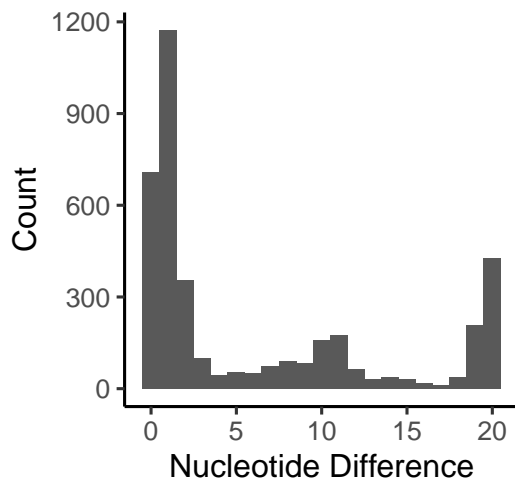


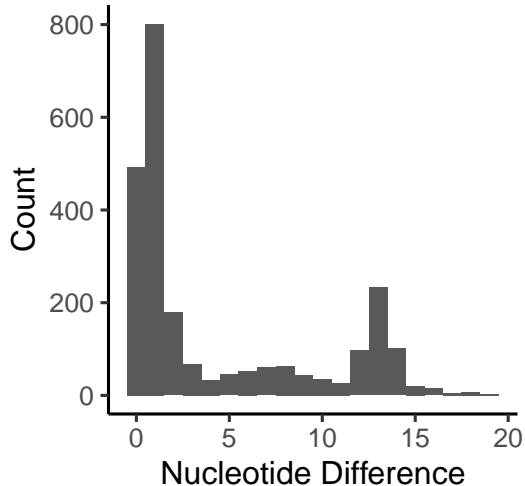
IGHV1-2*02

10131 sequences assigned
707 (7%) exact matches, in which:
524 unique CDR3
5 unique J



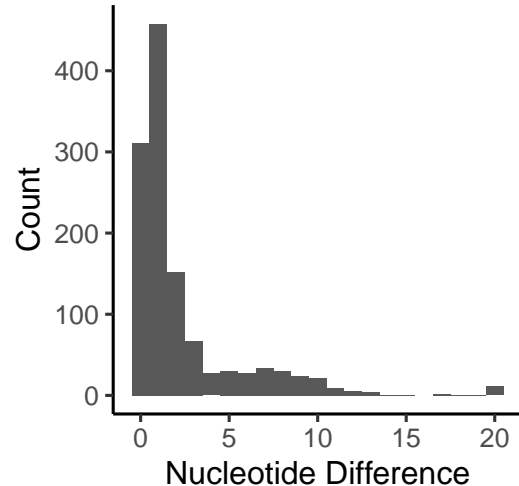
IGHV1-8*01

2390 sequences assigned
492 (20.6%) exact matches, in which:
377 unique CDR3
6 unique J



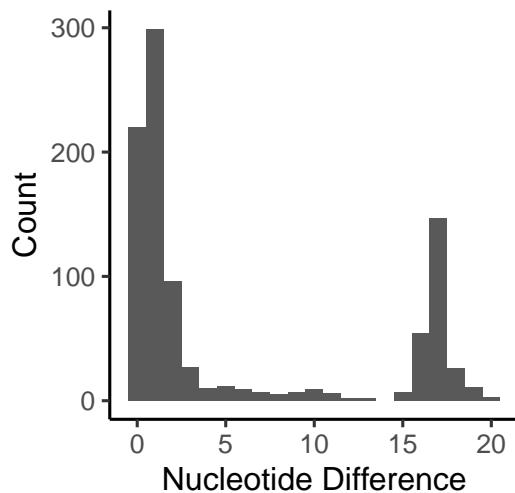
IGHV1-46*01

1244 sequences assigned
311 (25%) exact matches, in which:
245 unique CDR3
5 unique J



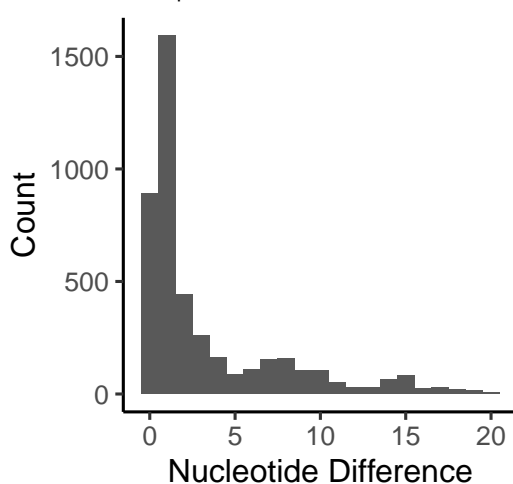
IGHV1-2*04

969 sequences assigned
220 (22.7%) exact matches, in which:
163 unique CDR3
6 unique J



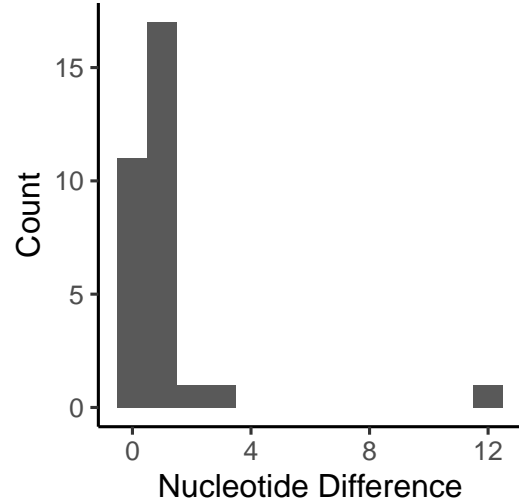
IGHV1-18*04

5447 sequences assigned
891 (16.4%) exact matches, in which:
652 unique CDR3
6 unique J



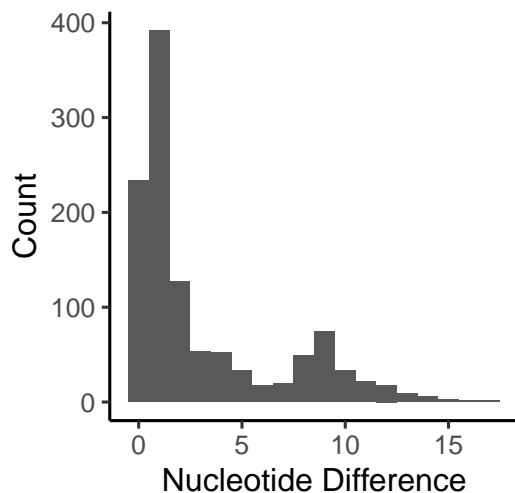
IGHV1-58*02

31 sequences assigned
11 (35.5%) exact matches, in which:
7 unique CDR3
4 unique J



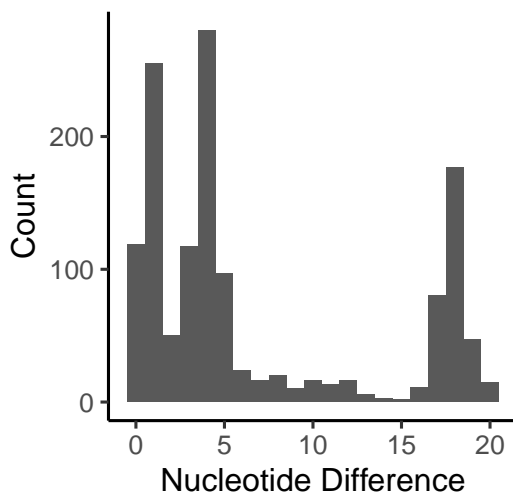
IGHV1-3*01_05

1149 sequences assigned
234 (20.4%) exact matches, in which:
180 unique CDR3
5 unique J



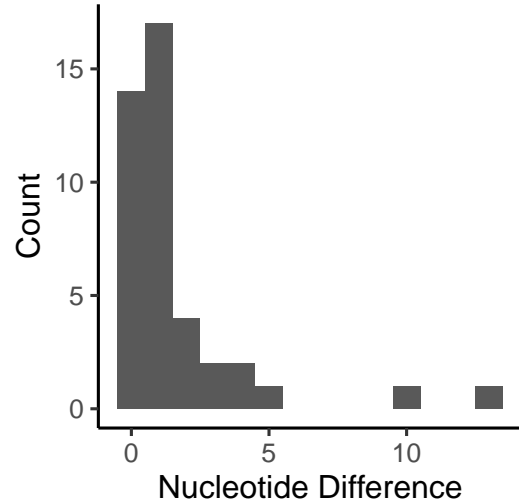
IGHV1-24*01

1402 sequences assigned
119 (8.5%) exact matches, in which:
80 unique CDR3
6 unique J



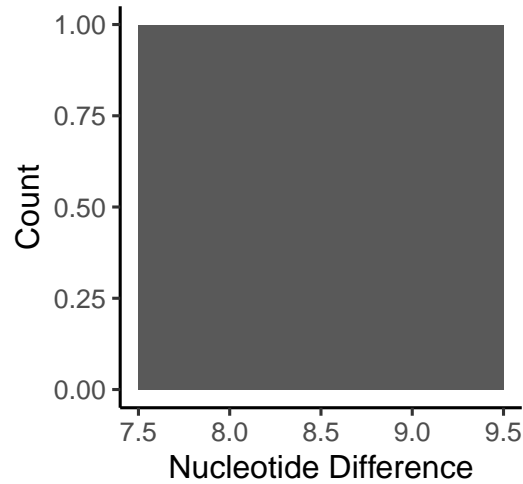
IGHV1-58*01_03

42 sequences assigned
14 (33.3%) exact matches, in which:
11 unique CDR3
4 unique J



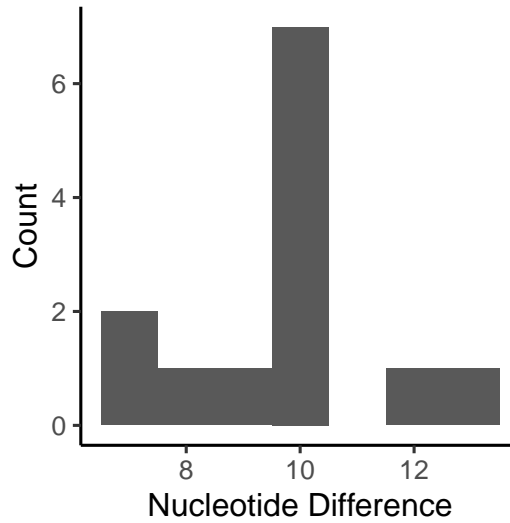
IGHV1-69-2*01

2 sequences assigned
No exact matches.



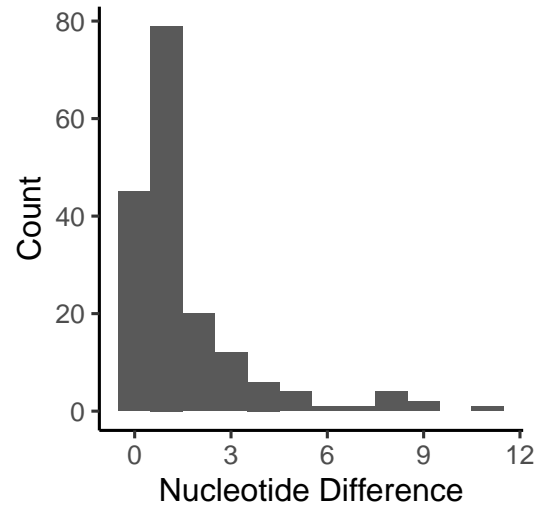
IGHV1-NL1*01

13 sequences assigned
No exact matches.



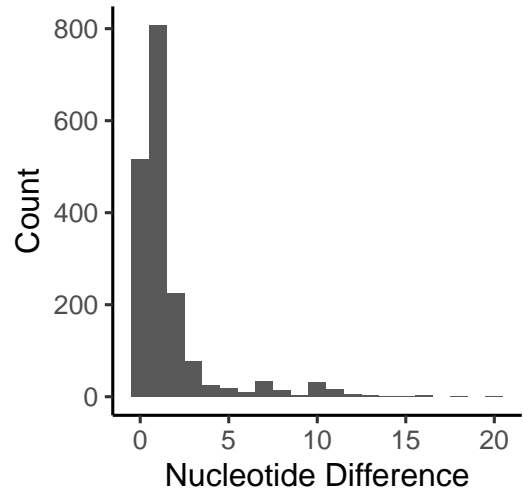
IGHV2-26*01

175 sequences assigned
45 (25.7%) exact matches, in which:
33 unique CDR3
5 unique J



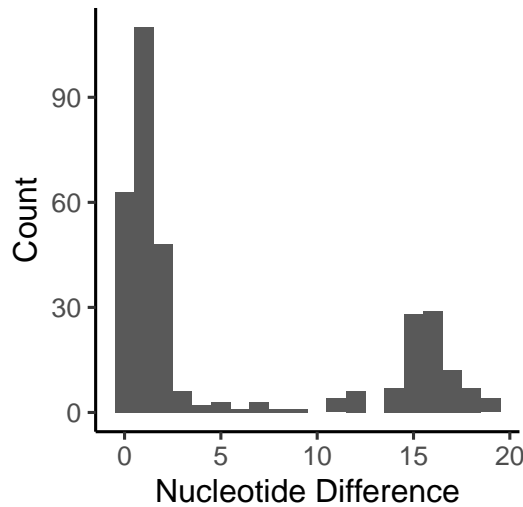
IGHV1-69*01_12_13

1842 sequences assigned
516 (28%) exact matches, in which:
419 unique CDR3
6 unique J



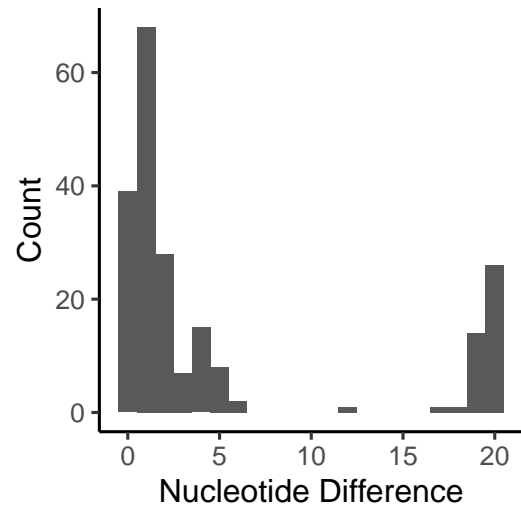
IGHV2-5*01

1026 sequences assigned
63 (6.1%) exact matches, in which:
46 unique CDR3
4 unique J



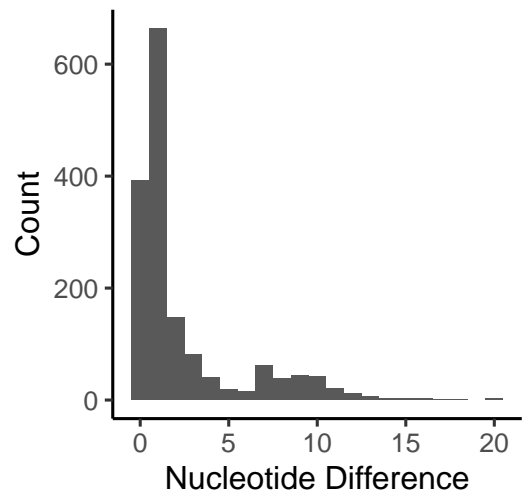
IGHV2-70*01

222 sequences assigned
39 (17.6%) exact matches, in which:
31 unique CDR3
4 unique J



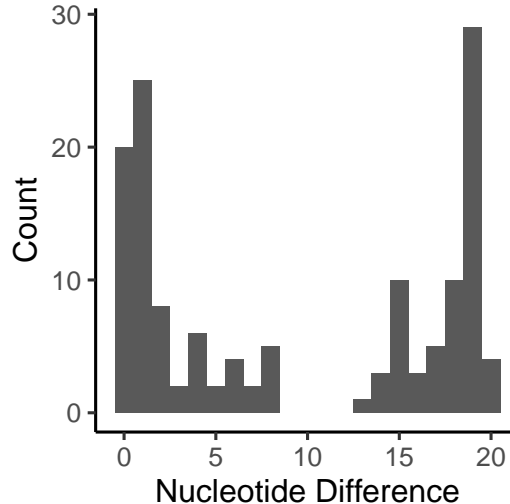
IGHV1-69*06_14

1677 sequences assigned
392 (23.4%) exact matches, in which:
326 unique CDR3
5 unique J



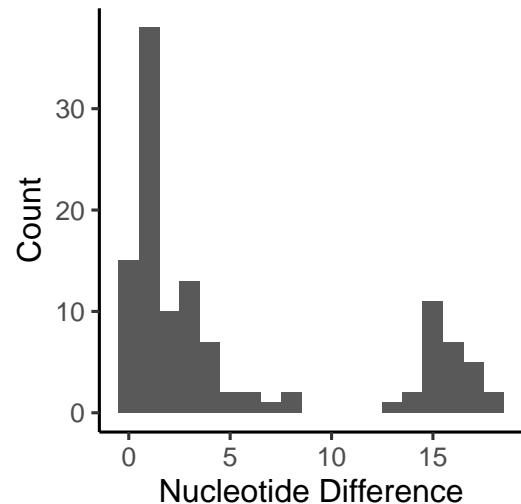
IGHV2-5*02

1137 sequences assigned
20 (1.8%) exact matches, in which:
15 unique CDR3
4 unique J



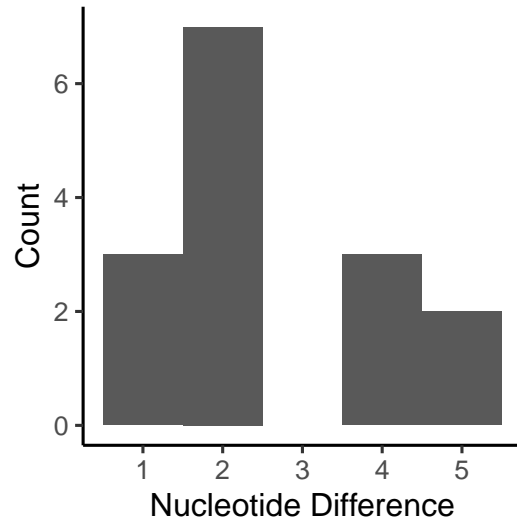
IGHV2-70*04

118 sequences assigned
15 (12.7%) exact matches, in which:
14 unique CDR3
3 unique J



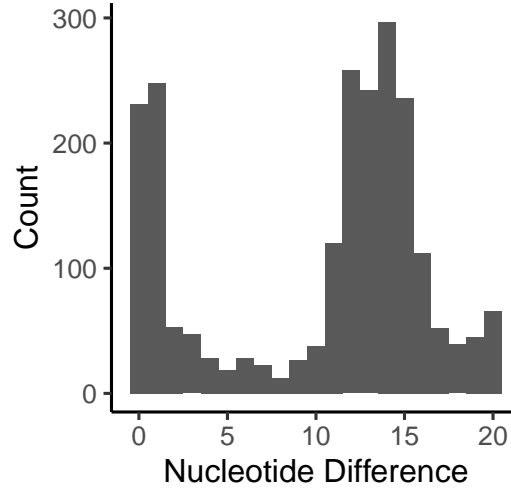
IGHV2-70*12

15 sequences assigned
No exact matches.



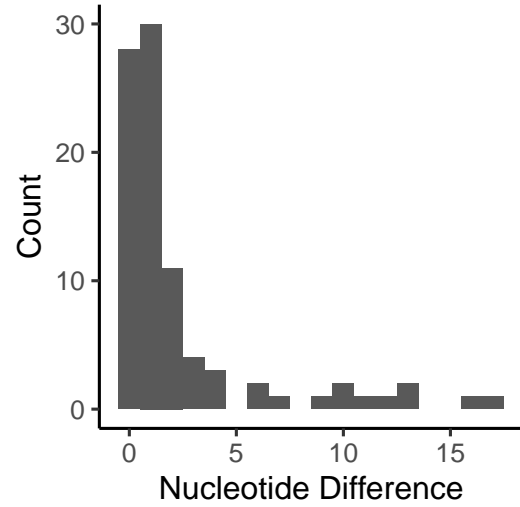
IGHV3-7*03

2467 sequences assigned
231 (9.4%) exact matches, in which:
148 unique CDR3
6 unique J



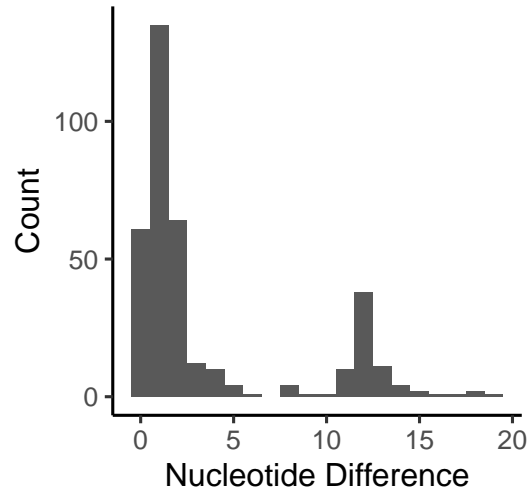
IGHV3-11*04

88 sequences assigned
28 (31.8%) exact matches, in which:
26 unique CDR3
4 unique J



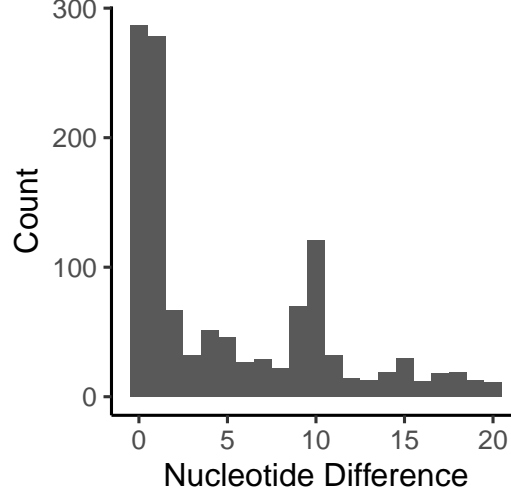
IGHV2-70*11_15

363 sequences assigned
61 (16.8%) exact matches, in which:
44 unique CDR3
4 unique J



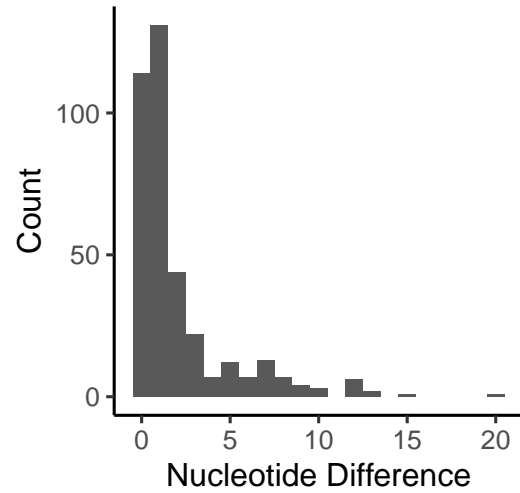
IGHV3-9*01

1250 sequences assigned
287 (23%) exact matches, in which:
168 unique CDR3
6 unique J



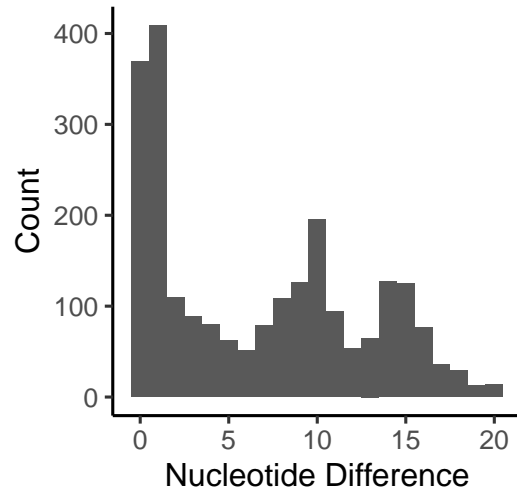
IGHV3-11*06

674 sequences assigned
114 (16.9%) exact matches, in which:
73 unique CDR3
6 unique J



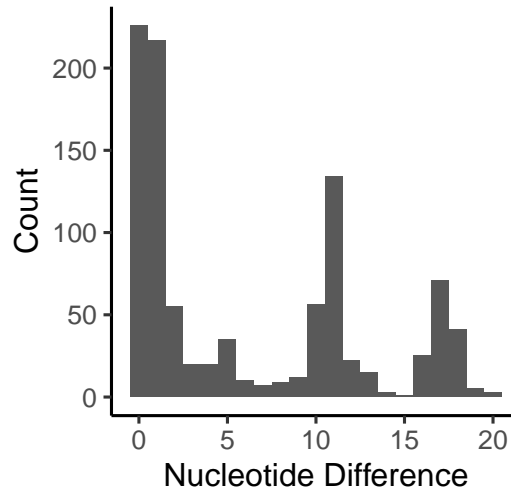
IGHV3-7*01

2434 sequences assigned
369 (15.2%) exact matches, in which:
231 unique CDR3
6 unique J



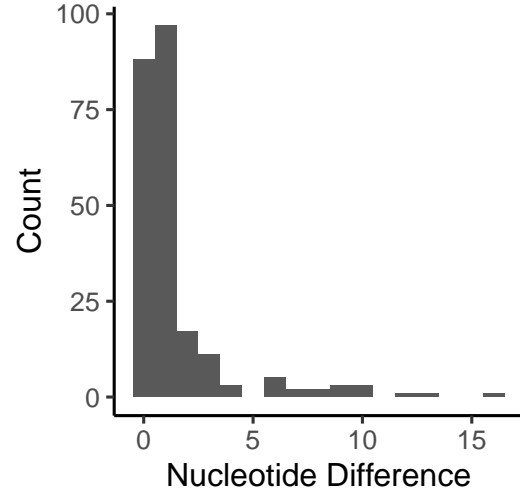
IGHV3-11*01

1007 sequences assigned
226 (22.4%) exact matches, in which:
147 unique CDR3
5 unique J



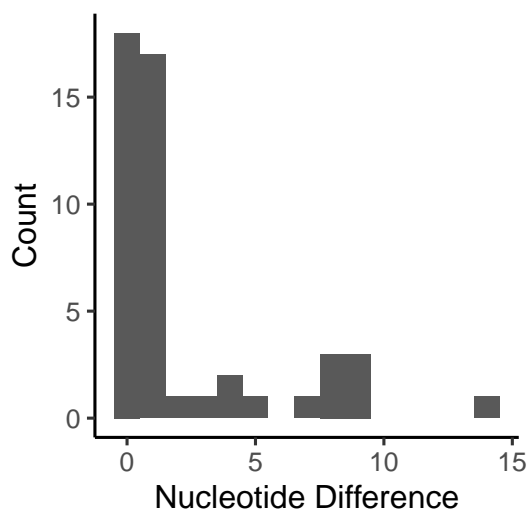
IGHV3-13*01

234 sequences assigned
88 (37.6%) exact matches, in which:
52 unique CDR3
6 unique J



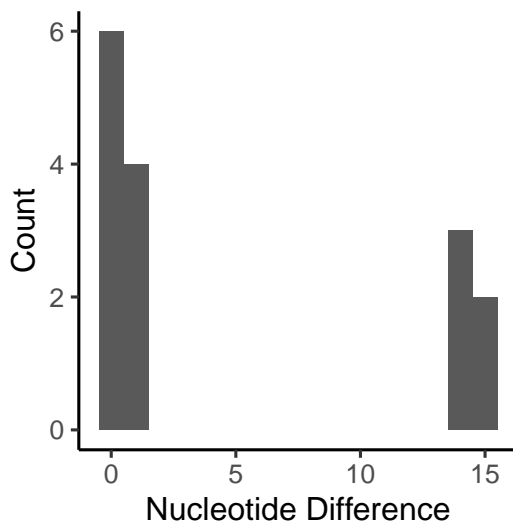
IGHV3-13*05

49 sequences assigned
18 (36.7%) exact matches, in which:
10 unique CDR3
4 unique J



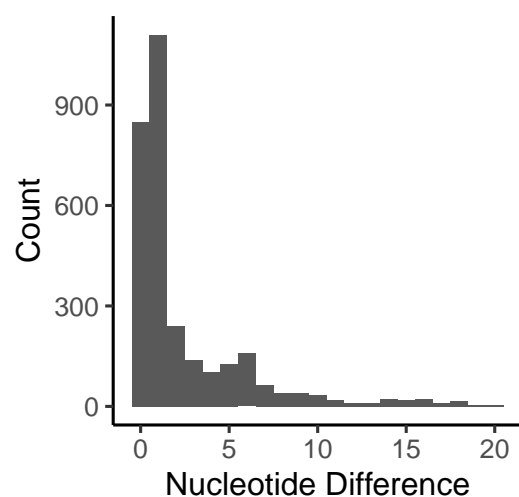
IGHV3-20*01_02

15 sequences assigned
6 (40%) exact matches, in which:
5 unique CDR3
2 unique J



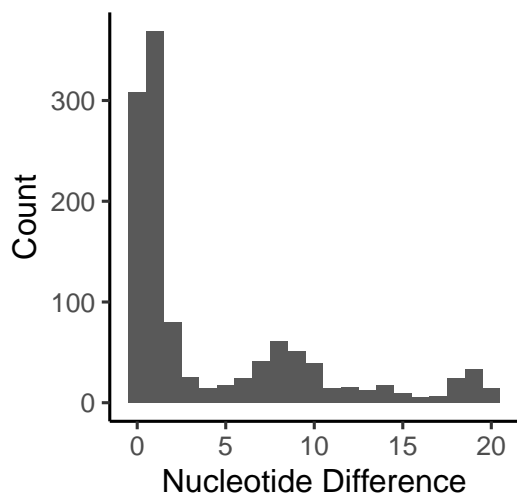
IGHV3-21*01_02

3051 sequences assigned
849 (27.8%) exact matches, in which:
488 unique CDR3
6 unique J



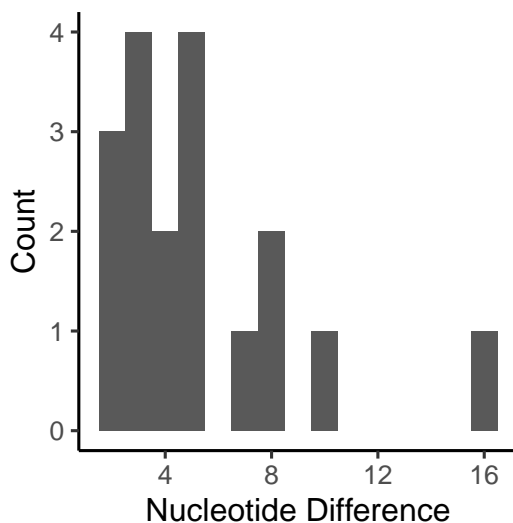
IGHV3-15*01_02

1362 sequences assigned
308 (22.6%) exact matches, in which:
169 unique CDR3
4 unique J



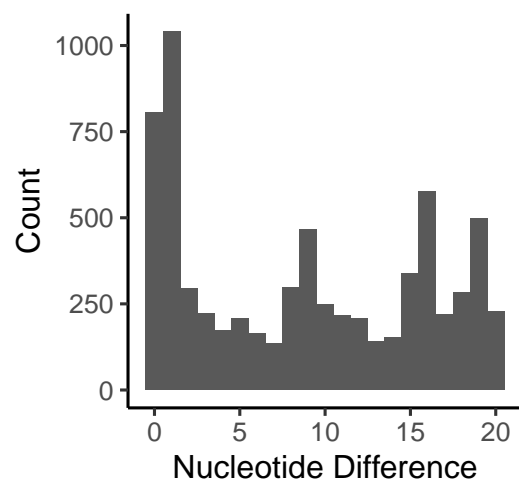
IGHV3-20*03_04

18 sequences assigned
No exact matches.



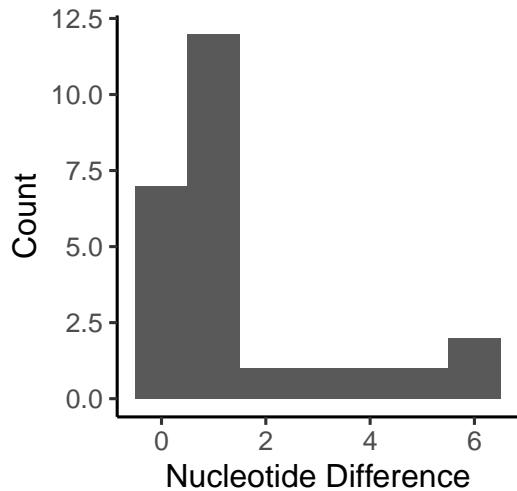
IGHV3-23*01_04

8038 sequences assigned
805 (10%) exact matches, in which:
442 unique CDR3
6 unique J



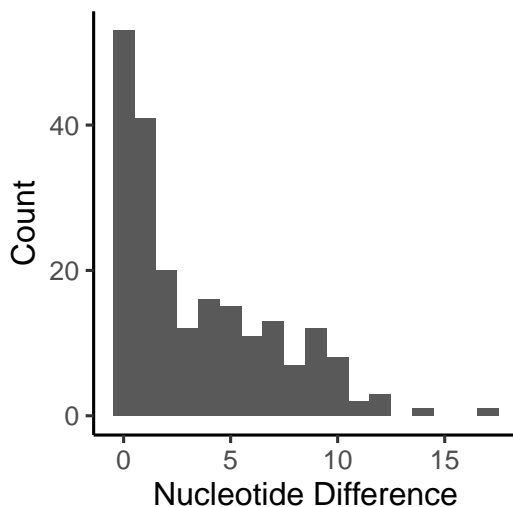
IGHV3-19*01

25 sequences assigned
7 (28%) exact matches, in which:
5 unique CDR3
1 unique J



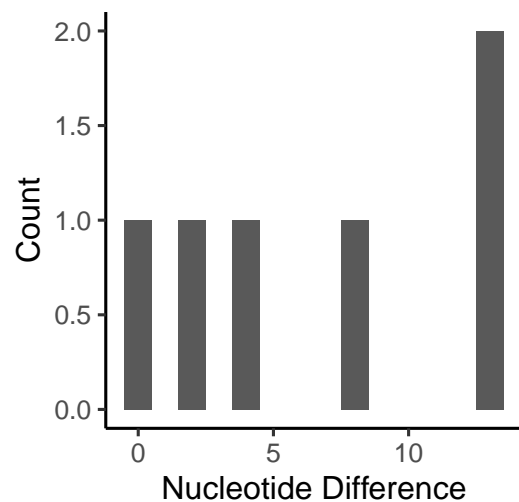
IGHV3-21*04

215 sequences assigned
53 (24.7%) exact matches, in which:
51 unique CDR3
4 unique J



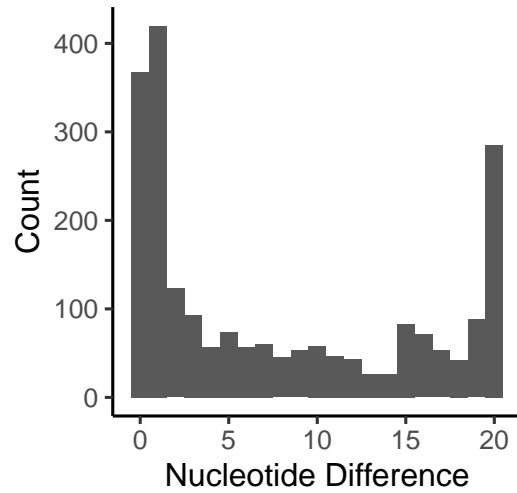
IGHV3-30-3*01

13 sequences assigned
1 (7.7%) exact matches, in which:
1 unique CDR3
1 unique J



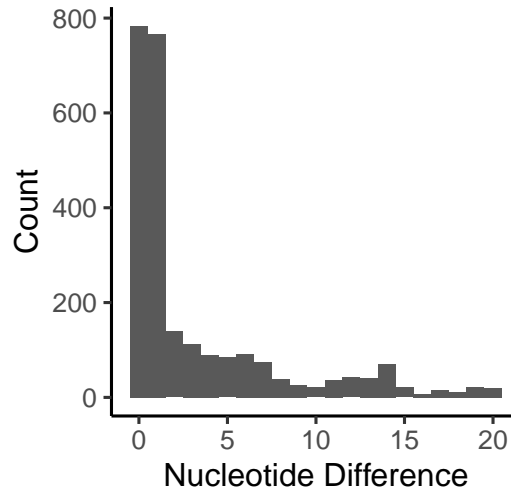
IGHV3–30*02

2897 sequences assigned
368 (12.7%) exact matches, in which:
245 unique CDR3
6 unique J



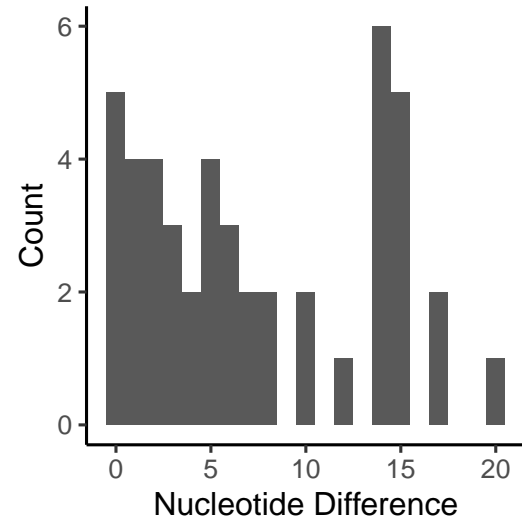
IGHV3–30*04

4318 sequences assigned
784 (18.2%) exact matches, in which:
493 unique CDR3
6 unique J



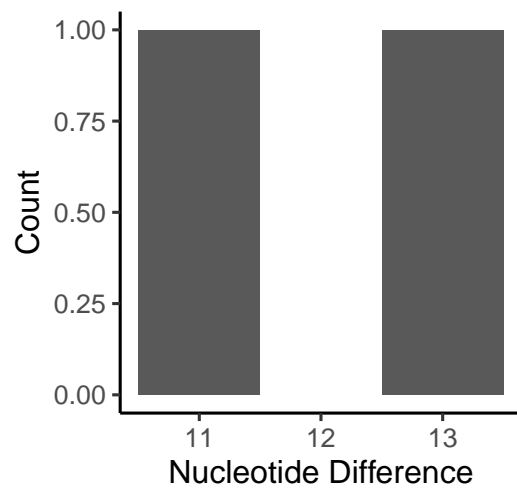
IGHV3–33*05

62 sequences assigned
5 (8.1%) exact matches, in which:
5 unique CDR3
1 unique J



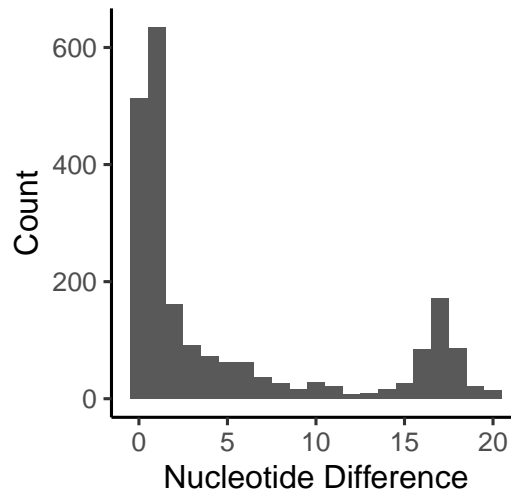
IGHV3–30–3*02

3 sequences assigned
No exact matches.



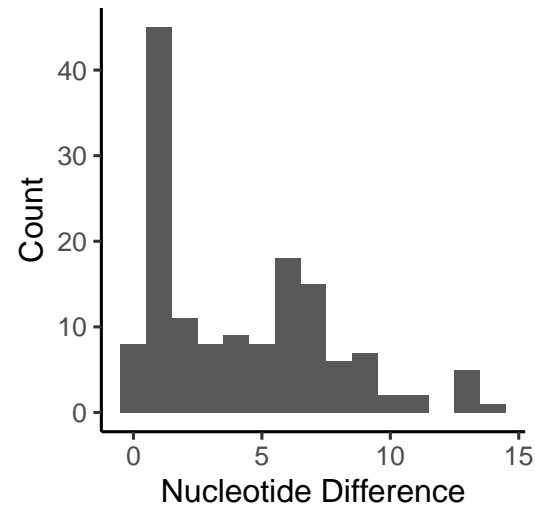
IGHV3–30*18

2951 sequences assigned
513 (17.4%) exact matches, in which:
304 unique CDR3
6 unique J



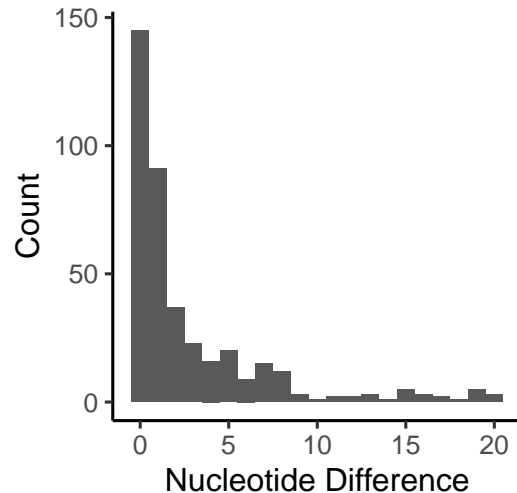
IGHV3–33*06

145 sequences assigned
8 (5.5%) exact matches, in which:
7 unique CDR3
2 unique J



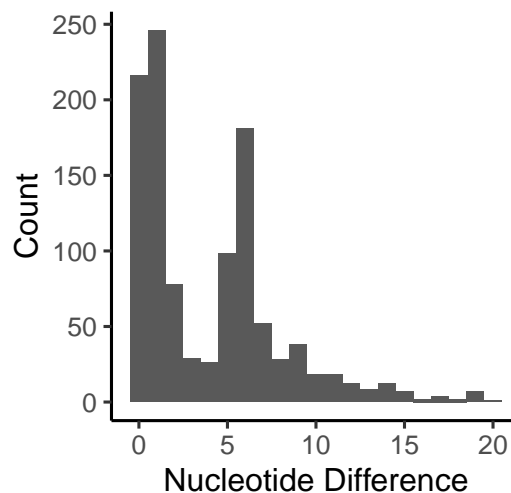
IGHV3–30*03

422 sequences assigned
145 (34.4%) exact matches, in which:
127 unique CDR3
6 unique J



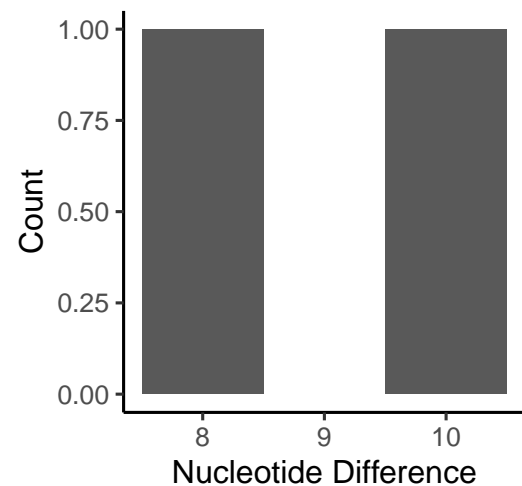
IGHV3–33*01

1148 sequences assigned
216 (18.8%) exact matches, in which:
140 unique CDR3
4 unique J



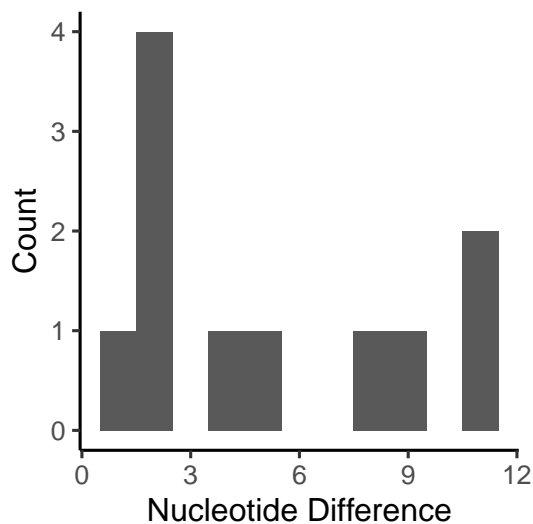
IGHV3–35*01

2 sequences assigned
No exact matches.



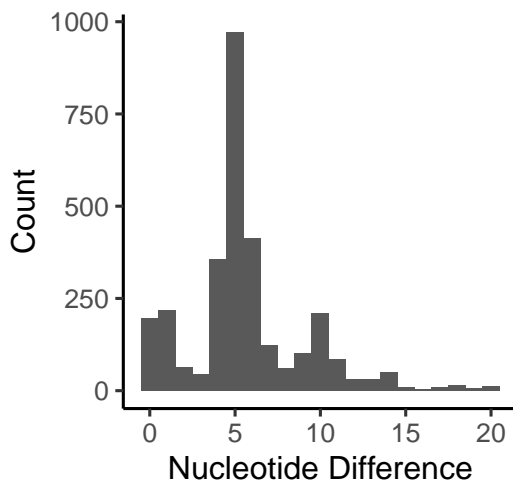
IGHV3-38-3*01

11 sequences assigned
No exact matches.



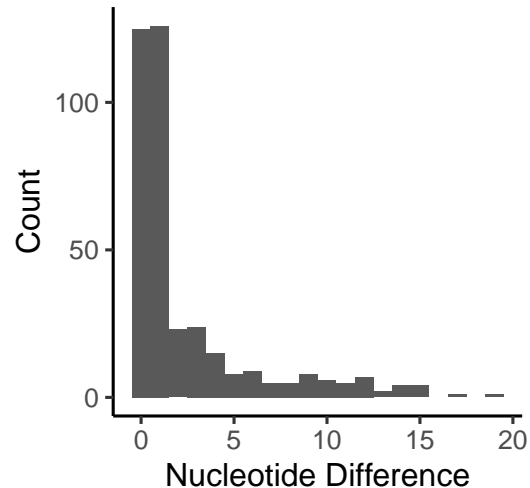
IGHV3-48*02

3262 sequences assigned
197 (6%) exact matches, in which:
126 unique CDR3
6 unique J



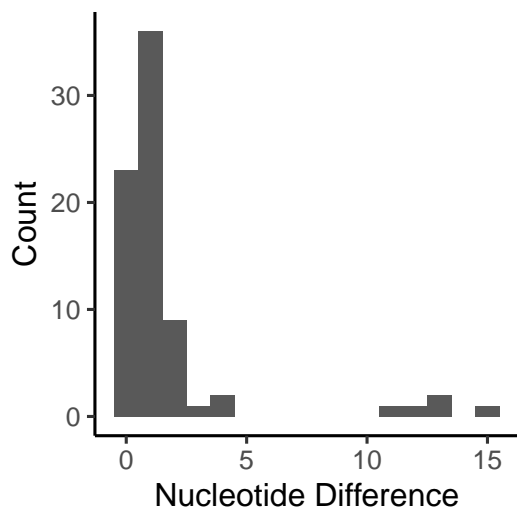
IGHV3-49*04

385 sequences assigned
125 (32.5%) exact matches, in which:
74 unique CDR3
4 unique J



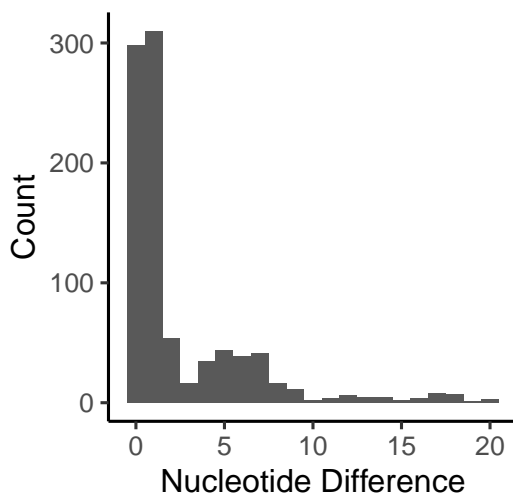
IGHV3-43*01

108 sequences assigned
23 (21.3%) exact matches, in which:
12 unique CDR3
3 unique J



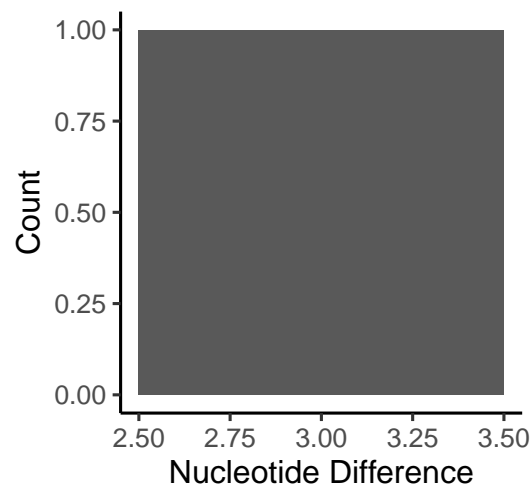
IGHV3-48*03

917 sequences assigned
298 (32.5%) exact matches, in which:
175 unique CDR3
5 unique J



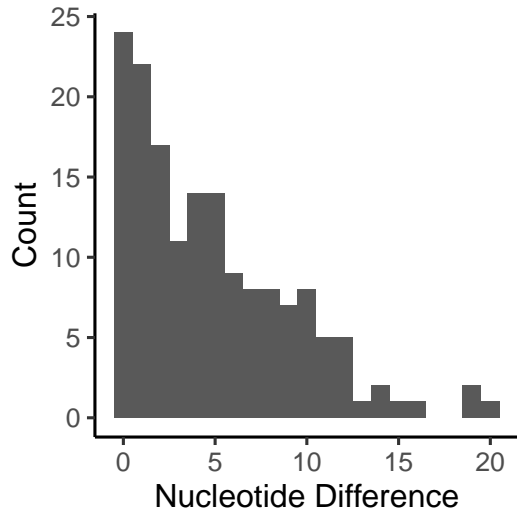
IGHV3-52*01_03

1 sequences assigned
No exact matches.



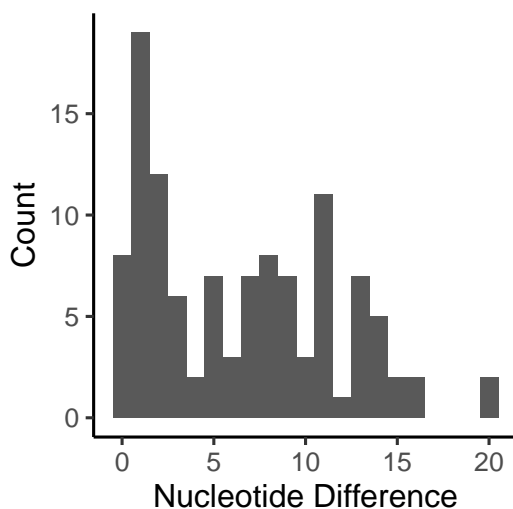
IGHV3-48*01

167 sequences assigned
24 (14.4%) exact matches, in which:
24 unique CDR3
5 unique J



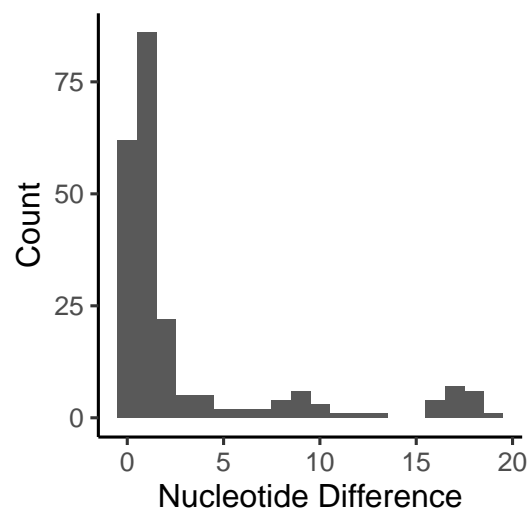
IGHV3-48*04

113 sequences assigned
8 (7.1%) exact matches, in which:
8 unique CDR3
4 unique J



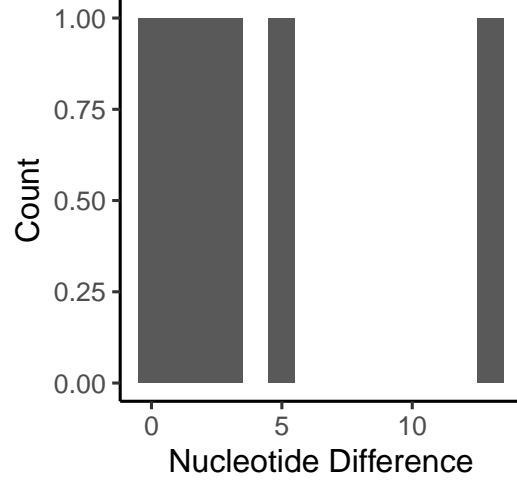
IGHV3-53*04

441 sequences assigned
62 (14.1%) exact matches, in which:
42 unique CDR3
5 unique J



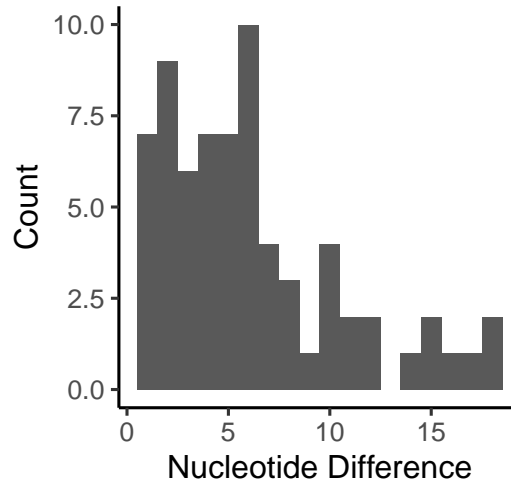
IGHV3-53*05

7 sequences assigned
1 (14.3%) exact matches, in which:
1 unique CDR3
1 unique J



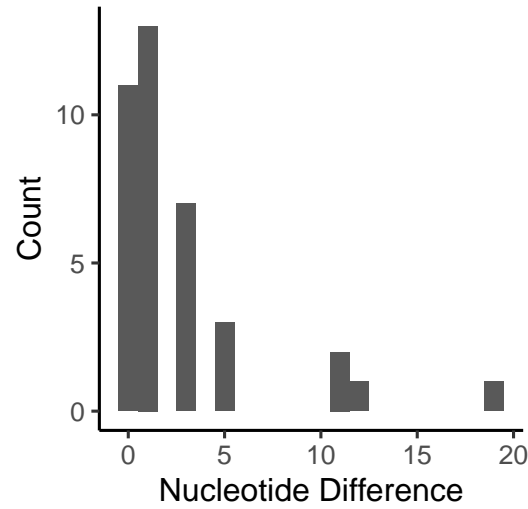
IGHV3-64*04

71 sequences assigned
No exact matches.



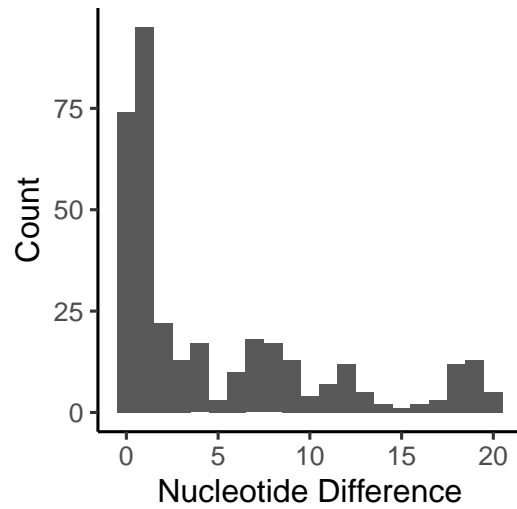
IGHV3-69-1*01

39 sequences assigned
11 (28.2%) exact matches, in which:
9 unique CDR3
3 unique J



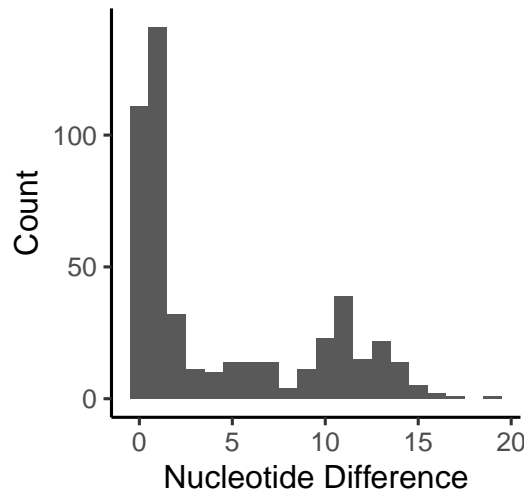
IGHV3-53*01_02

420 sequences assigned
74 (17.6%) exact matches, in which:
49 unique CDR3
5 unique J



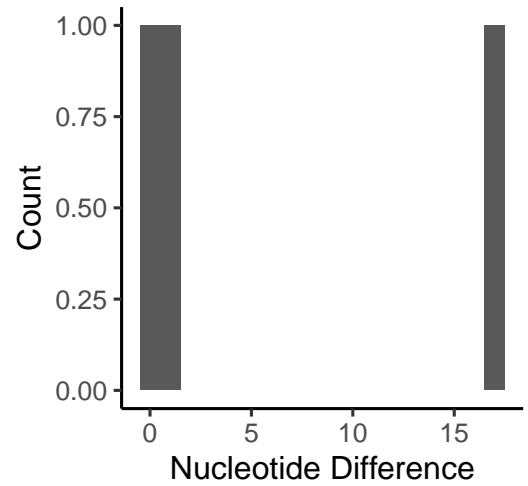
IGHV3-66*01

487 sequences assigned
111 (22.8%) exact matches, in which:
69 unique CDR3
4 unique J



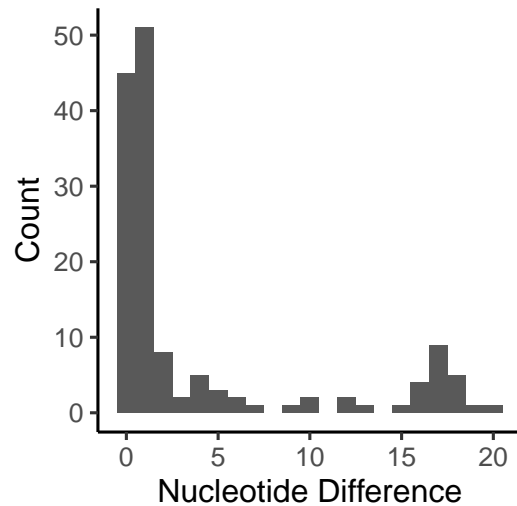
IGHV3-69-1*02

7 sequences assigned
1 (14.3%) exact matches, in which:
1 unique CDR3
1 unique J



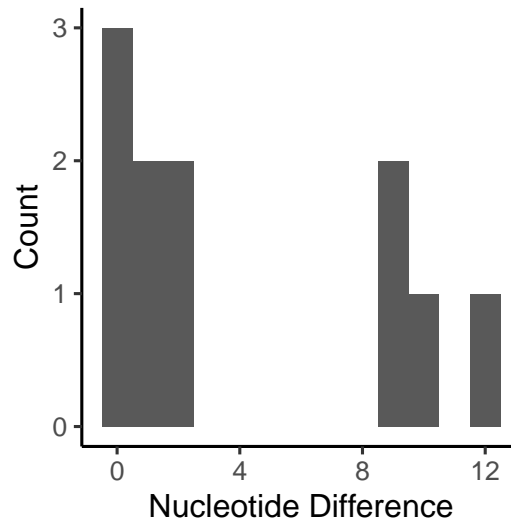
IGHV3-64*01

149 sequences assigned
45 (30.2%) exact matches, in which:
30 unique CDR3
4 unique J



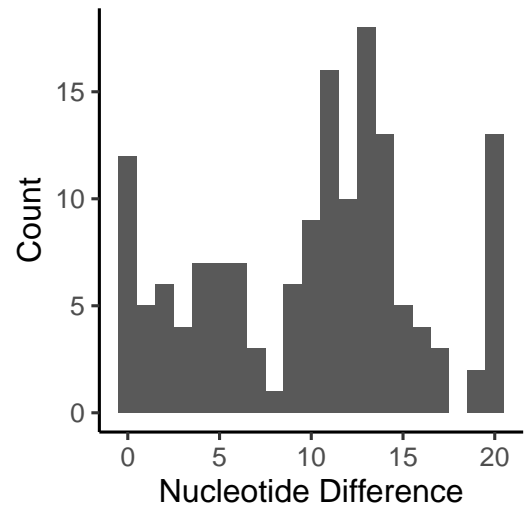
IGHV3-66*03

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



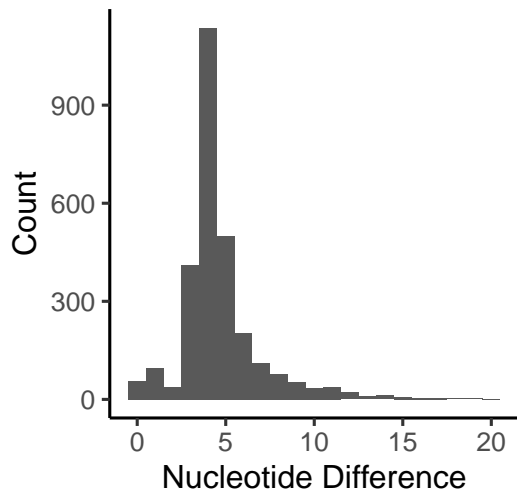
IGHV3-72*01

187 sequences assigned
12 (6.4%) exact matches, in which:
10 unique CDR3
3 unique J



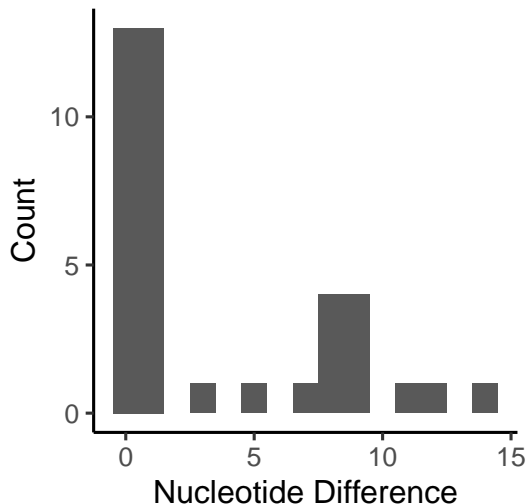
IGHV3-73*01_02

2866 sequences assigned
56 (2%) exact matches, in which:
32 unique CDR3
5 unique J



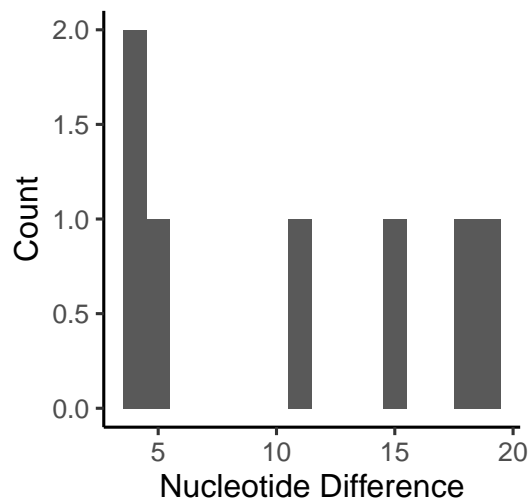
IGHV3-43D*03

40 sequences assigned
13 (32.5%) exact matches, in which:
5 unique CDR3
3 unique J



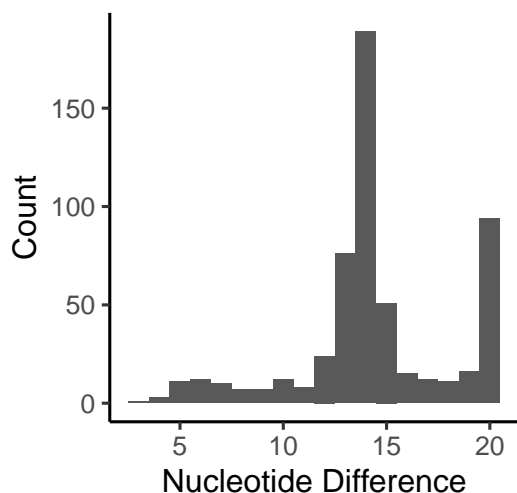
IGHV3-NL1*01

8 sequences assigned
No exact matches.



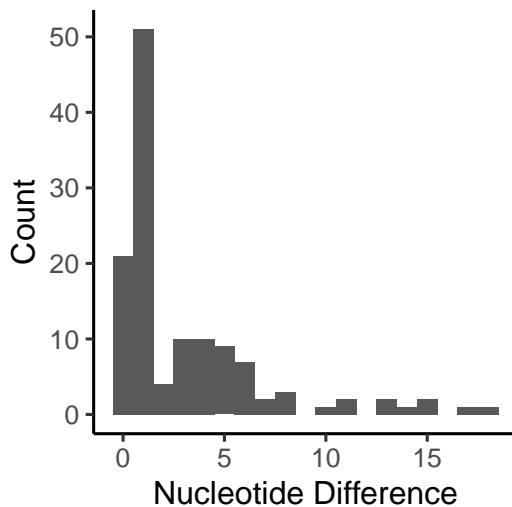
IGHV3-74*03

877 sequences assigned
No exact matches.



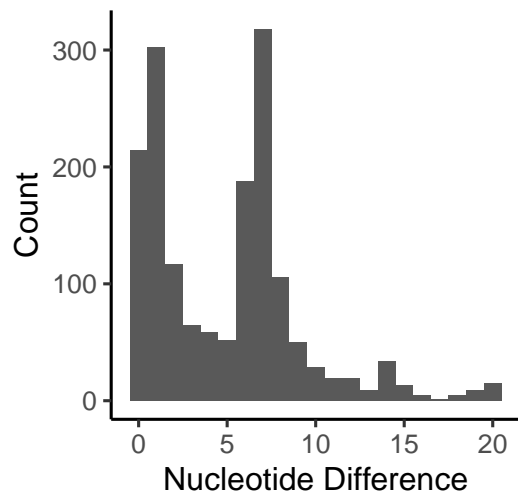
IGHV3-43D*04

127 sequences assigned
21 (16.5%) exact matches, in which:
11 unique CDR3
2 unique J



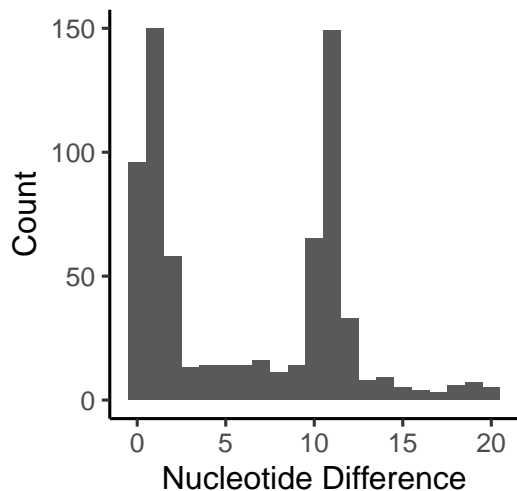
IGHV4-4*07

1853 sequences assigned
214 (11.5%) exact matches, in which:
165 unique CDR3
6 unique J



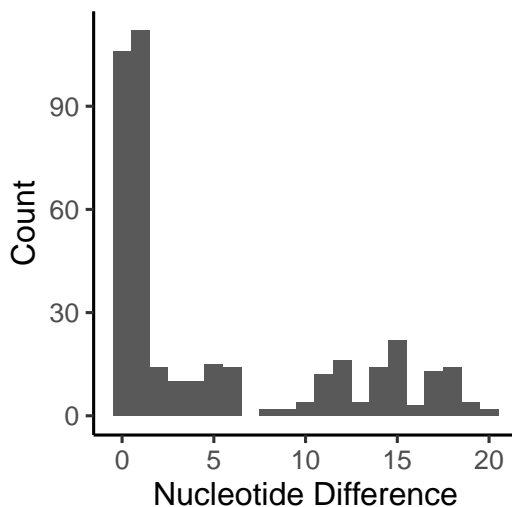
IGHV3-74*01_02

786 sequences assigned
96 (12.2%) exact matches, in which:
52 unique CDR3
5 unique J



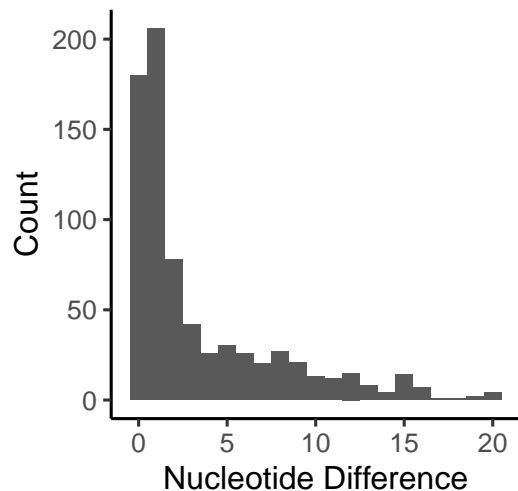
IGHV3-64D*06

490 sequences assigned
106 (21.6%) exact matches, in which:
65 unique CDR3
6 unique J



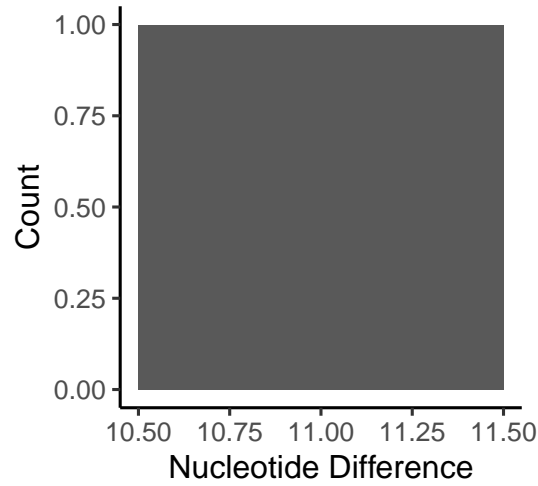
IGHV4-4*02_03

817 sequences assigned
180 (22%) exact matches, in which:
130 unique CDR3
6 unique J



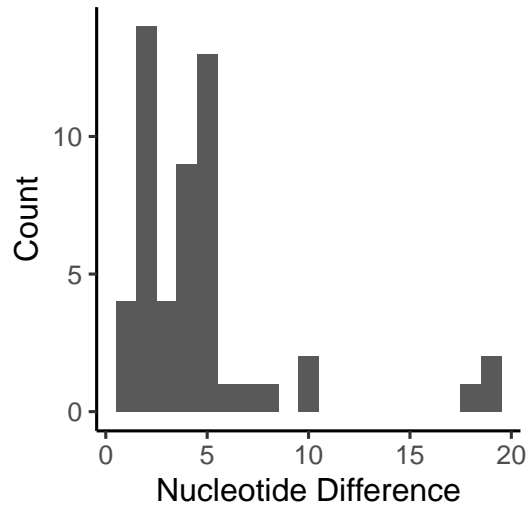
IGHV4-28*03

1 sequences assigned
No exact matches.



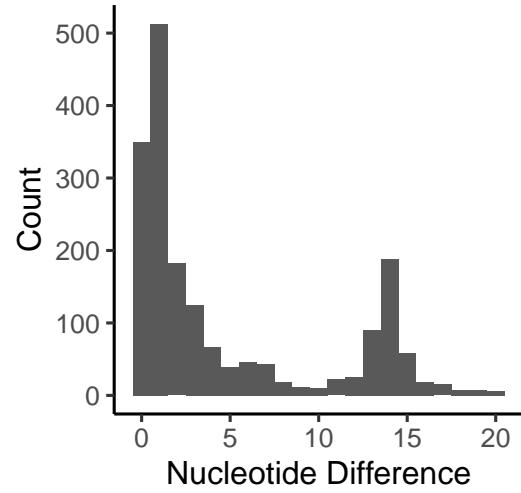
IGHV4-30-2*03

54 sequences assigned
No exact matches.



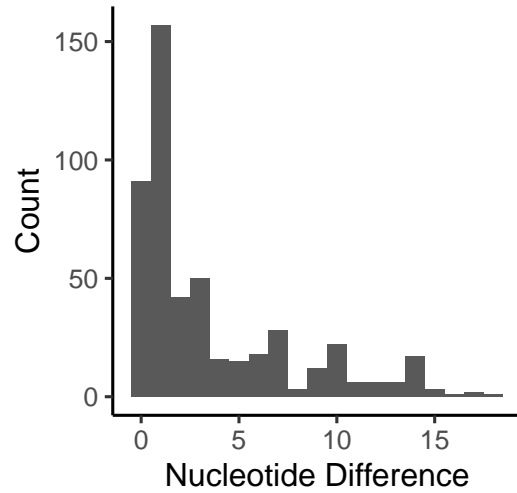
IGHV4-31*02

1920 sequences assigned
350 (18.2%) exact matches, in which:
283 unique CDR3
6 unique J



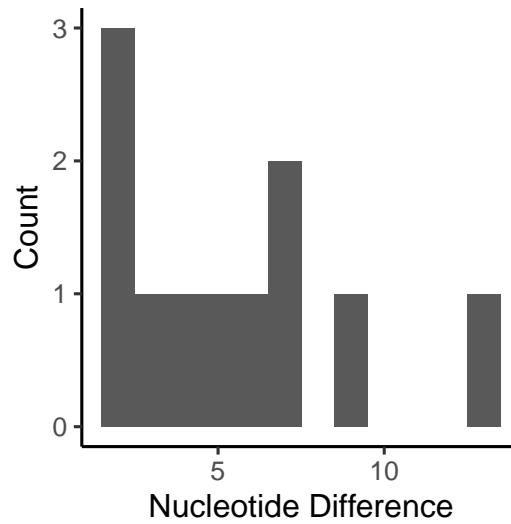
IGHV4-30-4*01

499 sequences assigned
91 (18.2%) exact matches, in which:
71 unique CDR3
4 unique J



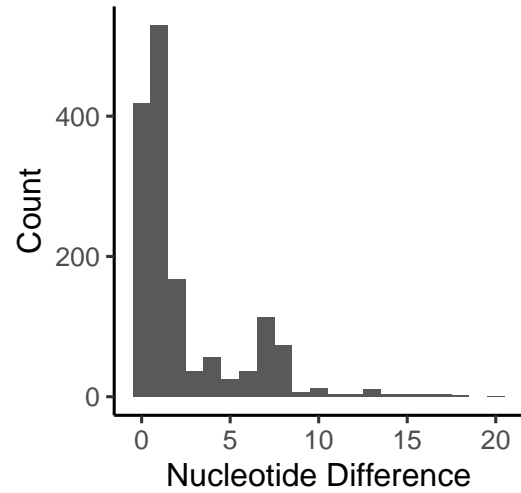
IGHV4-30-2*05

11 sequences assigned
No exact matches.



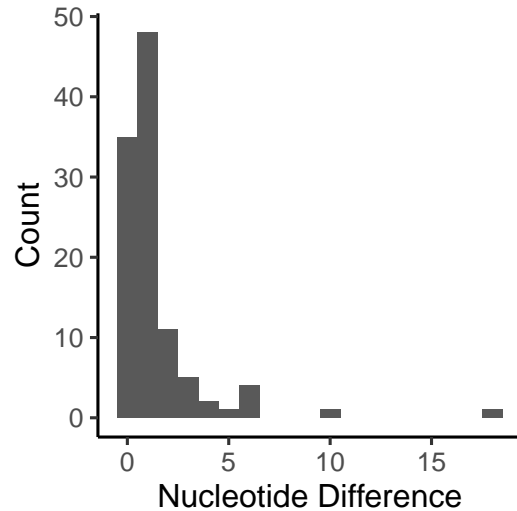
IGHV4-34*01_02

1629 sequences assigned
419 (25.7%) exact matches, in which:
267 unique CDR3
6 unique J



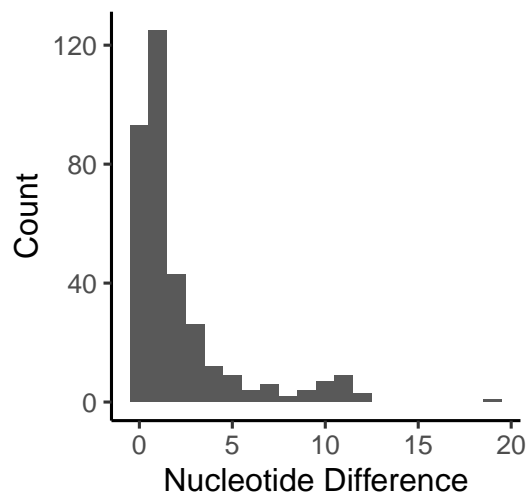
IGHV4-30-2*01

108 sequences assigned
35 (32.4%) exact matches, in which:
18 unique CDR3
4 unique J



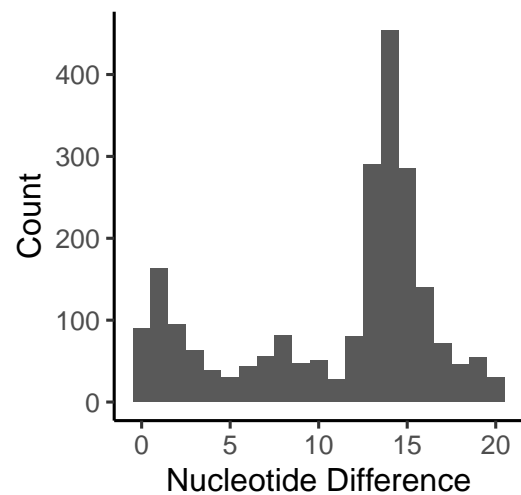
IGHV4-30-4*07

359 sequences assigned
93 (25.9%) exact matches, in which:
66 unique CDR3
6 unique J



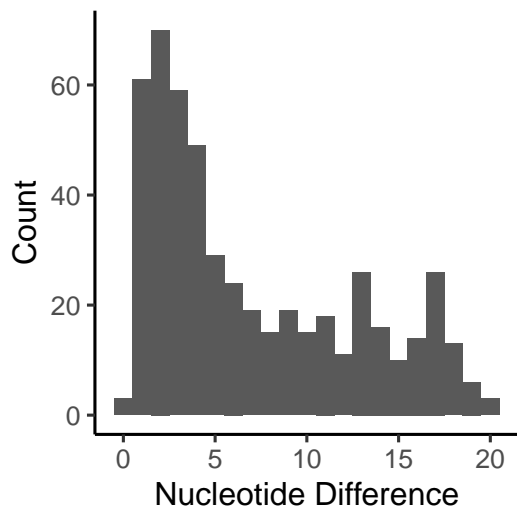
IGHV4-38-2*02

2278 sequences assigned
90 (4%) exact matches, in which:
74 unique CDR3
6 unique J



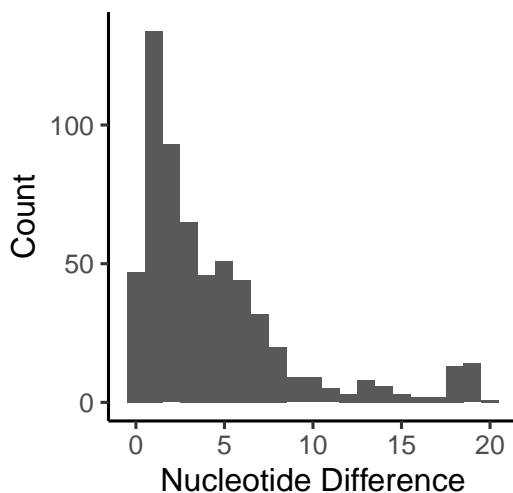
IGHV4–39*07

515 sequences assigned
3 (0.6%) exact matches, in which:
3 unique CDR3
2 unique J



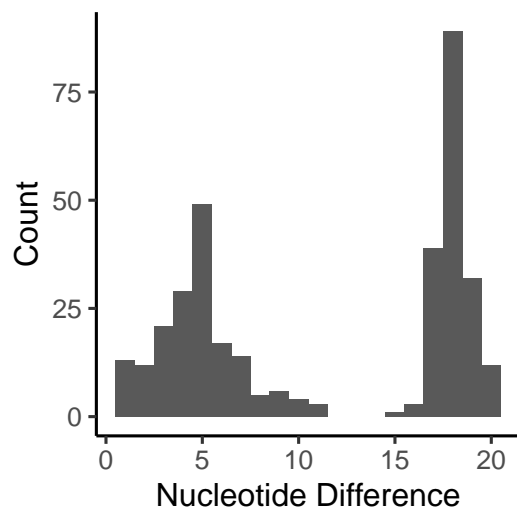
IGHV4–59*12

807 sequences assigned
47 (5.8%) exact matches, in which:
47 unique CDR3
6 unique J



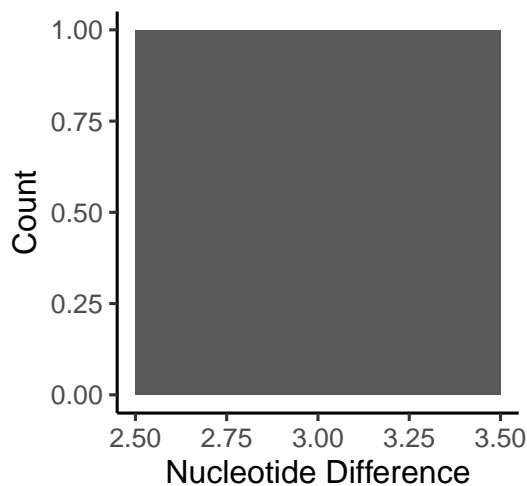
IGHV4–61*08

379 sequences assigned
No exact matches.



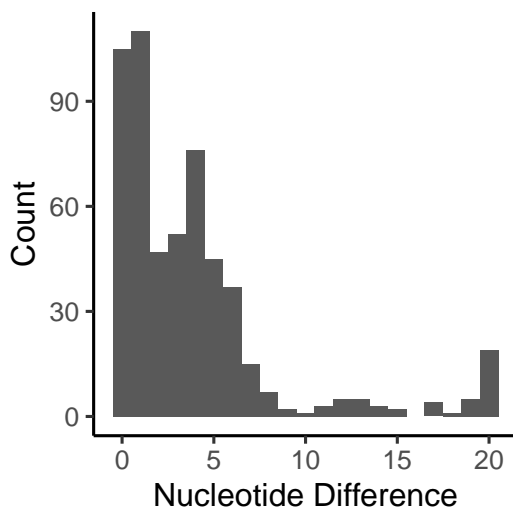
IGHV4–55*09

1 sequences assigned
No exact matches.



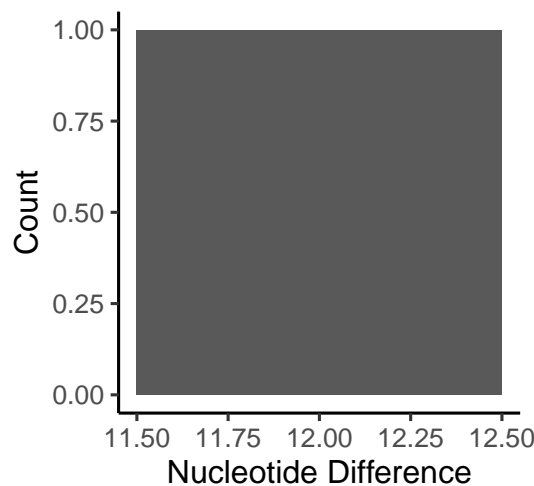
IGHV4–61*01

591 sequences assigned
105 (17.8%) exact matches, in which:
93 unique CDR3
4 unique J



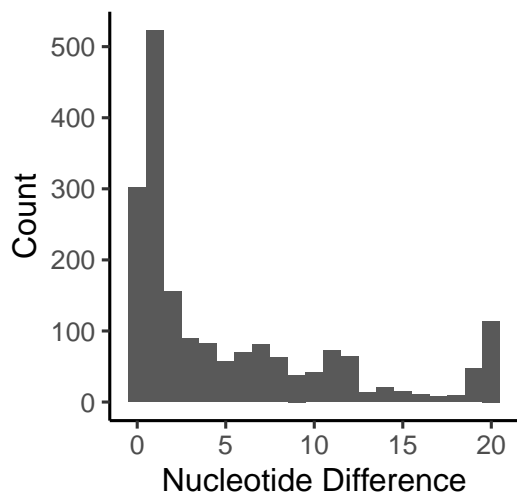
IGHV1/OR15–2*02_03

1 sequences assigned
No exact matches.



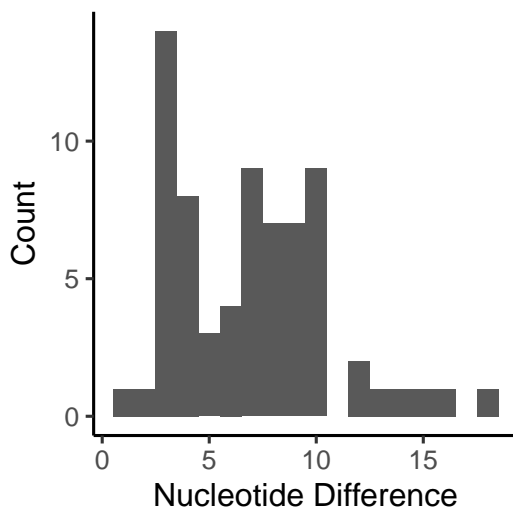
IGHV4–59*08

2272 sequences assigned
302 (13.3%) exact matches, in which:
221 unique CDR3
6 unique J



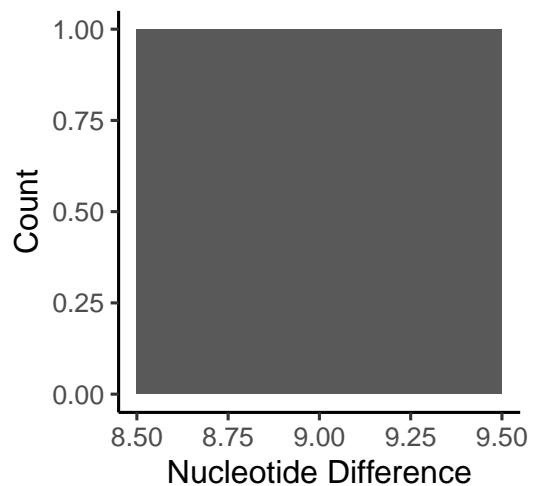
IGHV4–61*02

75 sequences assigned
No exact matches.



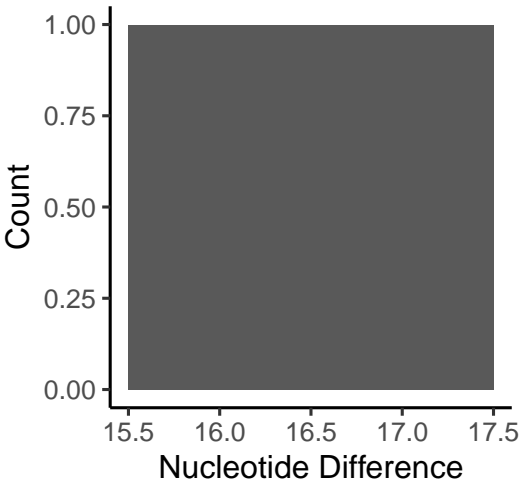
IGHV1/OR15–3*02

1 sequences assigned
No exact matches.



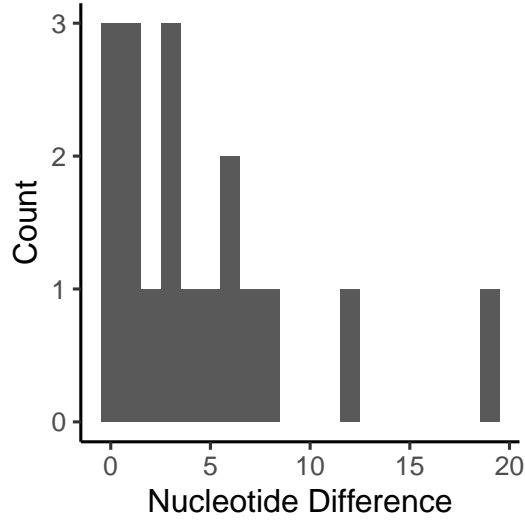
IGHV4/OR15–8*01

2 sequences assigned
No exact matches.



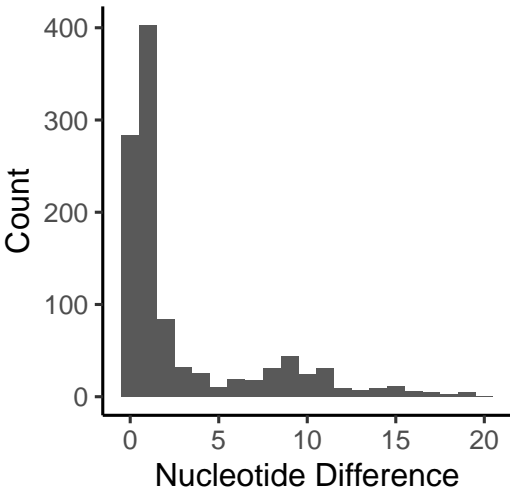
IGHV5–51*07

18 sequences assigned
3 (16.7%) exact matches, in which:
3 unique CDR3
1 unique J



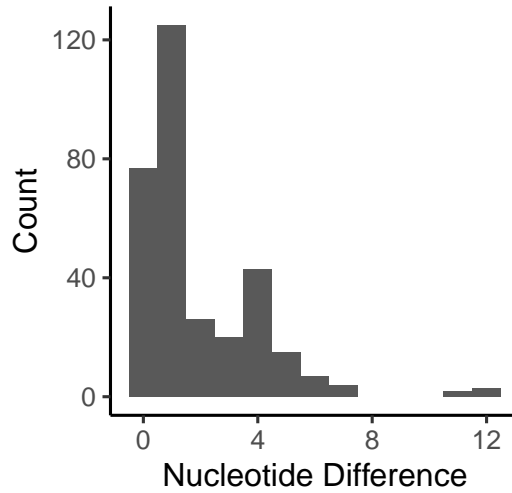
IGHV5–10–1*01_03

1104 sequences assigned
284 (25.7%) exact matches, in which:
174 unique CDR3
5 unique J



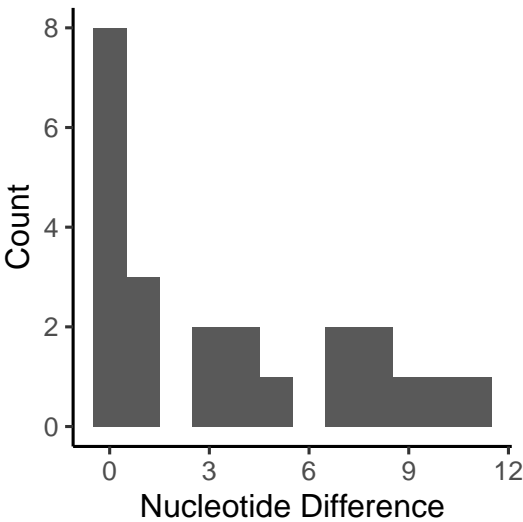
IGHV6–1*01_02

322 sequences assigned
77 (23.9%) exact matches, in which:
62 unique CDR3
4 unique J



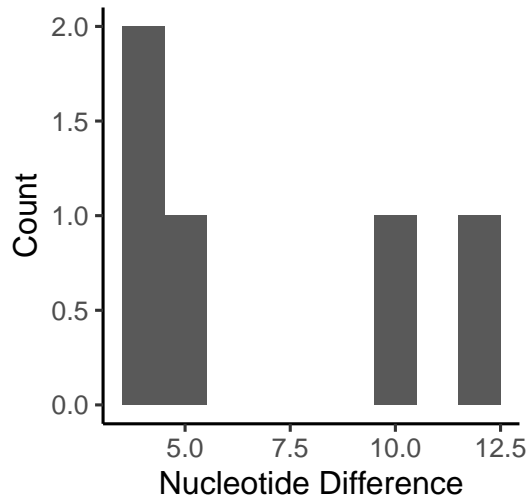
IGHV5–51*04

23 sequences assigned
8 (34.8%) exact matches, in which:
8 unique CDR3
4 unique J



IGHV7–4–1*02

5 sequences assigned
No exact matches.





Warning – no inferred sequences found.