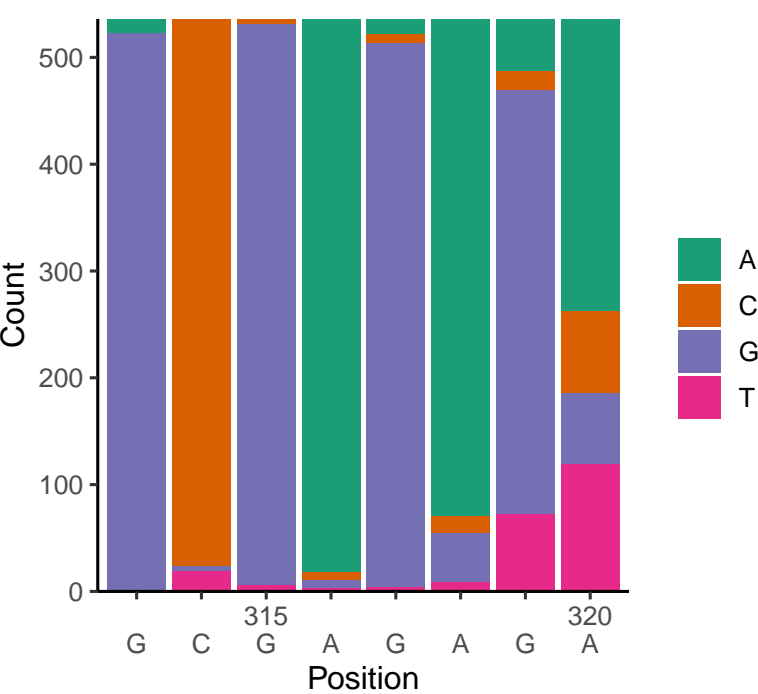
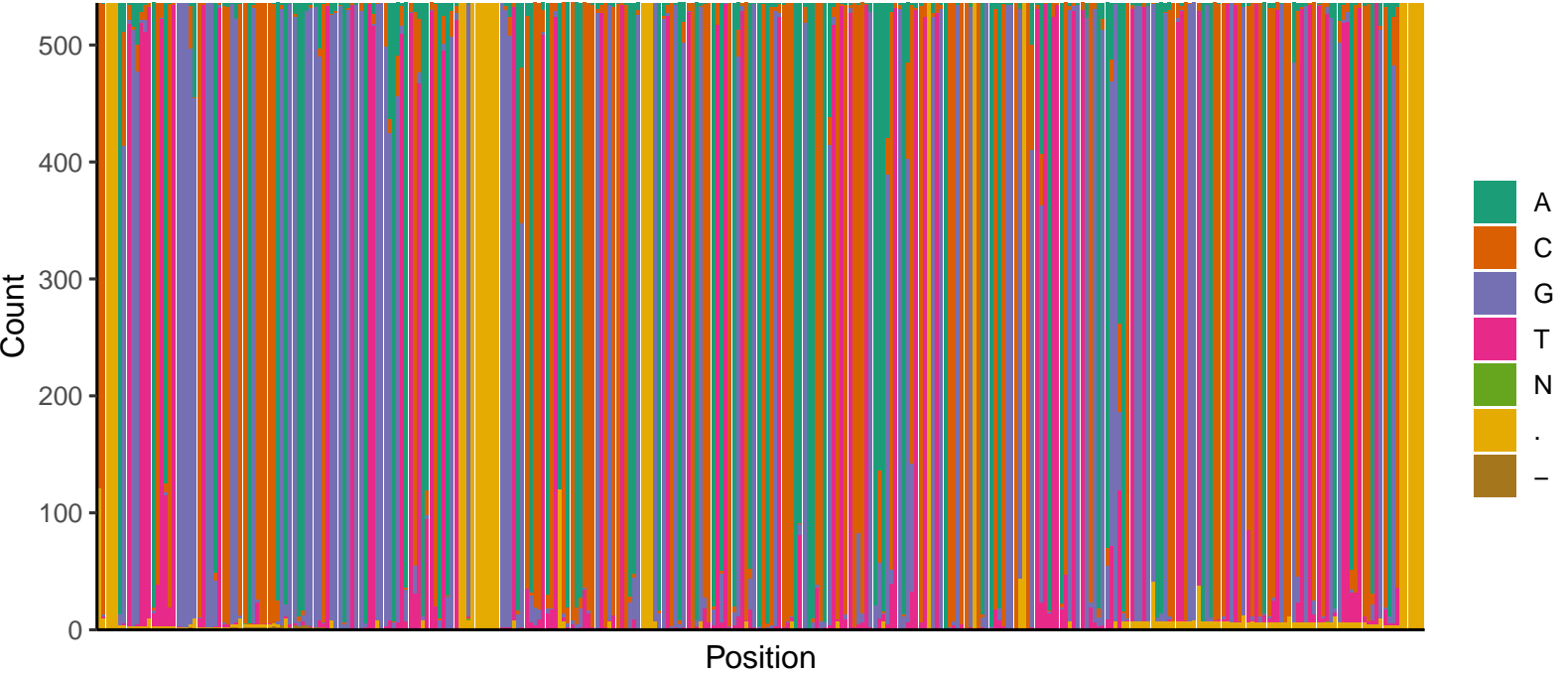


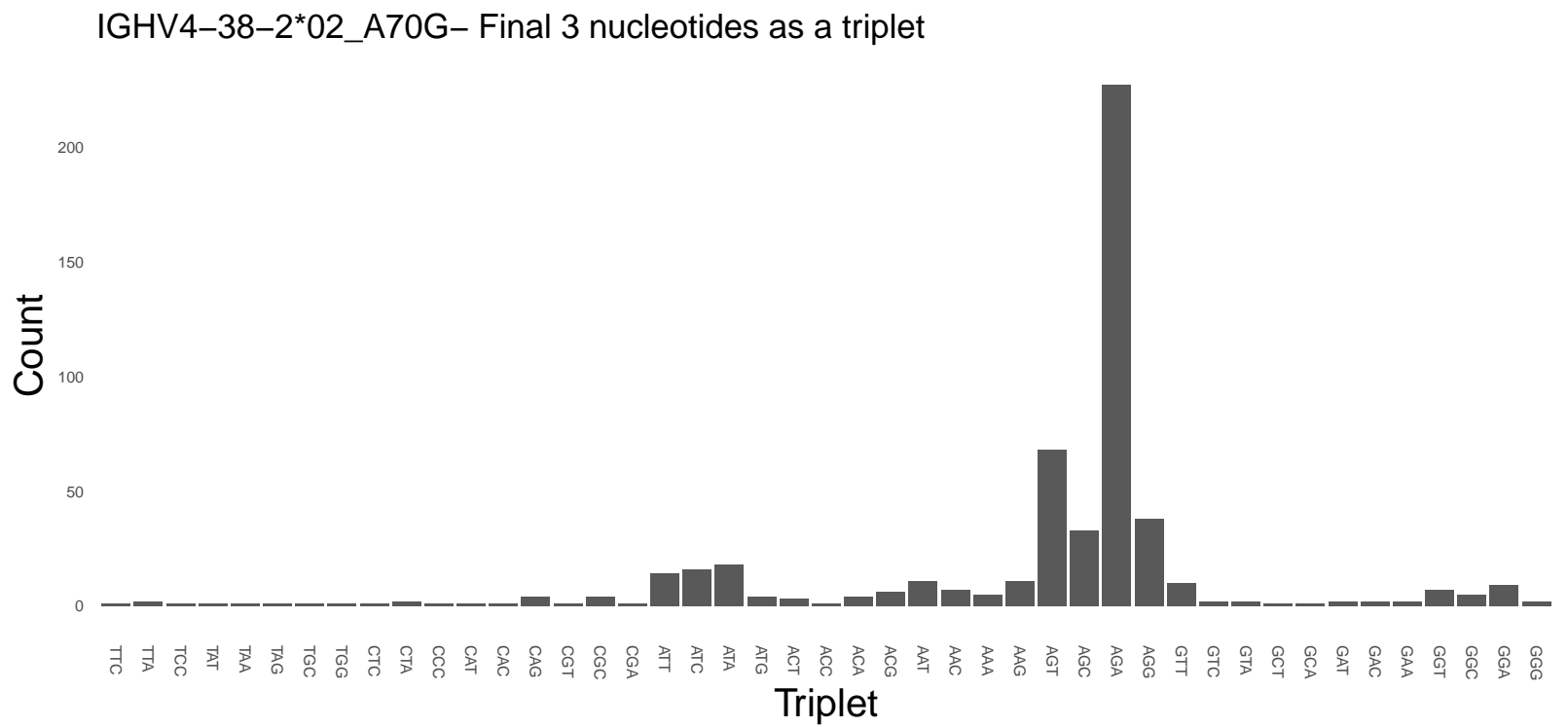
Gene IGHV4-38-2*02_A70G



Gene IGHV4-38-2*02_A70G

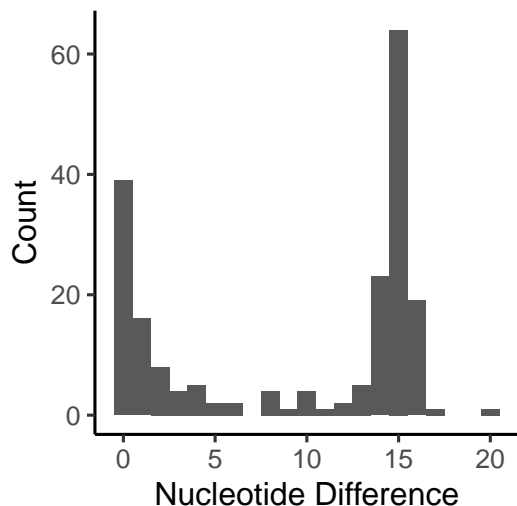


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



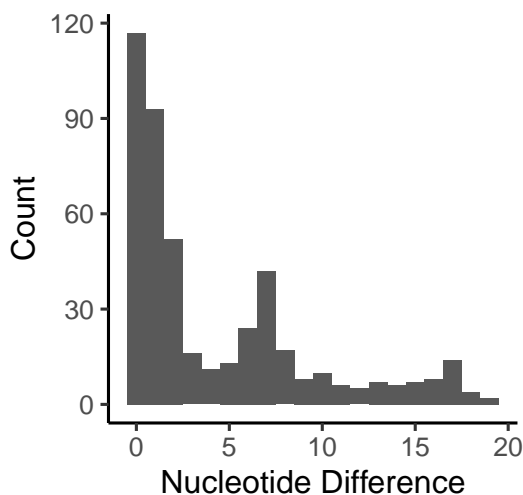
IGHV1-2*04

210 sequences assigned
39 (18.6%) exact matches, in which:
34 unique CDR3
5 unique J



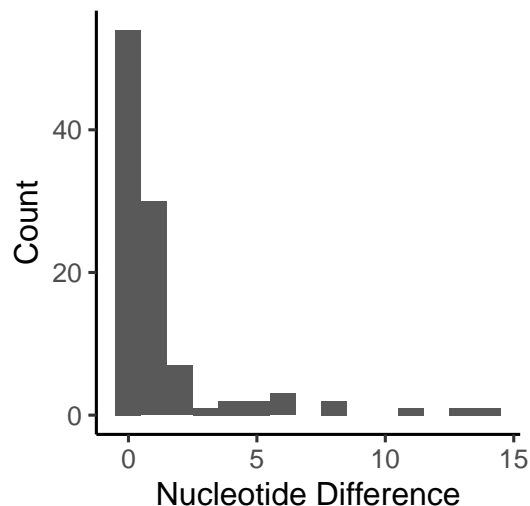
IGHV1-8*01

466 sequences assigned
117 (25.1%) exact matches, in which:
96 unique CDR3
4 unique J



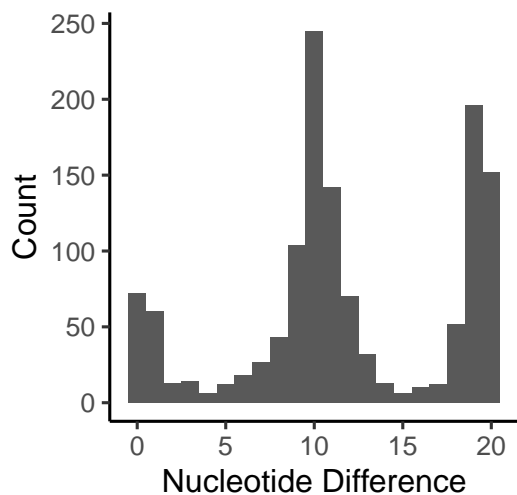
IGHV1-24*01

104 sequences assigned
54 (51.9%) exact matches, in which:
50 unique CDR3
5 unique J



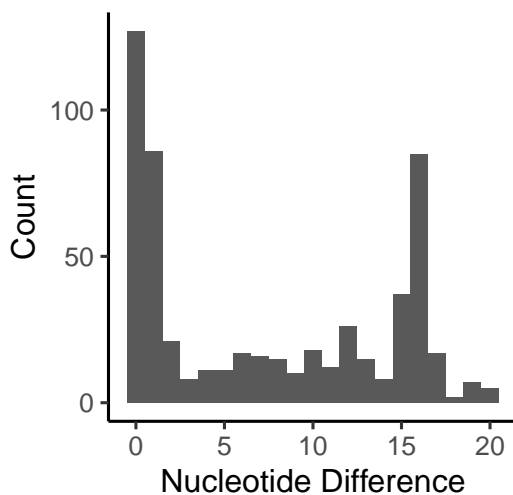
IGHV1-2*06

1372 sequences assigned
72 (5.2%) exact matches, in which:
66 unique CDR3
4 unique J



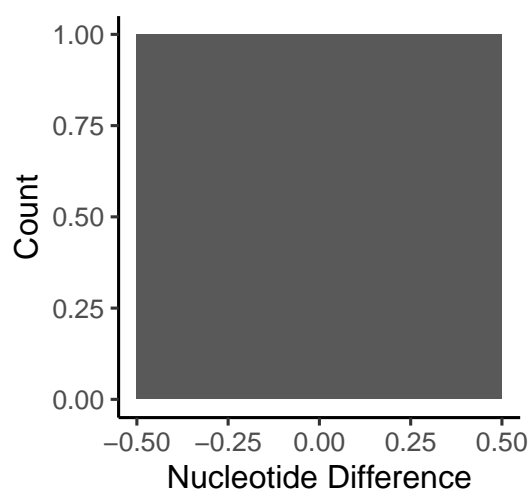
IGHV1-18*01

613 sequences assigned
127 (20.7%) exact matches, in which:
118 unique CDR3
4 unique J



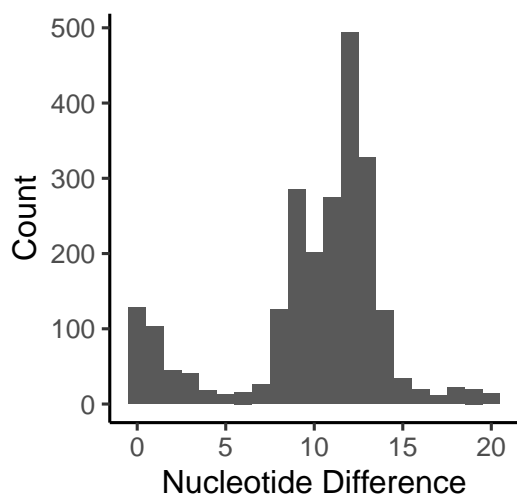
IGHV1-45*02

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



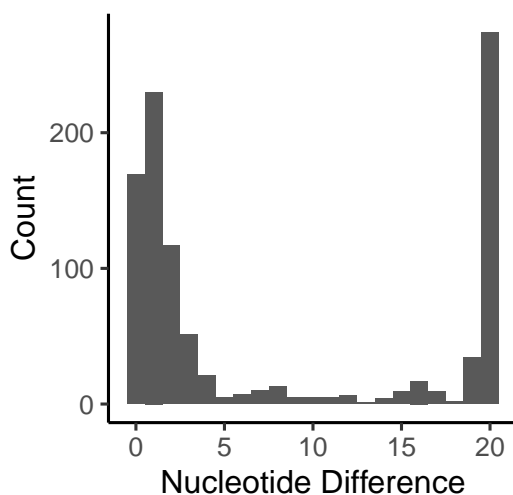
IGHV1-3*01

2406 sequences assigned
128 (5.3%) exact matches, in which:
121 unique CDR3
4 unique J



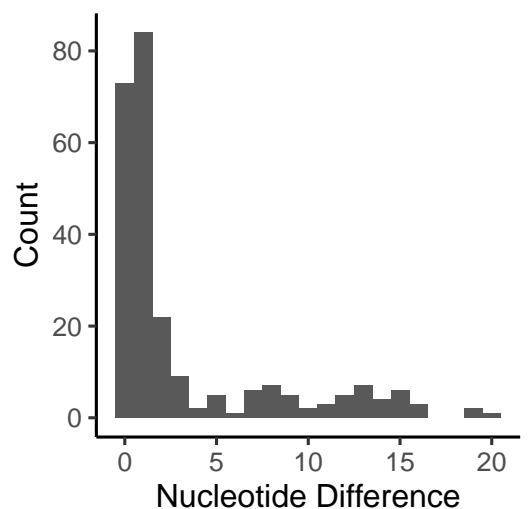
IGHV1-18*04

2531 sequences assigned
169 (6.7%) exact matches, in which:
129 unique CDR3
6 unique J



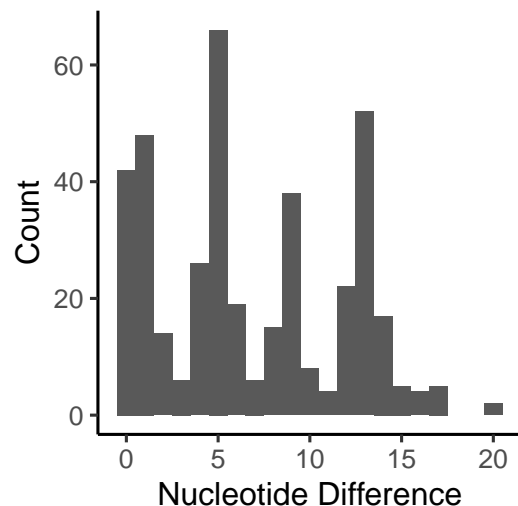
IGHV1-46*01

487 sequences assigned
73 (15%) exact matches, in which:
63 unique CDR3
4 unique J



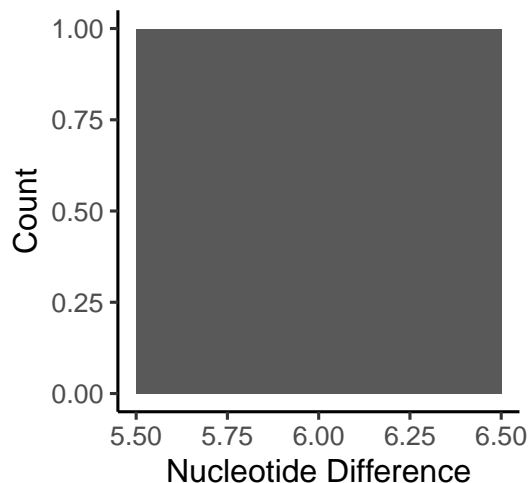
IGHV1-46*03

406 sequences assigned
42 (10.3%) exact matches, in which:
28 unique CDR3
5 unique J



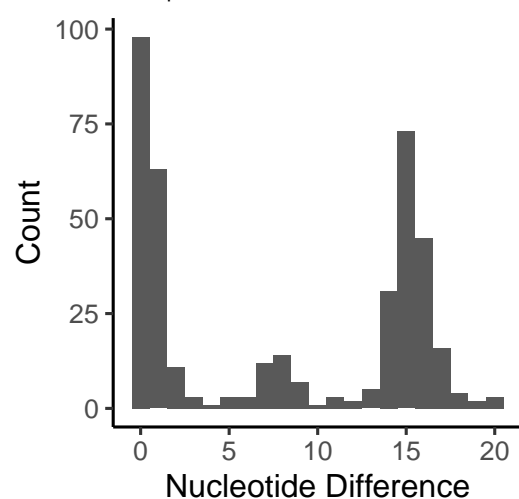
IGHV1-68*02

1 sequences assigned
No exact matches.



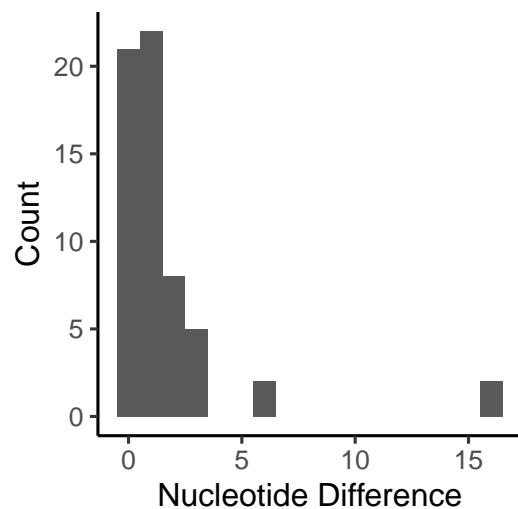
IGHV1-69*06

406 sequences assigned
98 (24.1%) exact matches, in which:
92 unique CDR3
4 unique J



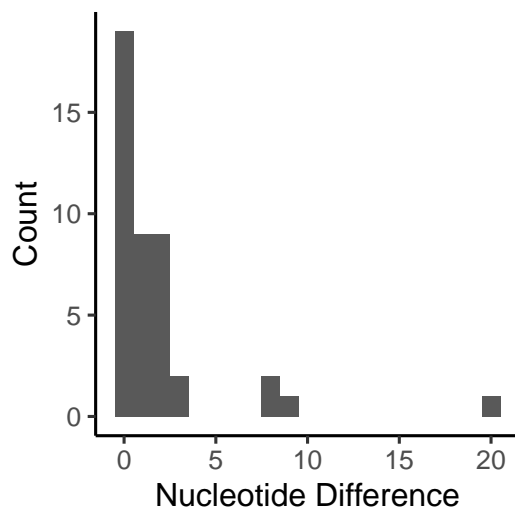
IGHV1-58*01

62 sequences assigned
21 (33.9%) exact matches, in which:
14 unique CDR3
3 unique J



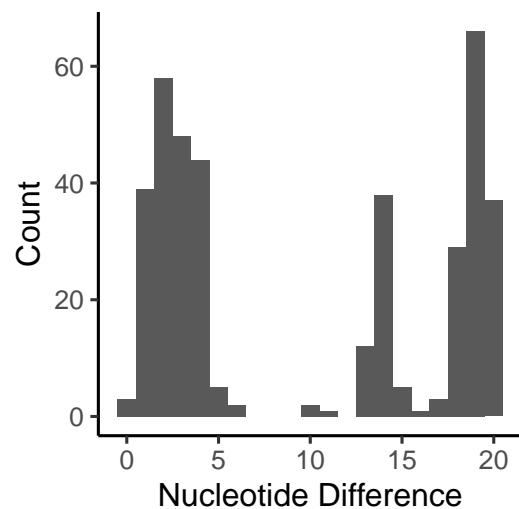
IGHV1-69-2*01

44 sequences assigned
19 (43.2%) exact matches, in which:
19 unique CDR3
4 unique J



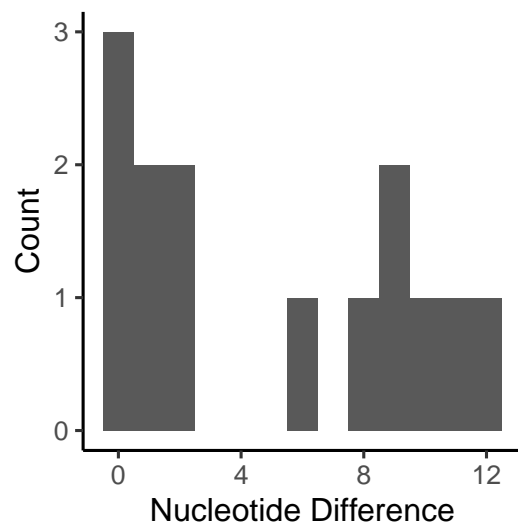
IGHV1-69*08

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



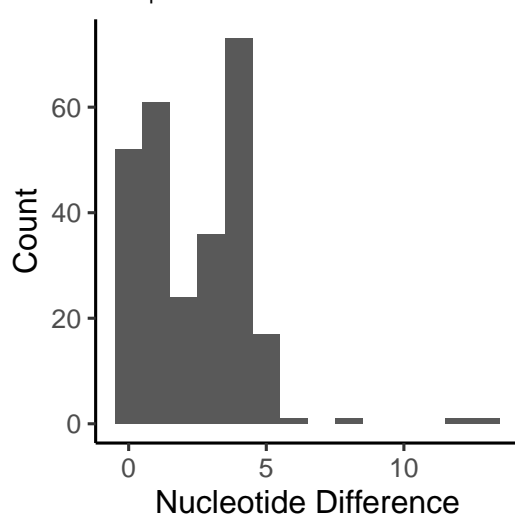
IGHV1-58*02

14 sequences assigned
3 (21.4%) exact matches, in which:
2 unique CDR3
2 unique J



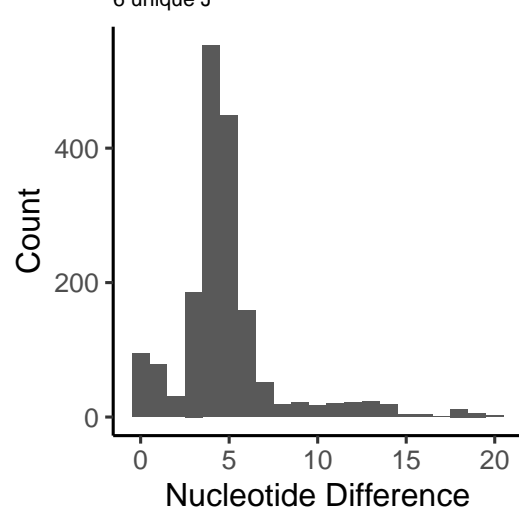
IGHV1-69*02

270 sequences assigned
52 (19.3%) exact matches, in which:
43 unique CDR3
6 unique J



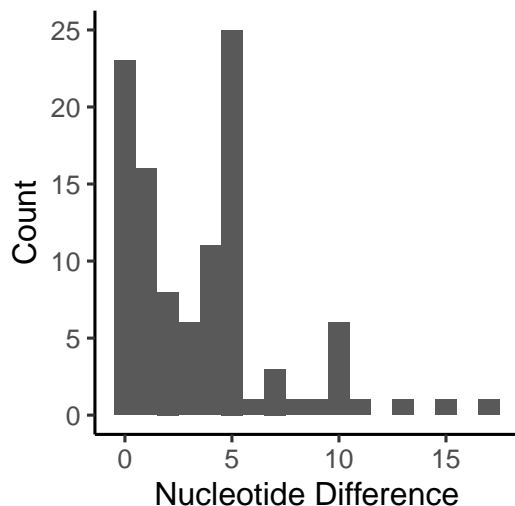
IGHV2-5*02

2037 sequences assigned
95 (4.7%) exact matches, in which:
87 unique CDR3
6 unique J



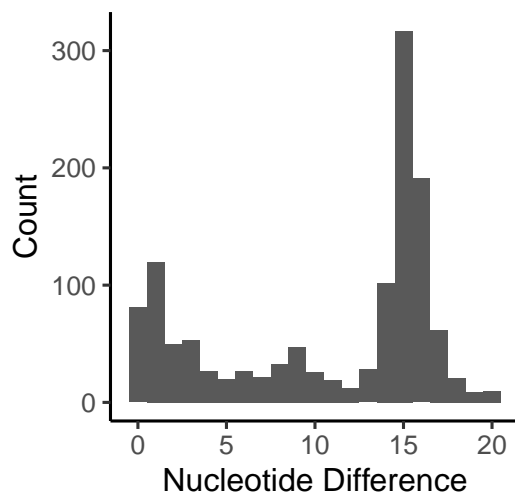
IGHV2-26*01

105 sequences assigned
23 (21.9%) exact matches, in which:
20 unique CDR3
4 unique J



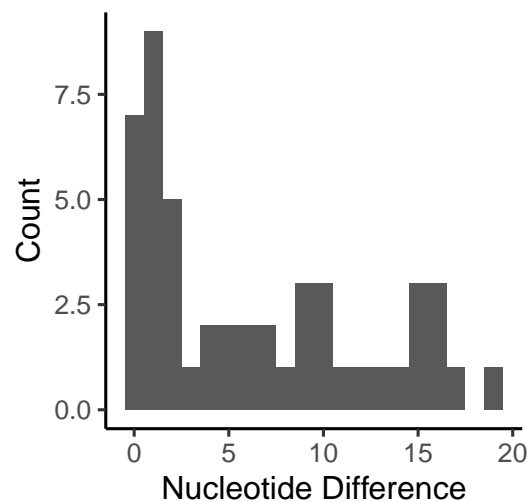
IGHV3-7*03

1311 sequences assigned
81 (6.2%) exact matches, in which:
66 unique CDR3
5 unique J



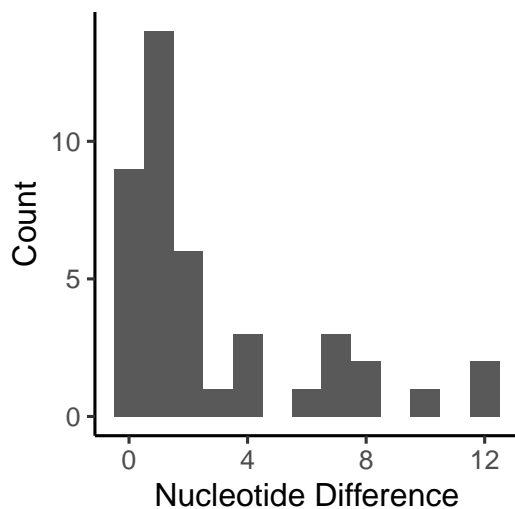
IGHV3-11*06

50 sequences assigned
7 (14%) exact matches, in which:
7 unique CDR3
3 unique J



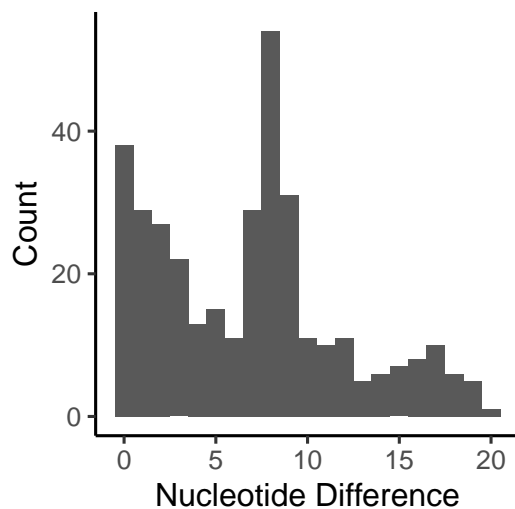
IGHV2-70*01

42 sequences assigned
9 (21.4%) exact matches, in which:
8 unique CDR3
4 unique J



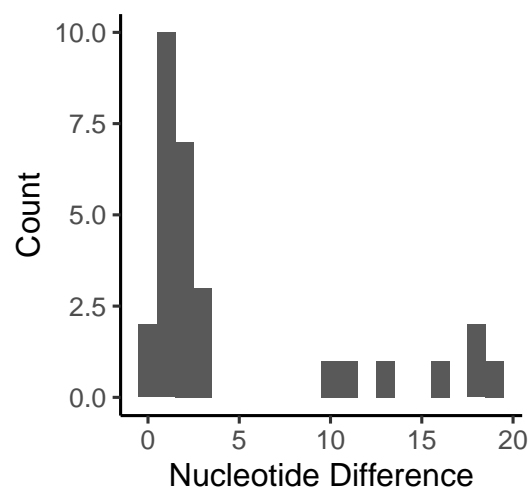
IGHV3-9*01

400 sequences assigned
38 (9.5%) exact matches, in which:
37 unique CDR3
5 unique J



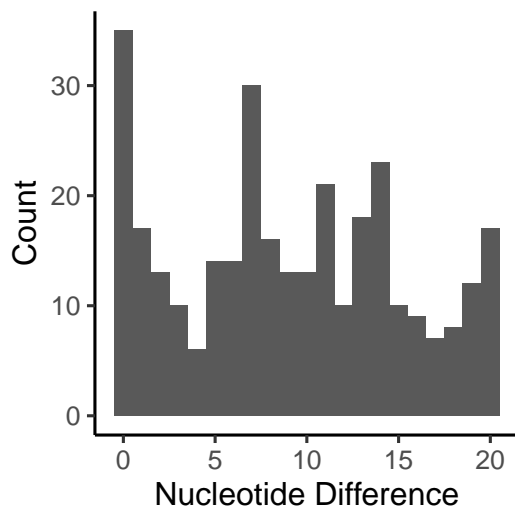
IGHV3-13*01

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



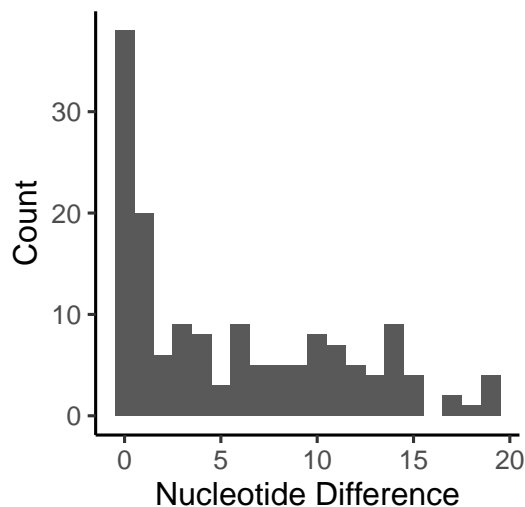
IGHV3-7*01

389 sequences assigned
35 (9%) exact matches, in which:
35 unique CDR3
4 unique J



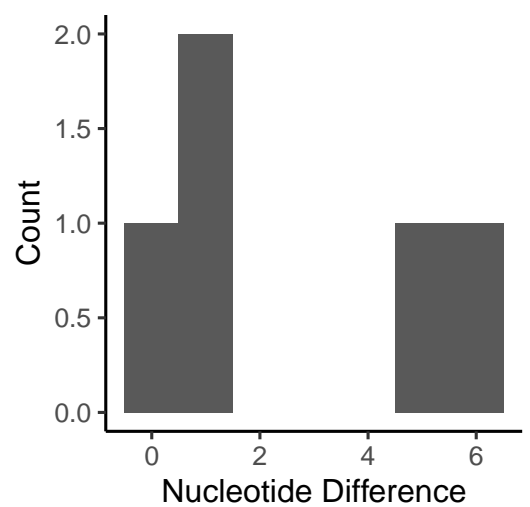
IGHV3-11*01

168 sequences assigned
38 (22.6%) exact matches, in which:
37 unique CDR3
5 unique J



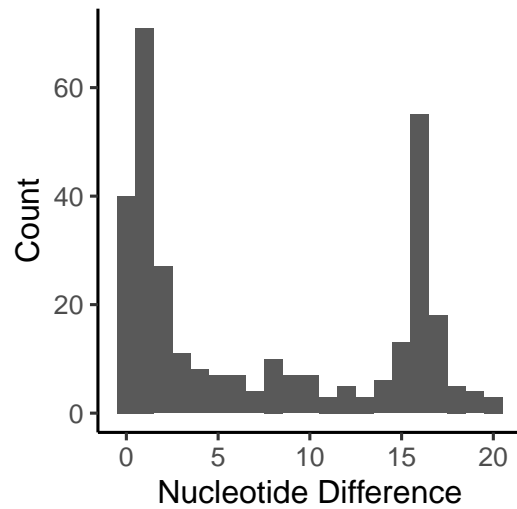
IGHV3-13*05

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



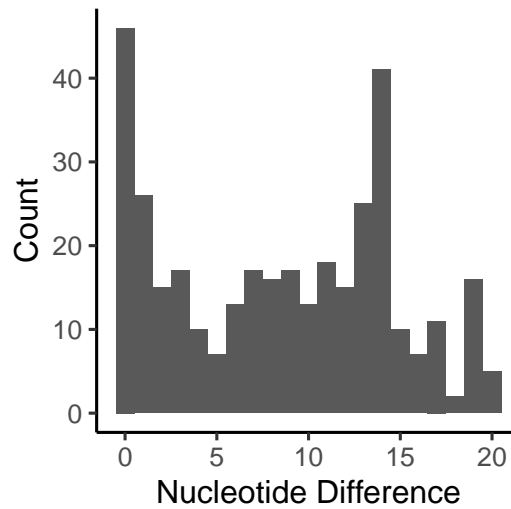
IGHV3-15*01

847 sequences assigned
40 (4.7%) exact matches, in which:
36 unique CDR3
5 unique J



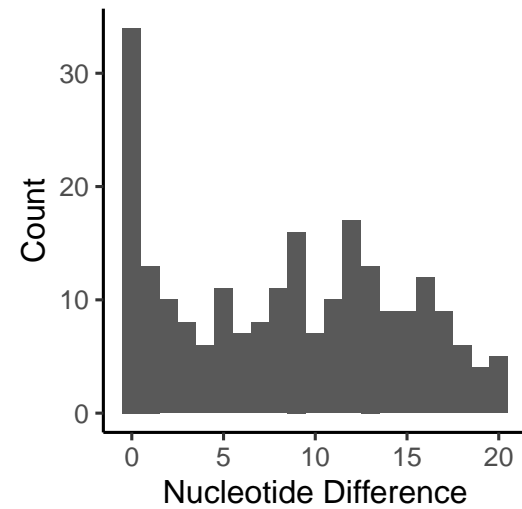
IGHV3-23*04

659 sequences assigned
46 (7%) exact matches, in which:
44 unique CDR3
5 unique J



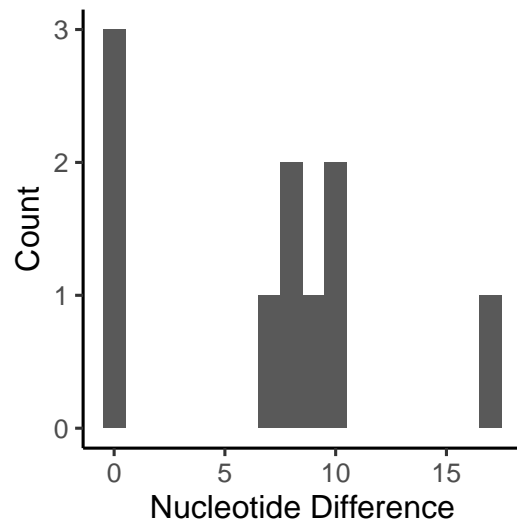
IGHV3-48*01

254 sequences assigned
34 (13.4%) exact matches, in which:
33 unique CDR3
4 unique J



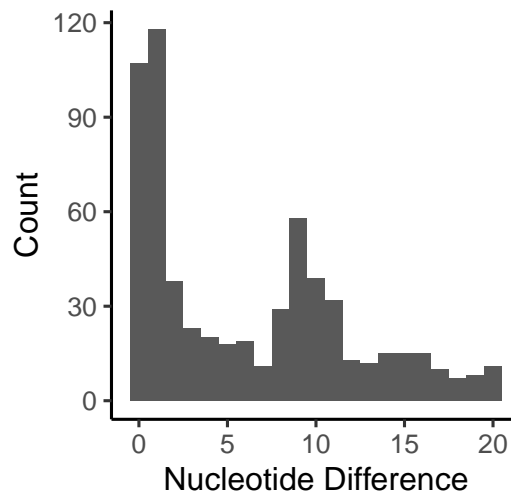
IGHV3-20*01

11 sequences assigned
3 (27.3%) exact matches, in which:
3 unique CDR3
2 unique J



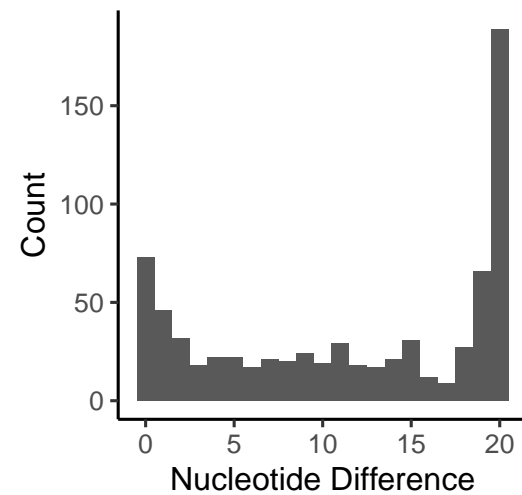
IGHV3-33*01

656 sequences assigned
107 (16.3%) exact matches, in which:
92 unique CDR3
5 unique J



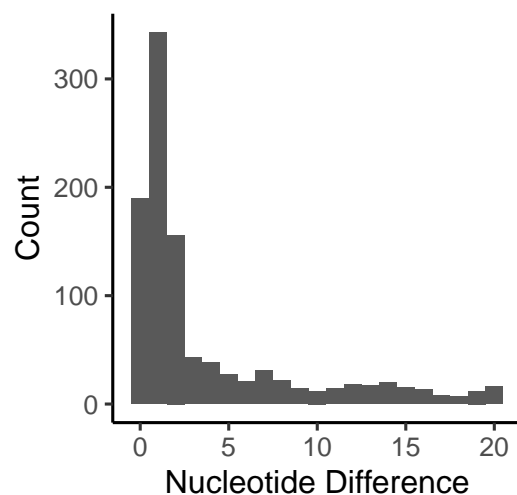
IGHV3-48*03

1013 sequences assigned
73 (7.2%) exact matches, in which:
73 unique CDR3
6 unique J



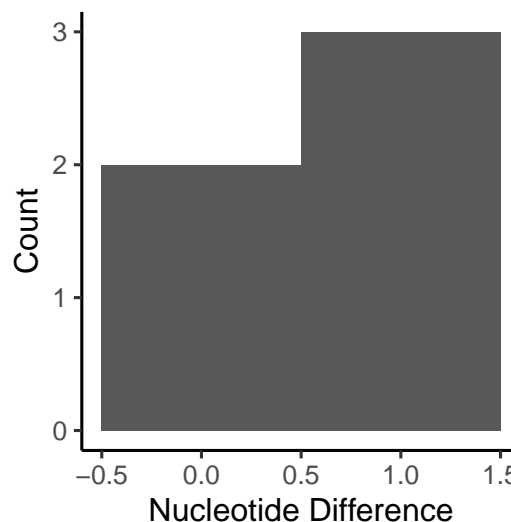
IGHV3-21*01

1380 sequences assigned
190 (13.8%) exact matches, in which:
129 unique CDR3
6 unique J



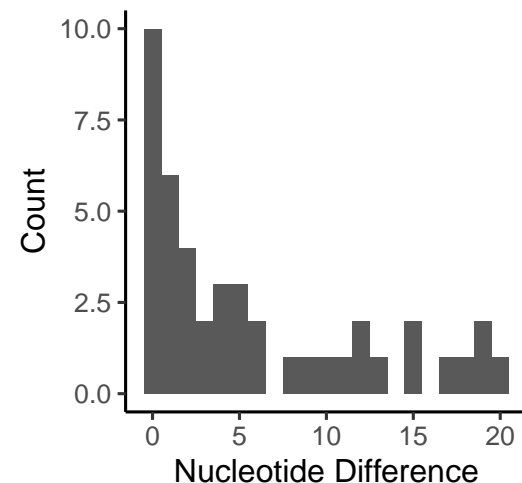
IGHV3-43*01

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
1 unique J



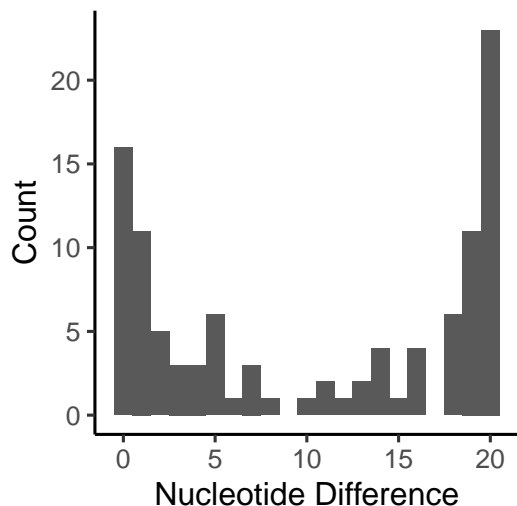
IGHV3-49*03

44 sequences assigned
10 (22.7%) exact matches, in which:
10 unique CDR3
4 unique J



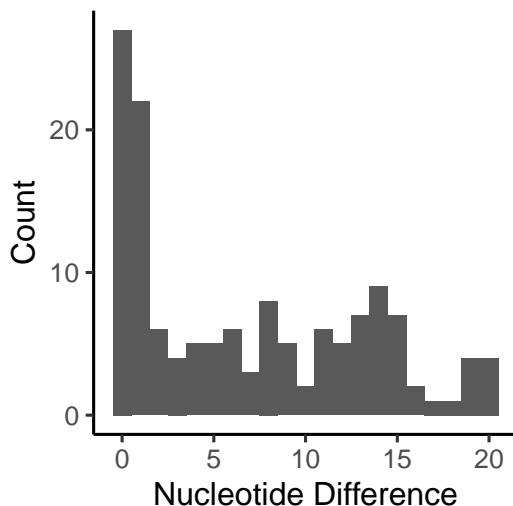
IGHV3-49*04

148 sequences assigned
16 (10.8%) exact matches, in which:
16 unique CDR3
2 unique J



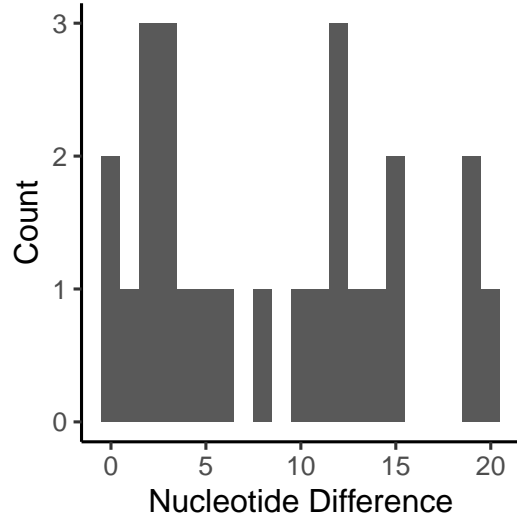
IGHV3-66*02

185 sequences assigned
27 (14.6%) exact matches, in which:
25 unique CDR3
4 unique J



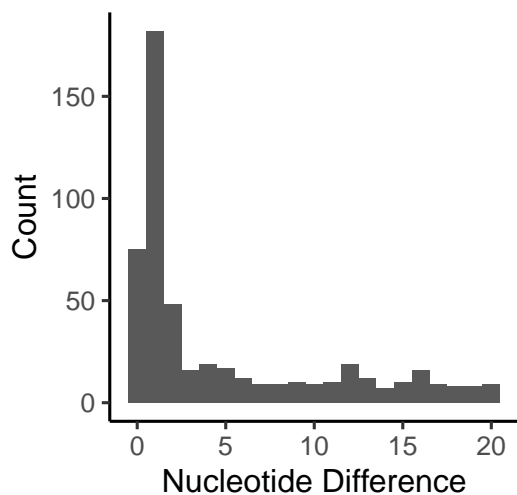
IGHV3-73*02

28 sequences assigned
2 (7.1%) exact matches, in which:
2 unique CDR3
1 unique J



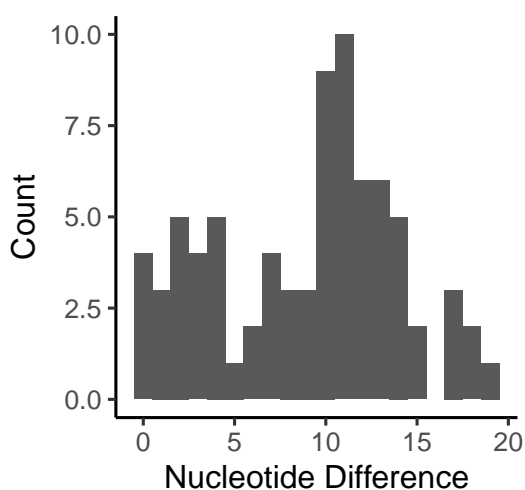
IGHV3-53*02

568 sequences assigned
75 (13.2%) exact matches, in which:
56 unique CDR3
4 unique J



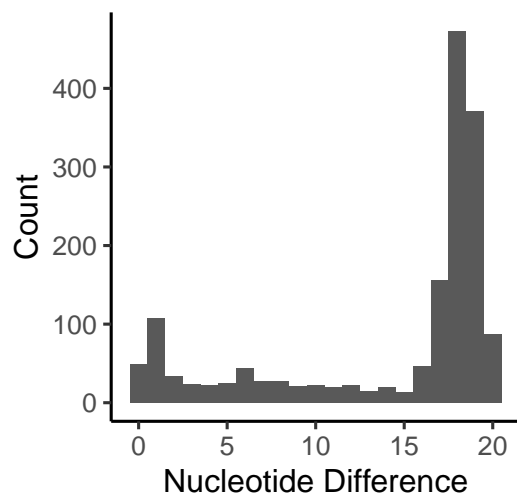
IGHV3-72*01

91 sequences assigned
4 (4.4%) exact matches, in which:
4 unique CDR3
3 unique J



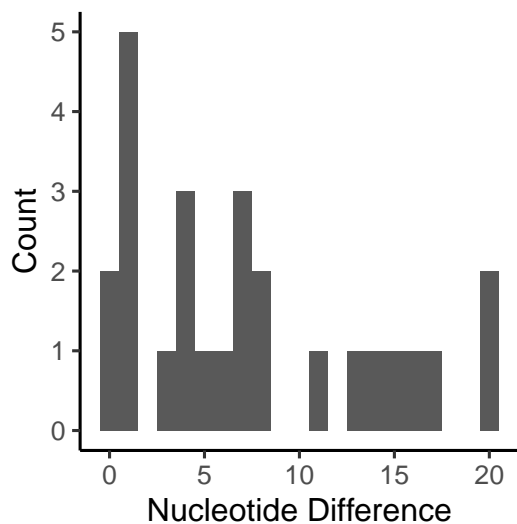
IGHV3-74*01

1874 sequences assigned
49 (2.6%) exact matches, in which:
39 unique CDR3
5 unique J



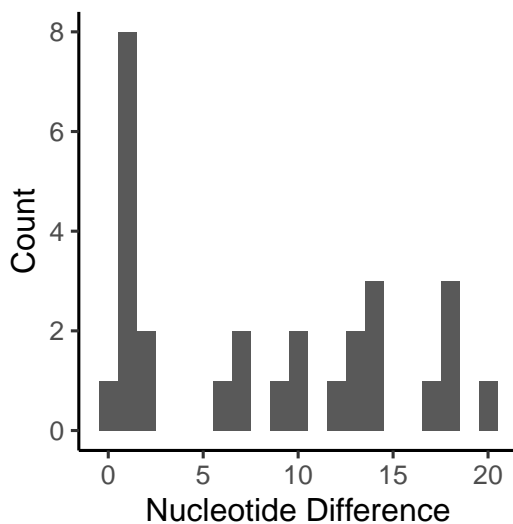
IGHV3-64*01

32 sequences assigned
2 (6.2%) exact matches, in which:
2 unique CDR3
2 unique J



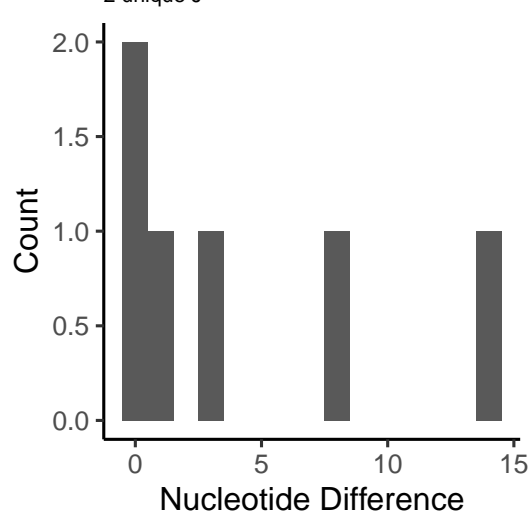
IGHV3-73*01

36 sequences assigned
1 (2.8%) exact matches, in which:
1 unique CDR3
1 unique J



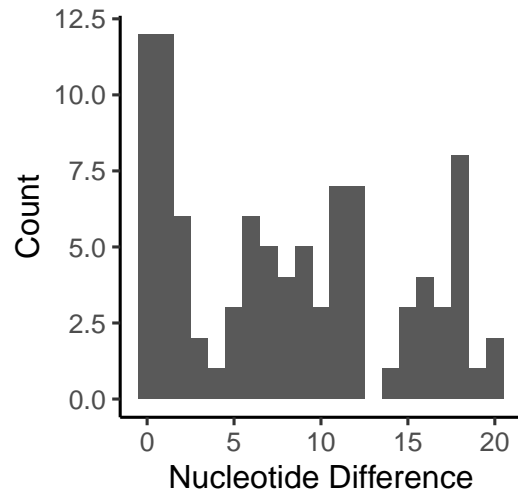
IGHV3-43D*04

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
2 unique J



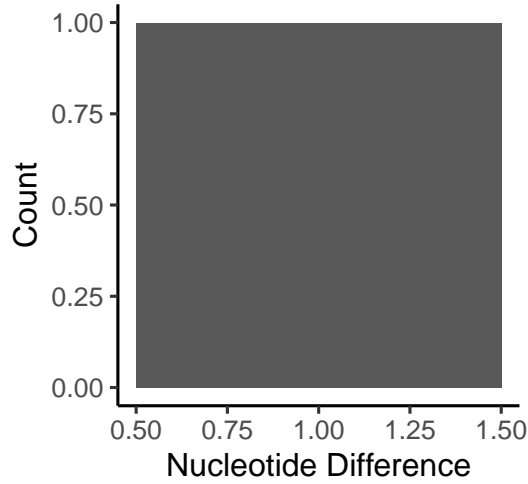
IGHV3-64D*06

114 sequences assigned
12 (10.5%) exact matches, in which:
12 unique CDR3
2 unique J



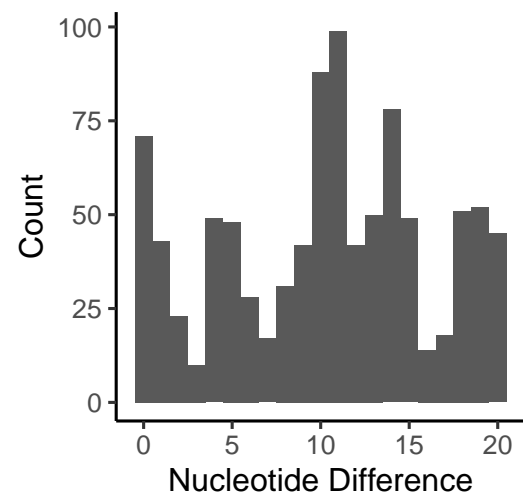
IGHV4-28*07

6 sequences assigned
No exact matches.



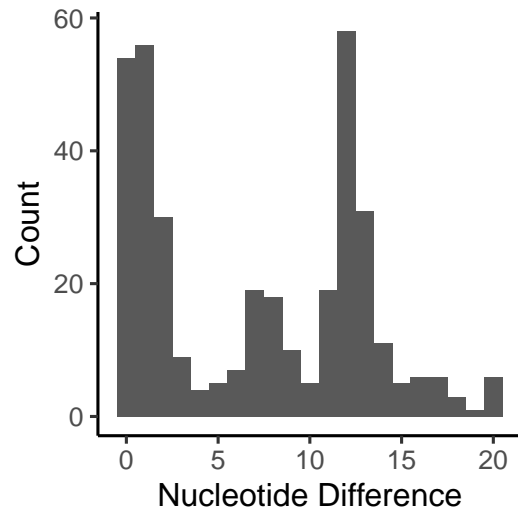
IGHV4-34*01

1320 sequences assigned
71 (5.4%) exact matches, in which:
71 unique CDR3
5 unique J



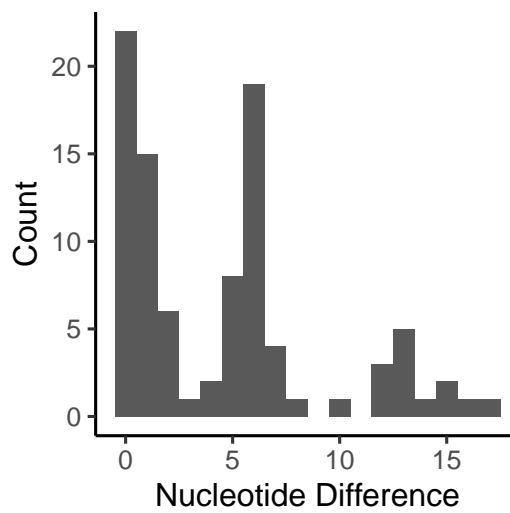
IGHV4-4*02

493 sequences assigned
54 (11%) exact matches, in which:
48 unique CDR3
4 unique J



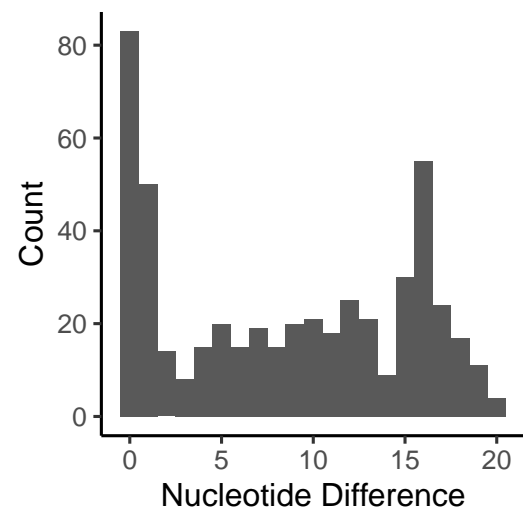
IGHV4-30-2*01

93 sequences assigned
22 (23.7%) exact matches, in which:
21 unique CDR3
4 unique J



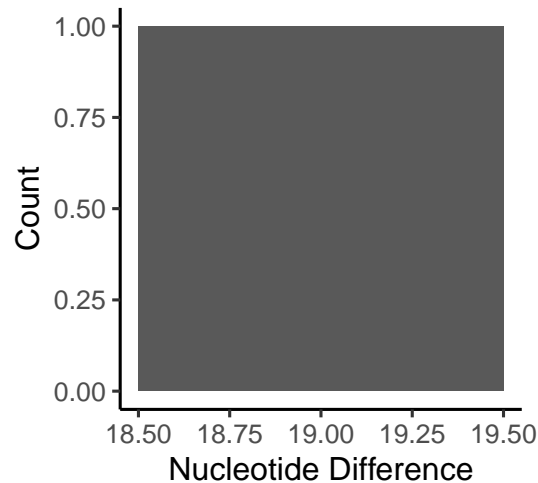
IGHV4-38-2*02_A70G

536 sequences assigned
83 (15.5%) exact matches, in which:
72 unique CDR3
5 unique J



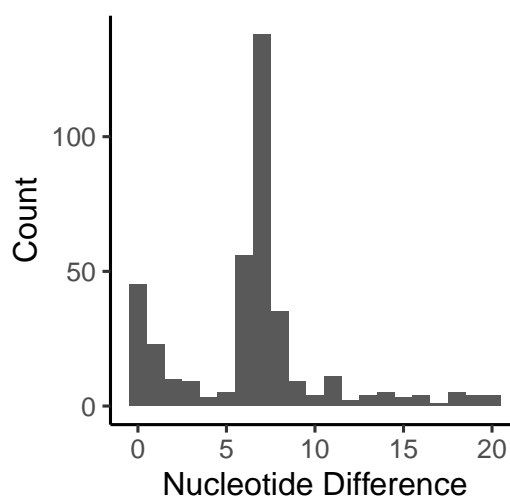
IGHV4-28*03

1 sequences assigned
No exact matches.



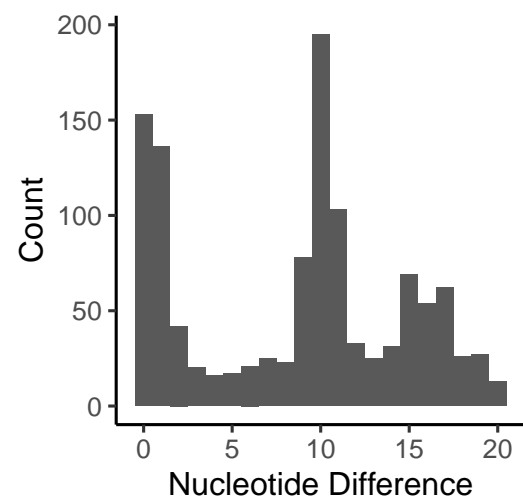
IGHV4-31*03

863 sequences assigned
45 (5.2%) exact matches, in which:
42 unique CDR3
5 unique J



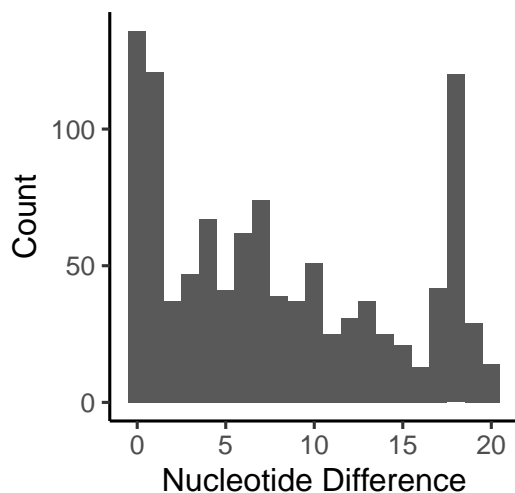
IGHV4-39*01

1296 sequences assigned
153 (11.8%) exact matches, in which:
139 unique CDR3
6 unique J



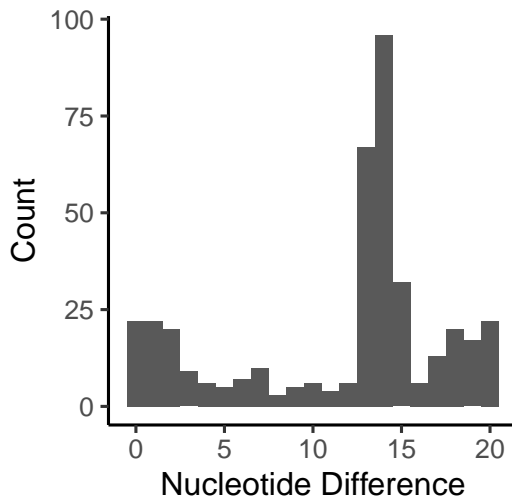
IGHV4–59*01

1215 sequences assigned
136 (11.2%) exact matches, in which:
118 unique CDR3
6 unique J



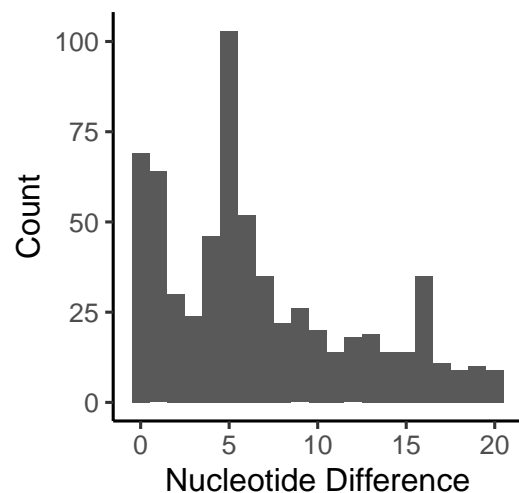
IGHV5–10–1*03

451 sequences assigned
22 (4.9%) exact matches, in which:
22 unique CDR3
3 unique J



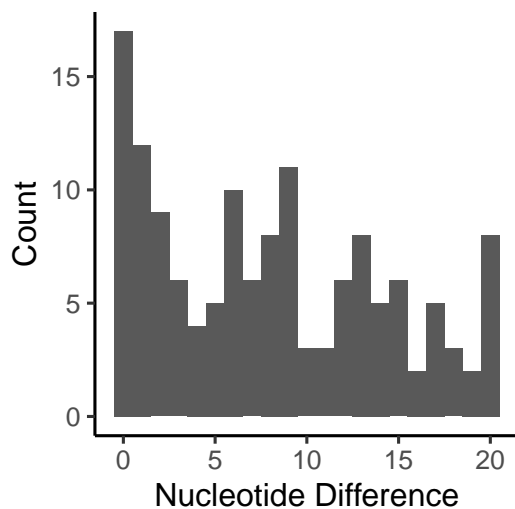
IGHV6–1*01

665 sequences assigned
69 (10.4%) exact matches, in which:
58 unique CDR3
6 unique J



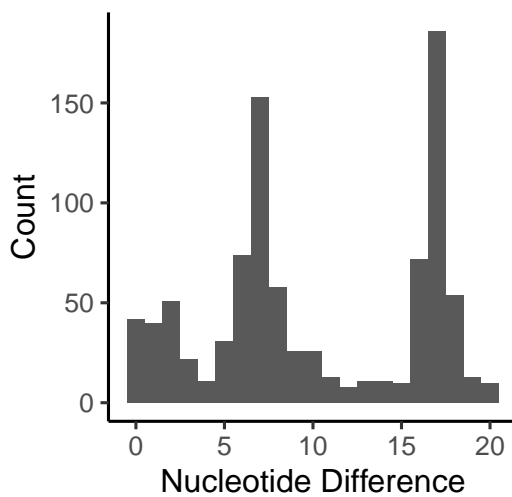
IGHV4–61*01

289 sequences assigned
17 (5.9%) exact matches, in which:
16 unique CDR3
4 unique J



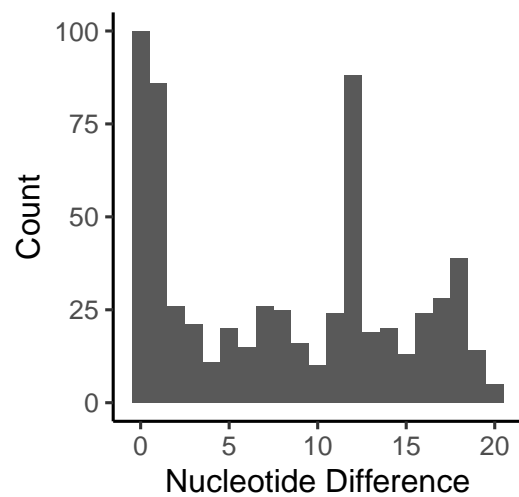
IGHV5–51*01

992 sequences assigned
42 (4.2%) exact matches, in which:
40 unique CDR3
5 unique J



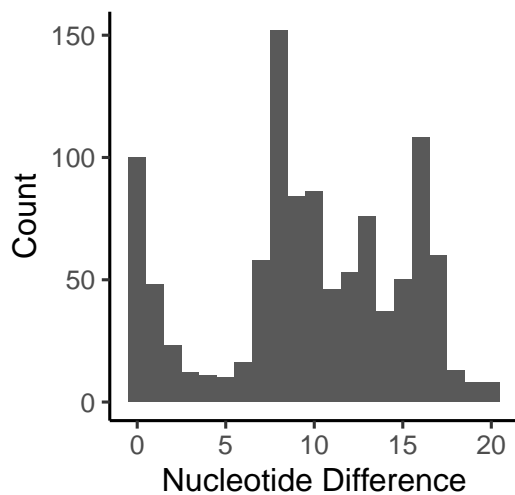
IGHV7–4–1*02

660 sequences assigned
100 (15.2%) exact matches, in which:
87 unique CDR3
6 unique J



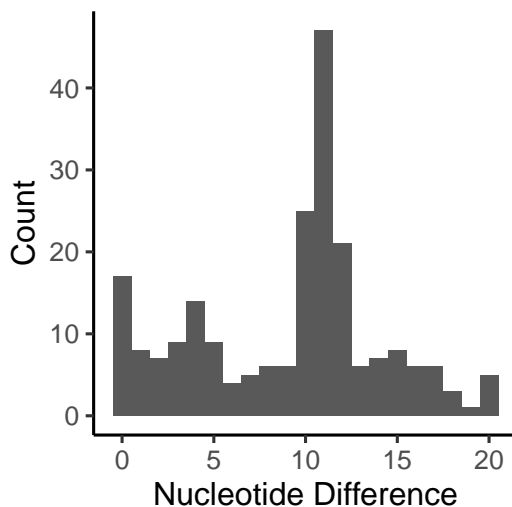
IGHV4–61*02

1393 sequences assigned
100 (7.2%) exact matches, in which:
89 unique CDR3
6 unique J



IGHV5–51*03

282 sequences assigned
17 (6%) exact matches, in which:
17 unique CDR3
4 unique J



IGHV4-38-2*02_A70G

