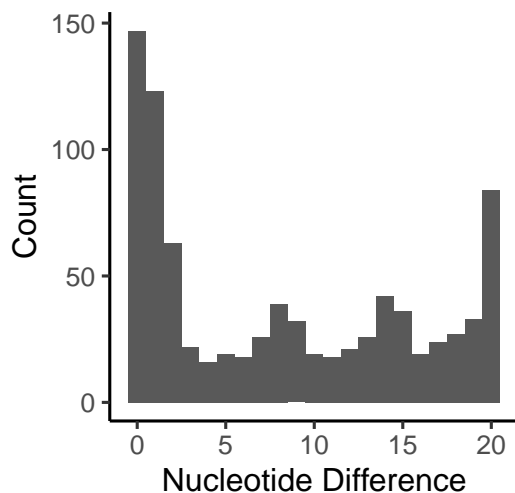


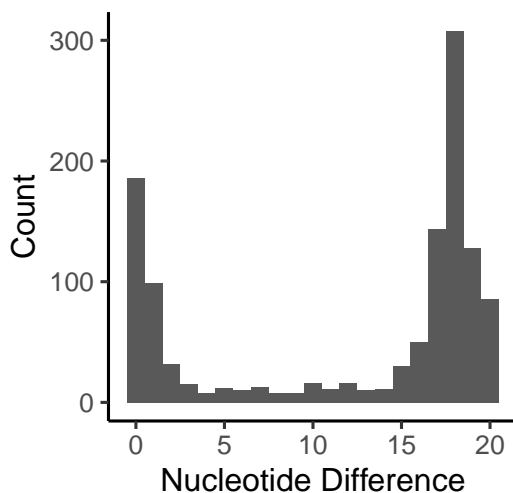
IGHV1-2*02

1411 sequences assigned
147 (10.4%) exact matches, in which:
141 unique CDR3
6 unique J



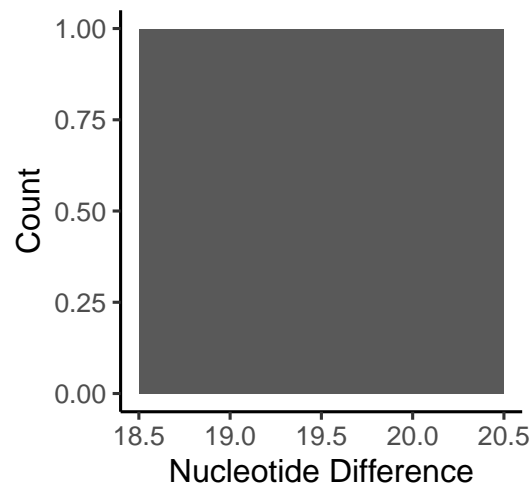
IGHV1-18*01

1619 sequences assigned
186 (11.5%) exact matches, in which:
170 unique CDR3
5 unique J



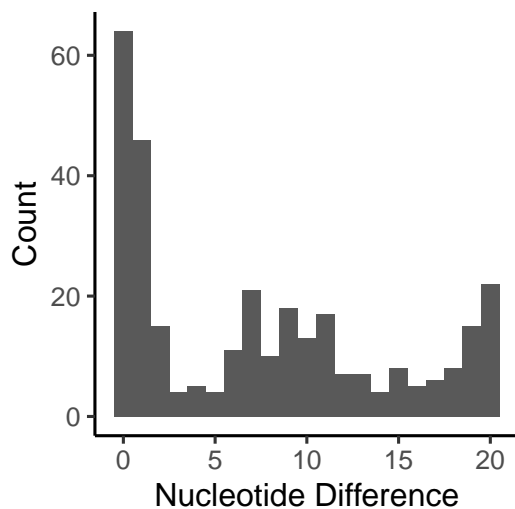
IGHV1-45*02

2 sequences assigned
No exact matches.



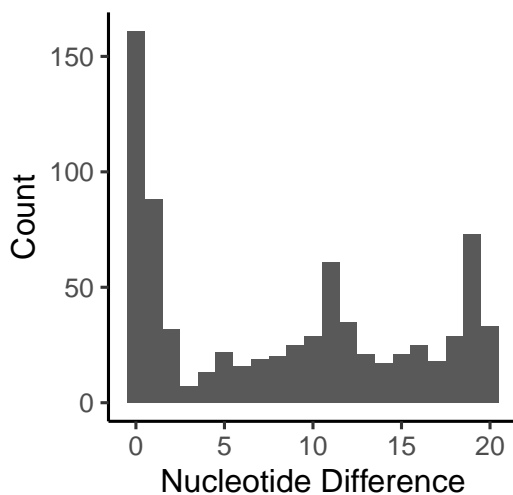
IGHV1-3*01

544 sequences assigned
64 (11.8%) exact matches, in which:
63 unique CDR3
4 unique J



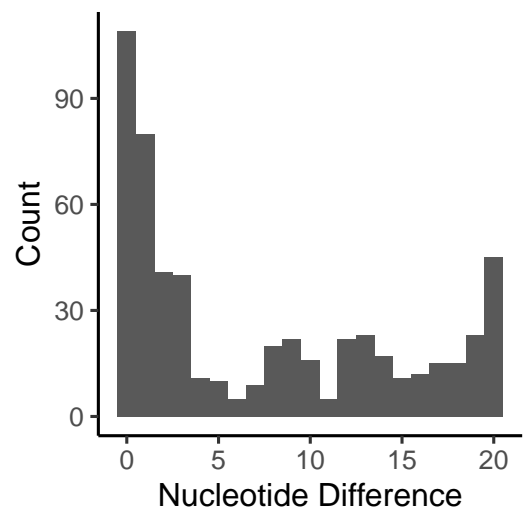
IGHV1-18*04

896 sequences assigned
161 (18%) exact matches, in which:
151 unique CDR3
5 unique J



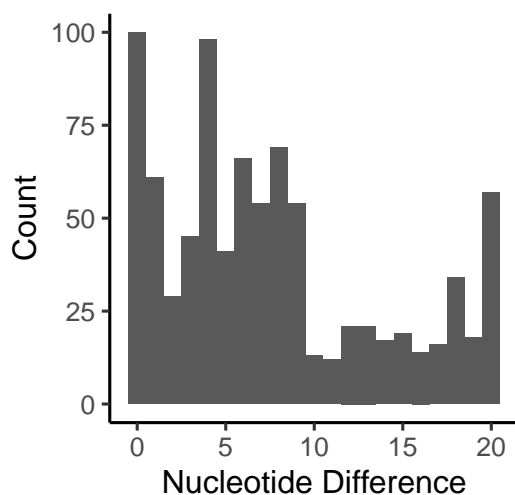
IGHV1-46*01

980 sequences assigned
109 (11.1%) exact matches, in which:
94 unique CDR3
5 unique J



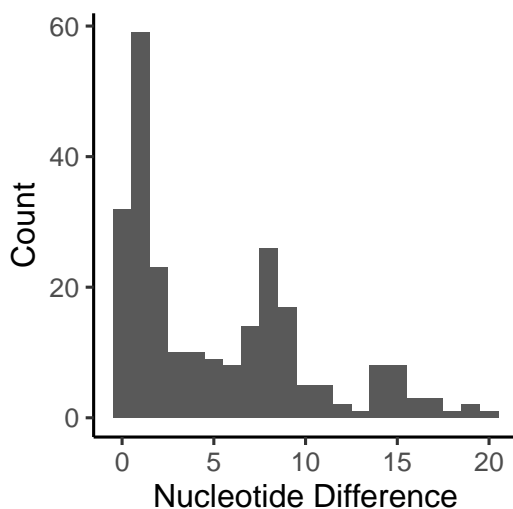
IGHV1-8*01

980 sequences assigned
100 (10.2%) exact matches, in which:
97 unique CDR3
5 unique J



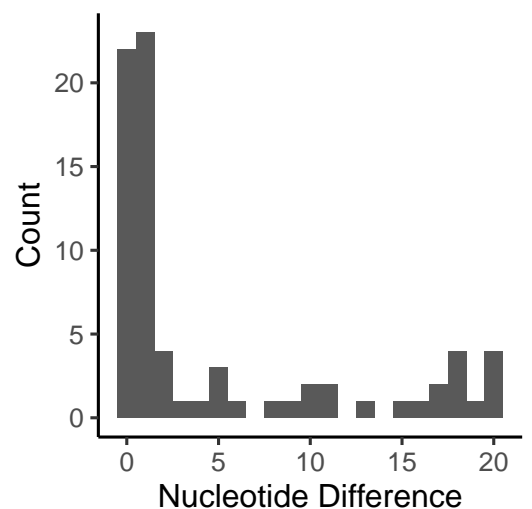
IGHV1-24*01

309 sequences assigned
32 (10.4%) exact matches, in which:
26 unique CDR3
4 unique J



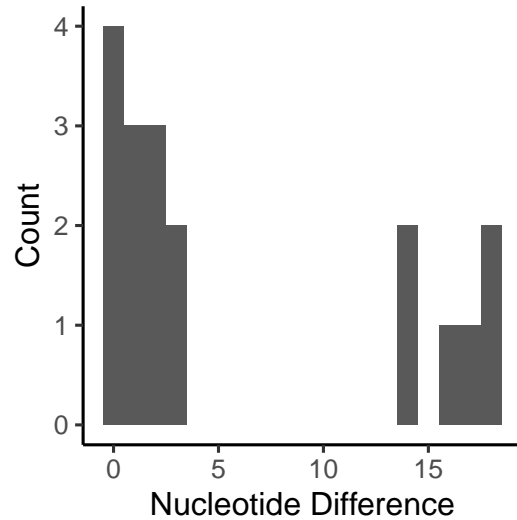
IGHV1-58*01

98 sequences assigned
22 (22.4%) exact matches, in which:
20 unique CDR3
6 unique J



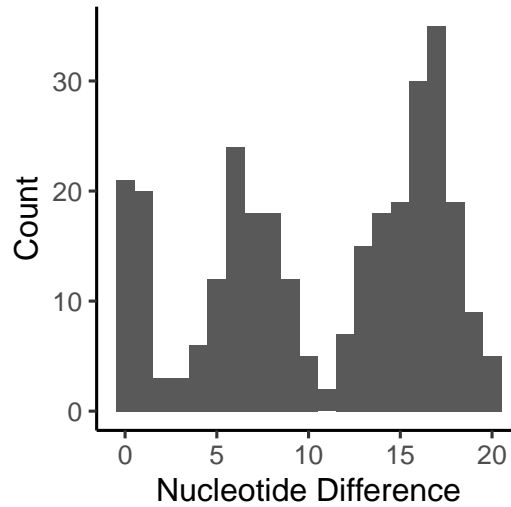
IGHV1-69-2*01

27 sequences assigned
4 (14.8%) exact matches, in which:
4 unique CDR3
1 unique J



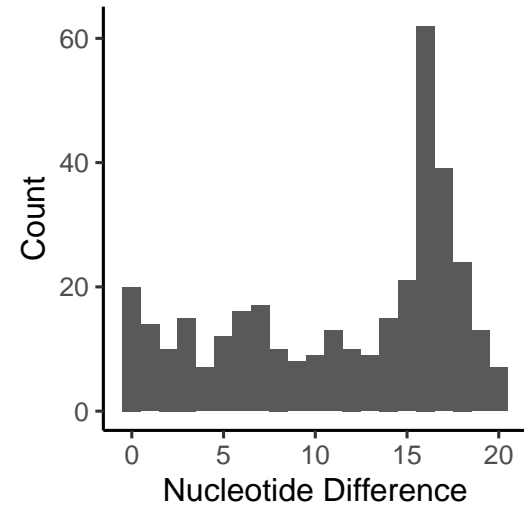
IGHV2-5*02

549 sequences assigned
21 (3.8%) exact matches, in which:
19 unique CDR3
5 unique J



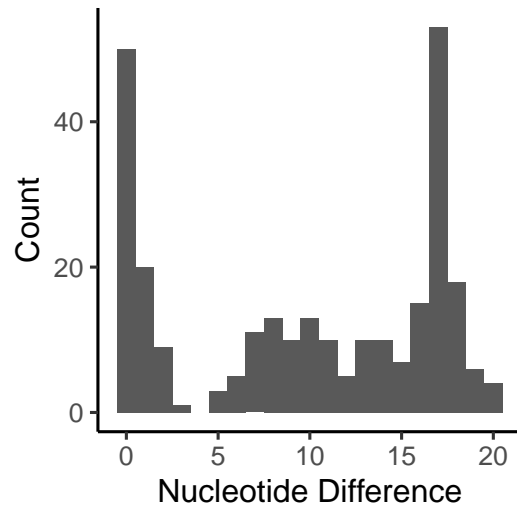
IGHV3-7*01

552 sequences assigned
20 (3.6%) exact matches, in which:
19 unique CDR3
5 unique J



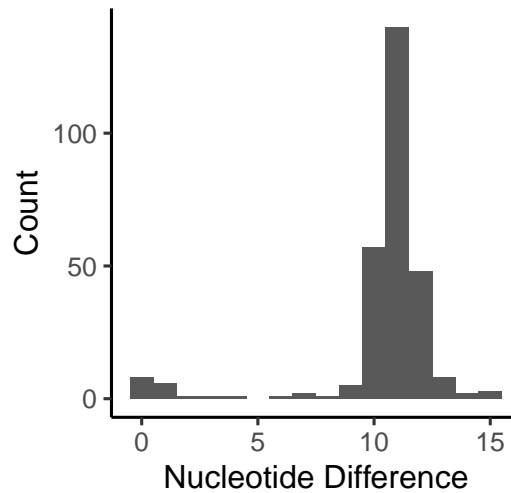
IGHV1-69*06

672 sequences assigned
50 (7.4%) exact matches, in which:
50 unique CDR3
5 unique J



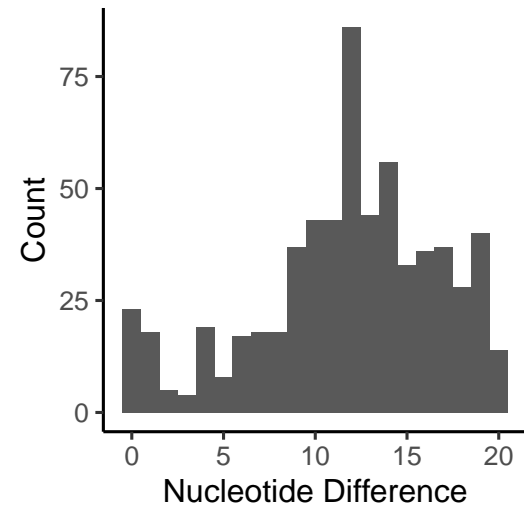
IGHV2-26*01

288 sequences assigned
8 (2.8%) exact matches, in which:
8 unique CDR3
3 unique J



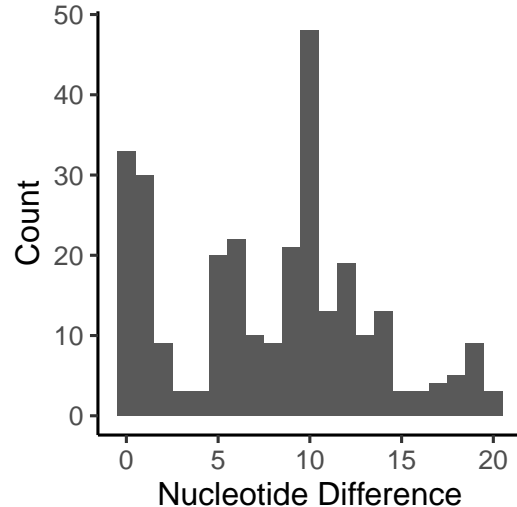
IGHV3-7*03

1035 sequences assigned
23 (2.2%) exact matches, in which:
23 unique CDR3
5 unique J



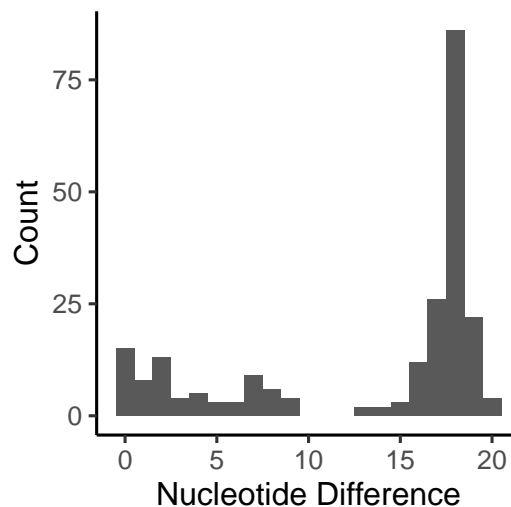
IGHV2-5*01

534 sequences assigned
33 (6.2%) exact matches, in which:
32 unique CDR3
5 unique J



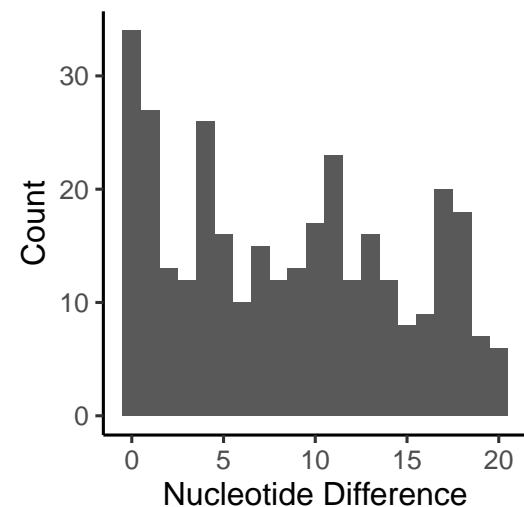
IGHV2-70*01

252 sequences assigned
15 (6%) exact matches, in which:
14 unique CDR3
5 unique J



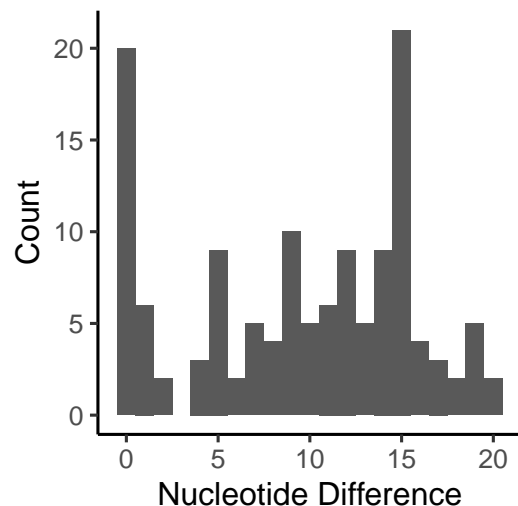
IGHV3-9*01

436 sequences assigned
34 (7.8%) exact matches, in which:
32 unique CDR3
3 unique J



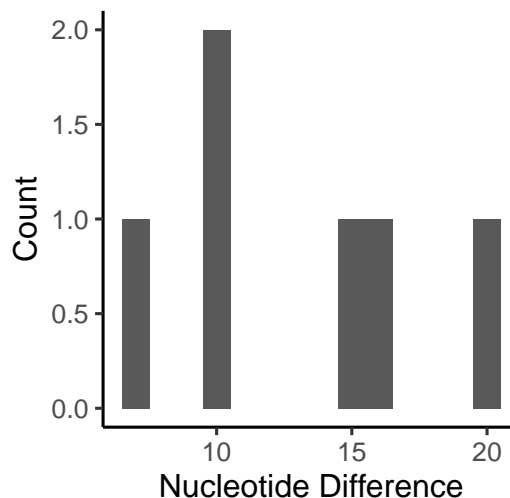
IGHV3-11*01

293 sequences assigned
20 (6.8%) exact matches, in which:
19 unique CDR3
4 unique J



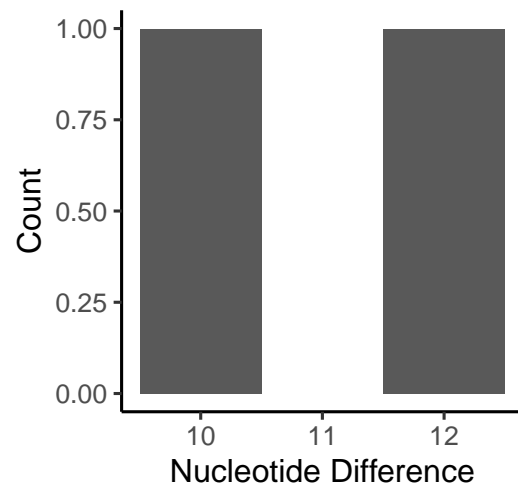
IGHV3-13*05

11 sequences assigned
No exact matches.



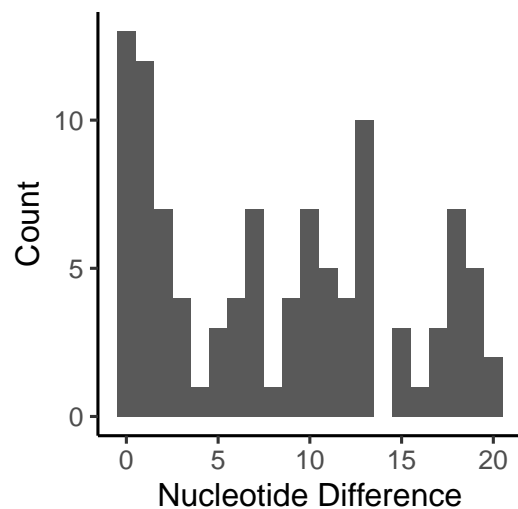
IGHV3-20*04

3 sequences assigned
No exact matches.



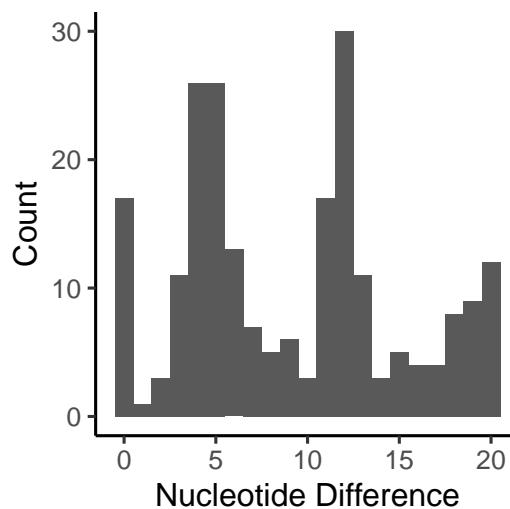
IGHV3-11*06

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



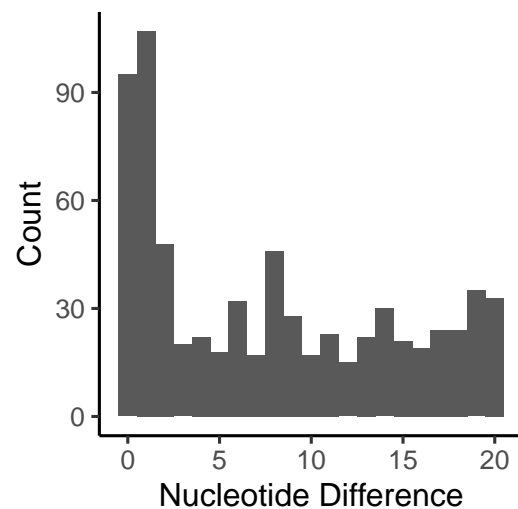
IGHV3-15*01

457 sequences assigned
17 (3.7%) exact matches, in which:
17 unique CDR3
3 unique J



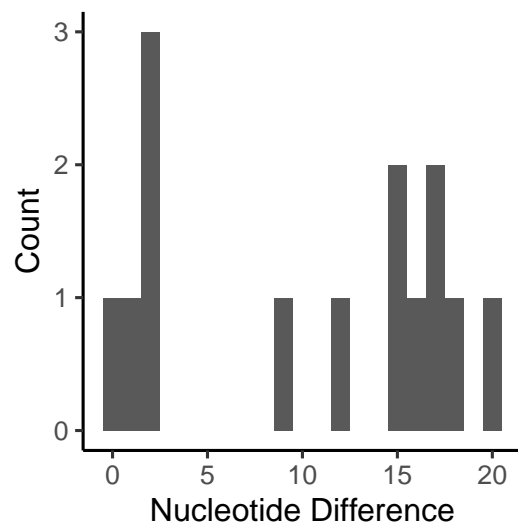
IGHV3-21*01

987 sequences assigned
95 (9.6%) exact matches, in which:
81 unique CDR3
6 unique J



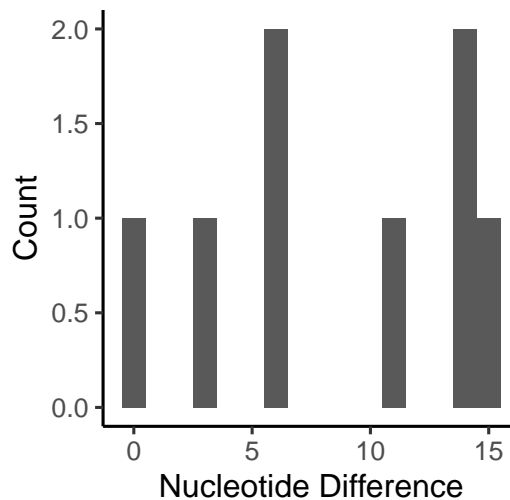
IGHV3-13*01

88 sequences assigned
1 (1.1%) exact matches, in which:
1 unique CDR3
1 unique J



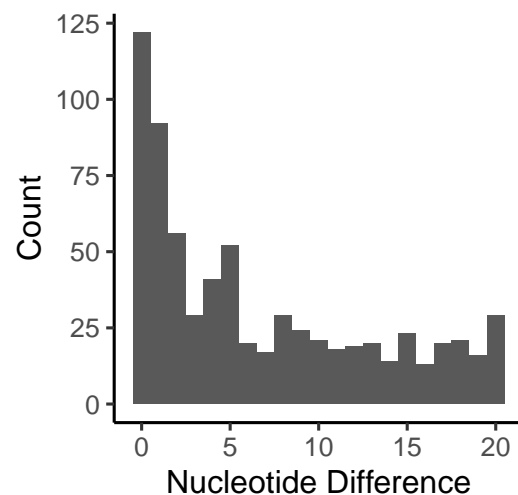
IGHV3-20*01

11 sequences assigned
1 (9.1%) exact matches, in which:
1 unique CDR3
1 unique J



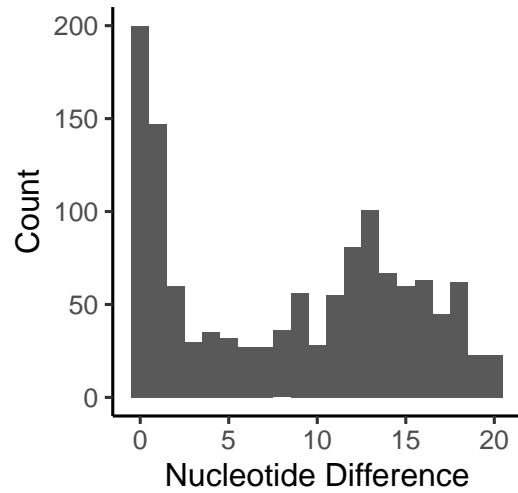
IGHV3-30-3*01

1299 sequences assigned
122 (9.4%) exact matches, in which:
118 unique CDR3
5 unique J



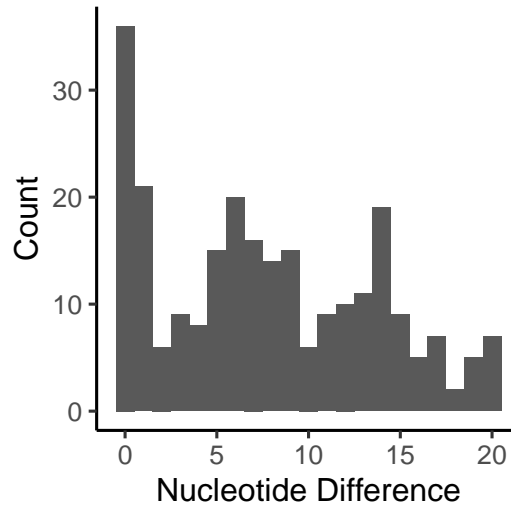
IGHV3–33*01

1688 sequences assigned
200 (11.8%) exact matches, in which:
188 unique CDR3
6 unique J



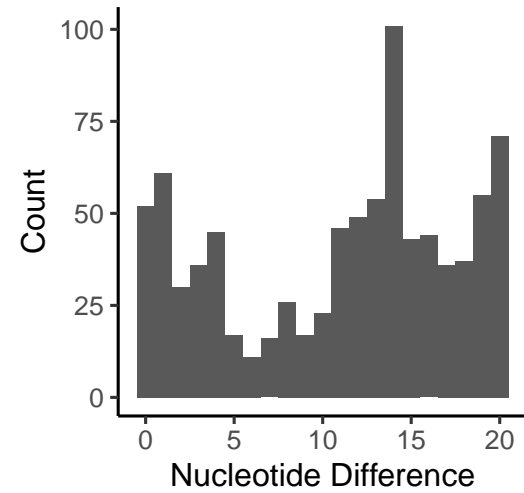
IGHV3–48*03

337 sequences assigned
36 (10.7%) exact matches, in which:
36 unique CDR3
5 unique J



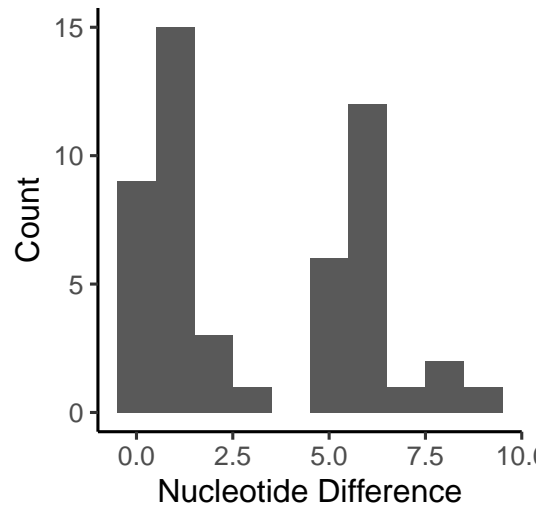
IGHV3–53*01

1186 sequences assigned
52 (4.4%) exact matches, in which:
48 unique CDR3
5 unique J



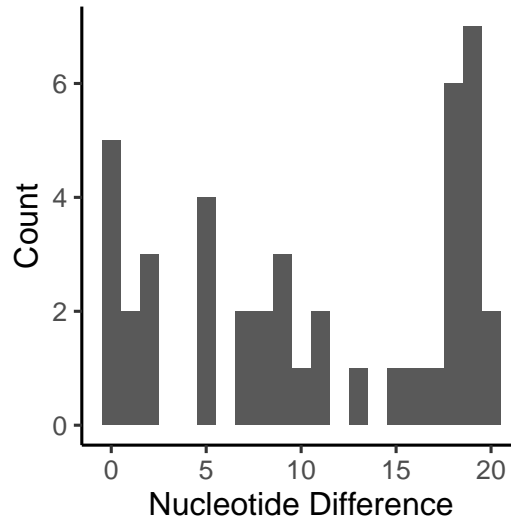
IGHV3–43*01

71 sequences assigned
9 (12.7%) exact matches, in which:
4 unique CDR3
2 unique J



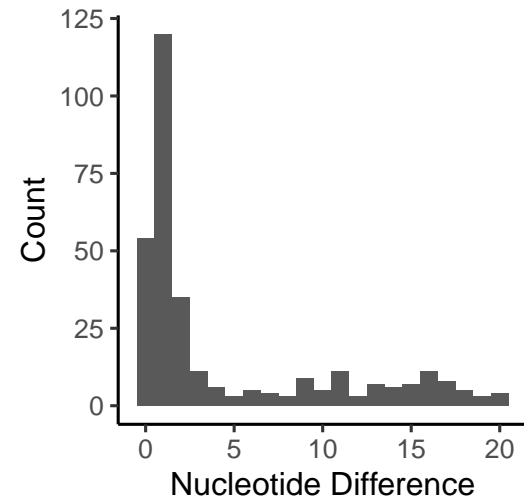
IGHV3–49*04

53 sequences assigned
5 (9.4%) exact matches, in which:
5 unique CDR3
3 unique J



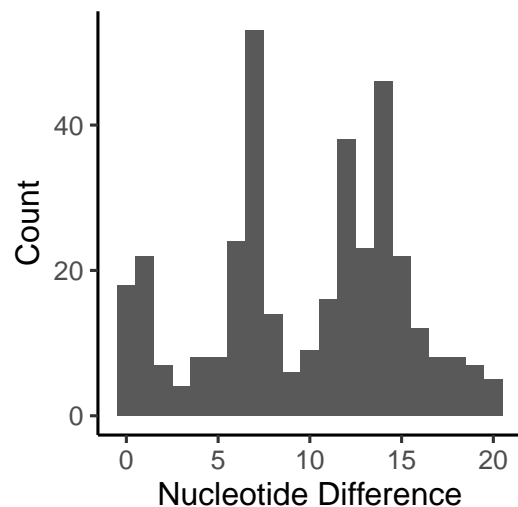
IGHV3–53*02

435 sequences assigned
54 (12.4%) exact matches, in which:
37 unique CDR3
5 unique J



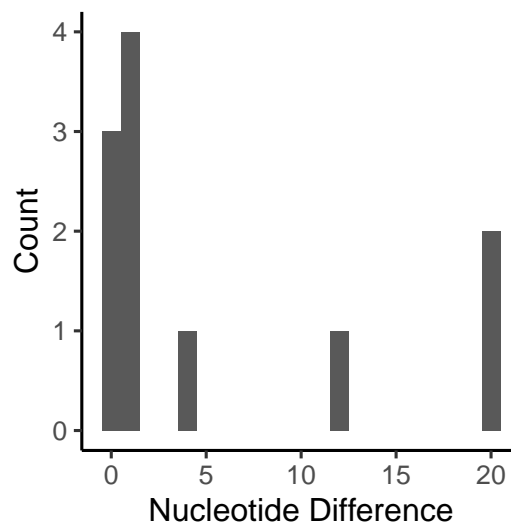
IGHV3–48*02

549 sequences assigned
18 (3.3%) exact matches, in which:
16 unique CDR3
4 unique J



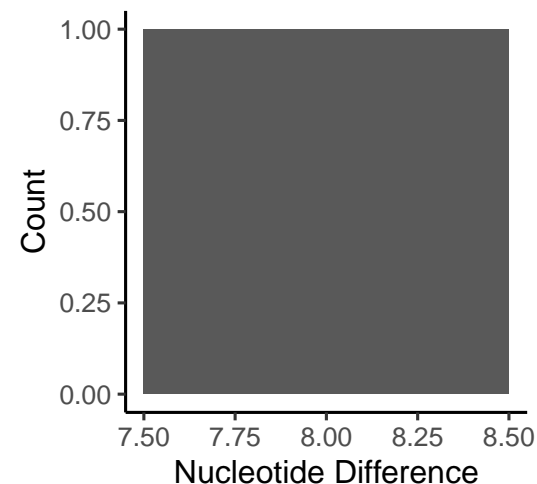
IGHV3–49*05

47 sequences assigned
3 (6.4%) exact matches, in which:
3 unique CDR3
2 unique J



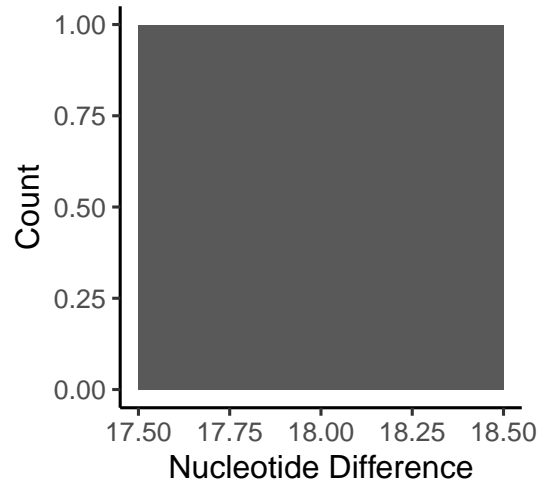
IGHV3–64*02

2 sequences assigned
No exact matches.



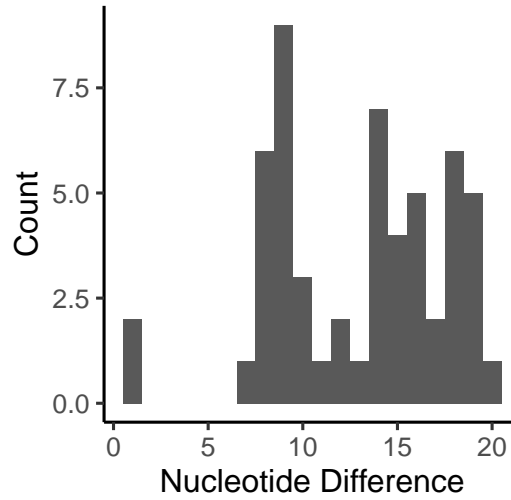
IGHV3-66*01

3 sequences assigned
No exact matches.



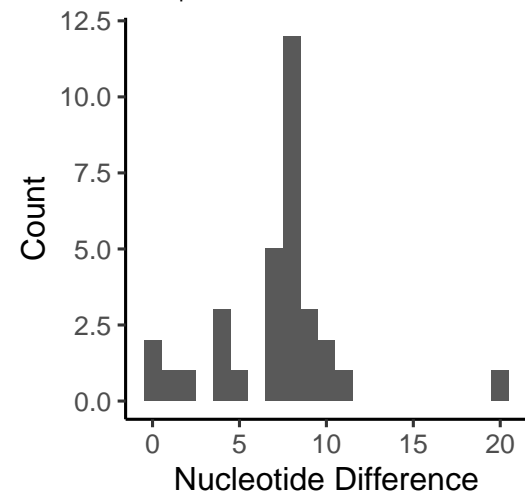
IGHV3-72*01

93 sequences assigned
No exact matches.



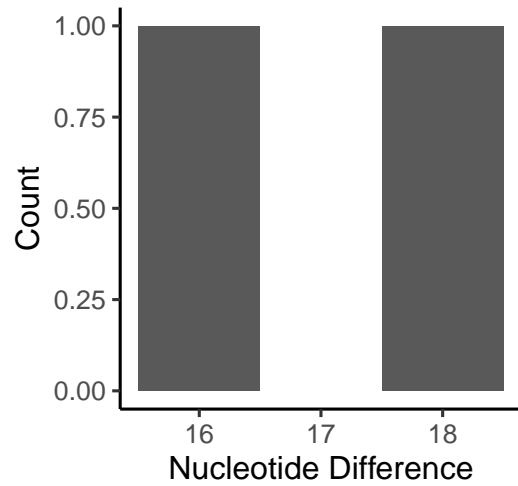
IGHV3-43D*04

35 sequences assigned
2 (5.7%) exact matches, in which:
2 unique CDR3
2 unique J



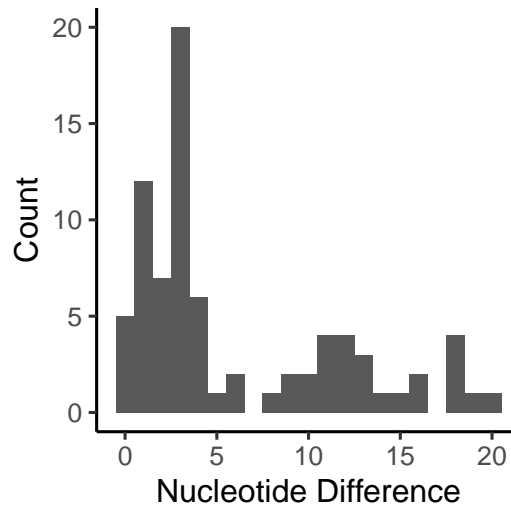
IGHV3-66*04

2 sequences assigned
No exact matches.



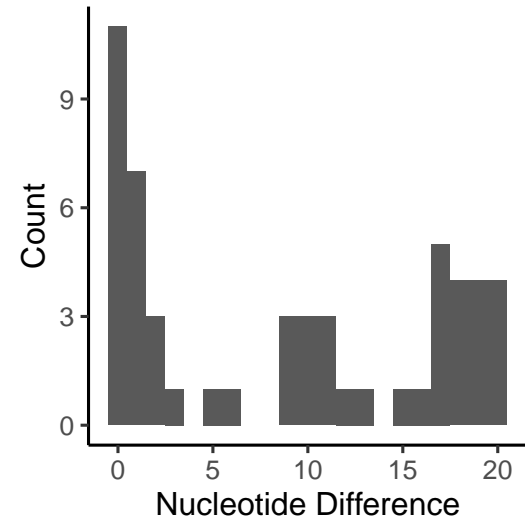
IGHV3-73*02

90 sequences assigned
5 (5.6%) exact matches, in which:
5 unique CDR3
4 unique J



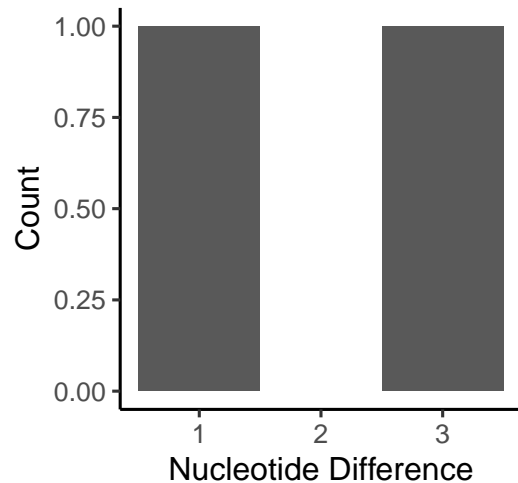
IGHV3-64D*06

128 sequences assigned
11 (8.6%) exact matches, in which:
11 unique CDR3
4 unique J



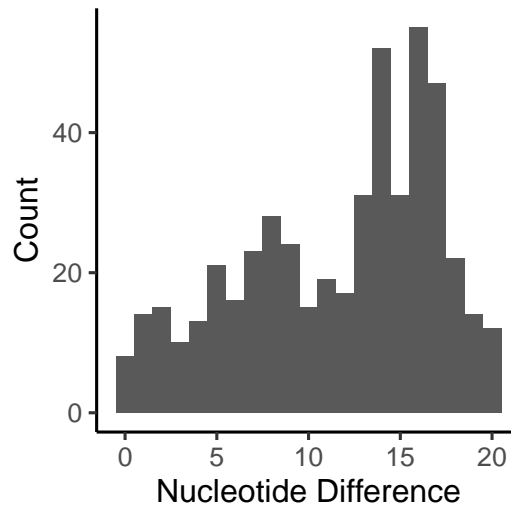
IGHV3-69-1*01

2 sequences assigned
No exact matches.



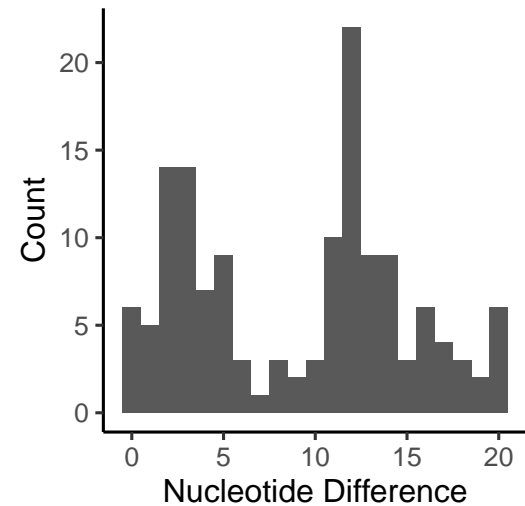
IGHV3-74*01

699 sequences assigned
8 (1.1%) exact matches, in which:
8 unique CDR3
3 unique J



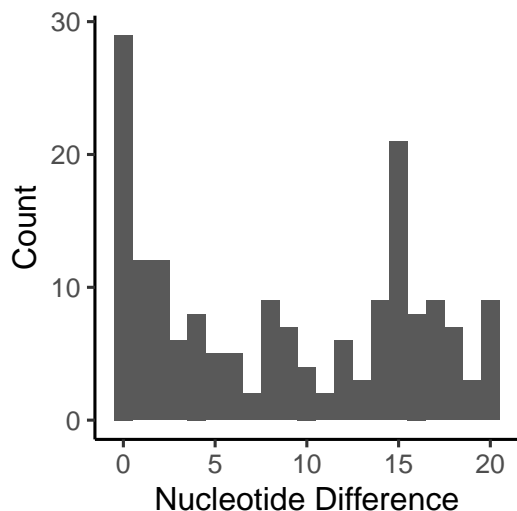
IGHV4-4*02

237 sequences assigned
6 (2.5%) exact matches, in which:
6 unique CDR3
3 unique J



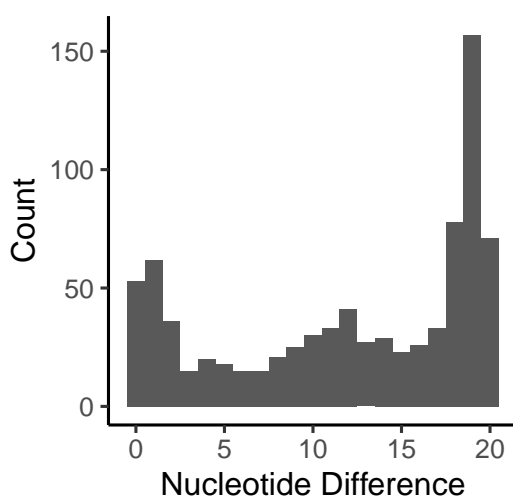
IGHV4-4*07

377 sequences assigned
29 (7.7%) exact matches, in which:
28 unique CDR3
5 unique J



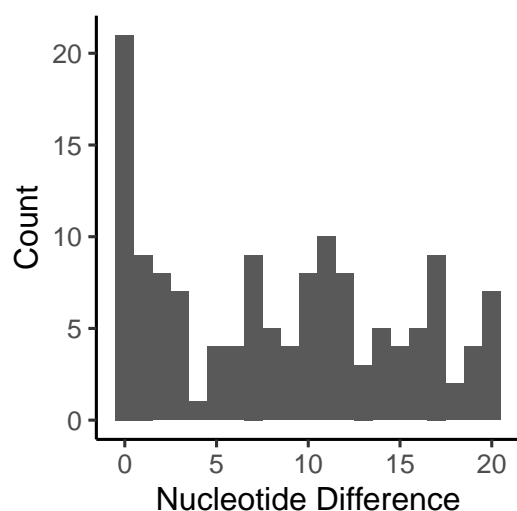
IGHV4-31*03

1029 sequences assigned
53 (5.2%) exact matches, in which:
46 unique CDR3
5 unique J



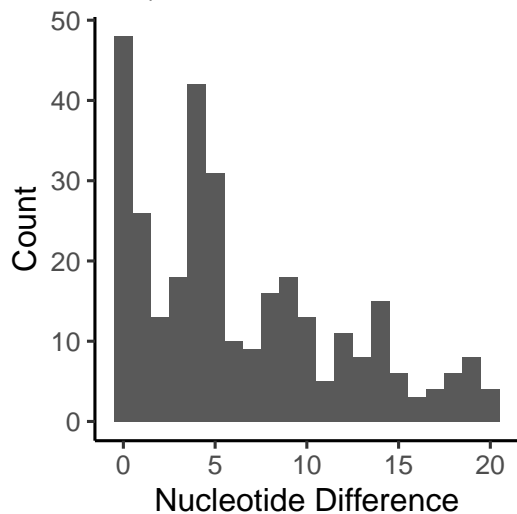
IGHV4-38-2*01

314 sequences assigned
21 (6.7%) exact matches, in which:
21 unique CDR3
4 unique J



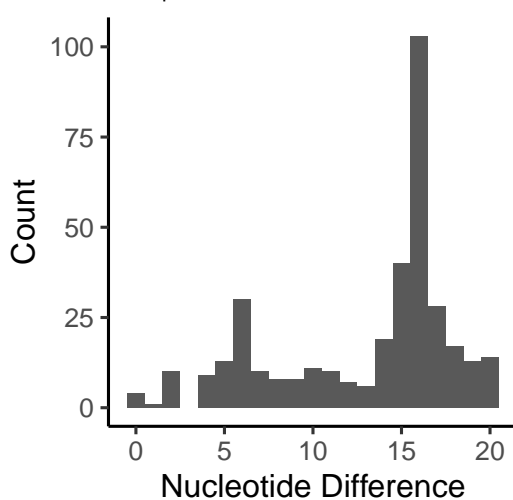
IGHV4-30-4*01

423 sequences assigned
48 (11.3%) exact matches, in which:
39 unique CDR3
4 unique J



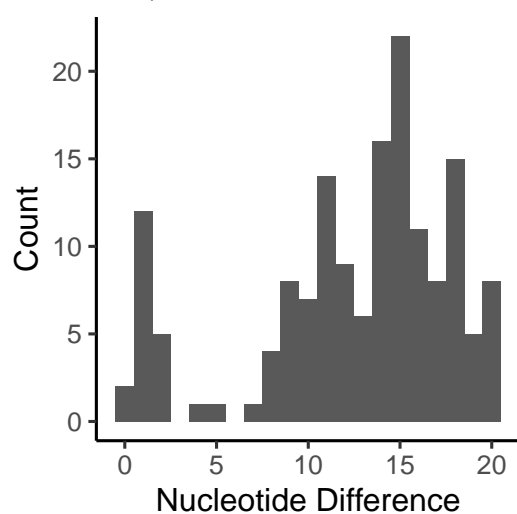
IGHV4-34*01

426 sequences assigned
4 (0.9%) exact matches, in which:
4 unique CDR3
3 unique J



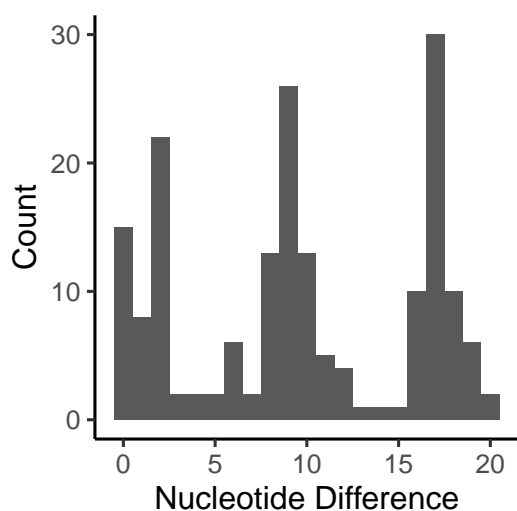
IGHV4-38-2*02

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



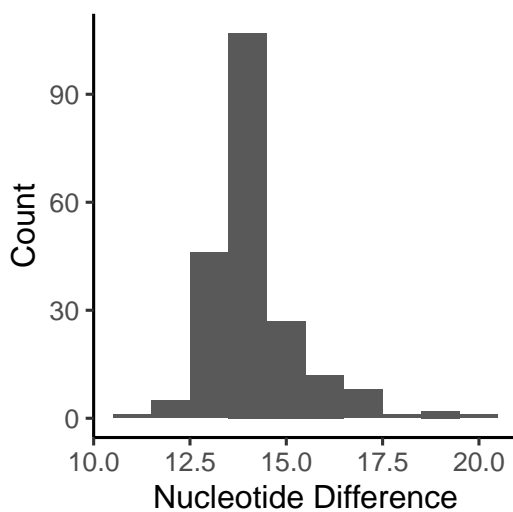
IGHV4-30-2*01

313 sequences assigned
15 (4.8%) exact matches, in which:
15 unique CDR3
4 unique J



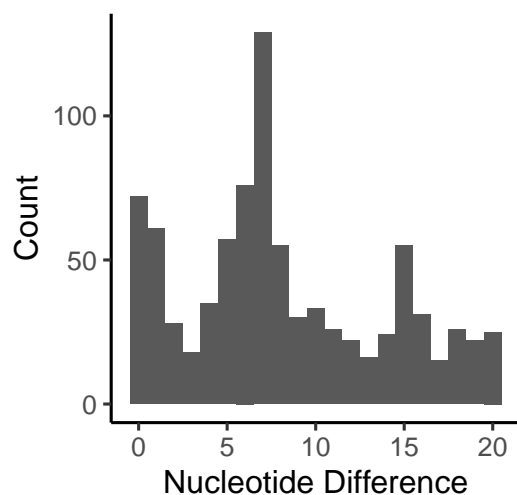
IGHV4-34*02

631 sequences assigned
No exact matches.



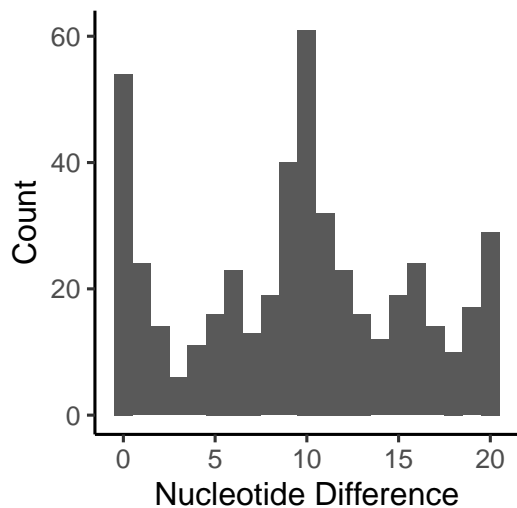
IGHV4-39*01

1194 sequences assigned
72 (6%) exact matches, in which:
71 unique CDR3
6 unique J



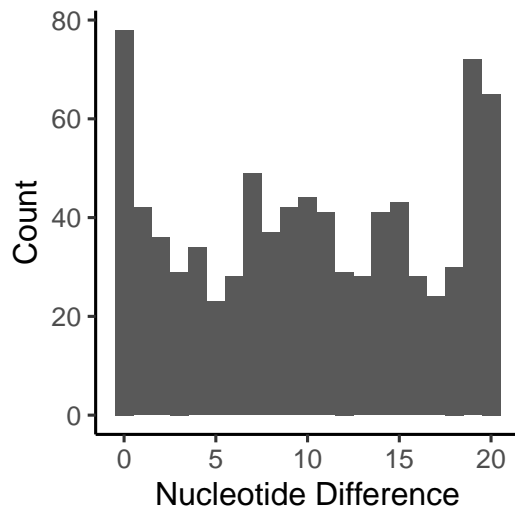
IGHV4–59*01

878 sequences assigned
54 (6.2%) exact matches, in which:
52 unique CDR3
5 unique J



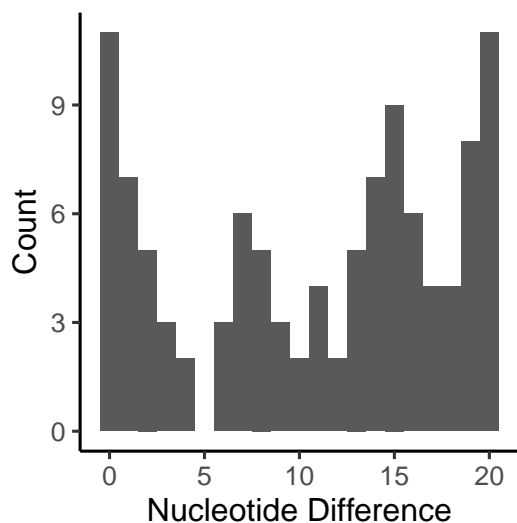
IGHV5–51*01

1089 sequences assigned
78 (7.2%) exact matches, in which:
76 unique CDR3
4 unique J



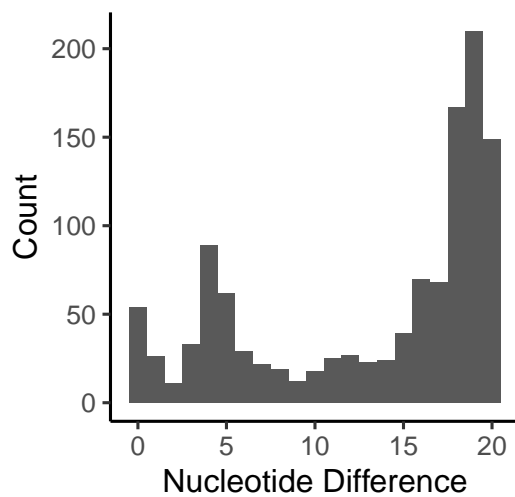
IGHV4–61*01

159 sequences assigned
11 (6.9%) exact matches, in which:
11 unique CDR3
4 unique J



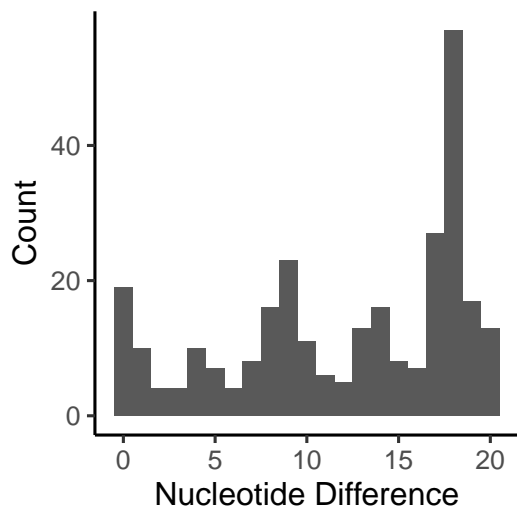
IGHV6–1*01

1495 sequences assigned
54 (3.6%) exact matches, in which:
53 unique CDR3
5 unique J



IGHV5–10–1*03

415 sequences assigned
19 (4.6%) exact matches, in which:
19 unique CDR3
4 unique J





[illegible]