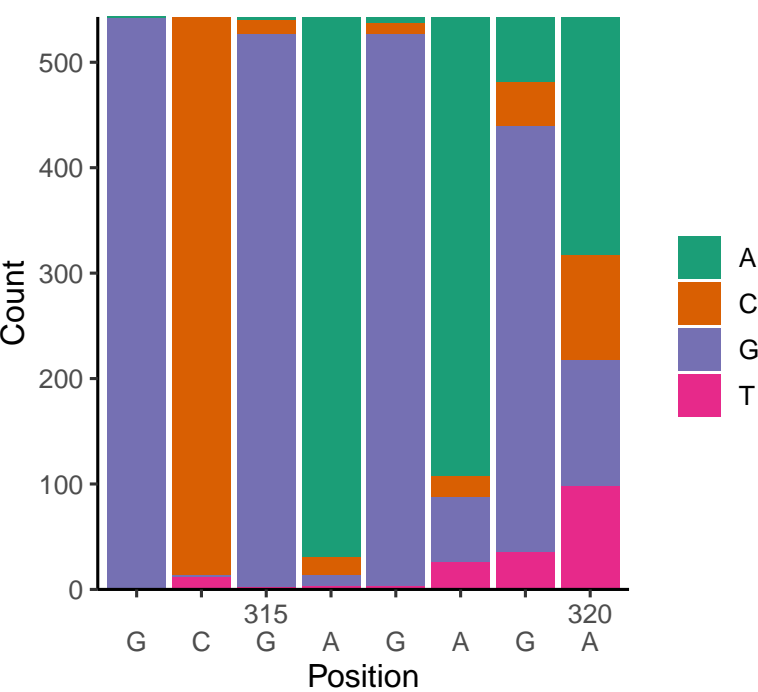
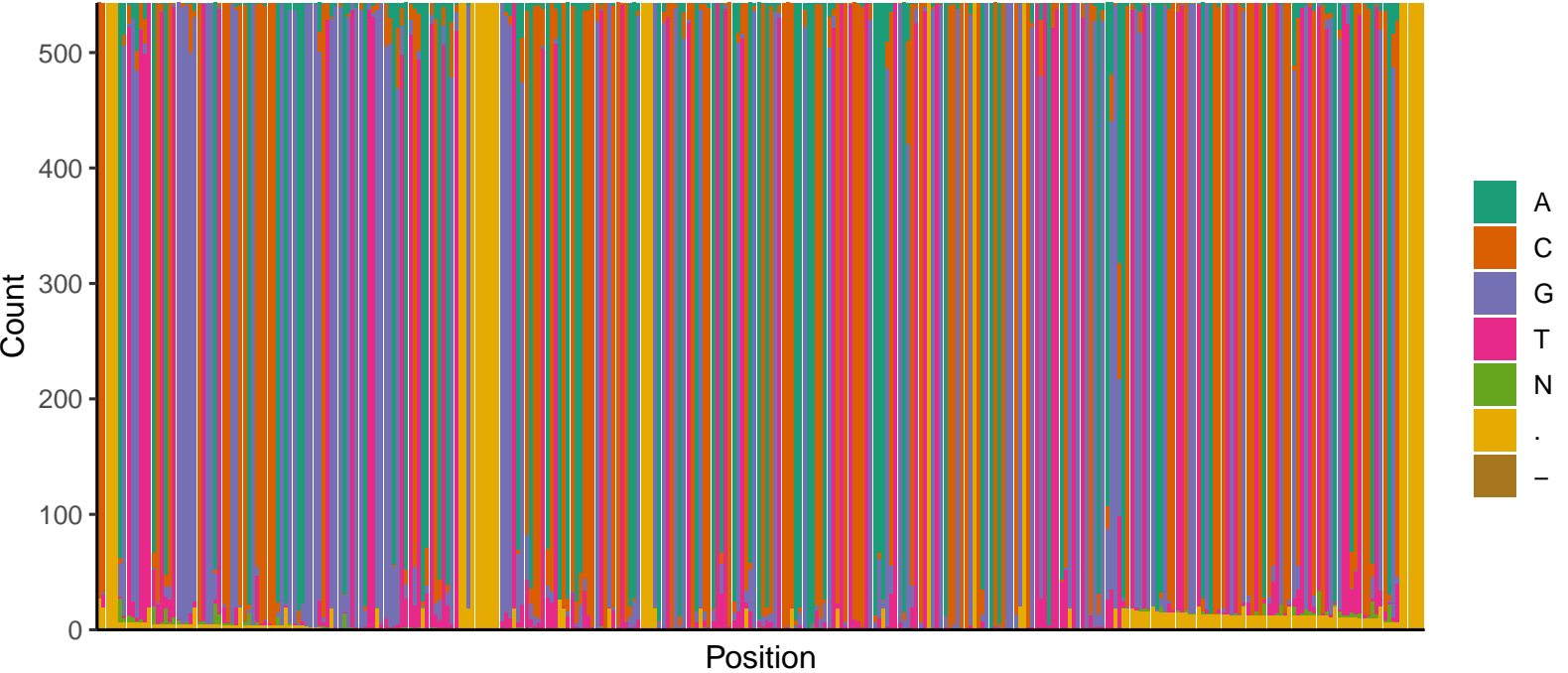


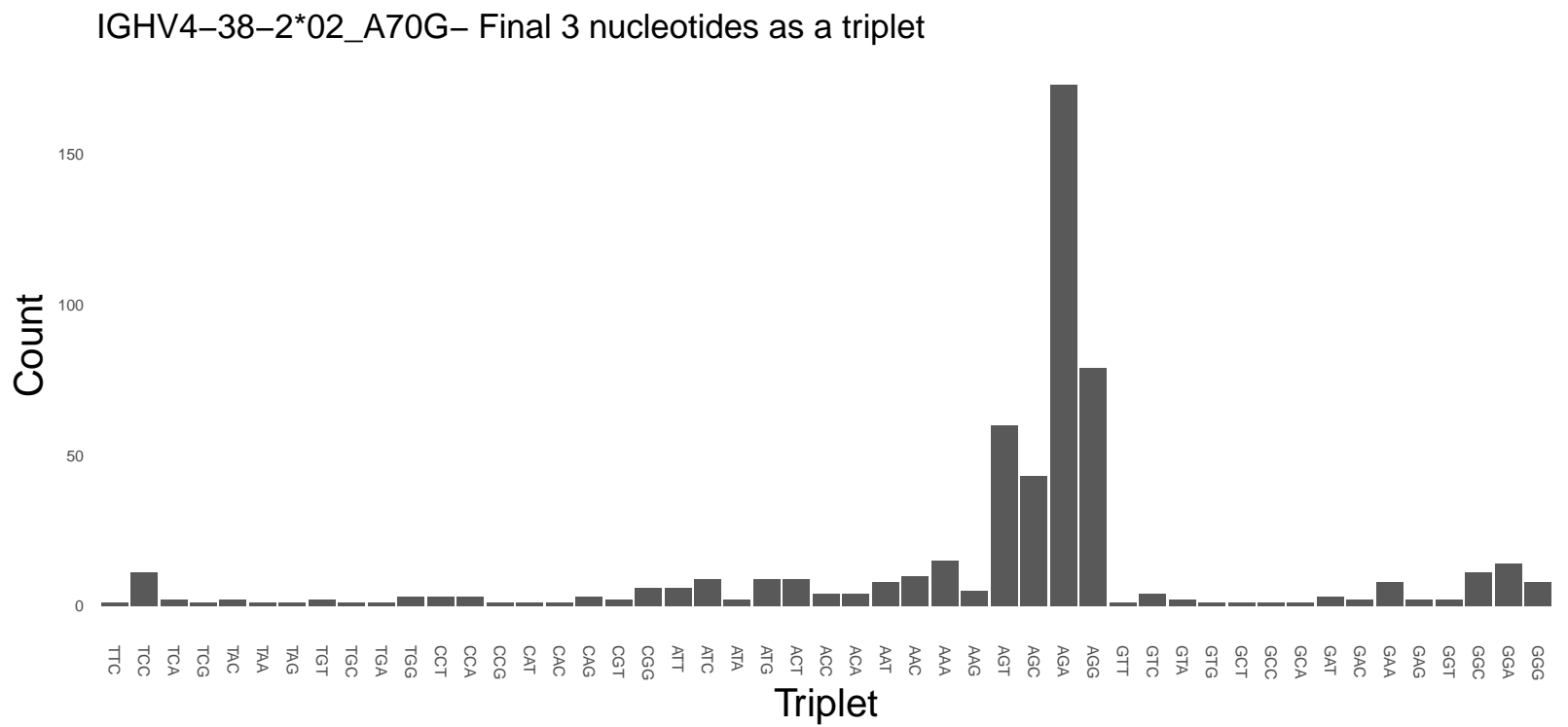
Gene IGHV4-38-2*02_A70G



Gene IGHV4-38-2*02_A70G

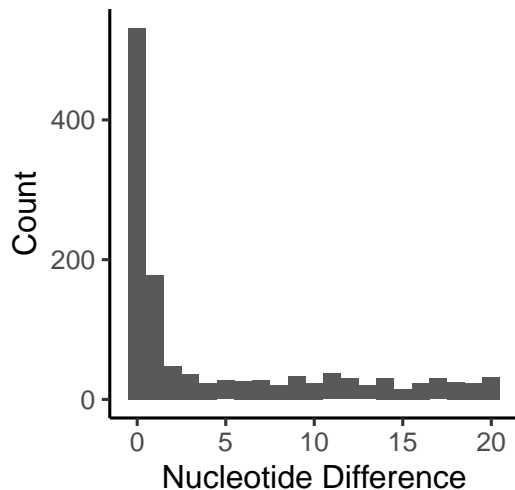


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



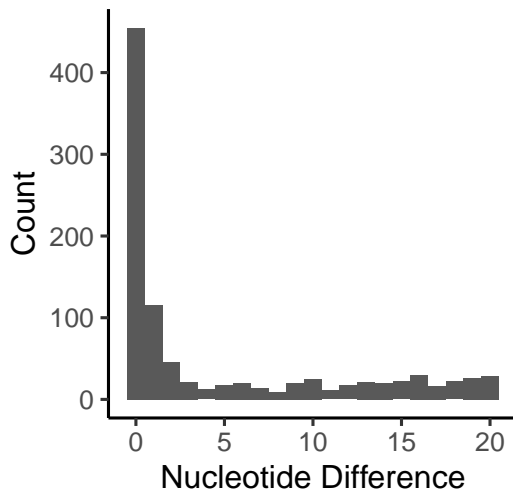
IGHV1-2*06

1625 sequences assigned
532 (32.7%) exact matches, in which:
522 unique CDR3
6 unique J



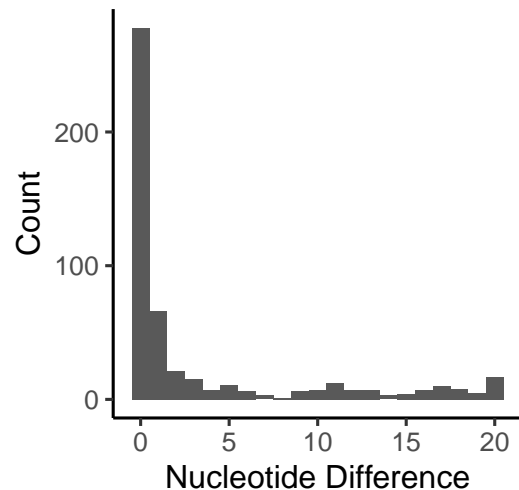
IGHV1-18*01

1295 sequences assigned
455 (35.1%) exact matches, in which:
450 unique CDR3
6 unique J



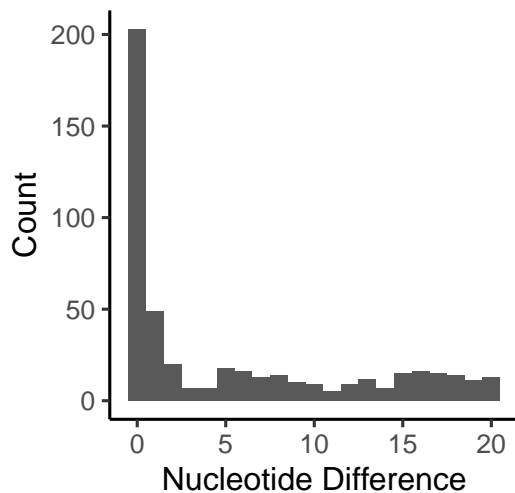
IGHV1-46*01

666 sequences assigned
278 (41.7%) exact matches, in which:
274 unique CDR3
6 unique J



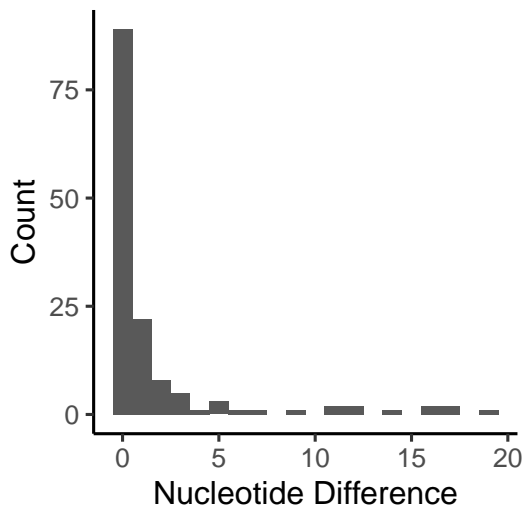
IGHV1-3*01

658 sequences assigned
203 (30.9%) exact matches, in which:
200 unique CDR3
6 unique J



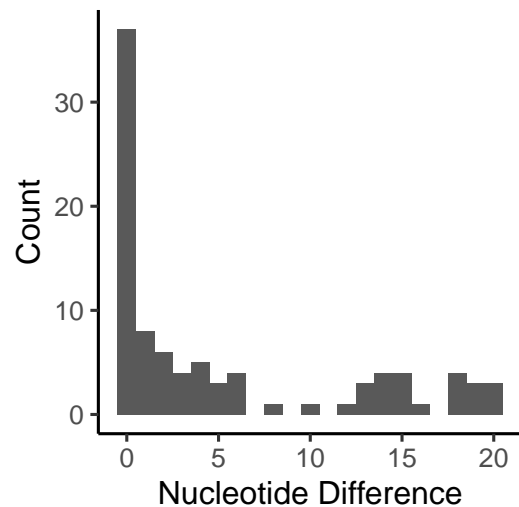
IGHV1-24*01

165 sequences assigned
89 (53.9%) exact matches, in which:
88 unique CDR3
6 unique J



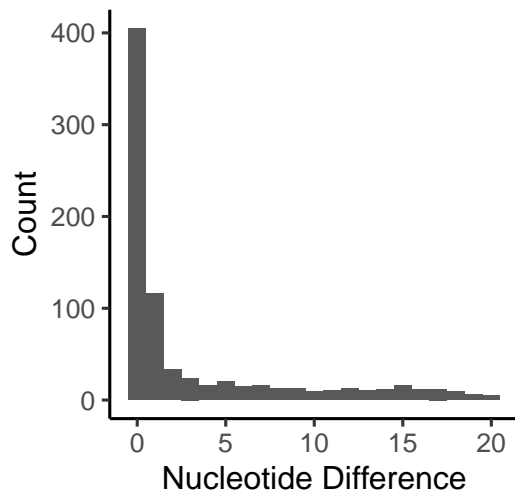
IGHV1-58*01

111 sequences assigned
37 (33.3%) exact matches, in which:
35 unique CDR3
4 unique J



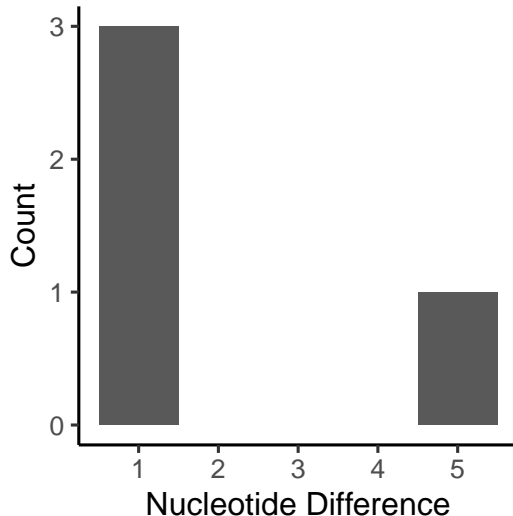
IGHV1-8*01

895 sequences assigned
405 (45.3%) exact matches, in which:
397 unique CDR3
6 unique J



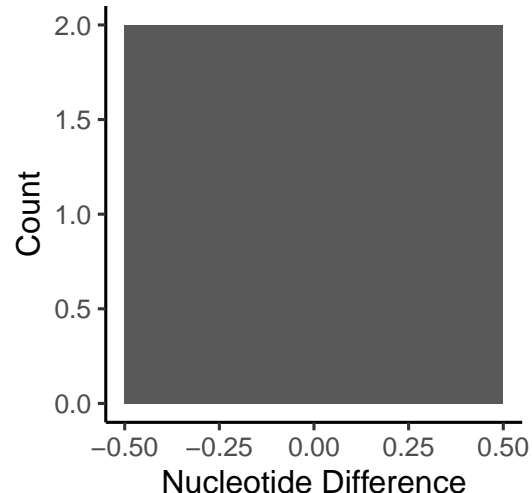
IGHV1-45*02

10 sequences assigned
No exact matches.



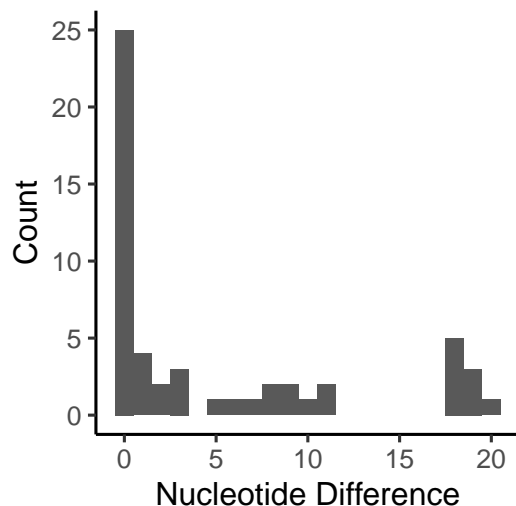
IGHV1-68*02

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



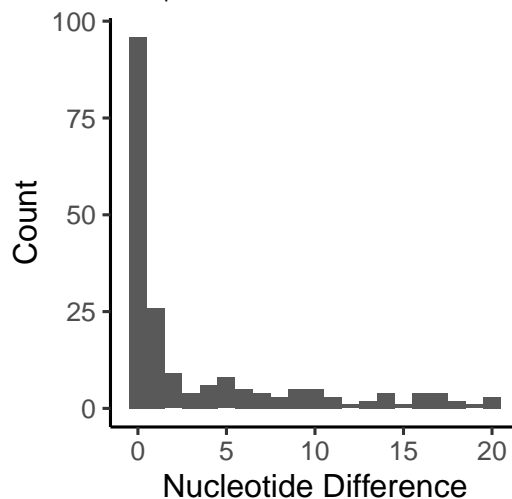
IGHV1-69-2*01

81 sequences assigned
25 (30.9%) exact matches, in which:
25 unique CDR3
4 unique J



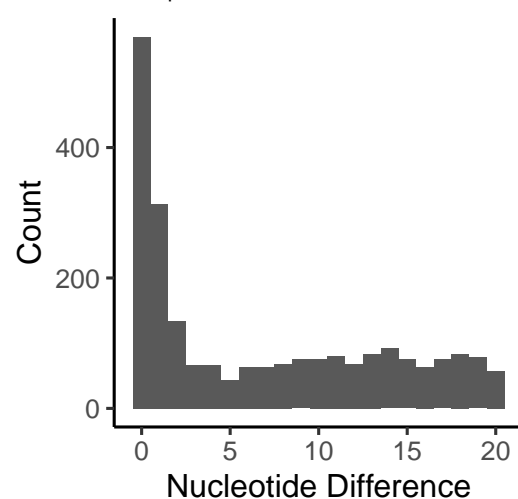
IGHV2-26*01

214 sequences assigned
96 (44.9%) exact matches, in which:
96 unique CDR3
5 unique J



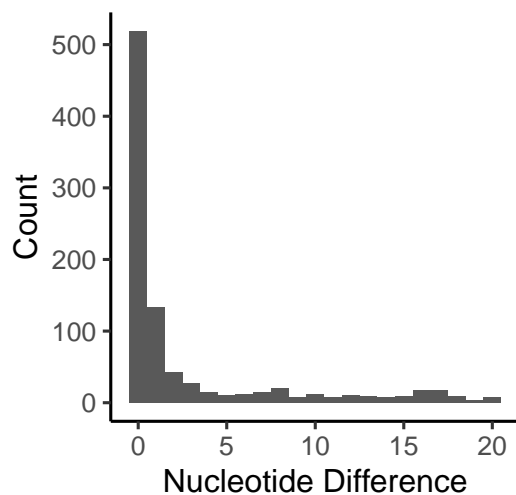
IGHV3-9*01

2831 sequences assigned
570 (20.1%) exact matches, in which:
554 unique CDR3
6 unique J



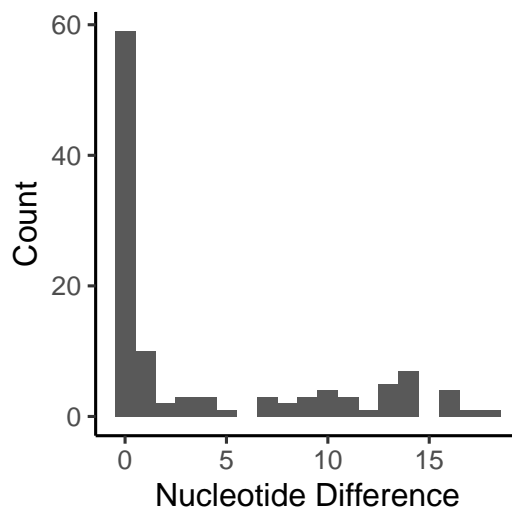
IGHV1-69*06

1100 sequences assigned
519 (47.2%) exact matches, in which:
515 unique CDR3
6 unique J



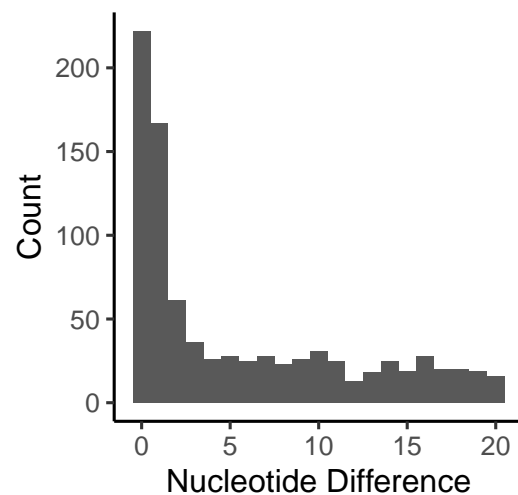
IGHV2-70*01

119 sequences assigned
59 (49.6%) exact matches, in which:
59 unique CDR3
5 unique J



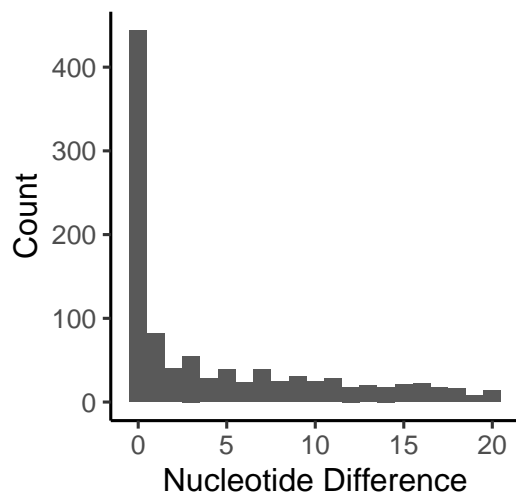
IGHV3-11*01

1117 sequences assigned
222 (19.9%) exact matches, in which:
219 unique CDR3
6 unique J



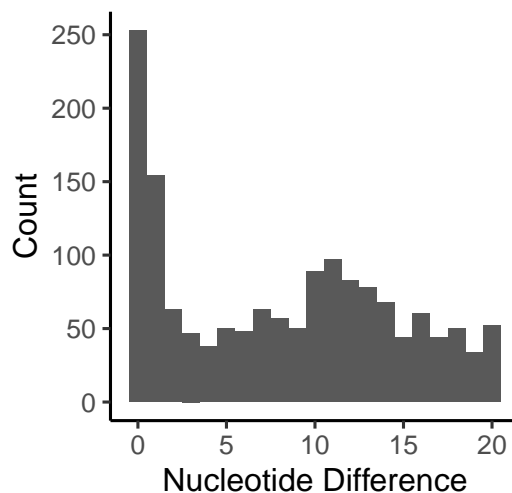
IGHV2-5*02

1166 sequences assigned
444 (38.1%) exact matches, in which:
438 unique CDR3
6 unique J



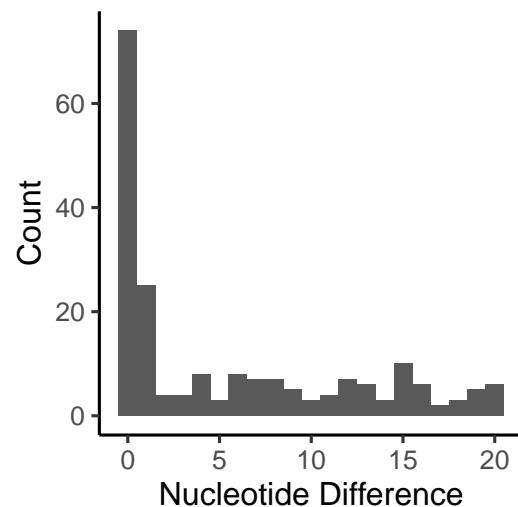
IGHV3-7*01

1888 sequences assigned
253 (13.4%) exact matches, in which:
243 unique CDR3
6 unique J



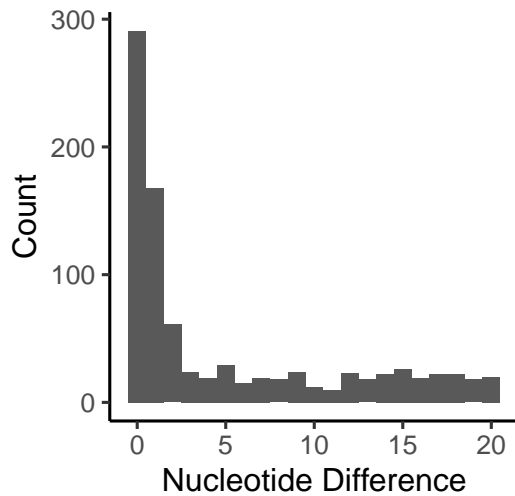
IGHV3-13*01

238 sequences assigned
74 (31.1%) exact matches, in which:
72 unique CDR3
4 unique J



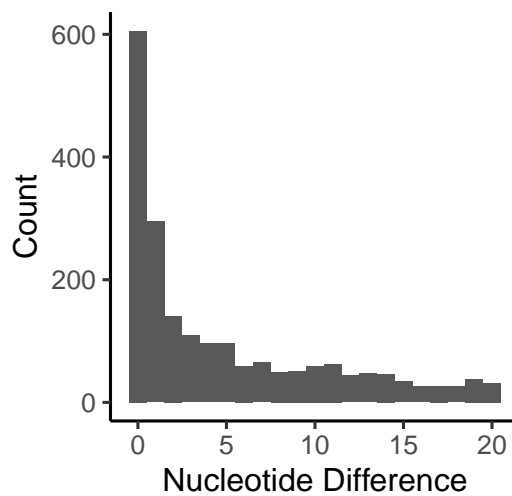
IGHV3-15*01

1158 sequences assigned
291 (25.1%) exact matches, in which:
284 unique CDR3
6 unique J



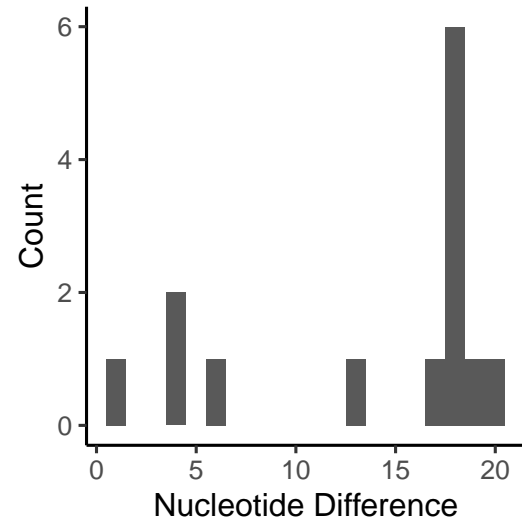
IGHV3-21*01

2504 sequences assigned
606 (24.2%) exact matches, in which:
591 unique CDR3
6 unique J



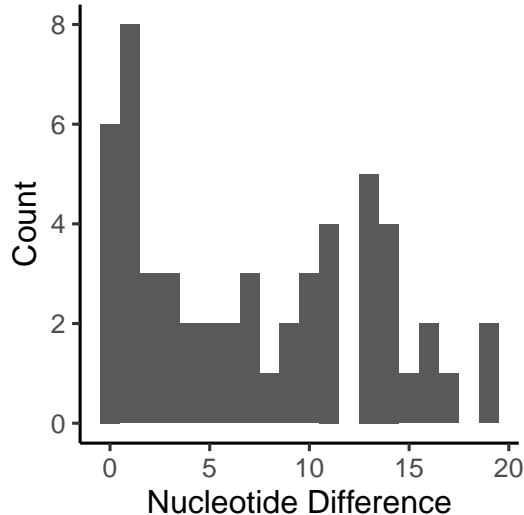
IGHV3-30-3*03

40 sequences assigned
No exact matches.



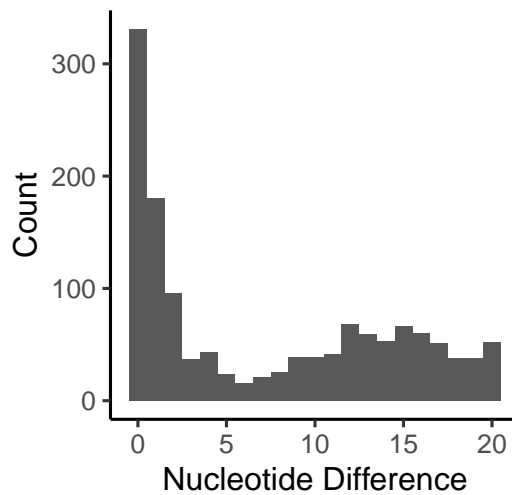
IGHV3-20*01

57 sequences assigned
6 (10.5%) exact matches, in which:
6 unique CDR3
3 unique J



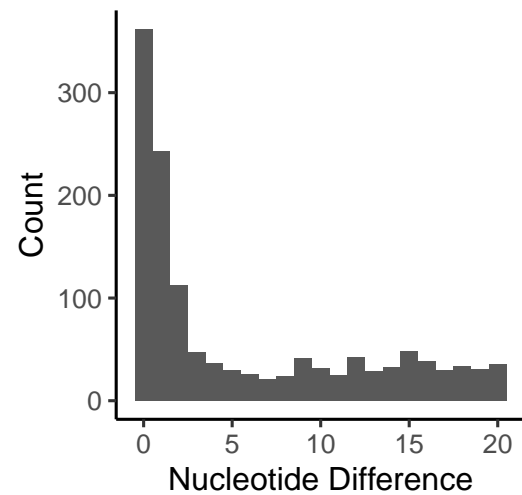
IGHV3-23*04

1806 sequences assigned
331 (18.3%) exact matches, in which:
325 unique CDR3
6 unique J



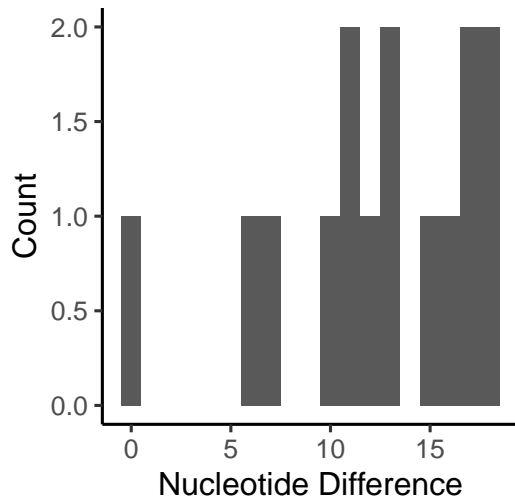
IGHV3-33*01

1599 sequences assigned
362 (22.6%) exact matches, in which:
357 unique CDR3
6 unique J



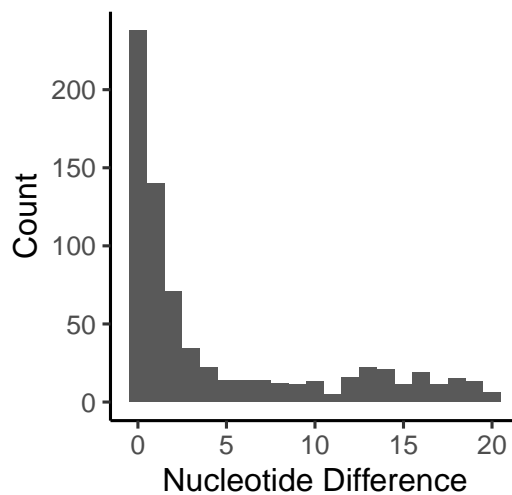
IGHV3-20*04

18 sequences assigned
1 (5.6%) exact matches, in which:
1 unique CDR3
1 unique J



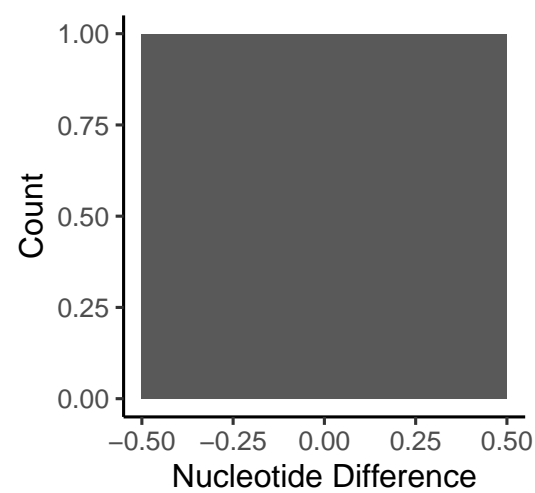
IGHV3-30*01

913 sequences assigned
238 (26.1%) exact matches, in which:
232 unique CDR3
6 unique J



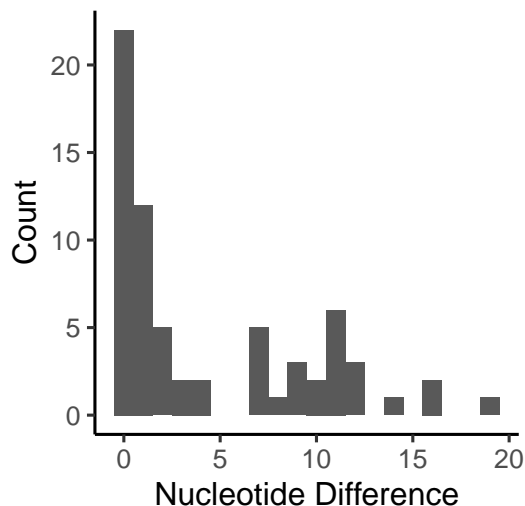
IGHV3-35*01

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



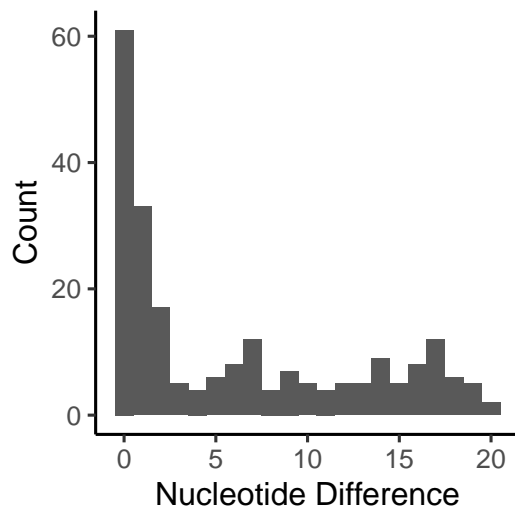
IGHV3-43*01

80 sequences assigned
22 (27.5%) exact matches, in which:
19 unique CDR3
3 unique J



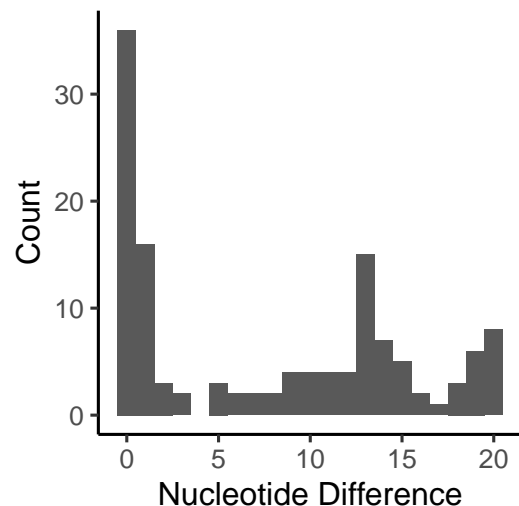
IGHV3-49*04

288 sequences assigned
61 (21.2%) exact matches, in which:
59 unique CDR3
5 unique J



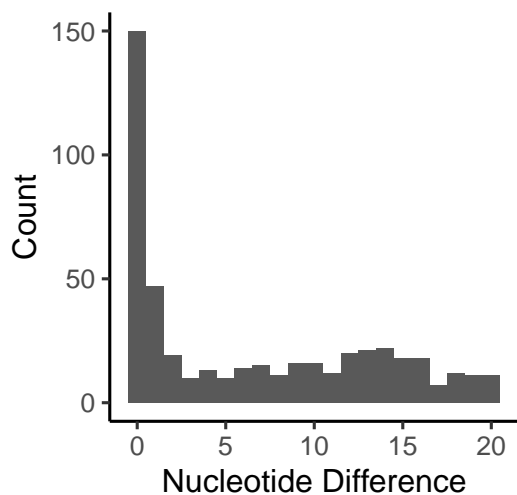
IGHV3-53*02

183 sequences assigned
36 (19.7%) exact matches, in which:
34 unique CDR3
6 unique J



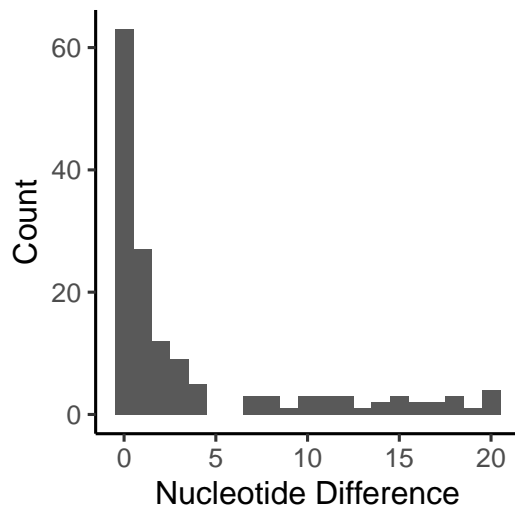
IGHV3-48*02

581 sequences assigned
150 (25.8%) exact matches, in which:
147 unique CDR3
6 unique J



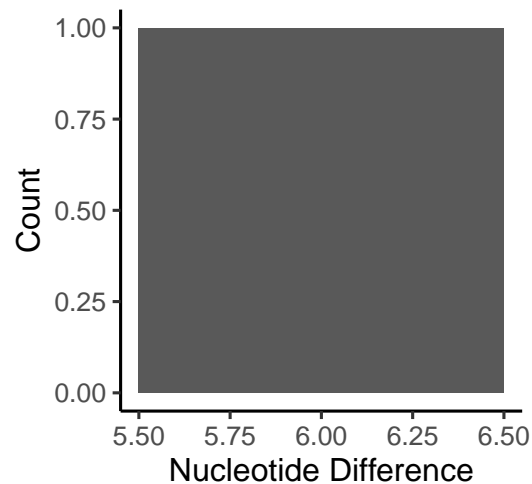
IGHV3-49*05

185 sequences assigned
63 (34.1%) exact matches, in which:
60 unique CDR3
4 unique J



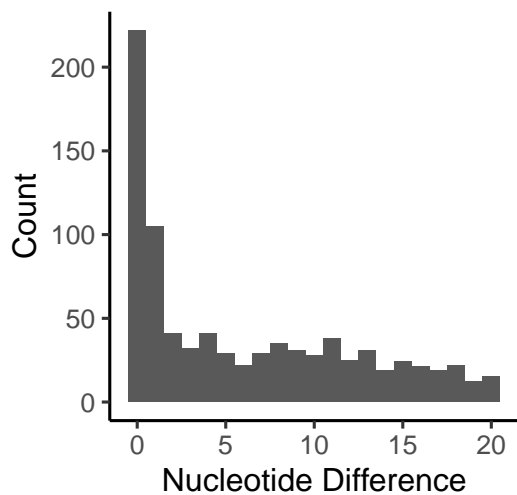
IGHV3-62*04

1 sequences assigned
No exact matches.



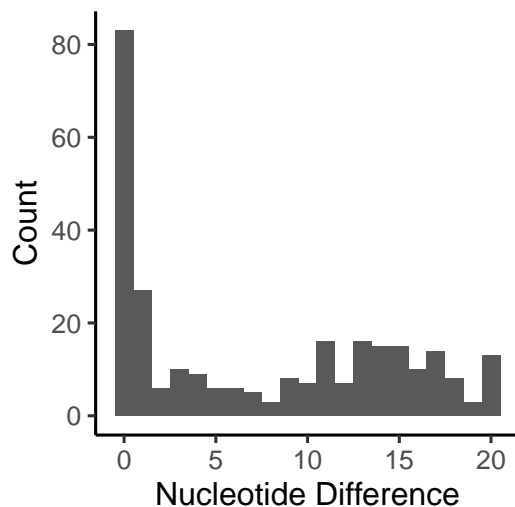
IGHV3-48*03

1006 sequences assigned
222 (22.1%) exact matches, in which:
213 unique CDR3
6 unique J



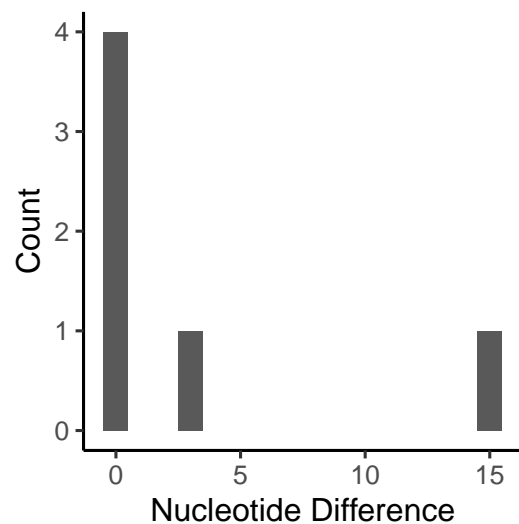
IGHV3-53*01

380 sequences assigned
83 (21.8%) exact matches, in which:
81 unique CDR3
6 unique J



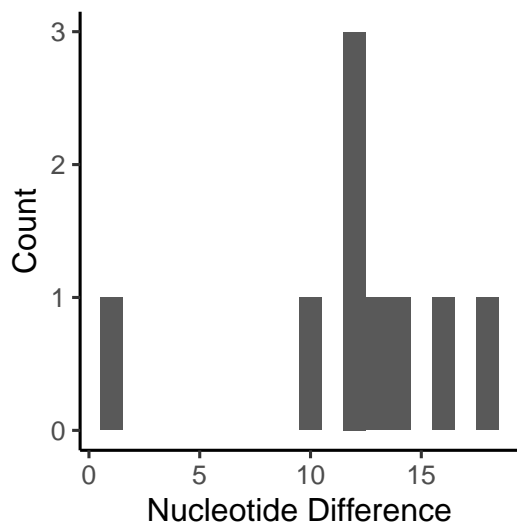
IGHV3-64*02

6 sequences assigned
4 (66.7%) exact matches, in which:
4 unique CDR3
2 unique J



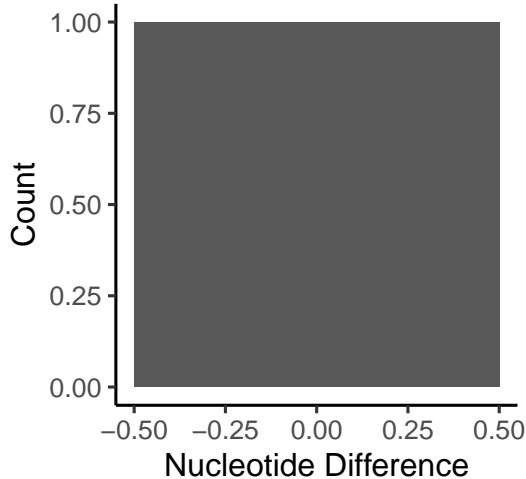
IGHV3-66*03

9 sequences assigned
No exact matches.



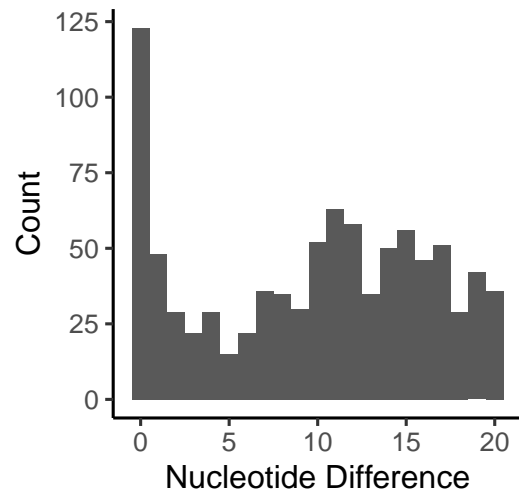
IGHV3-71*03

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



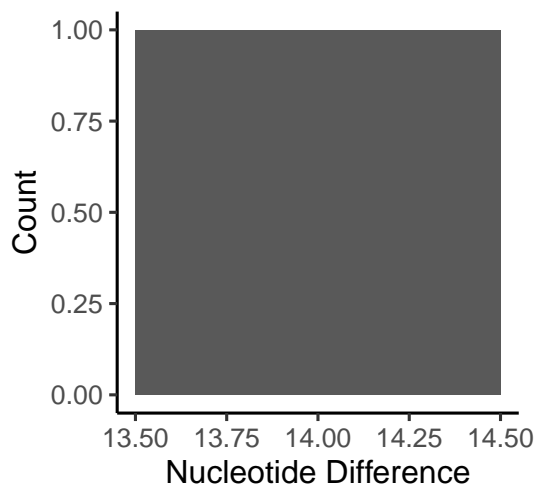
IGHV3-74*01

1260 sequences assigned
123 (9.8%) exact matches, in which:
120 unique CDR3
6 unique J



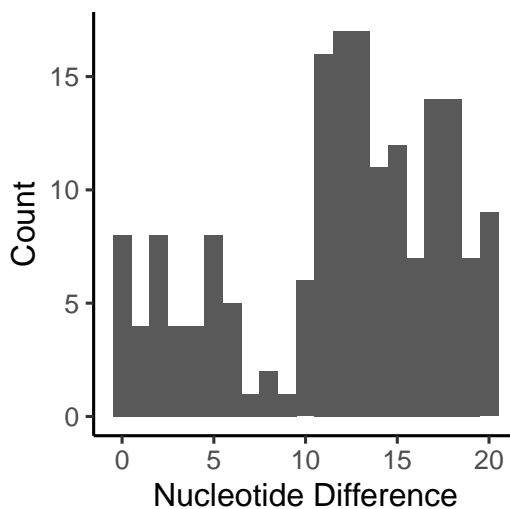
IGHV3-66*04

1 sequences assigned
No exact matches.



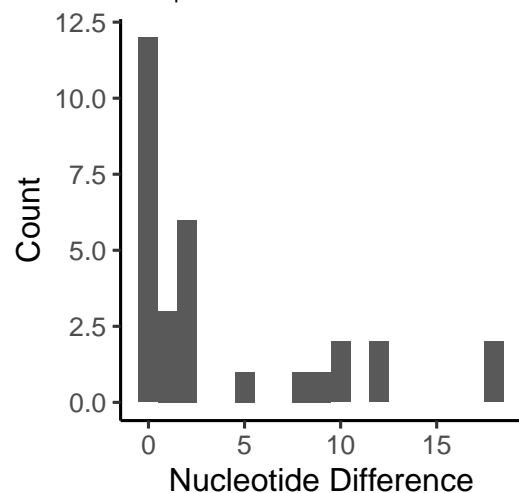
IGHV3-72*01

246 sequences assigned
8 (3.3%) exact matches, in which:
8 unique CDR3
4 unique J



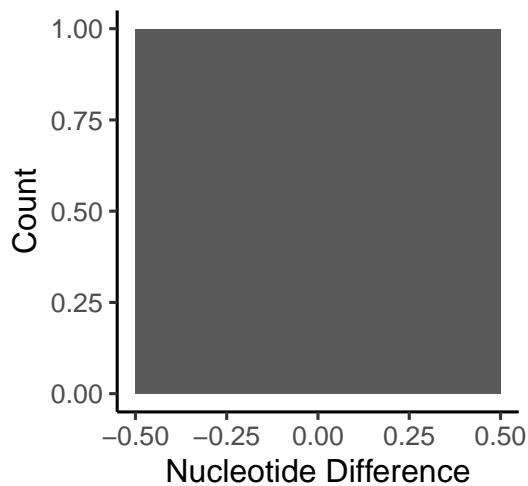
IGHV3-43D*04

31 sequences assigned
12 (38.7%) exact matches, in which:
11 unique CDR3
3 unique J



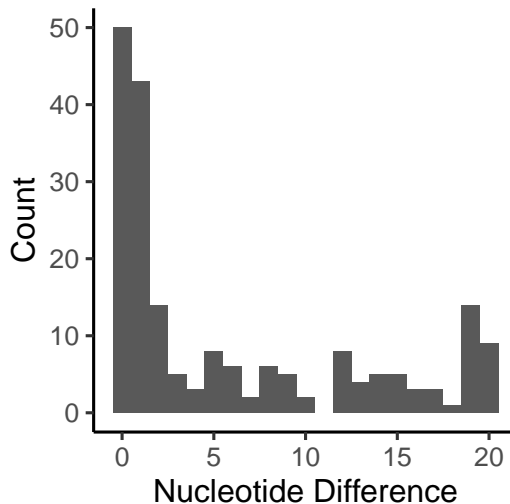
IGHV3-69-1*01

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



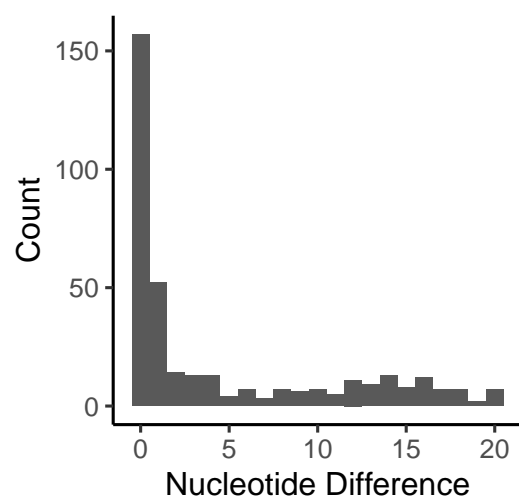
IGHV3-73*02

235 sequences assigned
50 (21.3%) exact matches, in which:
49 unique CDR3
5 unique J



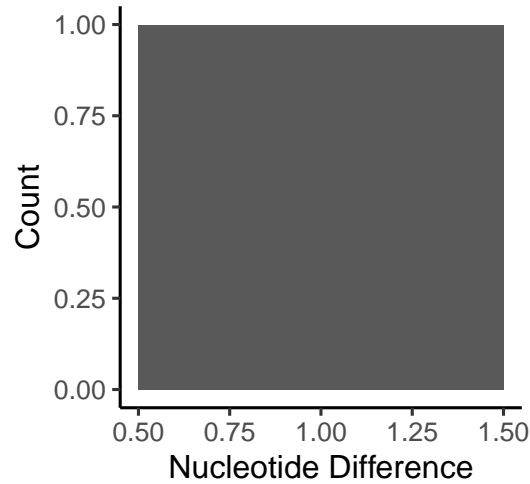
IGHV4-4*02

464 sequences assigned
157 (33.8%) exact matches, in which:
154 unique CDR3
6 unique J



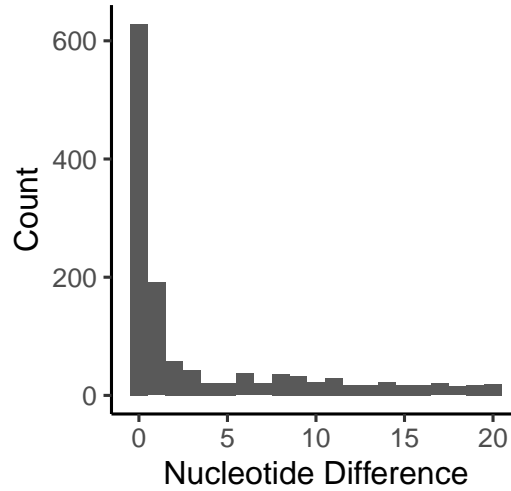
IGHV4-28*01

1 sequences assigned
No exact matches.



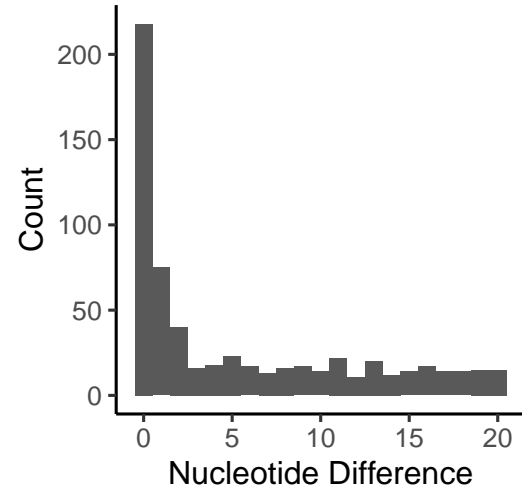
IGHV4-34*01

1489 sequences assigned
629 (42.2%) exact matches, in which:
616 unique CDR3
6 unique J



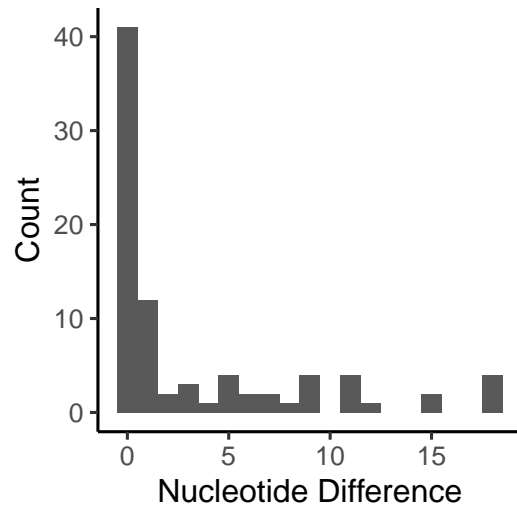
IGHV4-59*01

761 sequences assigned
218 (28.6%) exact matches, in which:
211 unique CDR3
6 unique J



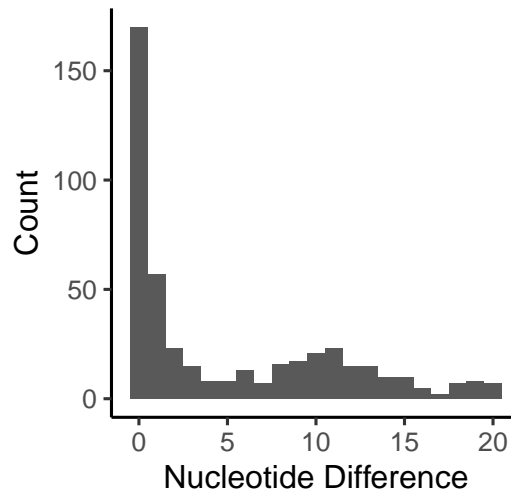
IGHV4-31*01

89 sequences assigned
41 (46.1%) exact matches, in which:
41 unique CDR3
5 unique J



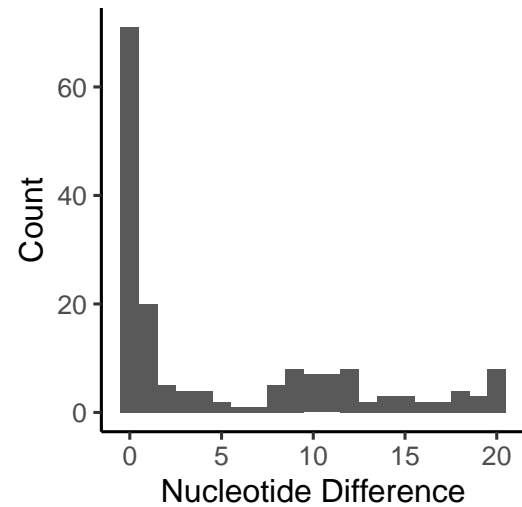
IGHV4-38-2*02_A70G

543 sequences assigned
170 (31.3%) exact matches, in which:
166 unique CDR3
6 unique J



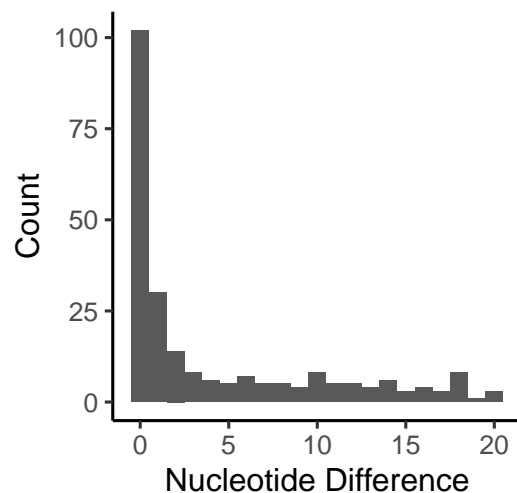
IGHV4-61*01

272 sequences assigned
71 (26.1%) exact matches, in which:
71 unique CDR3
6 unique J



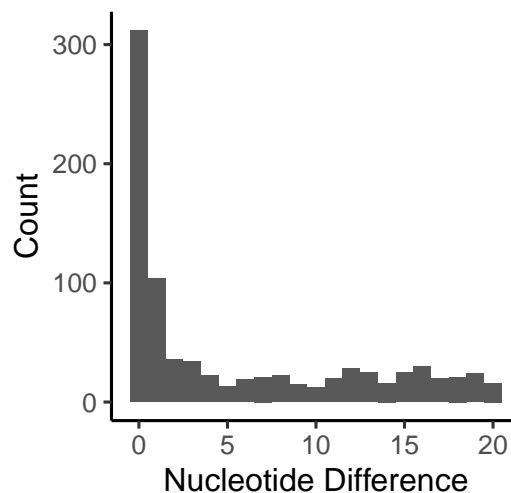
IGHV4-31*03

293 sequences assigned
102 (34.8%) exact matches, in which:
102 unique CDR3
5 unique J



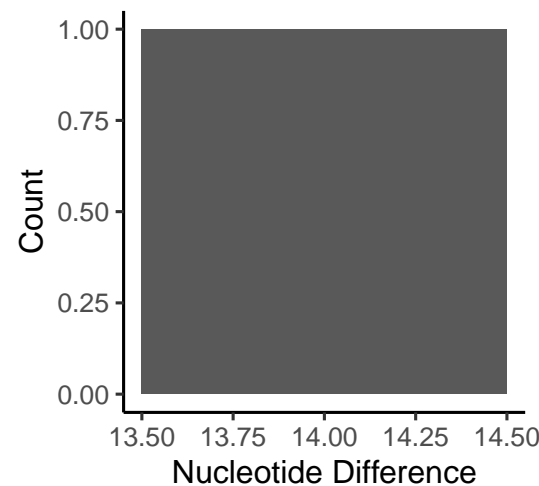
IGHV4-39*01

1117 sequences assigned
312 (27.9%) exact matches, in which:
306 unique CDR3
5 unique J



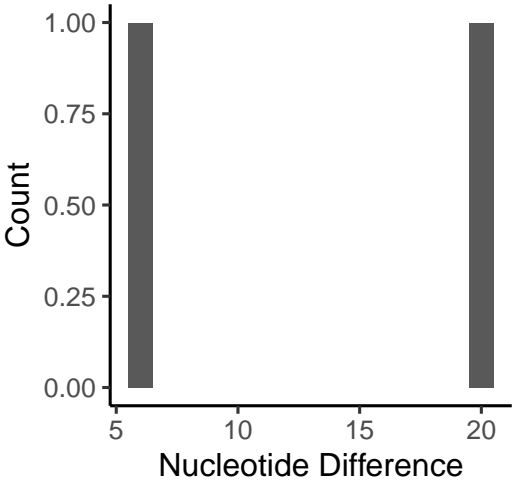
IGHV1/OR15-1*04

3 sequences assigned
No exact matches.



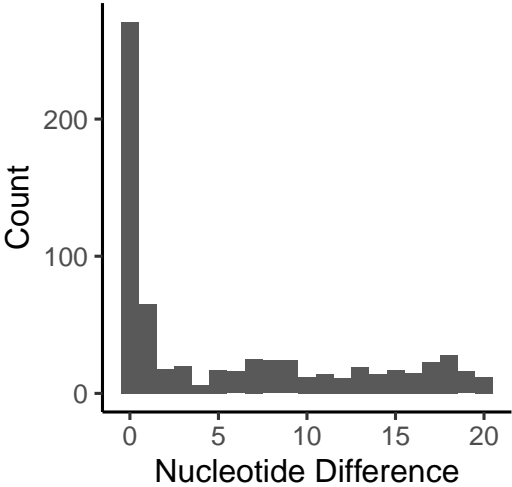
IGHV4/OR15-8*02

3 sequences assigned
No exact matches.



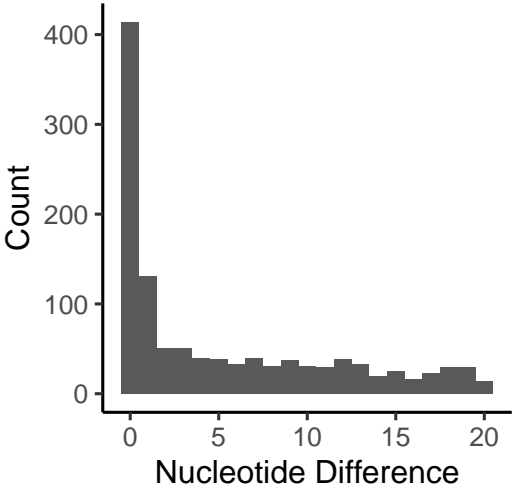
IGHV7-4-1*02

818 sequences assigned
271 (33.1%) exact matches, in which:
266 unique CDR3
6 unique J



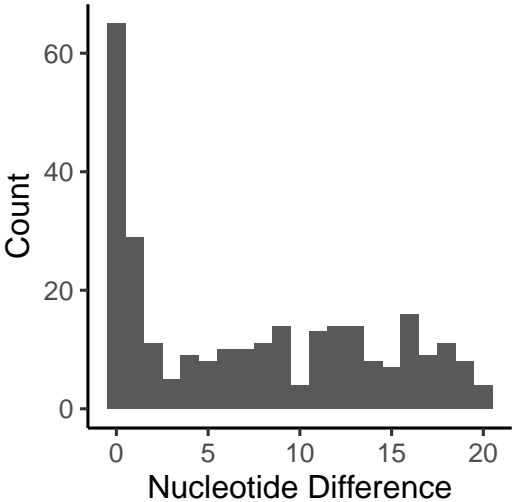
IGHV5-51*01

1314 sequences assigned
414 (31.5%) exact matches, in which:
404 unique CDR3
6 unique J

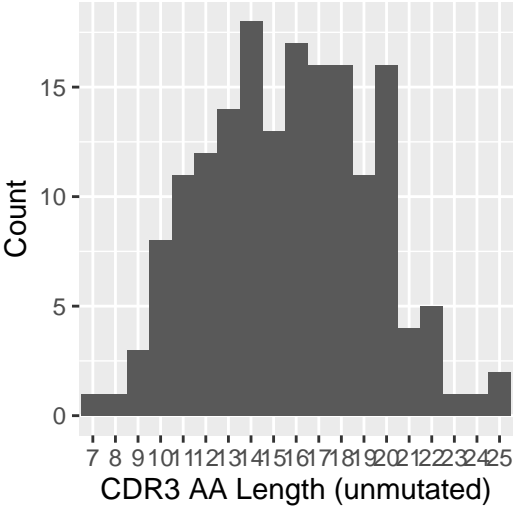


IGHV6-1*01

317 sequences assigned
65 (20.5%) exact matches, in which:
64 unique CDR3
5 unique J



IGHV4-38-2*02_A70G





[illegible]