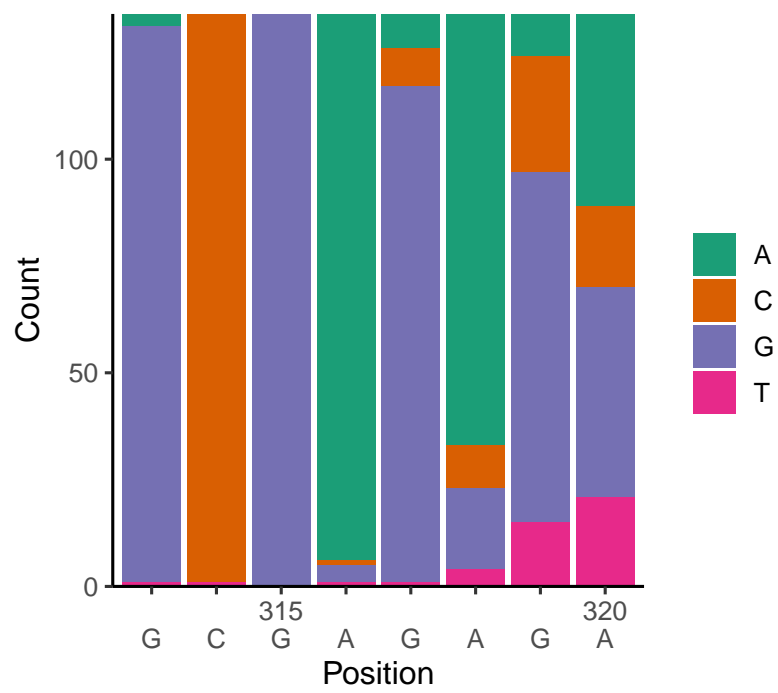
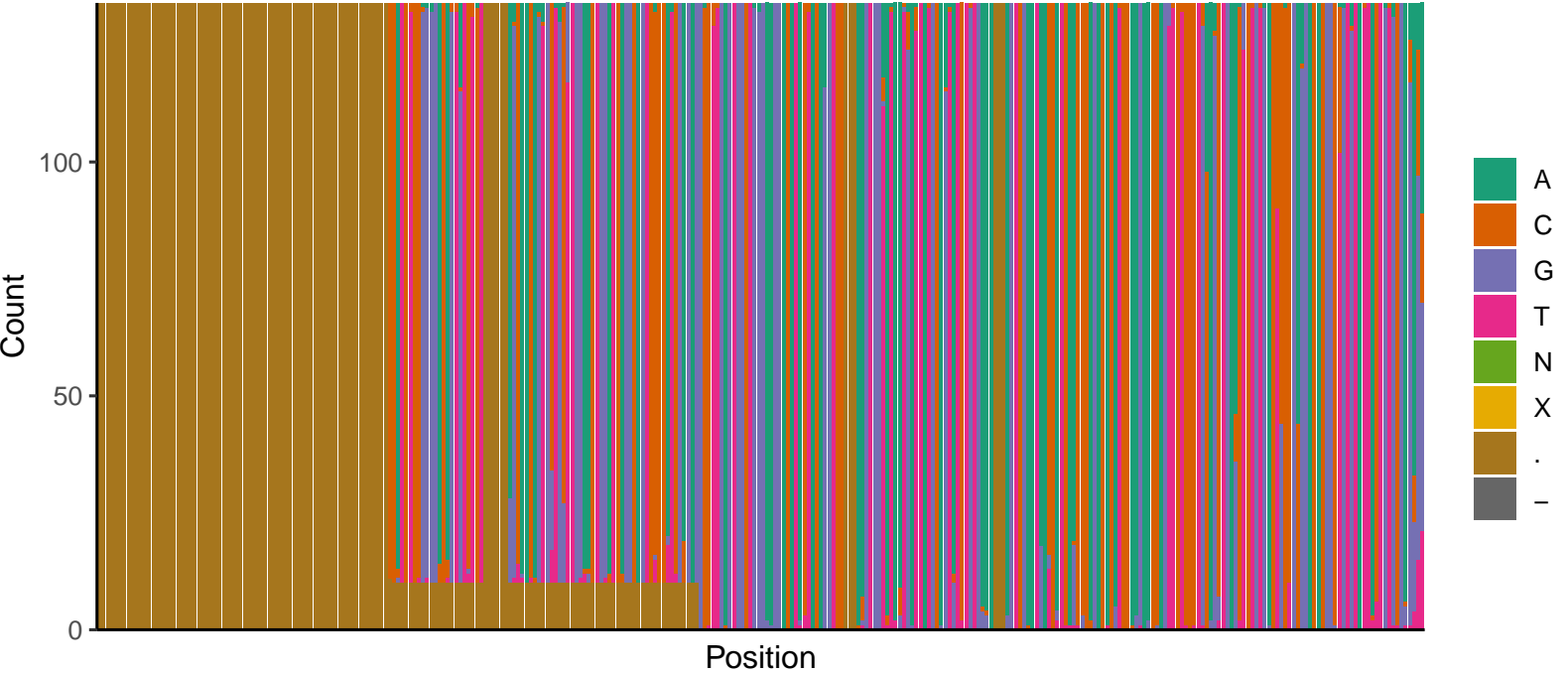


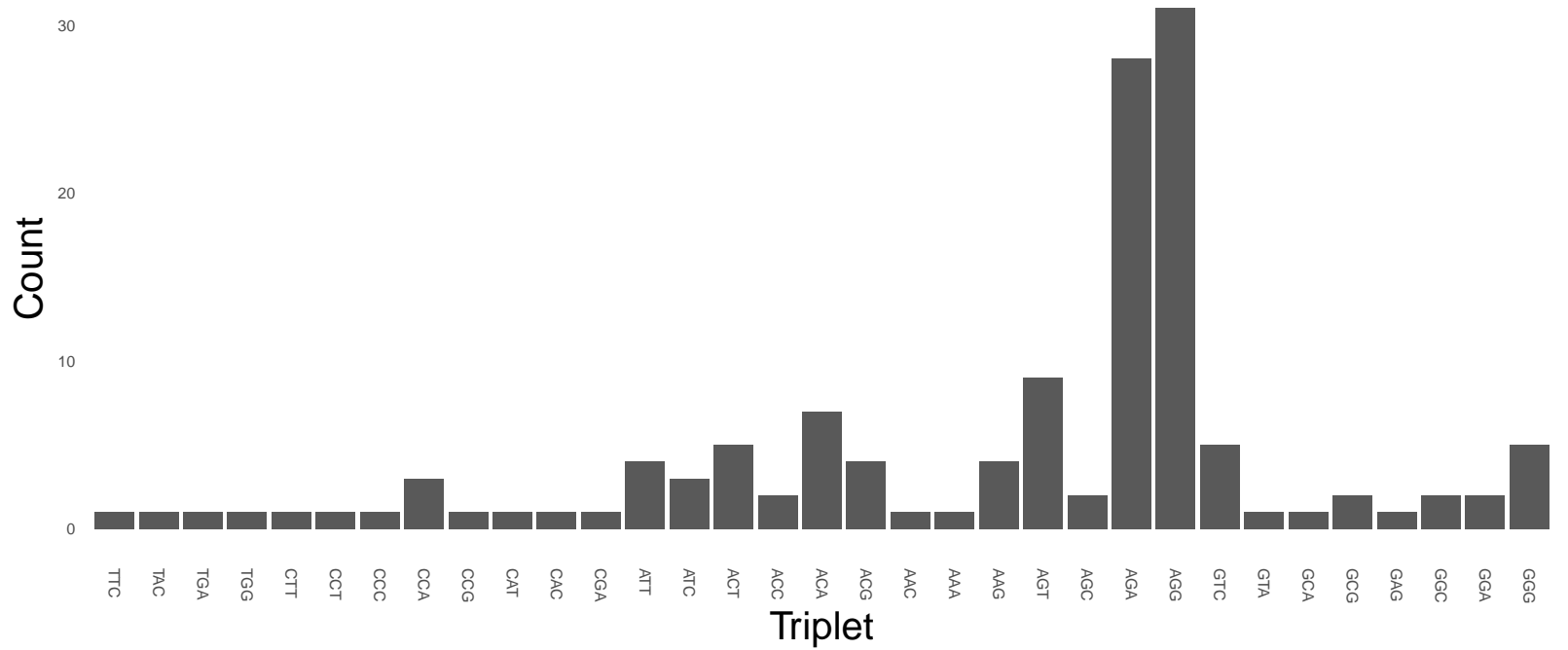
Gene IGHV6-1*01_02_A315G



Gene IGHV6-1*01_02_A315G

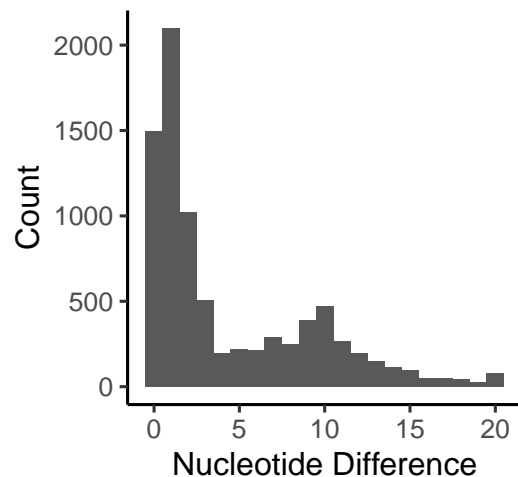


IGHV6-1*01_02_A315G- Final 3 nucleotides as a triplet



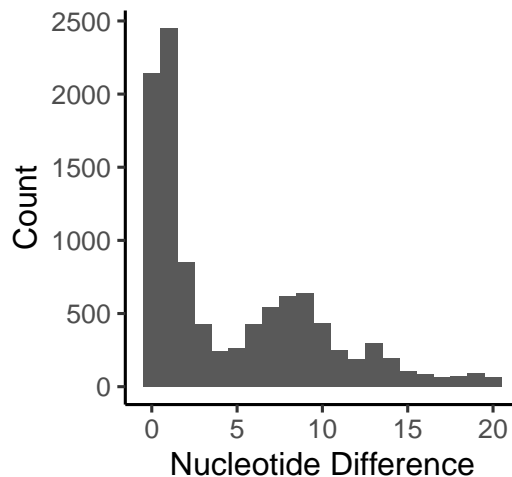
IGHV1-2*02

8877 sequences assigned
1498 (16.9%) exact matches, in which:
1276 unique CDR3
7 unique J



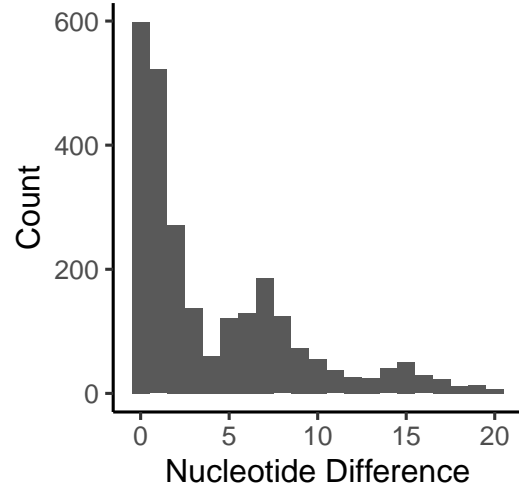
IGHV1-18*01

11094 sequences assigned
2141 (19.3%) exact matches, in which:
1800 unique CDR3
7 unique J



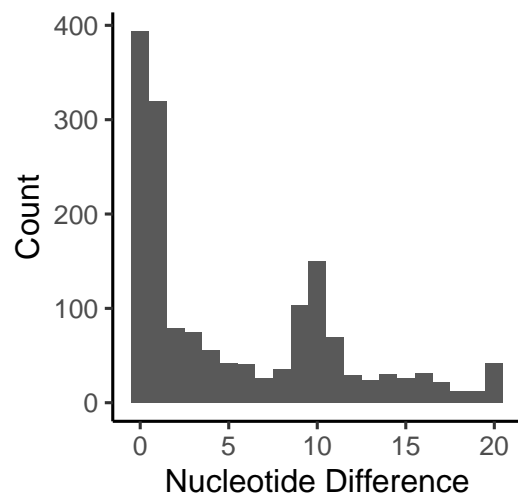
IGHV1-46*01

2567 sequences assigned
599 (23.3%) exact matches, in which:
530 unique CDR3
7 unique J



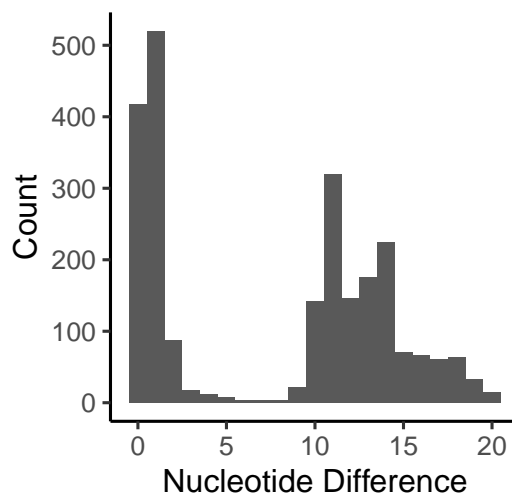
IGHV1-3*01_05

1795 sequences assigned
394 (21.9%) exact matches, in which:
333 unique CDR3
7 unique J



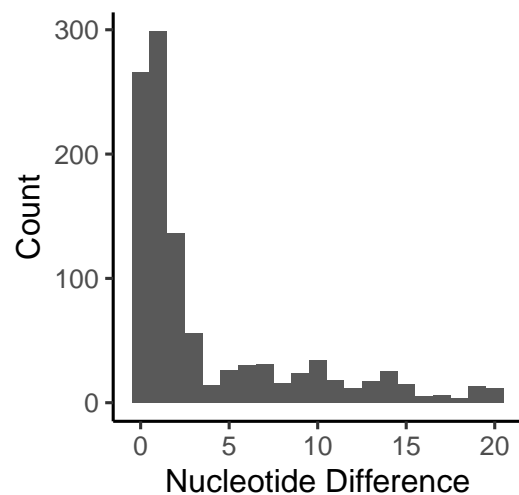
IGHV1-24*01

2500 sequences assigned
418 (16.7%) exact matches, in which:
316 unique CDR3
7 unique J



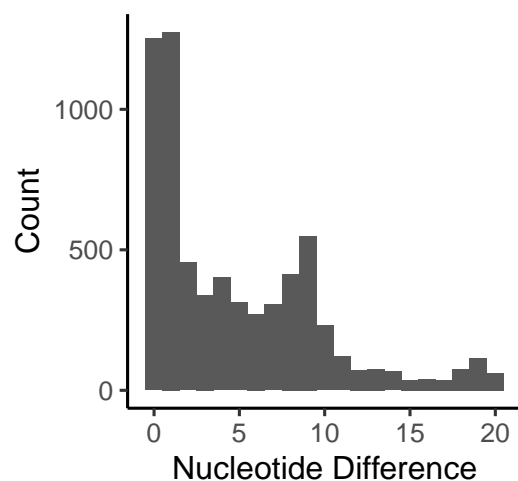
IGHV1-46*03

1092 sequences assigned
266 (24.4%) exact matches, in which:
210 unique CDR3
7 unique J



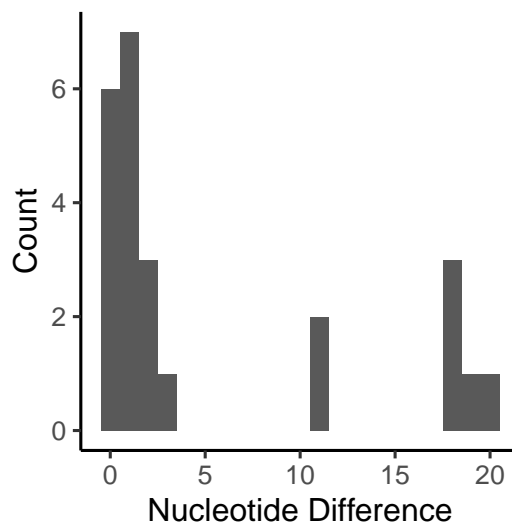
IGHV1-8*01

6677 sequences assigned
1252 (18.8%) exact matches, in which:
1080 unique CDR3
7 unique J



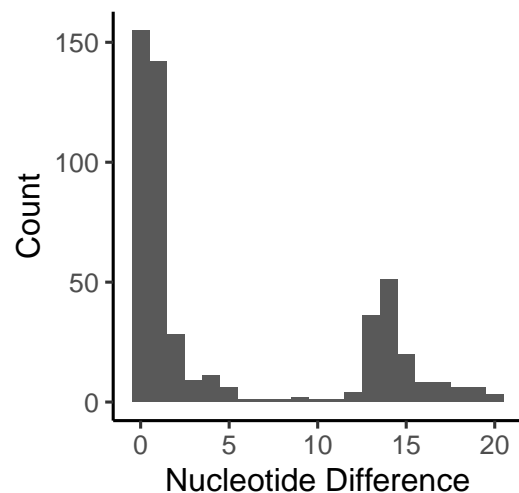
IGHV1-45*02

24 sequences assigned
6 (25%) exact matches, in which:
6 unique CDR3
5 unique J



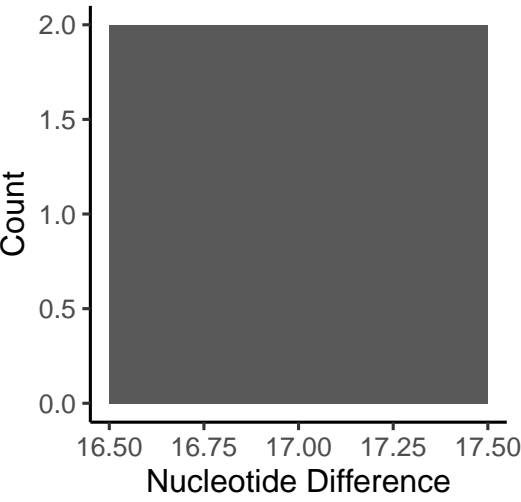
IGHV1-58*02

516 sequences assigned
155 (30%) exact matches, in which:
127 unique CDR3
6 unique J



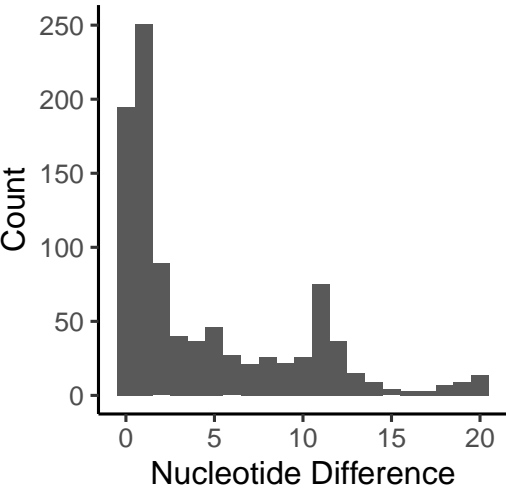
IGHV1-69-2*01

3 sequences assigned
No exact matches.



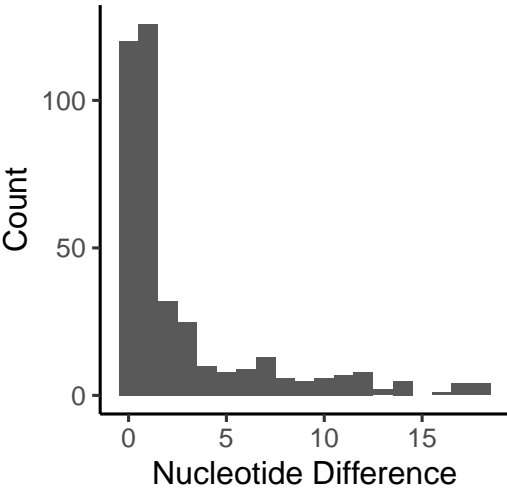
IGHV2-5*02

1028 sequences assigned
195 (19%) exact matches, in which:
165 unique CDR3
7 unique J



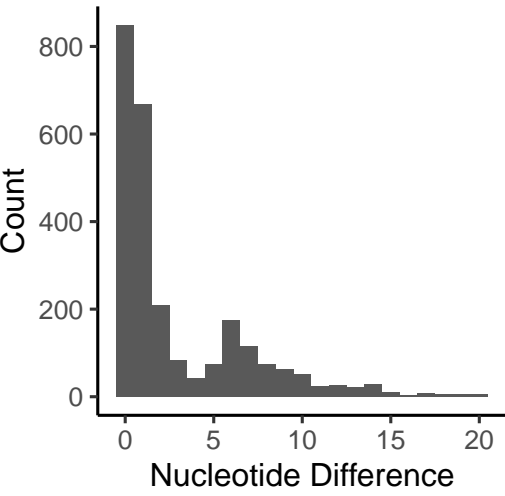
IGHV2-70*11_15

393 sequences assigned
120 (30.5%) exact matches, in which:
95 unique CDR3
5 unique J



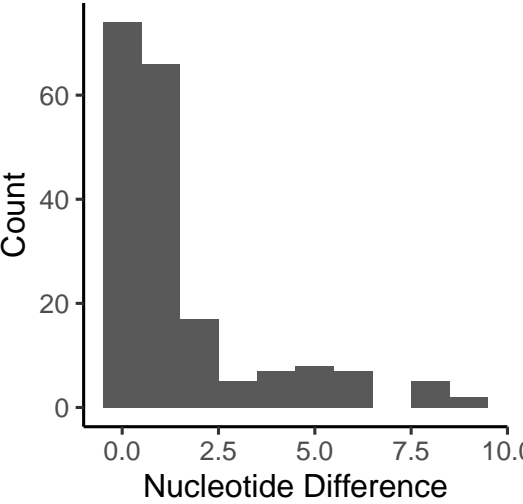
IGHV1-69*04_09

2872 sequences assigned
849 (29.6%) exact matches, in which:
771 unique CDR3
7 unique J



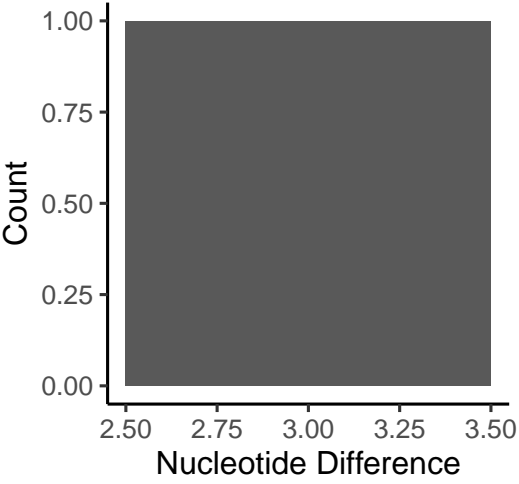
IGHV2-26*01

204 sequences assigned
74 (36.3%) exact matches, in which:
65 unique CDR3
6 unique J



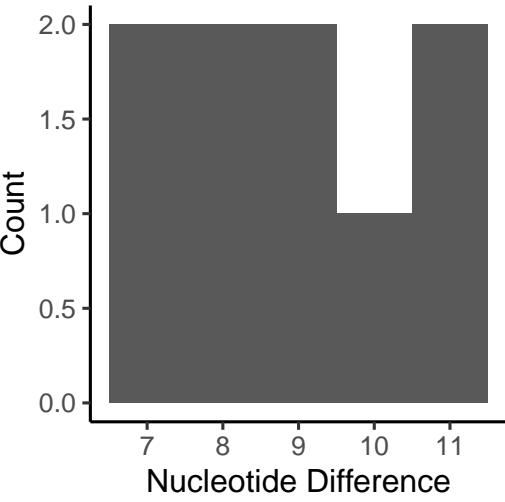
IGHV2-70D*14

1 sequences assigned
No exact matches.



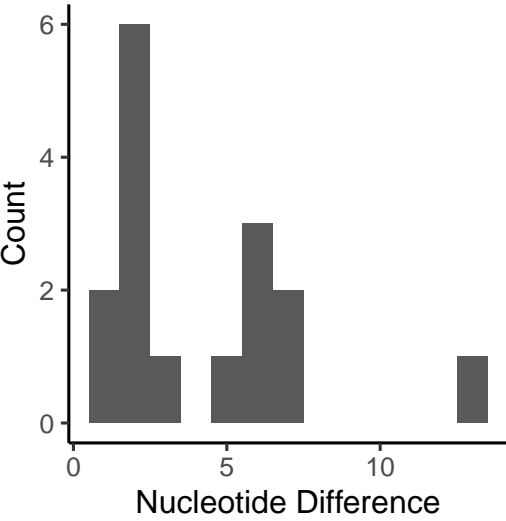
IGHV1-NL1*01

9 sequences assigned
No exact matches.



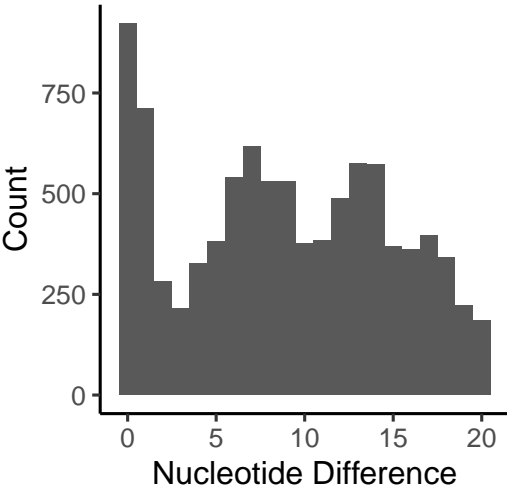
IGHV2-70*12

16 sequences assigned
No exact matches.



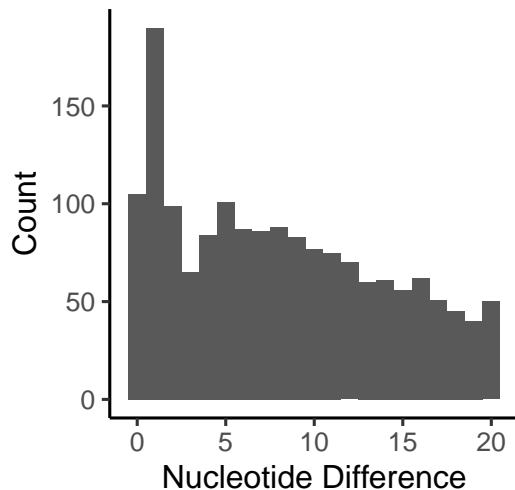
IGHV3-7*01

10400 sequences assigned
923 (8.9%) exact matches, in which:
654 unique CDR3
7 unique J



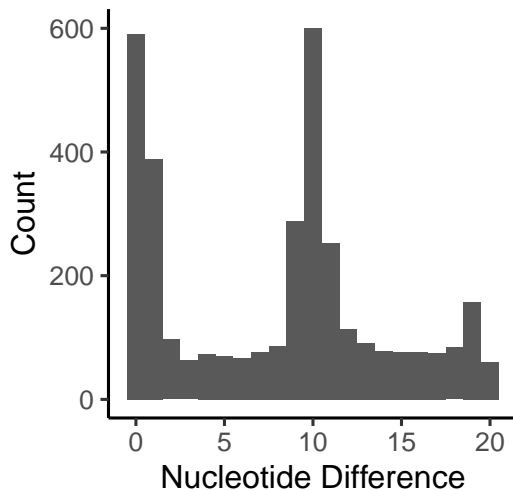
IGHV3-7*03

1924 sequences assigned
105 (5.5%) exact matches, in which:
80 unique CDR3
6 unique J



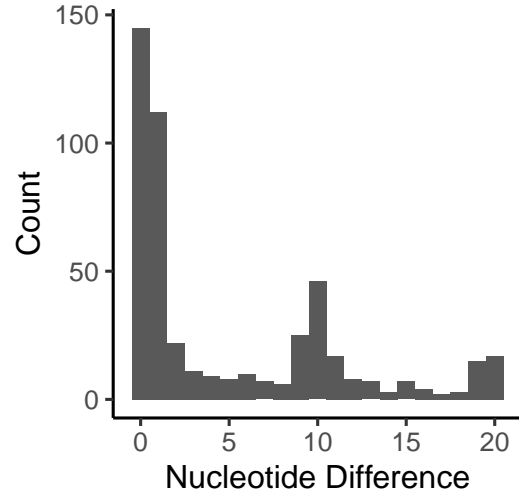
IGHV3-11*01

4605 sequences assigned
591 (12.8%) exact matches, in which:
412 unique CDR3
6 unique J



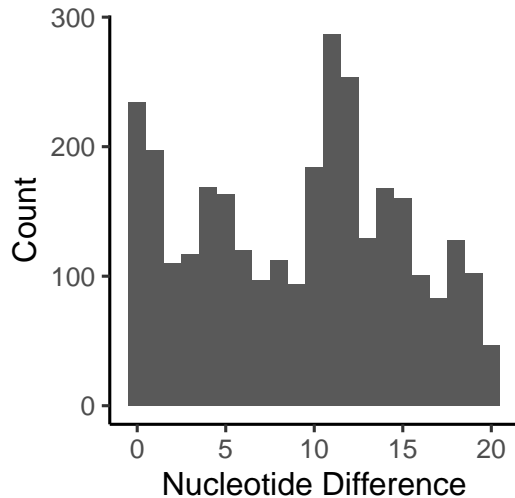
IGHV3-13*01

554 sequences assigned
145 (26.2%) exact matches, in which:
83 unique CDR3
5 unique J



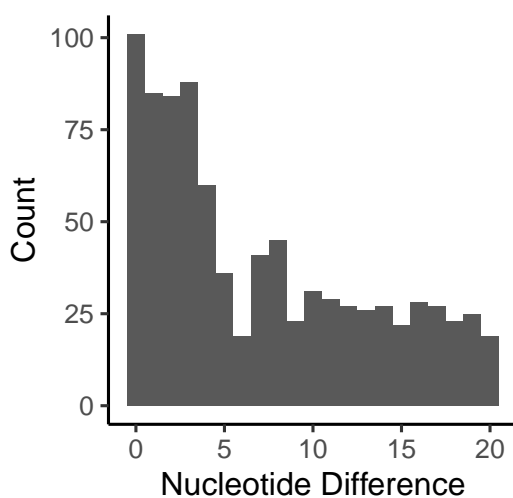
IGHV3-7*04

3350 sequences assigned
234 (7%) exact matches, in which:
146 unique CDR3
7 unique J



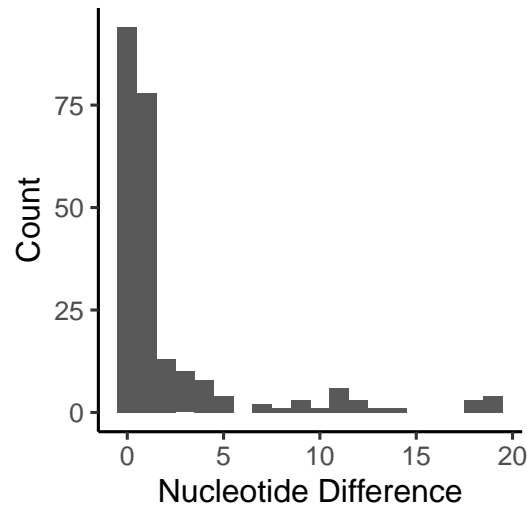
IGHV3-11*04

970 sequences assigned
101 (10.4%) exact matches, in which:
99 unique CDR3
6 unique J



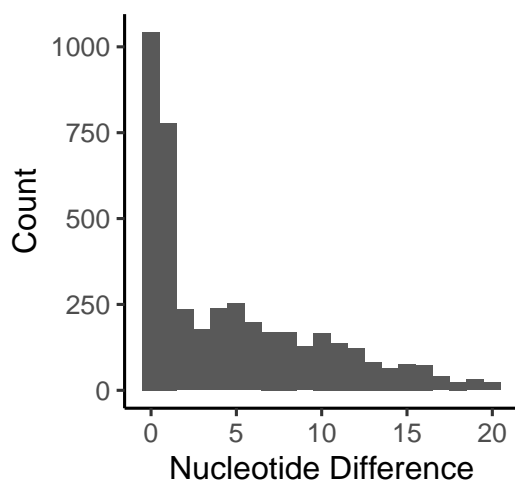
IGHV3-13*04

263 sequences assigned
94 (35.7%) exact matches, in which:
52 unique CDR3
6 unique J



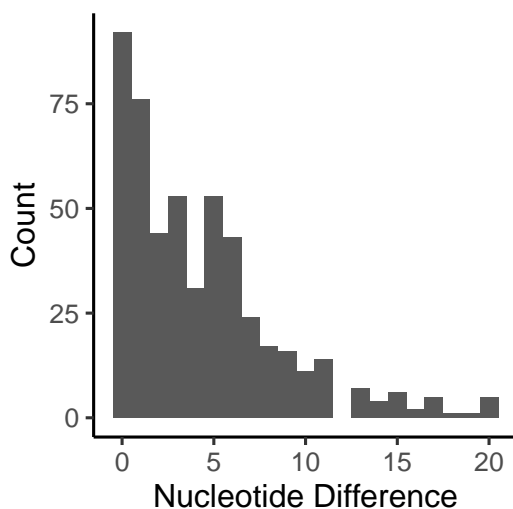
IGHV3-9*01

4637 sequences assigned
1043 (22.5%) exact matches, in which:
638 unique CDR3
7 unique J



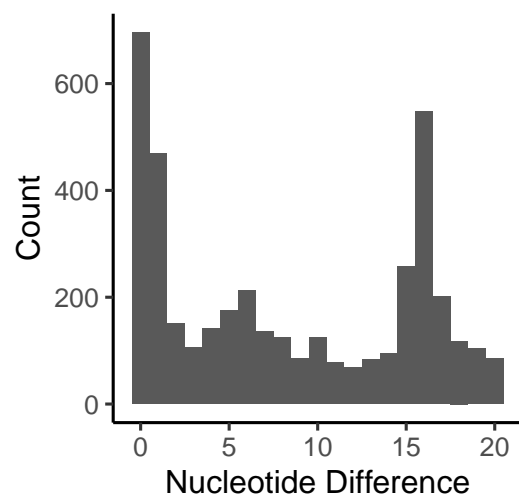
IGHV3-11*06

562 sequences assigned
92 (16.4%) exact matches, in which:
87 unique CDR3
7 unique J



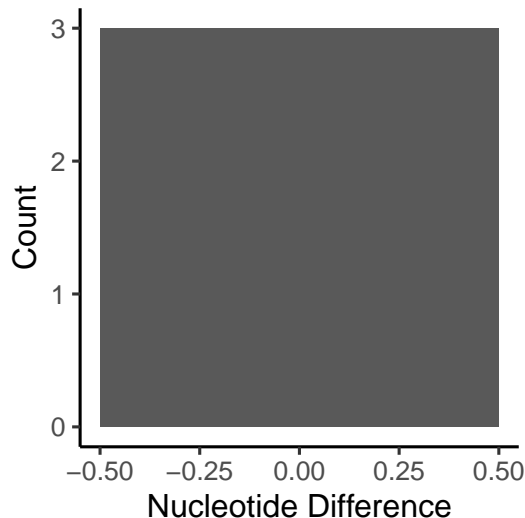
IGHV3-15*01_02

4601 sequences assigned
696 (15.1%) exact matches, in which:
439 unique CDR3
7 unique J



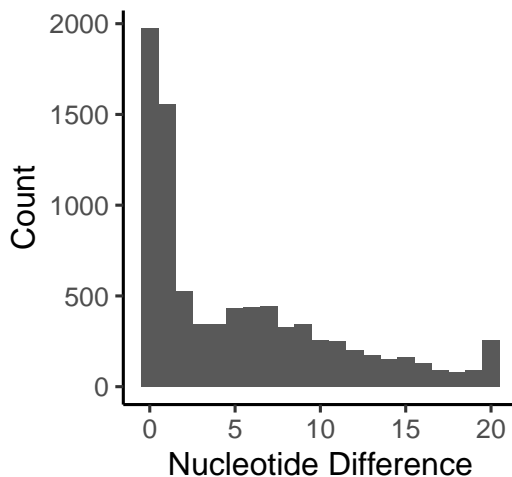
IGHV3-19*01

3 sequences assigned
3 (100%) exact matches, in which:
3 unique CDR3
2 unique J



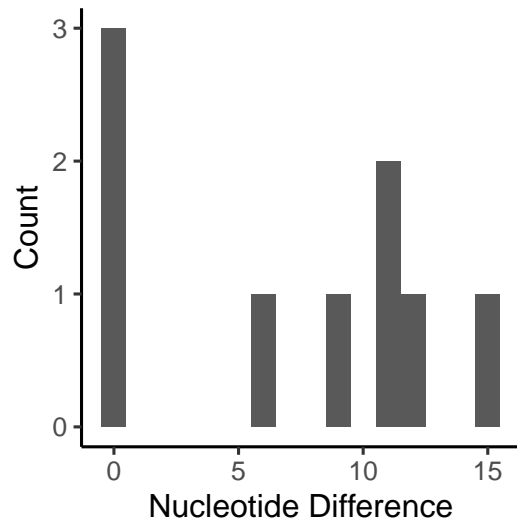
IGHV3-21*01_02

10027 sequences assigned
1974 (19.7%) exact matches, in which:
1269 unique CDR3
7 unique J



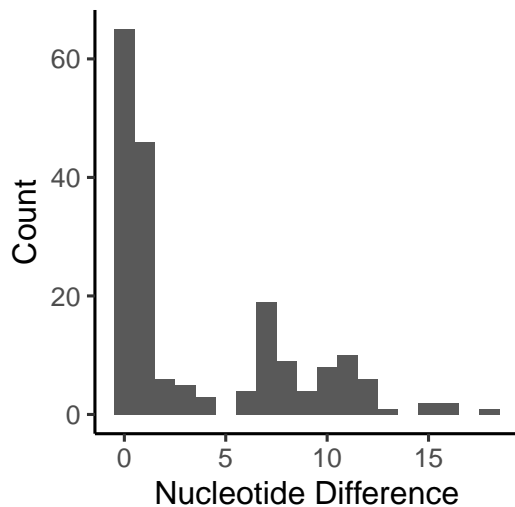
IGHV3-30-3*01

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



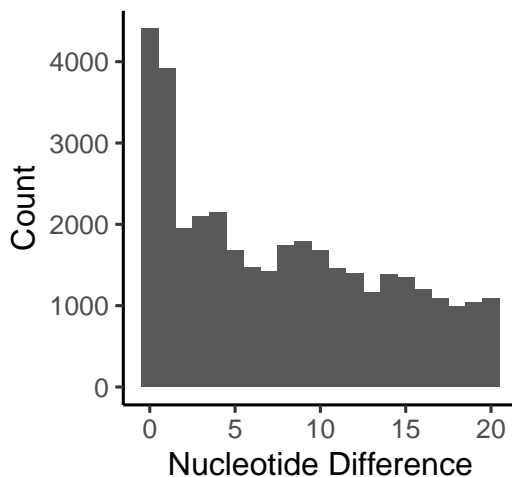
IGHV3-20*01_02

207 sequences assigned
65 (31.4%) exact matches, in which:
36 unique CDR3
5 unique J



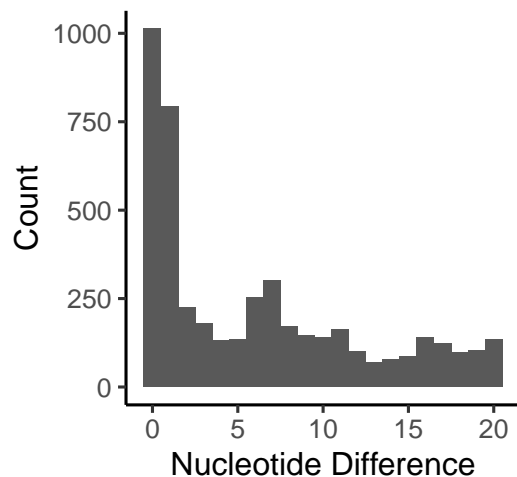
IGHV3-23*01_04

48782 sequences assigned
4405 (9%) exact matches, in which:
2651 unique CDR3
7 unique J



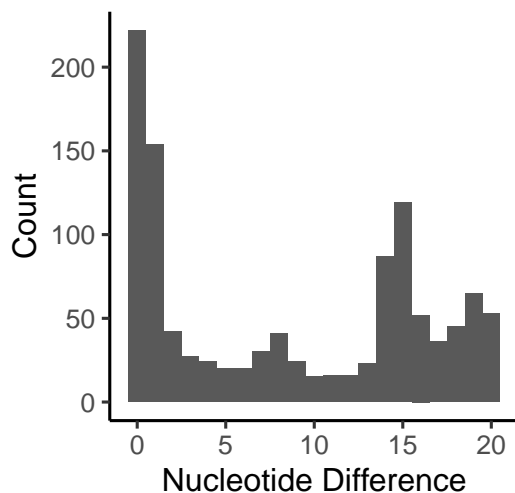
IGHV3-30*02

5034 sequences assigned
1013 (20.1%) exact matches, in which:
621 unique CDR3
7 unique J



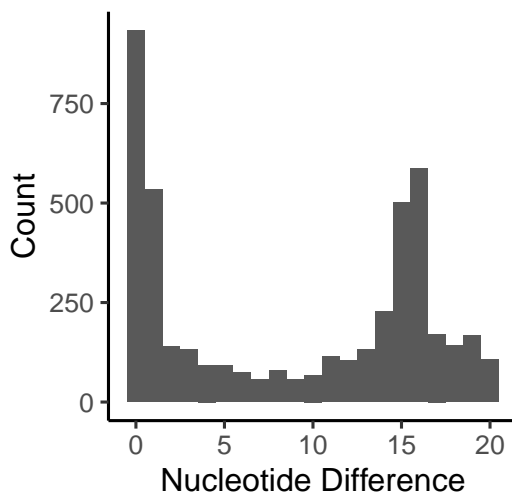
IGHV3-20*03_04

1491 sequences assigned
222 (14.9%) exact matches, in which:
146 unique CDR3
7 unique J



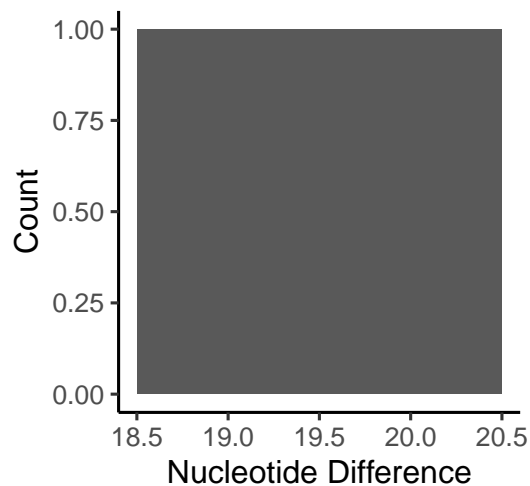
IGHV3-30*01

5050 sequences assigned
934 (18.5%) exact matches, in which:
626 unique CDR3
7 unique J



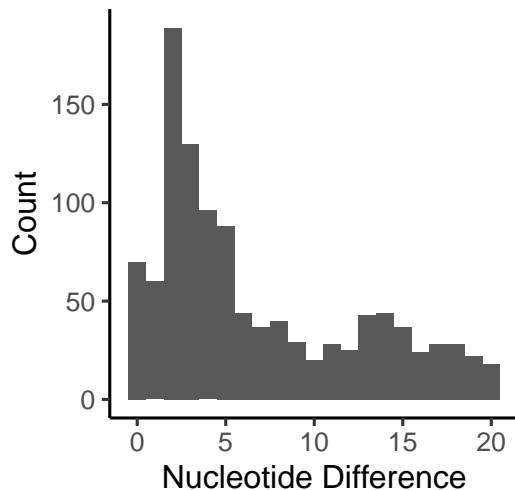
IGHV3-30-3*02

11 sequences assigned
No exact matches.



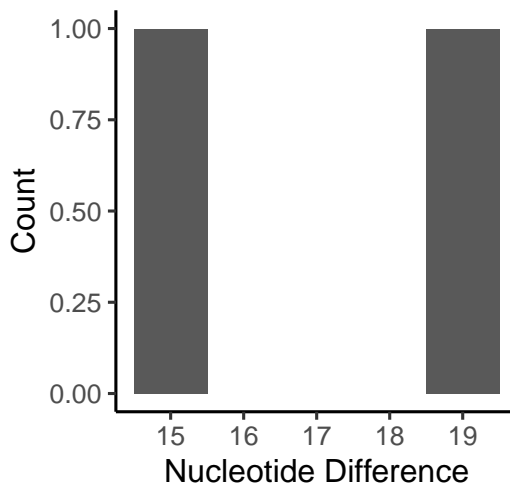
IGHV3–30*07

1166 sequences assigned
70 (6%) exact matches, in which:
69 unique CDR3
6 unique J



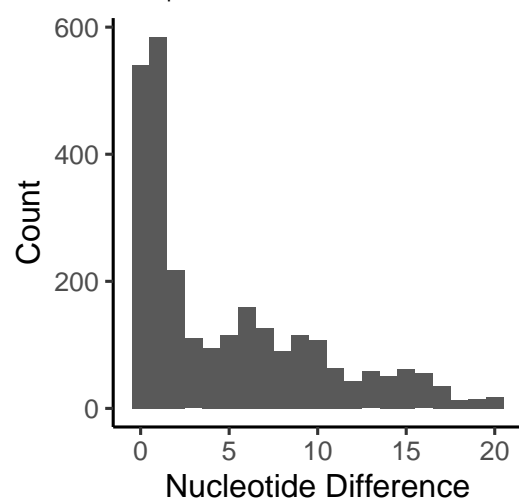
IGHV3–35*01

2 sequences assigned
No exact matches.



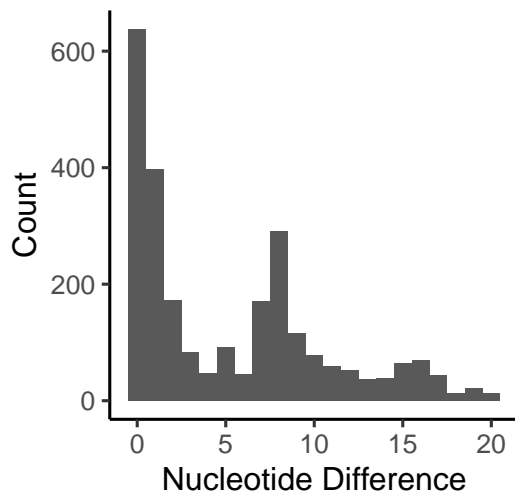
IGHV3–48*02

2792 sequences assigned
541 (19.4%) exact matches, in which:
339 unique CDR3
7 unique J



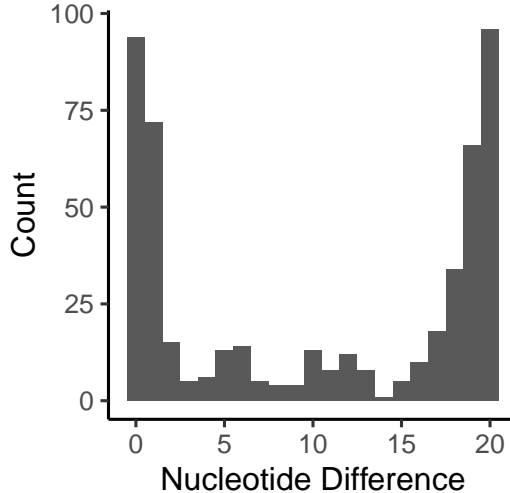
IGHV3–30*18

2898 sequences assigned
638 (22%) exact matches, in which:
444 unique CDR3
7 unique J



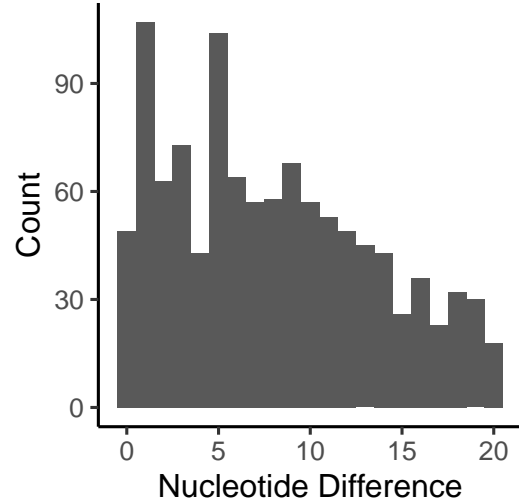
IGHV3–43*01

1115 sequences assigned
94 (8.4%) exact matches, in which:
54 unique CDR3
6 unique J



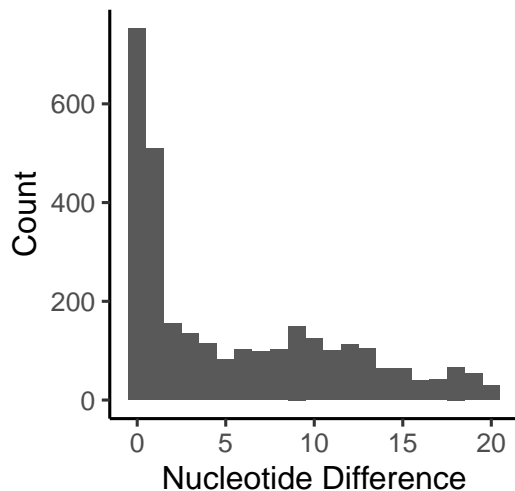
IGHV3–48*04

1234 sequences assigned
49 (4%) exact matches, in which:
49 unique CDR3
5 unique J



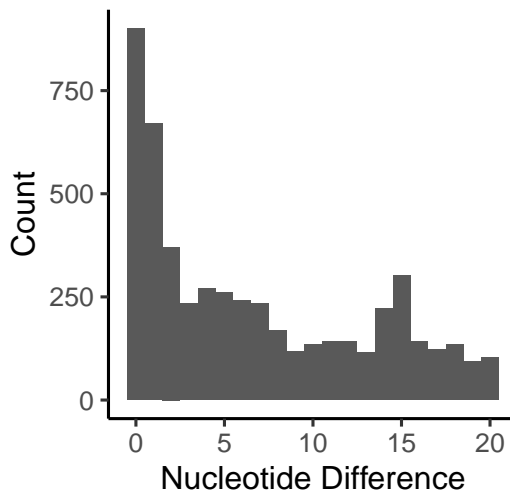
IGHV3–33*01

3521 sequences assigned
753 (21.4%) exact matches, in which:
530 unique CDR3
7 unique J



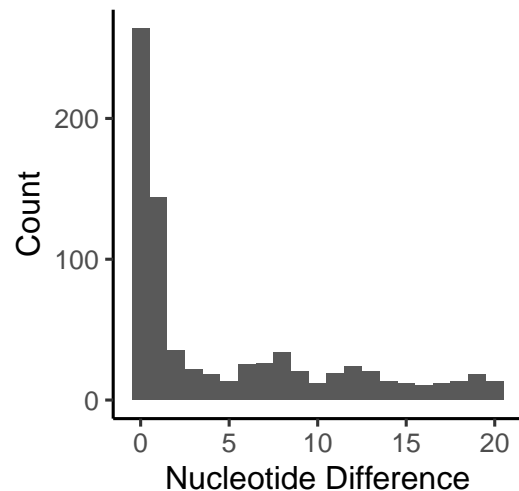
IGHV3–48*01

5816 sequences assigned
901 (15.5%) exact matches, in which:
610 unique CDR3
7 unique J



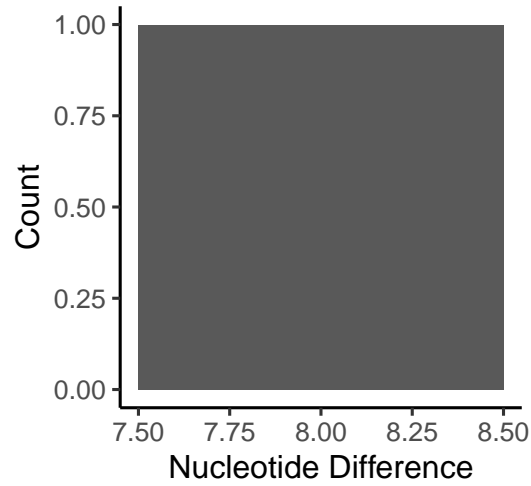
IGHV3–49*03_05

908 sequences assigned
264 (29.1%) exact matches, in which:
165 unique CDR3
7 unique J



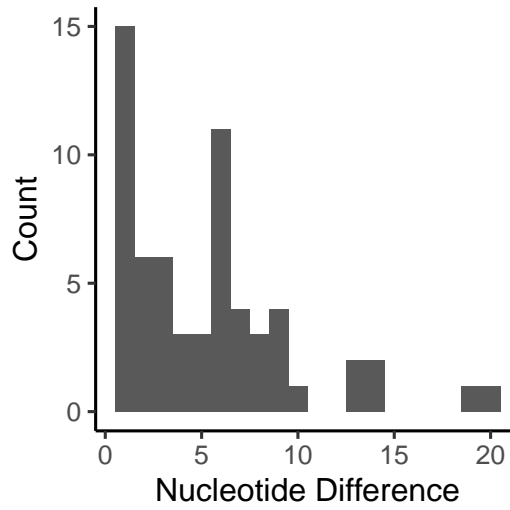
IGHV3-52*02

1 sequences assigned
No exact matches.



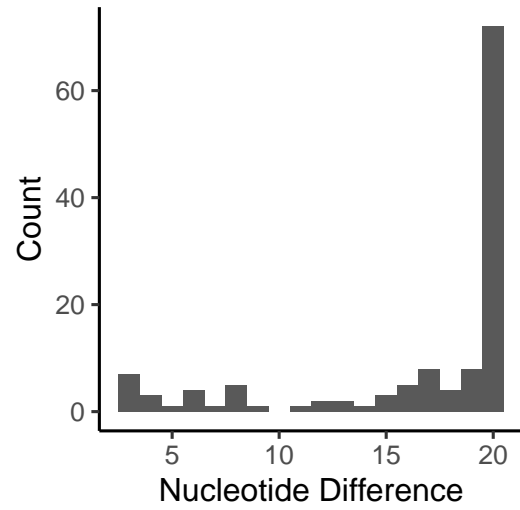
IGHV3-64*04

66 sequences assigned
No exact matches.



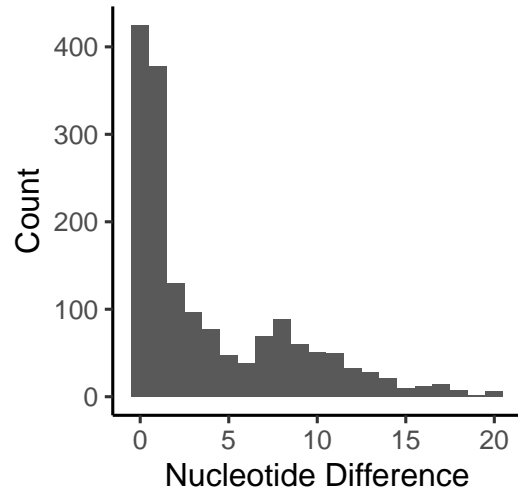
IGHV3-69-1*01

326 sequences assigned
No exact matches.



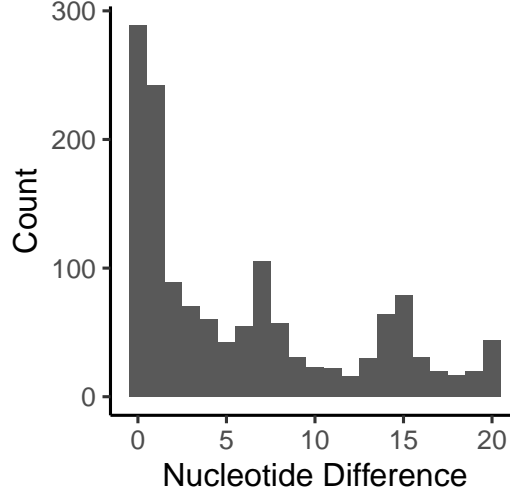
IGHV3-53*01_02

1732 sequences assigned
425 (24.5%) exact matches, in which:
276 unique CDR3
7 unique J



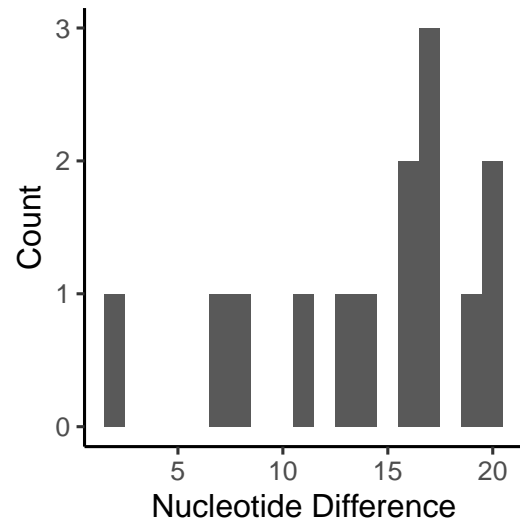
IGHV3-66*01

2004 sequences assigned
289 (14.4%) exact matches, in which:
201 unique CDR3
6 unique J



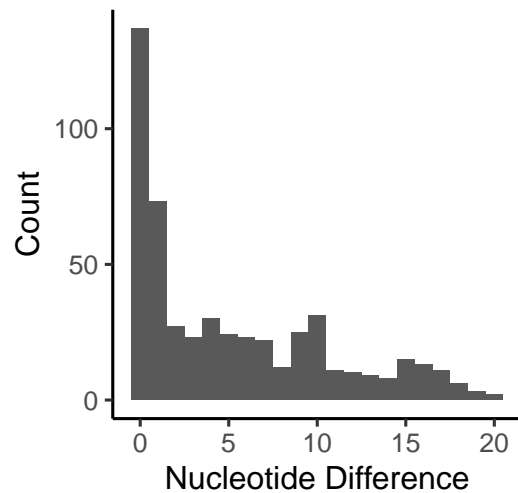
IGHV3-69-1*02

20 sequences assigned
No exact matches.



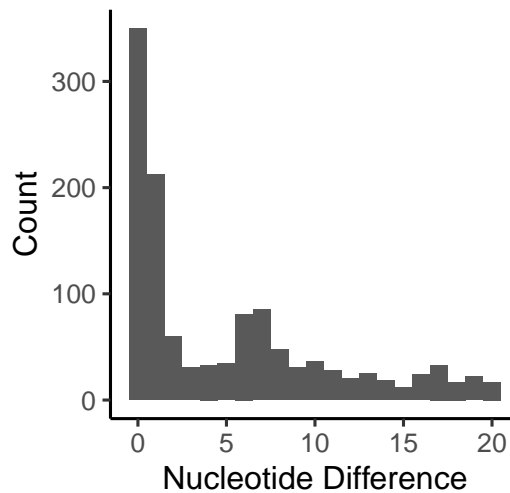
IGHV3-64*01

548 sequences assigned
137 (25%) exact matches, in which:
87 unique CDR3
5 unique J



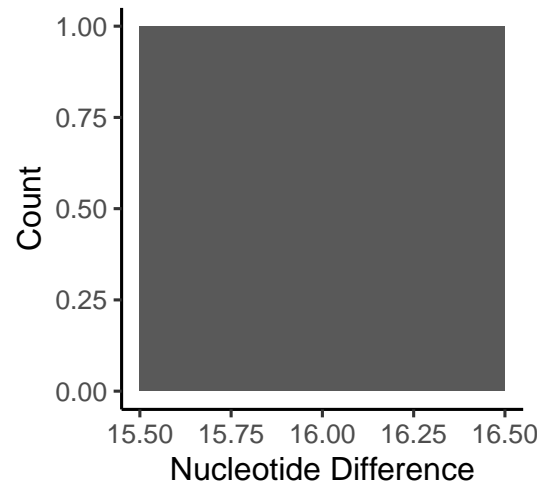
IGHV3-66*02

1434 sequences assigned
350 (24.4%) exact matches, in which:
228 unique CDR3
7 unique J



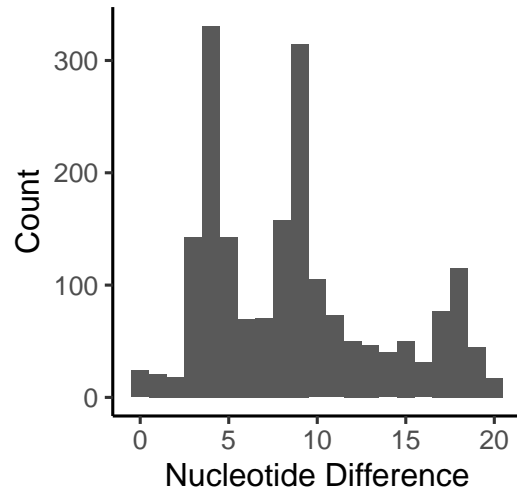
IGHV3-71*03

1 sequences assigned
No exact matches.



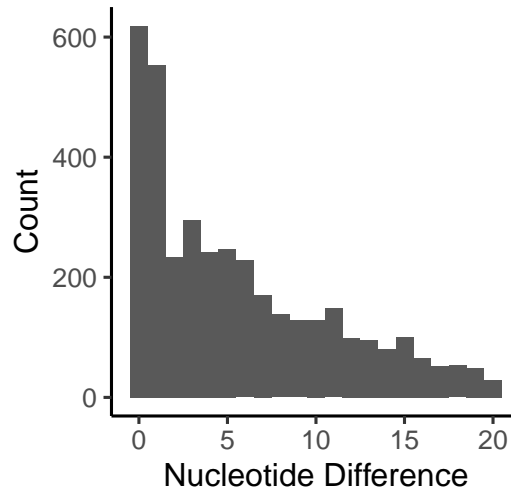
IGHV3-72*01

2003 sequences assigned
24 (1.2%) exact matches, in which:
16 unique CDR3
6 unique J



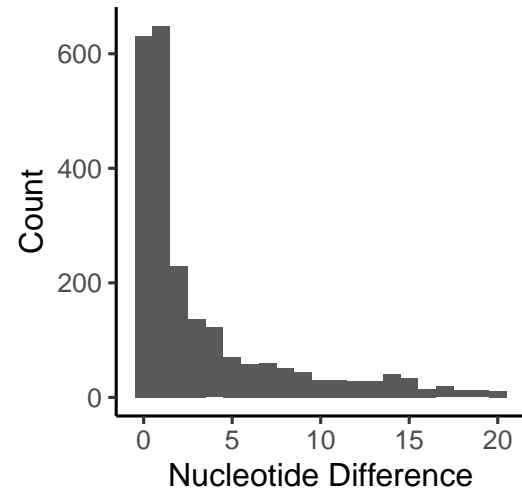
IGHV3-74*01_02

4192 sequences assigned
619 (14.8%) exact matches, in which:
418 unique CDR3
7 unique J



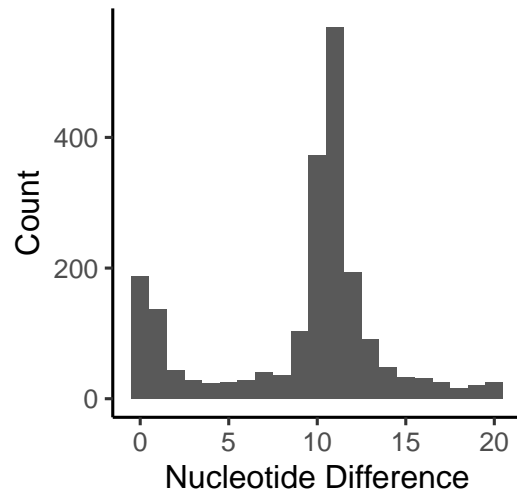
IGHV4-4*07

2614 sequences assigned
631 (24.1%) exact matches, in which:
547 unique CDR3
7 unique J



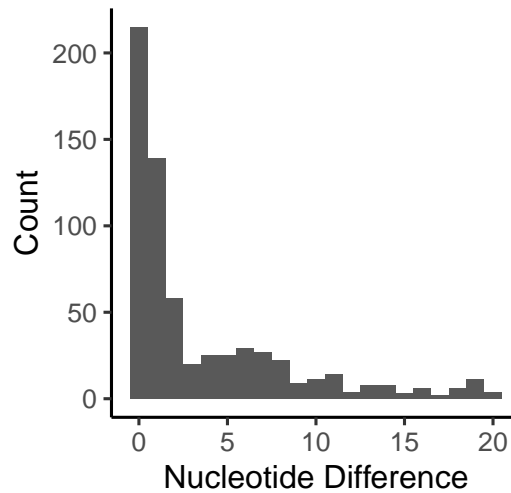
IGHV3-73*01_02

2134 sequences assigned
188 (8.8%) exact matches, in which:
118 unique CDR3
7 unique J



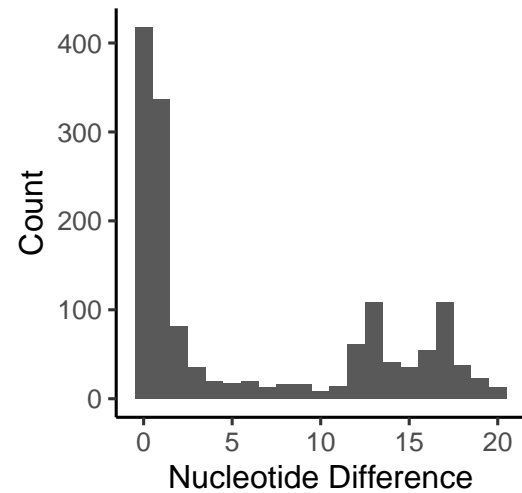
IGHV3-64D*06

850 sequences assigned
215 (25.3%) exact matches, in which:
127 unique CDR3
7 unique J



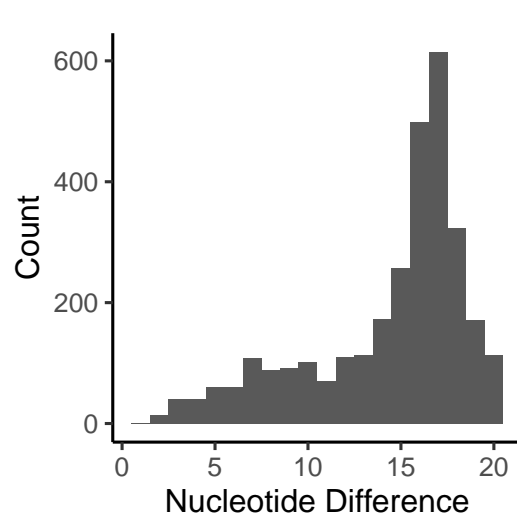
IGHV4-4*02_03

1803 sequences assigned
418 (23.2%) exact matches, in which:
357 unique CDR3
7 unique J



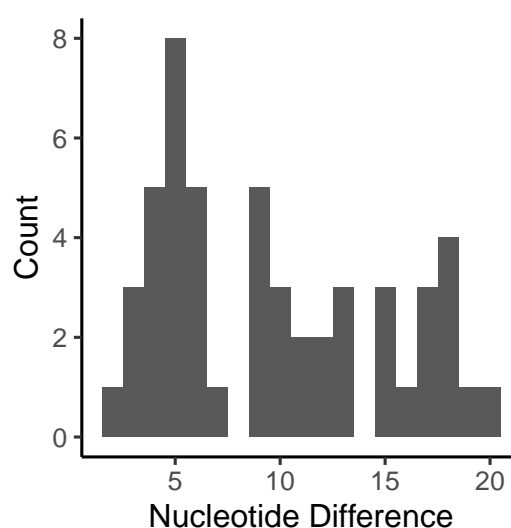
IGHV3-74*03

3787 sequences assigned
No exact matches.



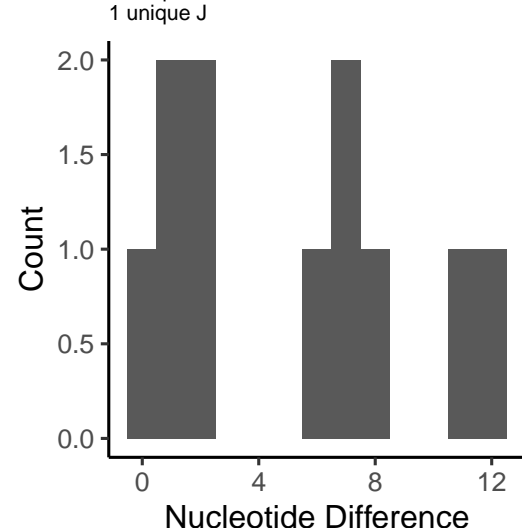
IGHV3-NL1*01

74 sequences assigned
No exact matches.



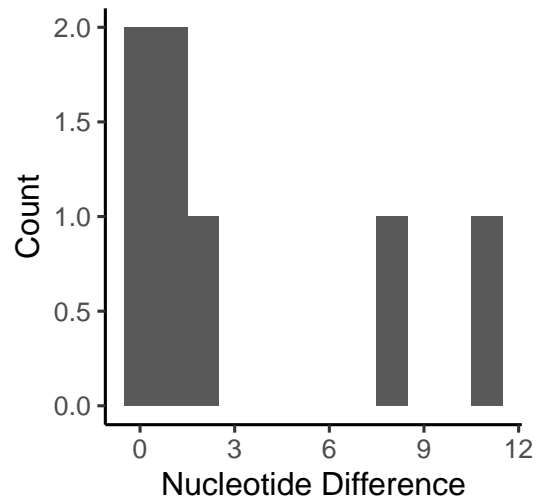
IGHV4-28*03

13 sequences assigned
1 (7.7%) exact matches, in which:
1 unique CDR3
1 unique J



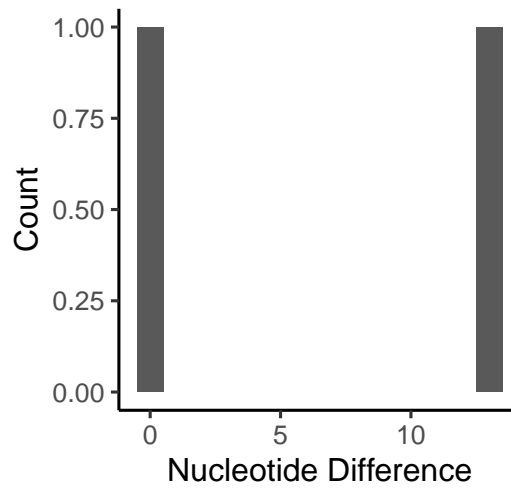
IGHV4-28*01_07

7 sequences assigned
2 (28.6%) exact matches, in which:
2 unique CDR3
2 unique J



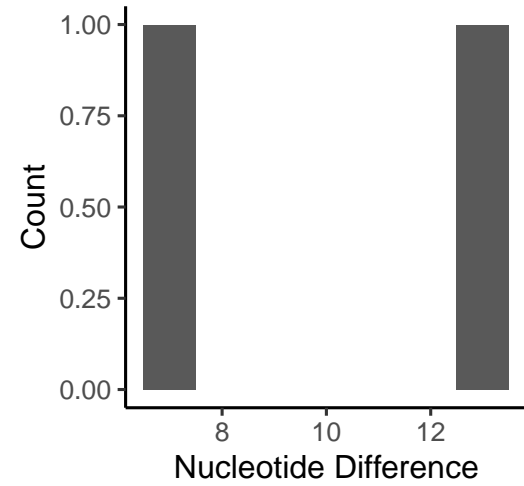
IGHV4-30-4*01

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



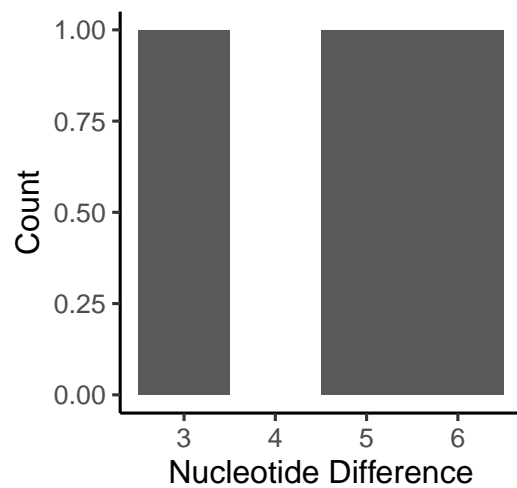
IGHV4-30-4*08

3 sequences assigned
No exact matches.



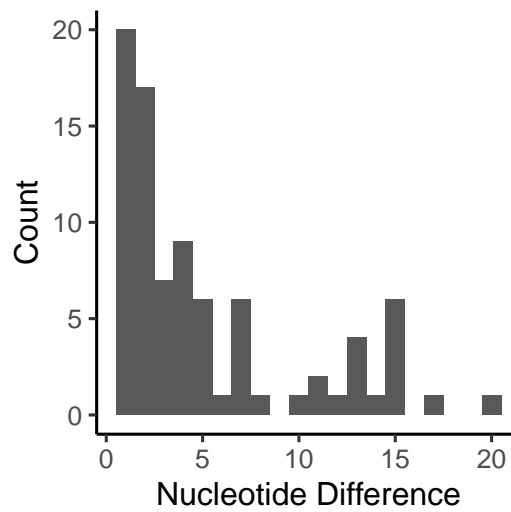
IGHV4-28*02_05

3 sequences assigned
No exact matches.



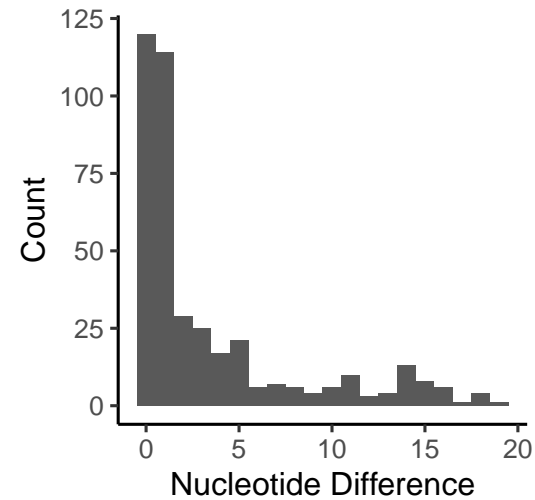
IGHV4-30-2*03

124 sequences assigned
No exact matches.



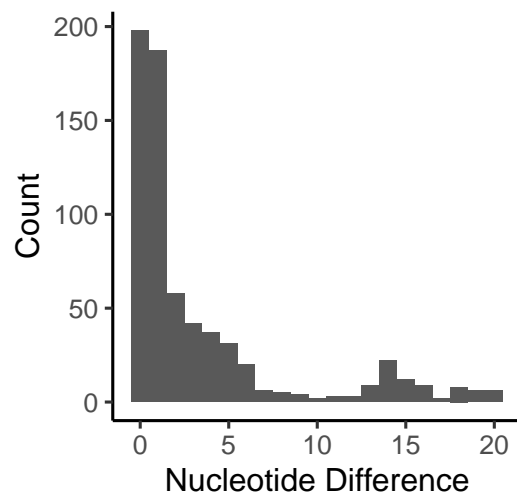
IGHV4-31*01

426 sequences assigned
120 (28.2%) exact matches, in which:
102 unique CDR3
7 unique J



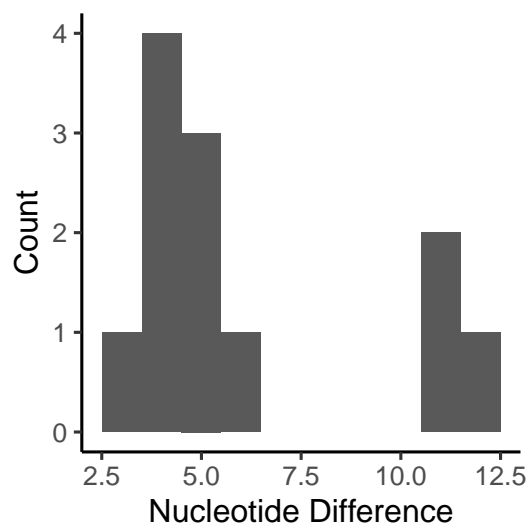
IGHV4-30-2*01

837 sequences assigned
198 (23.7%) exact matches, in which:
141 unique CDR3
5 unique J



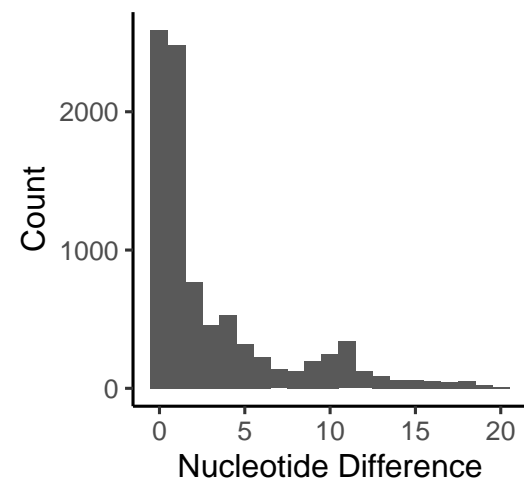
IGHV4-30-4*07

12 sequences assigned
No exact matches.



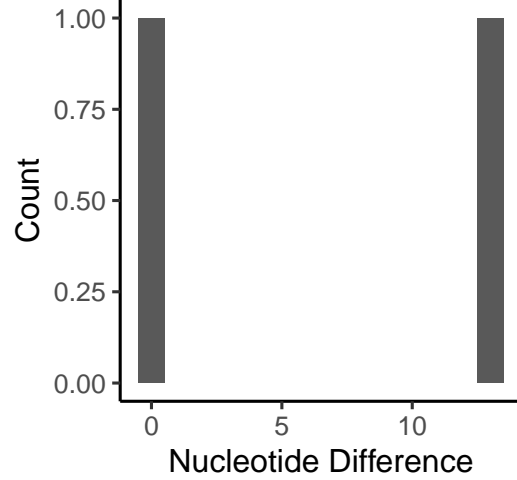
IGHV4-34*01_02

9560 sequences assigned
2591 (27.1%) exact matches, in which:
1951 unique CDR3
7 unique J



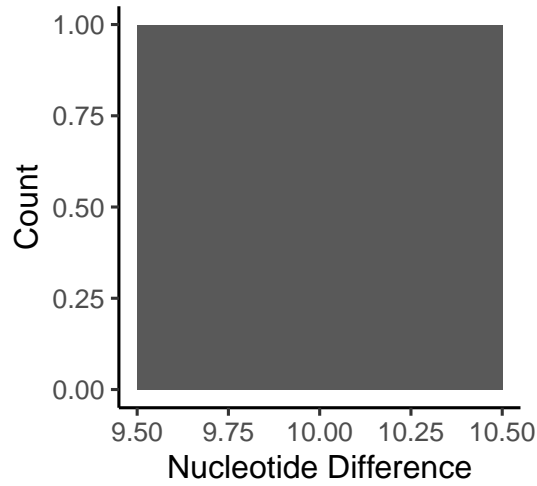
IGHV4-38-2*01

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



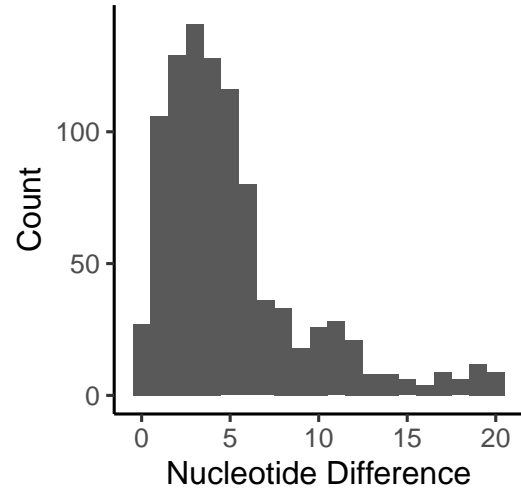
IGHV4-55*03

1 sequences assigned
No exact matches.



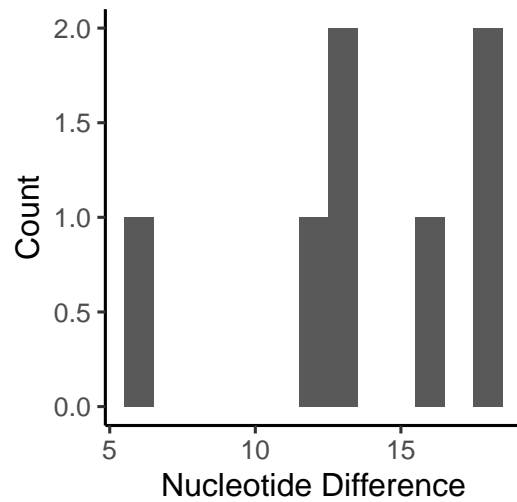
IGHV4-61*01

988 sequences assigned
27 (2.7%) exact matches, in which:
23 unique CDR3
5 unique J



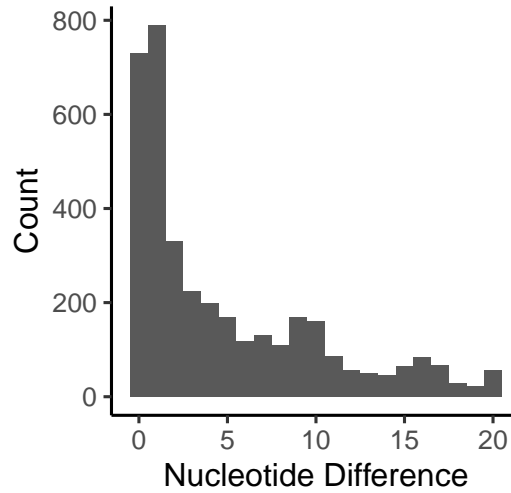
IGHV4-38-2*02

9 sequences assigned
No exact matches.



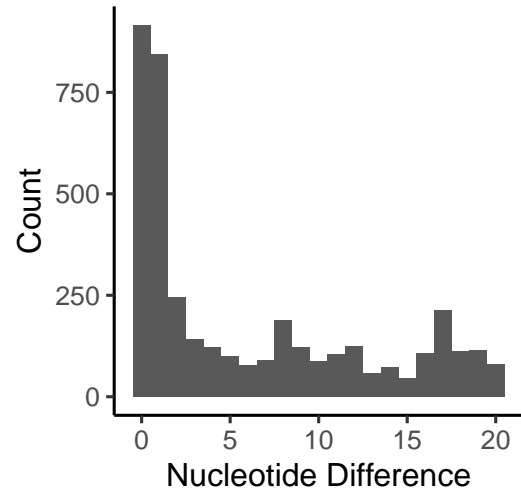
IGHV4-59*08

4708 sequences assigned
731 (15.5%) exact matches, in which:
620 unique CDR3
7 unique J



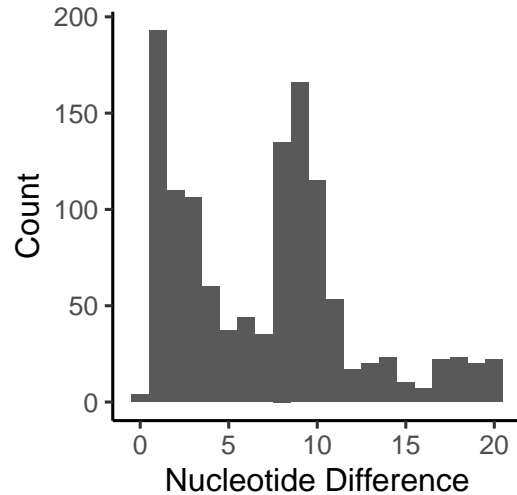
IGHV4-61*02

4735 sequences assigned
916 (19.3%) exact matches, in which:
801 unique CDR3
7 unique J



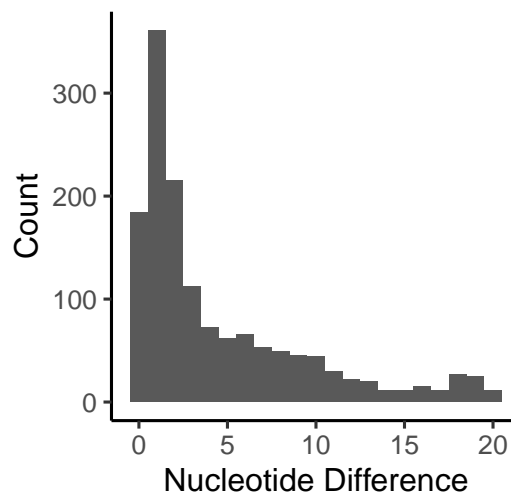
IGHV4-39*07

1354 sequences assigned
4 (0.3%) exact matches, in which:
4 unique CDR3
2 unique J



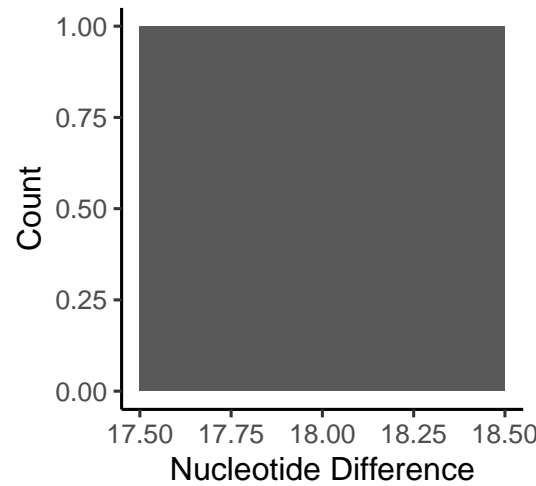
IGHV4-59*12

2224 sequences assigned
184 (8.3%) exact matches, in which:
177 unique CDR3
7 unique J



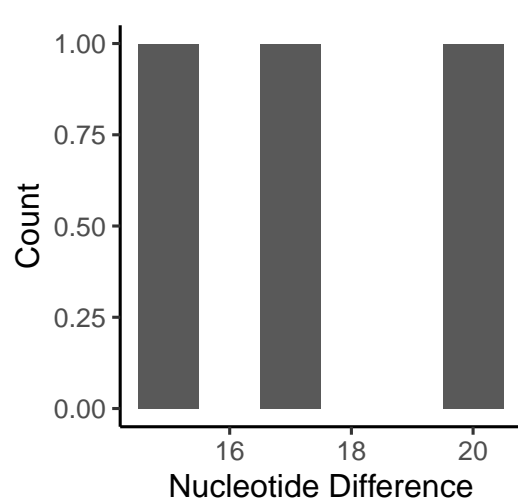
IGHV1/OR15-2*01

1 sequences assigned
No exact matches.



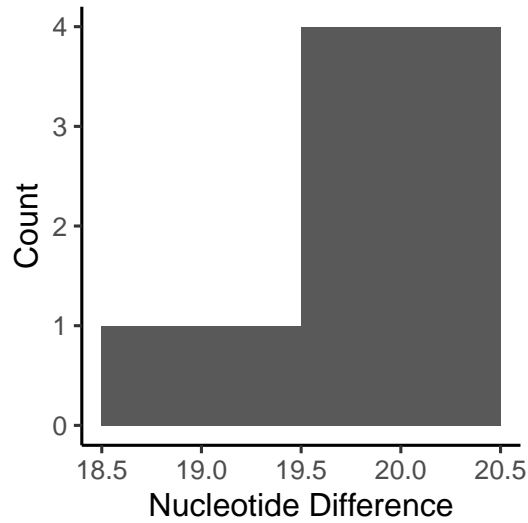
IGHV1/OR15-2*02_03

3 sequences assigned
No exact matches.



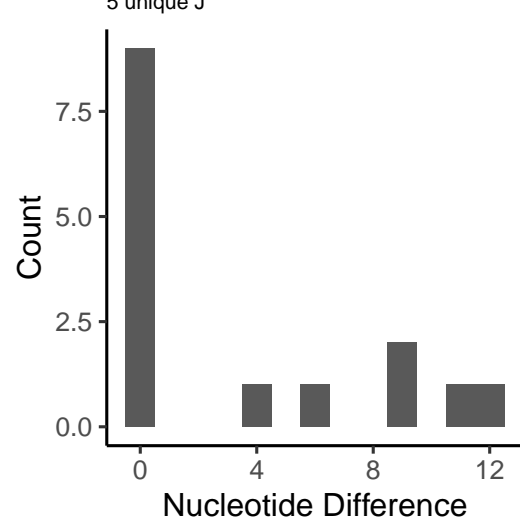
IGHV4/OR15-8*02

11 sequences assigned
No exact matches.



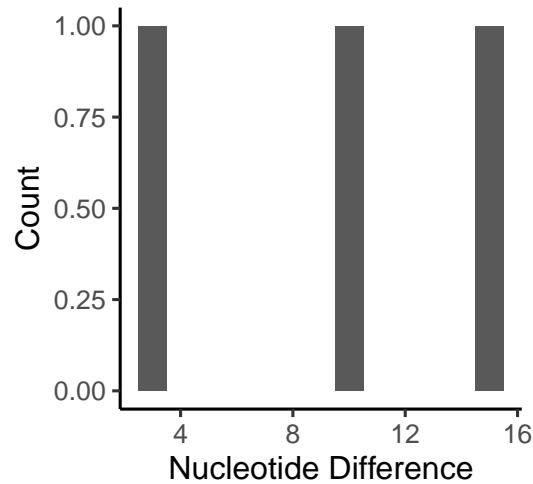
IGHV5-51*06

16 sequences assigned
9 (56.2%) exact matches, in which:
9 unique CDR3
5 unique J



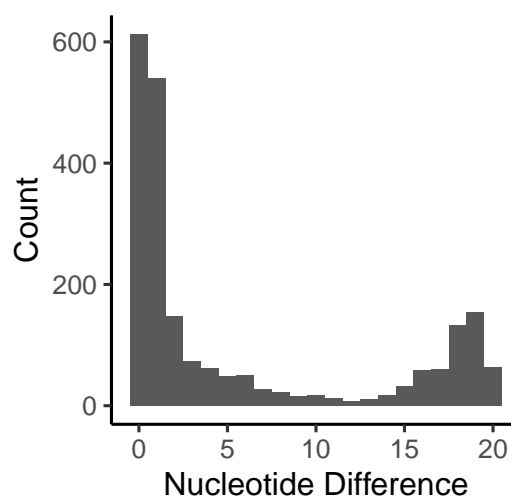
IGHV1/OR15-3*02

4 sequences assigned
No exact matches.



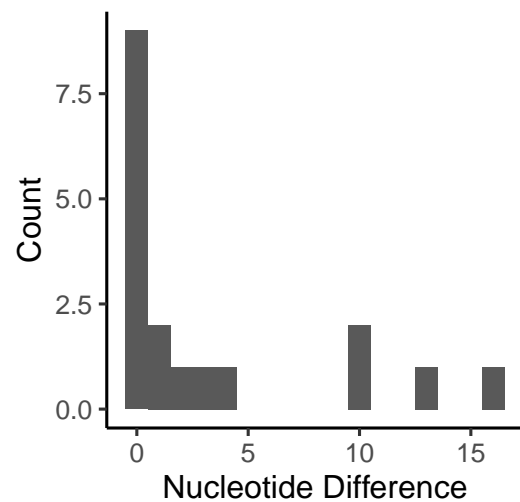
IGHV5-10-1*01_03

2442 sequences assigned
613 (25.1%) exact matches, in which:
406 unique CDR3
7 unique J



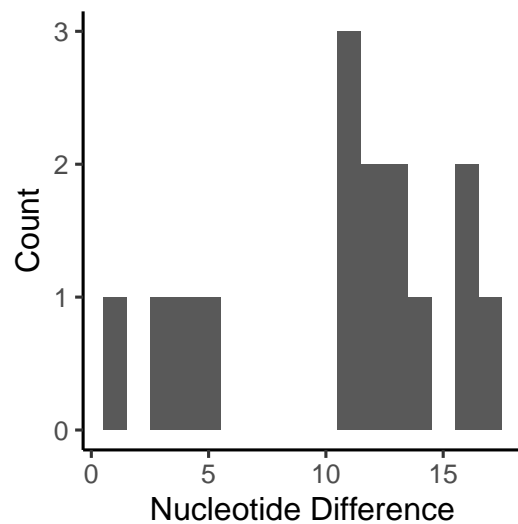
IGHV5-51*07

21 sequences assigned
9 (42.9%) exact matches, in which:
9 unique CDR3
4 unique J



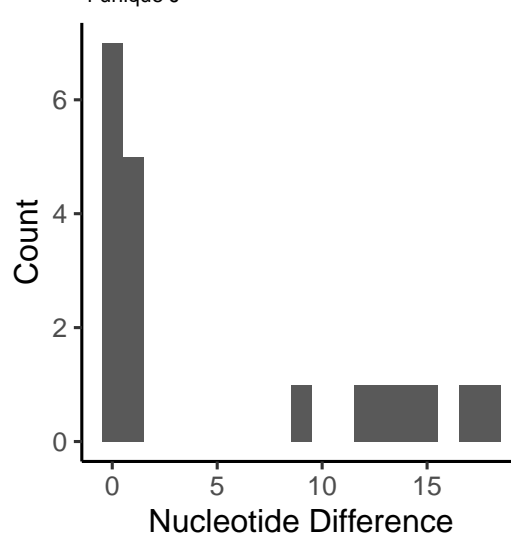
IGHV4/OR15-8*01

19 sequences assigned
No exact matches.



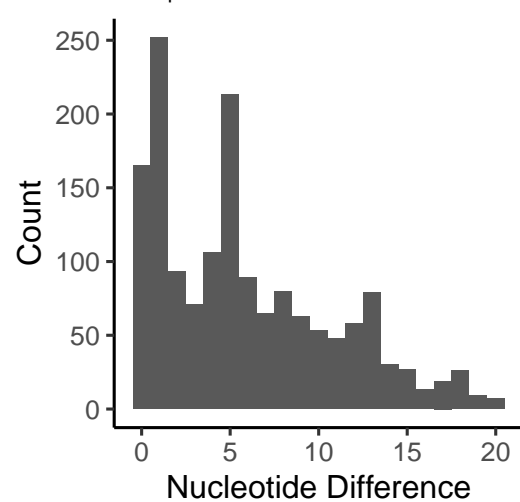
IGHV5-51*04

22 sequences assigned
7 (31.8%) exact matches, in which:
7 unique CDR3
4 unique J



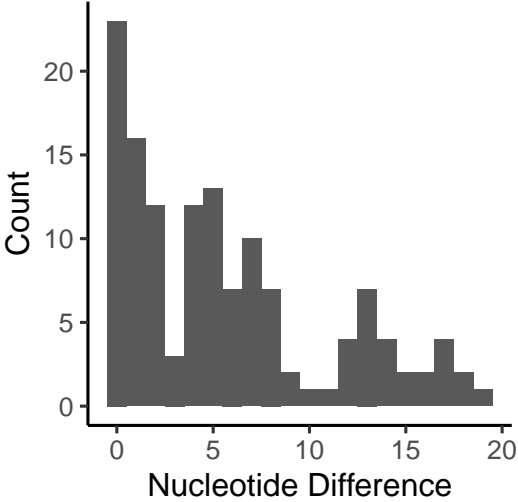
IGHV6-1*01_02

1573 sequences assigned
165 (10.5%) exact matches, in which:
129 unique CDR3
7 unique J



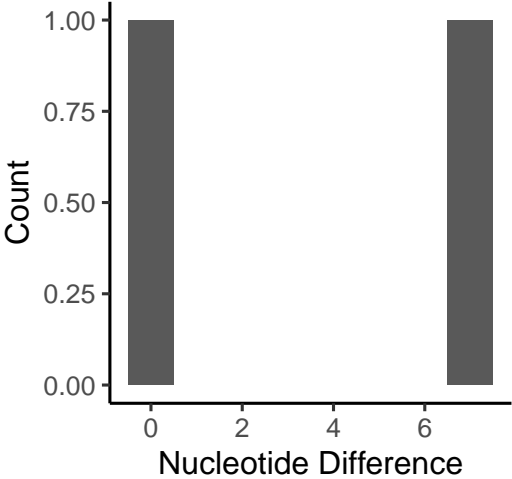
IGHV6-1*01_02_A315G

134 sequences assigned
23 (17.2%) exact matches, in which:
23 unique CDR3
6 unique J



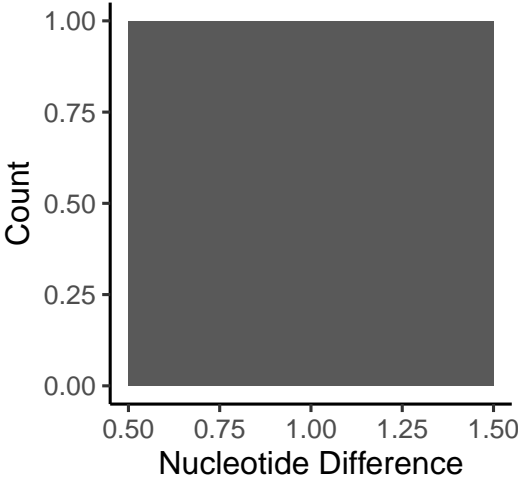
IGHV7-4-1*02

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



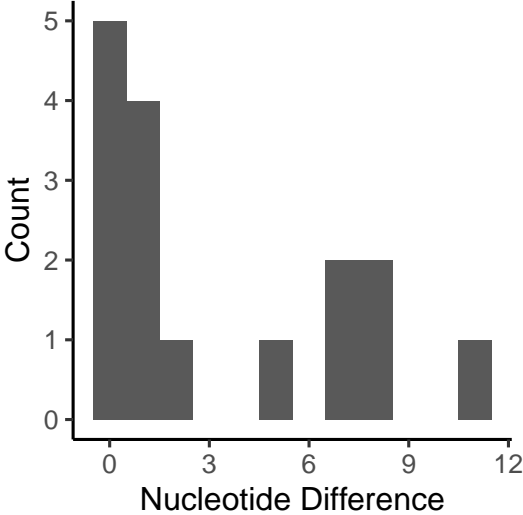
IGHV3/OR16-8*01

1 sequences assigned
No exact matches.

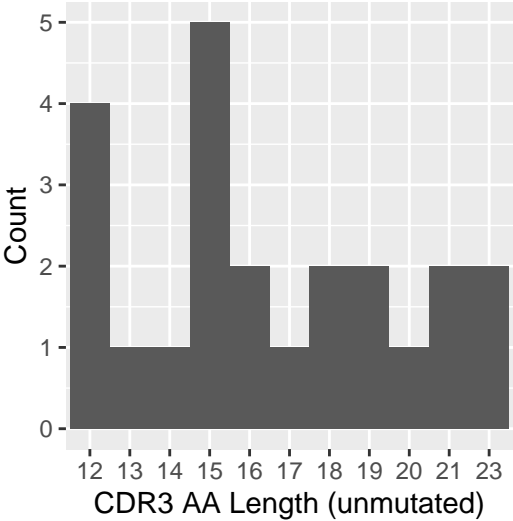


IGHV7-4-1*01

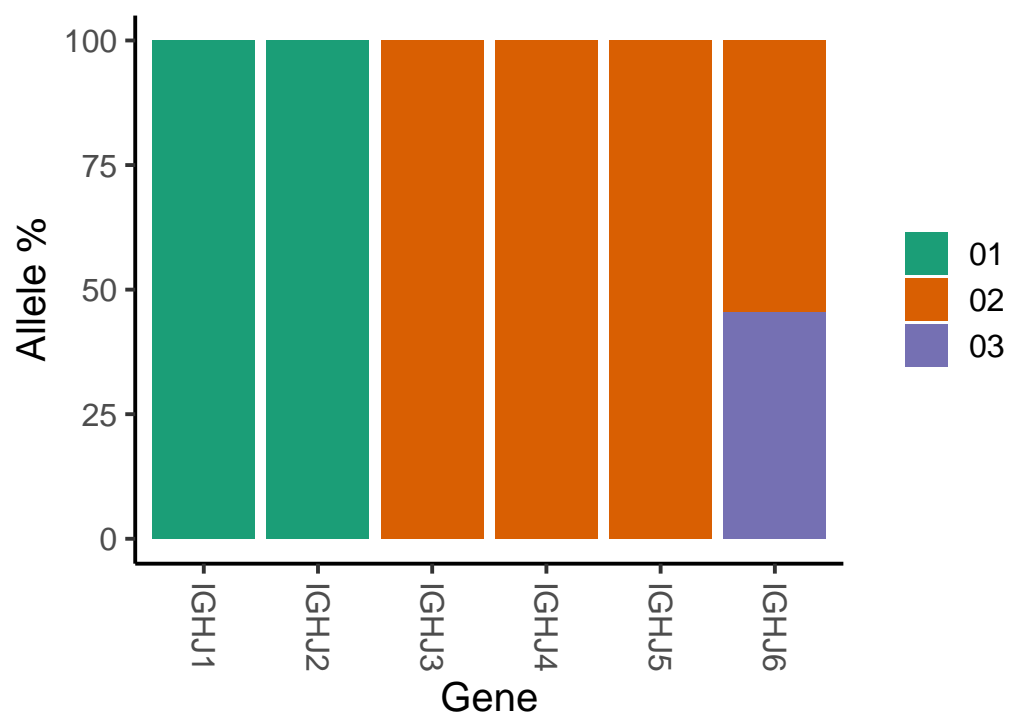
16 sequences assigned
5 (31.2%) exact matches, in which:
5 unique CDR3
3 unique J



IGHV6-1*01_02_A315G



Allele Usage



Sequence Count by IGHJ6 allele usage

