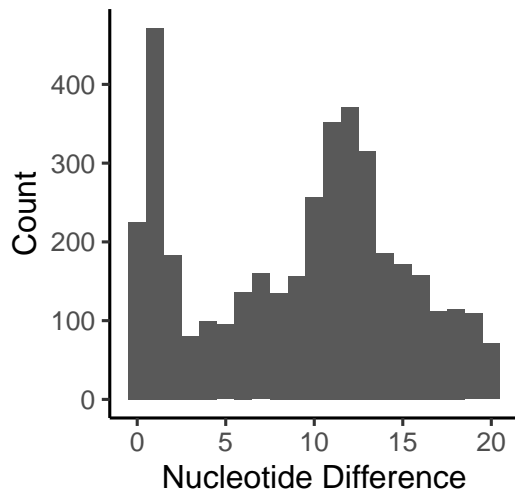


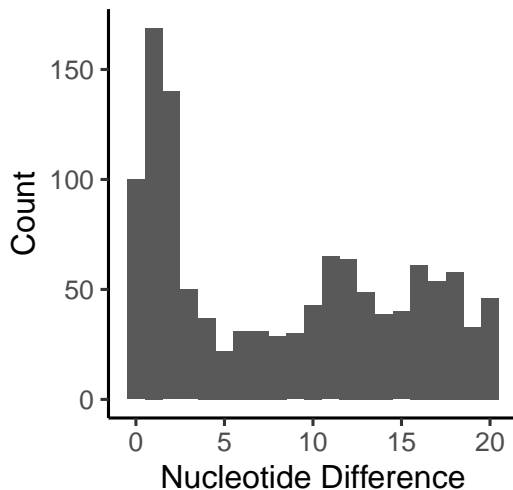
IGHV1-2*02

4613 sequences assigned
225 (4.9%) exact matches, in which:
171 unique CDR3
5 unique J



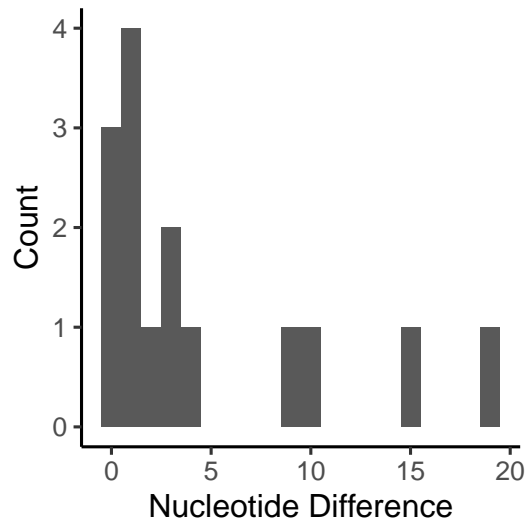
IGHV1-18*01

1372 sequences assigned
100 (7.3%) exact matches, in which:
79 unique CDR3
5 unique J



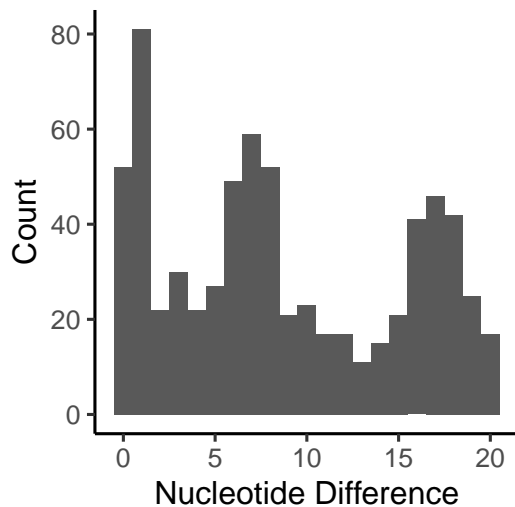
IGHV1-45*02

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



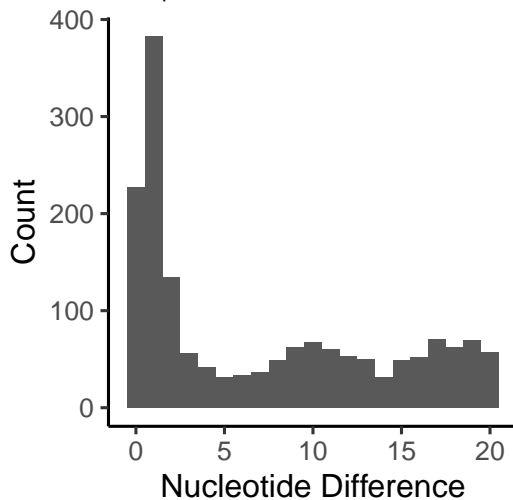
IGHV1-3*01_05

1390 sequences assigned
52 (3.7%) exact matches, in which:
37 unique CDR3
5 unique J



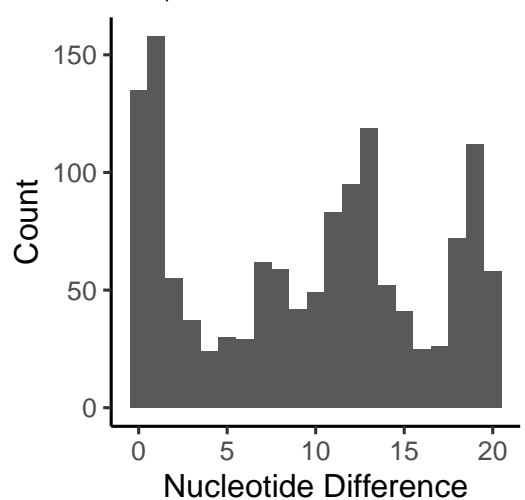
IGHV1-18*04

2093 sequences assigned
227 (10.8%) exact matches, in which:
169 unique CDR3
6 unique J



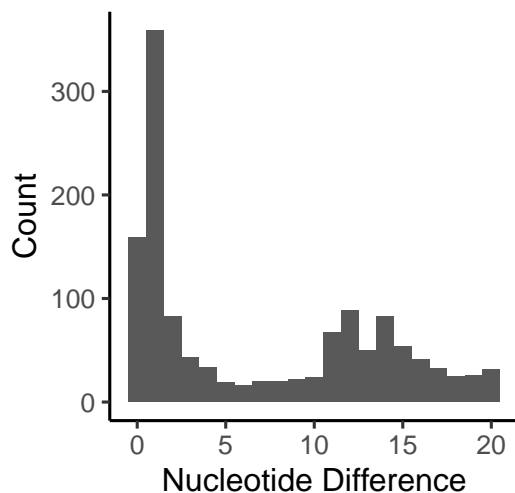
IGHV1-46*01

1674 sequences assigned
135 (8.1%) exact matches, in which:
109 unique CDR3
5 unique J



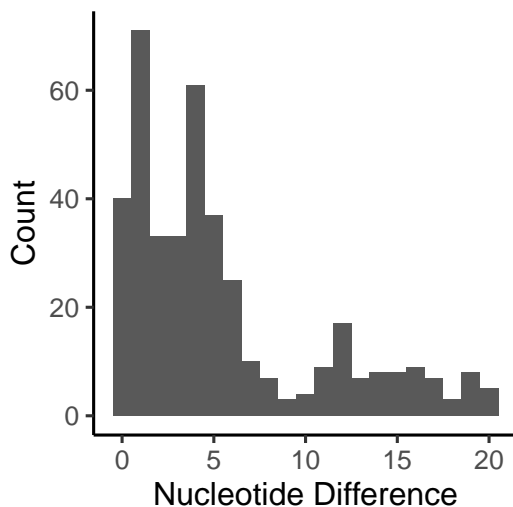
IGHV1-8*01

1487 sequences assigned
159 (10.7%) exact matches, in which:
107 unique CDR3
6 unique J



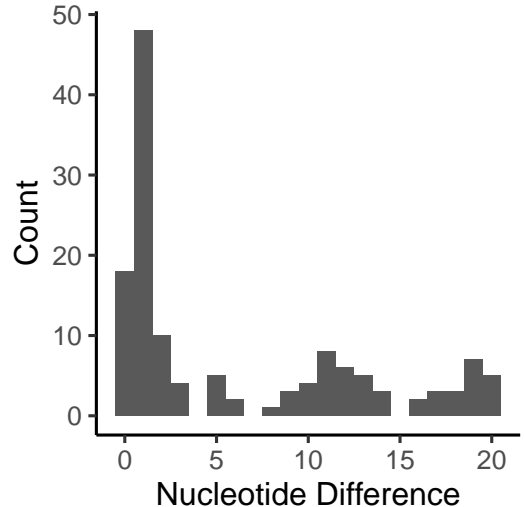
IGHV1-24*01

513 sequences assigned
40 (7.8%) exact matches, in which:
30 unique CDR3
4 unique J



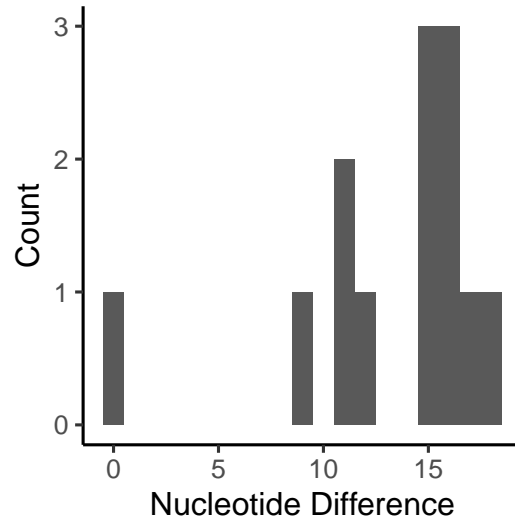
IGHV1-58*01_03

162 sequences assigned
18 (11.1%) exact matches, in which:
16 unique CDR3
5 unique J



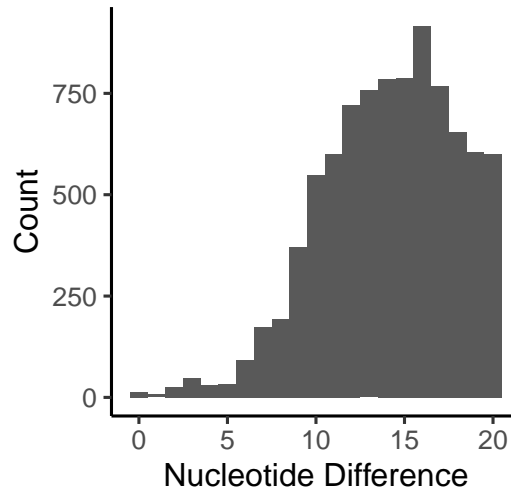
IGHV1-69-2*01

14 sequences assigned
1 (7.1%) exact matches, in which:
1 unique CDR3
1 unique J



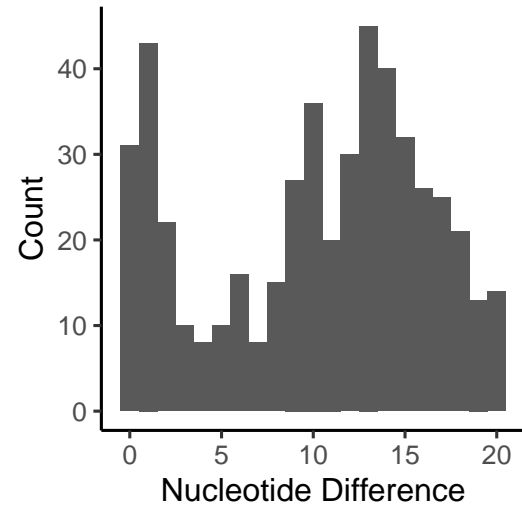
IGHV2-5*01

9999 sequences assigned
14 (0.1%) exact matches, in which:
12 unique CDR3
3 unique J



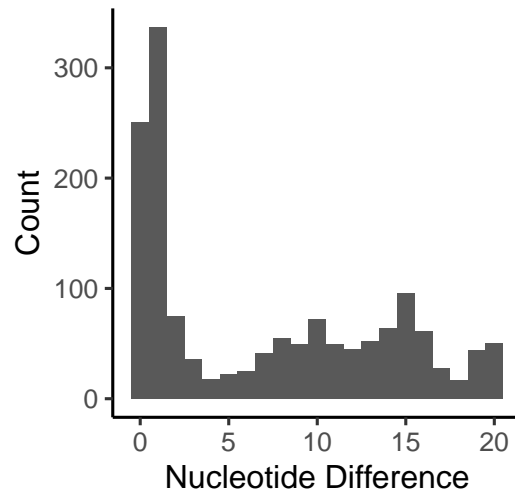
IGHV2-70*11_15

671 sequences assigned
31 (4.6%) exact matches, in which:
24 unique CDR3
4 unique J



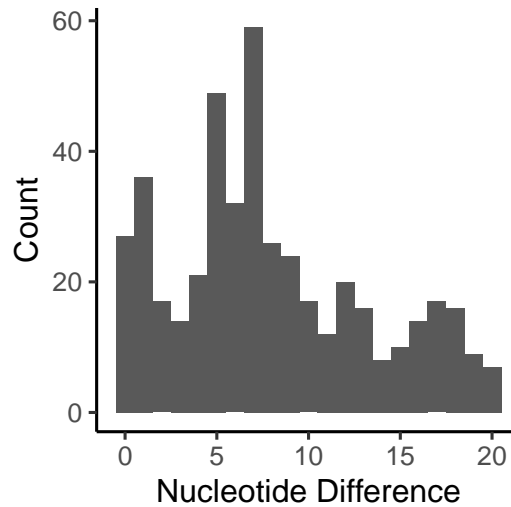
IGHV1-69*01_12_13

1815 sequences assigned
251 (13.8%) exact matches, in which:
201 unique CDR3
6 unique J



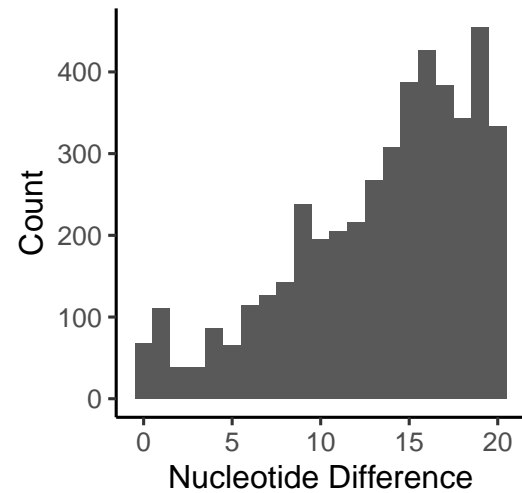
IGHV2-5*02

497 sequences assigned
27 (5.4%) exact matches, in which:
21 unique CDR3
3 unique J



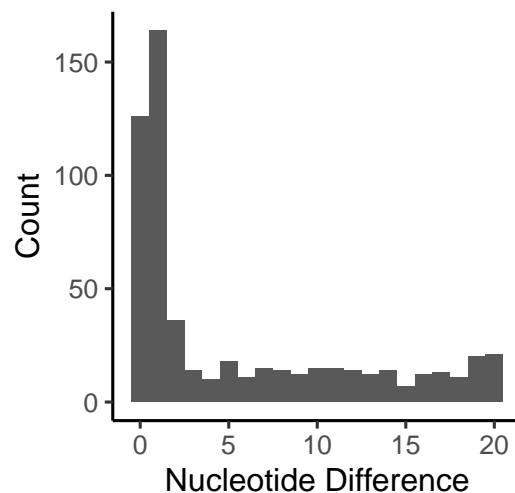
IGHV3-7*01

5853 sequences assigned
68 (1.2%) exact matches, in which:
56 unique CDR3
5 unique J



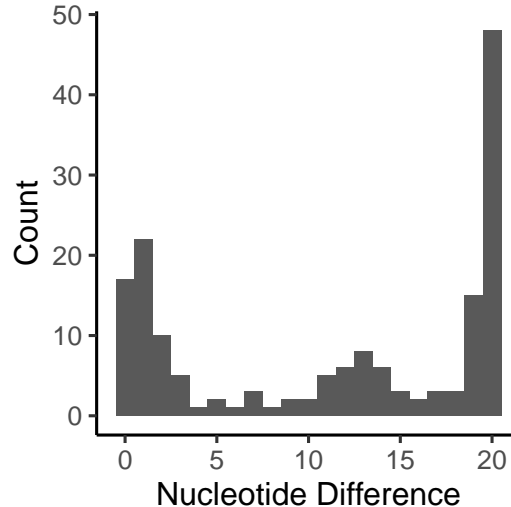
IGHV1-69*06_14

729 sequences assigned
126 (17.3%) exact matches, in which:
103 unique CDR3
5 unique J



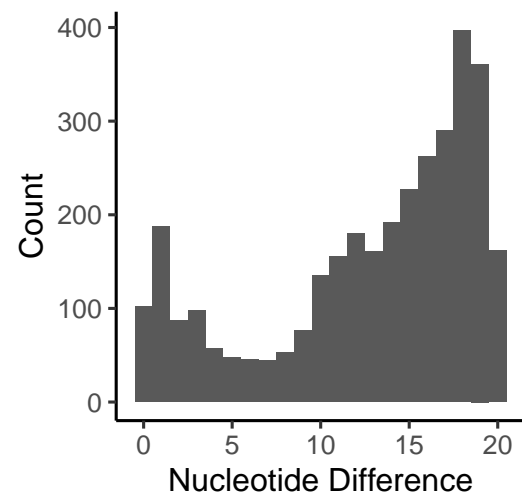
IGHV2-26*01

203 sequences assigned
17 (8.4%) exact matches, in which:
16 unique CDR3
5 unique J



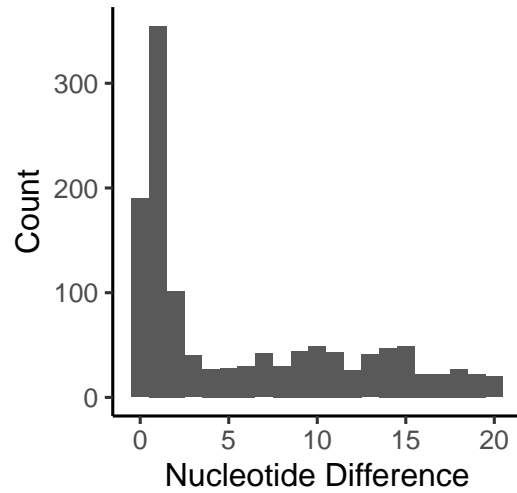
IGHV3-7*03

3849 sequences assigned
102 (2.7%) exact matches, in which:
73 unique CDR3
4 unique J



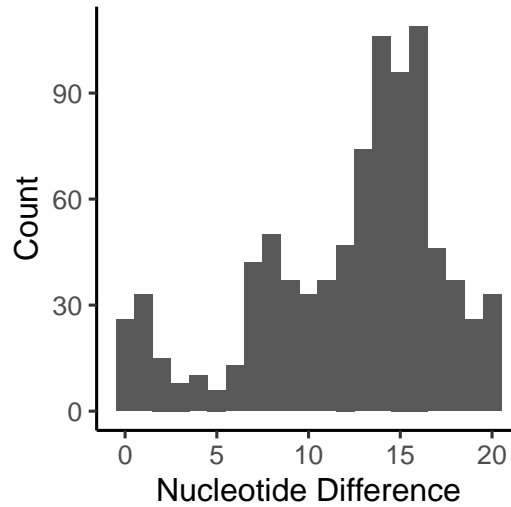
IGHV3-9*01

1367 sequences assigned
190 (13.9%) exact matches, in which:
137 unique CDR3
6 unique J



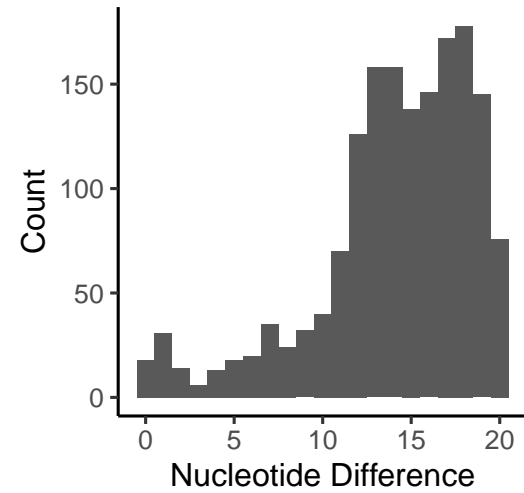
IGHV3-11*06

964 sequences assigned
26 (2.7%) exact matches, in which:
23 unique CDR3
4 unique J



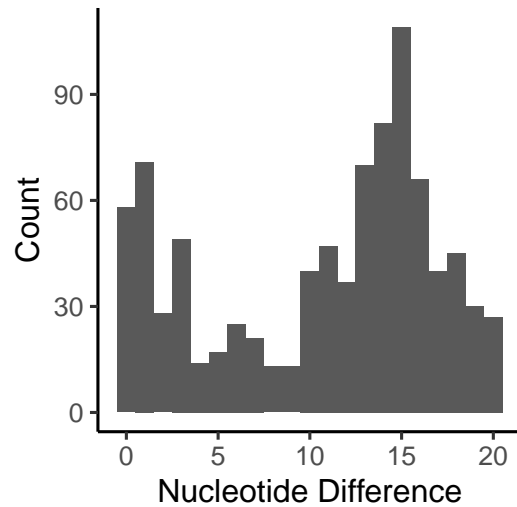
IGHV3-15*07

1944 sequences assigned
18 (0.9%) exact matches, in which:
16 unique CDR3
4 unique J



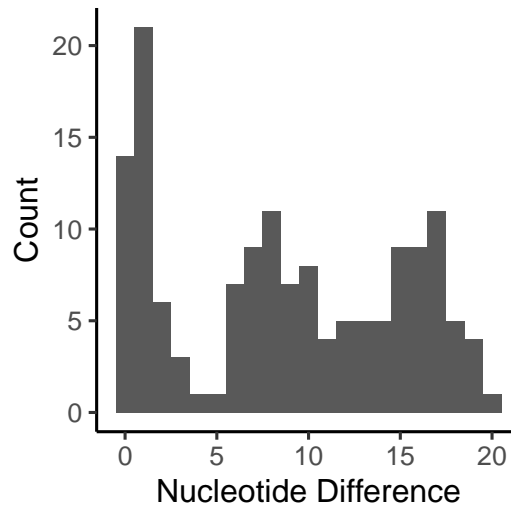
IGHV3-11*01

1117 sequences assigned
58 (5.2%) exact matches, in which:
53 unique CDR3
5 unique J



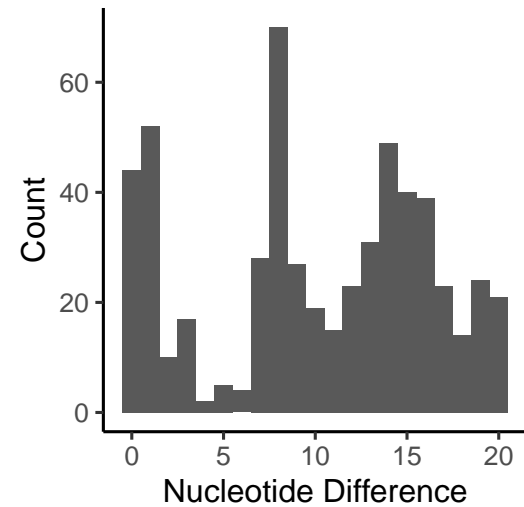
IGHV3-13*01

157 sequences assigned
14 (8.9%) exact matches, in which:
9 unique CDR3
3 unique J



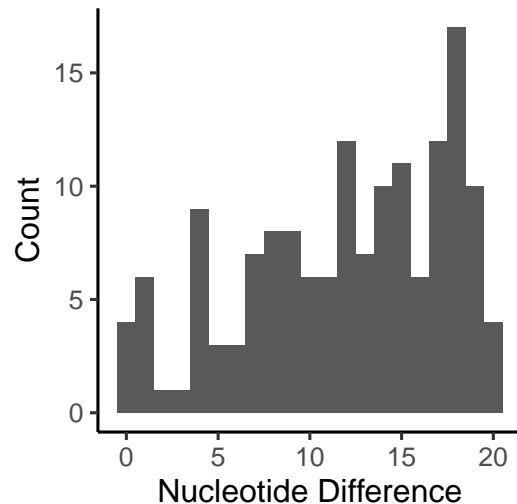
IGHV3-15*01_02

792 sequences assigned
44 (5.6%) exact matches, in which:
35 unique CDR3
4 unique J



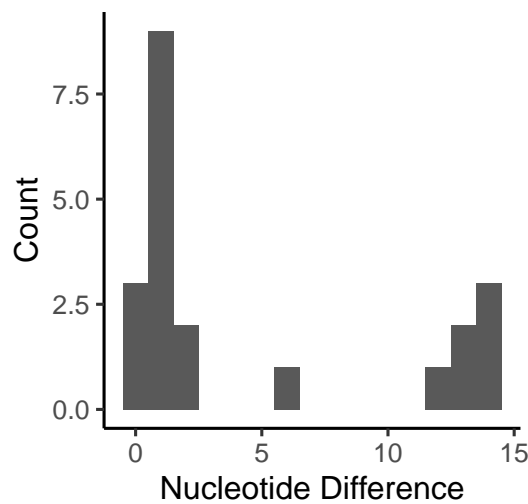
IGHV3-11*04

194 sequences assigned
4 (2.1%) exact matches, in which:
4 unique CDR3
1 unique J



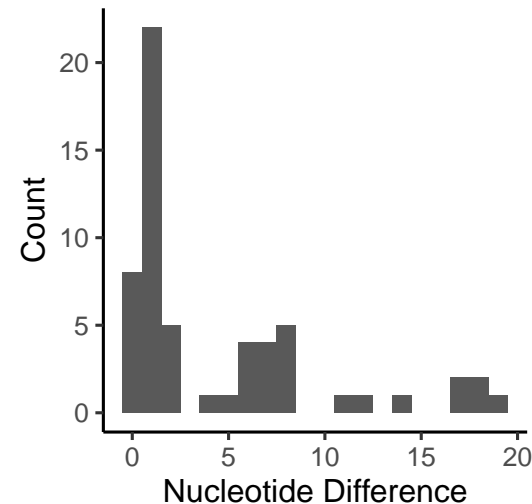
IGHV3-13*05

24 sequences assigned
3 (12.5%) exact matches, in which:
3 unique CDR3
1 unique J



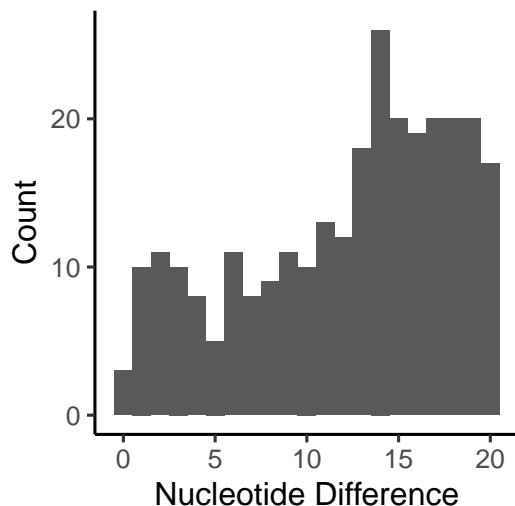
IGHV3-20*03_04

66 sequences assigned
8 (12.1%) exact matches, in which:
6 unique CDR3
2 unique J



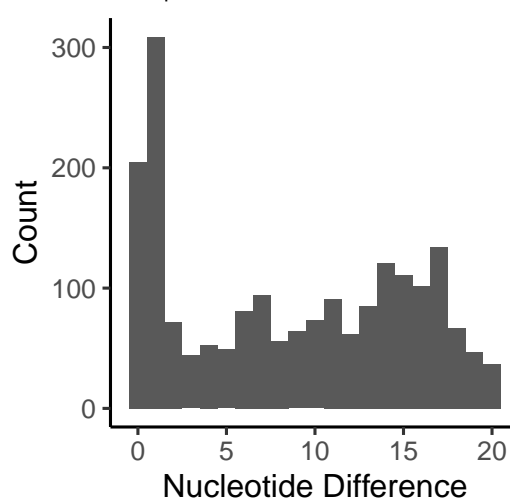
IGHV3-21*04

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



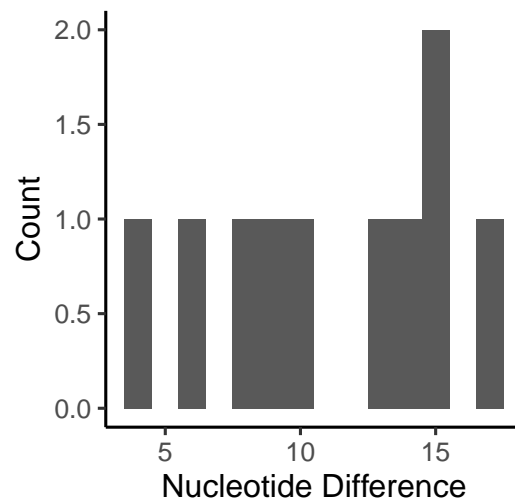
IGHV3-30-3*01

2306 sequences assigned
205 (8.9%) exact matches, in which:
157 unique CDR3
5 unique J



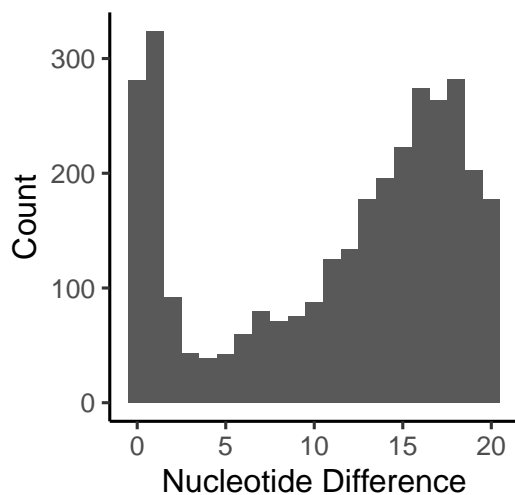
IGHV3-33*05

23 sequences assigned
No exact matches.



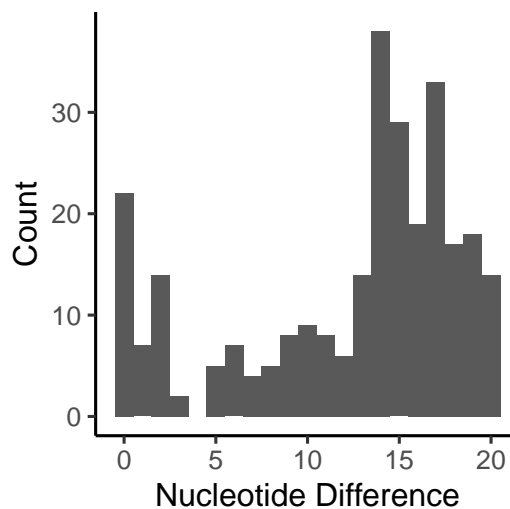
IGHV3-21*01_02

3961 sequences assigned
281 (7.1%) exact matches, in which:
226 unique CDR3
6 unique J



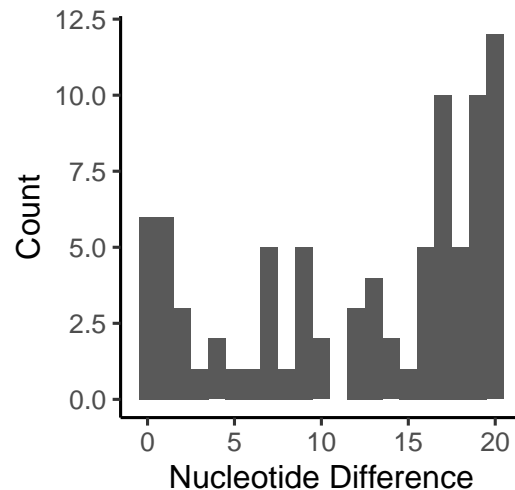
IGHV3-30*03

412 sequences assigned
22 (5.3%) exact matches, in which:
20 unique CDR3
4 unique J



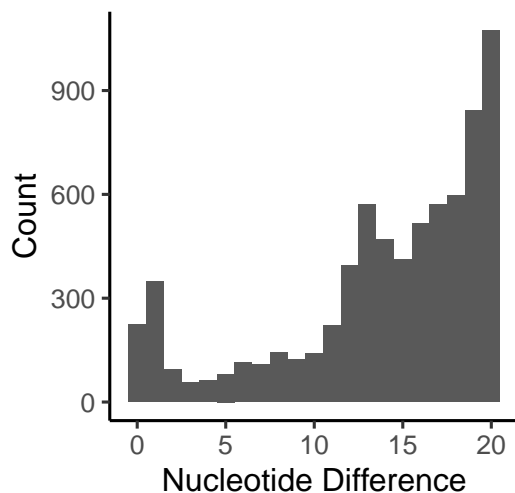
IGHV3-33*08

205 sequences assigned
6 (2.9%) exact matches, in which:
6 unique CDR3
2 unique J



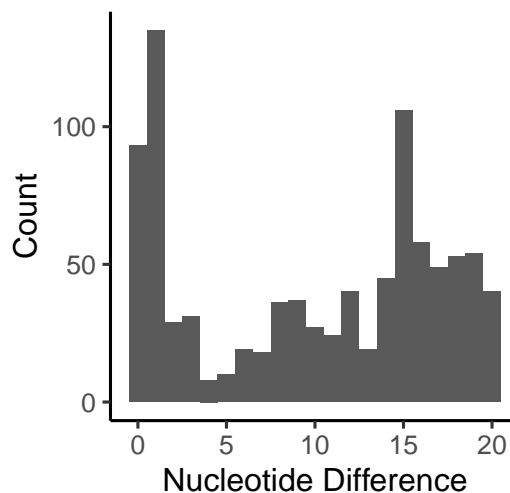
IGHV3-23*01_04

12852 sequences assigned
225 (1.8%) exact matches, in which:
182 unique CDR3
6 unique J



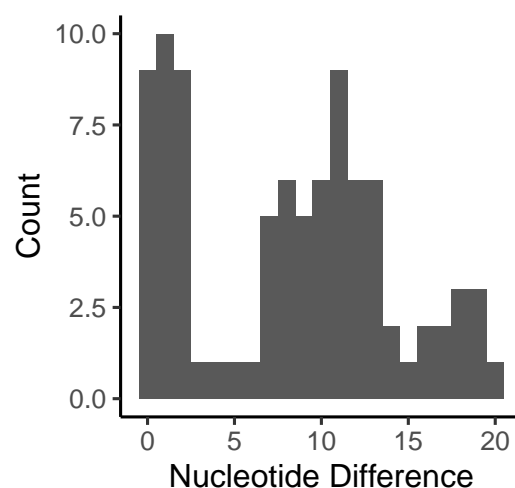
IGHV3-33*01

1295 sequences assigned
93 (7.2%) exact matches, in which:
74 unique CDR3
4 unique J



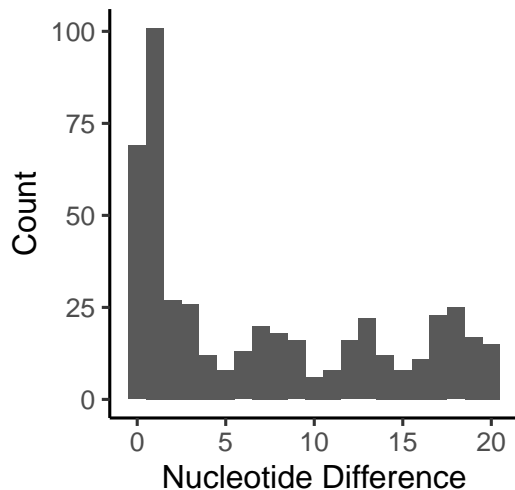
IGHV3-43*01

108 sequences assigned
9 (8.3%) exact matches, in which:
7 unique CDR3
2 unique J



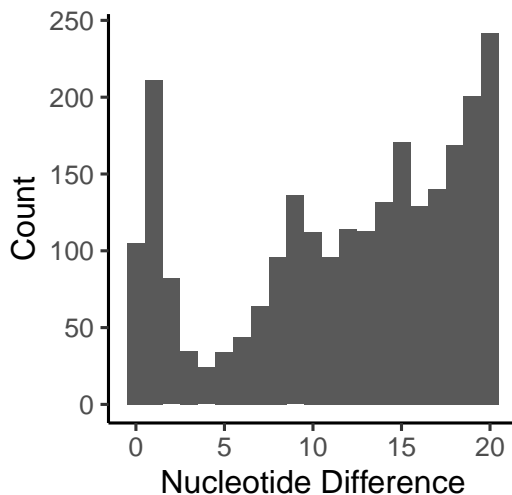
IGHV3-48*02

879 sequences assigned
69 (7.8%) exact matches, in which:
49 unique CDR3
5 unique J



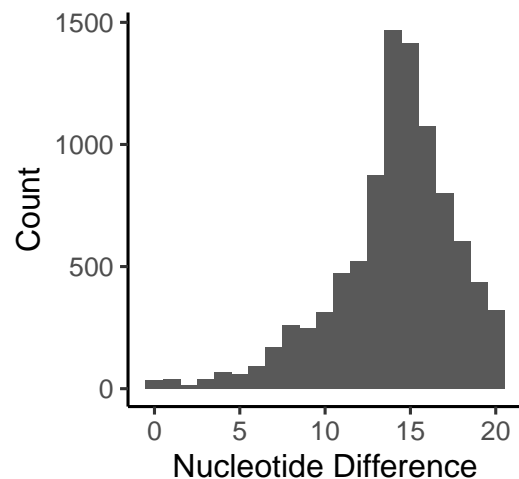
IGHV3-53*01_02

6830 sequences assigned
105 (1.5%) exact matches, in which:
81 unique CDR3
6 unique J



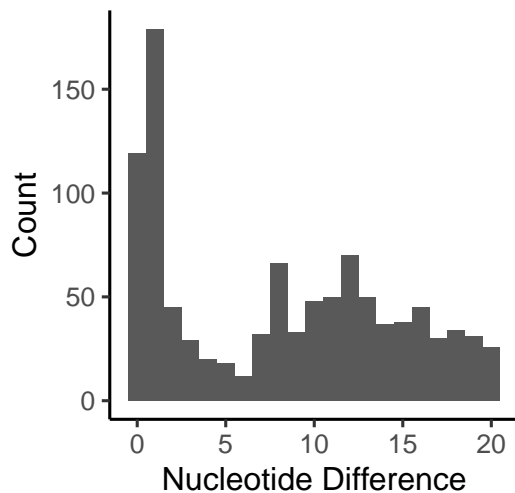
IGHV3-66*01

10266 sequences assigned
33 (0.3%) exact matches, in which:
26 unique CDR3
4 unique J



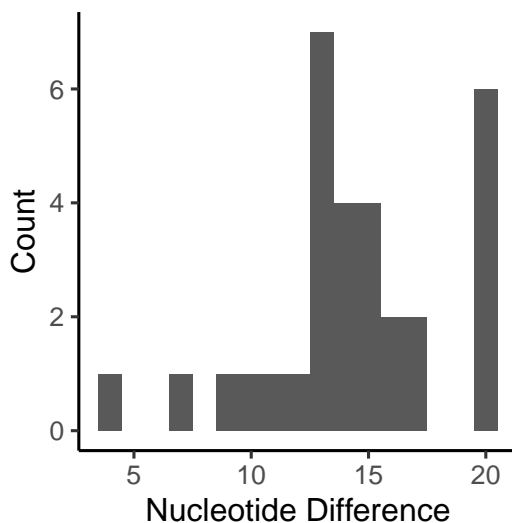
IGHV3-48*04

1263 sequences assigned
119 (9.4%) exact matches, in which:
80 unique CDR3
5 unique J



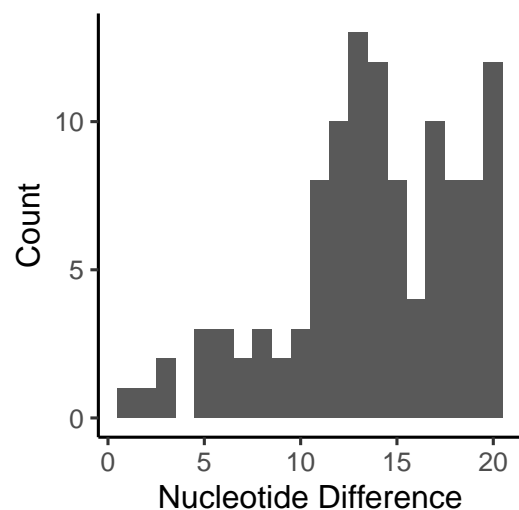
IGHV3-64*04

38 sequences assigned
No exact matches.



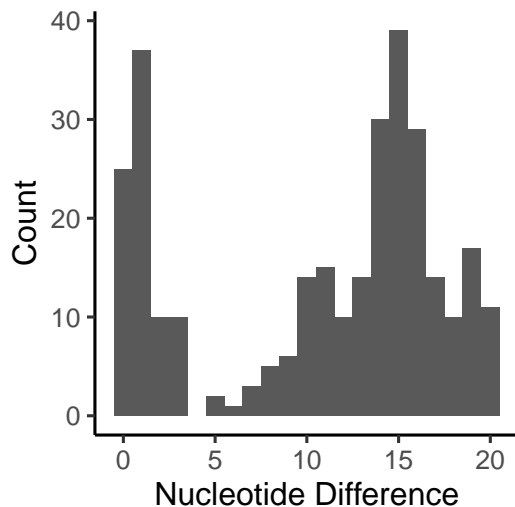
IGHV3-66*02

163 sequences assigned
No exact matches.



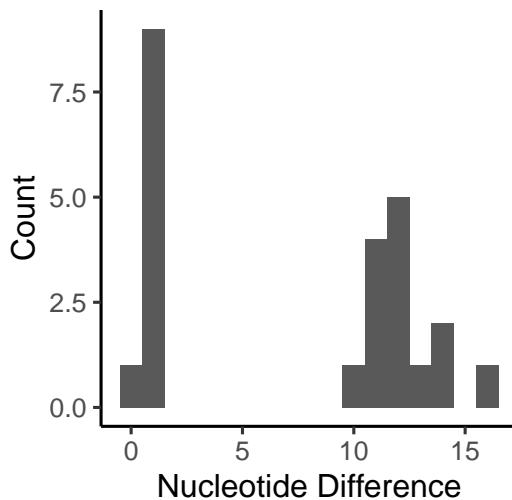
IGHV3-49*03_05

454 sequences assigned
25 (5.5%) exact matches, in which:
20 unique CDR3
4 unique J



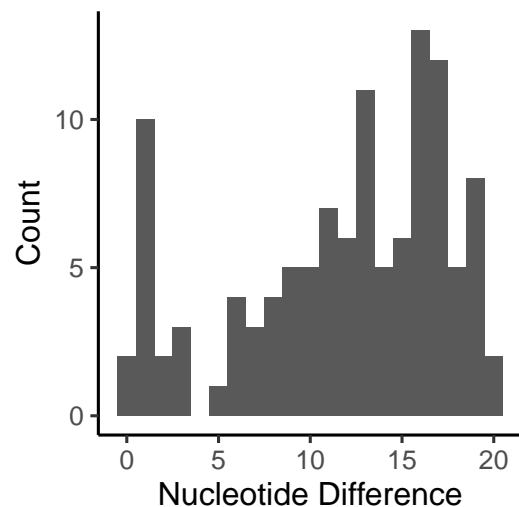
IGHV3-64*02_07

26 sequences assigned
1 (3.8%) exact matches, in which:
1 unique CDR3
1 unique J



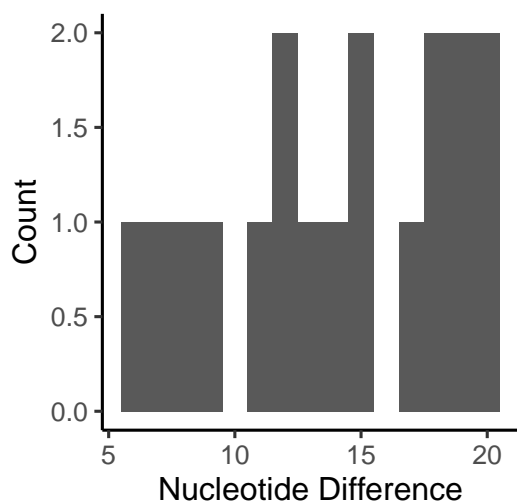
IGHV3-66*04

134 sequences assigned
2 (1.5%) exact matches, in which:
1 unique CDR3
1 unique J



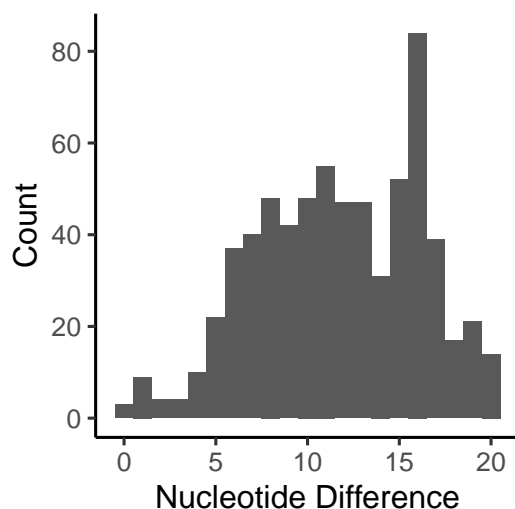
IGHV3-69-1*01

36 sequences assigned
No exact matches.



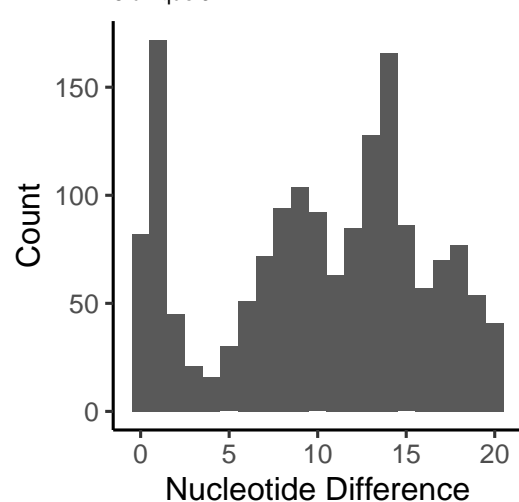
IGHV3-72*01

720 sequences assigned
3 (0.4%) exact matches, in which:
3 unique CDR3
2 unique J



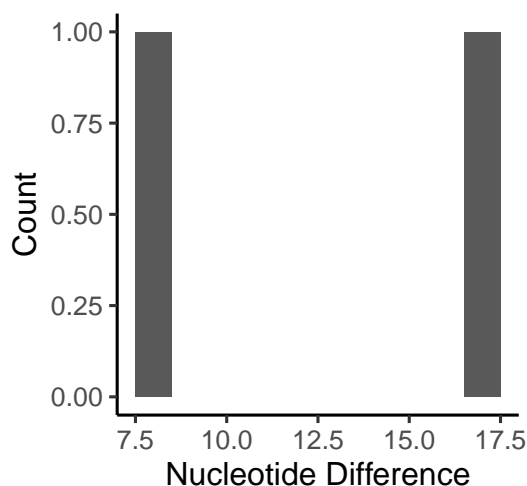
IGHV3-74*01_02

1778 sequences assigned
82 (4.6%) exact matches, in which:
65 unique CDR3
5 unique J



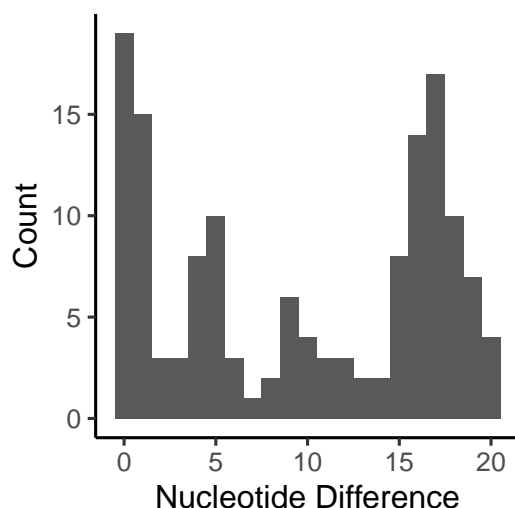
IGHV3-69-1*02

17 sequences assigned
No exact matches.



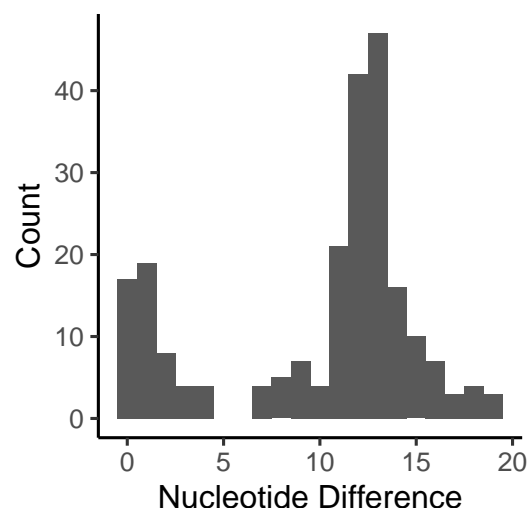
IGHV3-73*01_02

183 sequences assigned
19 (10.4%) exact matches, in which:
18 unique CDR3
2 unique J



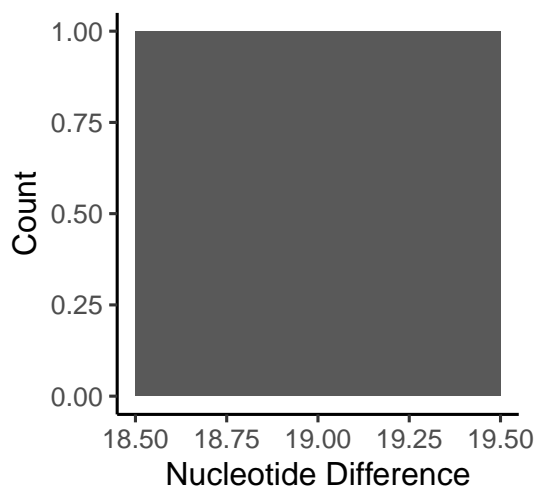
IGHV3-43D*03

246 sequences assigned
17 (6.9%) exact matches, in which:
14 unique CDR3
3 unique J



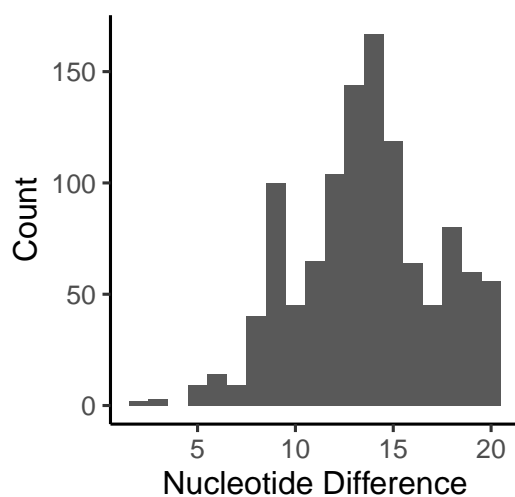
IGHV3-71*01_04

6 sequences assigned
No exact matches.



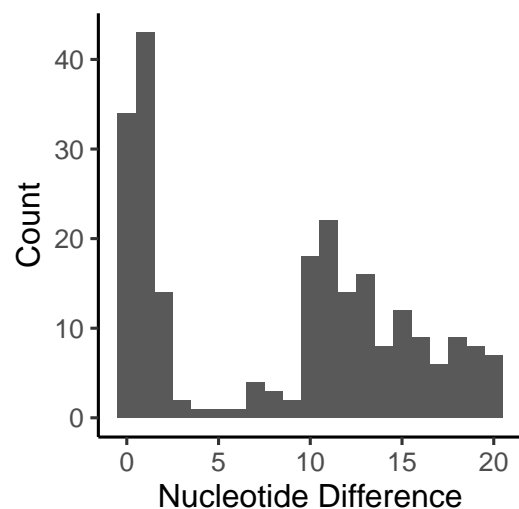
IGHV3-74*03

1381 sequences assigned
No exact matches.



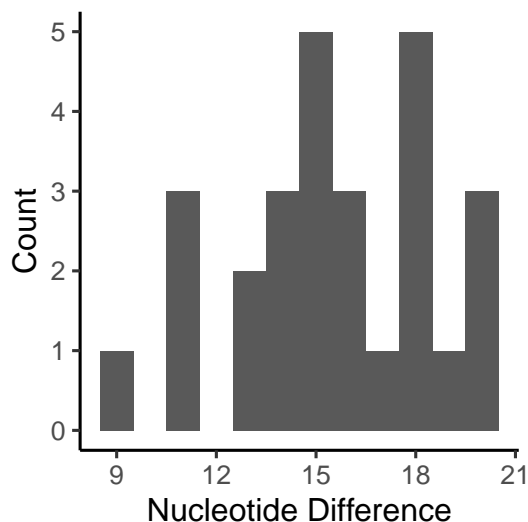
IGHV3-64D*09

294 sequences assigned
34 (11.6%) exact matches, in which:
26 unique CDR3
5 unique J



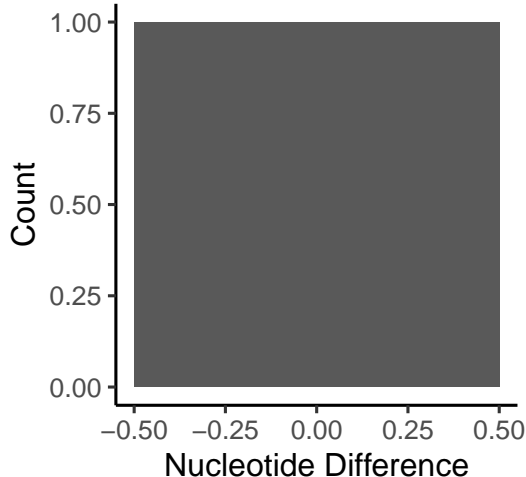
IGHV3–NL1*01

47 sequences assigned
No exact matches.



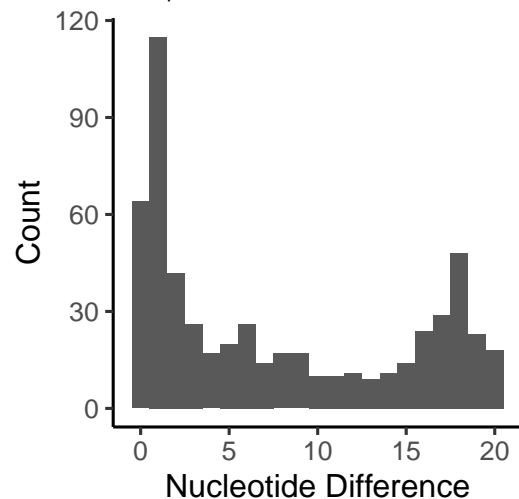
IGHV4–28*03

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



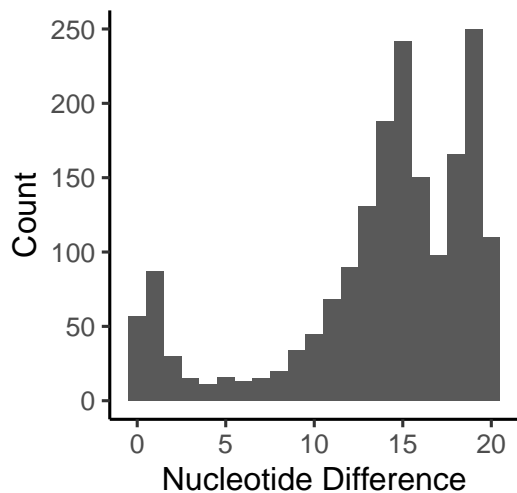
IGHV4–30–4*01

621 sequences assigned
64 (10.3%) exact matches, in which:
51 unique CDR3
5 unique J



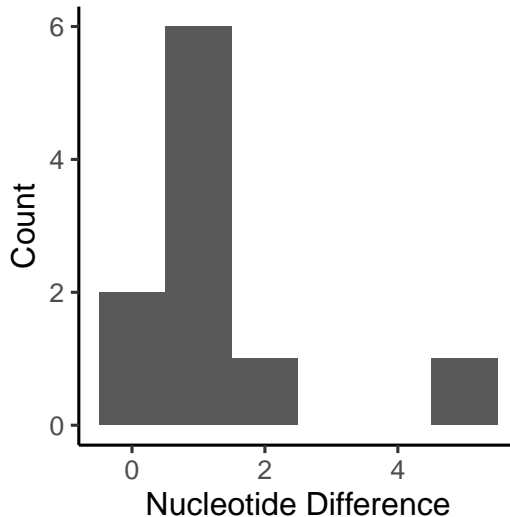
IGHV4–4*07

2123 sequences assigned
57 (2.7%) exact matches, in which:
40 unique CDR3
4 unique J



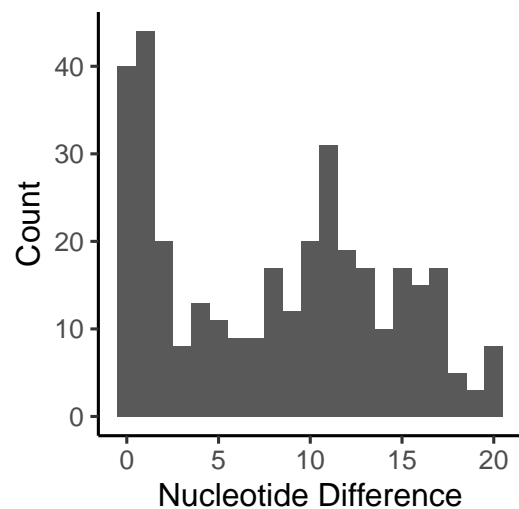
IGHV4–28*01_07

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



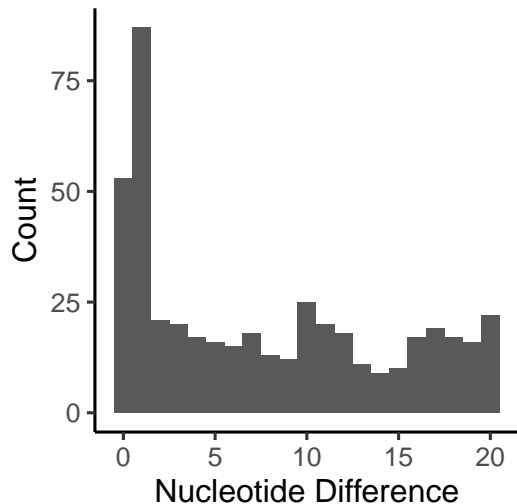
IGHV4–31*02

429 sequences assigned
40 (9.3%) exact matches, in which:
35 unique CDR3
6 unique J



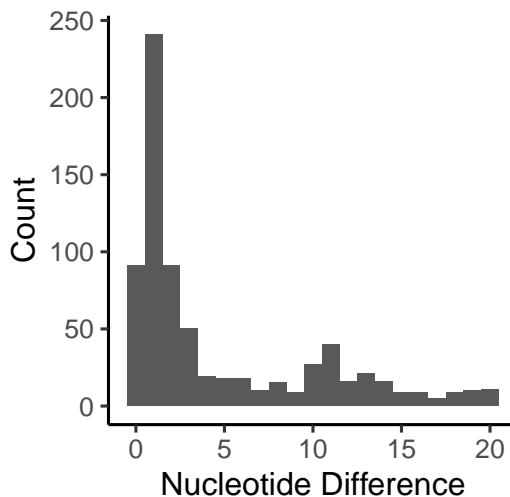
IGHV4–4*02_03

576 sequences assigned
53 (9.2%) exact matches, in which:
40 unique CDR3
4 unique J



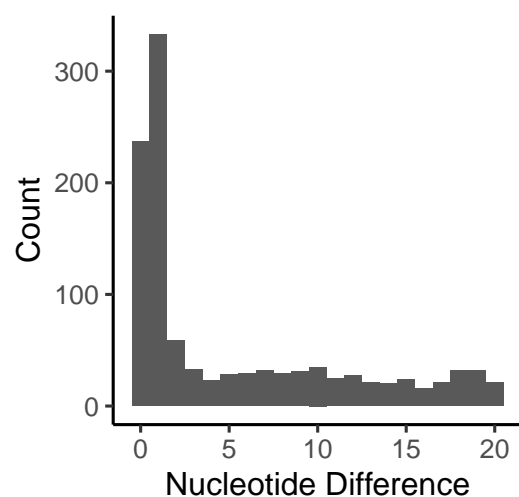
IGHV4–30–2*01

867 sequences assigned
91 (10.5%) exact matches, in which:
67 unique CDR3
5 unique J



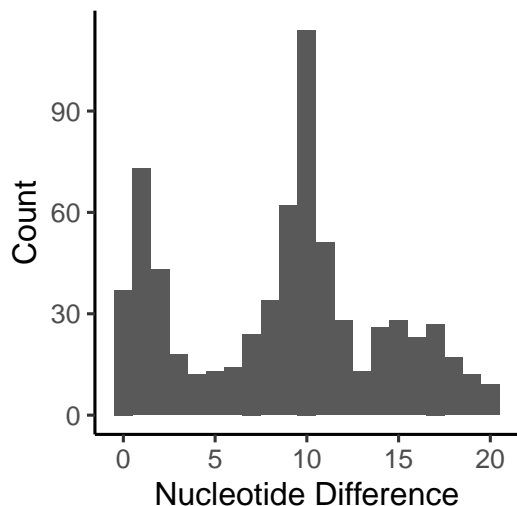
IGHV4–34*01_02

1319 sequences assigned
237 (18%) exact matches, in which:
166 unique CDR3
6 unique J



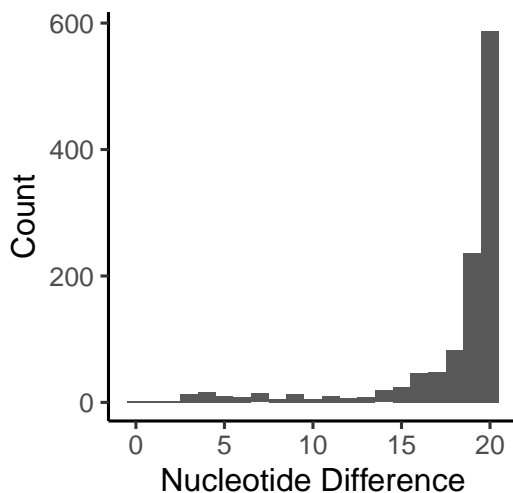
IGHV4-38-2*02

781 sequences assigned
37 (4.7%) exact matches, in which:
31 unique CDR3
6 unique J



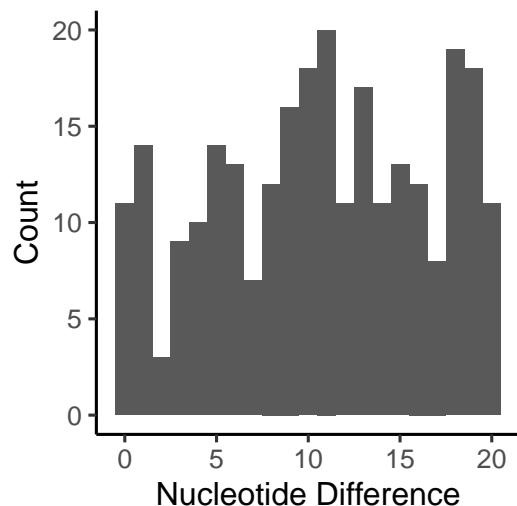
IGHV4-59*02

15576 sequences assigned
2 (0%) exact matches, in which:
2 unique CDR3
2 unique J



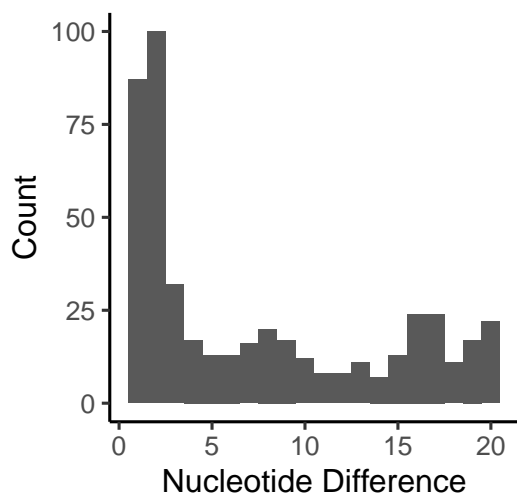
IGHV4-59*12

388 sequences assigned
11 (2.8%) exact matches, in which:
11 unique CDR3
3 unique J



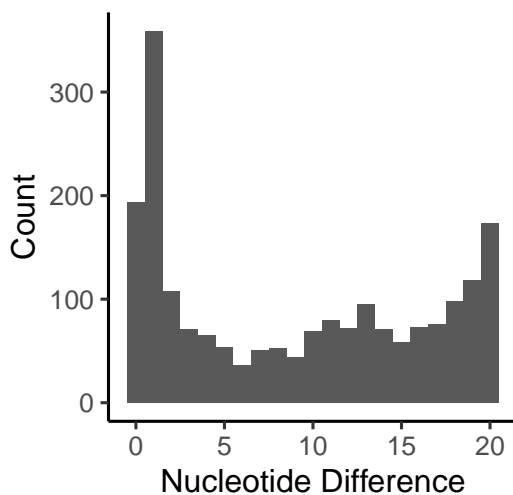
IGHV4-39*02

667 sequences assigned
No exact matches.



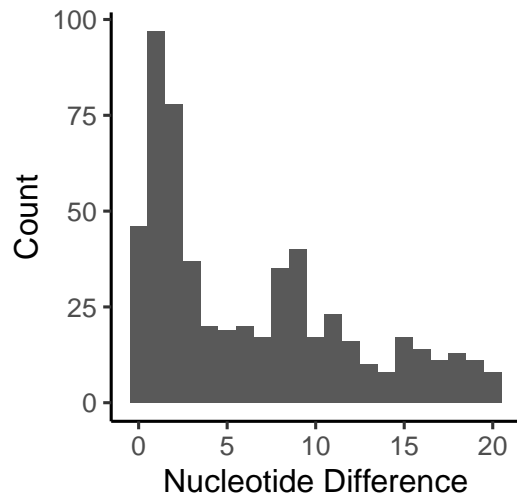
IGHV4-59*01_07

3229 sequences assigned
194 (6%) exact matches, in which:
142 unique CDR3
6 unique J



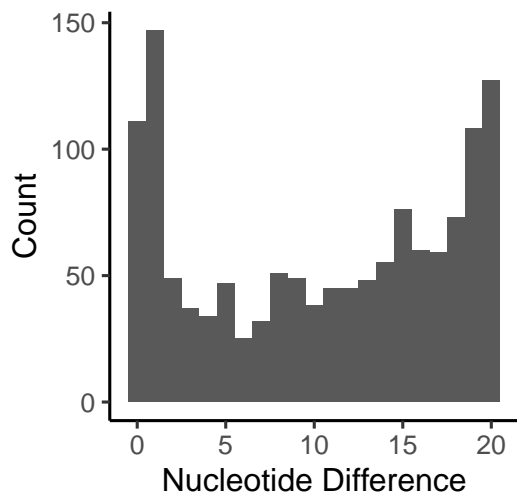
IGHV4-61*01

788 sequences assigned
46 (5.8%) exact matches, in which:
42 unique CDR3
4 unique J



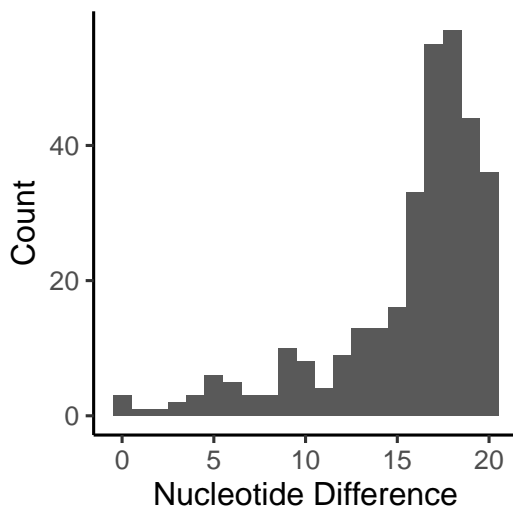
IGHV4-39*07

1985 sequences assigned
111 (5.6%) exact matches, in which:
89 unique CDR3
4 unique J



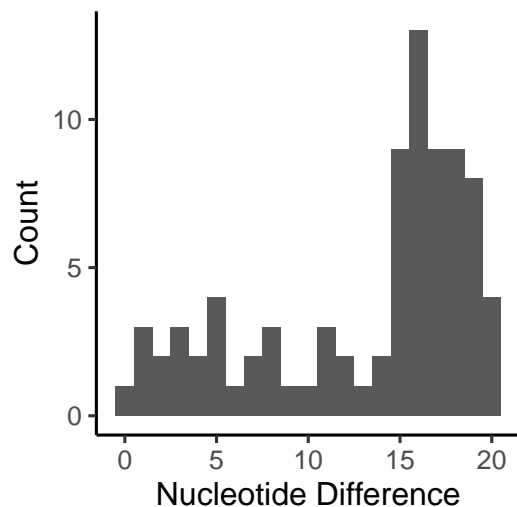
IGHV4-59*11

426 sequences assigned
3 (0.7%) exact matches, in which:
3 unique CDR3
2 unique J



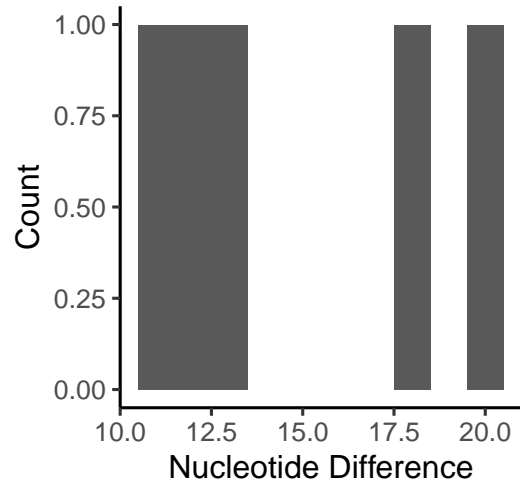
IGHV4-61*08

157 sequences assigned
1 (0.6%) exact matches, in which:
1 unique CDR3
1 unique J



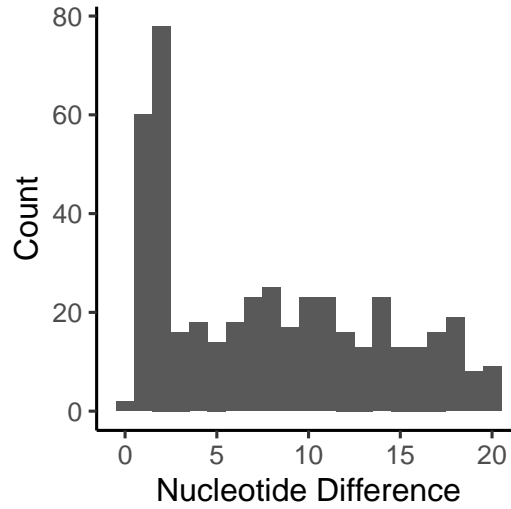
IGHV1/OR15-3*02

11 sequences assigned
No exact matches.



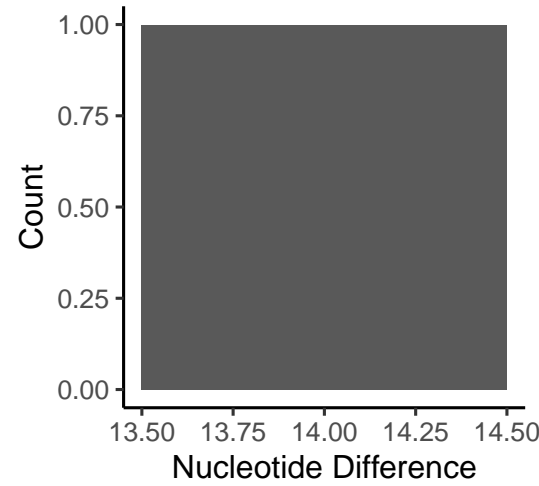
IGHV5-51*07

482 sequences assigned
2 (0.4%) exact matches, in which:
2 unique CDR3
2 unique J



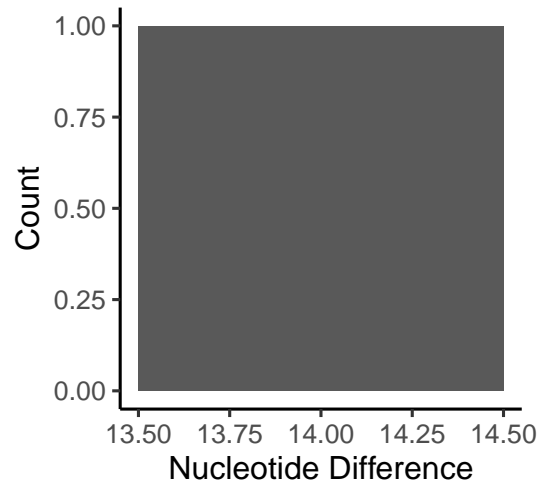
IGHV3/OR16-9*01

1 sequences assigned
No exact matches.



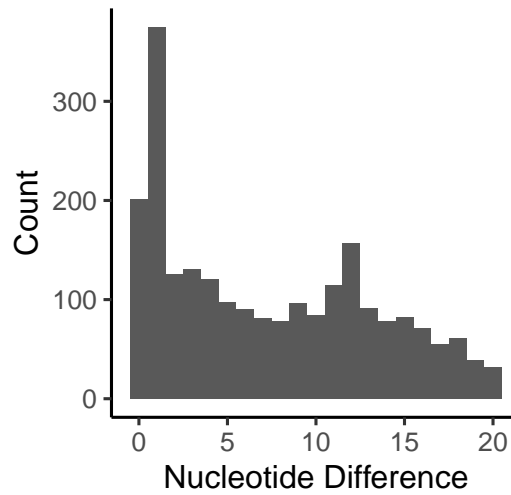
IGHV4/OR15-8*01

6 sequences assigned
No exact matches.



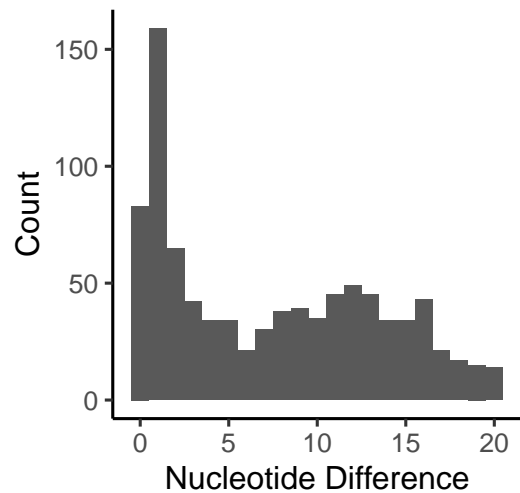
IGHV5-51*01_03

2470 sequences assigned
201 (8.1%) exact matches, in which:
152 unique CDR3
6 unique J



IGHV5-10-1*01_03

1159 sequences assigned
83 (7.2%) exact matches, in which:
63 unique CDR3
5 unique J



IGHV6-1*01_02

2132 sequences assigned
26 (1.2%) exact matches, in which:
22 unique CDR3
4 unique J

