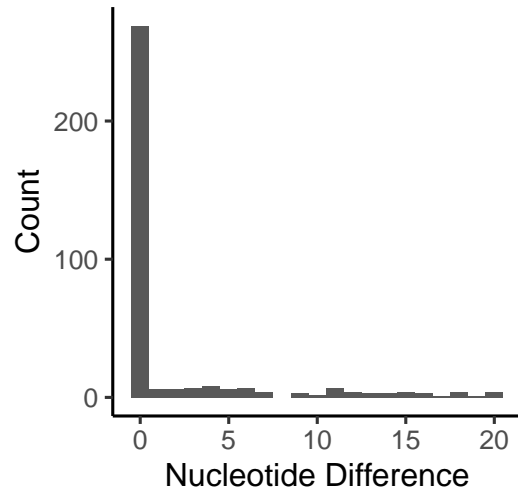


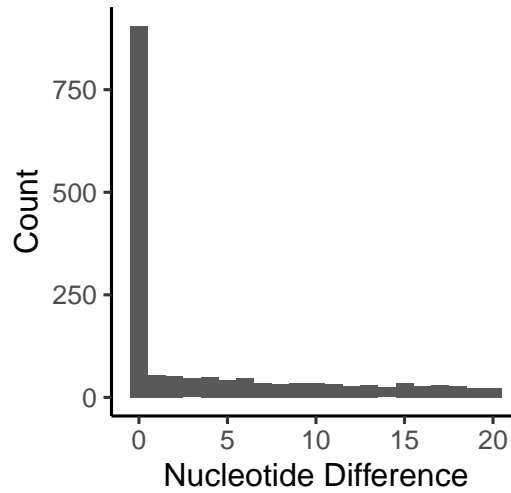
IGHV1-2*04

376 sequences assigned
269 (71.5%) exact matches, in which:
268 unique CDR3
5 unique J



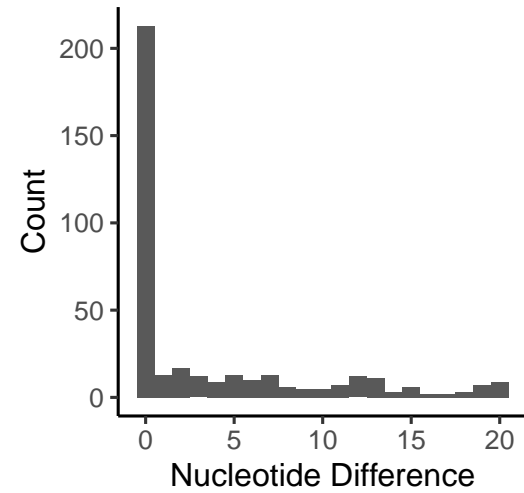
IGHV1-18*04

1971 sequences assigned
906 (46%) exact matches, in which:
899 unique CDR3
6 unique J



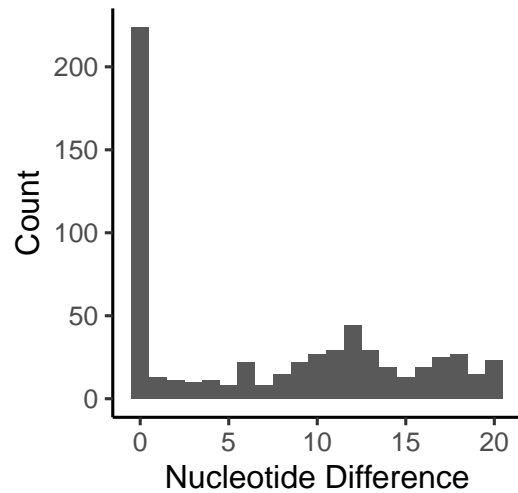
IGHV1-46*01

462 sequences assigned
213 (46.1%) exact matches, in which:
213 unique CDR3
6 unique J



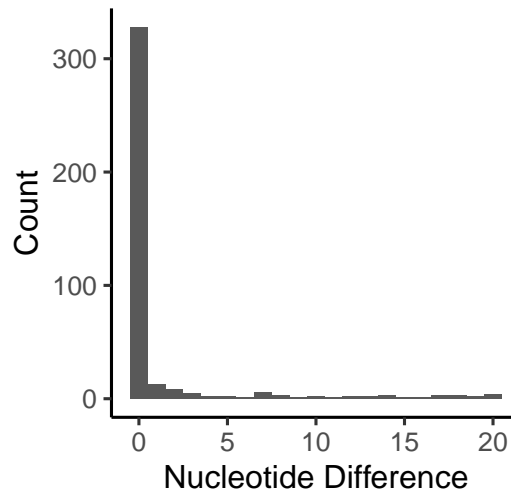
IGHV1-3*01_05

715 sequences assigned
224 (31.3%) exact matches, in which:
224 unique CDR3
6 unique J



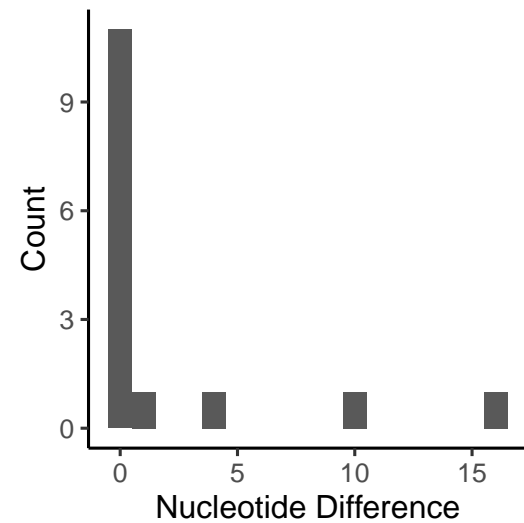
IGHV1-24*01

404 sequences assigned
328 (81.2%) exact matches, in which:
324 unique CDR3
6 unique J



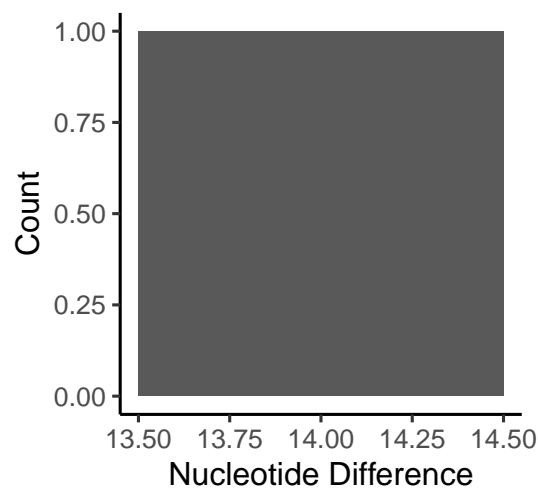
IGHV1-58*02

15 sequences assigned
11 (73.3%) exact matches, in which:
11 unique CDR3
3 unique J



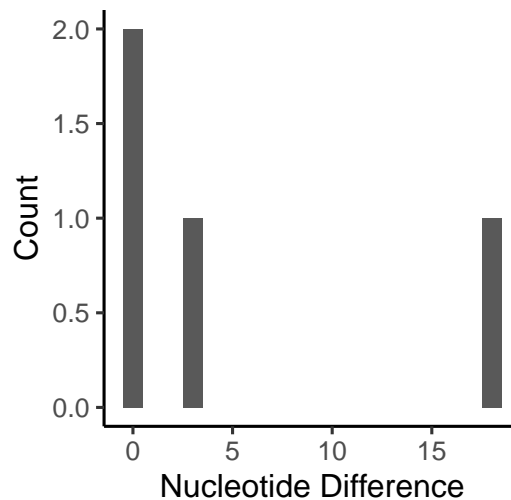
IGHV1-8*01

1 sequences assigned
No exact matches.



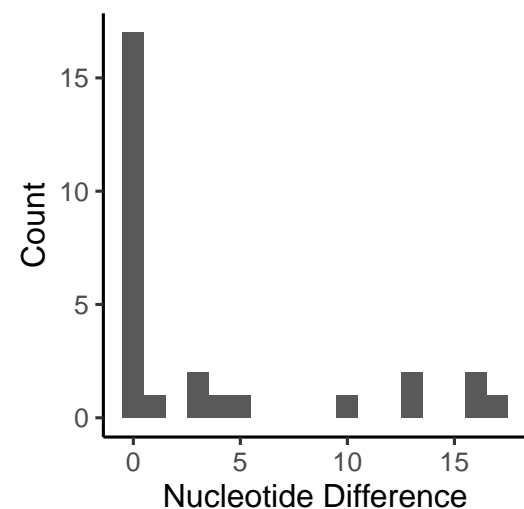
IGHV1-45*02

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



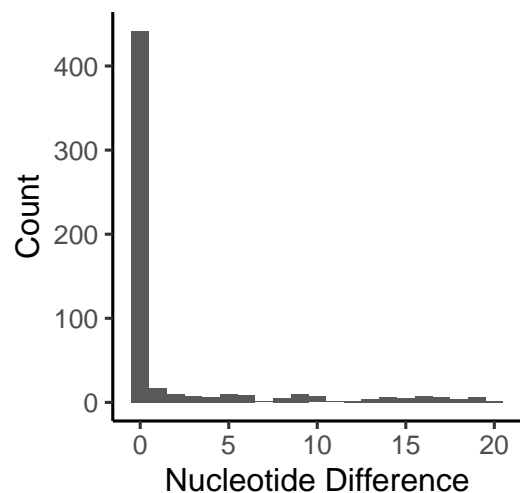
IGHV1-58*01_03

31 sequences assigned
17 (54.8%) exact matches, in which:
17 unique CDR3
4 unique J



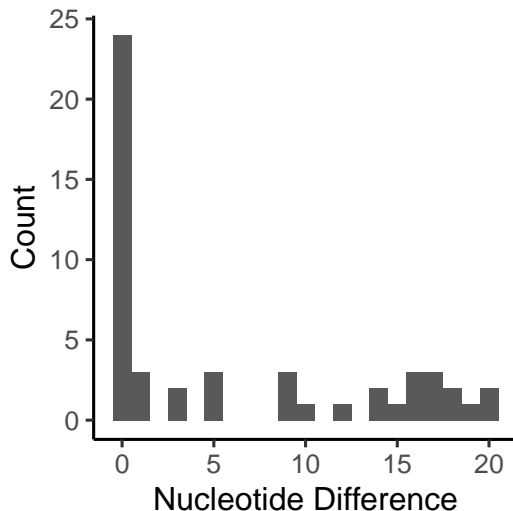
IGHV1-69*01_12_13

607 sequences assigned
442 (72.8%) exact matches, in which:
441 unique CDR3
6 unique J



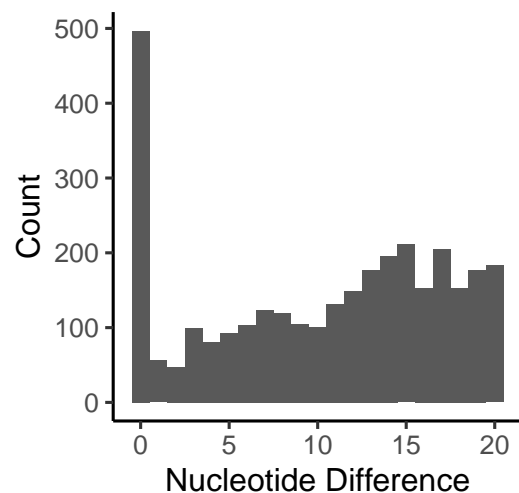
IGHV2-26*01

52 sequences assigned
24 (46.2%) exact matches, in which:
24 unique CDR3
5 unique J



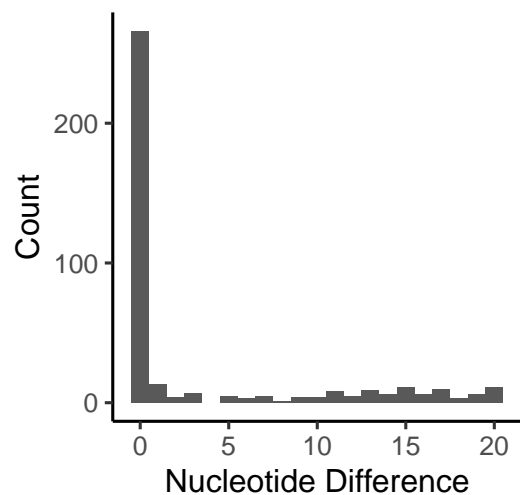
IGHV3-7*03

4283 sequences assigned
497 (11.6%) exact matches, in which:
488 unique CDR3
6 unique J



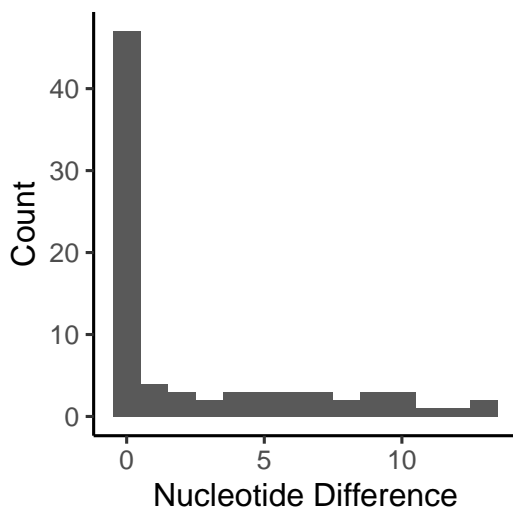
IGHV1-69*04_09

463 sequences assigned
266 (57.5%) exact matches, in which:
265 unique CDR3
6 unique J



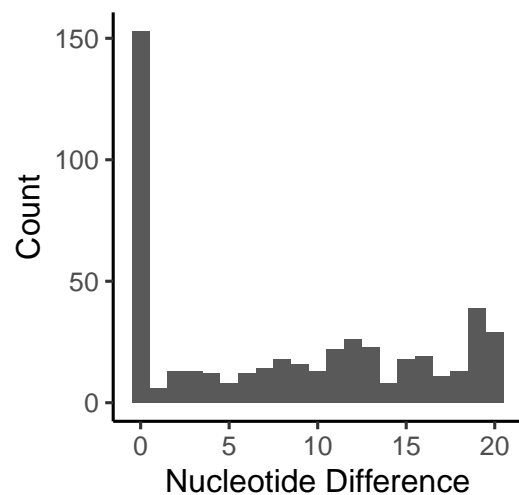
IGHV2-70*01

85 sequences assigned
47 (55.3%) exact matches, in which:
46 unique CDR3
6 unique J



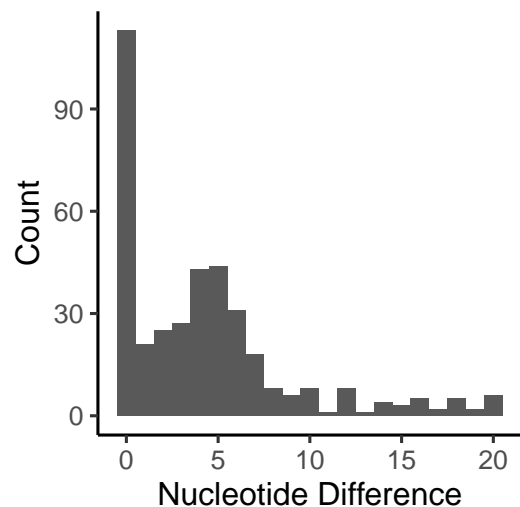
IGHV3-11*06

664 sequences assigned
153 (23%) exact matches, in which:
148 unique CDR3
6 unique J



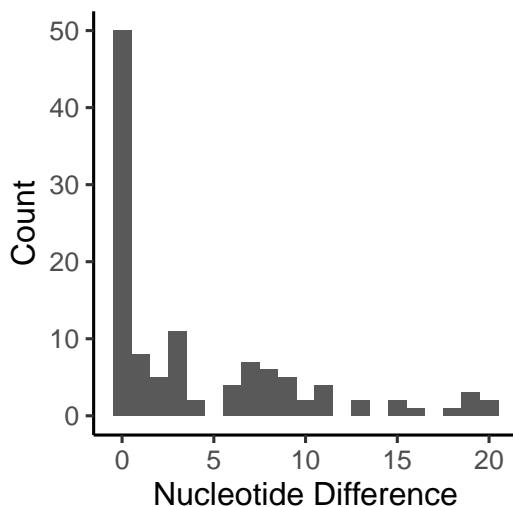
IGHV2-5*02

397 sequences assigned
113 (28.5%) exact matches, in which:
111 unique CDR3
6 unique J



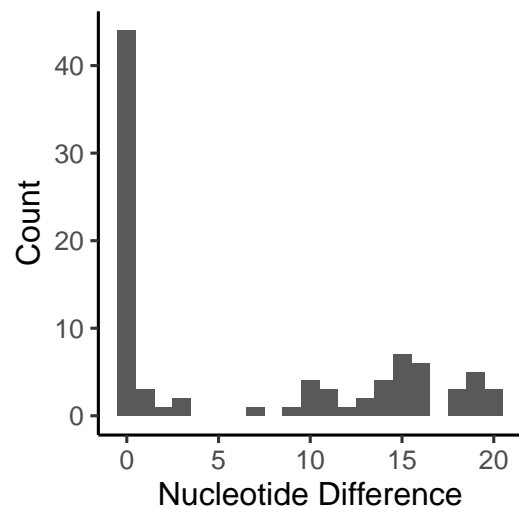
IGHV2-70*11_15

123 sequences assigned
50 (40.7%) exact matches, in which:
49 unique CDR3
5 unique J



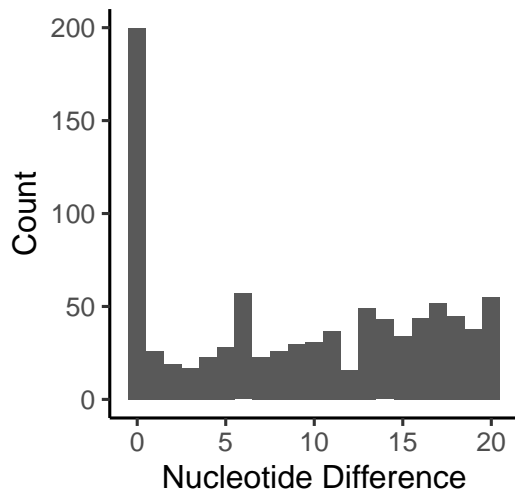
IGHV3-13*05

111 sequences assigned
44 (39.6%) exact matches, in which:
42 unique CDR3
5 unique J



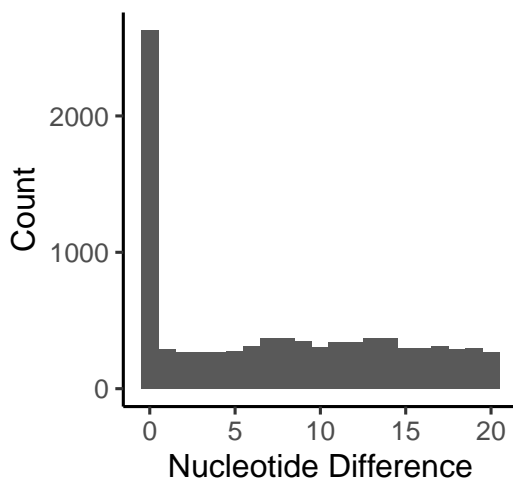
IGHV3-15*01_02

1270 sequences assigned
200 (15.7%) exact matches, in which:
193 unique CDR3
6 unique J



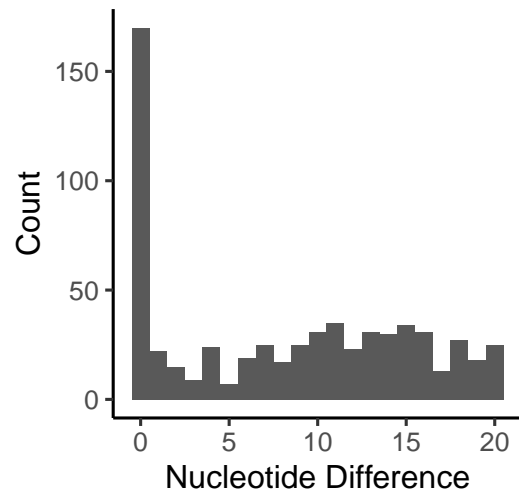
IGHV3-23*01_04

11192 sequences assigned
2627 (23.5%) exact matches, in which:
2567 unique CDR3
6 unique J



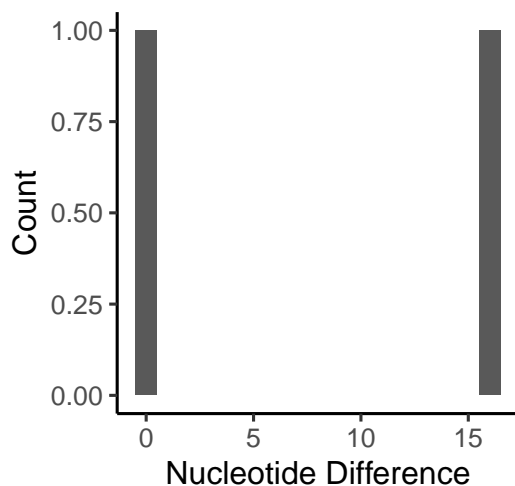
IGHV3-33*01

788 sequences assigned
170 (21.6%) exact matches, in which:
164 unique CDR3
6 unique J



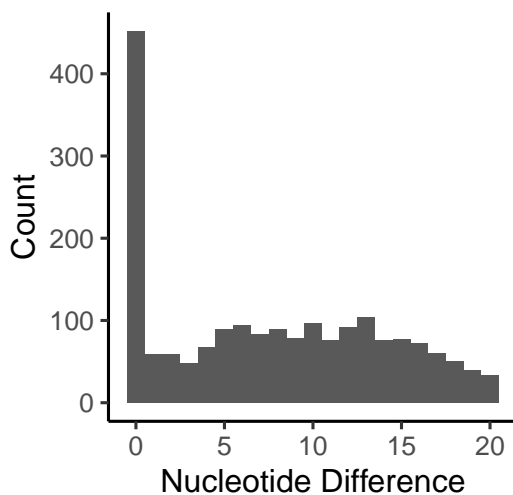
IGHV3-20*01_02

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



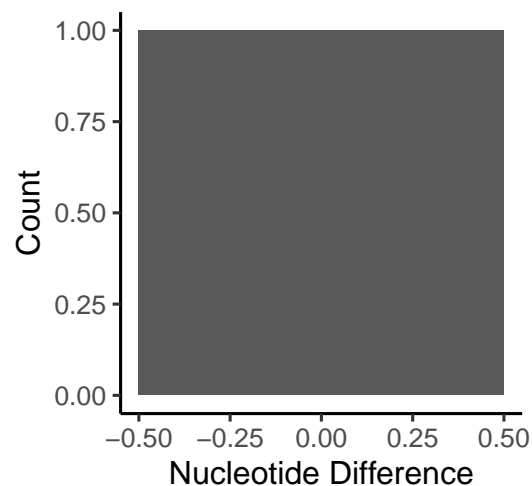
IGHV3-30-3*01

2087 sequences assigned
452 (21.7%) exact matches, in which:
446 unique CDR3
6 unique J



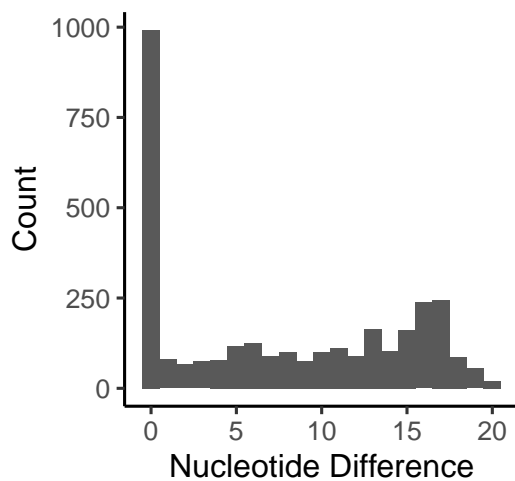
IGHV3-38-3*01

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



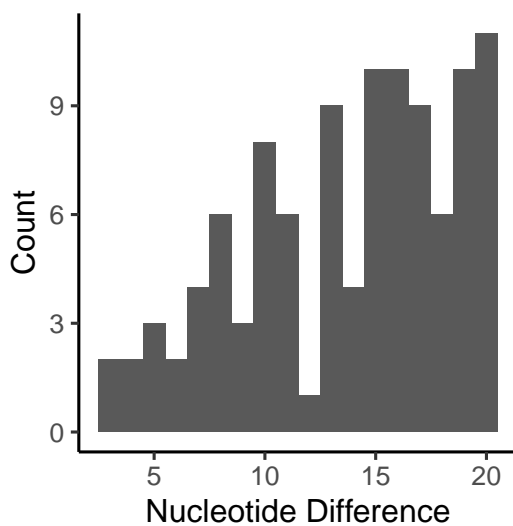
IGHV3-21*01_02

3354 sequences assigned
992 (29.6%) exact matches, in which:
945 unique CDR3
6 unique J



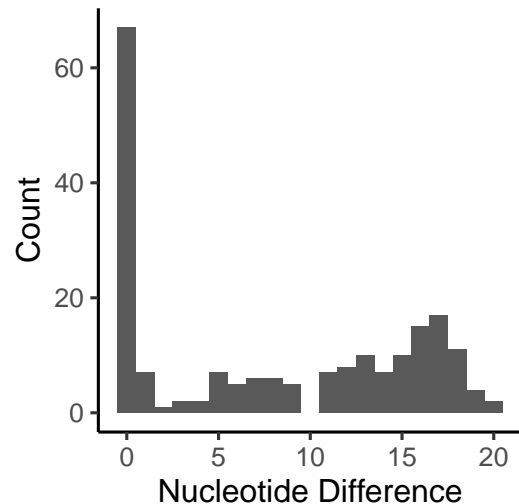
IGHV3-30*04

142 sequences assigned
No exact matches.



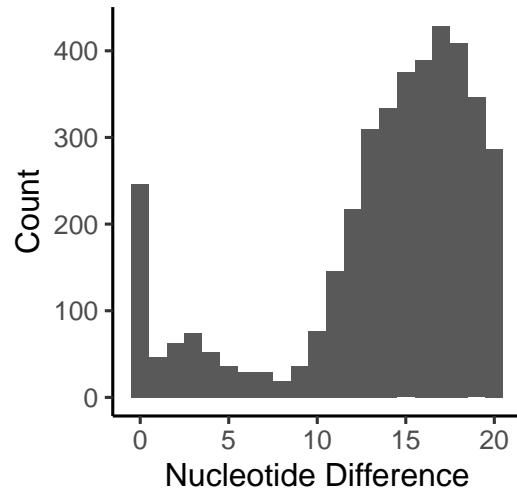
IGHV3-43*01

217 sequences assigned
67 (30.9%) exact matches, in which:
65 unique CDR3
5 unique J



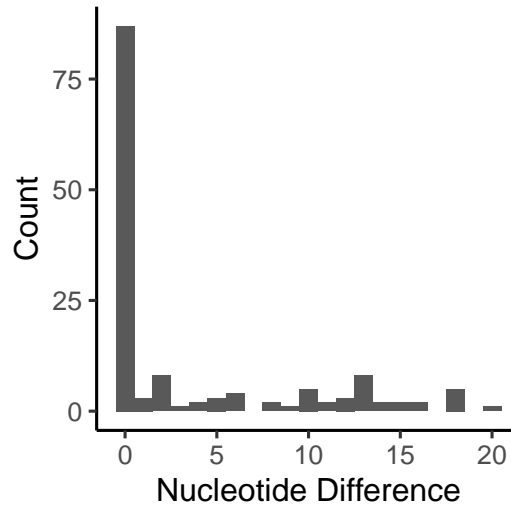
IGHV3-48*02

5291 sequences assigned
246 (4.6%) exact matches, in which:
235 unique CDR3
6 unique J



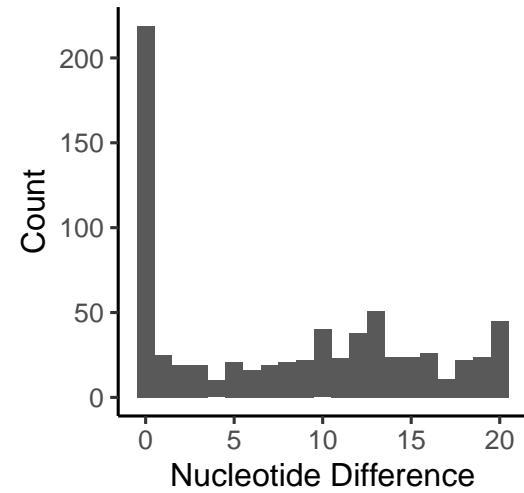
IGHV3-53*04

198 sequences assigned
87 (43.9%) exact matches, in which:
85 unique CDR3
6 unique J



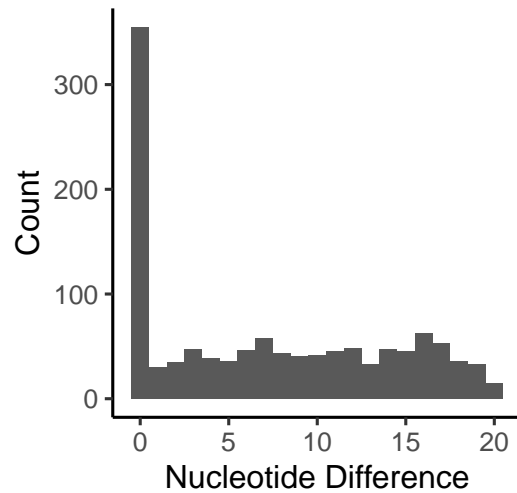
IGHV3-66*01

935 sequences assigned
219 (23.4%) exact matches, in which:
214 unique CDR3
6 unique J



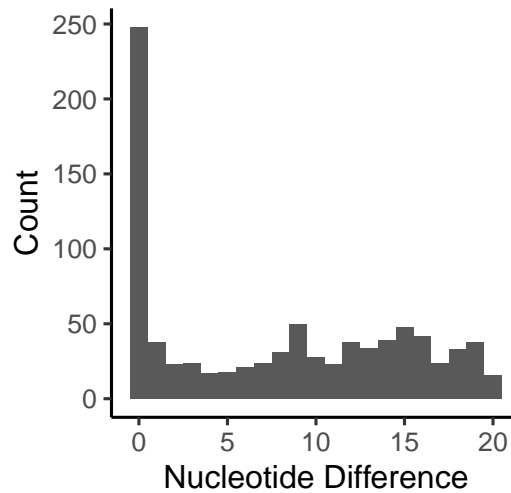
IGHV3-48*04

1376 sequences assigned
355 (25.8%) exact matches, in which:
340 unique CDR3
6 unique J



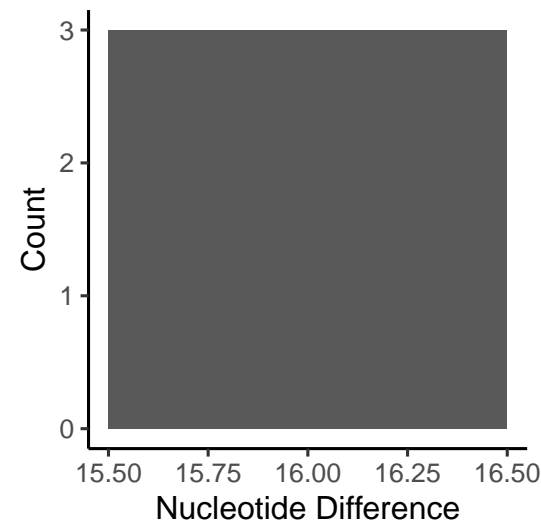
IGHV3-53*01_02

951 sequences assigned
248 (26.1%) exact matches, in which:
244 unique CDR3
6 unique J



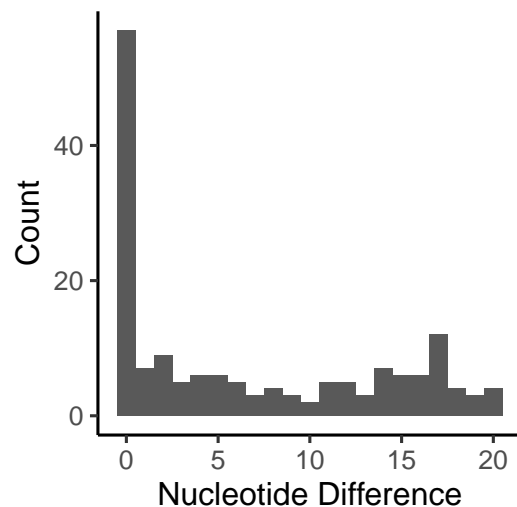
IGHV3-69-1*02

6 sequences assigned
No exact matches.



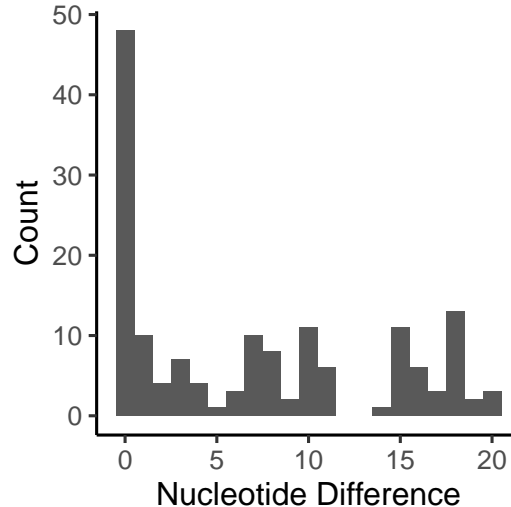
IGHV3-49*03_05

186 sequences assigned
57 (30.6%) exact matches, in which:
56 unique CDR3
5 unique J



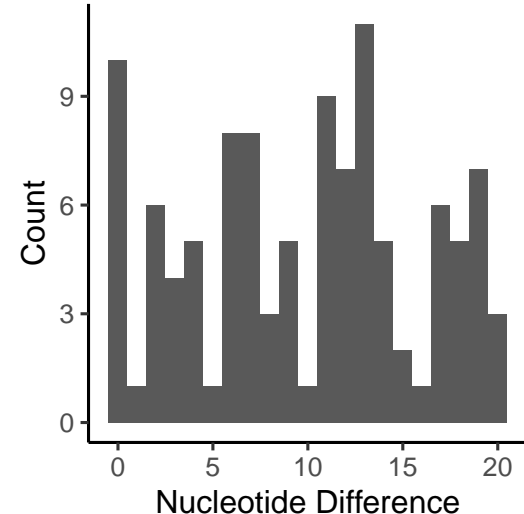
IGHV3-64*01

195 sequences assigned
48 (24.6%) exact matches, in which:
47 unique CDR3
5 unique J



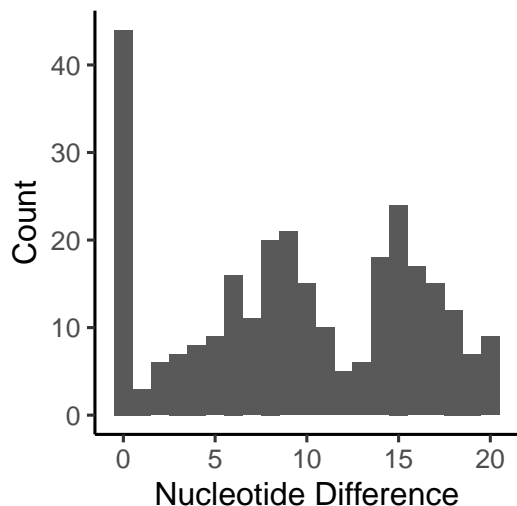
IGHV3-72*01

135 sequences assigned
10 (7.4%) exact matches, in which:
10 unique CDR3
4 unique J



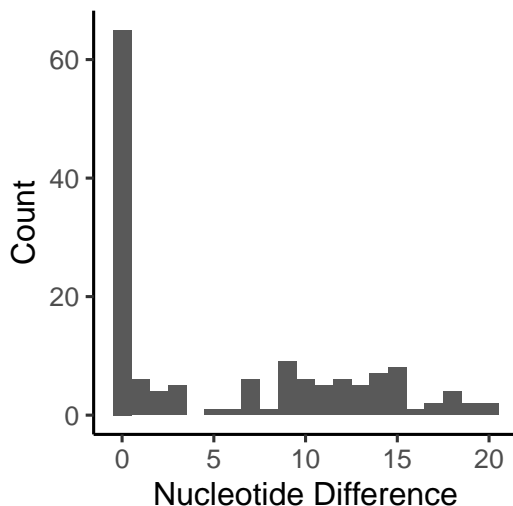
IGHV3-73*01_02

290 sequences assigned
44 (15.2%) exact matches, in which:
43 unique CDR3
4 unique J



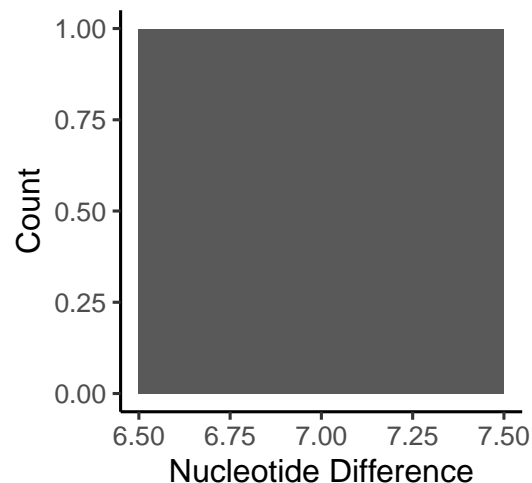
IGHV3-43D*03

155 sequences assigned
65 (41.9%) exact matches, in which:
62 unique CDR3
5 unique J



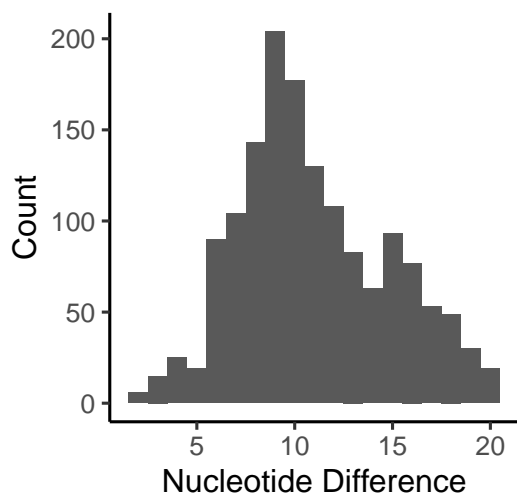
IGHV3-NL1*01

3 sequences assigned
No exact matches.



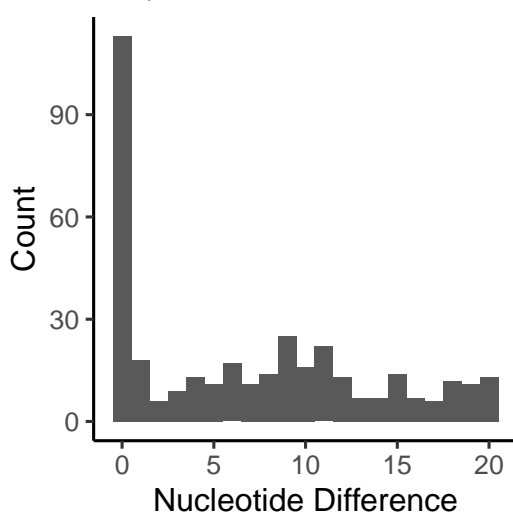
IGHV3-74*03

1566 sequences assigned
No exact matches.



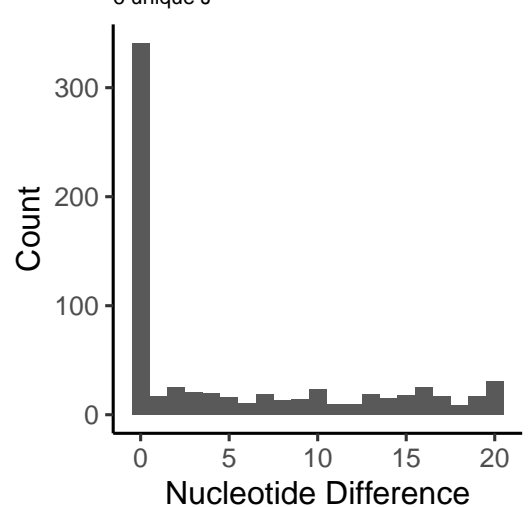
IGHV3-64D*06

606 sequences assigned
113 (18.6%) exact matches, in which:
111 unique CDR3
6 unique J



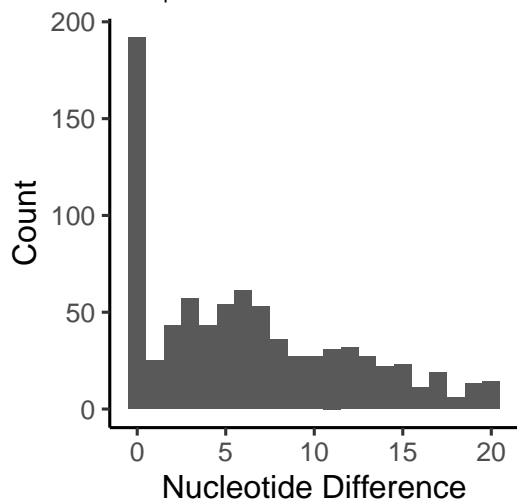
IGHV4-4*02_03

817 sequences assigned
341 (41.7%) exact matches, in which:
333 unique CDR3
6 unique J



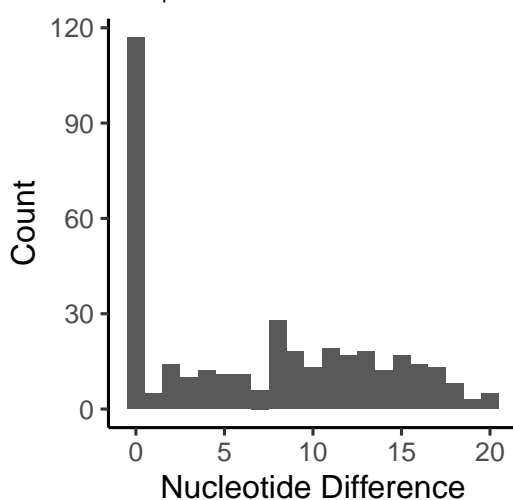
IGHV3-74*01_02

861 sequences assigned
192 (22.3%) exact matches, in which:
178 unique CDR3
6 unique J



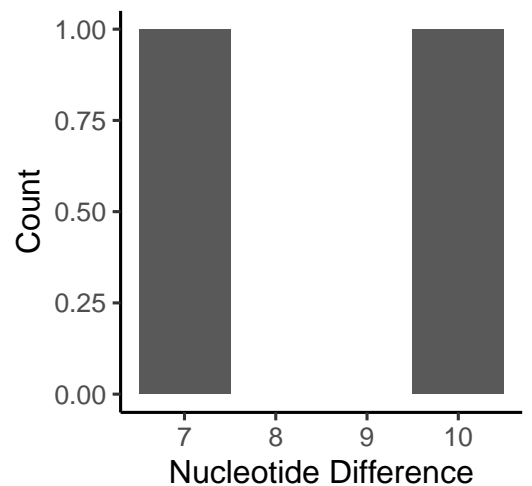
IGHV3-64D*09

413 sequences assigned
117 (28.3%) exact matches, in which:
115 unique CDR3
5 unique J



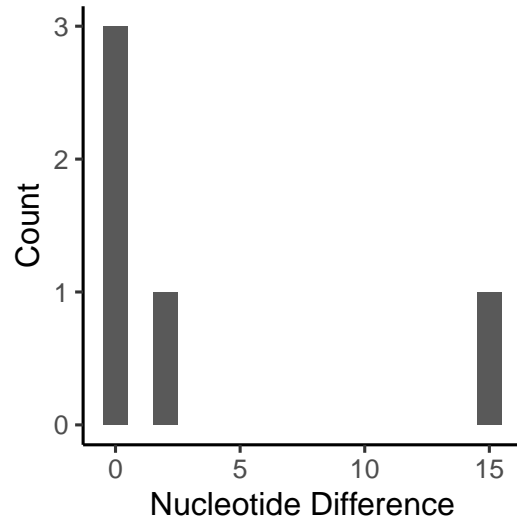
IGHV4-28*03

2 sequences assigned
No exact matches.



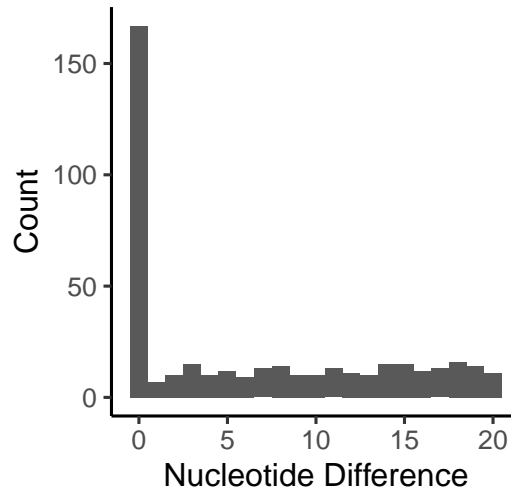
IGHV4-28*01_07

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



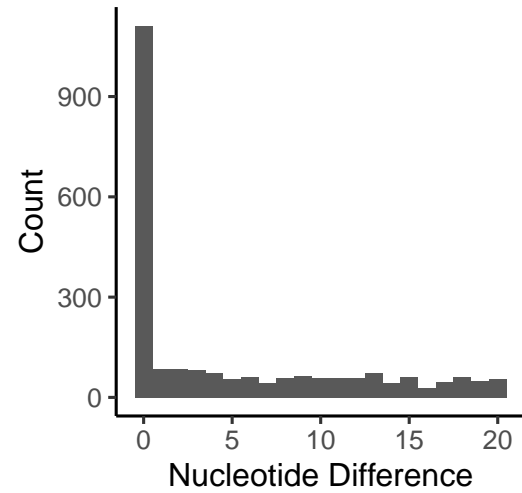
IGHV4-31*02

500 sequences assigned
167 (33.4%) exact matches, in which:
165 unique CDR3
6 unique J



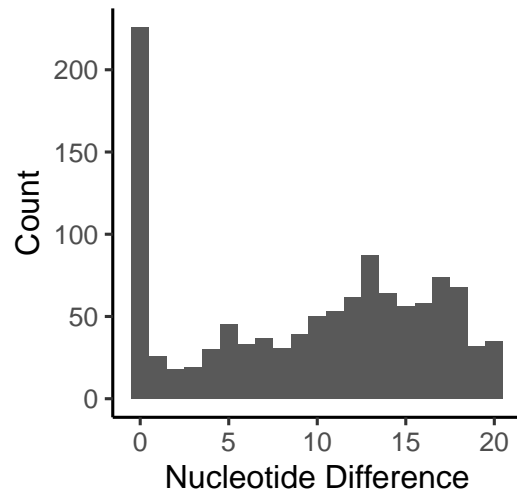
IGHV4-39*07

2798 sequences assigned
1112 (39.7%) exact matches, in which:
1089 unique CDR3
6 unique J



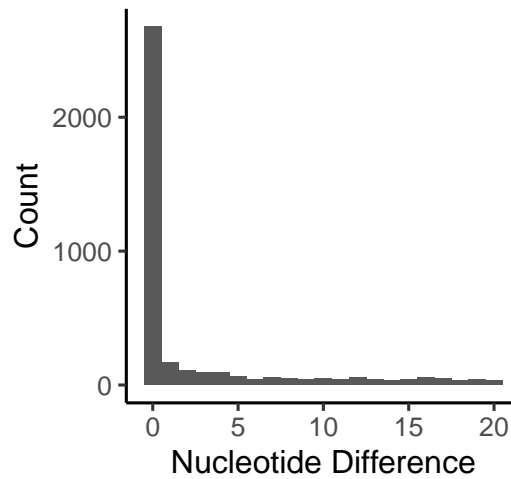
IGHV4-30-4*01

1241 sequences assigned
226 (18.2%) exact matches, in which:
223 unique CDR3
6 unique J



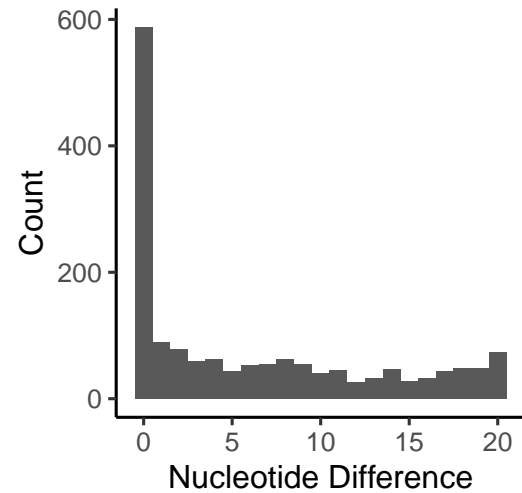
IGHV4-34*01_02

4359 sequences assigned
2676 (61.4%) exact matches, in which:
2615 unique CDR3
6 unique J



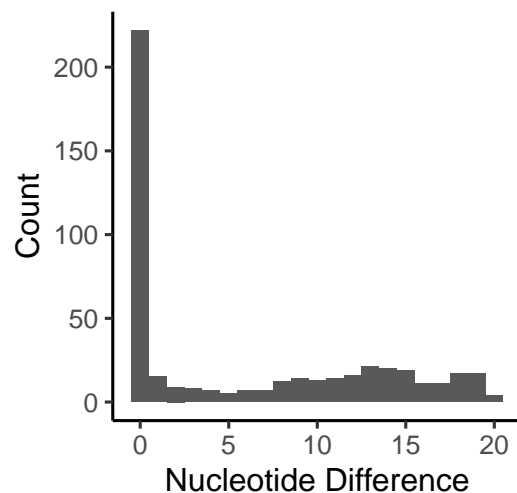
IGHV4-59*08

2244 sequences assigned
588 (26.2%) exact matches, in which:
565 unique CDR3
6 unique J



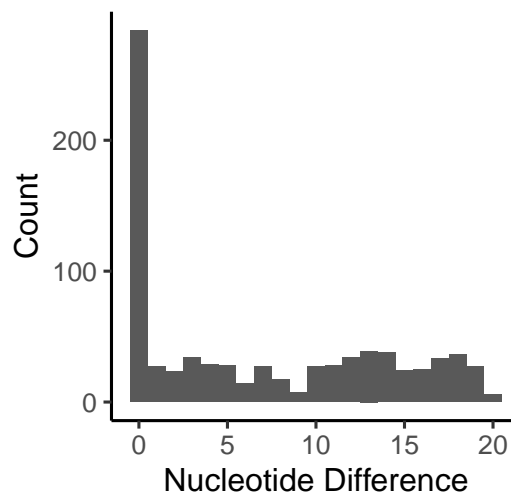
IGHV4-30-2*01

555 sequences assigned
222 (40%) exact matches, in which:
218 unique CDR3
6 unique J



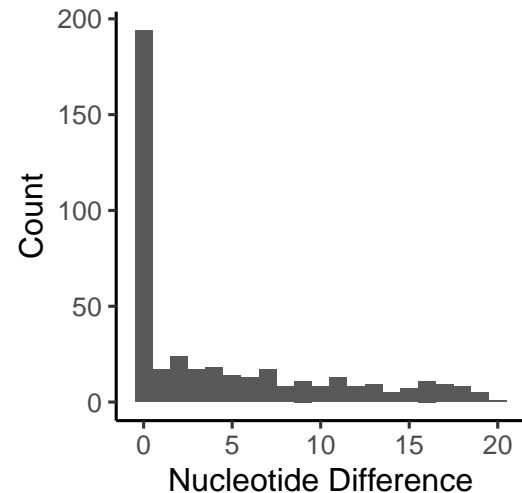
IGHV4-38-2*02

954 sequences assigned
284 (29.8%) exact matches, in which:
279 unique CDR3
6 unique J



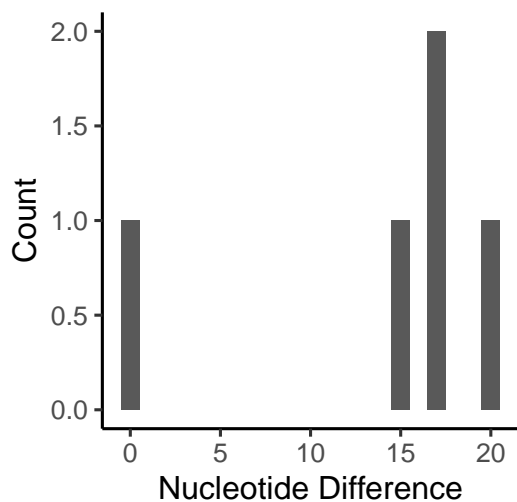
IGHV4-61*01

493 sequences assigned
194 (39.4%) exact matches, in which:
190 unique CDR3
6 unique J



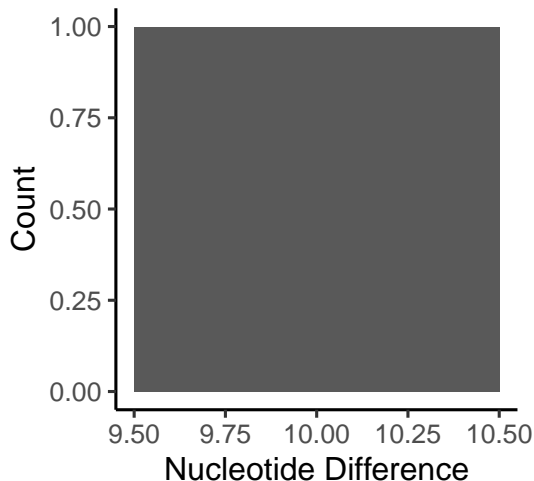
IGHV4/OR15-8*01

9 sequences assigned
1 (11.1%) exact matches, in which:
1 unique CDR3
1 unique J



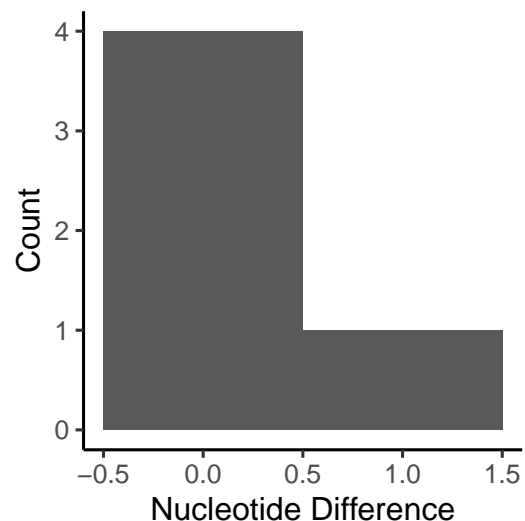
IGHV5-51*06

1 sequences assigned
No exact matches.



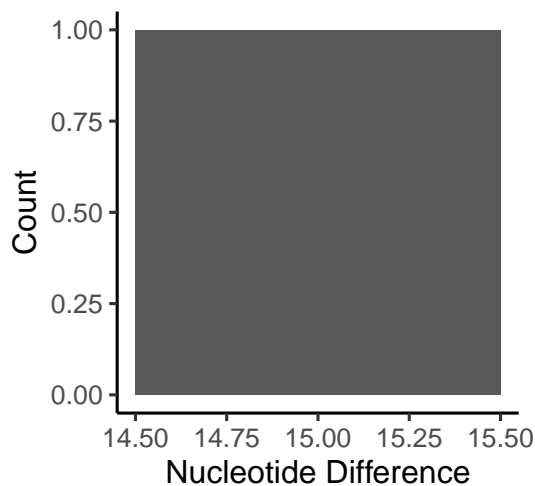
IGHV7-4-1*01

5 sequences assigned
4 (80%) exact matches, in which:
4 unique CDR3
2 unique J



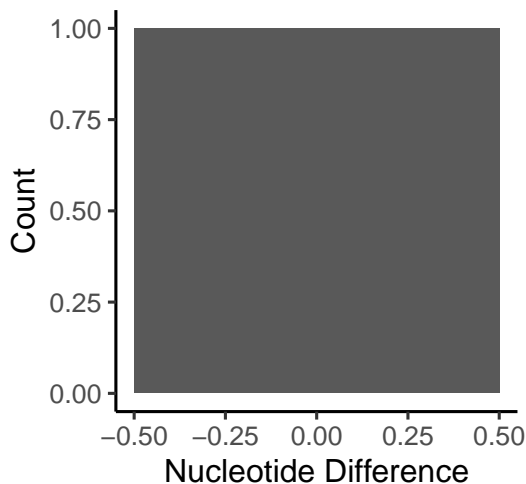
IGHV4/OR15-8*02

14 sequences assigned
No exact matches.



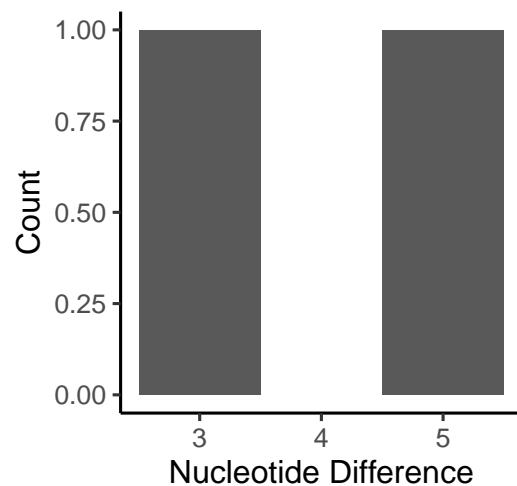
IGHV5-51*01_03

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



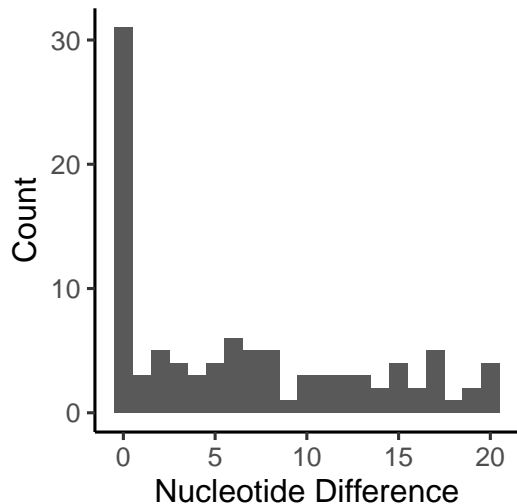
IGHV7-4-1*02

2 sequences assigned
No exact matches.



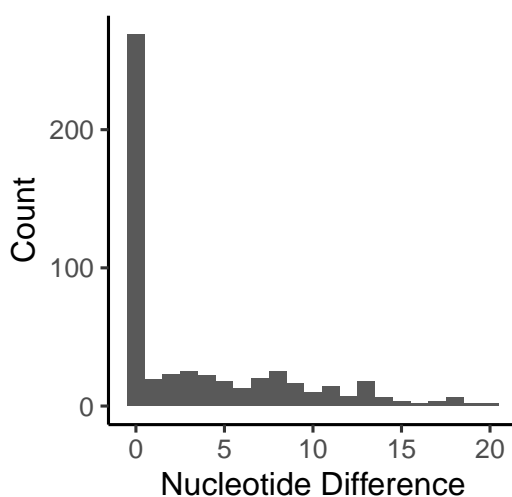
IGHV5-10-1*01_03

113 sequences assigned
31 (27.4%) exact matches, in which:
30 unique CDR3
5 unique J



IGHV6-1*01_02

537 sequences assigned
269 (50.1%) exact matches, in which:
264 unique CDR3
6 unique J





[illegible]