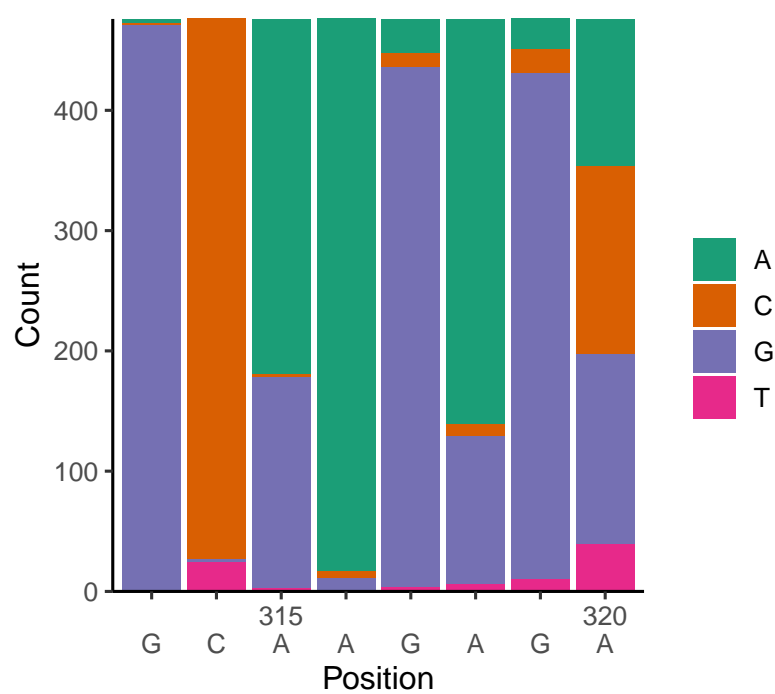
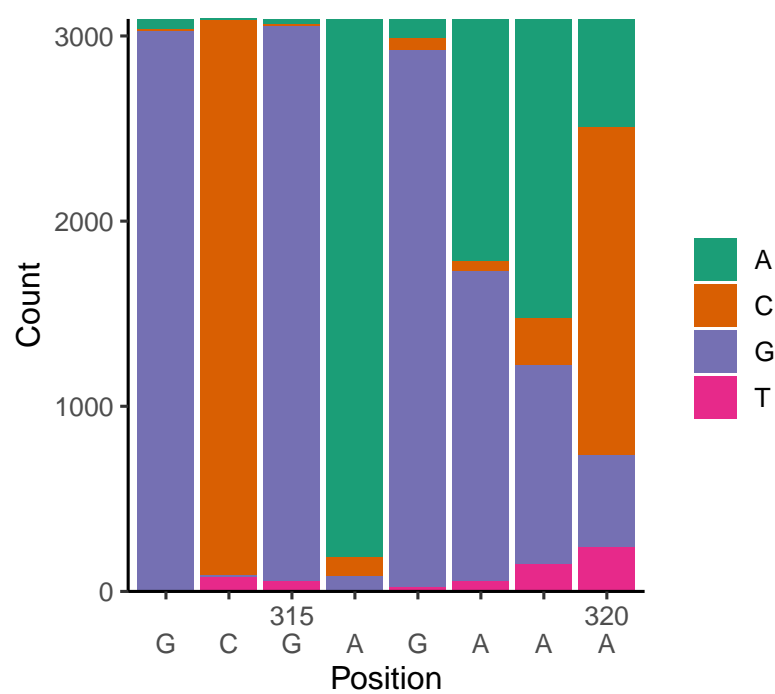


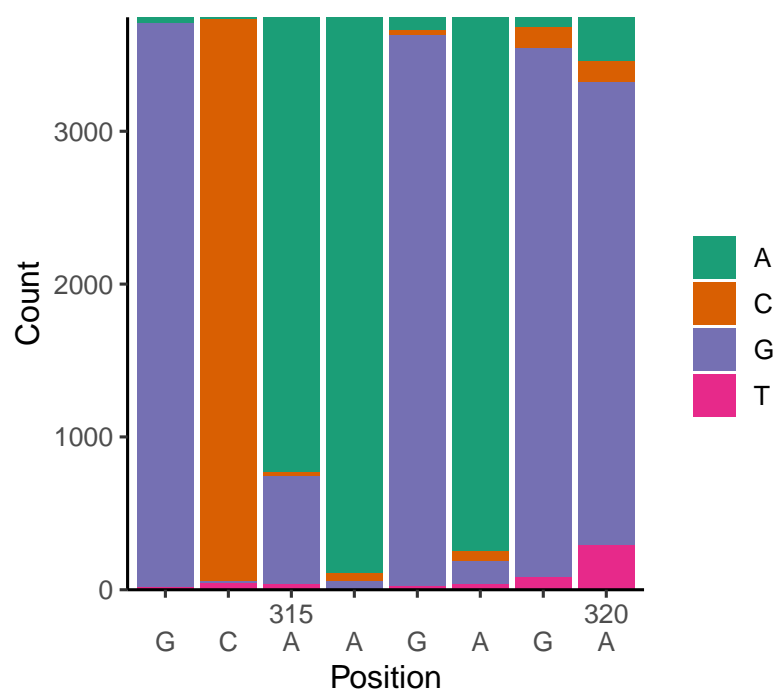
Gene IGHV3-13*01_C210T



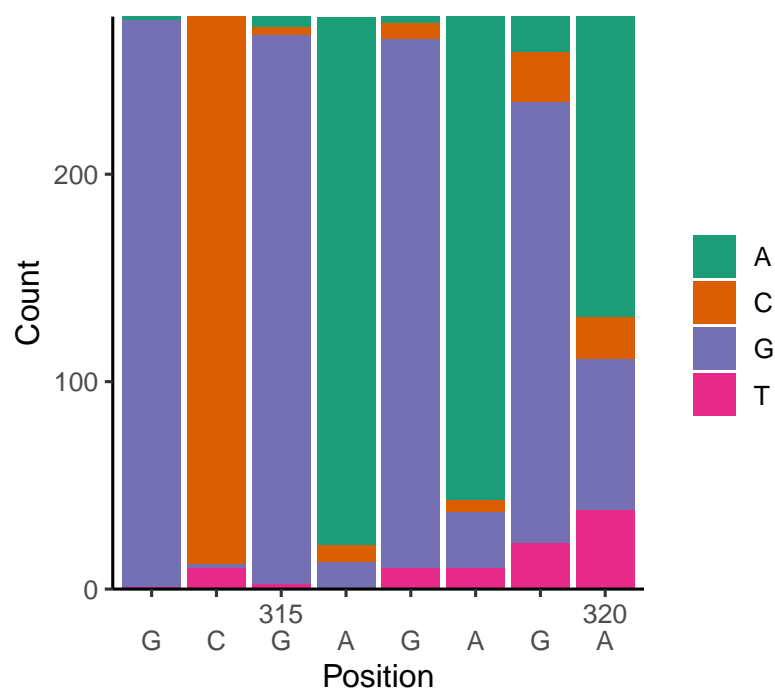
Gene IGHV4-28*02_05_G80T_A109C_C



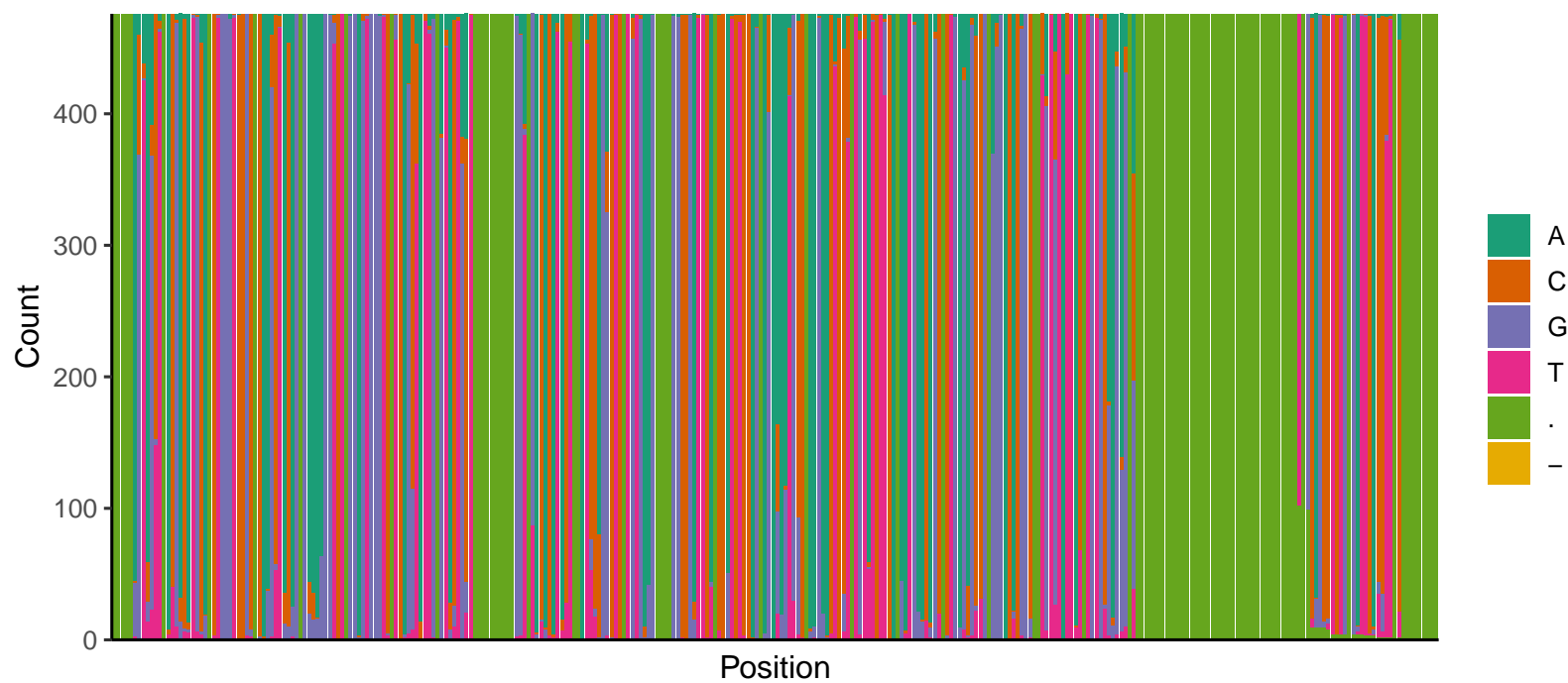
Gene IGHV6-1*01_02_A163C_C174T_G176T_A207C_C230T_A275C



Gene IGHV1-3*01_05_C134A



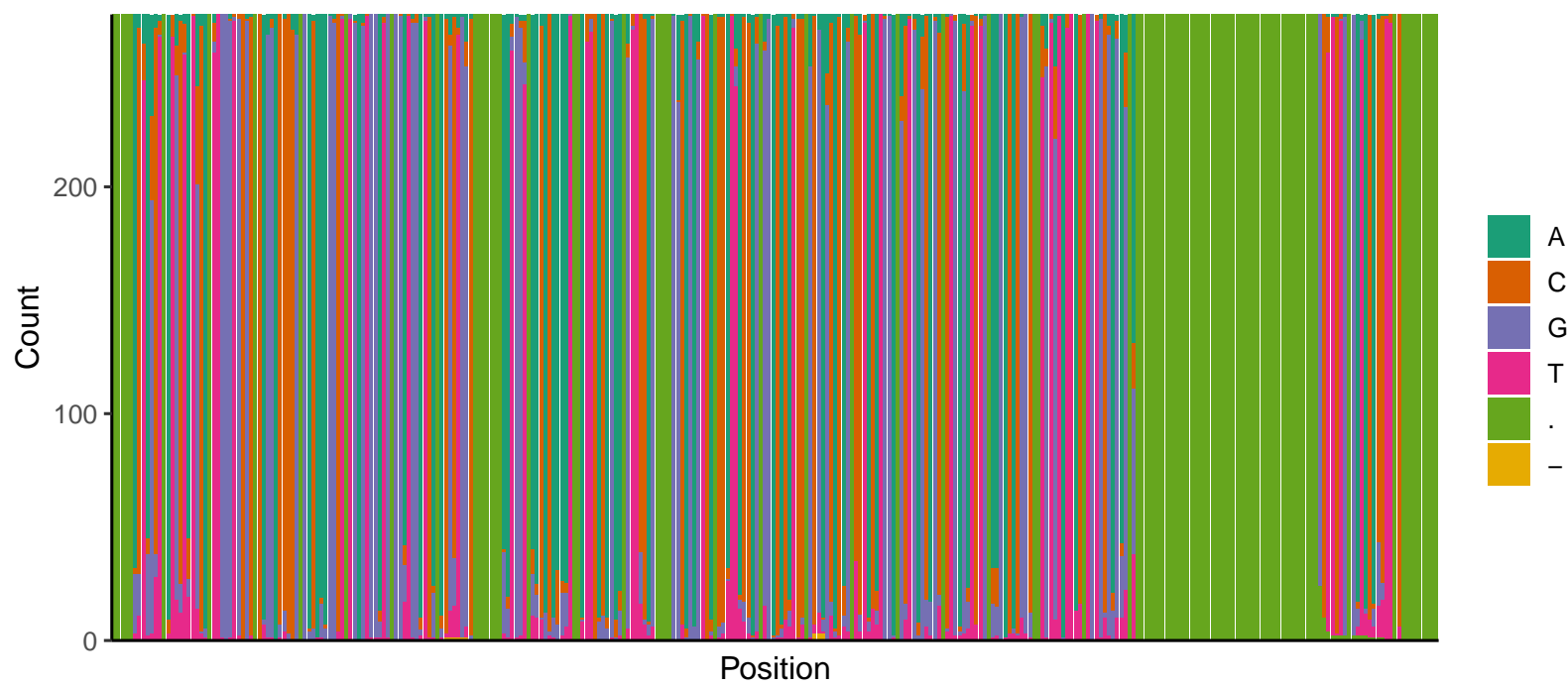
Gene IGHV3-13*01_C210T



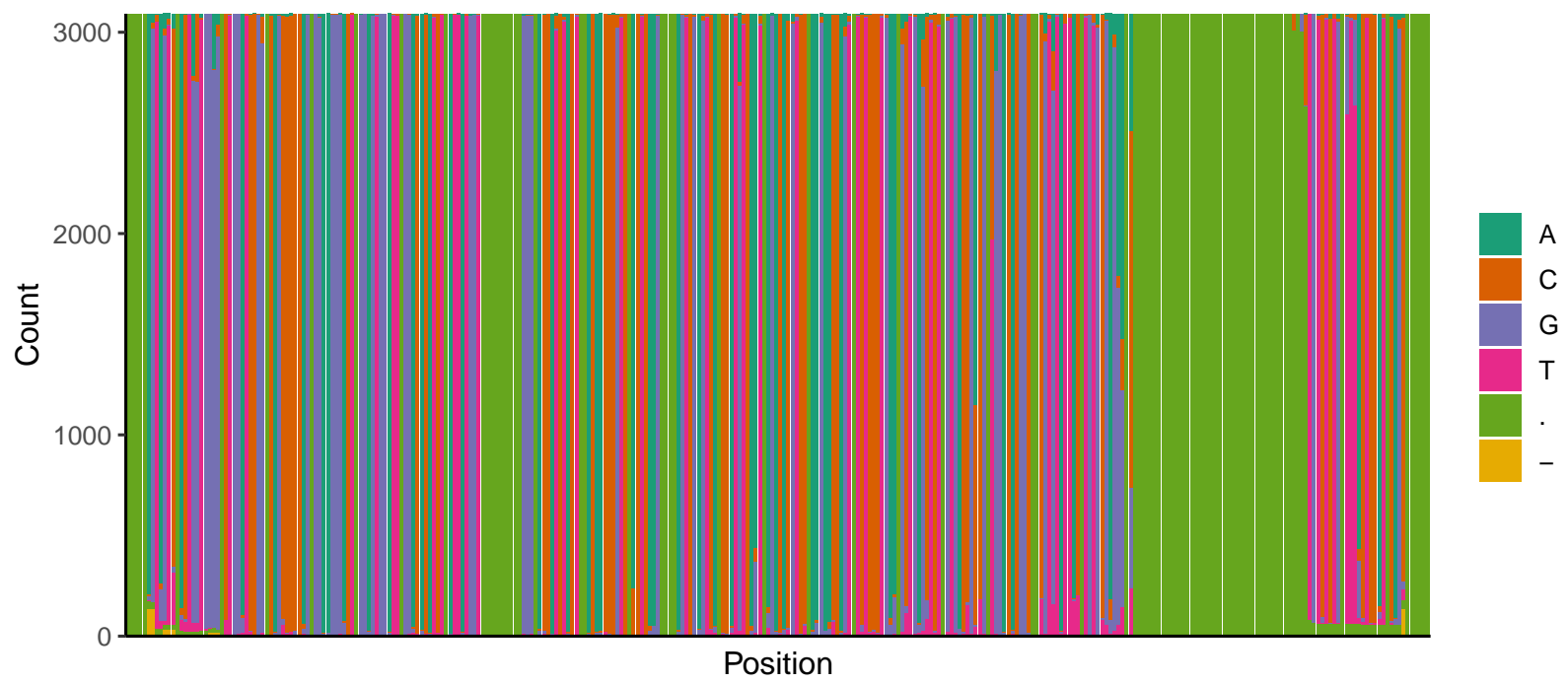
Gene IGHV6-1*01_02_A163C_C174T_G176T_A207C_C230T_A275C



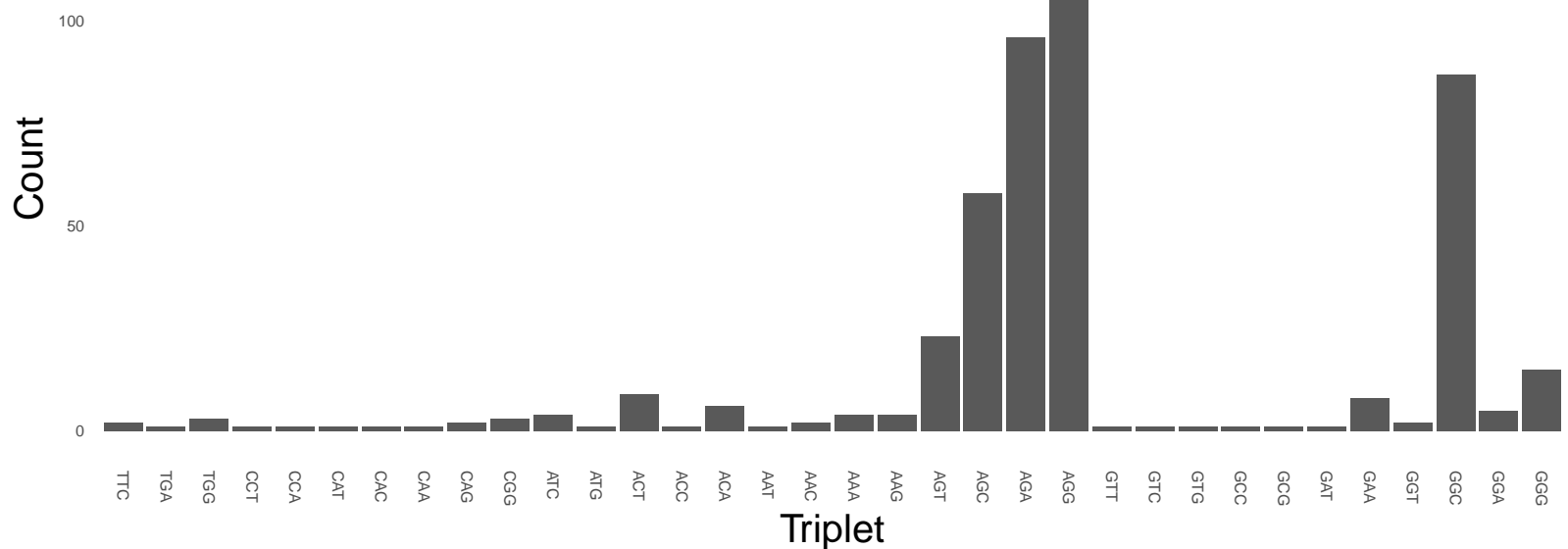
Gene IGHV1-3*01_05_C134A



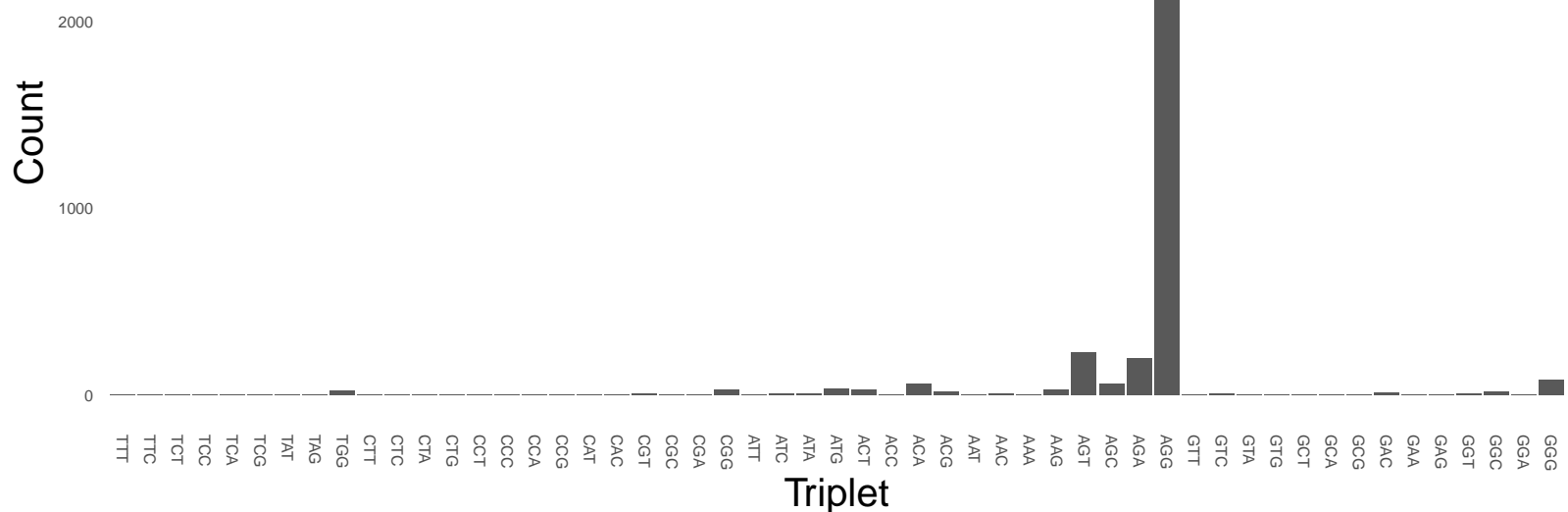
Gene IGHV4-28*02_05_G80T_A109C_G162A_T163C_A175G_G191C_C210A_G238A_



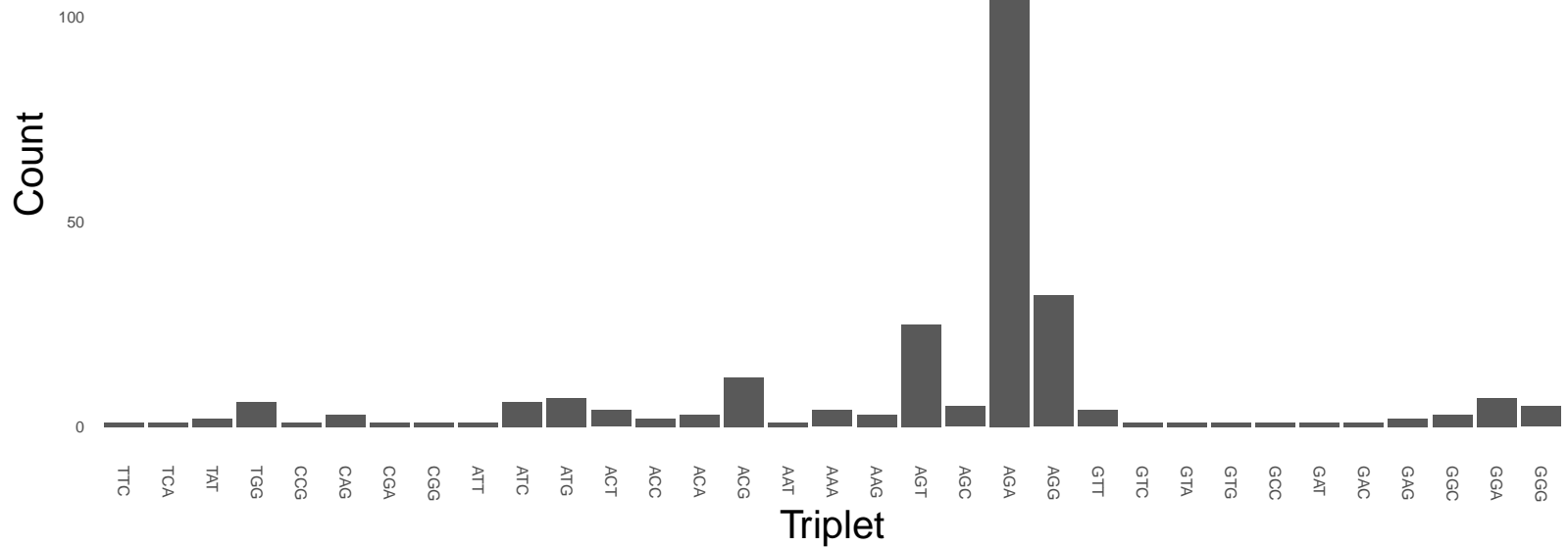
IGHV3-13*01_C210T- Final 3 nucleotides as a triplet



IGHV6-1*01_02_A163C_C174T_G176T_A207C_C230T_A275C- Final 3 nucleotides as a triplet



IGHV1-3*01_05_C134A- Final 3 nucleotides as a triplet

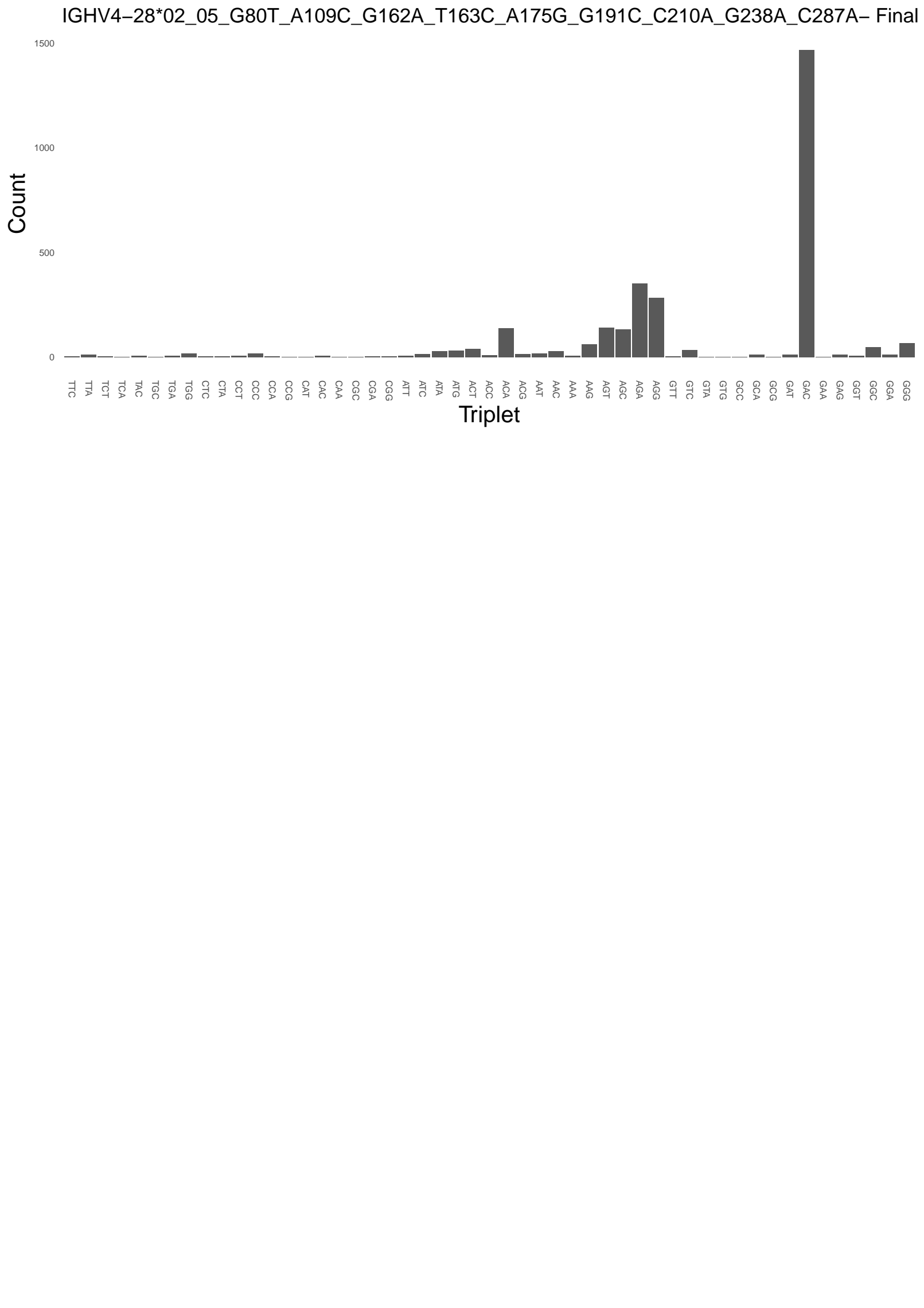


Count

1500
1000
500
0

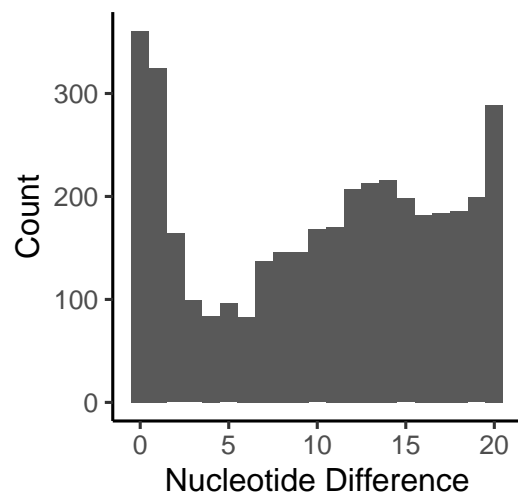
Triplet

TTC TTA TCT TCA TAC TGC TGA TGG CTC CTA CCT CCC CCA CCG CAT CAC CAA CGC CGA CGG ATT ATC ATA ATG ACT ACC ACA ACG AAT AAC AAA AAG AGT AGC AGA AGG GTT GTC GTA GTG GCC GCA GCG GAT GAC GAA GAG GGT GGC GGA GGG



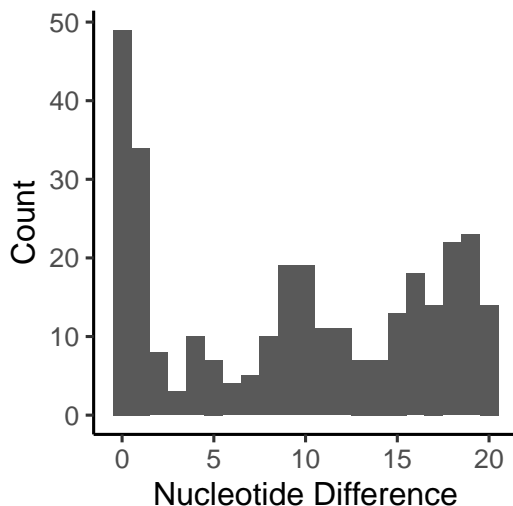
IGHV1-2*02

5580 sequences assigned
361 (6.5%) exact matches, in which:
297 unique CDR3
7 unique J



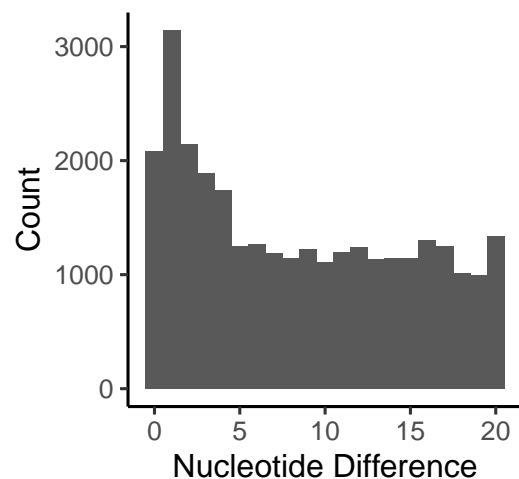
IGHV1-3*01_05

394 sequences assigned
49 (12.4%) exact matches, in which:
41 unique CDR3
6 unique J



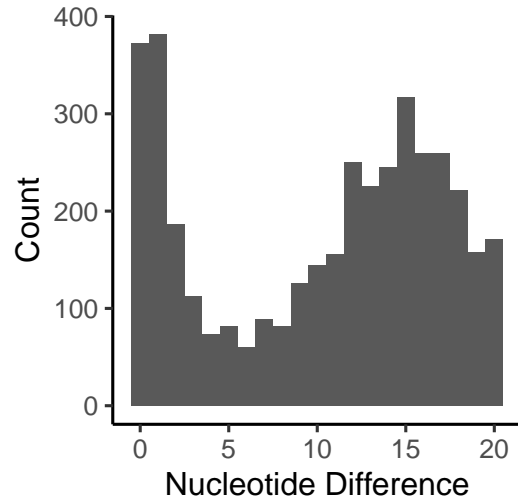
IGHV1-18*01

36478 sequences assigned
2081 (5.7%) exact matches, in which:
1609 unique CDR3
7 unique J



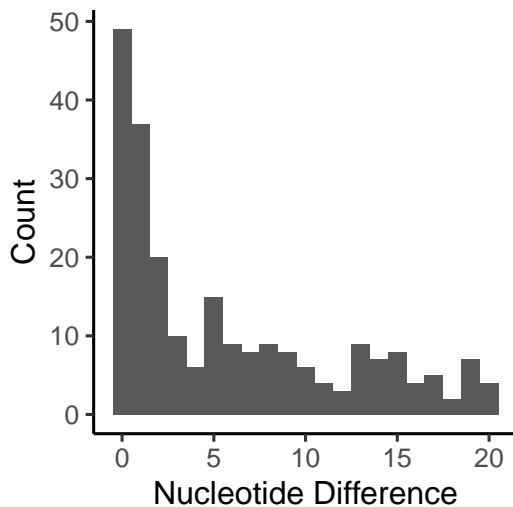
IGHV1-2*06

5041 sequences assigned
373 (7.4%) exact matches, in which:
303 unique CDR3
7 unique J



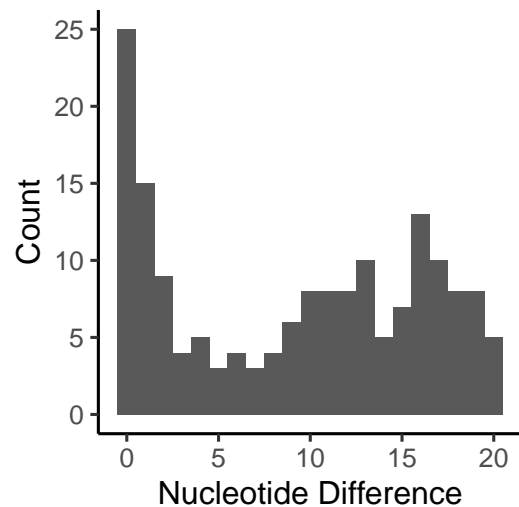
IGHV1-3*01_05_C134A

276 sequences assigned
49 (17.8%) exact matches, in which:
45 unique CDR3
5 unique J



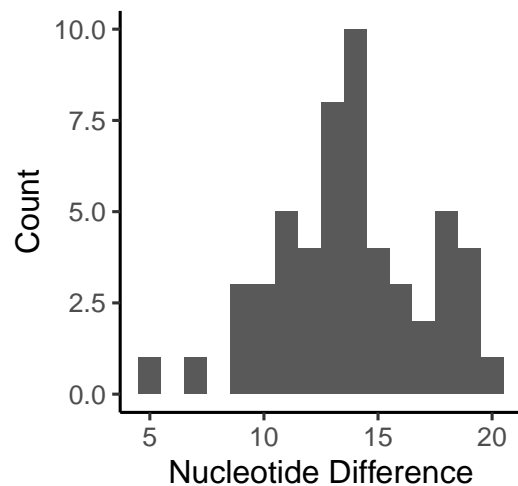
IGHV1-24*01

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



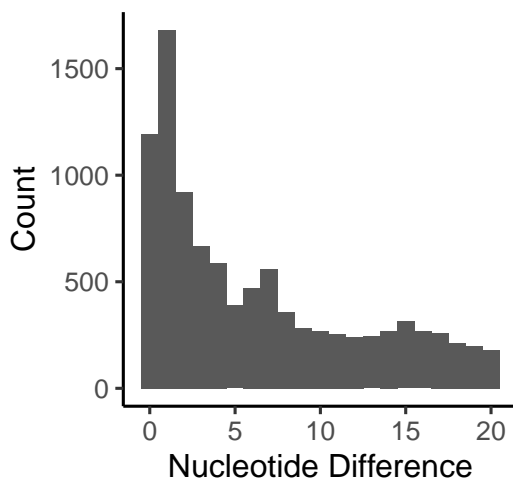
IGHV1-3*04

96 sequences assigned
No exact matches.



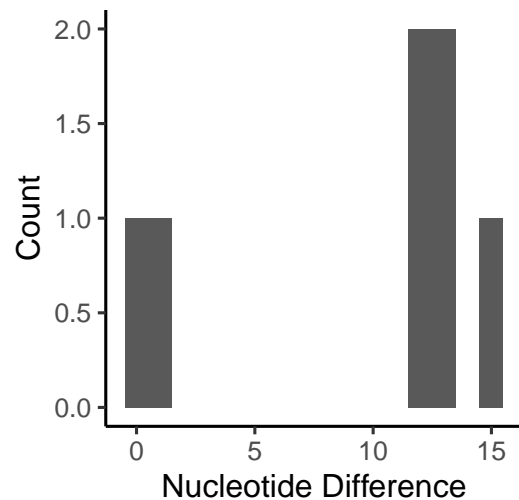
IGHV1-8*01

10917 sequences assigned
1194 (10.9%) exact matches, in which:
871 unique CDR3
7 unique J



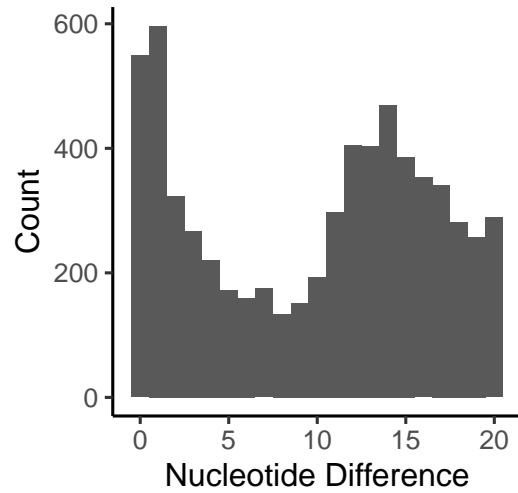
IGHV1-45*02

17 sequences assigned
1 (5.9%) exact matches, in which:
1 unique CDR3
1 unique J



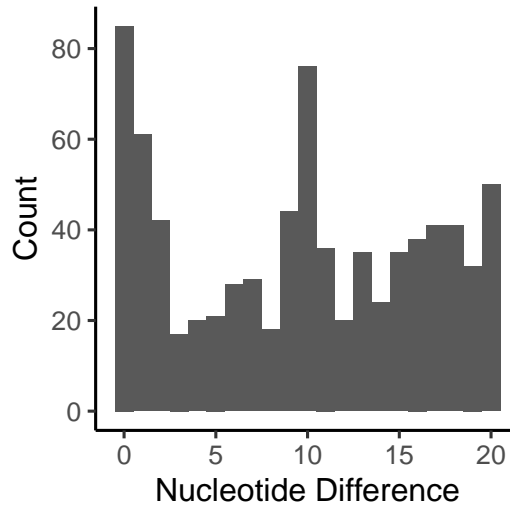
IGHV1-46*01

8669 sequences assigned
549 (6.3%) exact matches, in which:
444 unique CDR3
7 unique J



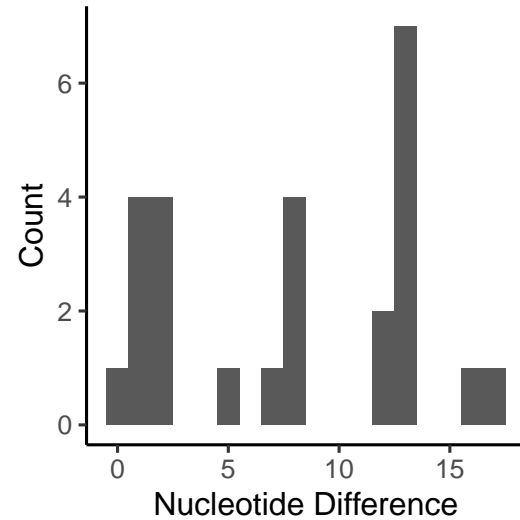
IGHV1-69*02

1158 sequences assigned
85 (7.3%) exact matches, in which:
74 unique CDR3
7 unique J



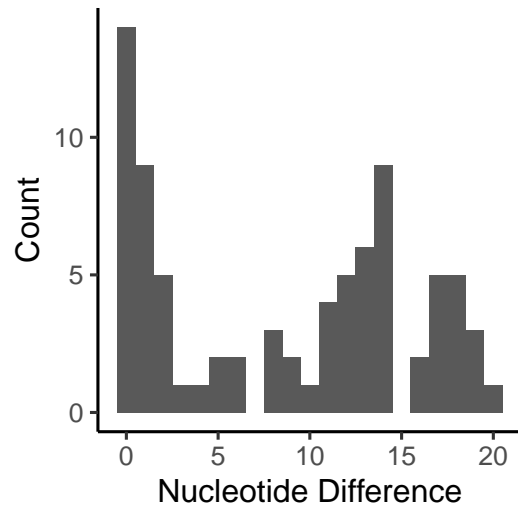
IGHV2-5*01

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



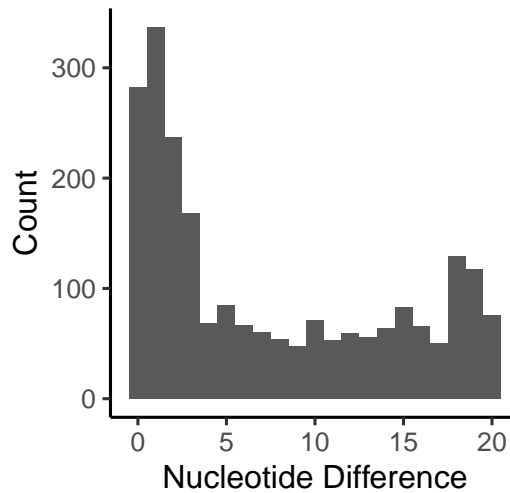
IGHV1-58*02

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



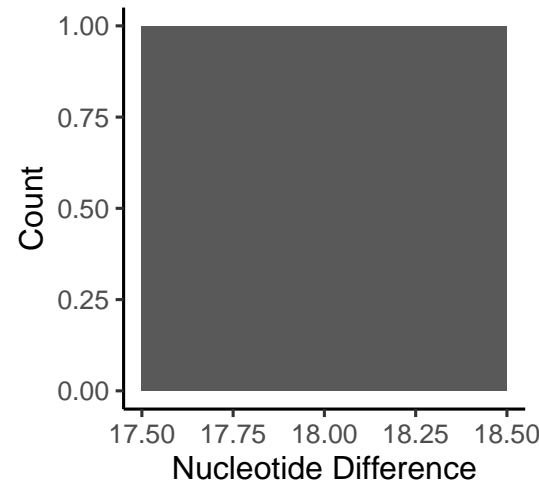
IGHV1-69*05

3083 sequences assigned
282 (9.1%) exact matches, in which:
220 unique CDR3
7 unique J



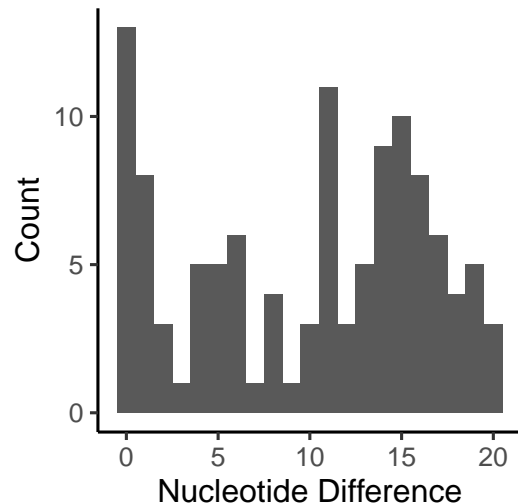
IGHV2-26*02

1 sequences assigned
No exact matches.



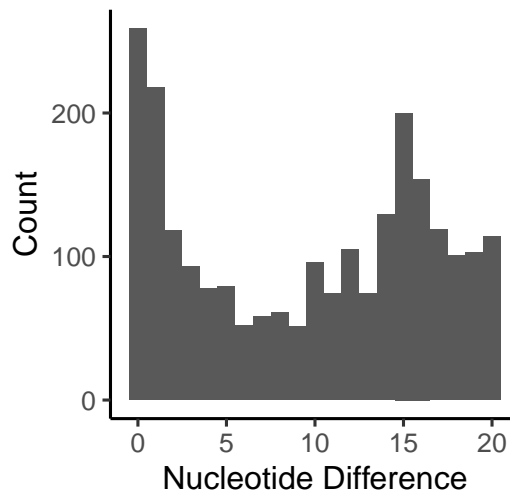
IGHV1-69-2*01

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



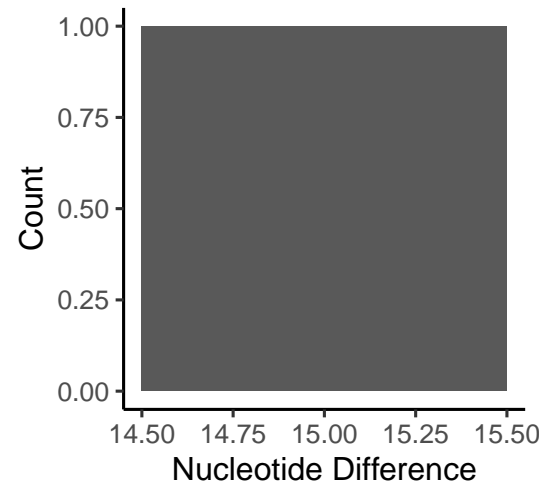
IGHV1-69*01_12_13

3079 sequences assigned
259 (8.4%) exact matches, in which:
225 unique CDR3
7 unique J



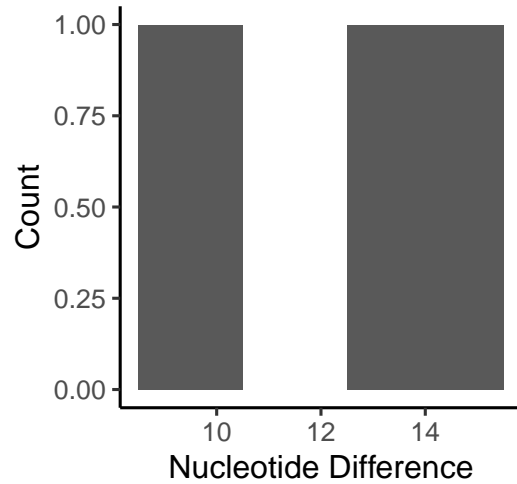
IGHV2-70*13

1 sequences assigned
No exact matches.



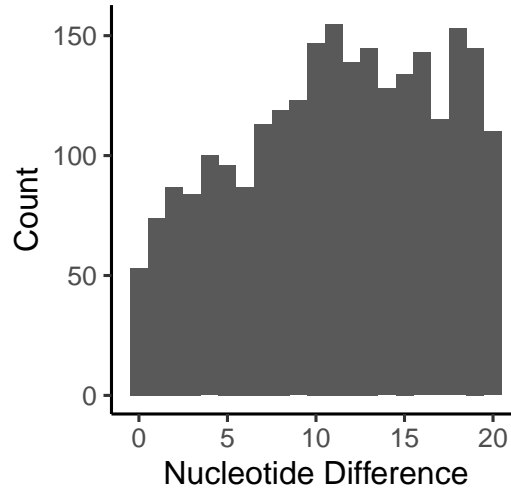
IGHV2-70*20

8 sequences assigned
No exact matches.



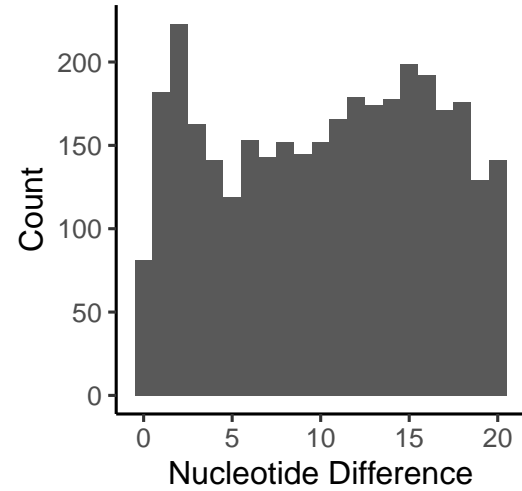
IGHV3-7*03

3185 sequences assigned
53 (1.7%) exact matches, in which:
52 unique CDR3
7 unique J



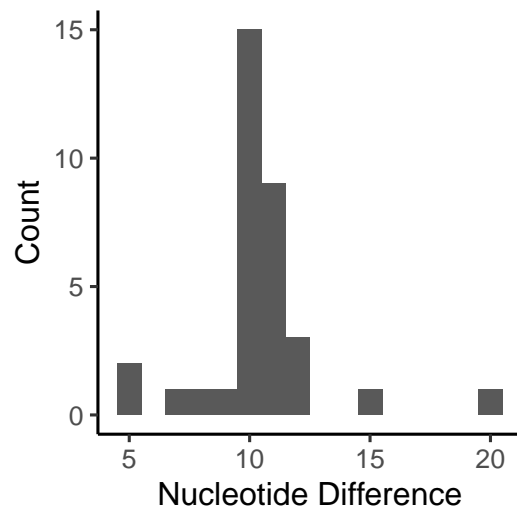
IGHV3-11*04

4039 sequences assigned
81 (2%) exact matches, in which:
79 unique CDR3
7 unique J



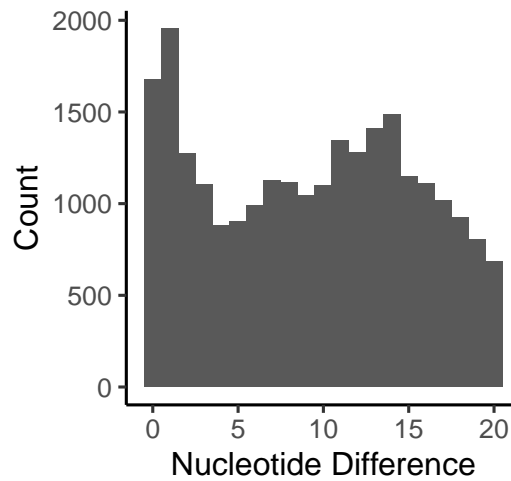
IGHV2-70*11_15

35 sequences assigned
No exact matches.



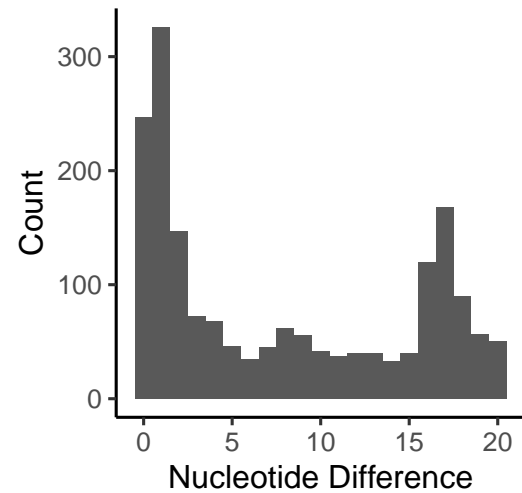
IGHV3-9*01

27980 sequences assigned
1679 (6%) exact matches, in which:
1195 unique CDR3
7 unique J



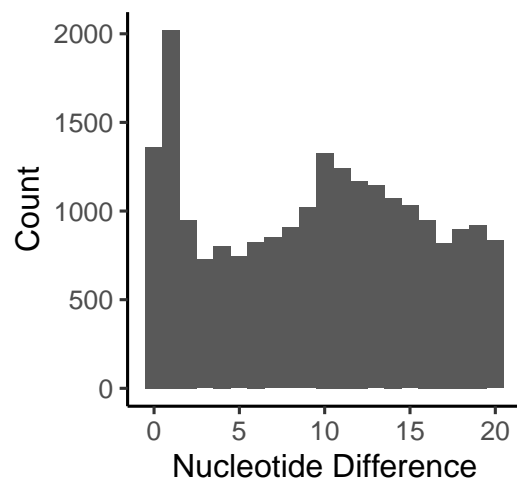
IGHV3-13*01

2085 sequences assigned
247 (11.8%) exact matches, in which:
175 unique CDR3
7 unique J



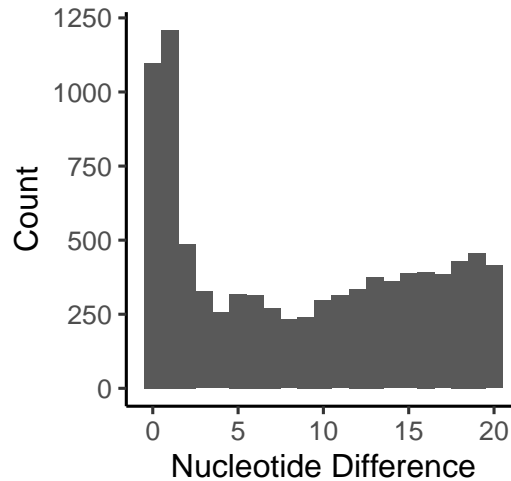
IGHV3-7*01

25910 sequences assigned
1362 (5.3%) exact matches, in which:
1045 unique CDR3
7 unique J



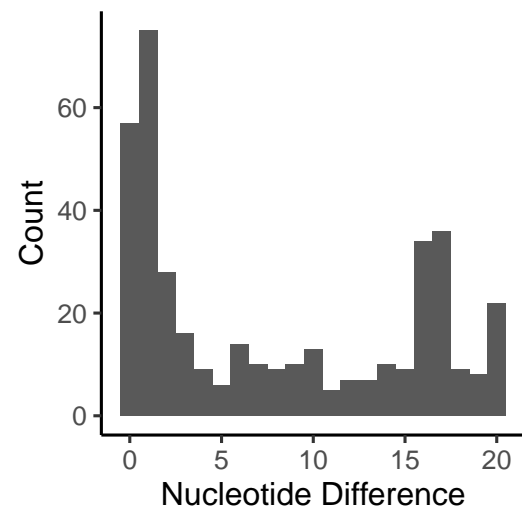
IGHV3-11*01

10938 sequences assigned
1098 (10%) exact matches, in which:
846 unique CDR3
7 unique J



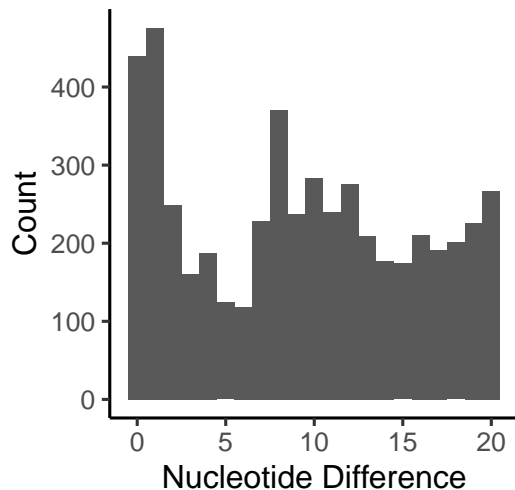
IGHV3-13*01_C210T

476 sequences assigned
57 (12%) exact matches, in which:
34 unique CDR3
6 unique J



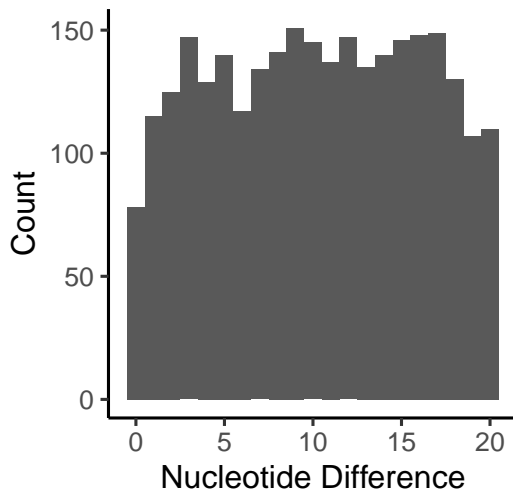
IGHV3-15*01_02

6726 sequences assigned
440 (6.5%) exact matches, in which:
350 unique CDR3
7 unique J



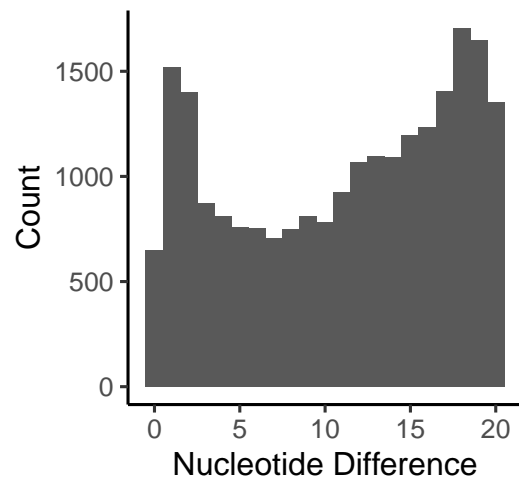
IGHV3-21*04

3499 sequences assigned
78 (2.2%) exact matches, in which:
74 unique CDR3
7 unique J



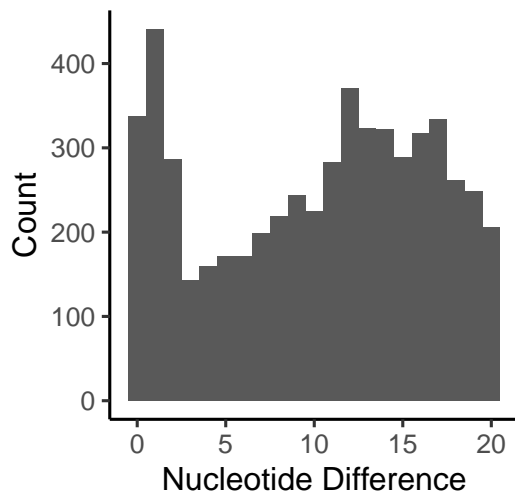
IGHV3-23*03

31284 sequences assigned
648 (2.1%) exact matches, in which:
498 unique CDR3
7 unique J



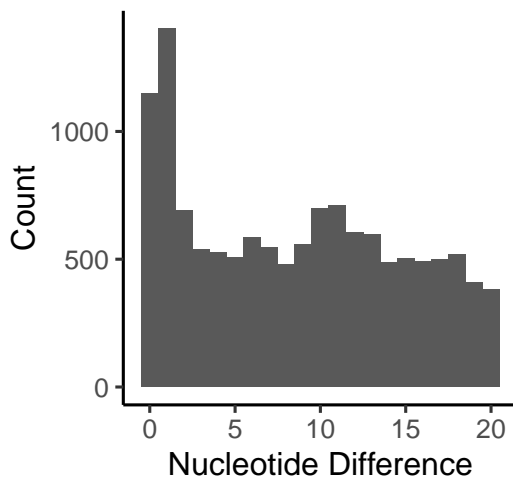
IGHV3-20*03_04

6935 sequences assigned
338 (4.9%) exact matches, in which:
227 unique CDR3
7 unique J



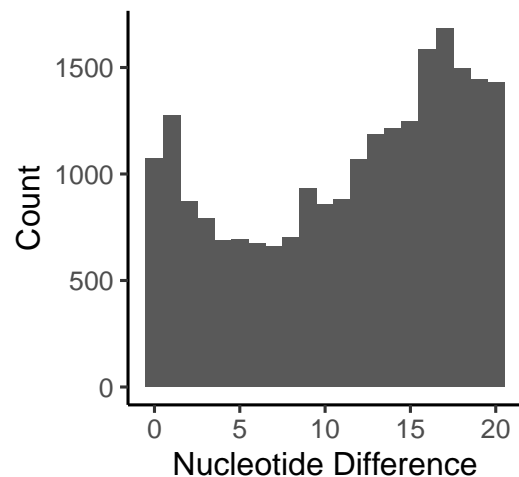
IGHV3-21*01_02

14699 sequences assigned
1150 (7.8%) exact matches, in which:
895 unique CDR3
7 unique J



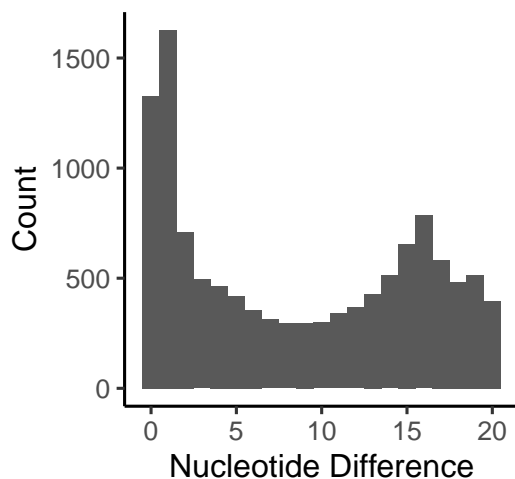
IGHV3-23*01_04

30754 sequences assigned
1072 (3.5%) exact matches, in which:
843 unique CDR3
7 unique J



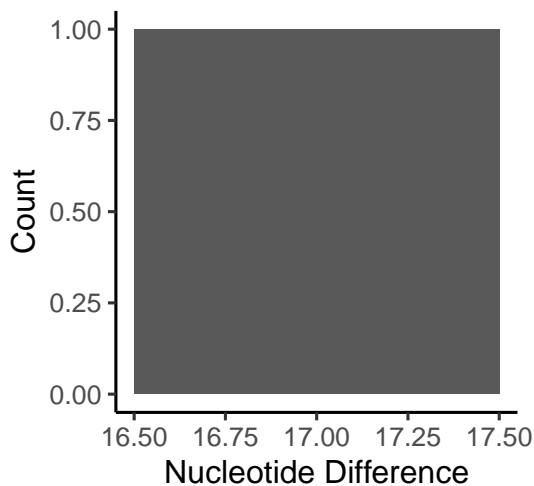
IGHV3-21*03

13826 sequences assigned
1328 (9.6%) exact matches, in which:
946 unique CDR3
7 unique J



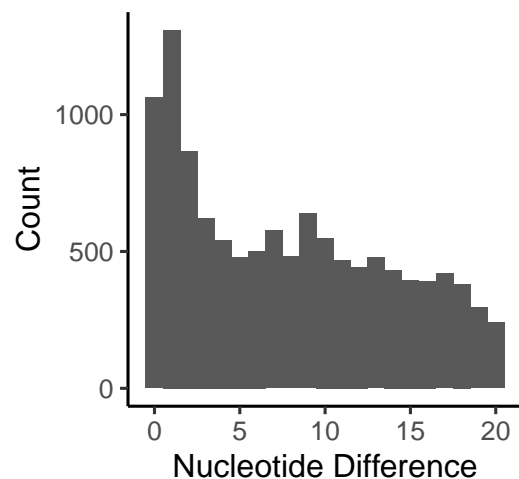
IGHV3-22*01_02

1 sequences assigned
No exact matches.



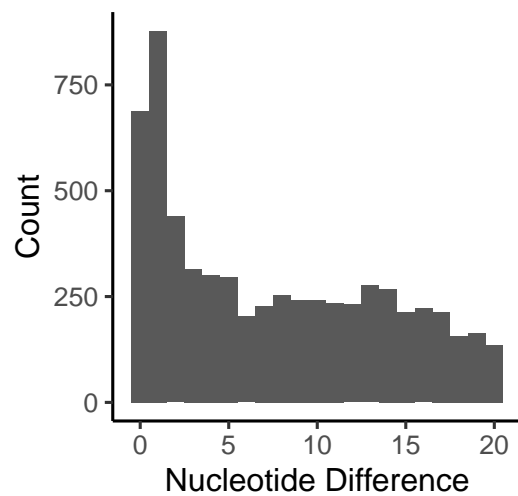
IGHV3-33*01

13083 sequences assigned
1062 (8.1%) exact matches, in which:
827 unique CDR3
7 unique J



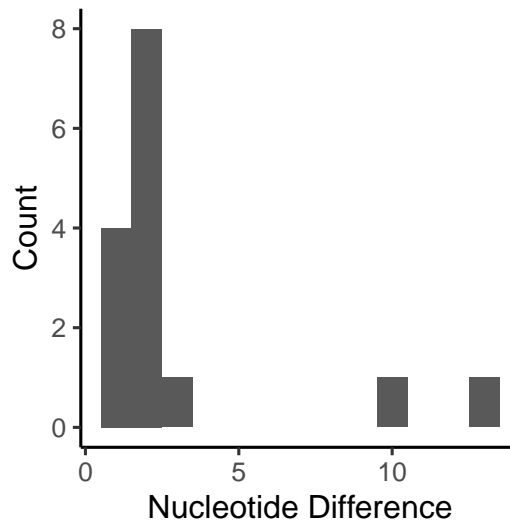
IGHV3–33*06

6871 sequences assigned
688 (10%) exact matches, in which:
435 unique CDR3
7 unique J



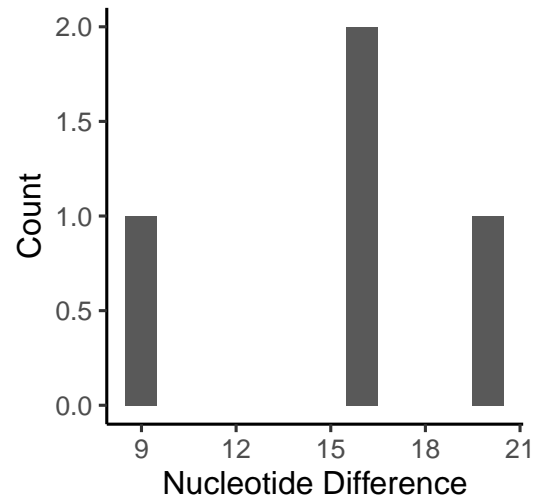
IGHV3–35*02

17 sequences assigned
No exact matches.



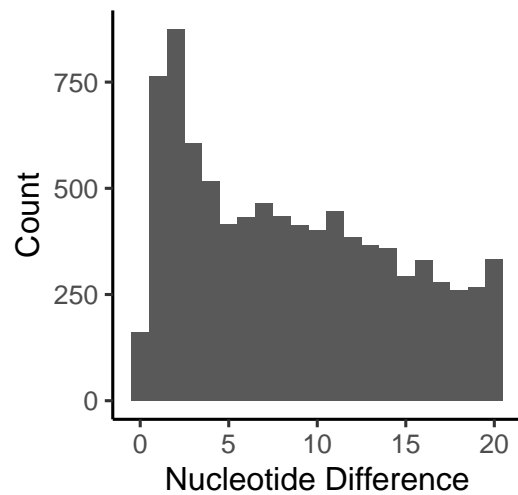
IGHV3–38*03

5 sequences assigned
No exact matches.



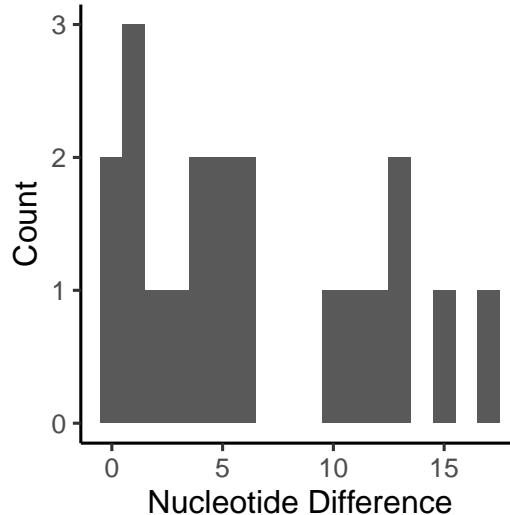
IGHV3–33*08

10219 sequences assigned
162 (1.6%) exact matches, in which:
153 unique CDR3
7 unique J



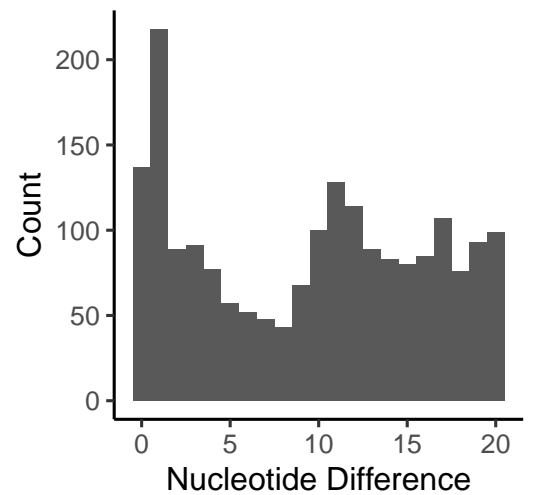
IGHV3–38–3*01

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



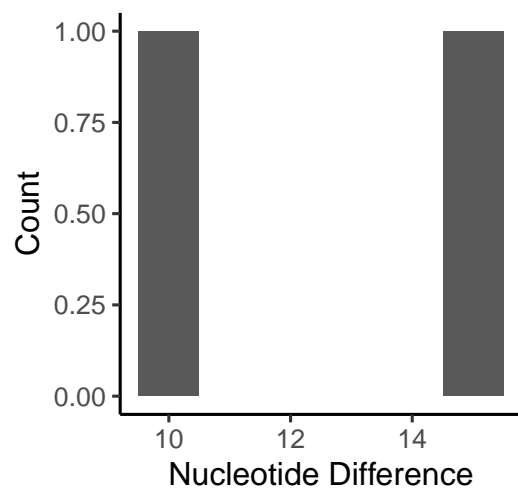
IGHV3–43*01

2516 sequences assigned
137 (5.4%) exact matches, in which:
90 unique CDR3
7 unique J



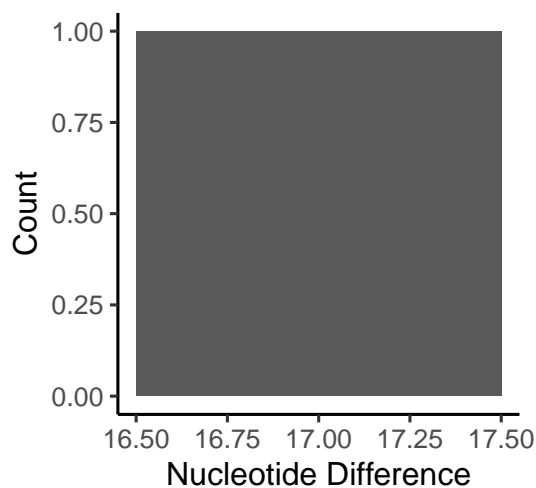
IGHV3–35*01

2 sequences assigned
No exact matches.



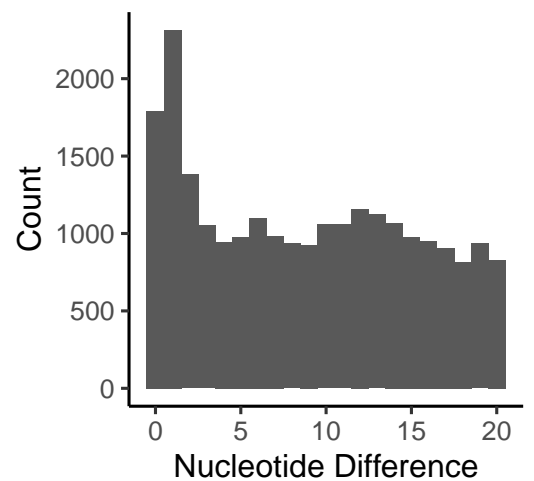
IGHV3–38*02

1 sequences assigned
No exact matches.



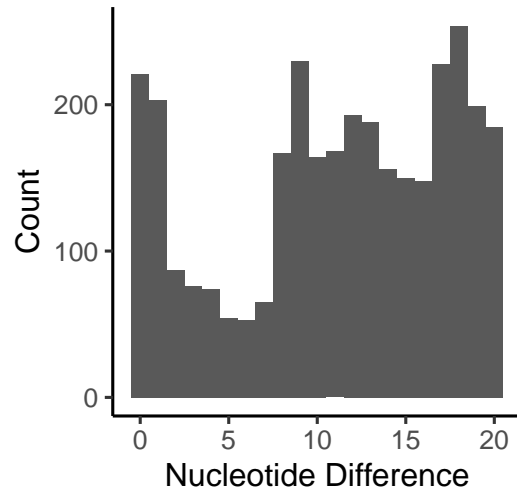
IGHV3–48*03

27788 sequences assigned
1790 (6.4%) exact matches, in which:
1378 unique CDR3
7 unique J



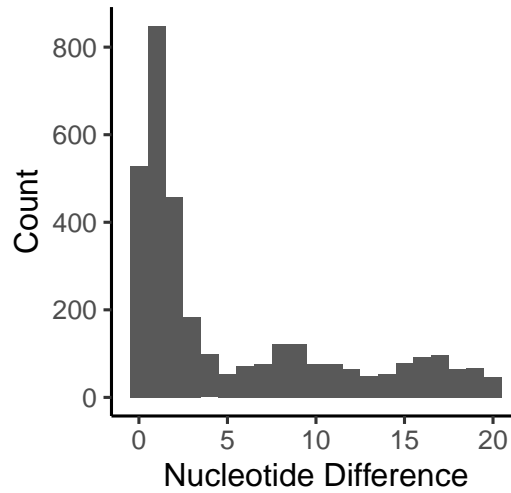
IGHV3-49*04

4909 sequences assigned
221 (4.5%) exact matches, in which:
165 unique CDR3
7 unique J



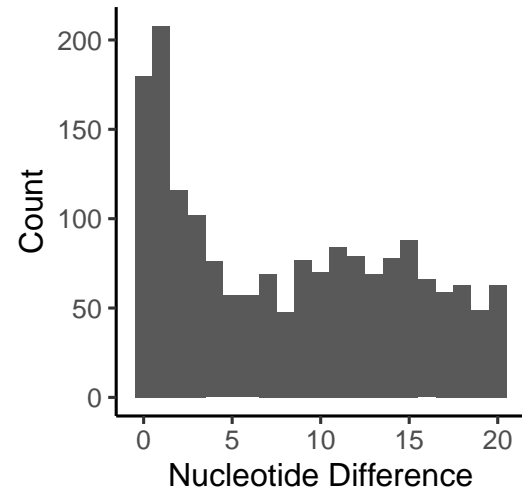
IGHV3-53*04

3654 sequences assigned
528 (14.4%) exact matches, in which:
362 unique CDR3
7 unique J



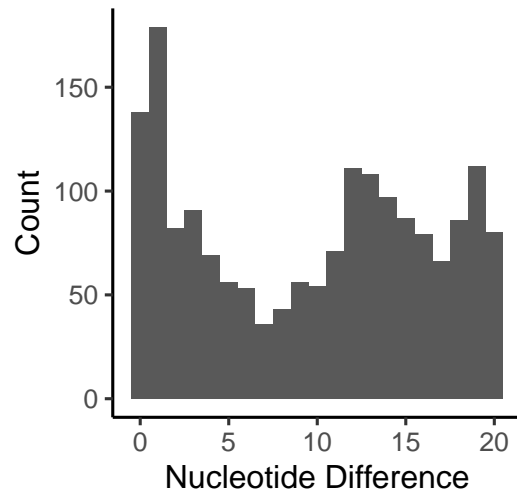
IGHV3-64*01

2064 sequences assigned
180 (8.7%) exact matches, in which:
130 unique CDR3
7 unique J



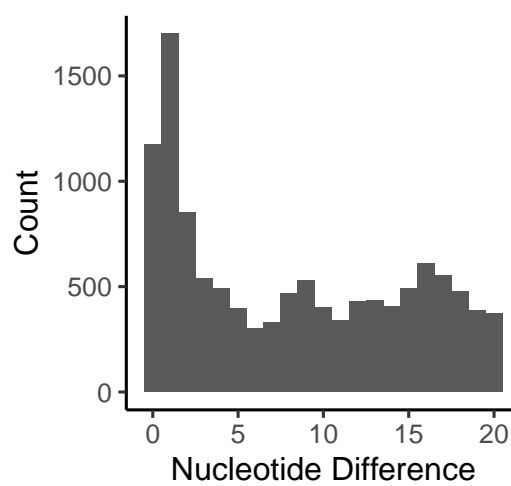
IGHV3-49*03_05

2248 sequences assigned
138 (6.1%) exact matches, in which:
99 unique CDR3
6 unique J



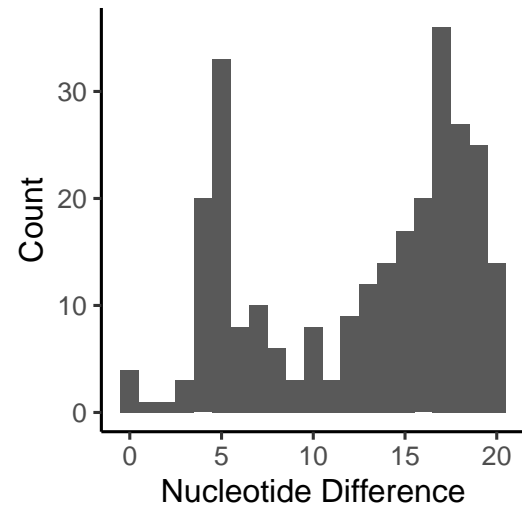
IGHV3-53*05

14821 sequences assigned
1175 (7.9%) exact matches, in which:
862 unique CDR3
7 unique J



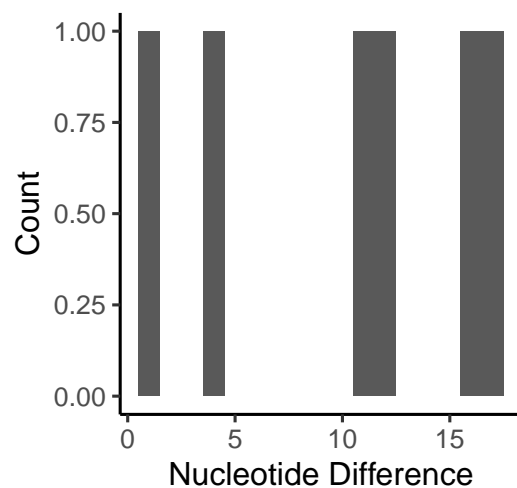
IGHV3-64*02_07

529 sequences assigned
4 (0.8%) exact matches, in which:
3 unique CDR3
3 unique J



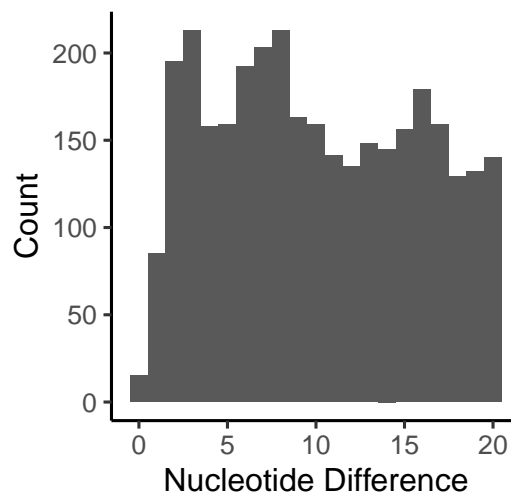
IGHV3-52*01_03

6 sequences assigned
No exact matches.



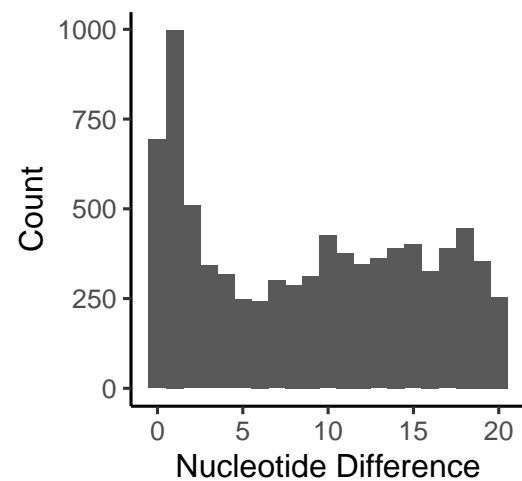
IGHV3-53*01_02

4167 sequences assigned
15 (0.4%) exact matches, in which:
15 unique CDR3
4 unique J



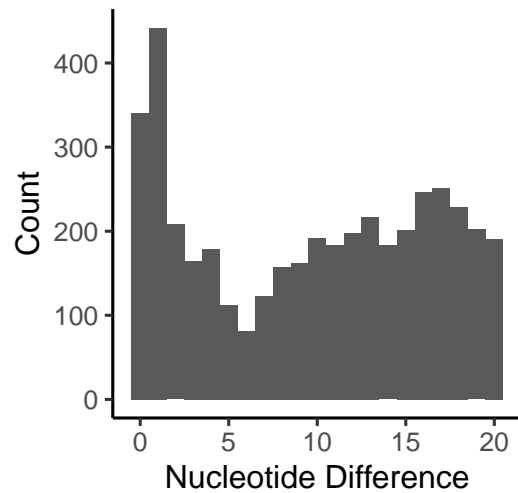
IGHV3-66*01

11203 sequences assigned
693 (6.2%) exact matches, in which:
512 unique CDR3
7 unique J



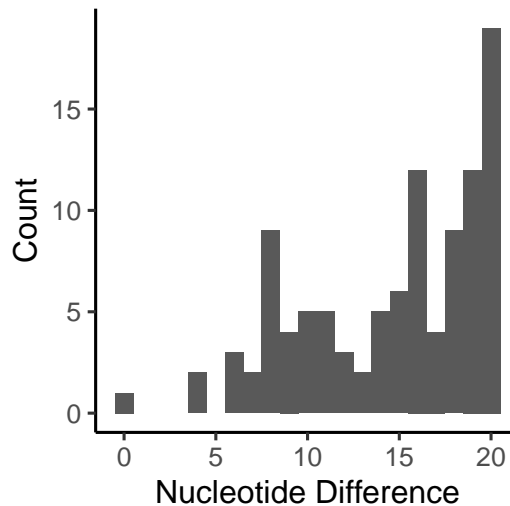
IGHV3–66*02

5363 sequences assigned
341 (6.4%) exact matches, in which:
256 unique CDR3
7 unique J



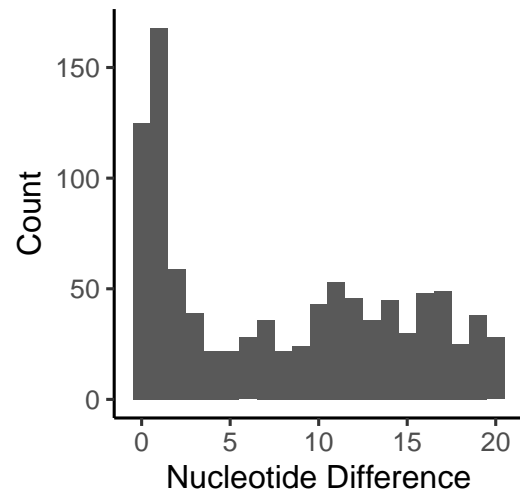
IGHV3–69–1*02

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



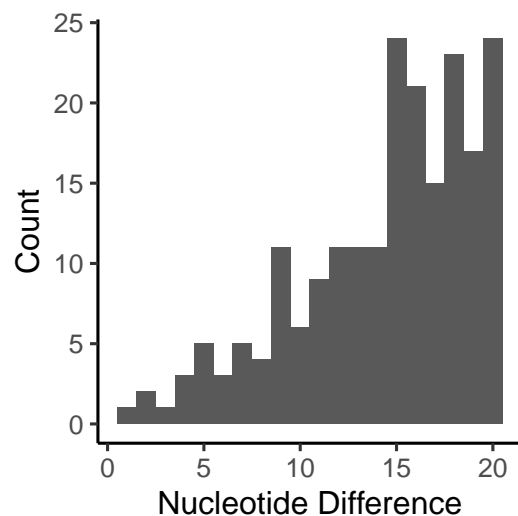
IGHV3–73*01_02

1198 sequences assigned
125 (10.4%) exact matches, in which:
102 unique CDR3
7 unique J



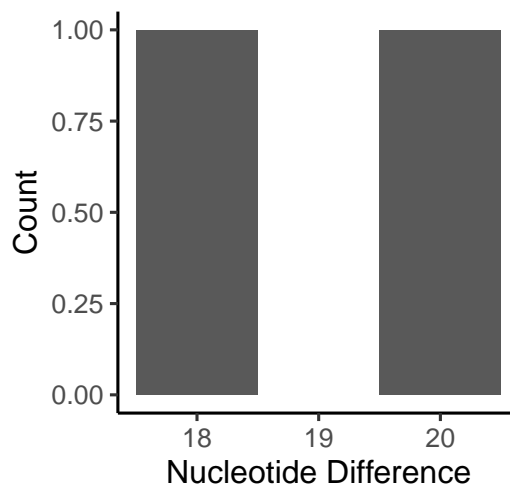
IGHV3–66*03

287 sequences assigned
No exact matches.



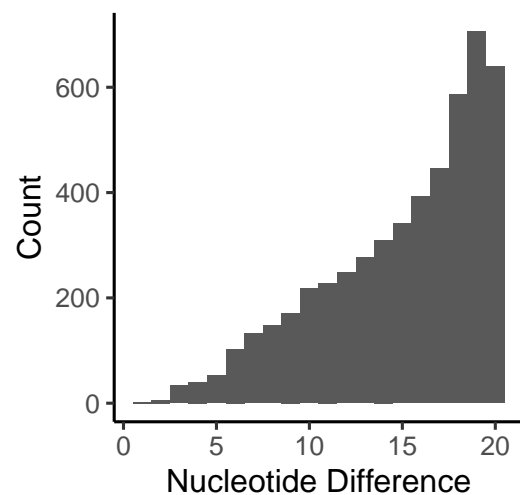
IGHV3–71*01_04

38 sequences assigned
No exact matches.



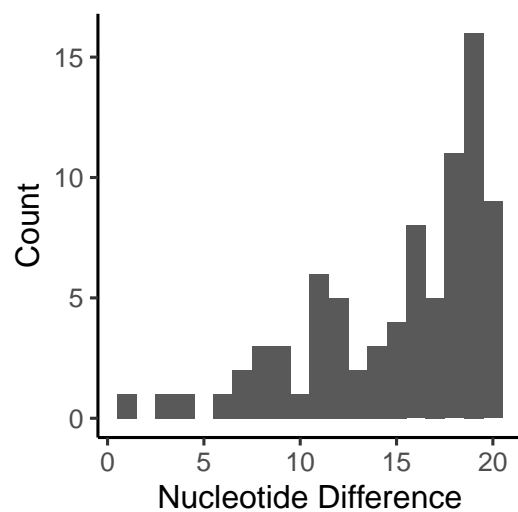
IGHV3–74*03

8442 sequences assigned
No exact matches.



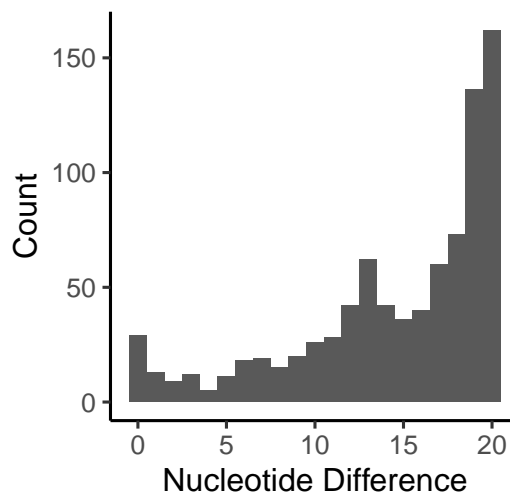
IGHV3–69–1*01

227 sequences assigned
No exact matches.



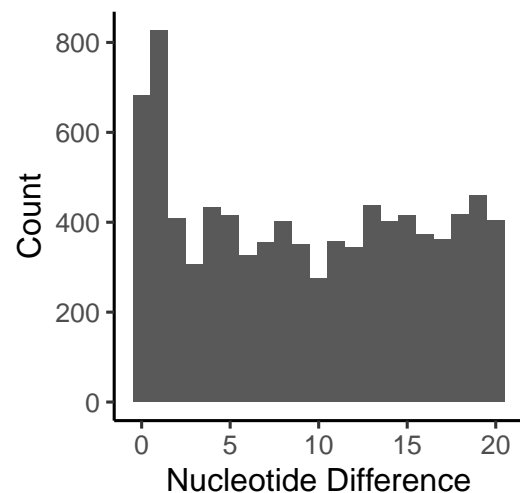
IGHV3–72*01

1328 sequences assigned
29 (2.2%) exact matches, in which:
24 unique CDR3
5 unique J



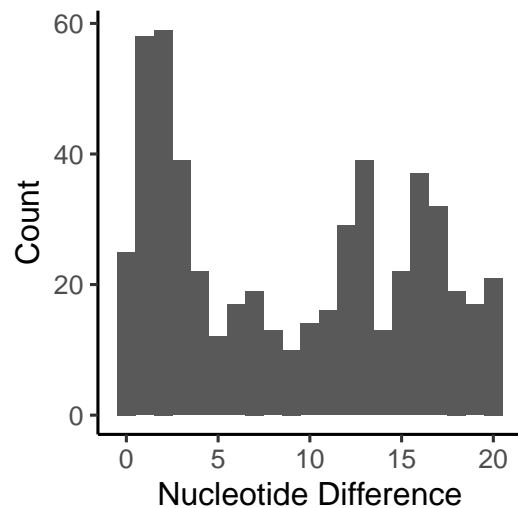
IGHV3–74*01_02

10863 sequences assigned
682 (6.3%) exact matches, in which:
534 unique CDR3
7 unique J



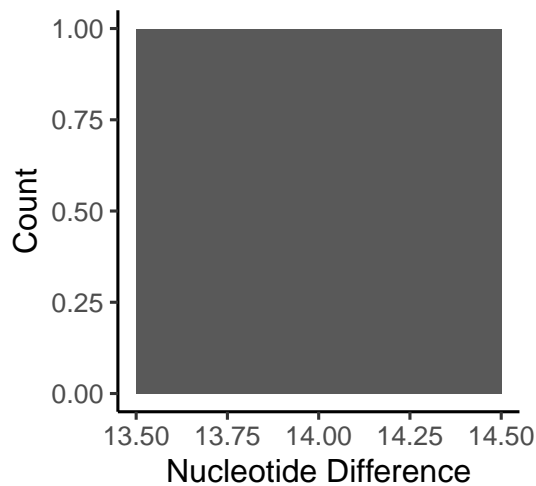
IGHV3-43D*03

660 sequences assigned
25 (3.8%) exact matches, in which:
21 unique CDR3
3 unique J



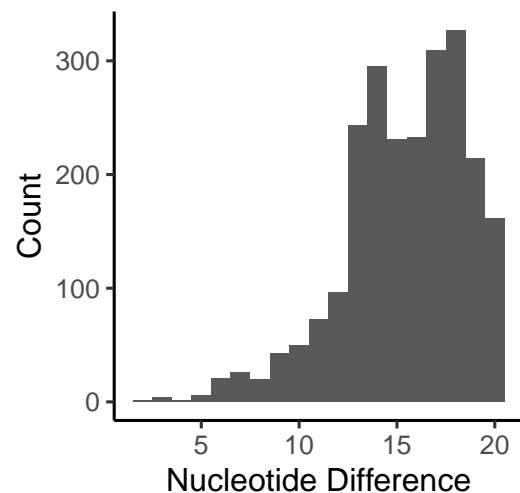
IGHV3-64D*09

4 sequences assigned
No exact matches.



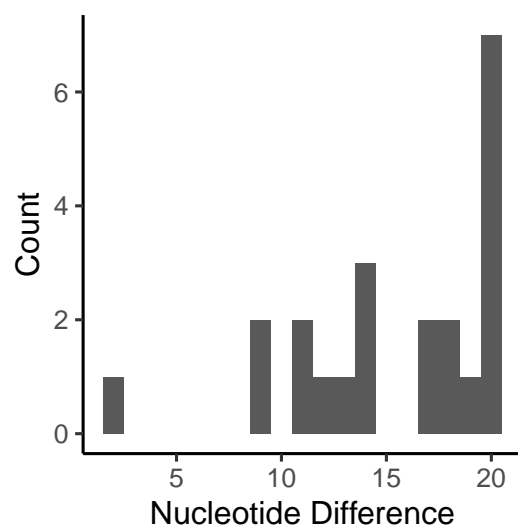
IGHV4-28*03

3034 sequences assigned
No exact matches.



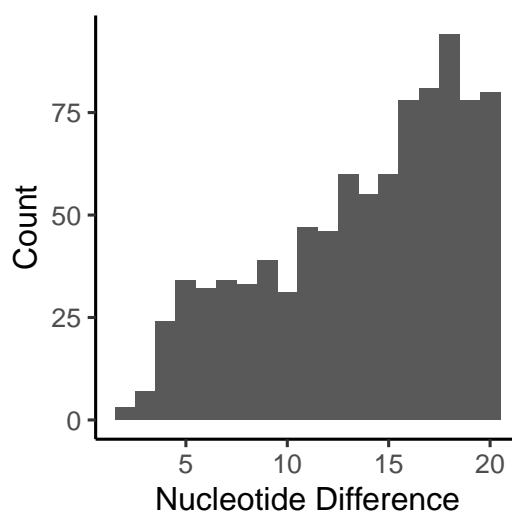
IGHV3-43D*04

53 sequences assigned
No exact matches.



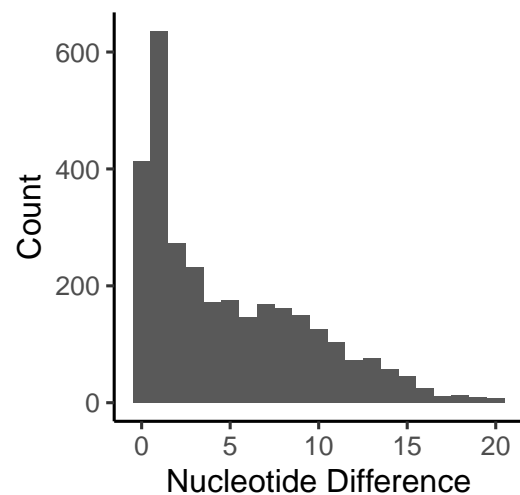
IGHV3-NL1*01

1370 sequences assigned
No exact matches.



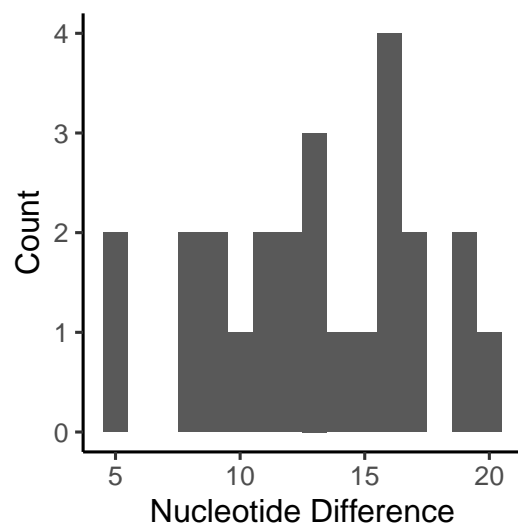
IGHV4-28*02_05_G80T_

3092 sequences assigned
414 (13.4%) exact matches, in which:
262 unique CDR3
7 unique J



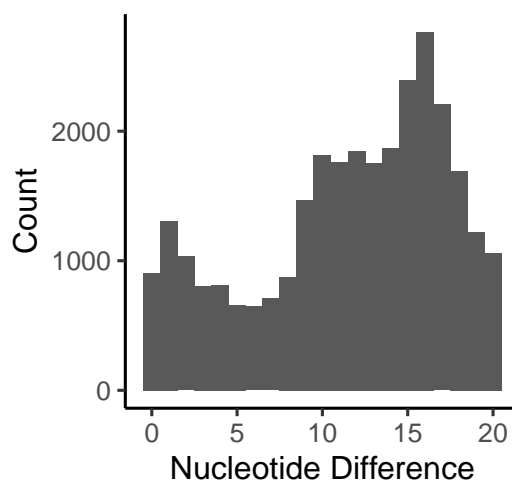
IGHV3-64D*06

32 sequences assigned
No exact matches.



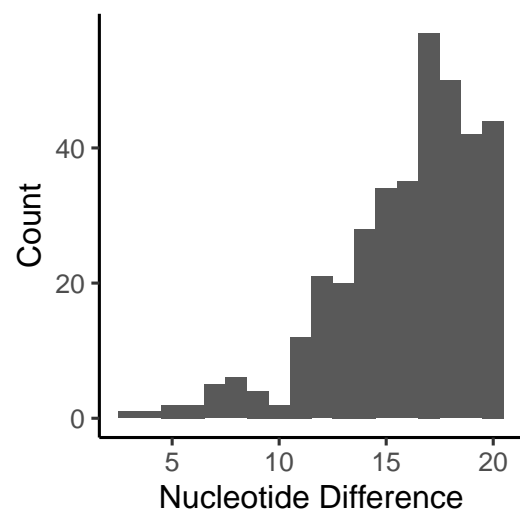
IGHV4-4*02_03

36046 sequences assigned
904 (2.5%) exact matches, in which:
646 unique CDR3
7 unique J



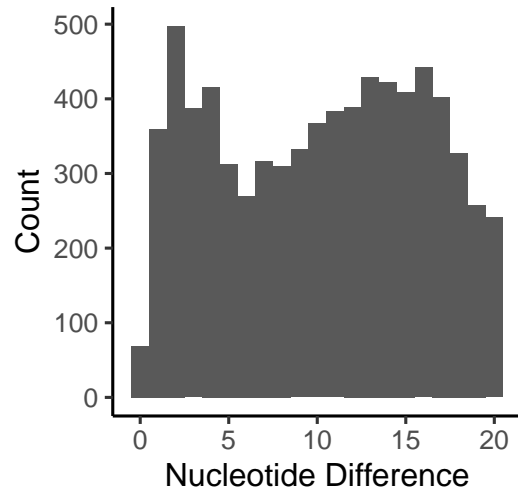
IGHV4-30-4*01

585 sequences assigned
No exact matches.



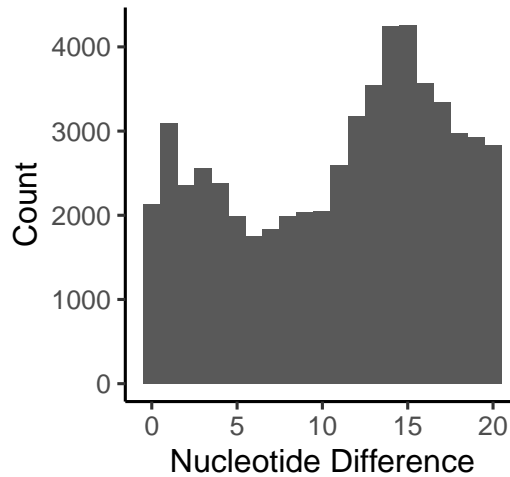
IGHV4-30-2*01

8310 sequences assigned
69 (0.8%) exact matches, in which:
65 unique CDR3
7 unique J



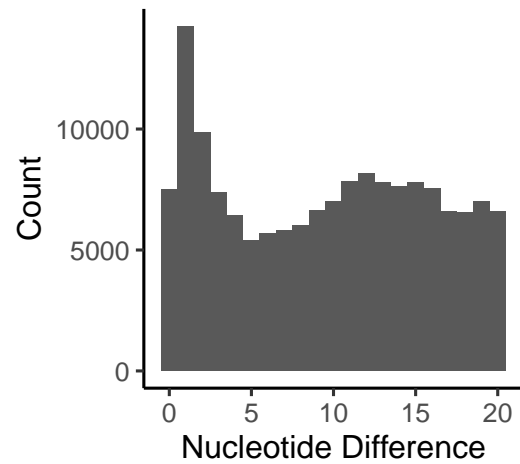
IGHV4-31*02

71062 sequences assigned
2136 (3%) exact matches, in which:
1450 unique CDR3
7 unique J



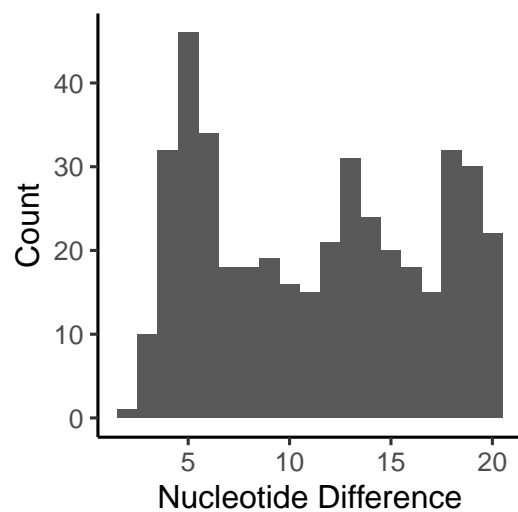
IGHV4-39*07

203127 sequences assigned
7488 (3.7%) exact matches, in which:
4522 unique CDR3
7 unique J



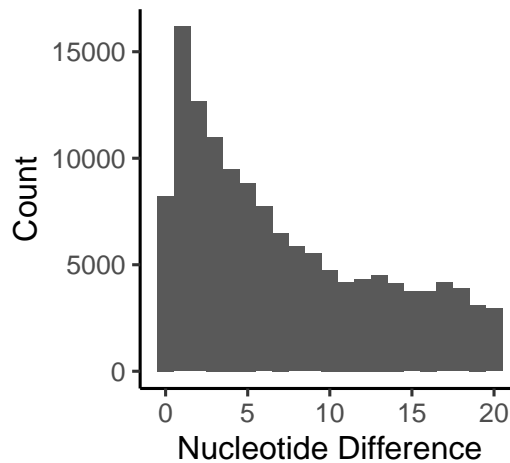
IGHV4-30-4*07

536 sequences assigned
No exact matches.



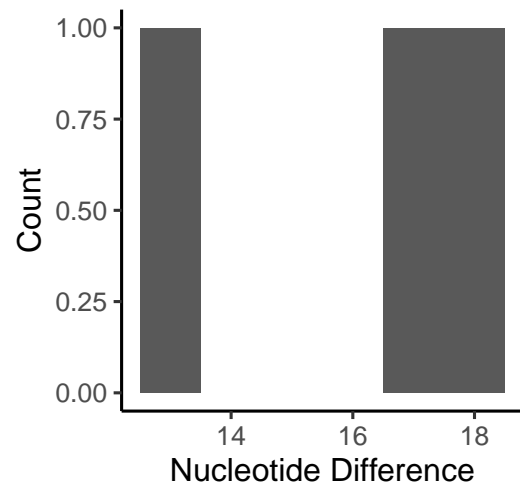
IGHV4-34*01_02

154206 sequences assigned
8233 (5.3%) exact matches, in which:
5114 unique CDR3
7 unique J



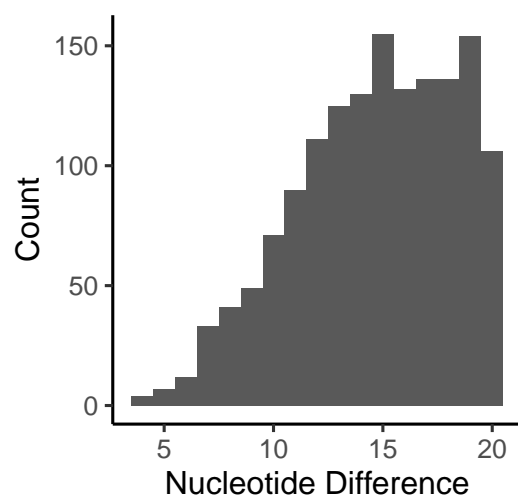
IGHV4-55*09

19 sequences assigned
No exact matches.



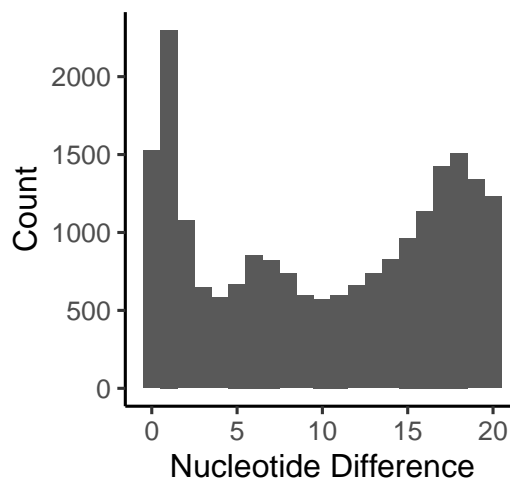
IGHV4-30-4*08

2247 sequences assigned
No exact matches.



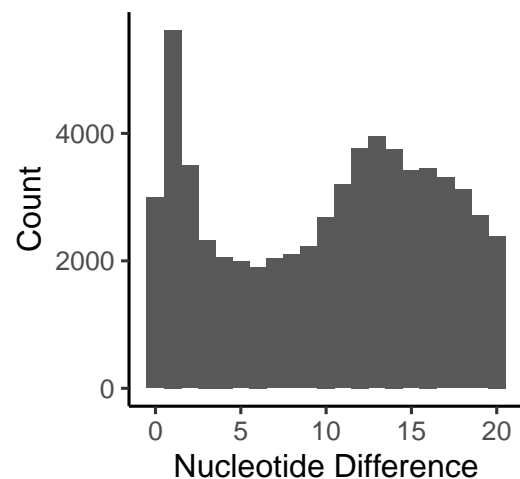
IGHV4-38-2*02

26422 sequences assigned
1525 (5.8%) exact matches, in which:
1023 unique CDR3
7 unique J



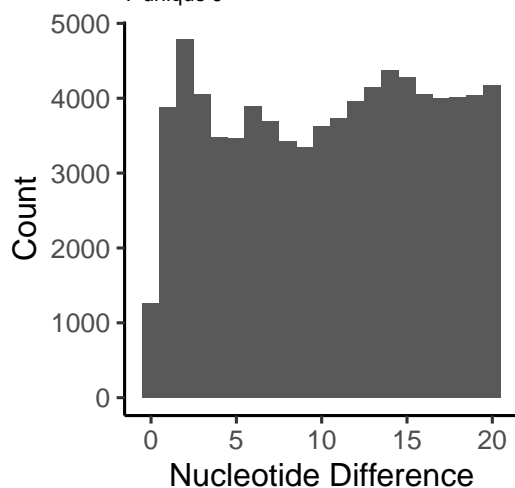
IGHV4-59*08

76460 sequences assigned
2992 (3.9%) exact matches, in which:
1953 unique CDR3
7 unique J



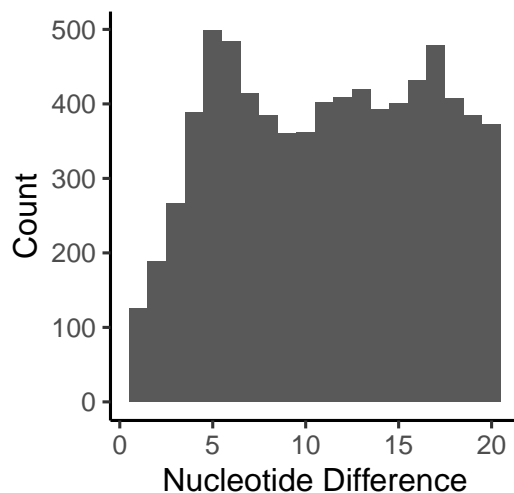
IGHV4-59*12

100761 sequences assigned
1265 (1.3%) exact matches, in which:
1019 unique CDR3
7 unique J



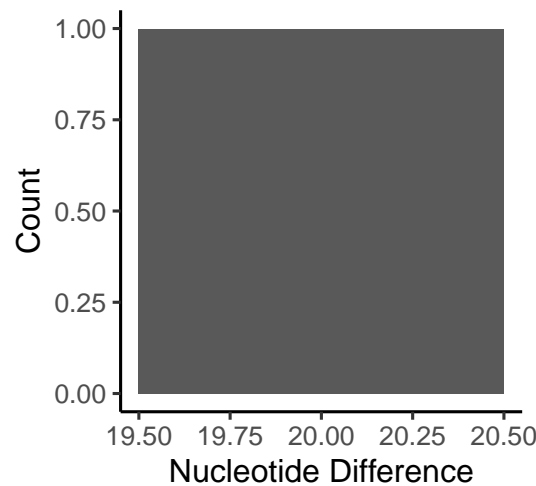
IGHV4-61*08

9574 sequences assigned
No exact matches.



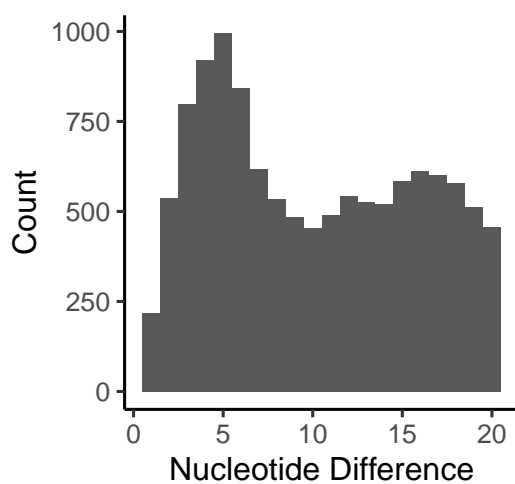
IGHV1/OR15-3*02

1 sequences assigned
No exact matches.



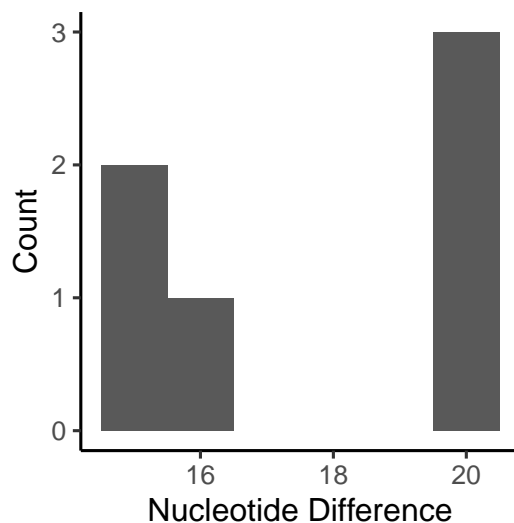
IGHV4-61*01

14019 sequences assigned
No exact matches.



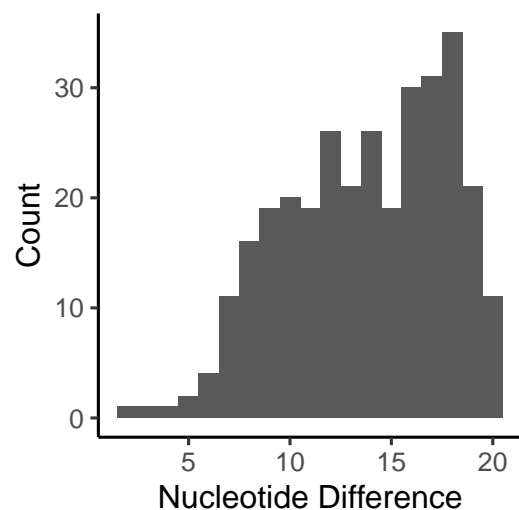
IGHV1/OR15-1*04

10 sequences assigned
No exact matches.



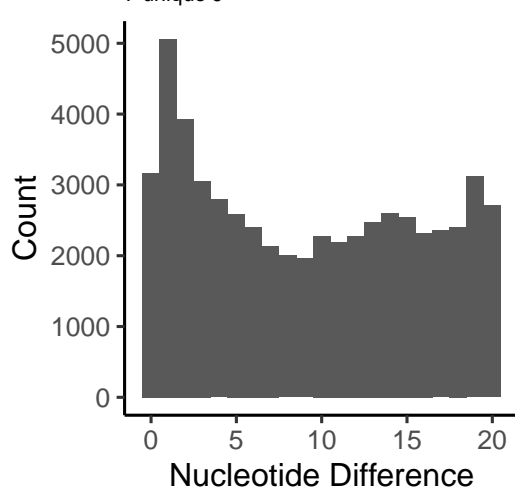
IGHV4/OR15-8*01

490 sequences assigned
No exact matches.



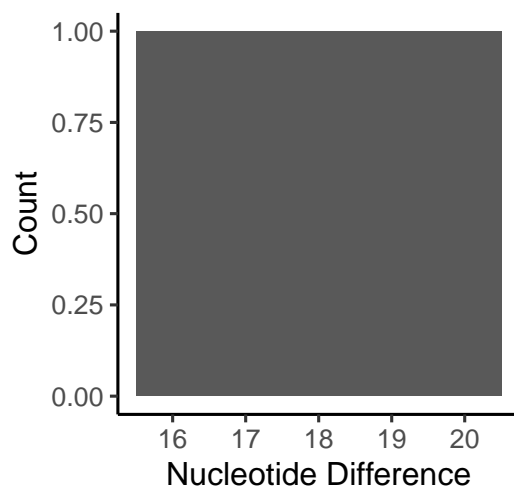
IGHV4-61*02

68708 sequences assigned
3166 (4.6%) exact matches, in which:
1996 unique CDR3
7 unique J



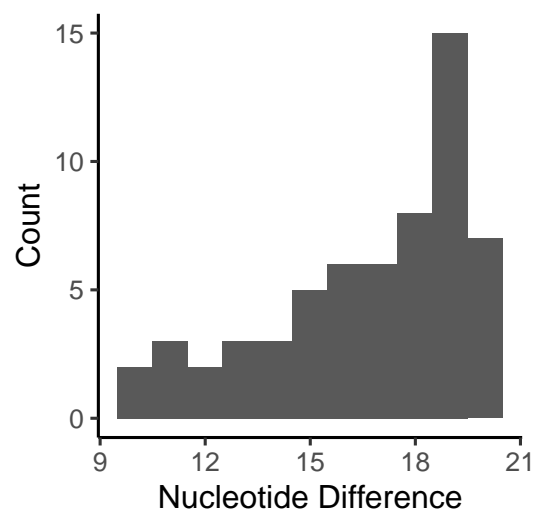
IGHV1/OR15-2*02_03

14 sequences assigned
No exact matches.



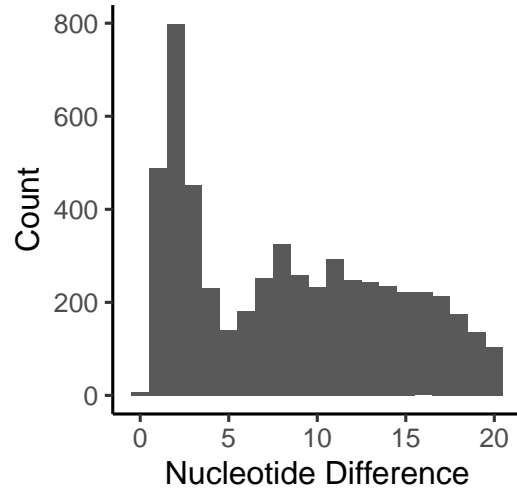
IGHV4/OR15-8*02

734 sequences assigned
No exact matches.



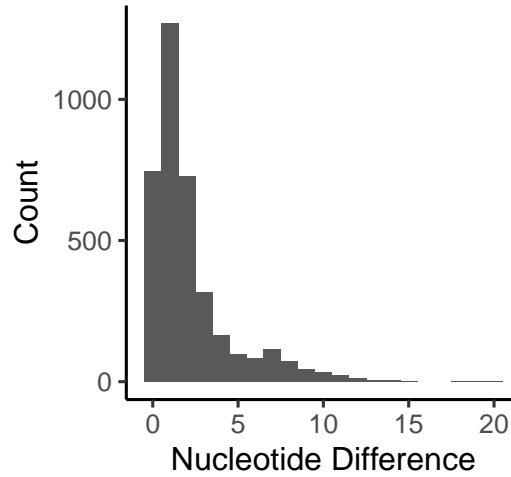
IGHV5–51*07

5893 sequences assigned
8 (0.1%) exact matches, in which:
8 unique CDR3
4 unique J



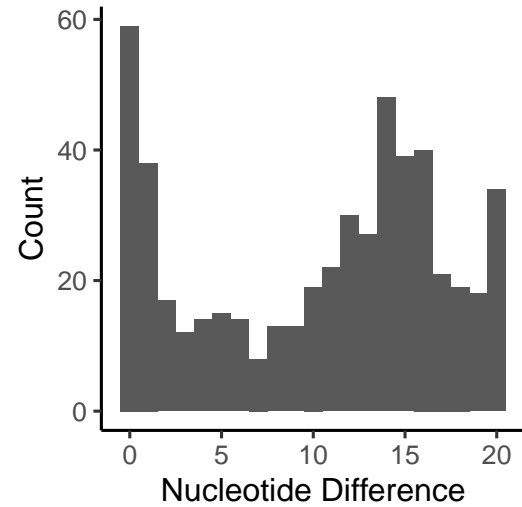
IGHV6–1*01_02_A163C

3746 sequences assigned
746 (19.9%) exact matches, in which:
334 unique CDR3
7 unique J



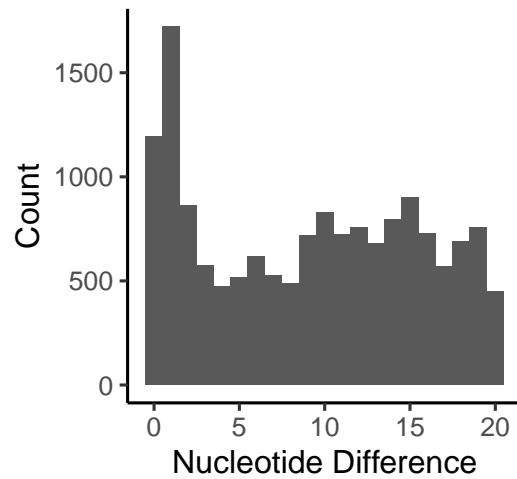
IGHV7–4–1*02

668 sequences assigned
59 (8.8%) exact matches, in which:
51 unique CDR3
7 unique J



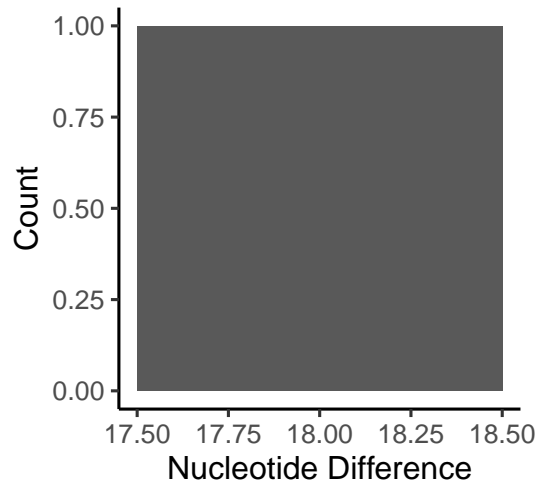
IGHV5–51*01_03

17171 sequences assigned
1192 (6.9%) exact matches, in which:
862 unique CDR3
7 unique J



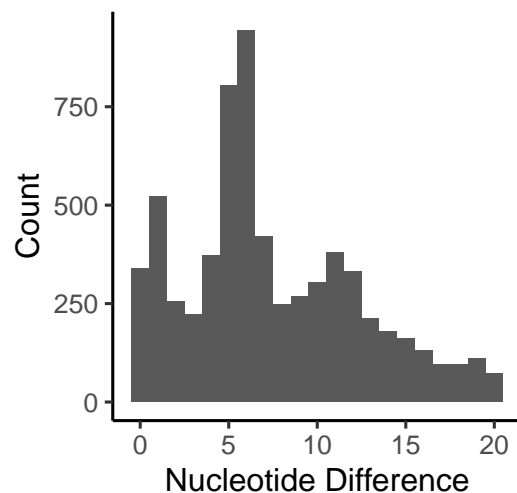
IGHV3/OR16–8*01

2 sequences assigned
No exact matches.



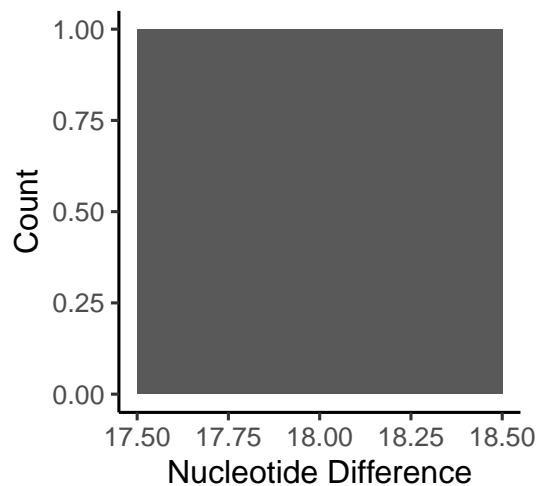
IGHV6–1*01_02

7022 sequences assigned
340 (4.8%) exact matches, in which:
247 unique CDR3
7 unique J

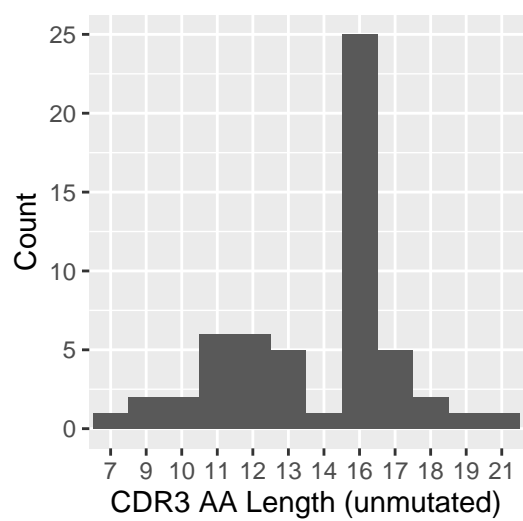


IGHV3/OR16–13*01

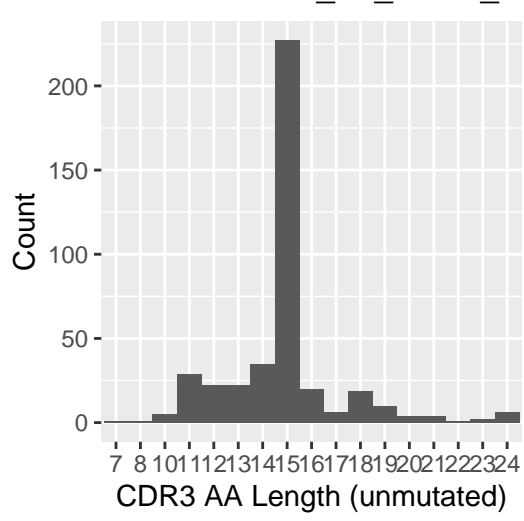
4 sequences assigned
No exact matches.



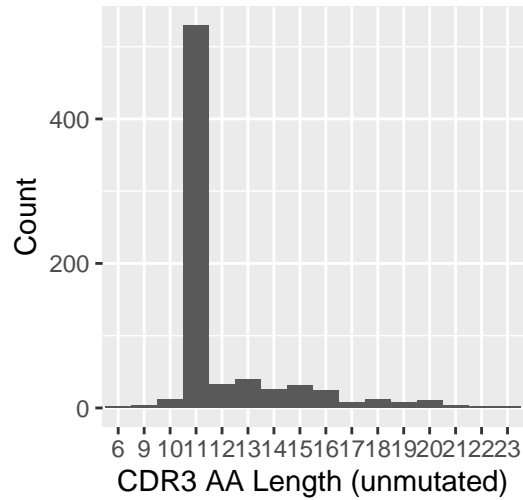
IGHV3-13*01_C210T



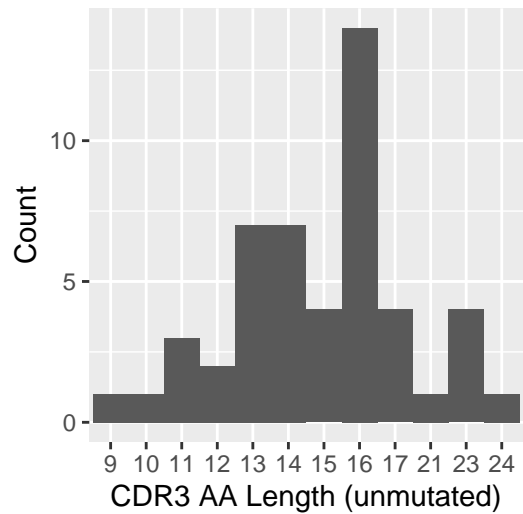
IGHV4-28*02_05_G80T_A109C_G162A_T163C_A175G_G19



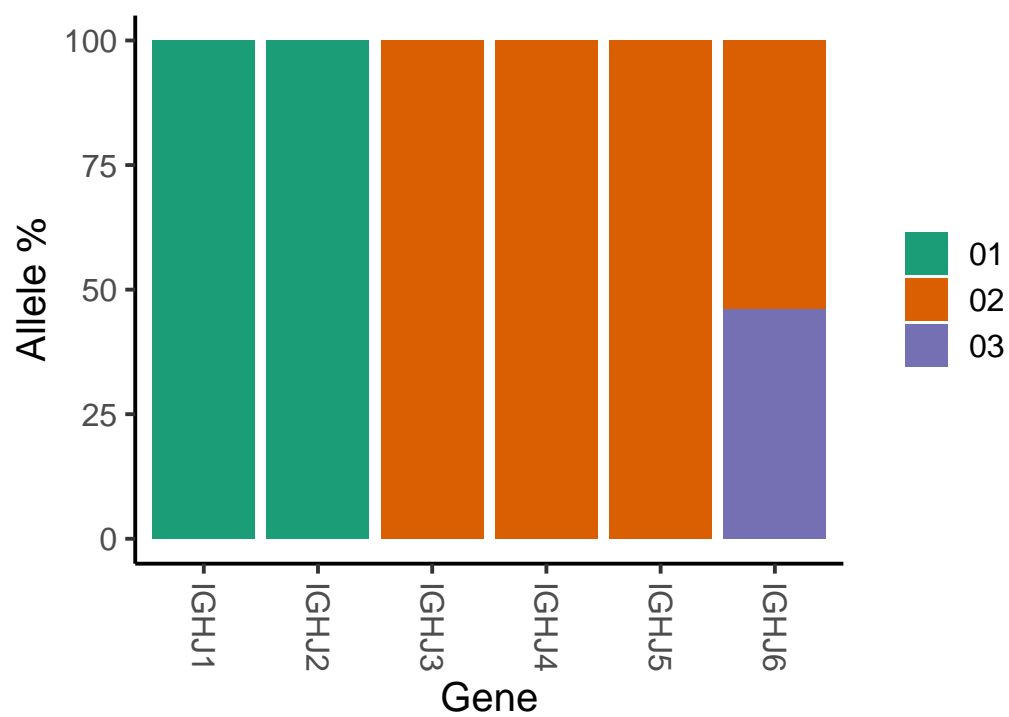
IGHV6-1*01_02_A163C_C174T_G176T_A207C_C230T_A275C



IGHV1-3*01_05_C134A



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.