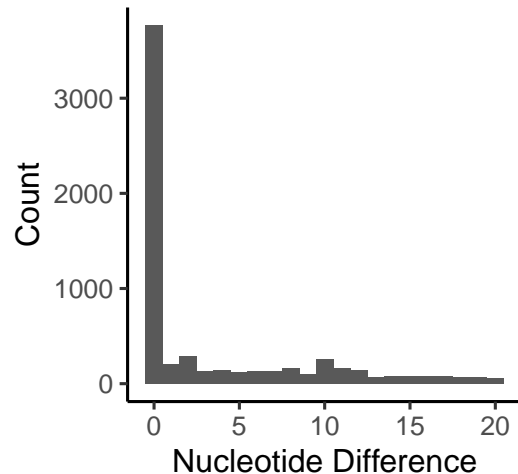


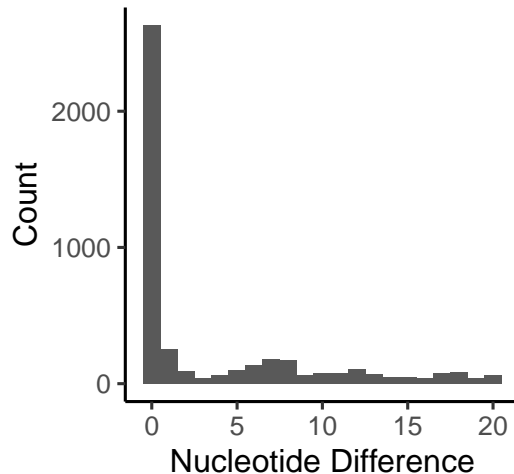
IGHV1-2*02

6744 sequences assigned
3765 (55.8%) exact matches, in which:
3709 unique CDR3
7 unique J



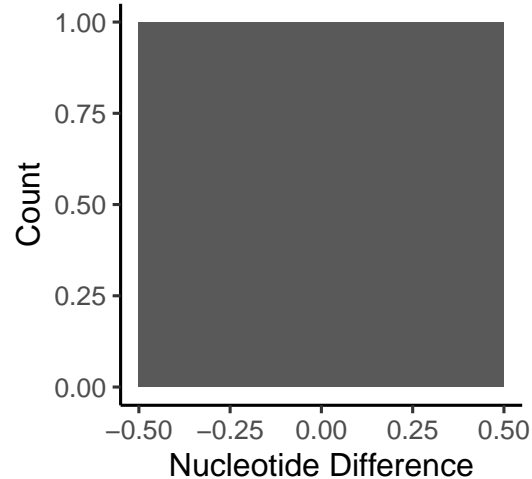
IGHV1-18*04

4854 sequences assigned
2630 (54.2%) exact matches, in which:
2561 unique CDR3
7 unique J



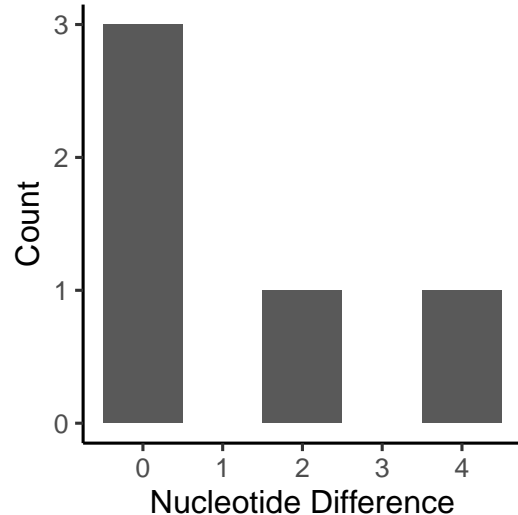
IGHV1-45*03

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



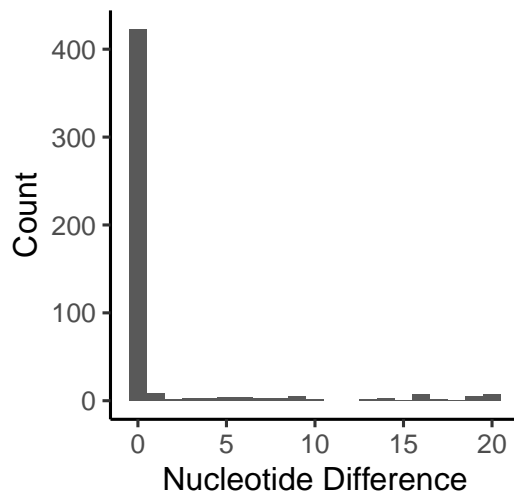
IGHV1-3*02

5 sequences assigned
3 (60%) exact matches, in which:
3 unique CDR3
2 unique J



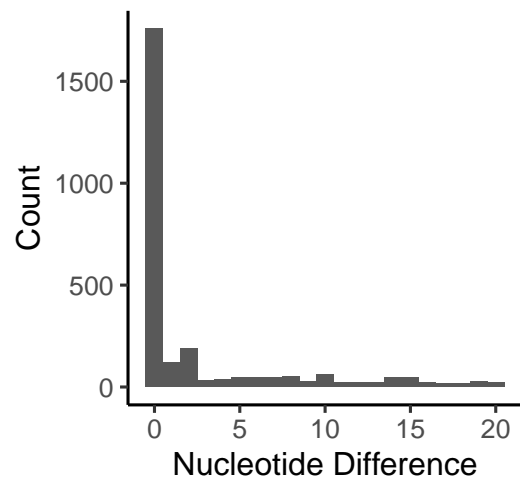
IGHV1-24*01

515 sequences assigned
423 (82.1%) exact matches, in which:
423 unique CDR3
7 unique J



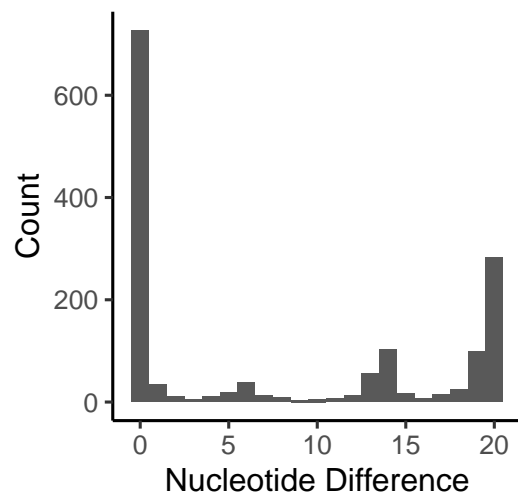
IGHV1-46*01

3044 sequences assigned
1758 (57.8%) exact matches, in which:
1738 unique CDR3
7 unique J



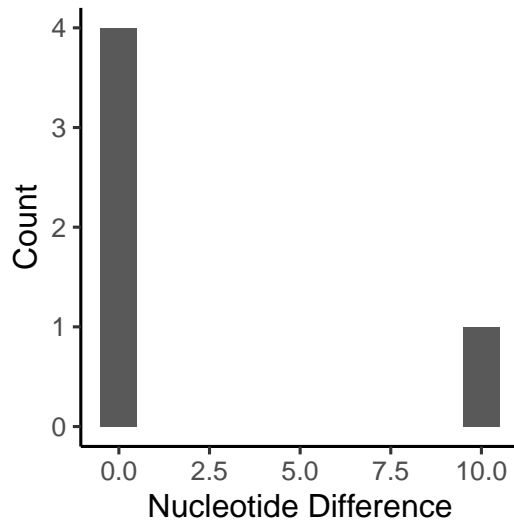
IGHV1-8*03

1562 sequences assigned
727 (46.5%) exact matches, in which:
720 unique CDR3
7 unique J



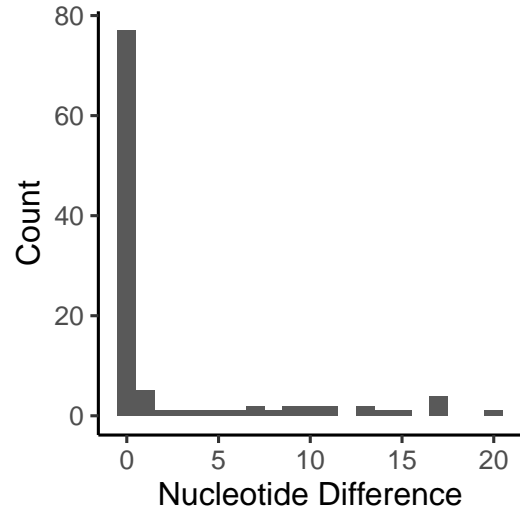
IGHV1-45*02

5 sequences assigned
4 (80%) exact matches, in which:
4 unique CDR3
2 unique J



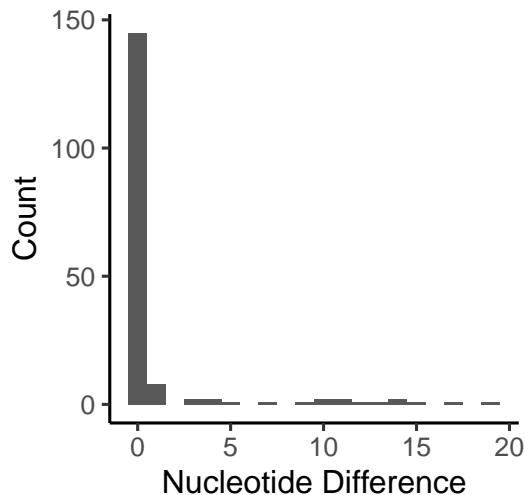
IGHV1-58*02

107 sequences assigned
77 (72%) exact matches, in which:
77 unique CDR3
5 unique J



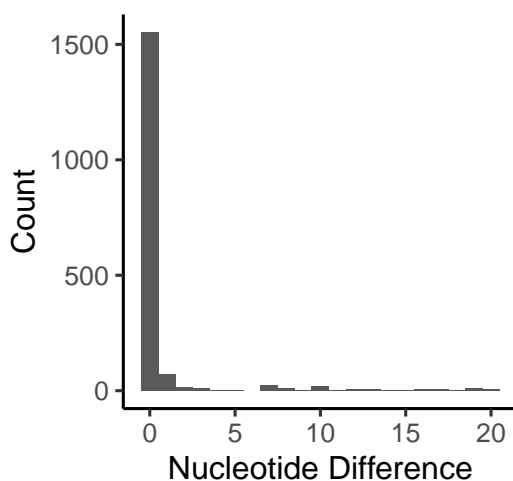
IGHV1-58*01_03

235 sequences assigned
145 (61.7%) exact matches, in which:
145 unique CDR3
6 unique J



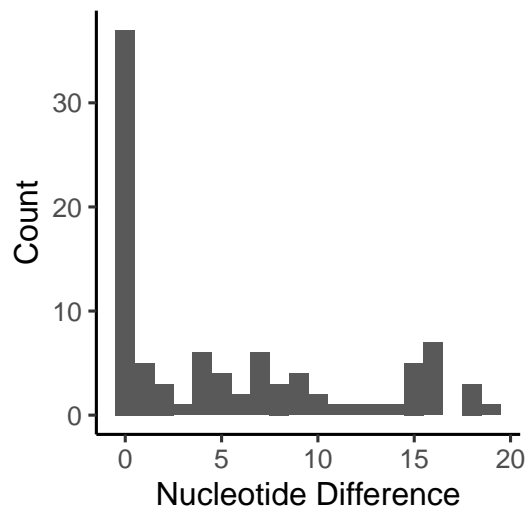
IGHV1-69*04_09

1819 sequences assigned
1552 (85.3%) exact matches, in which:
1544 unique CDR3
7 unique J



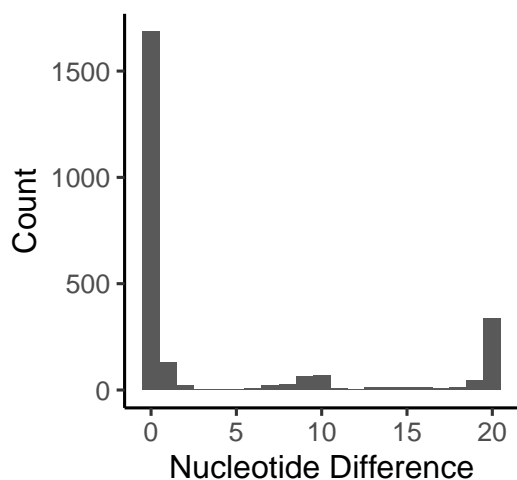
IGHV2-5*02

119 sequences assigned
37 (31.1%) exact matches, in which:
37 unique CDR3
5 unique J



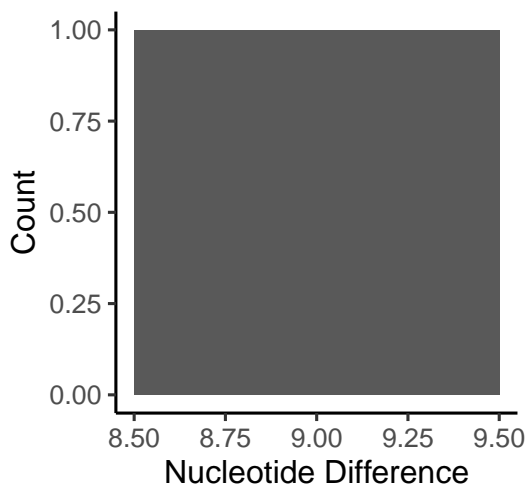
IGHV1-69*01_12_13

3203 sequences assigned
1685 (52.6%) exact matches, in which:
1674 unique CDR3
7 unique J



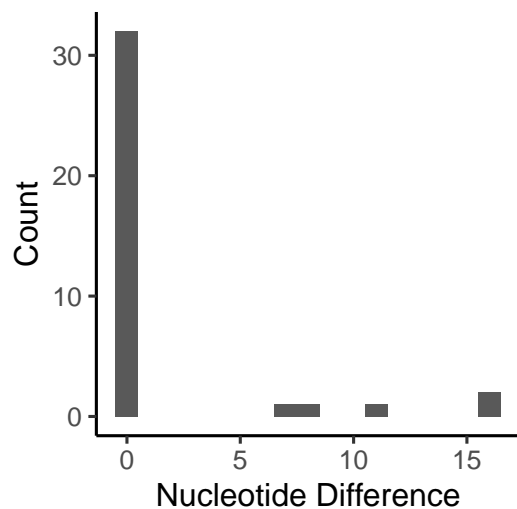
IGHV1-NL1*01

1 sequences assigned
No exact matches.



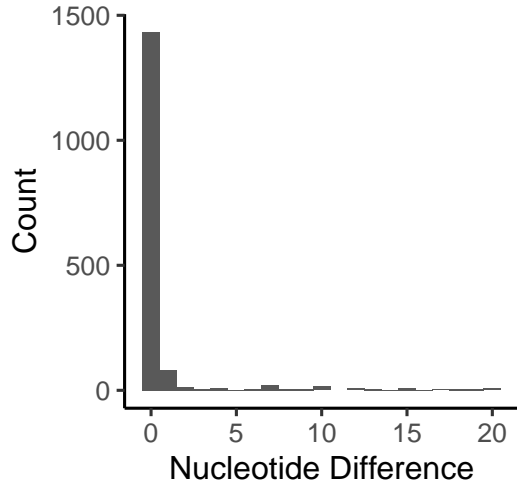
IGHV2-26*01

55 sequences assigned
32 (58.2%) exact matches, in which:
32 unique CDR3
6 unique J



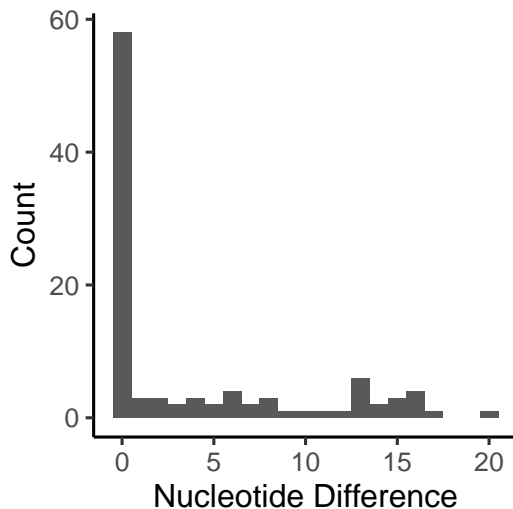
IGHV1-69*10

1701 sequences assigned
1433 (84.2%) exact matches, in which:
1418 unique CDR3
7 unique J



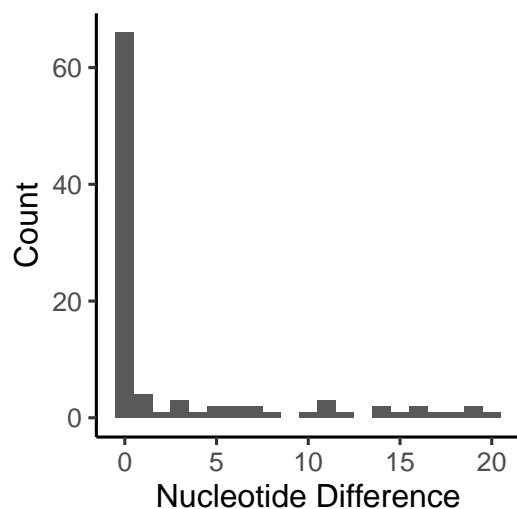
IGHV2-5*01

105 sequences assigned
58 (55.2%) exact matches, in which:
57 unique CDR3
6 unique J



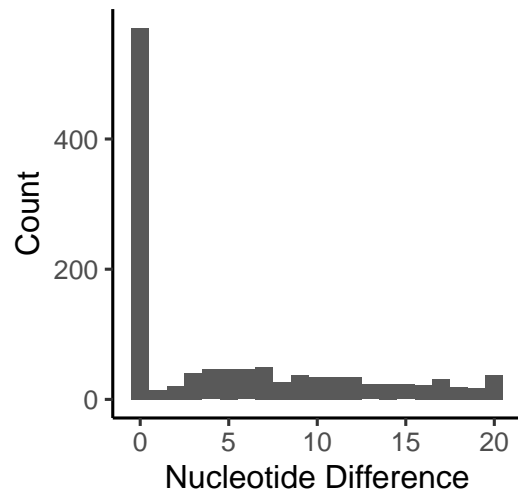
IGHV2-70*01

107 sequences assigned
66 (61.7%) exact matches, in which:
65 unique CDR3
5 unique J



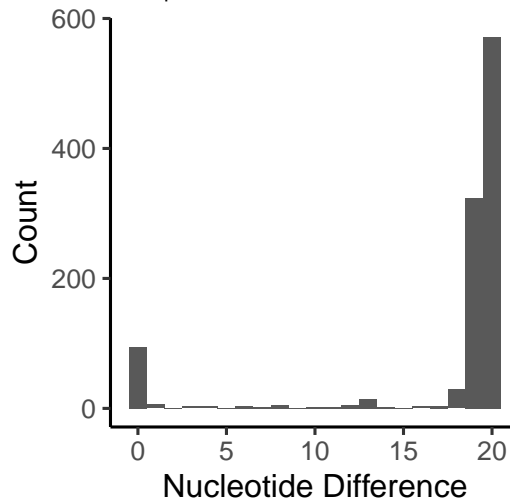
IGHV3-7*01

1376 sequences assigned
571 (41.5%) exact matches, in which:
432 unique CDR3
7 unique J



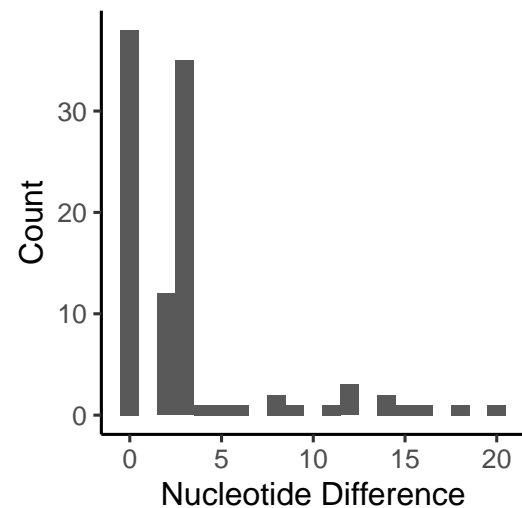
IGHV3-9*03

1139 sequences assigned
95 (8.3%) exact matches, in which:
78 unique CDR3
6 unique J



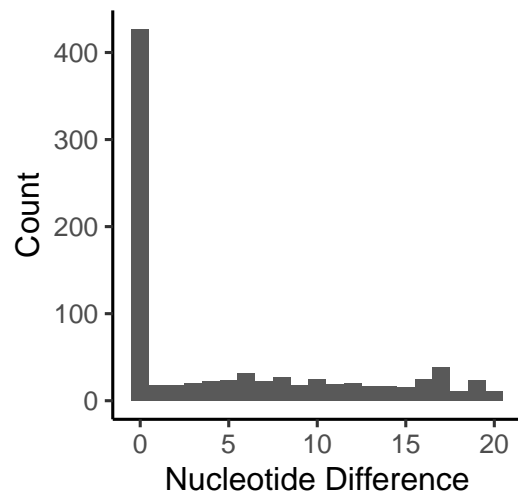
IGHV3-13*05

108 sequences assigned
38 (35.2%) exact matches, in which:
29 unique CDR3
4 unique J



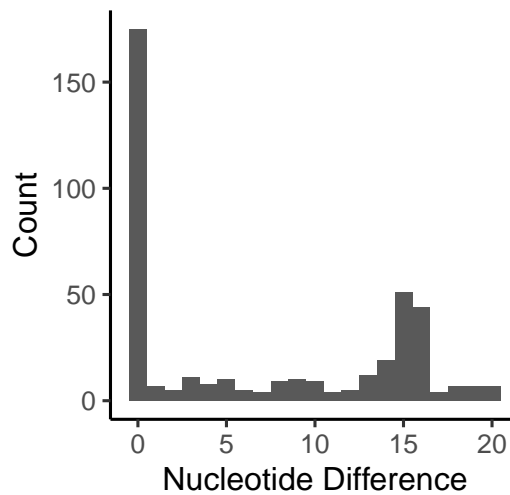
IGHV3-7*03

1040 sequences assigned
427 (41.1%) exact matches, in which:
327 unique CDR3
6 unique J



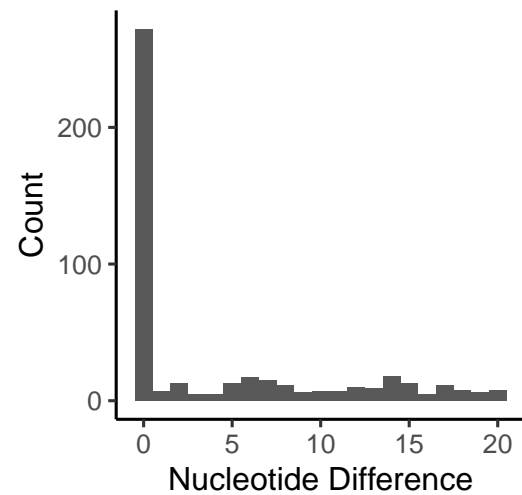
IGHV3-11*04

859 sequences assigned
175 (20.4%) exact matches, in which:
138 unique CDR3
5 unique J



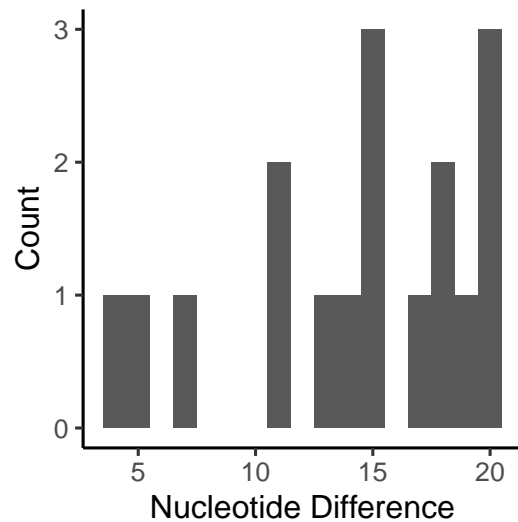
IGHV3-15*01_02

559 sequences assigned
272 (48.7%) exact matches, in which:
224 unique CDR3
7 unique J



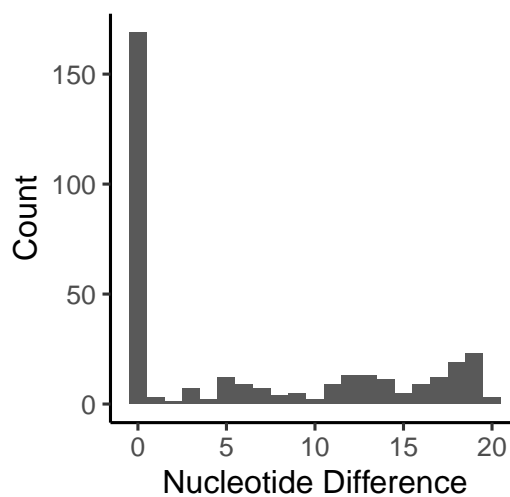
IGHV3-9*01

25 sequences assigned
No exact matches.



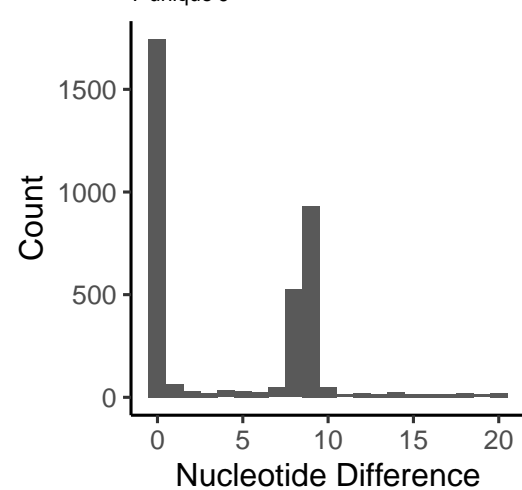
IGHV3-11*06

407 sequences assigned
169 (41.5%) exact matches, in which:
135 unique CDR3
6 unique J



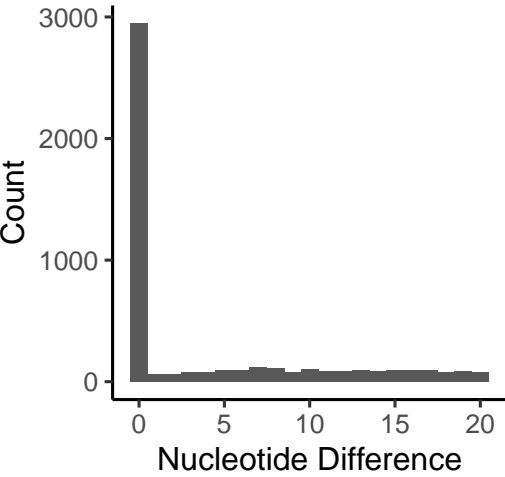
IGHV3-21*01_02

3906 sequences assigned
1745 (44.7%) exact matches, in which:
1311 unique CDR3
7 unique J



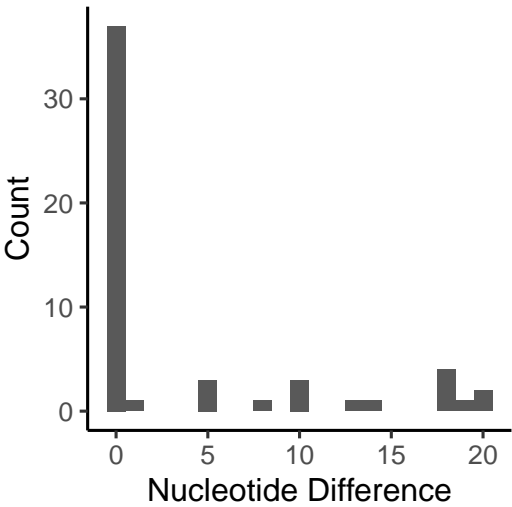
IGHV3-23*01_04

5775 sequences assigned
2947 (51%) exact matches, in which:
2251 unique CDR3
7 unique J



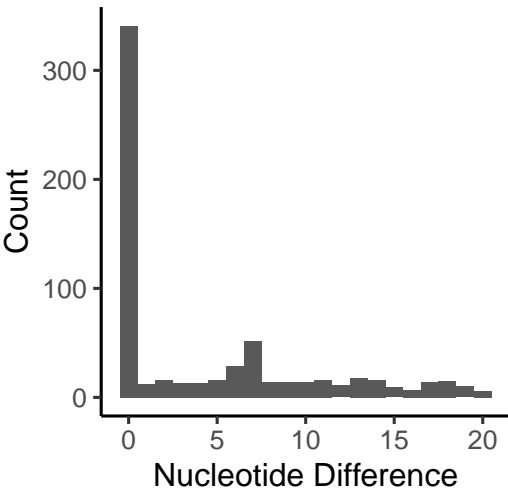
IGHV3-43*01

61 sequences assigned
37 (60.7%) exact matches, in which:
30 unique CDR3
5 unique J



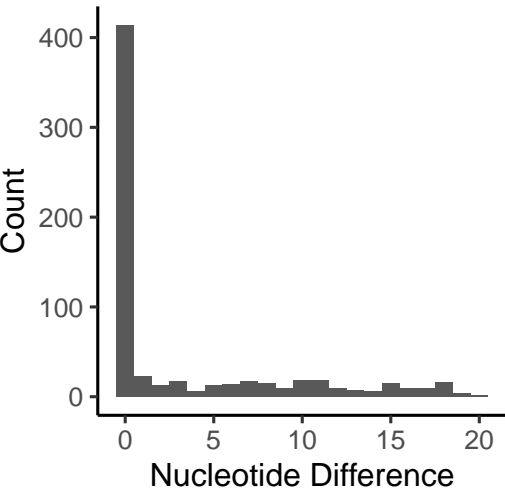
IGHV3-48*02

782 sequences assigned
341 (43.6%) exact matches, in which:
264 unique CDR3
6 unique J



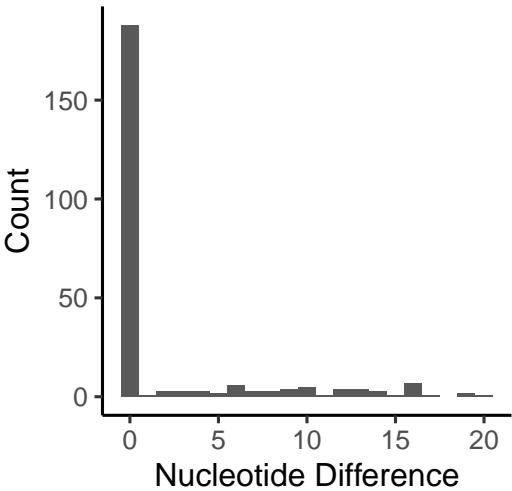
IGHV3-33*01

730 sequences assigned
414 (56.7%) exact matches, in which:
336 unique CDR3
6 unique J



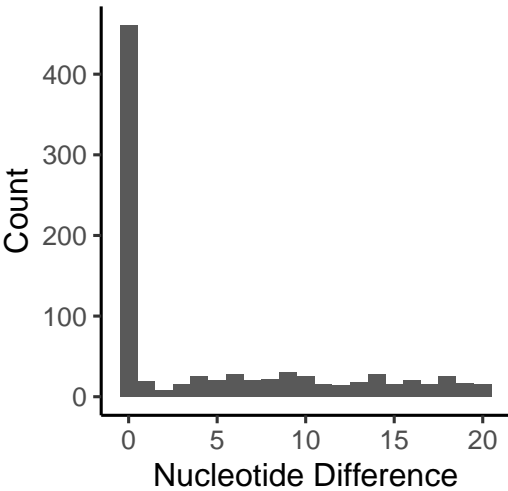
IGHV3-43*02

298 sequences assigned
188 (63.1%) exact matches, in which:
144 unique CDR3
6 unique J



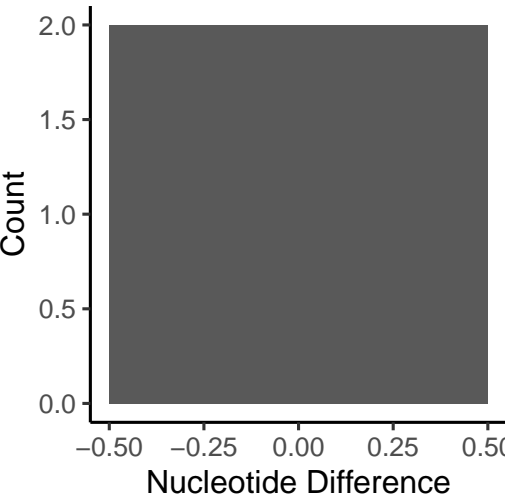
IGHV3-48*03

976 sequences assigned
461 (47.2%) exact matches, in which:
375 unique CDR3
7 unique J



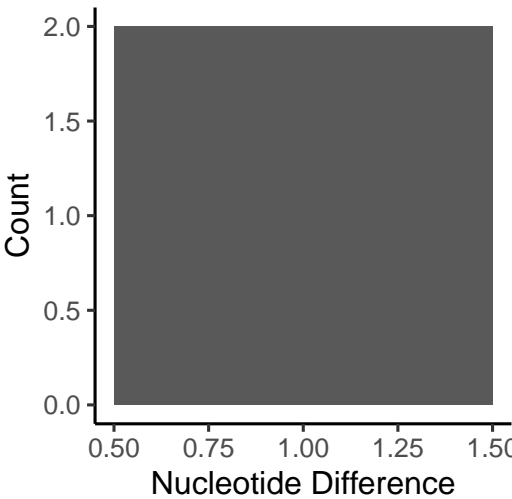
IGHV3-35*01

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



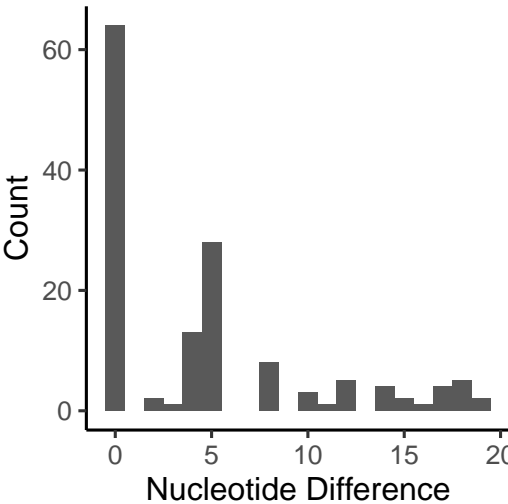
IGHV3-47*02

2 sequences assigned
No exact matches.



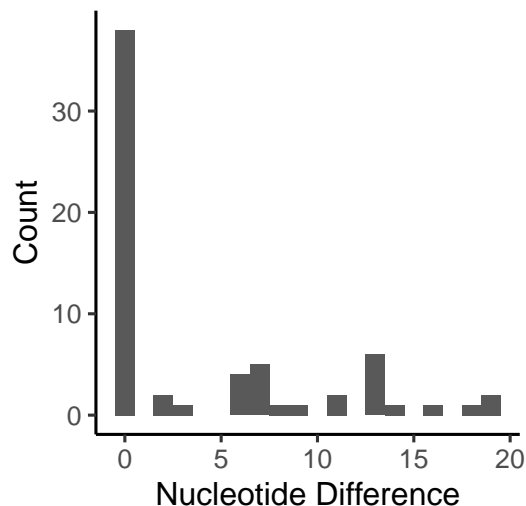
IGHV3-49*04

159 sequences assigned
64 (40.3%) exact matches, in which:
57 unique CDR3
6 unique J



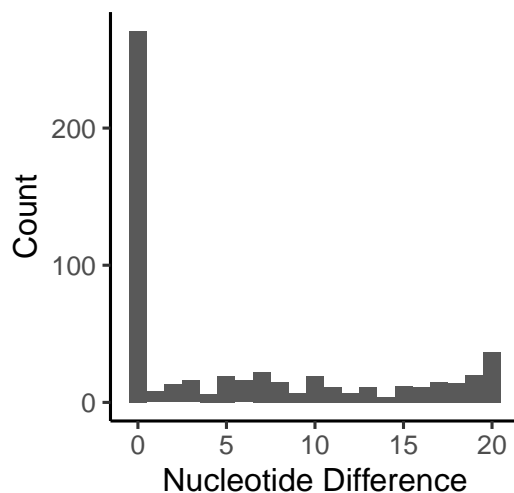
IGHV3-49*03_05

65 sequences assigned
38 (58.5%) exact matches, in which:
34 unique CDR3
5 unique J



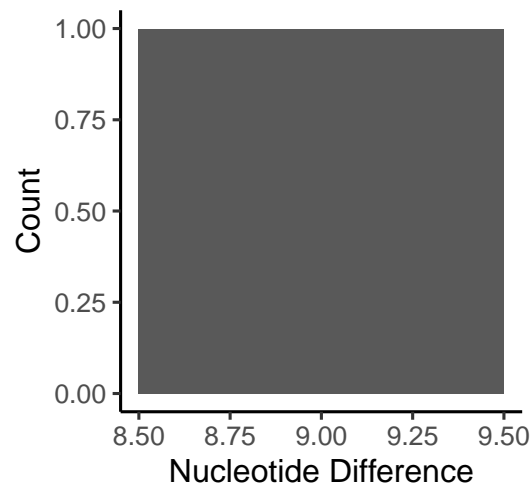
IGHV3-53*01_02

742 sequences assigned
271 (36.5%) exact matches, in which:
228 unique CDR3
6 unique J



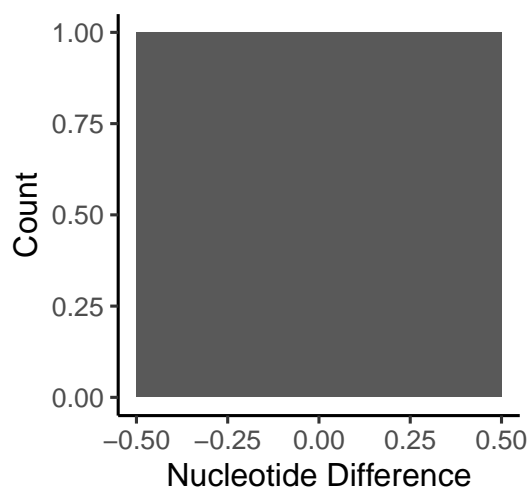
IGHV3-66*03

1 sequences assigned
No exact matches.



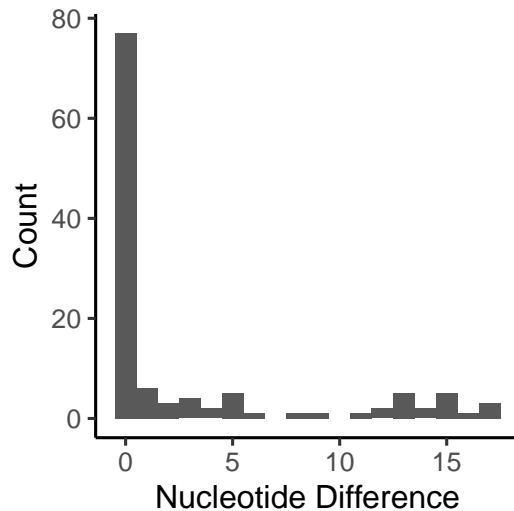
IGHV3-52*01_03

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



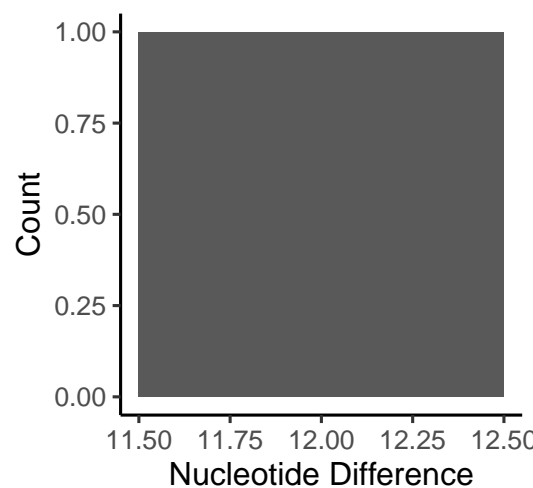
IGHV3-64*01

136 sequences assigned
77 (56.6%) exact matches, in which:
57 unique CDR3
7 unique J



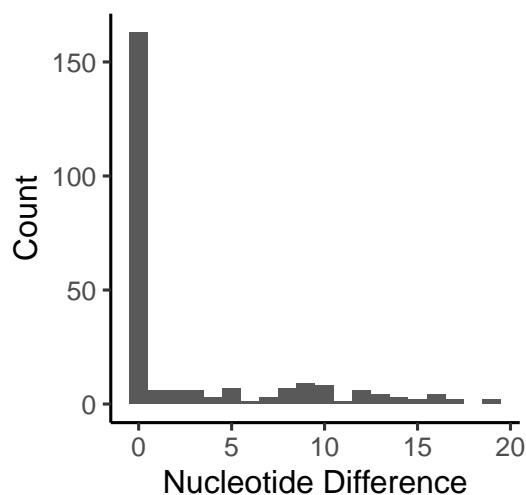
IGHV3-69-1*01

1 sequences assigned
No exact matches.



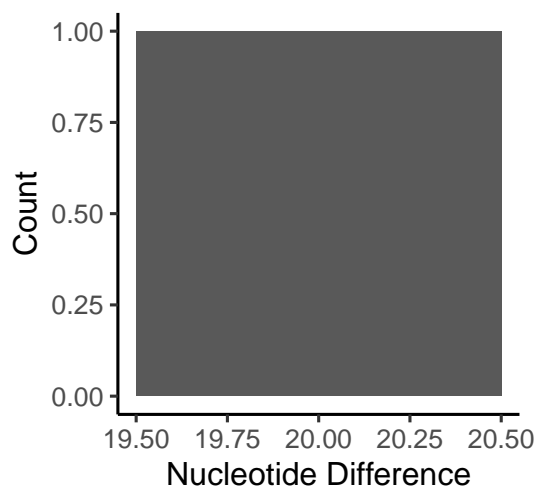
IGHV3-53*04

260 sequences assigned
163 (62.7%) exact matches, in which:
128 unique CDR3
6 unique J



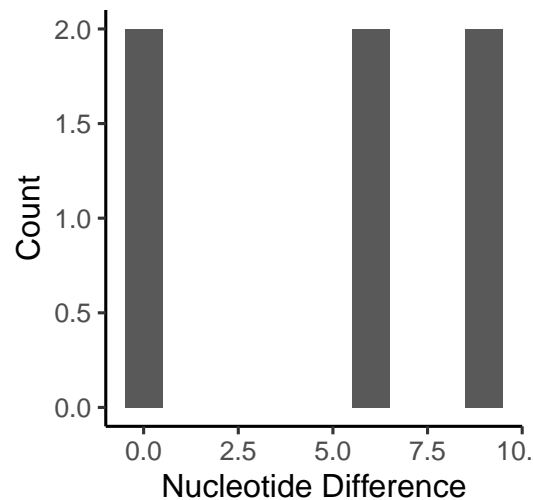
IGHV3-66*01

1 sequences assigned
No exact matches.



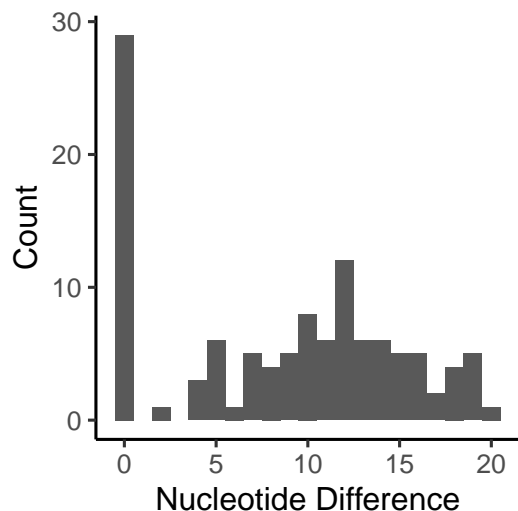
IGHV3-69-1*02

15 sequences assigned
2 (13.3%) exact matches, in which:
1 unique CDR3
1 unique J



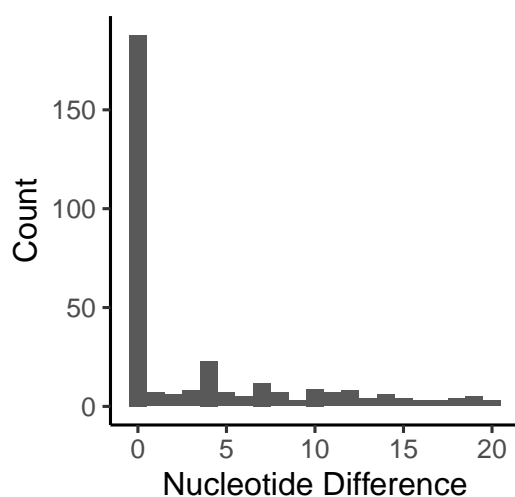
IGHV3-72*01

122 sequences assigned
29 (23.8%) exact matches, in which:
23 unique CDR3
3 unique J



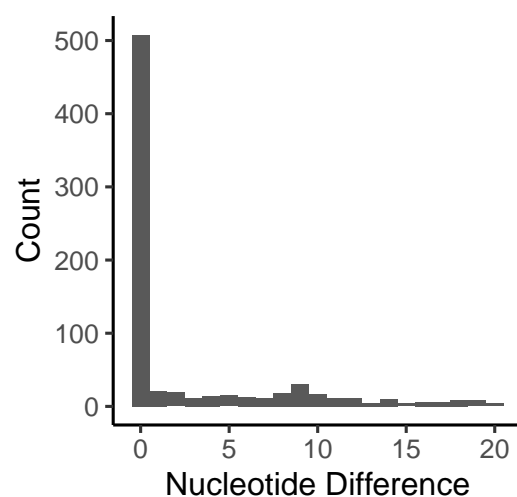
IGHV3-74*01_02

366 sequences assigned
188 (51.4%) exact matches, in which:
145 unique CDR3
6 unique J



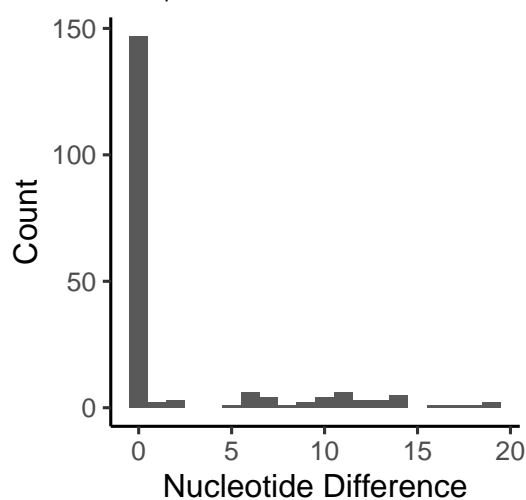
IGHV4-4*07

1003 sequences assigned
508 (50.6%) exact matches, in which:
504 unique CDR3
7 unique J



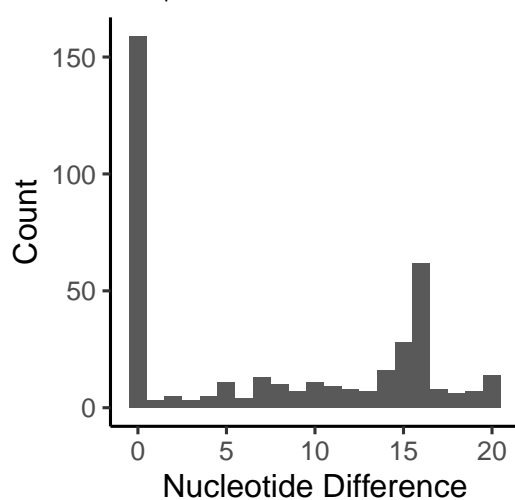
IGHV3-73*01_02

219 sequences assigned
147 (67.1%) exact matches, in which:
114 unique CDR3
7 unique J



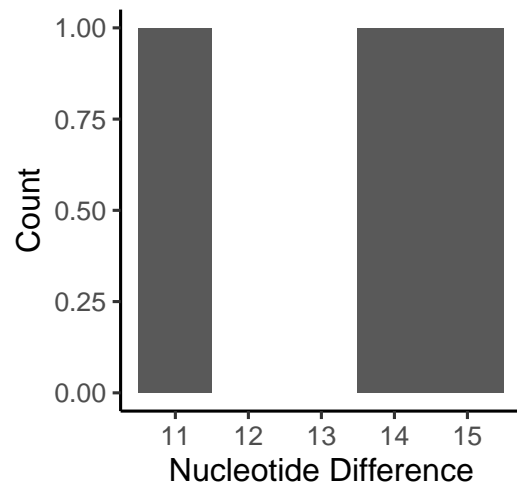
IGHV3-74*01_02_A81G

683 sequences assigned
159 (23.3%) exact matches, in which:
125 unique CDR3
7 unique J



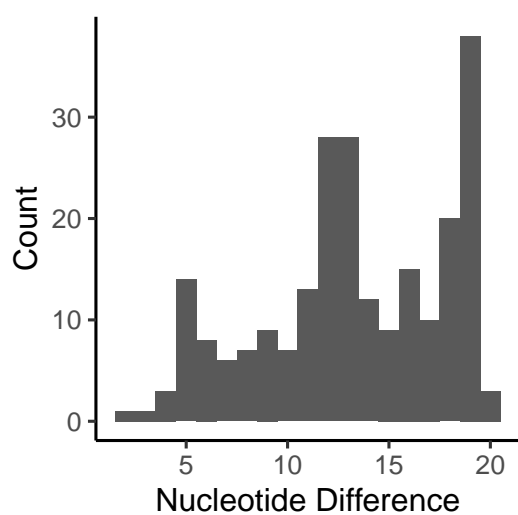
IGHV4-30-2*03

3 sequences assigned
No exact matches.



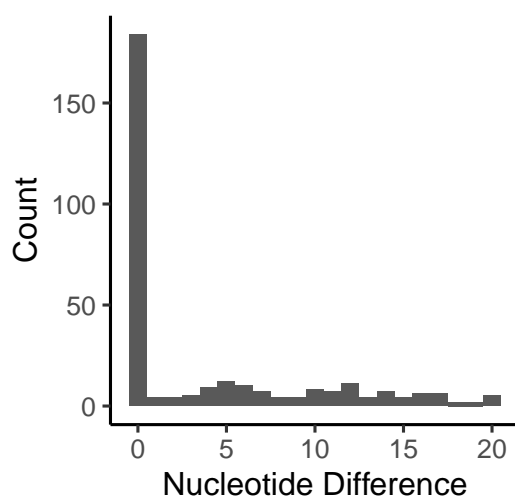
IGHV3-74*03

389 sequences assigned
No exact matches.



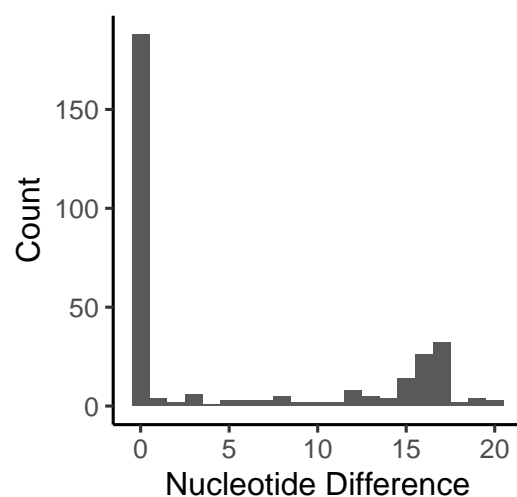
IGHV3-64D*06

328 sequences assigned
184 (56.1%) exact matches, in which:
140 unique CDR3
6 unique J



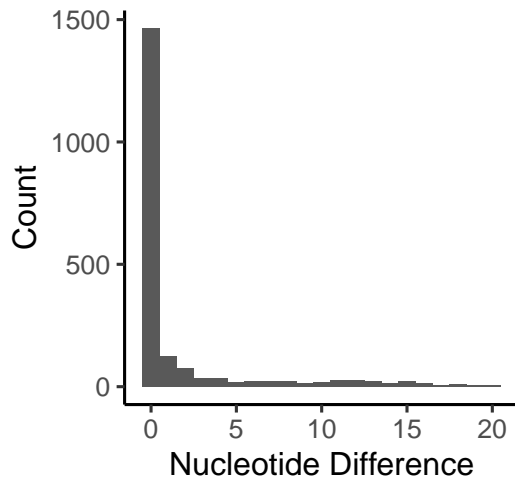
IGHV4-31*02

354 sequences assigned
188 (53.1%) exact matches, in which:
184 unique CDR3
6 unique J



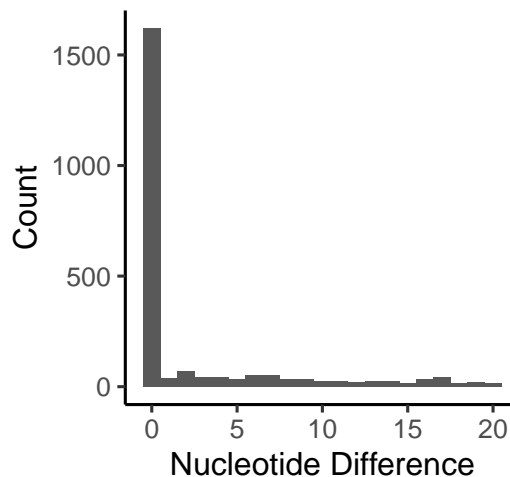
IGHV4-34*01_02

2219 sequences assigned
1464 (66%) exact matches, in which:
1452 unique CDR3
7 unique J



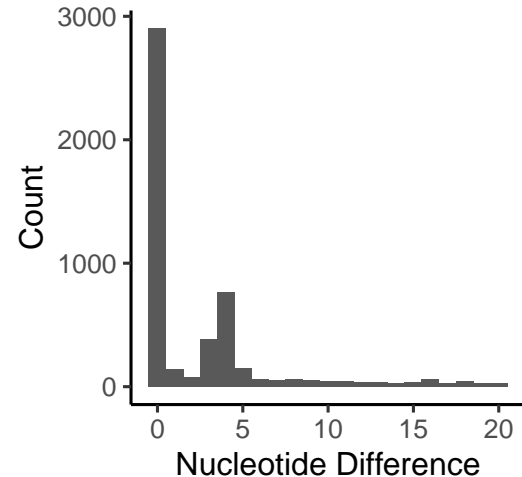
IGHV4-59*02_G88A

2495 sequences assigned
1620 (64.9%) exact matches, in which:
1607 unique CDR3
7 unique J



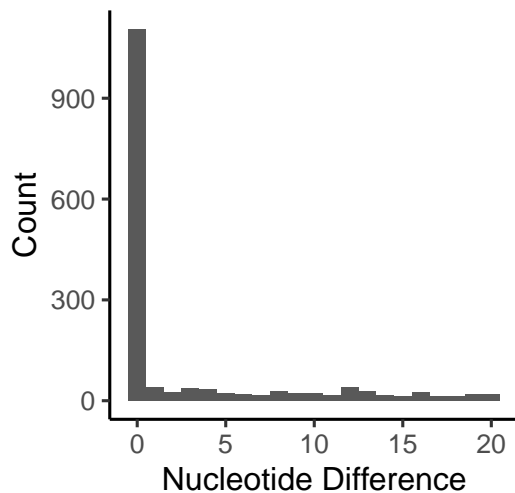
IGHV5-51*07_A128G

5700 sequences assigned
2902 (50.9%) exact matches, in which:
2500 unique CDR3
7 unique J



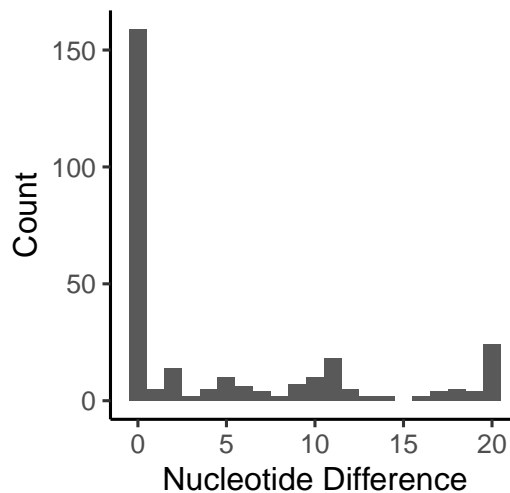
IGHV4-39*02_C258G

1760 sequences assigned
1106 (62.8%) exact matches, in which:
1088 unique CDR3
7 unique J



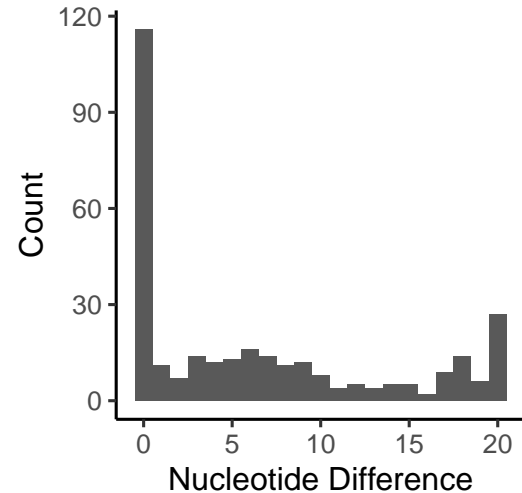
IGHV4-61*01

385 sequences assigned
159 (41.3%) exact matches, in which:
158 unique CDR3
7 unique J



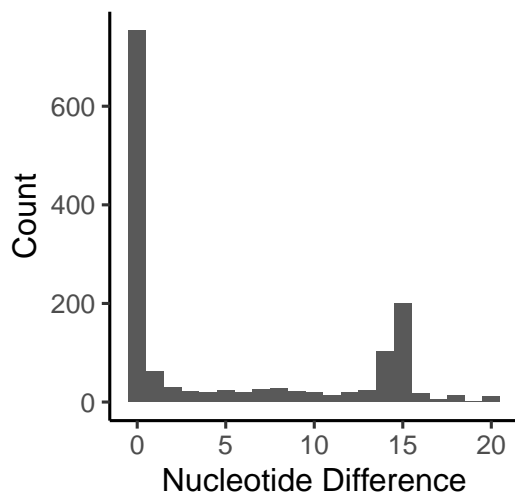
IGHV6-1*01_02

384 sequences assigned
116 (30.2%) exact matches, in which:
114 unique CDR3
7 unique J



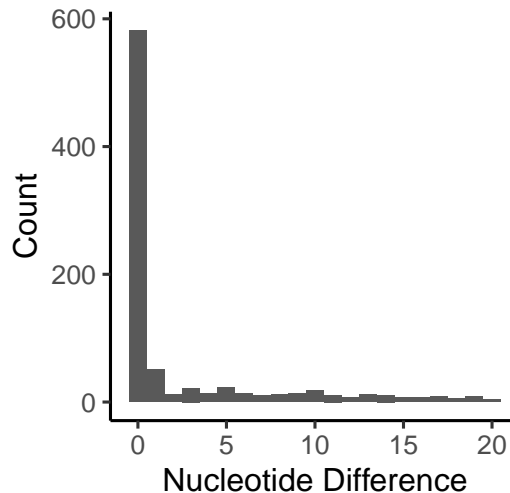
IGHV4-59*08

1602 sequences assigned
754 (47.1%) exact matches, in which:
747 unique CDR3
6 unique J



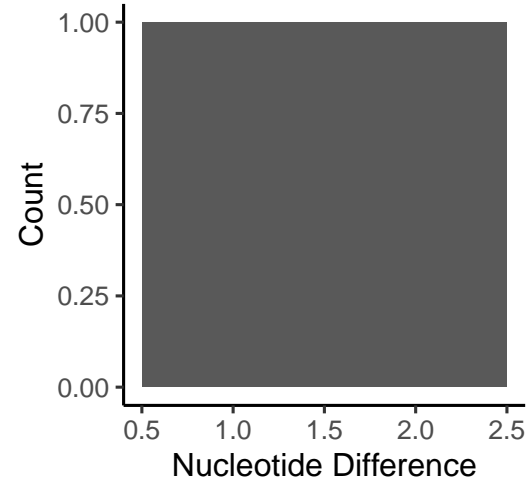
IGHV5-10-1*01_03

956 sequences assigned
582 (60.9%) exact matches, in which:
524 unique CDR3
7 unique J

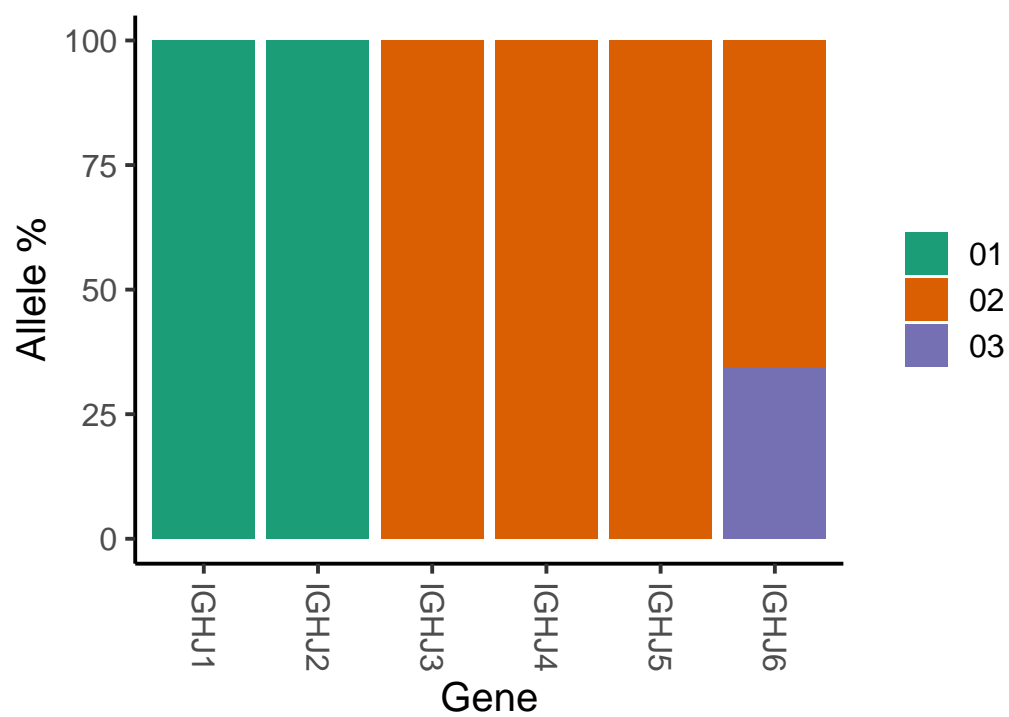


IGHV3/OR16-9*01

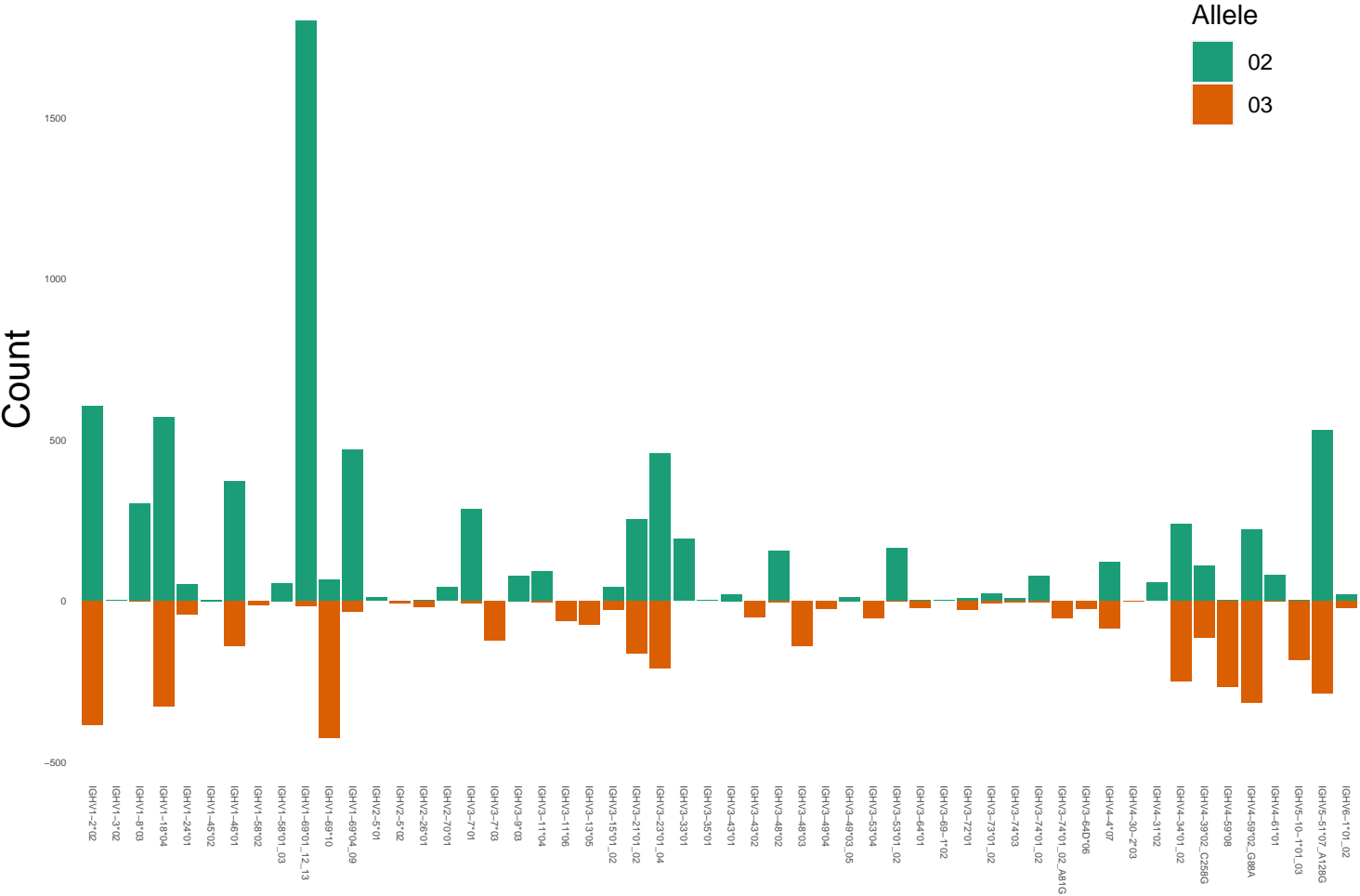
2 sequences assigned
No exact matches.



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.