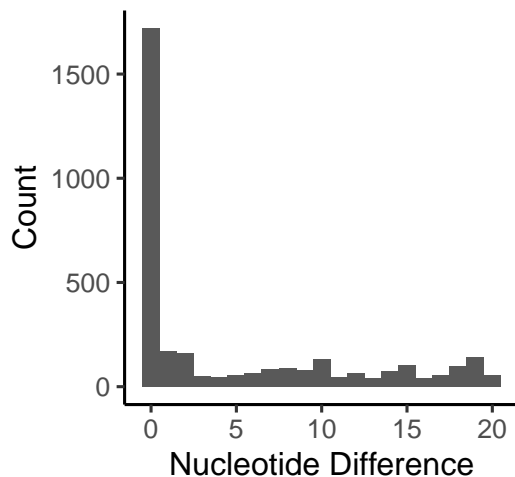


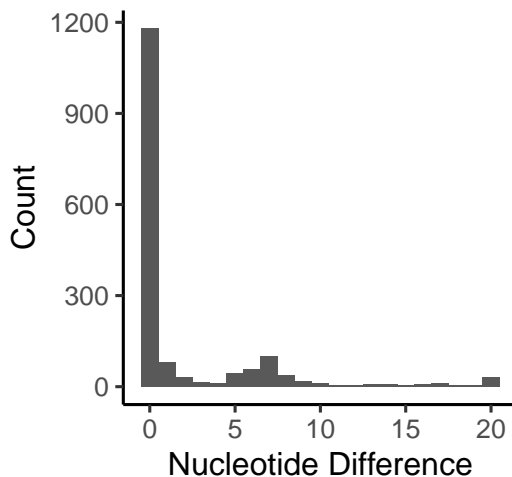
IGHV1-2*02

3666 sequences assigned
1719 (46.9%) exact matches, in which:
1702 unique CDR3
6 unique J



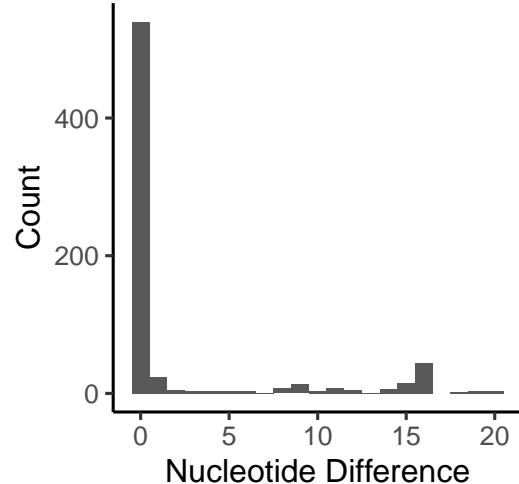
IGHV1-8*01

1792 sequences assigned
1180 (65.8%) exact matches, in which:
1168 unique CDR3
6 unique J



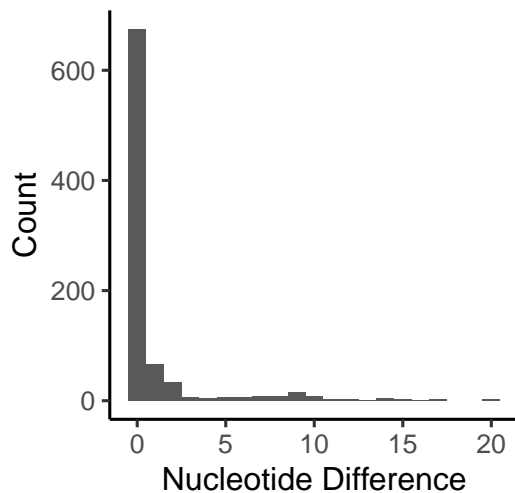
IGHV1-24*01

700 sequences assigned
540 (77.1%) exact matches, in which:
536 unique CDR3
6 unique J



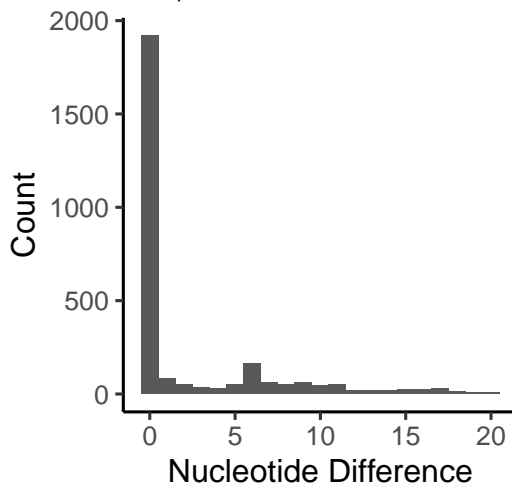
IGHV1-2*04

866 sequences assigned
675 (77.9%) exact matches, in which:
665 unique CDR3
6 unique J



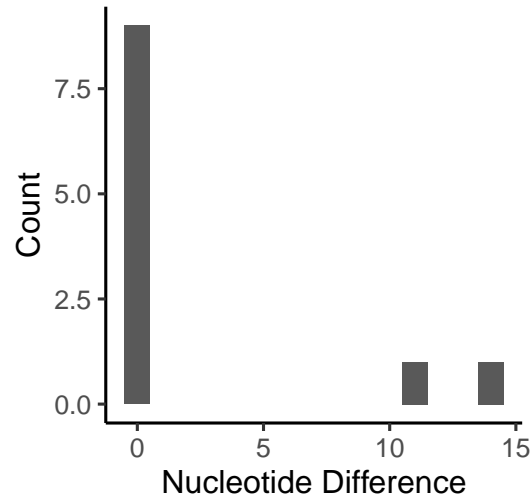
IGHV1-18*01

2869 sequences assigned
1919 (66.9%) exact matches, in which:
1903 unique CDR3
6 unique J



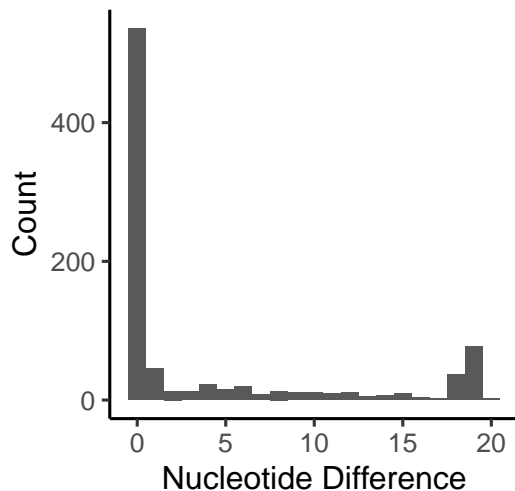
IGHV1-45*02

14 sequences assigned
9 (64.3%) exact matches, in which:
9 unique CDR3
4 unique J



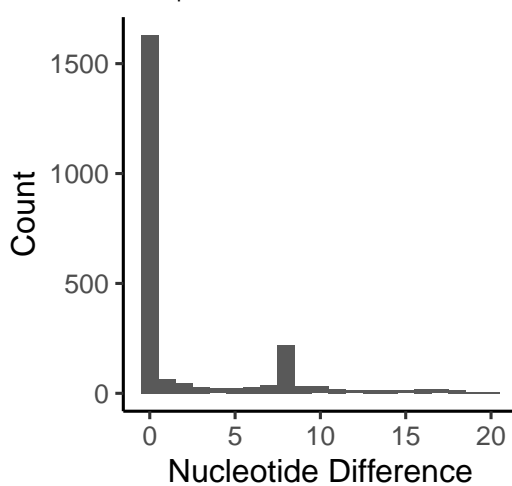
IGHV1-3*01_05

918 sequences assigned
536 (58.4%) exact matches, in which:
530 unique CDR3
6 unique J



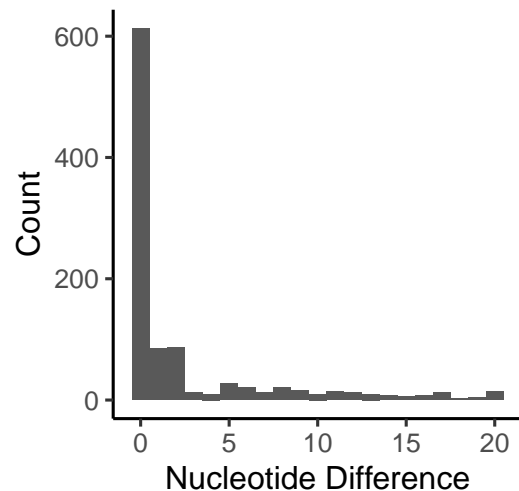
IGHV1-18*04

2505 sequences assigned
1630 (65.1%) exact matches, in which:
1617 unique CDR3
6 unique J



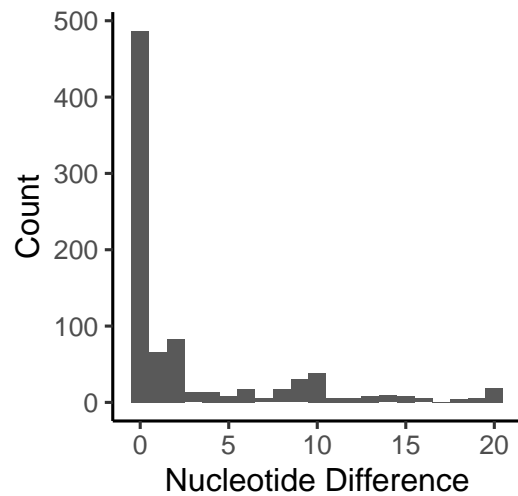
IGHV1-46*01

1034 sequences assigned
613 (59.3%) exact matches, in which:
605 unique CDR3
6 unique J



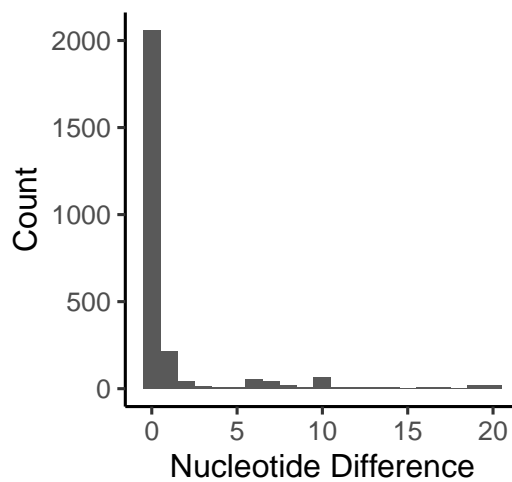
IGHV1-46*03

962 sequences assigned
487 (50.6%) exact matches, in which:
477 unique CDR3
6 unique J



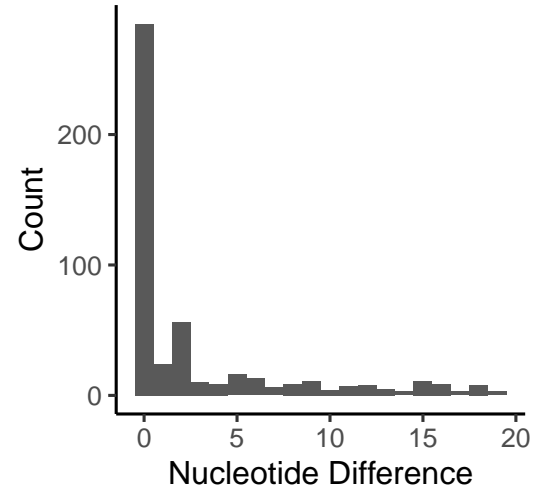
IGHV1-69*01_12_13

2894 sequences assigned
2058 (71.1%) exact matches, in which:
2042 unique CDR3
6 unique J



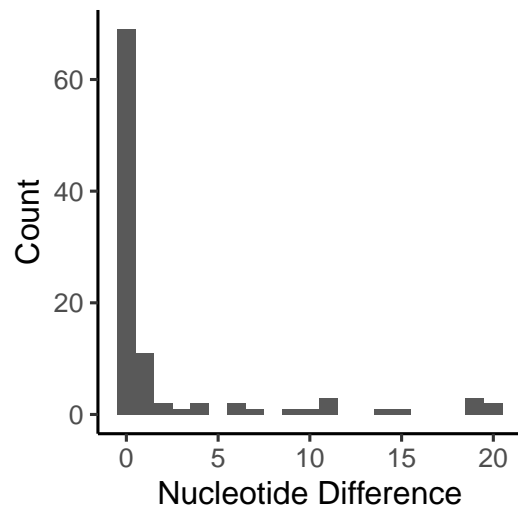
IGHV2-5*01

518 sequences assigned
285 (55%) exact matches, in which:
280 unique CDR3
6 unique J



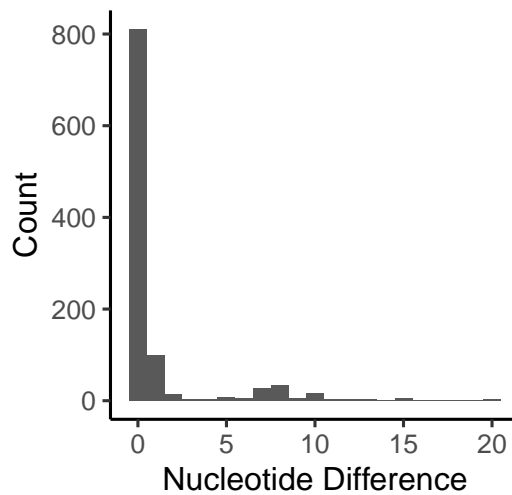
IGHV1-58*02

103 sequences assigned
69 (67%) exact matches, in which:
67 unique CDR3
5 unique J



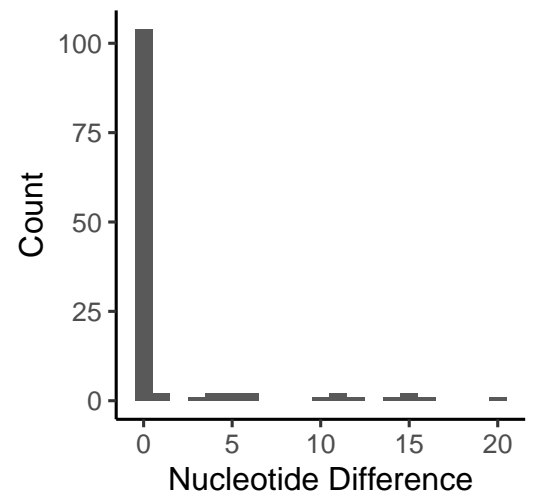
IGHV1-69*04_09_G112A

1095 sequences assigned
811 (74.1%) exact matches, in which:
805 unique CDR3
6 unique J



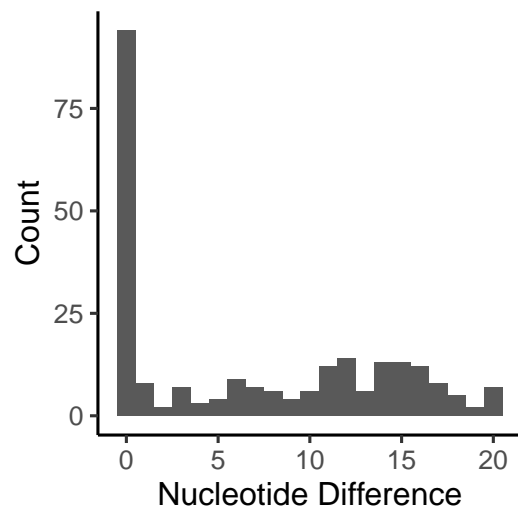
IGHV2-26*01

123 sequences assigned
104 (84.6%) exact matches, in which:
103 unique CDR3
5 unique J



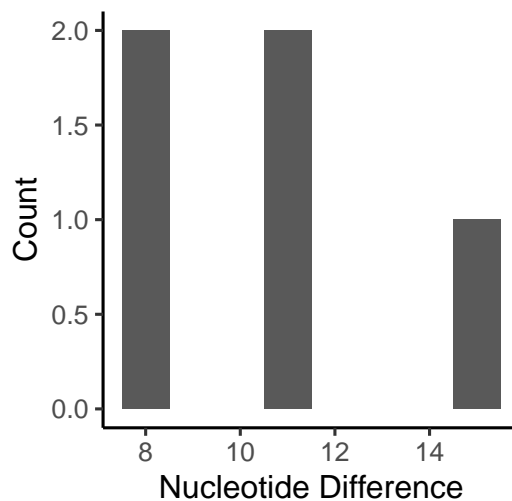
IGHV1-58*01_03

270 sequences assigned
94 (34.8%) exact matches, in which:
92 unique CDR3
5 unique J



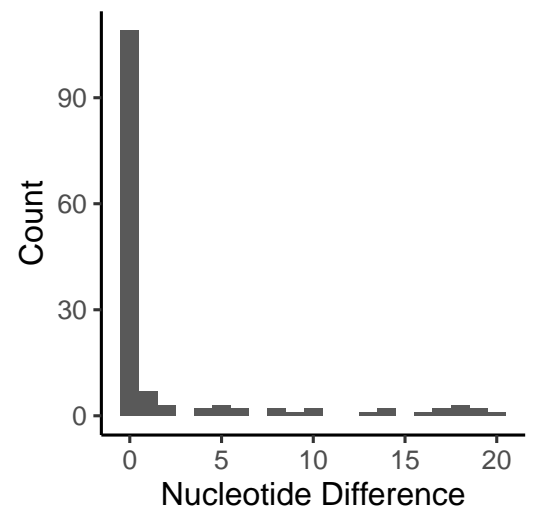
IGHV1-NL1*01

5 sequences assigned
No exact matches.



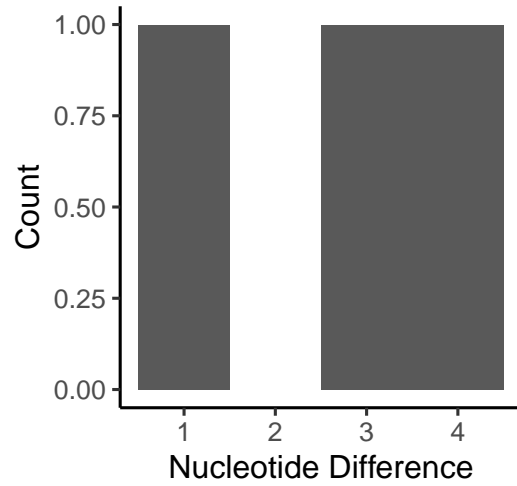
IGHV2-70*01

145 sequences assigned
109 (75.2%) exact matches, in which:
108 unique CDR3
5 unique J



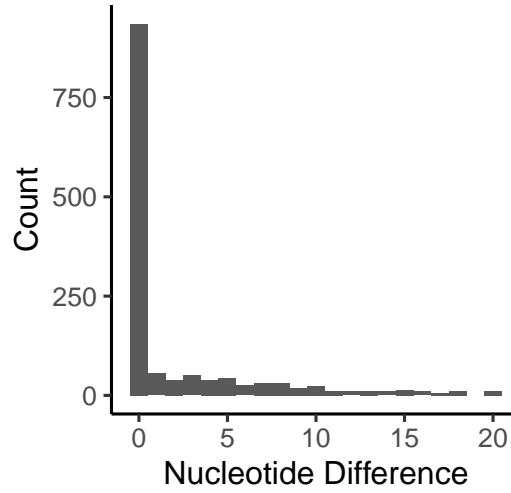
IGHV2-70D*04

3 sequences assigned
No exact matches.



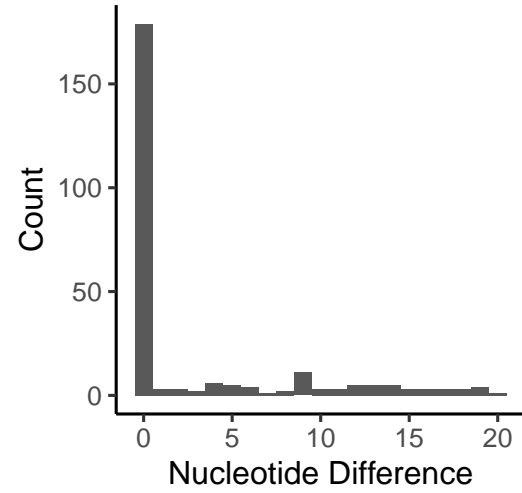
IGHV3-9*01

1445 sequences assigned
936 (64.8%) exact matches, in which:
642 unique CDR3
6 unique J



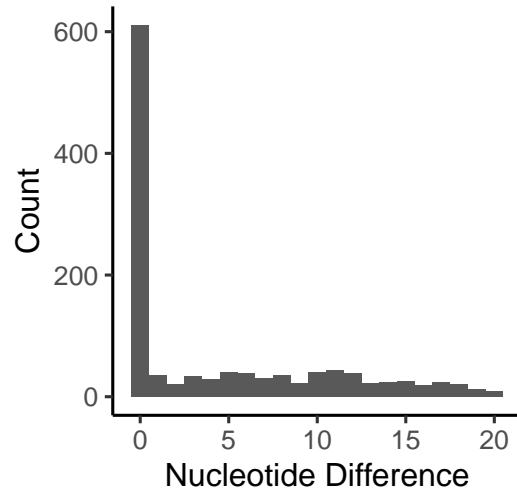
IGHV3-13*01

270 sequences assigned
179 (66.3%) exact matches, in which:
110 unique CDR3
5 unique J



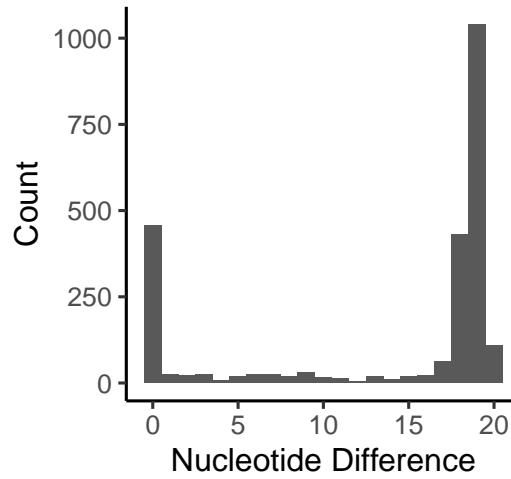
IGHV3-7*01

1289 sequences assigned
611 (47.4%) exact matches, in which:
421 unique CDR3
6 unique J



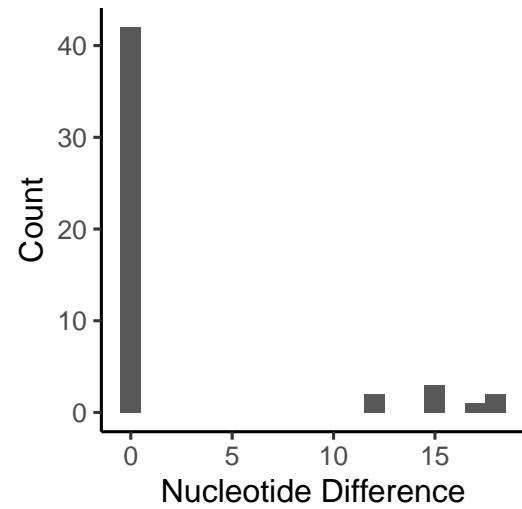
IGHV3-11*01

2502 sequences assigned
457 (18.3%) exact matches, in which:
322 unique CDR3
6 unique J



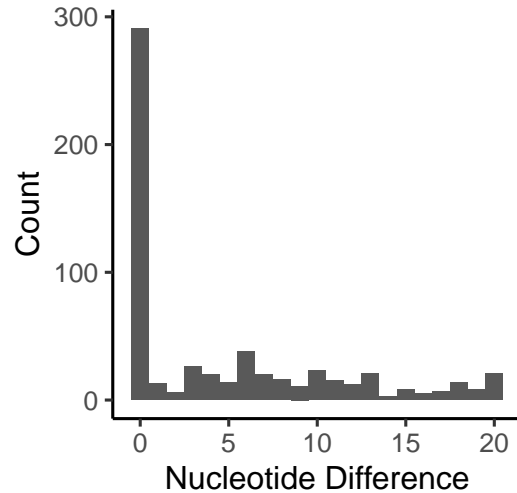
IGHV3-13*05

51 sequences assigned
42 (82.4%) exact matches, in which:
28 unique CDR3
4 unique J



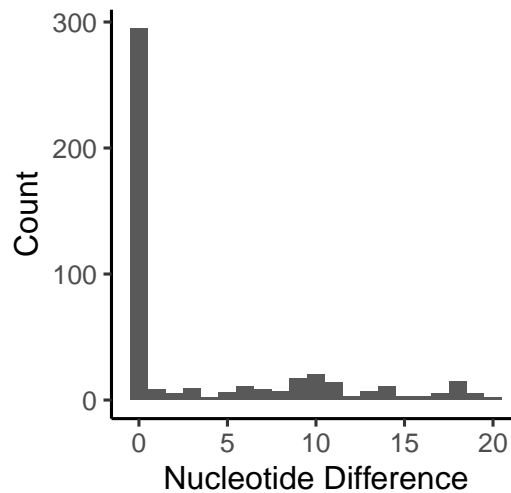
IGHV3-7*05

670 sequences assigned
291 (43.4%) exact matches, in which:
199 unique CDR3
6 unique J



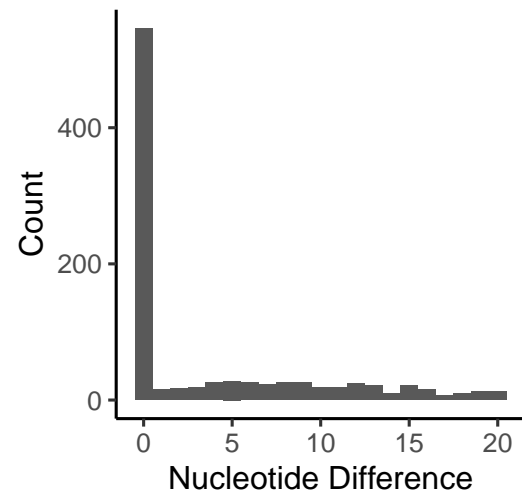
IGHV3-11*06

507 sequences assigned
295 (58.2%) exact matches, in which:
204 unique CDR3
6 unique J



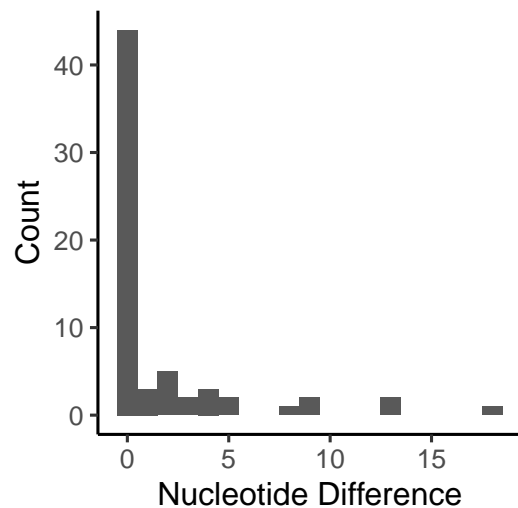
IGHV3-15*01_02

1027 sequences assigned
546 (53.2%) exact matches, in which:
416 unique CDR3
6 unique J



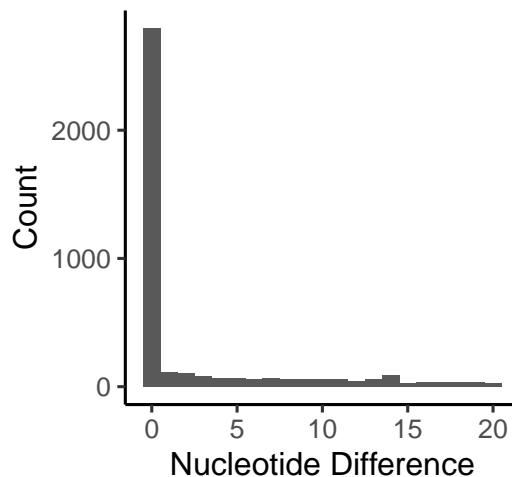
IGHV3-20*01_02

70 sequences assigned
44 (62.9%) exact matches, in which:
31 unique CDR3
5 unique J



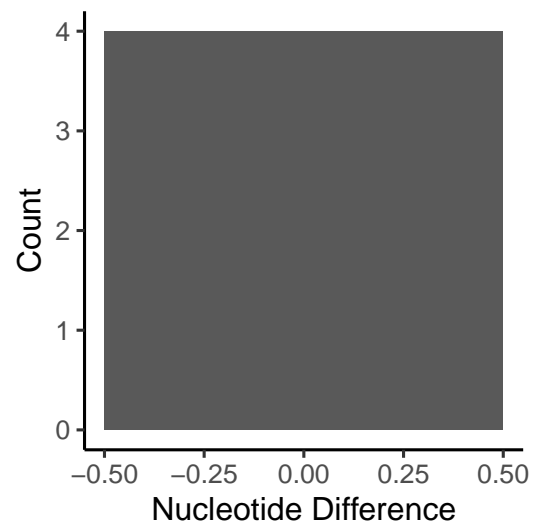
IGHV3-30-3*01

4391 sequences assigned
2794 (63.6%) exact matches, in which:
1946 unique CDR3
6 unique J



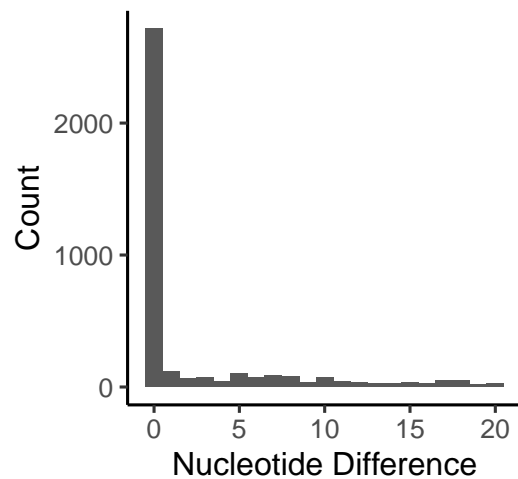
IGHV3-47*01

4 sequences assigned
4 (100%) exact matches, in which:
2 unique CDR3
2 unique J



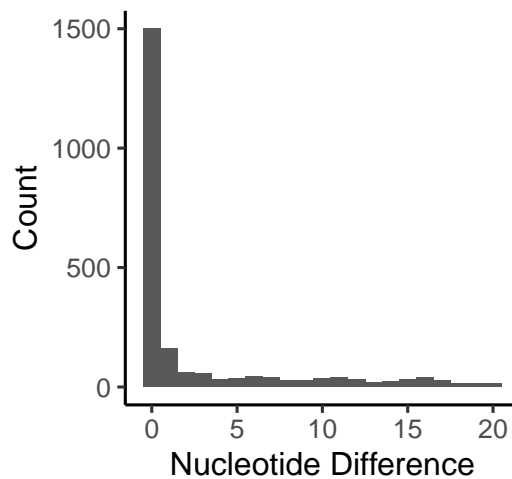
IGHV3-21*01_02

3990 sequences assigned
2715 (68%) exact matches, in which:
1829 unique CDR3
6 unique J



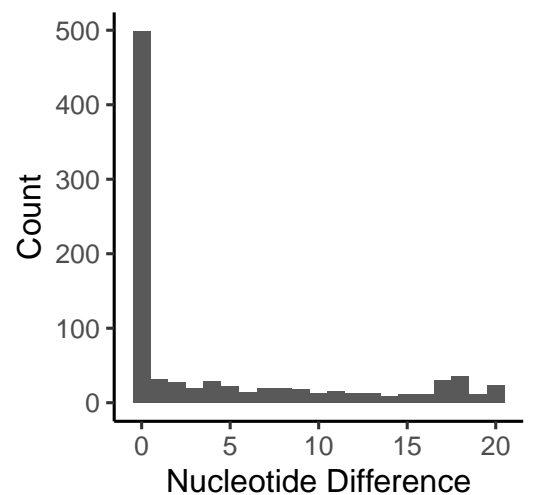
IGHV3-33*01

2399 sequences assigned
1500 (62.5%) exact matches, in which:
1108 unique CDR3
6 unique J



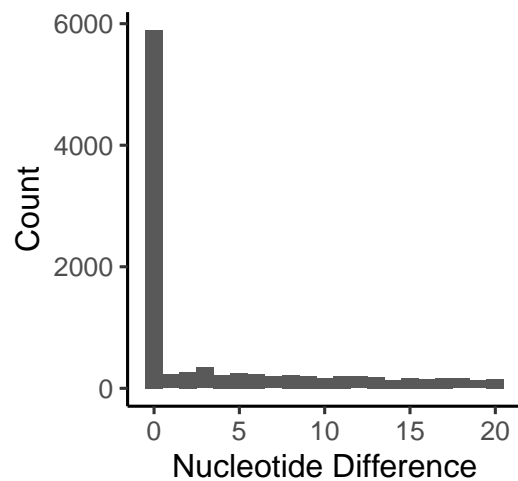
IGHV3-48*01

984 sequences assigned
499 (50.7%) exact matches, in which:
338 unique CDR3
6 unique J



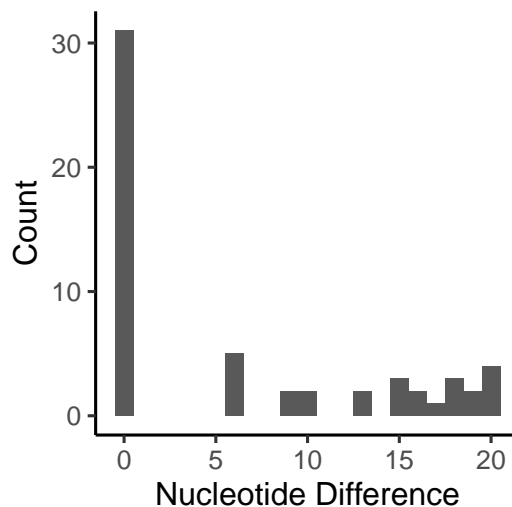
IGHV3-23*01_04

10805 sequences assigned
5895 (54.6%) exact matches, in which:
3868 unique CDR3
6 unique J



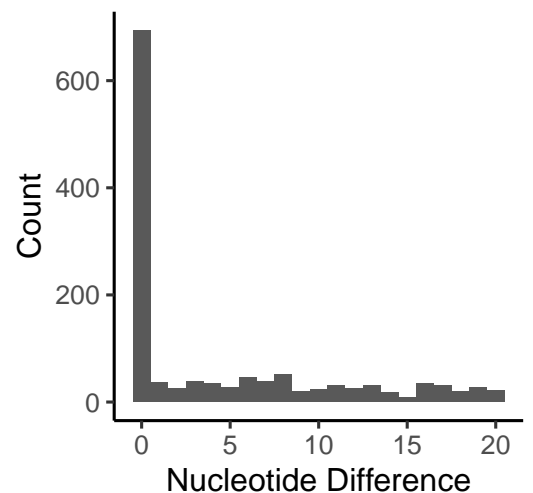
IGHV3-43*01

61 sequences assigned
31 (50.8%) exact matches, in which:
23 unique CDR3
3 unique J



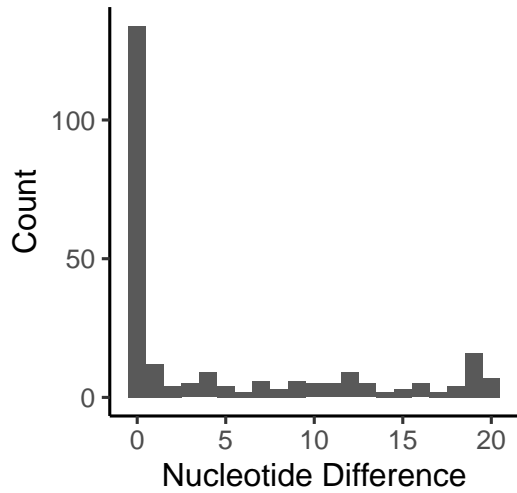
IGHV3-48*03

1411 sequences assigned
694 (49.2%) exact matches, in which:
506 unique CDR3
6 unique J



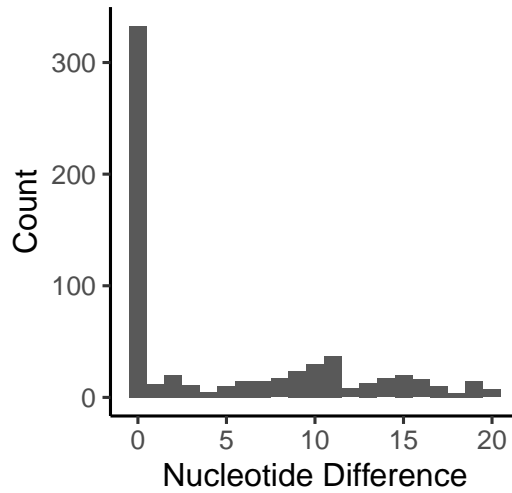
IGHV3-49*04

277 sequences assigned
134 (48.4%) exact matches, in which:
101 unique CDR3
5 unique J



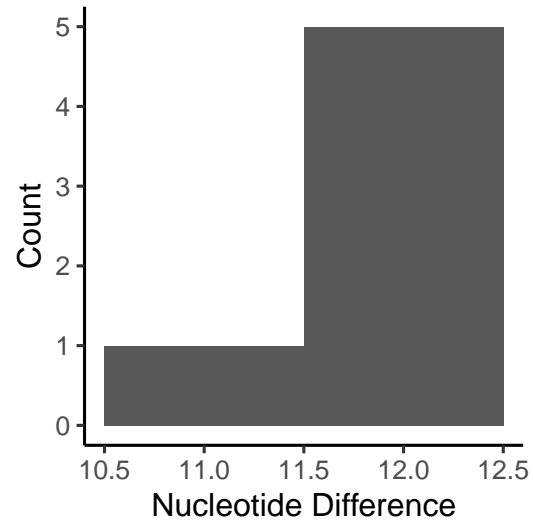
IGHV3-53*01_02

691 sequences assigned
333 (48.2%) exact matches, in which:
239 unique CDR3
6 unique J



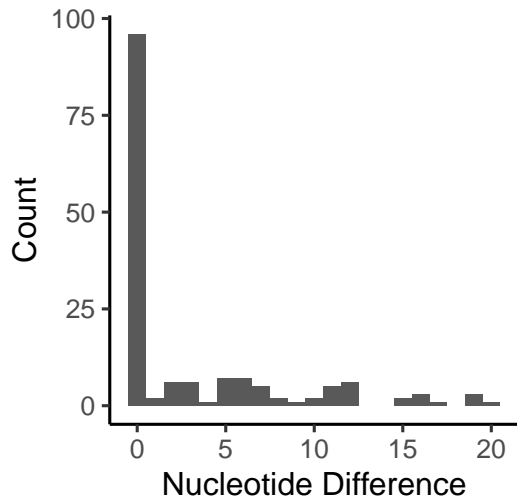
IGHV3-69-1*01

13 sequences assigned
No exact matches.



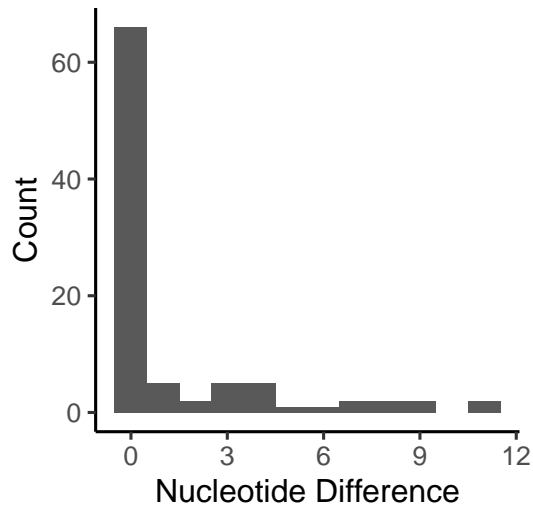
IGHV3-49*03_05

167 sequences assigned
96 (57.5%) exact matches, in which:
75 unique CDR3
5 unique J



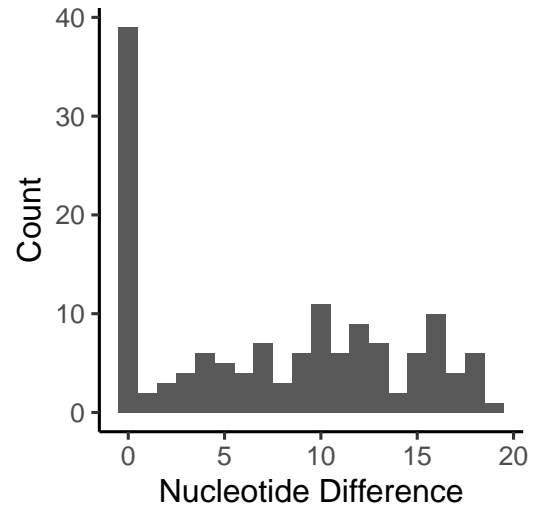
IGHV3-64*01

98 sequences assigned
66 (67.3%) exact matches, in which:
43 unique CDR3
4 unique J



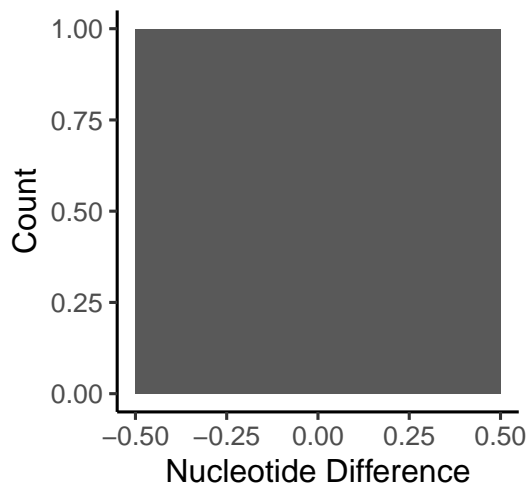
IGHV3-72*01

159 sequences assigned
39 (24.5%) exact matches, in which:
29 unique CDR3
4 unique J



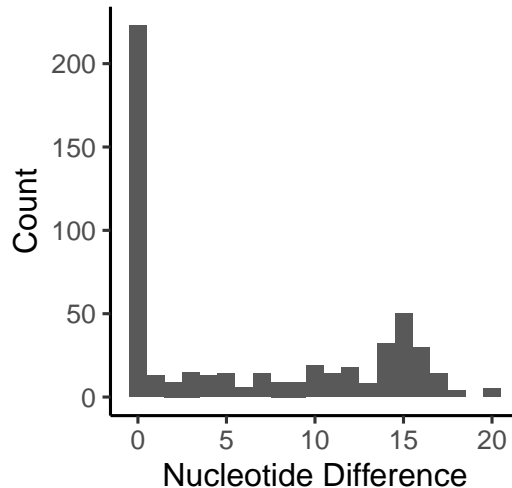
IGHV3-52*01_03

1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



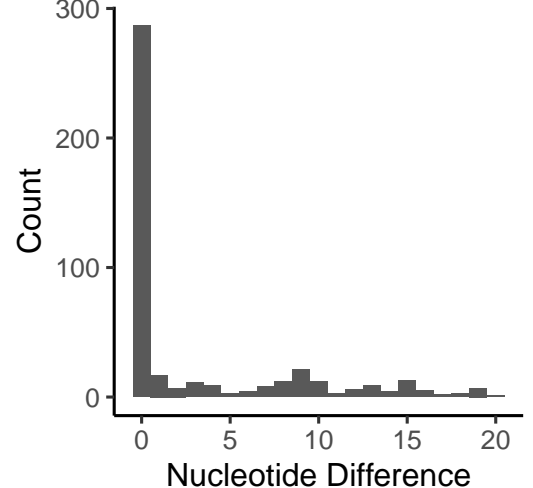
IGHV3-66*02

565 sequences assigned
223 (39.5%) exact matches, in which:
160 unique CDR3
5 unique J



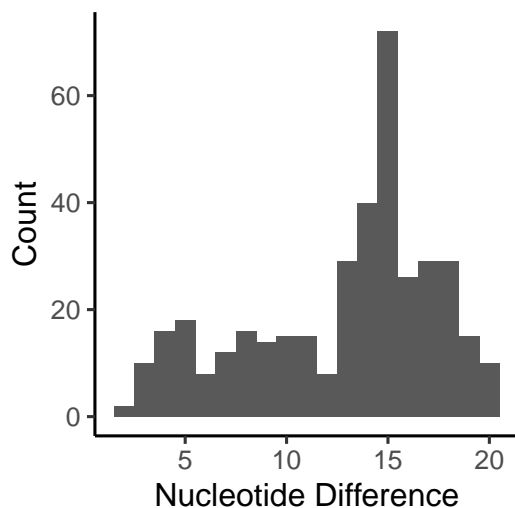
IGHV3-73*01_02

469 sequences assigned
287 (61.2%) exact matches, in which:
207 unique CDR3
5 unique J



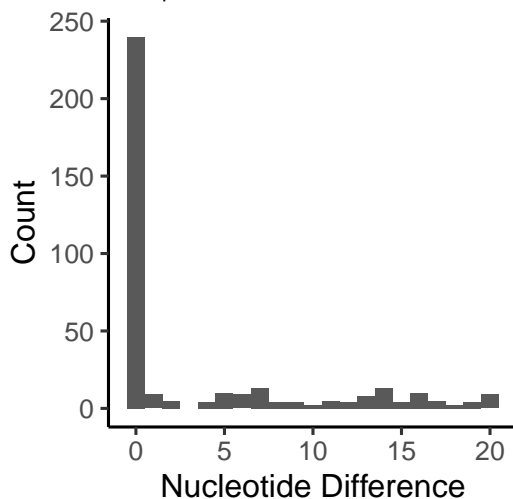
IGHV3-74*03

444 sequences assigned
No exact matches.



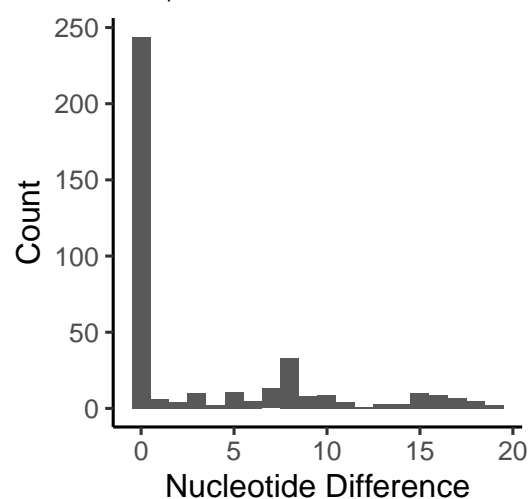
IGHV3-64D*08

417 sequences assigned
240 (57.6%) exact matches, in which:
149 unique CDR3
6 unique J



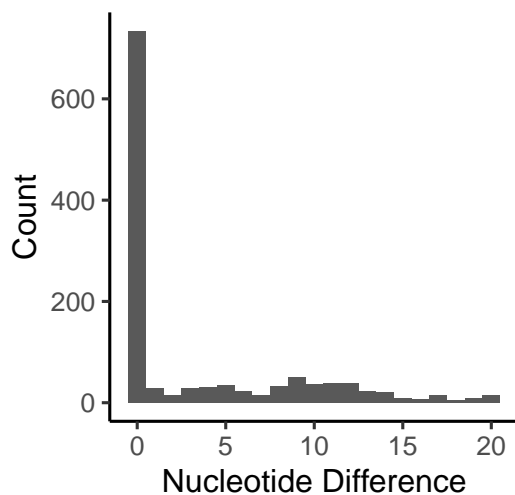
IGHV4-4*02_03

408 sequences assigned
244 (59.8%) exact matches, in which:
241 unique CDR3
6 unique J



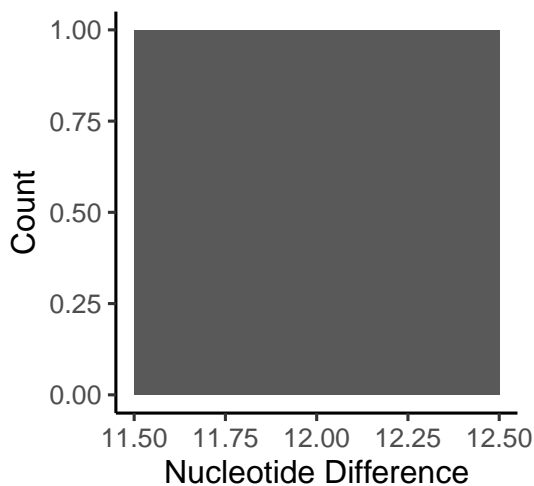
IGHV3-74*01_02

1255 sequences assigned
734 (58.5%) exact matches, in which:
479 unique CDR3
6 unique J



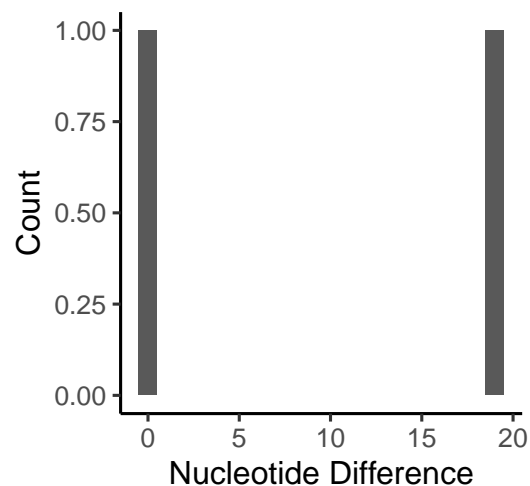
IGHV3-NL1*01

1 sequences assigned
No exact matches.



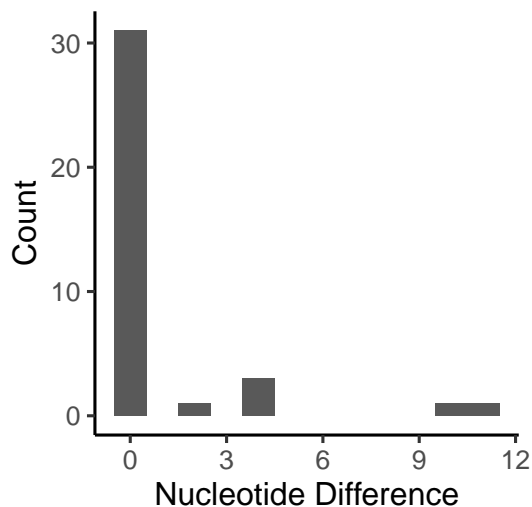
IGHV4-28*01_07

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



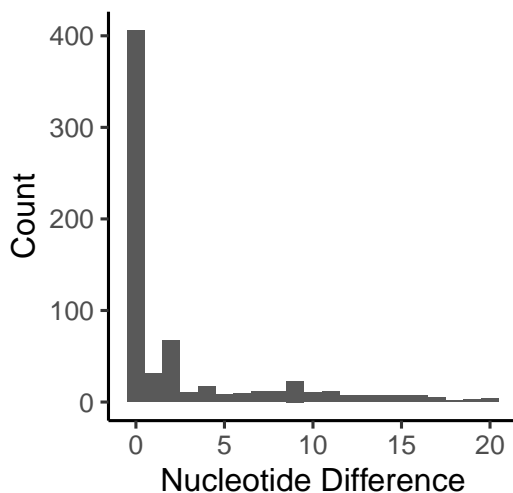
IGHV3-43D*04

39 sequences assigned
31 (79.5%) exact matches, in which:
26 unique CDR3
4 unique J



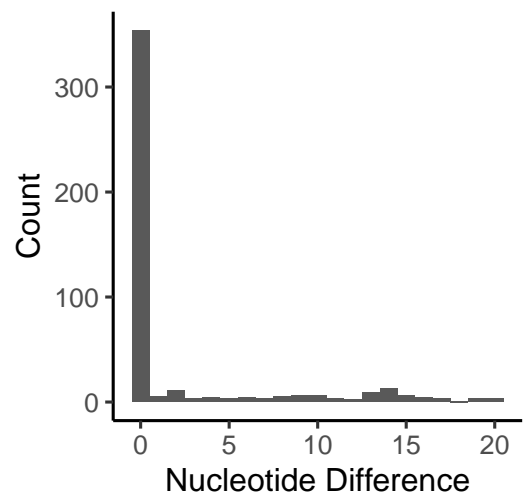
IGHV4-4*07

762 sequences assigned
406 (53.3%) exact matches, in which:
400 unique CDR3
5 unique J



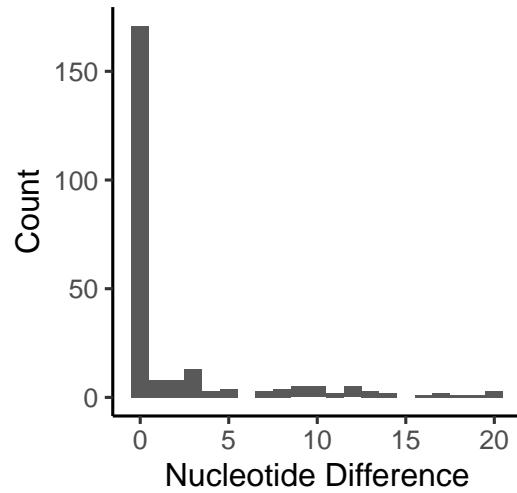
IGHV4-30-2*01

469 sequences assigned
354 (75.5%) exact matches, in which:
332 unique CDR3
6 unique J



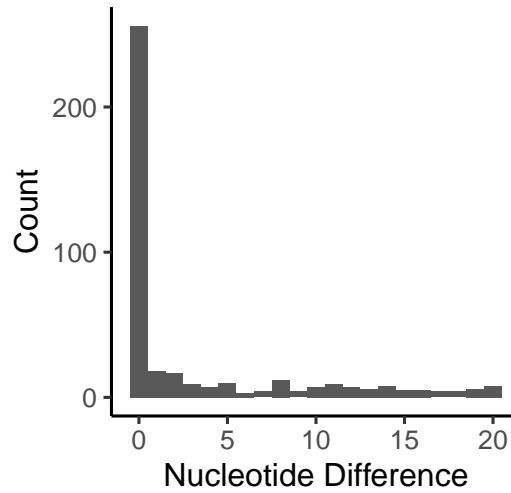
IGHV4-30-4*01

283 sequences assigned
171 (60.4%) exact matches, in which:
170 unique CDR3
6 unique J



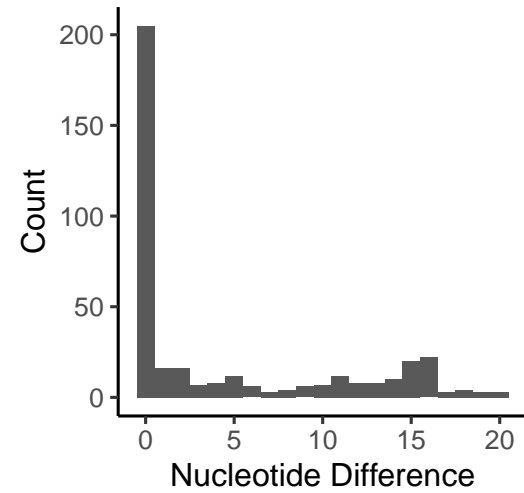
IGHV4-38-2*02_A70G

466 sequences assigned
256 (54.9%) exact matches, in which:
249 unique CDR3
6 unique J



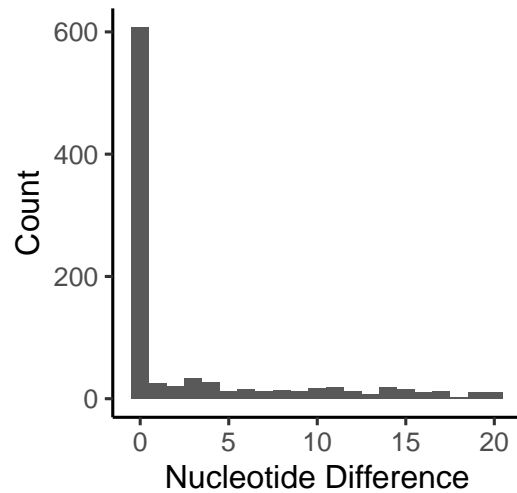
IGHV4-61*01

410 sequences assigned
205 (50%) exact matches, in which:
205 unique CDR3
6 unique J



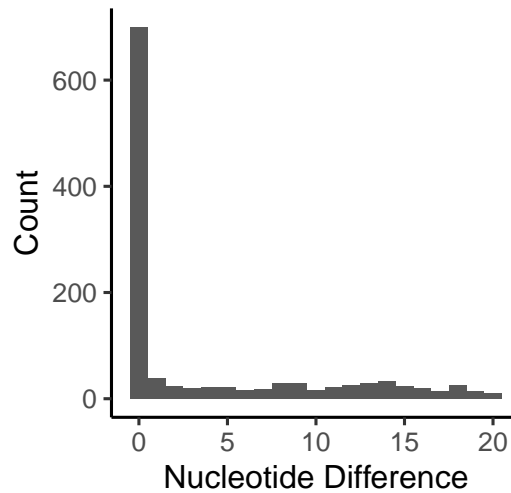
IGHV4-31*02

947 sequences assigned
608 (64.2%) exact matches, in which:
604 unique CDR3
6 unique J



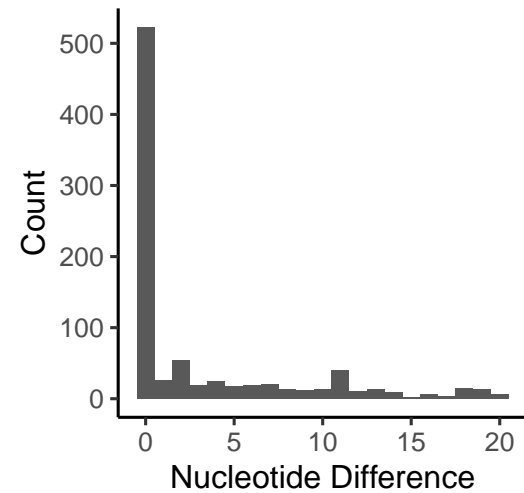
IGHV4-39*02_C258G

1289 sequences assigned
700 (54.3%) exact matches, in which:
689 unique CDR3
6 unique J



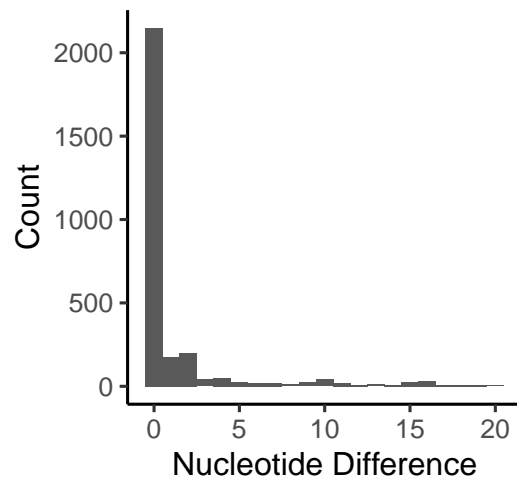
IGHV4-61*02

975 sequences assigned
523 (53.6%) exact matches, in which:
521 unique CDR3
6 unique J



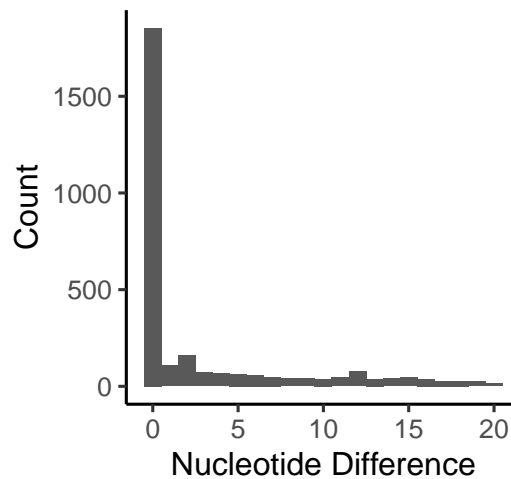
IGHV4-34*01_02

3054 sequences assigned
2148 (70.3%) exact matches, in which:
2113 unique CDR3
6 unique J



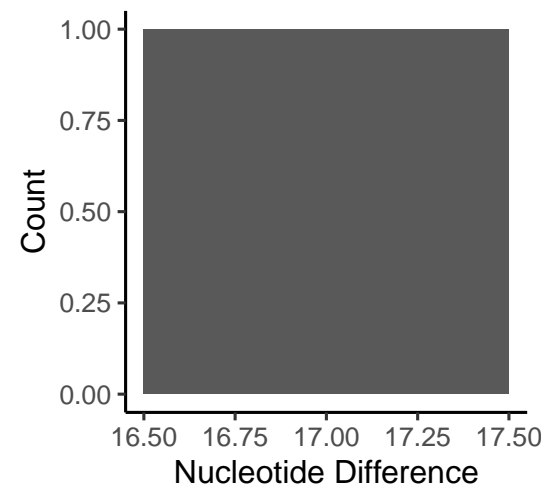
IGHV4-59*02_G88A

3050 sequences assigned
1853 (60.8%) exact matches, in which:
1834 unique CDR3
6 unique J



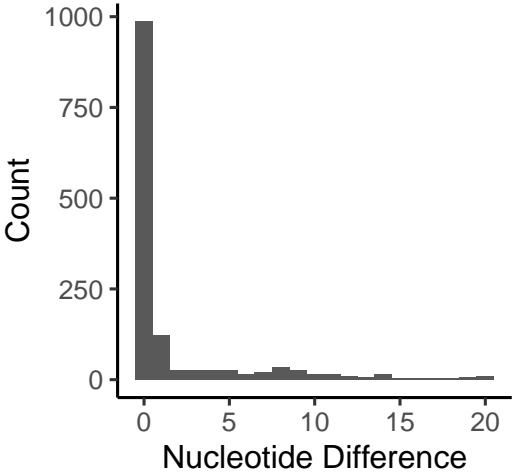
IGHV4/OR15-8*02

2 sequences assigned
No exact matches.



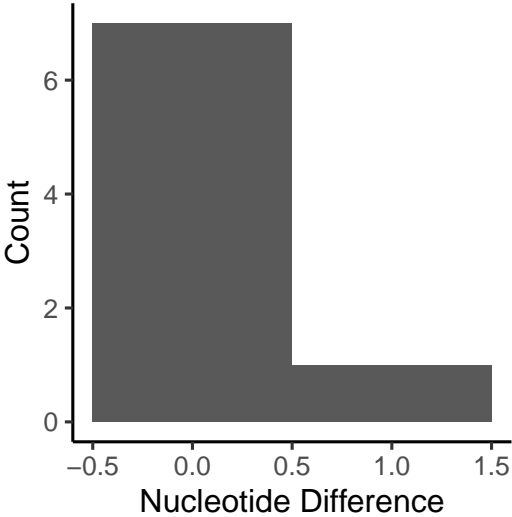
IGHV5-10-1*01_03

1423 sequences assigned
987 (69.4%) exact matches, in which:
744 unique CDR3
6 unique J



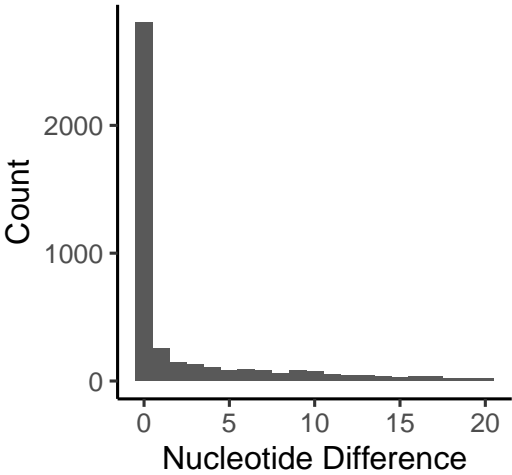
IGHV7-4-1*01

8 sequences assigned
7 (87.5%) exact matches, in which:
7 unique CDR3
3 unique J



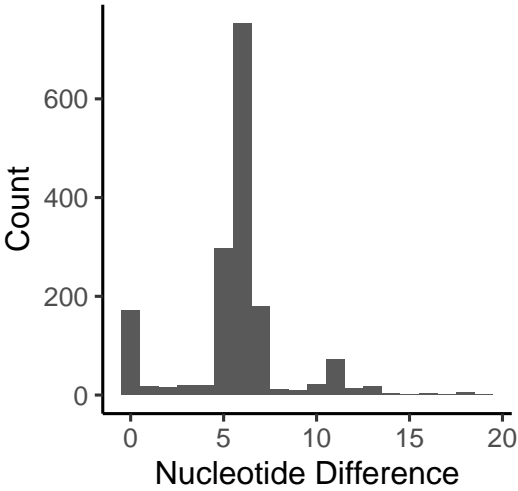
IGHV5-51*07_A128G

4344 sequences assigned
2803 (64.5%) exact matches, in which:
2063 unique CDR3
6 unique J



IGHV6-1*01_02

1653 sequences assigned
171 (10.3%) exact matches, in which:
170 unique CDR3
5 unique J





Warning – no inferred sequences found.