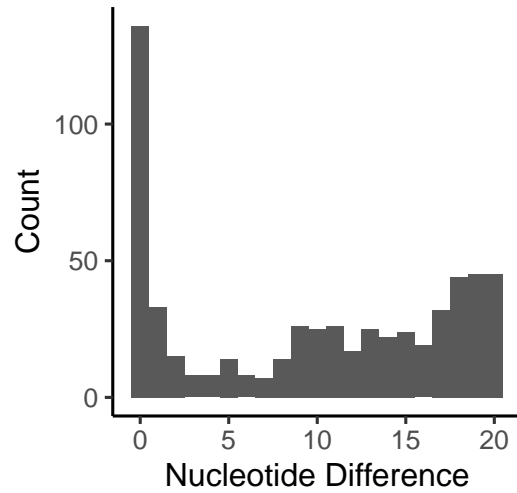


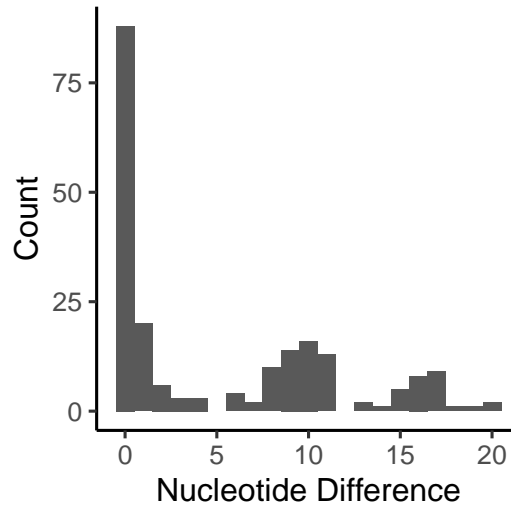
IGHV1-2*02

1040 sequences assigned
136 (13.1%) exact matches, in which:
133 unique CDR3
6 unique J



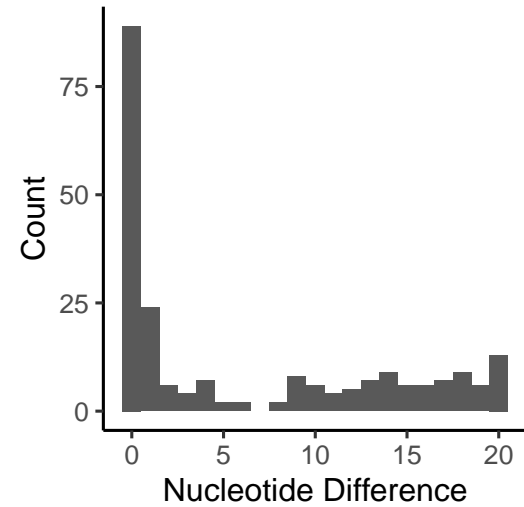
IGHV1-8*01

267 sequences assigned
88 (33%) exact matches, in which:
85 unique CDR3
5 unique J



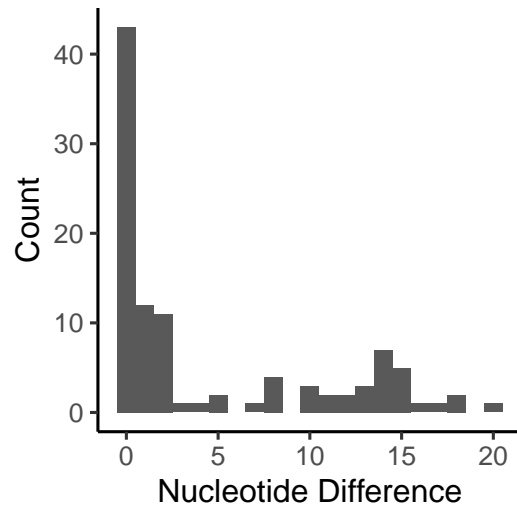
IGHV1-24*01

299 sequences assigned
89 (29.8%) exact matches, in which:
89 unique CDR3
5 unique J



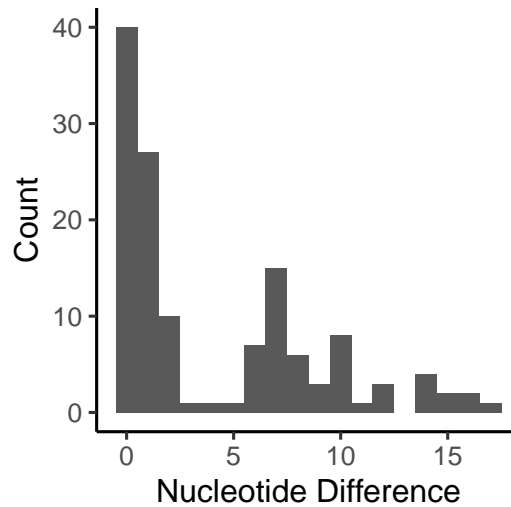
IGHV1-2*04

142 sequences assigned
43 (30.3%) exact matches, in which:
41 unique CDR3
4 unique J



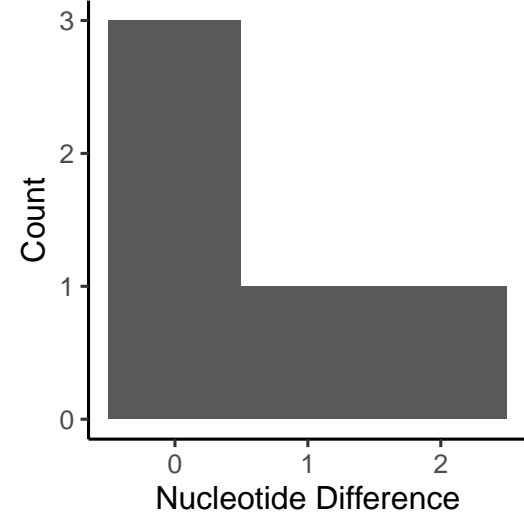
IGHV1-8*03

187 sequences assigned
40 (21.4%) exact matches, in which:
36 unique CDR3
6 unique J



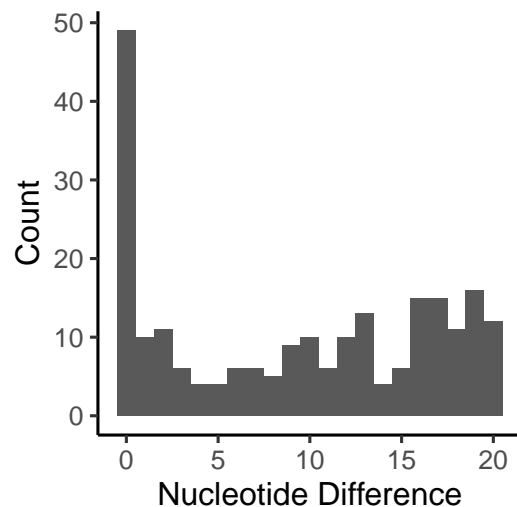
IGHV1-45*02

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



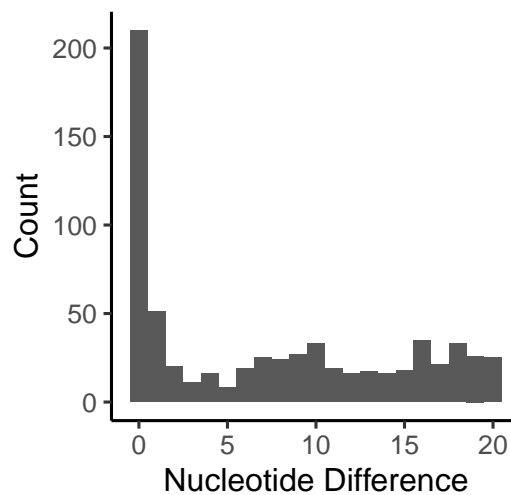
IGHV1-3*01

699 sequences assigned
49 (7%) exact matches, in which:
48 unique CDR3
5 unique J



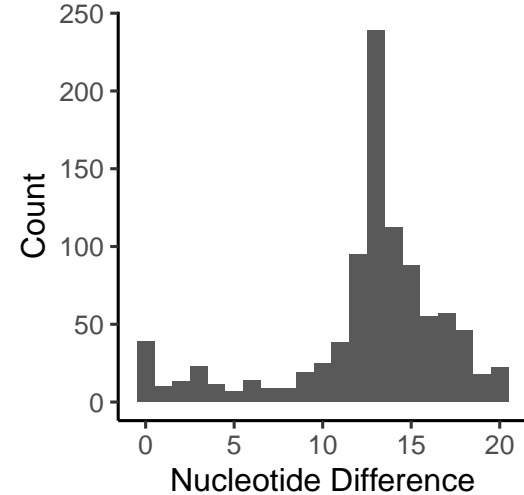
IGHV1-18*01

1111 sequences assigned
210 (18.9%) exact matches, in which:
201 unique CDR3
5 unique J



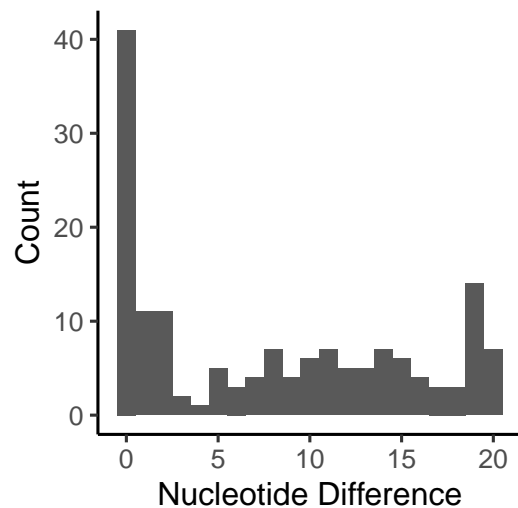
IGHV1-46*01

2062 sequences assigned
39 (1.9%) exact matches, in which:
39 unique CDR3
5 unique J



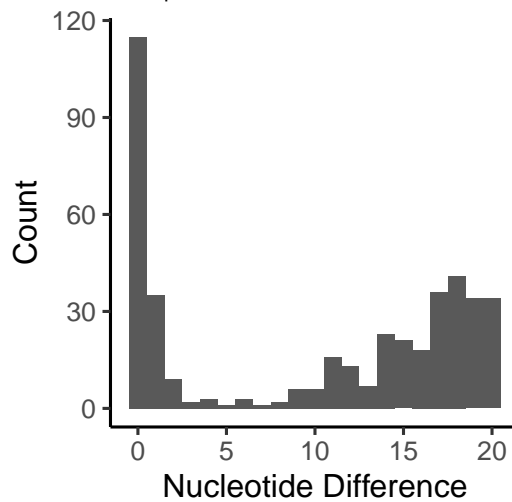
IGHV1-46*03

347 sequences assigned
41 (11.8%) exact matches, in which:
37 unique CDR3
4 unique J



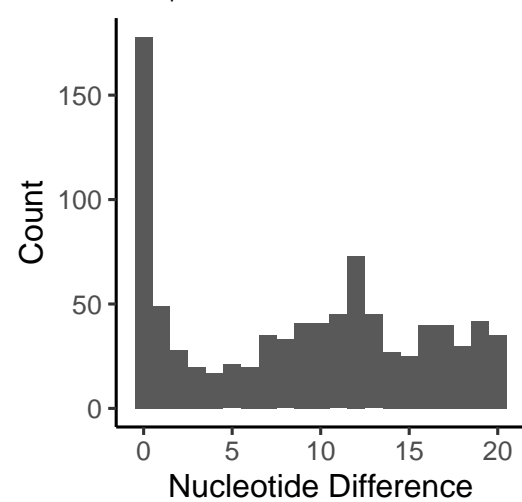
IGHV1-69*04

708 sequences assigned
115 (16.2%) exact matches, in which:
114 unique CDR3
4 unique J



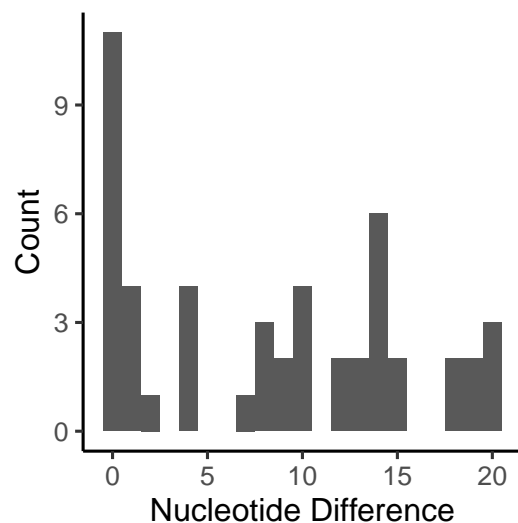
IGHV2-5*01

1129 sequences assigned
178 (15.8%) exact matches, in which:
173 unique CDR3
6 unique J



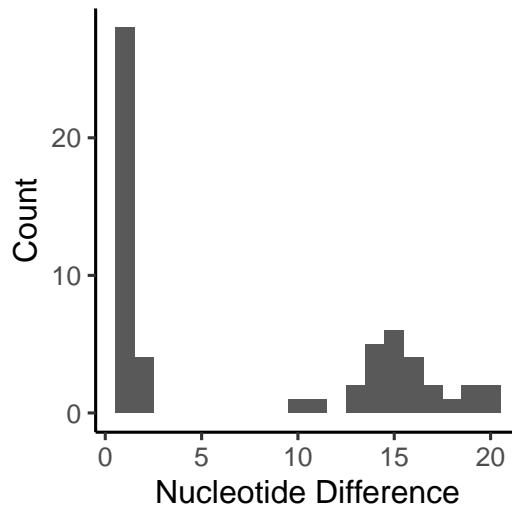
IGHV1-58*02

71 sequences assigned
11 (15.5%) exact matches, in which:
11 unique CDR3
4 unique J



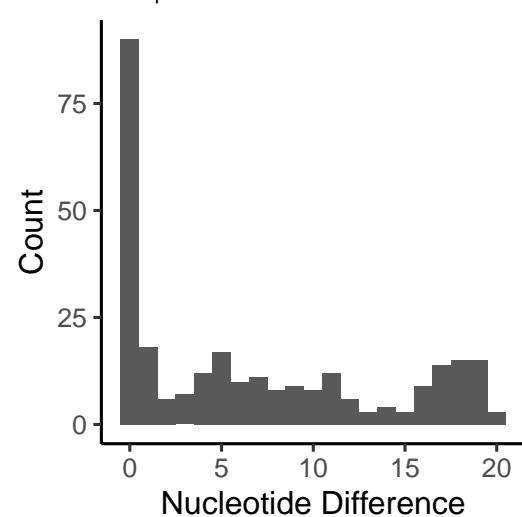
IGHV1-69*08

129 sequences assigned
No exact matches.



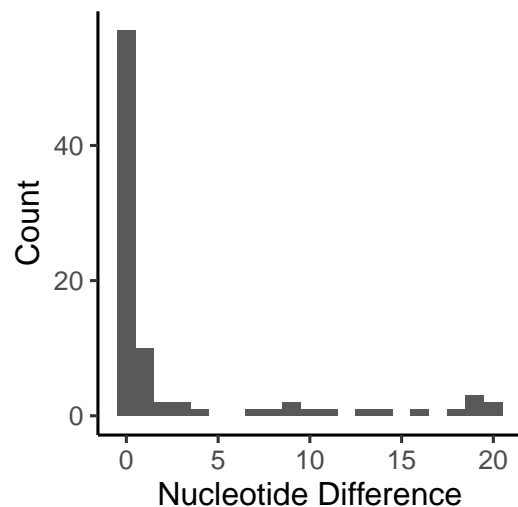
IGHV2-26*01

319 sequences assigned
90 (28.2%) exact matches, in which:
87 unique CDR3
5 unique J



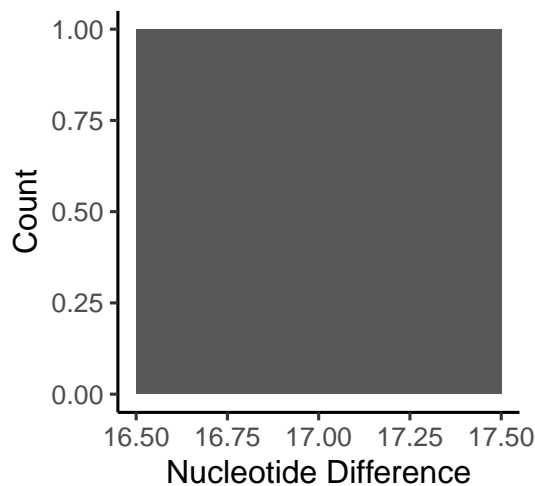
IGHV1-69*02

162 sequences assigned
57 (35.2%) exact matches, in which:
57 unique CDR3
5 unique J



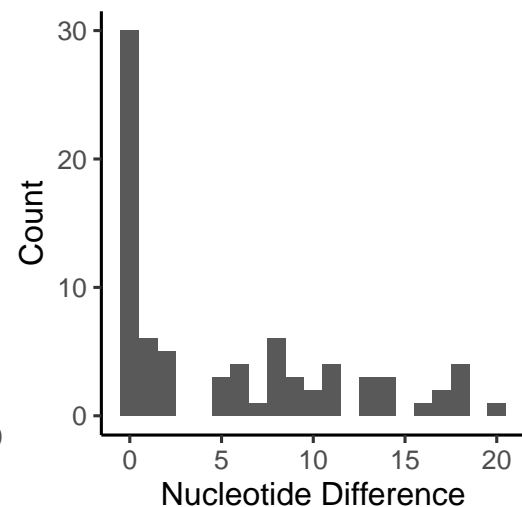
IGHV1-69D*01

1 sequences assigned
No exact matches.



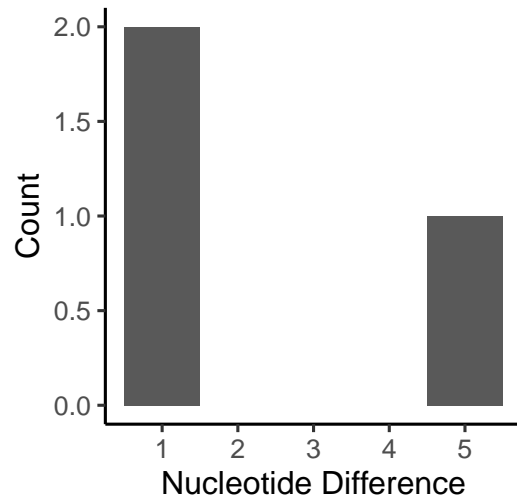
IGHV2-70*15

93 sequences assigned
30 (32.3%) exact matches, in which:
30 unique CDR3
5 unique J



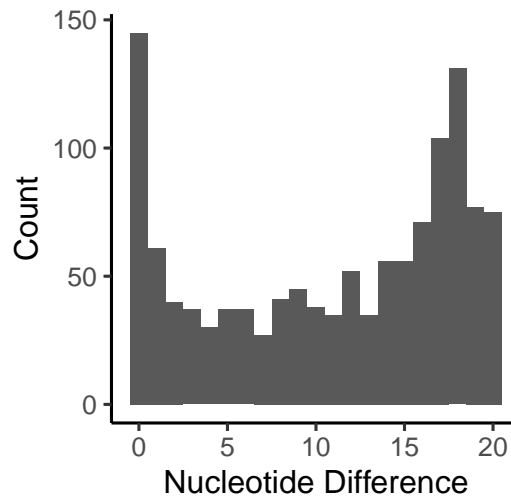
IGHV2-70D*04

3 sequences assigned
No exact matches.



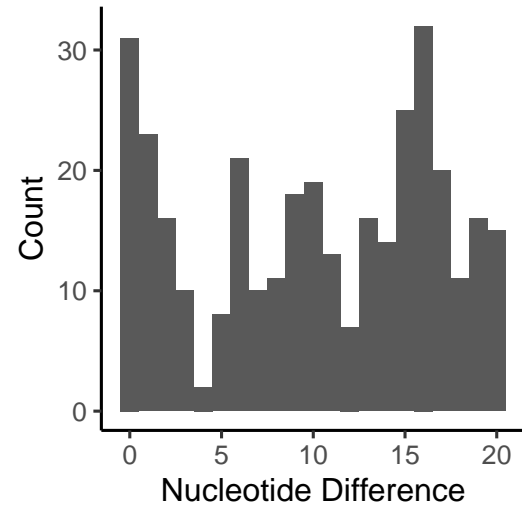
IGHV3-9*01

2759 sequences assigned
145 (5.3%) exact matches, in which:
136 unique CDR3
6 unique J



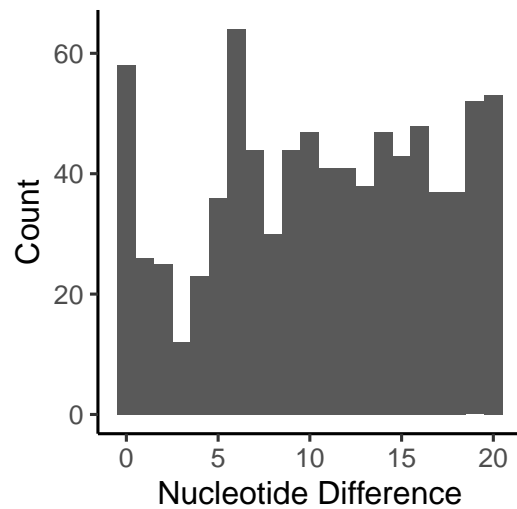
IGHV3-11*04

623 sequences assigned
31 (5%) exact matches, in which:
31 unique CDR3
5 unique J



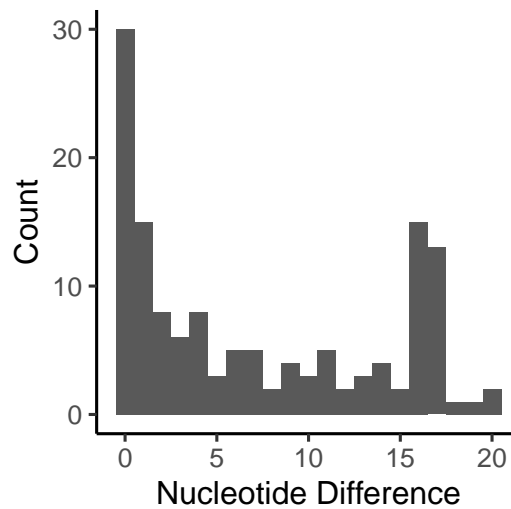
IGHV3-7*01

1271 sequences assigned
58 (4.6%) exact matches, in which:
56 unique CDR3
5 unique J



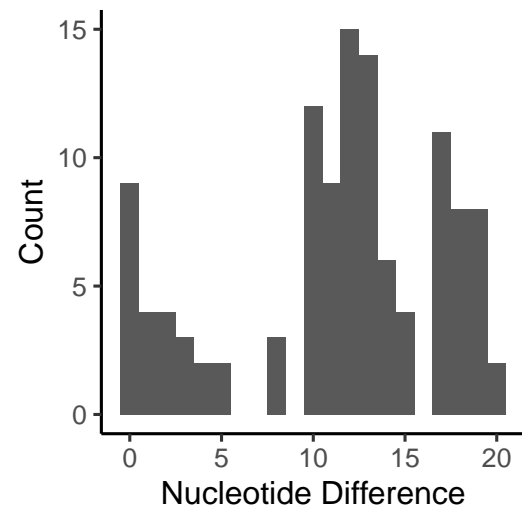
IGHV3-9*03

159 sequences assigned
30 (18.9%) exact matches, in which:
26 unique CDR3
5 unique J



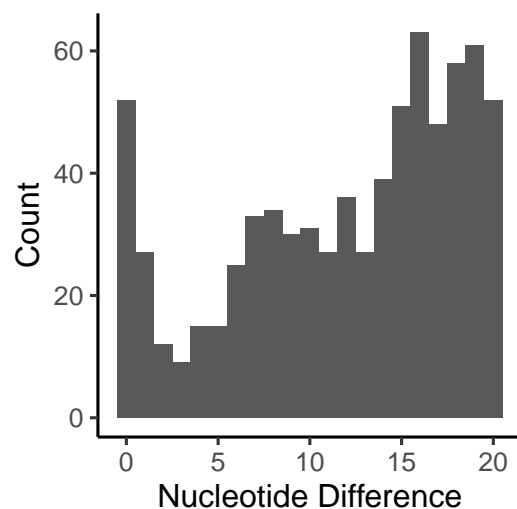
IGHV3-13*01

160 sequences assigned
9 (5.6%) exact matches, in which:
9 unique CDR3
4 unique J



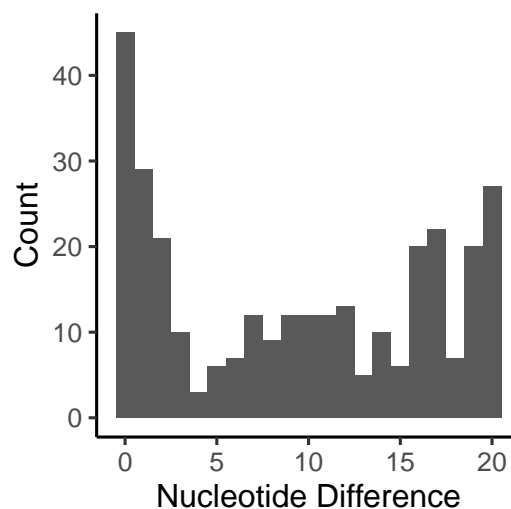
IGHV3-7*03

1163 sequences assigned
52 (4.5%) exact matches, in which:
52 unique CDR3
5 unique J



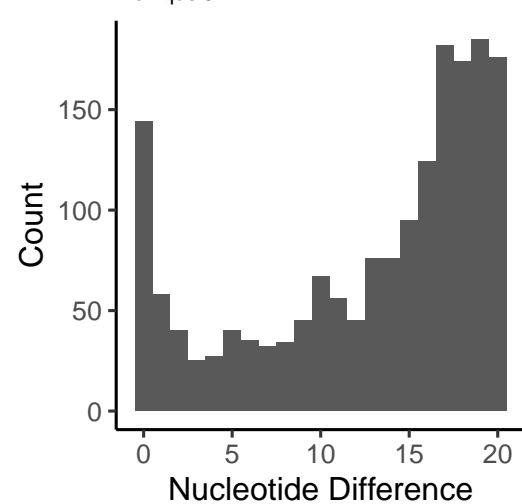
IGHV3-11*01

773 sequences assigned
45 (5.8%) exact matches, in which:
42 unique CDR3
5 unique J



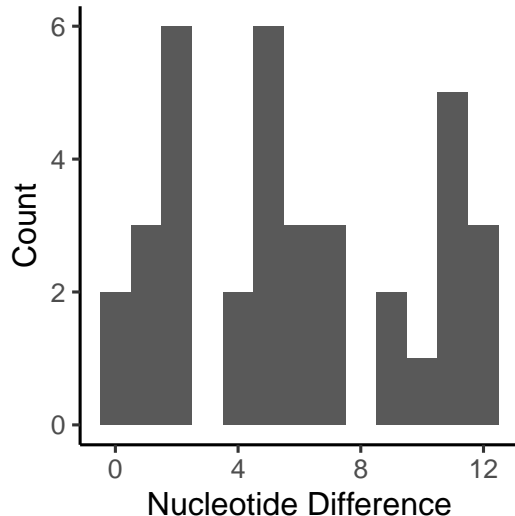
IGHV3-15*01

3357 sequences assigned
144 (4.3%) exact matches, in which:
138 unique CDR3
4 unique J



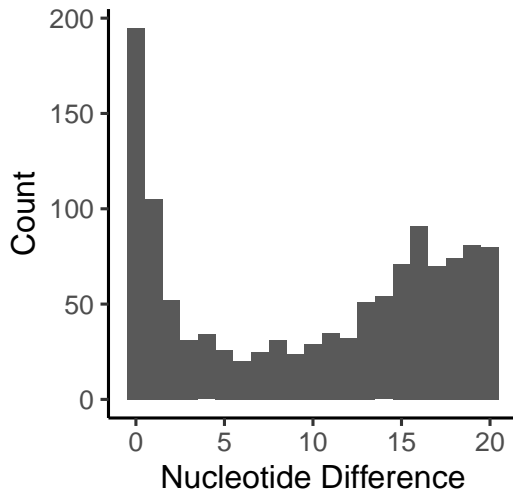
IGHV3-20*01

36 sequences assigned
2 (5.6%) exact matches, in which:
2 unique CDR3
2 unique J



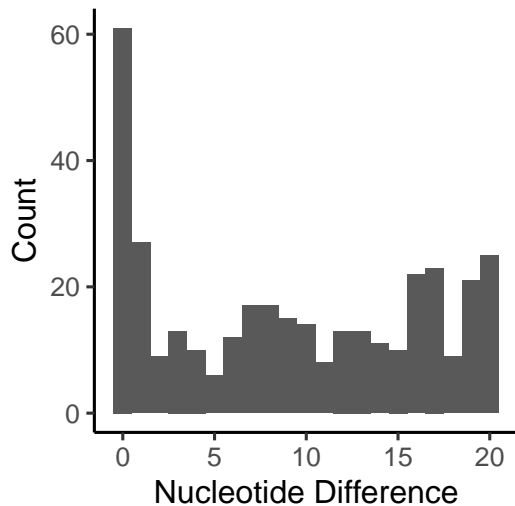
IGHV3-33*01

2152 sequences assigned
195 (9.1%) exact matches, in which:
192 unique CDR3
6 unique J



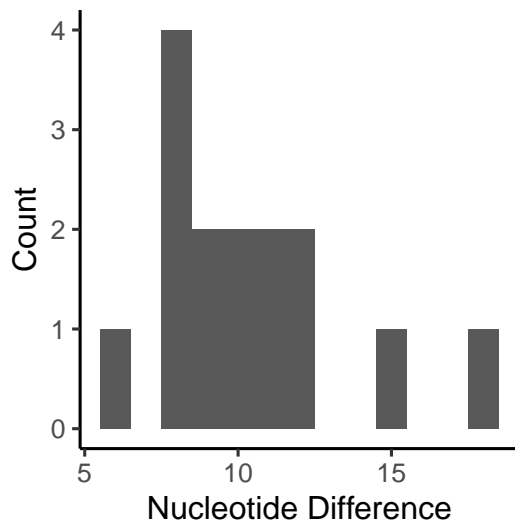
IGHV3-48*01

627 sequences assigned
61 (9.7%) exact matches, in which:
59 unique CDR3
5 unique J



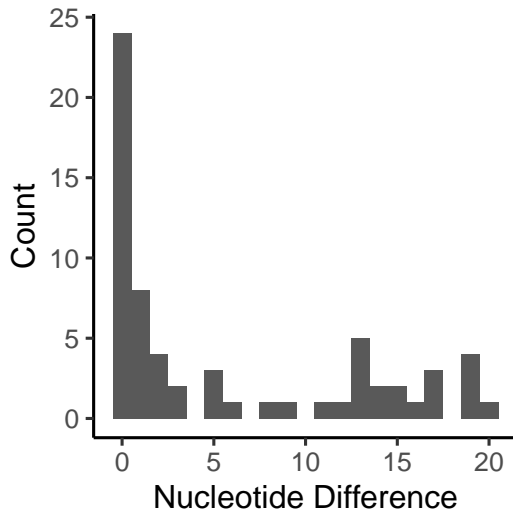
IGHV3-20*04

20 sequences assigned
No exact matches.



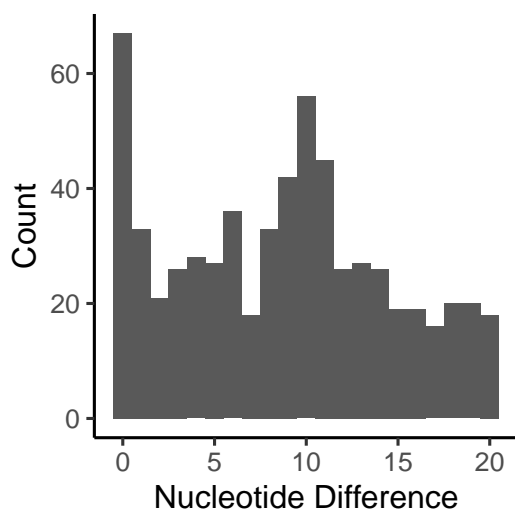
IGHV3-43*01

152 sequences assigned
24 (15.8%) exact matches, in which:
23 unique CDR3
3 unique J



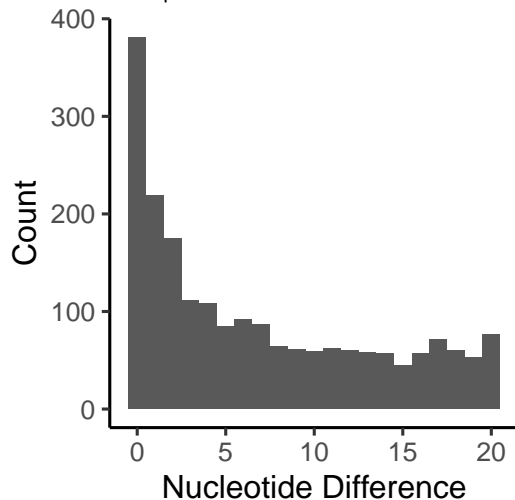
IGHV3-48*04

902 sequences assigned
67 (7.4%) exact matches, in which:
61 unique CDR3
5 unique J



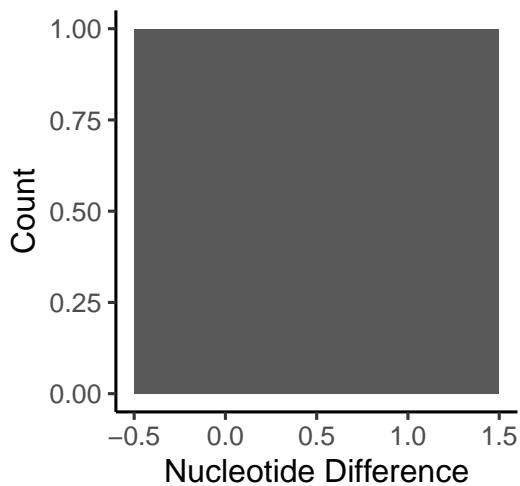
IGHV3-21*01

3016 sequences assigned
381 (12.6%) exact matches, in which:
294 unique CDR3
6 unique J



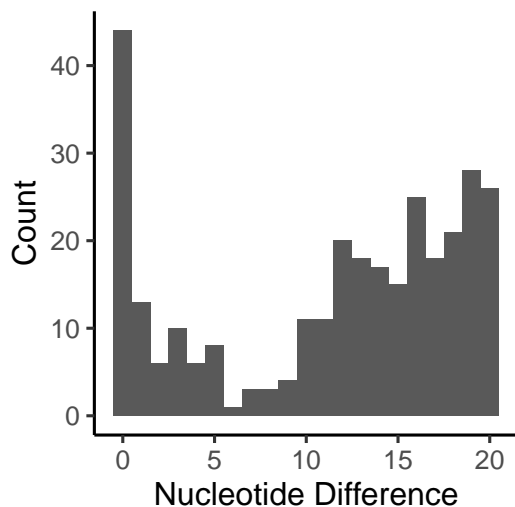
IGHV3-47*01

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



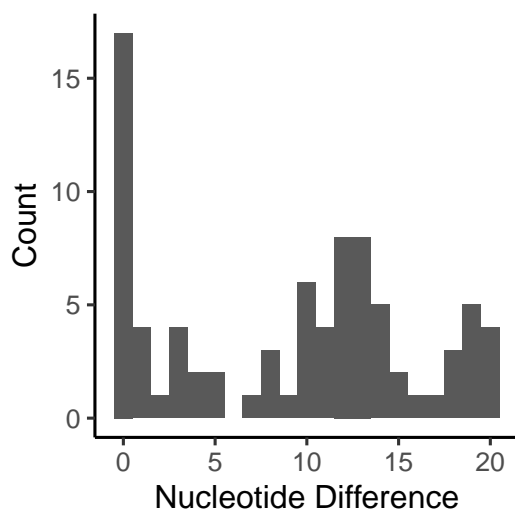
IGHV3-49*03

501 sequences assigned
44 (8.8%) exact matches, in which:
43 unique CDR3
6 unique J



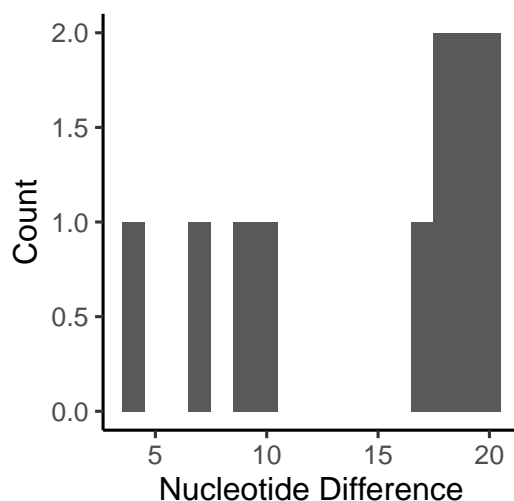
IGHV3-53*02

155 sequences assigned
17 (11%) exact matches, in which:
17 unique CDR3
3 unique J



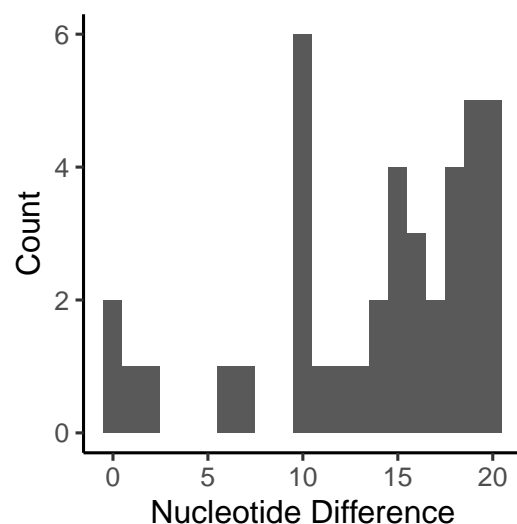
IGHV3-64*07

47 sequences assigned
No exact matches.



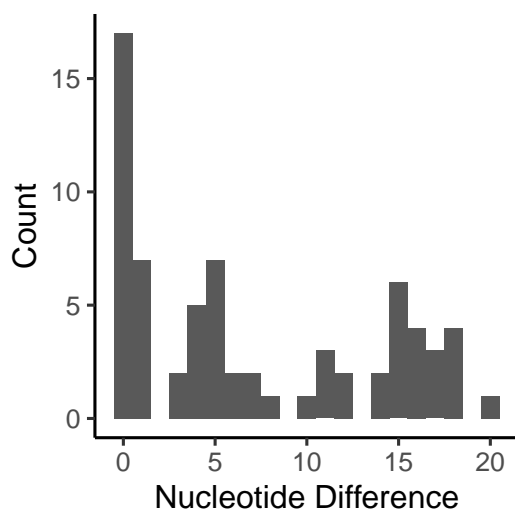
IGHV3-66*04

107 sequences assigned
2 (1.9%) exact matches, in which:
2 unique CDR3
2 unique J



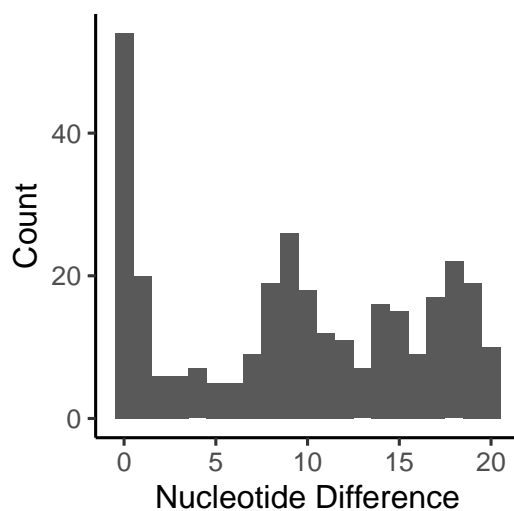
IGHV3-53*04

99 sequences assigned
17 (17.2%) exact matches, in which:
17 unique CDR3
4 unique J



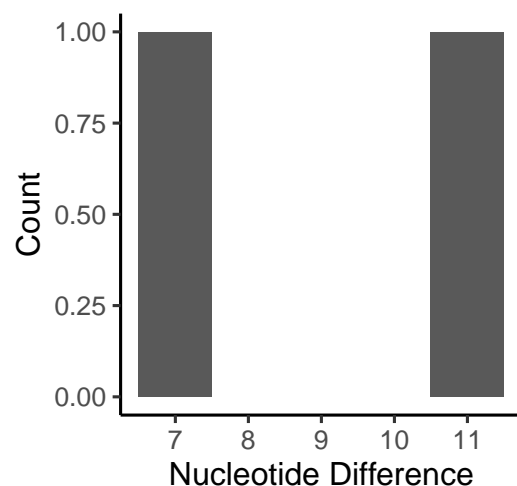
IGHV3-66*01

497 sequences assigned
54 (10.9%) exact matches, in which:
49 unique CDR3
5 unique J



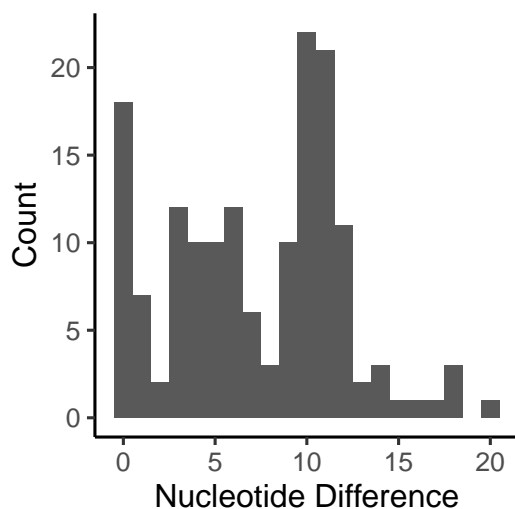
IGHV3-69-1*01

3 sequences assigned
No exact matches.



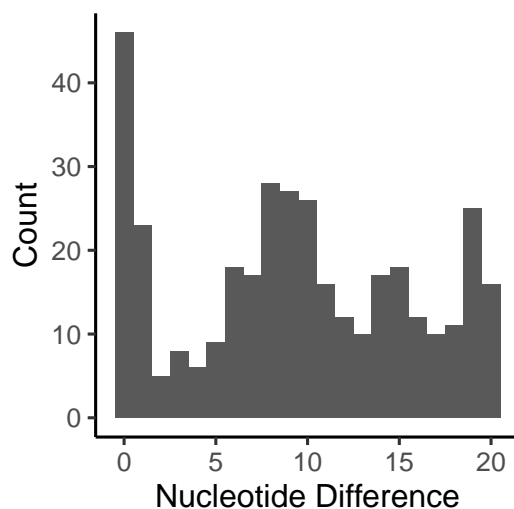
IGHV3-64*01

216 sequences assigned
18 (8.3%) exact matches, in which:
18 unique CDR3
4 unique J



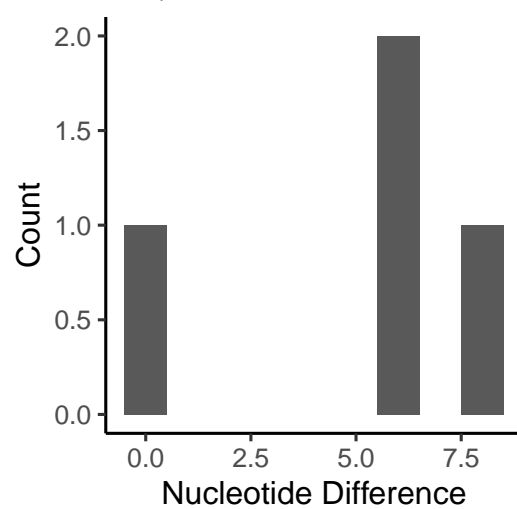
IGHV3-66*02

551 sequences assigned
46 (8.3%) exact matches, in which:
46 unique CDR3
6 unique J



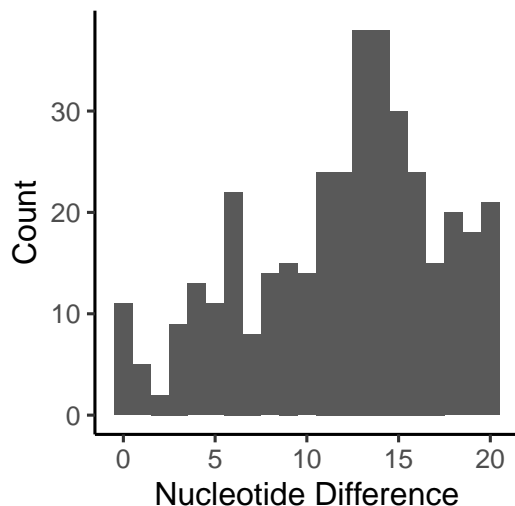
IGHV3-69-1*02

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



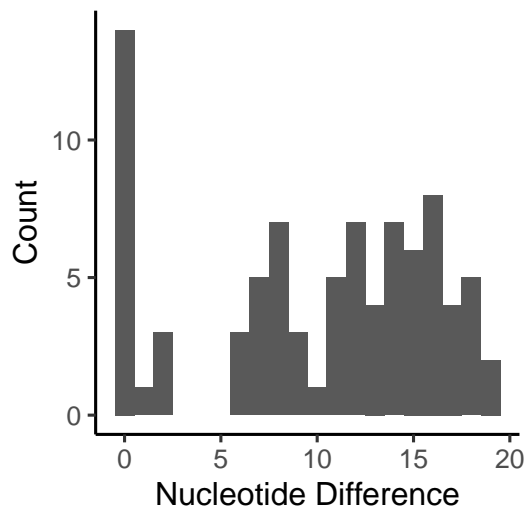
IGHV3-72*01

590 sequences assigned
11 (1.9%) exact matches, in which:
11 unique CDR3
3 unique J



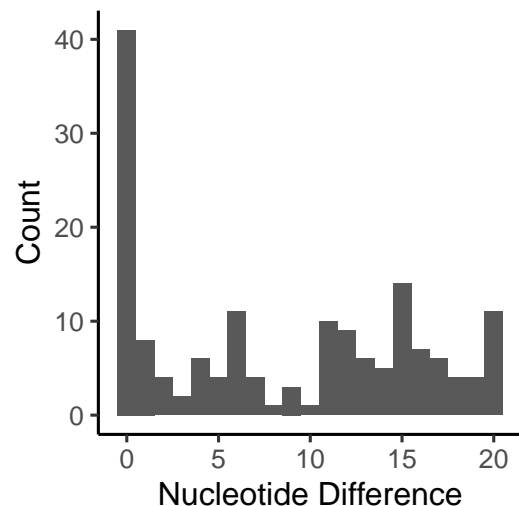
IGHV3-43D*03

117 sequences assigned
14 (12%) exact matches, in which:
14 unique CDR3
2 unique J



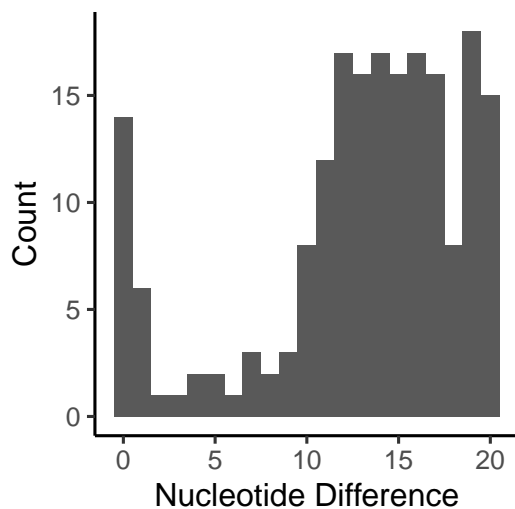
IGHV4-4*02

237 sequences assigned
41 (17.3%) exact matches, in which:
40 unique CDR3
5 unique J



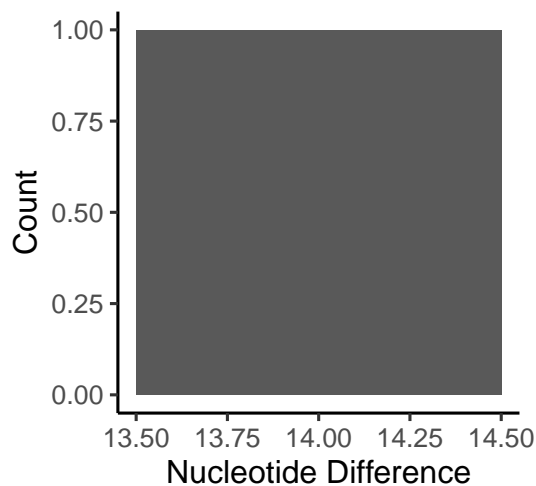
IGHV3-73*01

386 sequences assigned
14 (3.6%) exact matches, in which:
13 unique CDR3
5 unique J



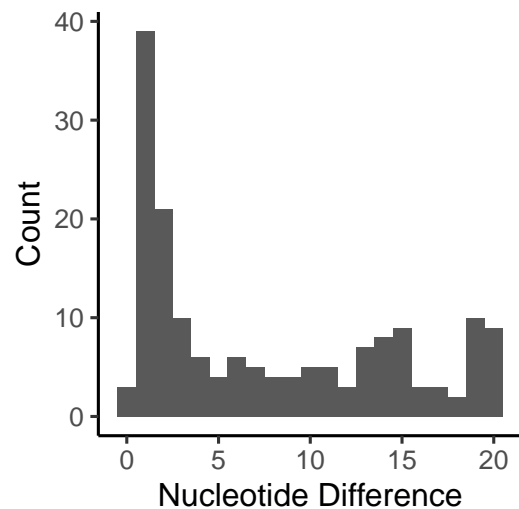
IGHV3-64D*06

1 sequences assigned
No exact matches.



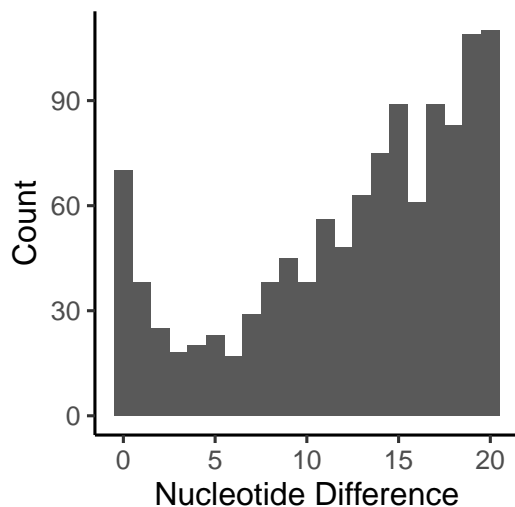
IGHV4-4*07

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



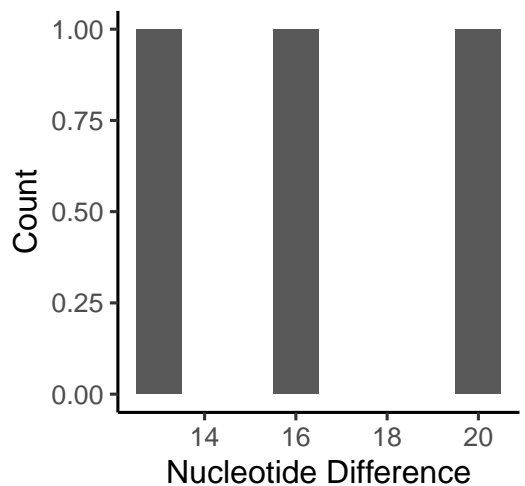
IGHV3-74*01

2035 sequences assigned
70 (3.4%) exact matches, in which:
64 unique CDR3
5 unique J



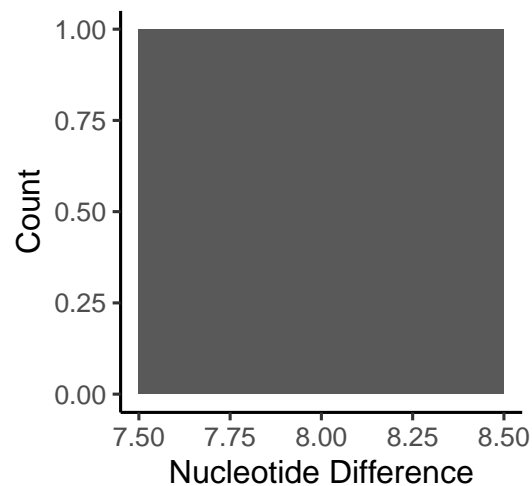
IGHV3-NL1*01

3 sequences assigned
No exact matches.



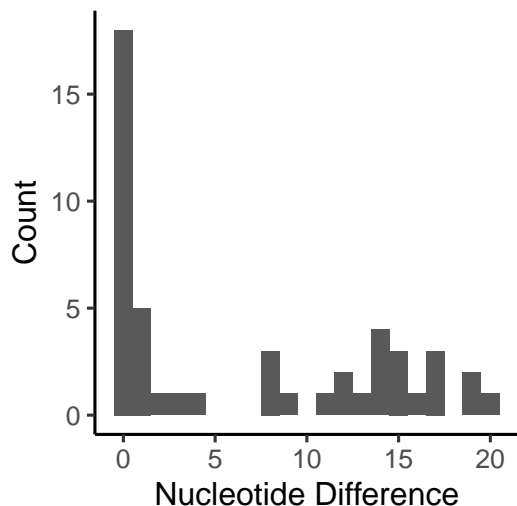
IGHV4-28*03

9 sequences assigned
No exact matches.



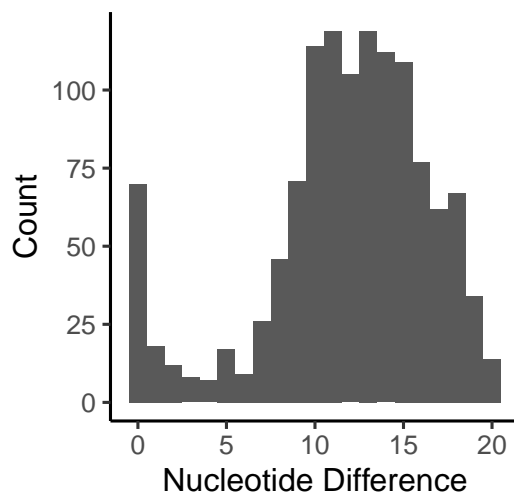
IGHV4-30-2*01

74 sequences assigned
18 (24.3%) exact matches, in which:
18 unique CDR3
4 unique J



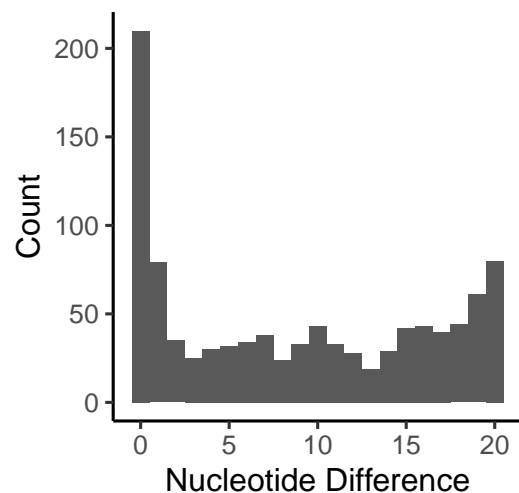
IGHV4-31*03

1736 sequences assigned
70 (4%) exact matches, in which:
66 unique CDR3
5 unique J



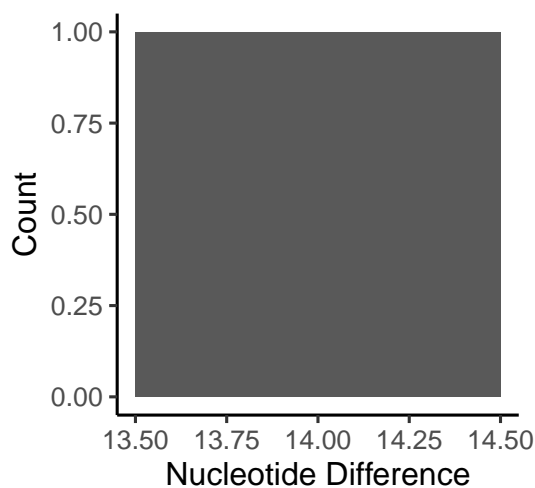
IGHV4-39*01

2646 sequences assigned
210 (7.9%) exact matches, in which:
206 unique CDR3
6 unique J



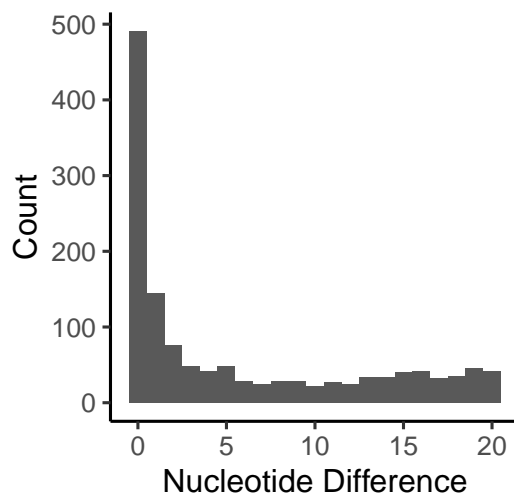
IGHV4-30-4*03

1 sequences assigned
No exact matches.



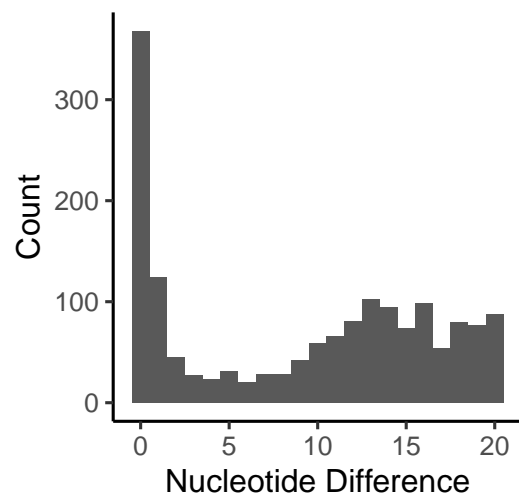
IGHV4-34*01

1831 sequences assigned
491 (26.8%) exact matches, in which:
465 unique CDR3
6 unique J



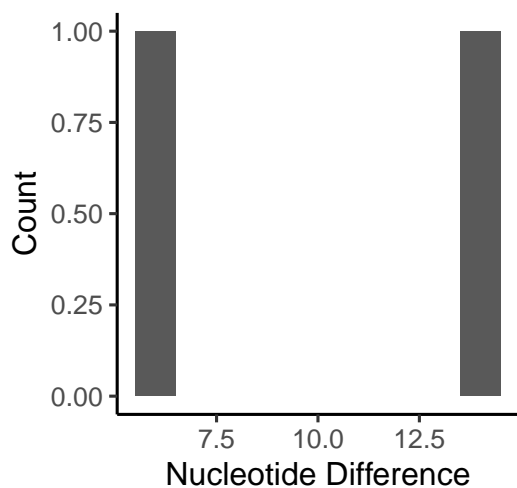
IGHV4-39*07

2460 sequences assigned
368 (15%) exact matches, in which:
342 unique CDR3
6 unique J



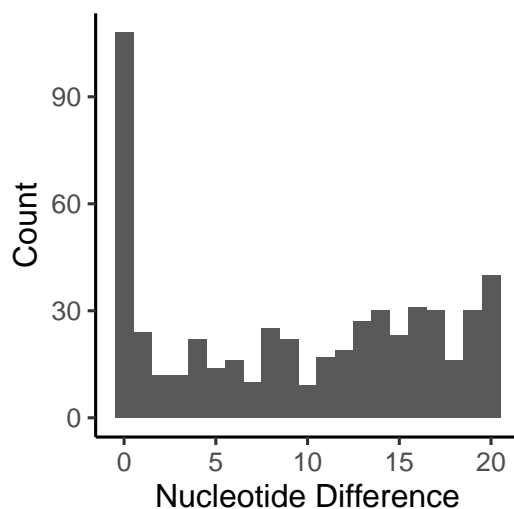
IGHV4-30-4*07

3 sequences assigned
No exact matches.



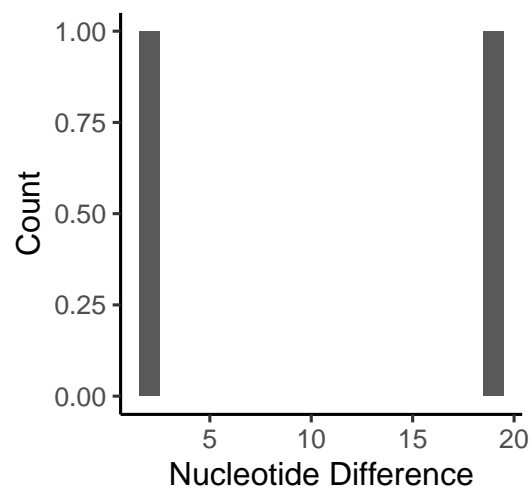
IGHV4-38-2*02

836 sequences assigned
108 (12.9%) exact matches, in which:
104 unique CDR3
6 unique J



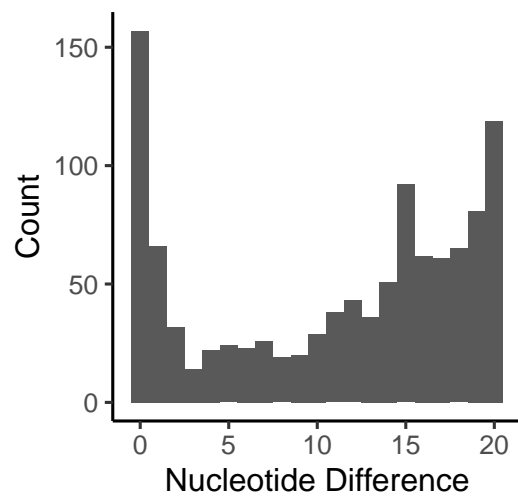
IGHV4-55*09

2 sequences assigned
No exact matches.



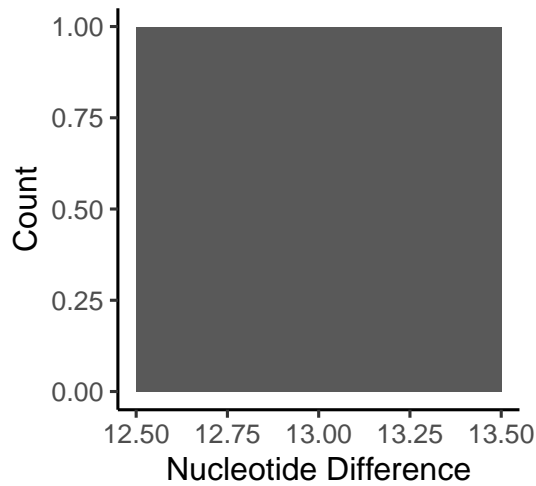
IGHV4–59*01

2317 sequences assigned
157 (6.8%) exact matches, in which:
151 unique CDR3
6 unique J



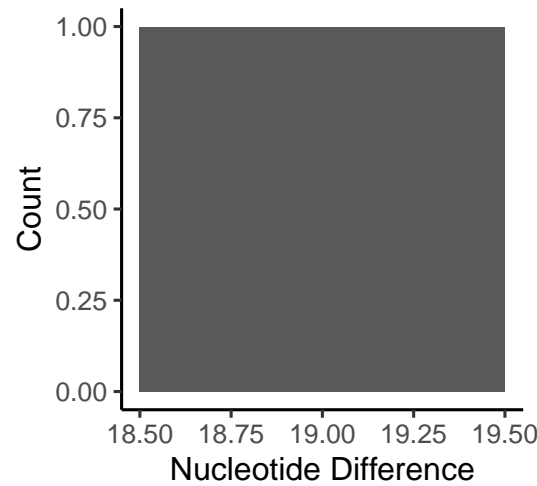
IGHV1/OR15–1*04

3 sequences assigned
No exact matches.



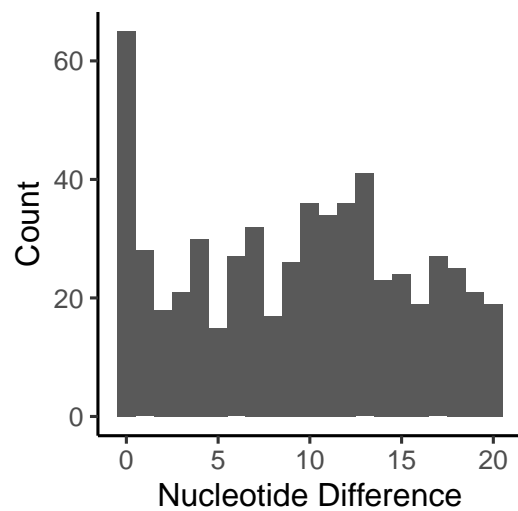
IGHV1/OR15–9*01

1 sequences assigned
No exact matches.



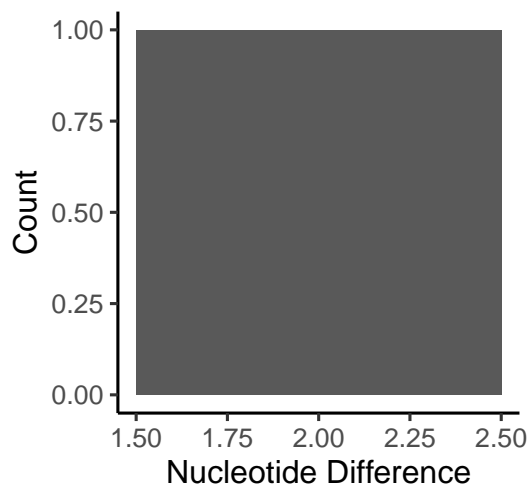
IGHV4–59*08

803 sequences assigned
65 (8.1%) exact matches, in which:
61 unique CDR3
5 unique J



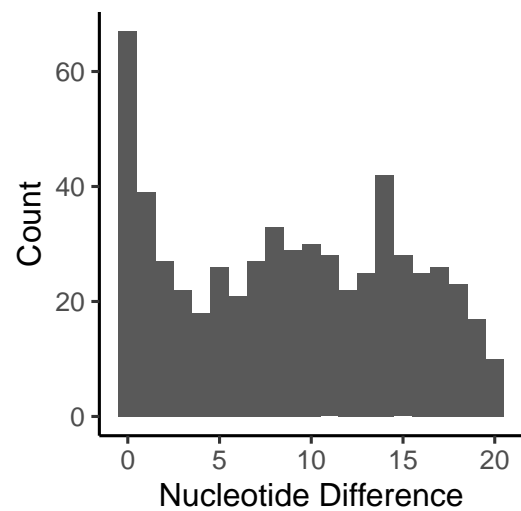
IGHV1/OR15–2*01

1 sequences assigned
No exact matches.



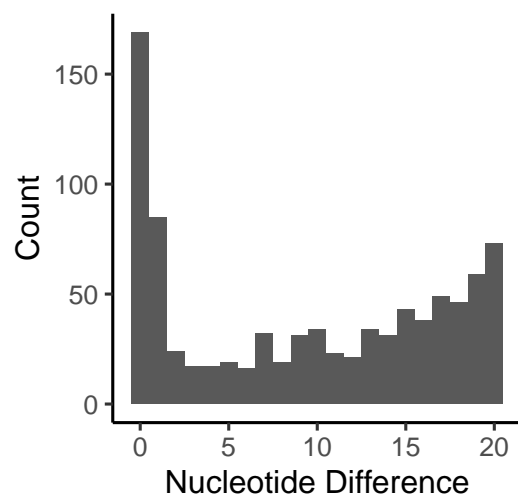
IGHV5–51*01

833 sequences assigned
67 (8%) exact matches, in which:
67 unique CDR3
5 unique J



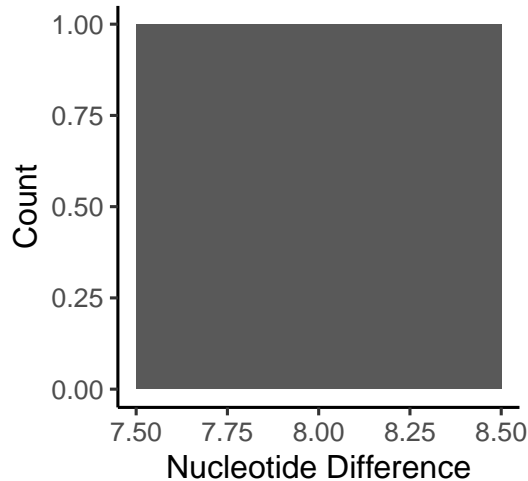
IGHV4–61*02

1495 sequences assigned
169 (11.3%) exact matches, in which:
149 unique CDR3
6 unique J



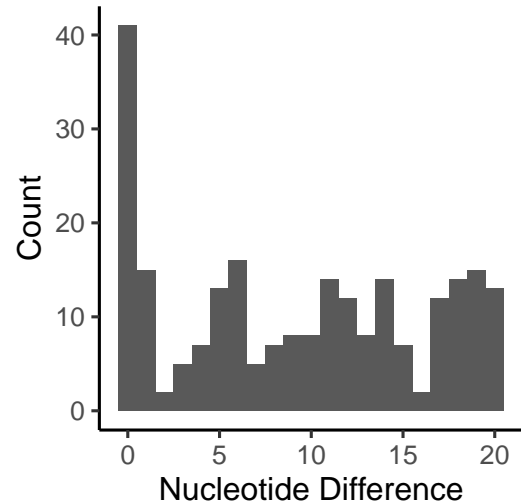
IGHV4/OR15–8*02

3 sequences assigned
No exact matches.



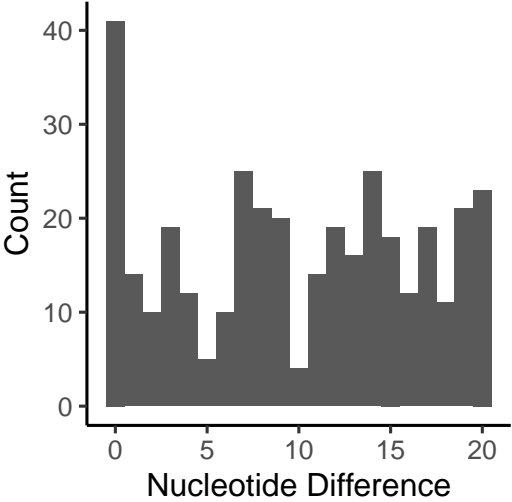
IGHV5–51*03

405 sequences assigned
41 (10.1%) exact matches, in which:
40 unique CDR3
5 unique J



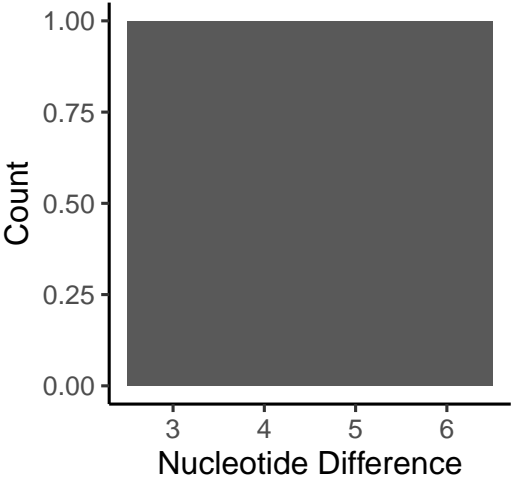
IGHV6-1*01

665 sequences assigned
41 (6.2%) exact matches, in which:
40 unique CDR3
5 unique J



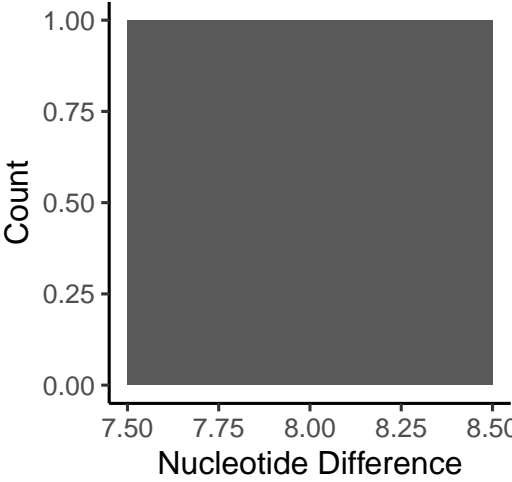
IGHV3/OR16-9*01

4 sequences assigned
No exact matches.



IGHV3/OR16-12*01

1 sequences assigned
No exact matches.





[illegible]