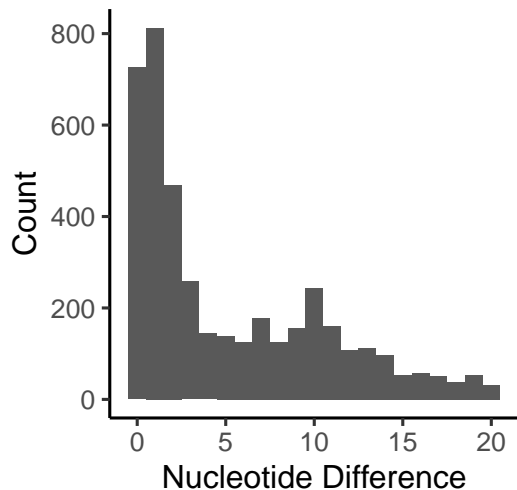


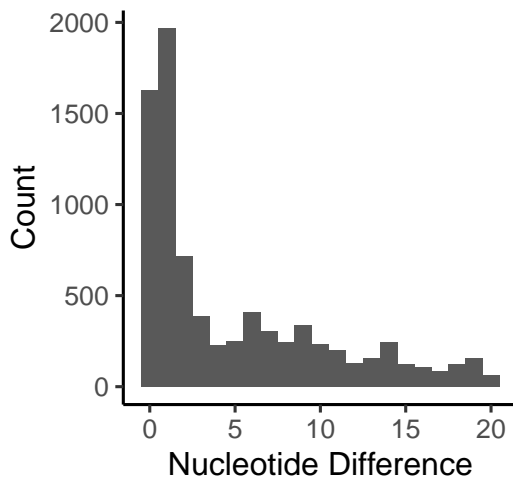
IGHV1-2*02

4390 sequences assigned
726 (16.5%) exact matches, in which:
596 unique CDR3
6 unique J



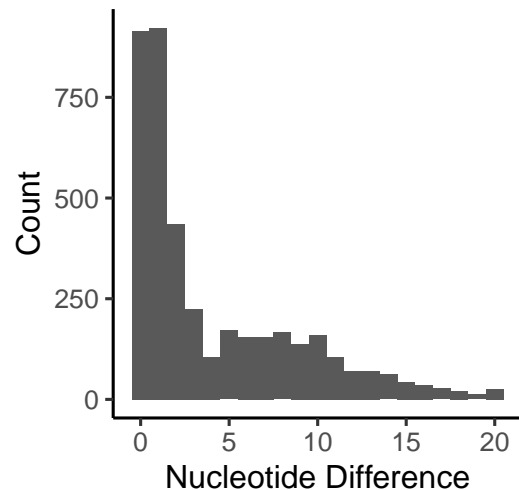
IGHV1-18*01

8708 sequences assigned
1628 (18.7%) exact matches, in which:
1304 unique CDR3
6 unique J



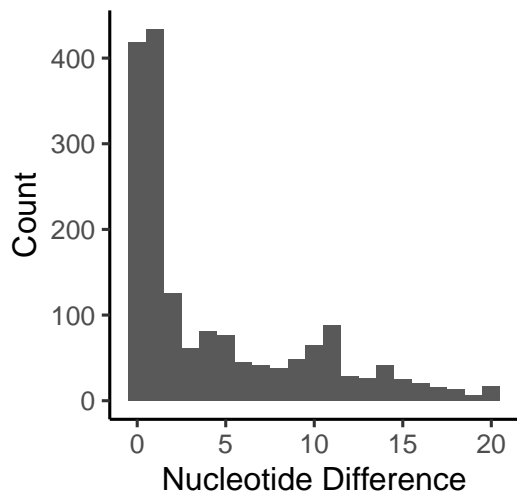
IGHV1-46*01

4478 sequences assigned
915 (20.4%) exact matches, in which:
771 unique CDR3
6 unique J



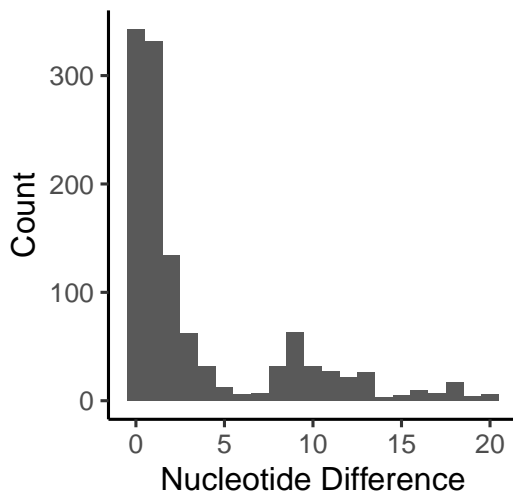
IGHV1-3*01_05

1882 sequences assigned
418 (22.2%) exact matches, in which:
350 unique CDR3
6 unique J



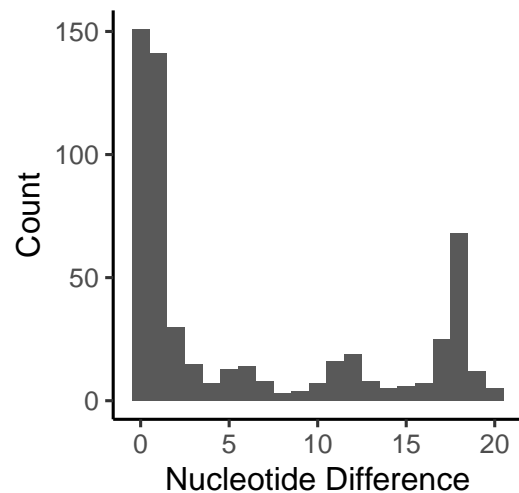
IGHV1-24*01

1211 sequences assigned
343 (28.3%) exact matches, in which:
299 unique CDR3
6 unique J



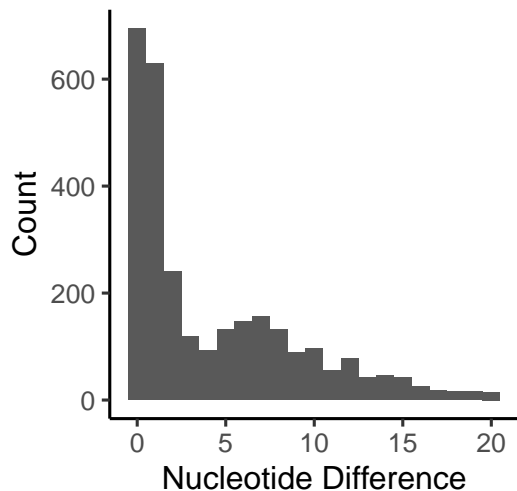
IGHV1-58*01_03

731 sequences assigned
151 (20.7%) exact matches, in which:
128 unique CDR3
5 unique J



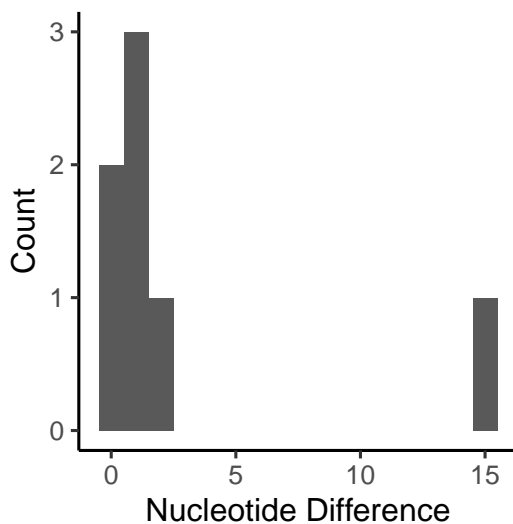
IGHV1-8*01

3012 sequences assigned
695 (23.1%) exact matches, in which:
611 unique CDR3
6 unique J



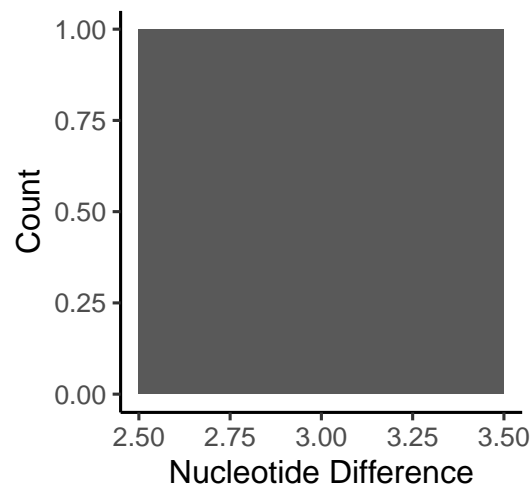
IGHV1-45*02

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



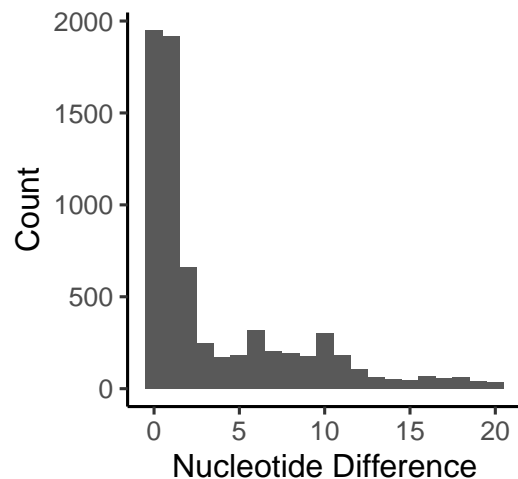
IGHV1-68*01

1 sequences assigned
No exact matches.



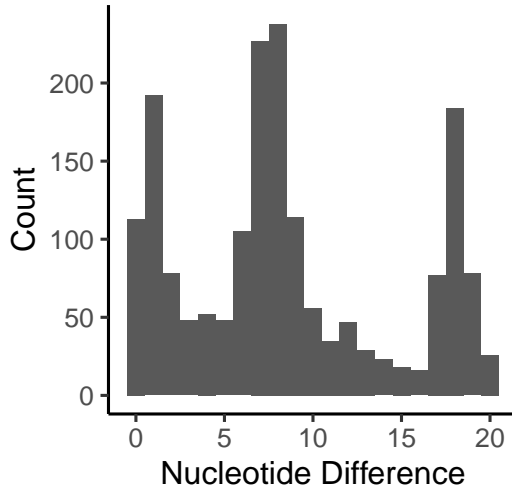
IGHV1-69*01_12_13

7789 sequences assigned
1949 (25%) exact matches, in which:
1673 unique CDR3
6 unique J



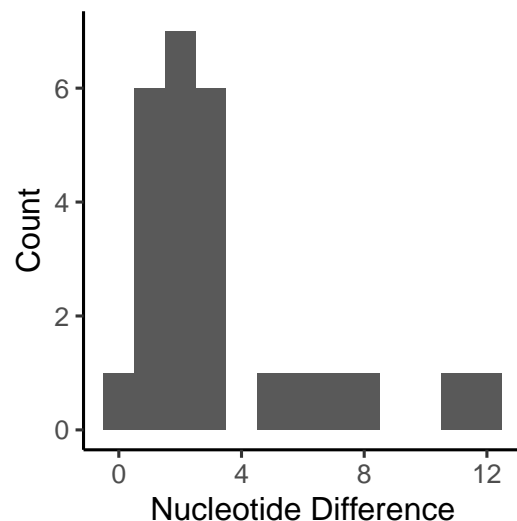
IGHV2-5*02

1871 sequences assigned
113 (6%) exact matches, in which:
92 unique CDR3
5 unique J



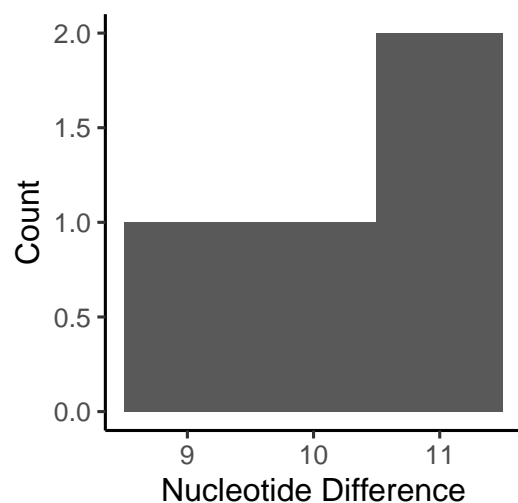
IGHV2-70*12

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



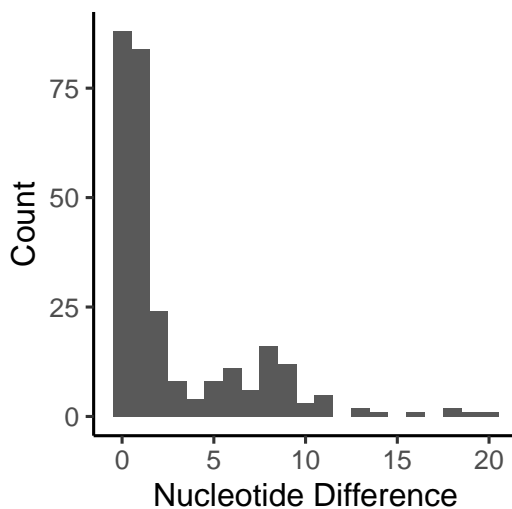
IGHV1-NL1*01

4 sequences assigned
No exact matches.



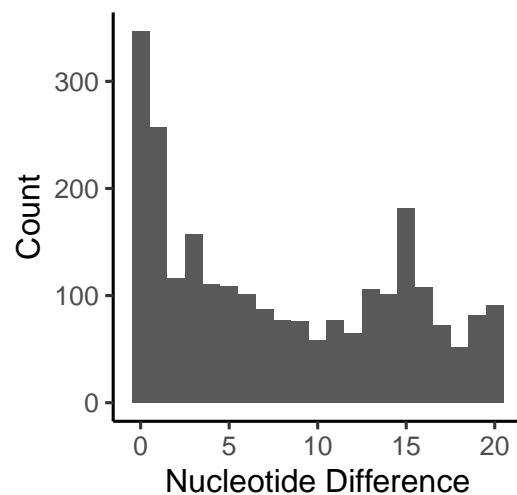
IGHV2-26*01

546 sequences assigned
88 (16.1%) exact matches, in which:
71 unique CDR3
4 unique J



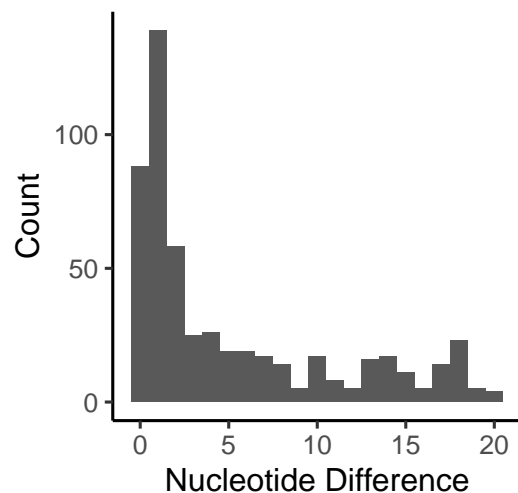
IGHV3-7*01

2978 sequences assigned
347 (11.7%) exact matches, in which:
241 unique CDR3
6 unique J



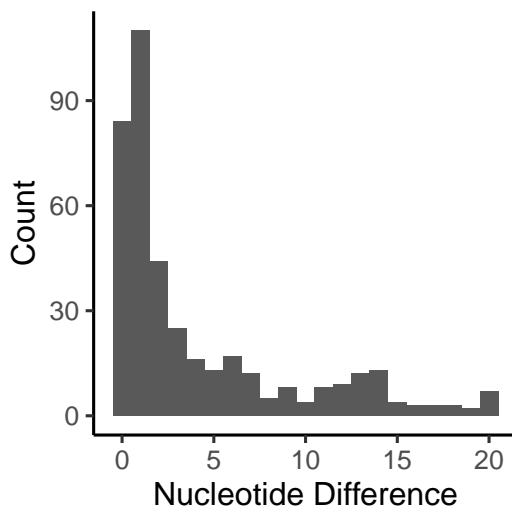
IGHV2-5*01

623 sequences assigned
88 (14.1%) exact matches, in which:
72 unique CDR3
5 unique J



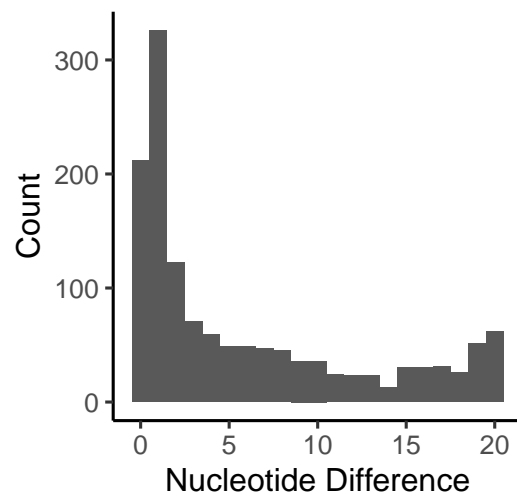
IGHV2-70*01

619 sequences assigned
84 (13.6%) exact matches, in which:
66 unique CDR3
4 unique J



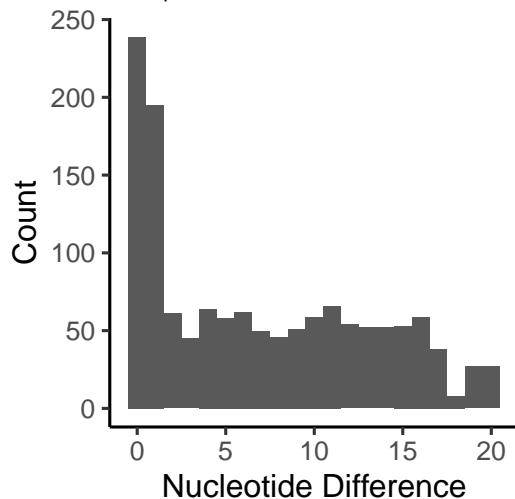
IGHV3-7*03

1744 sequences assigned
212 (12.2%) exact matches, in which:
142 unique CDR3
6 unique J



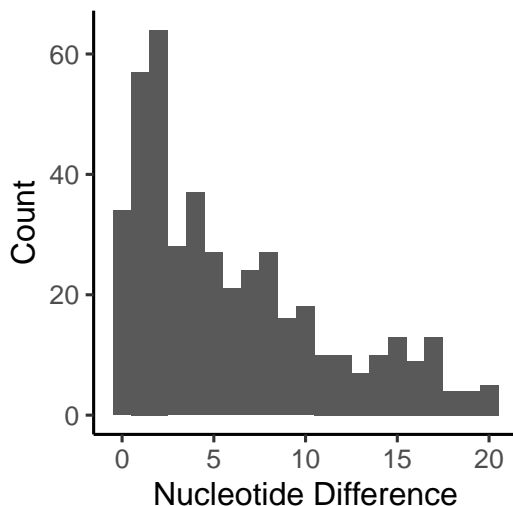
IGHV3-7*05

2245 sequences assigned
239 (10.6%) exact matches, in which:
174 unique CDR3
6 unique J



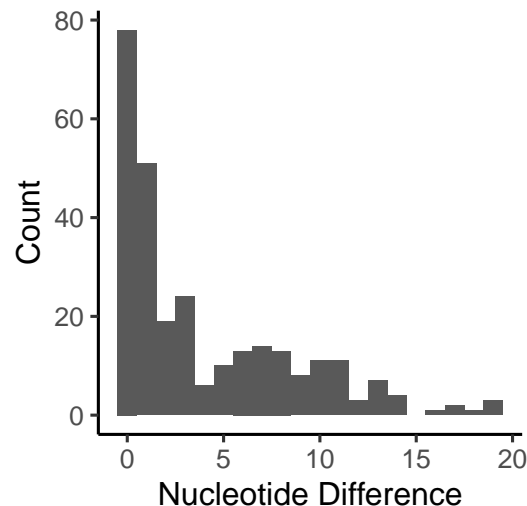
IGHV3-11*04

449 sequences assigned
34 (7.6%) exact matches, in which:
33 unique CDR3
5 unique J



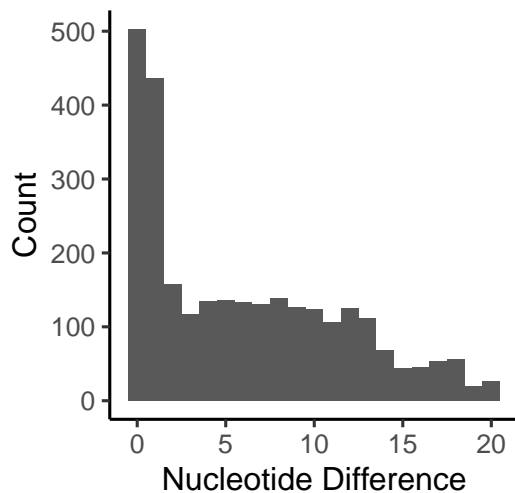
IGHV3-13*01

282 sequences assigned
78 (27.7%) exact matches, in which:
60 unique CDR3
5 unique J



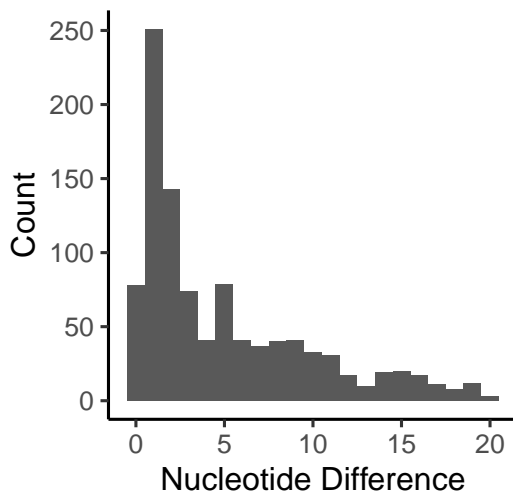
IGHV3-9*01

3026 sequences assigned
503 (16.6%) exact matches, in which:
285 unique CDR3
6 unique J



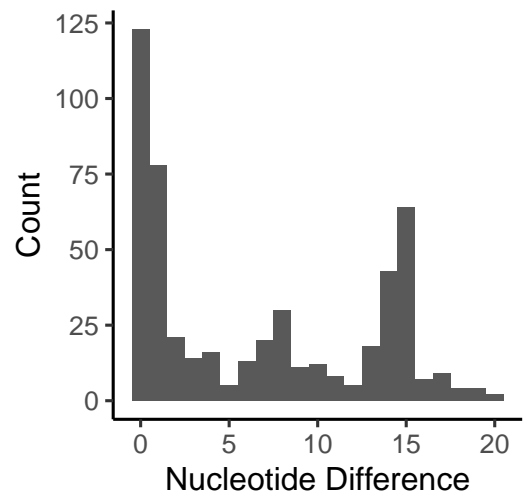
IGHV3-11*06

1088 sequences assigned
78 (7.2%) exact matches, in which:
72 unique CDR3
6 unique J



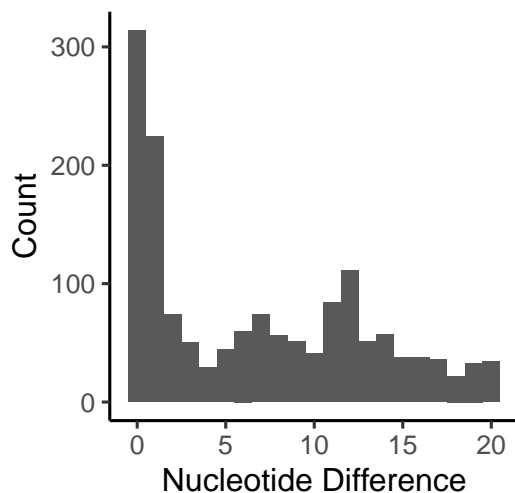
IGHV3-13*04

599 sequences assigned
123 (20.5%) exact matches, in which:
80 unique CDR3
5 unique J



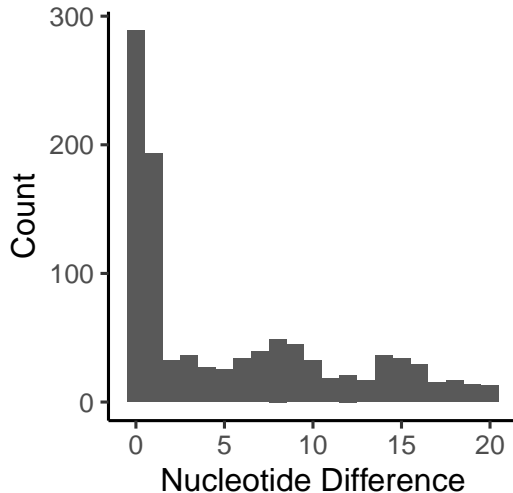
IGHV3-11*01

1708 sequences assigned
314 (18.4%) exact matches, in which:
208 unique CDR3
6 unique J



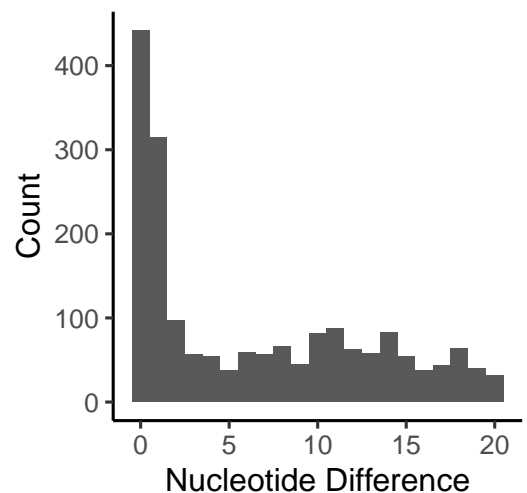
IGHV3-11*03_05

1329 sequences assigned
289 (21.7%) exact matches, in which:
195 unique CDR3
5 unique J



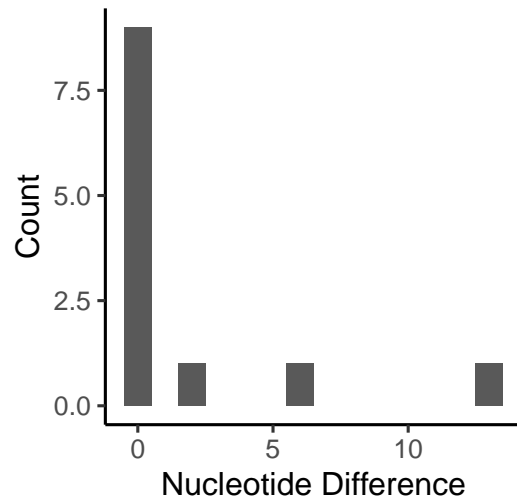
IGHV3-15*01_02

3431 sequences assigned
442 (12.9%) exact matches, in which:
263 unique CDR3
6 unique J



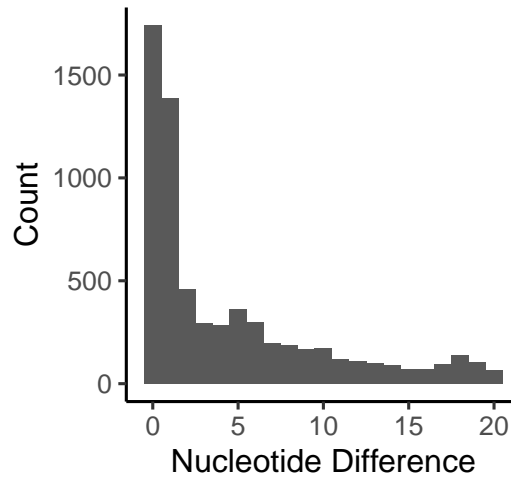
IGHV3-19*01

12 sequences assigned
9 (75%) exact matches, in which:
8 unique CDR3
2 unique J



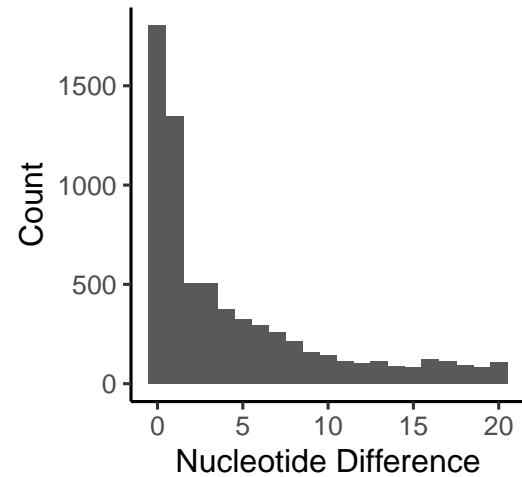
IGHV3-21*01_02

9133 sequences assigned
1741 (19.1%) exact matches, in which:
1116 unique CDR3
6 unique J



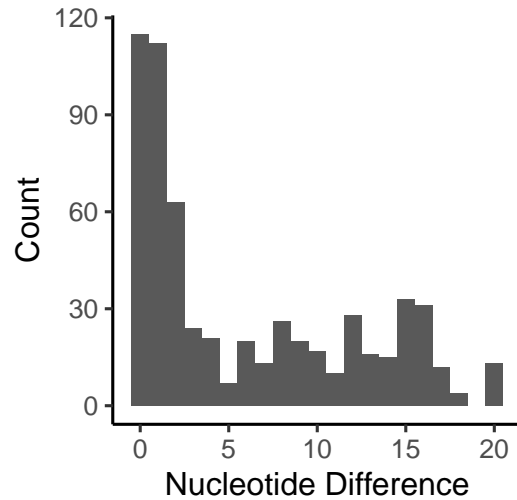
IGHV3-30-3*01

7890 sequences assigned
1804 (22.9%) exact matches, in which:
1183 unique CDR3
6 unique J



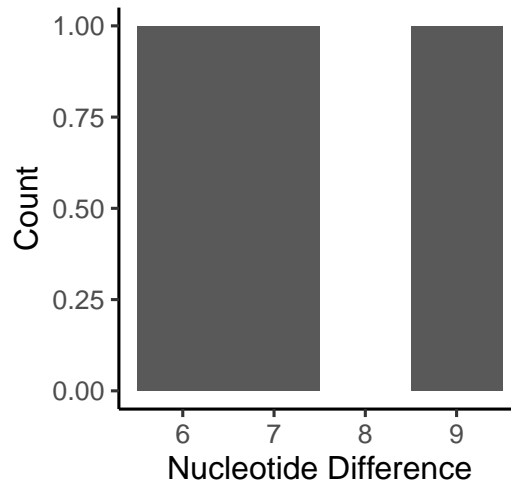
IGHV3-20*03_04

793 sequences assigned
115 (14.5%) exact matches, in which:
70 unique CDR3
5 unique J



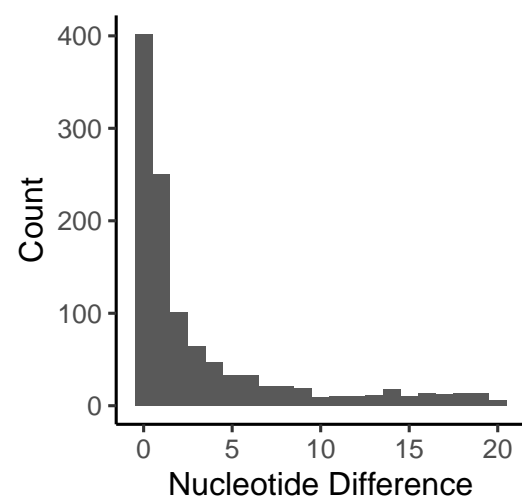
IGHV3-22*01_02

4 sequences assigned
No exact matches.



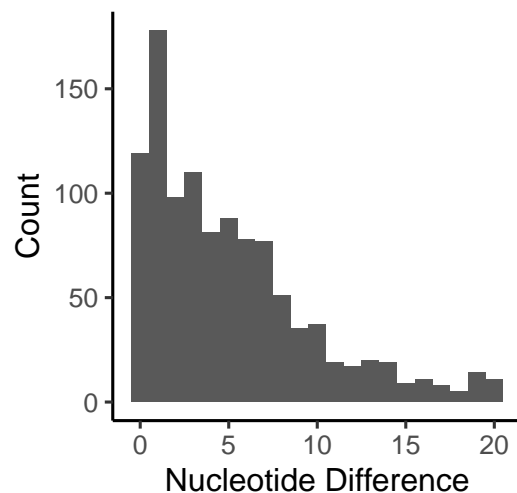
IGHV3-30*03

1897 sequences assigned
402 (21.2%) exact matches, in which:
347 unique CDR3
6 unique J



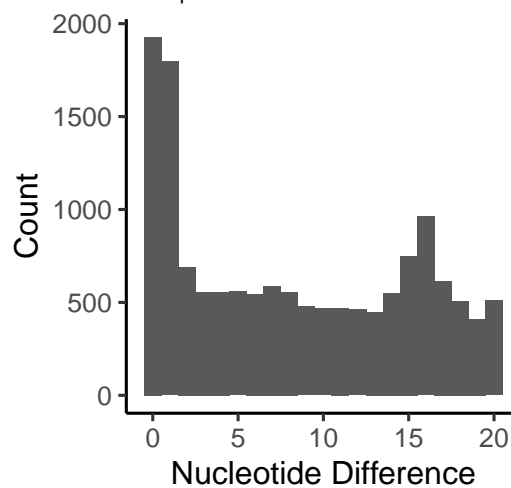
IGHV3-21*04

1230 sequences assigned
119 (9.7%) exact matches, in which:
104 unique CDR3
5 unique J



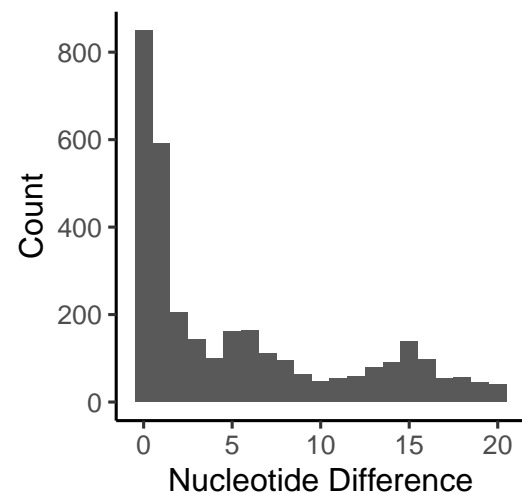
IGHV3-23*01_04

19746 sequences assigned
1928 (9.8%) exact matches, in which:
1156 unique CDR3
6 unique J



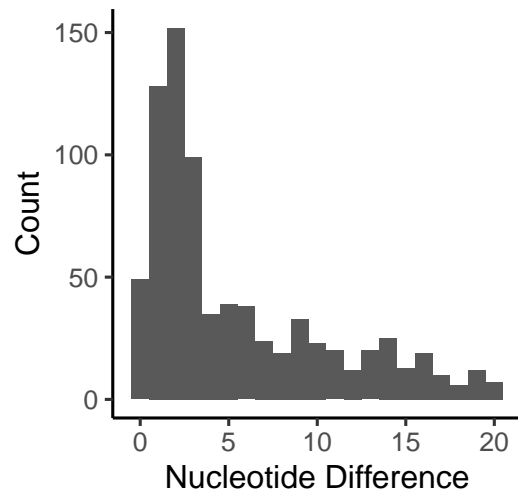
IGHV3-33*01

3518 sequences assigned
850 (24.2%) exact matches, in which:
555 unique CDR3
6 unique J



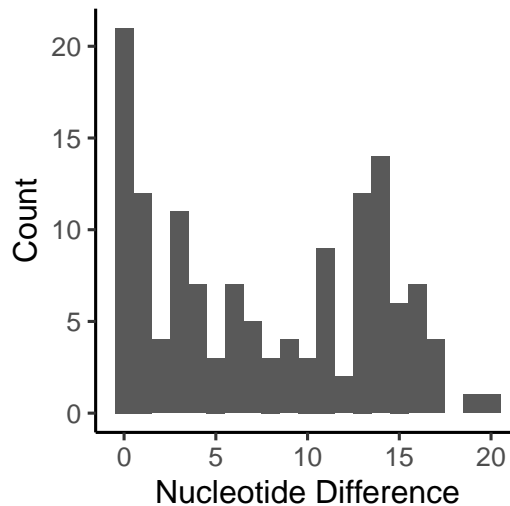
IGHV3-33*06

813 sequences assigned
49 (6%) exact matches, in which:
48 unique CDR3
5 unique J



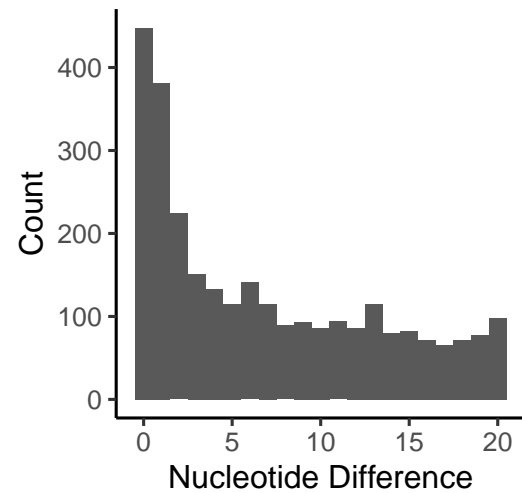
IGHV3-43*01

445 sequences assigned
21 (4.7%) exact matches, in which:
13 unique CDR3
2 unique J



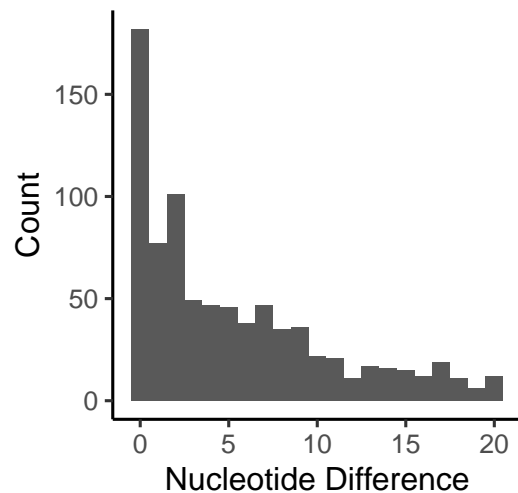
IGHV3-48*03

3643 sequences assigned
448 (12.3%) exact matches, in which:
275 unique CDR3
6 unique J



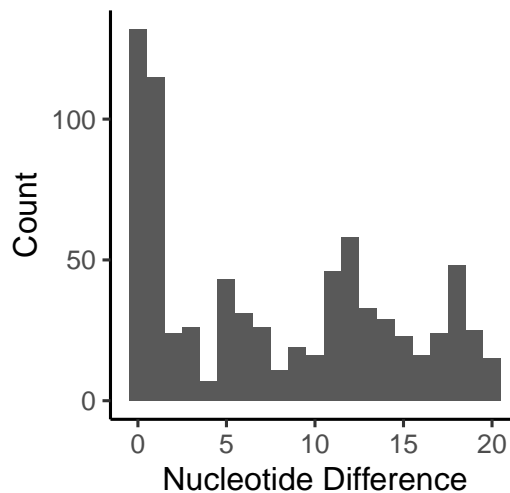
IGHV3-33*08

871 sequences assigned
182 (20.9%) exact matches, in which:
148 unique CDR3
6 unique J



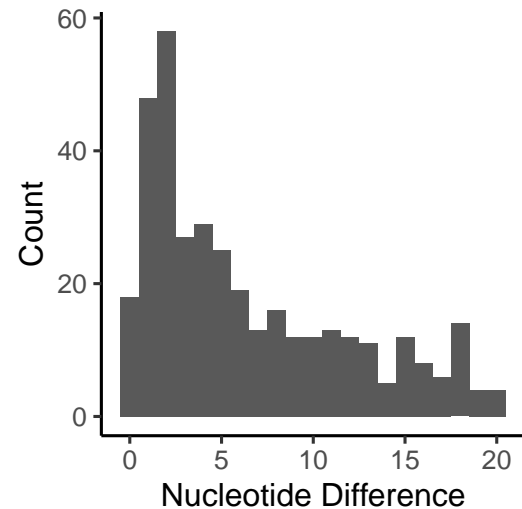
IGHV3-43*02

1053 sequences assigned
132 (12.5%) exact matches, in which:
76 unique CDR3
5 unique J



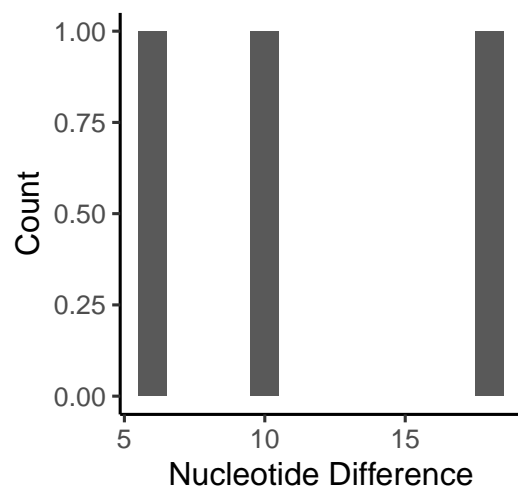
IGHV3-48*04

396 sequences assigned
18 (4.5%) exact matches, in which:
18 unique CDR3
5 unique J



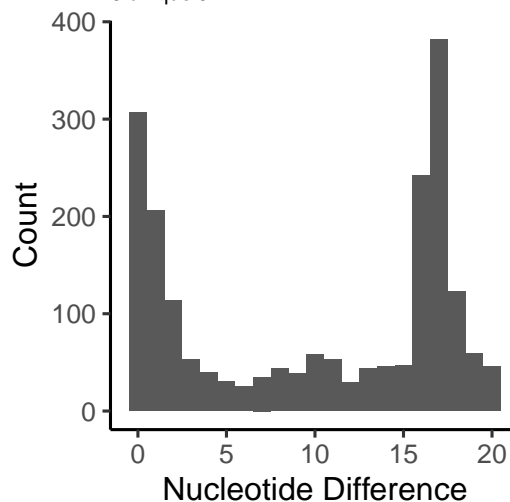
IGHV3-35*01

3 sequences assigned
No exact matches.



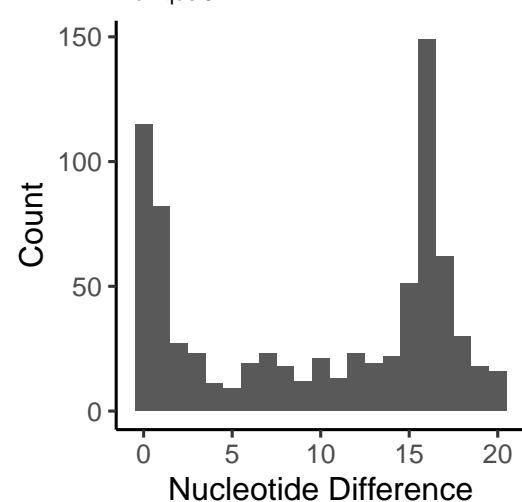
IGHV3-48*02

3069 sequences assigned
307 (10%) exact matches, in which:
185 unique CDR3
6 unique J



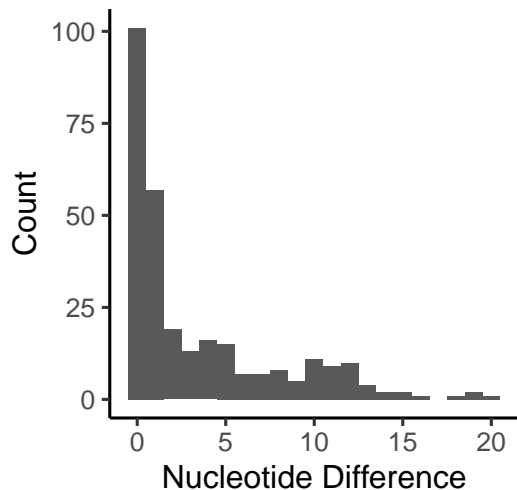
IGHV3-49*04

957 sequences assigned
115 (12%) exact matches, in which:
74 unique CDR3
4 unique J



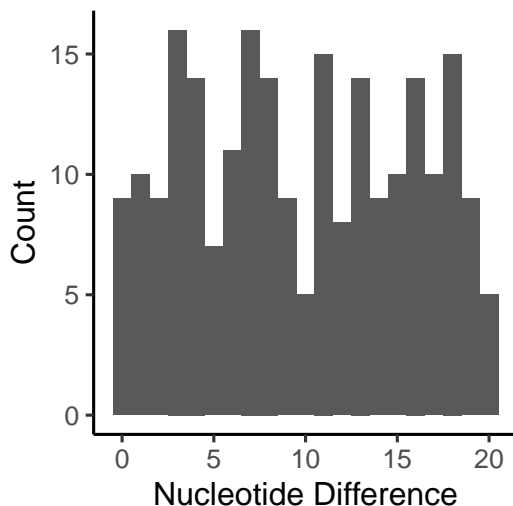
IGHV3-49*03_05

297 sequences assigned
101 (34%) exact matches, in which:
57 unique CDR3
5 unique J



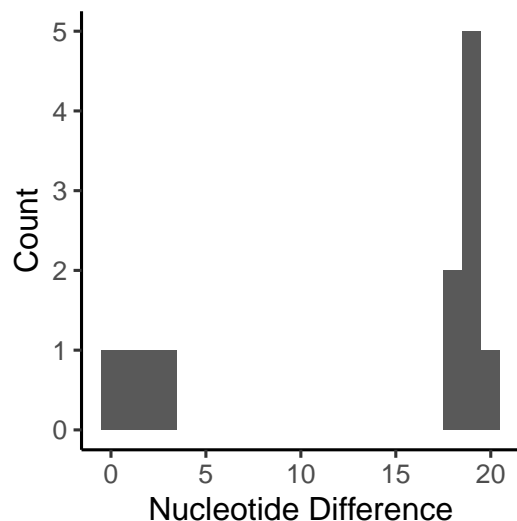
IGHV3-64*04

280 sequences assigned
9 (3.2%) exact matches, in which:
9 unique CDR3
3 unique J



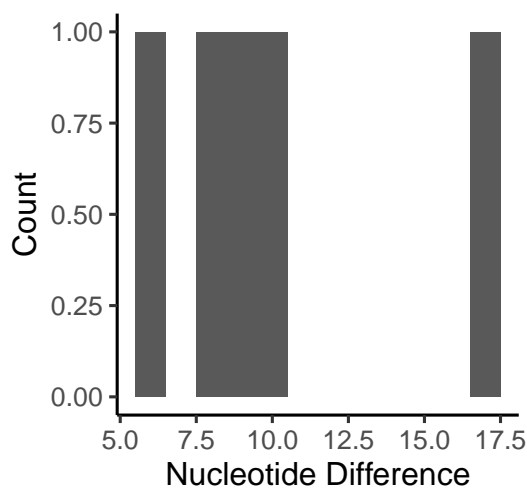
IGHV3-66*03

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



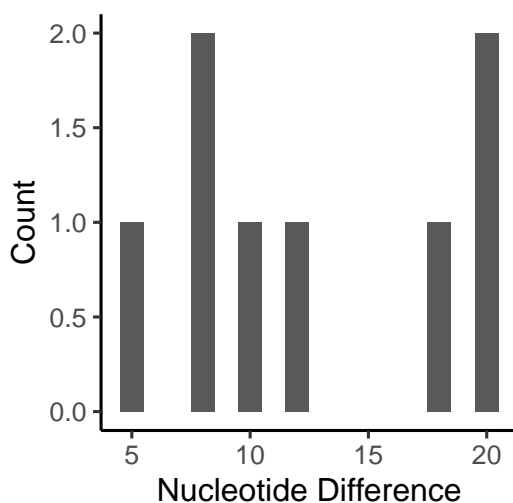
IGHV3-52*01_03

5 sequences assigned
No exact matches.



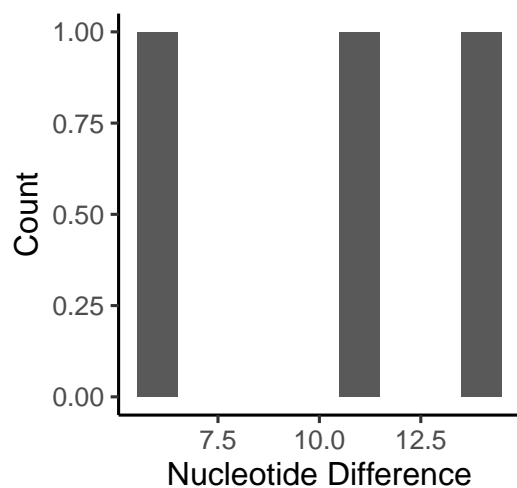
IGHV3-66*01

9 sequences assigned
No exact matches.



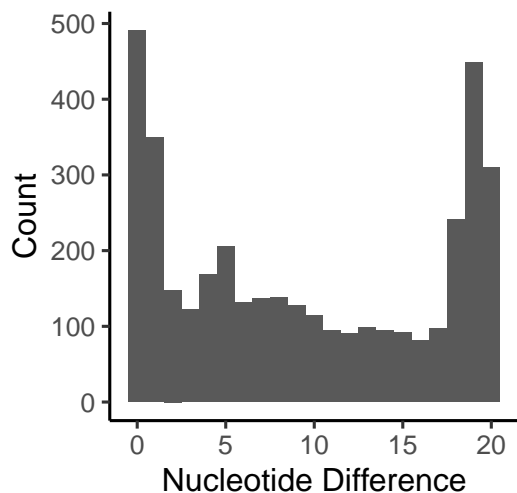
IGHV3-66*04

5 sequences assigned
No exact matches.



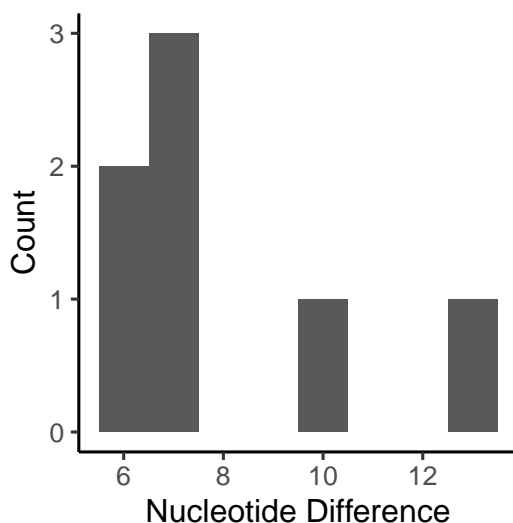
IGHV3-53*01_02

4774 sequences assigned
491 (10.3%) exact matches, in which:
327 unique CDR3
6 unique J



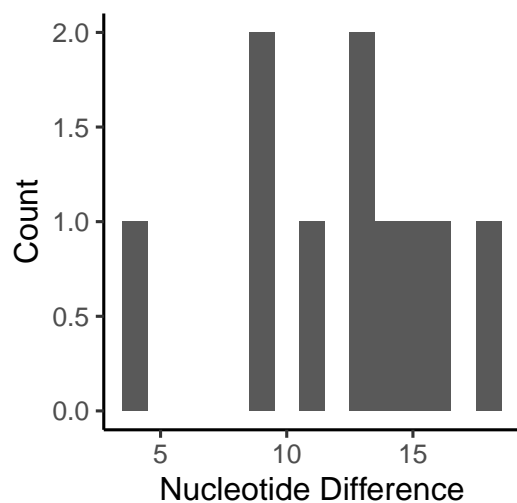
IGHV3-66*02

7 sequences assigned
No exact matches.



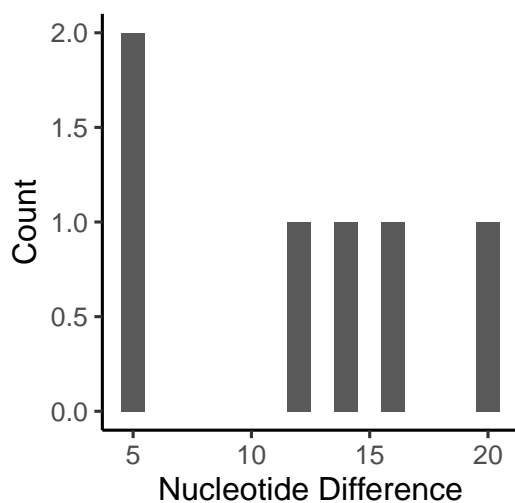
IGHV3-69-1*01

14 sequences assigned
No exact matches.



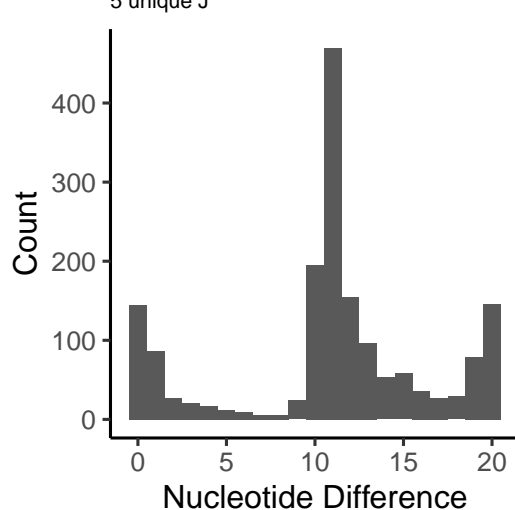
IGHV3-69-1*02

11 sequences assigned
No exact matches.



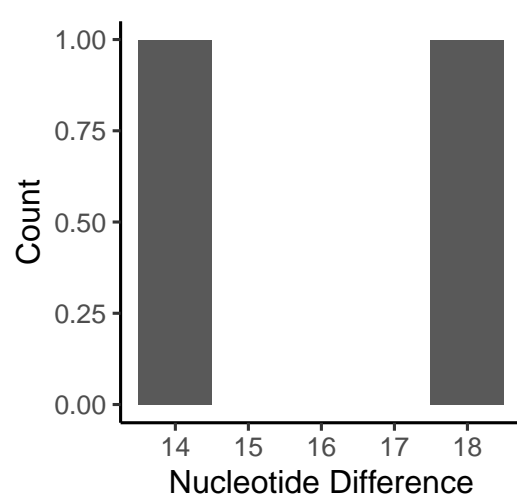
IGHV3-73*01_02

1866 sequences assigned
145 (7.8%) exact matches, in which:
88 unique CDR3
5 unique J



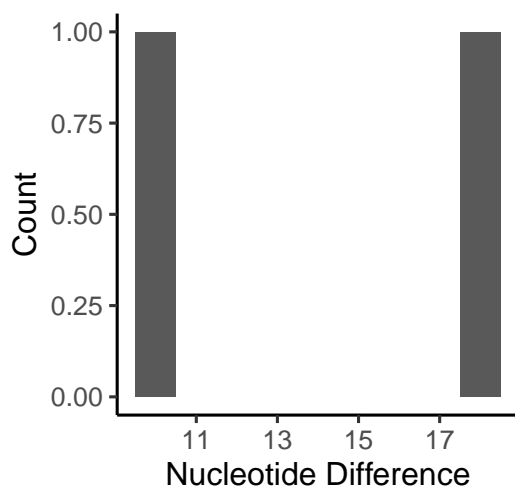
IGHV3-43D*04

2 sequences assigned
No exact matches.



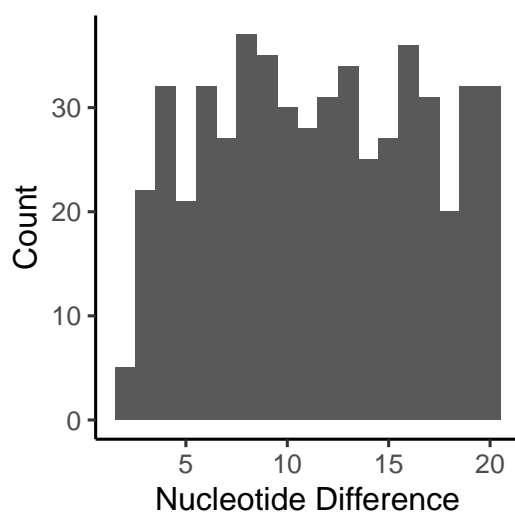
IGHV3-71*01_04

2 sequences assigned
No exact matches.



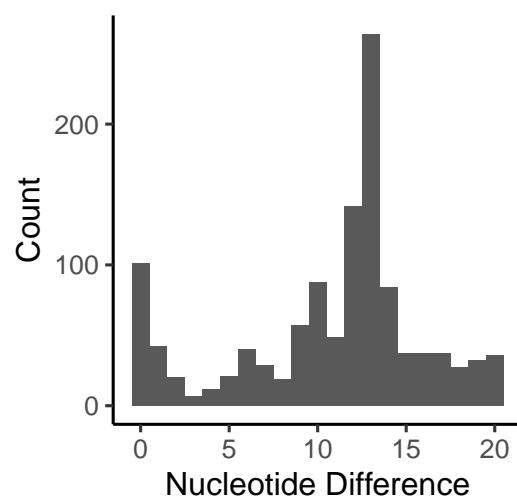
IGHV3-74*03

986 sequences assigned
No exact matches.



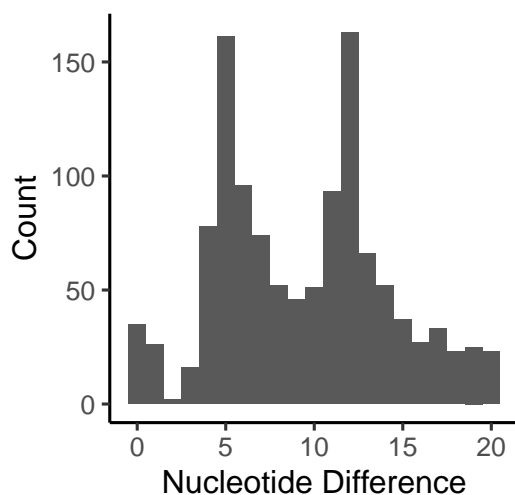
IGHV3-64D*09

1382 sequences assigned
101 (7.3%) exact matches, in which:
60 unique CDR3
4 unique J



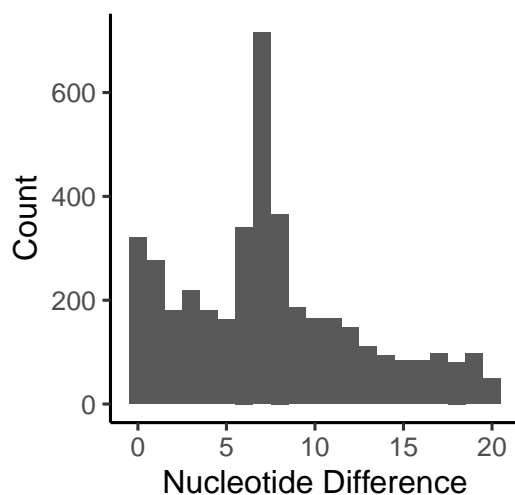
IGHV3-72*01

1544 sequences assigned
35 (2.3%) exact matches, in which:
22 unique CDR3
4 unique J



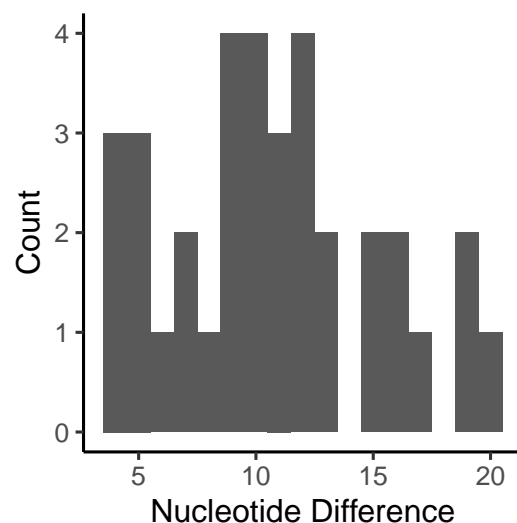
IGHV3-74*01_02

4548 sequences assigned
321 (7.1%) exact matches, in which:
218 unique CDR3
6 unique J



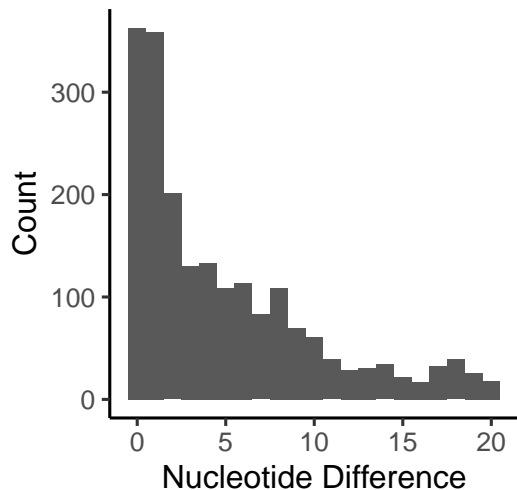
IGHV3-NL1*01

42 sequences assigned
No exact matches.



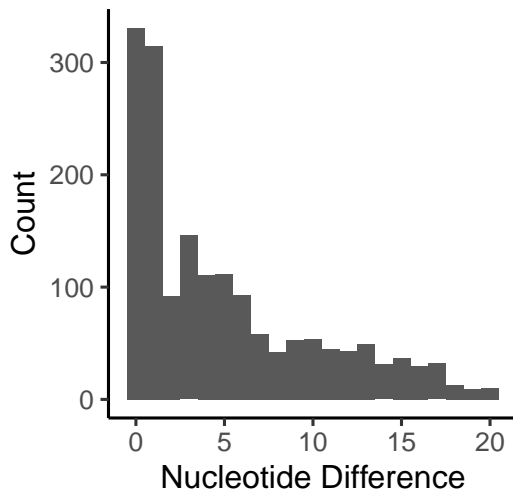
IGHV4-4*07

2609 sequences assigned
363 (13.9%) exact matches, in which:
316 unique CDR3
6 unique J



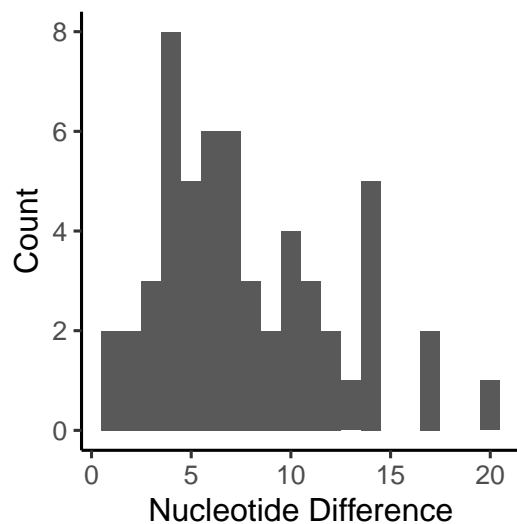
IGHV4-30-4*01

1896 sequences assigned
331 (17.5%) exact matches, in which:
265 unique CDR3
6 unique J



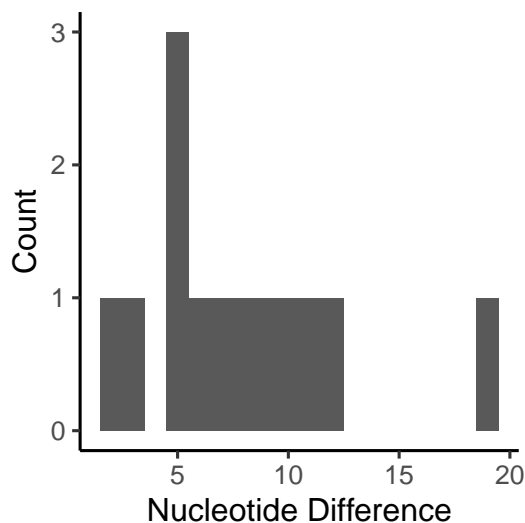
IGHV4-30-2*03

535 sequences assigned
No exact matches.



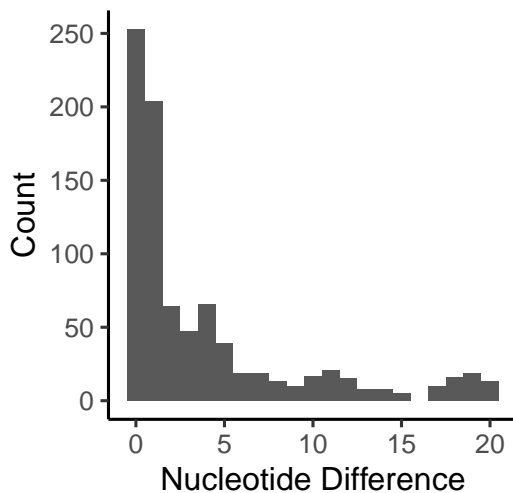
IGHV4-28*03

13 sequences assigned
No exact matches.



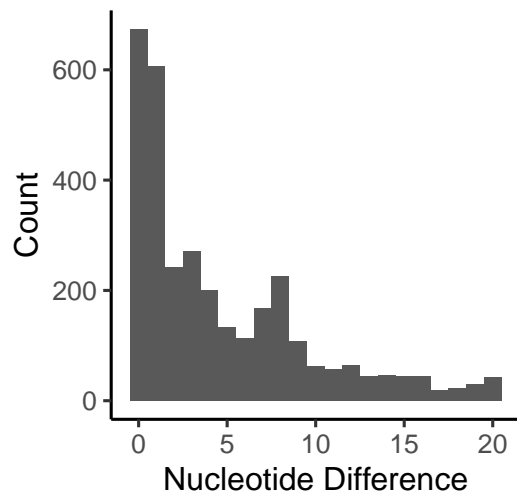
IGHV4-30-2*01

917 sequences assigned
253 (27.6%) exact matches, in which:
189 unique CDR3
6 unique J



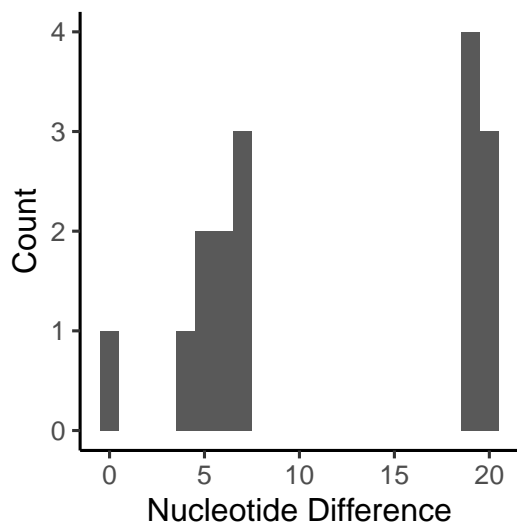
IGHV4-31*02

3954 sequences assigned
674 (17%) exact matches, in which:
577 unique CDR3
6 unique J



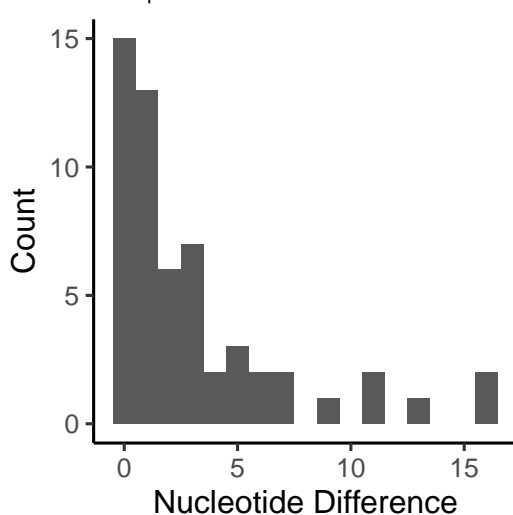
IGHV4-28*01_07

19 sequences assigned
1 (5.3%) exact matches, in which:
1 unique CDR3
1 unique J



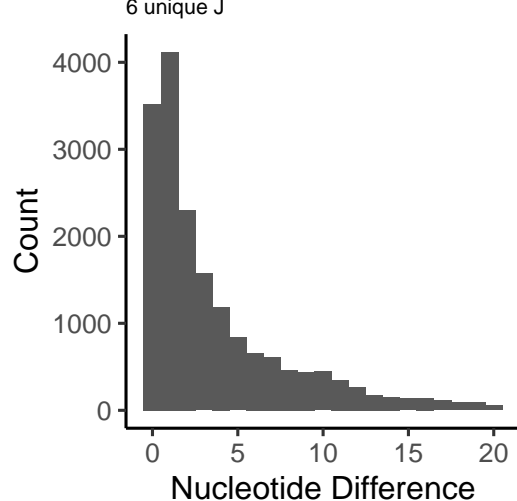
IGHV4-30-2*02

56 sequences assigned
15 (26.8%) exact matches, in which:
14 unique CDR3
4 unique J



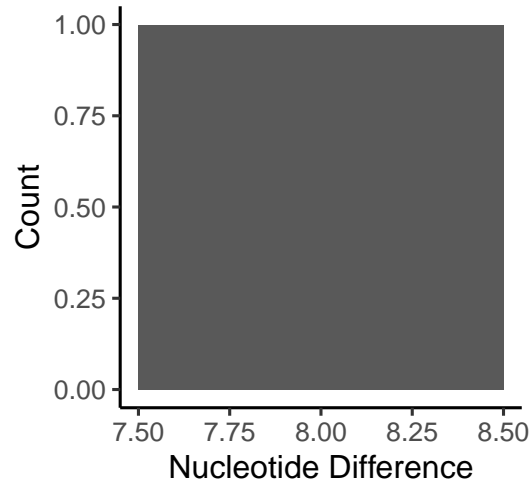
IGHV4-34*01_02

19011 sequences assigned
3518 (18.5%) exact matches, in which:
2546 unique CDR3
6 unique J



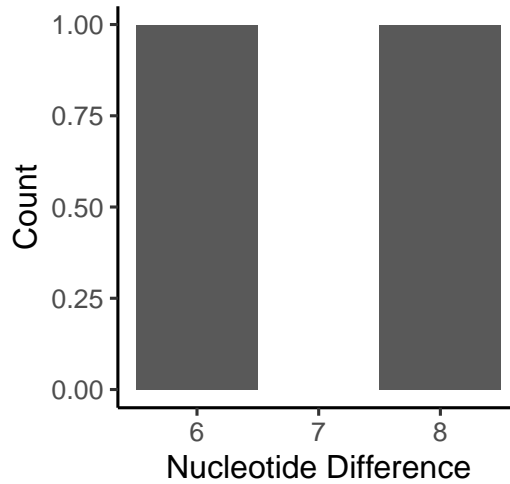
IGHV4-38-2*01

2 sequences assigned
No exact matches.



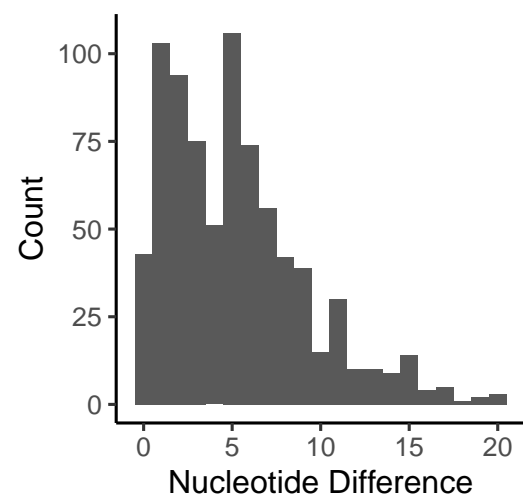
IGHV4-55*09

2 sequences assigned
No exact matches.



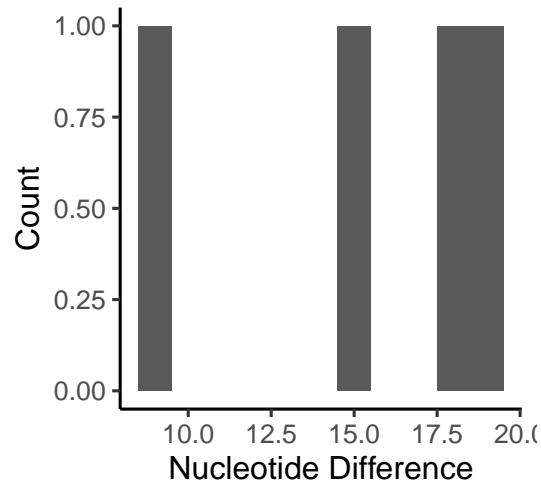
IGHV4-59*12

810 sequences assigned
43 (5.3%) exact matches, in which:
43 unique CDR3
5 unique J



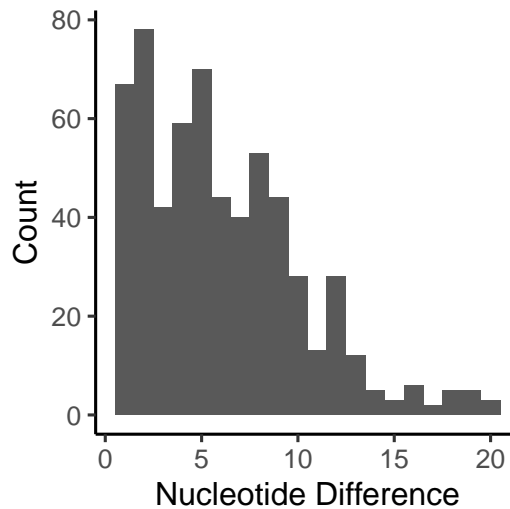
IGHV4-38-2*02

14 sequences assigned
No exact matches.



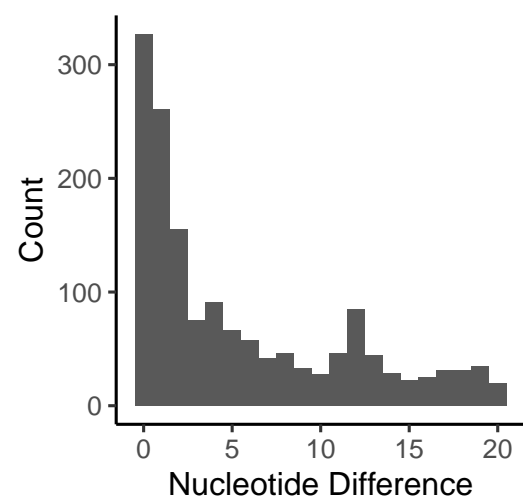
IGHV4-59*08

644 sequences assigned
No exact matches.



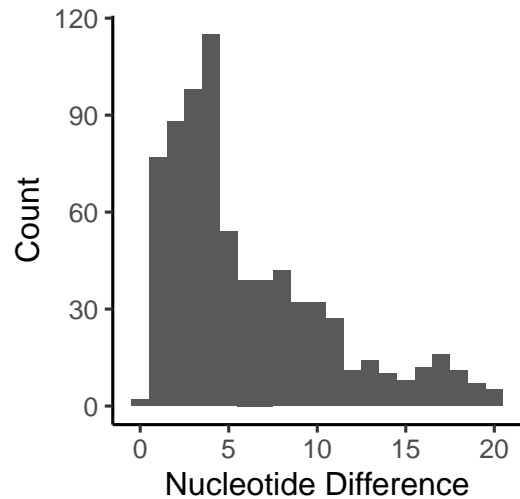
IGHV4-61*01

1877 sequences assigned
327 (17.4%) exact matches, in which:
296 unique CDR3
6 unique J



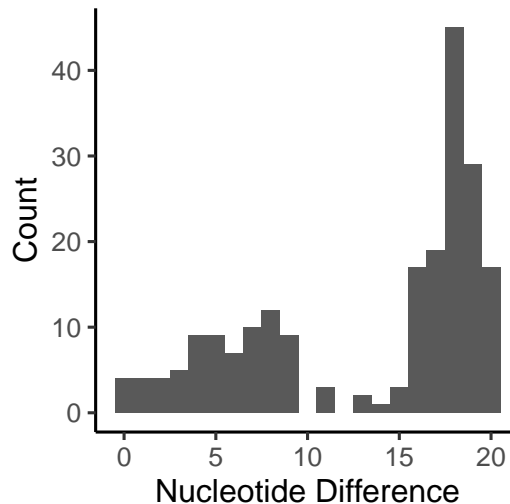
IGHV4-39*07

1129 sequences assigned
2 (0.2%) exact matches, in which:
2 unique CDR3
2 unique J



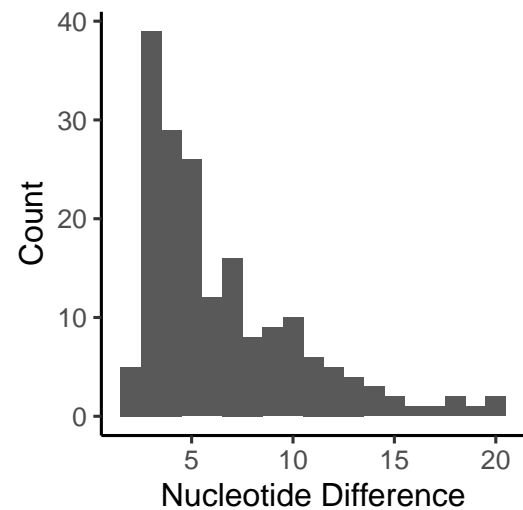
IGHV4-59*11

305 sequences assigned
4 (1.3%) exact matches, in which:
4 unique CDR3
3 unique J



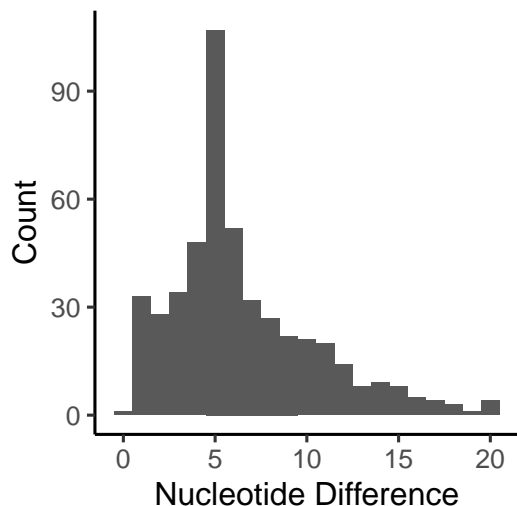
IGHV4-61*02

289 sequences assigned
No exact matches.



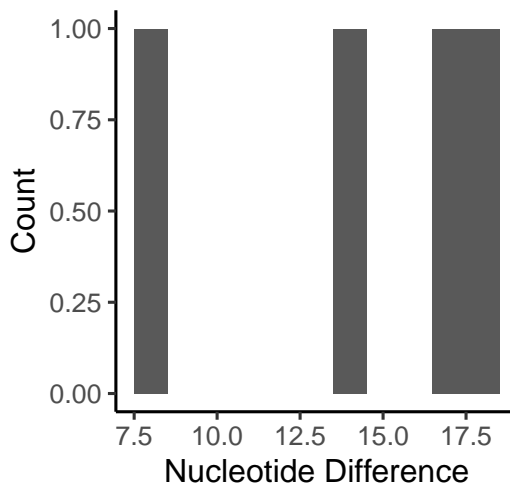
IGHV4-61*08

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



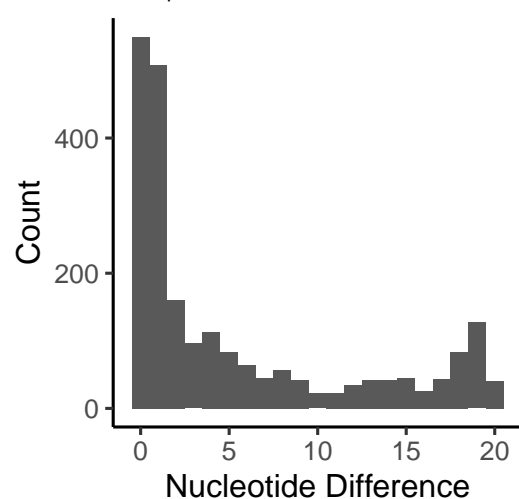
IGHV1/OR15-3*02

4 sequences assigned
No exact matches.



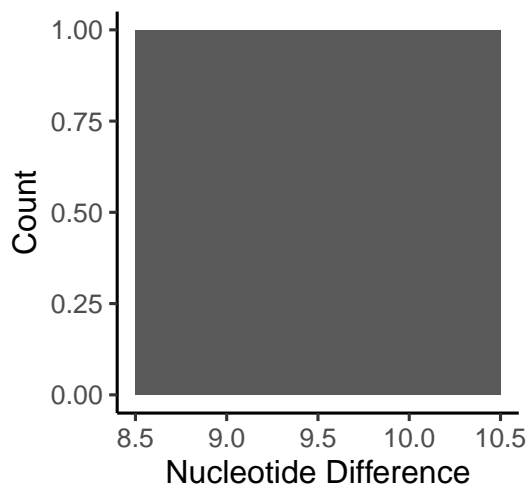
IGHV5-10-1*01_03

2598 sequences assigned
550 (21.2%) exact matches, in which:
381 unique CDR3
6 unique J



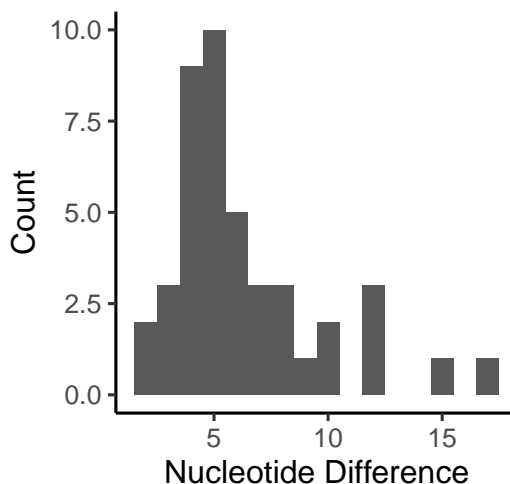
IGHV1/OR15-1*04

2 sequences assigned
No exact matches.



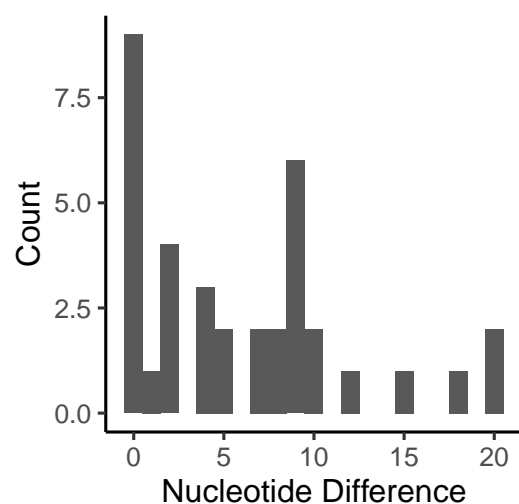
IGHV4/OR15-8*01

46 sequences assigned
No exact matches.



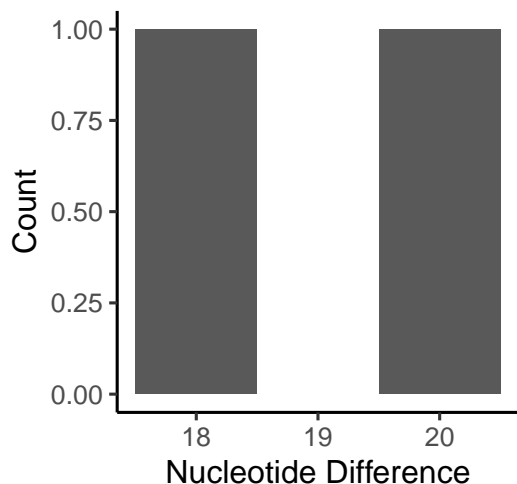
IGHV5-51*04

45 sequences assigned
9 (20%) exact matches, in which:
9 unique CDR3
3 unique J



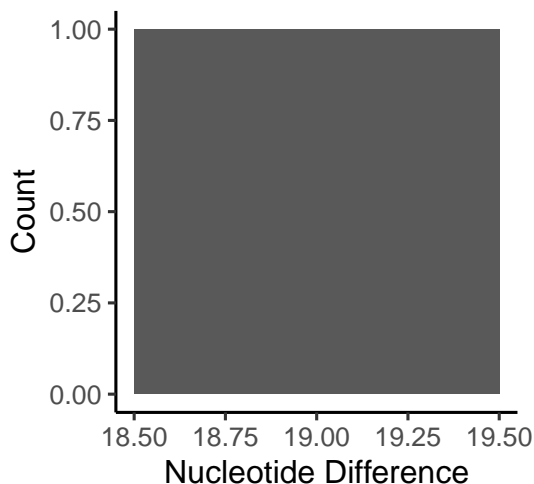
IGHV1/OR15-2*02_03

12 sequences assigned
No exact matches.



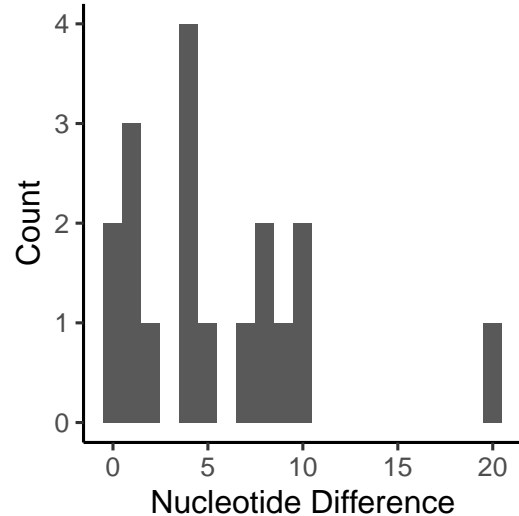
IGHV1/OR15-9*01

1 sequences assigned
No exact matches.



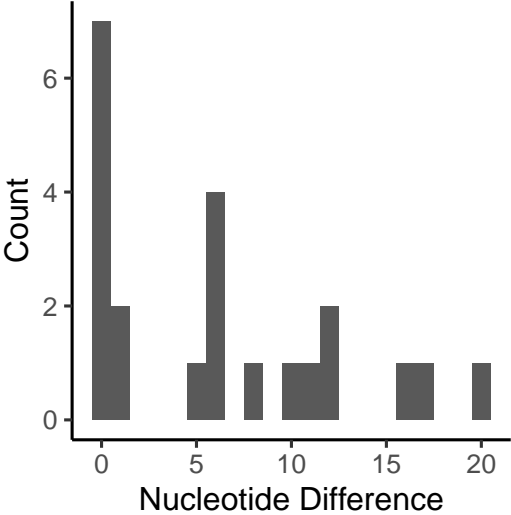
IGHV5-51*06

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



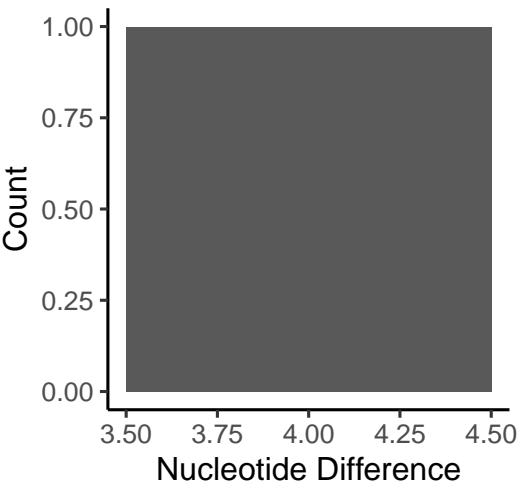
IGHV5-51*07

30 sequences assigned
7 (23.3%) exact matches, in which:
7 unique CDR3
5 unique J



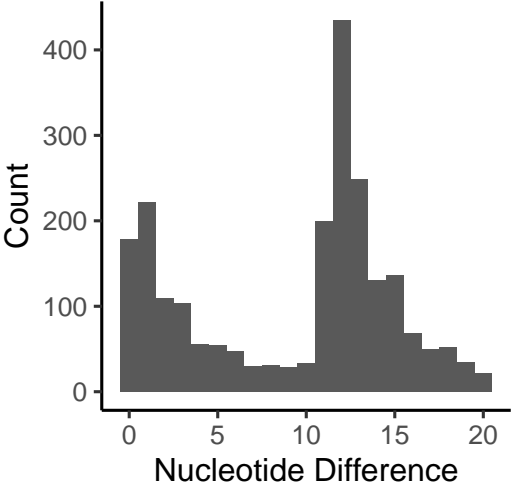
IGHV3/OR16-10*01_03

2 sequences assigned
No exact matches.



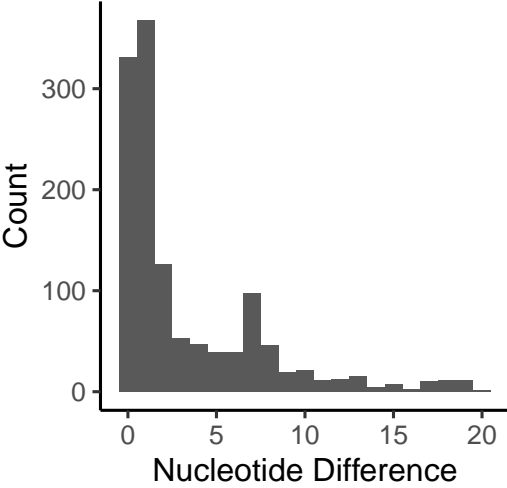
IGHV6-1*01_02

2357 sequences assigned
179 (7.6%) exact matches, in which:
153 unique CDR3
5 unique J



IGHV7-4-1*02

1443 sequences assigned
331 (22.9%) exact matches, in which:
246 unique CDR3
6 unique J



IGHV3/OR16-6*02

1 sequences assigned
No exact matches.

