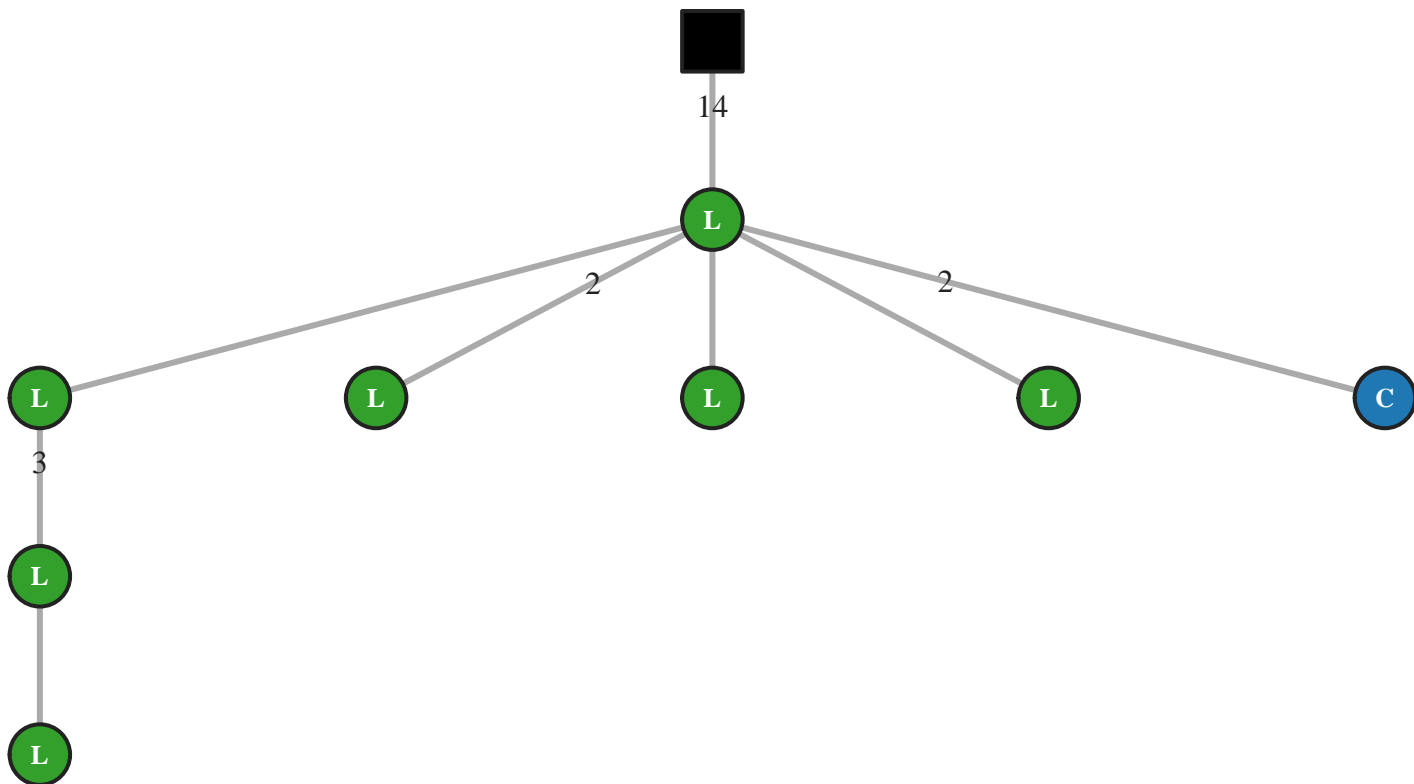
M5 IgG IGHV3-30/J6 69bp (44881)



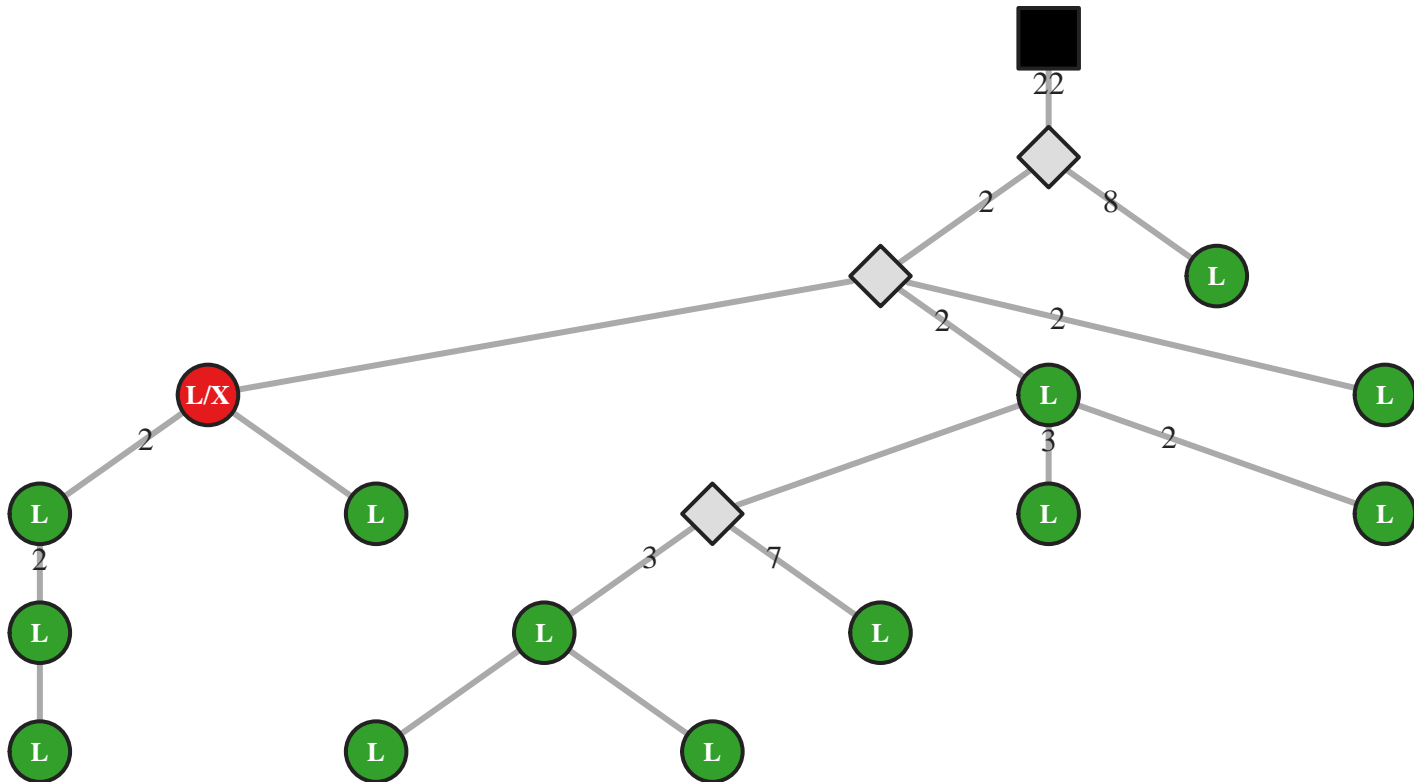
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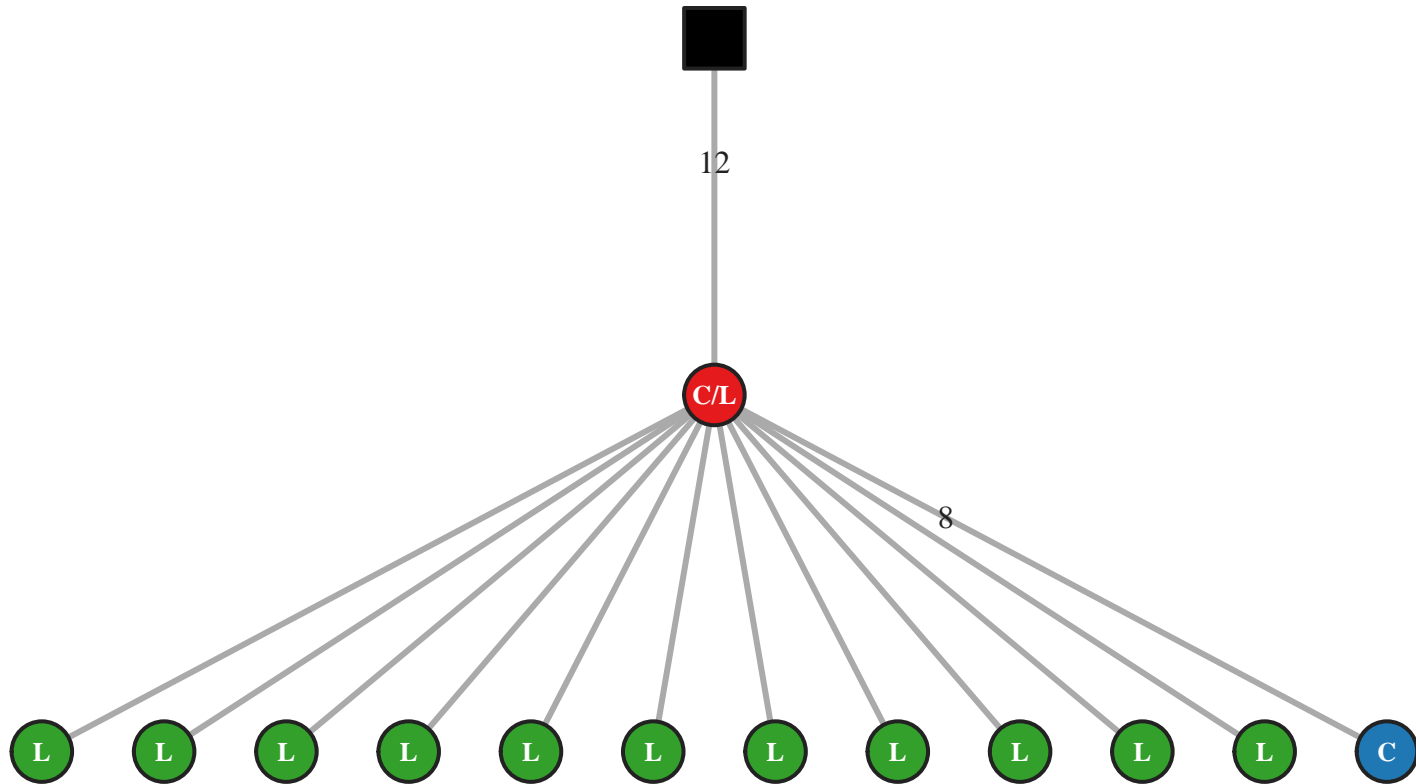
M5 IgG IGHV3-30/J6 69bp (44947)



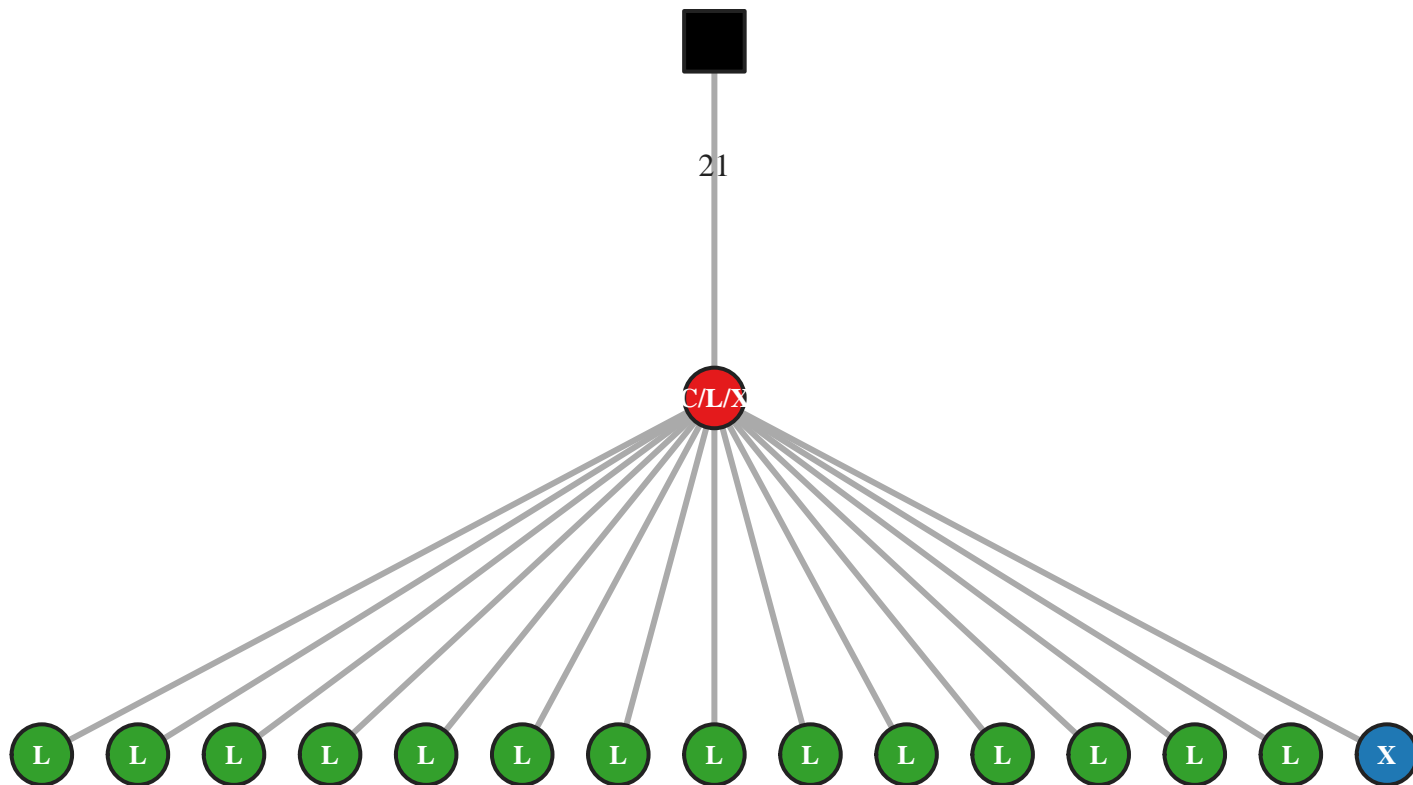
M5 IgG IGHV3-30/J6 72bp (7874)



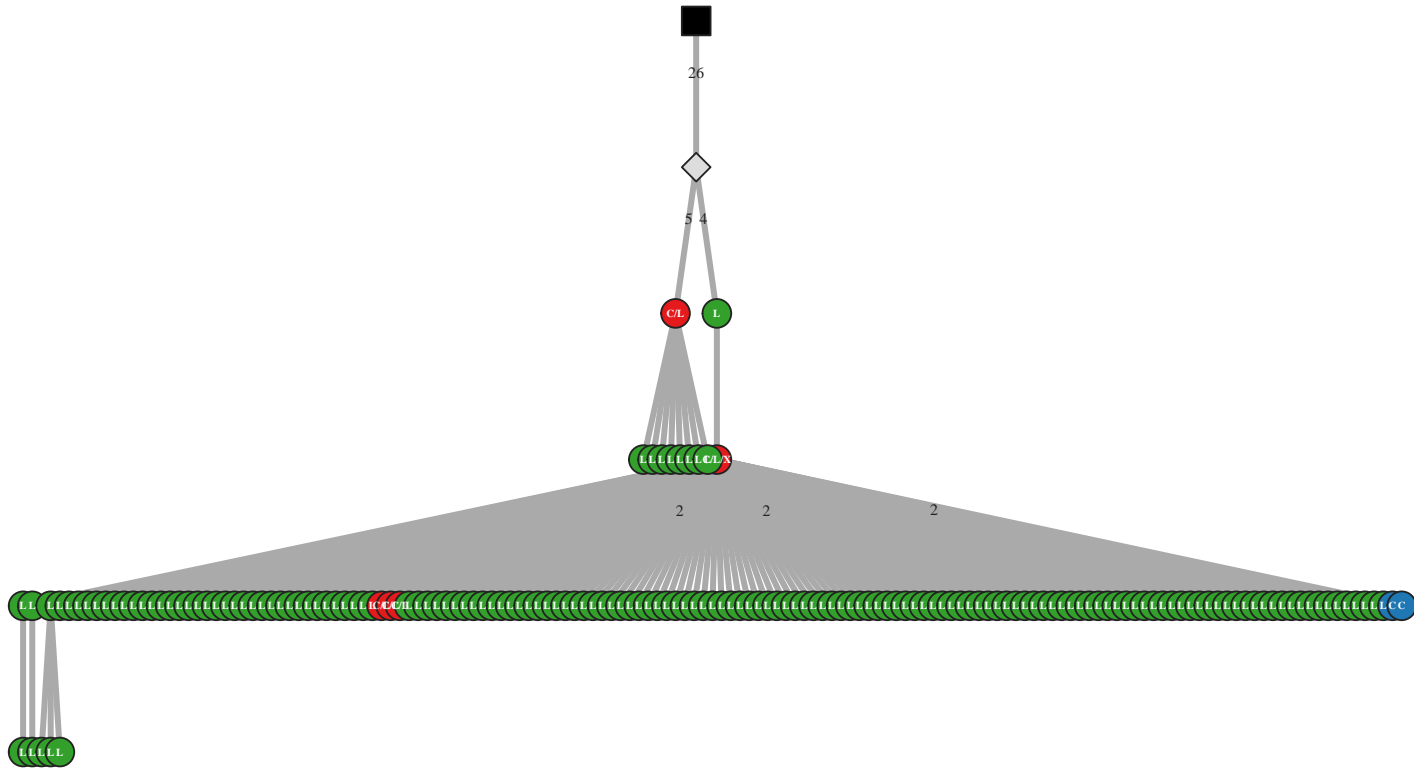
M5 IgG IGHV3-30/J6 72bp (7921)



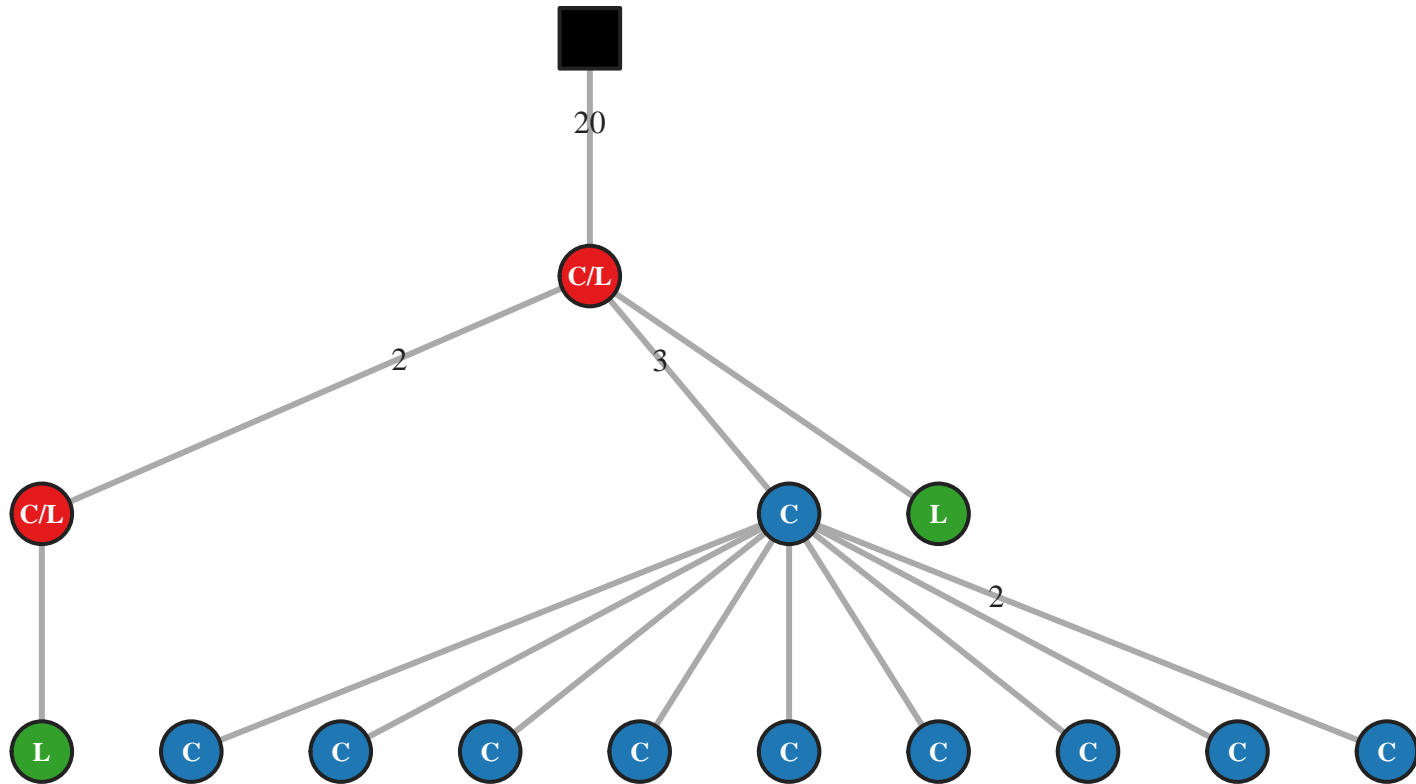
M5 IgG IGHV3-30/J6 72bp (7932)



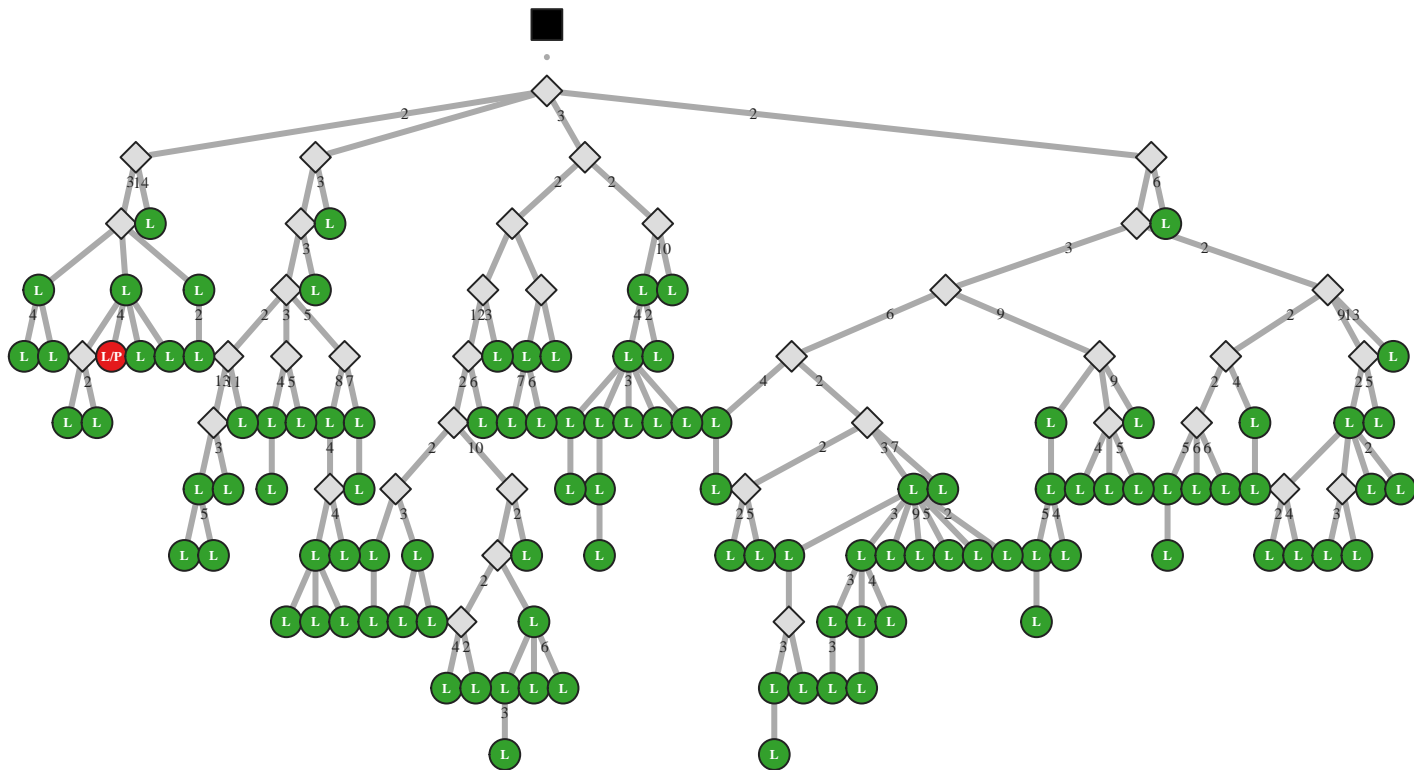
M5 IgG IGHV3-30-3/J1 36bp (44748)



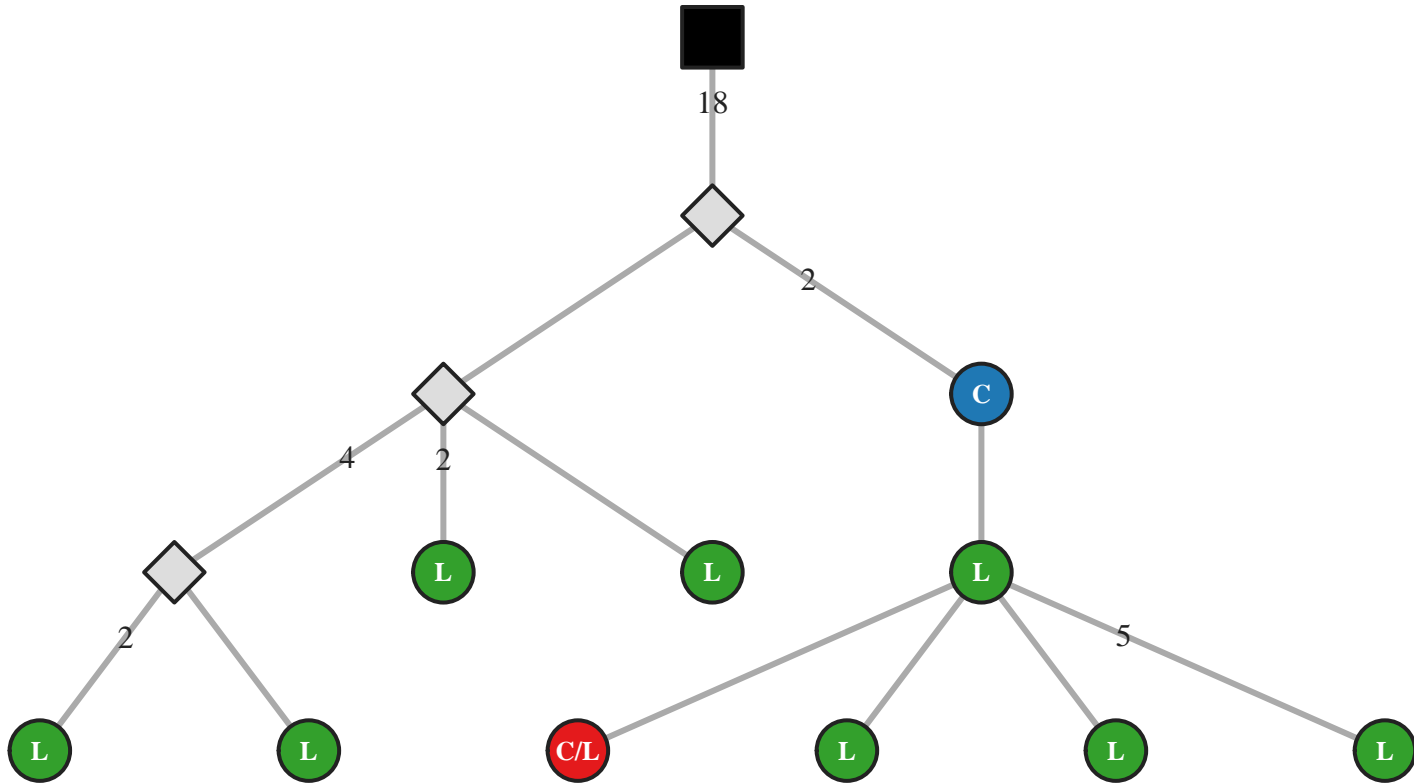
M5 IgG IGHV3-30-3/J1 51bp (51809)



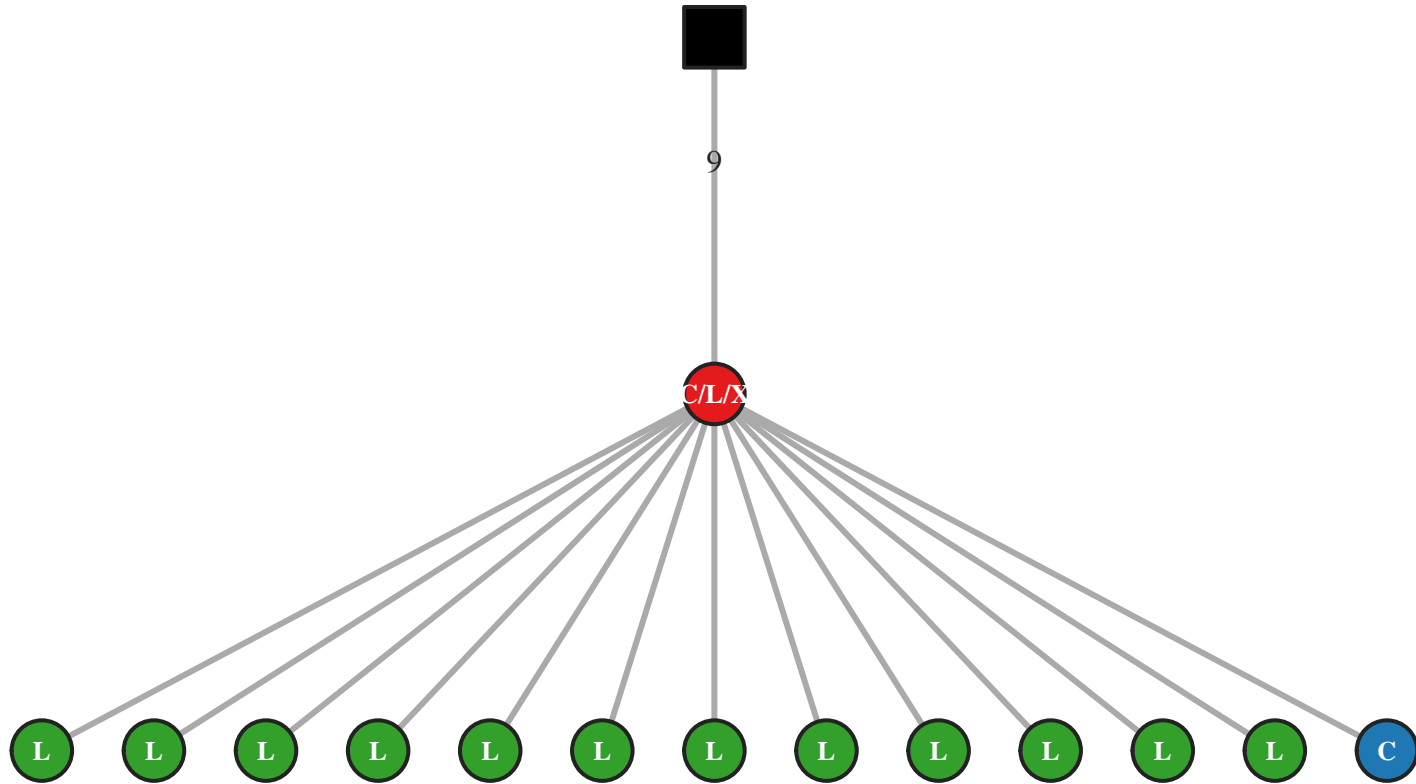
M5 IgG IGHV3-30-3/J2 39bp (26338)



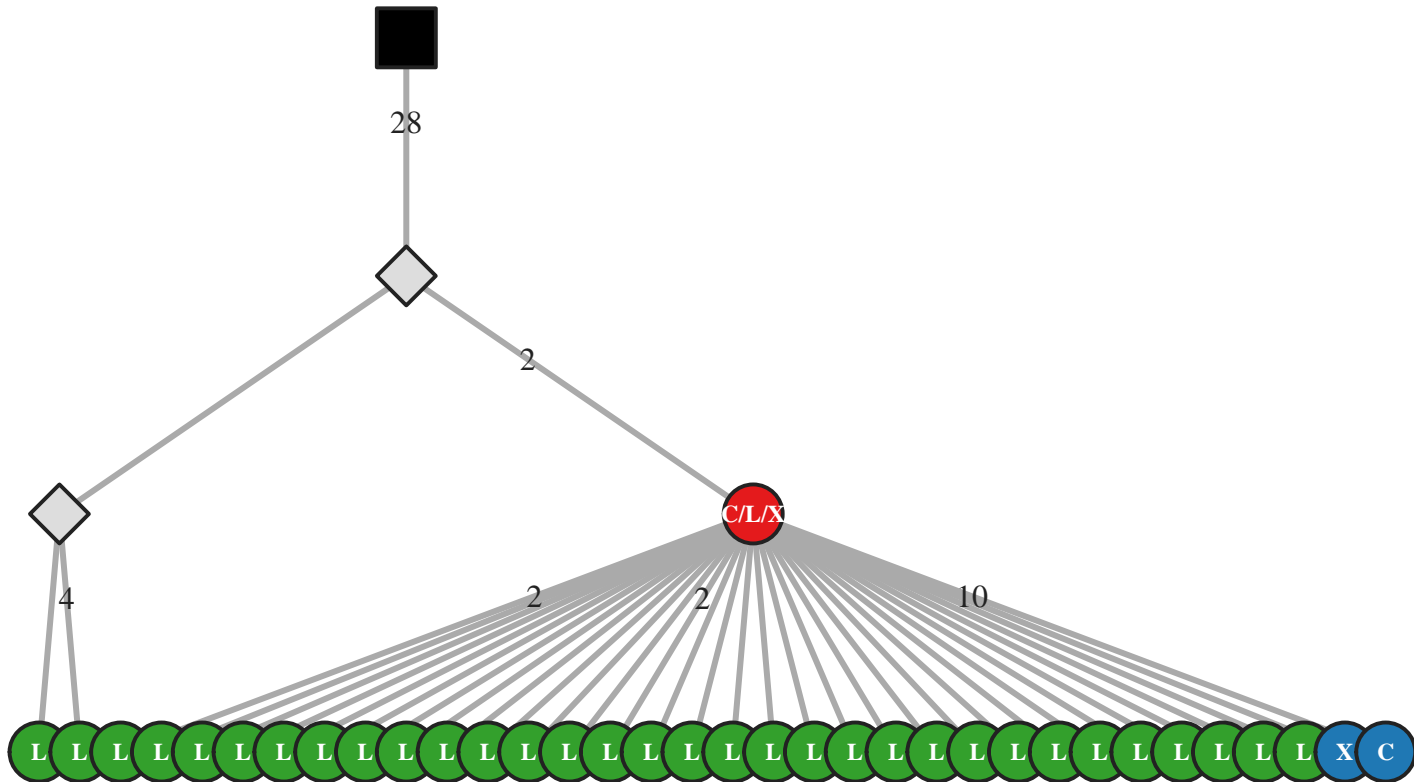
M5 IgG IGHV3-30-3/J2 45bp (17567)



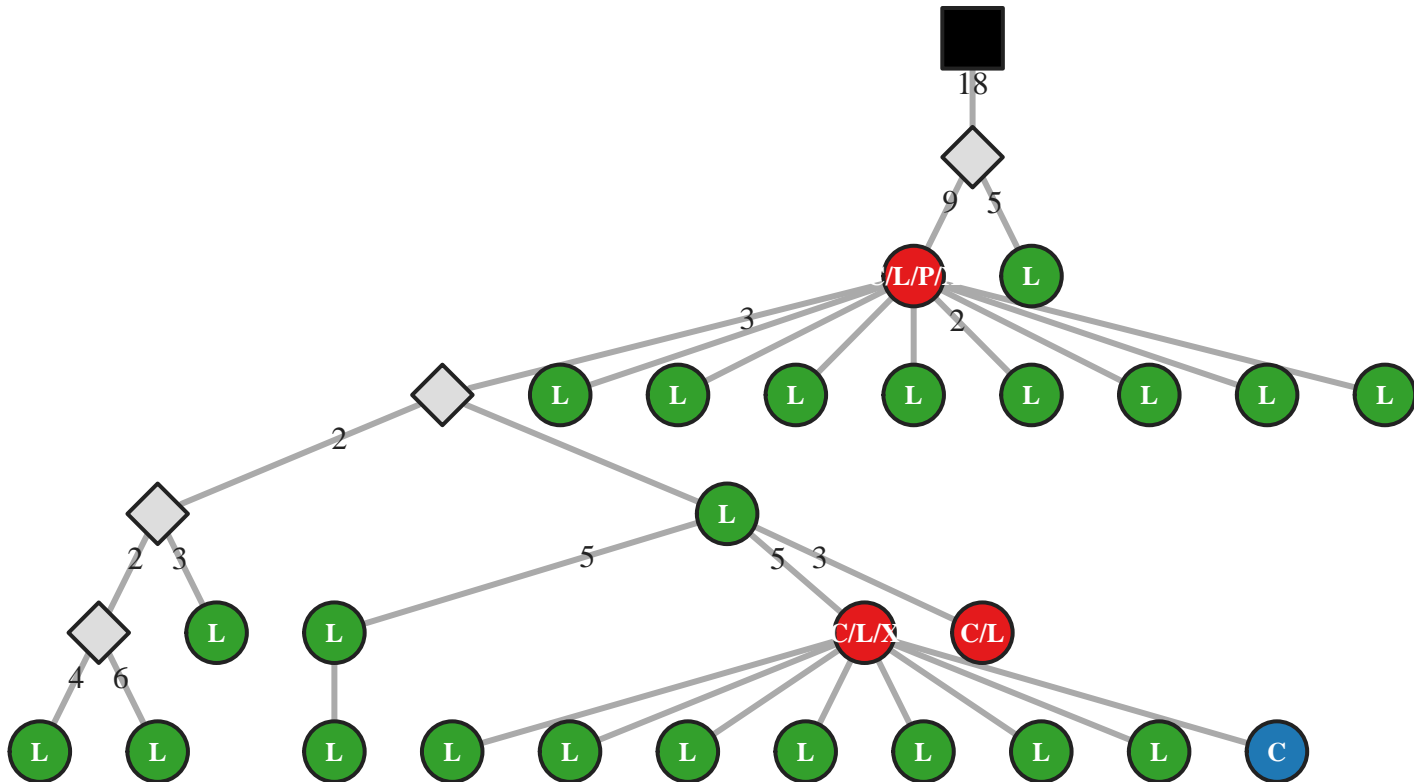
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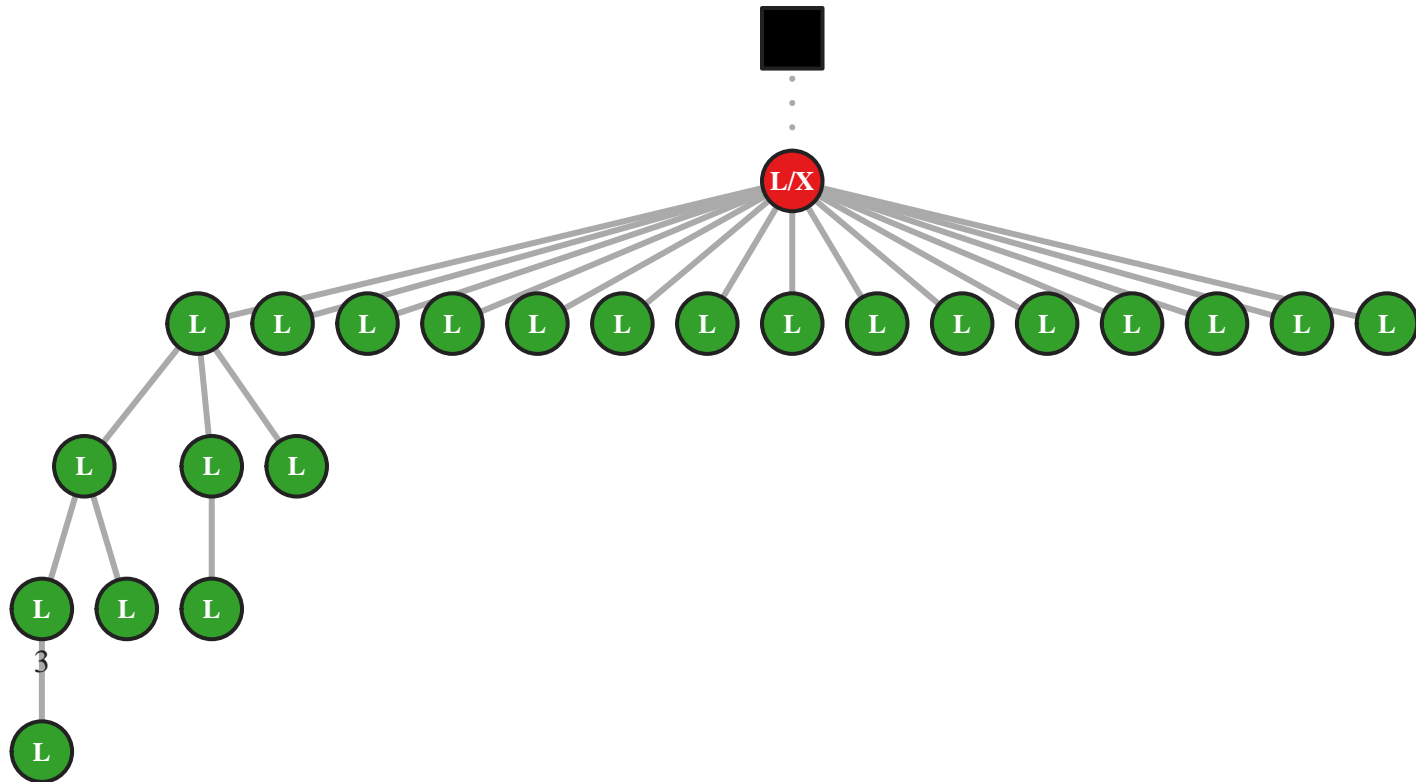
M5 IgG IGHV3-30-3/J3 48bp (7041)



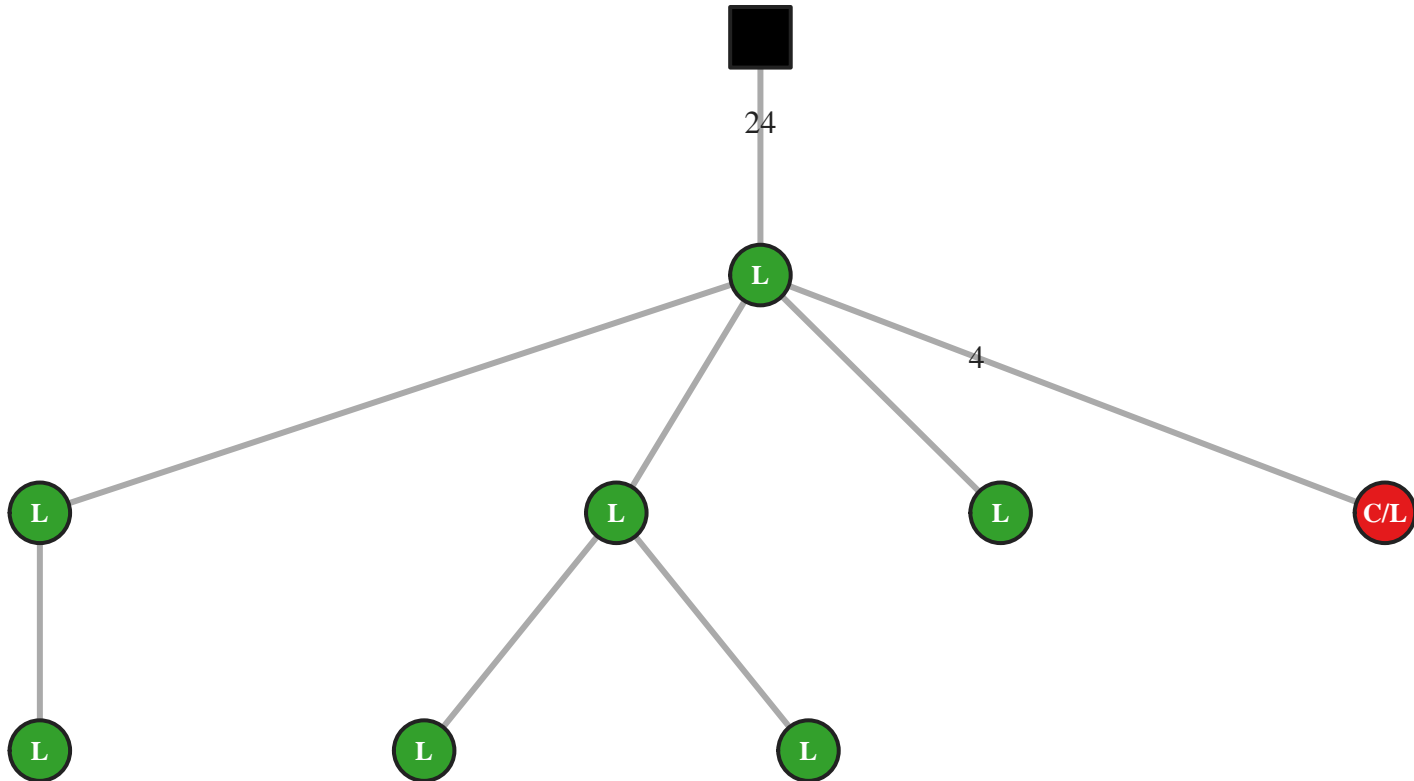
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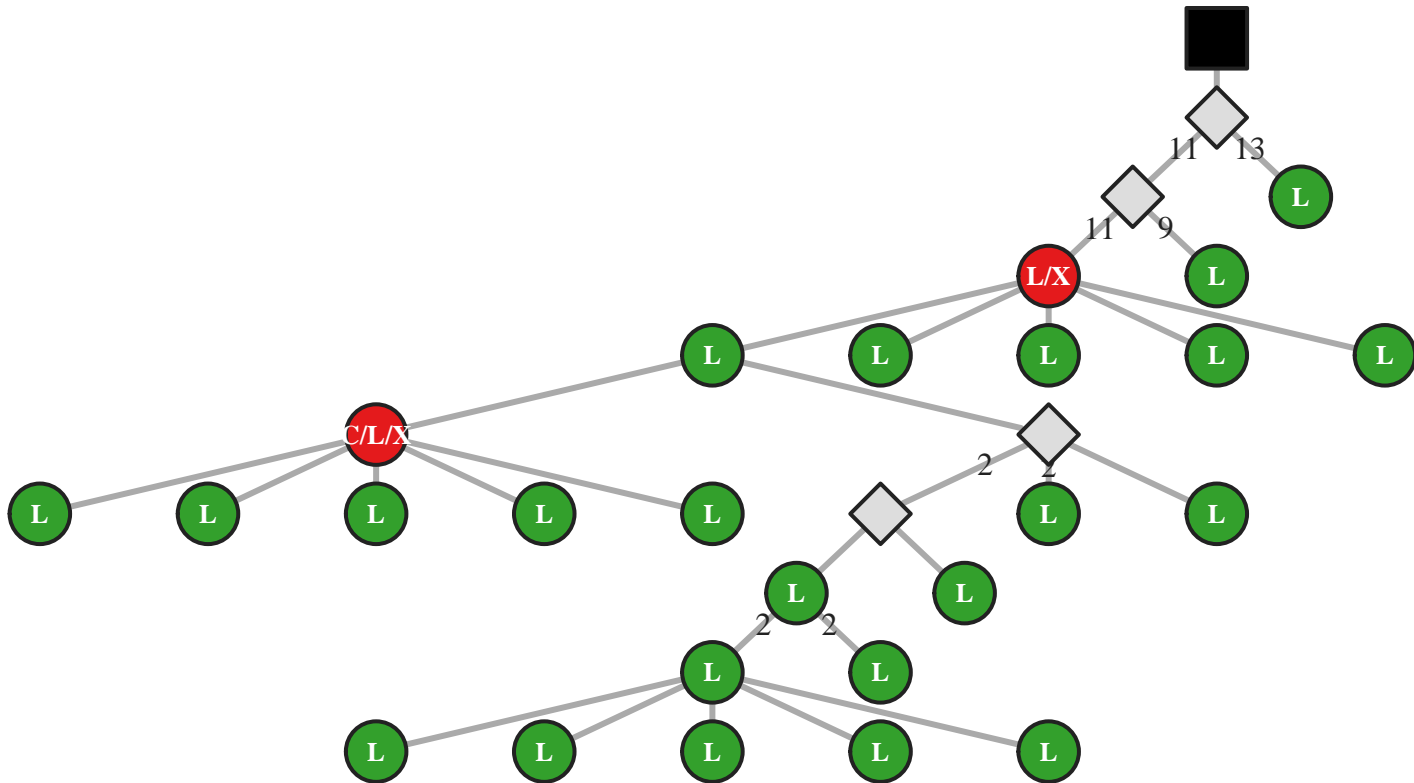
M5 IgG IGHV3-30-3/J3 54bp (51833)



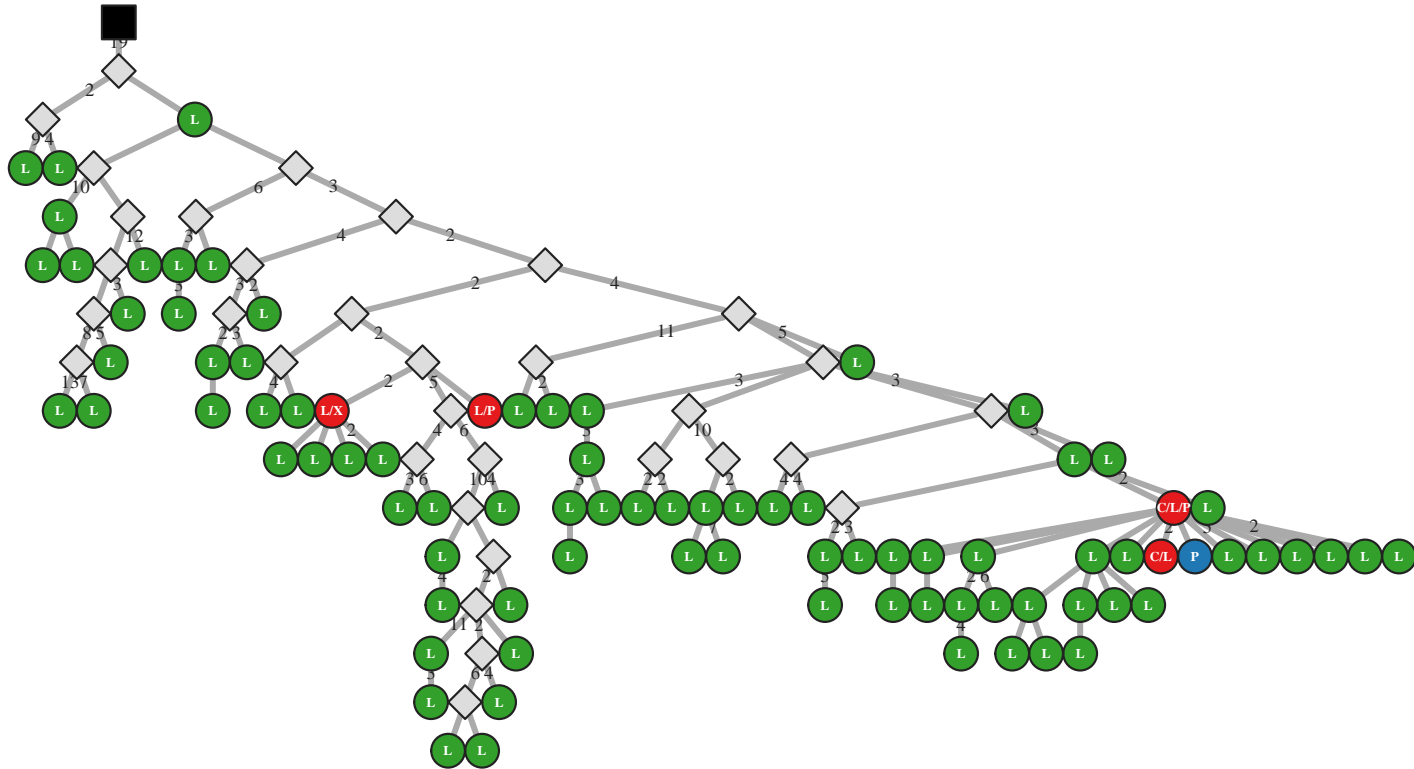
M5 IgG IGHV3-30-3/J3 60bp (34849)



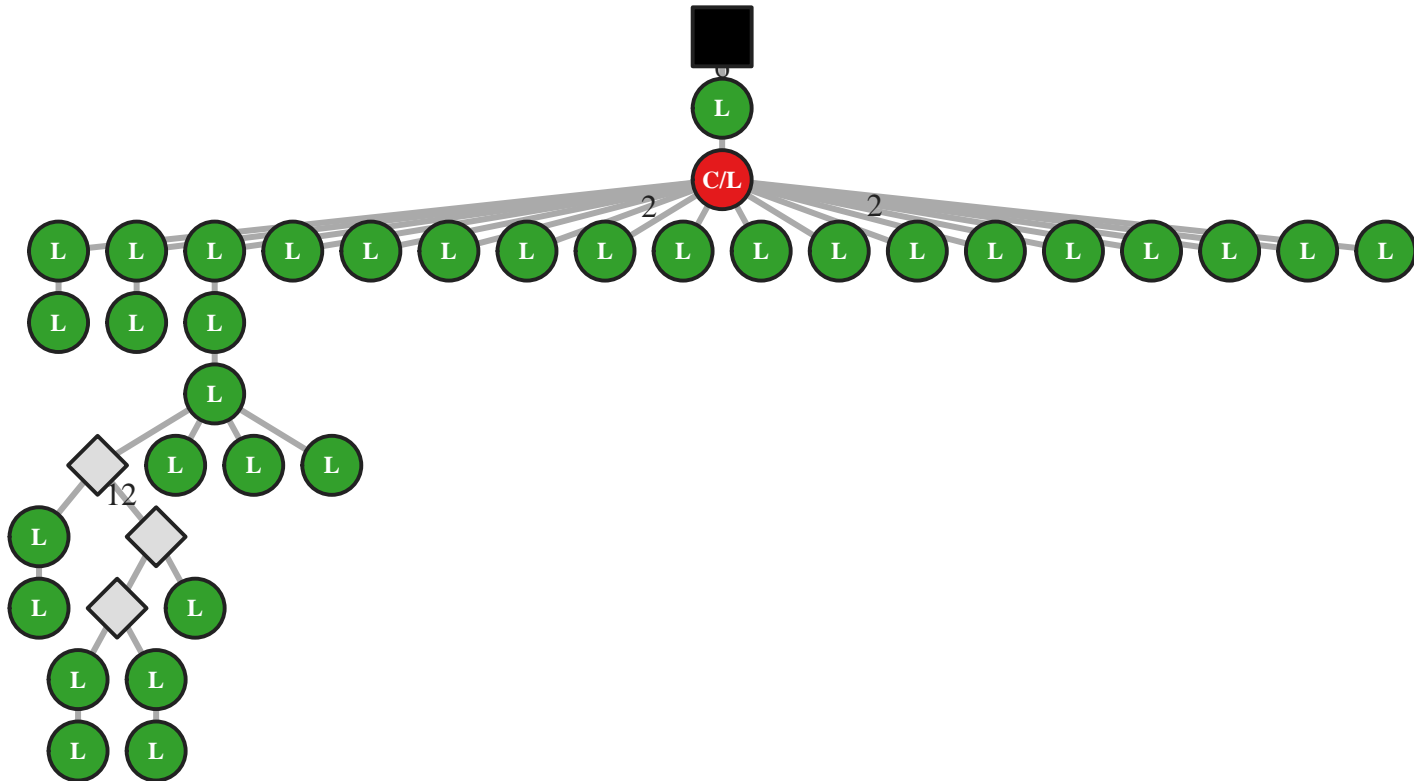
M5 IgG IGHV3-30-3/J4 24bp (51804)



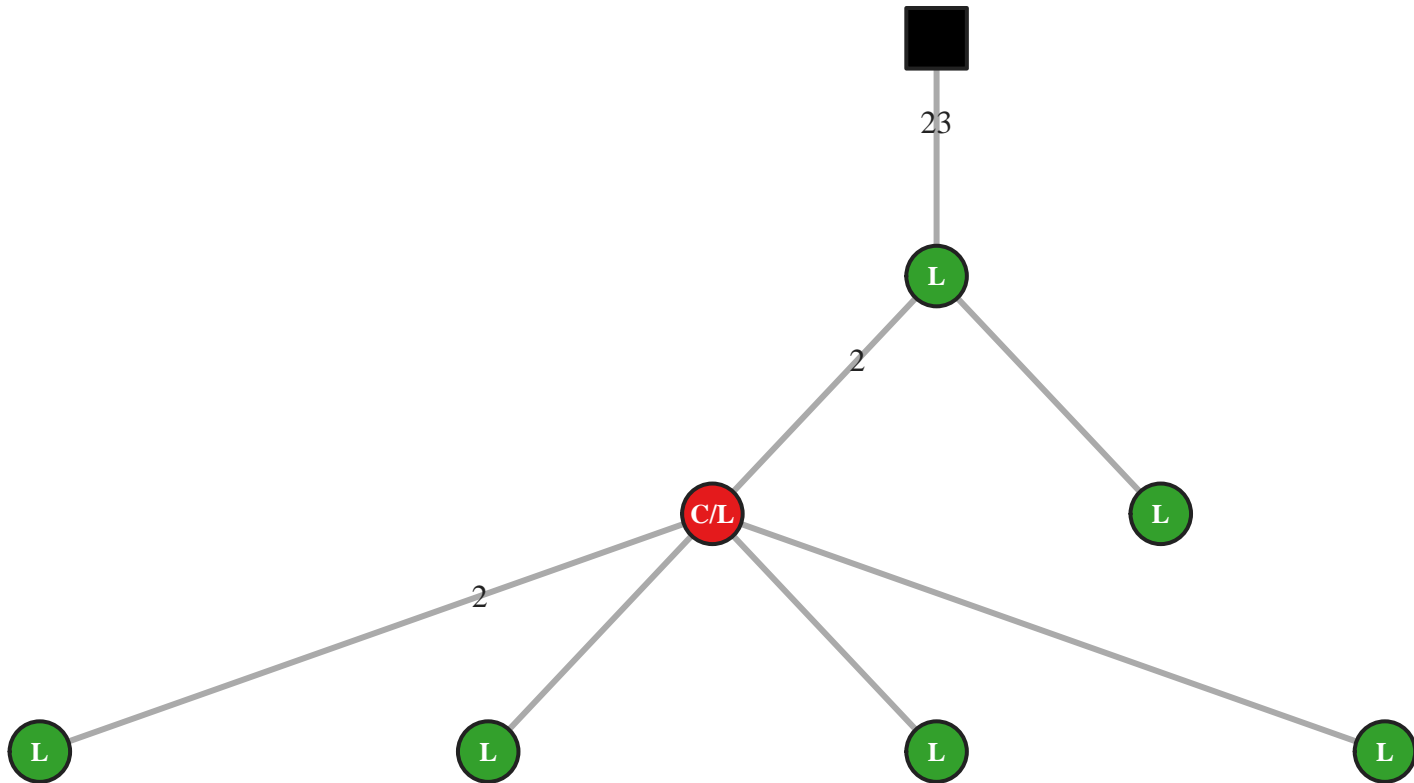
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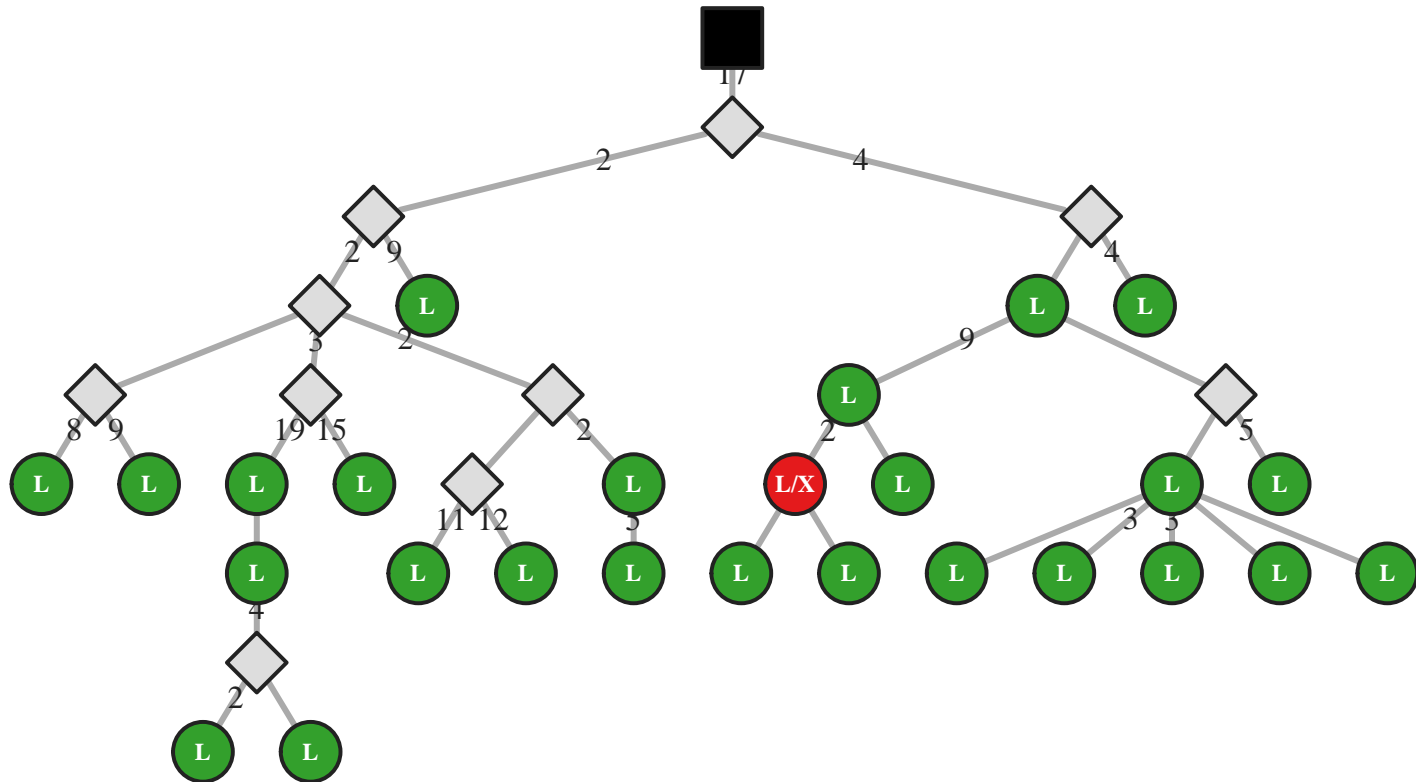
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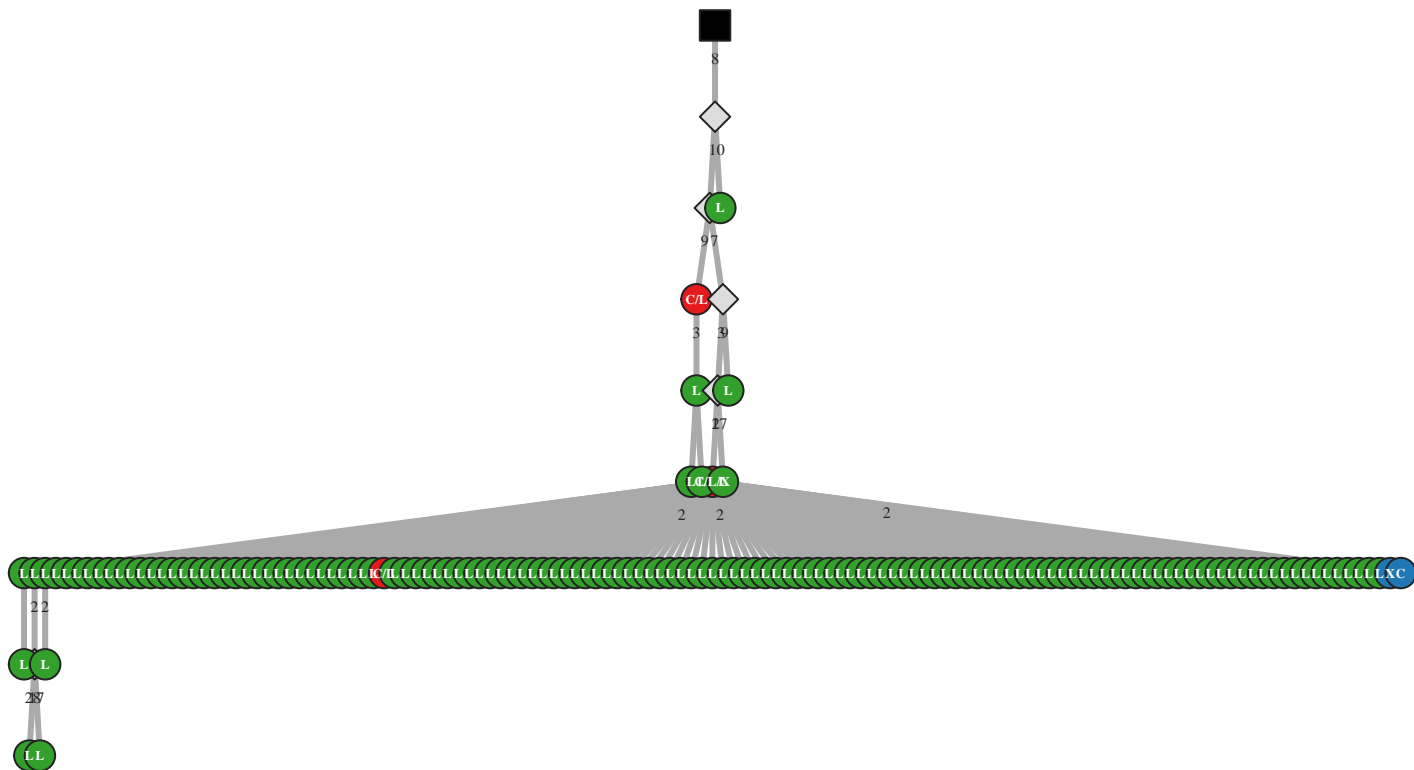
M5 IgA IGHV3-30-3/J4 33bp (2712)



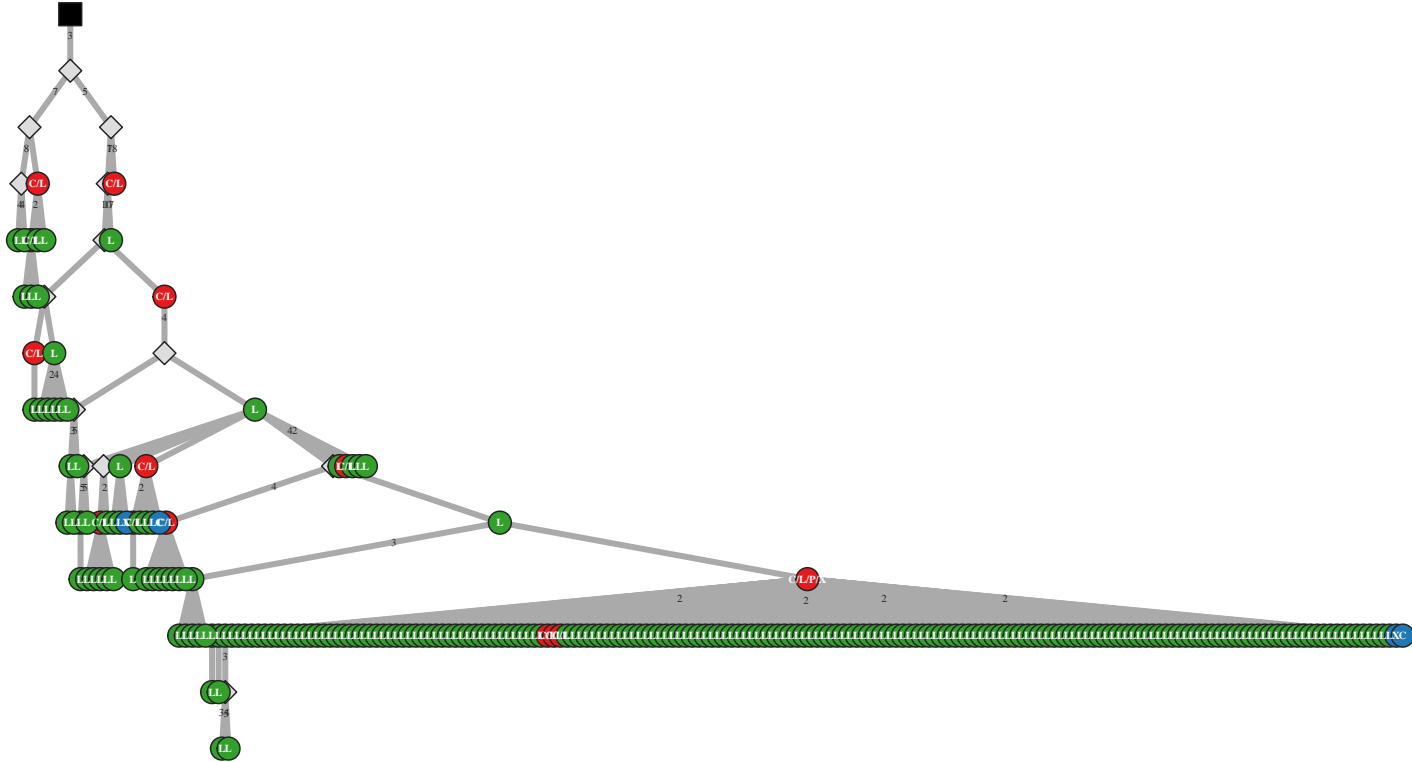
M5 IgG IGHV3-30-3/J4 33bp (7725)



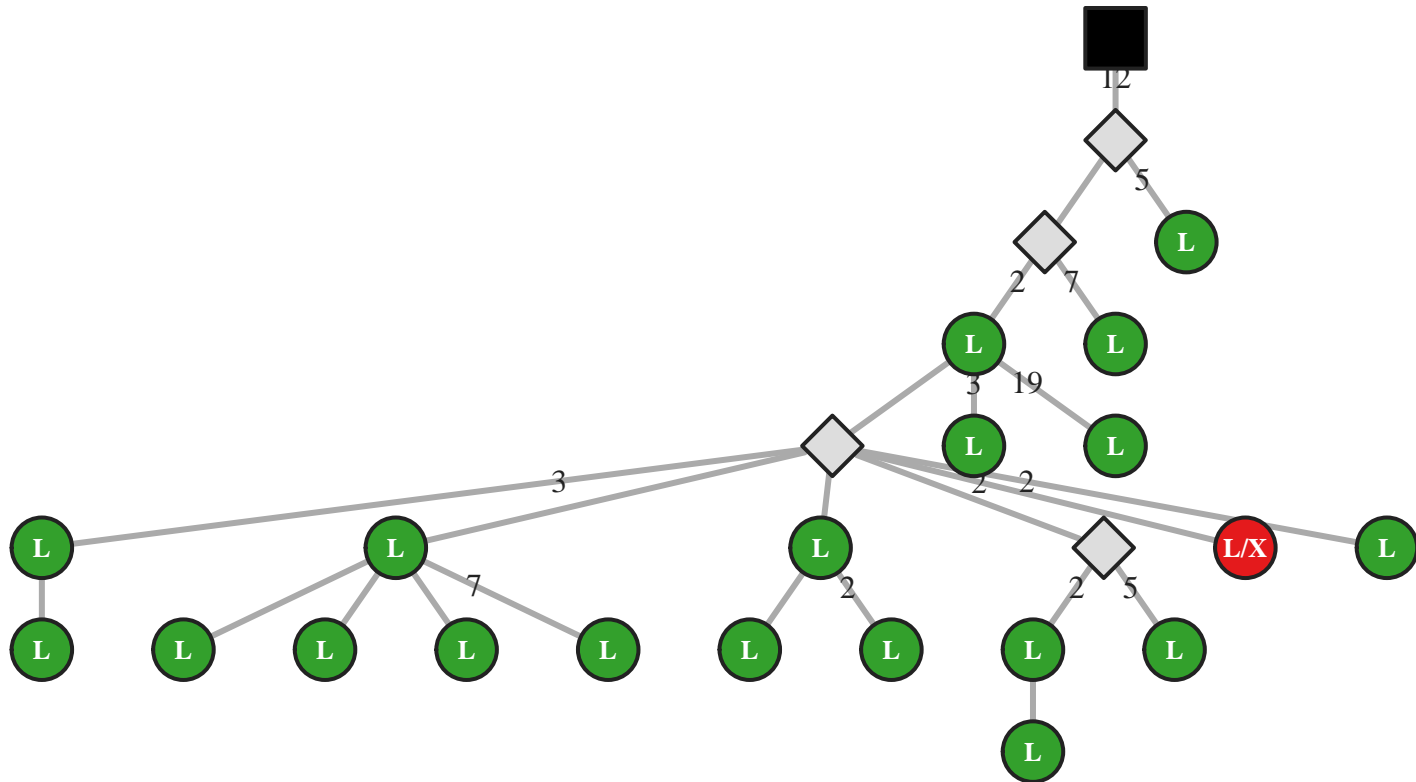
M5 IgG IGHV3-30-3/J4 33bp (7729)



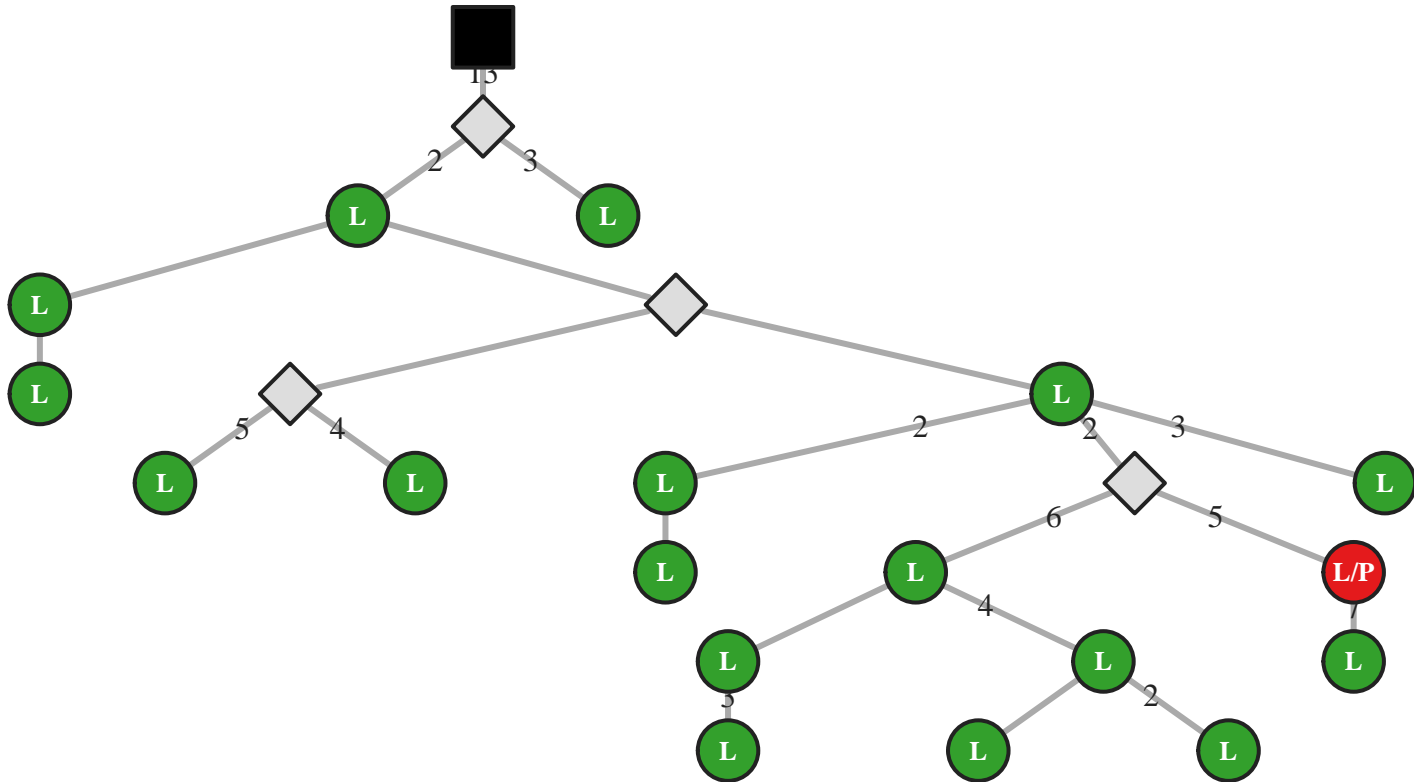
M5 IgG IGHV3-30-3/J4 39bp (7115)



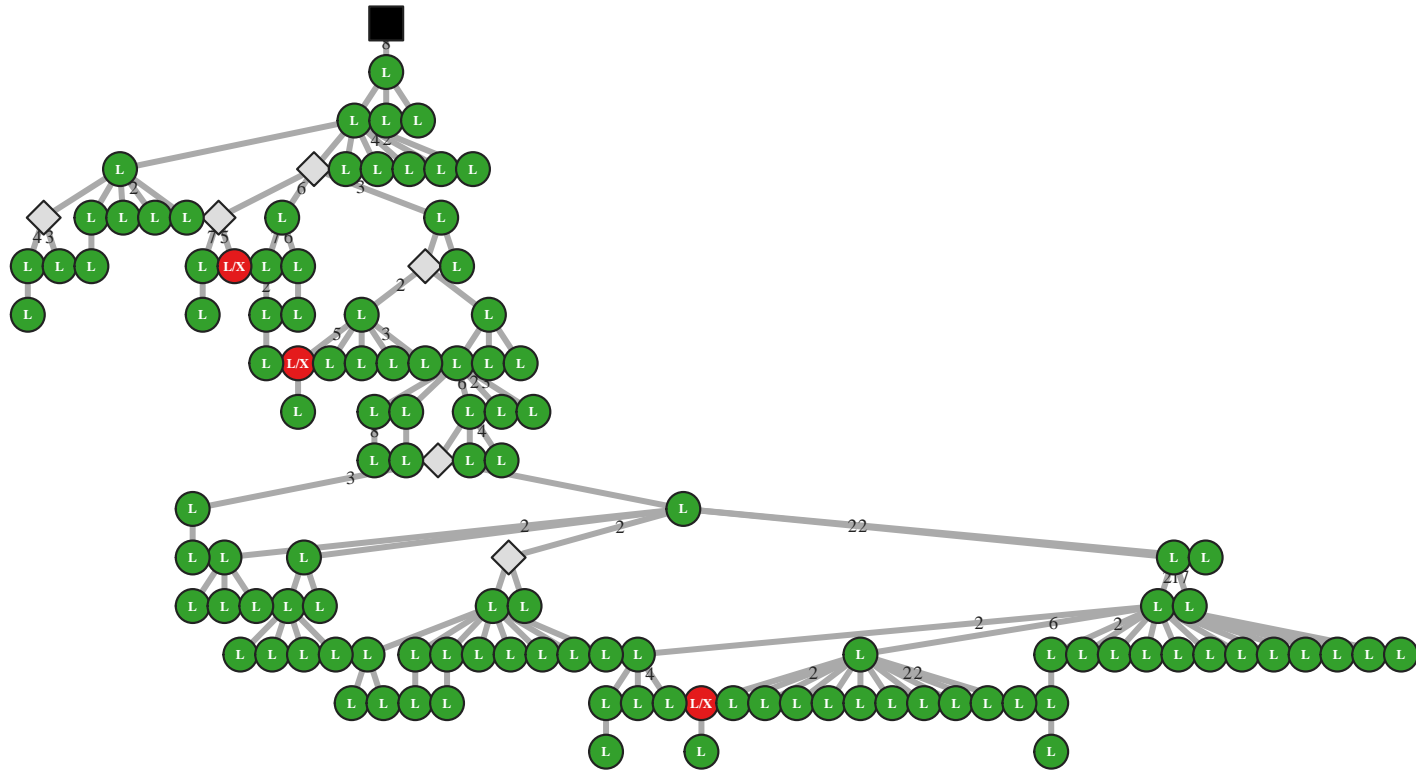
M5 IgG IGHV3-30-3/J4 39bp (7170)



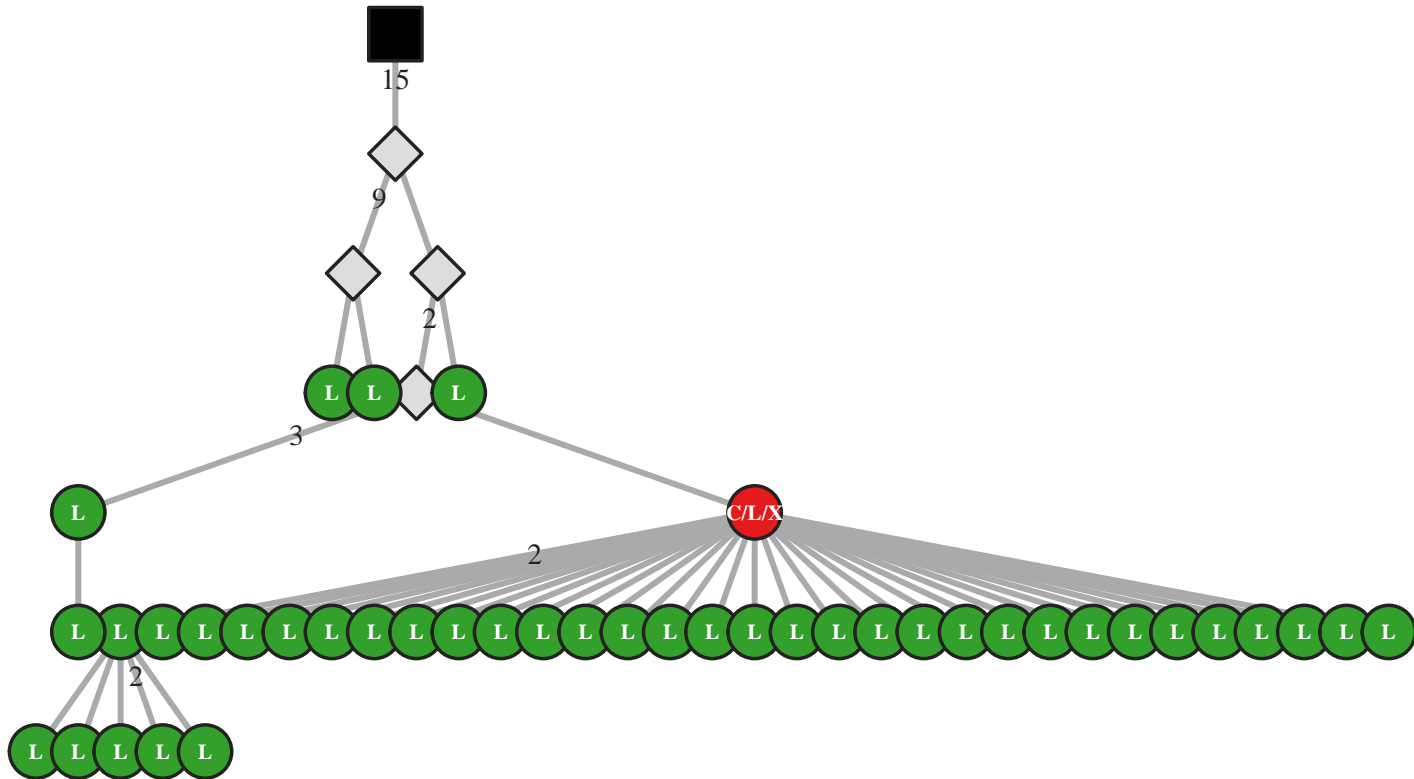
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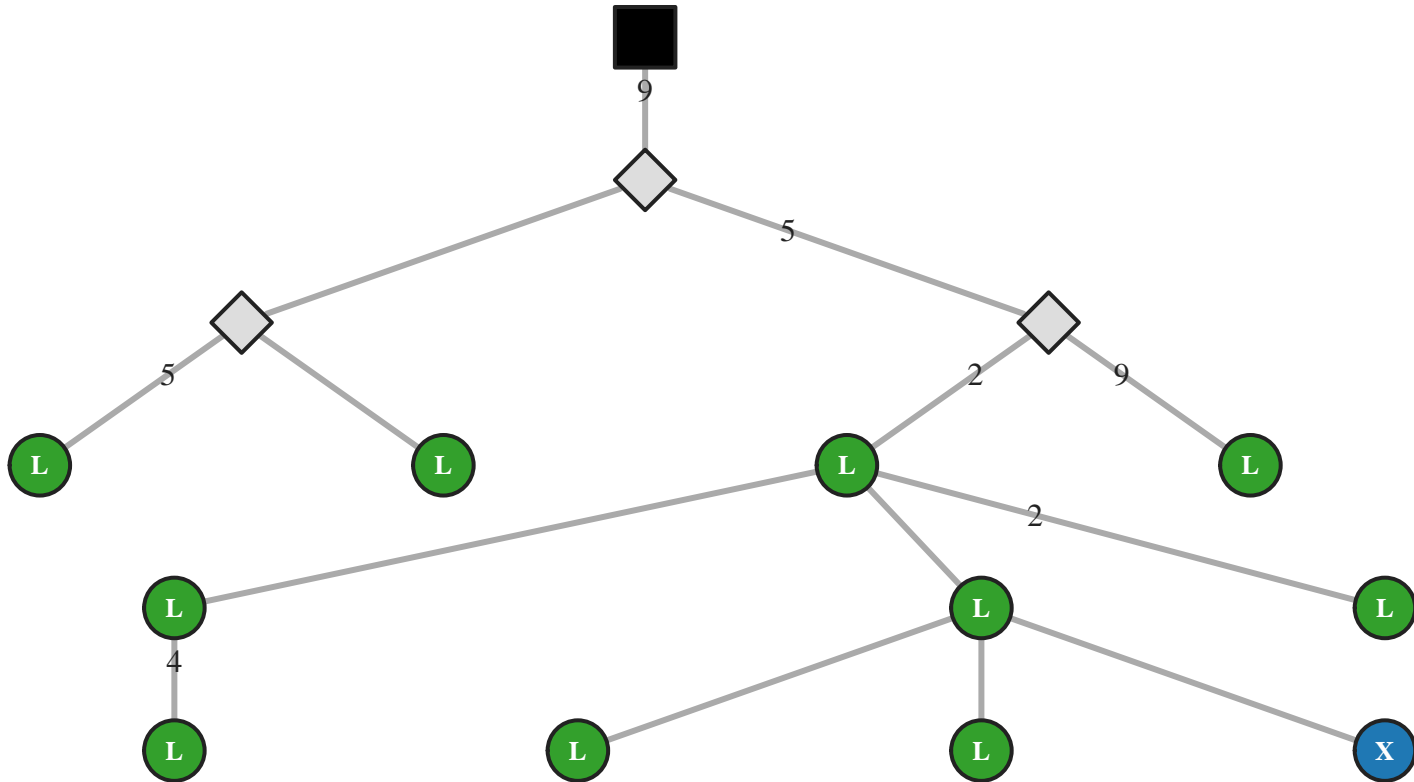
M5 IgG IGHV3-30-3/J4 39bp (7267)



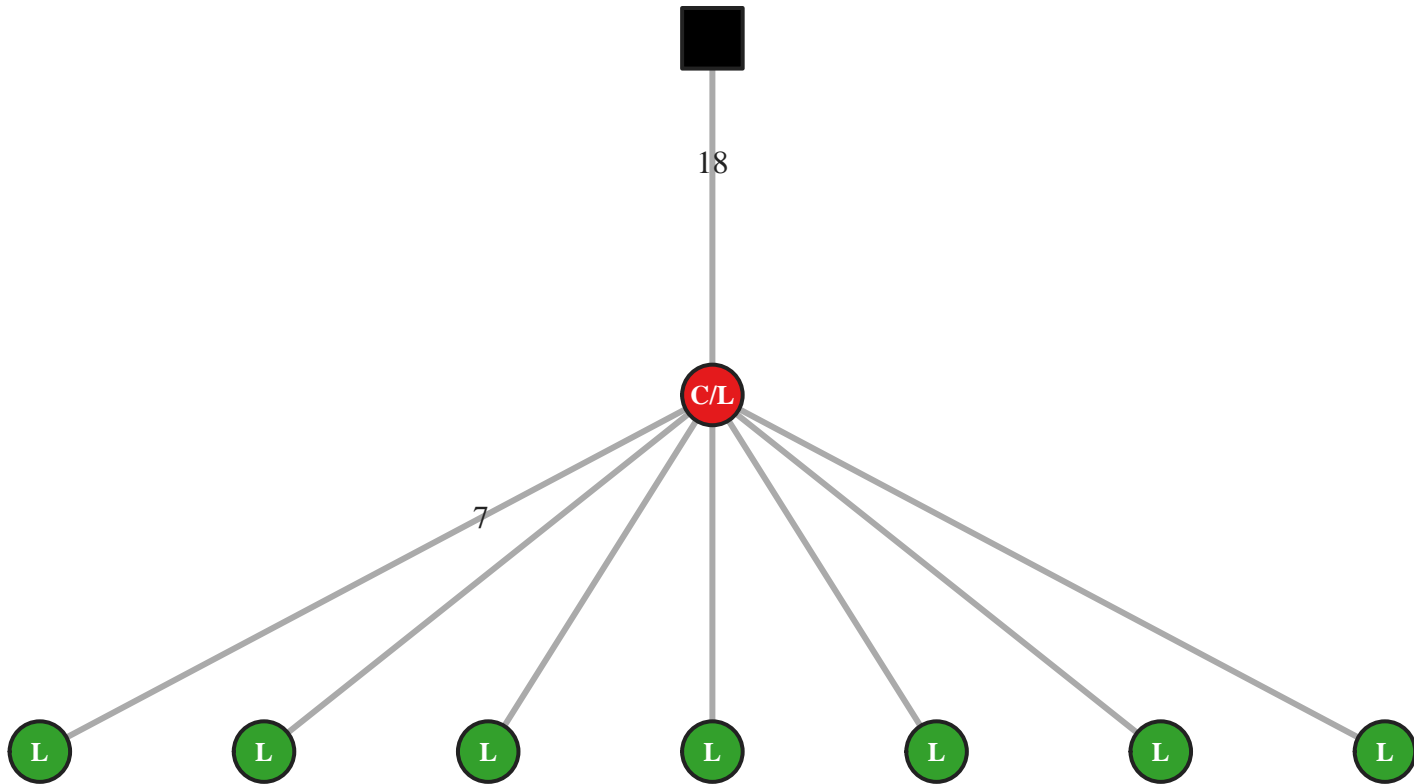
M5 IgG IGHV3-30-3/J4 39bp (7274)



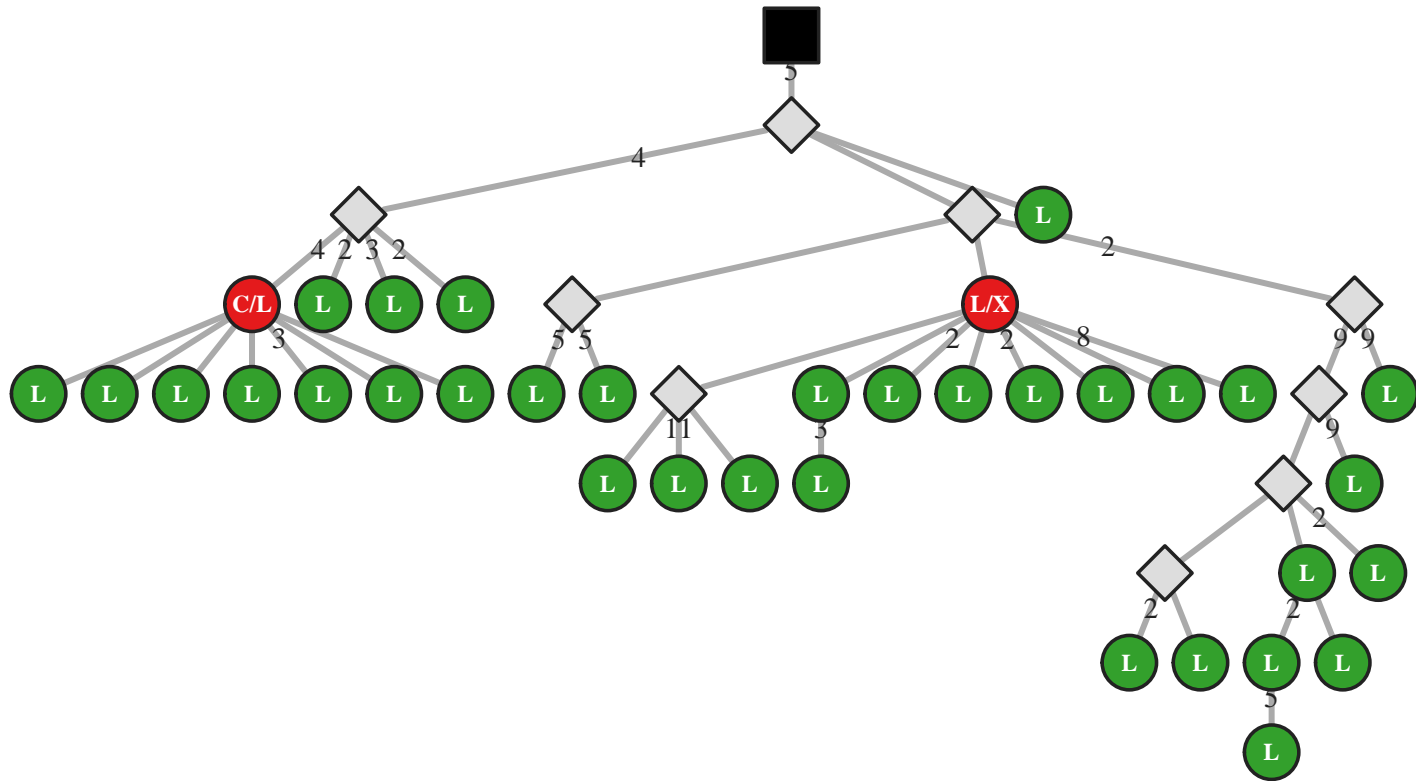
M5 IgG IGHV3-30-3/J4 39bp (7276)



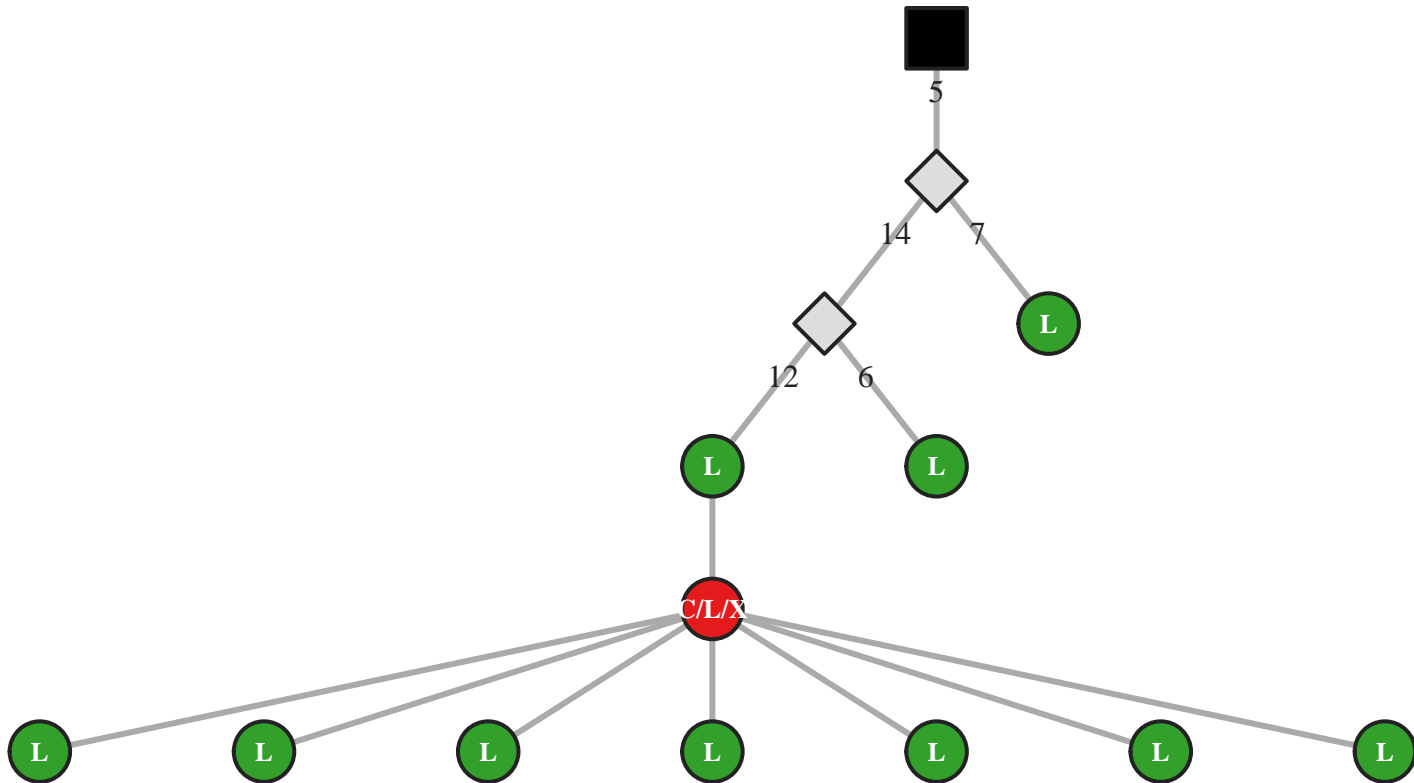
M5 IgG IGHV3-30-3/J4 42bp (44012)



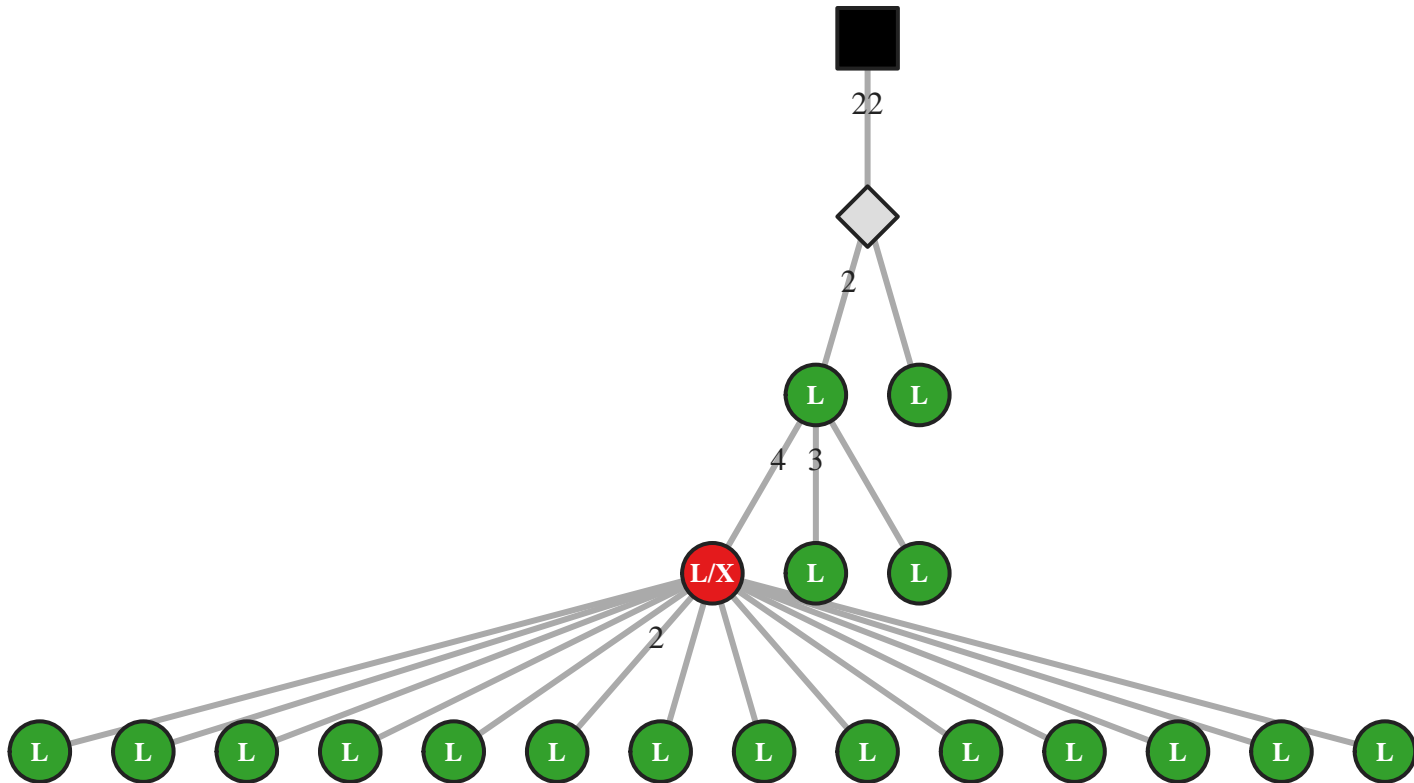
M5 IgA IGHV3-30-3/J4 45bp (2747)



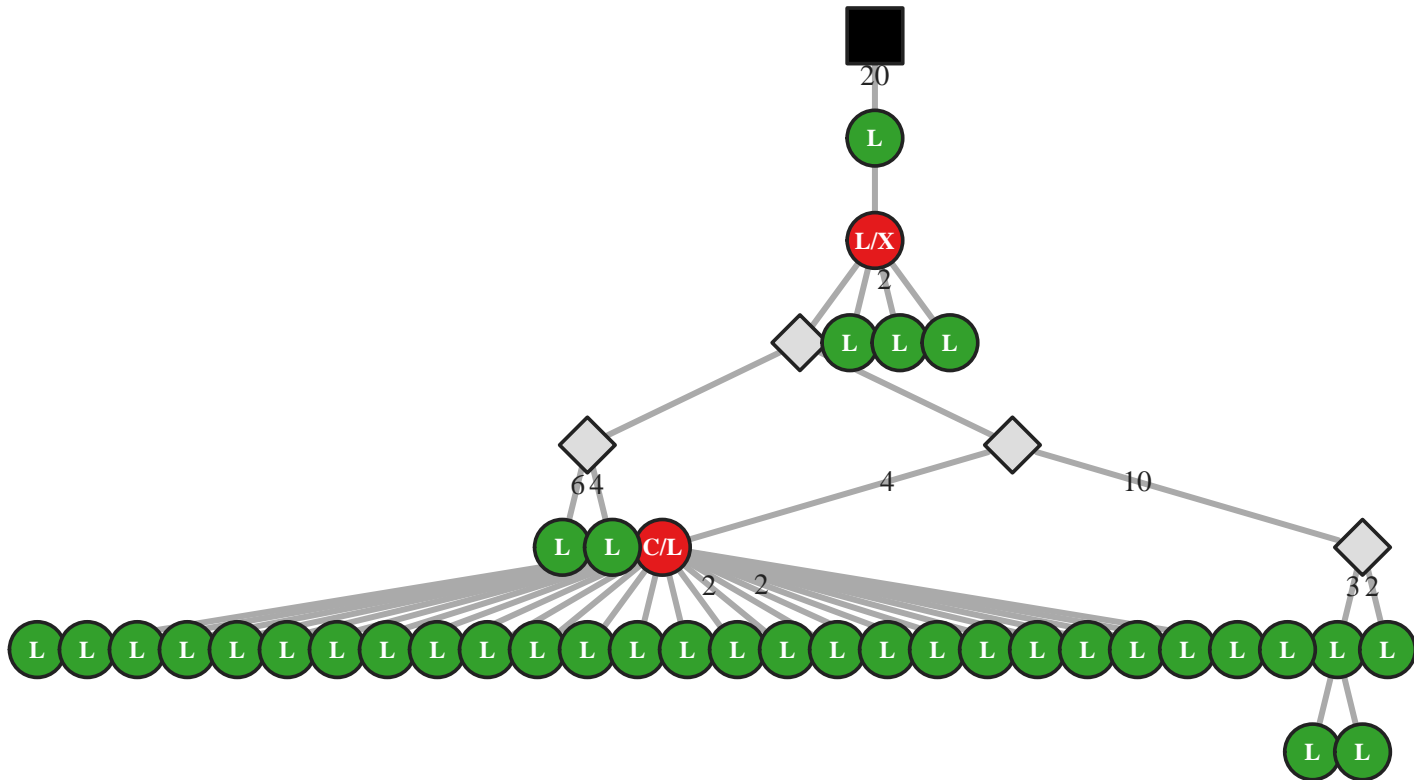
M5 IgG IGHV3-30-3/J4 48bp (7399)



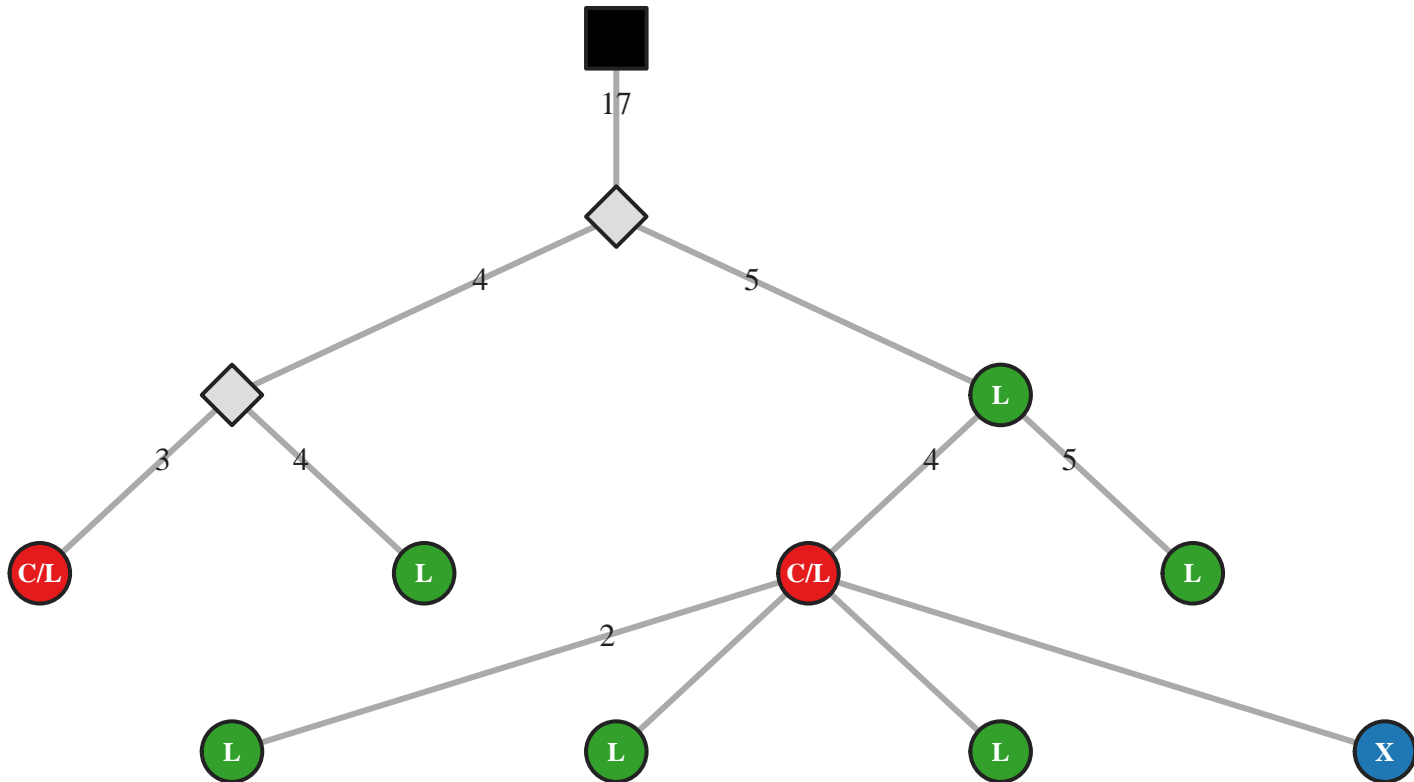
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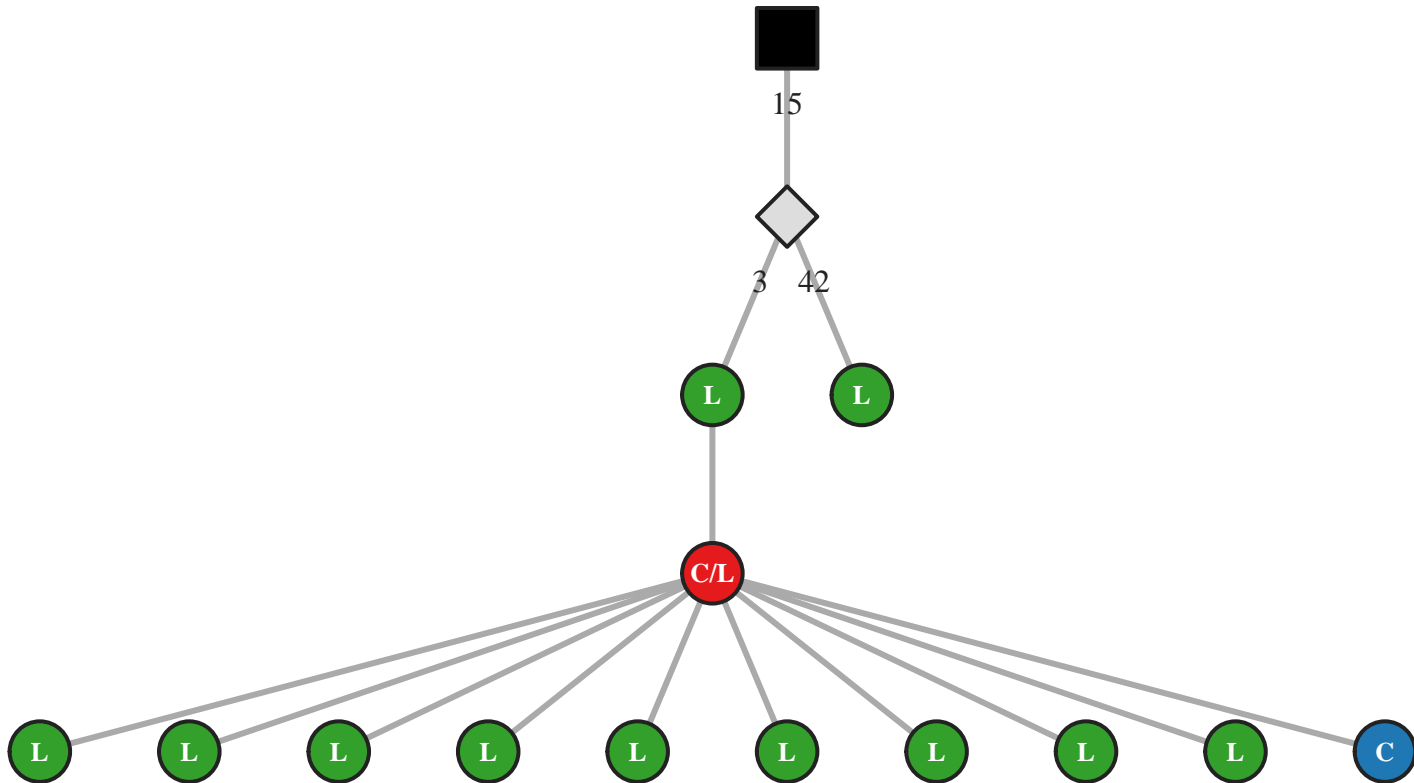
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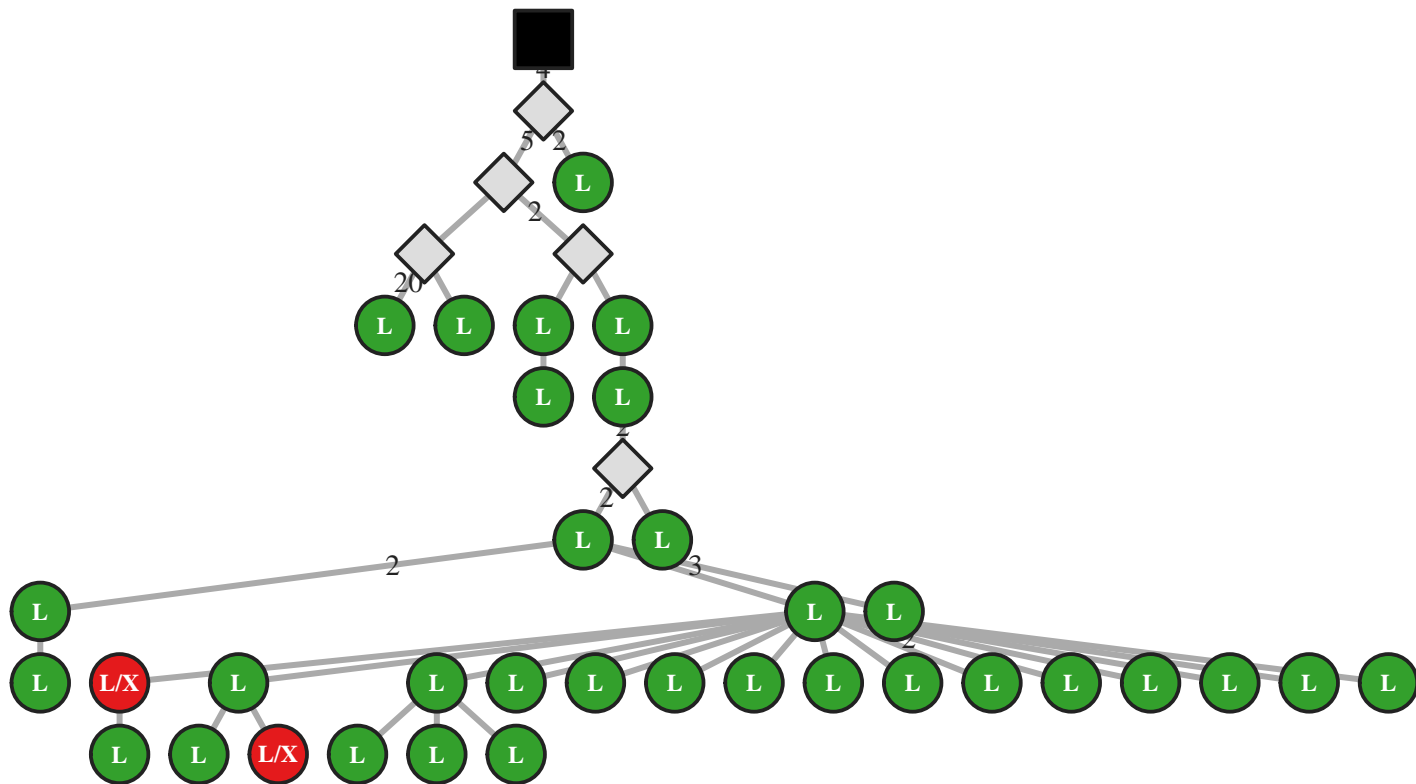
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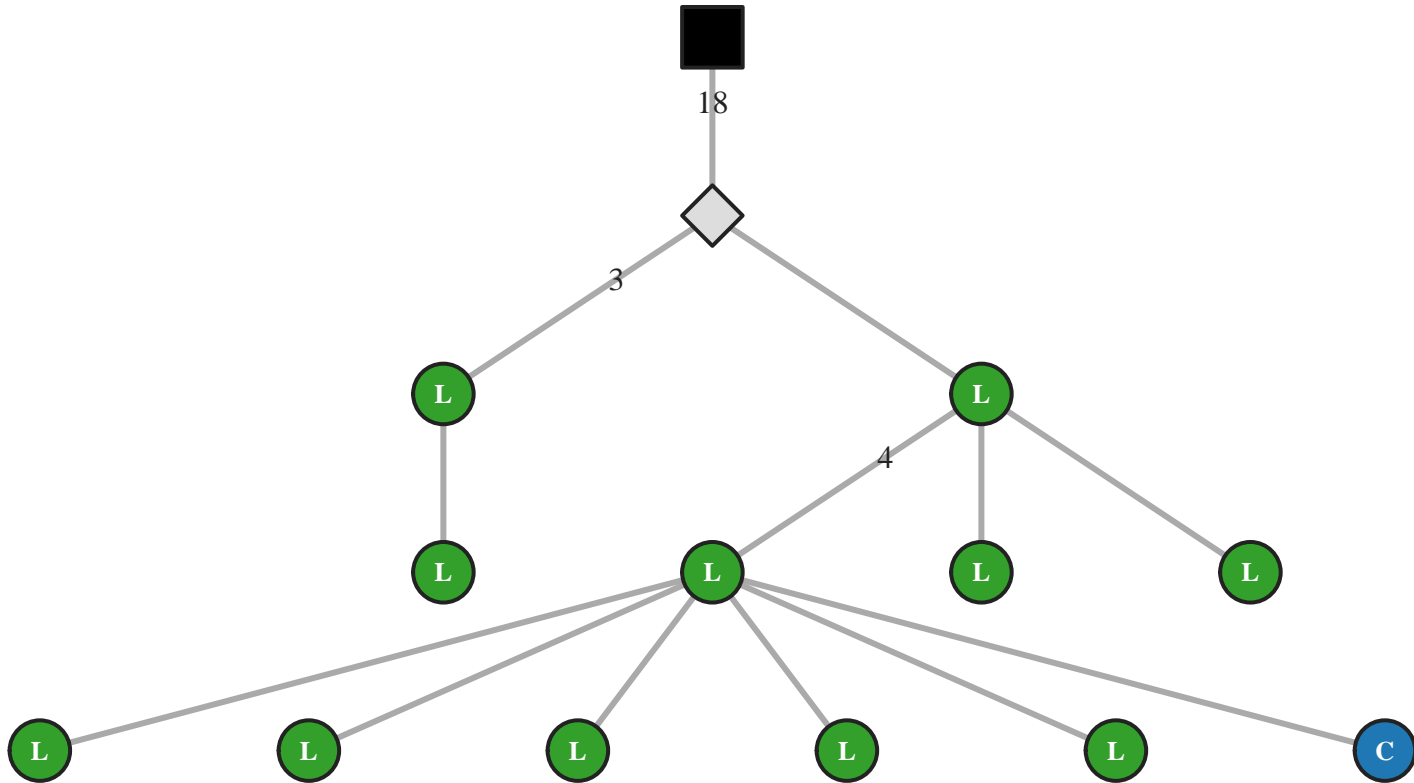
M5 IgG IGHV3-30-3/J4 51bp (44169)



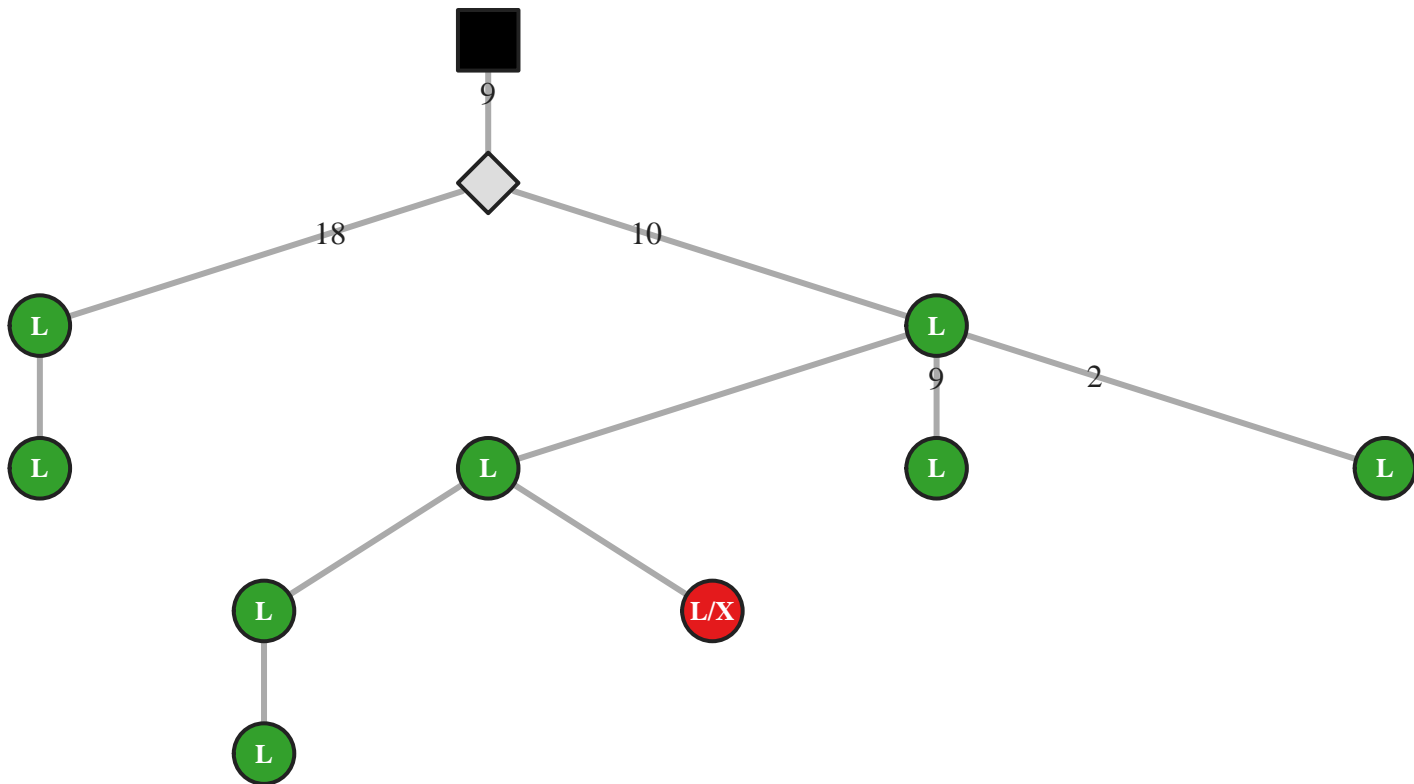
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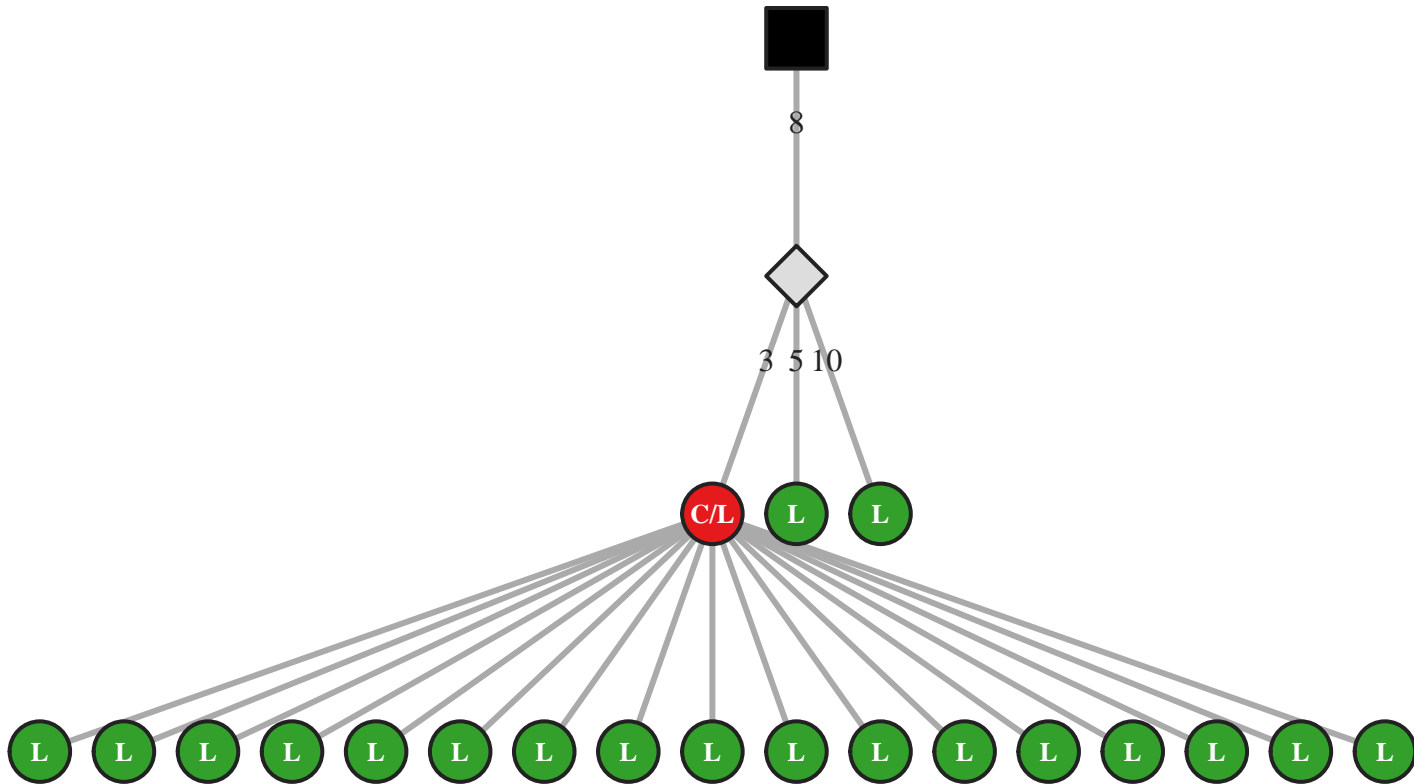
M5 IgG IGHV3-30-3/J4 54bp (34469)



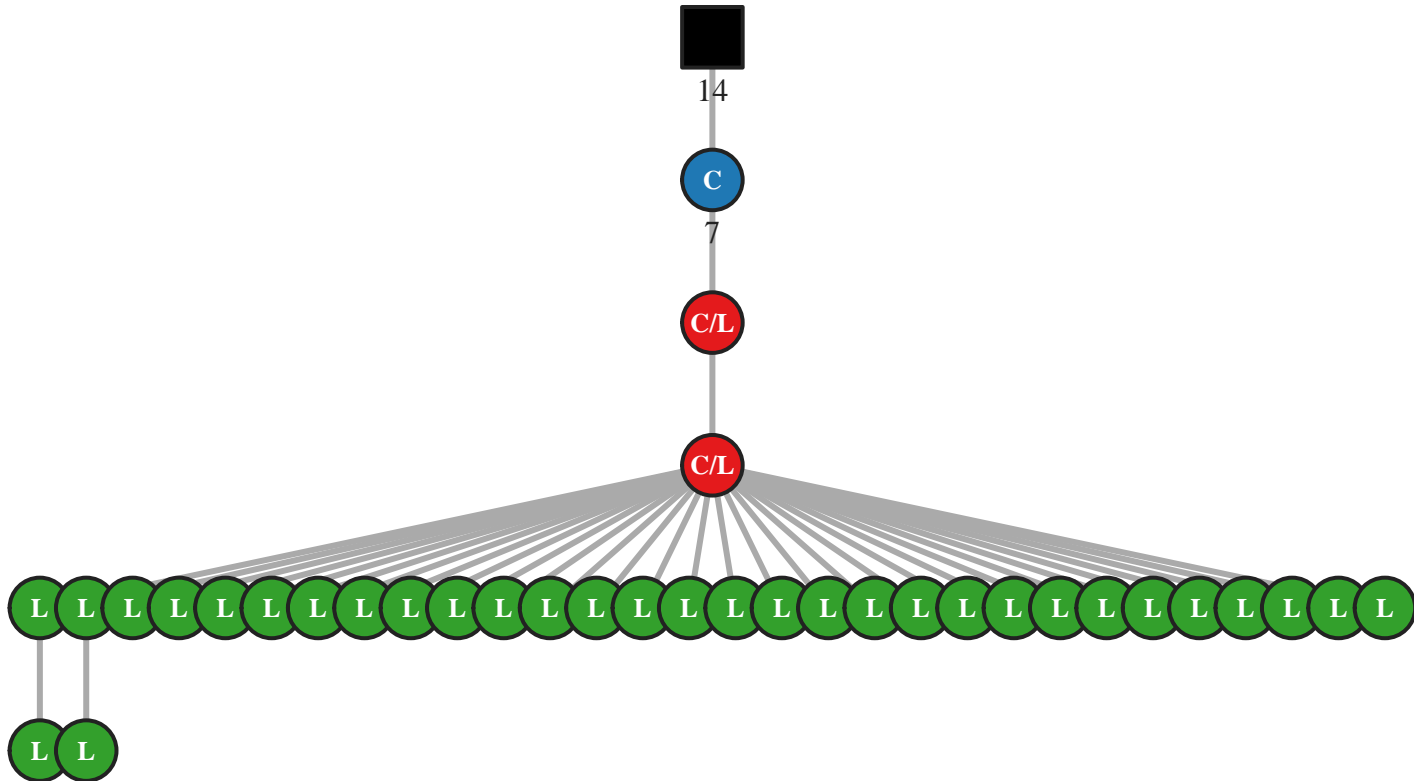
M5 IgG IGHV3-30-3/J4 54bp (34485)



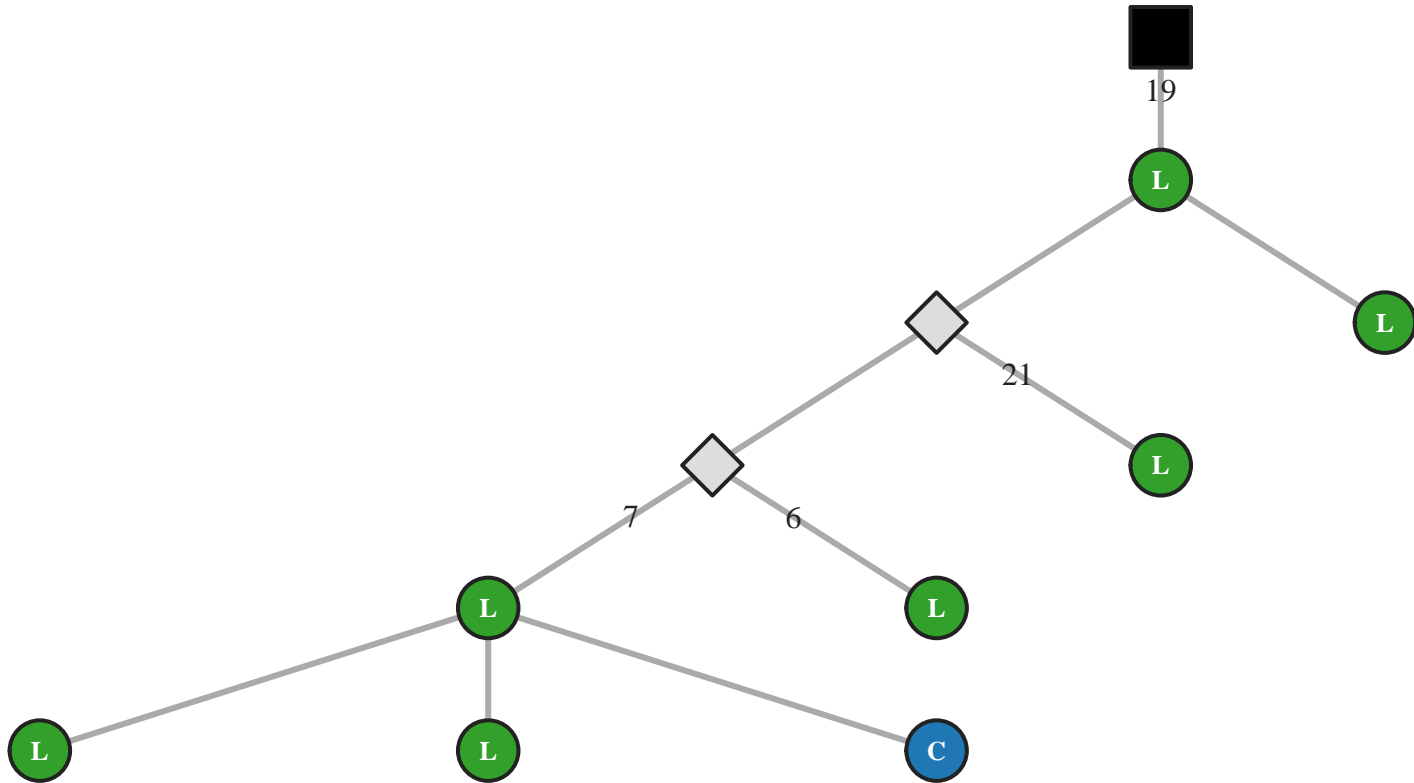
M5 IgG IGHV3-30-3/J4 54bp (34502)



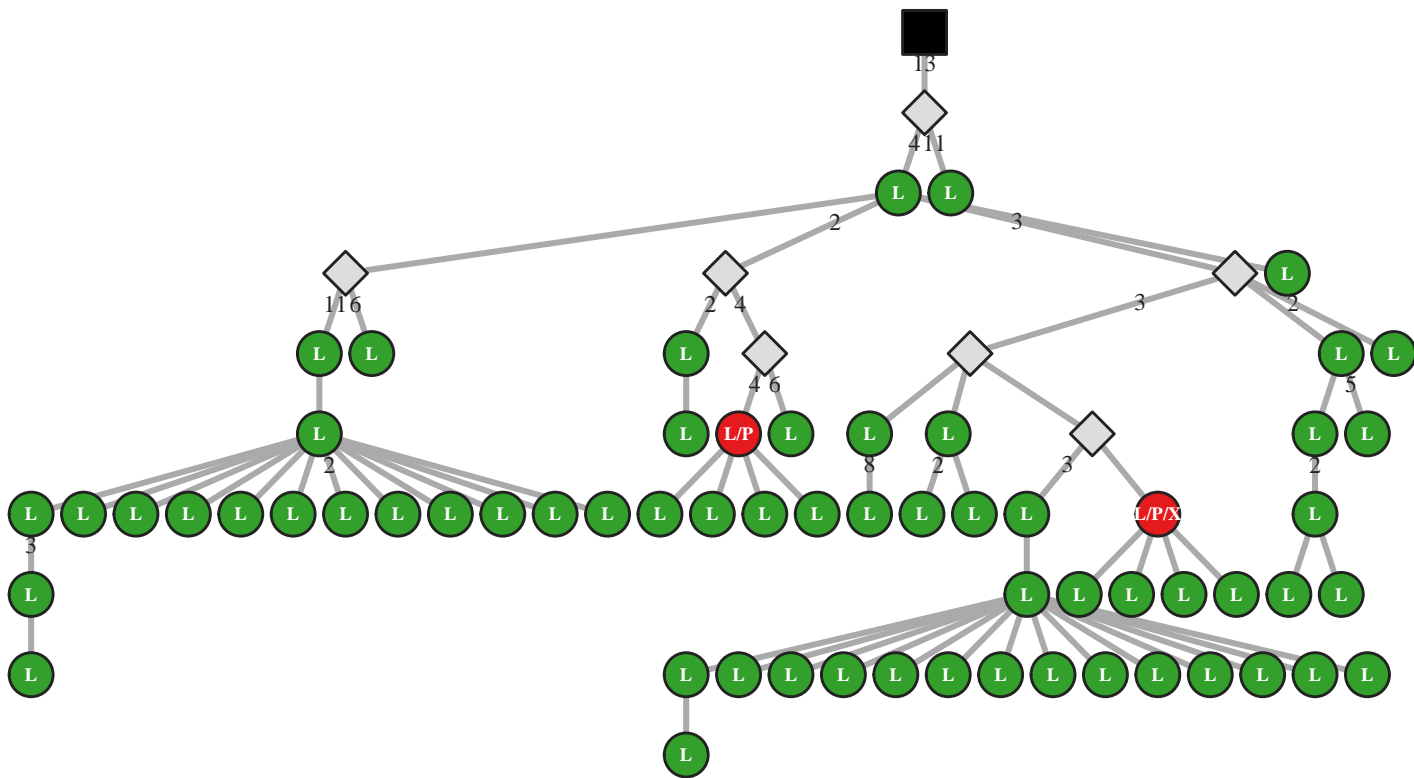
M5 IgG IGHV3-30-3/J5 75bp (44973)



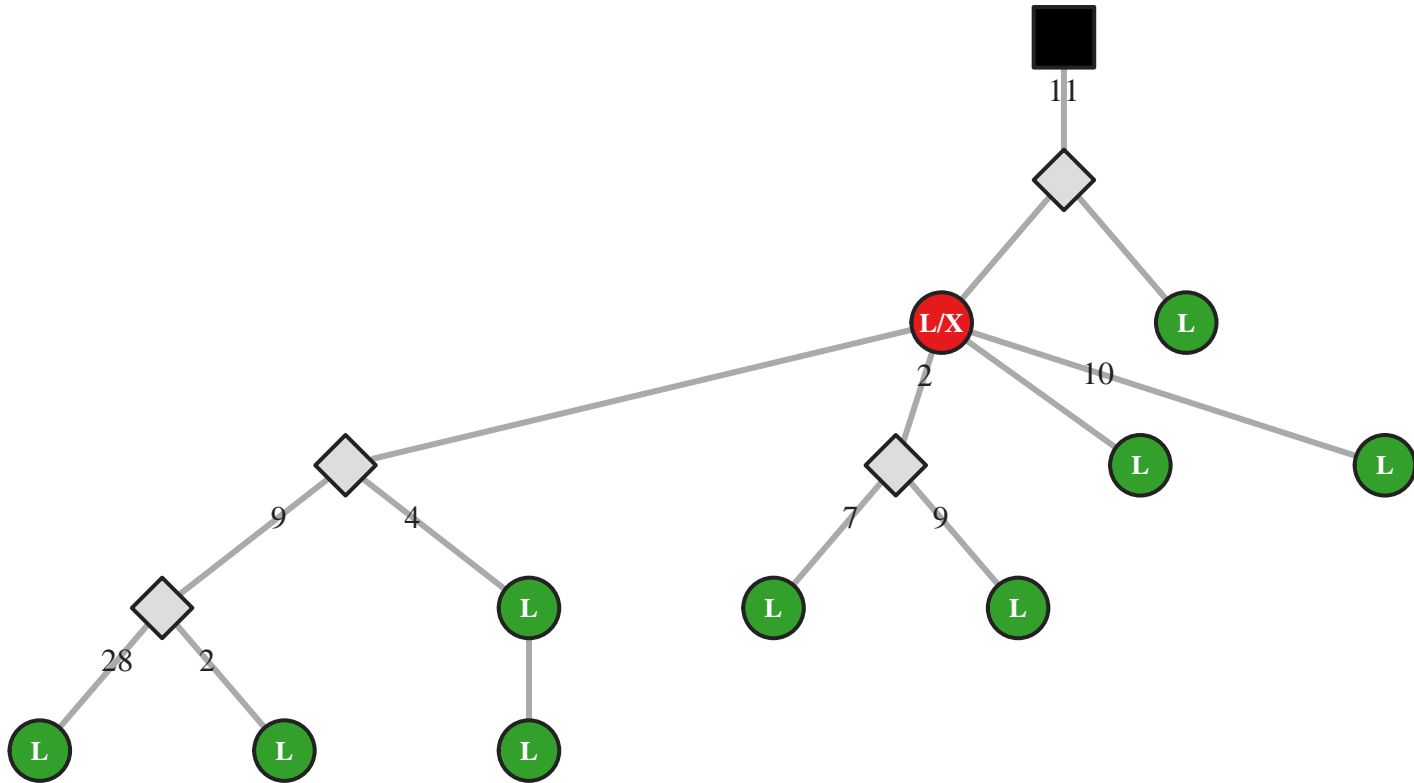
M5 IgG IGHV3-30-3/J6 33bp (26371)



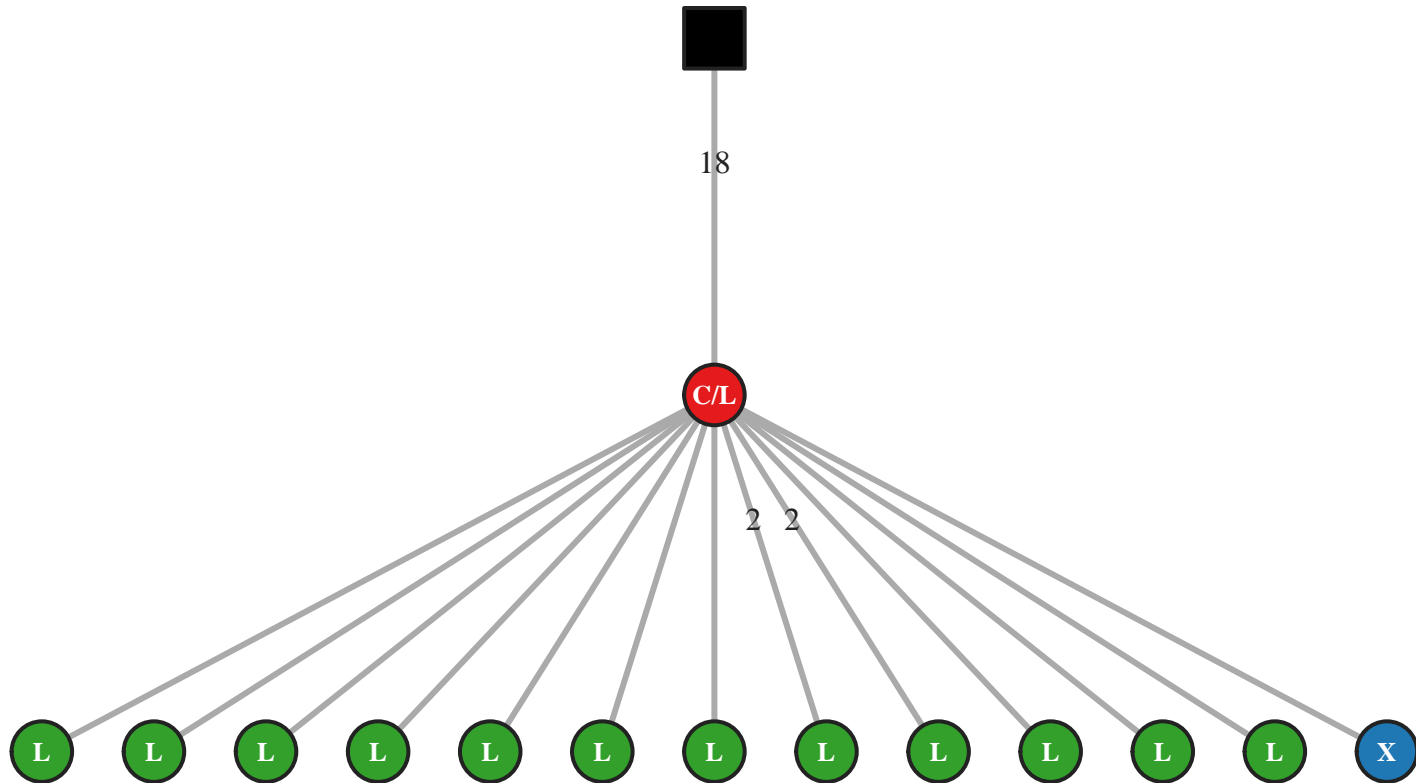
M5 IgG IGHV3-30-3/J6 57bp (26103)



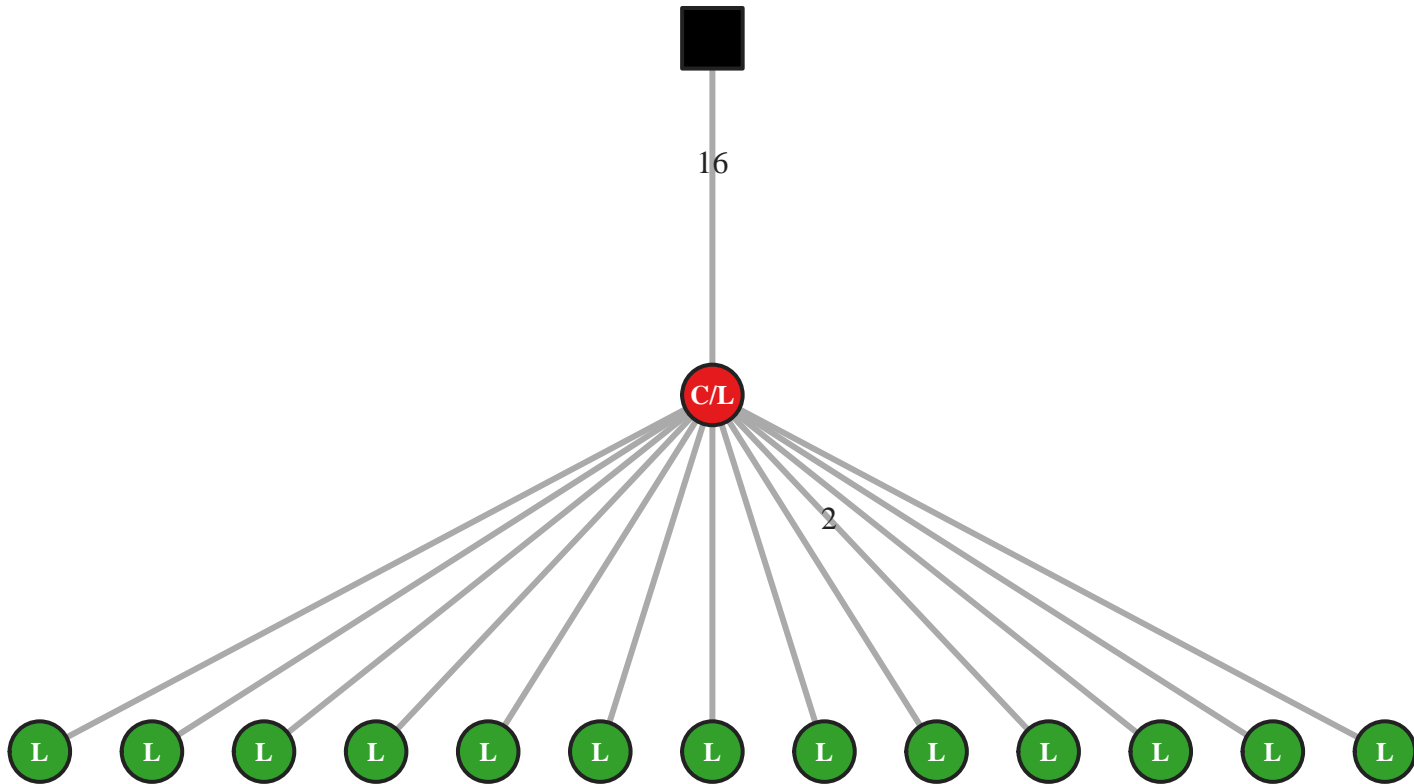
M5 IgG IGHV3-30-3/J6 57bp (26163)



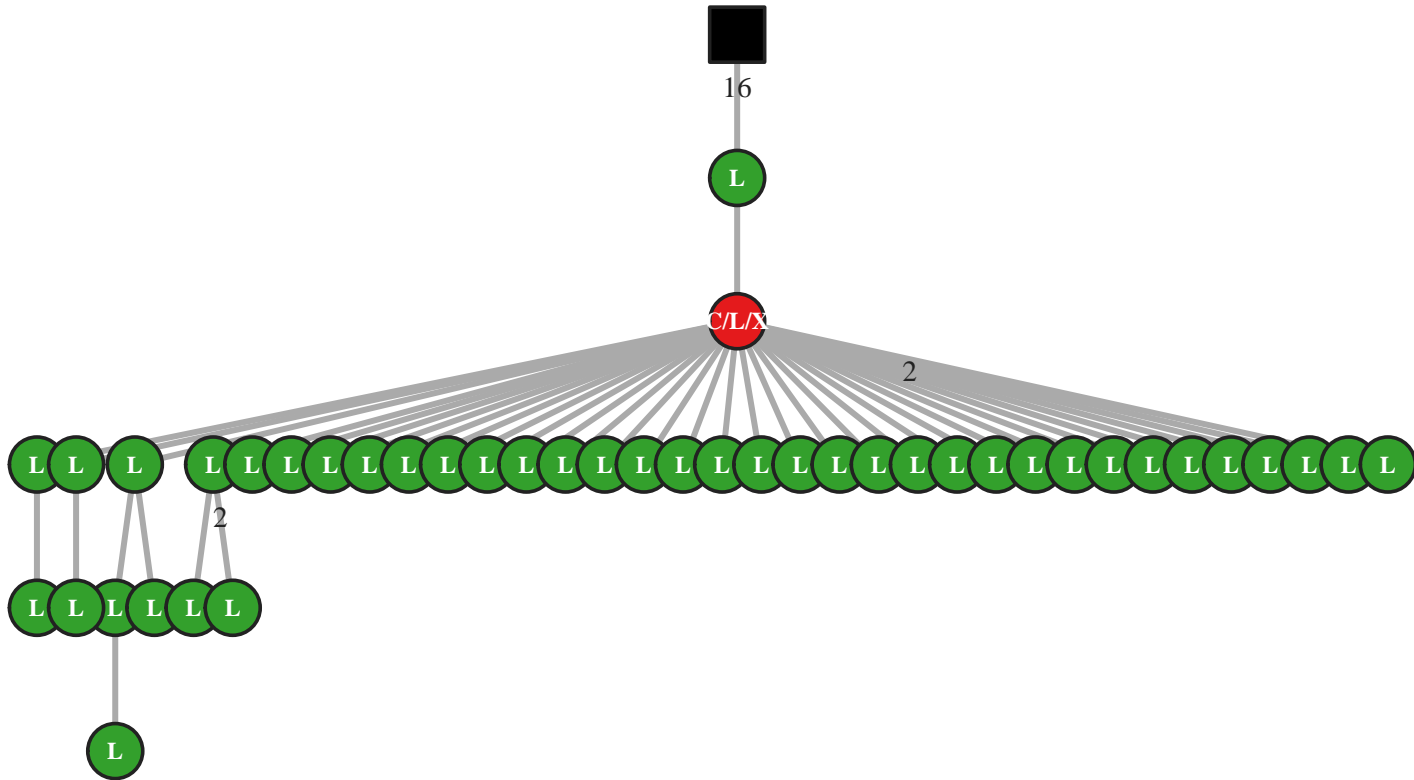
M5 IgG IGHV3-30-3/J6 60bp (26243)



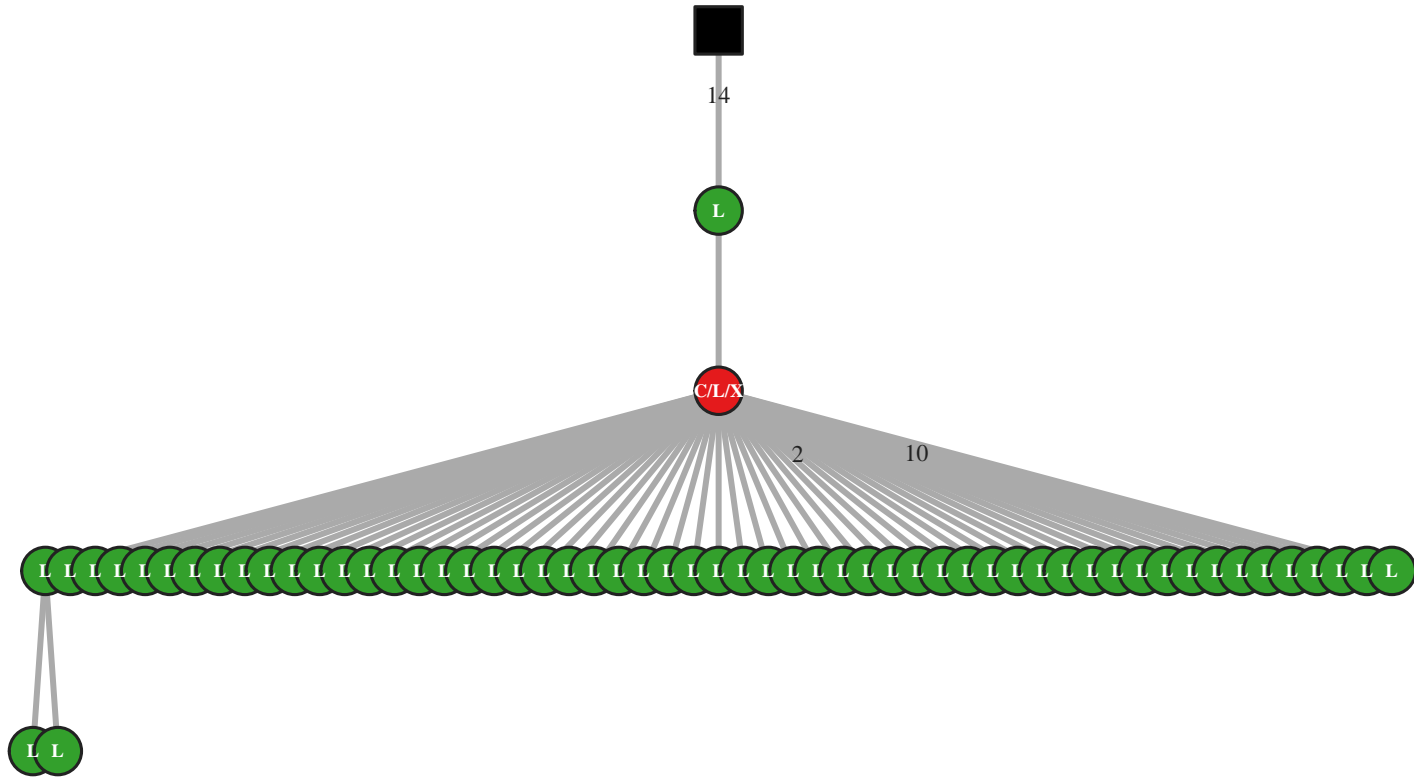
M5 IgG IGHV3-30-3/J6 60bp (26292)



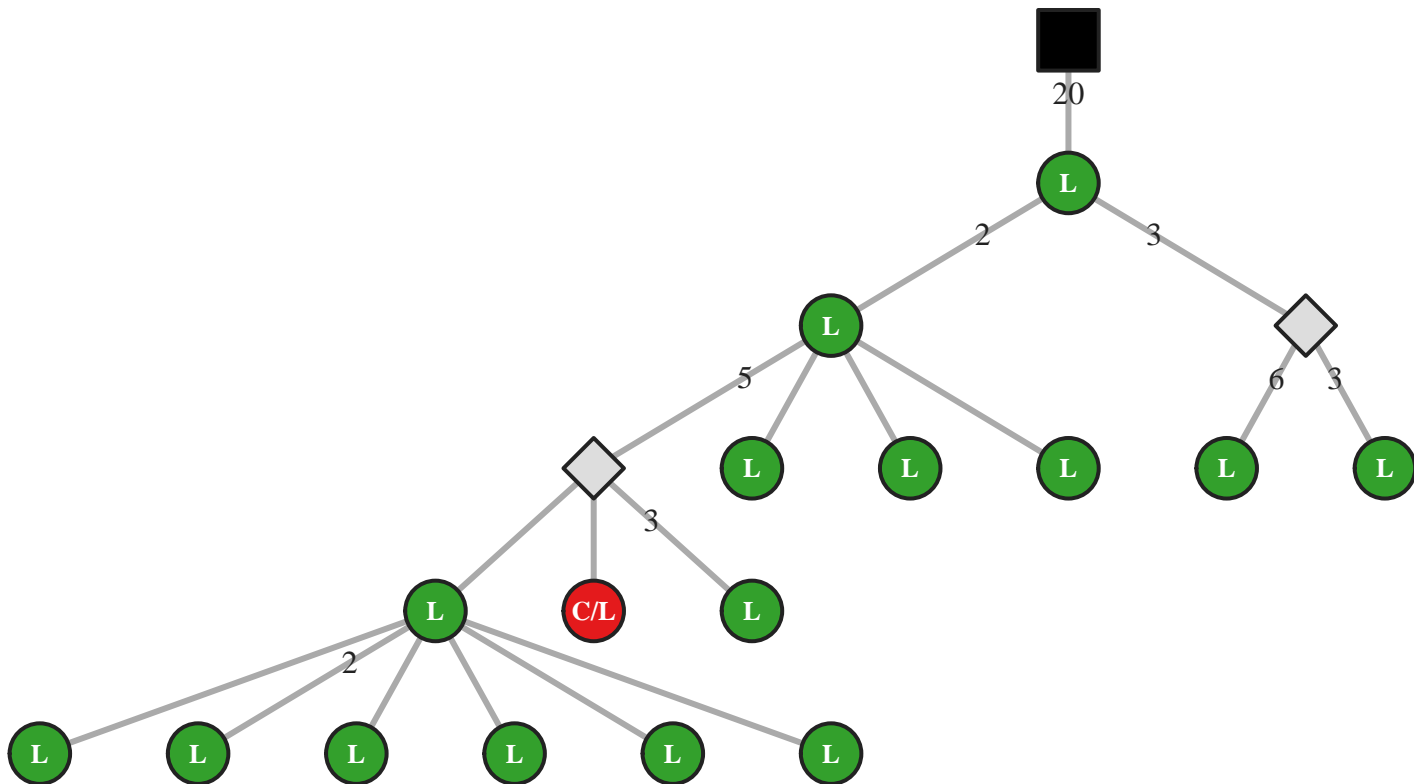
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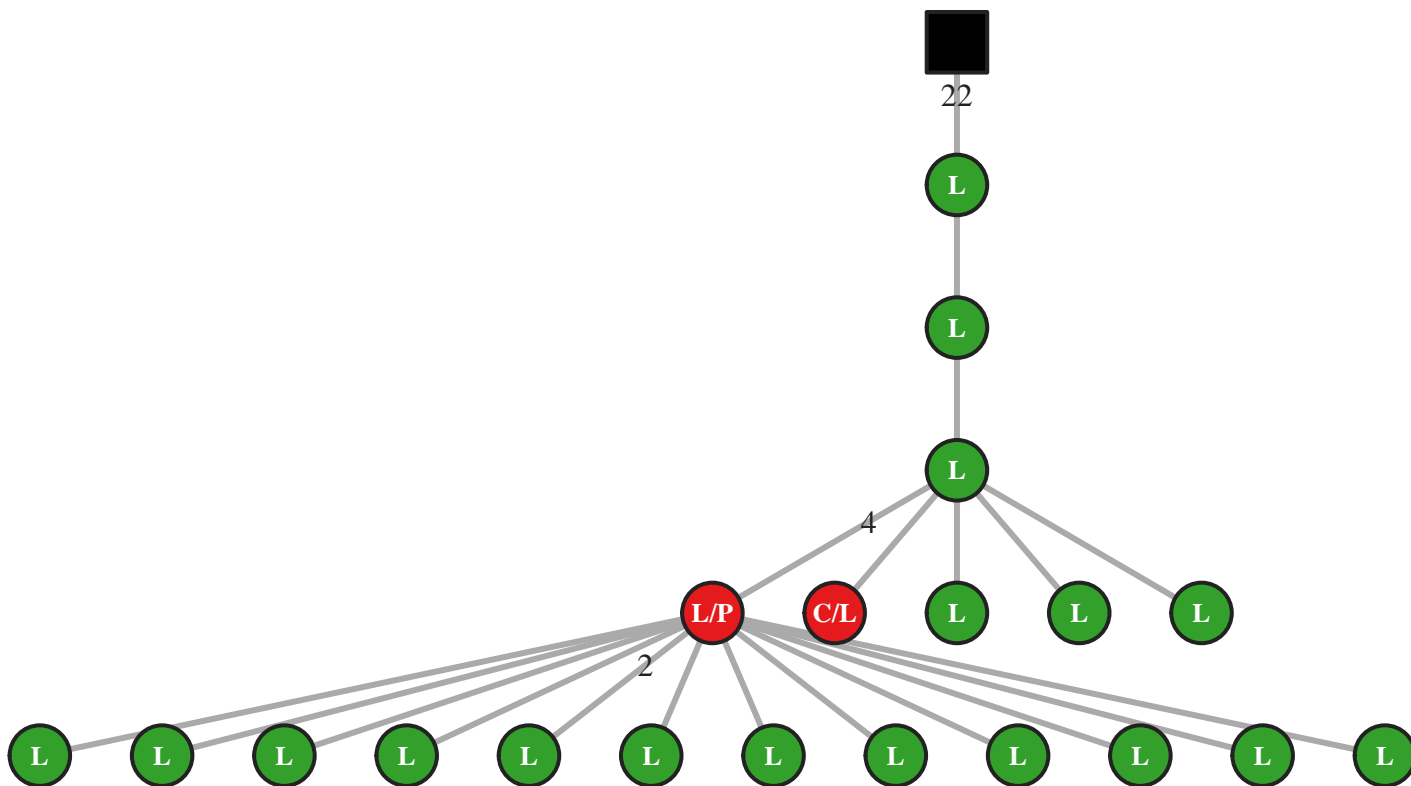
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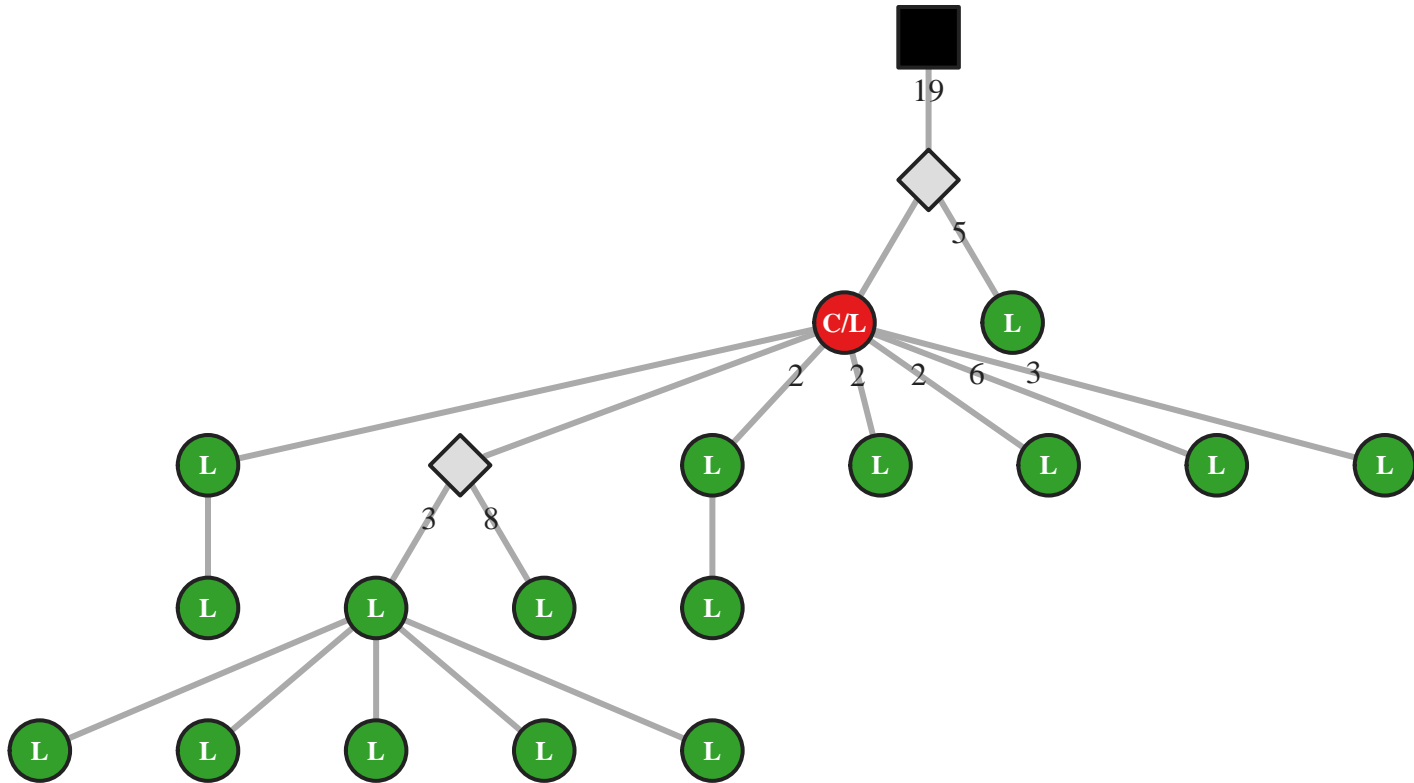
M5 IgG IGHV3-33/J1 36bp (51890)



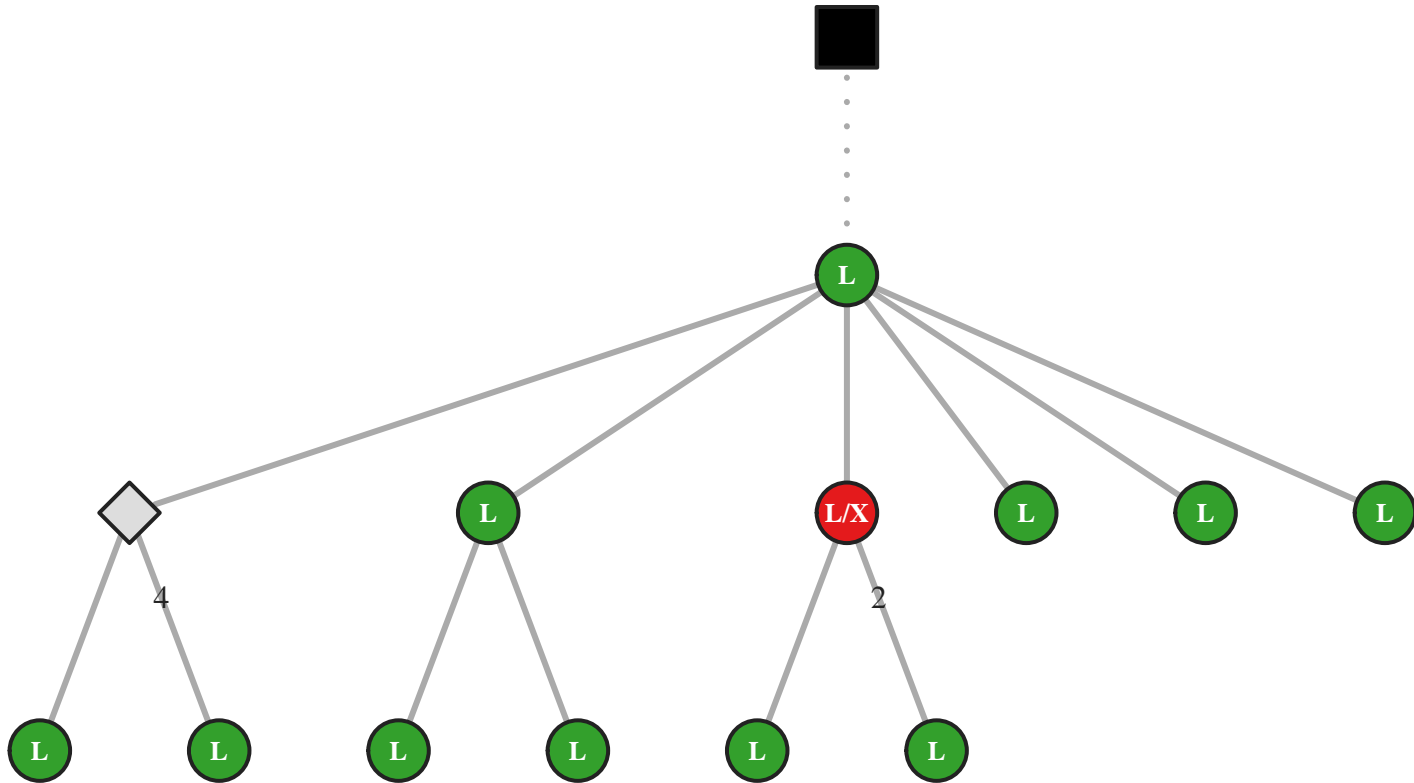
M5 IgG IGHV3-33/J1 42bp (45020)



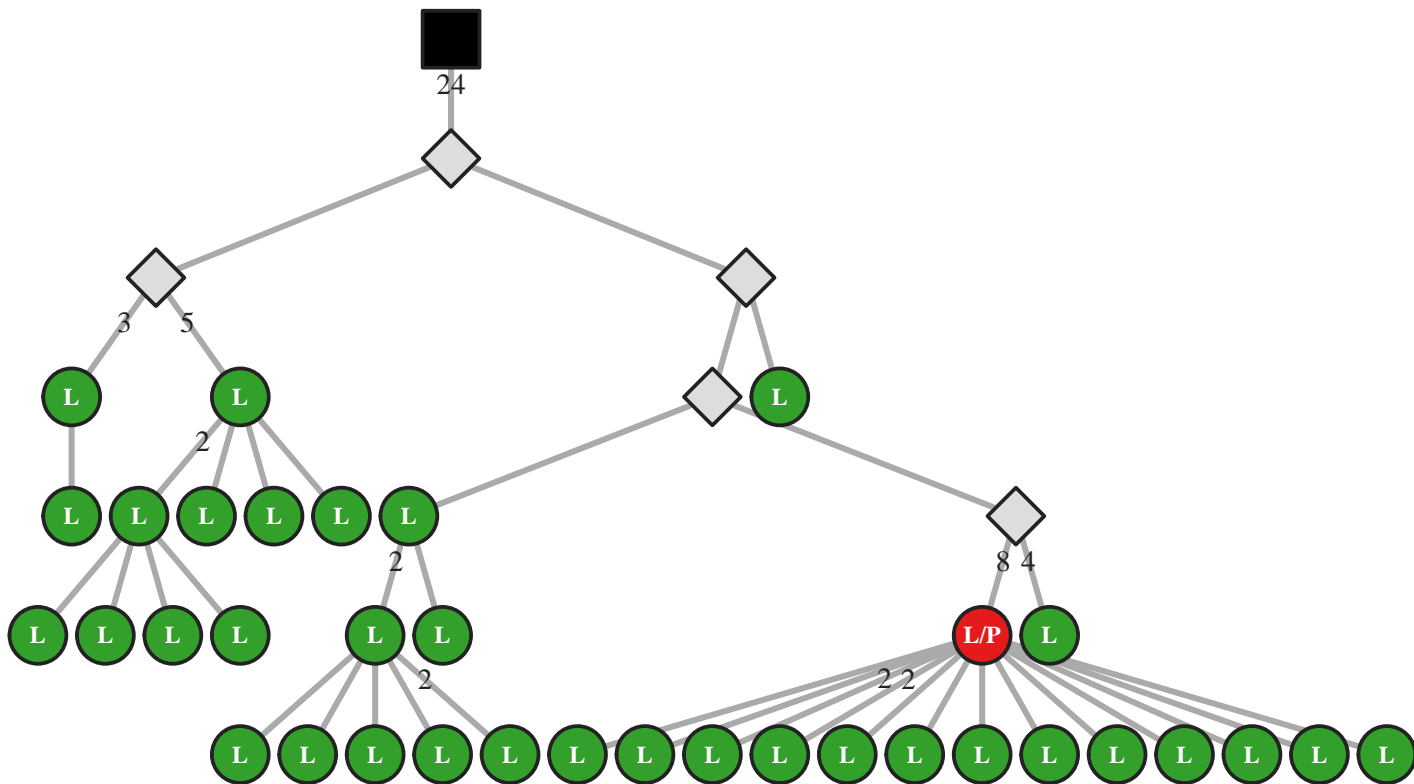
M5 IgG IGHV3-33/J1 66bp (45027)



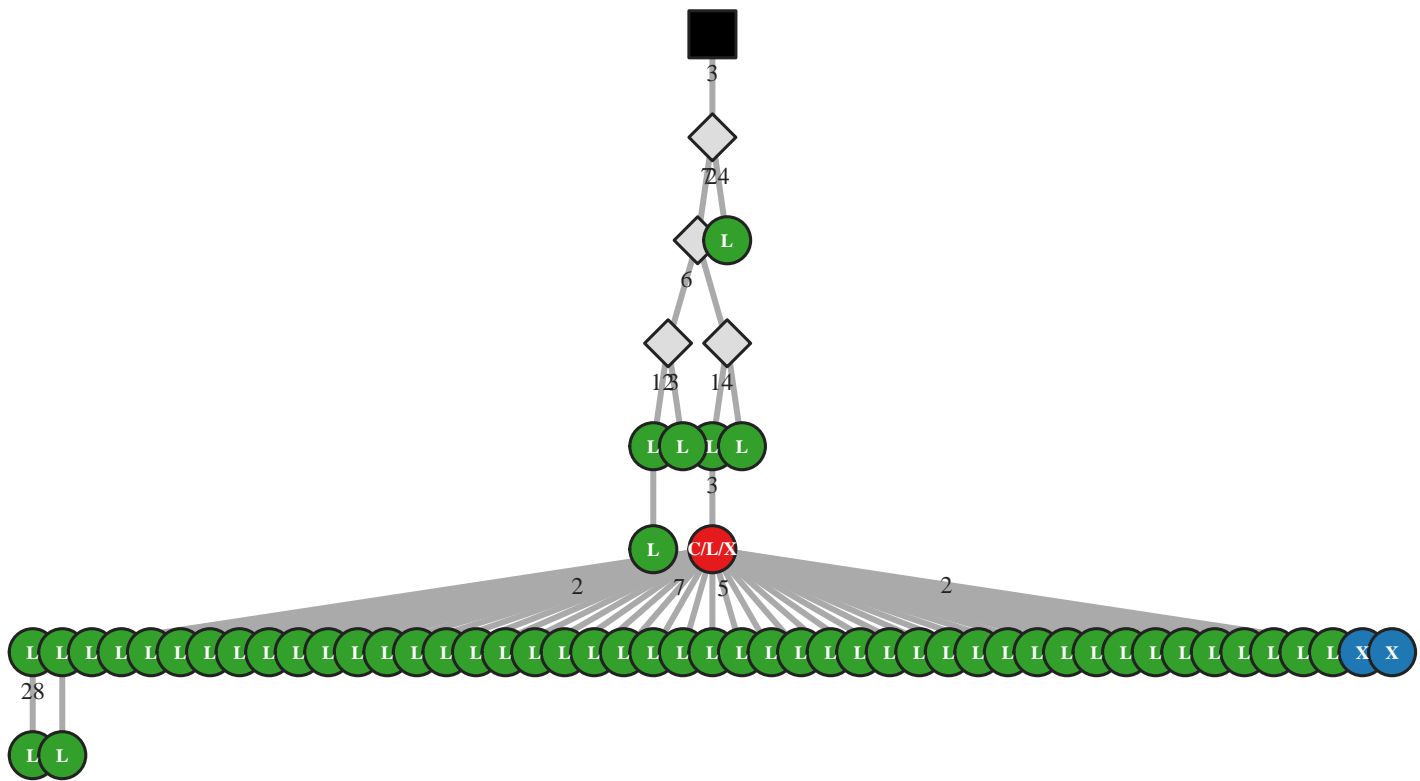
M5 IgG IGHV3-33/J2 54bp (45035)



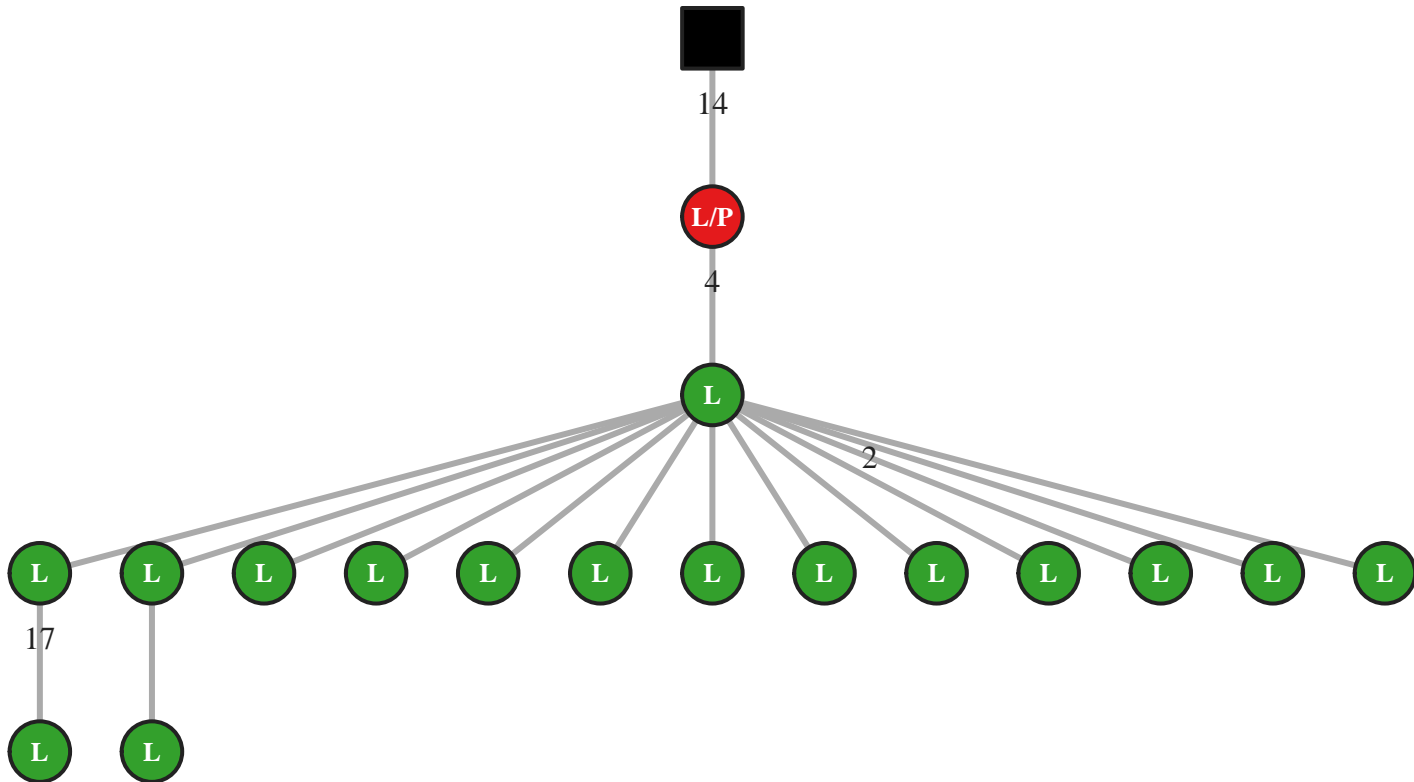
M5 IgG IGHV3-33/J2 57bp (35127)



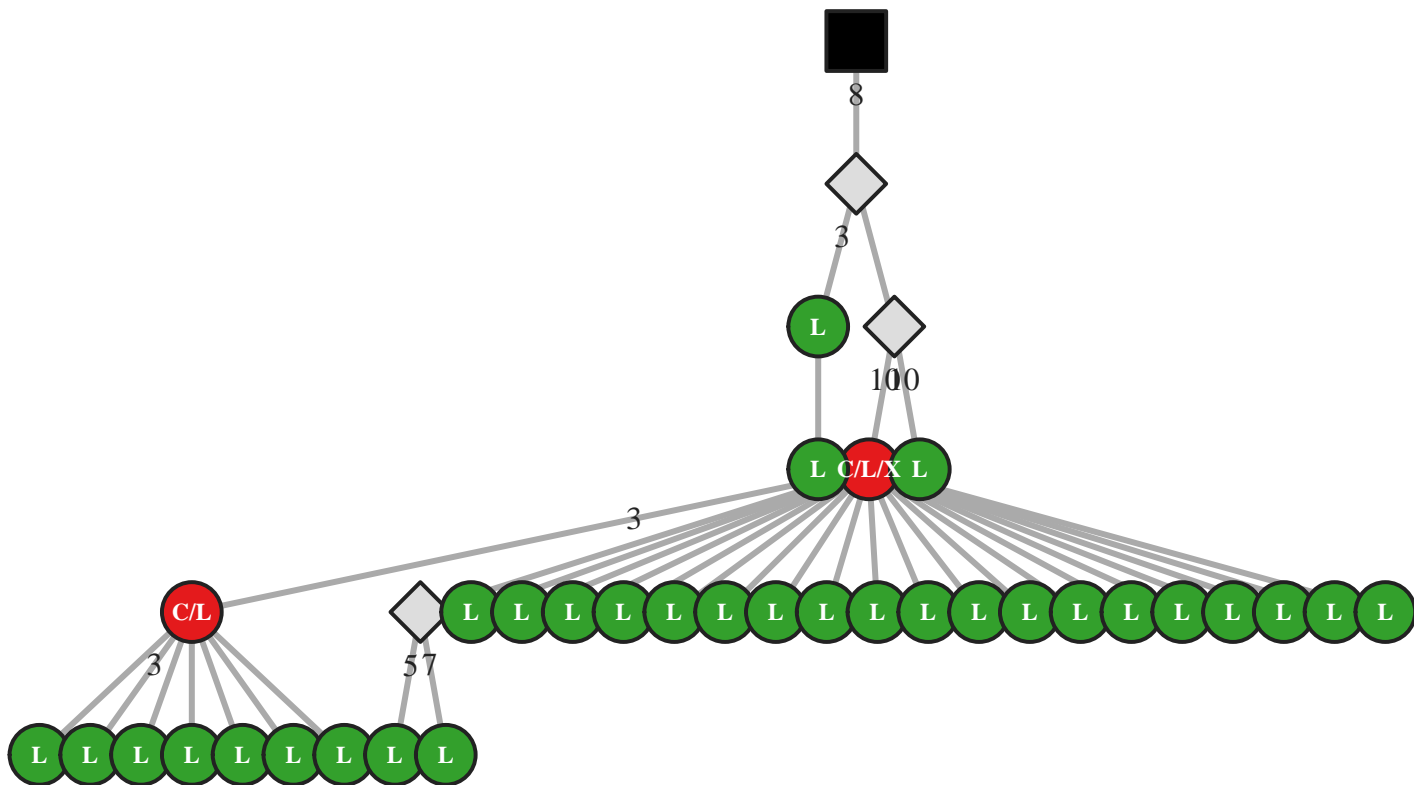
M5 IgG IGHV3-33/J3 39bp (35133)



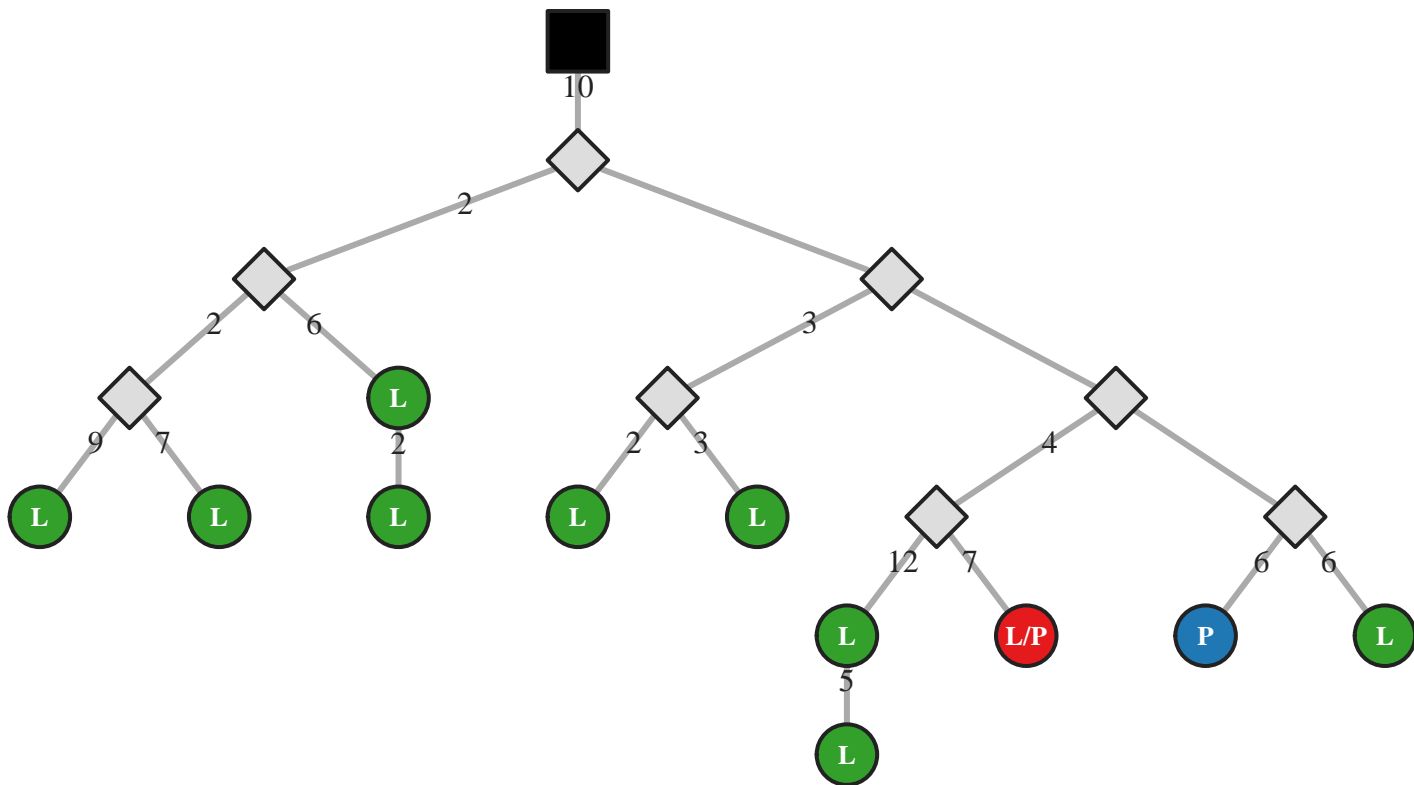
M5 IgG IGHV3-33/J3 42bp (7939)



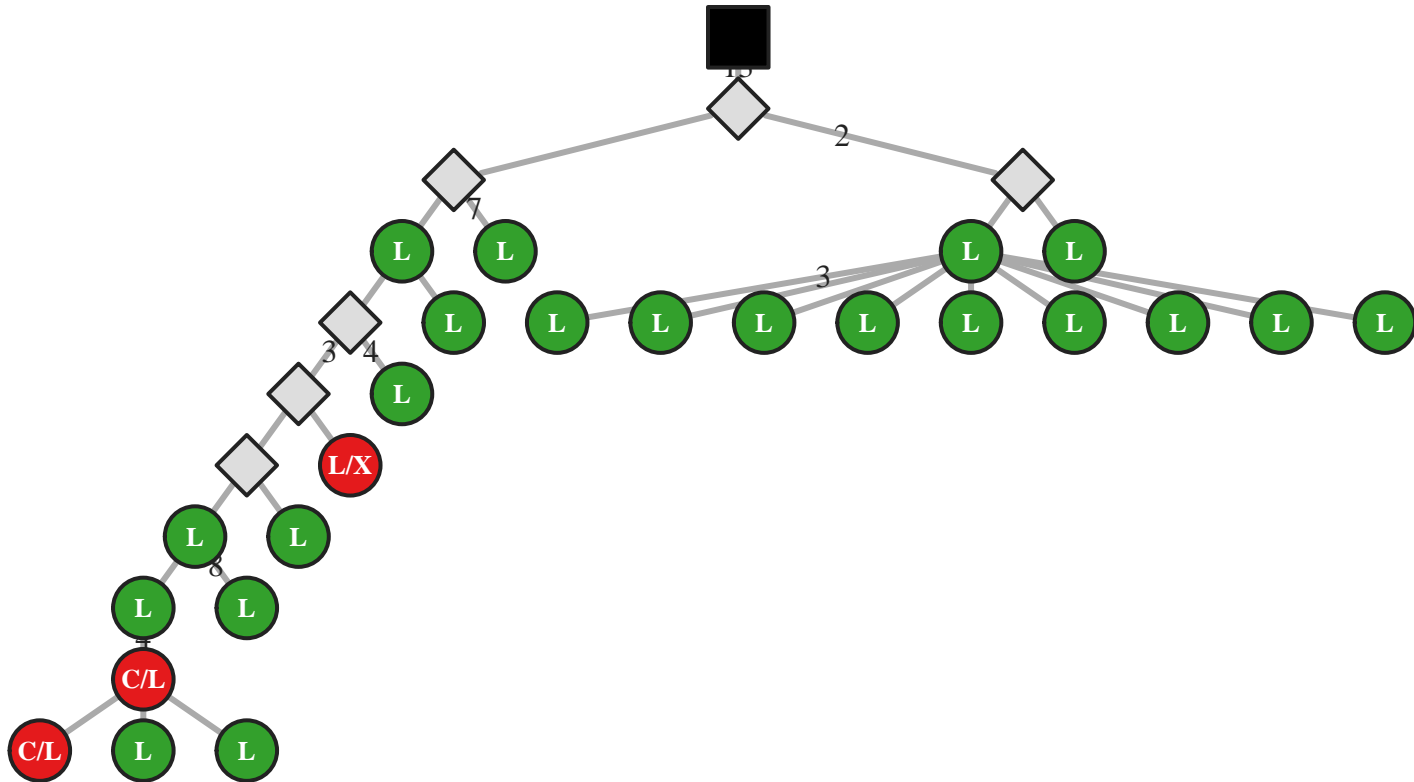
M5 IgG IGHV3-33/J3 54bp (45042)



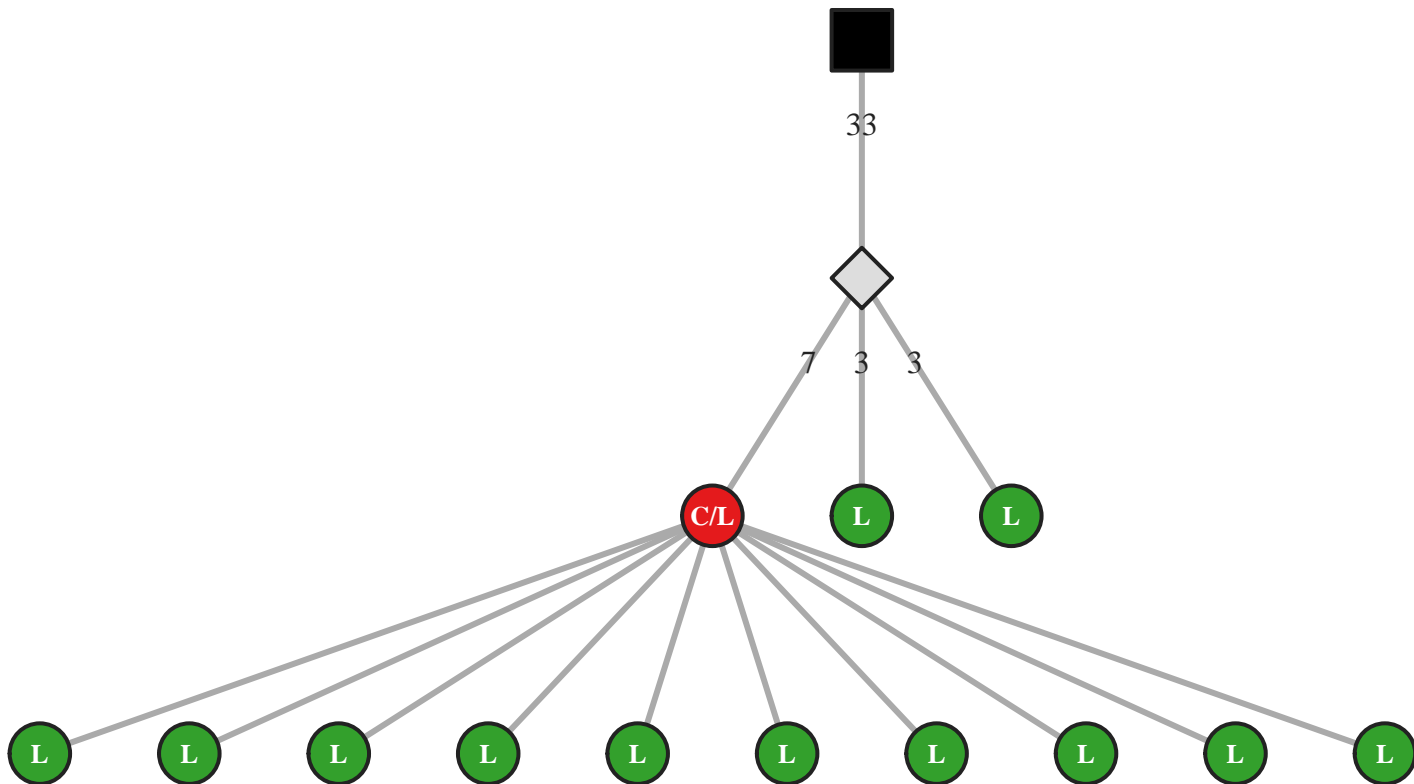
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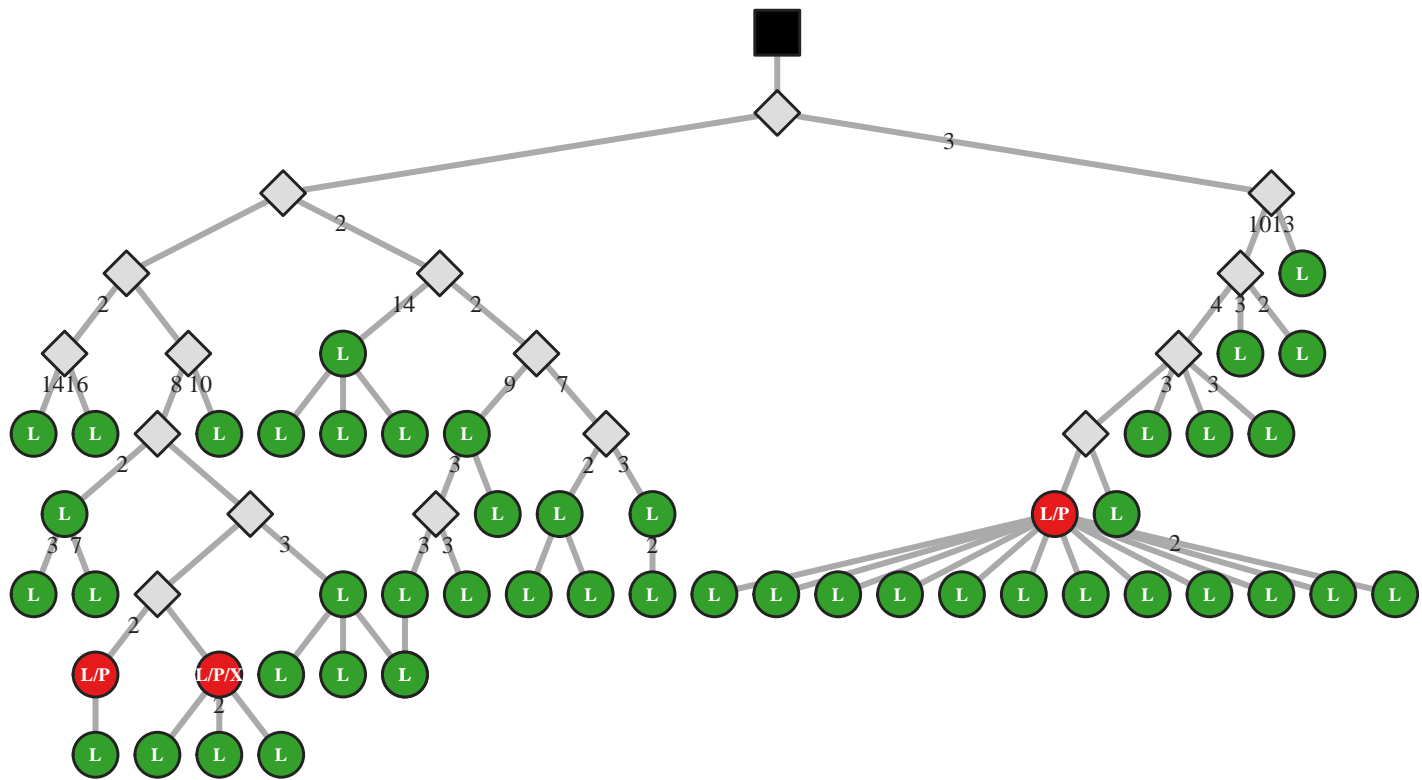
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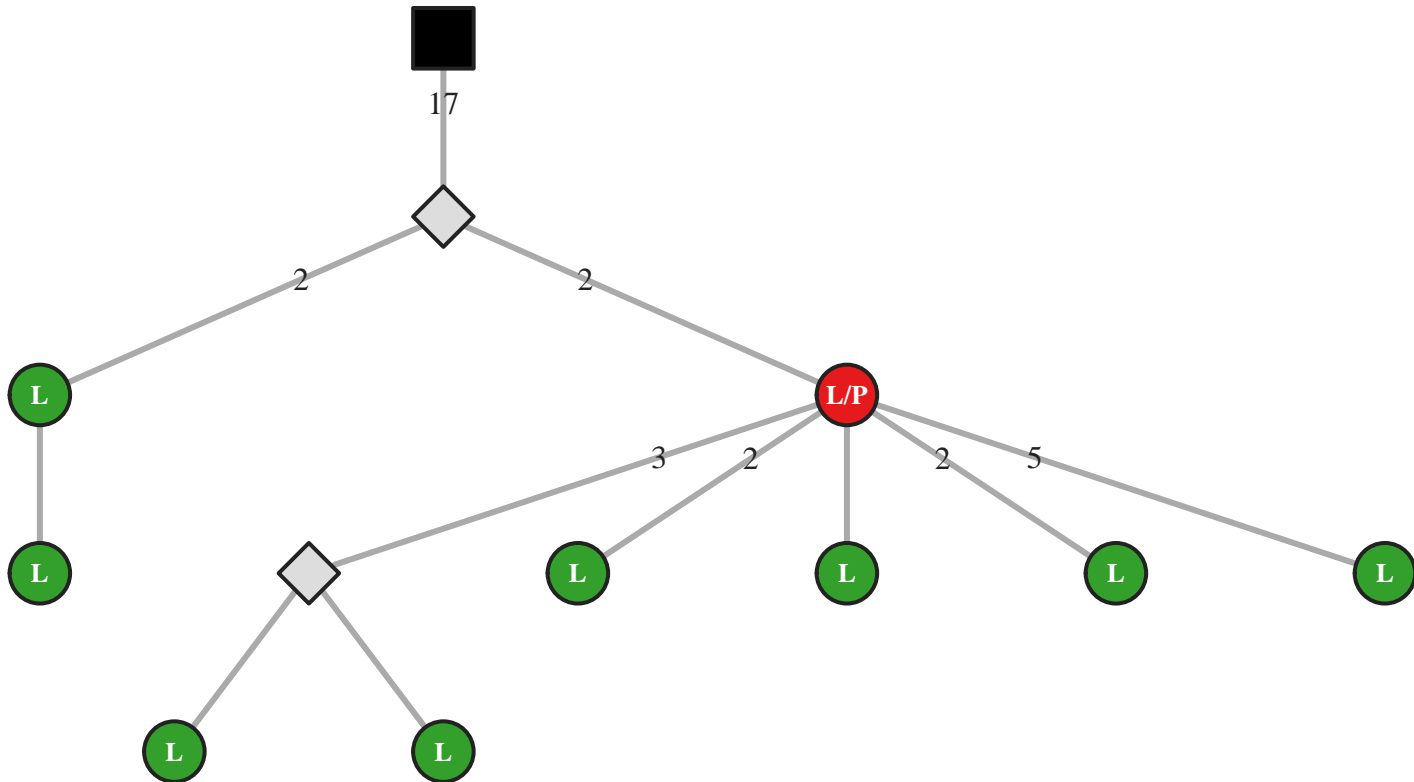
M5 IgG IGHV3-33/J3 54bp (45057)



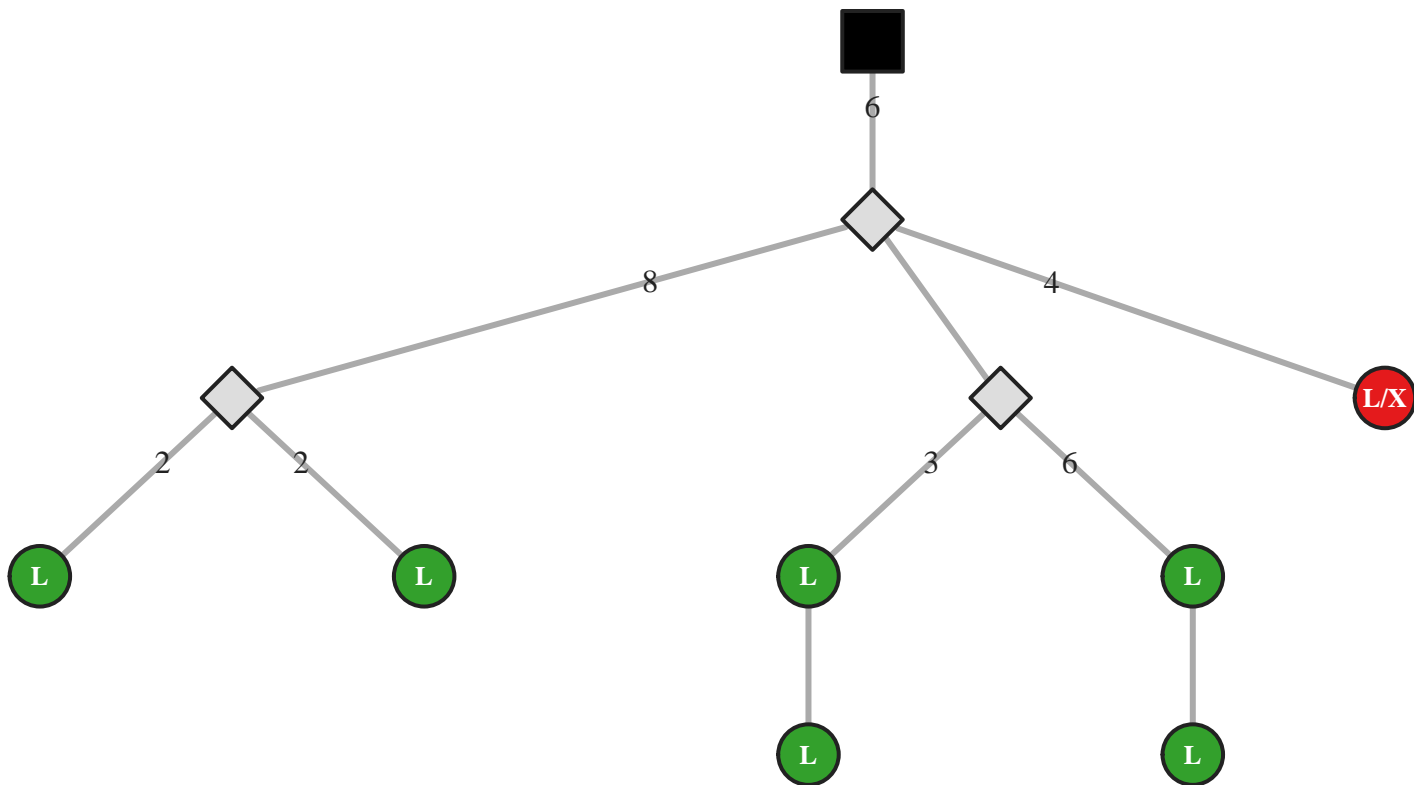
M5 IgG IGHV3-33/J3 60bp (45072)



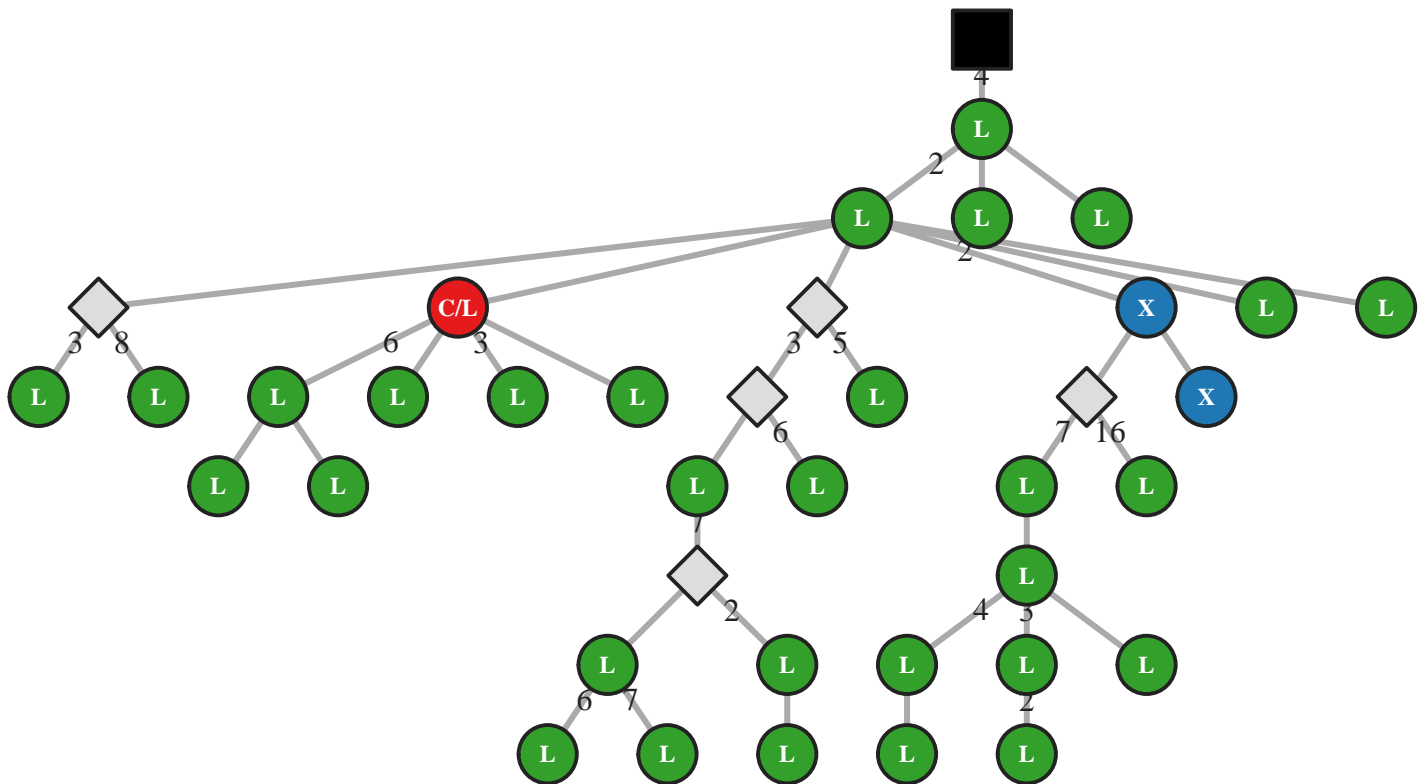
M5 IgG IGHV3-33/J3 69bp (8073)



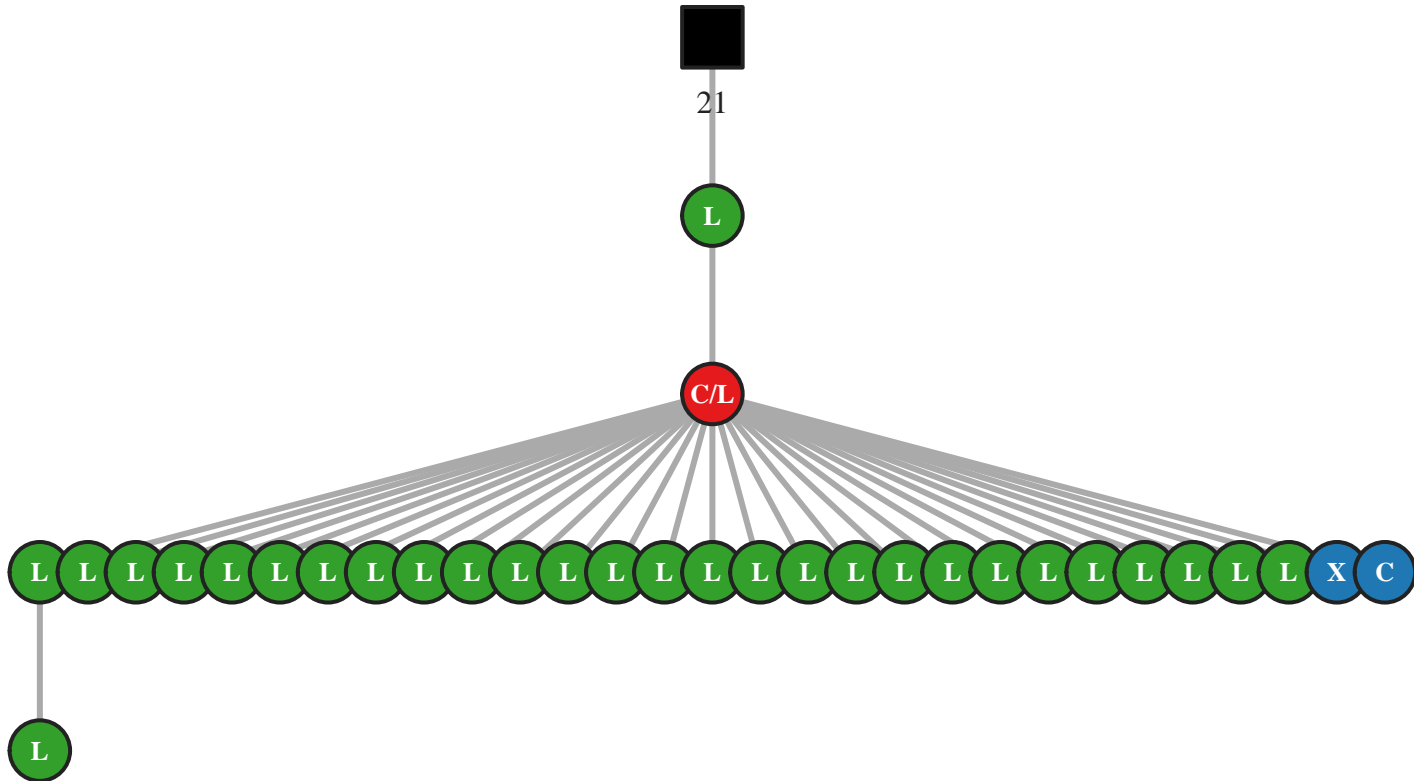
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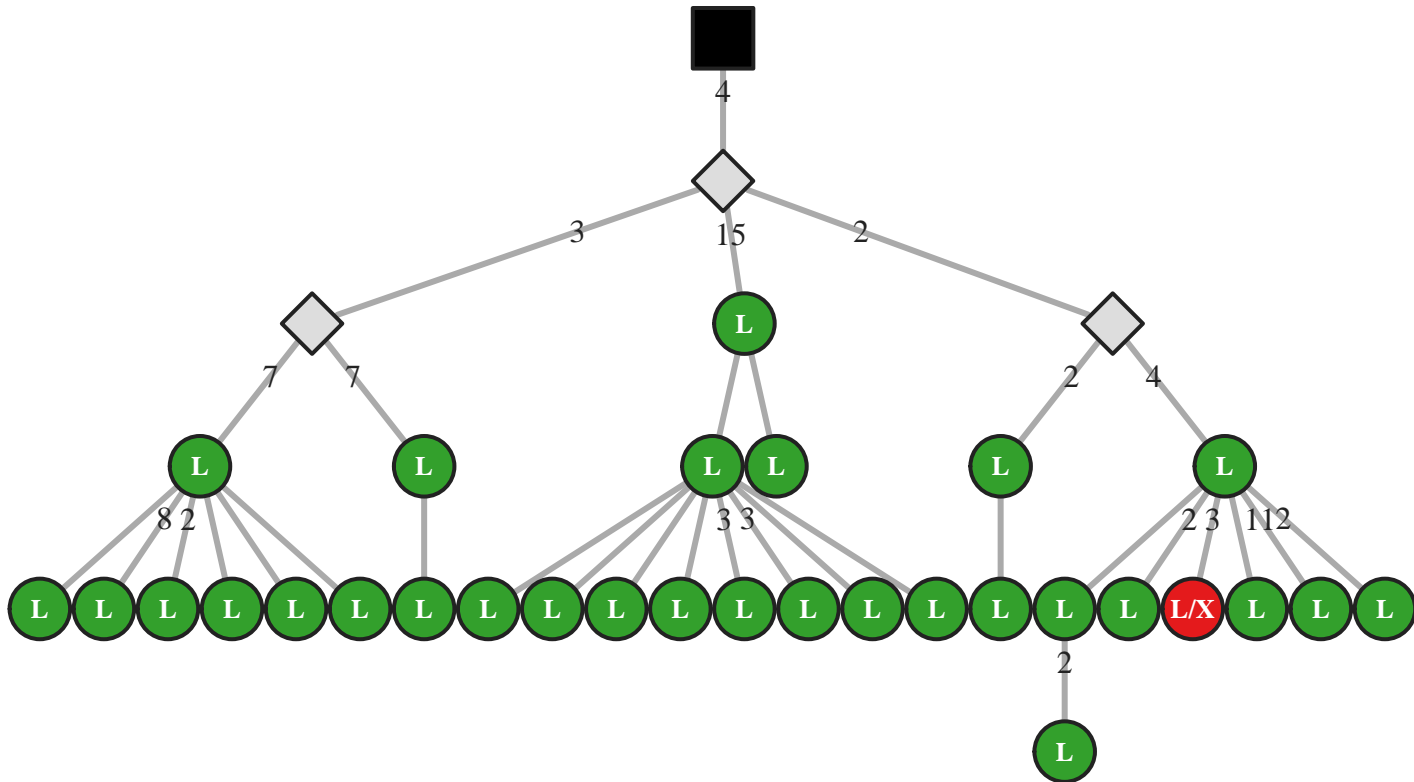
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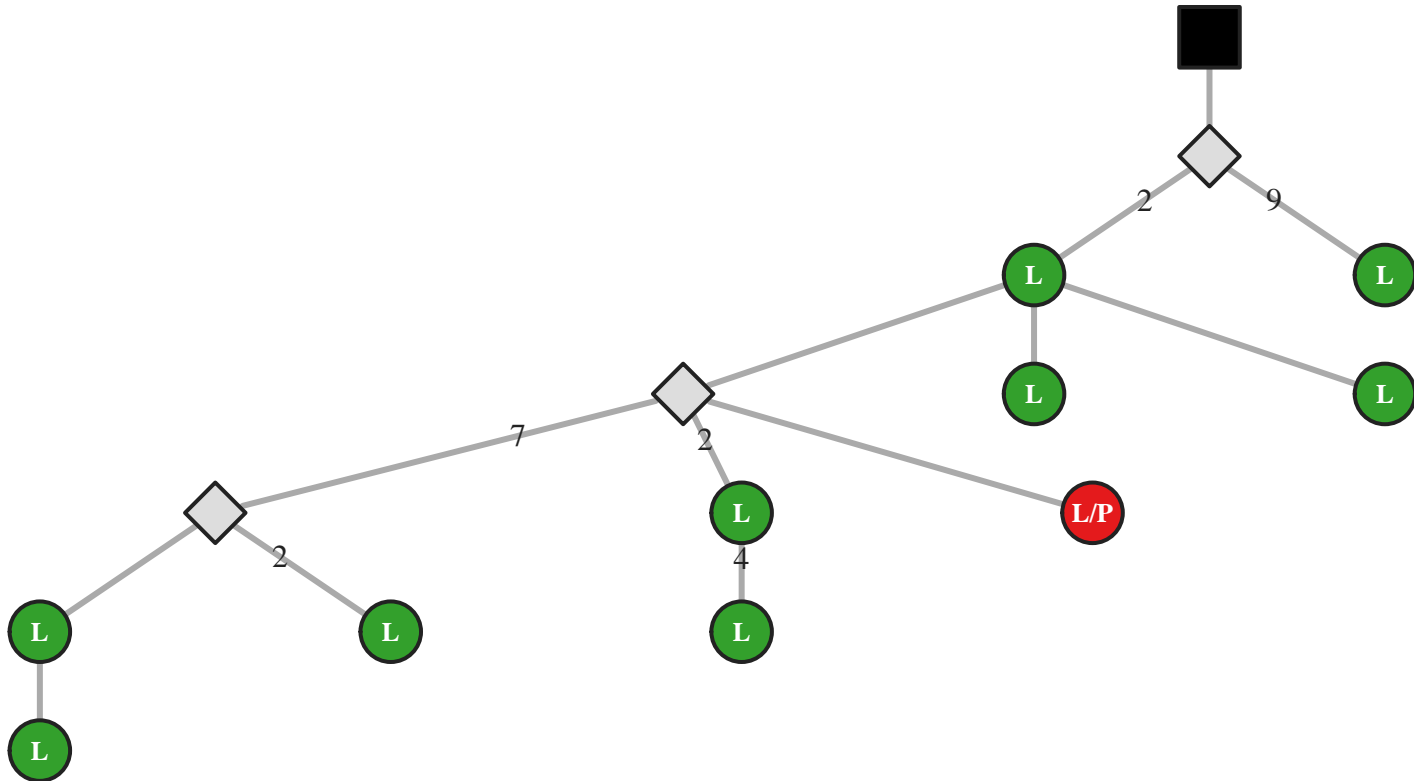
M5 IgM IGHV3-33/J4 36bp (29534)



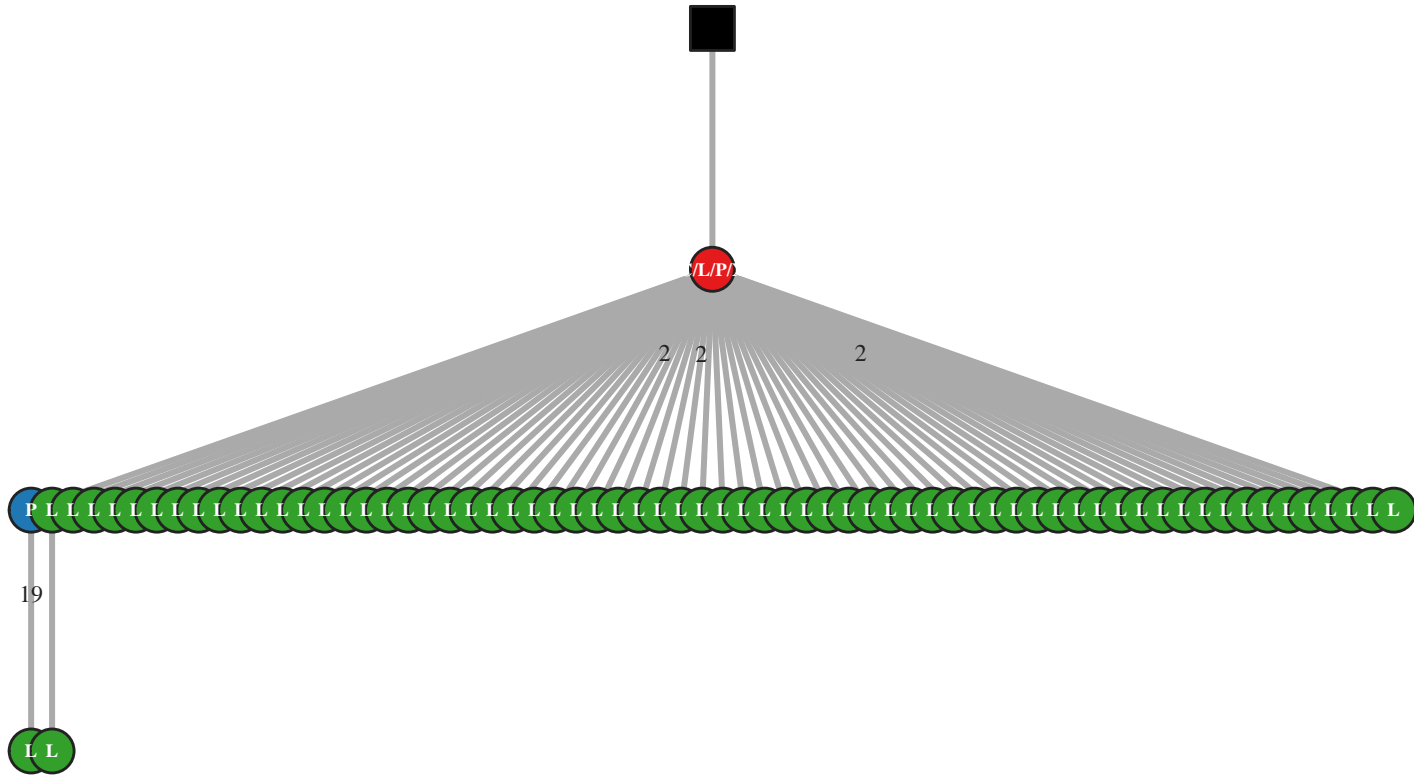
M5 IgA IGHV3-33/J4 39bp (21870)



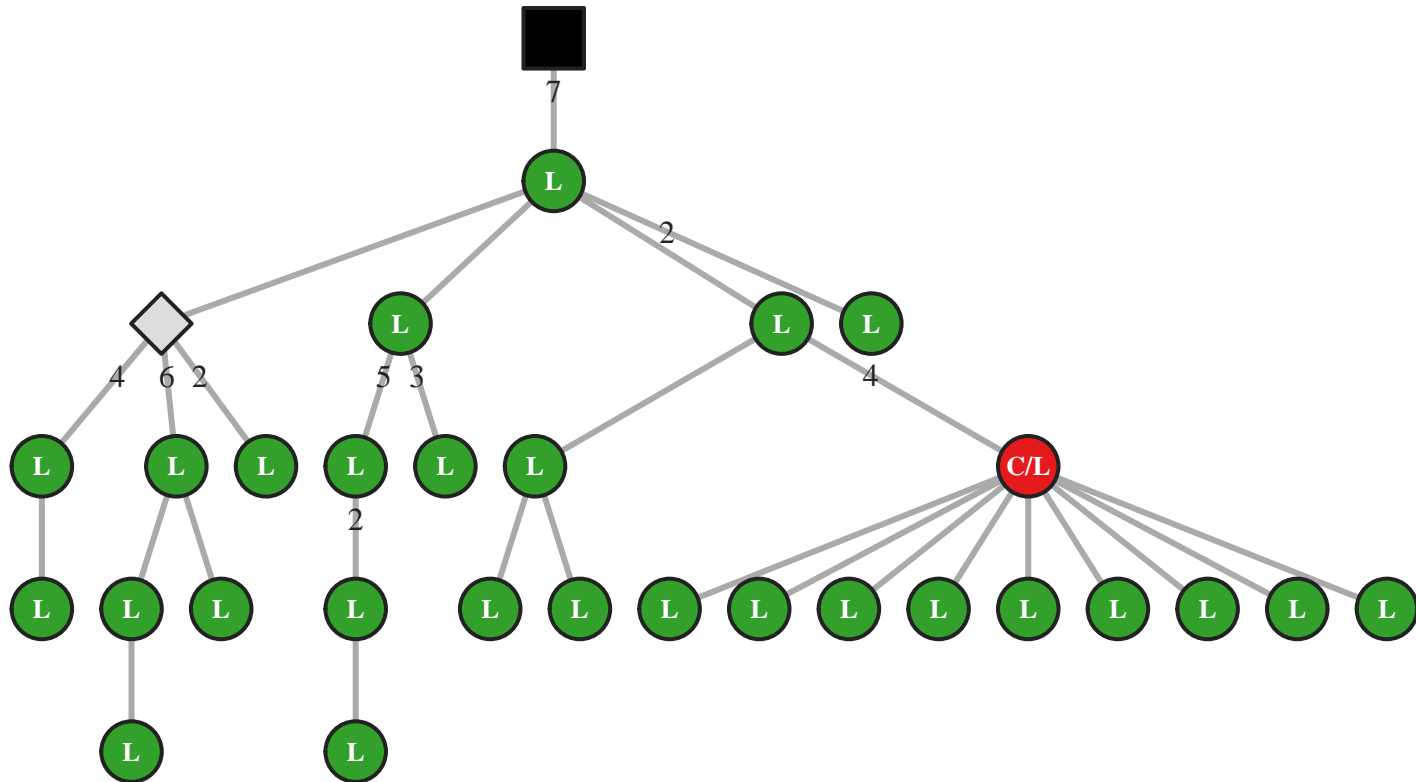
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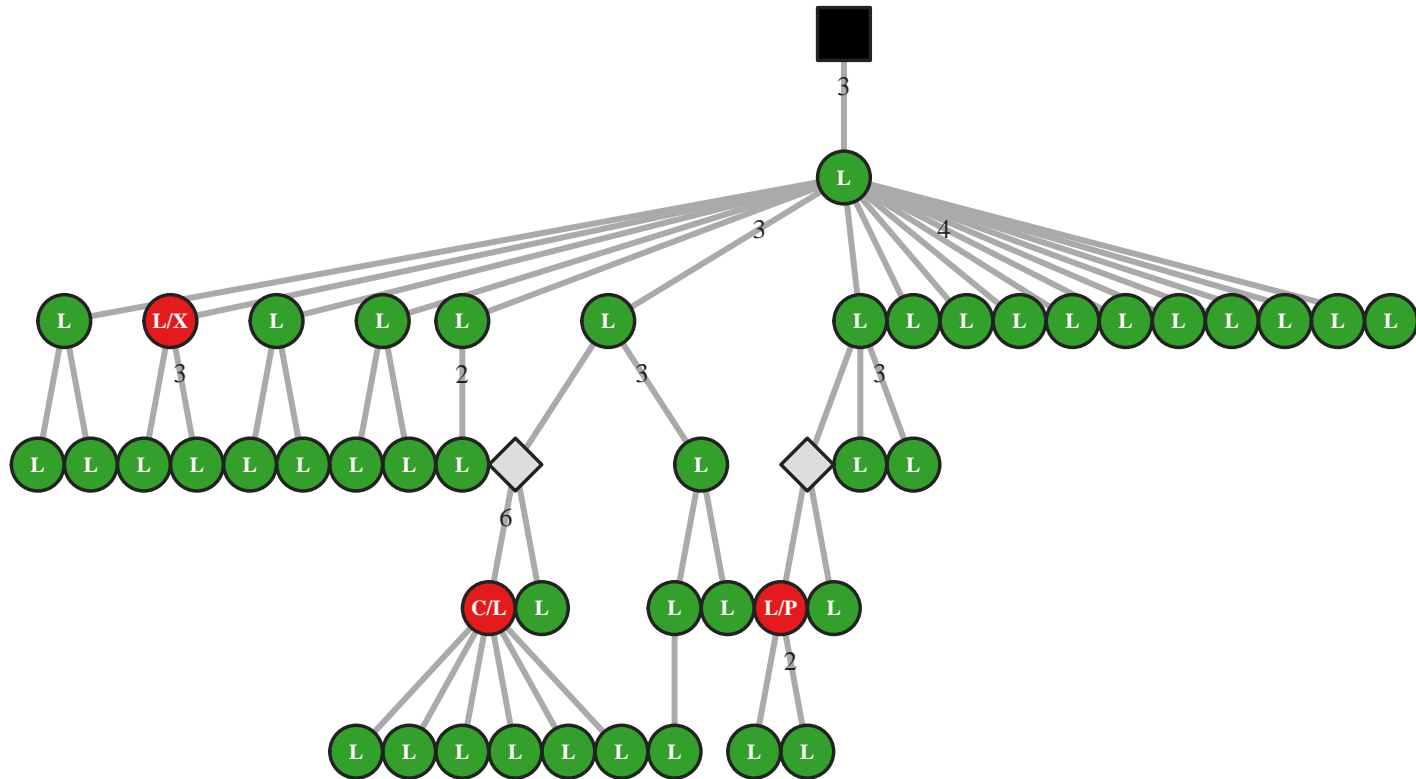
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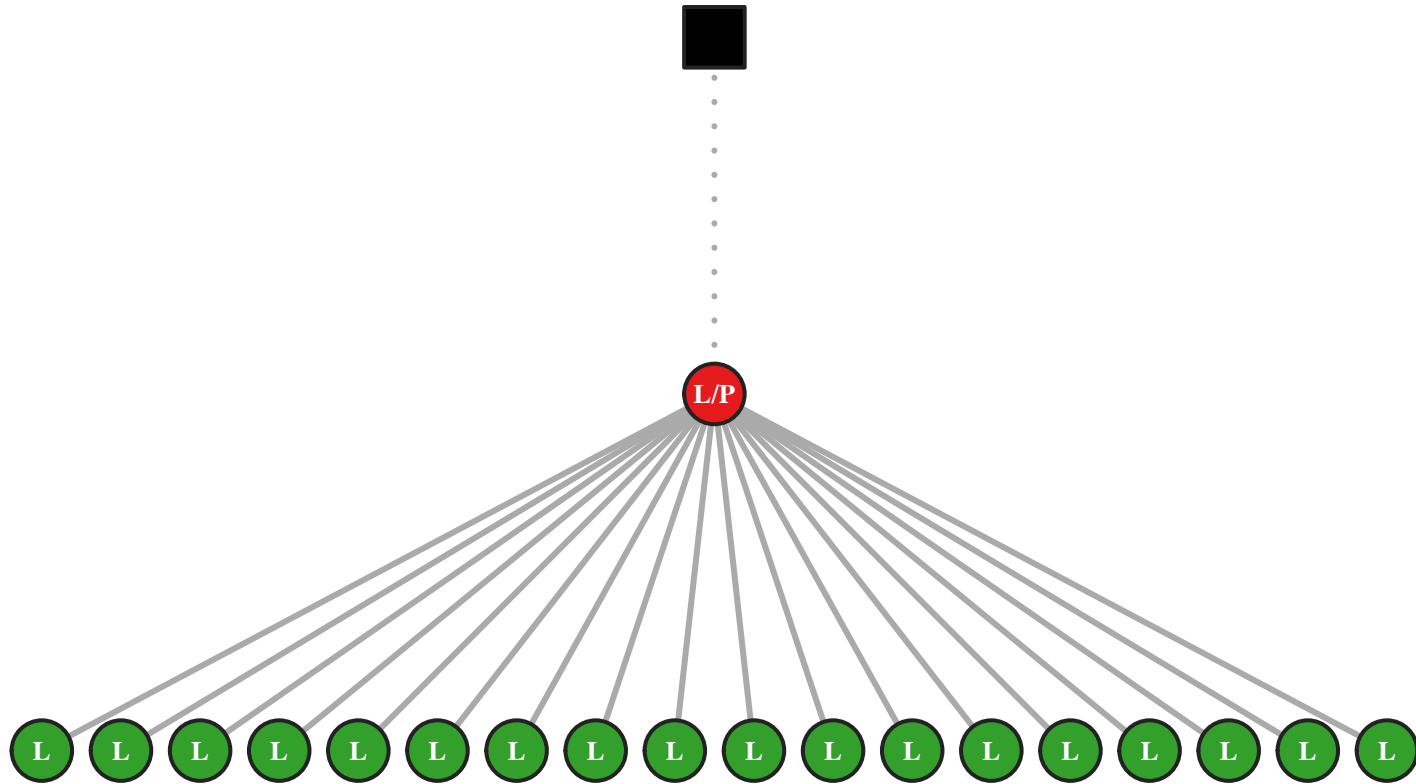
M5 IgG IGHV3-33/J4 39bp (7234)



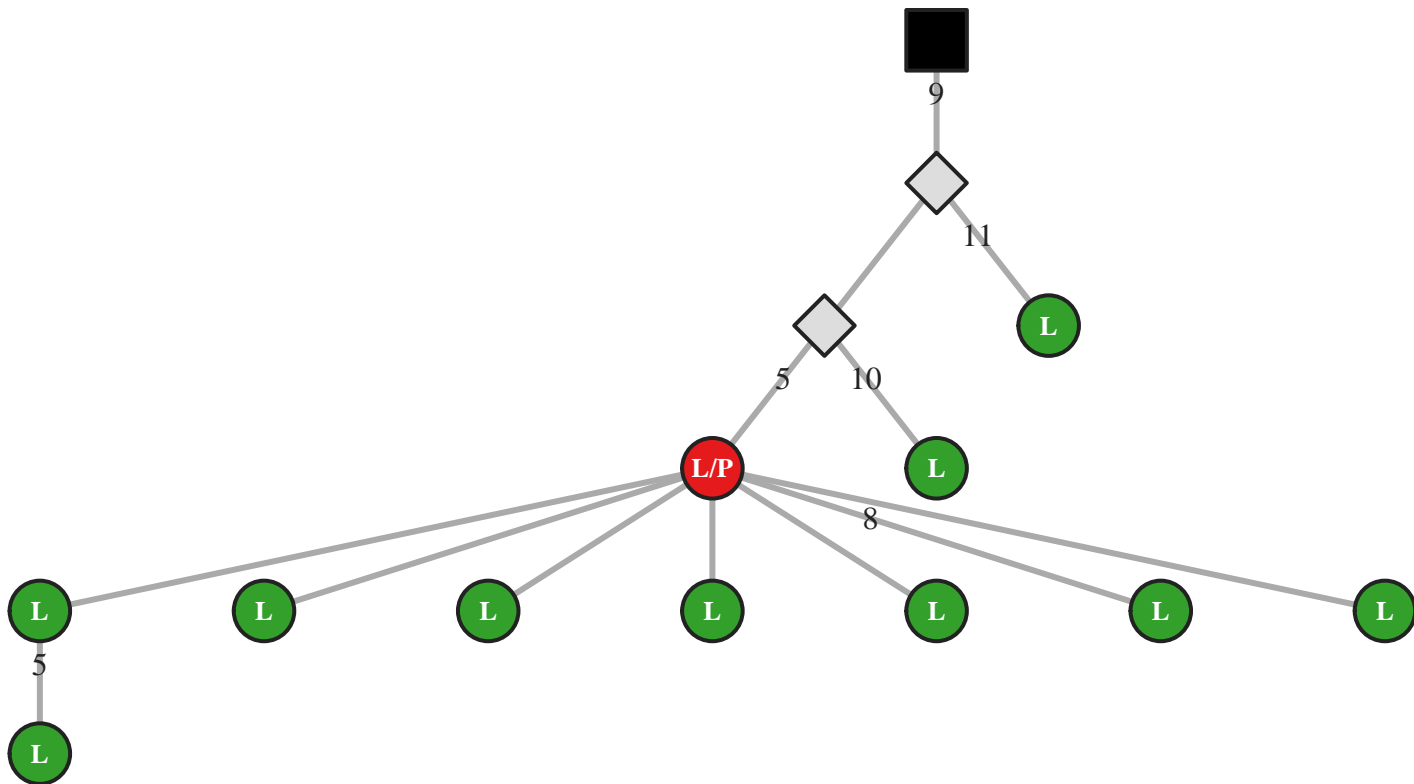
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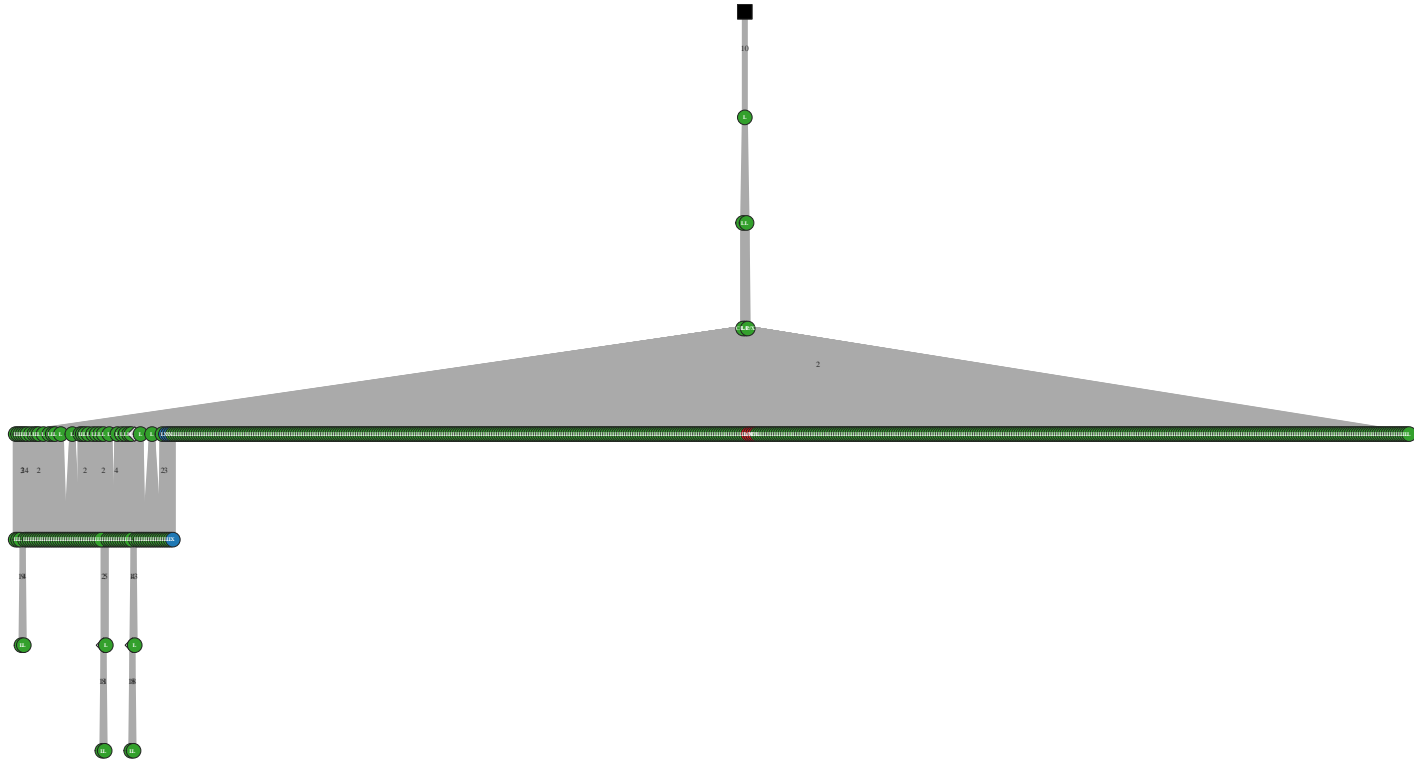
M5 IgG IGHV3-33/J4 42bp (43947)



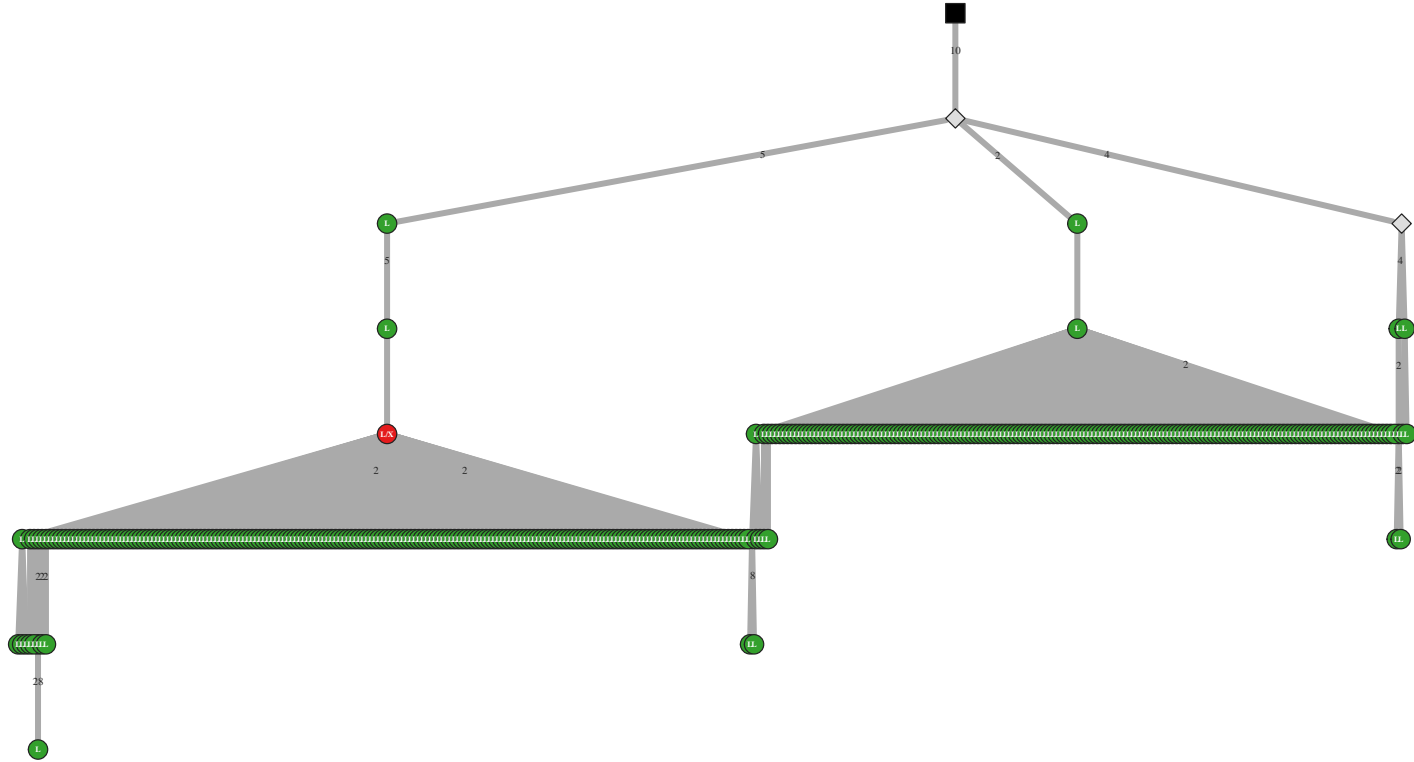
M5 IgG IGHV3-33/J4 45bp (16950)



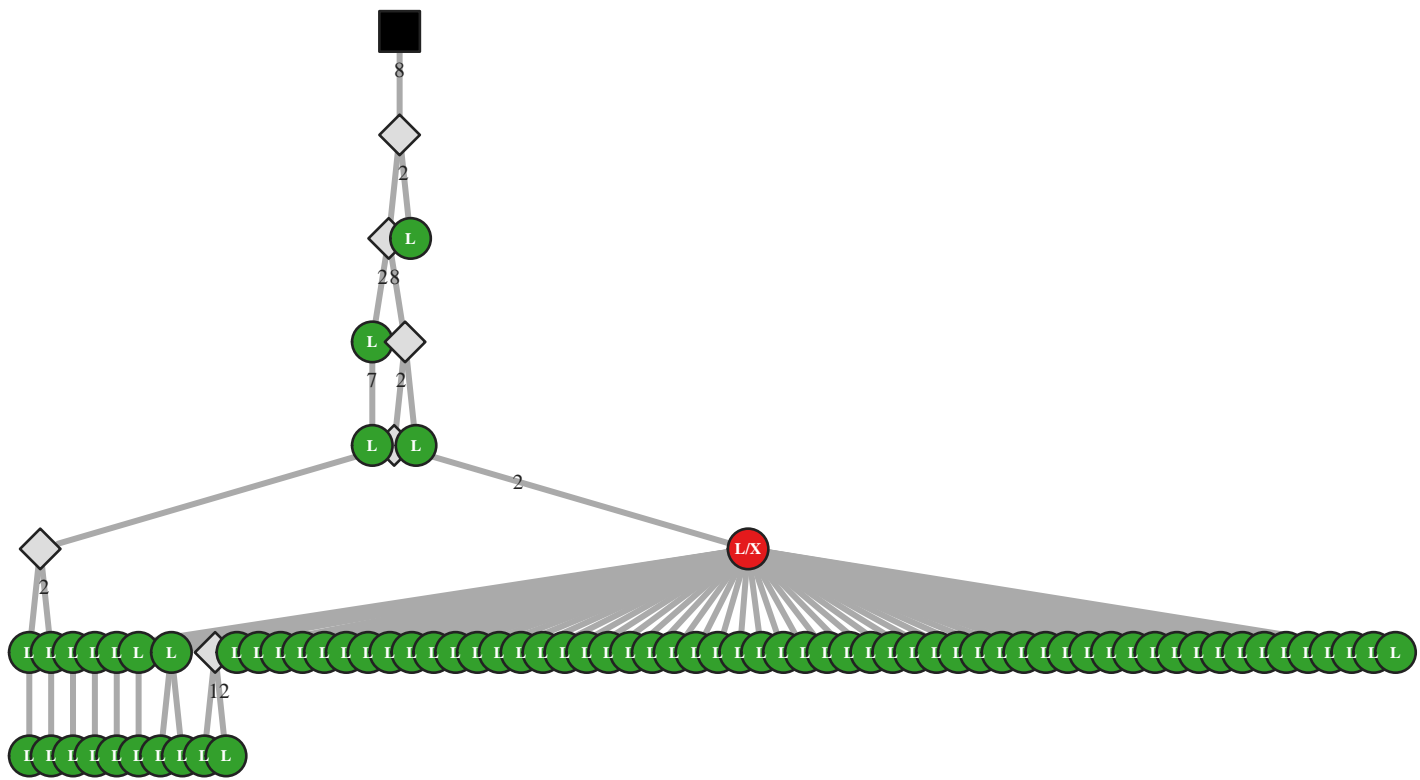
M5 IgG IGHV3-33/J4 45bp (17058)



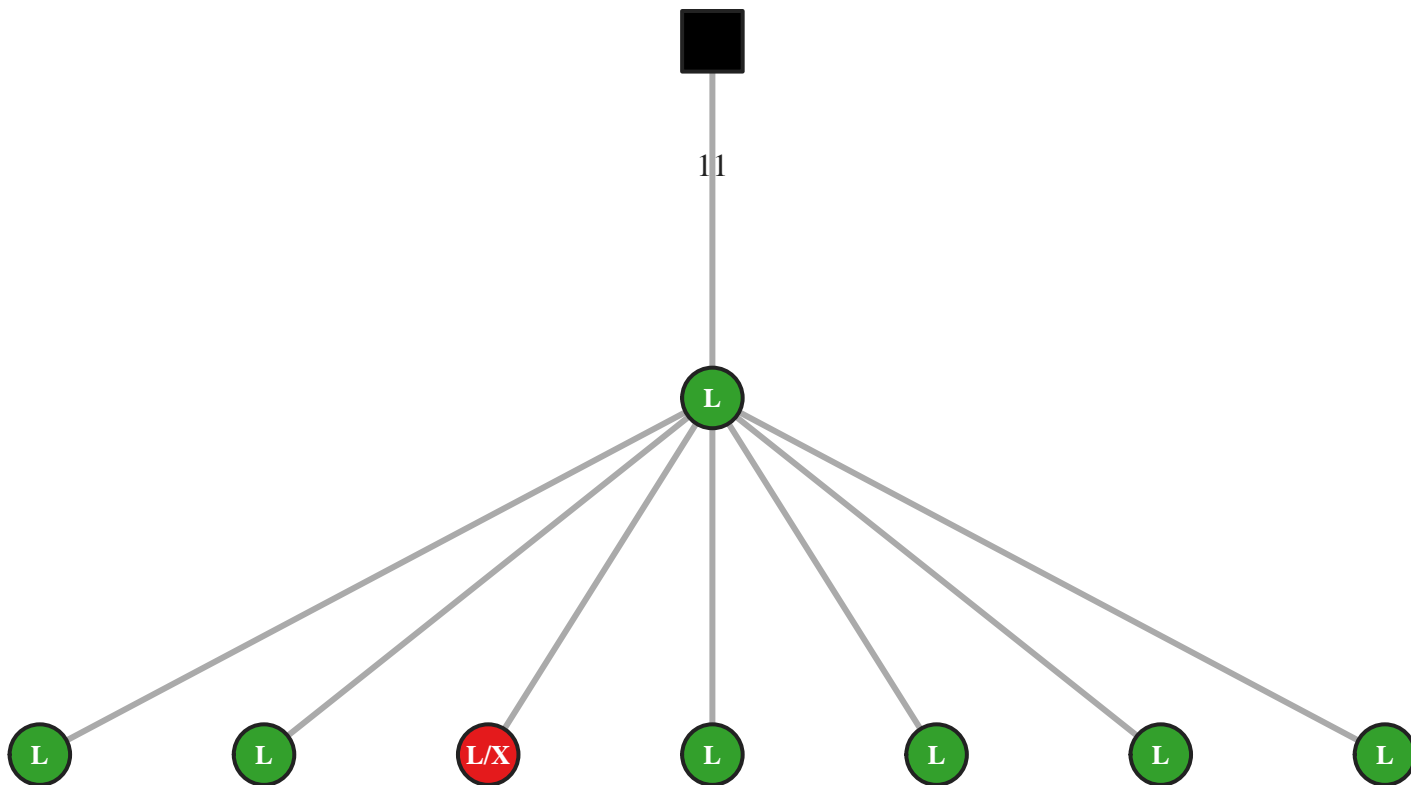
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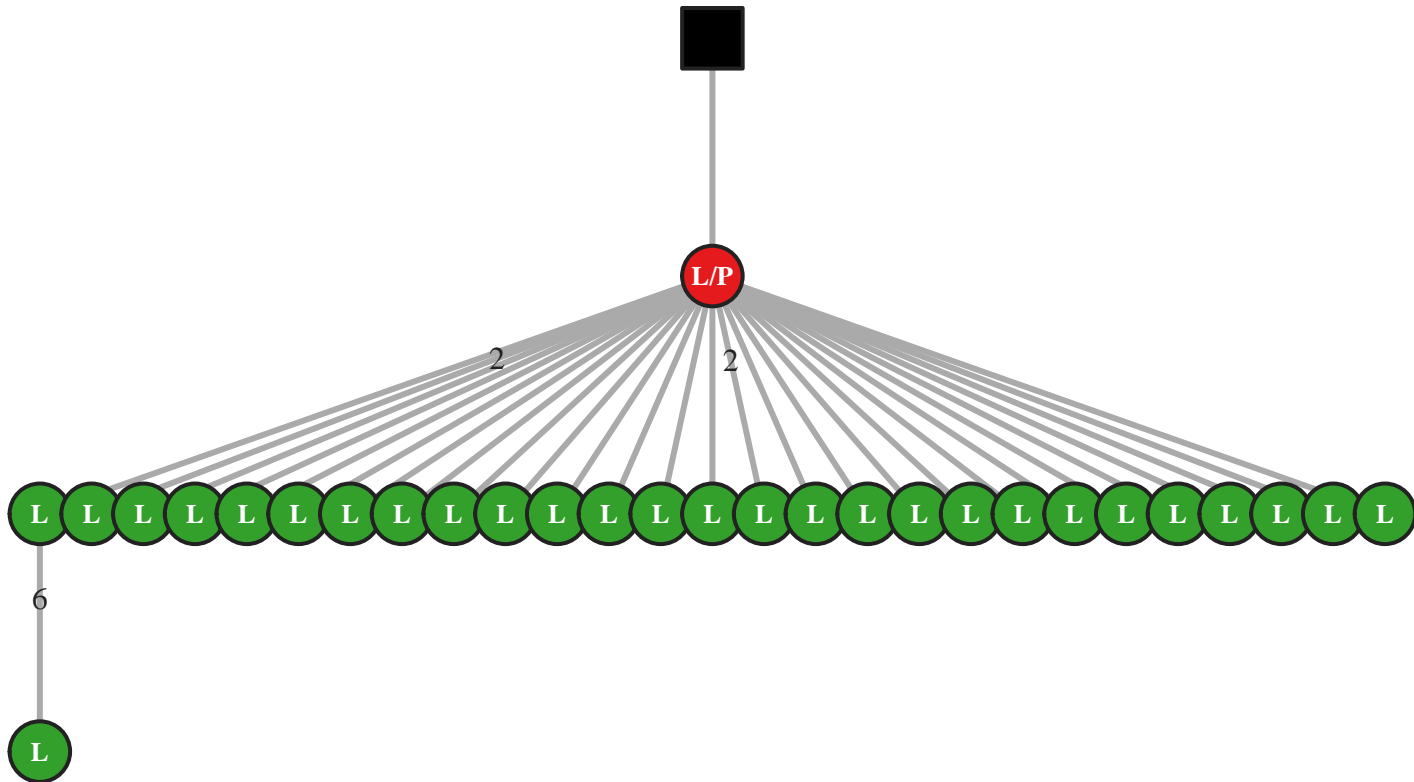
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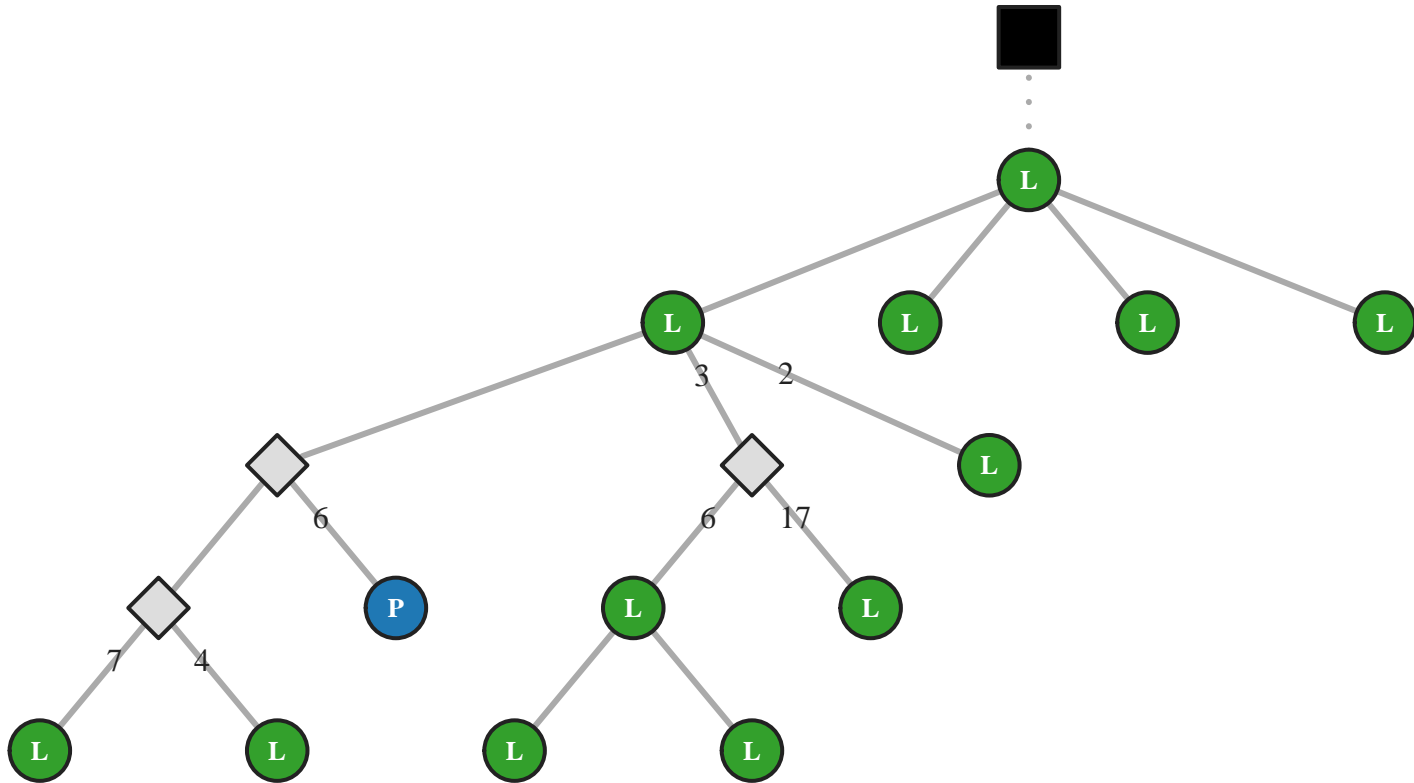
M5 IgG IGHV3-33/J4 48bp (7353)



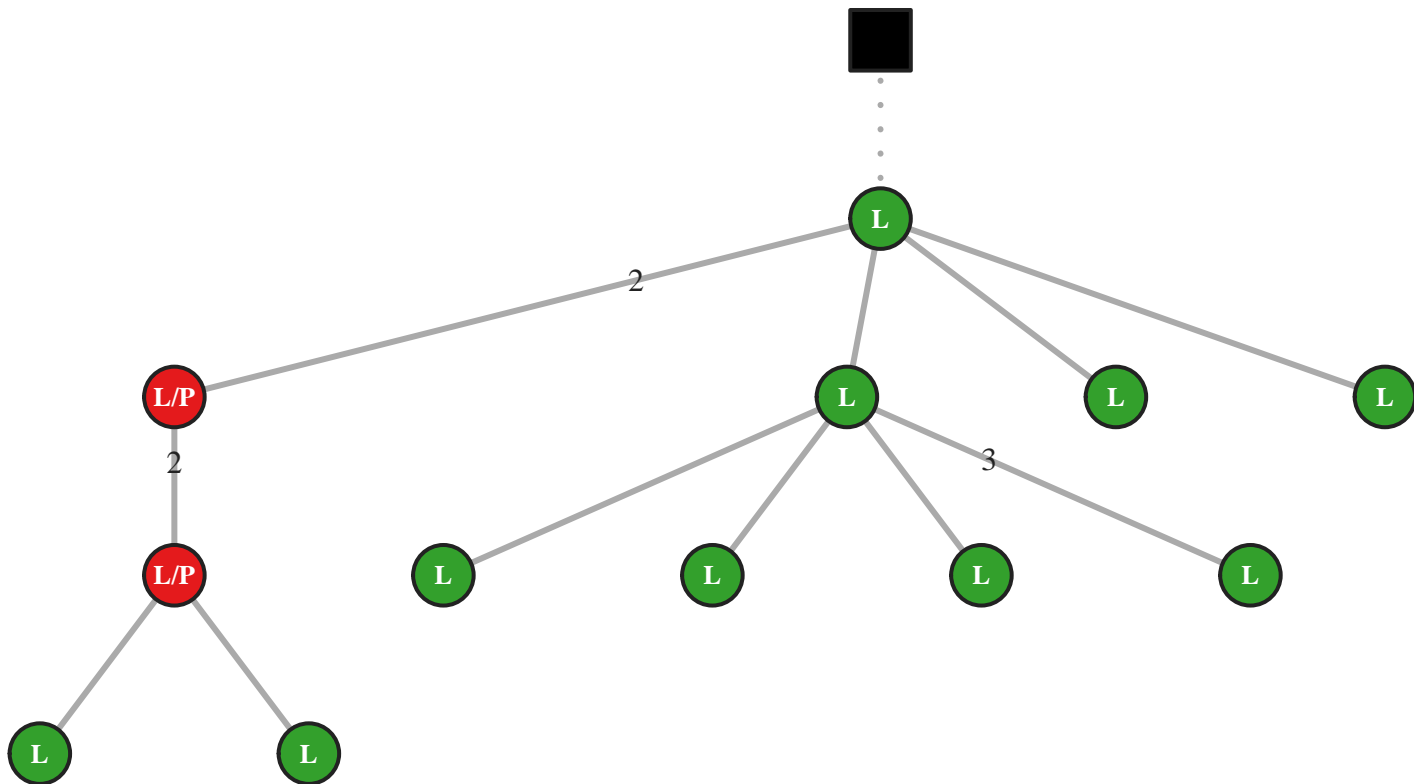
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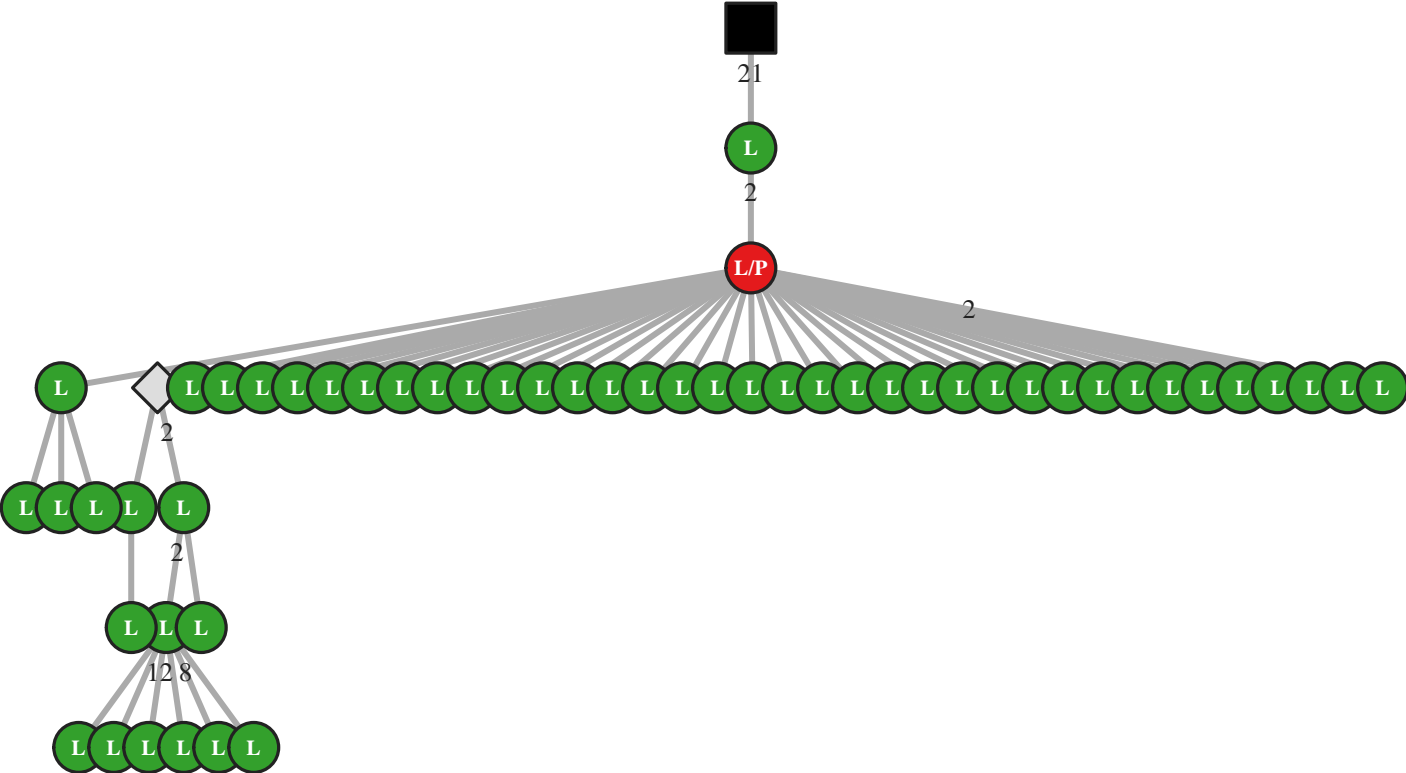
M5 IgG IGHV3-33/J4 51bp (44333)



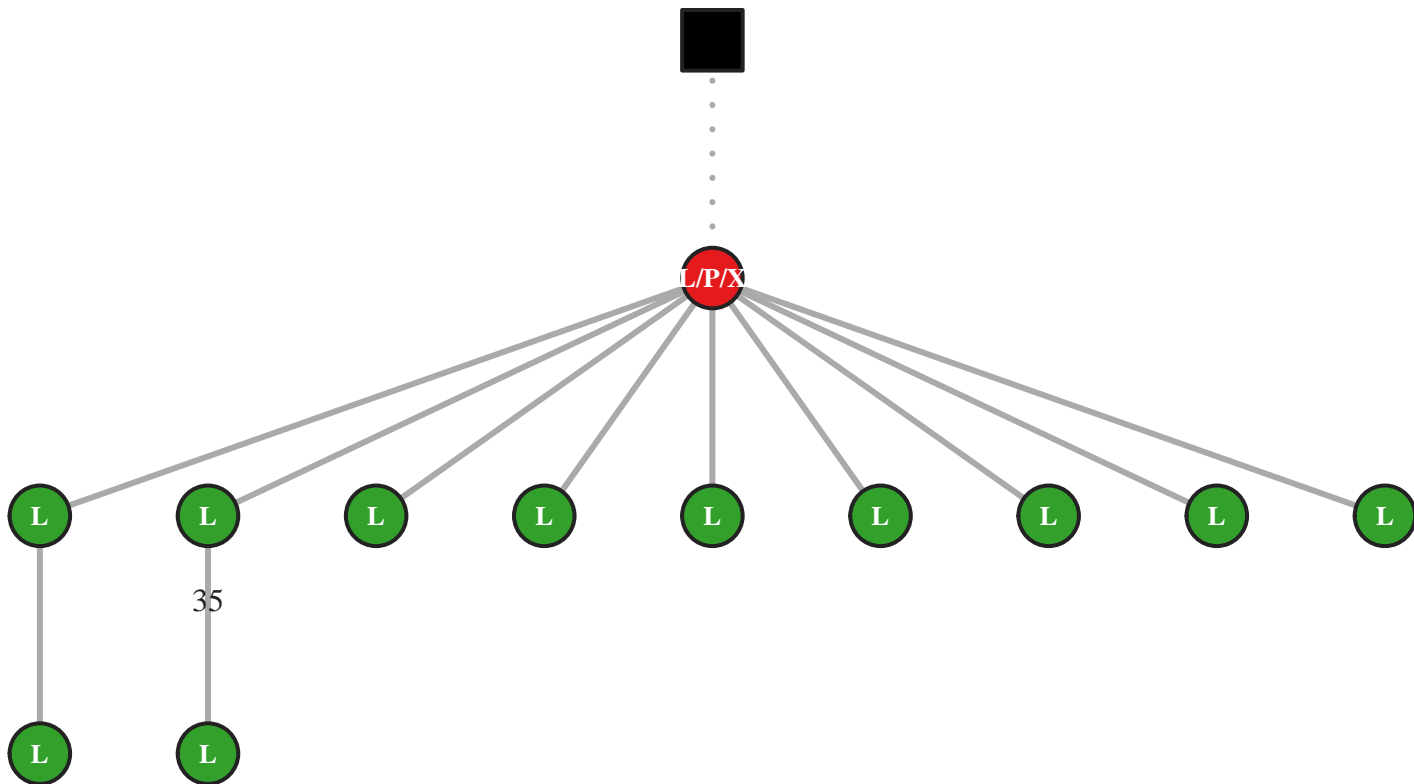
M5 IgG IGHV3-33/J4 51bp (44526)



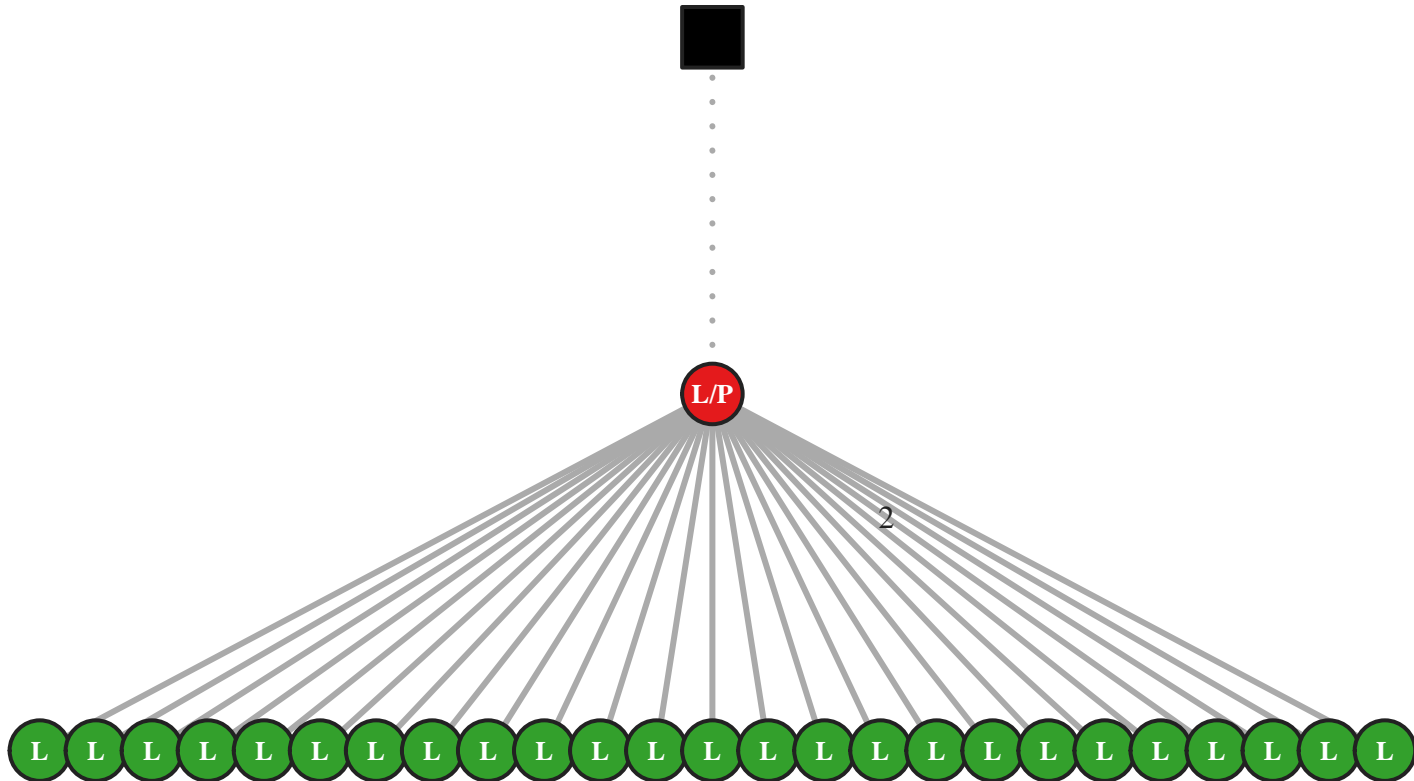
M5 IgG IGHV3-33/J4 54bp (34657)



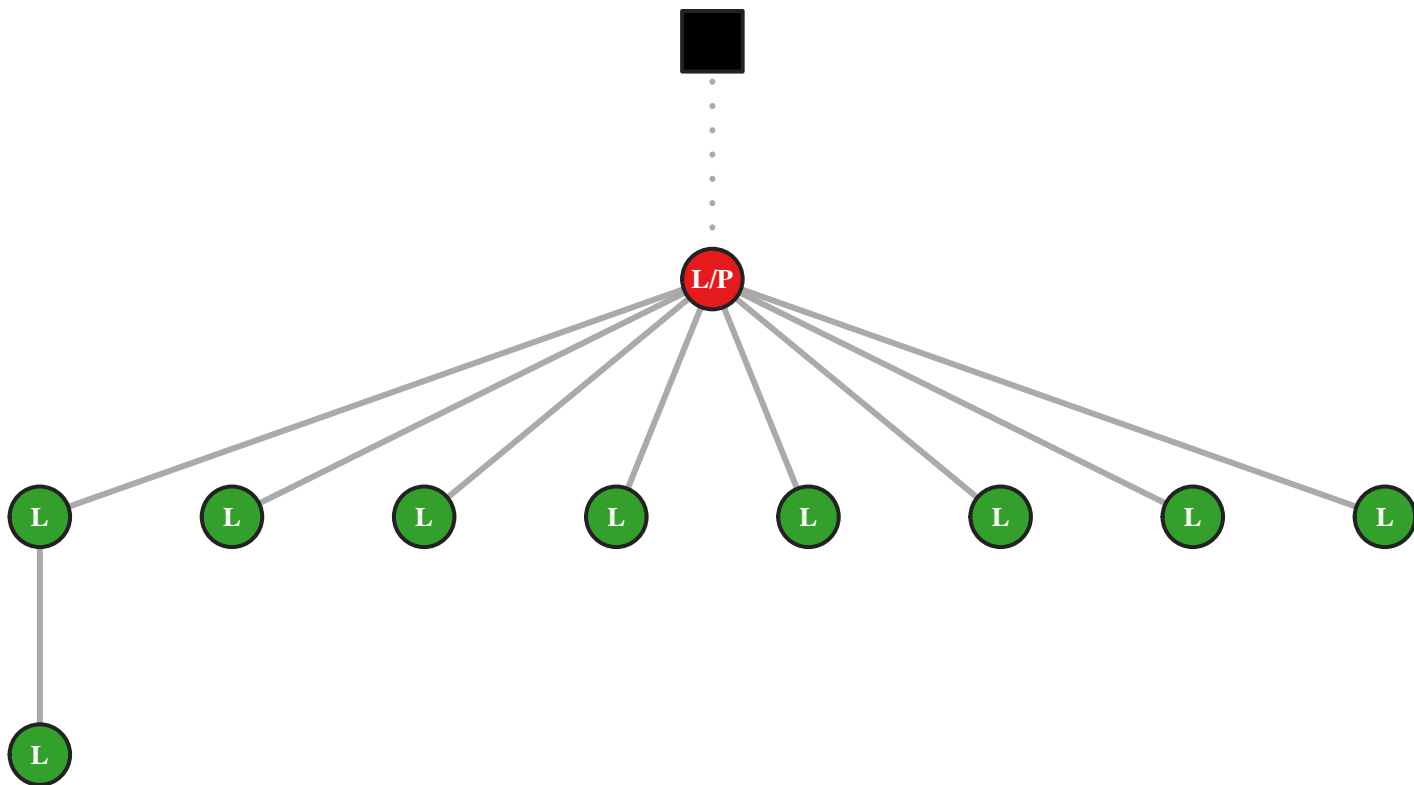
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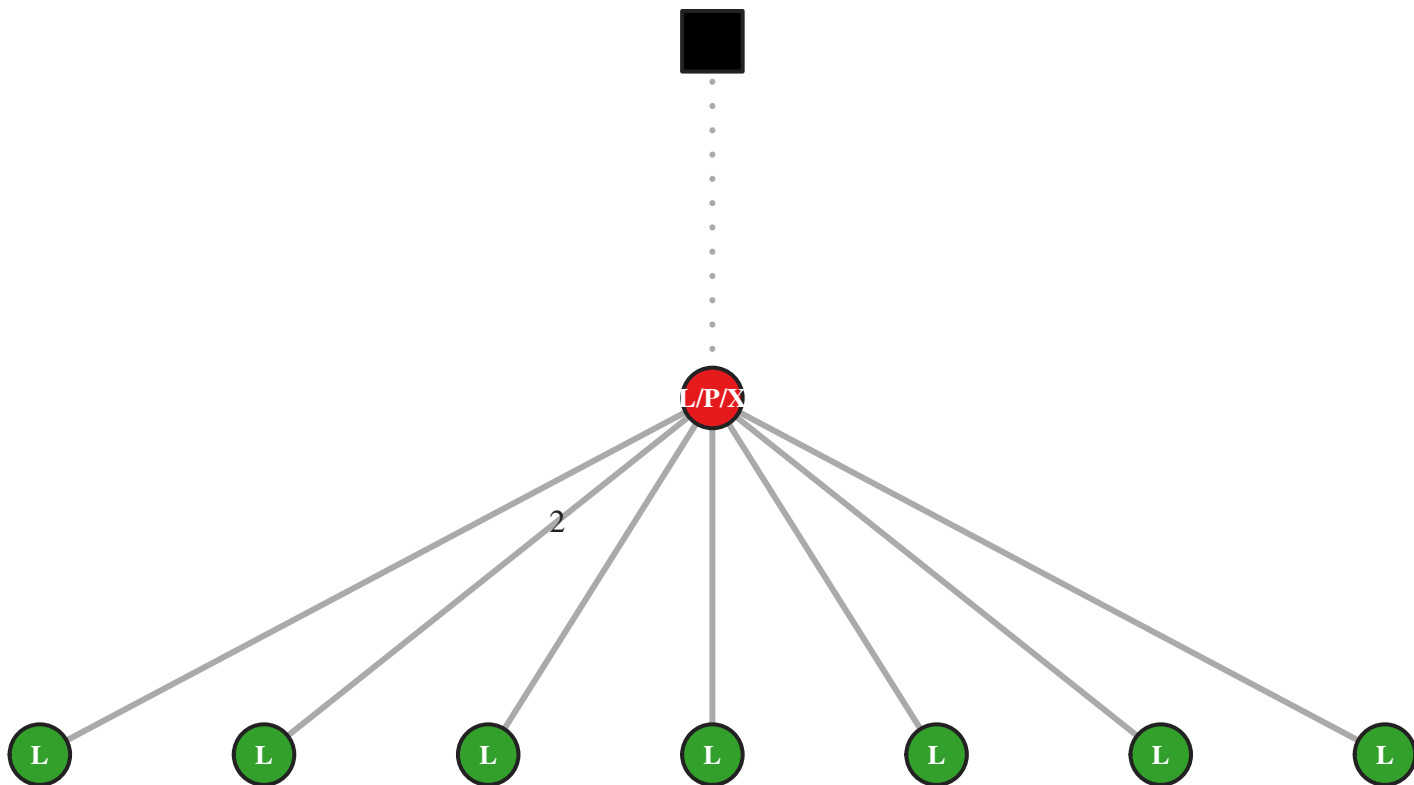
M5 IgG IGHV3-33/J4 54bp (34702)



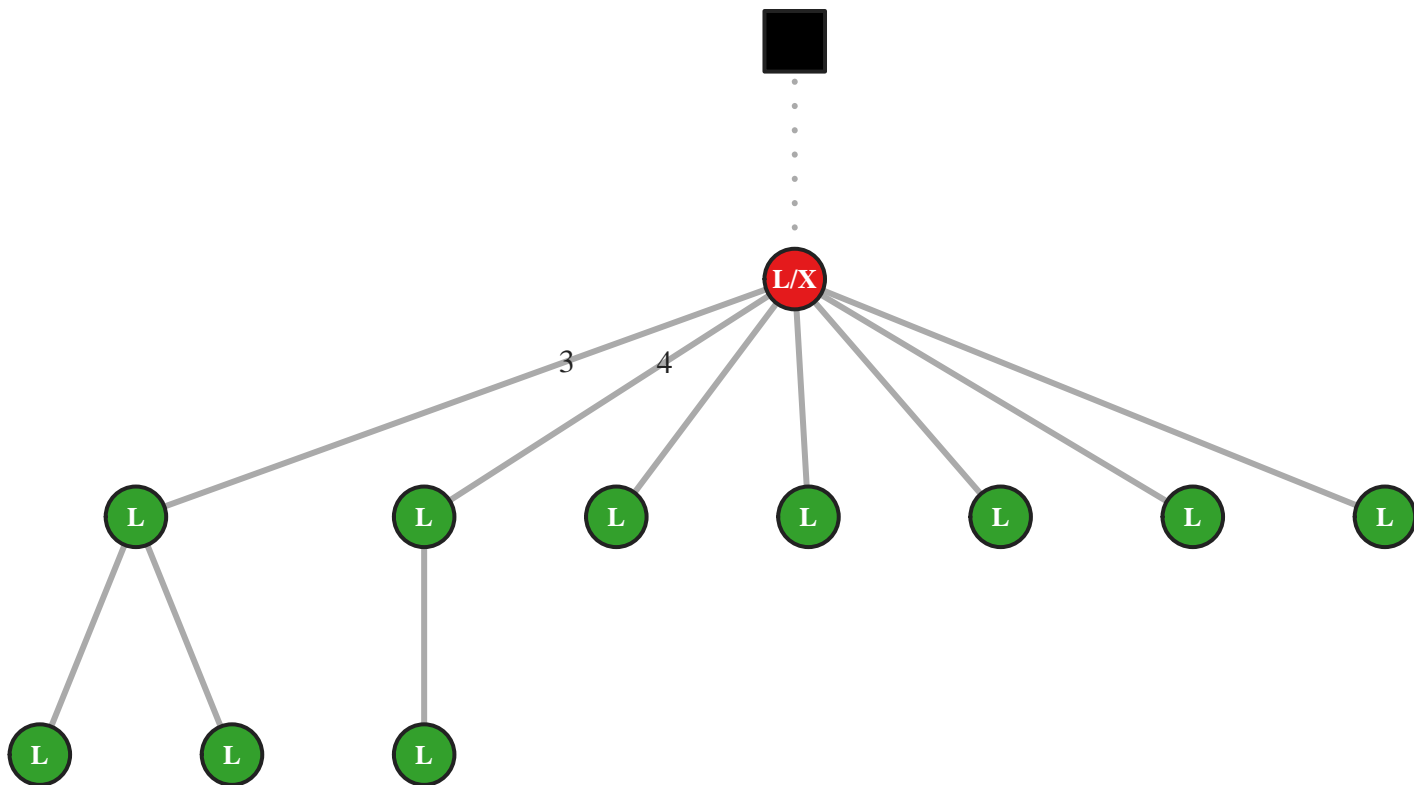
M5 IgG IGHV3-33/J4 57bp (51898)



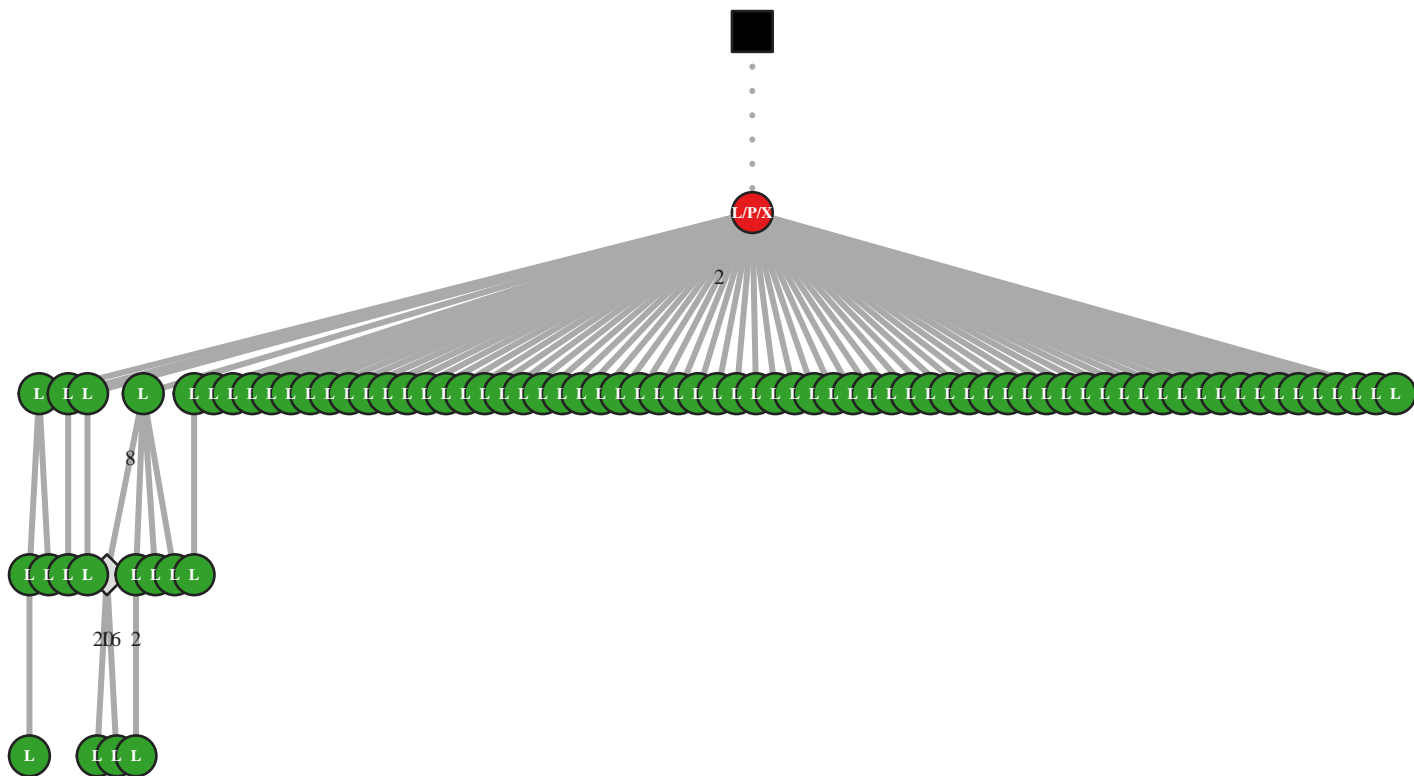
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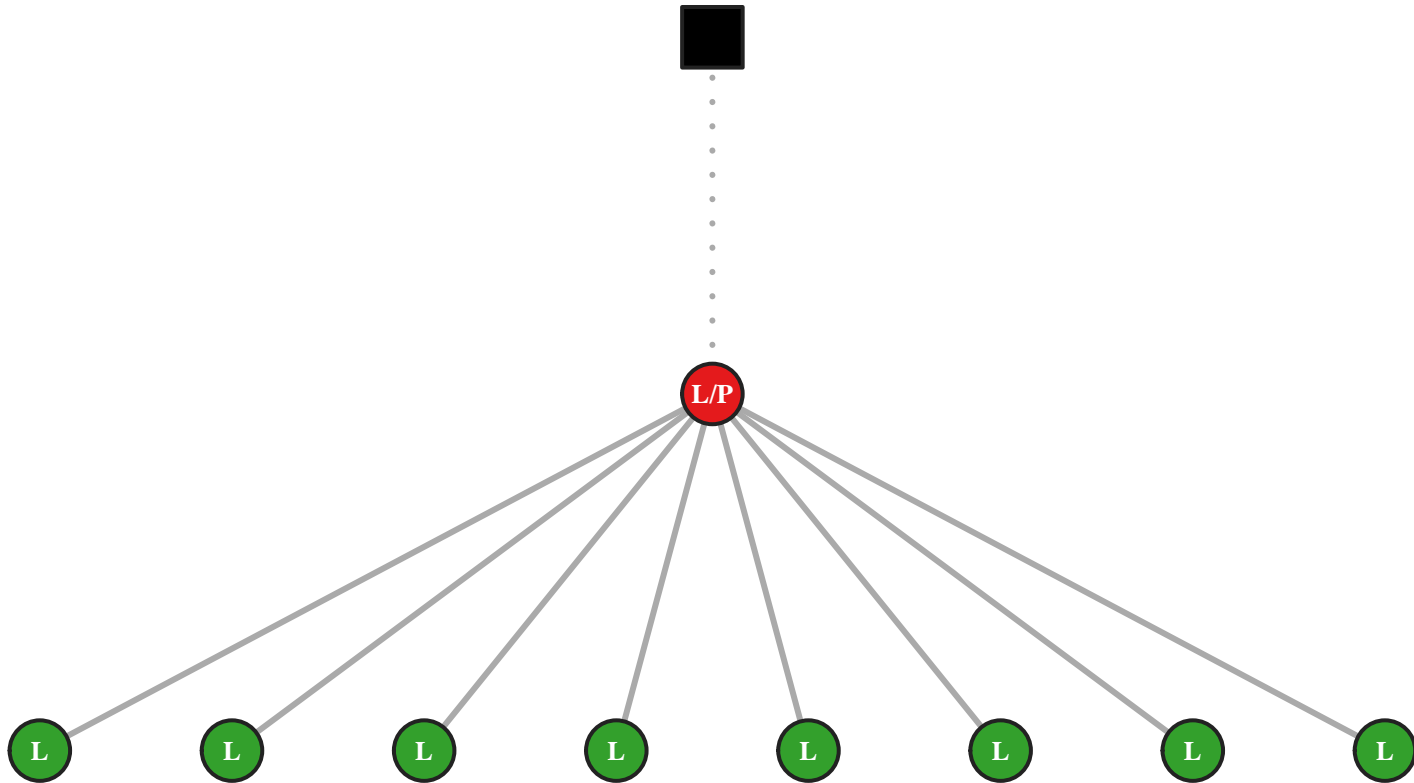
M5 IgG IGHV3-33/J4 60bp (25942)



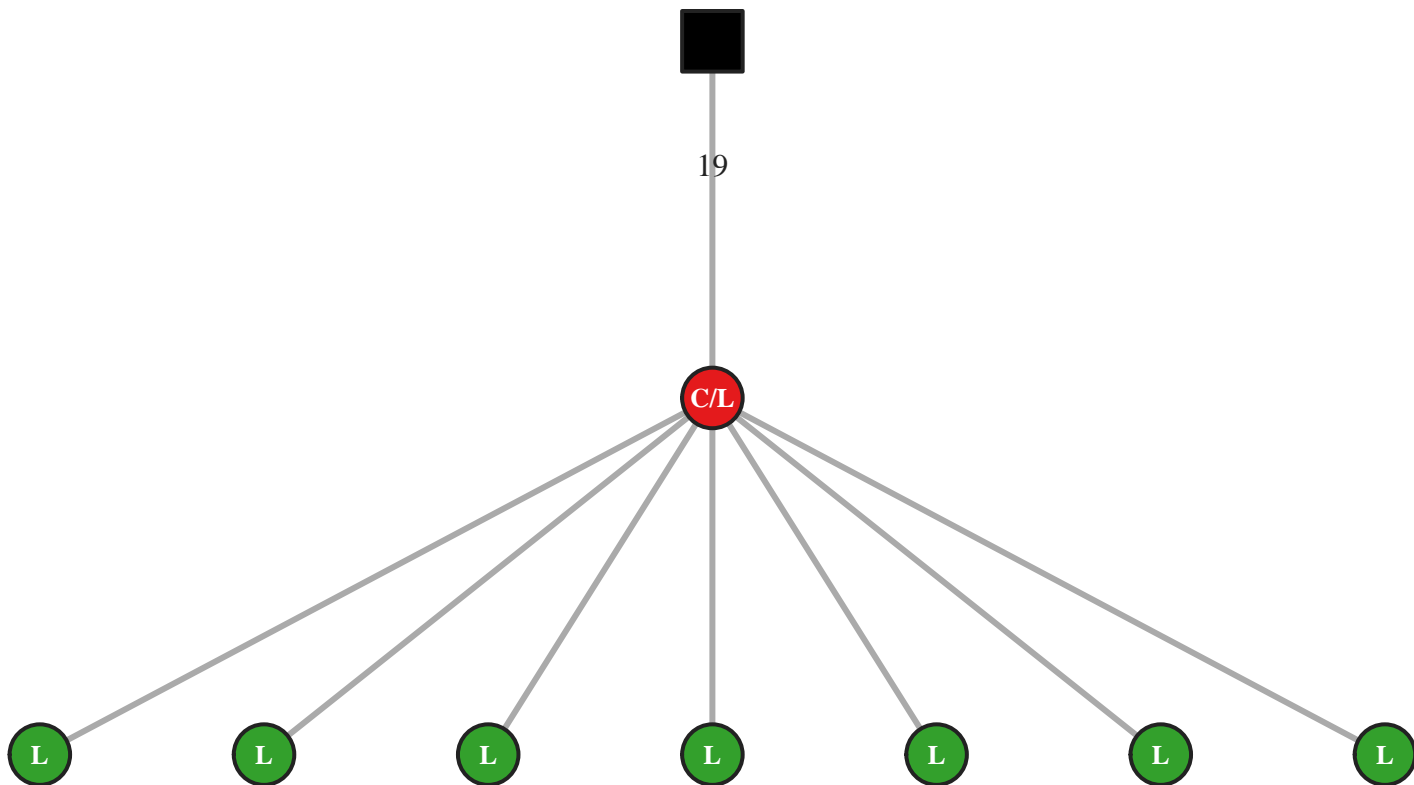
M5 IgG IGHV3-33/J4 66bp (45083)



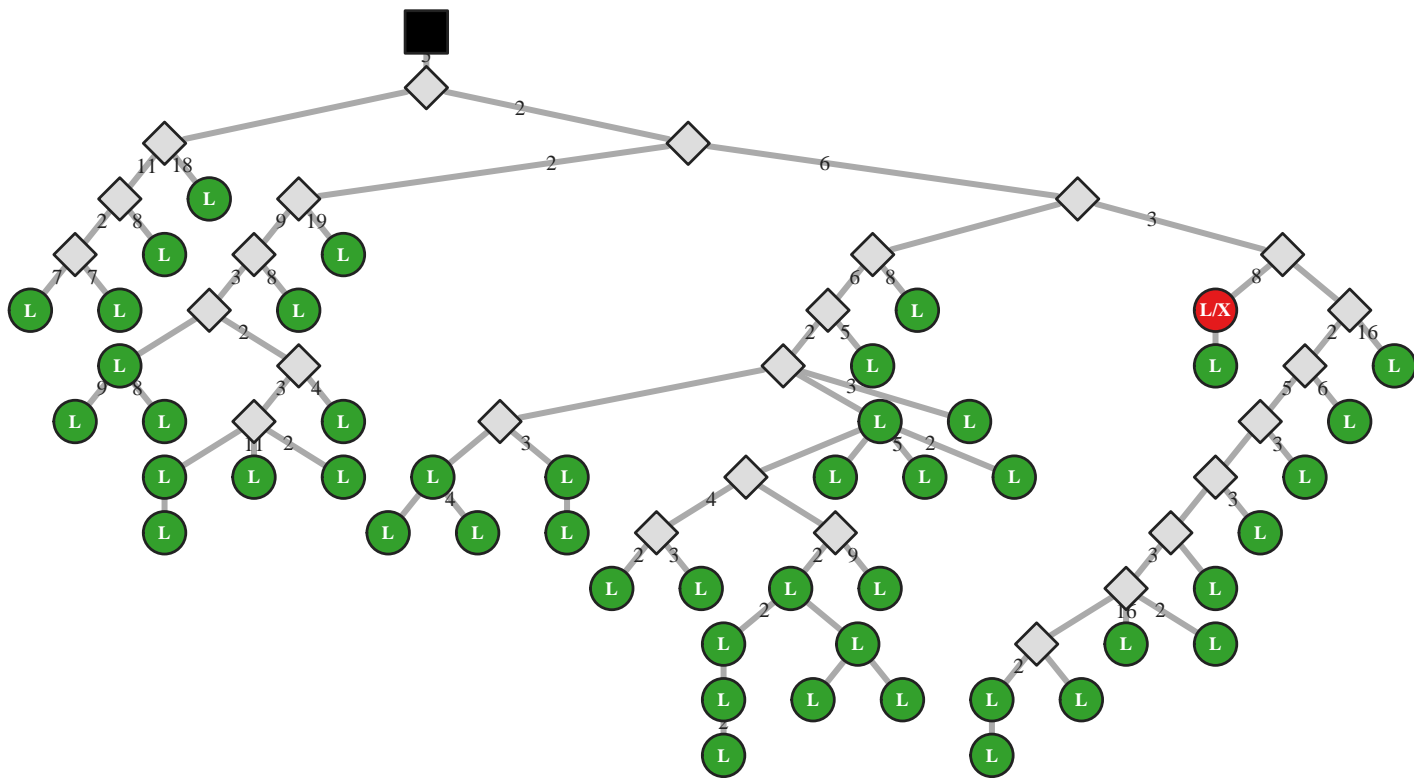
M5 IgG IGHV3-33/J4 66bp (45088)



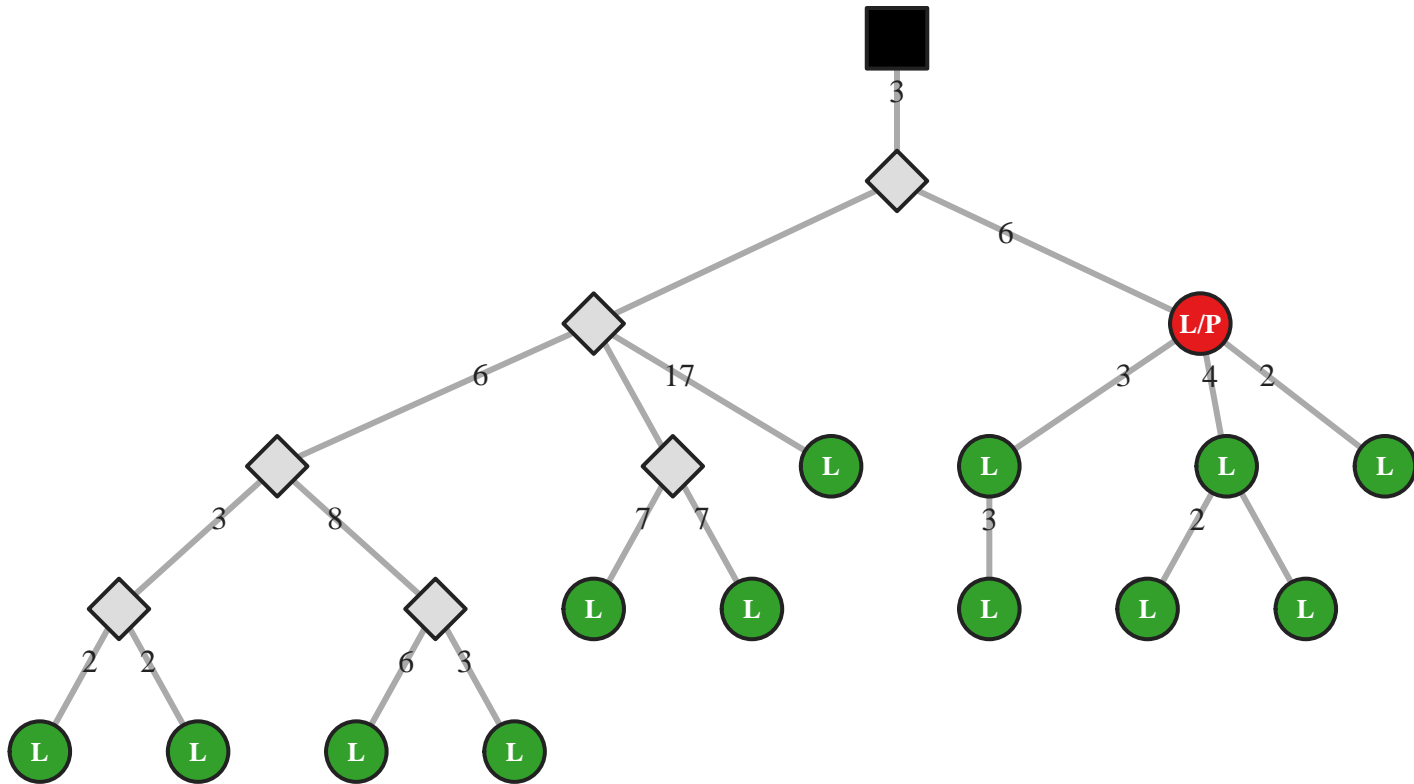
M5 IgG IGHV3-33/J5 48bp (44625)



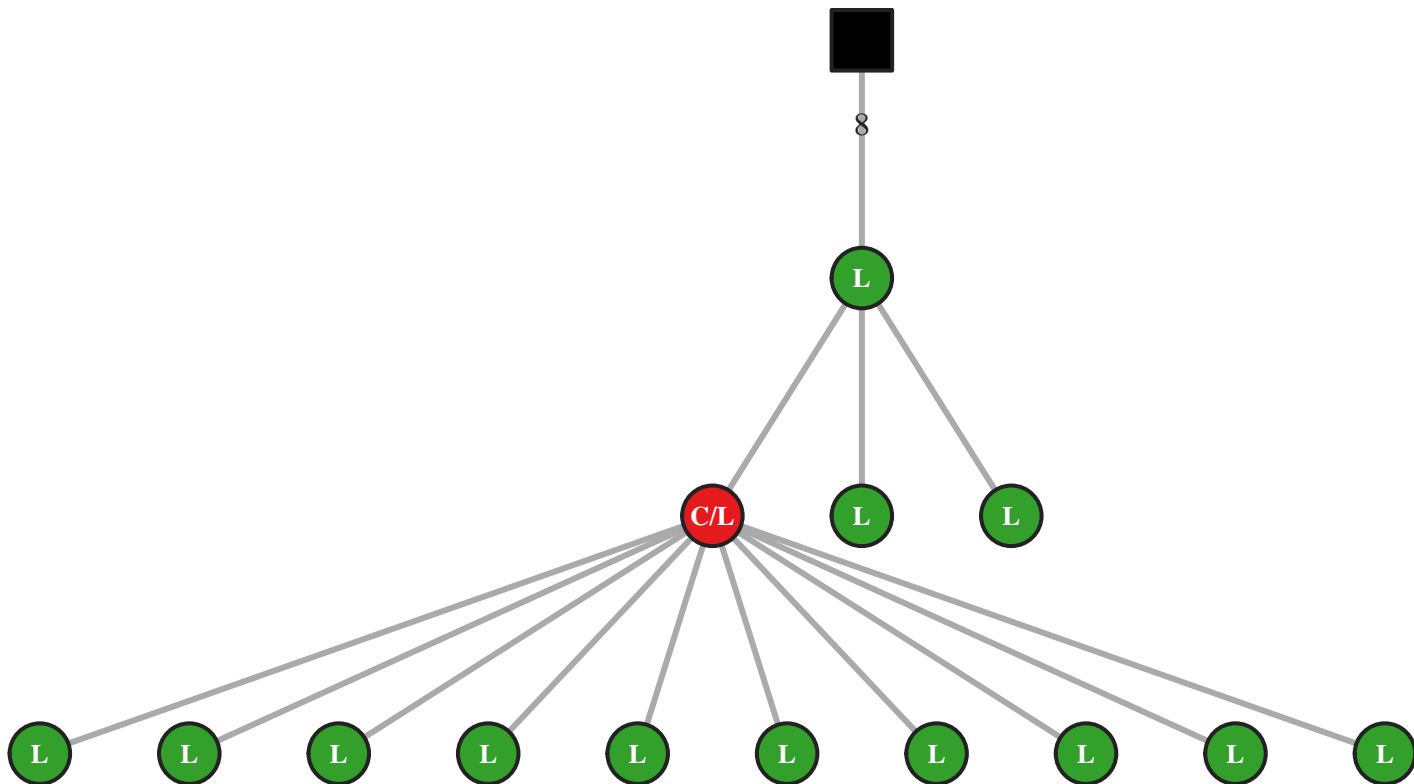
M5 IgG IGHV3-33/J5 48bp (44631)



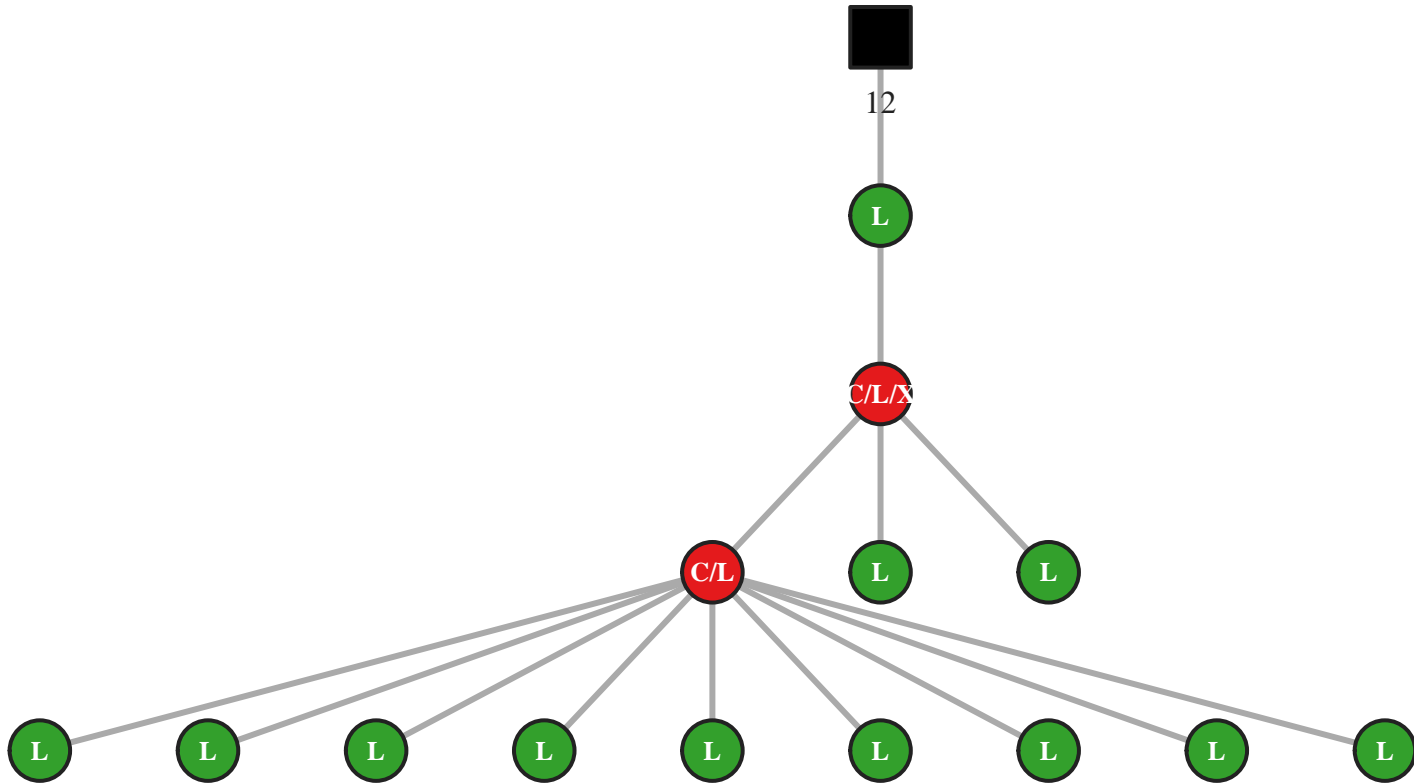
M5 IgG IGHV3-33/J5 51bp (17564)



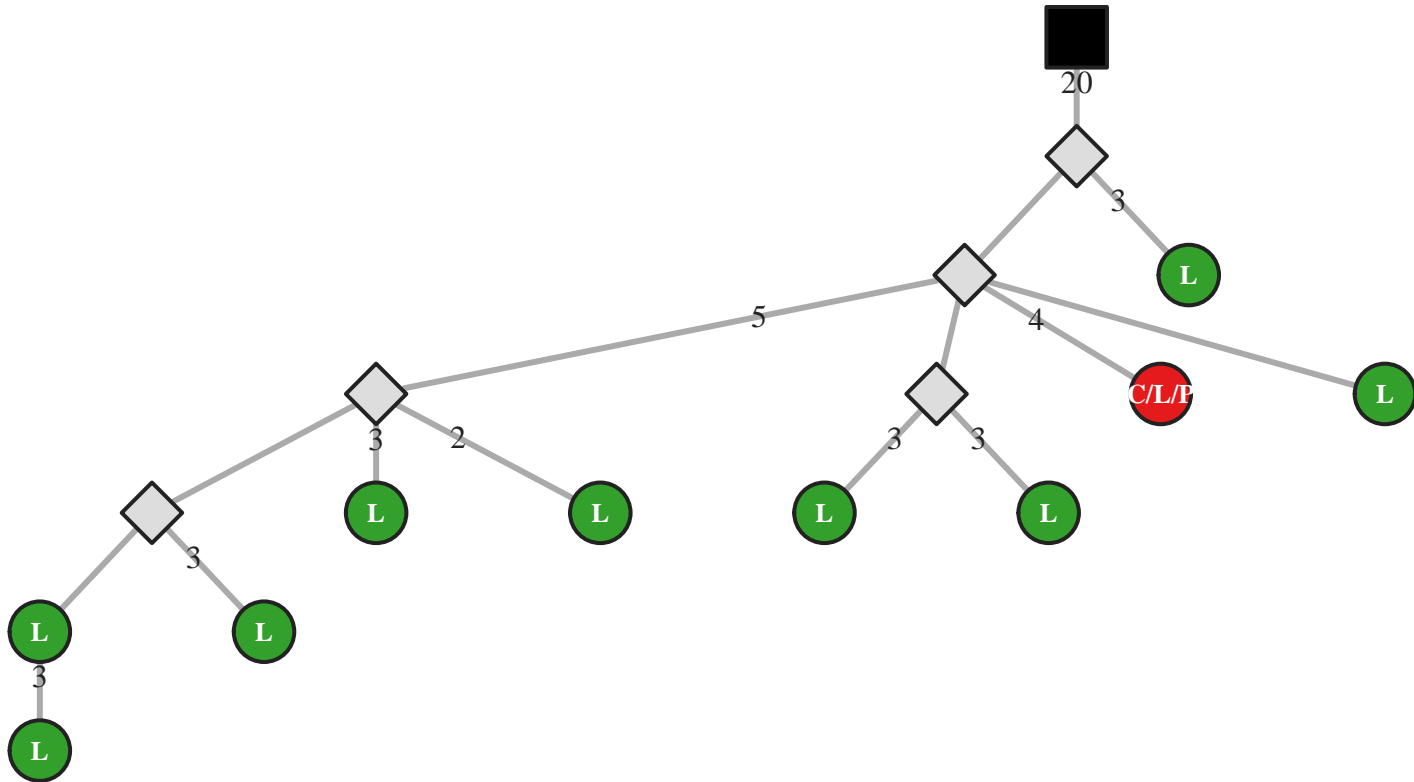
M5 IgG IGHV3-33/J5 54bp (8108)



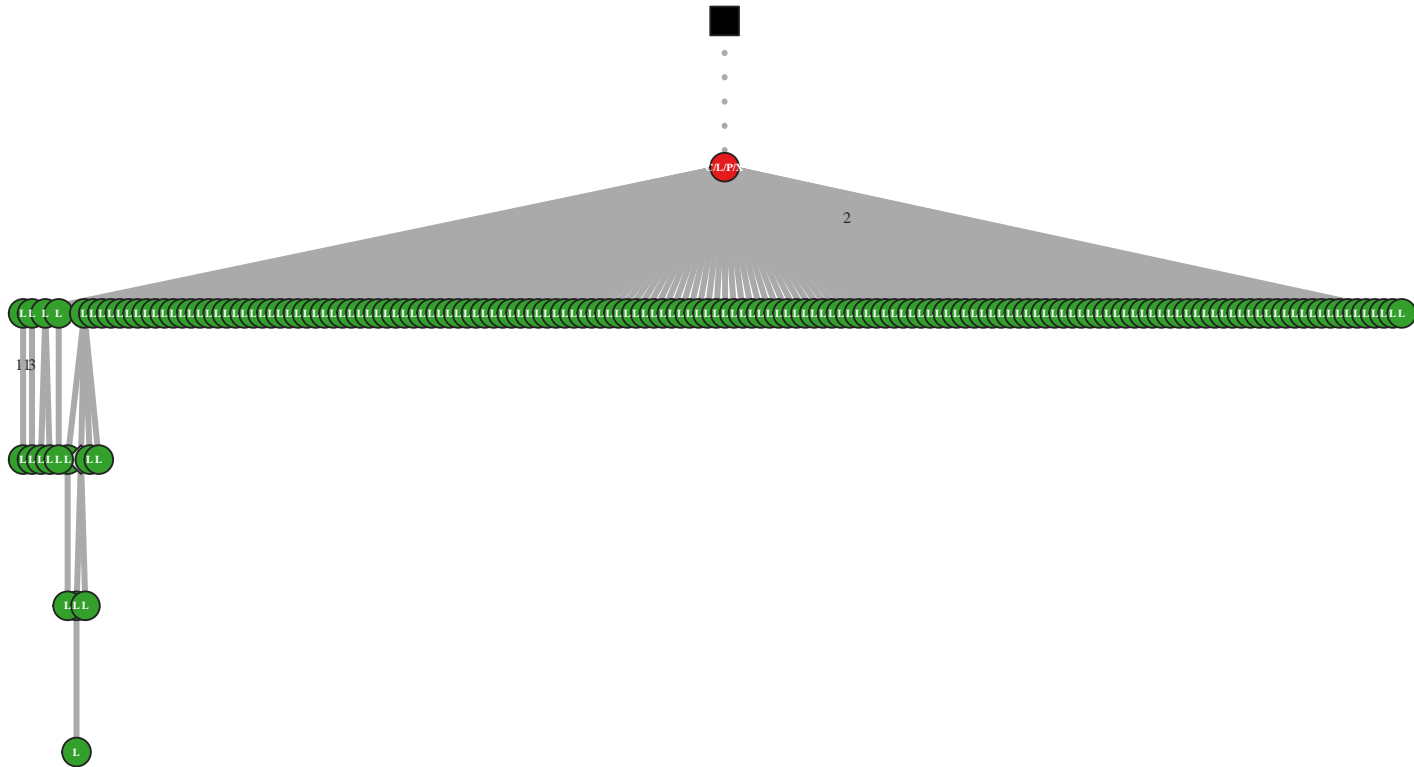
M5 IgG IGHV3-33/J6 51bp (51972)



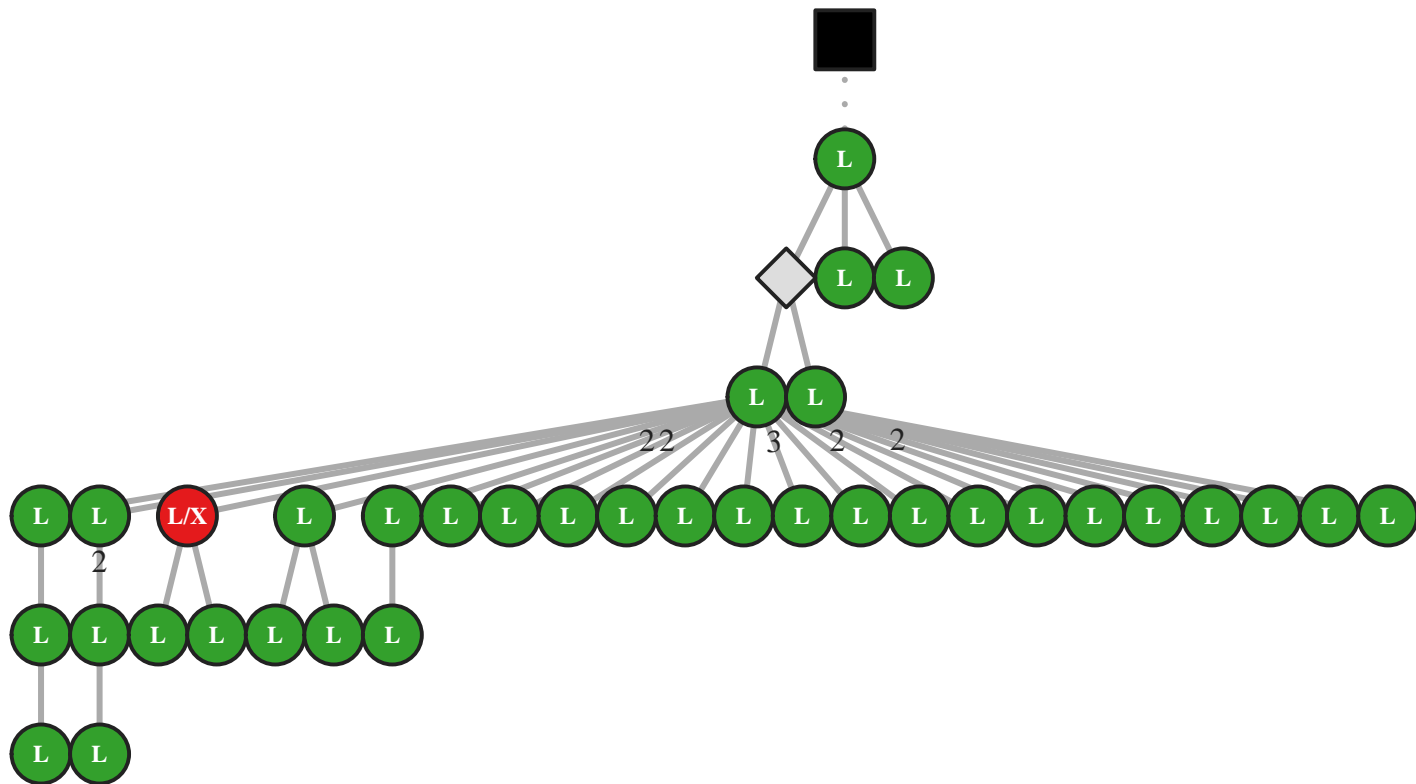
M5 IgG IGHV3-33/J6 54bp (51689)



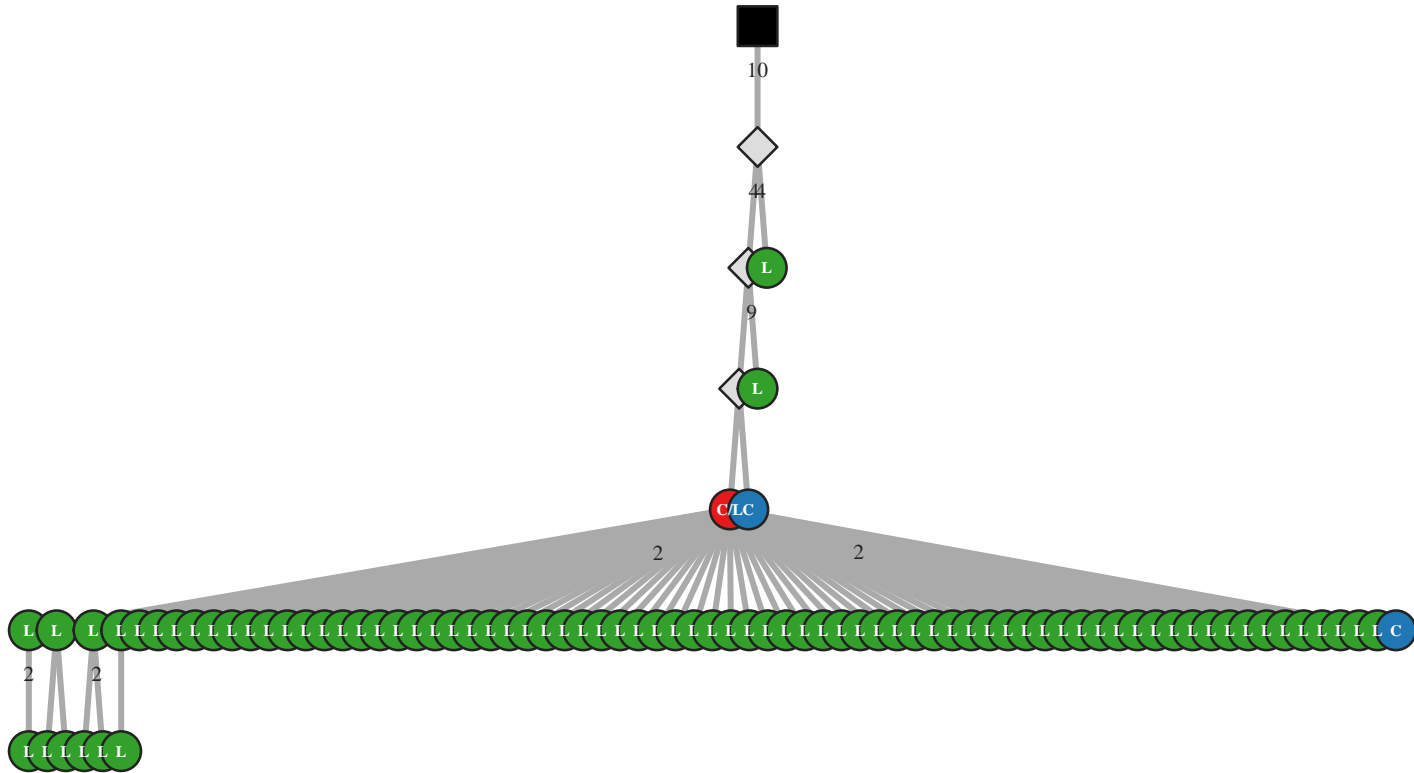
M5 IgG IGHV3-33/J6 54bp (51709)



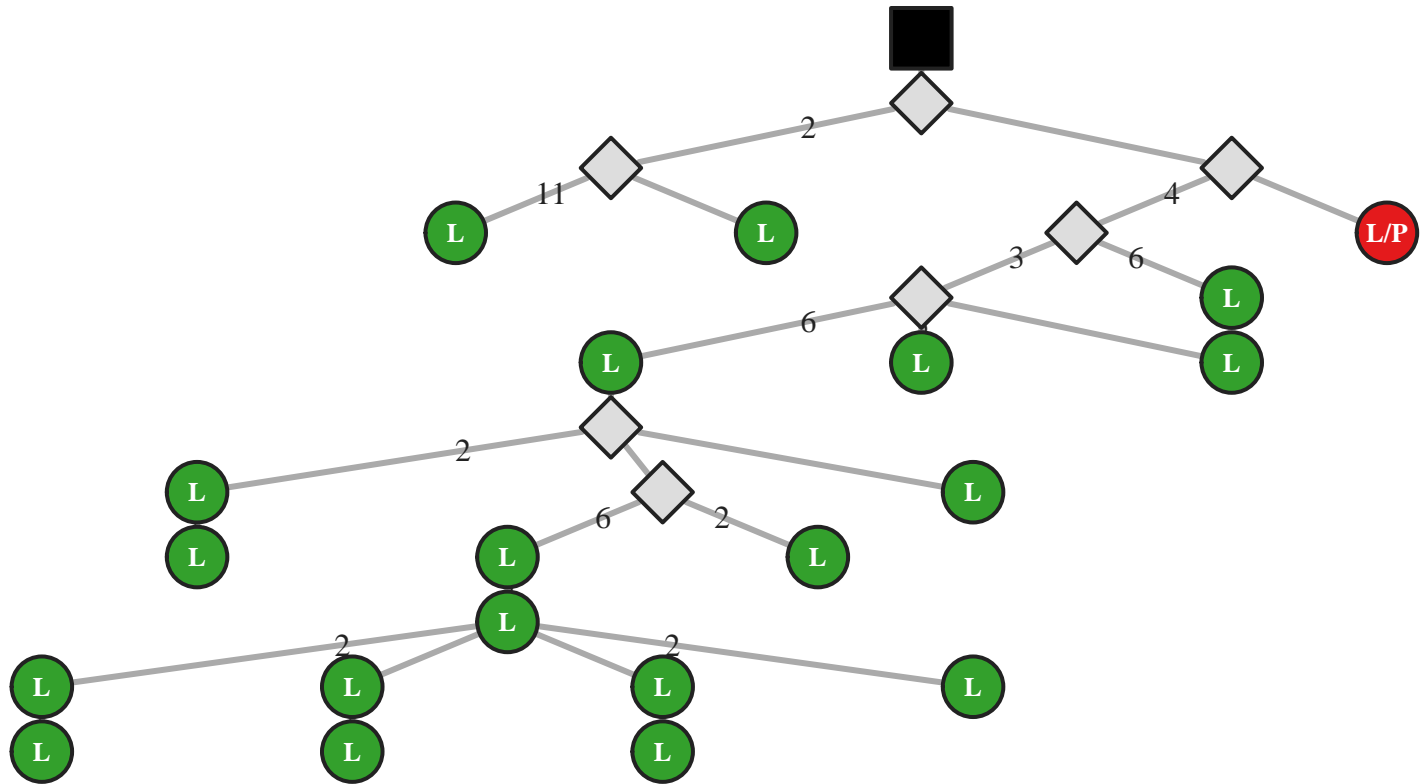
M5 IgG IGHV3-33/J6 66bp (17787)



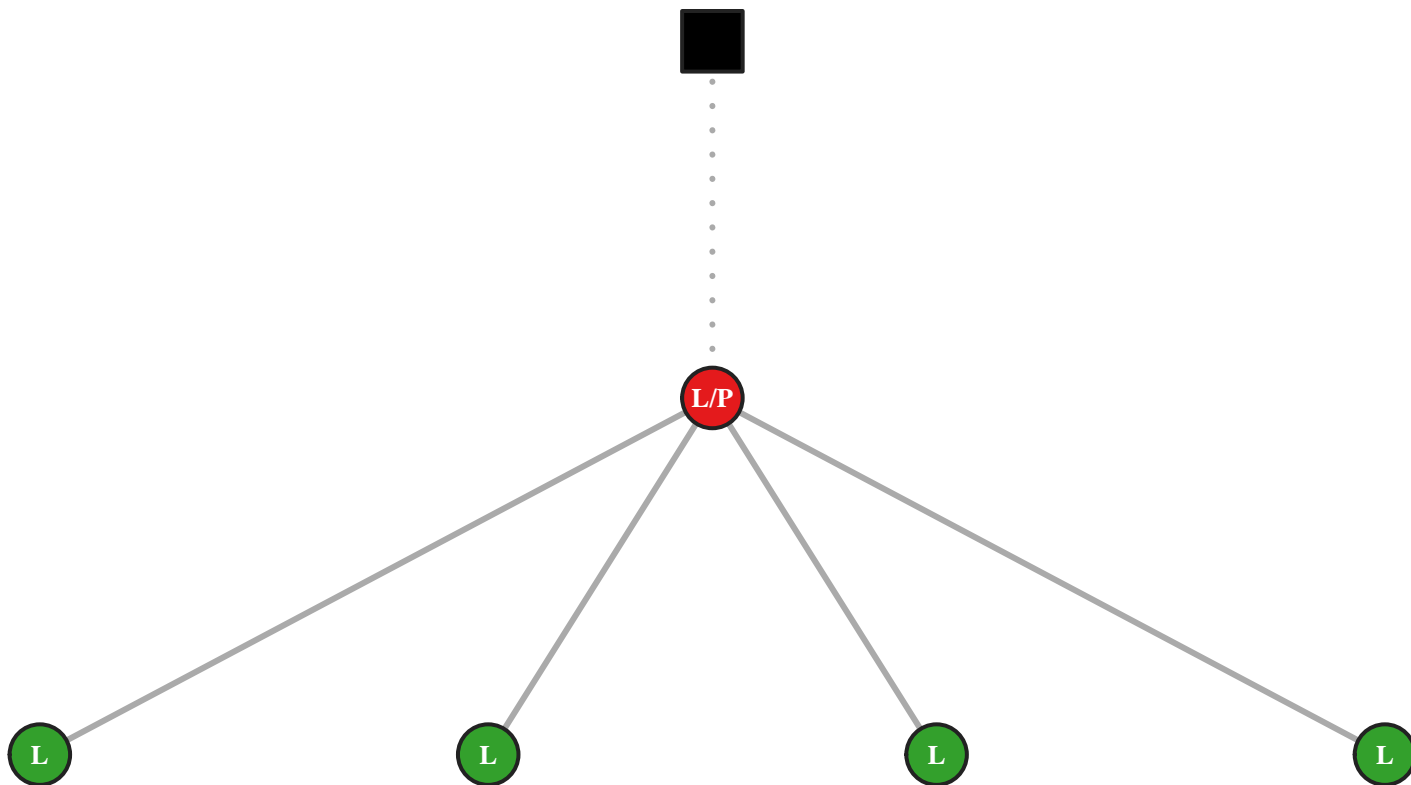
M5 IgG IGHV3-33/J6 69bp (17807)



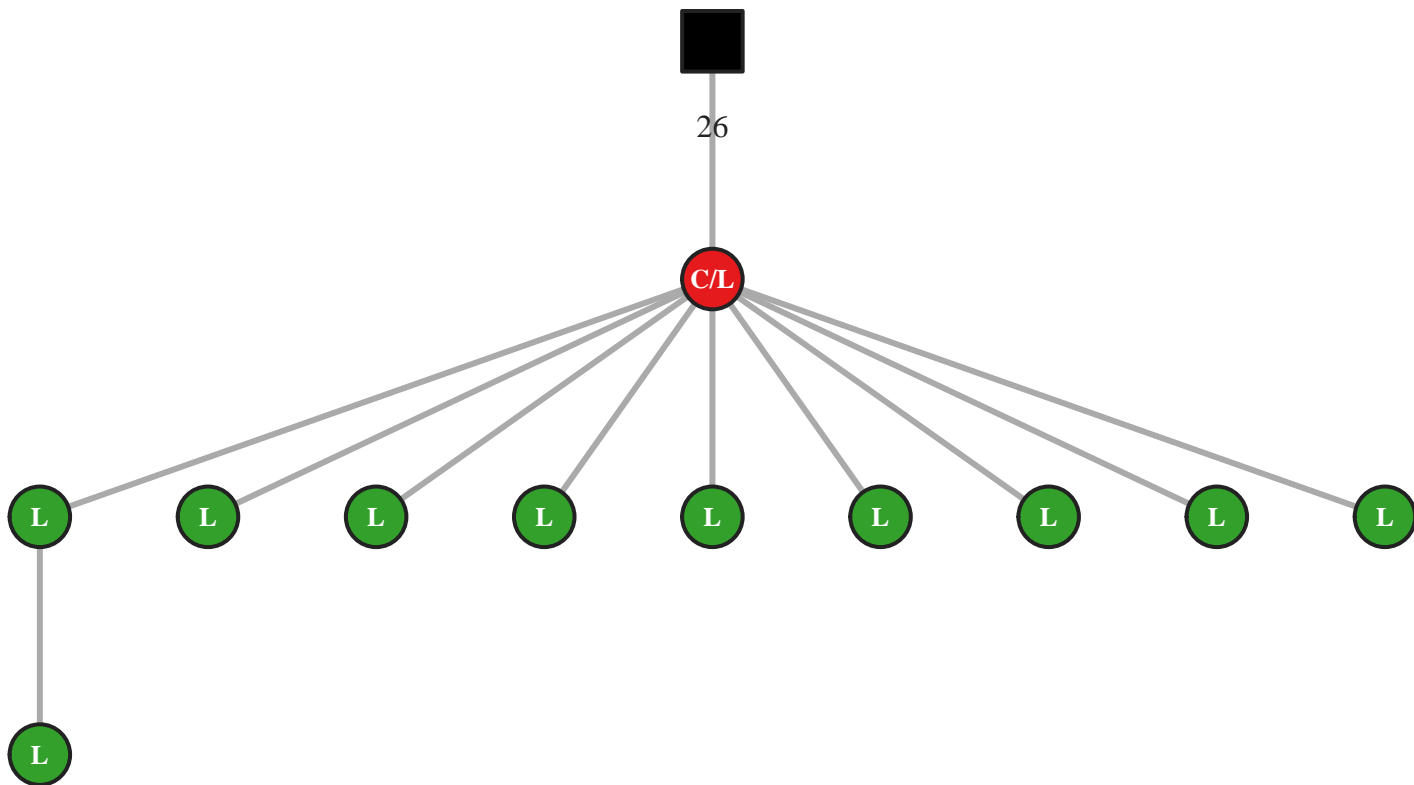
M5 IgG IGHV3-43/J4 54bp (45158)



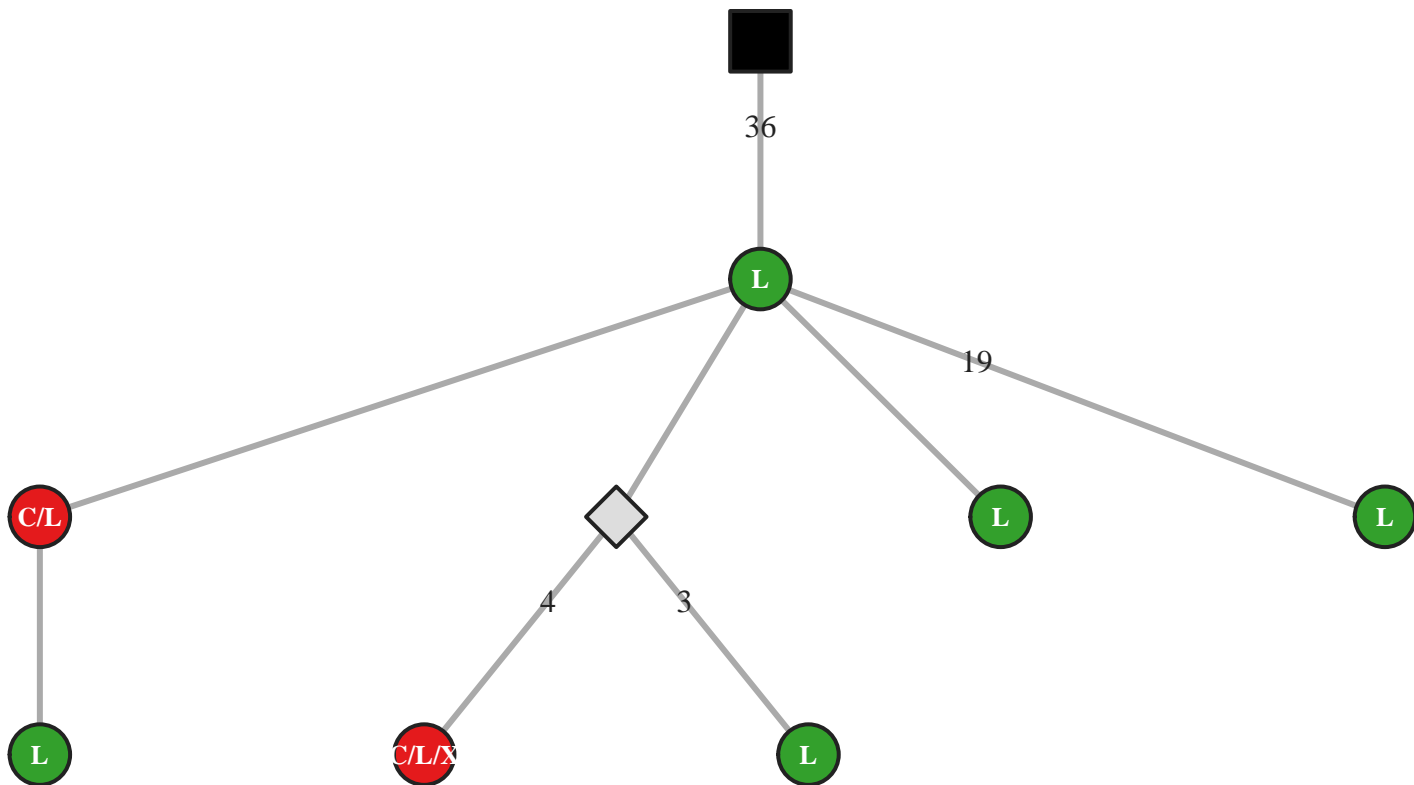
M5 IgG IGHV3-43/J4 57bp (8143)



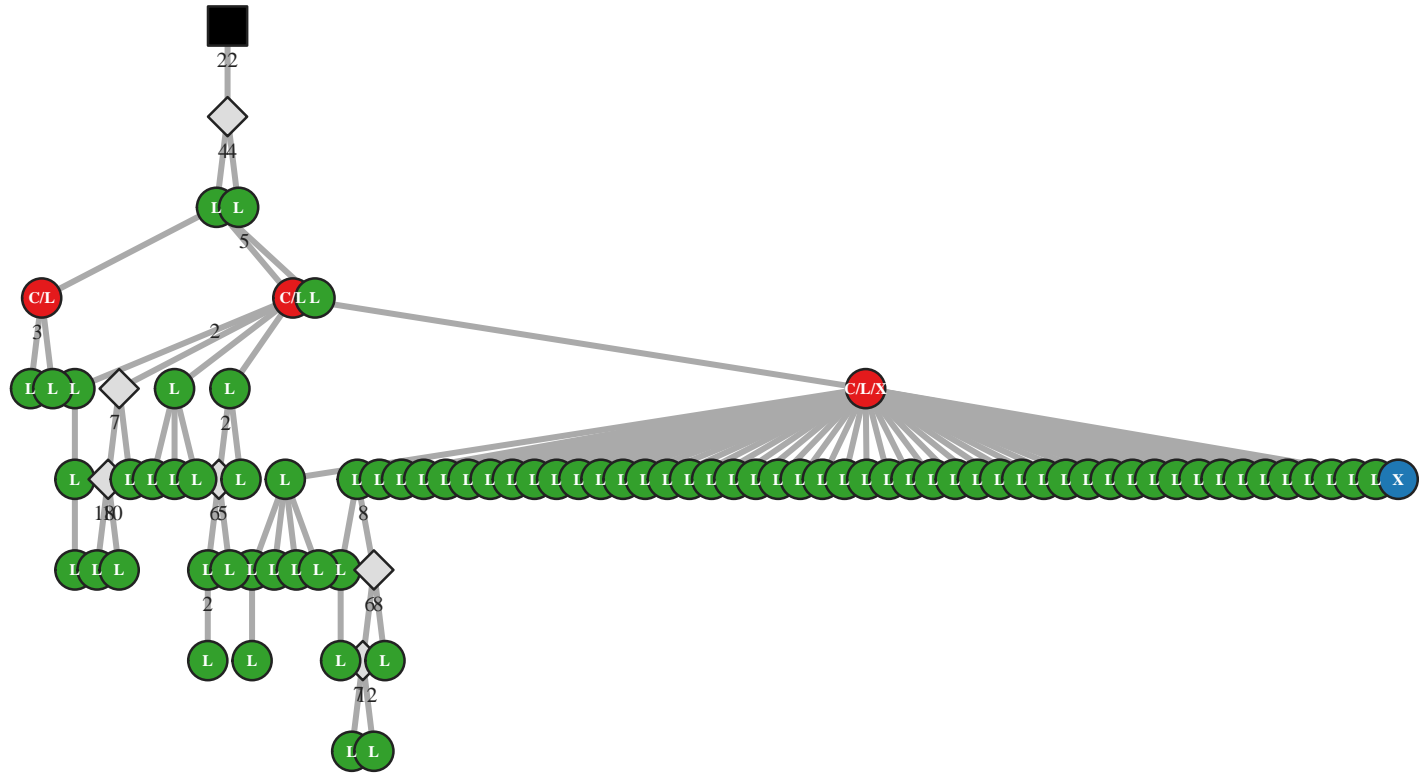
M5 IgG IGHV3-43/J5 51bp (35206)



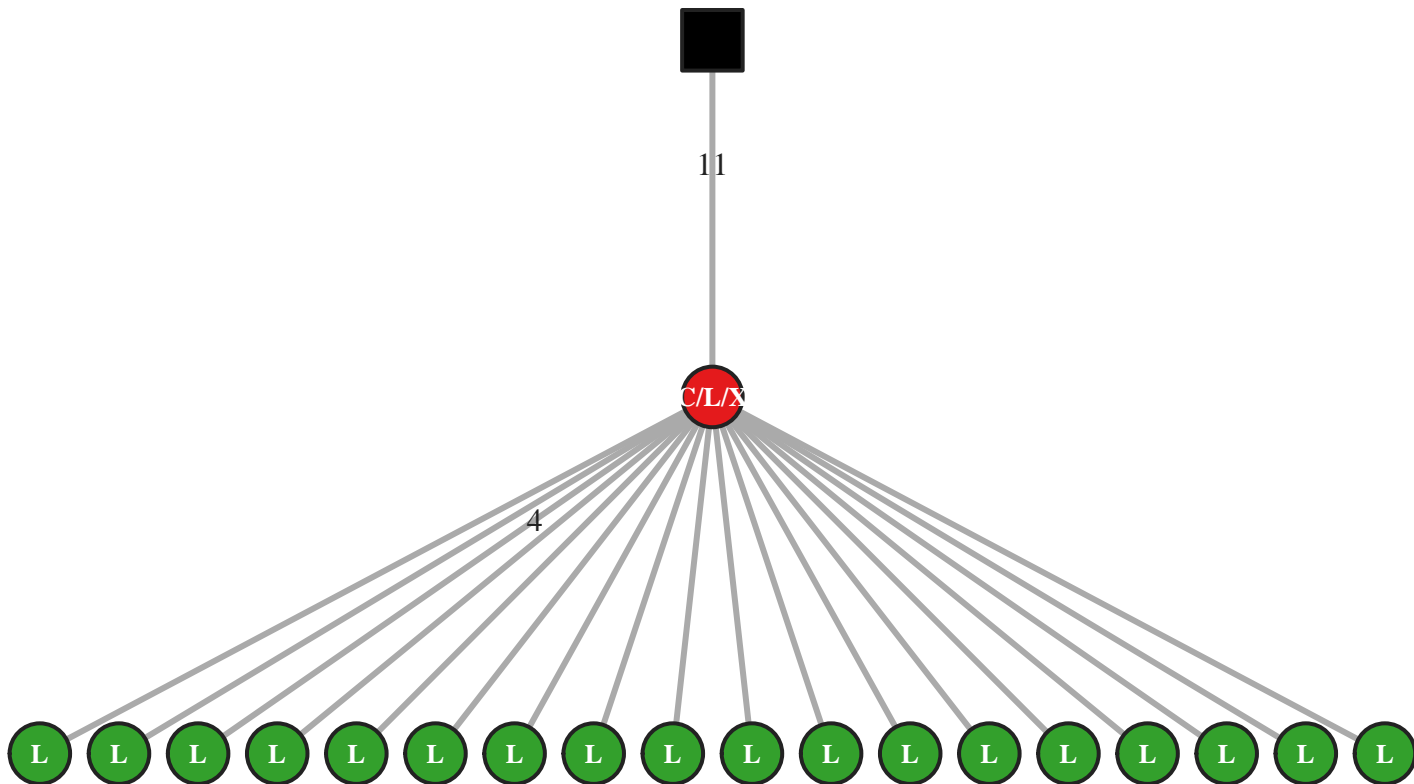
M5 IgG IGHV3-43/J6 36bp (35209)



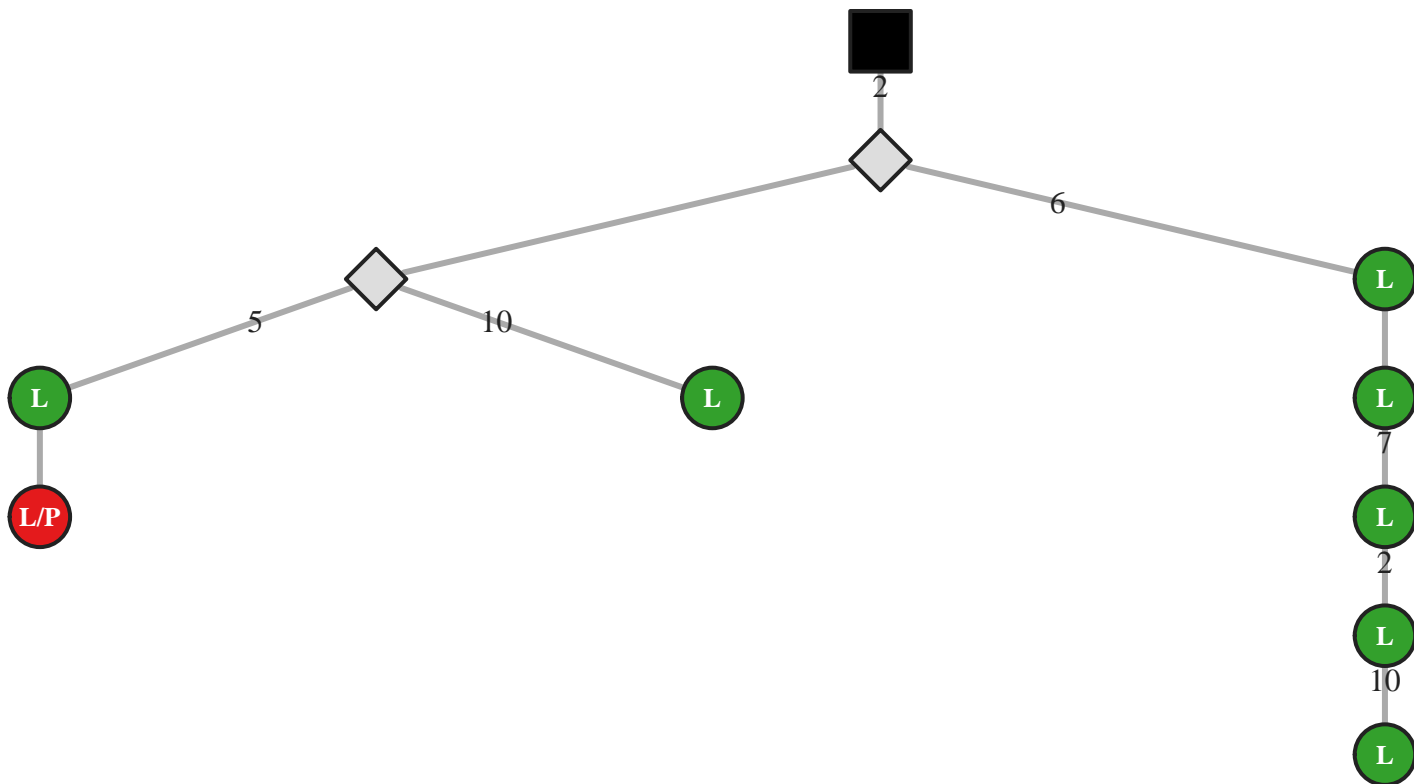
M5 IgG IGHV3-43/J6 42bp (35210)



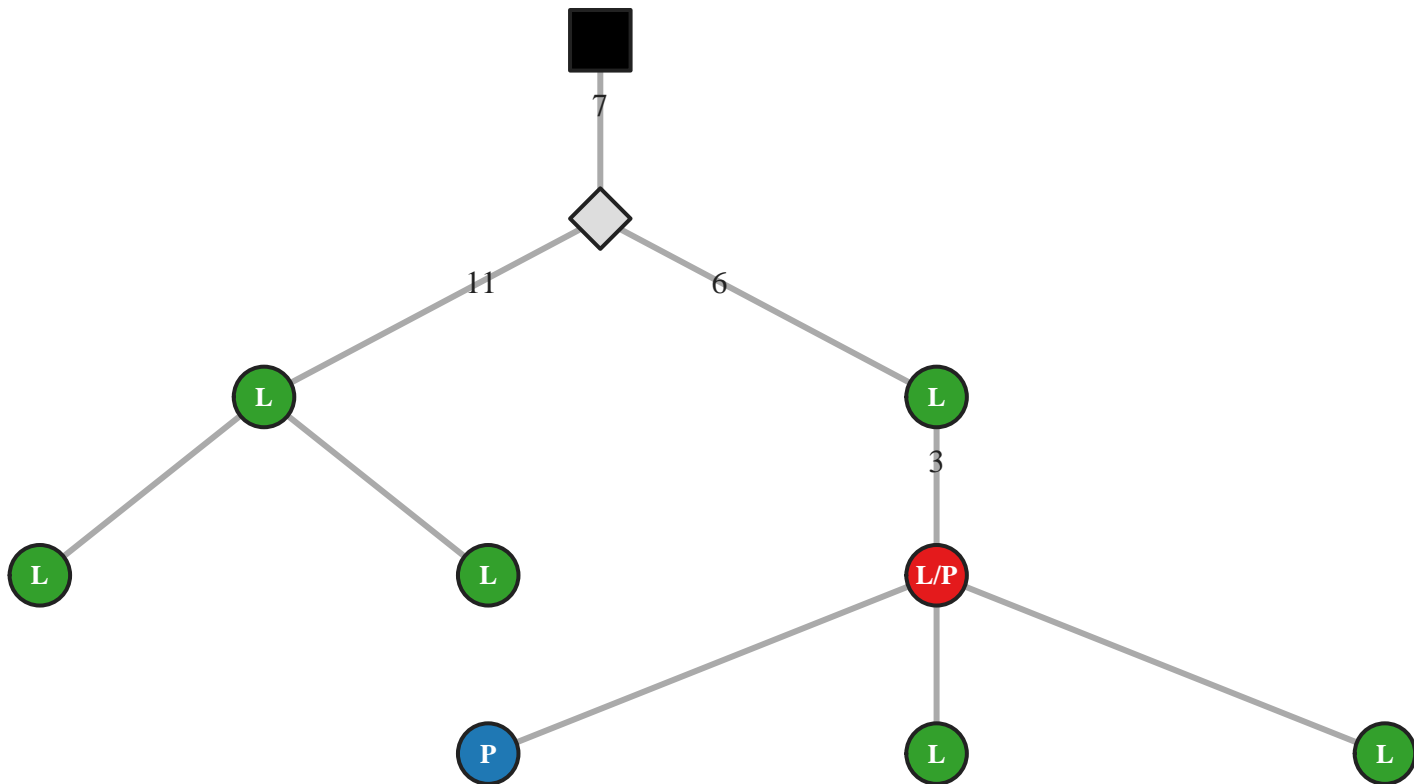
M5 IgG IGHV3-48/J3 45bp (35223)



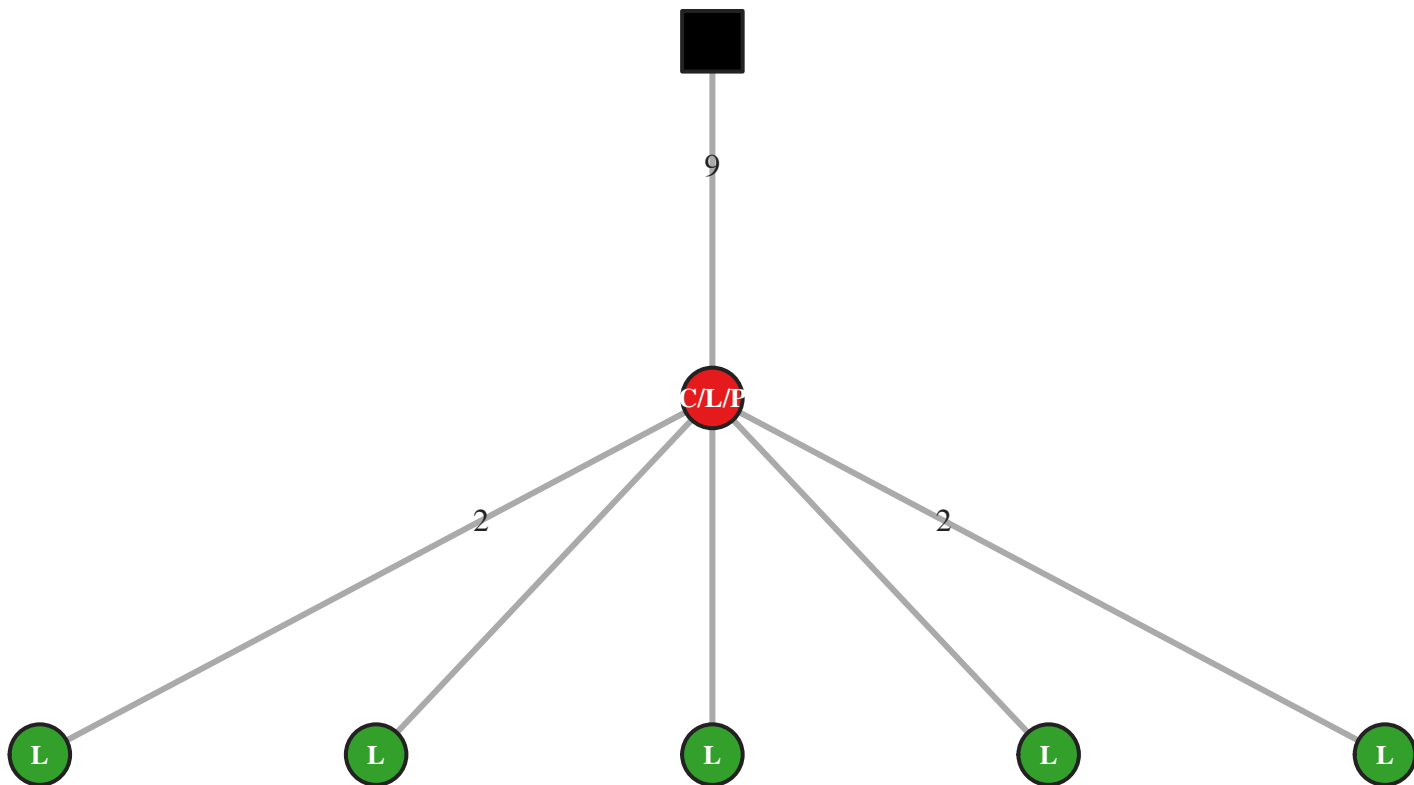
M5 IgG IGHV3-48/J3 54bp (17836)



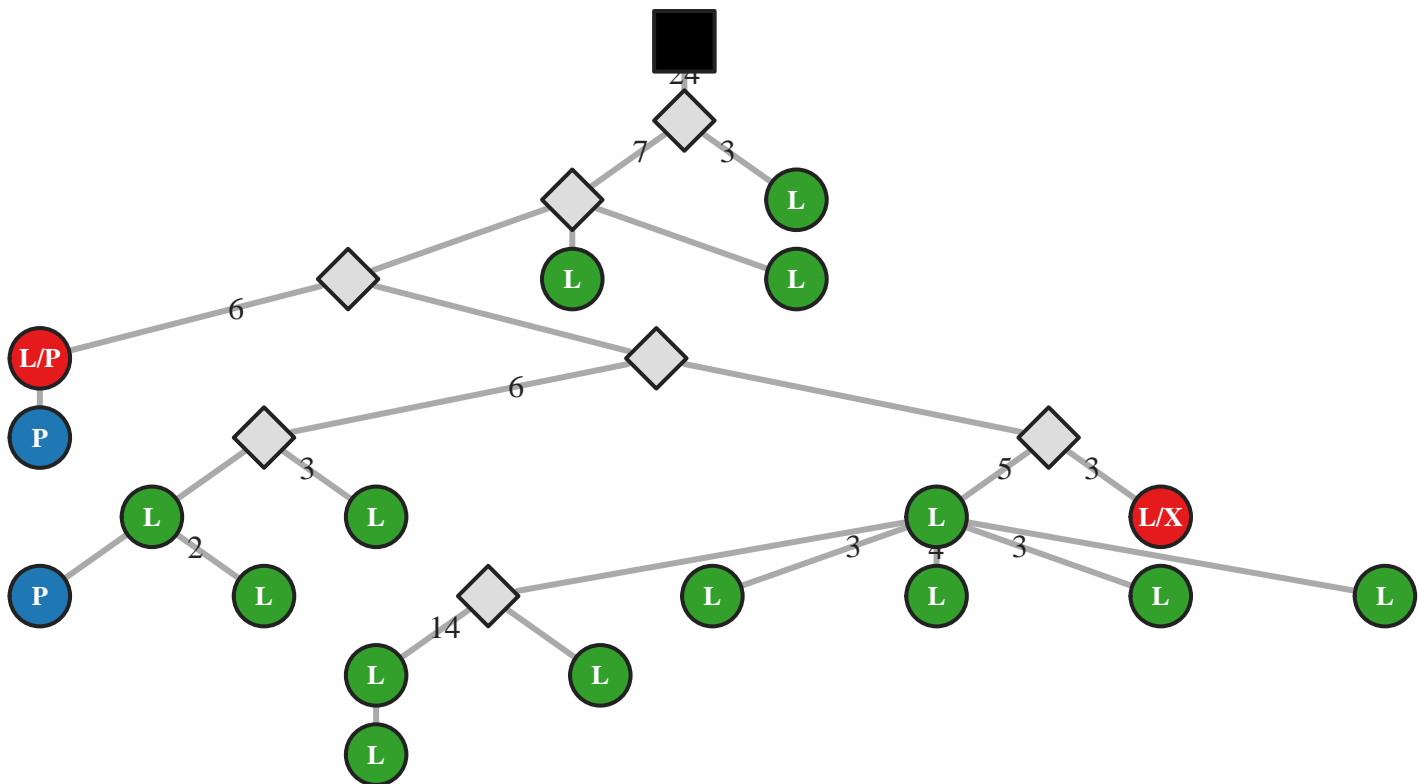
M5 IgG IGHV3-48/J4 33bp (35259)



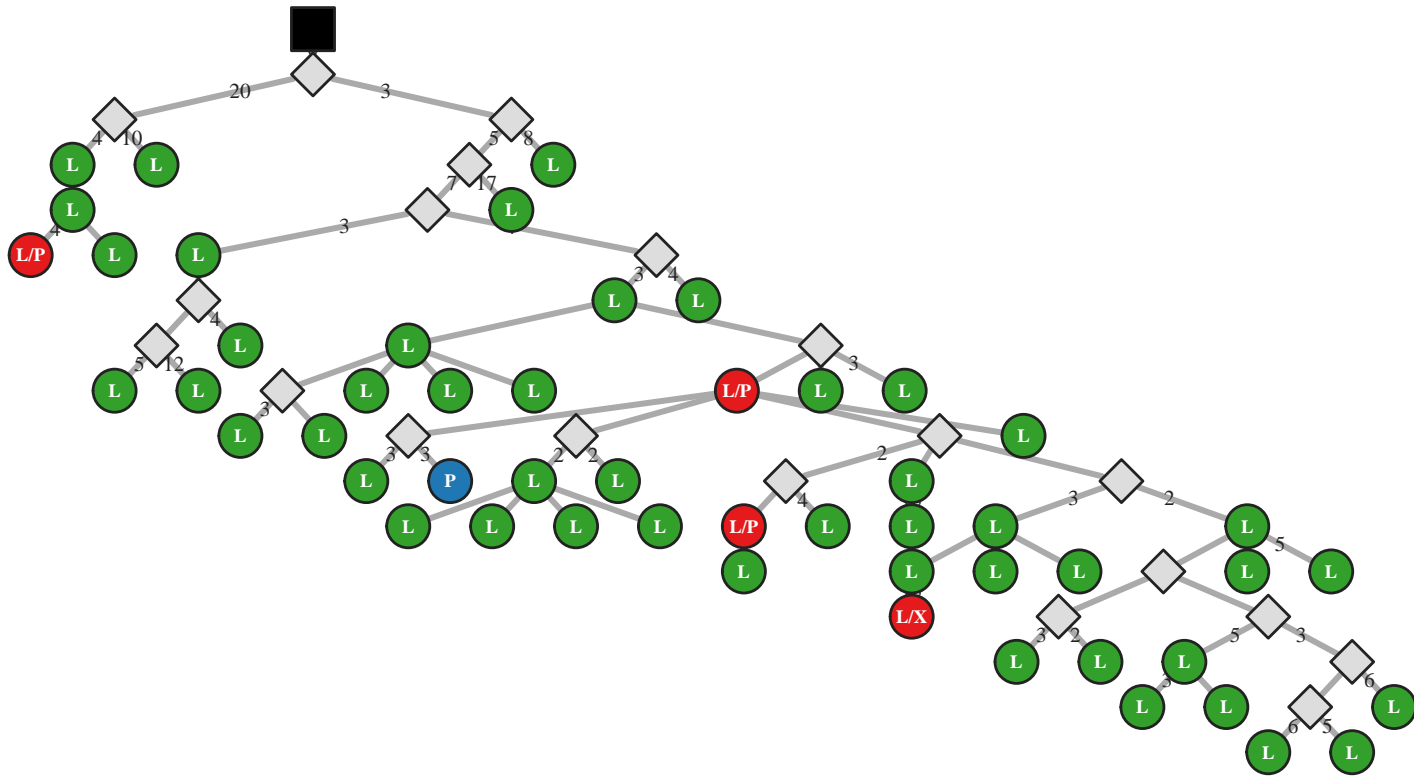
M5 IgG IGHV3-48/J4 33bp (35262)



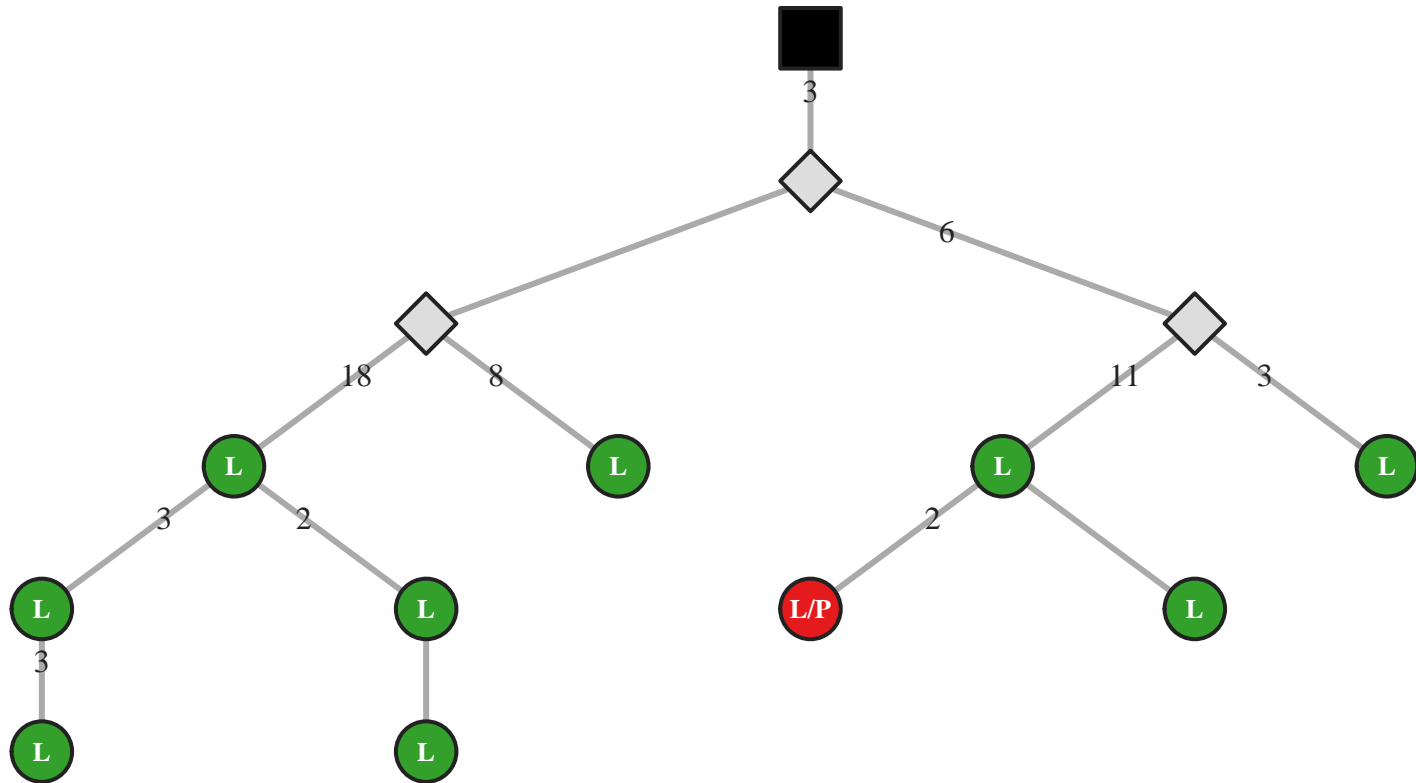
M5 IgG IGHV3-48/J4 39bp (8169)



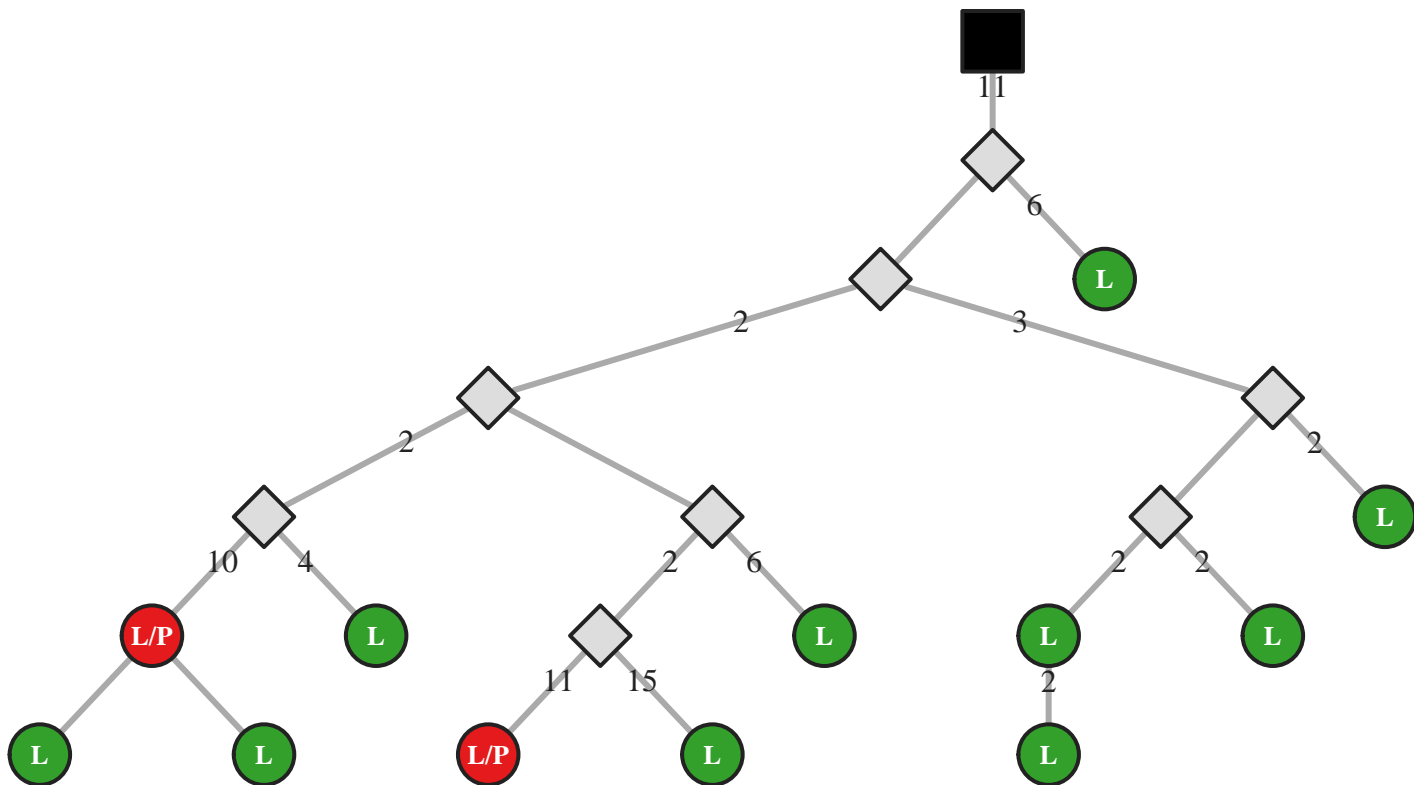
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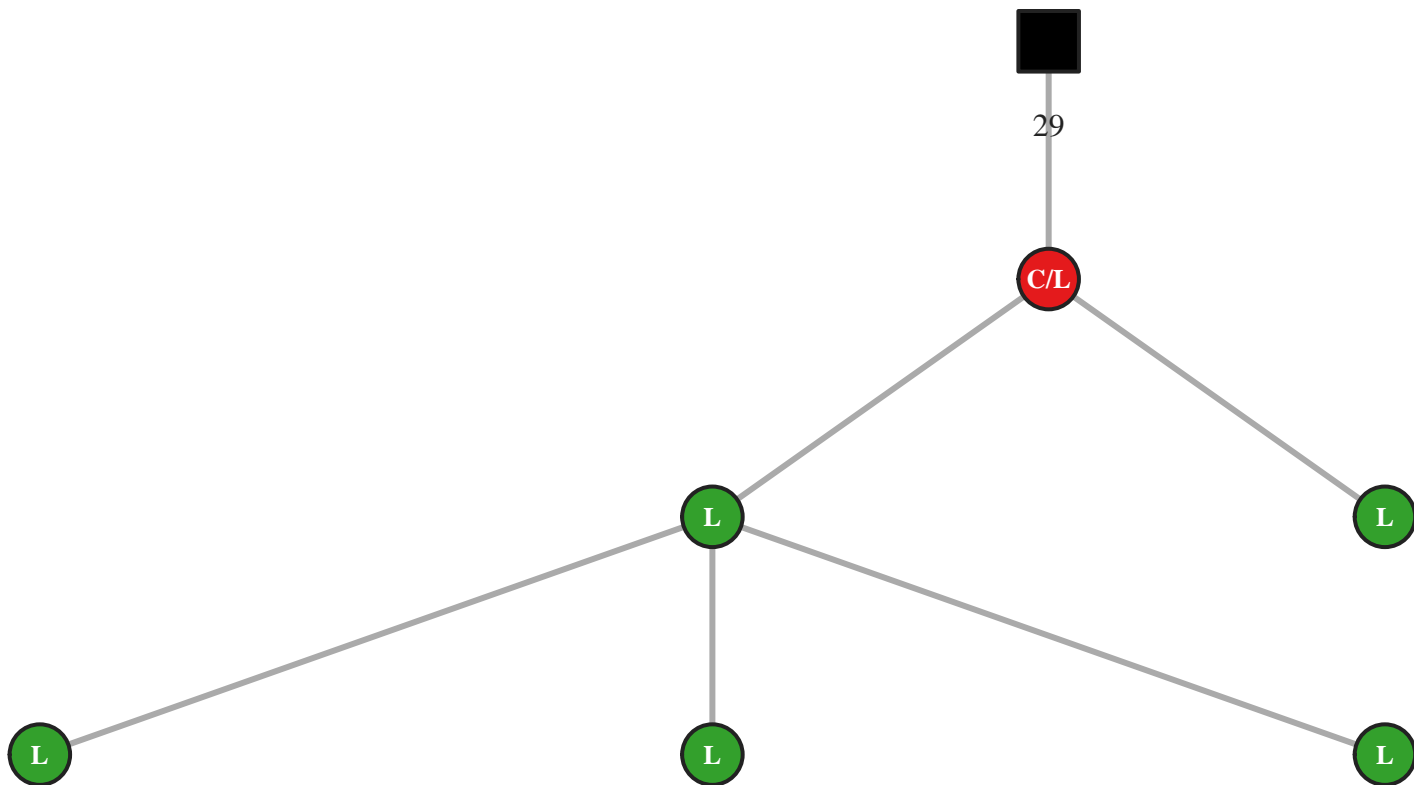
M5 IgG IGHV3-48/J4 42bp (8247)



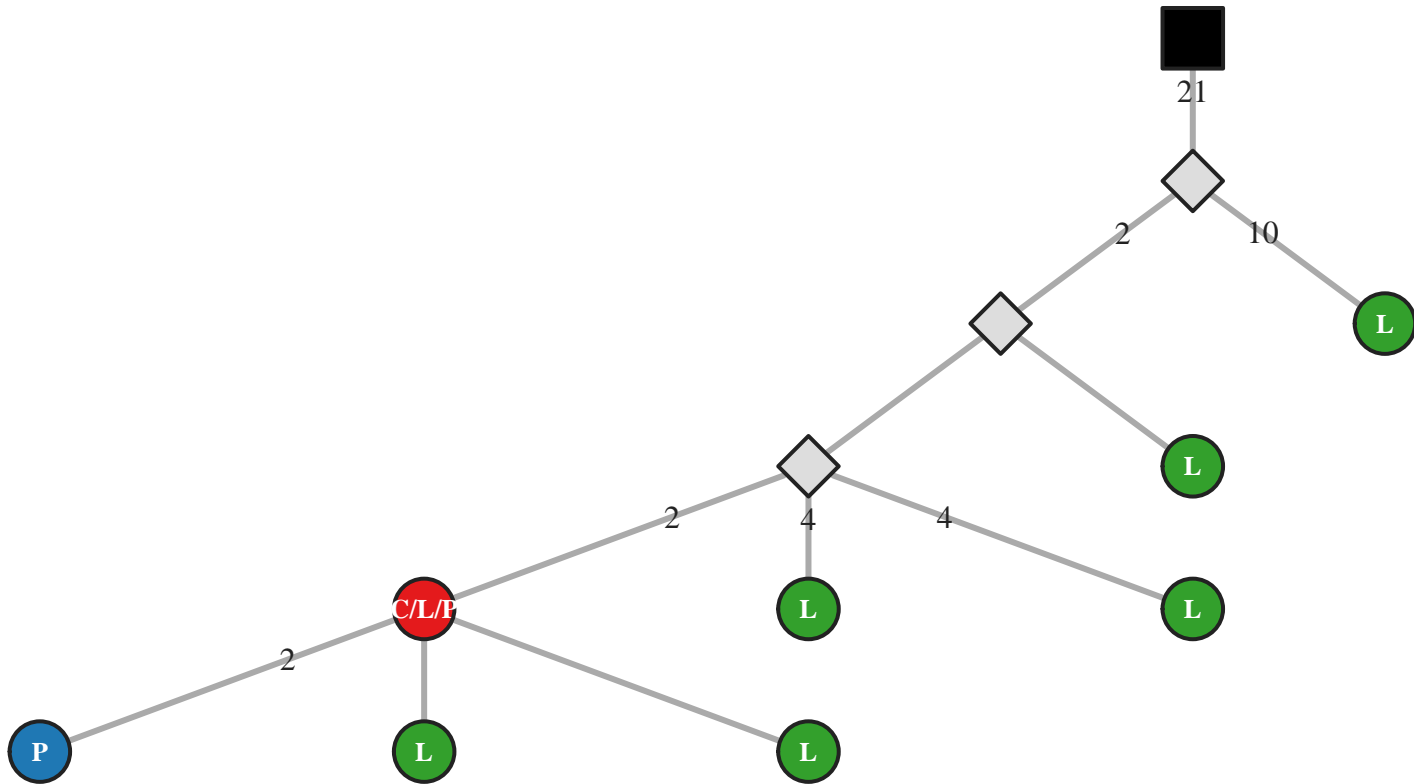
M5 IgG IGHV3-48/J4 51bp (26795)



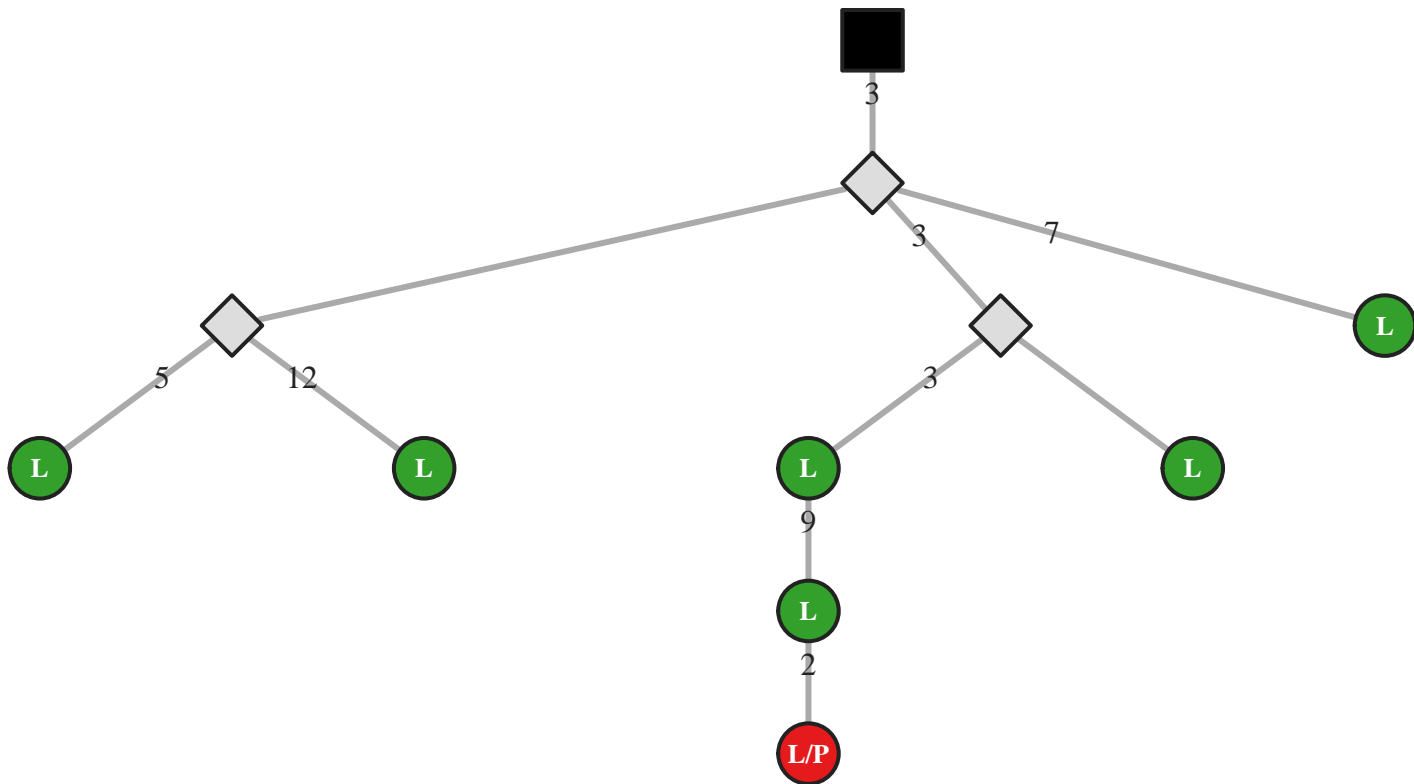
M5 IgG IGHV3-48/J4 54bp (45213)



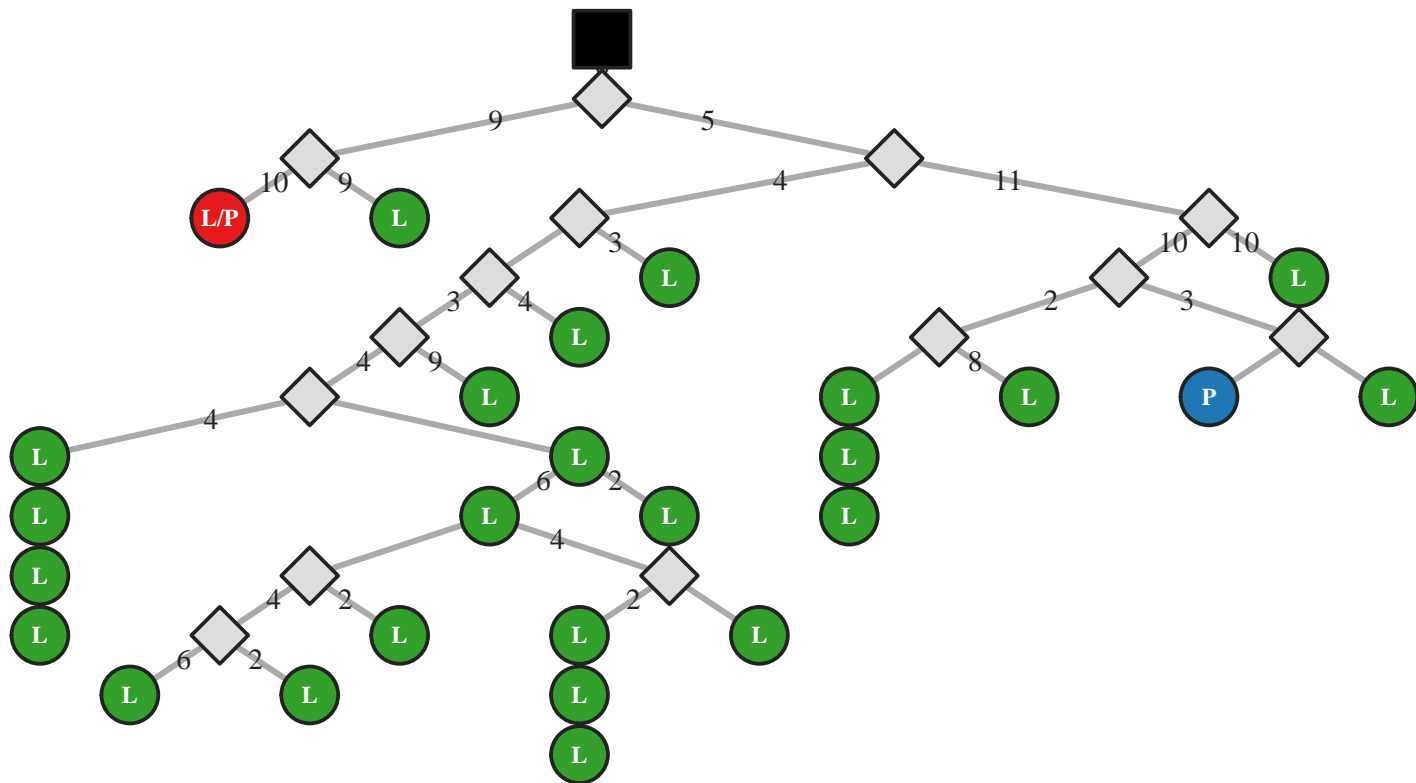
M5 IgG IGHV3-48/J4 63bp (52056)



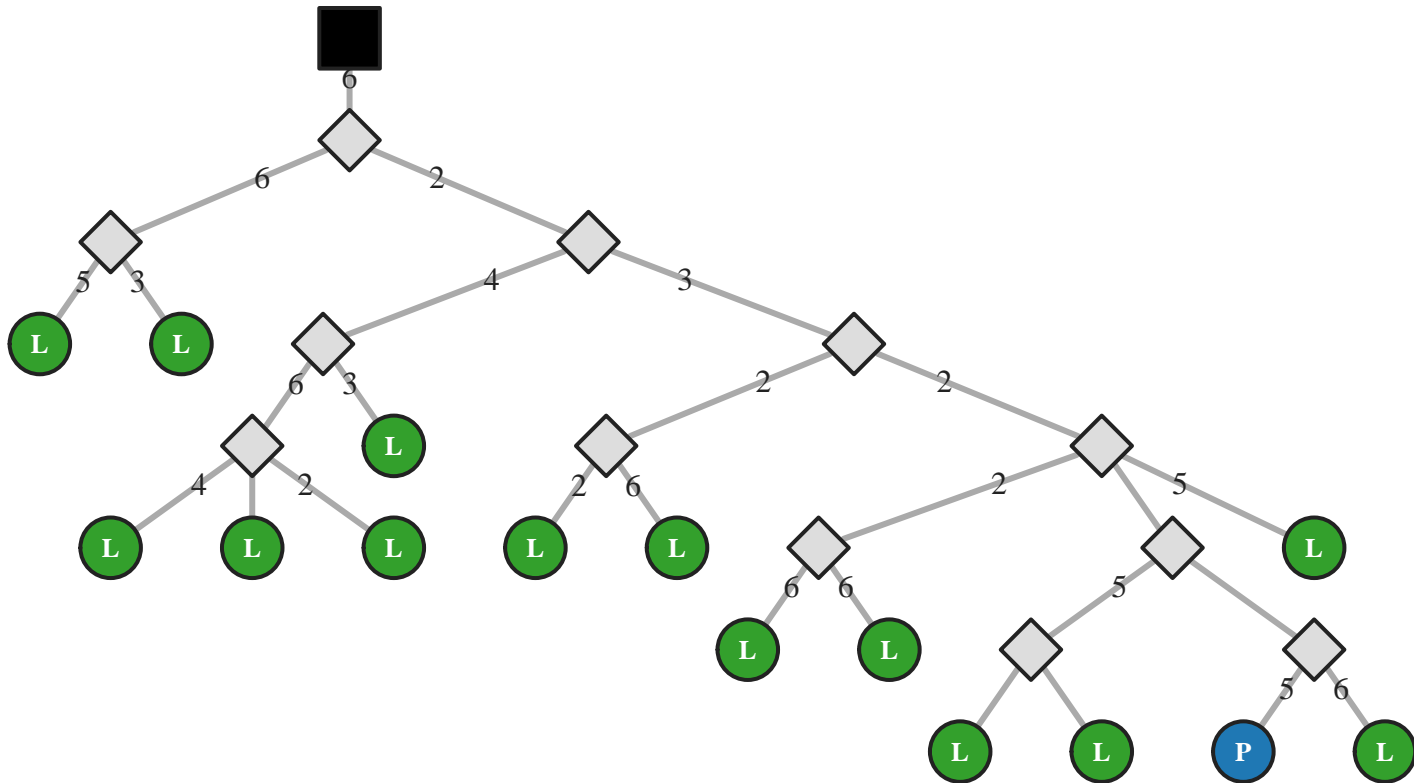
M5 IgG IGHV3-48/J5 36bp (35295)



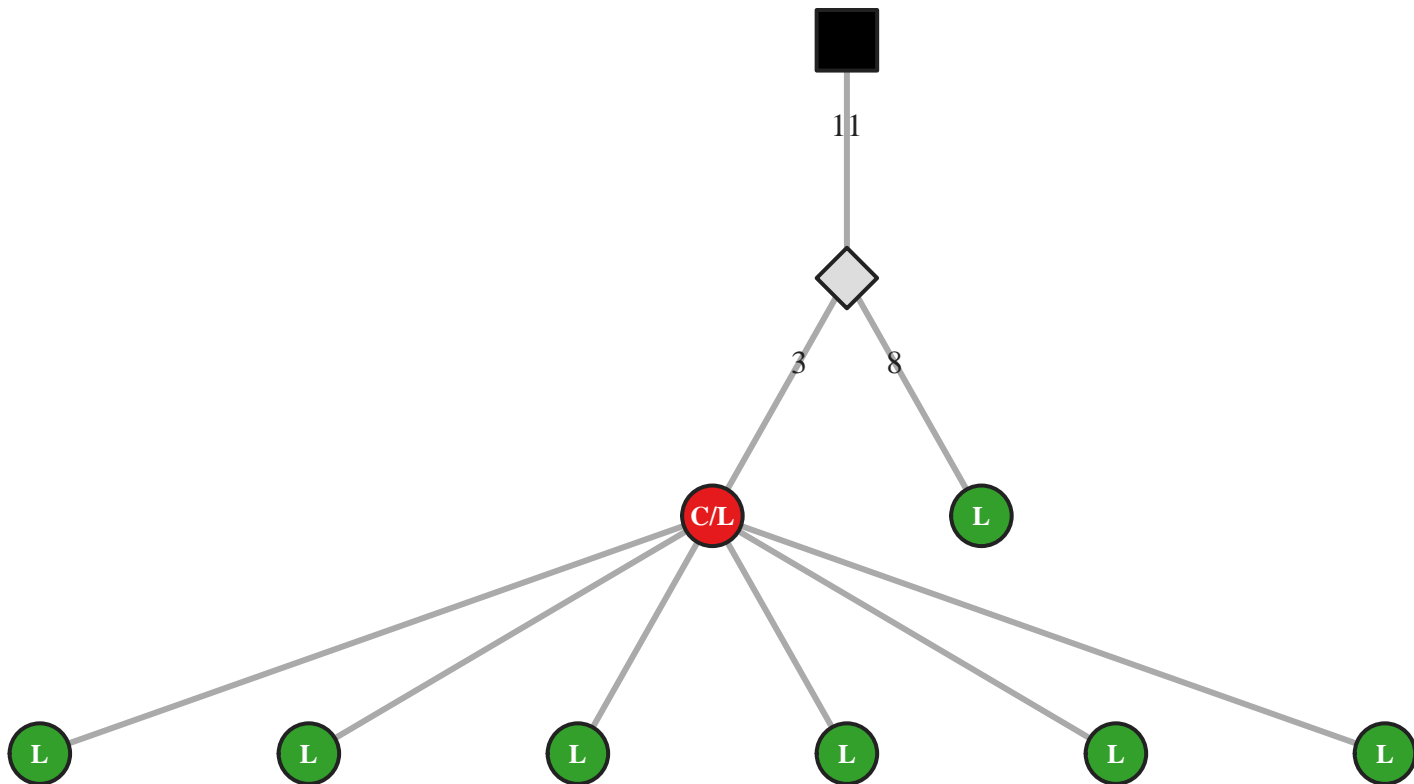
M5 IgG IGHV3-48/J5 39bp (52062)



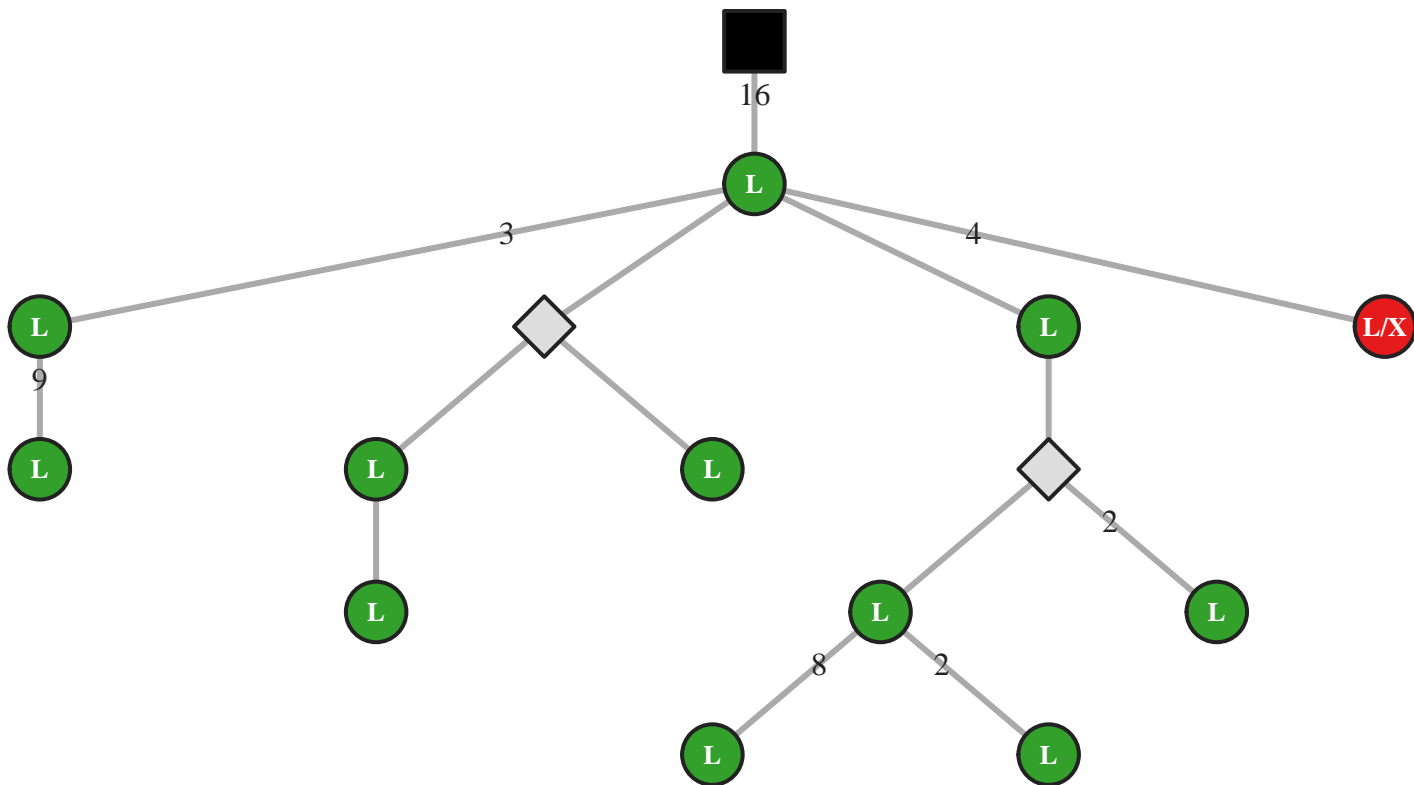
M5 IgG IGHV3-48/J5 39bp (52065)



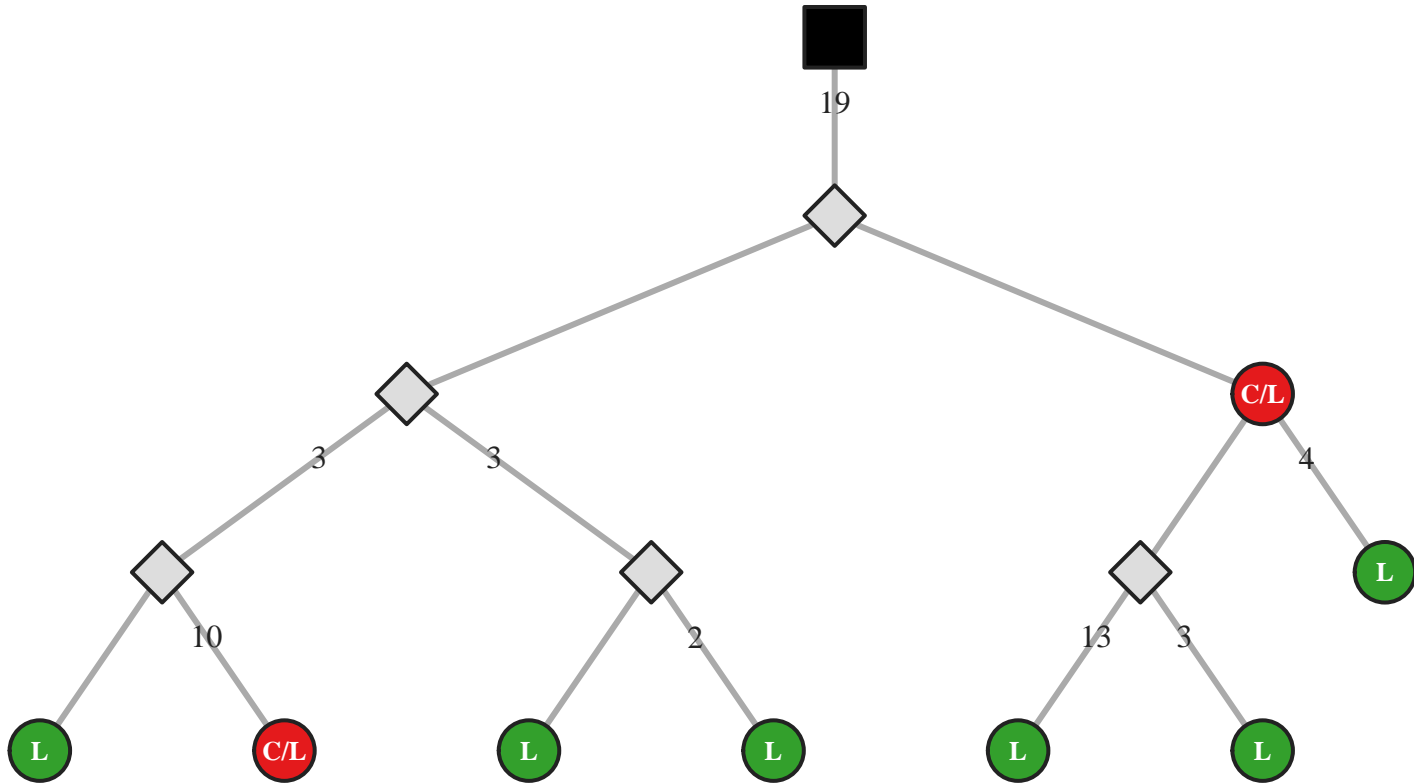
M5 IgG IGHV3-48/J6 45bp (17938)



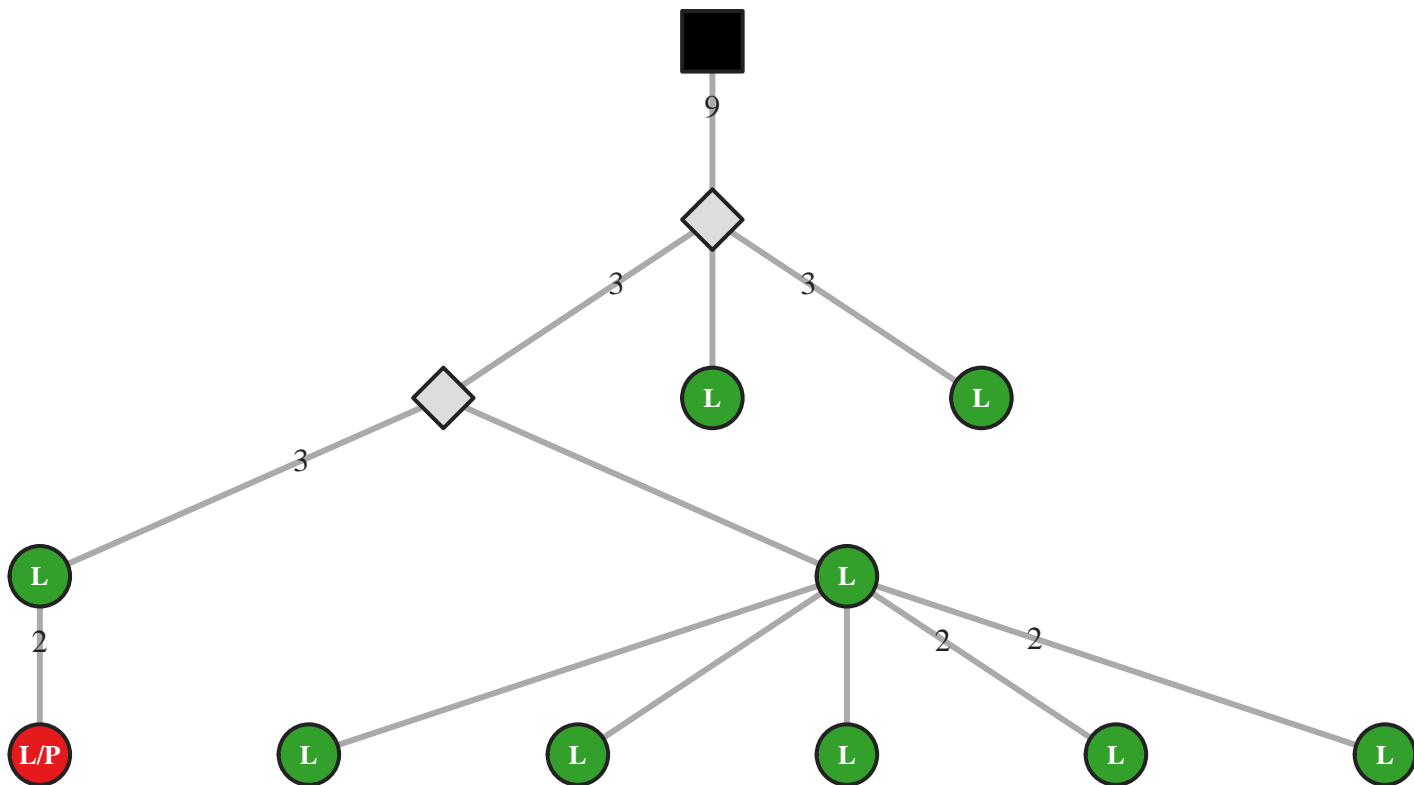
M5 IgG IGHV3-48/J6 51bp (17944)



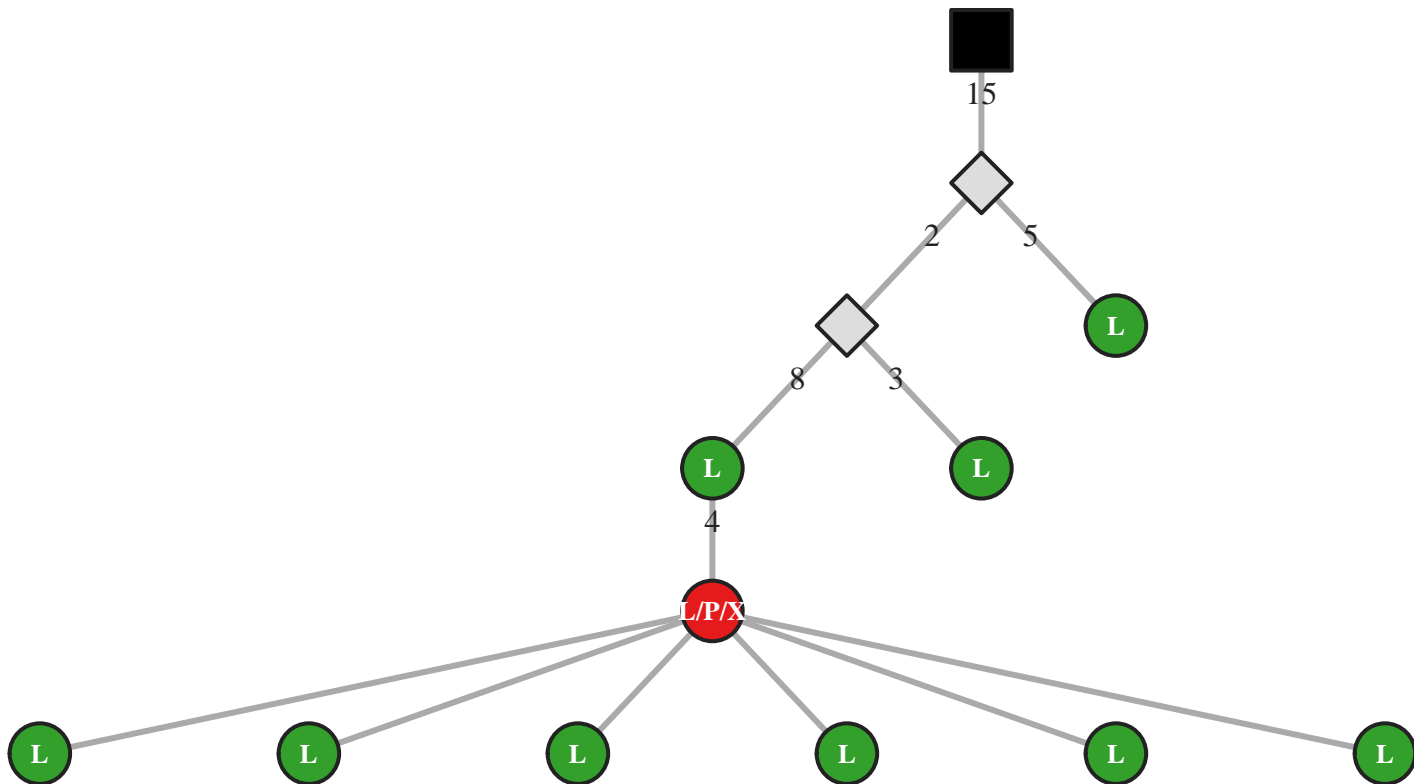
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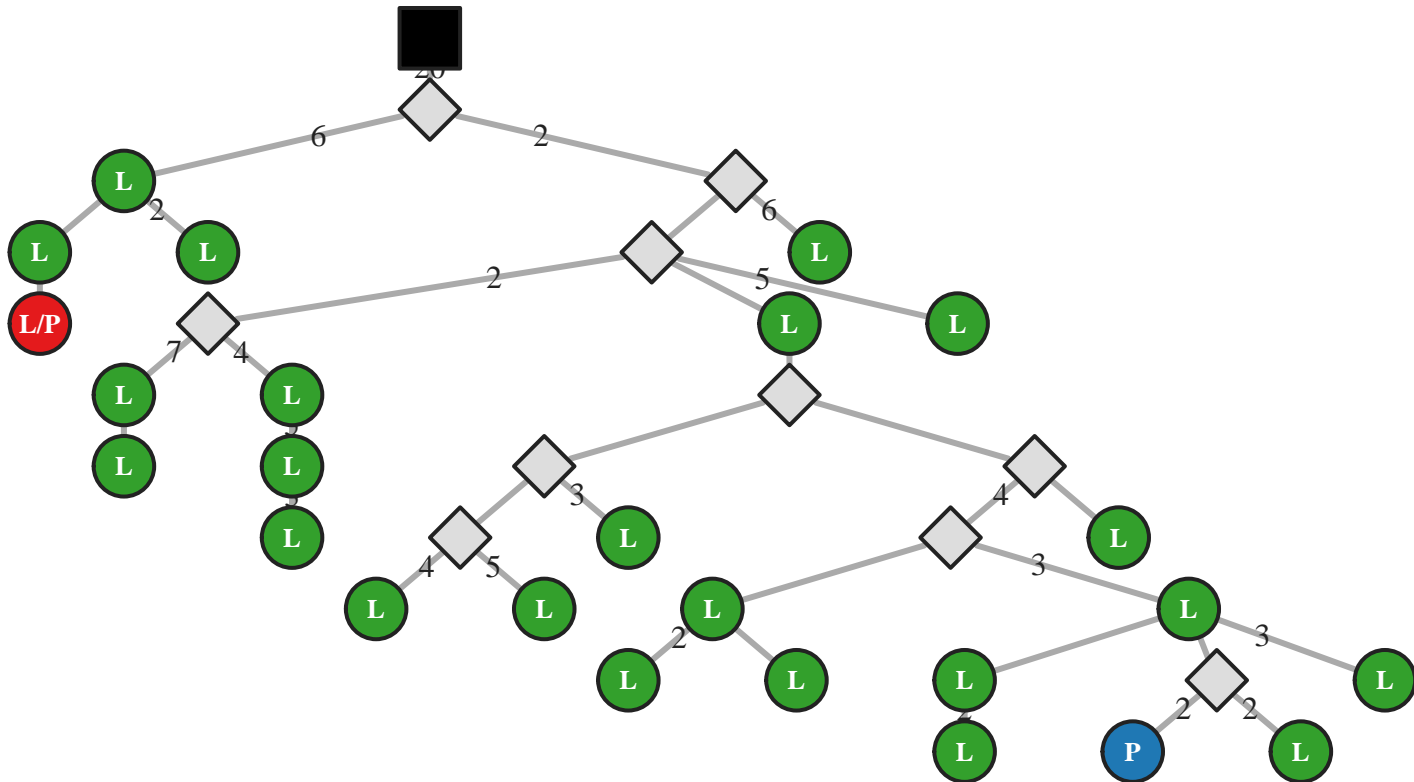
M5 IgG IGHV3-48/J6 54bp (45232)



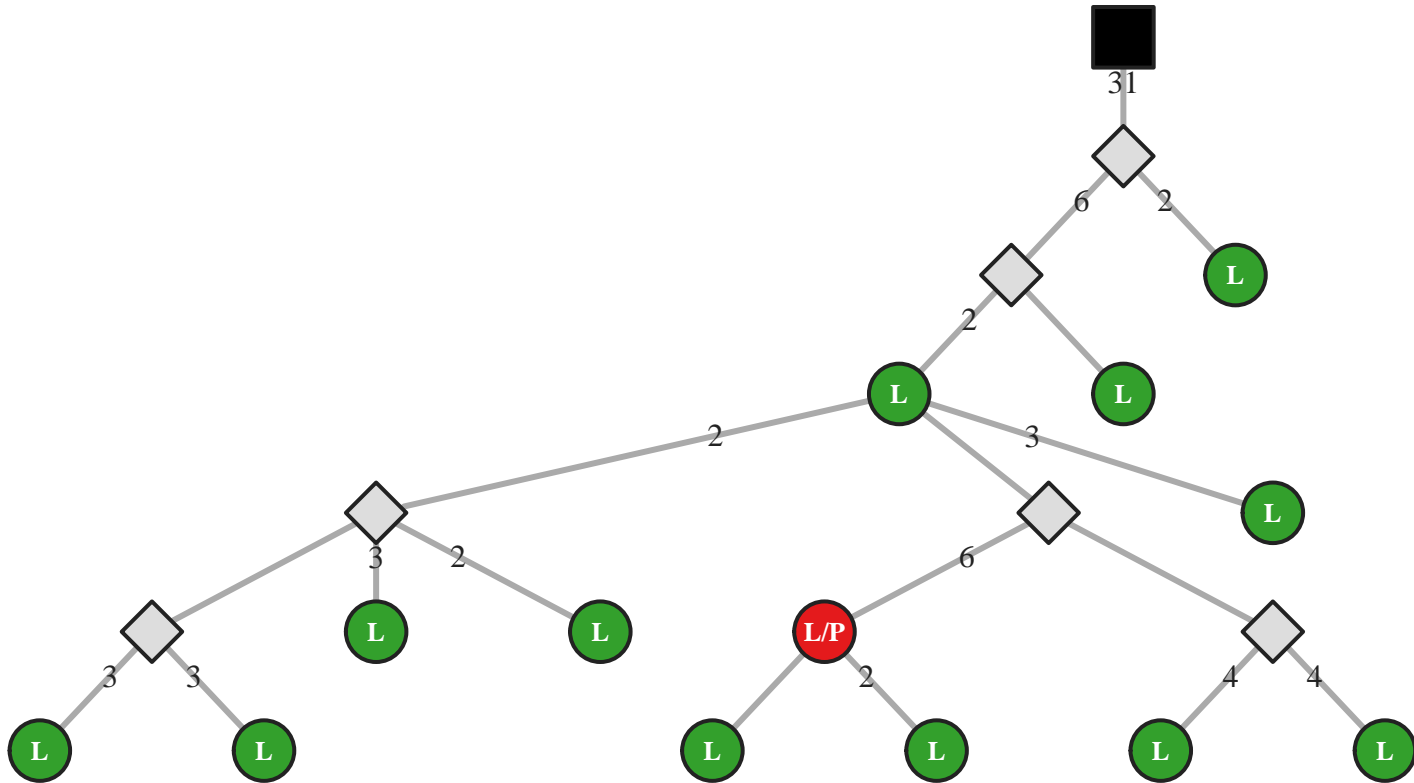
M5 IgG IGHV3-49/J1 27bp (17964)



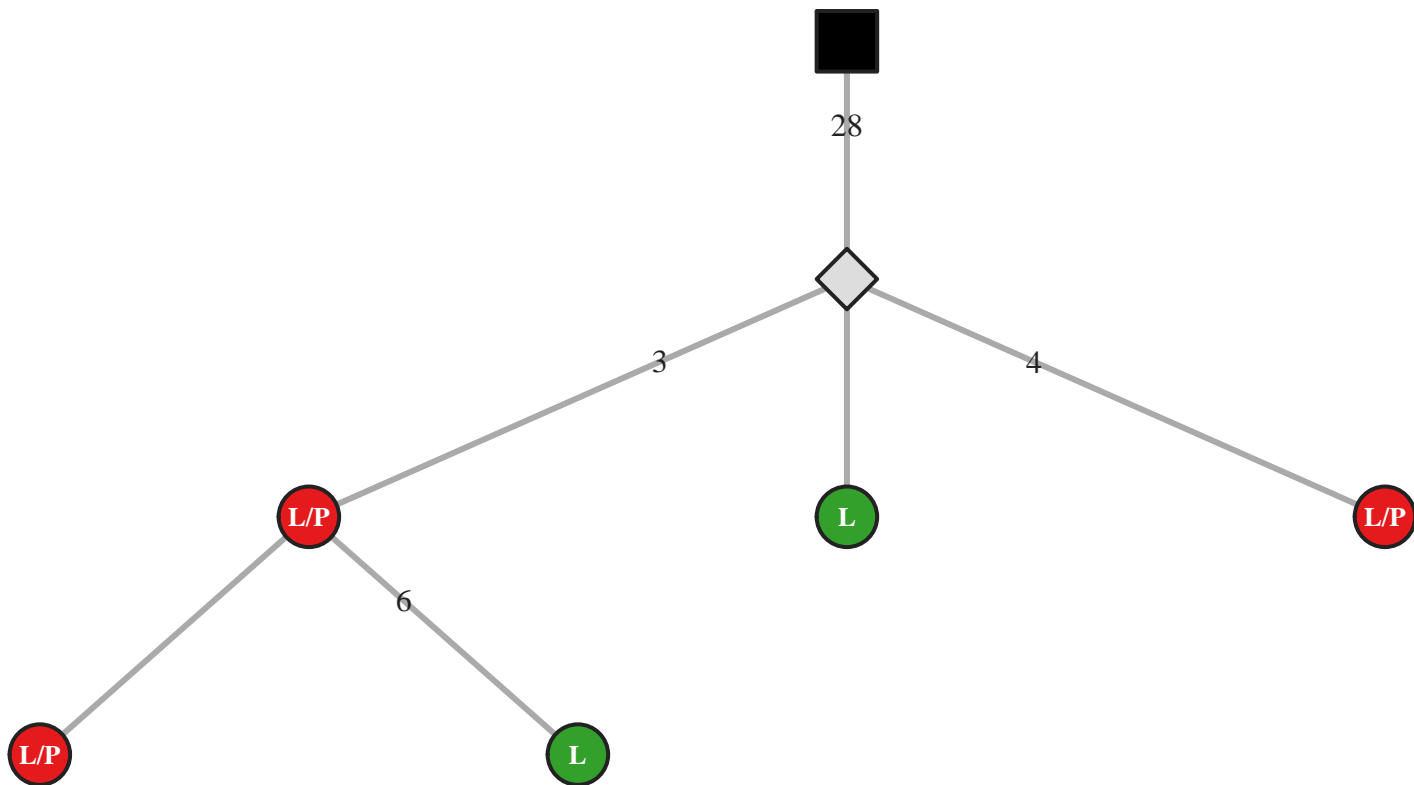
M5 IgG IGHV3-49/J3 63bp (8343)



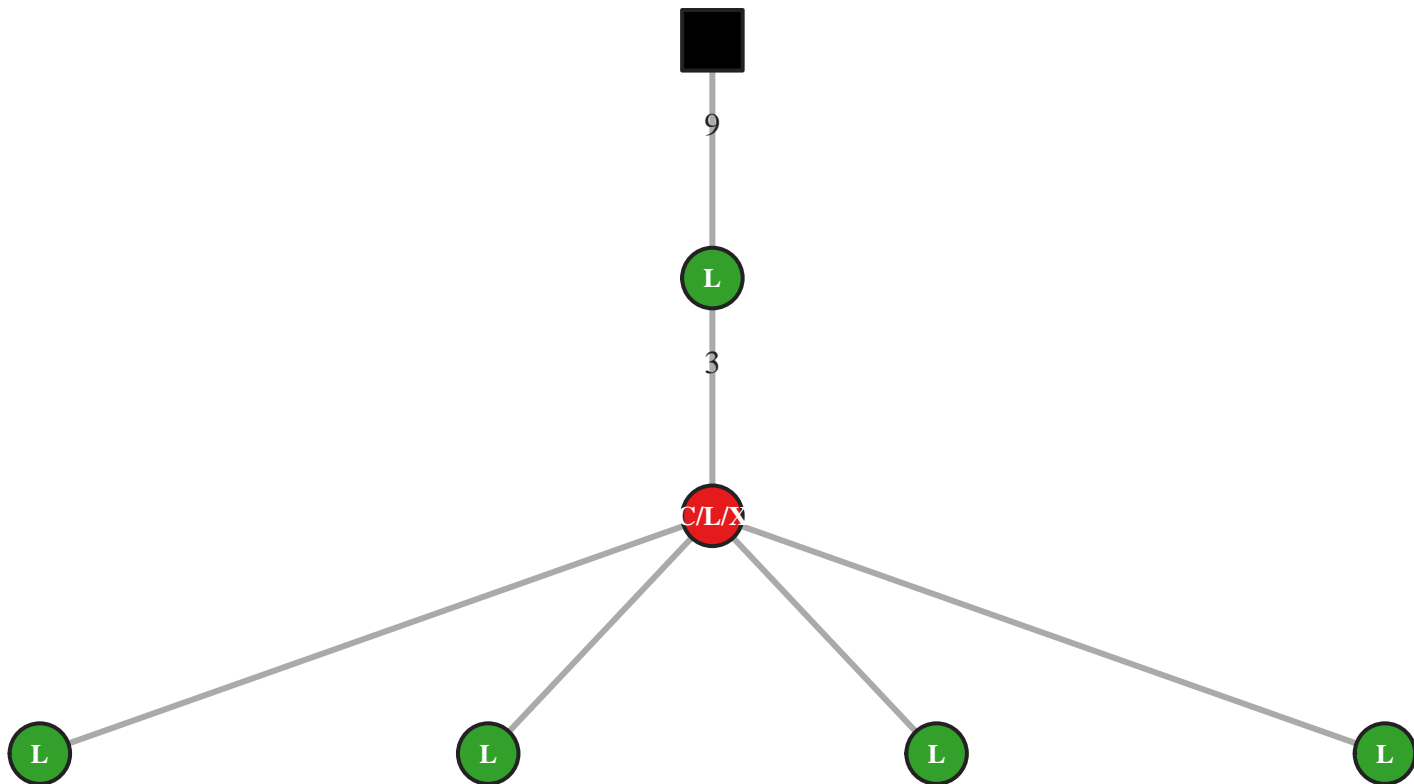
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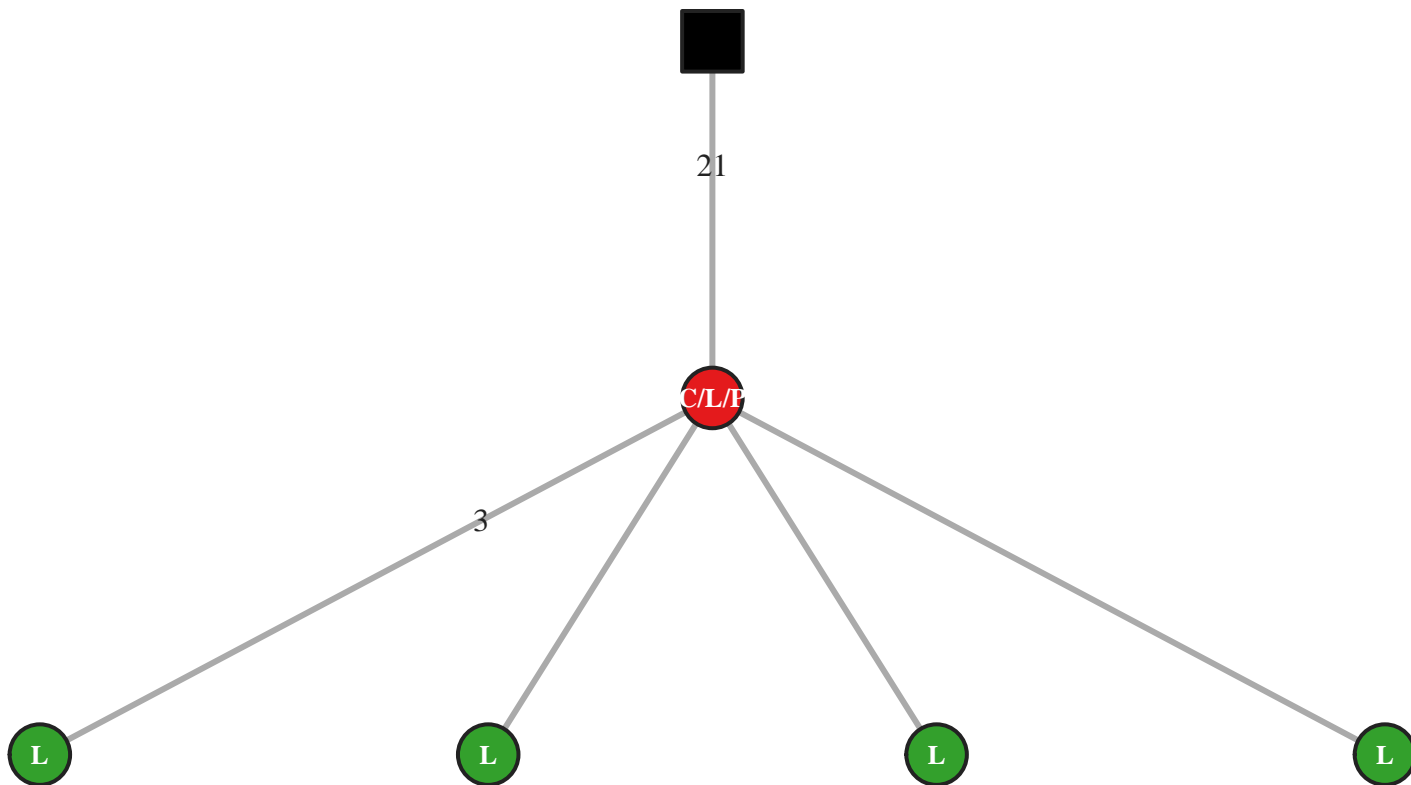
M5 IgG IGHV3-49/J3 81bp (8352)



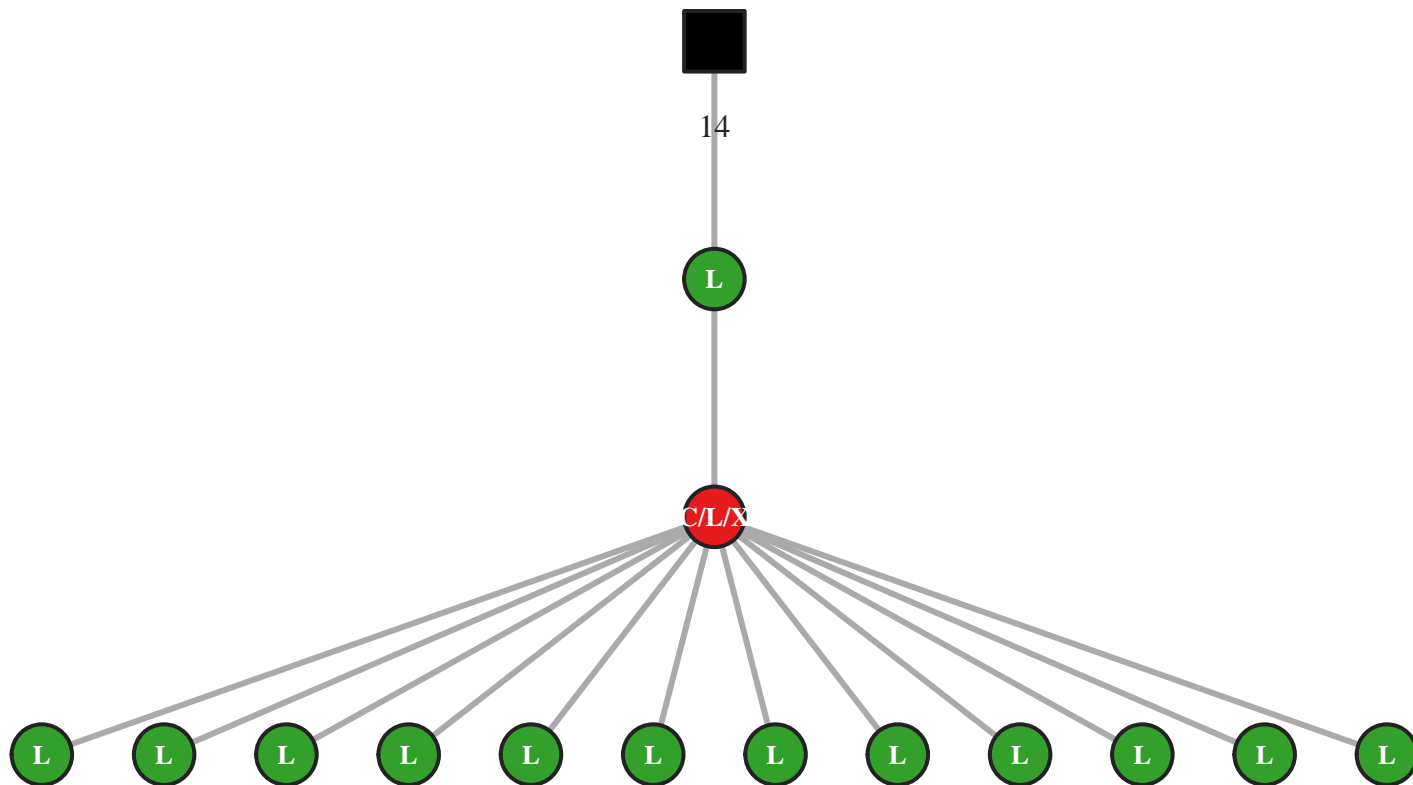
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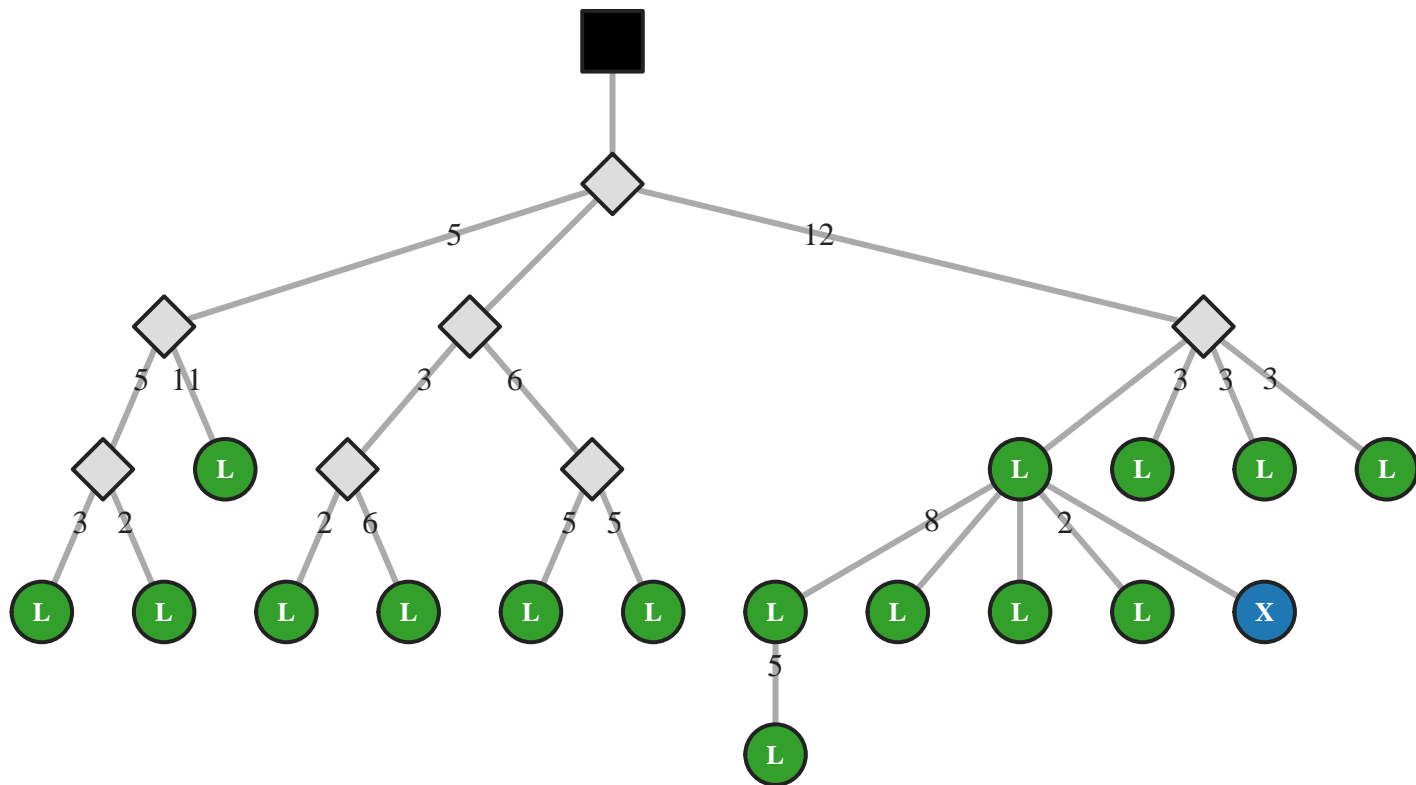
M5 IgG IGHV3-49/J4 30bp (17972)



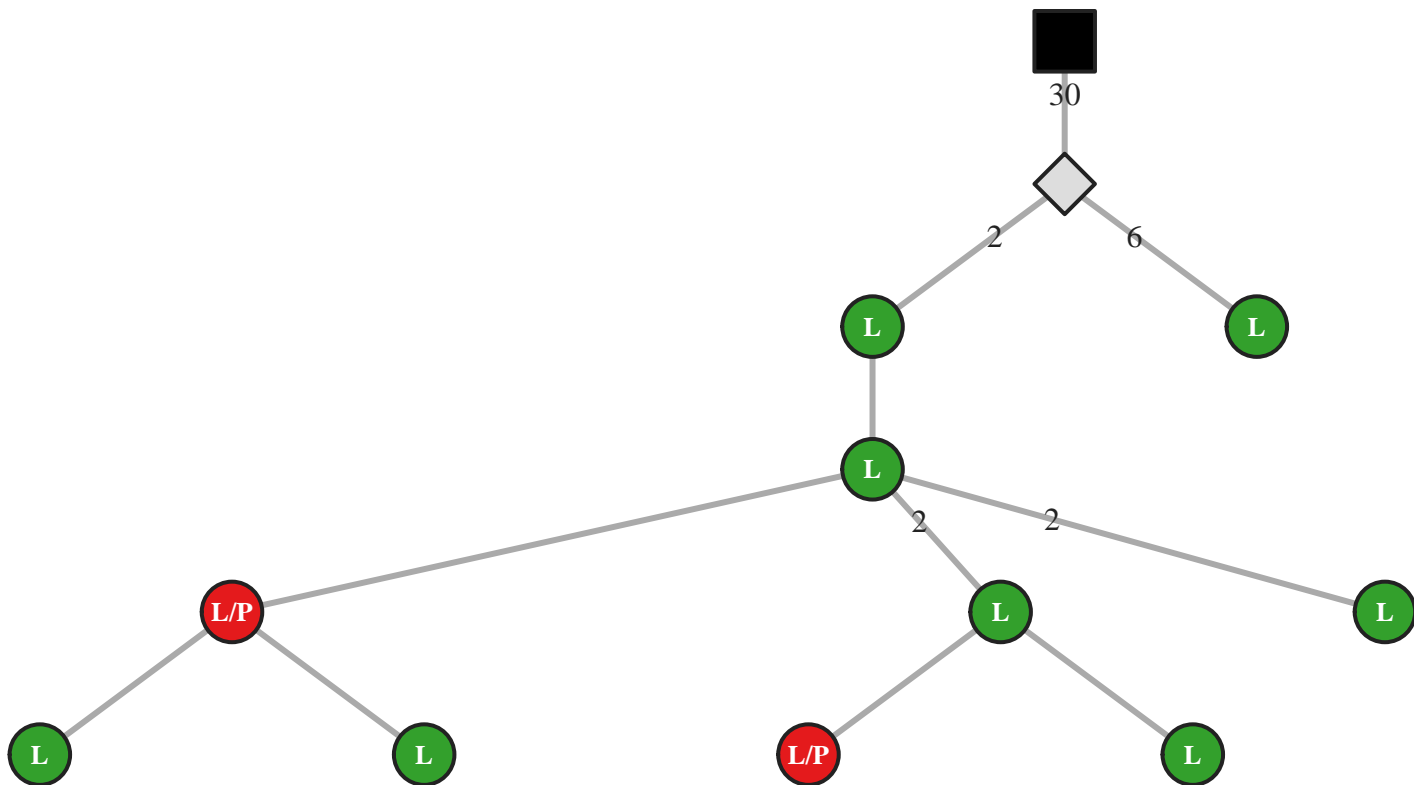
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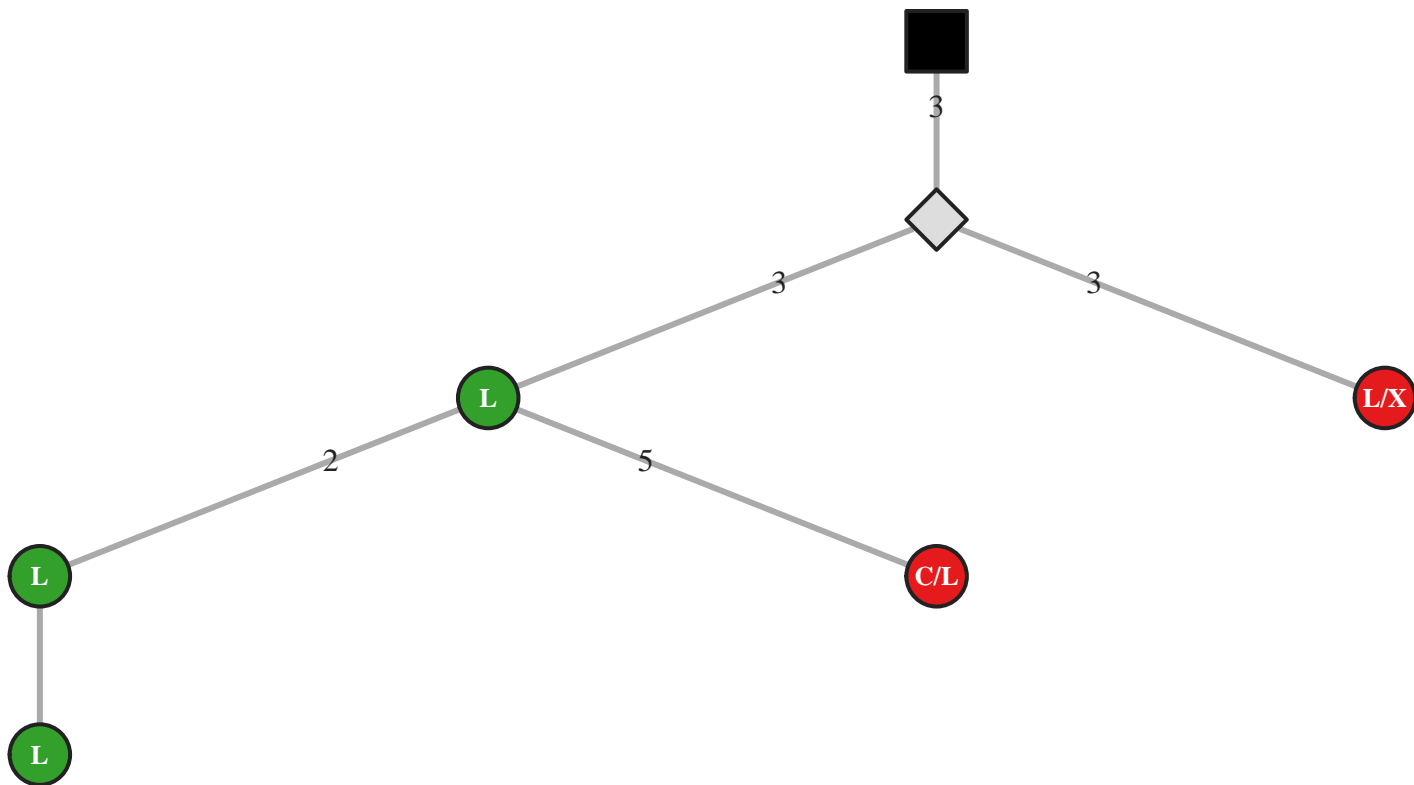
M5 IgG IGHV3-49/J4 45bp (26875)



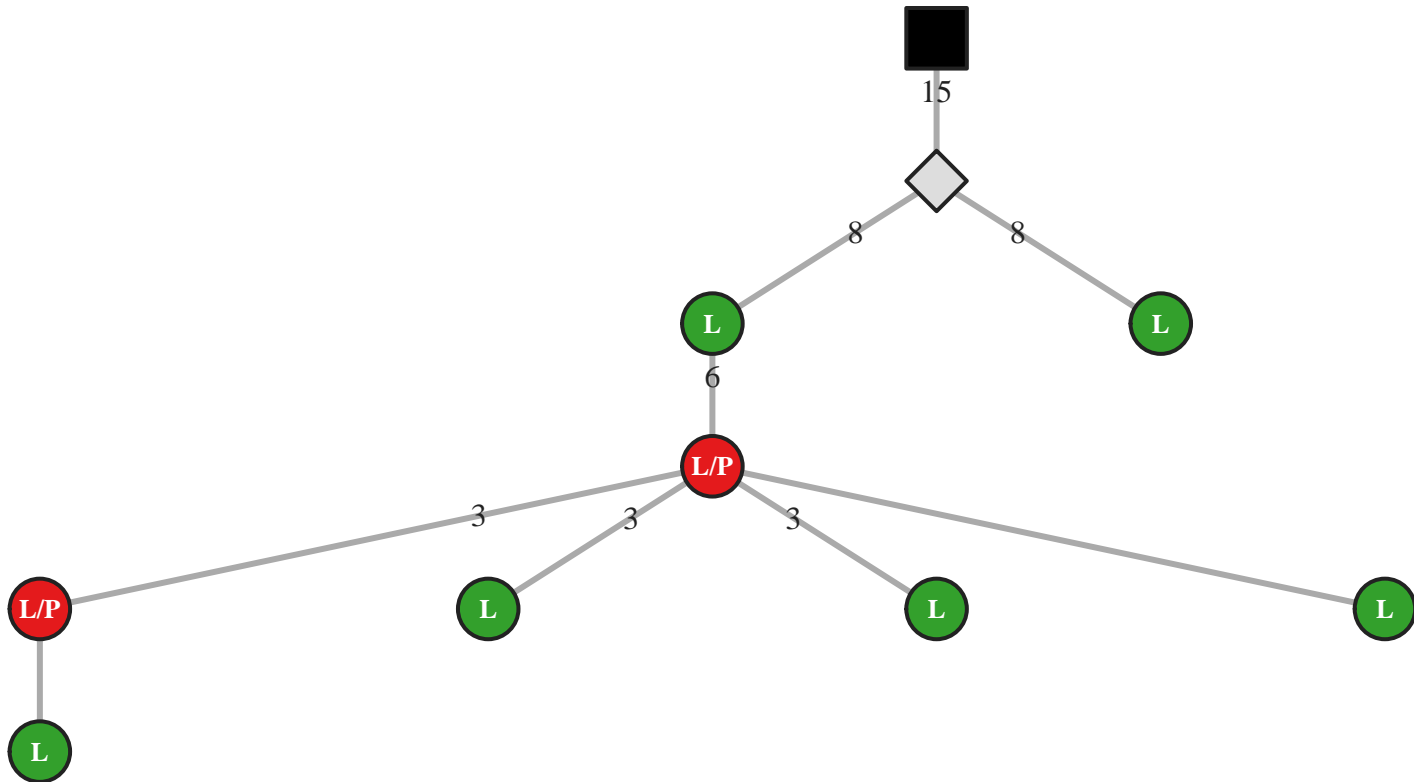
M5 IgG IGHV3-49/J4 54bp (45270)



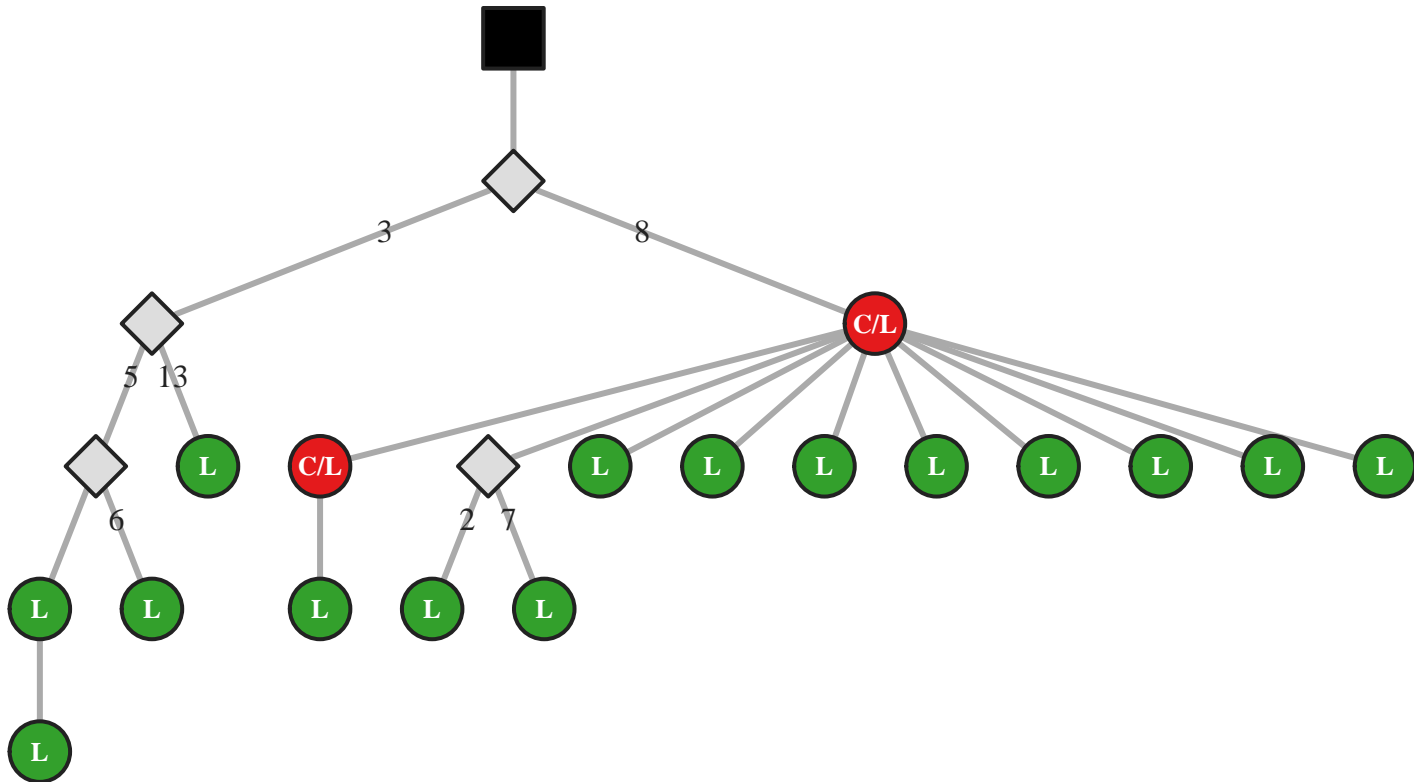
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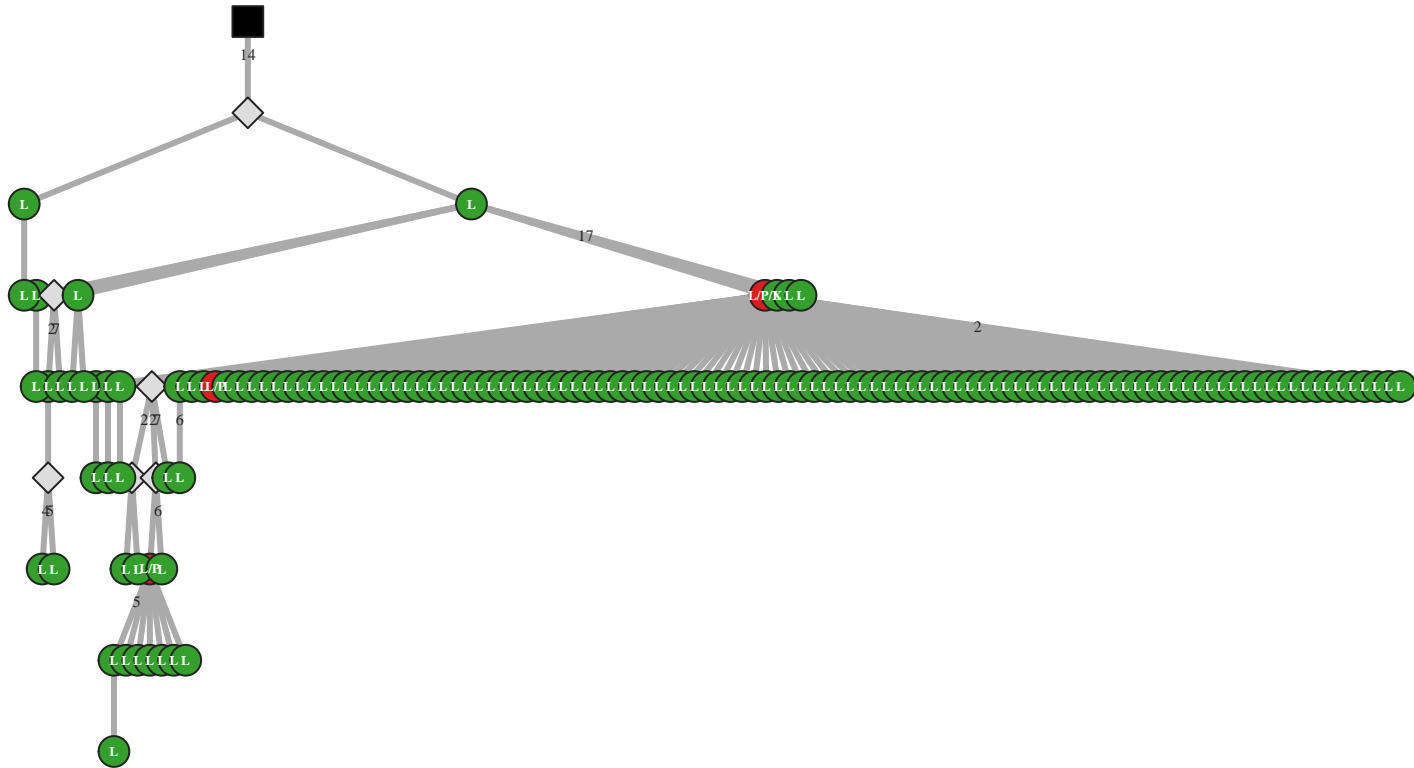
M5 IgG IGHV3-49/J5 63bp (17989)



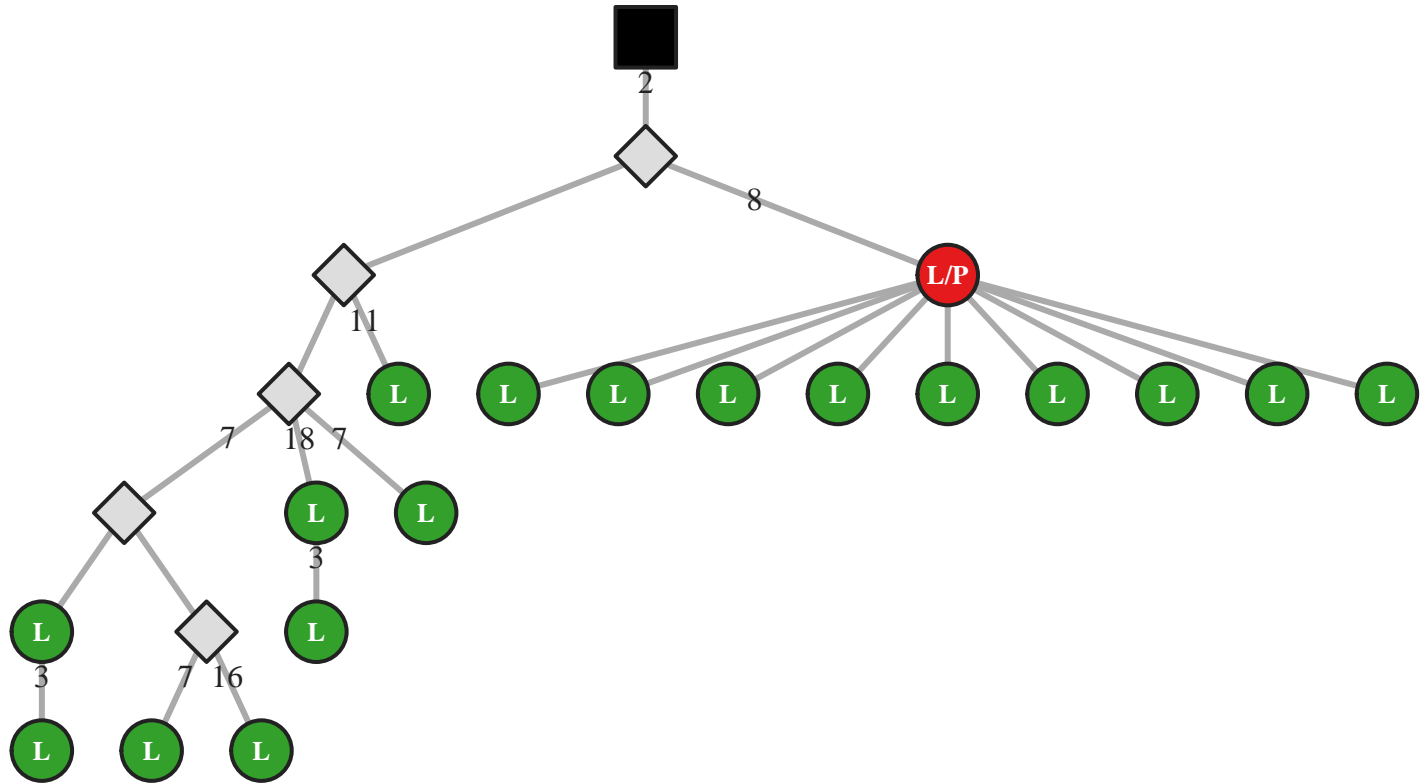
M5 IgG IGHV3-49/J6 48bp (8374)



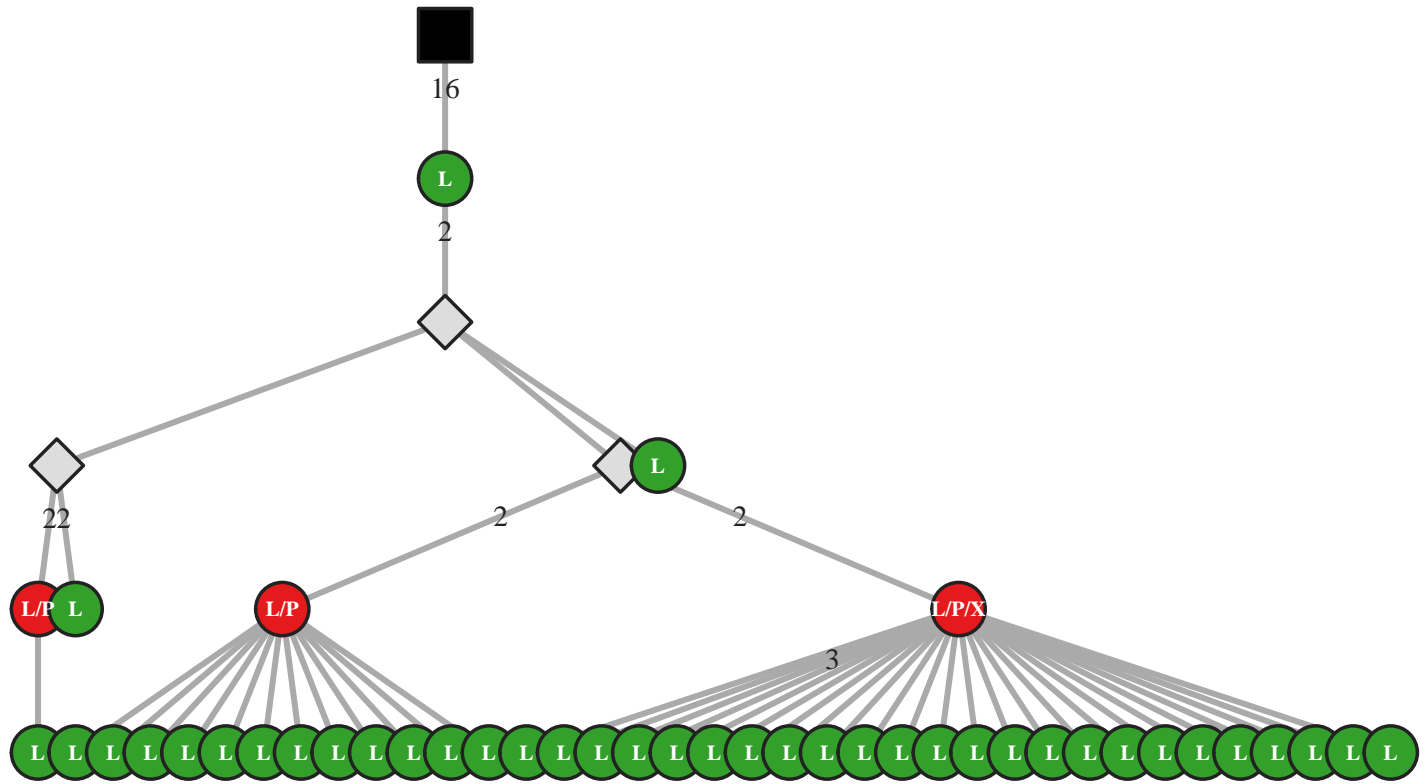
M5 IgG IGHV3-53/J3 63bp (8398)



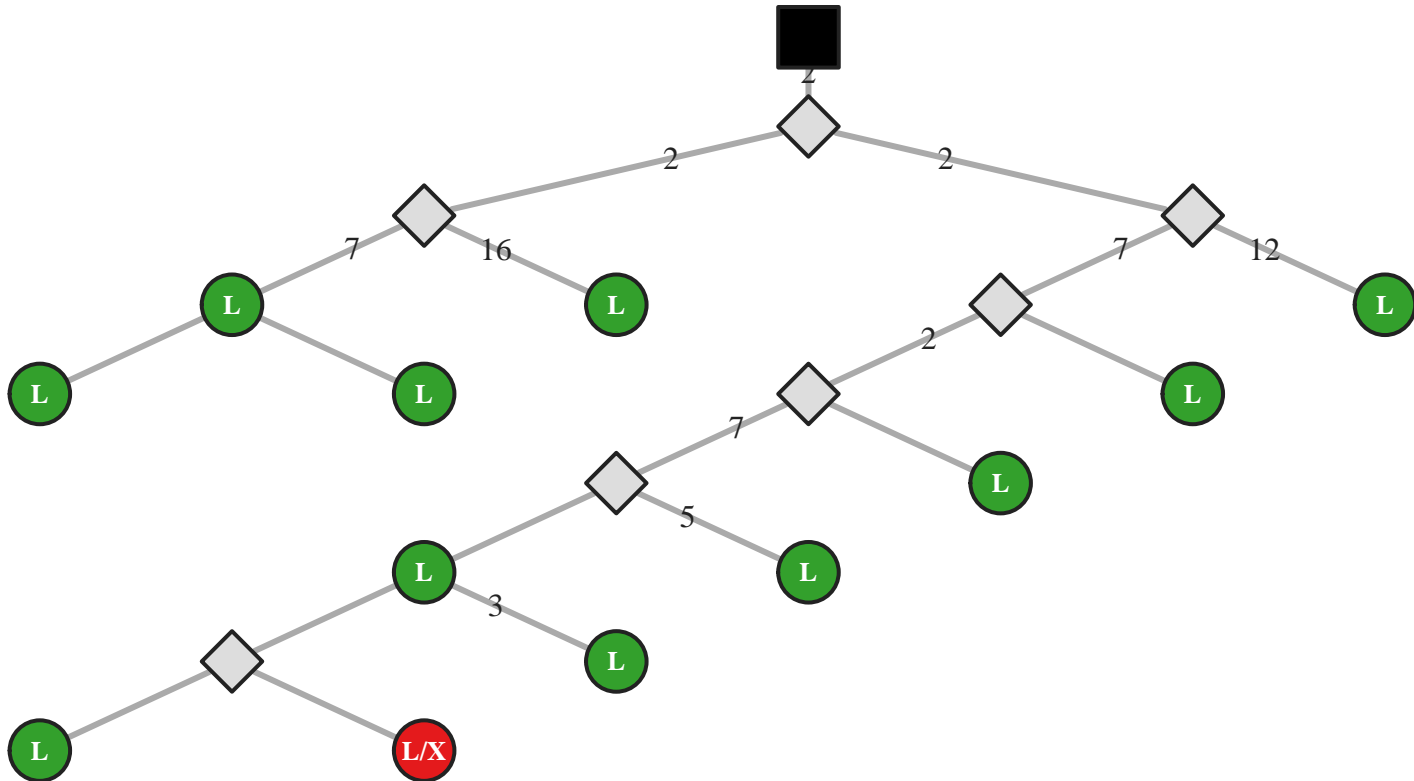
M5 IgG IGHV3-53/J3 63bp (8399)



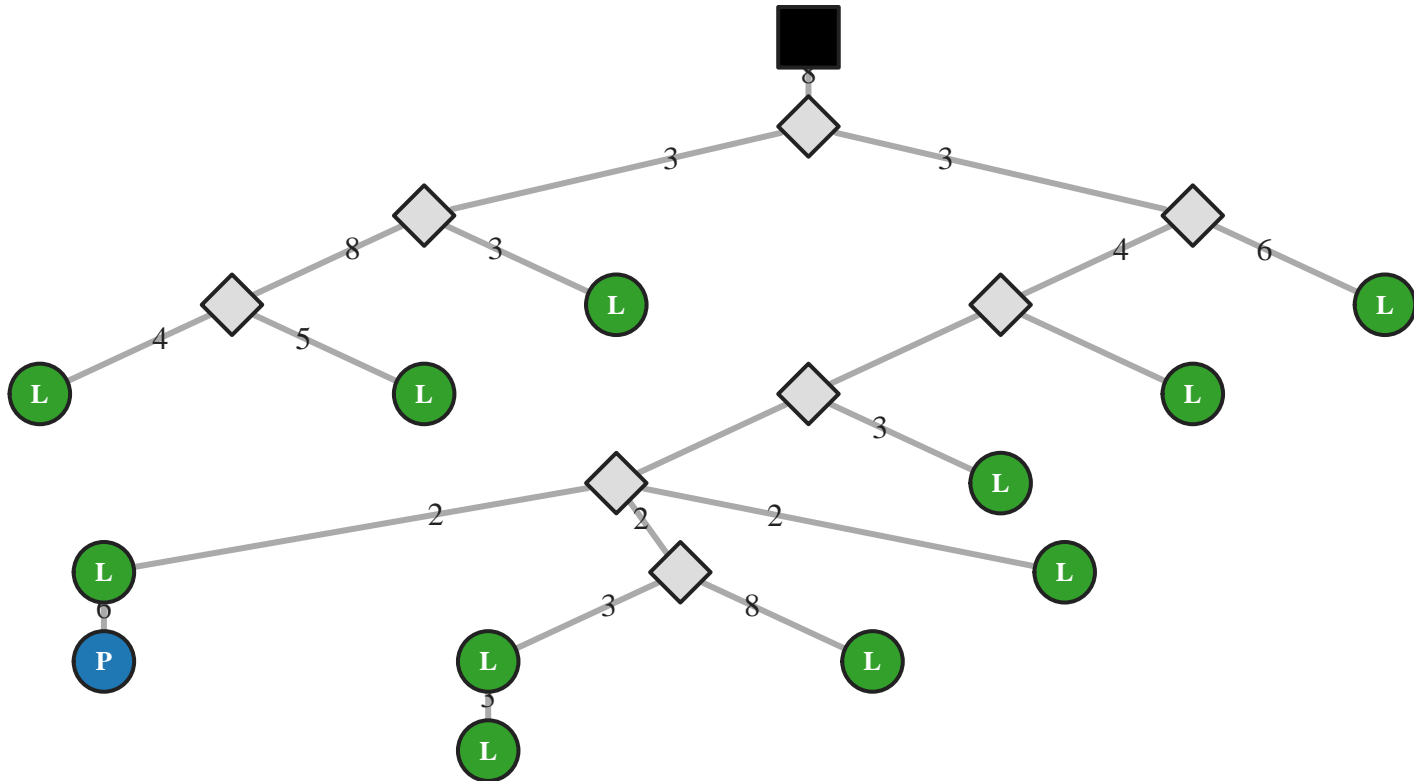
M5 IgG IGHV3-53/J3 63bp (8400)



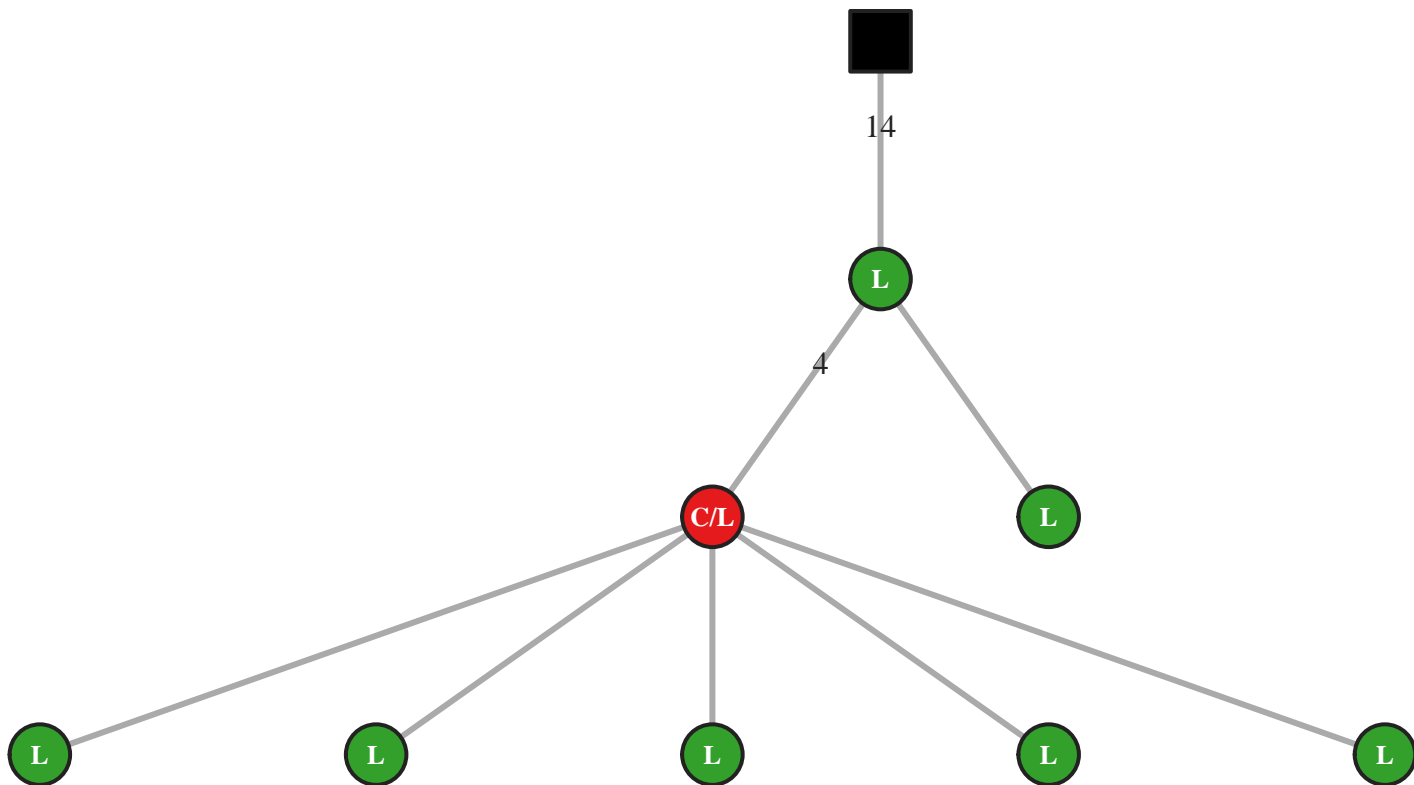
M5 IgG IGHV3-53/J4 27bp (35393)



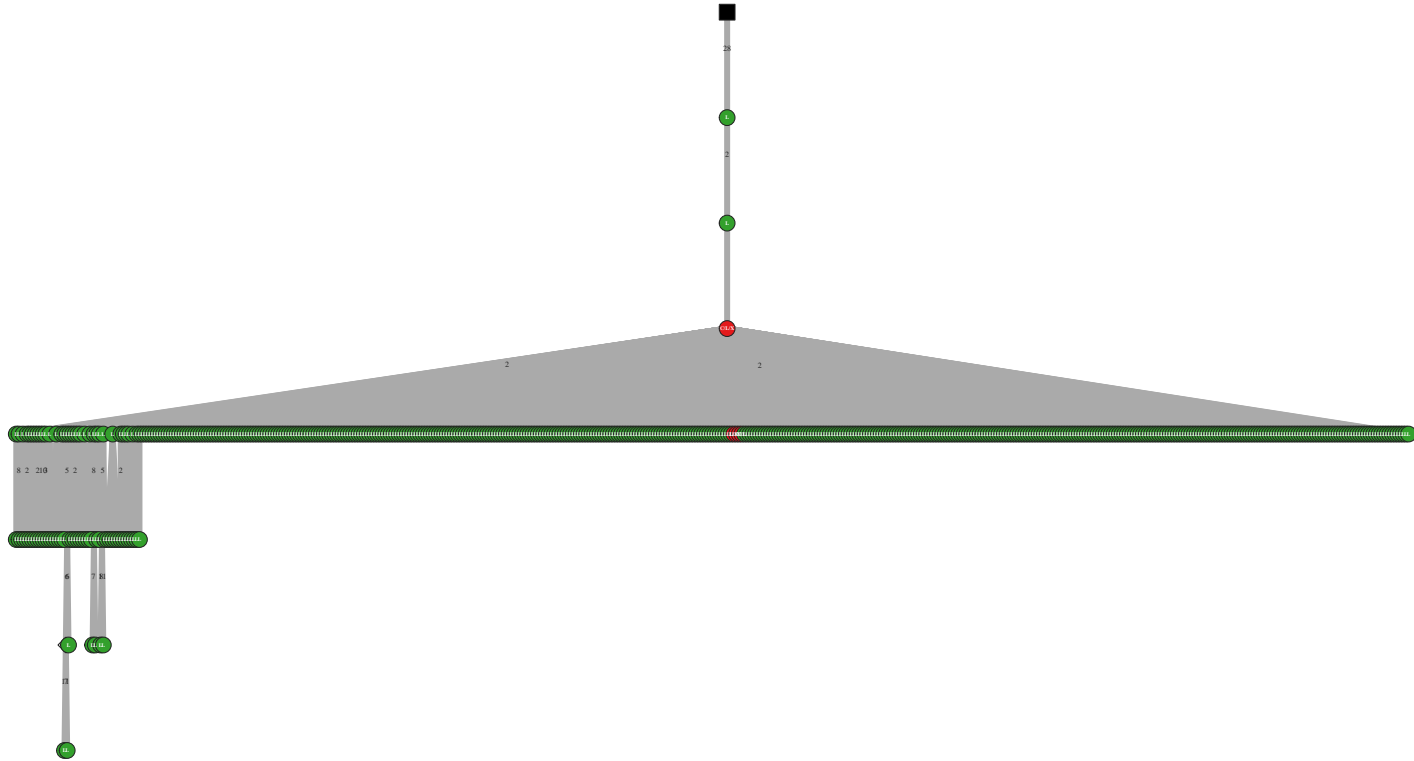
M5 IgG IGHV3-53/J4 42bp (26929)



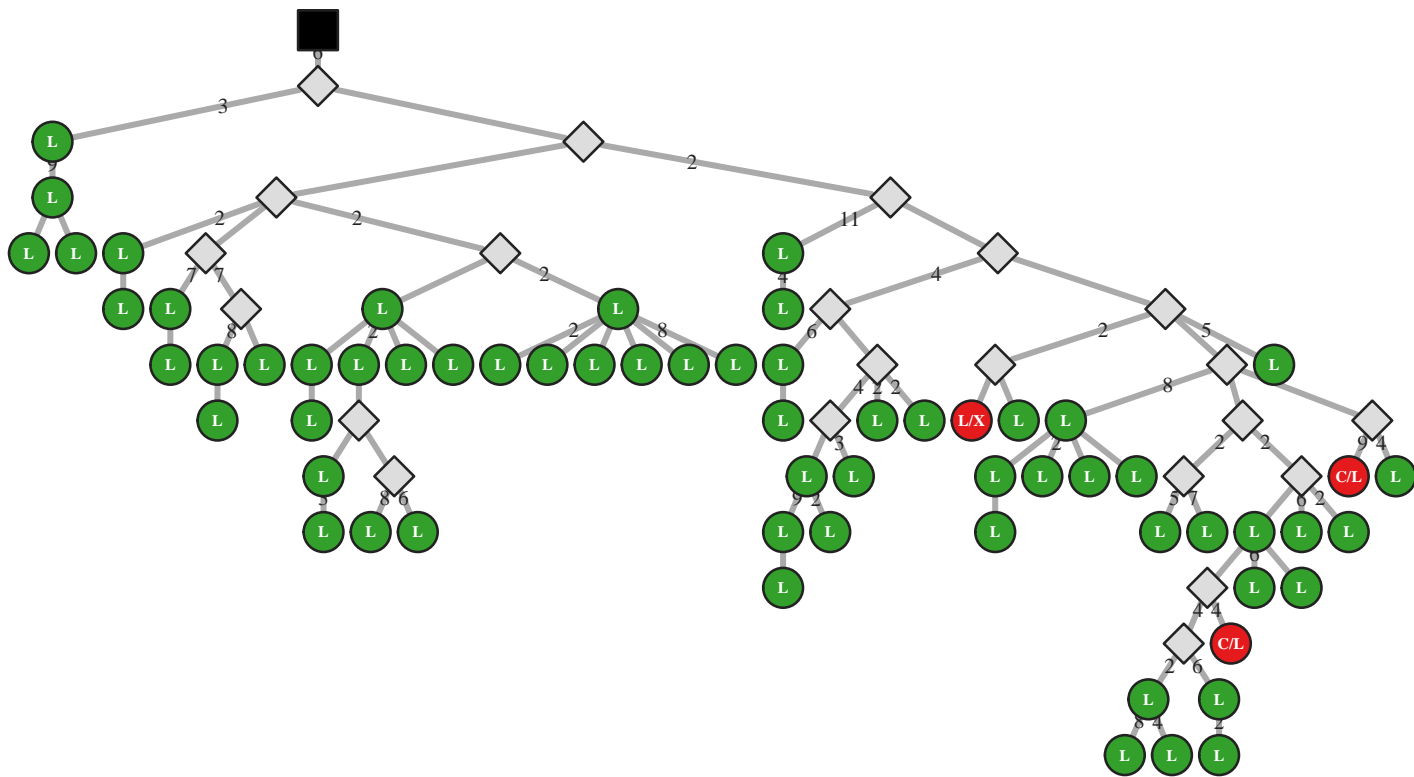
M5 IgG IGHV3-53/J4 42bp (26963)



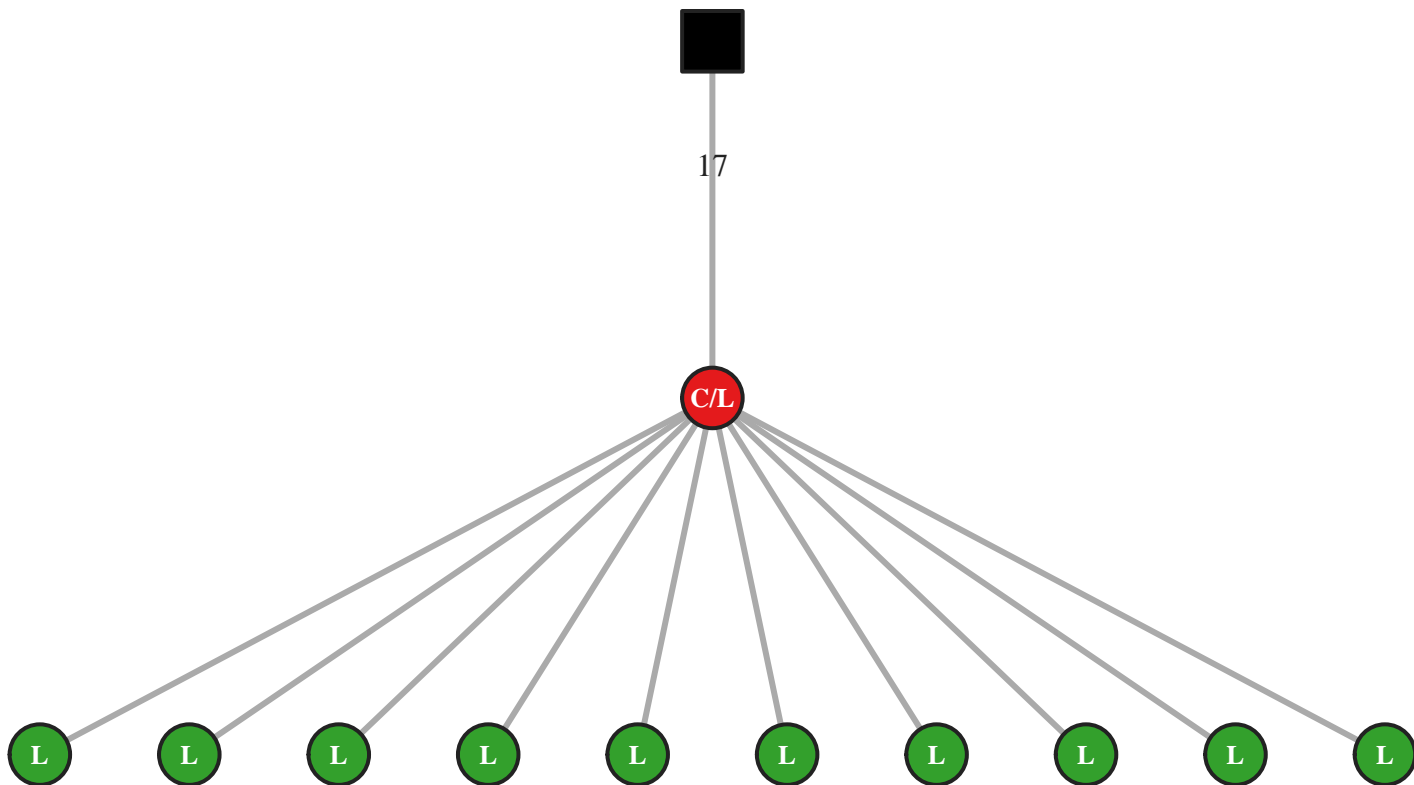
M5 IgG IGHV3-53/J4 42bp (26964)



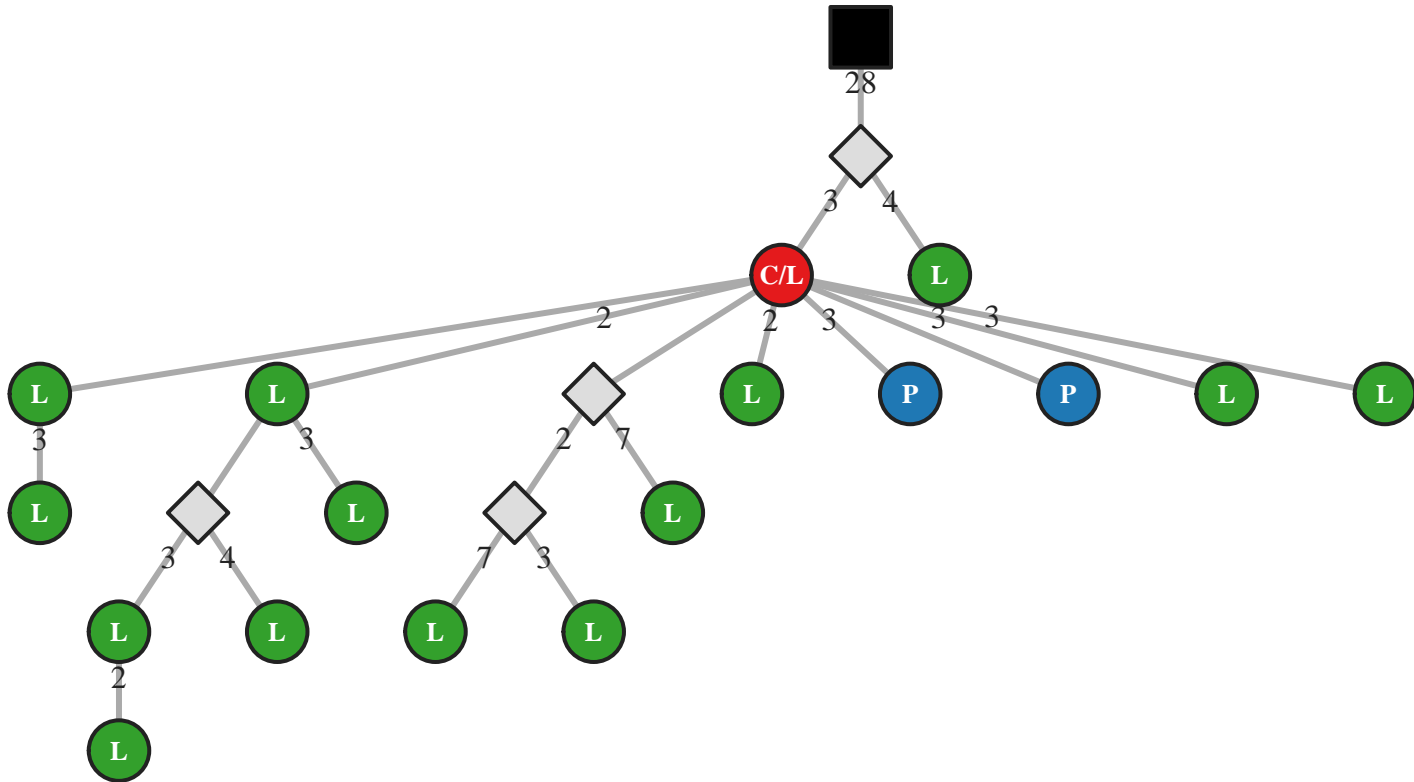
M5 IgG IGHV3-53/J4 48bp (52133)



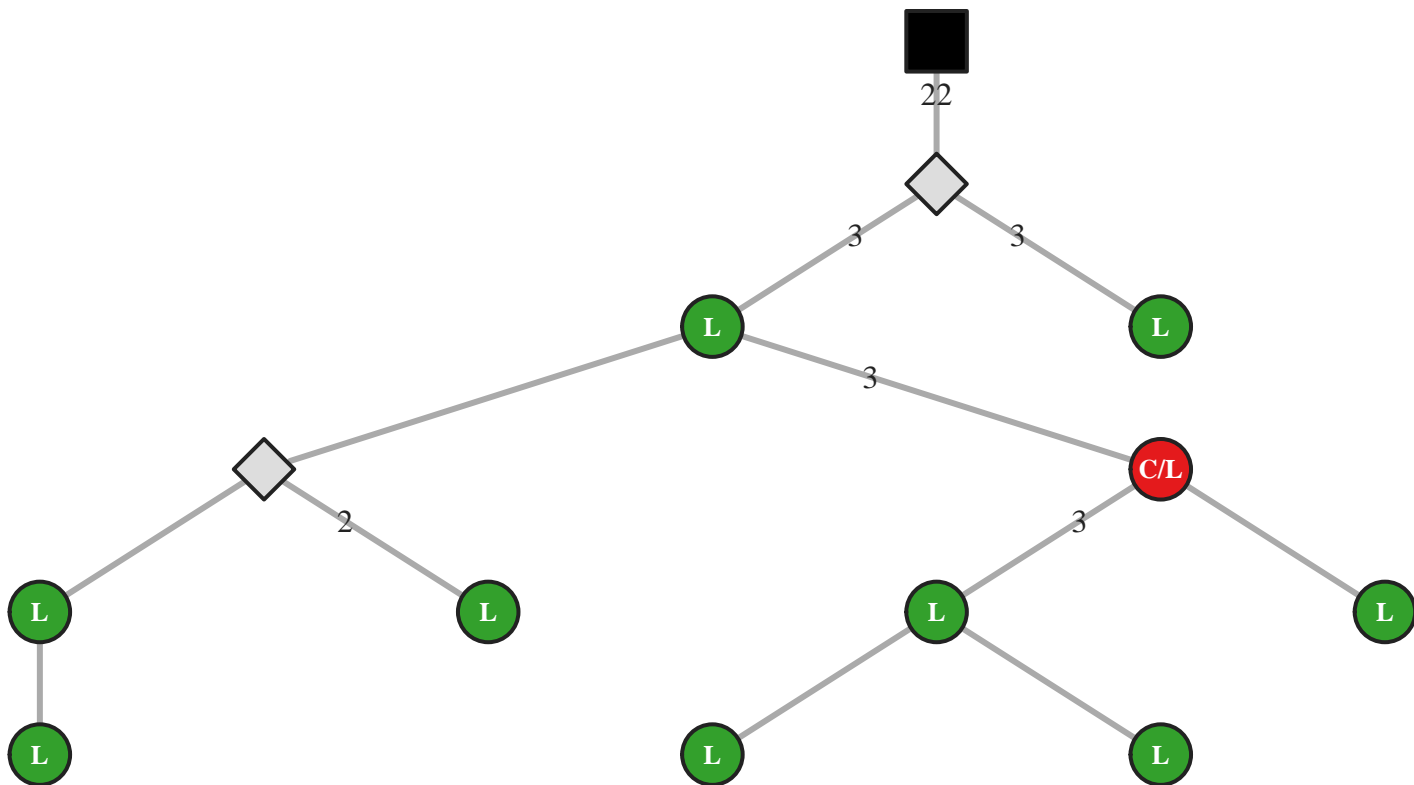
M5 IgG IGHV3-53/J4 51bp (18022)



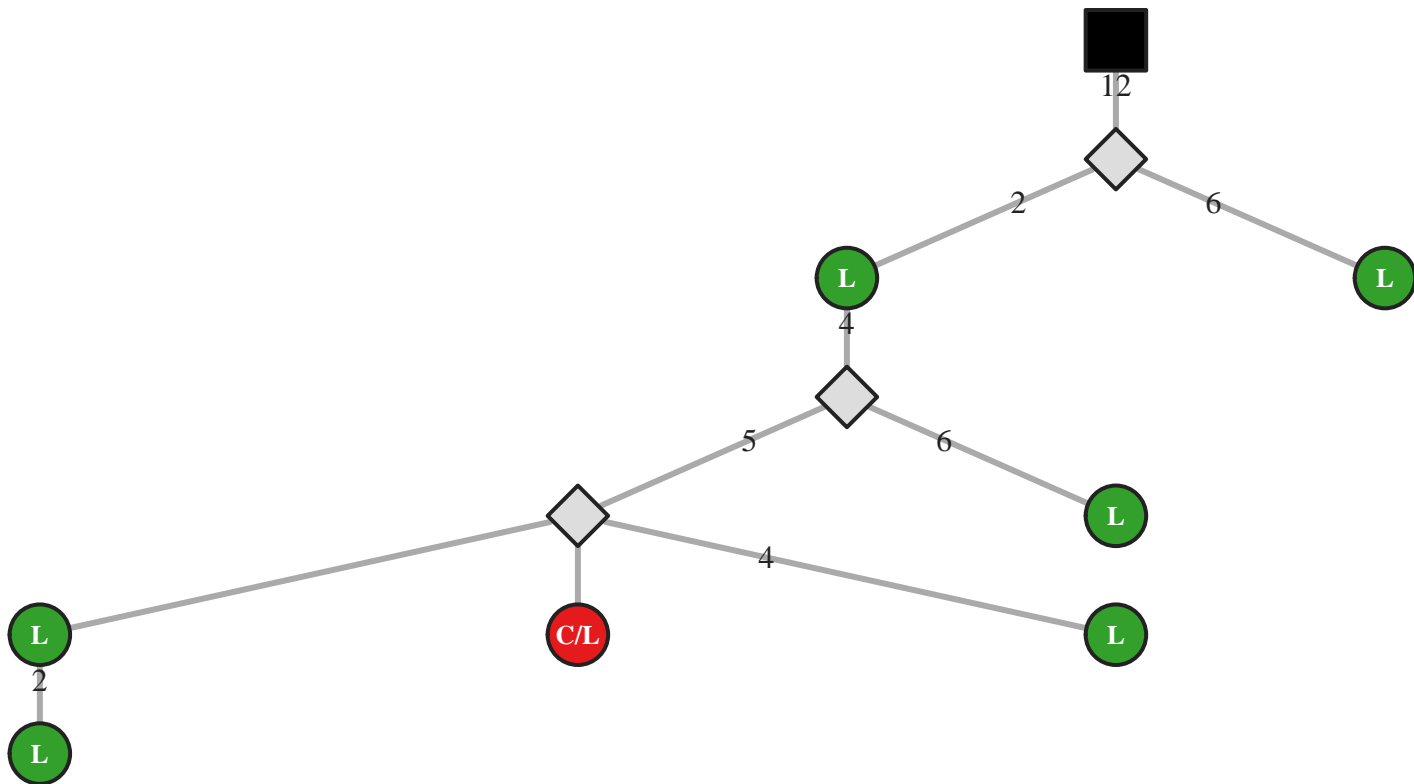
M5 IgG IGHV3-53/J4 66bp (18043)



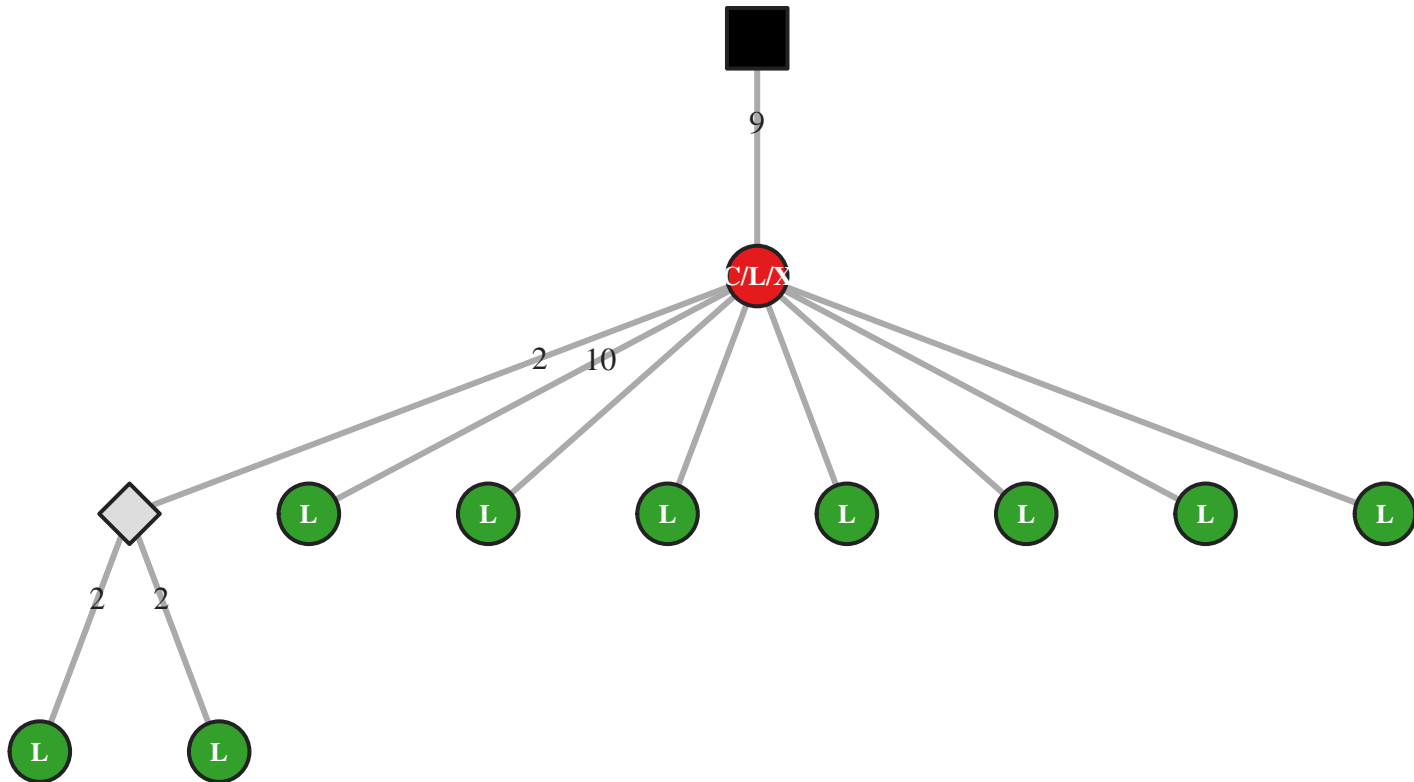
M5 IgG IGHV3-53/J6 45bp (45348)



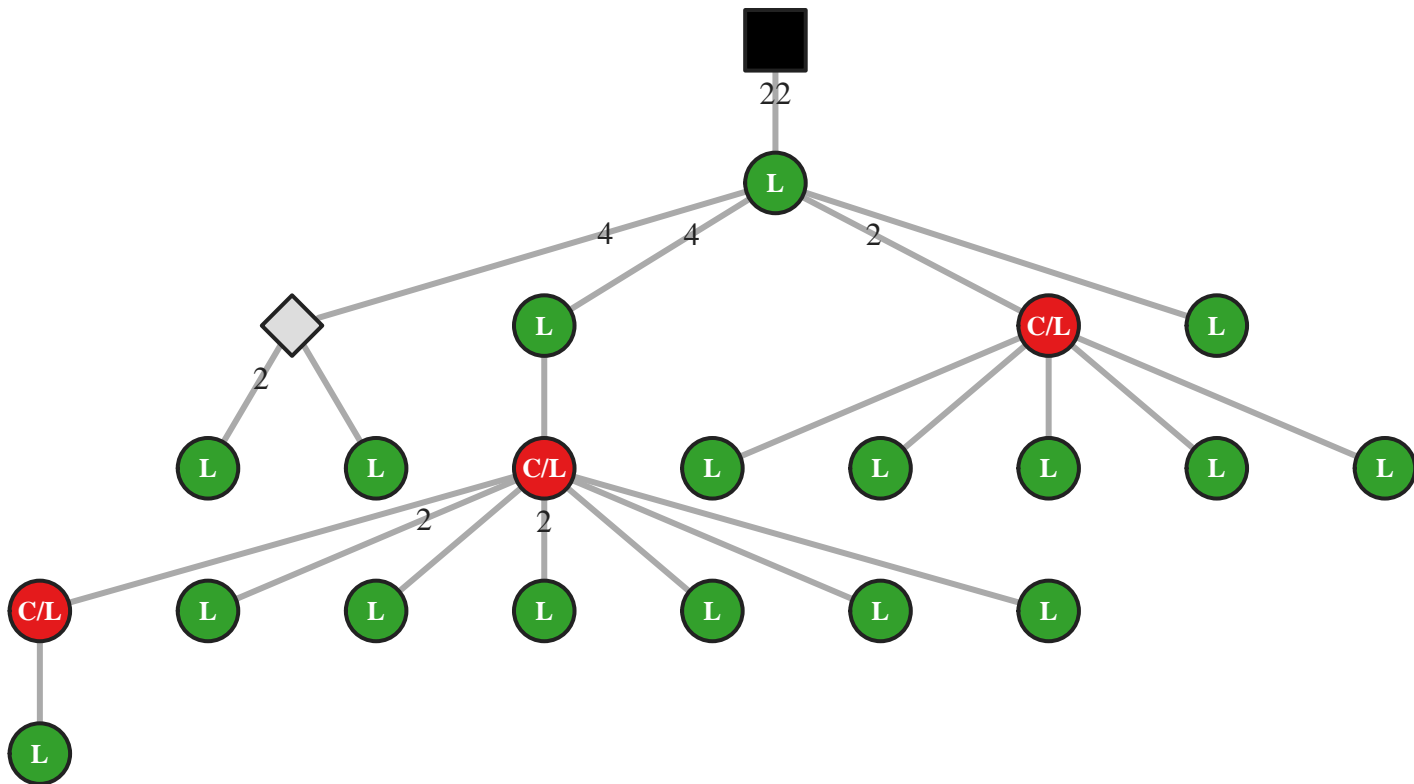
M5 IgG IGHV3-53/J6 60bp (26981)



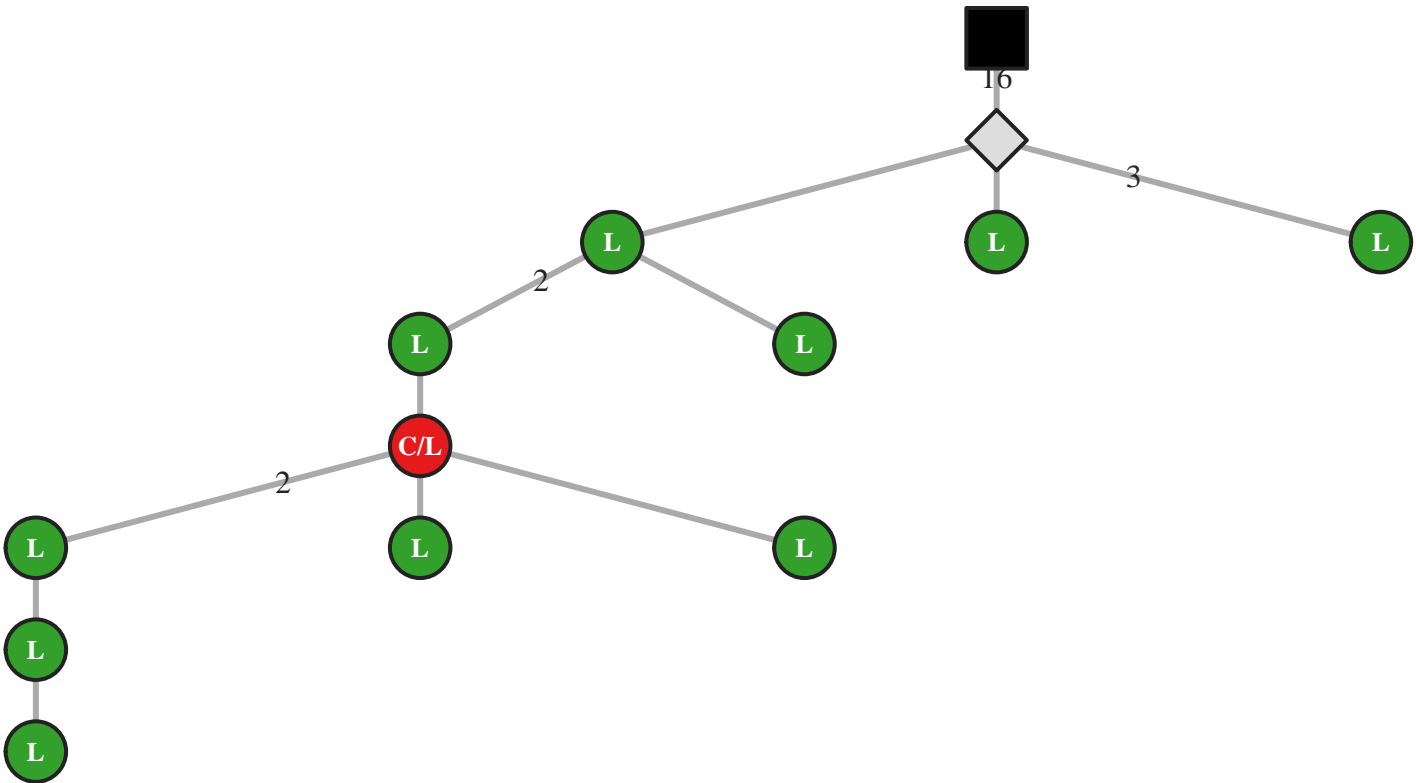
M5 IgG IGHV3-66/J4 36bp (45367)



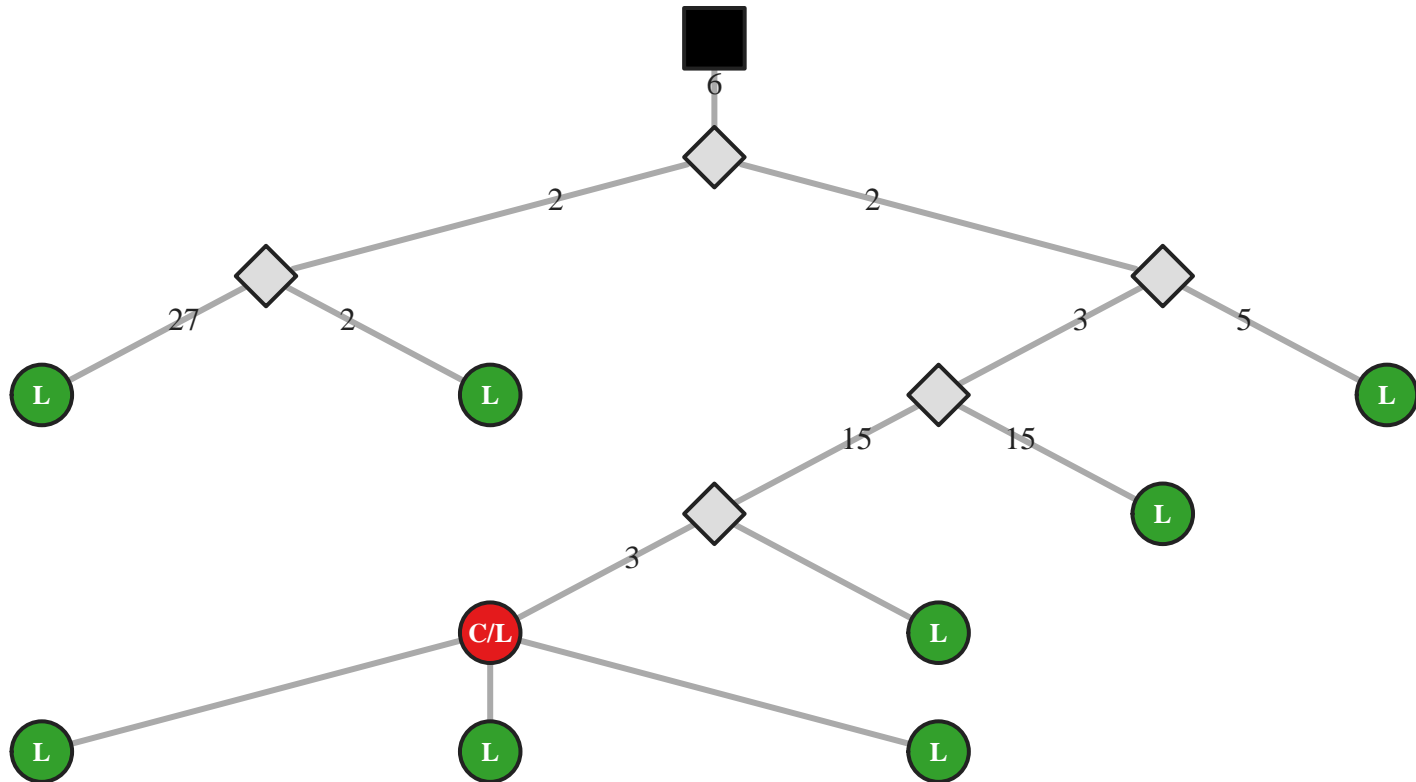
M5 IgG IGHV3-66/J4 36bp (45386)



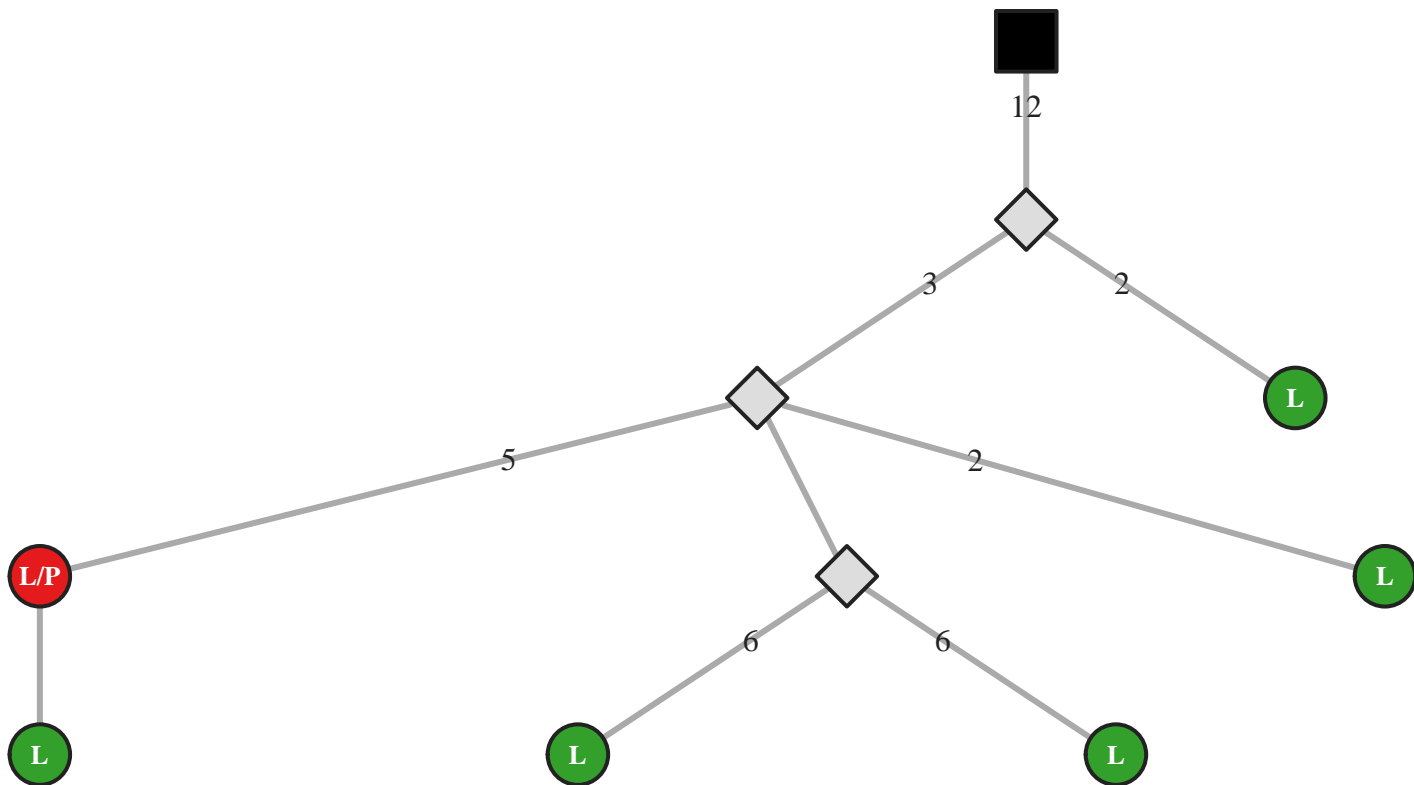
M5 IgA IGHV3-66/J5 27bp (30620)



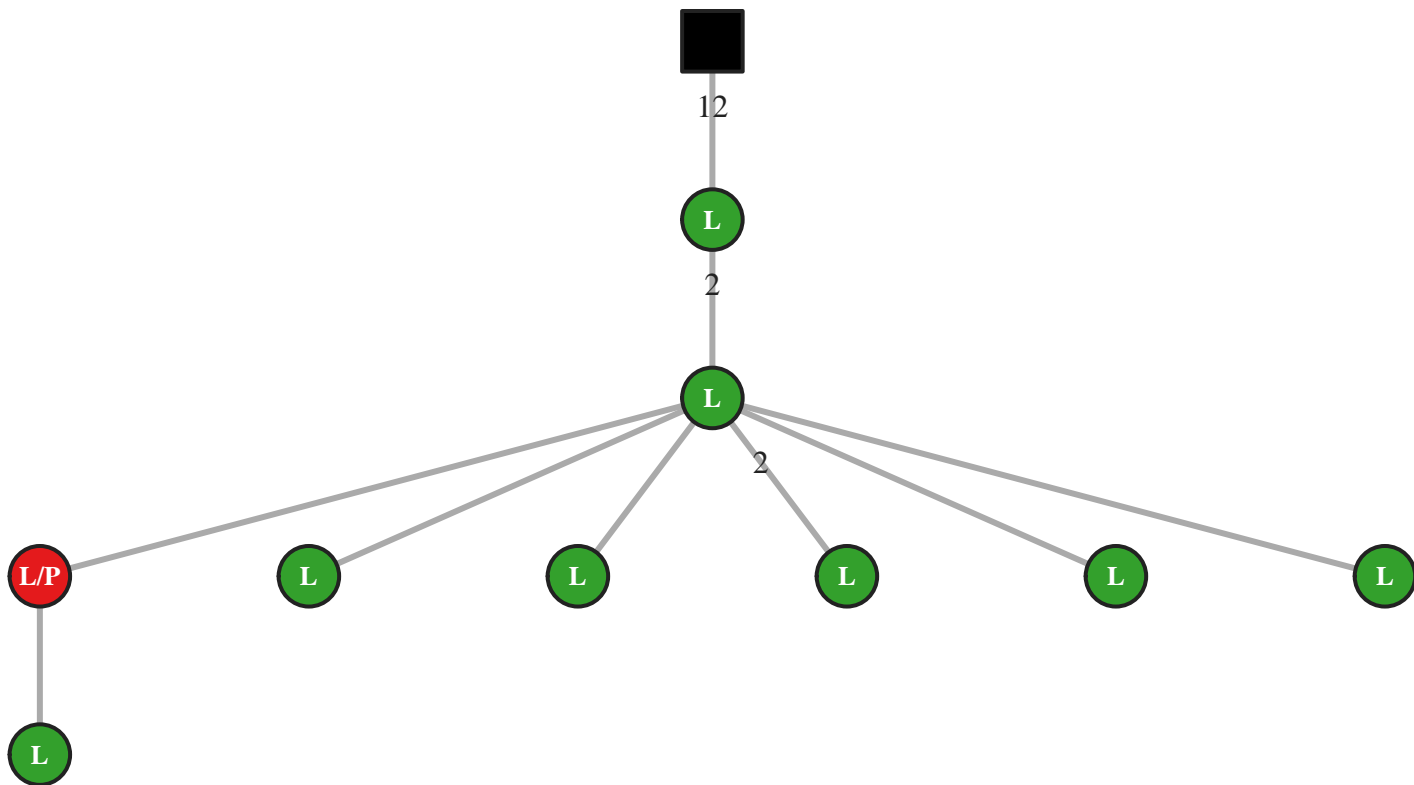
M5 IgG IGHV3-7/J1 36bp (35657)



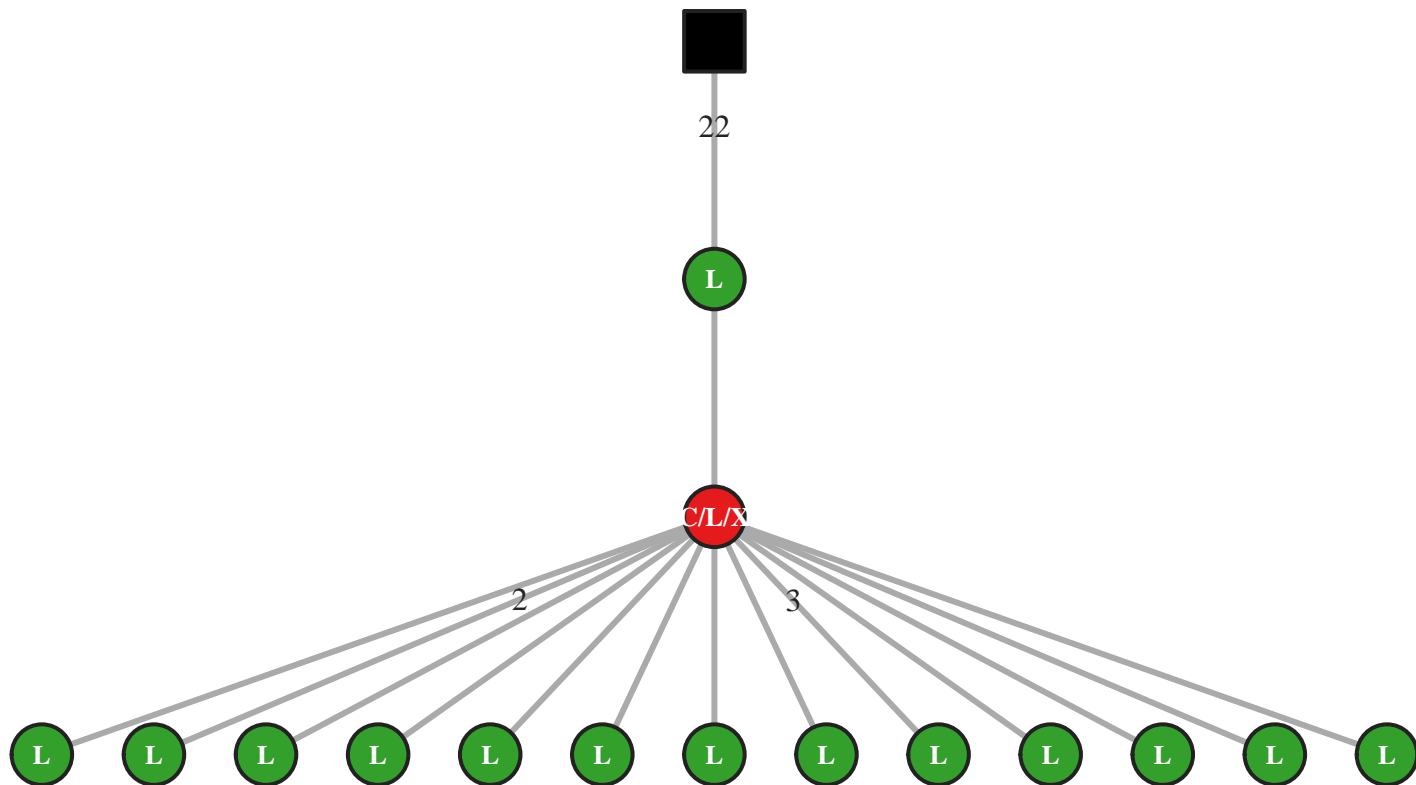
M5 IgG IGHV3-7/J3 51bp (27282)



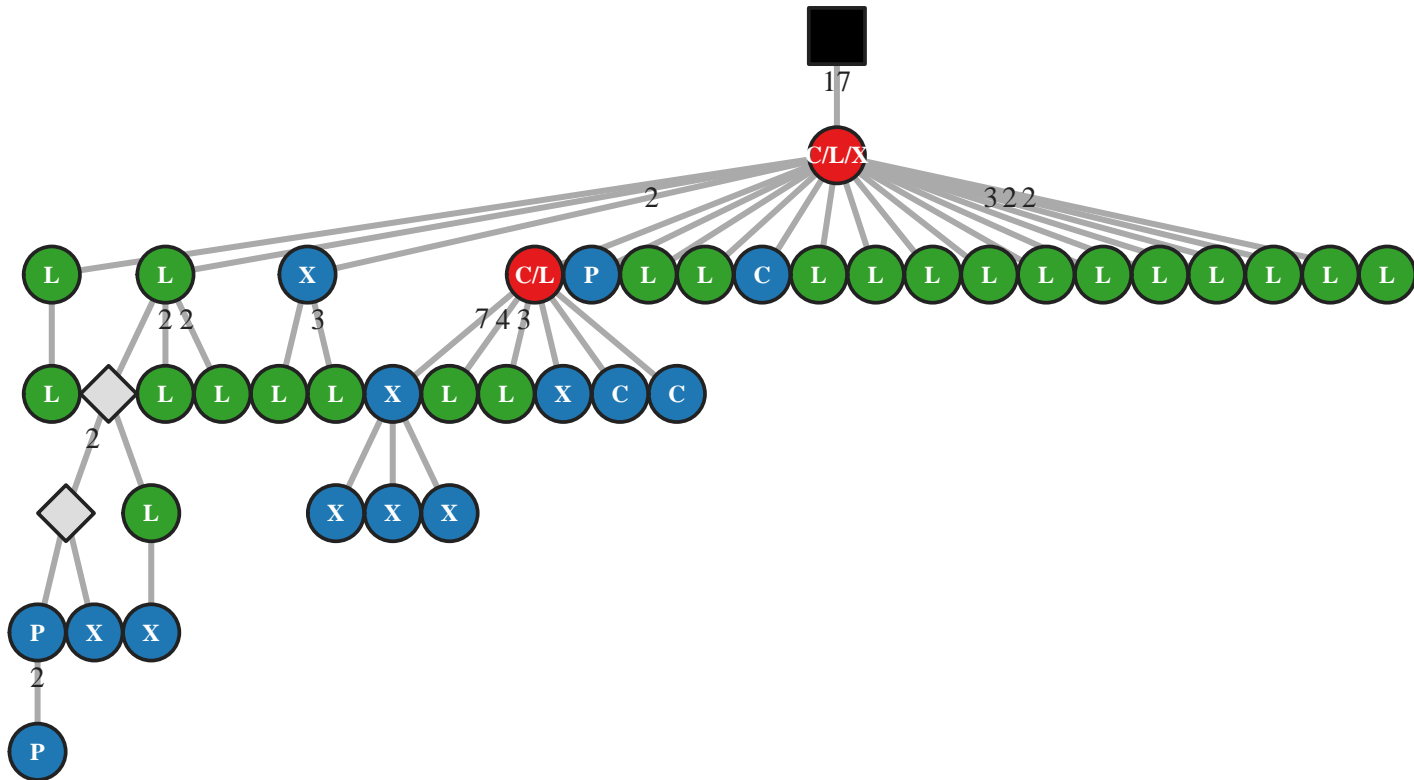
M5 IgG IGHV3-7/J4 27bp (52323)



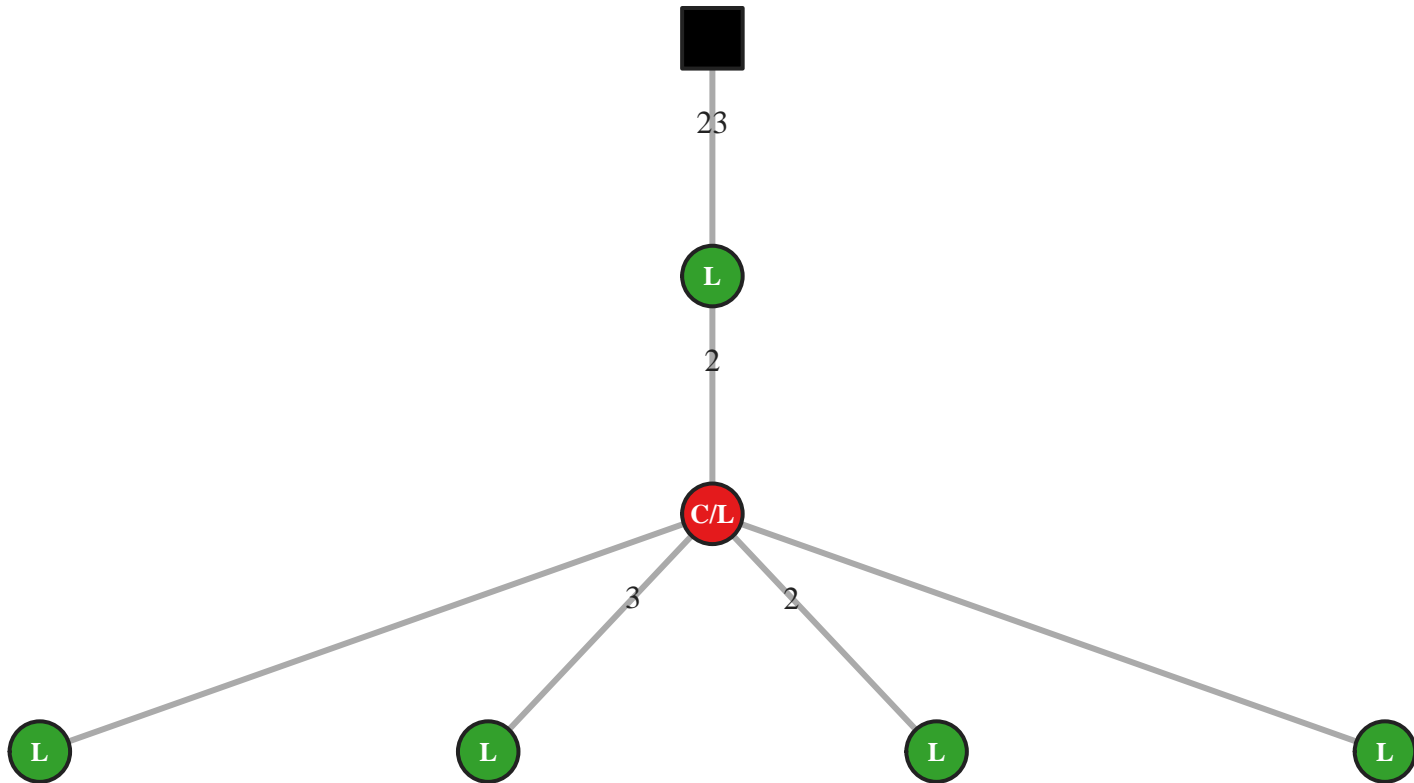
M5 IgG IGHV3-7/J4 30bp (45544)



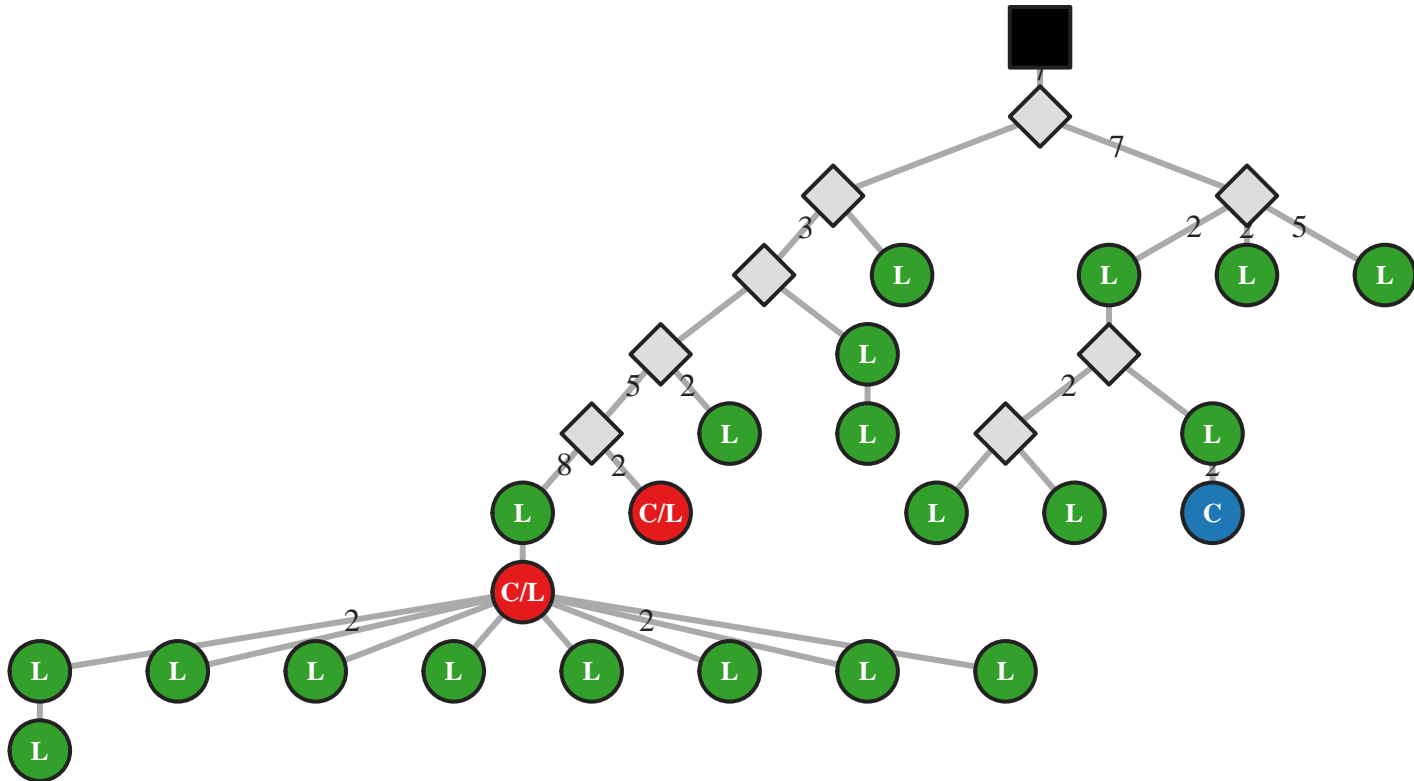
M5 IgG IGHV3-7/J4 36bp (52358)



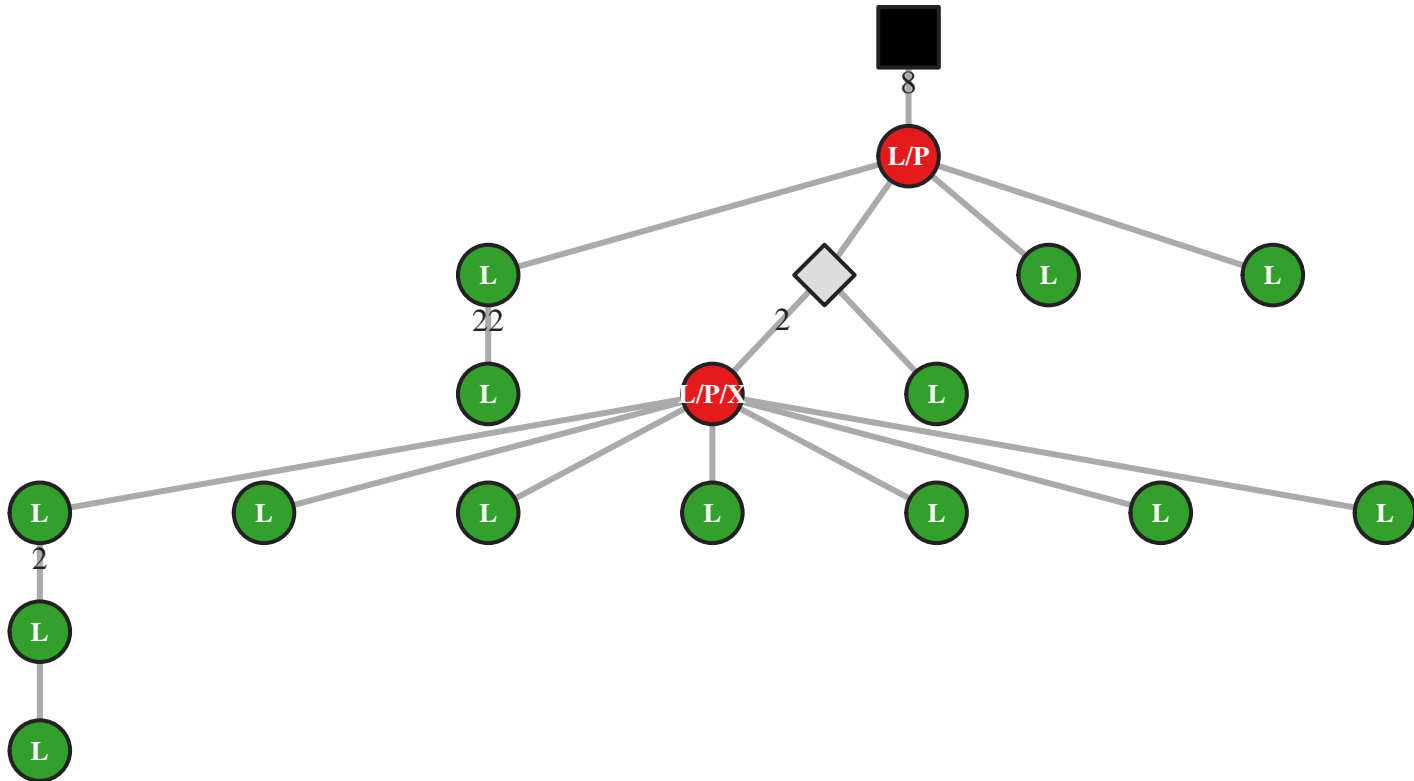
M5 IgM IGHV3-7/J4 36bp (54273)



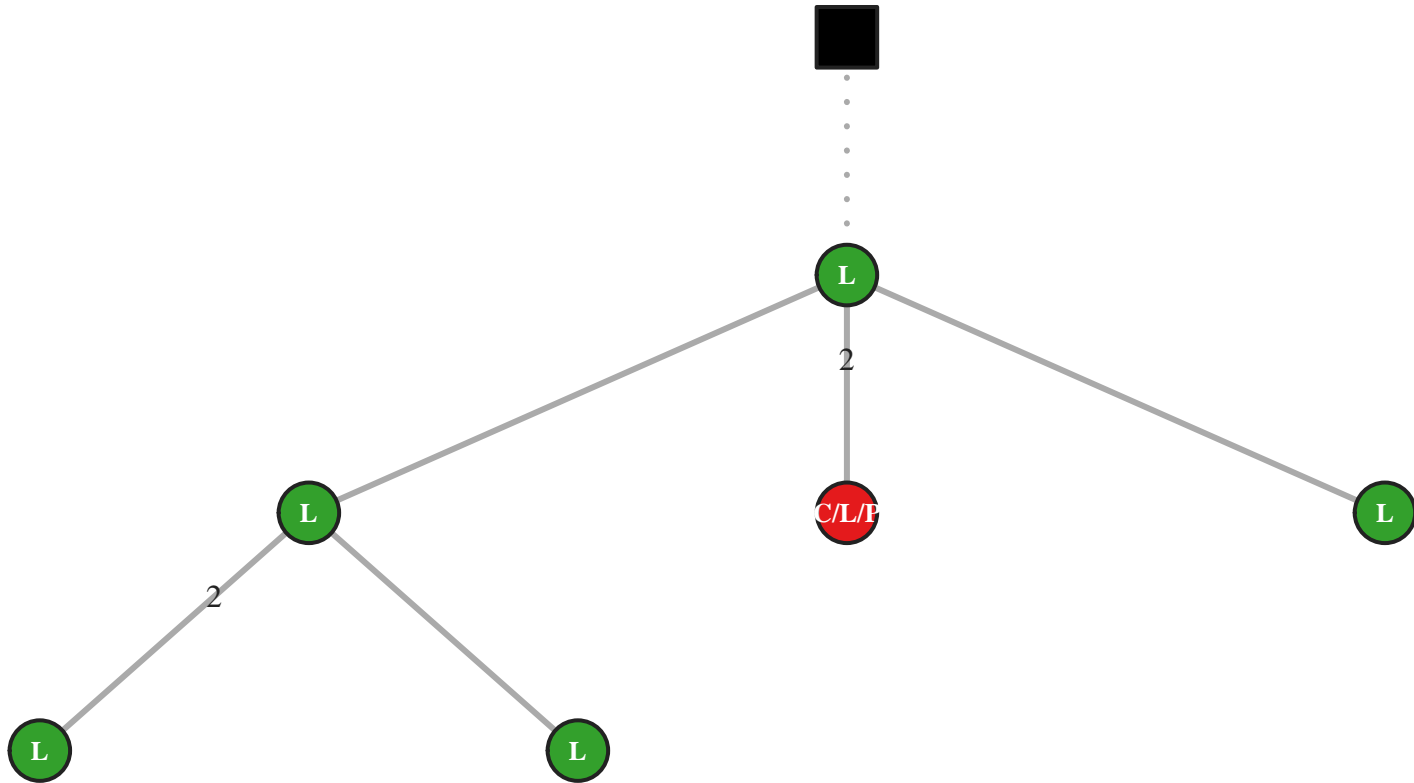
M5 IgG IGHV3-7/J4 39bp (8696)



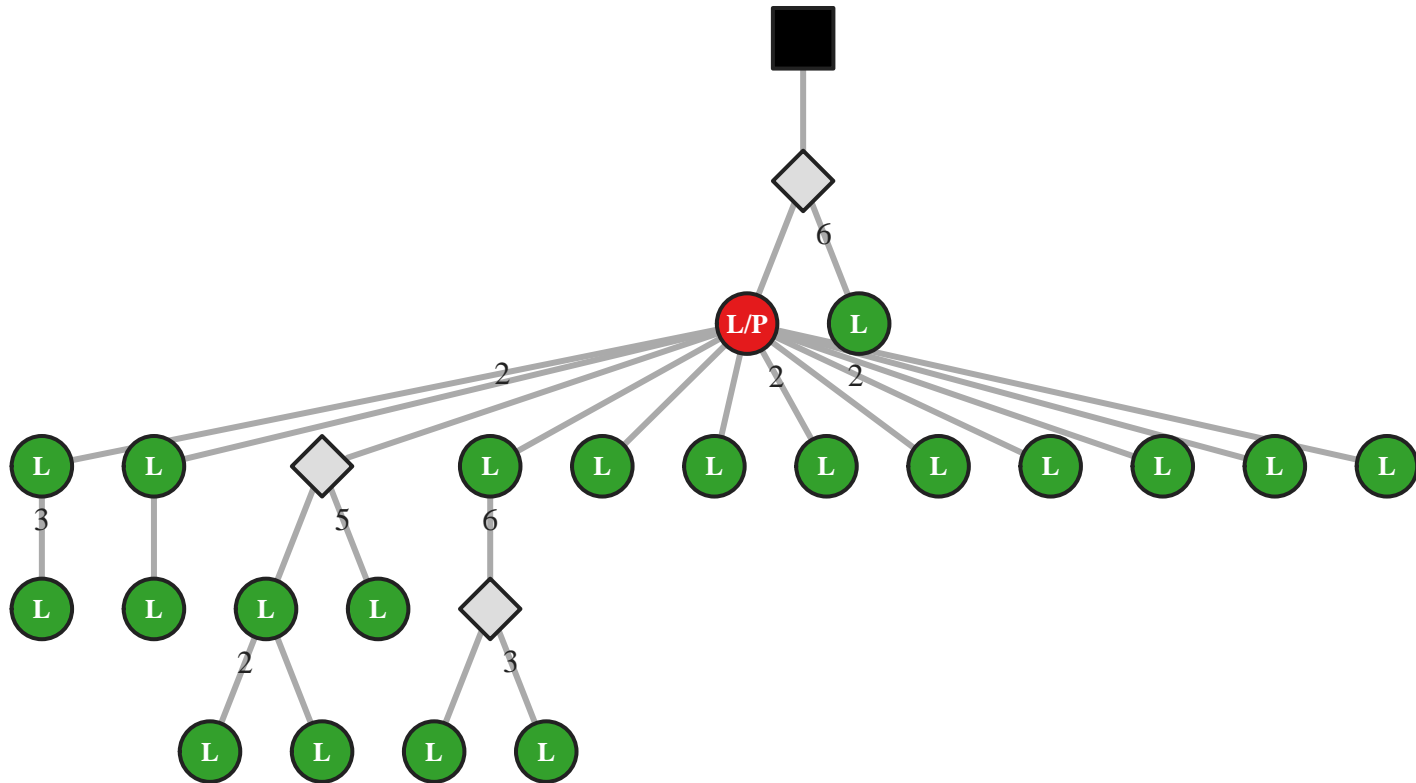
M5 IgG IGHV3-7/J4 39bp (8729)



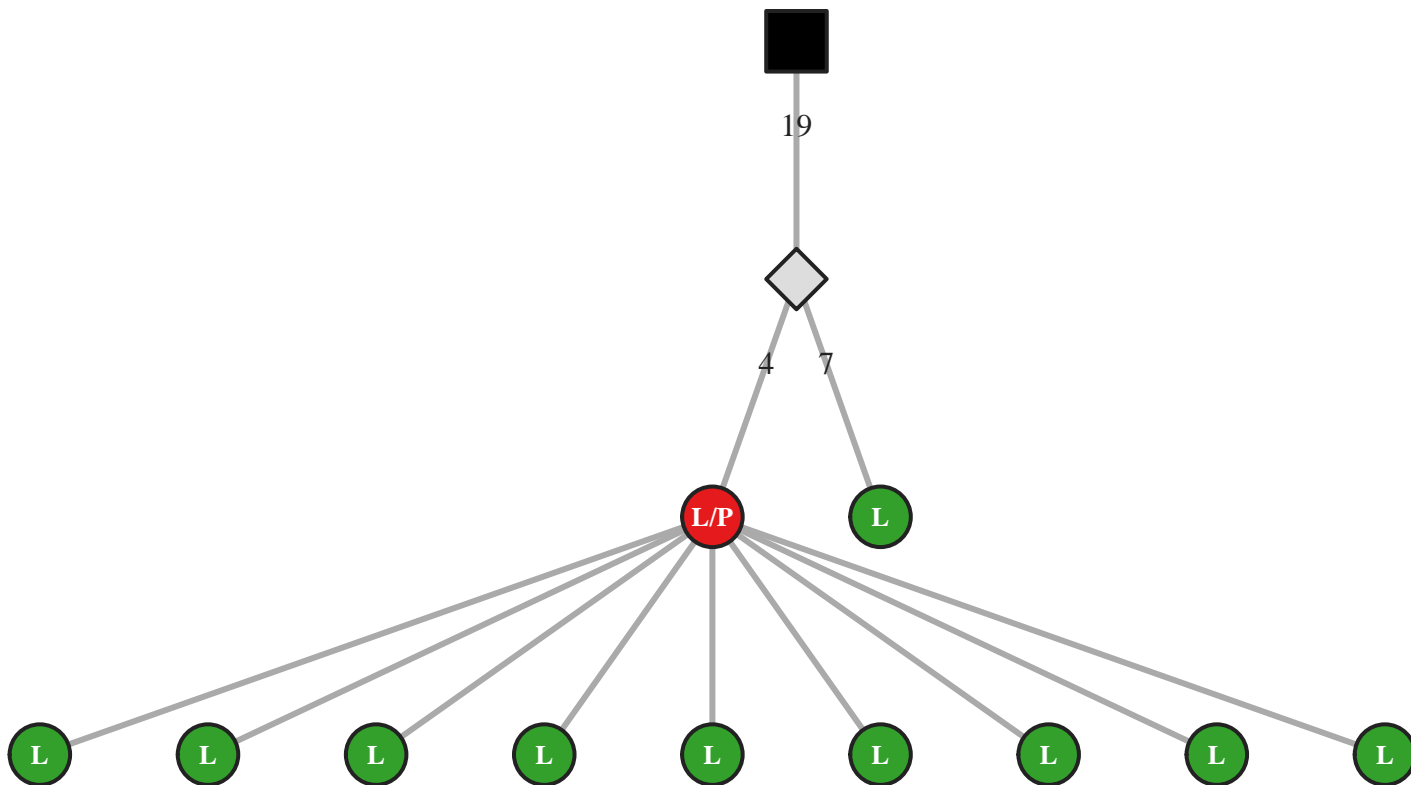
M5 IgG IGHV3-7/J4 42bp (8785)



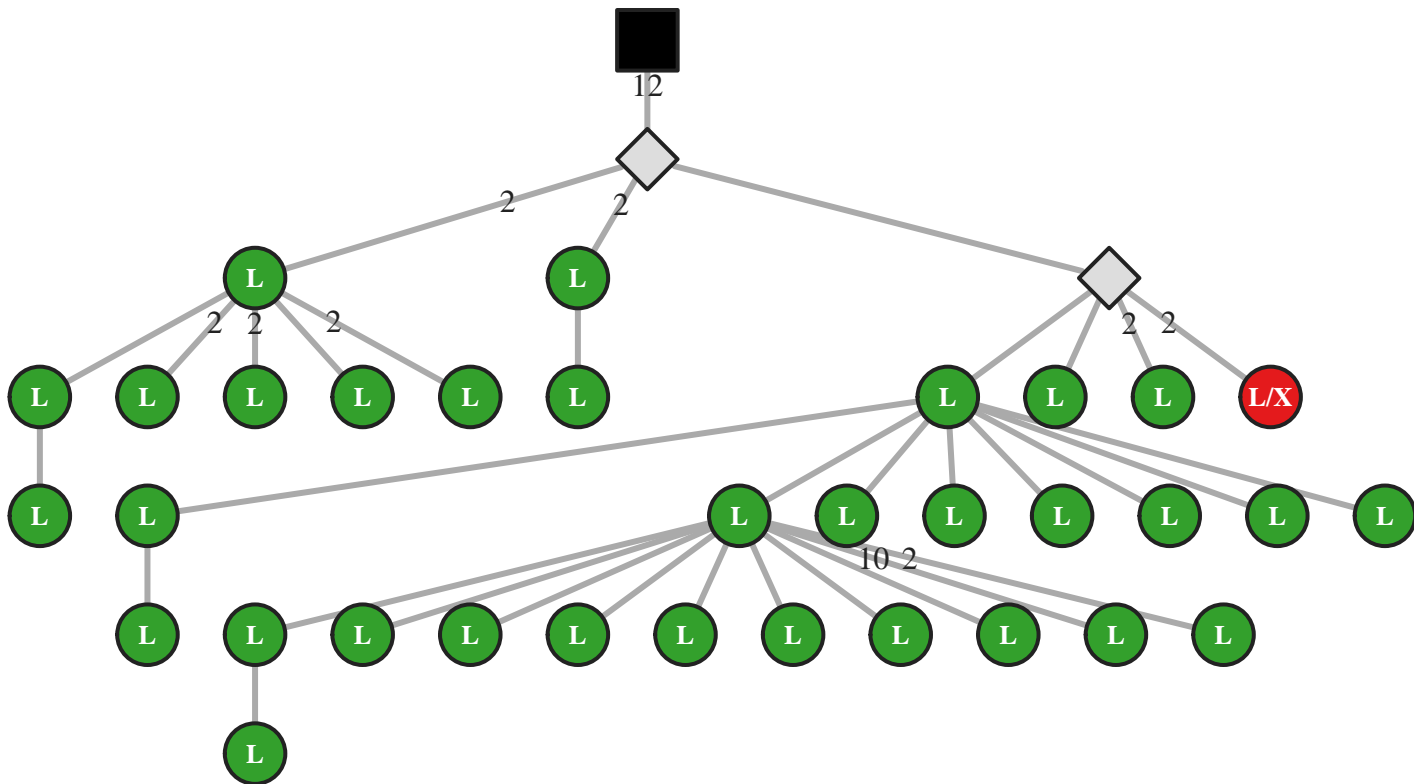
M5 IgG IGHV3-7/J4 42bp (8794)



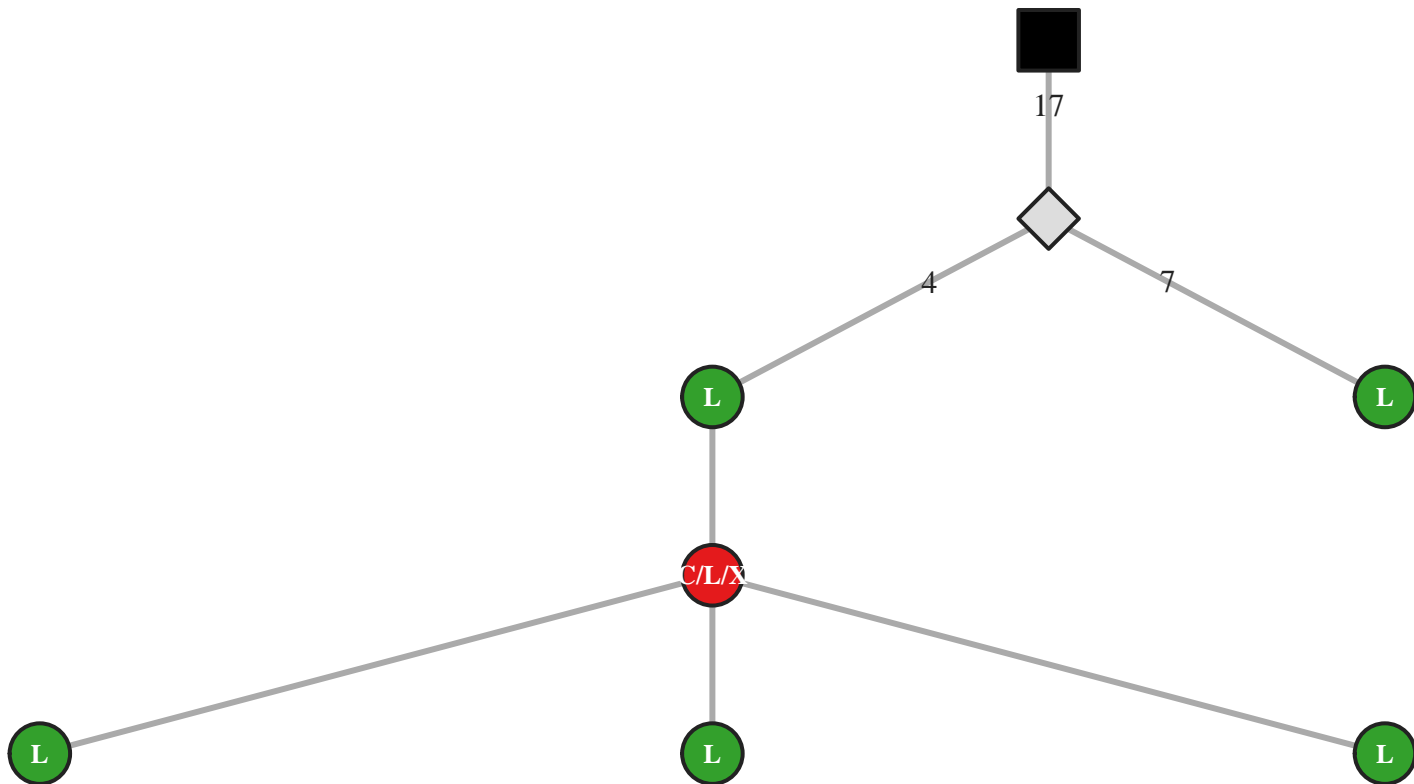
M5 IgG IGHV3-7/J4 48bp (45626)



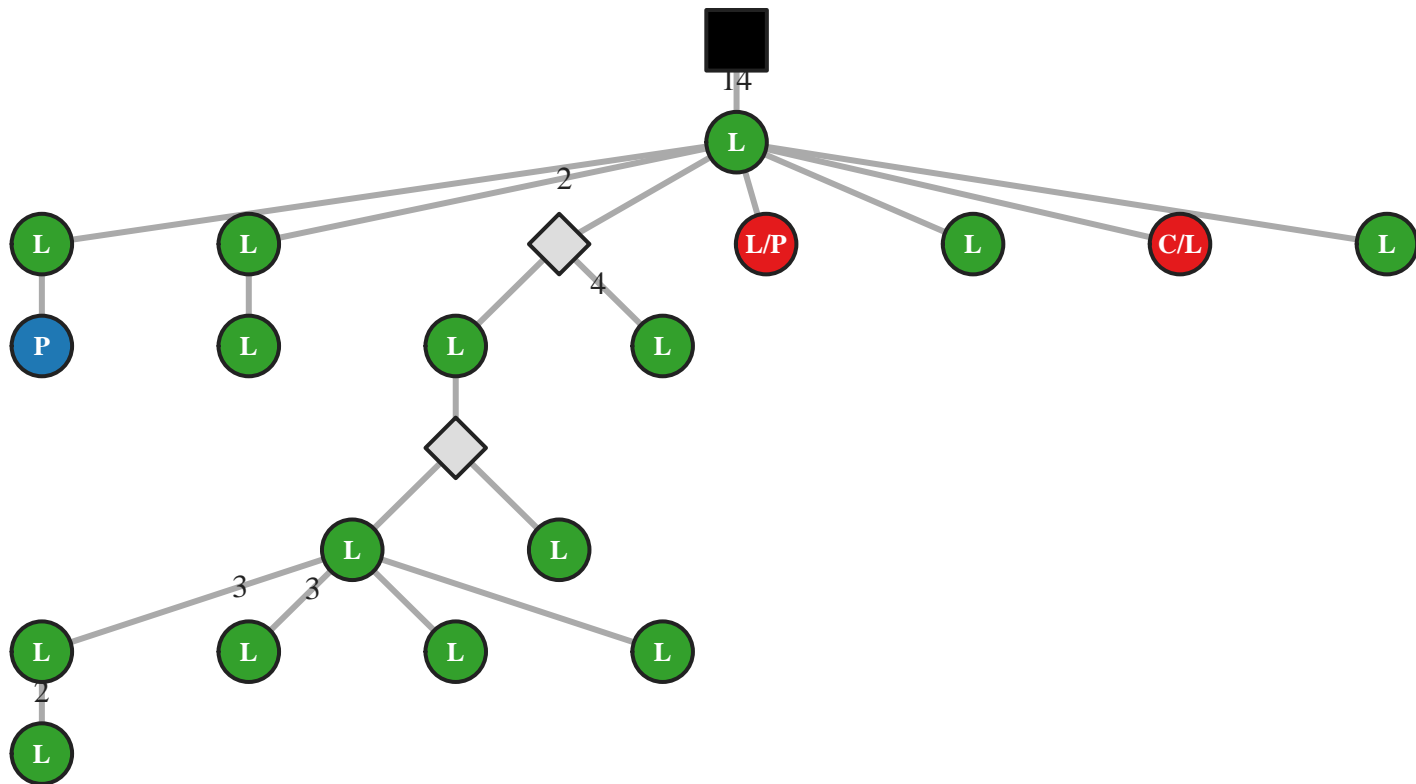
M5 IgG IGHV3-7/J4 51bp (52413)



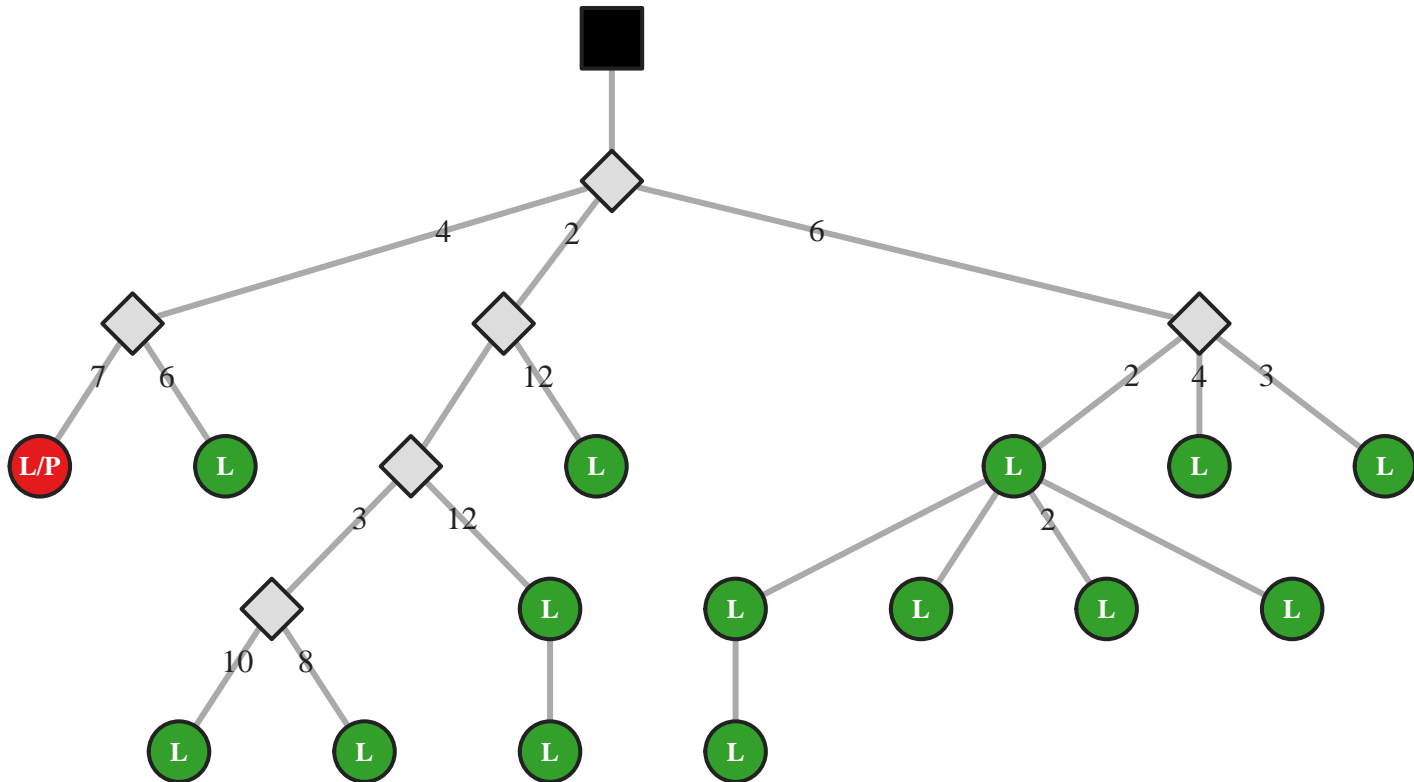
M5 IgG IGHV3-7/J4 51bp (52430)



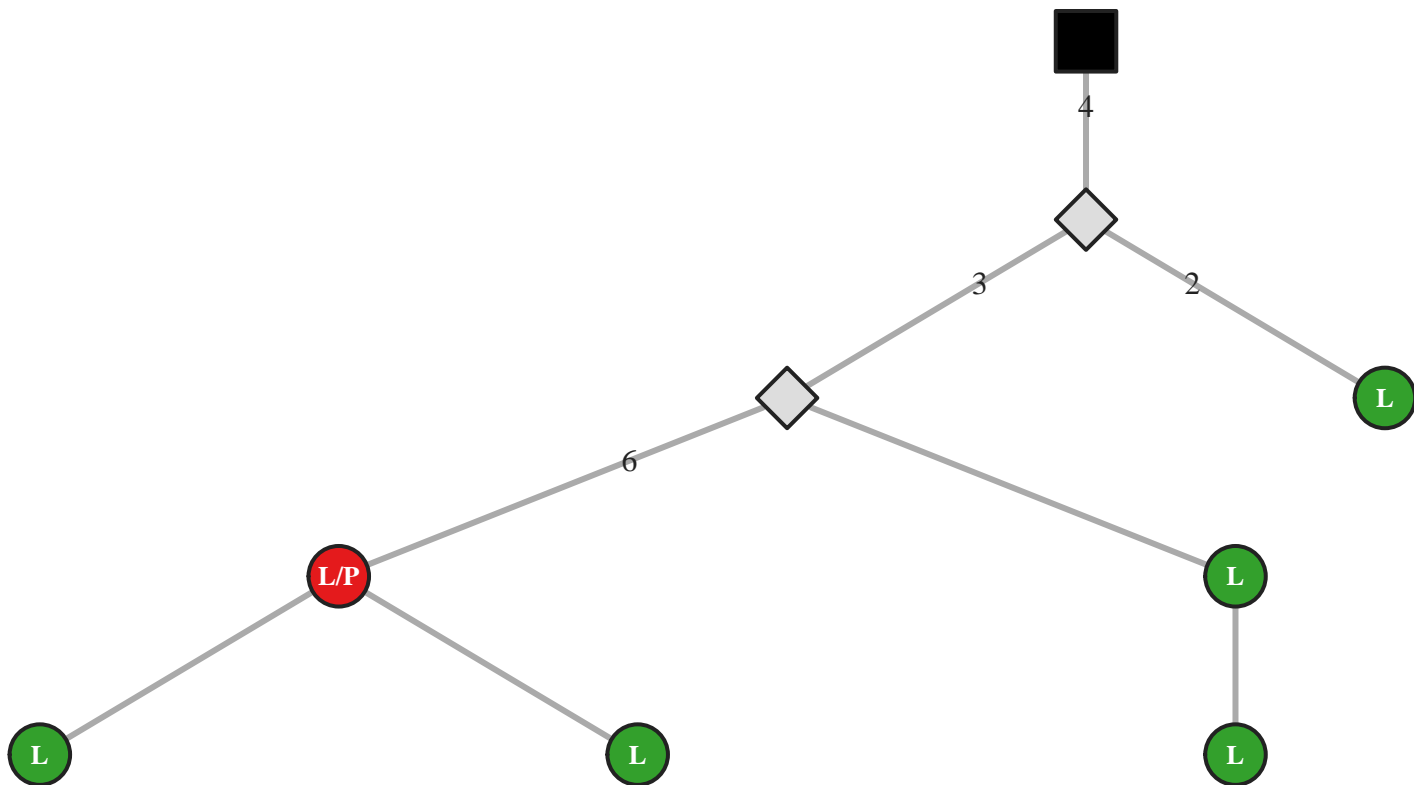
M5 IgG IGHV3-7/J4 51bp (52443)



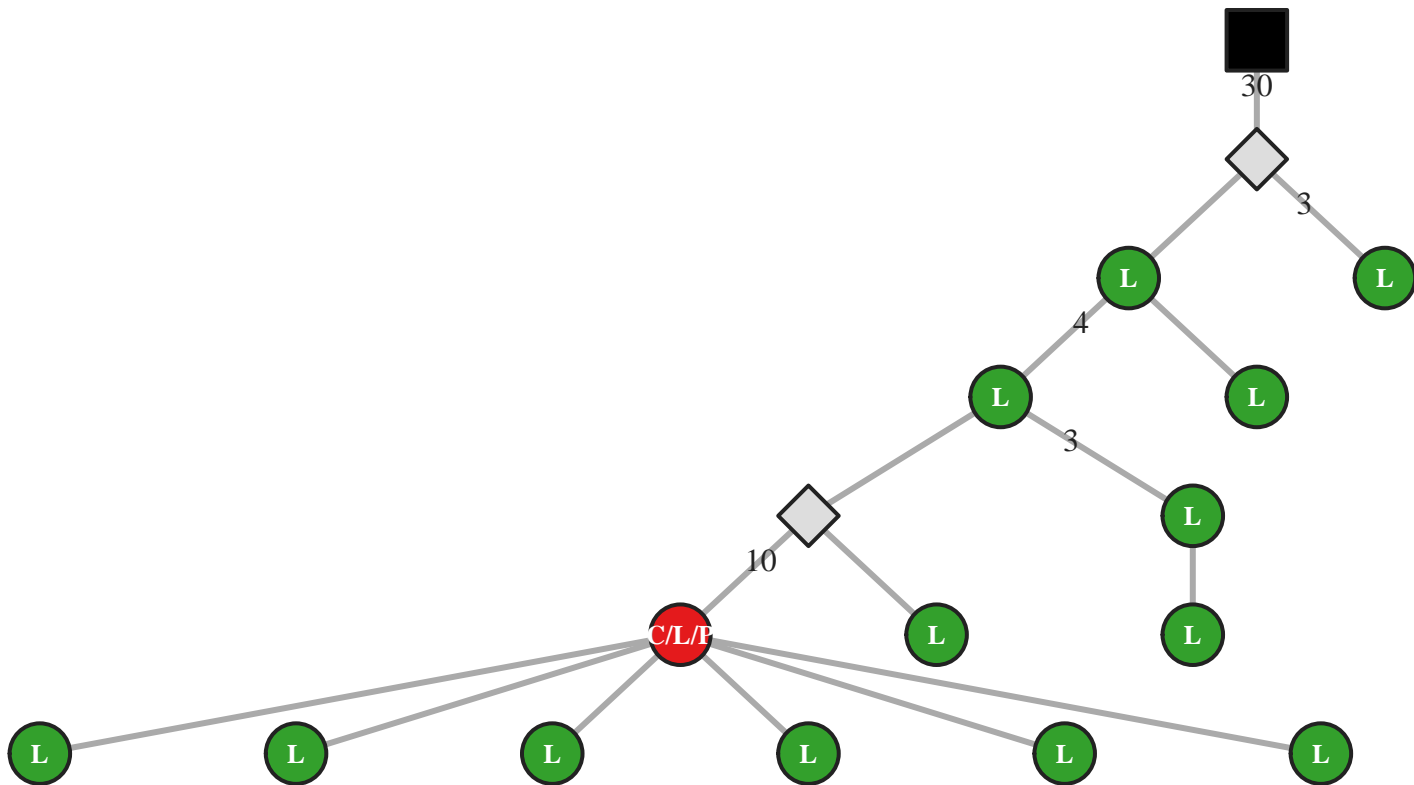
M5 IgG IGHV3-7/J4 54bp (45668)



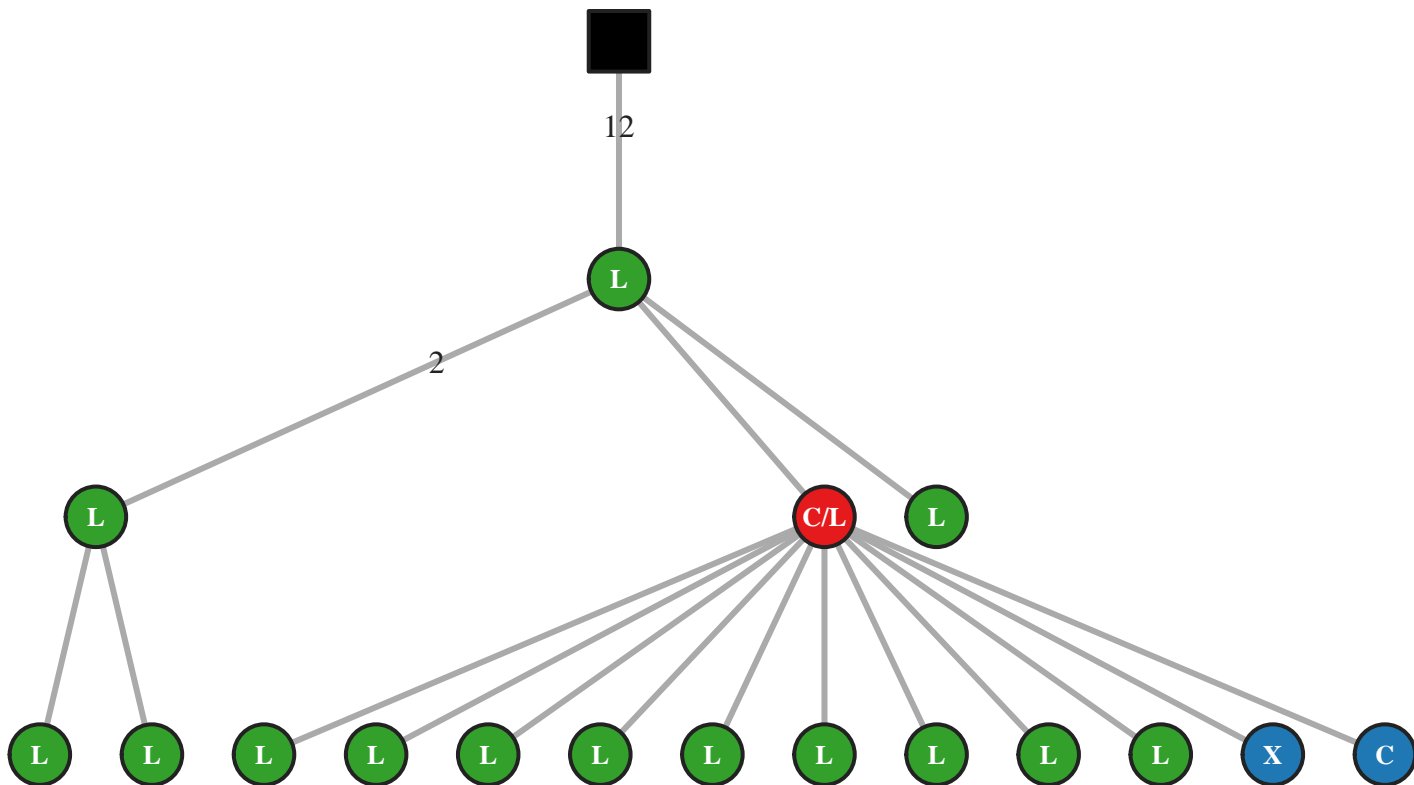
M5 IgG IGHV3-7/J4 63bp (35723)



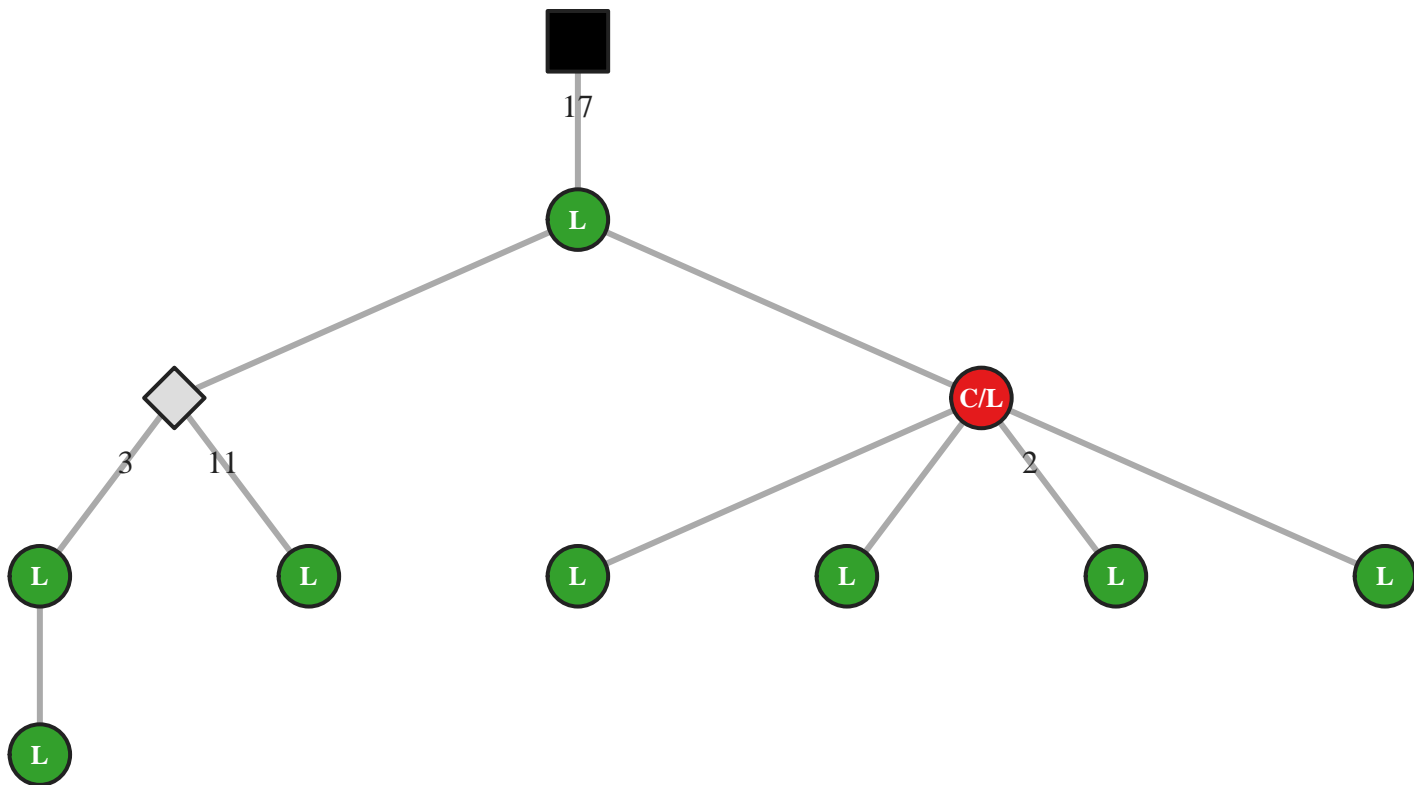
M5 IgG IGHV3-7/J4 63bp (35726)



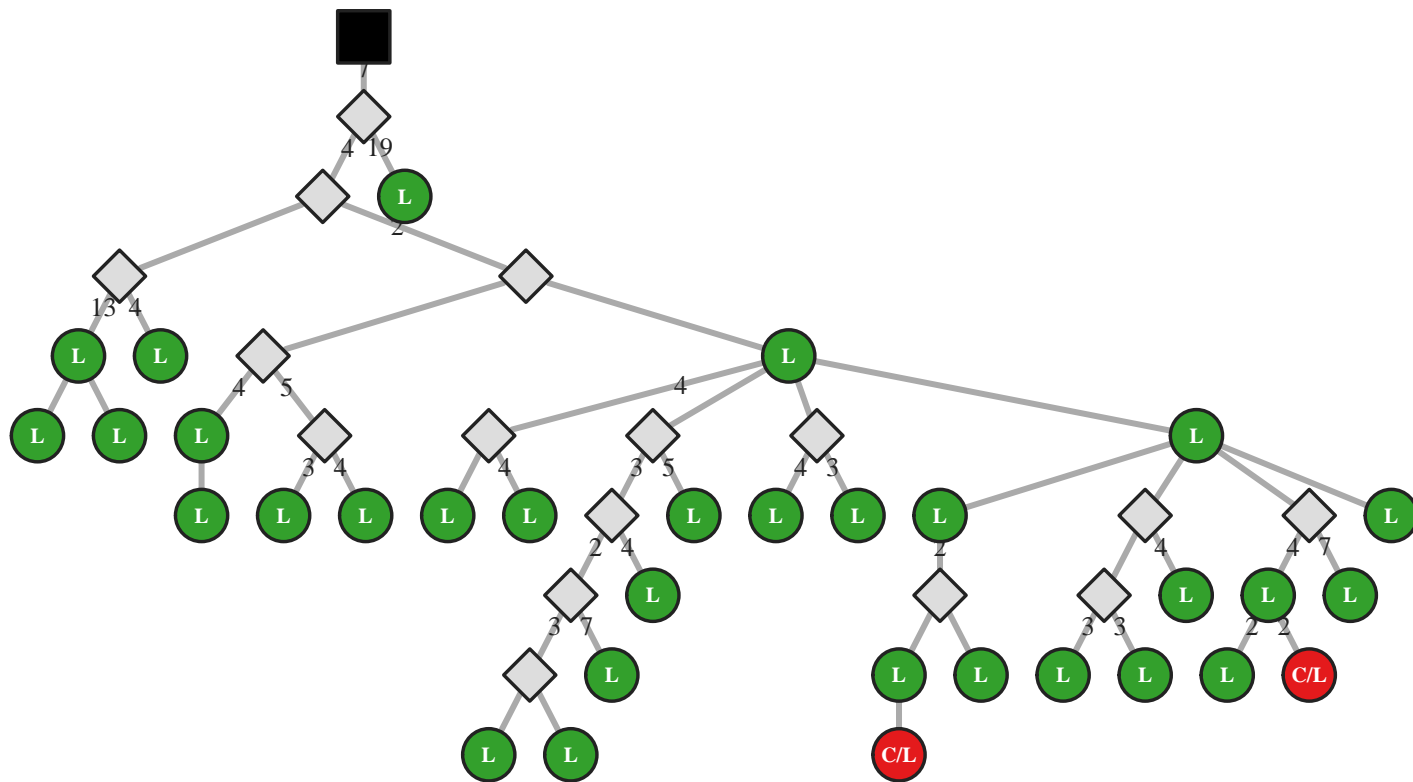
M5 IgG IGHV3-7/J5 27bp (52329)



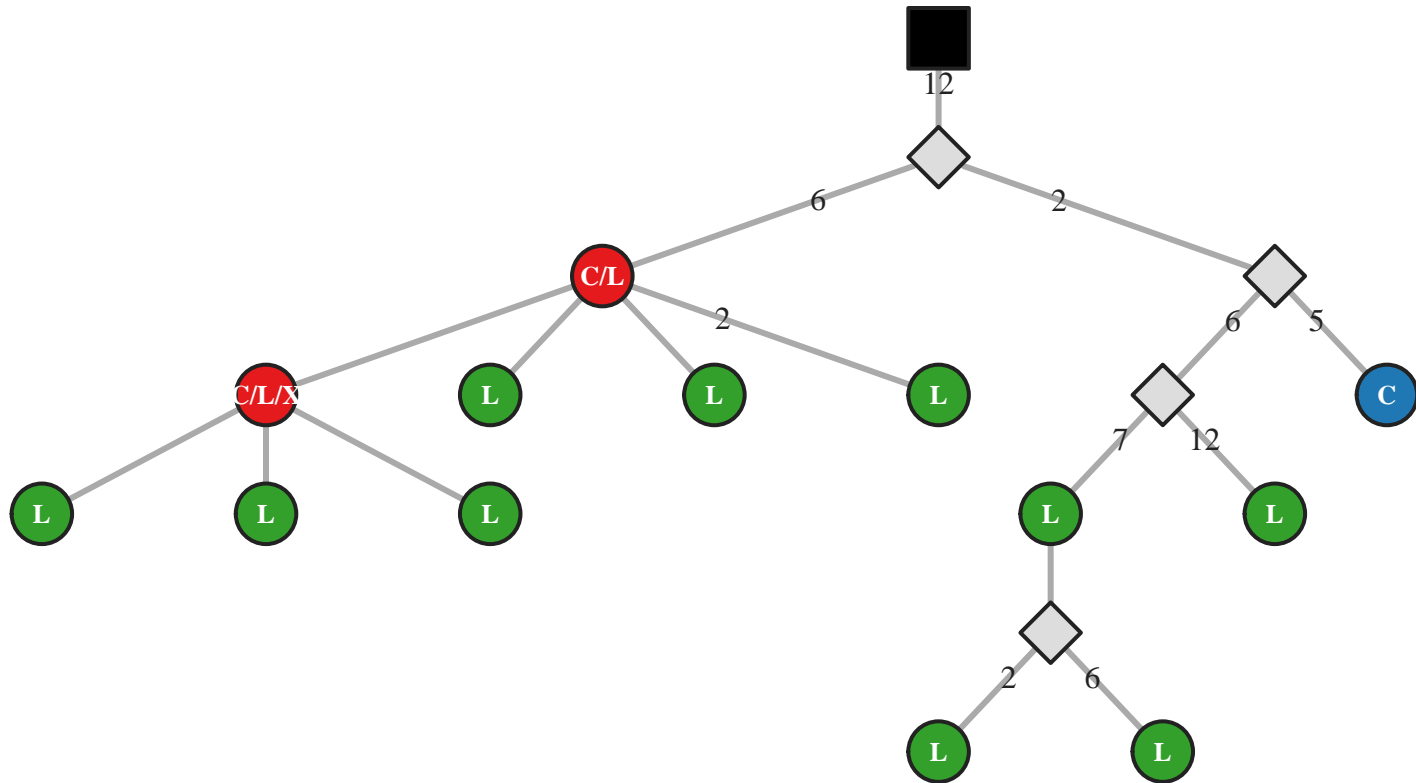
M5 IgA IGHV3-7/J5 42bp (3046)



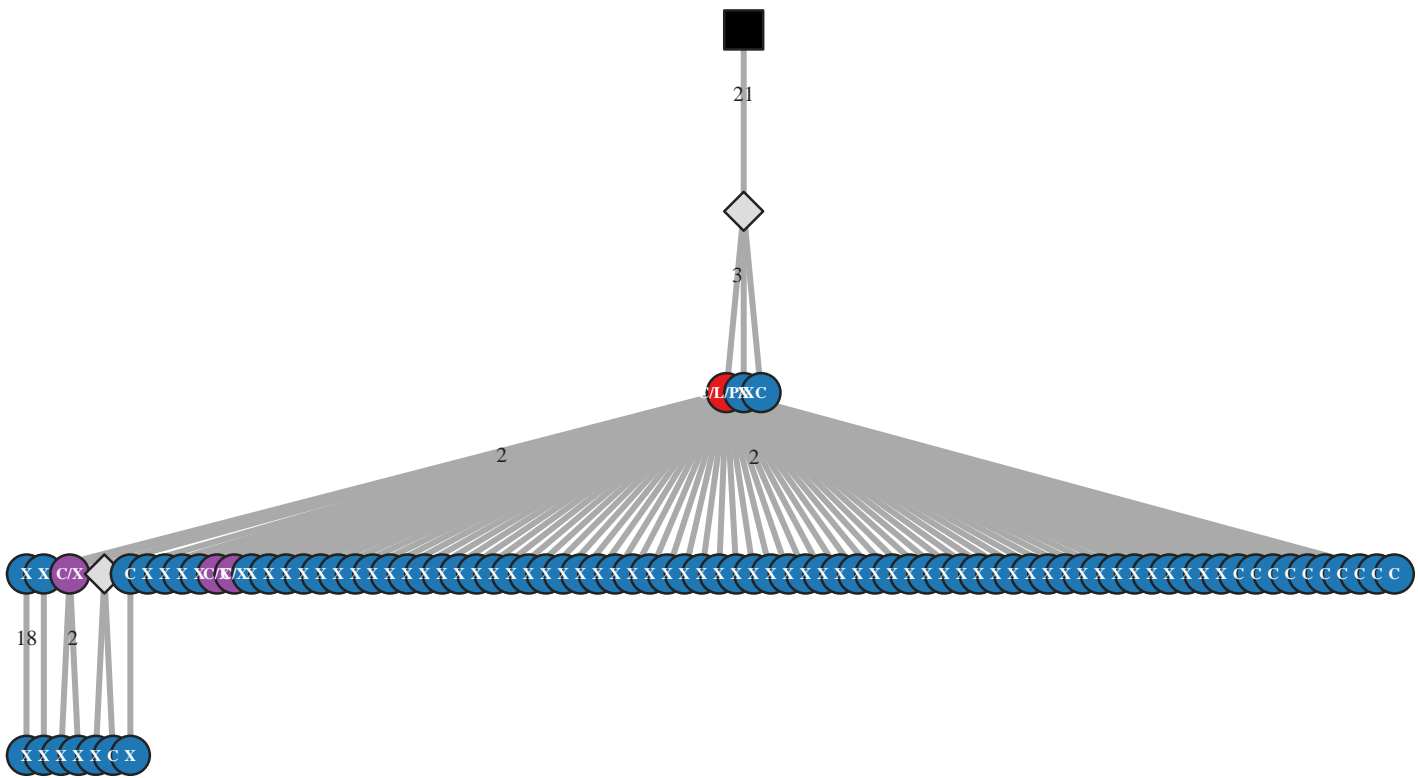
M5 IgG IGHV3-7/J6 24bp (18294)



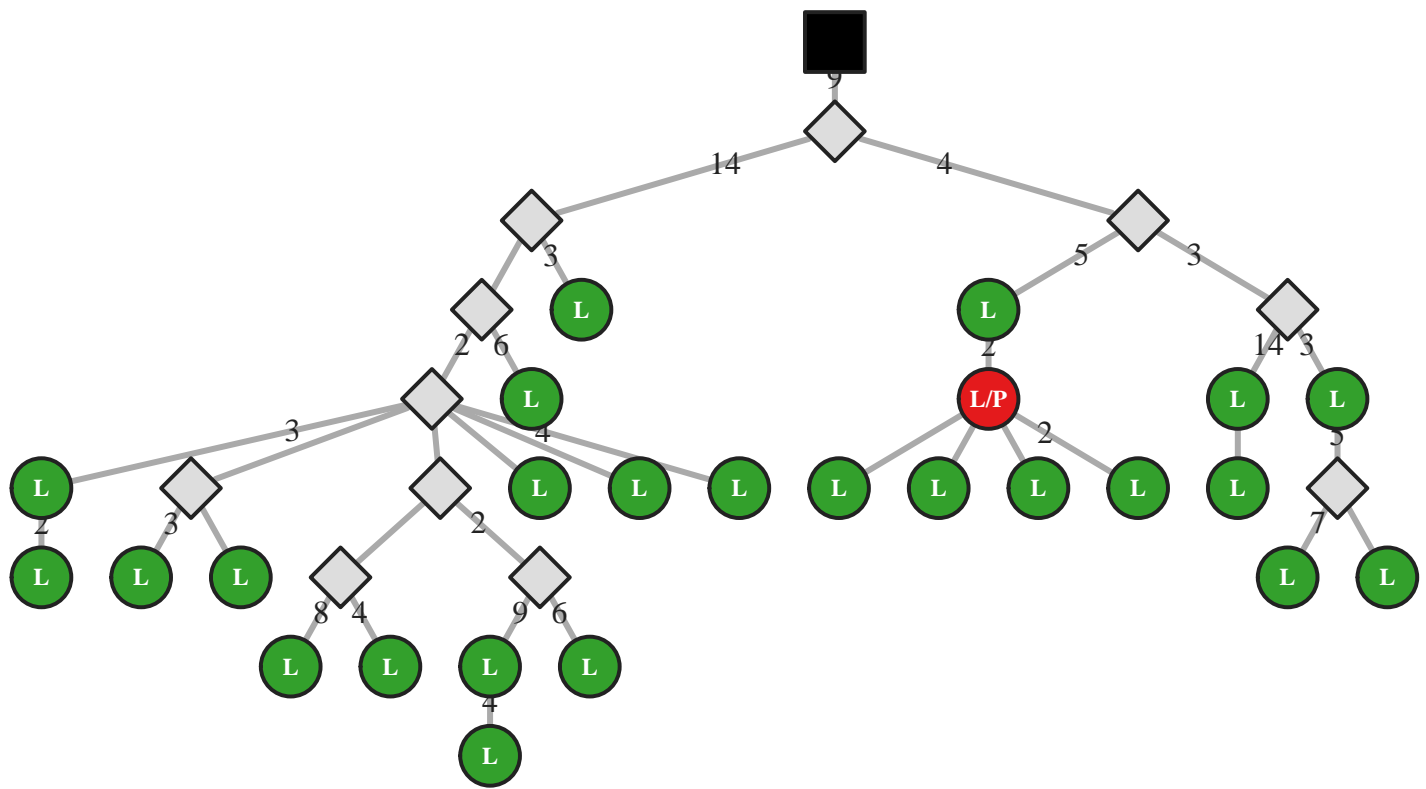
M5 IgG IGHV3-7/J6 27bp (18295)



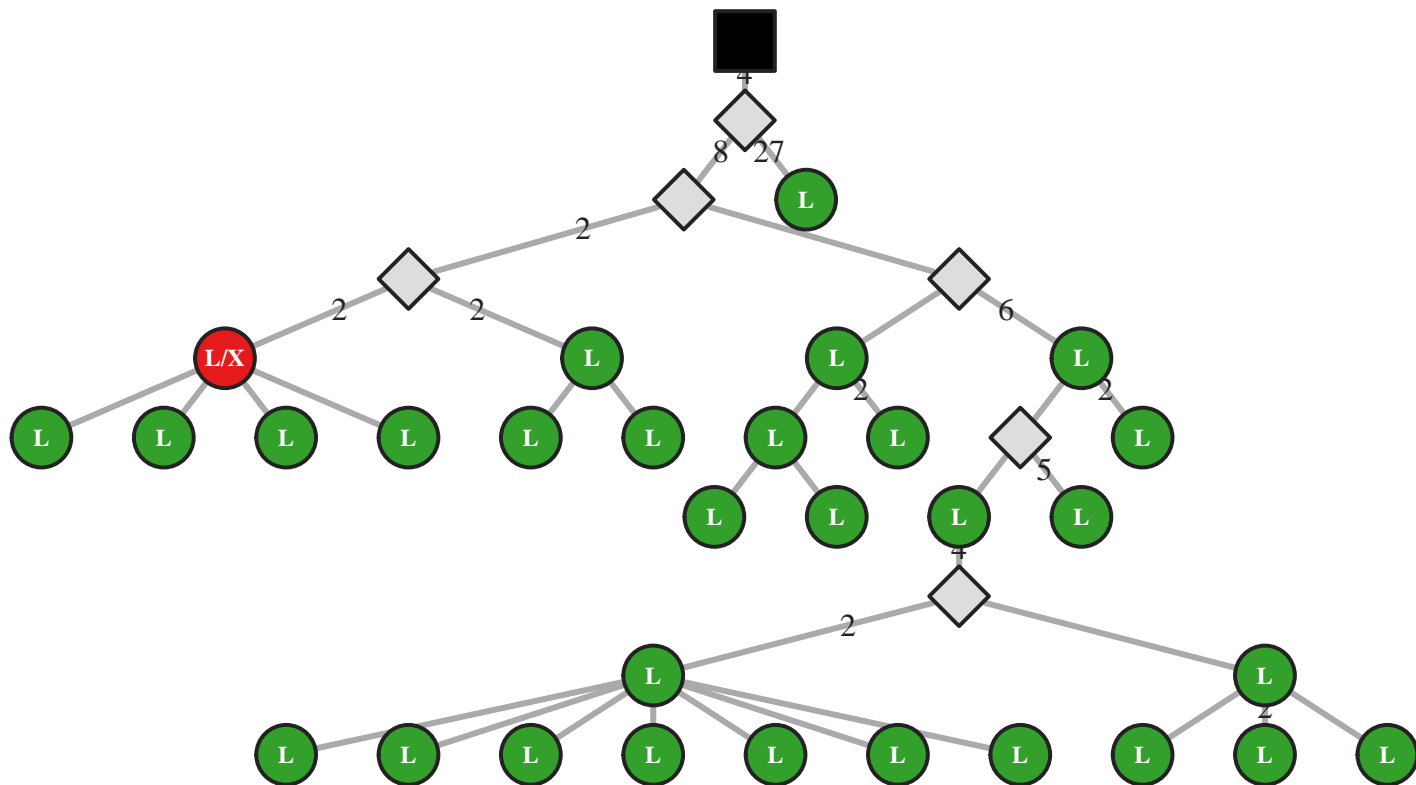
M5 IgG IGHV3-7/J6 66bp (8905)



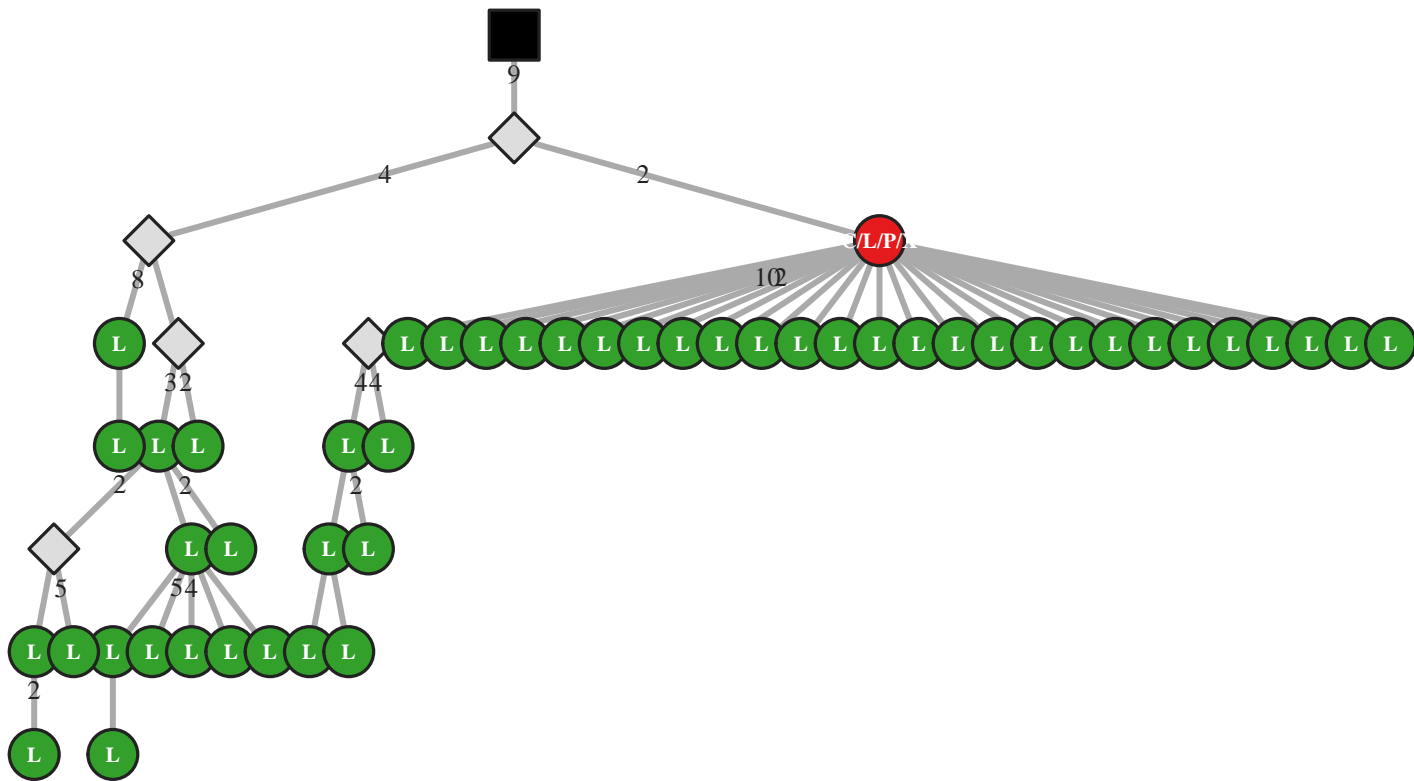
M5 IgG IGHV3-72/J3 24bp (27053)



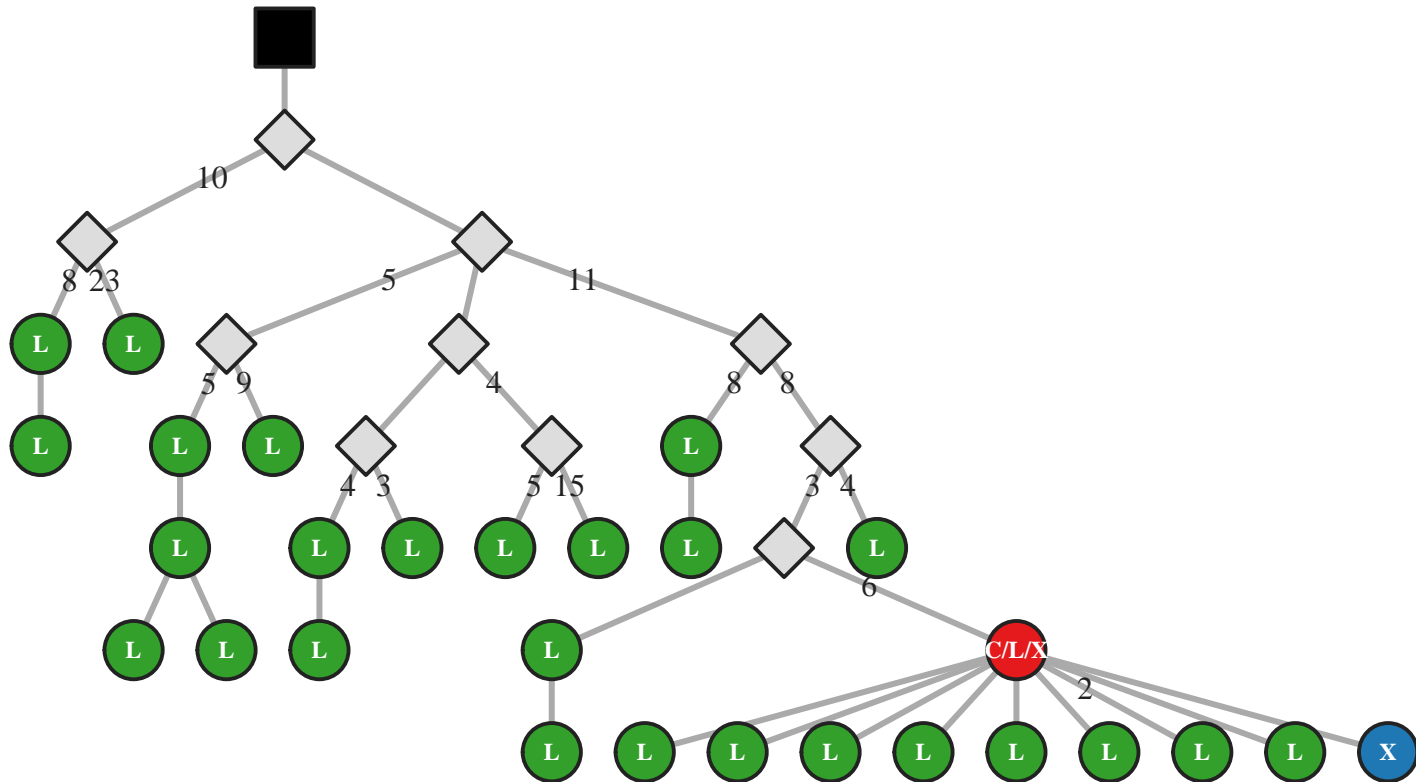
M5 IgG IGHV3-72/J4 24bp (35471)



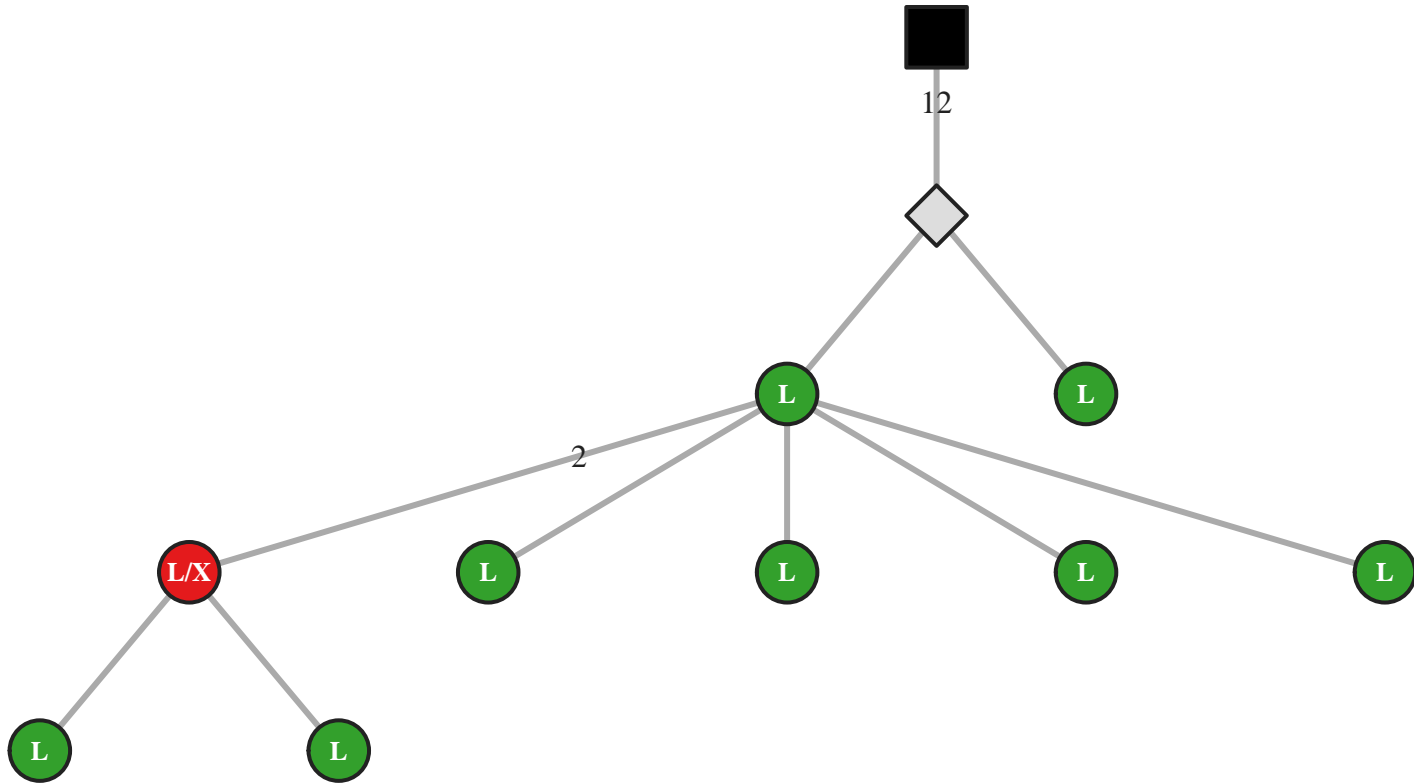
M5 IgG IGHV3-72/J4 30bp (45419)



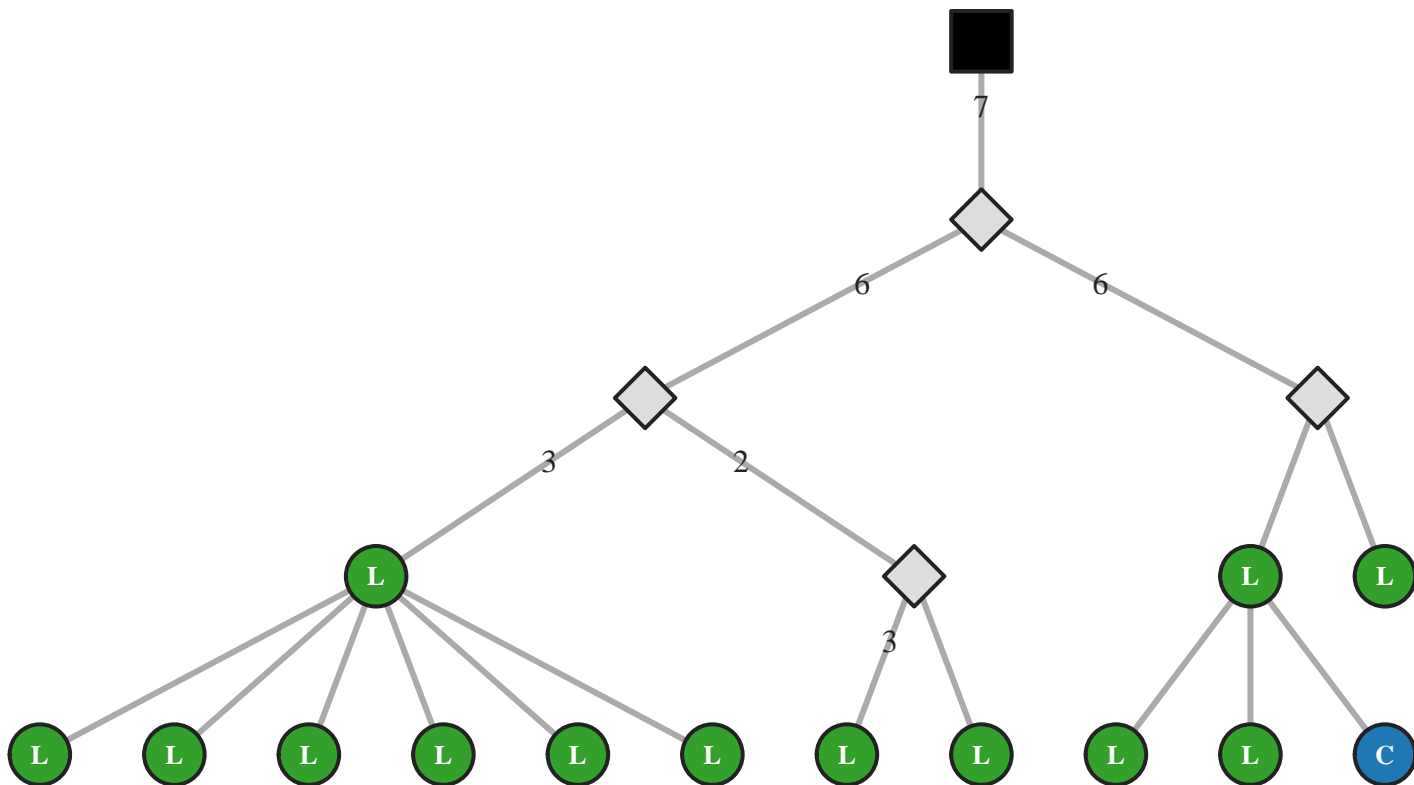
M5 IgG IGHV3-72/J4 36bp (52175)



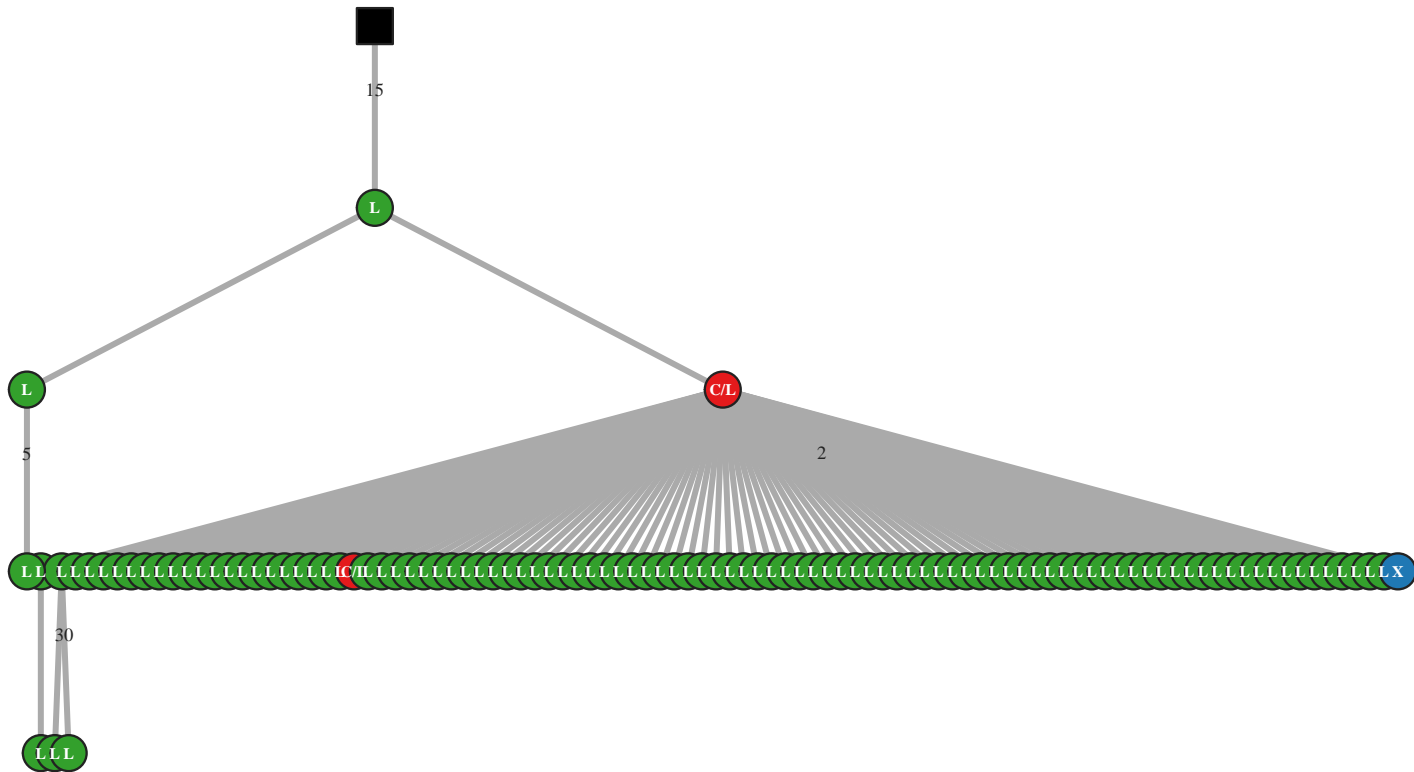
M5 IgM IGHV3-72/J4 51bp (54213)



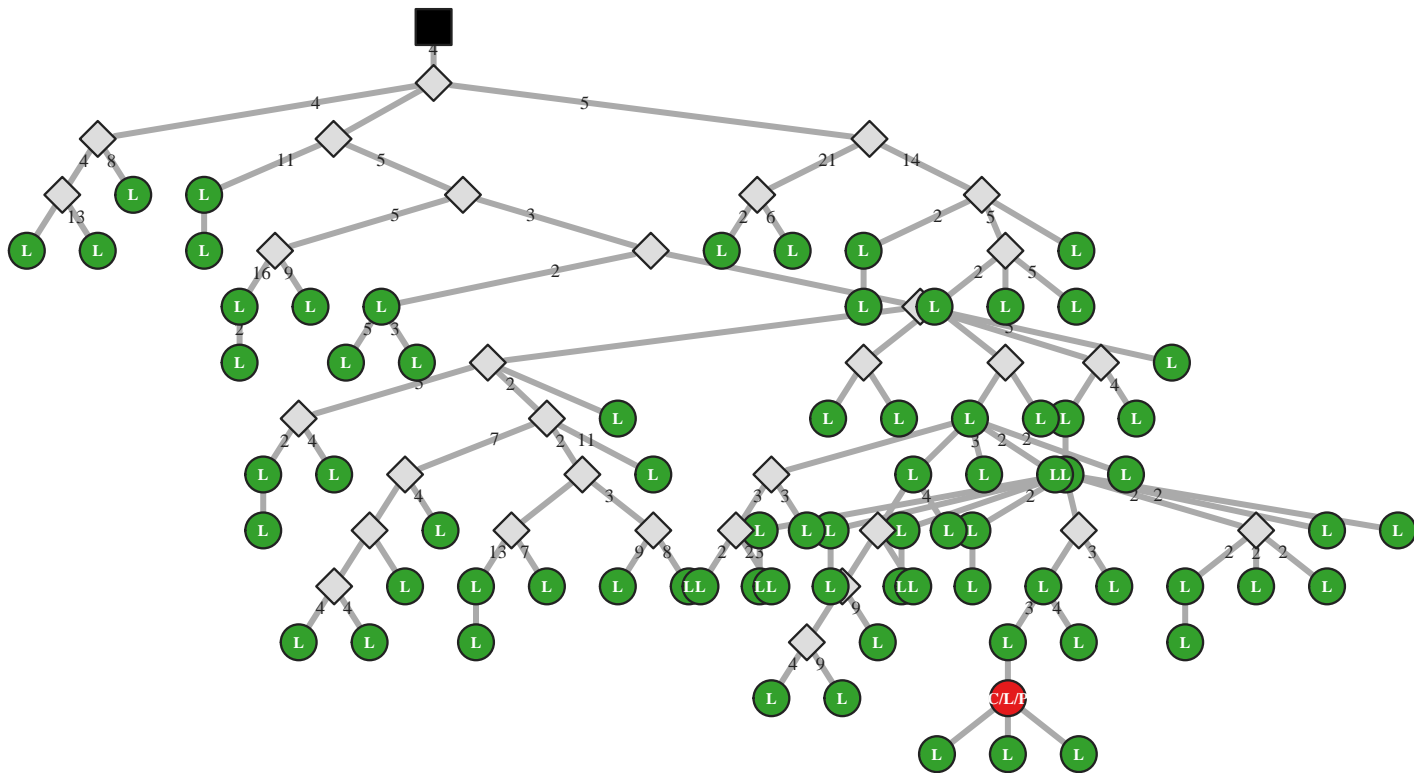
M5 IgG IGHV3-72/J6 33bp (35505)



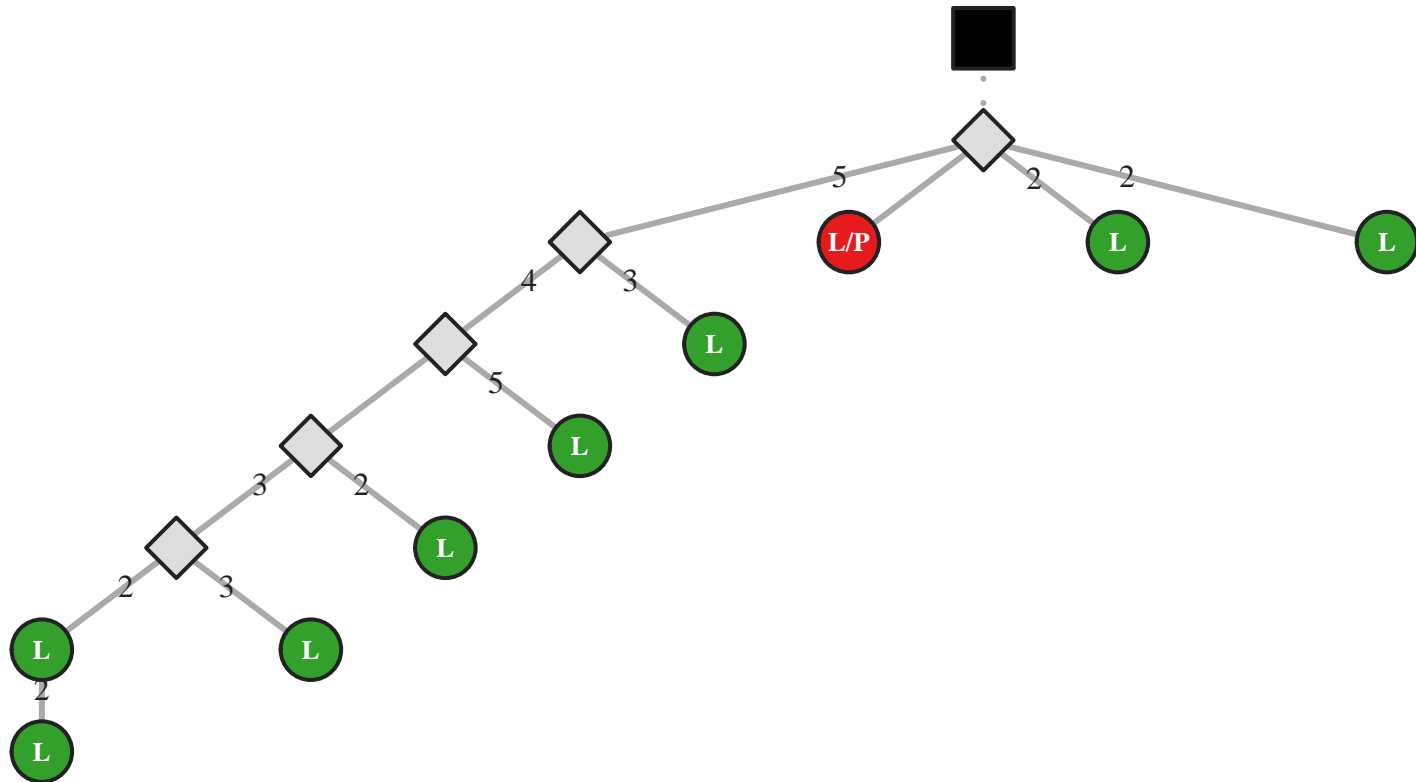
M5 IgG IGHV3-72/J6 54bp (8536)



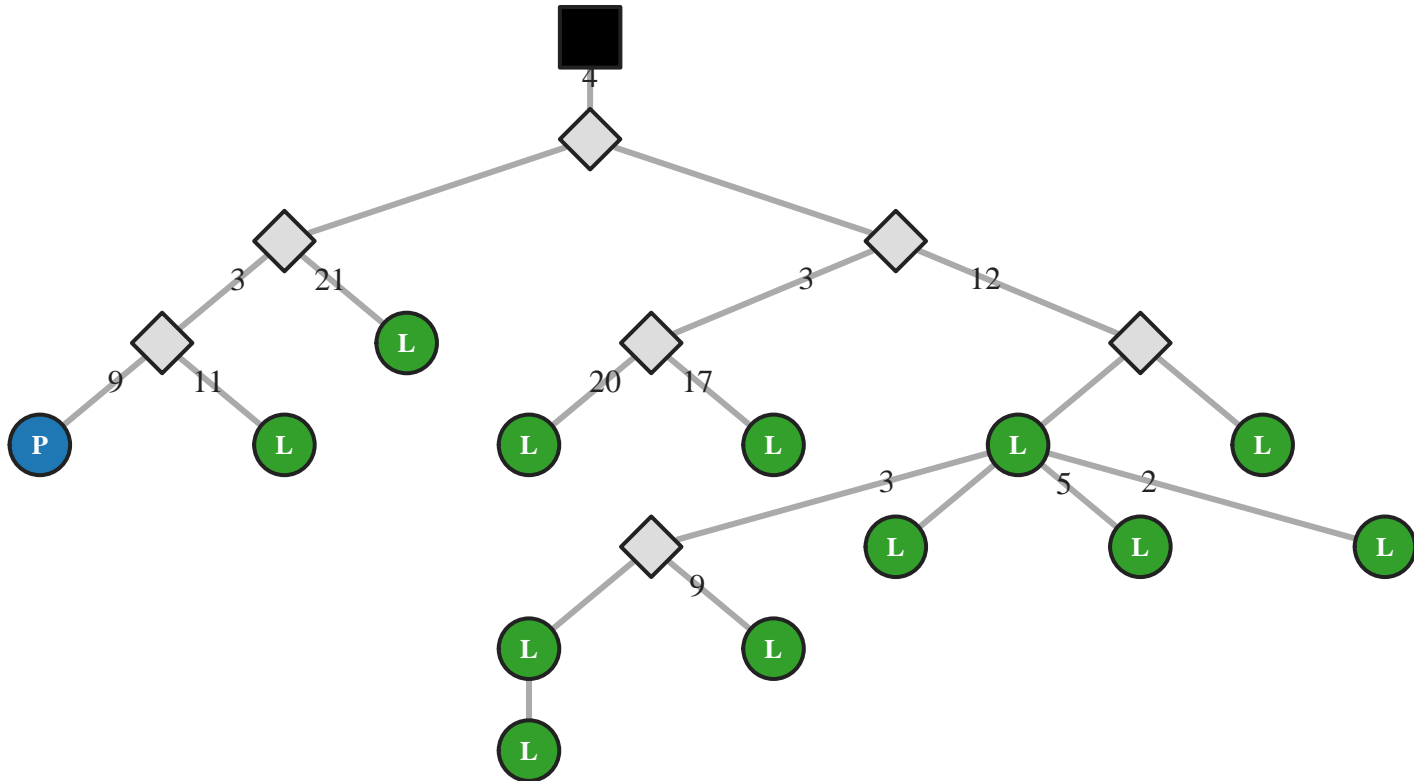
M5 IgG IGHV3-73/J3 24bp (35510)



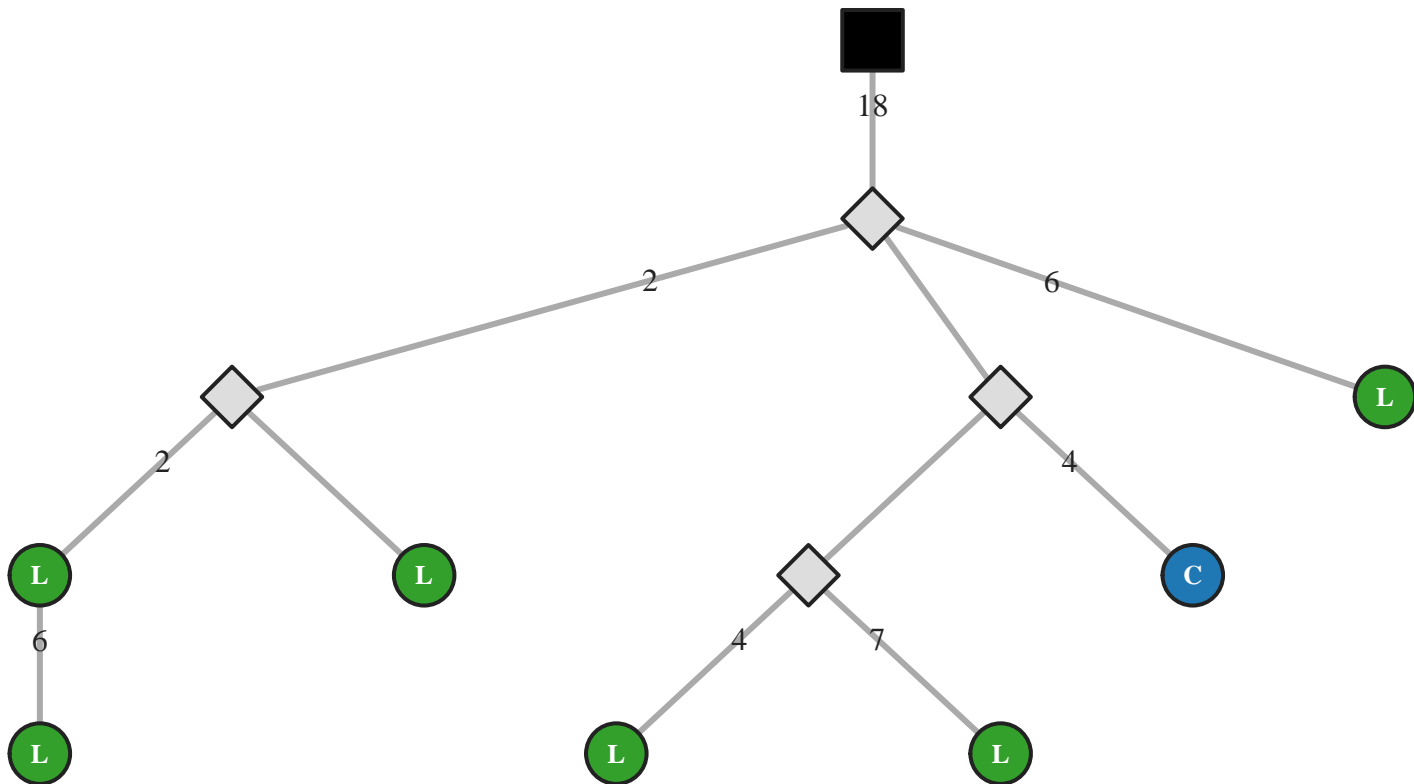
M5 IgG IGHV3-73/J3 39bp (45433)



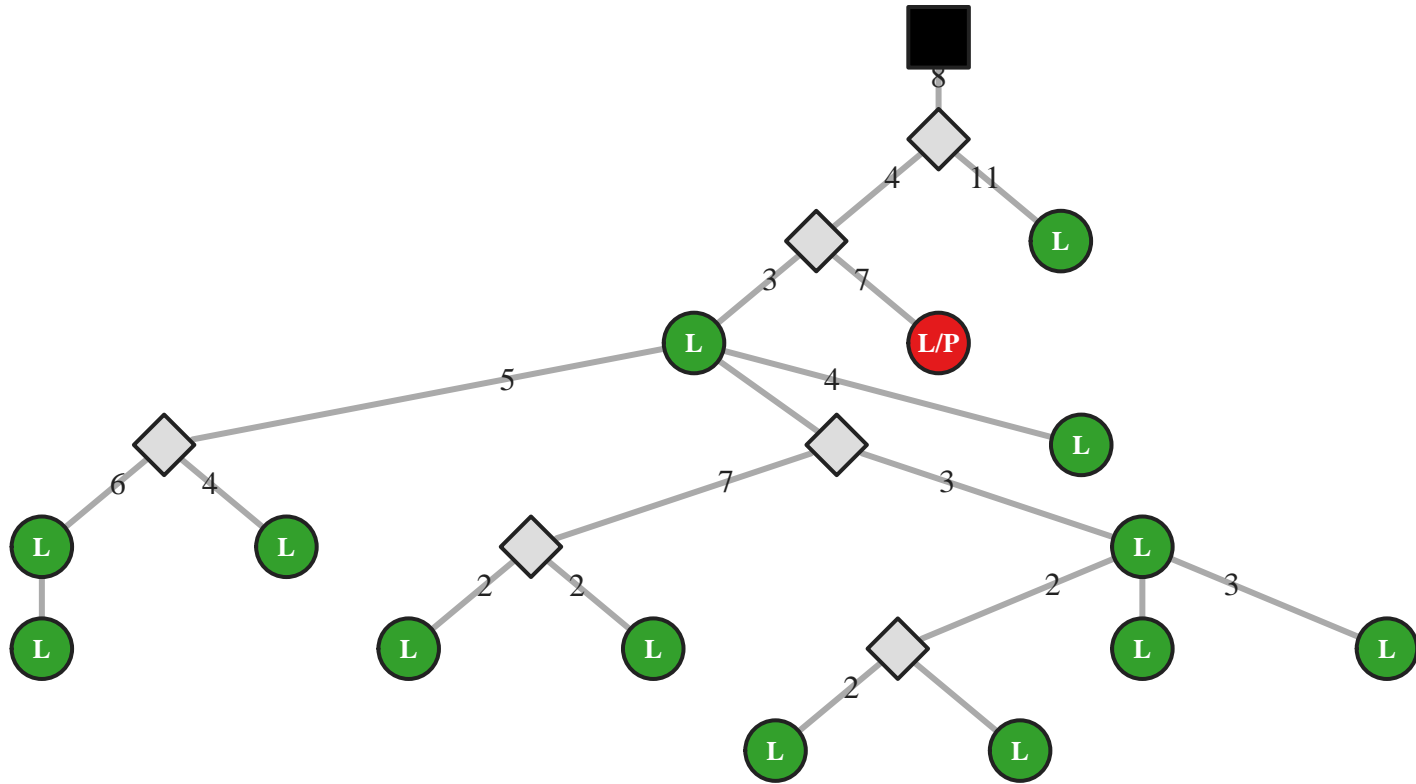
M5 IgG IGHV3-73/J4 24bp (45440)



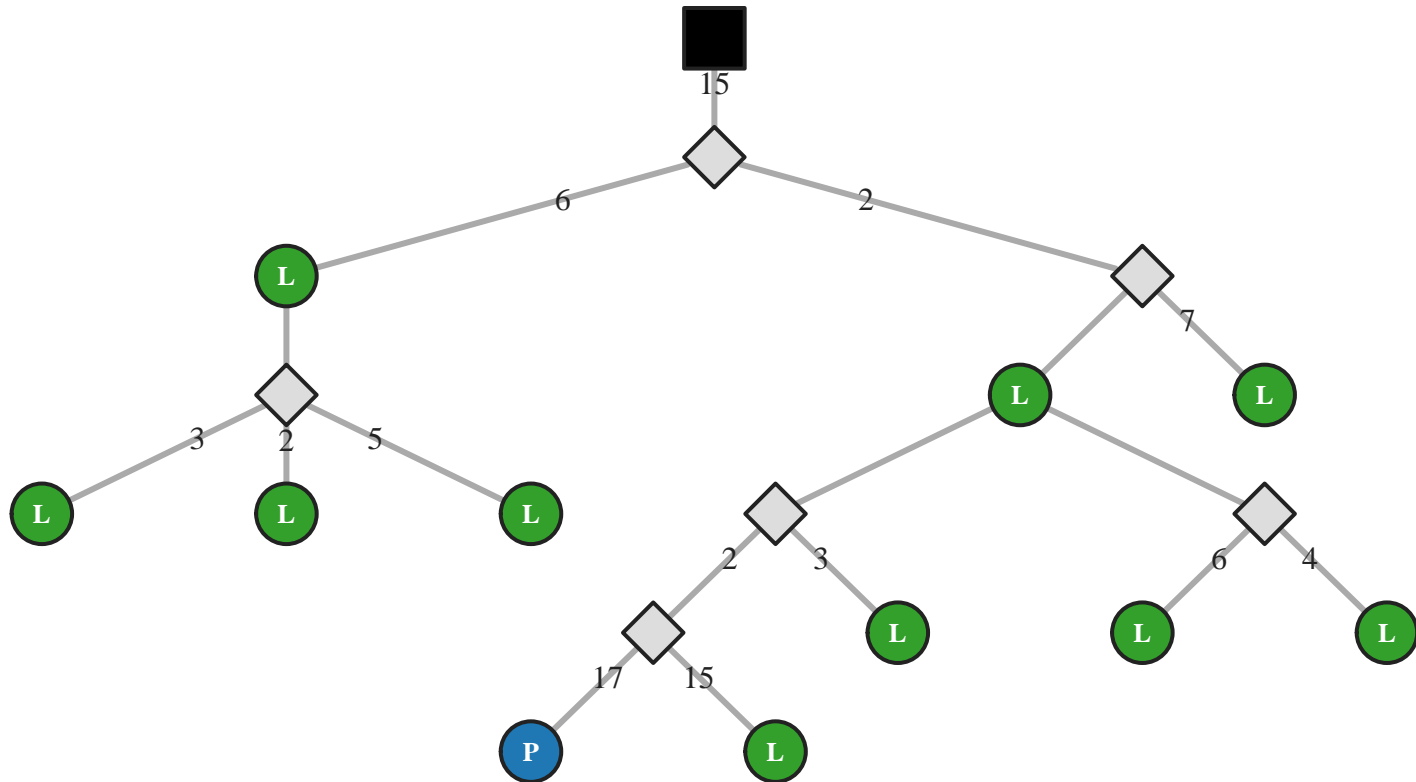
M5 IgA IGHV3-73/J5 45bp (12534)



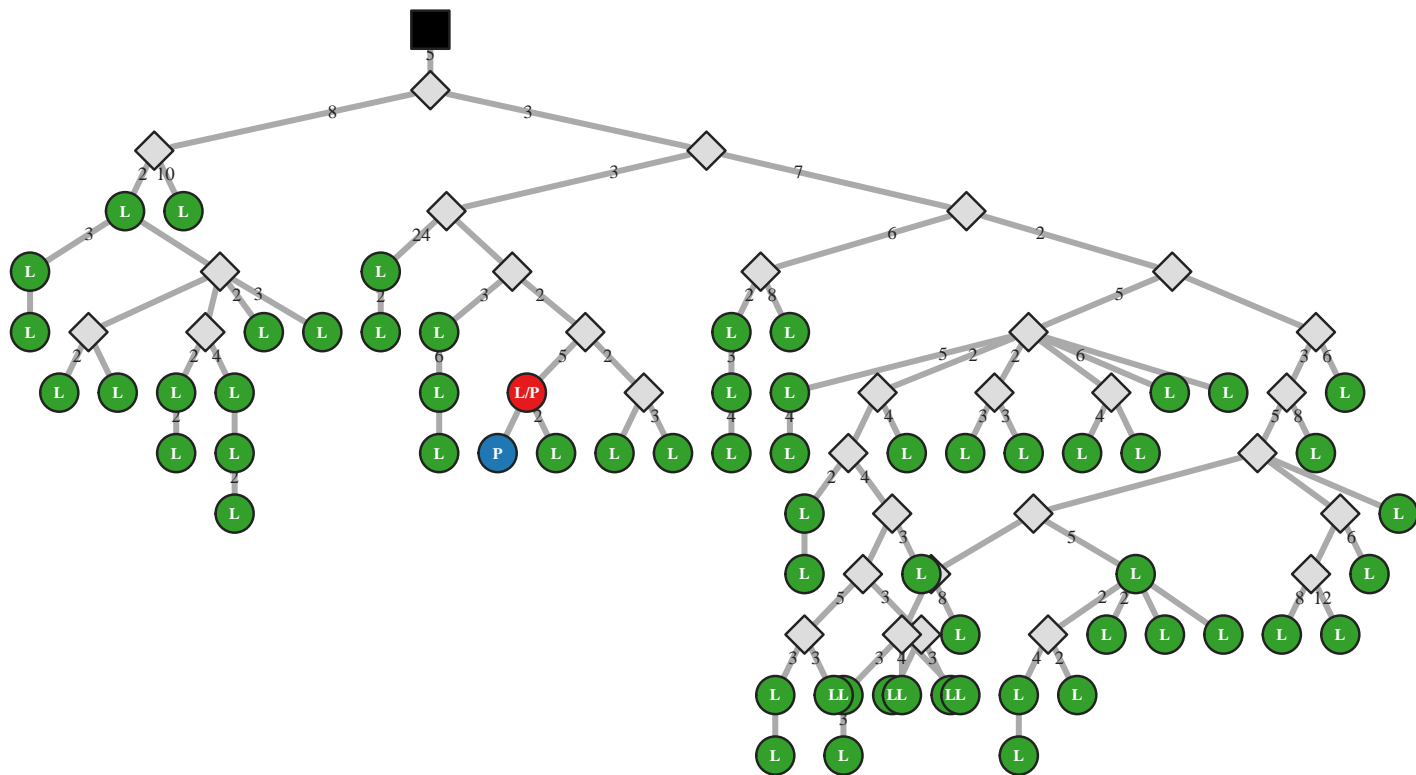
M5 IgG IGHV3-73/J5 48bp (18100)



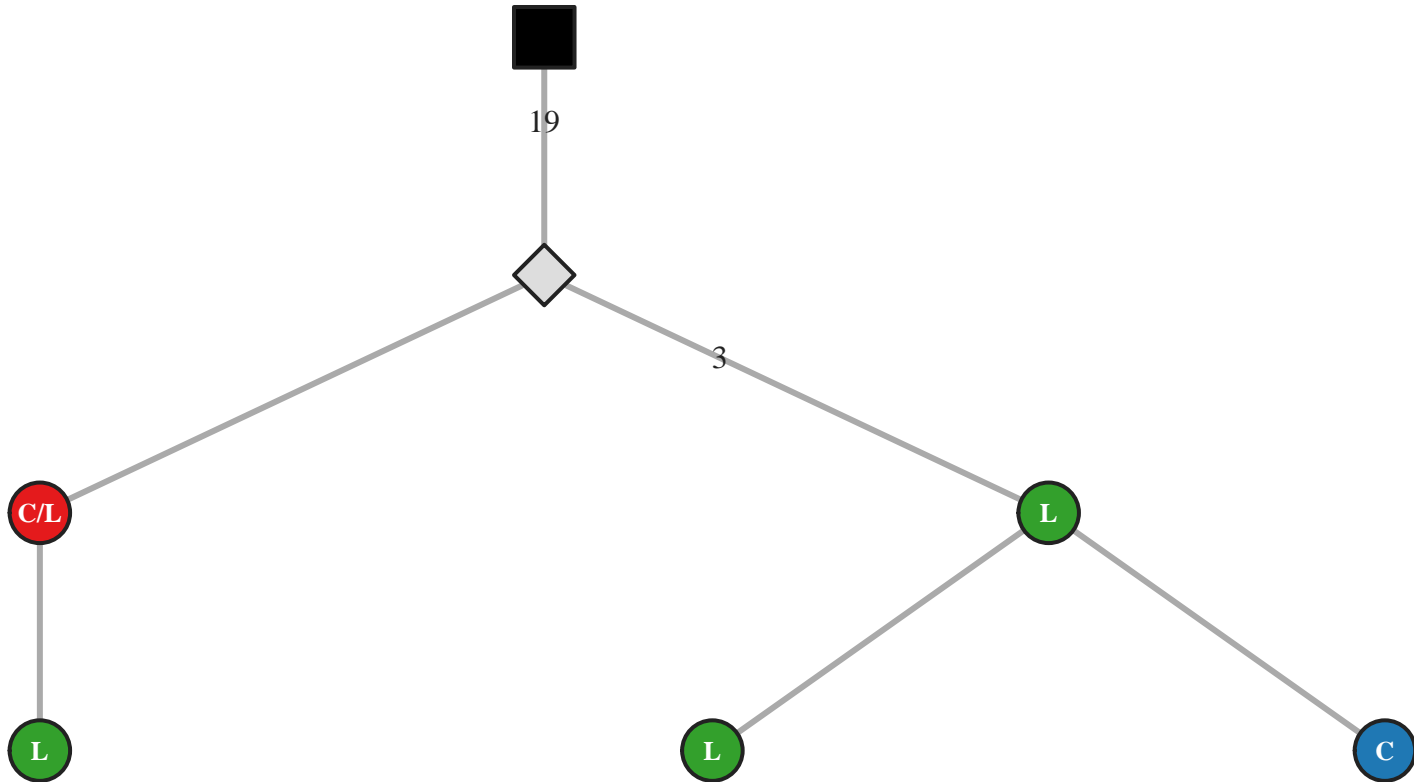
M5 IgG IGHV3-73/J5 51bp (8555)



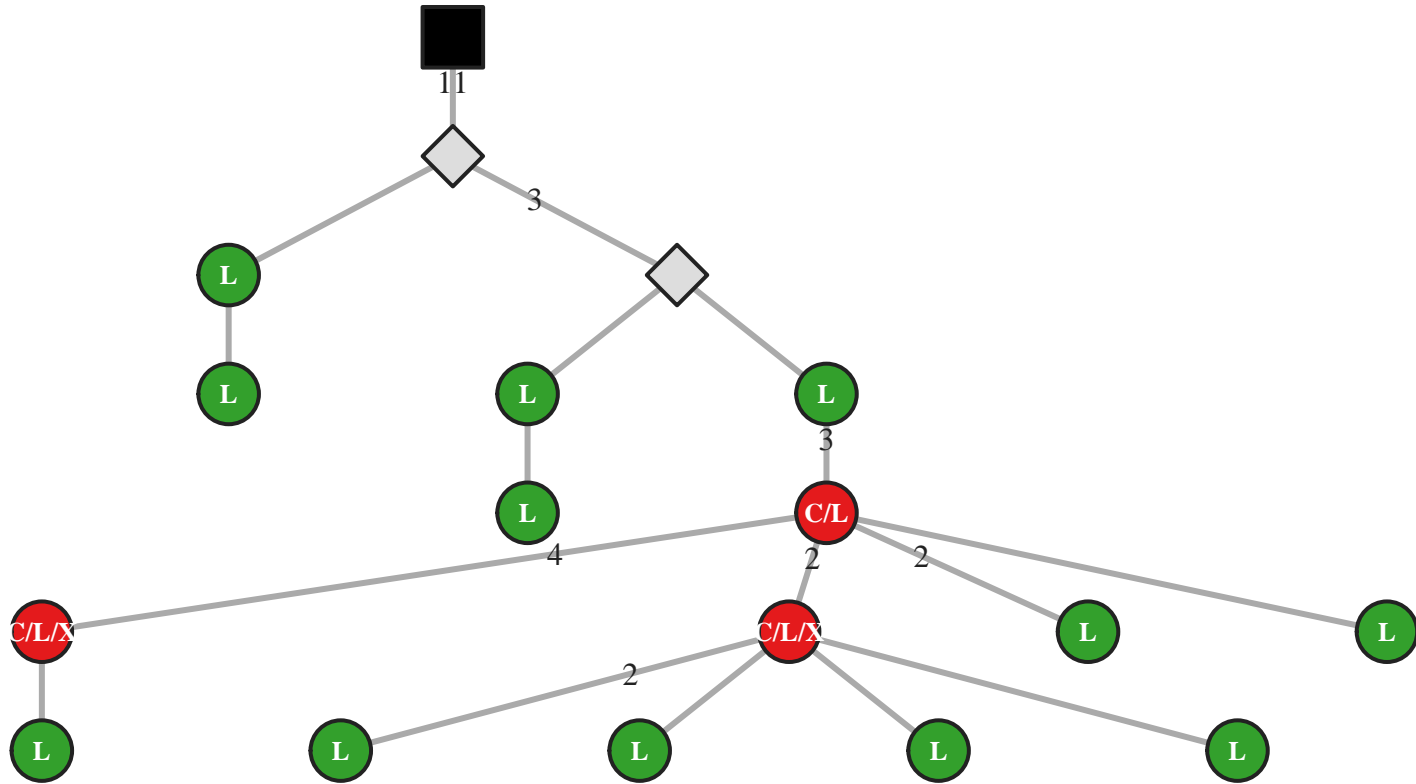
M5 IgG IGHV3-74/J1 27bp (18216)



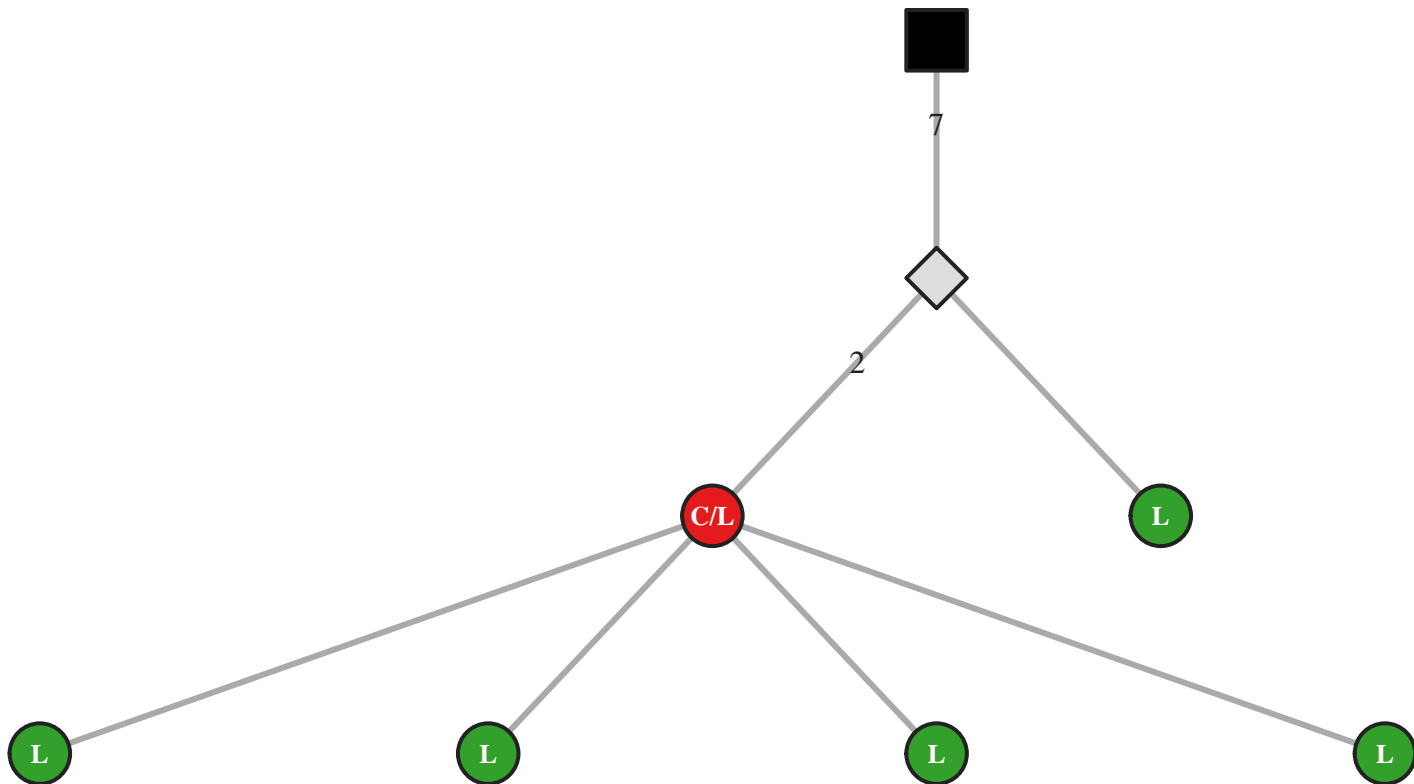
M5 IgM IGHV3-74/J2 36bp (37920)



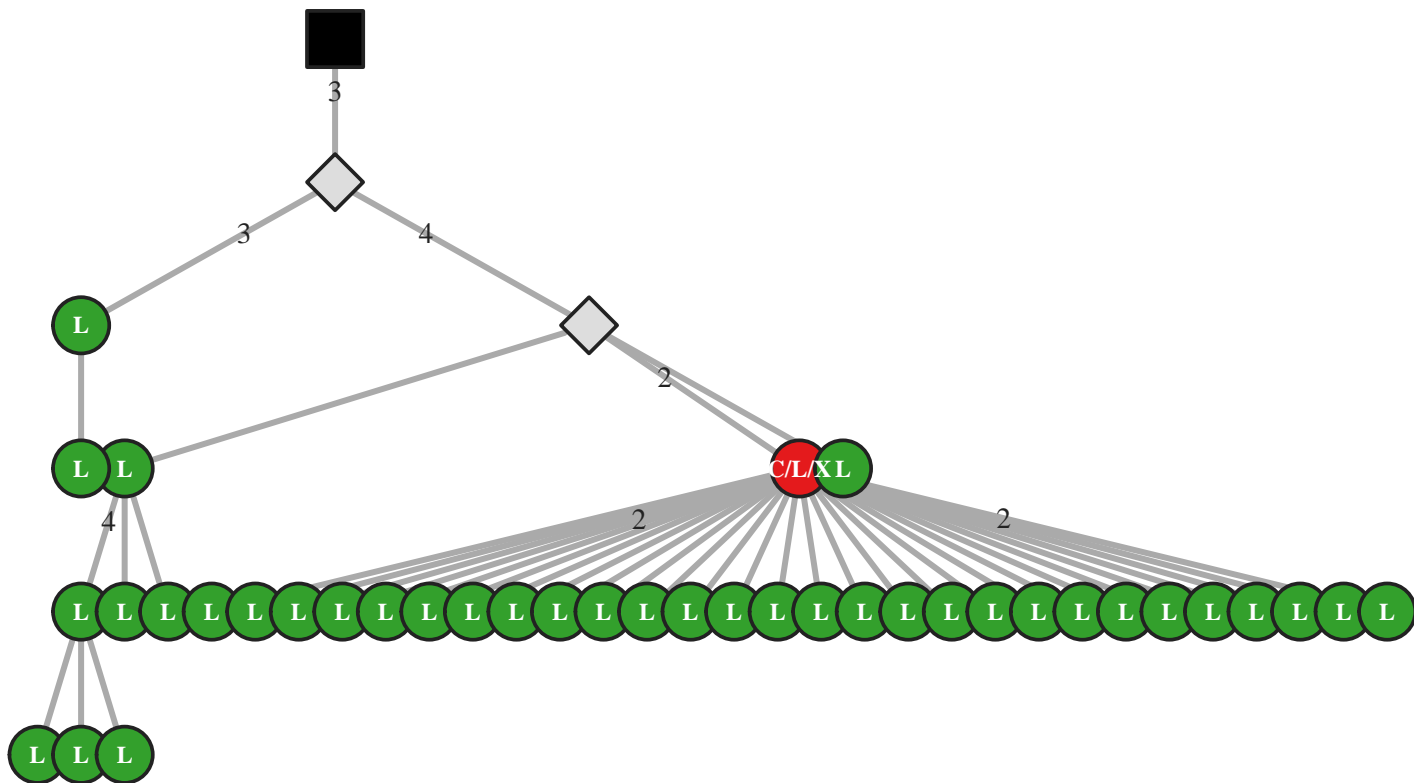
M5 IgM IGHV3-74/J3 45bp (20863)



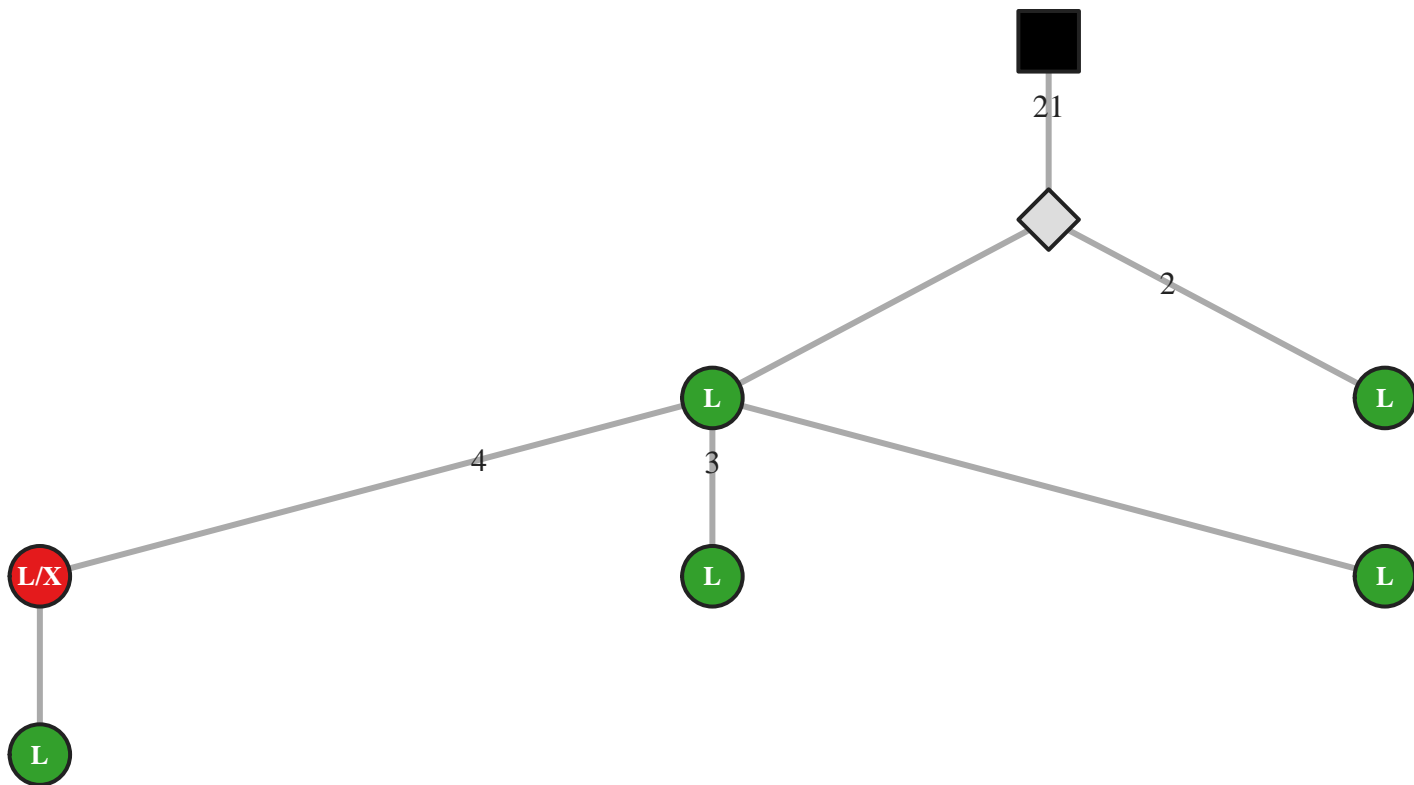
M5 IgA IGHV3-74/J3 48bp (12540)



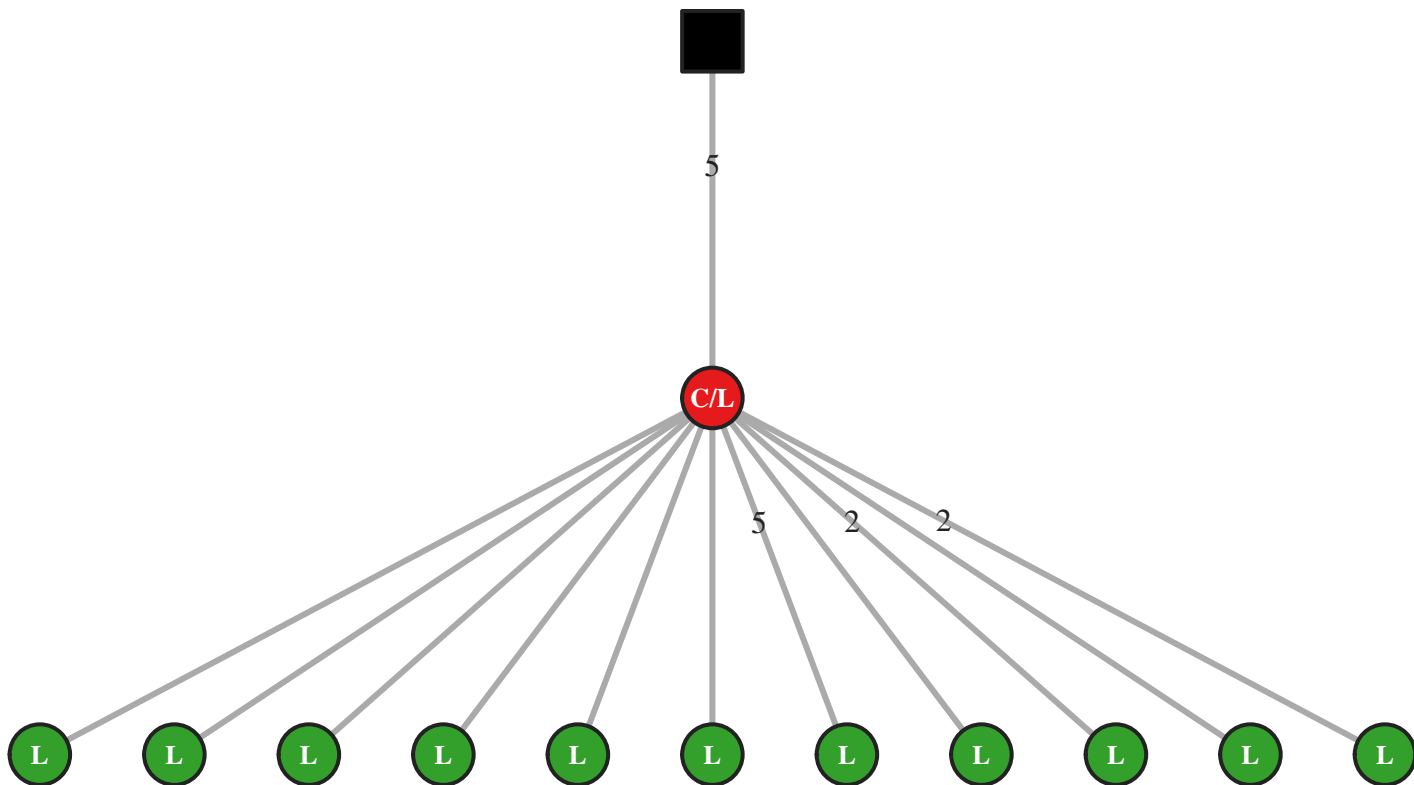
M5 IgG IGHV3-74/J3 48bp (35542)



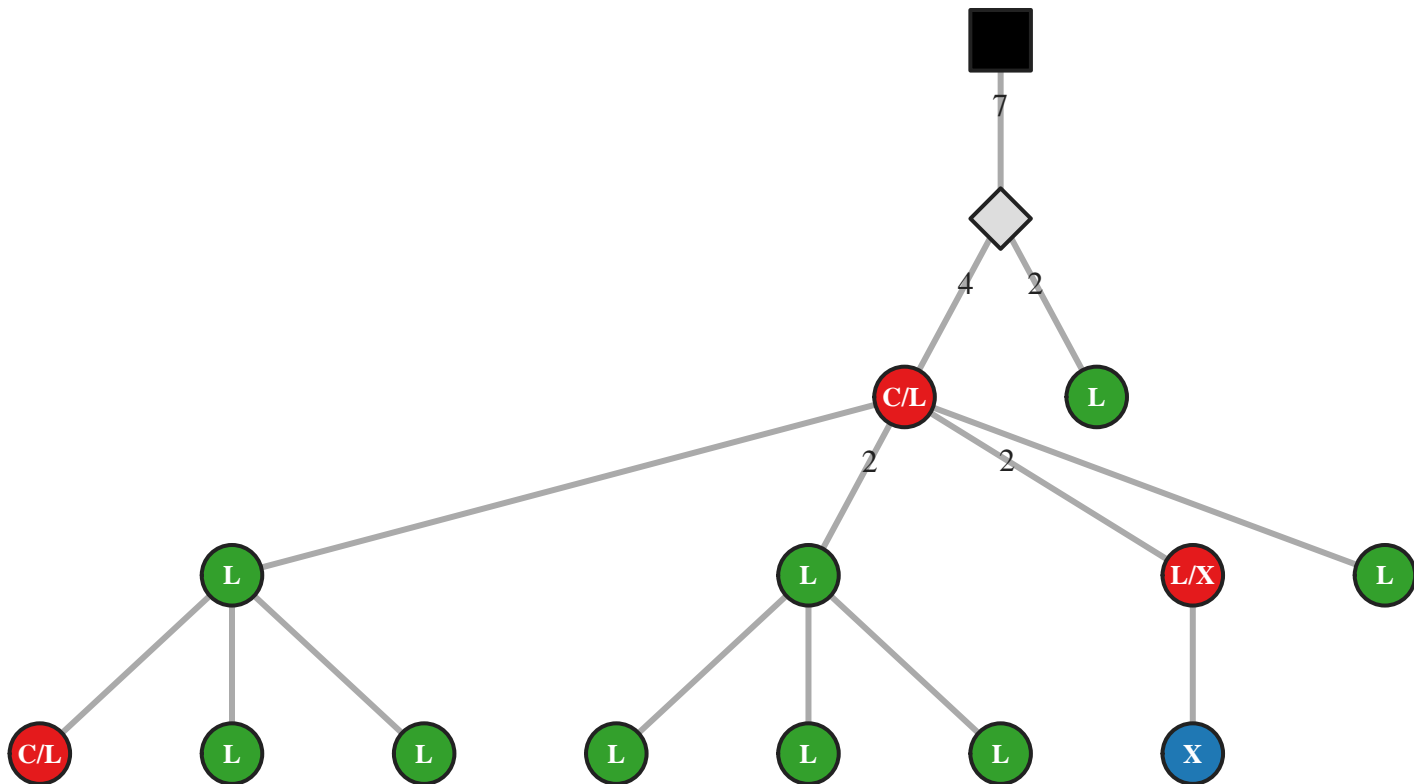
M5 IgG IGHV3-74/J3 60bp (52217)



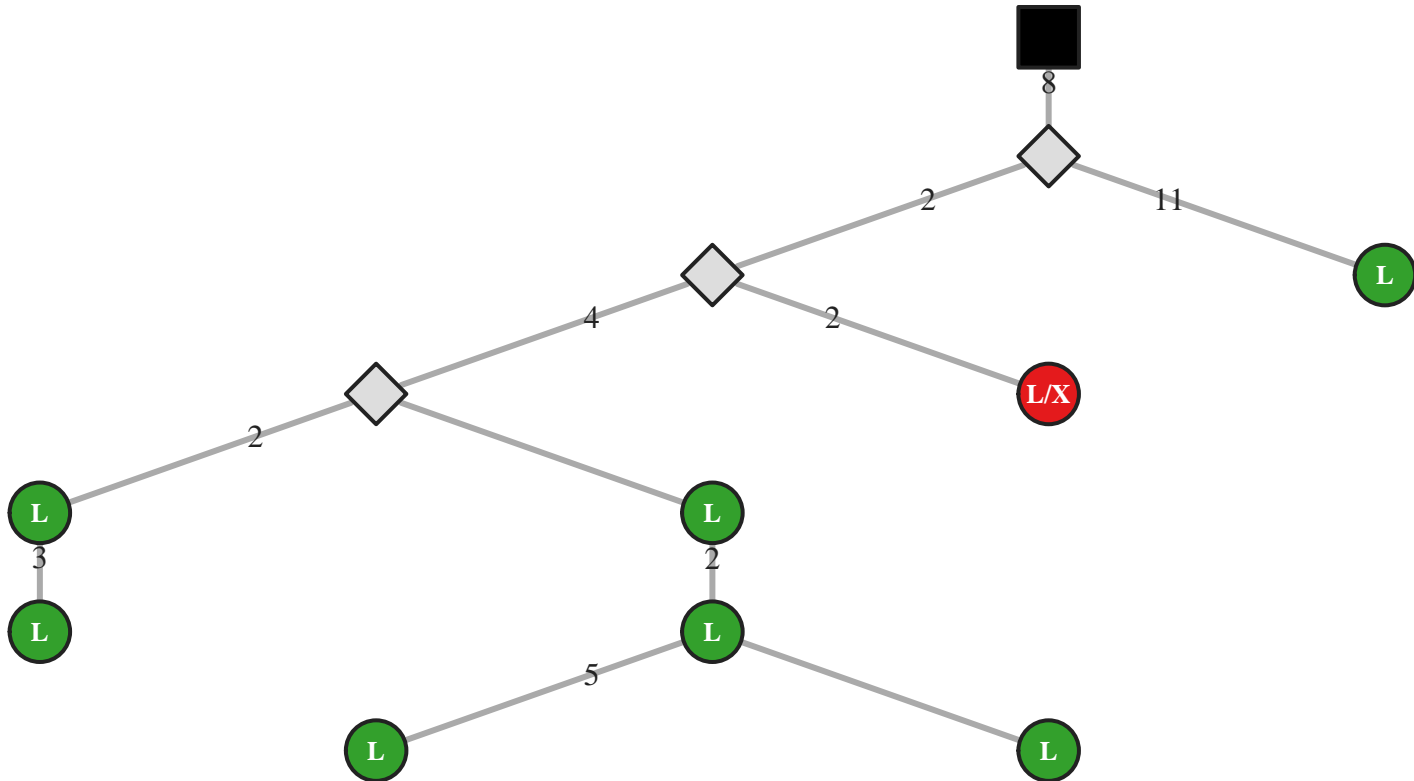
M5 IgG IGHV3-74/J4 30bp (27108)



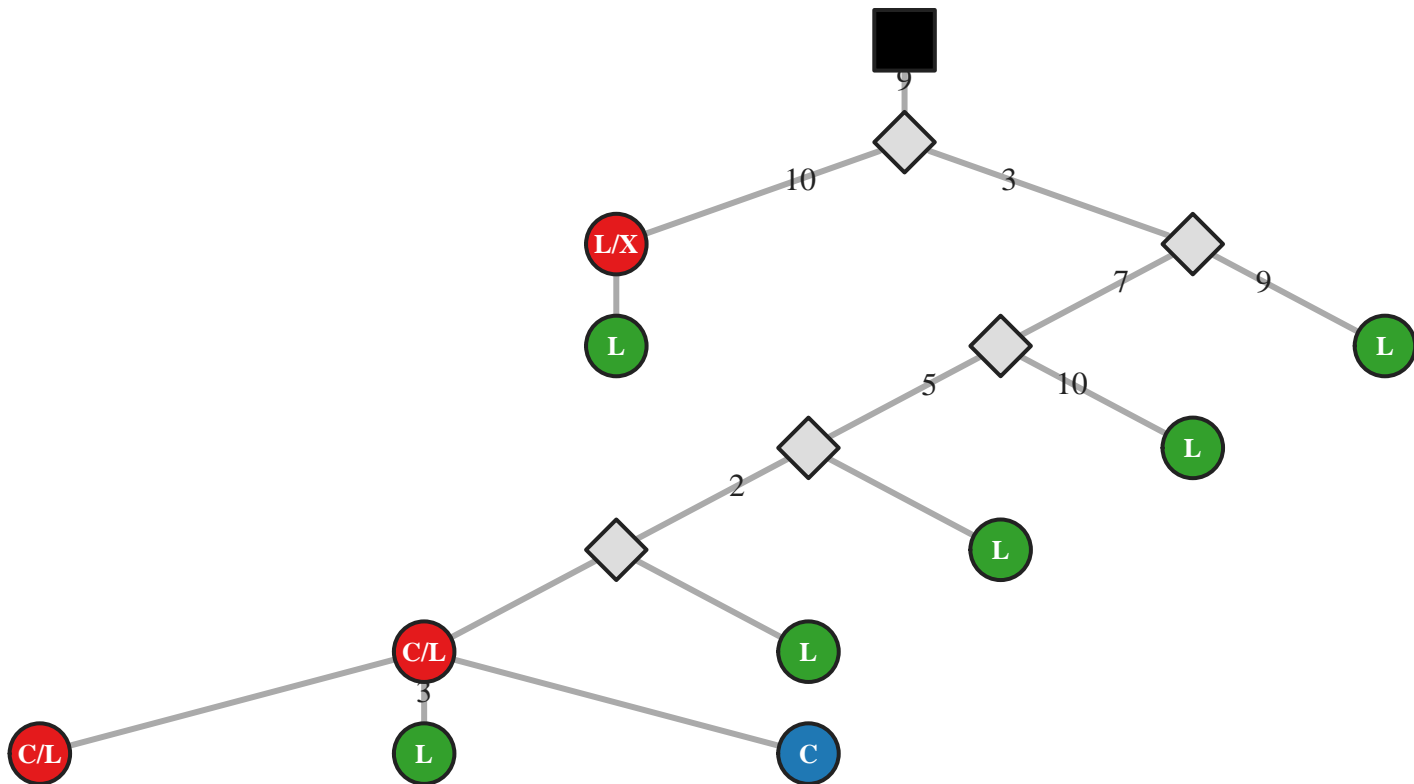
M5 IgG IGHV3-74/J4 33bp (35568)



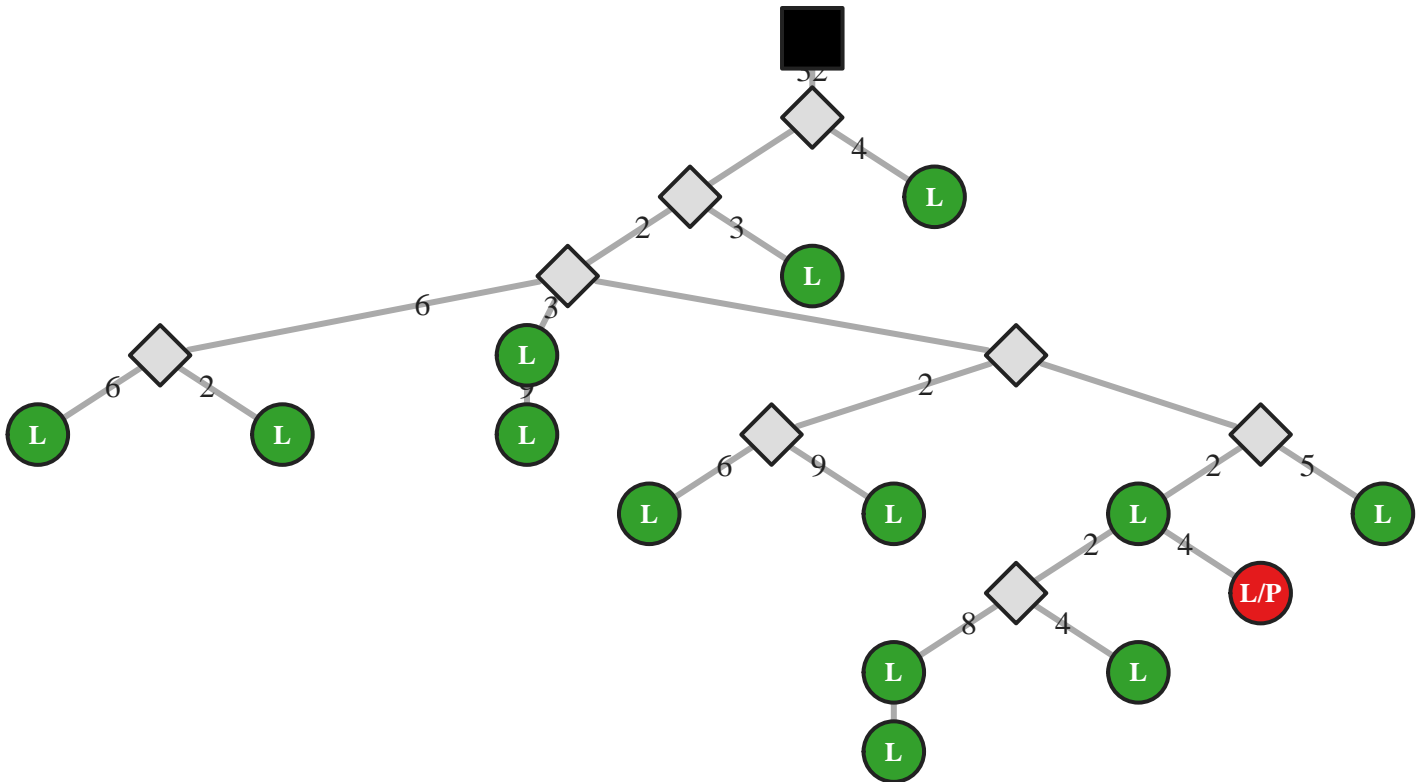
M5 IgA IGHV3-74/J4 36bp (30664)



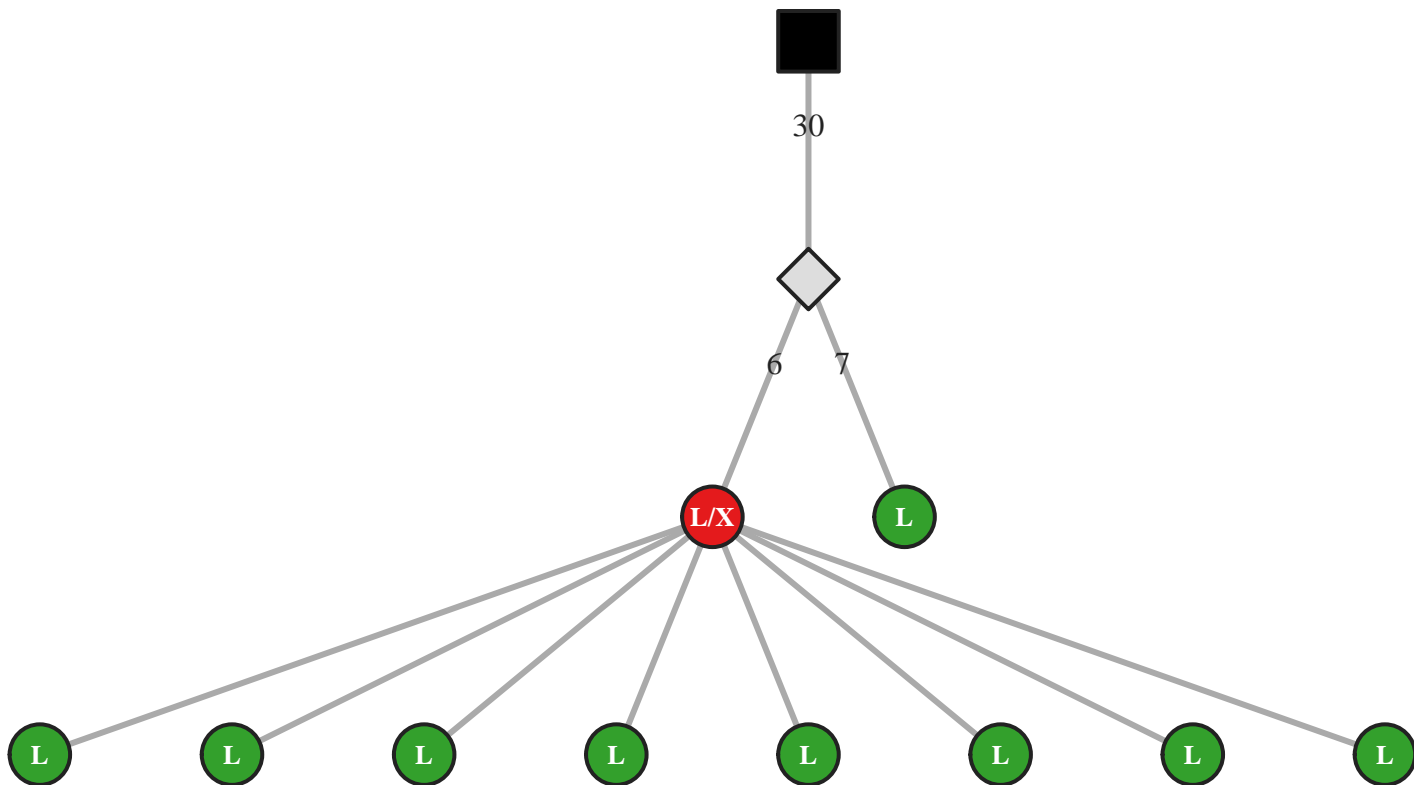
M5 IgG IGHV3-74/J4 36bp (18134)



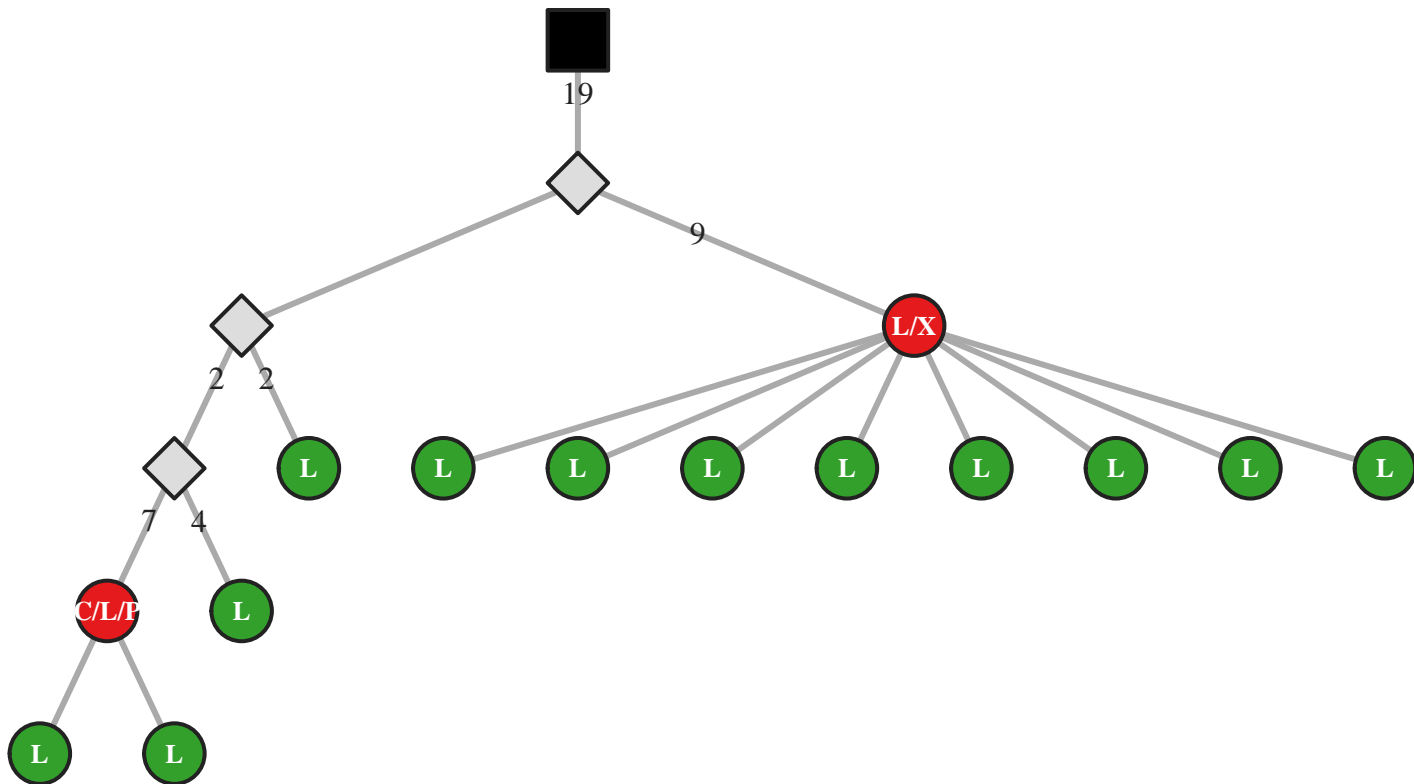
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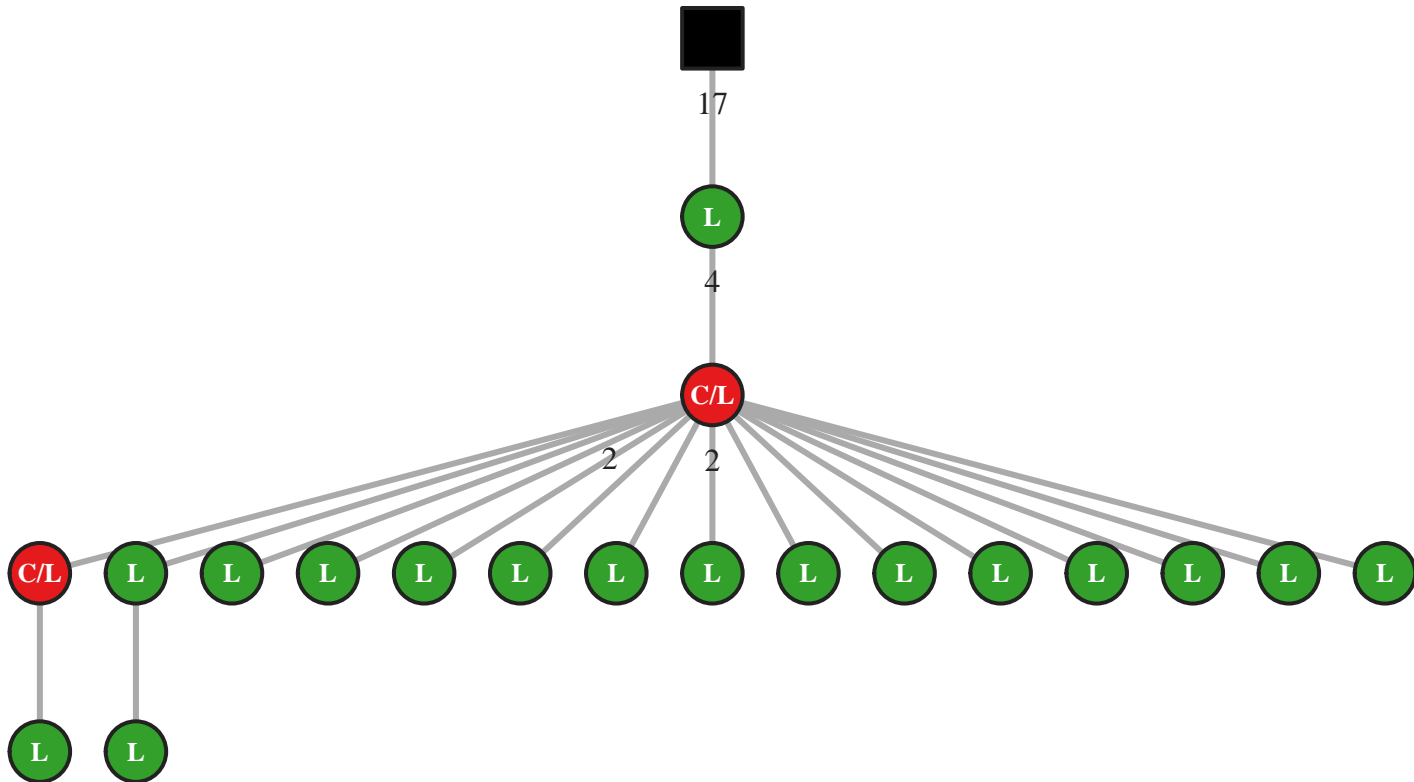
M5 IgG IGHV3-74/J4 36bp (18164)



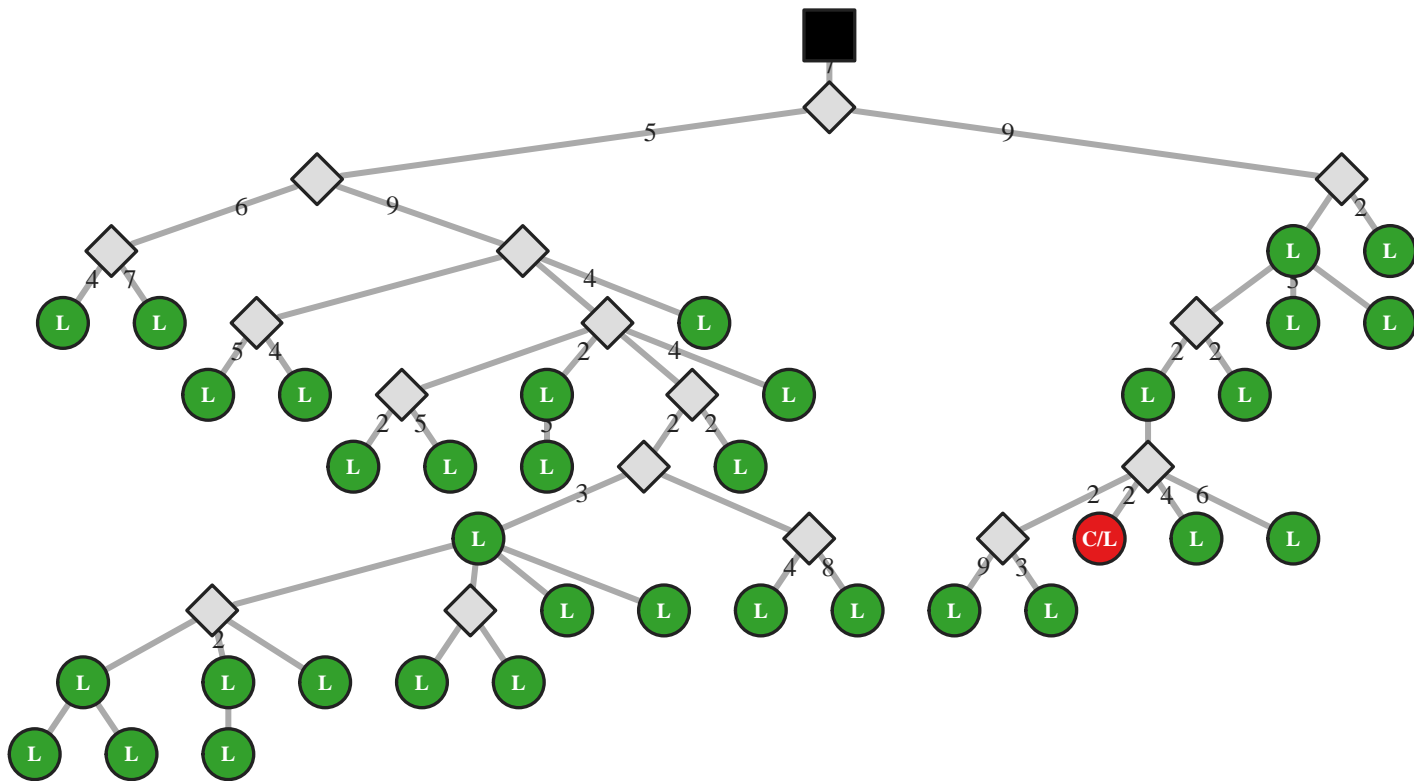
M5 IgG IGHV3-74/J4 36bp (18170)



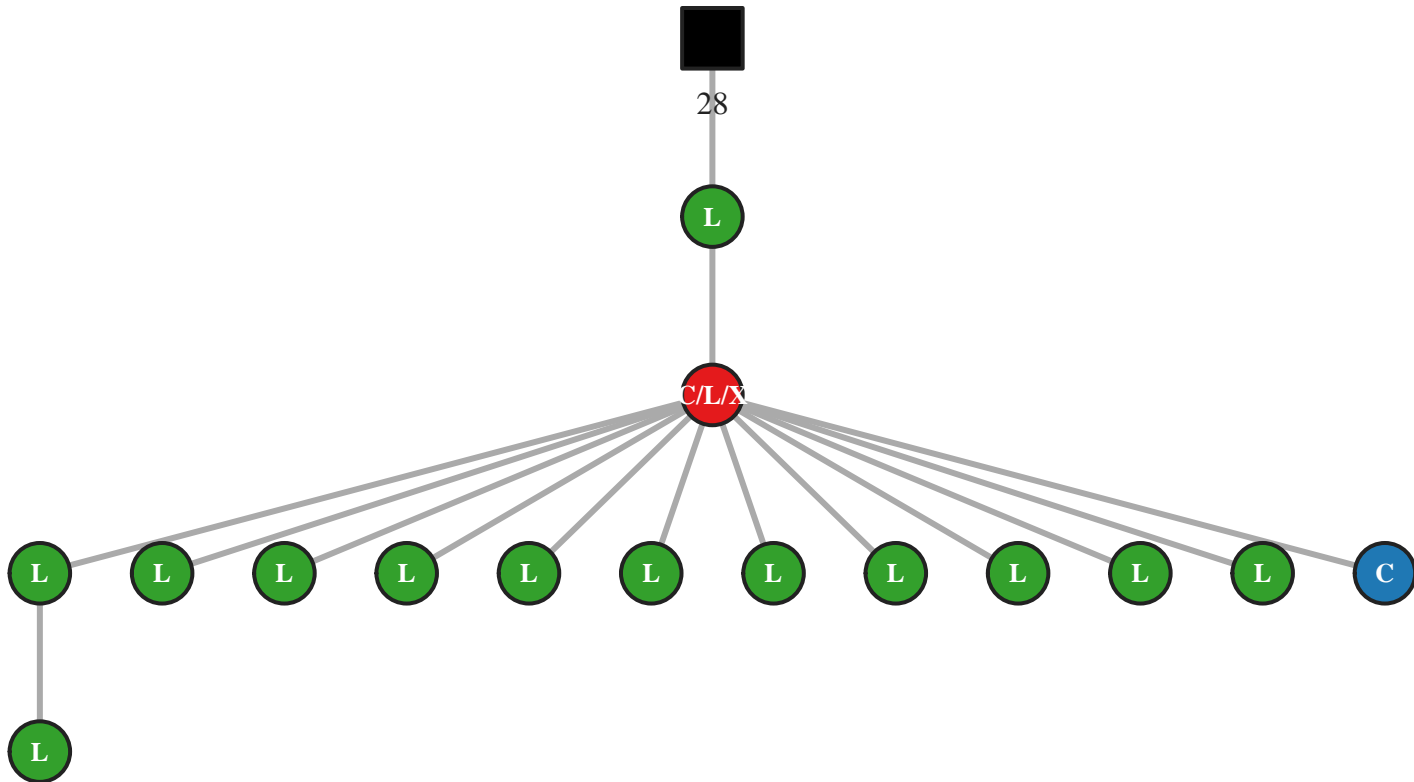
M5 IgG IGHV3-74/J4 36bp (18173)



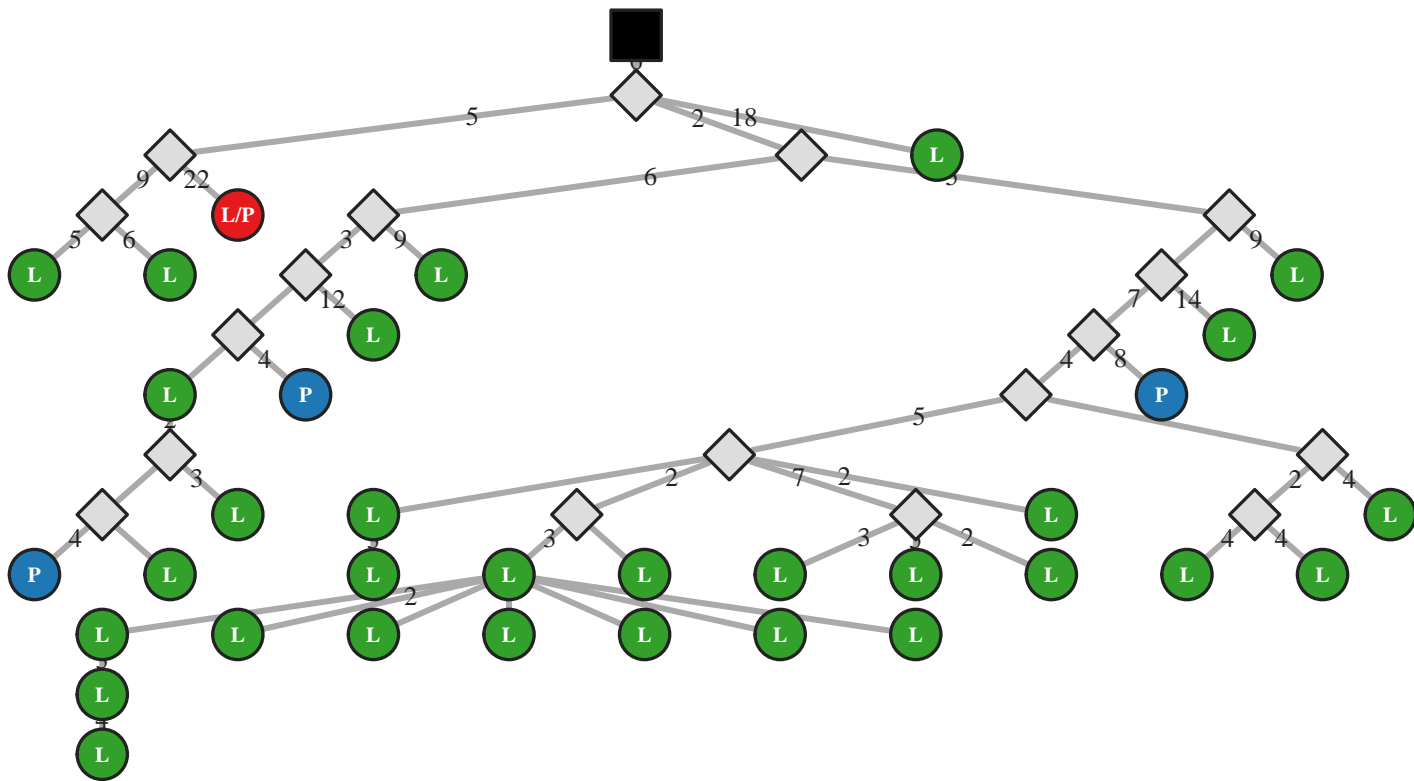
M5 IgG IGHV3-74/J4 36bp (18182)



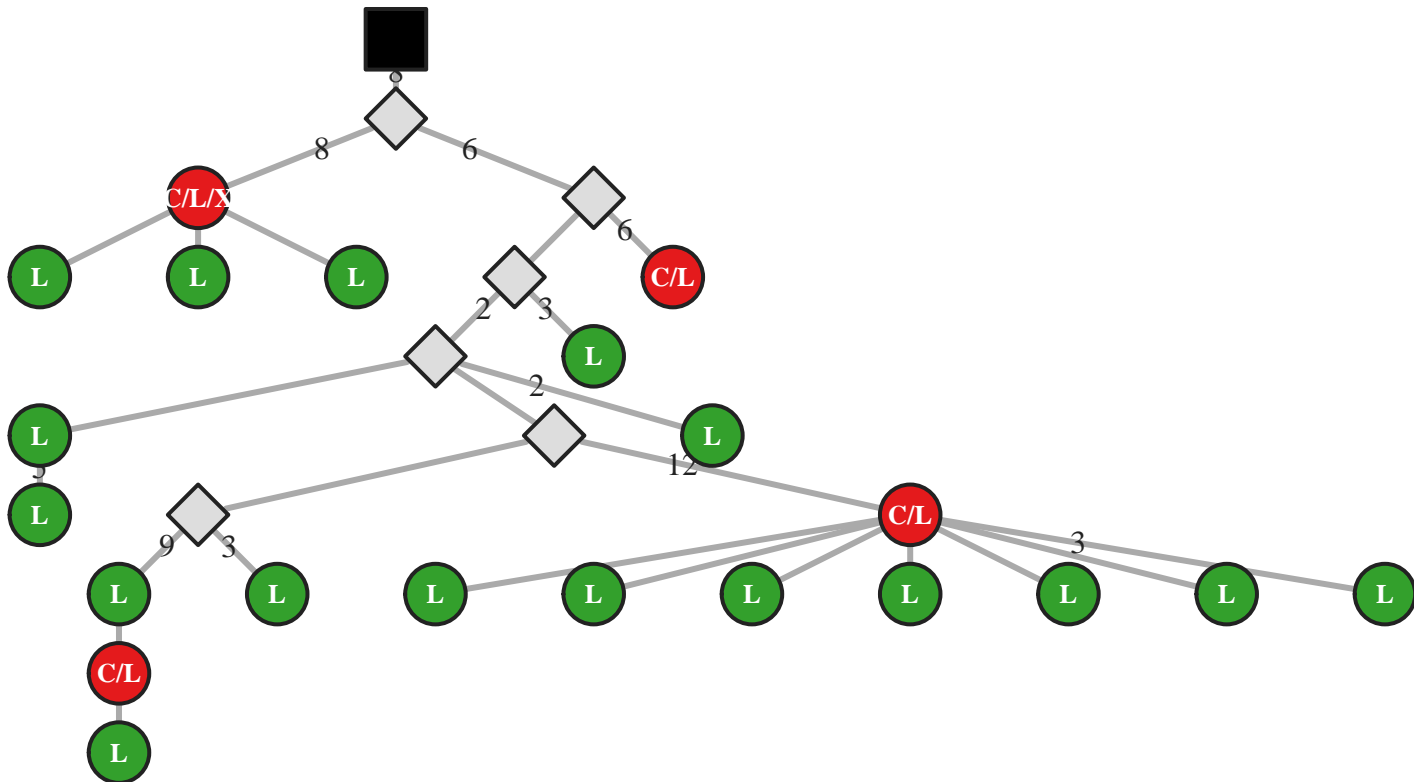
M5 IgG IGHV3-74/J4 36bp (18185)



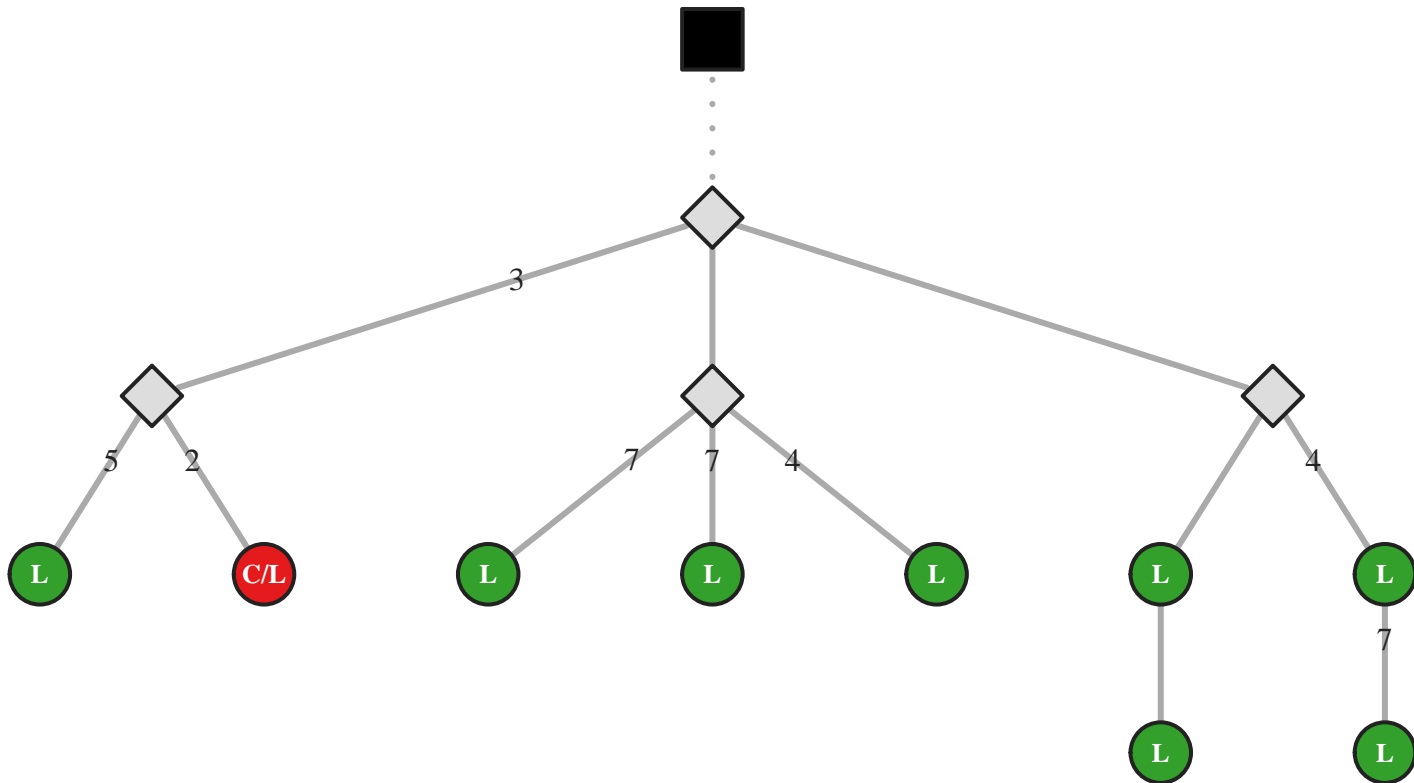
M5 IgG IGHV3-74/J4 36bp (18193)



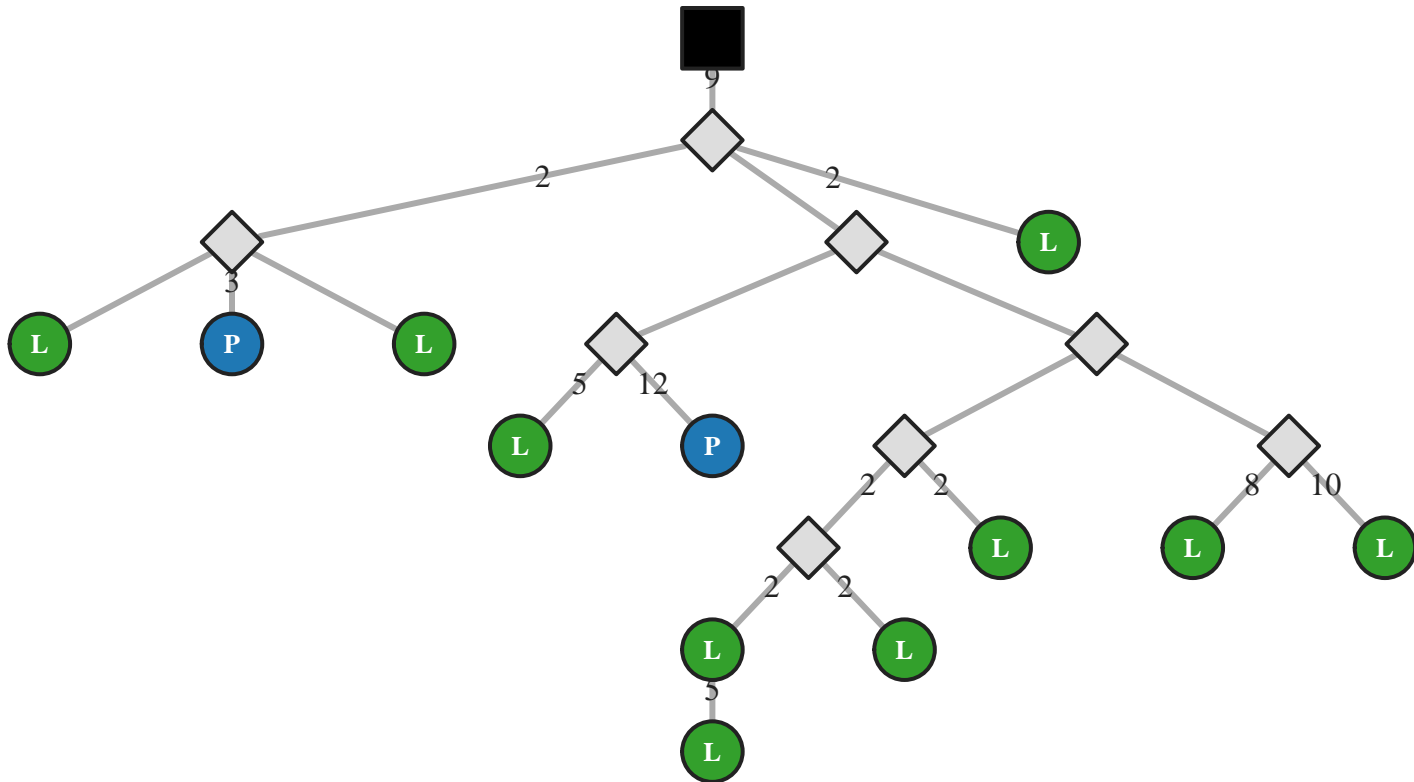
M5 IgM IGHV3-74/J4 39bp (48032)



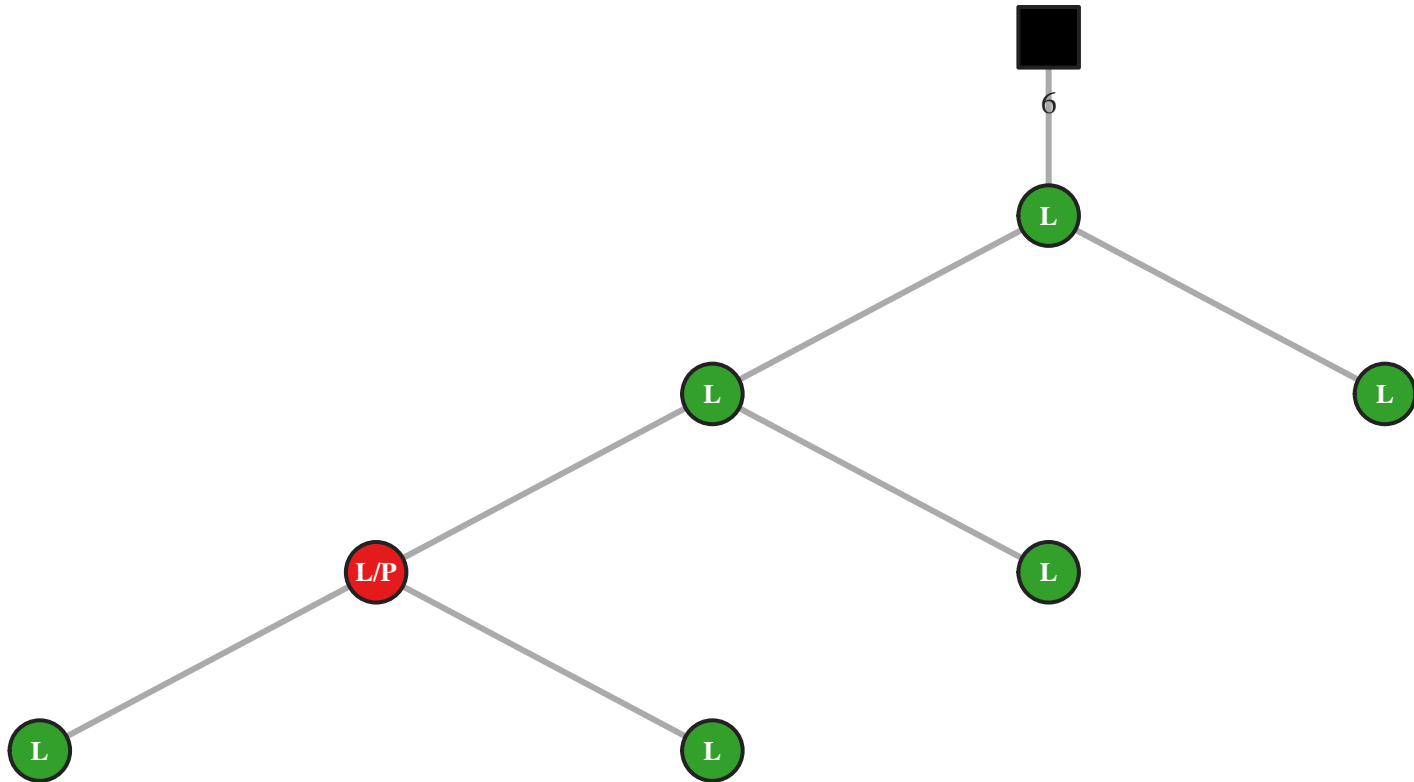
M5 IgA IGHV3-74/J4 45bp (3024)



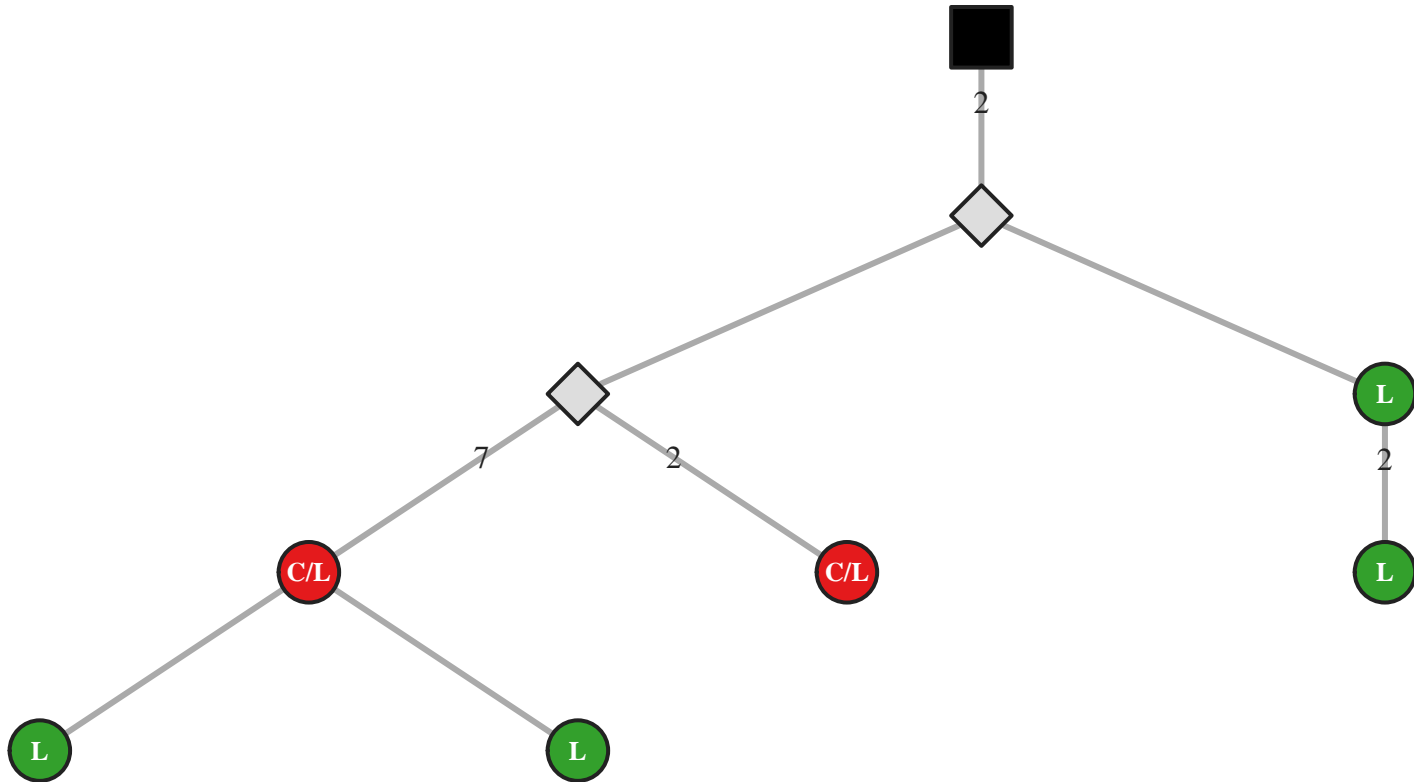
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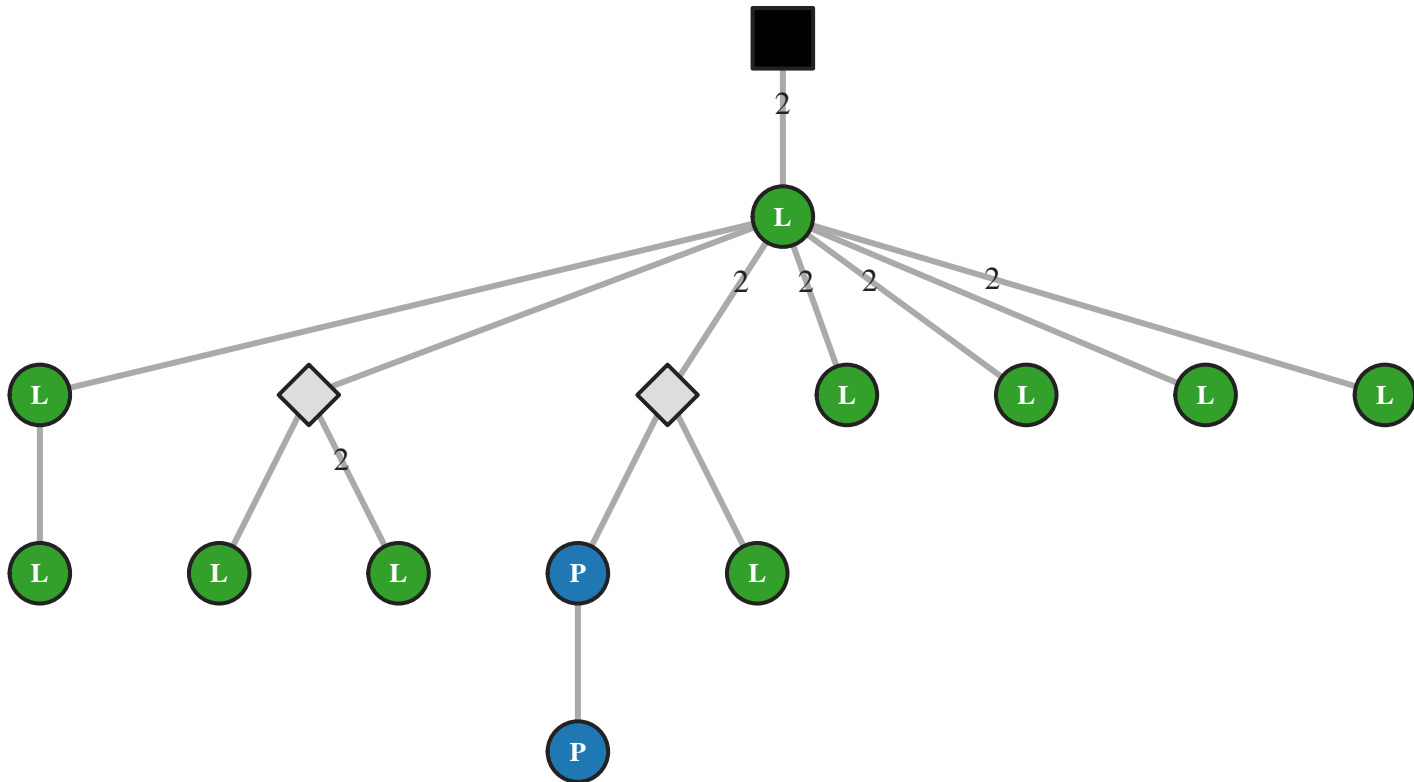
M5 IgM IGHV3-74/J4 45bp (54227)



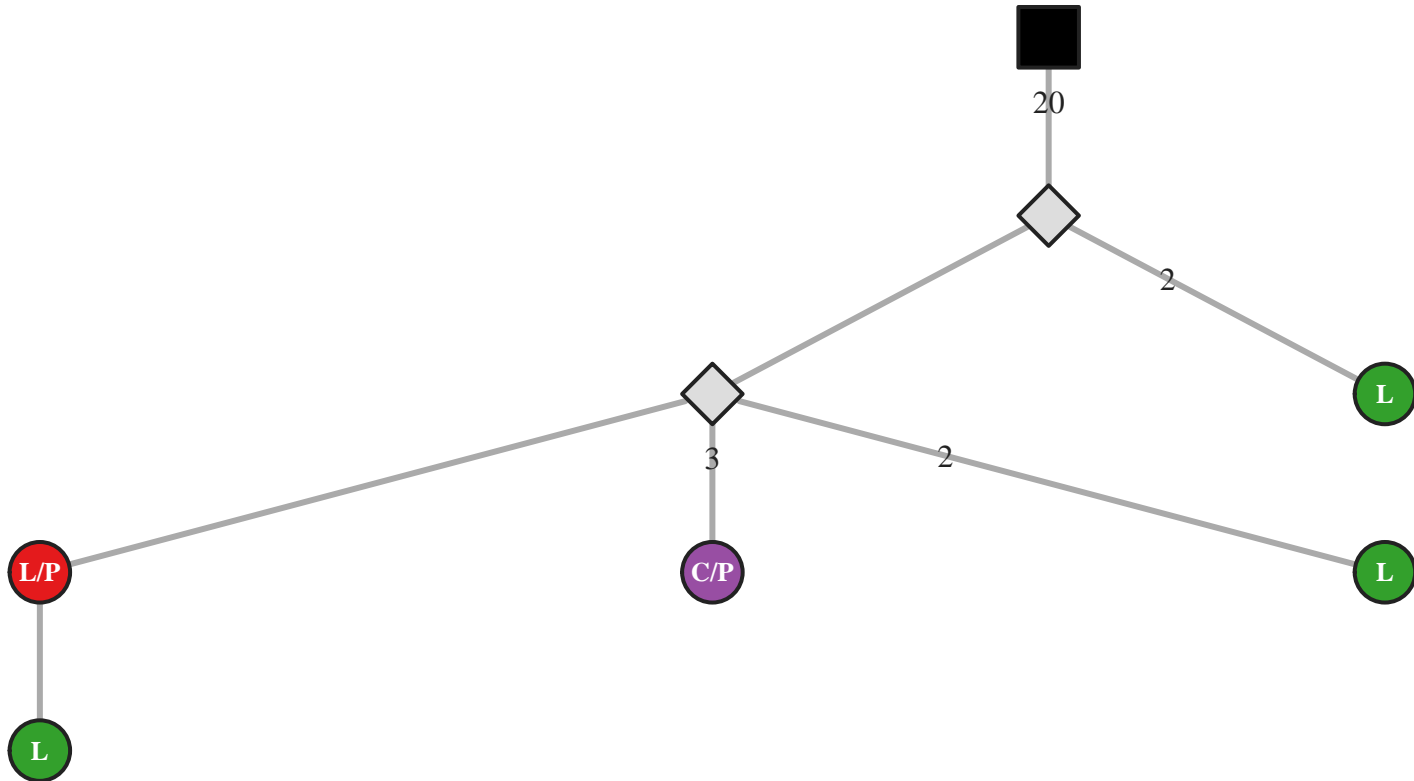
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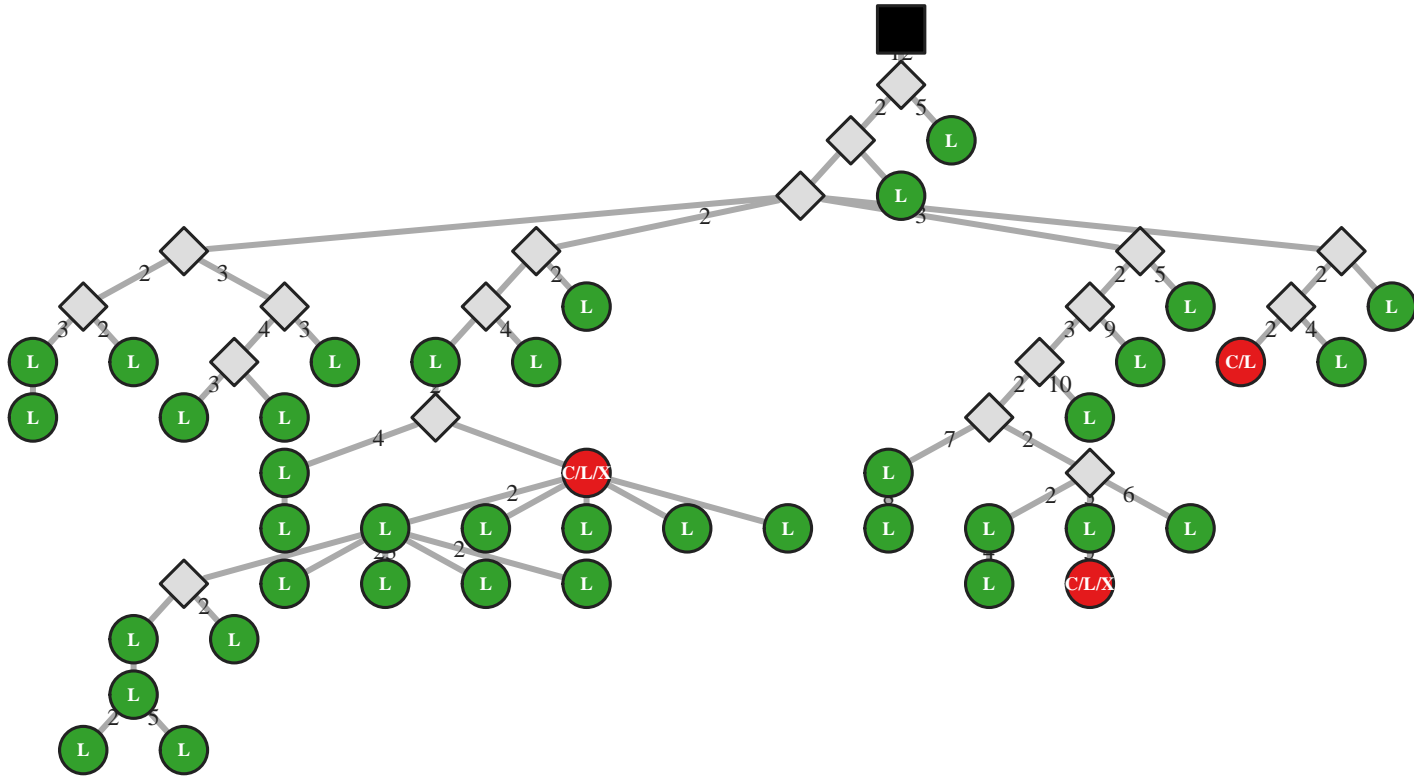
M5 IgG IGHV3-74/J4 48bp (52256)



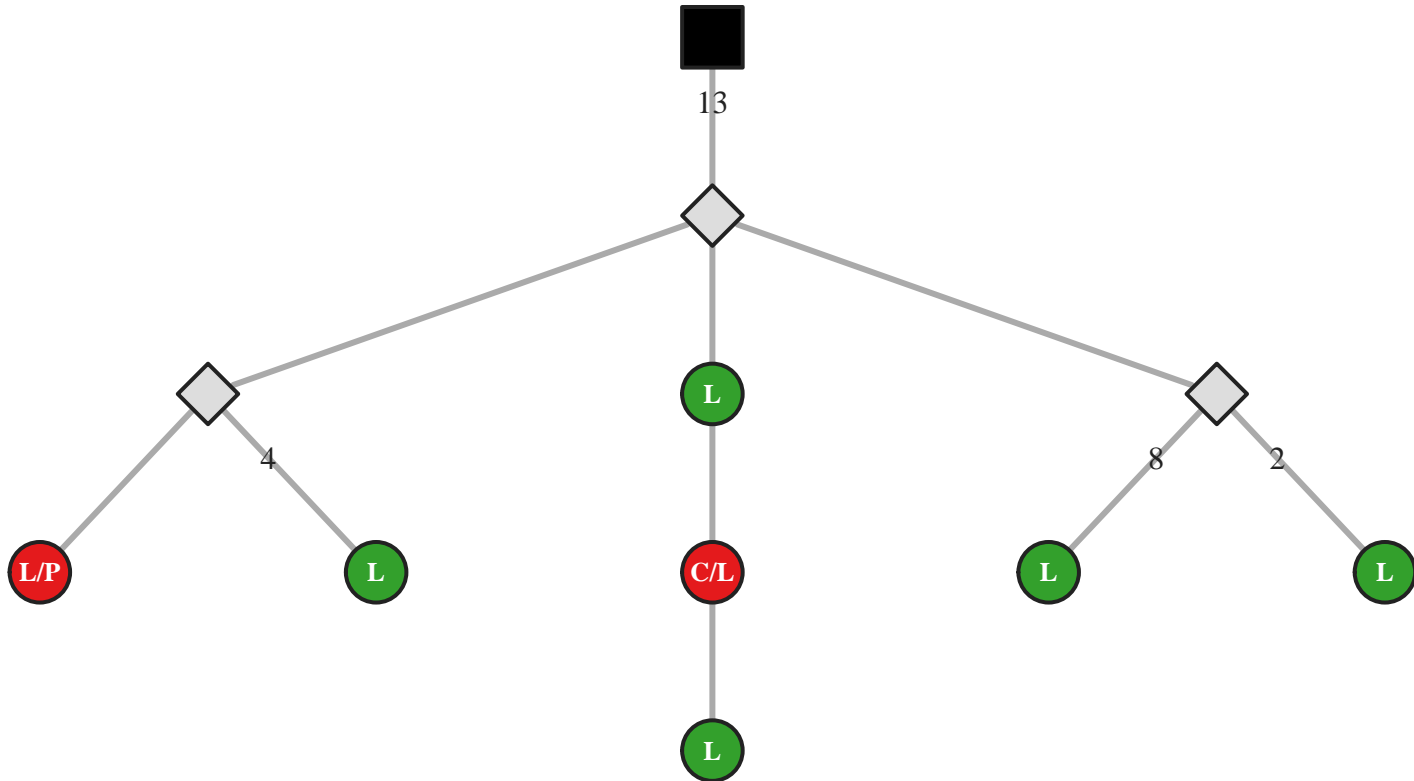
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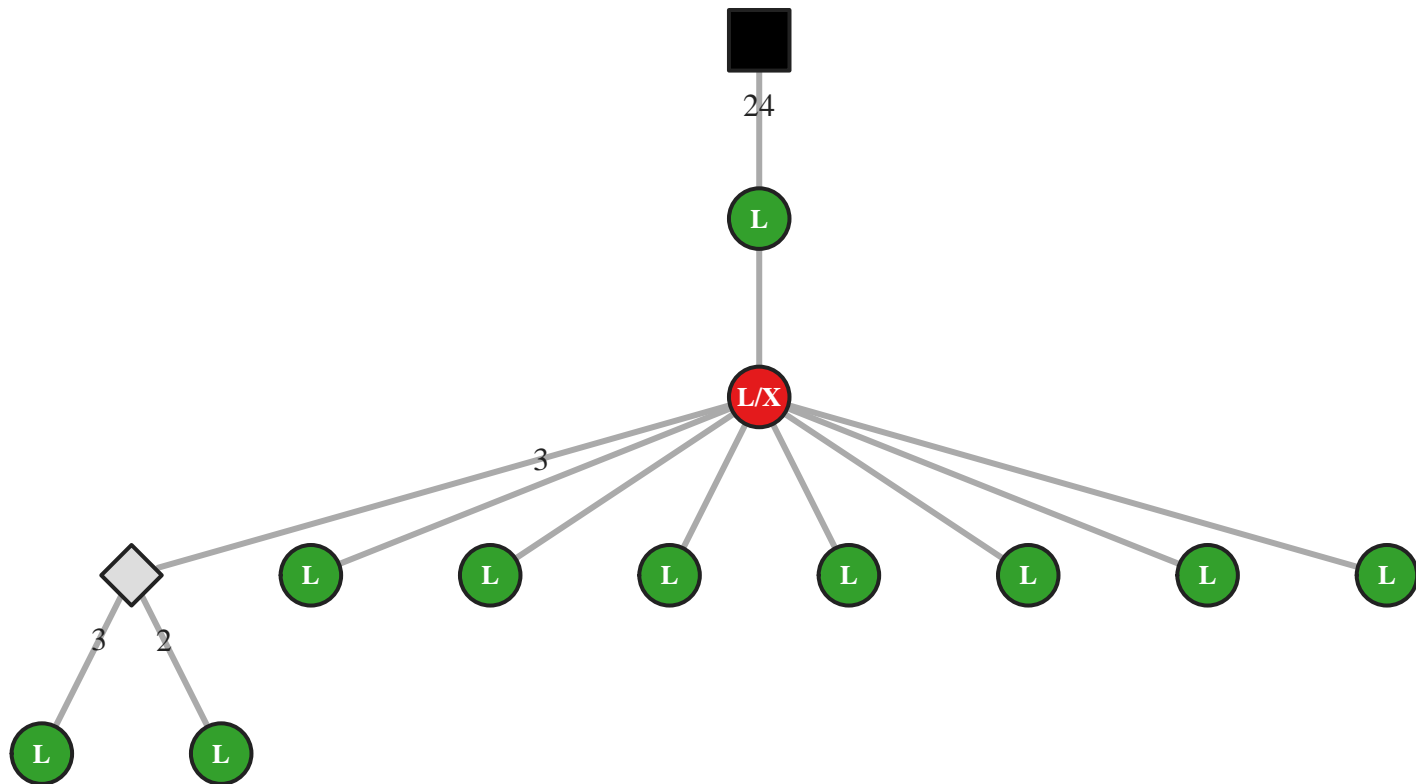
M5 IgM IGHV3-74/J4 48bp (48066)



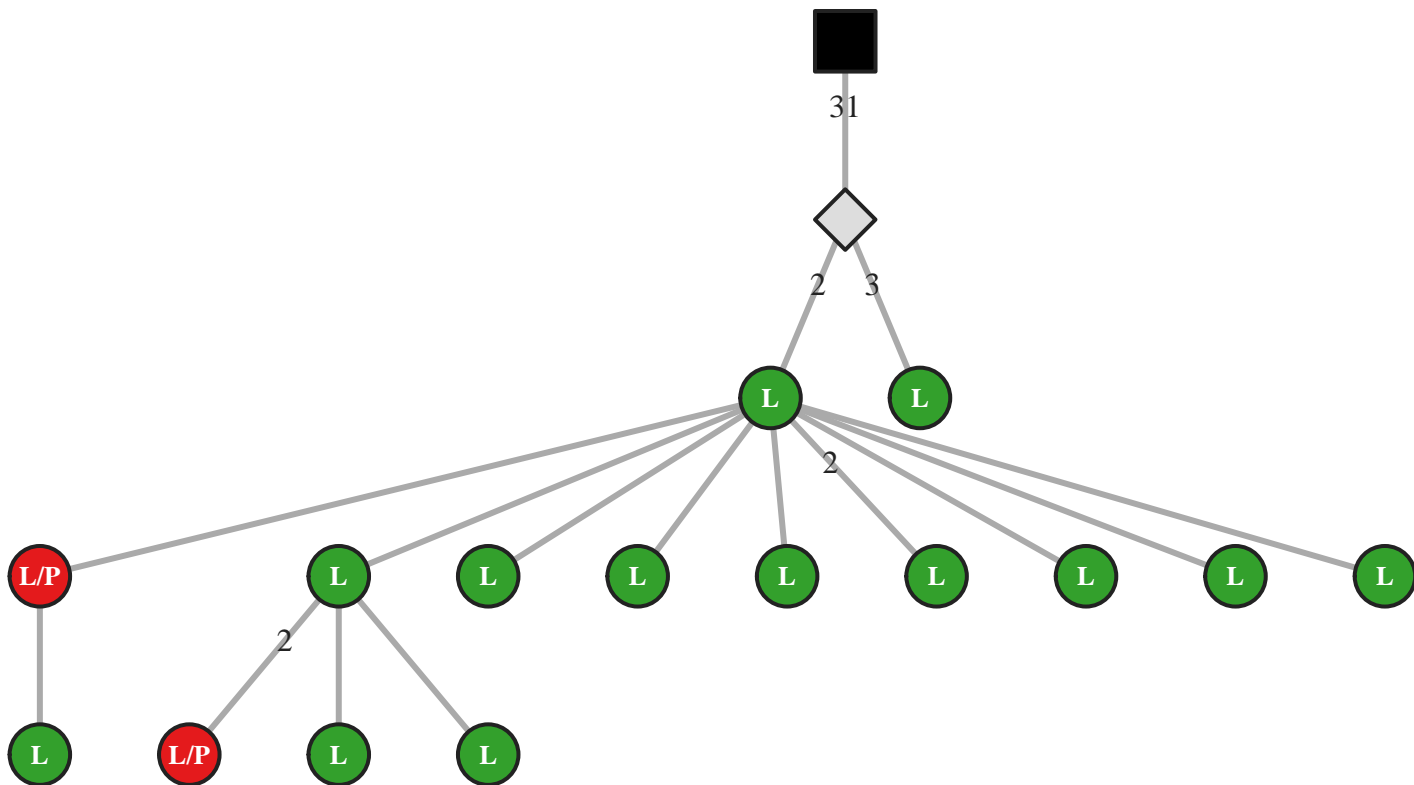
M5 IgM IGHV3-74/J4 51bp (54241)



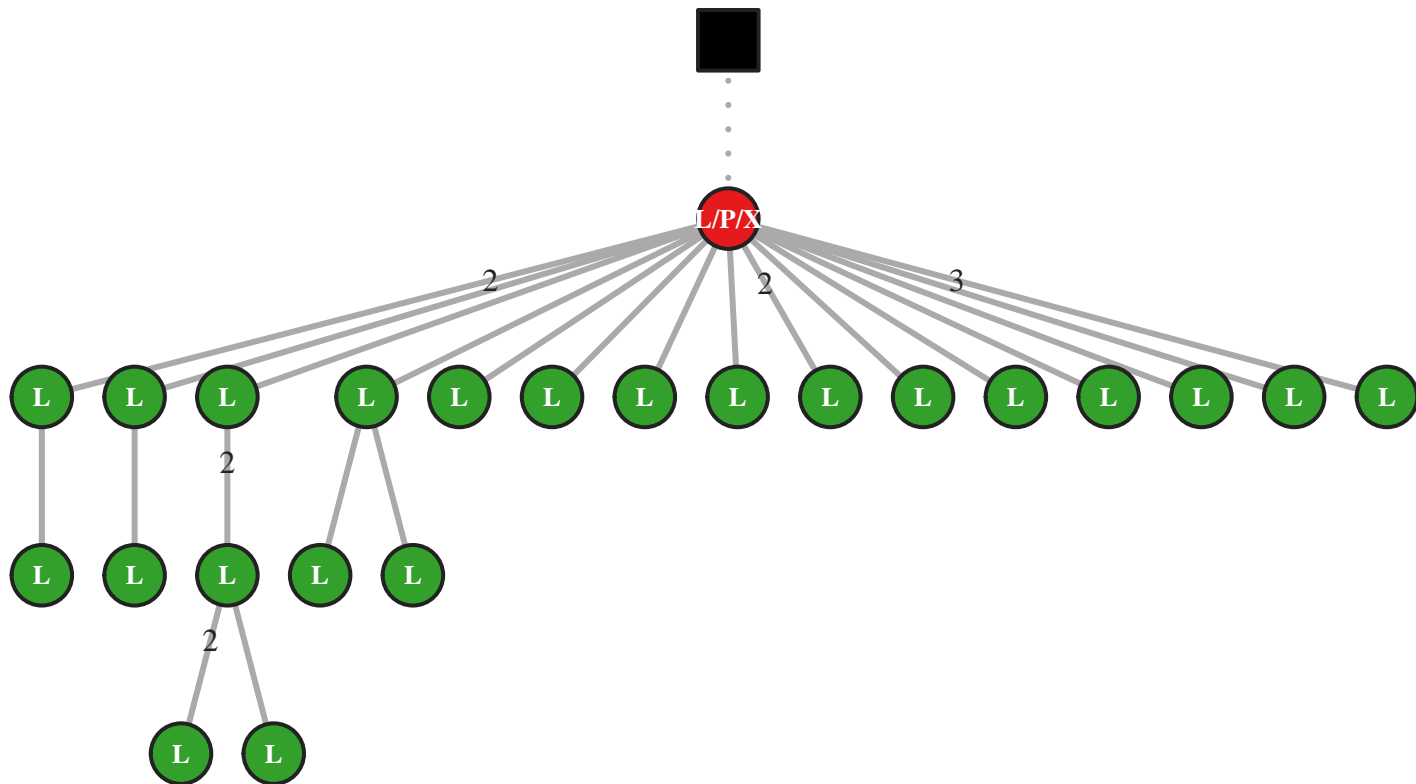
M5 IgG IGHV3-74/J5 27bp (18215)



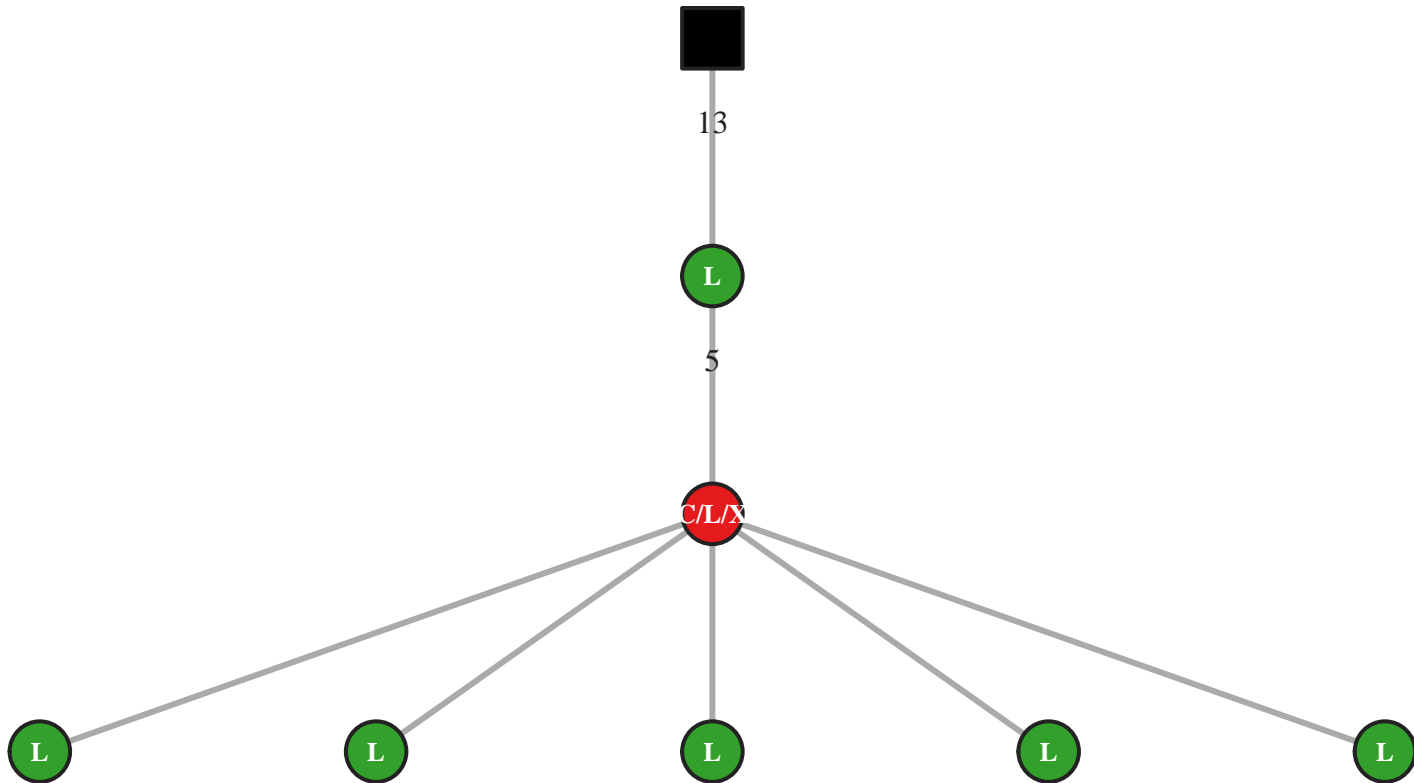
M5 IgG IGHV3-74/J5 36bp (45505)



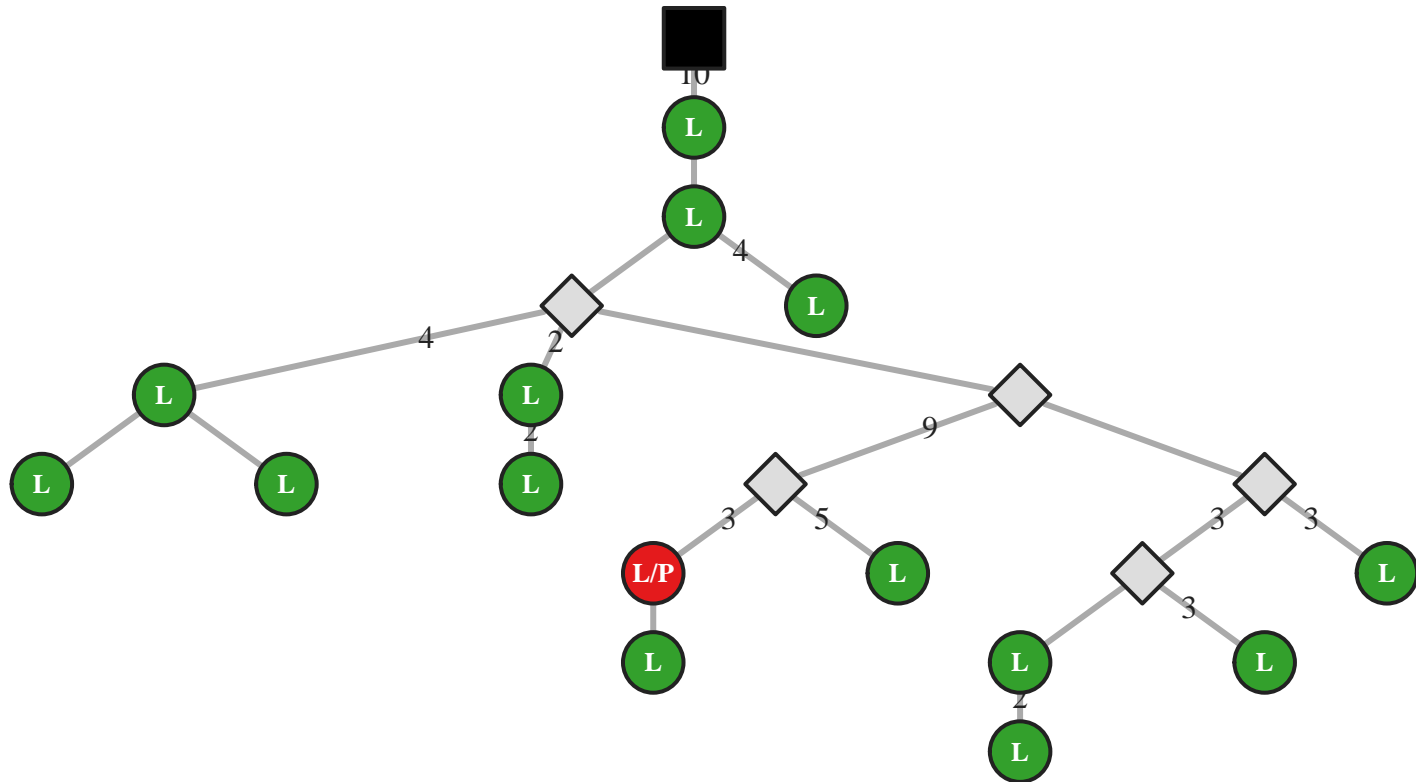
M5 IgG IGHV3-74/J5 60bp (52267)



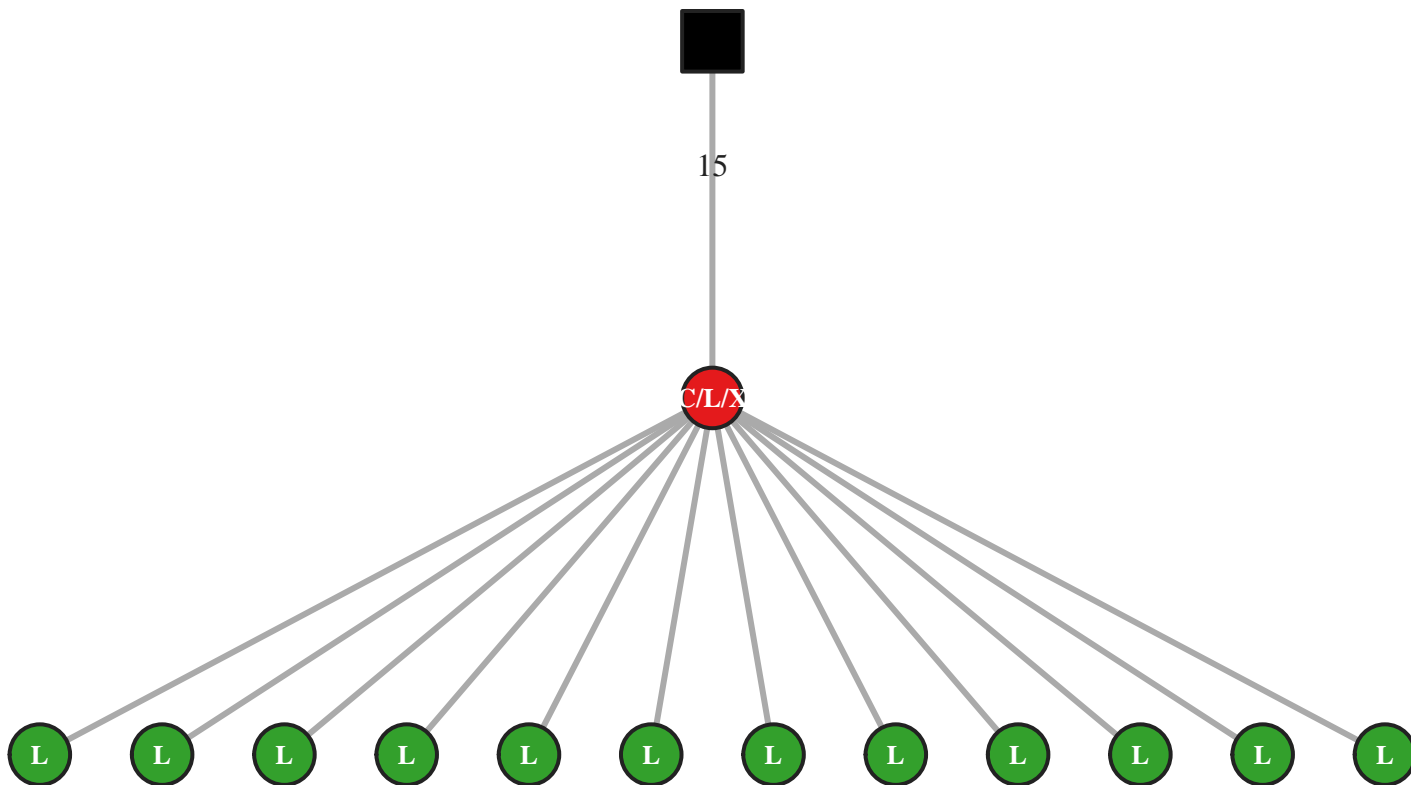
M5 IgG IGHV3-74/J6 57bp (52285)



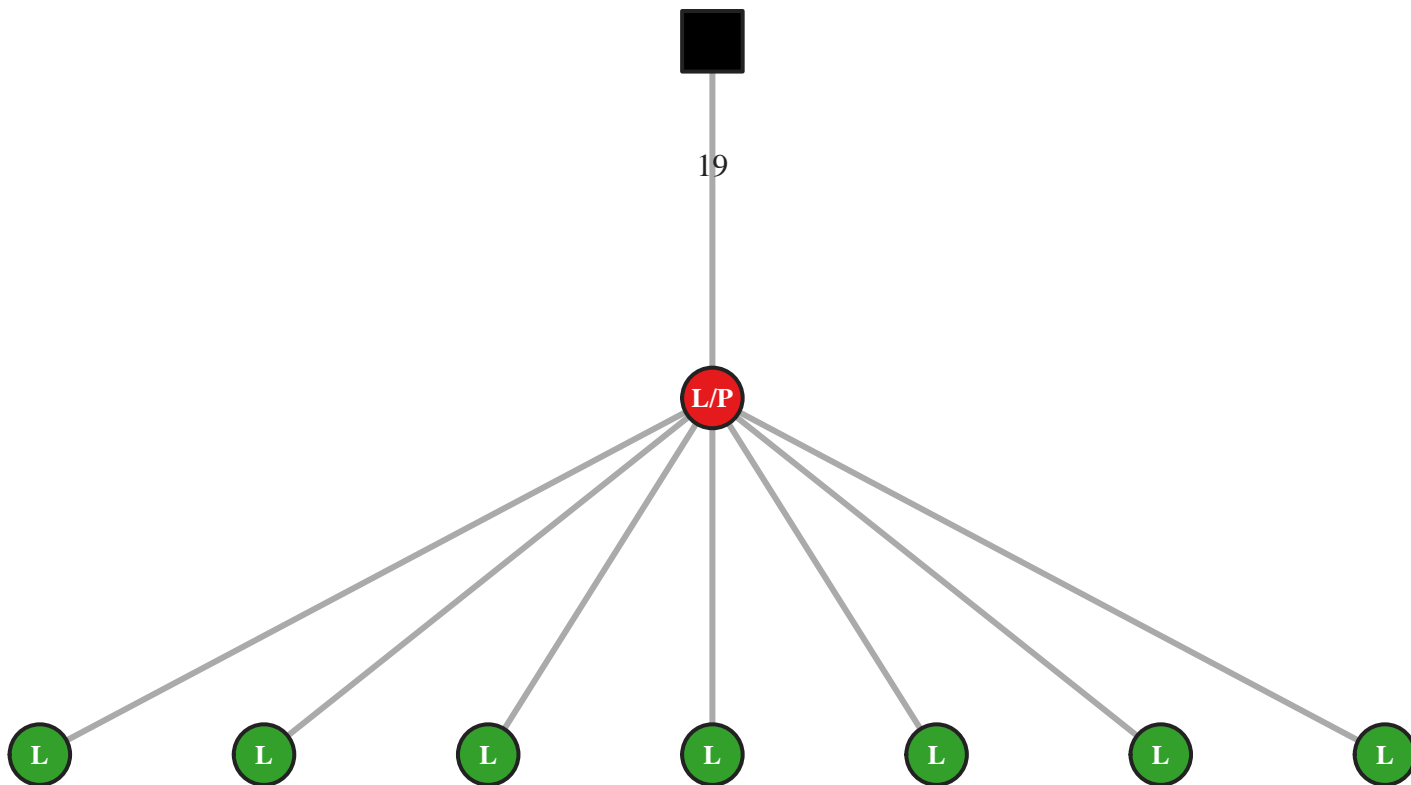
M5 IgG IGHV3-74/J6 60bp (8651)



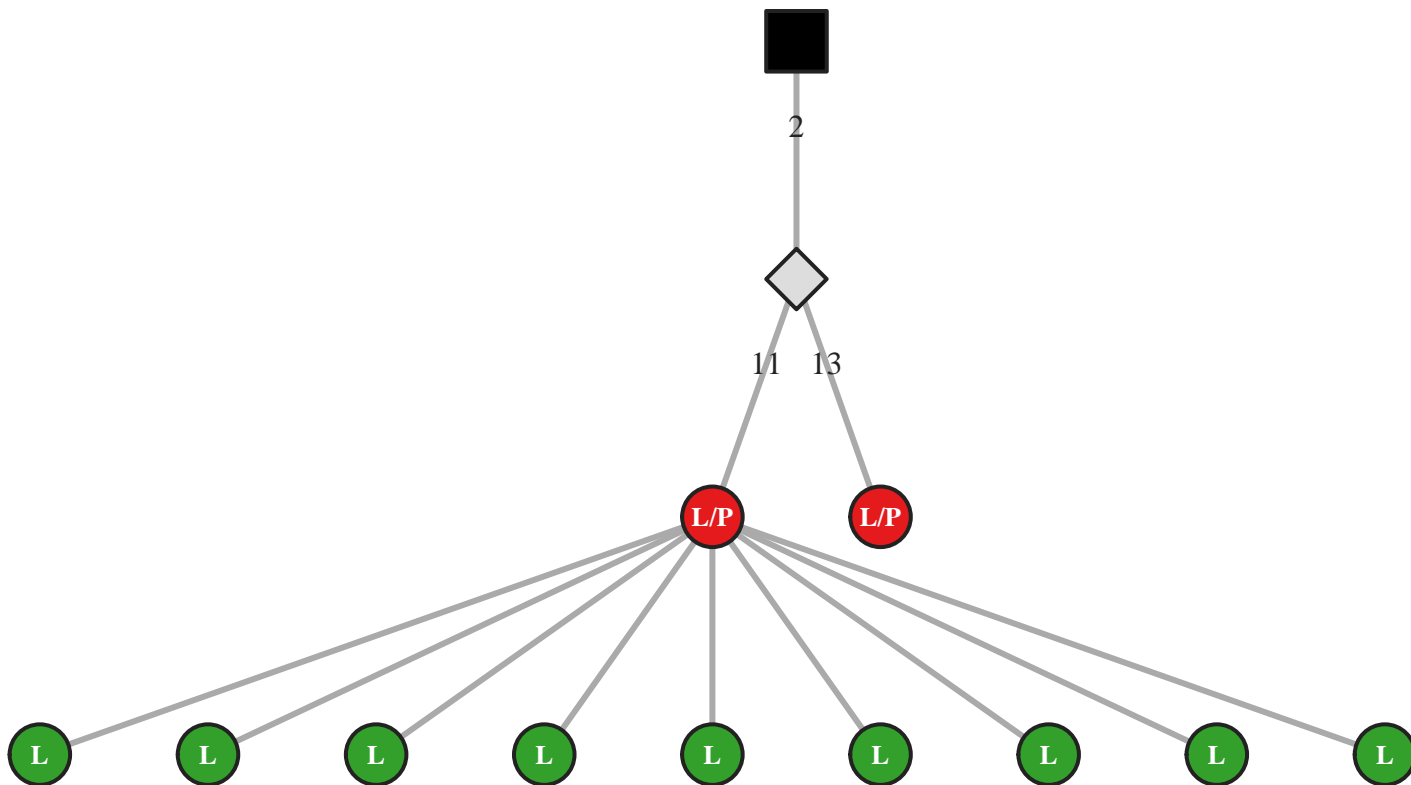
M5 IgA IGHV3-74/J6 66bp (30697)



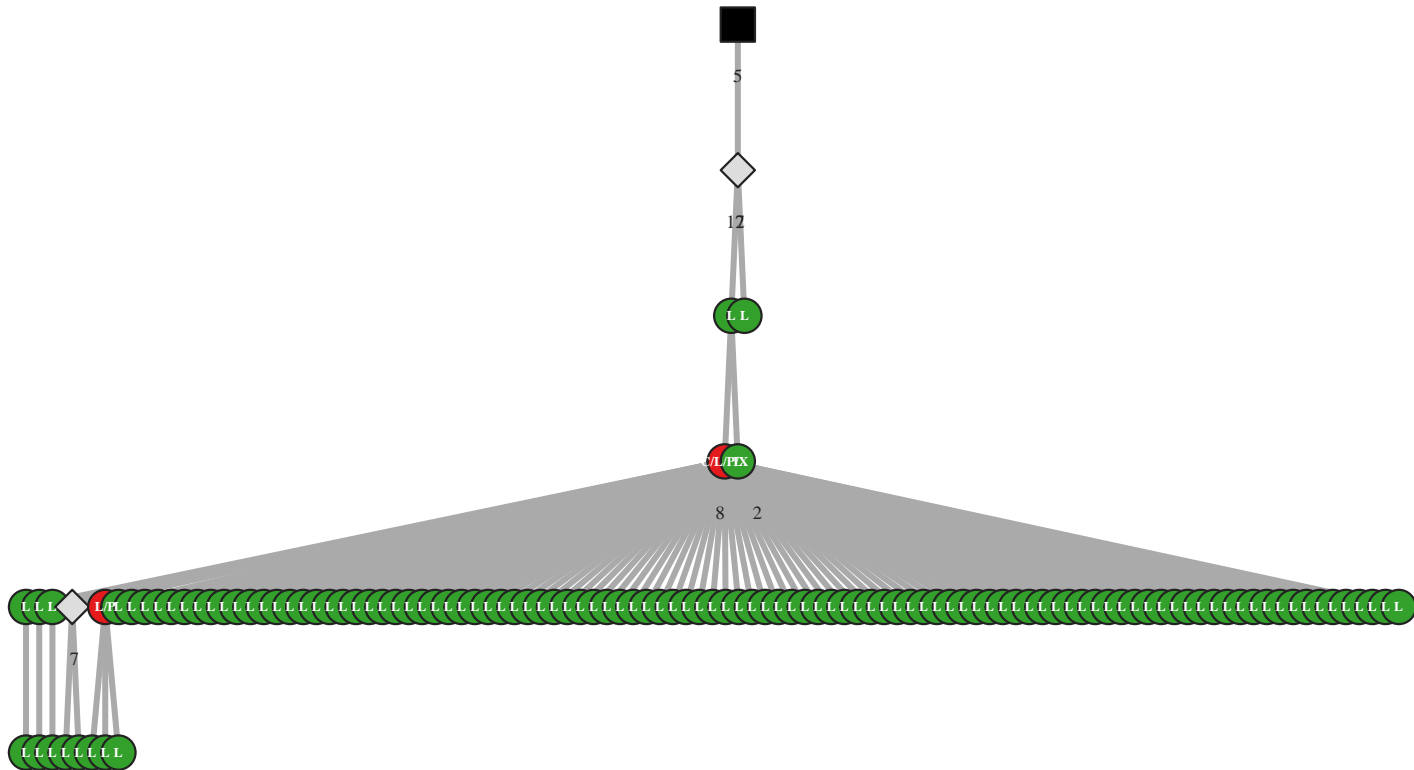
M5 IgG IGHV3-9/J3 48bp (45791)



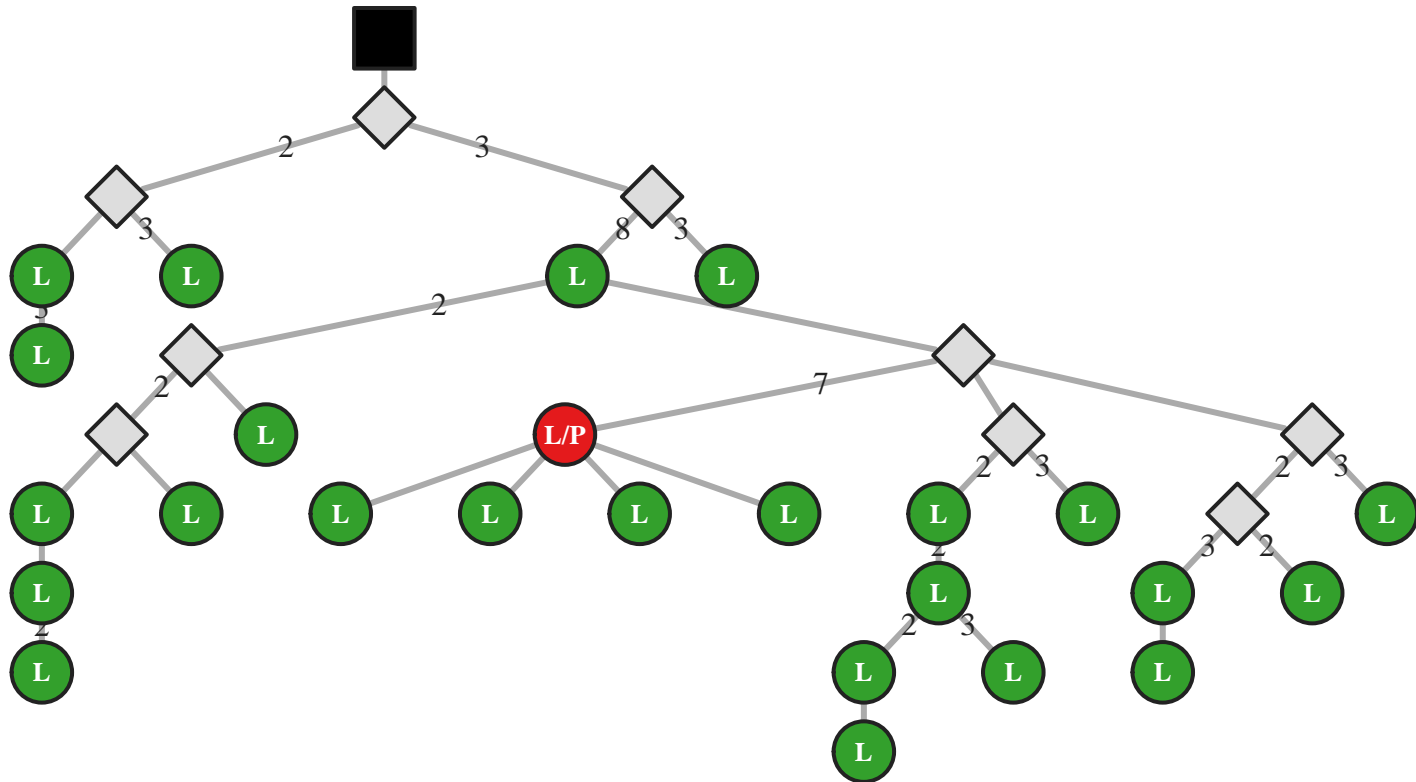
M5 IgG IGHV3-9/J3 48bp (45807)



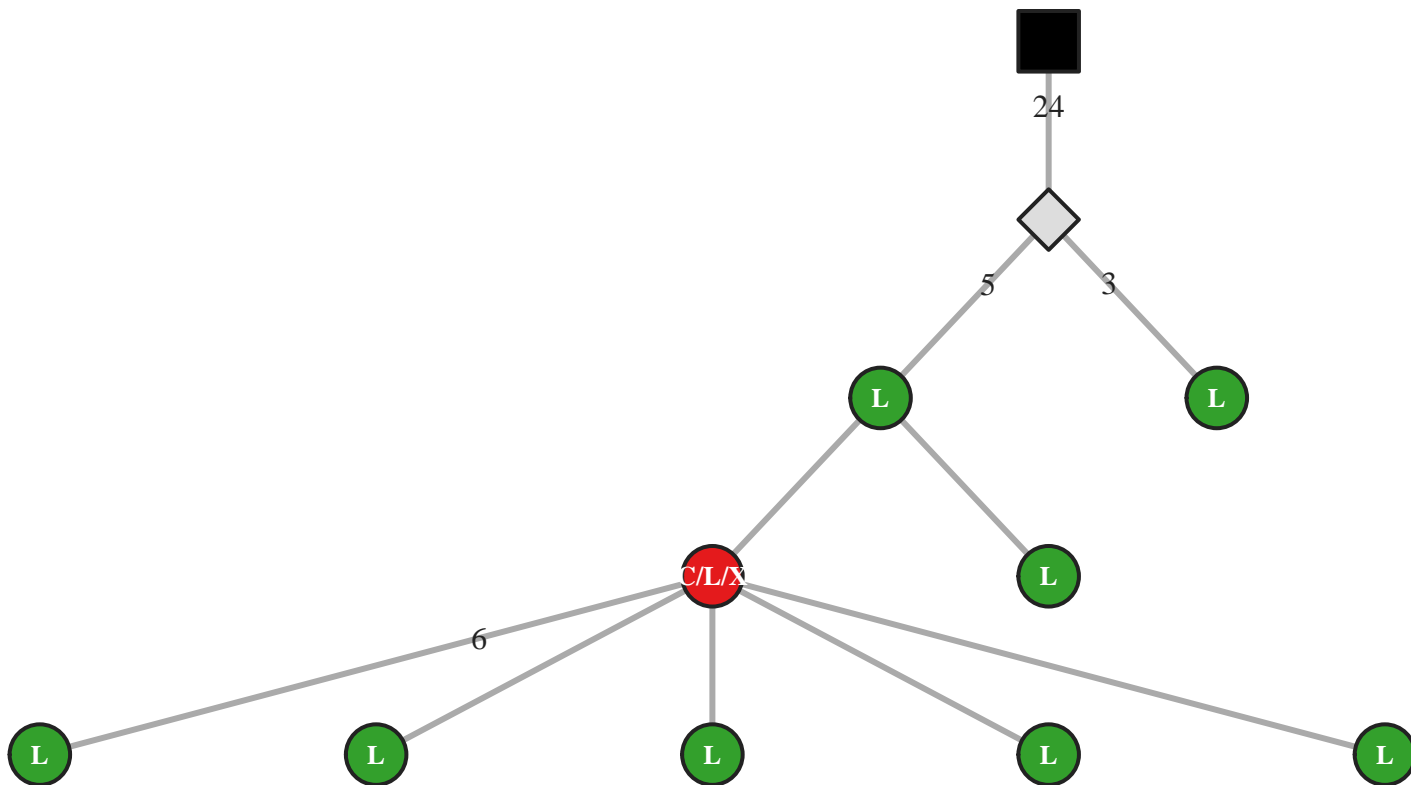
M5 IgG IGHV3-9/J3 48bp (45812)



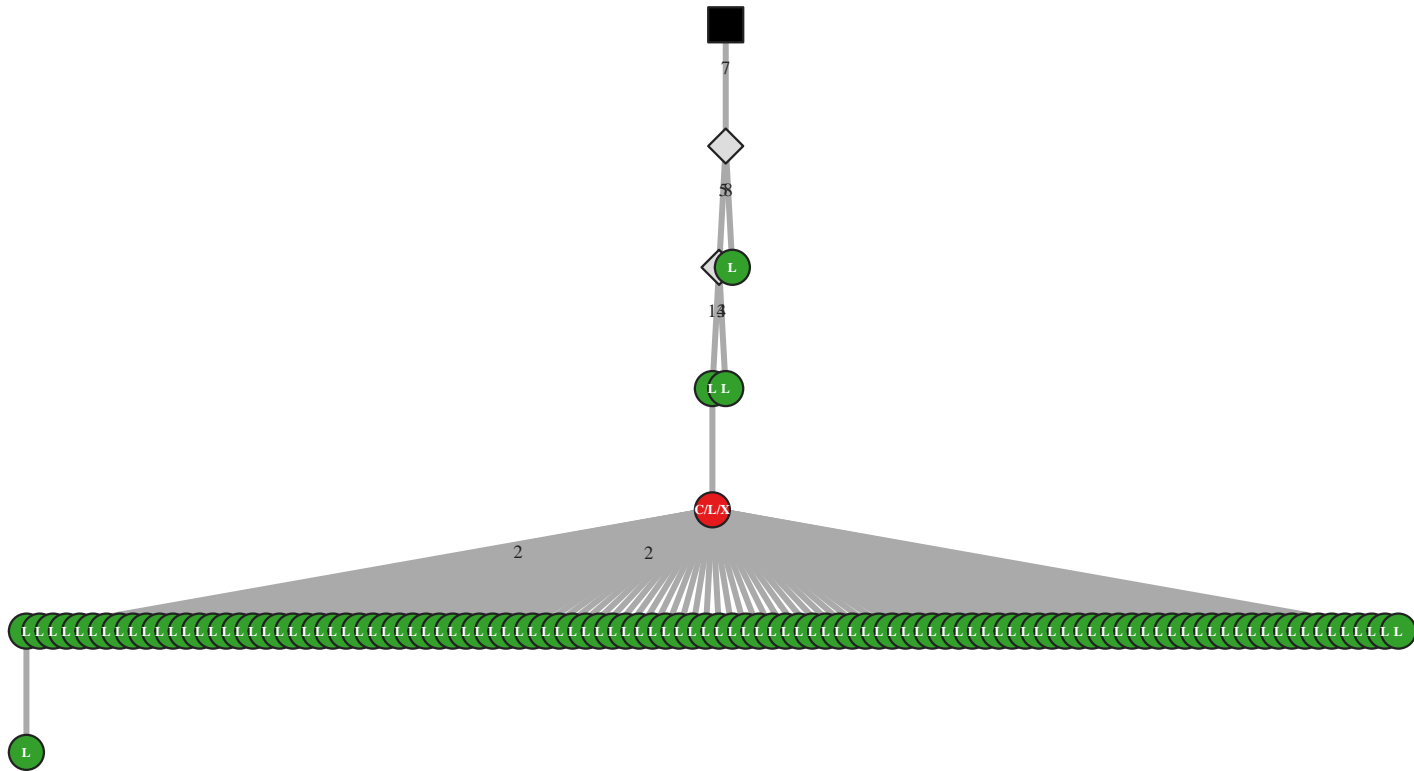
M5 IgG IGHV3-9/J4 42bp (18355)



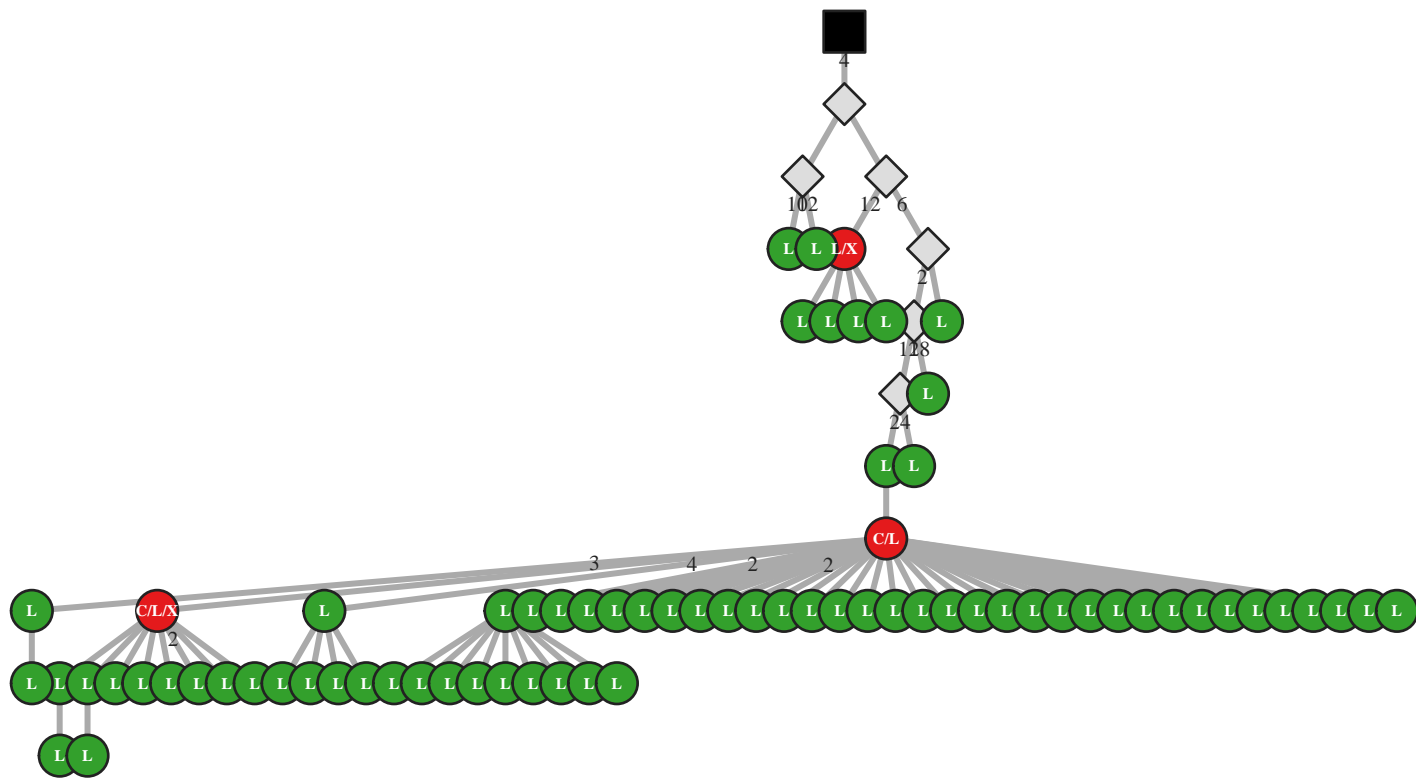
M5 IgG IGHV3-9/J4 42bp (18387)



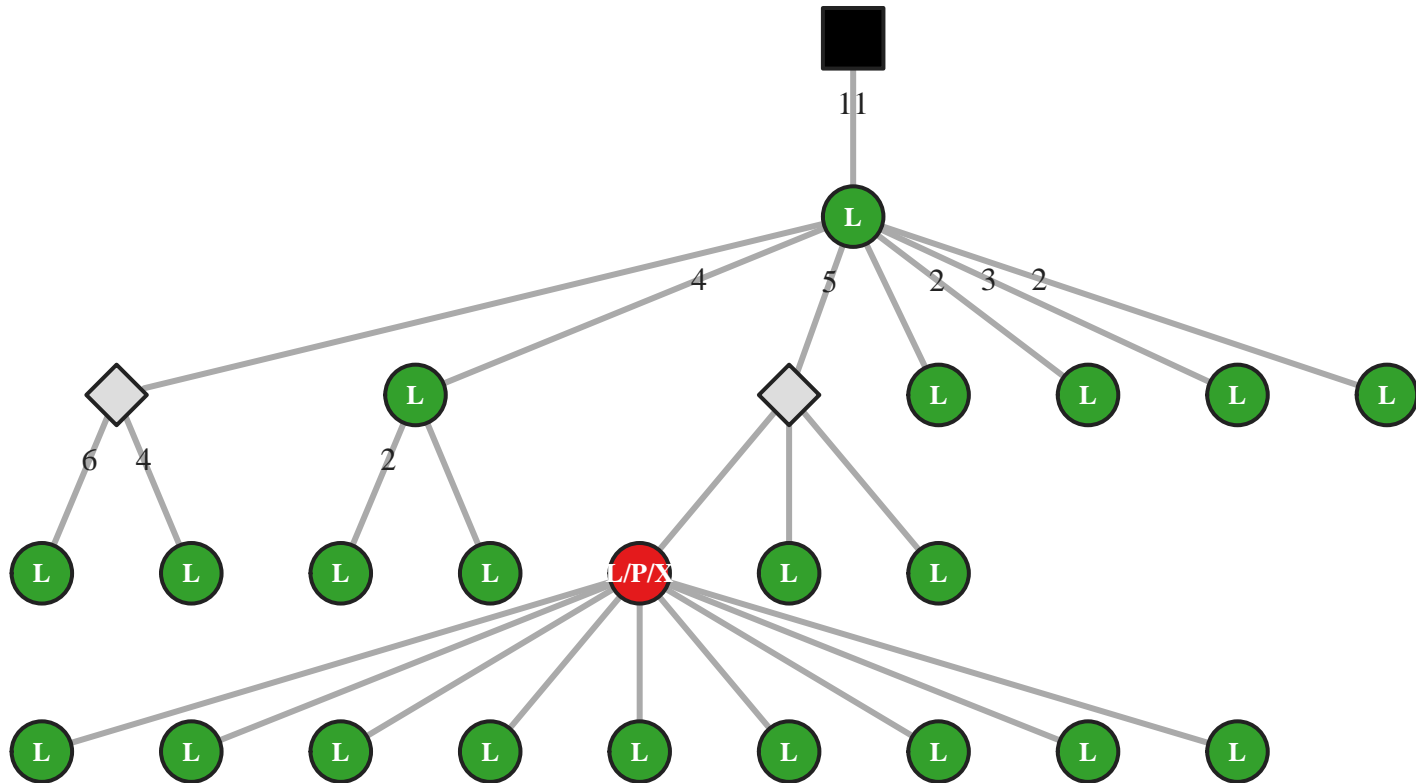
M5 IgA IGHV3-9/J4 45bp (3072)



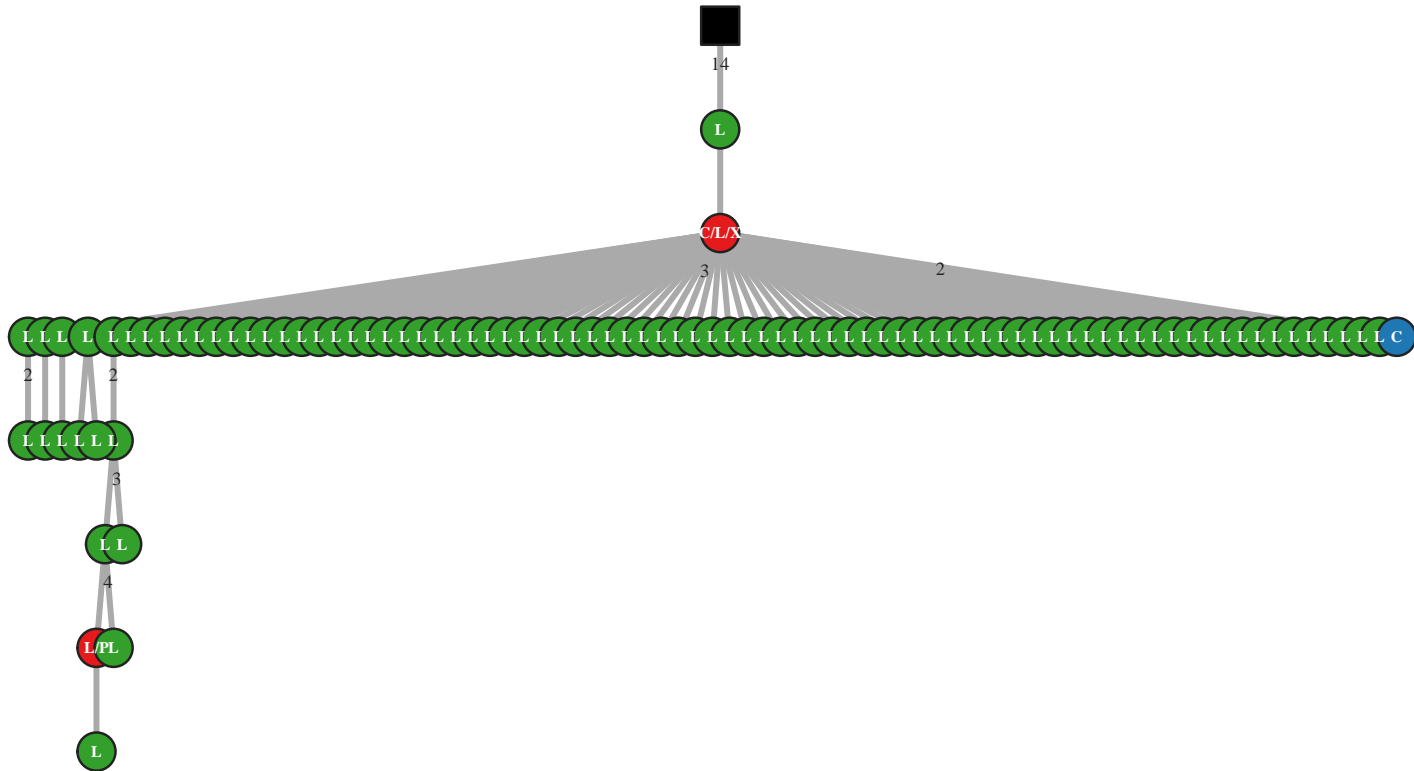
M5 IgG IGHV3-9/J4 45bp (27386)



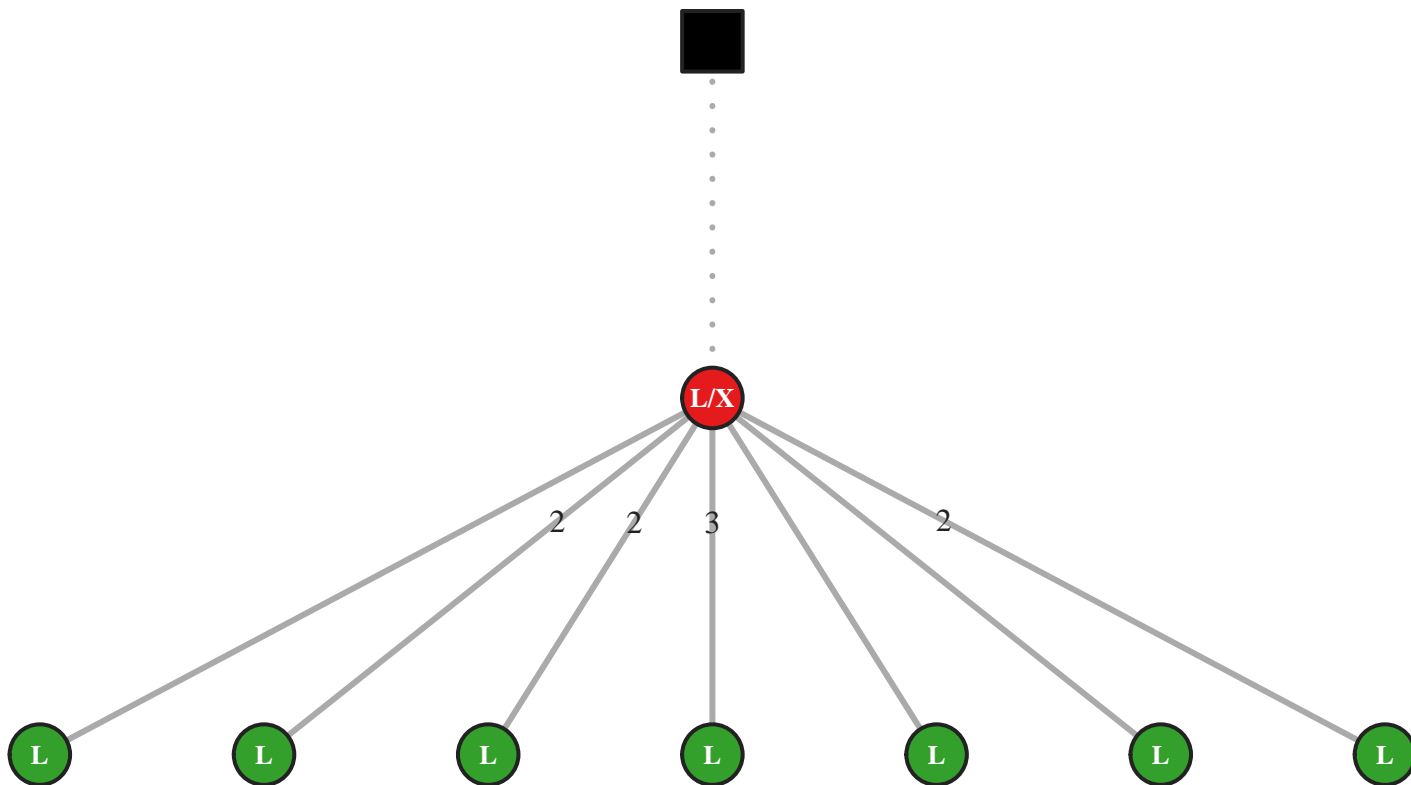
M5 IgG IGHV3-9/J4 45bp (27391)



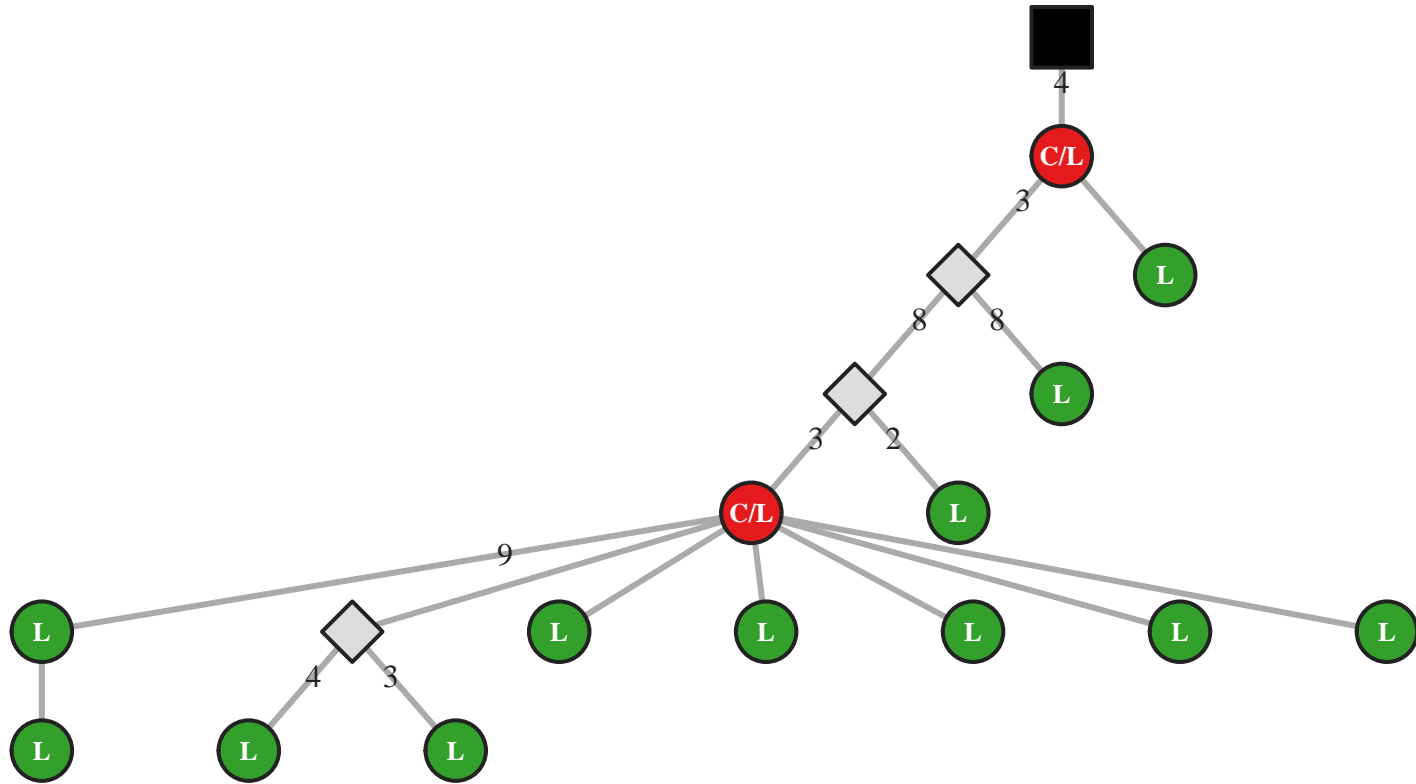
M5 IgG IGHV3-9/J4 45bp (27416)



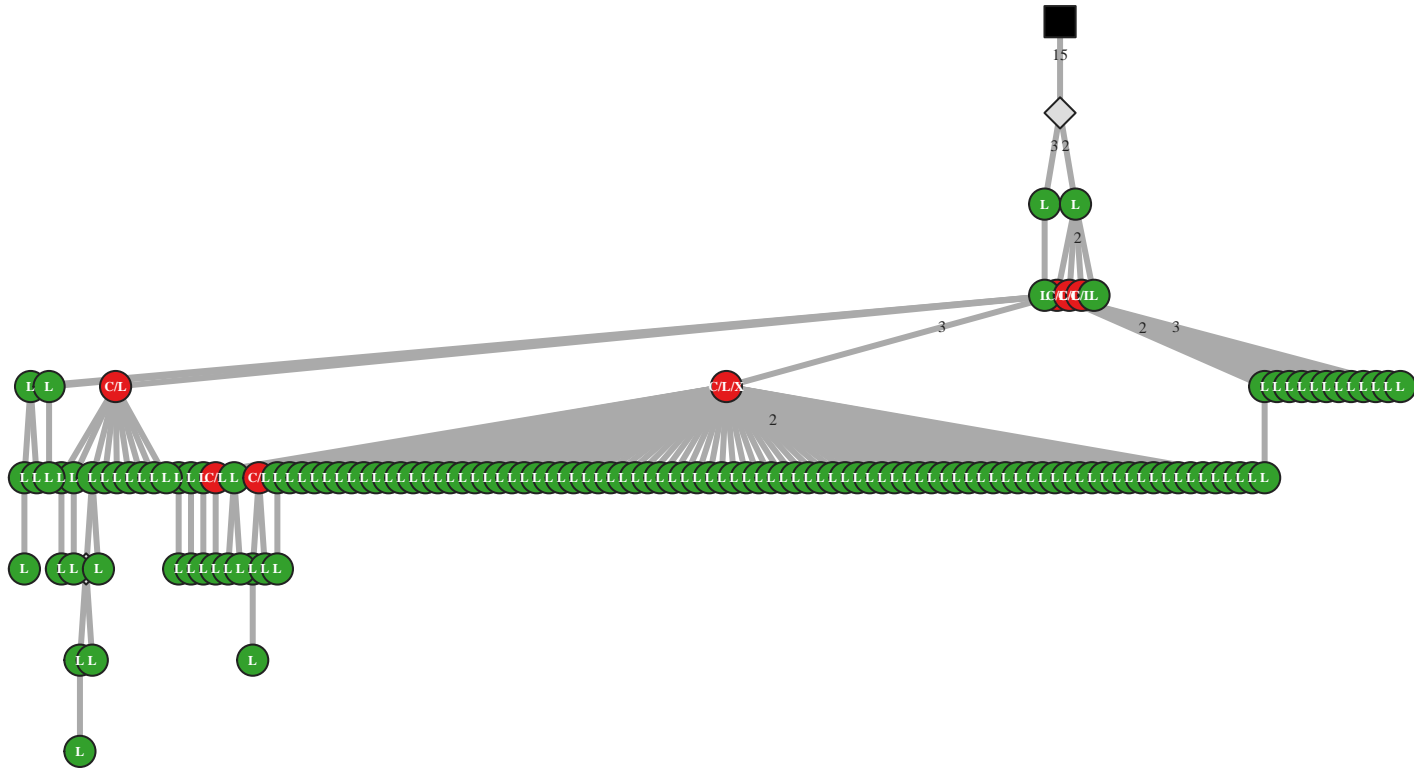
M5 IgG IGHV3-9/J4 45bp (27449)



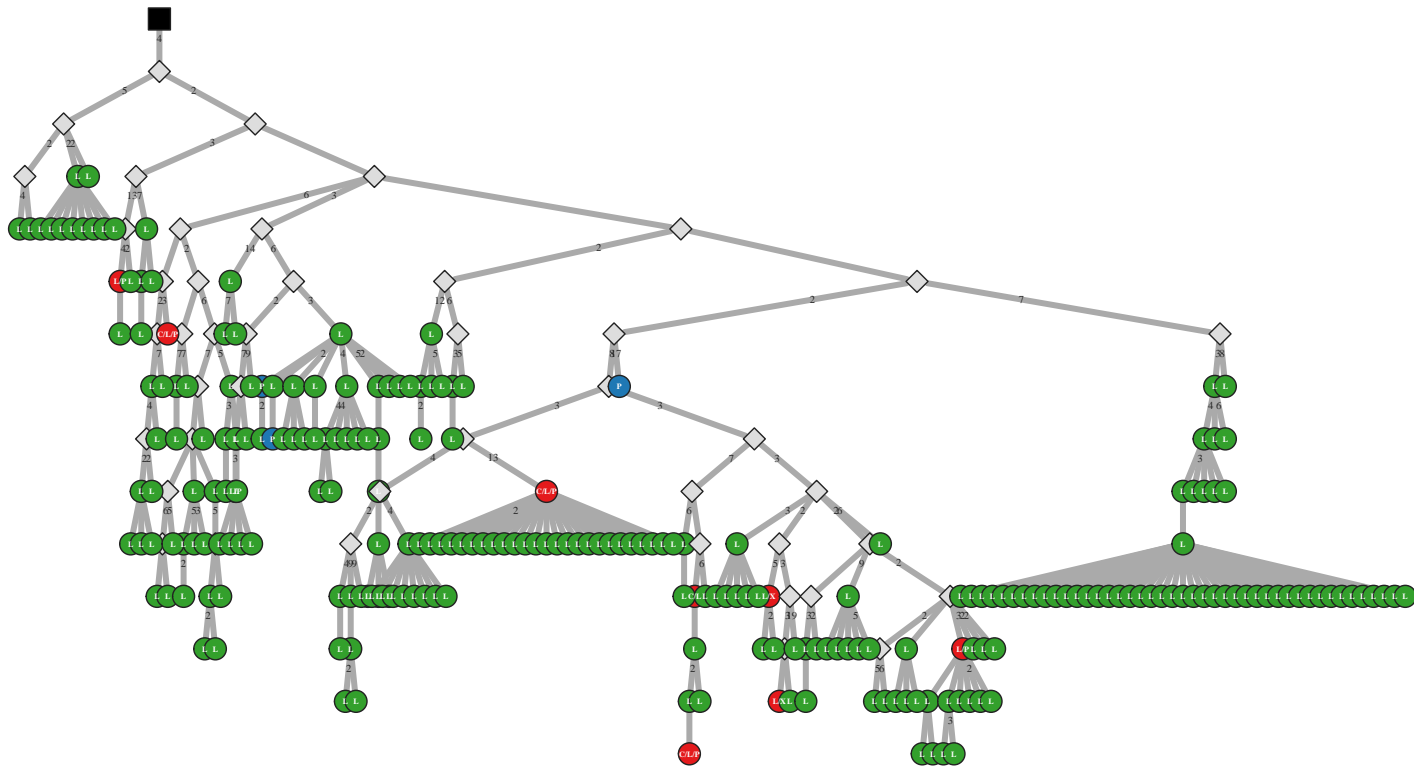
M5 IgG IGHV3-9/J4 45bp (27455)



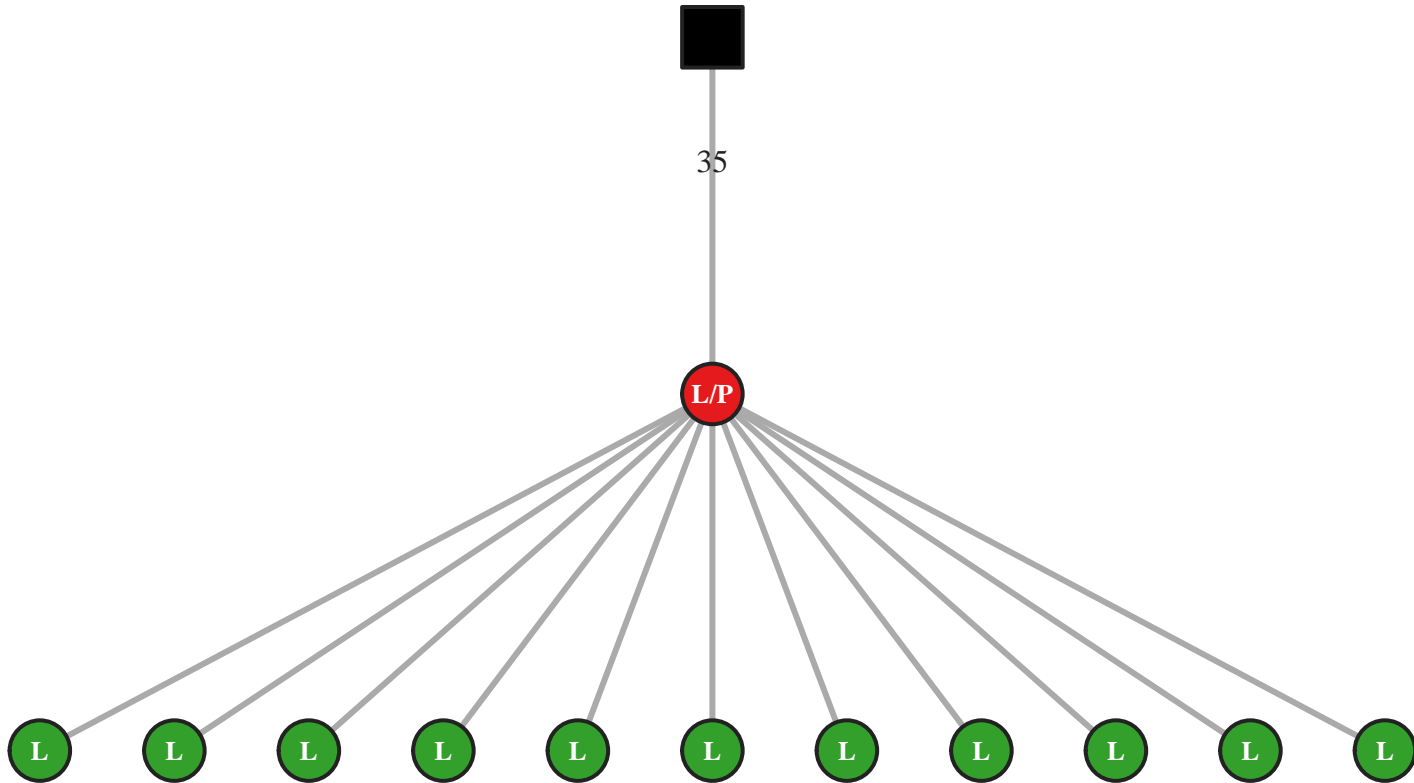
M5 IgG IGHV3-9/J4 48bp (9101)



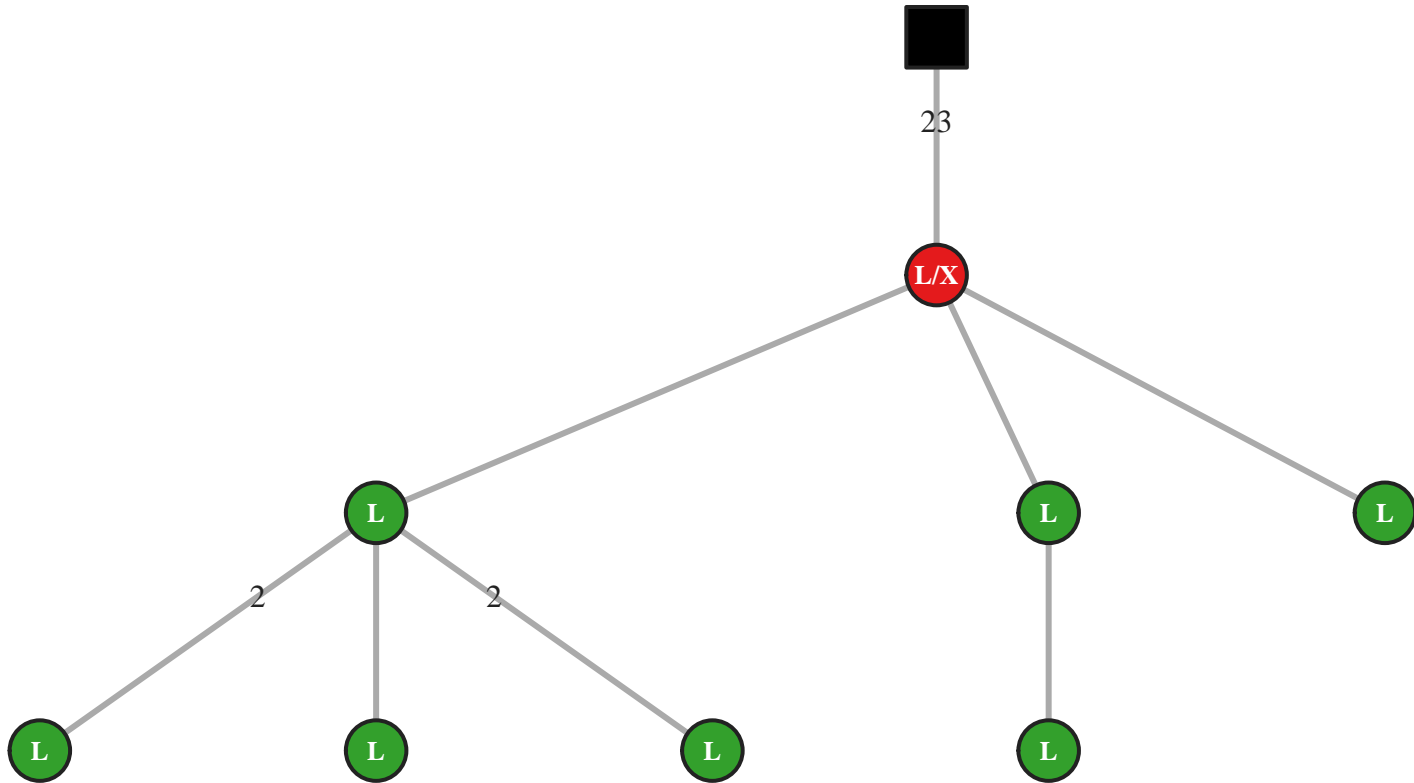
M5 IgG IGHV3-9/J4 48bp (9102)



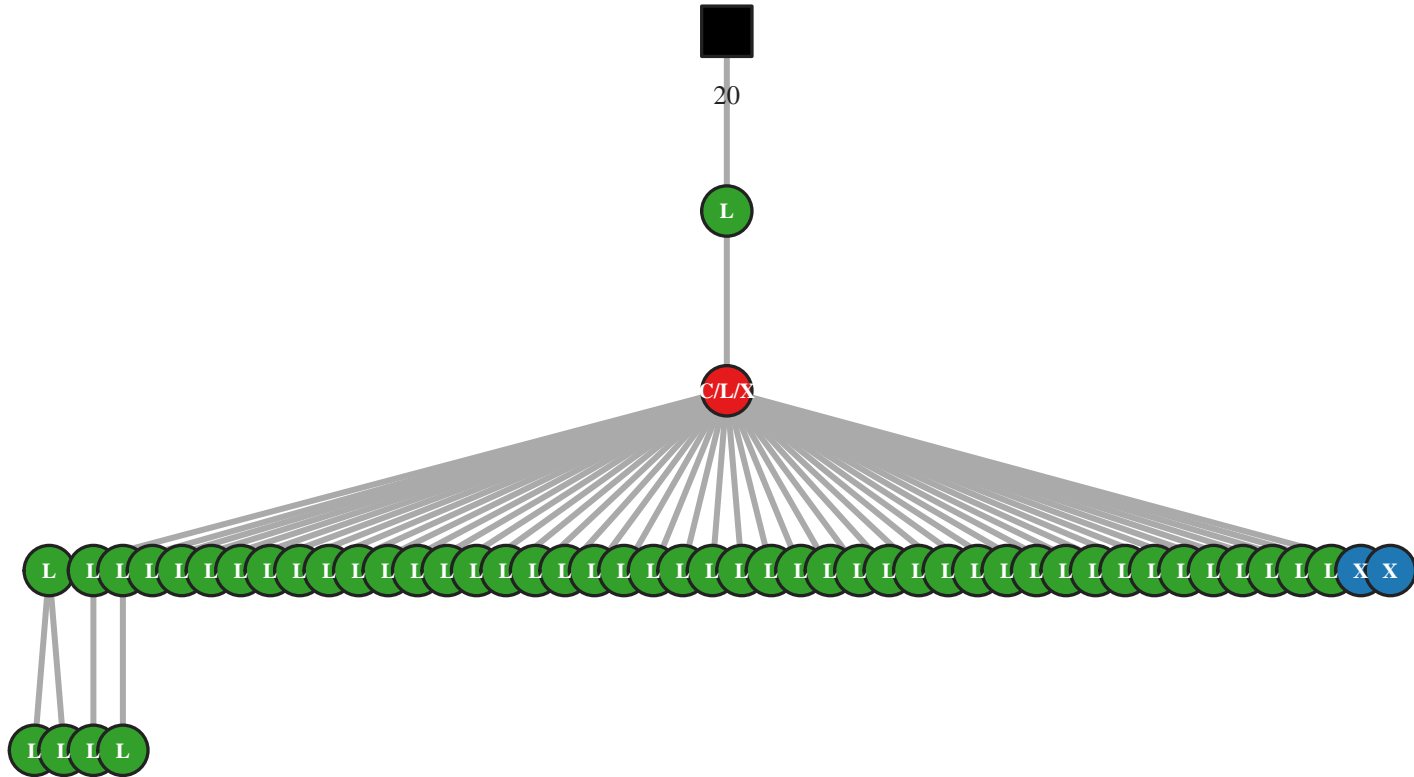
M5 IgG IGHV3-9/J4 48bp (9103)



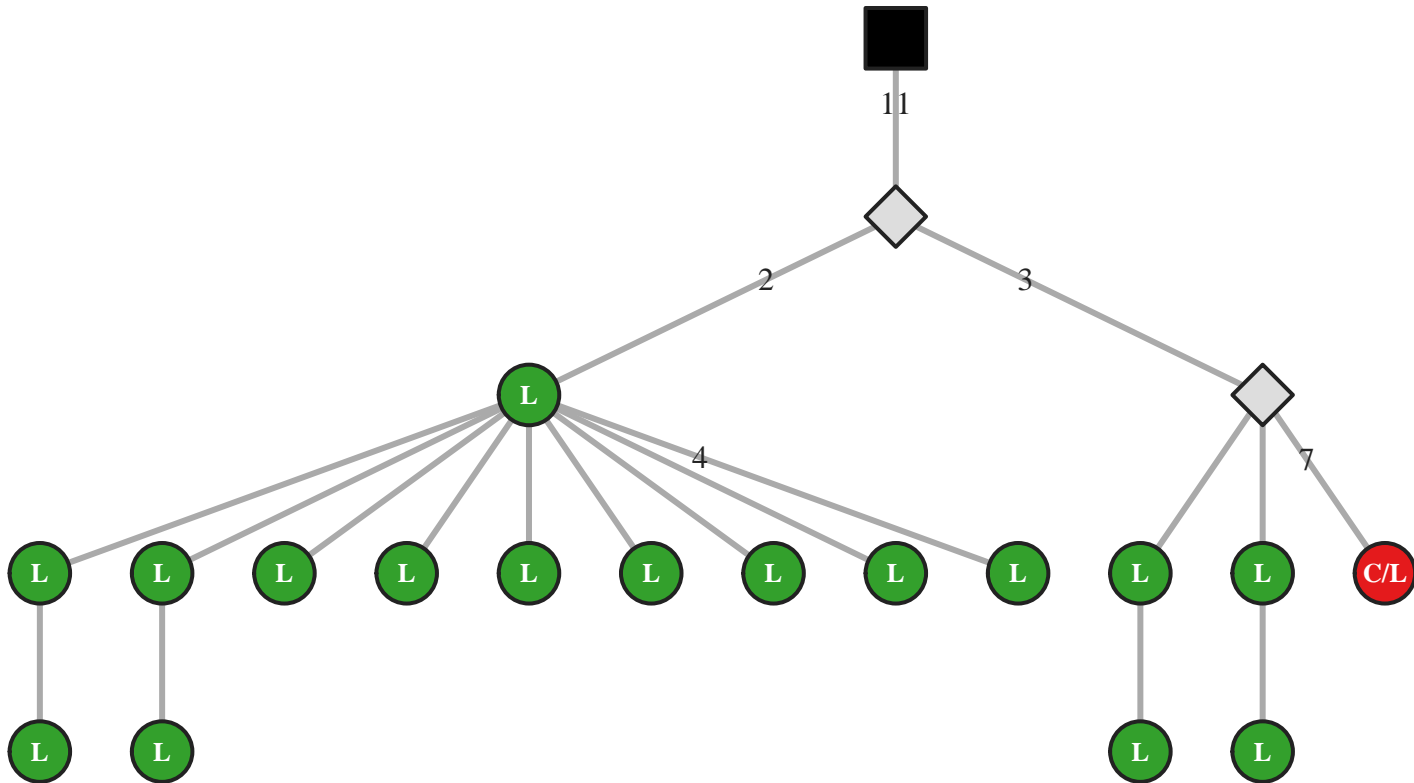
M5 IgG IGHV3-9/J4 48bp (9144)



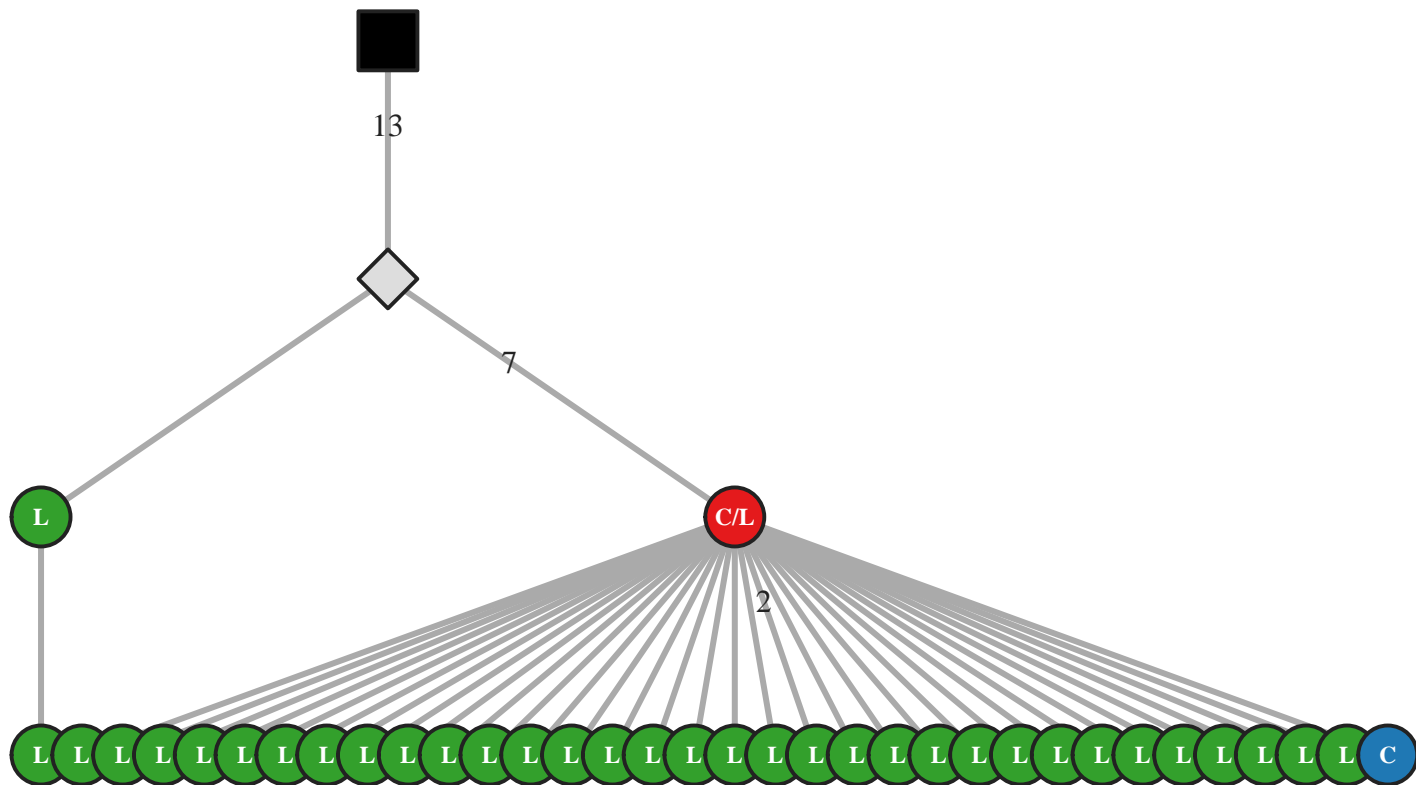
M5 IgG IGHV3-9/J4 48bp (9154)



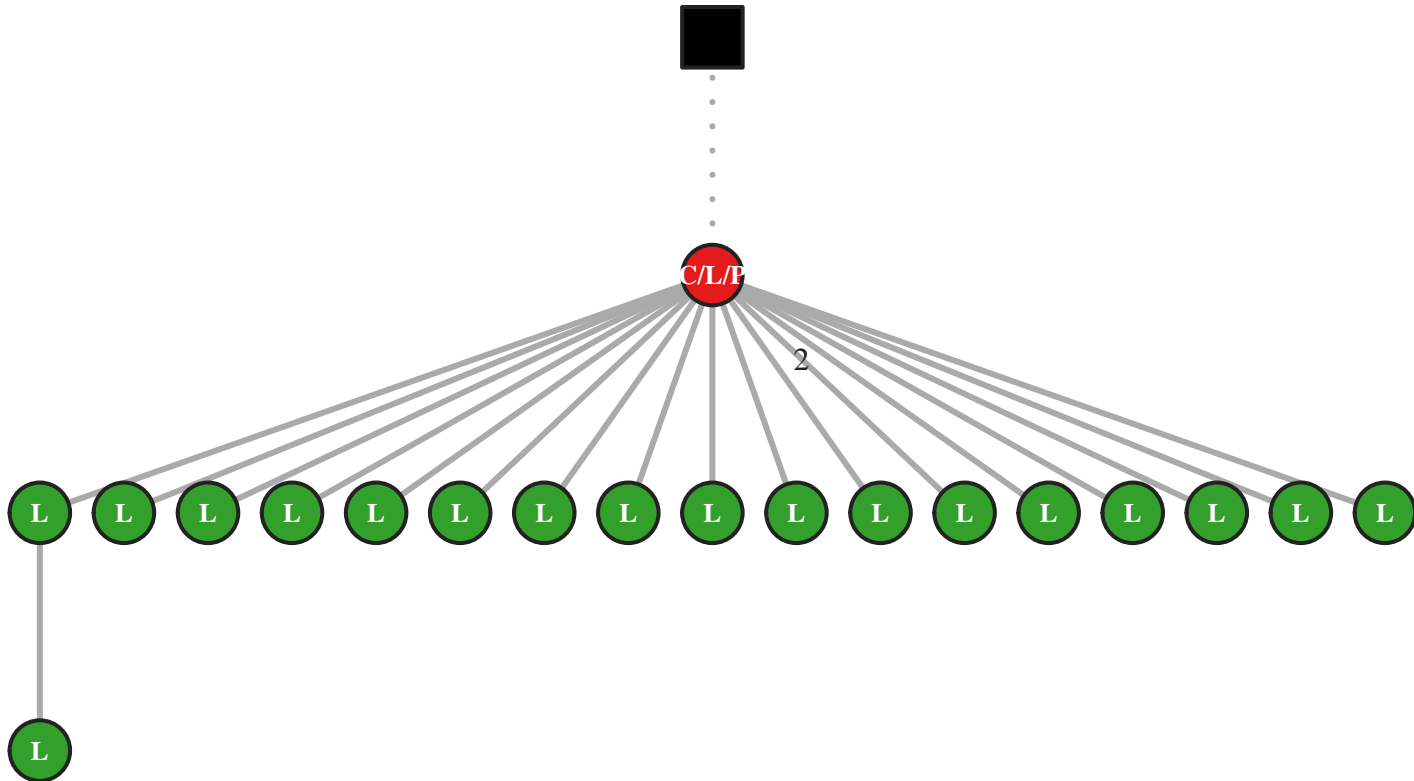
M5 IgG IGHV3-9/J4 51bp (27510)



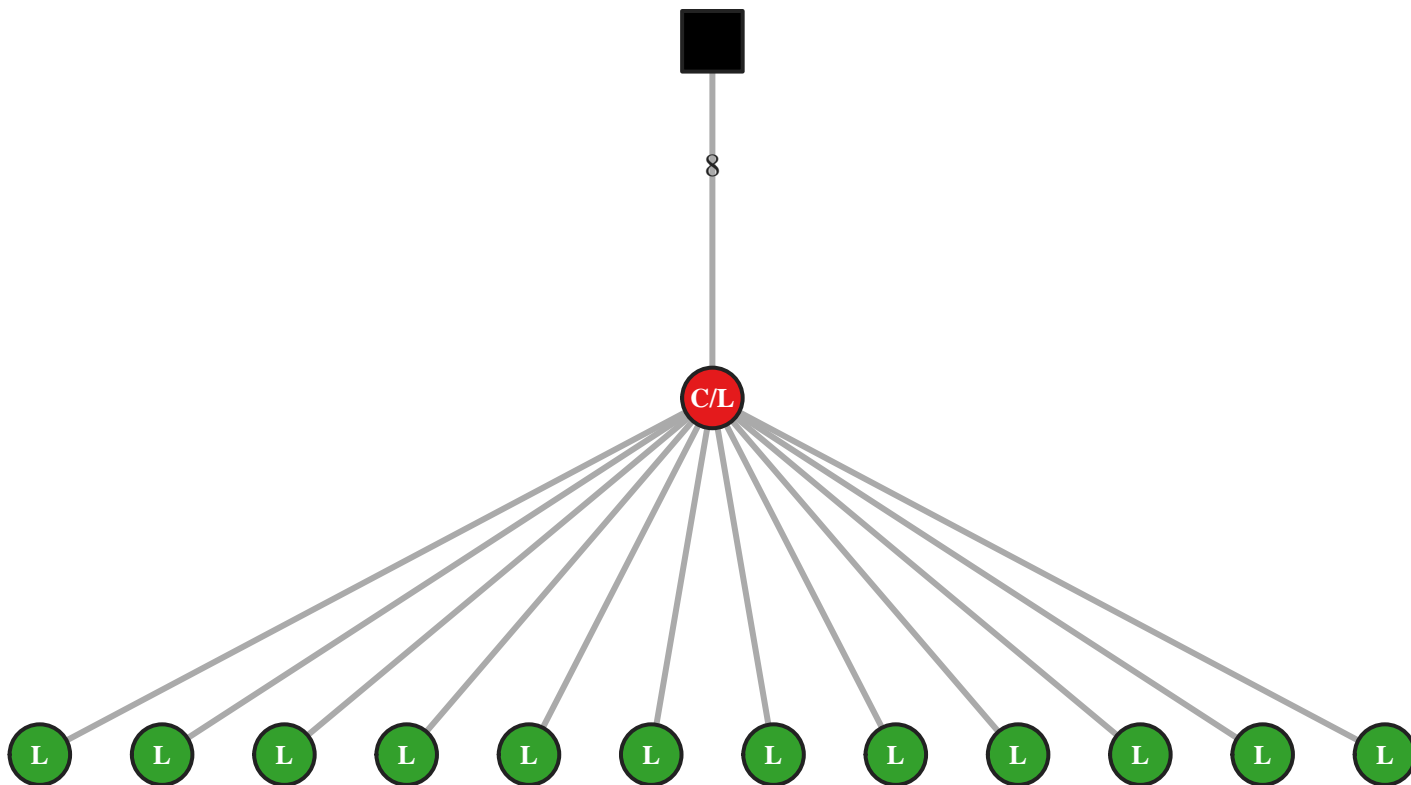
M5 IgG IGHV3-9/J4 51bp (27515)



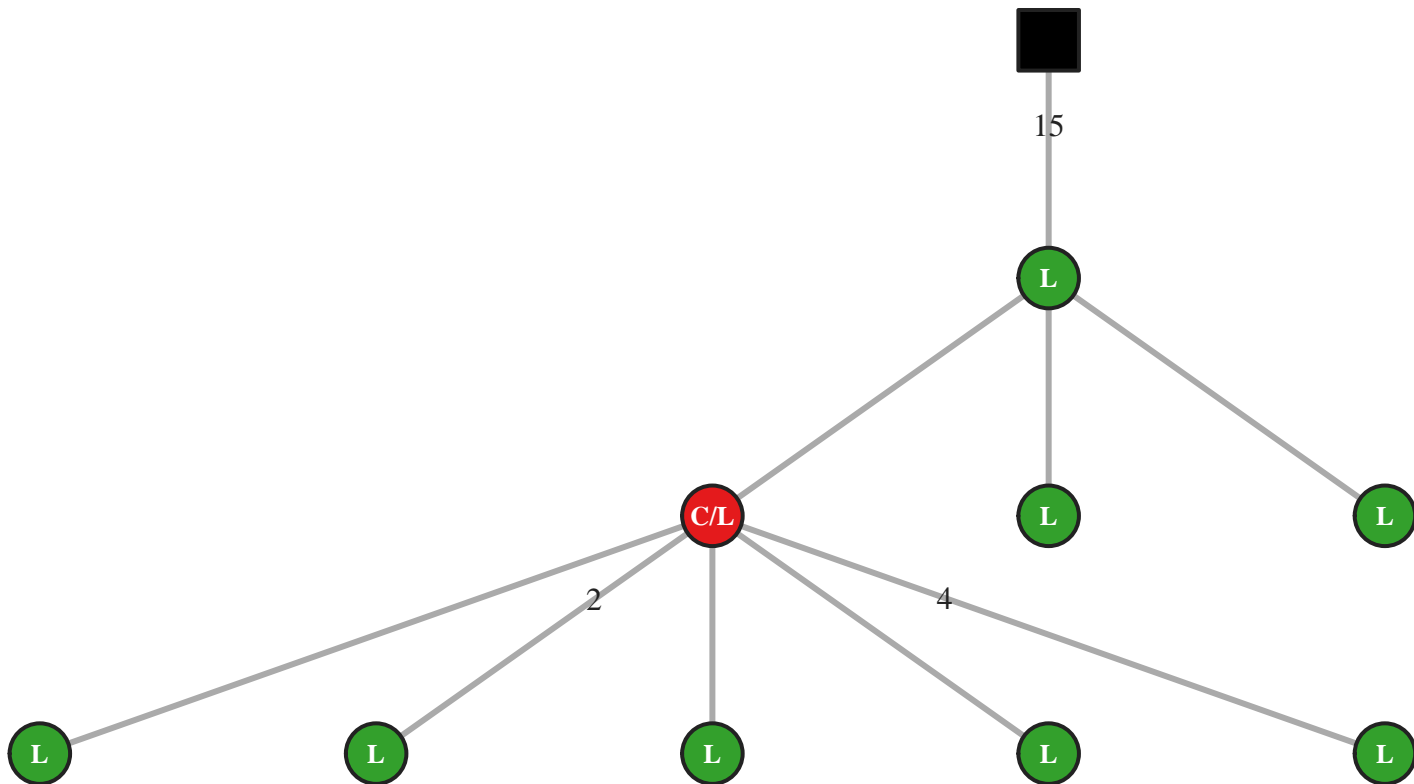
M5 IgG IGHV3-9/J4 54bp (45858)



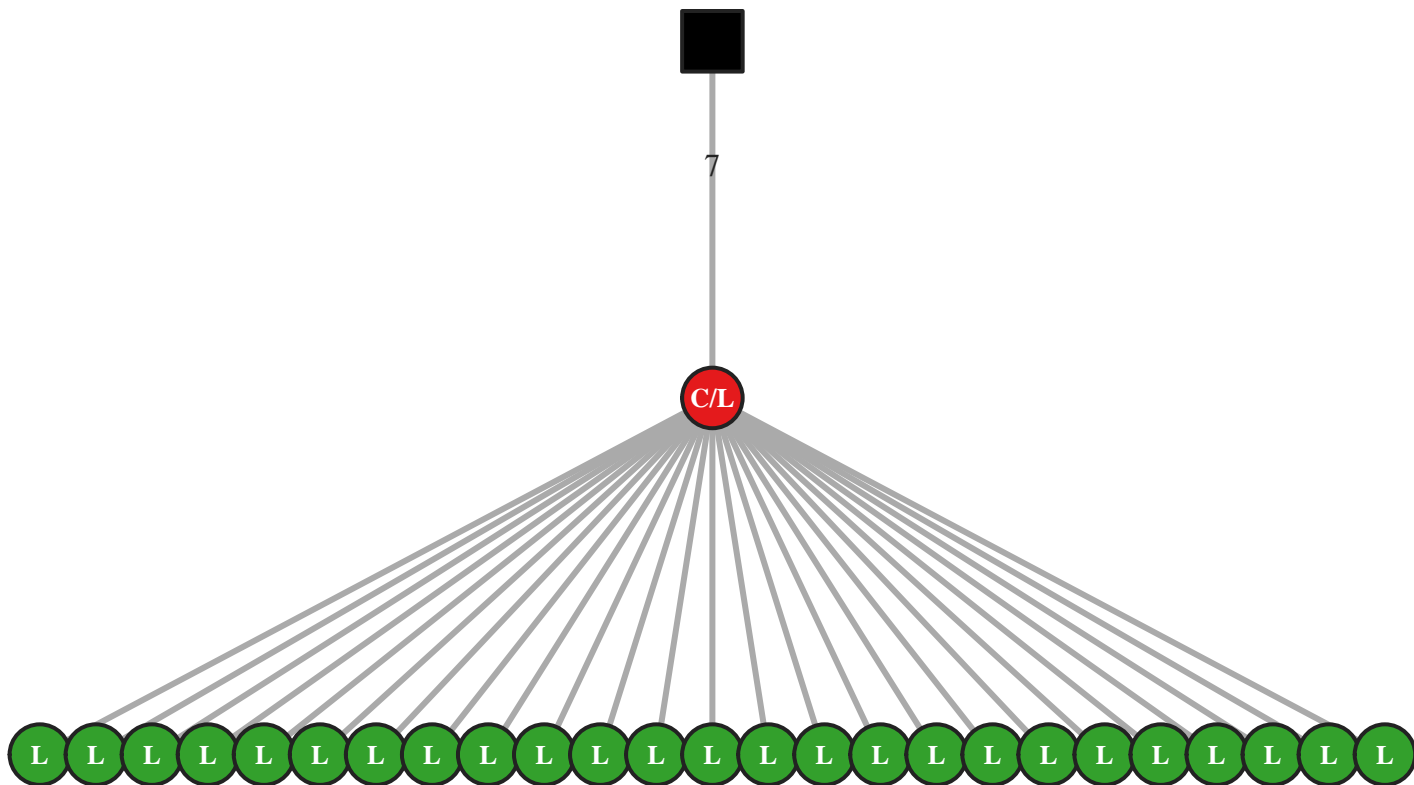
M5 IgG IGHV3-9/J4 54bp (45869)



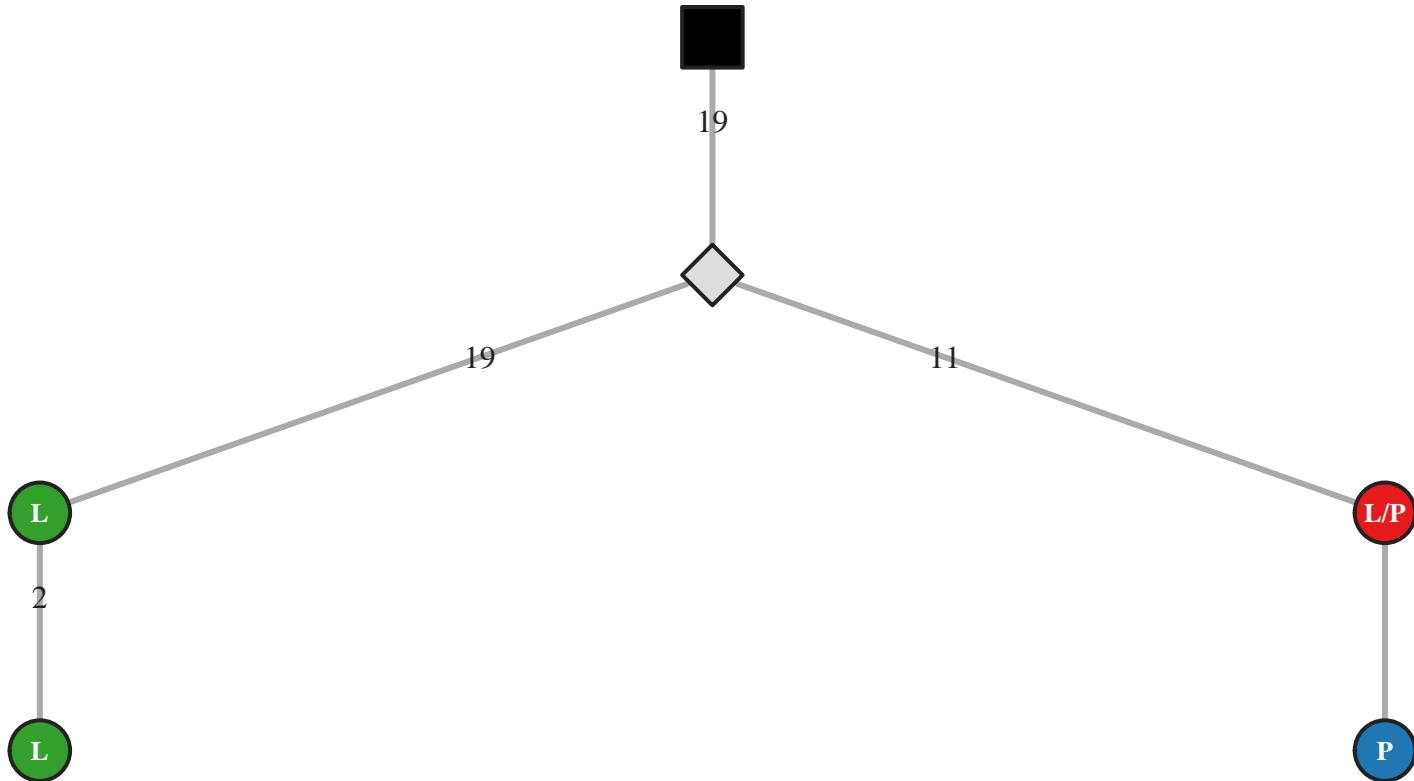
M5 IgG IGHV3-9/J4 54bp (45882)



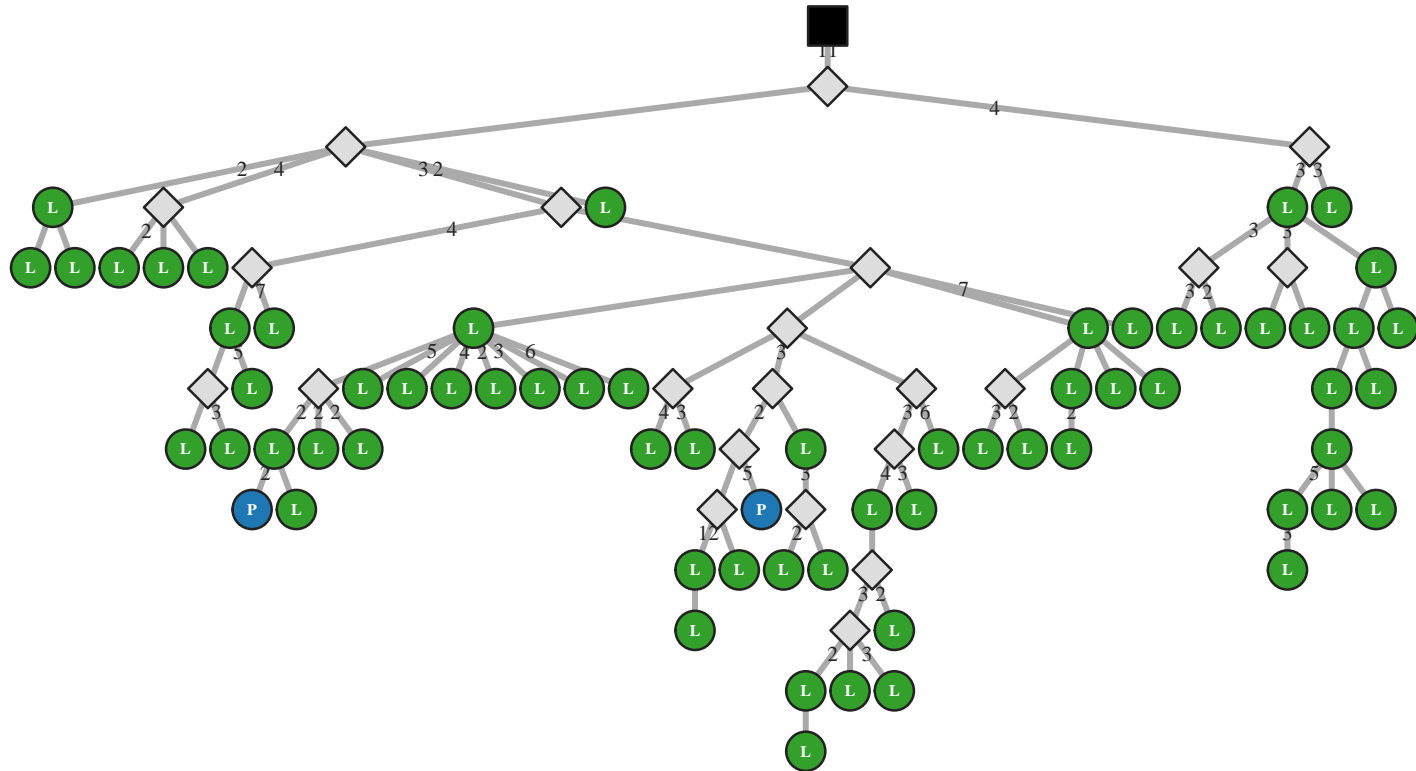
M5 IgG IGHV3-9/J4 54bp (45954)



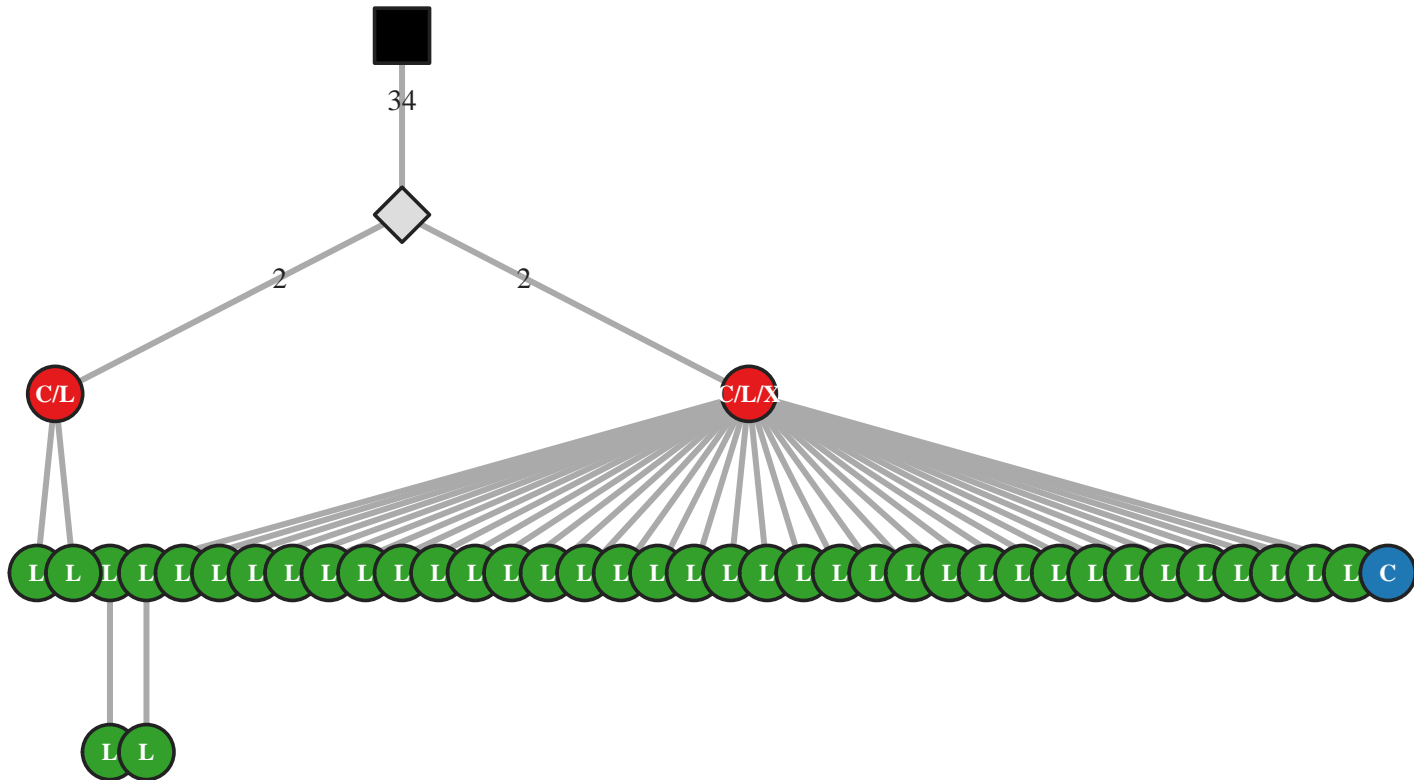
M5 IgG IGHV3-9/J4 60bp (9204)



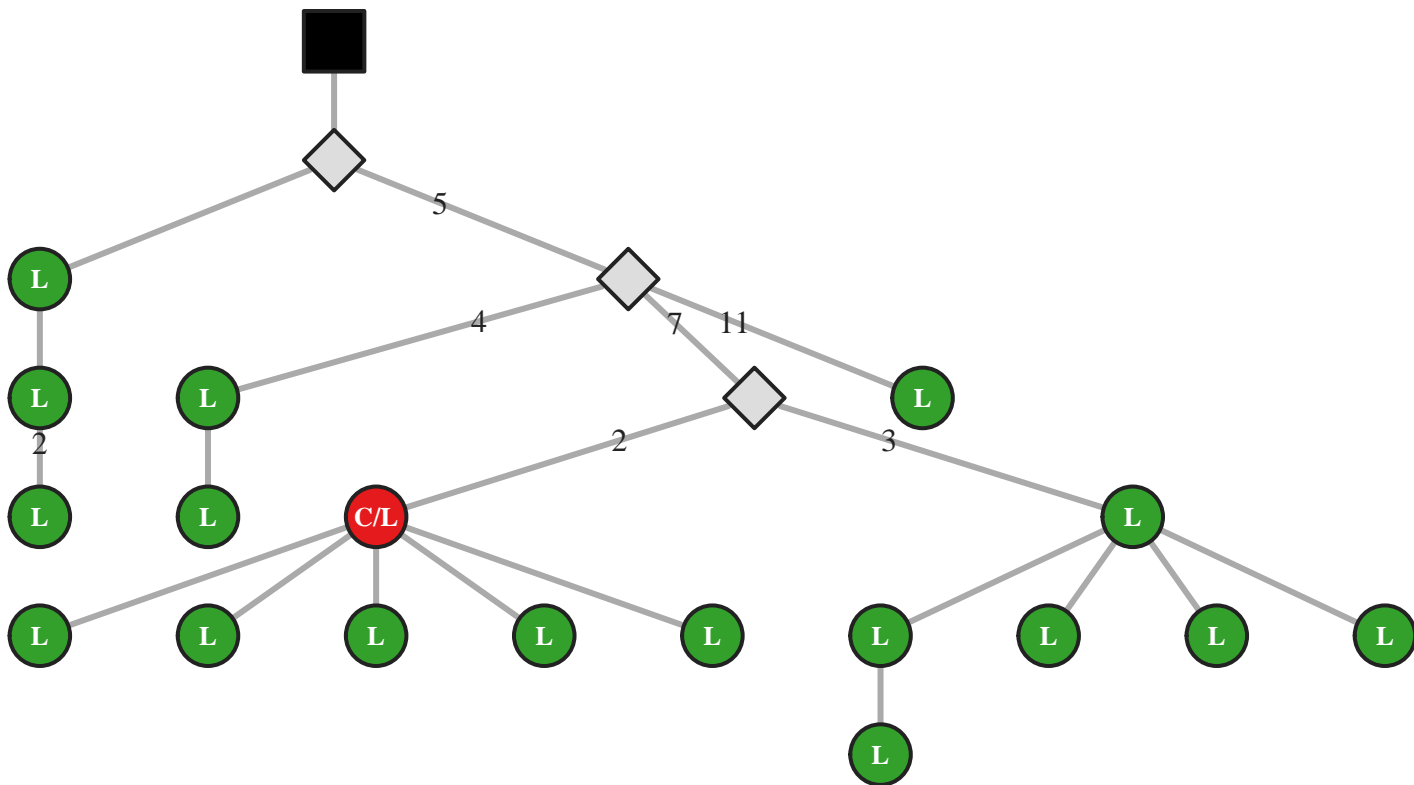
M5 IgG IGHV3-9/J4 60bp (9212)



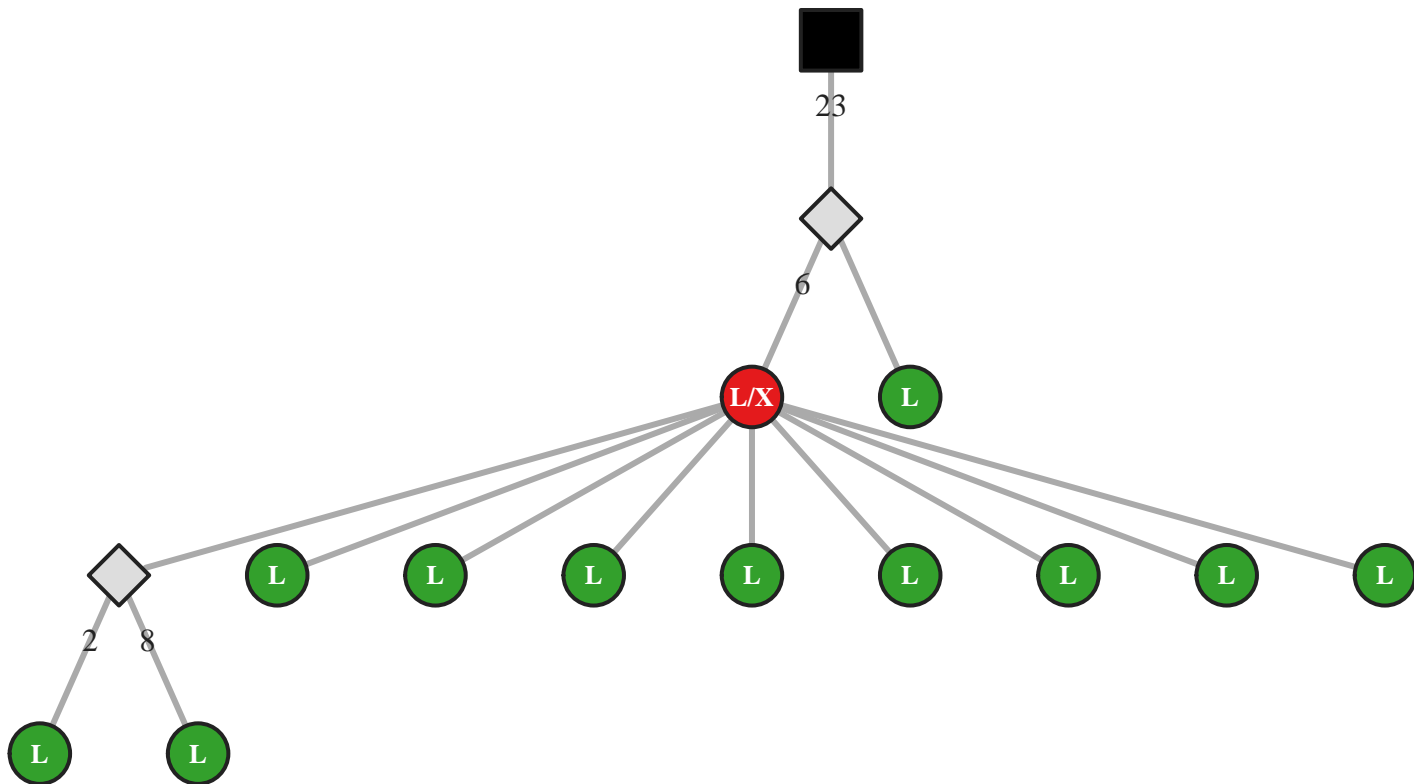
M5 IgG IGHV3-9/J5 48bp (45985)



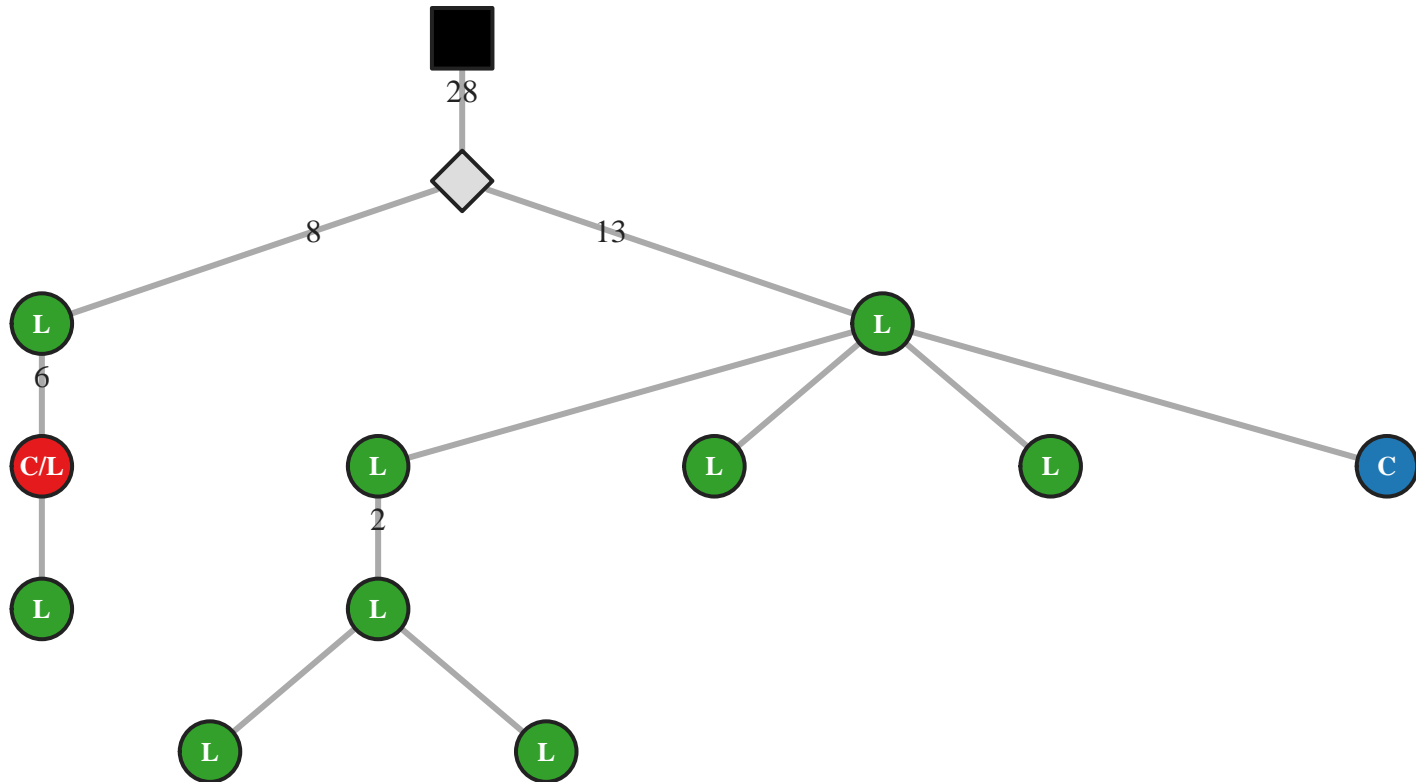
M5 IgG IGHV3-9/J5 51bp (9257)



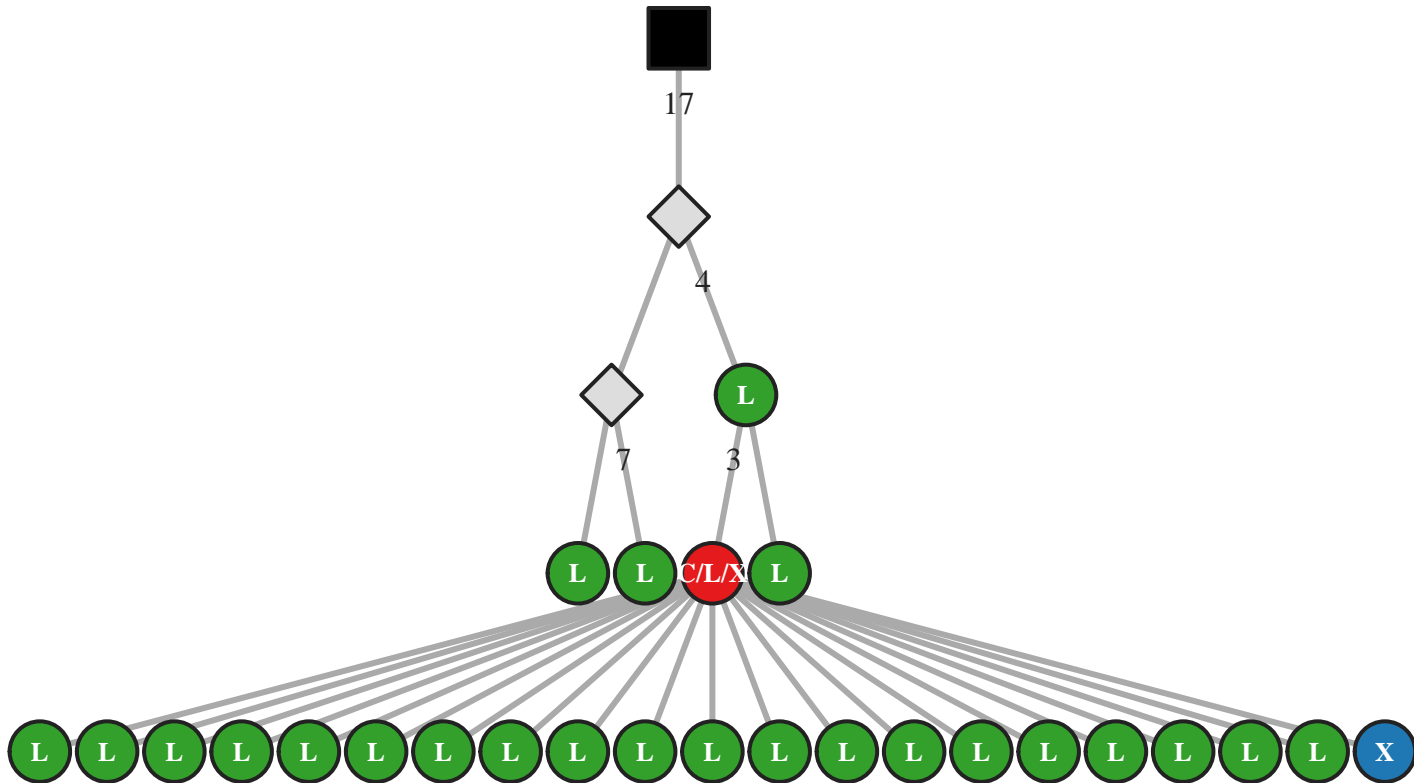
M5 IgG IGHV3-9/J5 54bp (18478)



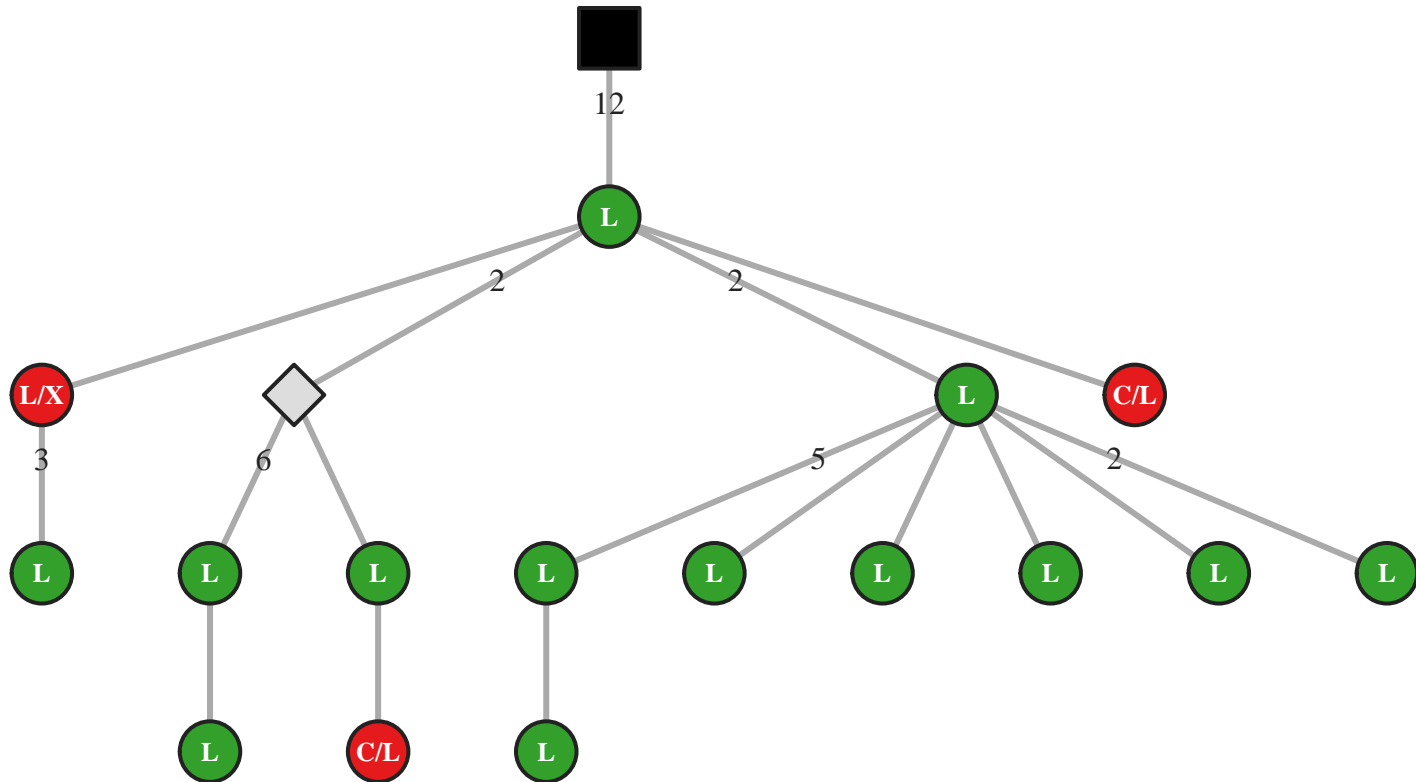
M5 IgG IGHV3-9/J5 54bp (18483)



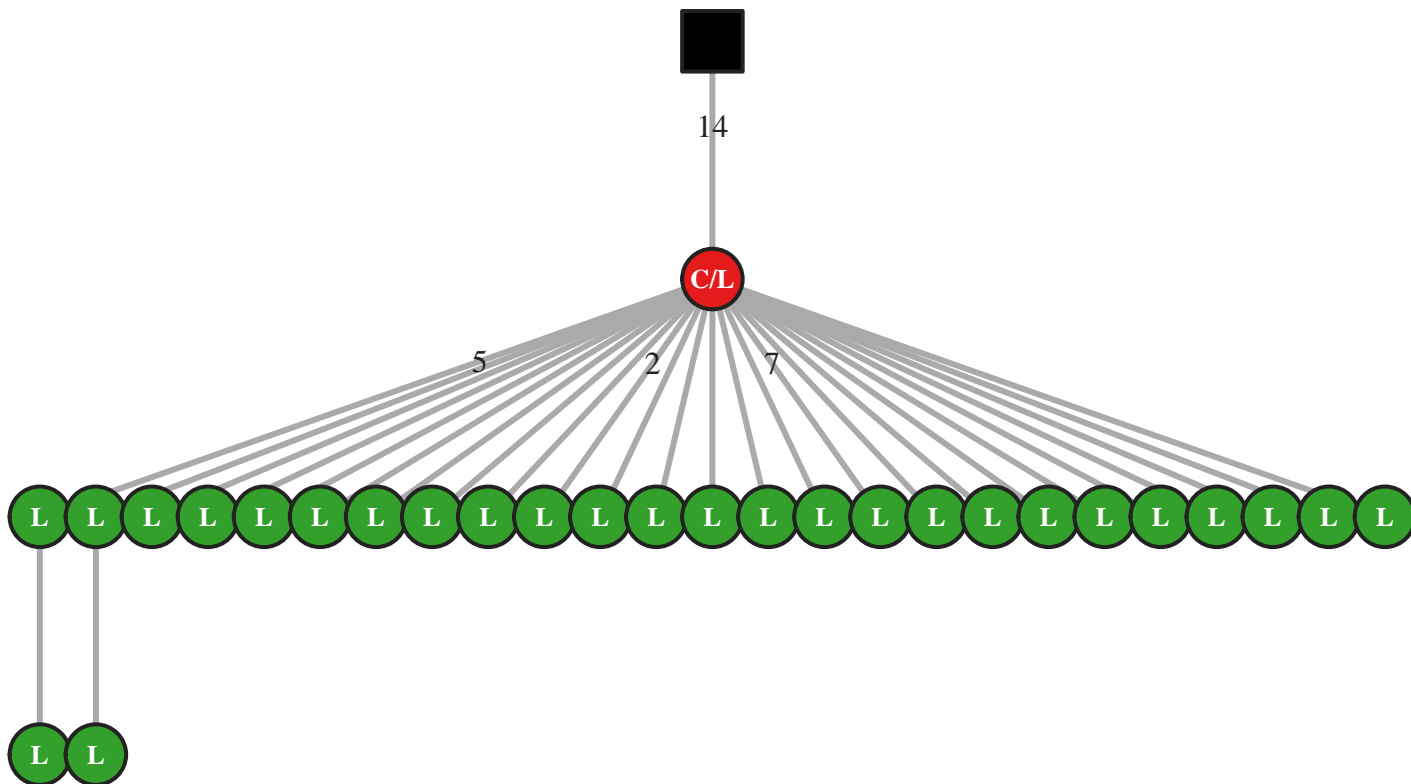
M5 IgG IGHV3-9/J5 54bp (18488)



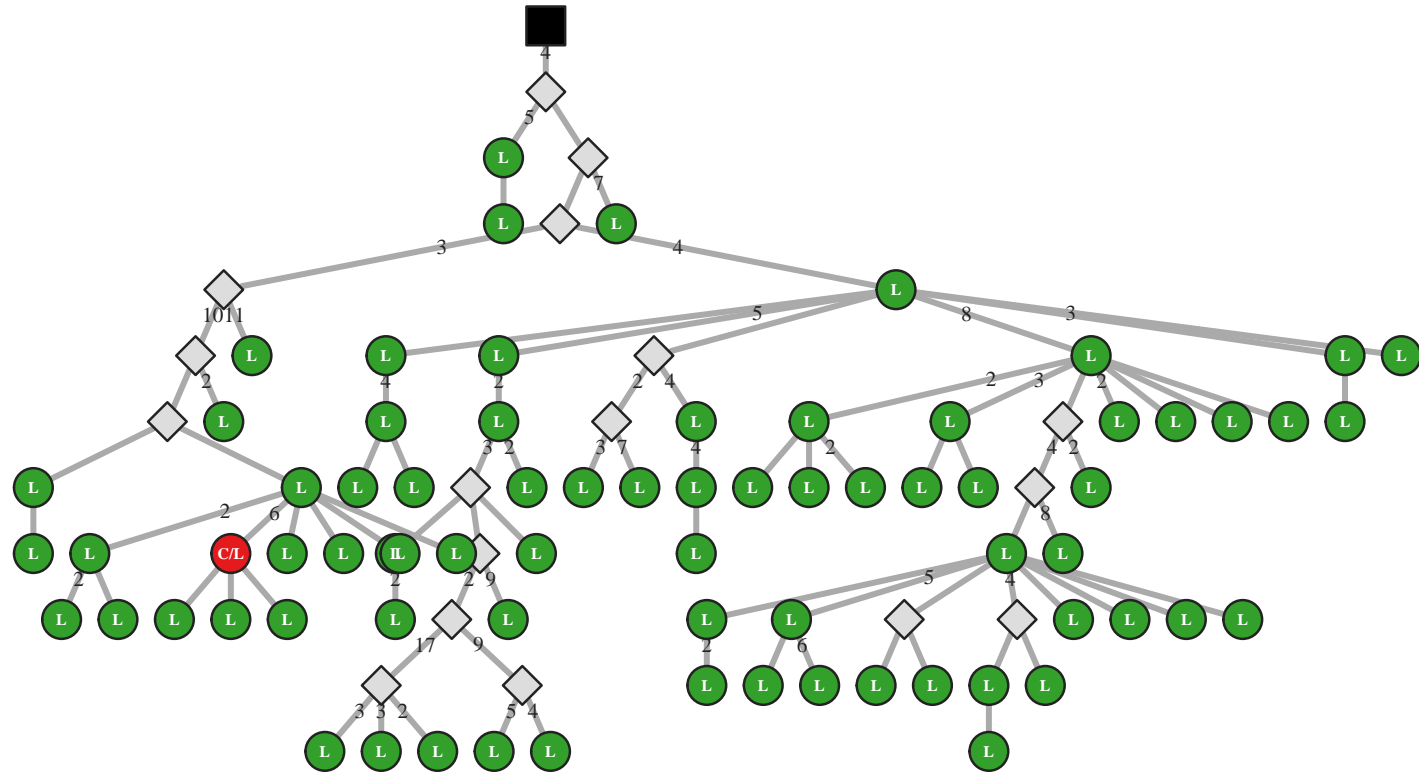
M5 IgG IGHV3-9/J6 42bp (9293)



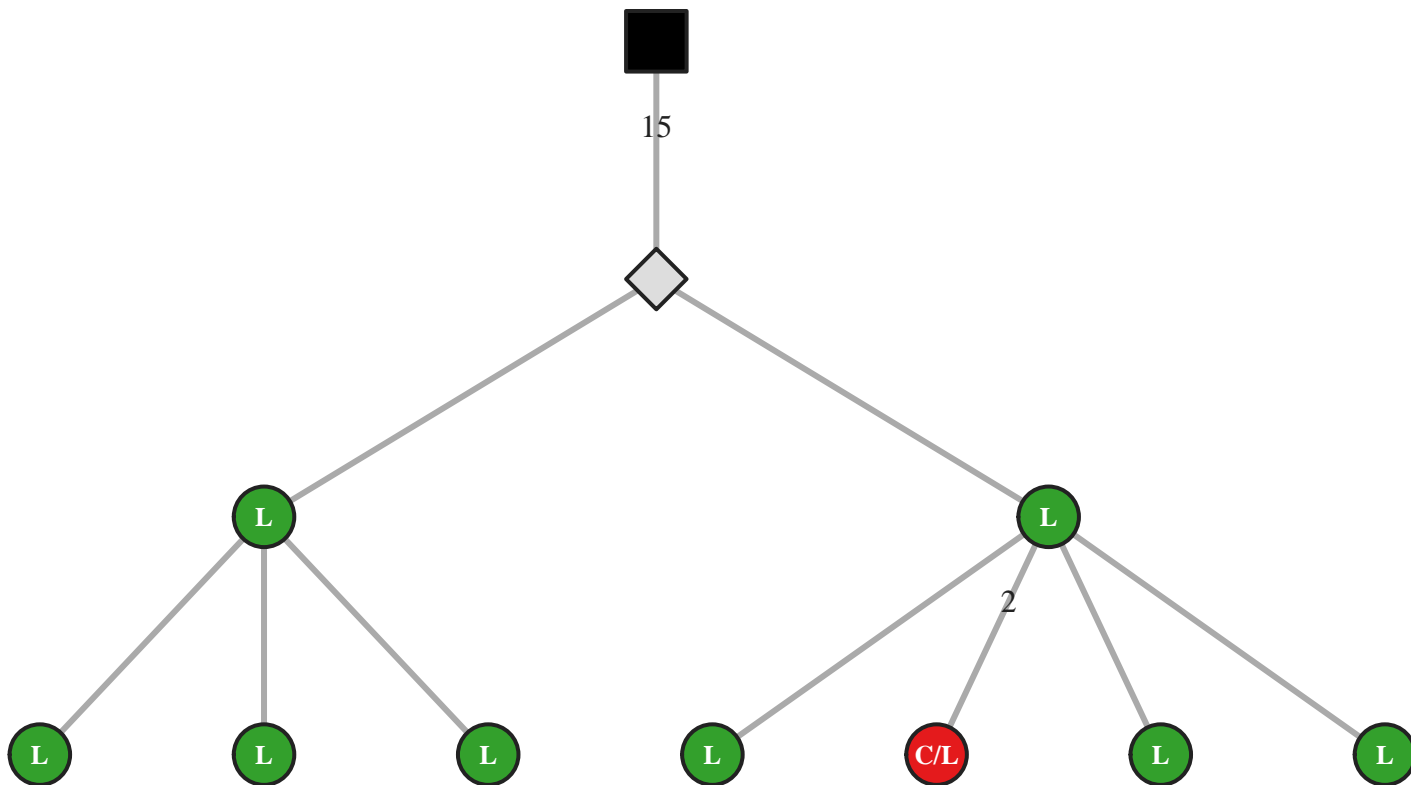
M5 IgG IGHV3-9/J6 48bp (52538)



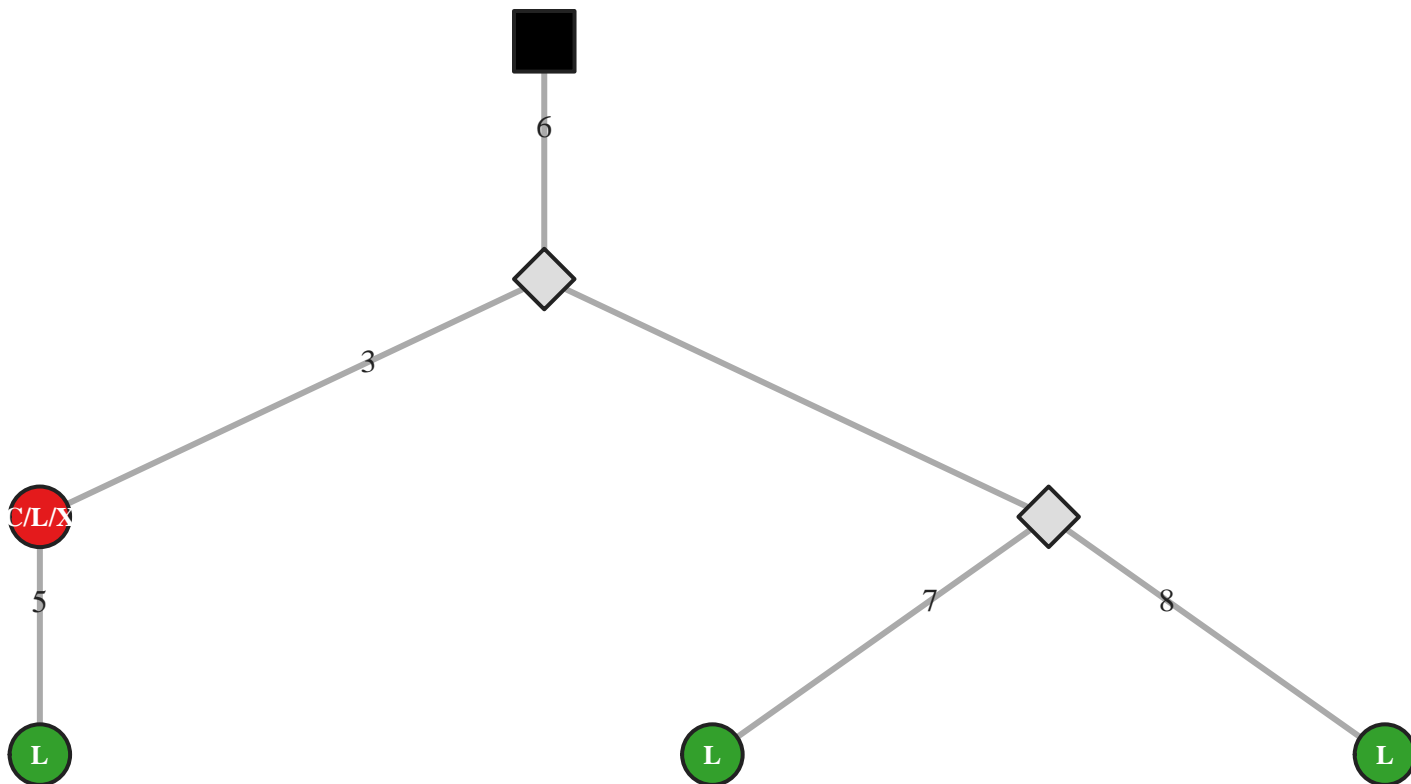
M5 IgG IGHV3-9/J6 51bp (46004)



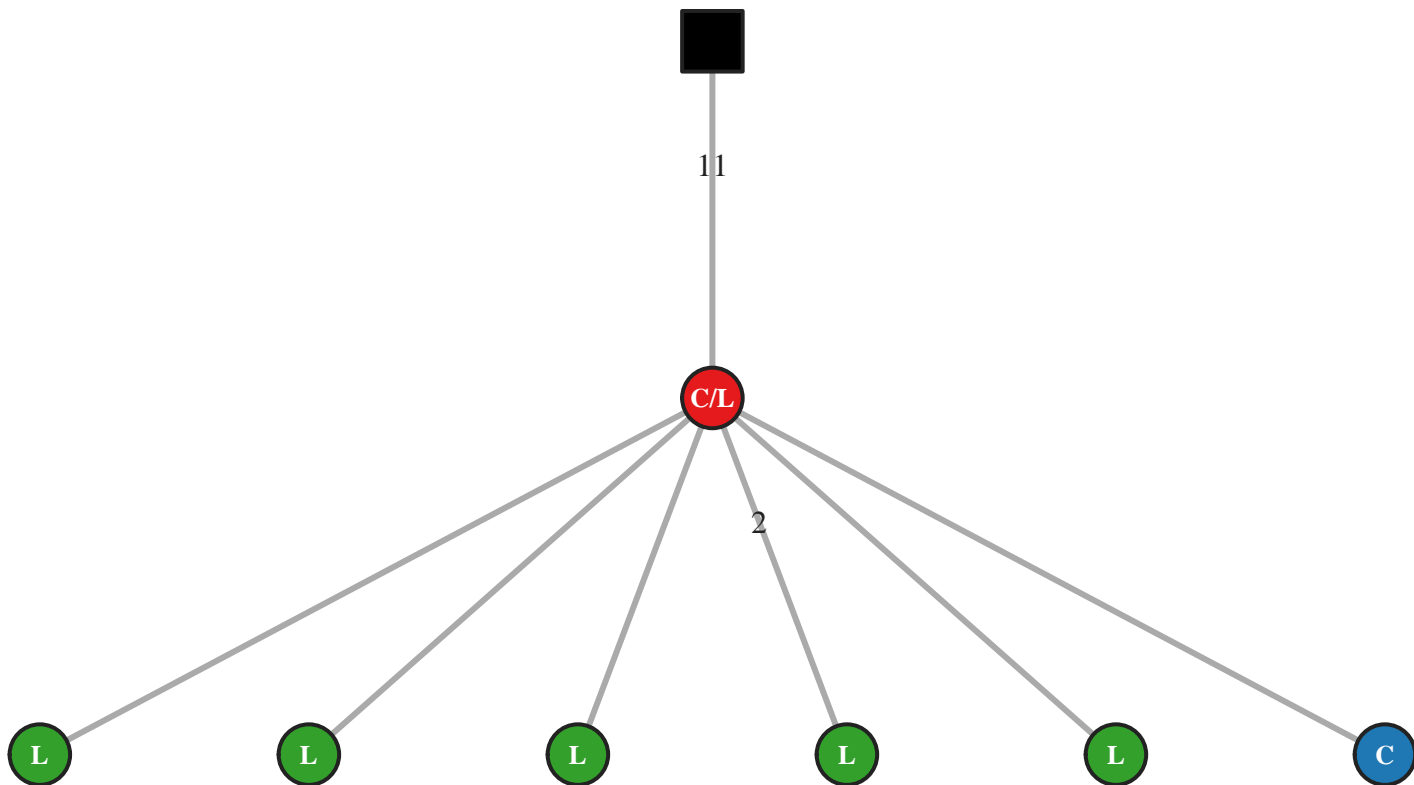
M5 IgG IGHV3-9/J6 57bp (18558)



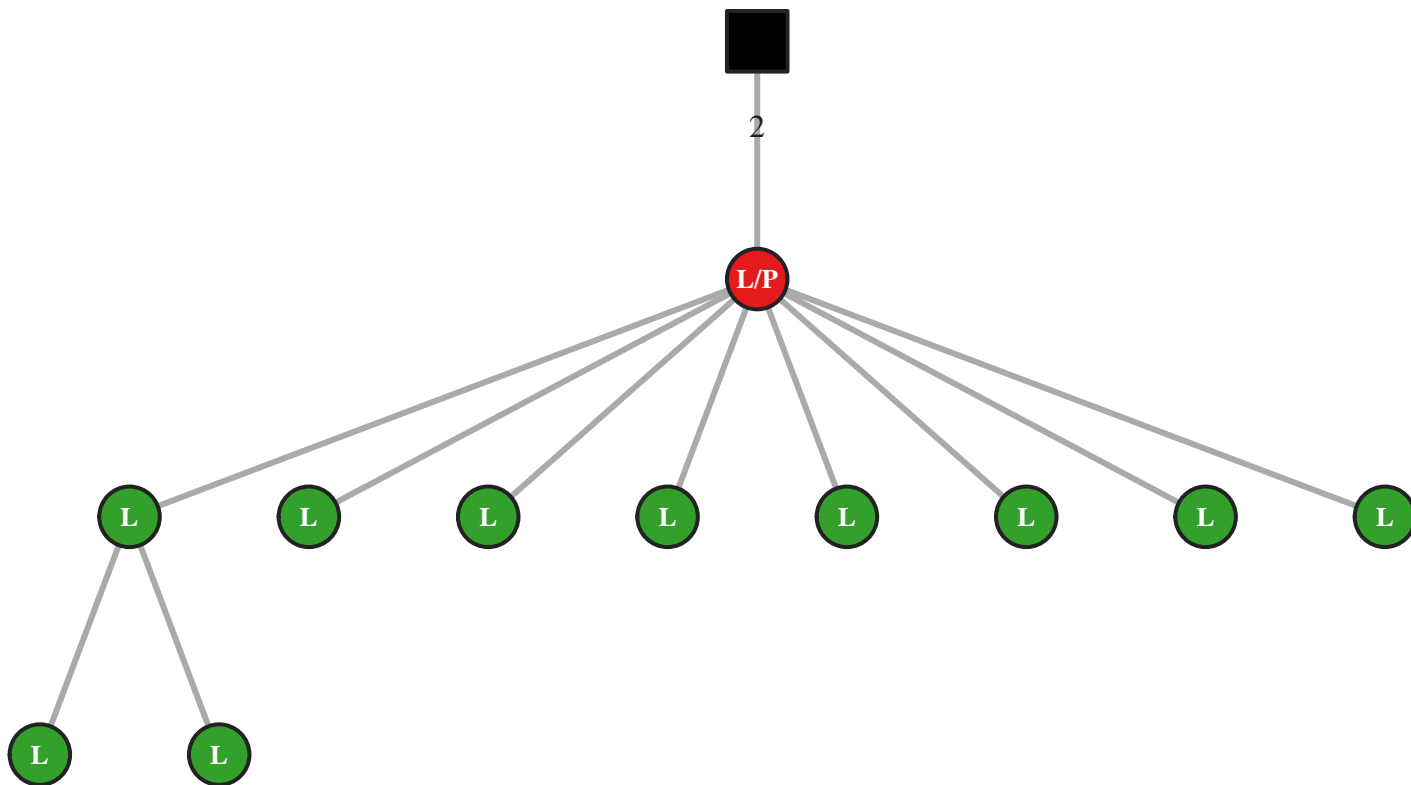
M5 IgG IGHV3-9/J6 57bp (18592)



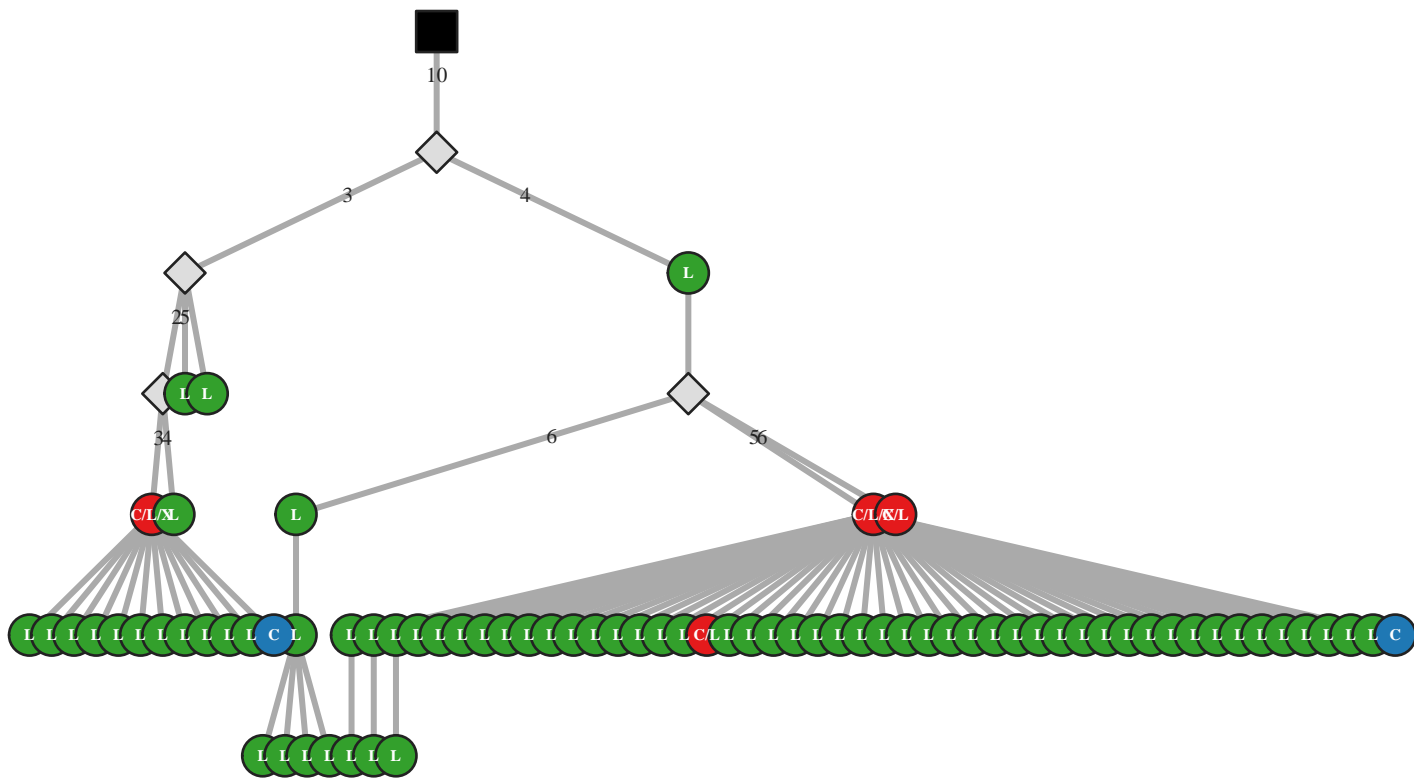
M5 IgG IGHV3-9/J6 60bp (18609)



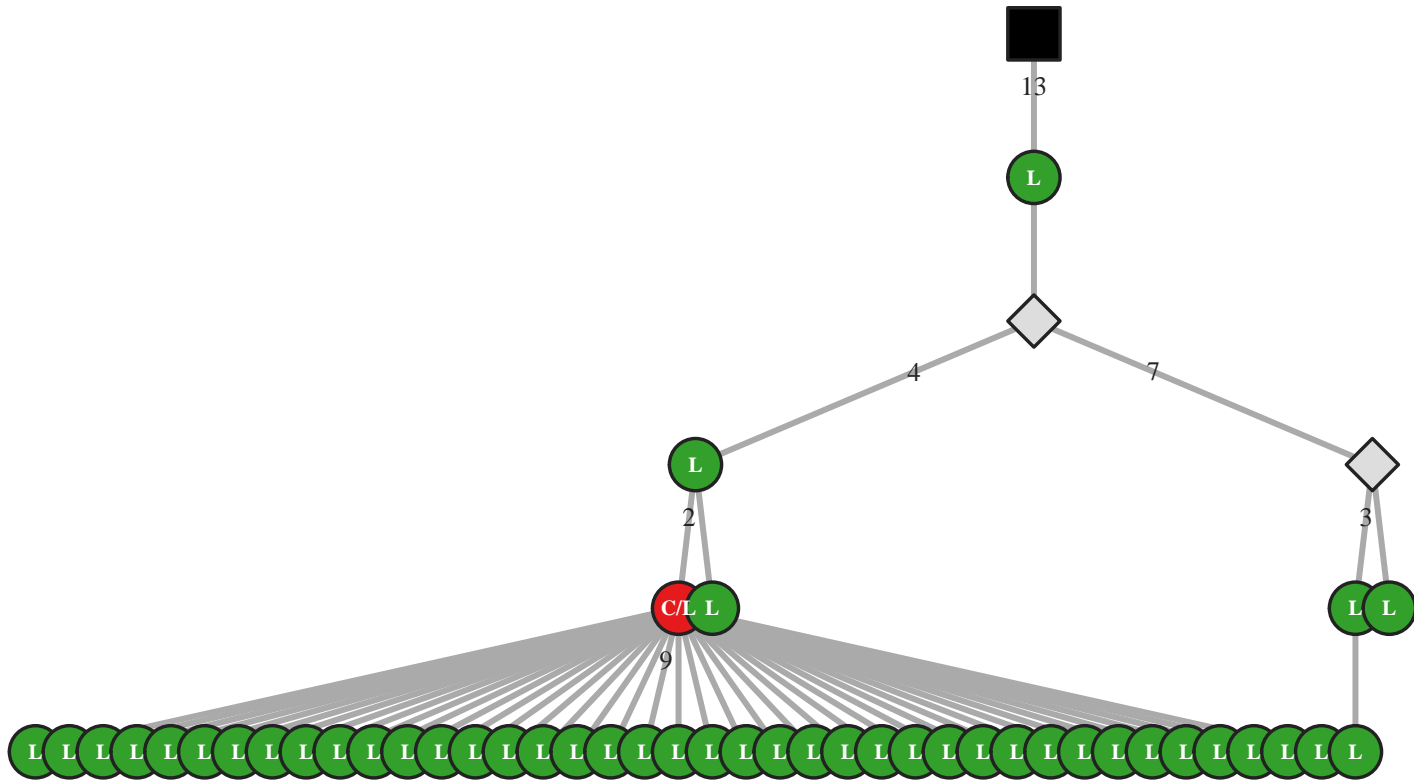
M5 IgG IGHV3-9/J6 60bp (18618)



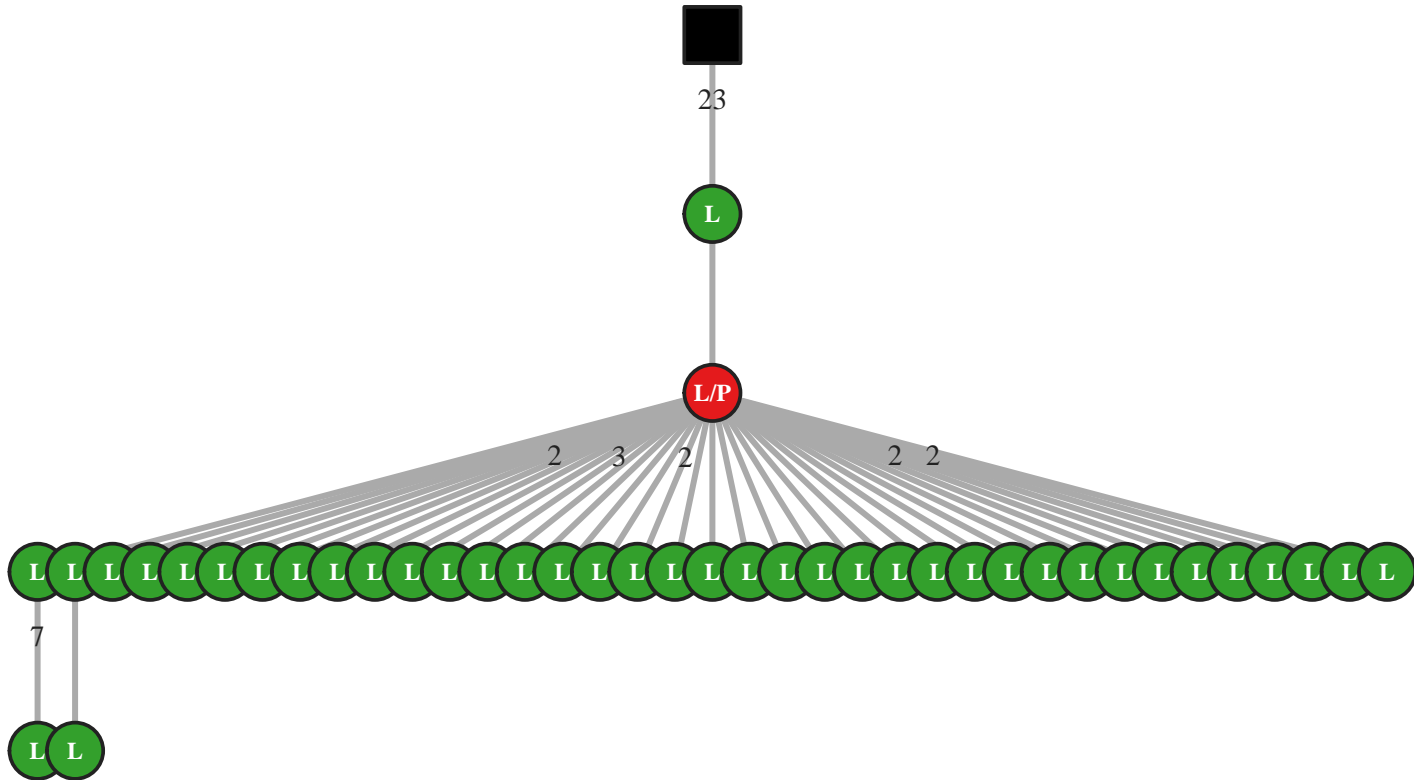
M5 IgG IGHV3-9/J6 60bp (18630)



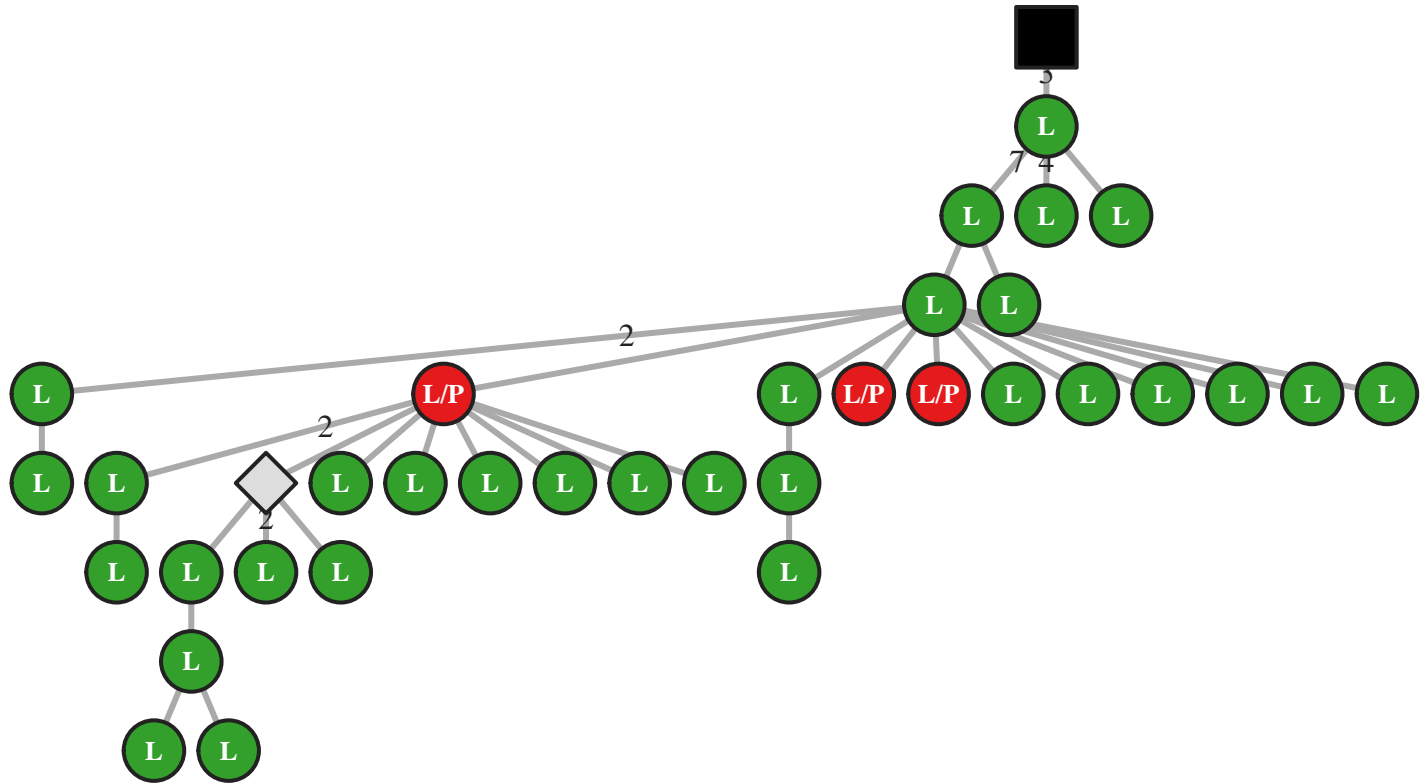
M5 IgG IGHV3-9/J6 63bp (35871)



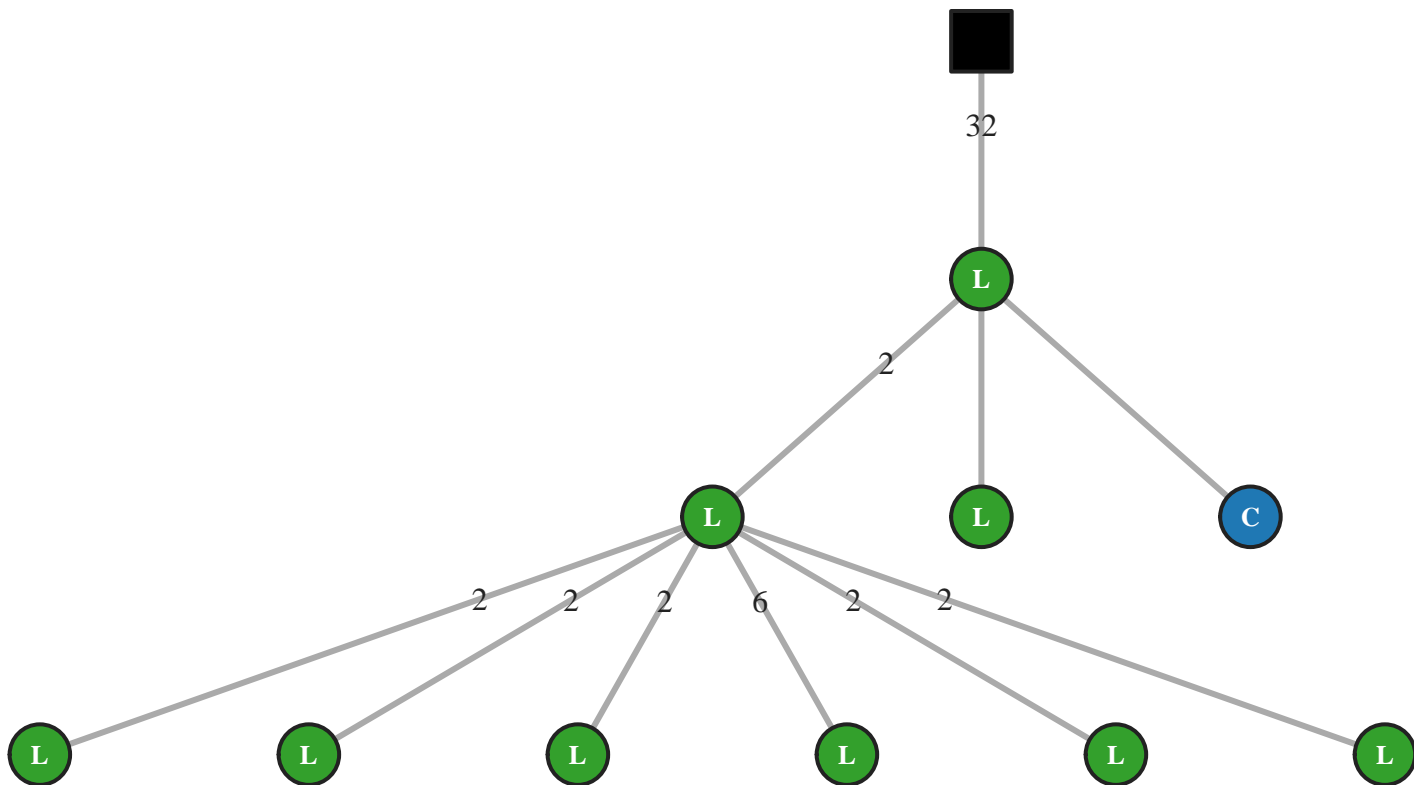
M5 IgG IGHV3-9/J6 72bp (18649)



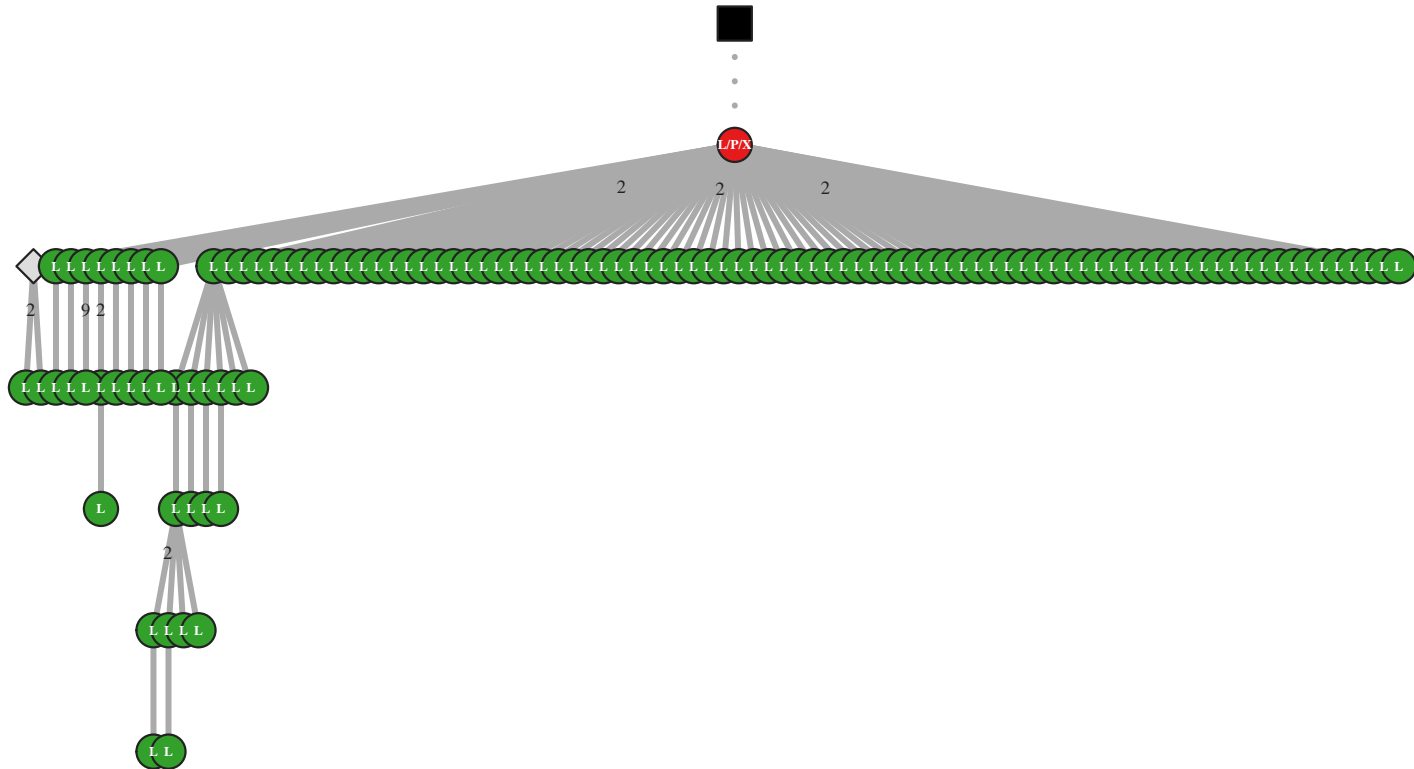
M5 IgG IGHV3-9/J6 72bp (18662)



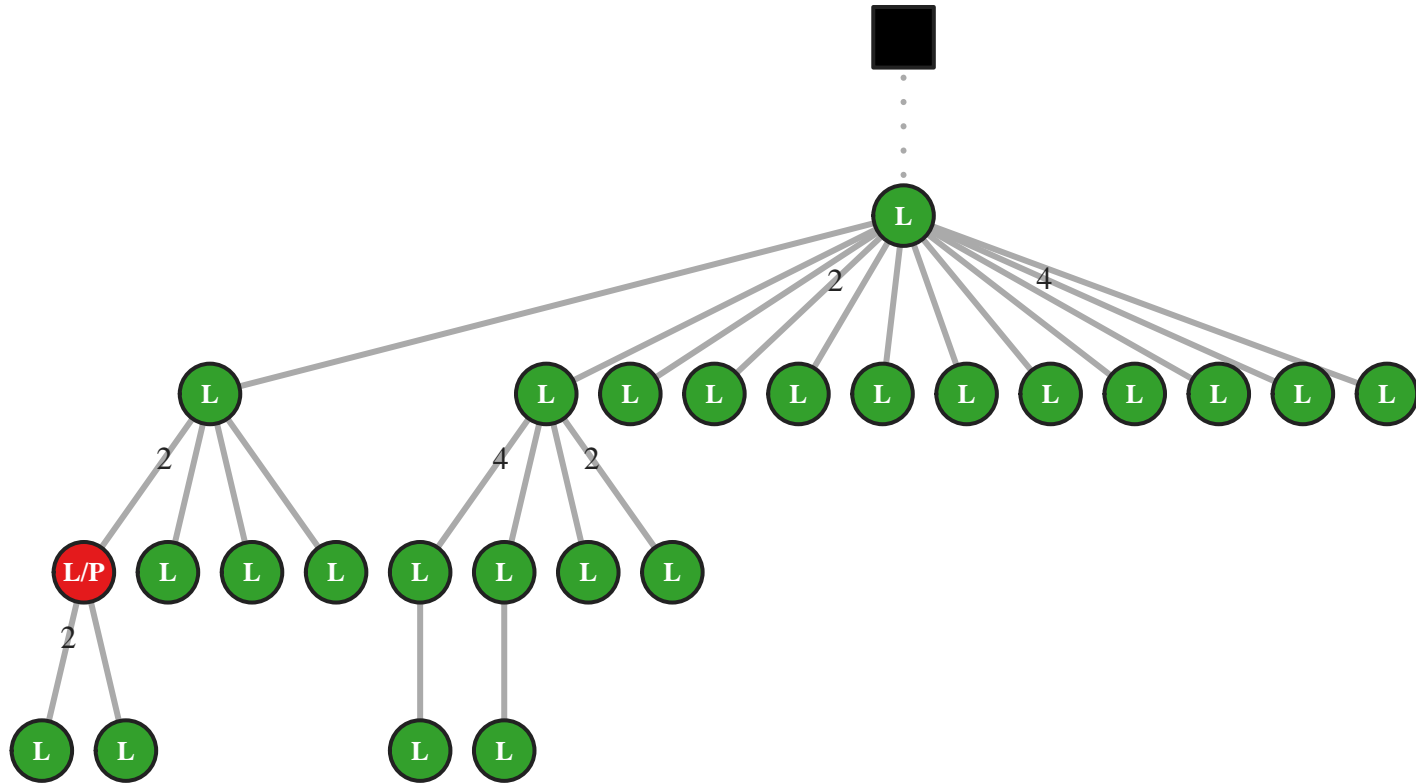
M5 IgG IGHV3/J4 54bp (18666)



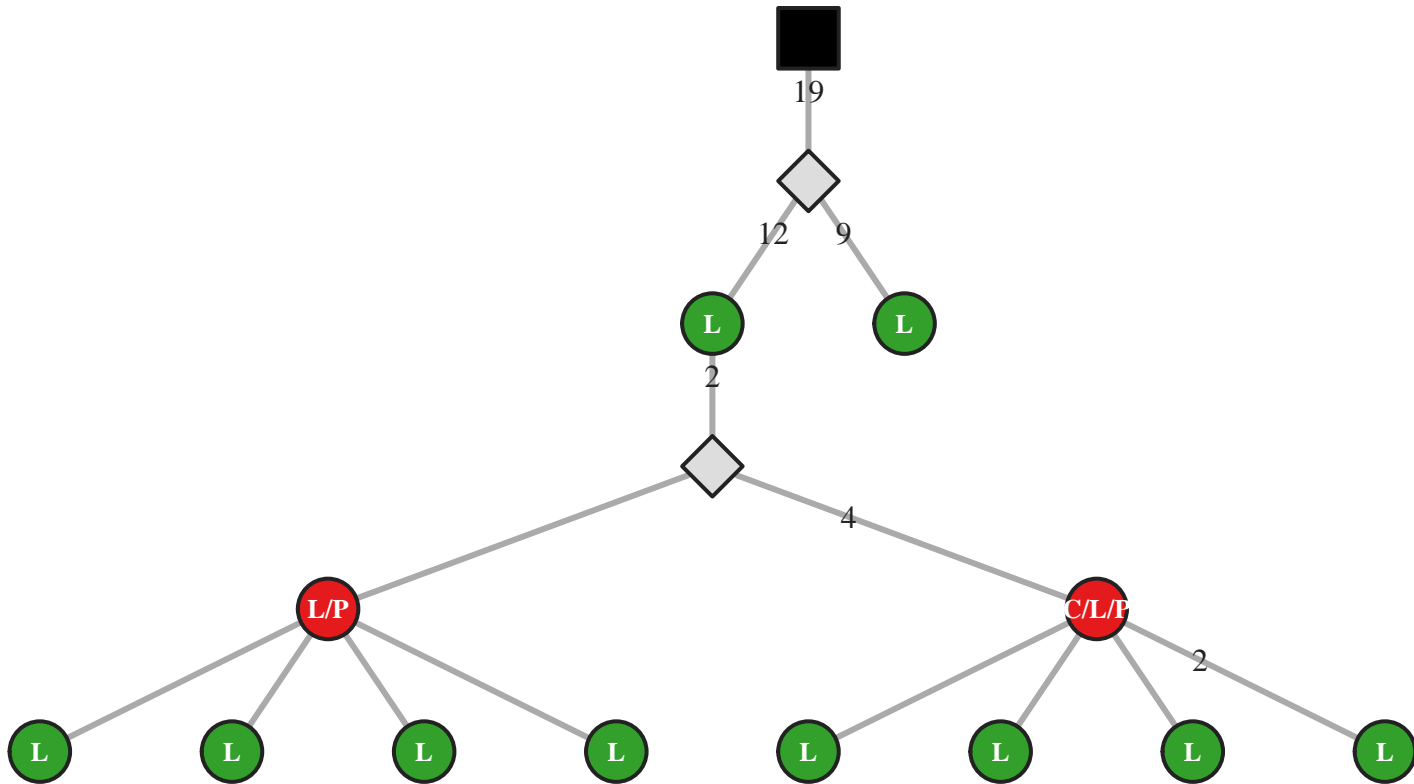
M5 IgG IGHV4-30-2/J3 45bp (9315)



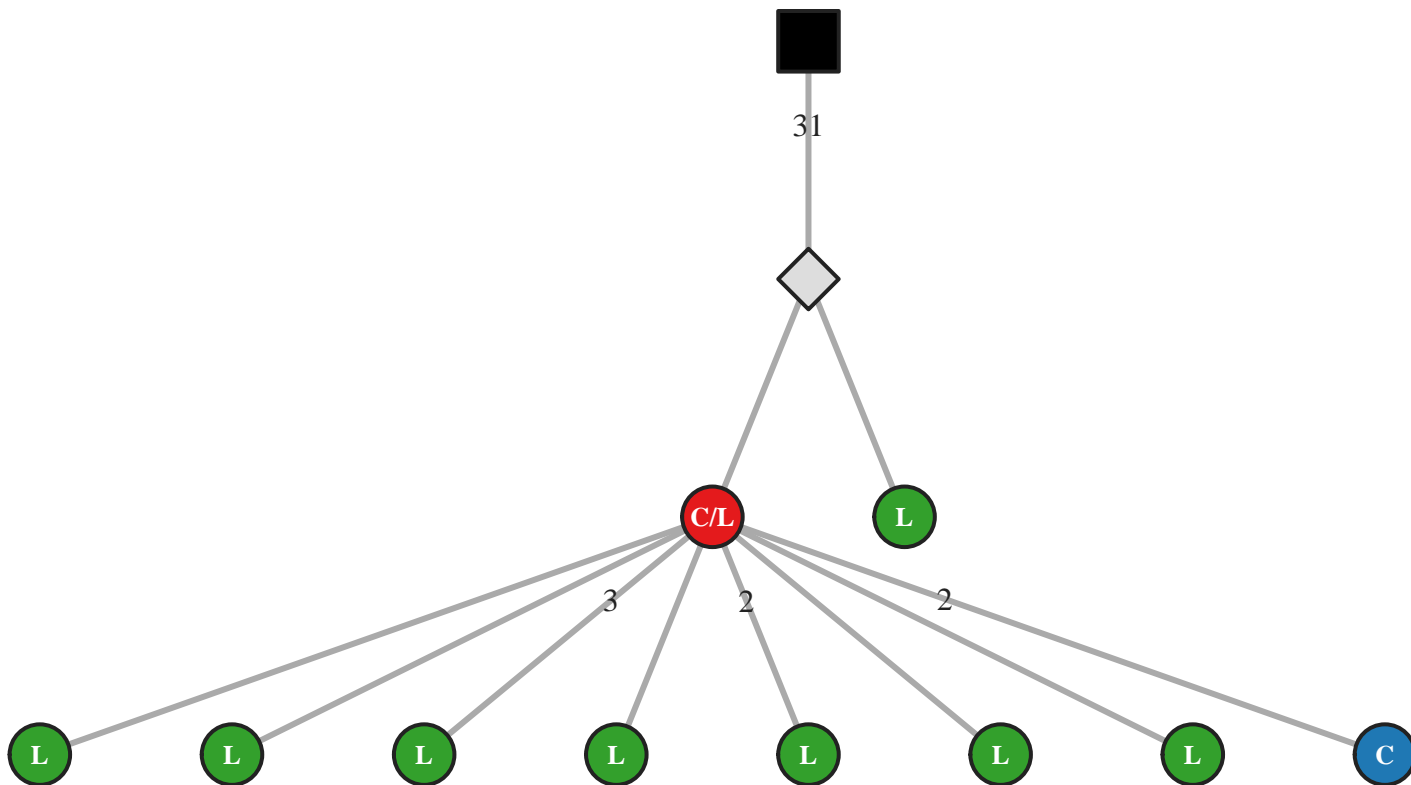
M5 IgG IGHV4-30-2/J3 51bp (18668)



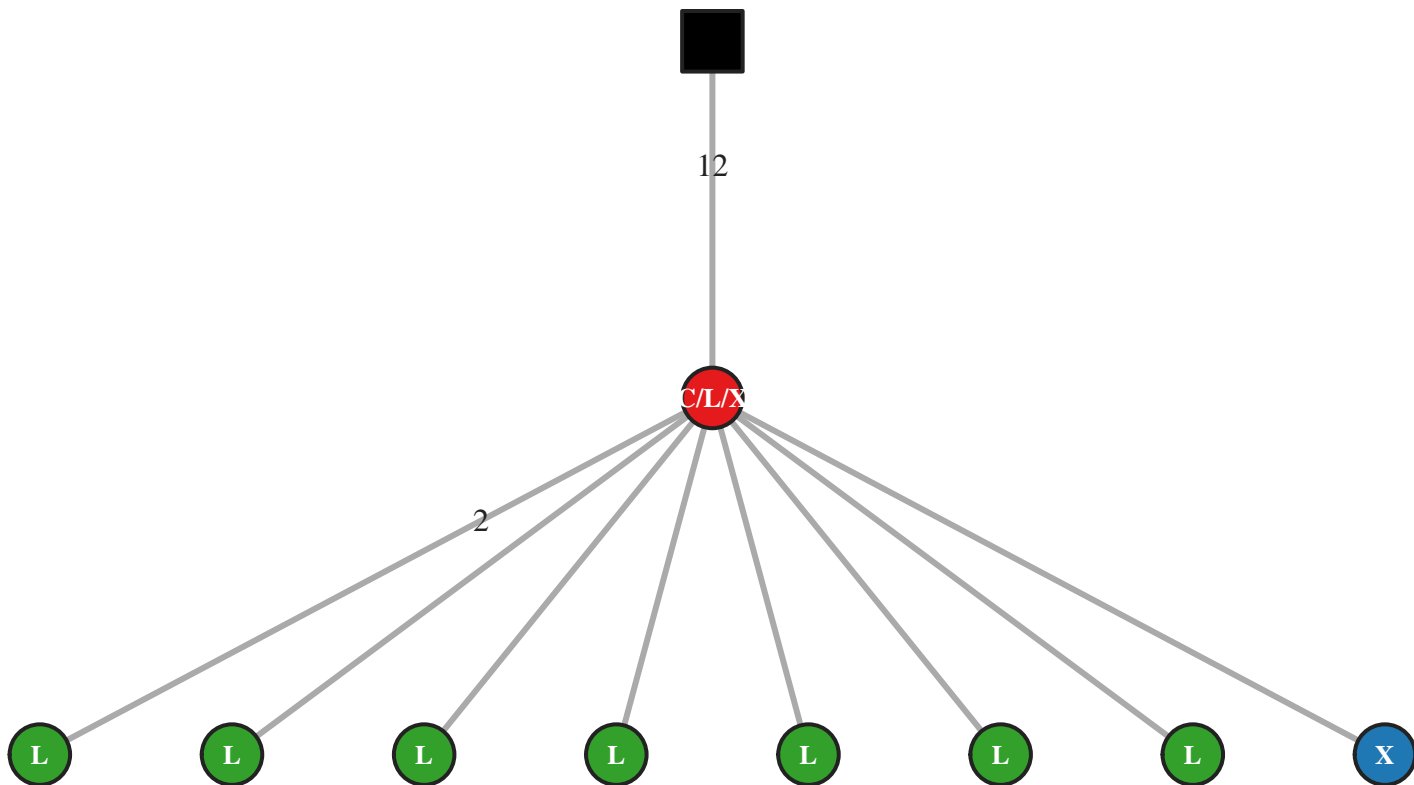
M5 IgG IGHV4-30-2/J3 66bp (18672)



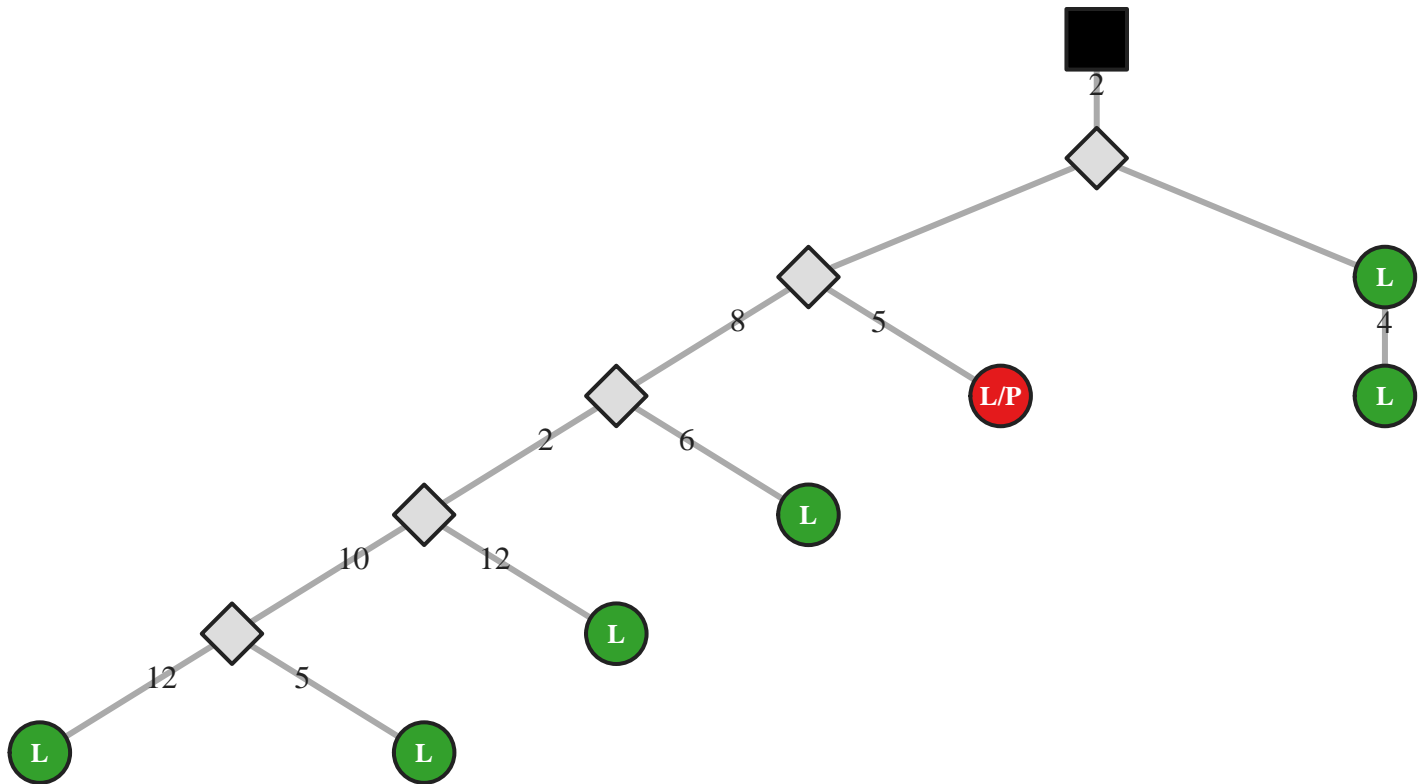
M5 IgG IGHV4-30-2/J4 33bp (9320)



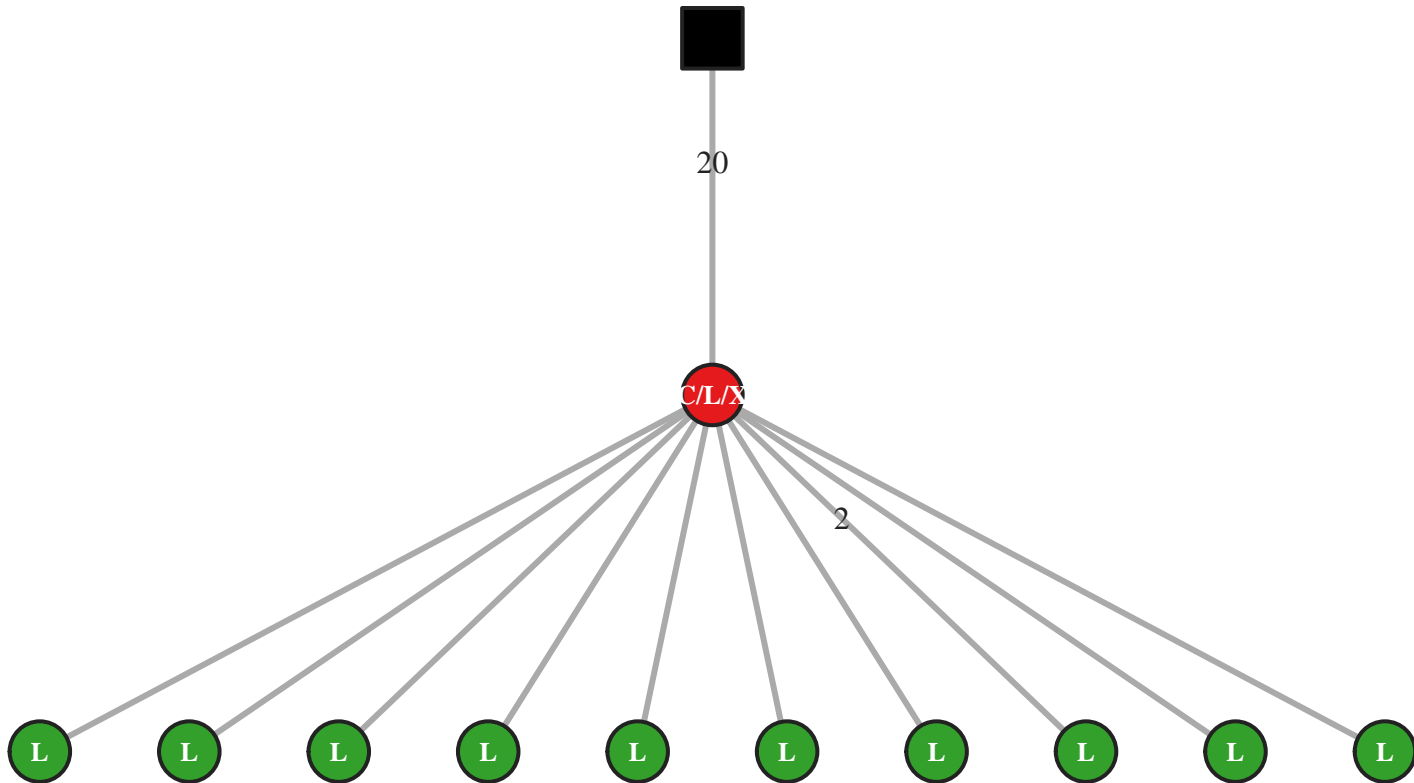
M5 IgG IGHV4-30-2/J4 33bp (9322)



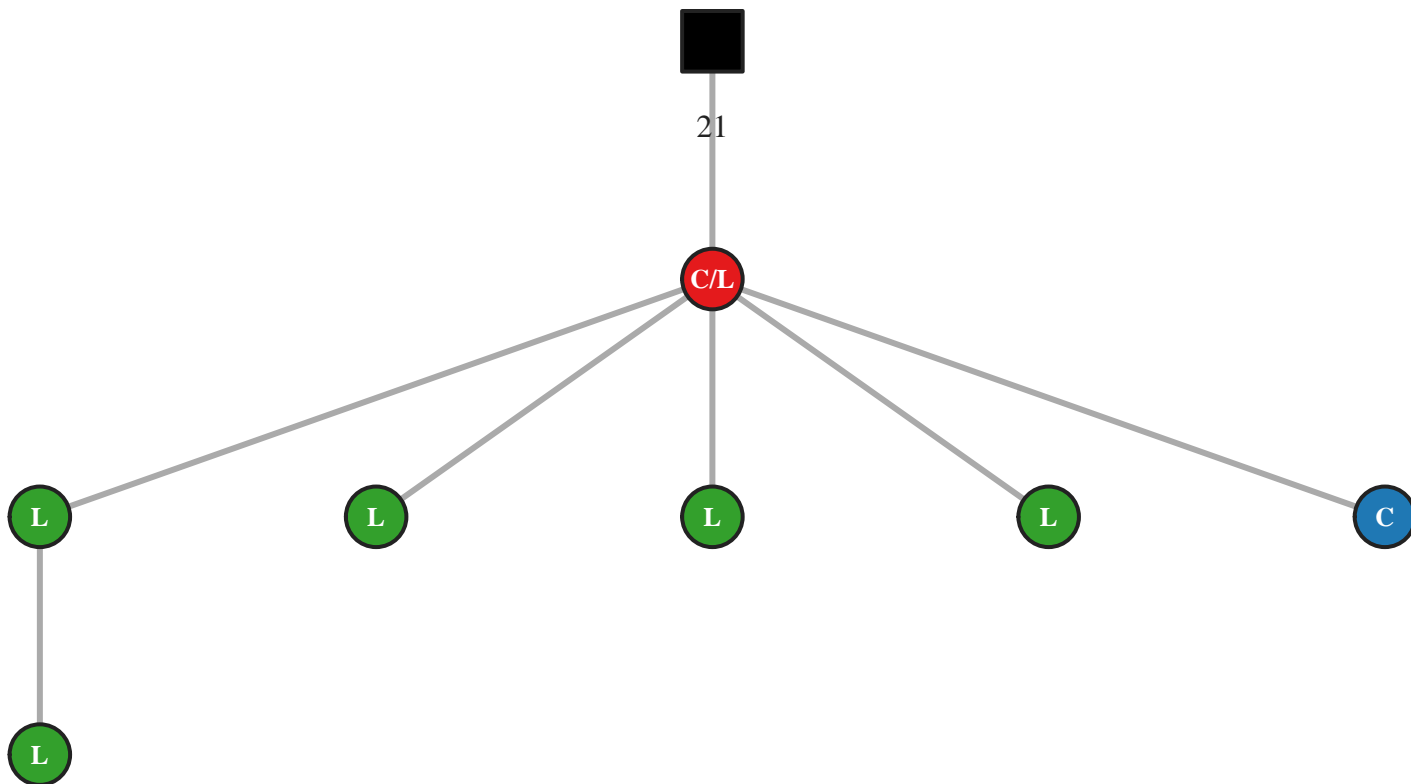
M5 IgG IGHV4-30-2/J4 51bp (46077)



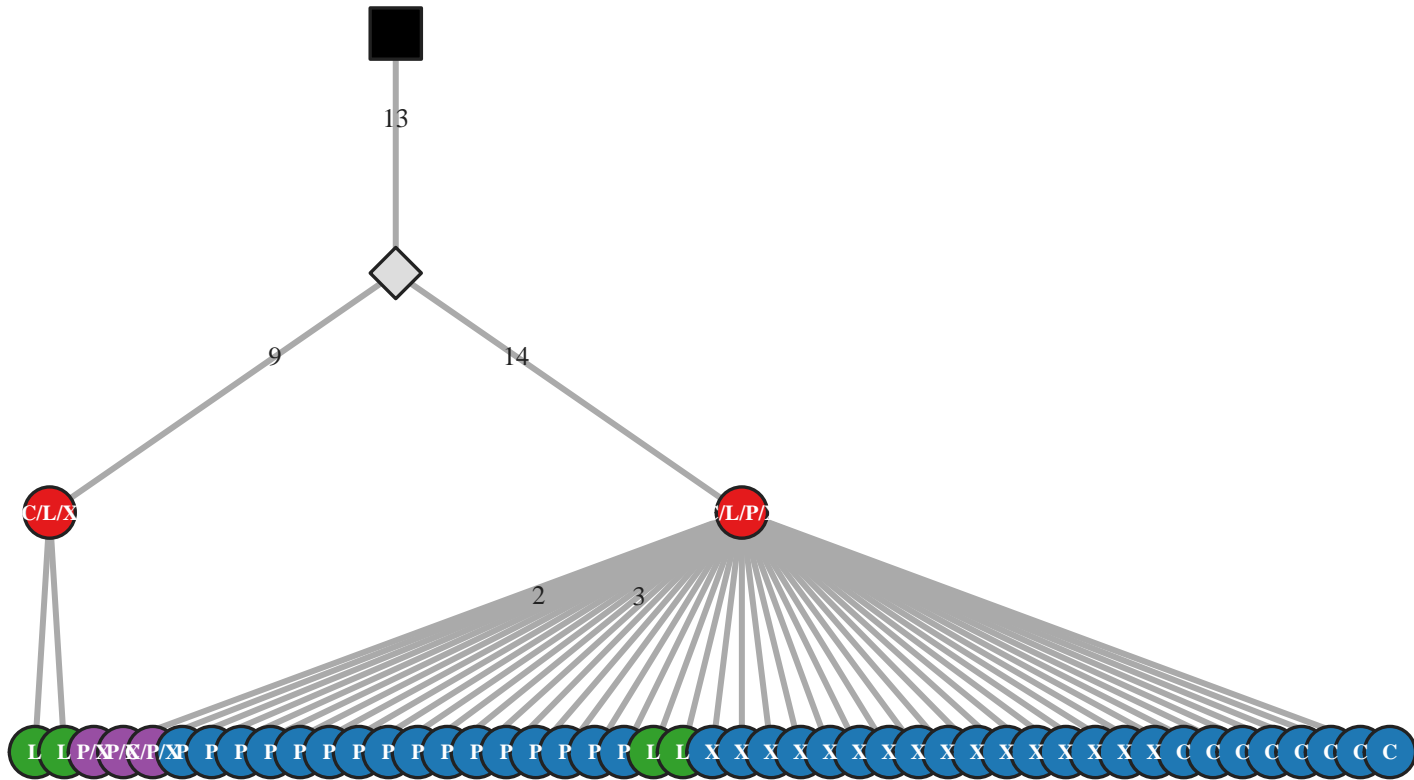
M5 IgG IGHV4-30-2/J4 54bp (46086)



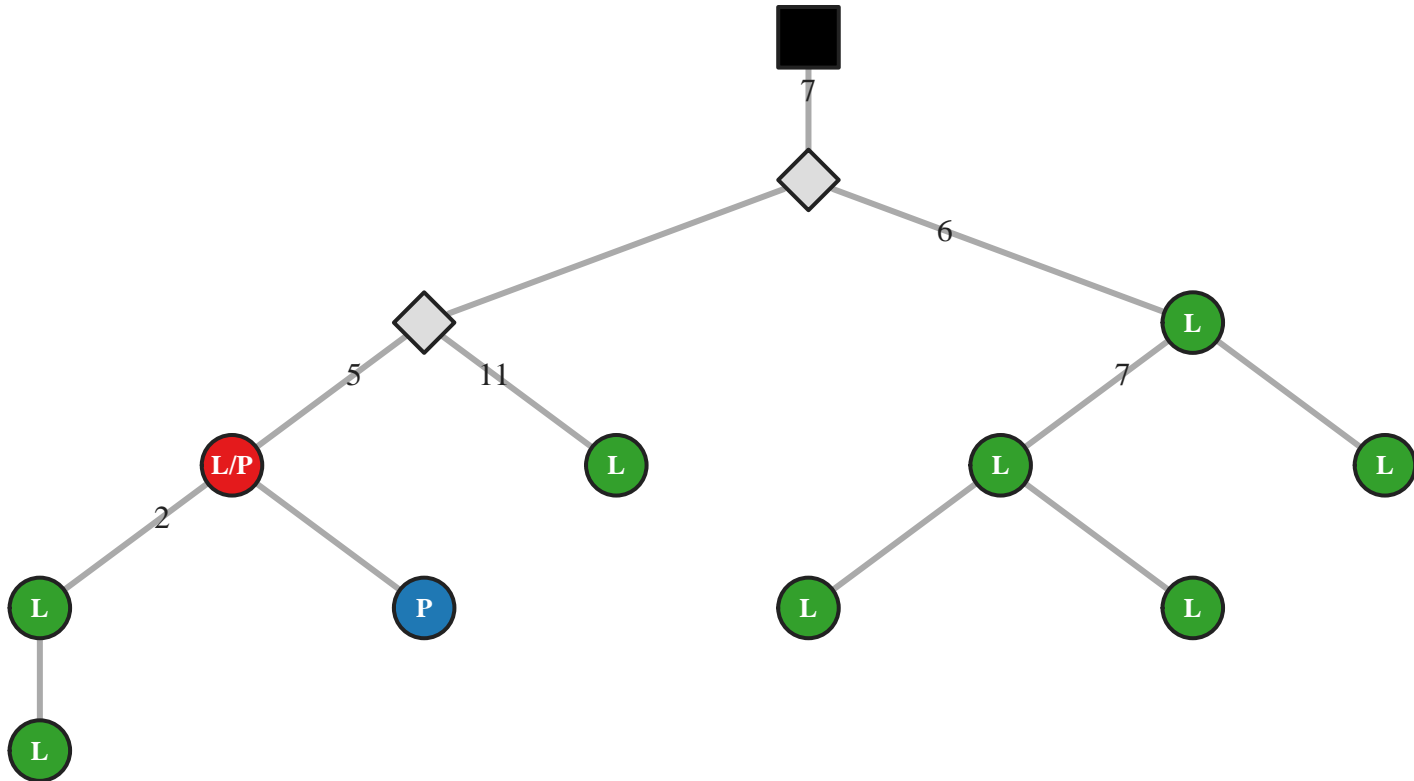
M5 IgG IGHV4-30-2/J5 39bp (9326)



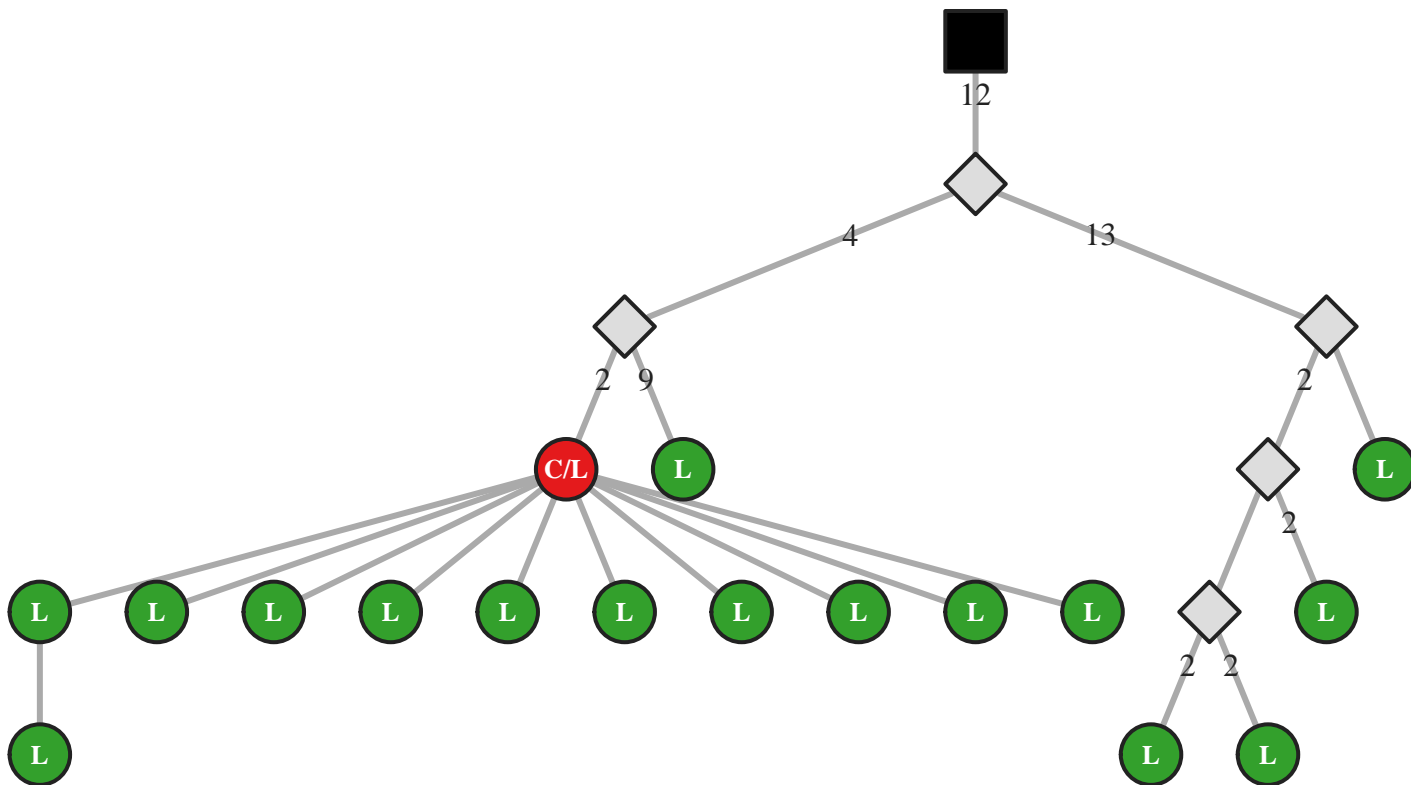
M5 IgG IGHV4-30-2/J5 45bp (9464)



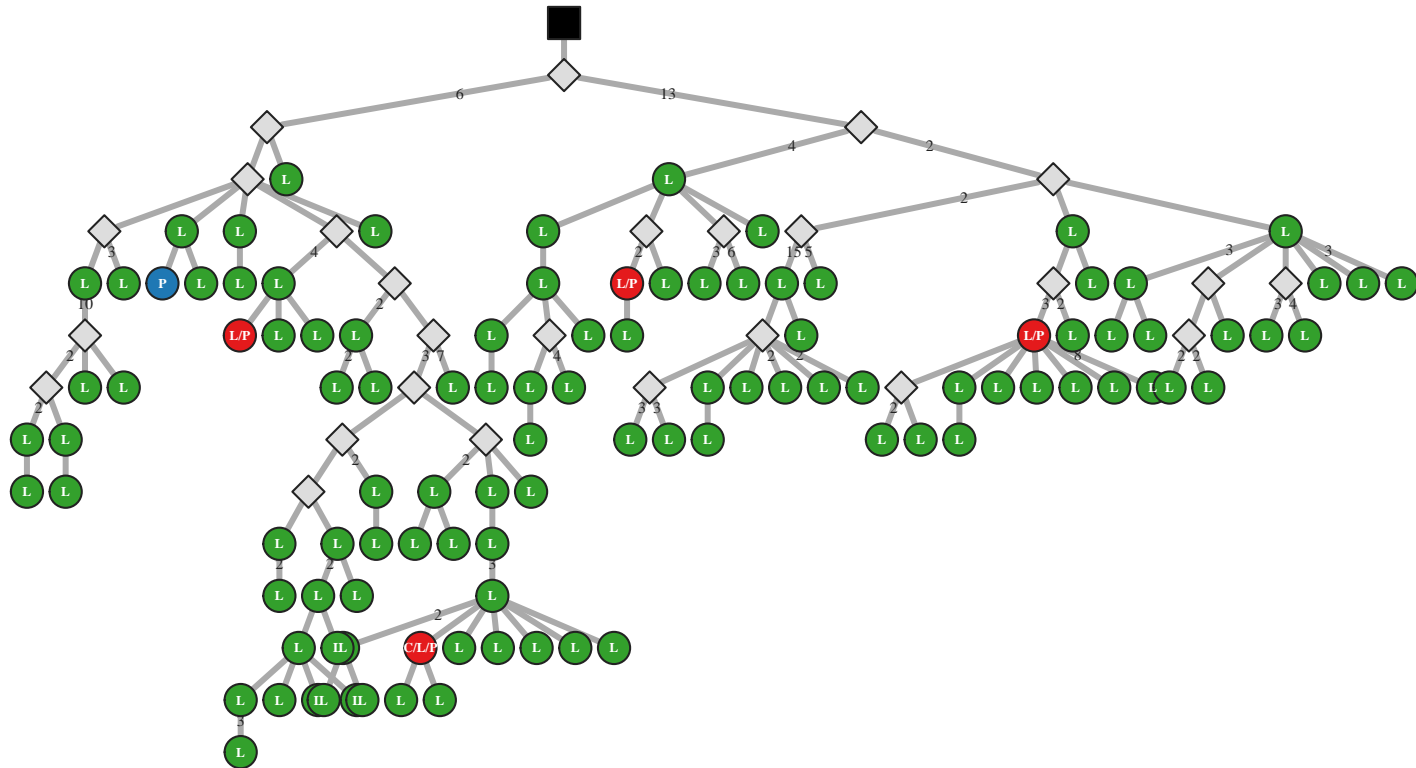
M5 IgG IGHV4-30-2/J6 57bp (35916)



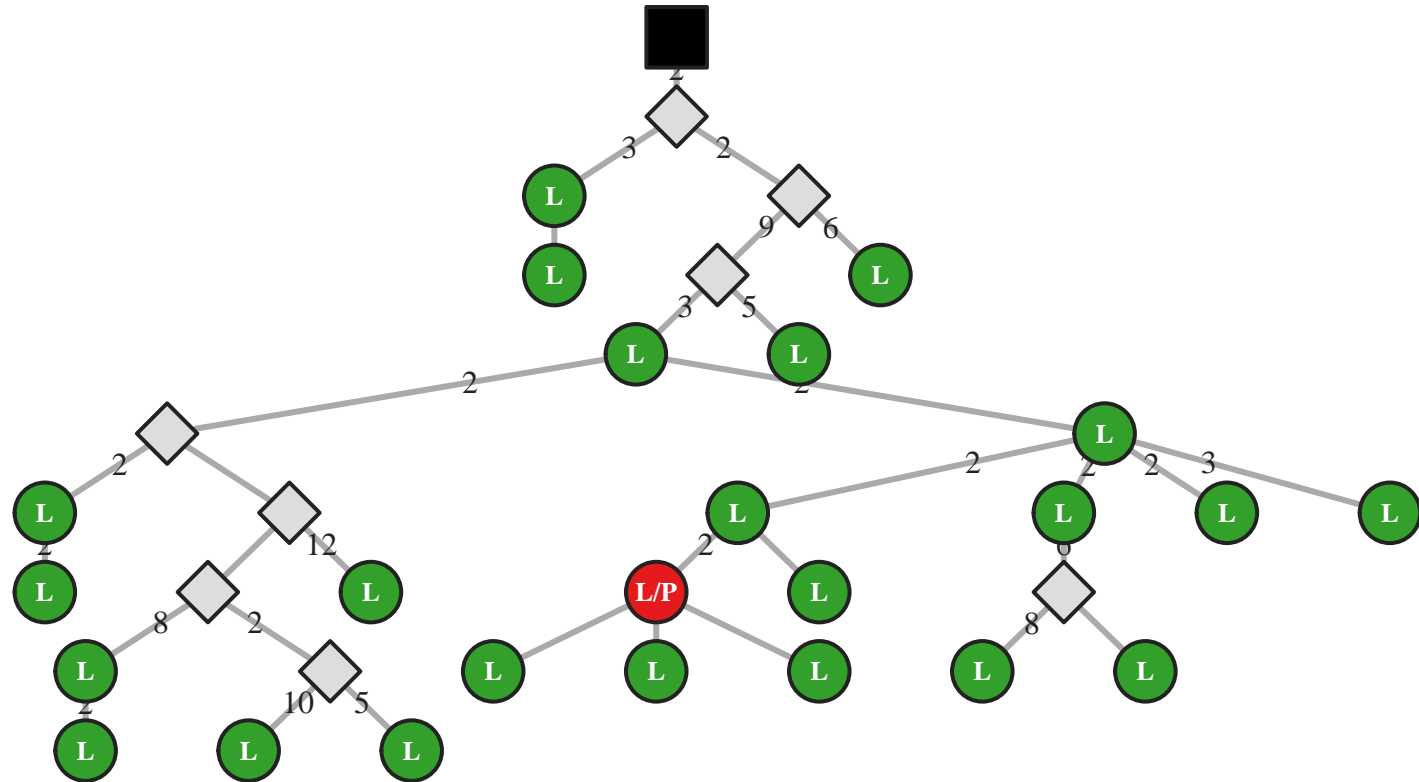
M5 IgG IGHV4-30-4/J3 69bp (35936)



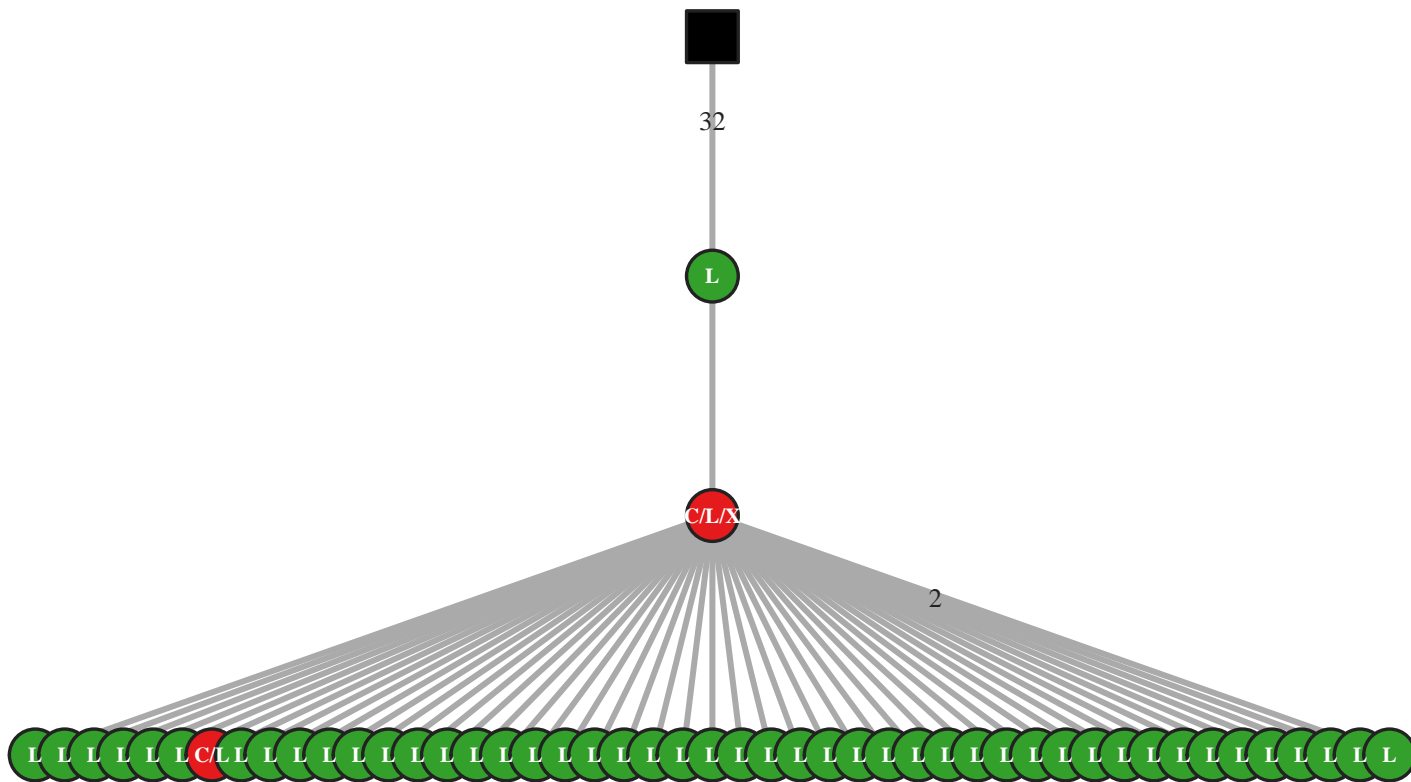
M5 IgG IGHV4-30-4/J4 36bp (35947)



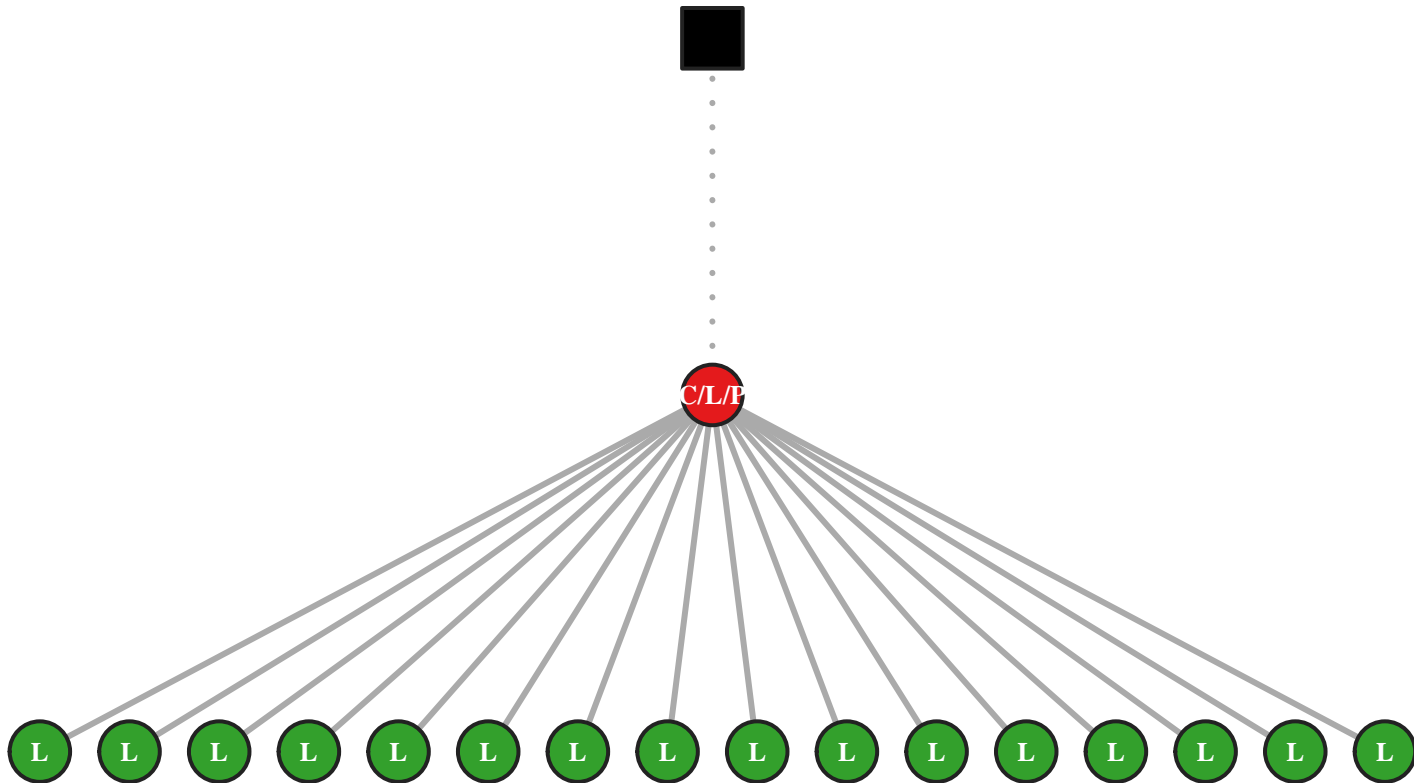
M5 IgG IGHV4-30-4/J4 39bp (9381)



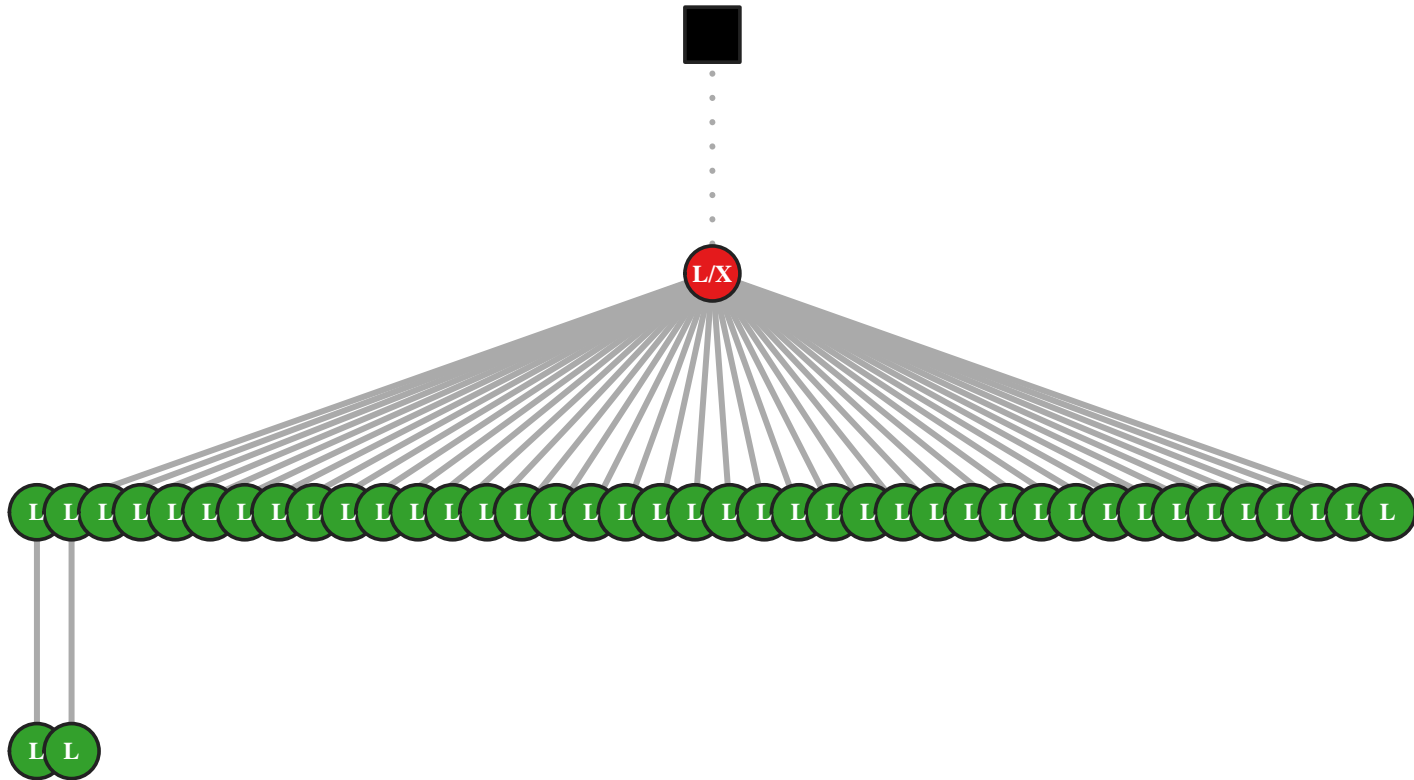
M5 IgG IGHV4-30-4/J4 39bp (9382)



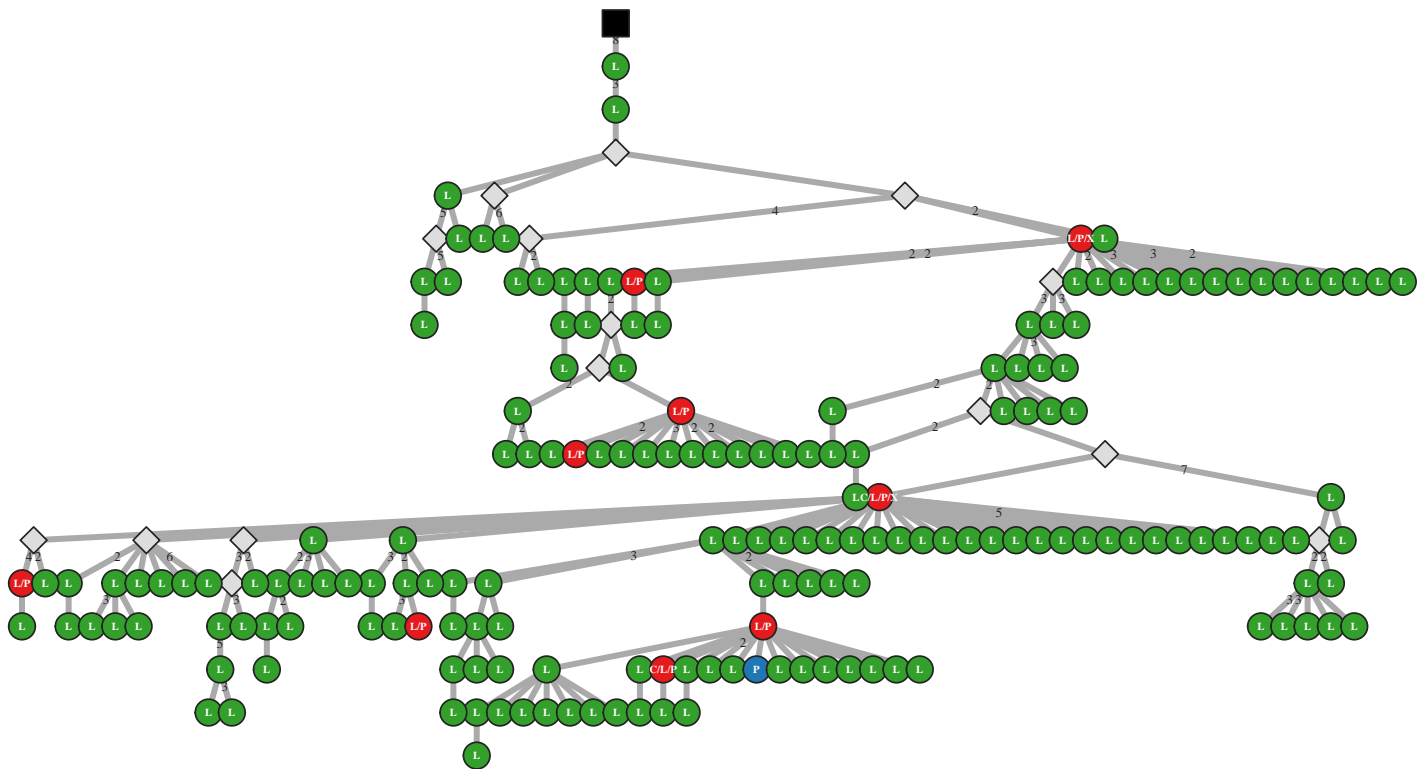
M5 IgG IGHV4-30-4/J4 42bp (18711)



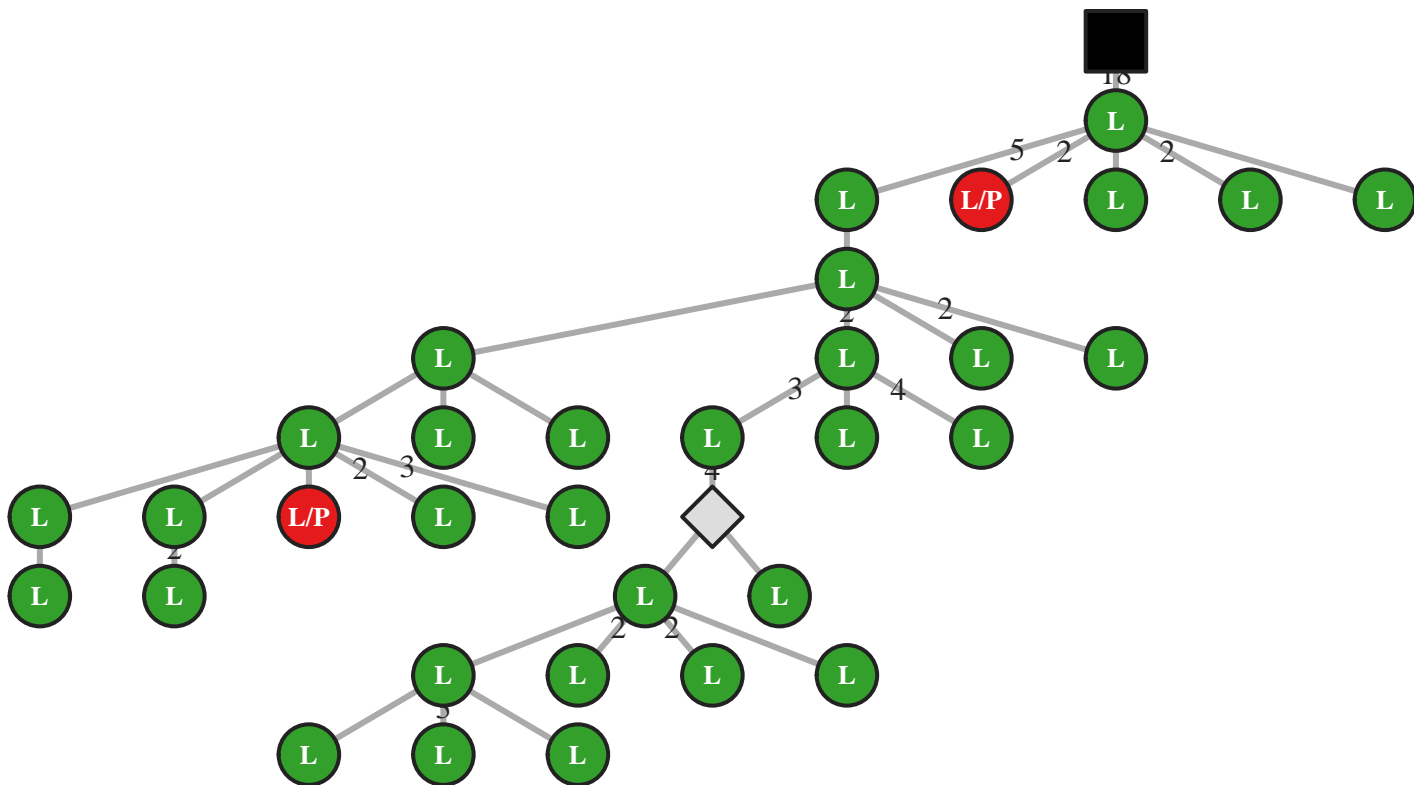
M5 IgG IGHV4-30-4/J4 42bp (18722)



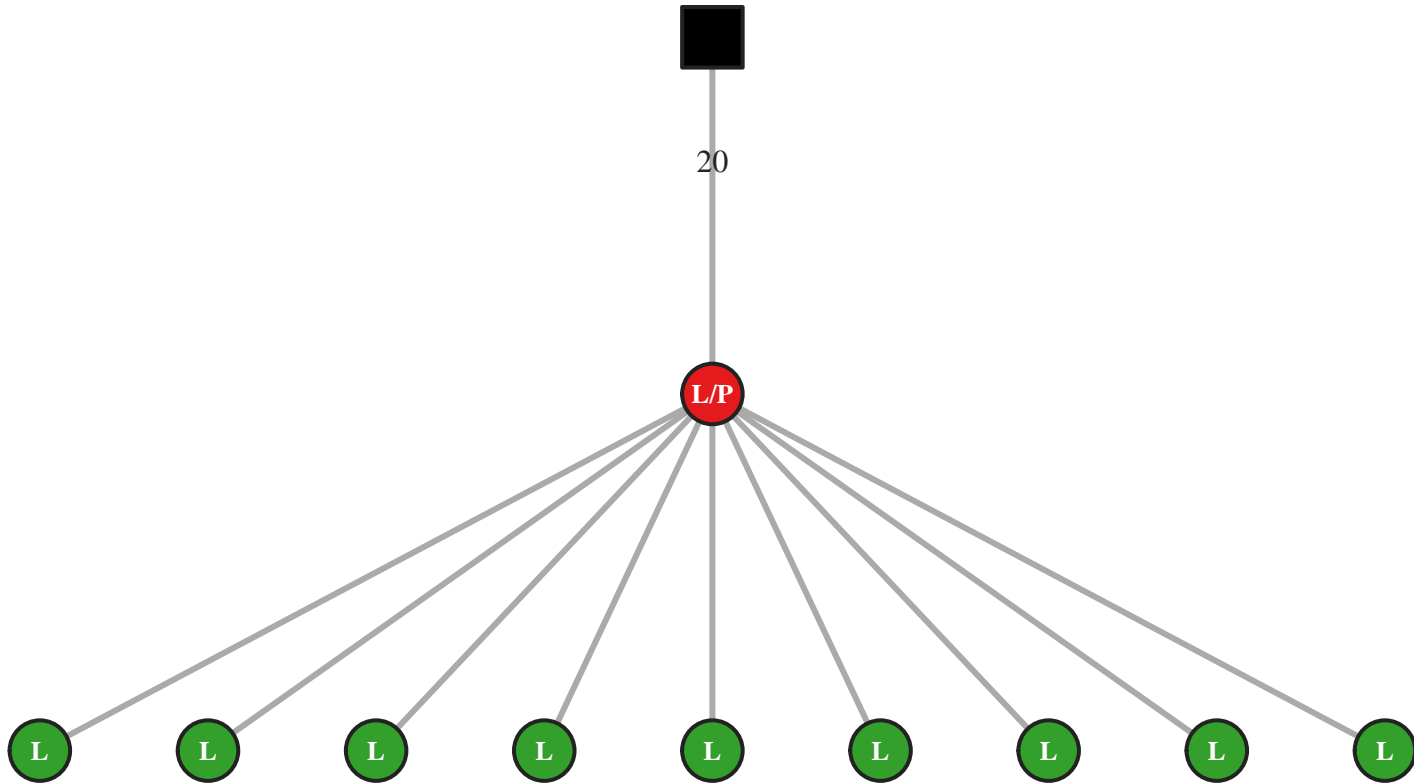
M5 IgG IGHV4-30-4/J4 45bp (18757)



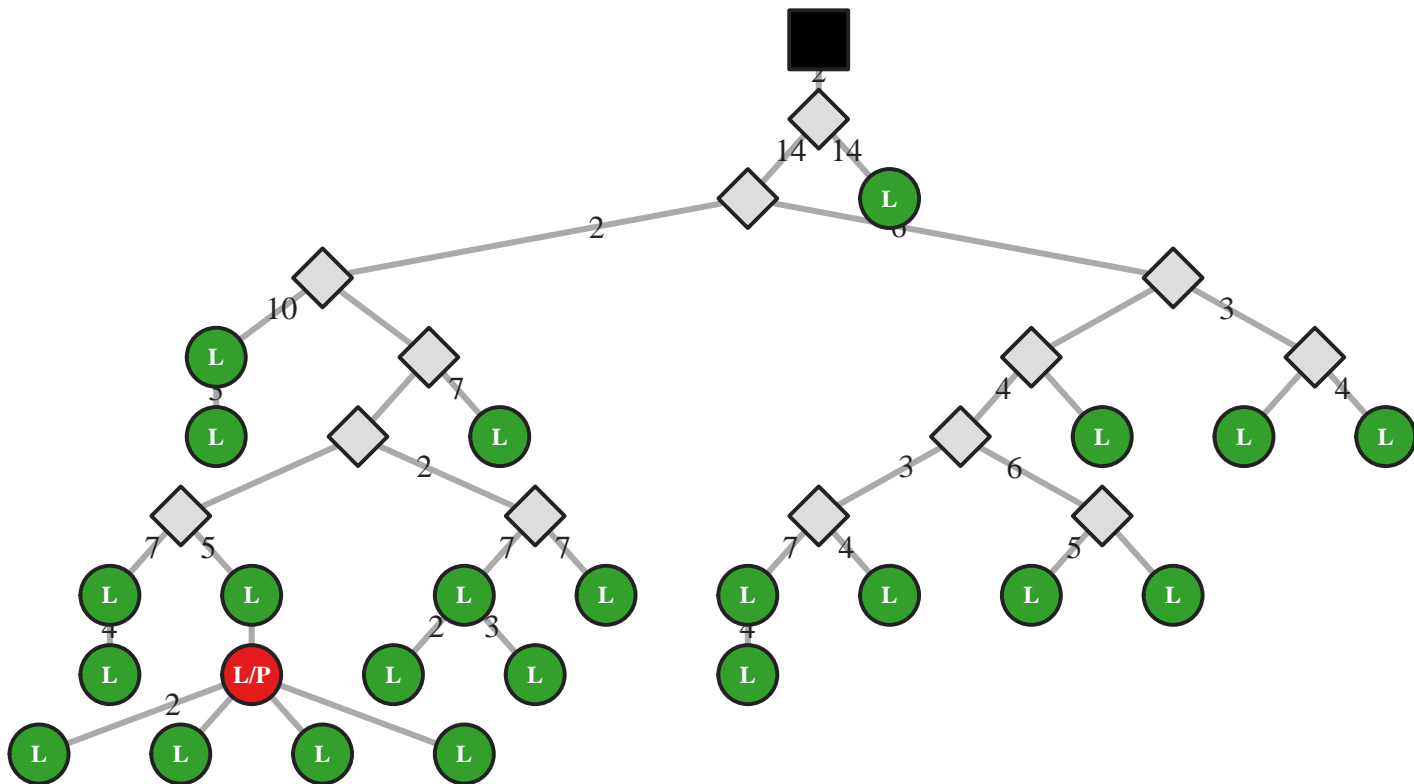
M5 IgG IGHV4-30-4/J4 51bp (35955)



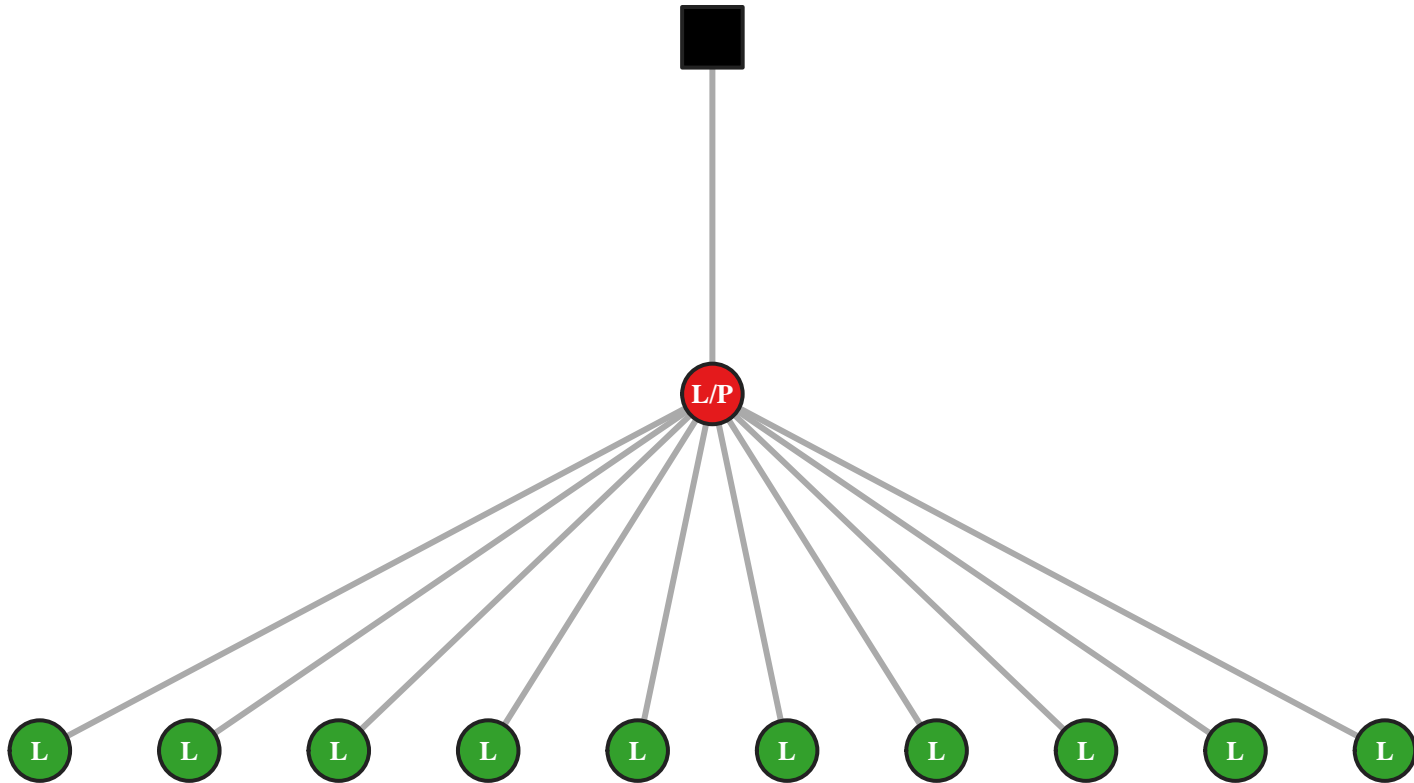
M5 IgG IGHV4-30-4/J4 51bp (35964)



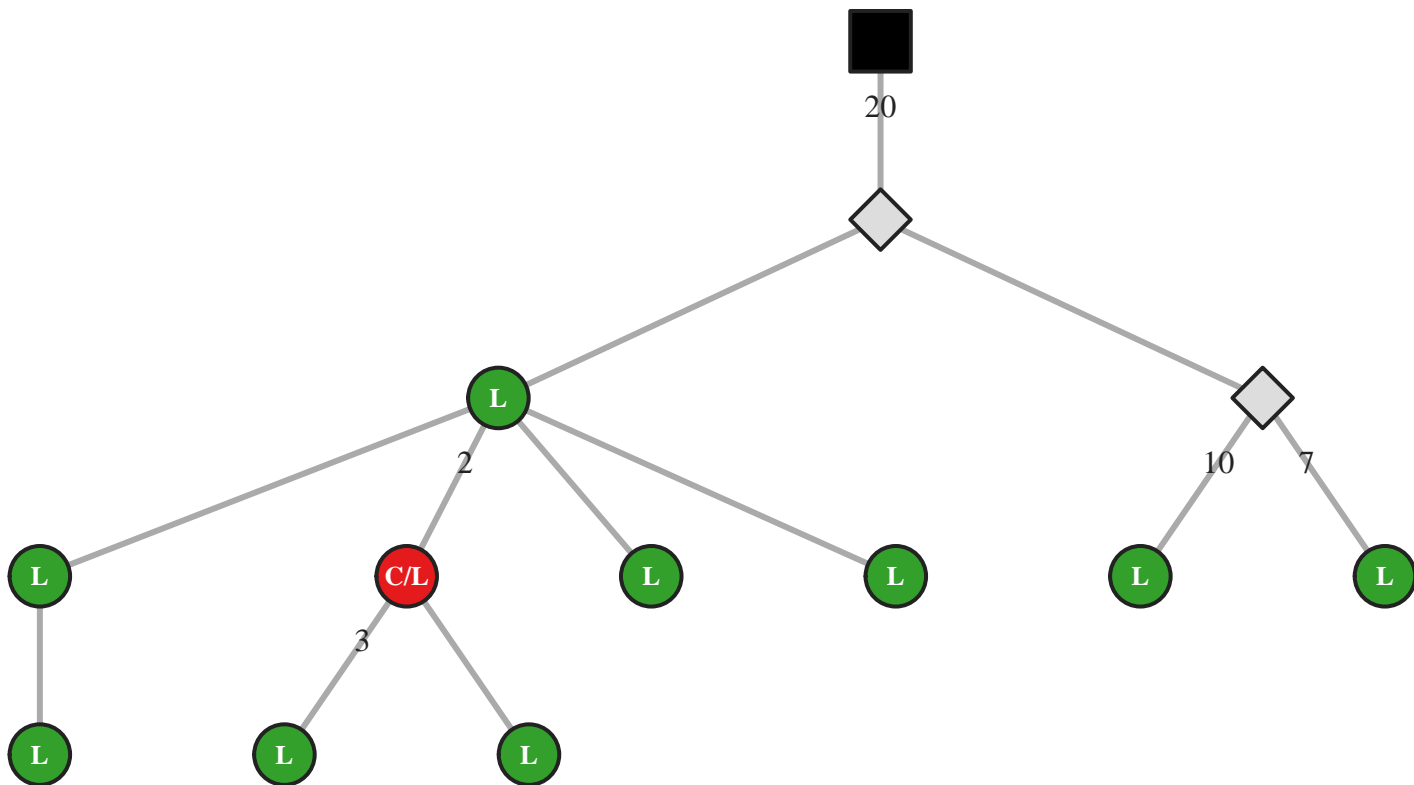
M5 IgG IGHV4-30-4/J4 51bp (35976)



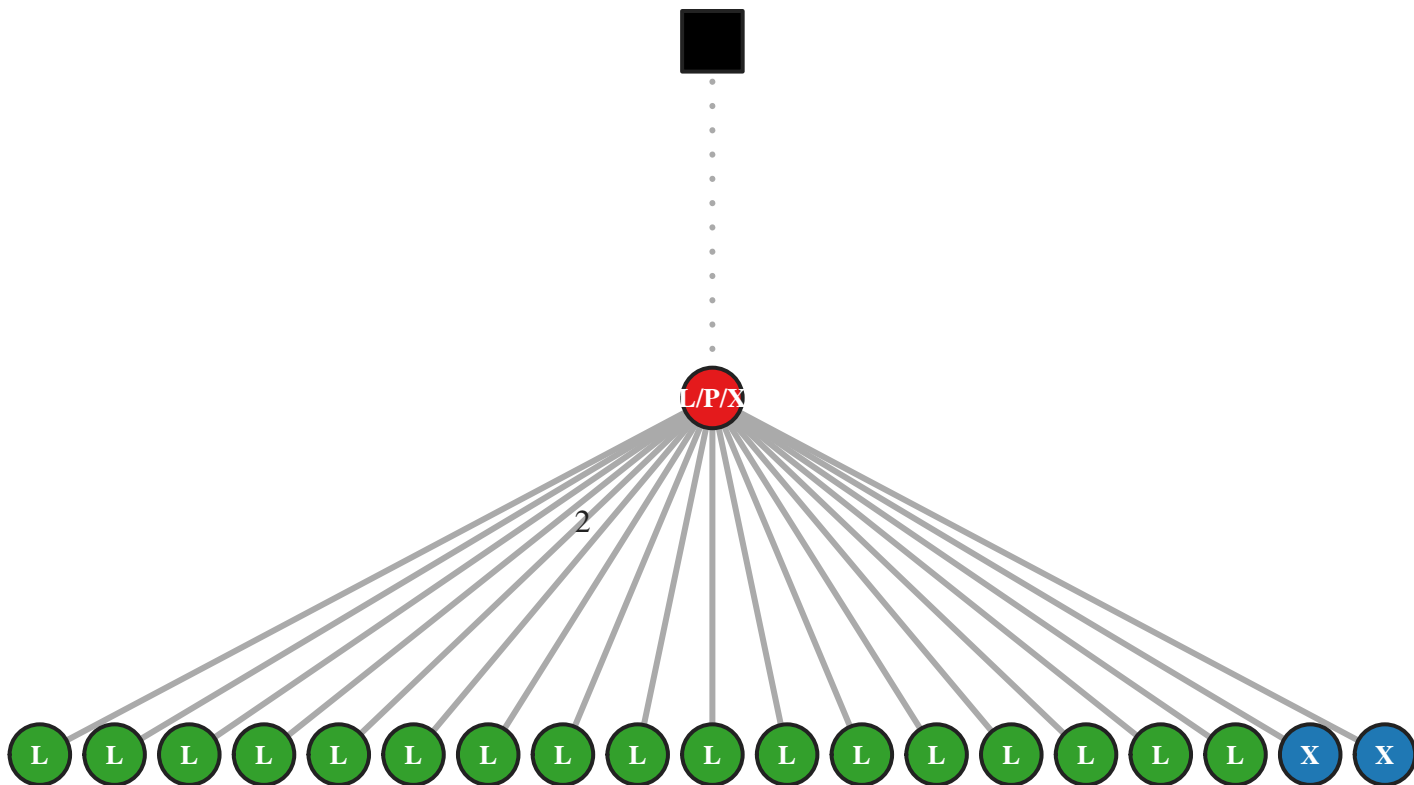
M5 IgG IGHV4-30-4/J4 57bp (46112)



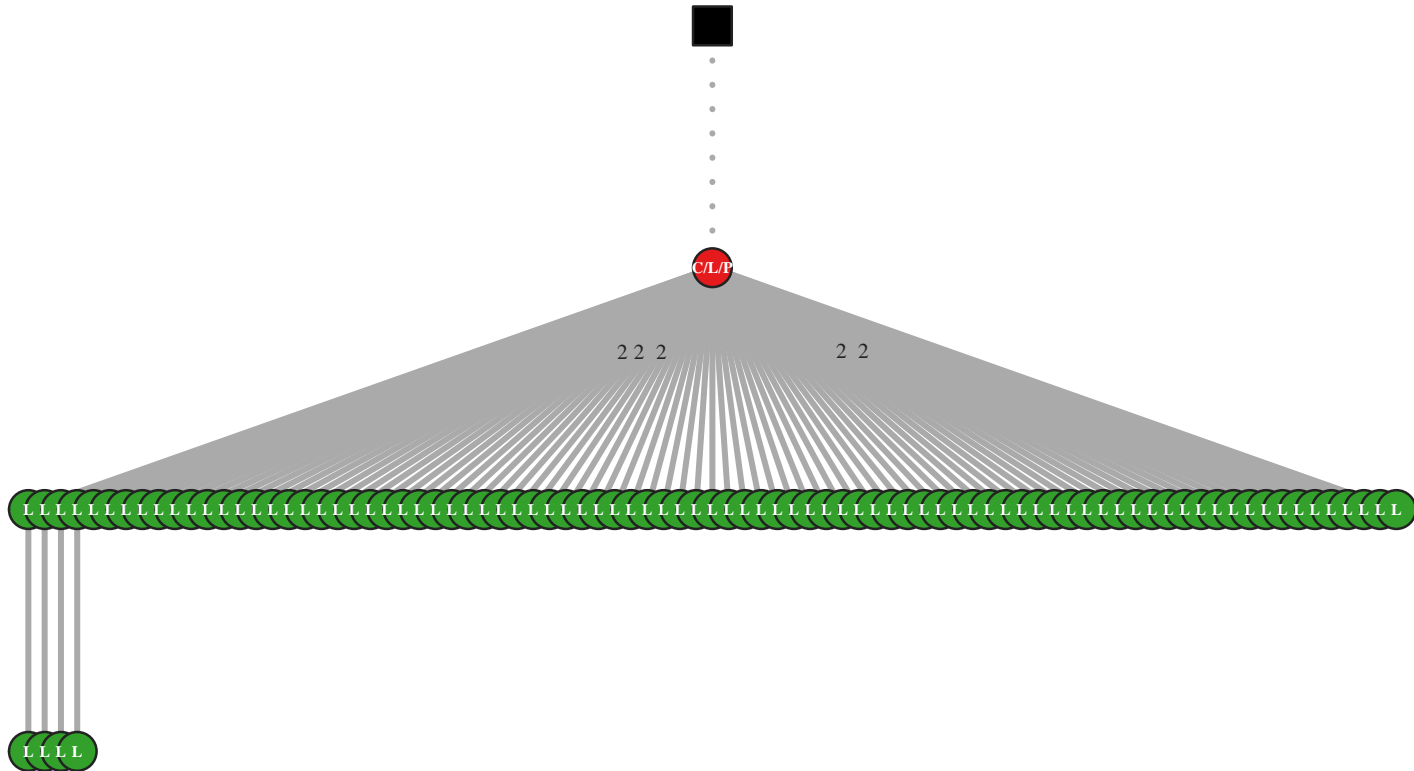
M5 IgG IGHV4-30-4/J4 57bp (46123)



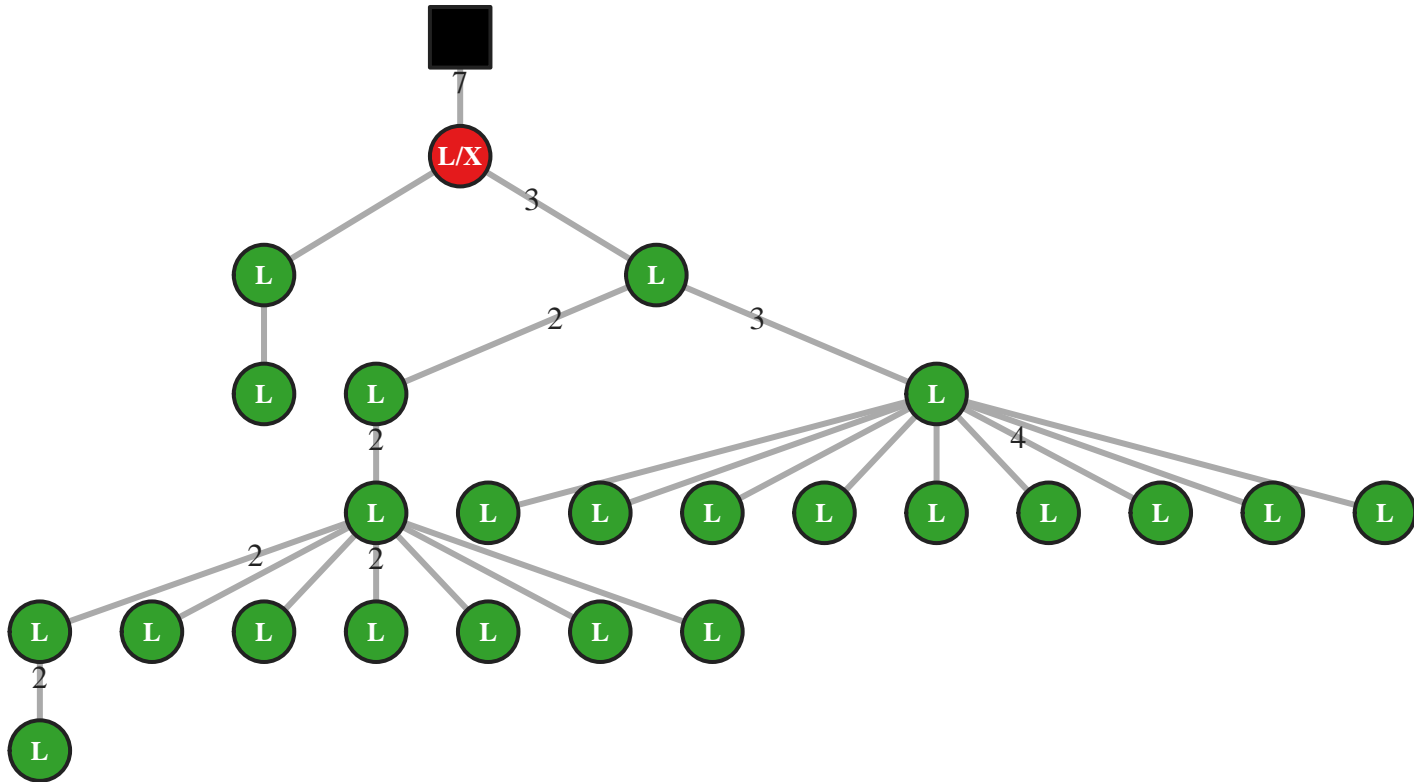
M5 IgA IGHV4-30-4/J5 54bp (30757)



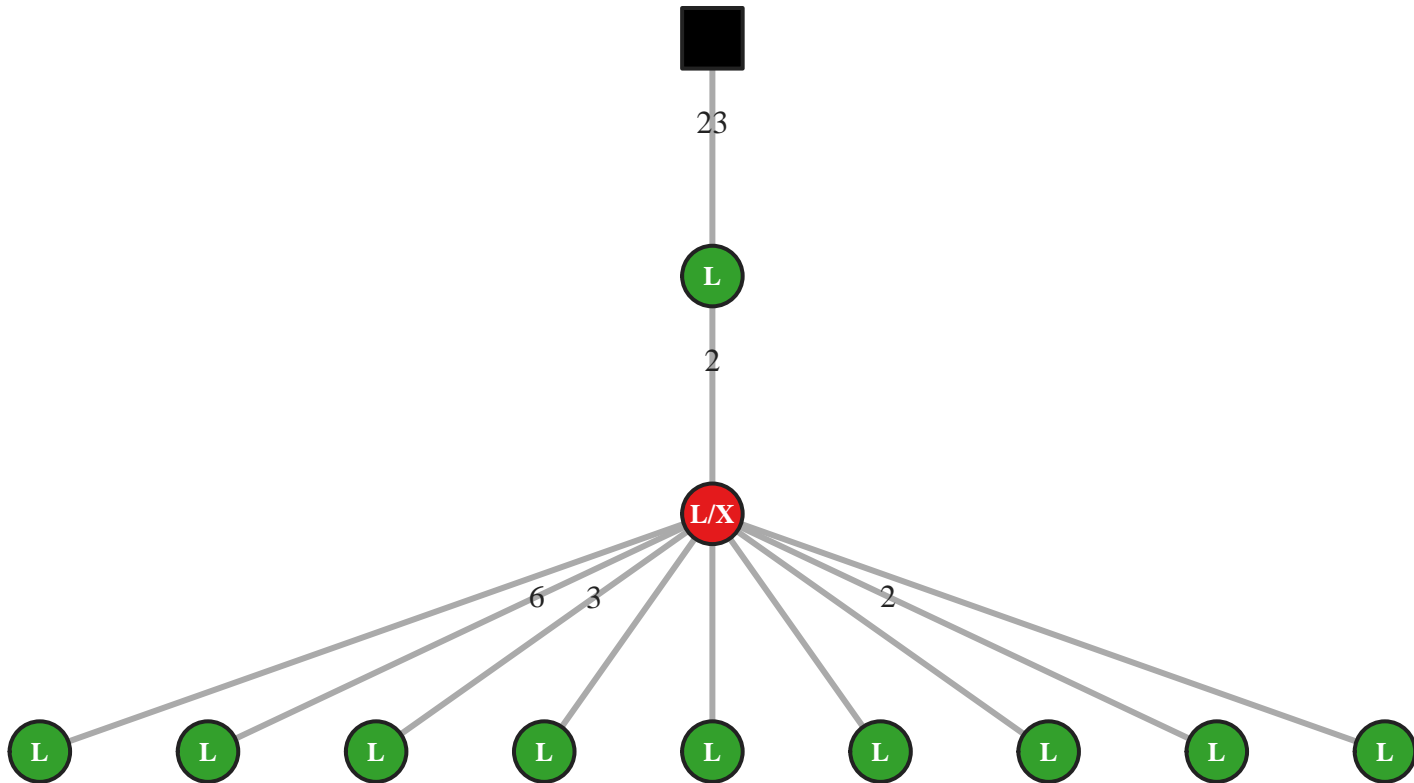
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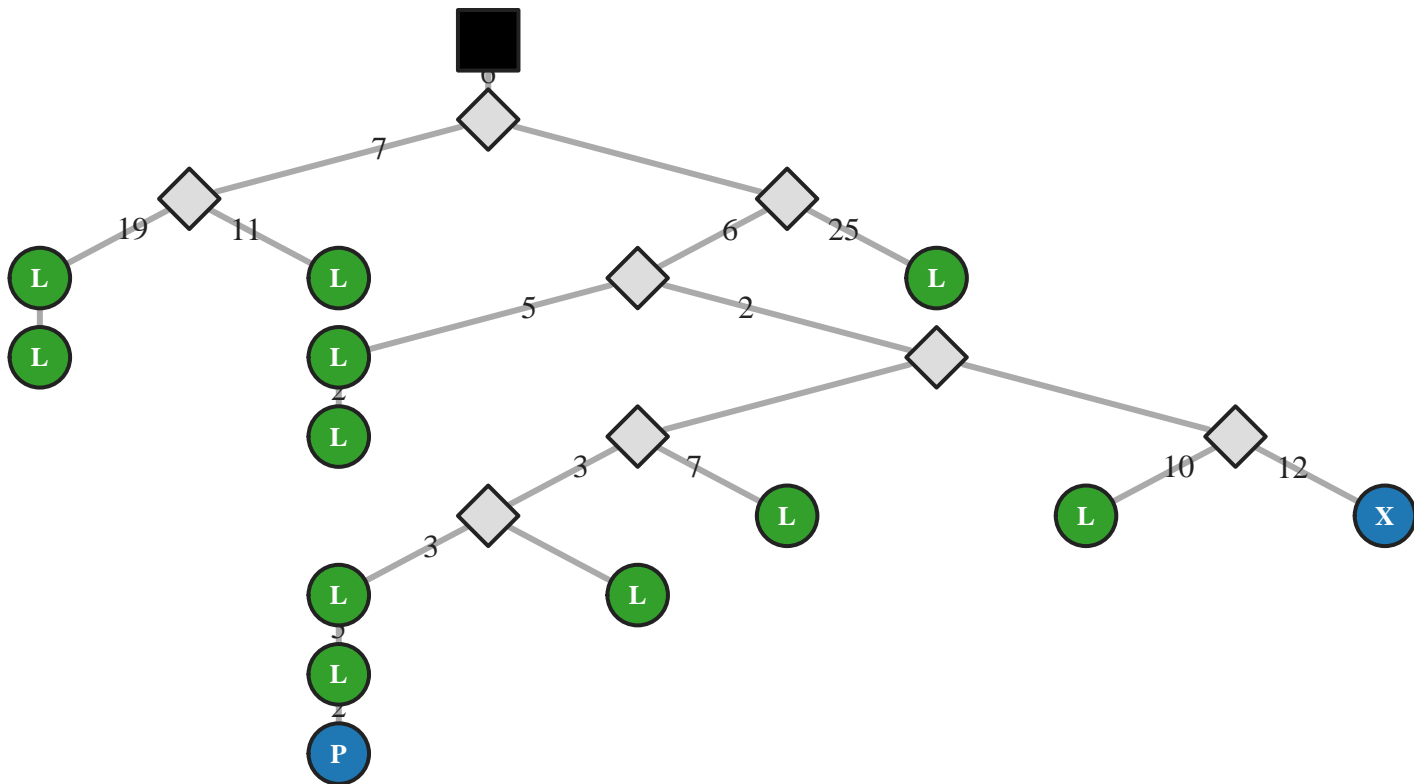
M5 IgG IGHV4-30-4/J6 51bp (9434)



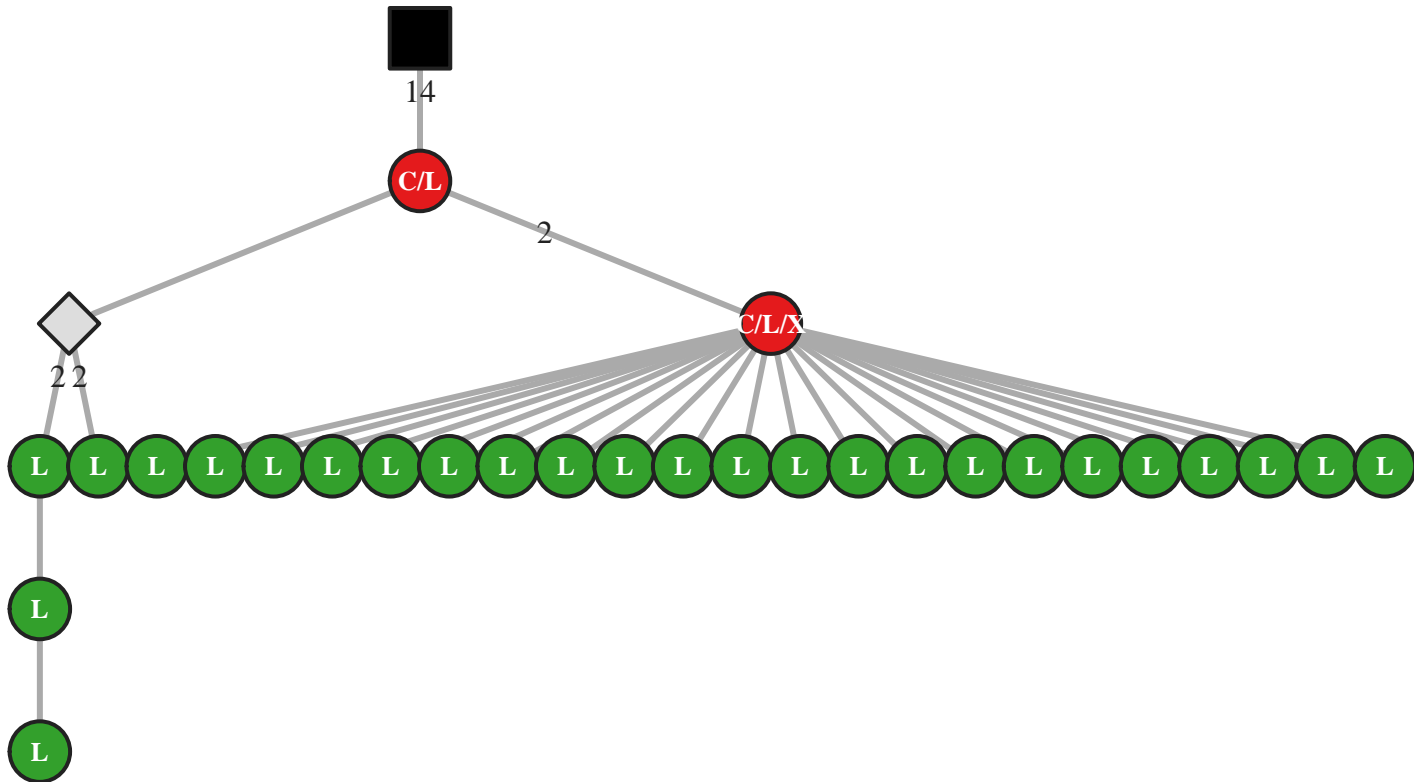
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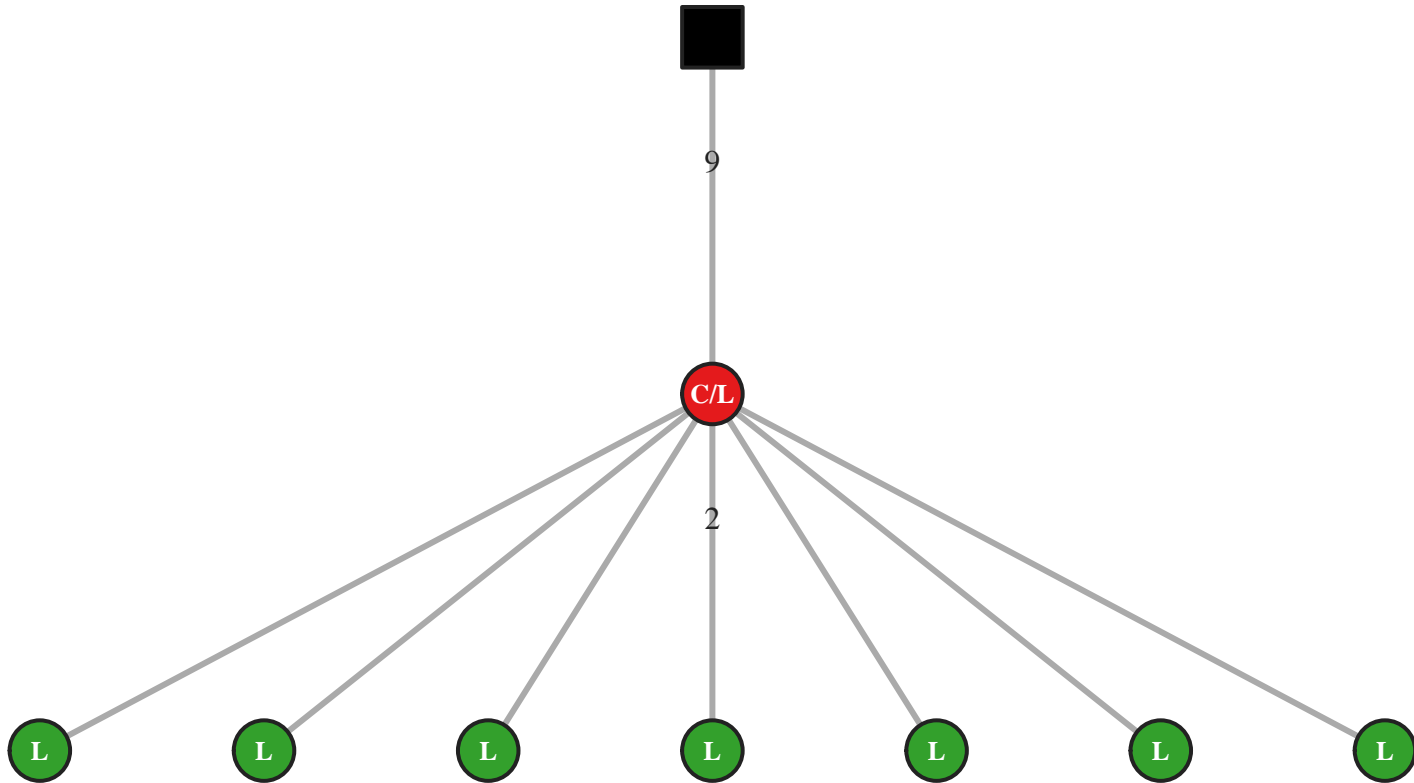
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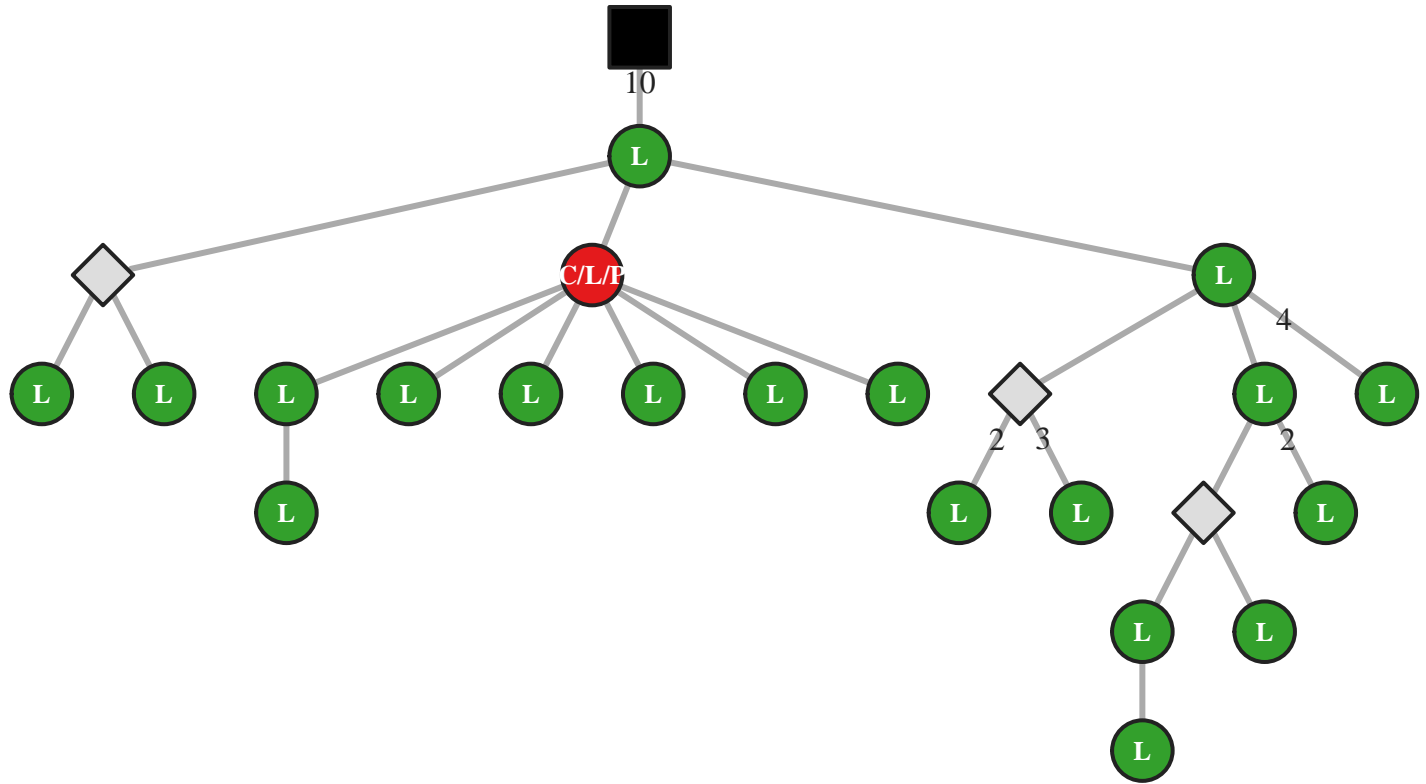
M5 IgG IGHV4-30-4/J6 57bp (27691)



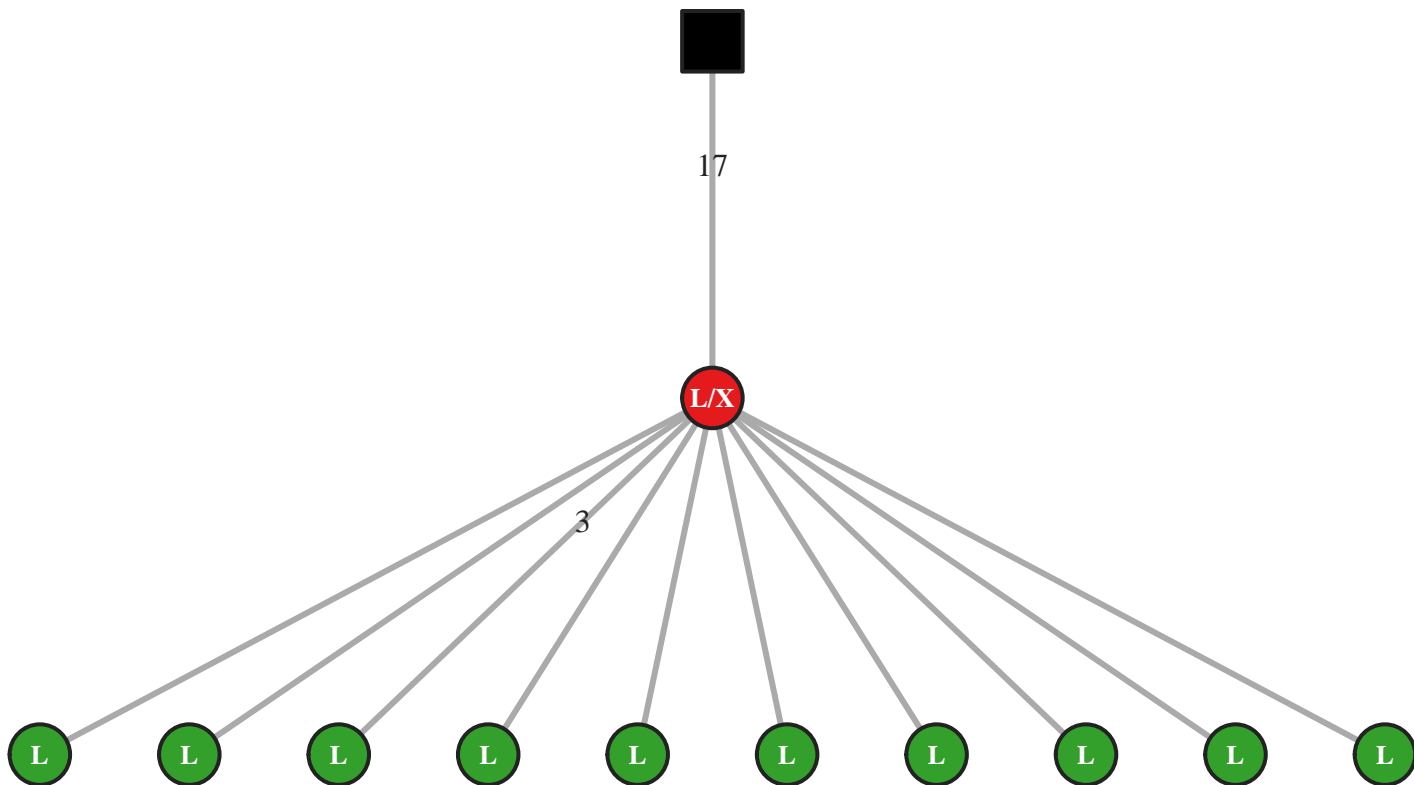
M5 IgG IGHV4-30-4/J6 69bp (52654)



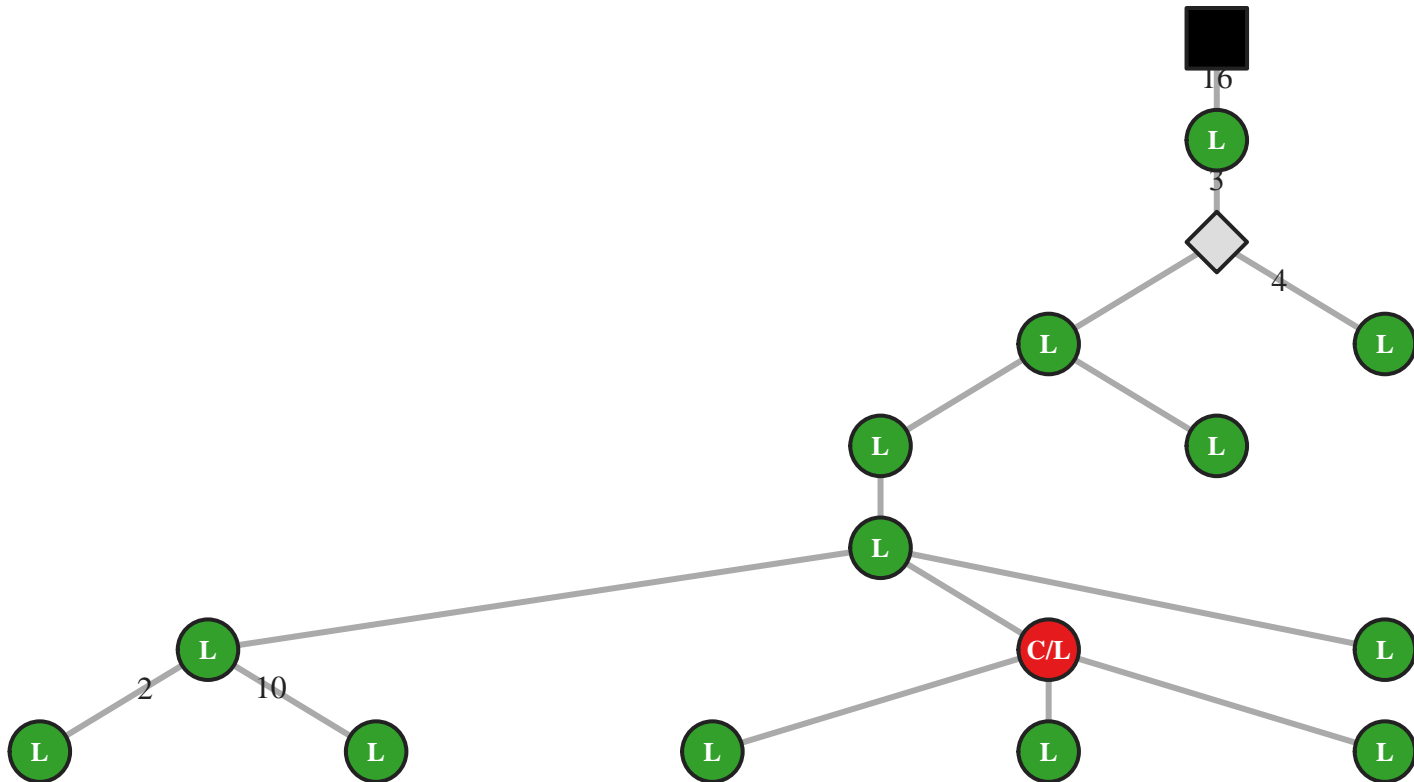
M5 IgG IGHV4-31/J2 48bp (52665)



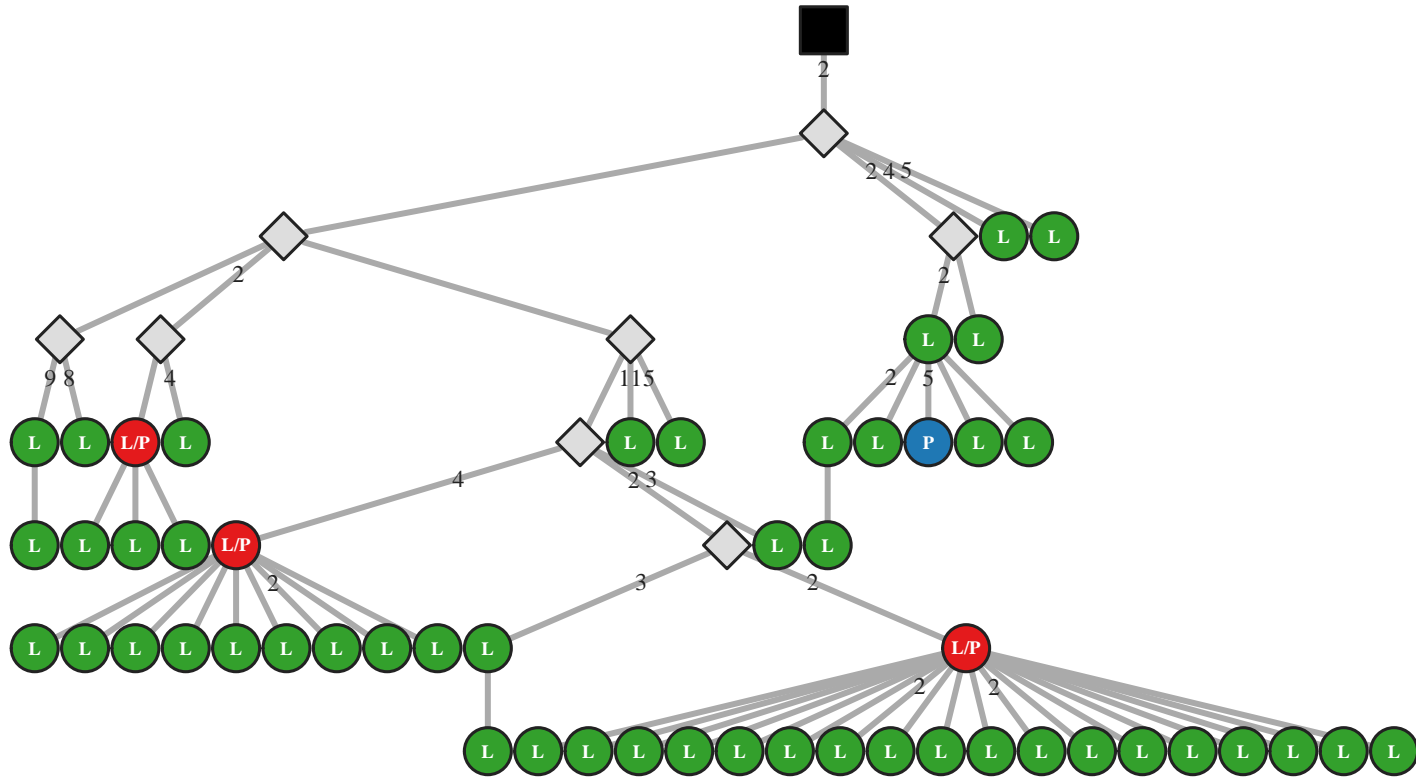
M5 IgG IGHV4-31/J3 39bp (27704)



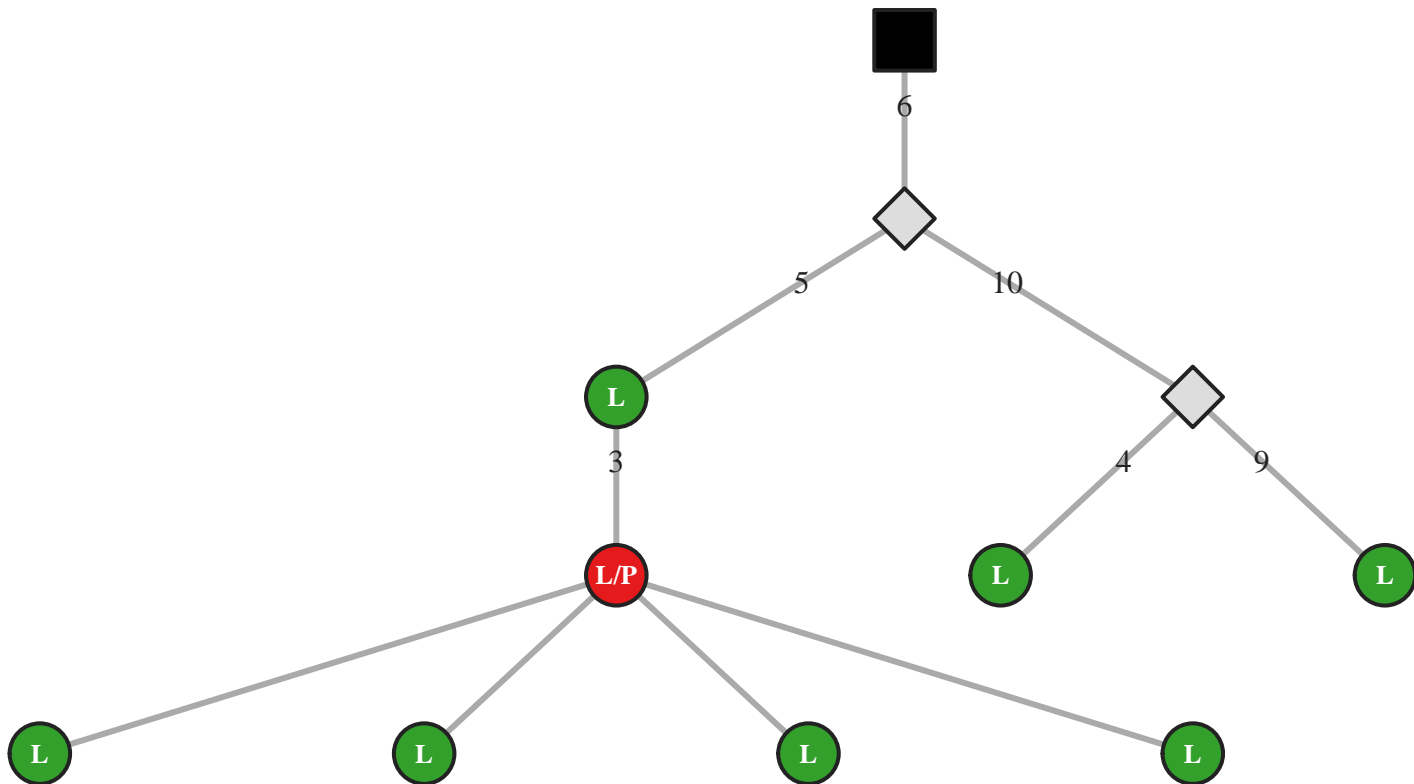
M5 IgG IGHV4-31/J3 63bp (9570)



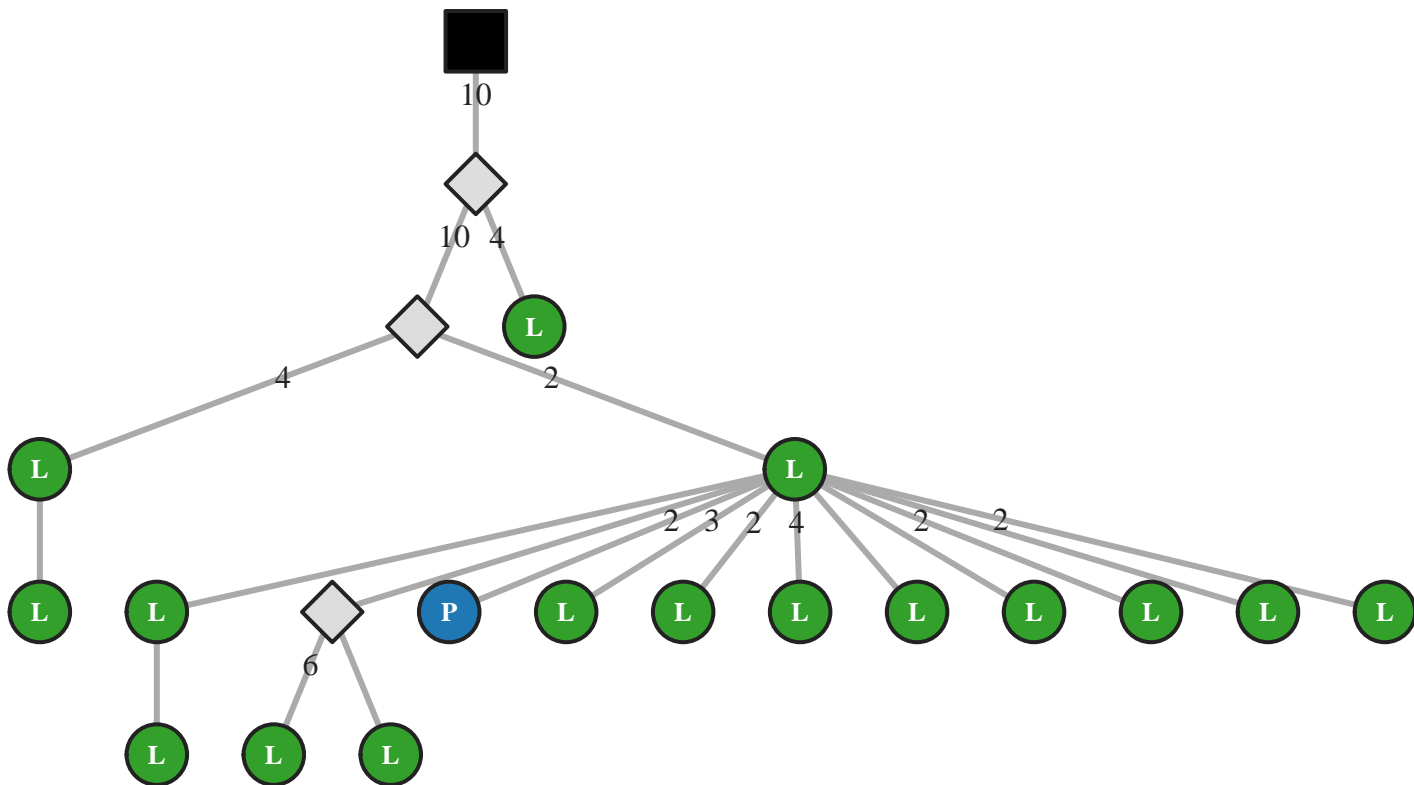
M5 IgG IGHV4-31/J3 63bp (9571)



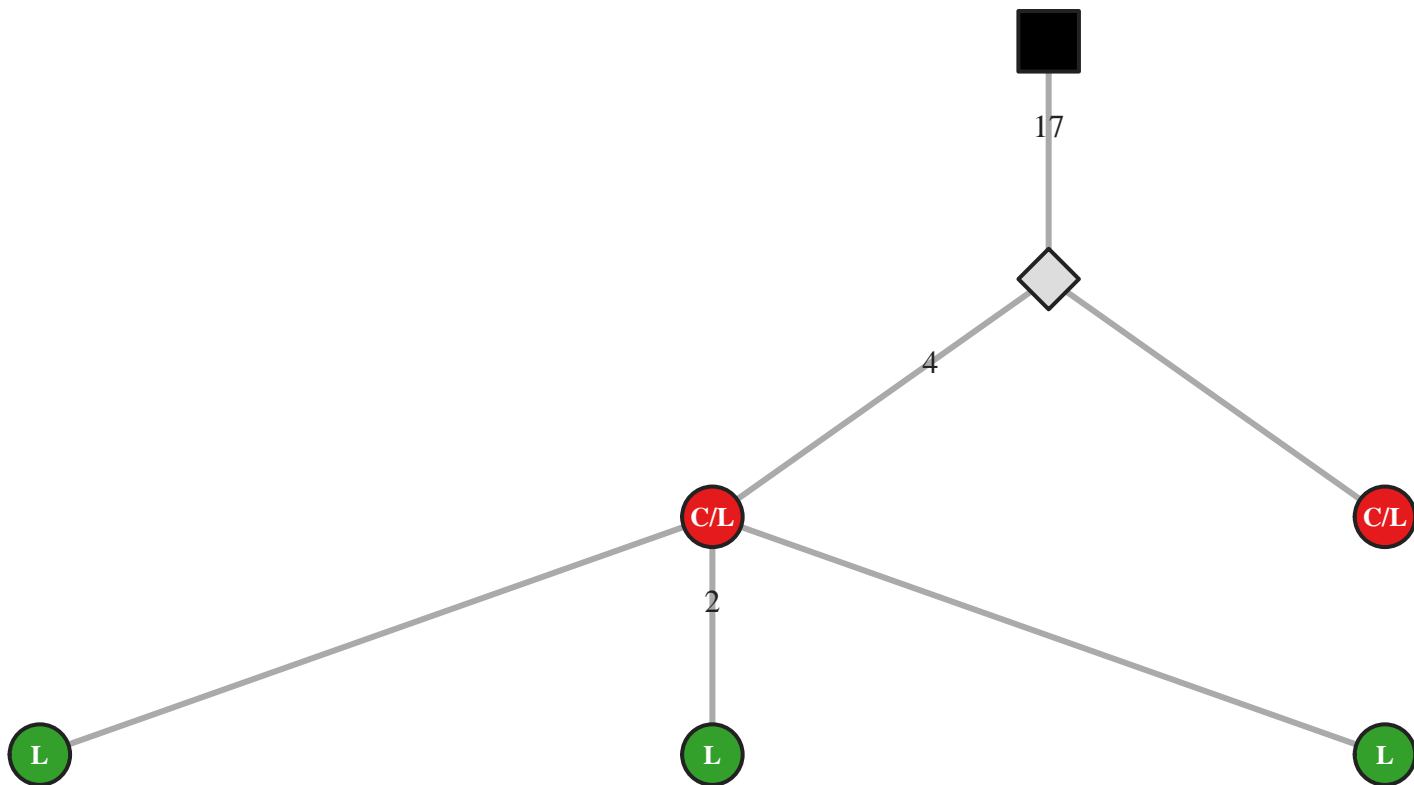
M5 IgG IGHV4-31/J3 66bp (18876)



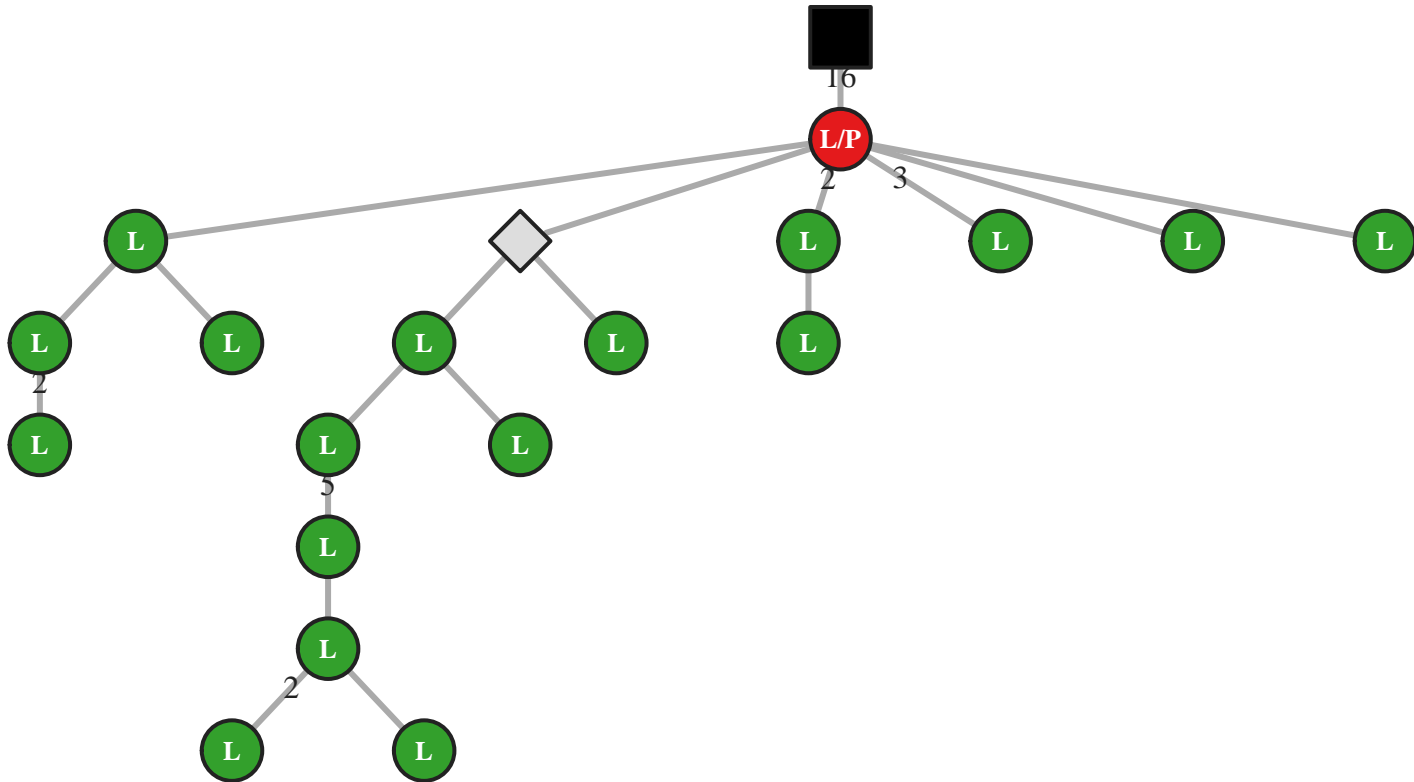
M5 IgG IGHV4-31/J4 33bp (27757)



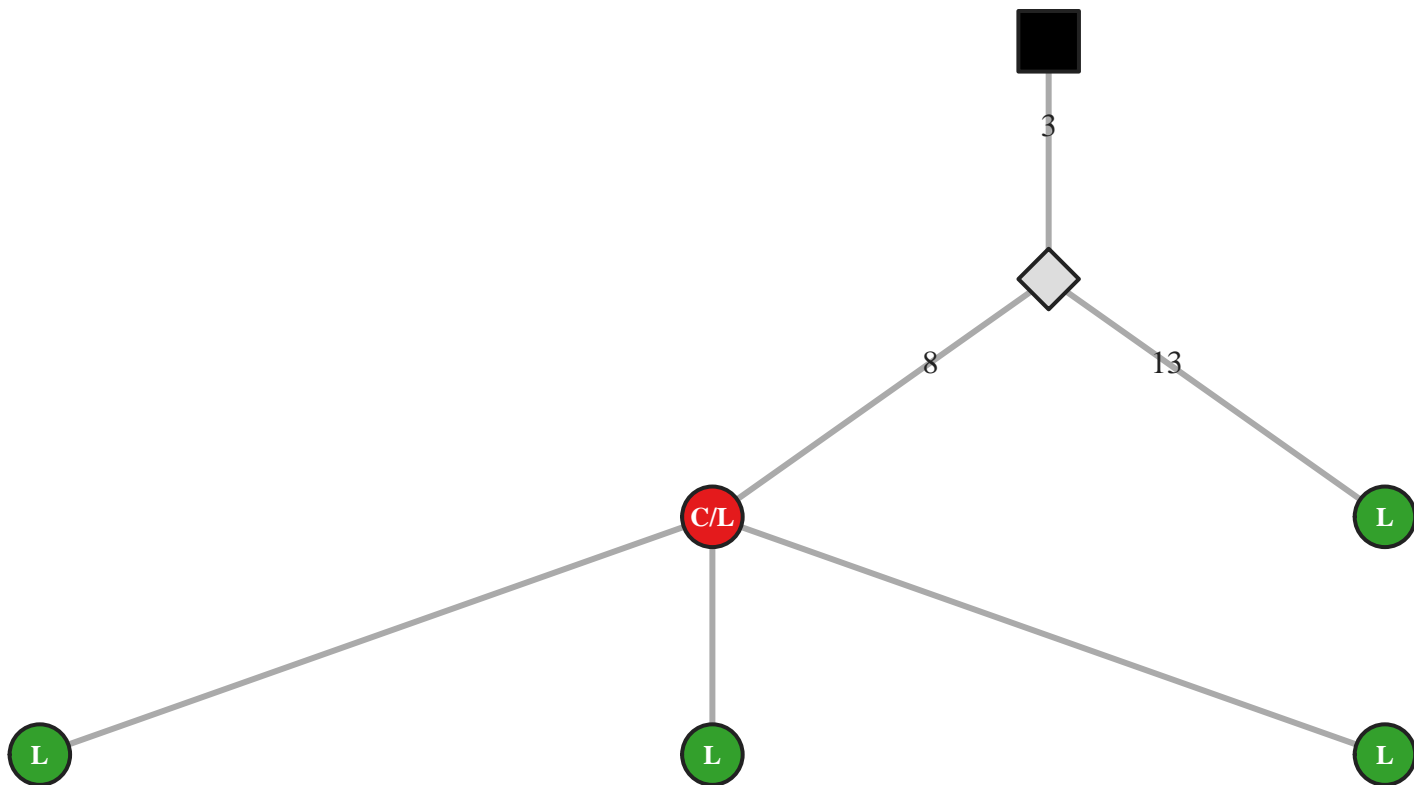
M5 IgG IGHV4-31/J4 36bp (9590)



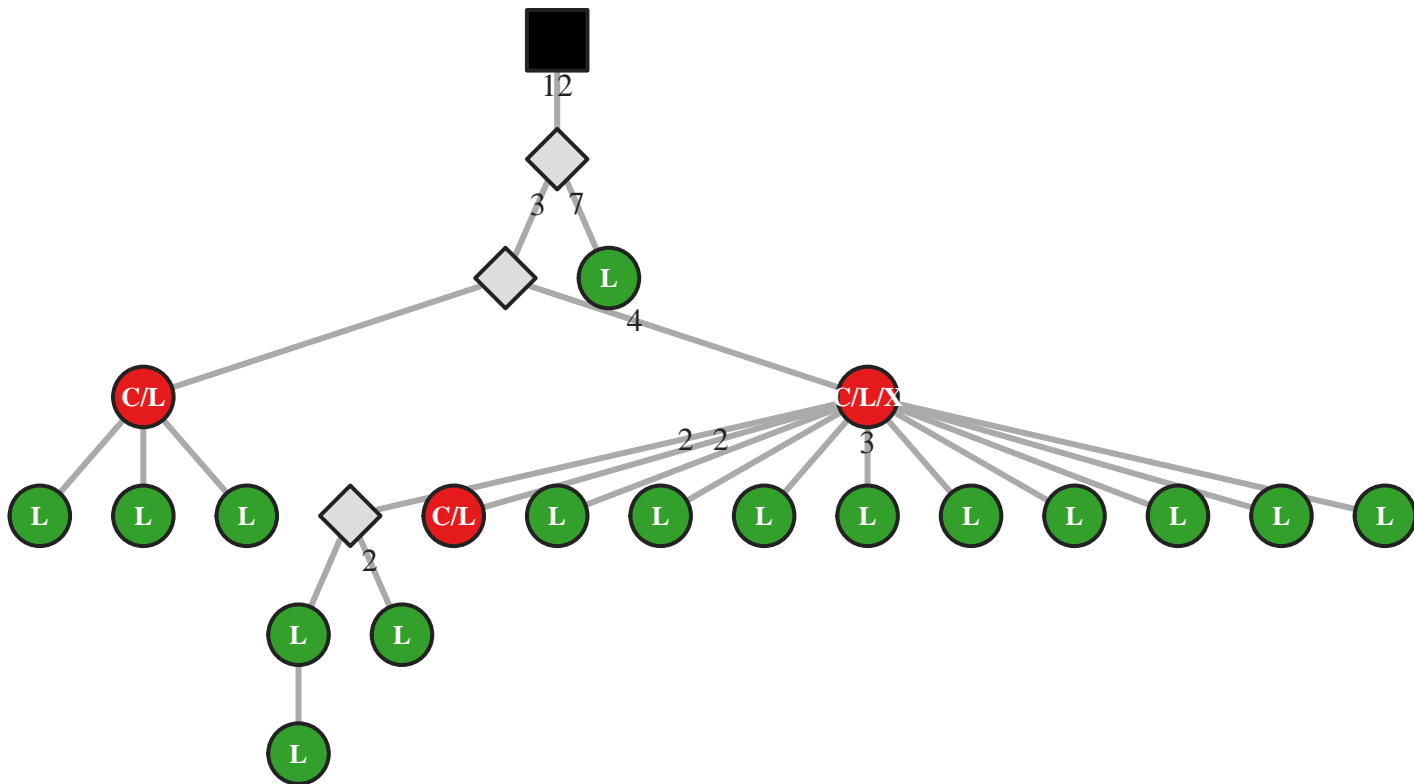
M5 IgG IGHV4-31/J4 39bp (52724)



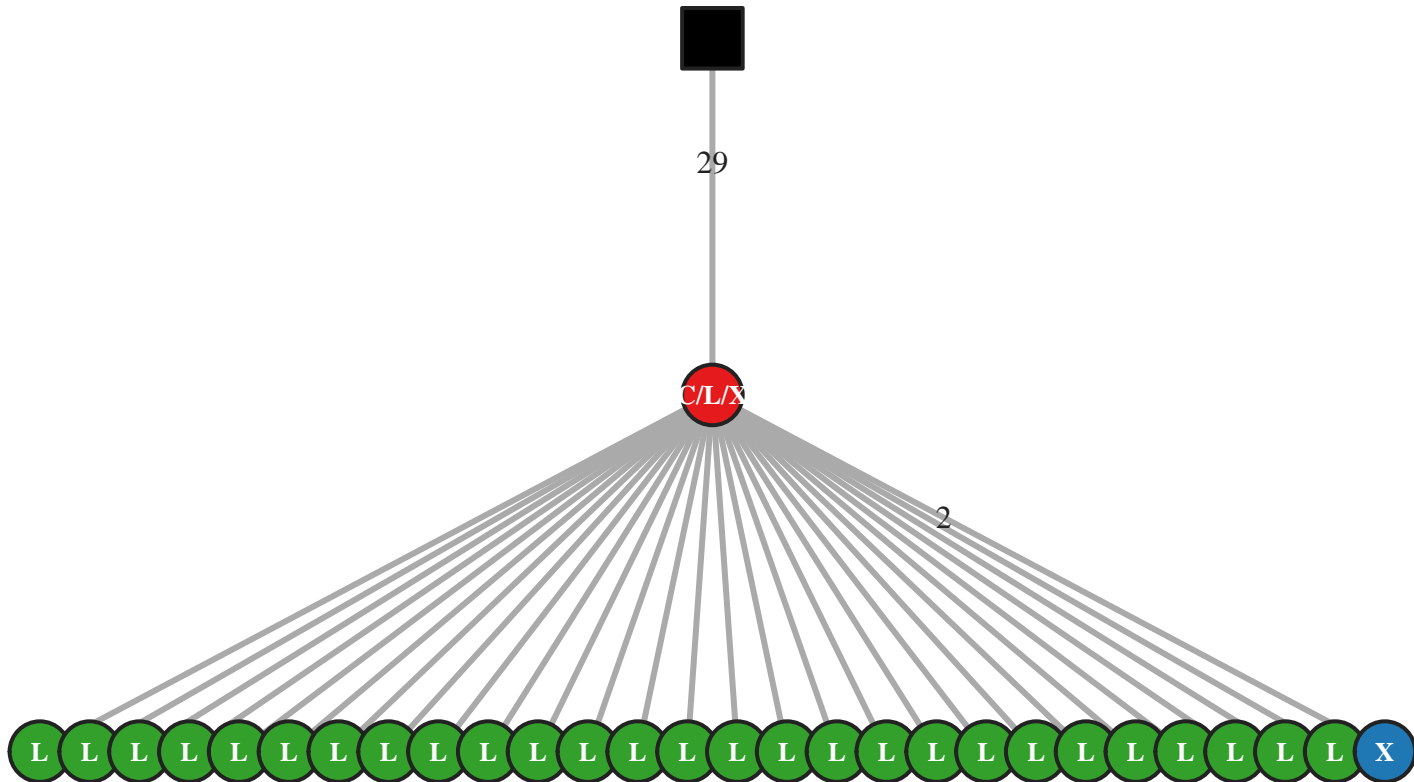
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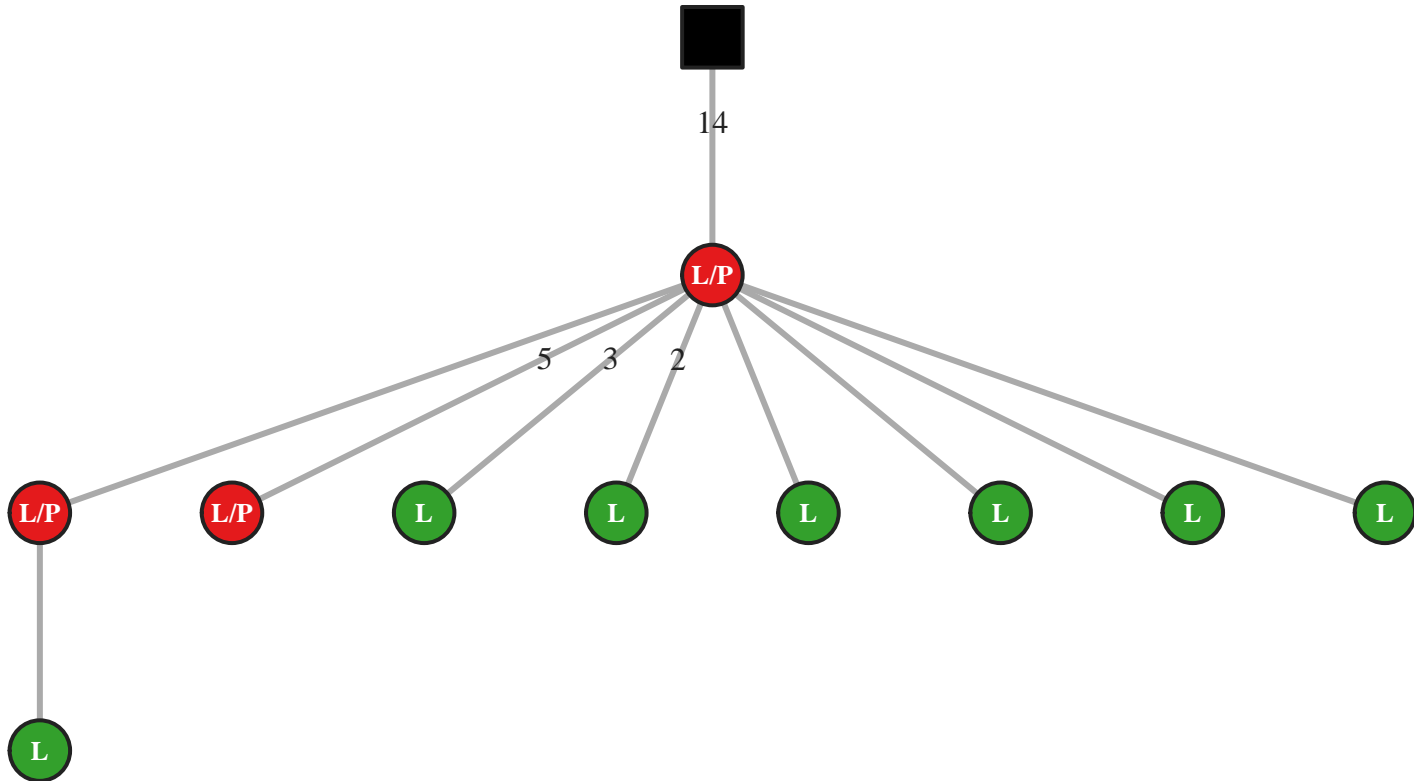
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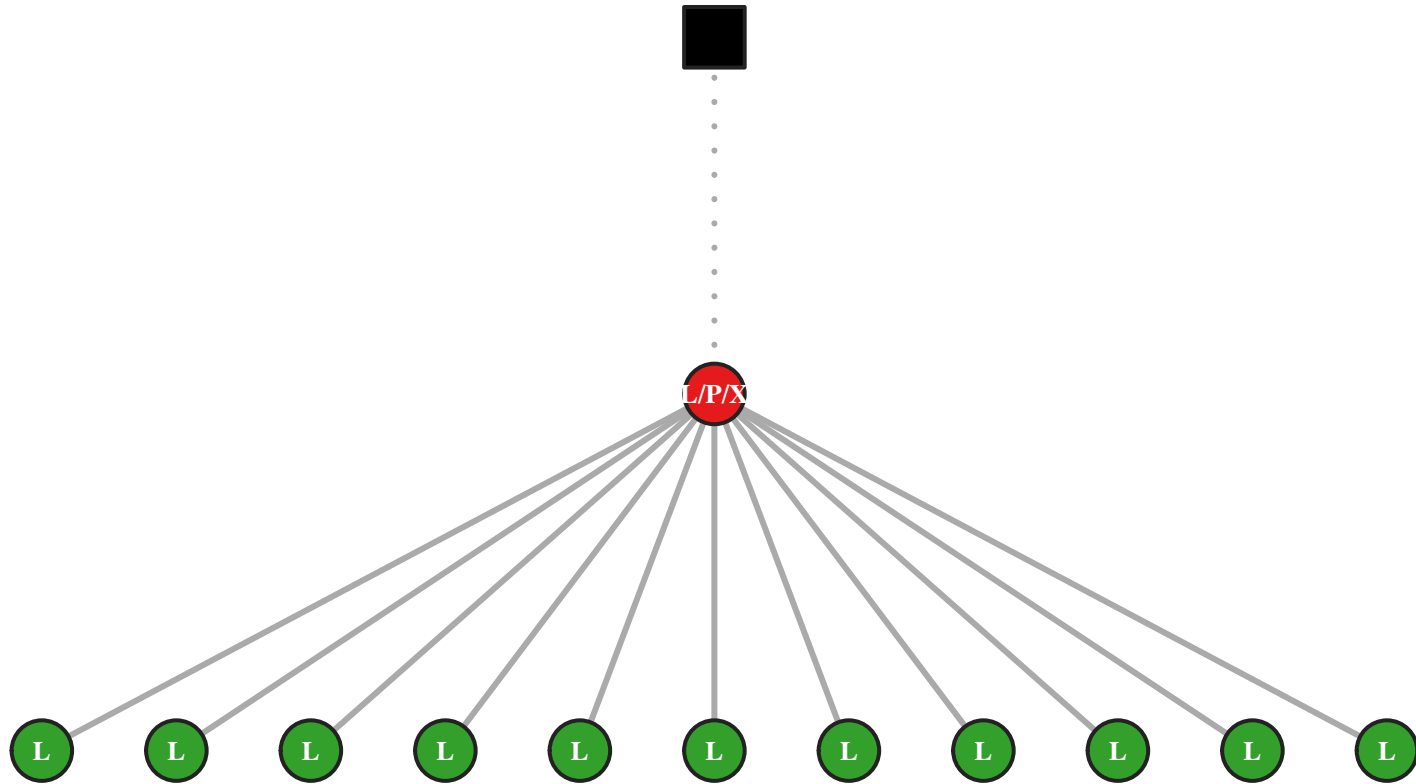
M5 IgA IGHV4-31/J4 42bp (30778)



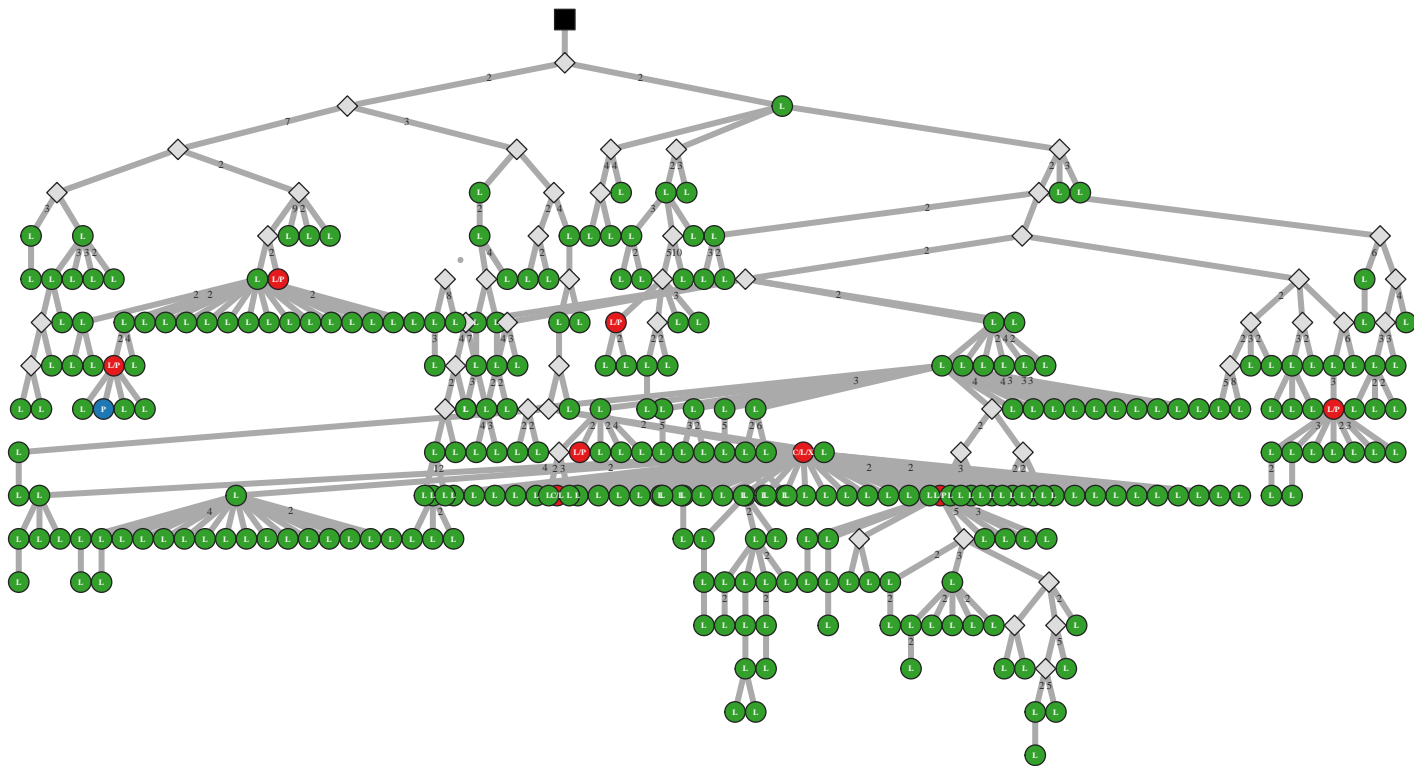
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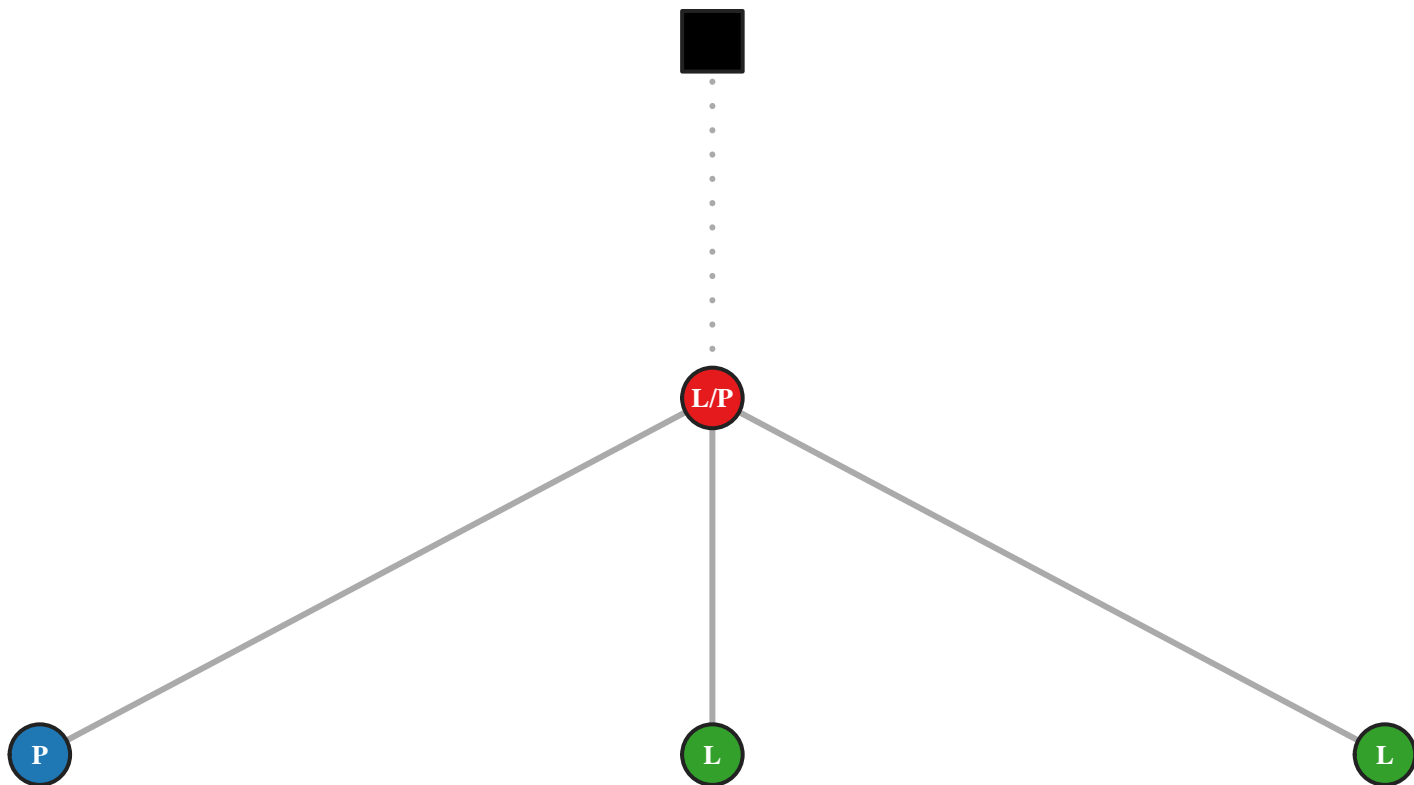
M5 IgG IGHV4-31/J4 42bp (52805)



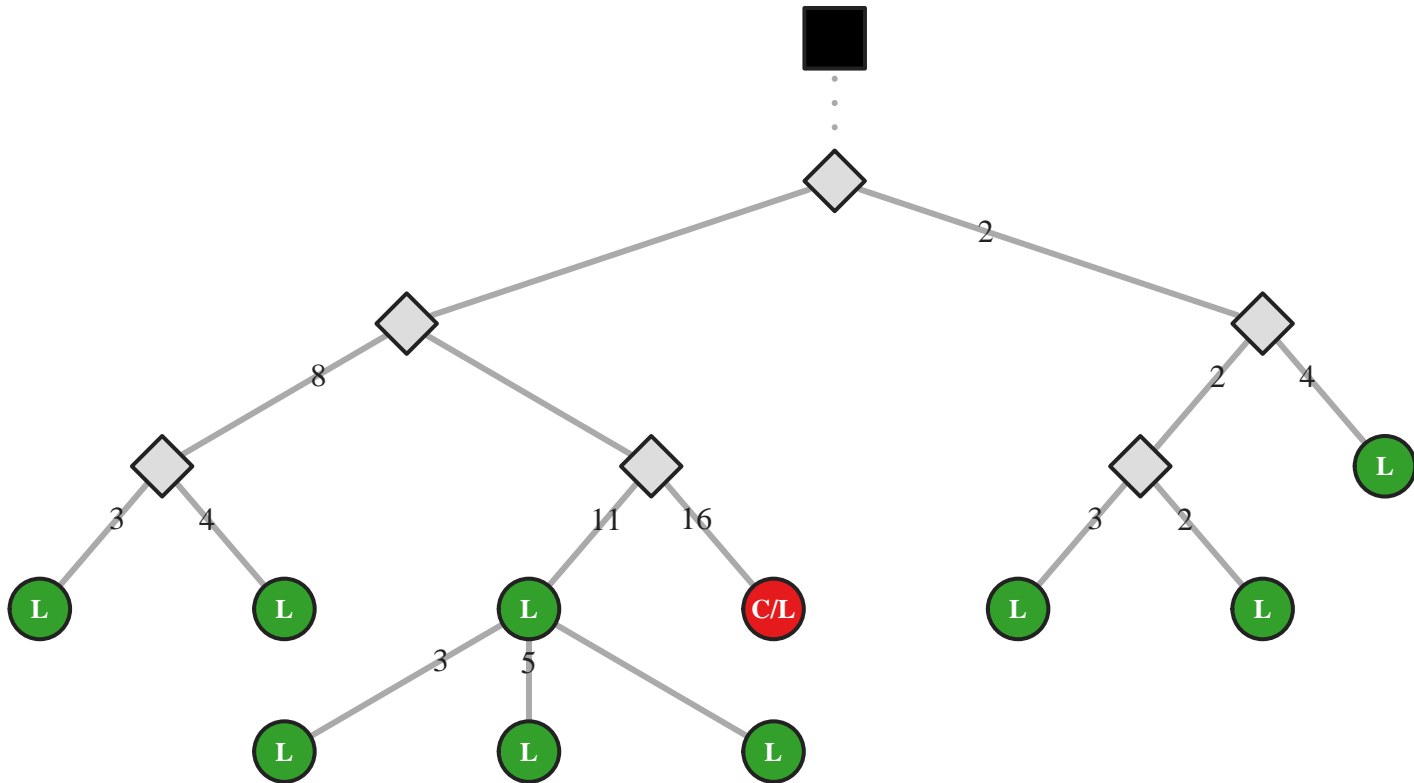
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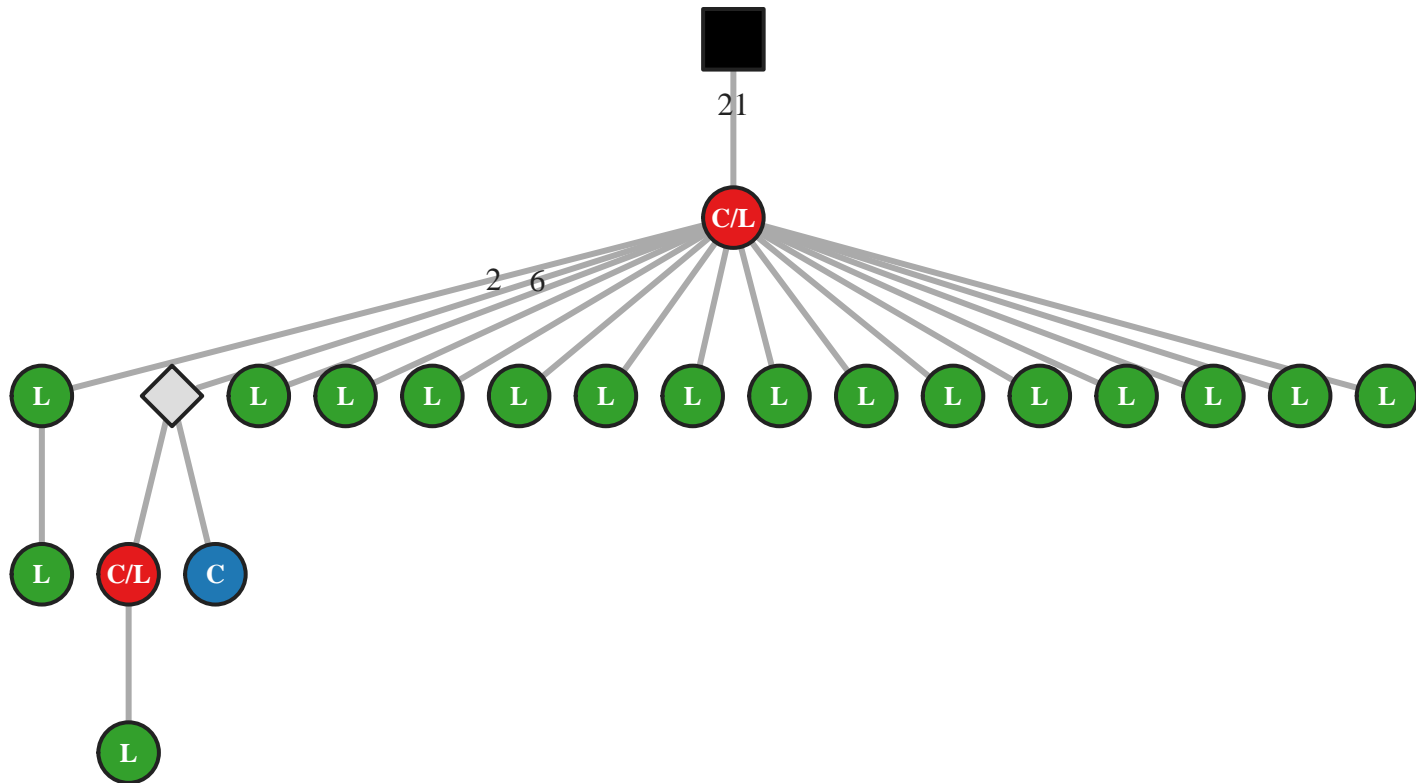
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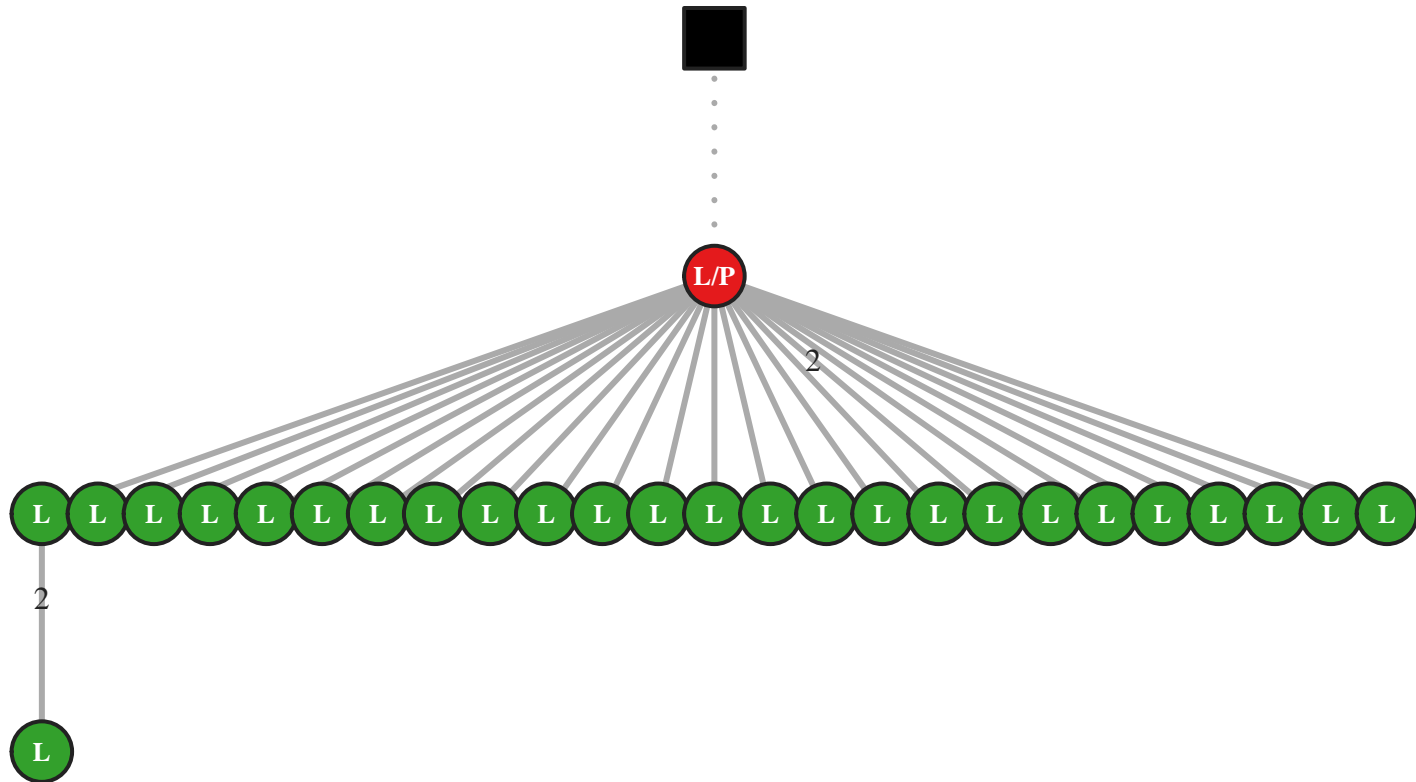
M5 IgG IGHV4-31/J4 42bp (52844)



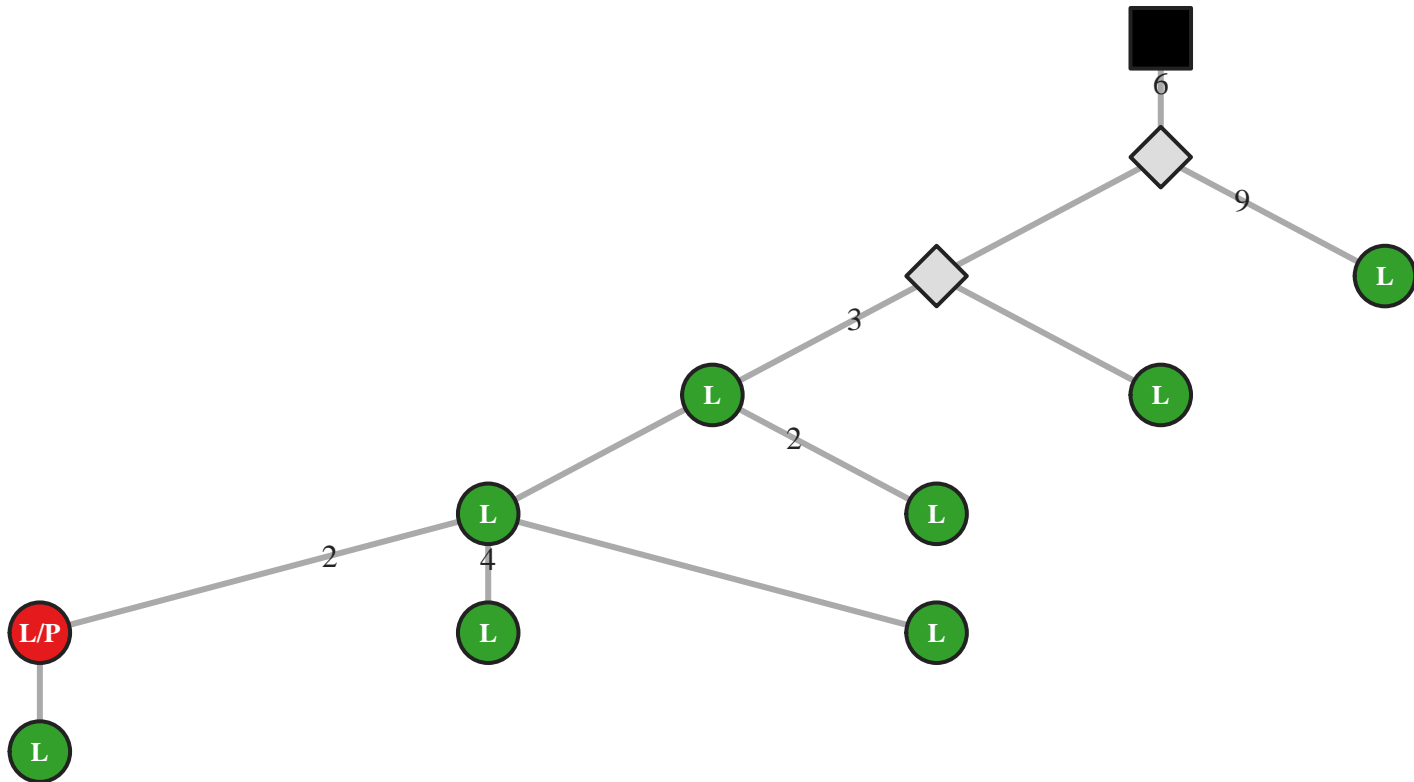
M5 IgG IGHV4-31/J4 45bp (9601)



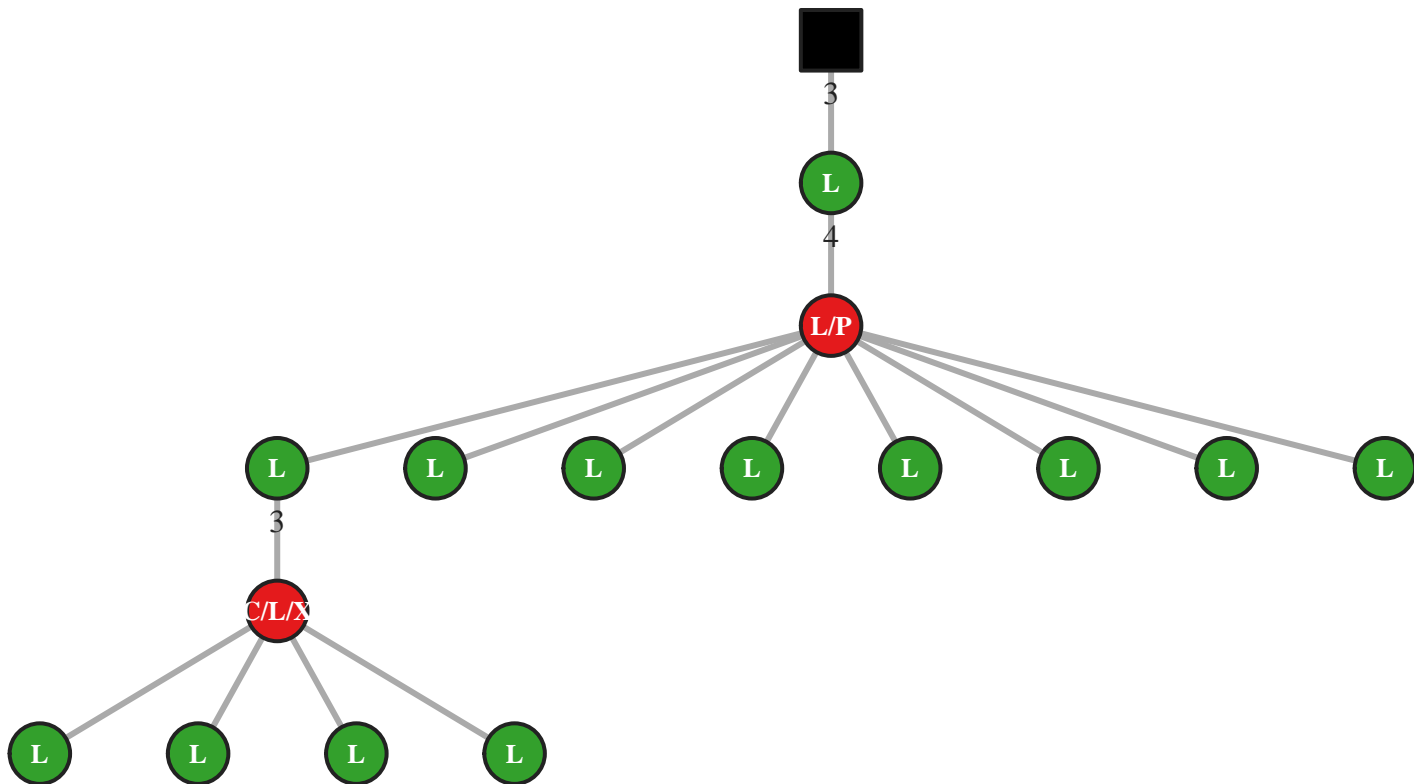
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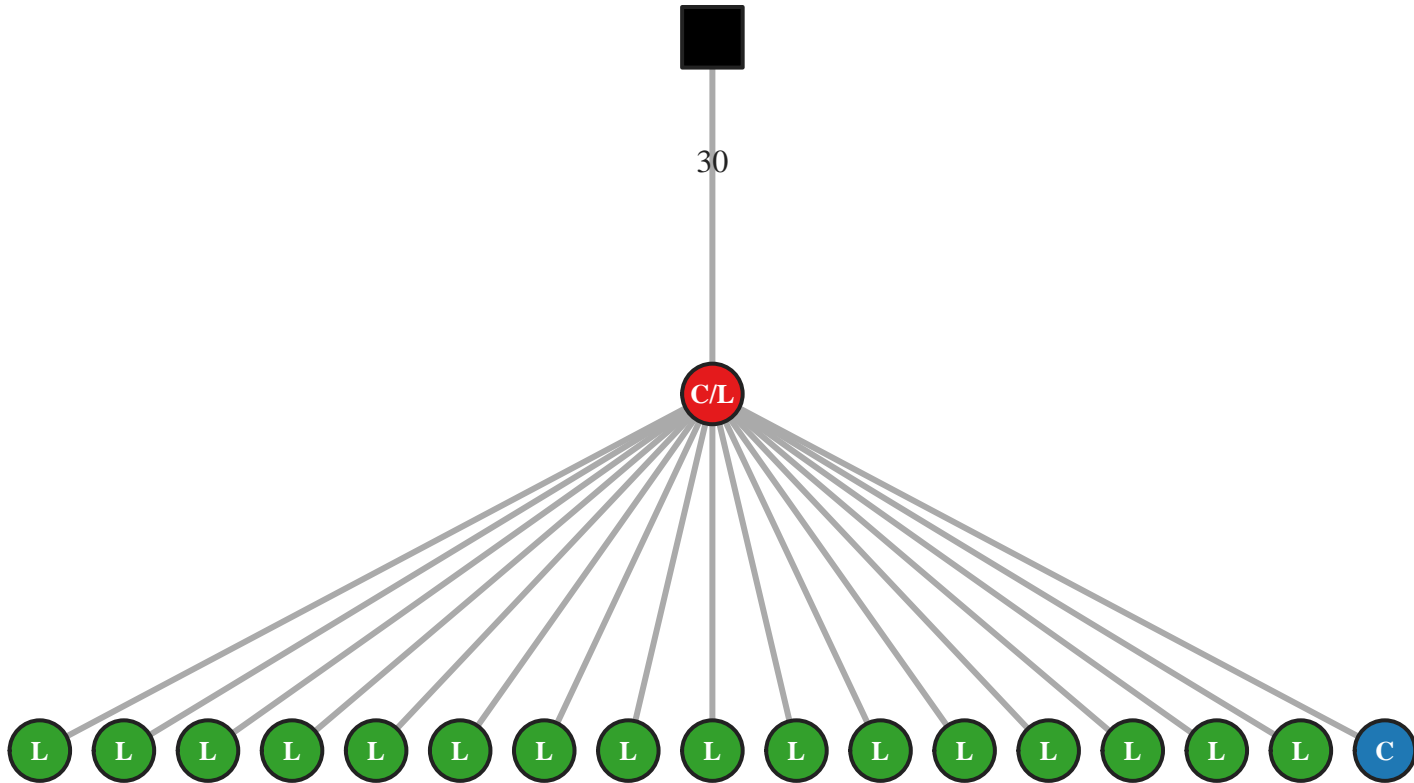
M5 IgG IGHV4-31/J4 45bp (9662)



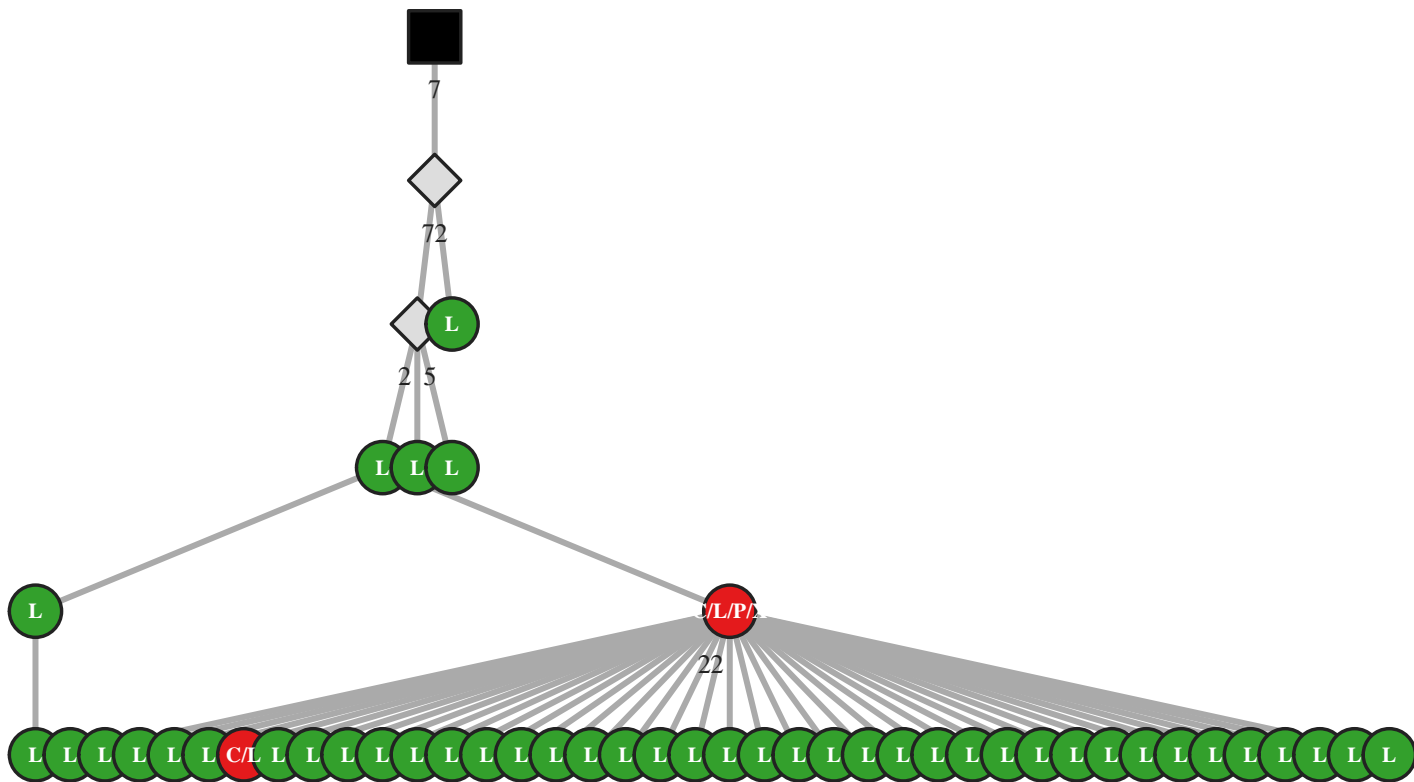
M5 IgG IGHV4-31/J4 48bp (46225)



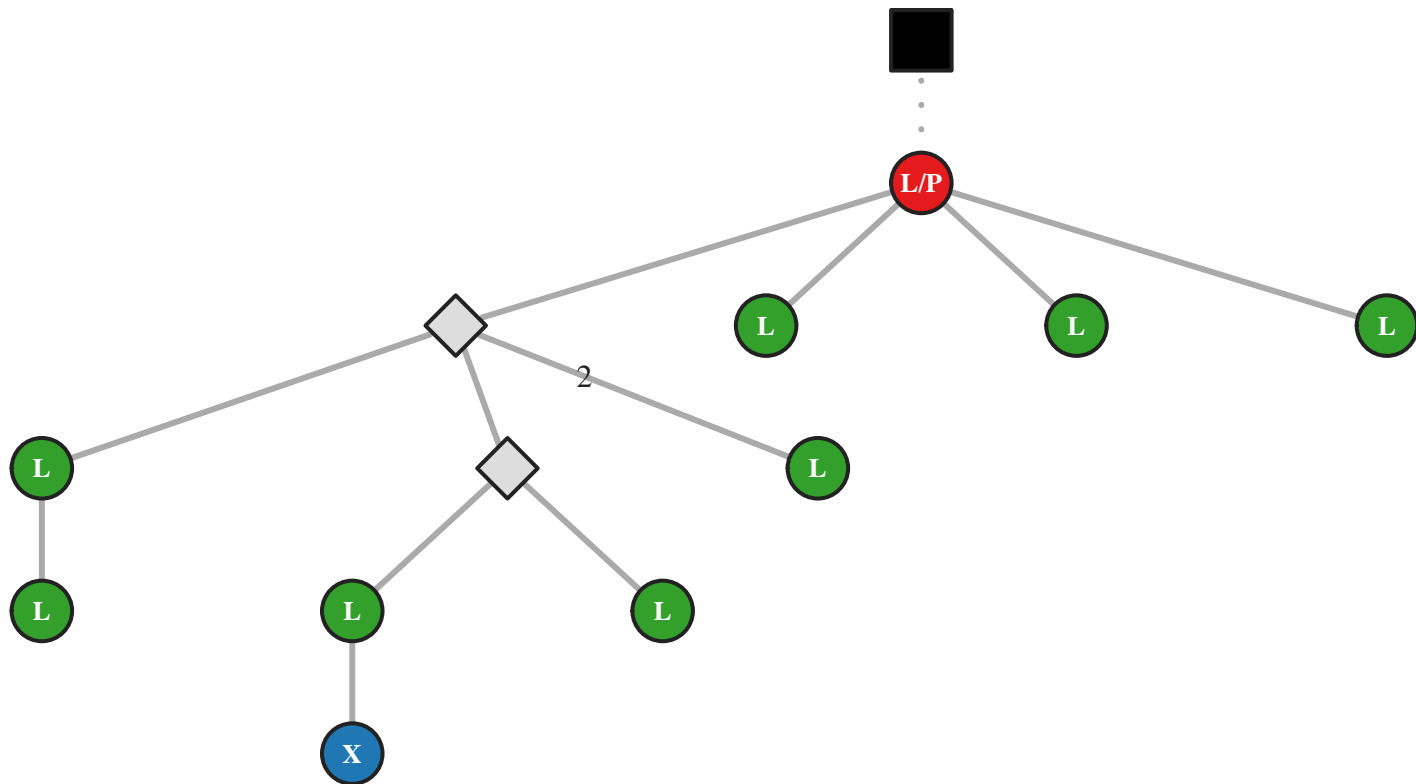
M5 IgG IGHV4-31/J4 48bp (46281)



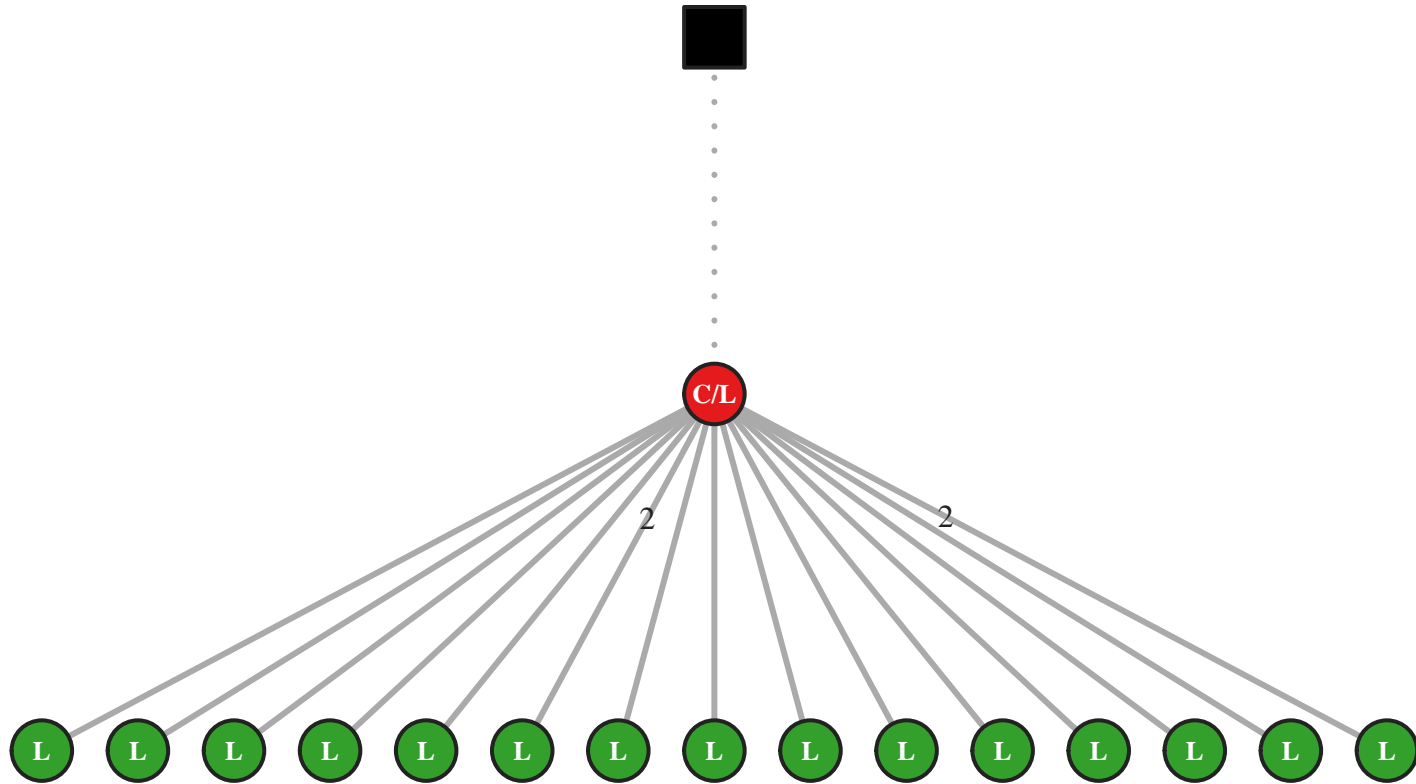
M5 IgG IGHV4-31/J4 51bp (18904)



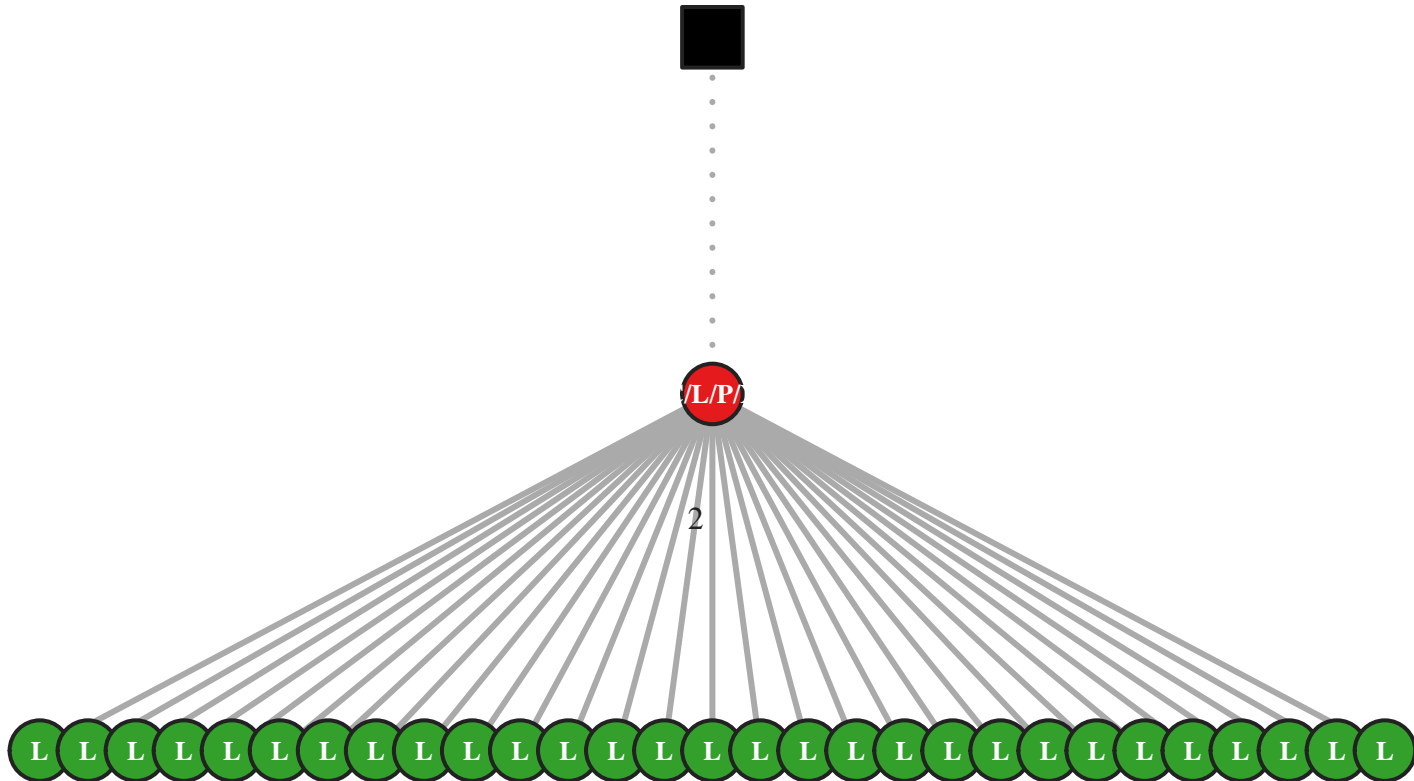
M5 IgA IGHV4-31/J4 54bp (3127)



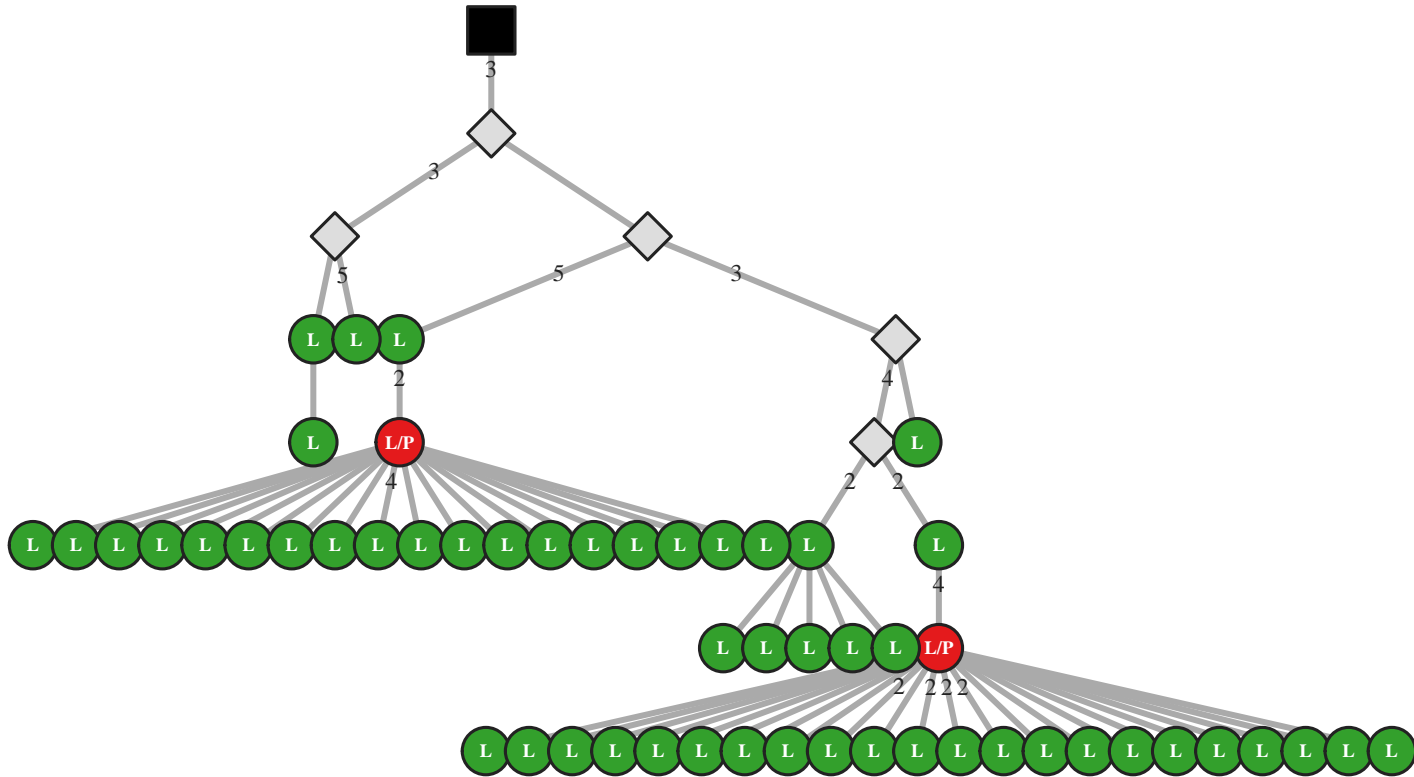
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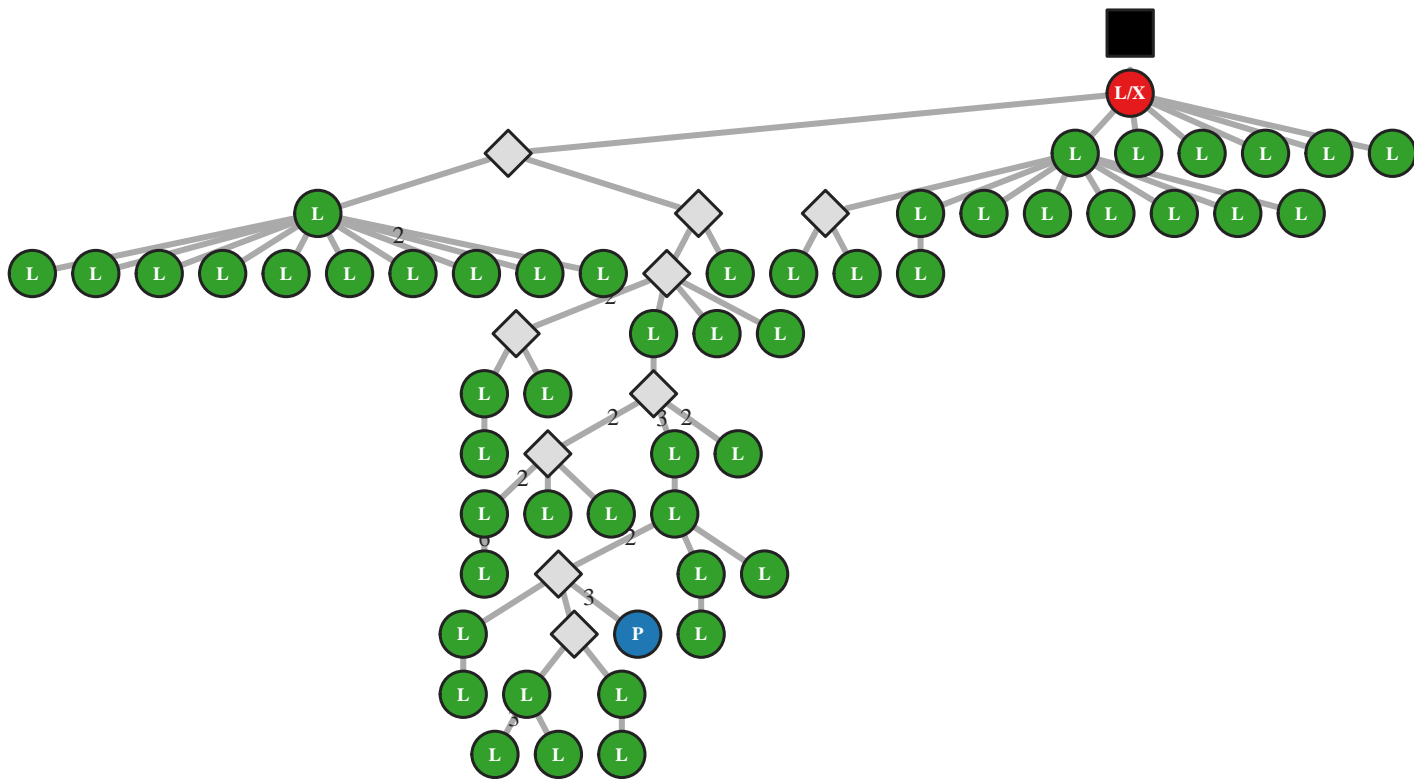
M5 IgG IGHV4-31/J4 54bp (36012)



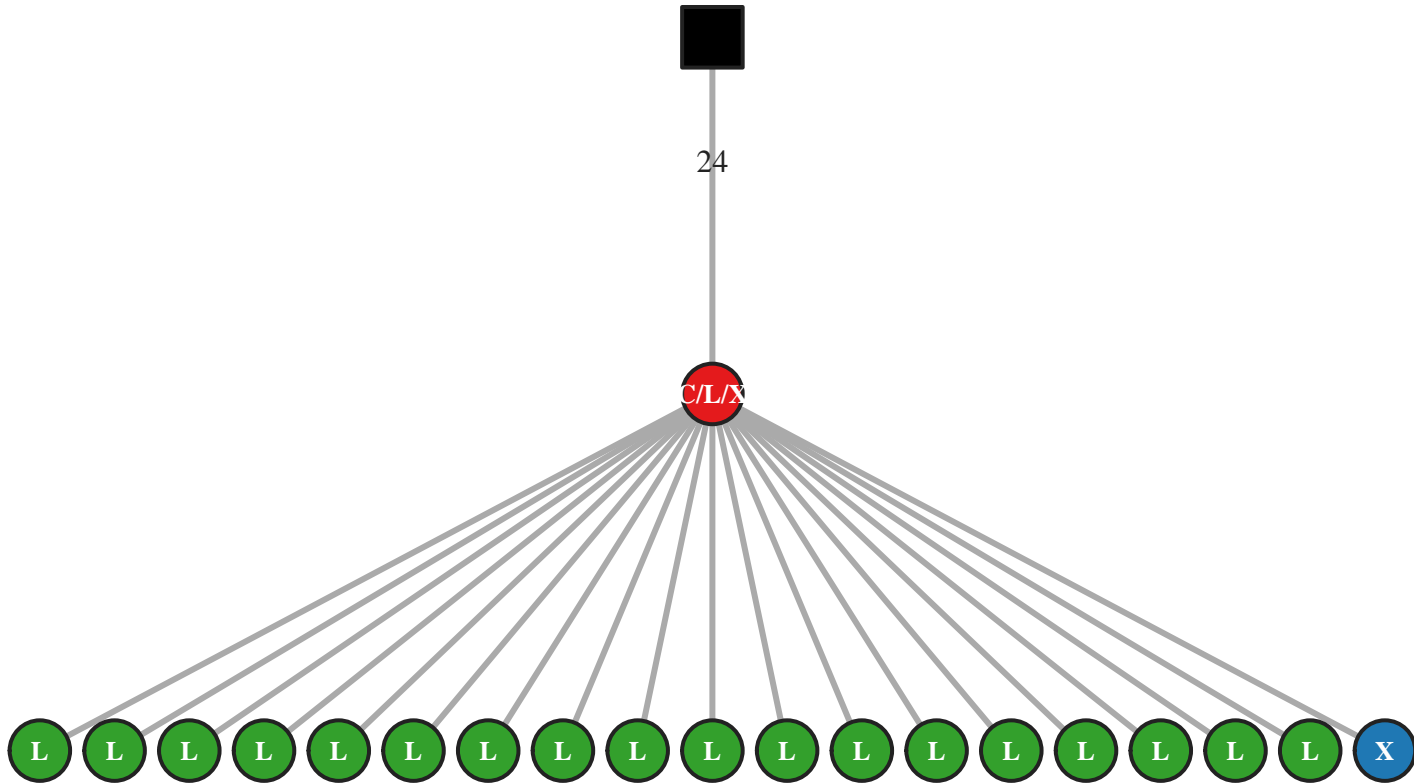
M5 IgG IGHV4-31/J4 54bp (36015)



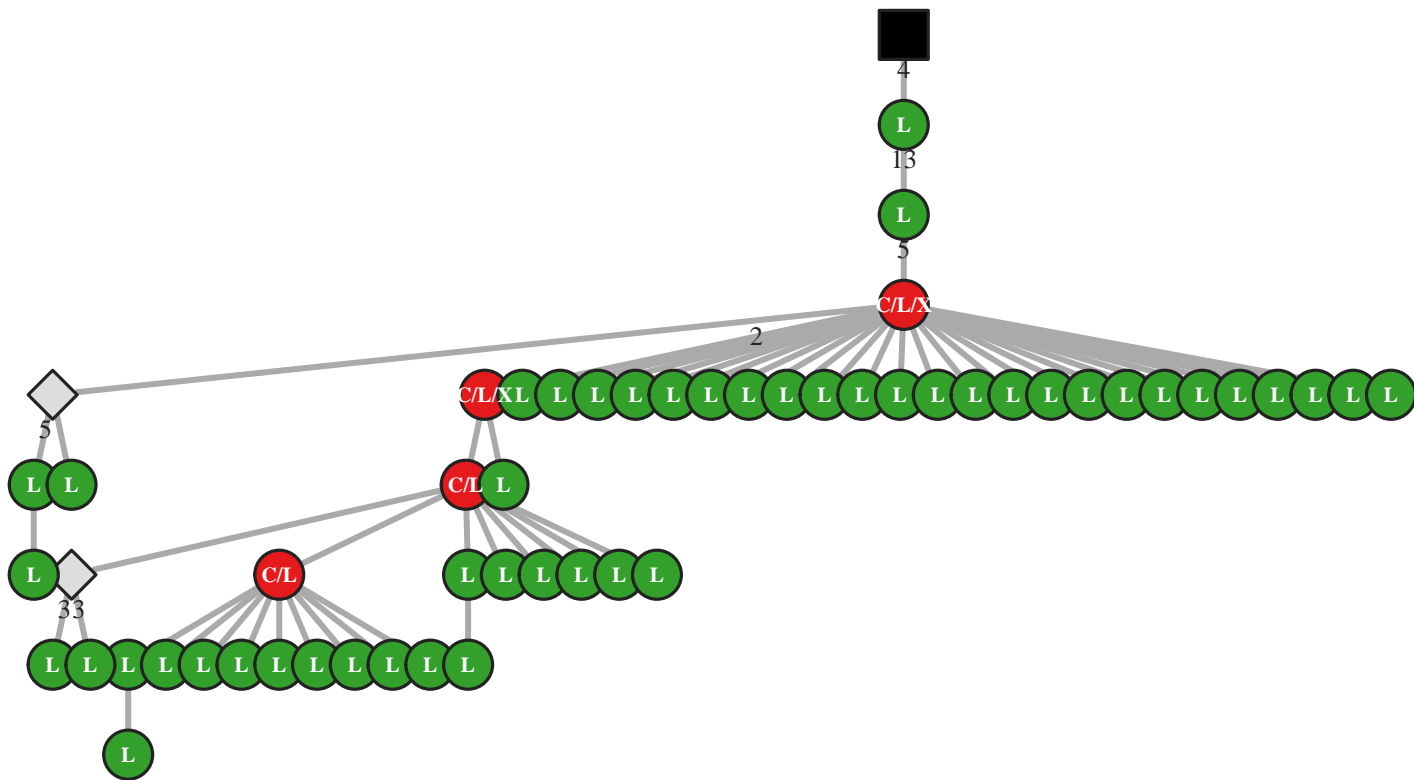
M5 IgG IGHV4-31/J4 54bp (36022)



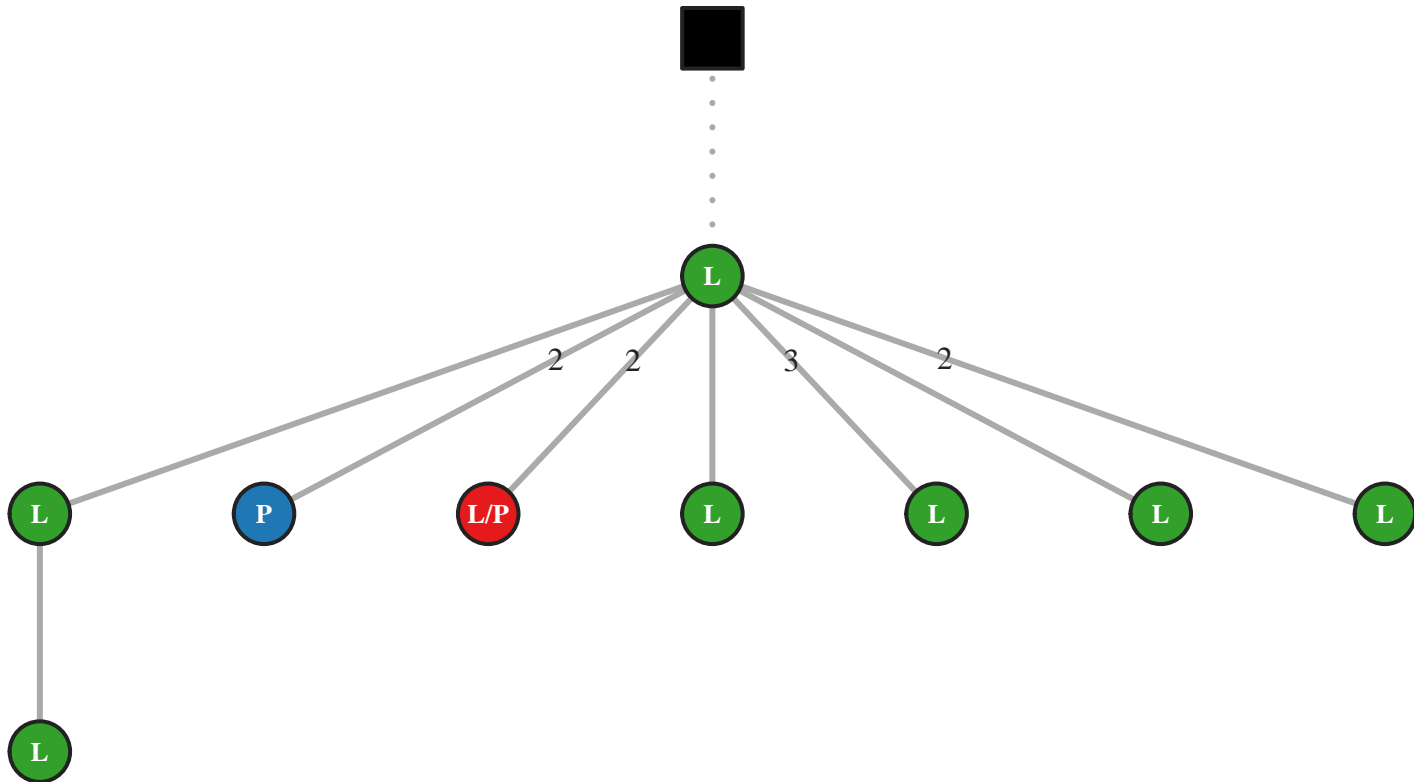
M5 IgG IGHV4-31/J4 54bp (36024)



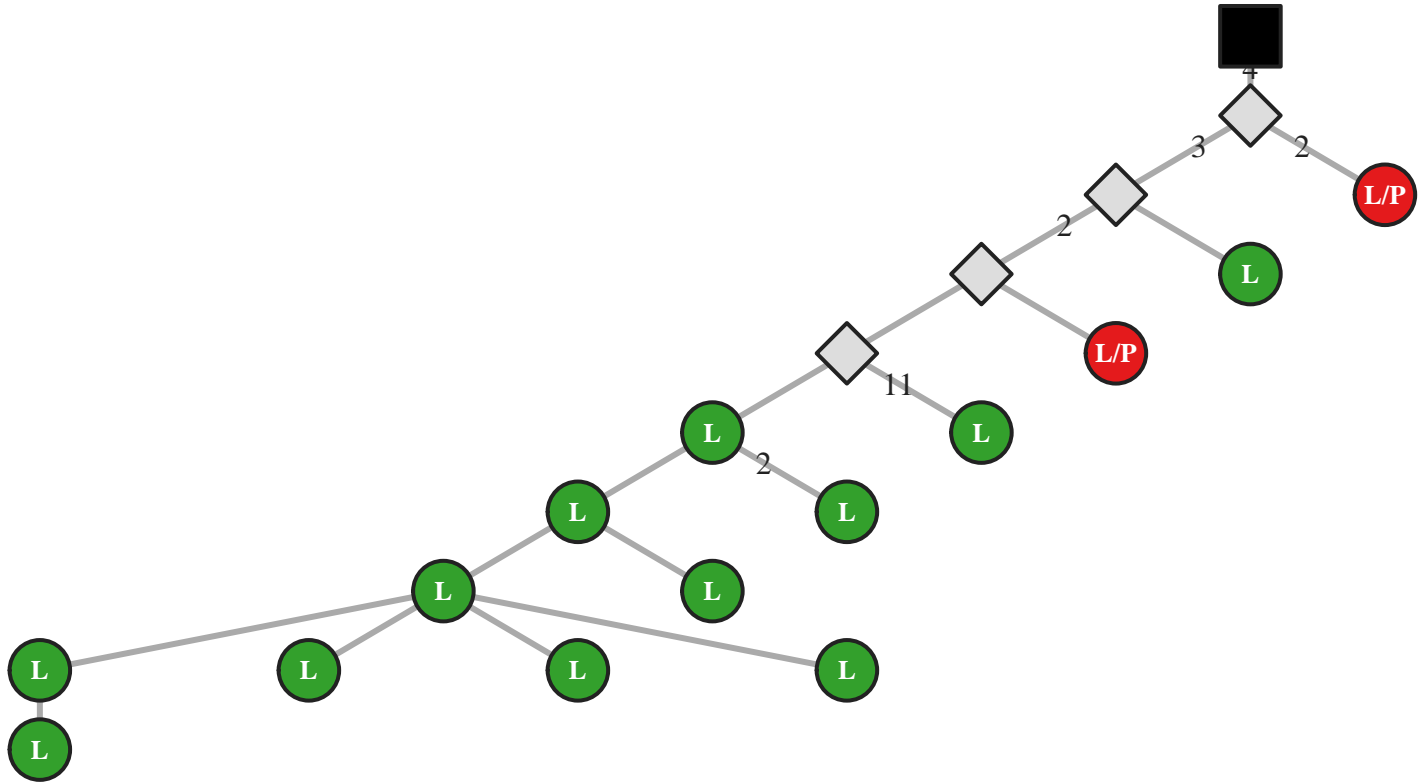
M5 IgG IGHV4-31/J4 54bp (36035)



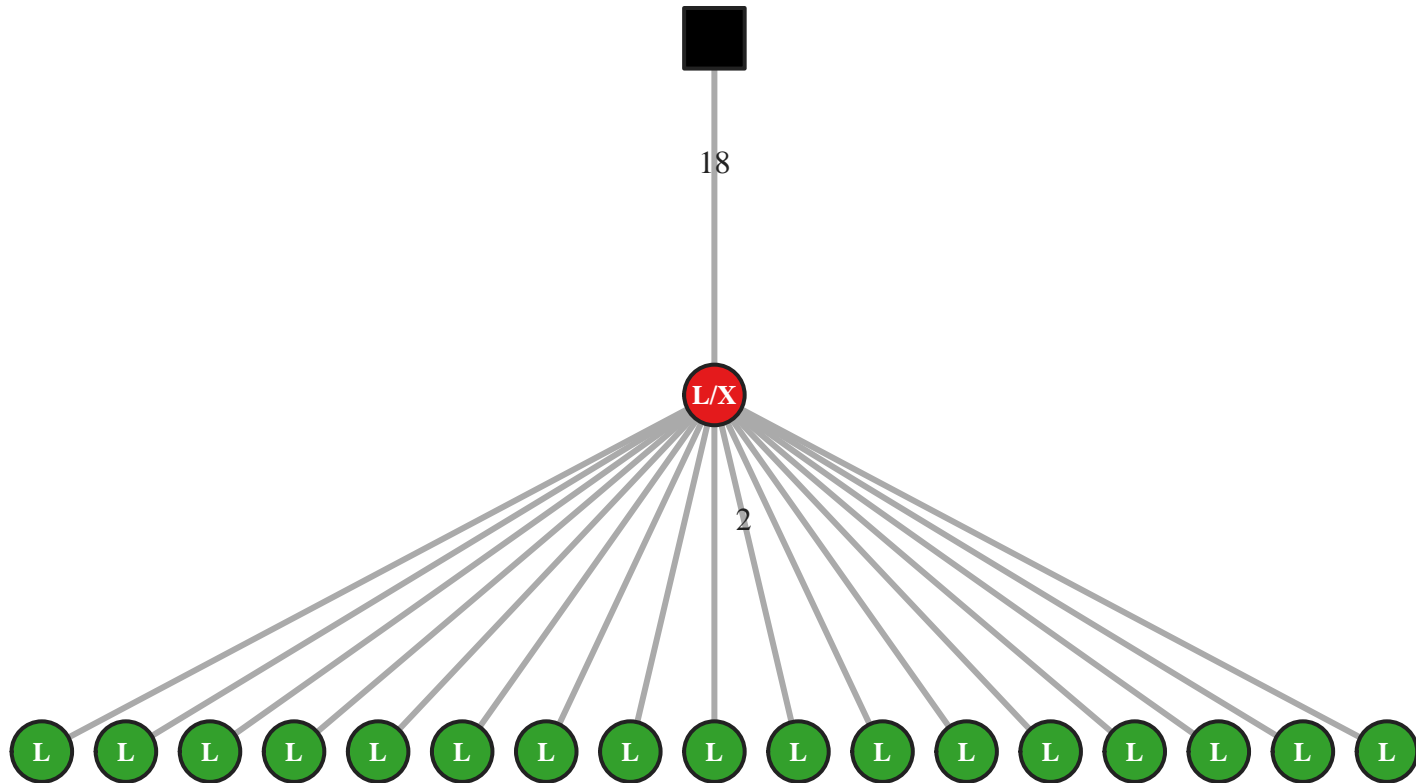
M5 IgG IGHV4-31/J4 54bp (36084)



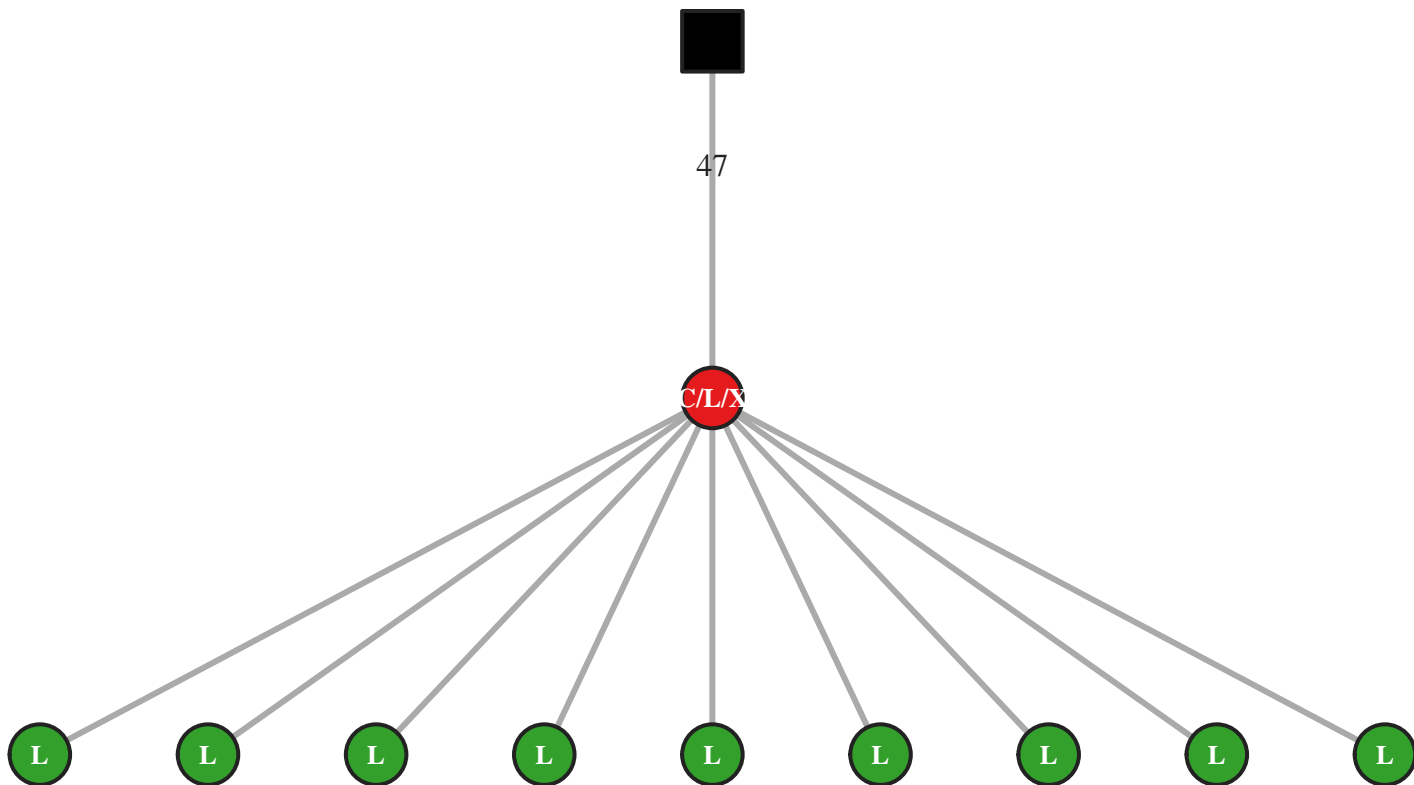
M5 IgG IGHV4-31/J4 57bp (27775)



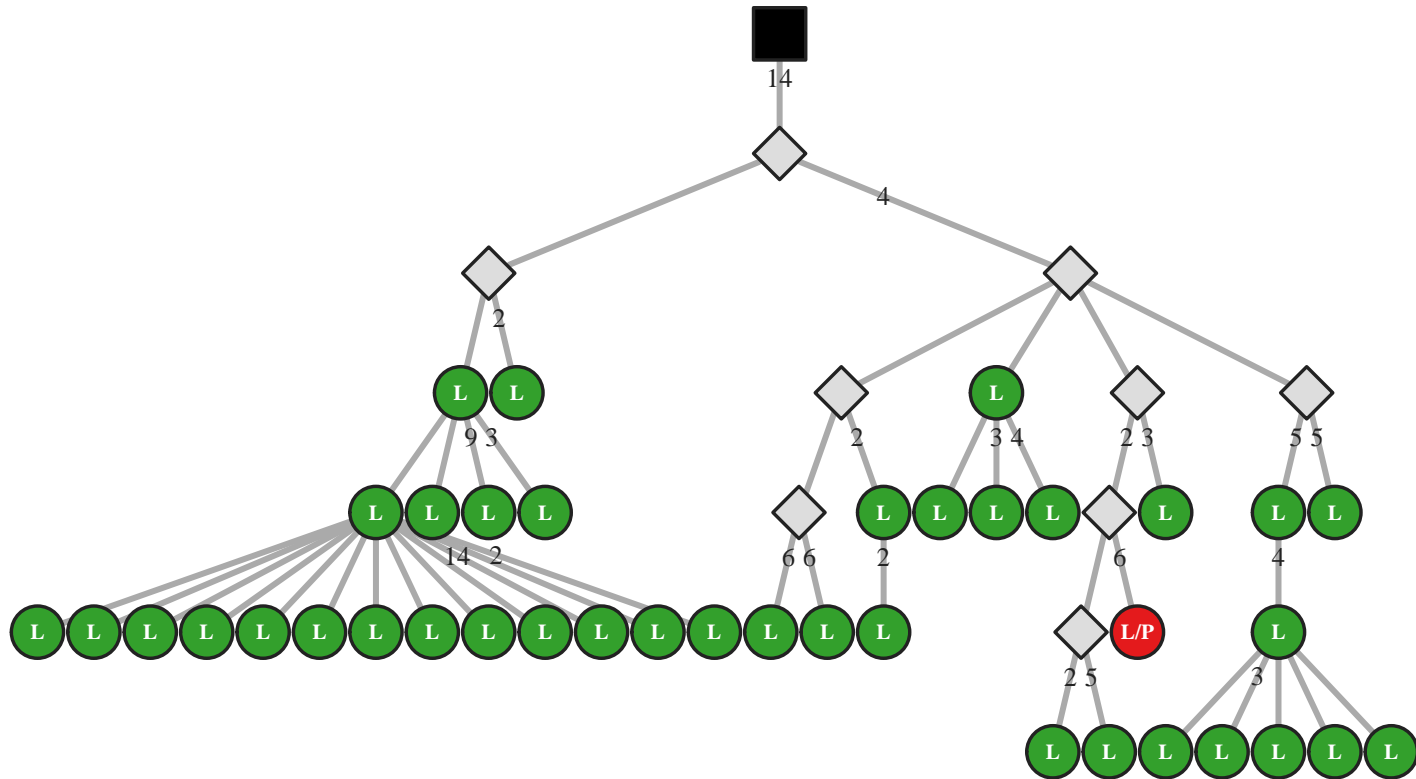
M5 IgG IGHV4-31/J4 69bp (46349)



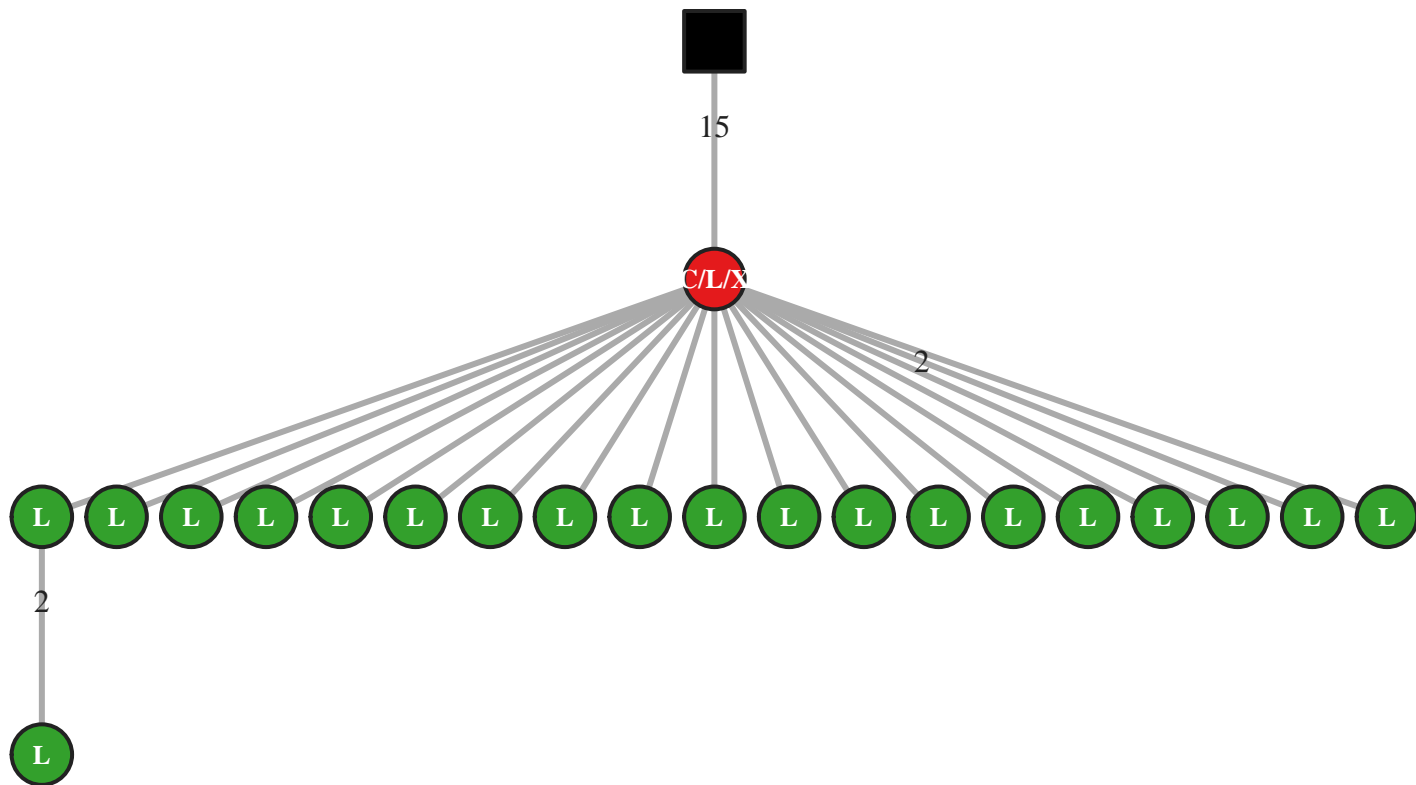
M5 IgG IGHV4-31/J5 21bp (46355)



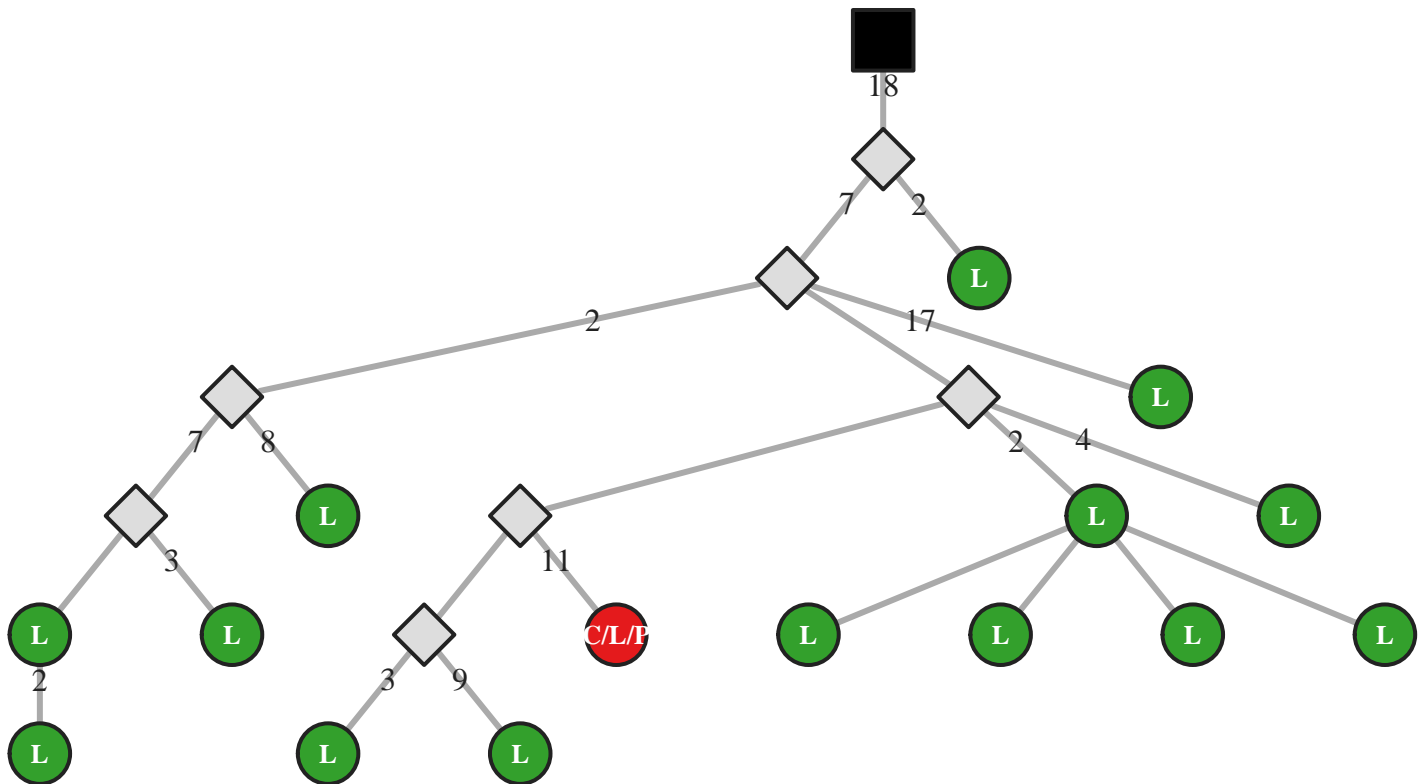
M5 IgG IGHV4-31/J5 42bp (9697)



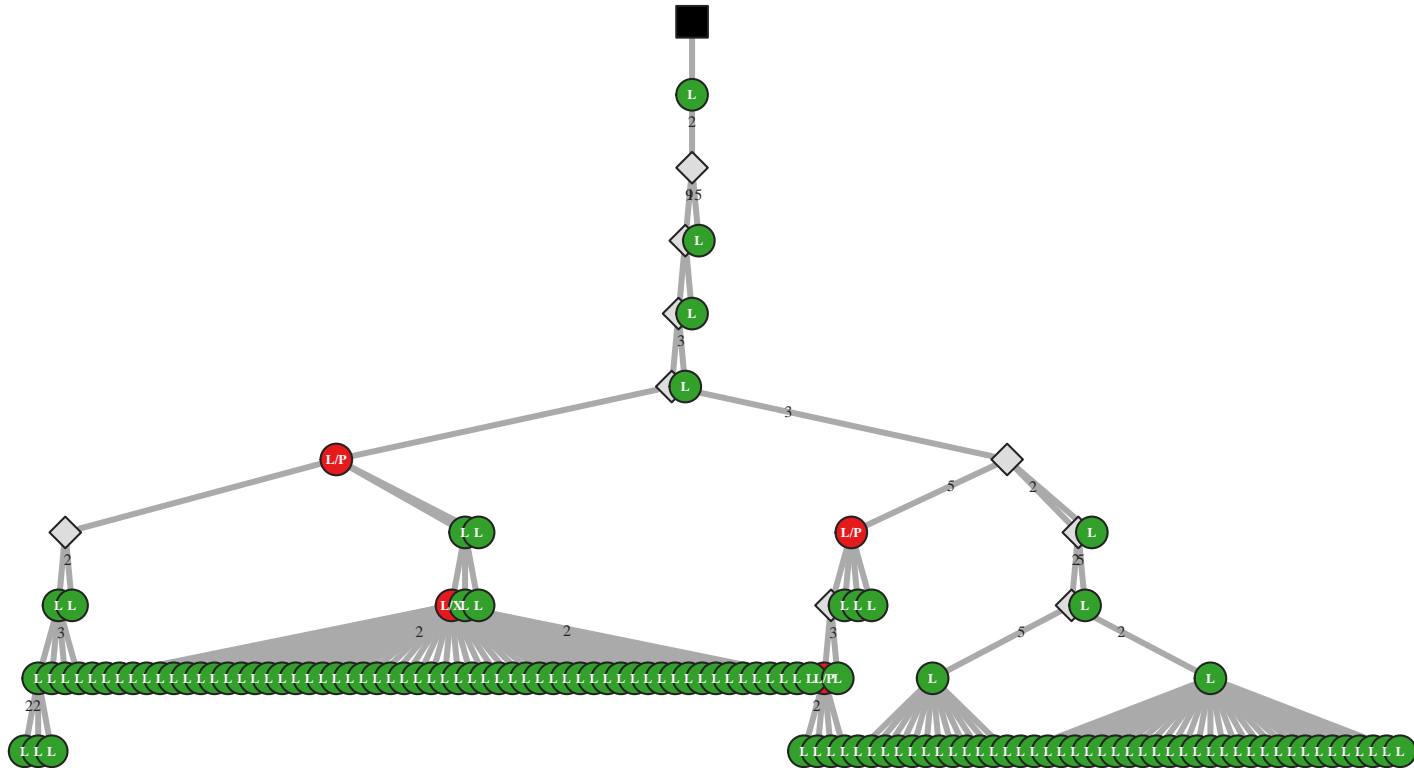
M5 IgG IGHV4-31/J5 45bp (9467)



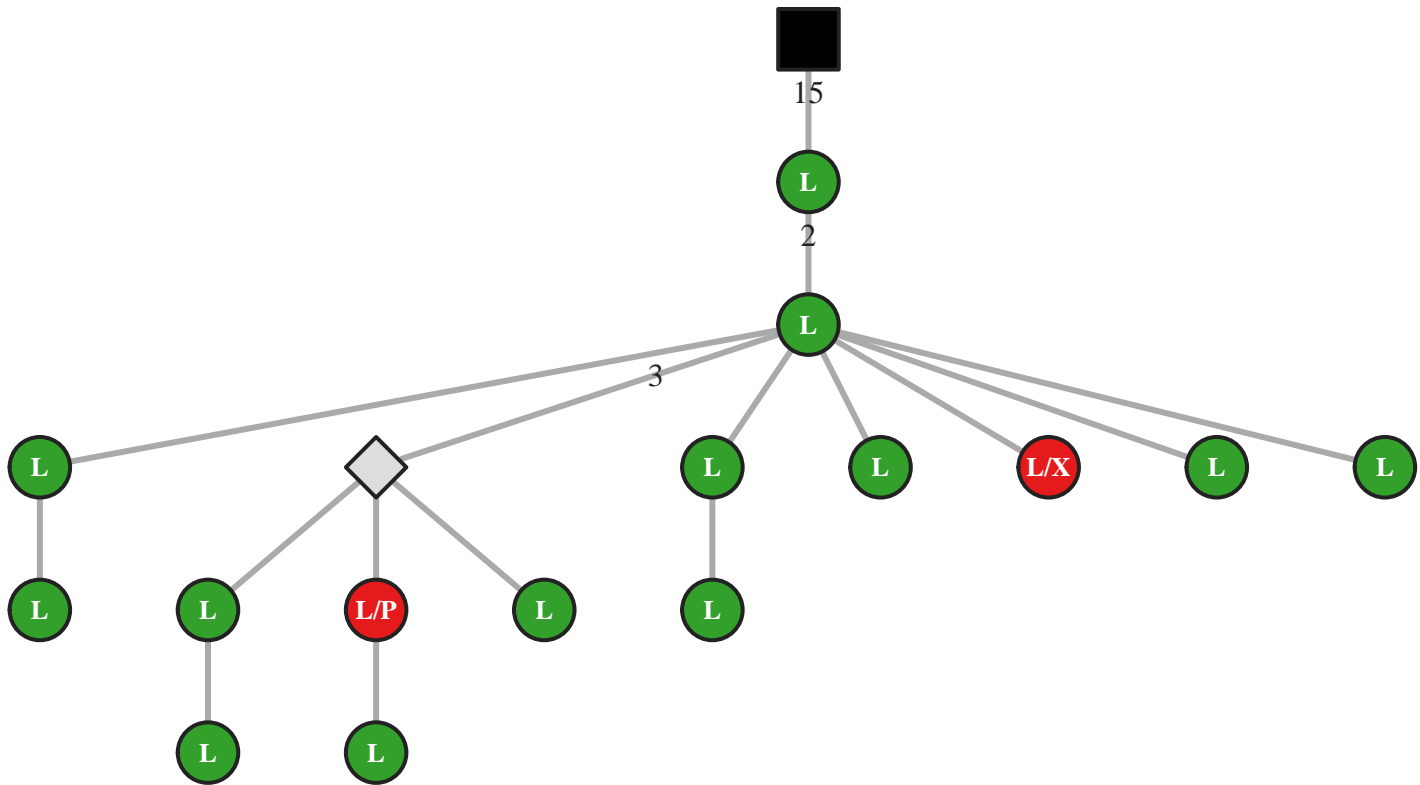
M5 IgG IGHV4-31/J5 48bp (27858)



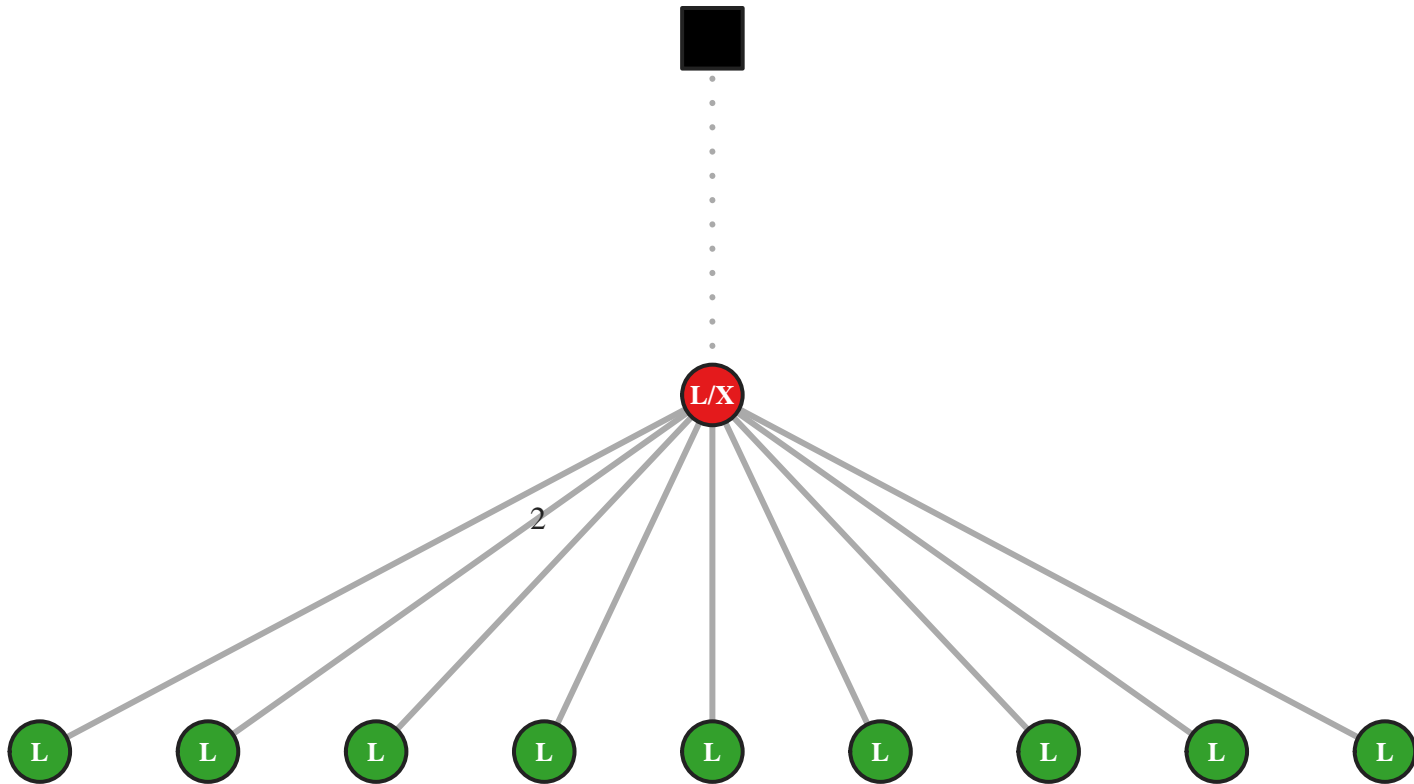
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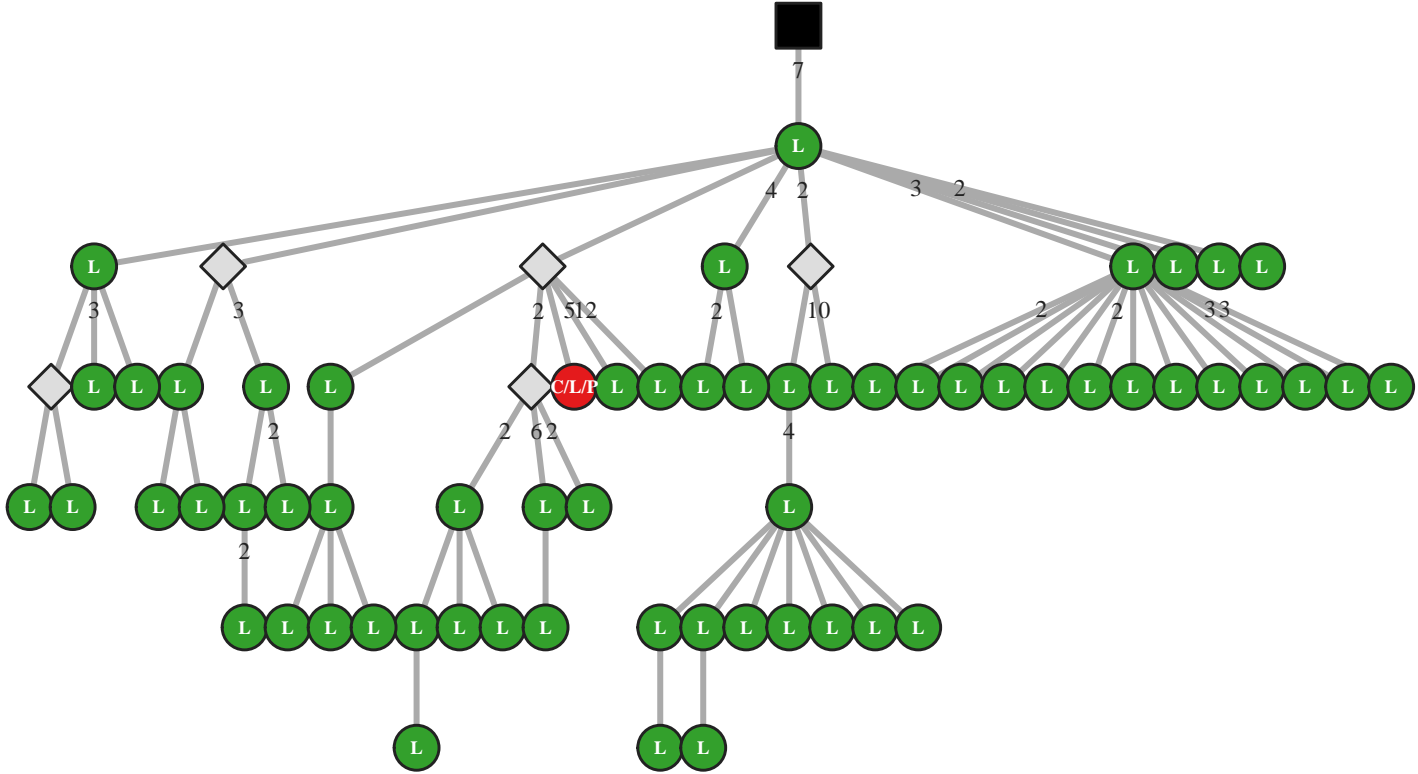
M5 IgG IGHV4-31/J5 54bp (27873)



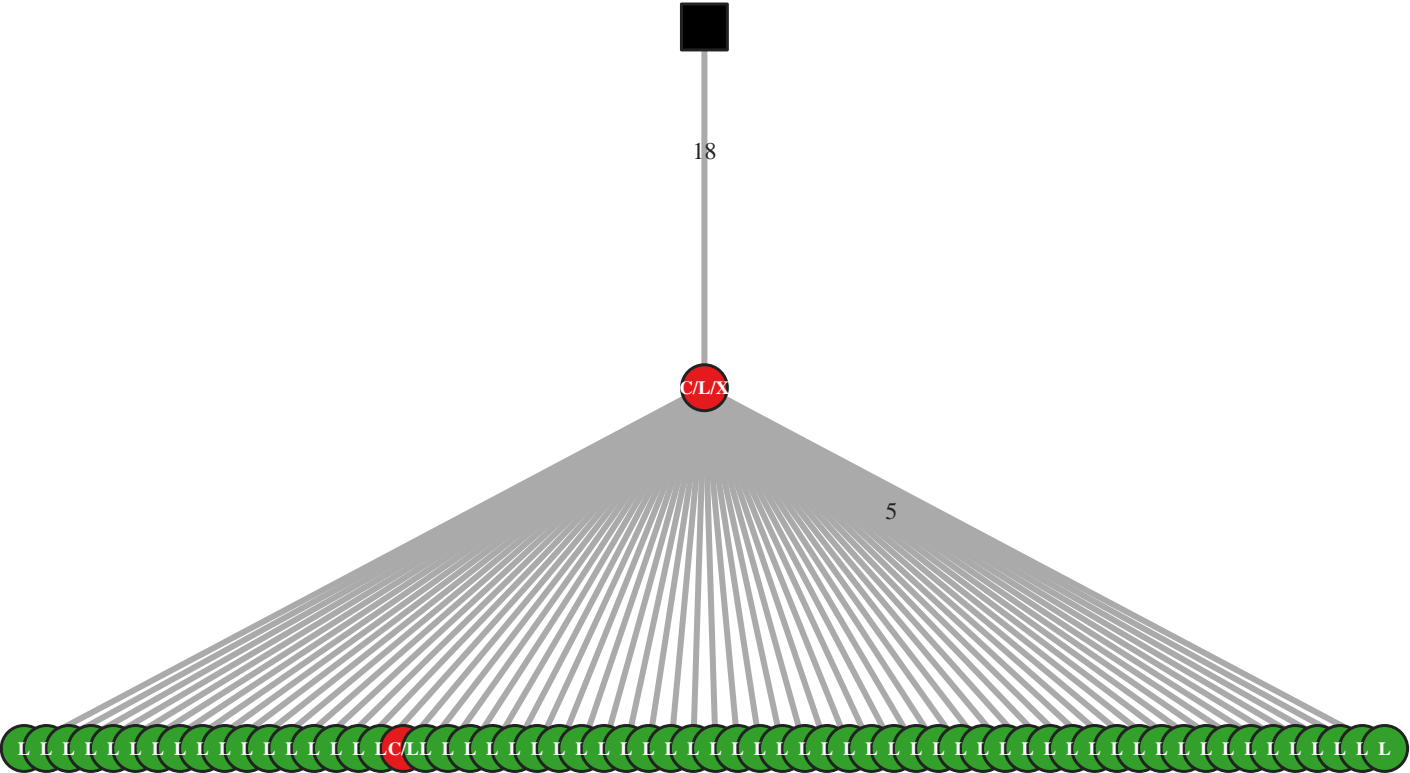
M5 IgG IGHV4-31/J5 54bp (27876)



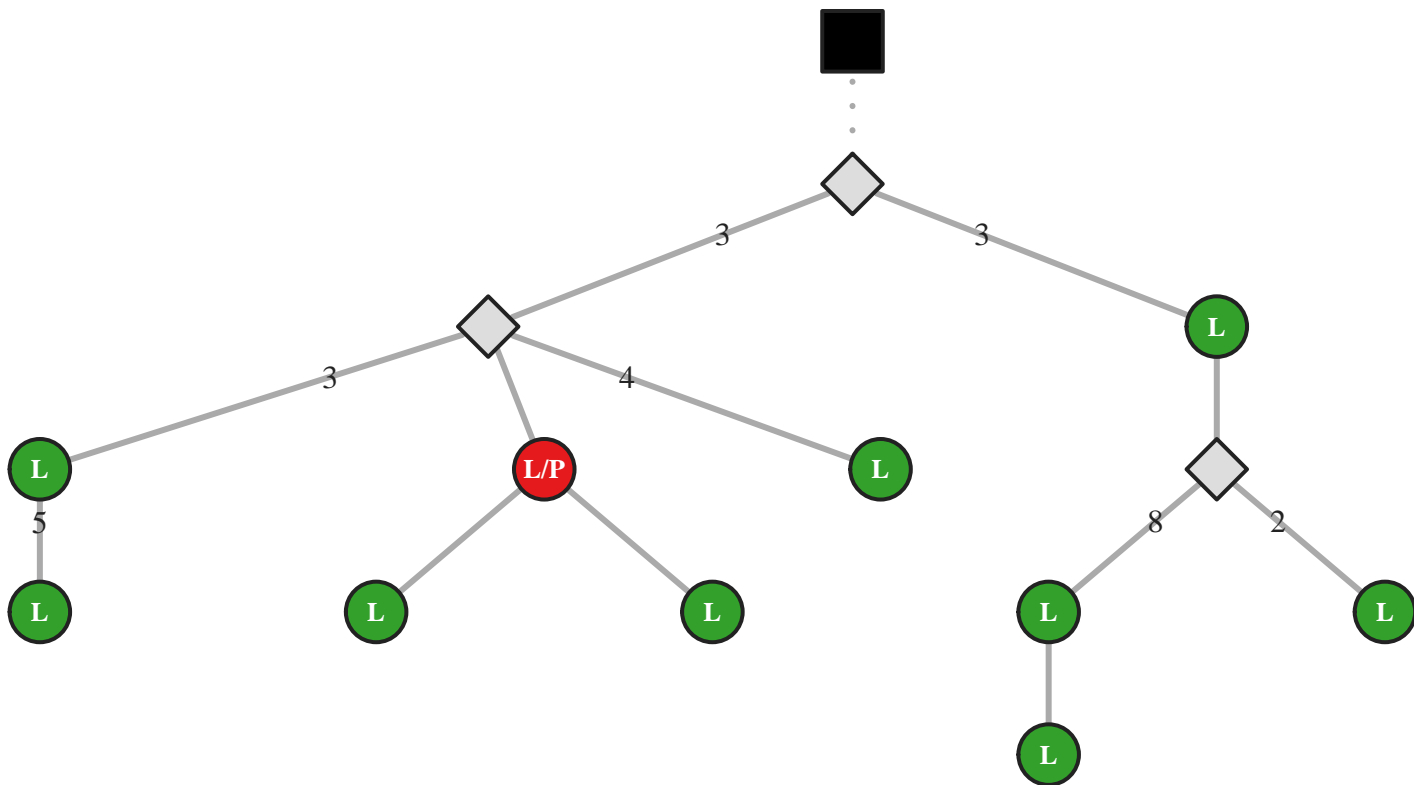
M5 IgG IGHV4-31/J5 57bp (9752)



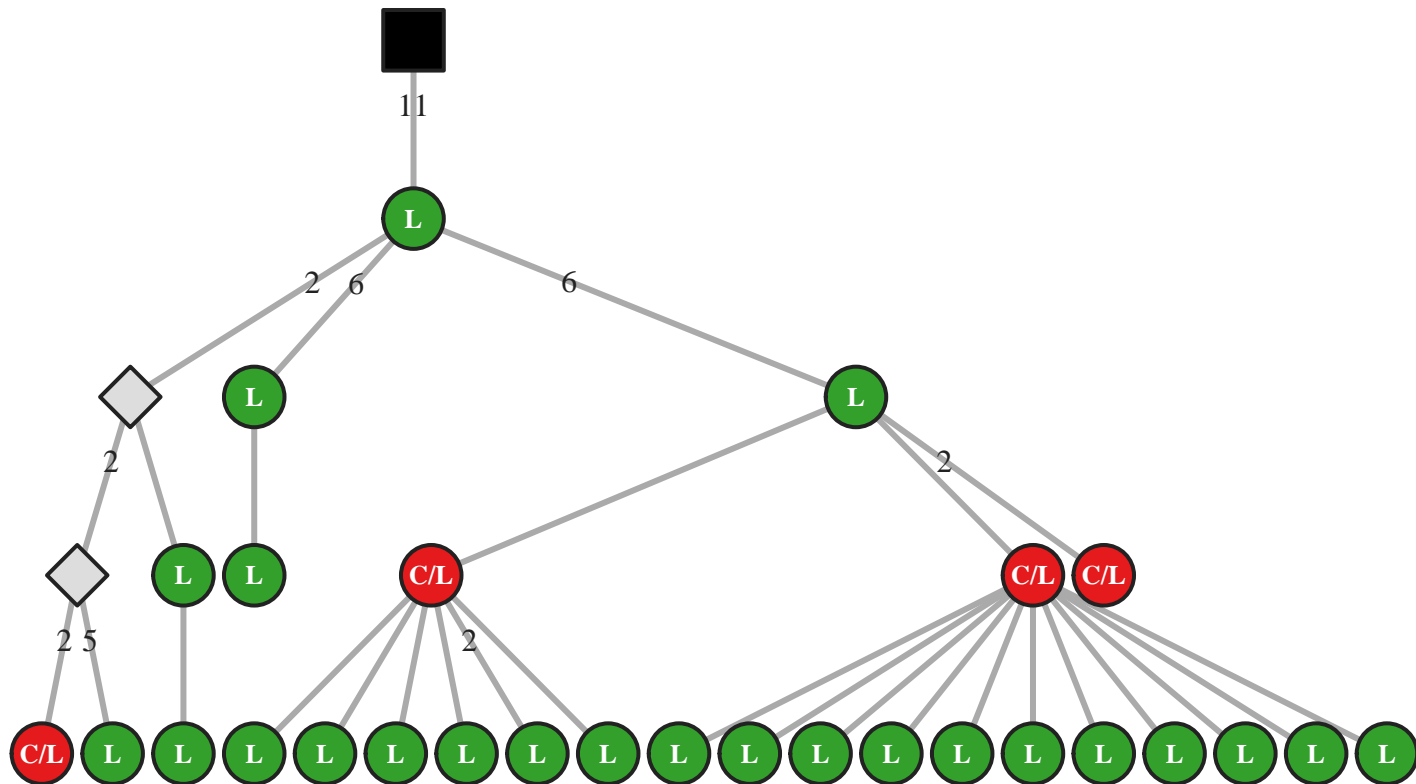
M5 IgG IGHV4-31/J6 42bp (18990)



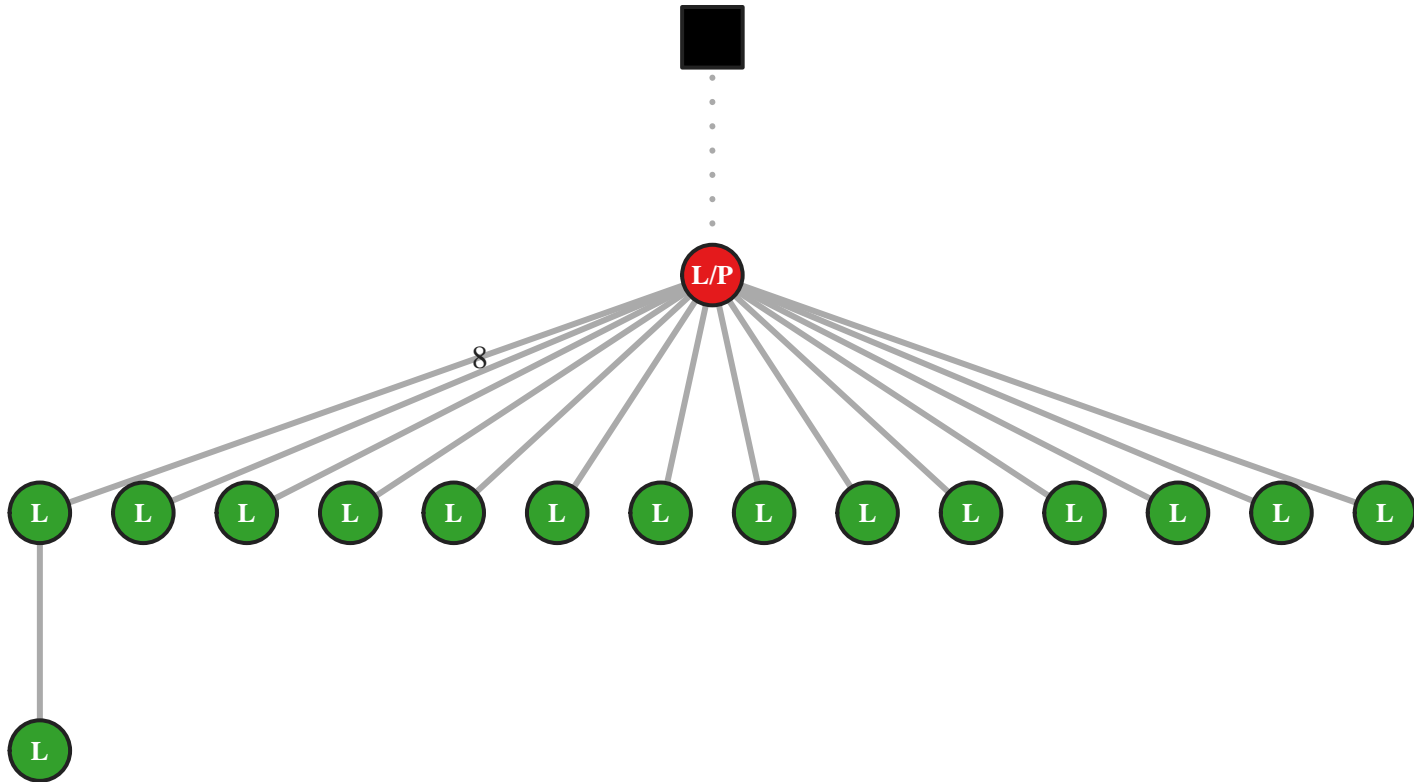
M5 IgG IGHV4-31/J6 48bp (52886)



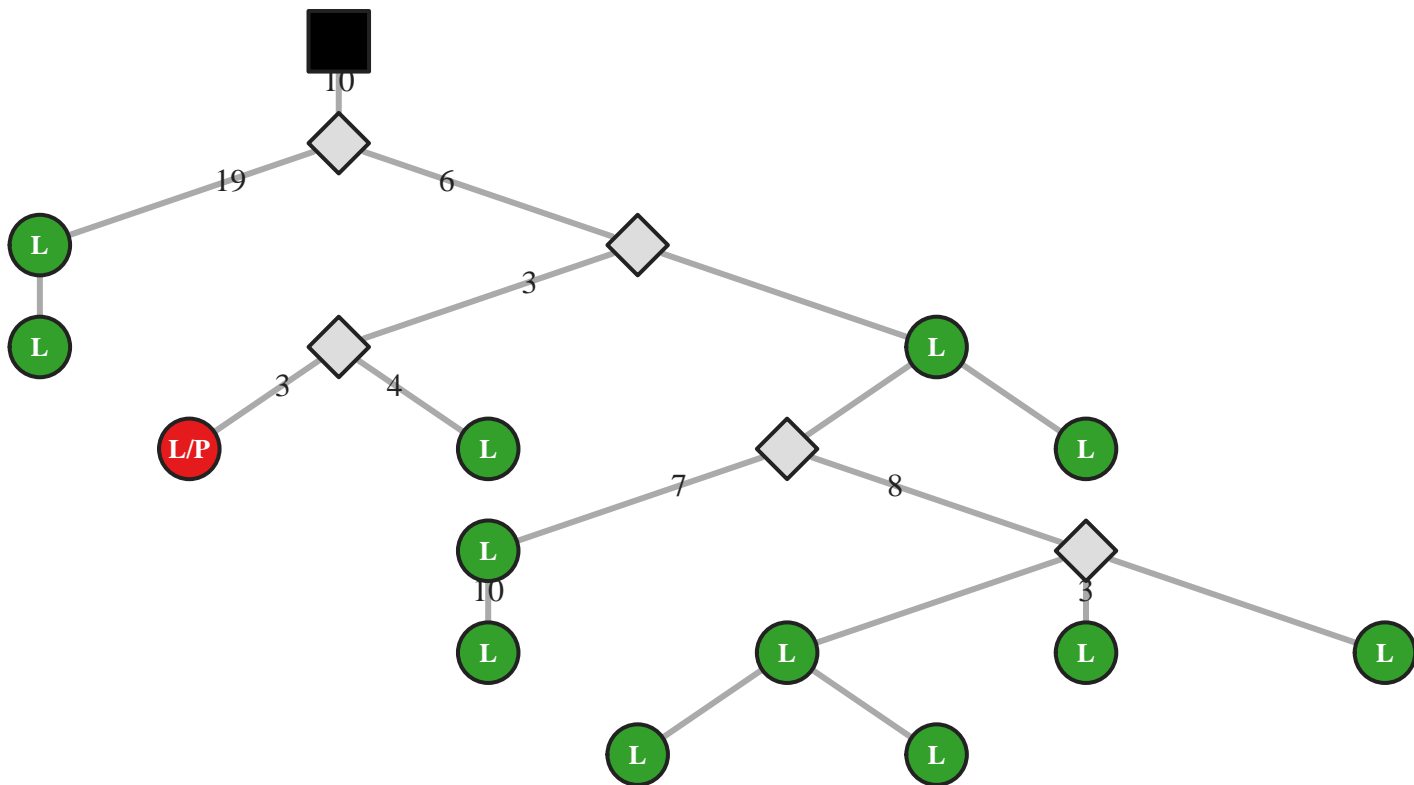
M5 IgG IGHV4-31/J6 51bp (27901)



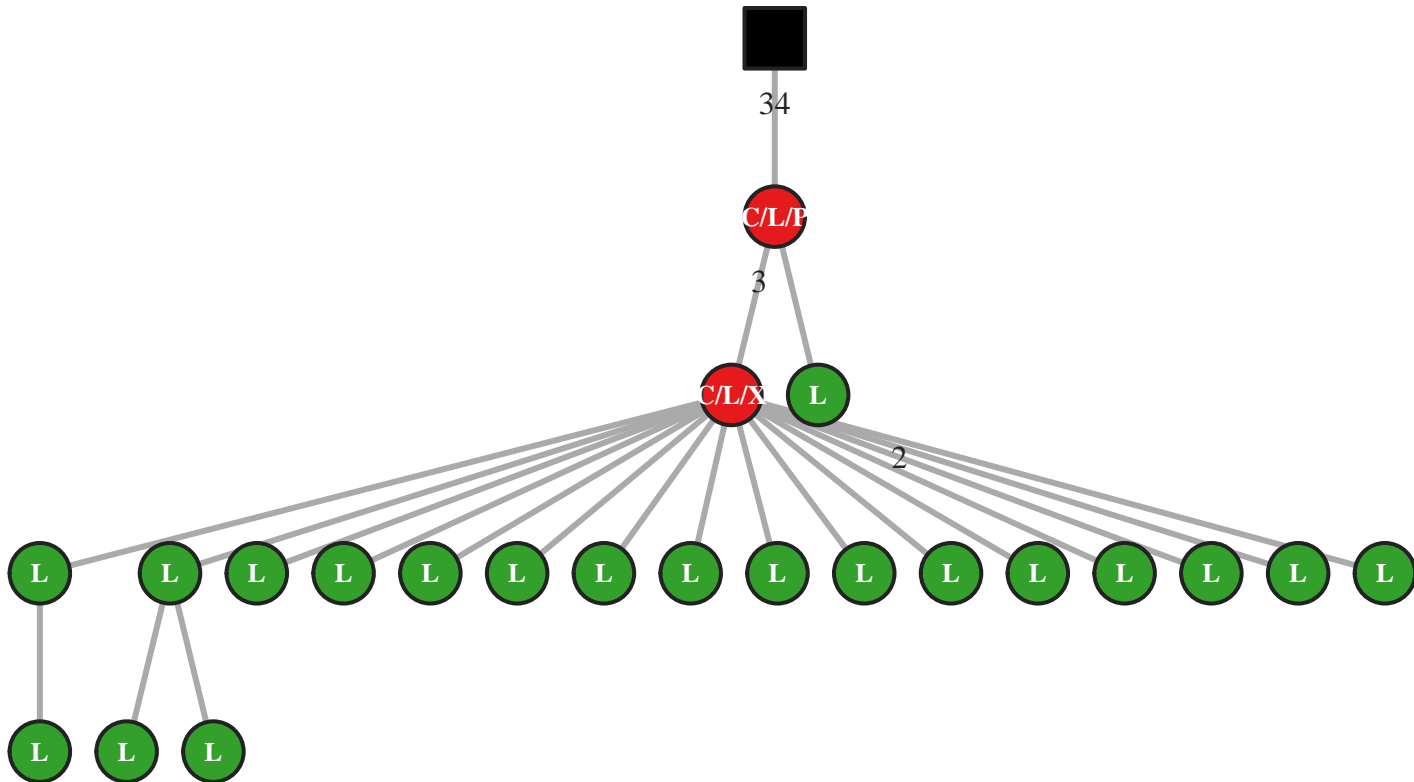
M5 IgG IGHV4-31/J6 57bp (52899)



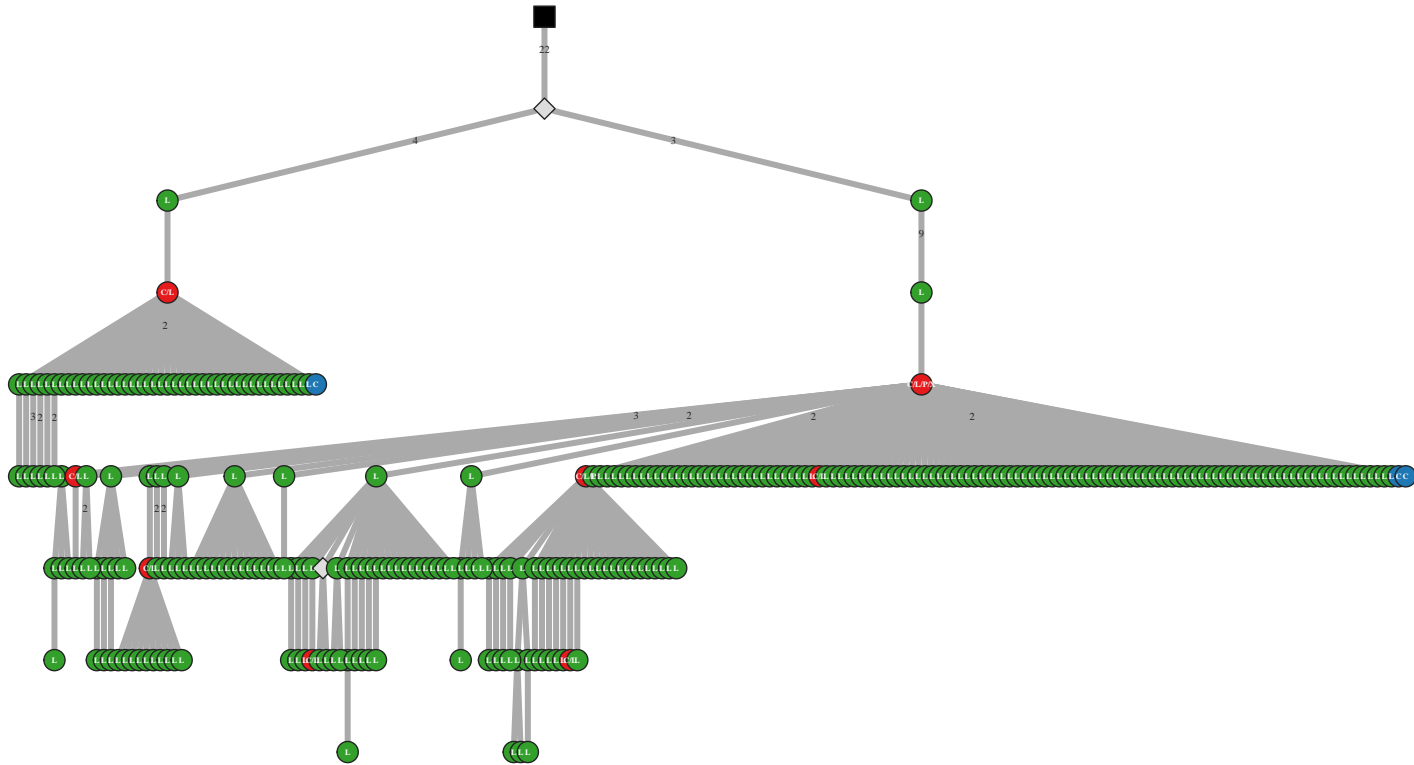
M5 IgG IGHV4-31/J6 57bp (52907)



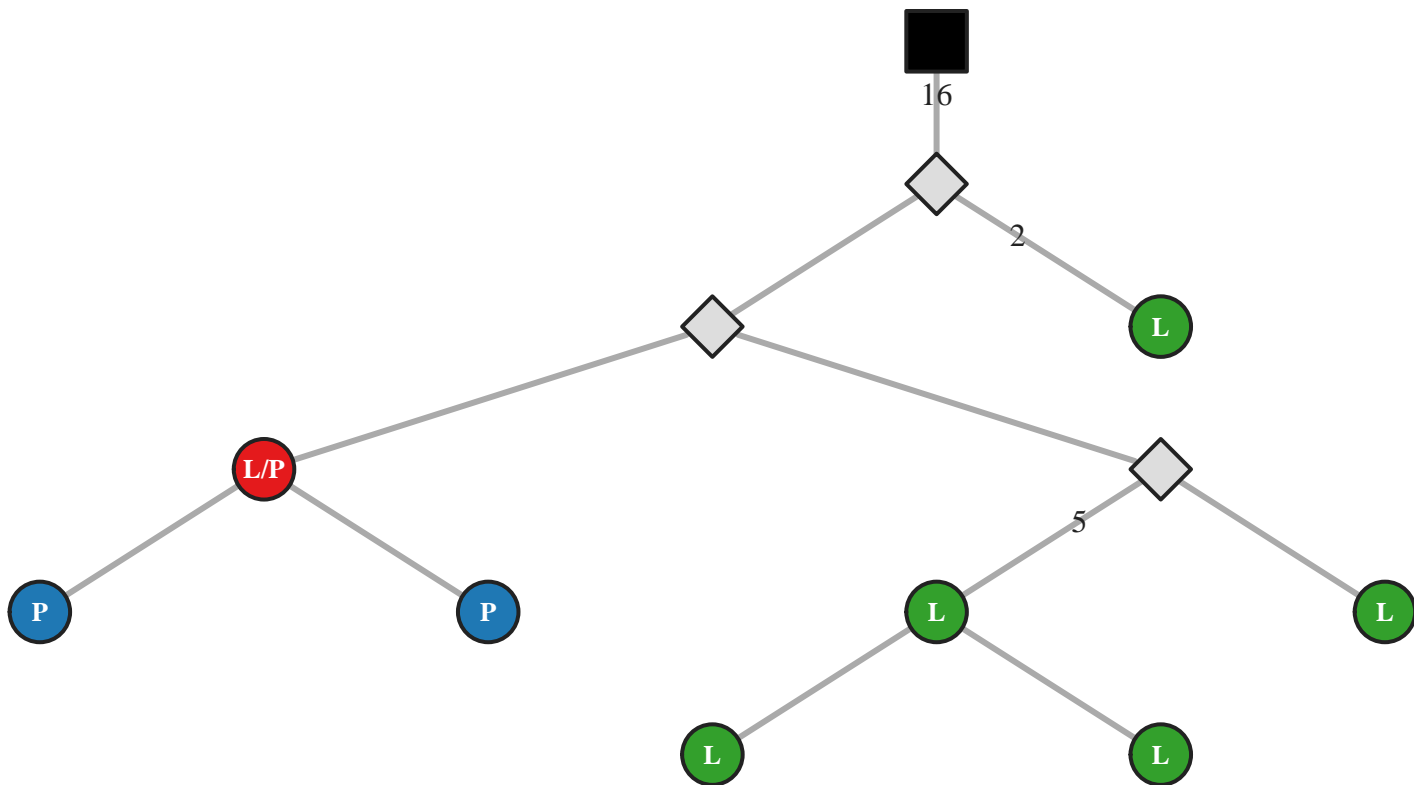
M5 IgA IGHV4-34/J3 45bp (12721)



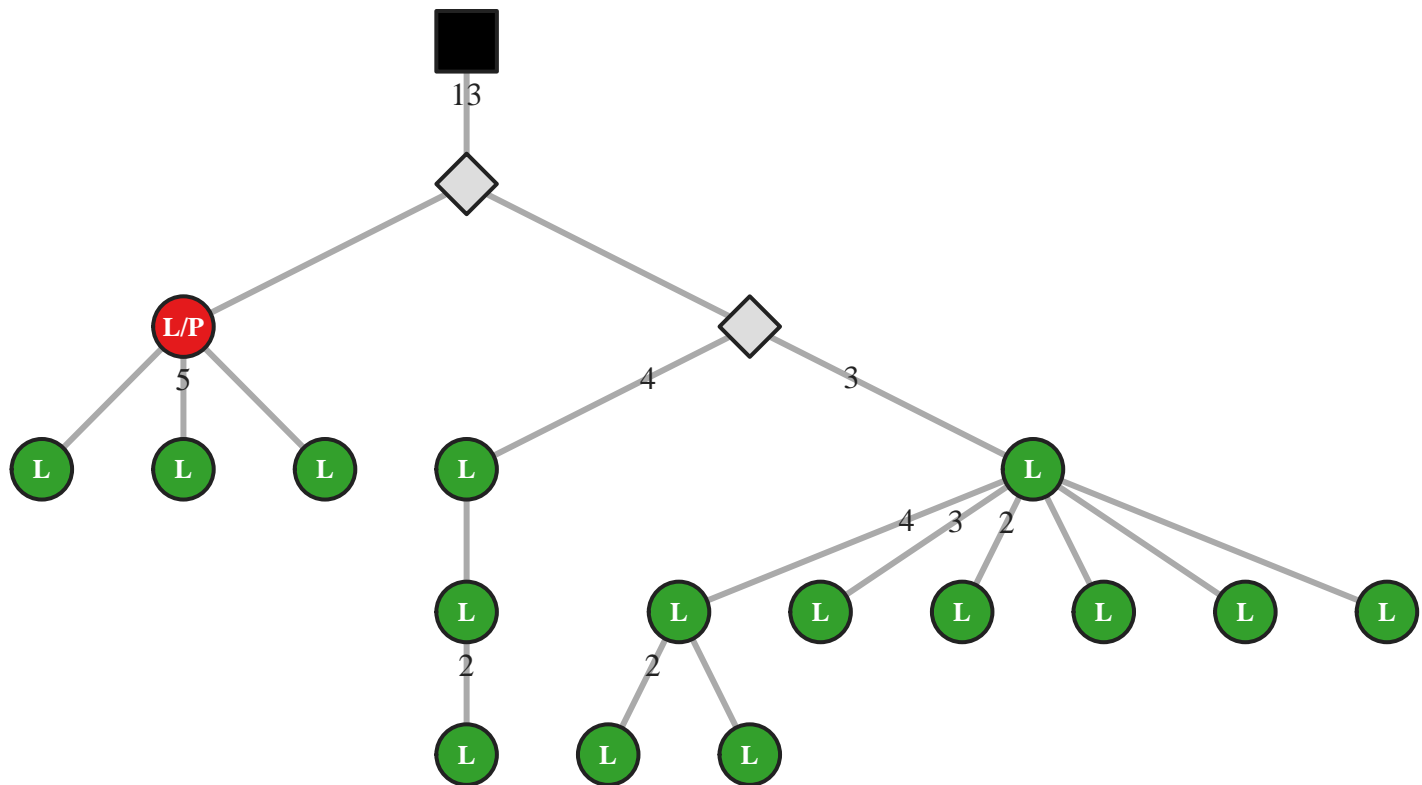
M5 IgG IGHV4-34/J3 60bp (52919)



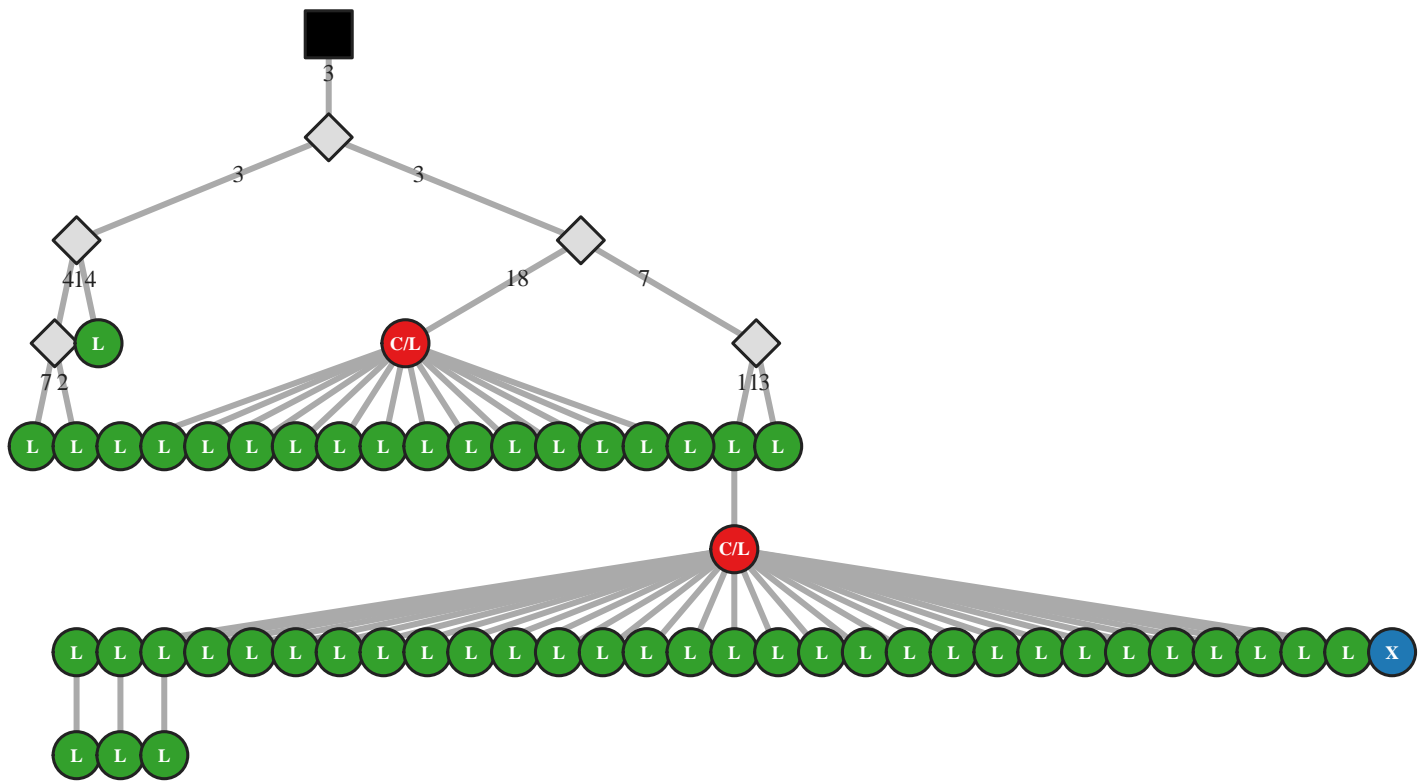
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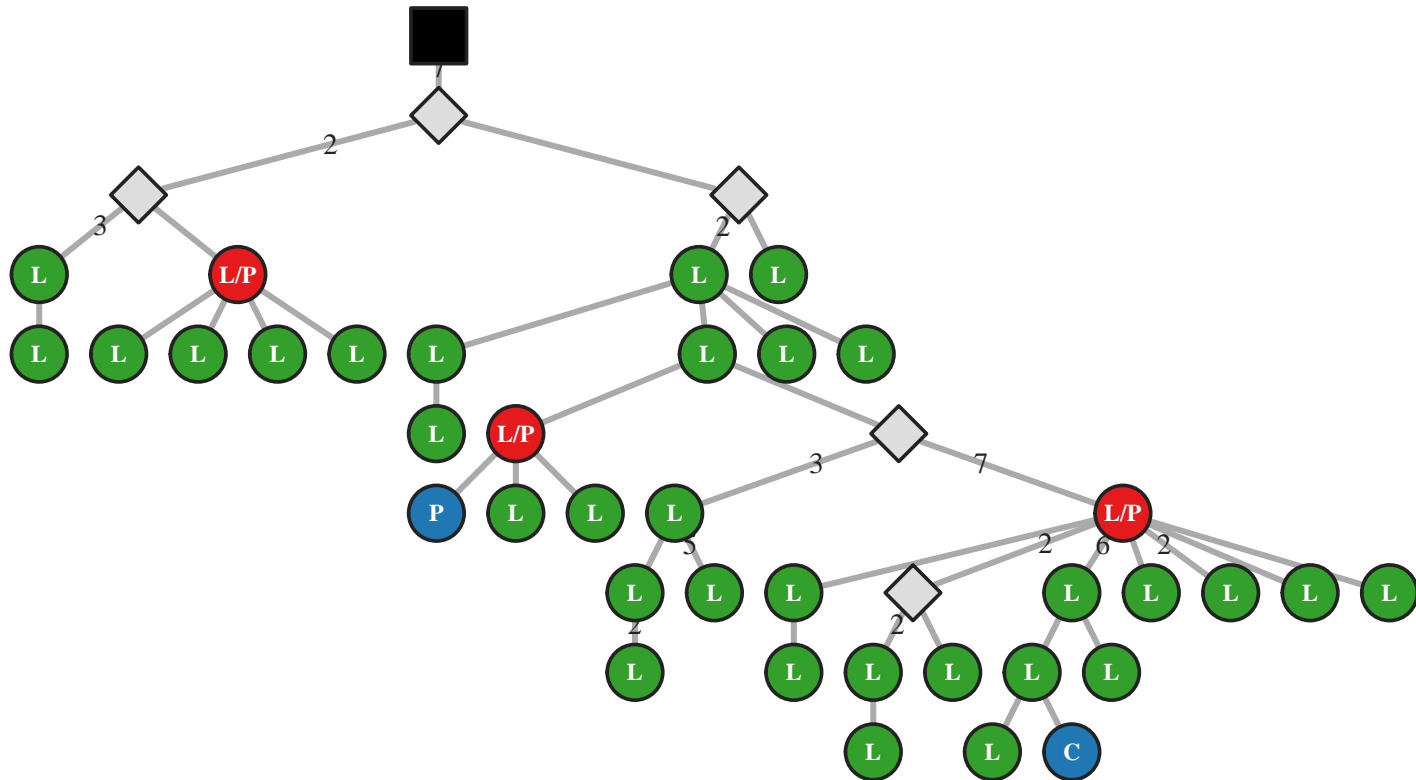
M5 IgG IGHV4-34/J4 51bp (36167)



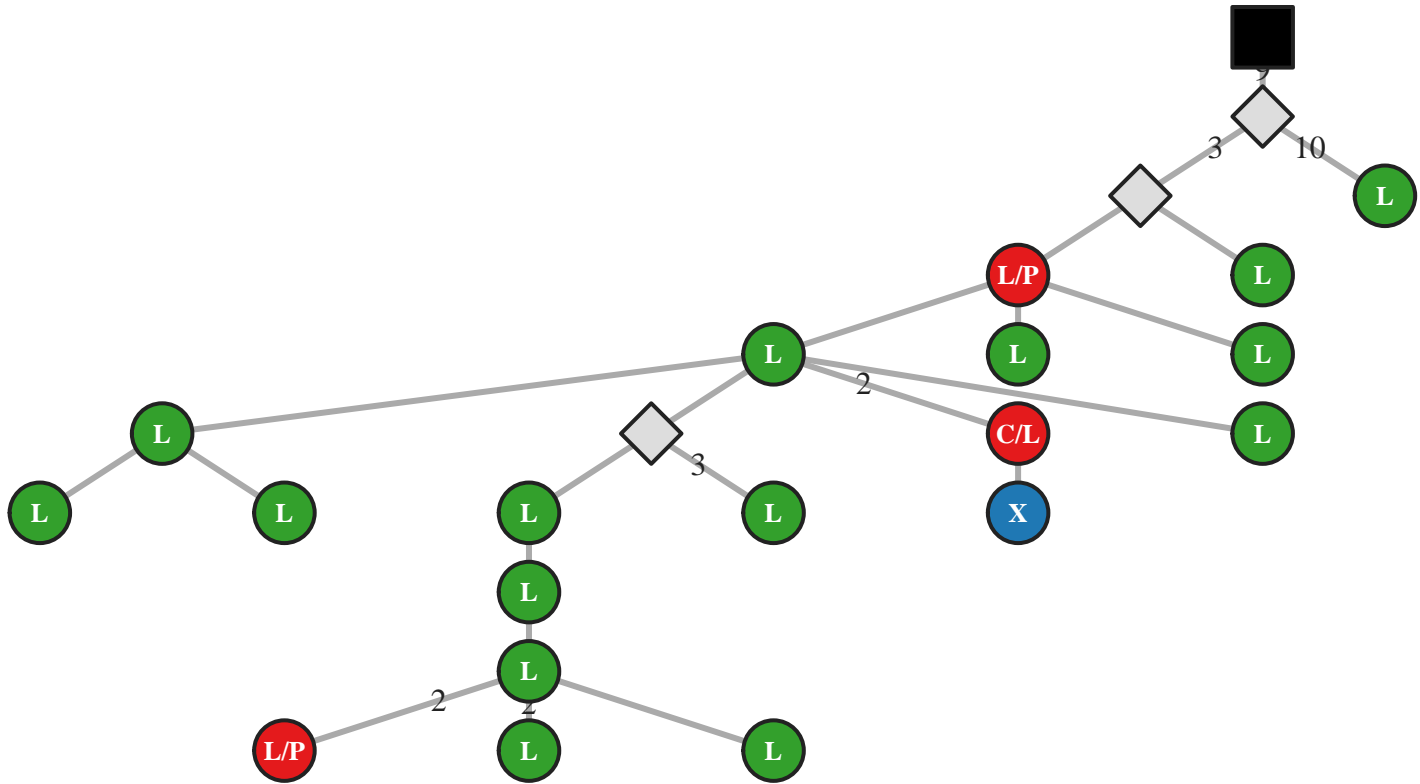
M5 IgG IGHV4-34/J5 51bp (46435)



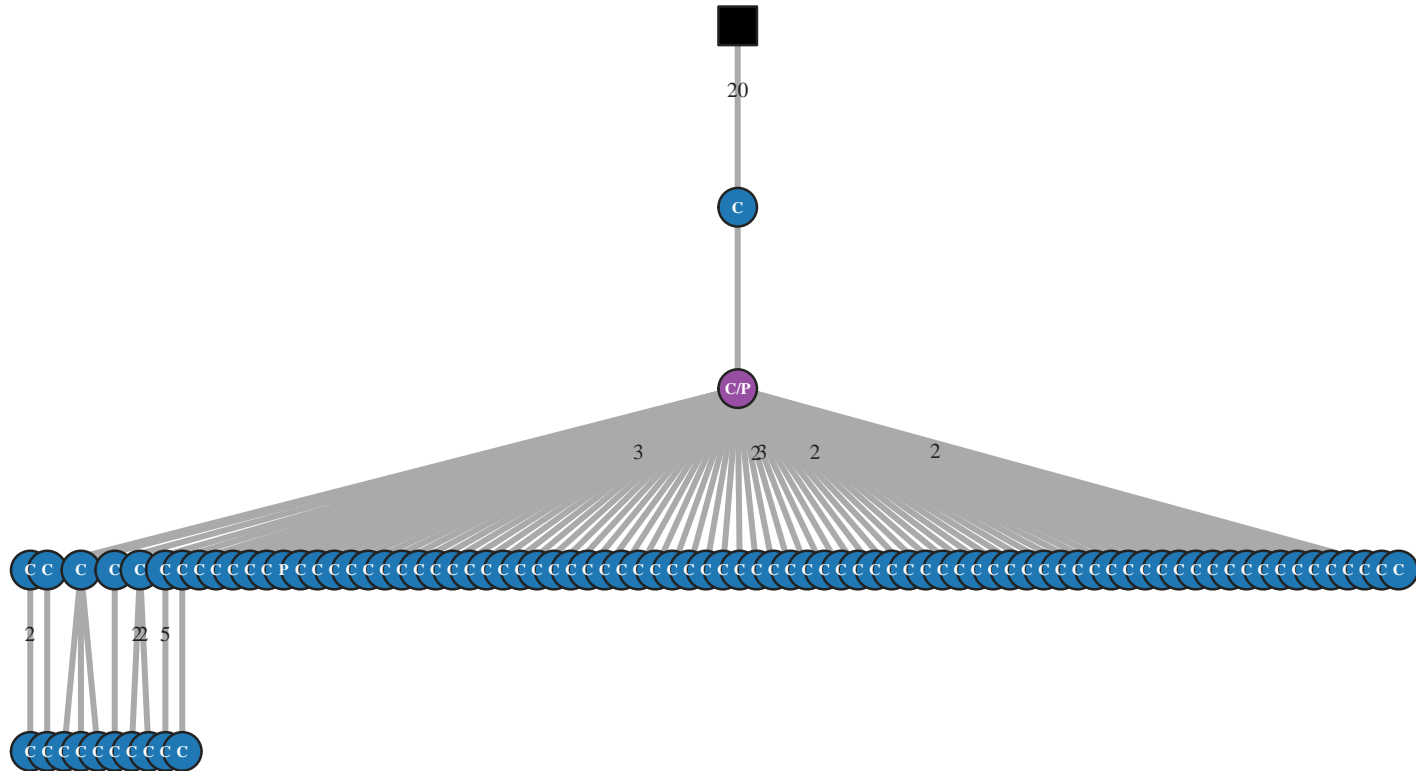
M5 IgG IGHV4-34/J5 51bp (46444)



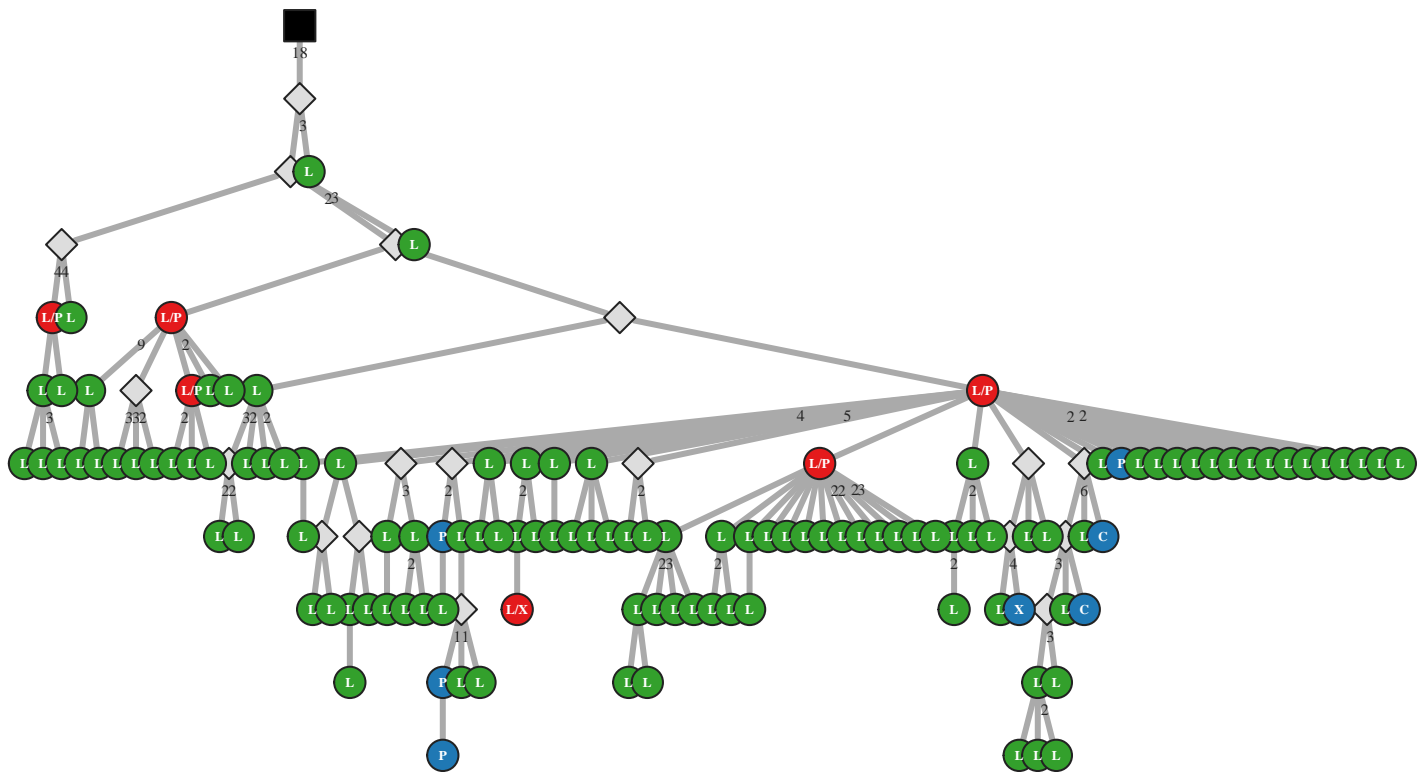
M5 IgG IGHV4-34/J6 54bp (46461)



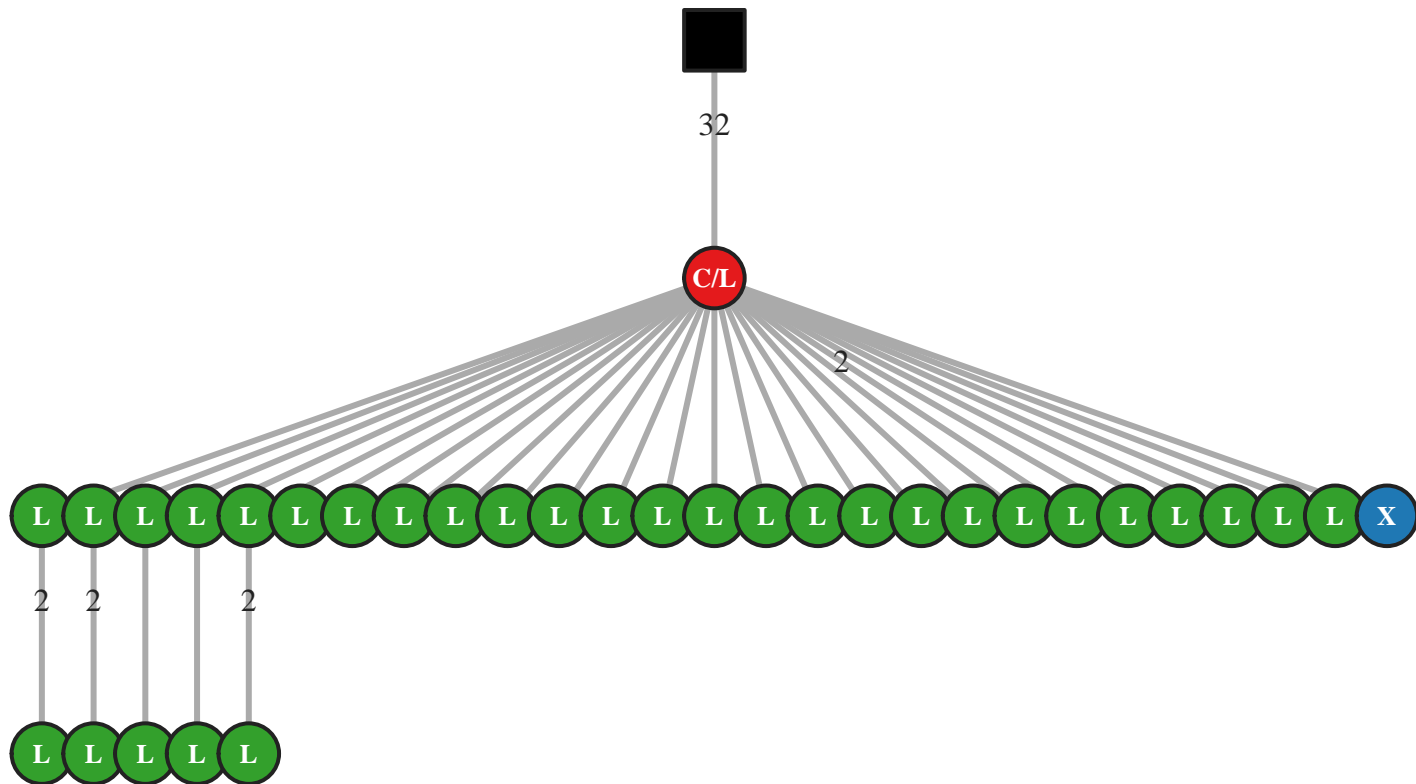
M5 IgG IGHV4-34/J6 78bp (19067)



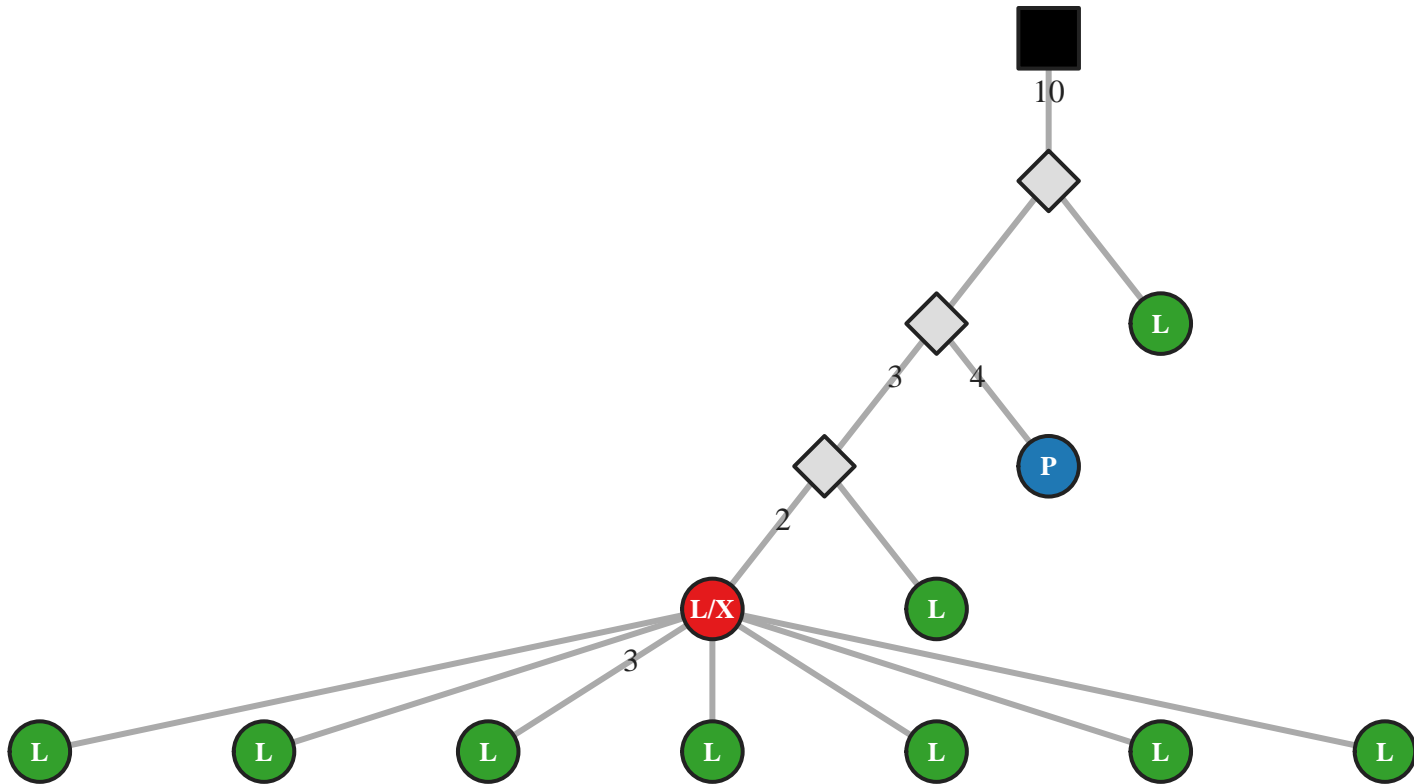
M5 IgG IGHV4-39/J2 60bp (52973)



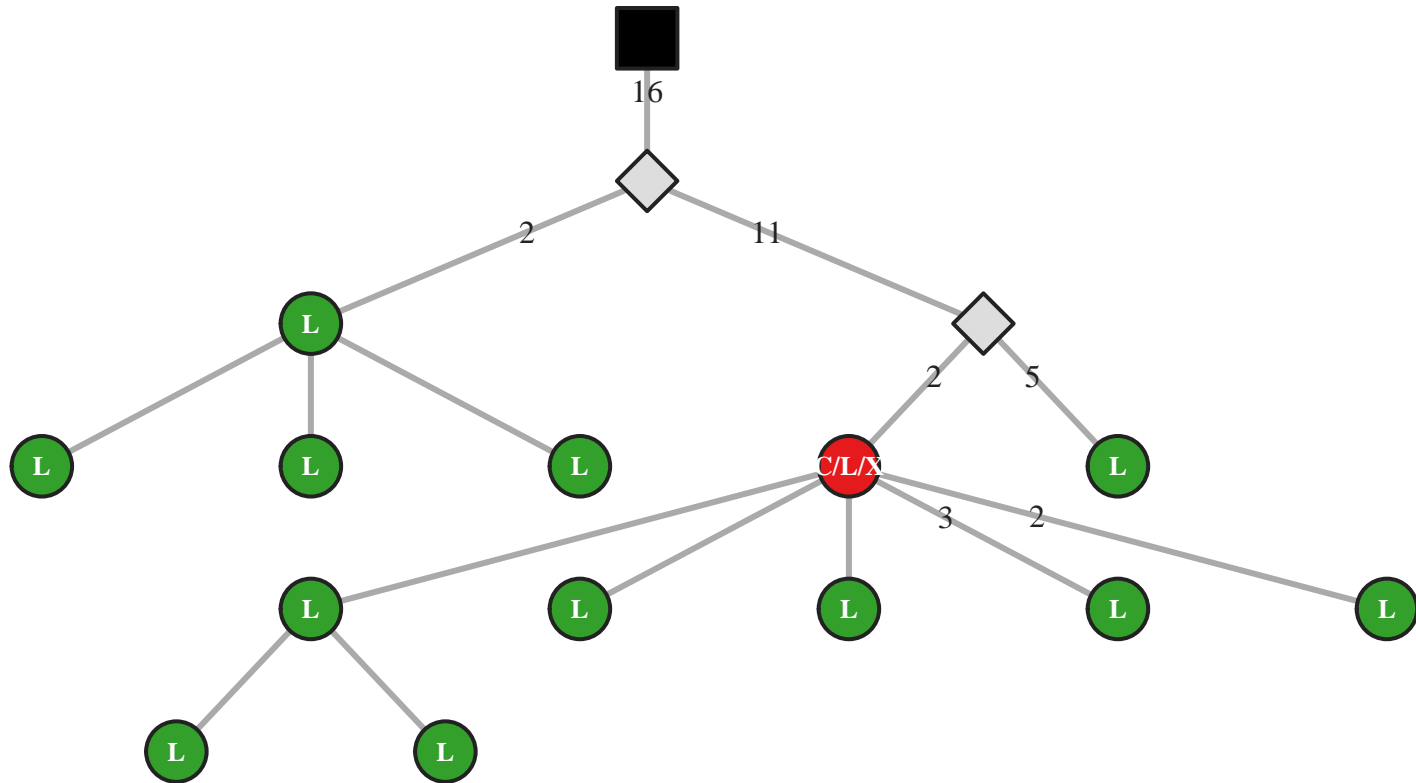
M5 IgA IGHV4-39/J3 48bp (30813)



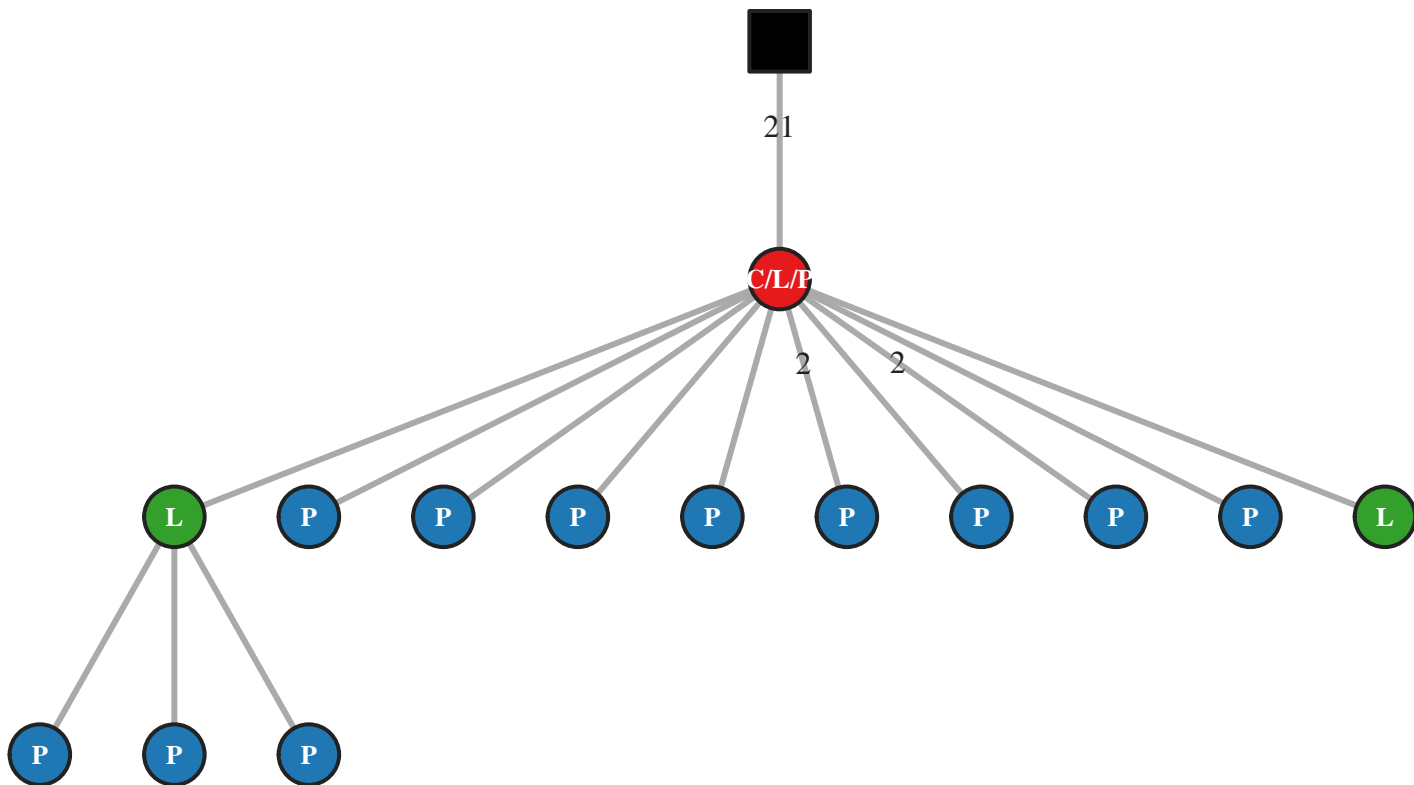
M5 IgG IGHV4-39/J3 57bp (19086)



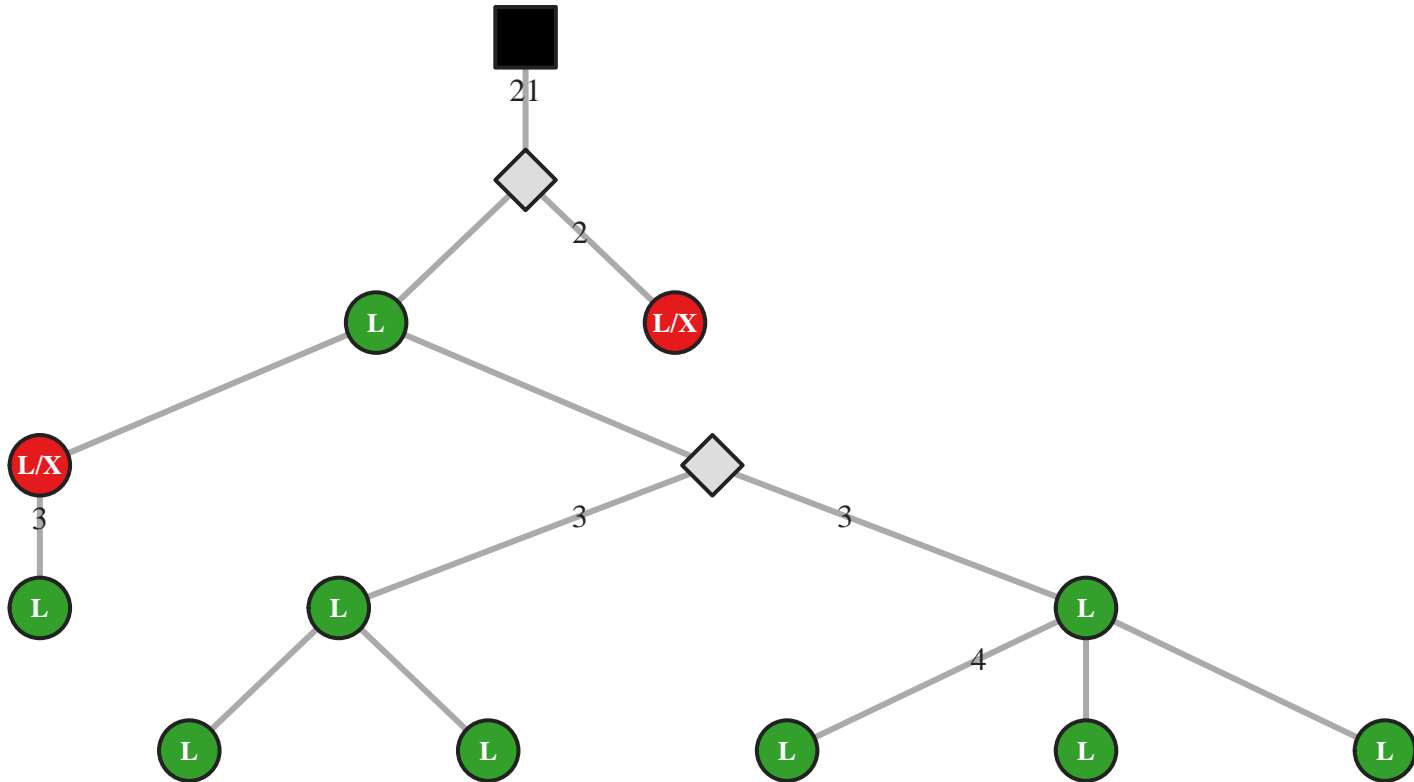
M5 IgG IGHV4-39/J4 39bp (52993)



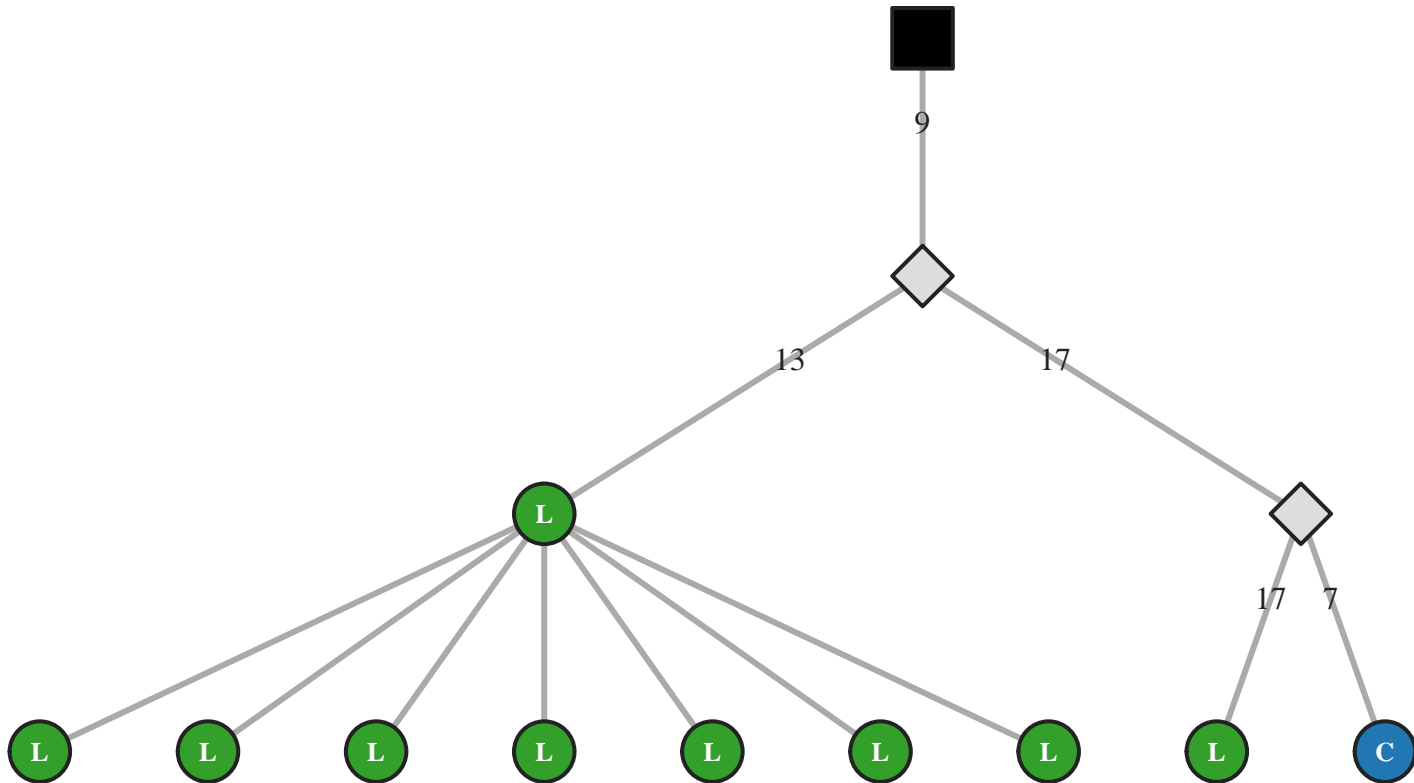
M5 IgG IGHV4-39/J4 39bp (53004)



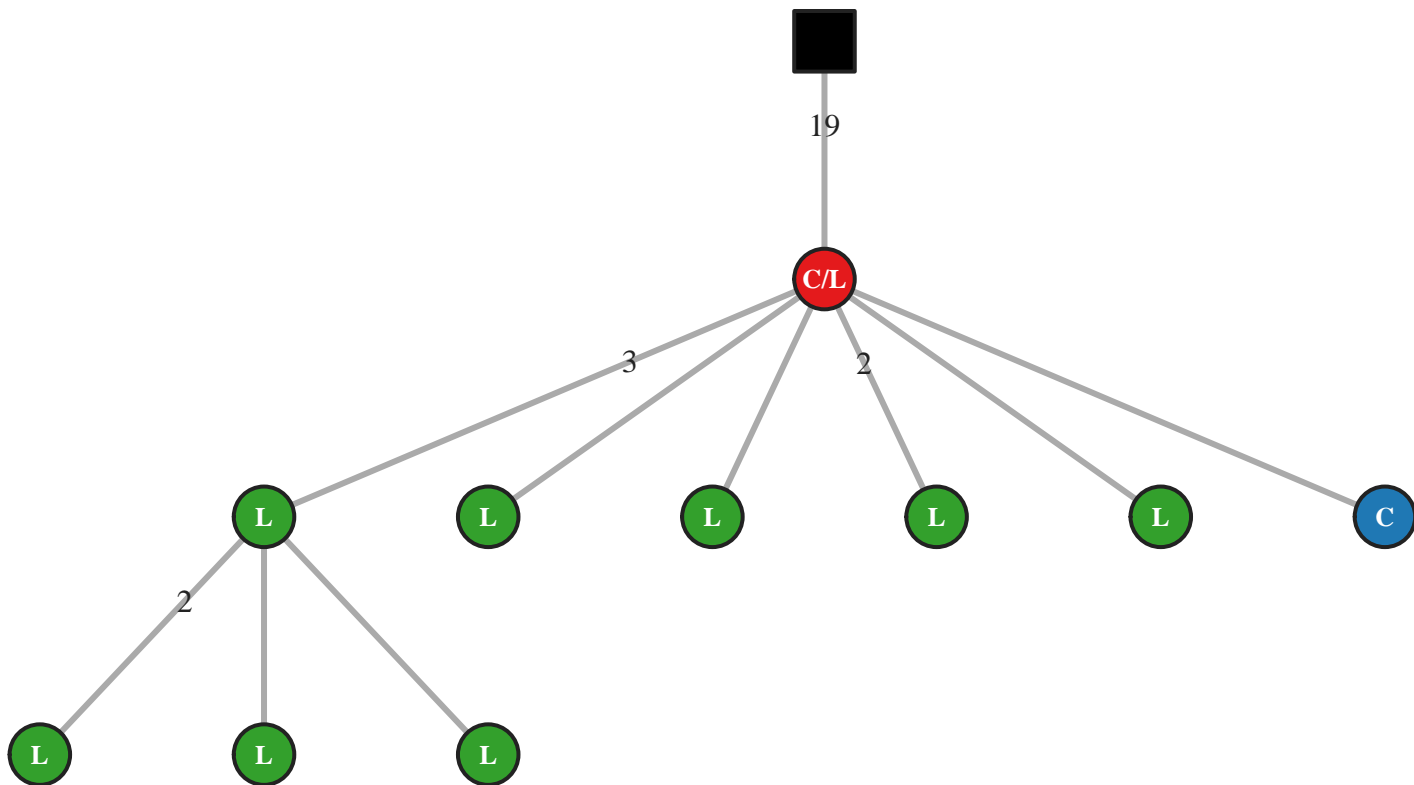
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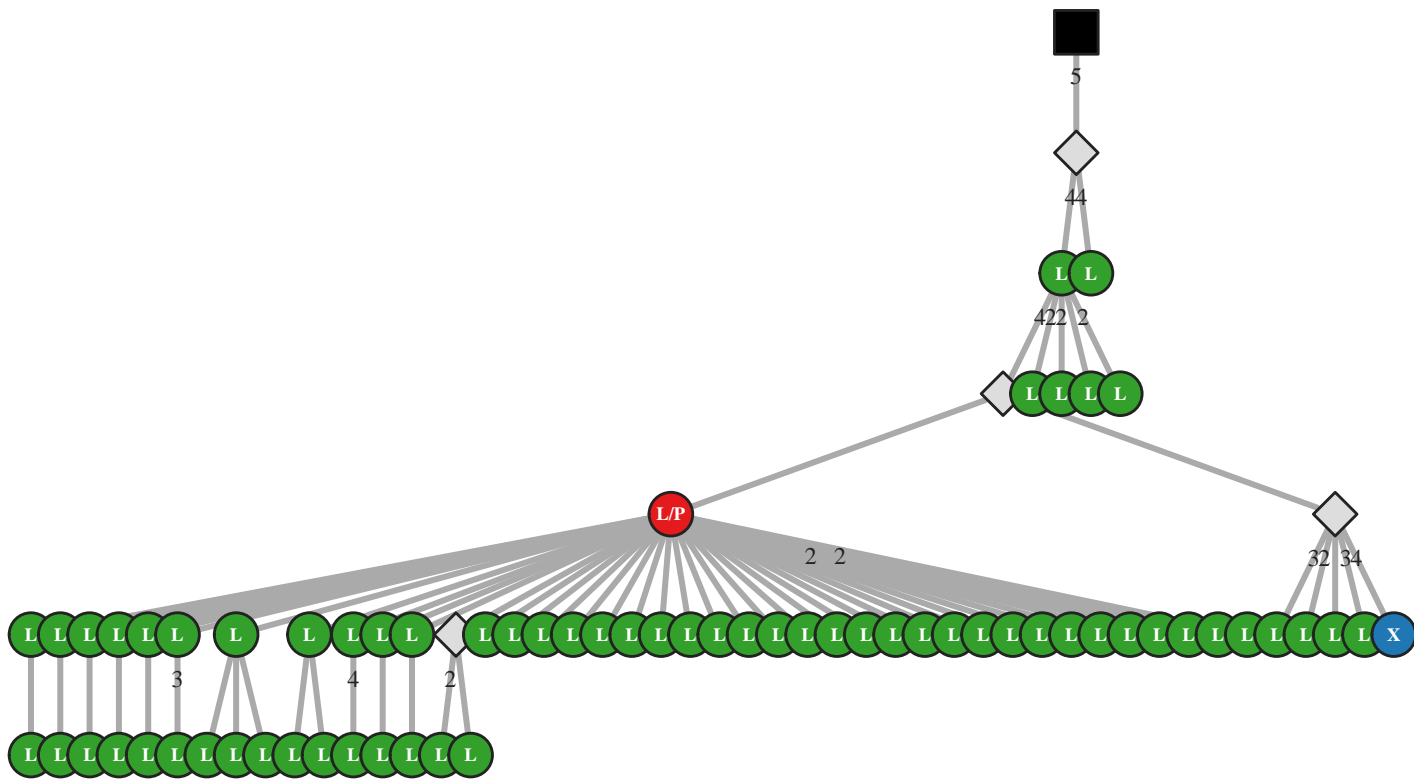
M5 IgA IGHV4-39/J4 42bp (12741)



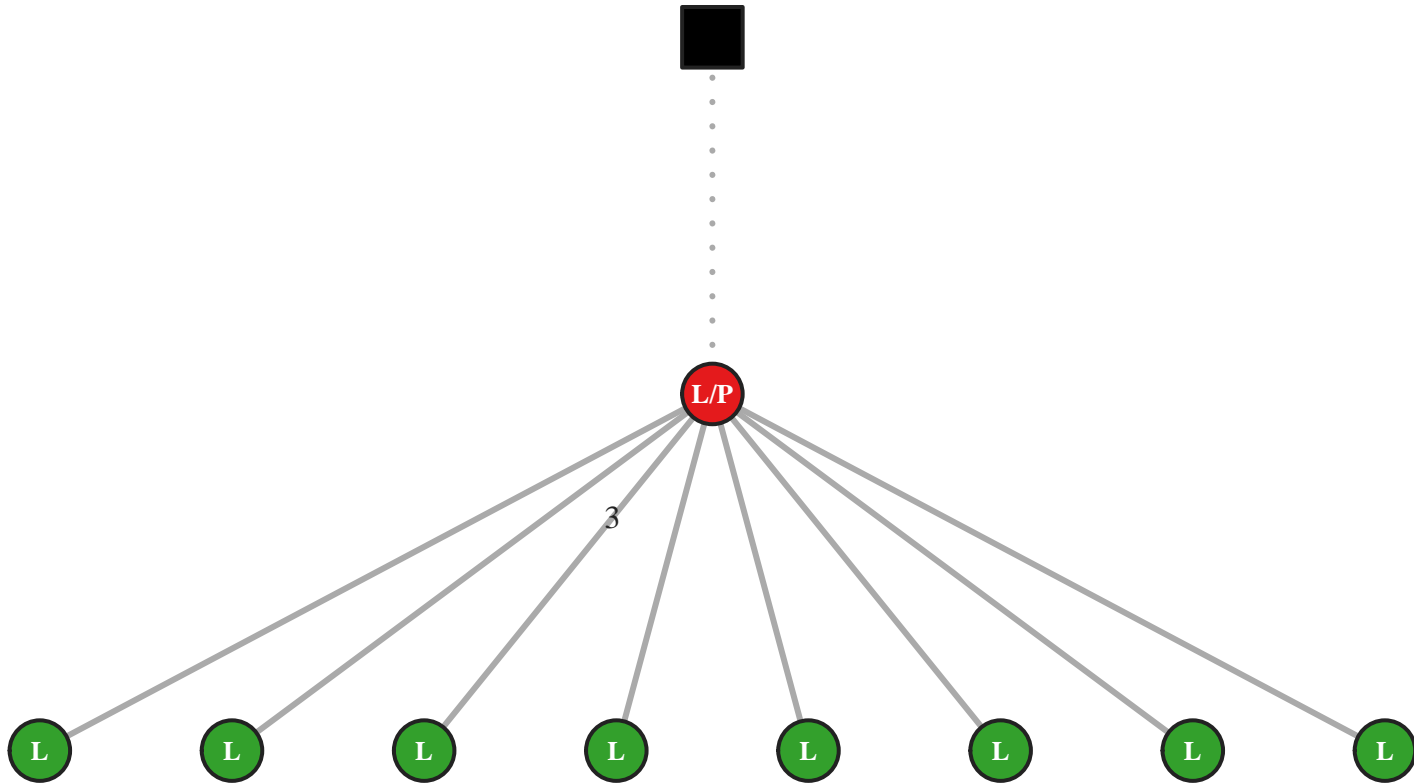
M5 IgG IGHV4-39/J4 42bp (36213)



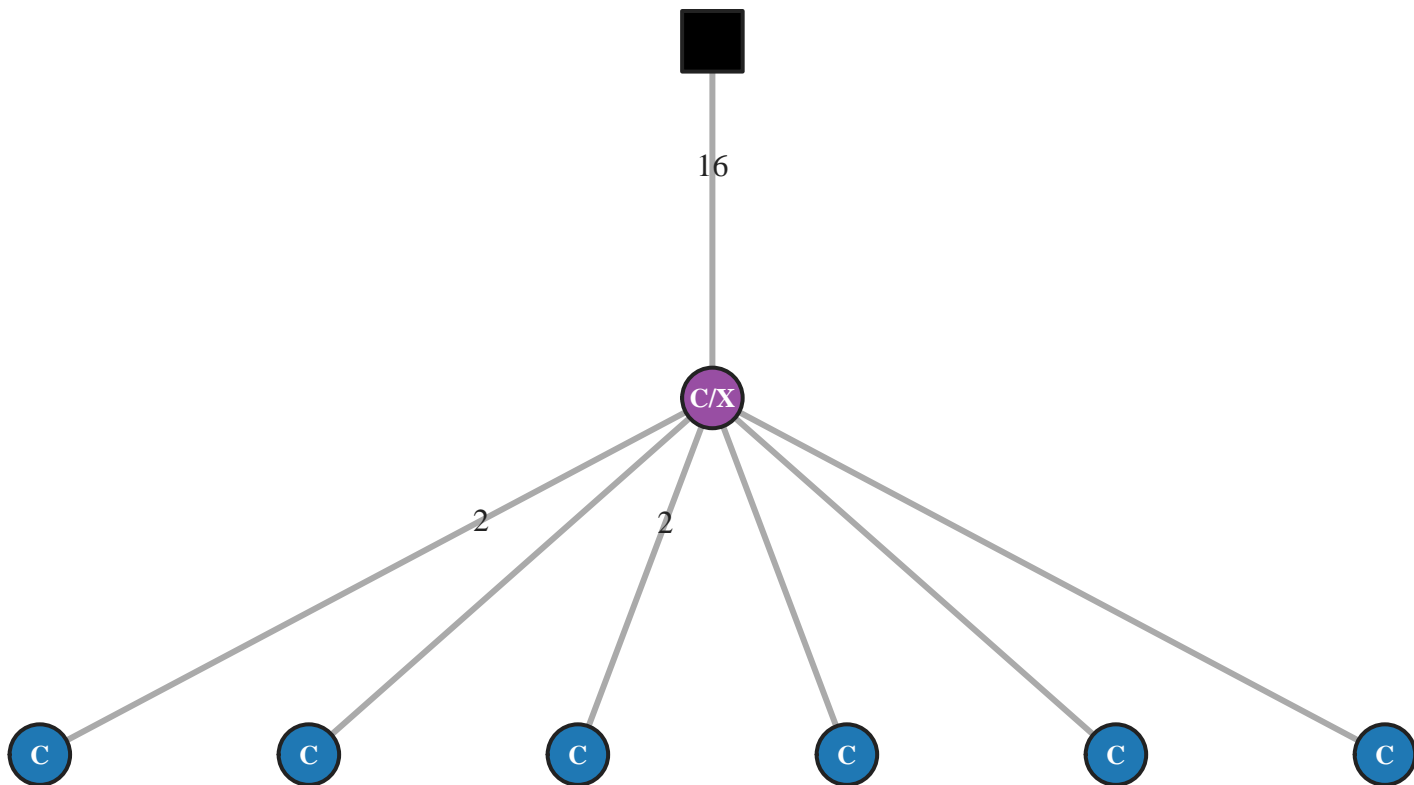
M5 IgG IGHV4-39/J4 42bp (36217)



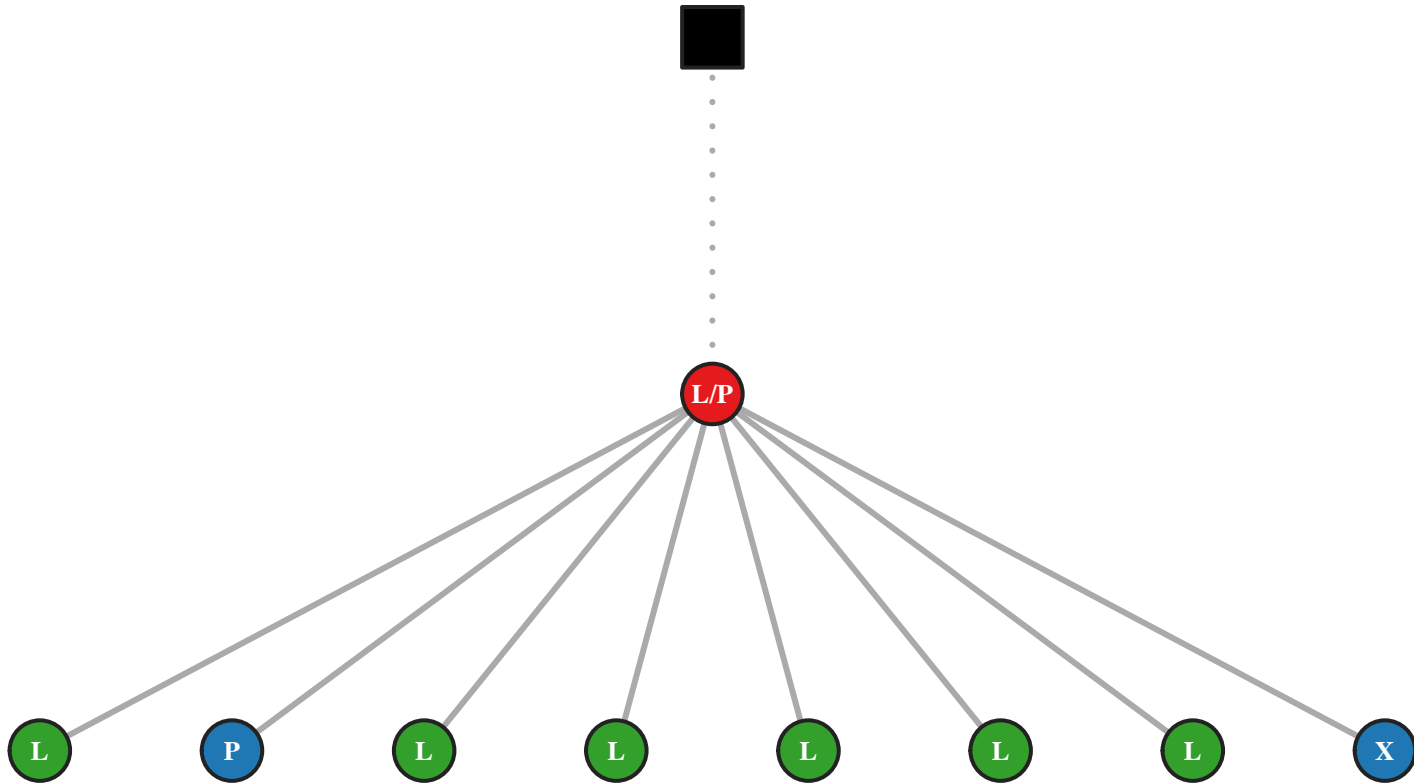
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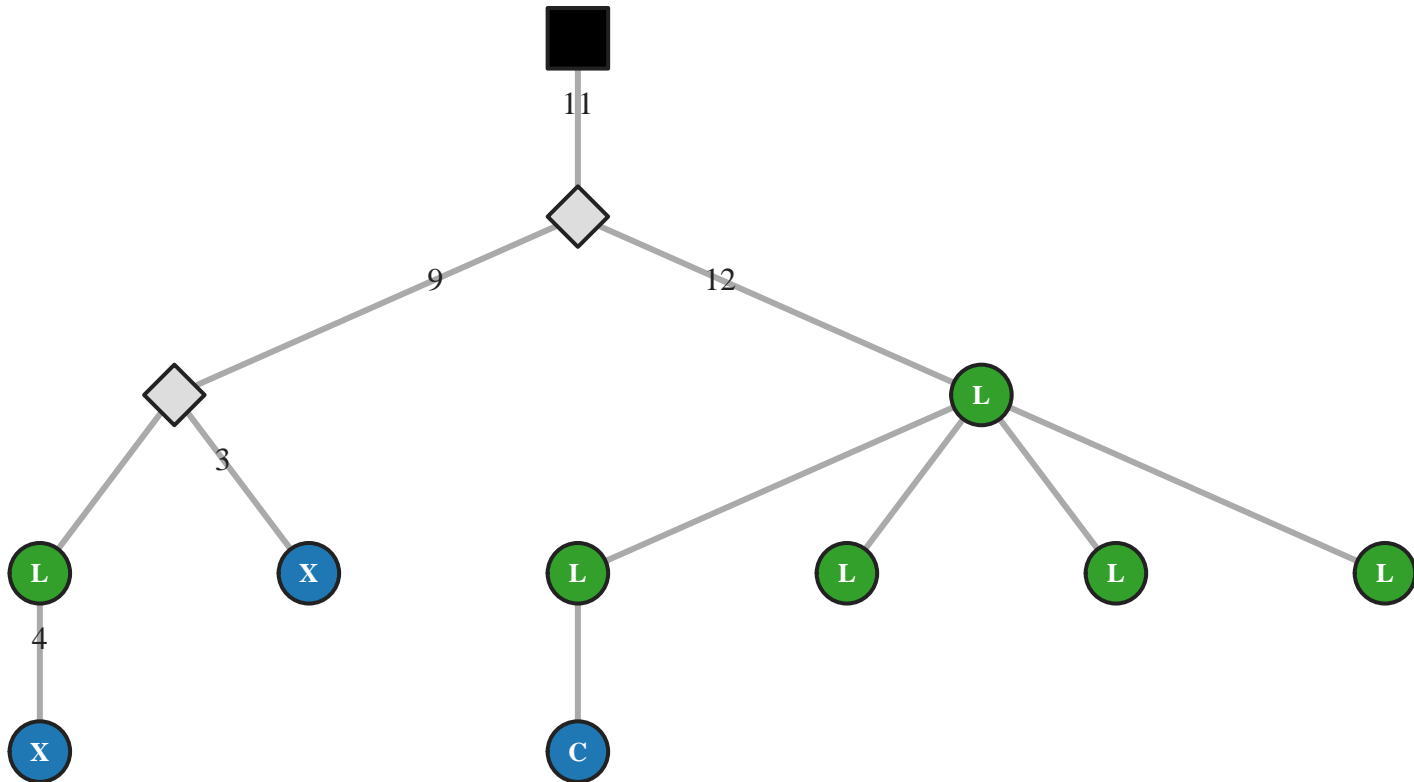
M5 IgG IGHV4-39/J4 45bp (46528)



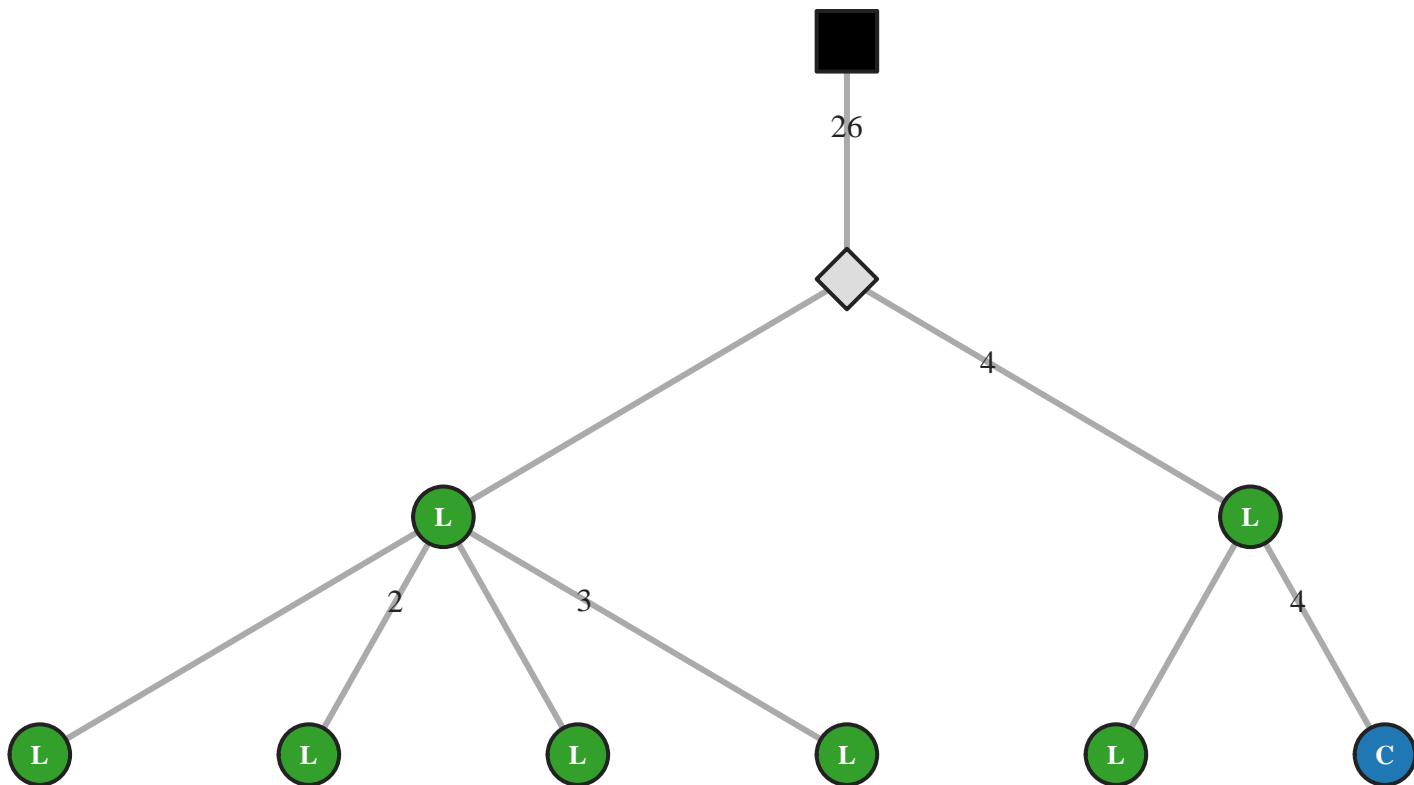
M5 IgG IGHV4-39/J4 45bp (46561)



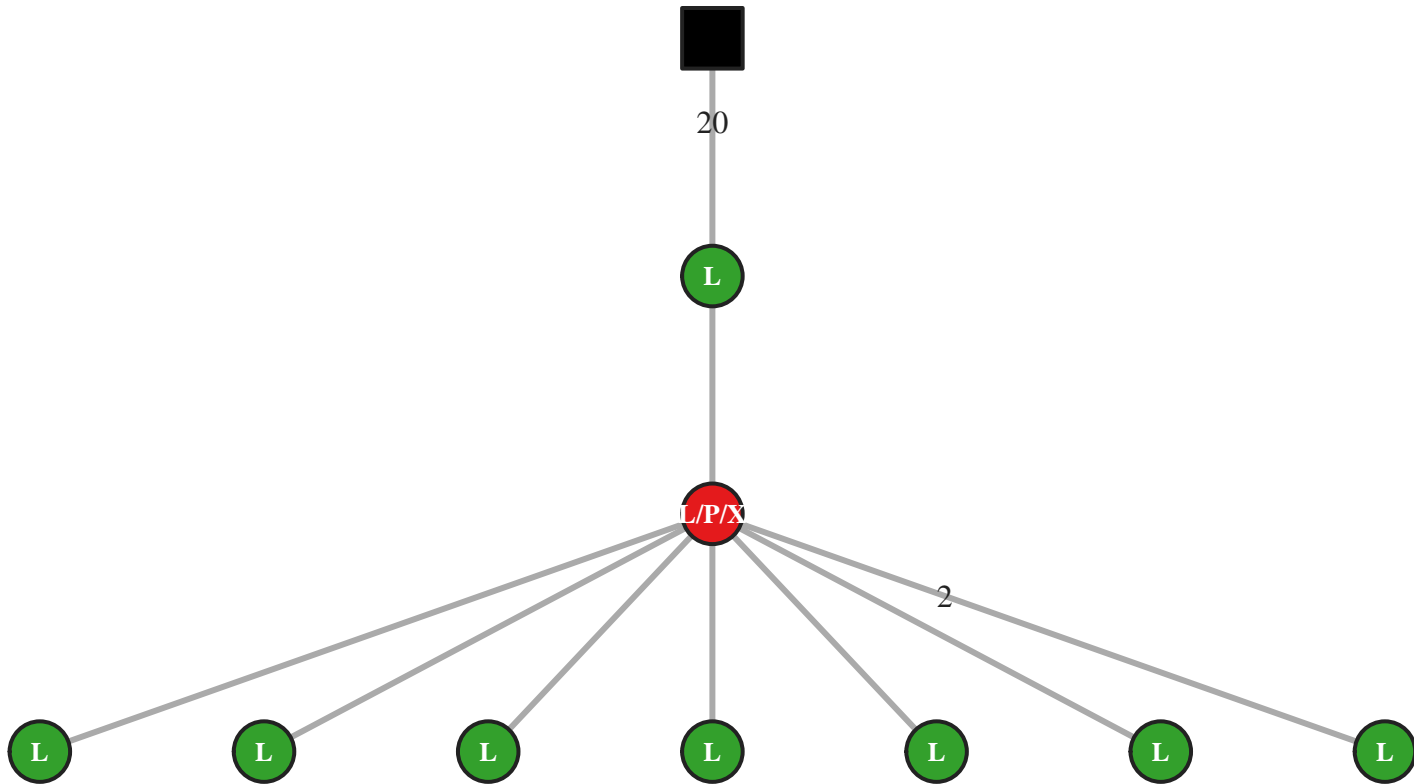
M5 IgG IGHV4-39/J4 48bp (53020)



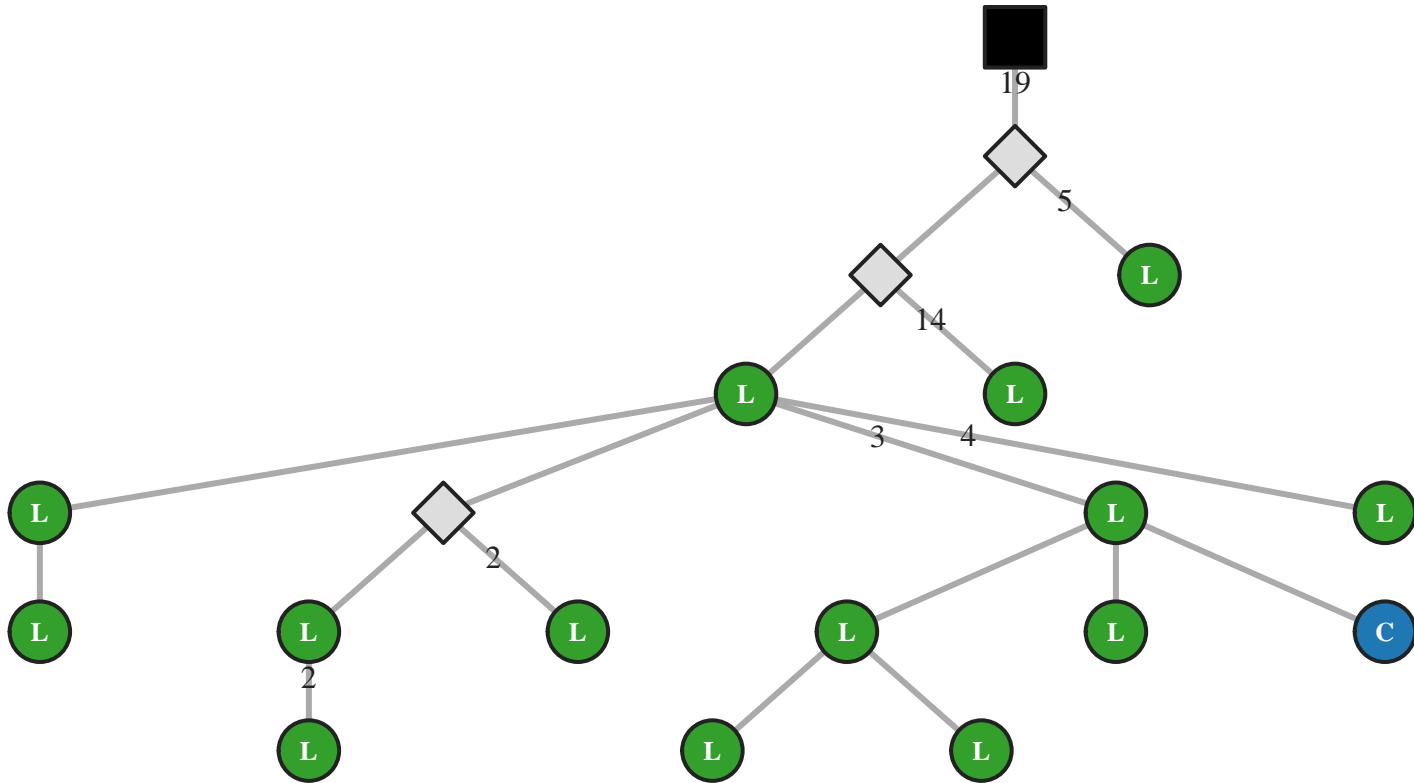
M5 IgG IGHV4-39/J4 48bp (53022)



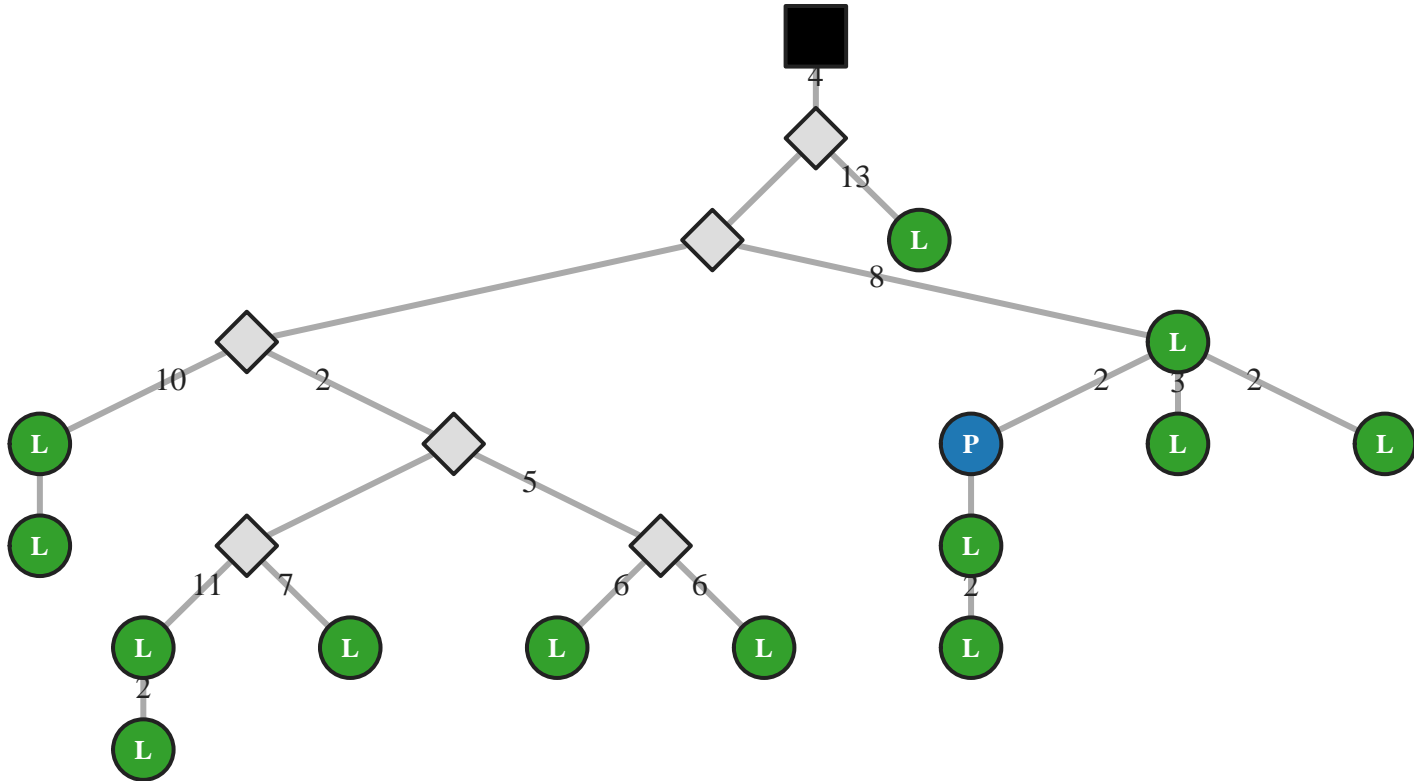
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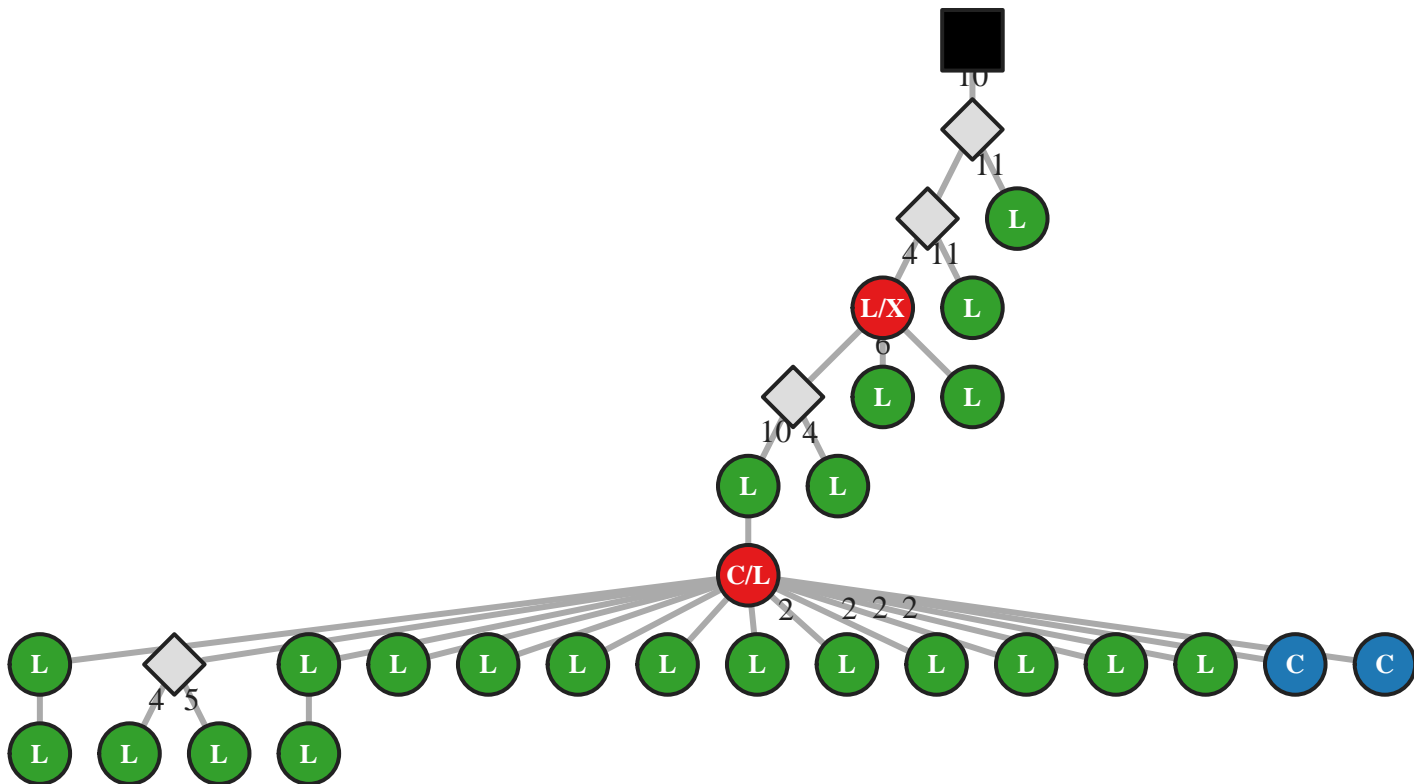
M5 IgG IGHV4-39/J4 48bp (53055)



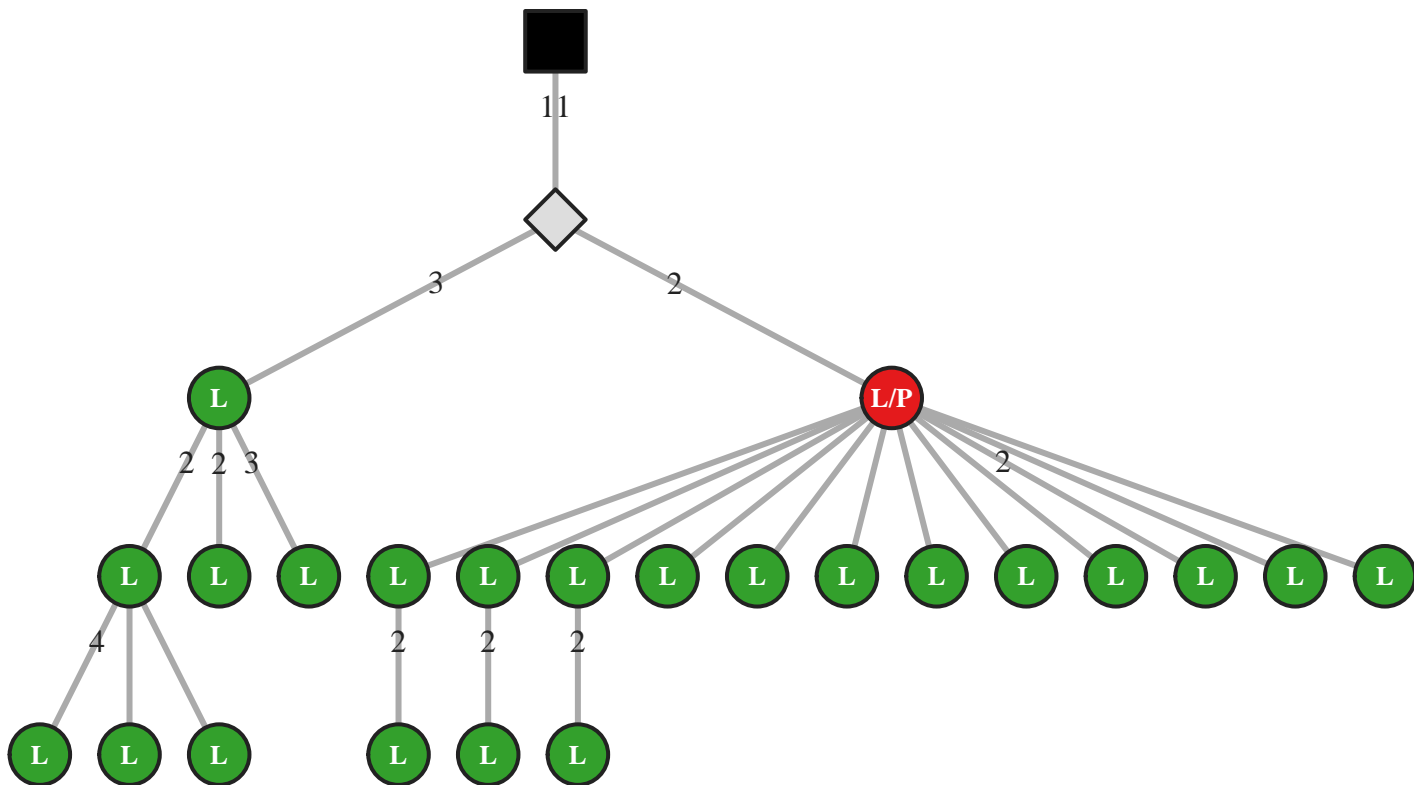
M5 IgG IGHV4-39/J4 51bp (36296)



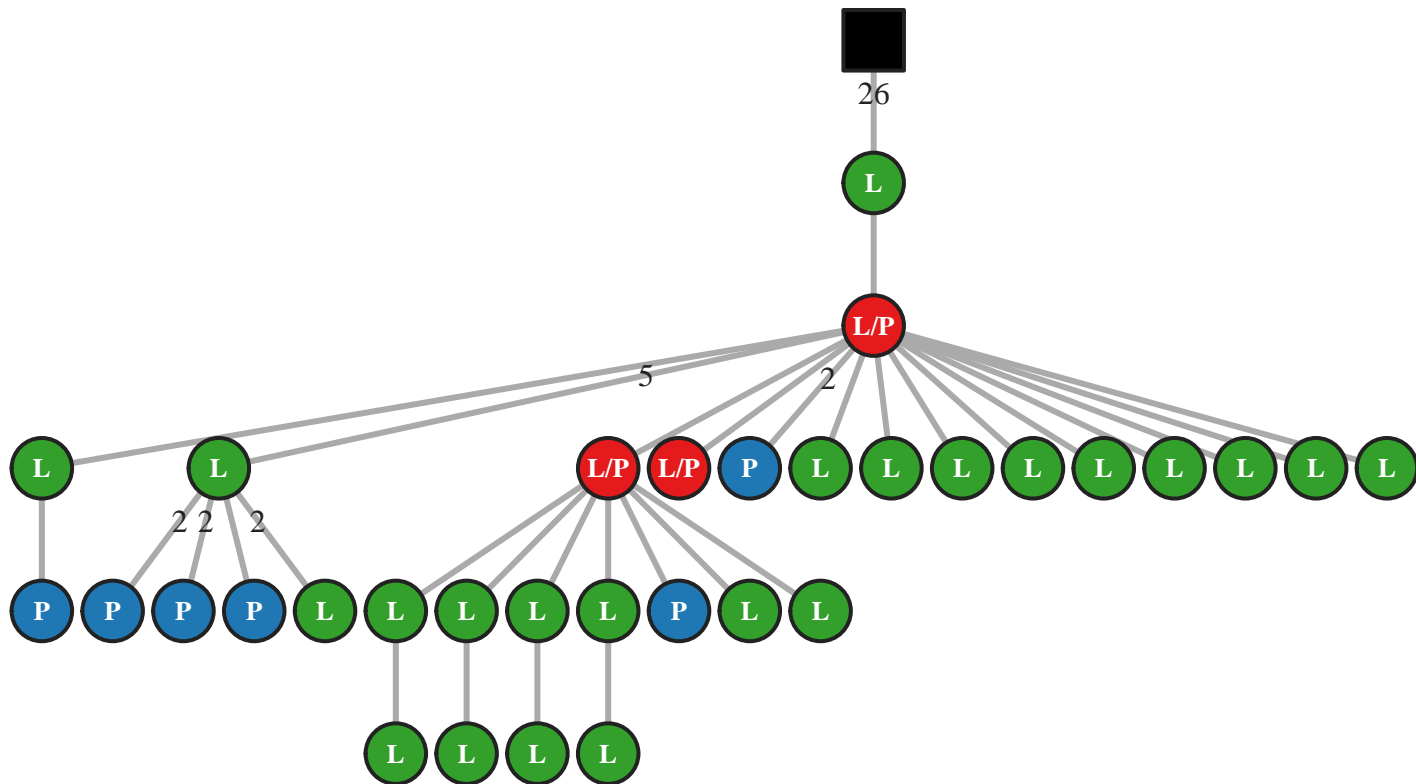
M5 IgG IGHV4-39/J4 57bp (46584)



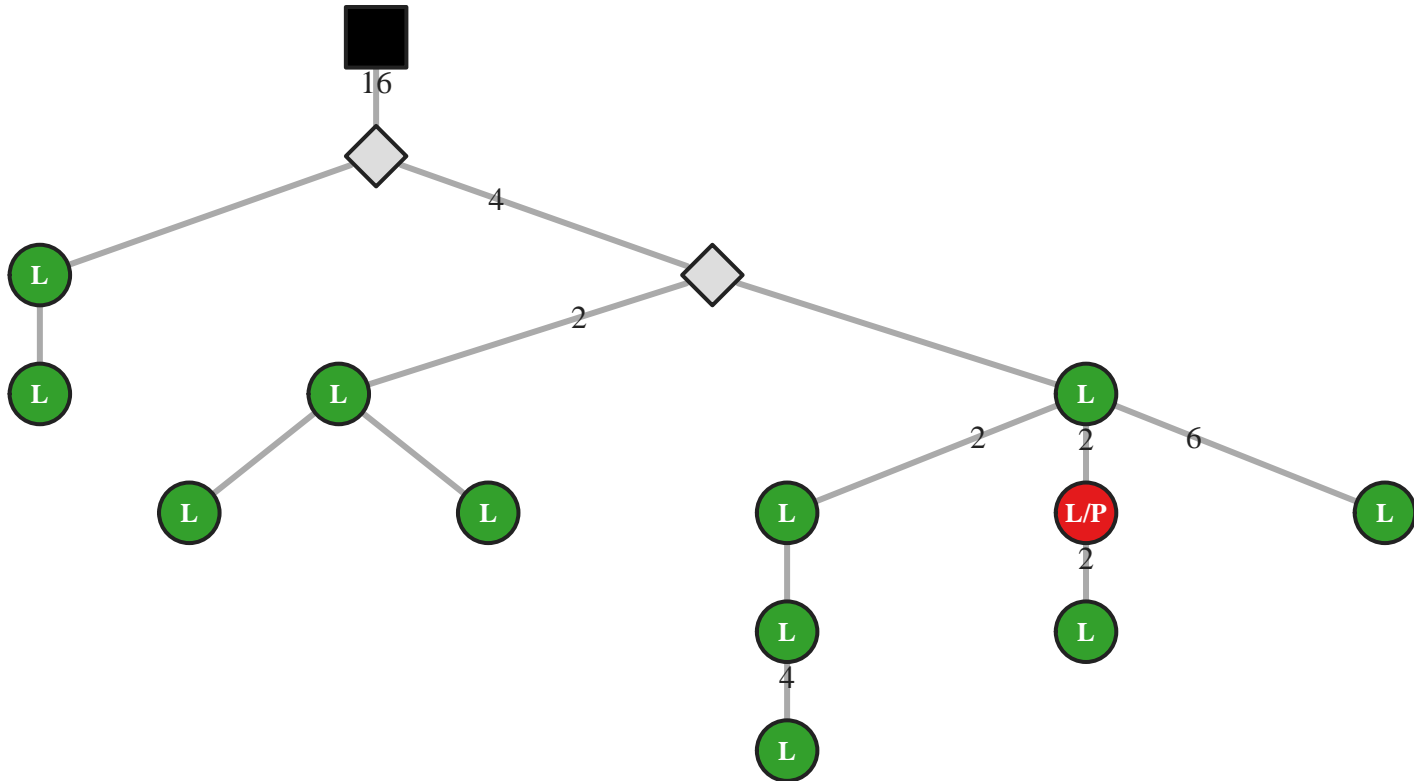
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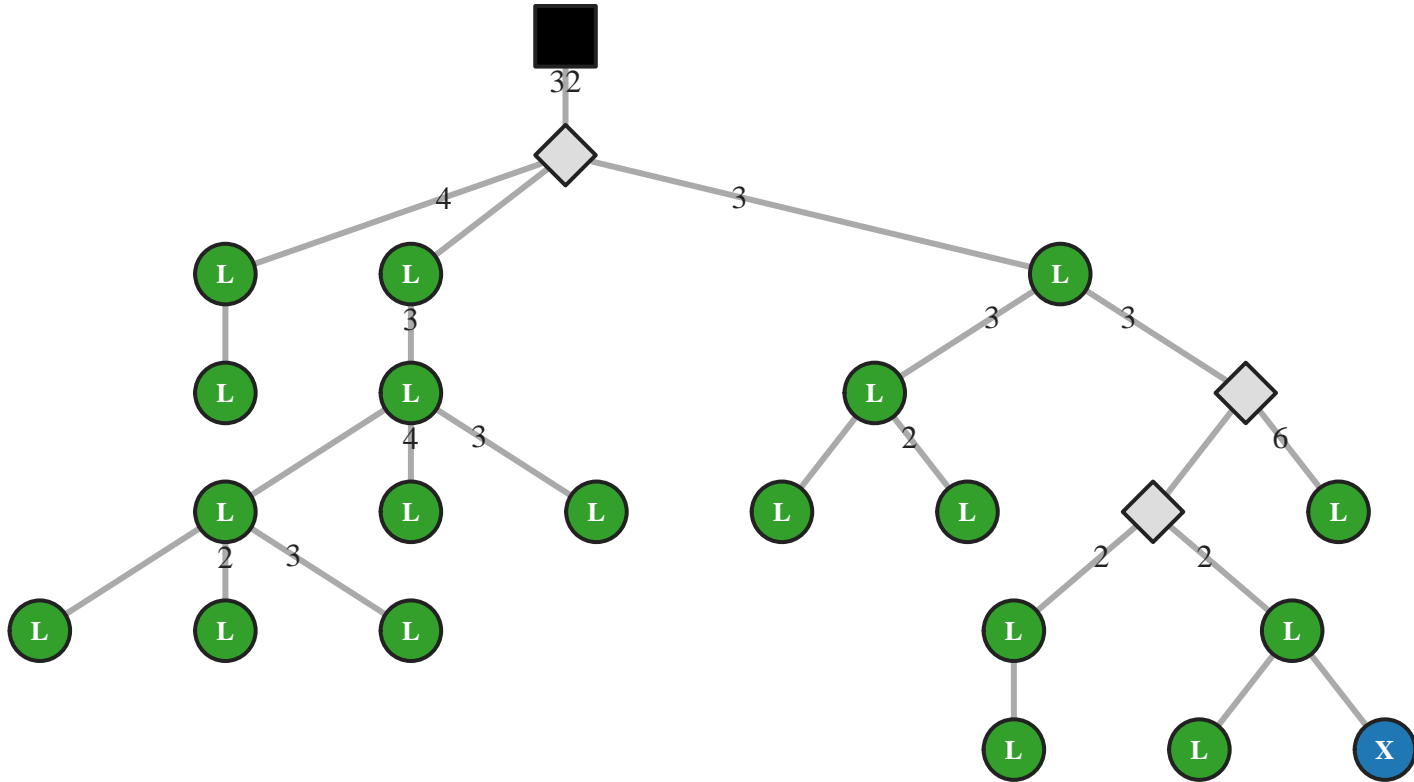
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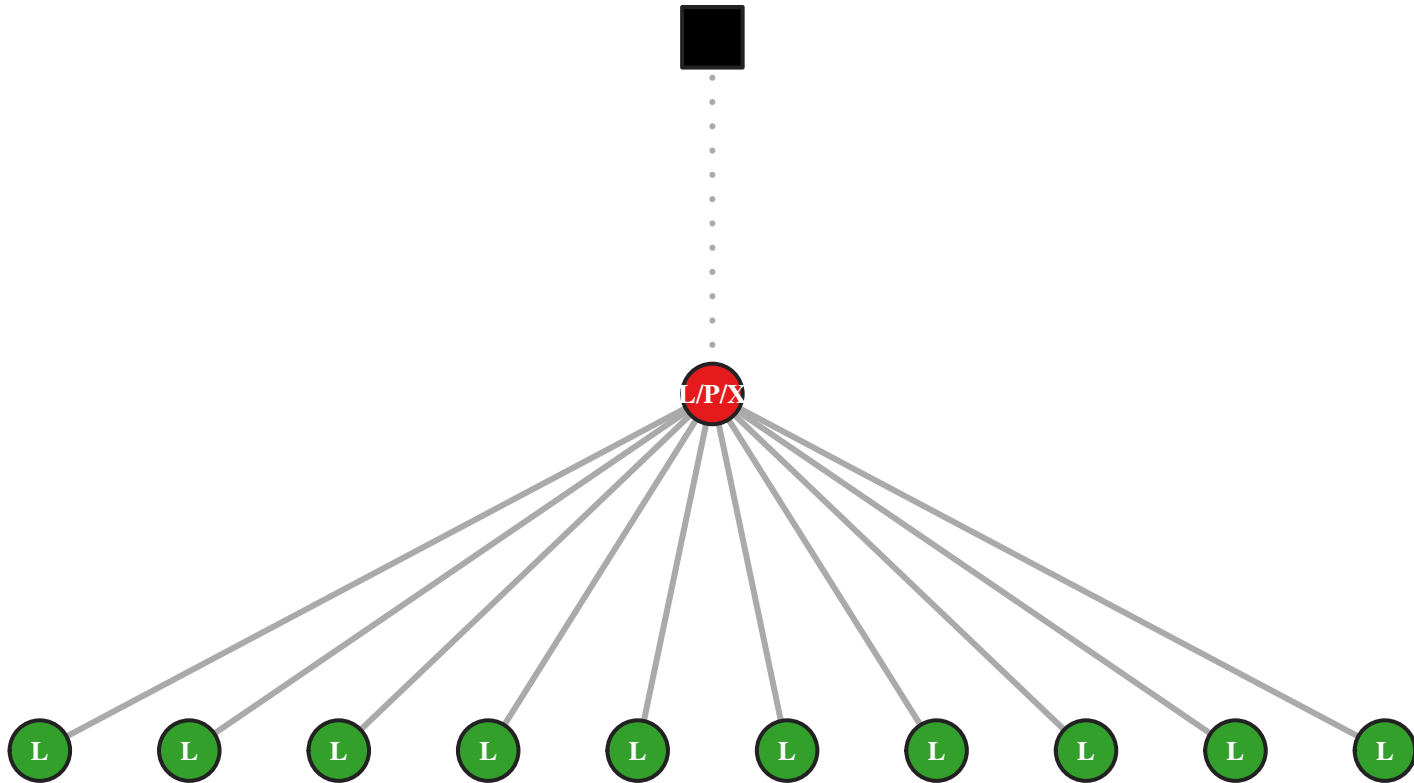
M5 IgG IGHV4-39/J5 39bp (53084)



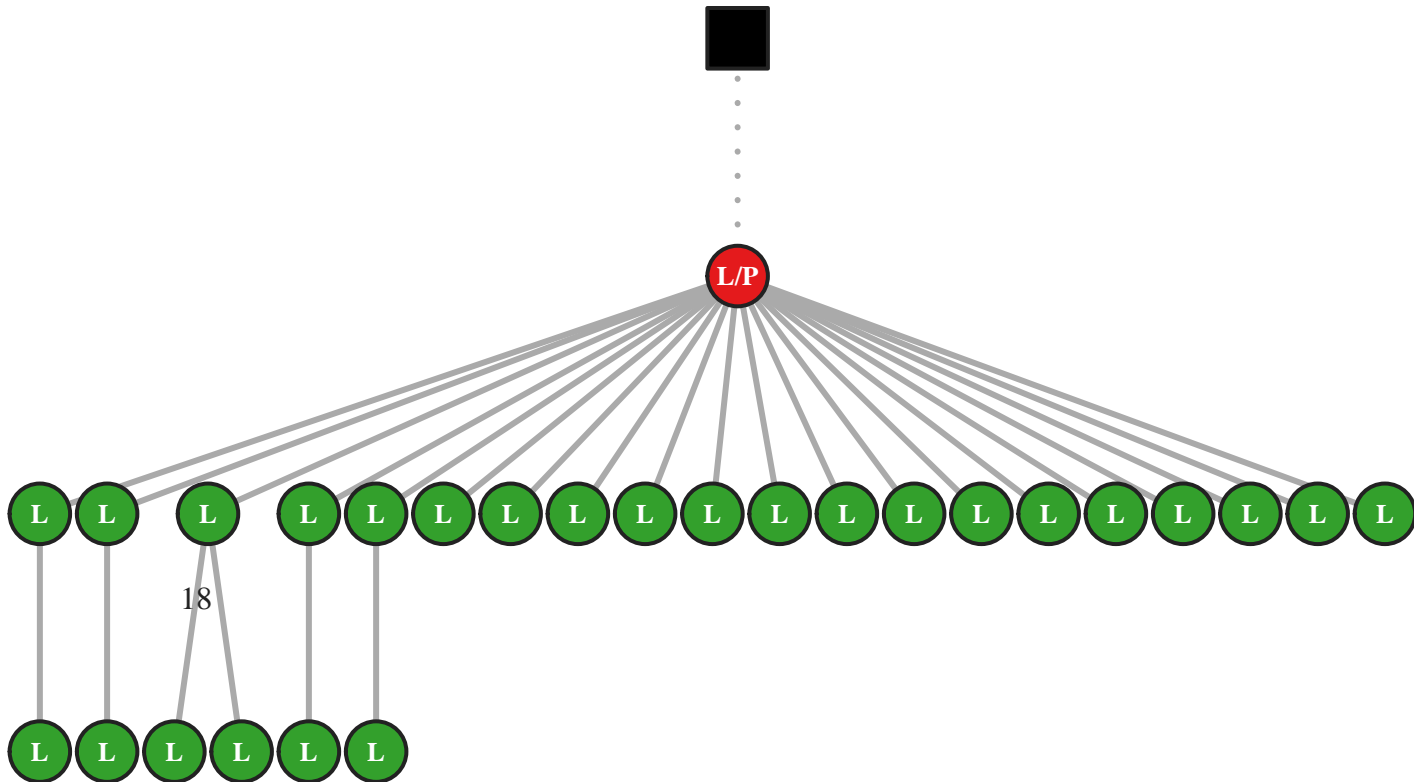
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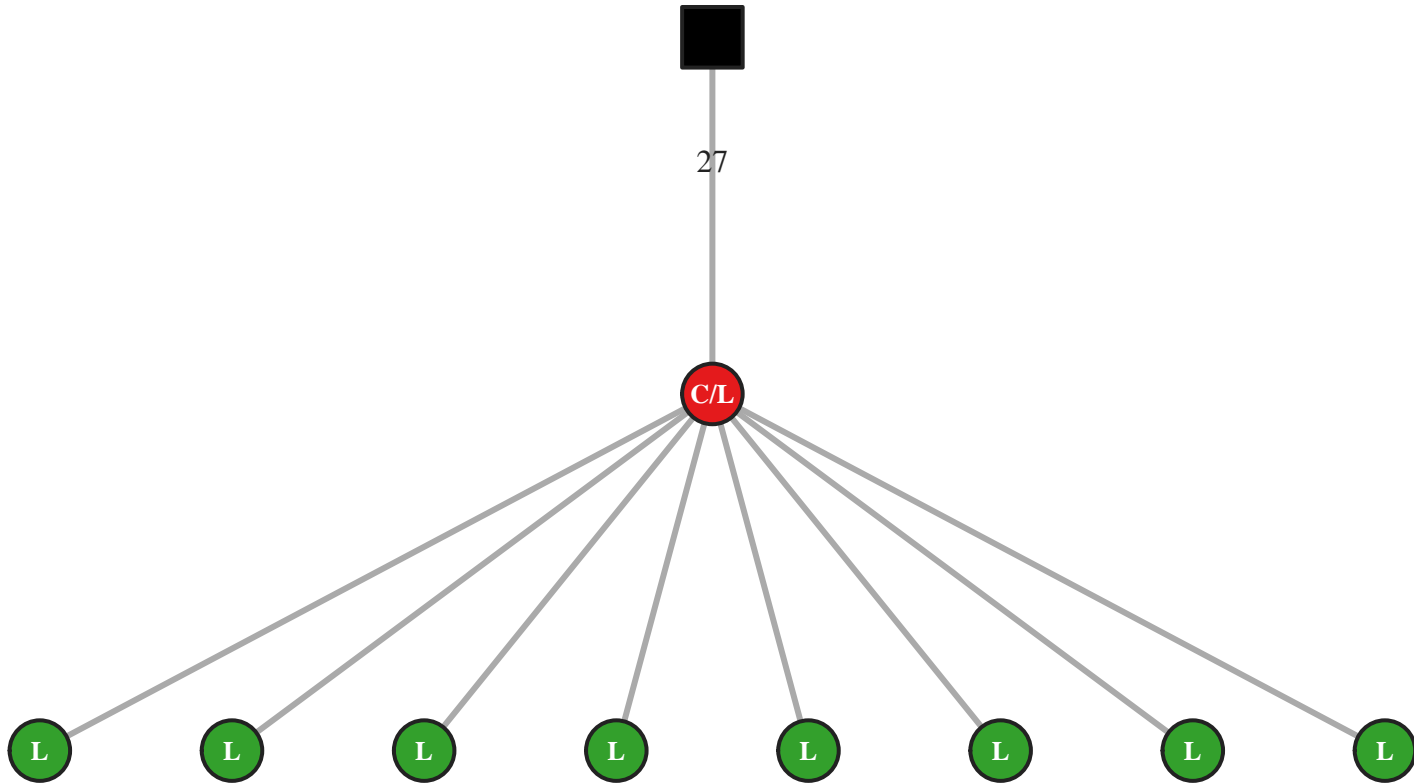
M5 IgA IGHV4-39/J5 51bp (30825)



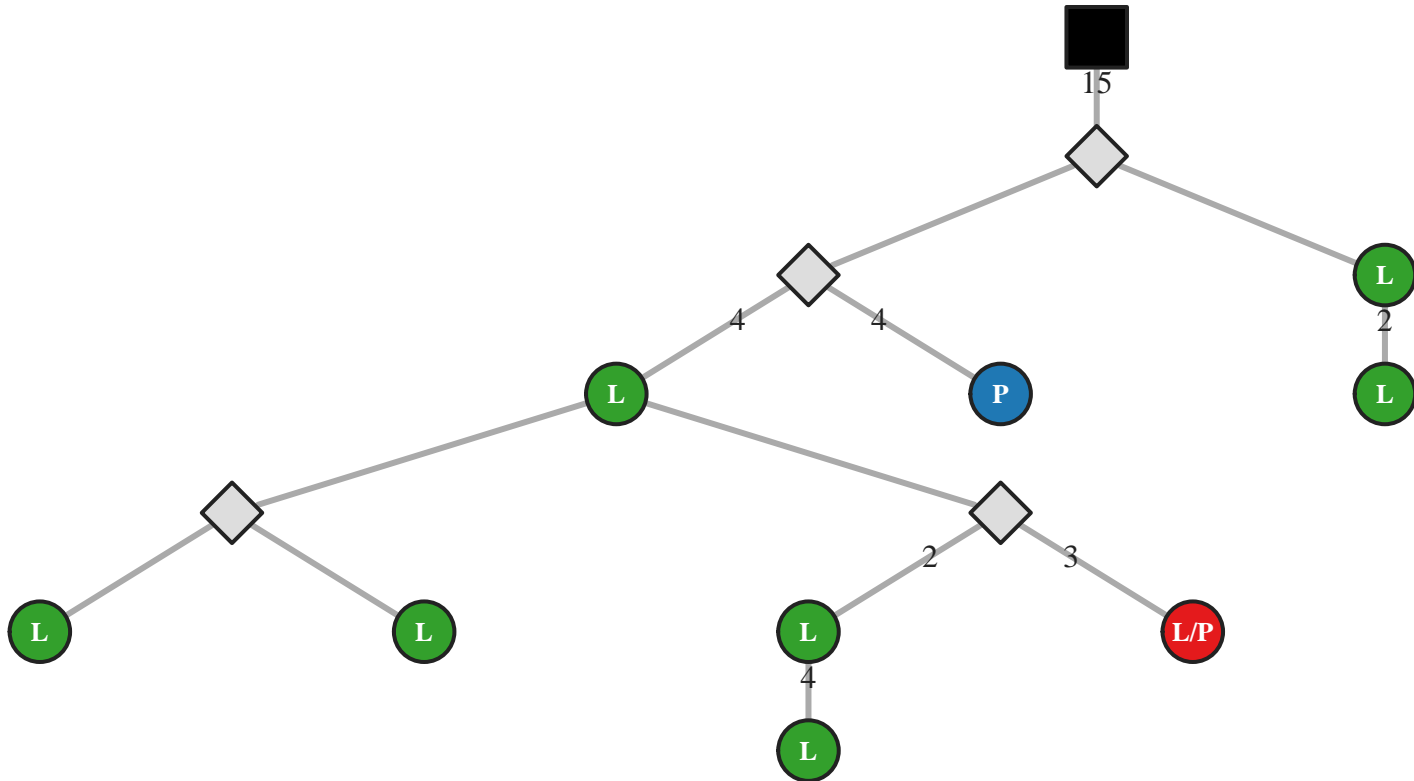
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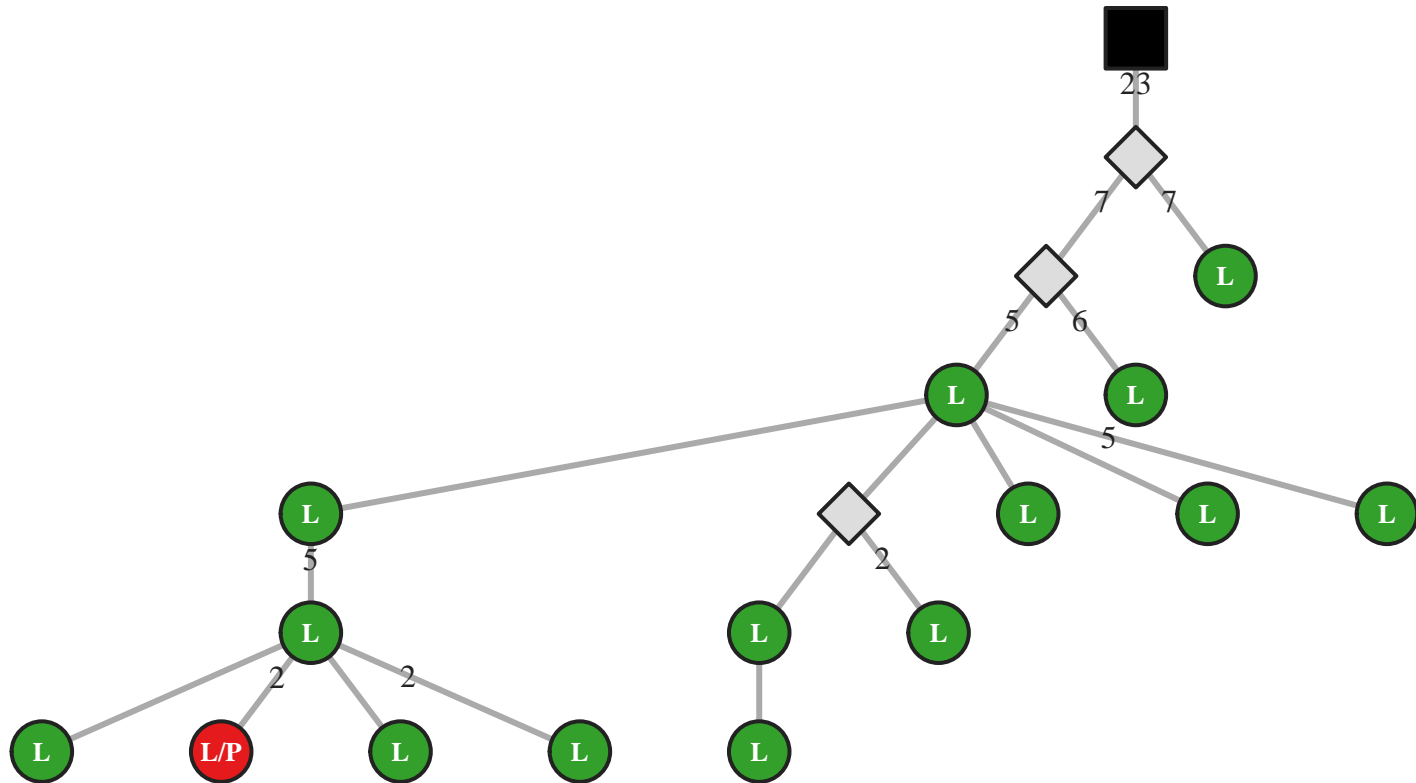
M5 IgG IGHV4-39/J5 54bp (36313)



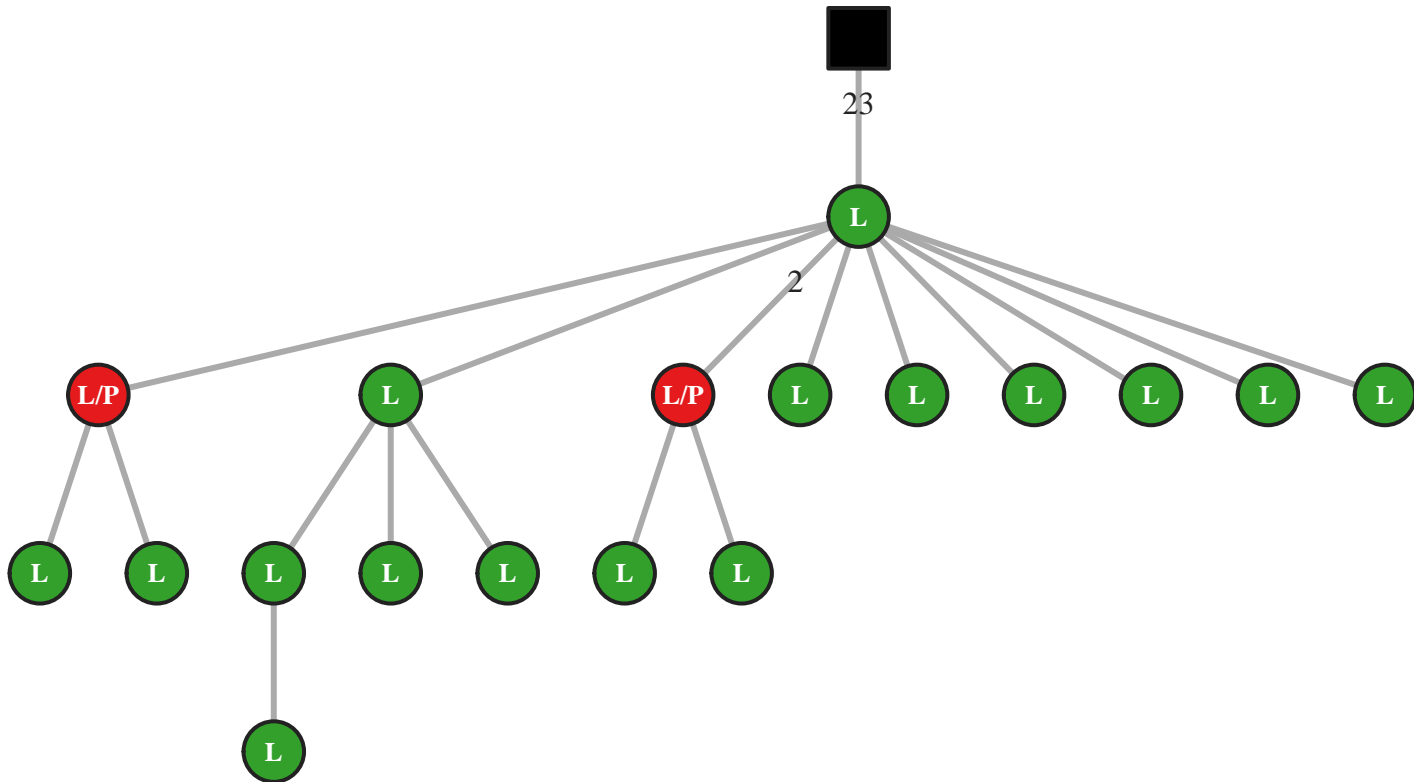
M5 IgG IGHV4-39/J5 57bp (19153)



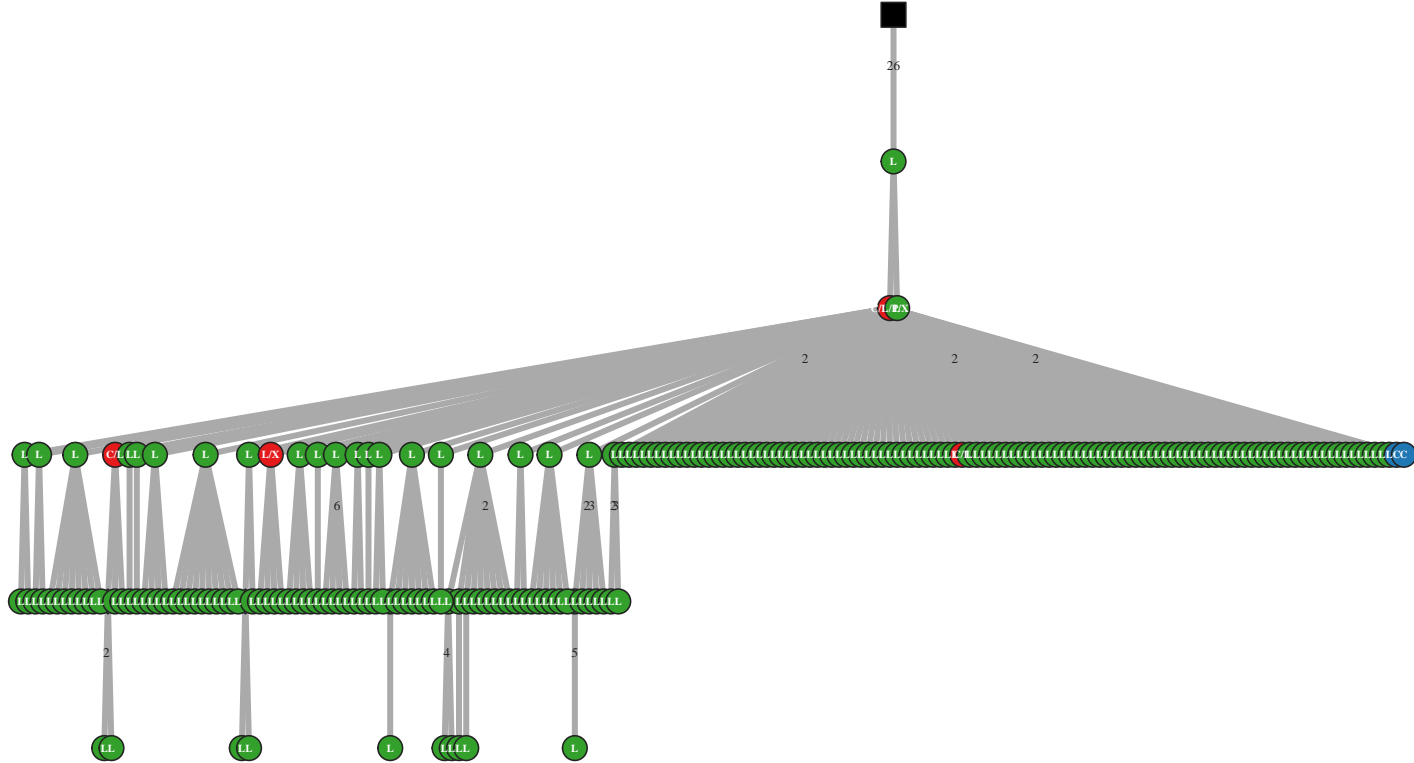
M5 IgG IGHV4-39/J5 60bp (9901)



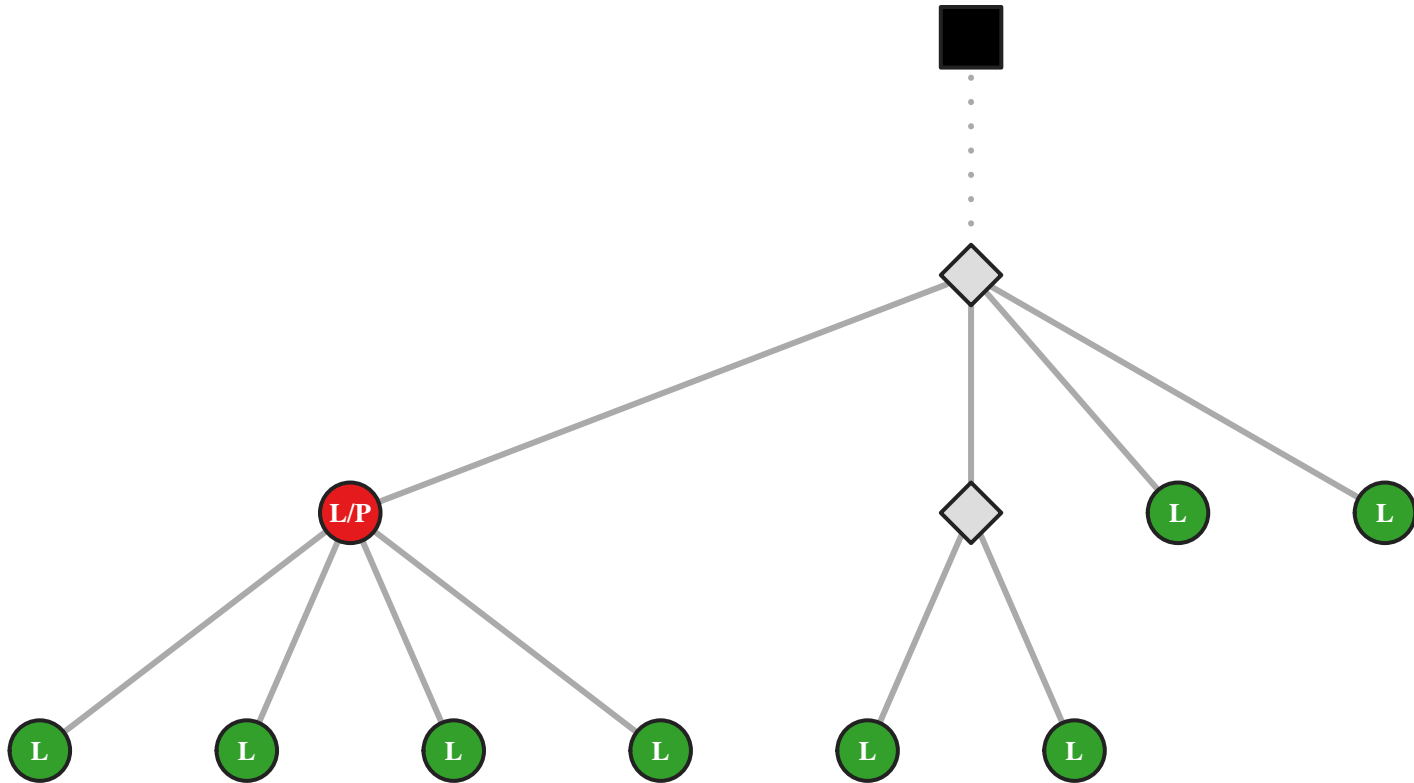
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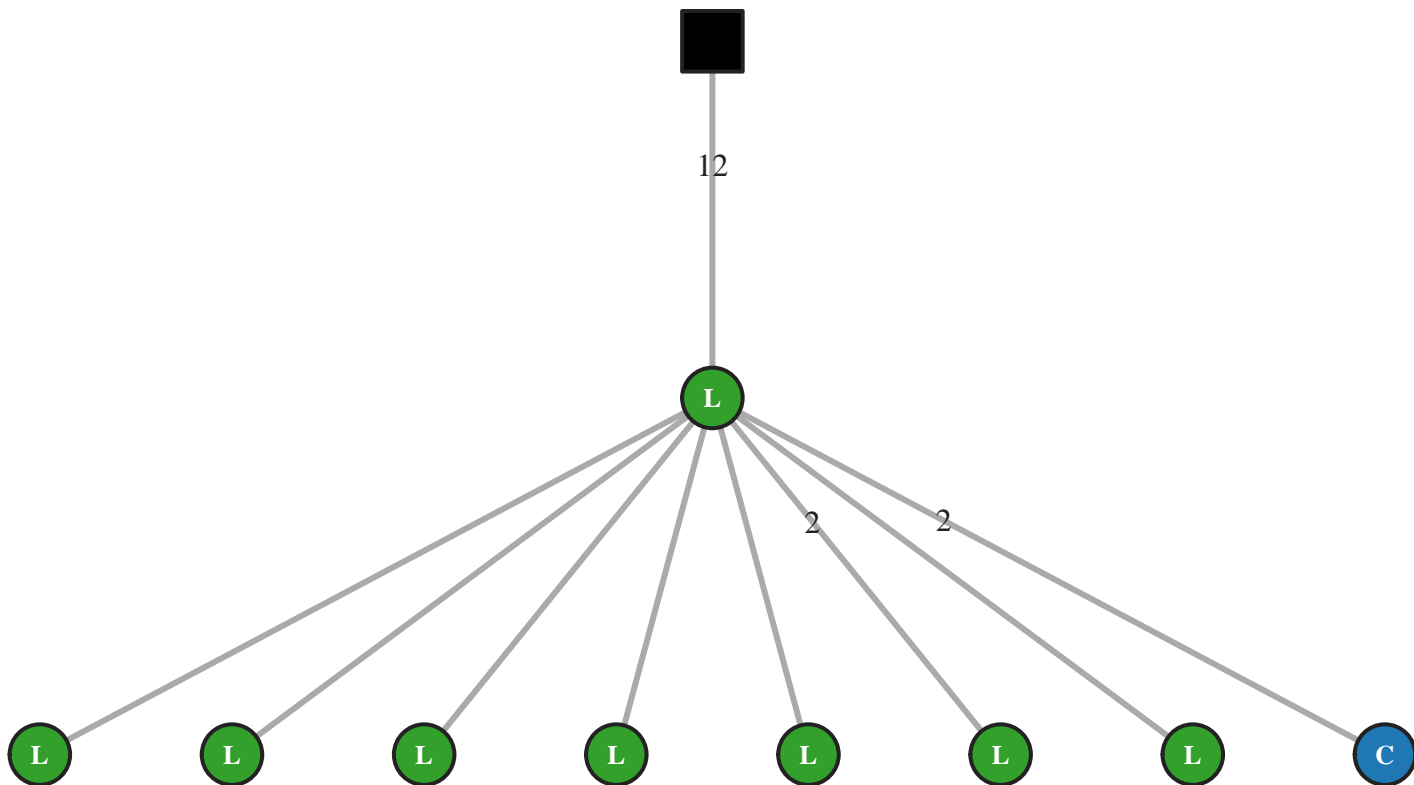
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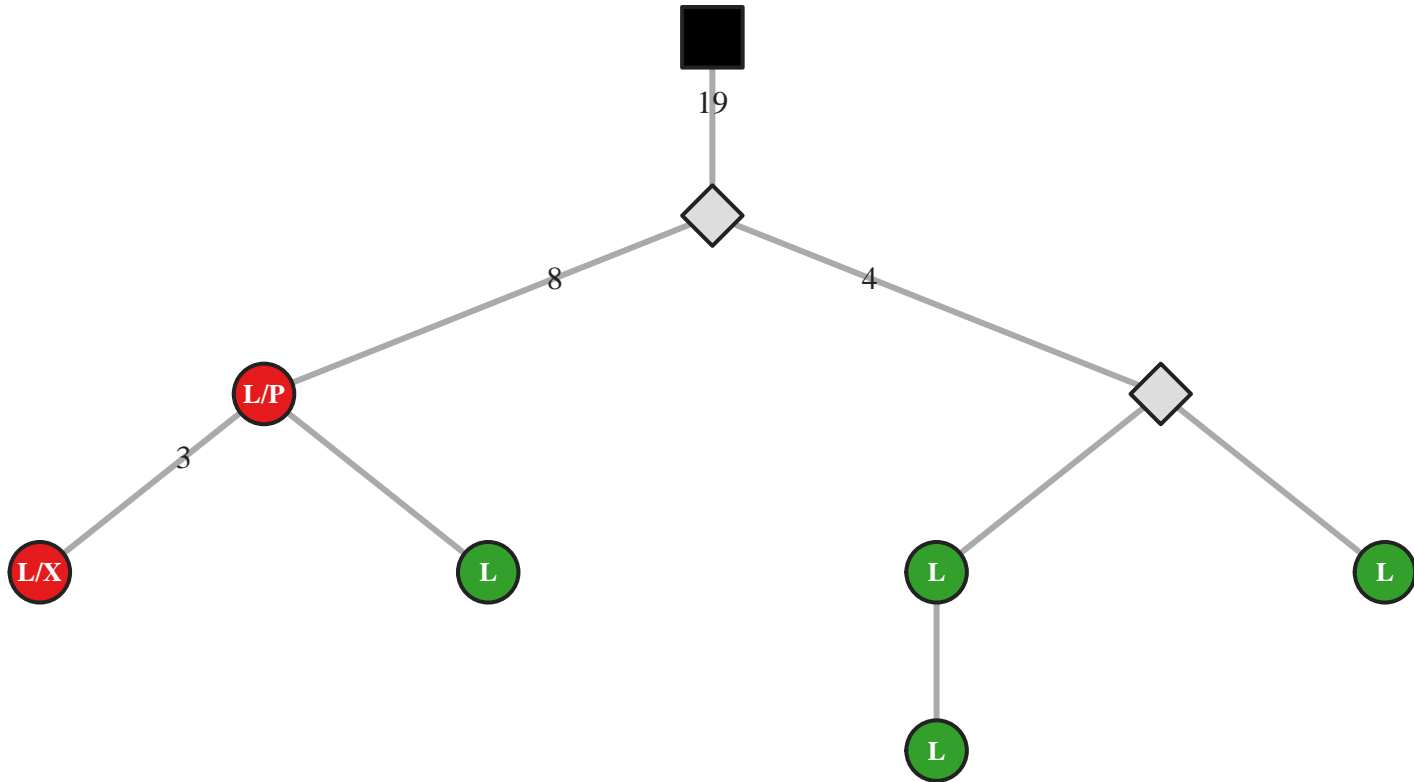
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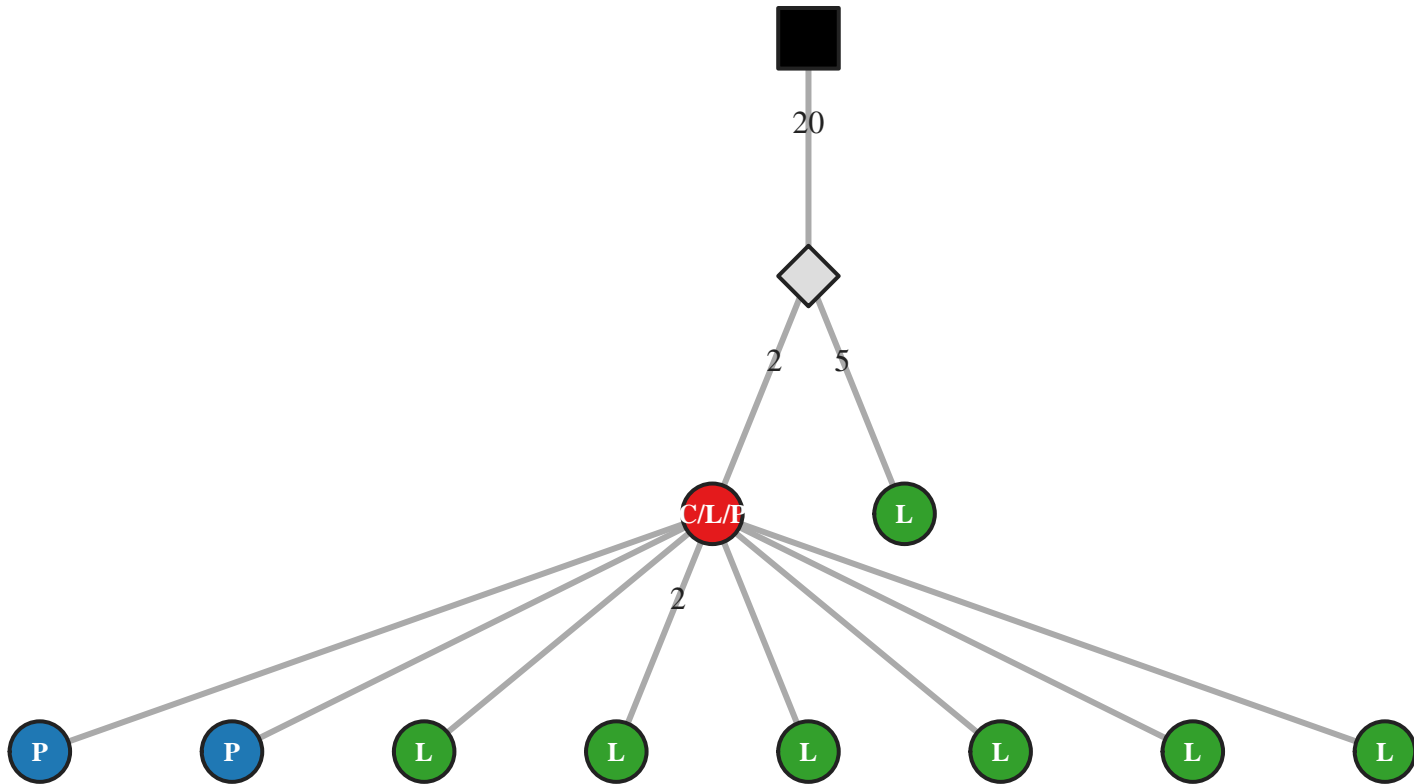
M5 IgG IGHV4-4/J3 39bp (36358)



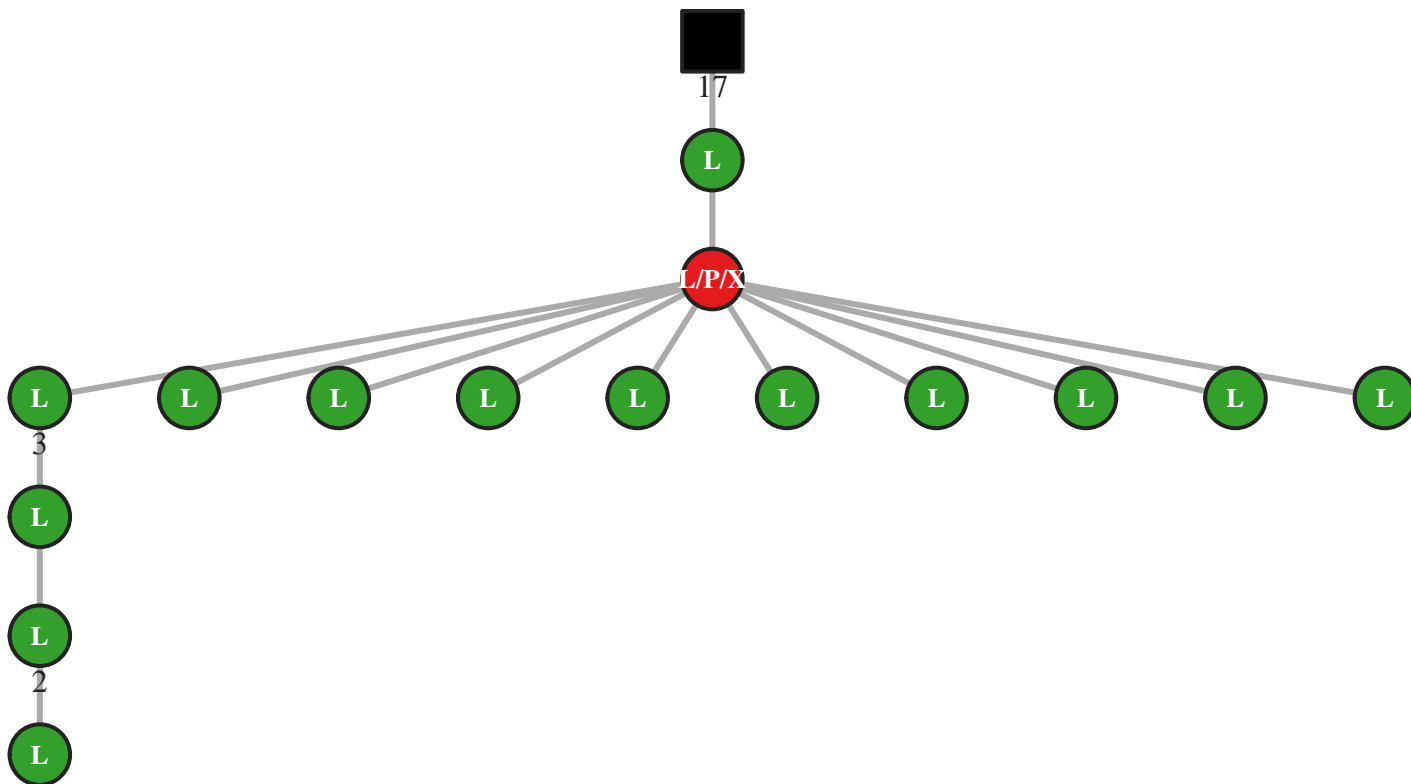
M5 IgG IGHV4-4/J4 30bp (9937)



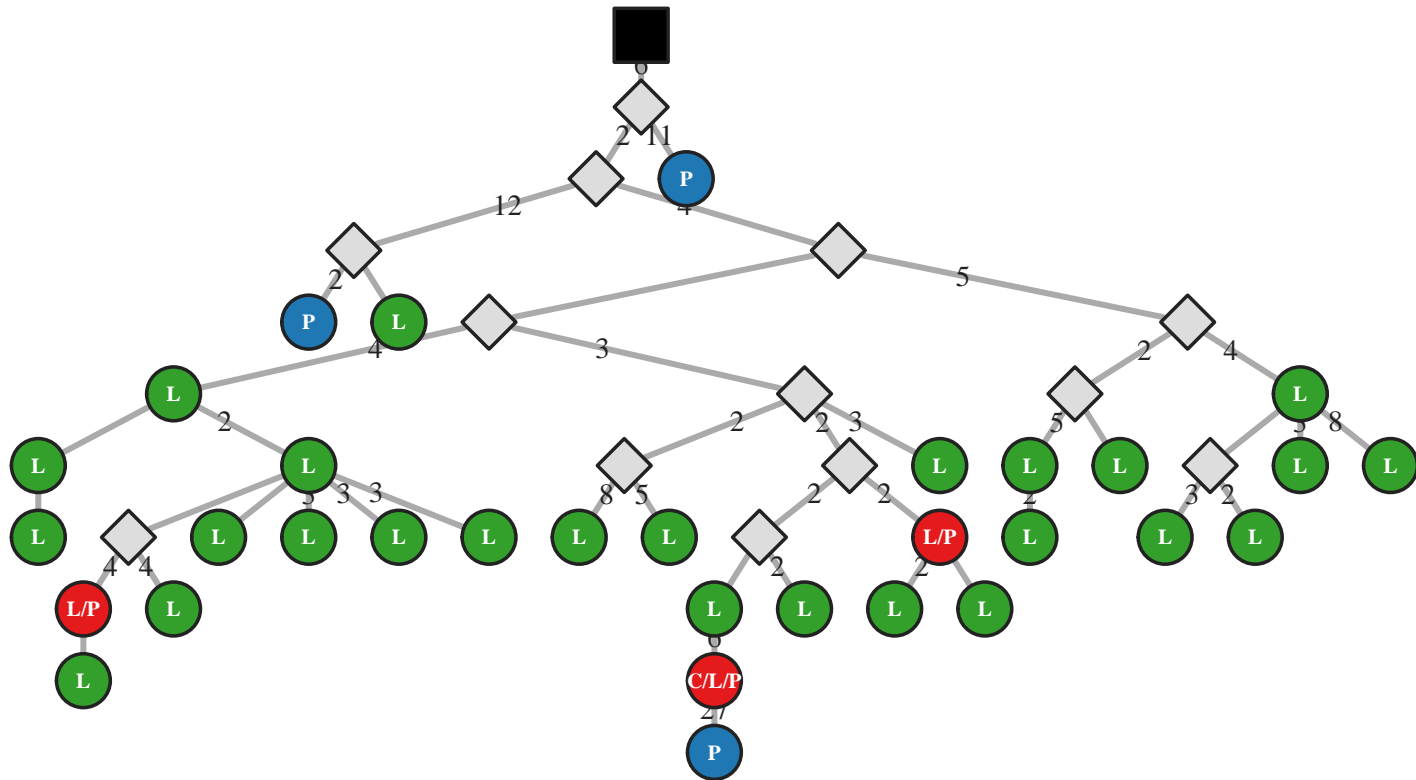
M5 IgG IGHV4-4/J4 39bp (28041)



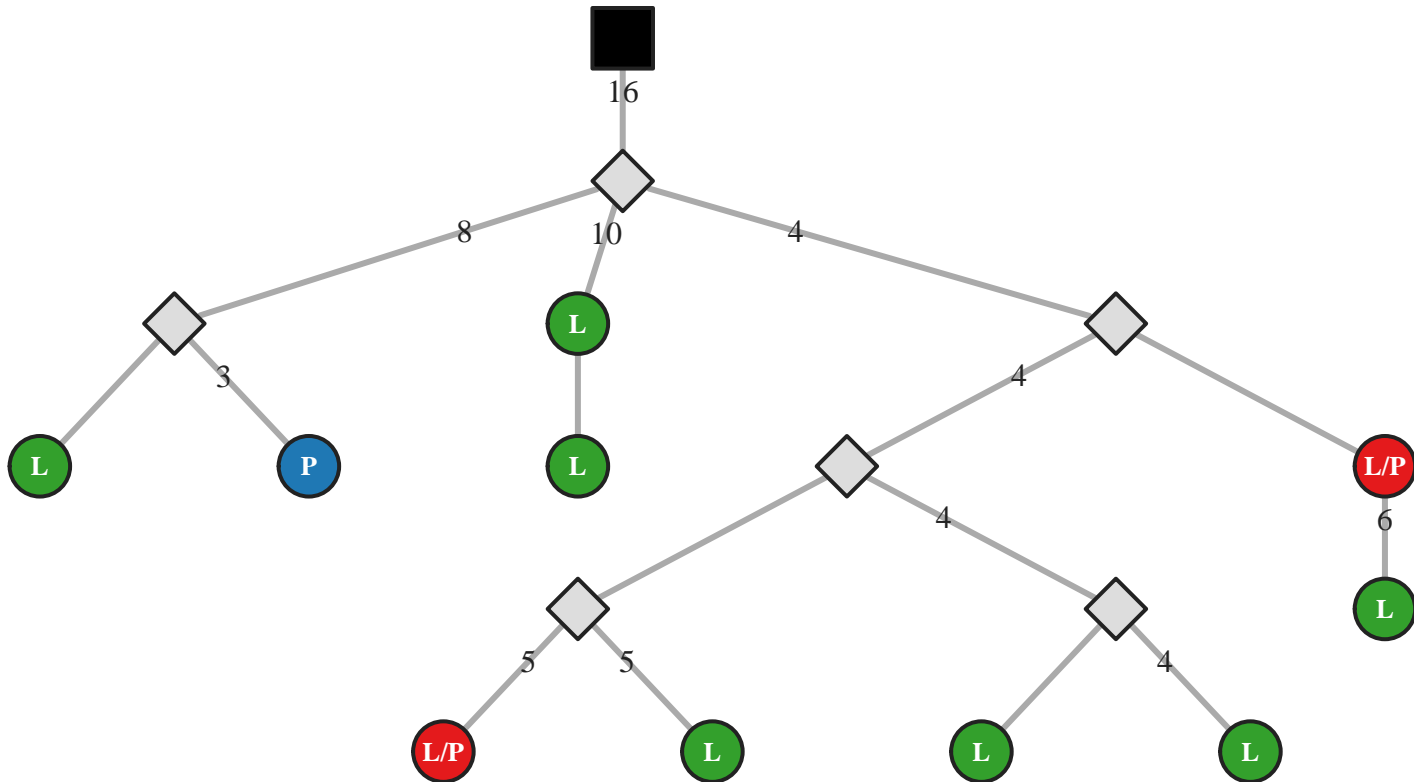
M5 IgG IGHV4-4/J4 39bp (28074)



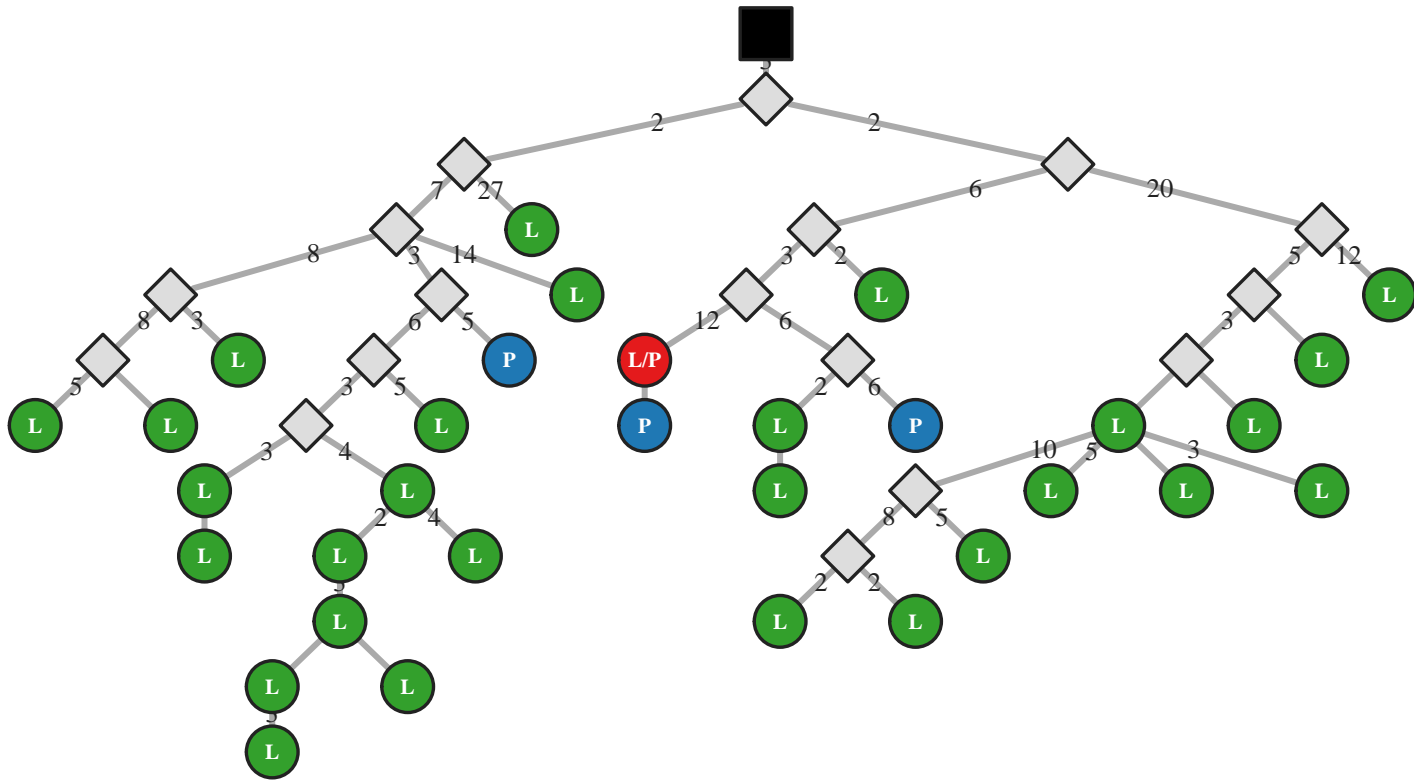
M5 IgG IGHV4-4/J4 42bp (36440)



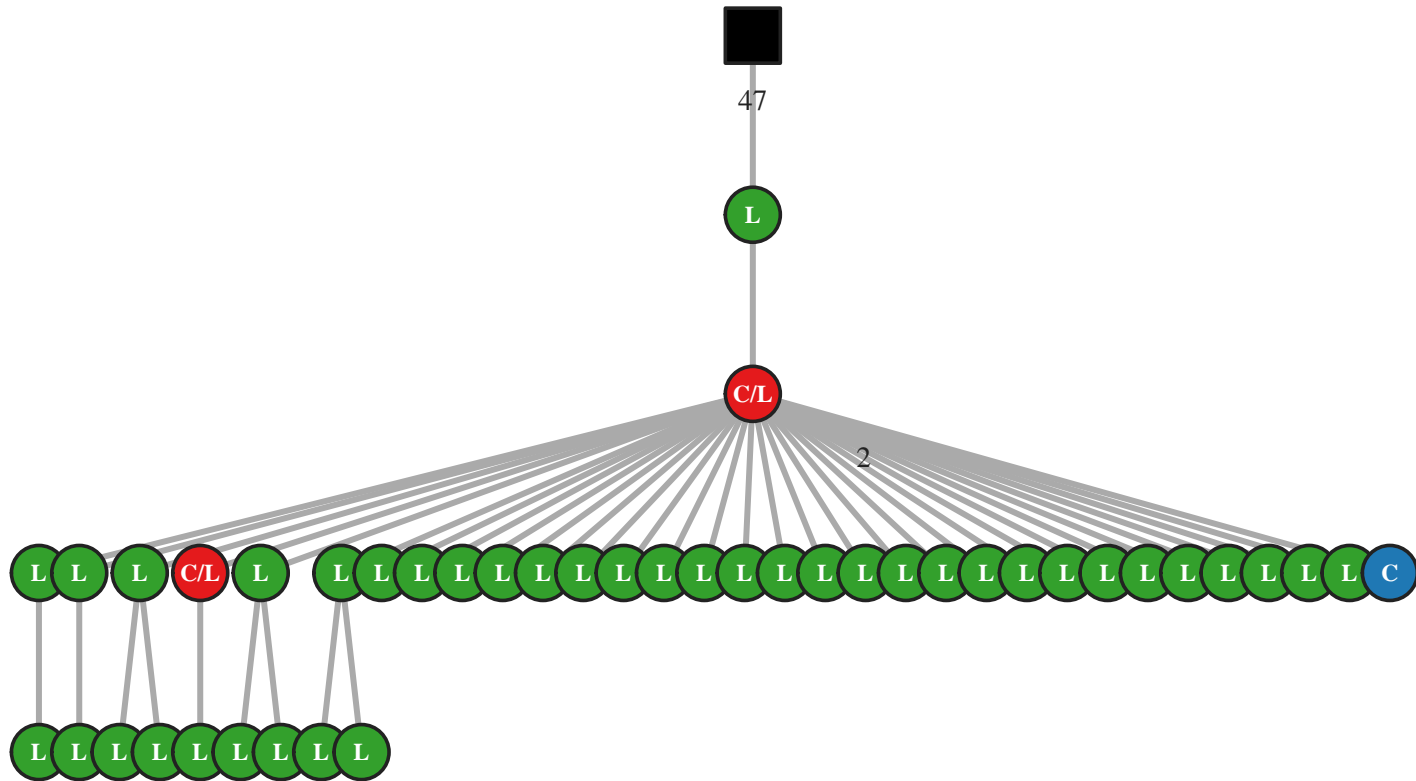
M5 IgA IGHV4-4/J4 45bp (3159)



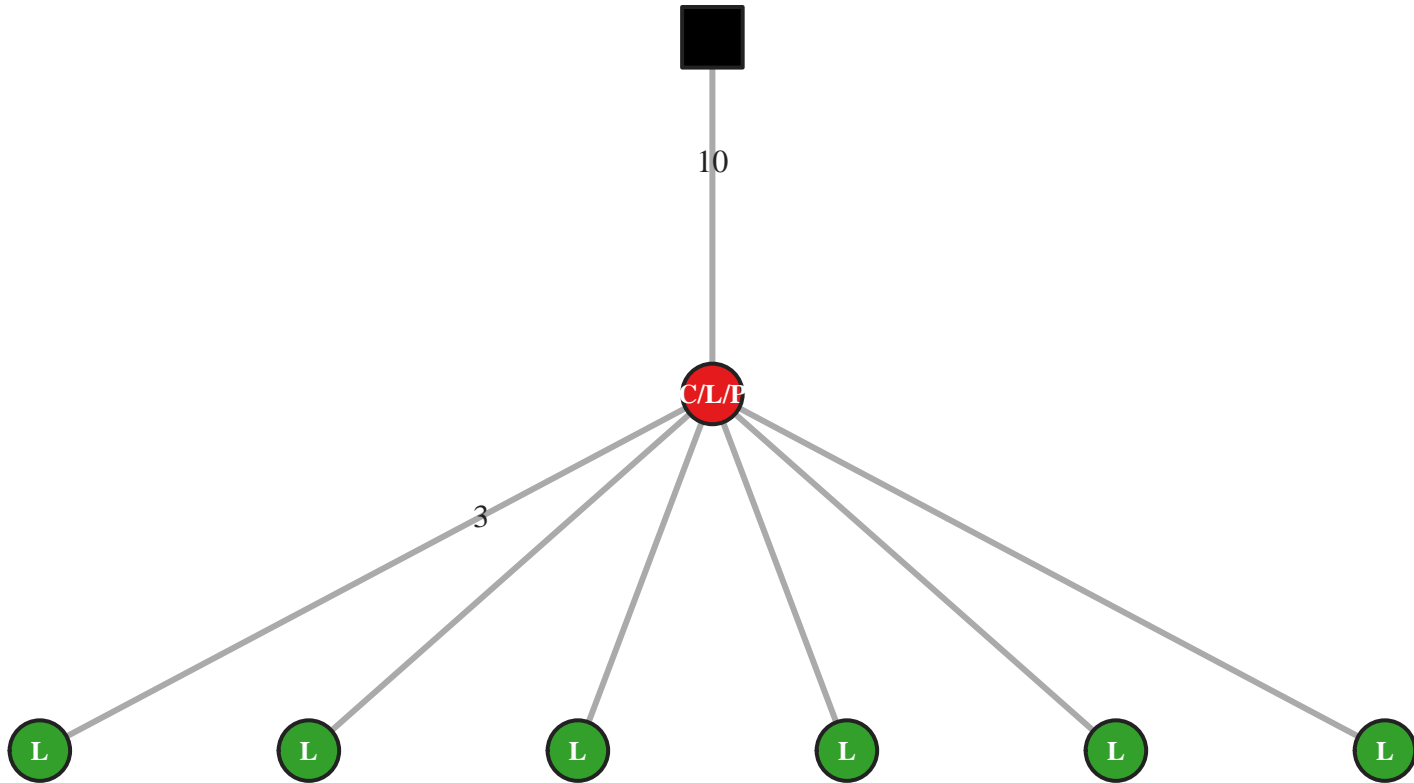
M5 IgA IGHV4-4/J4 45bp (3160)



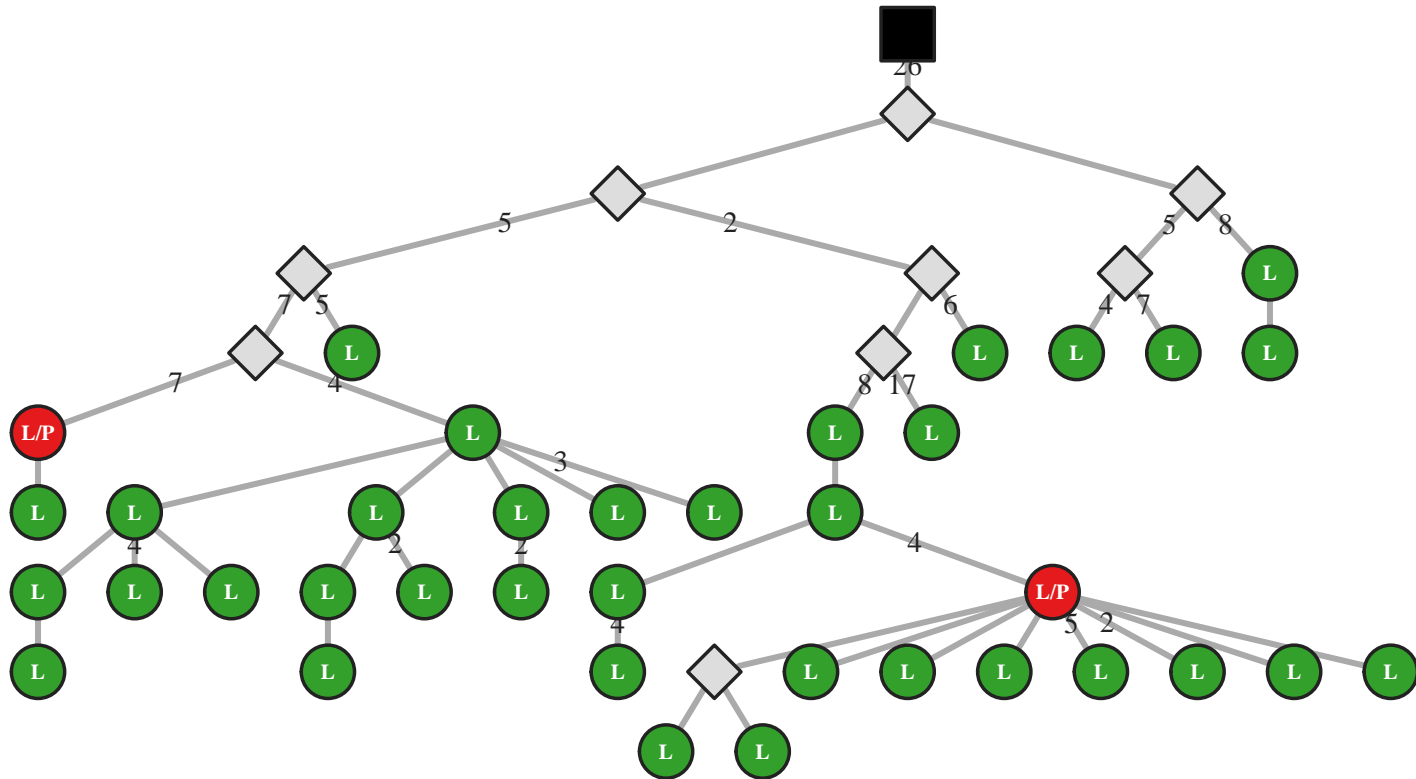
M5 IgG IGHV4-4/J4 45bp (9961)



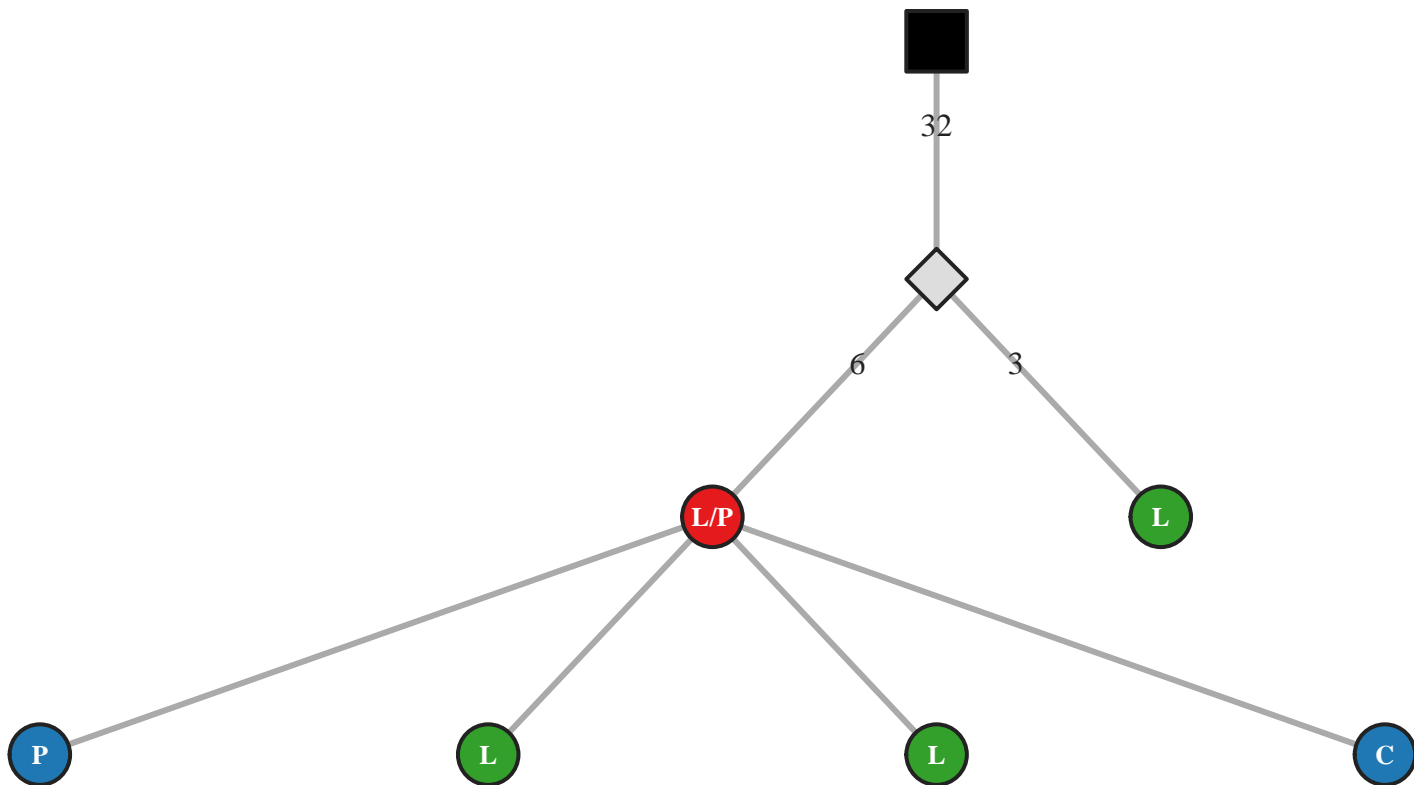
M5 IgG IGHV4-4/J4 45bp (9988)



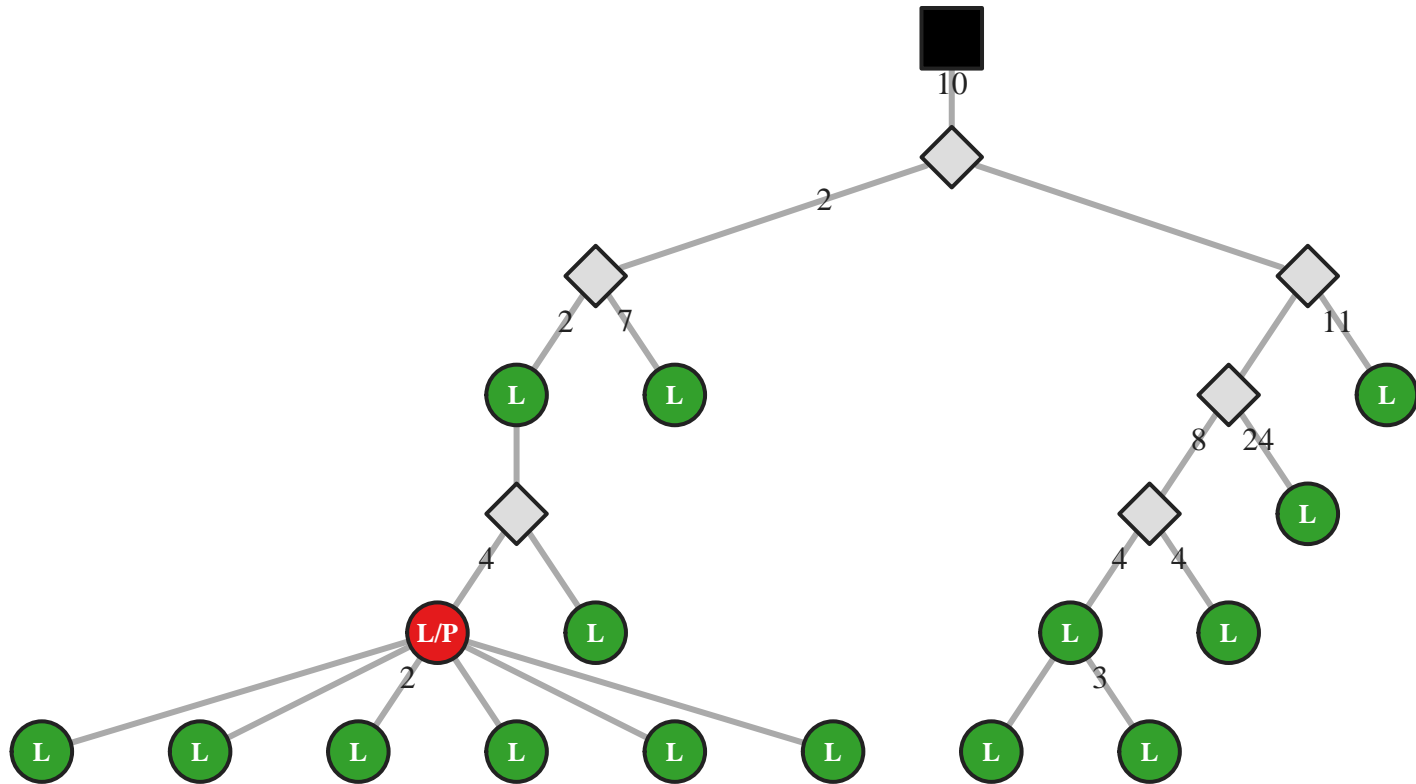
M5 IgG IGHV4-4/J4 45bp (9989)



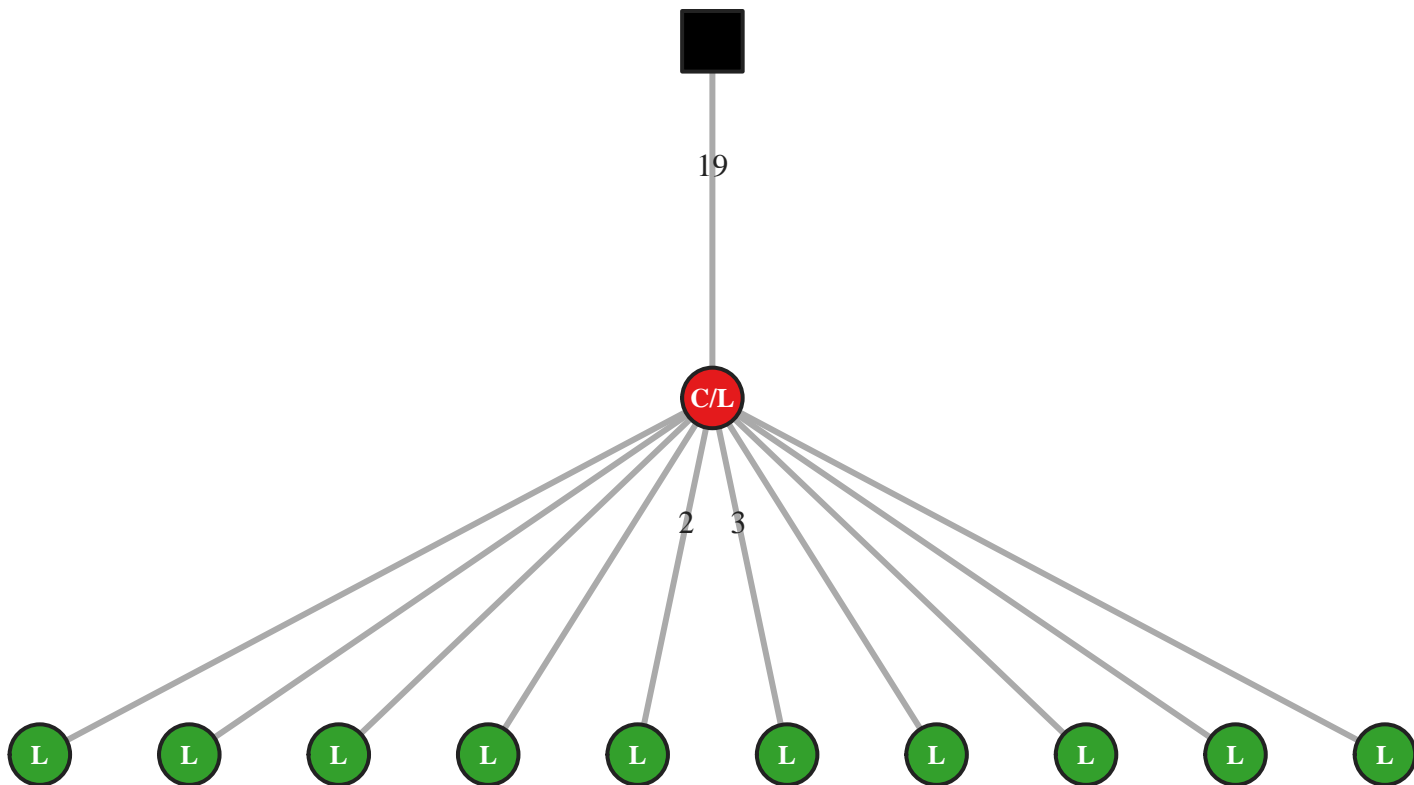
M5 IgG IGHV4-4/J4 51bp (46638)



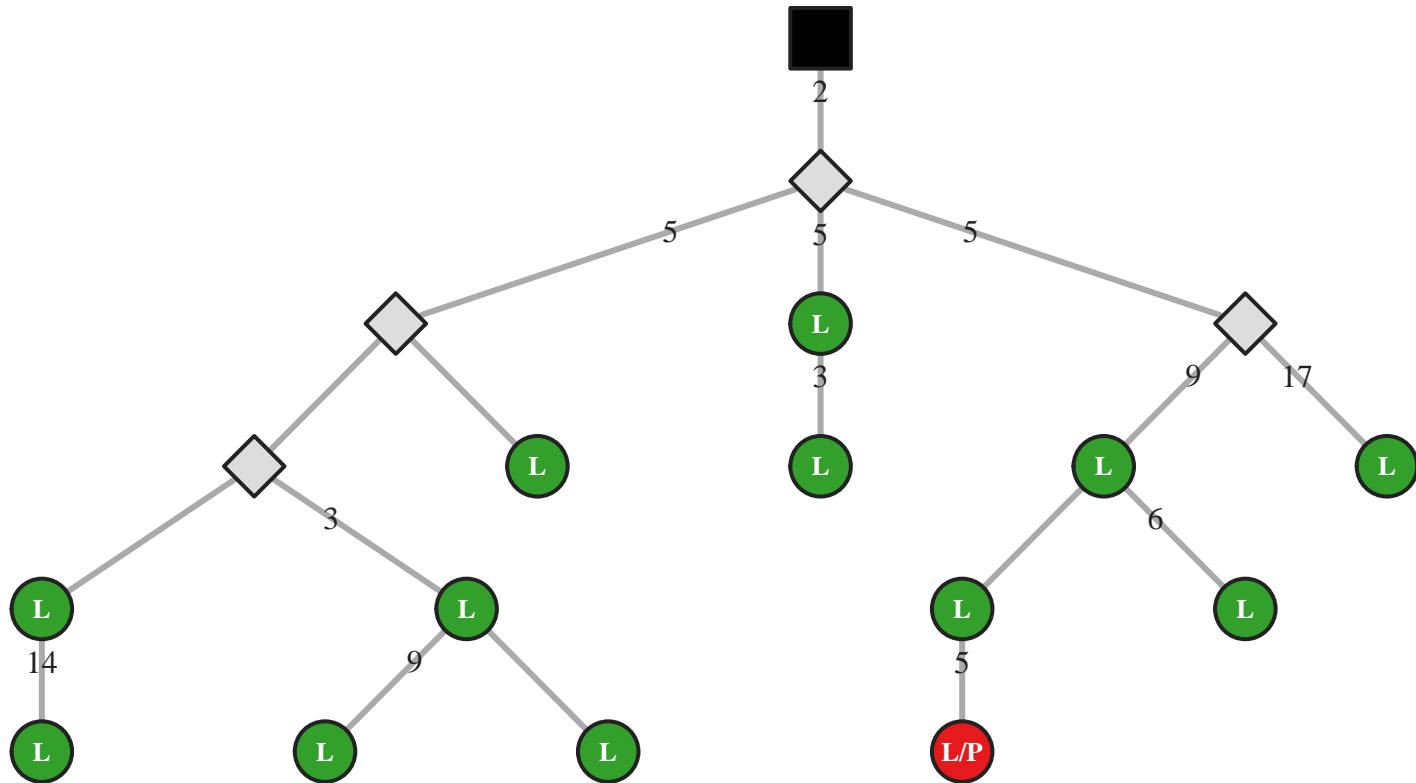
M5 IgG IGHV4-4/J4 57bp (10087)



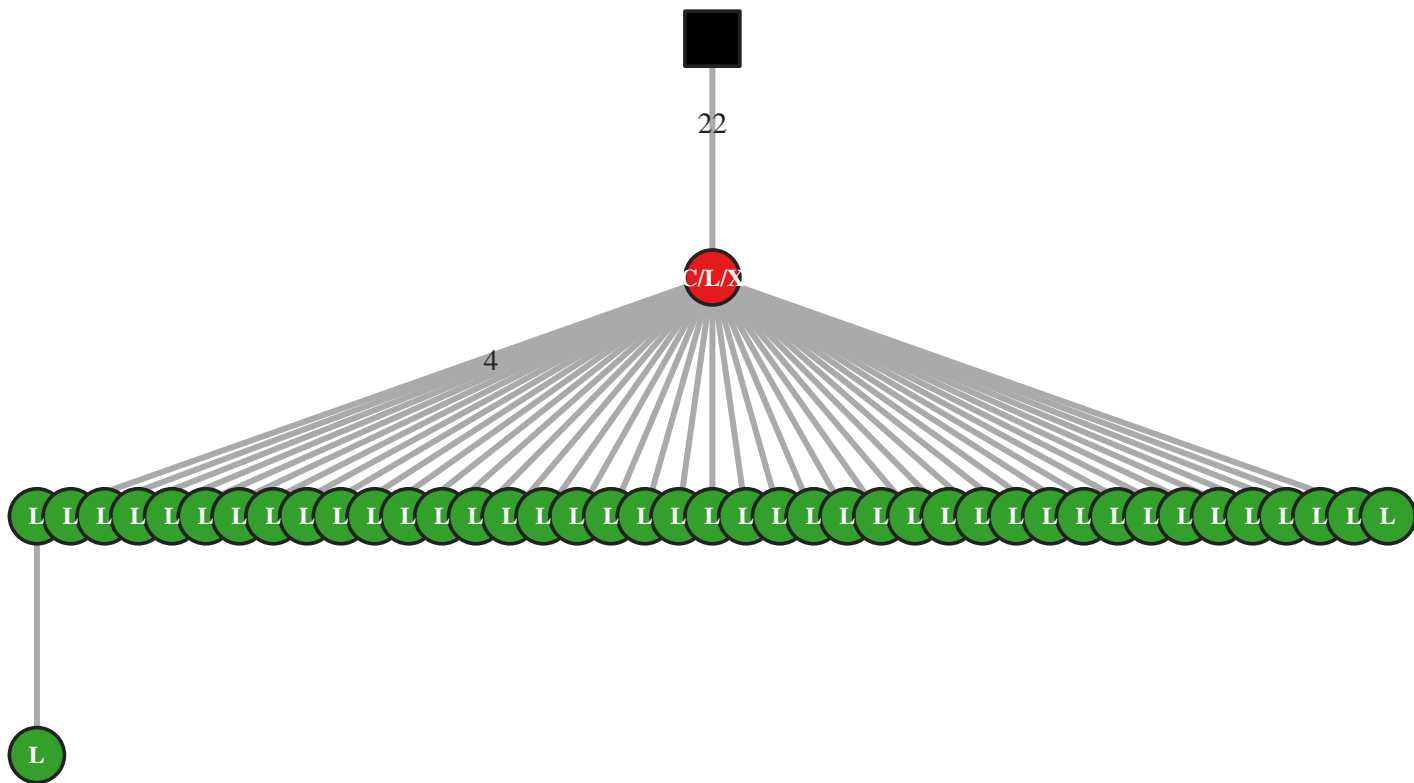
M5 IgM IGHV4-4/J4 63bp (29750)



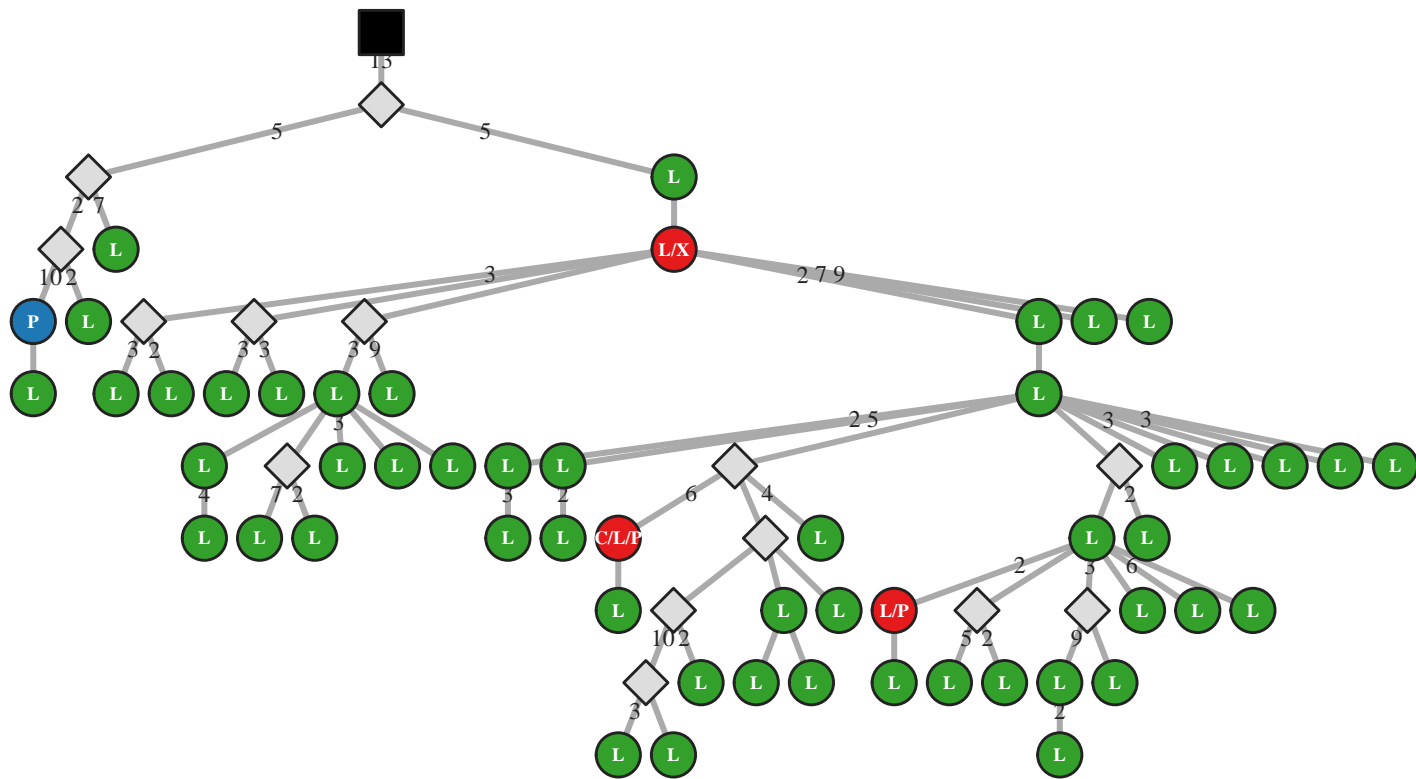
M5 IgG IGHV4-4/J5 30bp (46664)



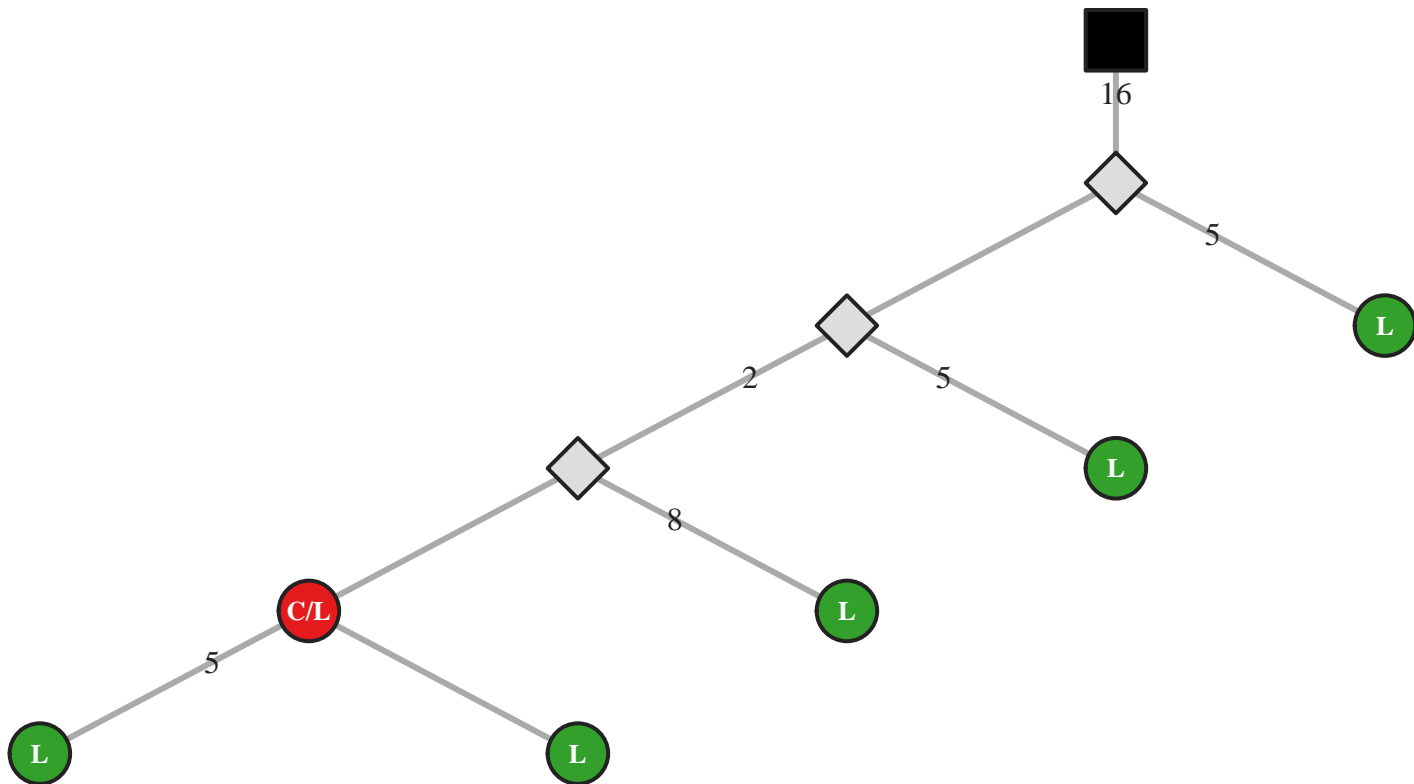
M5 IgG IGHV4-4/J5 39bp (10094)



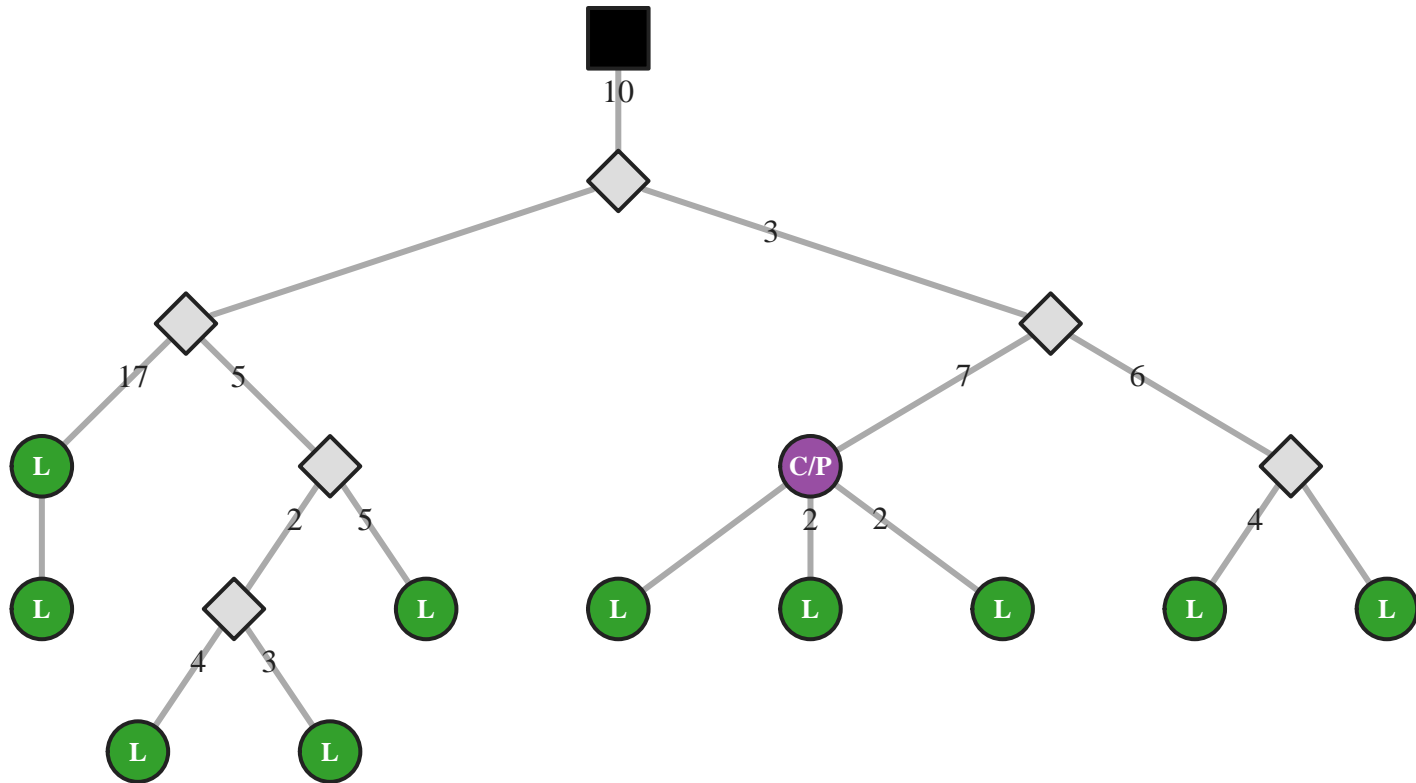
M5 IgG IGHV4-4/J5 42bp (28082)



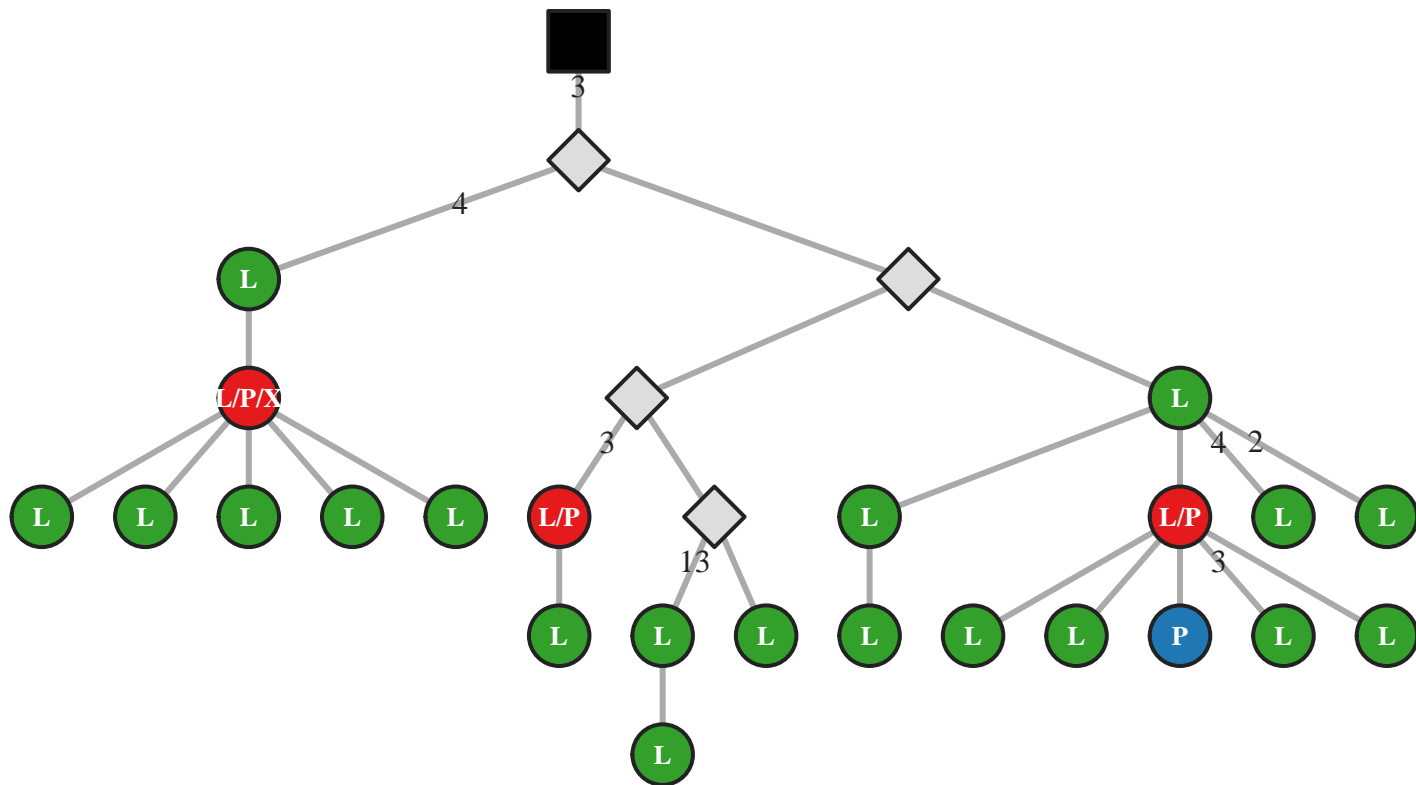
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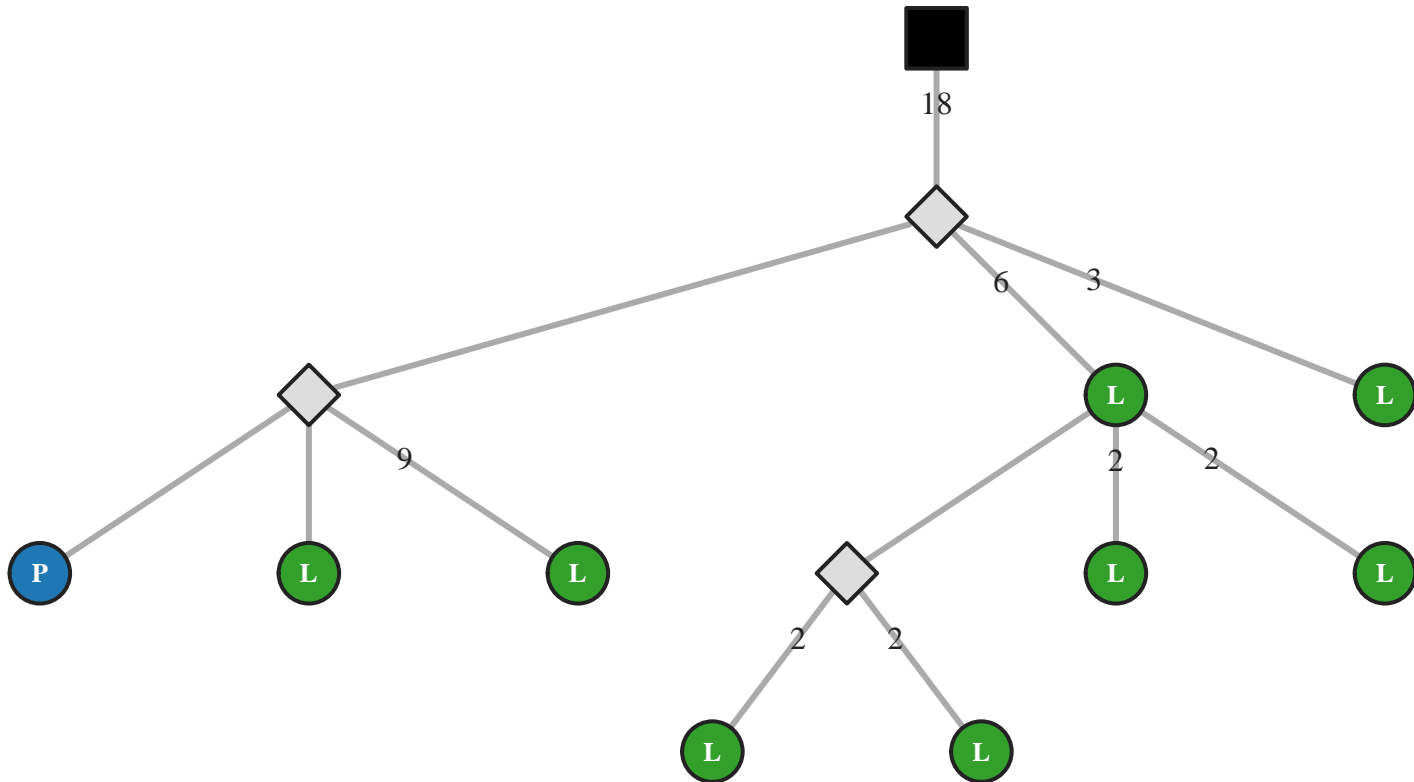
M5 IgG IGHV4-4/J6 48bp (53171)



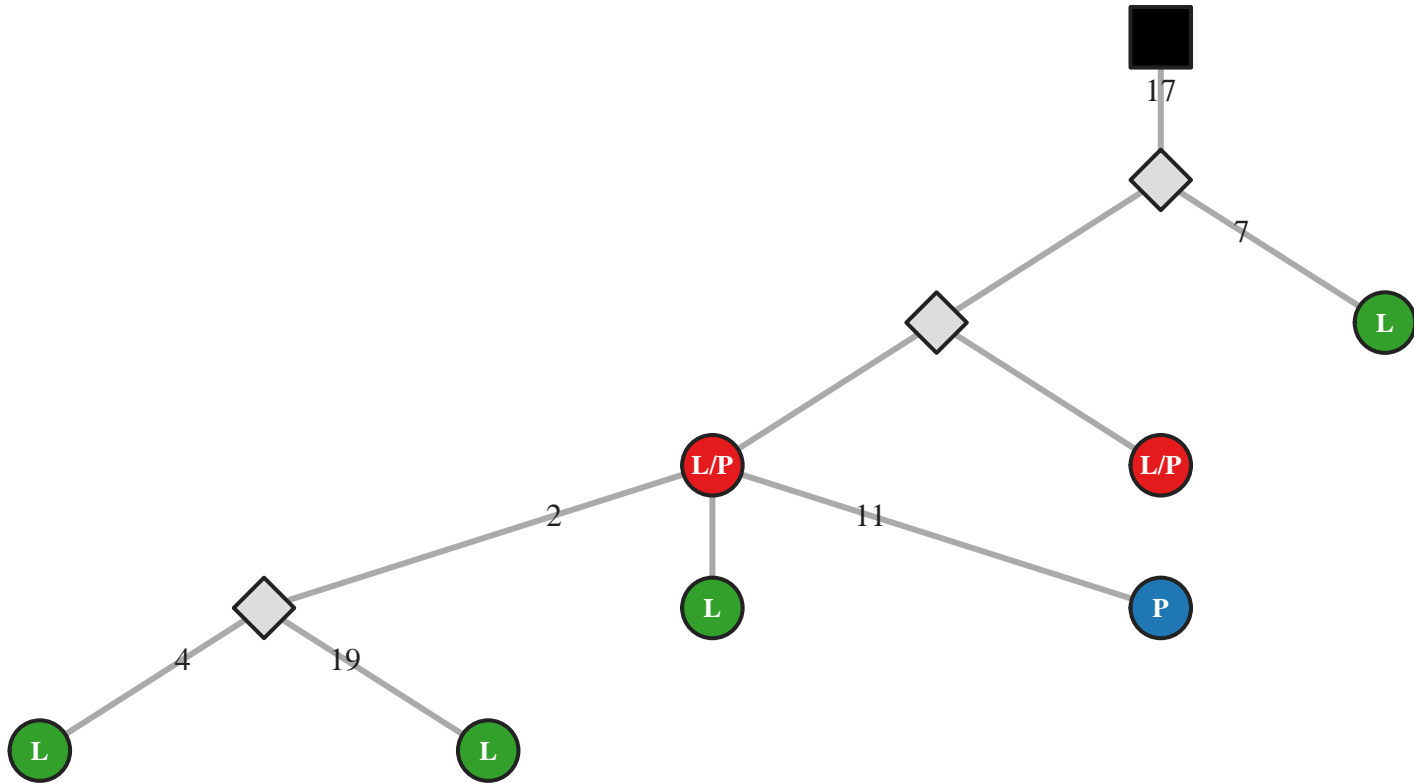
M5 IgG IGHV4-4/J6 54bp (10112)



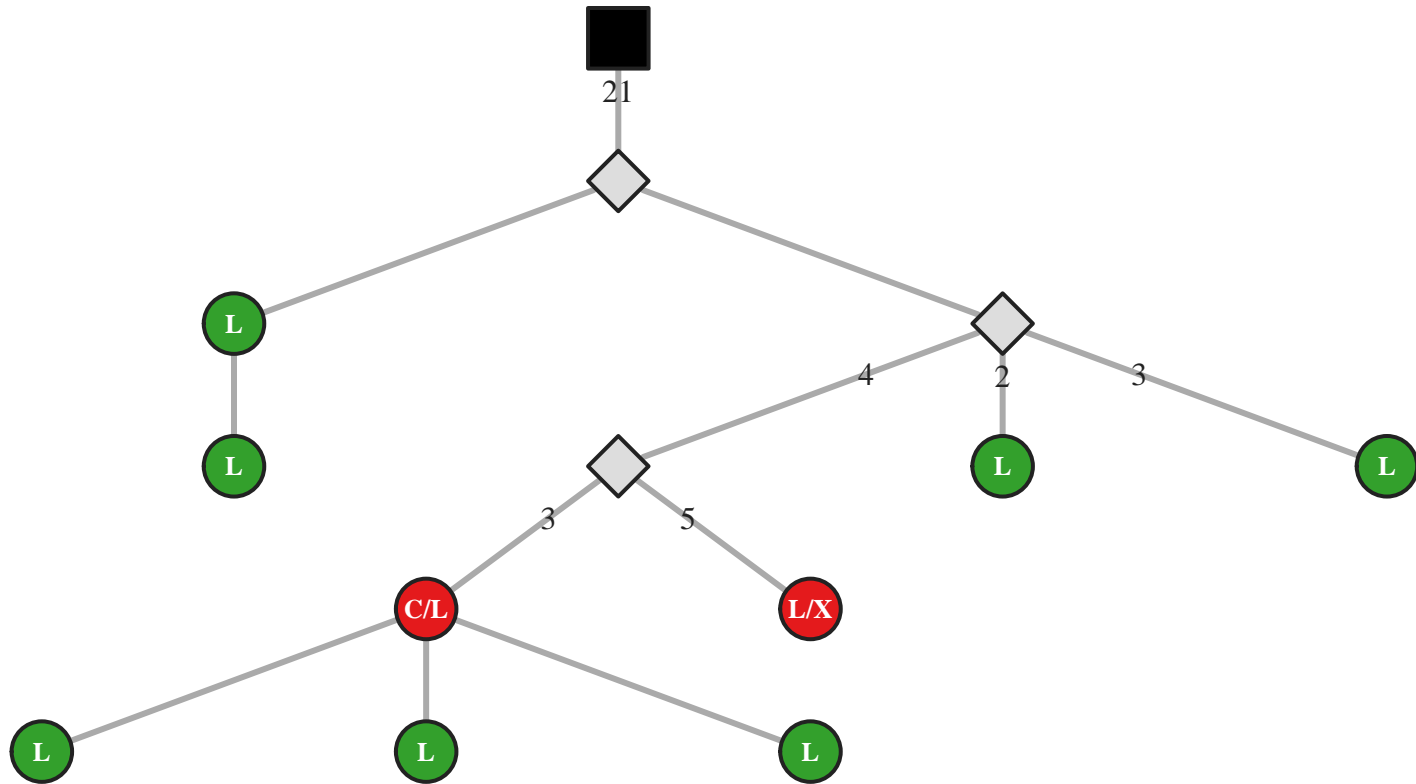
M5 IgG IGHV4-4/J6 57bp (46726)



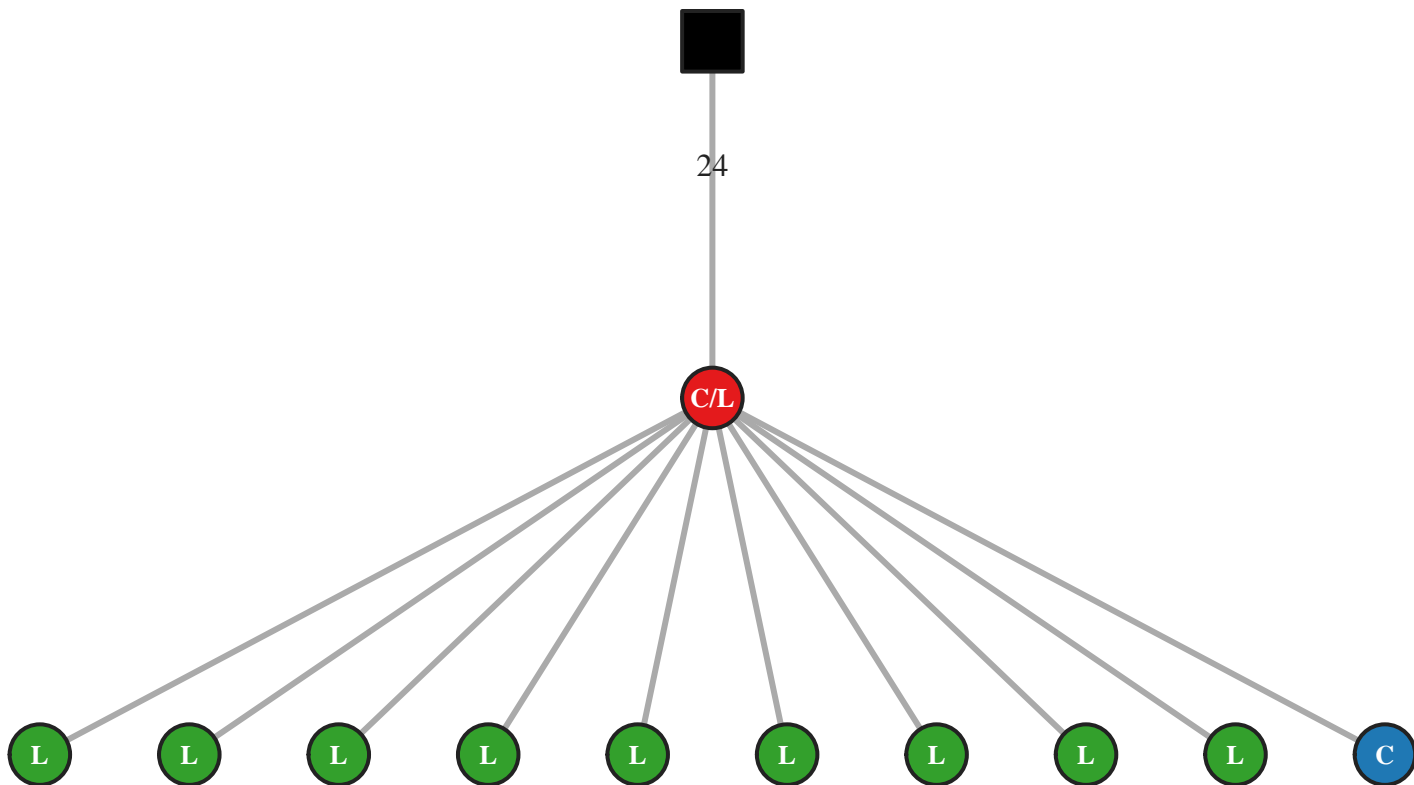
M5 IgG IGHV4-4/J6 63bp (53177)



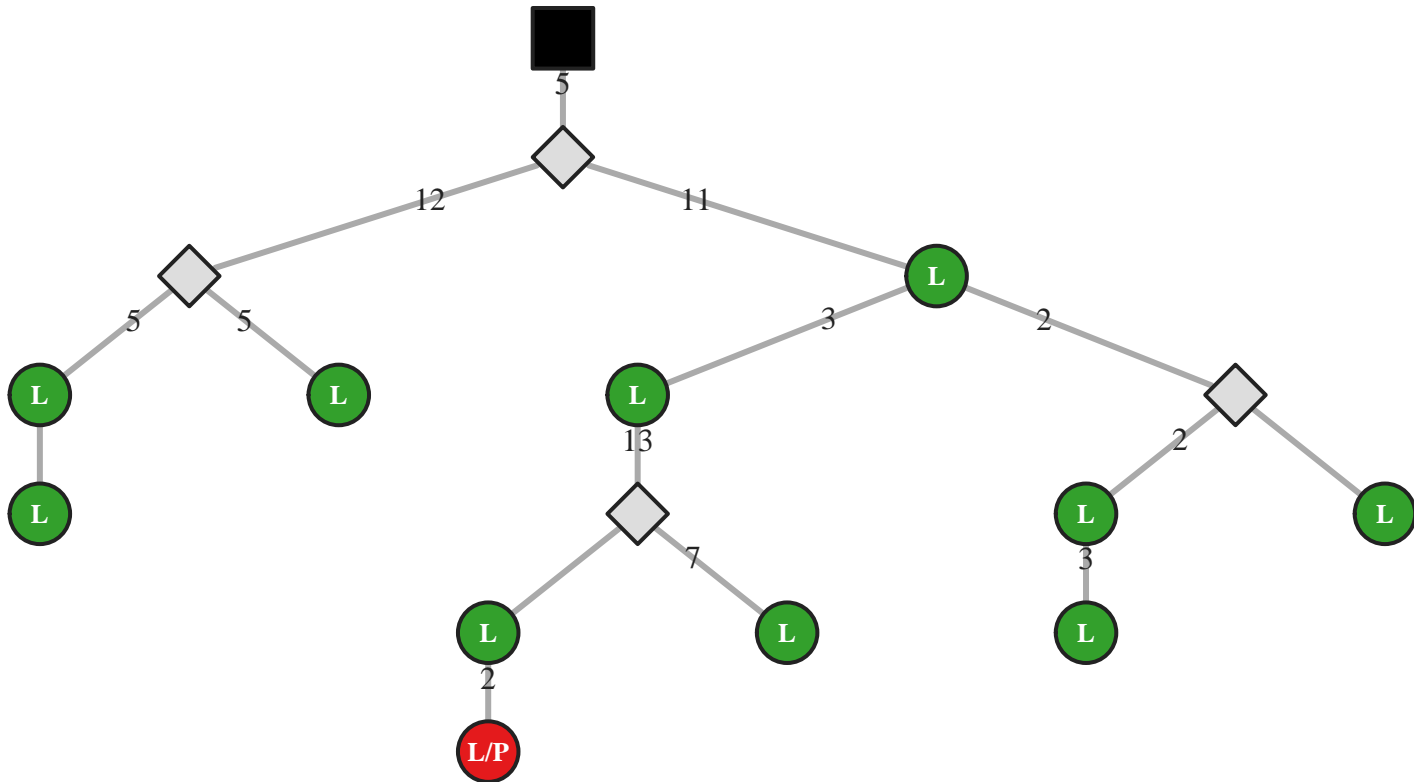
M5 IgG IGHV4-4/J6 69bp (36500)



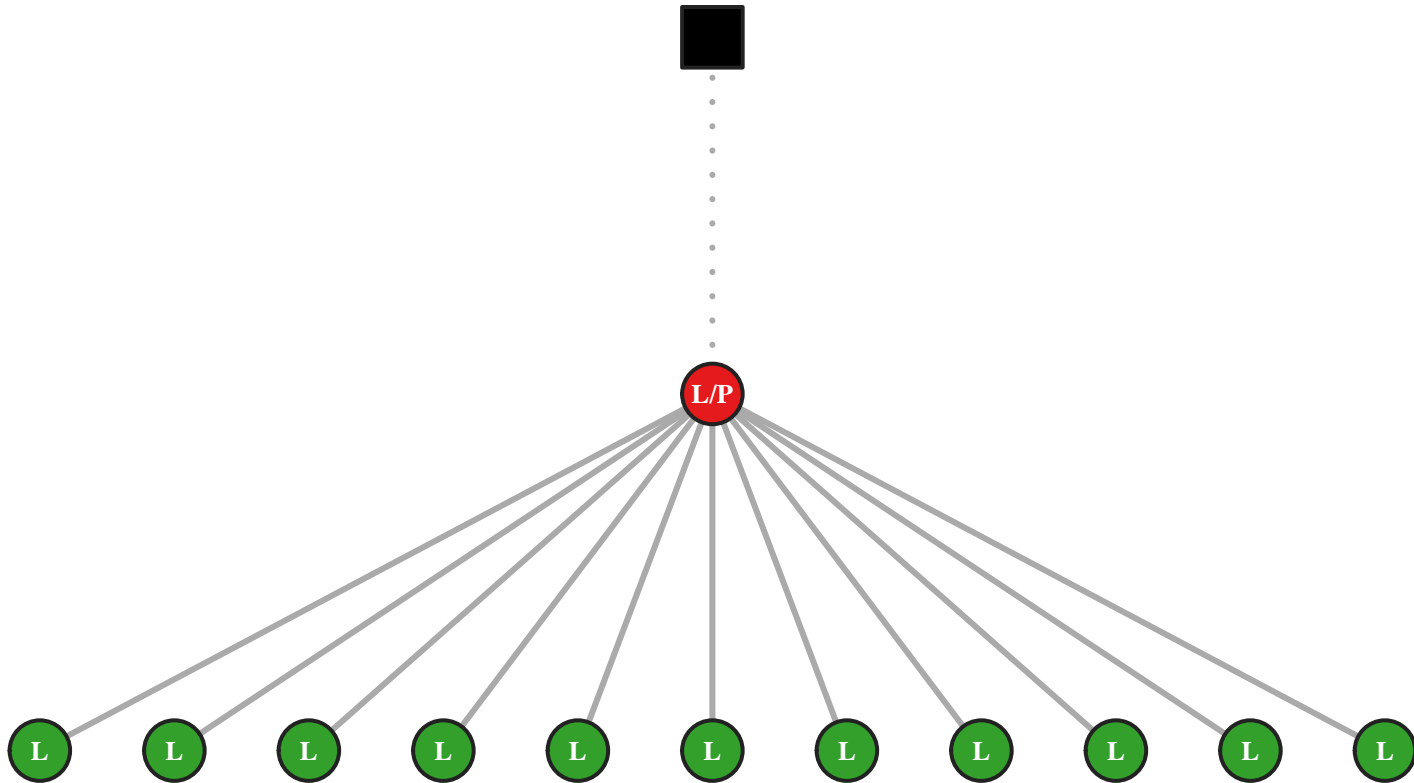
M5 IgG IGHV4-4/J6 72bp (53199)



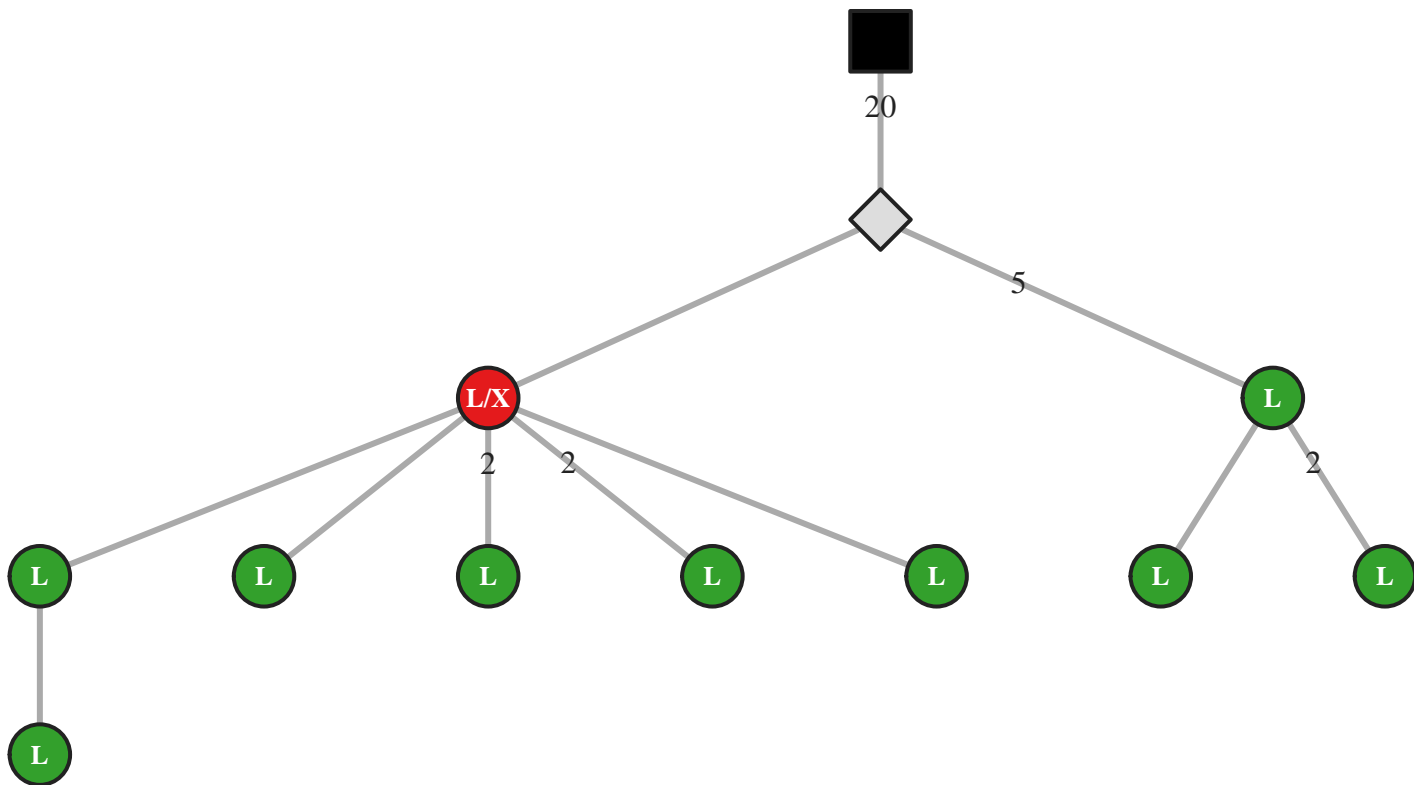
M5 IgG IGHV4-59/J1 27bp (46771)



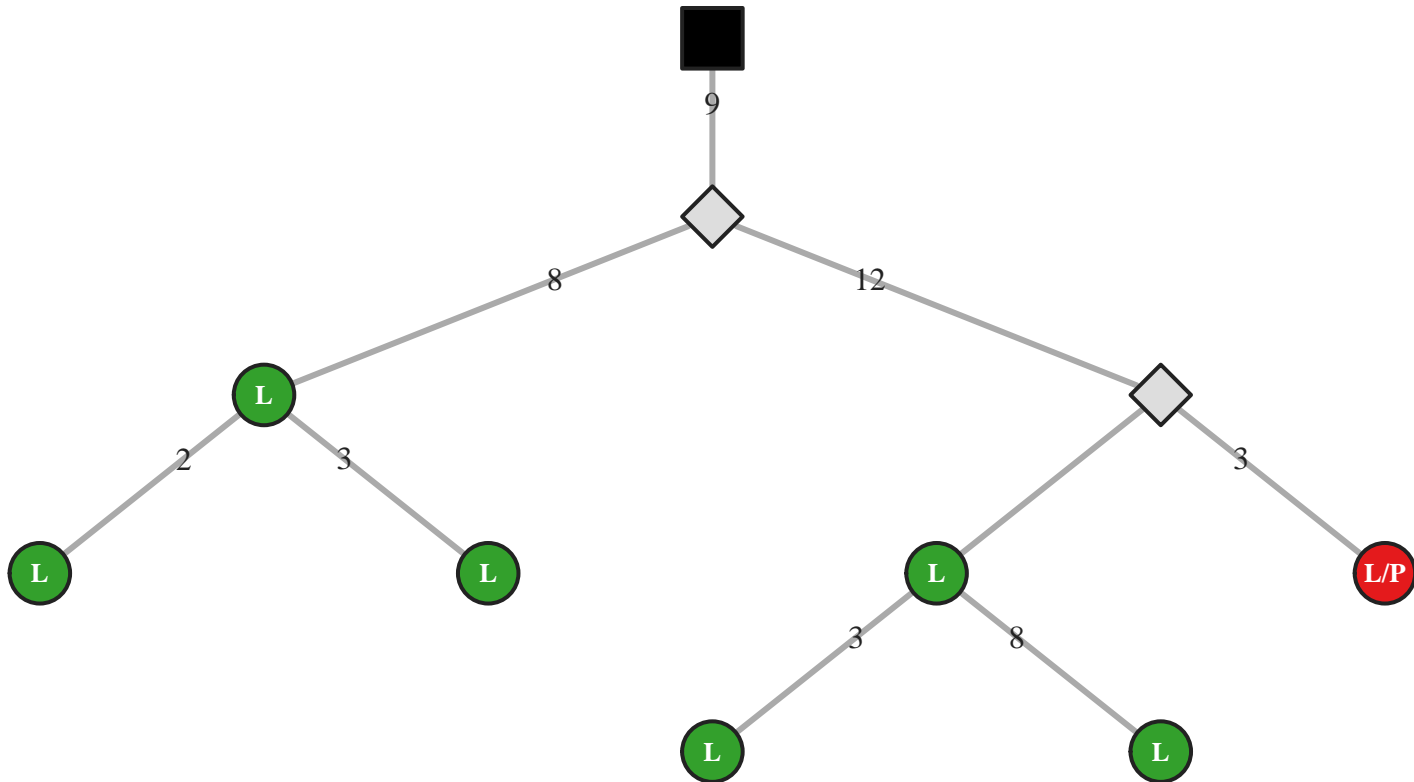
M5 IgG IGHV4-59/J2 48bp (28608)



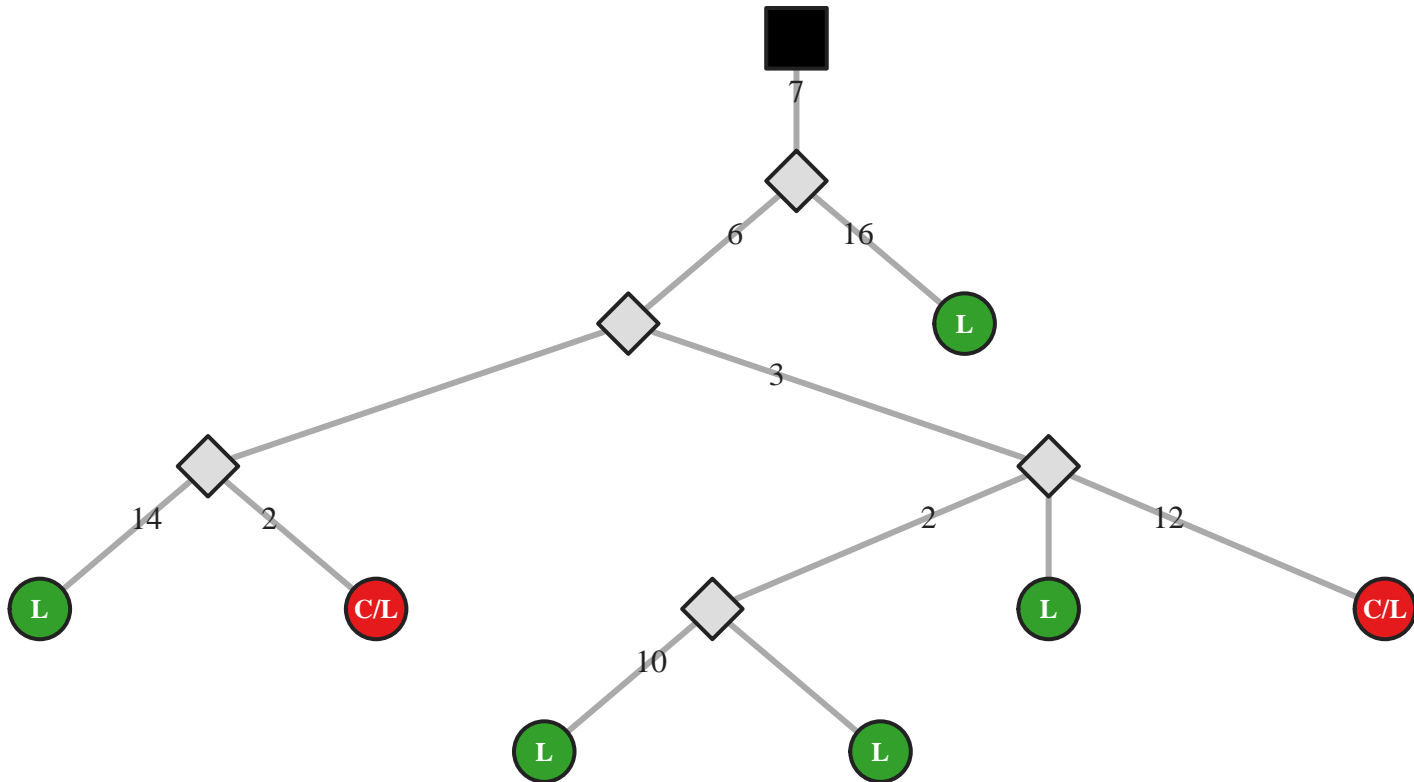
M5 IgG IGHV4-59/J2 63bp (10135)



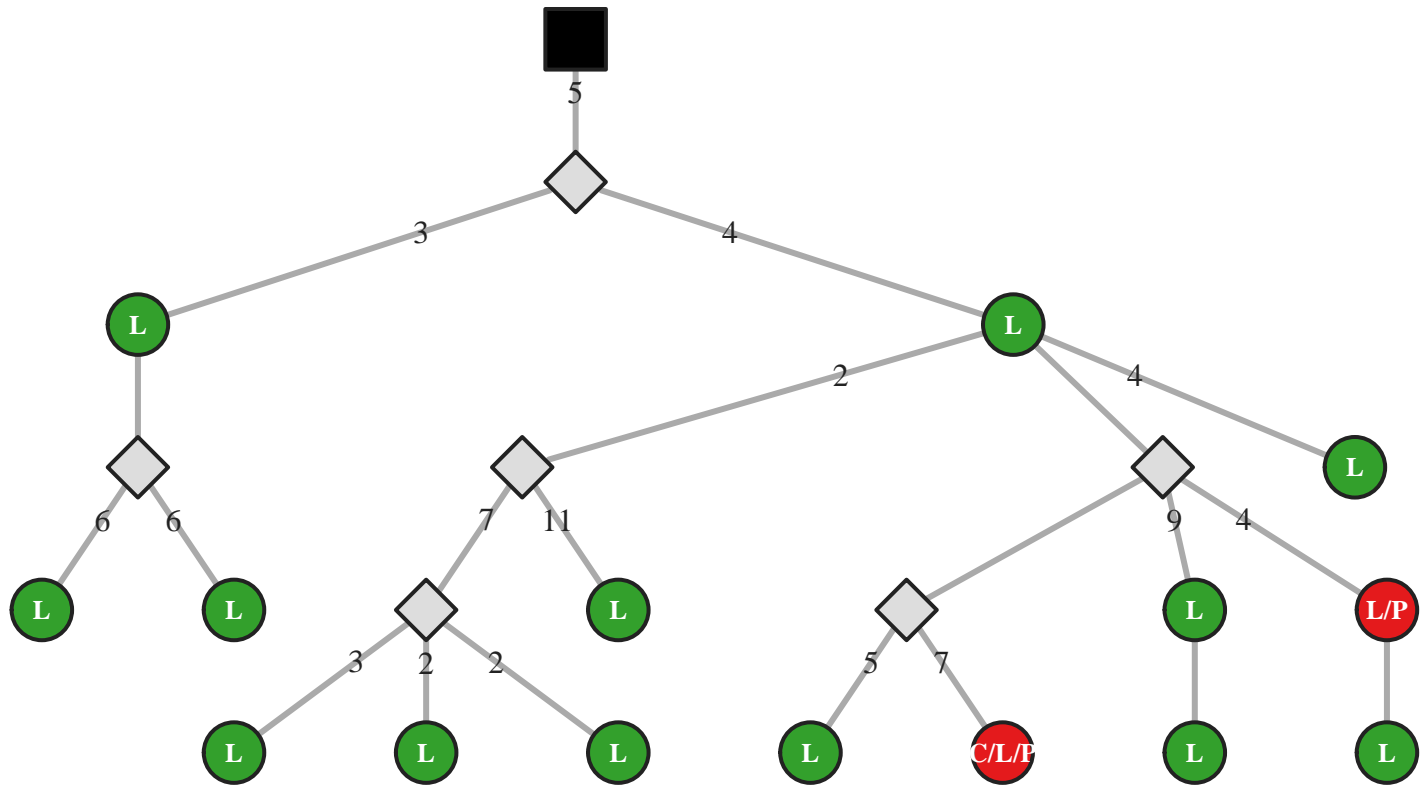
M5 IgG IGHV4-59/J3 45bp (10184)



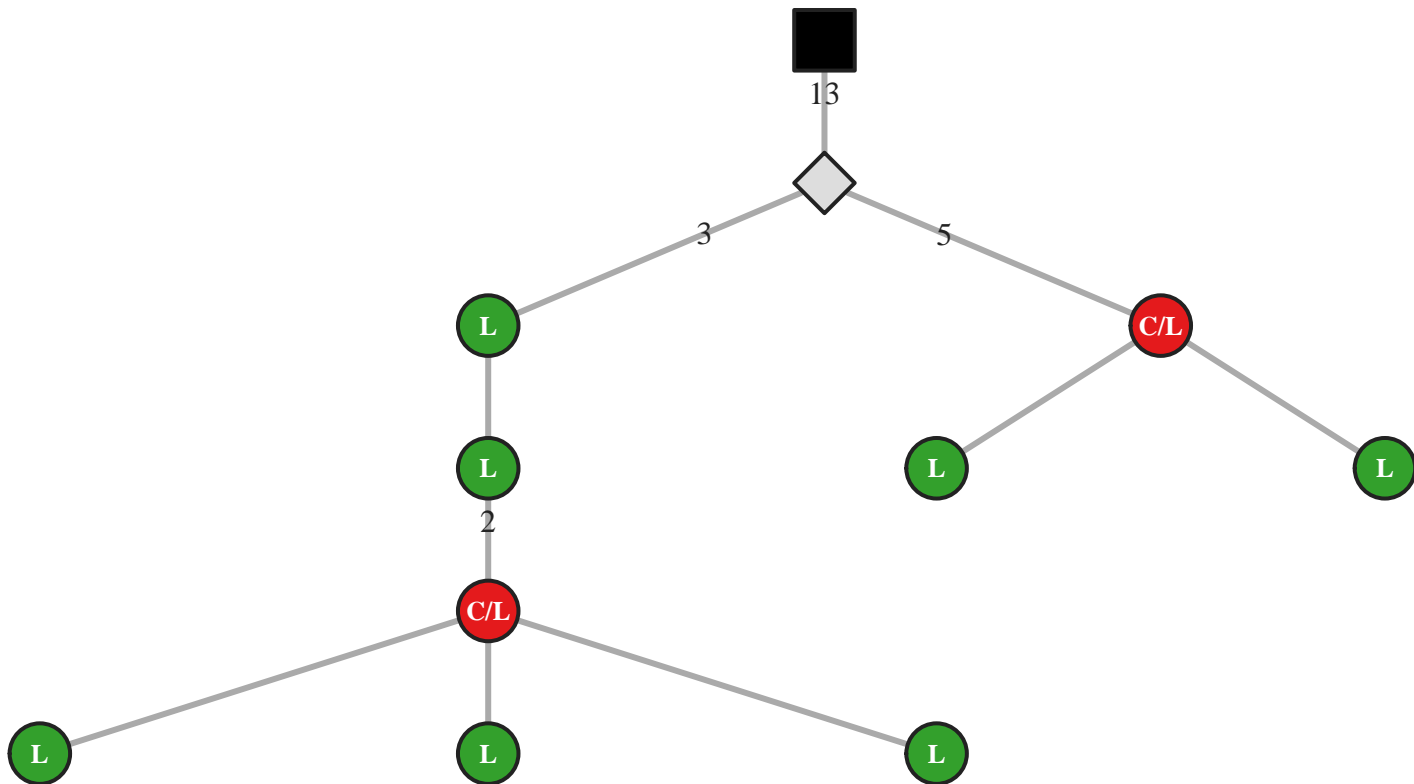
M5 IgG IGHV4-59/J3 48bp (19204)



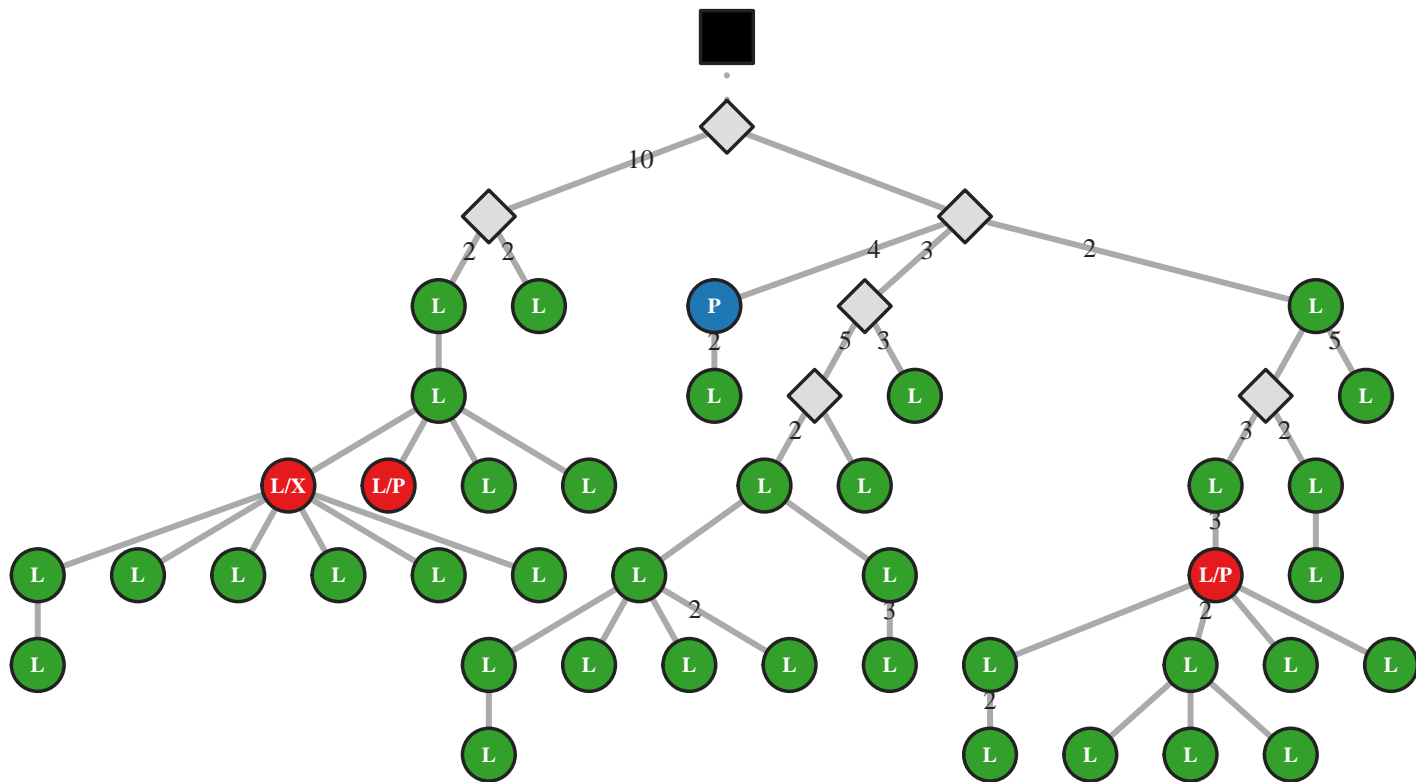
M5 IgG IGHV4-59/J3 48bp (19223)



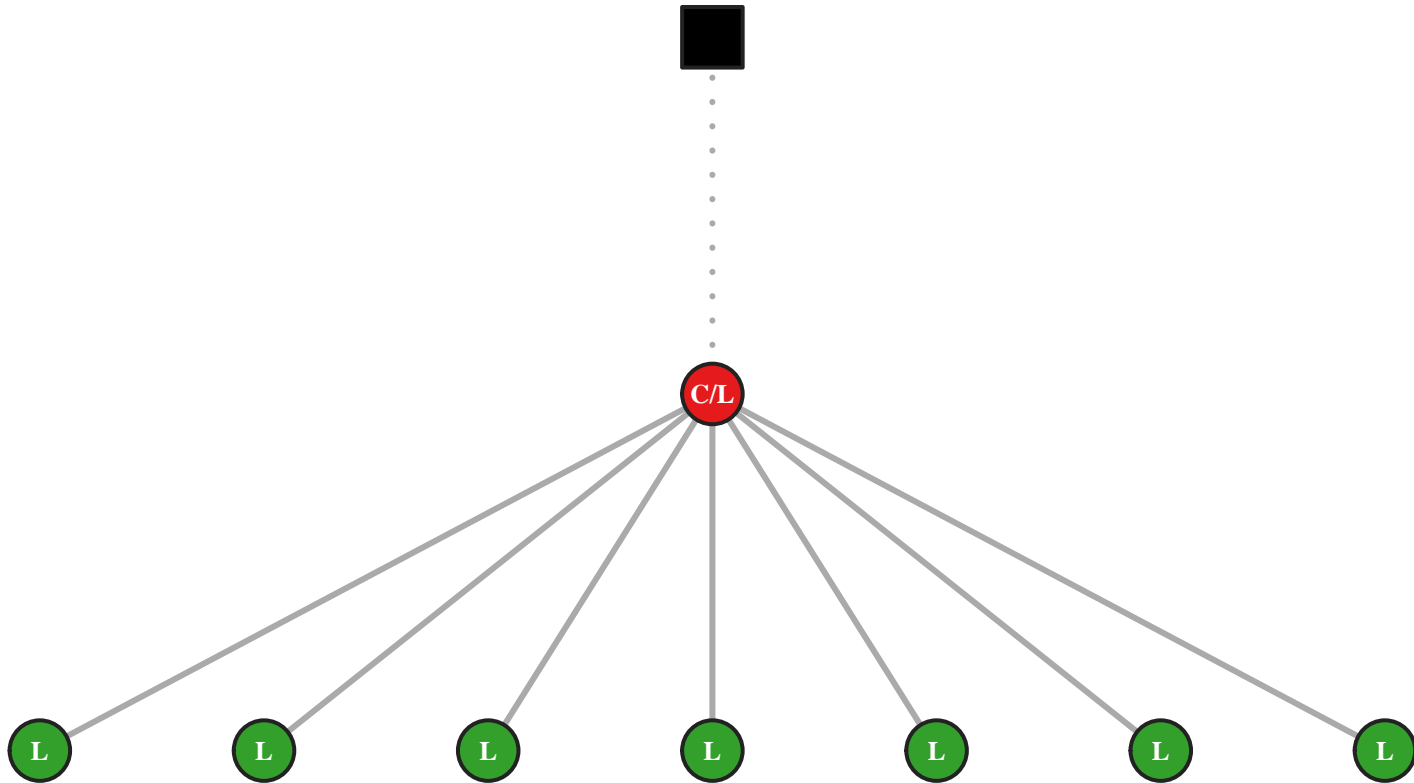
M5 IgG IGHV4-59/J3 51bp (36530)



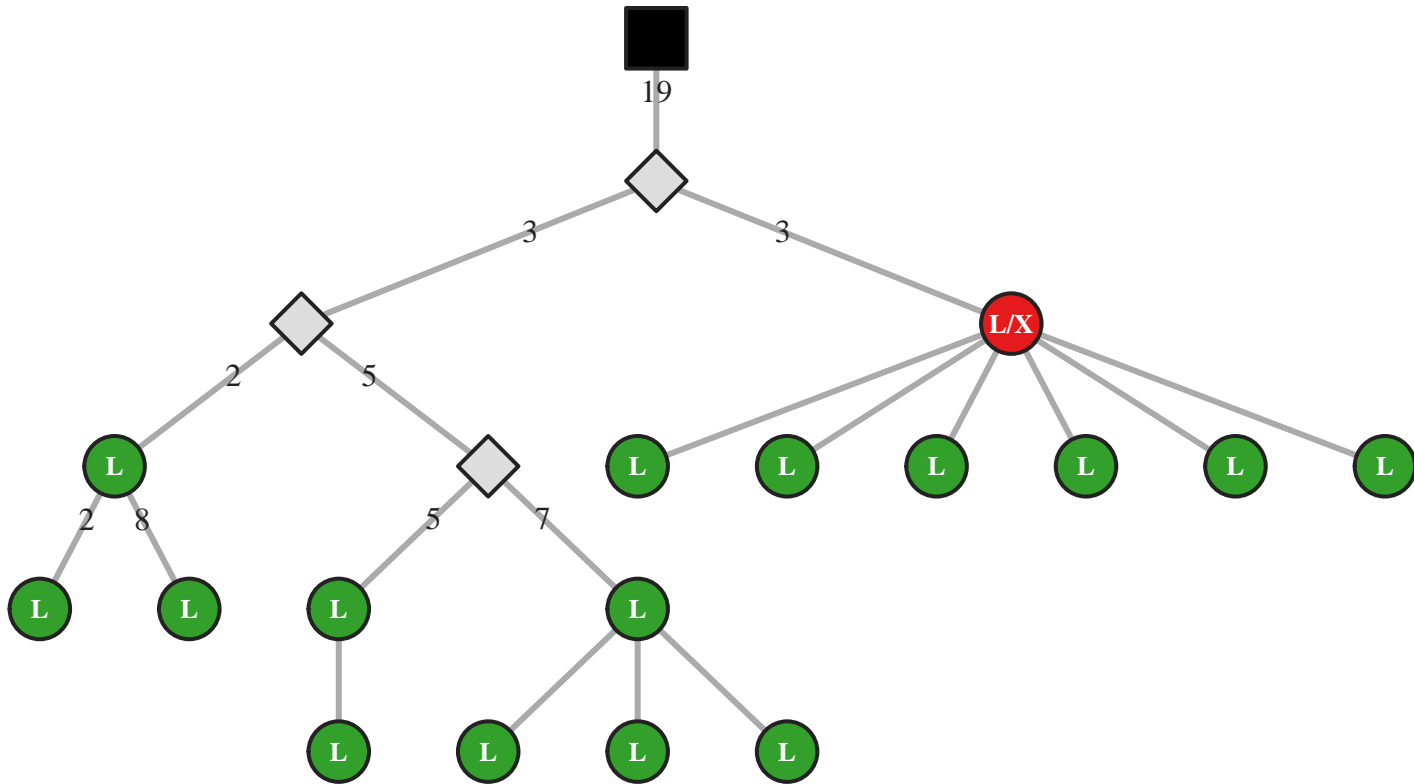
M5 IgG IGHV4-59/J3 60bp (19234)



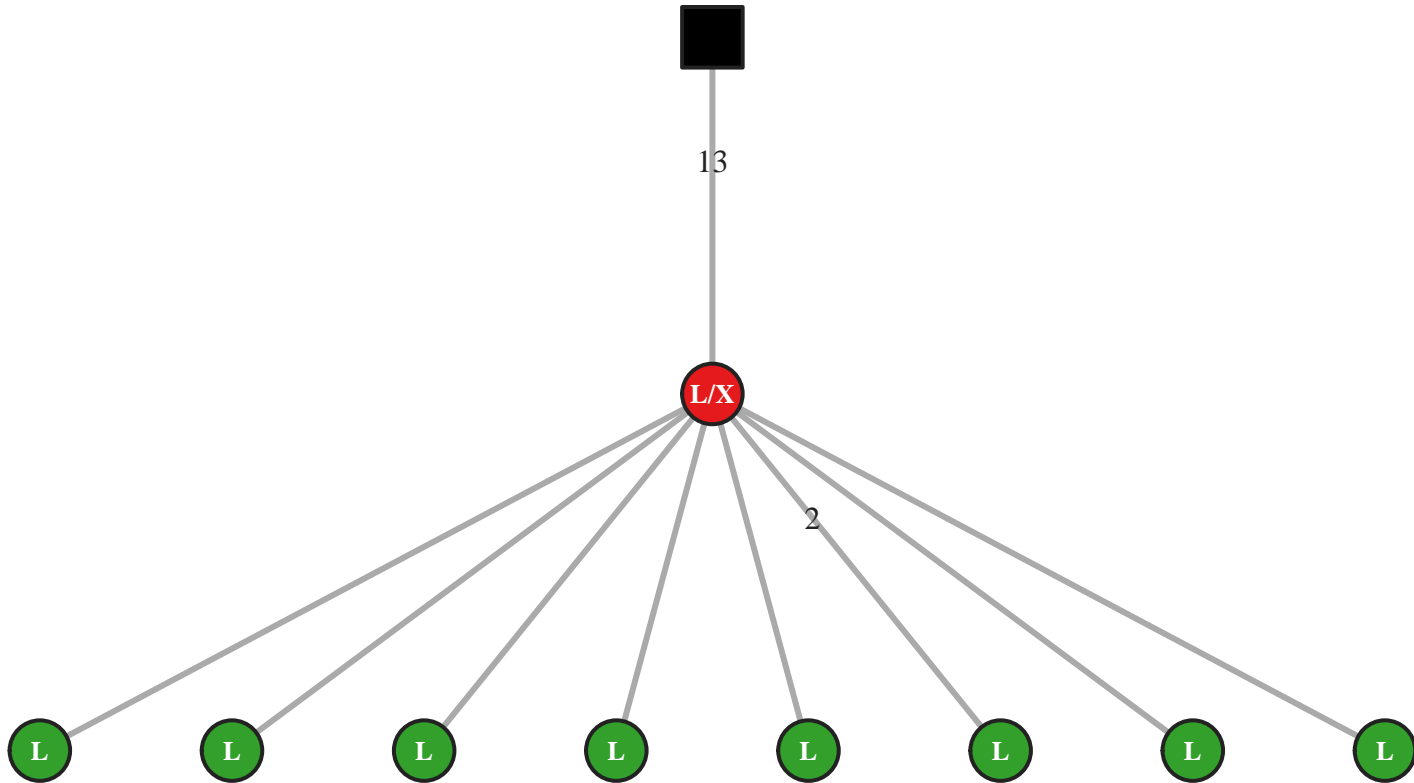
M5 IgG IGHV4-59/J4 30bp (19448)



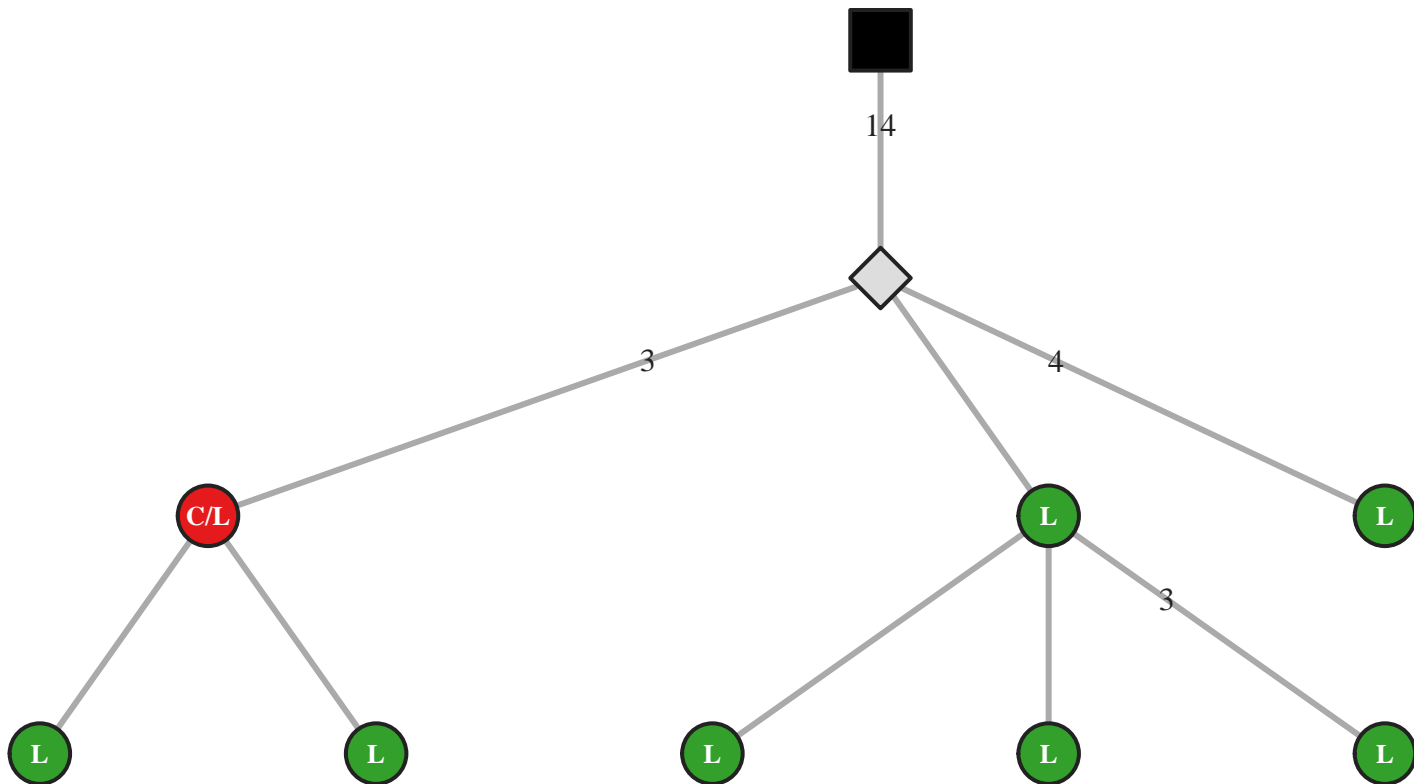
M5 IgG IGHV4-59/J4 36bp (53204)



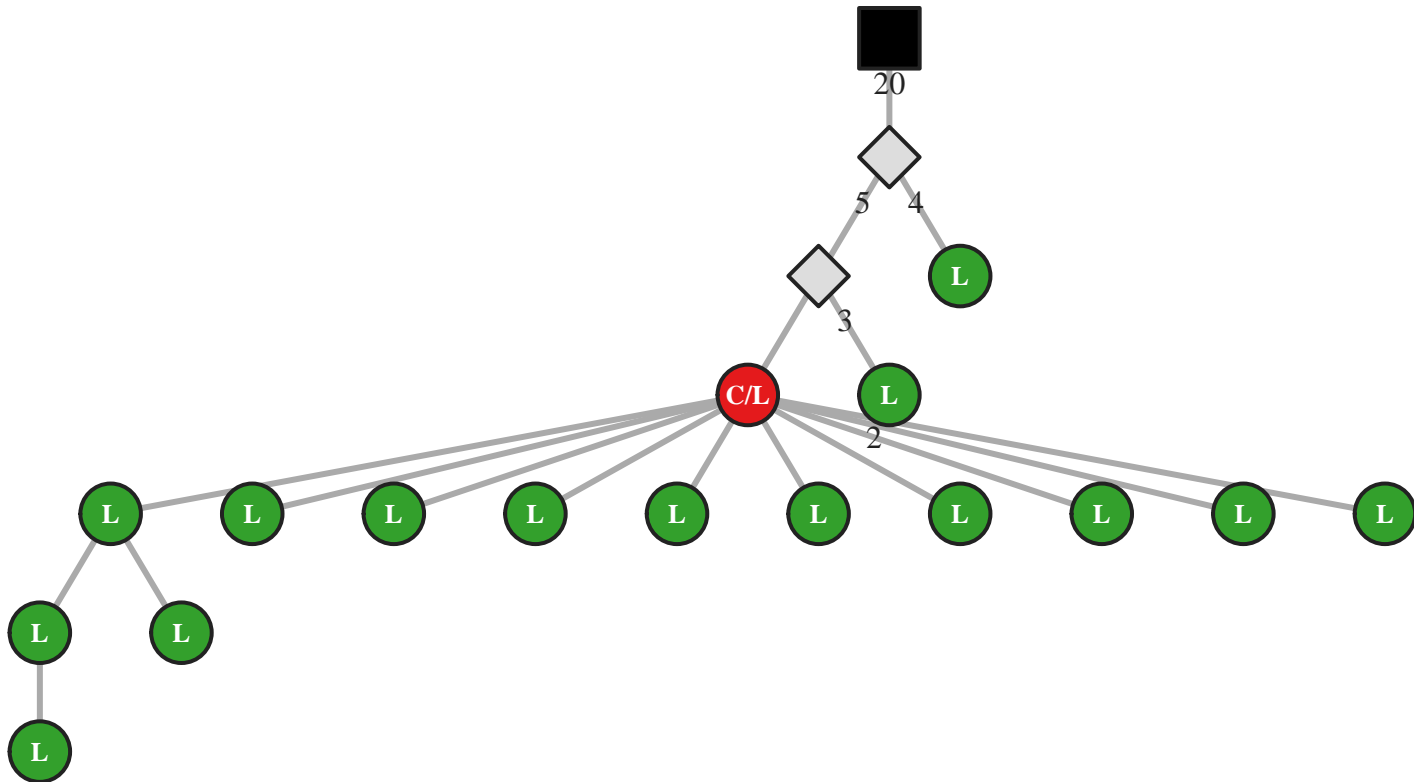
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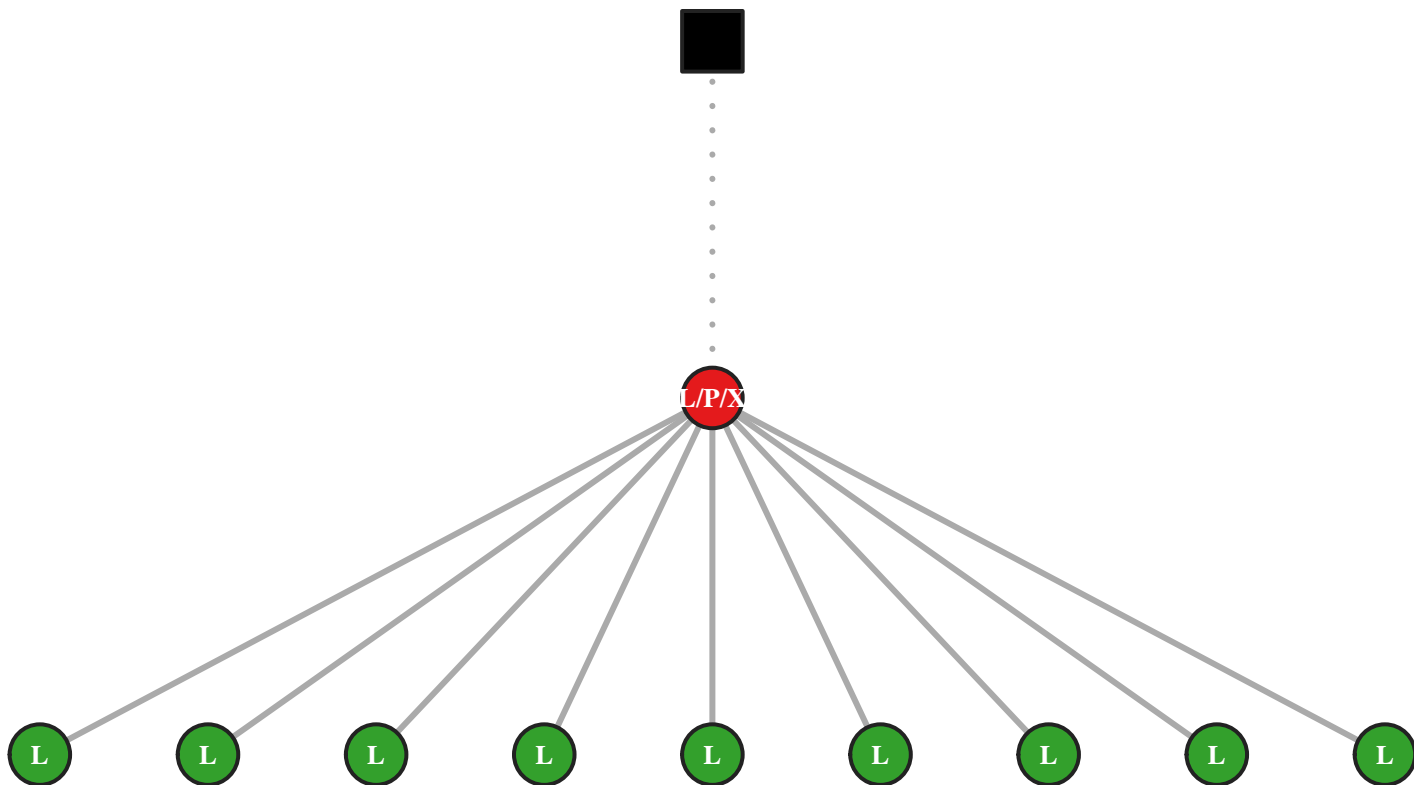
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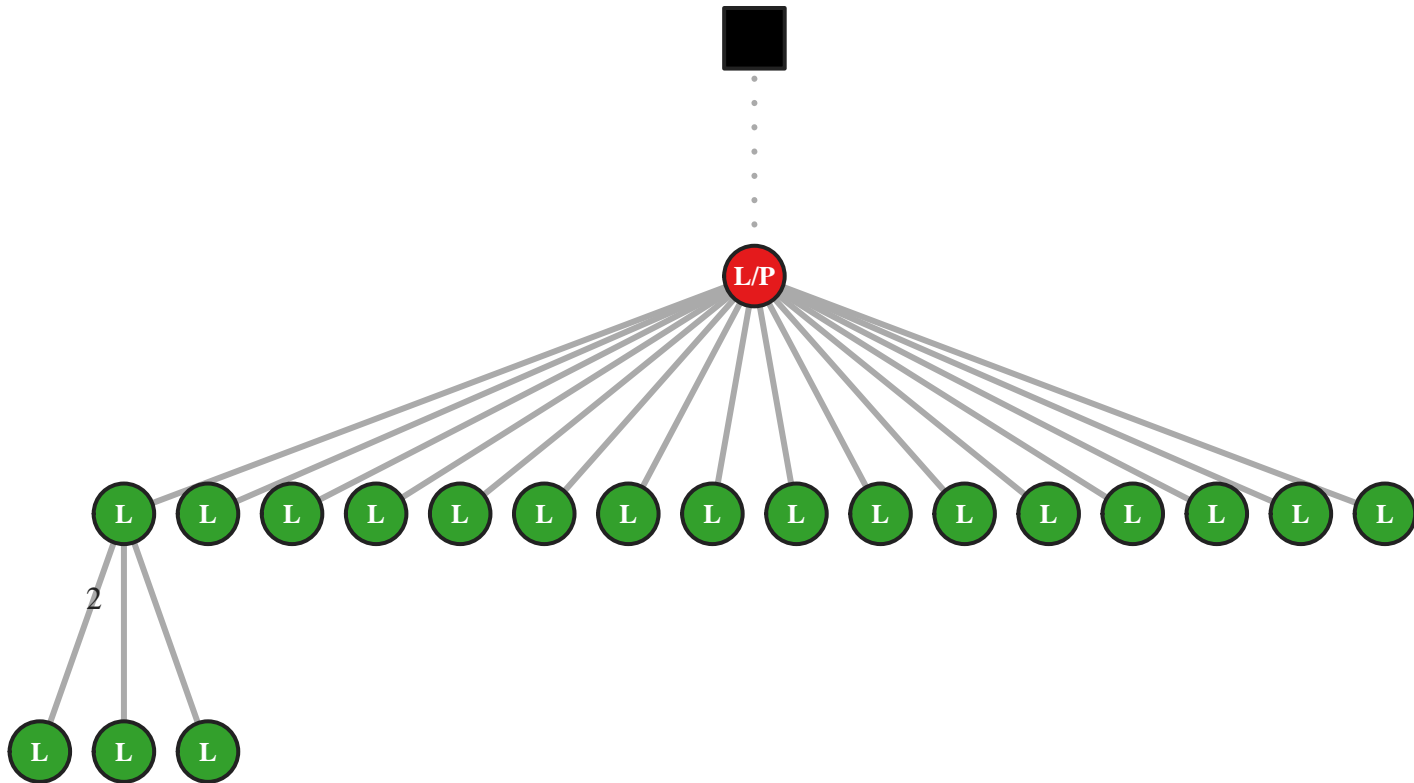
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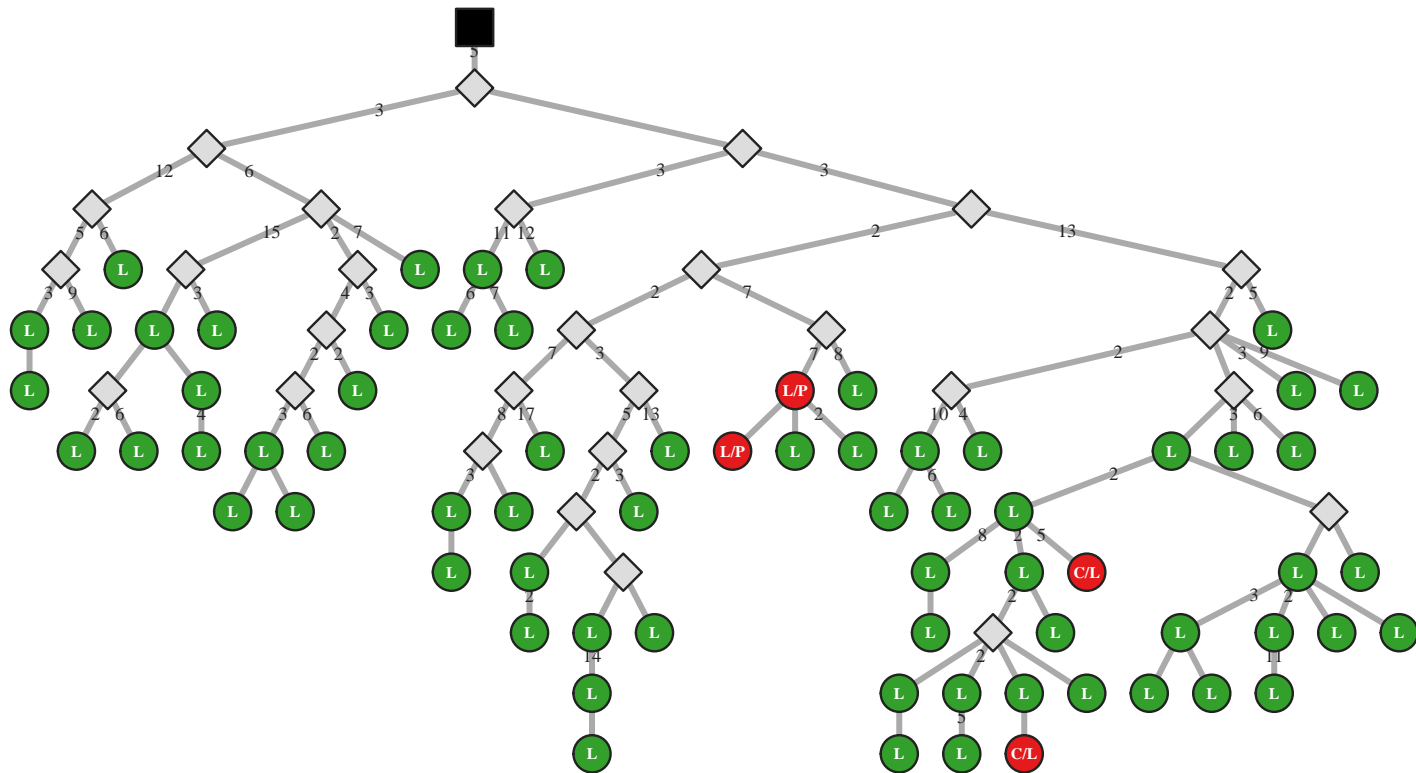
M5 IgA IGHV4-59/J4 39bp (39054)



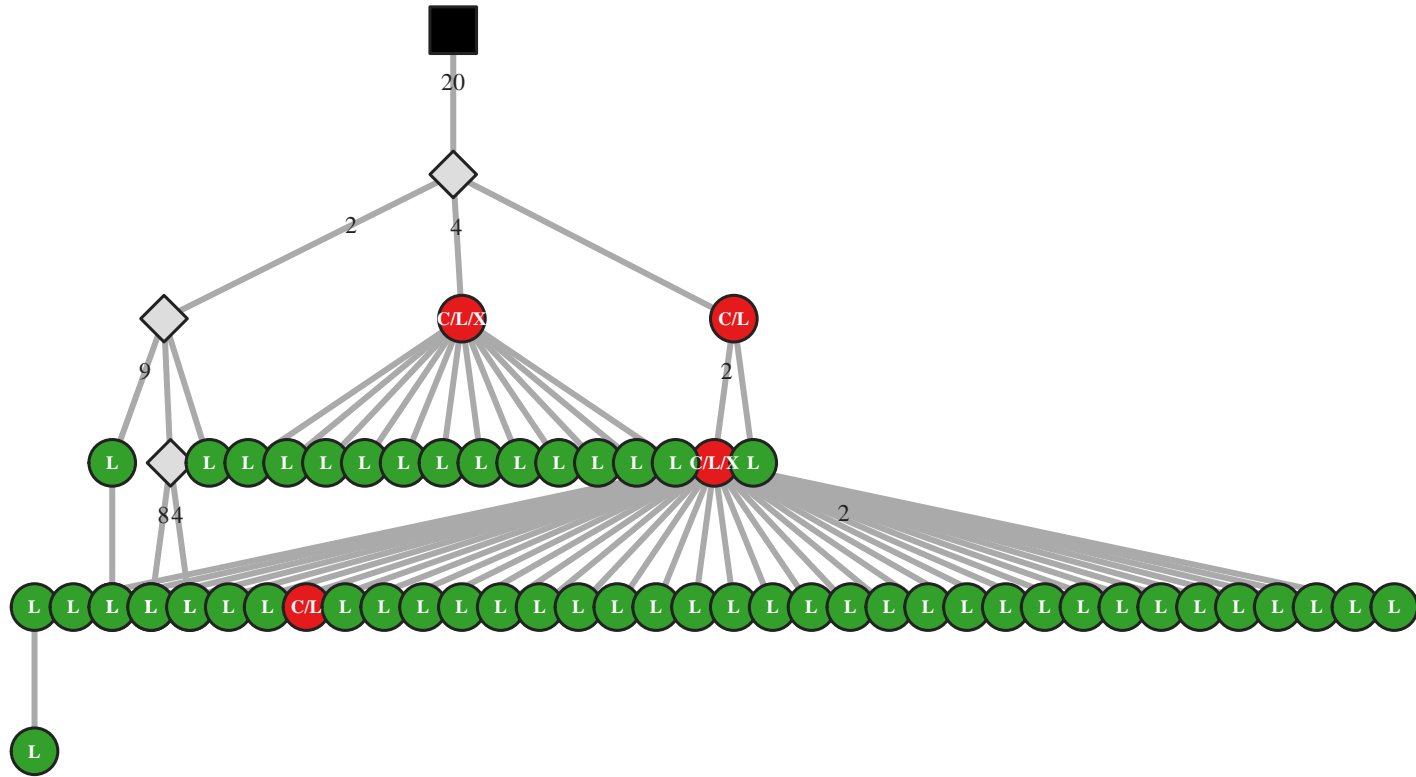
M5 IgG IGHV4-59/J4 39bp (28176)



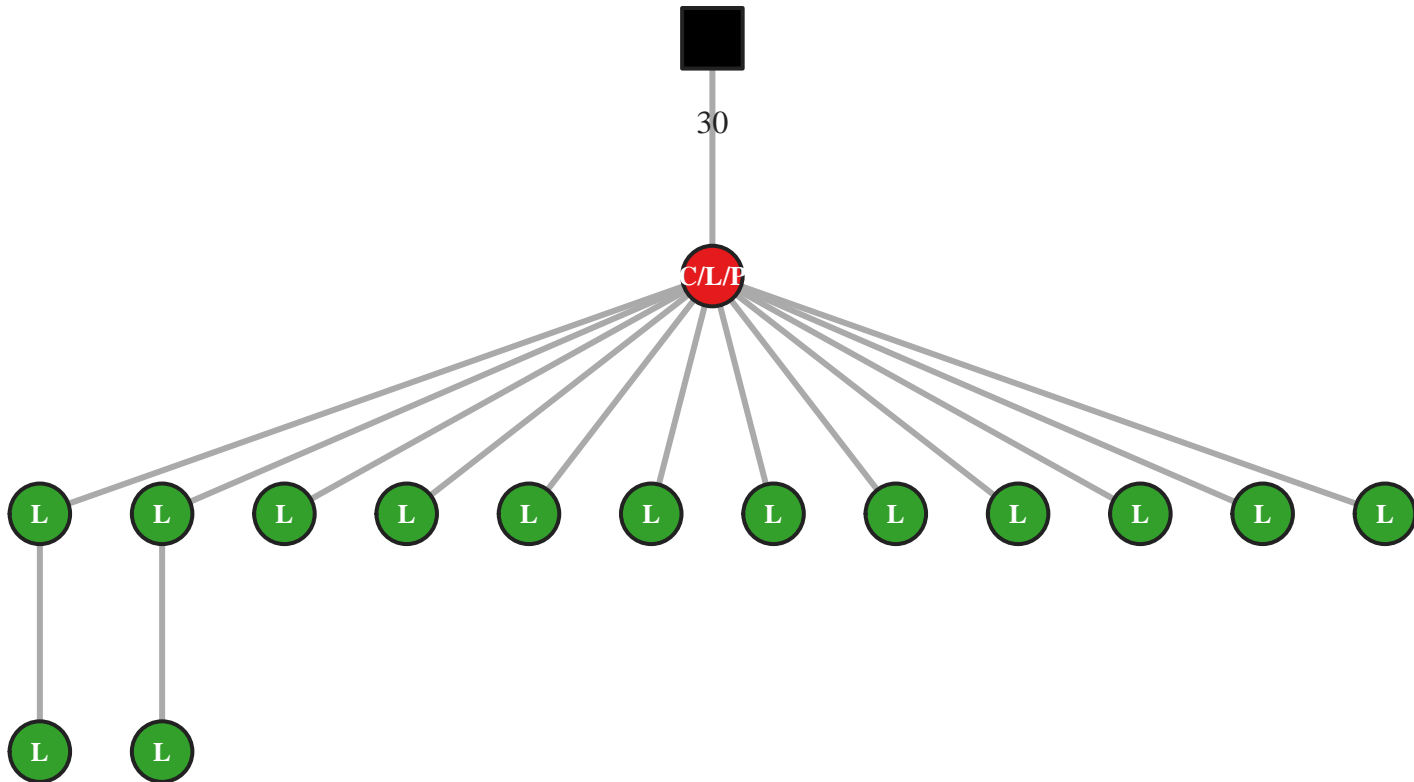
M5 IgG IGHV4-59/J4 39bp (28181)



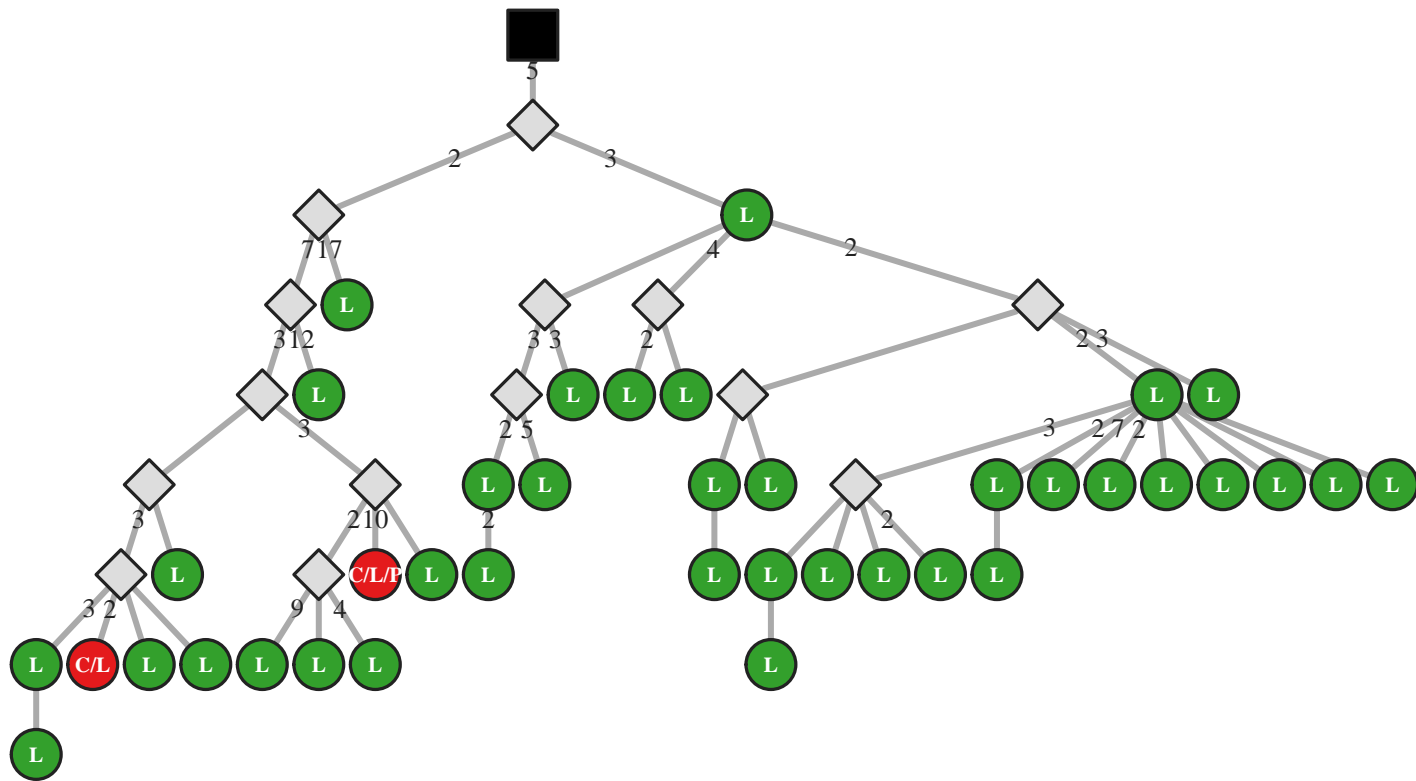
M5 IgA IGHV4-59/J4 42bp (49015)



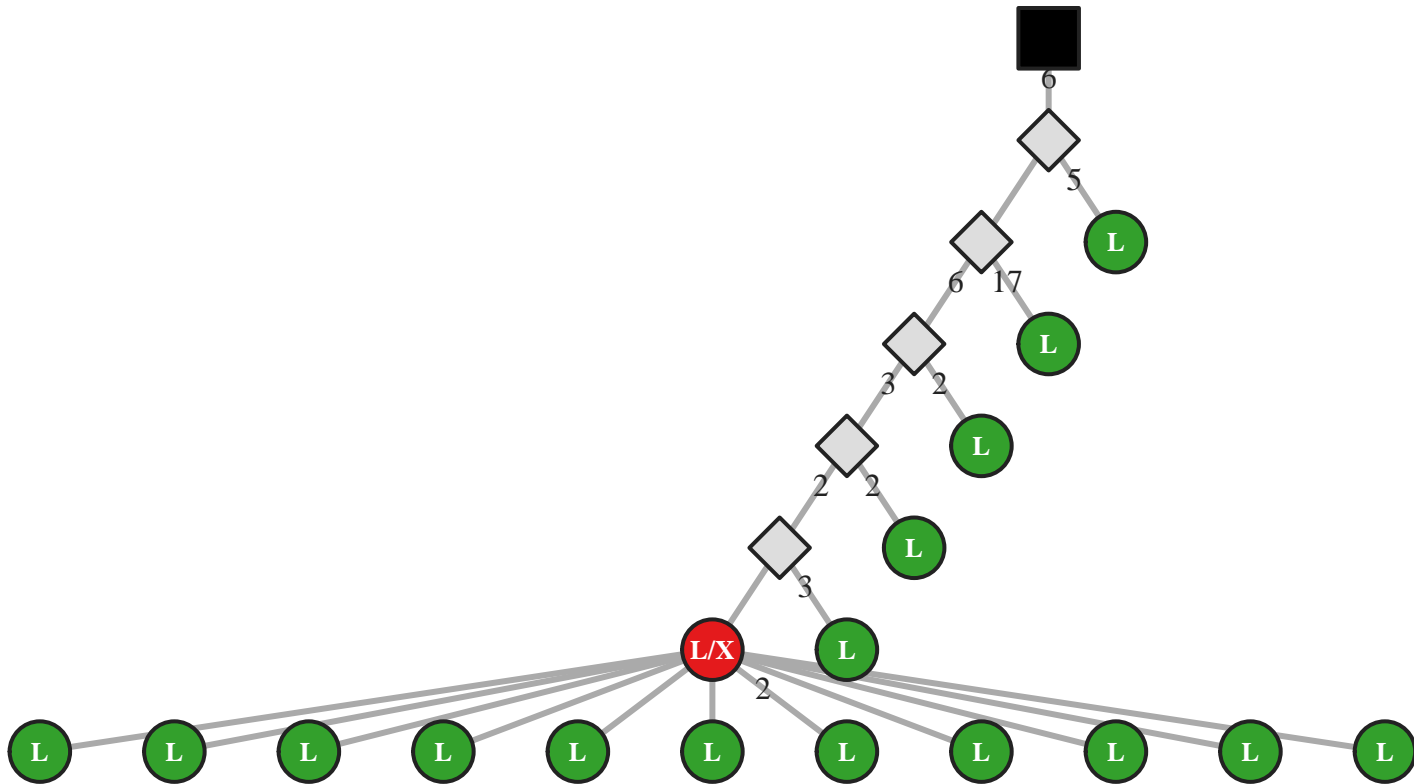
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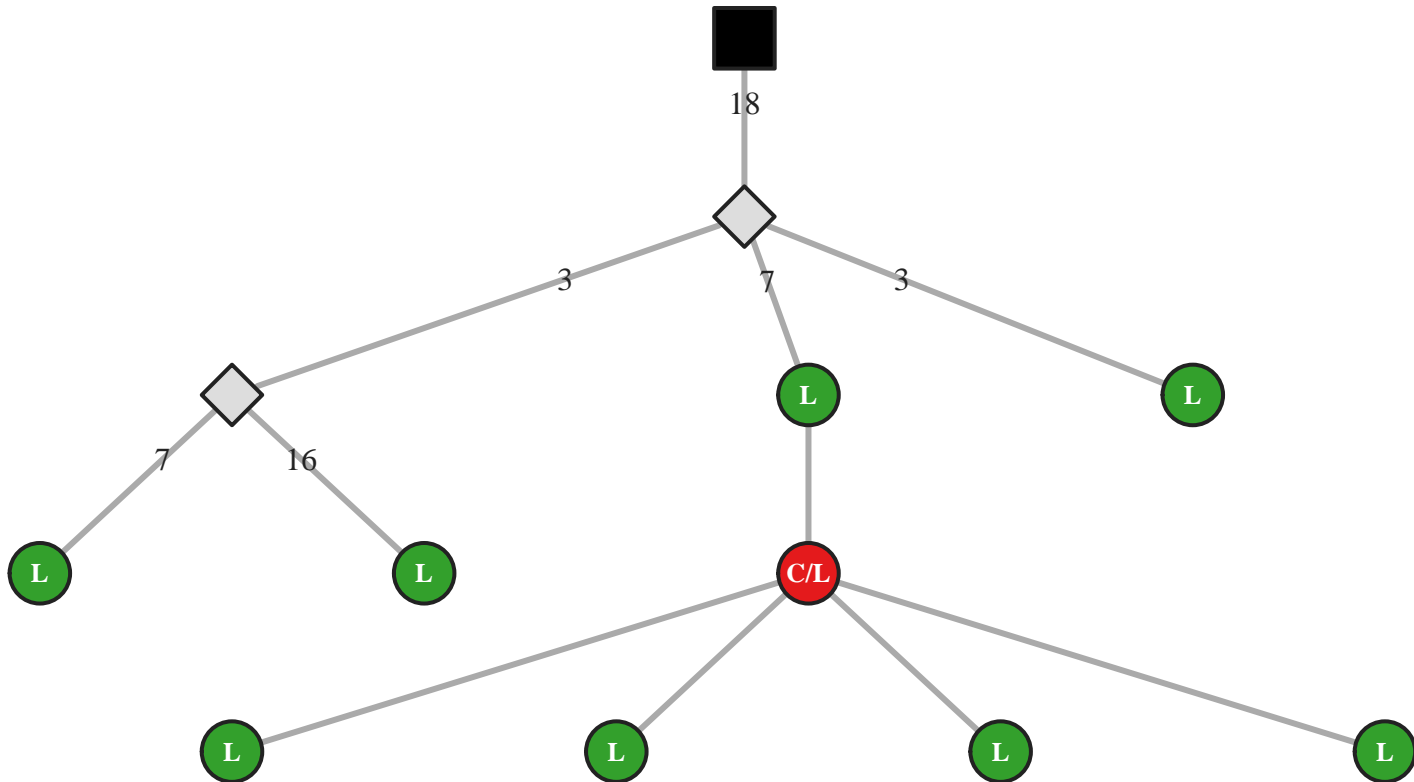
M5 IgG IGHV4-59/J4 42bp (53323)



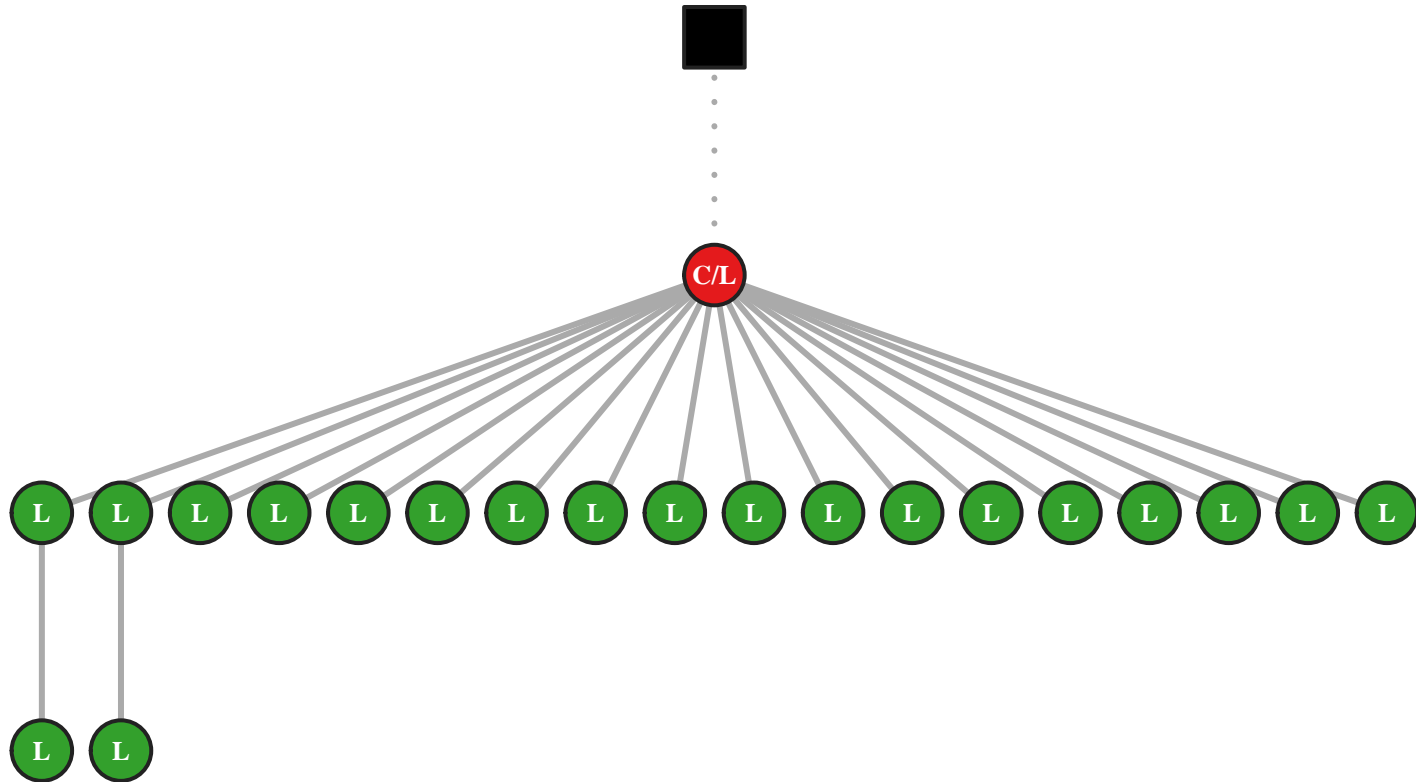
M5 IgG IGHV4-59/J4 42bp (53330)



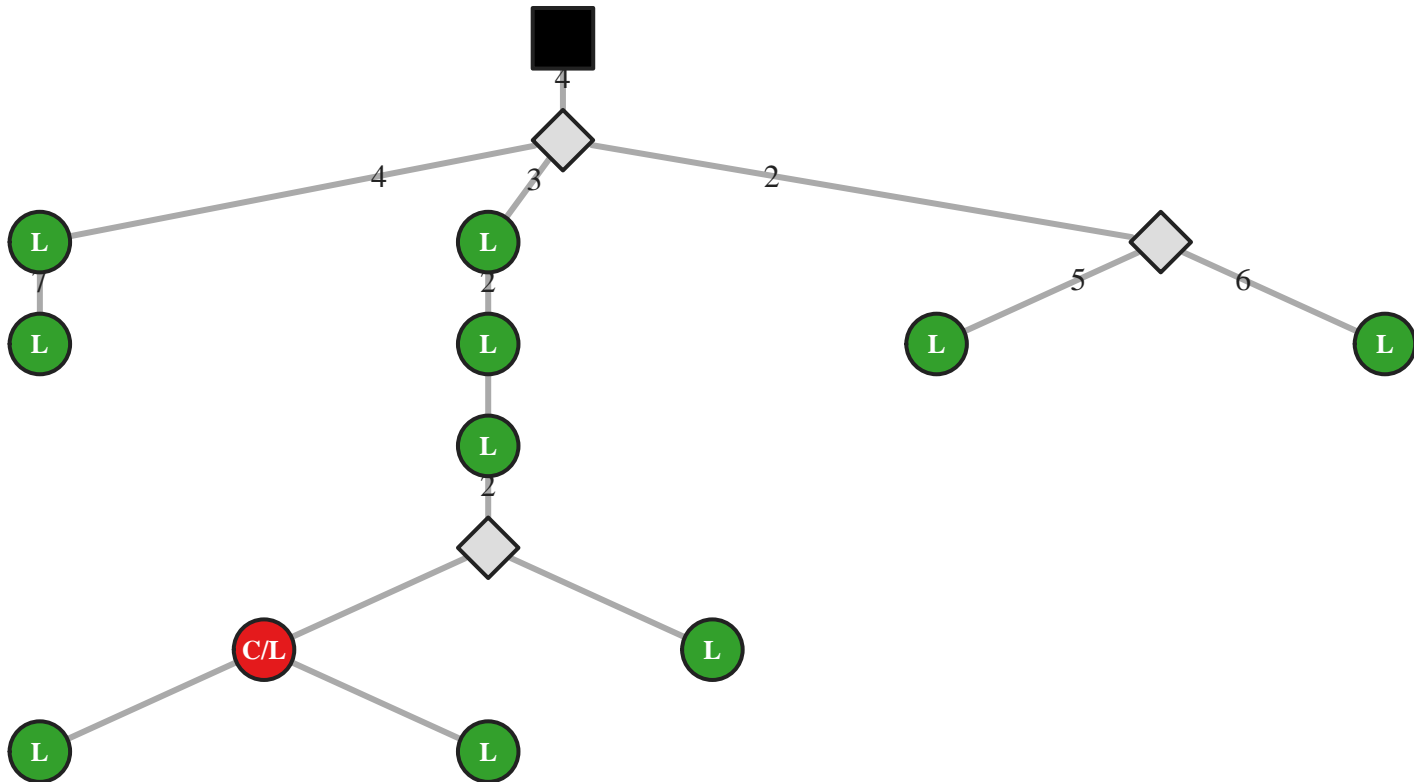
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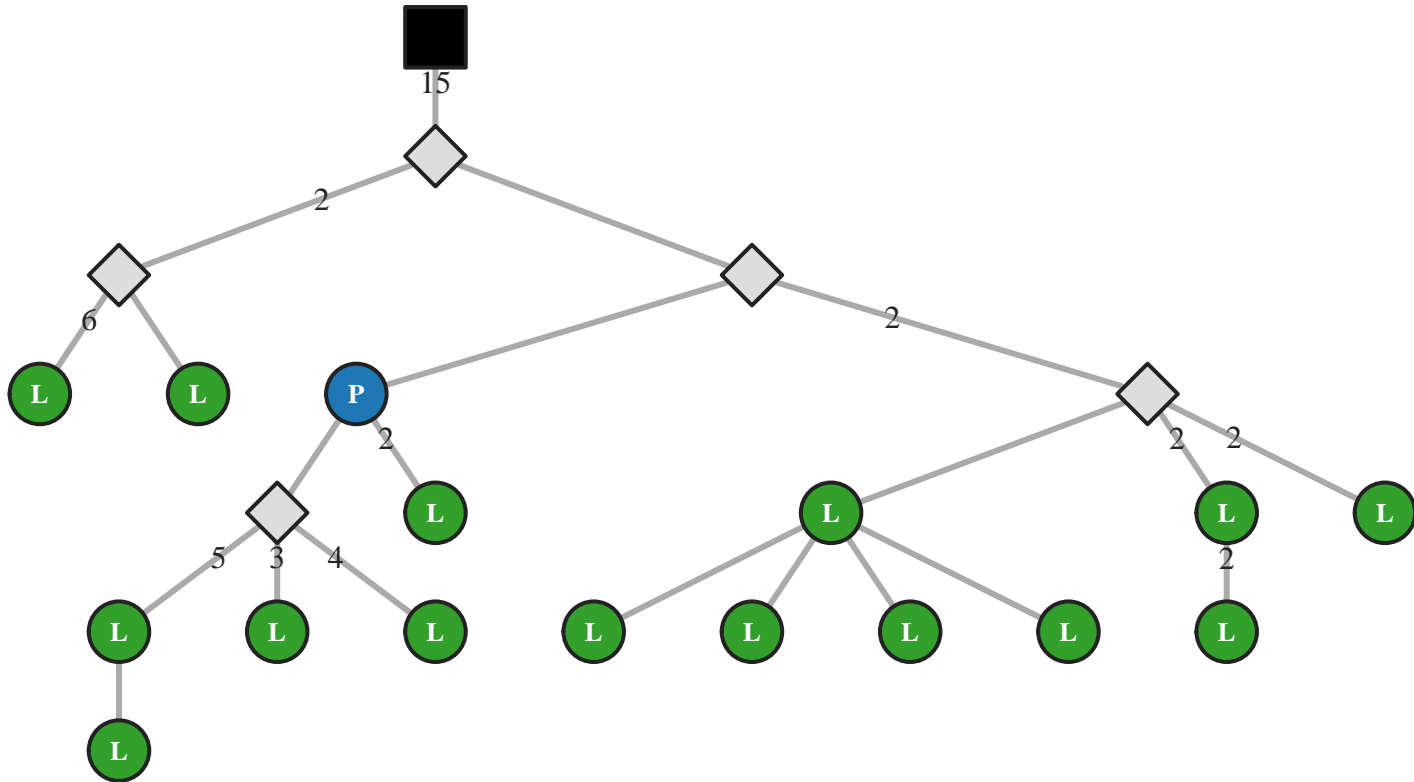
M5 IgG IGHV4-59/J4 42bp (53389)



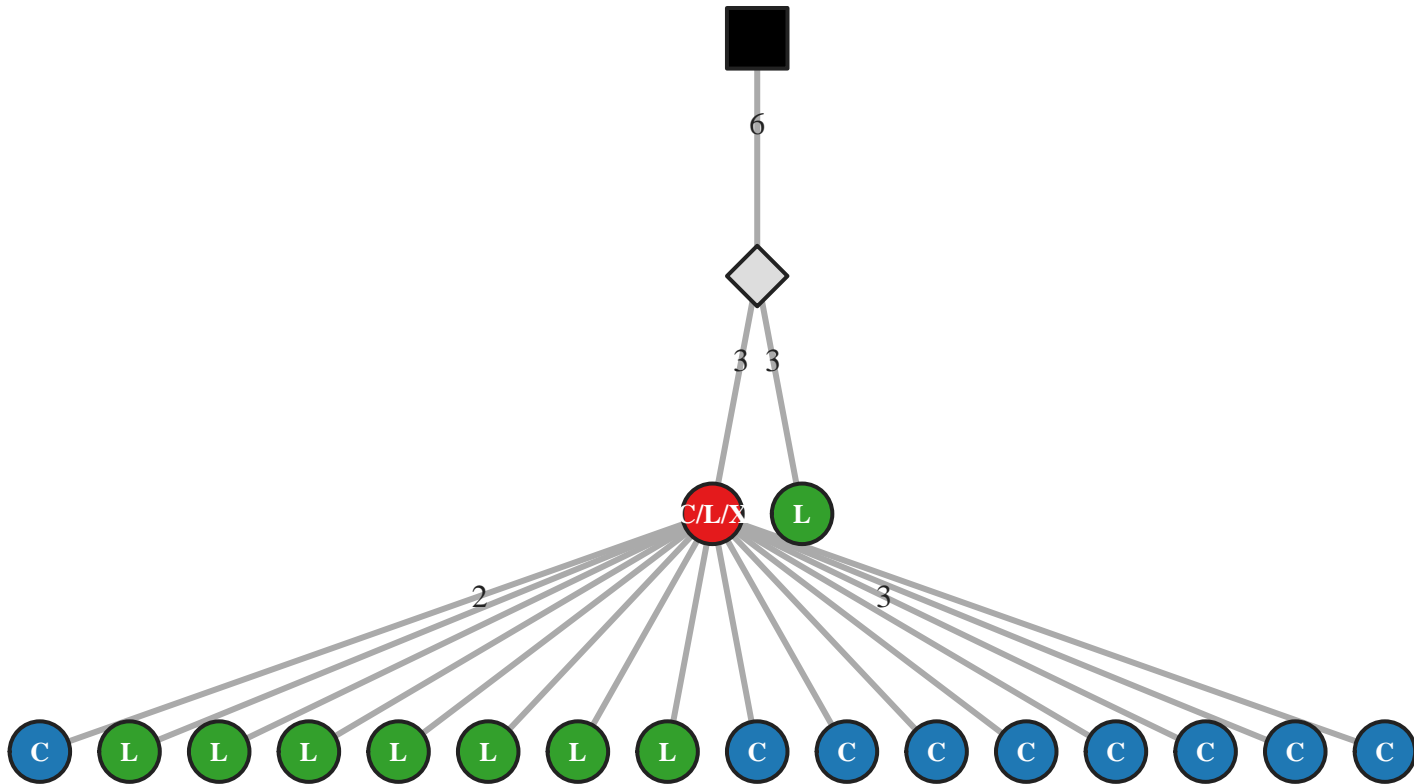
M5 IgA IGHV4-59/J4 45bp (12821)



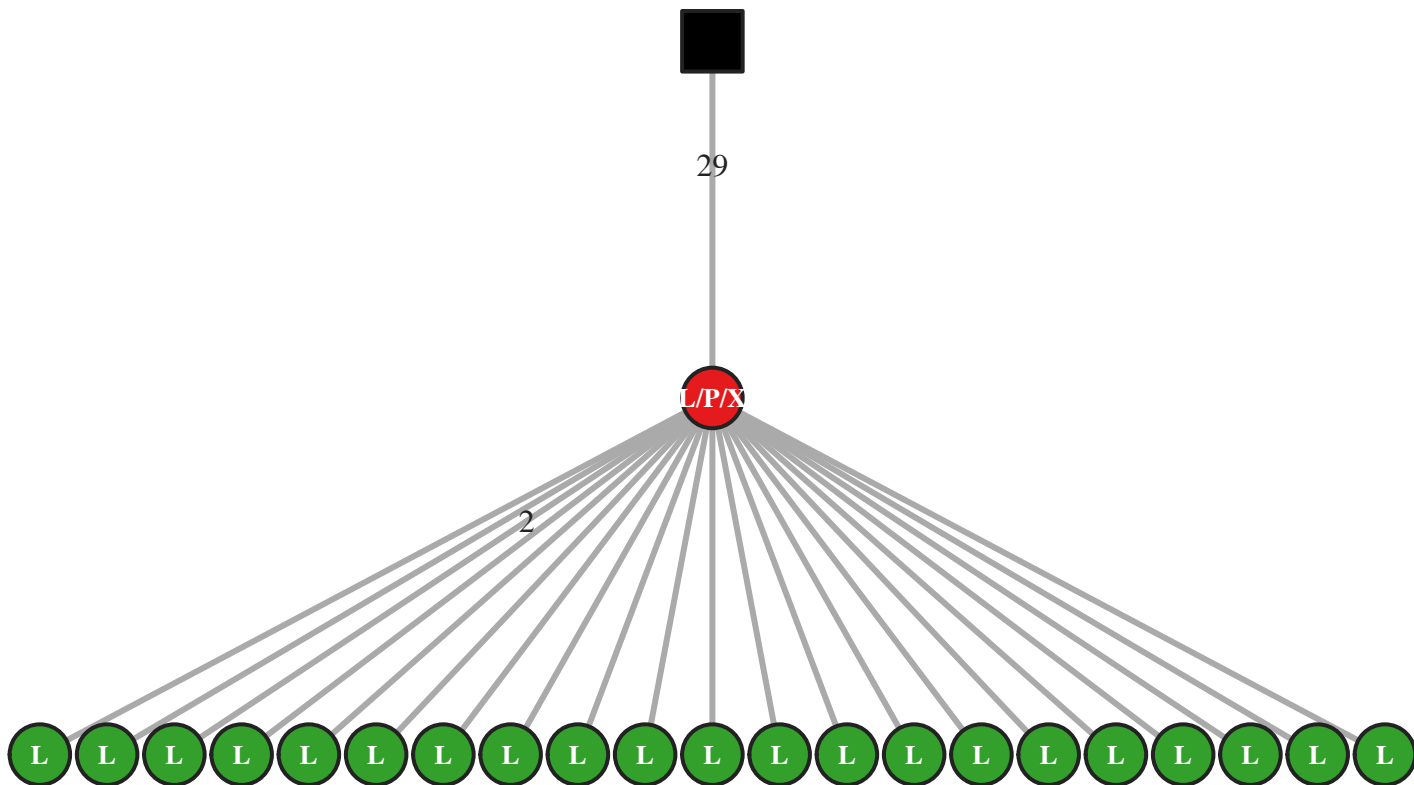
M5 IgG IGHV4-59/J4 48bp (10332)



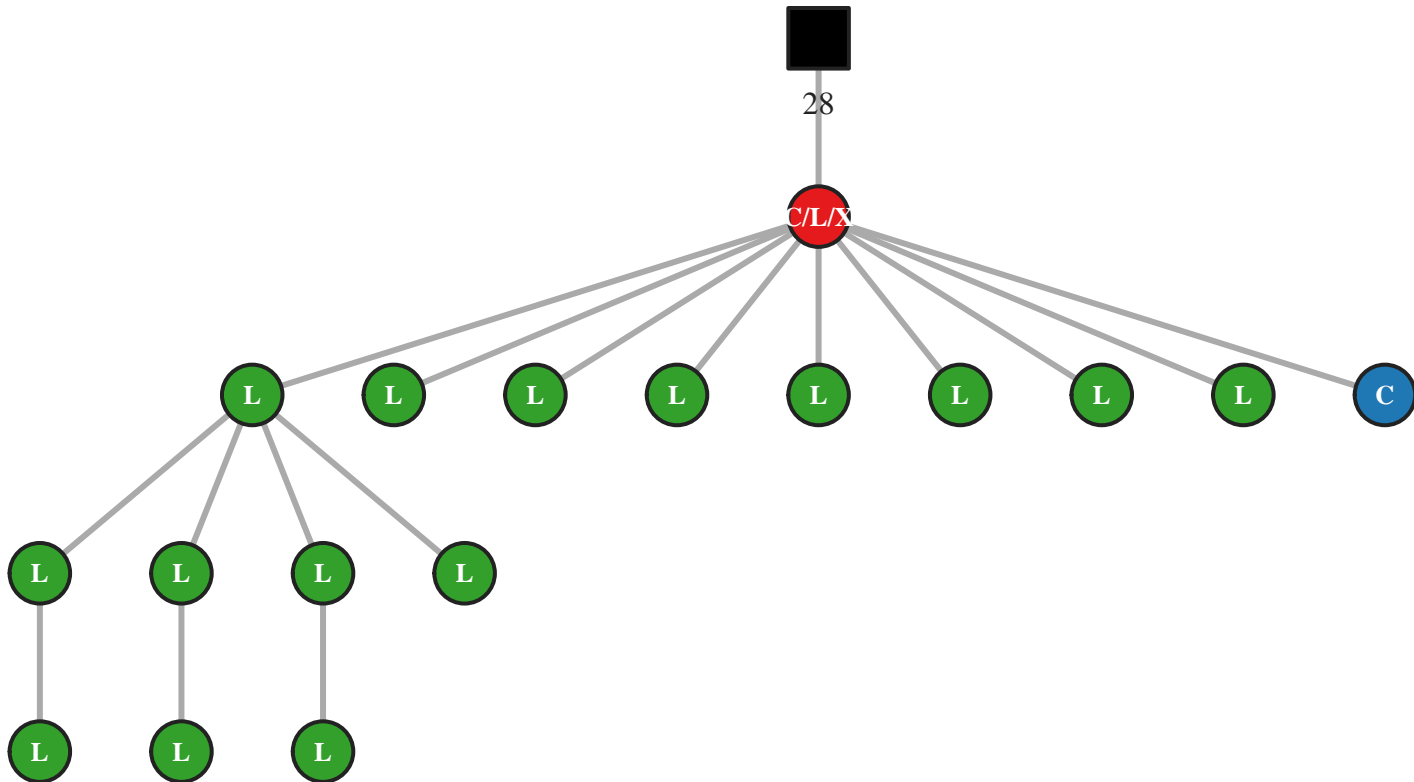
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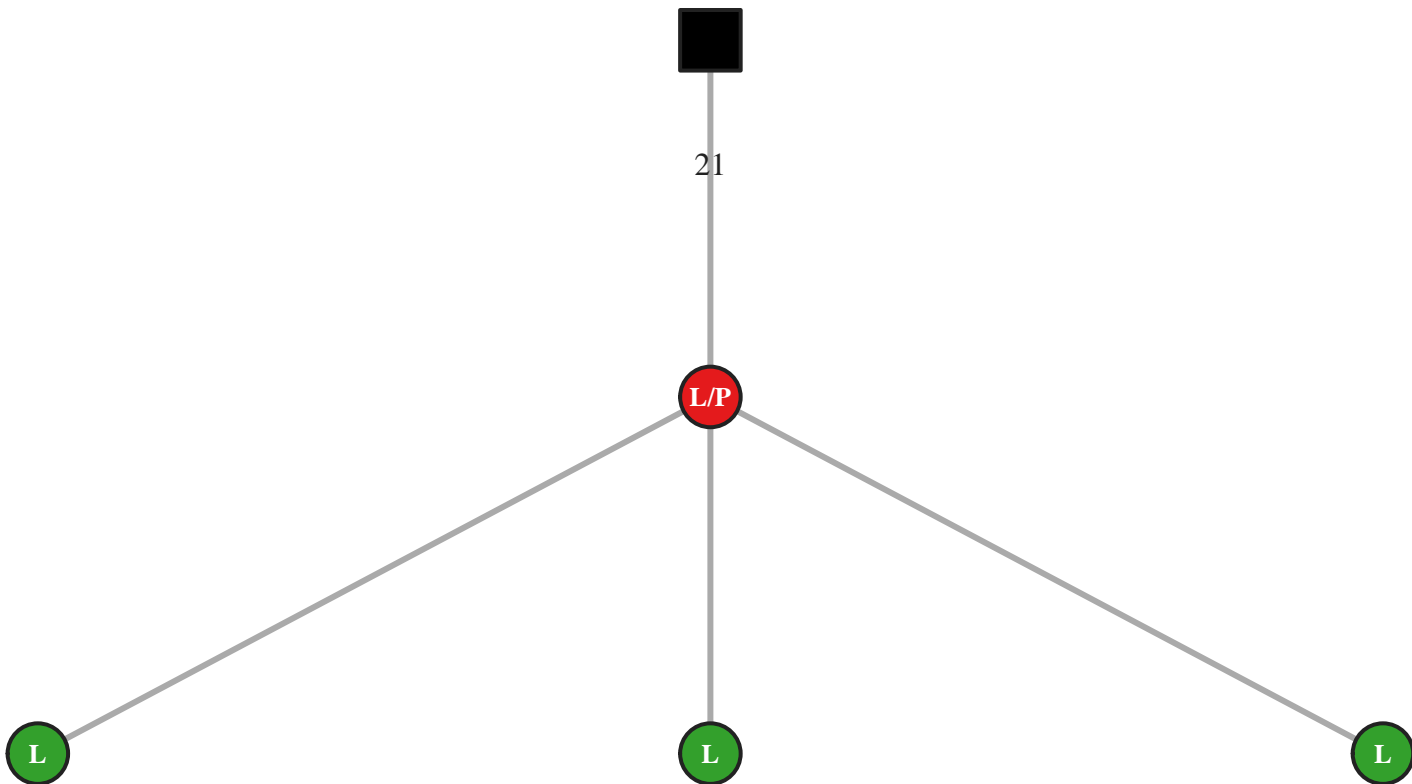
M5 IgG IGHV4-59/J4 54bp (28410)



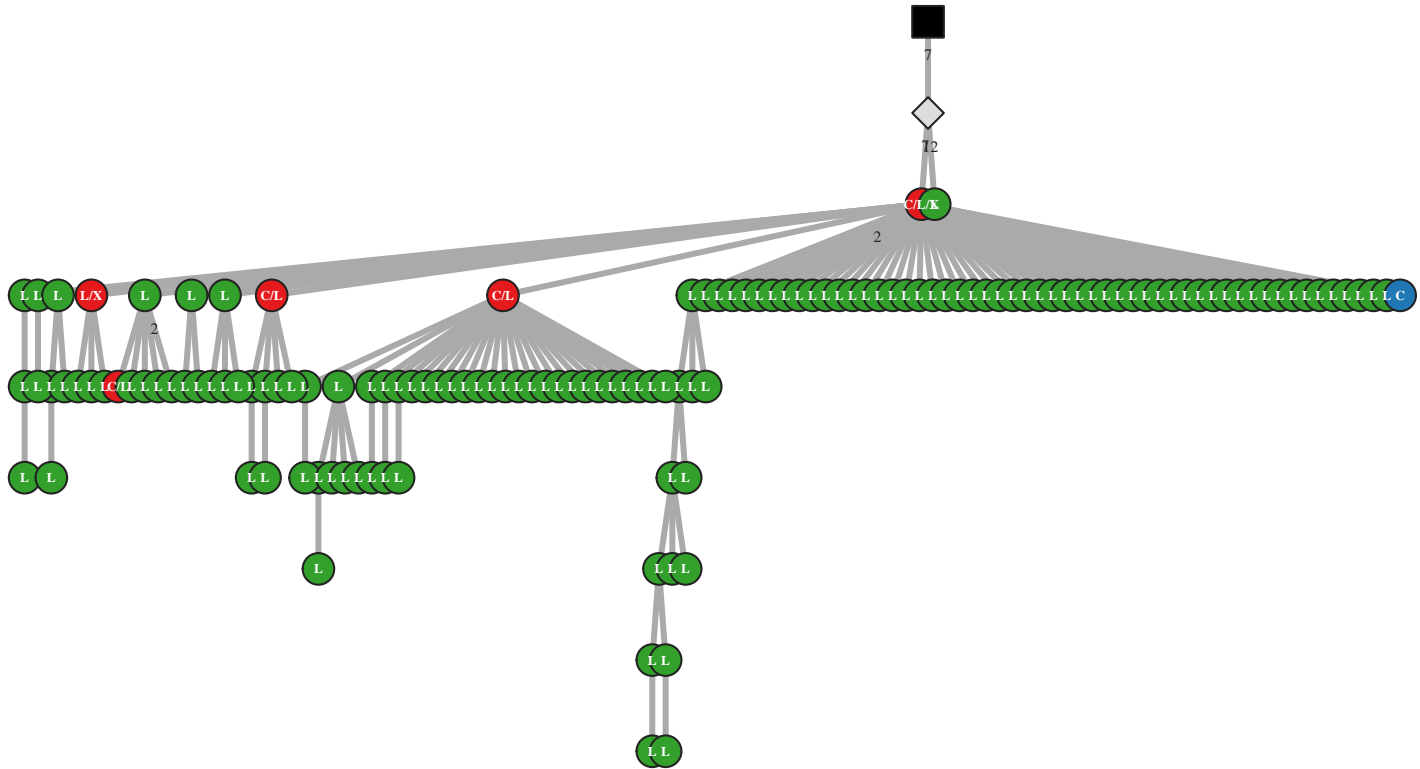
M5 IgA IGHV4-59/J4 57bp (12884)



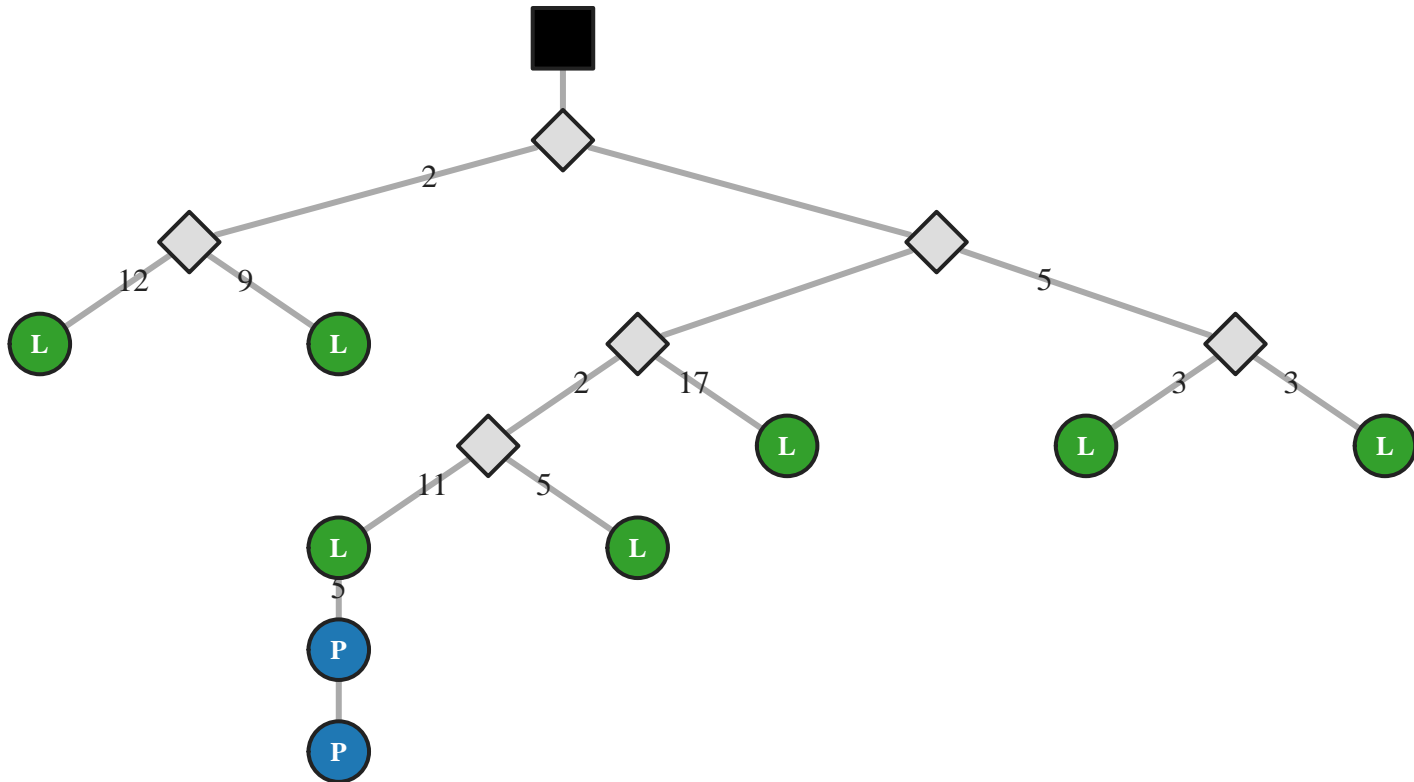
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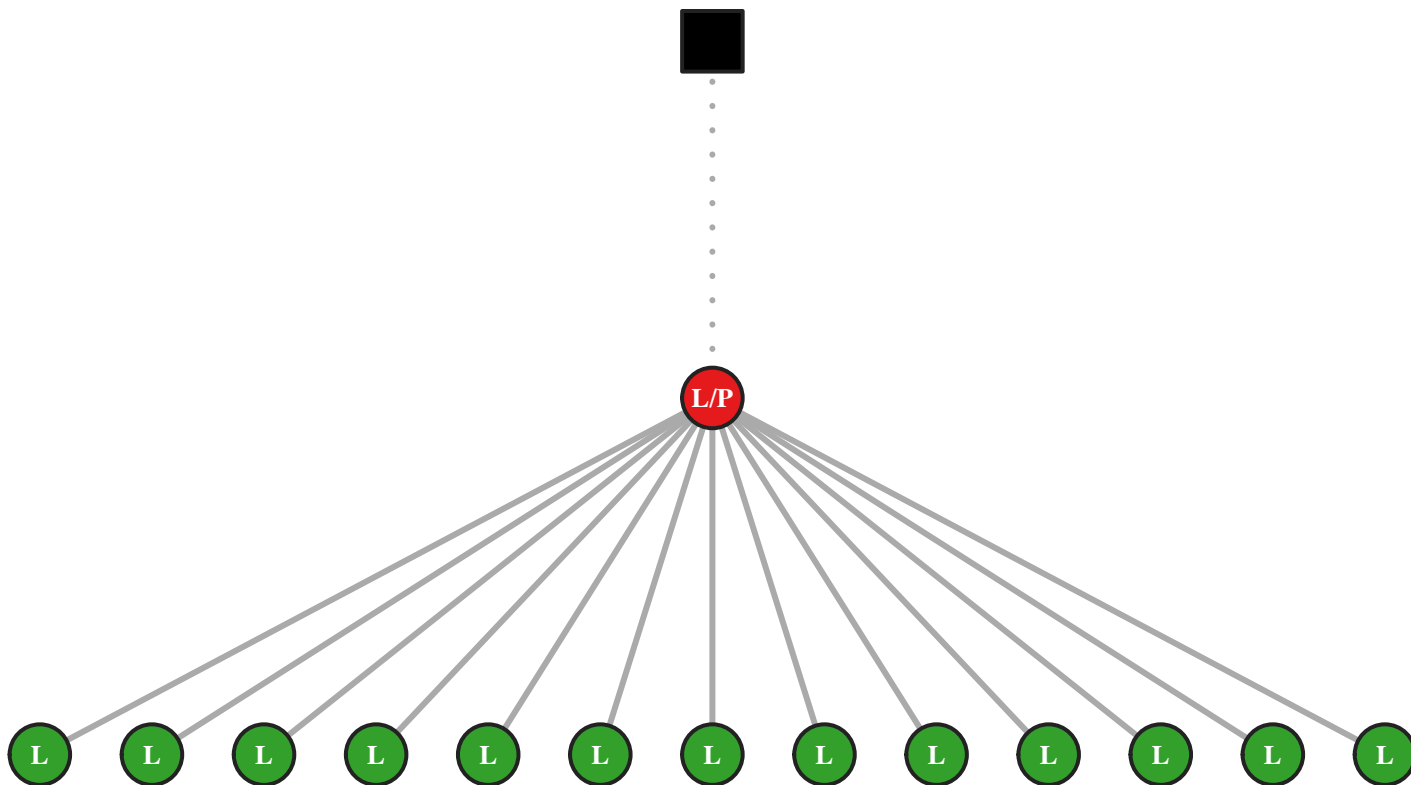
M5 IgA IGHV4-59/J4 60bp (30859)



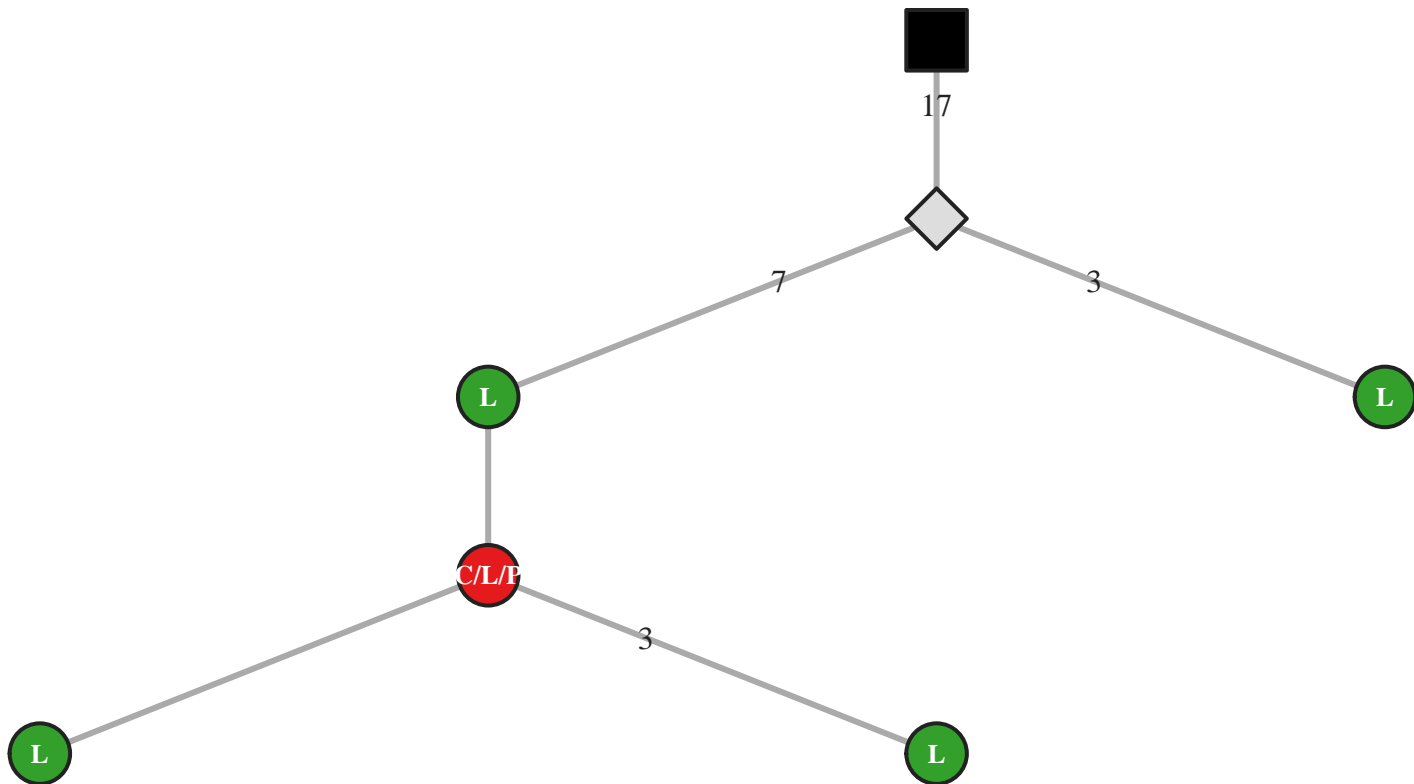
M5 IgG IGHV4-59/J4 63bp (36556)



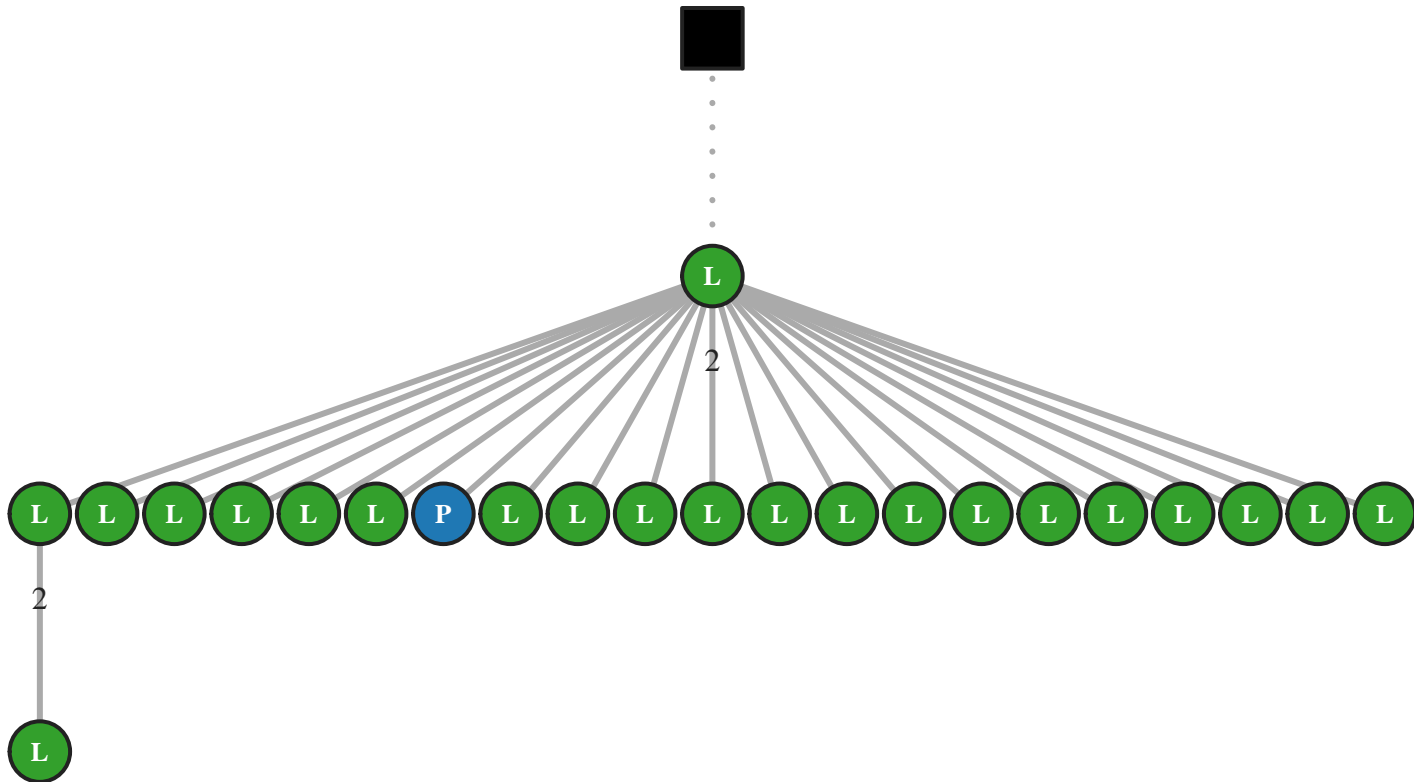
M5 IgA IGHV4-59/J4 69bp (3199)



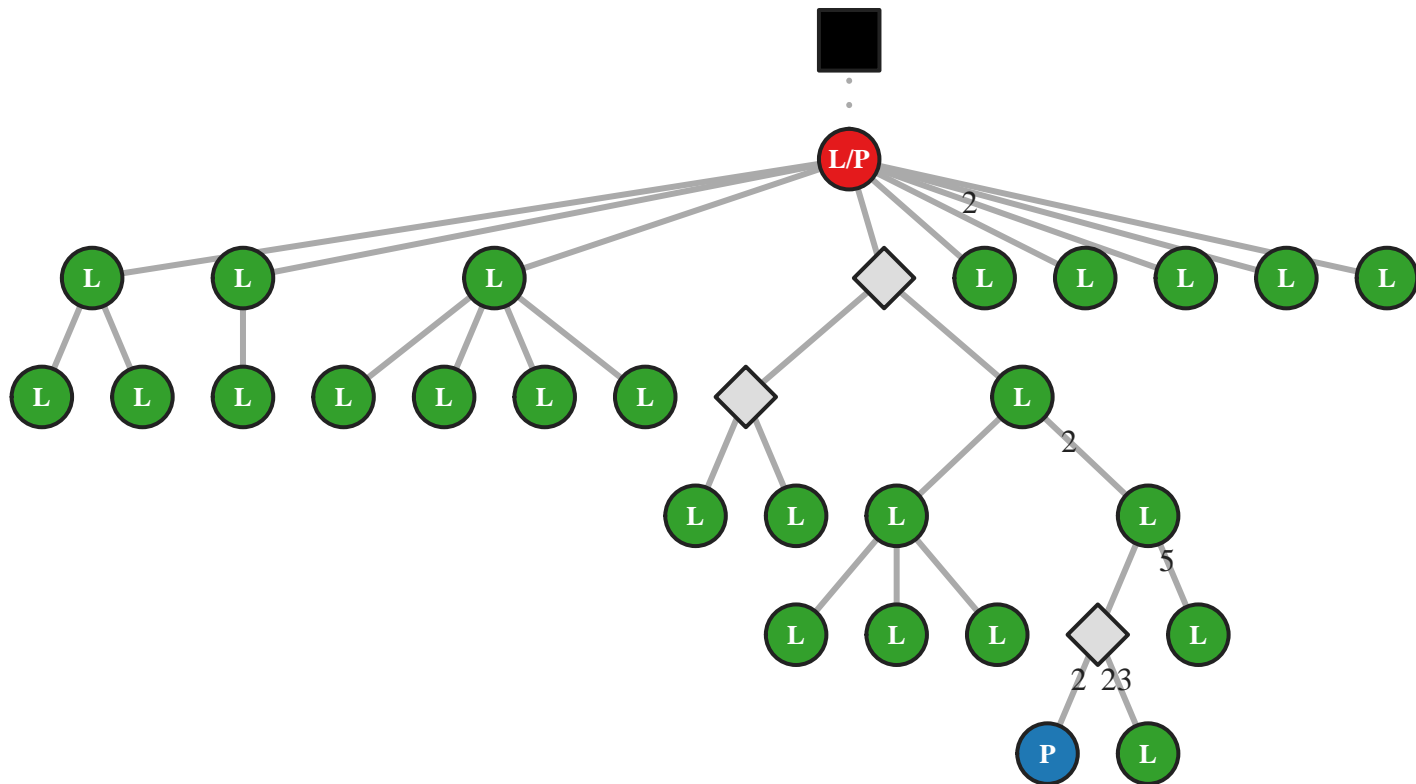
M5 IgG IGHV4-59/J4 69bp (46923)



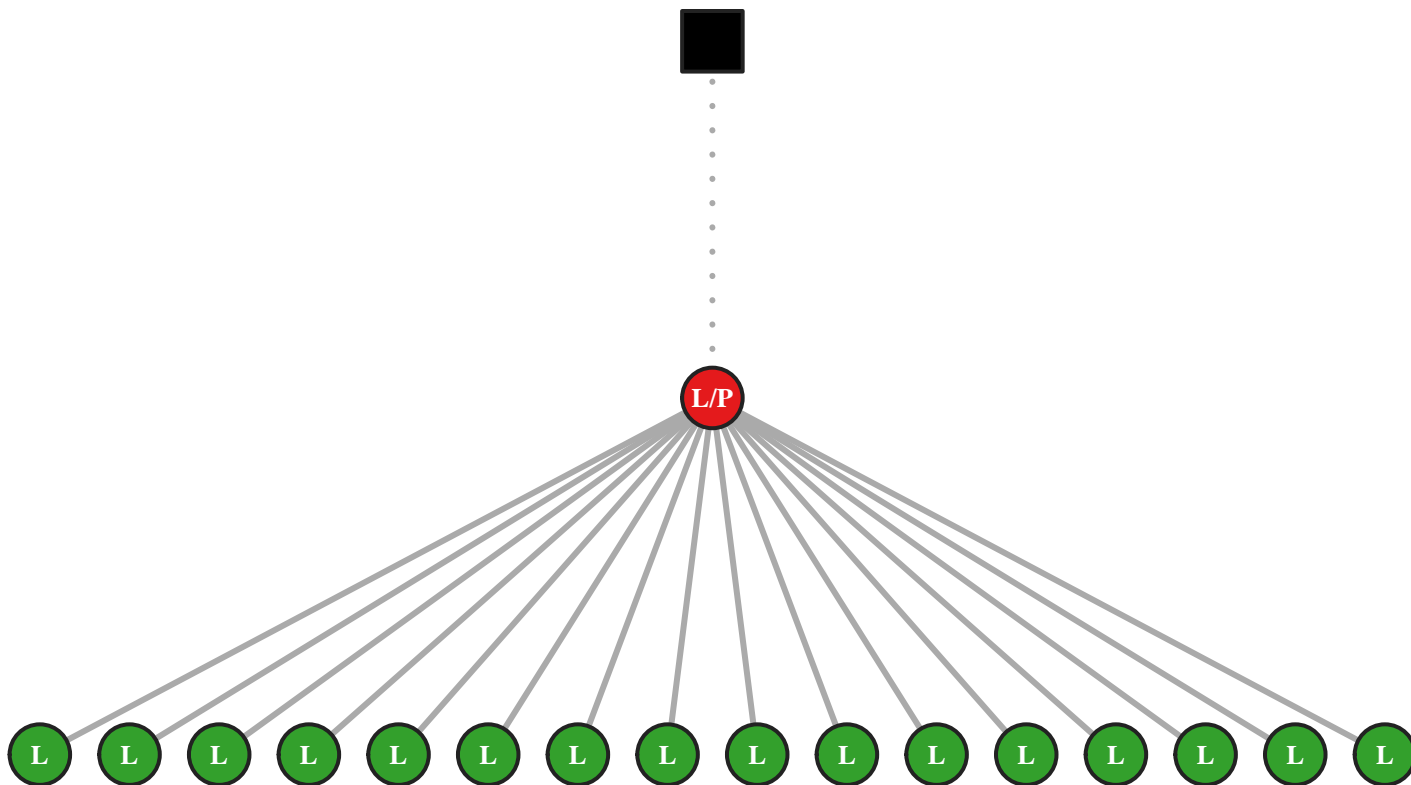
M5 IgG IGHV4-59/J4 69bp (46926)



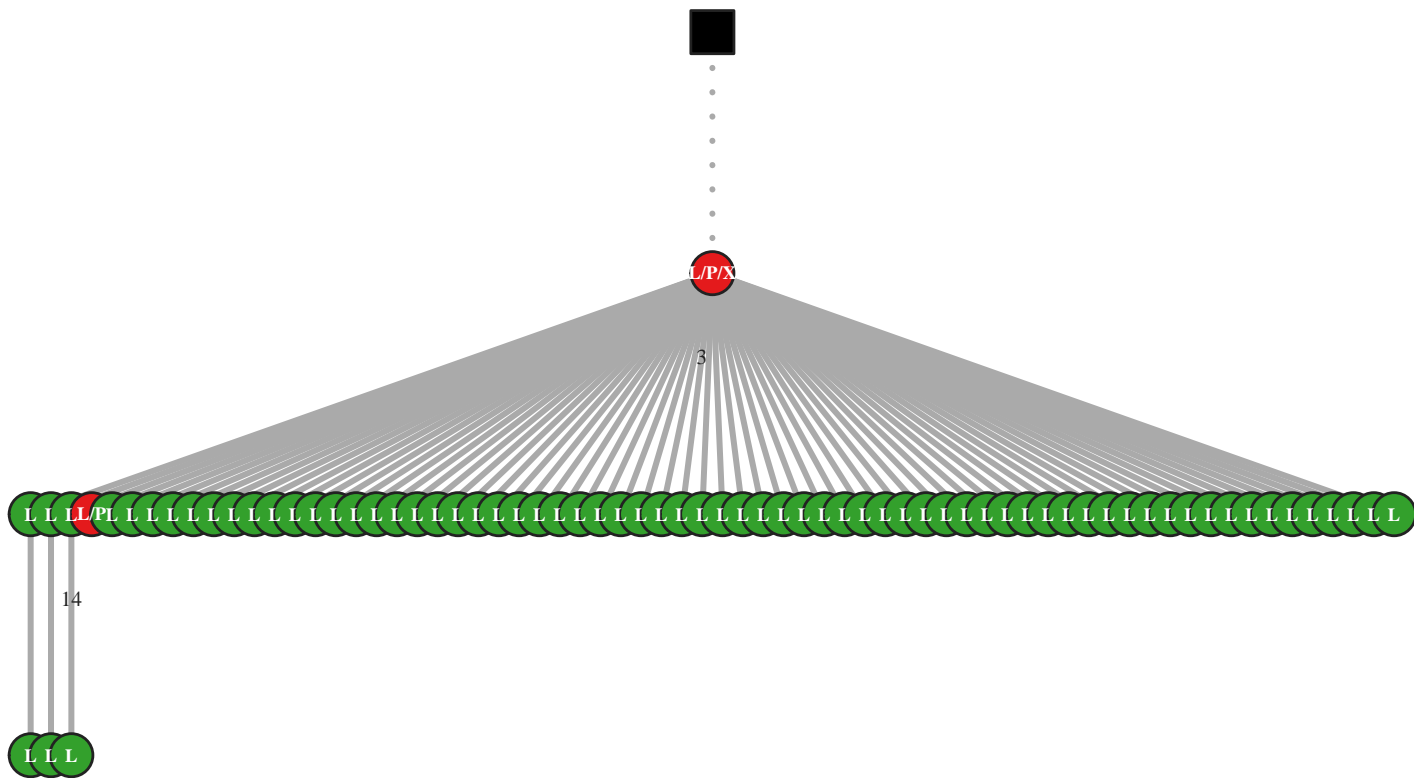
M5 IgG IGHV4-59/J5 33bp (19452)



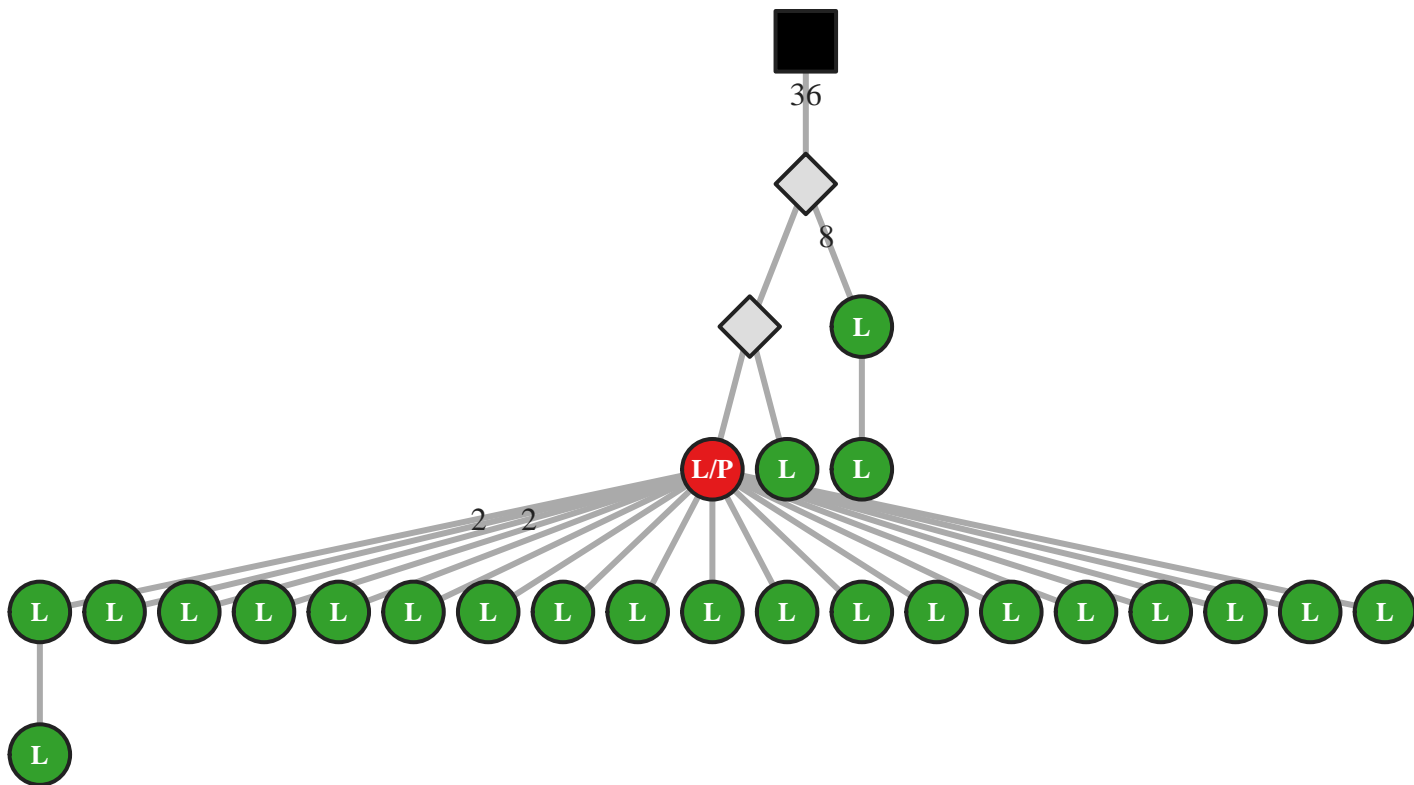
M5 IgA IGHV4-59/J5 36bp (3201)



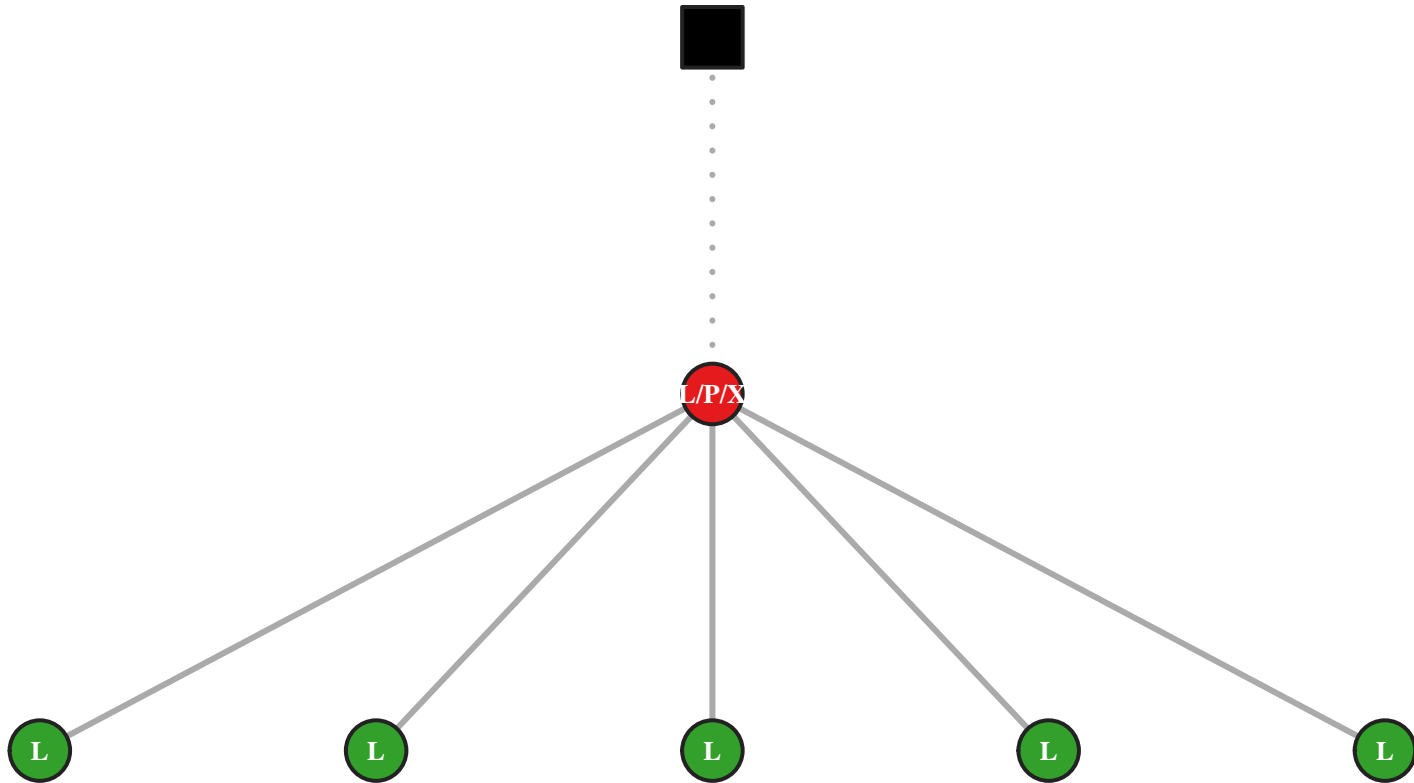
M5 IgG IGHV4-59/J5 36bp (19368)



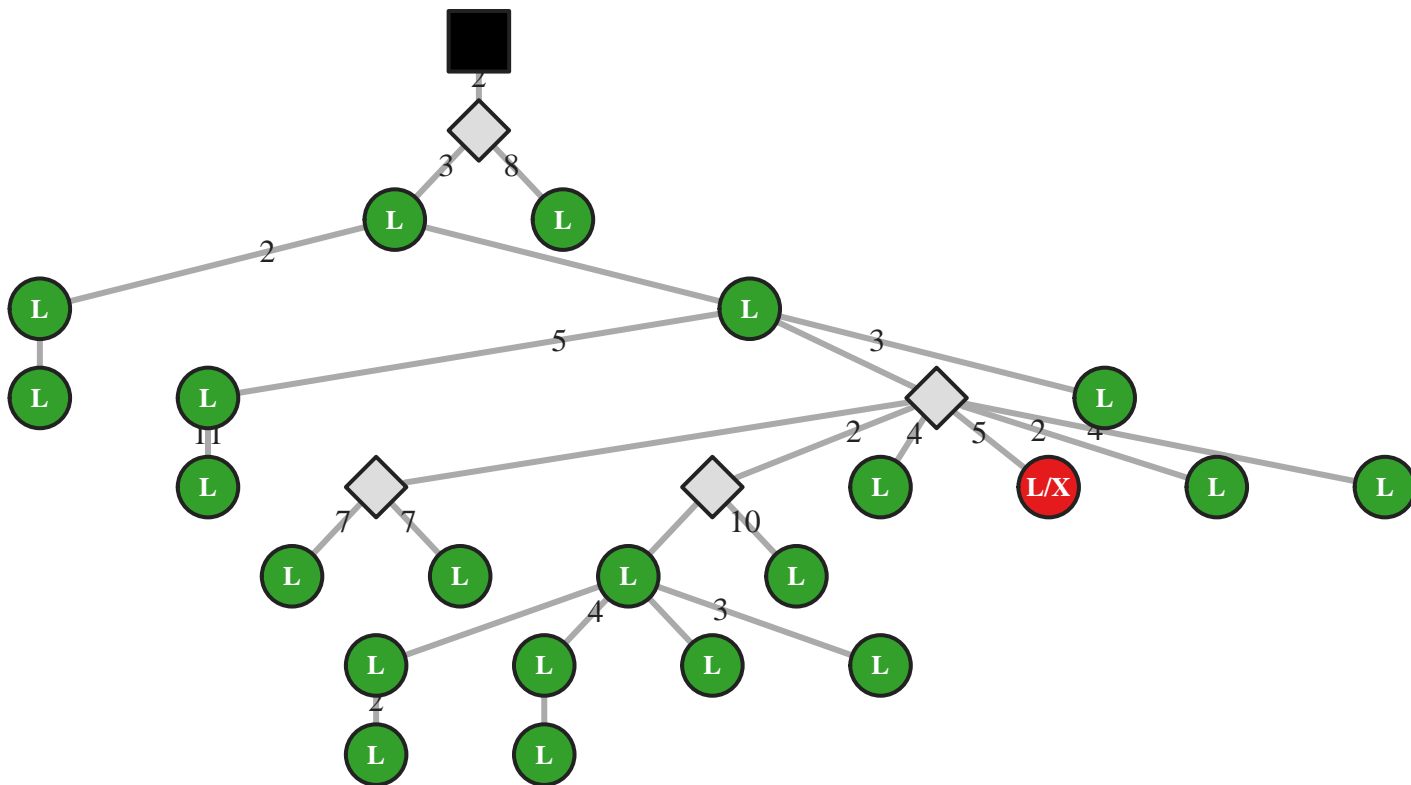
M5 IgG IGHV4-59/J5 42bp (28523)



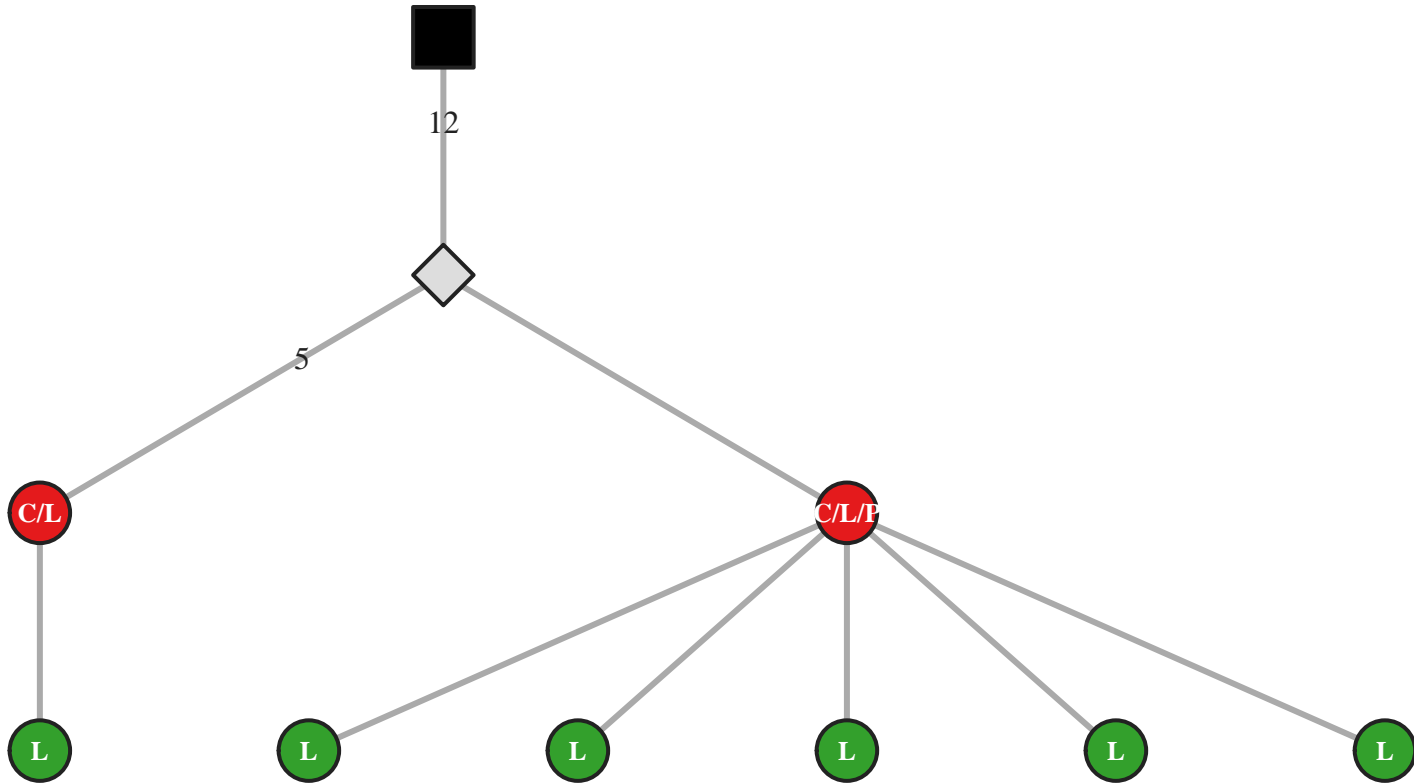
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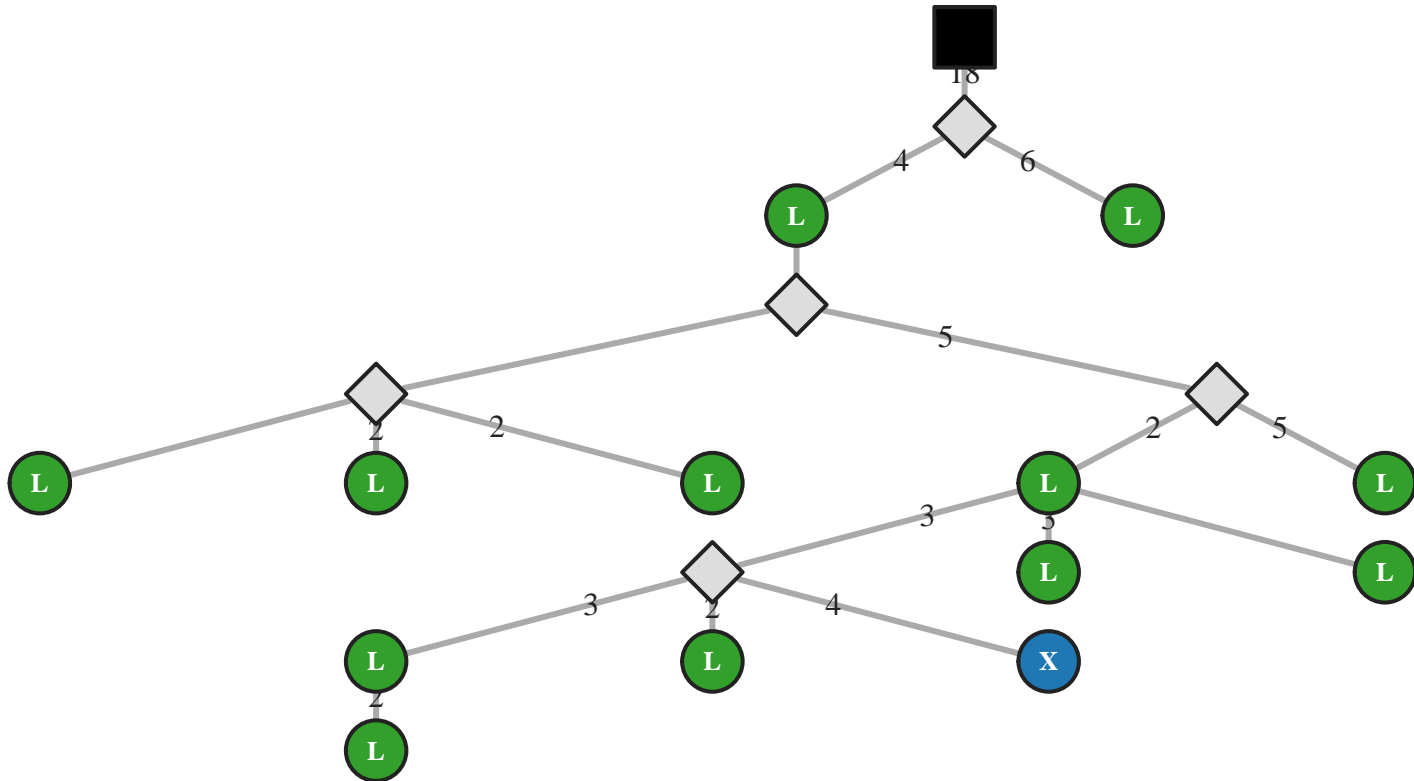
M5 IgG IGHV4-59/J5 45bp (46765)



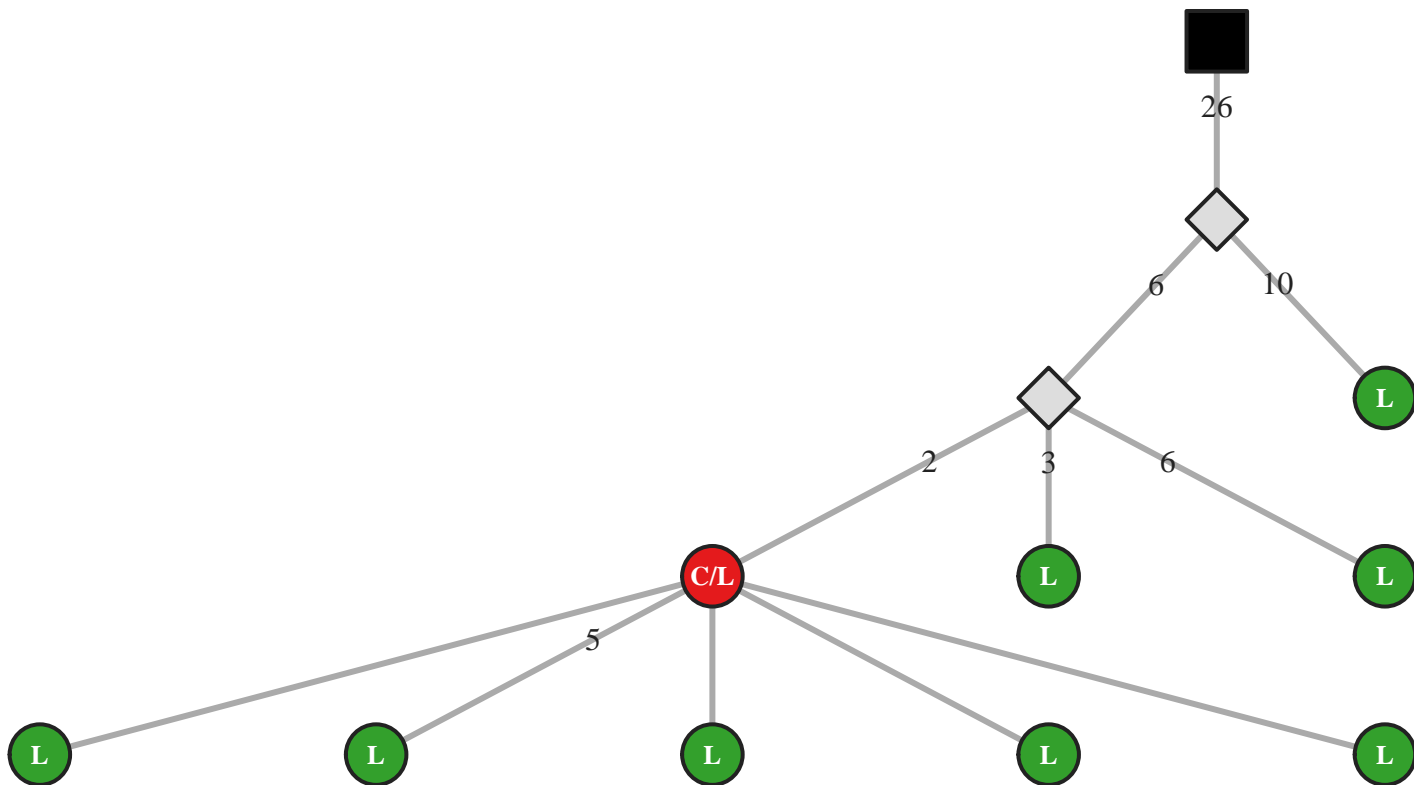
M5 IgG IGHV4-59/J5 48bp (53417)



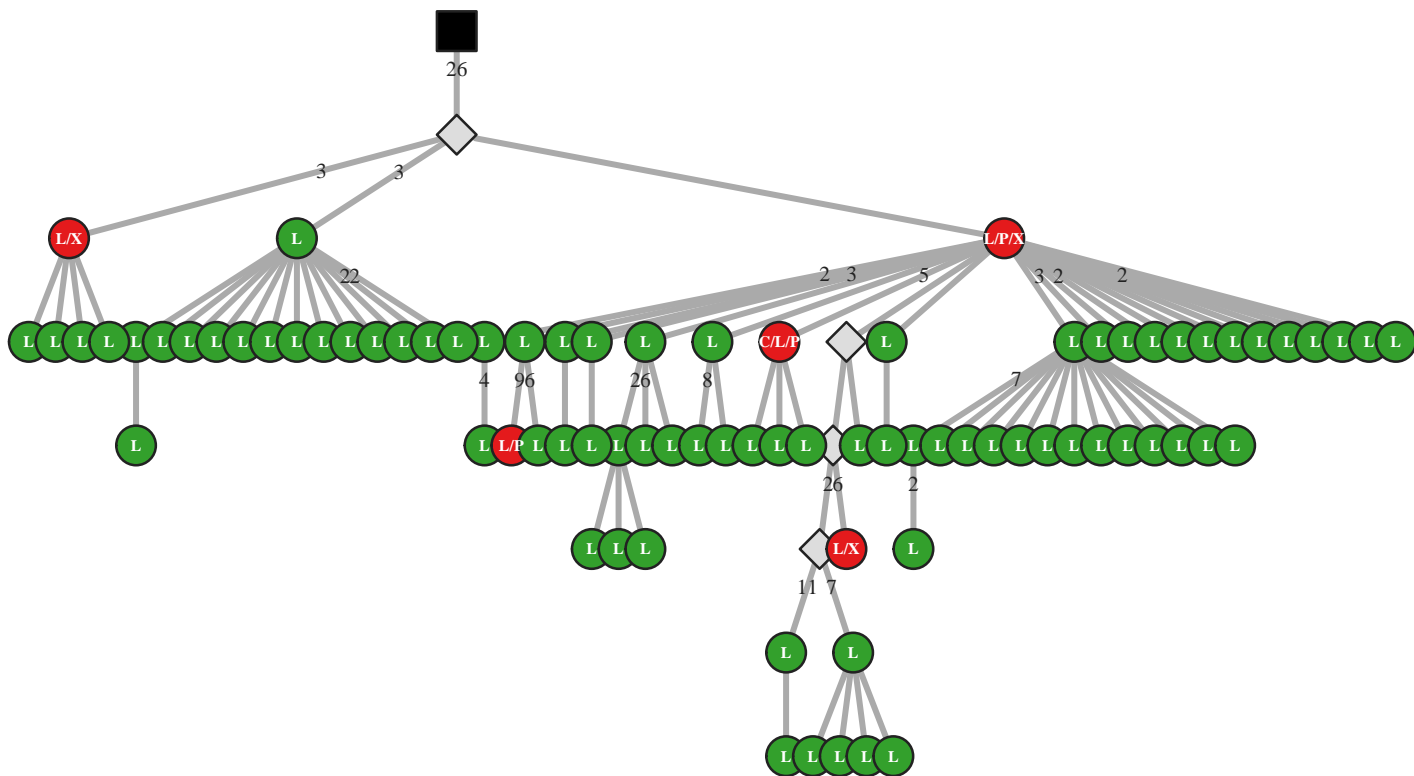
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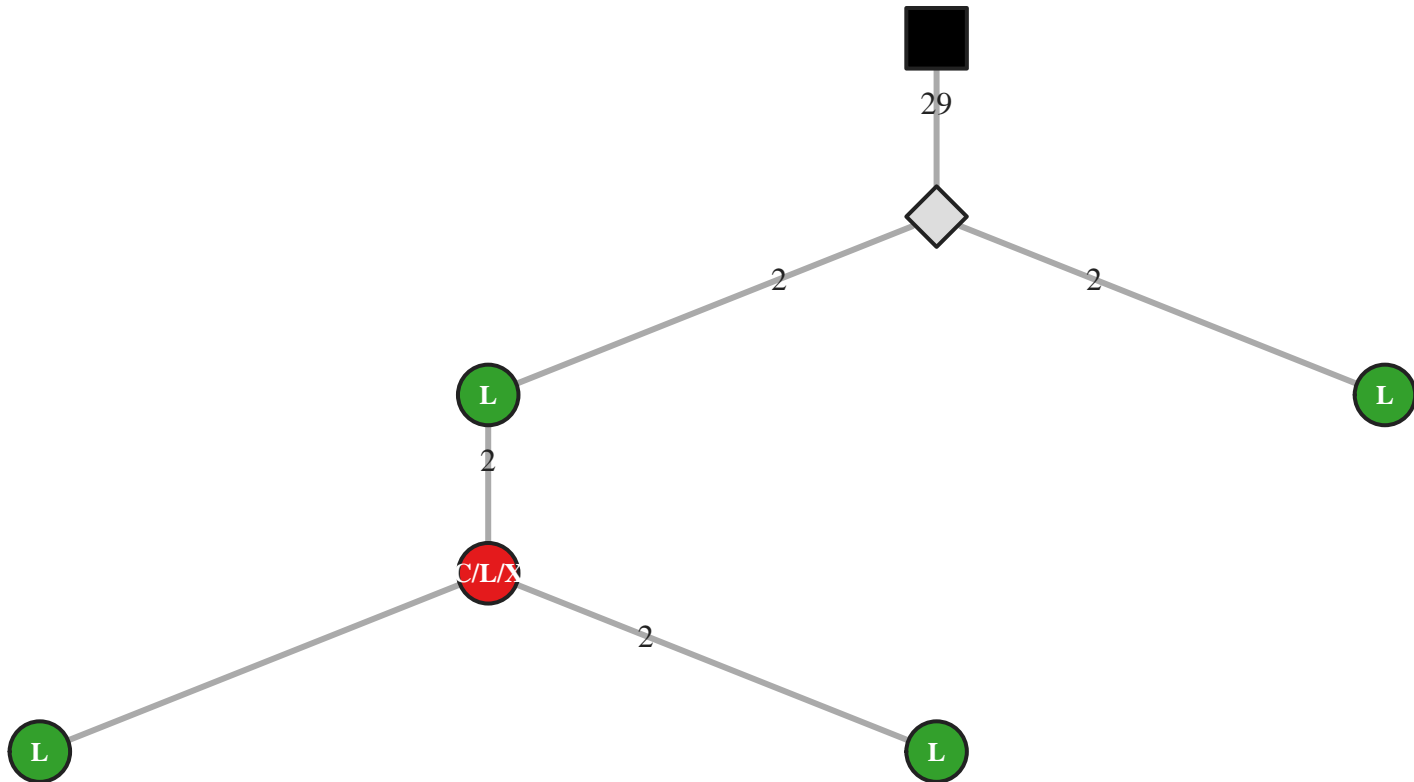
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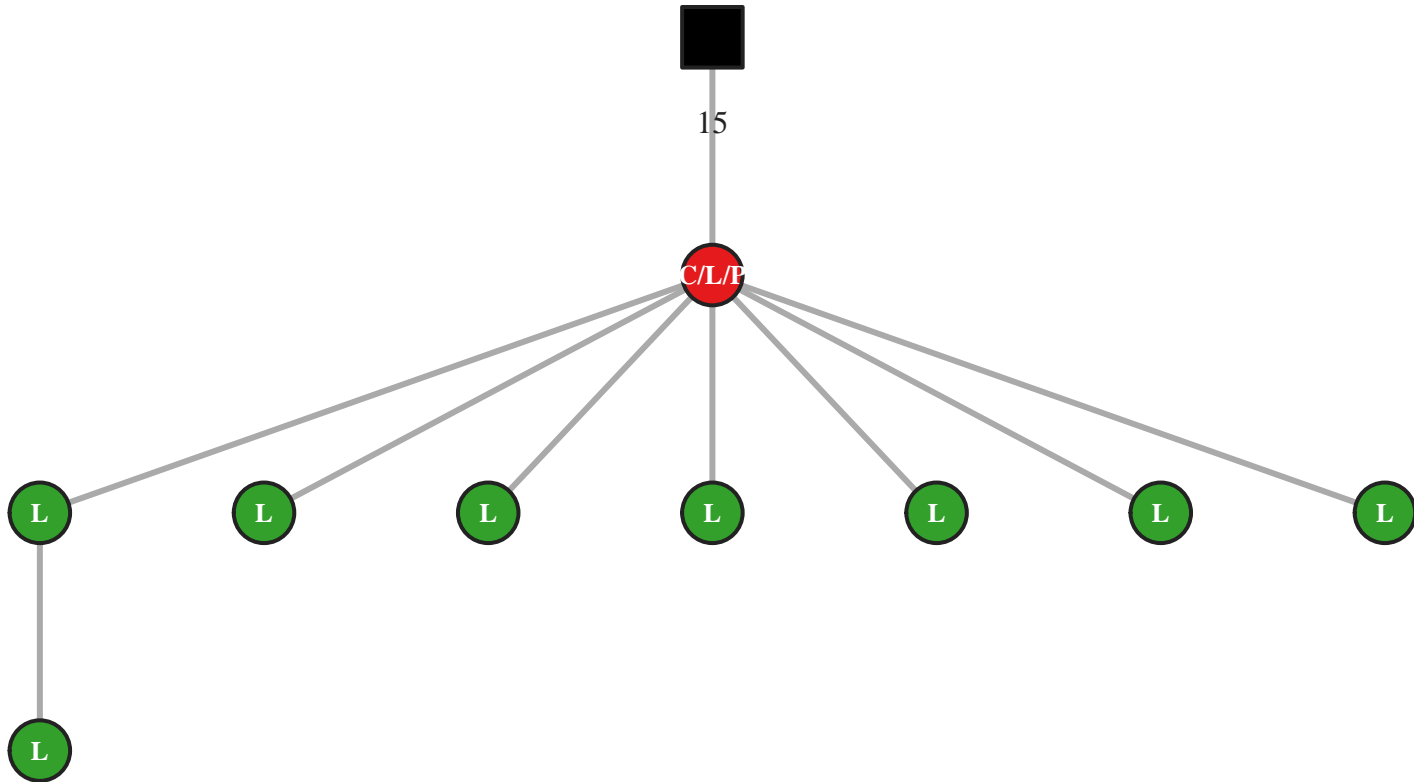
M5 IgG IGHV4-59/J5 51bp (36606)



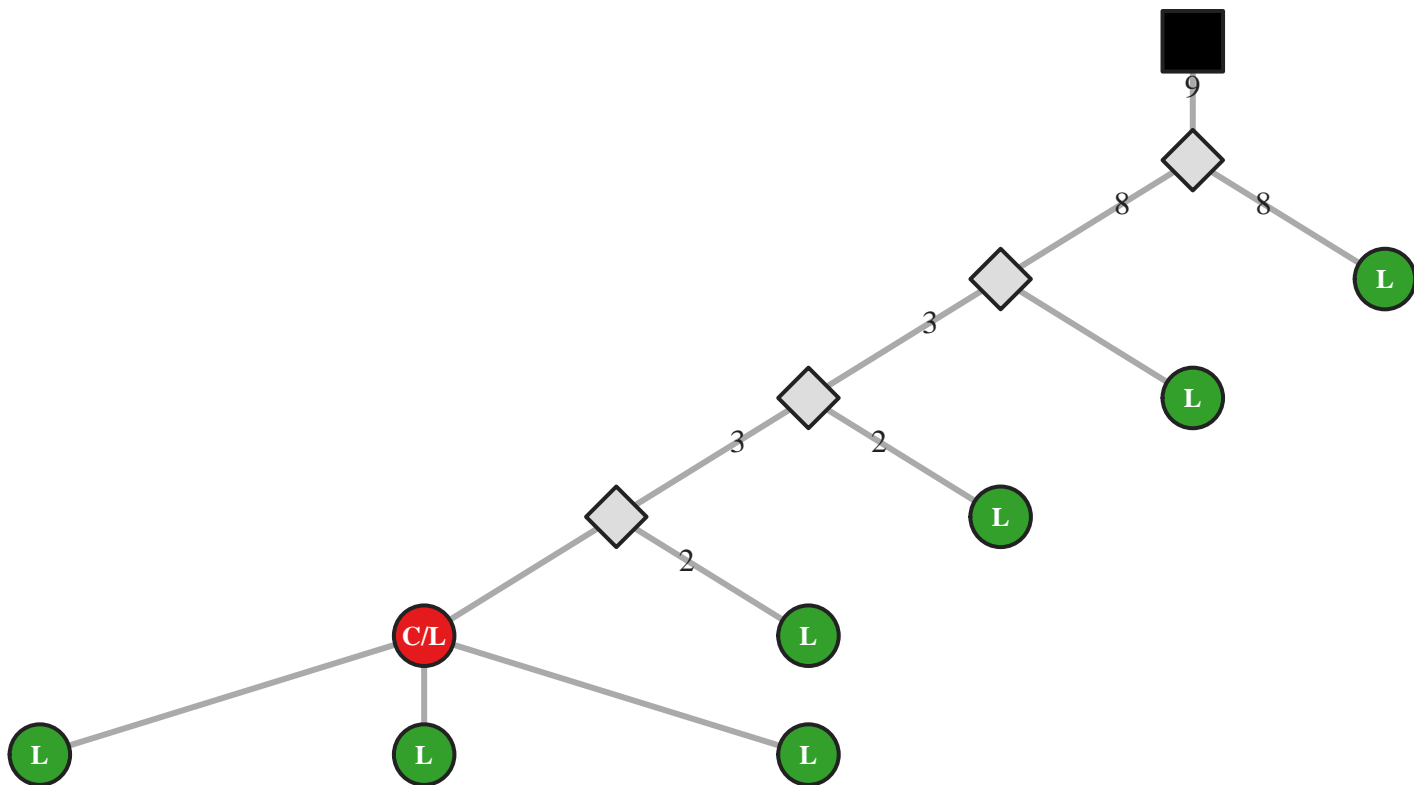
M5 IgA IGHV4-59/J5 54bp (30846)



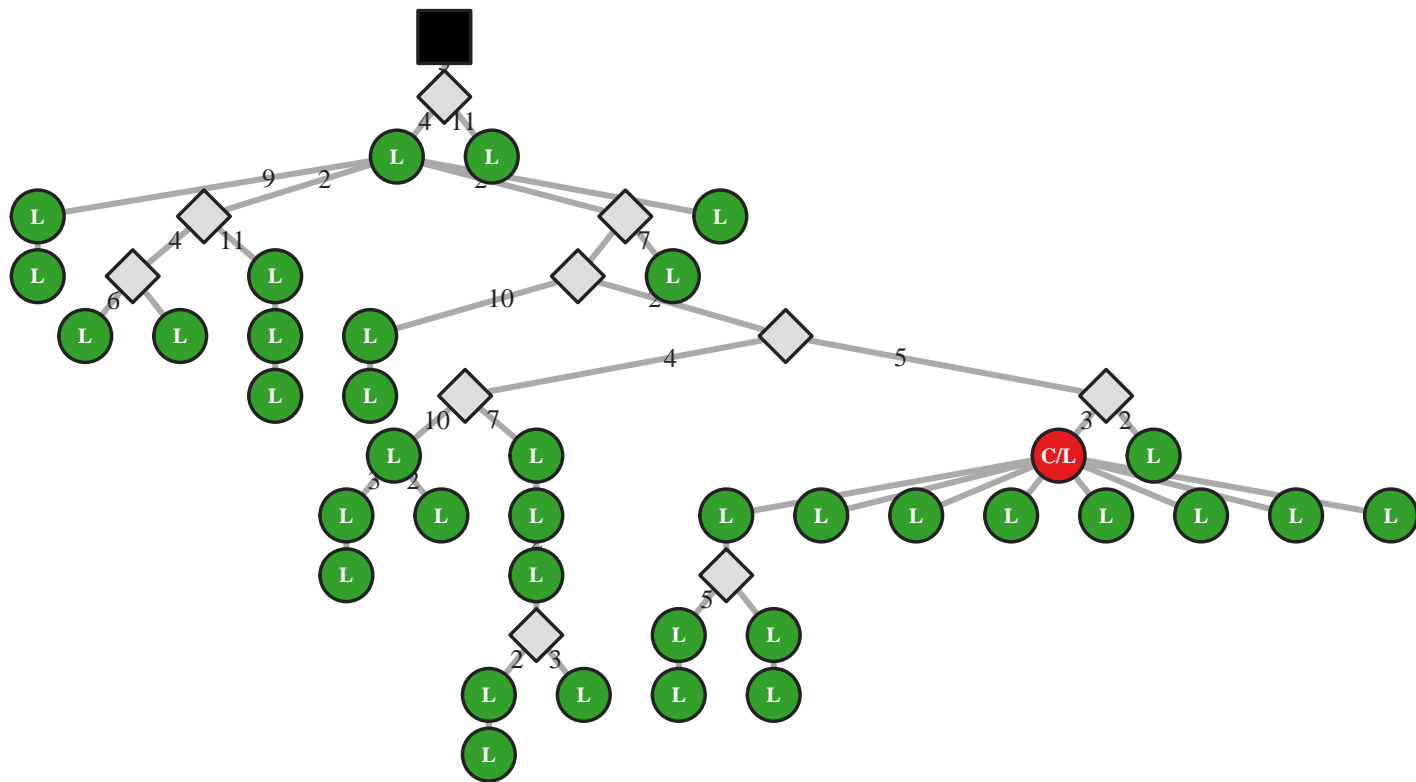
M5 IgG IGHV4-59/J5 60bp (28643)



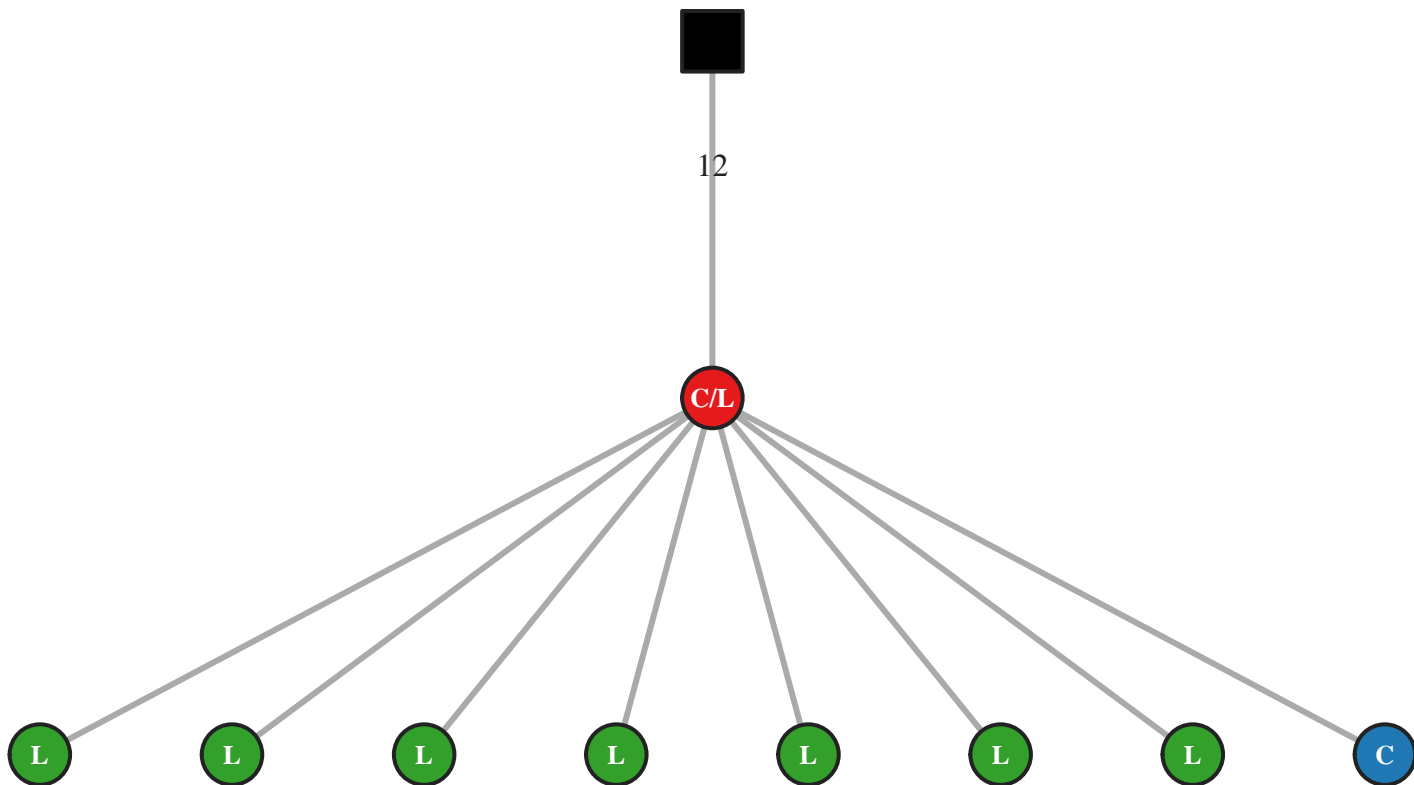
M5 IgG IGHV4-59/J6 51bp (19399)



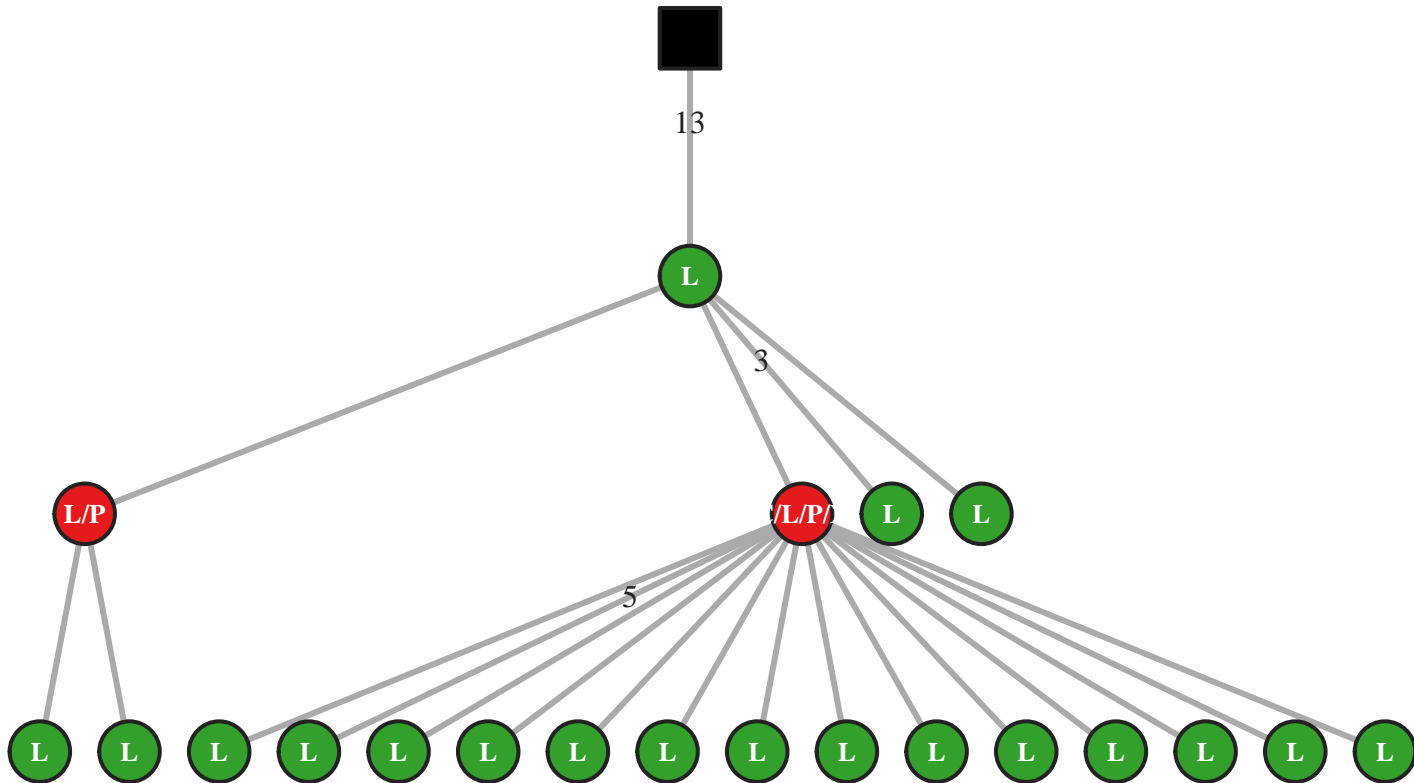
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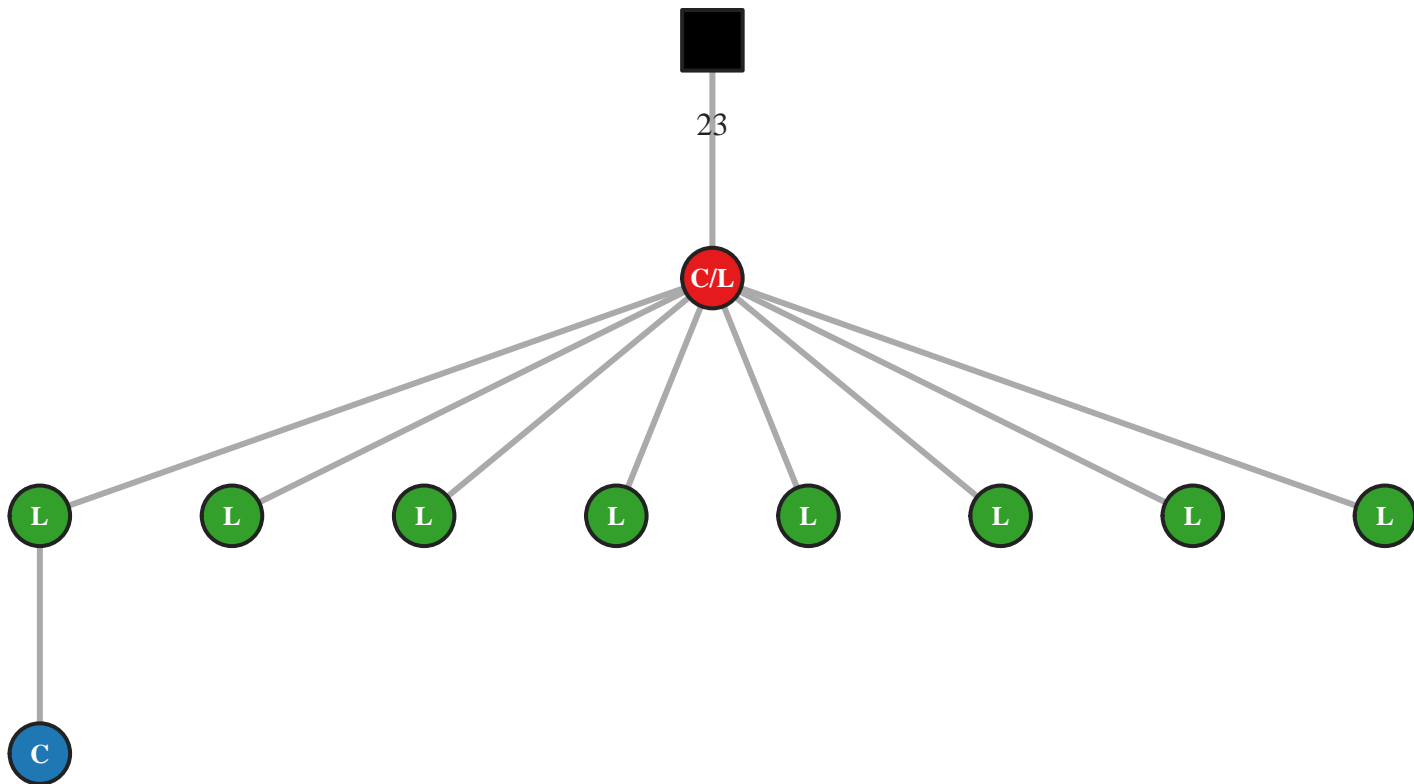
M5 IgG IGHV4-59/J6 57bp (28558)



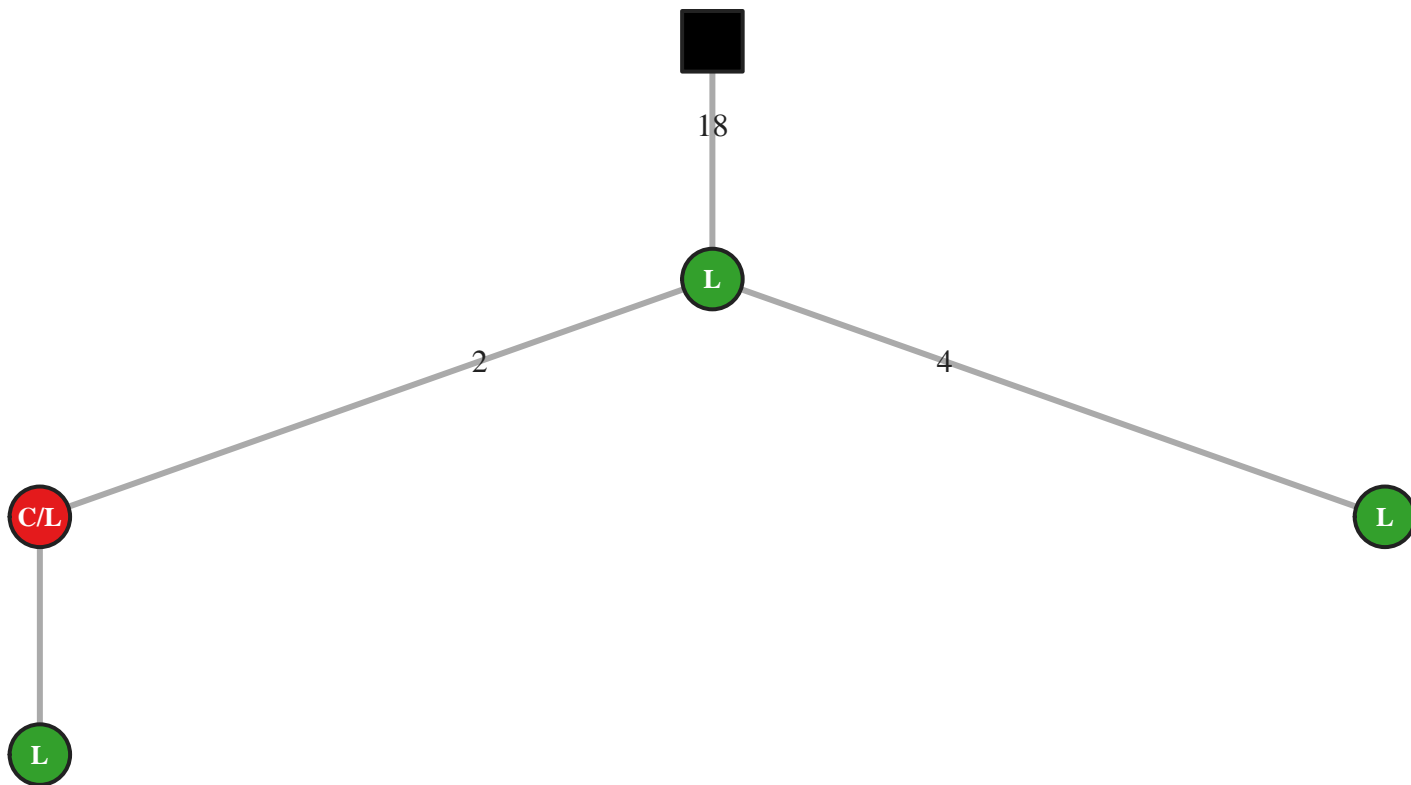
M5 IgG IGHV4-59/J6 57bp (28568)



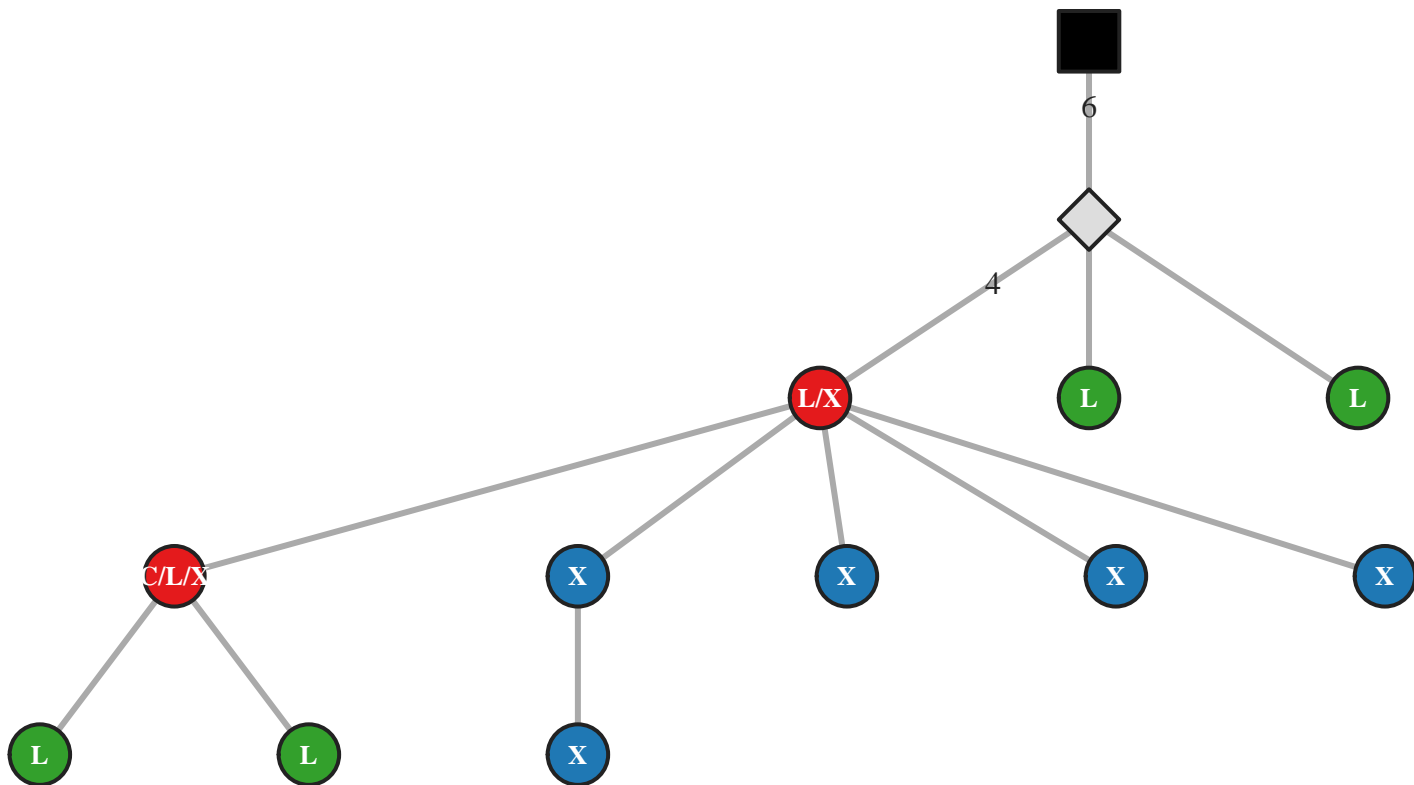
M5 IgG IGHV4-59/J6 60bp (46826)



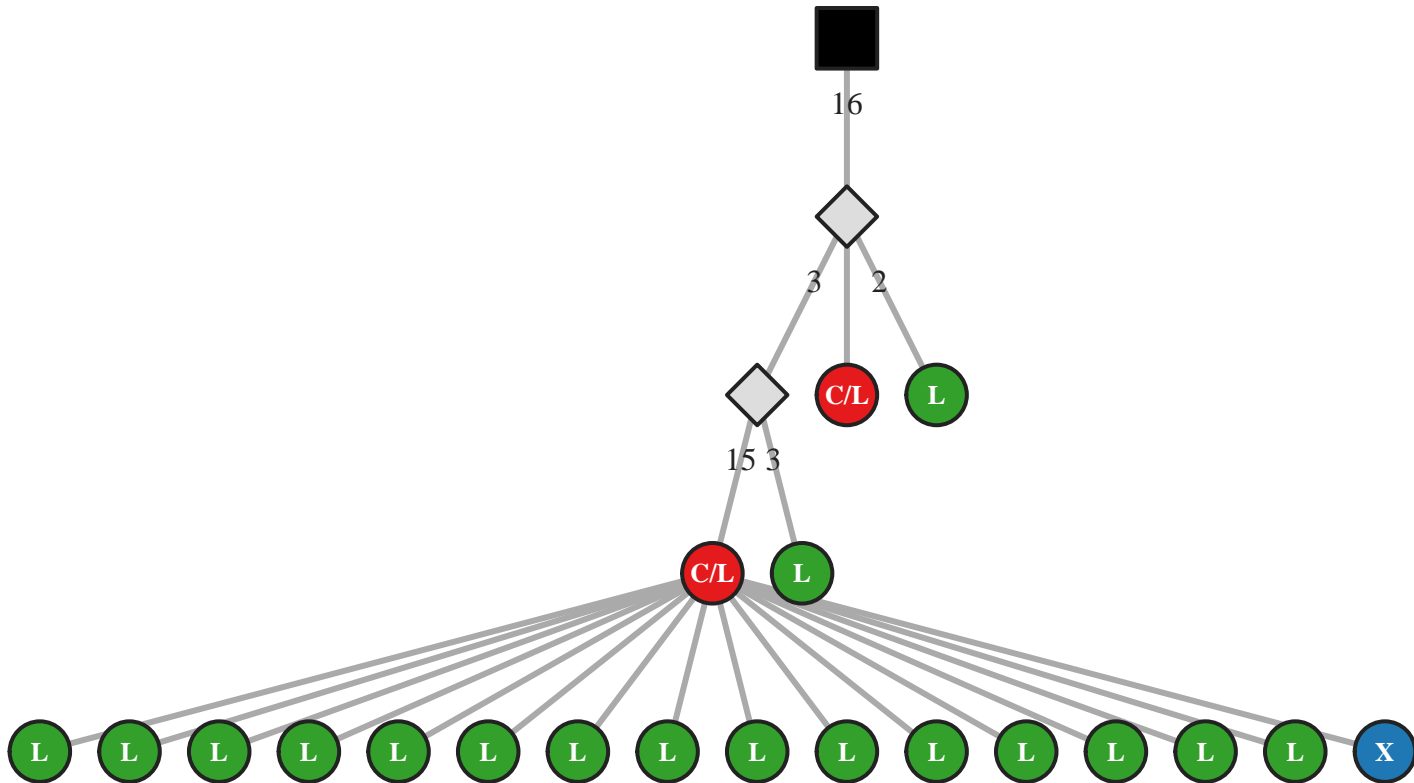
M5 IgG IGHV4-59/J6 63bp (46859)



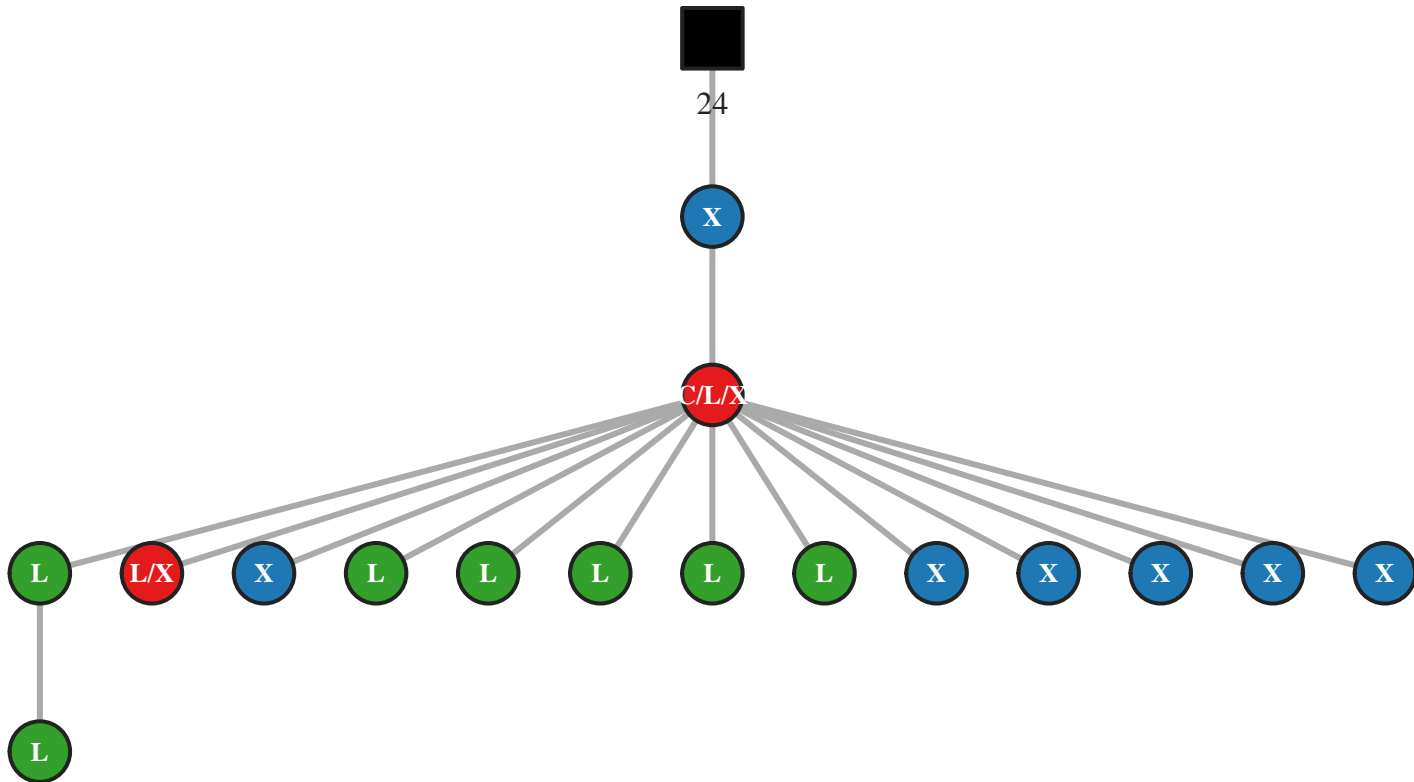
M5 IgG IGHV4-59/J6 66bp (10442)



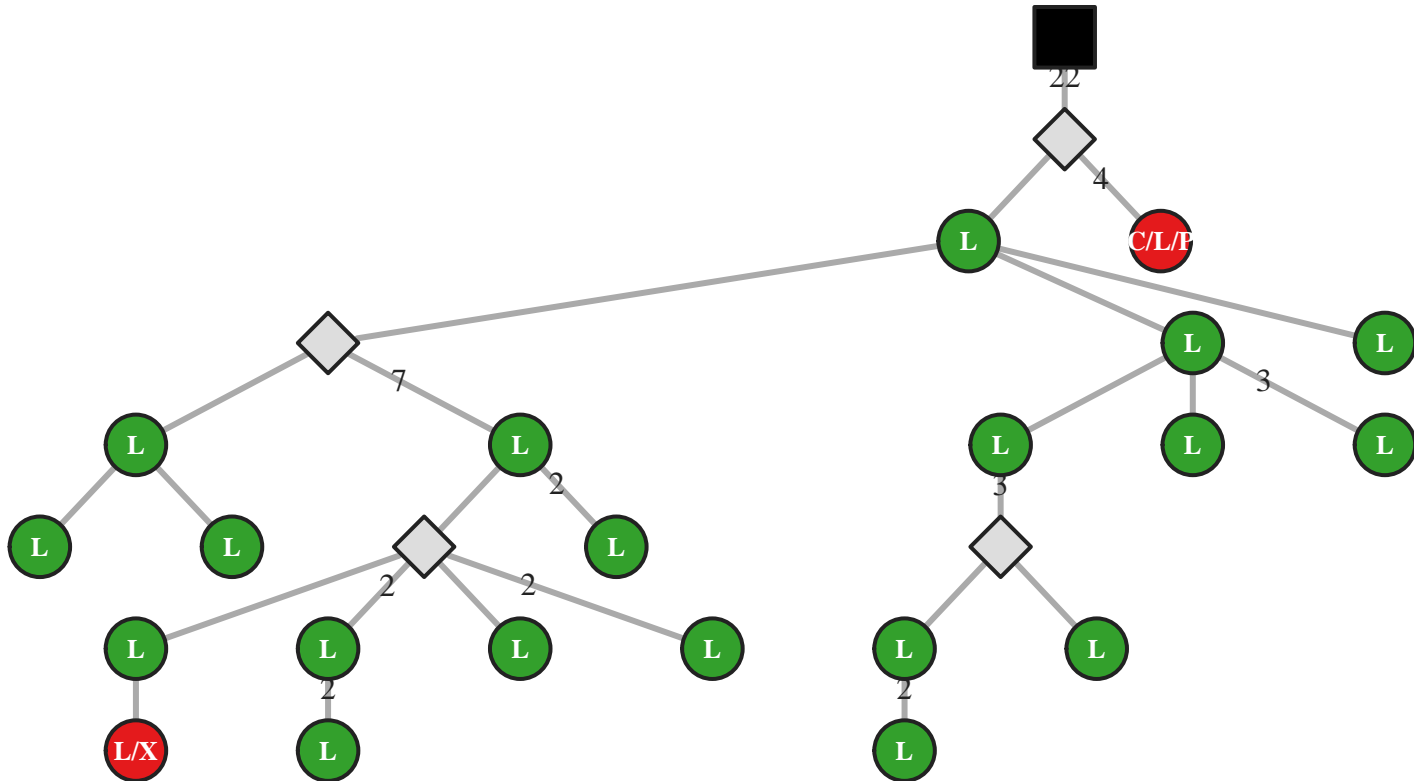
M5 IgA IGHV4-59/J6 69bp (30873)



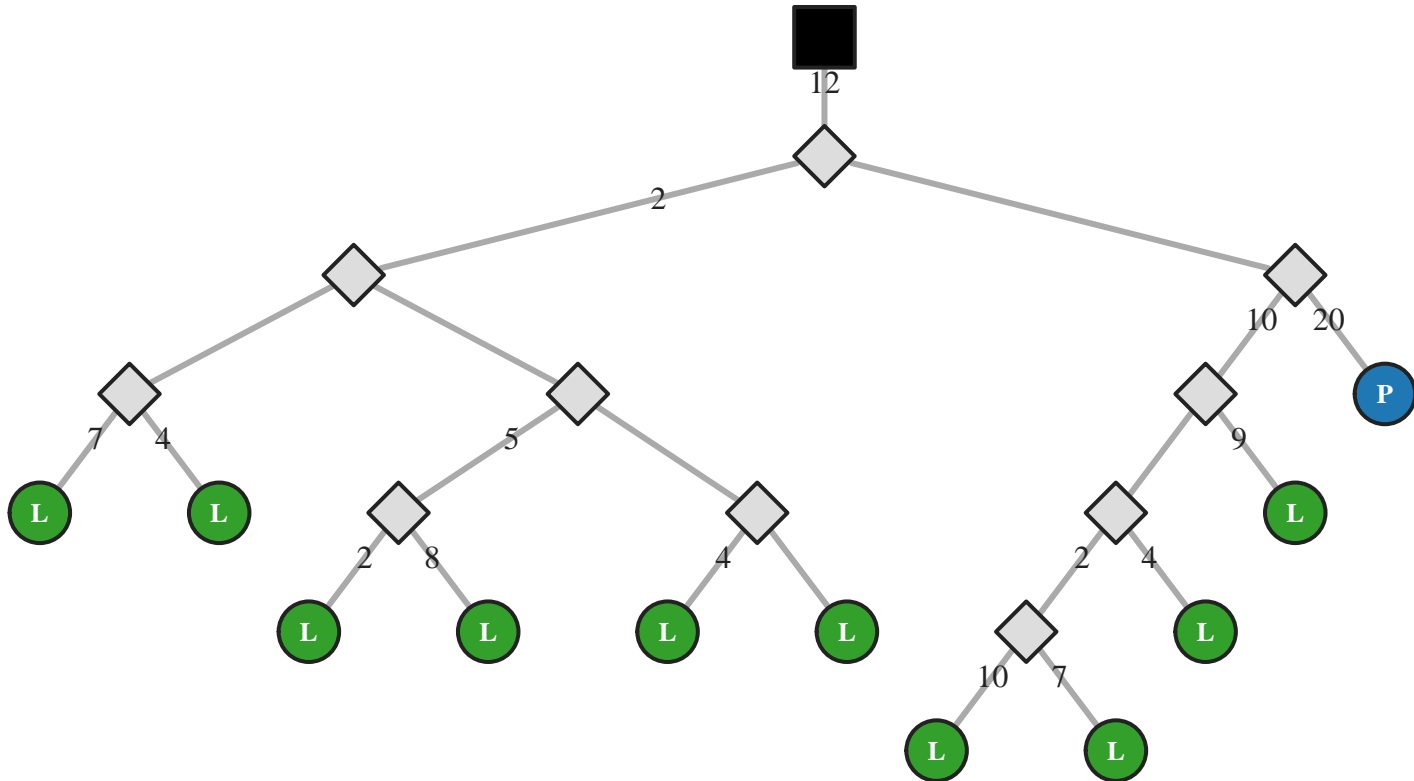
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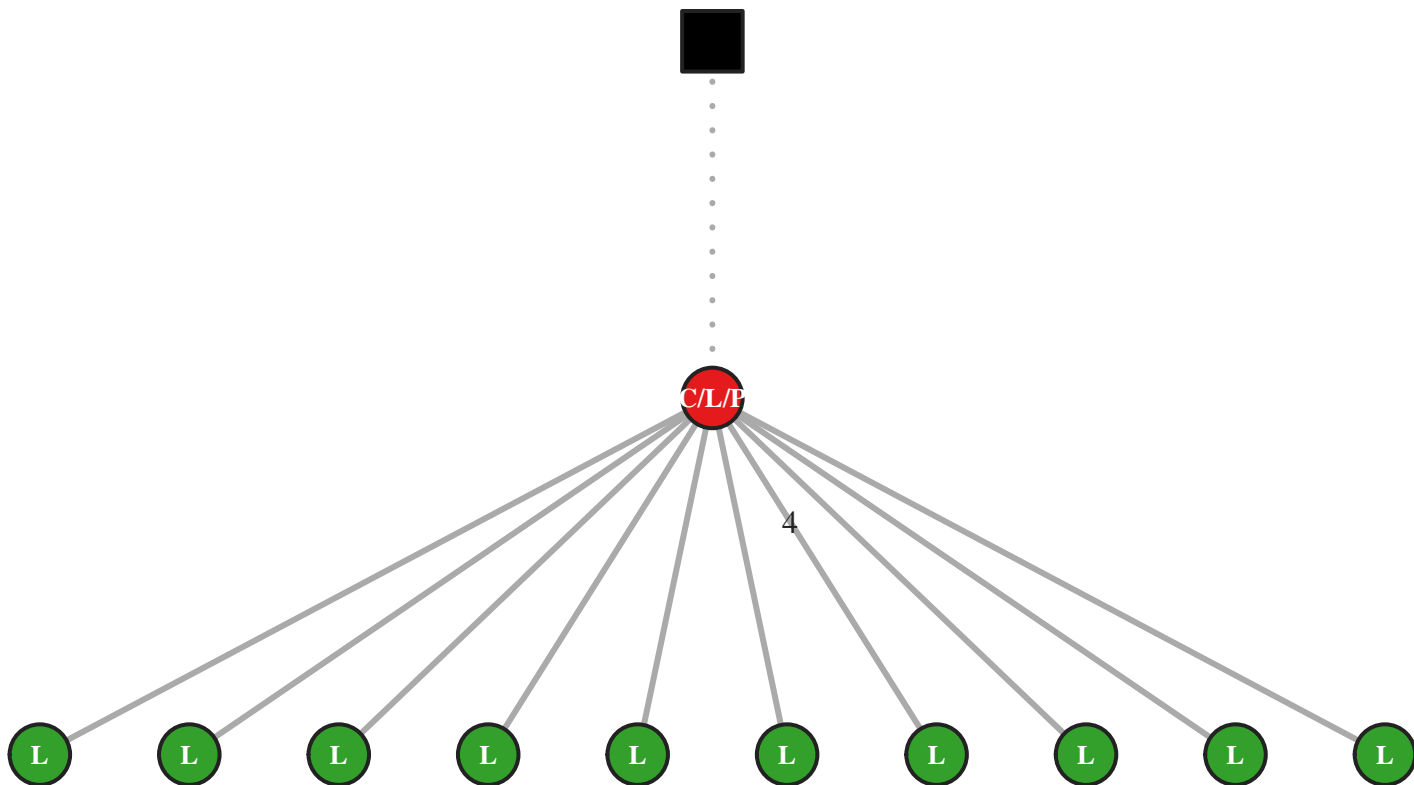
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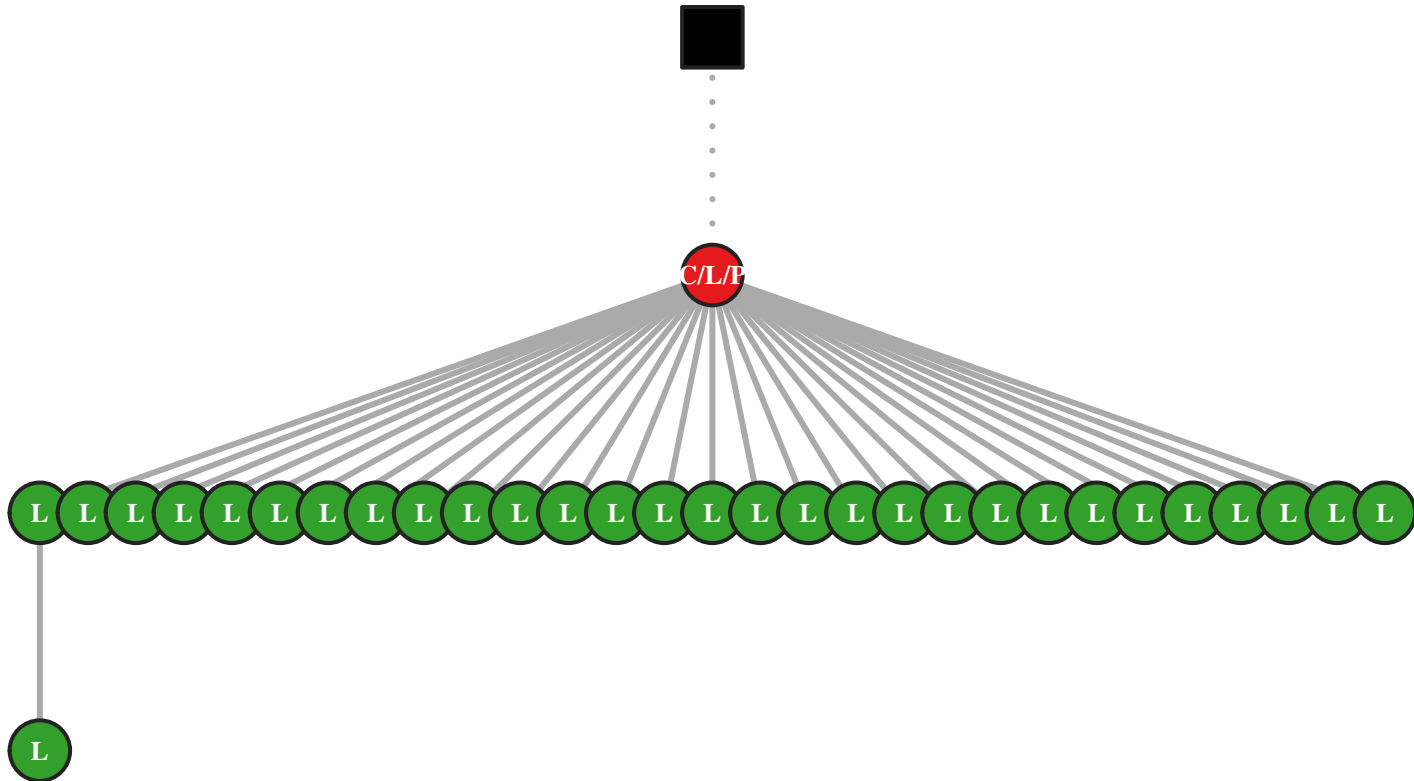
M5 IgA IGHV4-61/J4 42bp (49018)



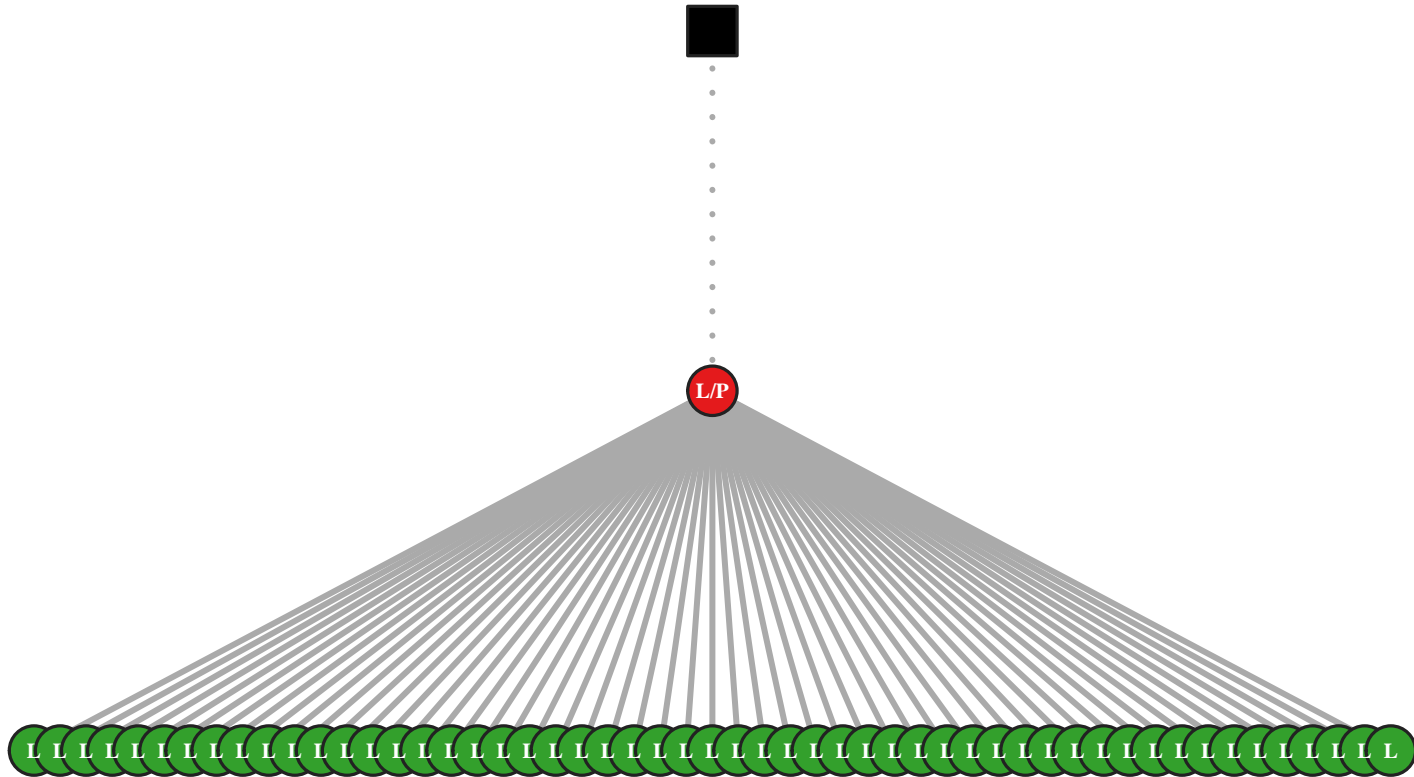
M5 IgA IGHV4-61/J4 45bp (12783)



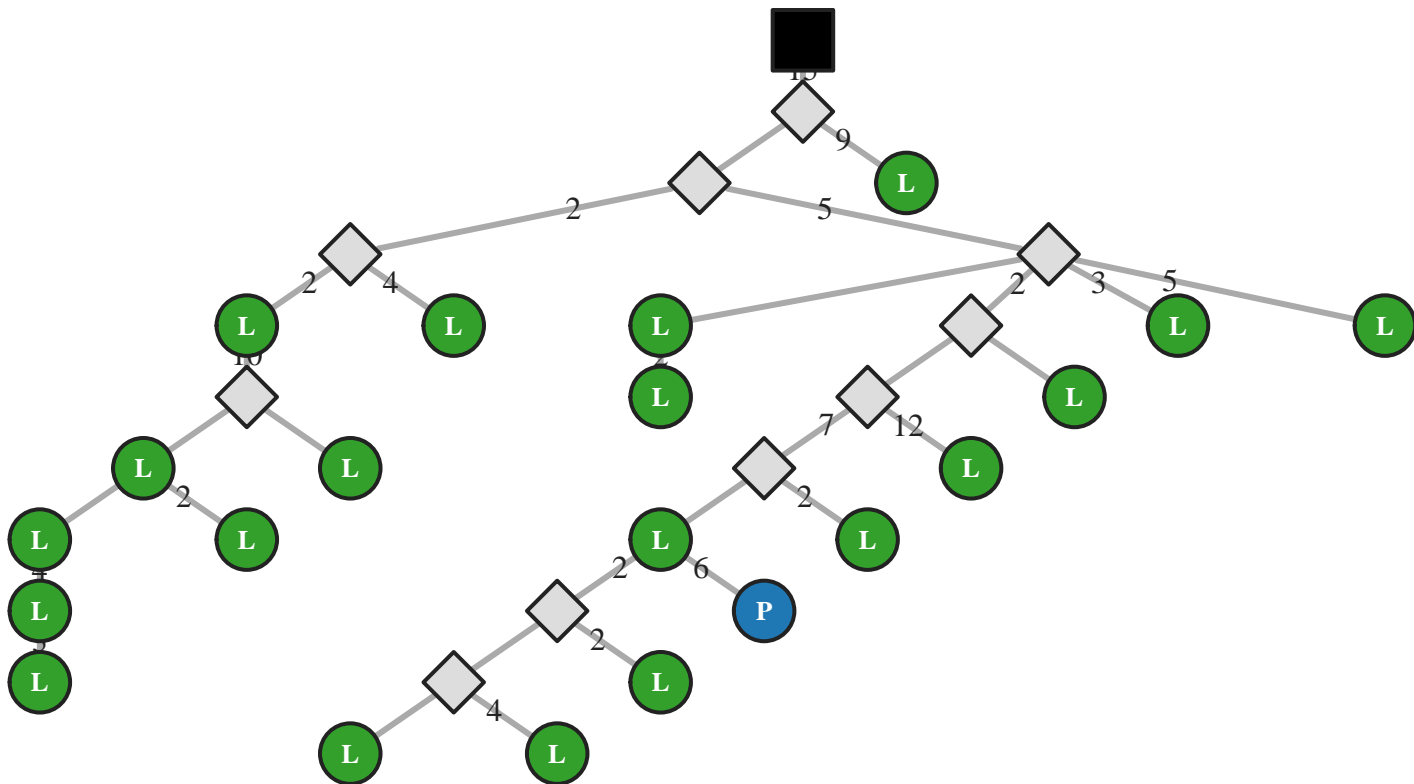
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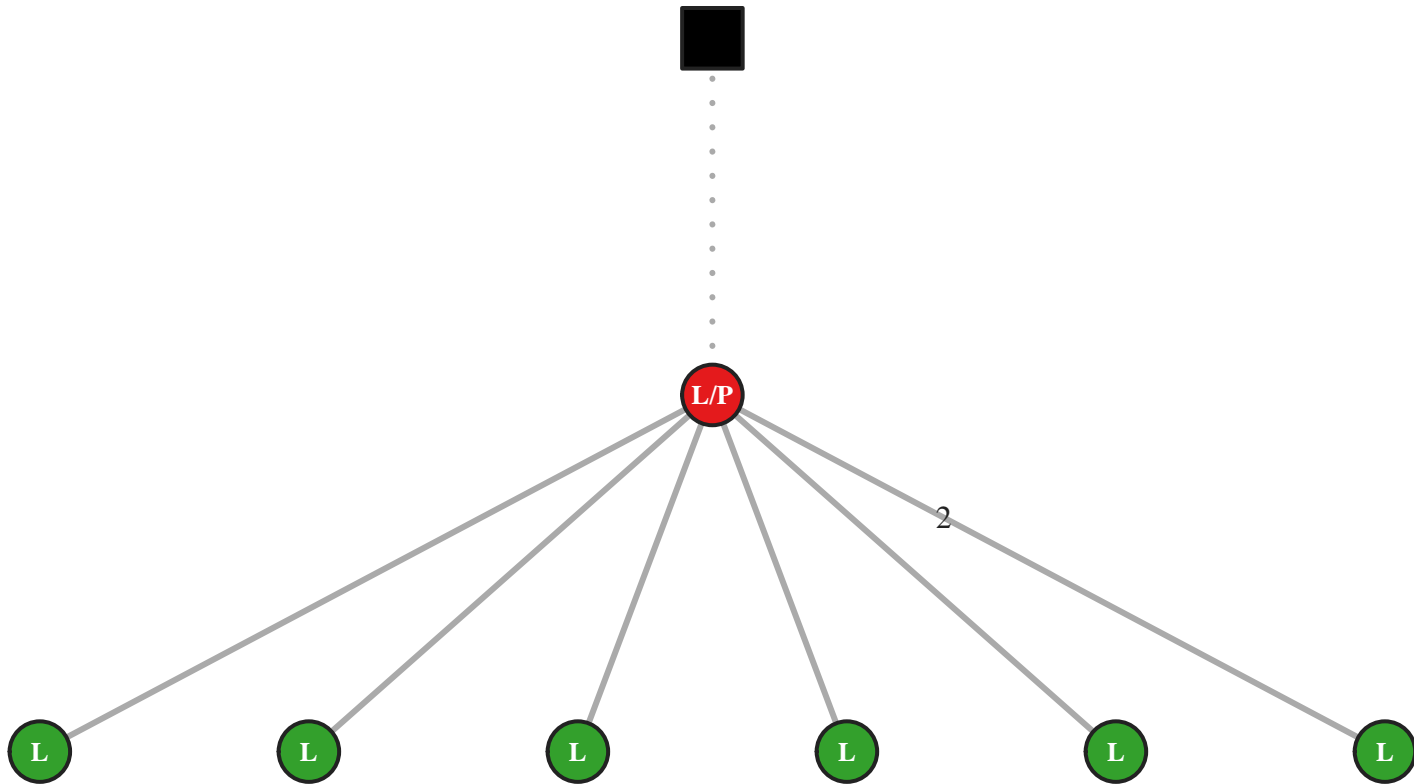
M5 IgG IGHV4-61/J4 45bp (28306)



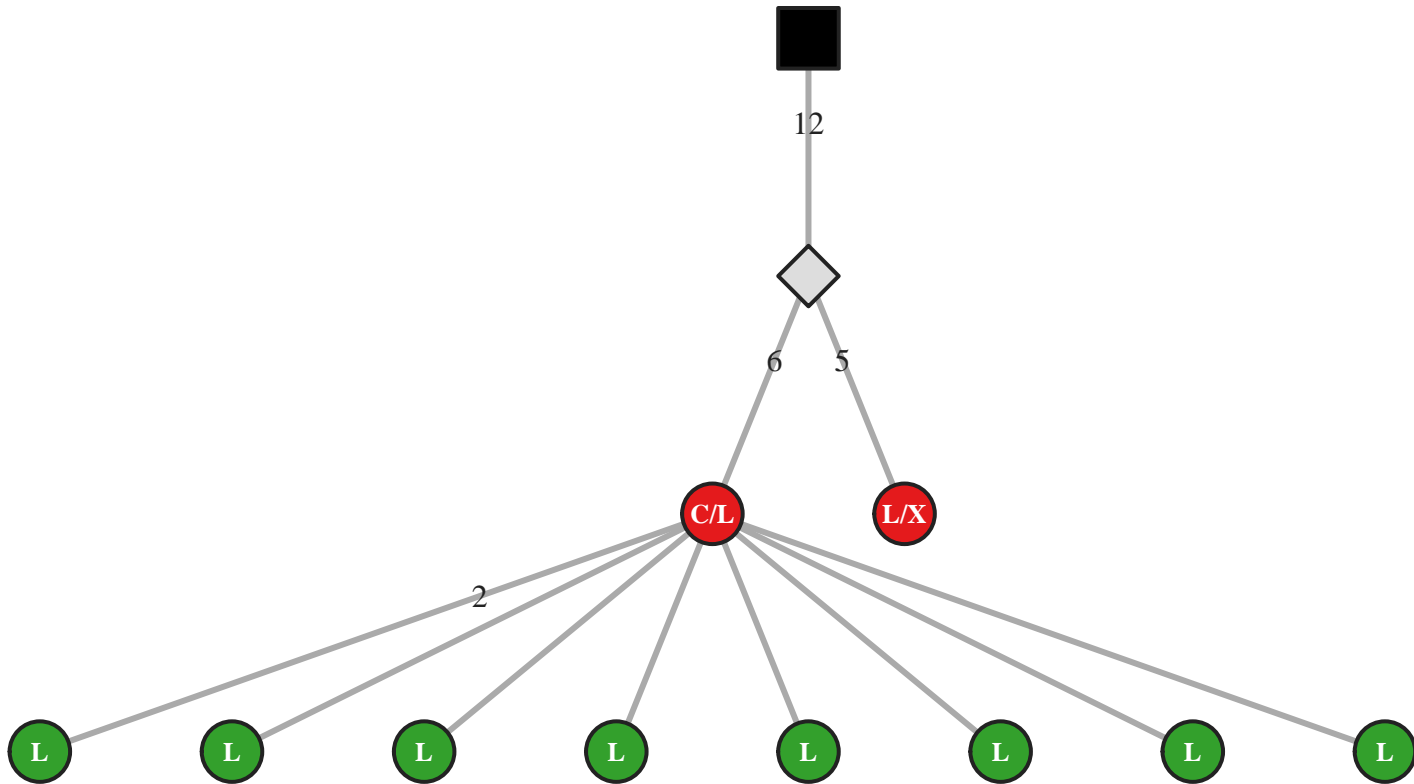
M5 IgG IGHV4-61/J4 45bp (28321)



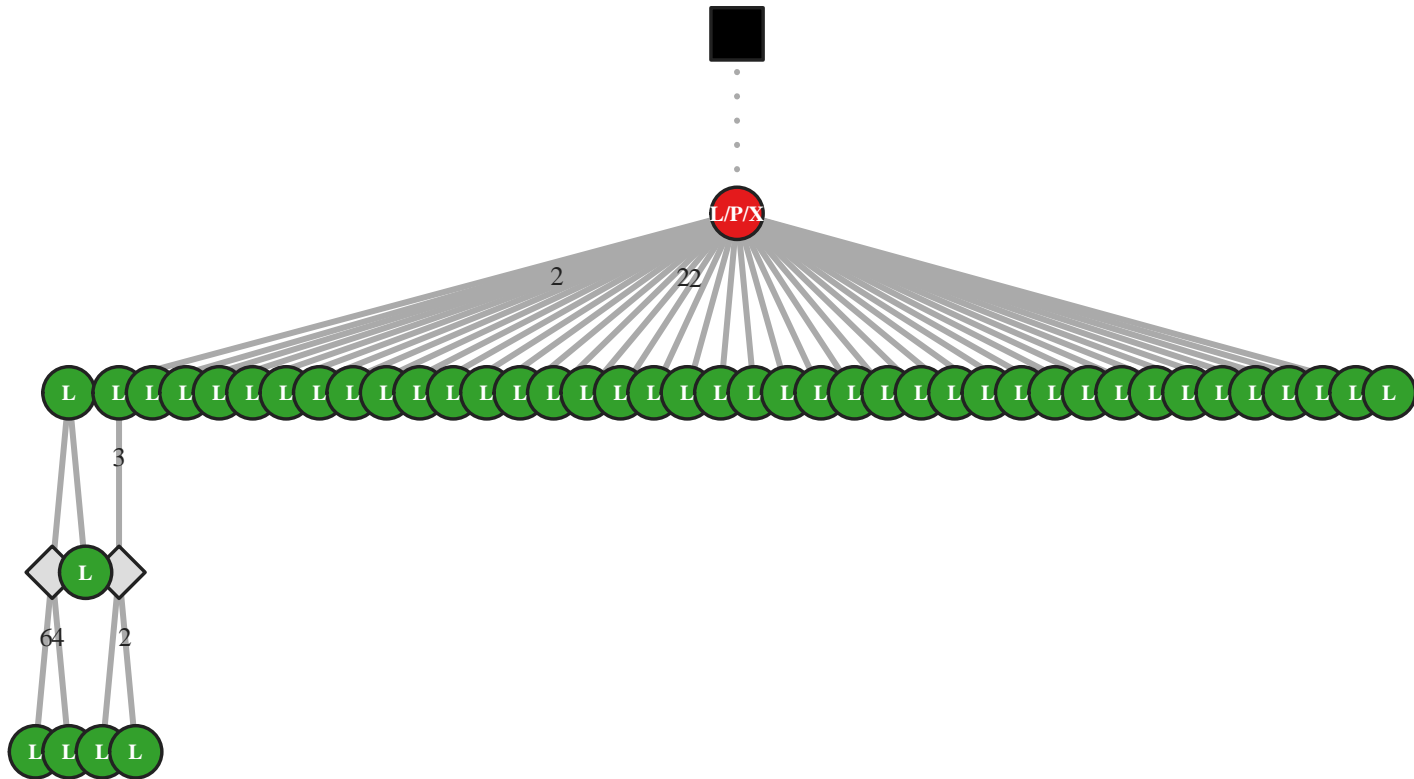
M5 IgG IGHV4-61/J4 45bp (28368)



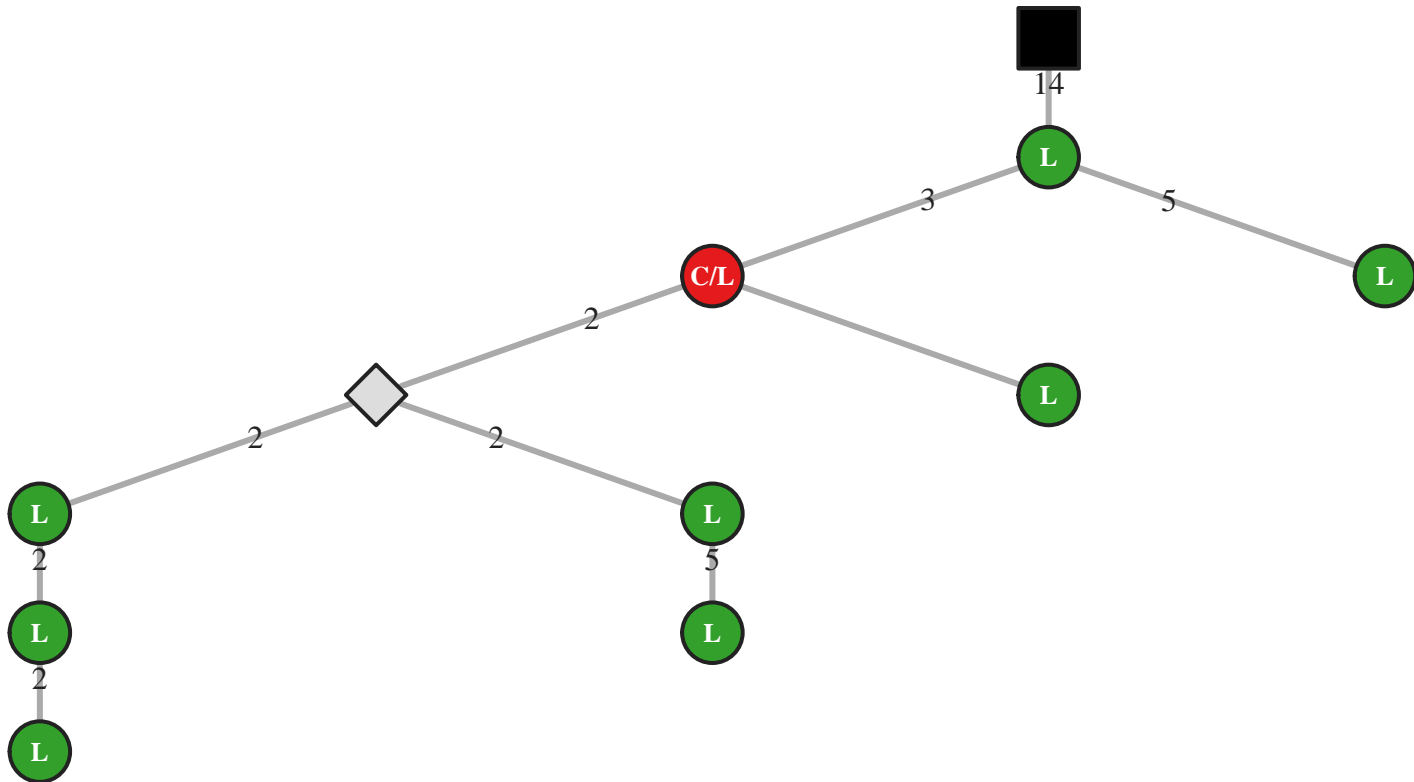
M5 IgG IGHV4-61/J4 45bp (28380)



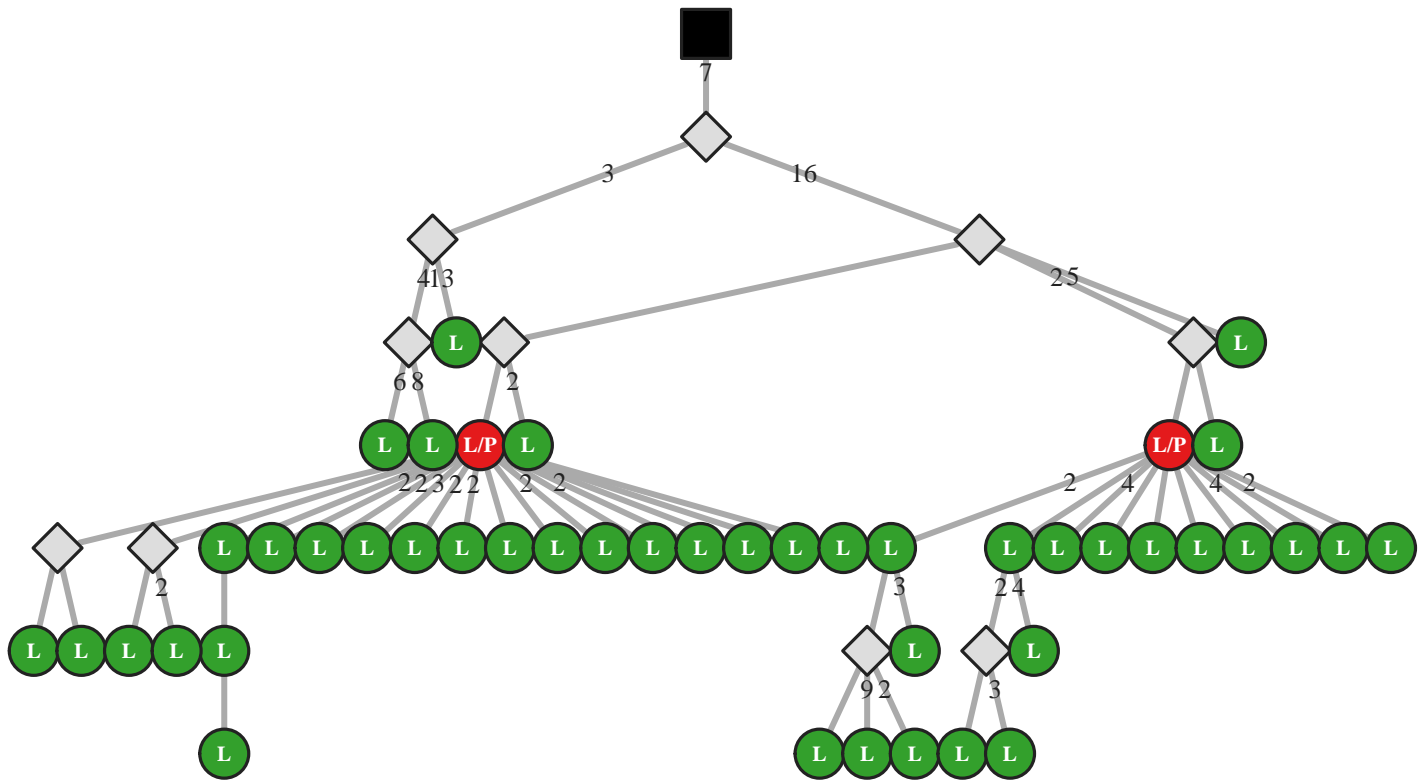
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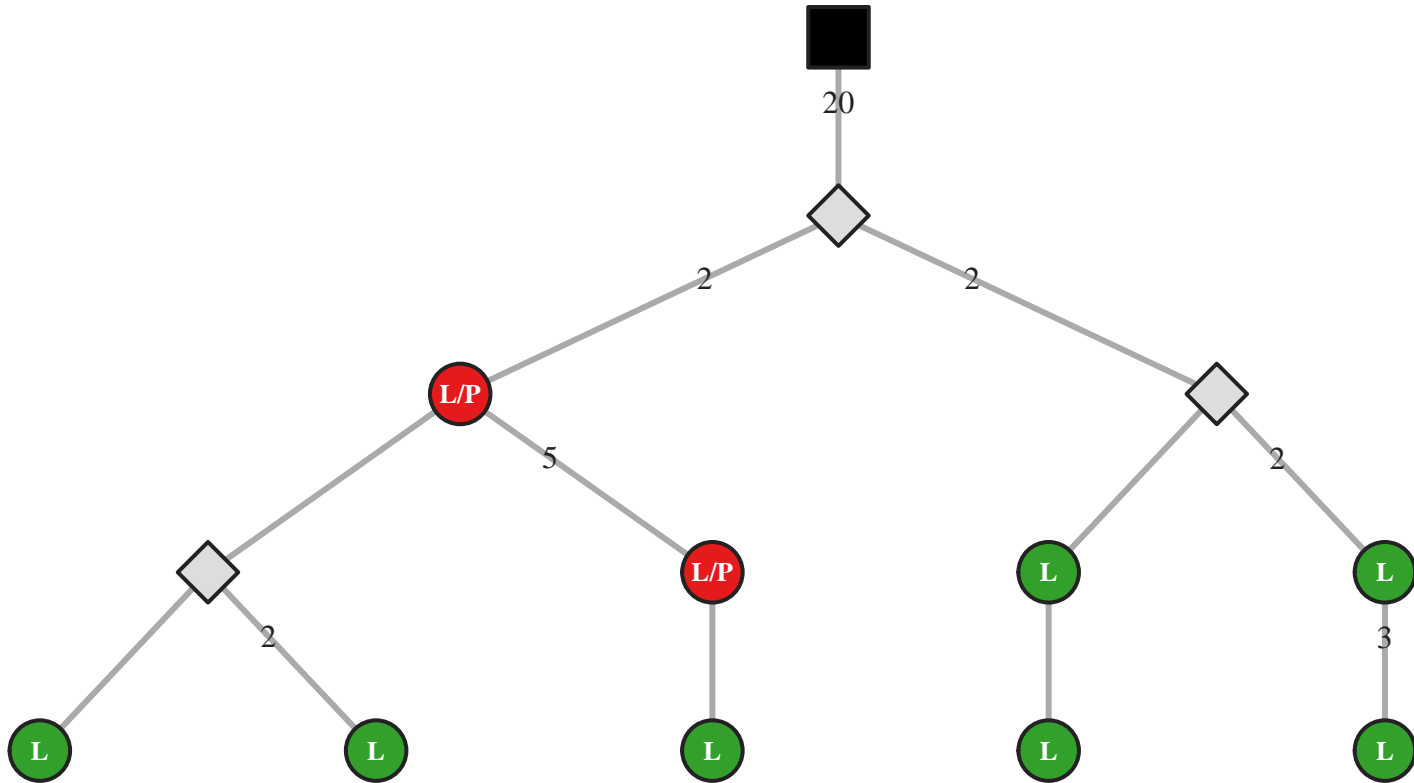
M5 IgG IGHV4-61/J4 48bp (19469)



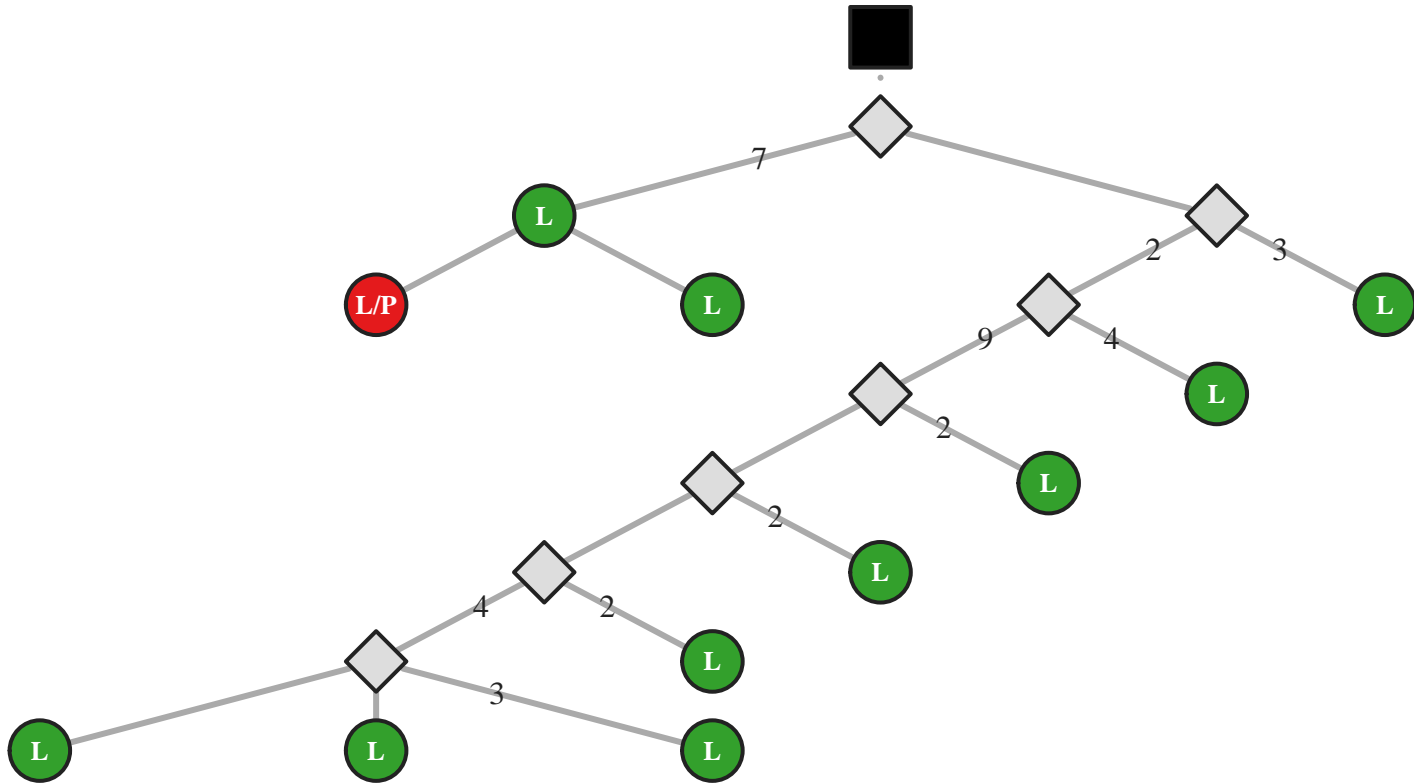
M5 IgG IGHV4-61/J4 48bp (19509)



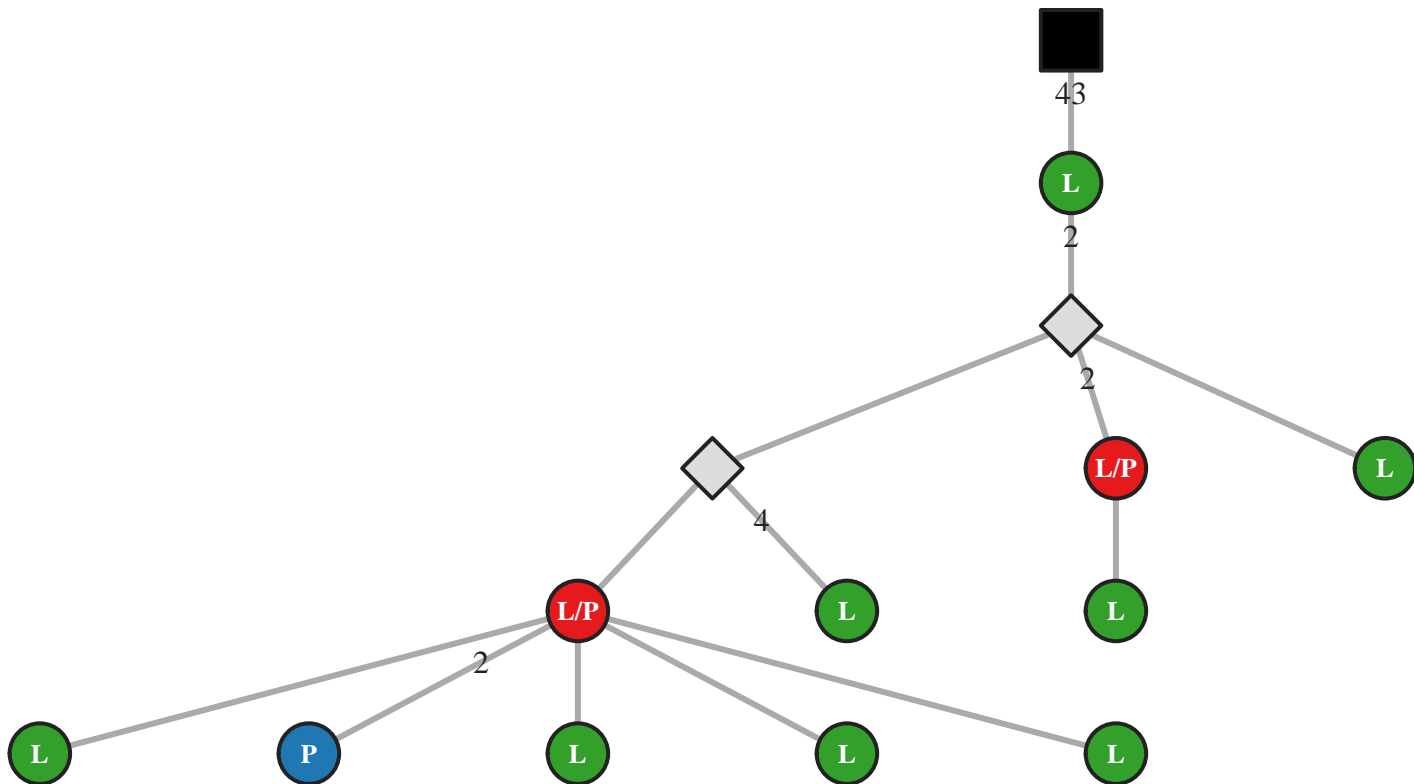
M5 IgG IGHV4-61/J4 54bp (28398)



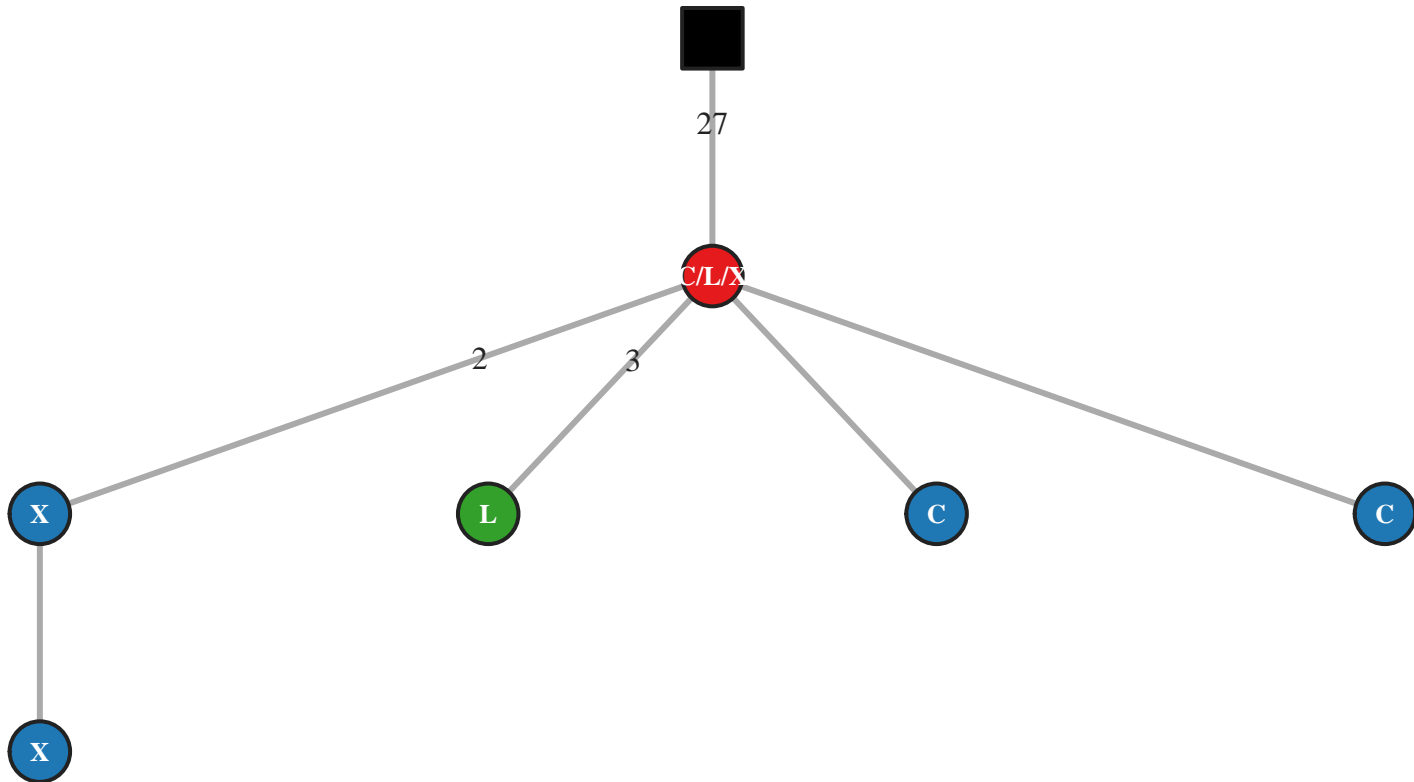
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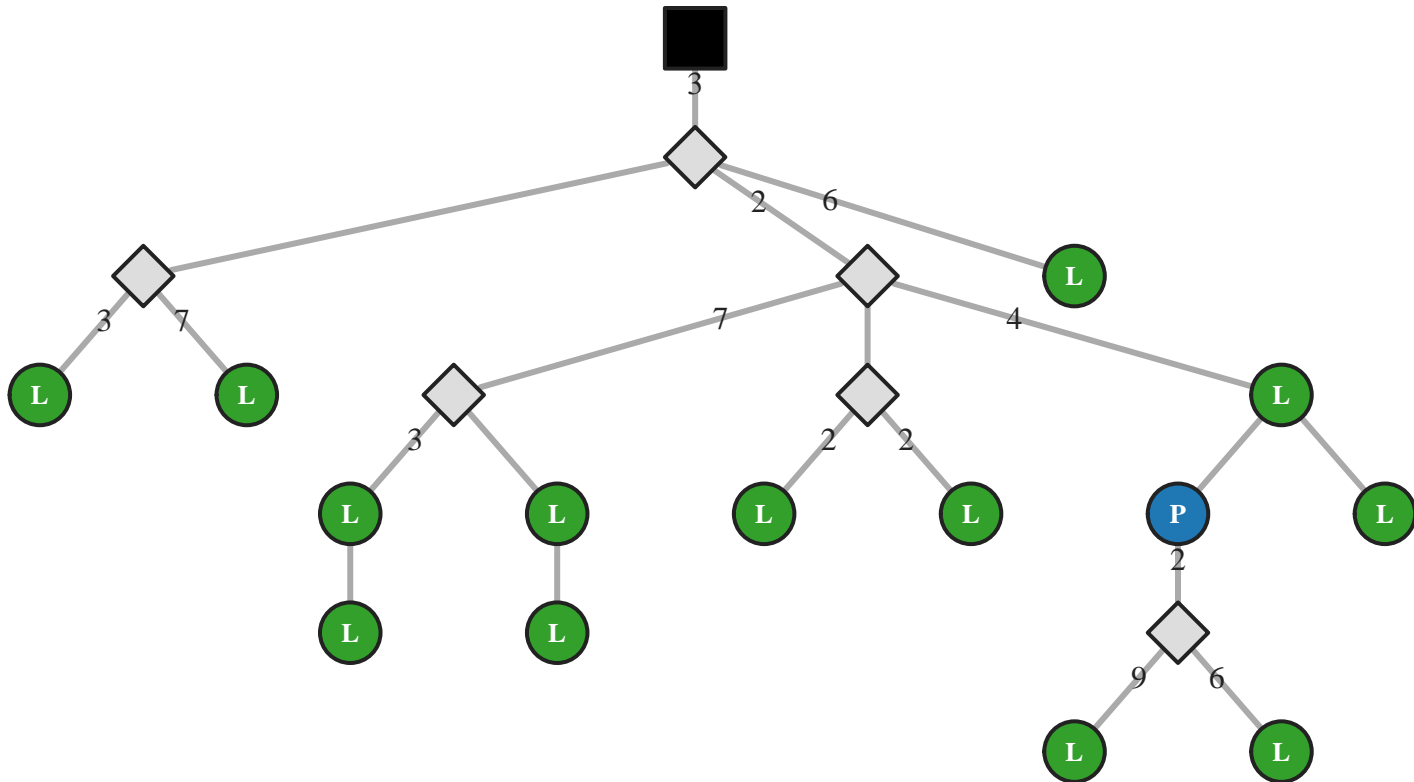
M5 IgG IGHV4-61/J5 57bp (28671)



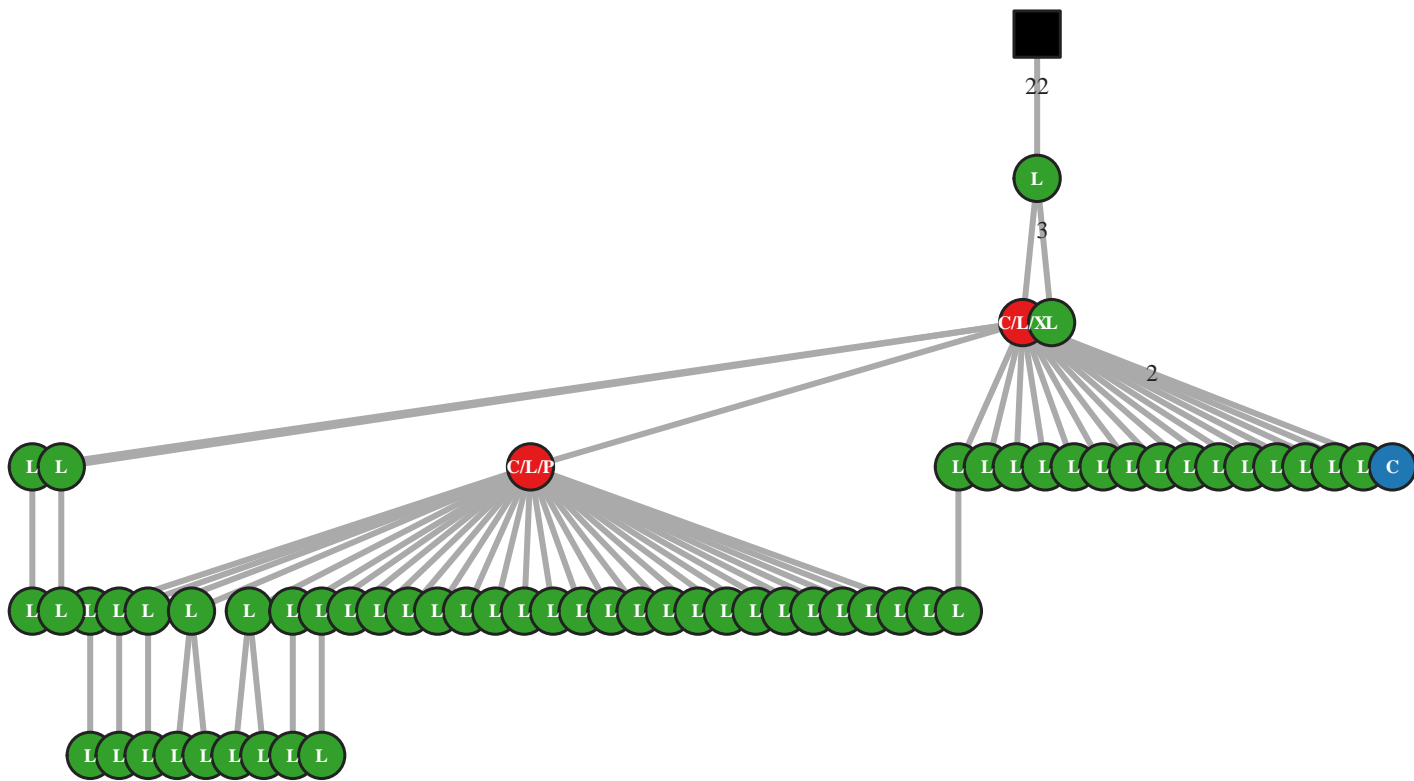
M5 IgG IGHV4-61/J6 66bp (46990)



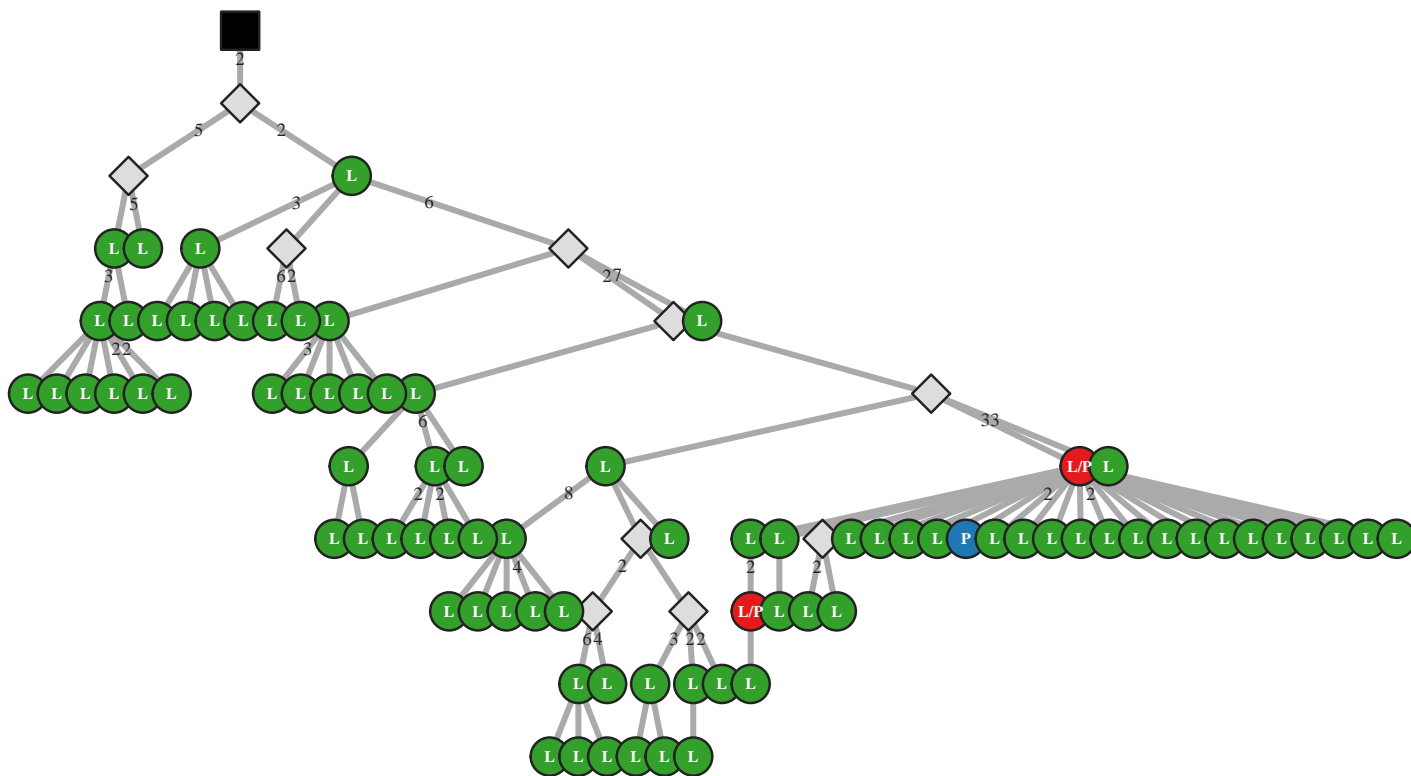
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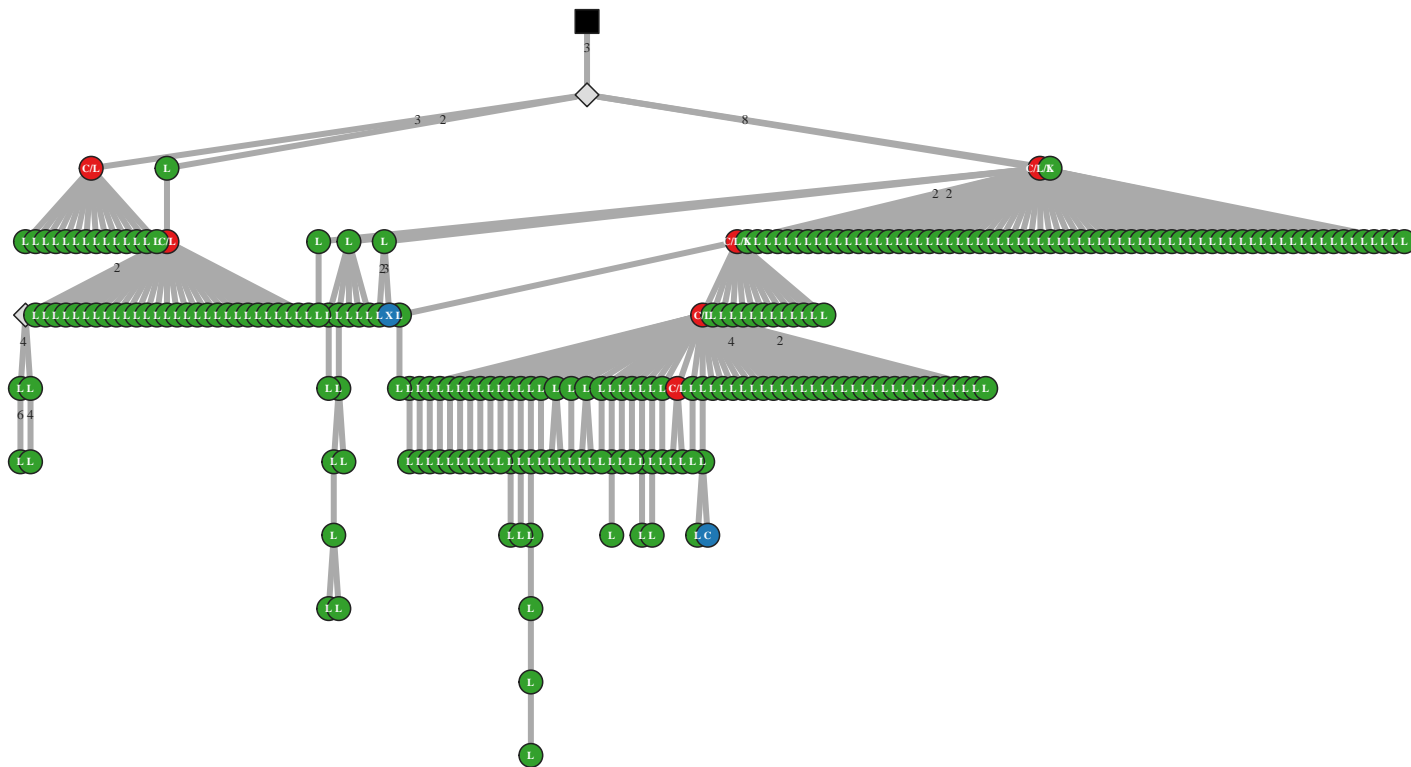
M5 IgG IGHV4-61/J6 72bp (19431)



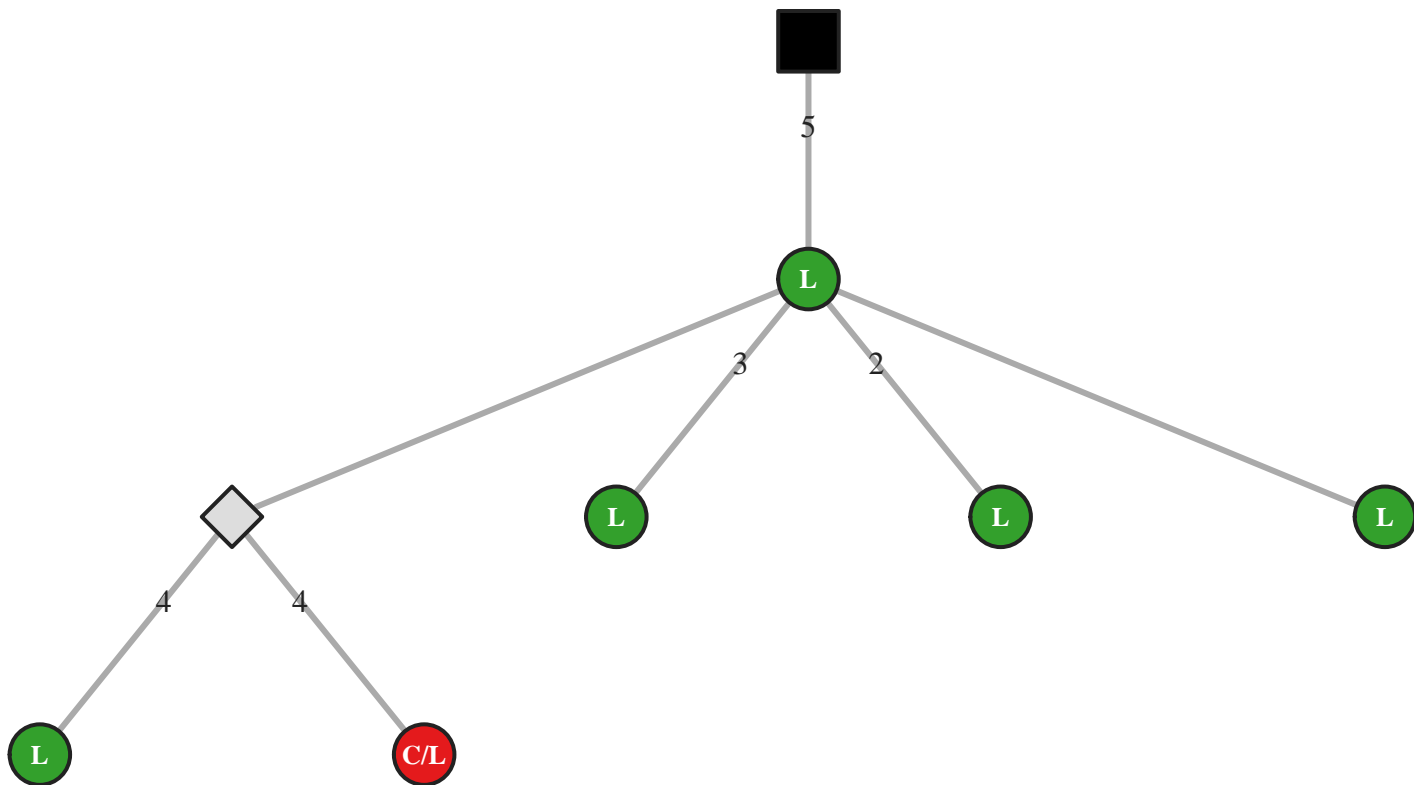
M5 IgG IGHV5-51/J1 42bp (36728)



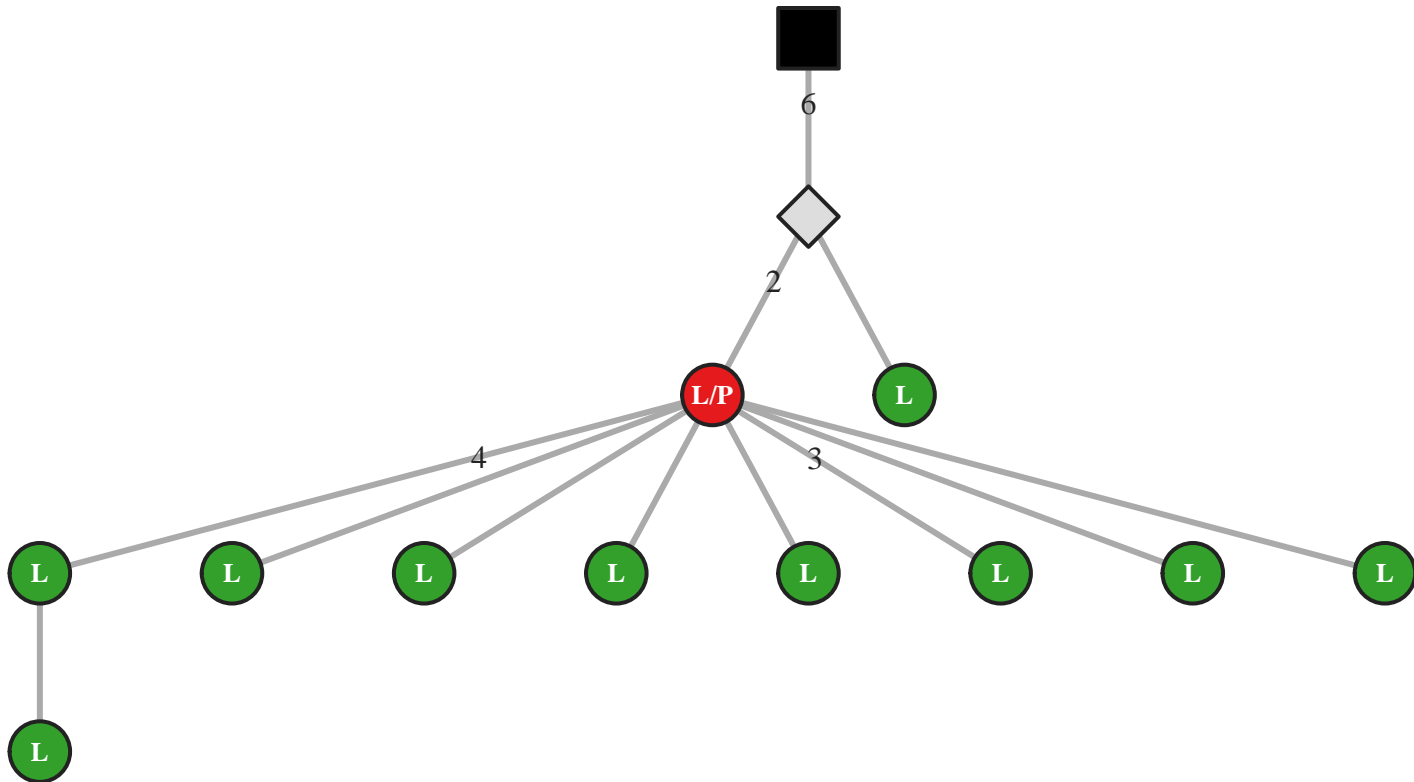
M5 IgG IGHV5-51/J1 63bp (36739)



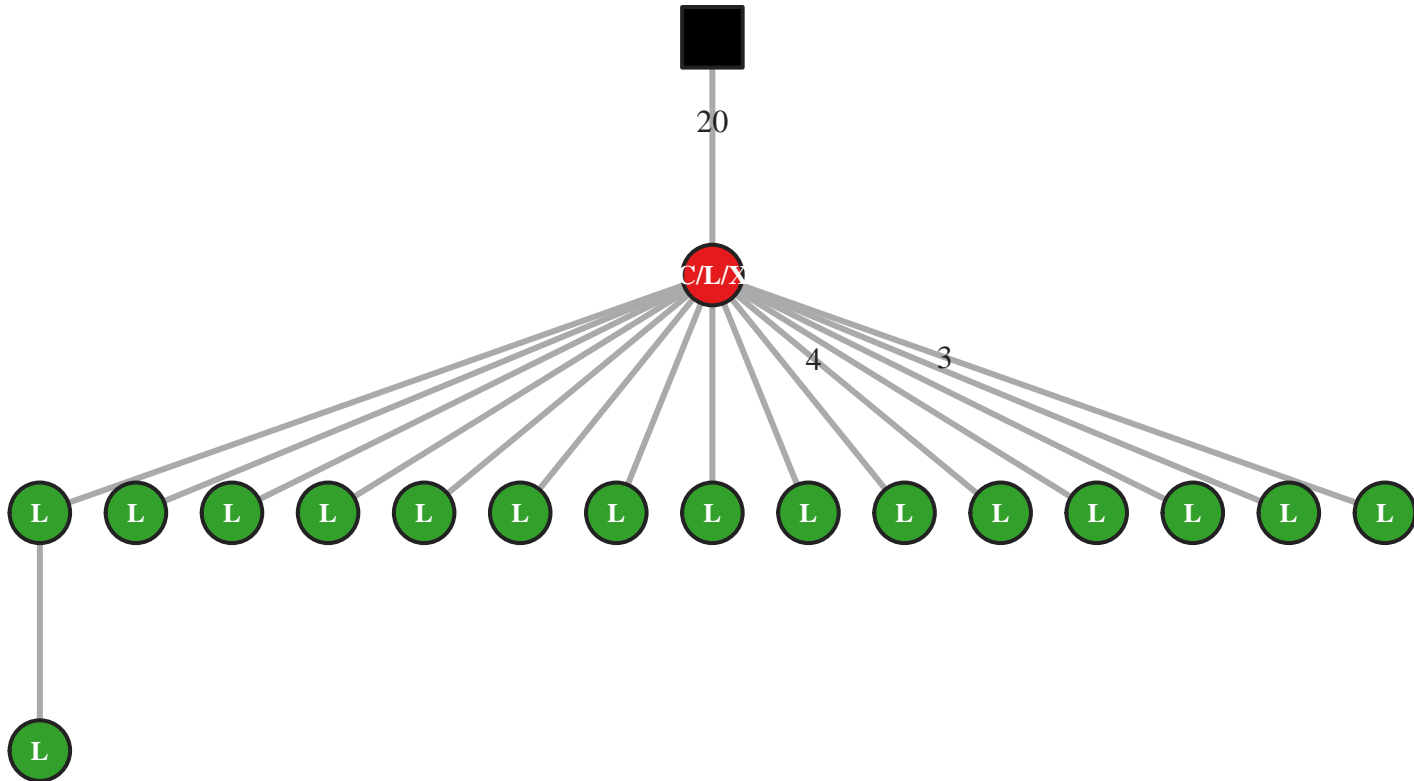
M5 IgG IGHV5-51/J2 45bp (10465)



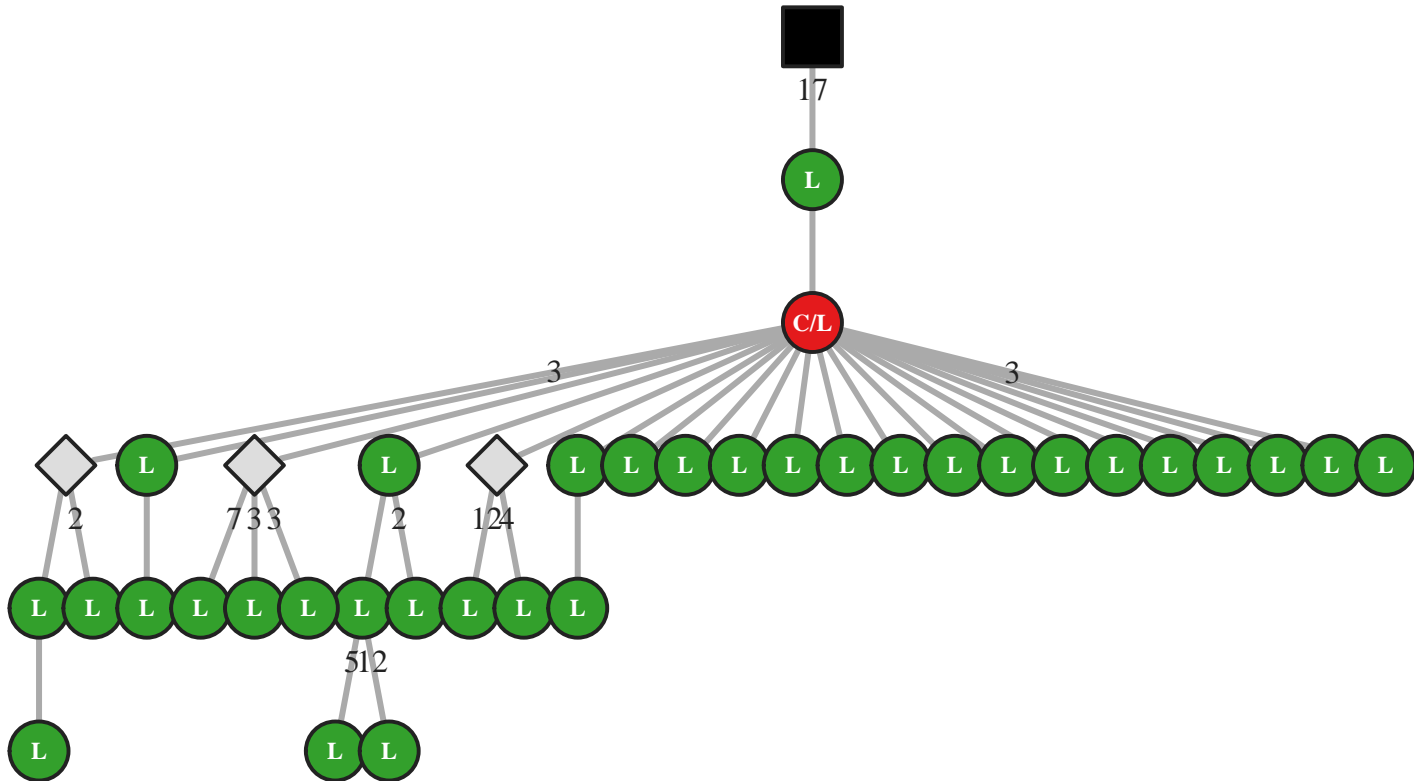
M5 IgG IGHV5-51/J2 54bp (47011)



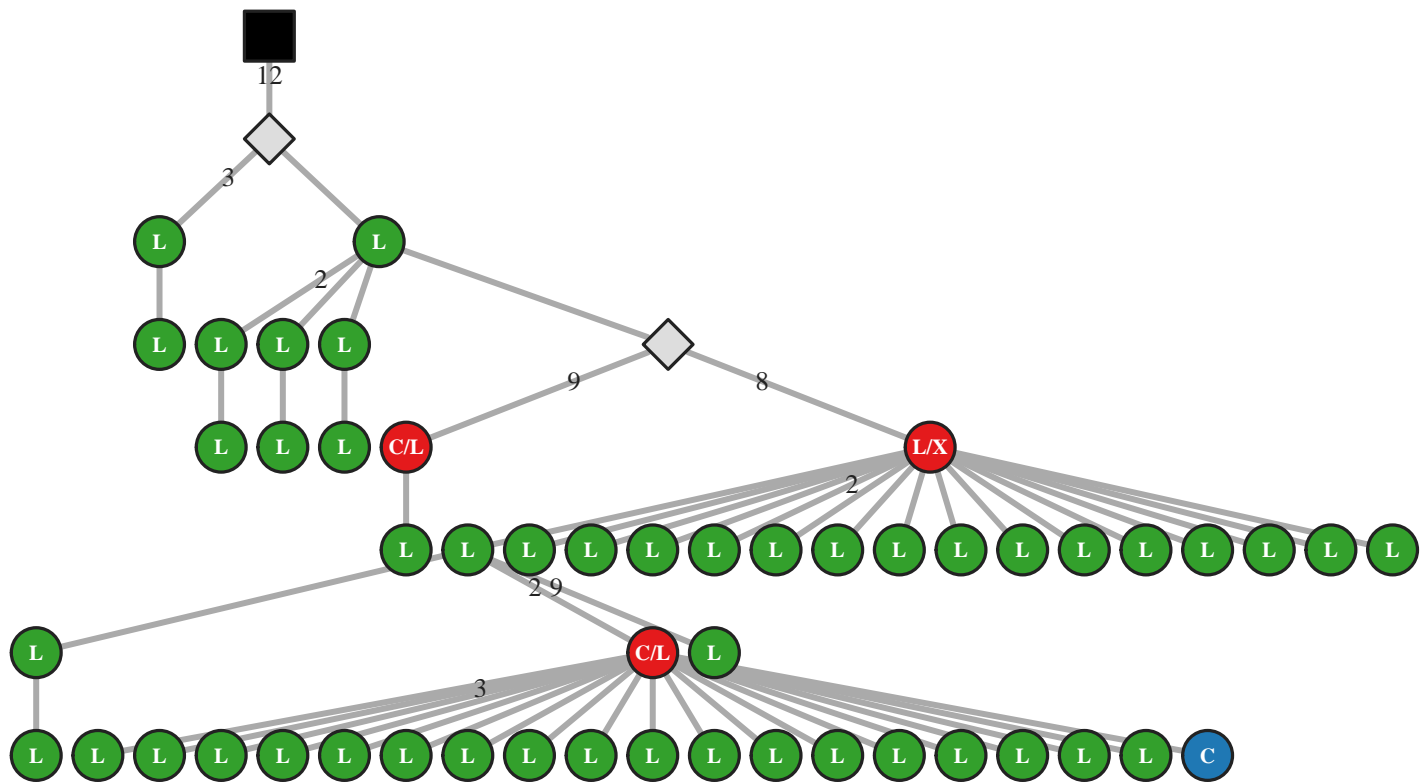
M5 IgG IGHV5-51/J2 66bp (53502)



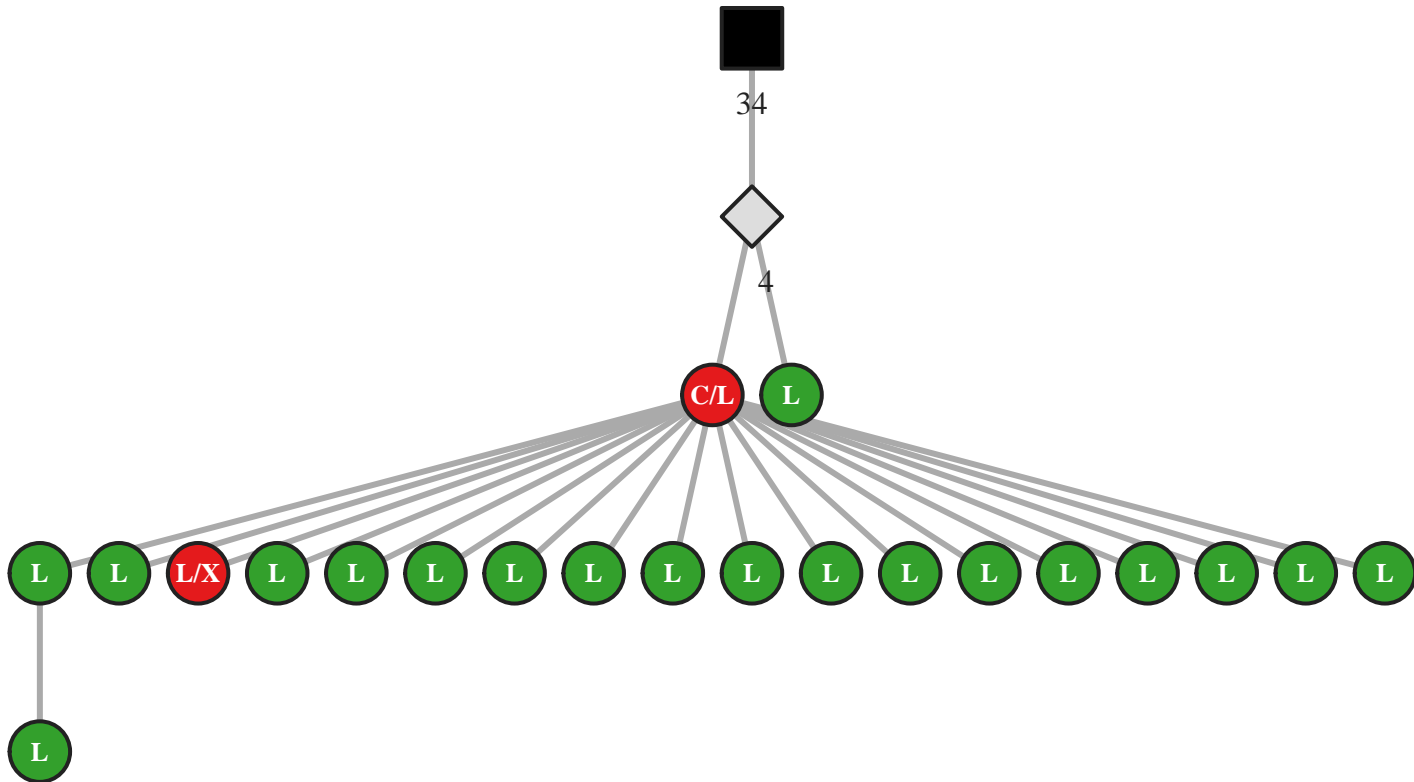
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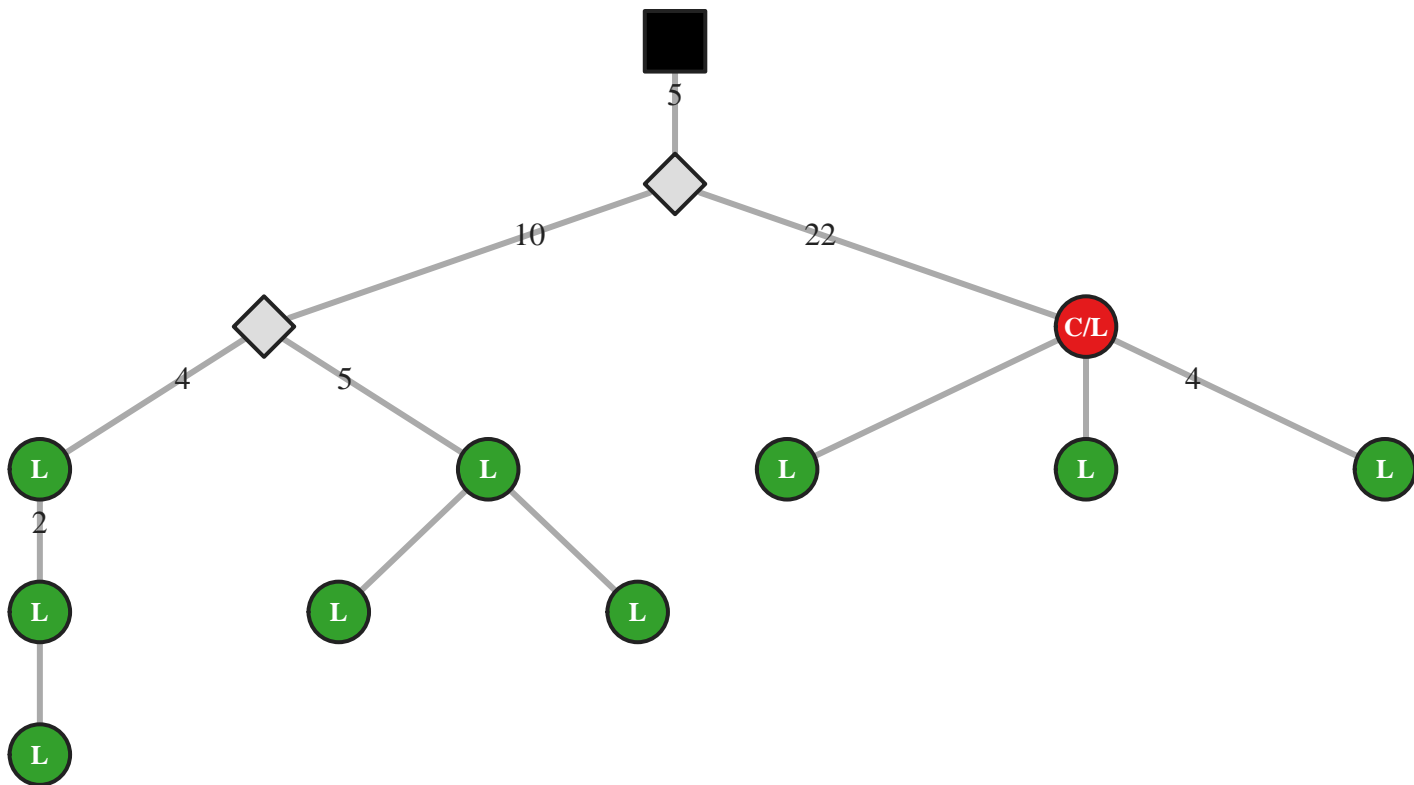
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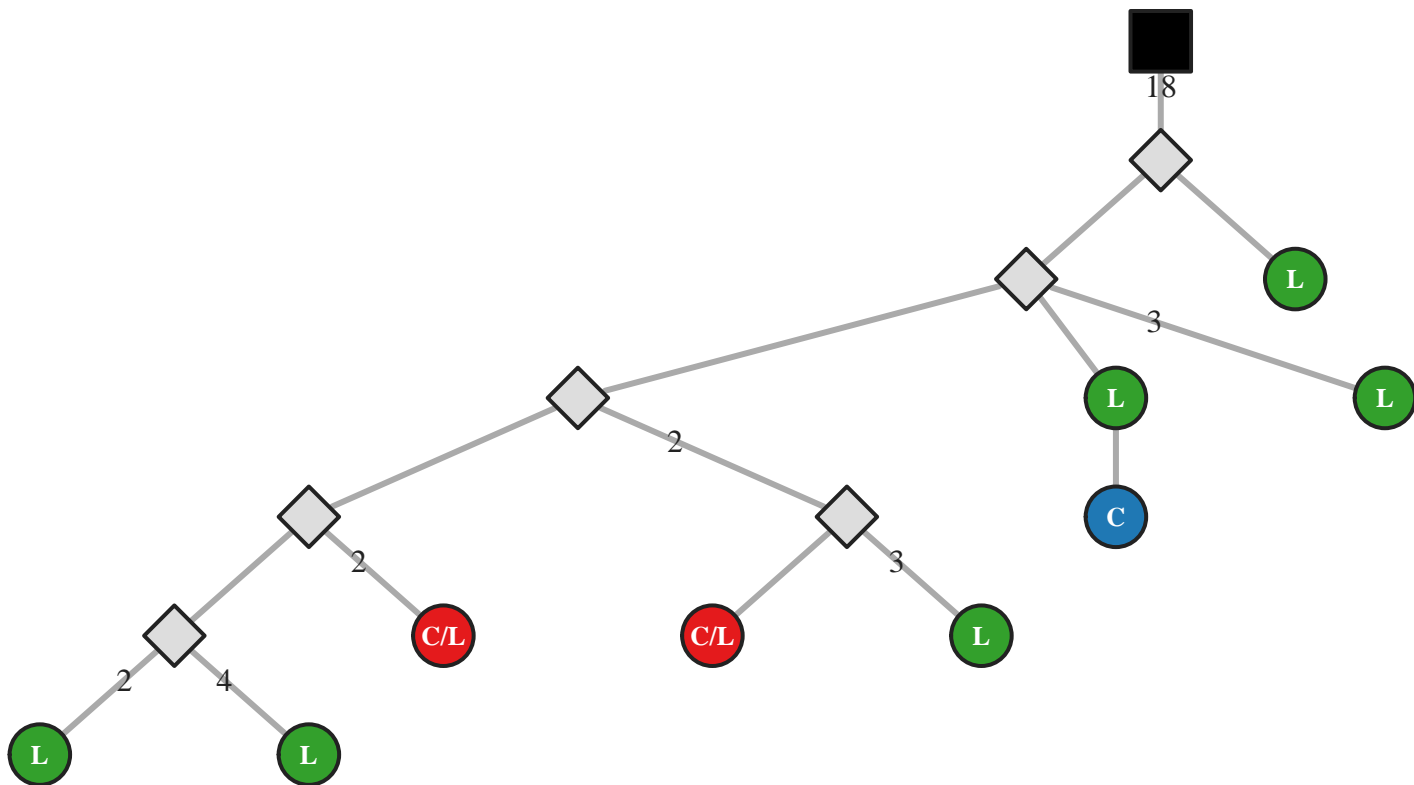
M5 IgG IGHV5-51/J3 45bp (36766)



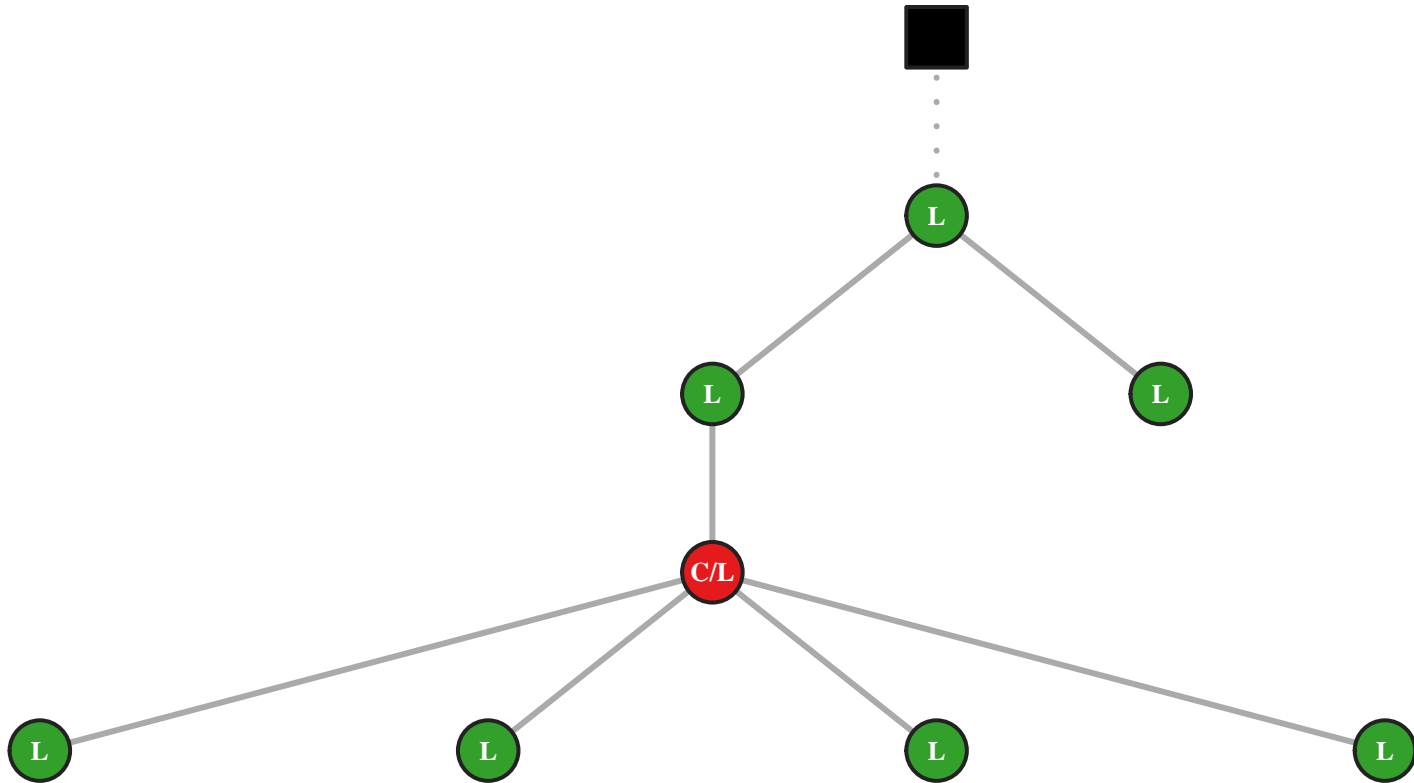
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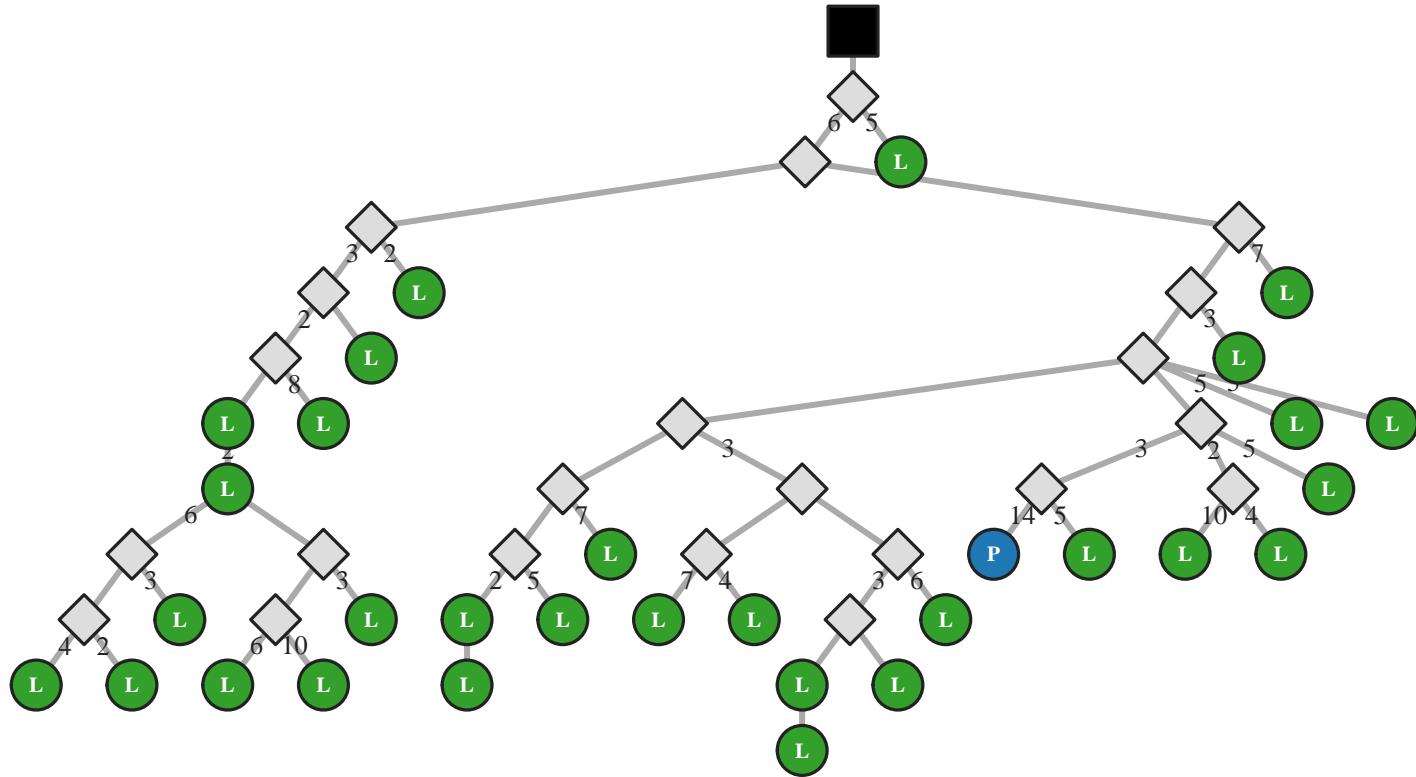
M5 IgG IGHV5-51/J3 45bp (36771)



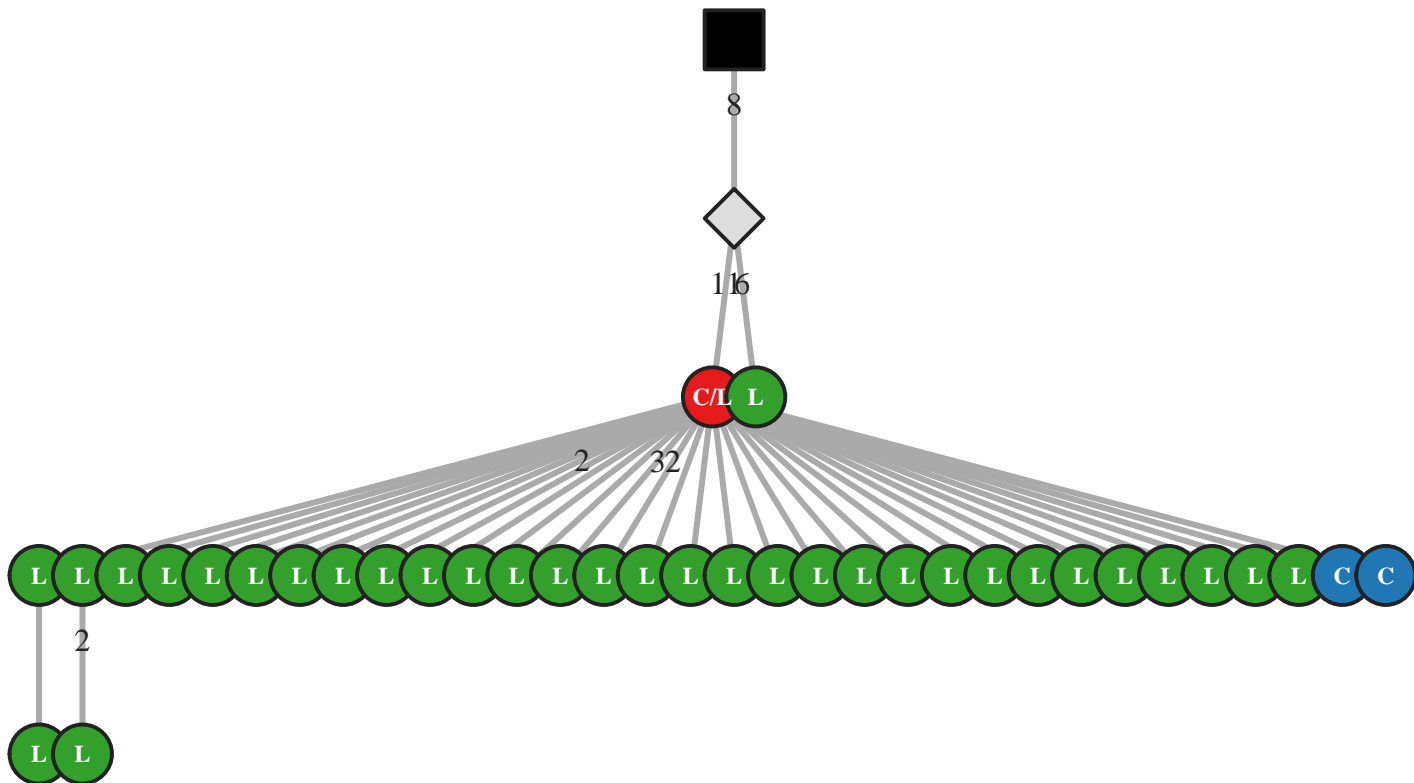
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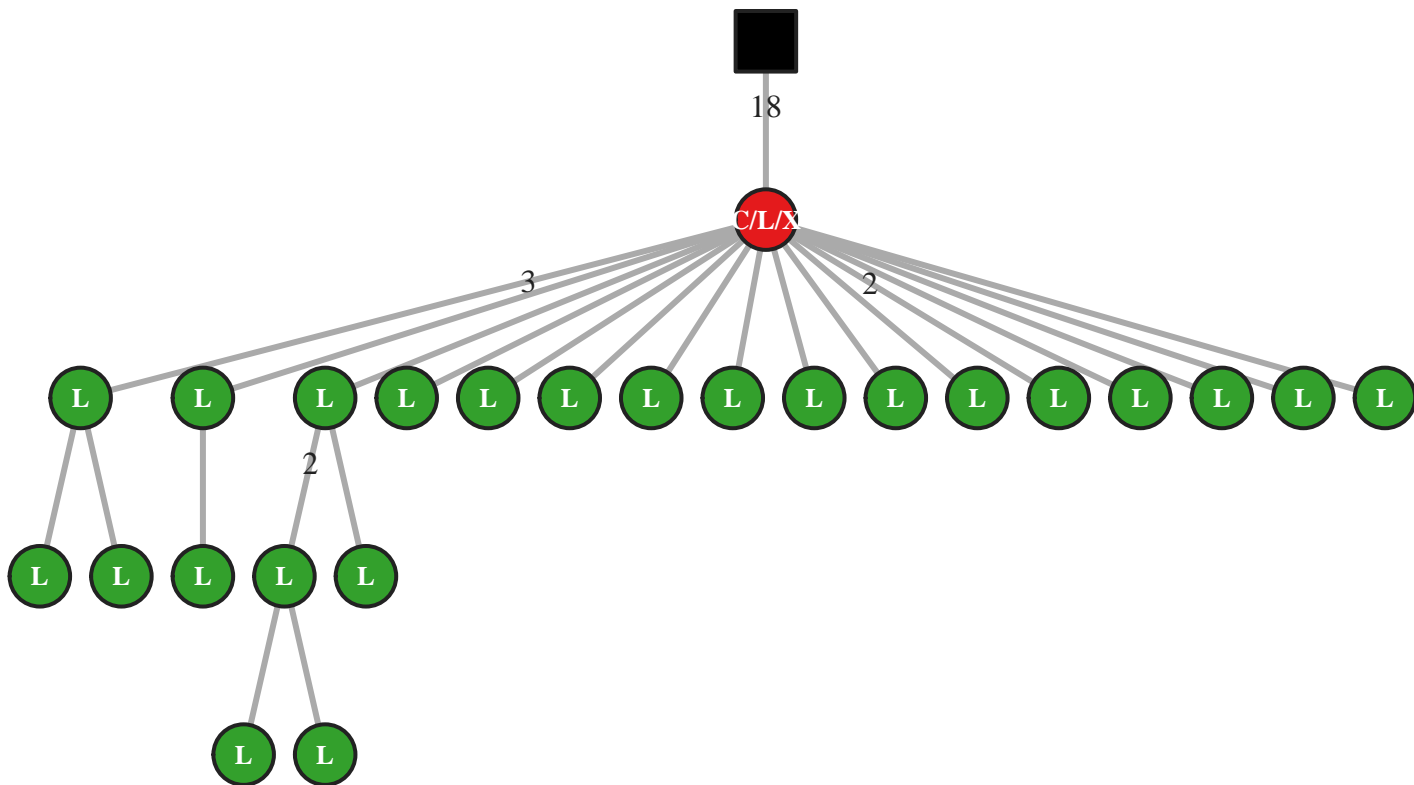
M5 IgG IGHV5-51/J3 48bp (53544)



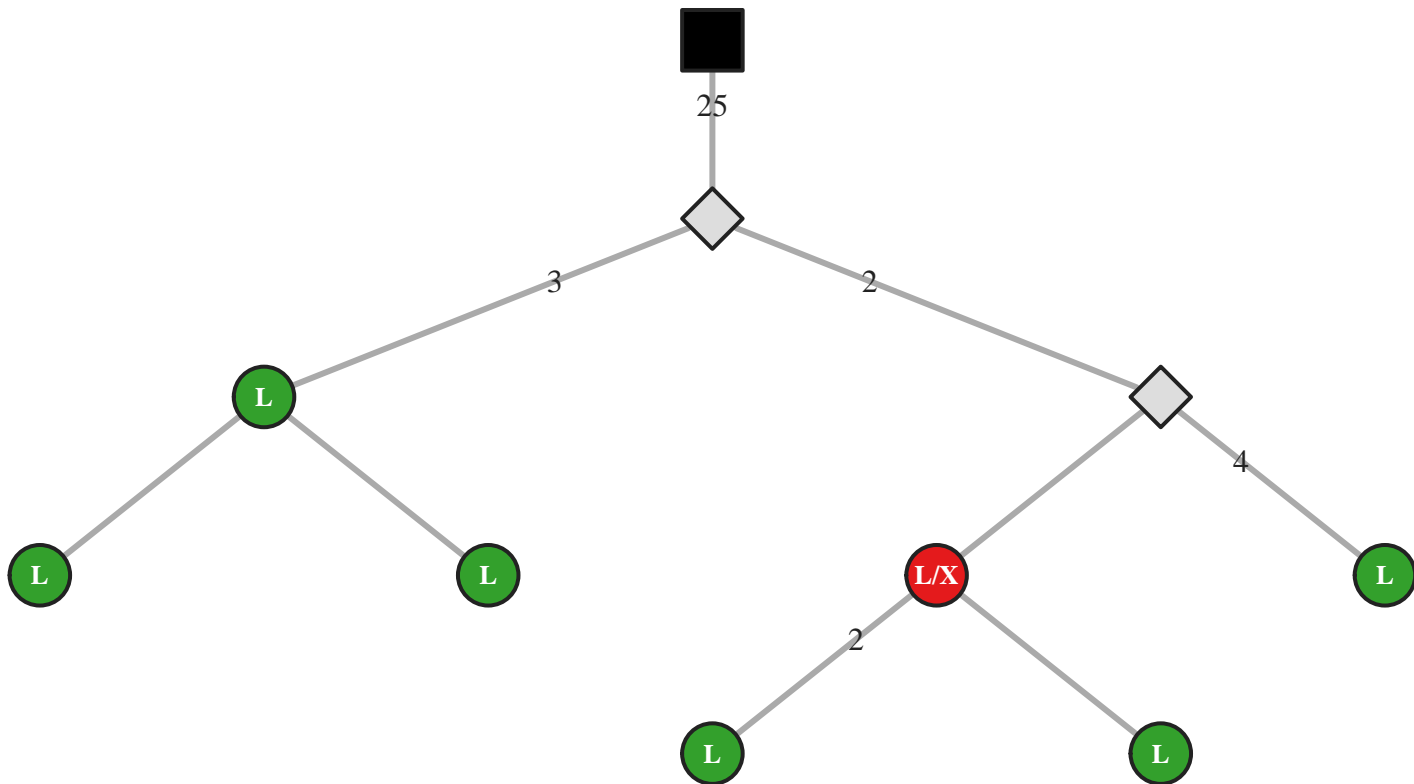
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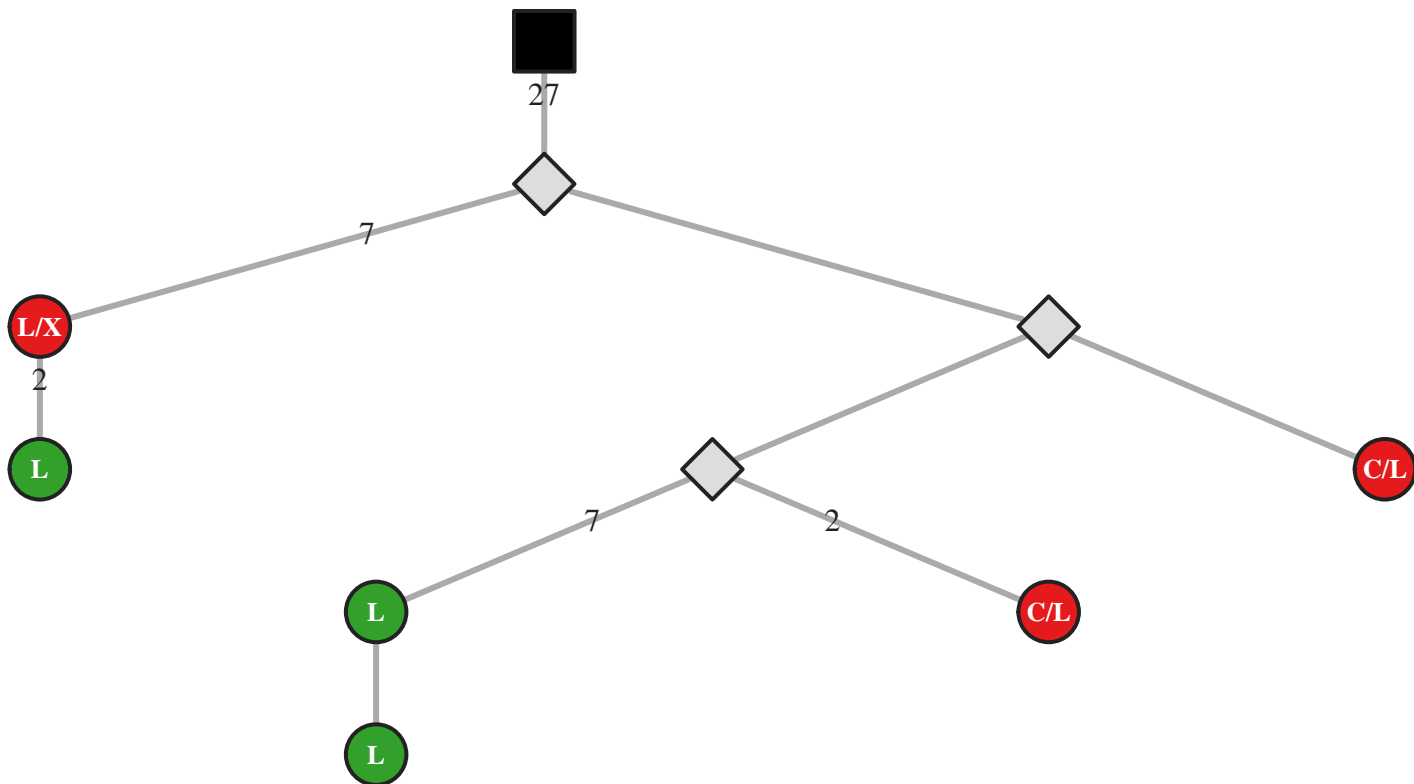
M5 IgG IGHV5-51/J3 48bp (53569)



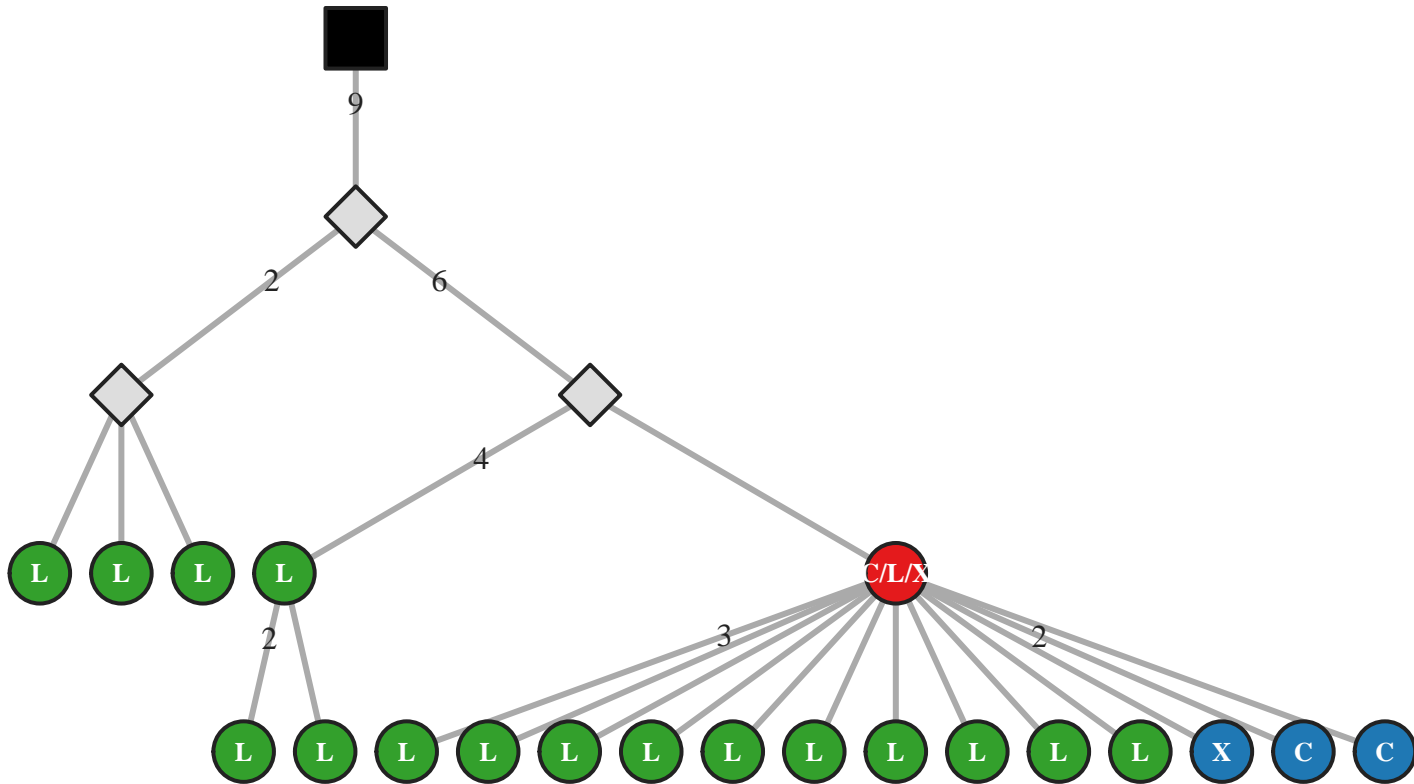
M5 IgG IGHV5-51/J3 66bp (36821)



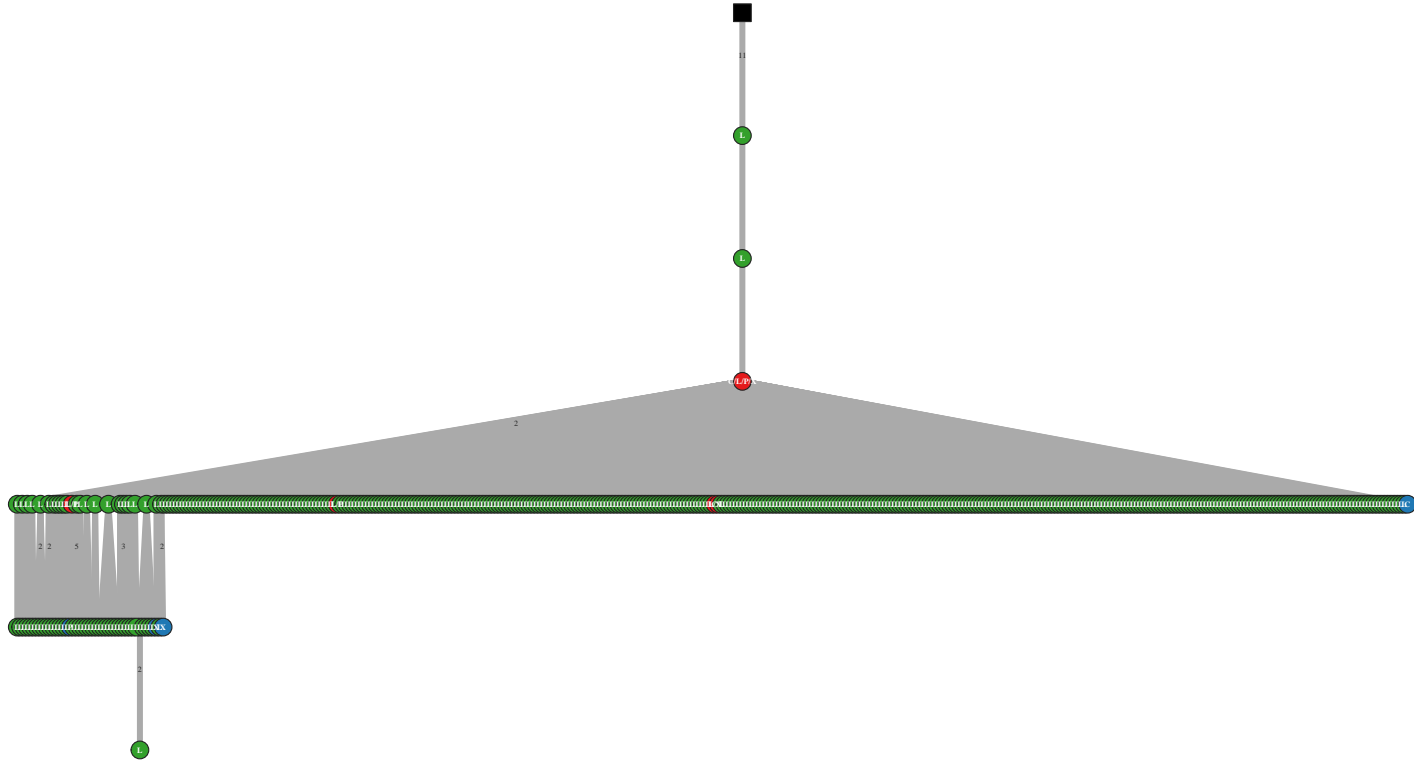
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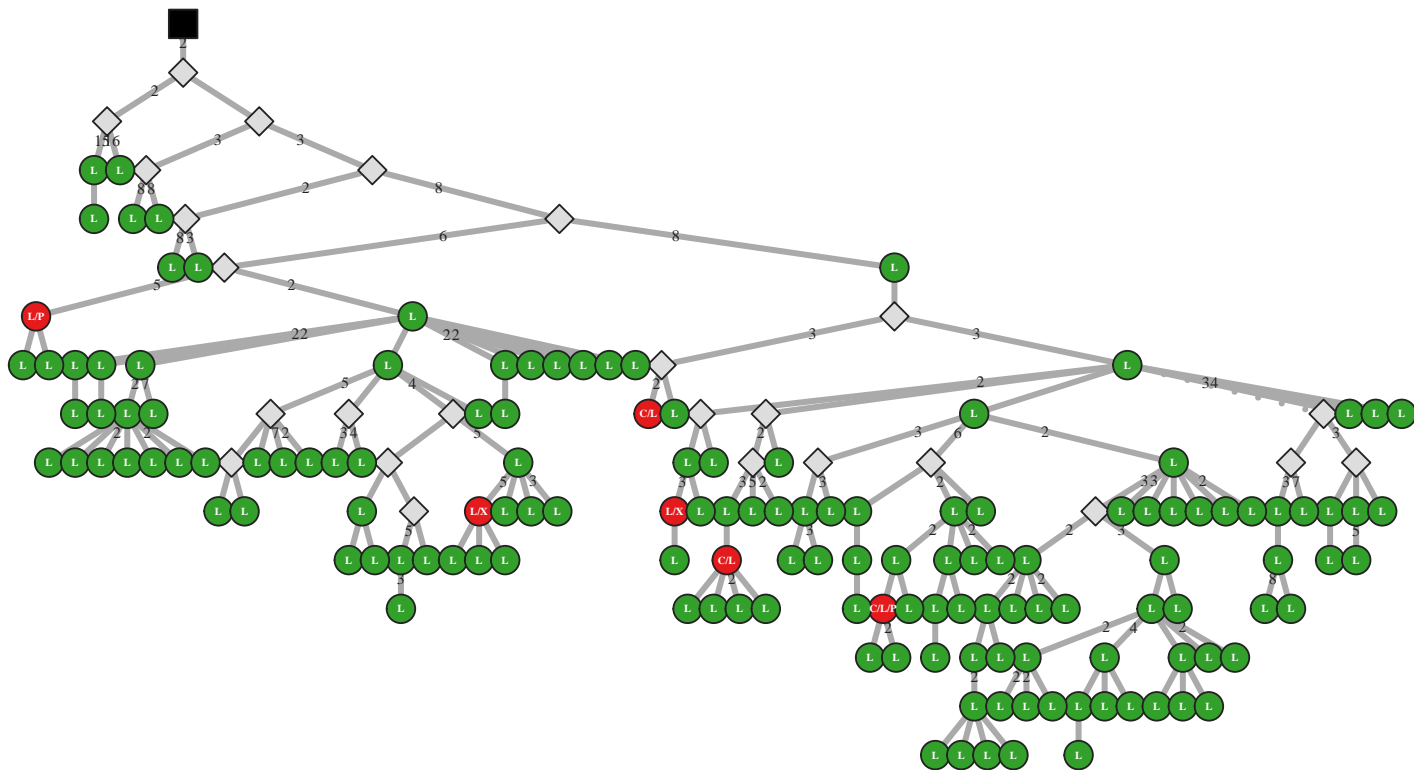
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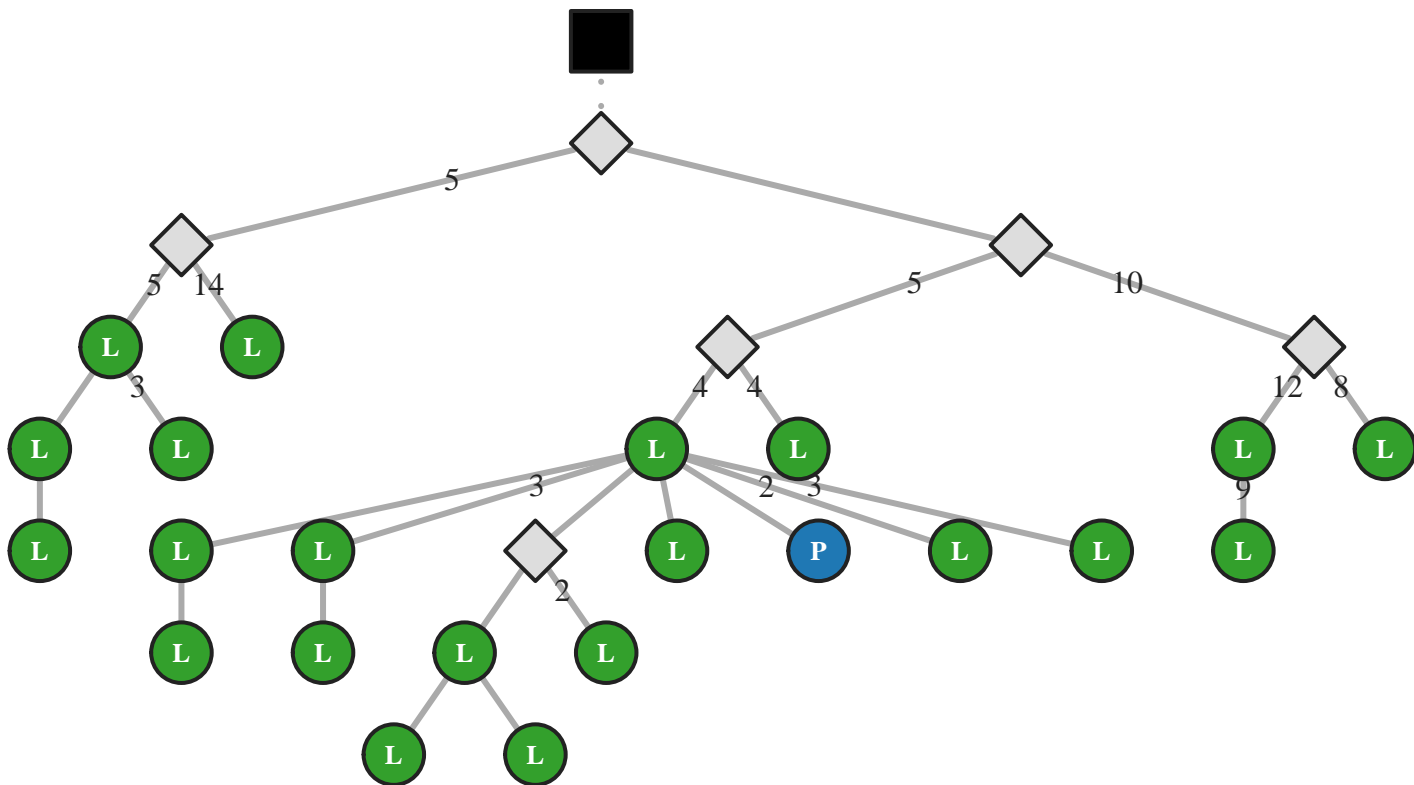
M5 IgG IGHV5-51/J4 33bp (47122)



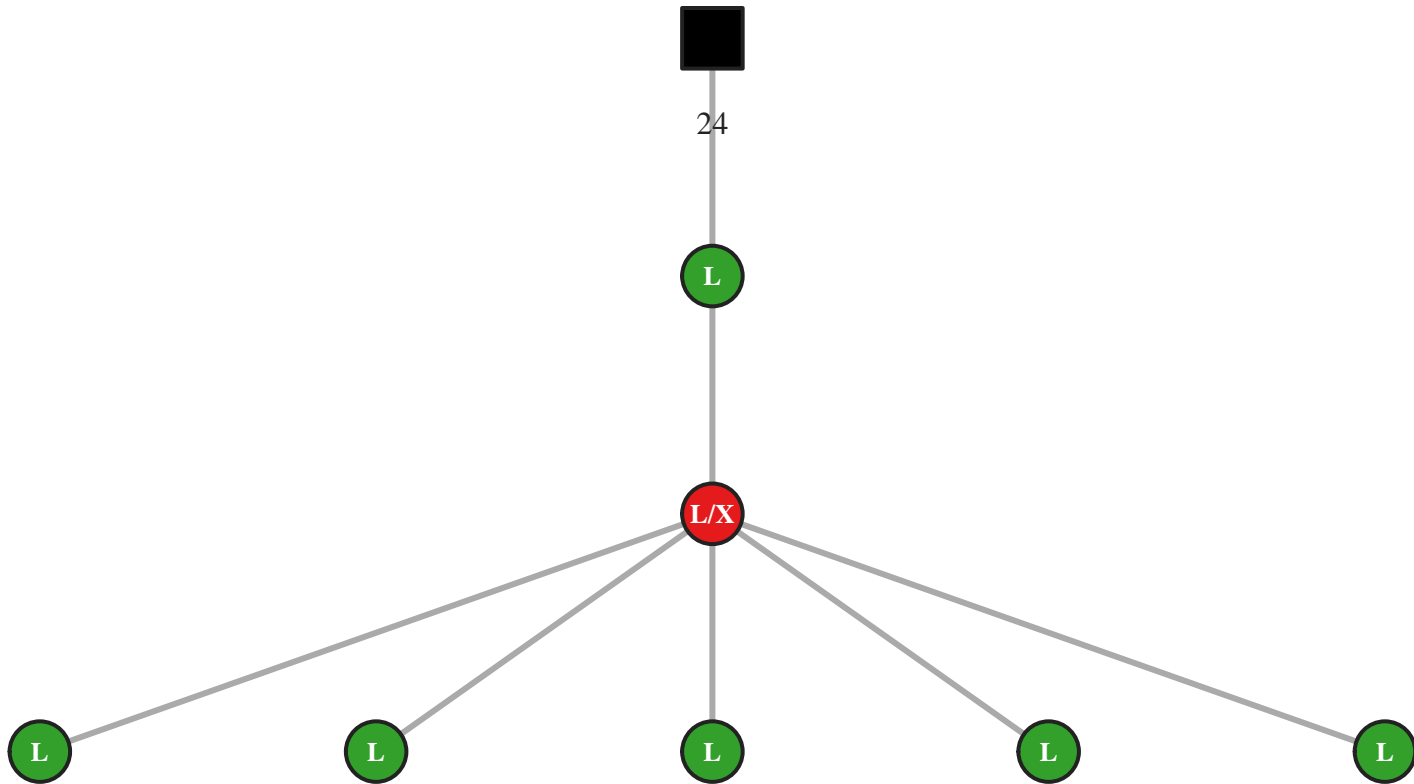
M5 IgG IGHV5-51/J4 33bp (47129)



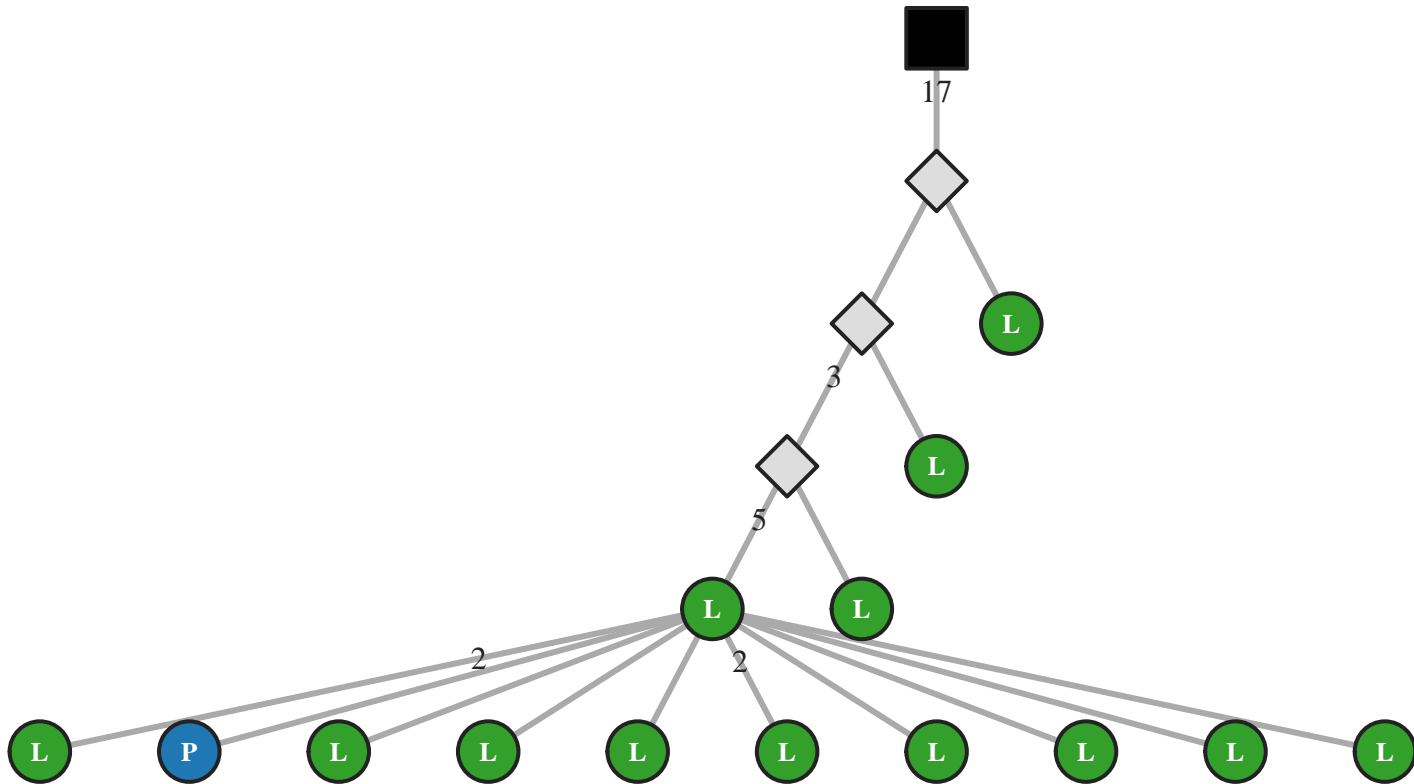
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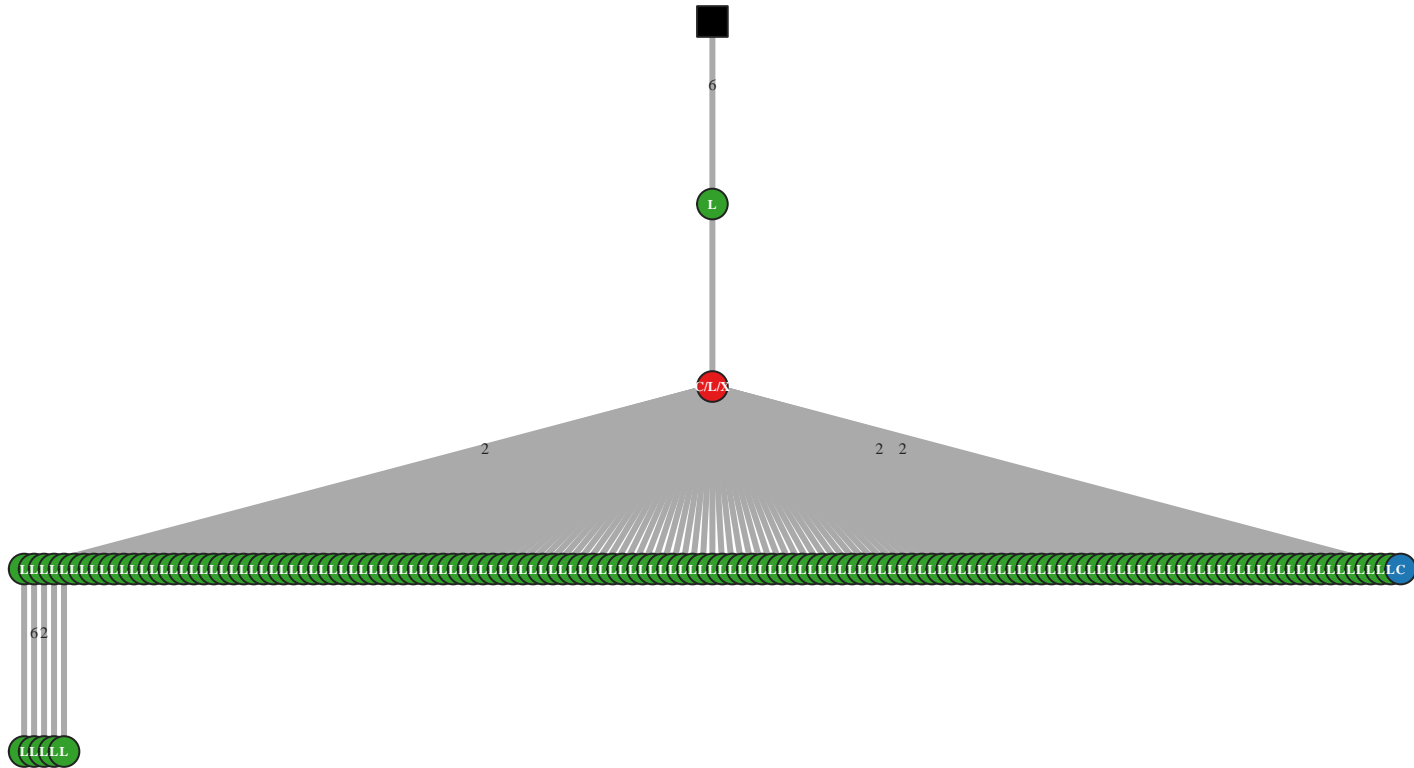
M5 IgG IGHV5-51/J4 36bp (19587)



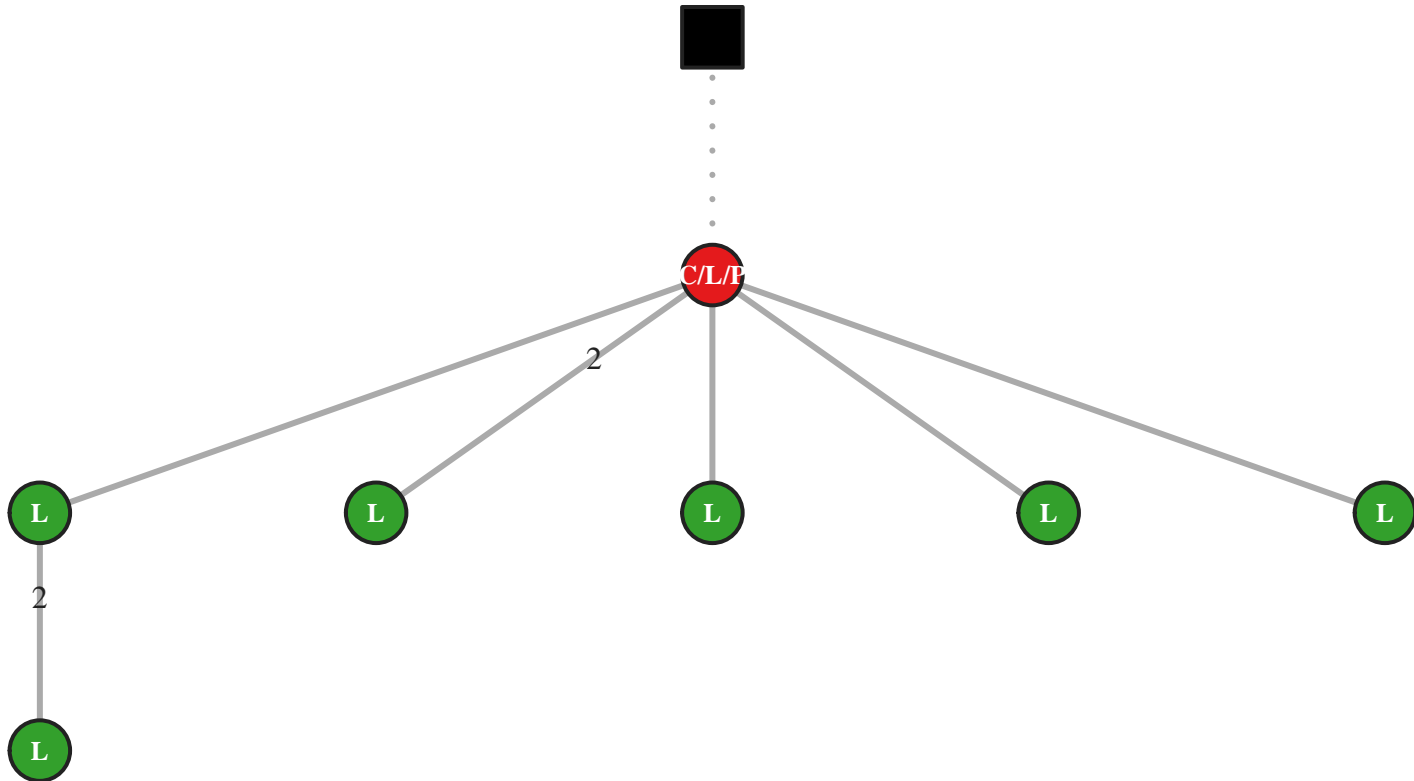
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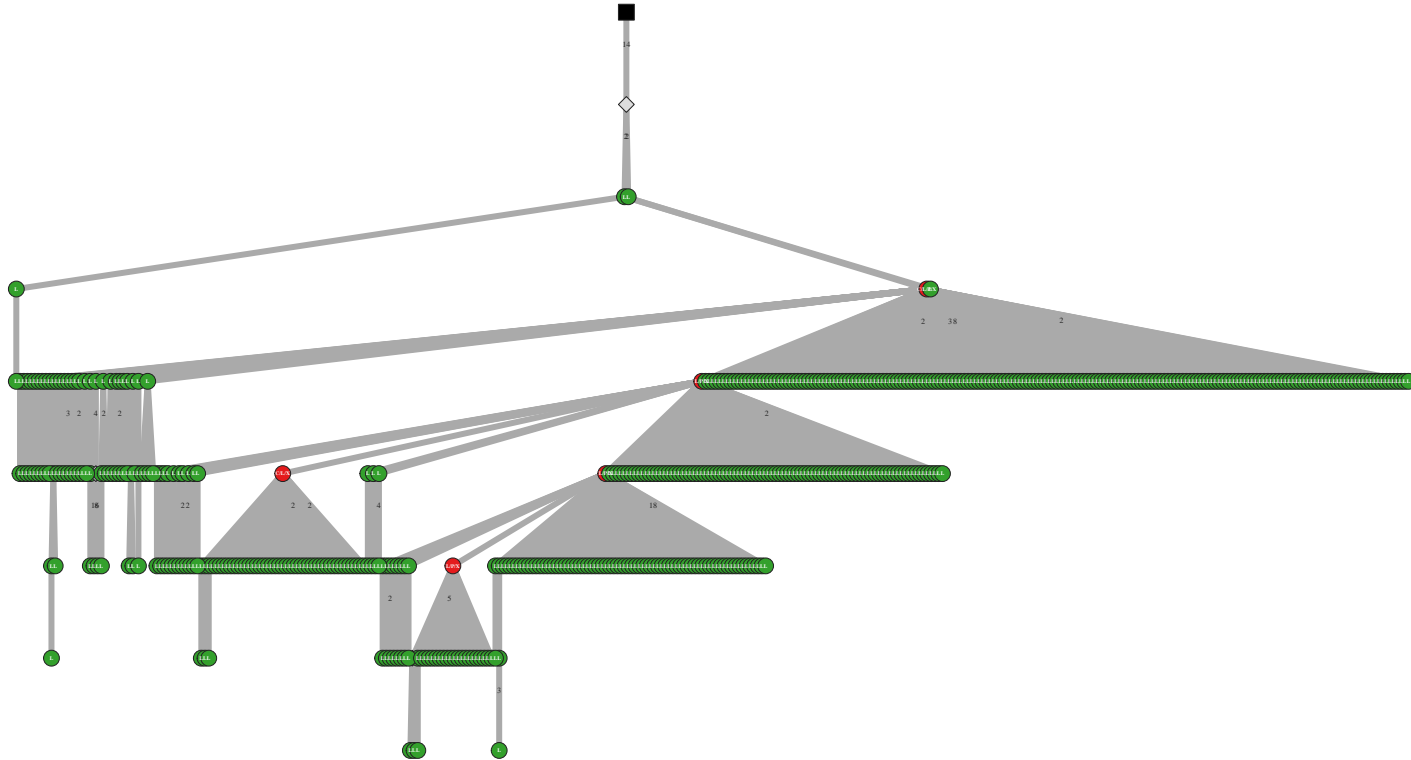
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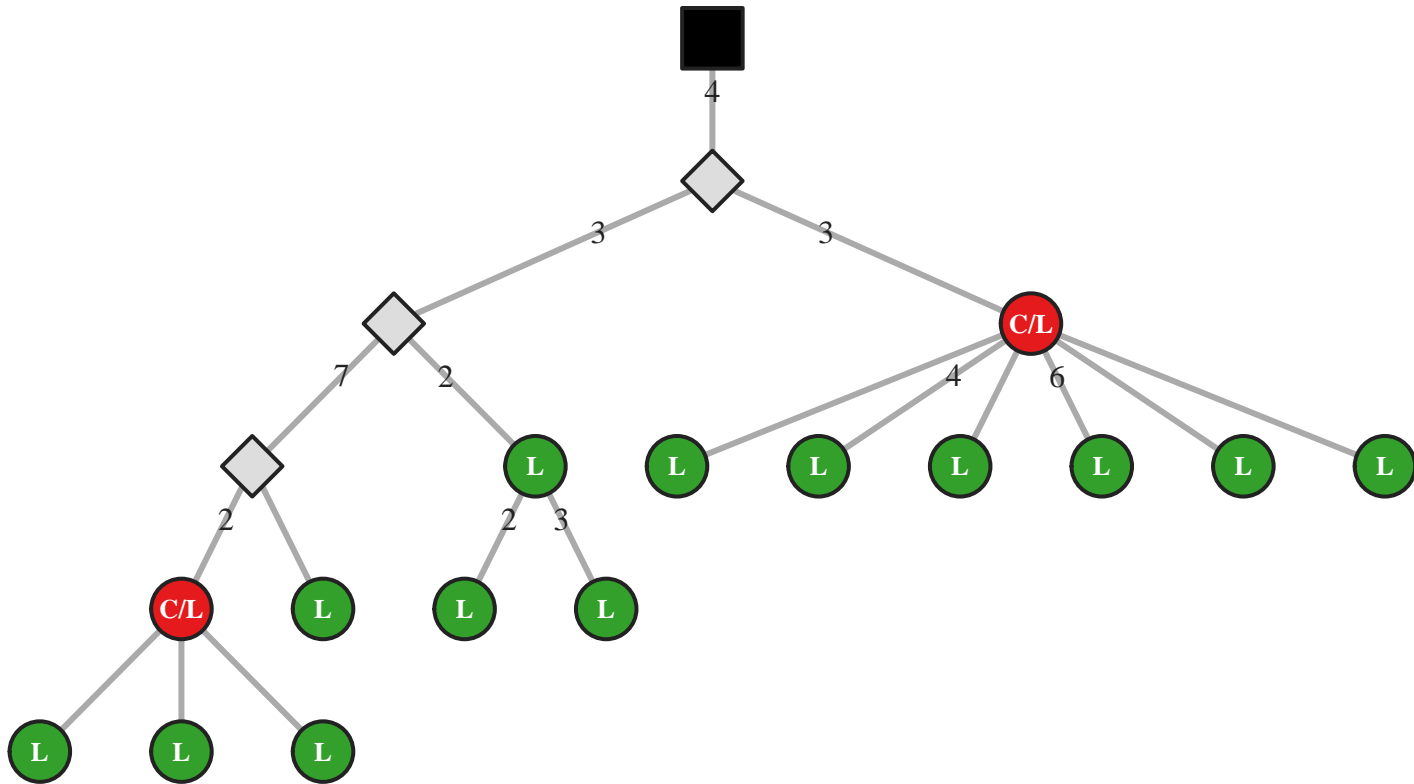
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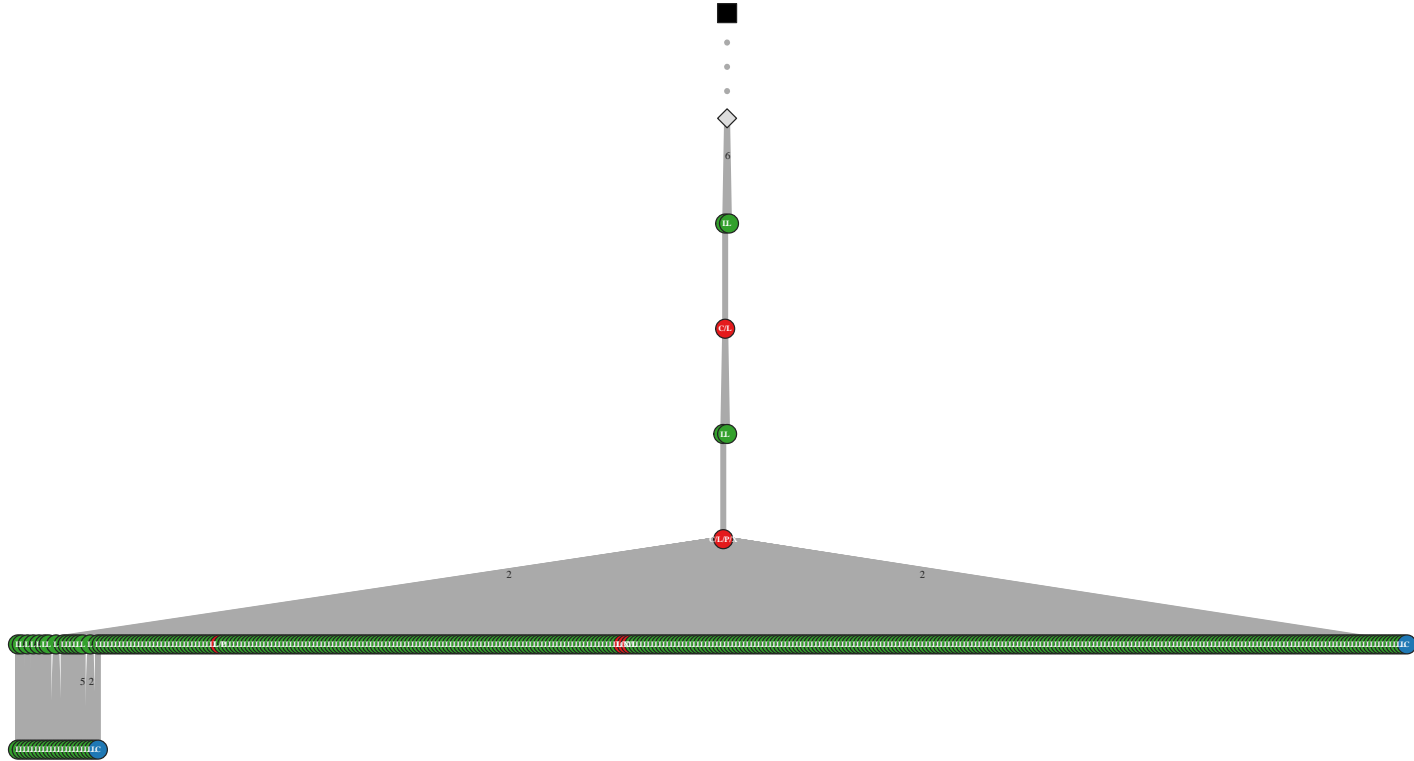
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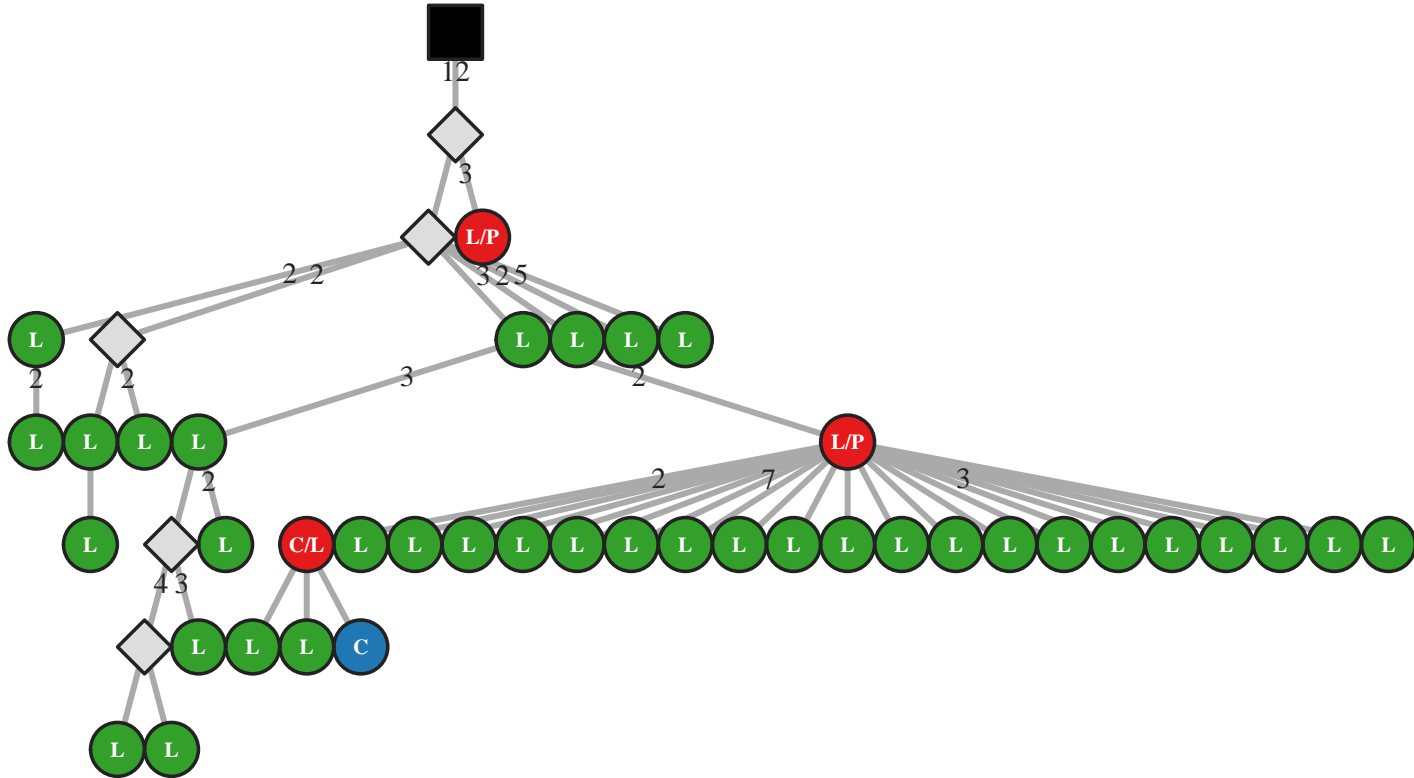
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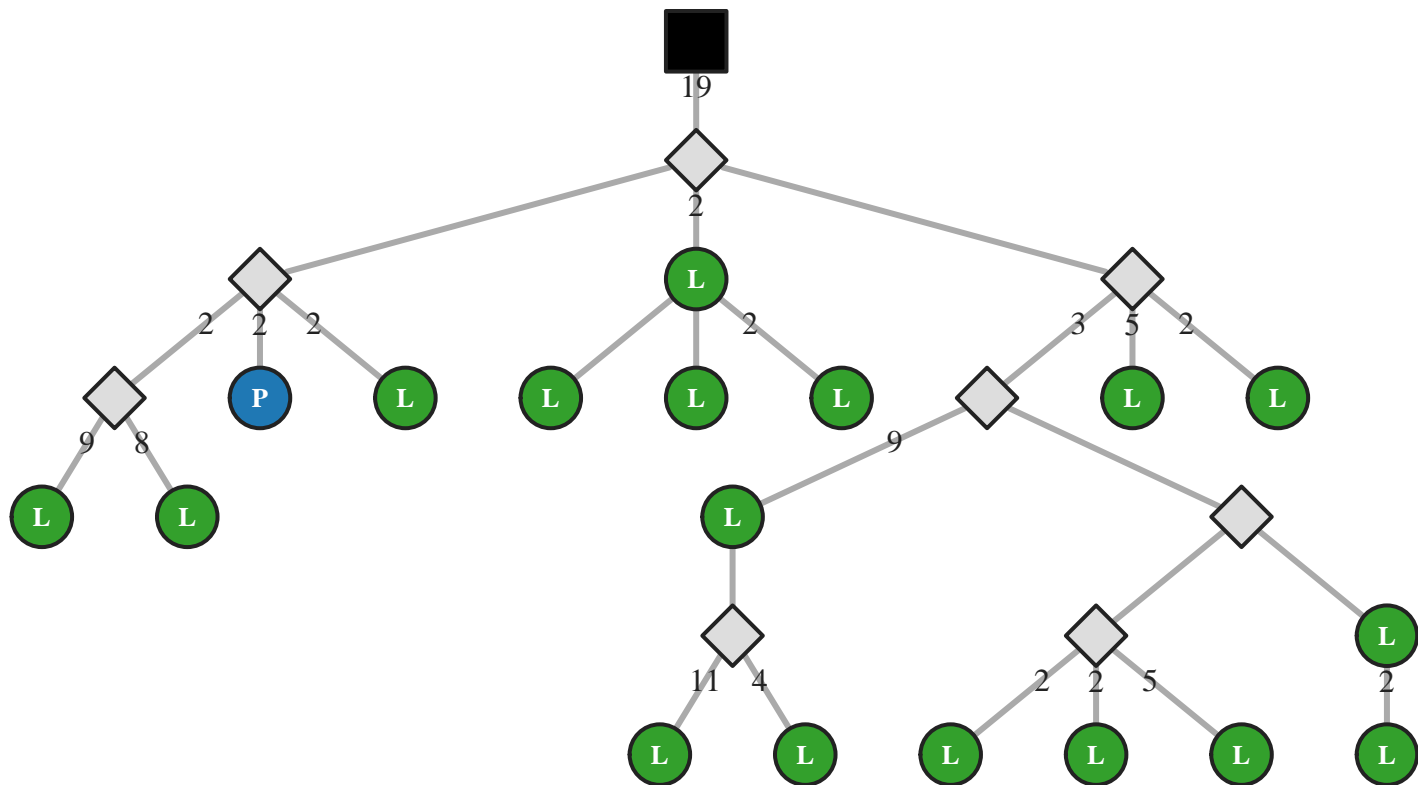
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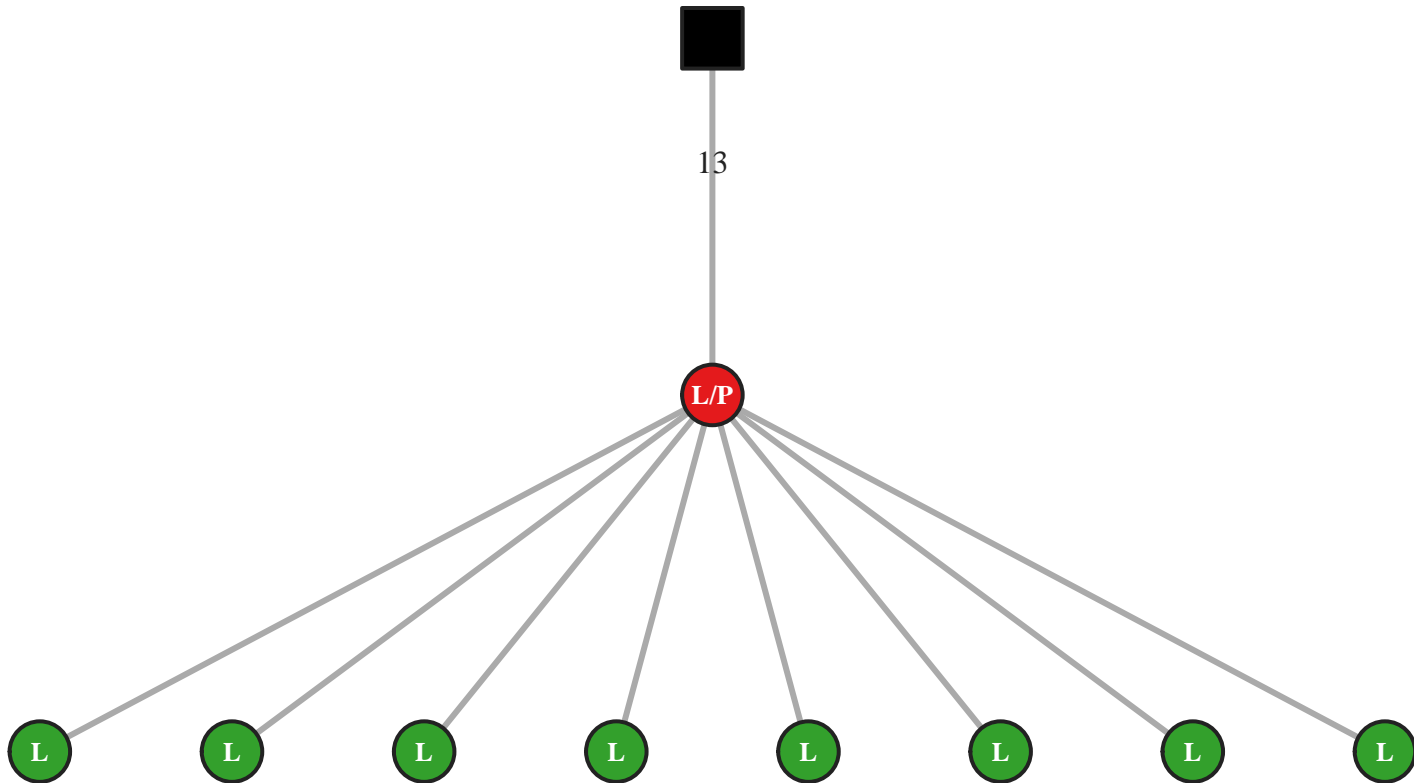
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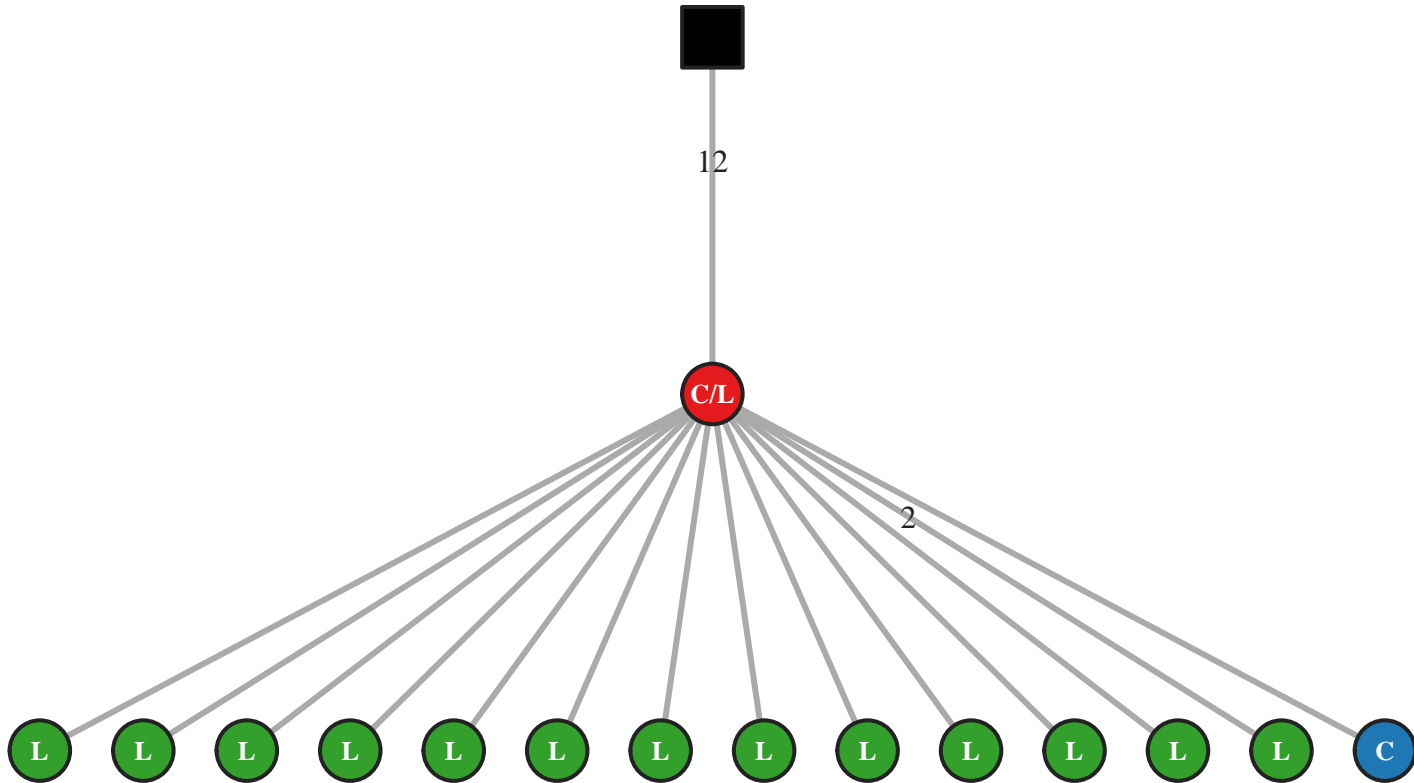
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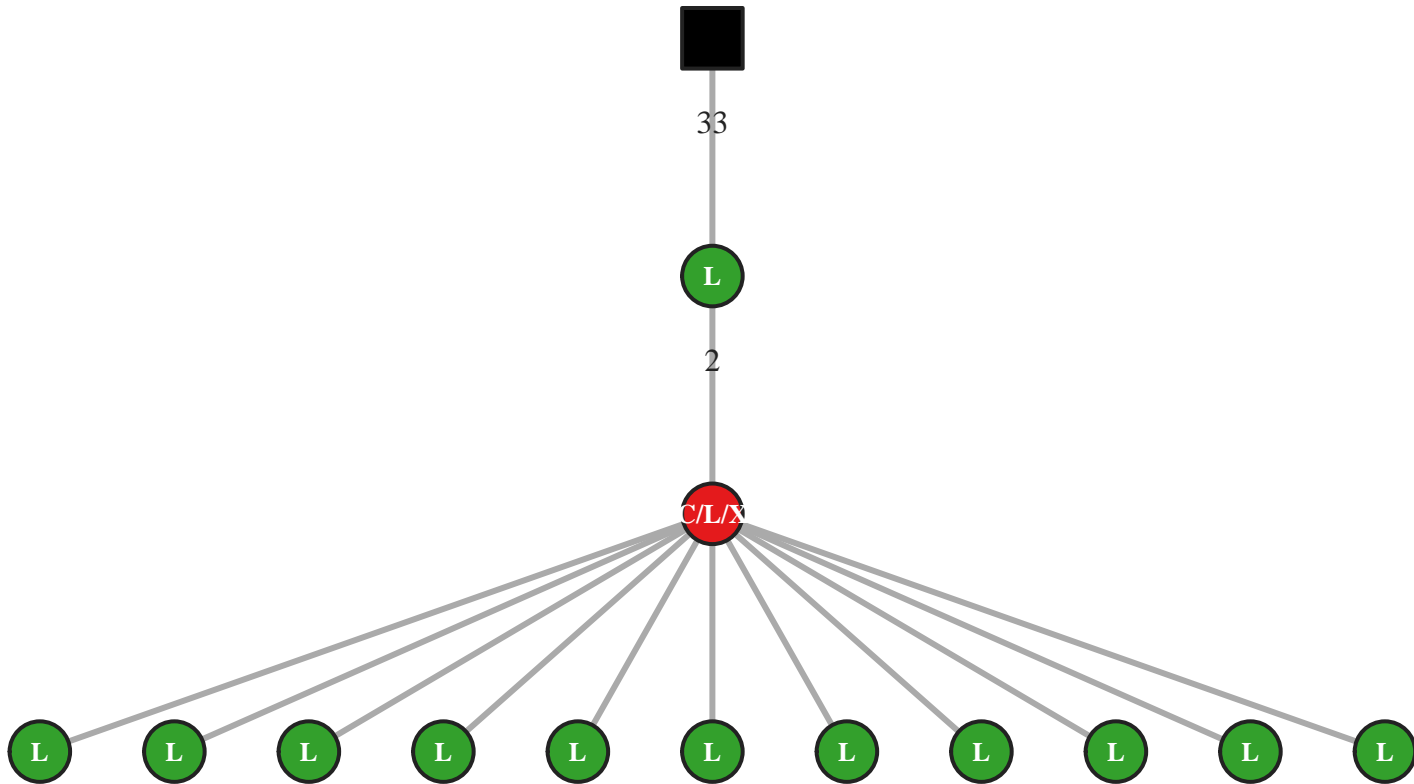
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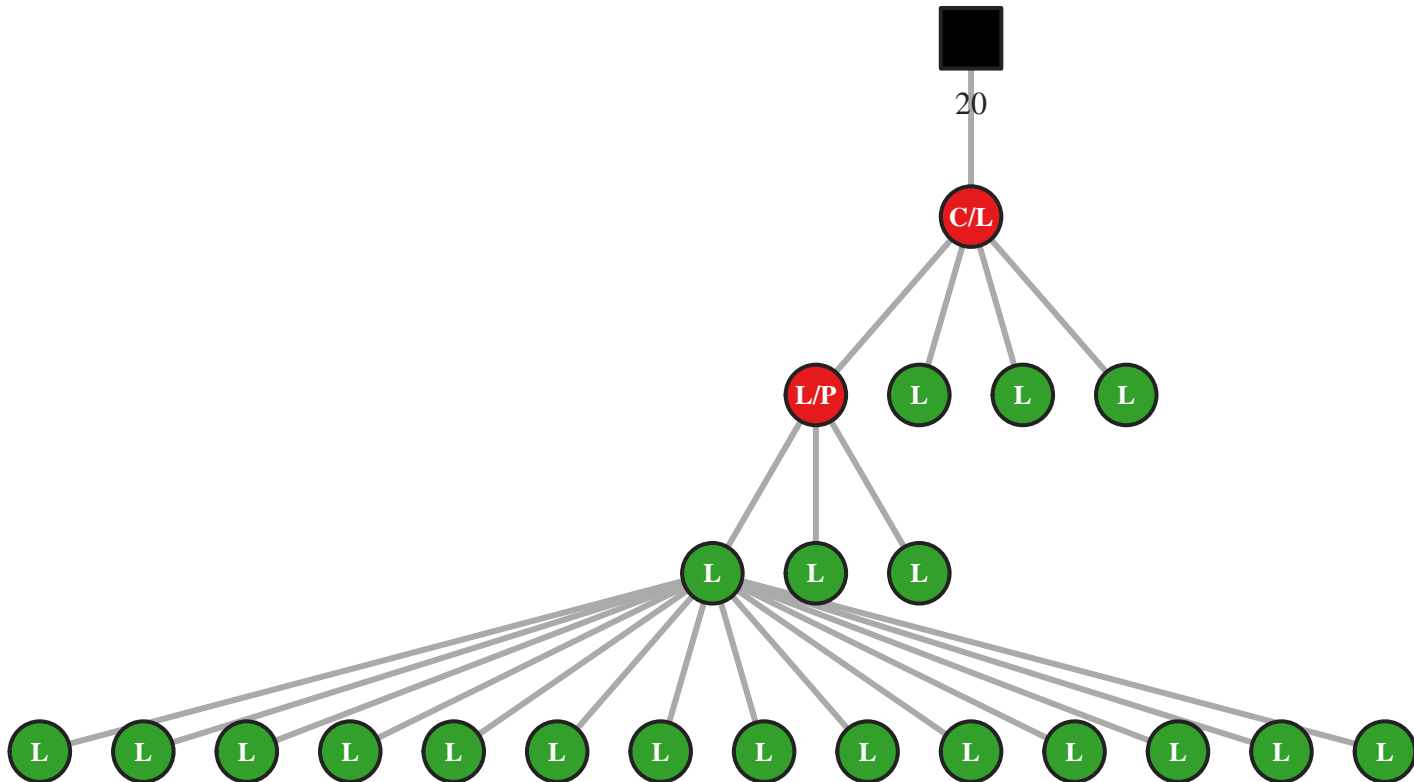
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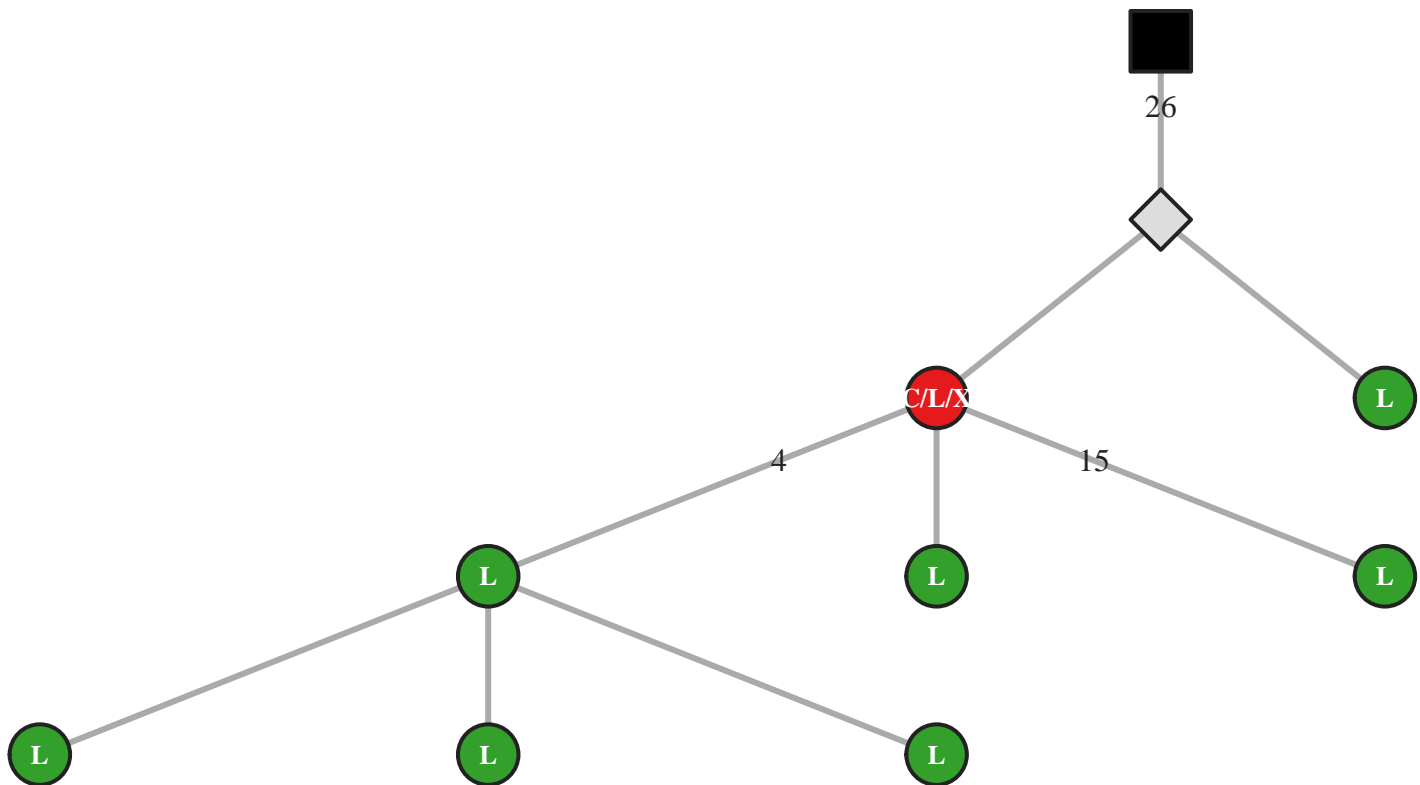
M5 IgA IGHV5-51/J4 42bp (12917)



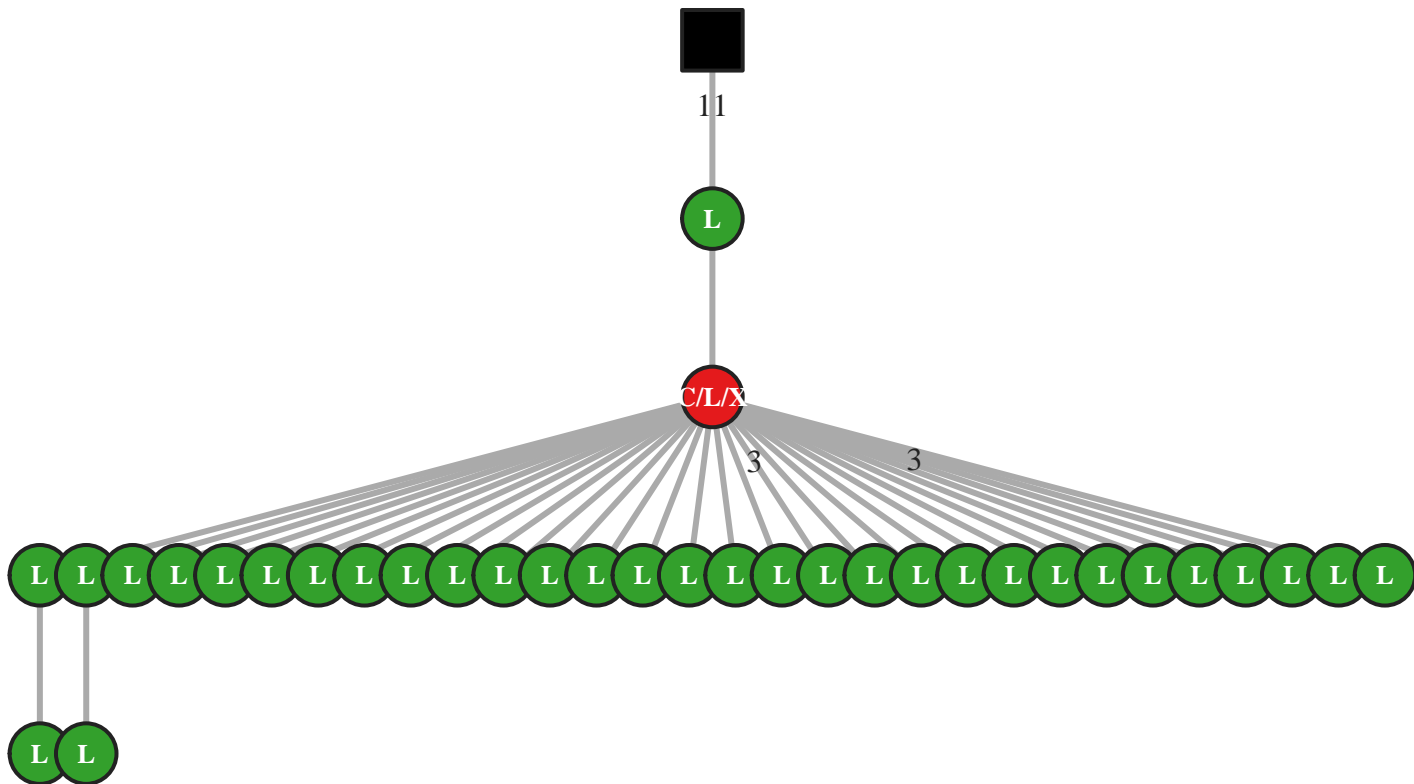
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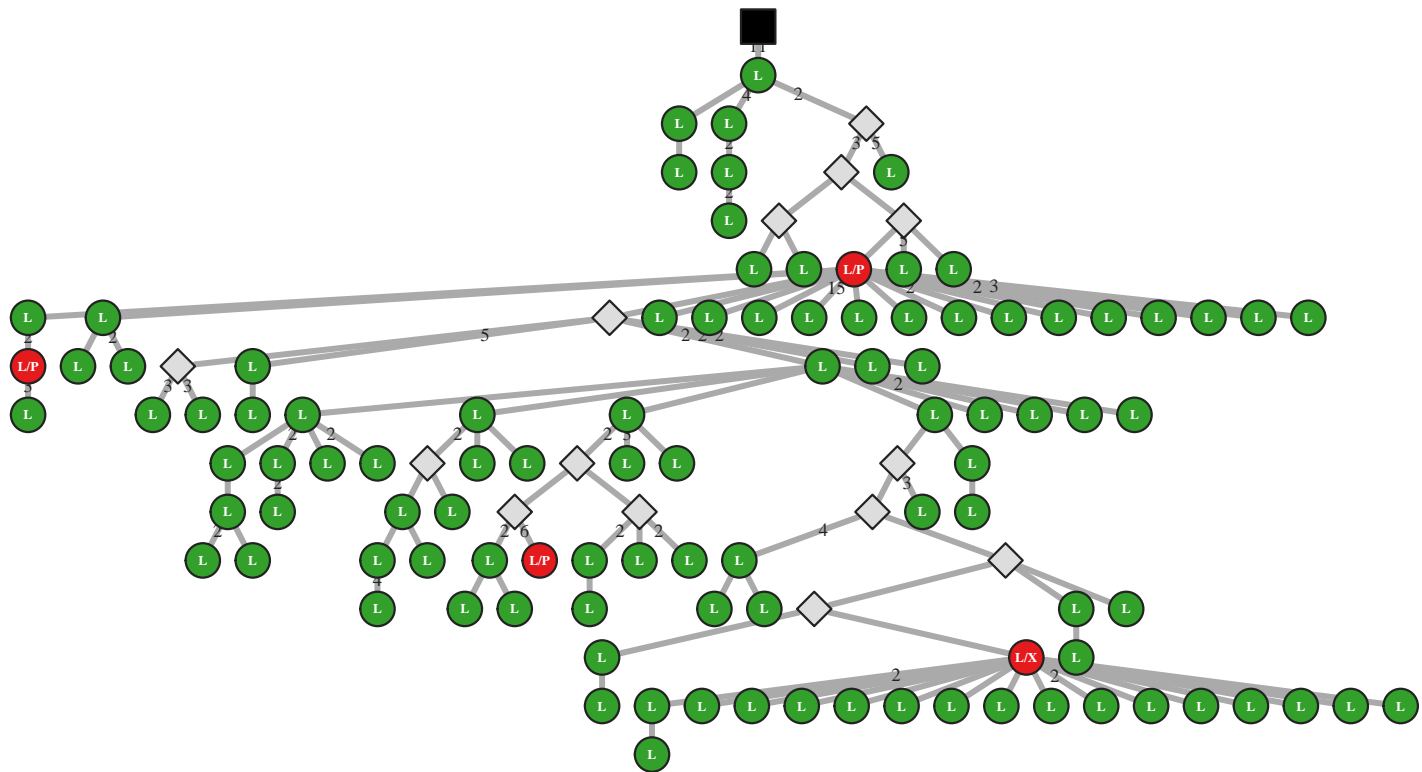
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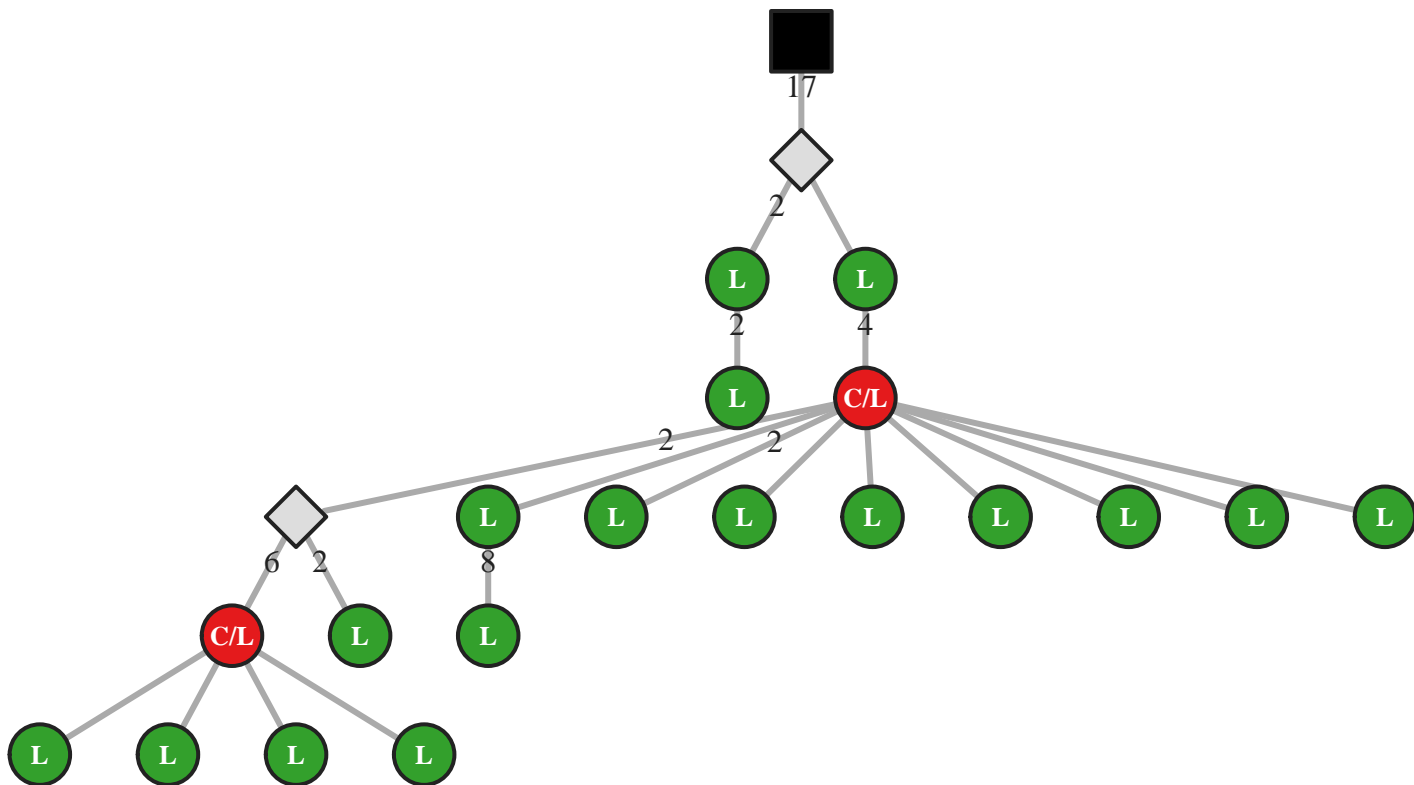
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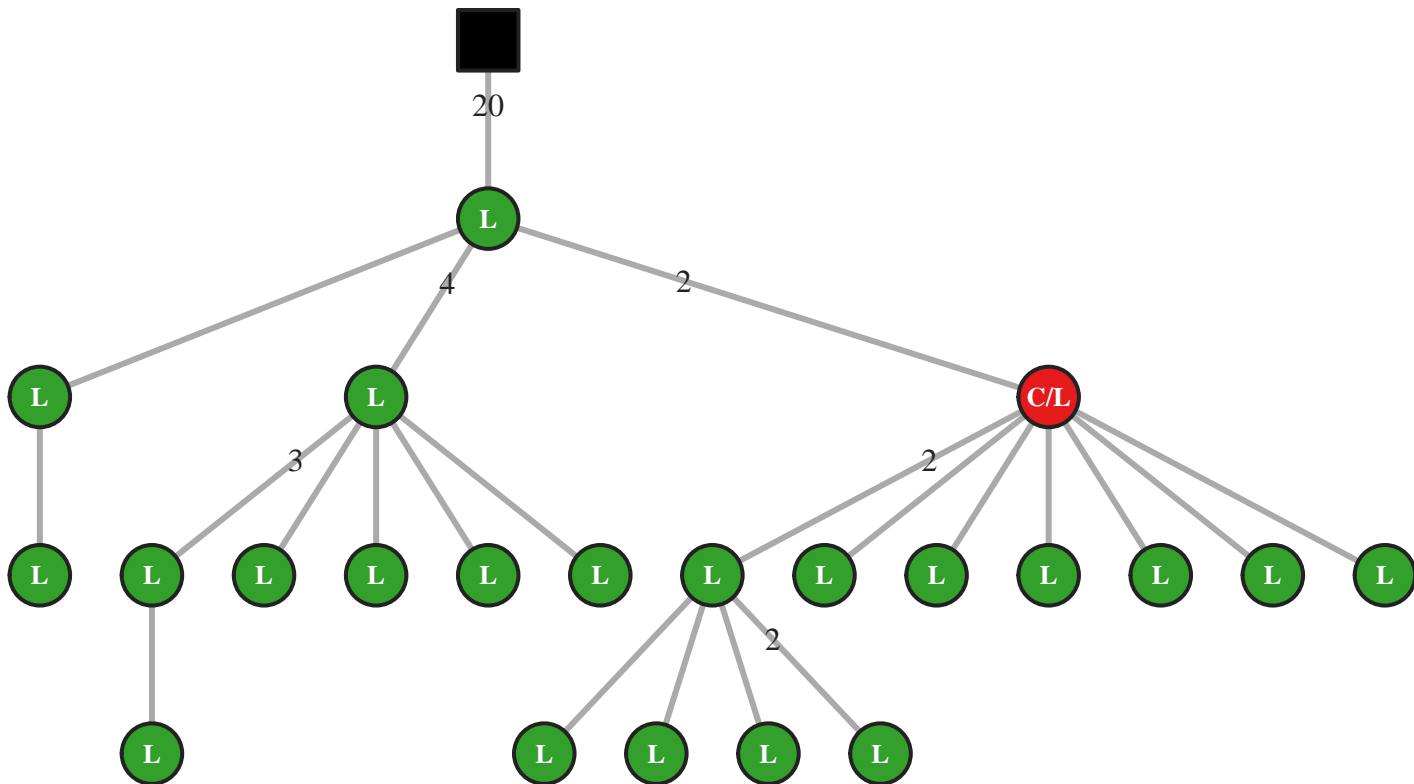
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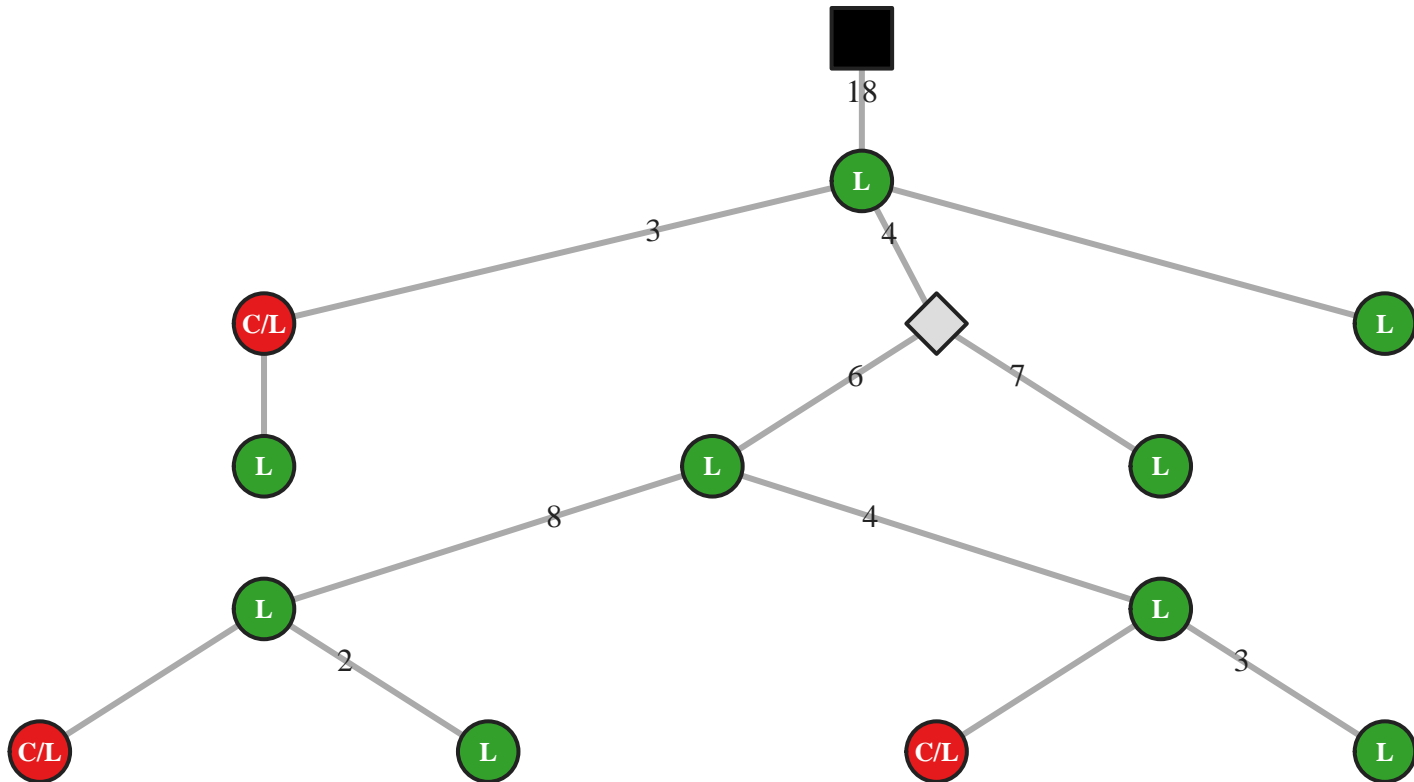
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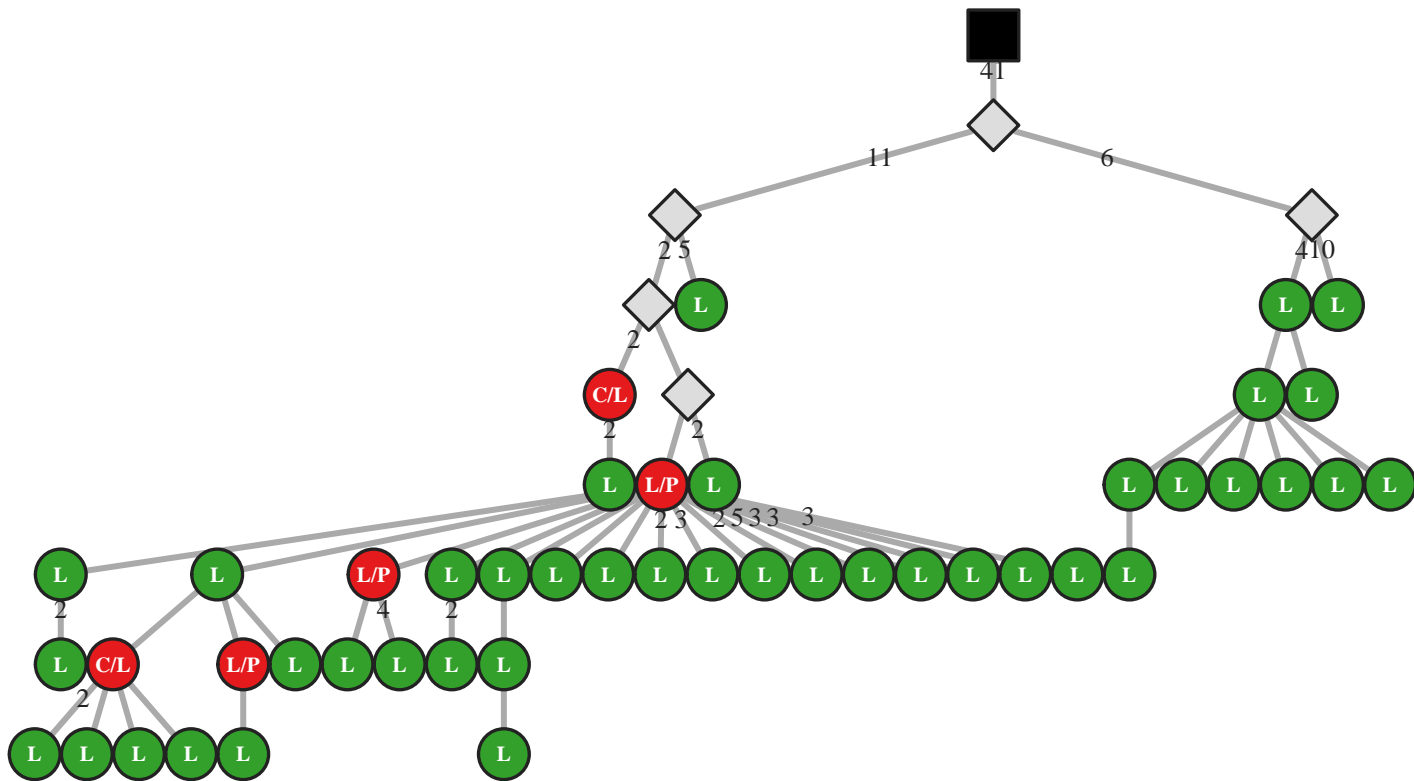
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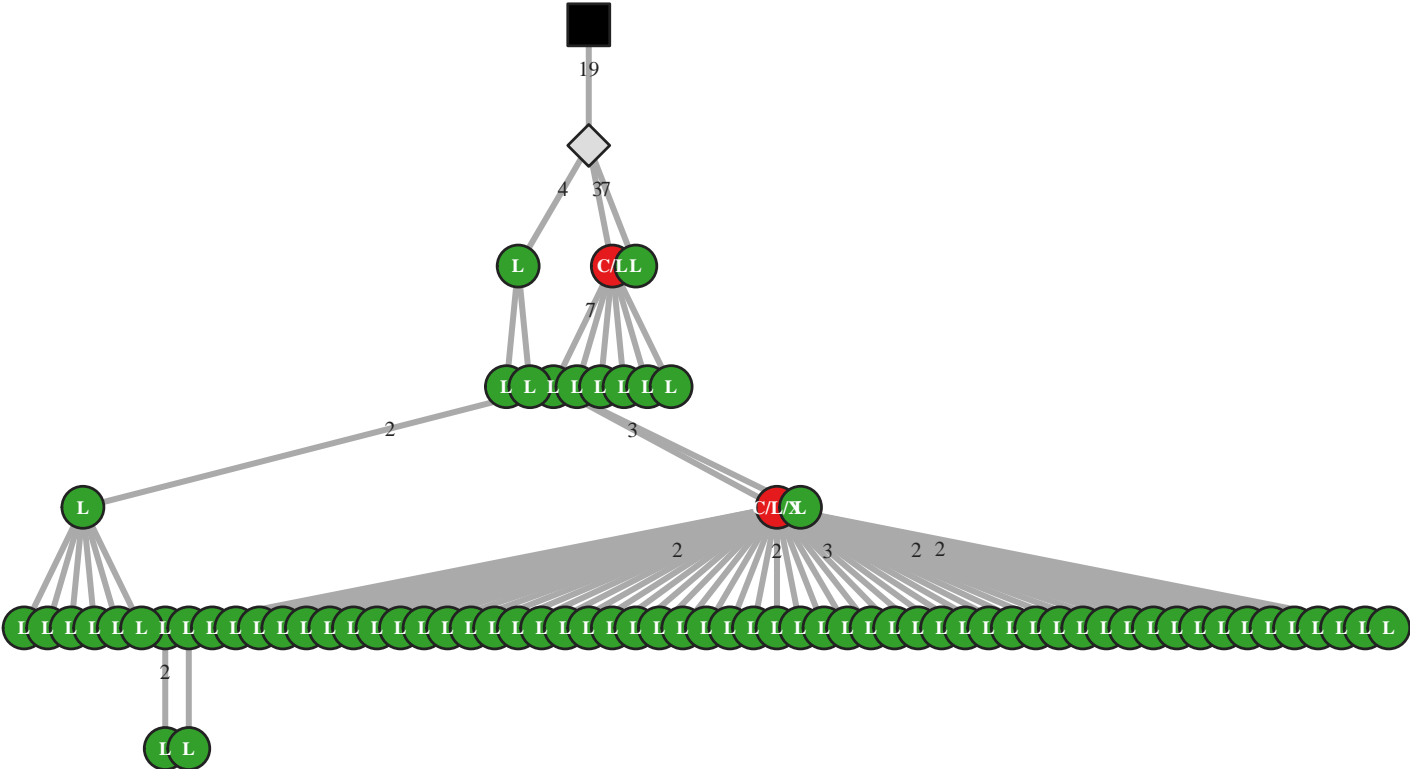
M5 IgG IGHV5-51/J4 42bp (19795)



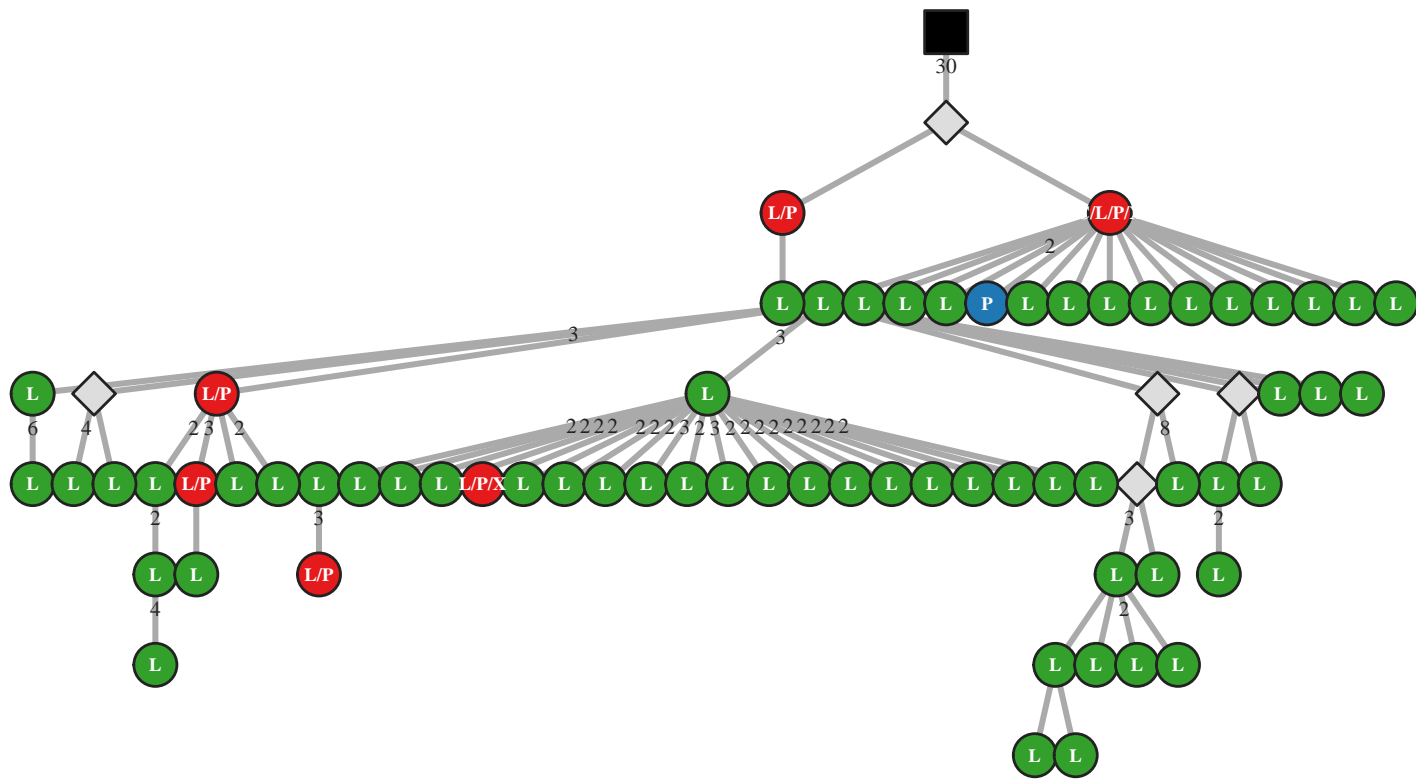
M5 IgG IGHV5-51/J4 45bp (19806)



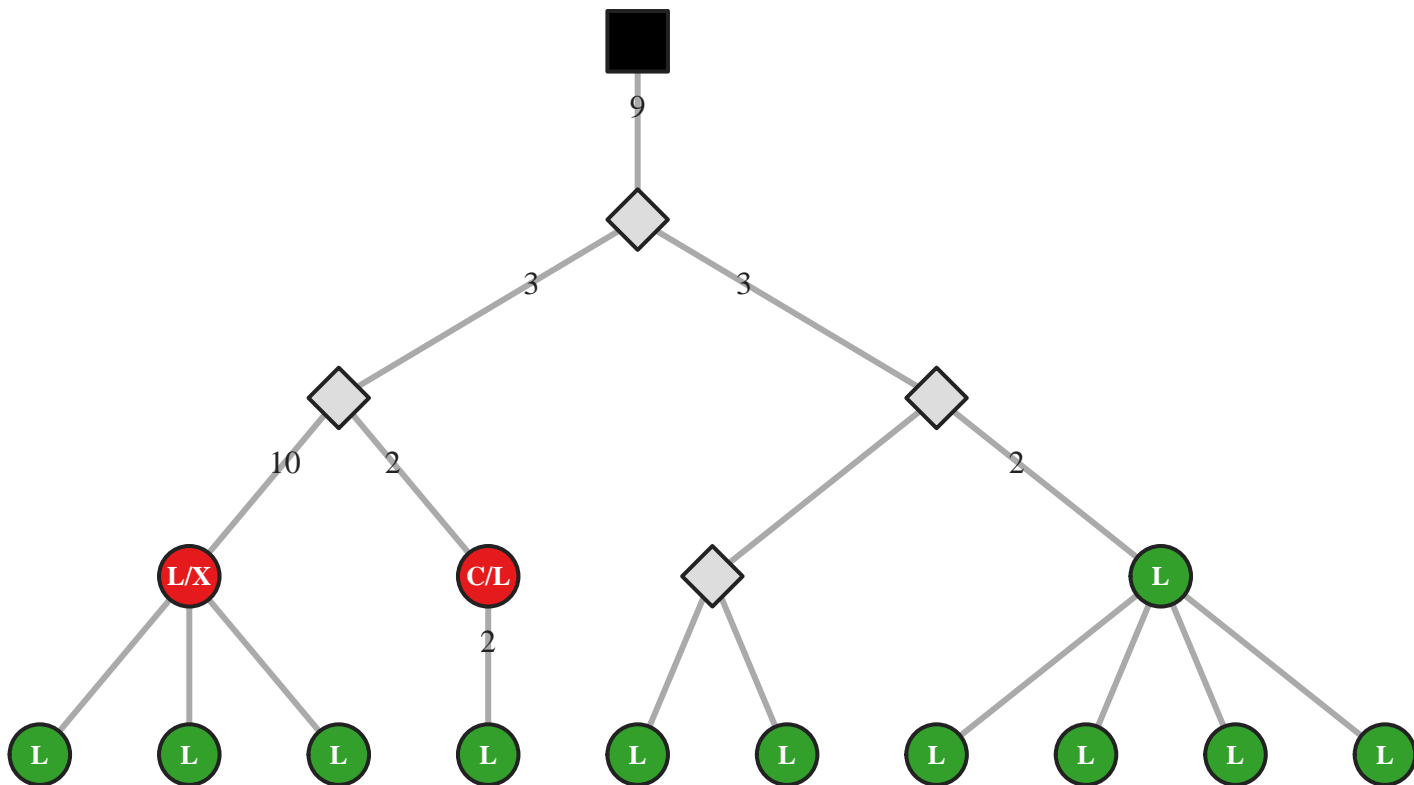
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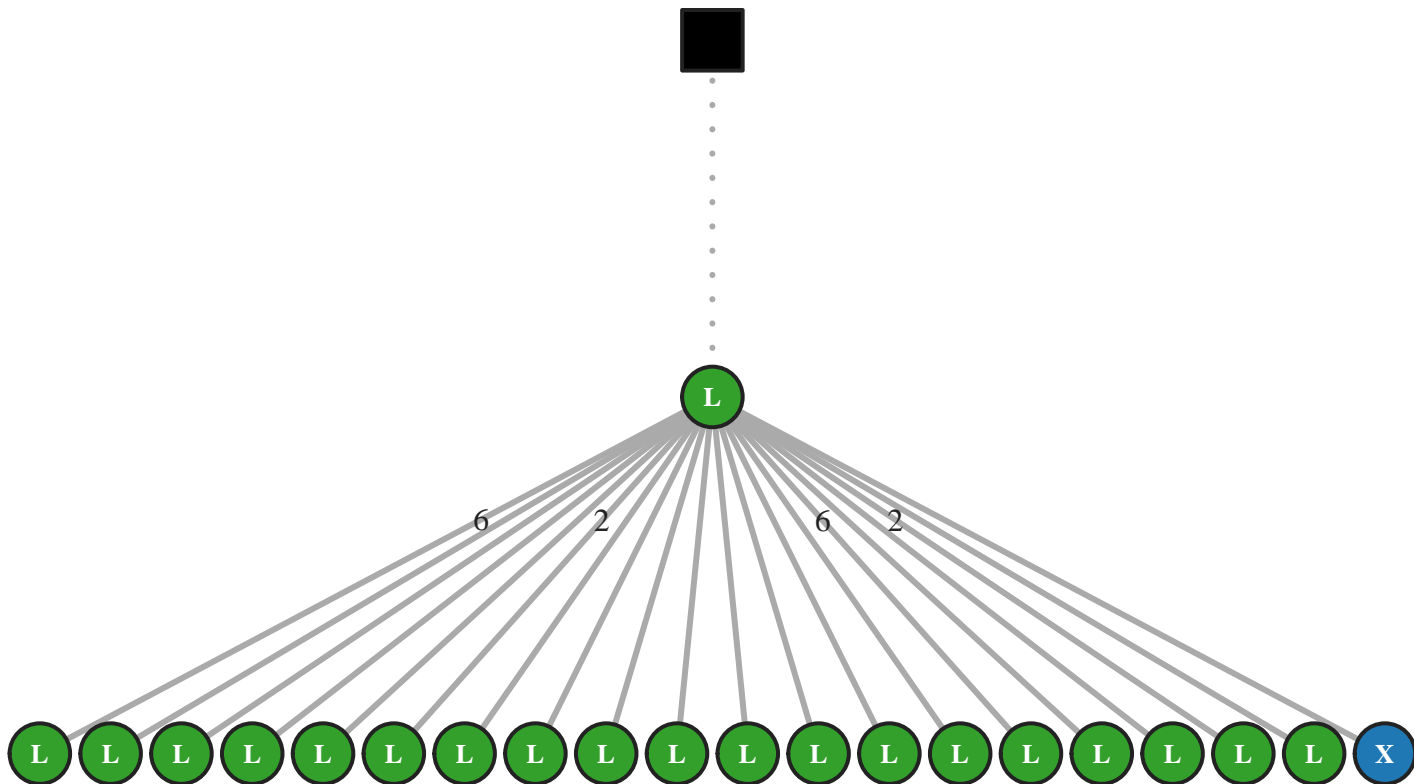
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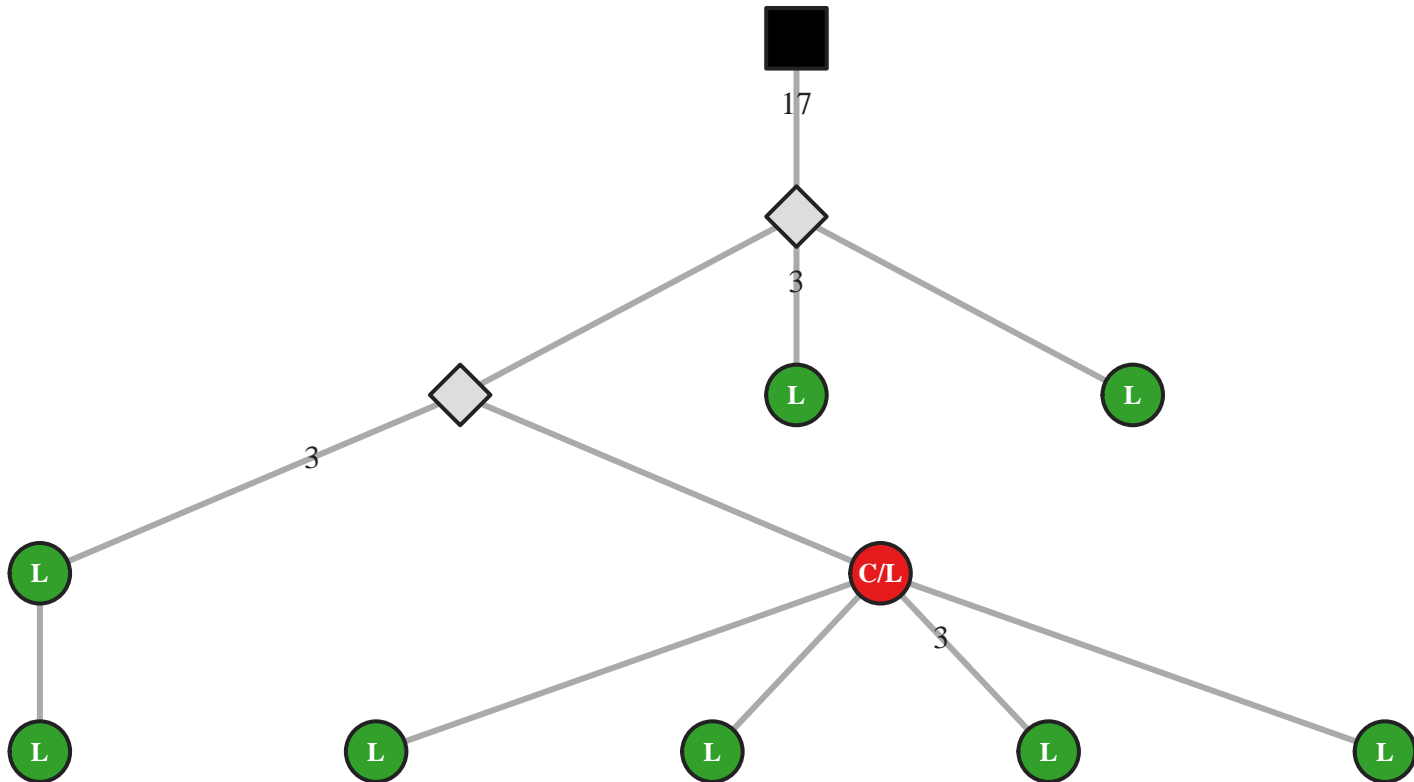
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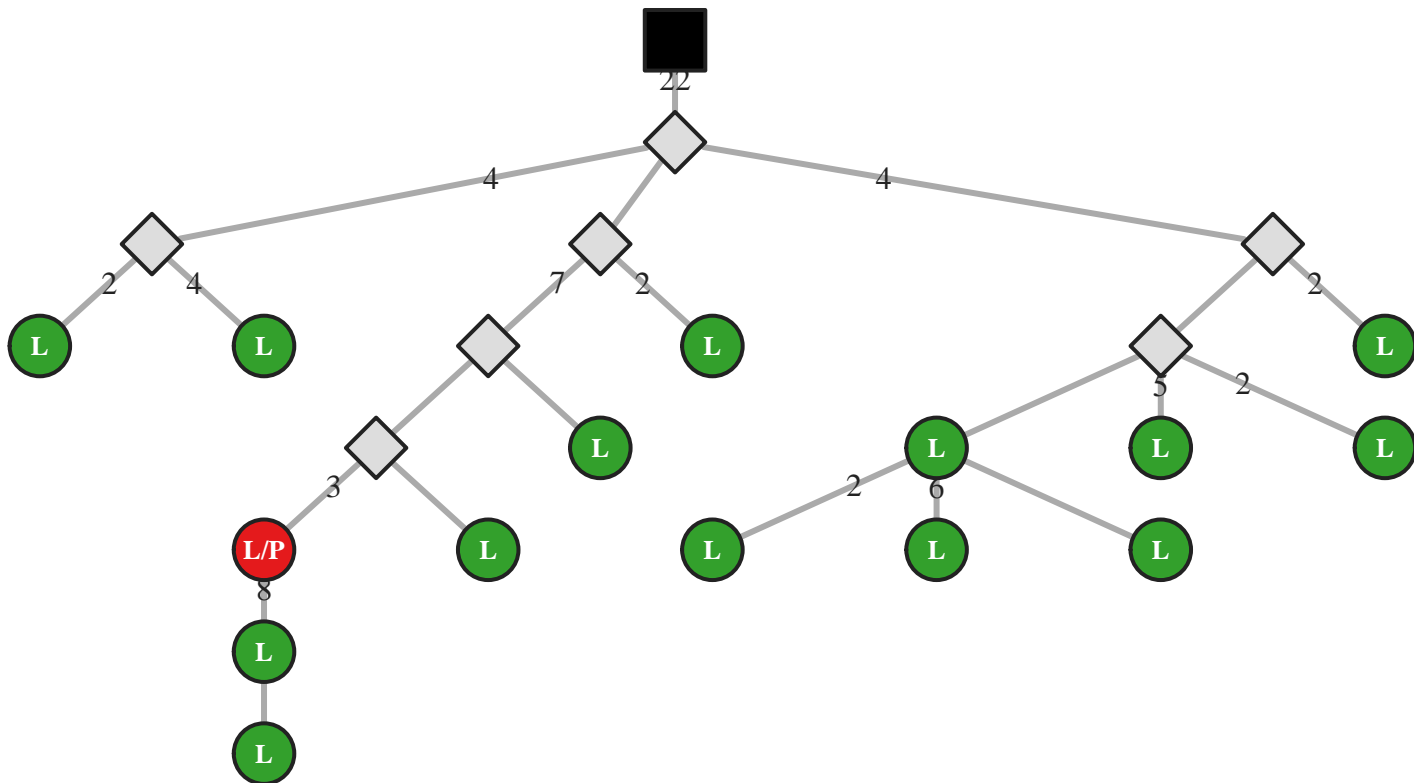
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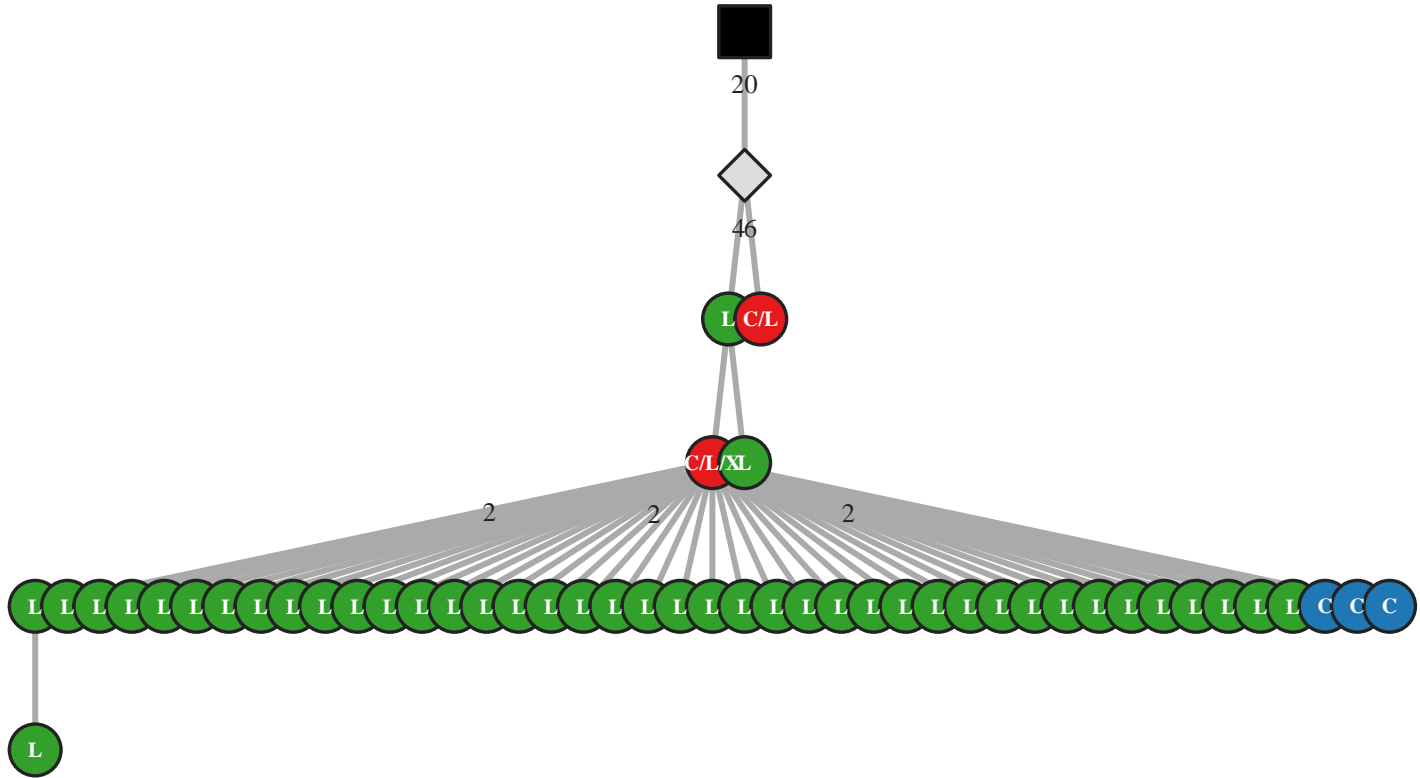
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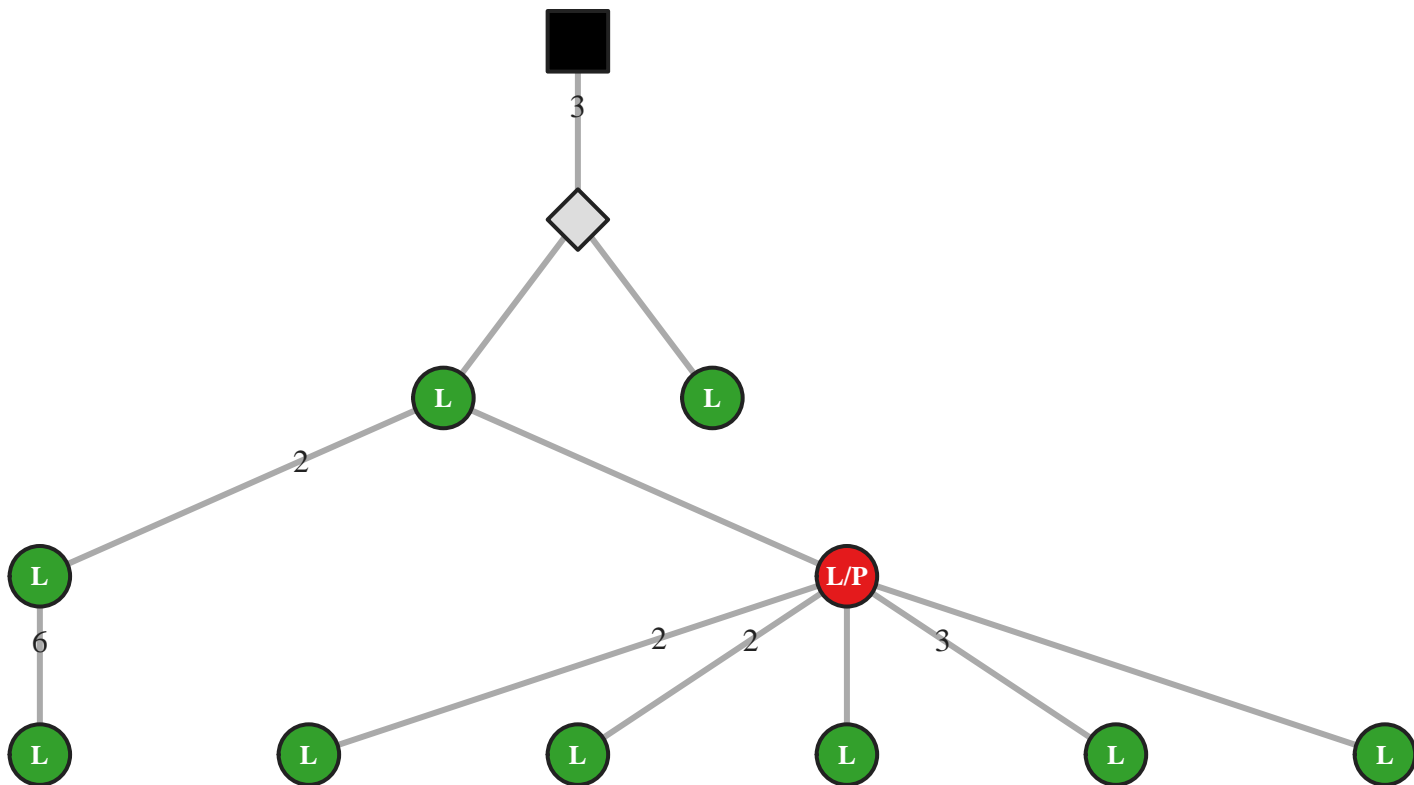
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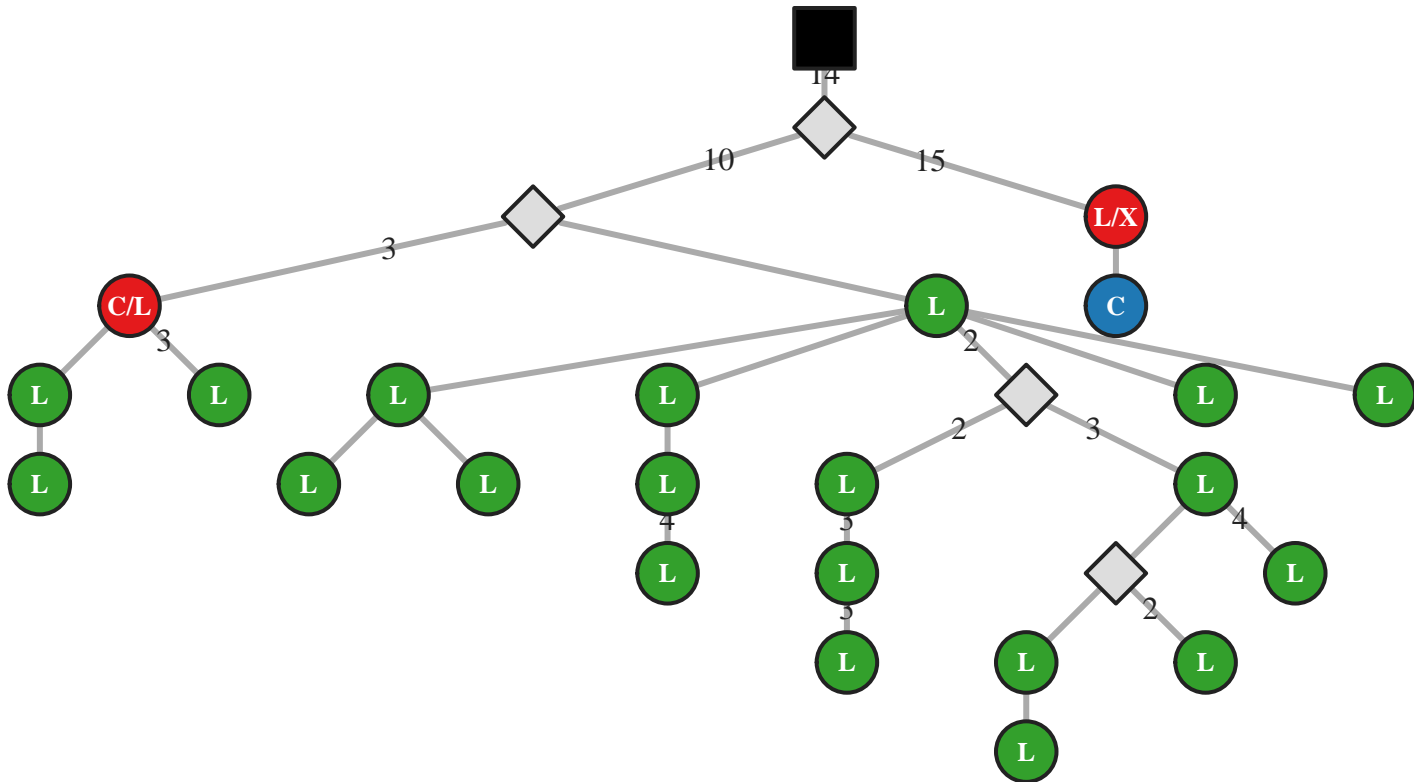
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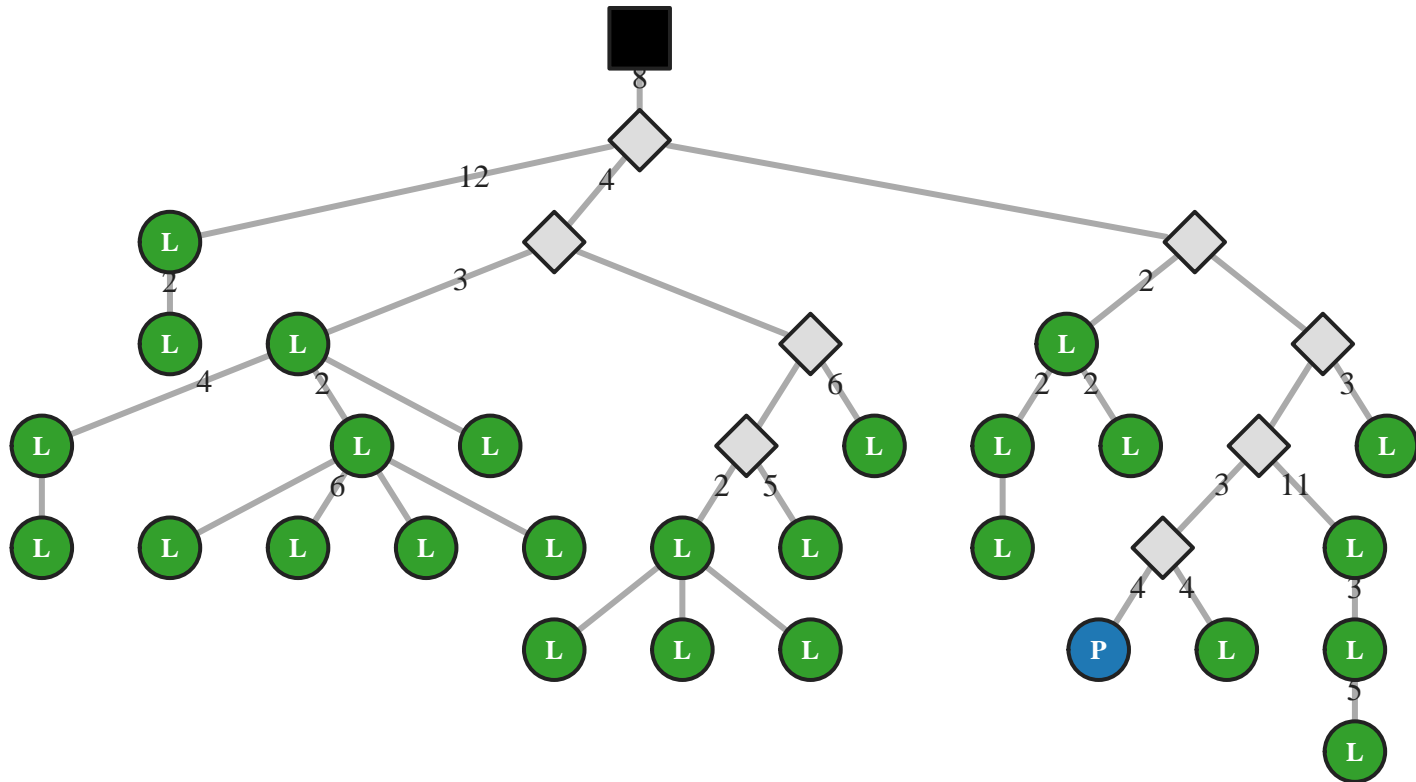
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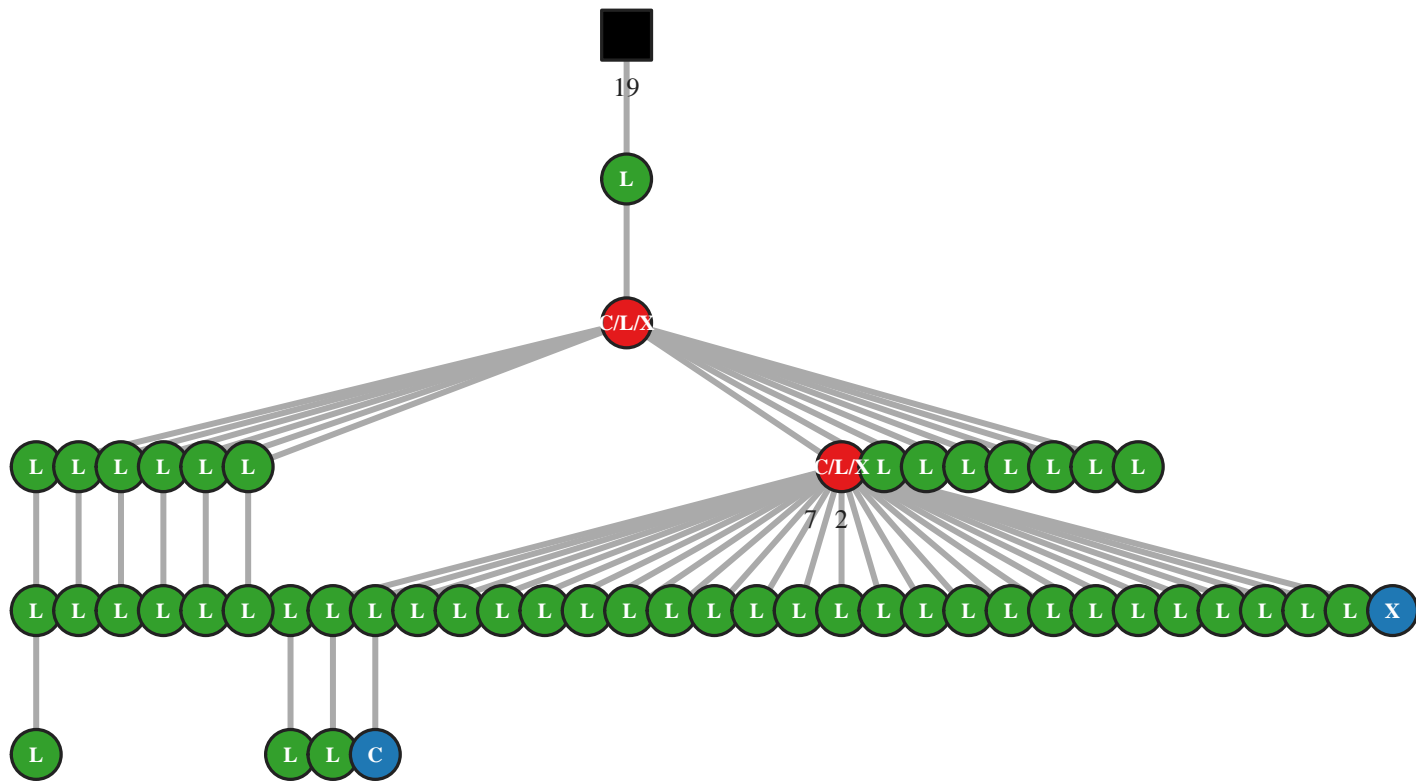
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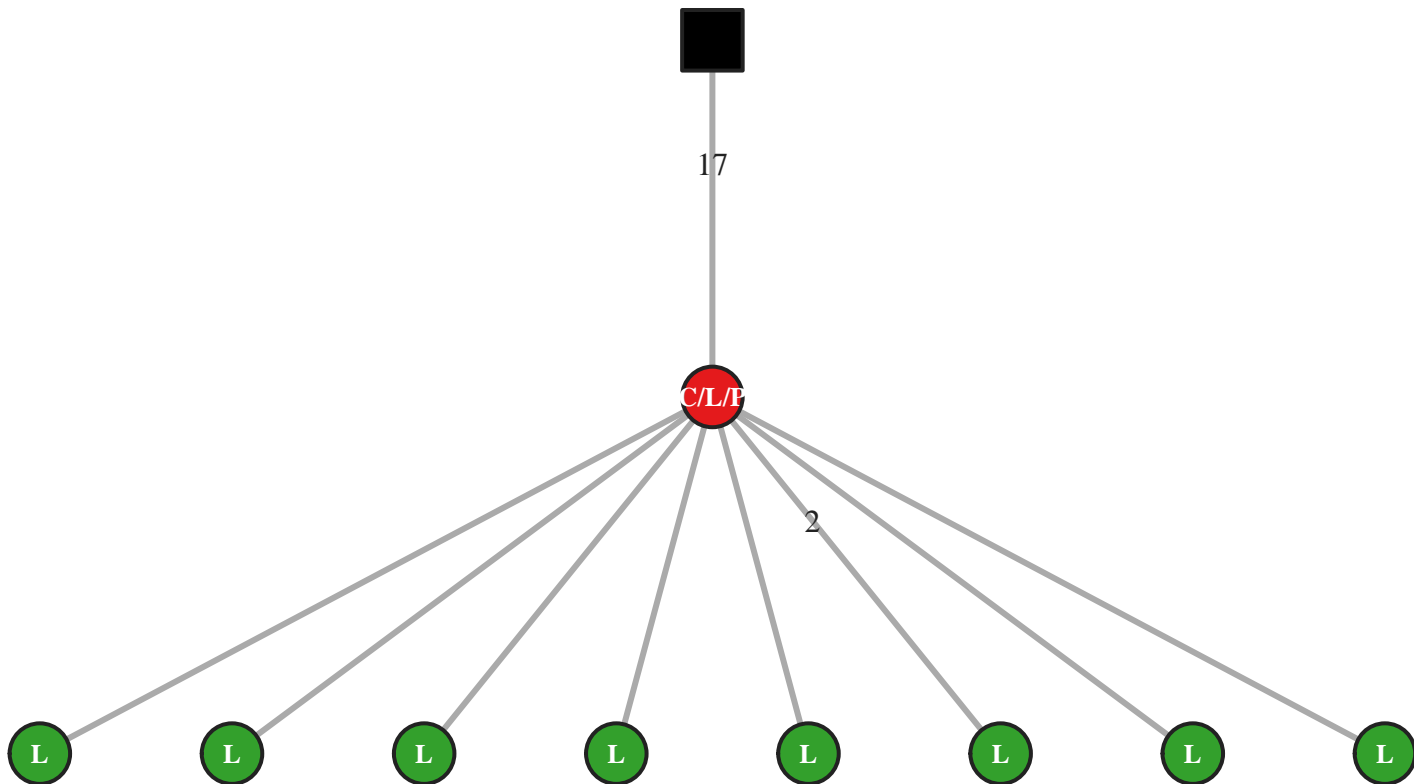
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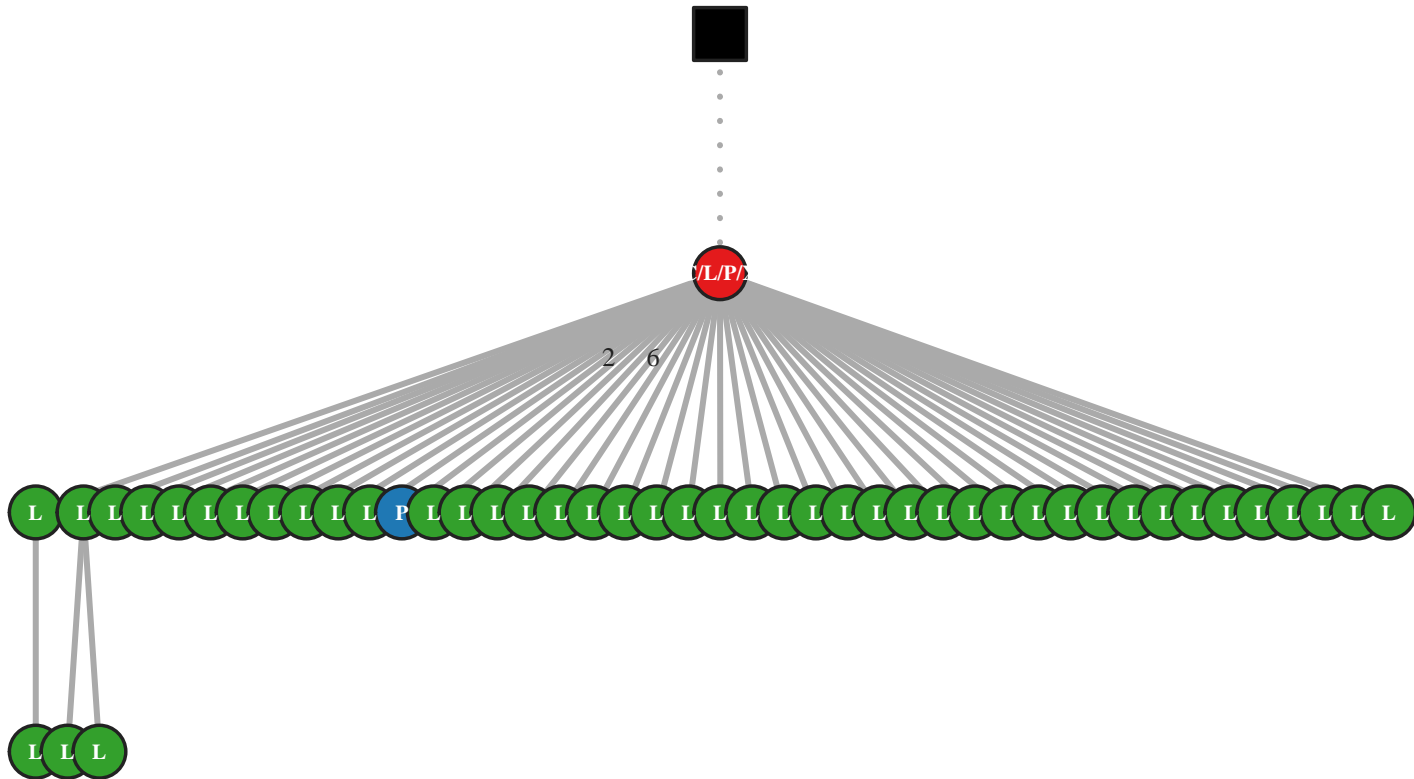
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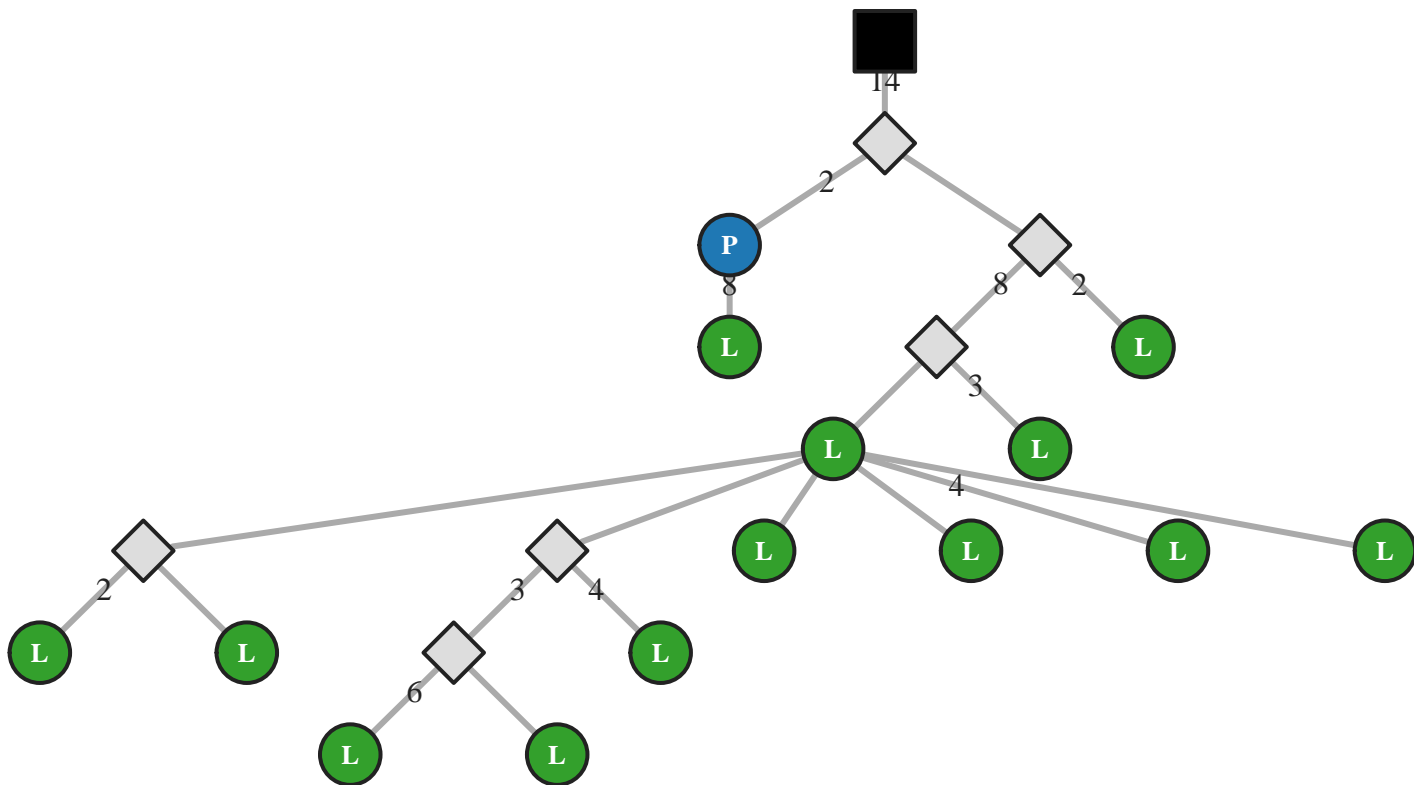
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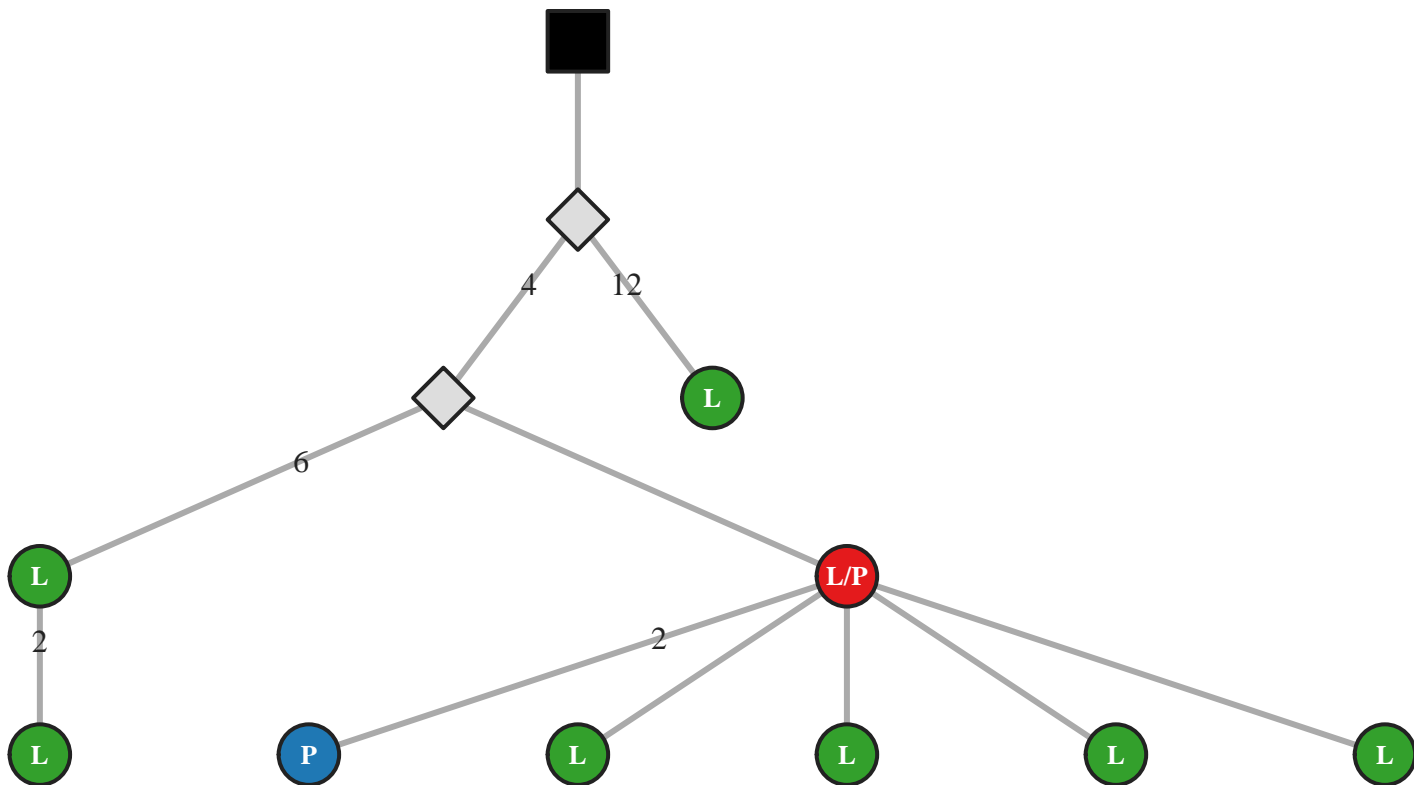
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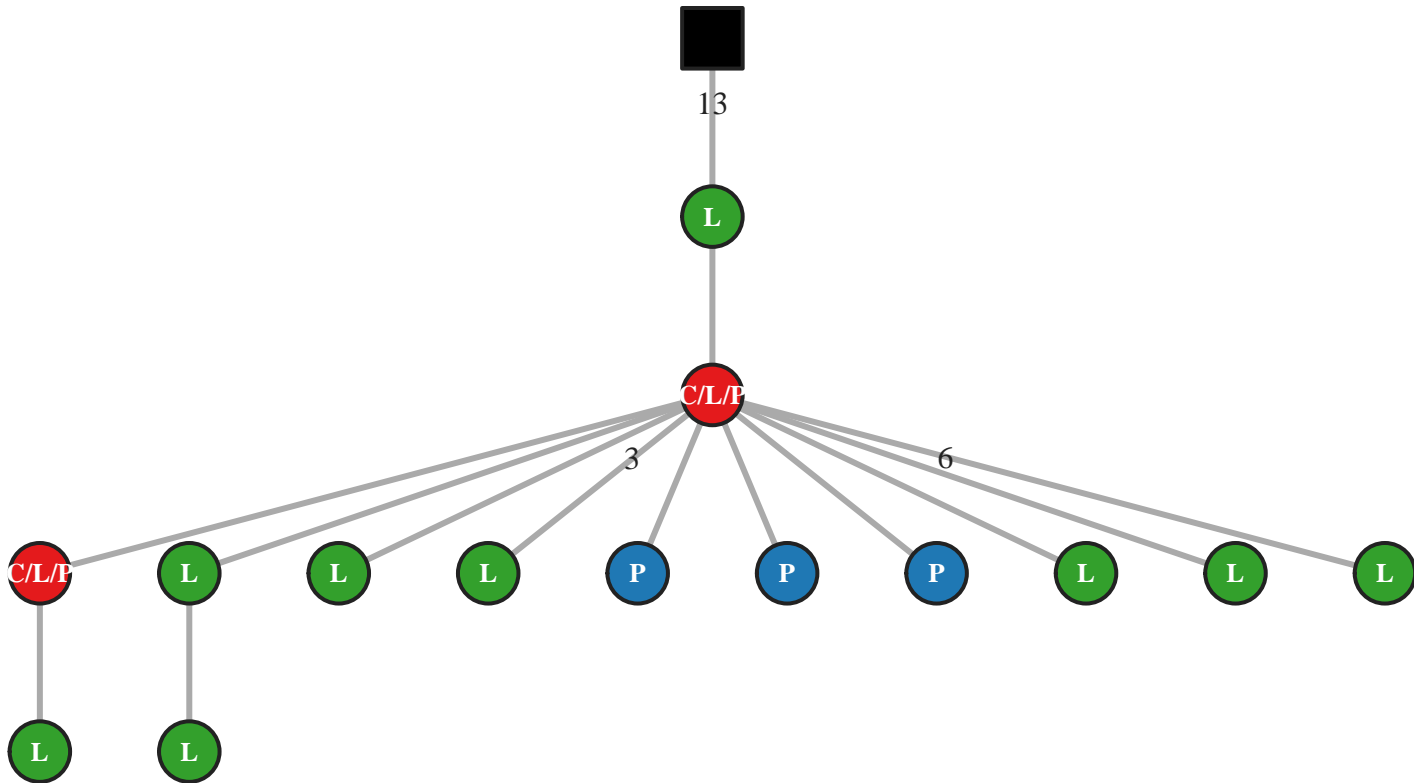
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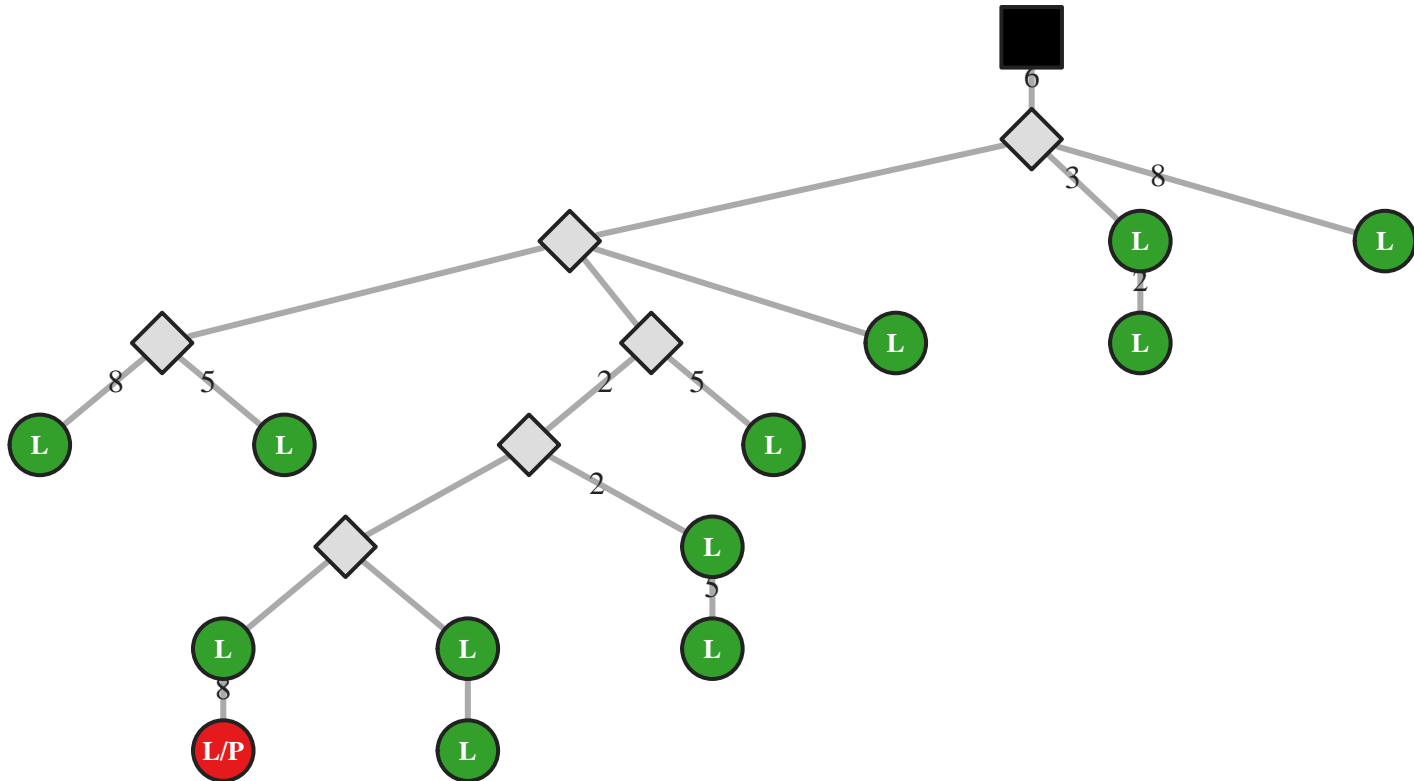
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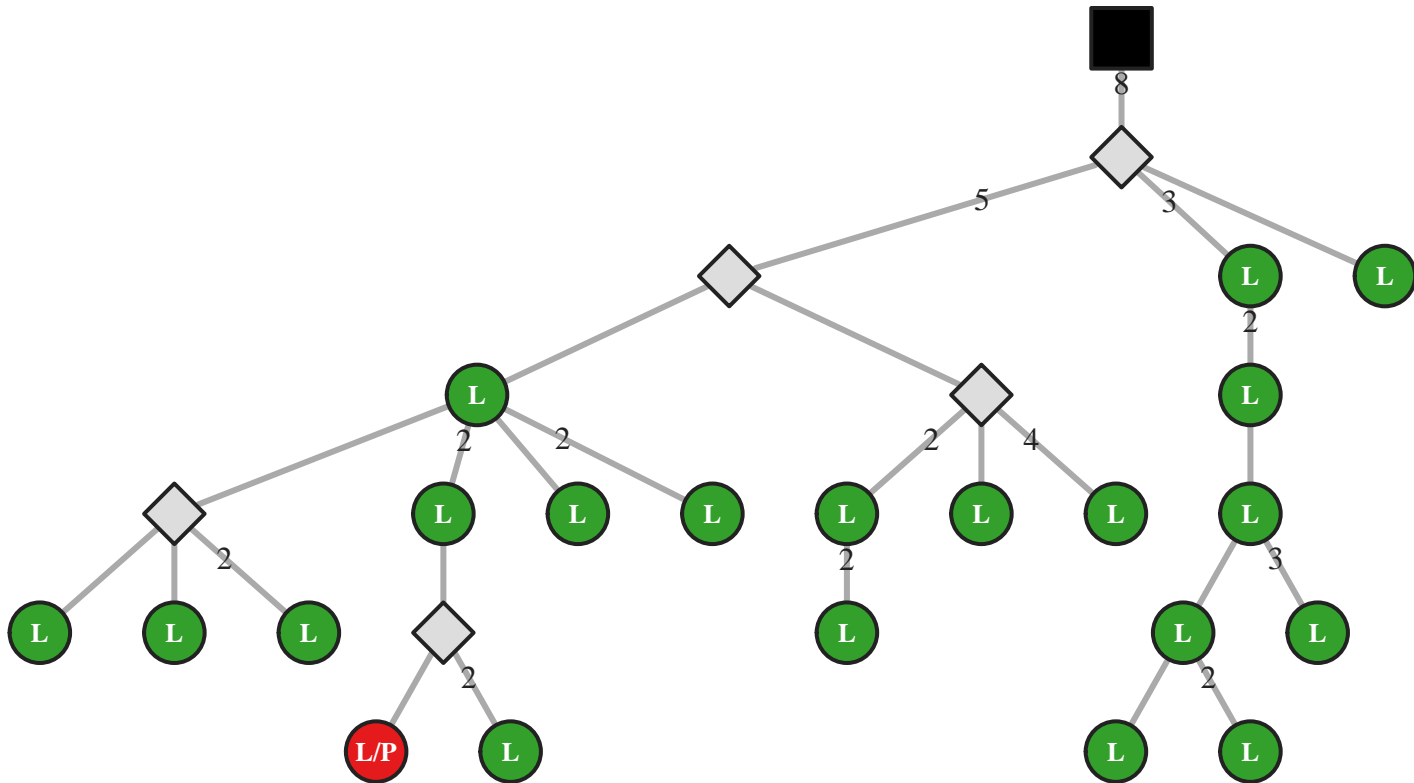
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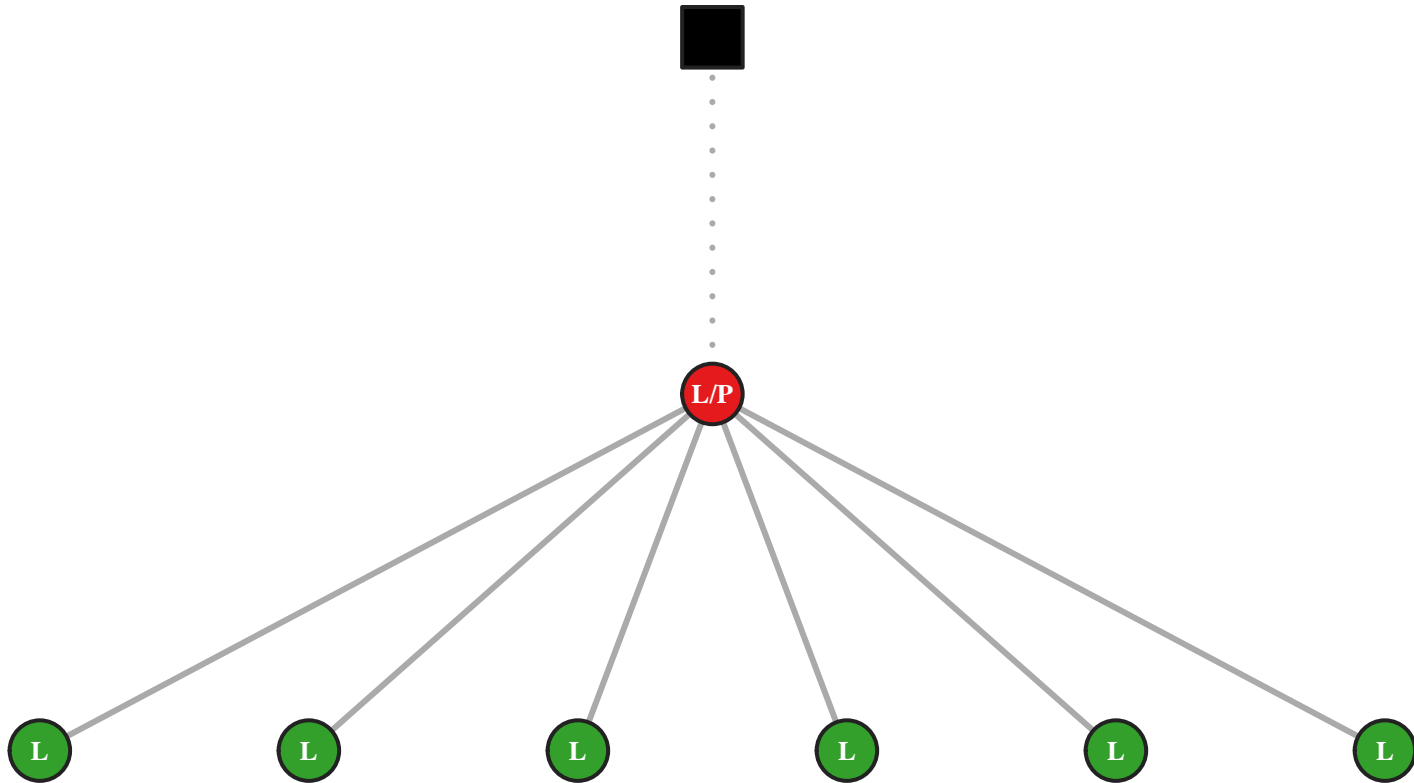
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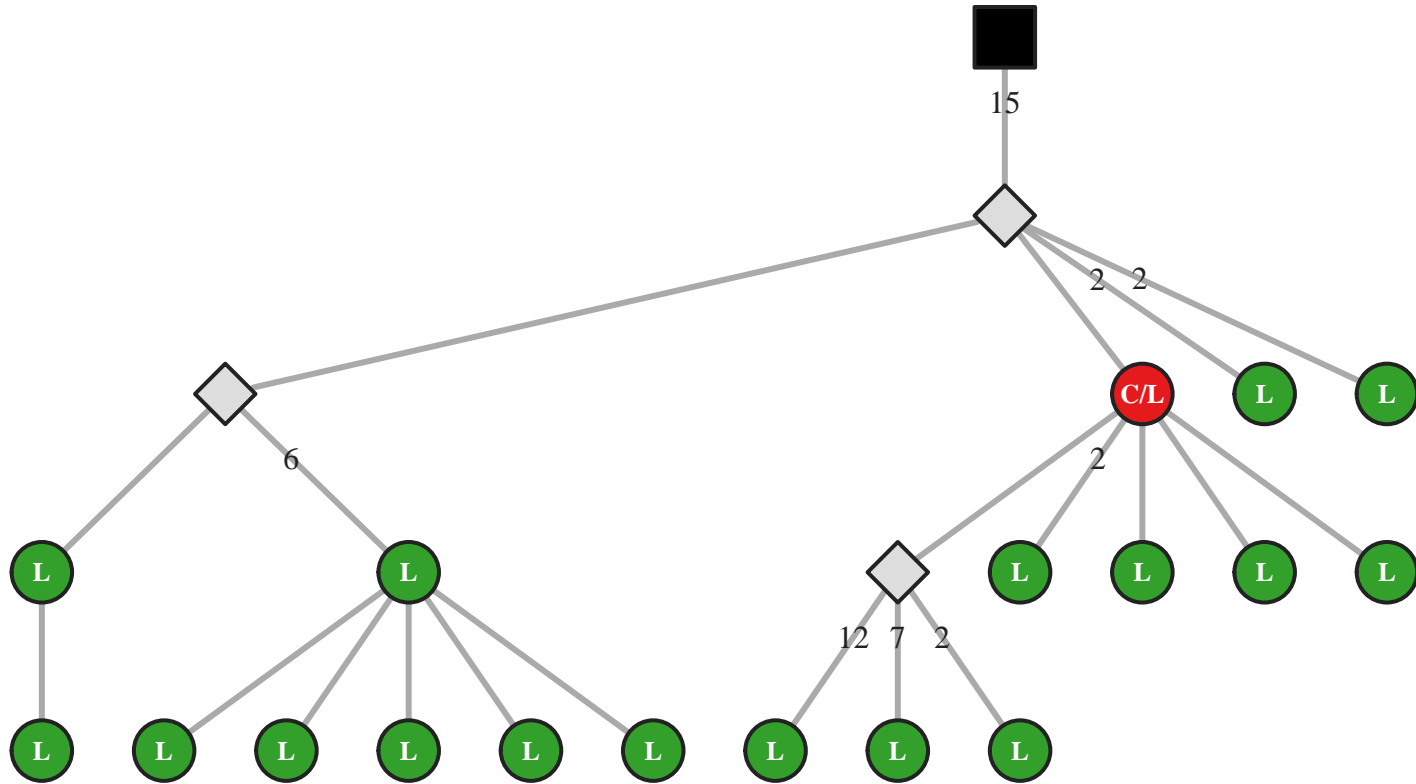
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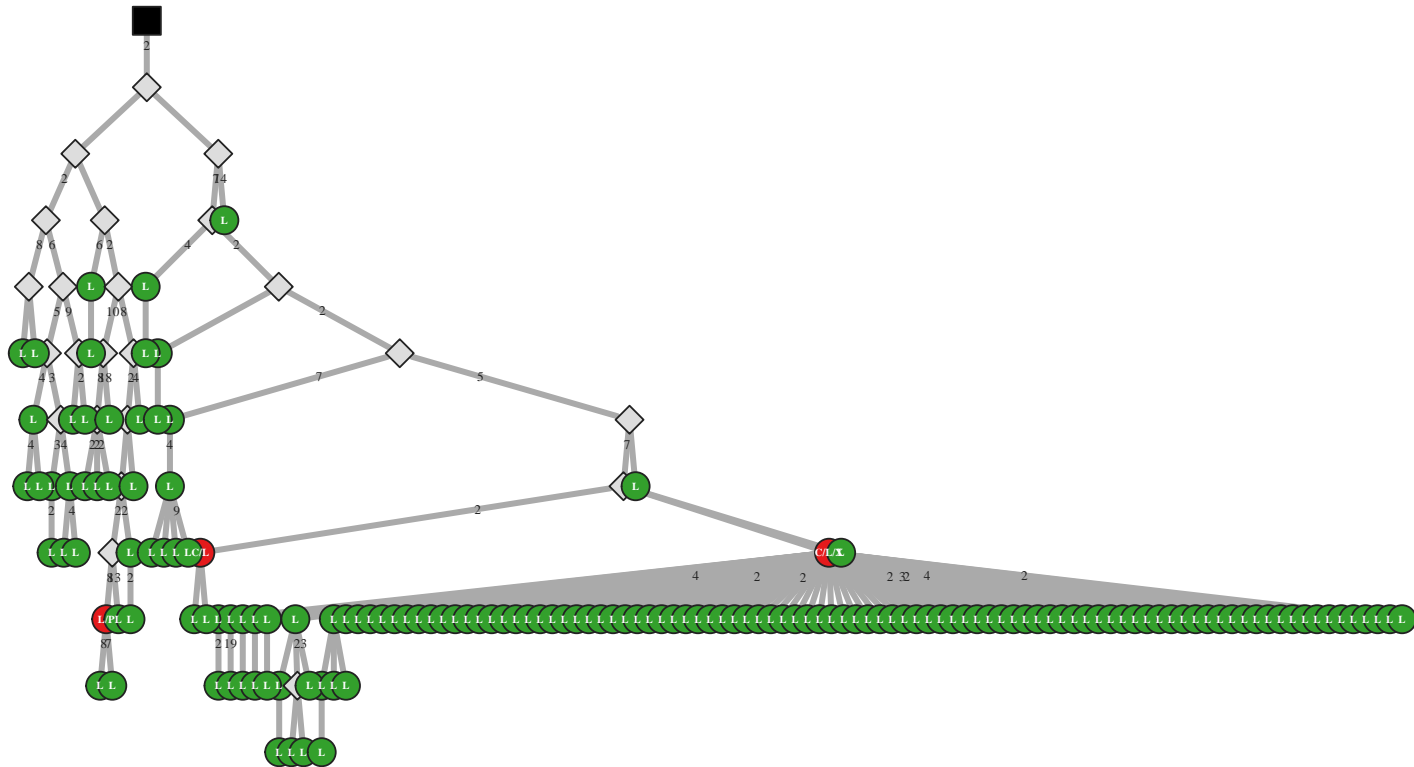
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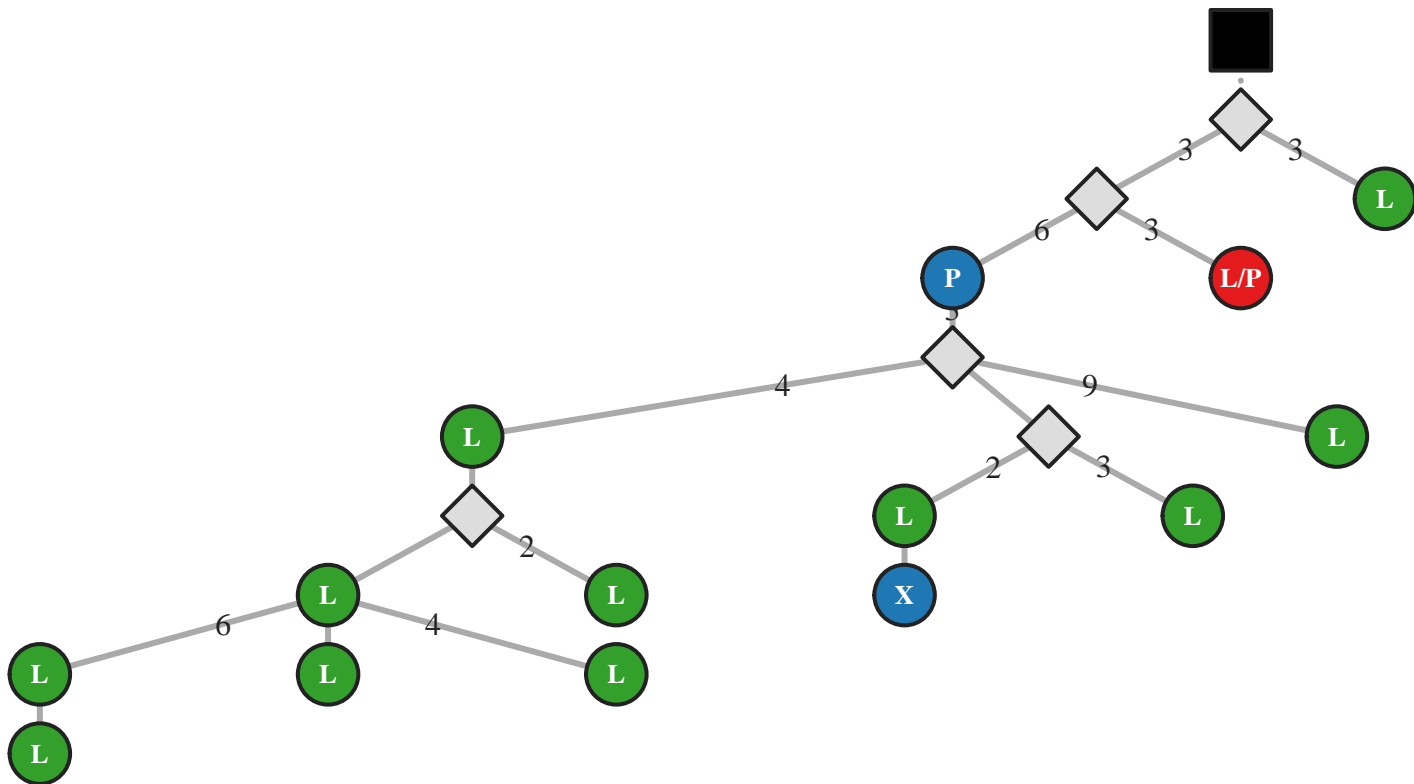
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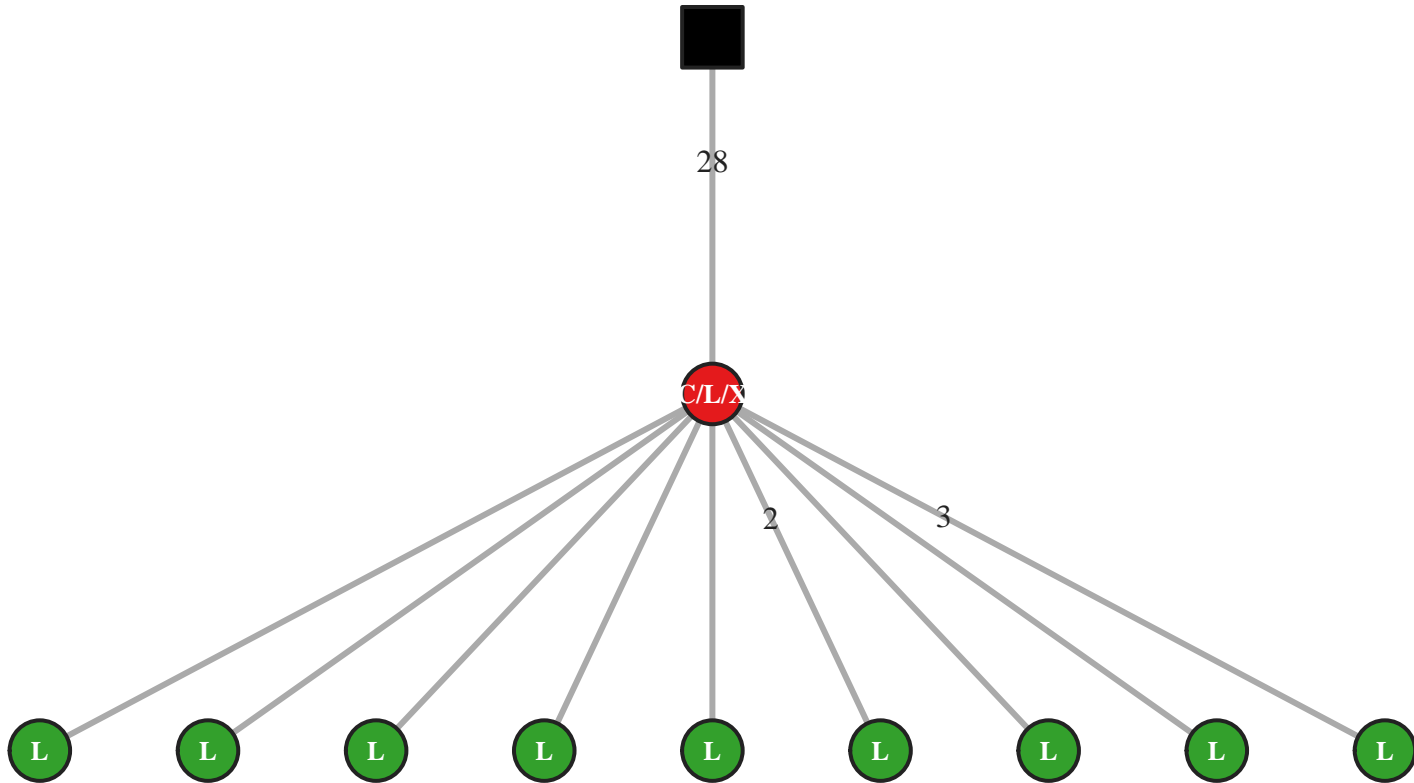
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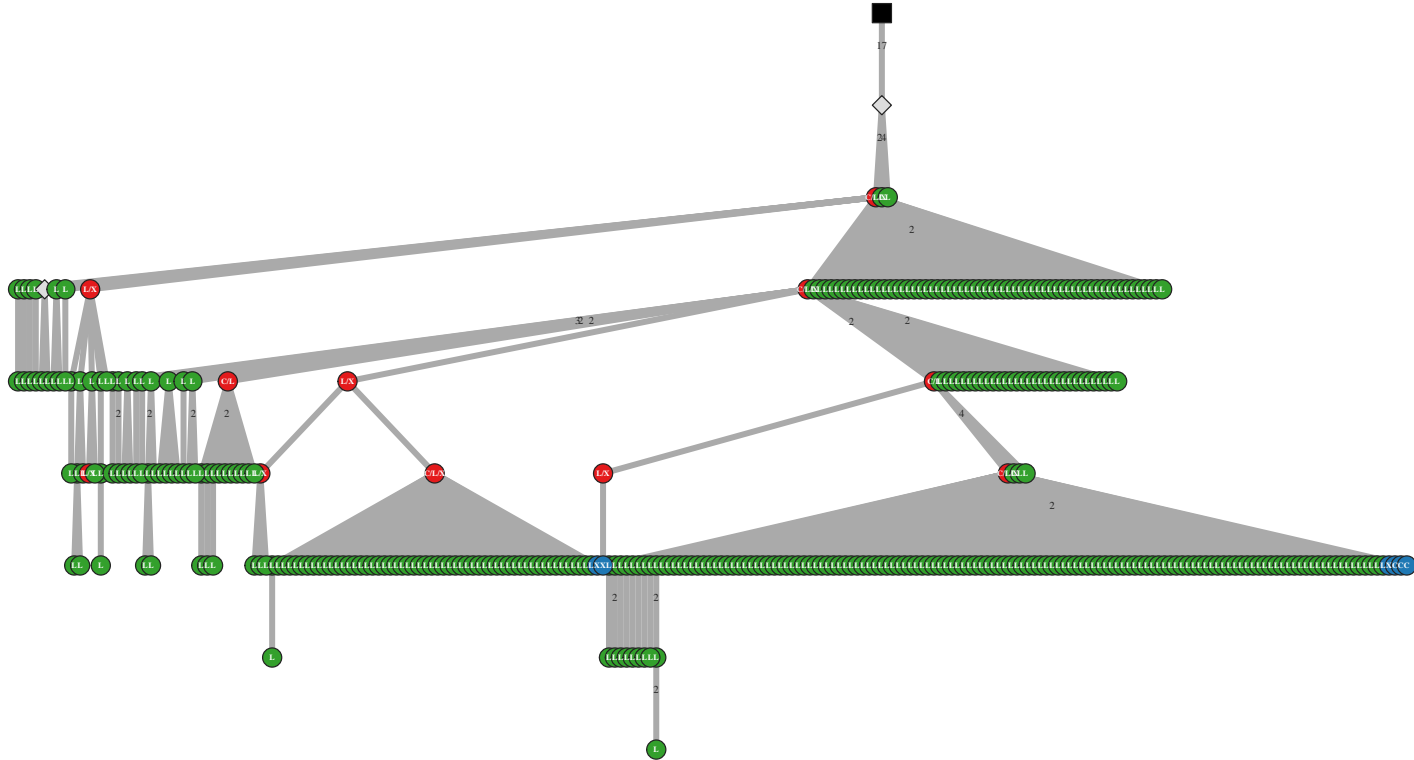
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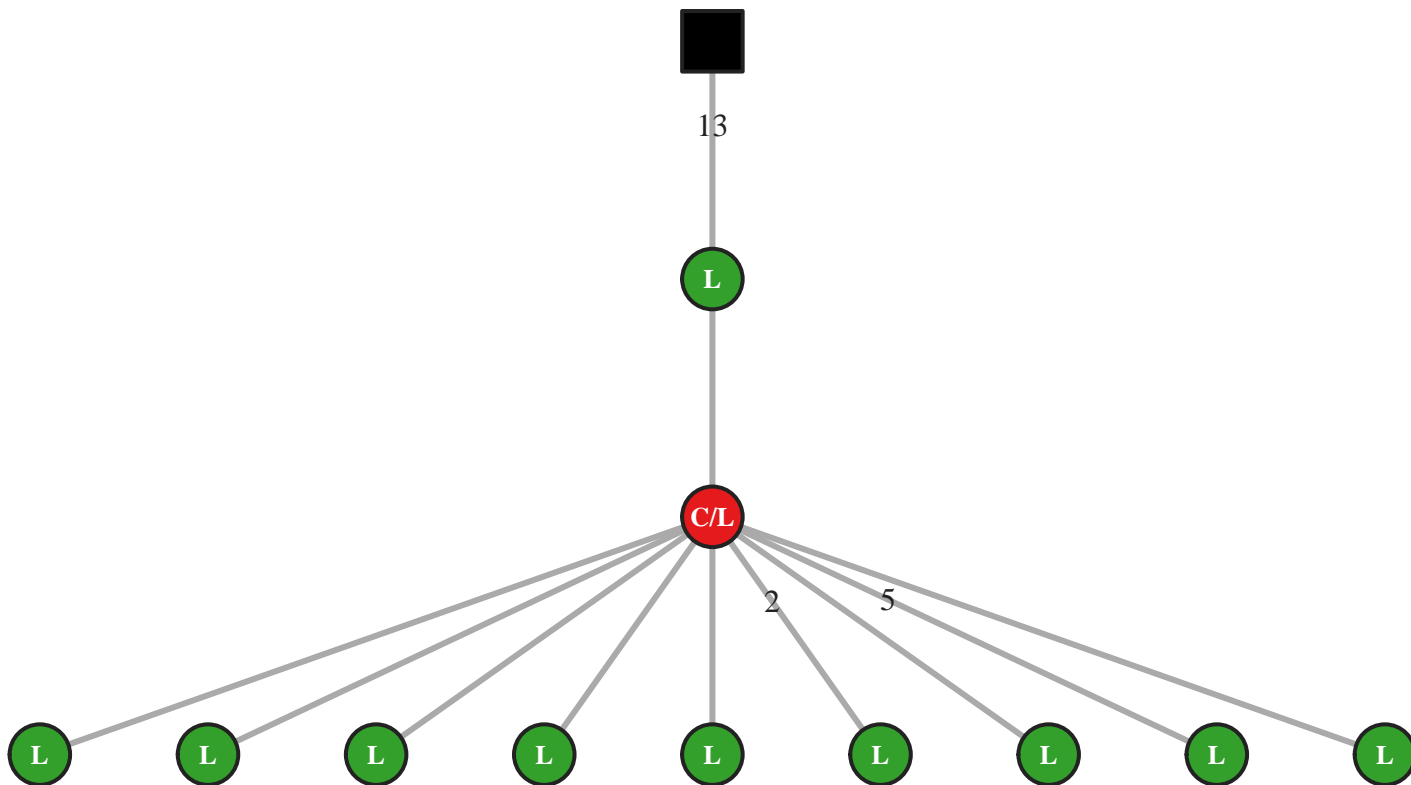
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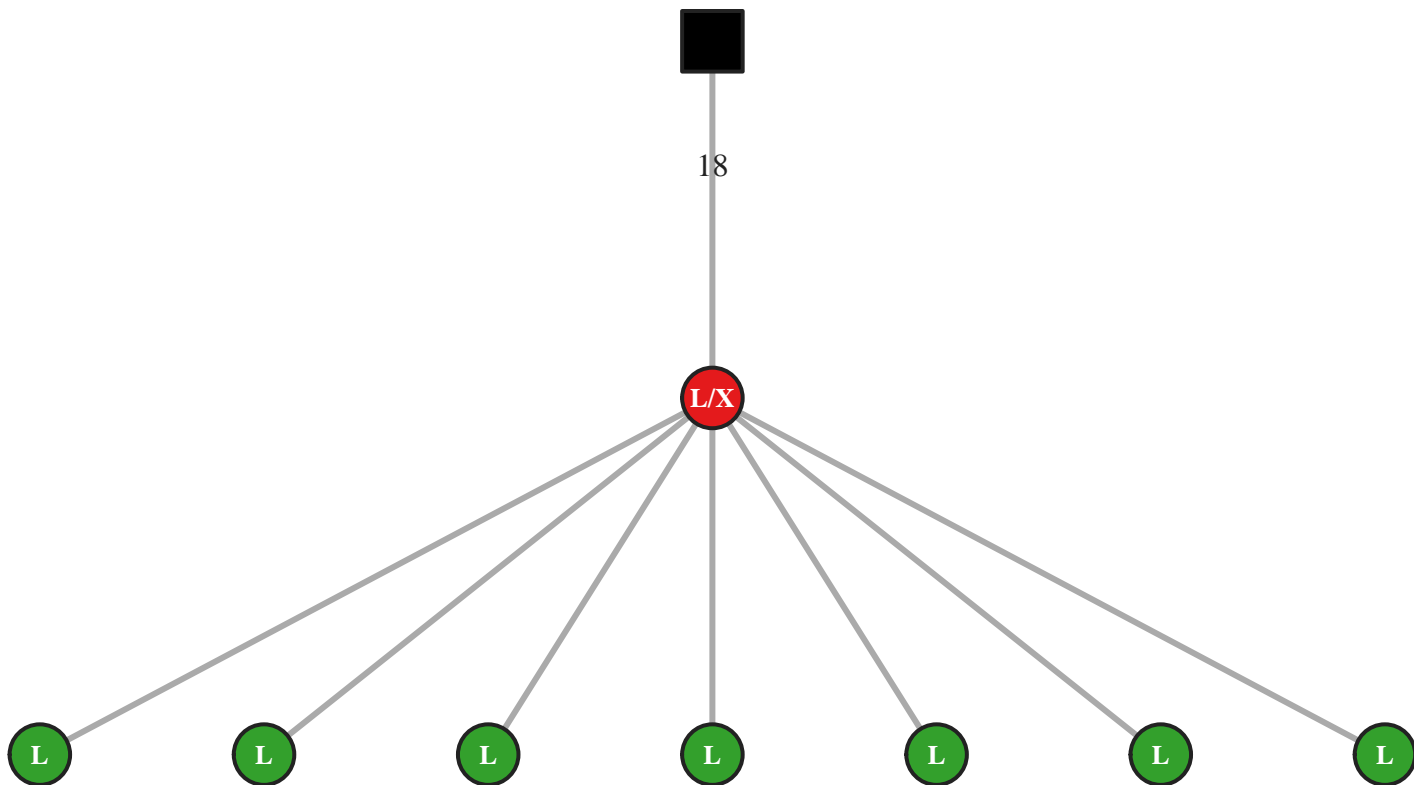
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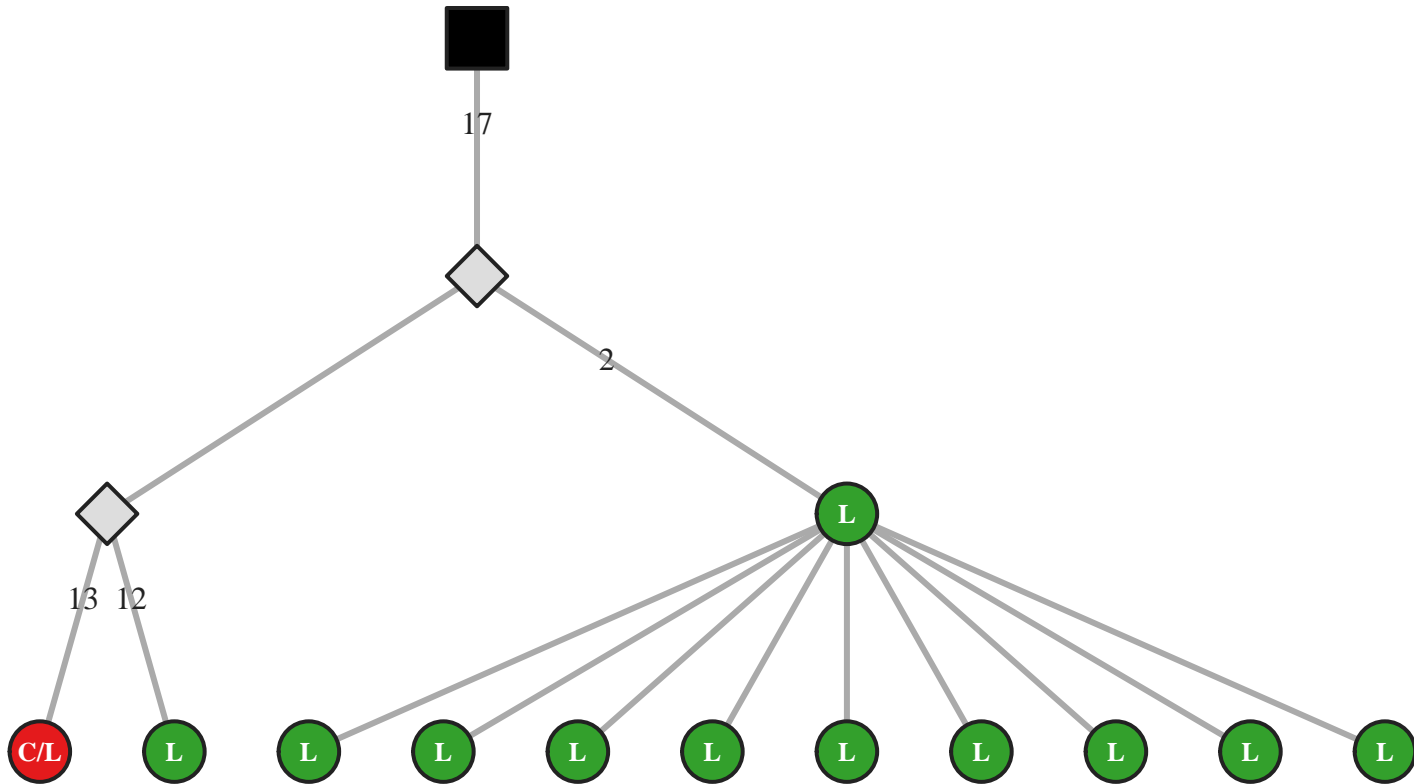
M5 IgG IGHV5-51/J6 33bp (47278)



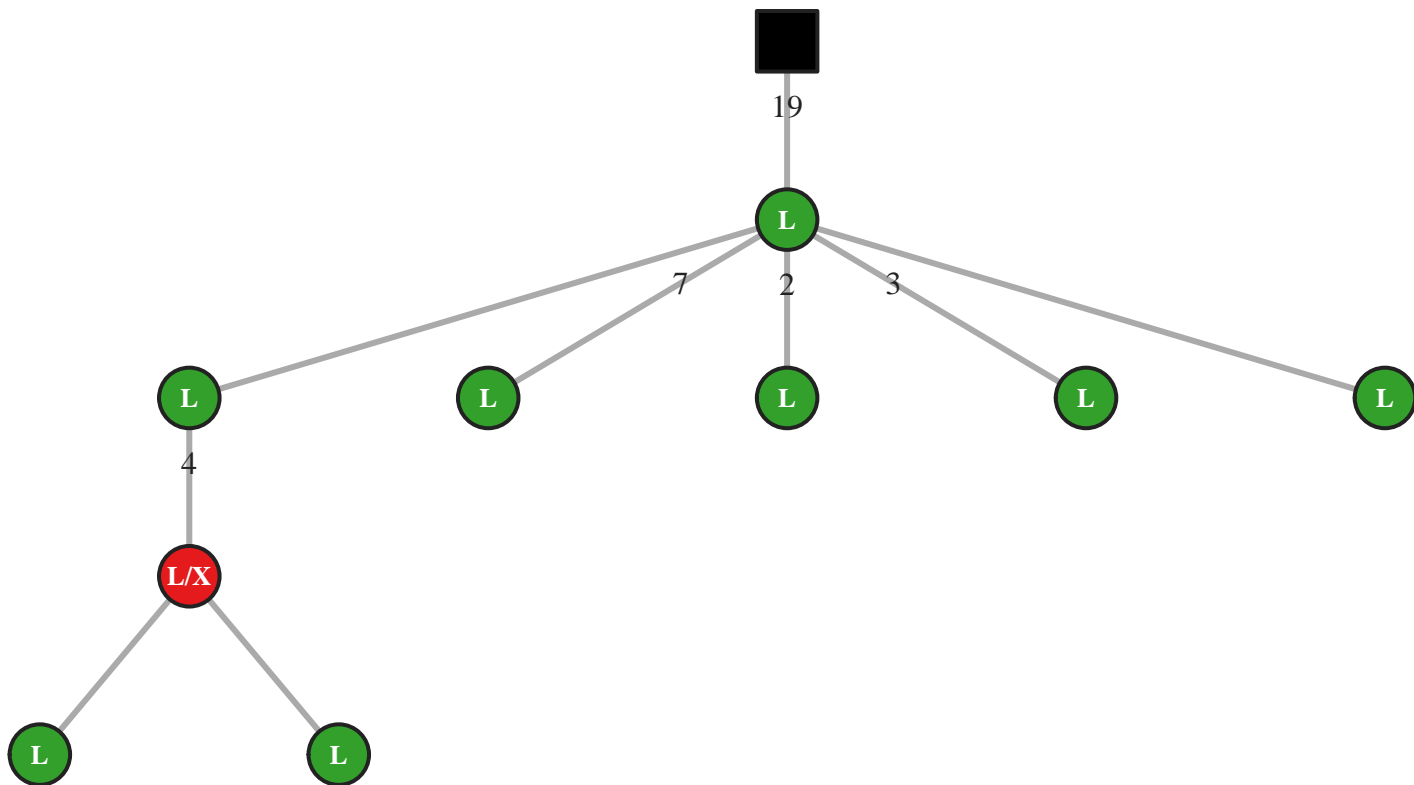
M5 IgG IGHV5-51/J6 45bp (53712)



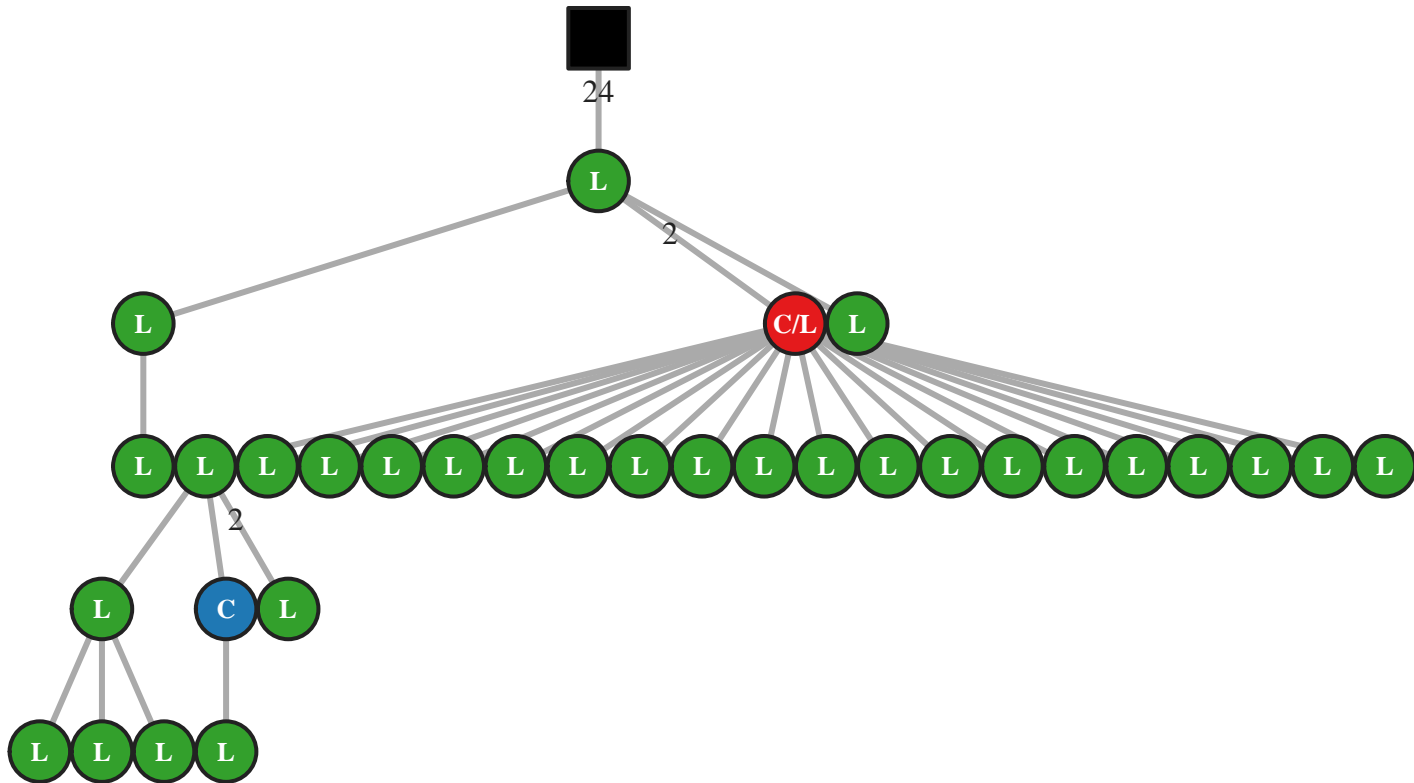
M5 IgG IGHV5-51/J6 51bp (20055)



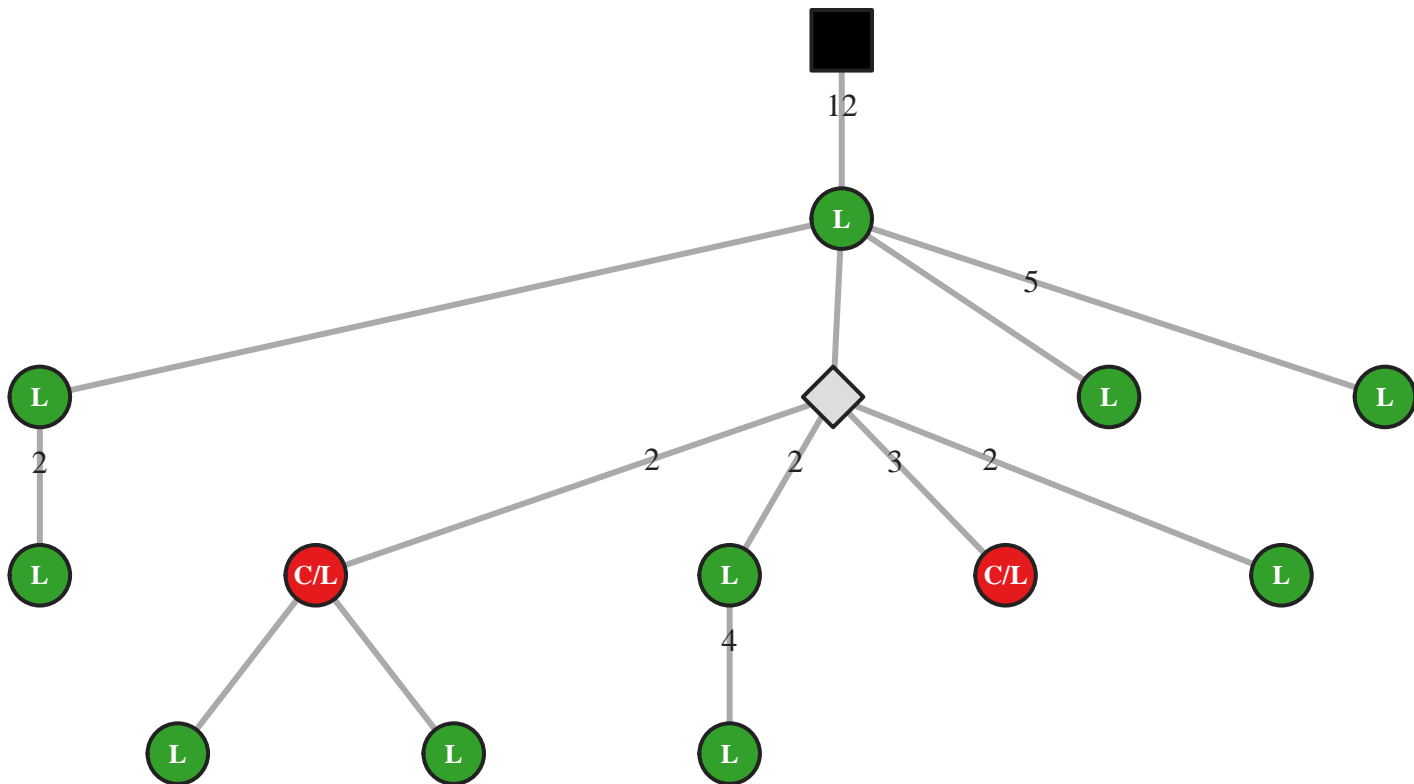
M5 IgG IGHV5-51/J6 51bp (20060)



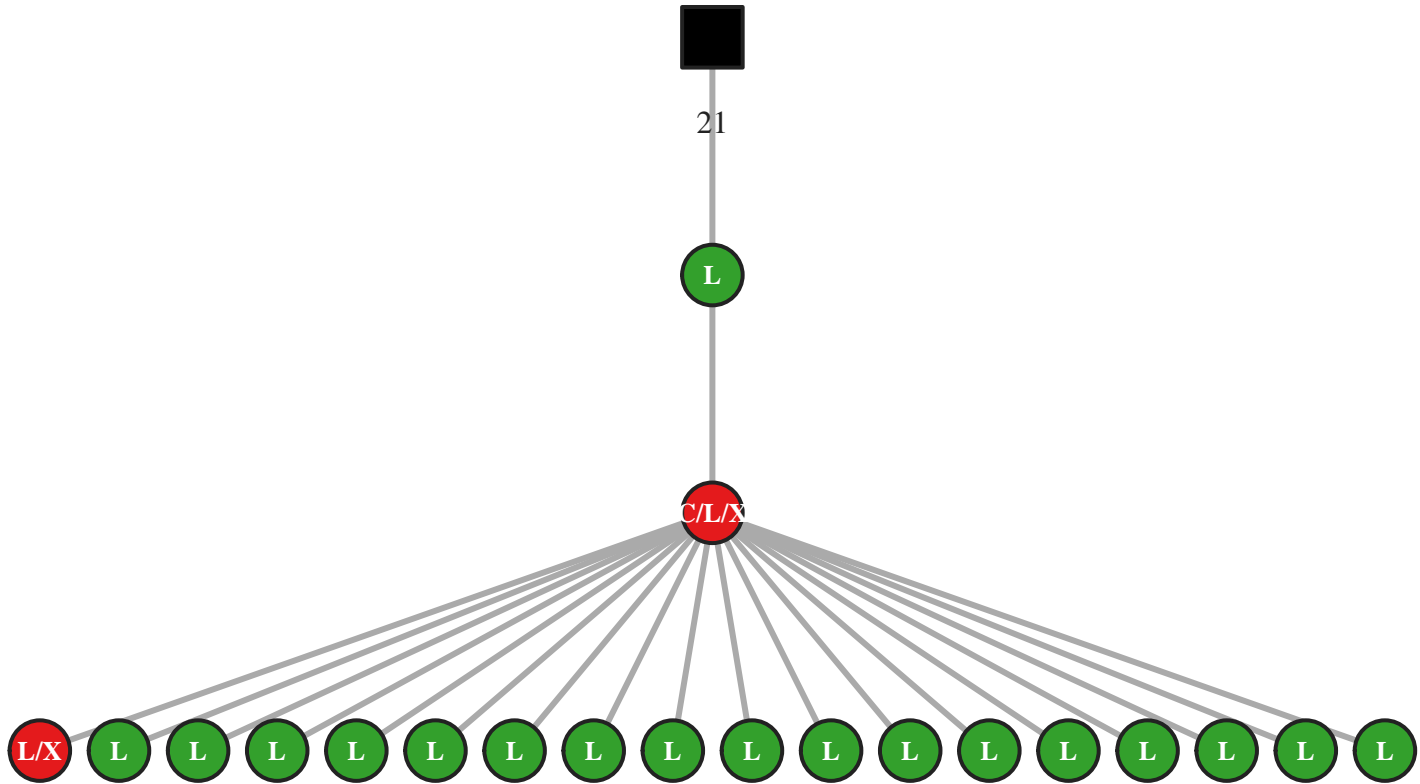
M5 IgG IGHV5-51/J6 54bp (10531)



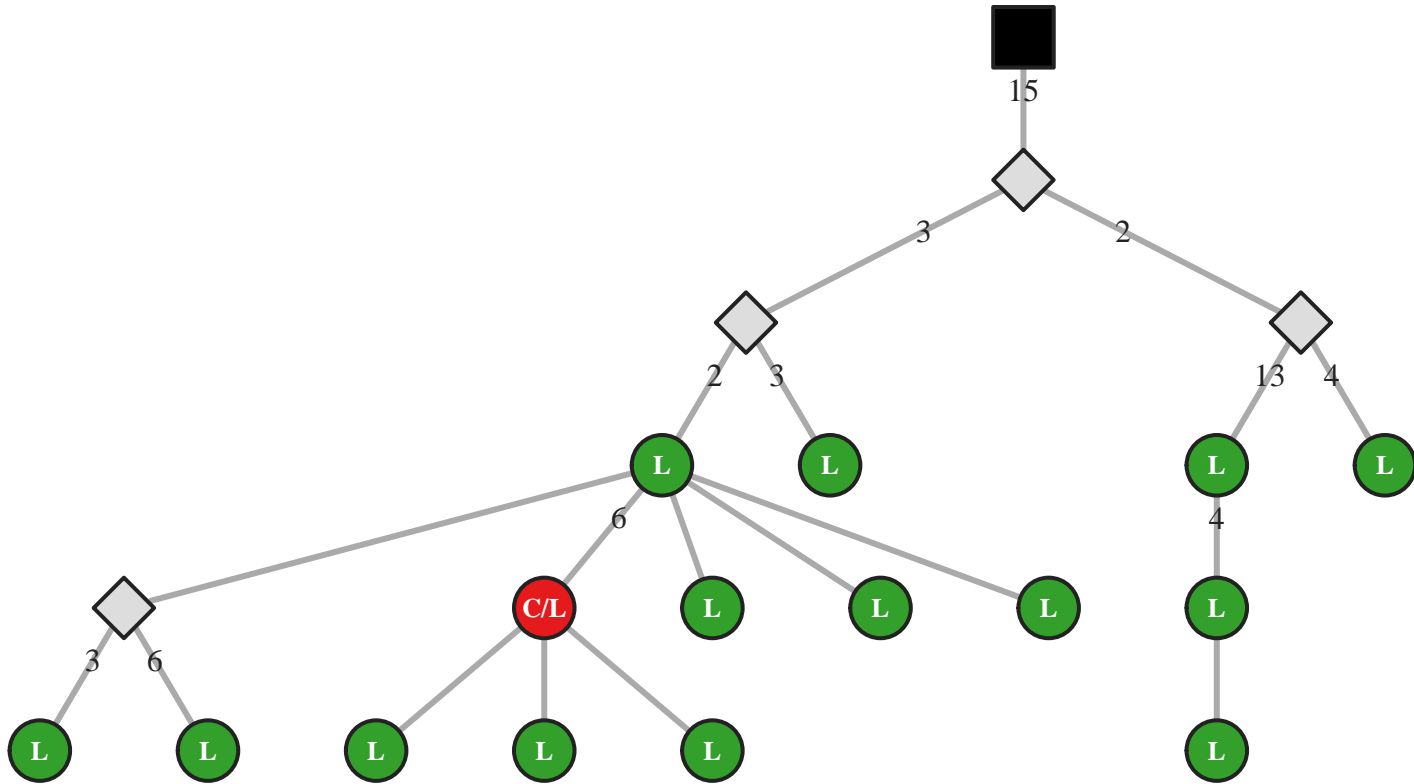
M5 IgG IGHV5-51/J6 57bp (10558)



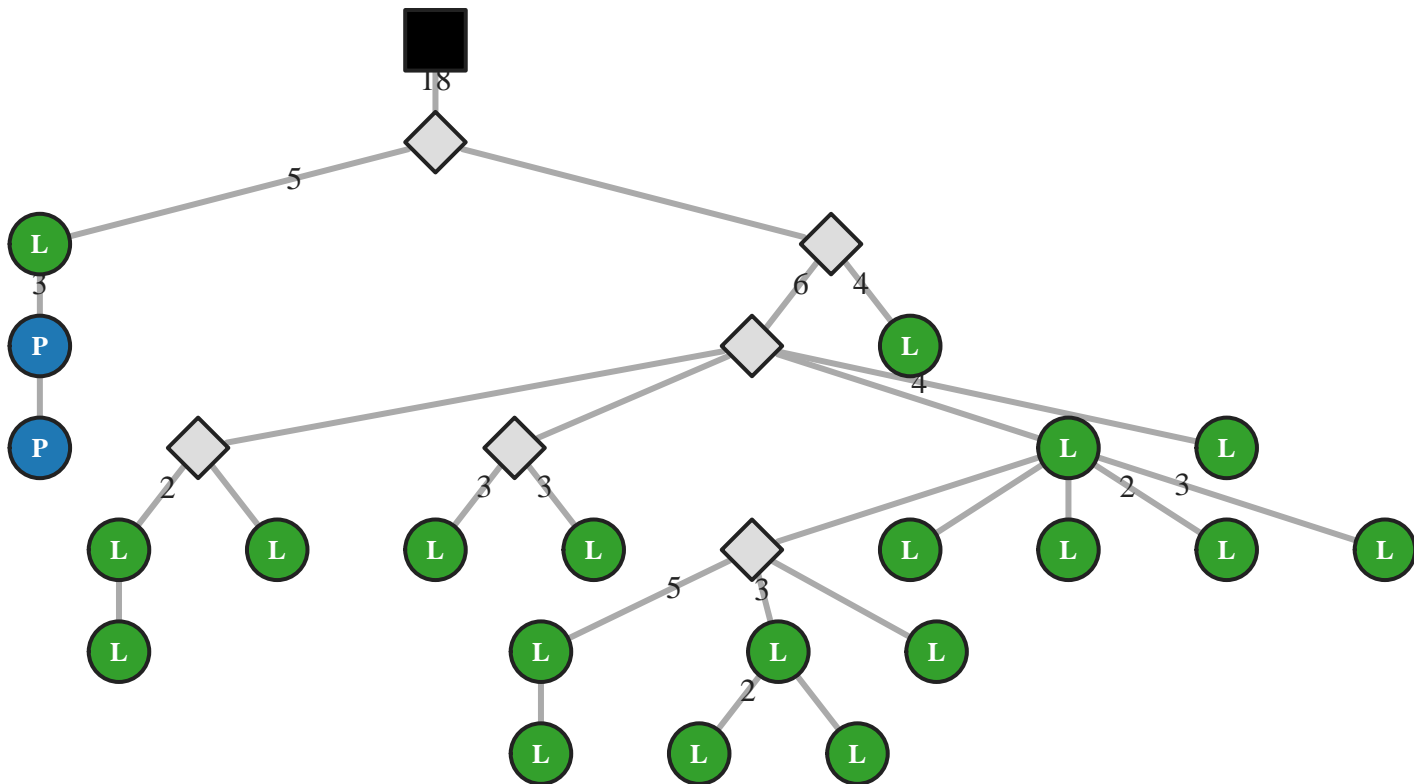
M5 IgG IGHV5-51/J6 63bp (10579)



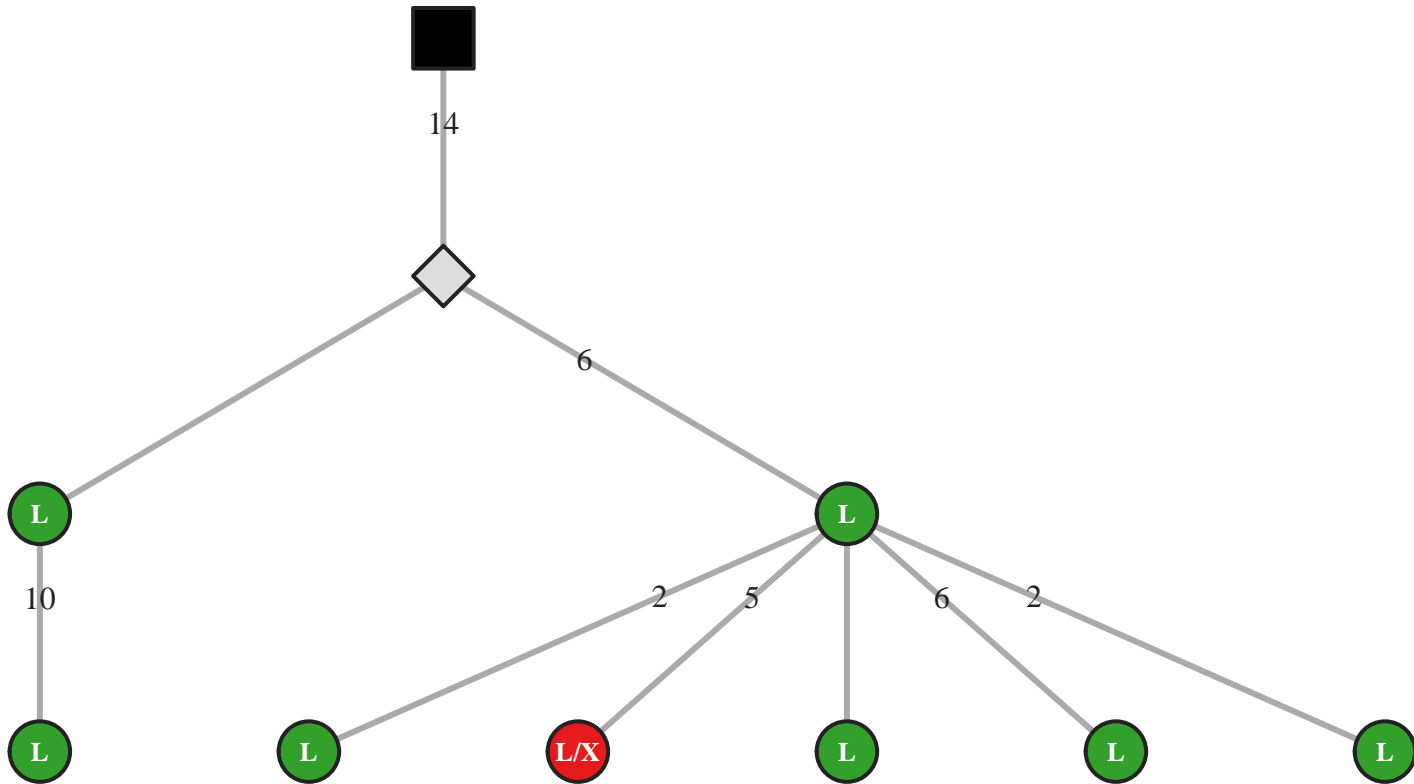
M5 IgA IGHV5-51/J6 66bp (3238)



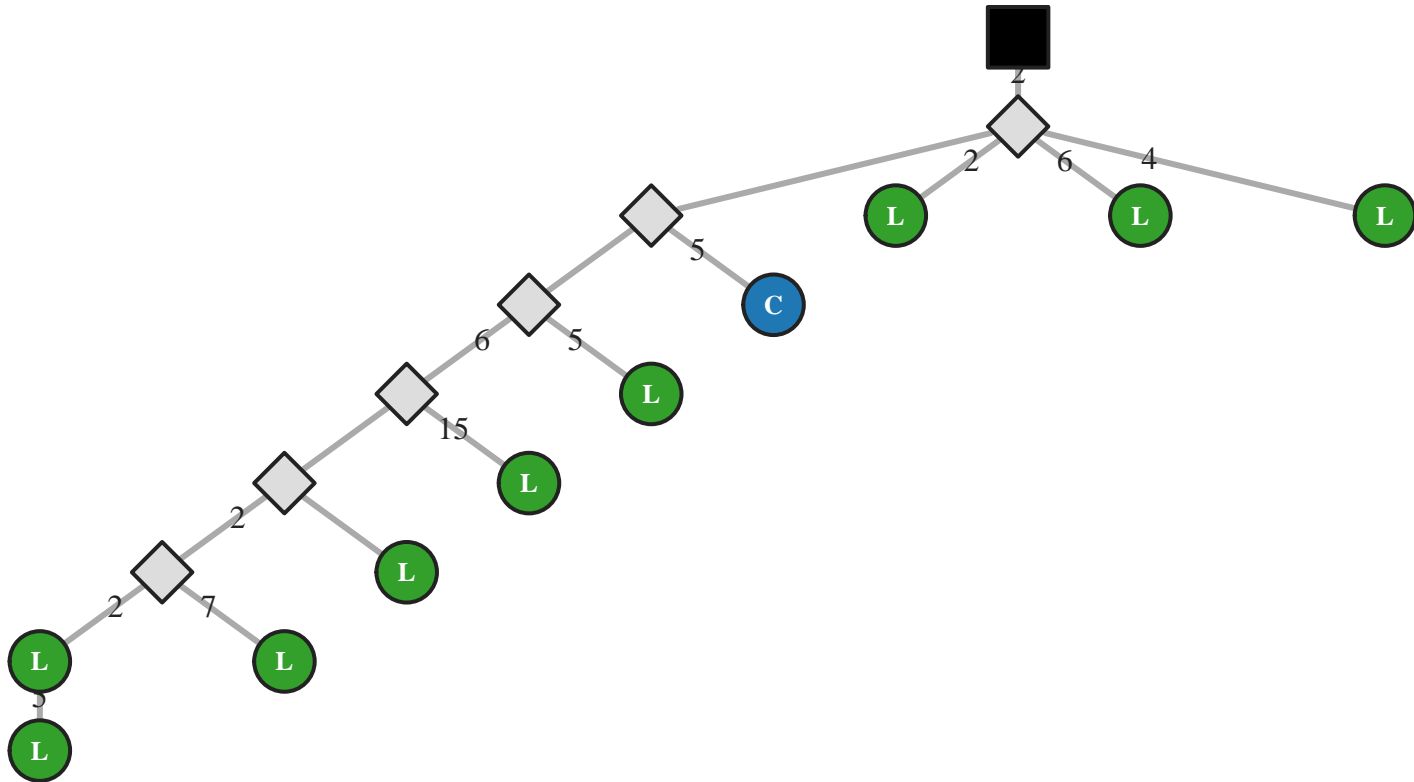
M5 IgG IGHV5-51/J6 66bp (20066)



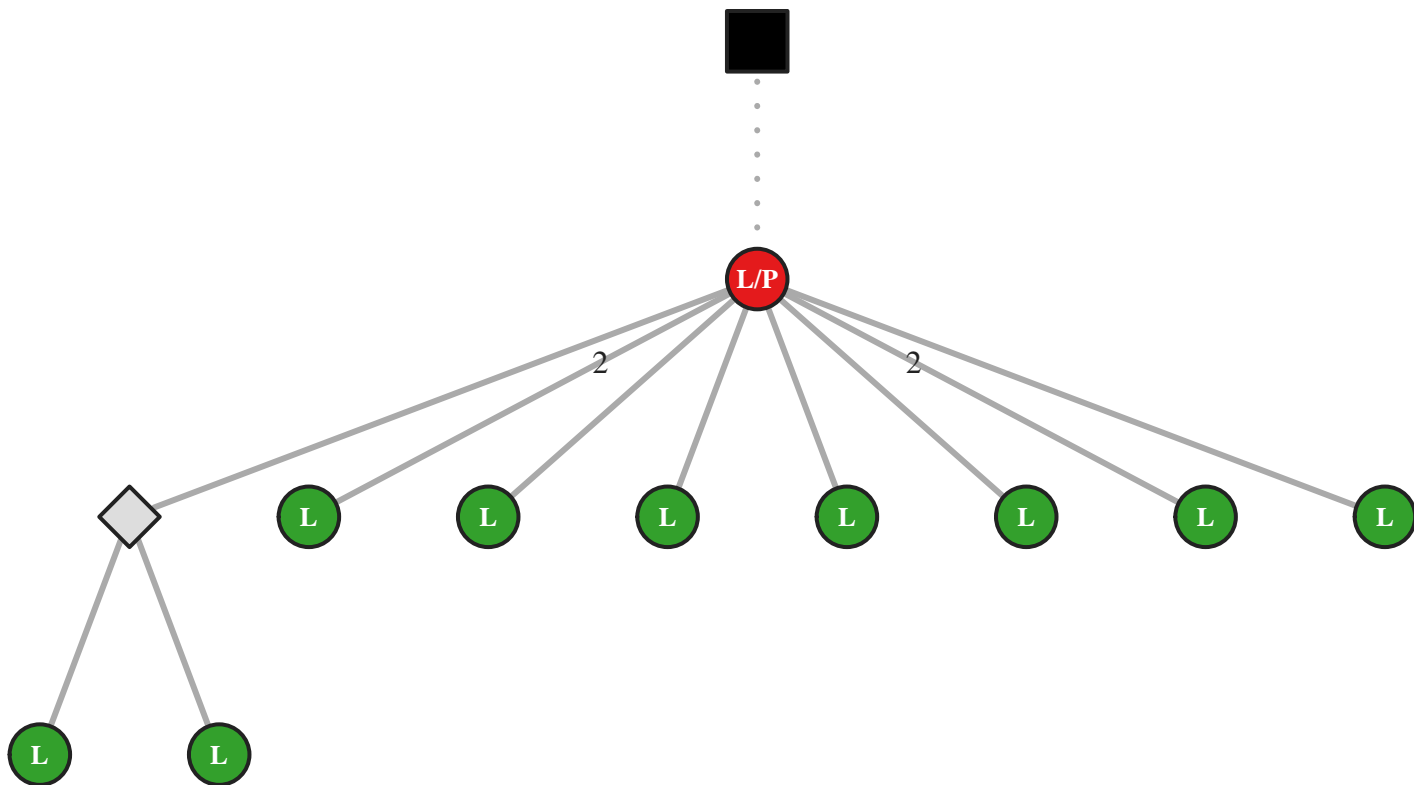
M5 IgG IGHV6-1/J4 39bp (28842)



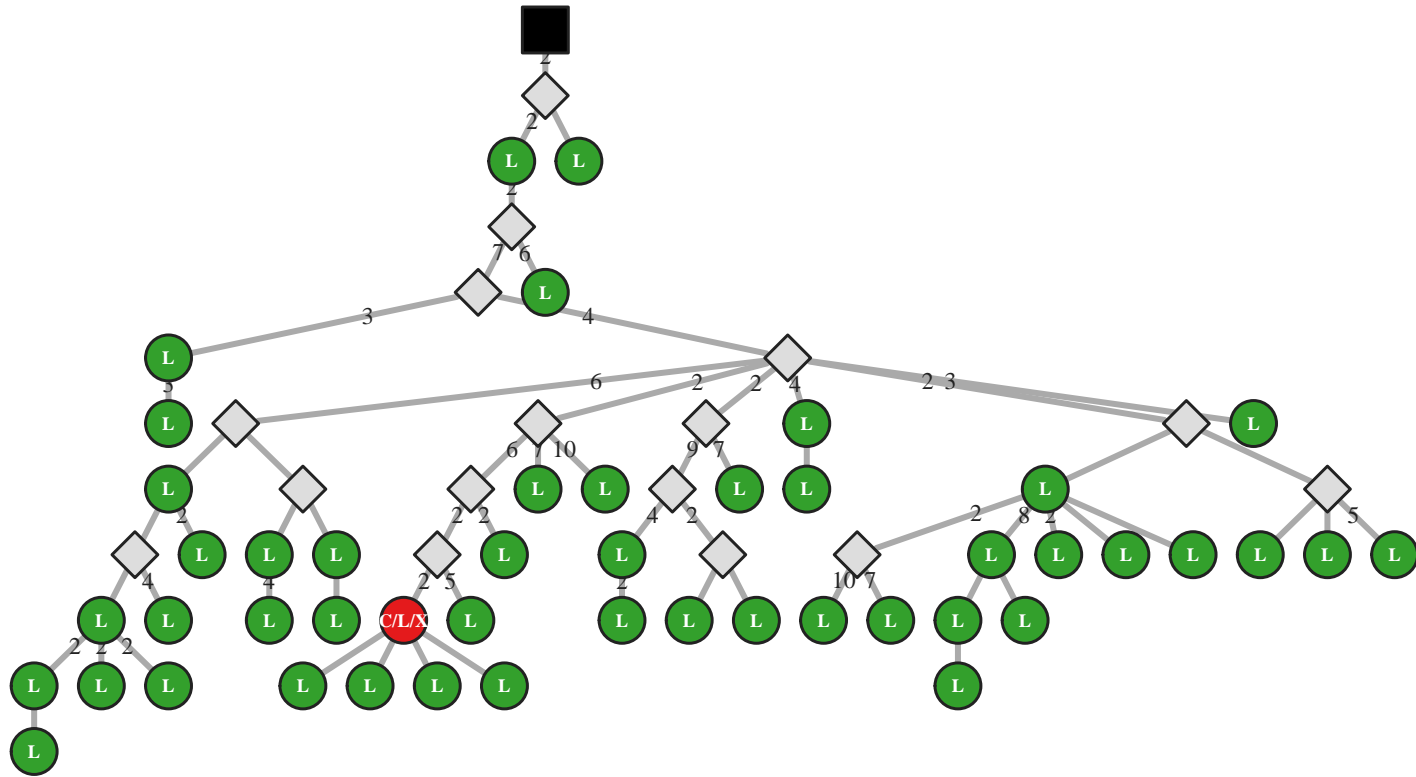
M5 IgG IGHV6-1/J4 48bp (47341)



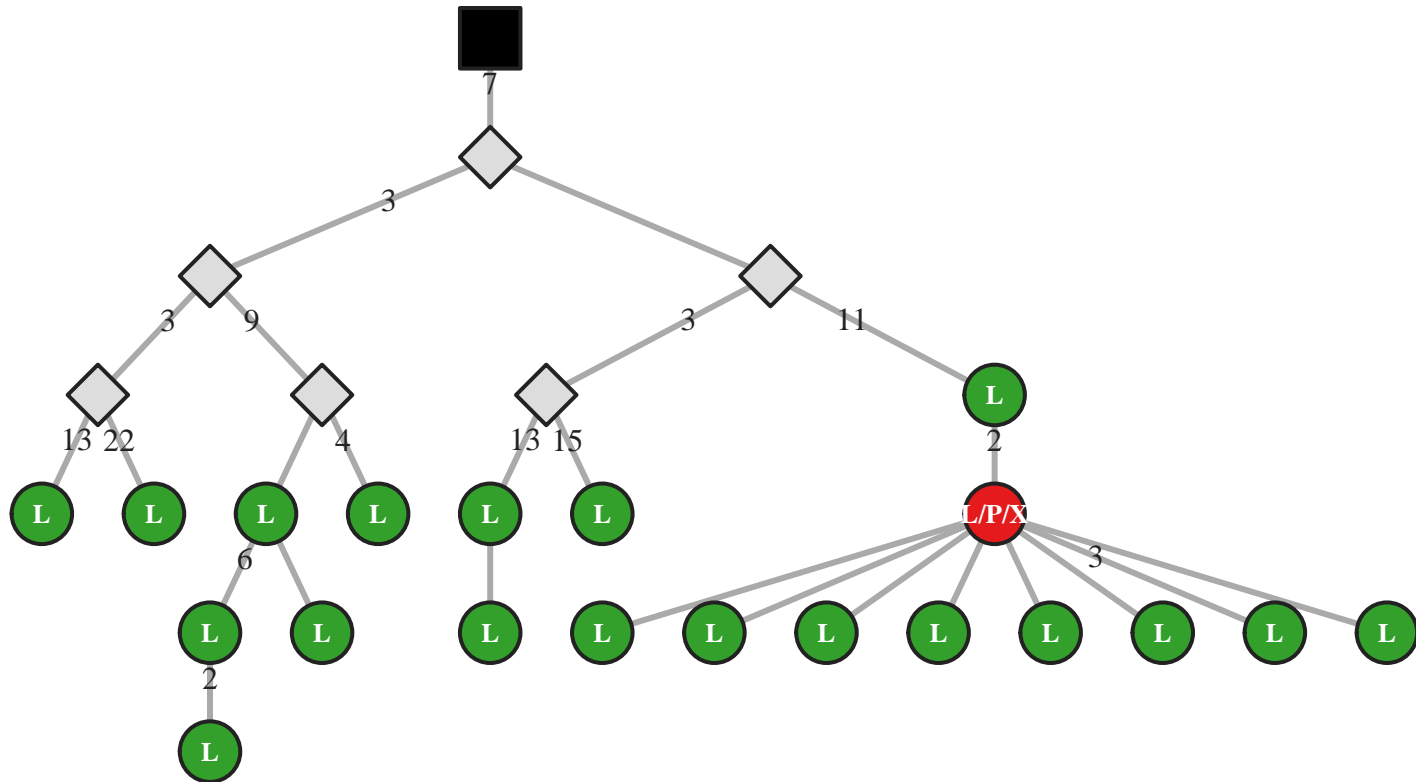
M5 IgG IGHV6-1/J6 54bp (47353)



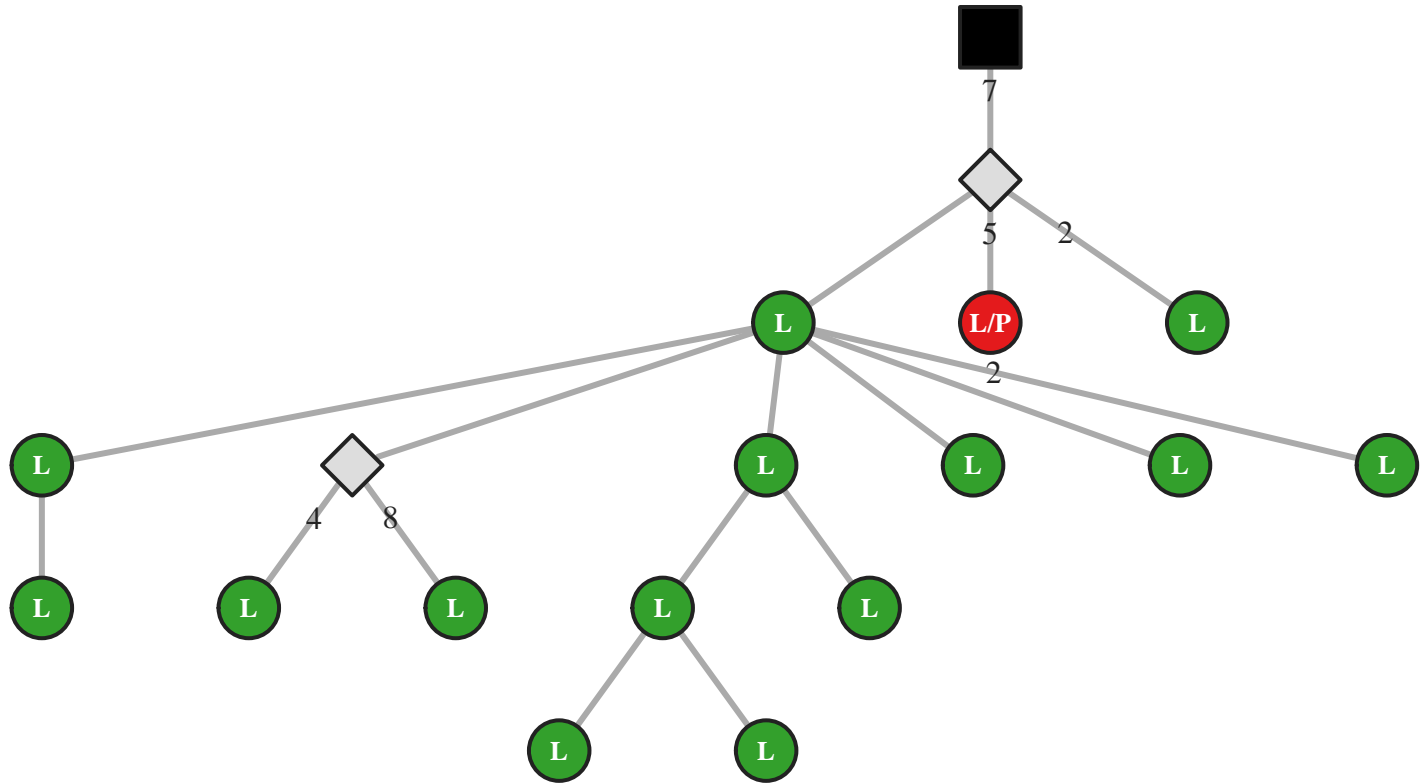
M5 IgG IGHV7-4-1/J1 39bp (47354)



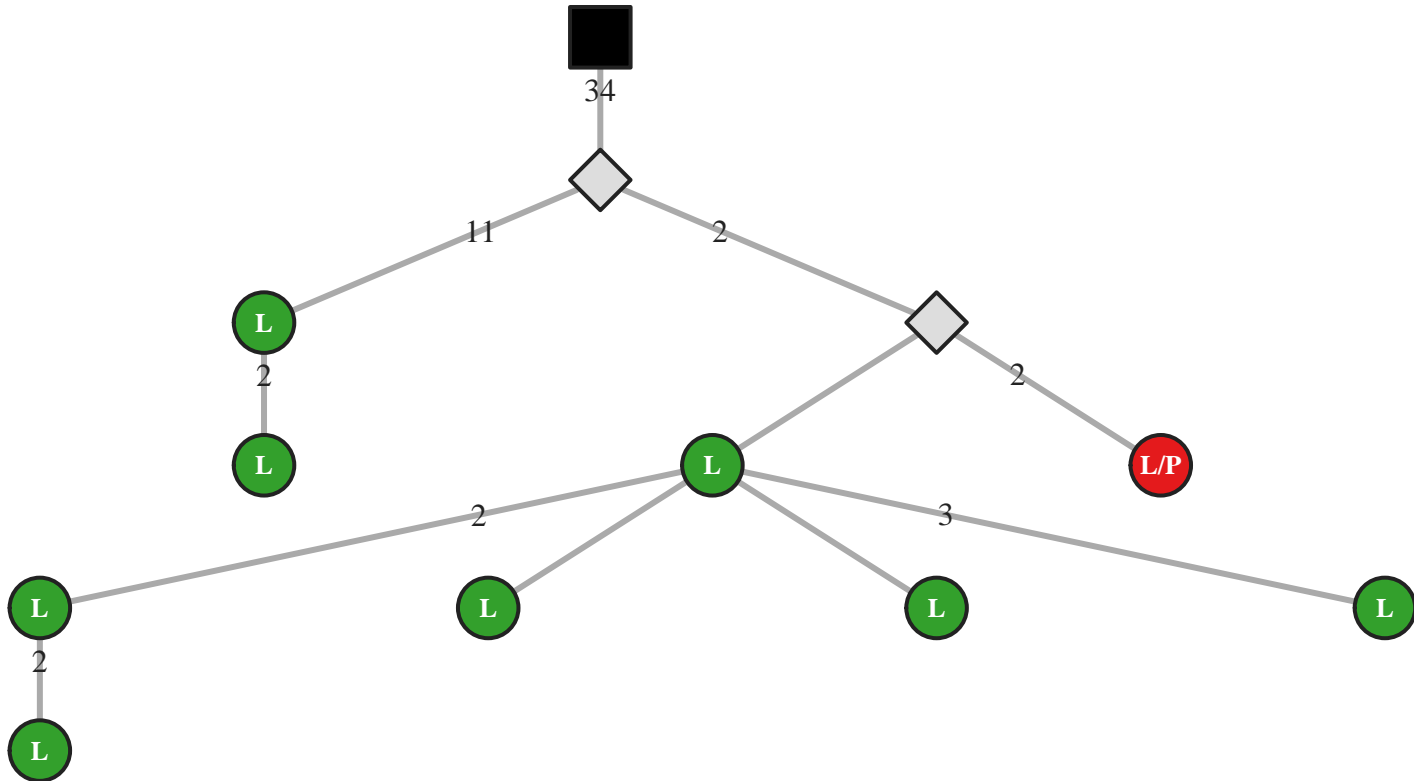
M5 IgG IGHV7-4-1/J1 48bp (10639)



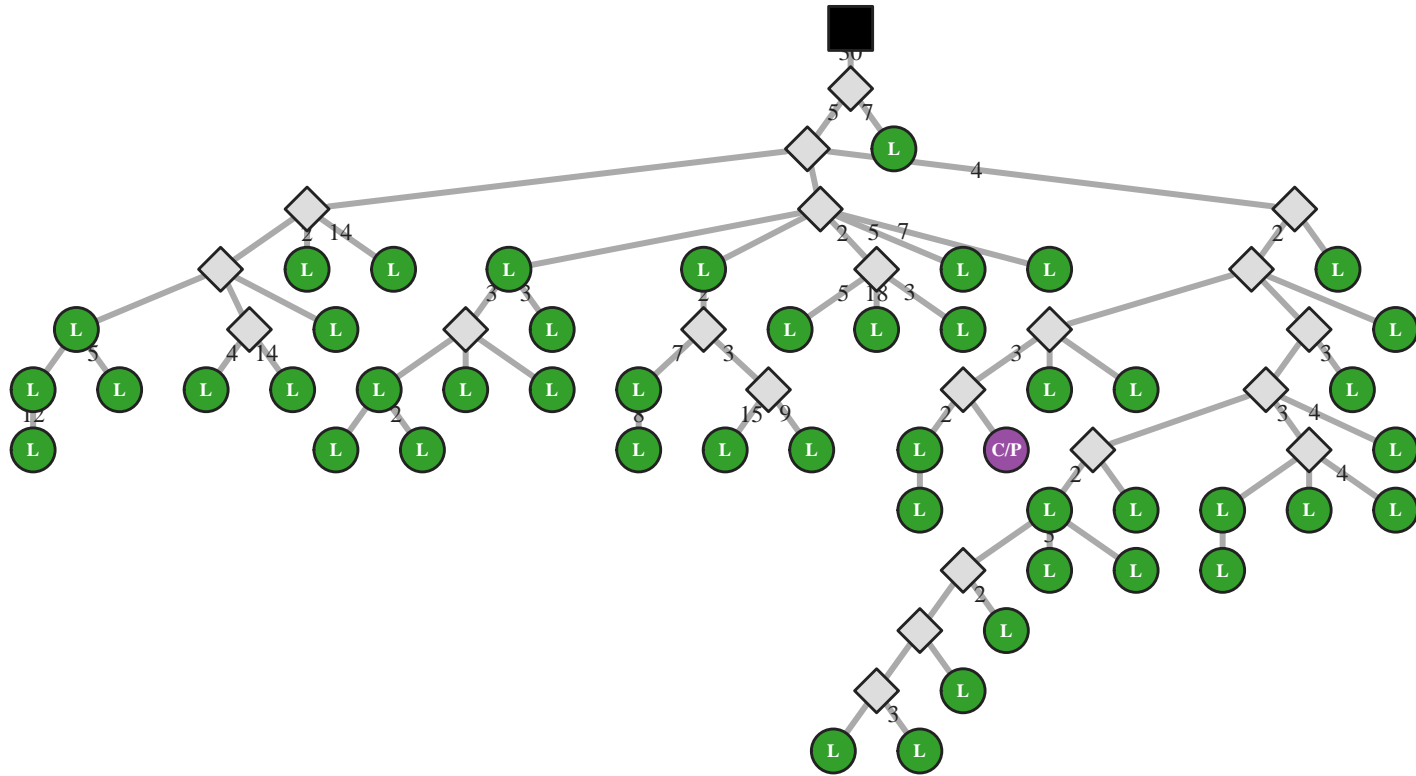
M5 IgG IGHV7-4-1/J2 45bp (36947)



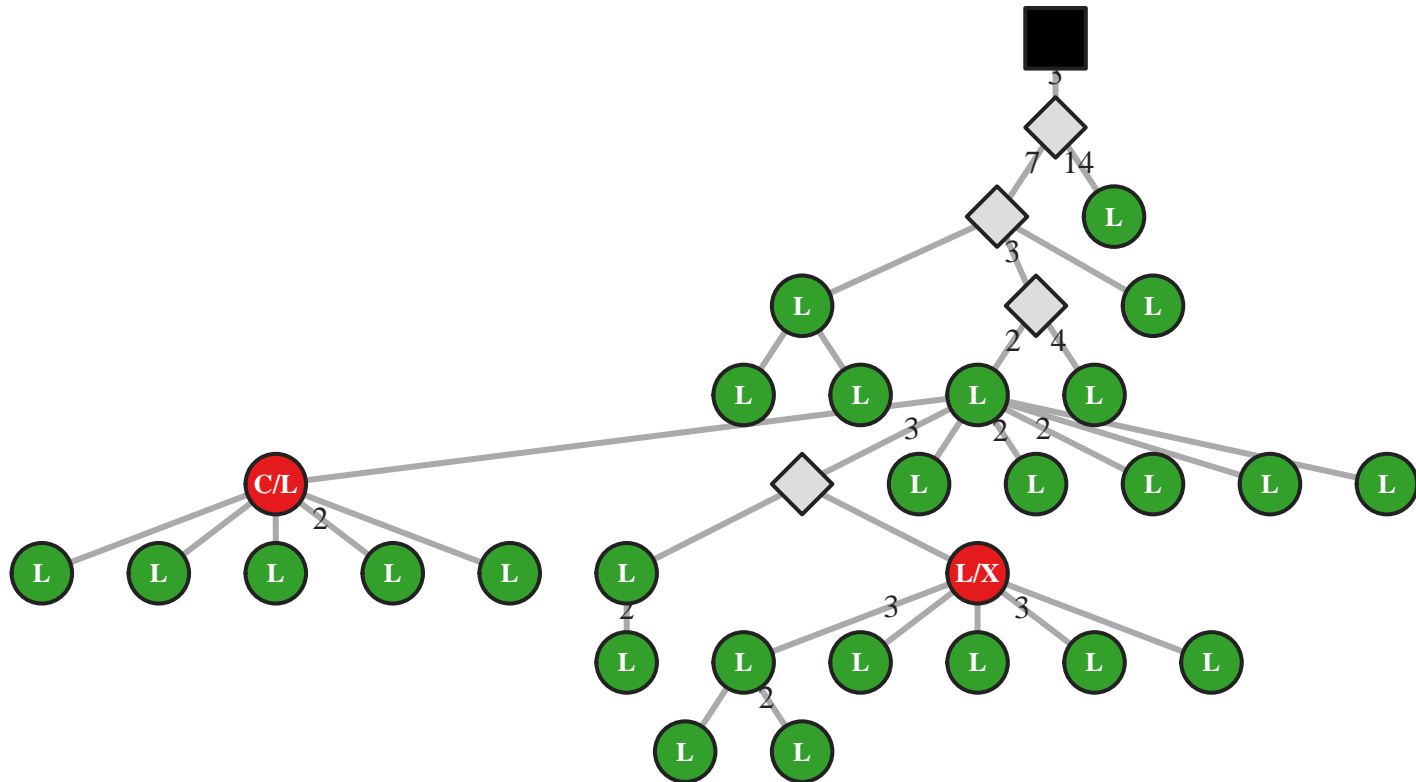
M5 IgG IGHV7-4-1/J3 45bp (36952)



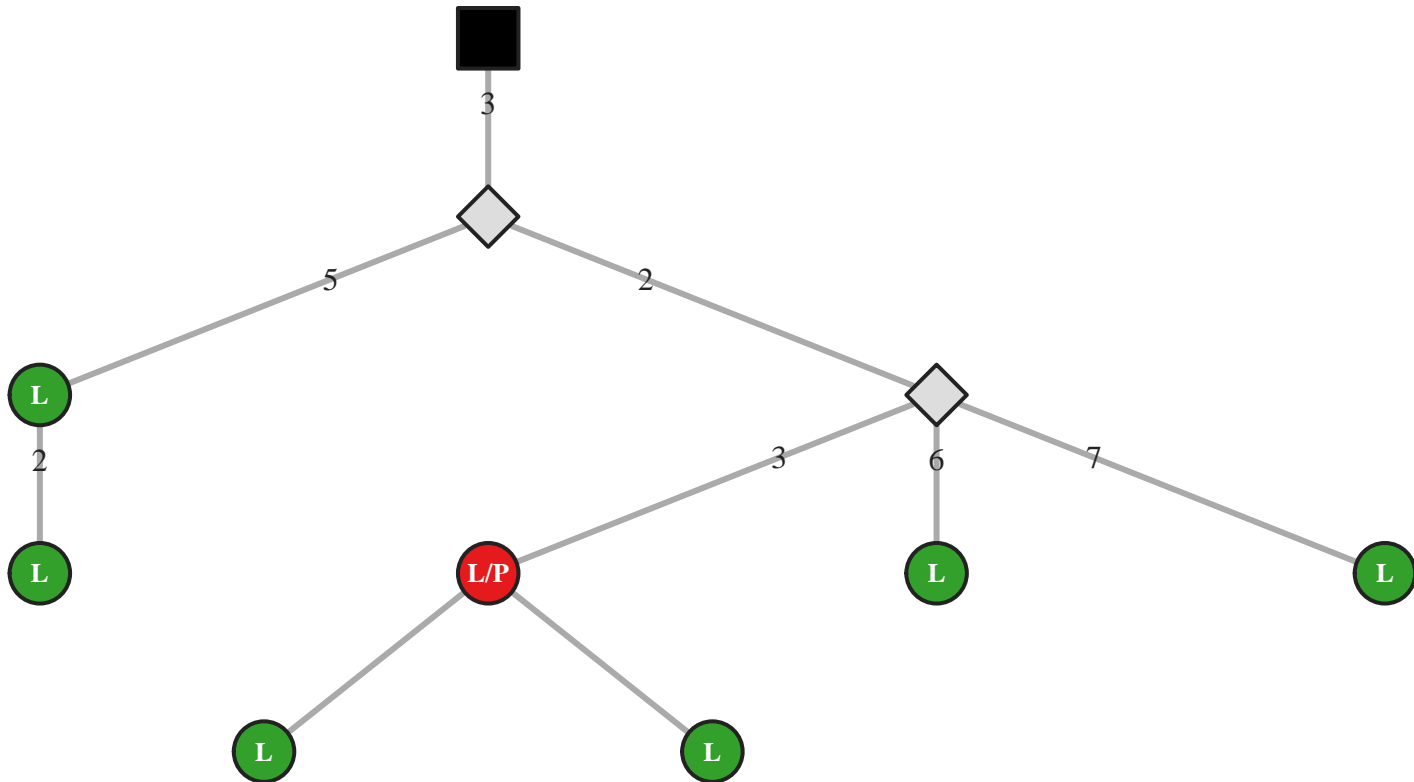
M5 IgG IGHV7-4-1/J3 48bp (47397)



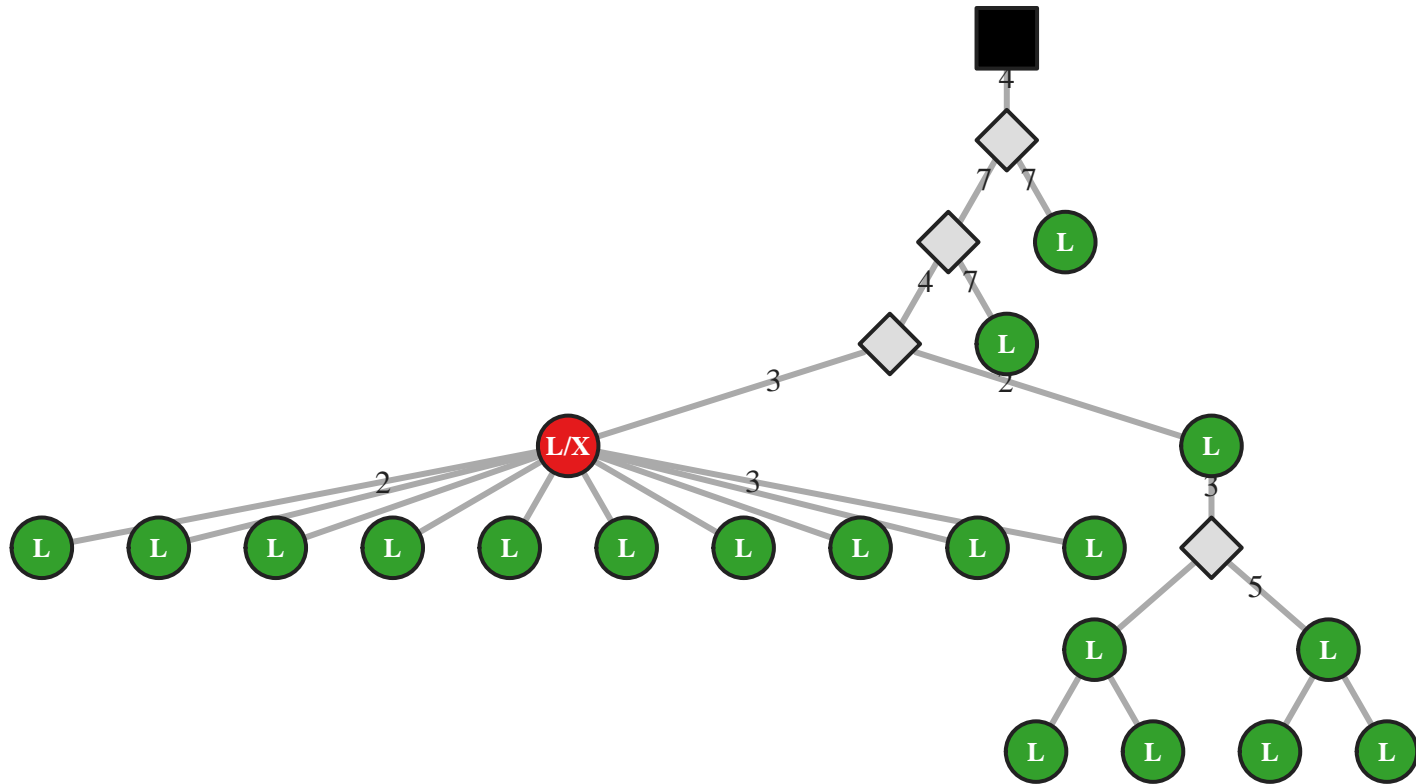
M5 IgG IGHV7-4-1/J3 57bp (20151)



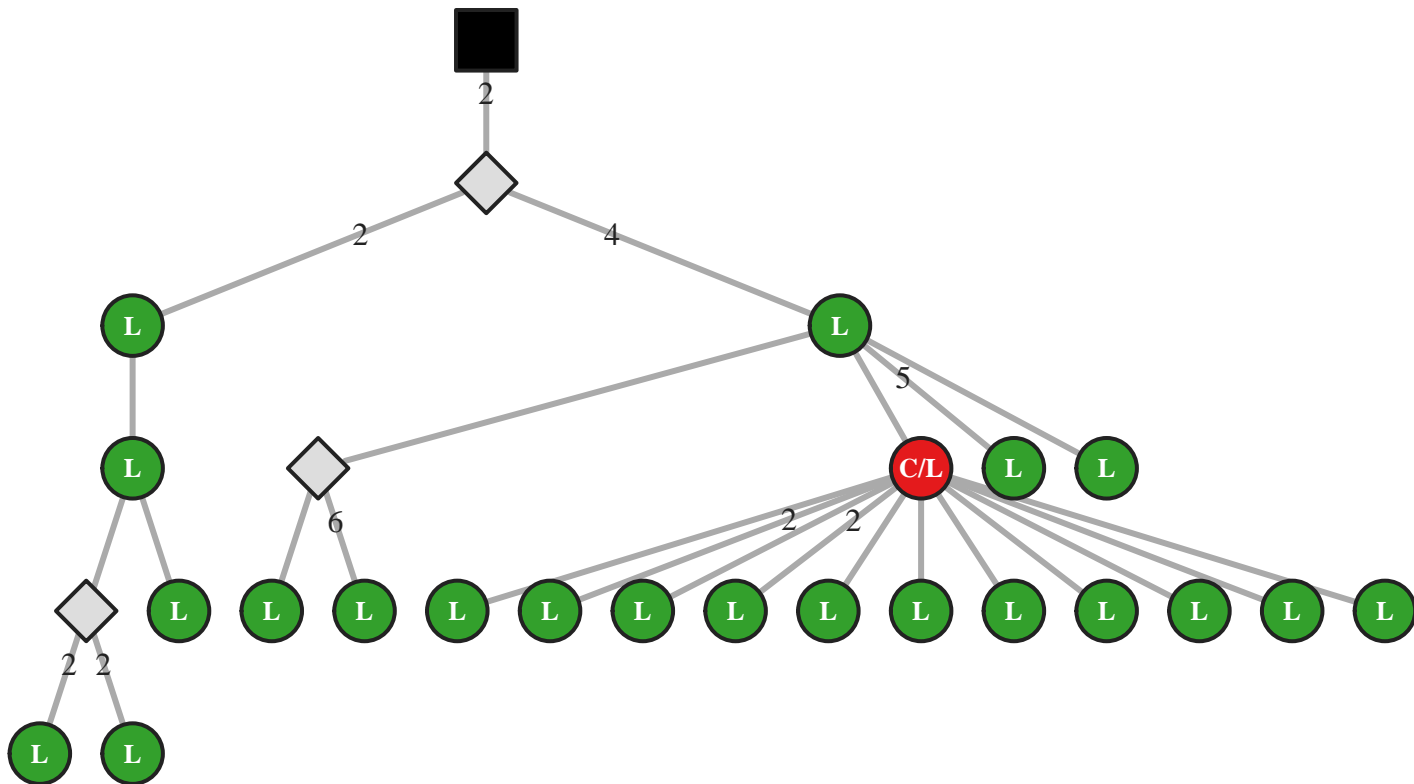
M5 IgG IGHV7-4-1/J3 63bp (36960)



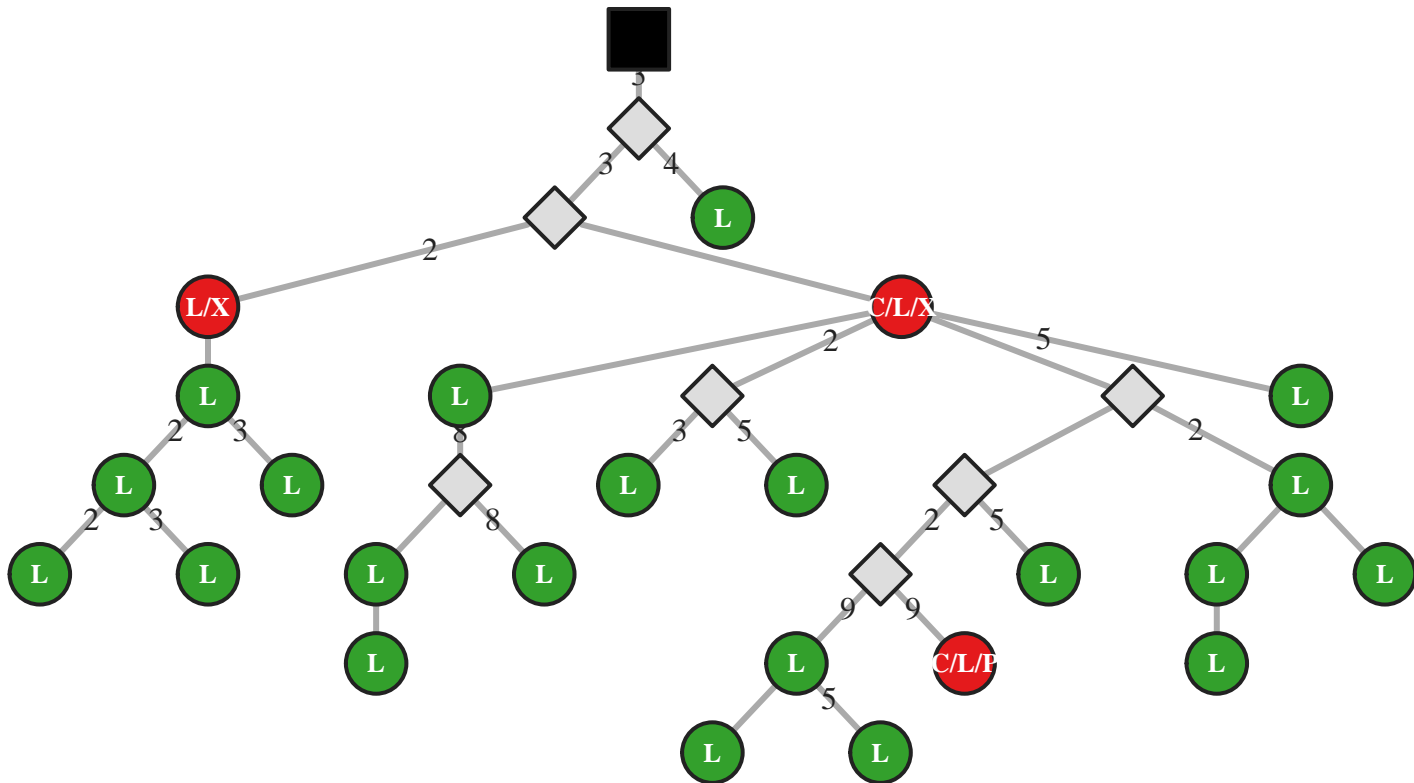
M5 IgG IGHV7-4-1/J4 30bp (20178)



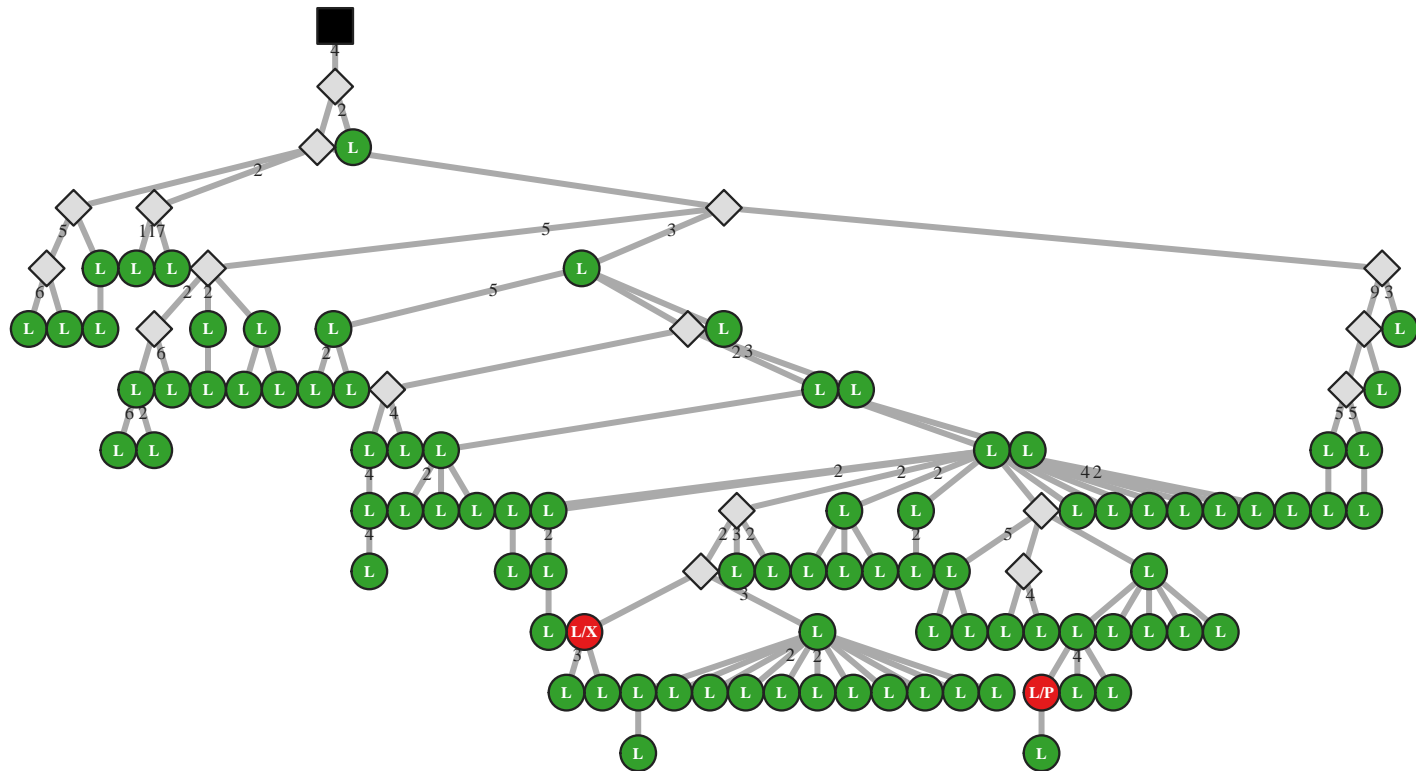
M5 IgA IGHV7-4-1/J4 39bp (3249)



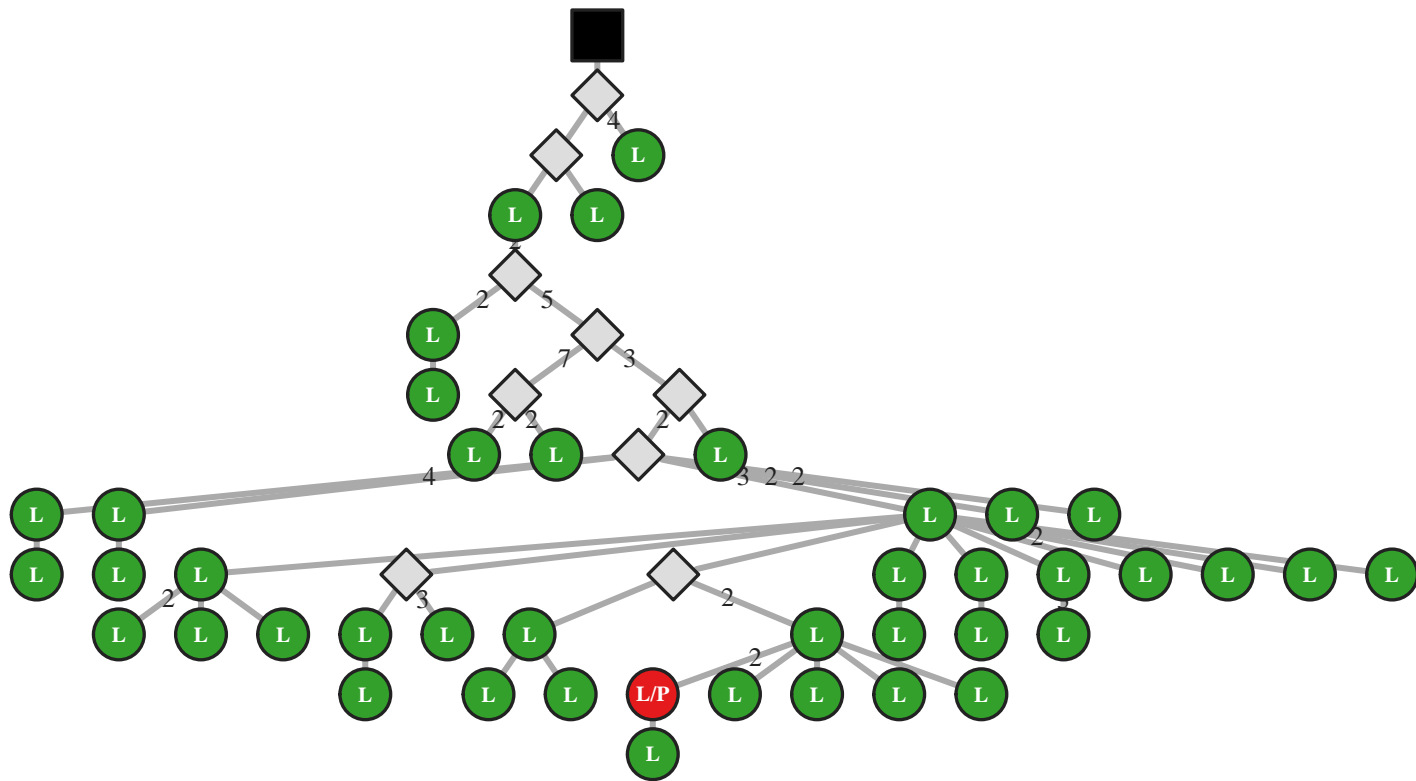
M5 IgA IGHV7-4-1/J4 39bp (3250)



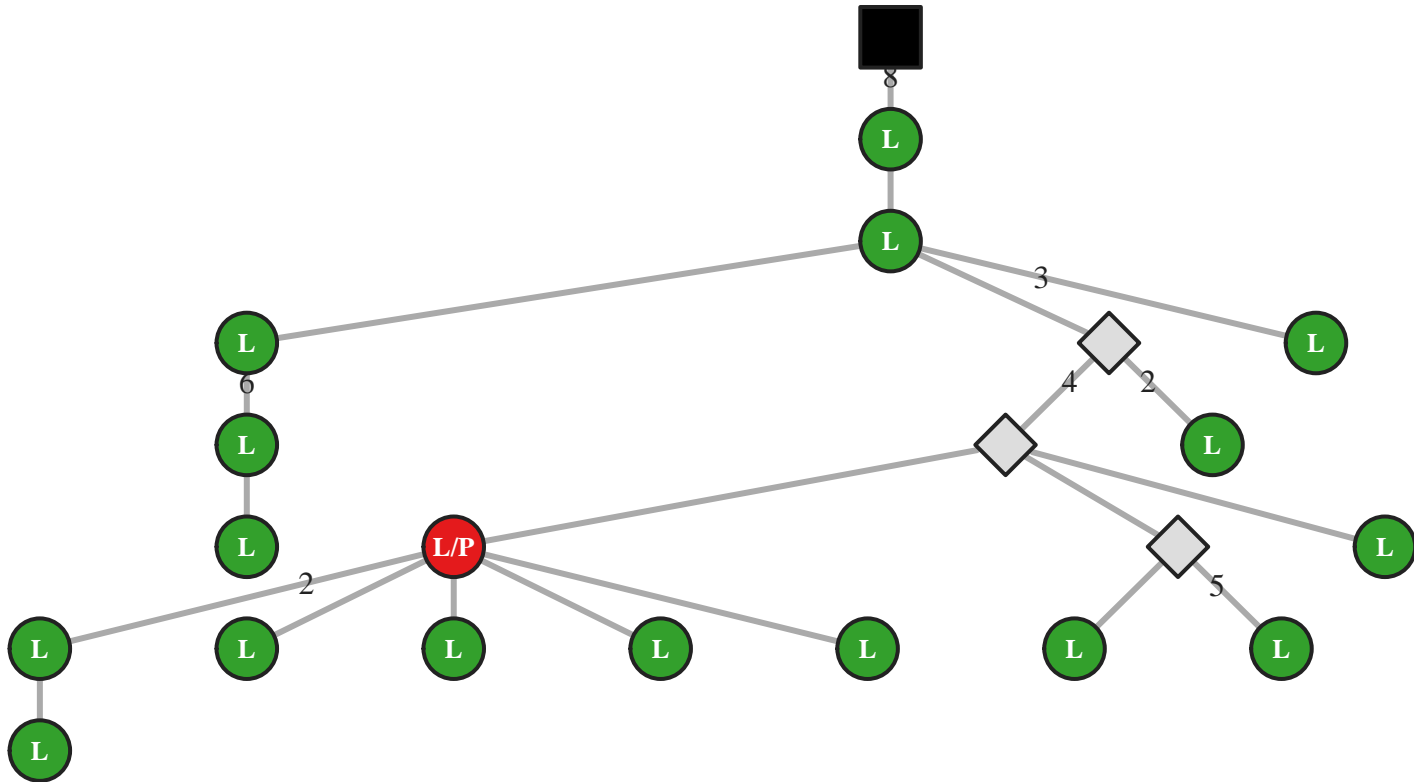
M5 IgG IGHV7-4-1/J4 39bp (47427)



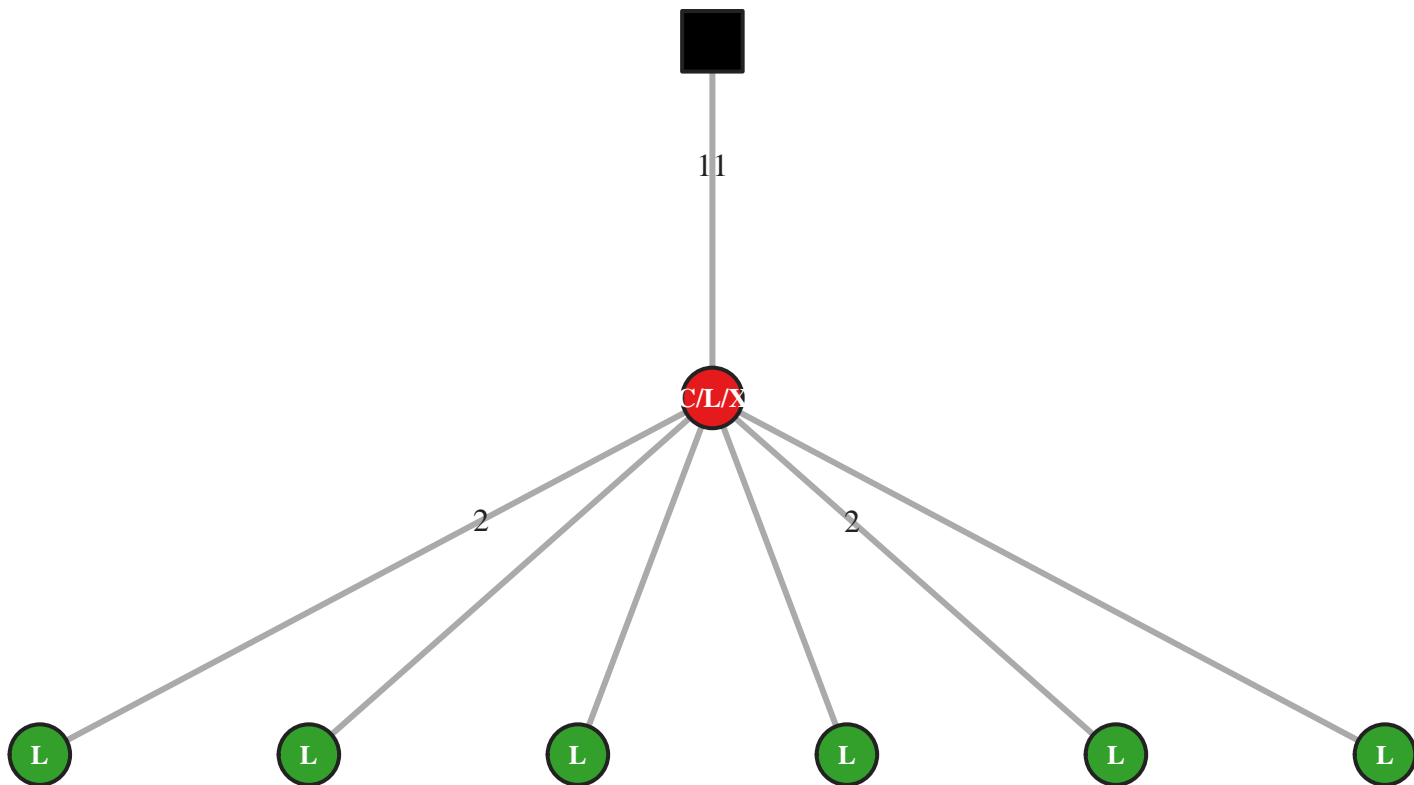
M5 IgA IGHV7-4-1/J4 42bp (3268)



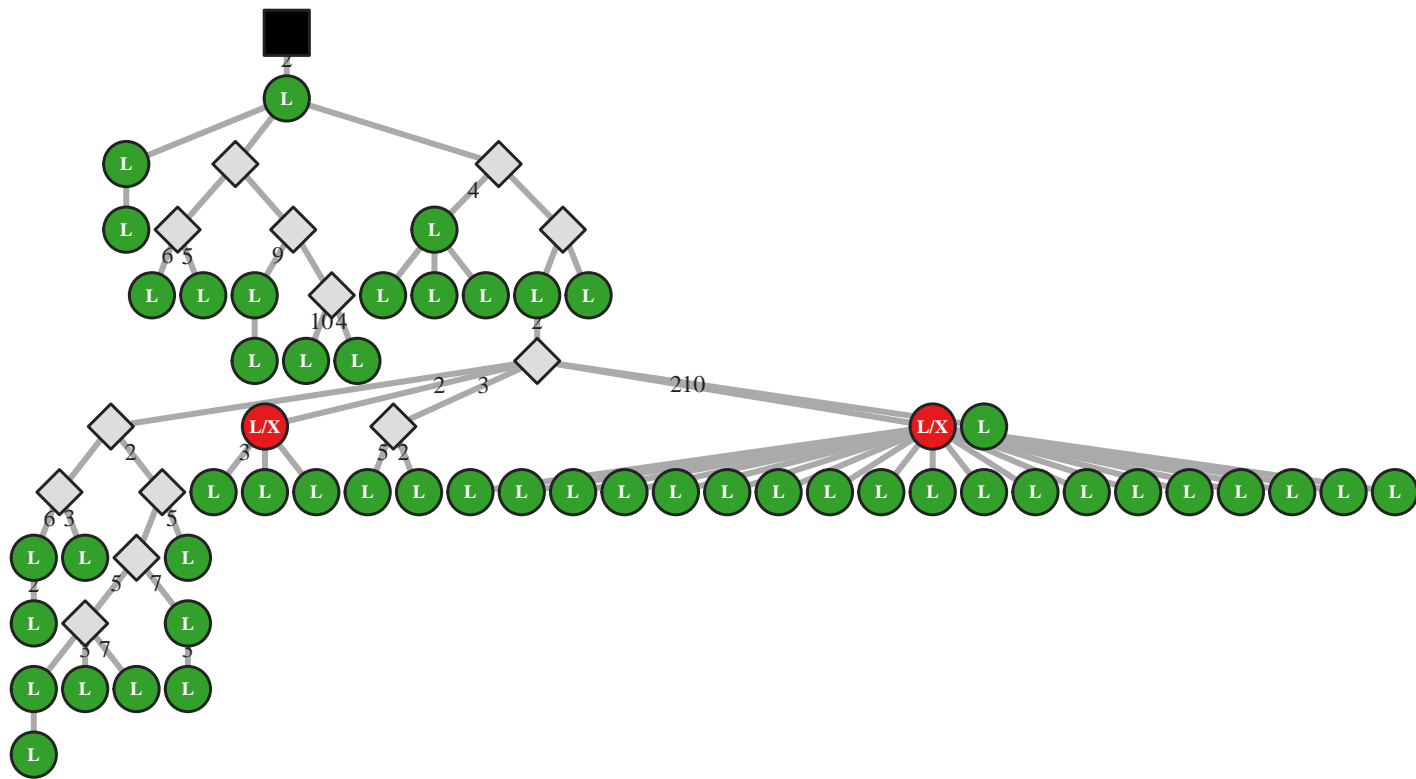
M5 IgG IGHV7-4-1/J4 42bp (37015)



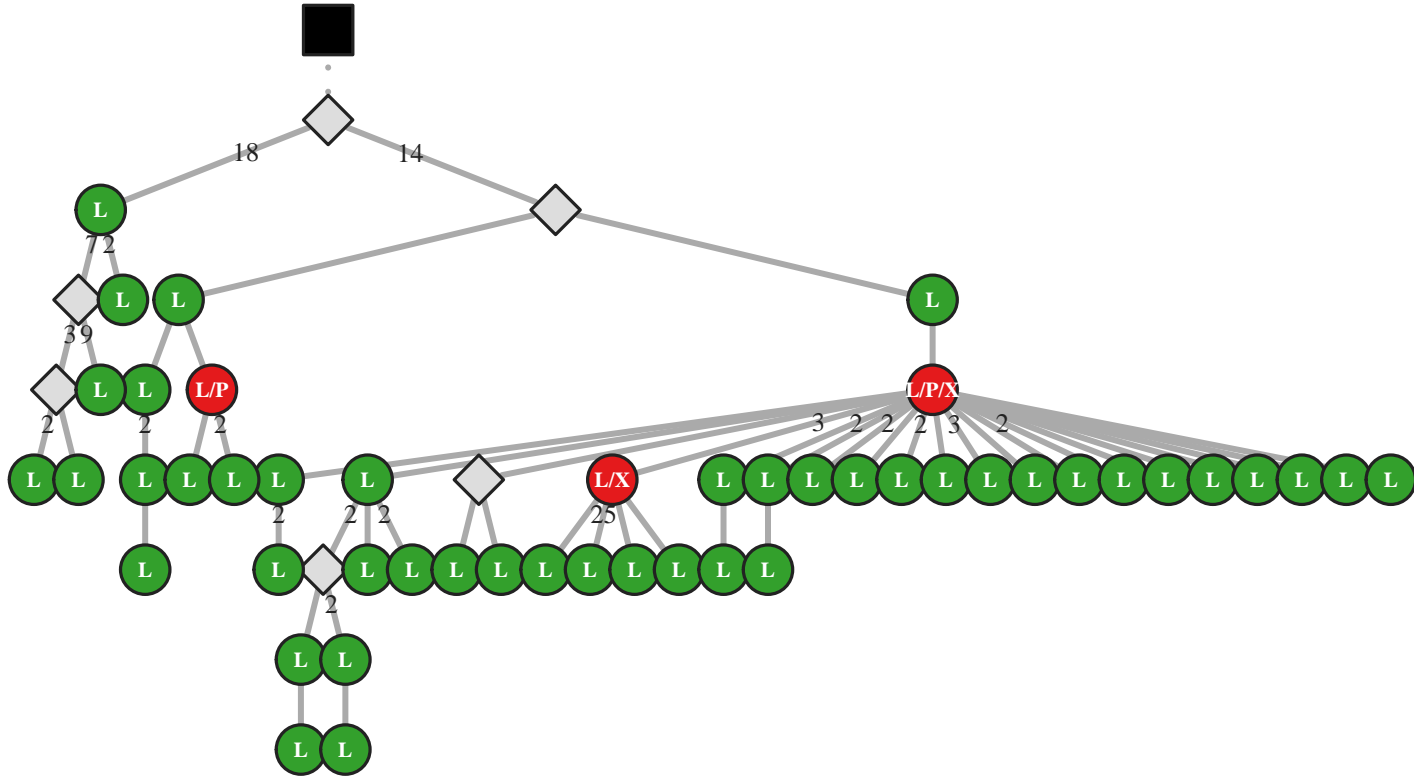
M5 IgG IGHV7-4-1/J4 42bp (37039)



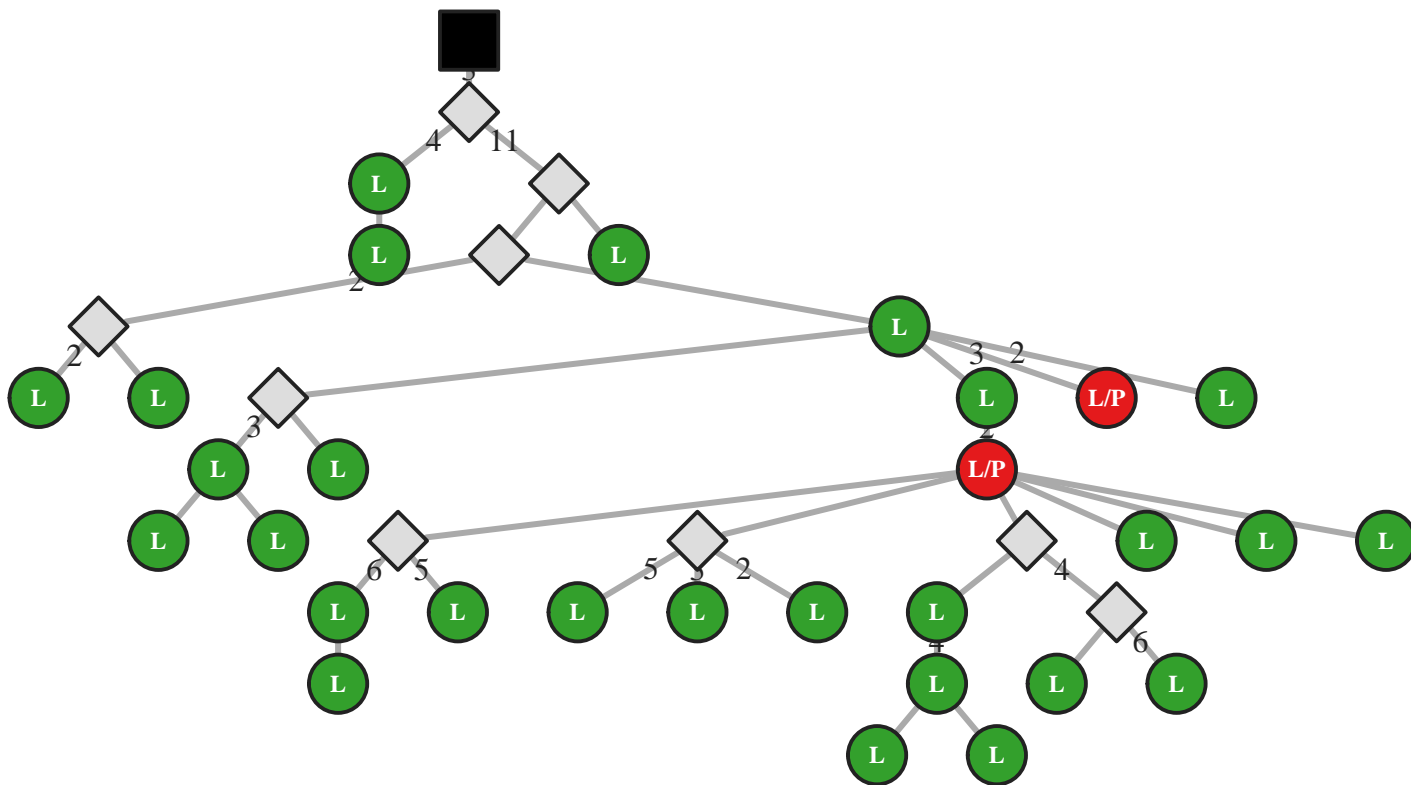
M5 IgM IGHV7-4-1/J4 42bp (11742)



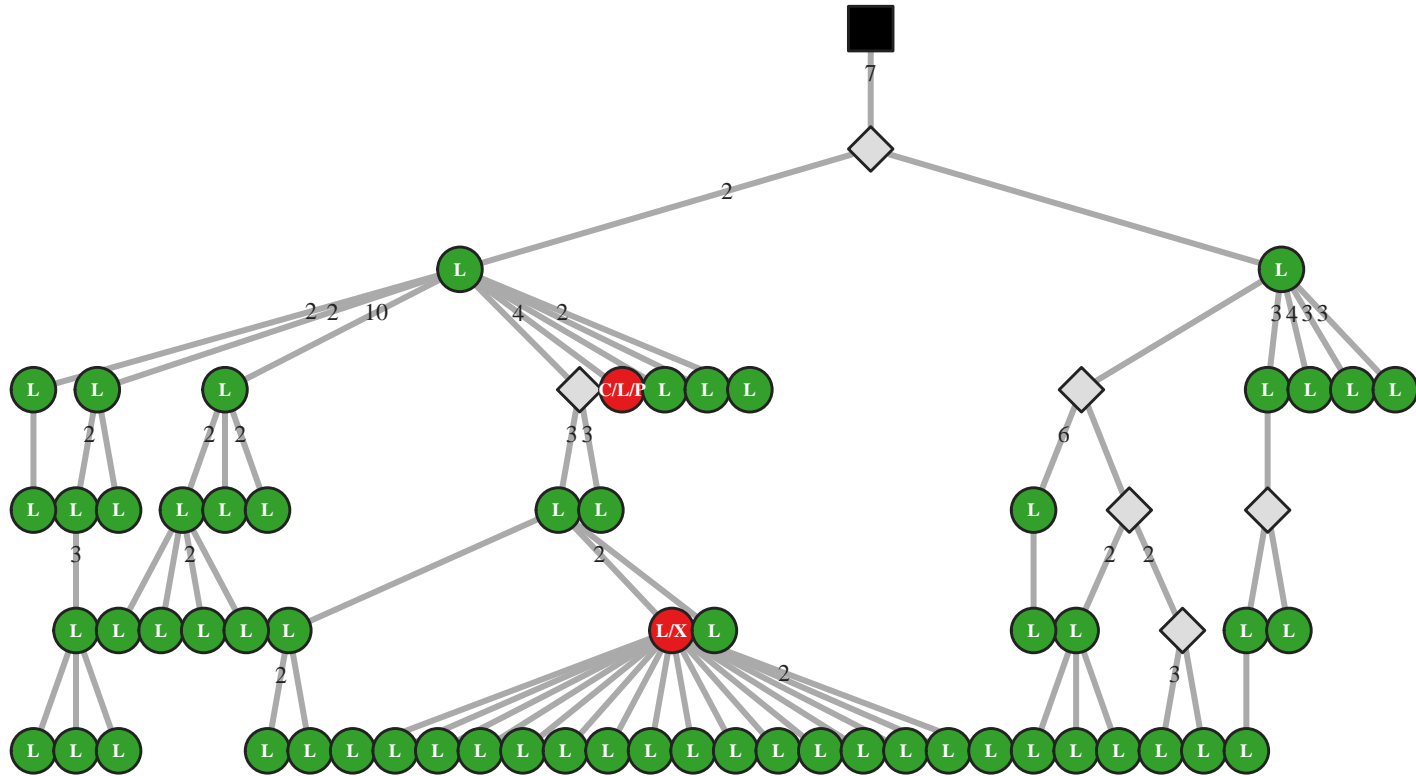
M5 IgG IGHV7-4-1/J4 45bp (10679)



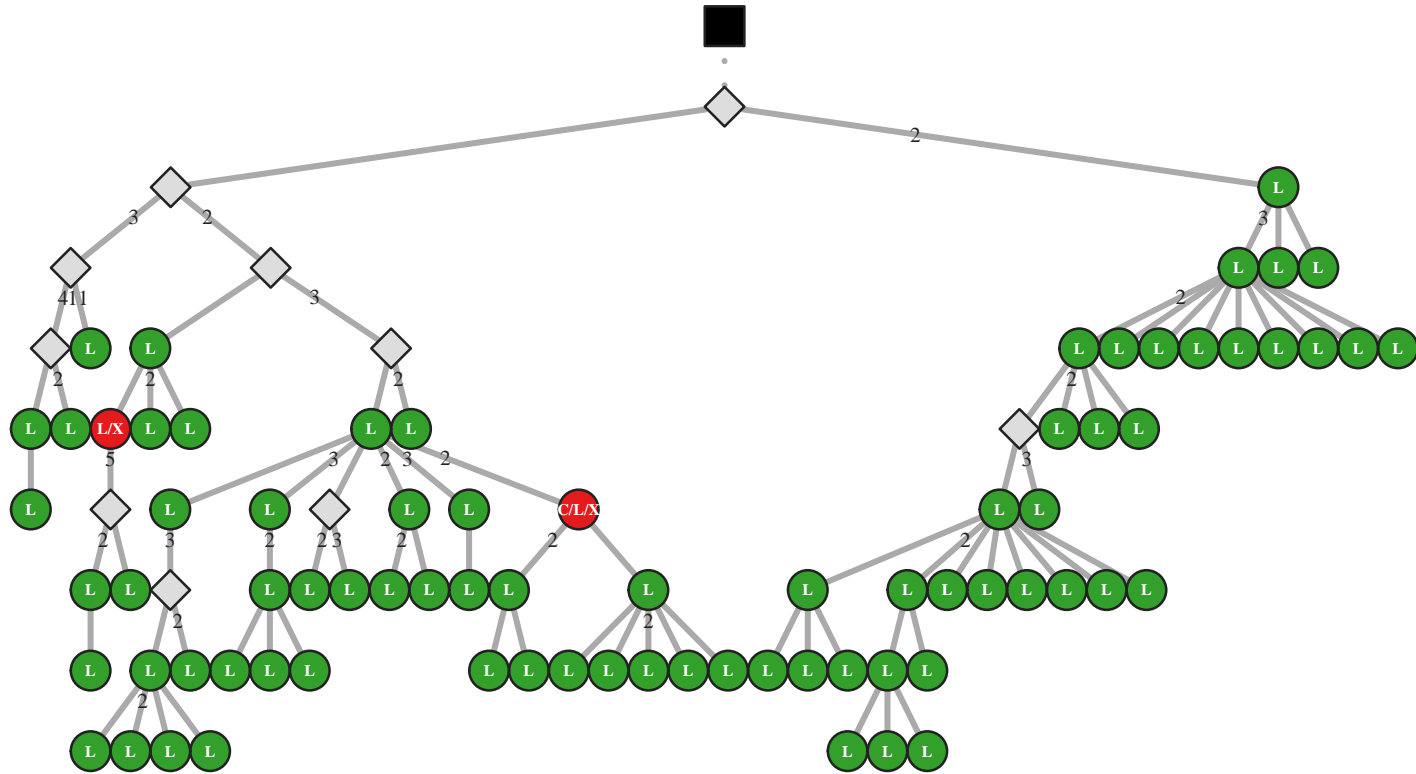
M5 IgG IGHV7-4-1/J4 45bp (10689)



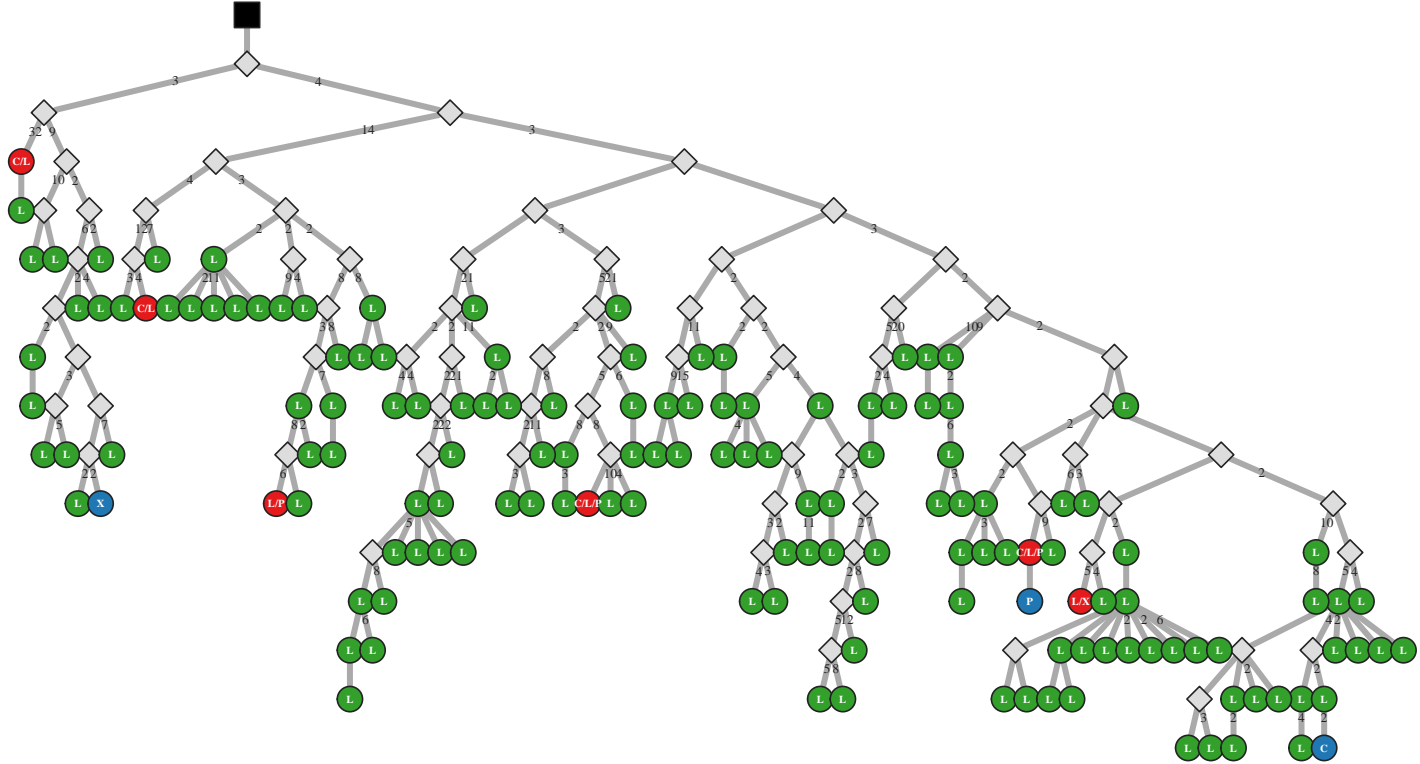
M5 IgG IGHV7-4-1/J4 45bp (10694)



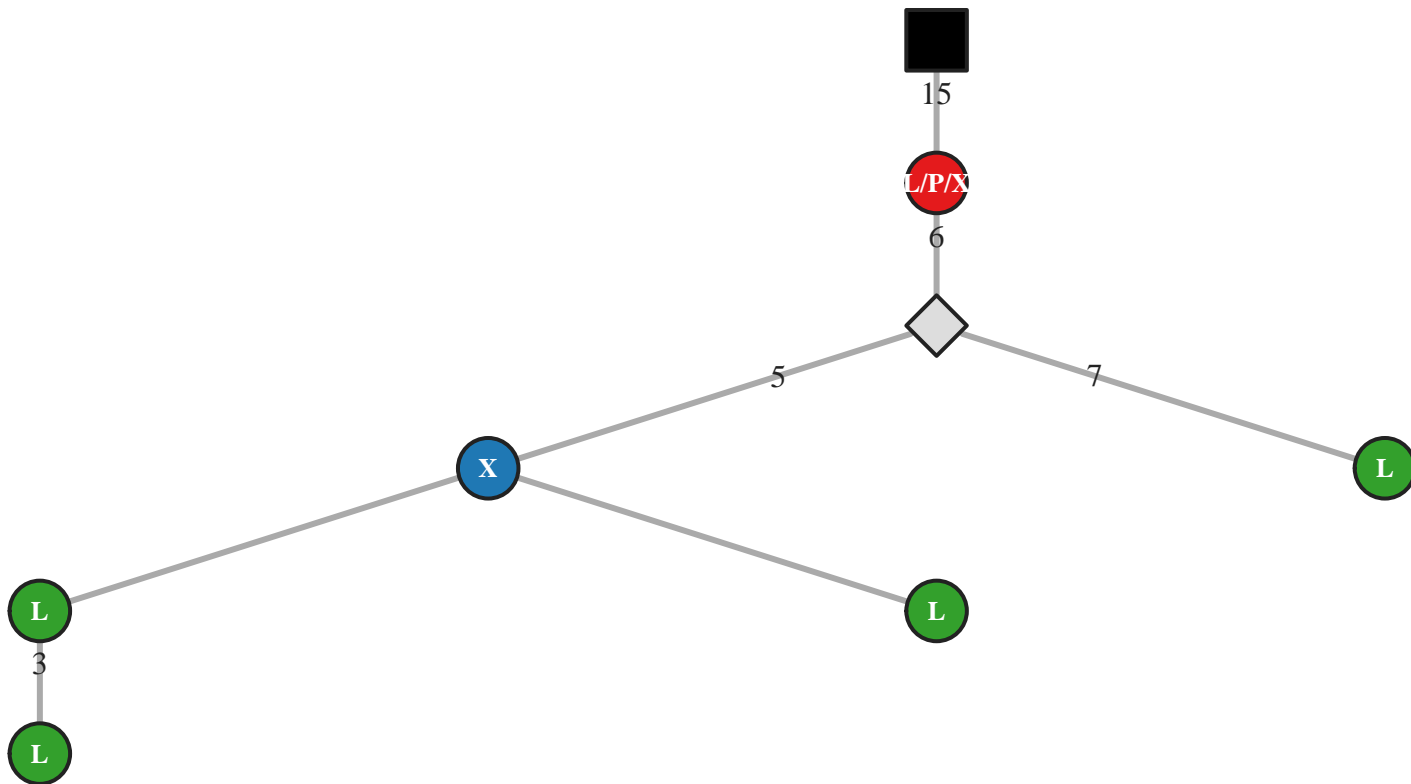
M5 IgG IGHV7-4-1/J4 45bp (10708)



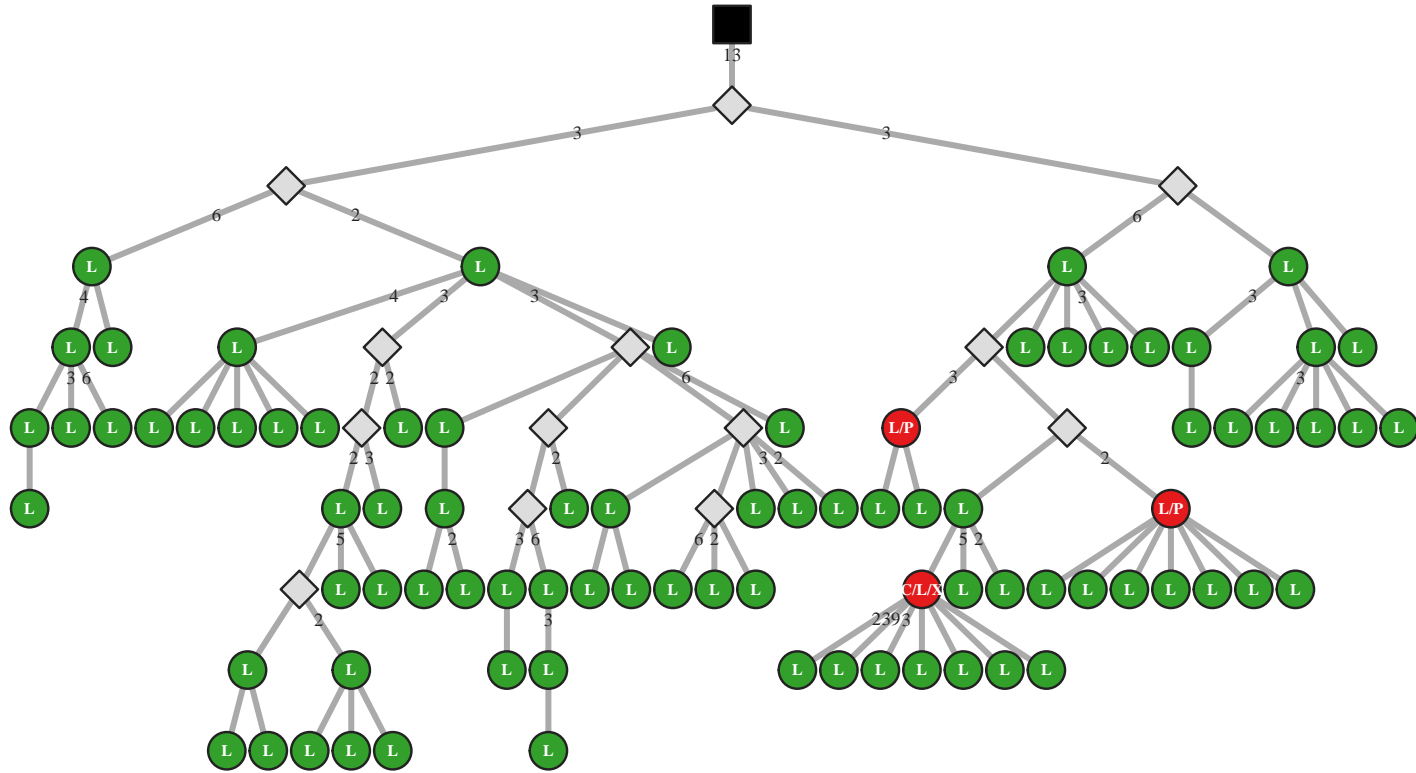
M5 IgG IGHV7-4-1/J4 45bp (10752)



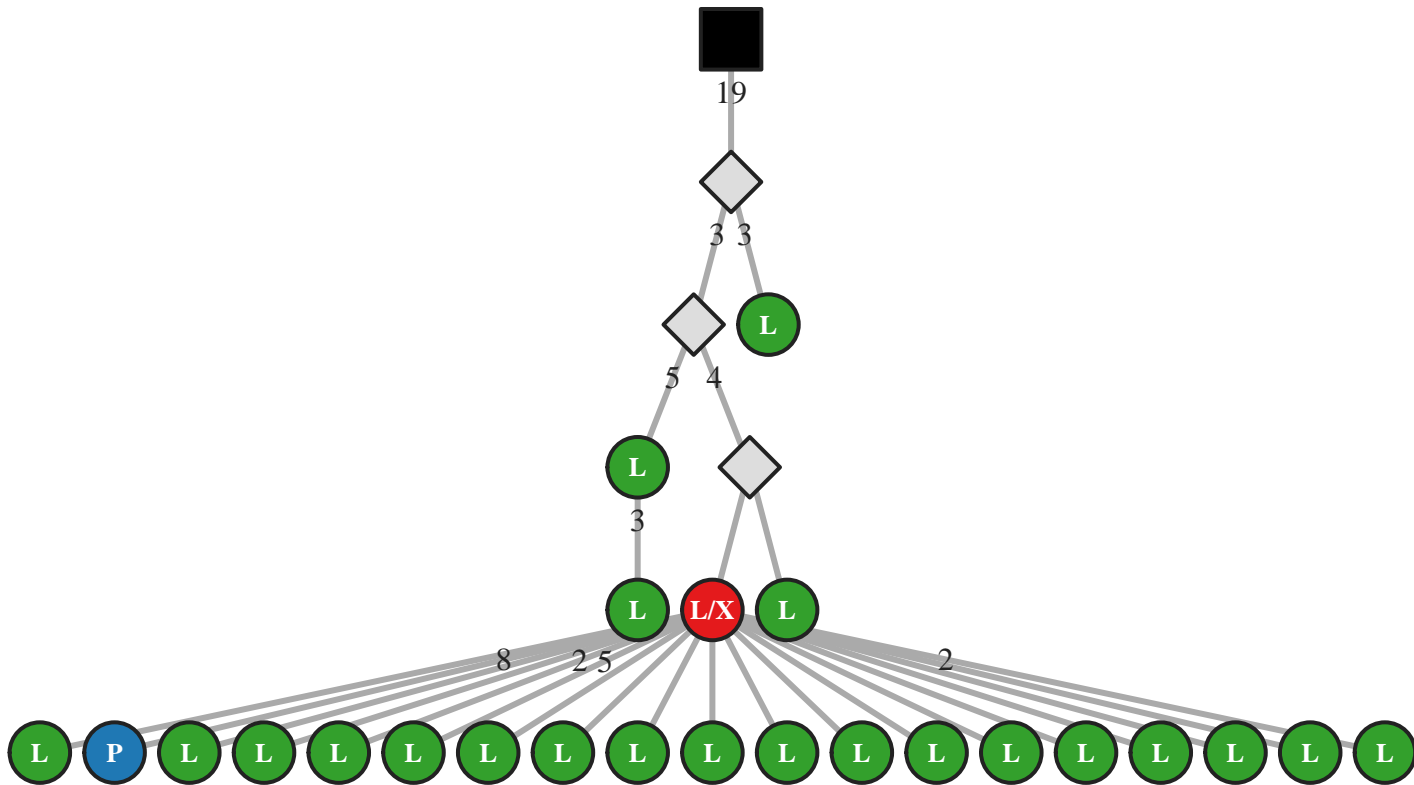
M5 IgG IGHV7-4-1/J4 48bp (28927)



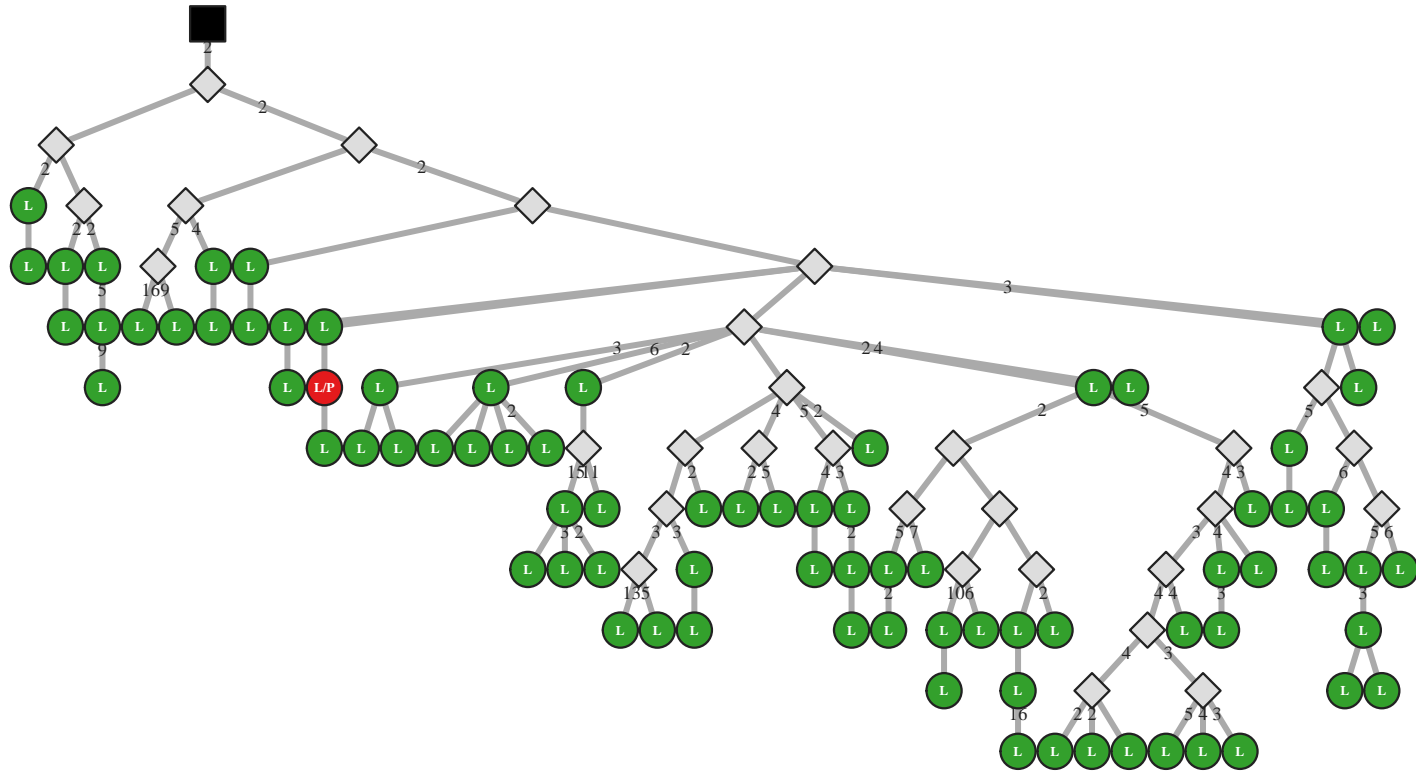
M5 IgG IGHV7-4-1/J4 51bp (37064)



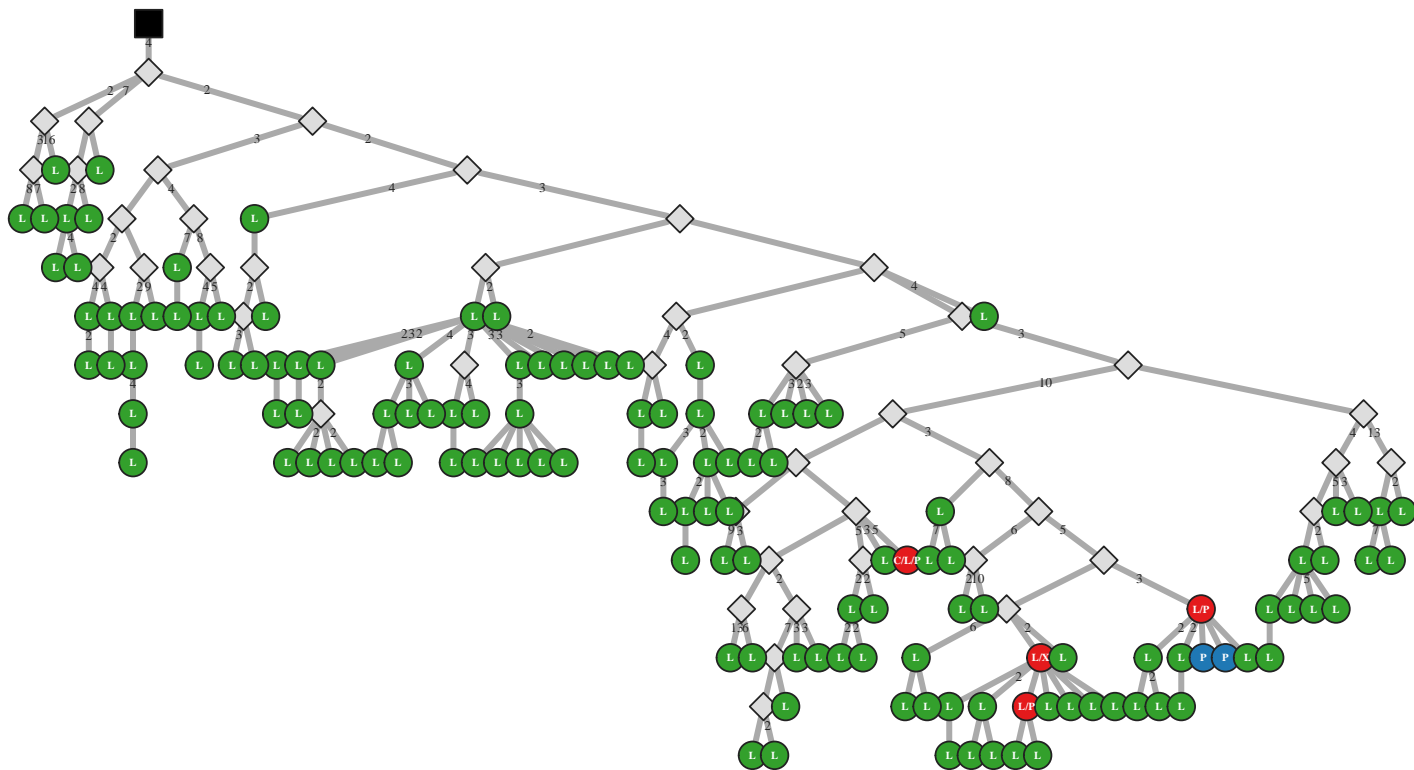
M5 IgG IGHV7-4-1/J4 51bp (37089)



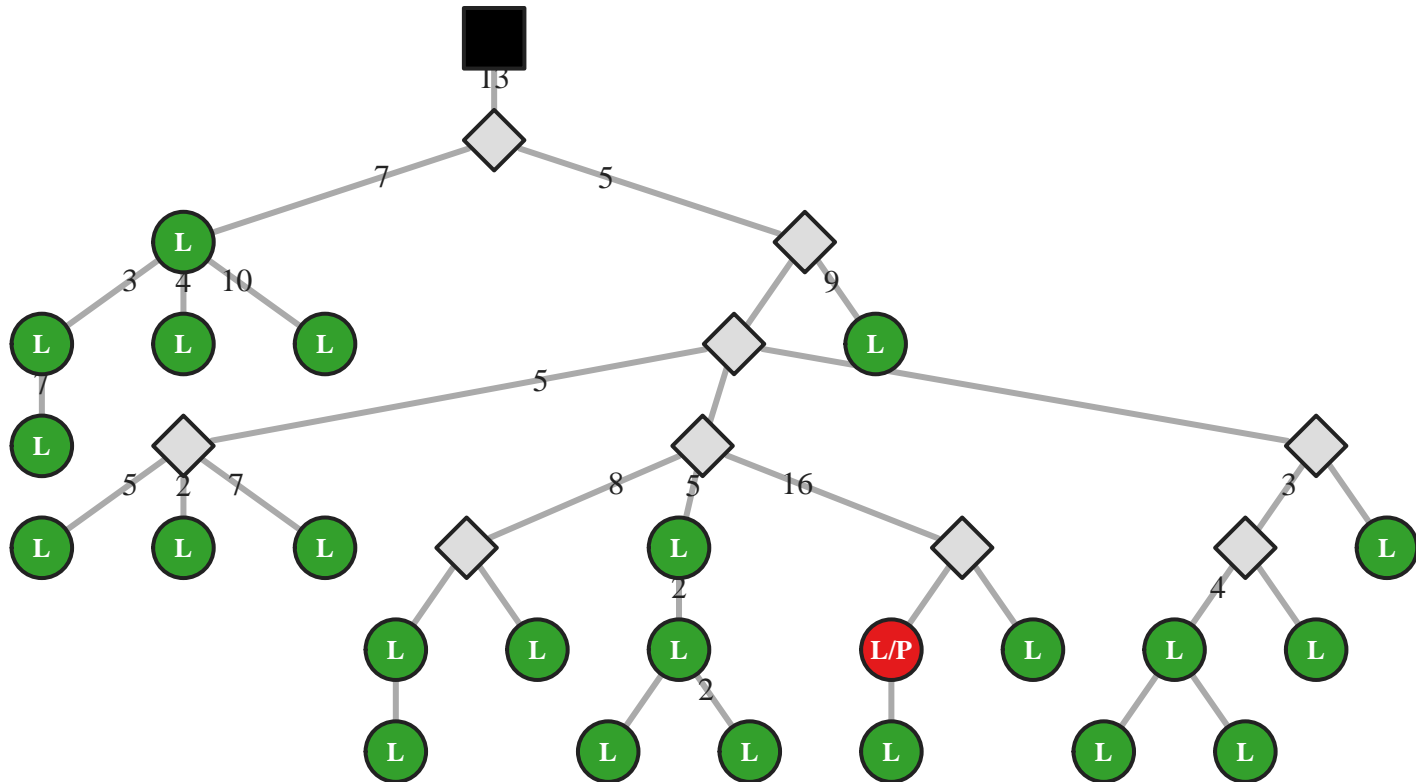
M5 IgG IGHV7-4-1/J4 51bp (37095)



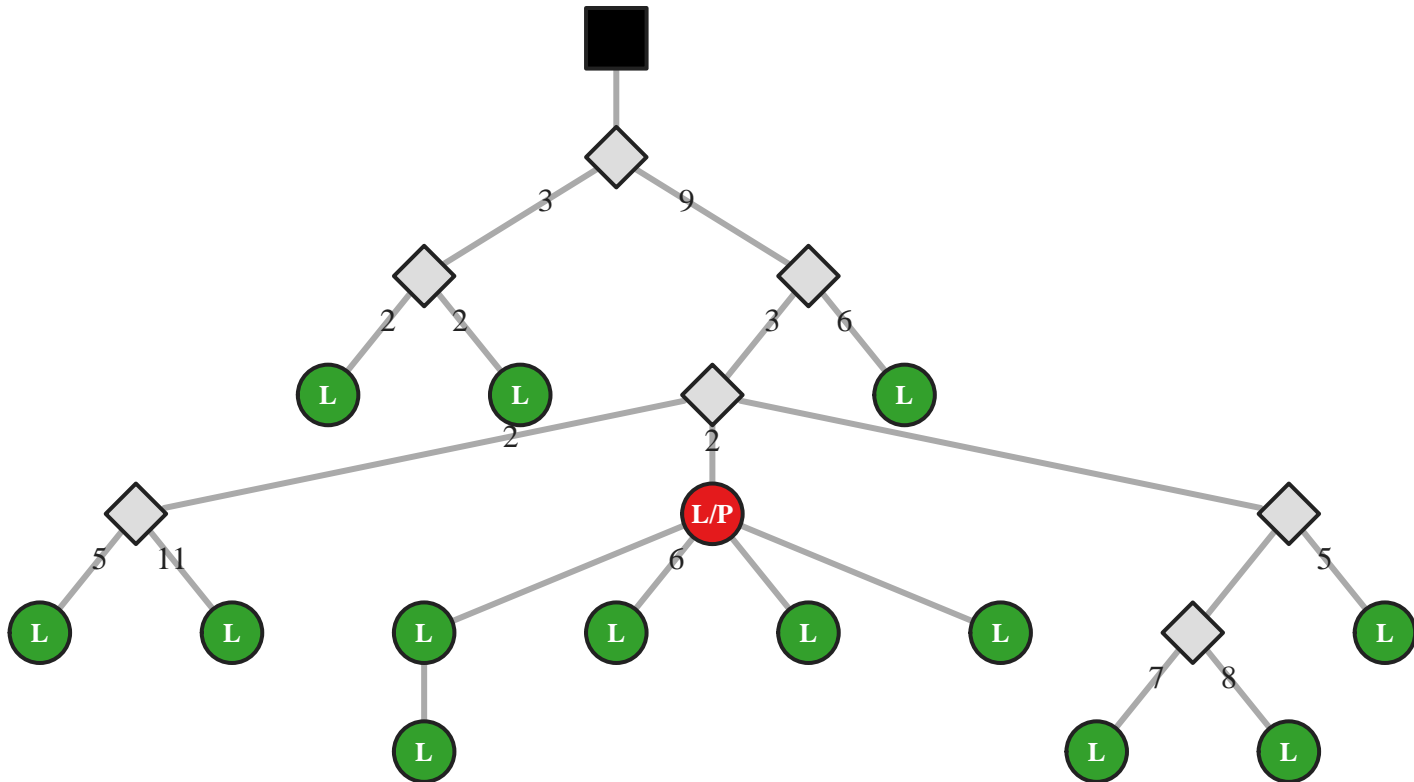
M5 IgG IGHV7-4-1/J4 51bp (37126)



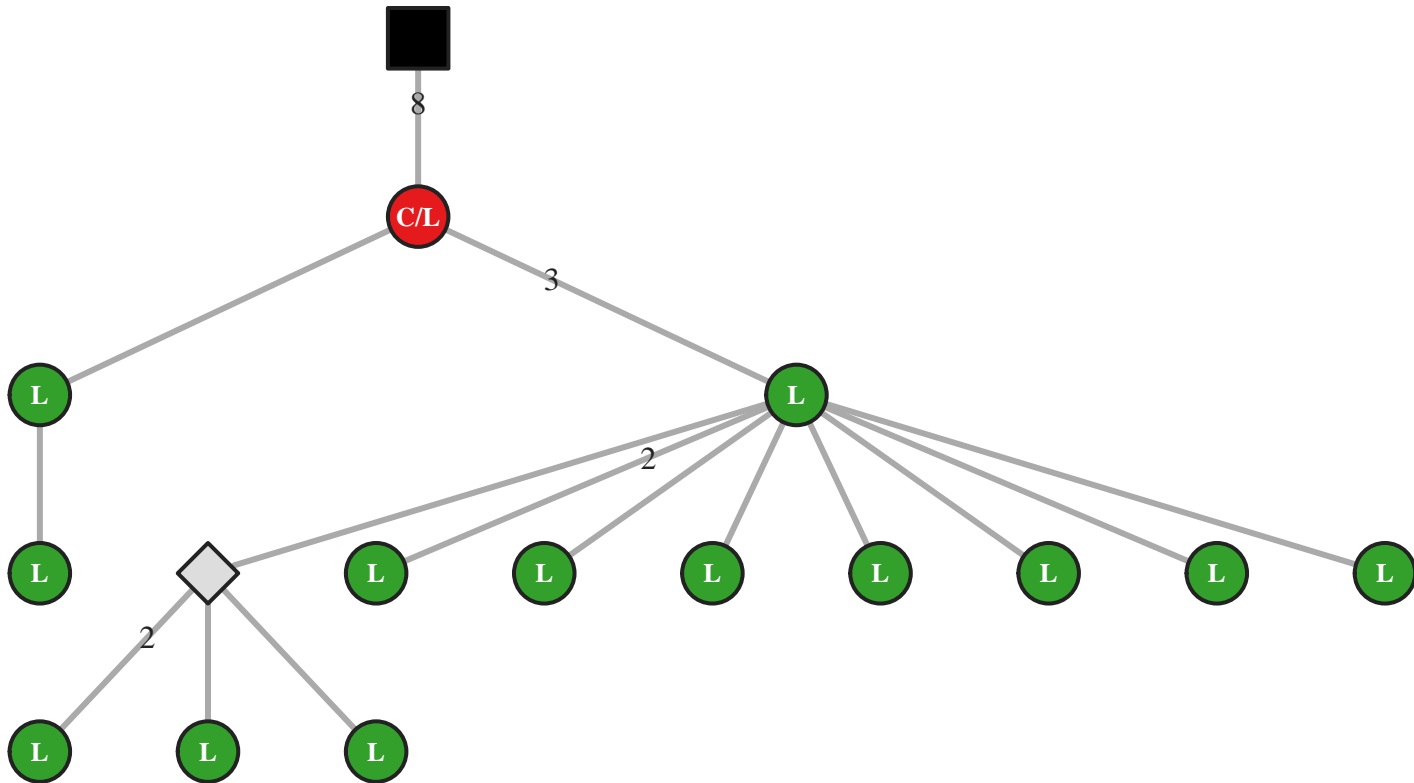
M5 IgG IGHV7-4-1/J4 51bp (37127)



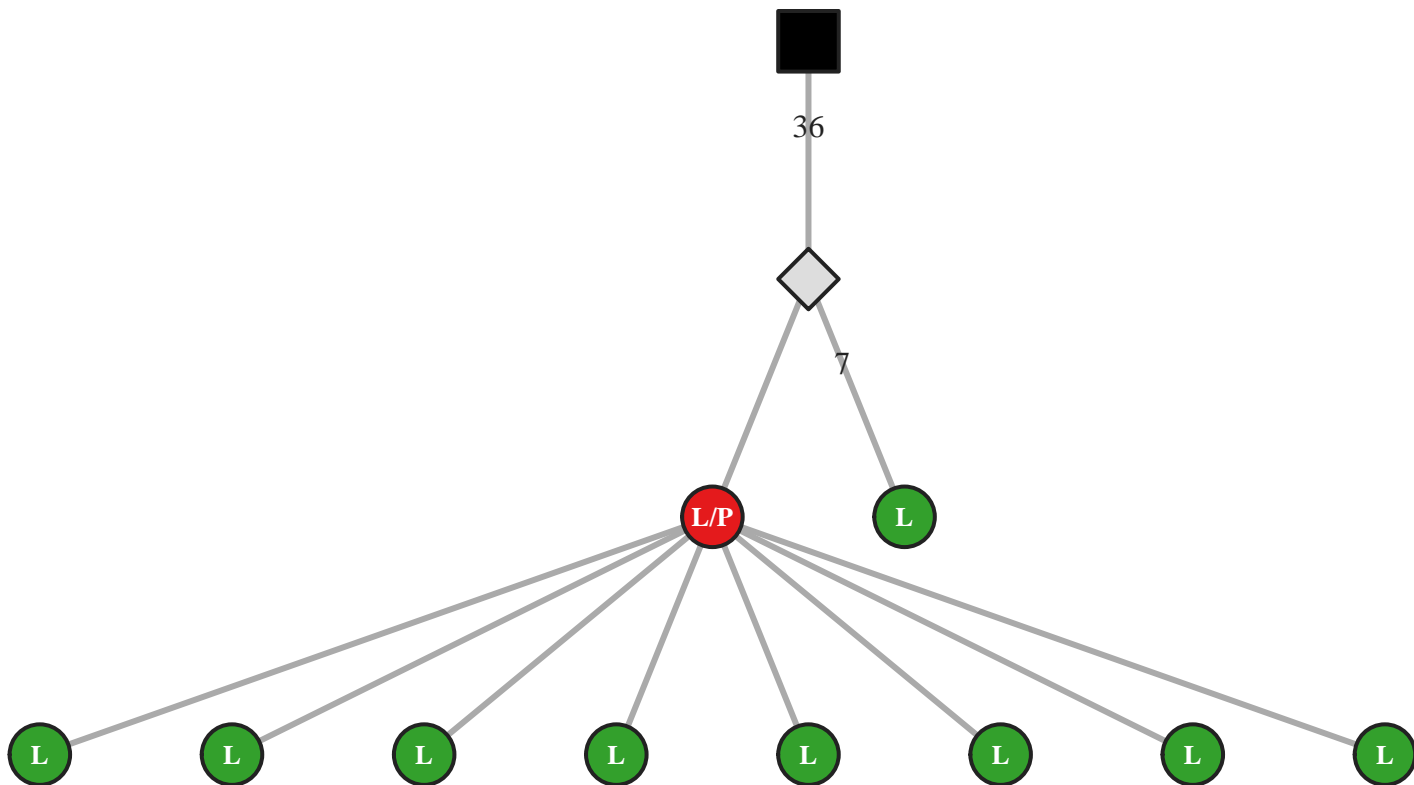
M5 IgG IGHV7-4-1/J4 54bp (37145)



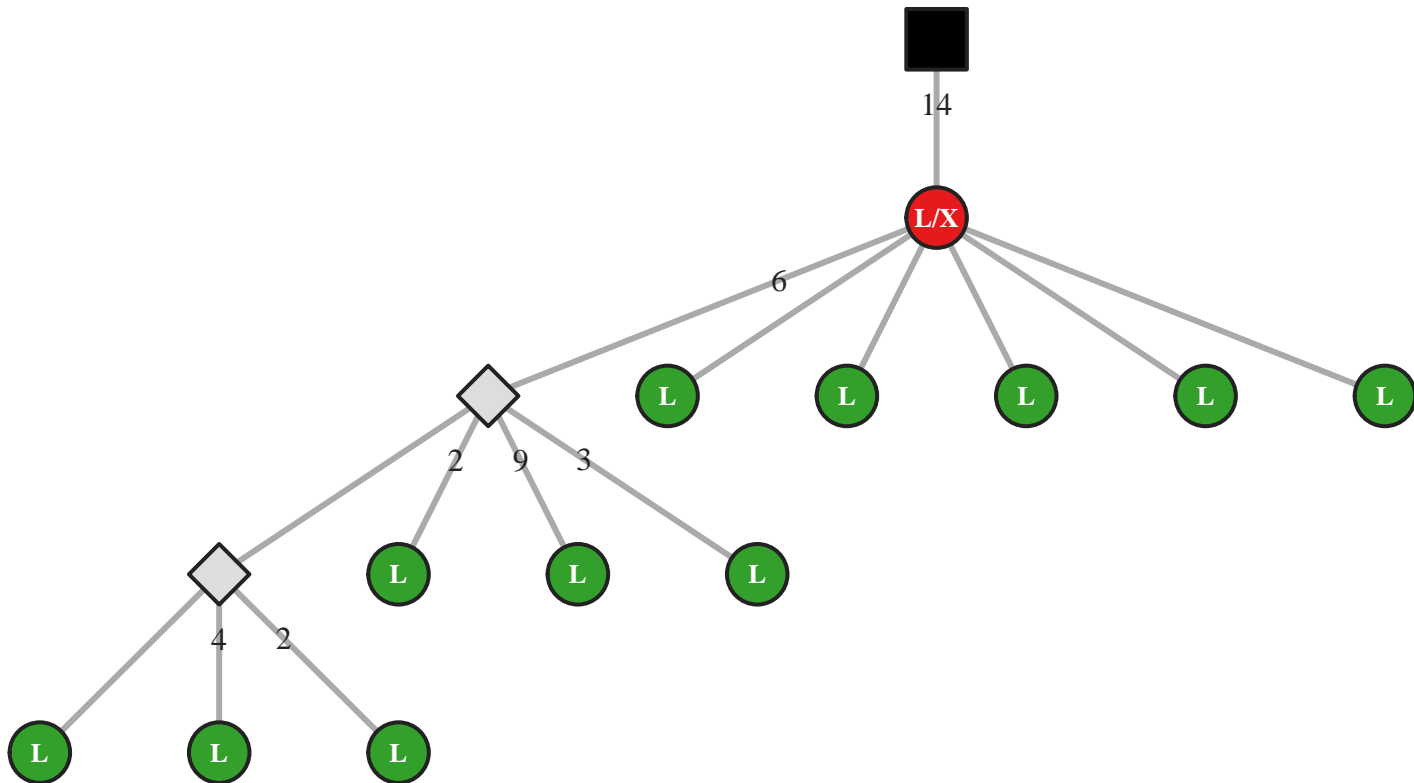
M5 IgG IGHV7-4-1/J4 54bp (37164)



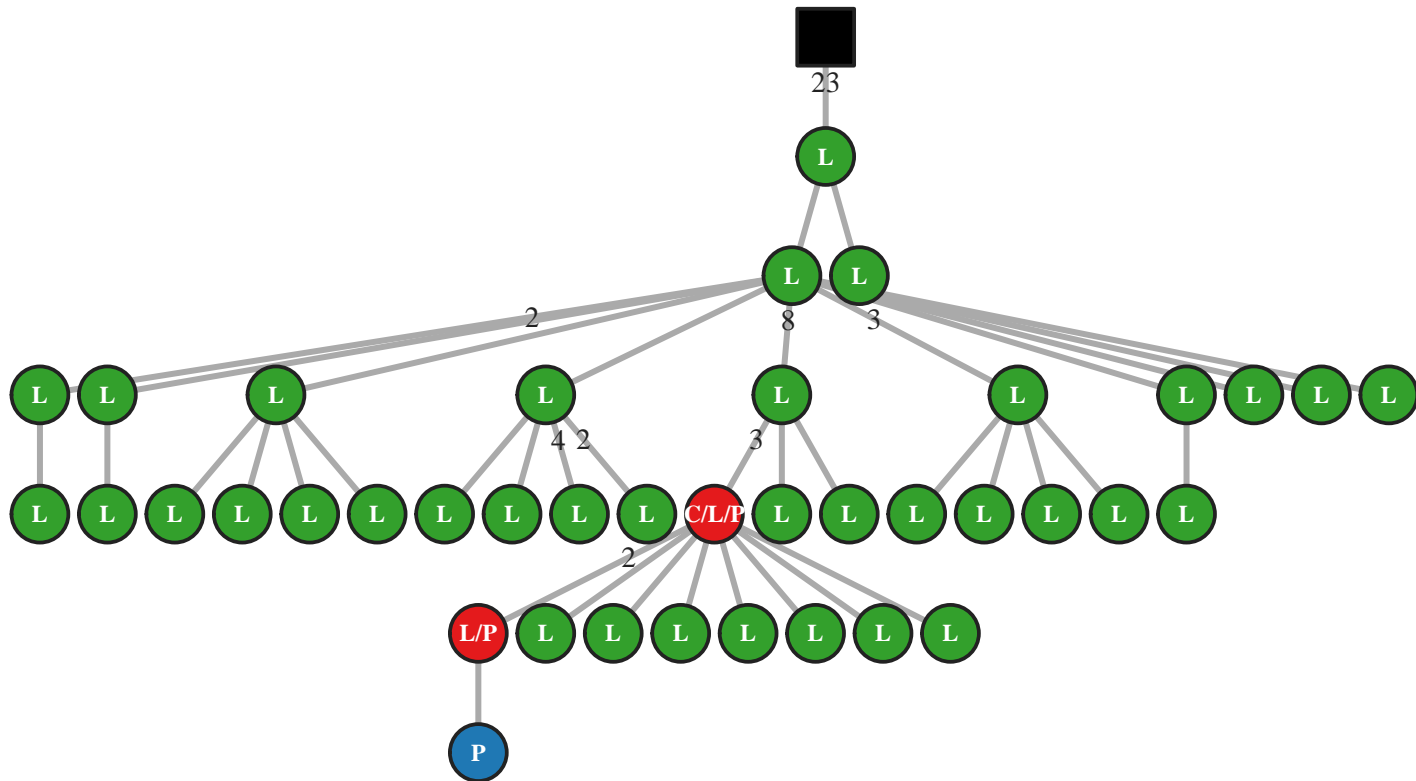
M5 IgG IGHV7-4-1/J4 57bp (28995)



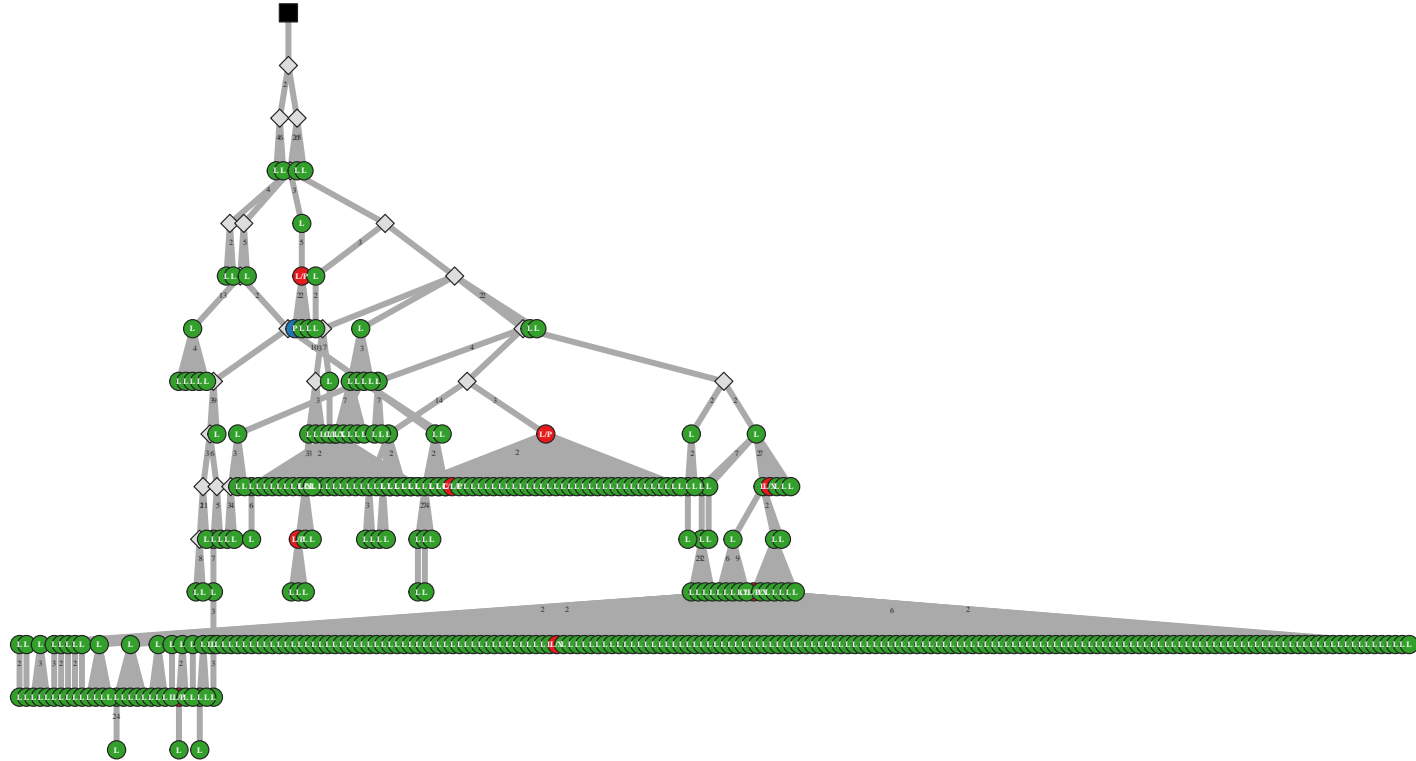
M5 IgG IGHV7-4-1/J4 60bp (37190)



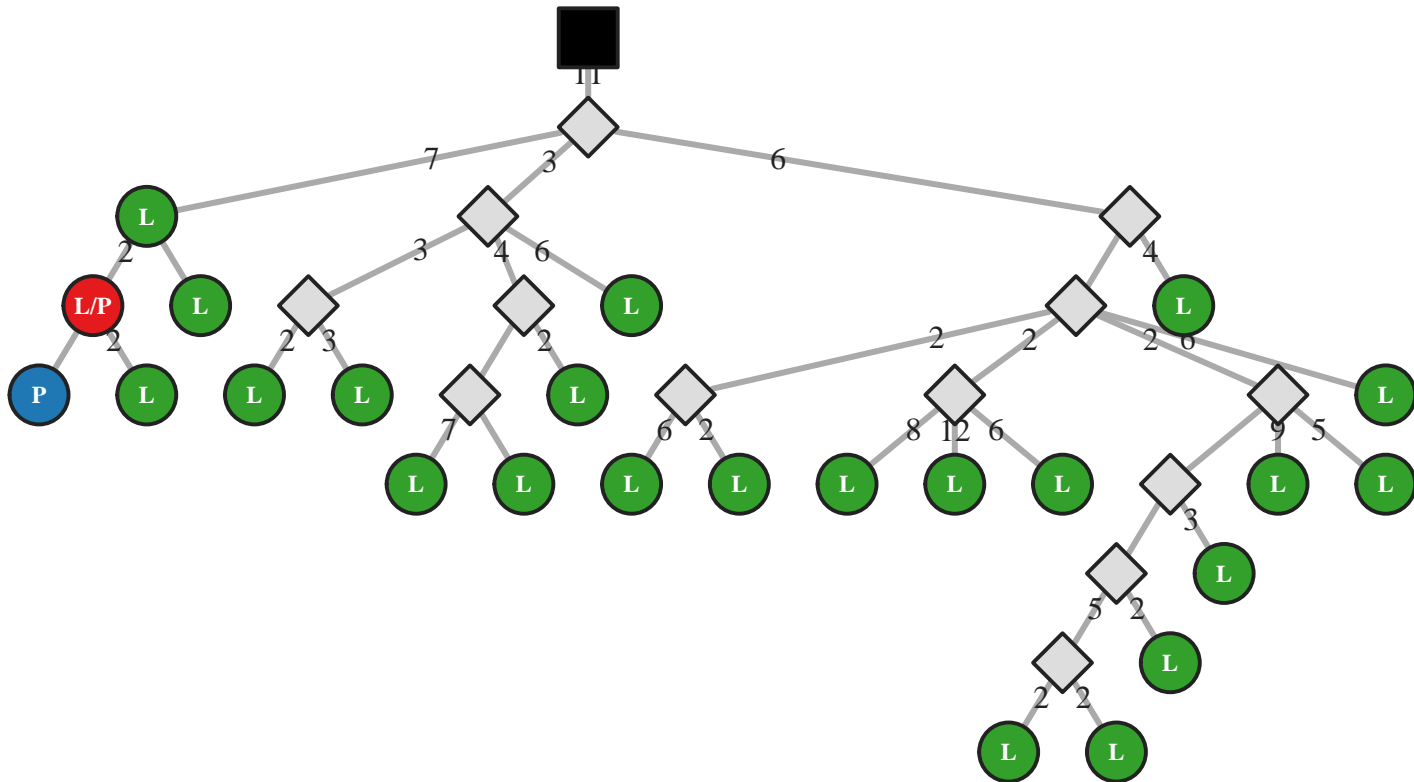
M5 IgG IGHV7-4-1/J4 60bp (37199)



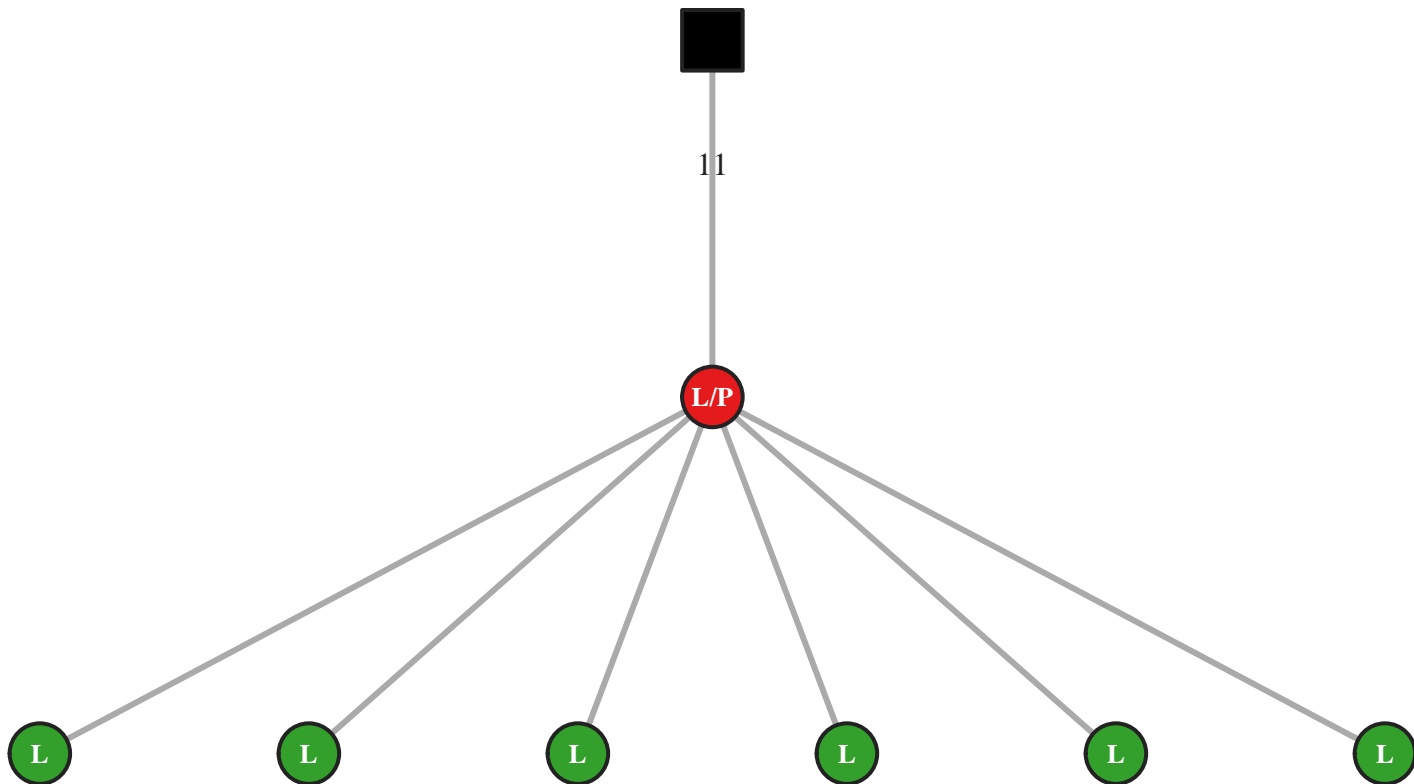
M5 IgG IGHV7-4-1/J4 60bp (37210)



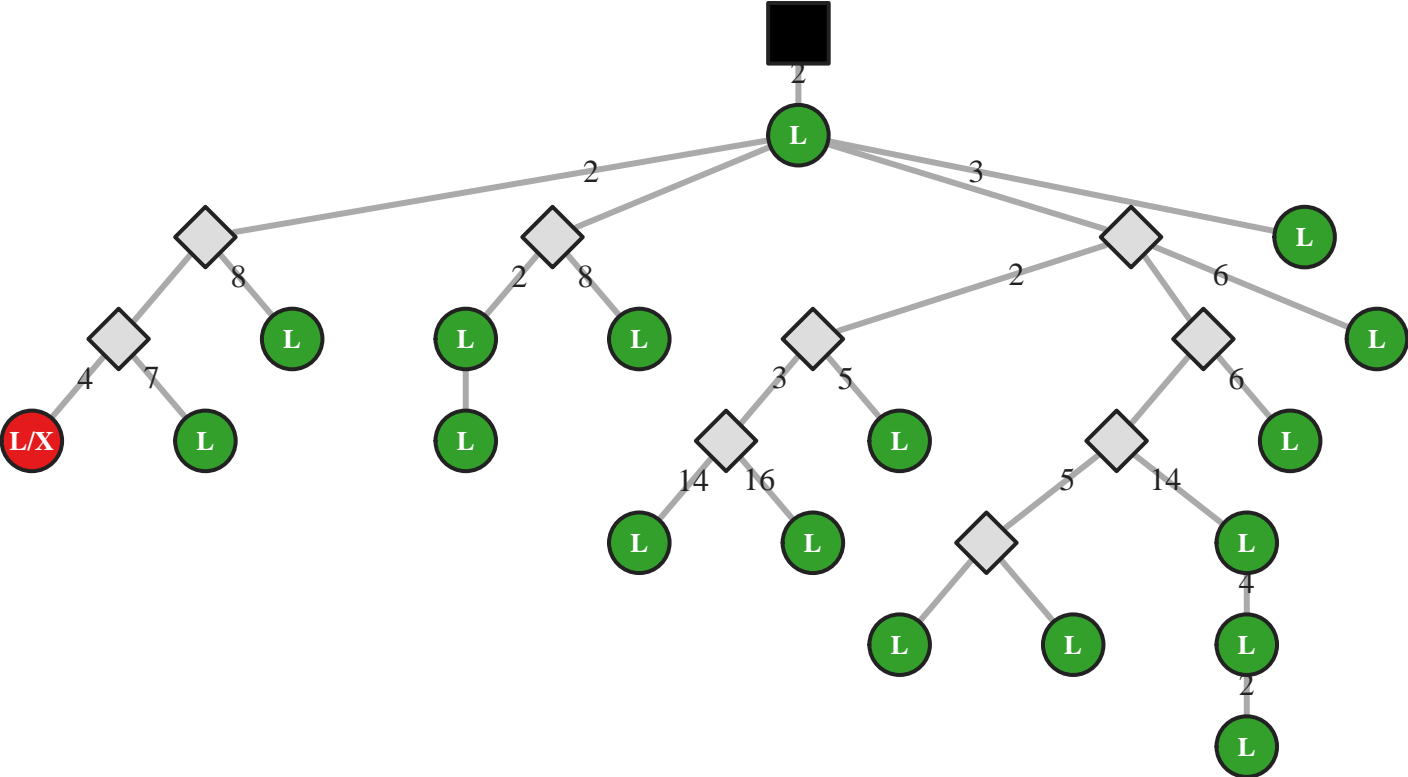
M5 IgG IGHV7-4-1/J4 60bp (37221)



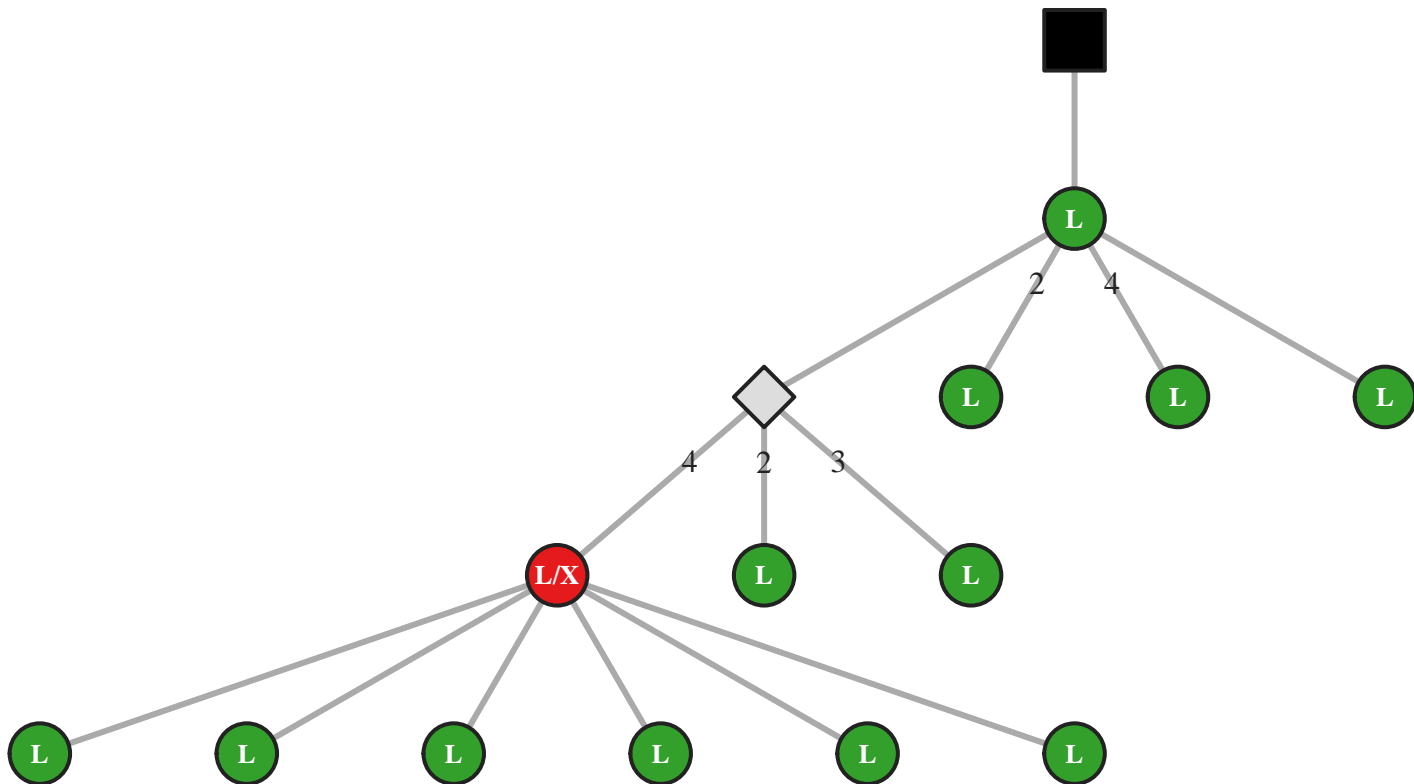
M5 IgG IGHV7-4-1/J4 60bp (37226)



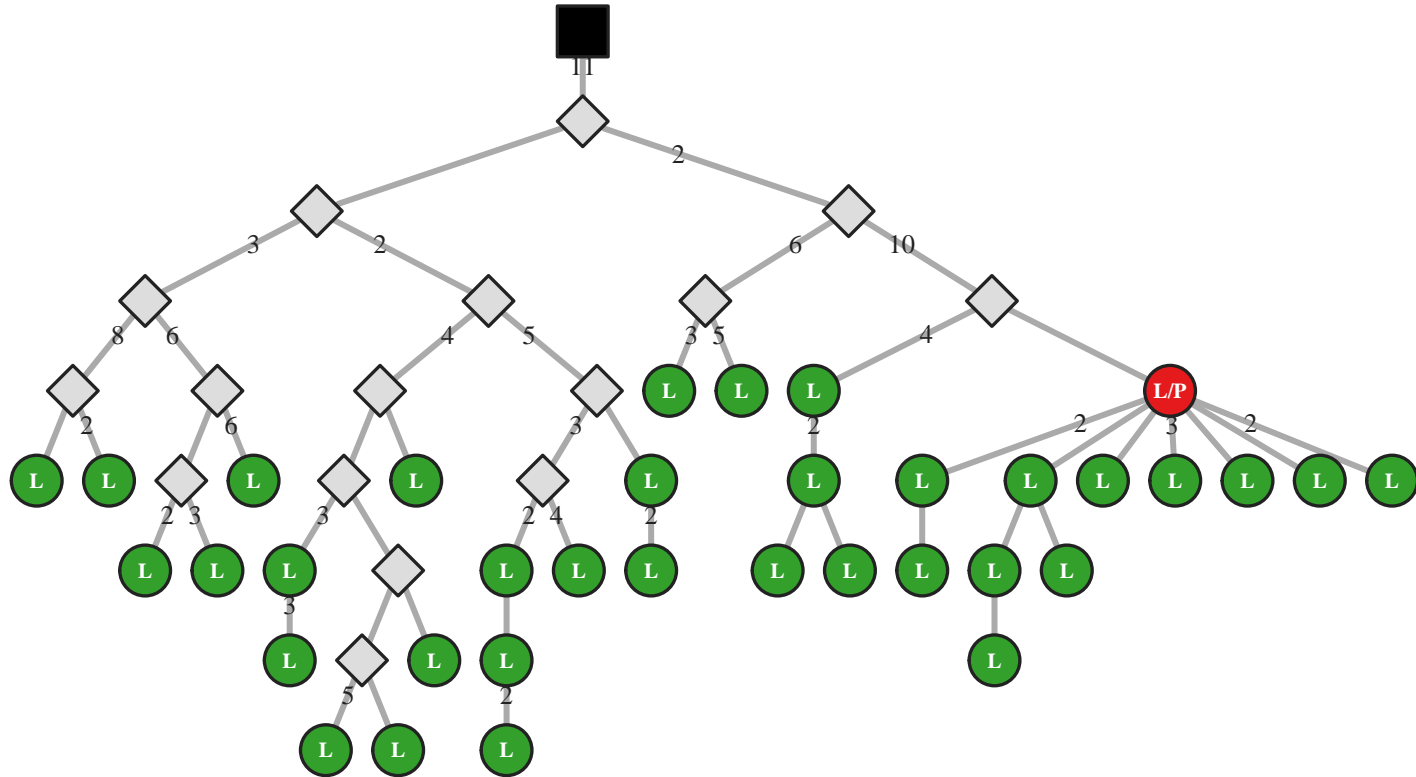
M5 IgA IGHV7-4-1/J5 42bp (30922)



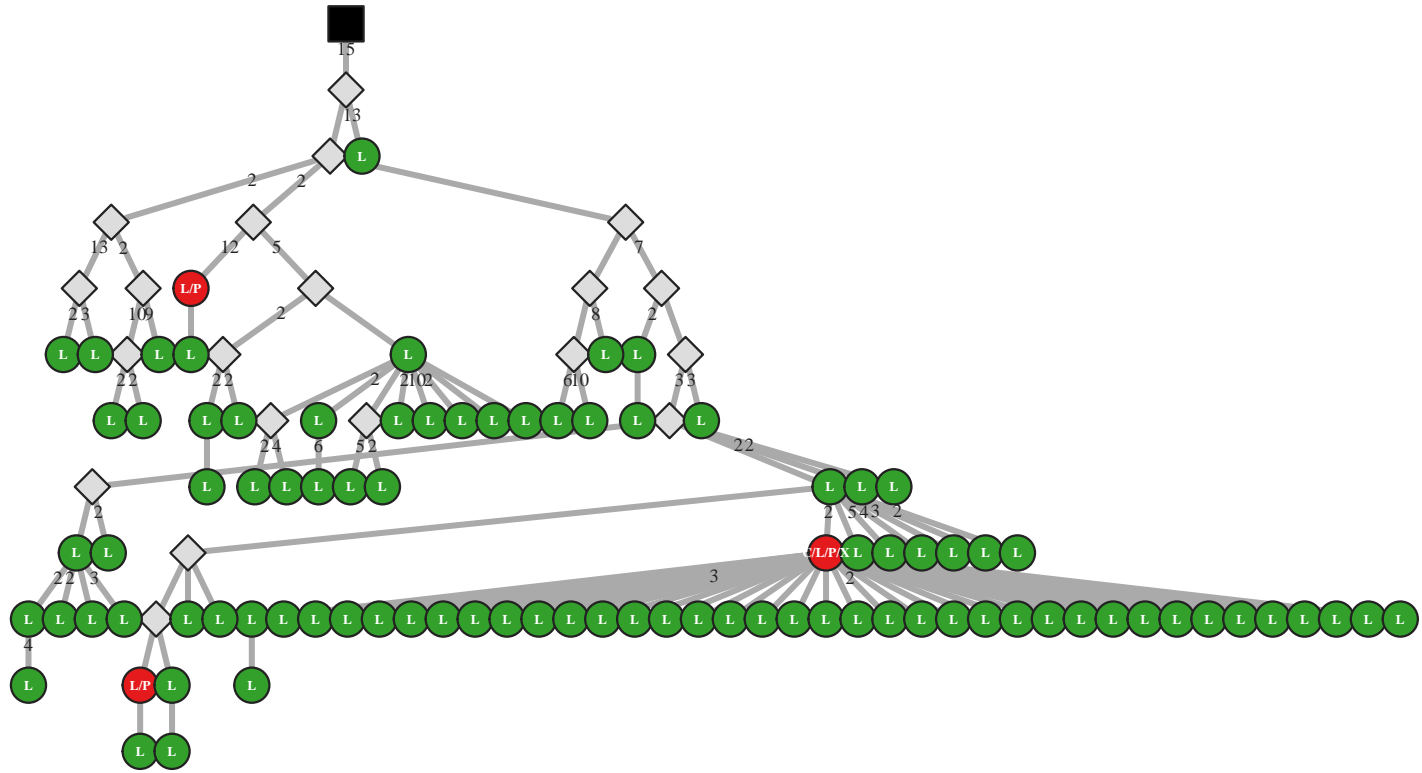
M5 IgG IGHV7-4-1/J5 42bp (47488)



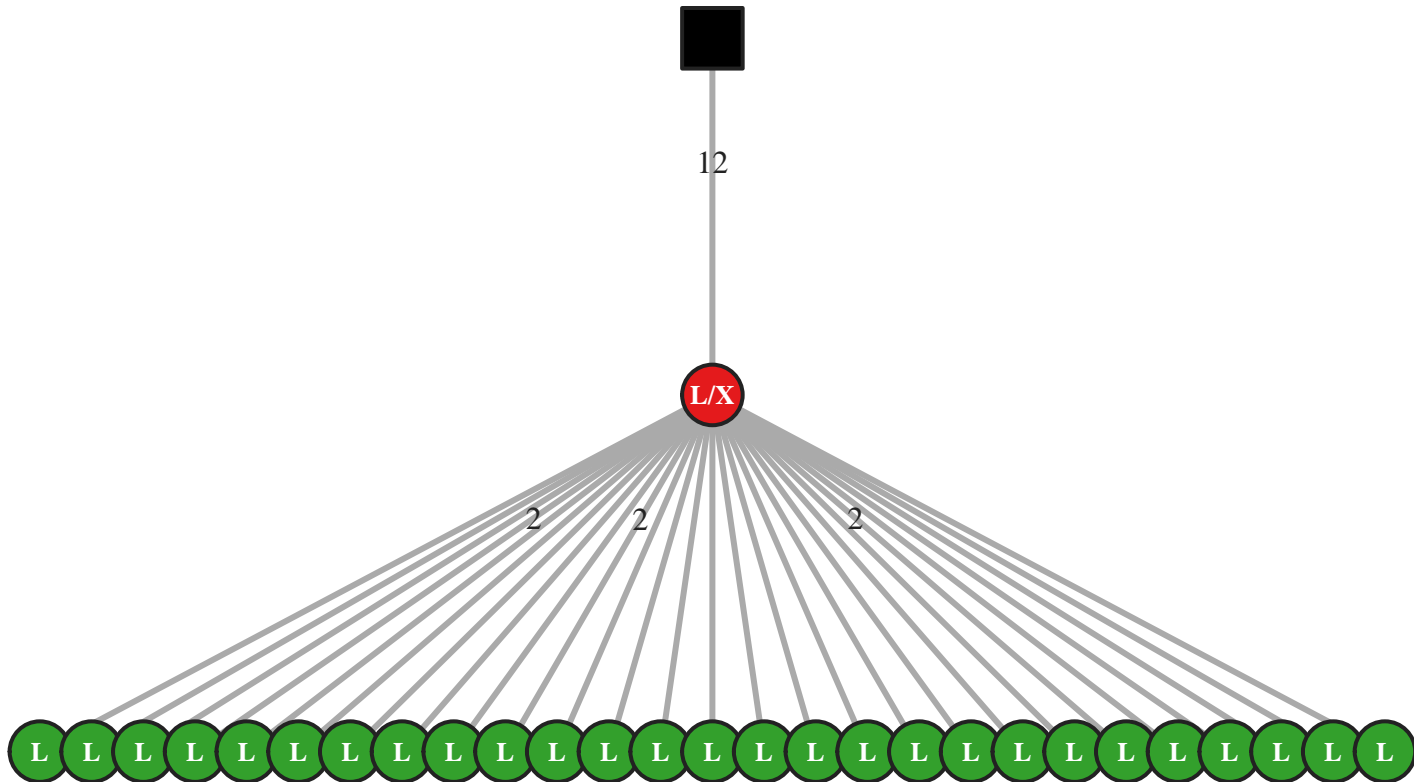
M5 IgG IGHV7-4-1/J5 42bp (47489)



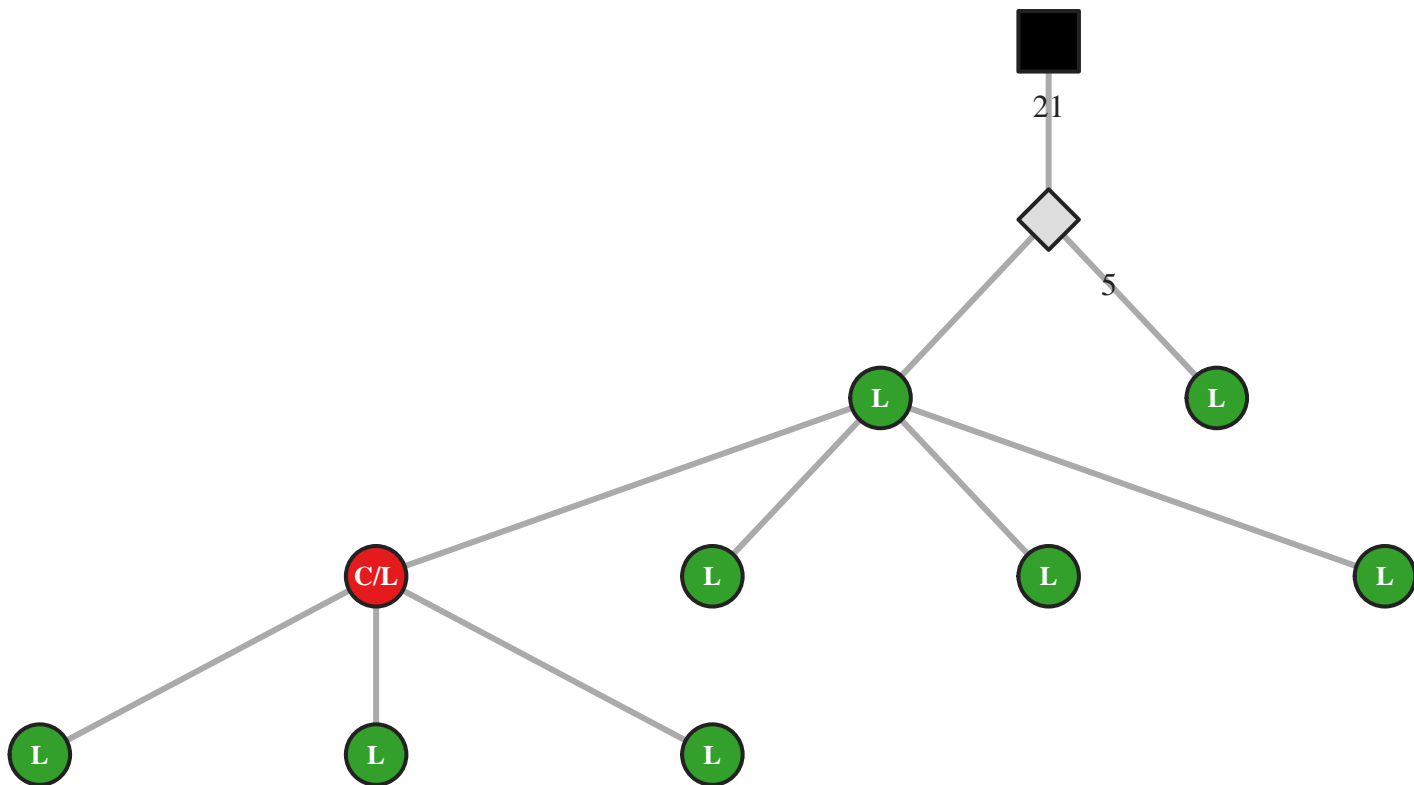
M5 IgG IGHV7-4-1/J5 60bp (20195)



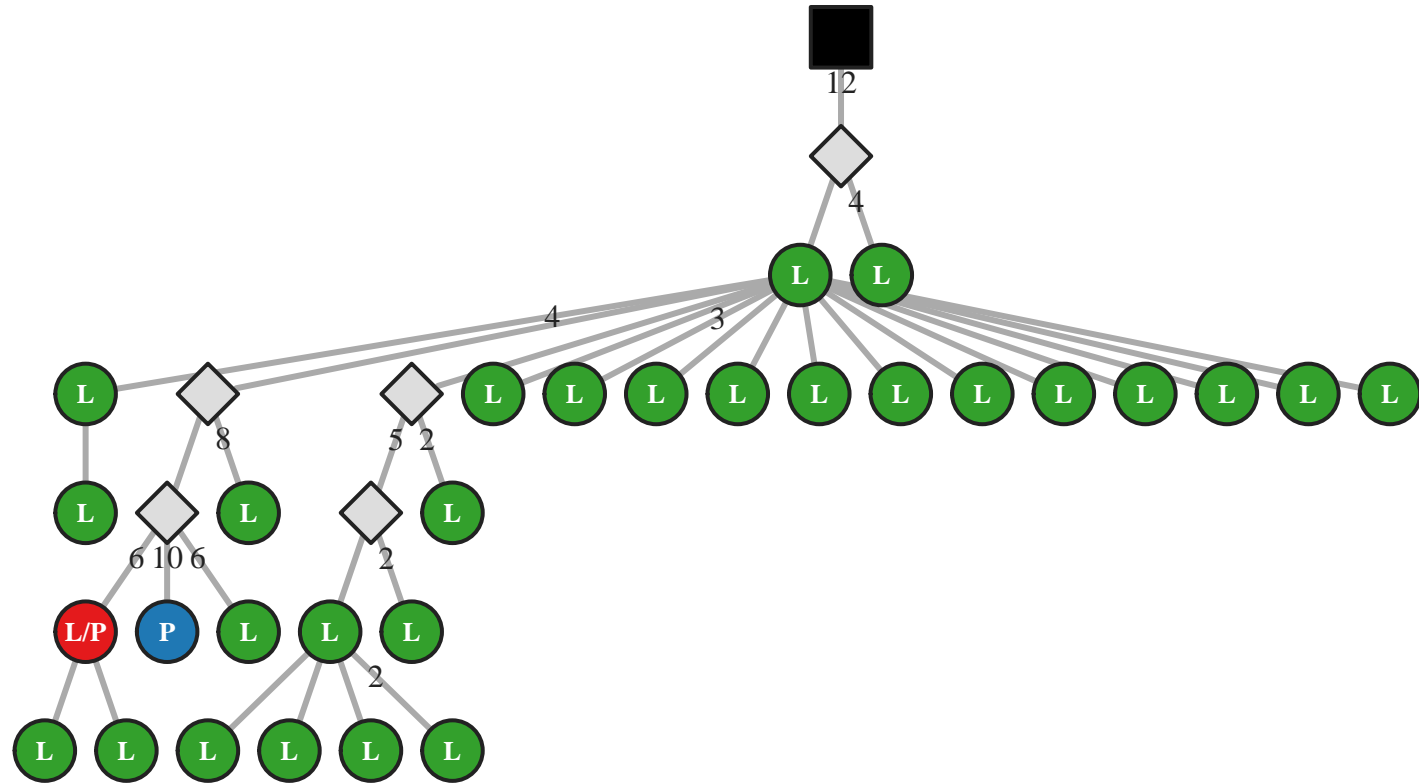
M5 IgM IGHV7-4-1/J6 48bp (21076)



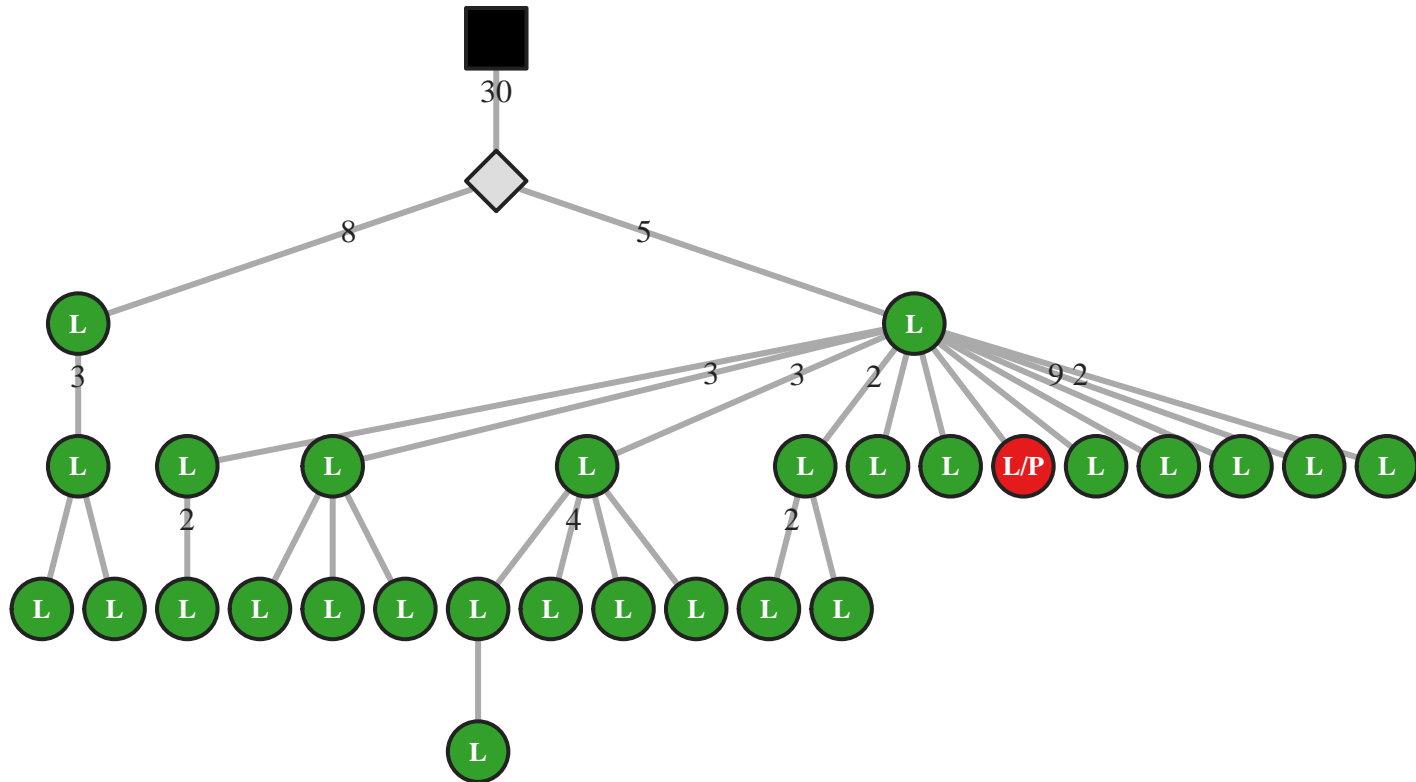
M5 IgG IGHV7-4-1/J6 63bp (37274)



M5 IgG IGHV7-4-1/J6 63bp (37294)



M5 IgG IGHV7-4-1/J6 72bp (53762)



M5 IgG IGHV7-4-1/J6 72bp (53768)

