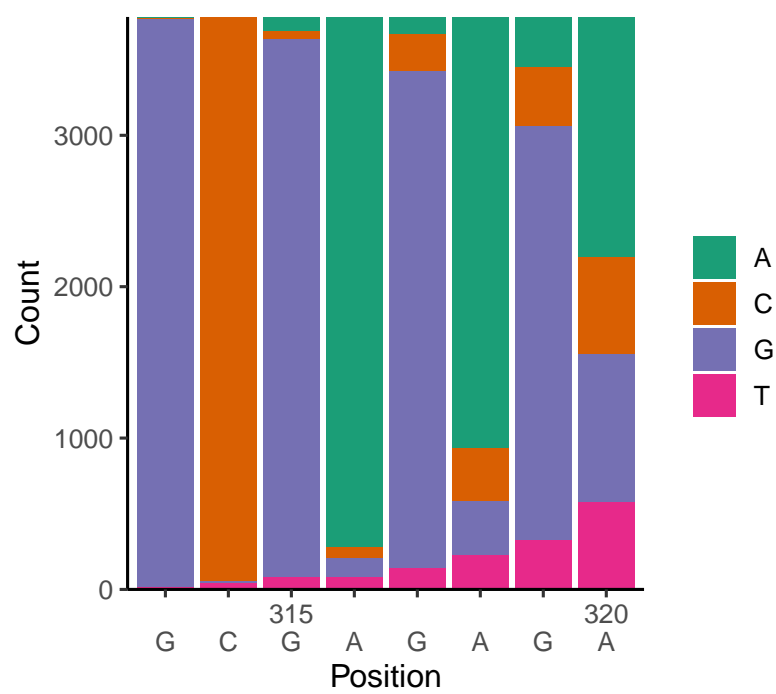


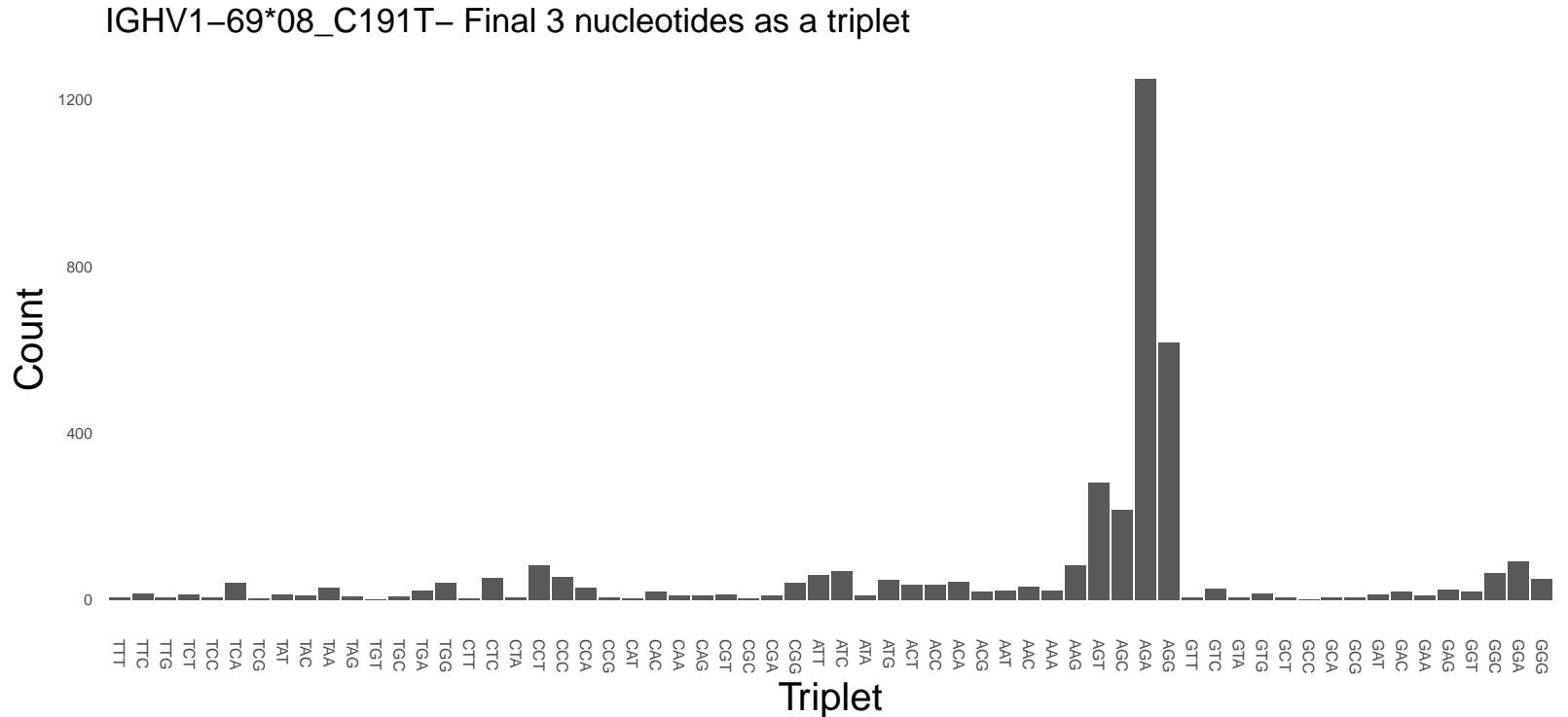
Gene IGHV1-69*08_C191T



Gene IGHV1-69*08_C191T

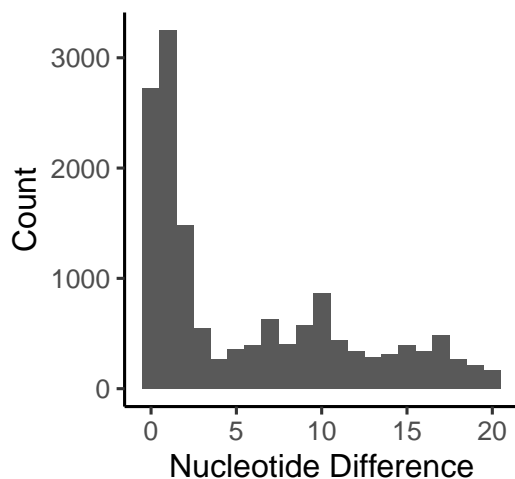


IGHV1-69*08_C191T- Final 3 nucleotides as a triplet



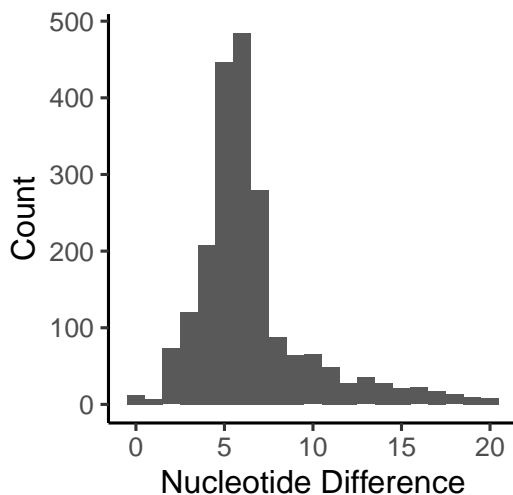
IGHV1-2*02

16313 sequences assigned
2724 (16.7%) exact matches, in which:
2240 unique CDR3
6 unique J



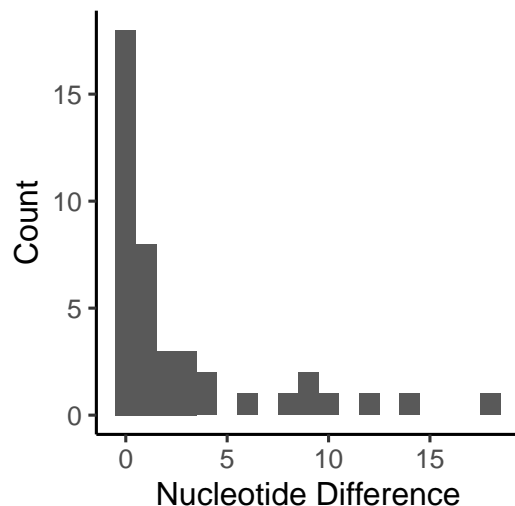
IGHV1-8*02

2145 sequences assigned
12 (0.6%) exact matches, in which:
12 unique CDR3
4 unique J



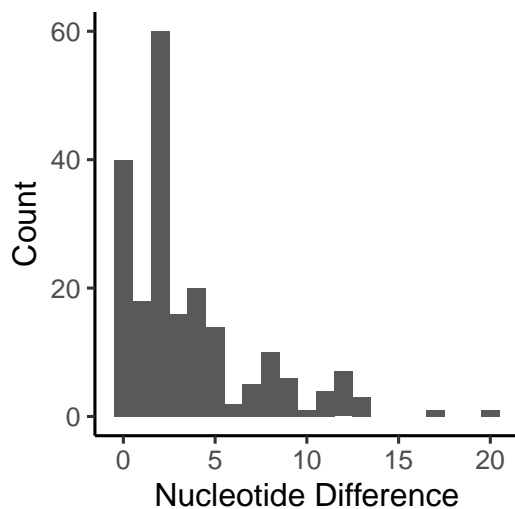
IGHV1-45*02

54 sequences assigned
18 (33.3%) exact matches, in which:
15 unique CDR3
4 unique J



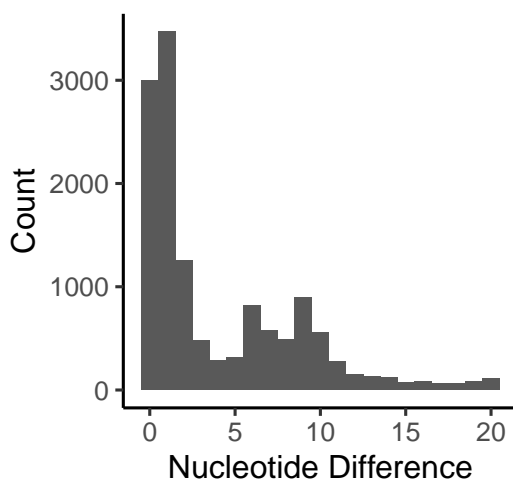
IGHV1-3*02

208 sequences assigned
40 (19.2%) exact matches, in which:
40 unique CDR3
5 unique J



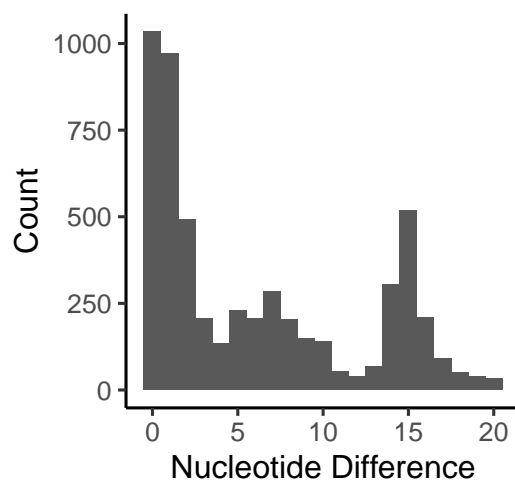
IGHV1-18*01

13832 sequences assigned
3002 (21.7%) exact matches, in which:
2452 unique CDR3
6 unique J



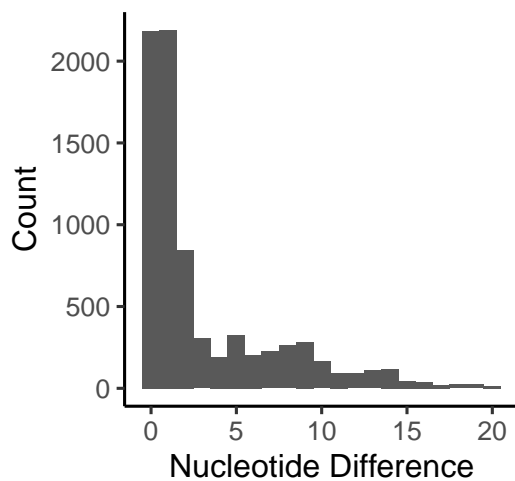
IGHV1-46*01

5874 sequences assigned
1034 (17.6%) exact matches, in which:
928 unique CDR3
6 unique J



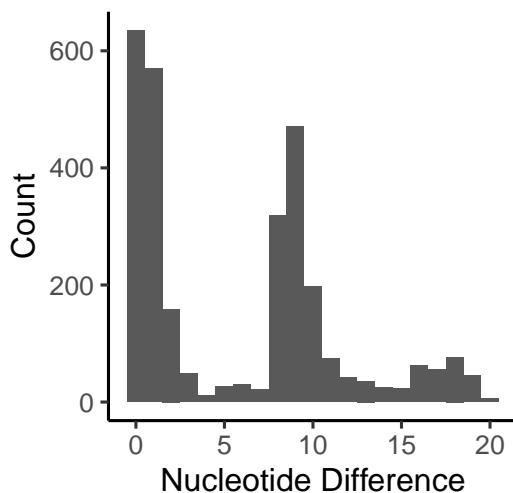
IGHV1-8*01

8465 sequences assigned
2183 (25.8%) exact matches, in which:
1859 unique CDR3
6 unique J



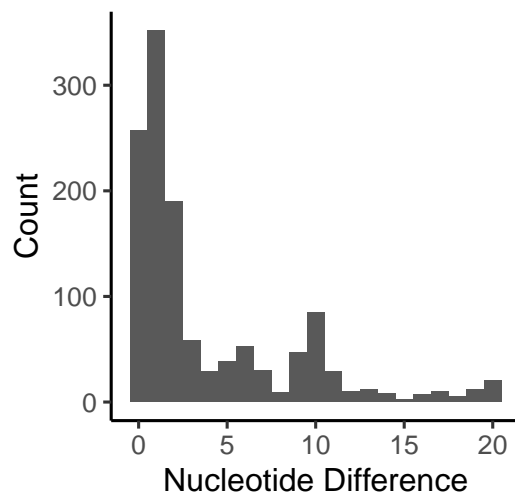
IGHV1-24*01

2968 sequences assigned
635 (21.4%) exact matches, in which:
549 unique CDR3
6 unique J



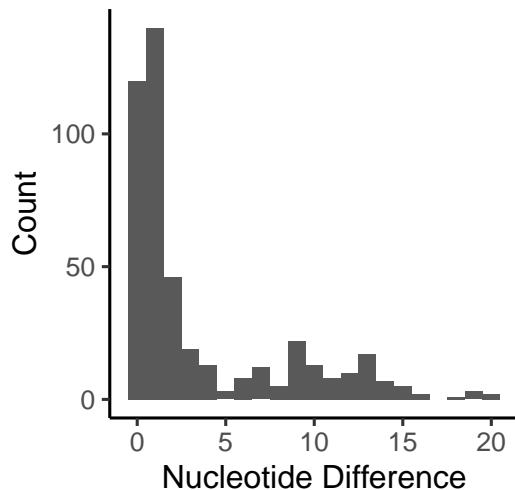
IGHV1-46*03

1826 sequences assigned
257 (14.1%) exact matches, in which:
194 unique CDR3
6 unique J



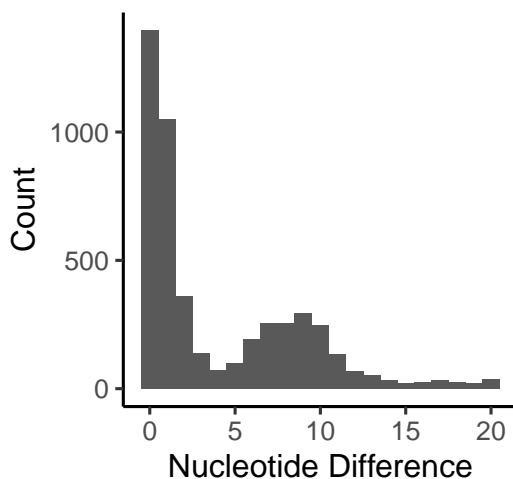
IGHV1-58*02

468 sequences assigned
120 (25.6%) exact matches, in which:
104 unique CDR3
5 unique J



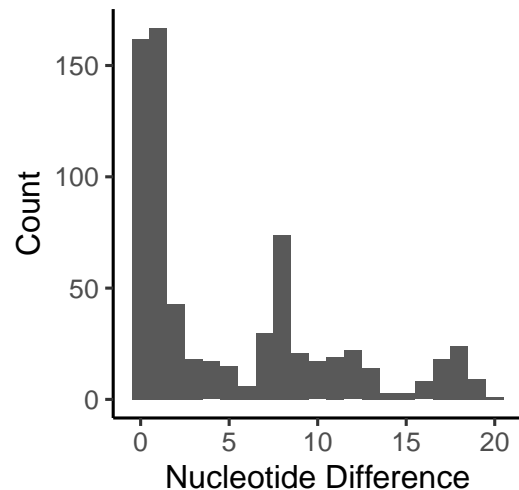
IGHV1-69*06_14

4923 sequences assigned
1396 (28.4%) exact matches, in which:
1264 unique CDR3
6 unique J



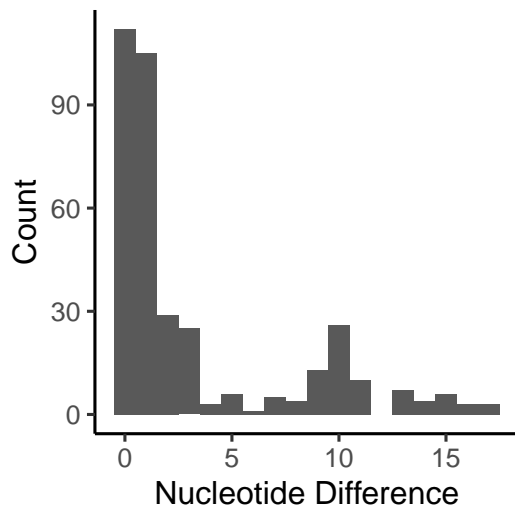
IGHV2-5*01

729 sequences assigned
162 (22.2%) exact matches, in which:
137 unique CDR3
5 unique J



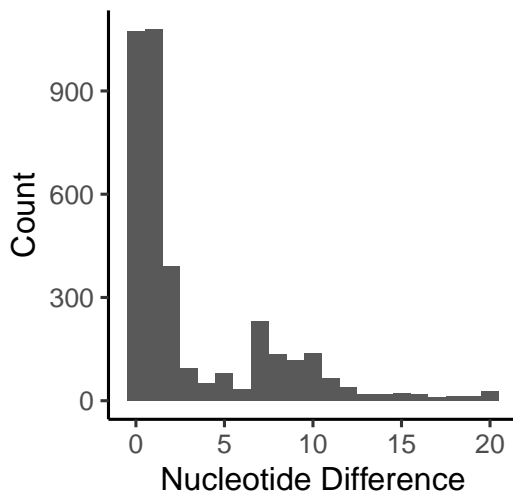
IGHV1-58*01_03

378 sequences assigned
112 (29.6%) exact matches, in which:
106 unique CDR3
5 unique J



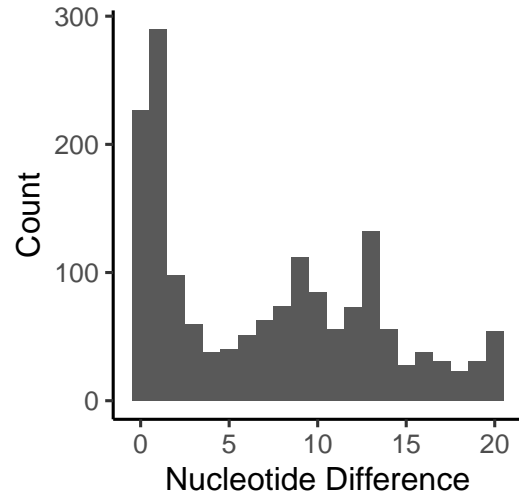
IGHV1-69*08_C191T

3782 sequences assigned
1073 (28.4%) exact matches, in which:
966 unique CDR3
6 unique J



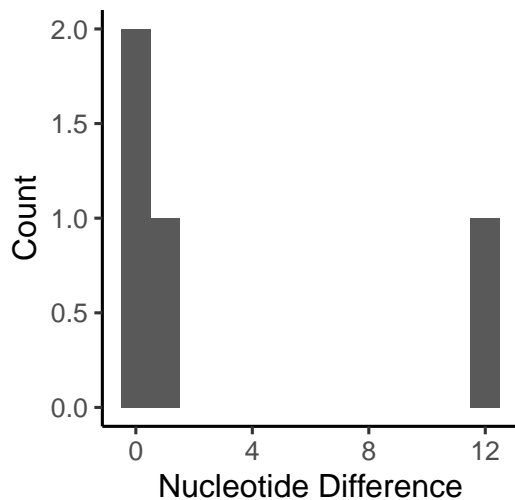
IGHV2-5*02

2831 sequences assigned
227 (8%) exact matches, in which:
174 unique CDR3
5 unique J



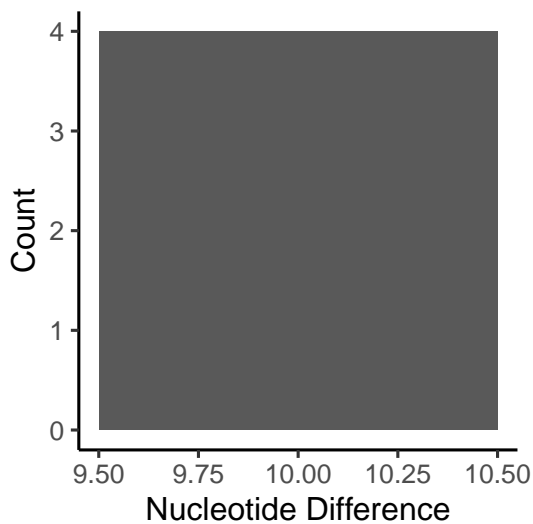
IGHV1-69-2*01

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



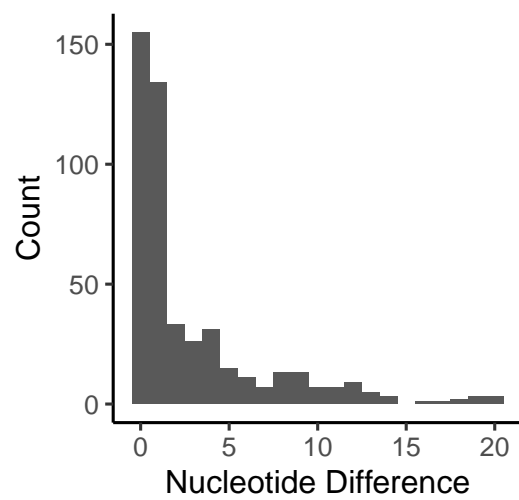
IGHV1-NL1*01

4 sequences assigned
No exact matches.



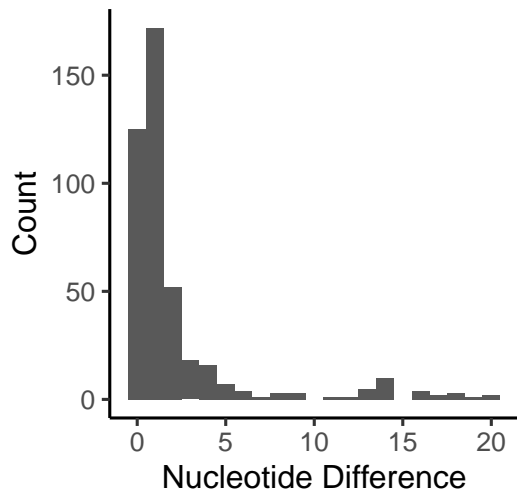
IGHV2-26*01

492 sequences assigned
155 (31.5%) exact matches, in which:
121 unique CDR3
6 unique J



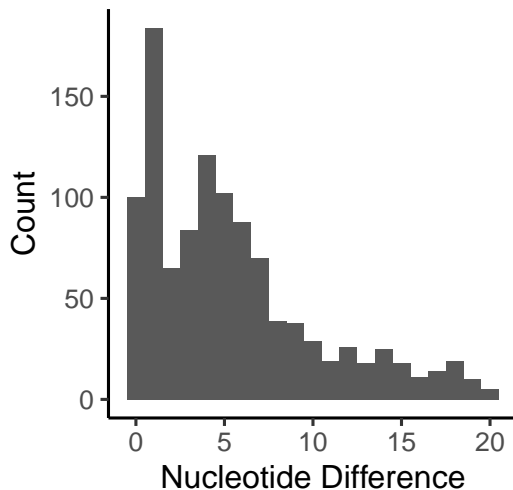
IGHV2-70*01

436 sequences assigned
125 (28.7%) exact matches, in which:
100 unique CDR3
5 unique J



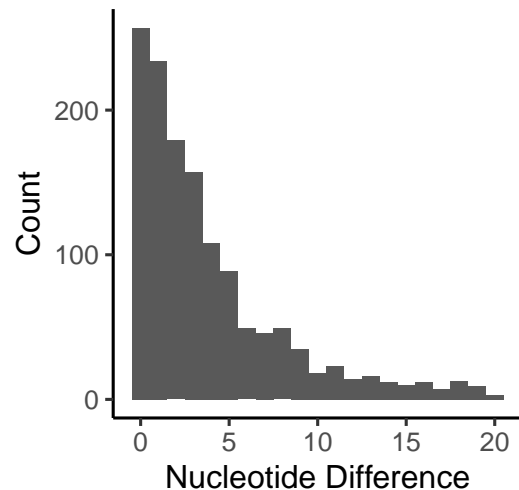
IGHV3-7*03

1158 sequences assigned
100 (8.6%) exact matches, in which:
97 unique CDR3
6 unique J



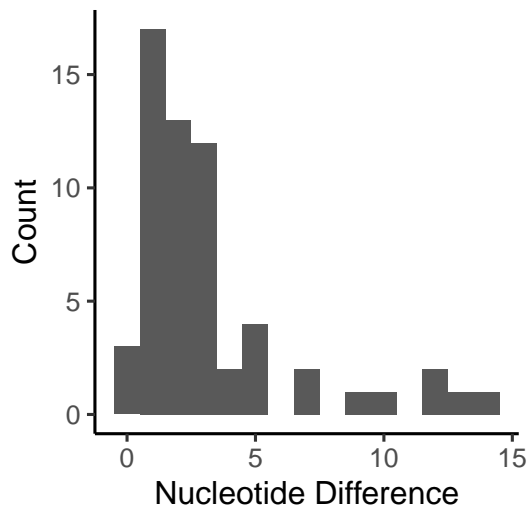
IGHV3-11*04

1428 sequences assigned
257 (18%) exact matches, in which:
242 unique CDR3
6 unique J



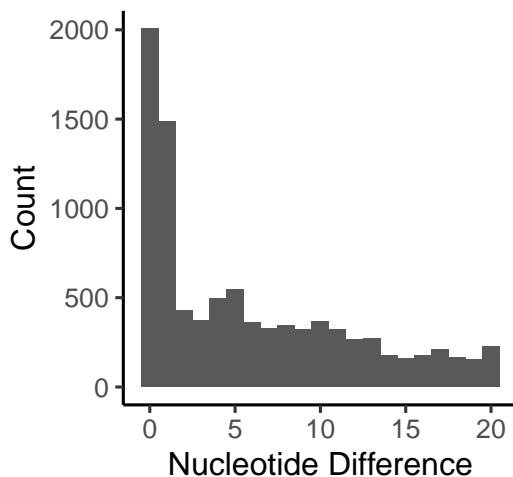
IGHV2-70*12

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



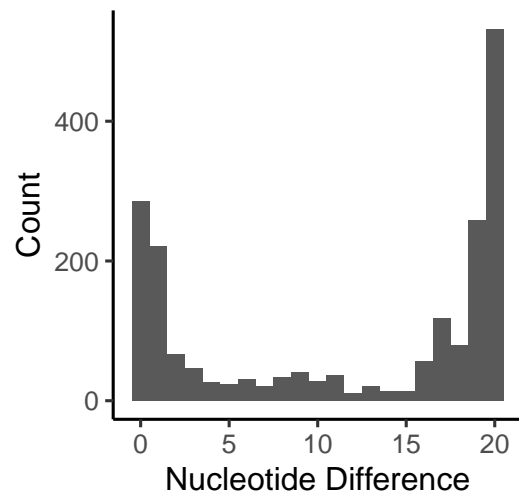
IGHV3-9*01

11152 sequences assigned
2006 (18%) exact matches, in which:
1168 unique CDR3
6 unique J



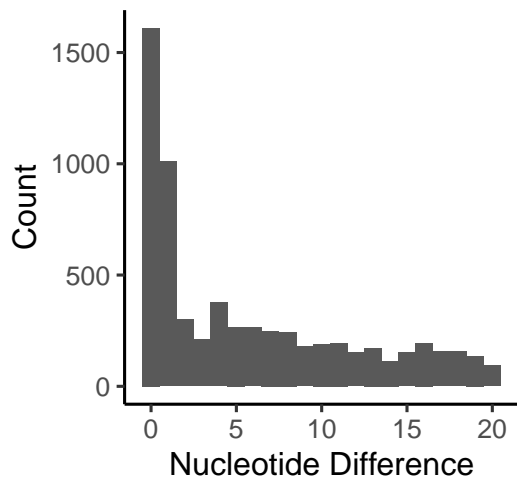
IGHV3-13*01

2554 sequences assigned
285 (11.2%) exact matches, in which:
188 unique CDR3
6 unique J



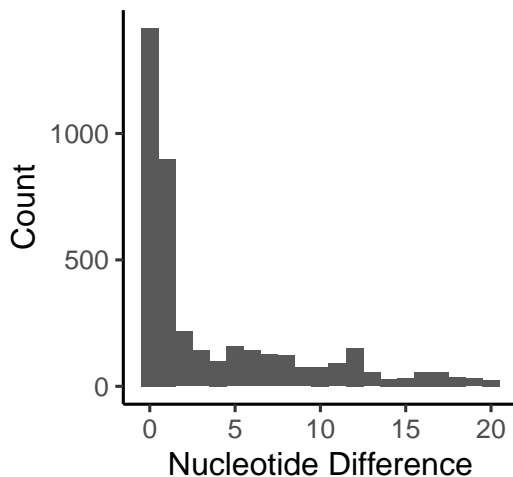
IGHV3-7*01

6870 sequences assigned
1610 (23.4%) exact matches, in which:
1122 unique CDR3
6 unique J



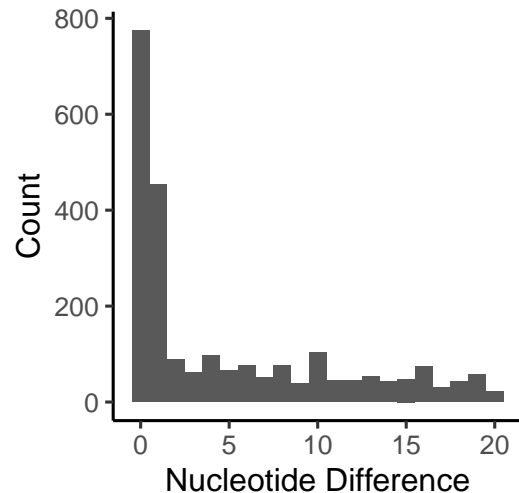
IGHV3-11*01

4987 sequences assigned
1417 (28.4%) exact matches, in which:
951 unique CDR3
6 unique J



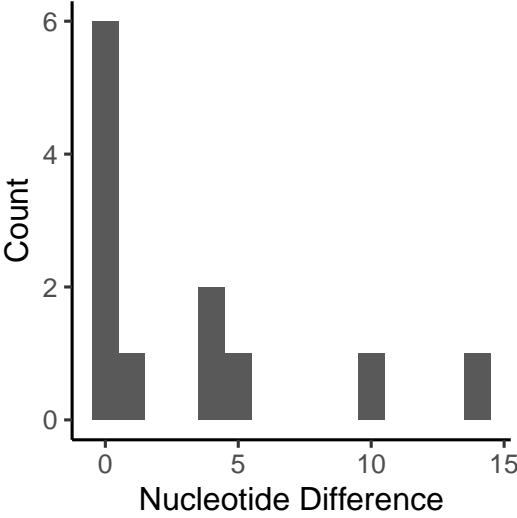
IGHV3-15*01_02

3705 sequences assigned
775 (20.9%) exact matches, in which:
458 unique CDR3
6 unique J



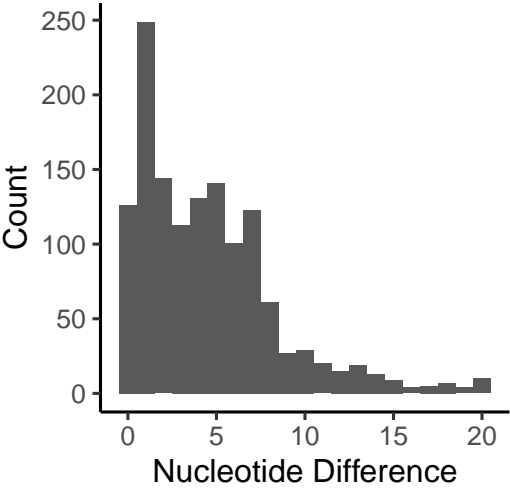
IGHV3-19*01

12 sequences assigned
6 (50%) exact matches, in which:
6 unique CDR3
3 unique J



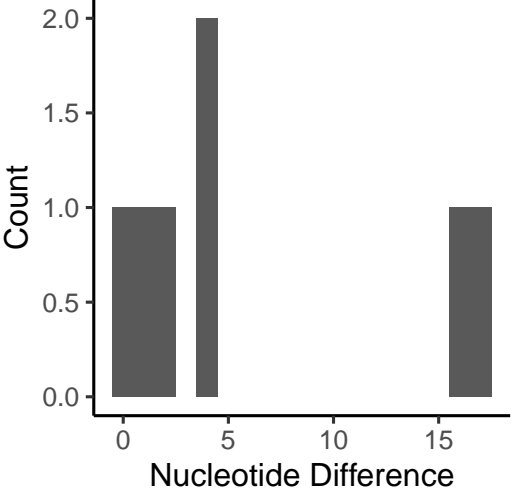
IGHV3-21*04

1435 sequences assigned
126 (8.8%) exact matches, in which:
116 unique CDR3
5 unique J



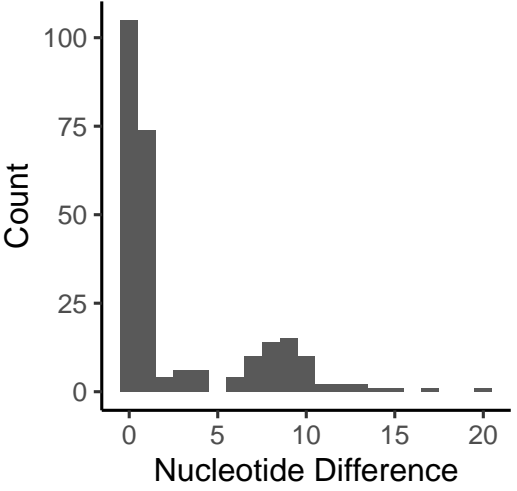
IGHV3-30-3*01

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



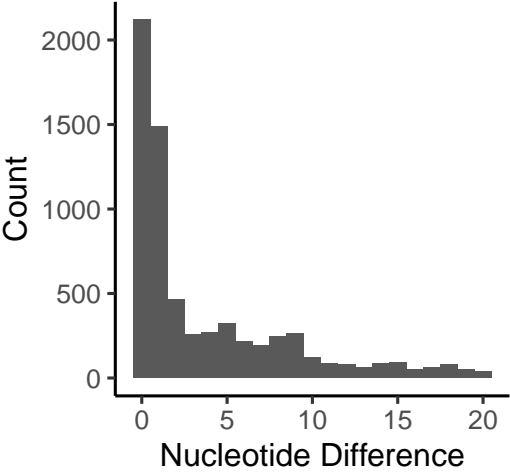
IGHV3-20*01_02

258 sequences assigned
105 (40.7%) exact matches, in which:
64 unique CDR3
5 unique J



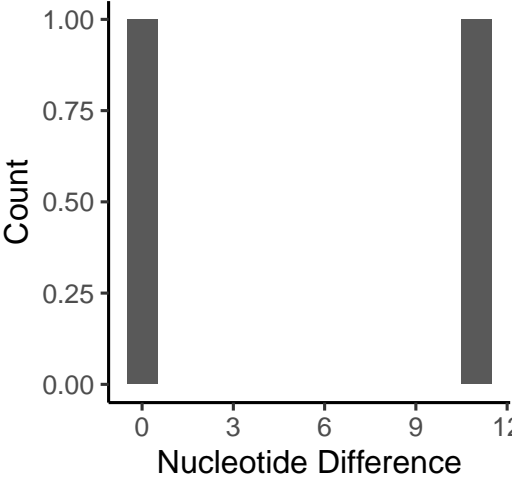
IGHV3-21*01_02

7611 sequences assigned
2120 (27.9%) exact matches, in which:
1367 unique CDR3
6 unique J



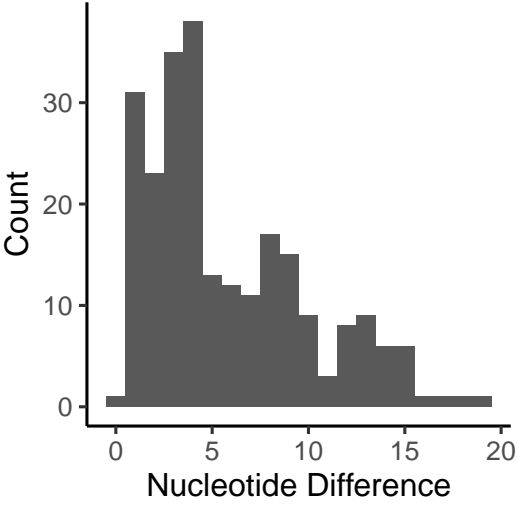
IGHV3-30-3*02

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



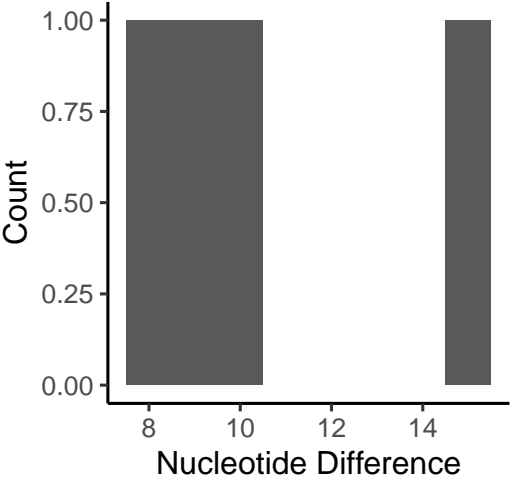
IGHV3-20*03_04

396 sequences assigned
1 (0.3%) exact matches, in which:
1 unique CDR3
1 unique J



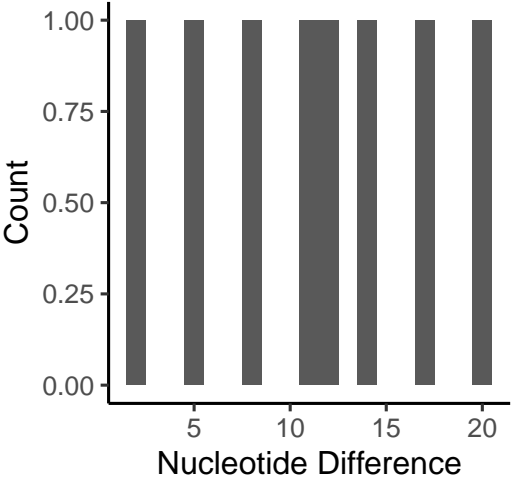
IGHV3-22*01_02

4 sequences assigned
No exact matches.



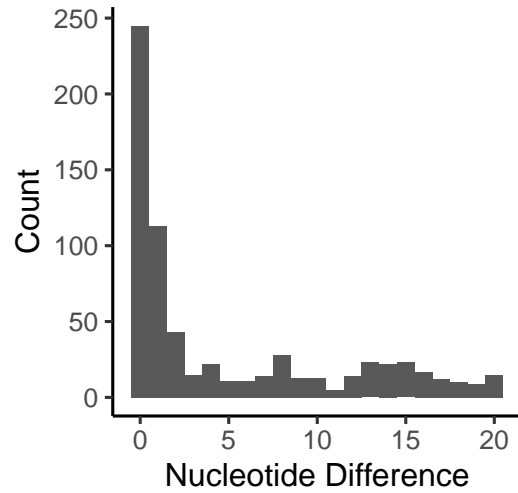
IGHV3-30-3*03

11 sequences assigned
No exact matches.



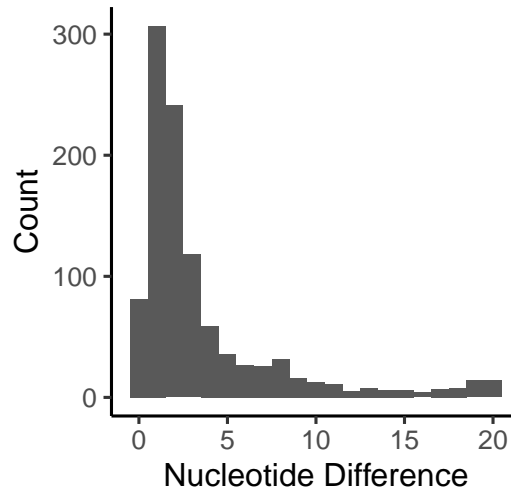
IGHV3–30*03

709 sequences assigned
245 (34.6%) exact matches, in which:
230 unique CDR3
5 unique J



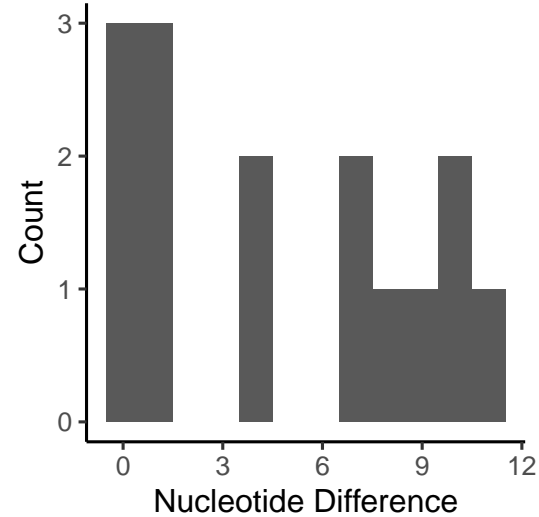
IGHV3–33*06

1051 sequences assigned
81 (7.7%) exact matches, in which:
78 unique CDR3
6 unique J



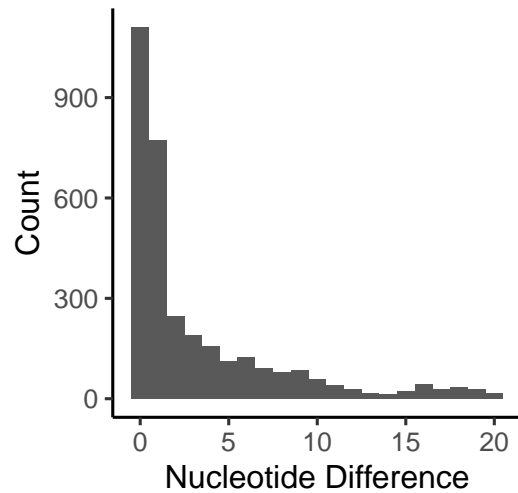
IGHV3–38*02

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



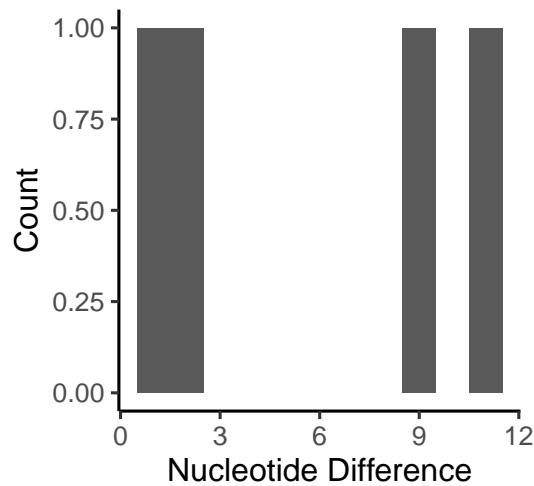
IGHV3–33*01

3428 sequences assigned
1111 (32.4%) exact matches, in which:
746 unique CDR3
6 unique J



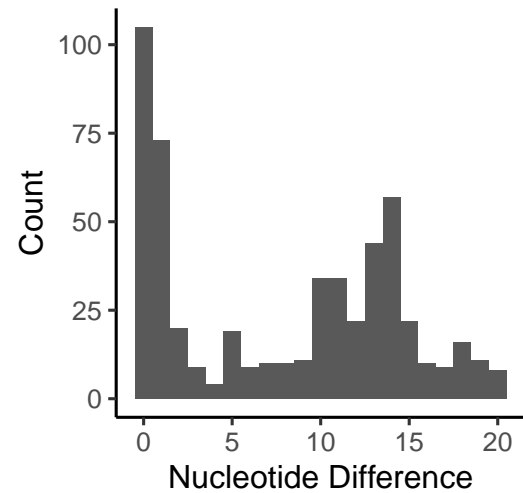
IGHV3–35*01

4 sequences assigned
No exact matches.



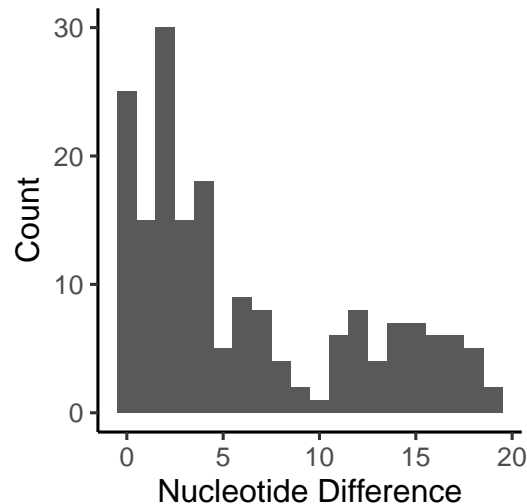
IGHV3–43*01

617 sequences assigned
105 (17%) exact matches, in which:
62 unique CDR3
4 unique J



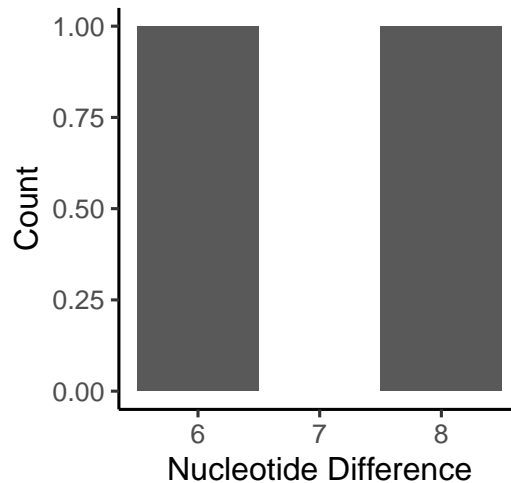
IGHV3–33*05

192 sequences assigned
25 (13%) exact matches, in which:
25 unique CDR3
4 unique J



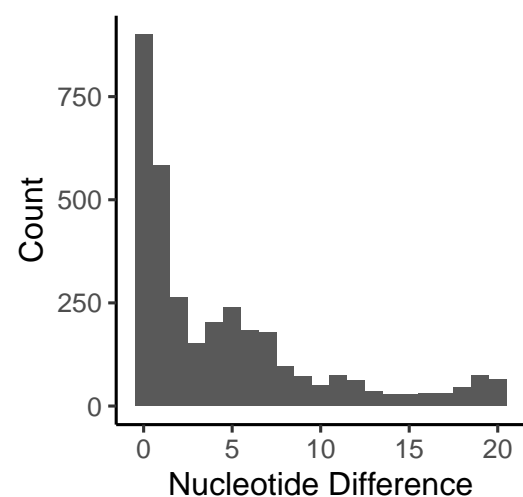
IGHV3–38–3*01

2 sequences assigned
No exact matches.



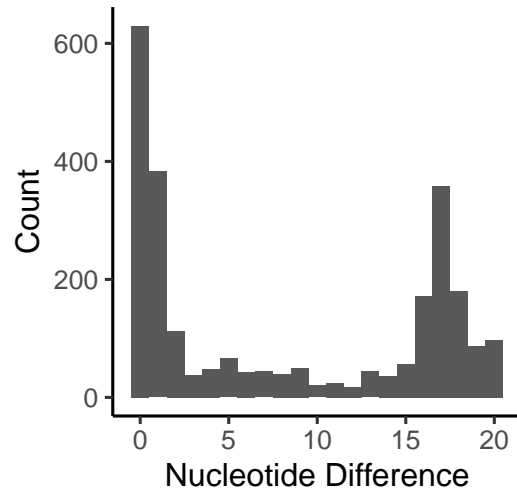
IGHV3–48*01

3582 sequences assigned
901 (25.2%) exact matches, in which:
621 unique CDR3
6 unique J



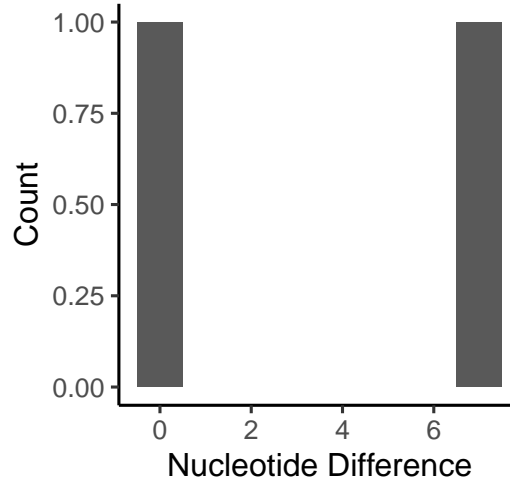
IGHV3-48*02

3193 sequences assigned
630 (19.7%) exact matches, in which:
417 unique CDR3
6 unique J



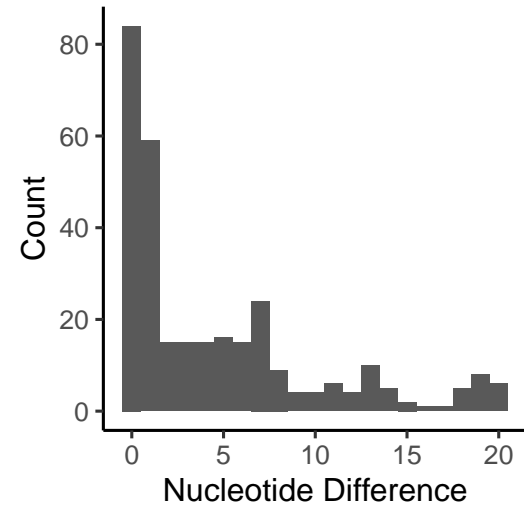
IGHV3-52*02

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



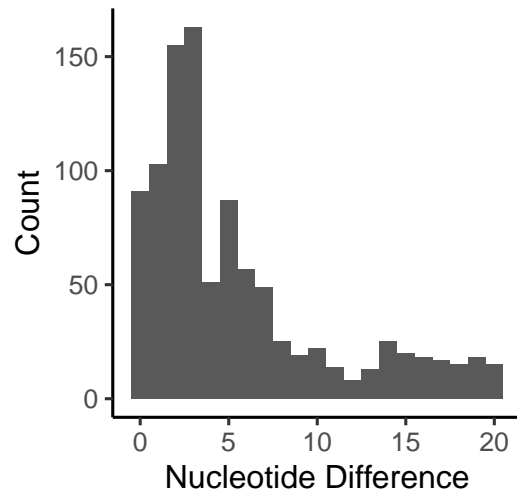
IGHV3-64*01

317 sequences assigned
84 (26.5%) exact matches, in which:
59 unique CDR3
6 unique J



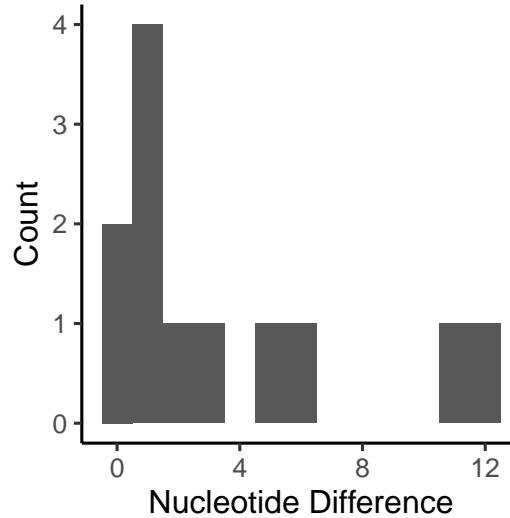
IGHV3-48*04

1236 sequences assigned
91 (7.4%) exact matches, in which:
85 unique CDR3
5 unique J



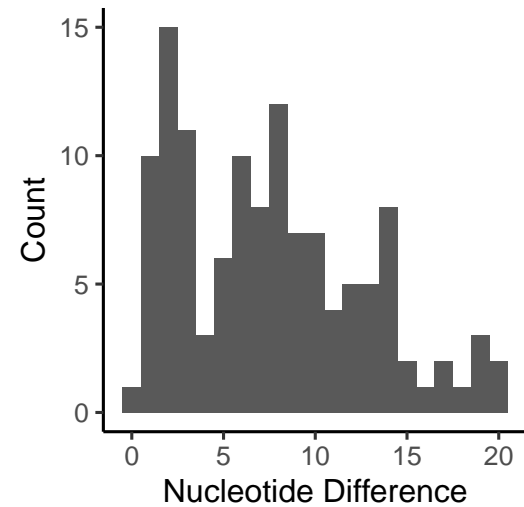
IGHV3-52*01_03

12 sequences assigned
2 (16.7%) exact matches, in which:
2 unique CDR3
2 unique J



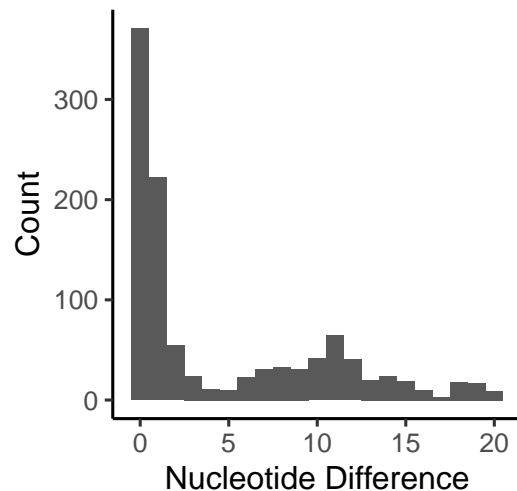
IGHV3-66*01

141 sequences assigned
1 (0.7%) exact matches, in which:
1 unique CDR3
1 unique J



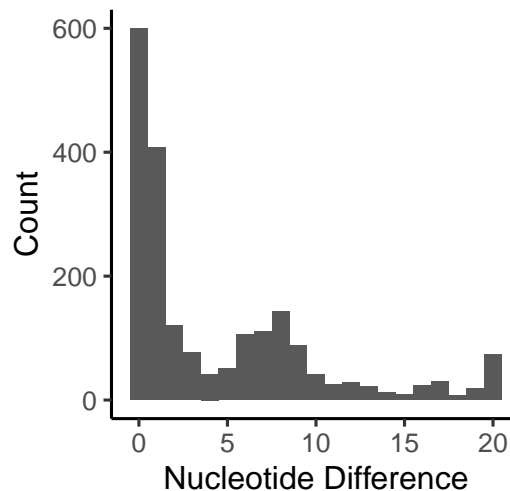
IGHV3-49*03_05

2444 sequences assigned
371 (15.2%) exact matches, in which:
229 unique CDR3
6 unique J



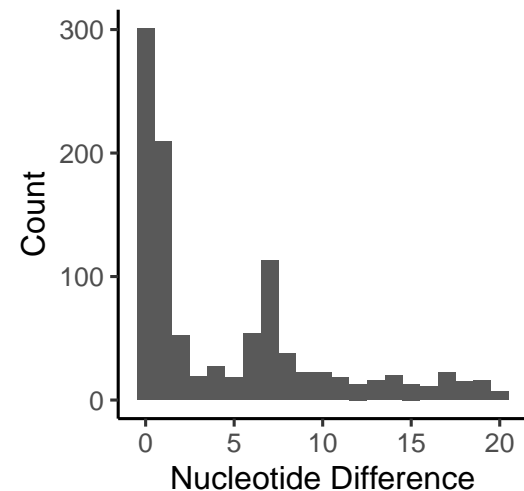
IGHV3-53*01_02

2794 sequences assigned
600 (21.5%) exact matches, in which:
398 unique CDR3
6 unique J



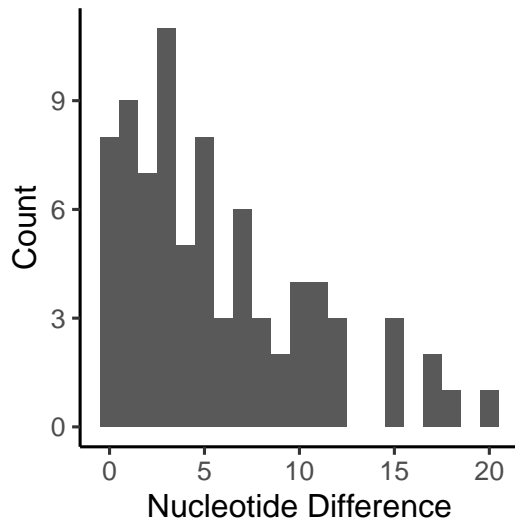
IGHV3-66*02

1162 sequences assigned
301 (25.9%) exact matches, in which:
209 unique CDR3
6 unique J



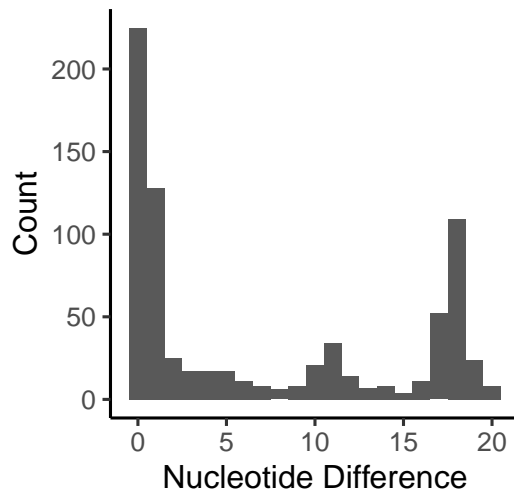
IGHV3-69-1*01

91 sequences assigned
8 (8.8%) exact matches, in which:
8 unique CDR3
5 unique J



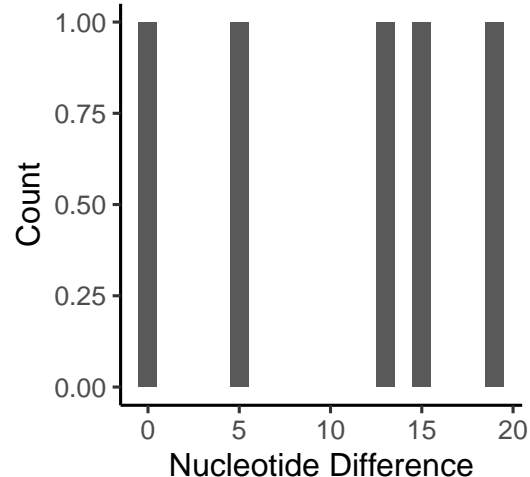
IGHV3-73*01_02

781 sequences assigned
225 (28.8%) exact matches, in which:
139 unique CDR3
6 unique J



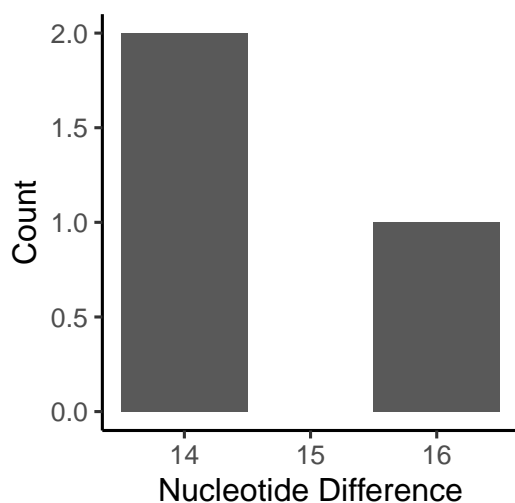
IGHV3-64D*06

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



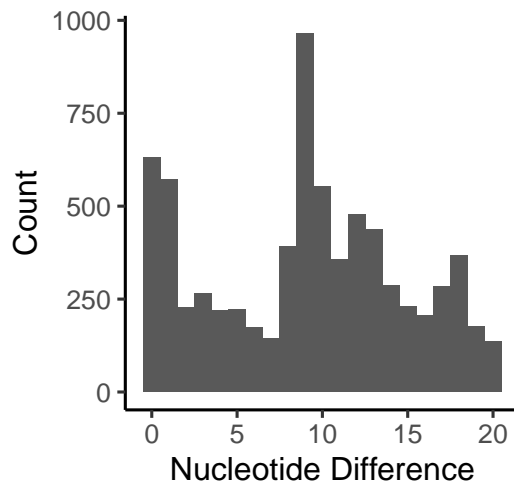
IGHV3-71*01_04

6 sequences assigned
No exact matches.



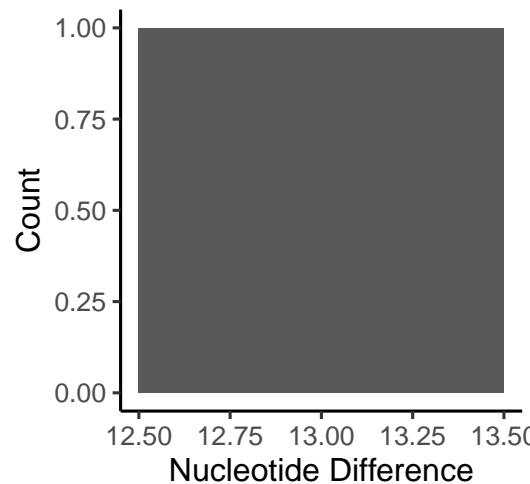
IGHV3-74*01_02

9133 sequences assigned
630 (6.9%) exact matches, in which:
416 unique CDR3
6 unique J



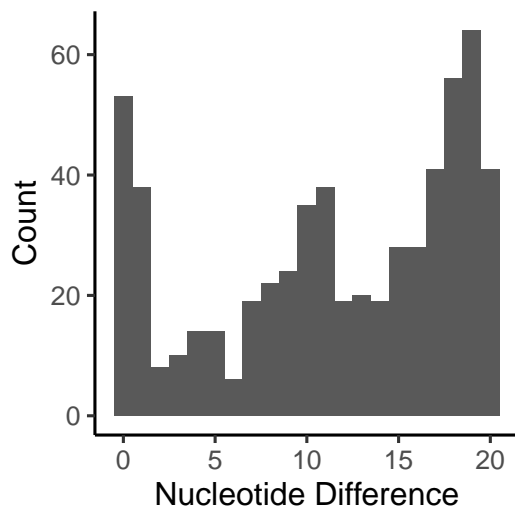
IGHV3-64D*09

1 sequences assigned
No exact matches.



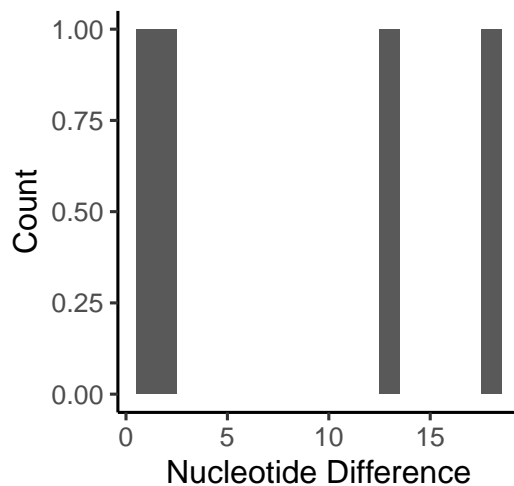
IGHV3-72*01

677 sequences assigned
53 (7.8%) exact matches, in which:
35 unique CDR3
6 unique J



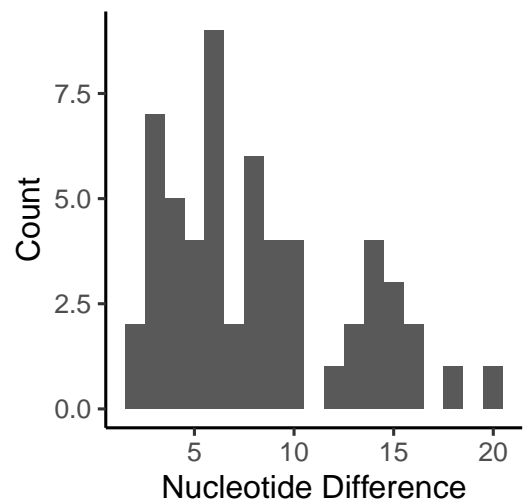
IGHV3-43D*04

6 sequences assigned
No exact matches.



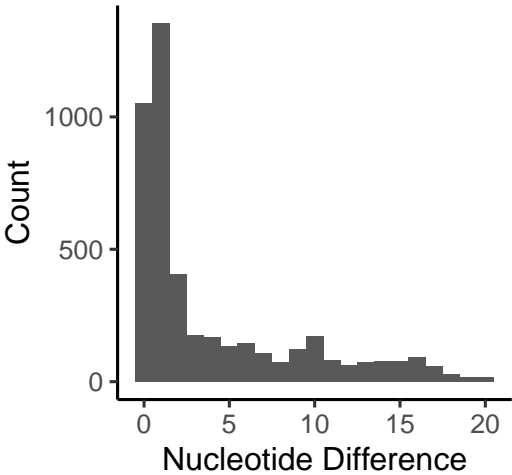
IGHV3-NL1*01

69 sequences assigned
No exact matches.



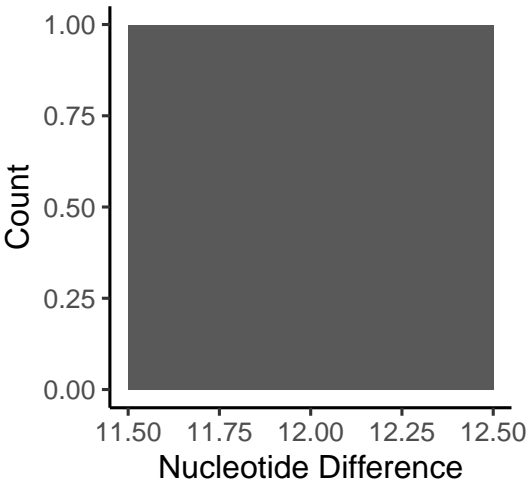
IGHV4-4*07

4976 sequences assigned
1051 (21.1%) exact matches, in which:
878 unique CDR3
6 unique J



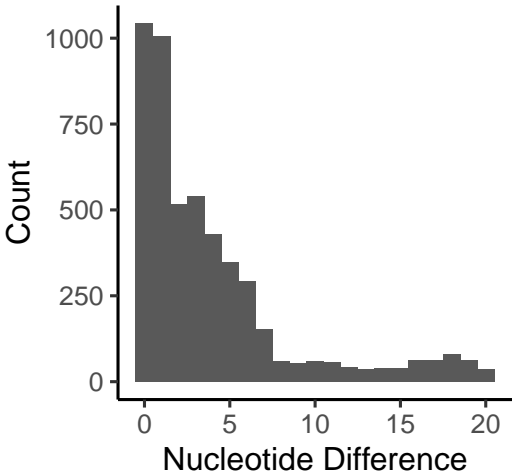
IGHV4-30-4*01

1 sequences assigned
No exact matches.



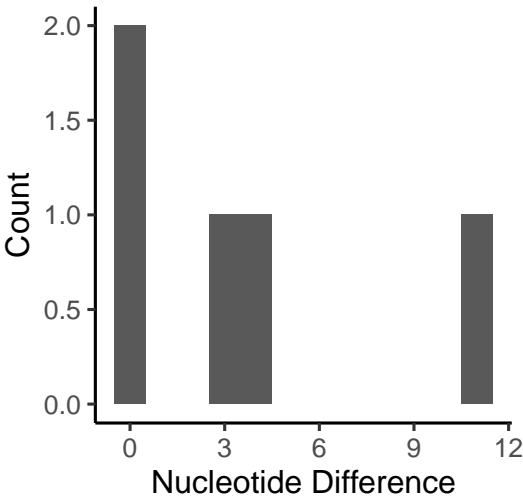
IGHV4-31*03_04

5550 sequences assigned
1043 (18.8%) exact matches, in which:
864 unique CDR3
6 unique J



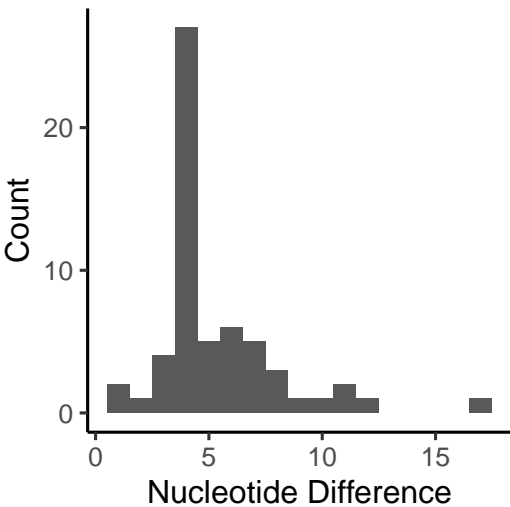
IGHV4-28*03

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
2 unique J



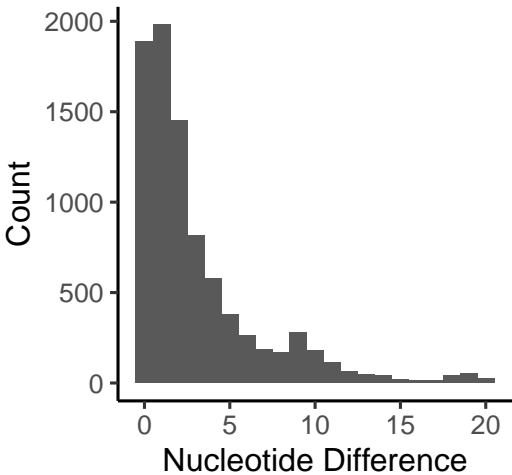
IGHV4-30-4*07

62 sequences assigned
No exact matches.



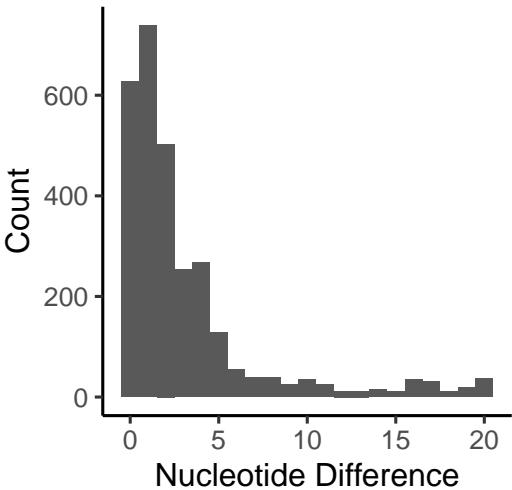
IGHV4-34*01_02

8799 sequences assigned
1891 (21.5%) exact matches, in which:
1411 unique CDR3
6 unique J



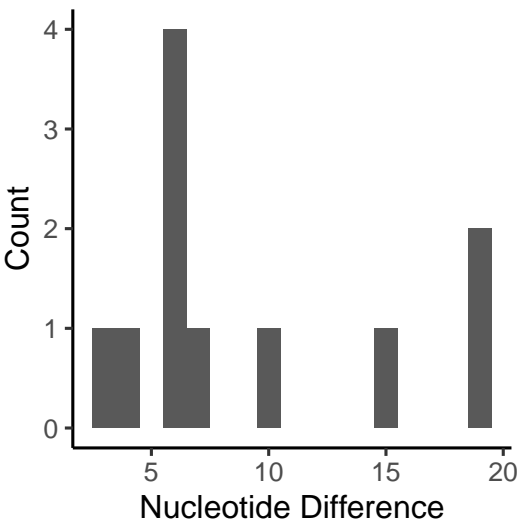
IGHV4-30-2*01

2980 sequences assigned
627 (21%) exact matches, in which:
466 unique CDR3
6 unique J



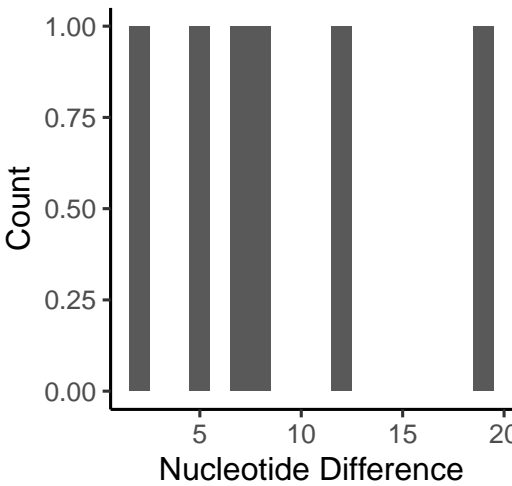
IGHV4-30-4*08

12 sequences assigned
No exact matches.



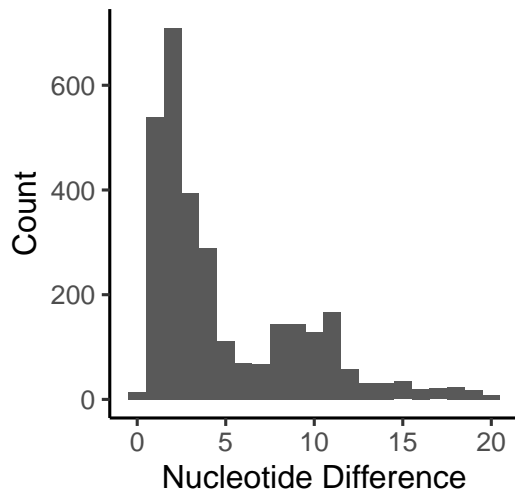
IGHV4-38-2*02

8 sequences assigned
No exact matches.



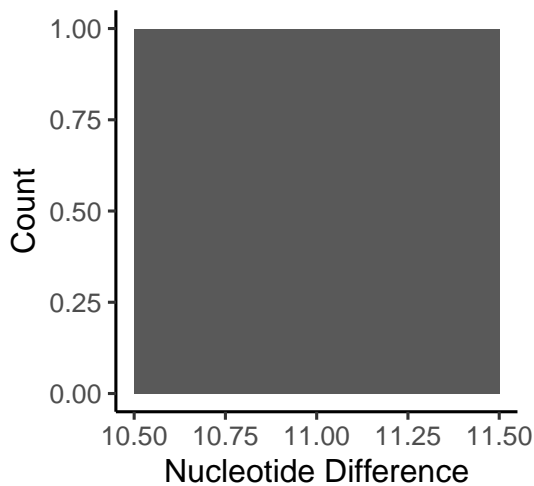
IGHV4-39*07

3086 sequences assigned
14 (0.5%) exact matches, in which:
14 unique CDR3
5 unique J



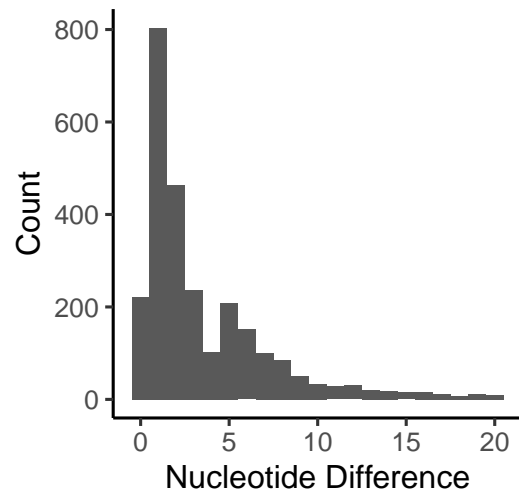
IGHV4-55*02_04_08

3 sequences assigned
No exact matches.



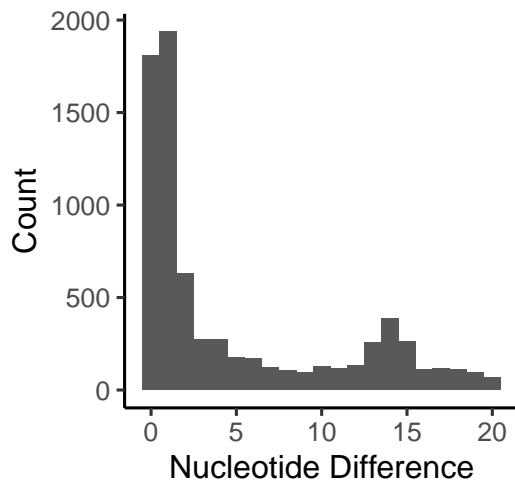
IGHV4-59*12

2670 sequences assigned
221 (8.3%) exact matches, in which:
210 unique CDR3
5 unique J



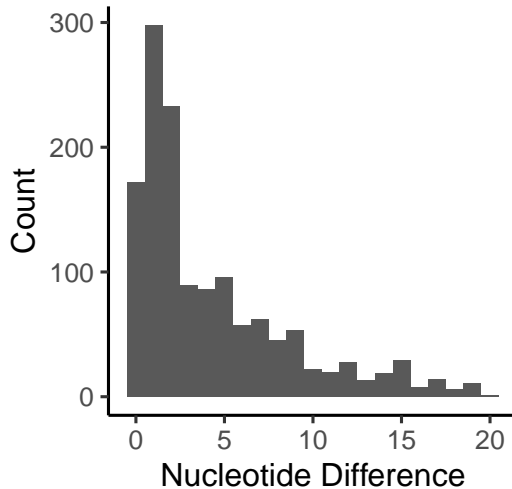
IGHV4-39*01_05

8471 sequences assigned
1810 (21.4%) exact matches, in which:
1357 unique CDR3
6 unique J



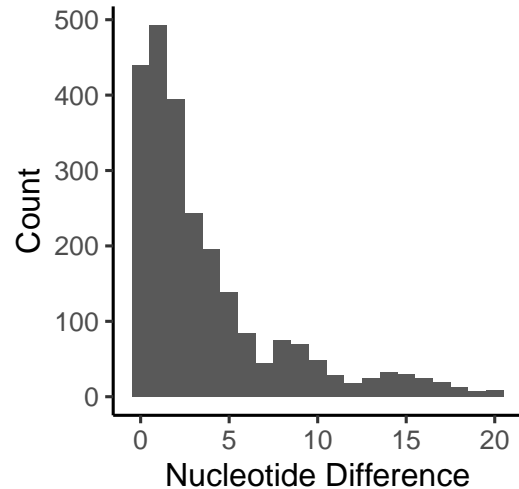
IGHV4-59*08

1398 sequences assigned
172 (12.3%) exact matches, in which:
161 unique CDR3
5 unique J



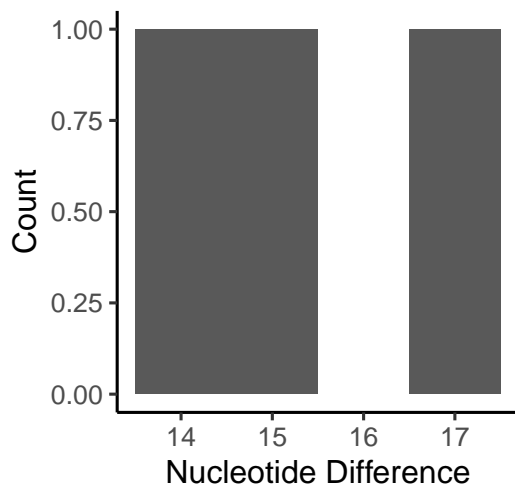
IGHV4-61*01

2515 sequences assigned
439 (17.5%) exact matches, in which:
404 unique CDR3
6 unique J



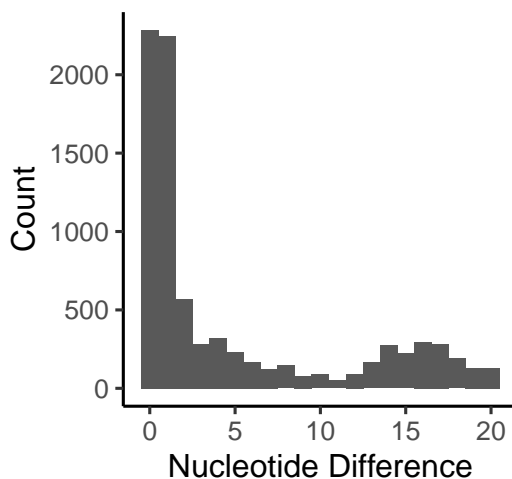
IGHV4-55*01_05

3 sequences assigned
No exact matches.



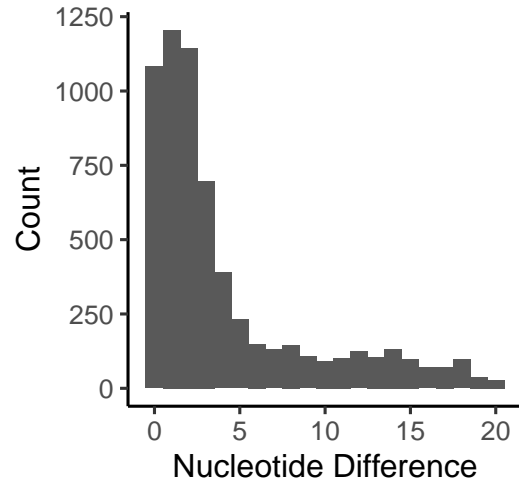
IGHV4-59*01_07

9895 sequences assigned
2285 (23.1%) exact matches, in which:
1861 unique CDR3
6 unique J



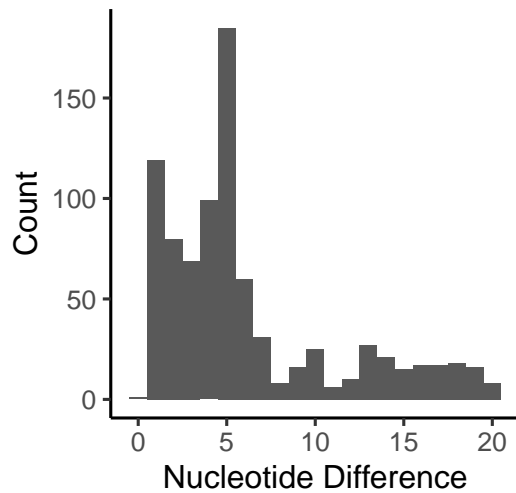
IGHV4-61*02

8213 sequences assigned
1082 (13.2%) exact matches, in which:
916 unique CDR3
6 unique J



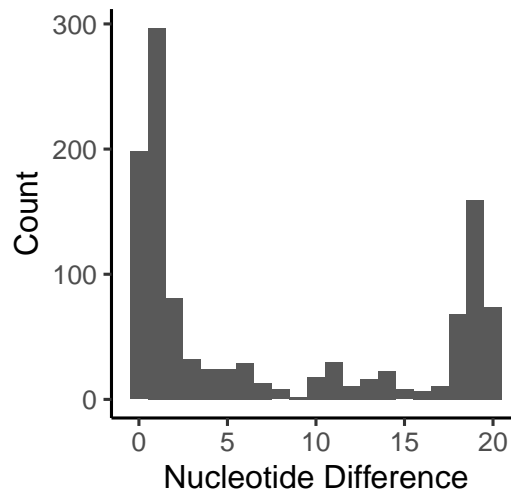
IGHV4-61*08

895 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



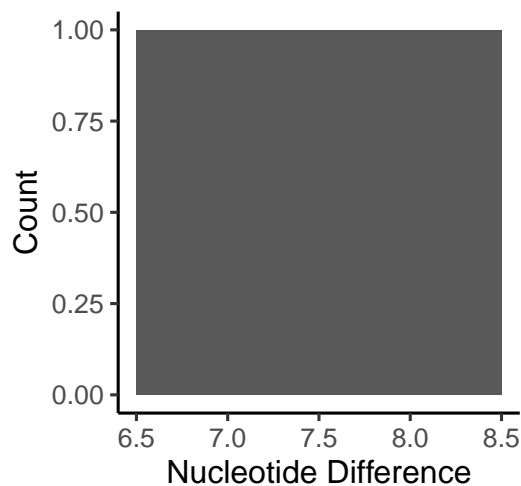
IGHV6-1*01_02

1233 sequences assigned
198 (16.1%) exact matches, in which:
160 unique CDR3
6 unique J



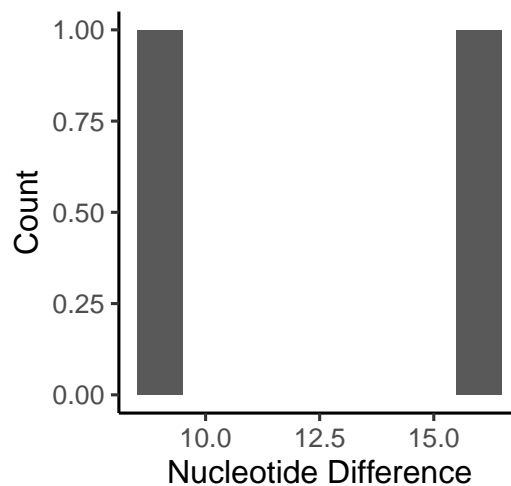
IGHV5-10-1*01_03

2 sequences assigned
No exact matches.



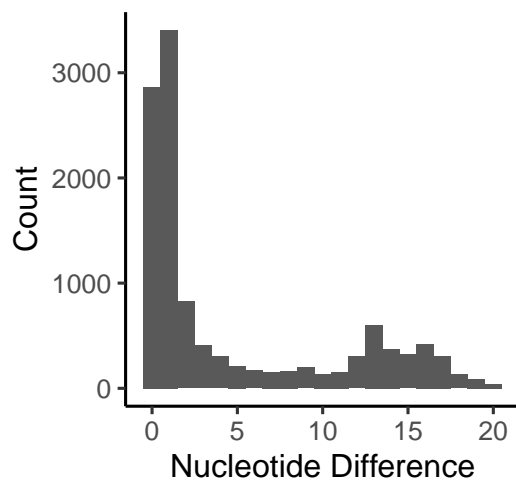
IGHV7-4-1*02

2 sequences assigned
No exact matches.



IGHV5-51*01_03

11968 sequences assigned
2867 (24%) exact matches, in which:
1485 unique CDR3
6 unique J





Novel sequence(s) IGHV3-30-3*01_T288C IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV3-30*03_T288C are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning - no inferred sequences found.

Warning - no inferred sequences found.

Novel sequence(s) IGHV3-33*01_G75C IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV3-33*01_G75C IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV3-30*03_T288C IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning - no inferred sequences found.

Warning - no inferred sequences found.

Warning - no inferred sequences found.

Novel sequence(s) IGHV1-69*04_09_G112A IGHV4-59*02_G88A IGHV5-10-1*01_03_T258C IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning - no inferred sequences found.

Novel sequence(s) IGHV1-69*08_C191T IGHV3-48*03_T303G IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning - no inferred sequences found.

Warning - no inferred sequences found.