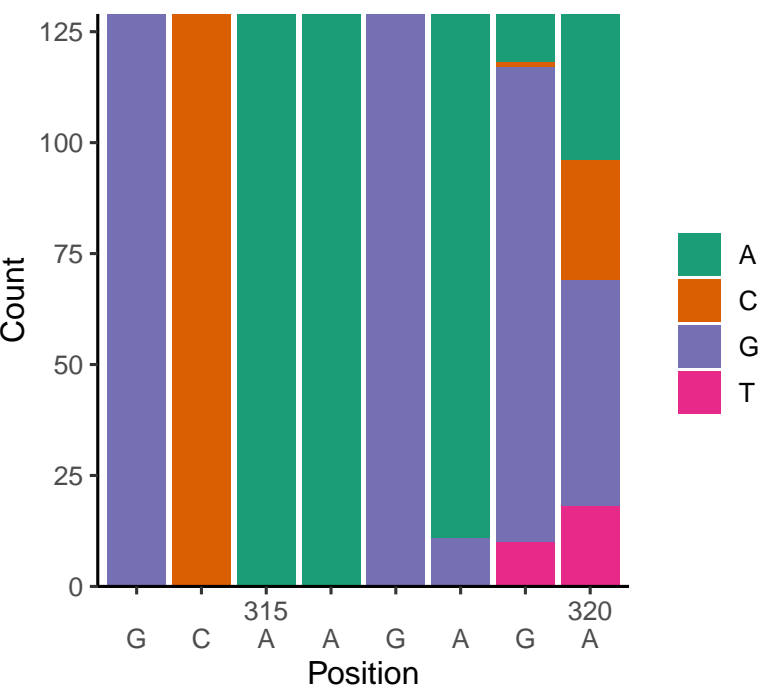
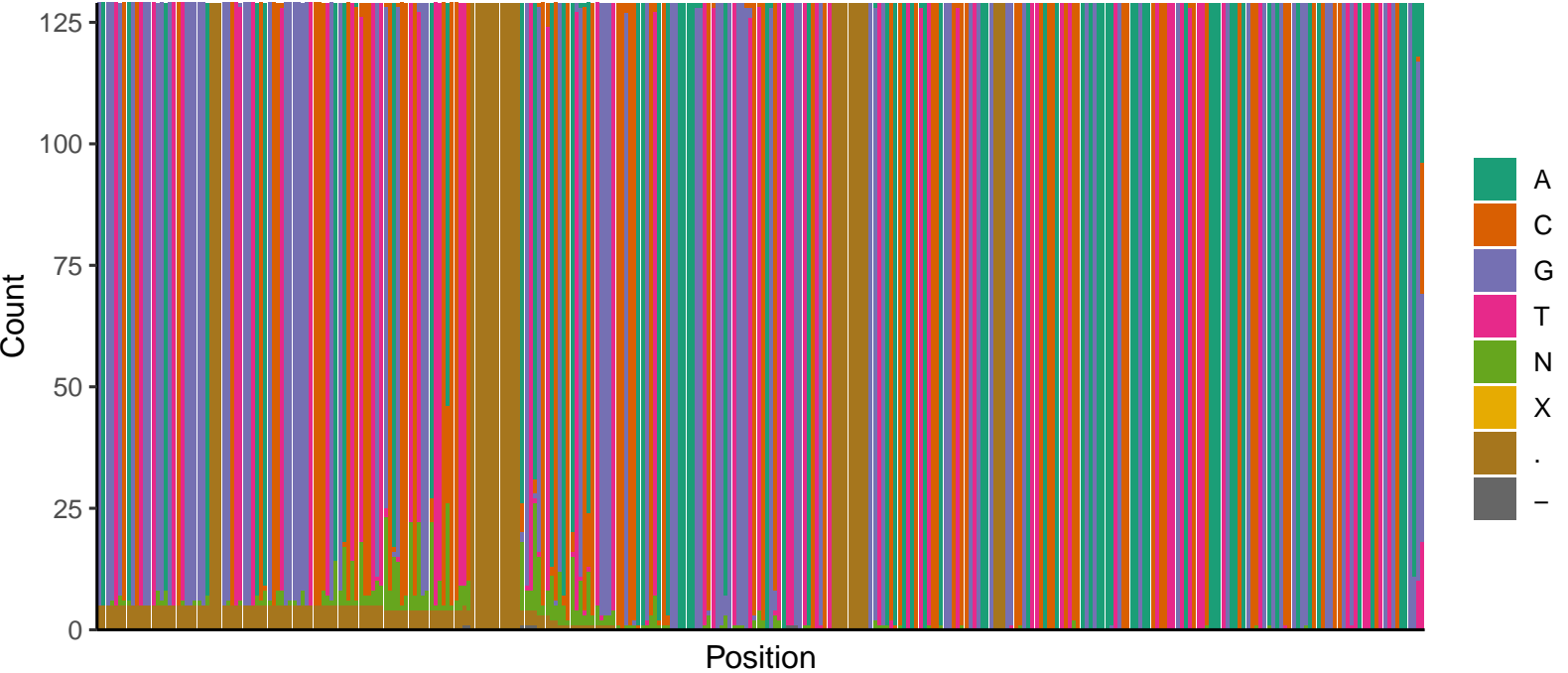


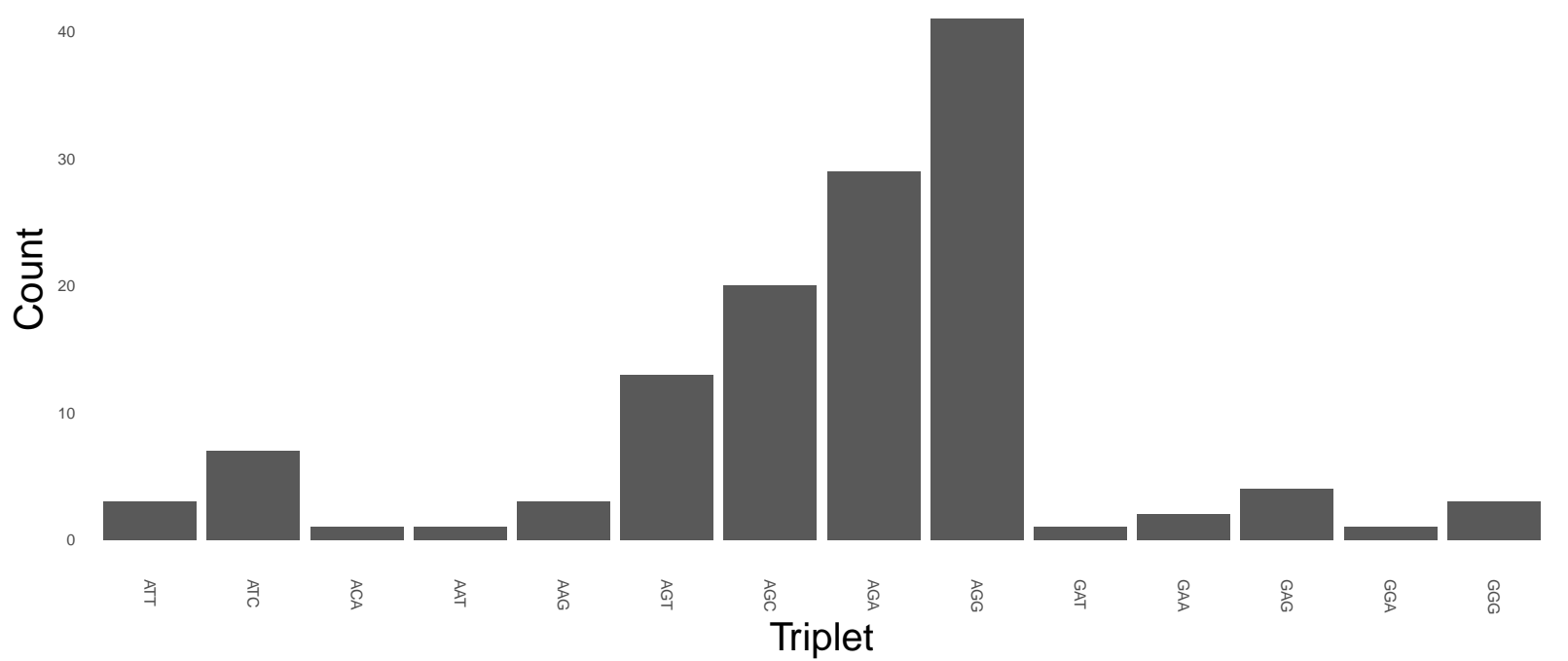
Gene IGHV3-13*01_G290A_T300C



Gene IGHV3-13*01_G290A_T300C

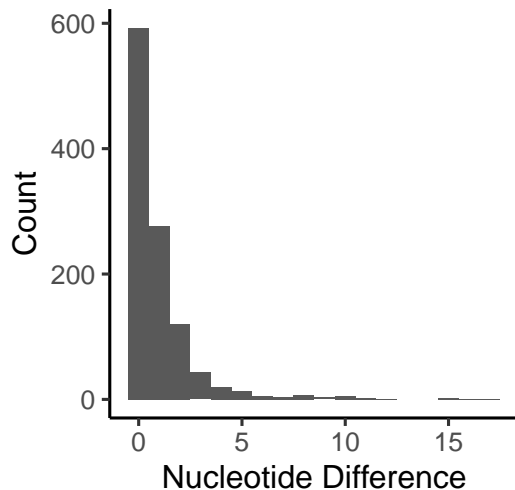


IGHV3-13*01_G290A_T300C- Final 3 nucleotides as a triplet



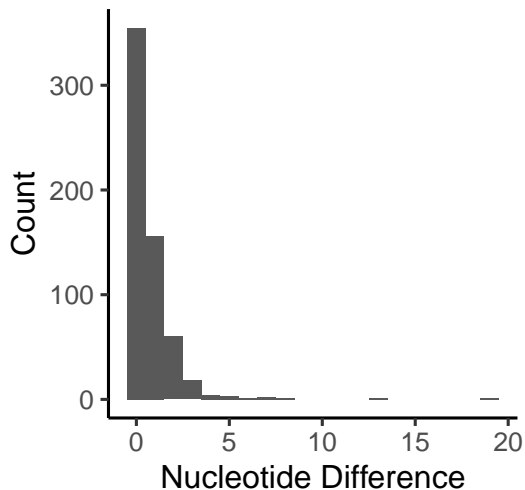
IGHV1-2*04

1099 sequences assigned
593 (54%) exact matches, in which:
492 unique CDR3
6 unique J



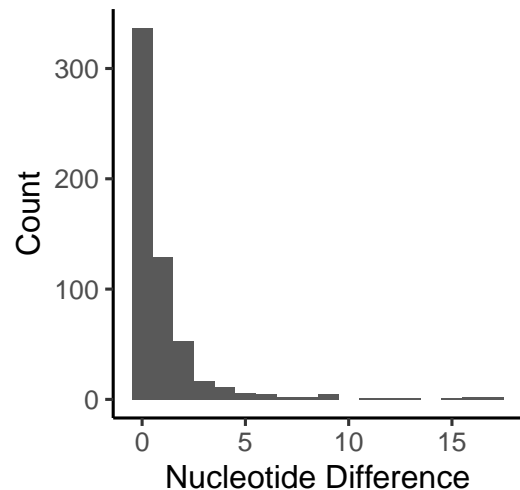
IGHV1-24*01

602 sequences assigned
355 (59%) exact matches, in which:
304 unique CDR3
6 unique J



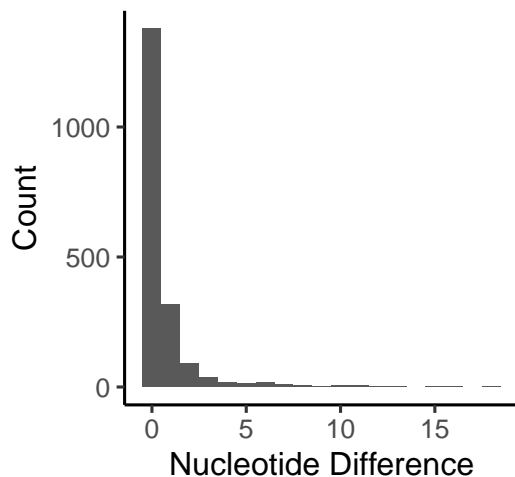
IGHV1-46*03

575 sequences assigned
337 (58.6%) exact matches, in which:
284 unique CDR3
6 unique J



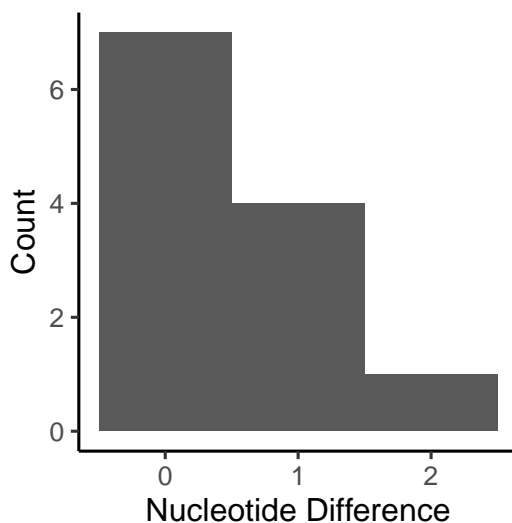
IGHV1-3*01

1903 sequences assigned
1378 (72.4%) exact matches, in which:
1144 unique CDR3
6 unique J



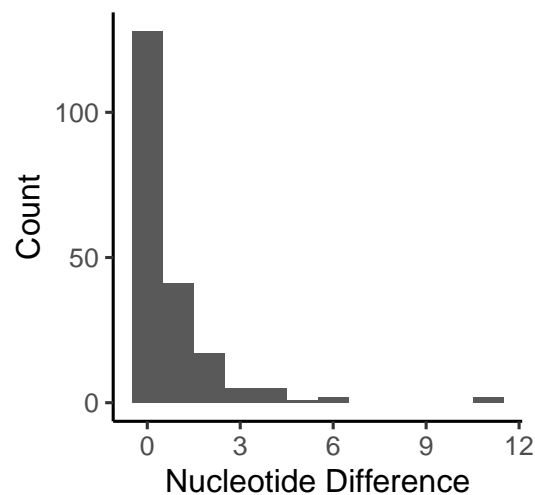
IGHV1-45*02

12 sequences assigned
7 (58.3%) exact matches, in which:
7 unique CDR3
3 unique J



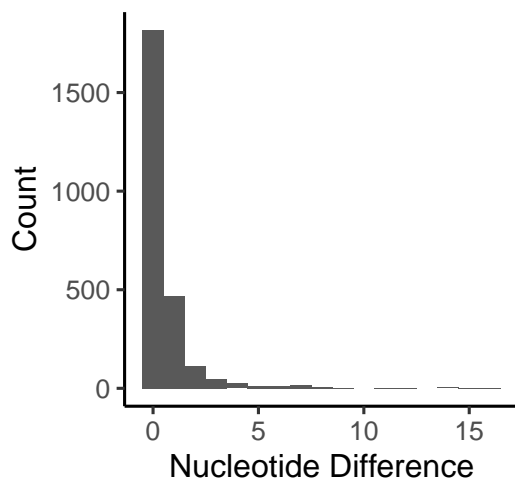
IGHV1-58*01

201 sequences assigned
128 (63.7%) exact matches, in which:
104 unique CDR3
5 unique J



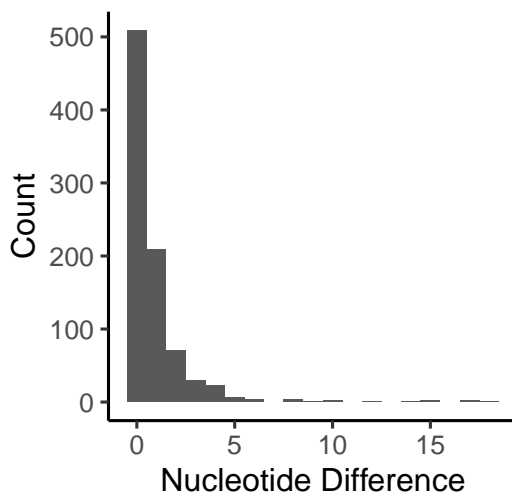
IGHV1-18*01

2530 sequences assigned
1817 (71.8%) exact matches, in which:
1526 unique CDR3
6 unique J



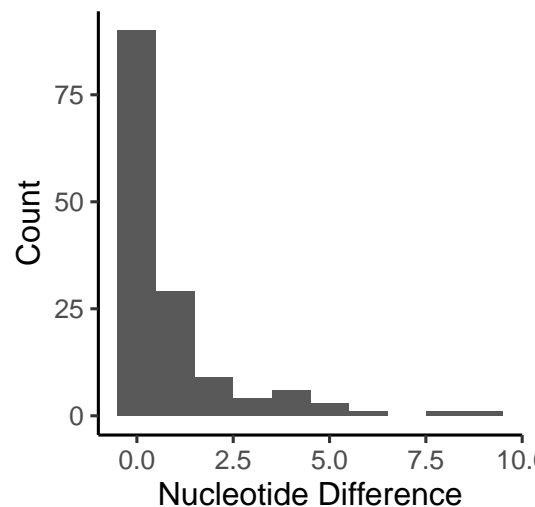
IGHV1-46*01

866 sequences assigned
509 (58.8%) exact matches, in which:
422 unique CDR3
6 unique J



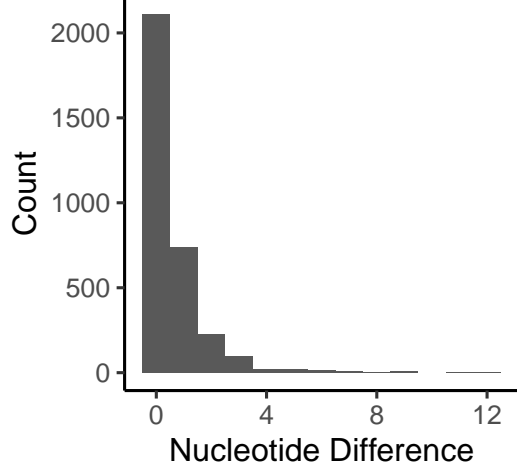
IGHV1-58*02

144 sequences assigned
90 (62.5%) exact matches, in which:
77 unique CDR3
5 unique J



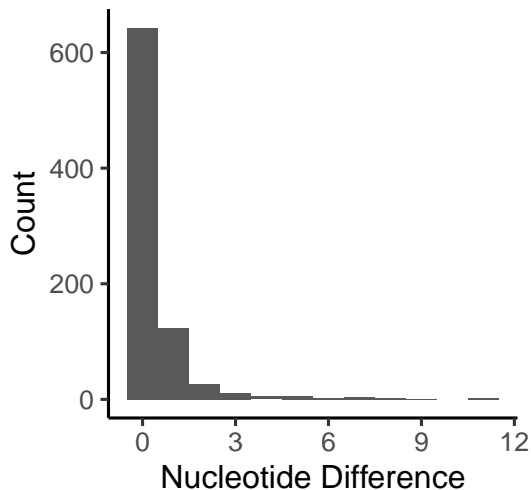
IGHV1-69*01

3255 sequences assigned
2109 (64.8%) exact matches, in which:
1643 unique CDR3
6 unique J



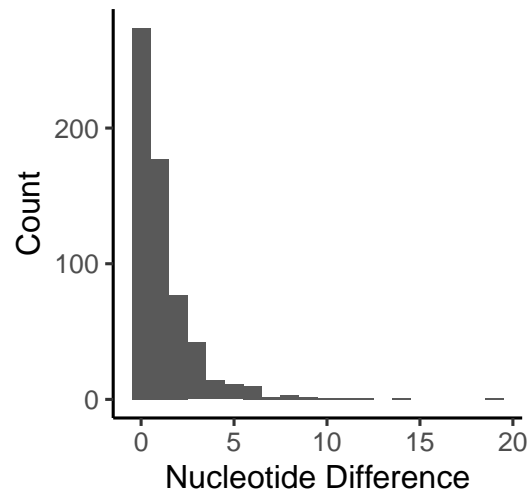
IGHV2-26*01

825 sequences assigned
643 (77.9%) exact matches, in which:
546 unique CDR3
6 unique J



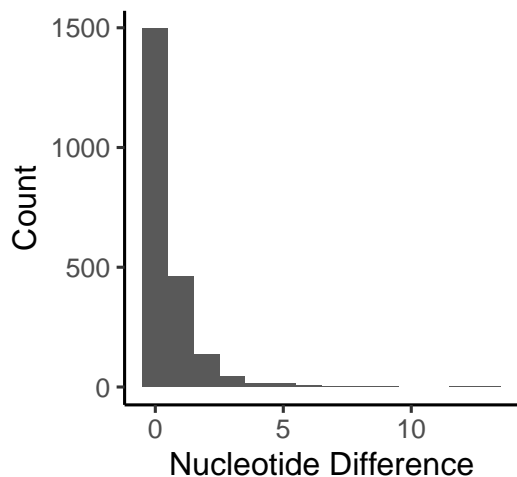
IGHV3-7*03

618 sequences assigned
274 (44.3%) exact matches, in which:
248 unique CDR3
6 unique J



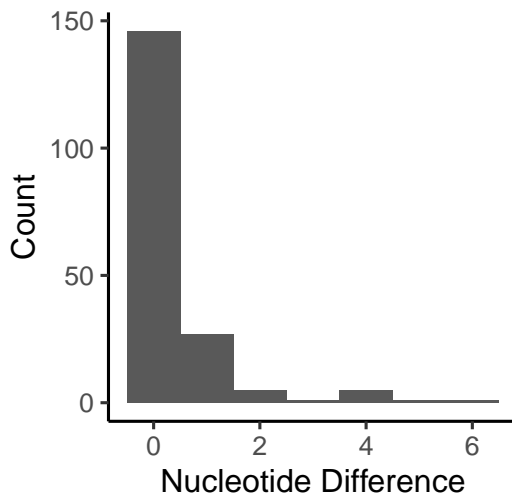
IGHV1-69*04

2187 sequences assigned
1496 (68.4%) exact matches, in which:
1135 unique CDR3
6 unique J



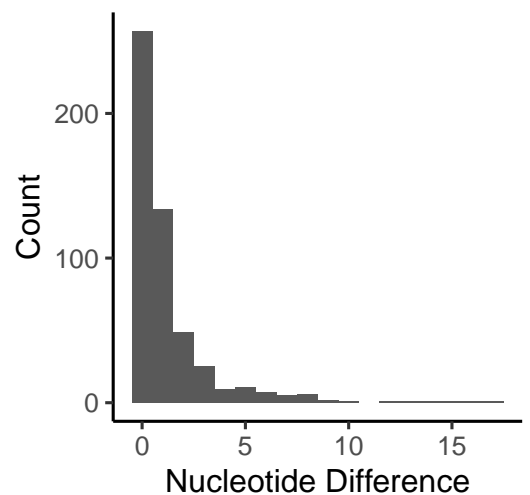
IGHV2-70*01

186 sequences assigned
146 (78.5%) exact matches, in which:
135 unique CDR3
5 unique J



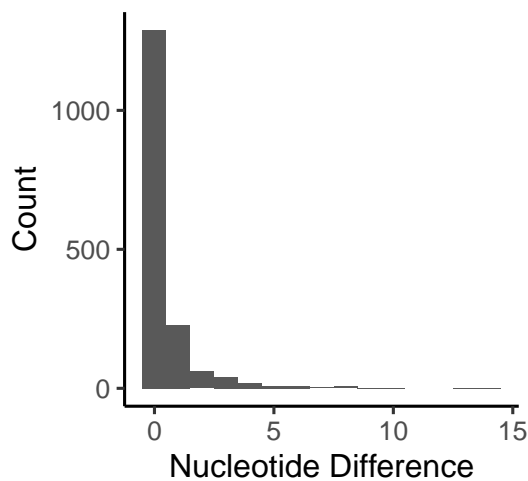
IGHV3-7*04

517 sequences assigned
257 (49.7%) exact matches, in which:
233 unique CDR3
6 unique J



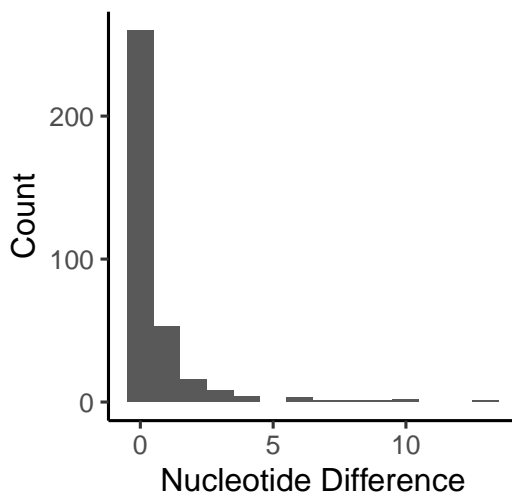
IGHV2-5*02

1669 sequences assigned
1289 (77.2%) exact matches, in which:
1065 unique CDR3
6 unique J



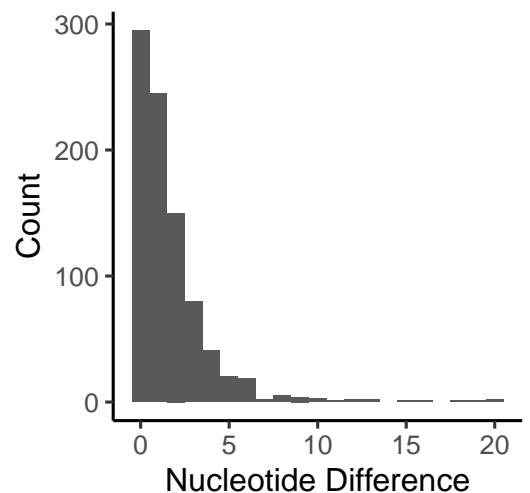
IGHV2-70*15

350 sequences assigned
260 (74.3%) exact matches, in which:
245 unique CDR3
6 unique J



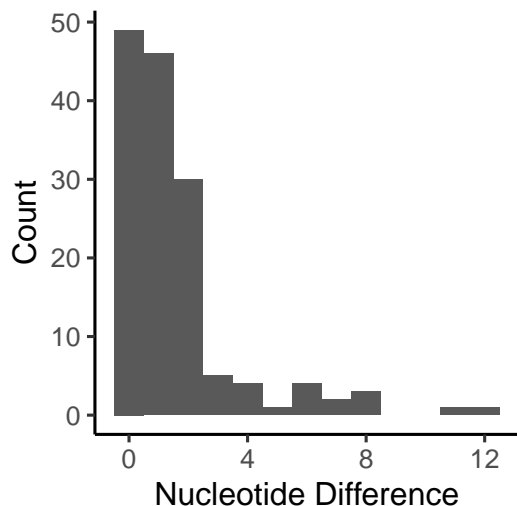
IGHV3-11*05

876 sequences assigned
295 (33.7%) exact matches, in which:
263 unique CDR3
6 unique J



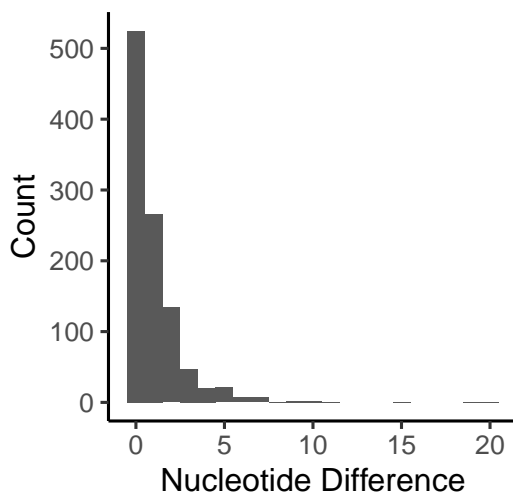
IGHV3-11*06

146 sequences assigned
49 (33.6%) exact matches, in which:
45 unique CDR3
5 unique J



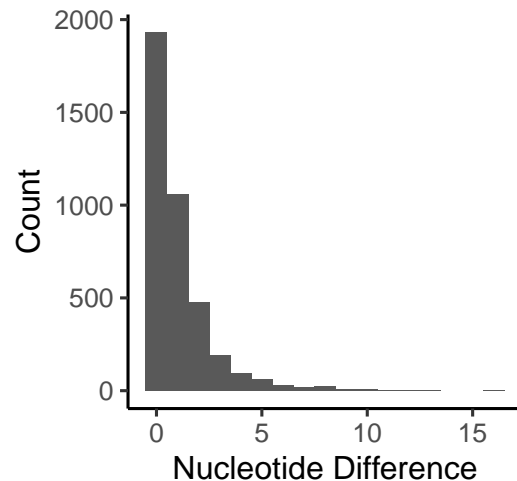
IGHV3-15*01

1036 sequences assigned
525 (50.7%) exact matches, in which:
475 unique CDR3
6 unique J



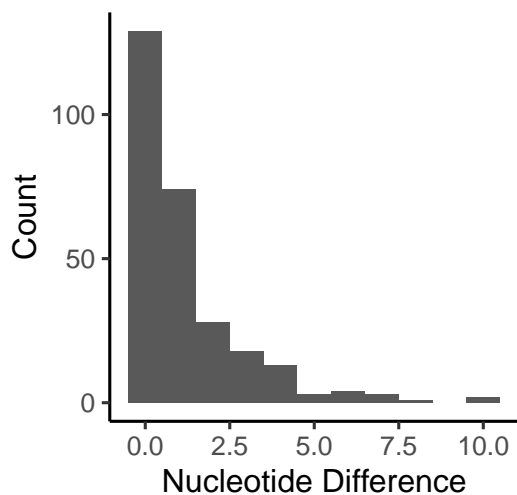
IGHV3-21*01

3911 sequences assigned
1931 (49.4%) exact matches, in which:
1667 unique CDR3
6 unique J



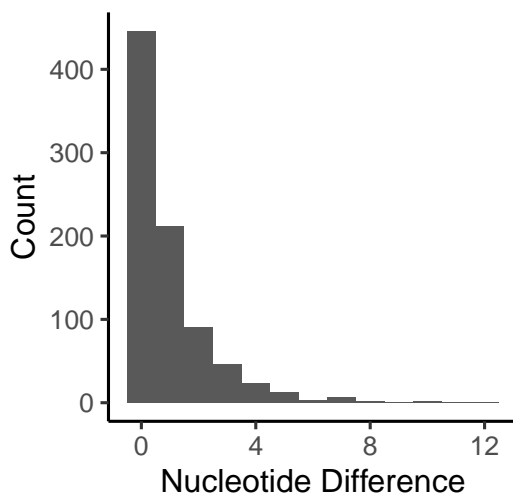
IGHV3-13*04

275 sequences assigned
129 (46.9%) exact matches, in which:
114 unique CDR3
5 unique J



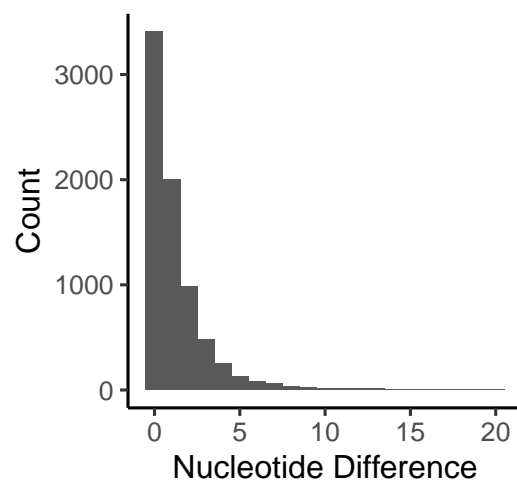
IGHV3-15*07

848 sequences assigned
446 (52.6%) exact matches, in which:
403 unique CDR3
6 unique J



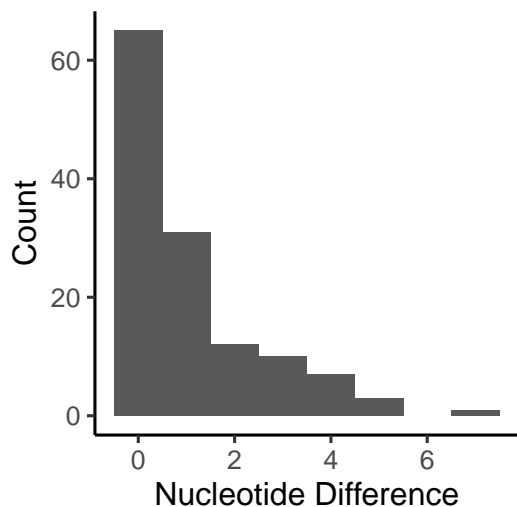
IGHV3-23*01

7545 sequences assigned
3407 (45.2%) exact matches, in which:
3006 unique CDR3
6 unique J



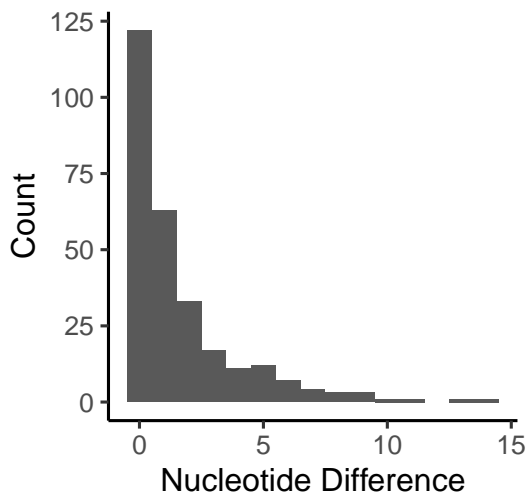
IGHV3-13*01_G290A_T3I

129 sequences assigned
65 (50.4%) exact matches, in which:
56 unique CDR3
5 unique J



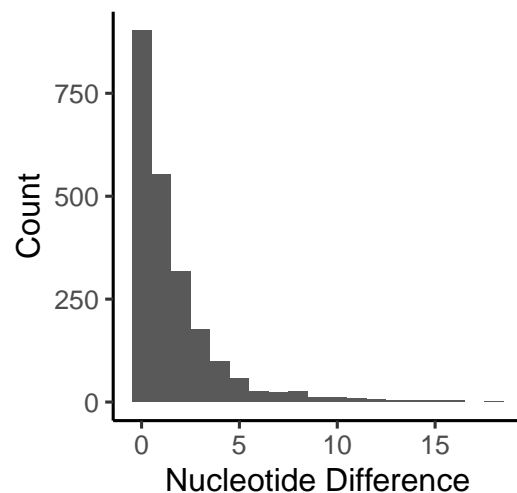
IGHV3-20*04

280 sequences assigned
122 (43.6%) exact matches, in which:
110 unique CDR3
5 unique J



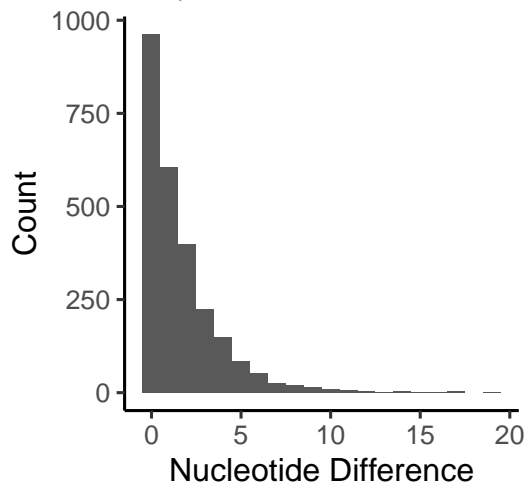
IGHV3-30*18

2235 sequences assigned
903 (40.4%) exact matches, in which:
811 unique CDR3
6 unique J



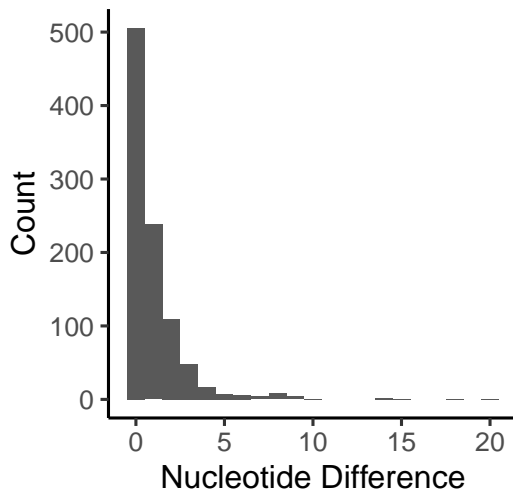
IGHV3–33*01

2572 sequences assigned
962 (37.4%) exact matches, in which:
875 unique CDR3
6 unique J



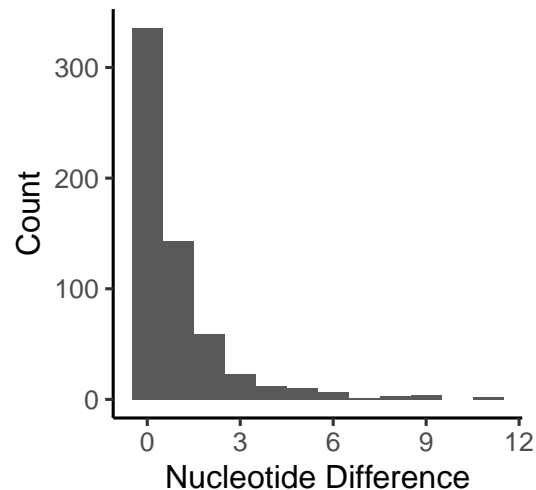
IGHV3–48*02

956 sequences assigned
506 (52.9%) exact matches, in which:
461 unique CDR3
6 unique J



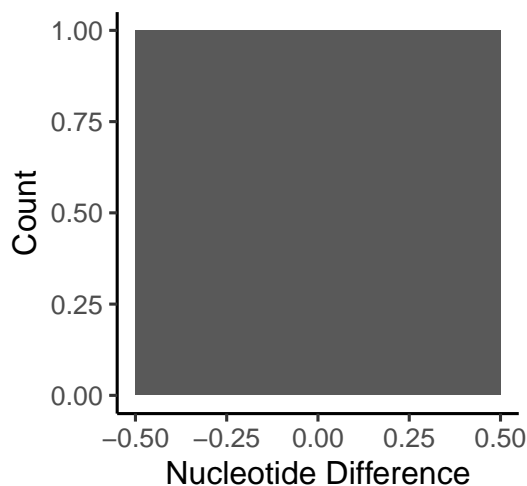
IGHV3–53*01

600 sequences assigned
336 (56%) exact matches, in which:
295 unique CDR3
6 unique J



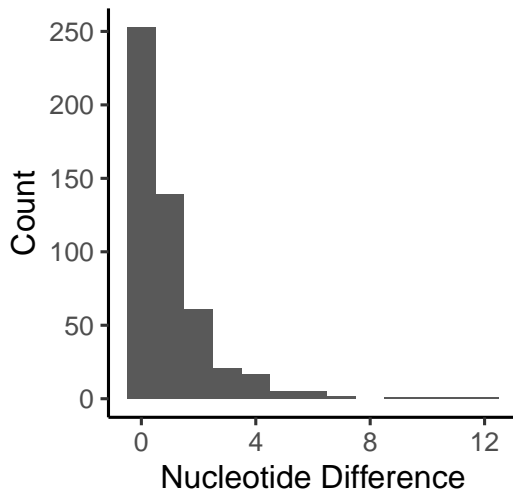
IGHV3–47*02

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



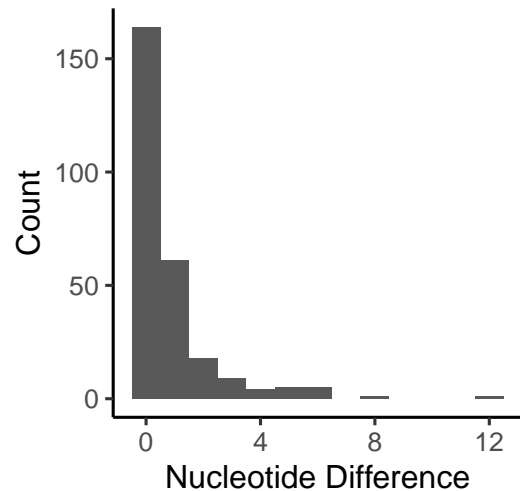
IGHV3–49*03

507 sequences assigned
253 (49.9%) exact matches, in which:
224 unique CDR3
6 unique J



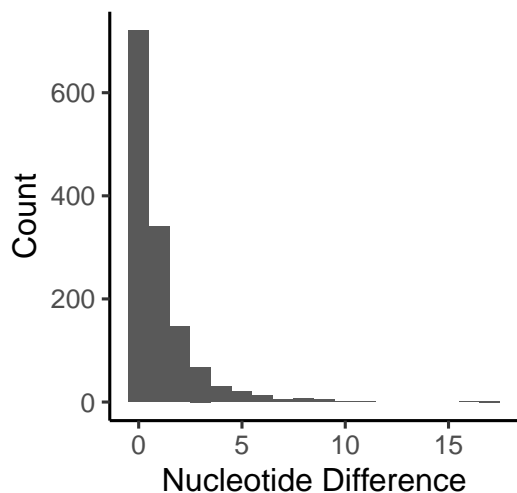
IGHV3–53*04

268 sequences assigned
164 (61.2%) exact matches, in which:
151 unique CDR3
6 unique J



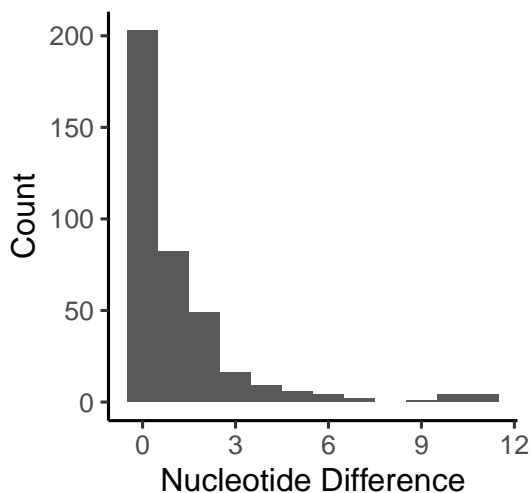
IGHV3–48*01

1362 sequences assigned
721 (52.9%) exact matches, in which:
637 unique CDR3
6 unique J



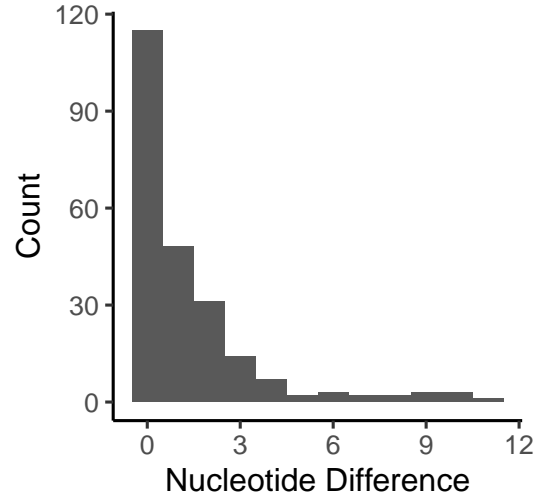
IGHV3–49*05

380 sequences assigned
203 (53.4%) exact matches, in which:
181 unique CDR3
5 unique J



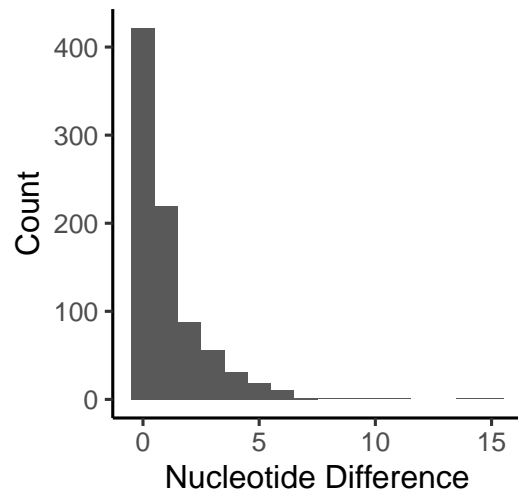
IGHV3–64*01

231 sequences assigned
115 (49.8%) exact matches, in which:
102 unique CDR3
6 unique J



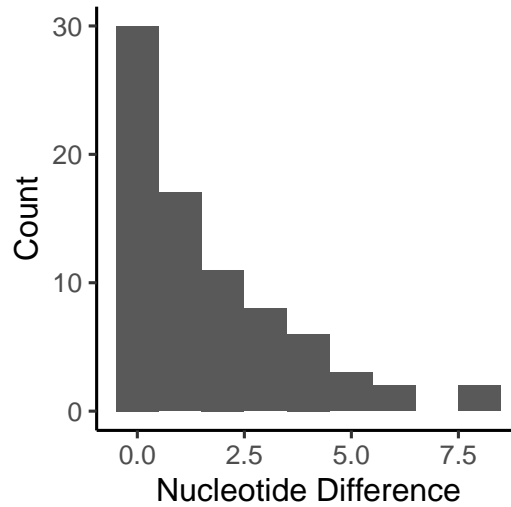
IGHV3-66*01

855 sequences assigned
422 (49.4%) exact matches, in which:
360 unique CDR3
6 unique J



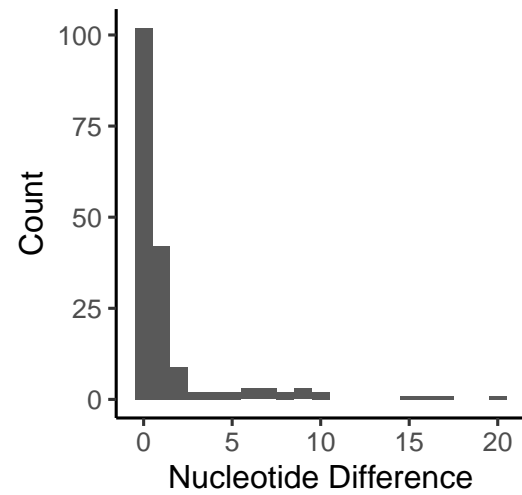
IGHV3-73*02

79 sequences assigned
30 (38%) exact matches, in which:
26 unique CDR3
4 unique J



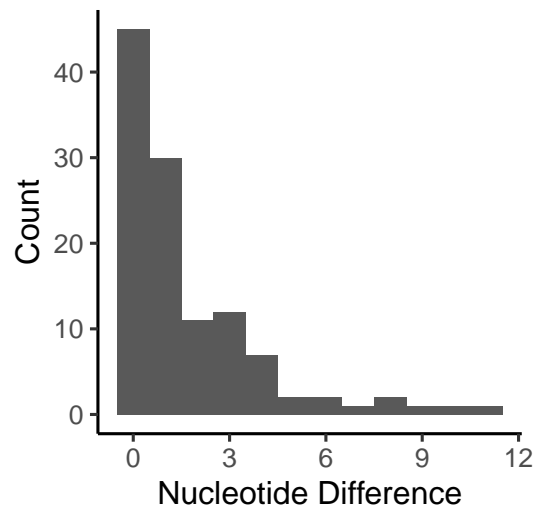
IGHV4-4*02

177 sequences assigned
102 (57.6%) exact matches, in which:
94 unique CDR3
6 unique J



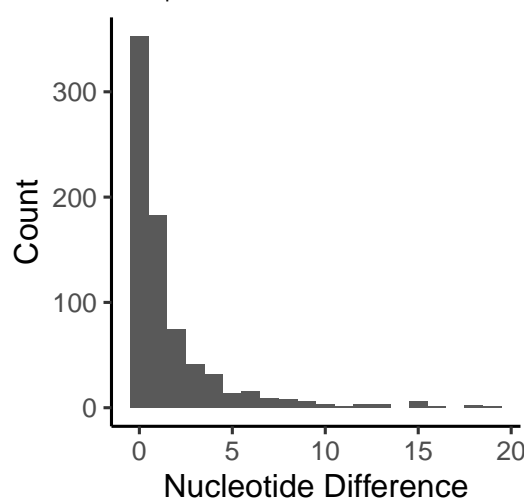
IGHV3-72*01

116 sequences assigned
45 (38.8%) exact matches, in which:
40 unique CDR3
4 unique J



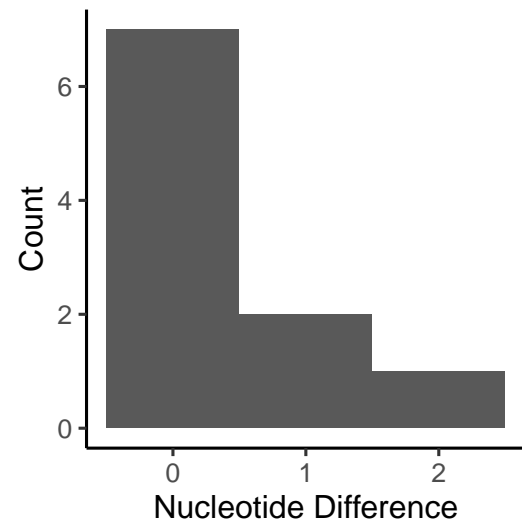
IGHV3-74*01

758 sequences assigned
353 (46.6%) exact matches, in which:
315 unique CDR3
6 unique J



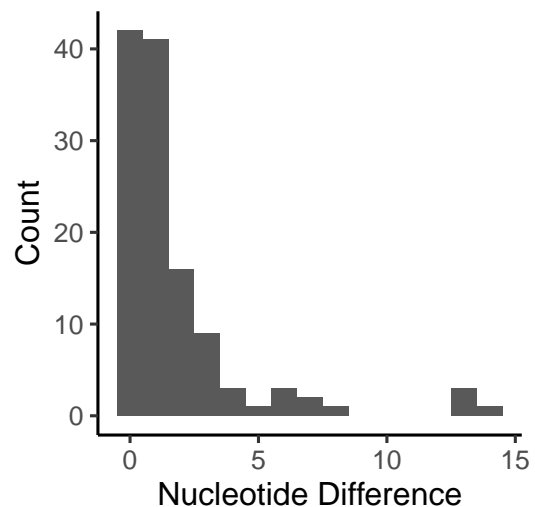
IGHV4-28*01

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



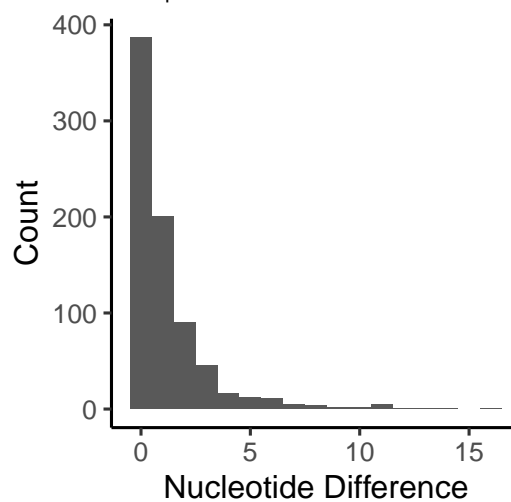
IGHV3-73*01

122 sequences assigned
42 (34.4%) exact matches, in which:
40 unique CDR3
4 unique J



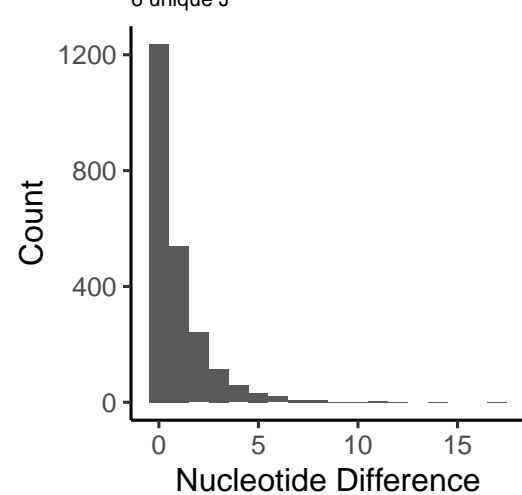
IGHV3-64D*06

786 sequences assigned
387 (49.2%) exact matches, in which:
342 unique CDR3
6 unique J



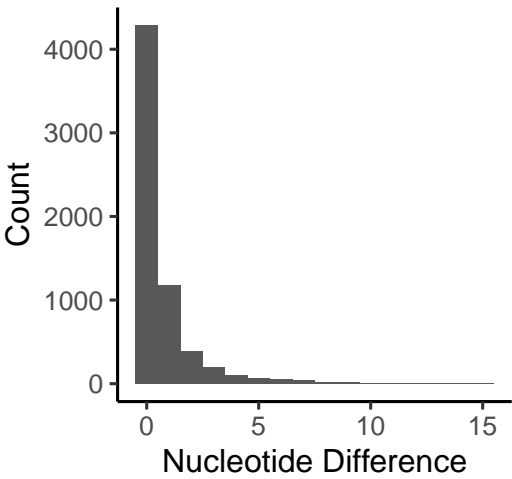
IGHV4-31*03

2268 sequences assigned
1237 (54.5%) exact matches, in which:
1055 unique CDR3
6 unique J



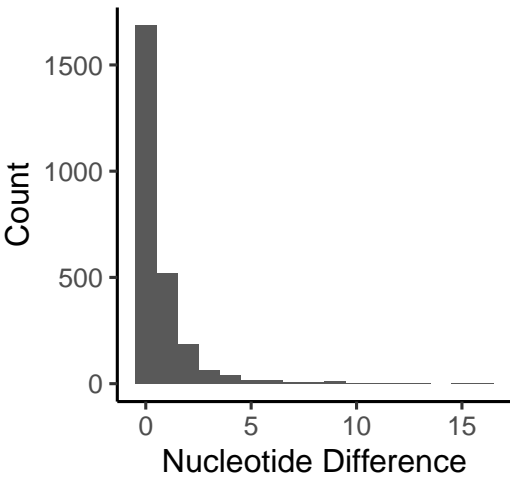
IGHV4-34*01

6371 sequences assigned
4285 (67.3%) exact matches, in which:
3337 unique CDR3
6 unique J



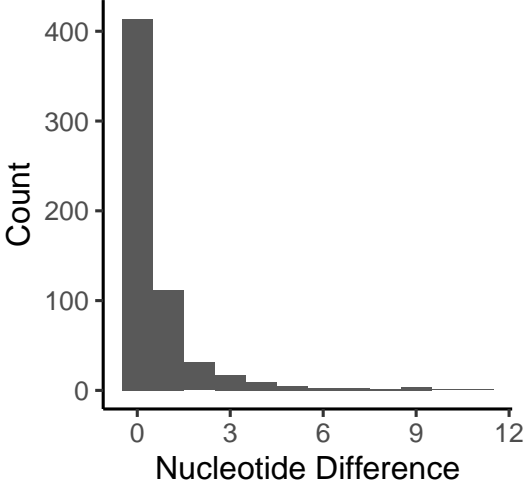
IGHV4-59*01

2567 sequences assigned
1686 (65.7%) exact matches, in which:
1428 unique CDR3
6 unique J



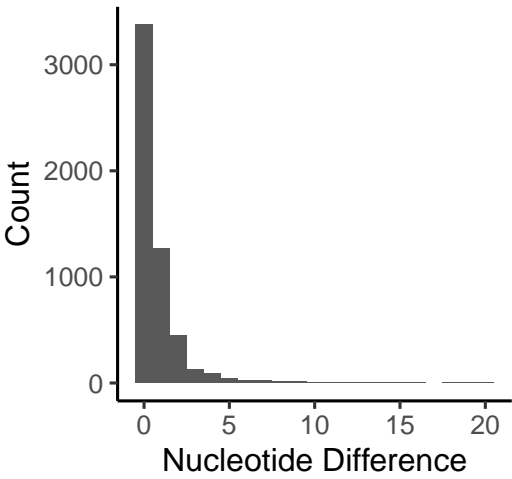
IGHV5-10-1*01

602 sequences assigned
414 (68.8%) exact matches, in which:
364 unique CDR3
6 unique J



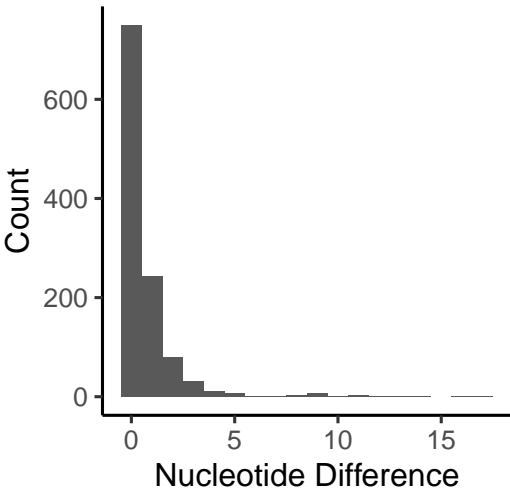
IGHV4-39*01

5474 sequences assigned
3377 (61.7%) exact matches, in which:
2748 unique CDR3
6 unique J



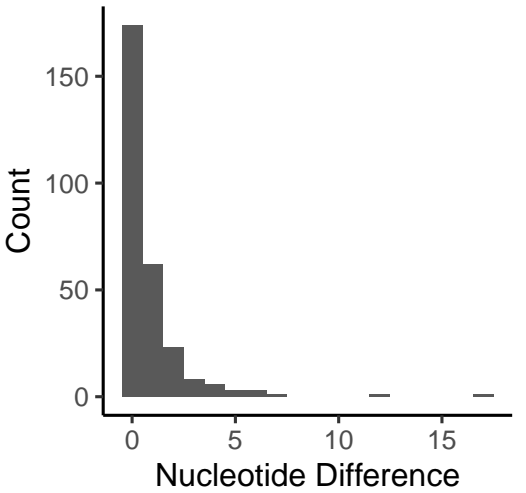
IGHV4-59*08

1154 sequences assigned
750 (65%) exact matches, in which:
648 unique CDR3
6 unique J



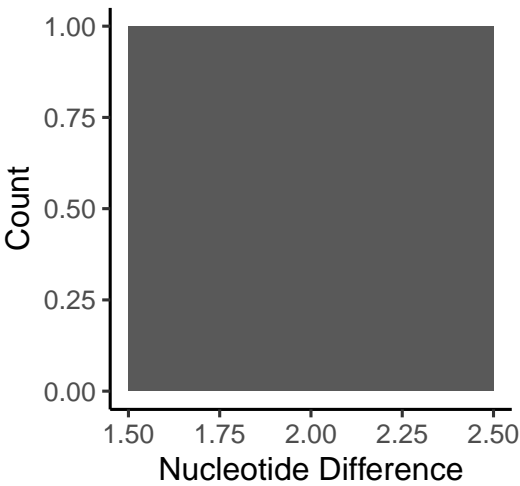
IGHV5-10-1*03

283 sequences assigned
174 (61.5%) exact matches, in which:
149 unique CDR3
6 unique J



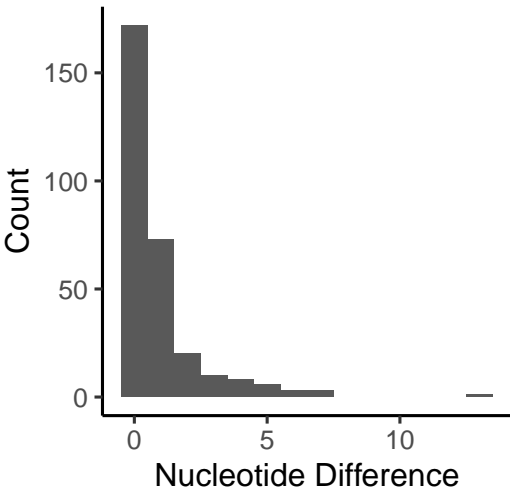
IGHV4-55*02

1 sequences assigned
No exact matches.



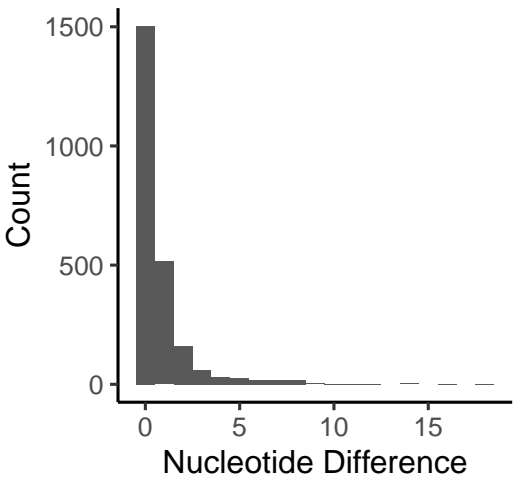
IGHV4-61*01

296 sequences assigned
172 (58.1%) exact matches, in which:
152 unique CDR3
5 unique J



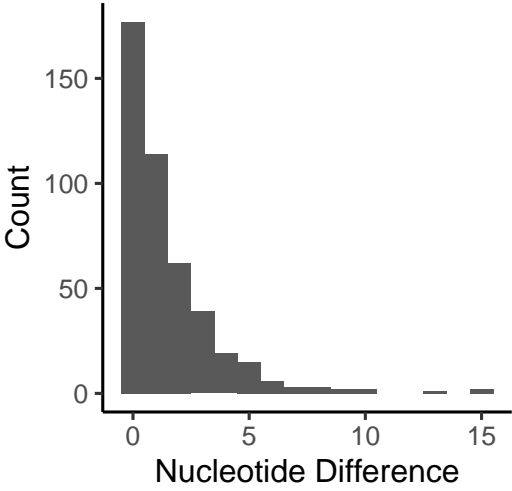
IGHV5-51*01

2368 sequences assigned
1503 (63.5%) exact matches, in which:
1277 unique CDR3
6 unique J



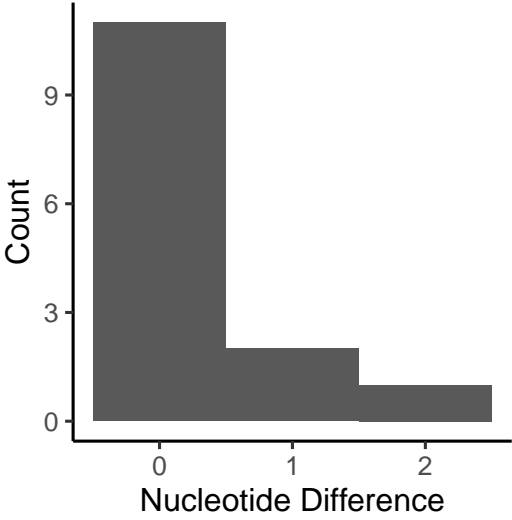
IGHV6-1*01

445 sequences assigned
177 (39.8%) exact matches, in which:
161 unique CDR3
6 unique J



IGHV7-4-1*01

14 sequences assigned
11 (78.6%) exact matches, in which:
9 unique CDR3
3 unique J



IGHV3-13*01_G290A_T300C

