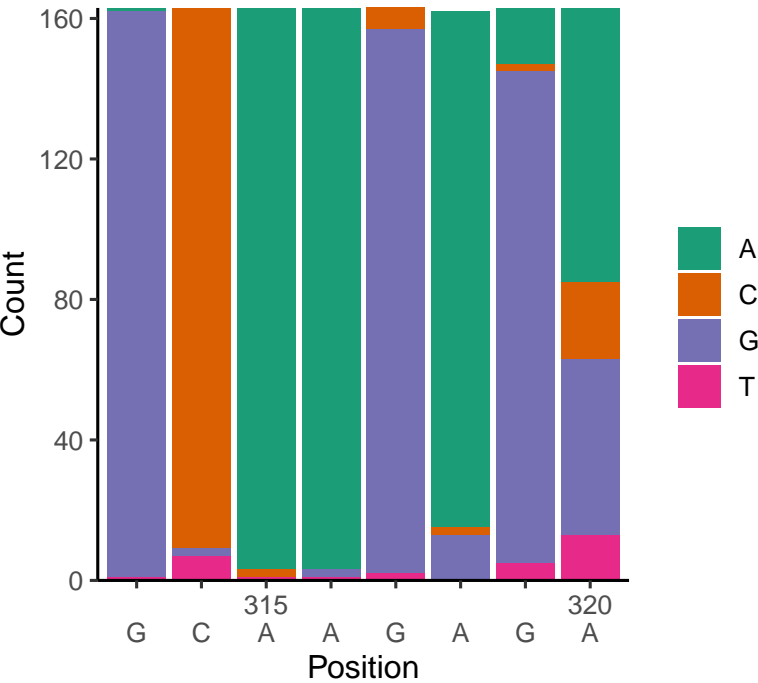
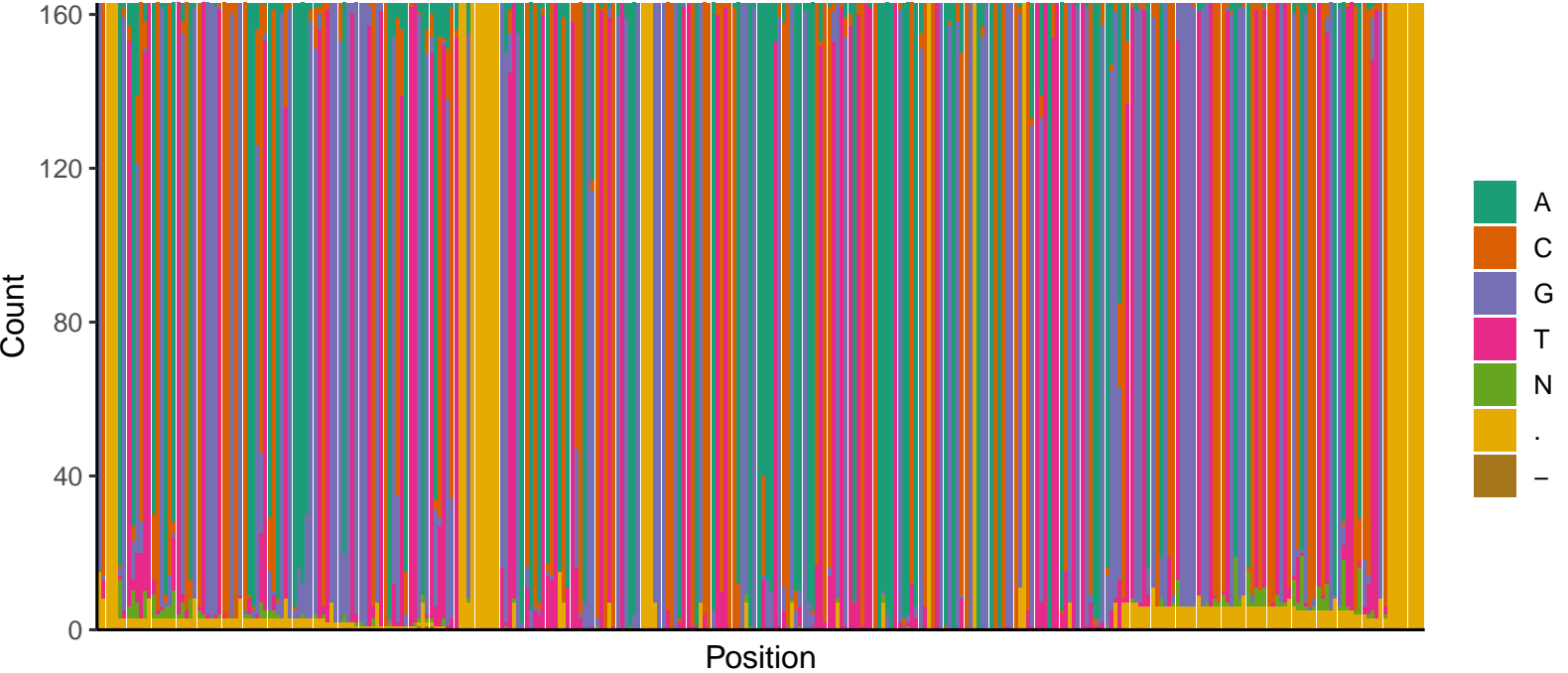


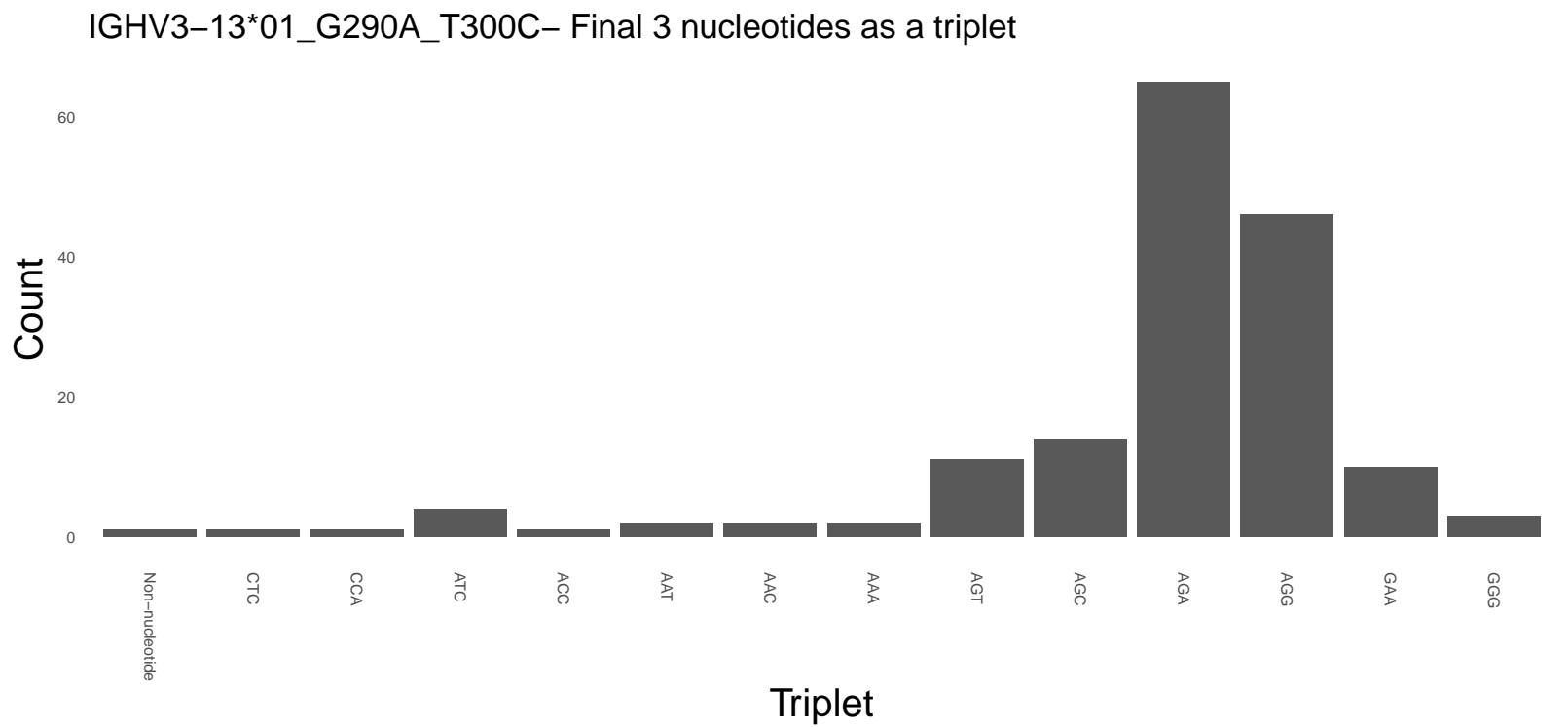
Gene IGHV3-13*01_G290A_T300C



Gene IGHV3-13*01_G290A_T300C

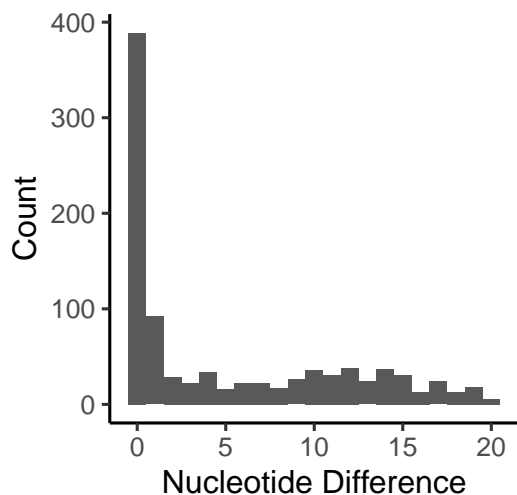


IGHV3-13*01_G290A_T300C- Final 3 nucleotides as a triplet



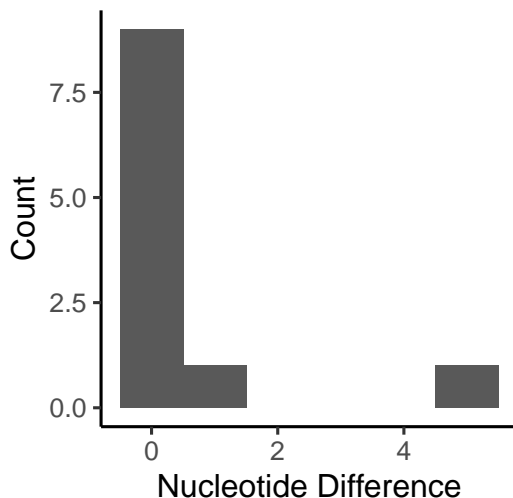
IGHV1-2*02

1066 sequences assigned
389 (36.5%) exact matches, in which:
380 unique CDR3
6 unique J



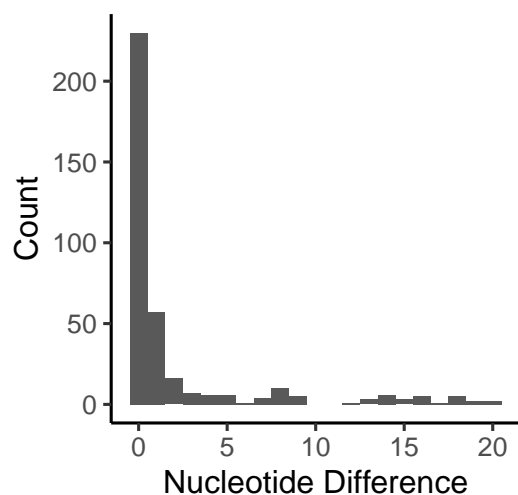
IGHV1-8*01

12 sequences assigned
9 (75%) exact matches, in which:
9 unique CDR3
4 unique J



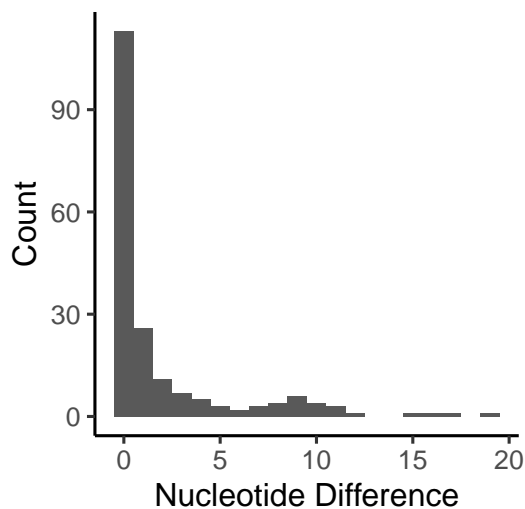
IGHV1-24*01

391 sequences assigned
230 (58.8%) exact matches, in which:
220 unique CDR3
6 unique J



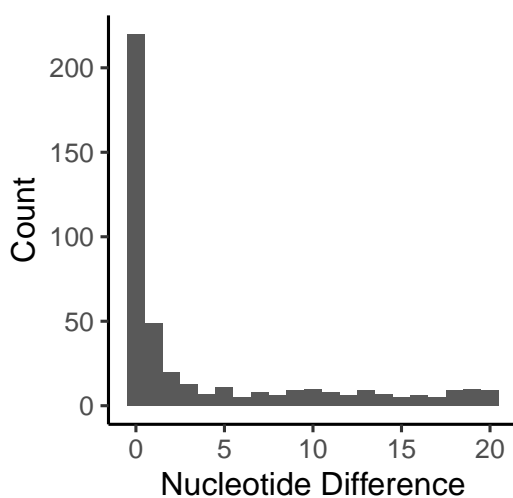
IGHV1-2*04

196 sequences assigned
113 (57.7%) exact matches, in which:
111 unique CDR3
5 unique J



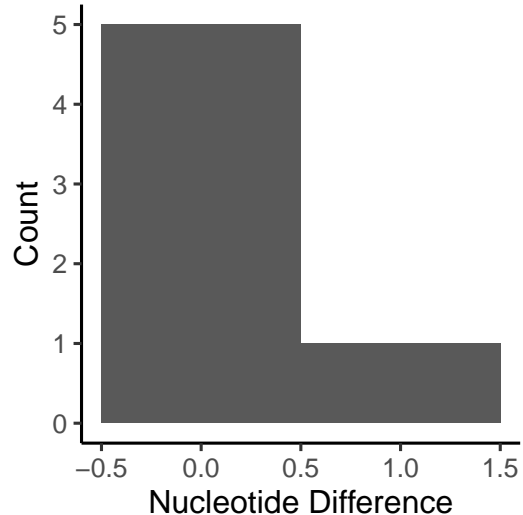
IGHV1-18*01

488 sequences assigned
220 (45.1%) exact matches, in which:
216 unique CDR3
5 unique J



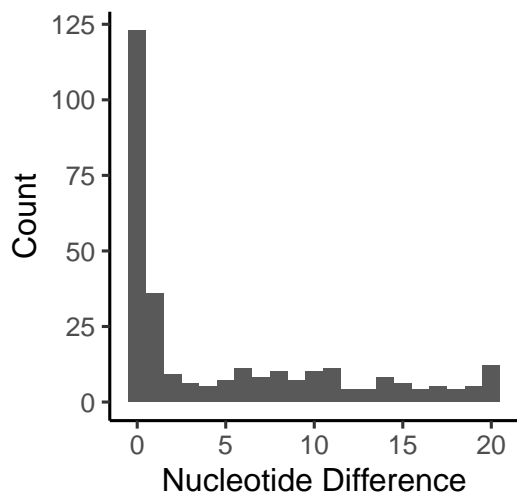
IGHV1-45*02

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



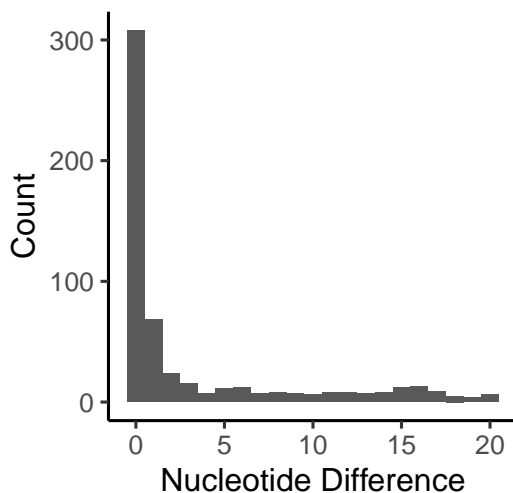
IGHV1-3*01

369 sequences assigned
123 (33.3%) exact matches, in which:
118 unique CDR3
6 unique J



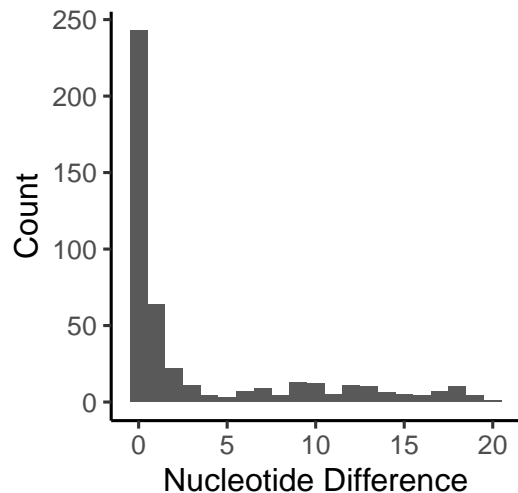
IGHV1-18*04

604 sequences assigned
308 (51%) exact matches, in which:
304 unique CDR3
6 unique J



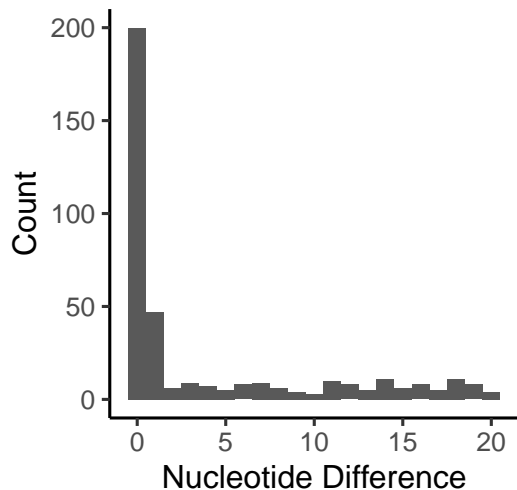
IGHV1-46*01

532 sequences assigned
243 (45.7%) exact matches, in which:
237 unique CDR3
5 unique J



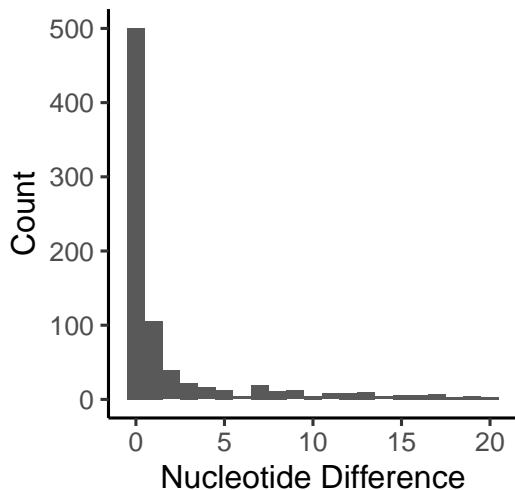
IGHV1-46*04

398 sequences assigned
200 (50.3%) exact matches, in which:
192 unique CDR3
6 unique J



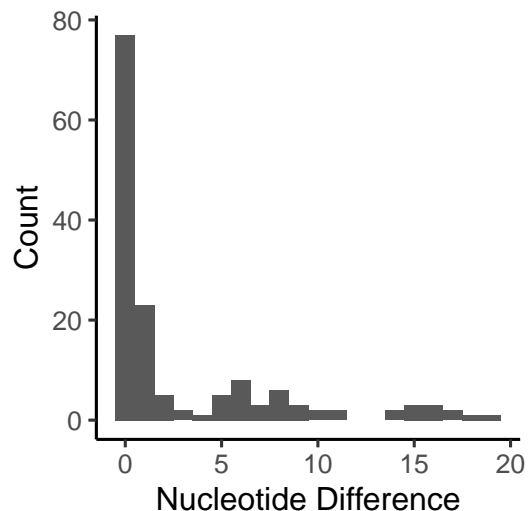
IGHV1-69*06

859 sequences assigned
501 (58.3%) exact matches, in which:
470 unique CDR3
6 unique J



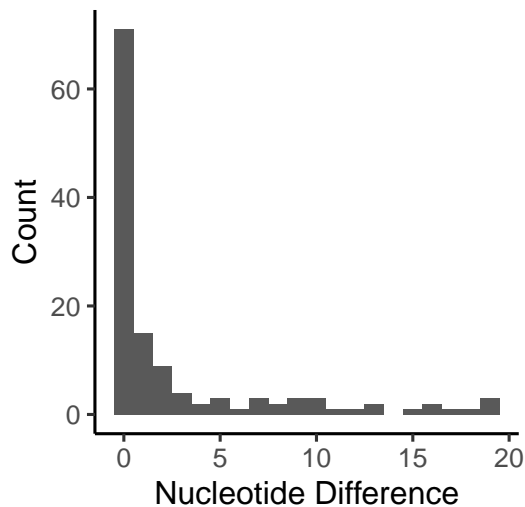
IGHV2-26*01

150 sequences assigned
77 (51.3%) exact matches, in which:
75 unique CDR3
5 unique J



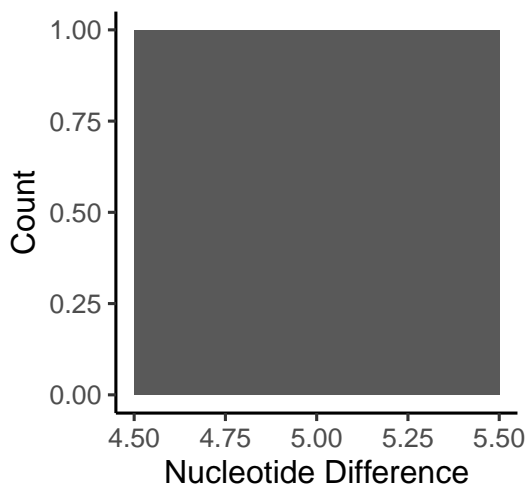
IGHV1-58*01

130 sequences assigned
71 (54.6%) exact matches, in which:
70 unique CDR3
5 unique J



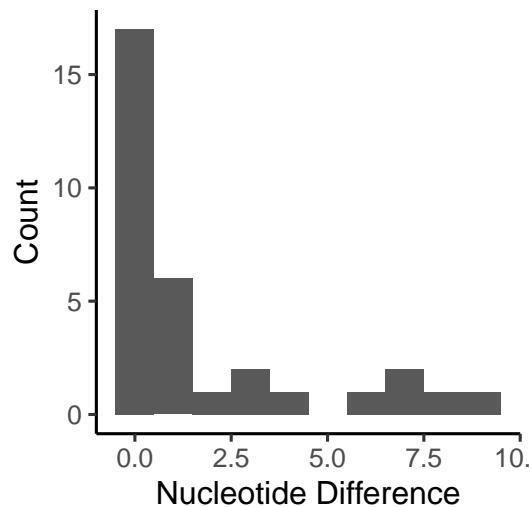
IGHV1-NL1*01

1 sequences assigned
No exact matches.



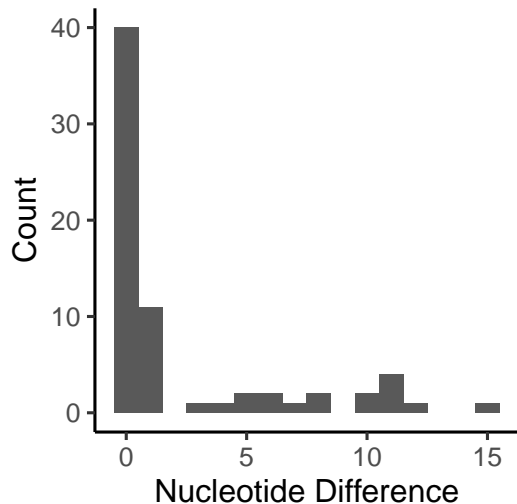
IGHV2-26*04

32 sequences assigned
17 (53.1%) exact matches, in which:
17 unique CDR3
4 unique J



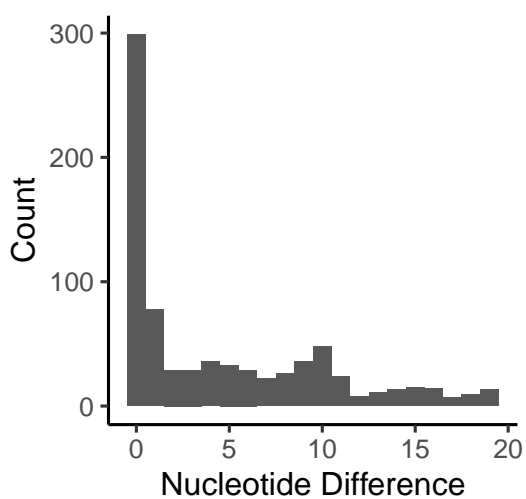
IGHV1-69-2*01

72 sequences assigned
40 (55.6%) exact matches, in which:
39 unique CDR3
4 unique J



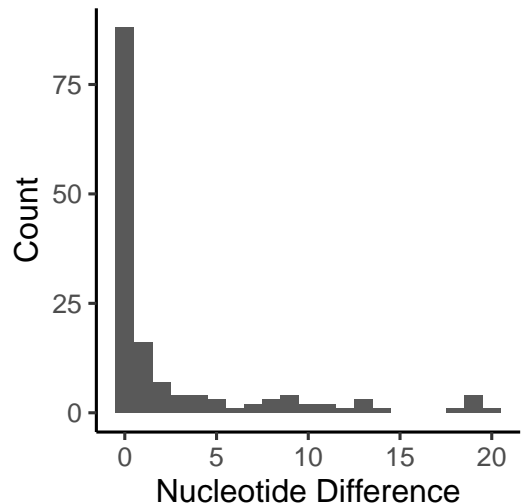
IGHV2-5*02

802 sequences assigned
299 (37.3%) exact matches, in which:
294 unique CDR3
6 unique J



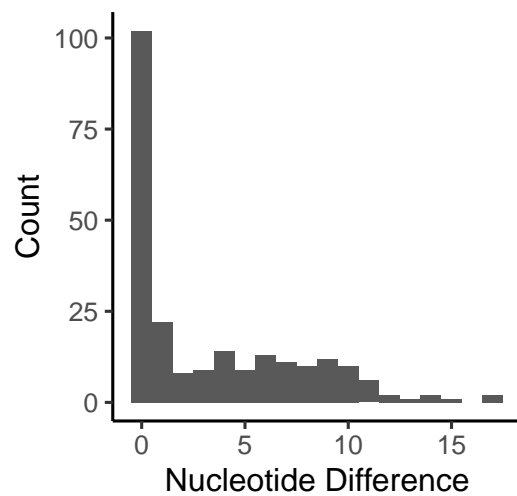
IGHV2-70*01

154 sequences assigned
88 (57.1%) exact matches, in which:
87 unique CDR3
5 unique J



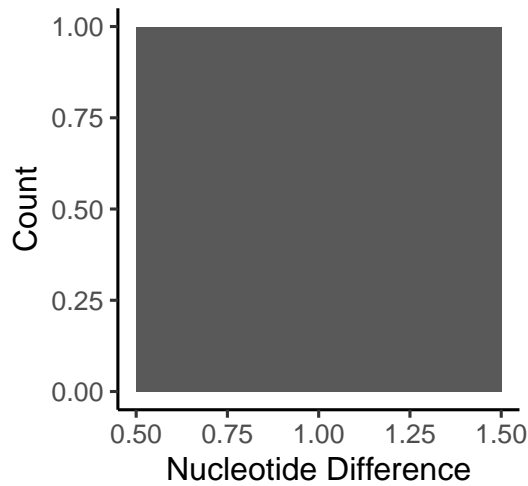
IGHV2-70*15

237 sequences assigned
102 (43%) exact matches, in which:
99 unique CDR3
5 unique J



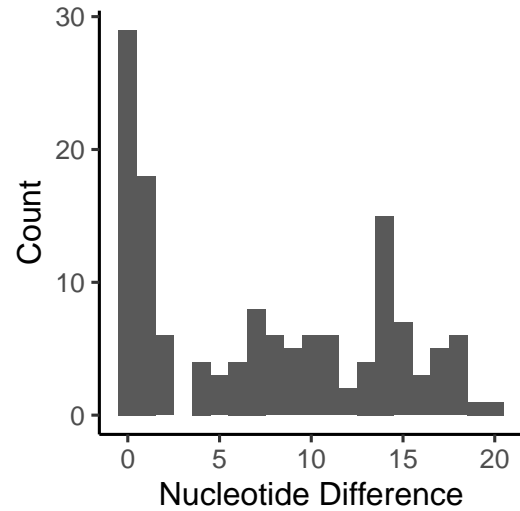
IGHV3-9*01

1 sequences assigned
No exact matches.



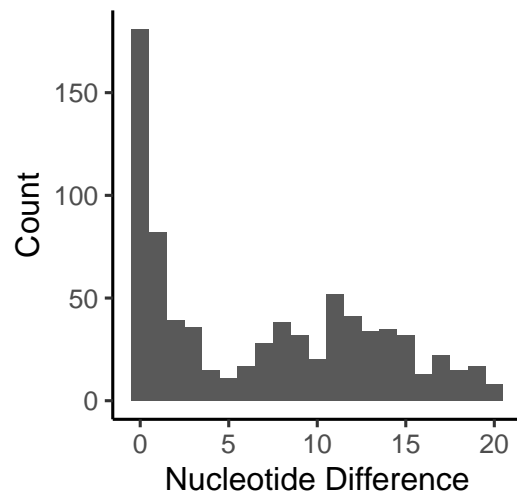
IGHV3-13*01_G290A_T33

163 sequences assigned
29 (17.8%) exact matches, in which:
28 unique CDR3
5 unique J



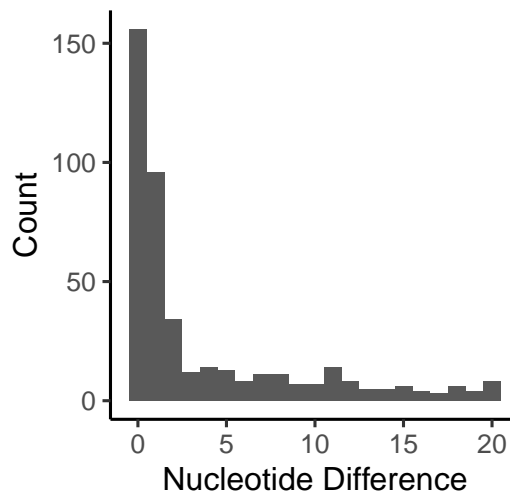
IGHV3-7*03

849 sequences assigned
181 (21.3%) exact matches, in which:
158 unique CDR3
6 unique J



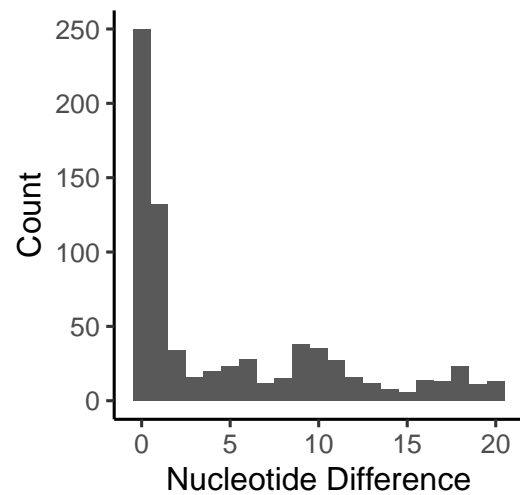
IGHV3-11*06

537 sequences assigned
156 (29.1%) exact matches, in which:
146 unique CDR3
6 unique J



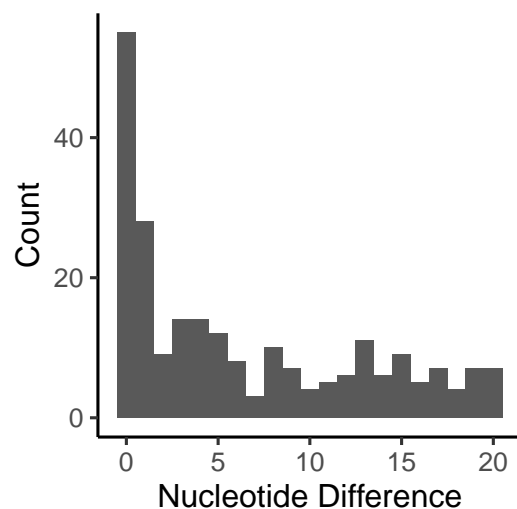
IGHV3-15*01

811 sequences assigned
250 (30.8%) exact matches, in which:
237 unique CDR3
6 unique J



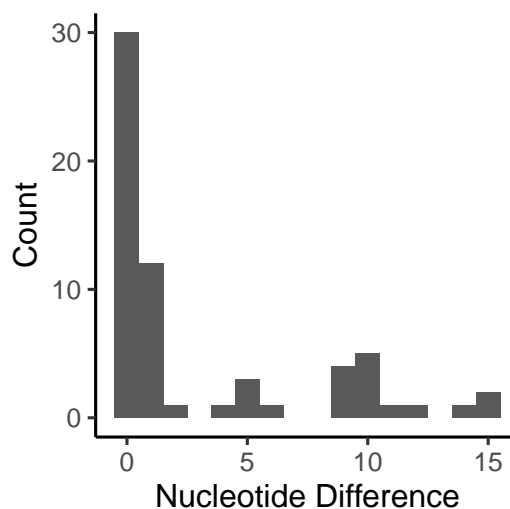
IGHV3-7*04

262 sequences assigned
55 (21%) exact matches, in which:
55 unique CDR3
4 unique J



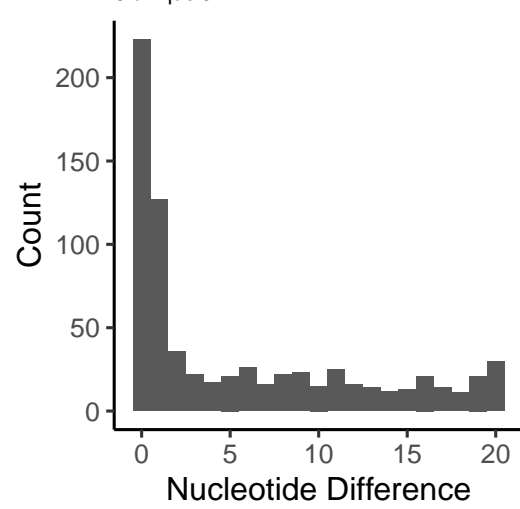
IGHV3-13*05

64 sequences assigned
30 (46.9%) exact matches, in which:
27 unique CDR3
4 unique J



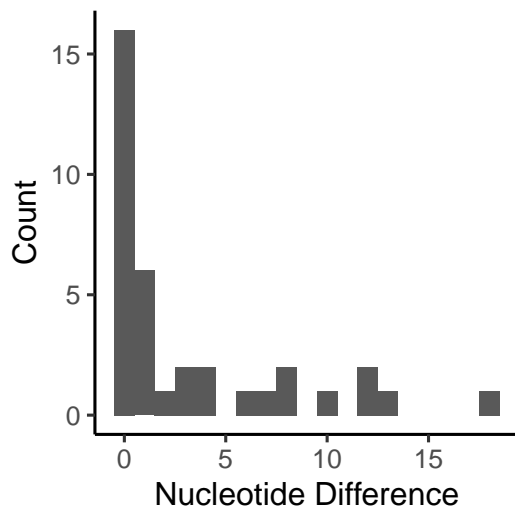
IGHV3-15*07

831 sequences assigned
223 (26.8%) exact matches, in which:
214 unique CDR3
6 unique J



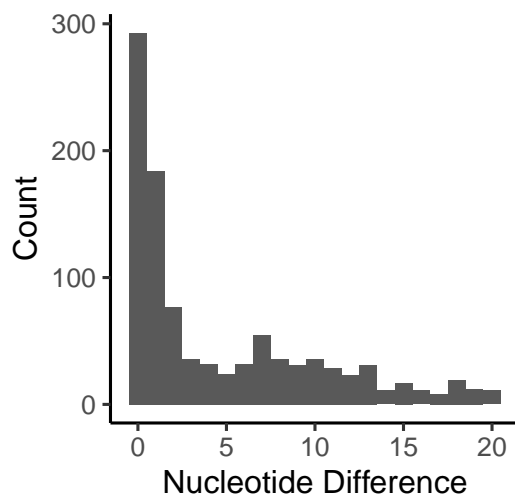
IGHV3-20*04

36 sequences assigned
16 (44.4%) exact matches, in which:
15 unique CDR3
3 unique J



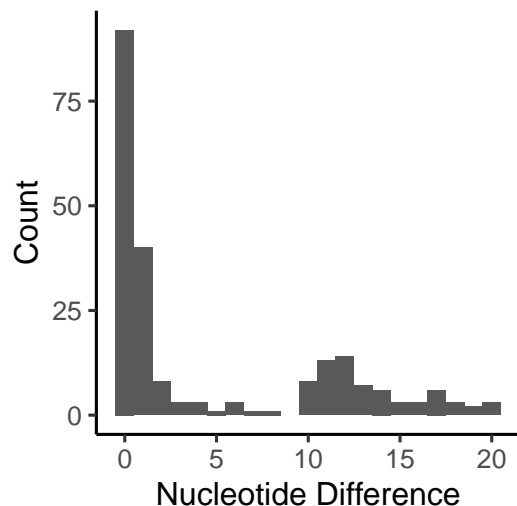
IGHV3-33*01

1159 sequences assigned
293 (25.3%) exact matches, in which:
280 unique CDR3
6 unique J



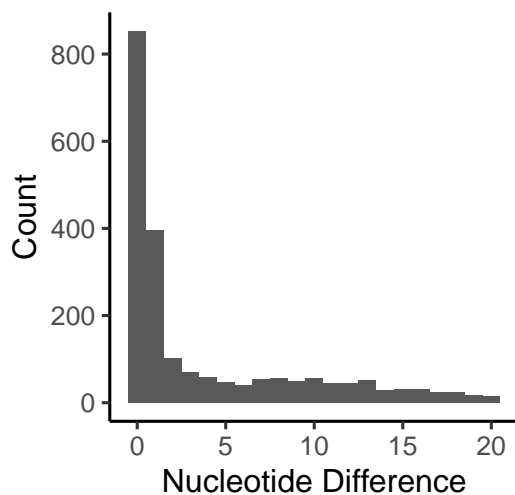
IGHV3-43*01

236 sequences assigned
92 (39%) exact matches, in which:
85 unique CDR3
5 unique J



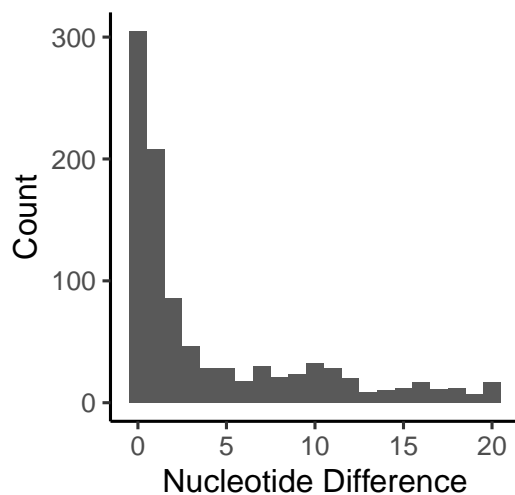
IGHV3-21*01

2184 sequences assigned
853 (39.1%) exact matches, in which:
810 unique CDR3
6 unique J



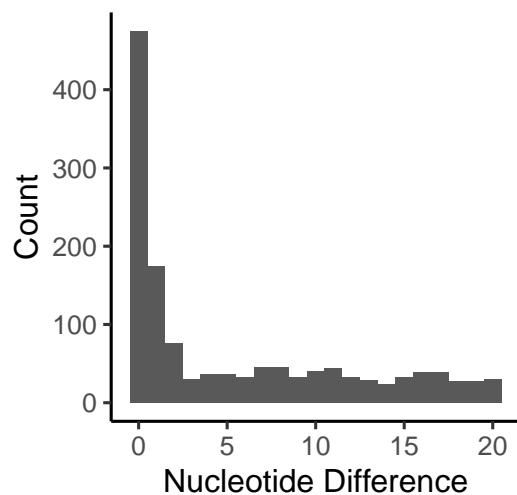
IGHV3-33*08

1102 sequences assigned
305 (27.7%) exact matches, in which:
287 unique CDR3
6 unique J



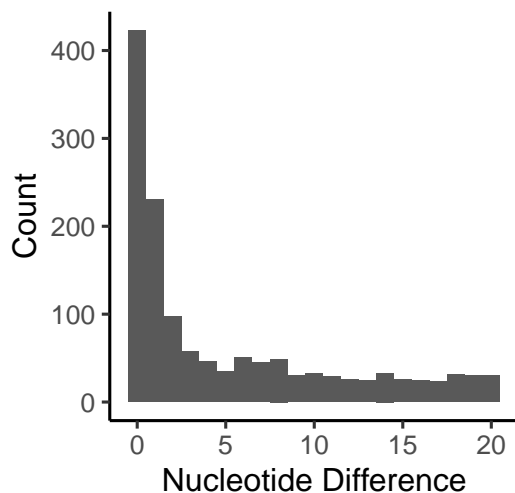
IGHV3-48*01

1609 sequences assigned
475 (29.5%) exact matches, in which:
455 unique CDR3
6 unique J



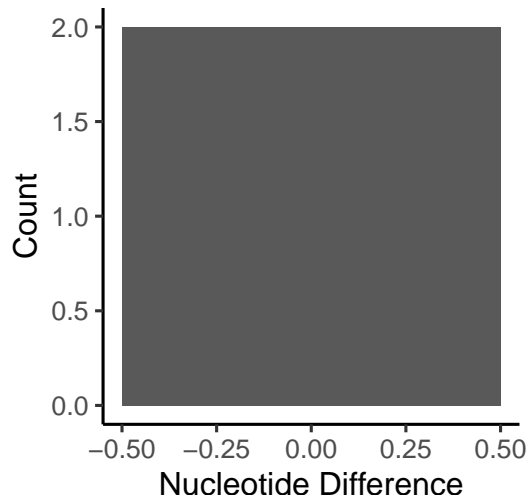
IGHV3-30-3*01

1760 sequences assigned
423 (24%) exact matches, in which:
395 unique CDR3
6 unique J



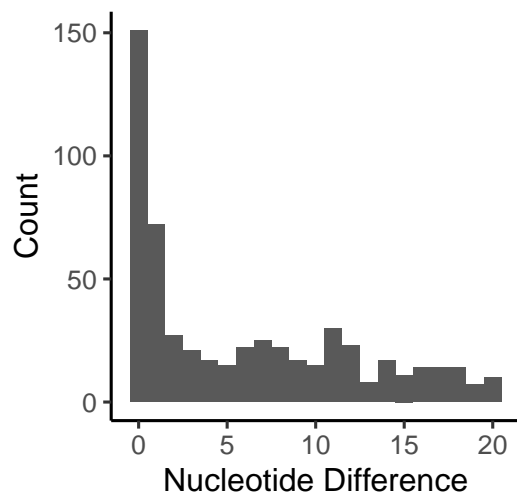
IGHV3-35*01

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



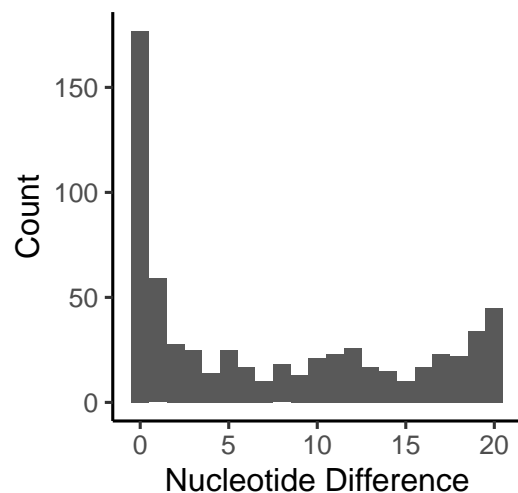
IGHV3-49*03

614 sequences assigned
151 (24.6%) exact matches, in which:
144 unique CDR3
6 unique J



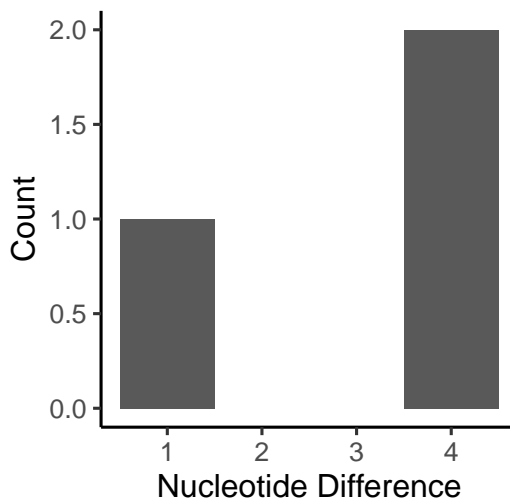
IGHV3-53*01

704 sequences assigned
177 (25.1%) exact matches, in which:
168 unique CDR3
6 unique J



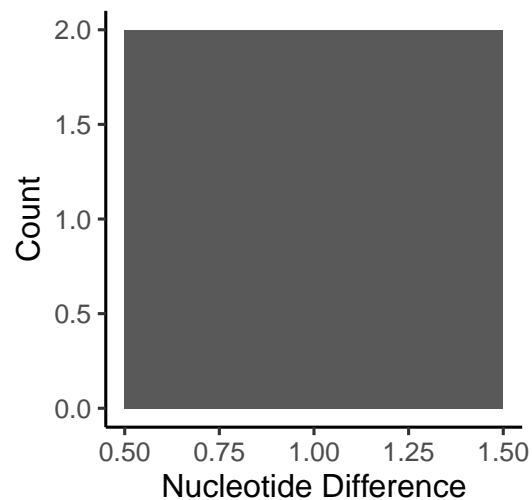
IGHV3-66*01

3 sequences assigned
No exact matches.



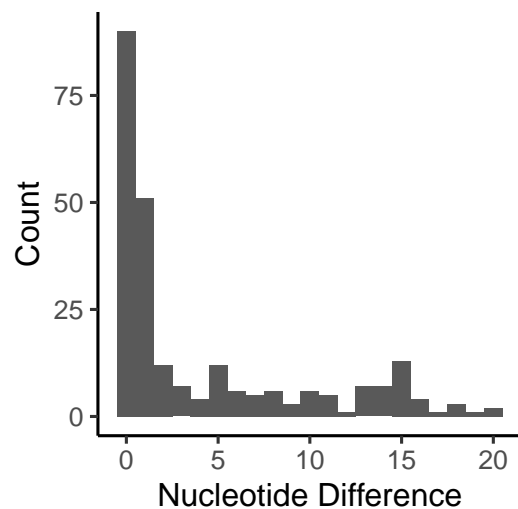
IGHV3-69-1*02

2 sequences assigned
No exact matches.



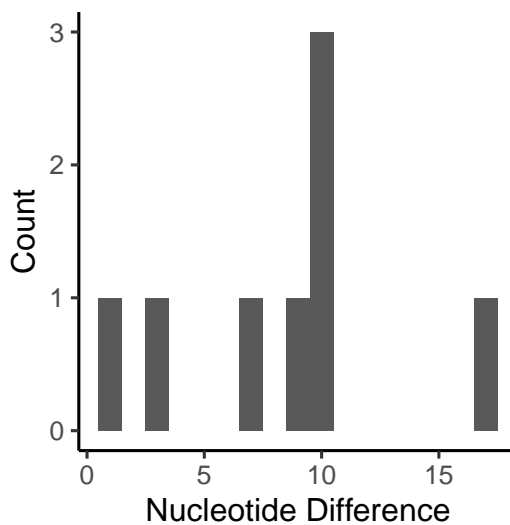
IGHV3-53*02

258 sequences assigned
90 (34.9%) exact matches, in which:
85 unique CDR3
5 unique J



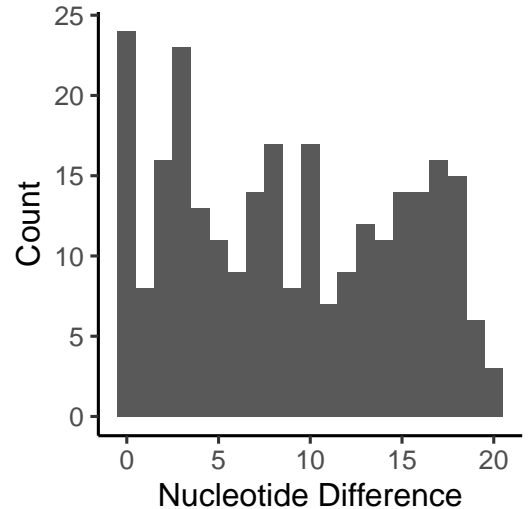
IGHV3-66*03

8 sequences assigned
No exact matches.



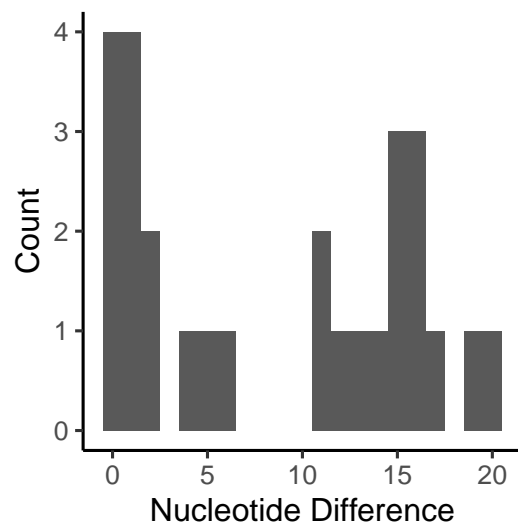
IGHV3-72*01

331 sequences assigned
24 (7.3%) exact matches, in which:
23 unique CDR3
5 unique J



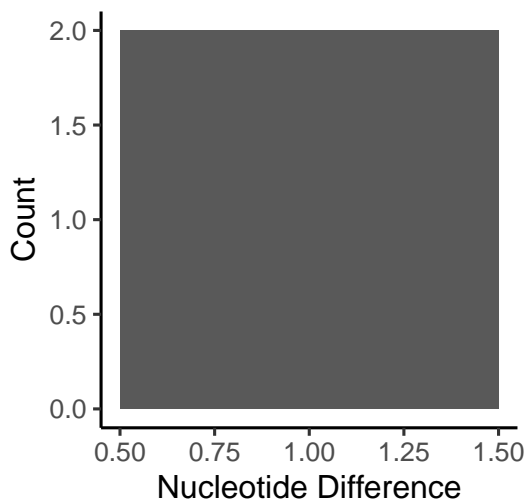
IGHV3-64*02

28 sequences assigned
4 (14.3%) exact matches, in which:
4 unique CDR3
3 unique J



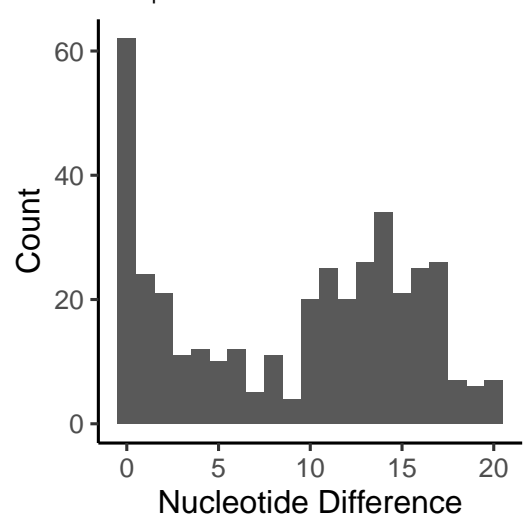
IGHV3-69-1*01

3 sequences assigned
No exact matches.



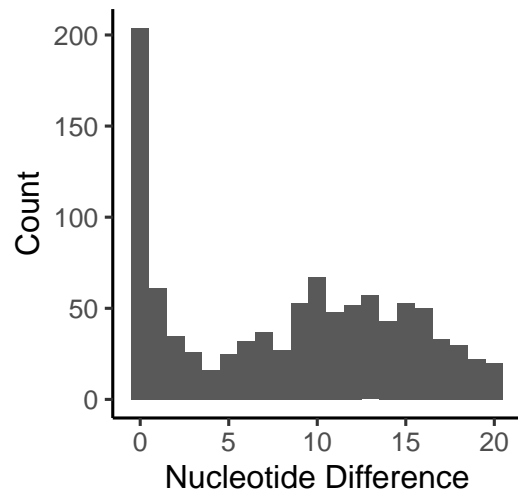
IGHV3-73*02

412 sequences assigned
62 (15%) exact matches, in which:
59 unique CDR3
5 unique J



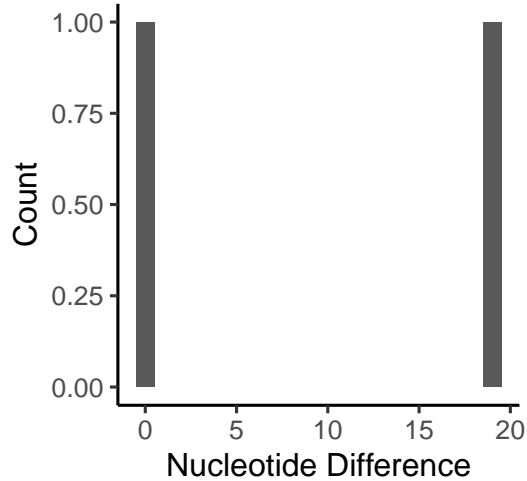
IGHV3-74*01

1196 sequences assigned
204 (17.1%) exact matches, in which:
191 unique CDR3
6 unique J



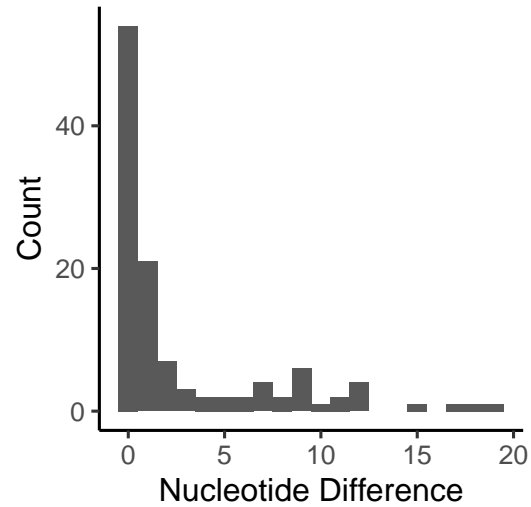
IGHV4-28*01

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



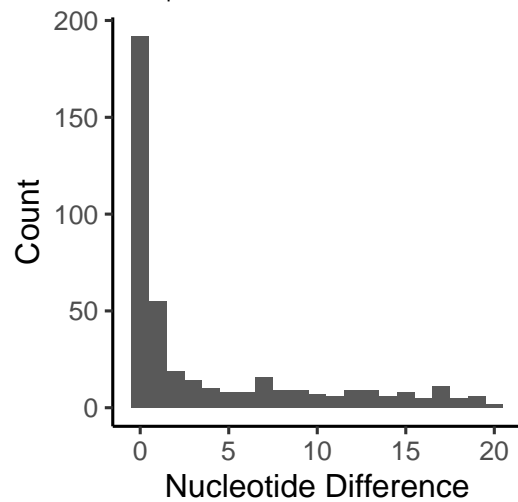
IGHV4-30-2*01

121 sequences assigned
54 (44.6%) exact matches, in which:
54 unique CDR3
5 unique J



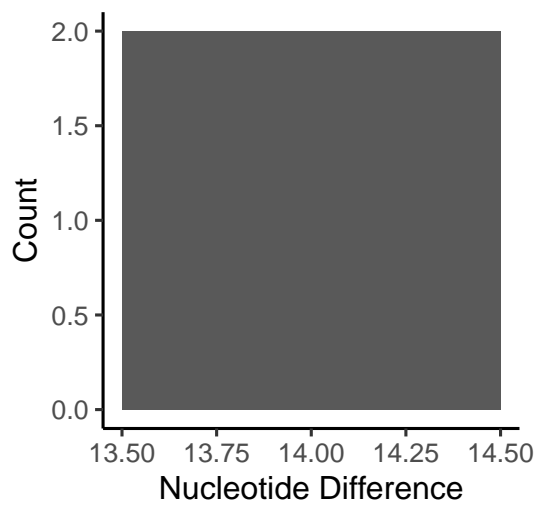
IGHV3-64D*06

483 sequences assigned
192 (39.8%) exact matches, in which:
178 unique CDR3
6 unique J



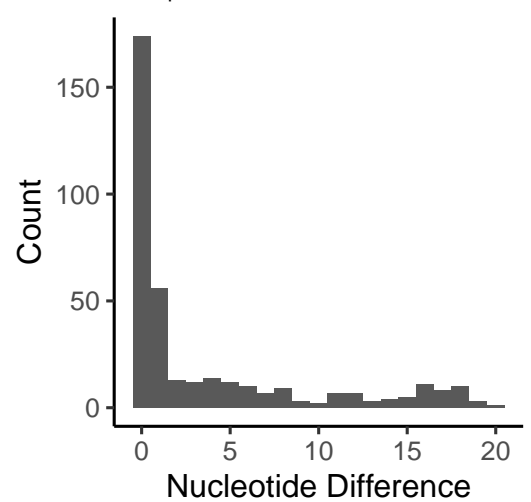
IGHV4-28*07

6 sequences assigned
No exact matches.



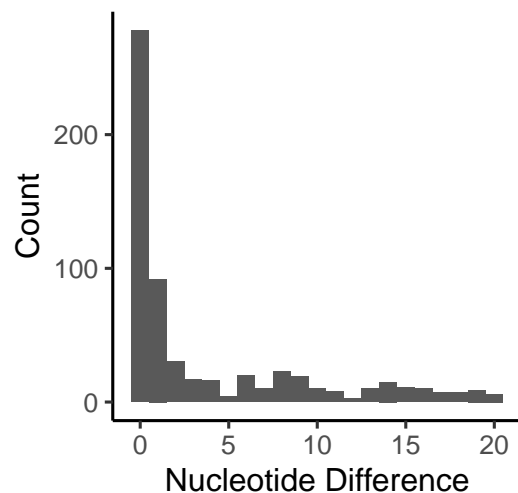
IGHV4-31*03

385 sequences assigned
174 (45.2%) exact matches, in which:
169 unique CDR3
6 unique J



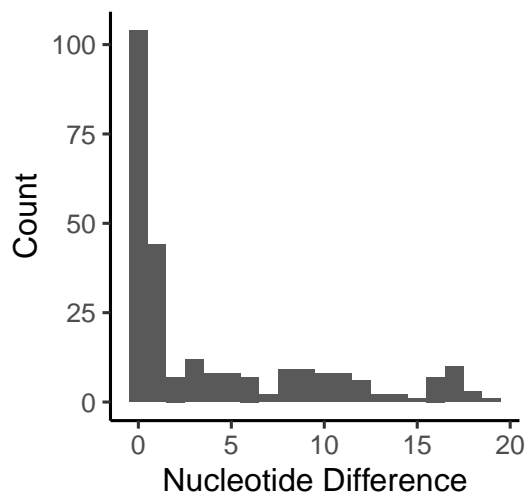
IGHV4-4*02

726 sequences assigned
278 (38.3%) exact matches, in which:
269 unique CDR3
6 unique J



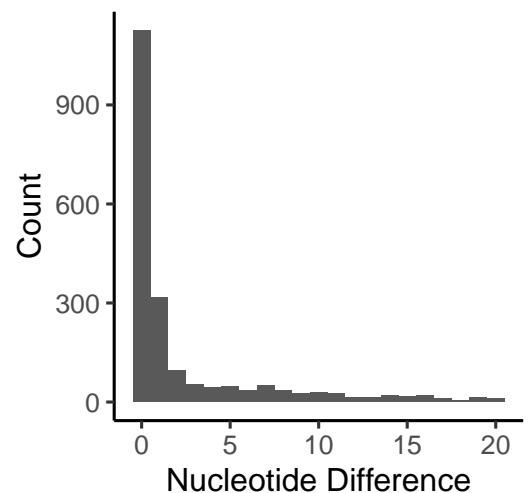
IGHV4-30-4*01

291 sequences assigned
104 (35.7%) exact matches, in which:
99 unique CDR3
6 unique J



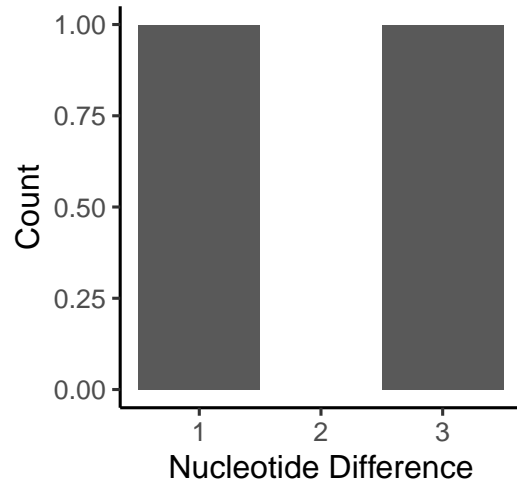
IGHV4-34*01

2165 sequences assigned
1126 (52%) exact matches, in which:
1088 unique CDR3
6 unique J



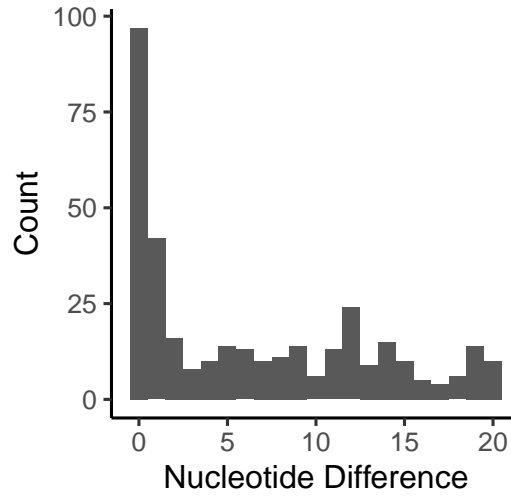
IGHV4-38-2*02

2 sequences assigned
No exact matches.



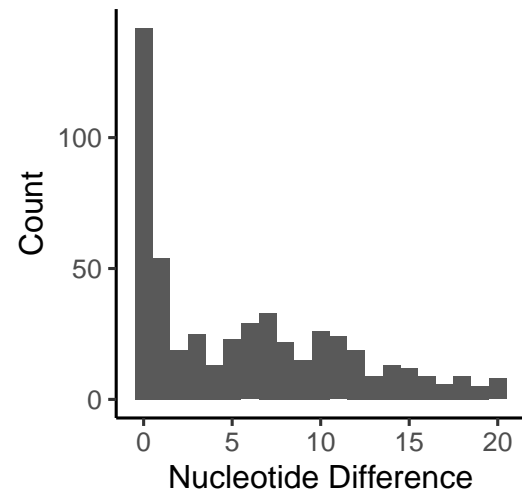
IGHV4-61*01

482 sequences assigned
97 (20.1%) exact matches, in which:
97 unique CDR3
6 unique J



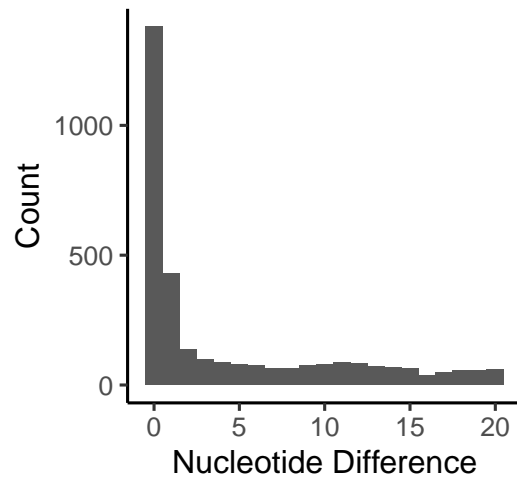
IGHV6-1*01

555 sequences assigned
142 (25.6%) exact matches, in which:
137 unique CDR3
5 unique J



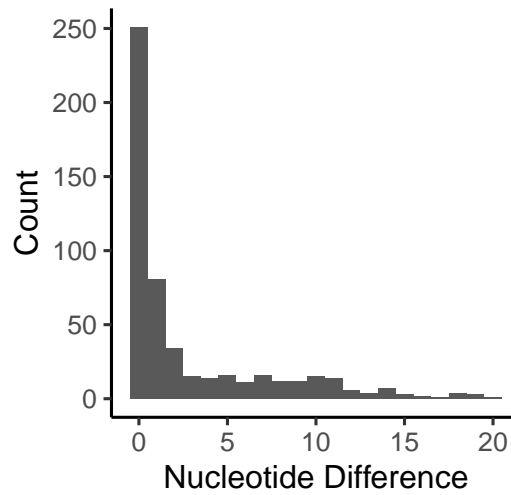
IGHV4-39*01

3681 sequences assigned
1380 (37.5%) exact matches, in which:
1328 unique CDR3
6 unique J



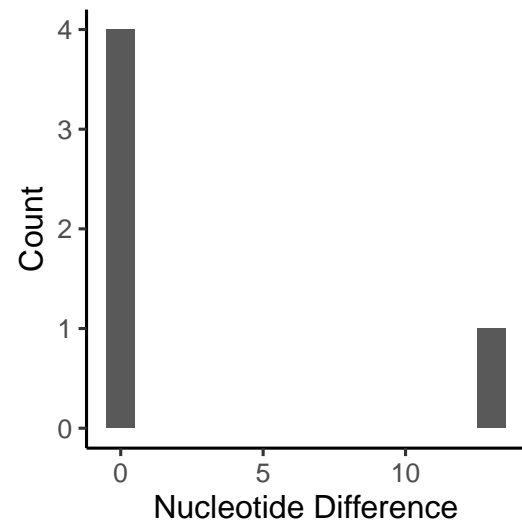
IGHV5-10-1*03

538 sequences assigned
251 (46.7%) exact matches, in which:
242 unique CDR3
5 unique J



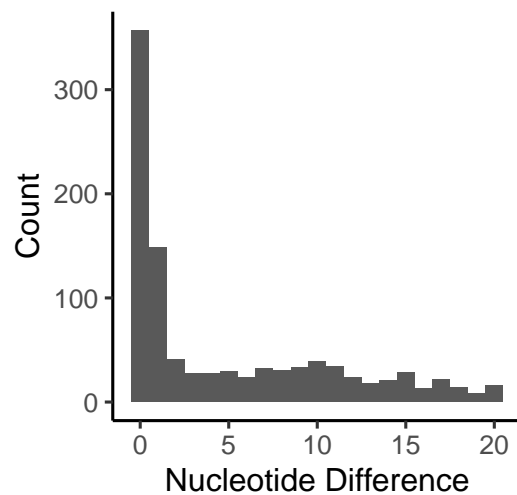
IGHV7-4-1*01

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



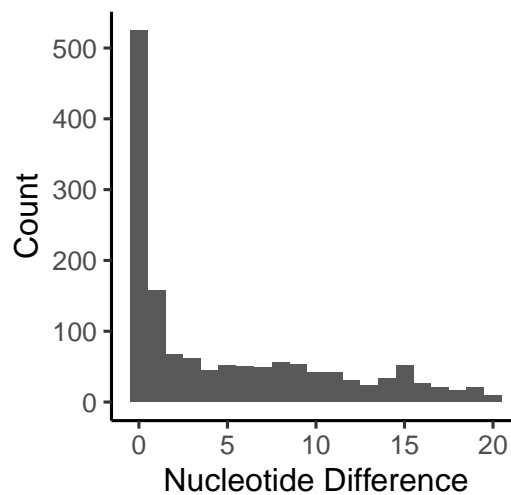
IGHV4-59*01

1163 sequences assigned
357 (30.7%) exact matches, in which:
352 unique CDR3
6 unique J

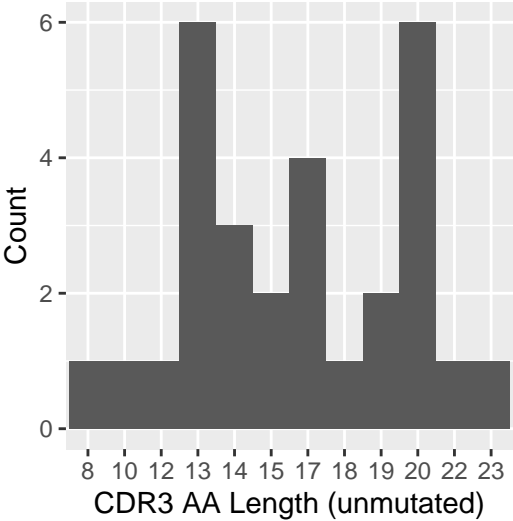


IGHV5-51*01

1531 sequences assigned
525 (34.3%) exact matches, in which:
511 unique CDR3
6 unique J



IGHV3-13*01_G290A_T300C





[illegible]