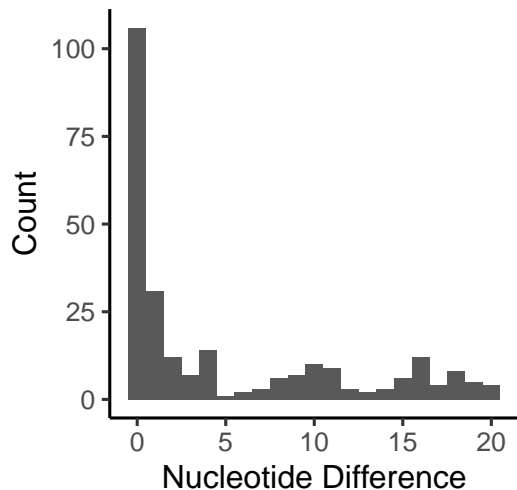


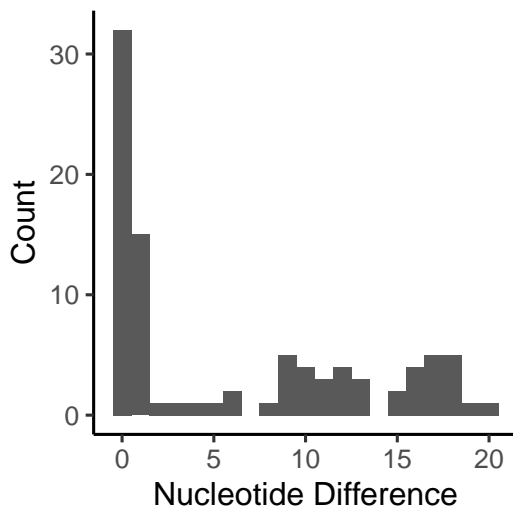
IGHV1-2*04

323 sequences assigned
106 (32.8%) exact matches, in which:
102 unique CDR3
5 unique J



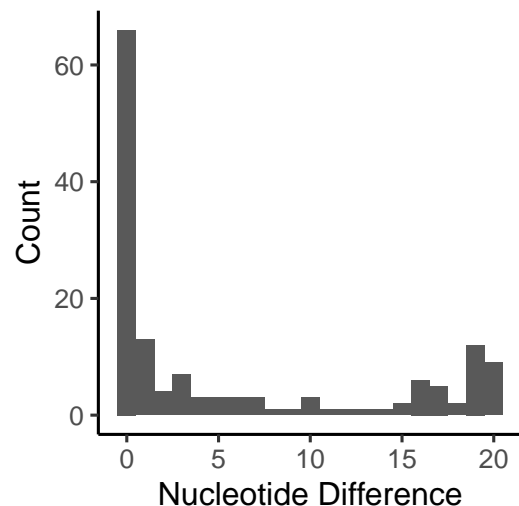
IGHV1-24*01

120 sequences assigned
32 (26.7%) exact matches, in which:
32 unique CDR3
5 unique J



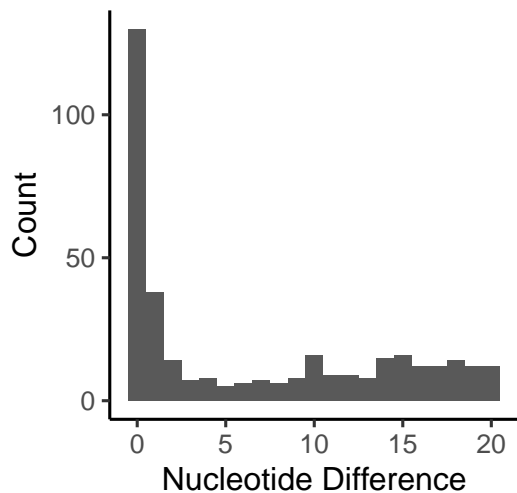
IGHV1-46*03

205 sequences assigned
66 (32.2%) exact matches, in which:
64 unique CDR3
5 unique J



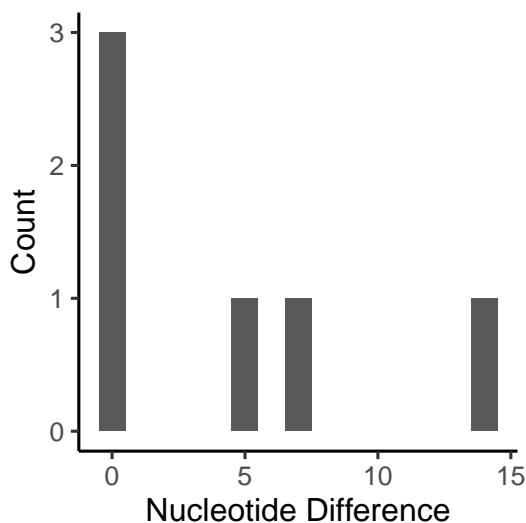
IGHV1-3*01

574 sequences assigned
130 (22.6%) exact matches, in which:
129 unique CDR3
6 unique J



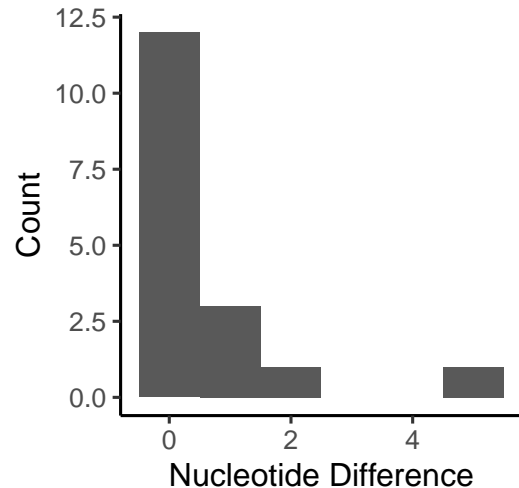
IGHV1-45*02

7 sequences assigned
3 (42.9%) exact matches, in which:
3 unique CDR3
1 unique J



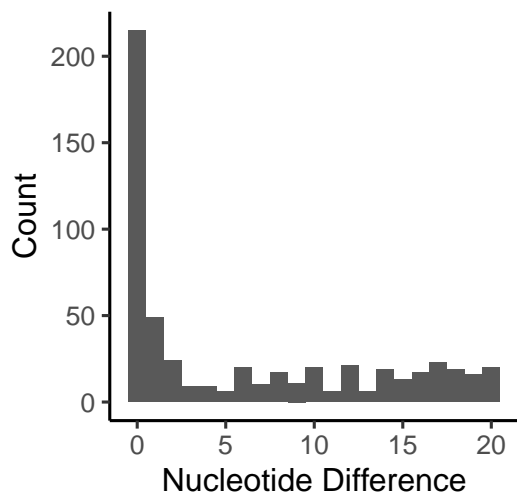
IGHV1-58*01

28 sequences assigned
12 (42.9%) exact matches, in which:
12 unique CDR3
3 unique J



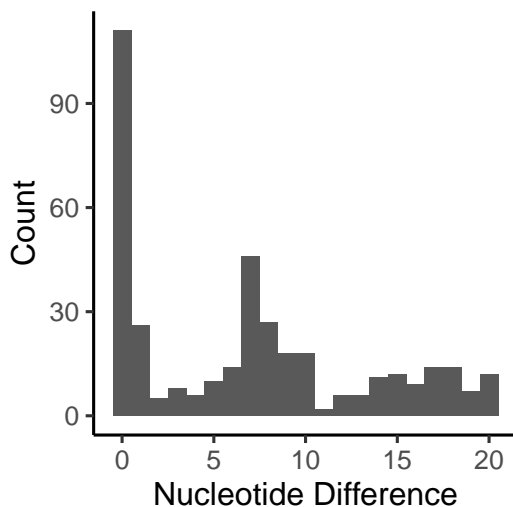
IGHV1-18*04

772 sequences assigned
215 (27.8%) exact matches, in which:
214 unique CDR3
5 unique J



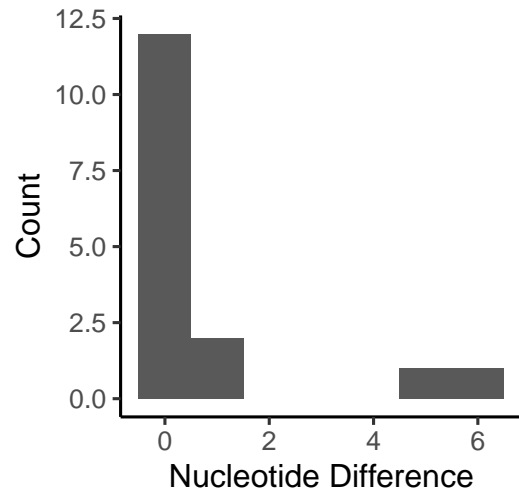
IGHV1-46*01

504 sequences assigned
111 (22%) exact matches, in which:
108 unique CDR3
5 unique J



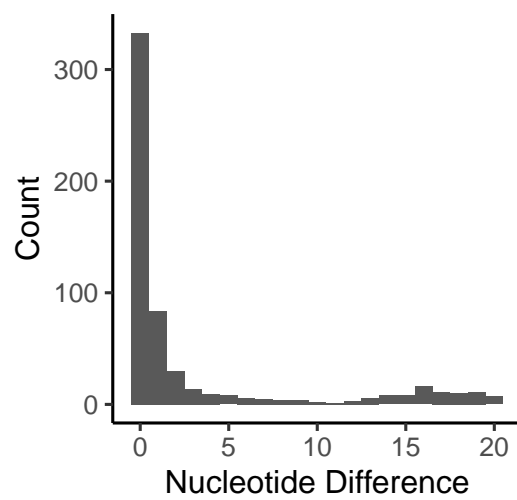
IGHV1-58*02

18 sequences assigned
12 (66.7%) exact matches, in which:
12 unique CDR3
5 unique J



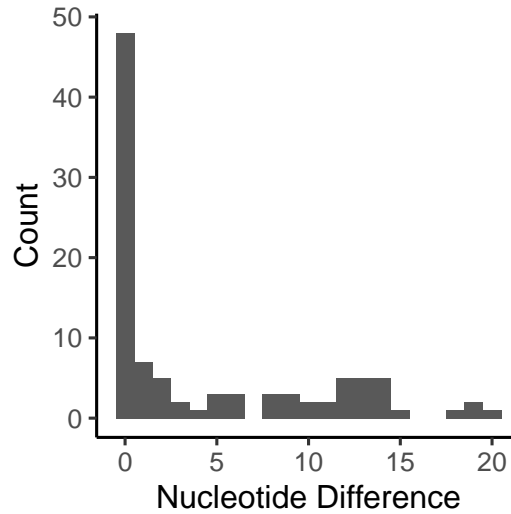
IGHV1–69*01

757 sequences assigned
333 (44%) exact matches, in which:
326 unique CDR3
6 unique J



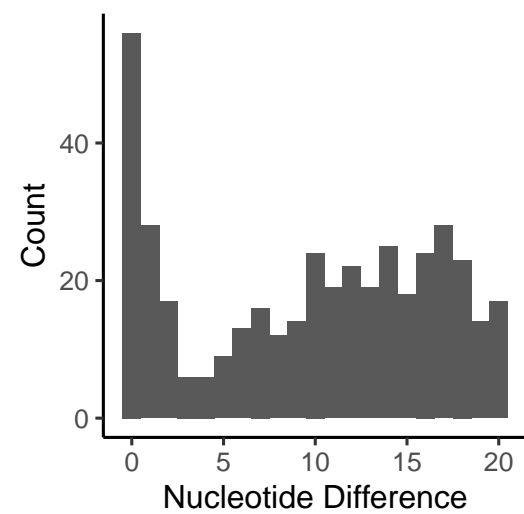
IGHV2–26*01

104 sequences assigned
48 (46.2%) exact matches, in which:
48 unique CDR3
5 unique J



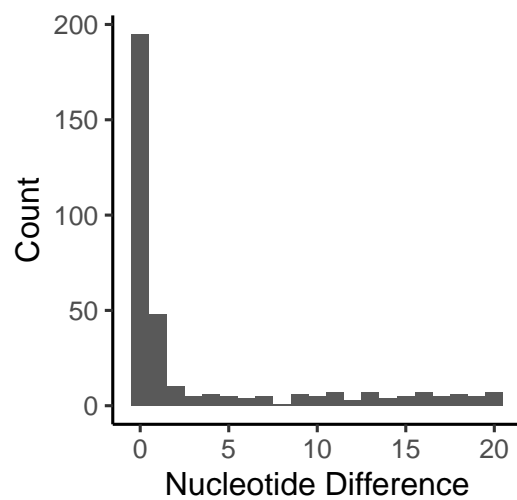
IGHV3–7*03

514 sequences assigned
56 (10.9%) exact matches, in which:
55 unique CDR3
4 unique J



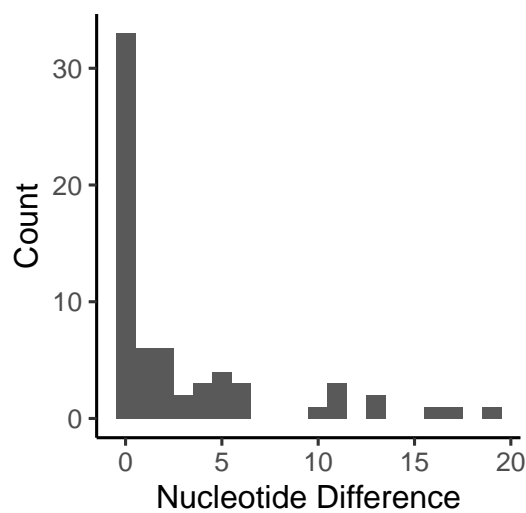
IGHV1–69*04

417 sequences assigned
195 (46.8%) exact matches, in which:
194 unique CDR3
6 unique J



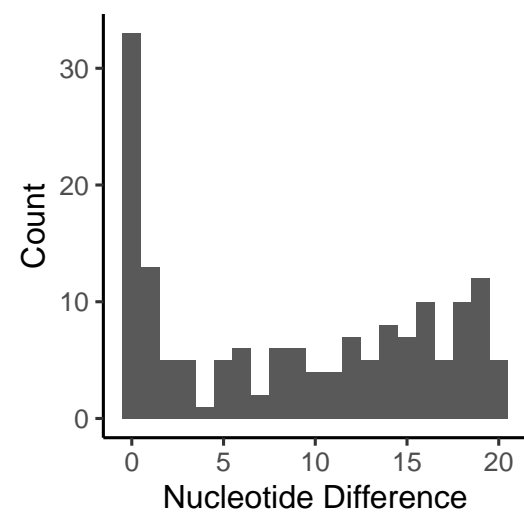
IGHV2–70*01

83 sequences assigned
33 (39.8%) exact matches, in which:
33 unique CDR3
4 unique J



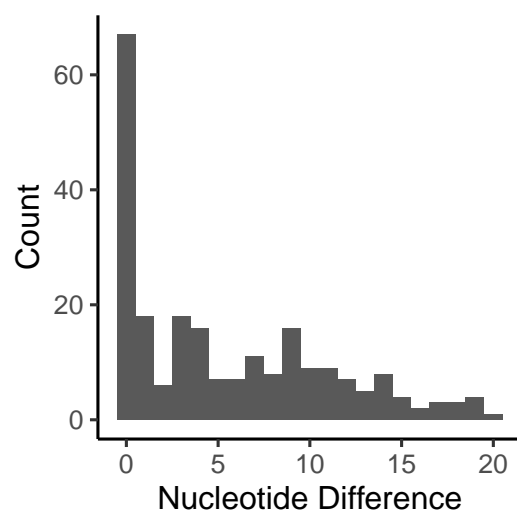
IGHV3–7*05

196 sequences assigned
33 (16.8%) exact matches, in which:
29 unique CDR3
4 unique J



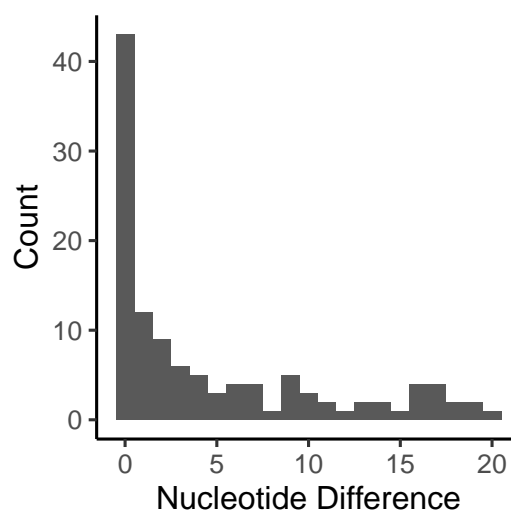
IGHV2–5*01

258 sequences assigned
67 (26%) exact matches, in which:
67 unique CDR3
5 unique J



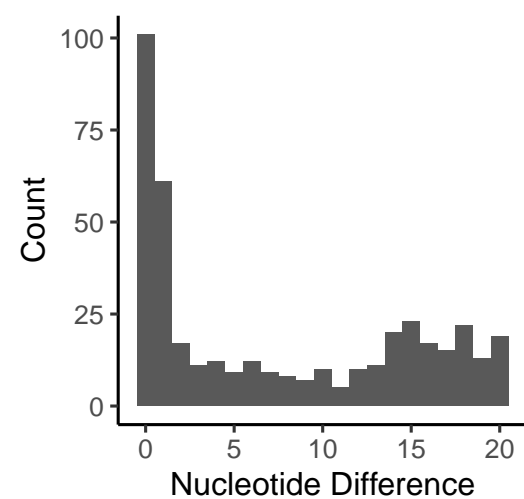
IGHV2–70*15

122 sequences assigned
43 (35.2%) exact matches, in which:
43 unique CDR3
4 unique J



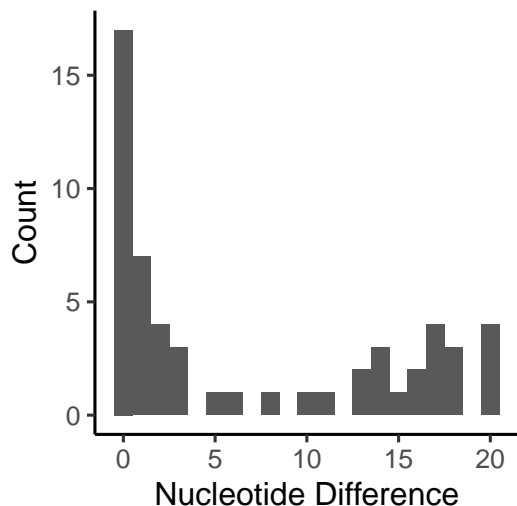
IGHV3–11*06

534 sequences assigned
101 (18.9%) exact matches, in which:
95 unique CDR3
5 unique J



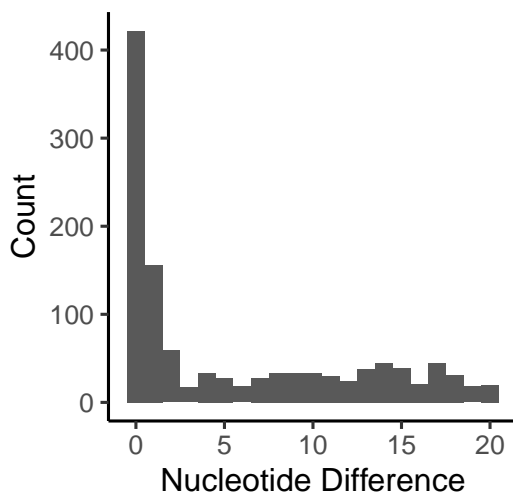
IGHV3-13*05

62 sequences assigned
17 (27.4%) exact matches, in which:
17 unique CDR3
5 unique J



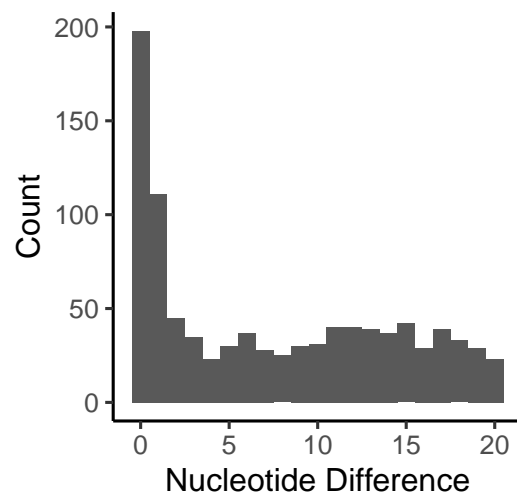
IGHV3-21*01

1494 sequences assigned
422 (28.2%) exact matches, in which:
401 unique CDR3
6 unique J



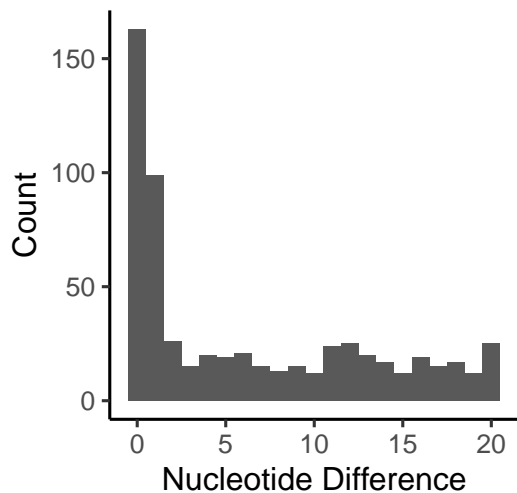
IGHV3-30*18

1239 sequences assigned
198 (16%) exact matches, in which:
190 unique CDR3
6 unique J



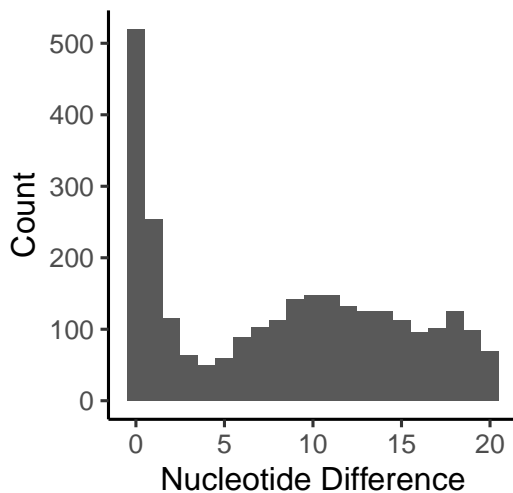
IGHV3-15*01

874 sequences assigned
163 (18.6%) exact matches, in which:
154 unique CDR3
5 unique J



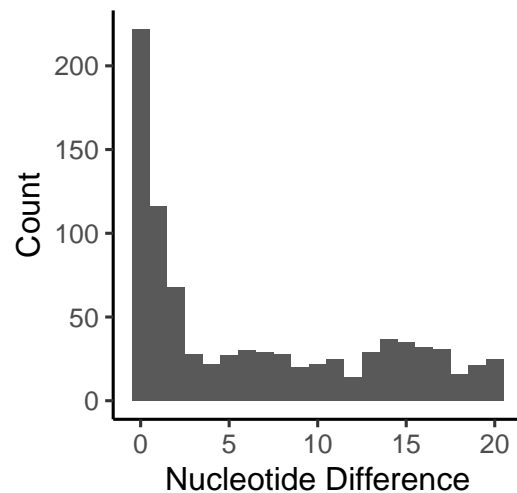
IGHV3-23*01

3814 sequences assigned
520 (13.6%) exact matches, in which:
505 unique CDR3
6 unique J



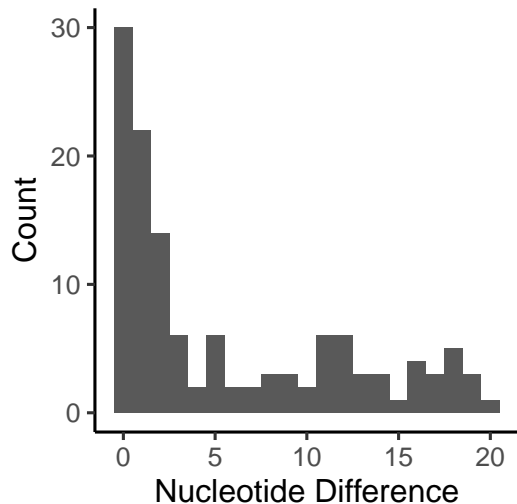
IGHV3-33*01

1229 sequences assigned
222 (18.1%) exact matches, in which:
218 unique CDR3
6 unique J



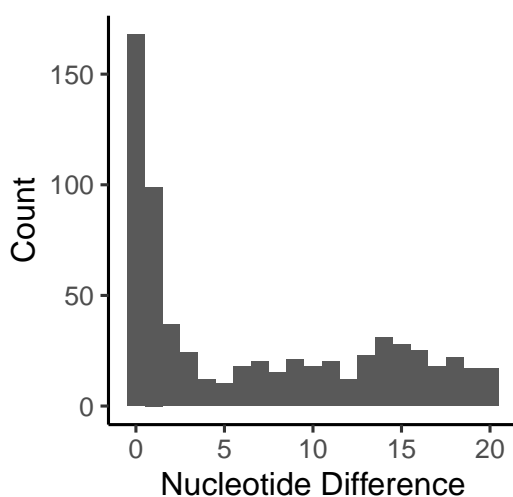
IGHV3-20*04

154 sequences assigned
30 (19.5%) exact matches, in which:
28 unique CDR3
4 unique J



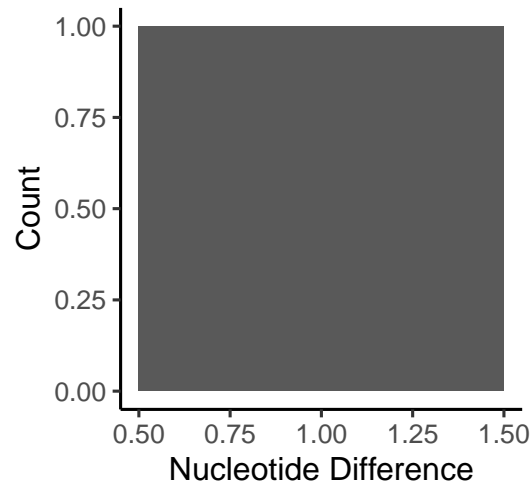
IGHV3-30-3*01

900 sequences assigned
168 (18.7%) exact matches, in which:
164 unique CDR3
6 unique J



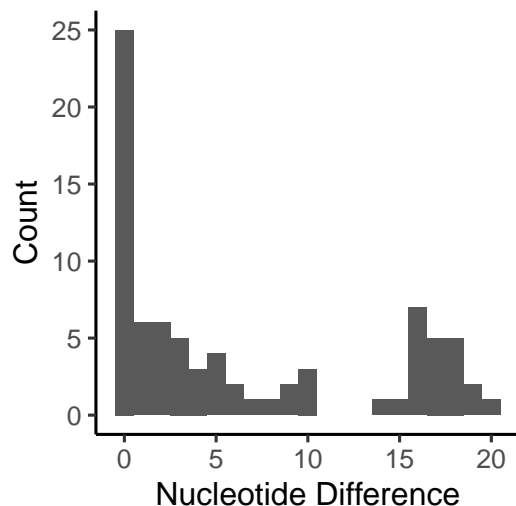
IGHV3-35*01

1 sequences assigned
No exact matches.



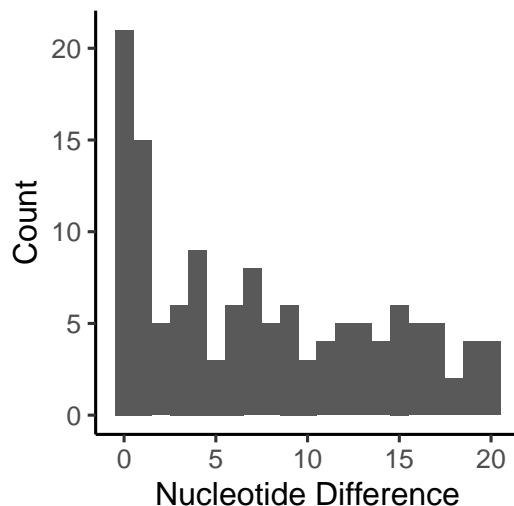
IGHV3-43*01

119 sequences assigned
25 (21%) exact matches, in which:
25 unique CDR3
4 unique J



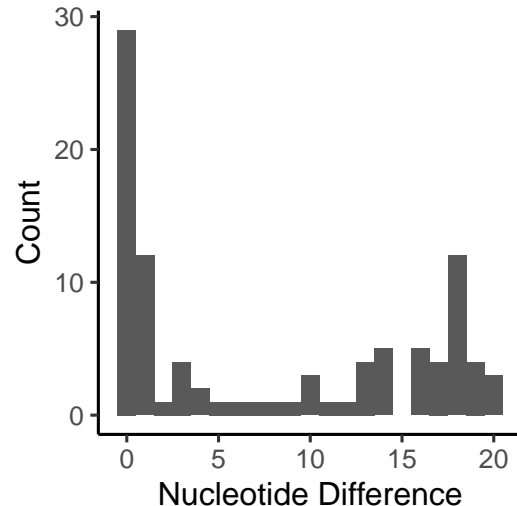
IGHV3-49*03

177 sequences assigned
21 (11.9%) exact matches, in which:
21 unique CDR3
5 unique J



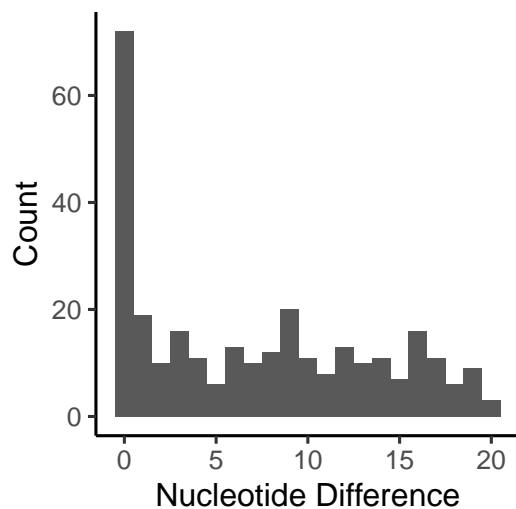
IGHV3-53*02

110 sequences assigned
29 (26.4%) exact matches, in which:
28 unique CDR3
3 unique J



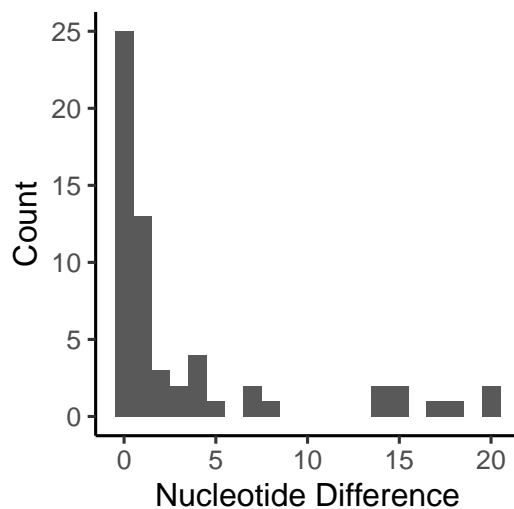
IGHV3-48*01

359 sequences assigned
72 (20.1%) exact matches, in which:
71 unique CDR3
6 unique J



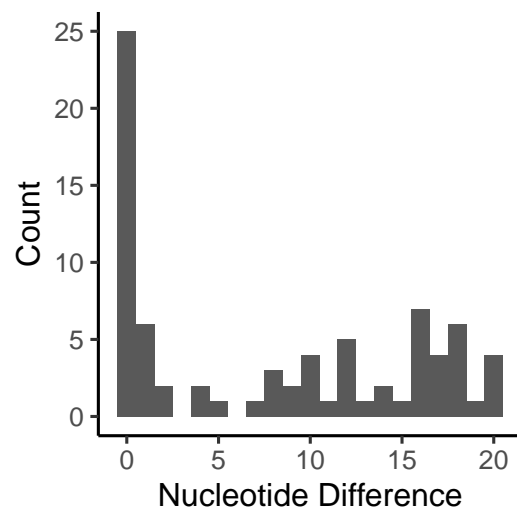
IGHV3-49*05

74 sequences assigned
25 (33.8%) exact matches, in which:
25 unique CDR3
5 unique J



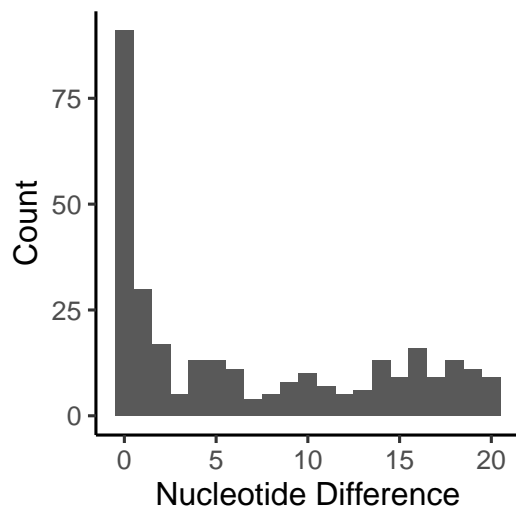
IGHV3-64*01

109 sequences assigned
25 (22.9%) exact matches, in which:
23 unique CDR3
5 unique J



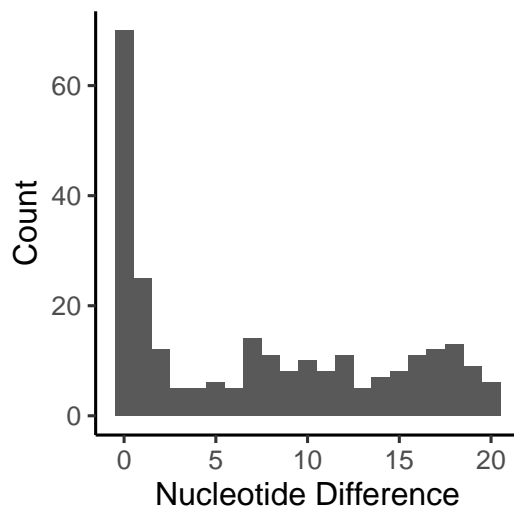
IGHV3-48*02

420 sequences assigned
91 (21.7%) exact matches, in which:
84 unique CDR3
5 unique J



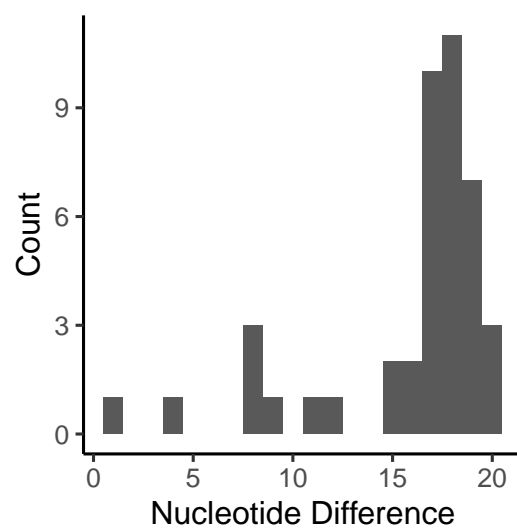
IGHV3-53*01

319 sequences assigned
70 (21.9%) exact matches, in which:
64 unique CDR3
5 unique J



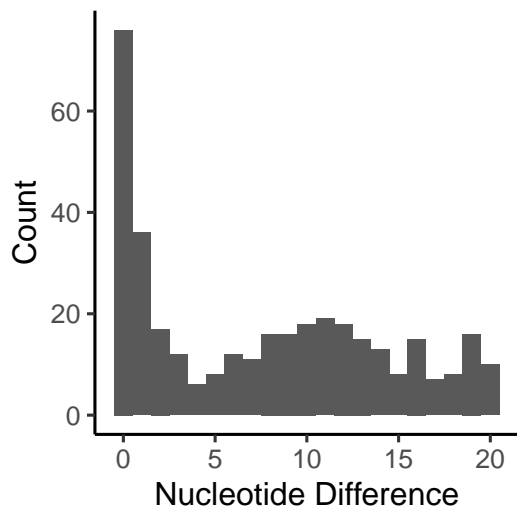
IGHV3-64*07

47 sequences assigned
No exact matches.



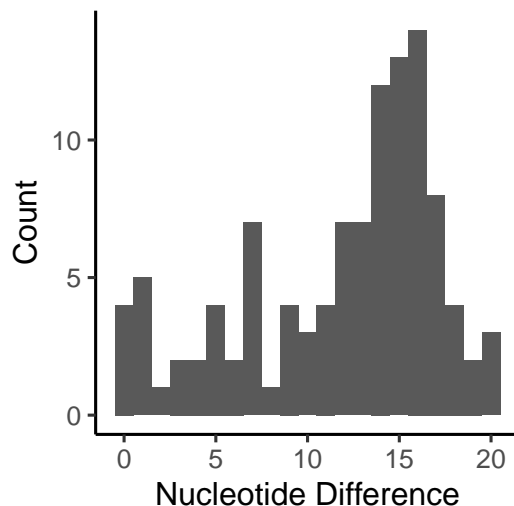
IGHV3-66*01

452 sequences assigned
76 (16.8%) exact matches, in which:
72 unique CDR3
5 unique J



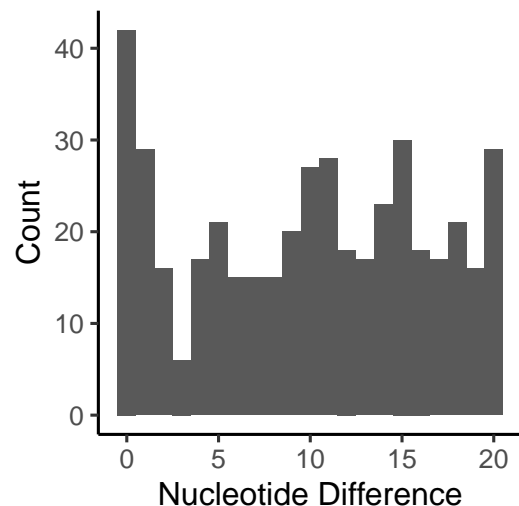
IGHV3-72*01

151 sequences assigned
4 (2.6%) exact matches, in which:
4 unique CDR3
3 unique J



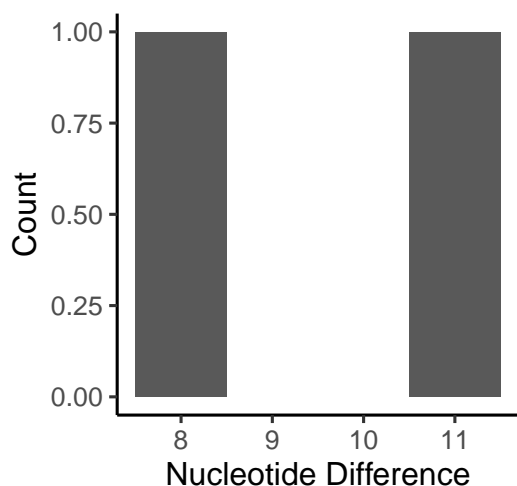
IGHV3-74*01

610 sequences assigned
42 (6.9%) exact matches, in which:
39 unique CDR3
6 unique J



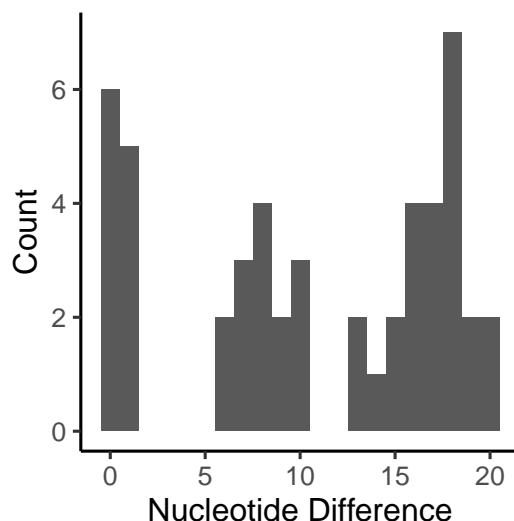
IGHV3-69-1*02

2 sequences assigned
No exact matches.



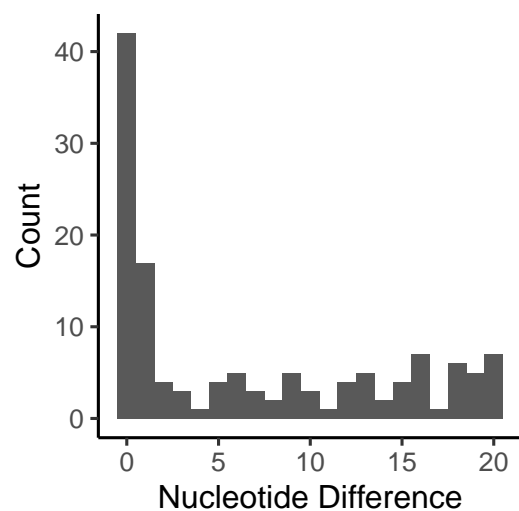
IGHV3-73*01

74 sequences assigned
6 (8.1%) exact matches, in which:
5 unique CDR3
2 unique J



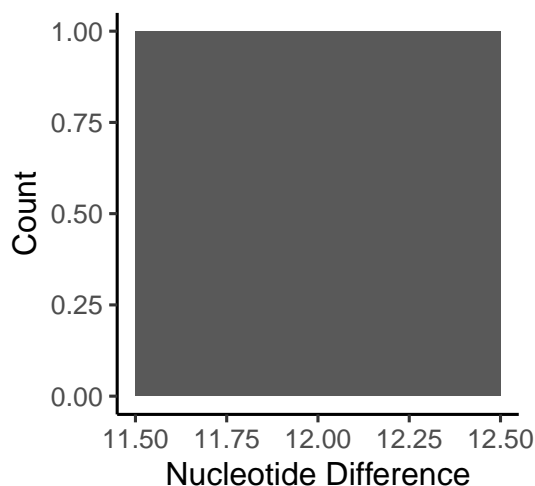
IGHV3-64D*08

167 sequences assigned
42 (25.1%) exact matches, in which:
40 unique CDR3
5 unique J



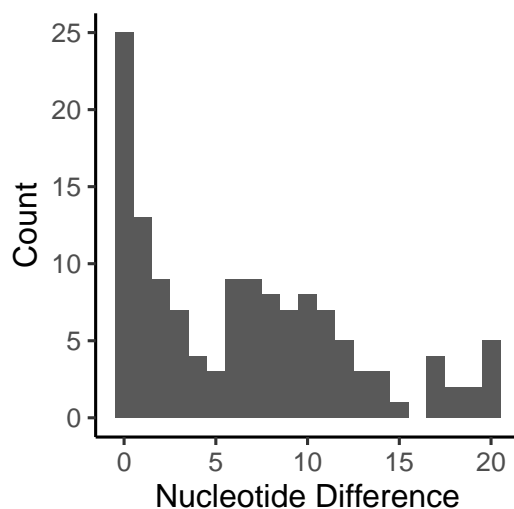
IGHV3-71*03

1 sequences assigned
No exact matches.



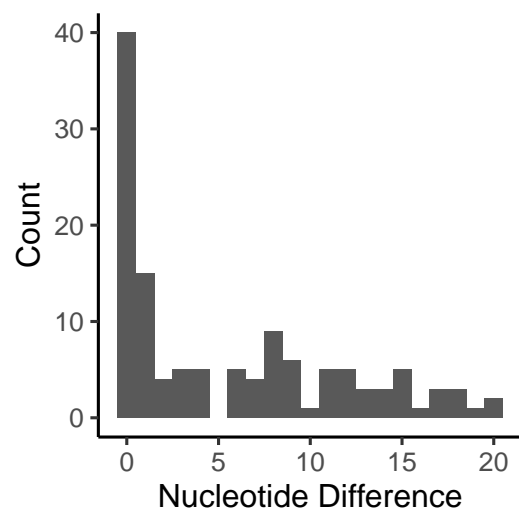
IGHV3-73*02

145 sequences assigned
25 (17.2%) exact matches, in which:
23 unique CDR3
4 unique J



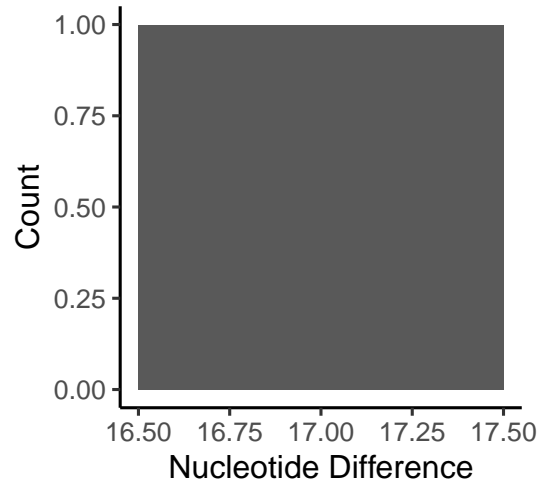
IGHV3-64D*09

154 sequences assigned
40 (26%) exact matches, in which:
37 unique CDR3
5 unique J



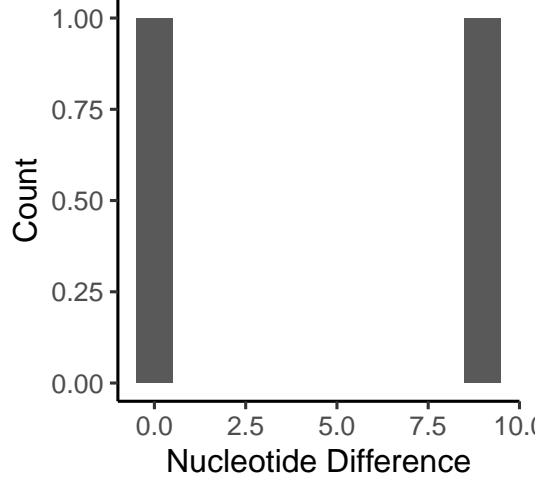
IGHV3–NL1*01

1 sequences assigned
No exact matches.



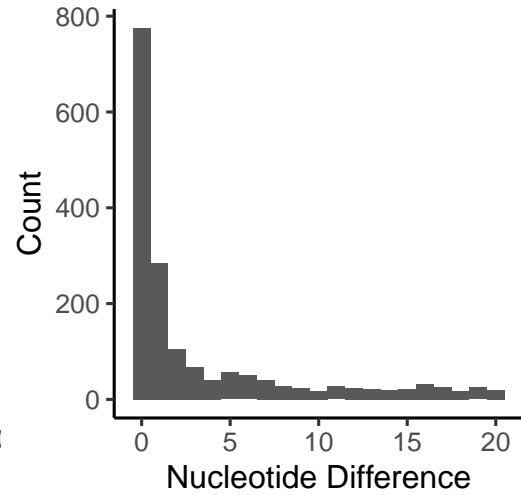
IGHV4–28*03

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



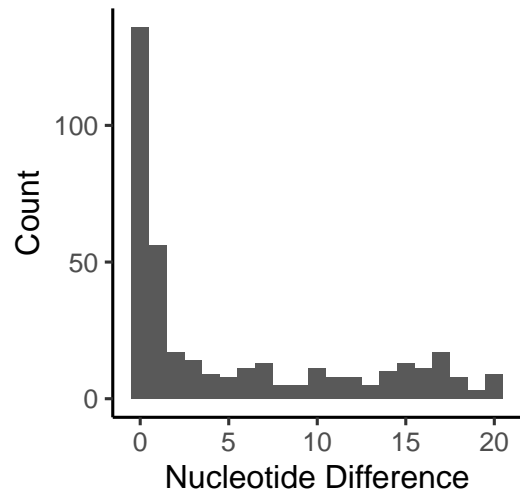
IGHV4–34*01

1958 sequences assigned
776 (39.6%) exact matches, in which:
687 unique CDR3
6 unique J



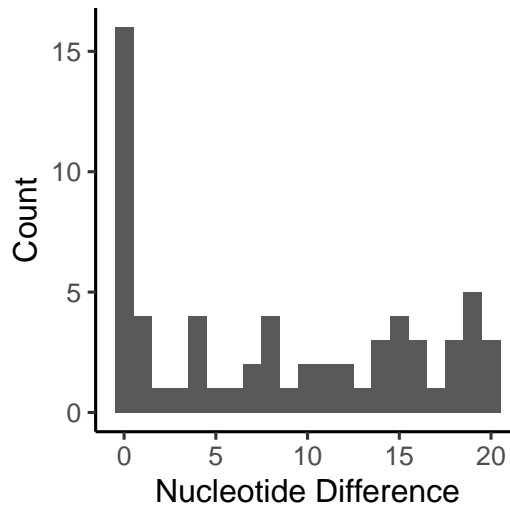
IGHV4–4*02

466 sequences assigned
136 (29.2%) exact matches, in which:
132 unique CDR3
6 unique J



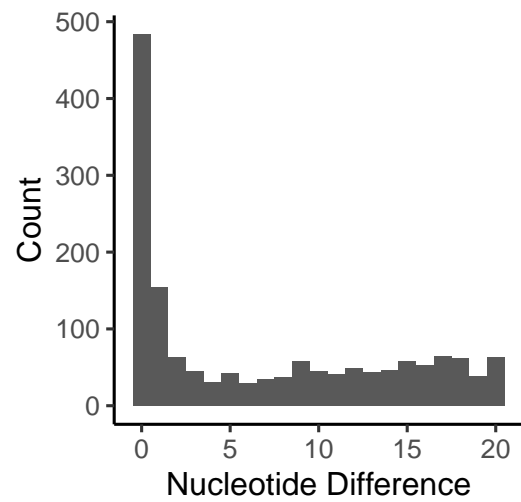
IGHV4–30–2*01

160 sequences assigned
16 (10%) exact matches, in which:
16 unique CDR3
4 unique J



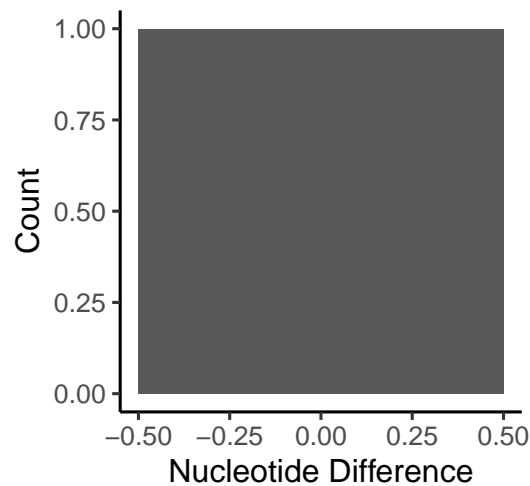
IGHV4–39*01

2154 sequences assigned
484 (22.5%) exact matches, in which:
470 unique CDR3
6 unique J



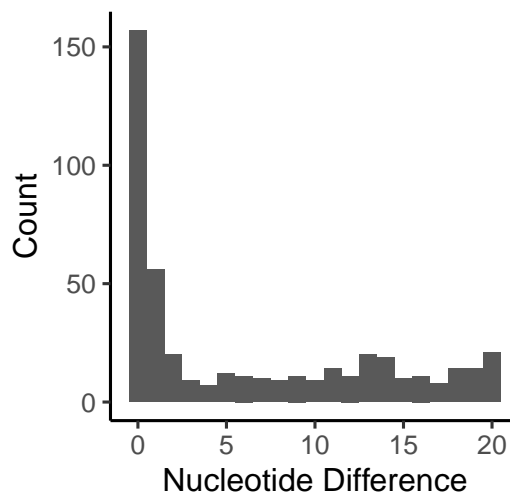
IGHV4–28*01

1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



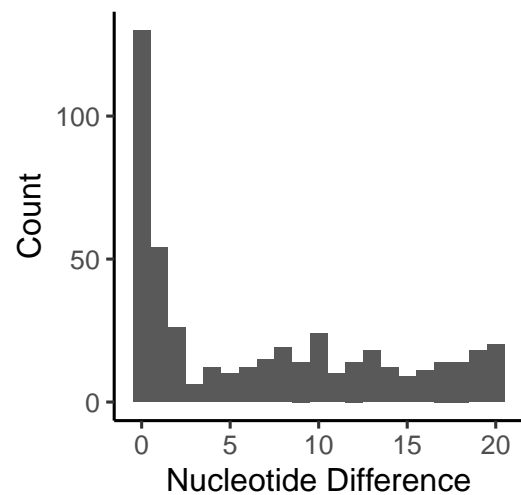
IGHV4–31*03

595 sequences assigned
157 (26.4%) exact matches, in which:
155 unique CDR3
6 unique J



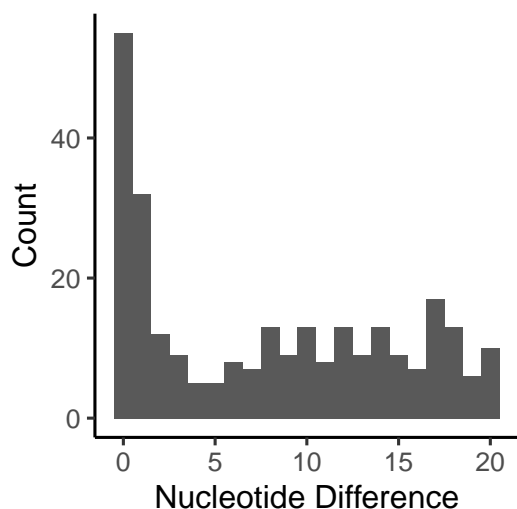
IGHV4–59*01

593 sequences assigned
130 (21.9%) exact matches, in which:
128 unique CDR3
5 unique J



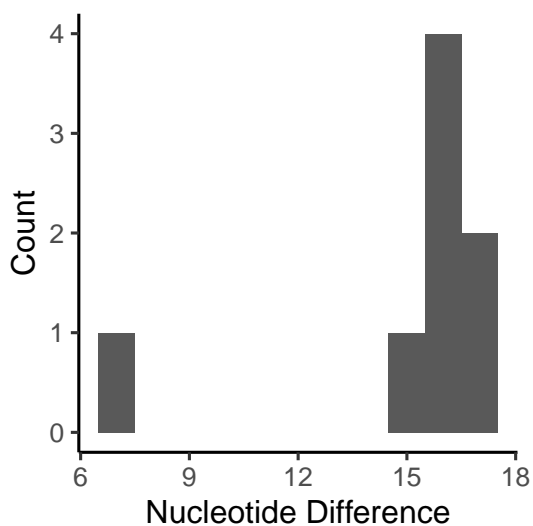
IGHV4-59*08

362 sequences assigned
55 (15.2%) exact matches, in which:
52 unique CDR3
6 unique J



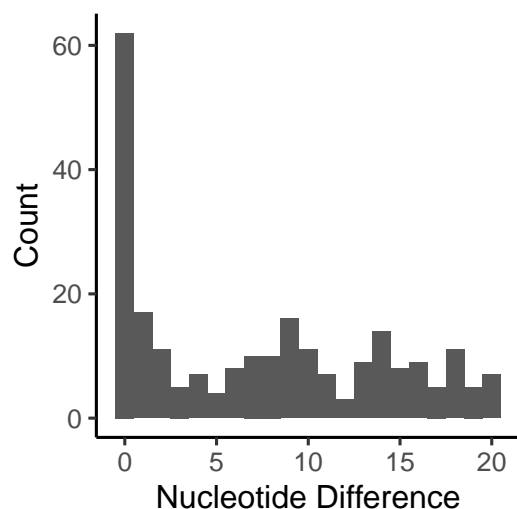
IGHV4/OR15-8*02

9 sequences assigned
No exact matches.



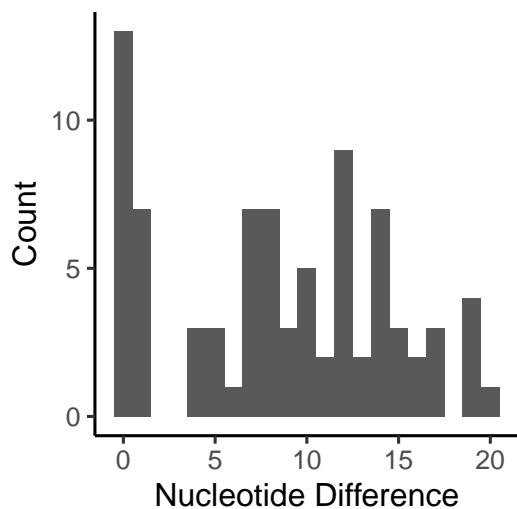
IGHV5-51*03

273 sequences assigned
62 (22.7%) exact matches, in which:
60 unique CDR3
5 unique J



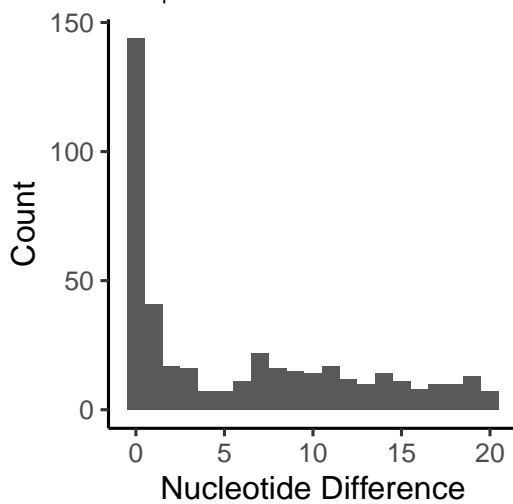
IGHV4-61*01

108 sequences assigned
13 (12%) exact matches, in which:
13 unique CDR3
4 unique J



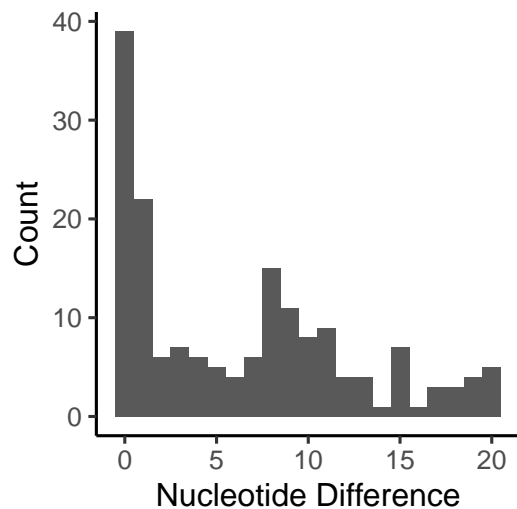
IGHV5-10-1*03

507 sequences assigned
144 (28.4%) exact matches, in which:
144 unique CDR3
5 unique J



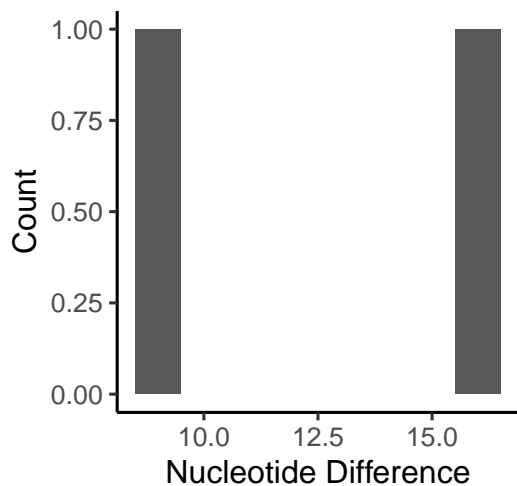
IGHV6-1*01

185 sequences assigned
39 (21.1%) exact matches, in which:
37 unique CDR3
4 unique J



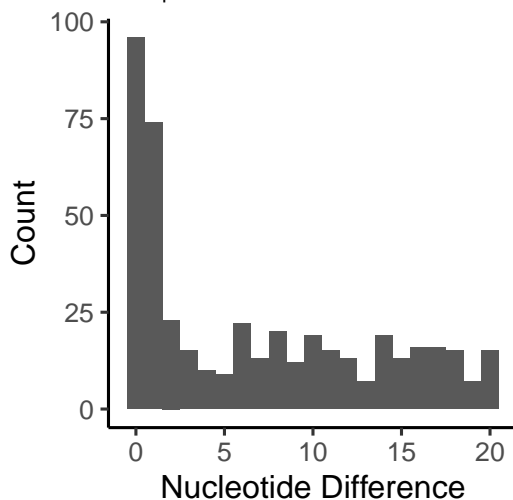
IGHV4-61*08

12 sequences assigned
No exact matches.



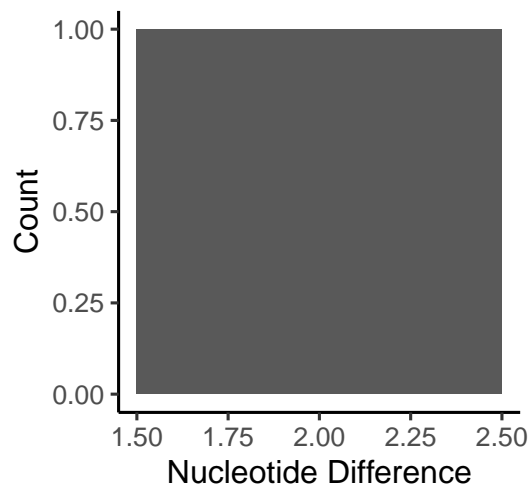
IGHV5-51*01

531 sequences assigned
96 (18.1%) exact matches, in which:
89 unique CDR3
5 unique J



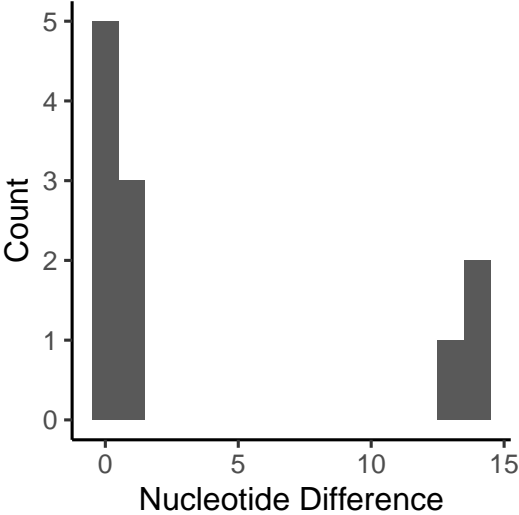
IGHV3/OR16-8*01

1 sequences assigned
No exact matches.



IGHV7-4-1*01

17 sequences assigned
5 (29.4%) exact matches, in which:
5 unique CDR3
3 unique J





Warning – no inferred sequences found.