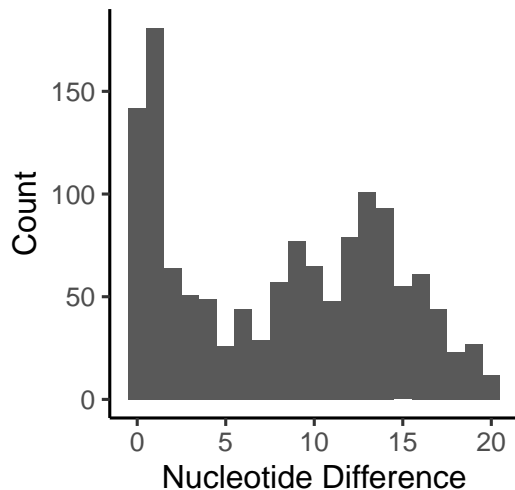


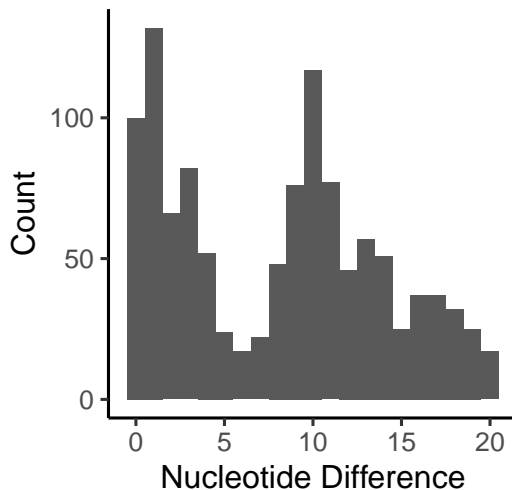
IGHV1-2*02

1755 sequences assigned
142 (8.1%) exact matches, in which:
112 unique CDR3
6 unique J



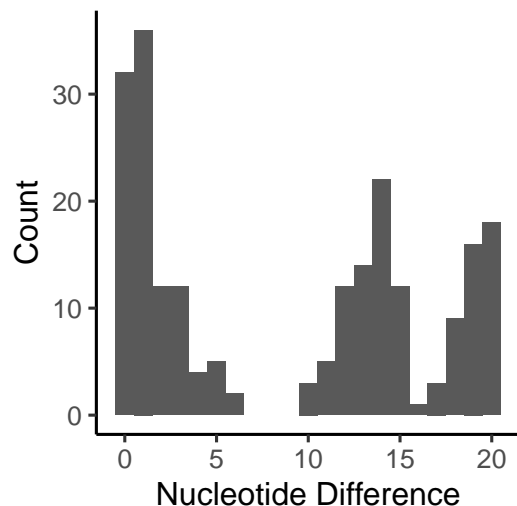
IGHV1-18*01

1434 sequences assigned
100 (7%) exact matches, in which:
80 unique CDR3
5 unique J



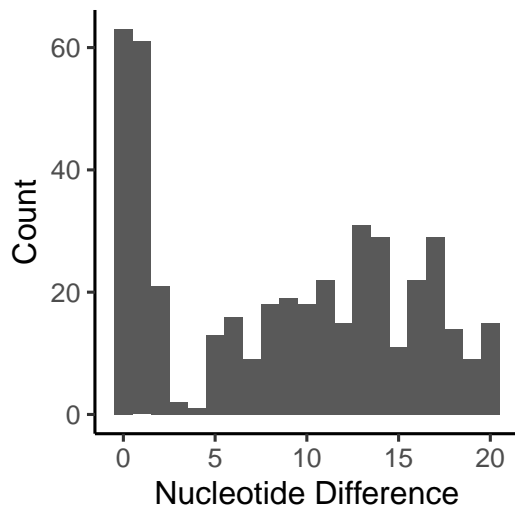
IGHV1-46*01

293 sequences assigned
32 (10.9%) exact matches, in which:
23 unique CDR3
5 unique J



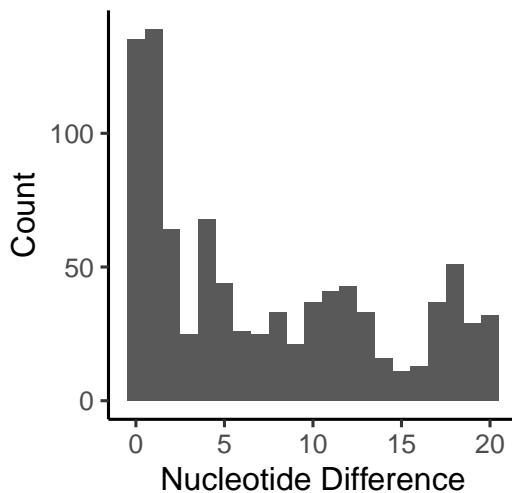
IGHV1-3*01

679 sequences assigned
63 (9.3%) exact matches, in which:
50 unique CDR3
6 unique J



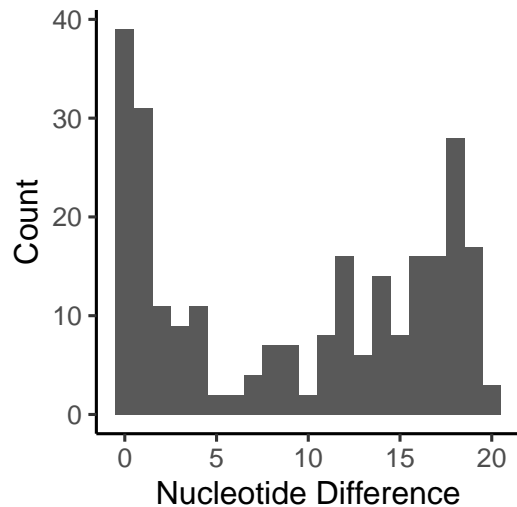
IGHV1-18*04

1183 sequences assigned
135 (11.4%) exact matches, in which:
101 unique CDR3
6 unique J



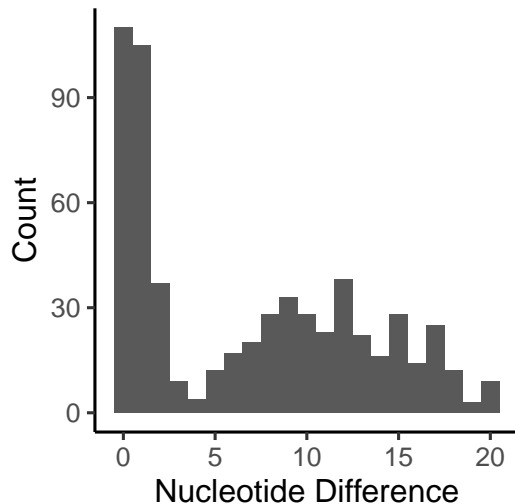
IGHV1-46*03

370 sequences assigned
39 (10.5%) exact matches, in which:
27 unique CDR3
5 unique J



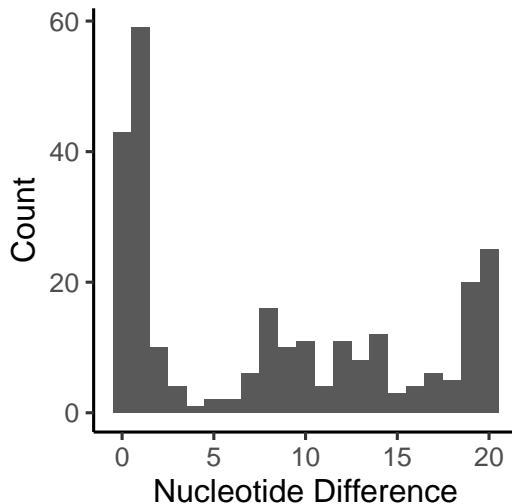
IGHV1-8*01

754 sequences assigned
110 (14.6%) exact matches, in which:
80 unique CDR3
6 unique J



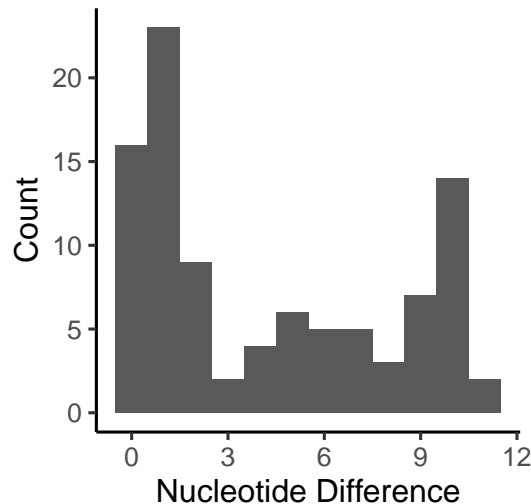
IGHV1-24*01

364 sequences assigned
43 (11.8%) exact matches, in which:
36 unique CDR3
5 unique J



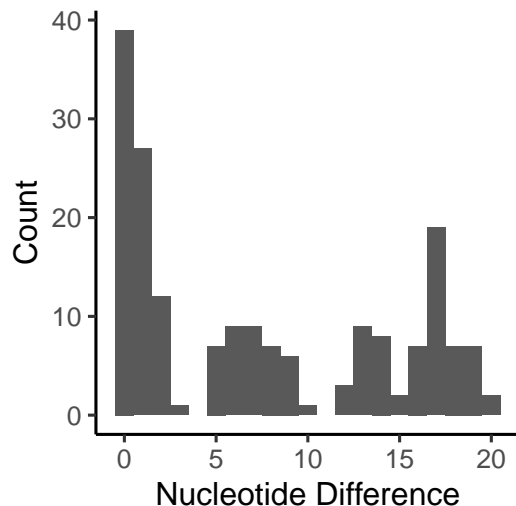
IGHV1-58*02

102 sequences assigned
16 (15.7%) exact matches, in which:
8 unique CDR3
2 unique J



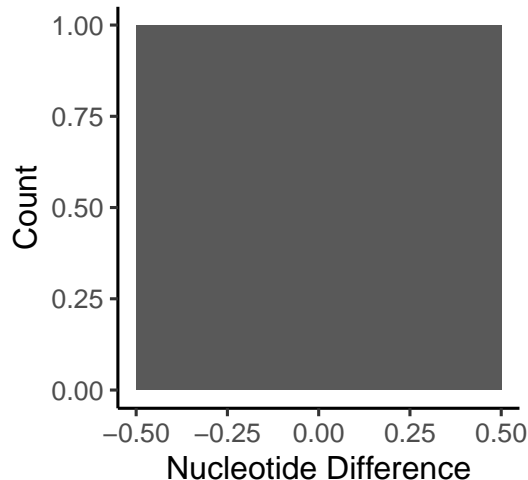
IGHV1-69*02

228 sequences assigned
39 (17.1%) exact matches, in which:
34 unique CDR3
6 unique J



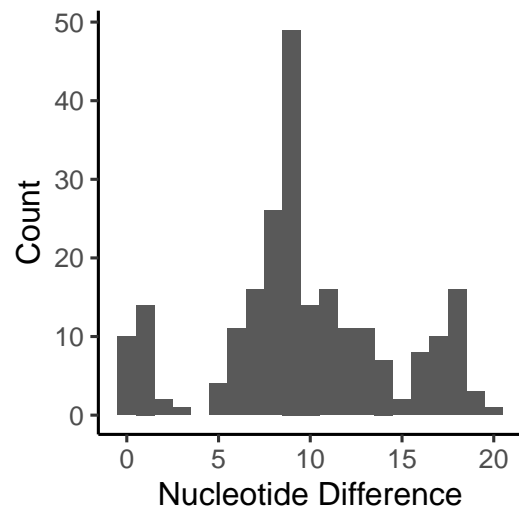
IGHV1-69D*01

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



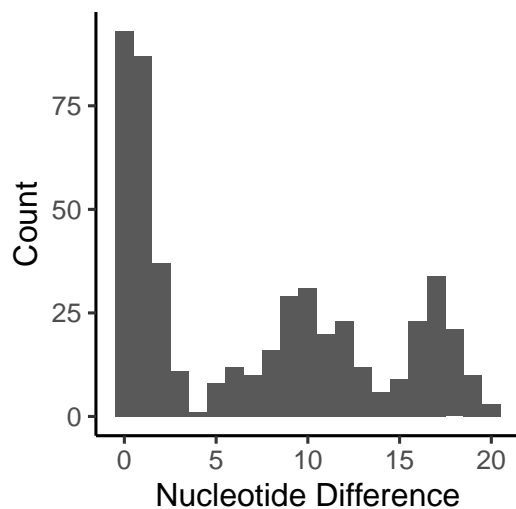
IGHV2-70*15

235 sequences assigned
10 (4.3%) exact matches, in which:
10 unique CDR3
4 unique J



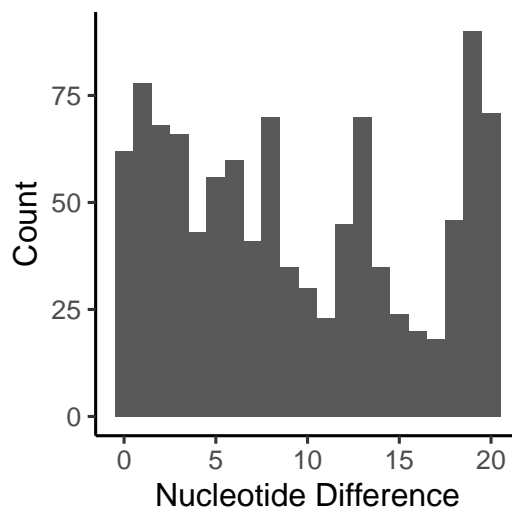
IGHV1-69*04

748 sequences assigned
93 (12.4%) exact matches, in which:
80 unique CDR3
5 unique J



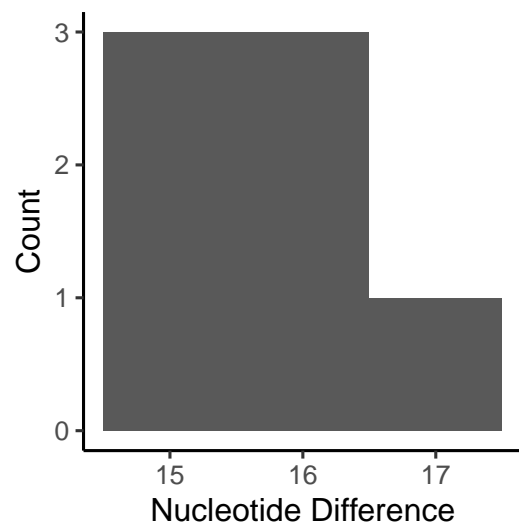
IGHV2-5*02

1189 sequences assigned
62 (5.2%) exact matches, in which:
51 unique CDR3
5 unique J



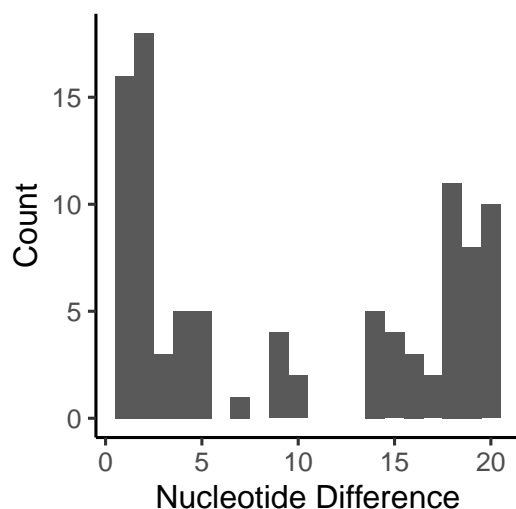
IGHV2-70D*04

7 sequences assigned
No exact matches.



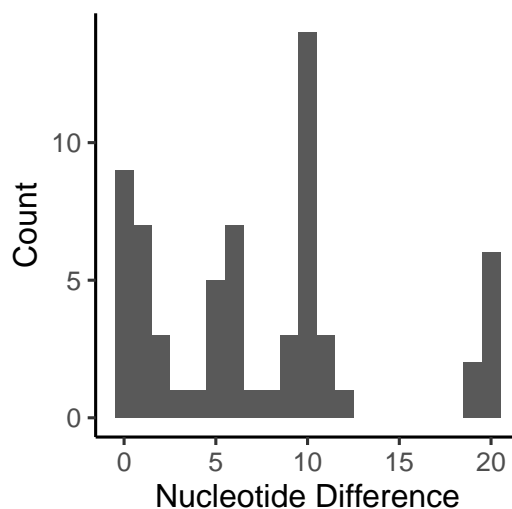
IGHV1-69*08

226 sequences assigned
No exact matches.



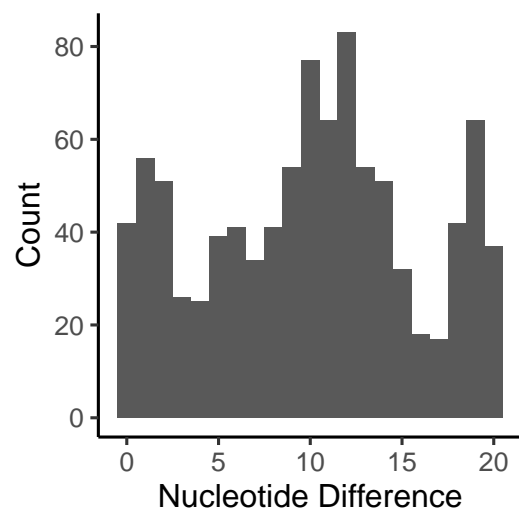
IGHV2-26*01

67 sequences assigned
9 (13.4%) exact matches, in which:
7 unique CDR3
3 unique J



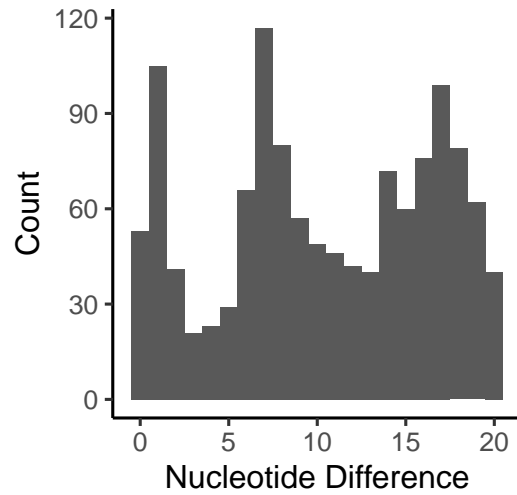
IGHV3-7*01

1185 sequences assigned
42 (3.5%) exact matches, in which:
37 unique CDR3
6 unique J



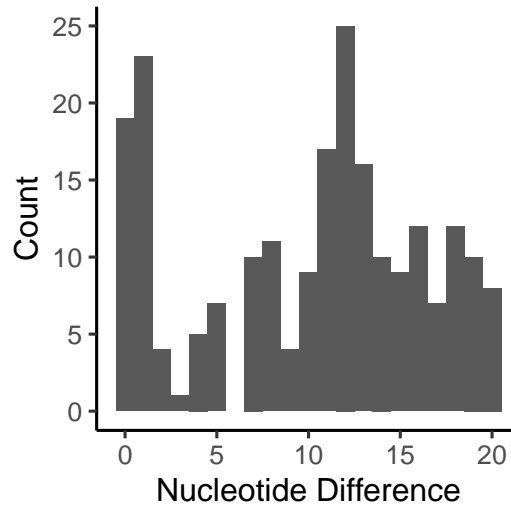
IGHV3-7*03

1614 sequences assigned
53 (3.3%) exact matches, in which:
40 unique CDR3
5 unique J



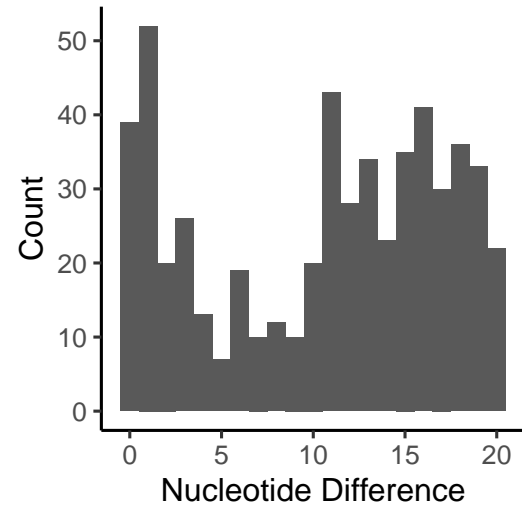
IGHV3-11*06

271 sequences assigned
19 (7%) exact matches, in which:
18 unique CDR3
5 unique J



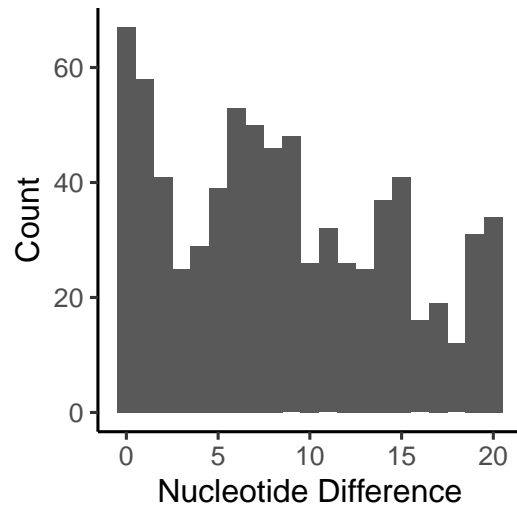
IGHV3-15*01

767 sequences assigned
39 (5.1%) exact matches, in which:
37 unique CDR3
4 unique J



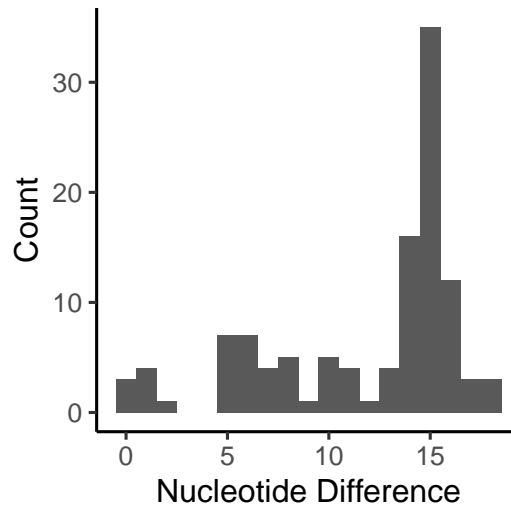
IGHV3-9*01

865 sequences assigned
67 (7.7%) exact matches, in which:
60 unique CDR3
5 unique J



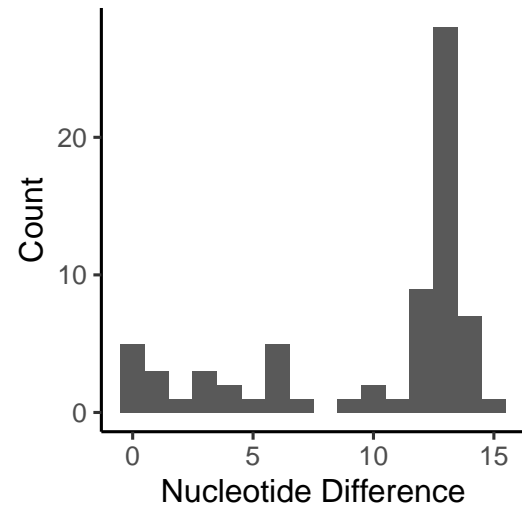
IGHV3-13*01

132 sequences assigned
3 (2.3%) exact matches, in which:
3 unique CDR3
3 unique J



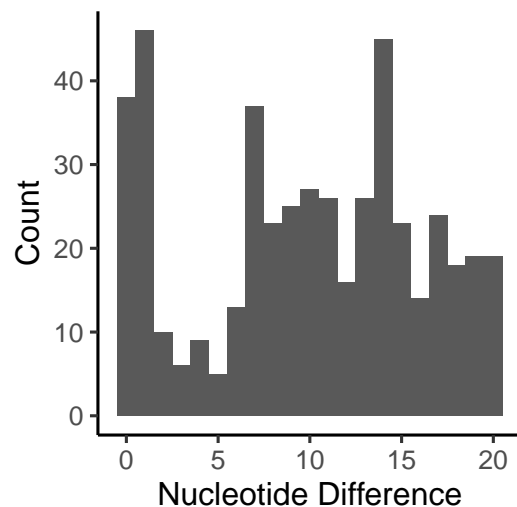
IGHV3-20*01

72 sequences assigned
5 (6.9%) exact matches, in which:
5 unique CDR3
3 unique J



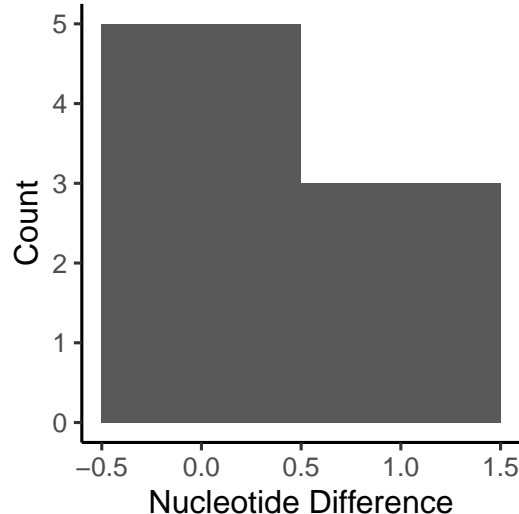
IGHV3-11*01

670 sequences assigned
38 (5.7%) exact matches, in which:
33 unique CDR3
4 unique J



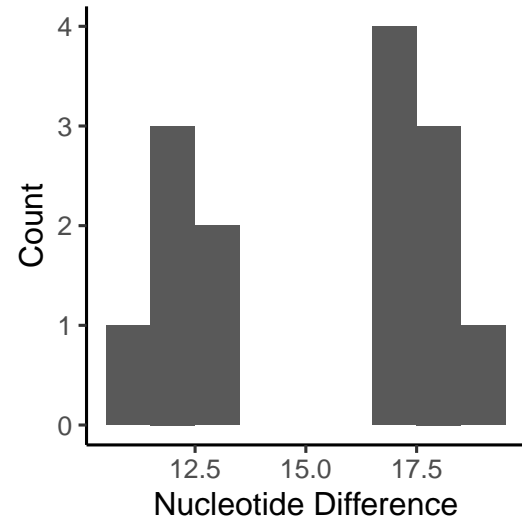
IGHV3-13*05

8 sequences assigned
5 (62.5%) exact matches, in which:
2 unique CDR3
2 unique J



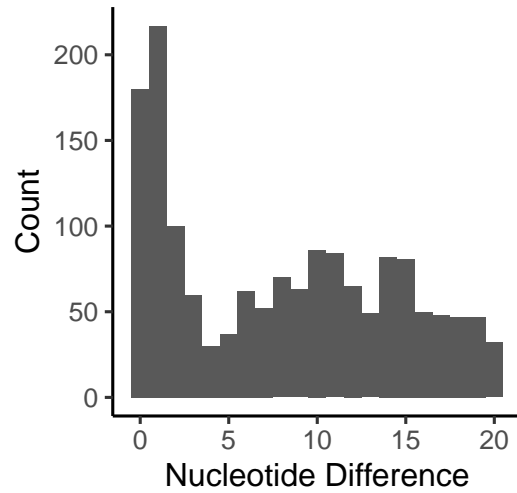
IGHV3-20*04

17 sequences assigned
No exact matches.



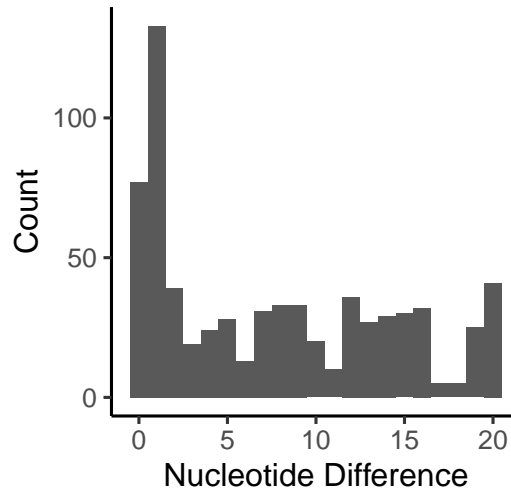
IGHV3-21*01

1987 sequences assigned
180 (9.1%) exact matches, in which:
143 unique CDR3
6 unique J



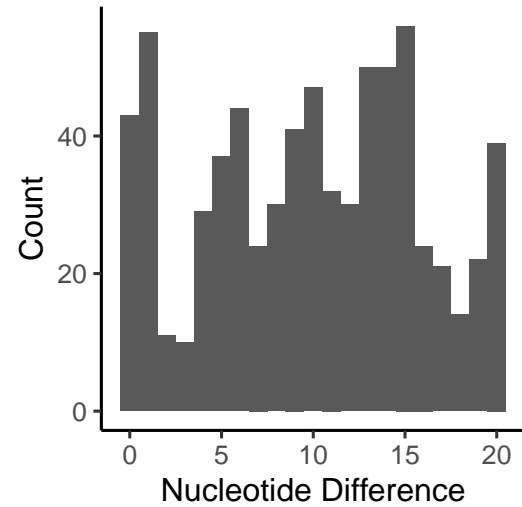
IGHV3-33*01

854 sequences assigned
77 (9%) exact matches, in which:
53 unique CDR3
4 unique J



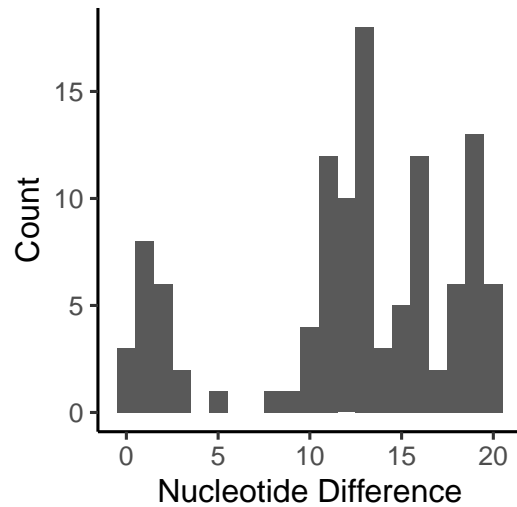
IGHV3-48*01

893 sequences assigned
43 (4.8%) exact matches, in which:
33 unique CDR3
4 unique J



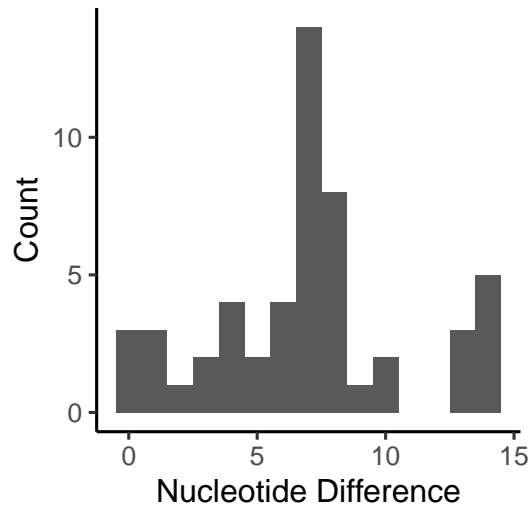
IGHV3-21*02

231 sequences assigned
3 (1.3%) exact matches, in which:
3 unique CDR3
1 unique J



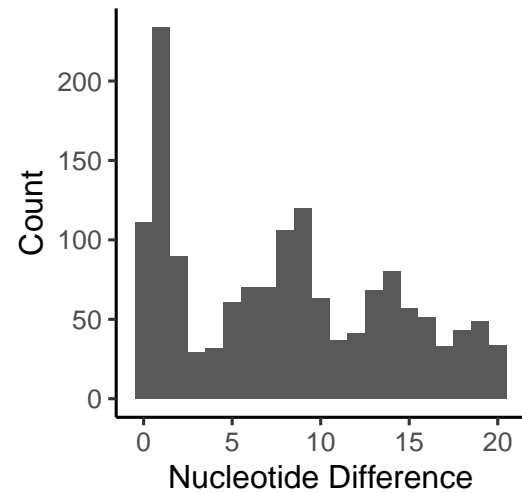
IGHV3-43*01

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



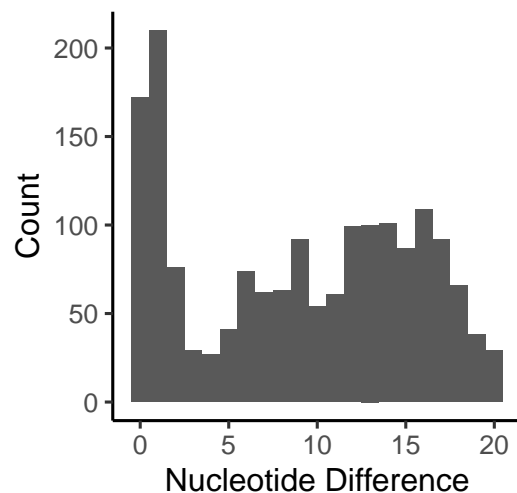
IGHV3-48*03

1715 sequences assigned
111 (6.5%) exact matches, in which:
81 unique CDR3
4 unique J



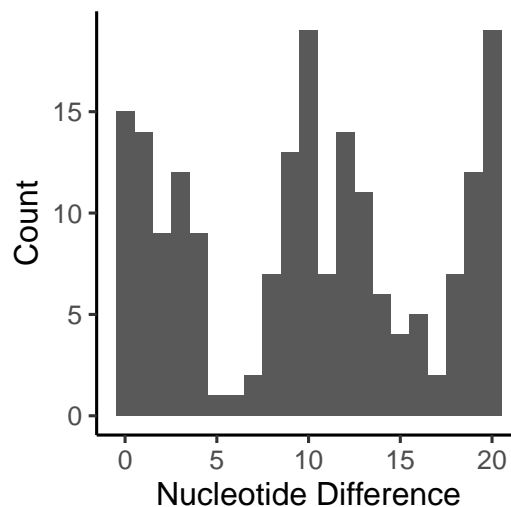
IGHV3-30-3*01

2161 sequences assigned
172 (8%) exact matches, in which:
146 unique CDR3
6 unique J



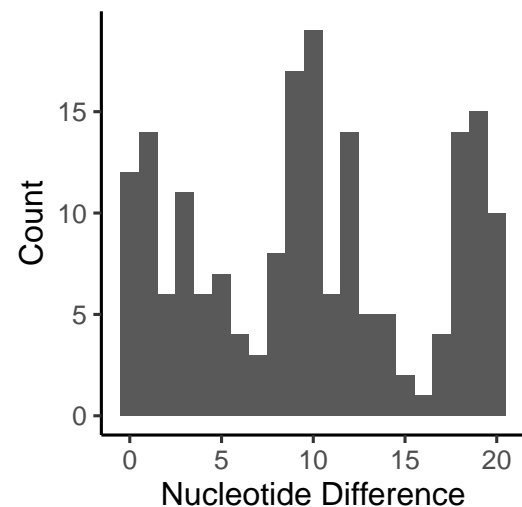
IGHV3-43*02

232 sequences assigned
15 (6.5%) exact matches, in which:
14 unique CDR3
3 unique J



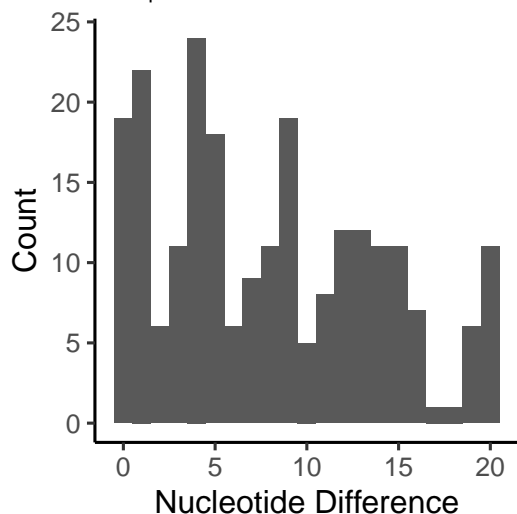
IGHV3-49*03

345 sequences assigned
12 (3.5%) exact matches, in which:
12 unique CDR3
3 unique J



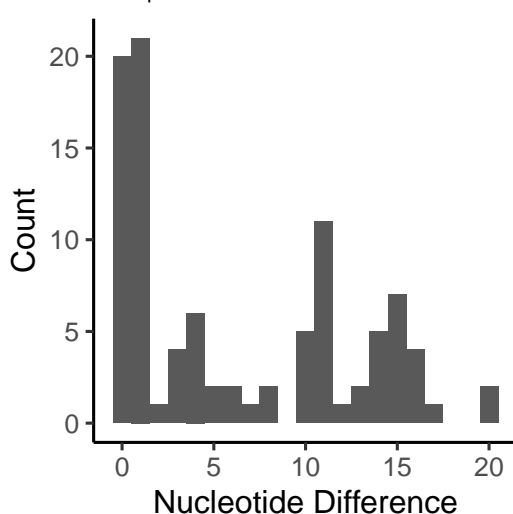
IGHV3-49*04

306 sequences assigned
19 (6.2%) exact matches, in which:
18 unique CDR3
5 unique J



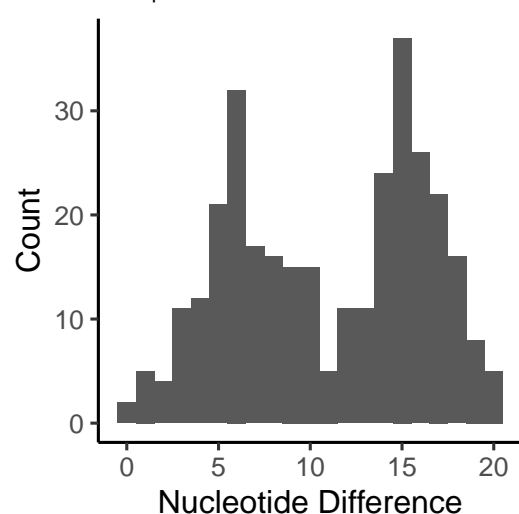
IGHV3-64*01

139 sequences assigned
20 (14.4%) exact matches, in which:
13 unique CDR3
3 unique J



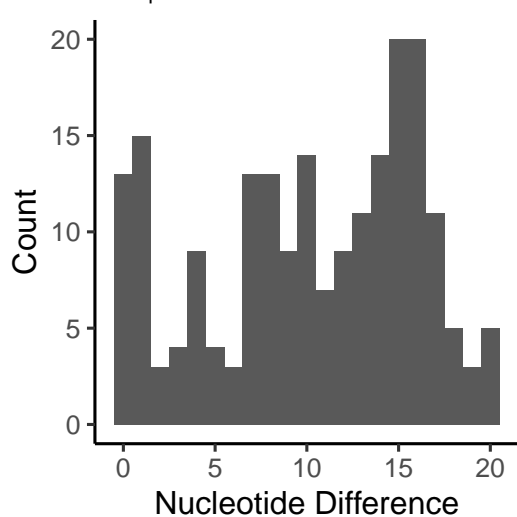
IGHV3-72*01

443 sequences assigned
2 (0.5%) exact matches, in which:
2 unique CDR3
1 unique J



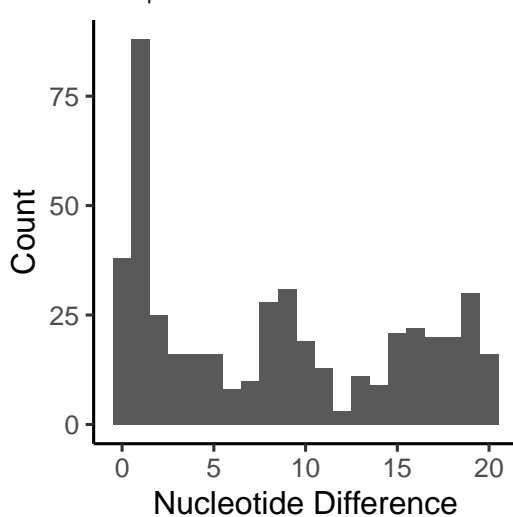
IGHV3-53*02

420 sequences assigned
13 (3.1%) exact matches, in which:
12 unique CDR3
5 unique J



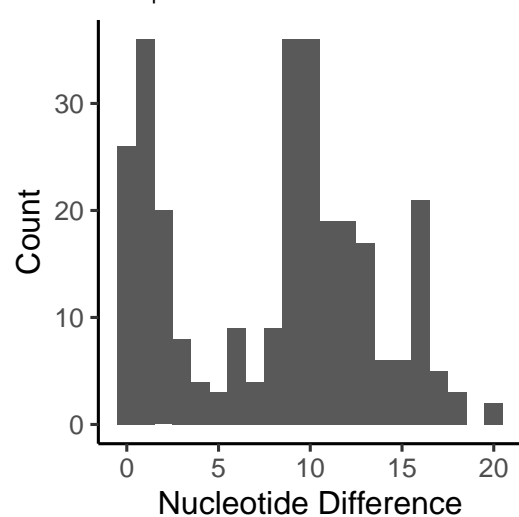
IGHV3-66*01

547 sequences assigned
38 (6.9%) exact matches, in which:
29 unique CDR3
5 unique J



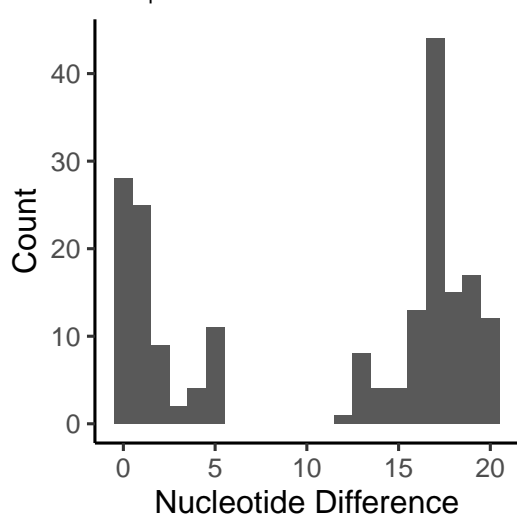
IGHV3-73*01

374 sequences assigned
26 (7%) exact matches, in which:
21 unique CDR3
4 unique J



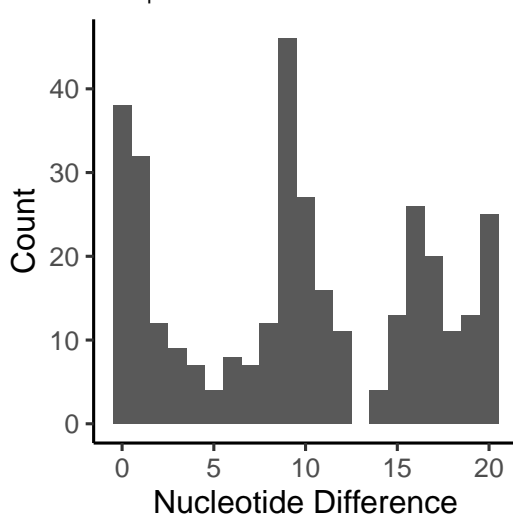
IGHV3-53*04

253 sequences assigned
28 (11.1%) exact matches, in which:
22 unique CDR3
4 unique J



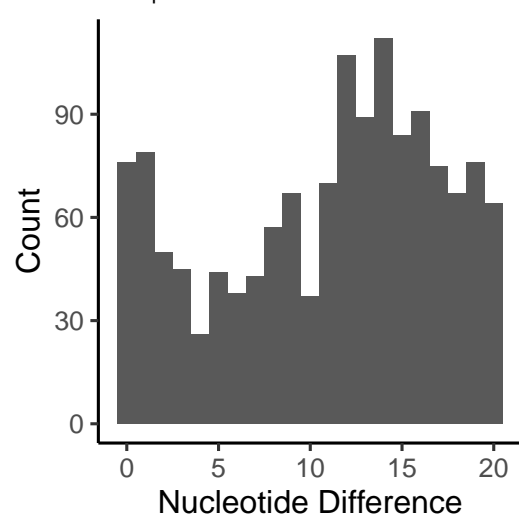
IGHV3-66*02

544 sequences assigned
38 (7%) exact matches, in which:
33 unique CDR3
4 unique J



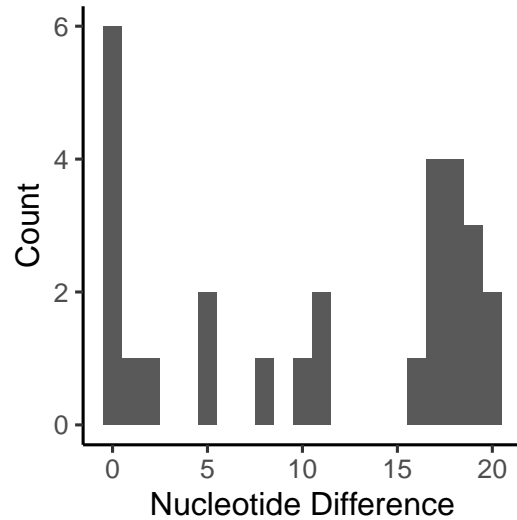
IGHV3-74*01

1882 sequences assigned
76 (4%) exact matches, in which:
64 unique CDR3
4 unique J



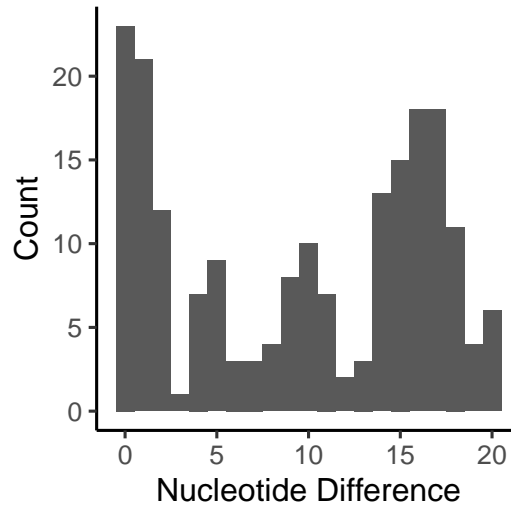
IGHV3-43D*03

30 sequences assigned
6 (20%) exact matches, in which:
6 unique CDR3
3 unique J



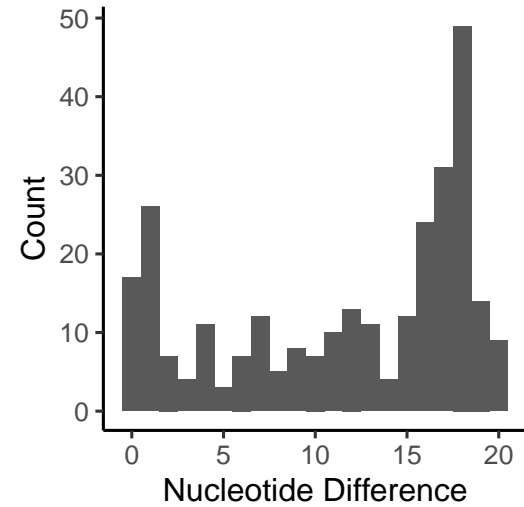
IGHV4-4*07

254 sequences assigned
23 (9.1%) exact matches, in which:
18 unique CDR3
4 unique J



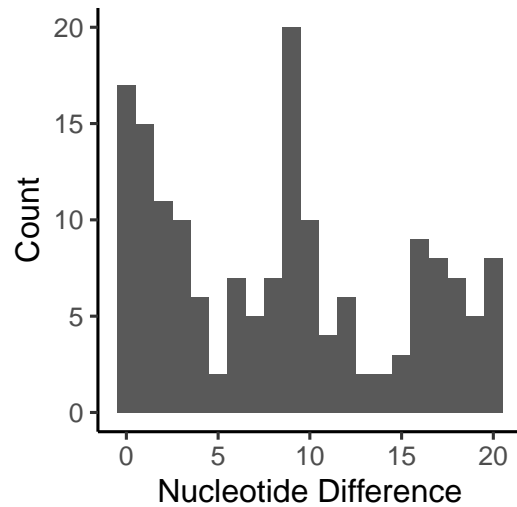
IGHV4-30-2*01

459 sequences assigned
17 (3.7%) exact matches, in which:
16 unique CDR3
5 unique J



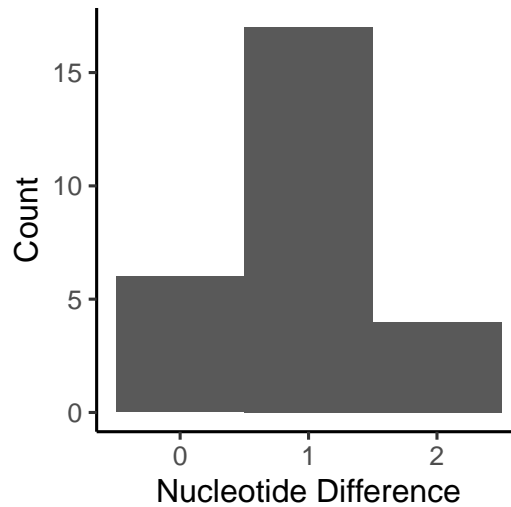
IGHV3-64D*06

245 sequences assigned
17 (6.9%) exact matches, in which:
17 unique CDR3
4 unique J



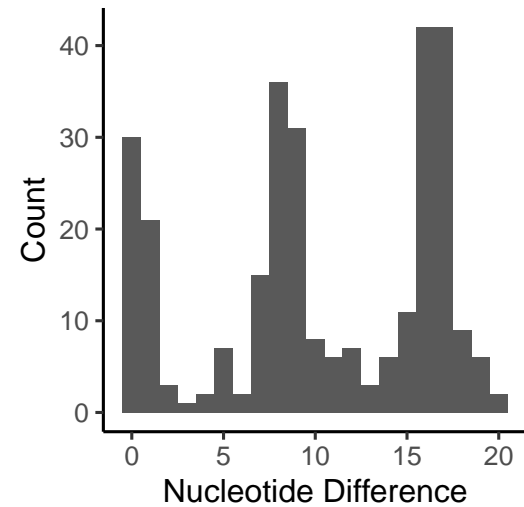
IGHV4-28*01

27 sequences assigned
6 (22.2%) exact matches, in which:
3 unique CDR3
1 unique J



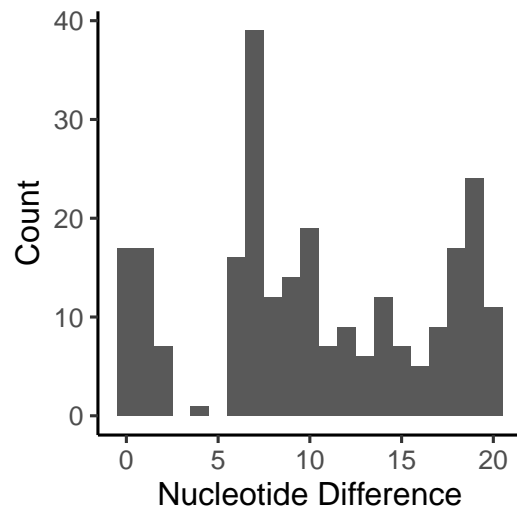
IGHV4-31*03

579 sequences assigned
30 (5.2%) exact matches, in which:
24 unique CDR3
6 unique J



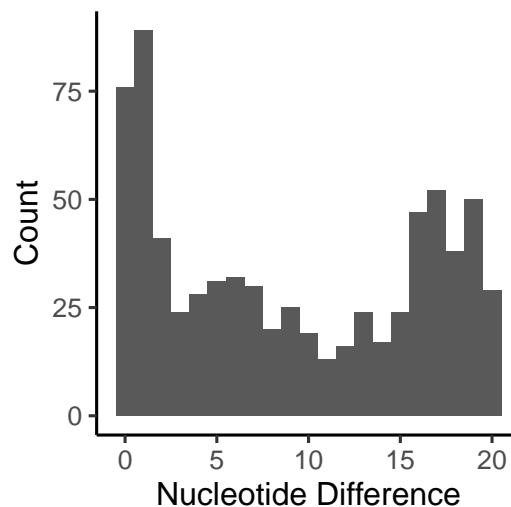
IGHV4-4*02

392 sequences assigned
17 (4.3%) exact matches, in which:
16 unique CDR3
4 unique J



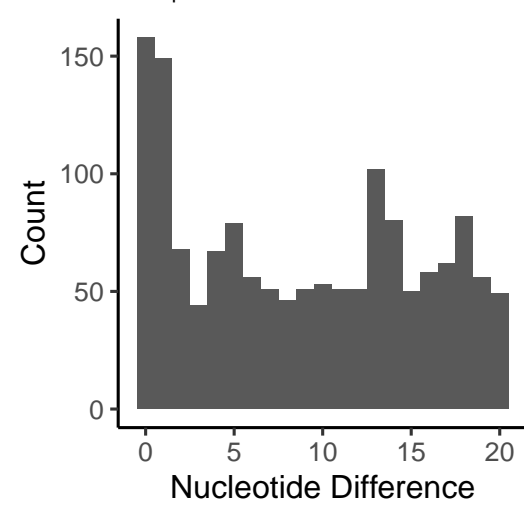
IGHV4-30-4*01

1064 sequences assigned
76 (7.1%) exact matches, in which:
62 unique CDR3
4 unique J



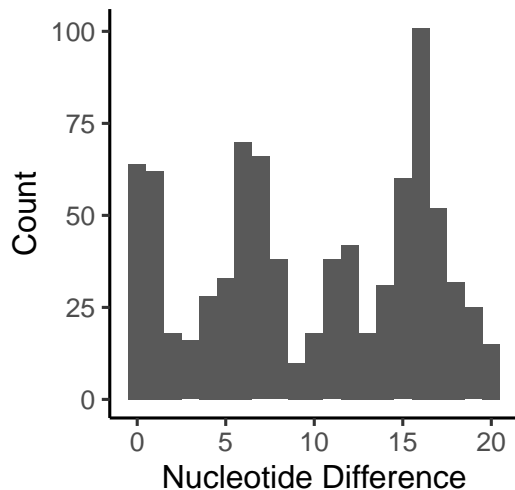
IGHV4-34*01

2022 sequences assigned
158 (7.8%) exact matches, in which:
140 unique CDR3
6 unique J



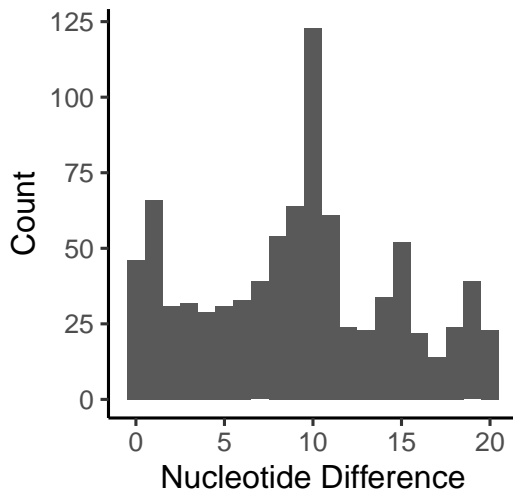
IGHV4-38-2*02

1260 sequences assigned
64 (5.1%) exact matches, in which:
55 unique CDR3
6 unique J



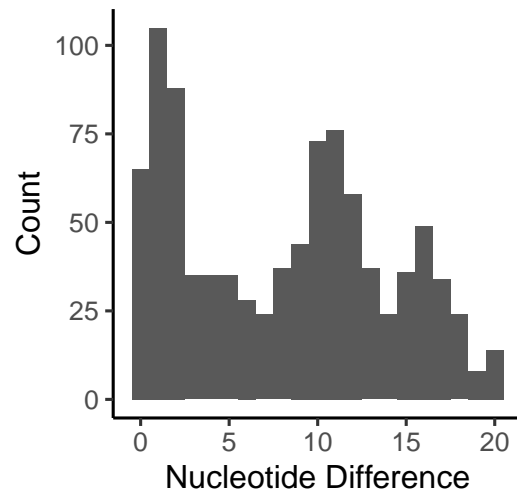
IGHV4-59*08

1066 sequences assigned
46 (4.3%) exact matches, in which:
35 unique CDR3
5 unique J



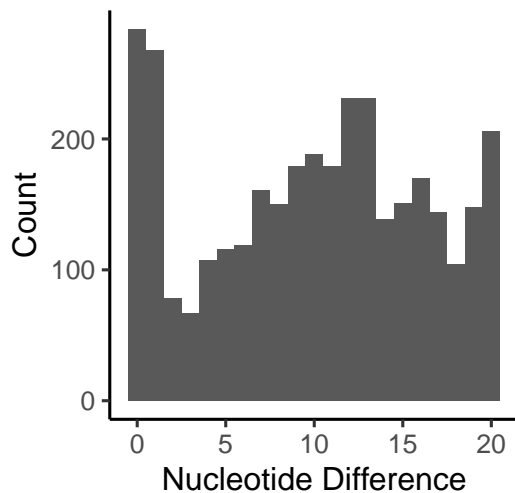
IGHV5-51*01

1174 sequences assigned
65 (5.5%) exact matches, in which:
57 unique CDR3
5 unique J



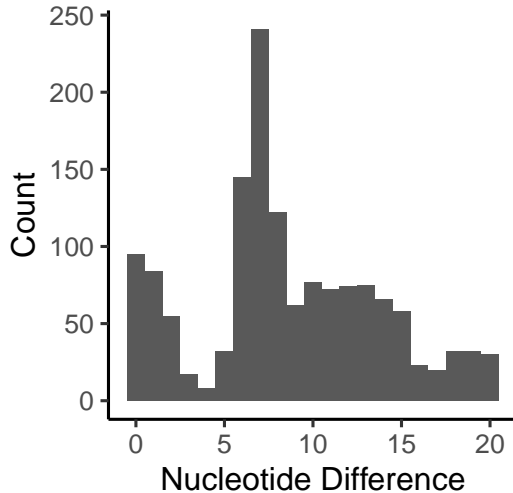
IGHV4-39*01

5165 sequences assigned
284 (5.5%) exact matches, in which:
266 unique CDR3
6 unique J



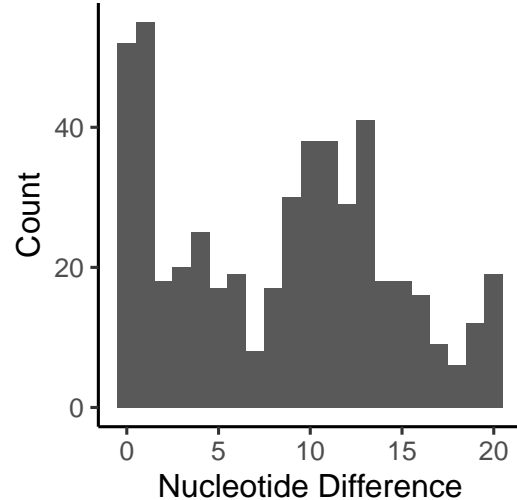
IGHV4-61*02

1810 sequences assigned
95 (5.2%) exact matches, in which:
69 unique CDR3
6 unique J



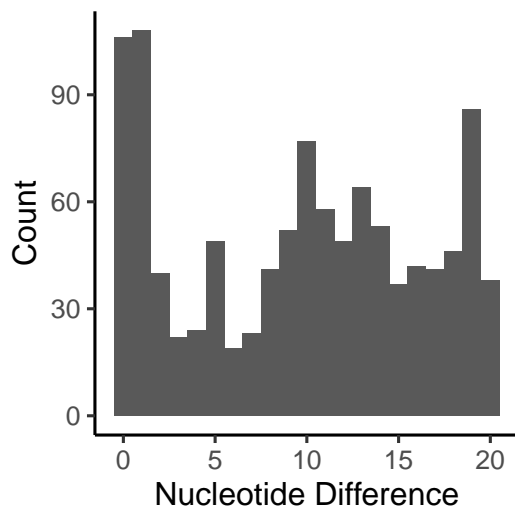
IGHV5-51*03

629 sequences assigned
52 (8.3%) exact matches, in which:
47 unique CDR3
5 unique J



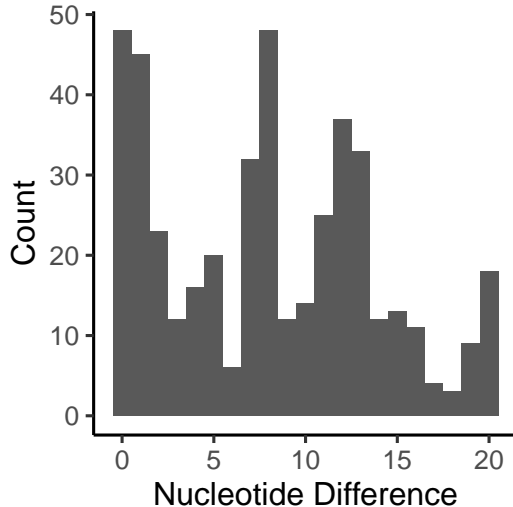
IGHV4-59*01

1284 sequences assigned
106 (8.3%) exact matches, in which:
87 unique CDR3
6 unique J



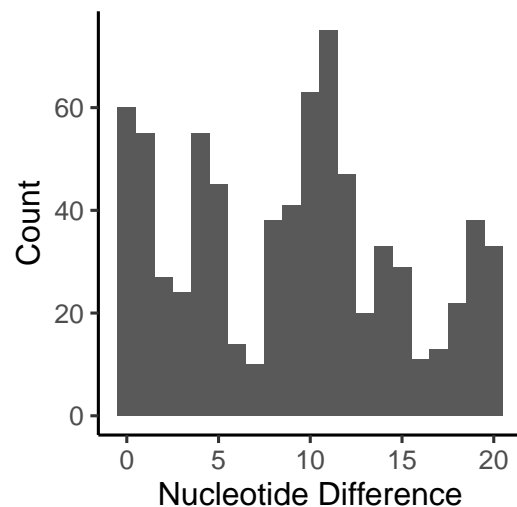
IGHV5-10-1*03

633 sequences assigned
48 (7.6%) exact matches, in which:
43 unique CDR3
5 unique J



IGHV6-1*01

798 sequences assigned
60 (7.5%) exact matches, in which:
46 unique CDR3
6 unique J





Warning – no inferred sequences found.