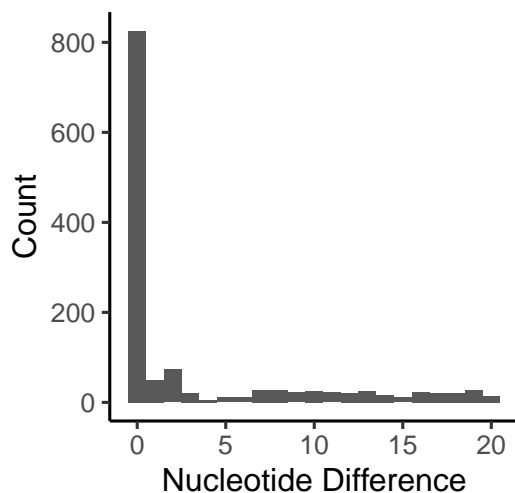


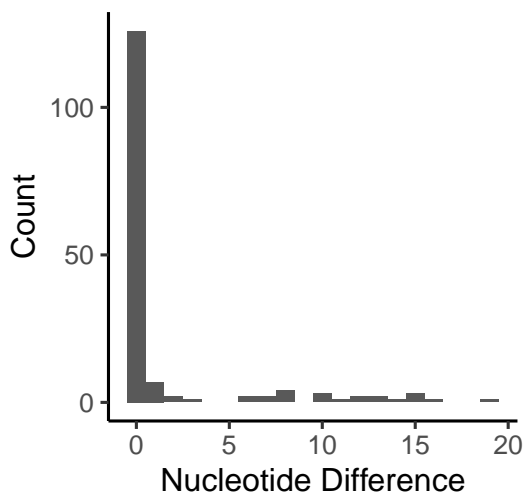
IGHV1–2*02

1482 sequences assigned
826 (55.7%) exact matches, in which:
819 unique CDR3
6 unique J



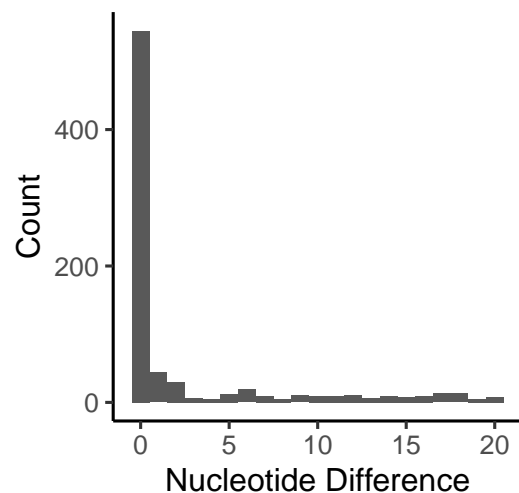
IGHV1–24*01

169 sequences assigned
126 (74.6%) exact matches, in which:
125 unique CDR3
5 unique J



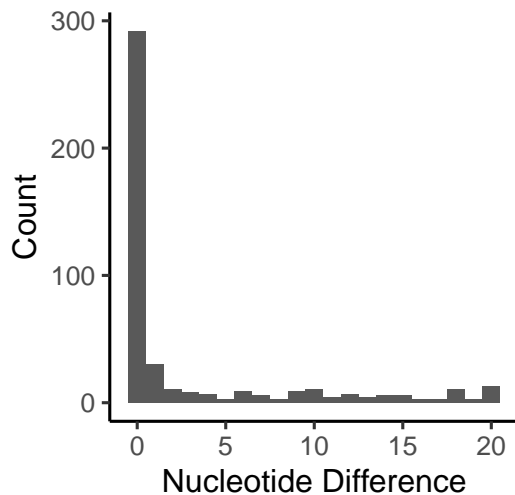
IGHV1–46*01

851 sequences assigned
545 (64%) exact matches, in which:
538 unique CDR3
6 unique J



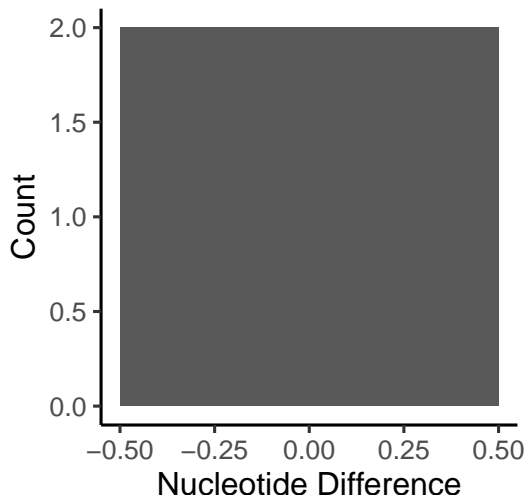
IGHV1–3*01_05

507 sequences assigned
292 (57.6%) exact matches, in which:
289 unique CDR3
6 unique J



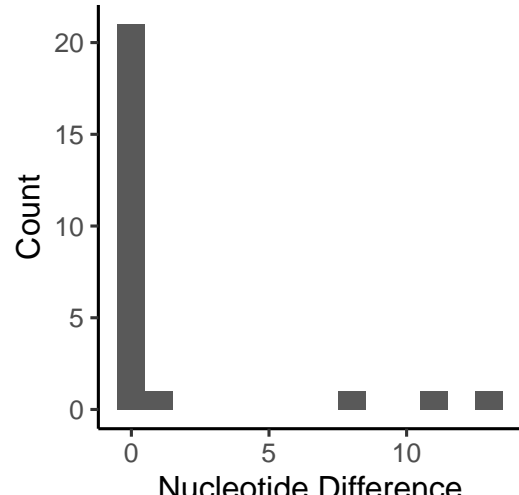
IGHV1–45*02

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



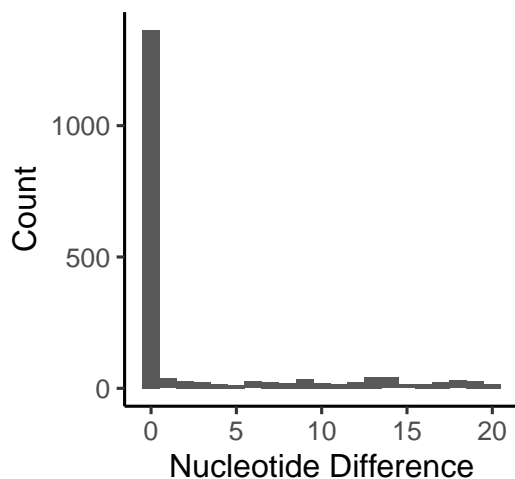
IGHV1–58*02

25 sequences assigned
21 (84%) exact matches, in which:
21 unique CDR3
4 unique J



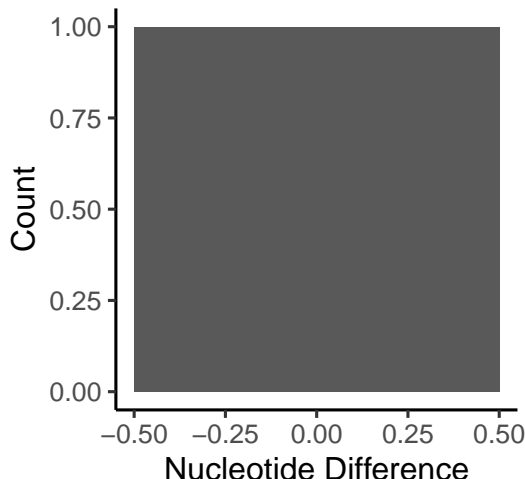
IGHV1–18*01

2026 sequences assigned
1364 (67.3%) exact matches, in which:
1353 unique CDR3
6 unique J



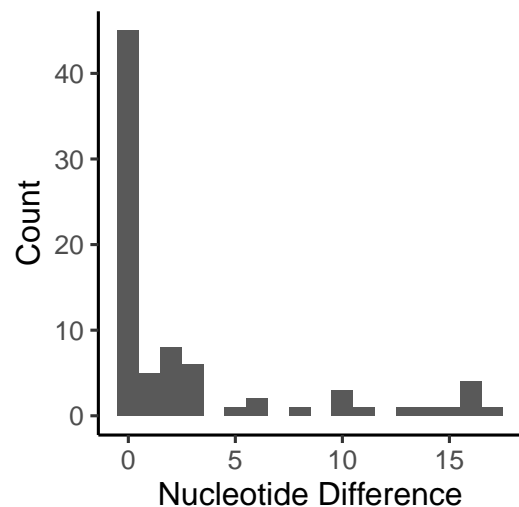
IGHV1–45*03

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



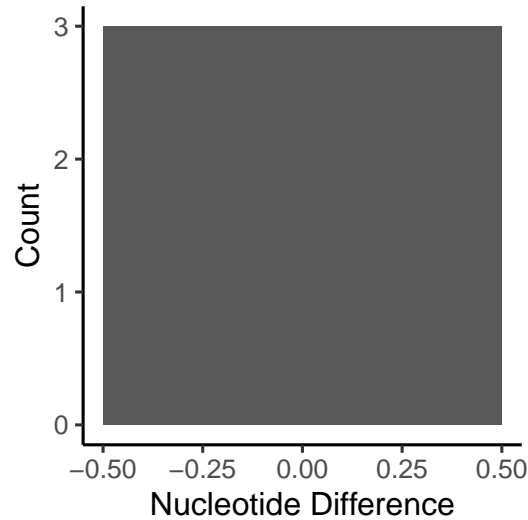
IGHV1–58*01_03

83 sequences assigned
45 (54.2%) exact matches, in which:
44 unique CDR3
5 unique J



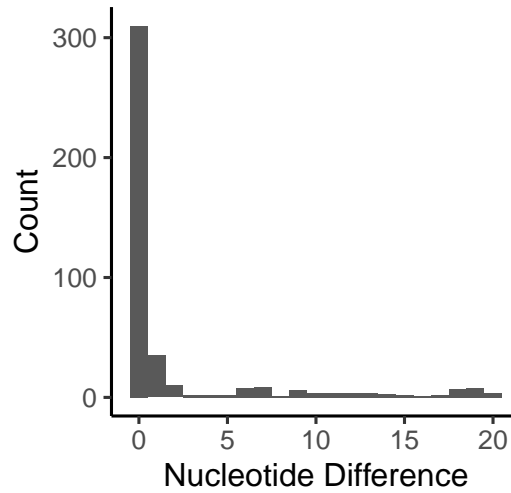
IGHV1-69-2*01

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



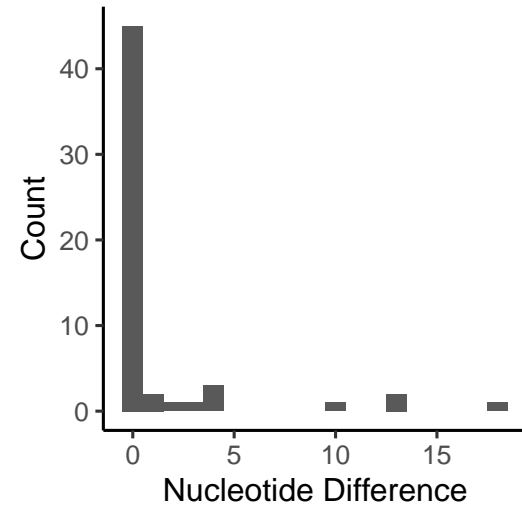
IGHV1-69*06_14

462 sequences assigned
310 (67.1%) exact matches, in which:
307 unique CDR3
6 unique J



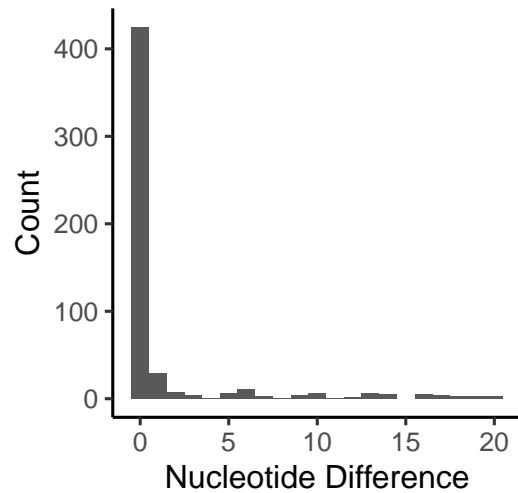
IGHV2-26*01

57 sequences assigned
45 (78.9%) exact matches, in which:
41 unique CDR3
4 unique J



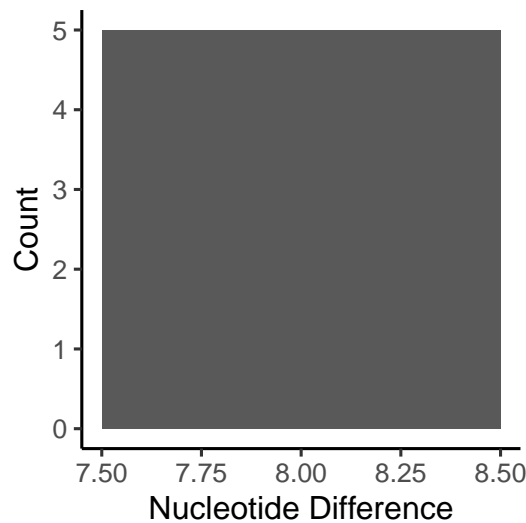
IGHV1-69*01_12_13

576 sequences assigned
425 (73.8%) exact matches, in which:
422 unique CDR3
6 unique J



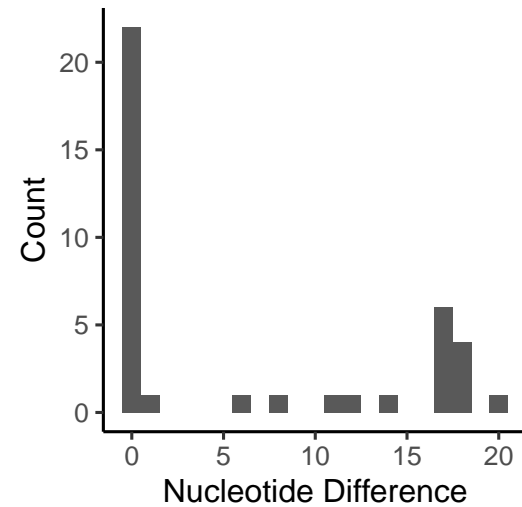
IGHV1-NL1*01

5 sequences assigned
No exact matches.



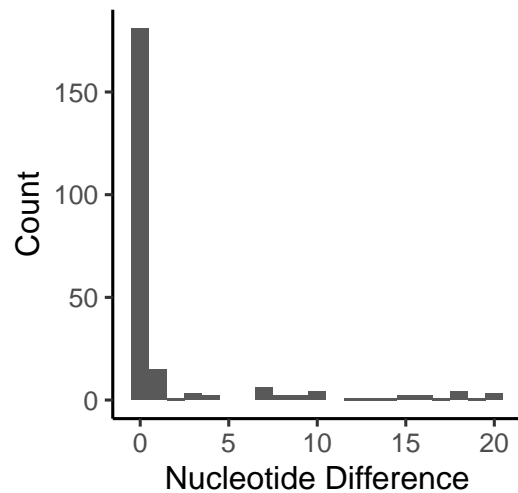
IGHV2-70*01

41 sequences assigned
22 (53.7%) exact matches, in which:
20 unique CDR3
3 unique J



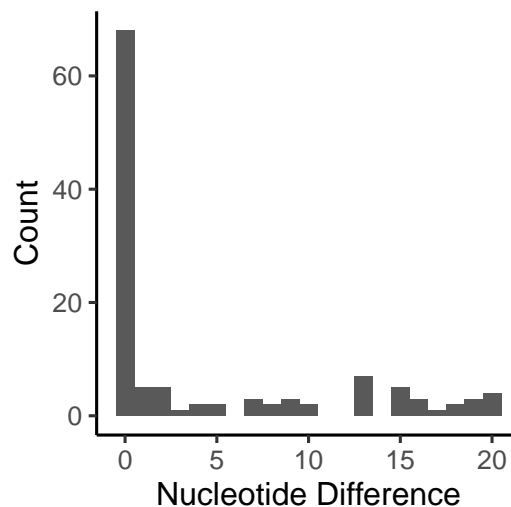
IGHV1-69*04_09_G112A

251 sequences assigned
181 (72.1%) exact matches, in which:
180 unique CDR3
5 unique J



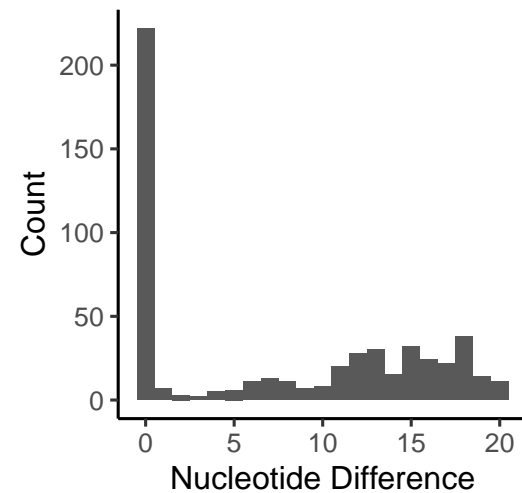
IGHV2-5*02

128 sequences assigned
68 (53.1%) exact matches, in which:
66 unique CDR3
6 unique J



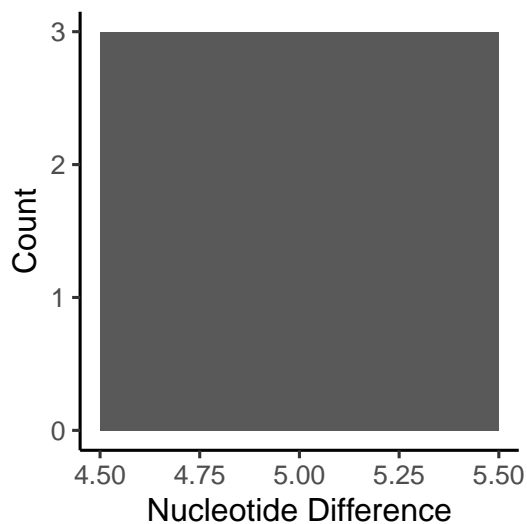
IGHV3-7*03

648 sequences assigned
222 (34.3%) exact matches, in which:
200 unique CDR3
6 unique J



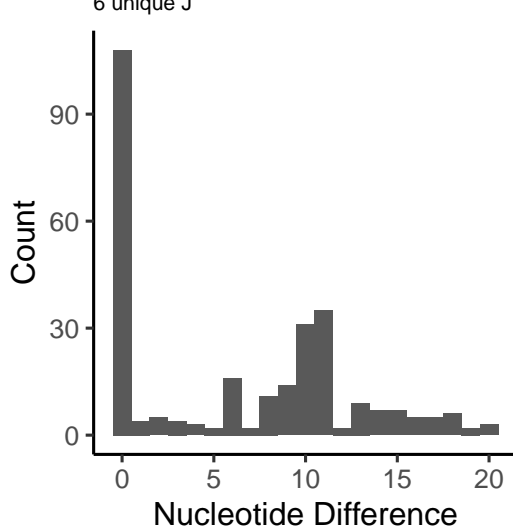
IGHV3-9*01

3 sequences assigned
No exact matches.



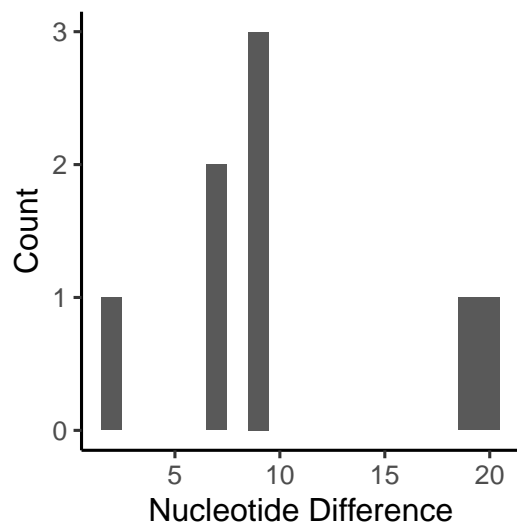
IGHV3-15*01_02

363 sequences assigned
108 (29.8%) exact matches, in which:
93 unique CDR3
6 unique J



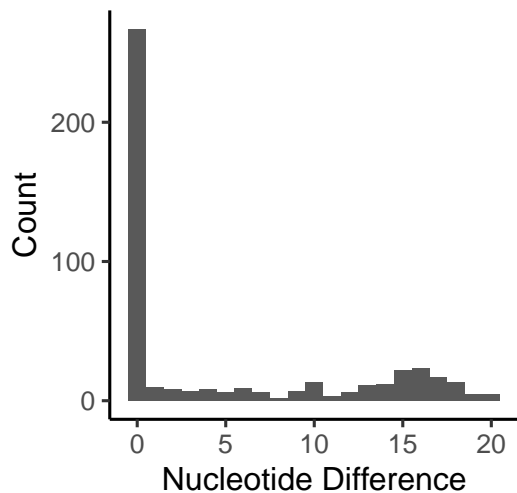
IGHV3-20*03_04

15 sequences assigned
No exact matches.



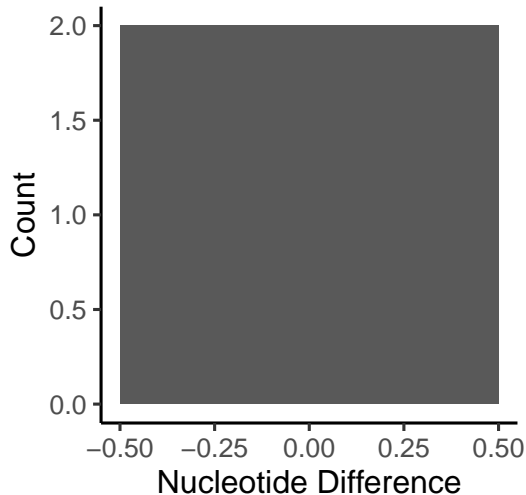
IGHV3-11*06_T300C

583 sequences assigned
267 (45.8%) exact matches, in which:
237 unique CDR3
6 unique J



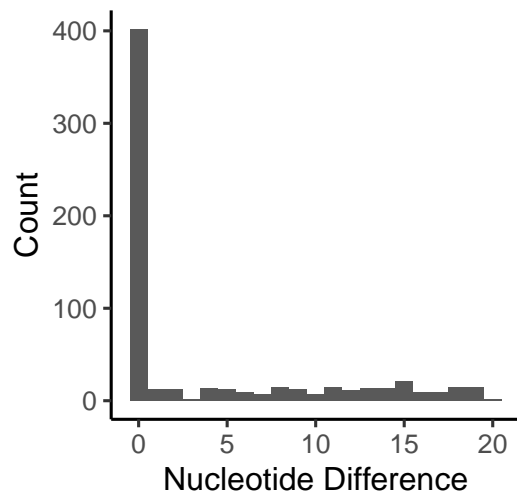
IGHV3-19*01

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



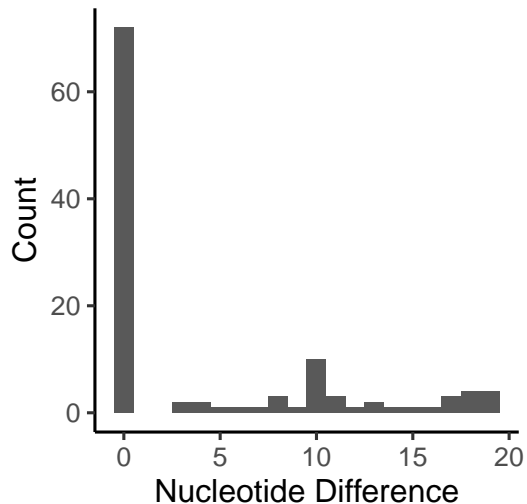
IGHV3-21*01_02

735 sequences assigned
402 (54.7%) exact matches, in which:
340 unique CDR3
6 unique J



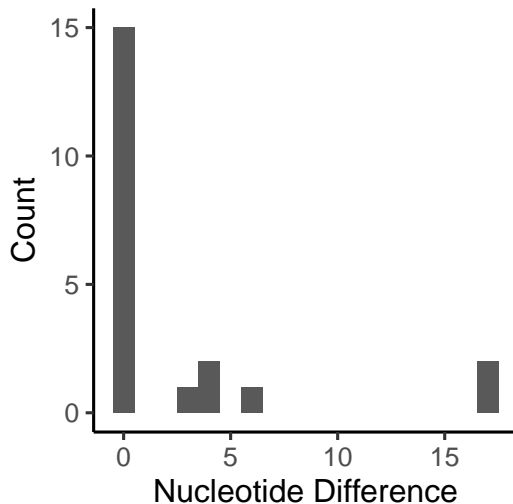
IGHV3-13*04

126 sequences assigned
72 (57.1%) exact matches, in which:
63 unique CDR3
6 unique J



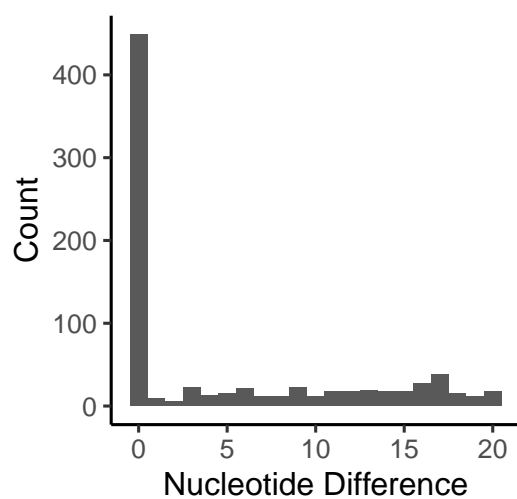
IGHV3-20*01_02

22 sequences assigned
15 (68.2%) exact matches, in which:
13 unique CDR3
5 unique J



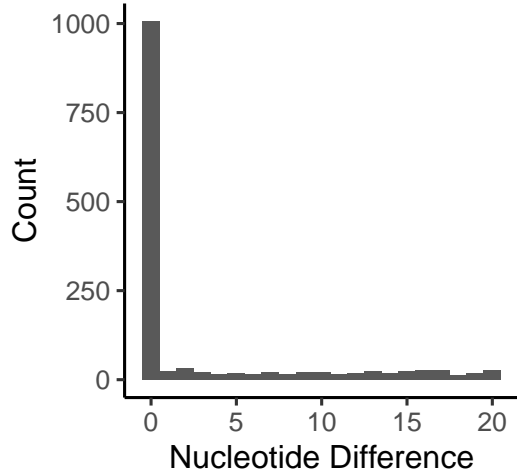
IGHV3-23*01_04

1052 sequences assigned
449 (42.7%) exact matches, in which:
387 unique CDR3
6 unique J



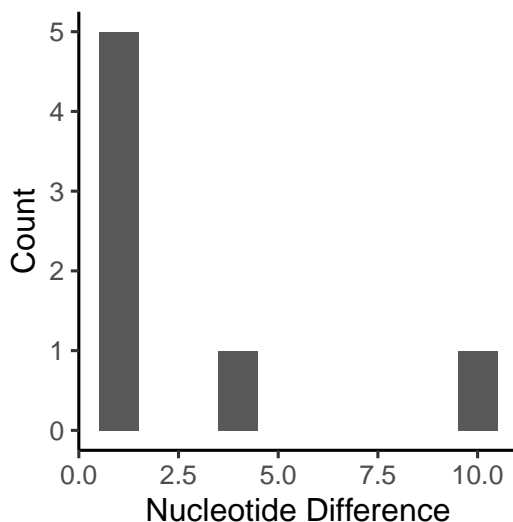
IGHV3-30-3*01

1788 sequences assigned
1006 (56.3%) exact matches, in which:
897 unique CDR3
6 unique J



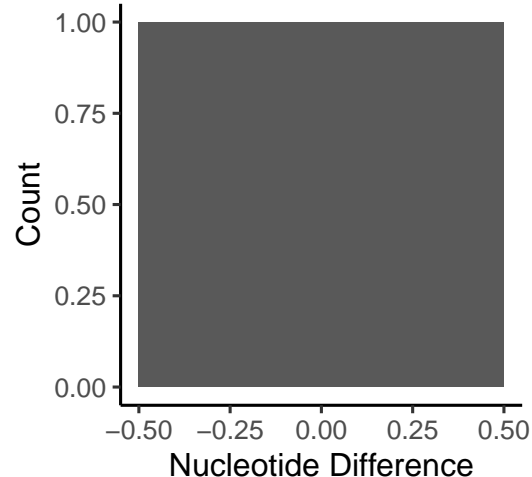
IGHV3-33*05

16 sequences assigned
No exact matches.



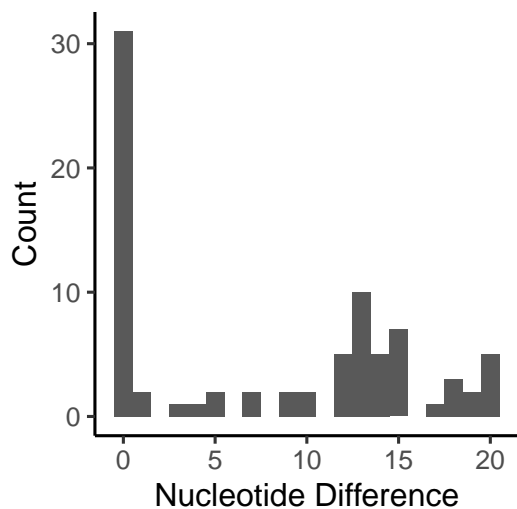
IGHV3-47*01

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



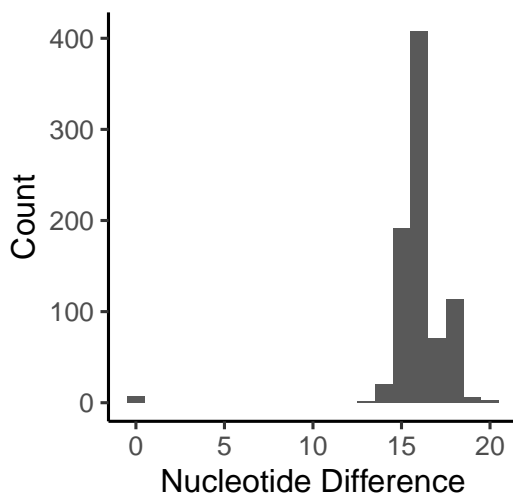
IGHV3-33*01

91 sequences assigned
31 (34.1%) exact matches, in which:
29 unique CDR3
4 unique J



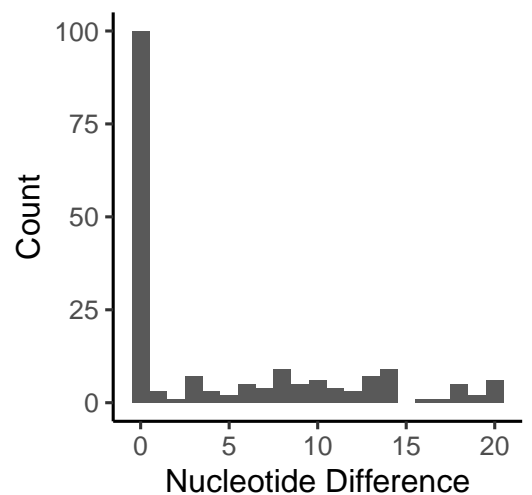
IGHV3-43*01

850 sequences assigned
7 (0.8%) exact matches, in which:
6 unique CDR3
3 unique J



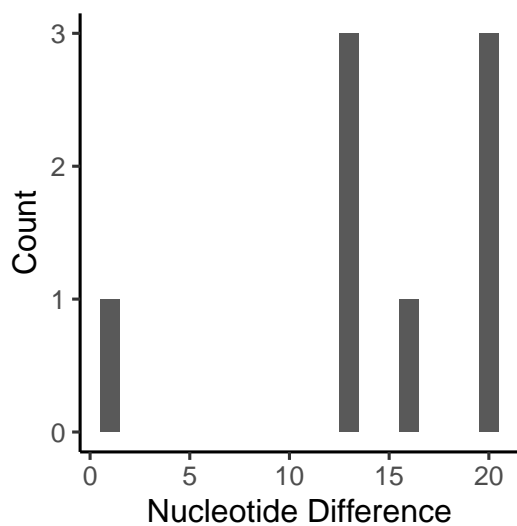
IGHV3-48*02

246 sequences assigned
100 (40.7%) exact matches, in which:
89 unique CDR3
5 unique J



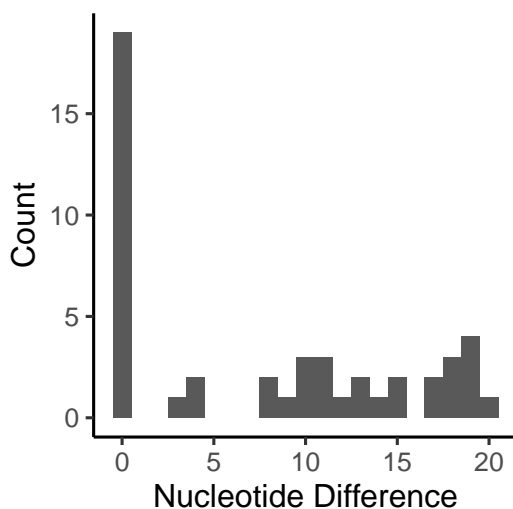
IGHV3-33*03

9 sequences assigned
No exact matches.



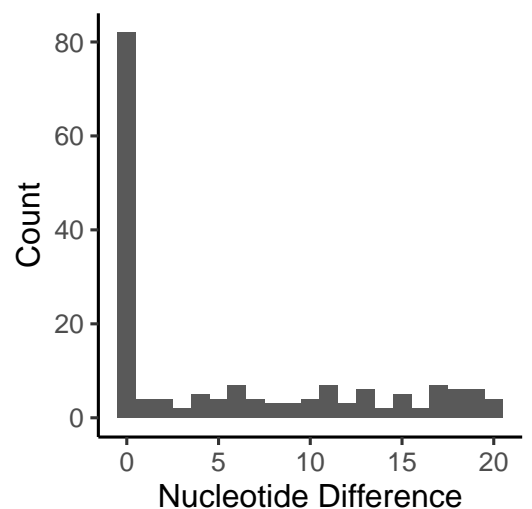
IGHV3-43*02

57 sequences assigned
19 (33.3%) exact matches, in which:
19 unique CDR3
4 unique J



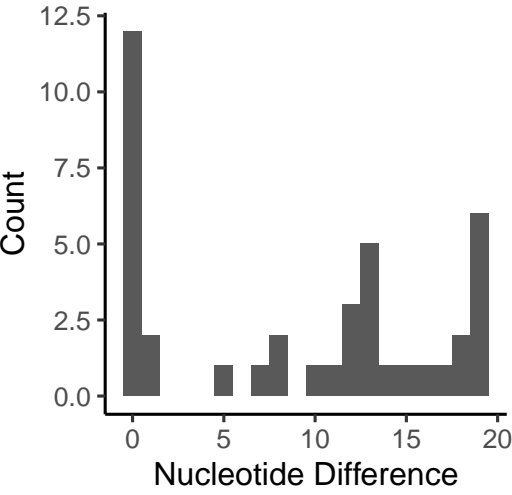
IGHV3-48*03

233 sequences assigned
82 (35.2%) exact matches, in which:
72 unique CDR3
5 unique J



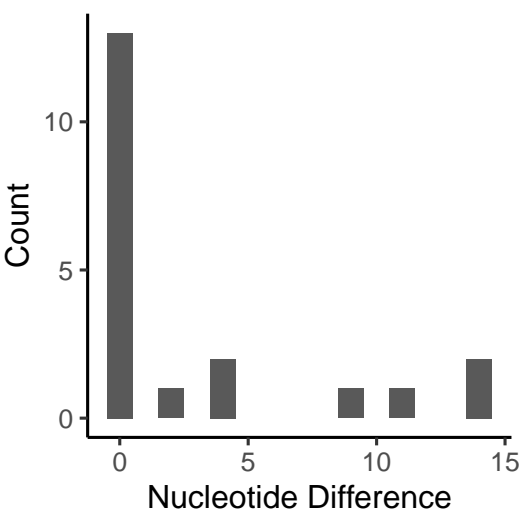
IGHV3-49*04

45 sequences assigned
12 (26.7%) exact matches, in which:
10 unique CDR3
4 unique J



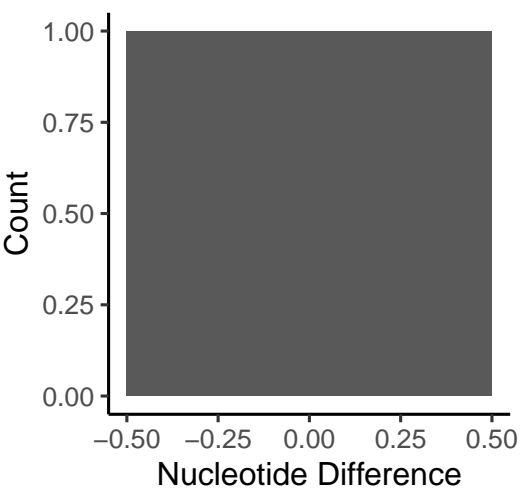
IGHV3-53*04

38 sequences assigned
13 (34.2%) exact matches, in which:
12 unique CDR3
3 unique J



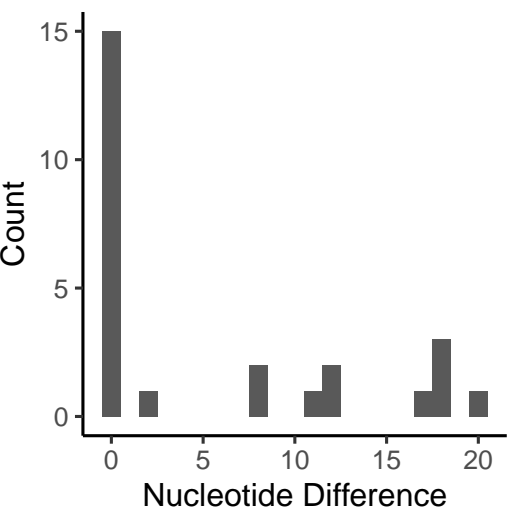
IGHV3-64*02_07

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



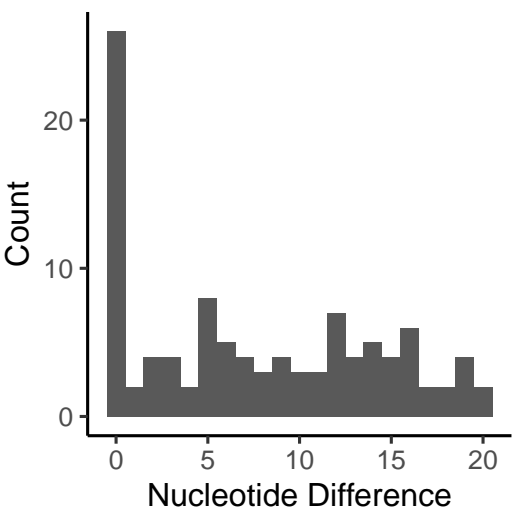
IGHV3-49*03_05

29 sequences assigned
15 (51.7%) exact matches, in which:
13 unique CDR3
3 unique J



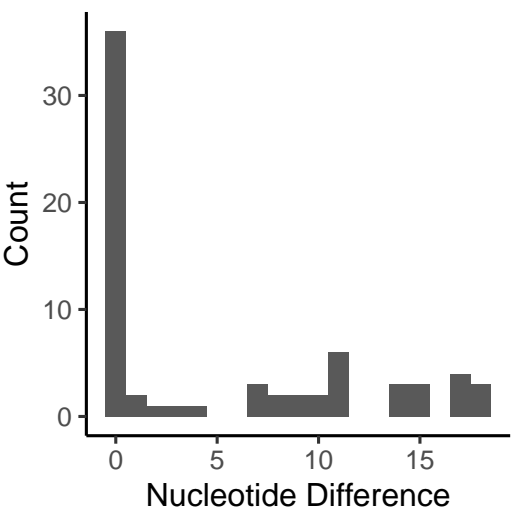
IGHV3-53*01_02

121 sequences assigned
26 (21.5%) exact matches, in which:
23 unique CDR3
5 unique J



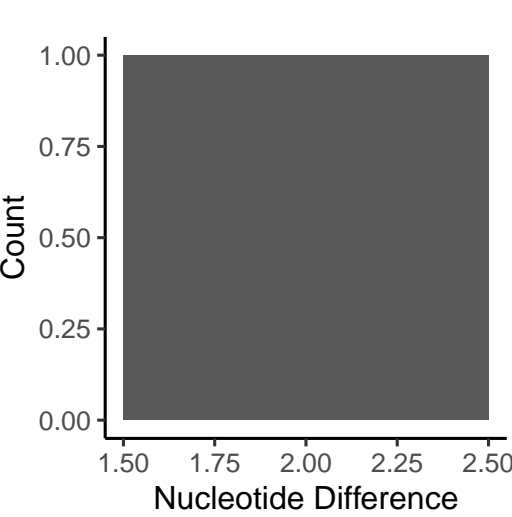
IGHV3-66*02

92 sequences assigned
36 (39.1%) exact matches, in which:
31 unique CDR3
5 unique J



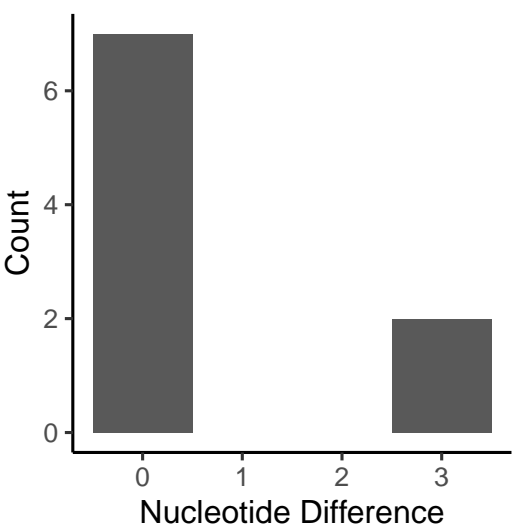
IGHV3-52*01_03

1 sequences assigned
No exact matches.



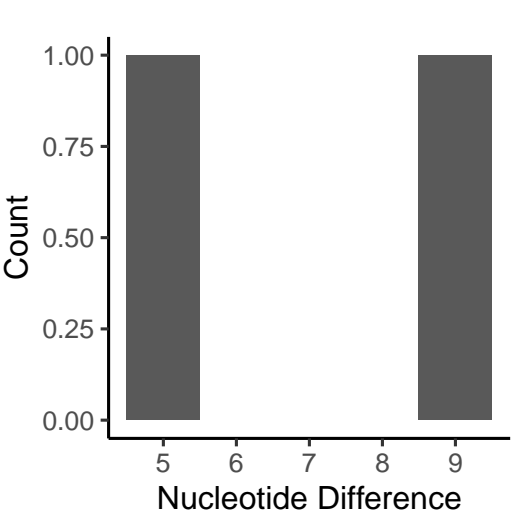
IGHV3-64*01

10 sequences assigned
7 (70%) exact matches, in which:
6 unique CDR3
3 unique J



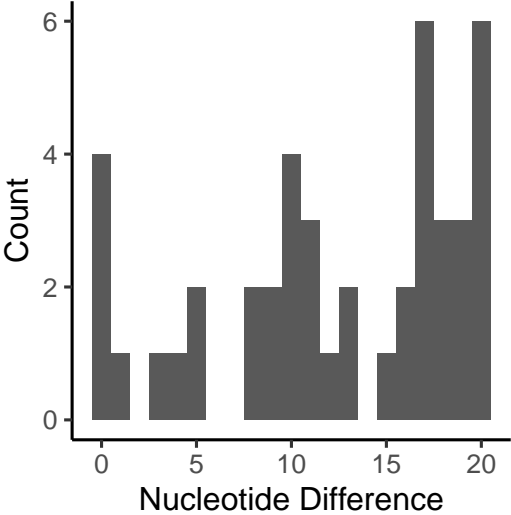
IGHV3-69-1*02

3 sequences assigned
No exact matches.



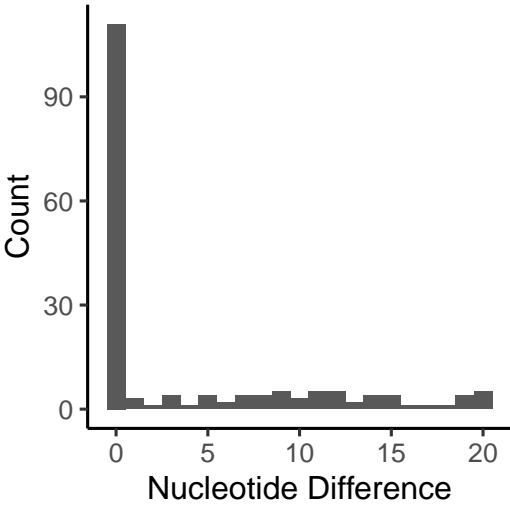
IGHV3-72*01

63 sequences assigned
4 (6.3%) exact matches, in which:
4 unique CDR3
3 unique J



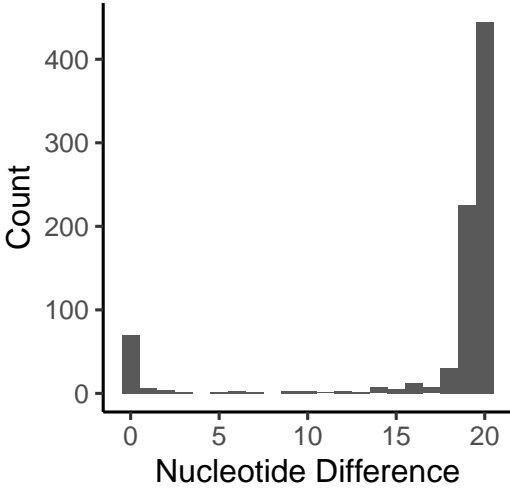
IGHV3-74*01_02

196 sequences assigned
111 (56.6%) exact matches, in which:
93 unique CDR3
4 unique J



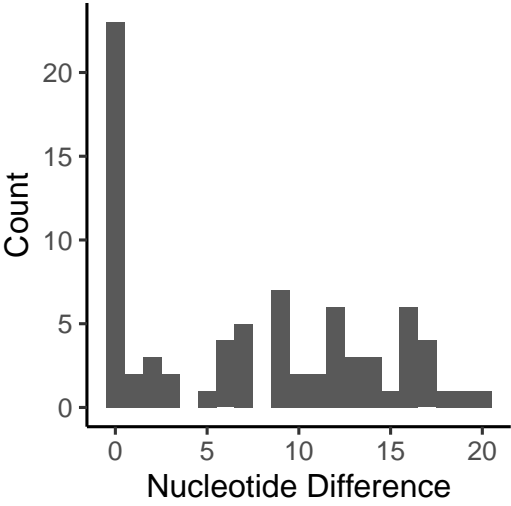
IGHV4-4*02_03

911 sequences assigned
70 (7.7%) exact matches, in which:
69 unique CDR3
6 unique J



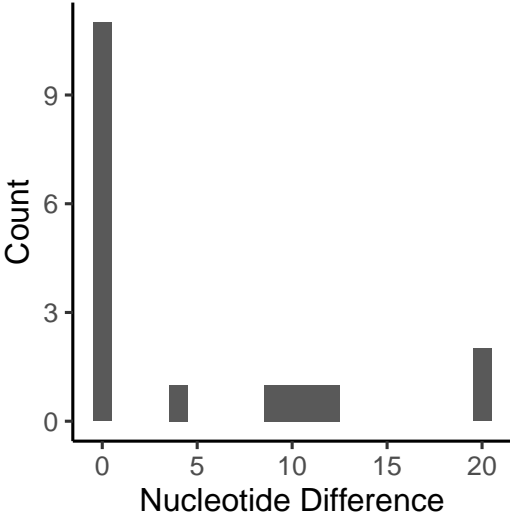
IGHV3-73*01_02

104 sequences assigned
23 (22.1%) exact matches, in which:
19 unique CDR3
4 unique J



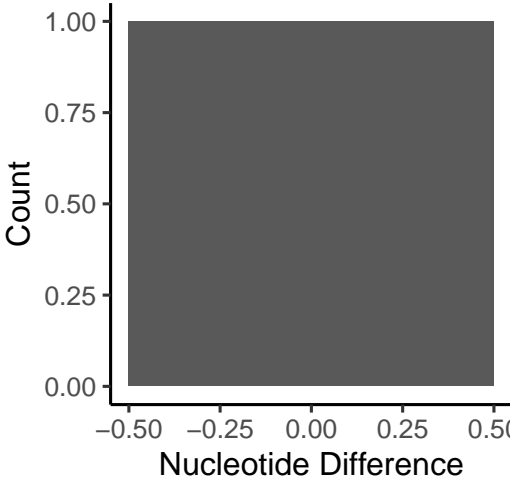
IGHV3-43D*03

21 sequences assigned
11 (52.4%) exact matches, in which:
9 unique CDR3
2 unique J



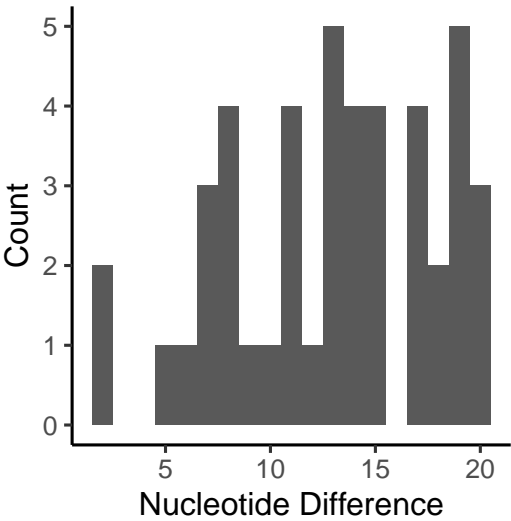
IGHV4-28*03

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



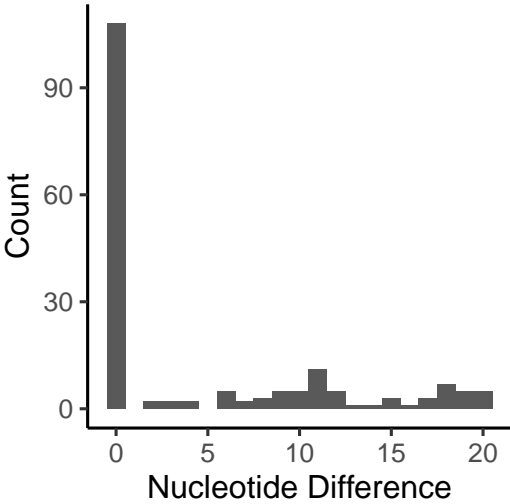
IGHV3-74*03

127 sequences assigned
No exact matches.



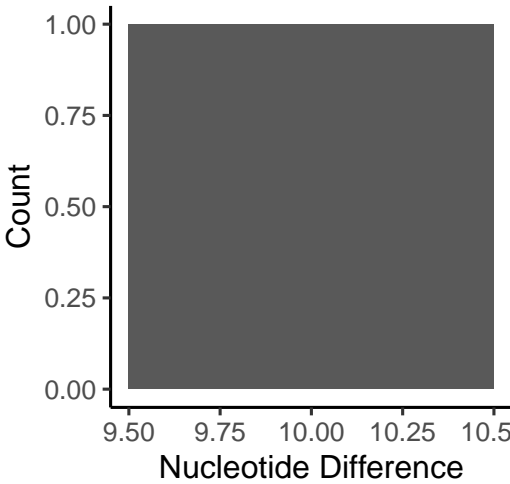
IGHV3-64D*06

275 sequences assigned
108 (39.3%) exact matches, in which:
91 unique CDR3
6 unique J



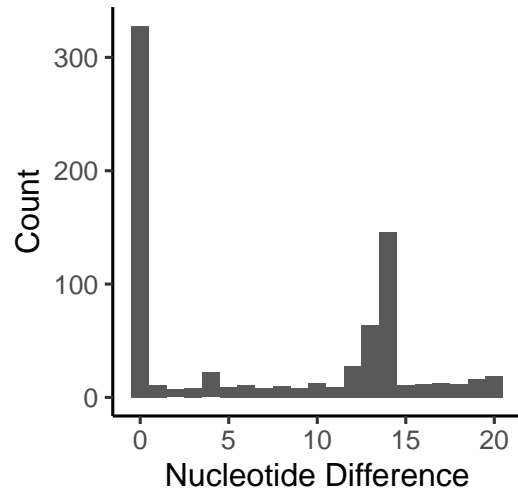
IGHV4-28*01_07

2 sequences assigned
No exact matches.



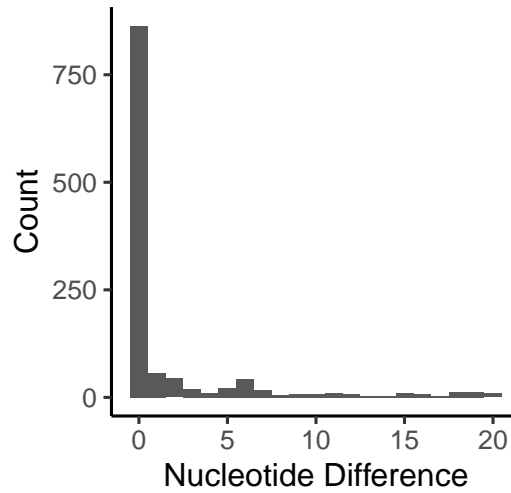
IGHV4-30-4*01

959 sequences assigned
328 (34.2%) exact matches, in which:
322 unique CDR3
6 unique J



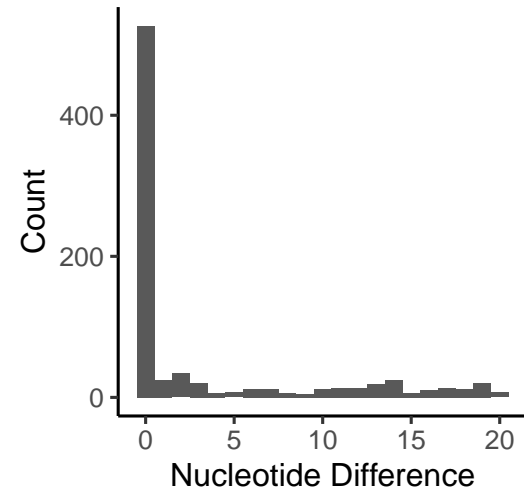
IGHV4-34*01_02

1277 sequences assigned
864 (67.7%) exact matches, in which:
837 unique CDR3
6 unique J



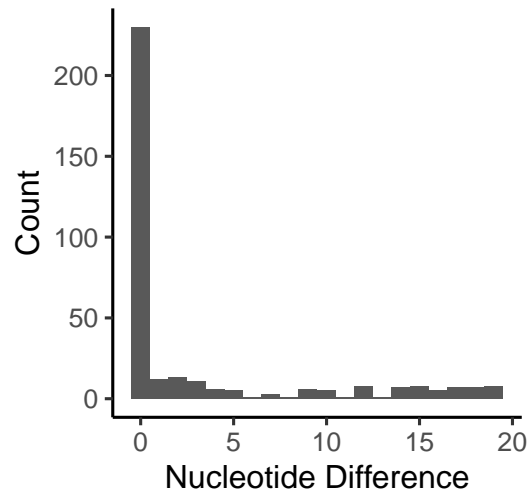
IGHV4-59*02_G88A

974 sequences assigned
527 (54.1%) exact matches, in which:
523 unique CDR3
6 unique J



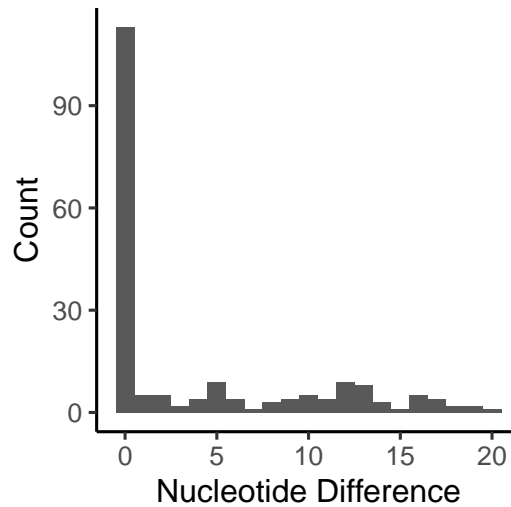
IGHV4-30-2*01

415 sequences assigned
230 (55.4%) exact matches, in which:
216 unique CDR3
6 unique J



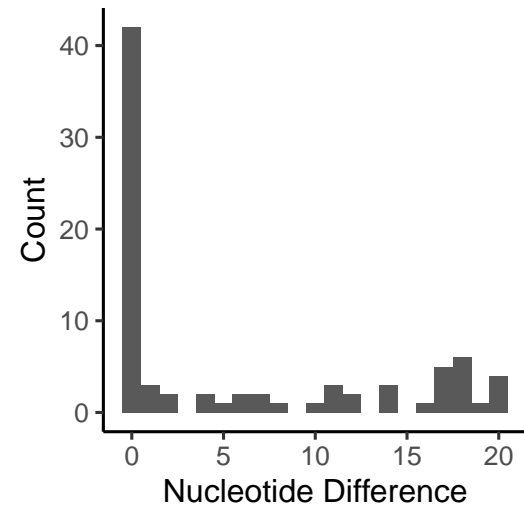
IGHV4-38-2*02

270 sequences assigned
113 (41.9%) exact matches, in which:
112 unique CDR3
6 unique J



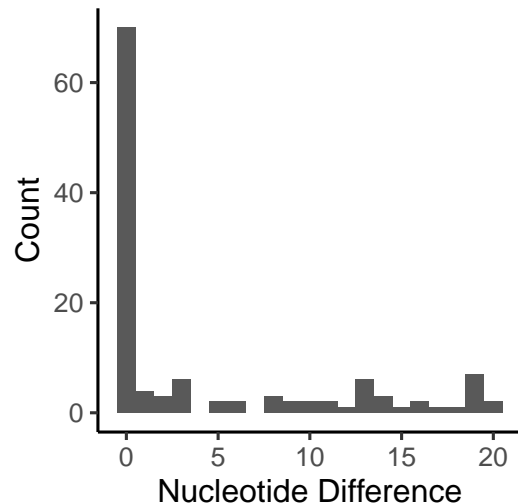
IGHV4-61*01

119 sequences assigned
42 (35.3%) exact matches, in which:
42 unique CDR3
5 unique J



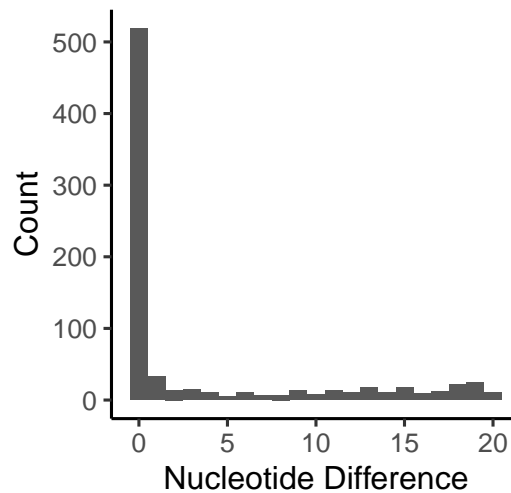
IGHV4-31*02

160 sequences assigned
70 (43.8%) exact matches, in which:
69 unique CDR3
5 unique J



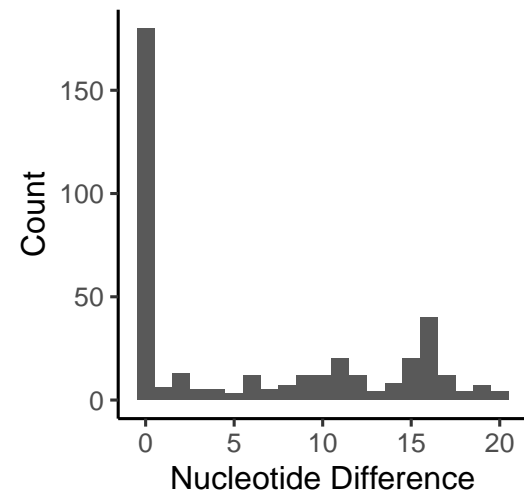
IGHV4-39*02_C258G

936 sequences assigned
519 (55.4%) exact matches, in which:
512 unique CDR3
6 unique J



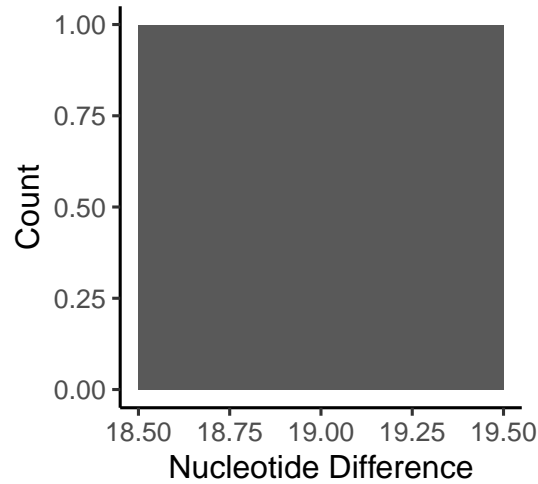
IGHV4-61*02

478 sequences assigned
180 (37.7%) exact matches, in which:
176 unique CDR3
6 unique J



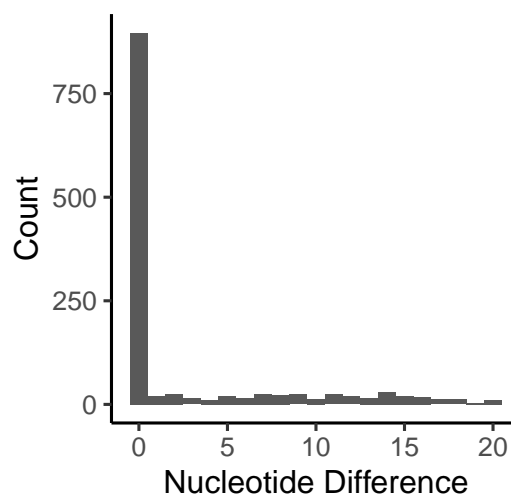
IGHV4/OR15–8*02

2 sequences assigned
No exact matches.



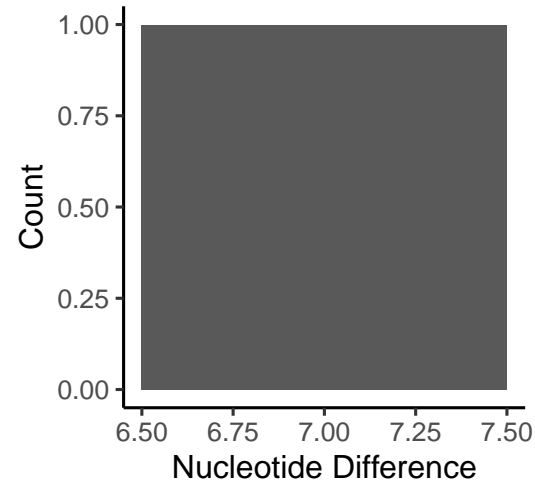
IGHV5–51*07_A128G

1338 sequences assigned
897 (67%) exact matches, in which:
824 unique CDR3
6 unique J



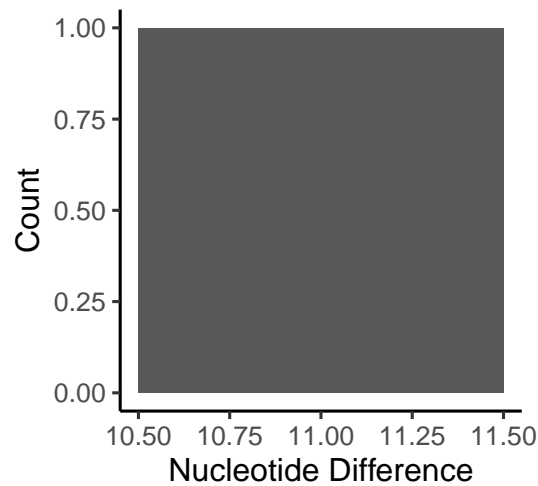
IGHV3/OR16–10*01_03

1 sequences assigned
No exact matches.



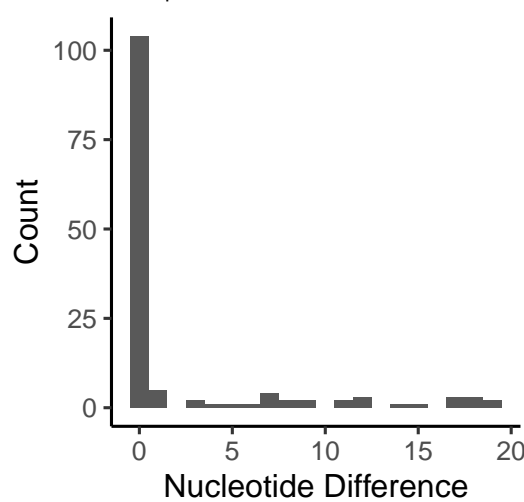
IGHV1/OR15–9*01

1 sequences assigned
No exact matches.



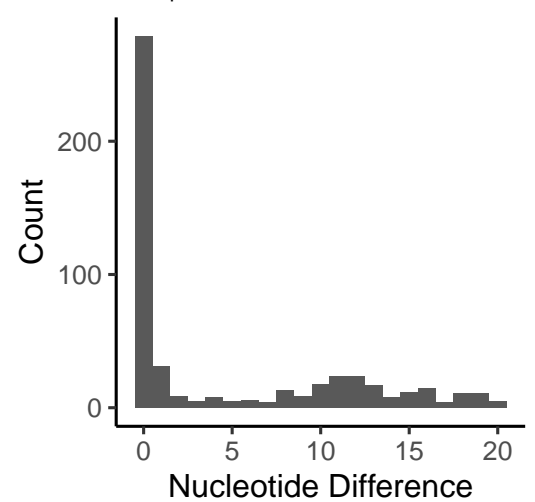
IGHV6–1*01_02

145 sequences assigned
104 (71.7%) exact matches, in which:
104 unique CDR3
5 unique J



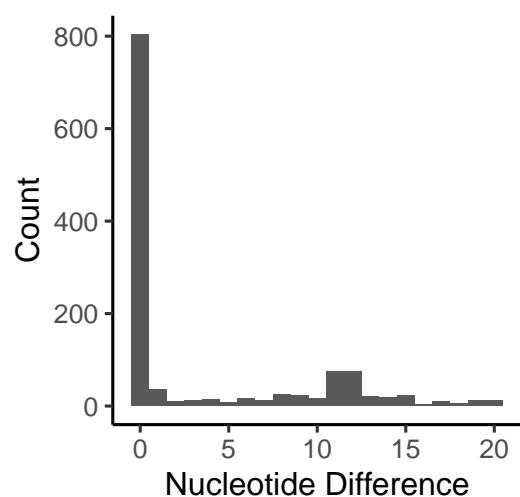
IGHV7–4–1*02

573 sequences assigned
279 (48.7%) exact matches, in which:
277 unique CDR3
6 unique J



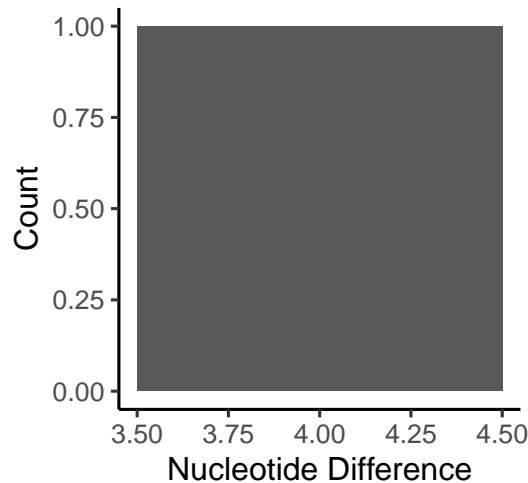
IGHV5–10–1*01_03

1291 sequences assigned
804 (62.3%) exact matches, in which:
737 unique CDR3
6 unique J



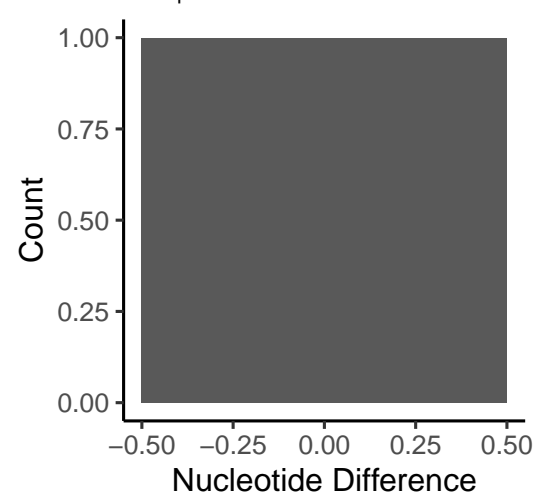
IGHV3/OR16–8*01

1 sequences assigned
No exact matches.



IGHV7–81*01

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





Warning – no inferred sequences found.