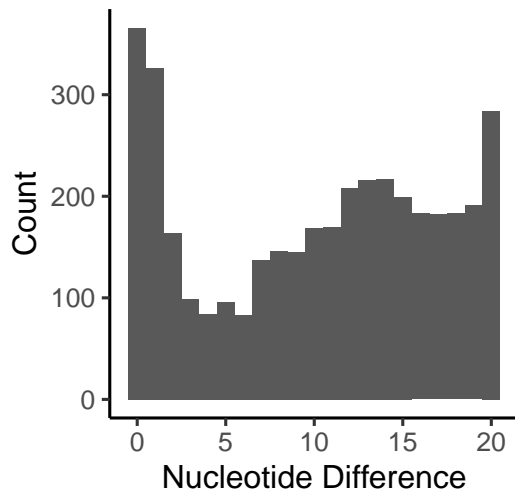


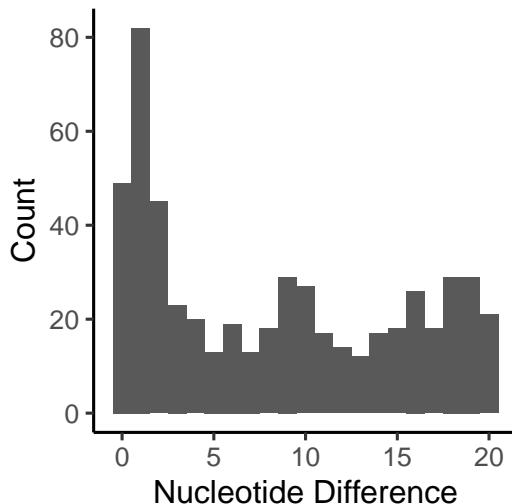
IGHV1-2*02

5568 sequences assigned
366 (6.6%) exact matches, in which:
302 unique CDR3
7 unique J



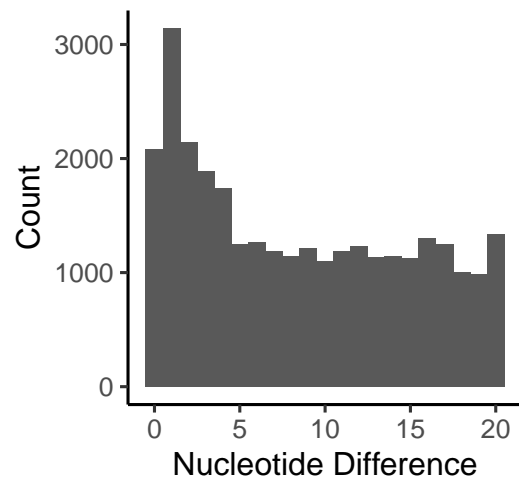
IGHV1-3*01_05

680 sequences assigned
49 (7.2%) exact matches, in which:
41 unique CDR3
6 unique J



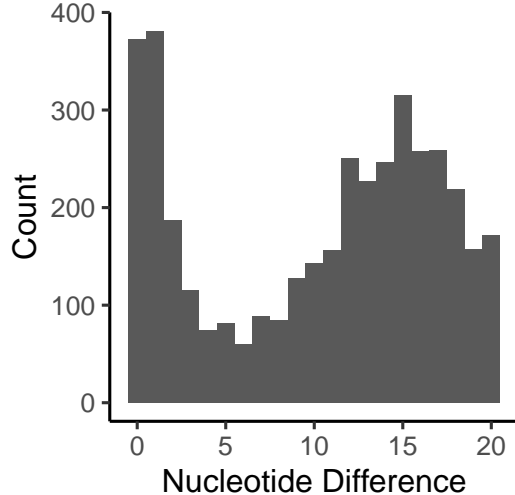
IGHV1-18*01

36469 sequences assigned
2082 (5.7%) exact matches, in which:
1609 unique CDR3
7 unique J



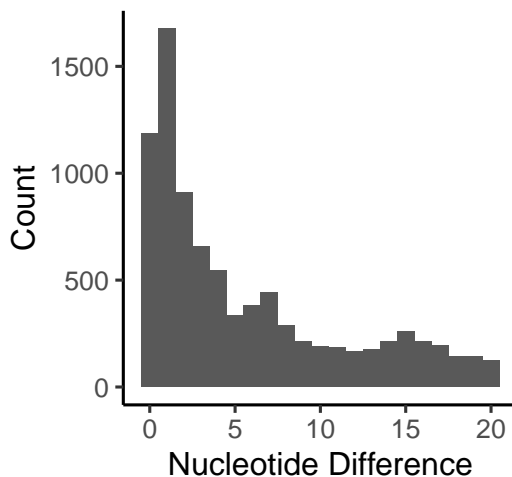
IGHV1-2*06

5052 sequences assigned
373 (7.4%) exact matches, in which:
303 unique CDR3
7 unique J



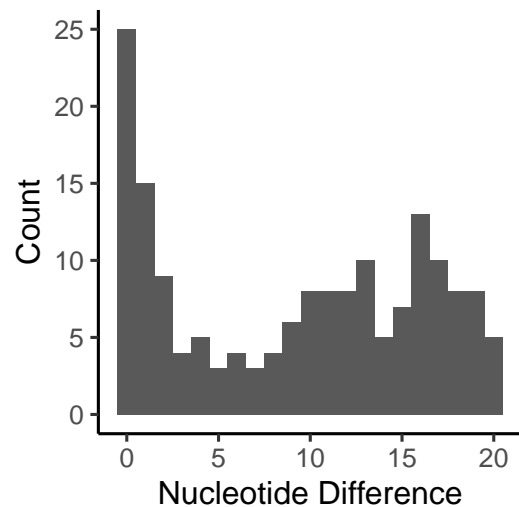
IGHV1-8*01

9435 sequences assigned
1187 (12.6%) exact matches, in which:
868 unique CDR3
7 unique J



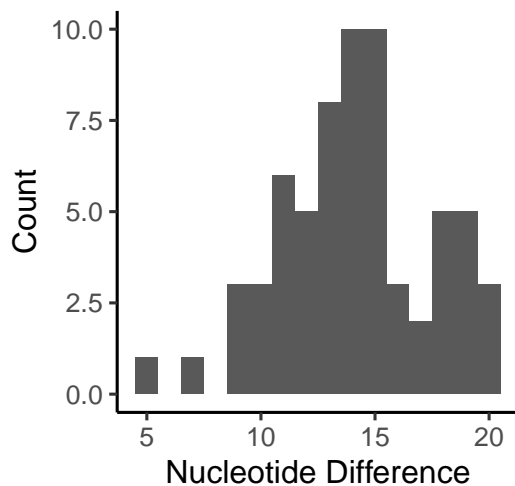
IGHV1-24*01

201 sequences assigned
25 (12.4%) exact matches, in which:
25 unique CDR3
4 unique J



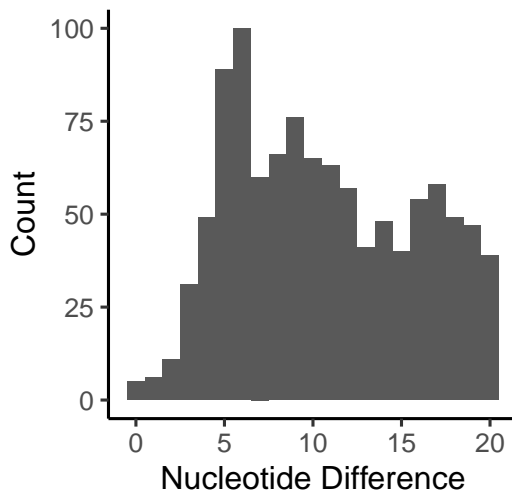
IGHV1-3*04

119 sequences assigned
No exact matches.



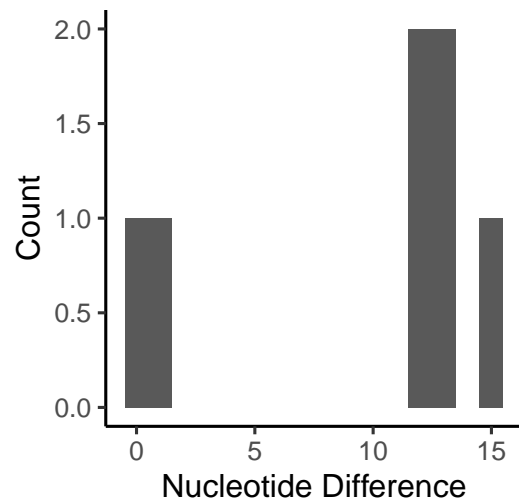
IGHV1-8*02

1256 sequences assigned
5 (0.4%) exact matches, in which:
4 unique CDR3
2 unique J



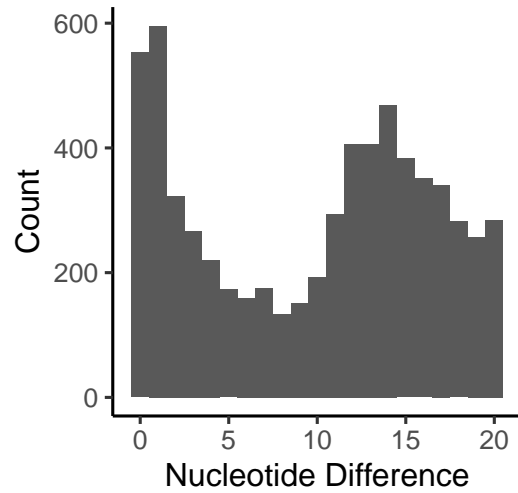
IGHV1-45*02

18 sequences assigned
1 (5.6%) exact matches, in which:
1 unique CDR3
1 unique J



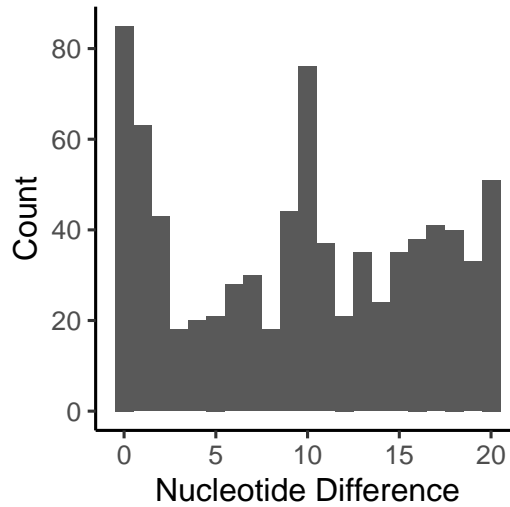
IGHV1-46*01

8669 sequences assigned
553 (6.4%) exact matches, in which:
446 unique CDR3
7 unique J



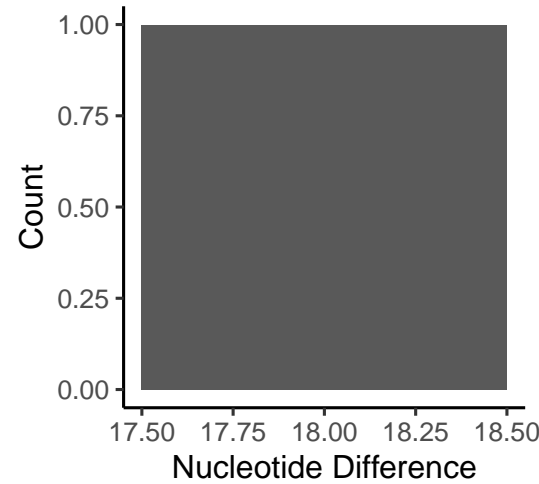
IGHV1-69*02

1171 sequences assigned
85 (7.3%) exact matches, in which:
74 unique CDR3
7 unique J



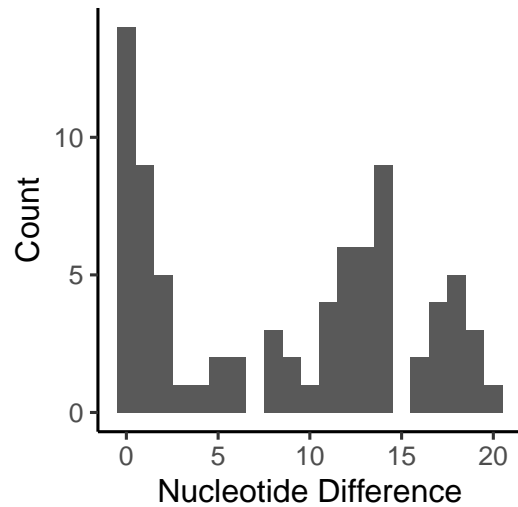
IGHV2-26*02

1 sequences assigned
No exact matches.



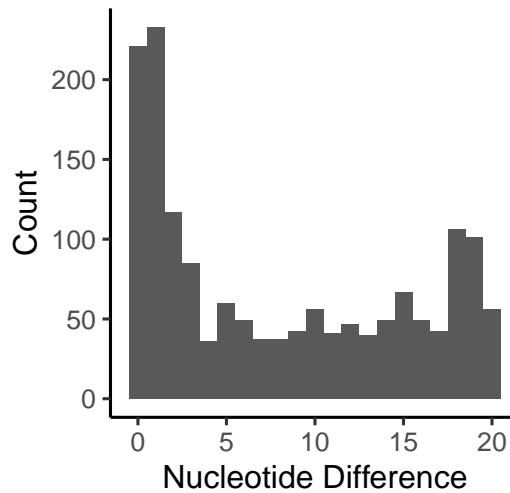
IGHV1-58*02

101 sequences assigned
14 (13.9%) exact matches, in which:
13 unique CDR3
4 unique J



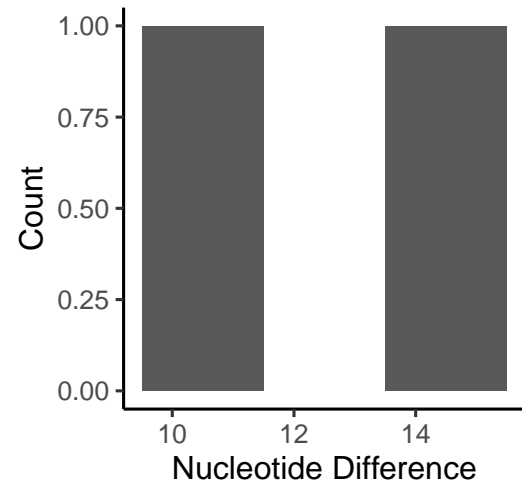
IGHV1-69*05

2267 sequences assigned
221 (9.7%) exact matches, in which:
167 unique CDR3
7 unique J



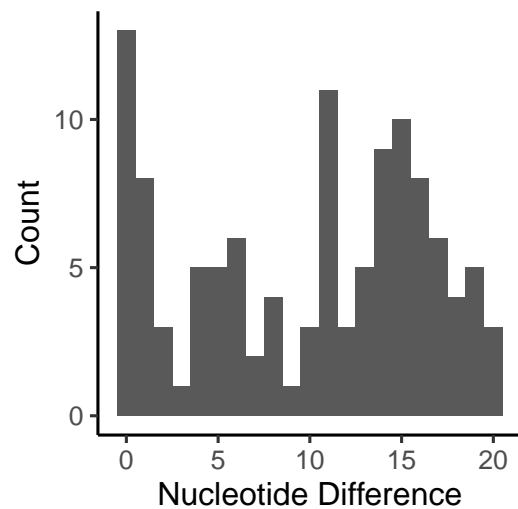
IGHV2-70*01

7 sequences assigned
No exact matches.



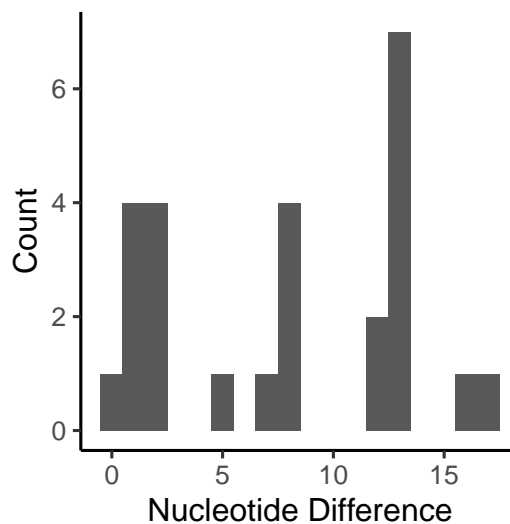
IGHV1-69-2*01

143 sequences assigned
13 (9.1%) exact matches, in which:
11 unique CDR3
3 unique J



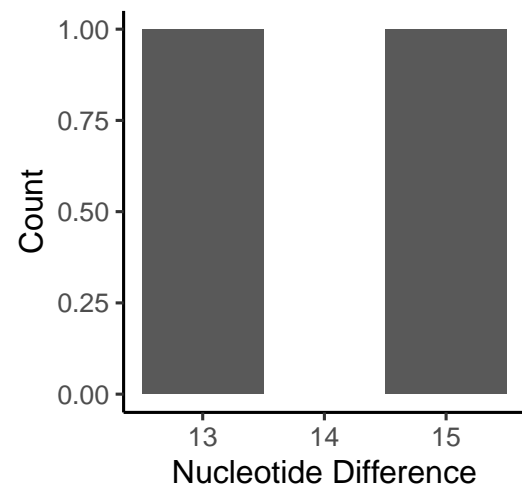
IGHV2-5*01

28 sequences assigned
1 (3.6%) exact matches, in which:
1 unique CDR3
1 unique J



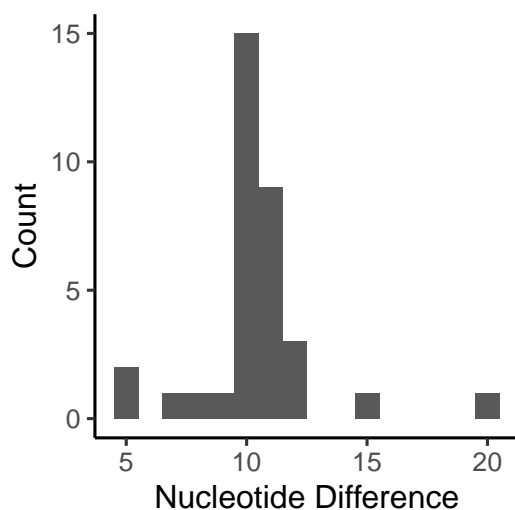
IGHV2-70*13

3 sequences assigned
No exact matches.



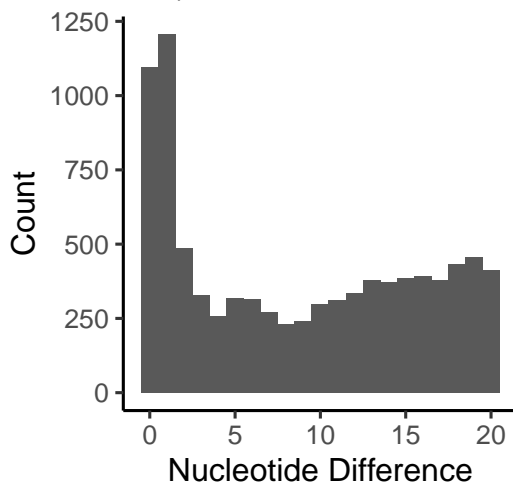
IGHV2-70*11_15

36 sequences assigned
No exact matches.



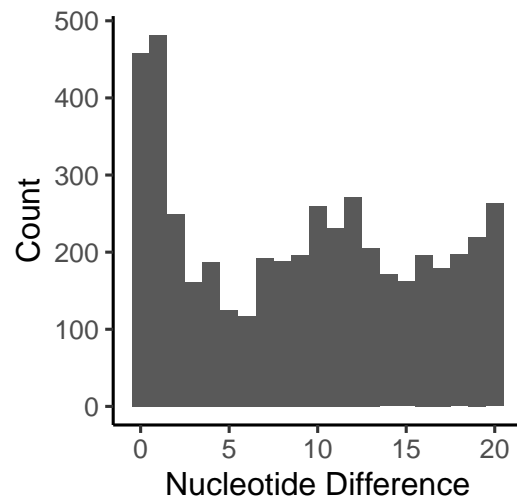
IGHV3-11*01

10951 sequences assigned
1095 (10%) exact matches, in which:
843 unique CDR3
7 unique J



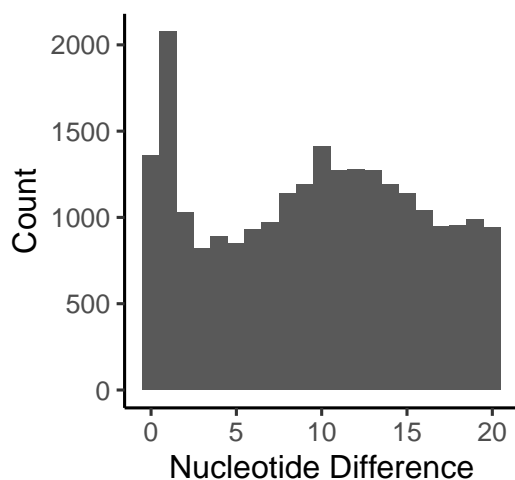
IGHV3-15*01_02

6382 sequences assigned
458 (7.2%) exact matches, in which:
365 unique CDR3
7 unique J



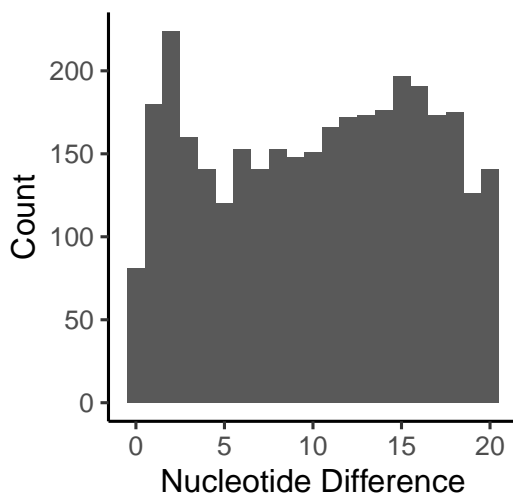
IGHV3-7*01

29075 sequences assigned
1360 (4.7%) exact matches, in which:
1043 unique CDR3
7 unique J



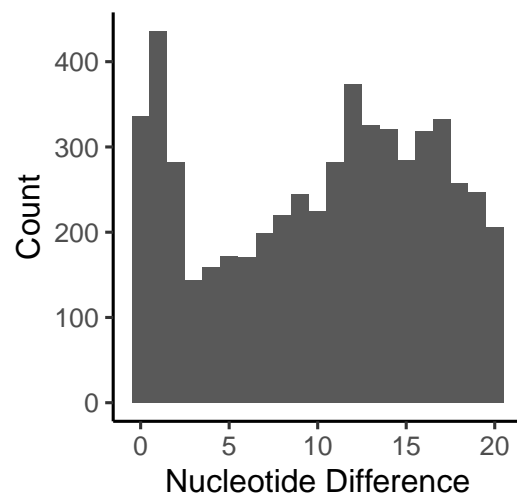
IGHV3-11*04

4015 sequences assigned
81 (2%) exact matches, in which:
79 unique CDR3
7 unique J



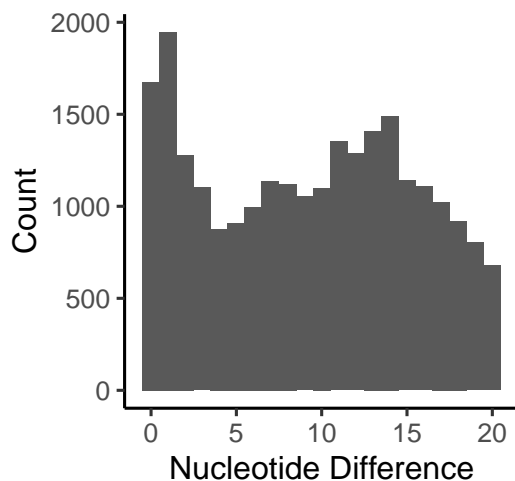
IGHV3-20*03_04

6917 sequences assigned
336 (4.9%) exact matches, in which:
226 unique CDR3
7 unique J



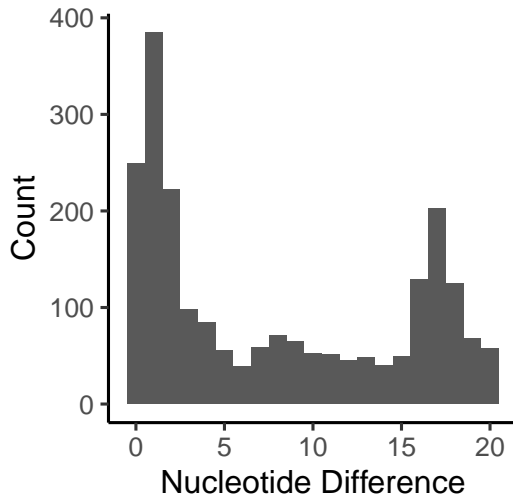
IGHV3-9*01

27992 sequences assigned
1676 (6%) exact matches, in which:
1195 unique CDR3
7 unique J



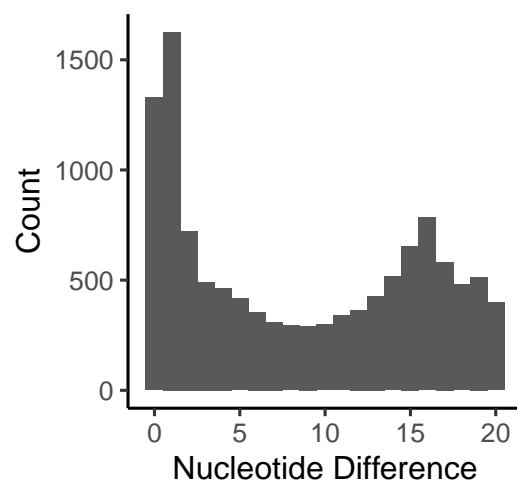
IGHV3-13*01

2570 sequences assigned
249 (9.7%) exact matches, in which:
176 unique CDR3
7 unique J



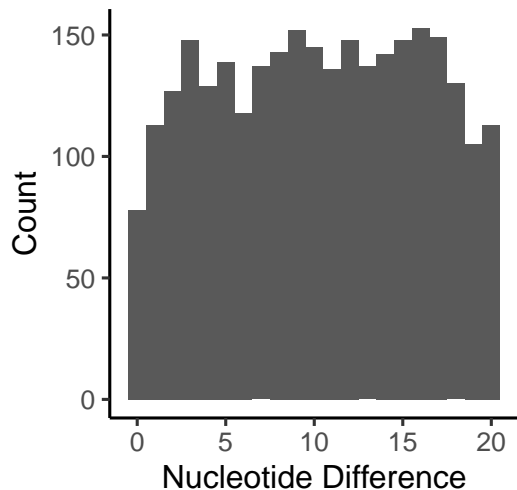
IGHV3-21*03

13813 sequences assigned
1329 (9.6%) exact matches, in which:
952 unique CDR3
7 unique J



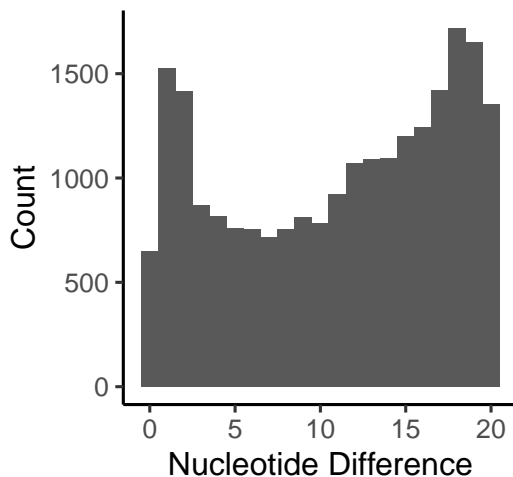
IGHV3-21*04

3521 sequences assigned
78 (2.2%) exact matches, in which:
74 unique CDR3
7 unique J



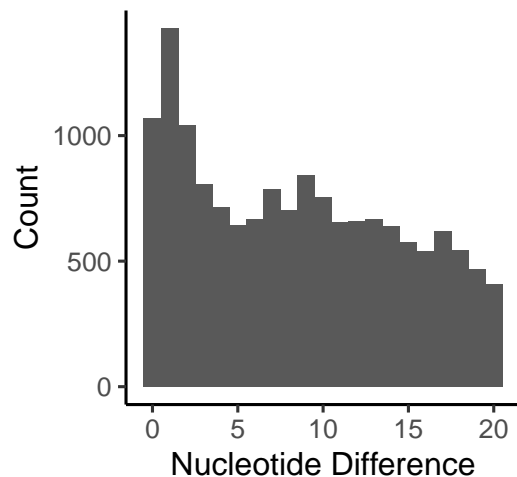
IGHV3-23*03

31323 sequences assigned
651 (2.1%) exact matches, in which:
499 unique CDR3
7 unique J



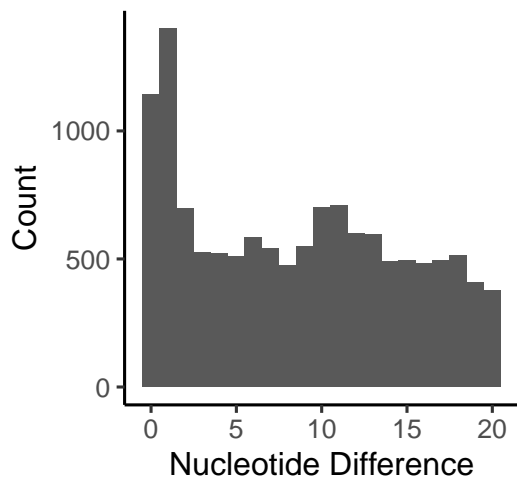
IGHV3-33*01

17814 sequences assigned
1068 (6%) exact matches, in which:
827 unique CDR3
7 unique J



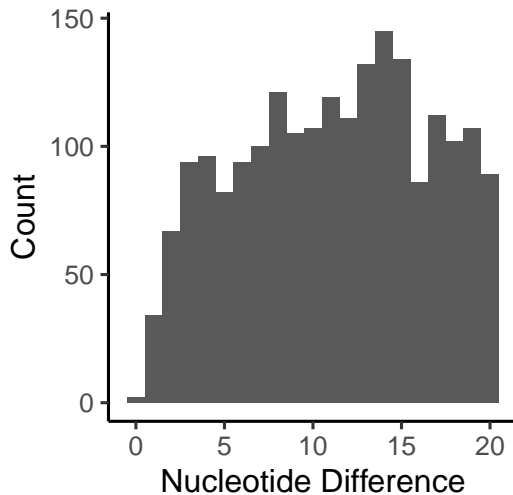
IGHV3-21*01_02

14606 sequences assigned
1141 (7.8%) exact matches, in which:
890 unique CDR3
7 unique J



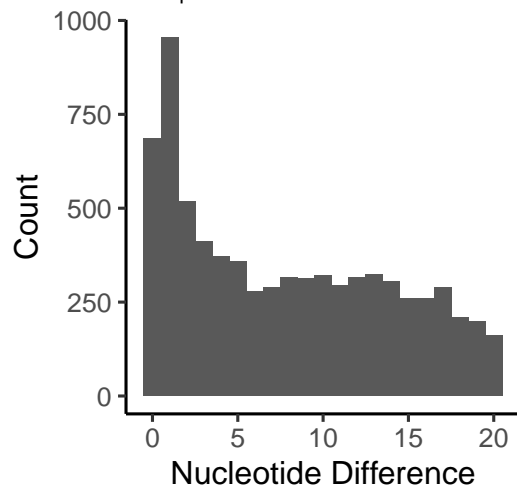
IGHV3-30-5*01

2722 sequences assigned
2 (0.1%) exact matches, in which:
2 unique CDR3
2 unique J



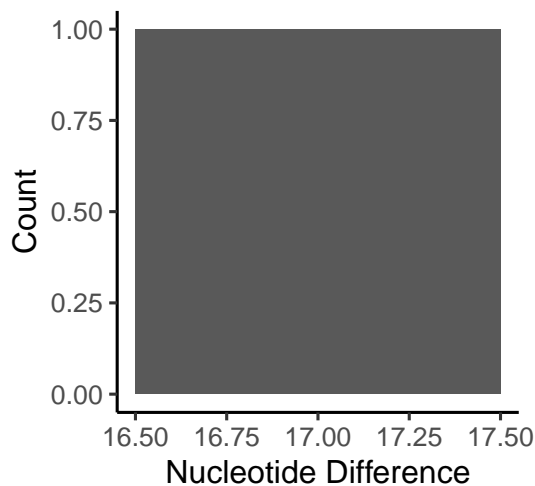
IGHV3-33*06

8201 sequences assigned
687 (8.4%) exact matches, in which:
434 unique CDR3
7 unique J



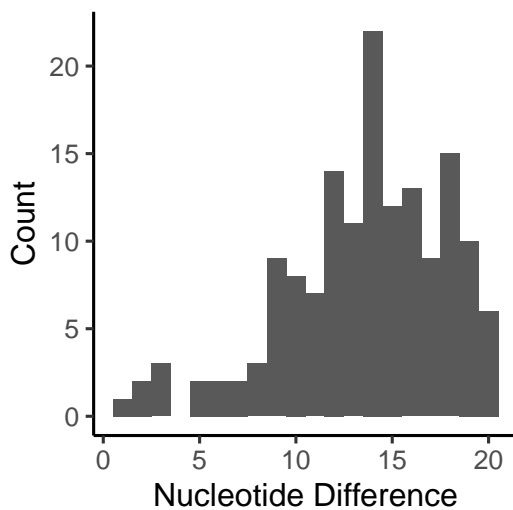
IGHV3-22*01_02

3 sequences assigned
No exact matches.



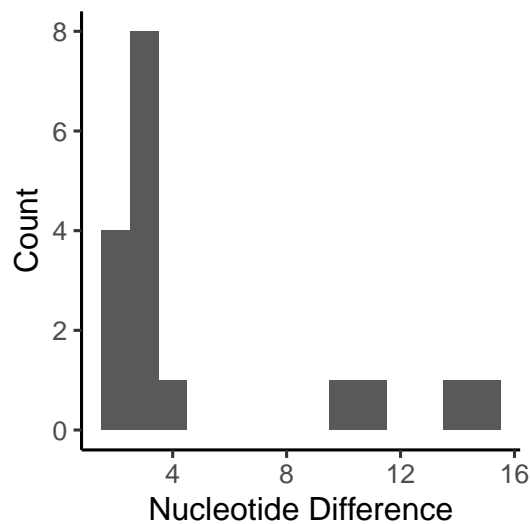
IGHV3-30-5*02

180 sequences assigned
No exact matches.



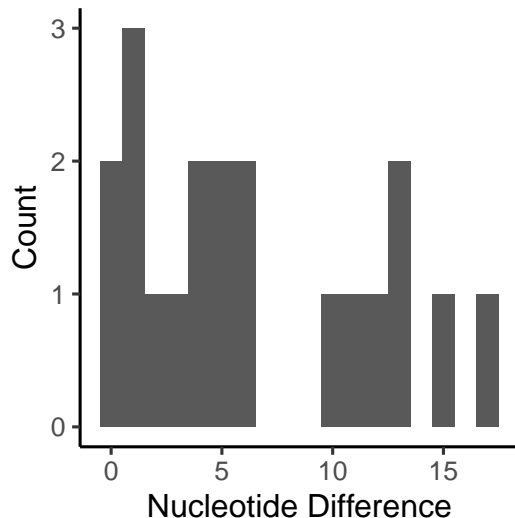
IGHV3-35*01

18 sequences assigned
No exact matches.



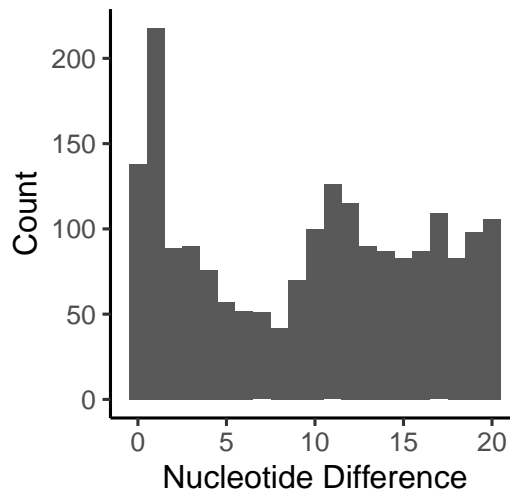
IGHV3-38-3*01

21 sequences assigned
2 (9.5%) exact matches, in which:
2 unique CDR3
1 unique J



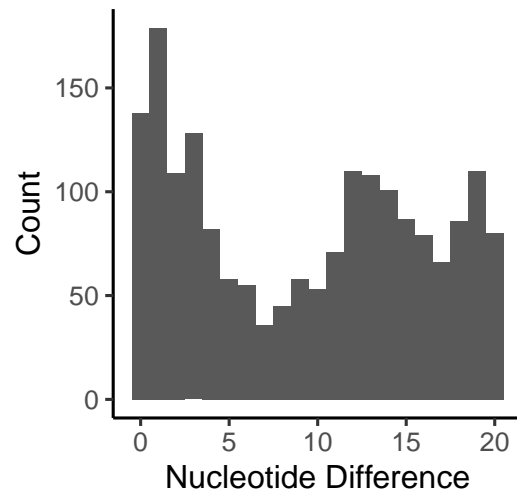
IGHV3-43*01

2576 sequences assigned
138 (5.4%) exact matches, in which:
91 unique CDR3
7 unique J



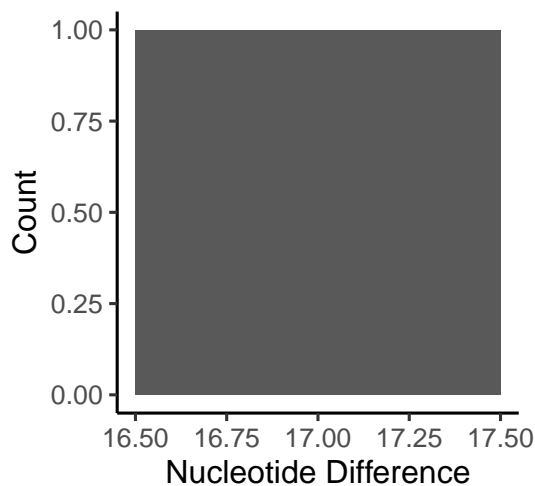
IGHV3-49*03_05

2333 sequences assigned
138 (5.9%) exact matches, in which:
99 unique CDR3
6 unique J



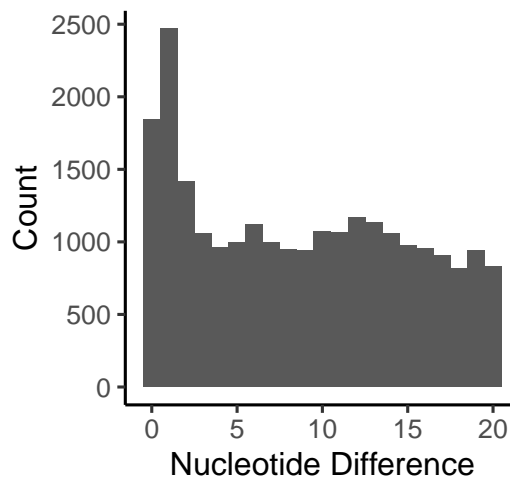
IGHV3-38*02

1 sequences assigned
No exact matches.



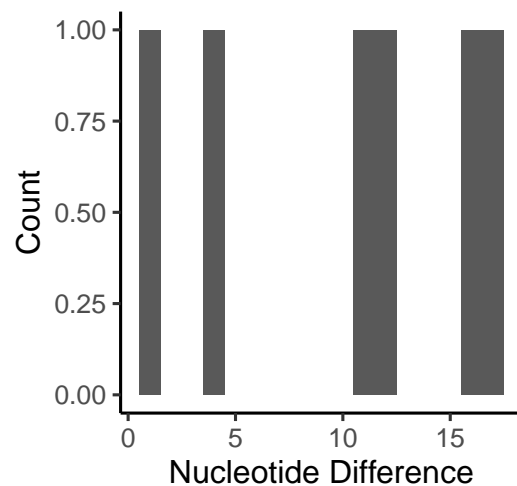
IGHV3-48*03

28104 sequences assigned
1844 (6.6%) exact matches, in which:
1400 unique CDR3
7 unique J



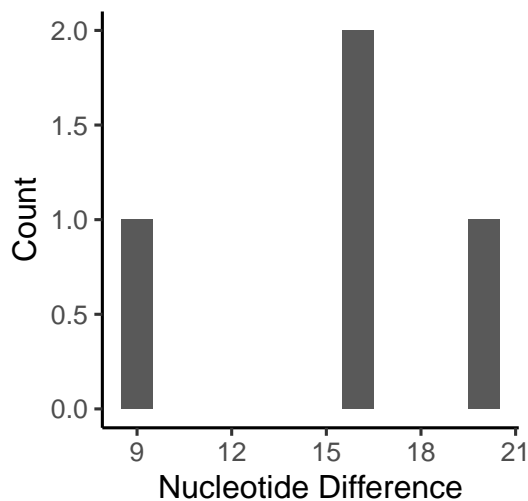
IGHV3-52*01_03

6 sequences assigned
No exact matches.



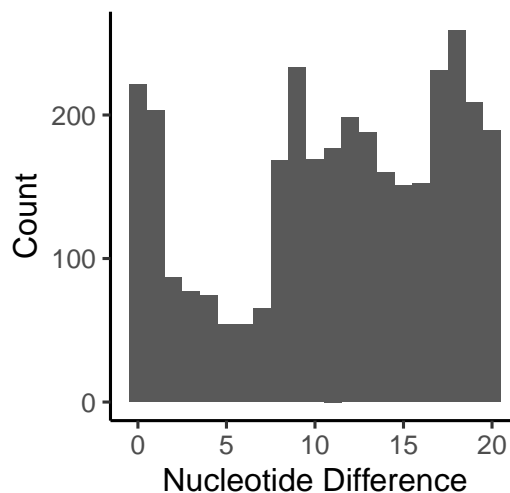
IGHV3-38*03

5 sequences assigned
No exact matches.



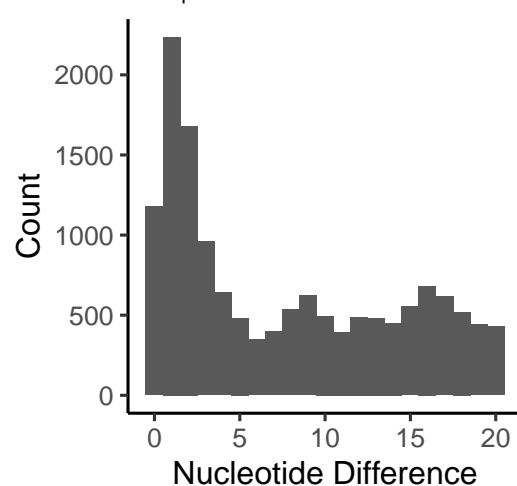
IGHV3-49*04

5096 sequences assigned
221 (4.3%) exact matches, in which:
165 unique CDR3
7 unique J



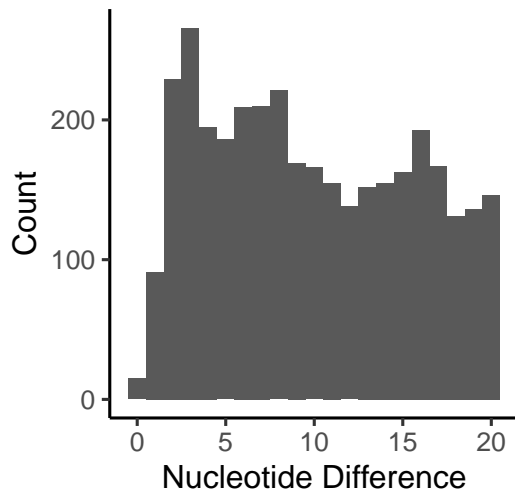
IGHV3-53*05

18074 sequences assigned
1178 (6.5%) exact matches, in which:
863 unique CDR3
7 unique J



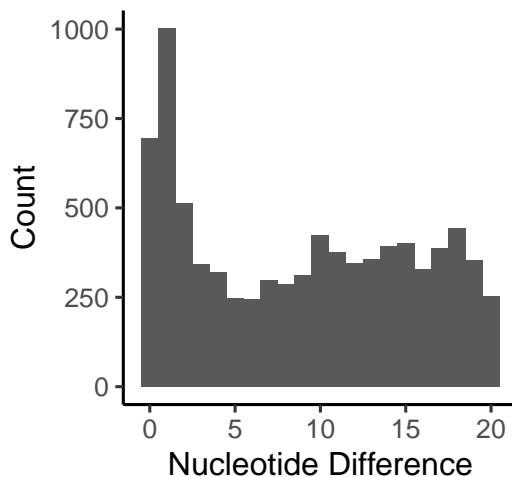
IGHV3-53*01_02

4474 sequences assigned
15 (0.3%) exact matches, in which:
15 unique CDR3
4 unique J



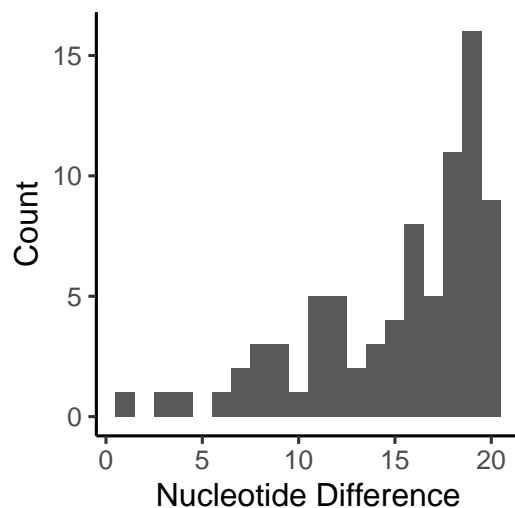
IGHV3-66*01

11211 sequences assigned
696 (6.2%) exact matches, in which:
514 unique CDR3
7 unique J



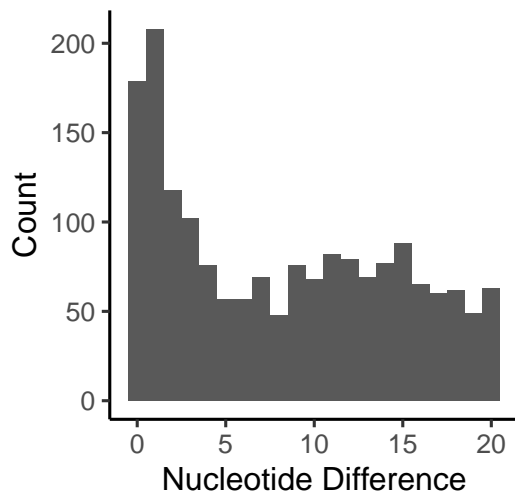
IGHV3-69-1*01

223 sequences assigned
No exact matches.



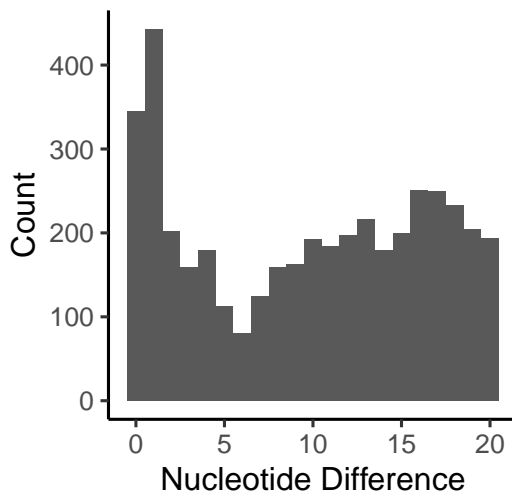
IGHV3-64*01

2060 sequences assigned
179 (8.7%) exact matches, in which:
129 unique CDR3
7 unique J



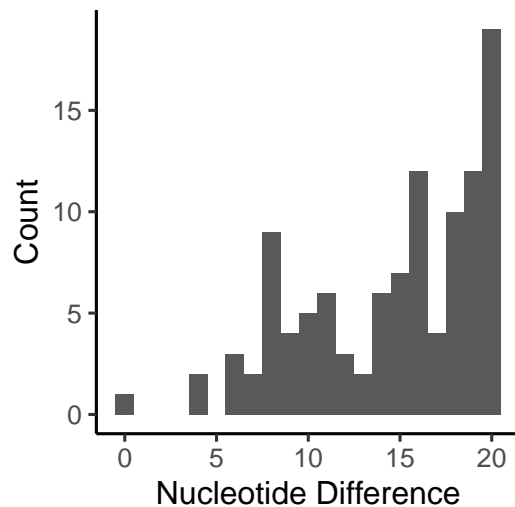
IGHV3-66*02

5361 sequences assigned
345 (6.4%) exact matches, in which:
258 unique CDR3
7 unique J



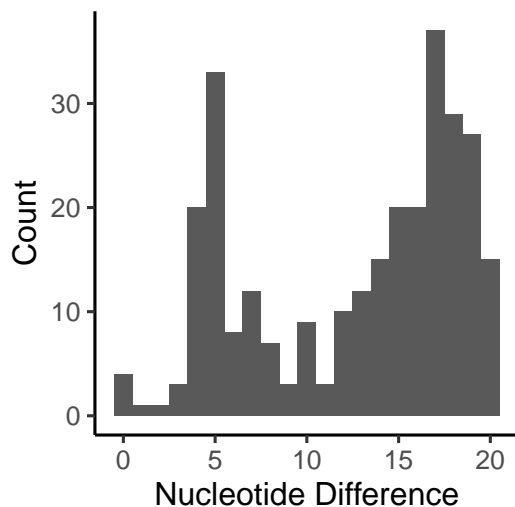
IGHV3-69-1*02

504 sequences assigned
1 (0.2%) exact matches, in which:
1 unique CDR3
1 unique J



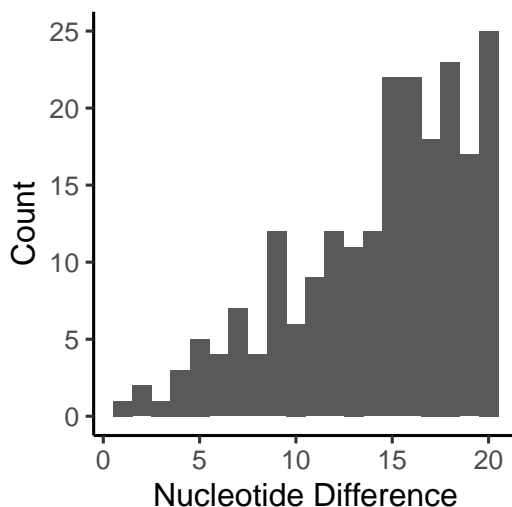
IGHV3-64*02_07

554 sequences assigned
4 (0.7%) exact matches, in which:
3 unique CDR3
3 unique J



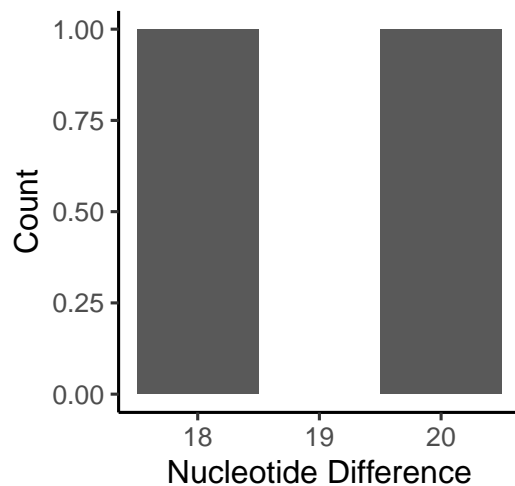
IGHV3-66*03

298 sequences assigned
No exact matches.



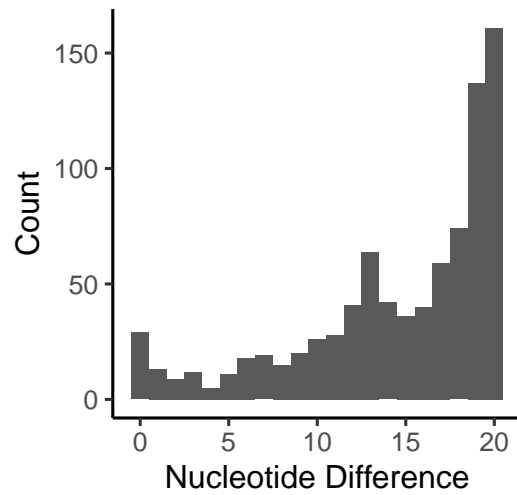
IGHV3-71*01_04

38 sequences assigned
No exact matches.



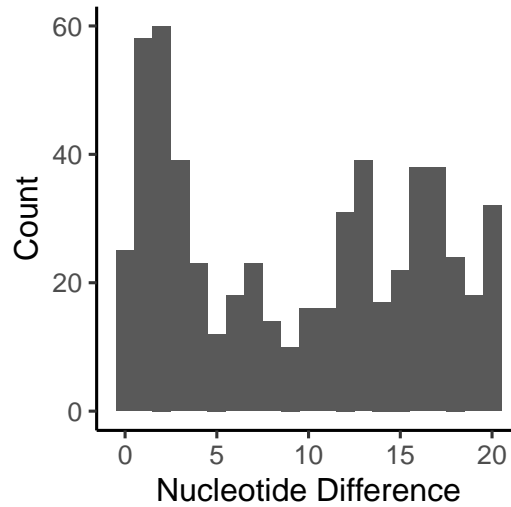
IGHV3-72*01

1339 sequences assigned
29 (2.2%) exact matches, in which:
24 unique CDR3
5 unique J



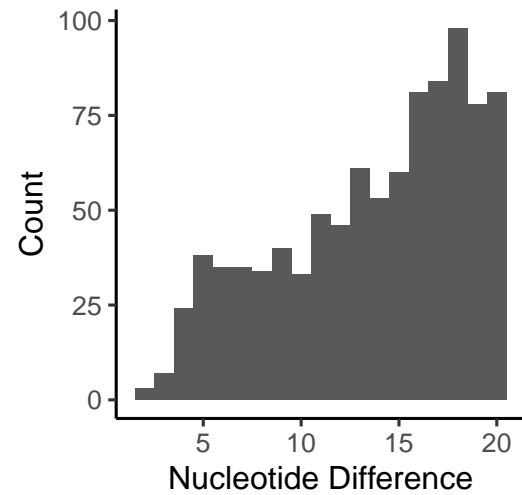
IGHV3-43D*03

757 sequences assigned
25 (3.3%) exact matches, in which:
21 unique CDR3
3 unique J



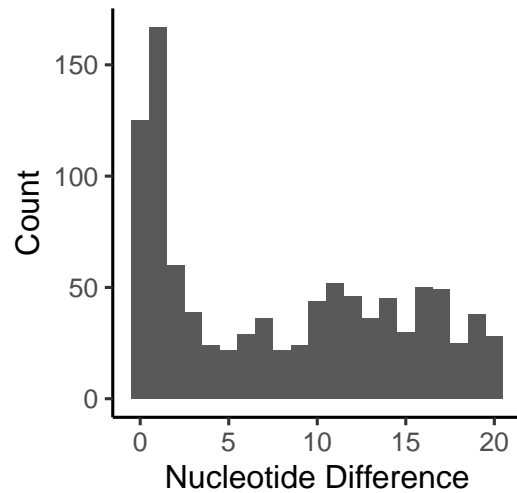
IGHV3-NL1*01

1386 sequences assigned
No exact matches.



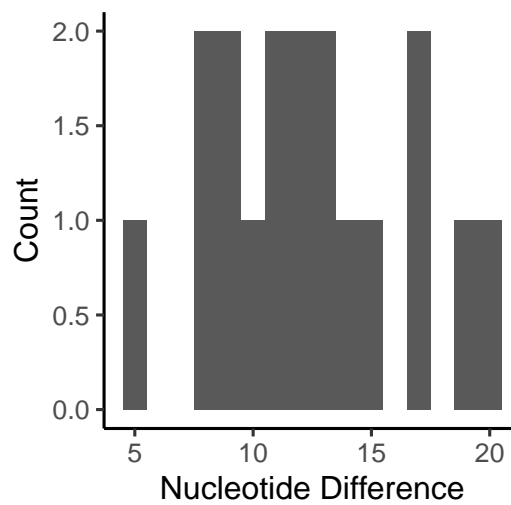
IGHV3-73*01_02

1204 sequences assigned
125 (10.4%) exact matches, in which:
102 unique CDR3
7 unique J



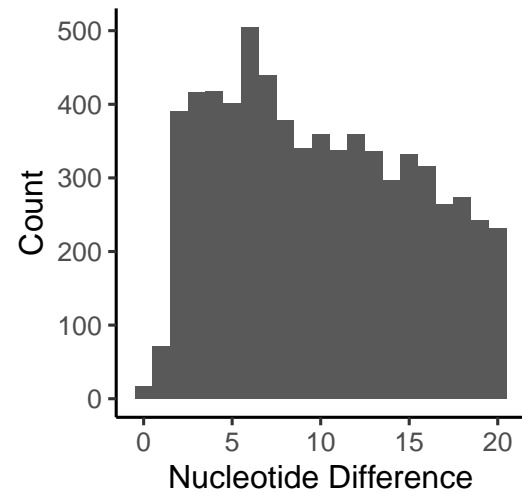
IGHV3-64D*06

24 sequences assigned
No exact matches.



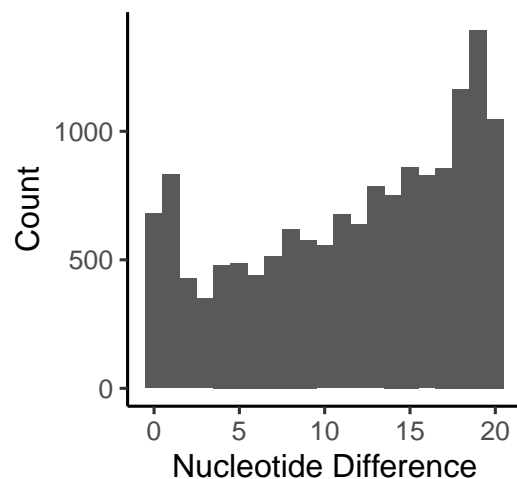
IGHV4-4*07

7914 sequences assigned
17 (0.2%) exact matches, in which:
17 unique CDR3
5 unique J



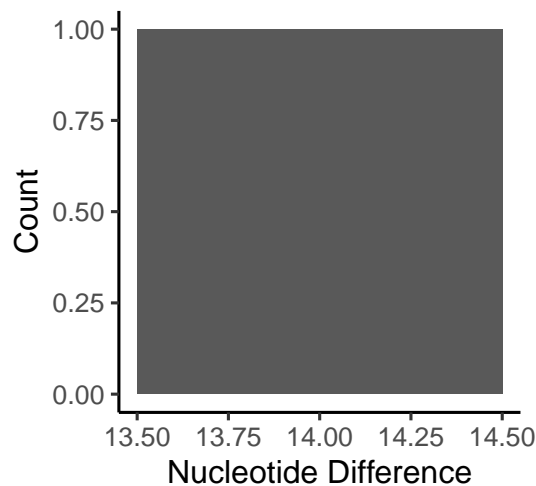
IGHV3-74*01_02

20800 sequences assigned
680 (3.3%) exact matches, in which:
532 unique CDR3
7 unique J



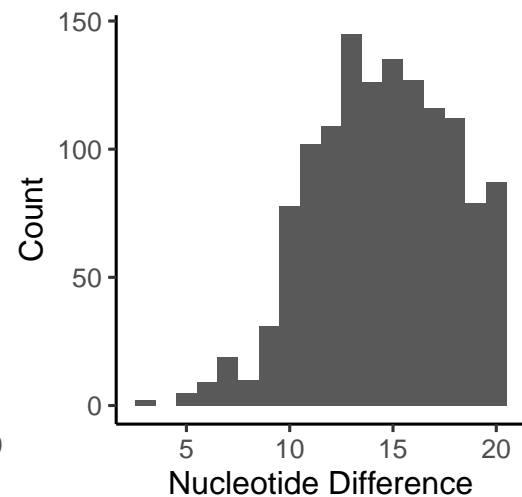
IGHV3-64D*09

2 sequences assigned
No exact matches.



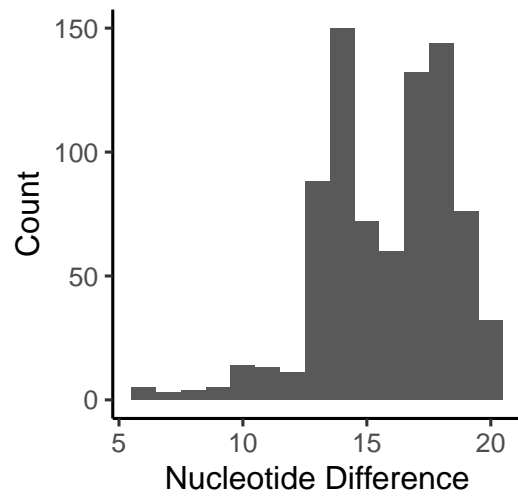
IGHV4-28*03

1602 sequences assigned
No exact matches.



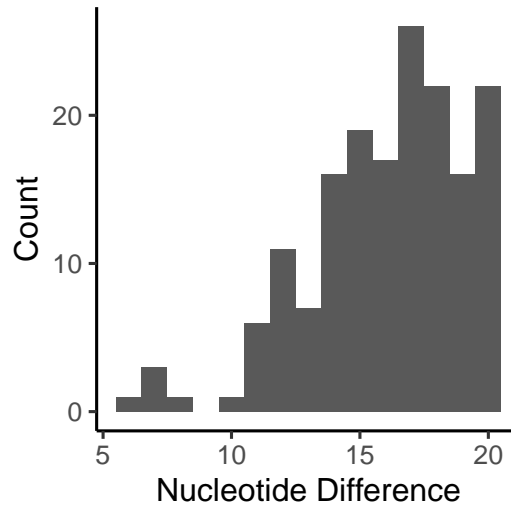
IGHV4-28*01_07

922 sequences assigned
No exact matches.



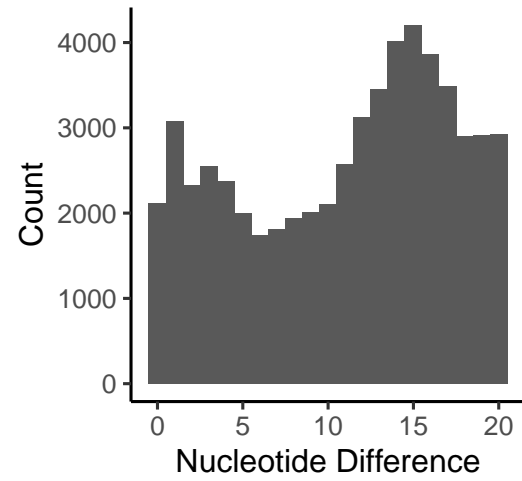
IGHV4-30-4*01

303 sequences assigned
No exact matches.



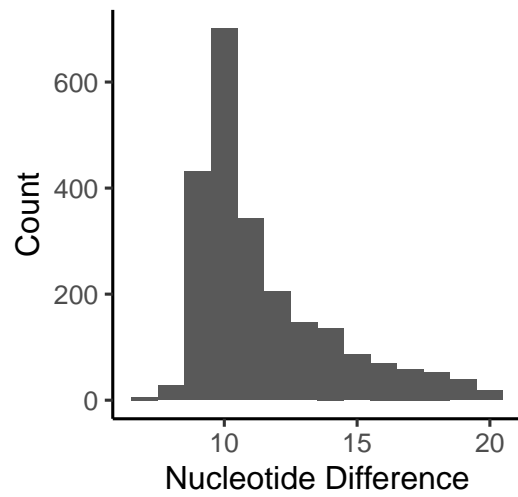
IGHV4-31*03_04

71716 sequences assigned
2117 (3%) exact matches, in which:
1445 unique CDR3
7 unique J



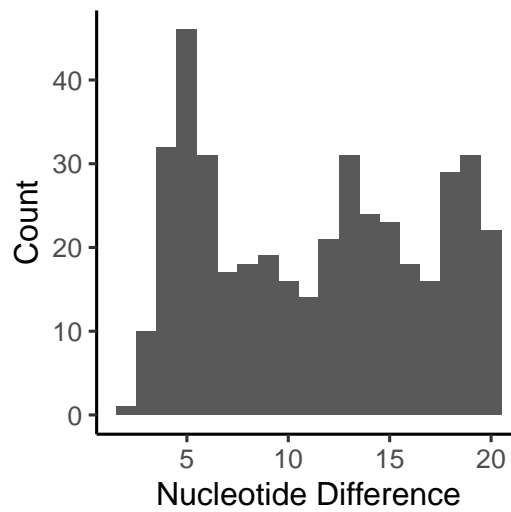
IGHV4-28*02_05

2384 sequences assigned
No exact matches.



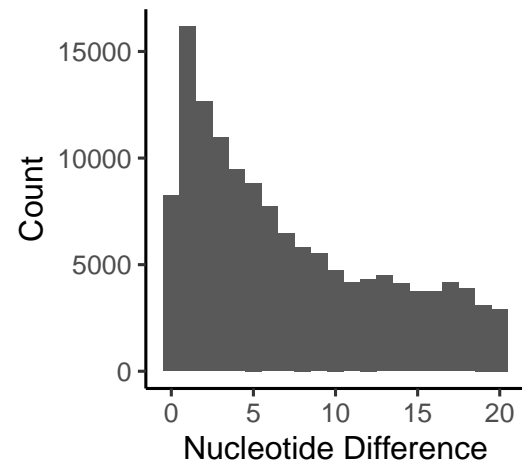
IGHV4-30-4*07

545 sequences assigned
No exact matches.



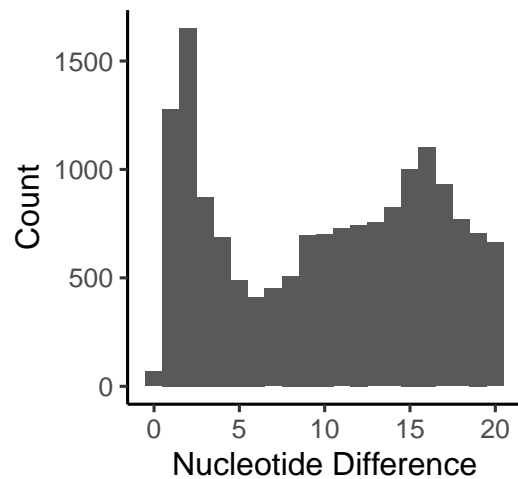
IGHV4-34*01_02

153861 sequences assigned
8234 (5.4%) exact matches, in which:
5117 unique CDR3
7 unique J



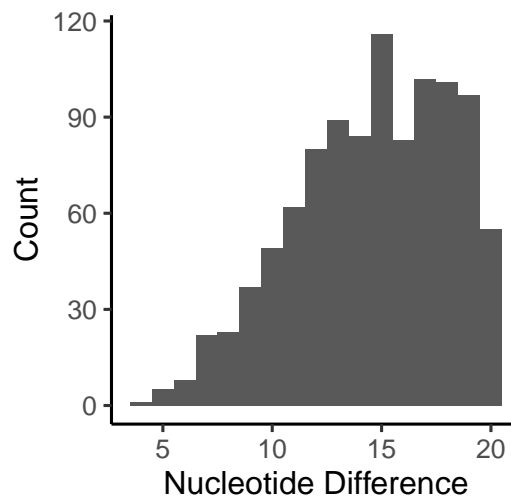
IGHV4-30-2*01

19448 sequences assigned
69 (0.4%) exact matches, in which:
65 unique CDR3
7 unique J



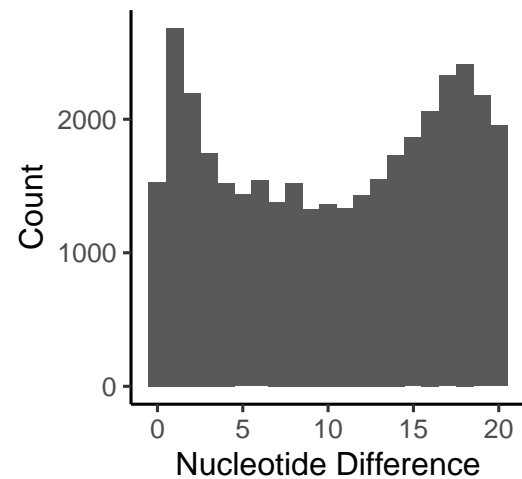
IGHV4-30-4*08

1332 sequences assigned
No exact matches.



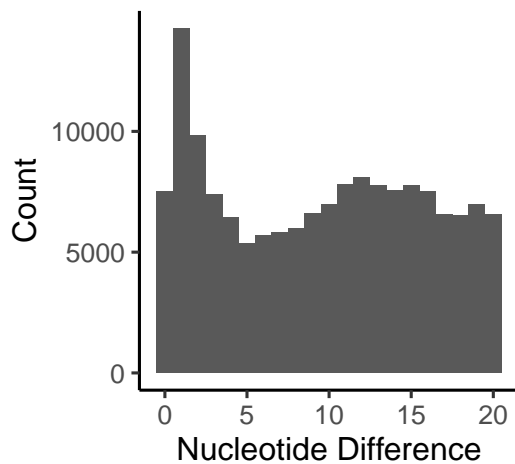
IGHV4-38-2*02

46348 sequences assigned
1531 (3.3%) exact matches, in which:
1027 unique CDR3
7 unique J



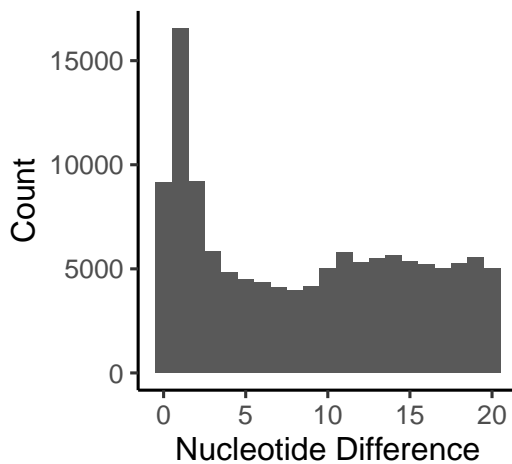
IGHV4–39*07

203366 sequences assigned
7511 (3.7%) exact matches, in which:
4536 unique CDR3
7 unique J



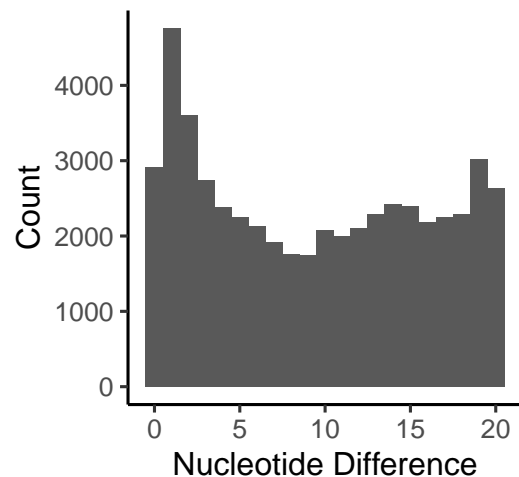
IGHV4–59*01_07

147790 sequences assigned
9152 (6.2%) exact matches, in which:
5805 unique CDR3
7 unique J



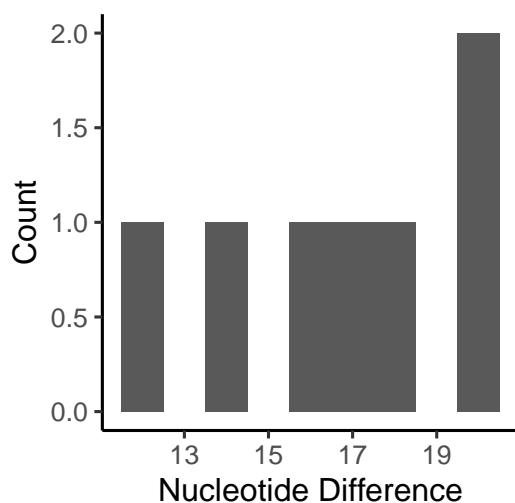
IGHV4–61*02

63795 sequences assigned
2914 (4.6%) exact matches, in which:
1933 unique CDR3
7 unique J



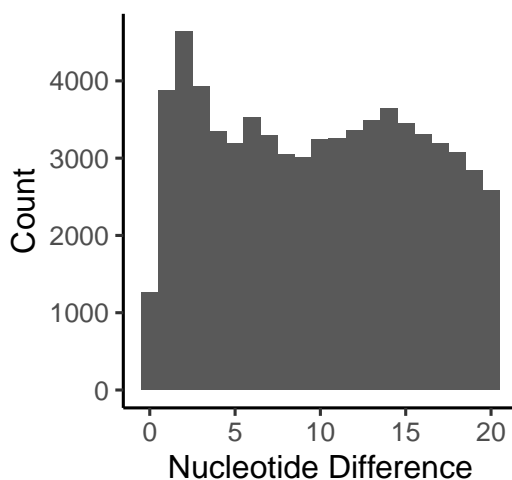
IGHV4–55*02_04_08

31 sequences assigned
No exact matches.



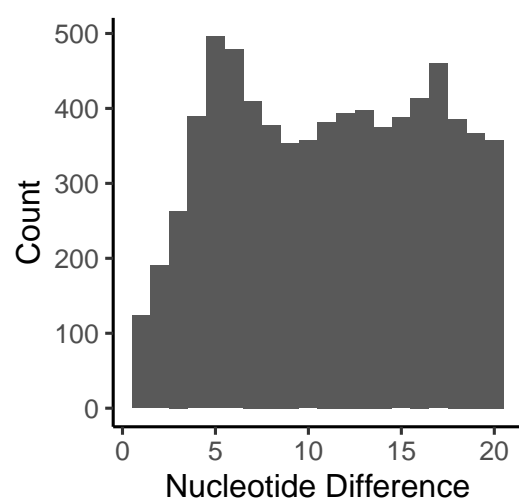
IGHV4–59*12

81046 sequences assigned
1268 (1.6%) exact matches, in which:
1019 unique CDR3
7 unique J



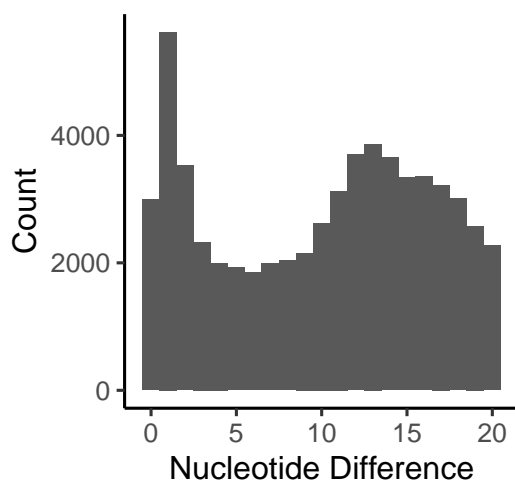
IGHV4–61*08

9283 sequences assigned
No exact matches.



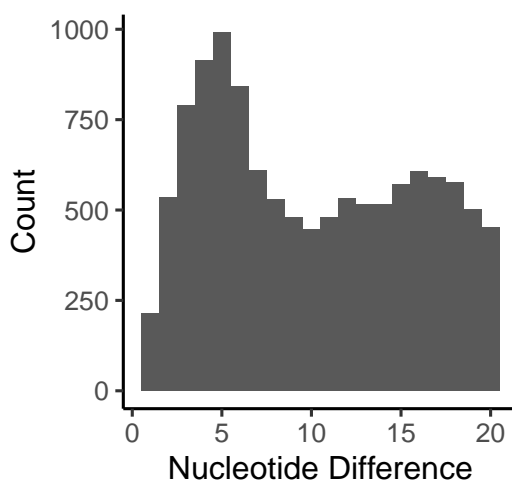
IGHV4–59*08

73926 sequences assigned
2992 (4%) exact matches, in which:
1956 unique CDR3
7 unique J



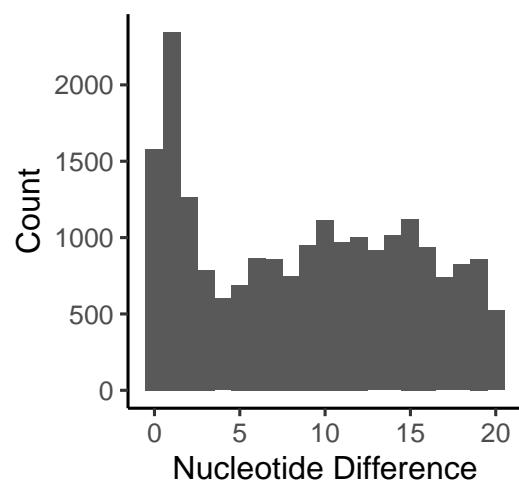
IGHV4–61*01

13872 sequences assigned
No exact matches.



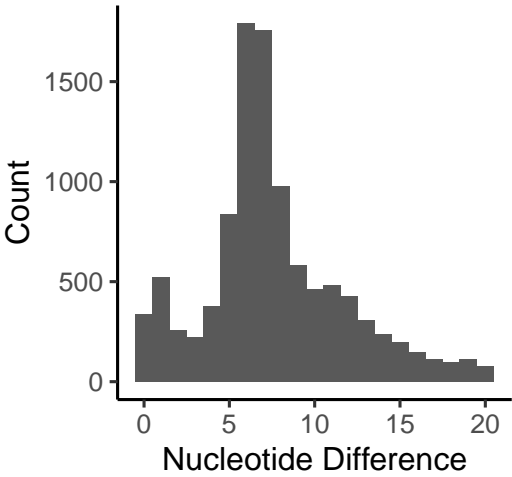
IGHV5–51*01_03

22688 sequences assigned
1582 (7%) exact matches, in which:
1162 unique CDR3
7 unique J



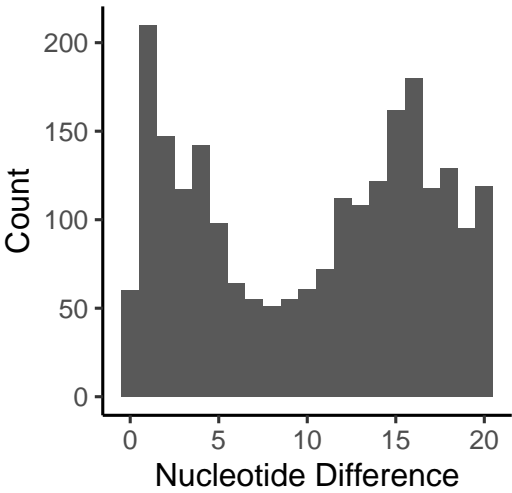
IGHV6-1*01_02

10909 sequences assigned
339 (3.1%) exact matches, in which:
247 unique CDR3
7 unique J

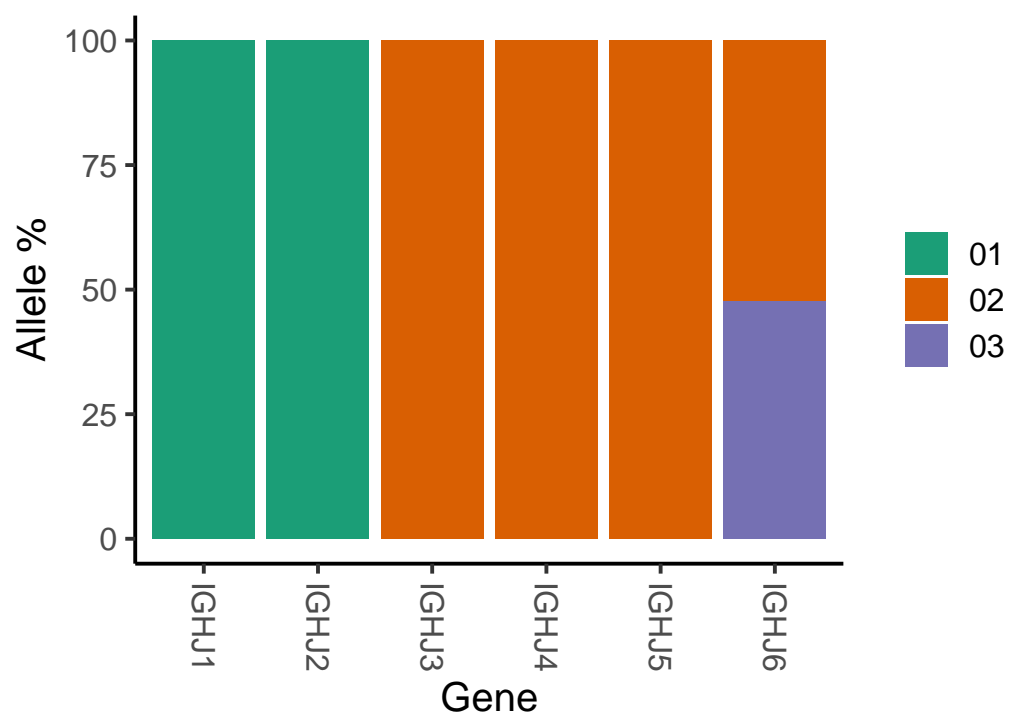


IGHV7-4-1*02

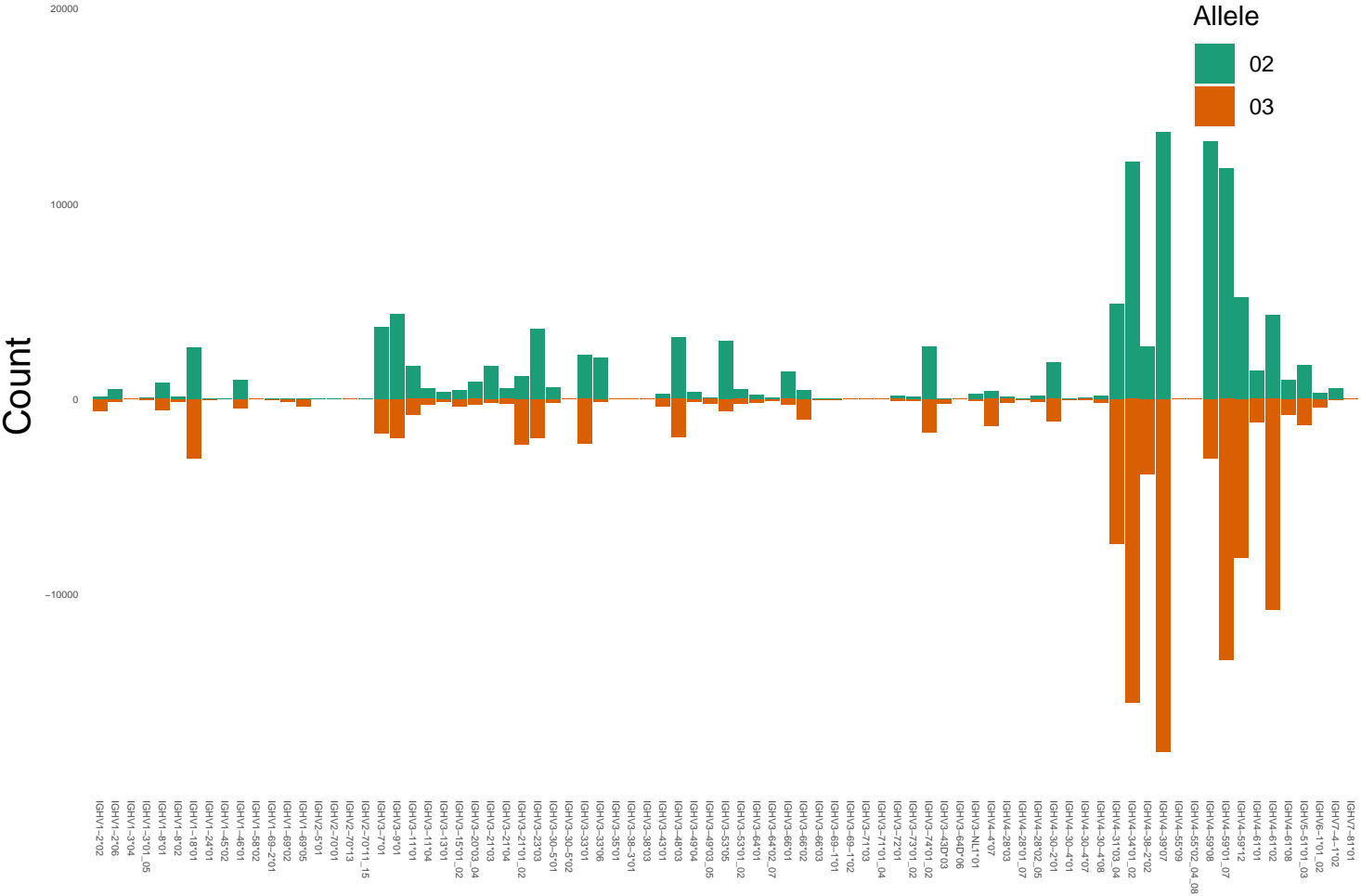
3405 sequences assigned
60 (1.8%) exact matches, in which:
52 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.