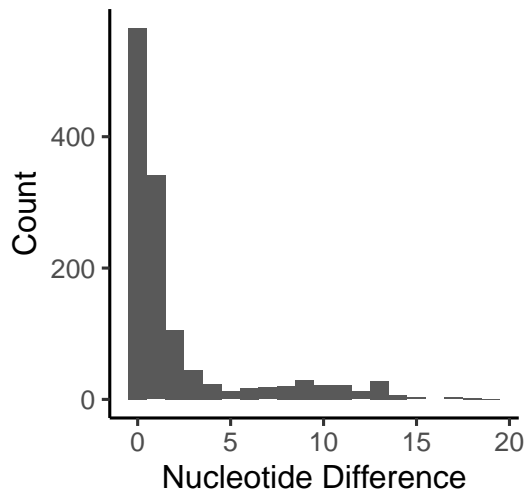


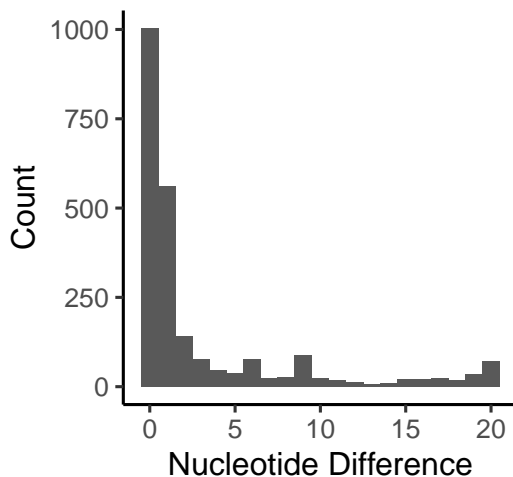
IGHV1-2*04

1288 sequences assigned
566 (43.9%) exact matches, in which:
530 unique CDR3
6 unique J



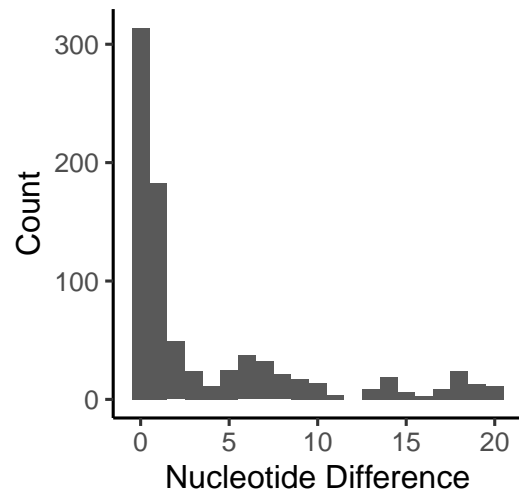
IGHV1-18*01

2418 sequences assigned
1003 (41.5%) exact matches, in which:
923 unique CDR3
6 unique J



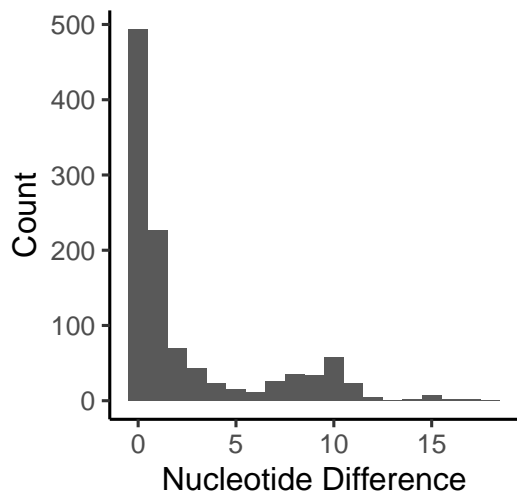
IGHV1-46*01

840 sequences assigned
314 (37.4%) exact matches, in which:
296 unique CDR3
6 unique J



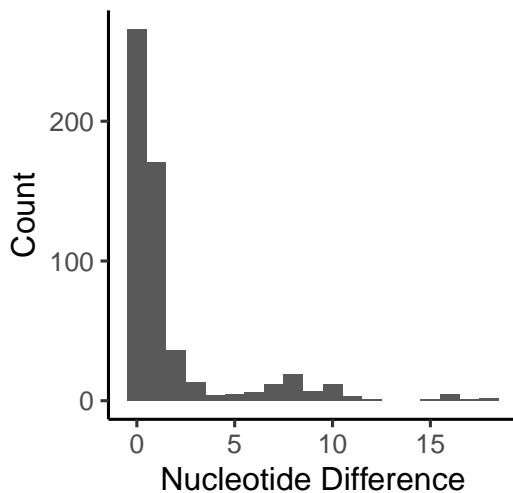
IGHV1-3*01_05

1085 sequences assigned
494 (45.5%) exact matches, in which:
462 unique CDR3
6 unique J



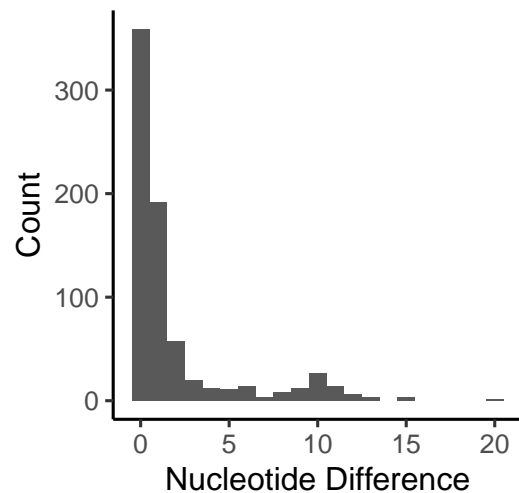
IGHV1-24*01

564 sequences assigned
266 (47.2%) exact matches, in which:
256 unique CDR3
6 unique J



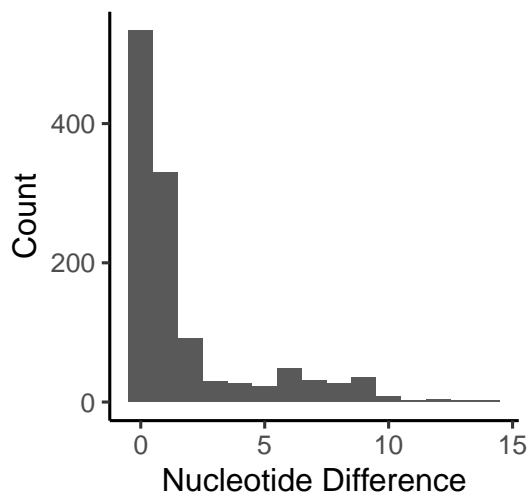
IGHV1-46*04

782 sequences assigned
359 (45.9%) exact matches, in which:
338 unique CDR3
6 unique J



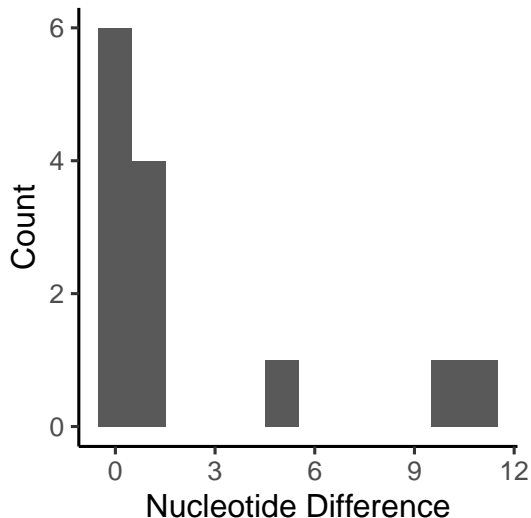
IGHV1-8*01

1193 sequences assigned
534 (44.8%) exact matches, in which:
485 unique CDR3
6 unique J



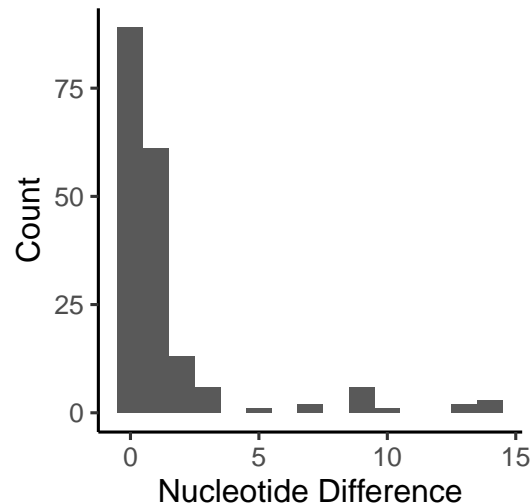
IGHV1-45*02

13 sequences assigned
6 (46.2%) exact matches, in which:
5 unique CDR3
3 unique J



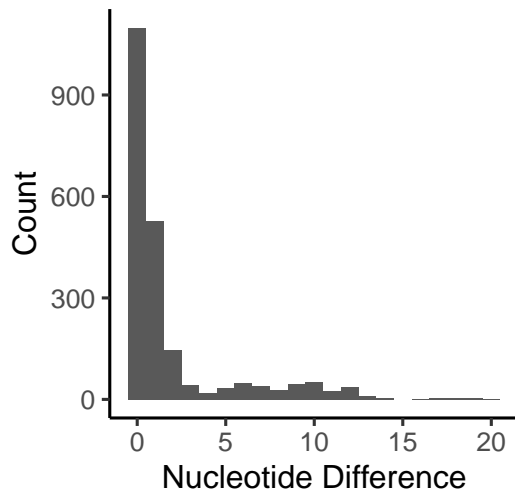
IGHV1-58*02

184 sequences assigned
89 (48.4%) exact matches, in which:
82 unique CDR3
5 unique J



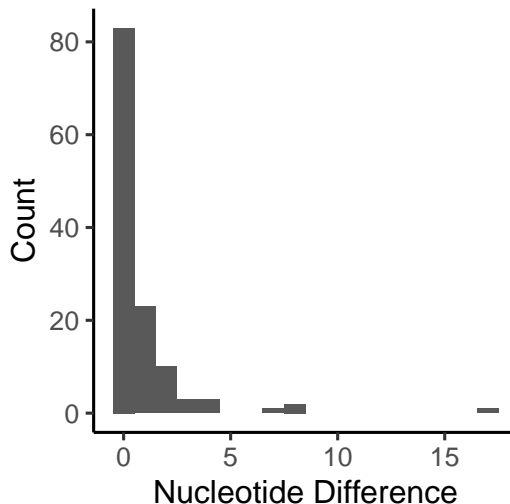
IGHV1–69*04_09

2259 sequences assigned
1099 (48.6%) exact matches, in which:
1049 unique CDR3
6 unique J



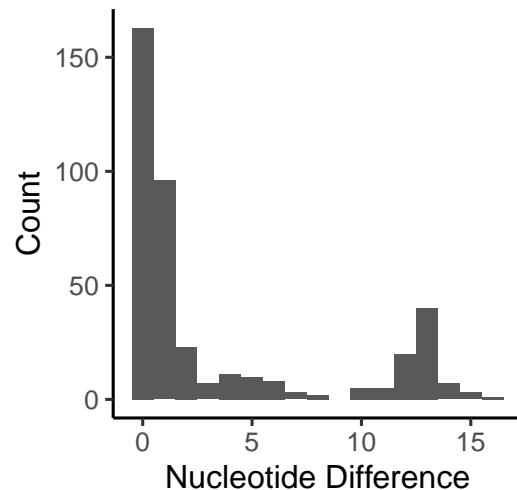
IGHV2–26*01

139 sequences assigned
83 (59.7%) exact matches, in which:
79 unique CDR3
6 unique J



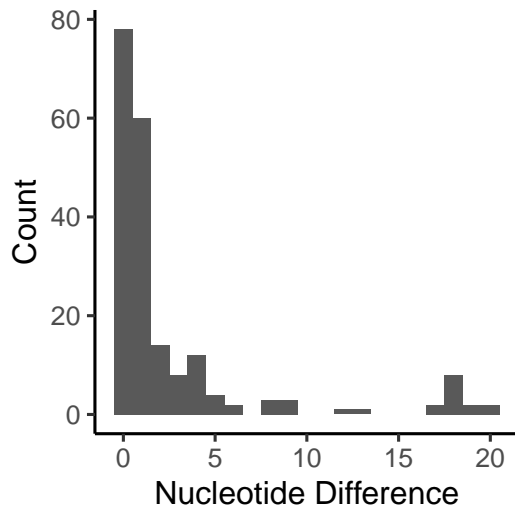
IGHV3–7*04

404 sequences assigned
163 (40.3%) exact matches, in which:
157 unique CDR3
6 unique J



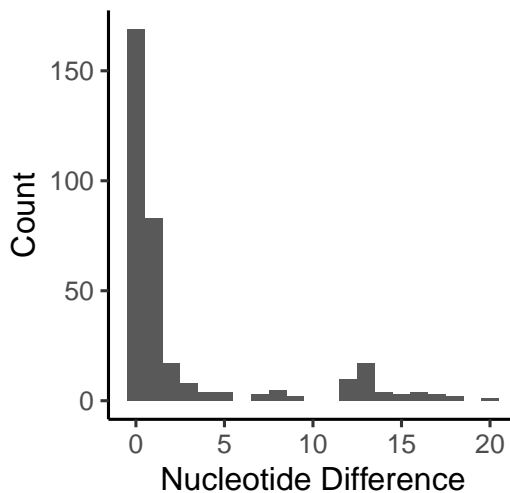
IGHV2–5*01

202 sequences assigned
78 (38.6%) exact matches, in which:
76 unique CDR3
5 unique J



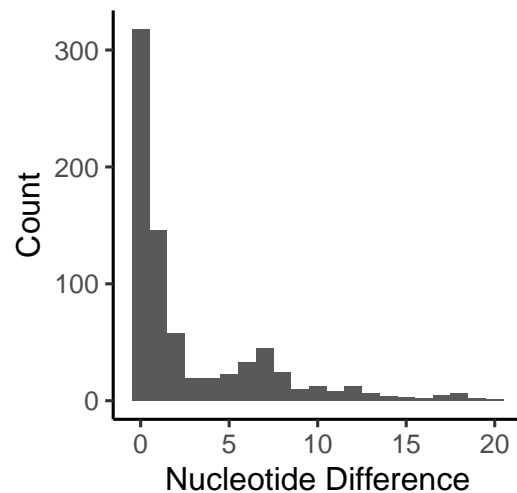
IGHV2–70*11_15

341 sequences assigned
169 (49.6%) exact matches, in which:
163 unique CDR3
6 unique J



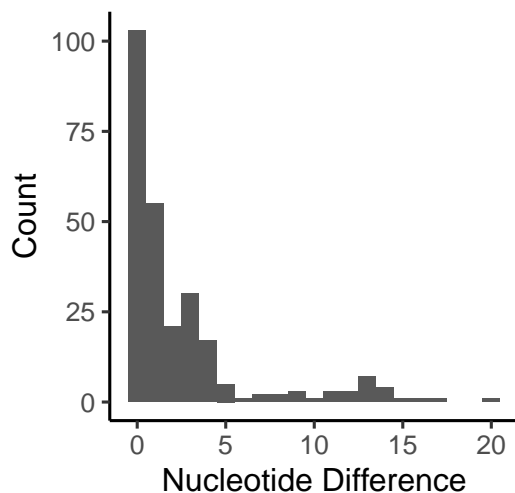
IGHV3–9*01

758 sequences assigned
318 (42%) exact matches, in which:
307 unique CDR3
6 unique J



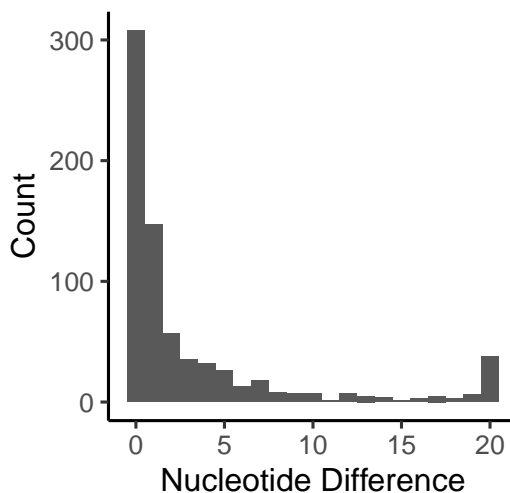
IGHV2–5*02

271 sequences assigned
103 (38%) exact matches, in which:
96 unique CDR3
6 unique J



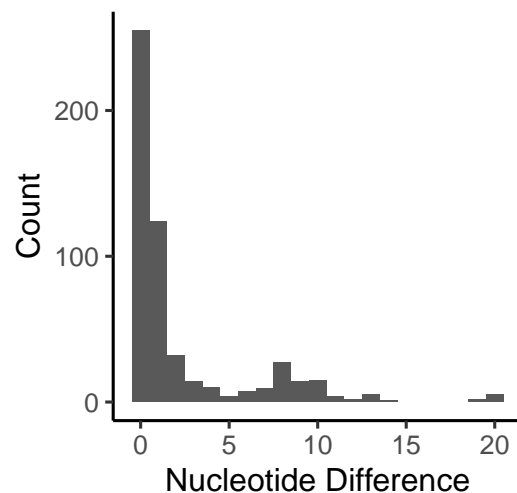
IGHV3–7*01

772 sequences assigned
308 (39.9%) exact matches, in which:
298 unique CDR3
6 unique J



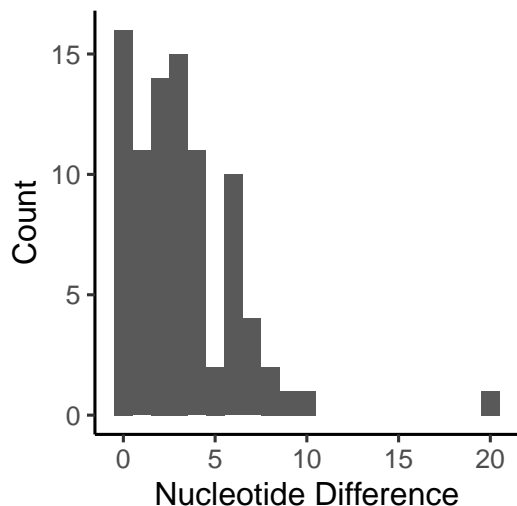
IGHV3–11*01

552 sequences assigned
255 (46.2%) exact matches, in which:
248 unique CDR3
6 unique J



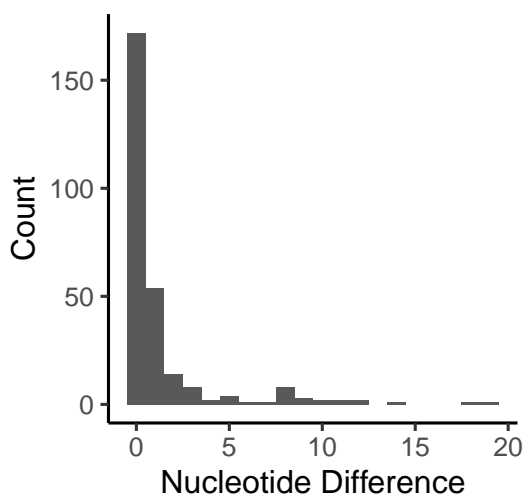
IGHV3-11*04

88 sequences assigned
16 (18.2%) exact matches, in which:
16 unique CDR3
4 unique J



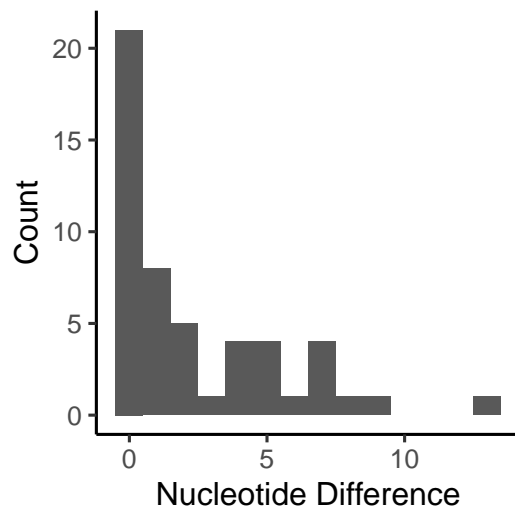
IGHV3-15*07

276 sequences assigned
172 (62.3%) exact matches, in which:
166 unique CDR3
6 unique J



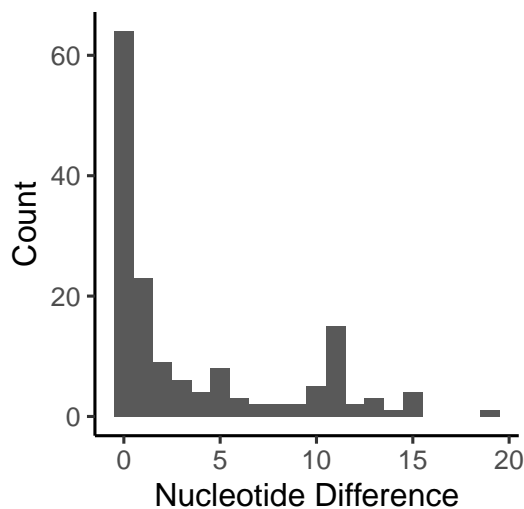
IGHV3-20*03_04

51 sequences assigned
21 (41.2%) exact matches, in which:
19 unique CDR3
3 unique J



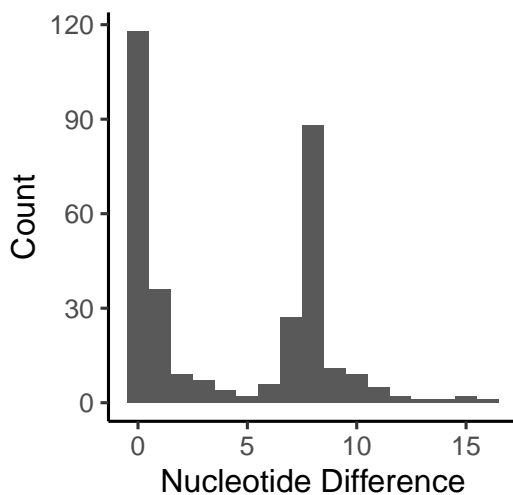
IGHV3-11*06

154 sequences assigned
64 (41.6%) exact matches, in which:
60 unique CDR3
6 unique J



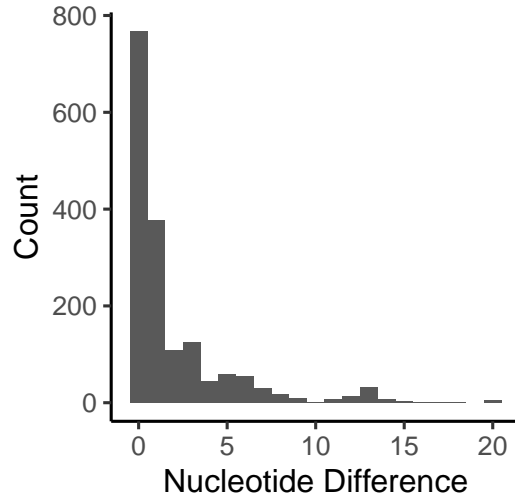
IGHV3-15*01_02

342 sequences assigned
118 (34.5%) exact matches, in which:
116 unique CDR3
6 unique J



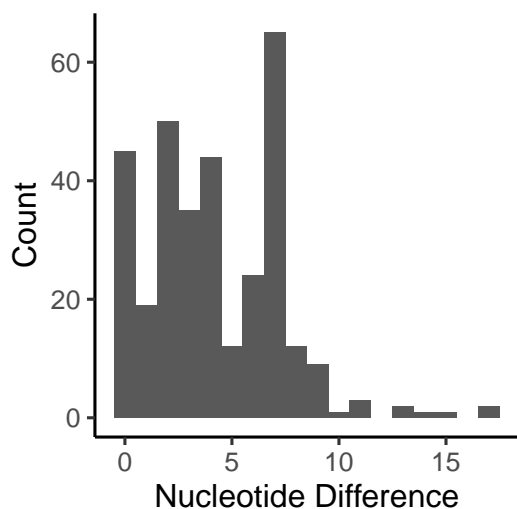
IGHV3-21*01_02

1708 sequences assigned
768 (45%) exact matches, in which:
720 unique CDR3
6 unique J



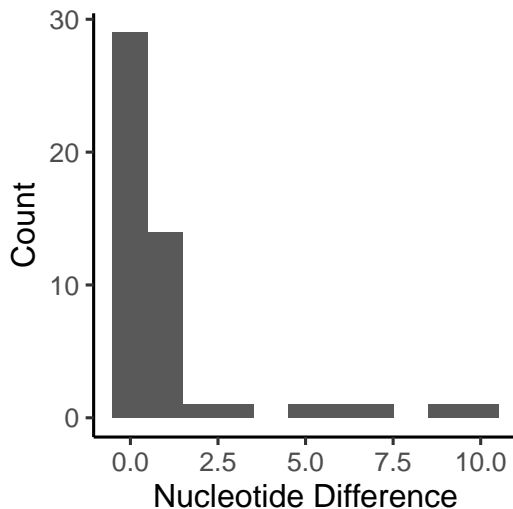
IGHV3-13*01

326 sequences assigned
45 (13.8%) exact matches, in which:
43 unique CDR3
5 unique J



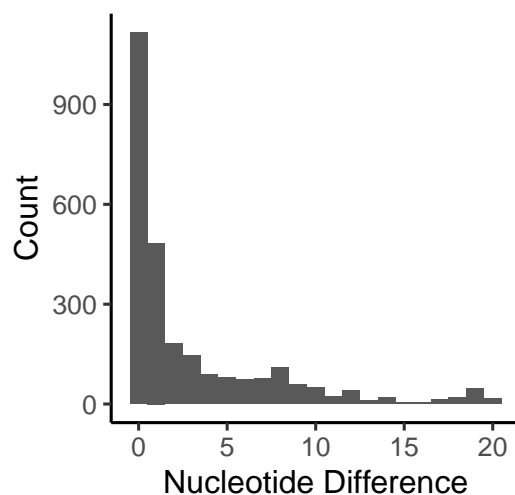
IGHV3-20*01_02

50 sequences assigned
29 (58%) exact matches, in which:
28 unique CDR3
5 unique J



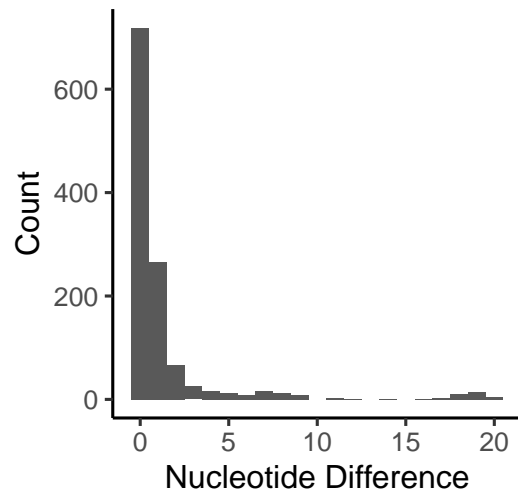
IGHV3-23*01_04

2789 sequences assigned
1117 (40.1%) exact matches, in which:
1060 unique CDR3
6 unique J



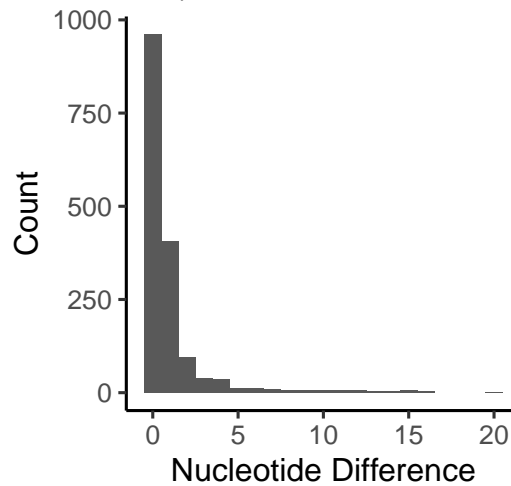
IGHV3-30-3*01

1228 sequences assigned
719 (58.6%) exact matches, in which:
691 unique CDR3
6 unique J



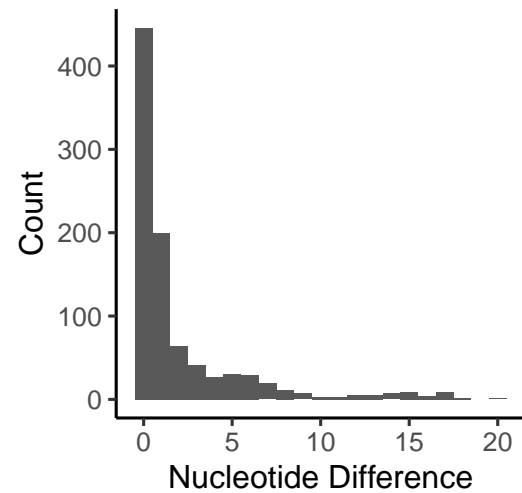
IGHV3-33*01

1624 sequences assigned
961 (59.2%) exact matches, in which:
920 unique CDR3
6 unique J



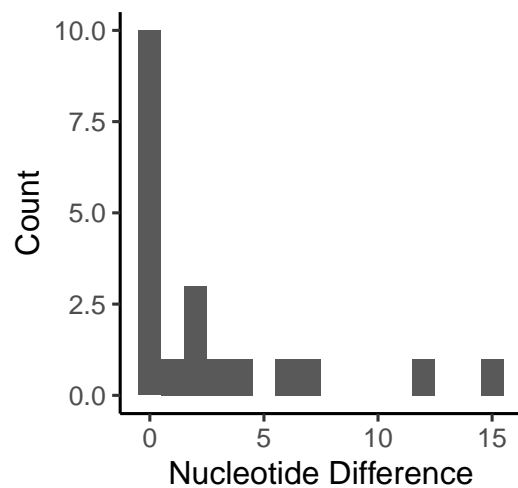
IGHV3-48*01

923 sequences assigned
446 (48.3%) exact matches, in which:
414 unique CDR3
6 unique J



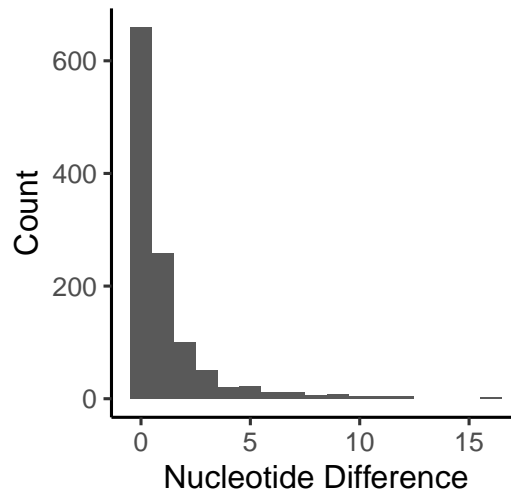
IGHV3-30-5*01

20 sequences assigned
10 (50%) exact matches, in which:
10 unique CDR3
3 unique J



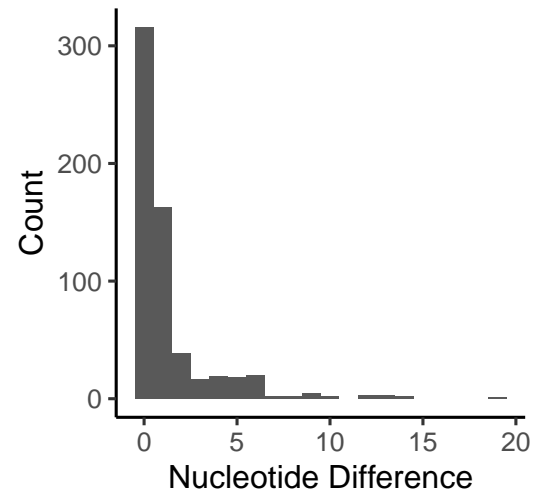
IGHV3-33*08

1167 sequences assigned
660 (56.6%) exact matches, in which:
641 unique CDR3
6 unique J



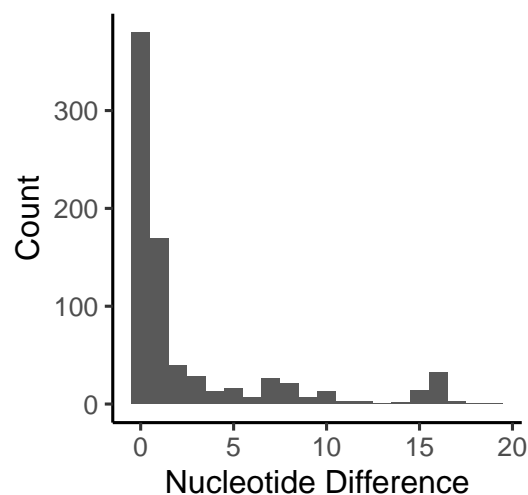
IGHV3-48*02

619 sequences assigned
316 (51.1%) exact matches, in which:
293 unique CDR3
6 unique J



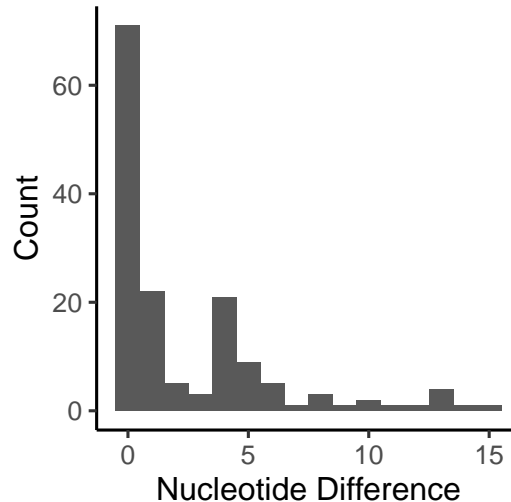
IGHV3-30*03

785 sequences assigned
380 (48.4%) exact matches, in which:
365 unique CDR3
6 unique J



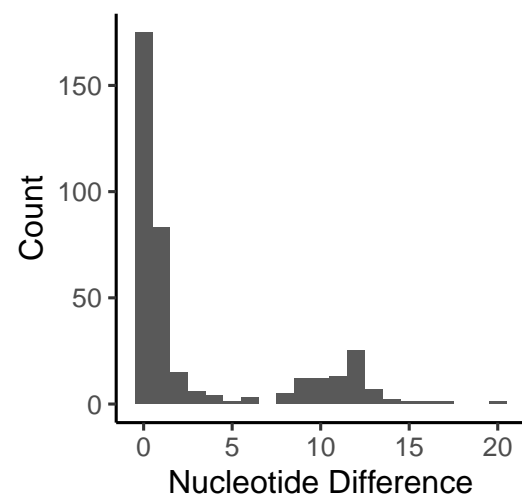
IGHV3-43*01

151 sequences assigned
71 (47%) exact matches, in which:
69 unique CDR3
5 unique J



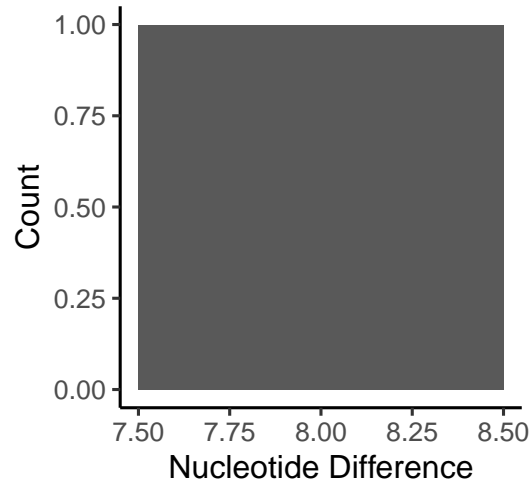
IGHV3-49*03_05

394 sequences assigned
175 (44.4%) exact matches, in which:
168 unique CDR3
6 unique J



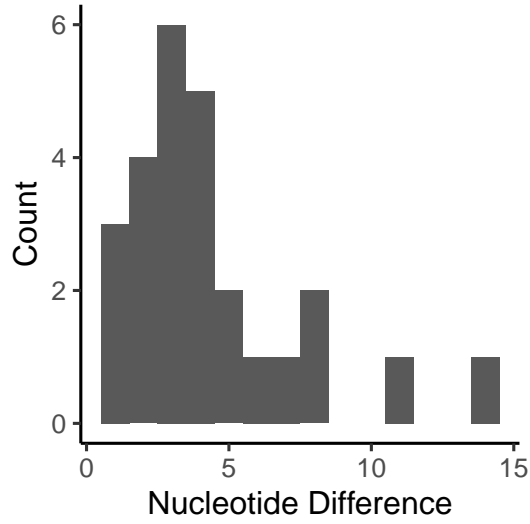
IGHV3-52*01_03

1 sequences assigned
No exact matches.



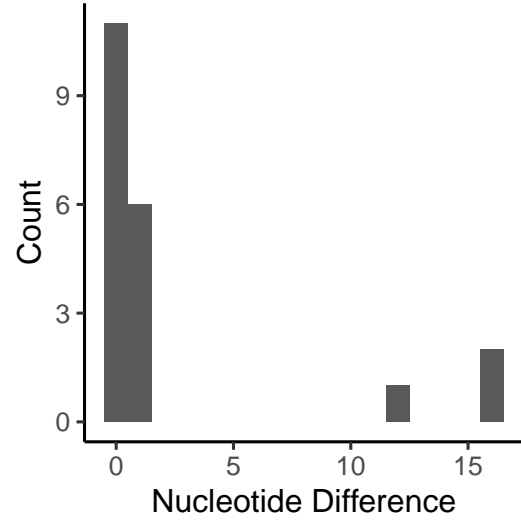
IGHV3-64*04

26 sequences assigned
No exact matches.



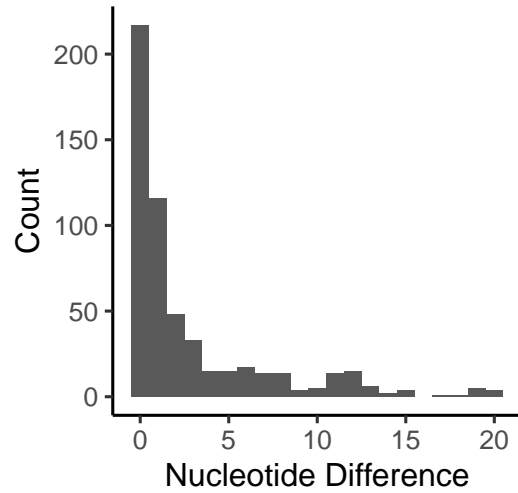
IGHV3-72*01

20 sequences assigned
11 (55%) exact matches, in which:
11 unique CDR3
2 unique J



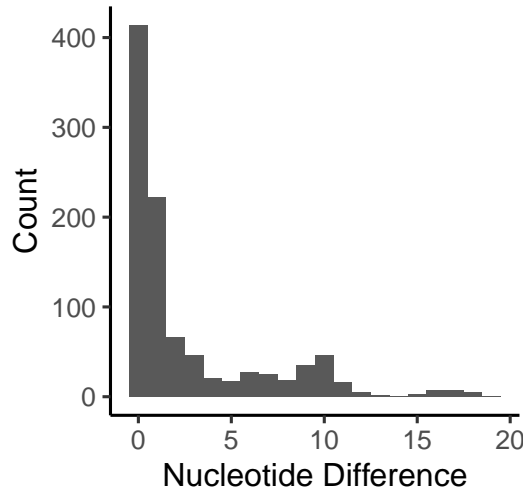
IGHV3-53*01_02

571 sequences assigned
217 (38%) exact matches, in which:
205 unique CDR3
6 unique J



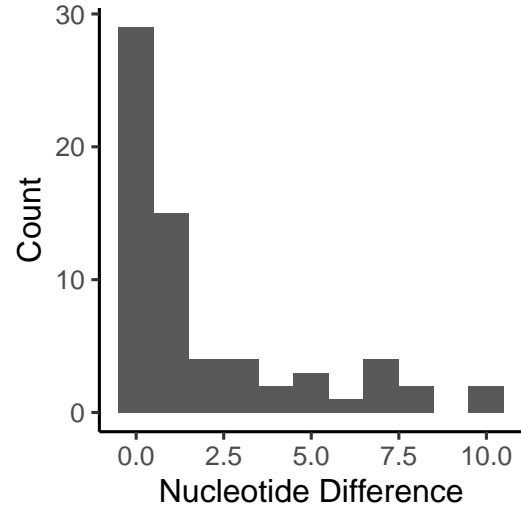
IGHV3-66*01

984 sequences assigned
414 (42.1%) exact matches, in which:
396 unique CDR3
6 unique J



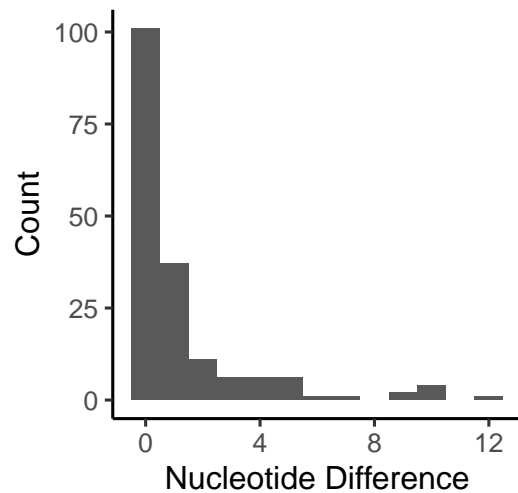
IGHV3-72*01_T159A_C10

67 sequences assigned
29 (43.3%) exact matches, in which:
29 unique CDR3
3 unique J



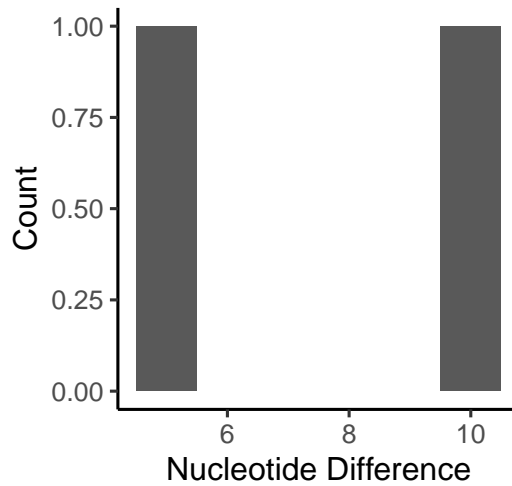
IGHV3-64*01

176 sequences assigned
101 (57.4%) exact matches, in which:
94 unique CDR3
6 unique J



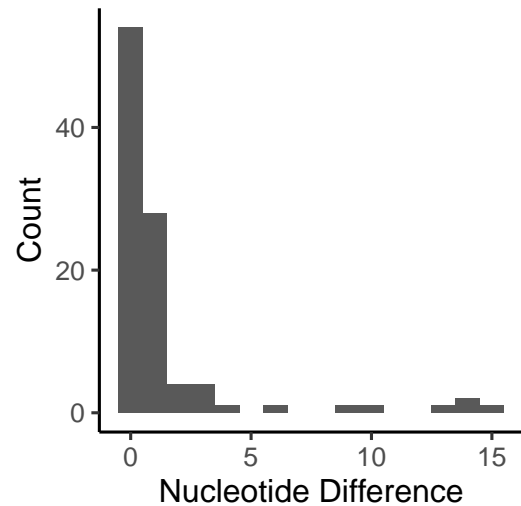
IGHV3-69-1*01

2 sequences assigned
No exact matches.



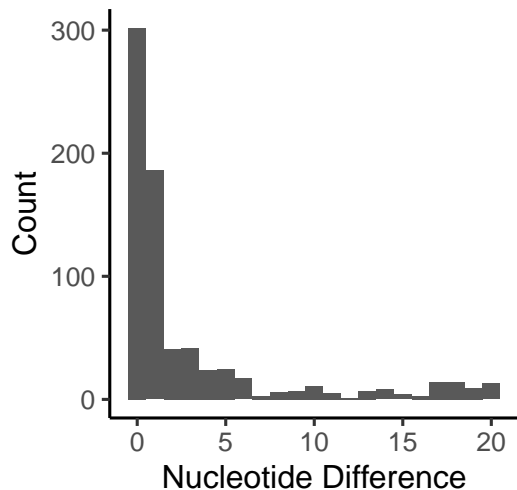
IGHV3-73*01_02

98 sequences assigned
54 (55.1%) exact matches, in which:
52 unique CDR3
5 unique J



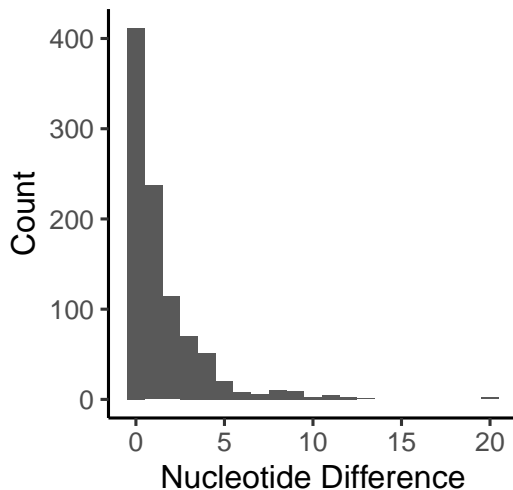
IGHV3-74*01_02

763 sequences assigned
302 (39.6%) exact matches, in which:
281 unique CDR3
6 unique J



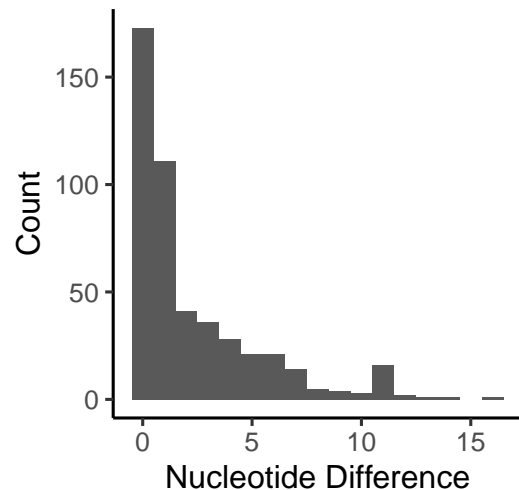
IGHV4-4*02_03

990 sequences assigned
412 (41.6%) exact matches, in which:
388 unique CDR3
6 unique J



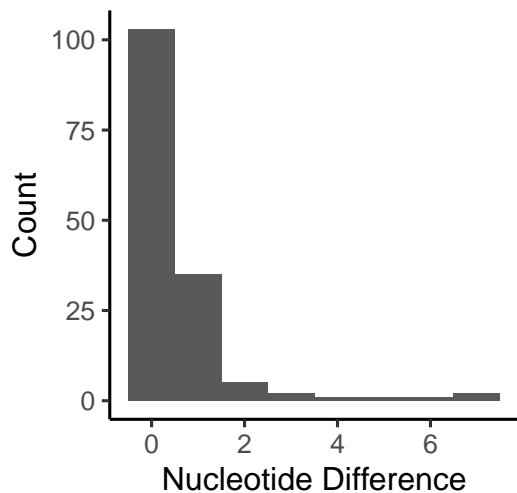
IGHV4-30-4*01

478 sequences assigned
173 (36.2%) exact matches, in which:
168 unique CDR3
5 unique J



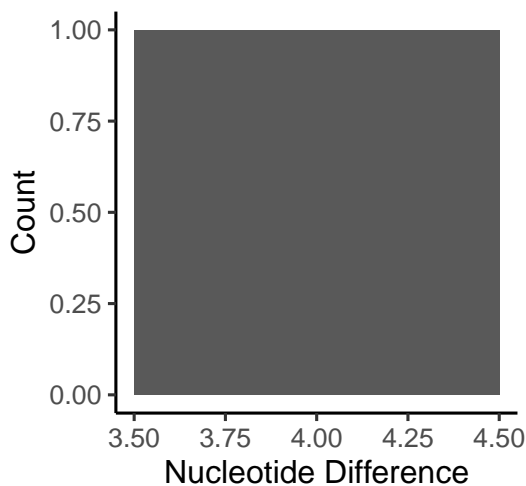
IGHV3-64D*06

150 sequences assigned
103 (68.7%) exact matches, in which:
91 unique CDR3
4 unique J



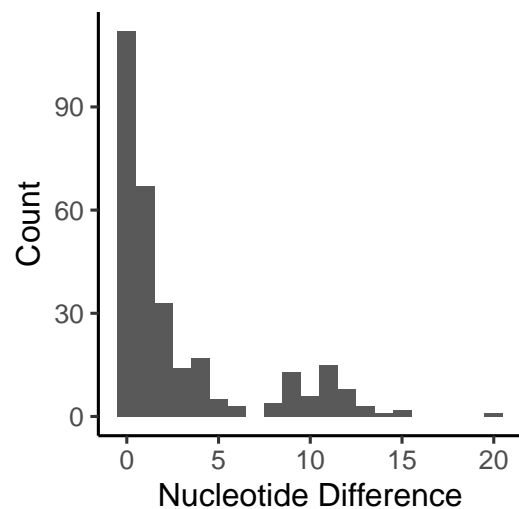
IGHV4-28*03

1 sequences assigned
No exact matches.



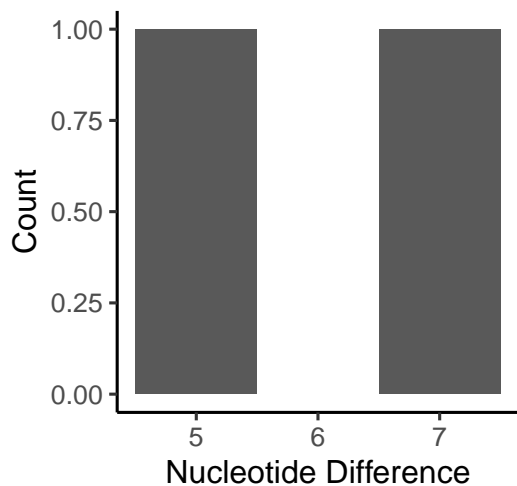
IGHV4-30-2*01

305 sequences assigned
112 (36.7%) exact matches, in which:
94 unique CDR3
6 unique J



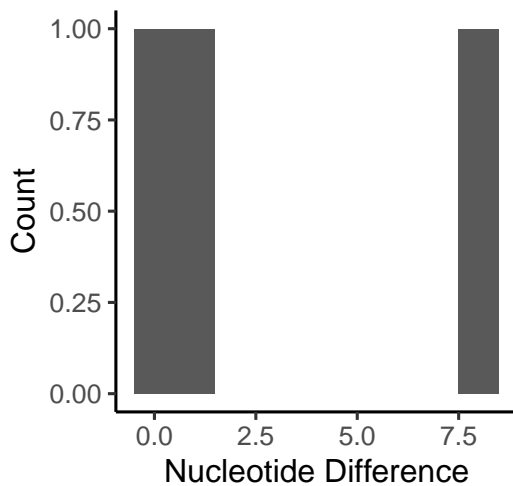
IGHV3-NL1*01

2 sequences assigned
No exact matches.



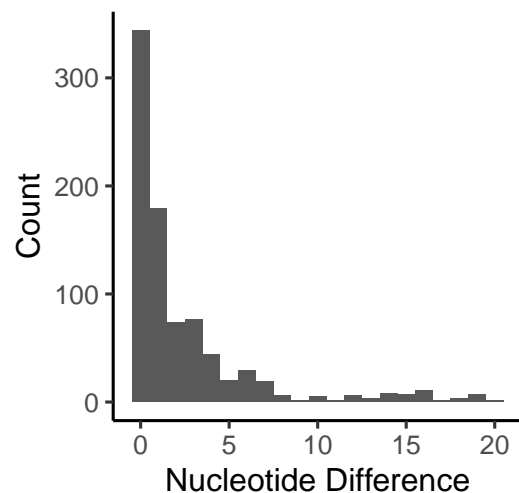
IGHV4-28*01_07

10 sequences assigned
1 (10%) exact matches, in which:
1 unique CDR3
1 unique J



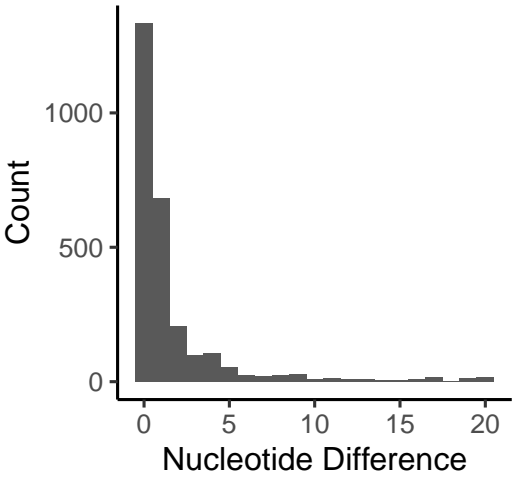
IGHV4-31*02

869 sequences assigned
344 (39.6%) exact matches, in which:
328 unique CDR3
6 unique J



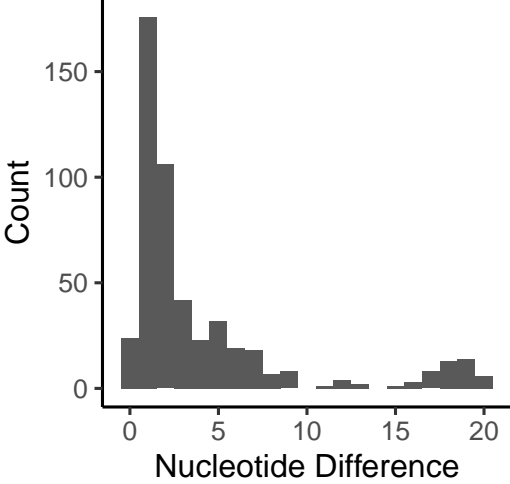
IGHV4-34*01_02

2698 sequences assigned
1333 (49.4%) exact matches, in which:
1216 unique CDR3
6 unique J



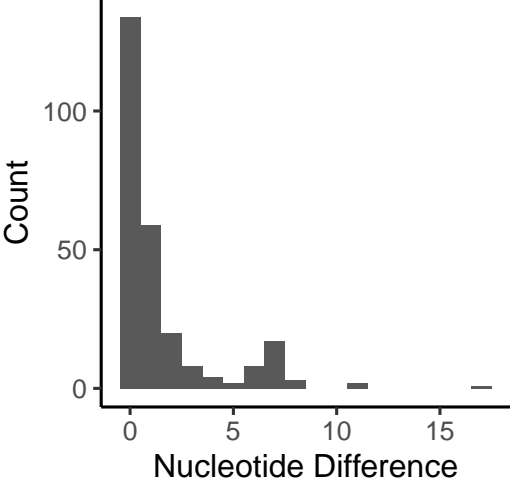
IGHV4-59*12

541 sequences assigned
24 (4.4%) exact matches, in which:
24 unique CDR3
4 unique J



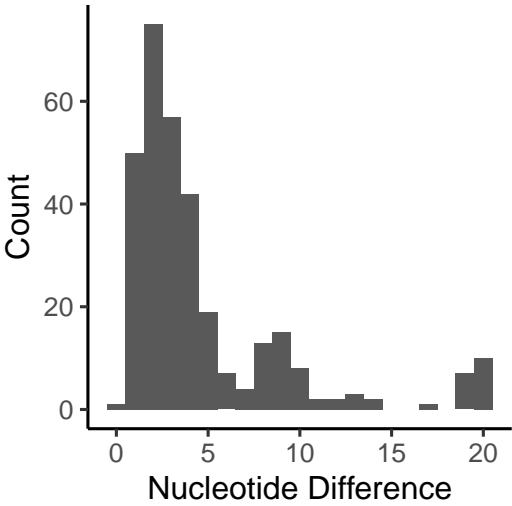
IGHV5-10-1*01_03

258 sequences assigned
134 (51.9%) exact matches, in which:
122 unique CDR3
6 unique J



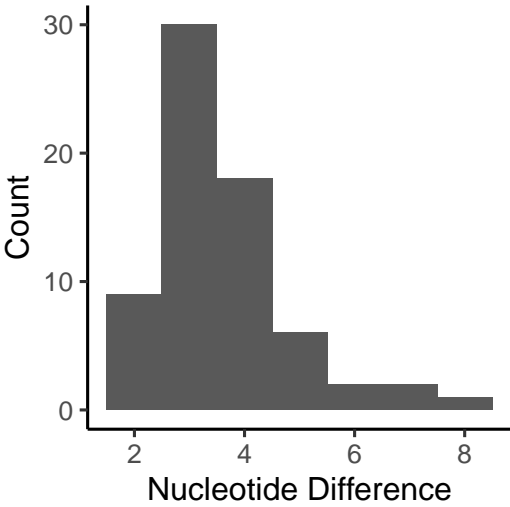
IGHV4-39*07

334 sequences assigned
1 (0.3%) exact matches, in which:
1 unique CDR3
1 unique J



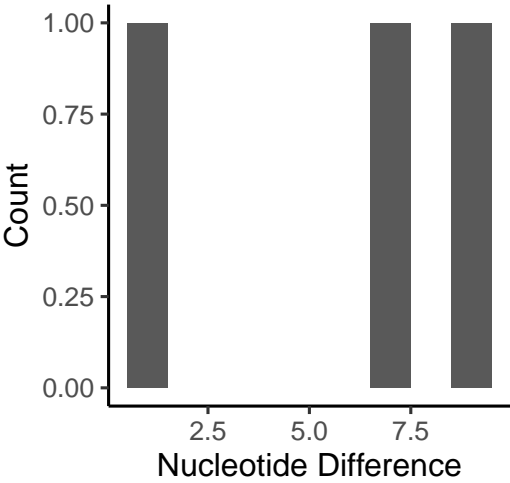
IGHV4-61*05

70 sequences assigned
No exact matches.



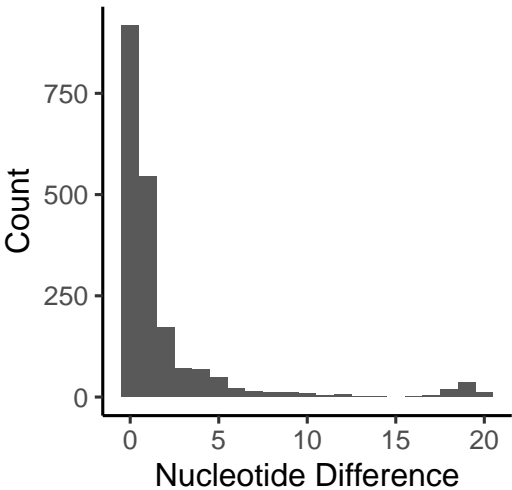
IGHV5-51*04

3 sequences assigned
No exact matches.



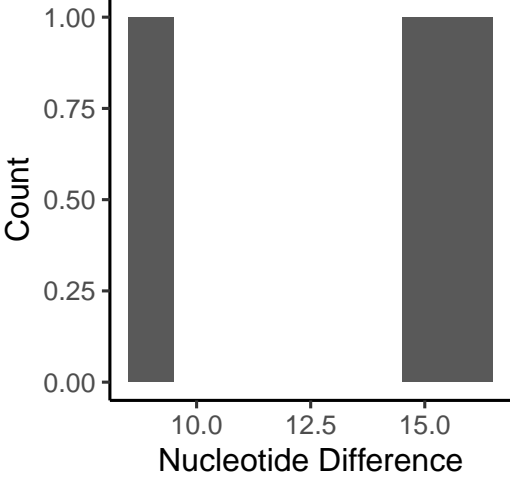
IGHV4-59*08

2169 sequences assigned
918 (42.3%) exact matches, in which:
856 unique CDR3
6 unique J



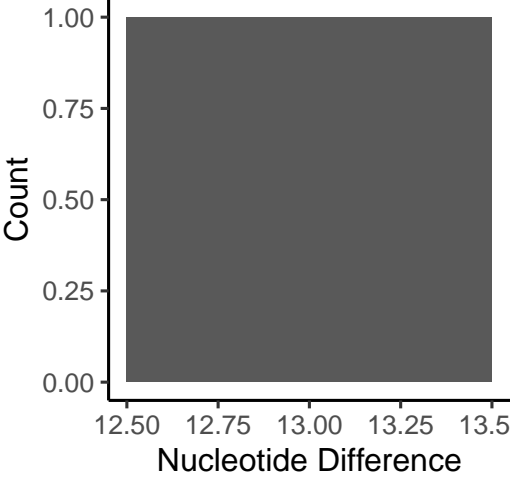
IGHV4/OR15-8*01

3 sequences assigned
No exact matches.



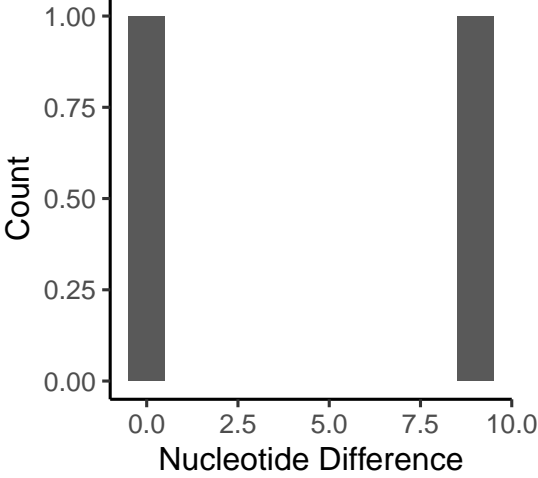
IGHV5-51*06

1 sequences assigned
No exact matches.



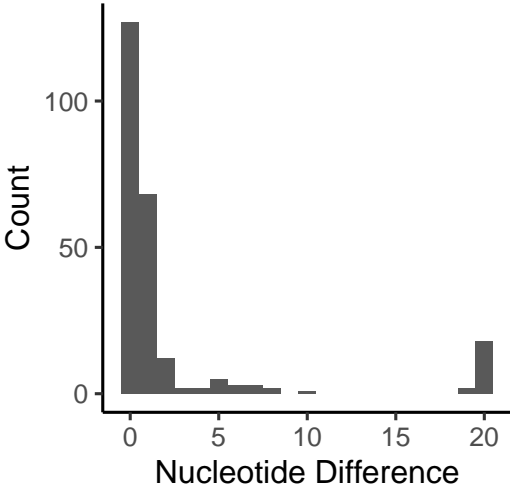
IGHV5-51*07

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



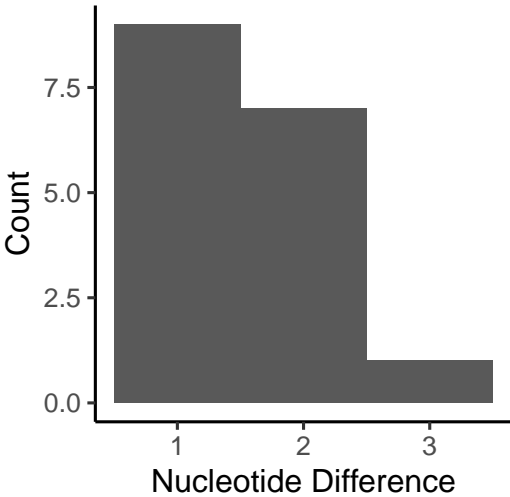
IGHV6-1*01_02

254 sequences assigned
127 (50%) exact matches, in which:
117 unique CDR3
6 unique J

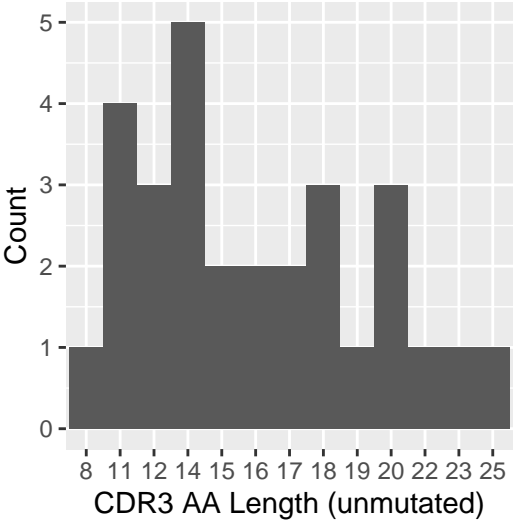


IGHV7-4-1*01

17 sequences assigned
No exact matches.



IGHV3-72*01_T159A_C162T_C163T_G164T_T165C_C167T_A173G_A181T_C183T_A184G_T18





[illegible]