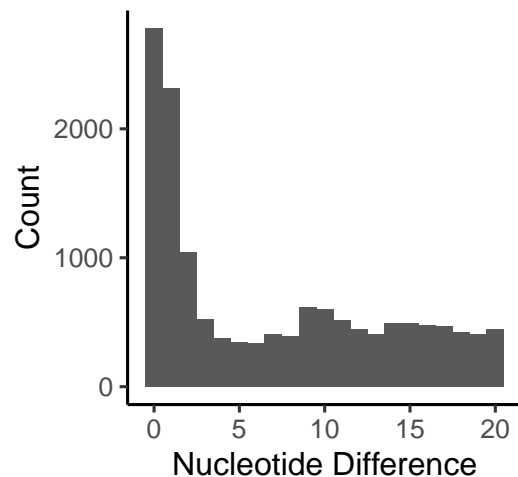


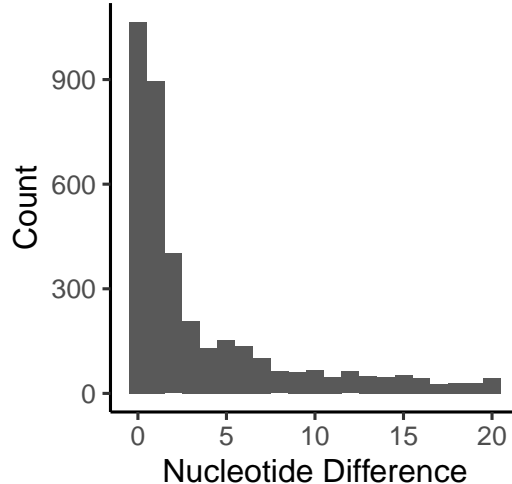
IGHV1-2*02

17168 sequences assigned
2779 (16.2%) exact matches, in which:
2376 unique CDR3
7 unique J



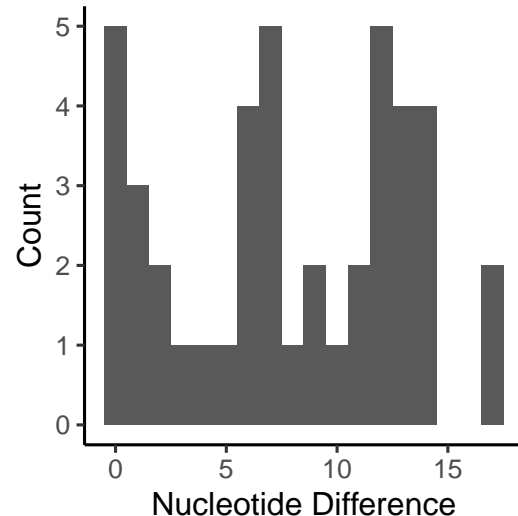
IGHV1-8*02_A250G

4008 sequences assigned
1066 (26.6%) exact matches, in which:
906 unique CDR3
7 unique J



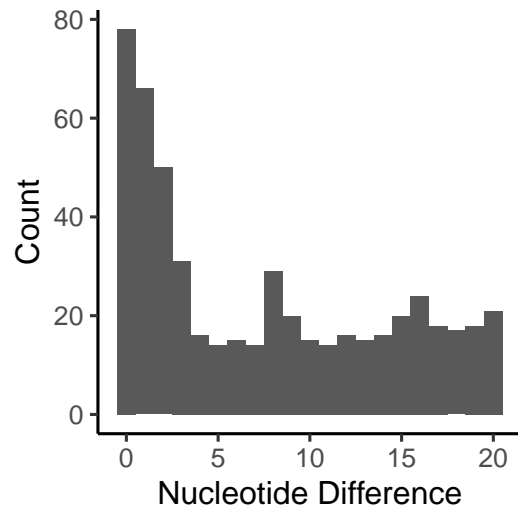
IGHV1-45*02

56 sequences assigned
5 (8.9%) exact matches, in which:
3 unique CDR3
2 unique J



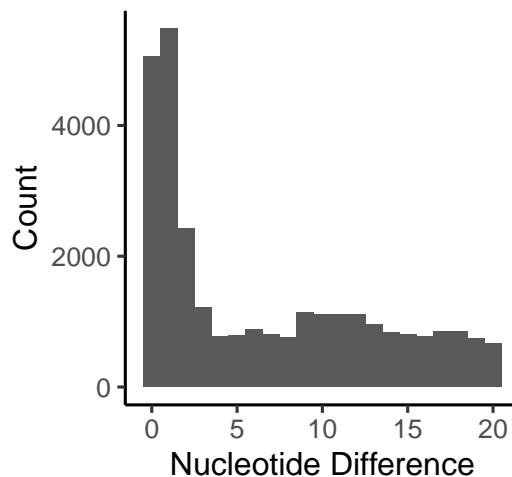
IGHV1-3*03

656 sequences assigned
78 (11.9%) exact matches, in which:
71 unique CDR3
6 unique J



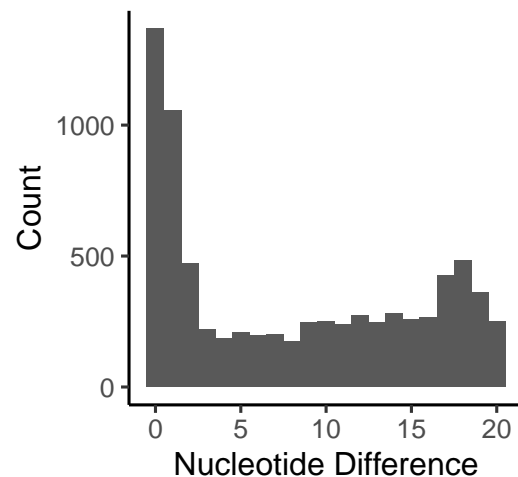
IGHV1-18*01

33896 sequences assigned
5062 (14.9%) exact matches, in which:
4001 unique CDR3
7 unique J



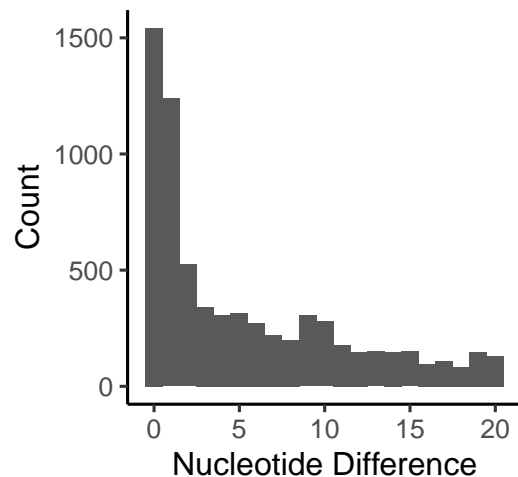
IGHV1-46*01

9632 sequences assigned
1368 (14.2%) exact matches, in which:
1183 unique CDR3
7 unique J



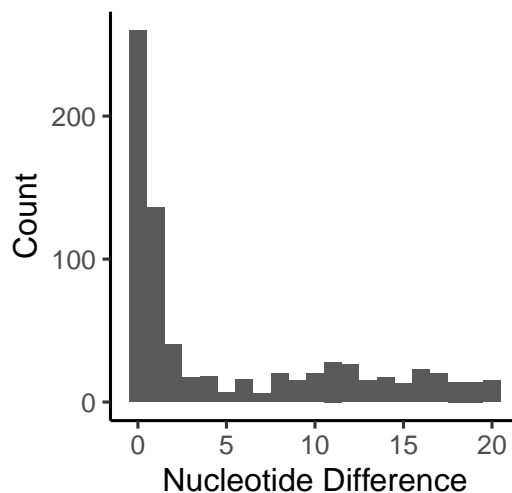
IGHV1-8*02

7446 sequences assigned
1542 (20.7%) exact matches, in which:
1287 unique CDR3
7 unique J



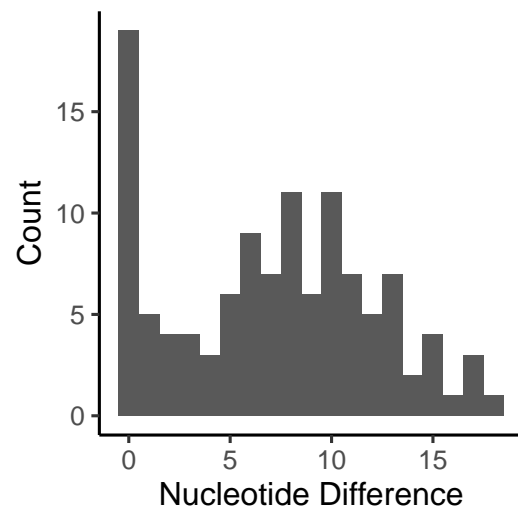
IGHV1-24*01

787 sequences assigned
260 (33%) exact matches, in which:
231 unique CDR3
7 unique J



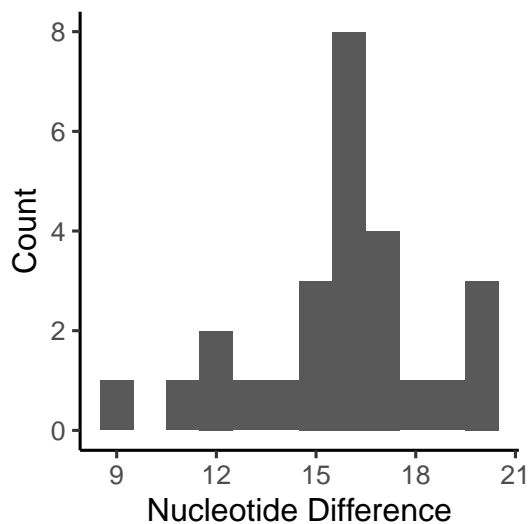
IGHV1-58*02

119 sequences assigned
19 (16%) exact matches, in which:
19 unique CDR3
4 unique J



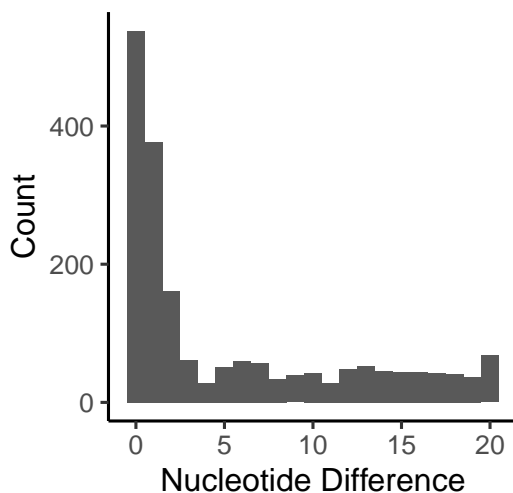
IGHV1-58*01_03

40 sequences assigned
No exact matches.



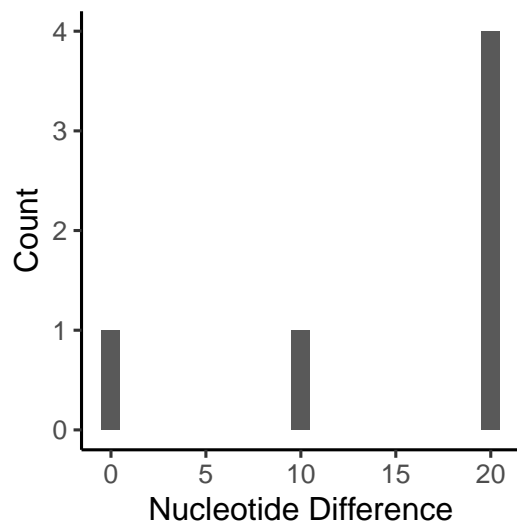
IGHV1-69*10

2304 sequences assigned
538 (23.4%) exact matches, in which:
468 unique CDR3
7 unique J



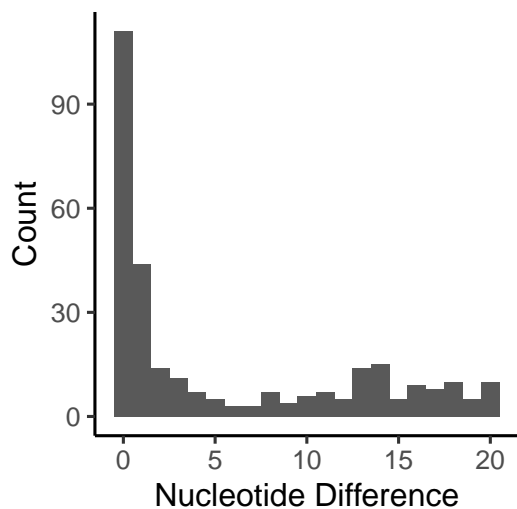
IGHV2-70*11_15

9 sequences assigned
1 (11.1%) exact matches, in which:
1 unique CDR3
1 unique J



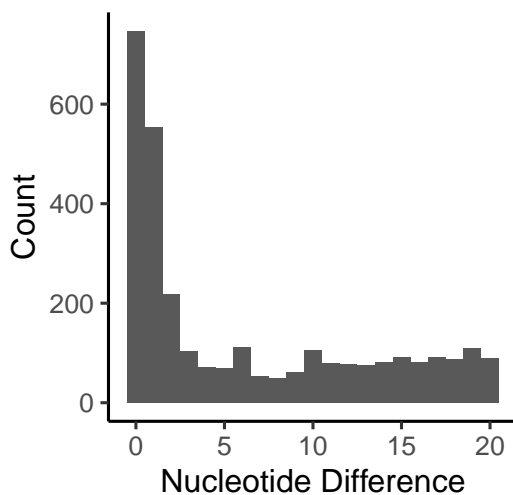
IGHV1-69-2*01

364 sequences assigned
111 (30.5%) exact matches, in which:
96 unique CDR3
7 unique J



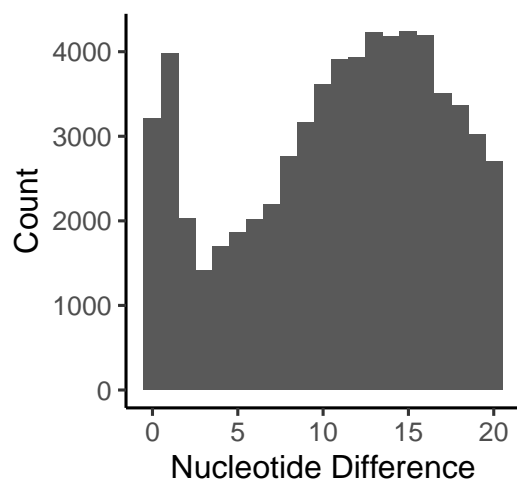
IGHV1-69*06_14

3685 sequences assigned
747 (20.3%) exact matches, in which:
667 unique CDR3
7 unique J



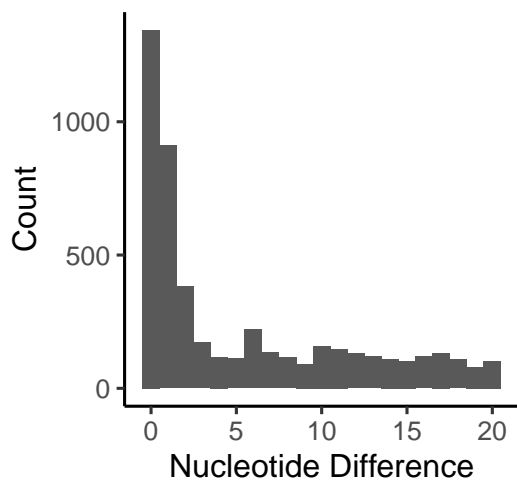
IGHV3-7*01

79705 sequences assigned
3205 (4%) exact matches, in which:
2683 unique CDR3
7 unique J



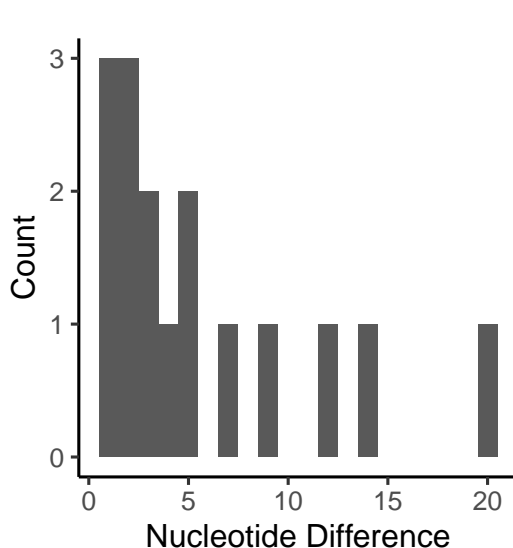
IGHV1-69*05

5943 sequences assigned
1344 (22.6%) exact matches, in which:
1190 unique CDR3
7 unique J



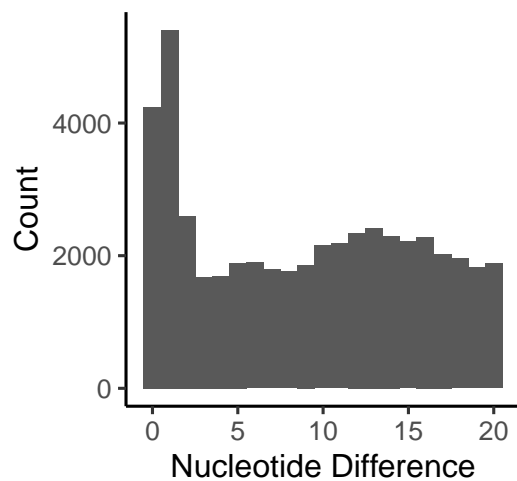
IGHV2-5*02

18 sequences assigned
No exact matches.



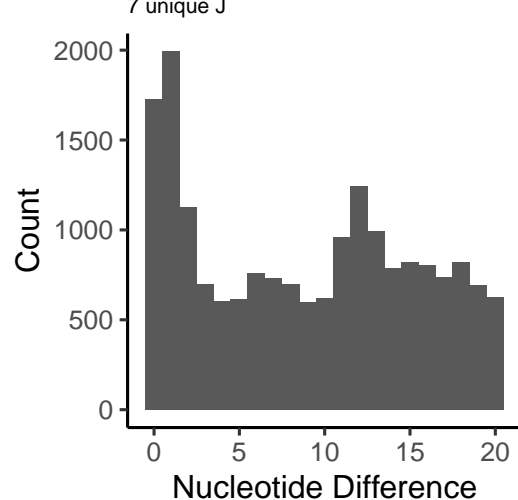
IGHV3-9*01

61506 sequences assigned
4238 (6.9%) exact matches, in which:
3327 unique CDR3
7 unique J



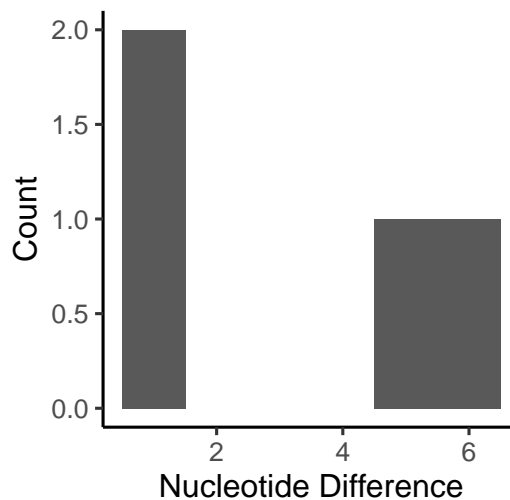
IGHV3-11*04

23926 sequences assigned
1727 (7.2%) exact matches, in which:
1465 unique CDR3
7 unique J



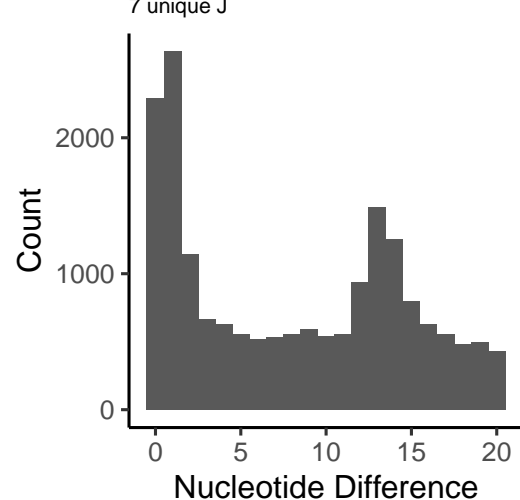
IGHV3-19*01

4 sequences assigned
No exact matches.



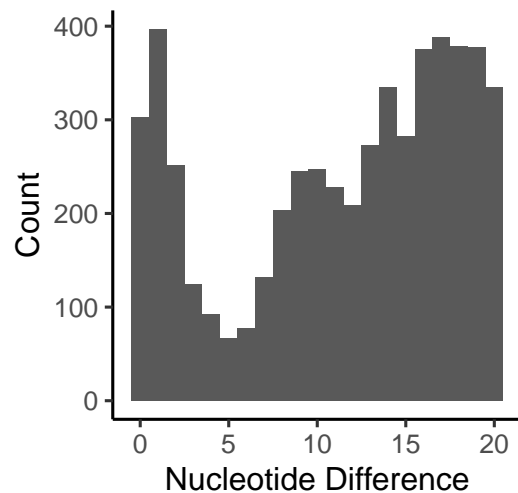
IGHV3-21*03

21370 sequences assigned
2290 (10.7%) exact matches, in which:
1723 unique CDR3
7 unique J



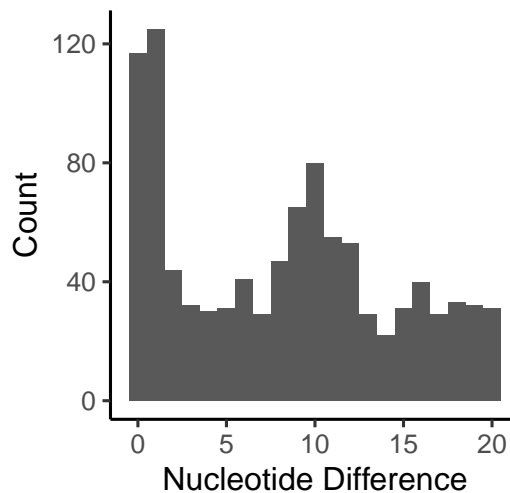
IGHV3-13*01

8563 sequences assigned
303 (3.5%) exact matches, in which:
240 unique CDR3
6 unique J



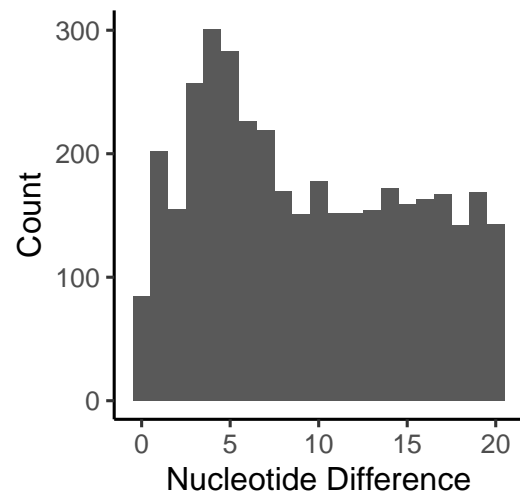
IGHV3-20*01_02

1226 sequences assigned
117 (9.5%) exact matches, in which:
92 unique CDR3
6 unique J



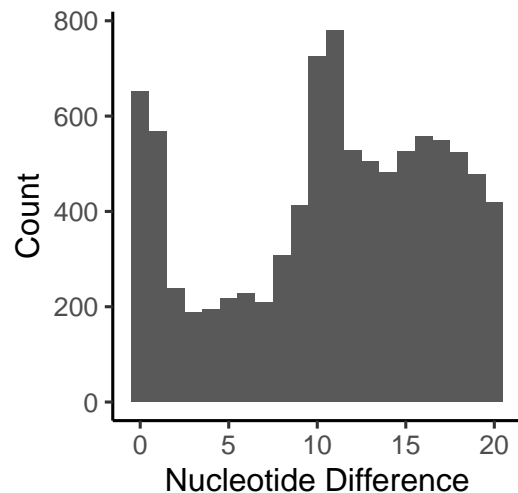
IGHV3-21*04

4722 sequences assigned
85 (1.8%) exact matches, in which:
84 unique CDR3
7 unique J



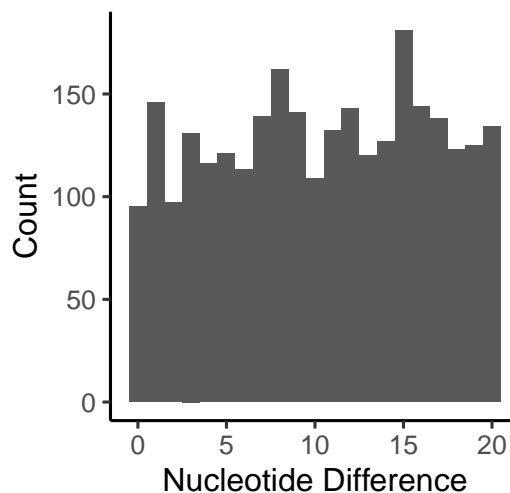
IGHV3-15*01_02

12741 sequences assigned
651 (5.1%) exact matches, in which:
568 unique CDR3
7 unique J



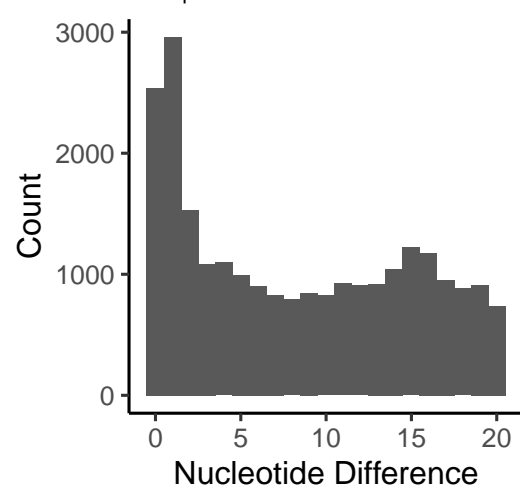
IGHV3-20*03_04

3587 sequences assigned
95 (2.6%) exact matches, in which:
80 unique CDR3
5 unique J



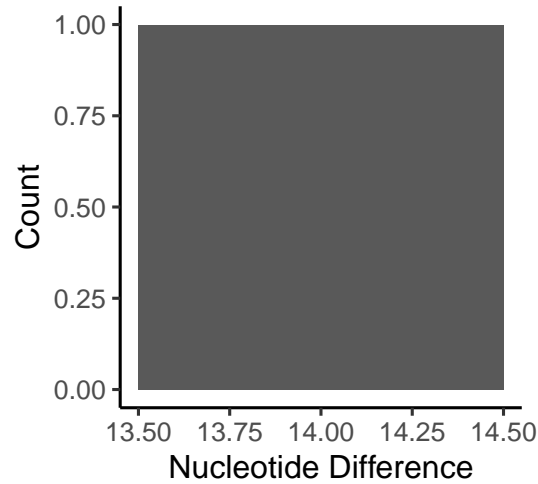
IGHV3-21*01_02

29073 sequences assigned
2539 (8.7%) exact matches, in which:
2094 unique CDR3
7 unique J



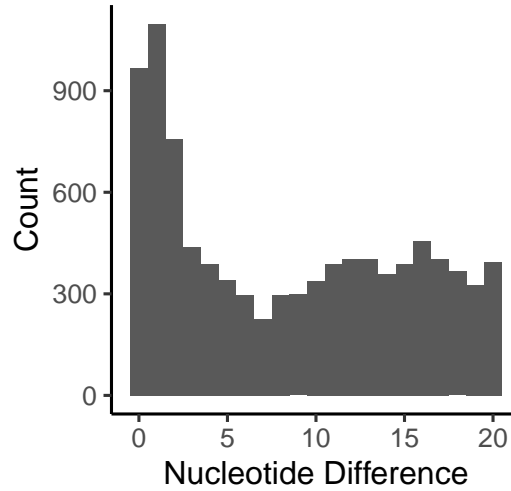
IGHV3-22*01_02

3 sequences assigned
No exact matches.



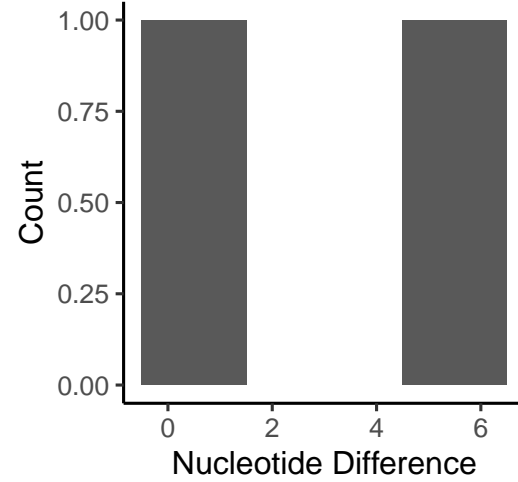
IGHV3-33*06

11487 sequences assigned
968 (8.4%) exact matches, in which:
713 unique CDR3
7 unique J



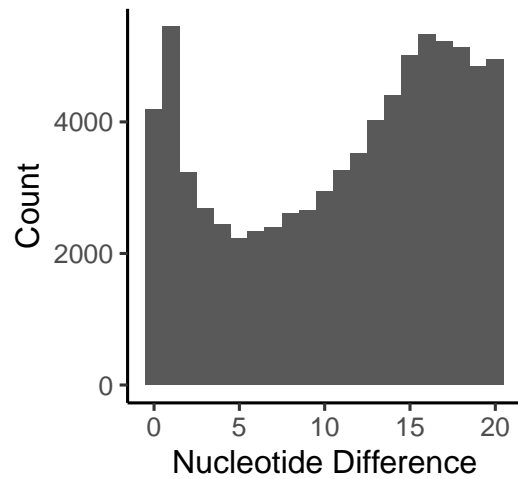
IGHV3-35*02

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



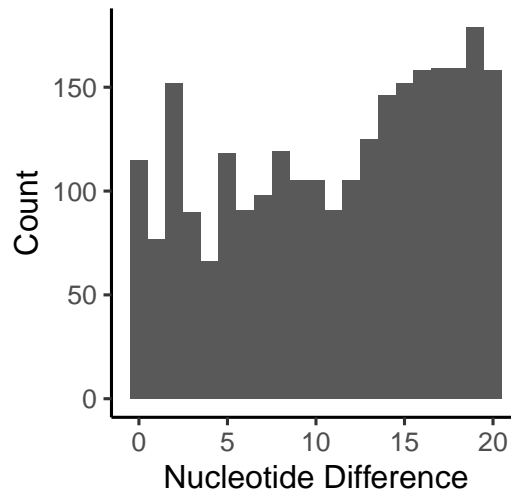
IGHV3-23*01_04

126586 sequences assigned
4187 (3.3%) exact matches, in which:
3344 unique CDR3
7 unique J



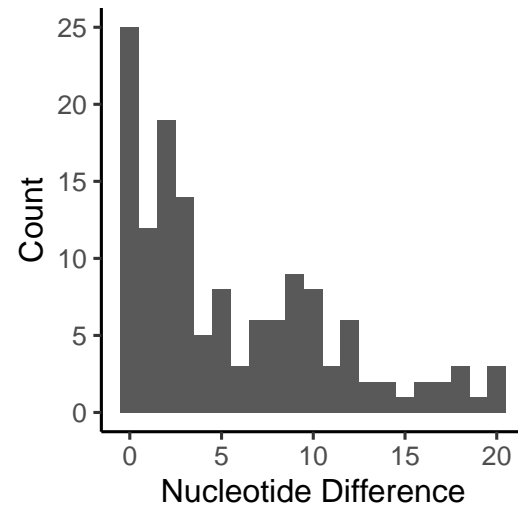
IGHV3-33*08

3764 sequences assigned
115 (3.1%) exact matches, in which:
115 unique CDR3
6 unique J



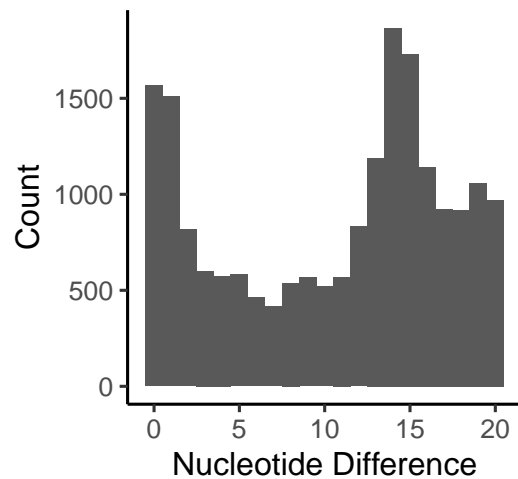
IGHV3-38-3*01

147 sequences assigned
25 (17%) exact matches, in which:
25 unique CDR3
5 unique J



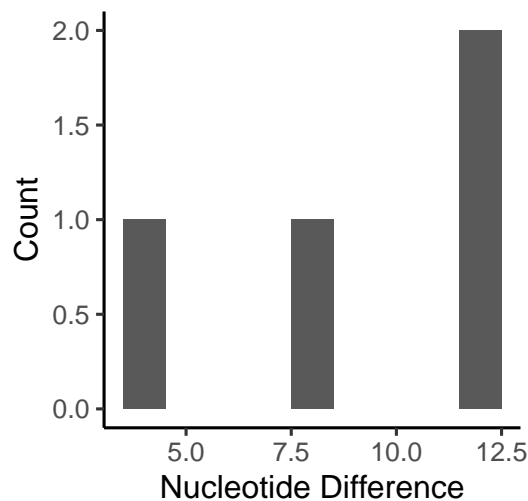
IGHV3-33*01

23084 sequences assigned
1566 (6.8%) exact matches, in which:
1213 unique CDR3
7 unique J



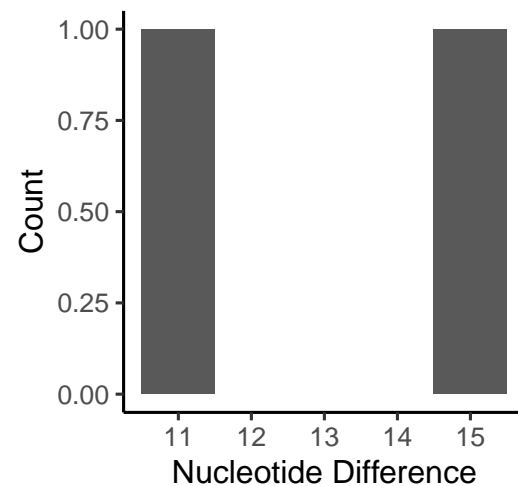
IGHV3-35*01

4 sequences assigned
No exact matches.



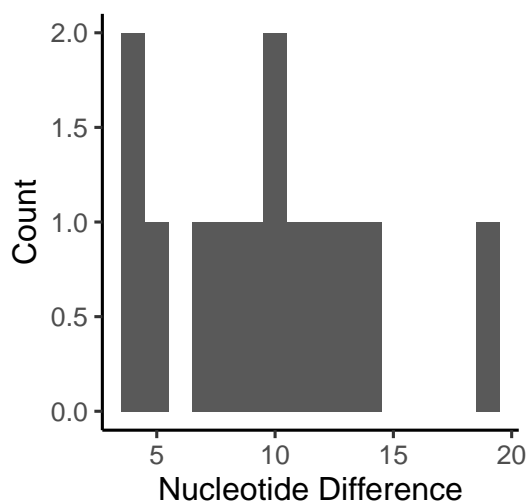
IGHV3-38*02

2 sequences assigned
No exact matches.



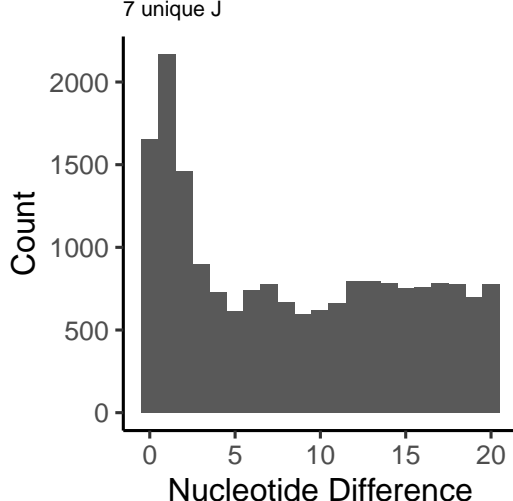
IGHV3-38*03

13 sequences assigned
No exact matches.



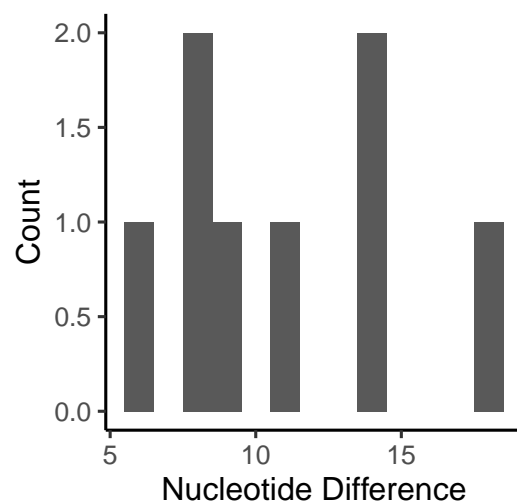
IGHV3-48*03

24478 sequences assigned
1655 (6.8%) exact matches, in which:
1340 unique CDR3
7 unique J



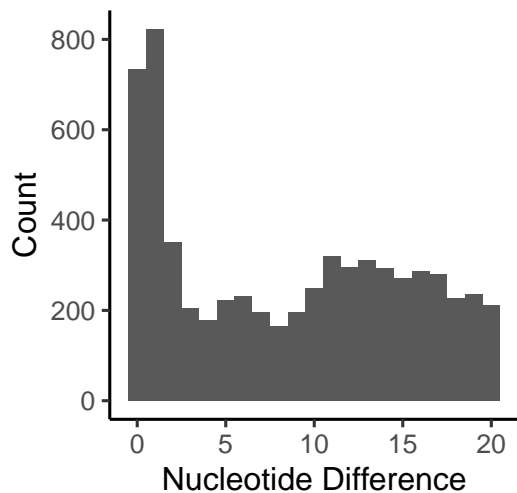
IGHV3-52*01_03

9 sequences assigned
No exact matches.



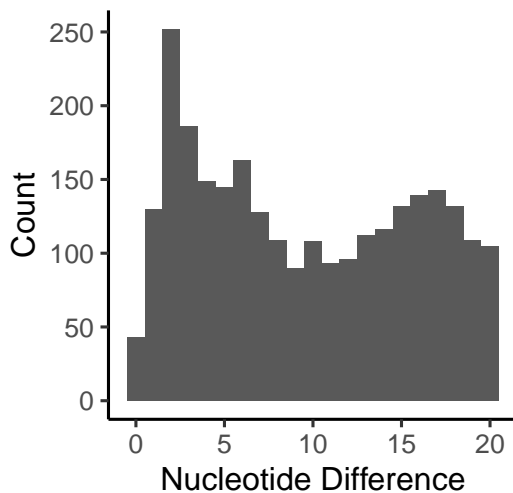
IGHV3-43*01

8511 sequences assigned
735 (8.6%) exact matches, in which:
596 unique CDR3
7 unique J



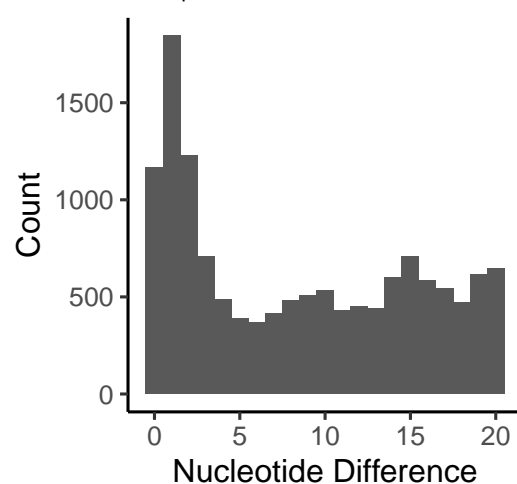
IGHV3-48*04

3726 sequences assigned
43 (1.2%) exact matches, in which:
39 unique CDR3
7 unique J



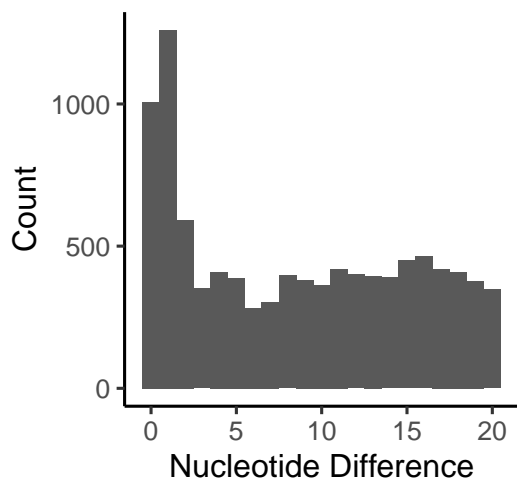
IGHV3-53*01_02

19485 sequences assigned
1167 (6%) exact matches, in which:
937 unique CDR3
7 unique J



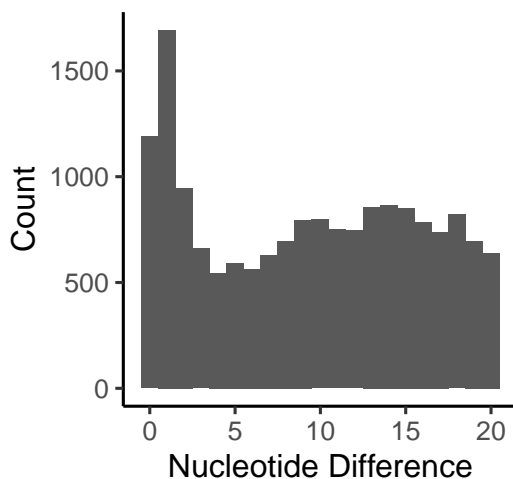
IGHV3-48*01

12184 sequences assigned
1008 (8.3%) exact matches, in which:
817 unique CDR3
7 unique J



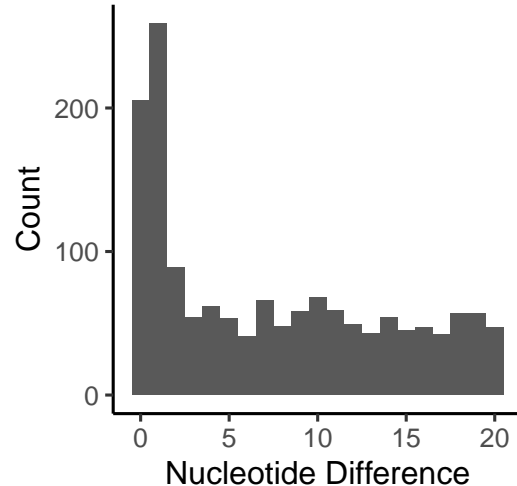
IGHV3-49*04

22479 sequences assigned
1190 (5.3%) exact matches, in which:
943 unique CDR3
7 unique J



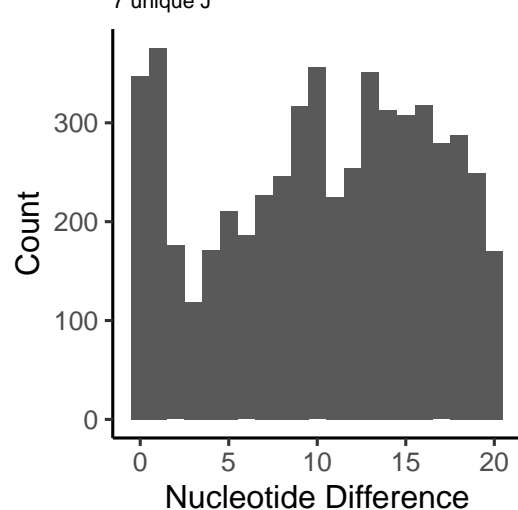
IGHV3-64*01

2183 sequences assigned
205 (9.4%) exact matches, in which:
165 unique CDR3
7 unique J



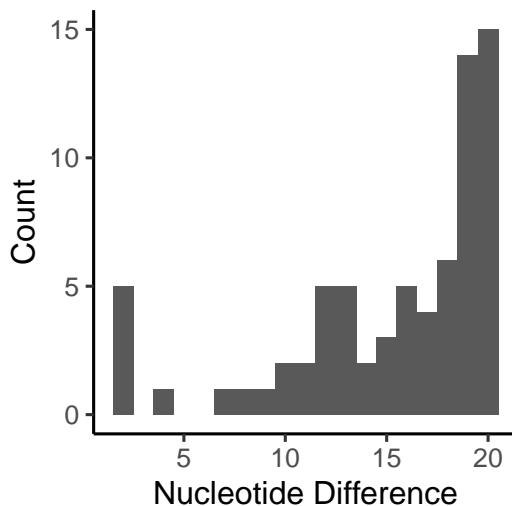
IGHV3-64*02_07

6681 sequences assigned
347 (5.2%) exact matches, in which:
283 unique CDR3
7 unique J



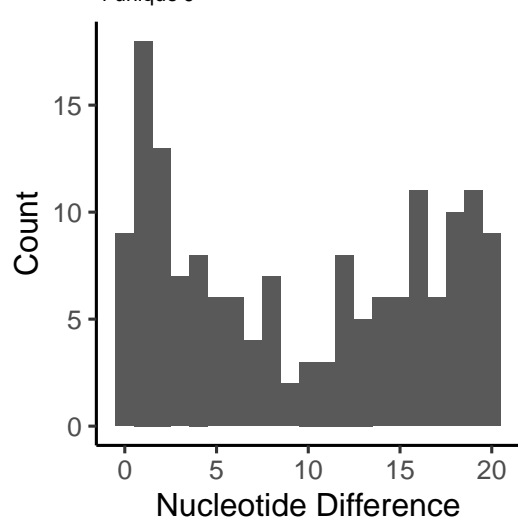
IGHV3-66*03

229 sequences assigned
No exact matches.



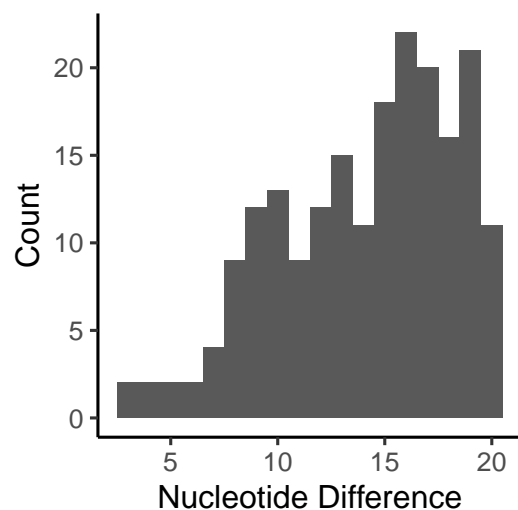
IGHV3-69-1*02

325 sequences assigned
9 (2.8%) exact matches, in which:
9 unique CDR3
4 unique J



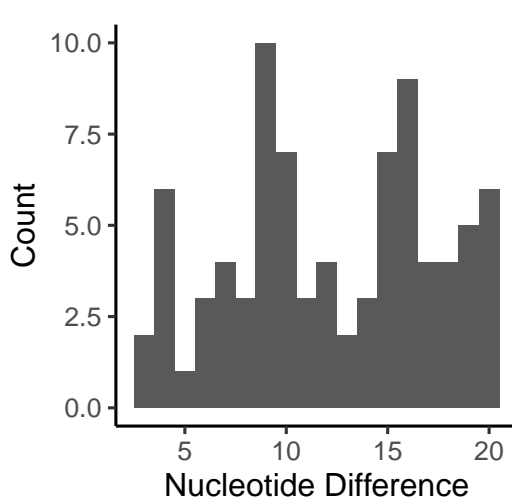
IGHV3-66*01

346 sequences assigned
No exact matches.



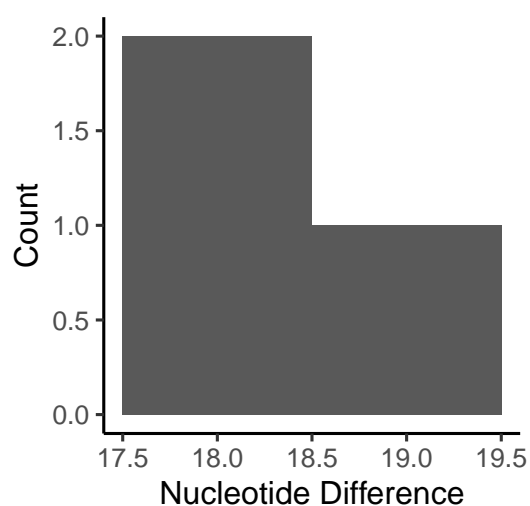
IGHV3-66*04

119 sequences assigned
No exact matches.



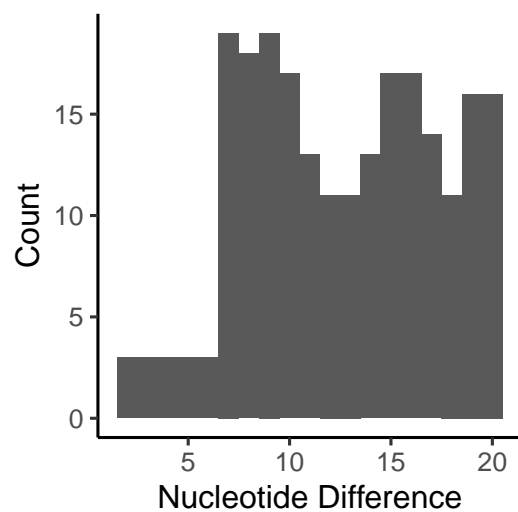
IGHV3-71*03

8 sequences assigned
No exact matches.



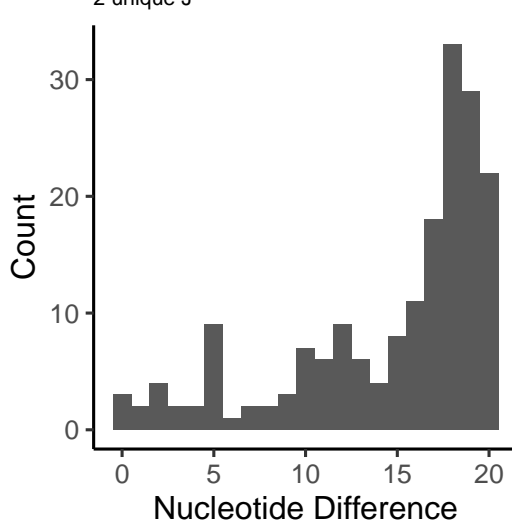
IGHV3-66*02

324 sequences assigned
No exact matches.



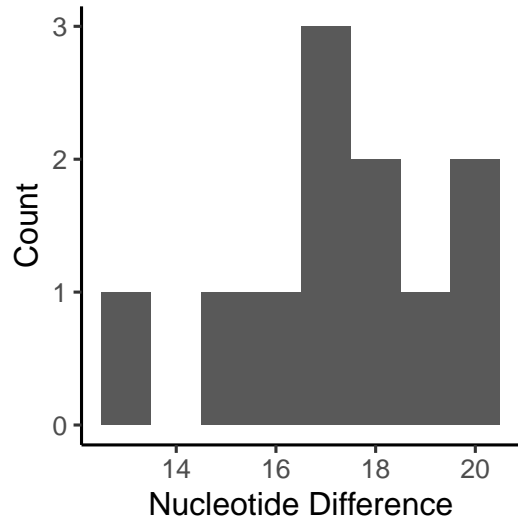
IGHV3-69-1*01

377 sequences assigned
3 (0.8%) exact matches, in which:
3 unique CDR3
2 unique J



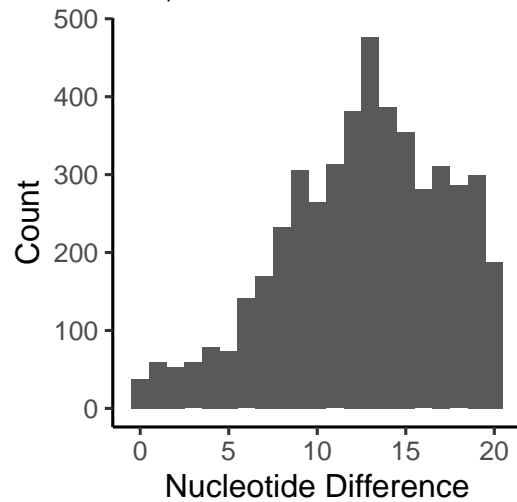
IGHV3-71*01_04

67 sequences assigned
No exact matches.



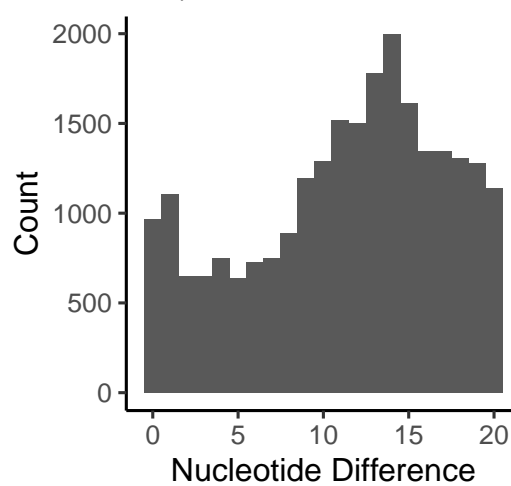
IGHV3-72*01

5912 sequences assigned
38 (0.6%) exact matches, in which:
33 unique CDR3
4 unique J



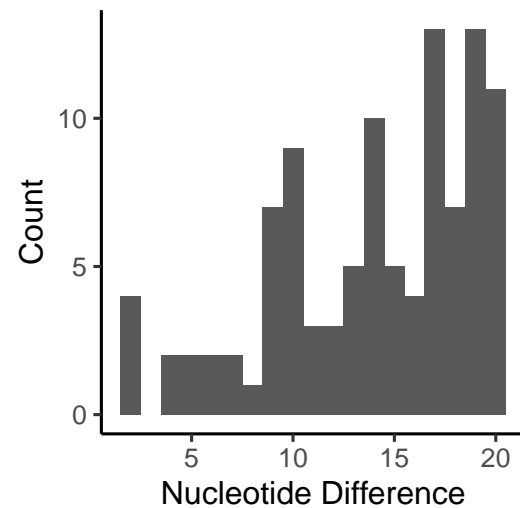
IGHV3-74*01_02

35137 sequences assigned
965 (2.7%) exact matches, in which:
790 unique CDR3
7 unique J



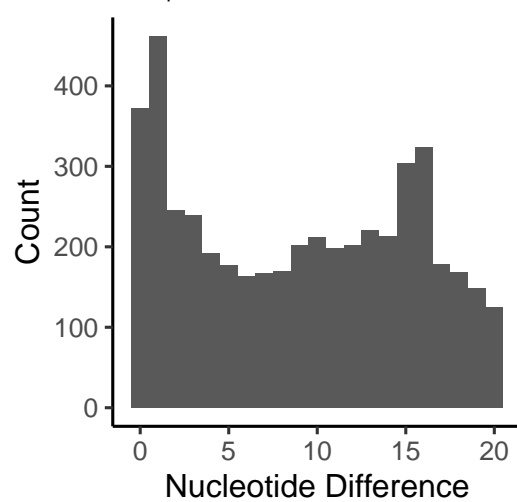
IGHV3-NL1*01

196 sequences assigned
No exact matches.



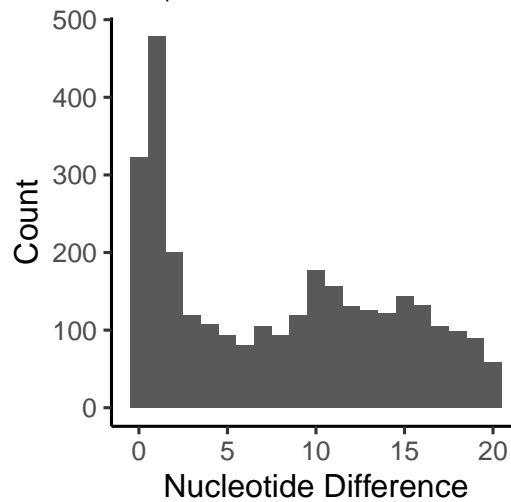
IGHV3-73*01_02

6636 sequences assigned
372 (5.6%) exact matches, in which:
310 unique CDR3
7 unique J



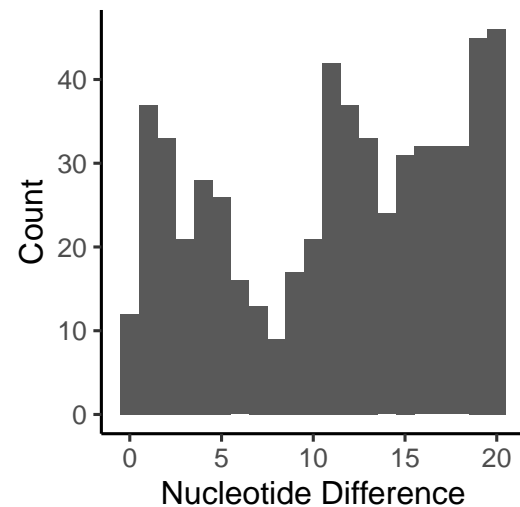
IGHV3-43D*04

3598 sequences assigned
323 (9%) exact matches, in which:
260 unique CDR3
7 unique J



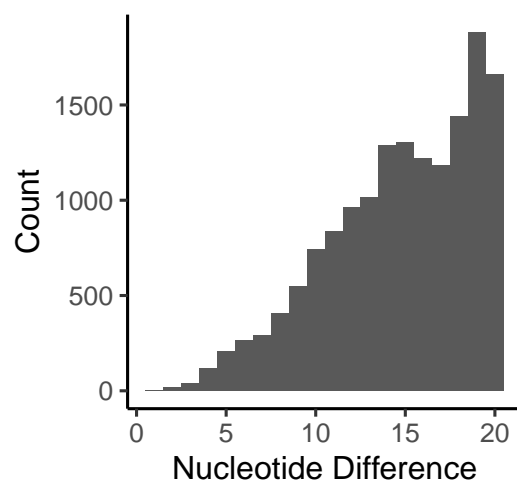
IGHV3-NL1*01_T201C_G

1090 sequences assigned
12 (1.1%) exact matches, in which:
12 unique CDR3
4 unique J



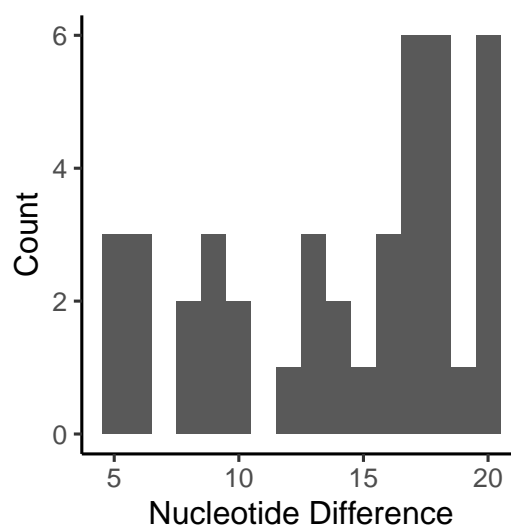
IGHV3-74*03

24778 sequences assigned
No exact matches.



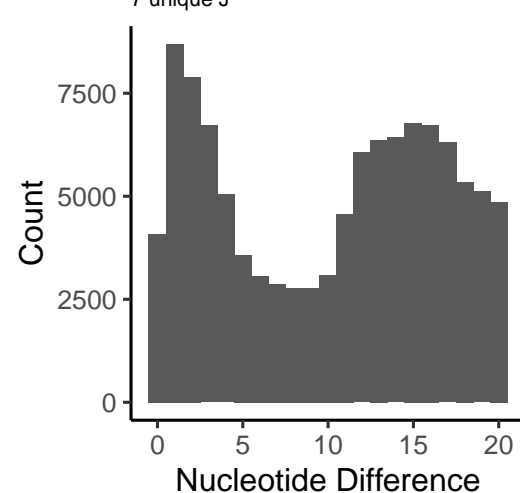
IGHV3-64D*06

77 sequences assigned
No exact matches.



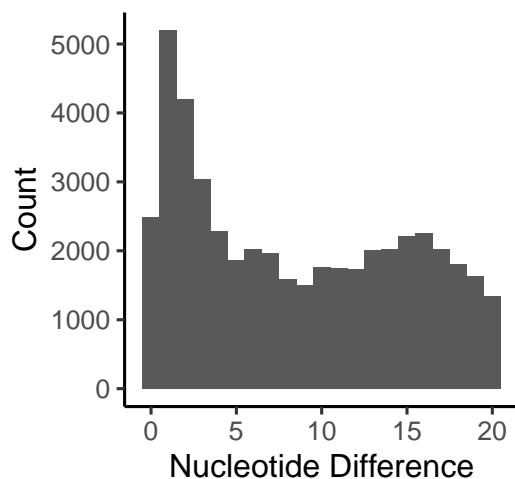
IGHV4-4*07

151738 sequences assigned
4081 (2.7%) exact matches, in which:
3056 unique CDR3
7 unique J



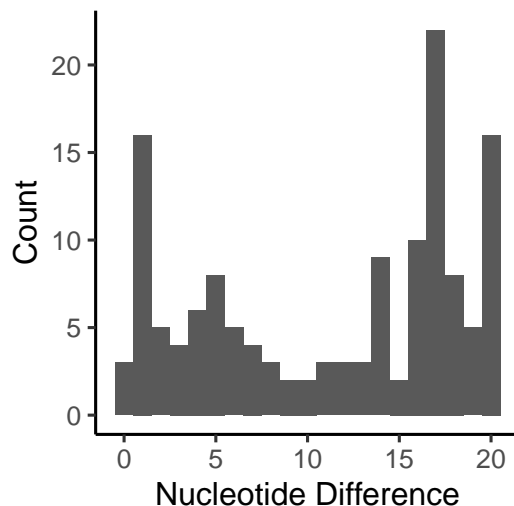
IGHV4-4*08

56396 sequences assigned
2483 (4.4%) exact matches, in which:
1914 unique CDR3
7 unique J



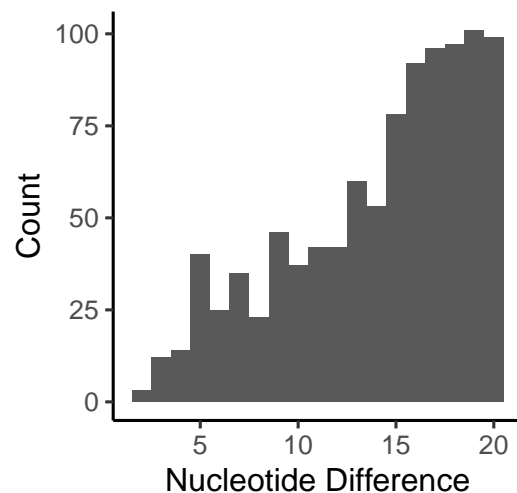
IGHV4-28*02_05

230 sequences assigned
3 (1.3%) exact matches, in which:
2 unique CDR3
1 unique J



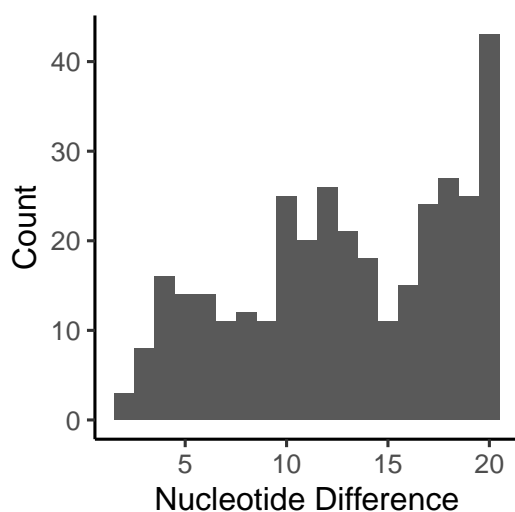
IGHV4-30-4*08

1765 sequences assigned
No exact matches.



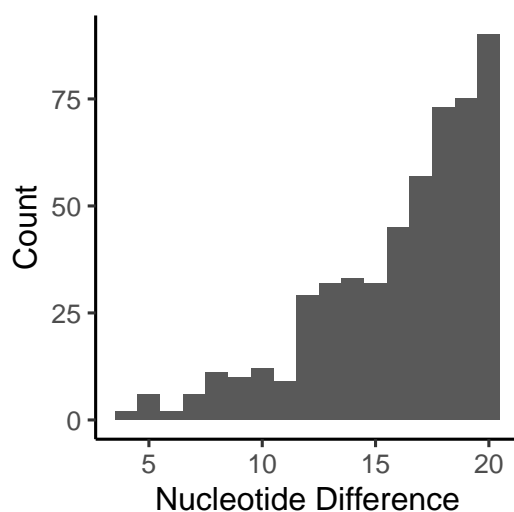
IGHV4-28*03

709 sequences assigned
No exact matches.



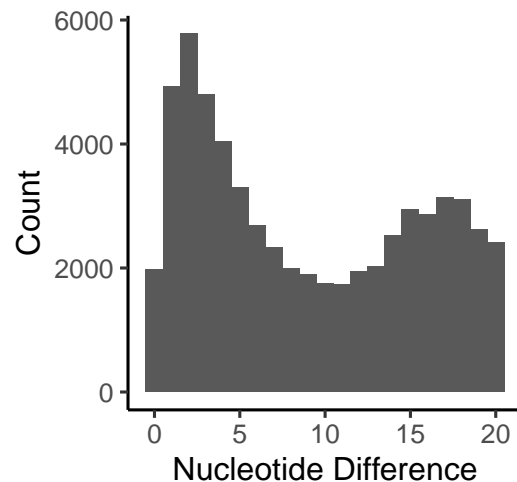
IGHV4-30-4*01

1364 sequences assigned
No exact matches.



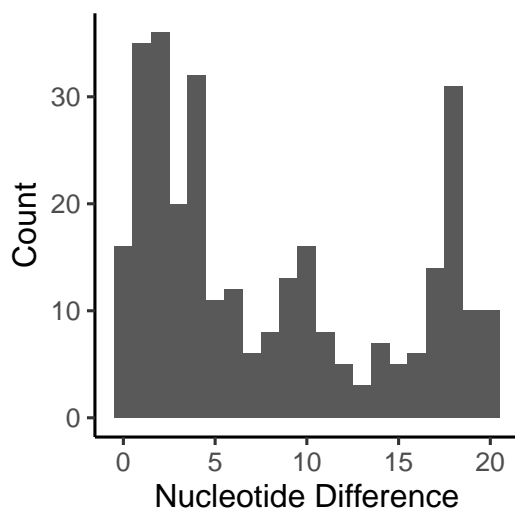
IGHV4-31*02

82358 sequences assigned
1970 (2.4%) exact matches, in which:
1524 unique CDR3
7 unique J



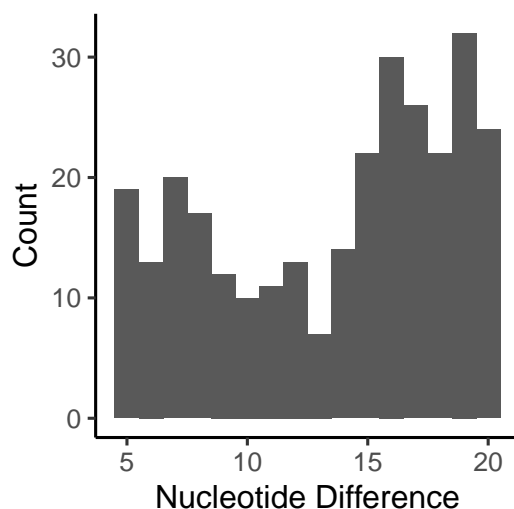
IGHV4-28*06

339 sequences assigned
16 (4.7%) exact matches, in which:
13 unique CDR3
3 unique J



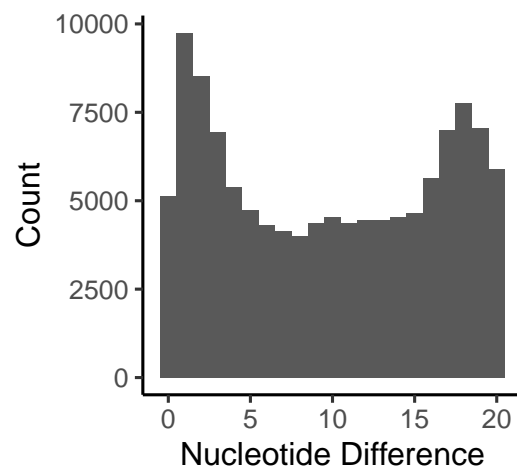
IGHV4-30-2*03

504 sequences assigned
No exact matches.



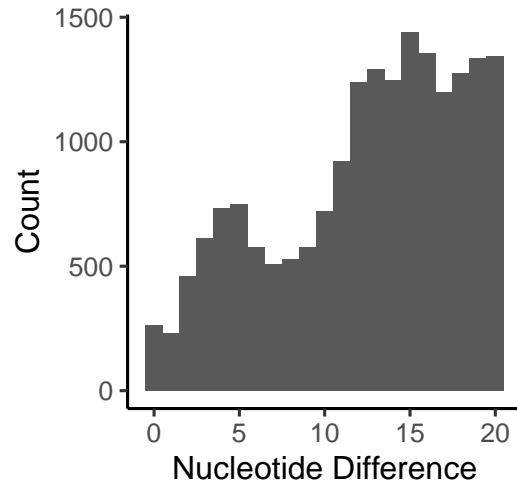
IGHV4-34*01_02

161572 sequences assigned
5119 (3.2%) exact matches, in which:
3707 unique CDR3
7 unique J



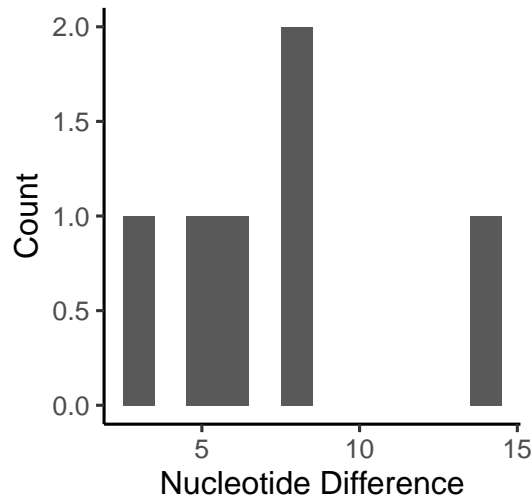
IGHV4-38-2*02

27458 sequences assigned
263 (1%) exact matches, in which:
252 unique CDR3
7 unique J



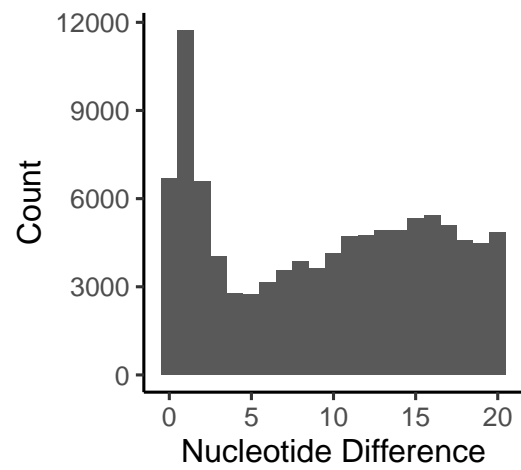
IGHV4-55*09

8 sequences assigned
No exact matches.



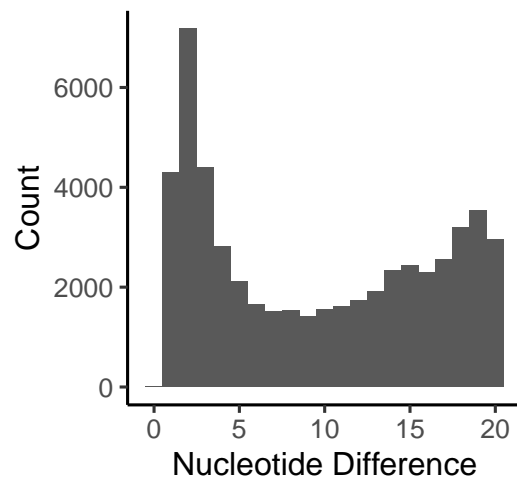
IGHV4-59*11

129564 sequences assigned
6681 (5.2%) exact matches, in which:
4841 unique CDR3
7 unique J



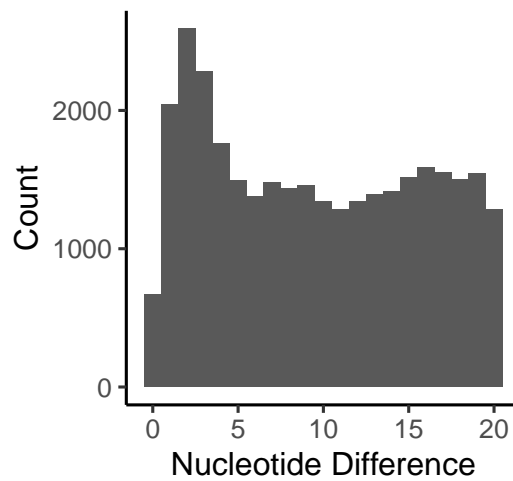
IGHV4-39*02

77672 sequences assigned
3 (0%) exact matches, in which:
3 unique CDR3
2 unique J



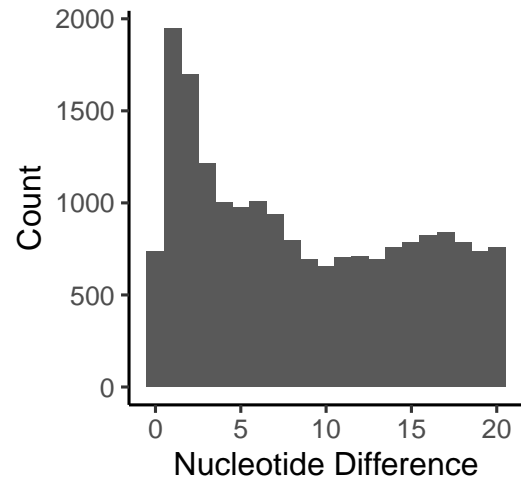
IGHV4-59*08

39043 sequences assigned
666 (1.7%) exact matches, in which:
604 unique CDR3
7 unique J



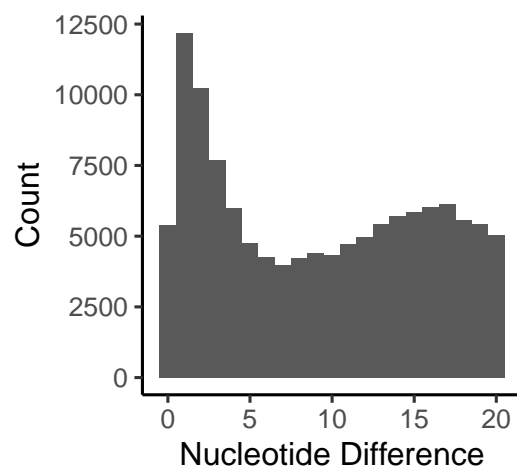
IGHV4-59*12

25439 sequences assigned
737 (2.9%) exact matches, in which:
677 unique CDR3
7 unique J



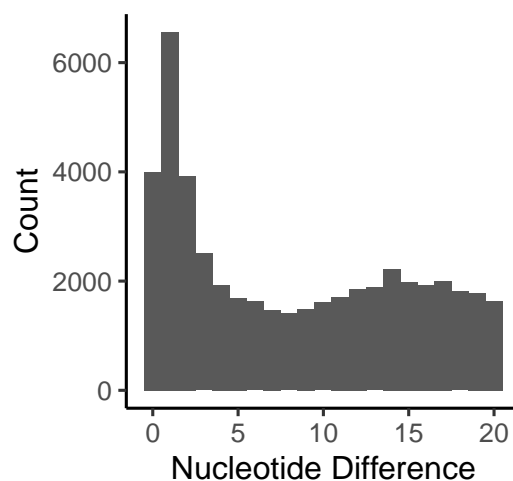
IGHV4-39*07

165122 sequences assigned
5385 (3.3%) exact matches, in which:
3886 unique CDR3
7 unique J



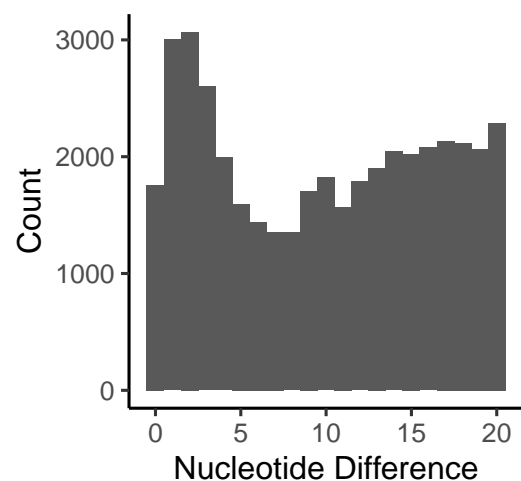
IGHV4-59*01_07

61628 sequences assigned
4003 (6.5%) exact matches, in which:
2957 unique CDR3
7 unique J



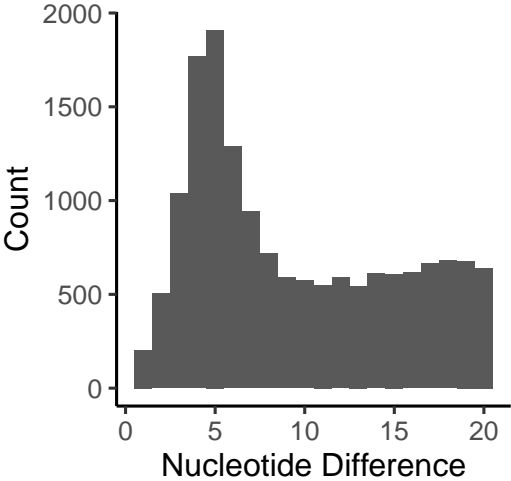
IGHV4-61*02

54466 sequences assigned
1760 (3.2%) exact matches, in which:
1416 unique CDR3
7 unique J



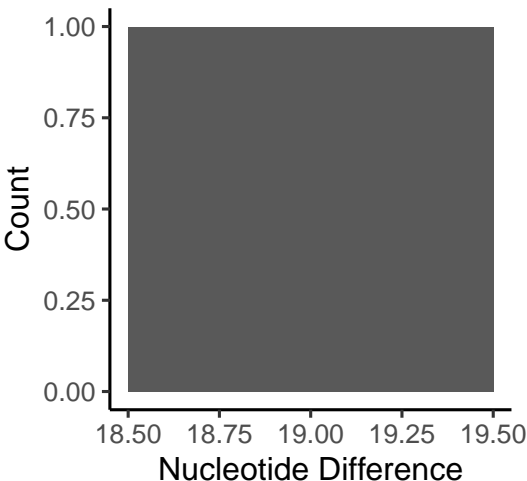
IGHV4-61*08

19749 sequences assigned
No exact matches.



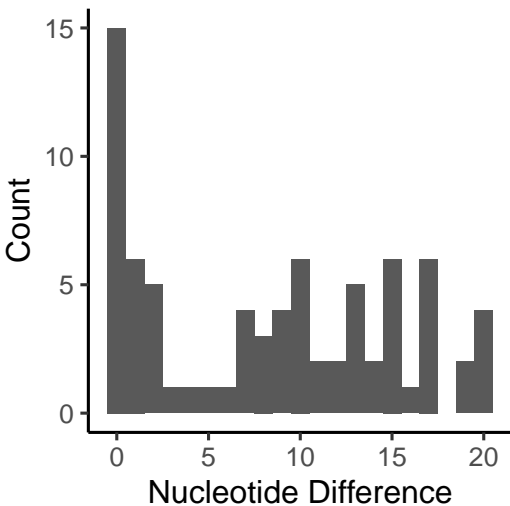
IGHV1/OR15-3*02

2 sequences assigned
No exact matches.



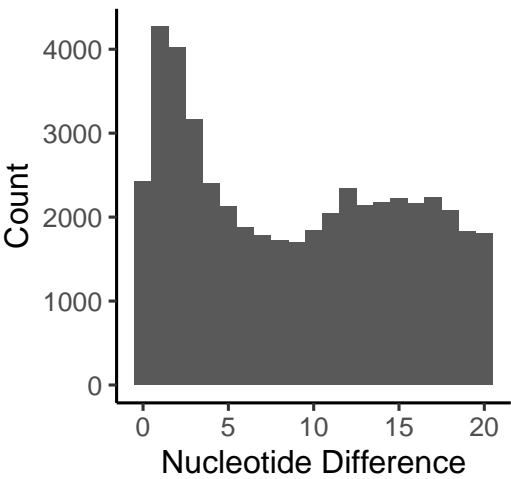
IGHV5-51*04

103 sequences assigned
15 (14.6%) exact matches, in which:
15 unique CDR3
3 unique J



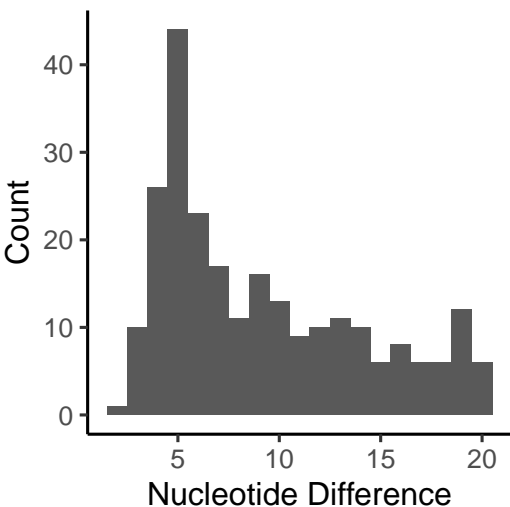
IGHV4-61*09

62280 sequences assigned
2425 (3.9%) exact matches, in which:
1908 unique CDR3
7 unique J



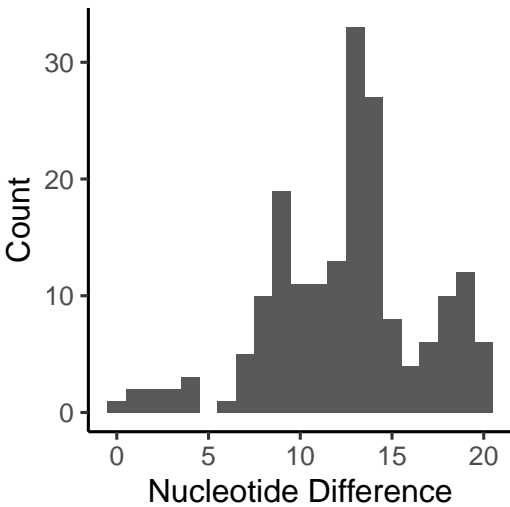
IGHV4/OR15-8*01

324 sequences assigned
No exact matches.



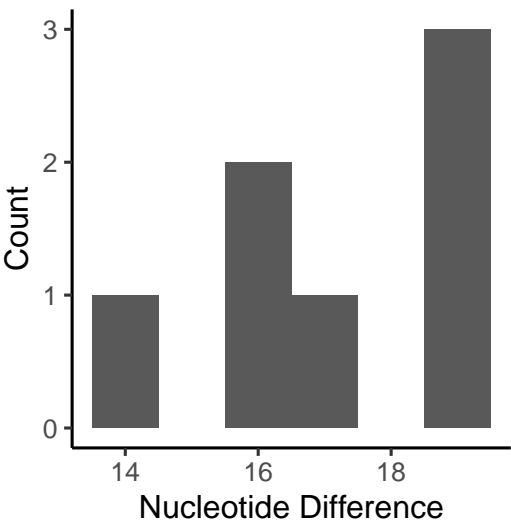
IGHV5-51*06

211 sequences assigned
1 (0.5%) exact matches, in which:
1 unique CDR3
1 unique J



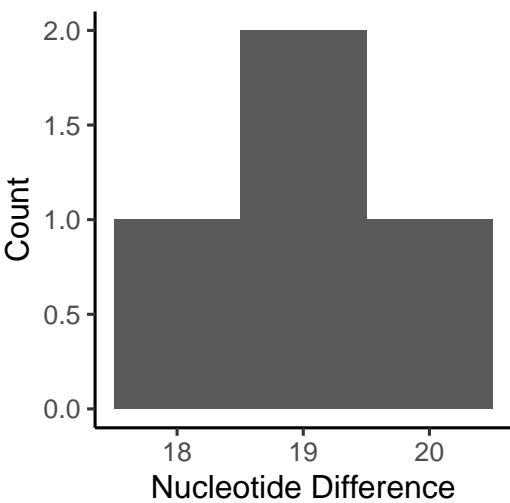
IGHV1/OR15-2*02_03

14 sequences assigned
No exact matches.



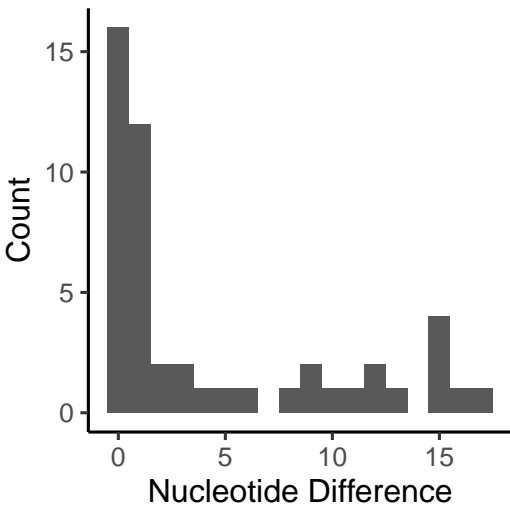
IGHV4/OR15-8*02

43 sequences assigned
No exact matches.



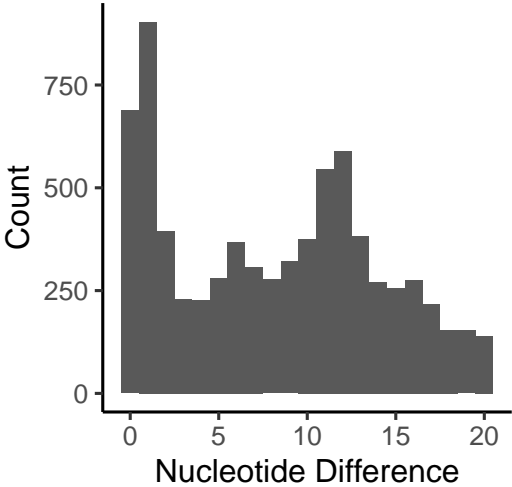
IGHV5-51*07

58 sequences assigned
16 (27.6%) exact matches, in which:
13 unique CDR3
4 unique J



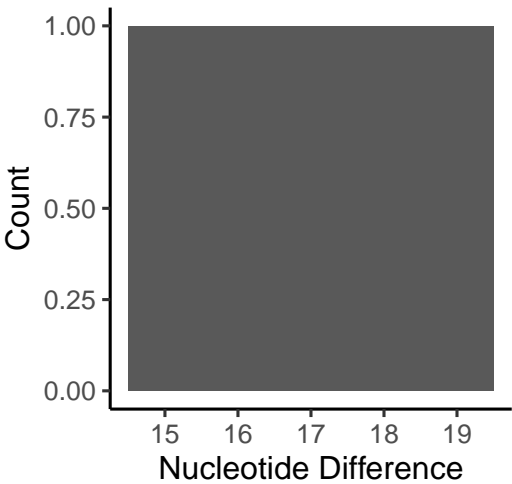
IGHV6-1*01_02

8014 sequences assigned
688 (8.6%) exact matches, in which:
511 unique CDR3
7 unique J



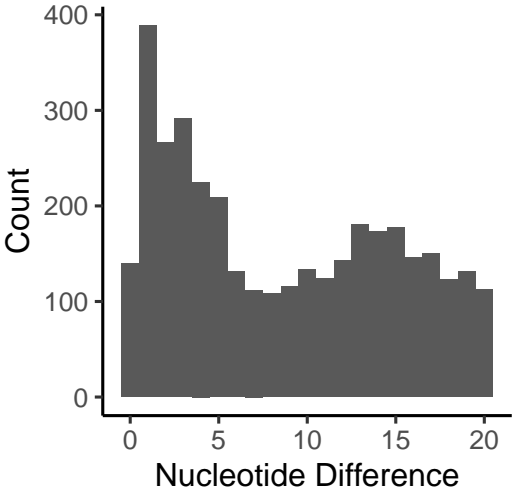
IGHV3/OR16-13*01

9 sequences assigned
No exact matches.

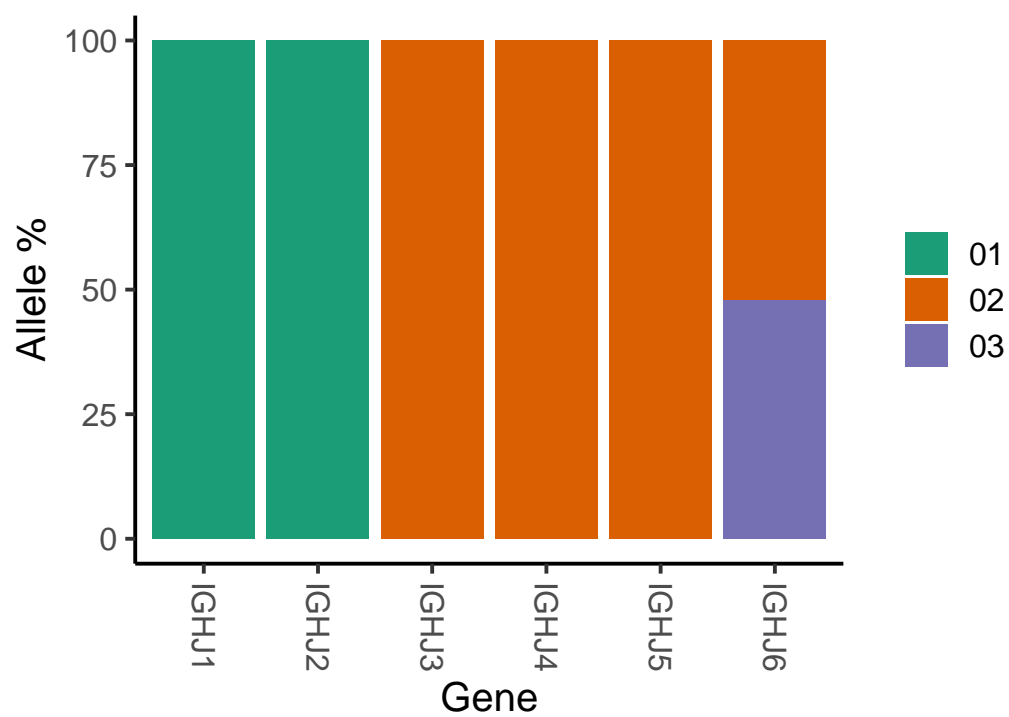


IGHV7-4-1*02

4570 sequences assigned
140 (3.1%) exact matches, in which:
128 unique CDR3
6 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.