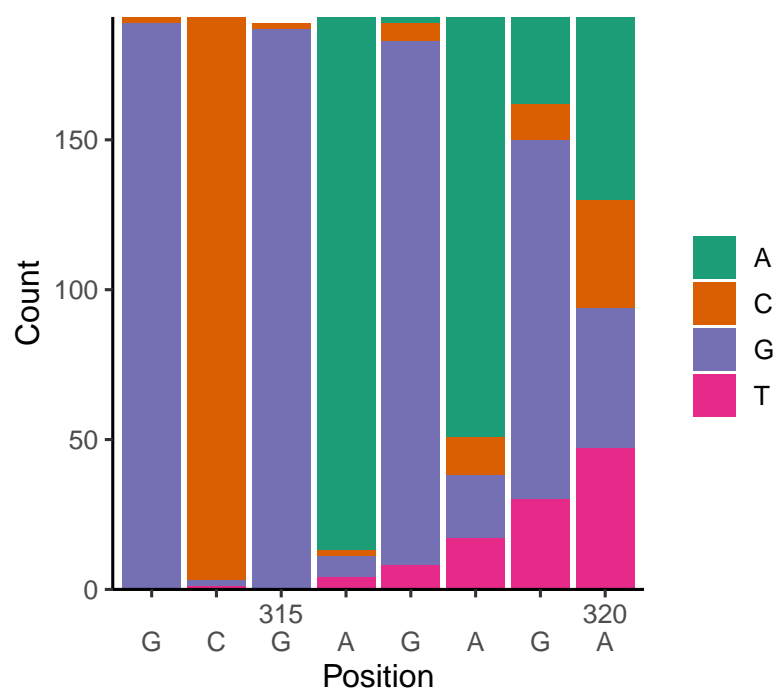
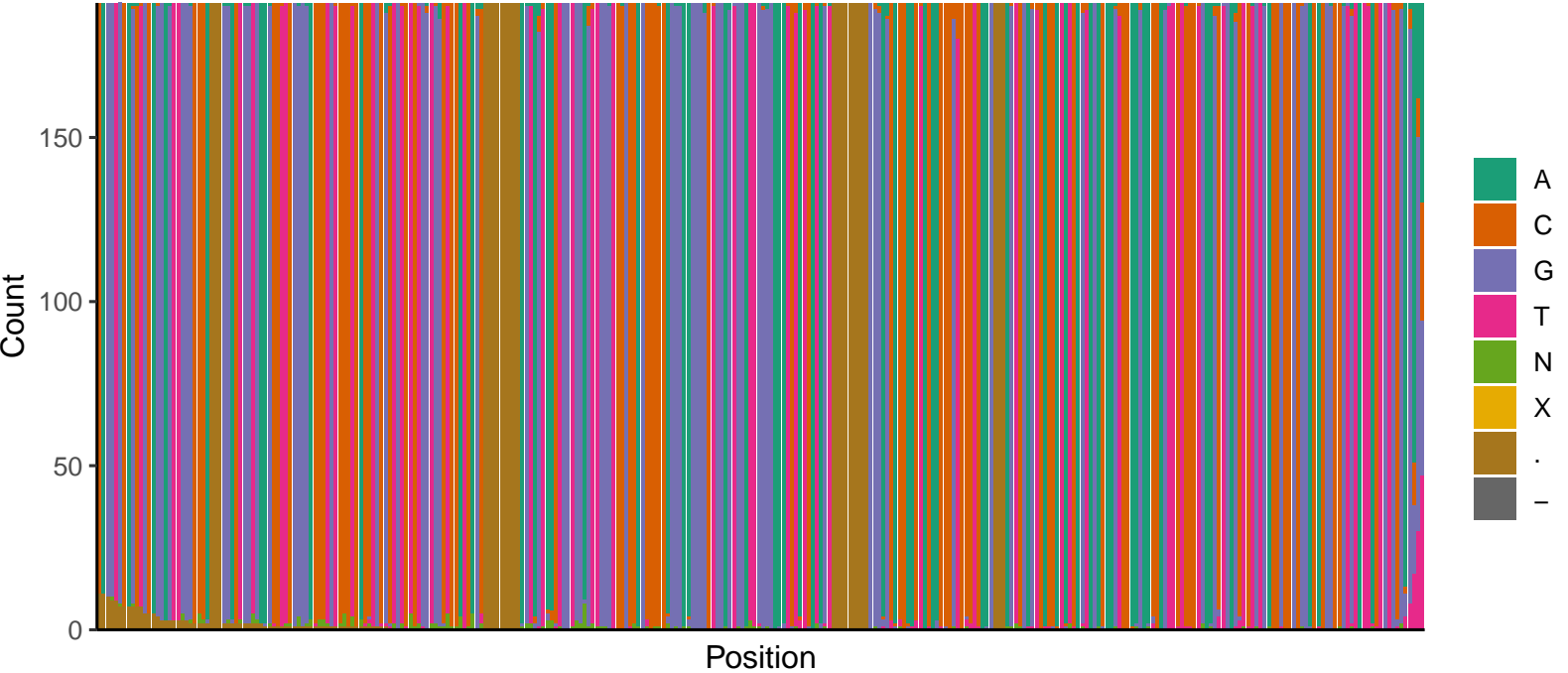


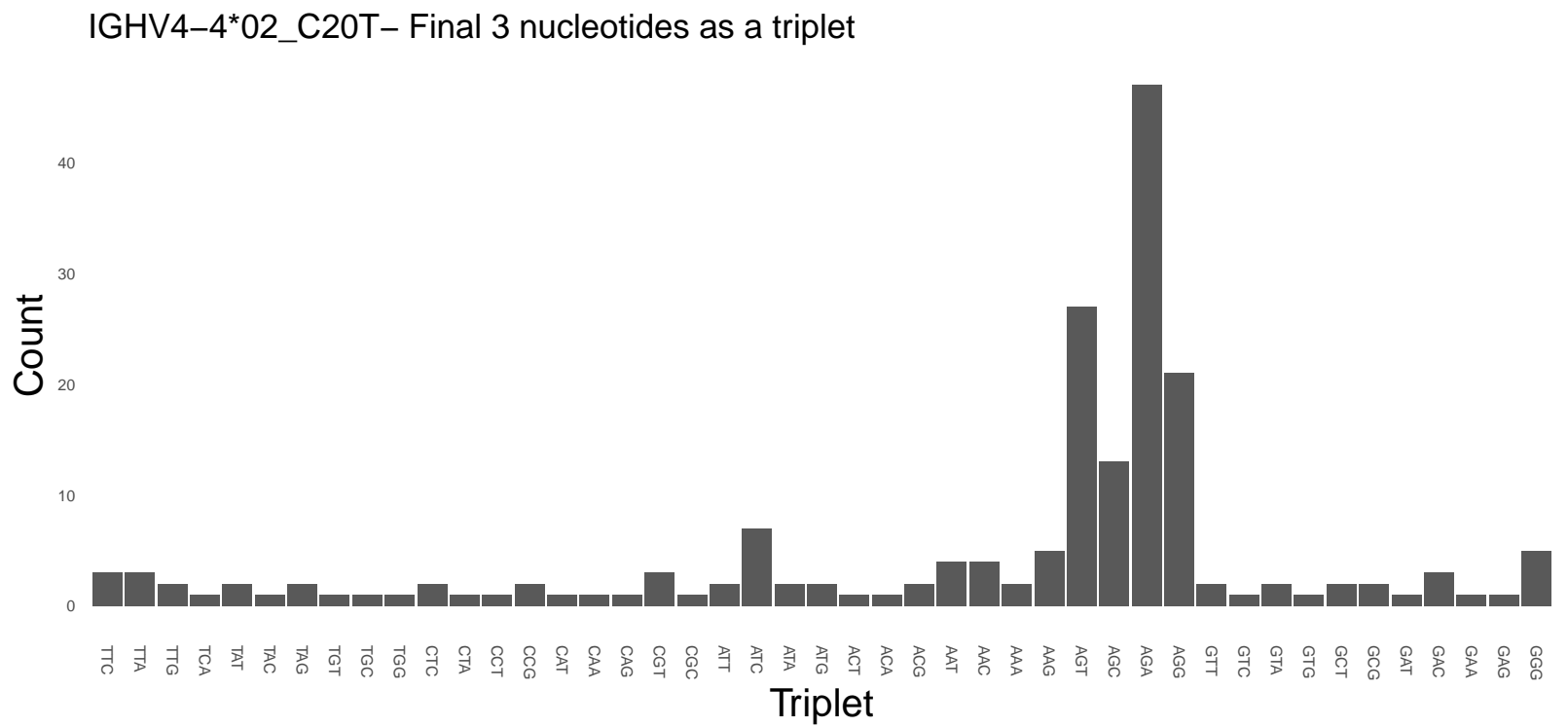
Gene IGHV4-4*02_C20T



Gene IGHV4-4*02_C20T

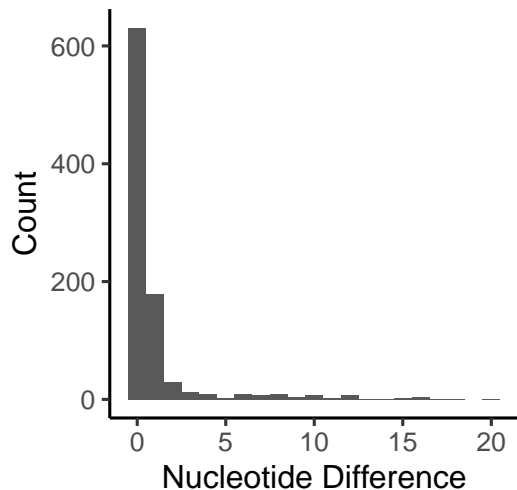


IGHV4-4*02_C20T- Final 3 nucleotides as a triplet



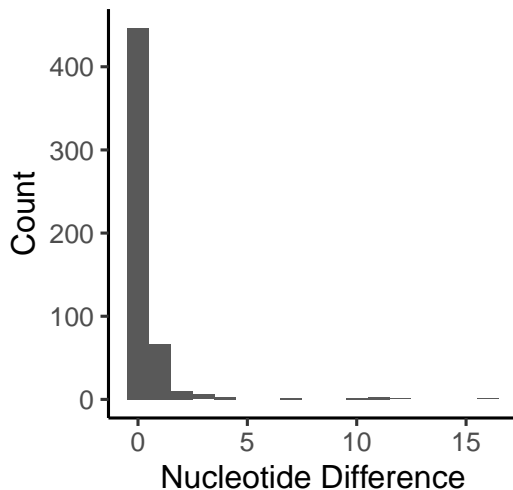
IGHV1-2*02

930 sequences assigned
631 (67.8%) exact matches, in which:
619 unique CDR3
6 unique J



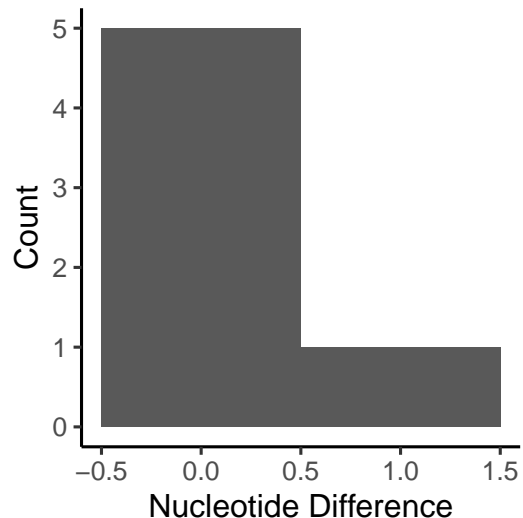
IGHV1-8*01

542 sequences assigned
447 (82.5%) exact matches, in which:
440 unique CDR3
7 unique J



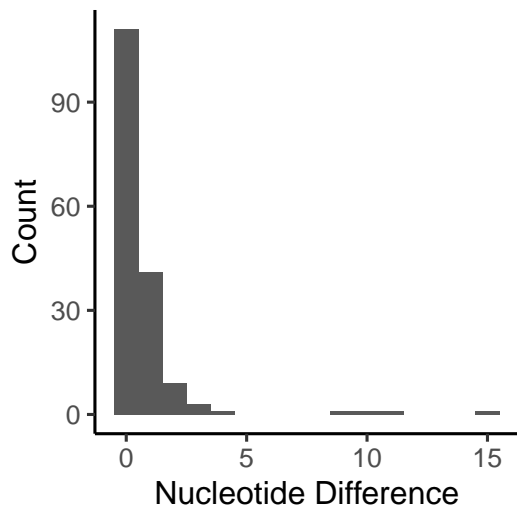
IGHV1-45*02

6 sequences assigned
5 (83.3%) exact matches, in which:
5 unique CDR3
3 unique J



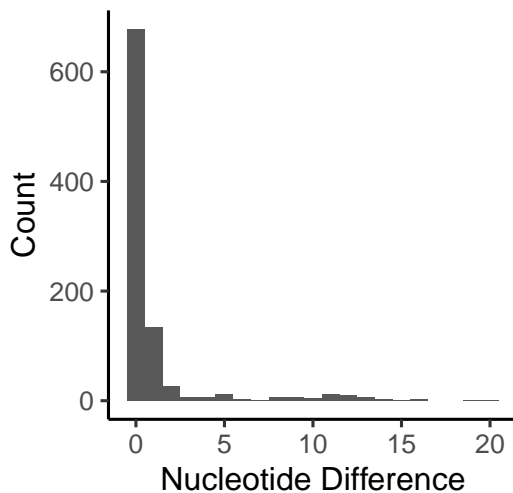
IGHV1-2*04

169 sequences assigned
111 (65.7%) exact matches, in which:
110 unique CDR3
6 unique J



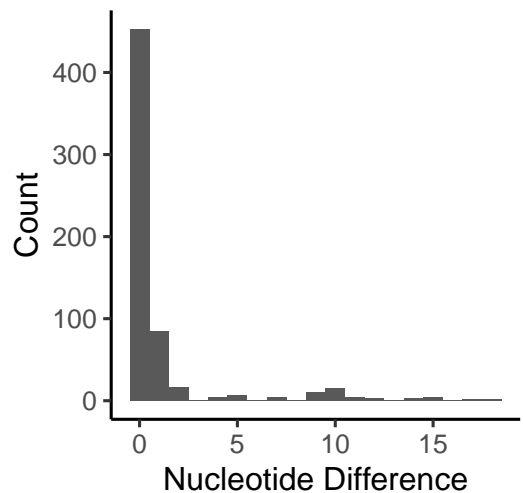
IGHV1-18*01

926 sequences assigned
678 (73.2%) exact matches, in which:
670 unique CDR3
7 unique J



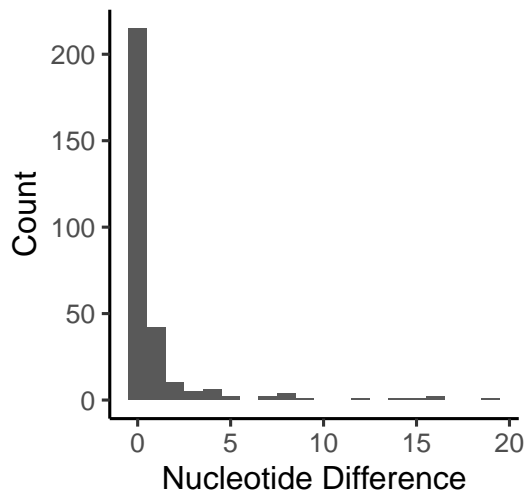
IGHV1-46*01

622 sequences assigned
453 (72.8%) exact matches, in which:
446 unique CDR3
7 unique J



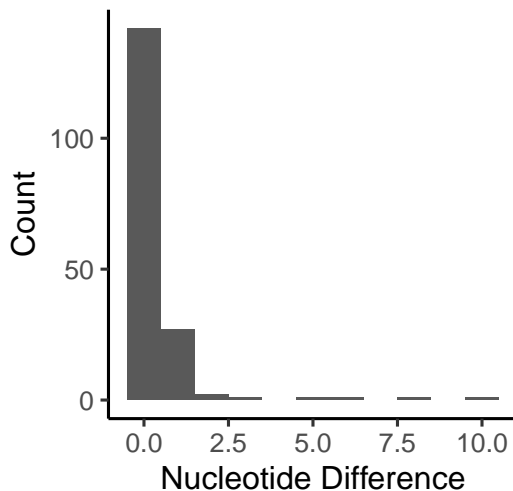
IGHV1-3*01

295 sequences assigned
215 (72.9%) exact matches, in which:
213 unique CDR3
6 unique J



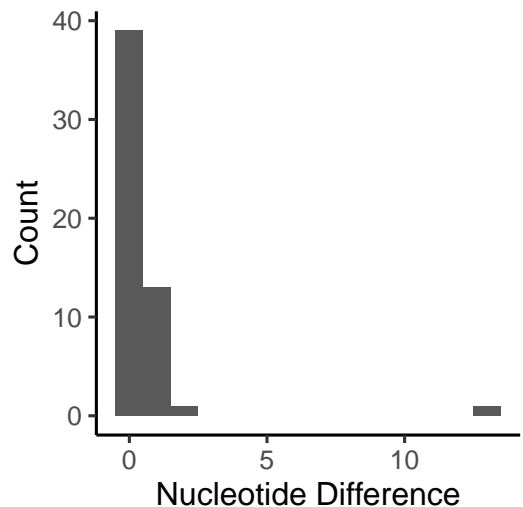
IGHV1-24*01

176 sequences assigned
142 (80.7%) exact matches, in which:
140 unique CDR3
7 unique J



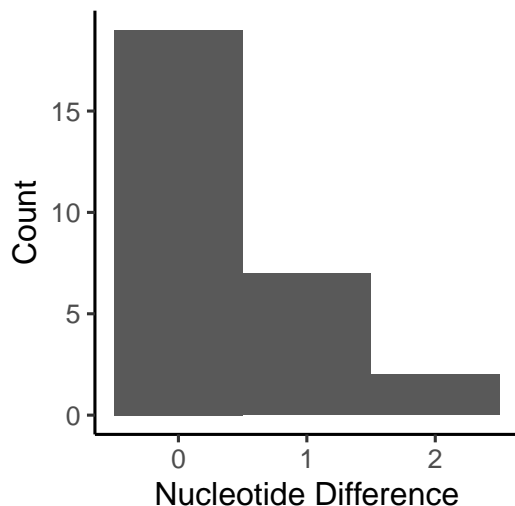
IGHV1-58*01

54 sequences assigned
39 (72.2%) exact matches, in which:
39 unique CDR3
5 unique J



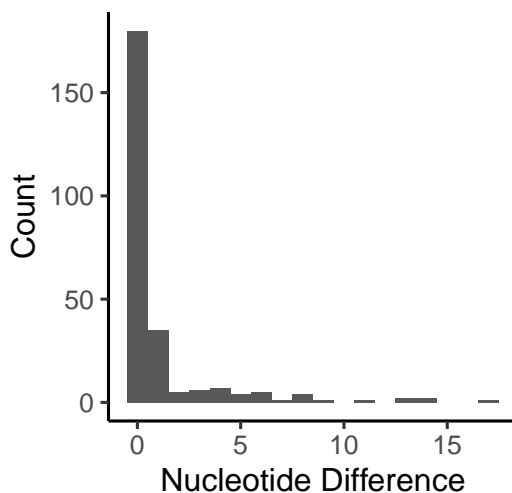
IGHV1-58*02

28 sequences assigned
19 (67.9%) exact matches, in which:
19 unique CDR3
4 unique J



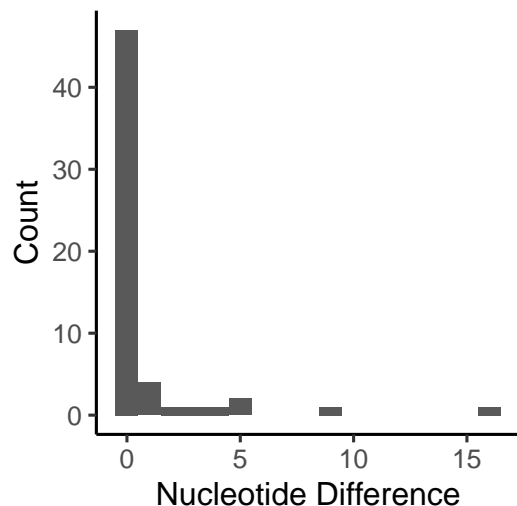
IGHV2-5*01

254 sequences assigned
180 (70.9%) exact matches, in which:
177 unique CDR3
6 unique J



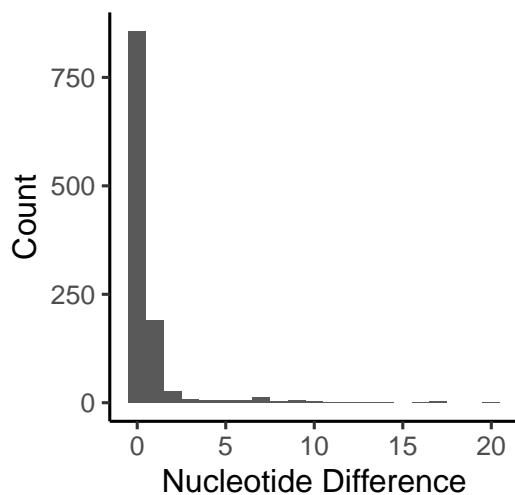
IGHV2-70*01

59 sequences assigned
47 (79.7%) exact matches, in which:
47 unique CDR3
5 unique J



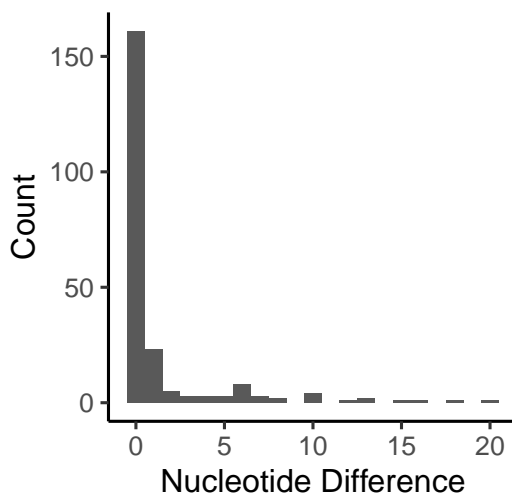
IGHV1-69*01

1144 sequences assigned
857 (74.9%) exact matches, in which:
842 unique CDR3
7 unique J



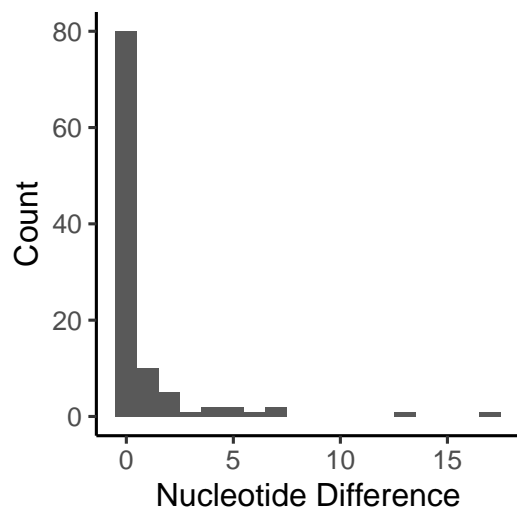
IGHV2-5*02

224 sequences assigned
161 (71.9%) exact matches, in which:
157 unique CDR3
6 unique J



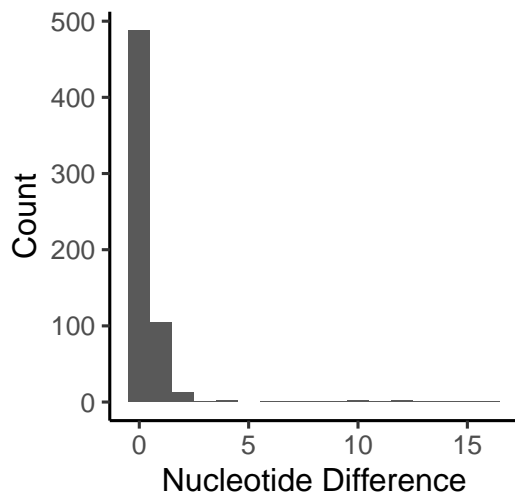
IGHV2-70*15

109 sequences assigned
80 (73.4%) exact matches, in which:
79 unique CDR3
4 unique J



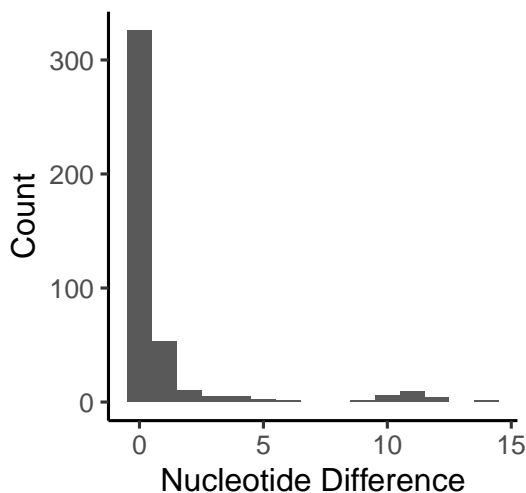
IGHV1-69*04

626 sequences assigned
488 (78%) exact matches, in which:
480 unique CDR3
6 unique J



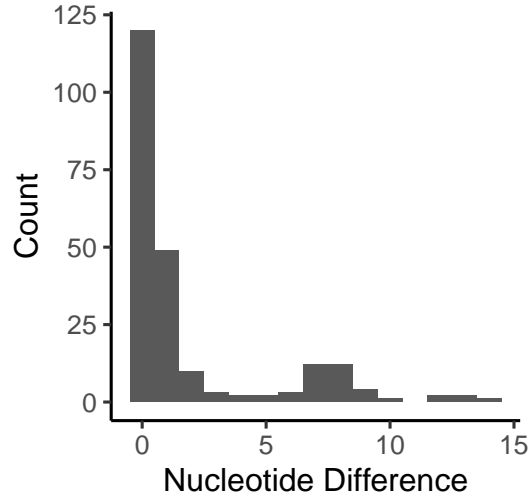
IGHV2-26*01

423 sequences assigned
326 (77.1%) exact matches, in which:
319 unique CDR3
7 unique J



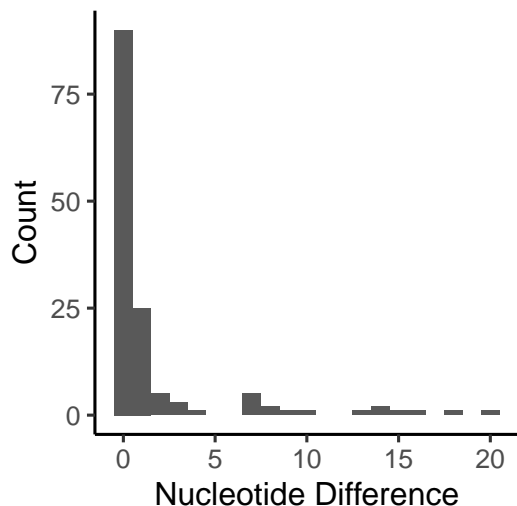
IGHV3-7*01

223 sequences assigned
120 (53.8%) exact matches, in which:
118 unique CDR3
6 unique J



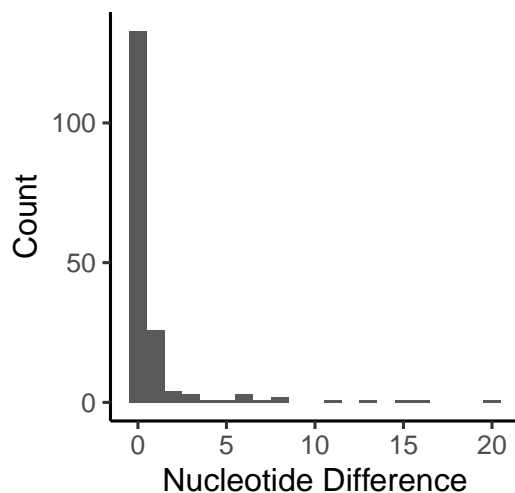
IGHV3-7*03

141 sequences assigned
90 (63.8%) exact matches, in which:
90 unique CDR3
5 unique J



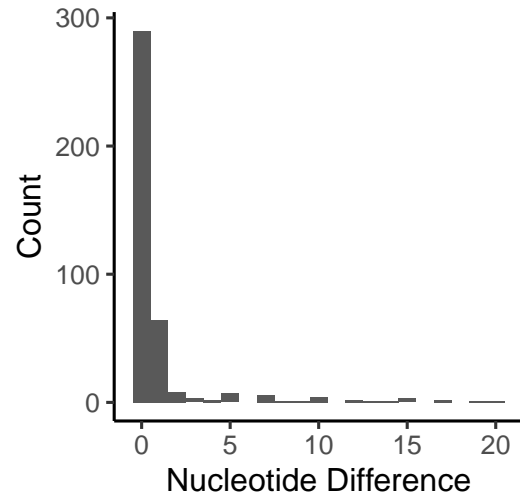
IGHV3-11*06

180 sequences assigned
133 (73.9%) exact matches, in which:
130 unique CDR3
6 unique J



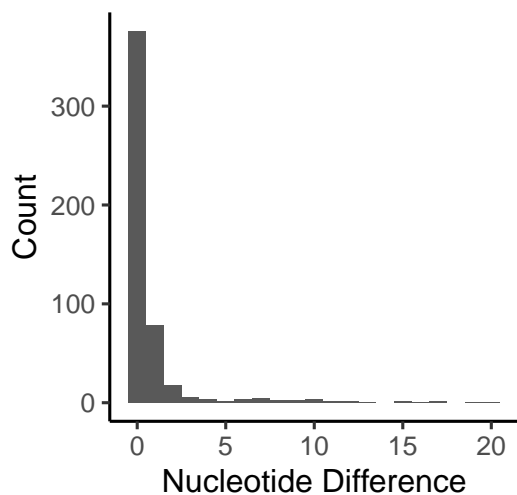
IGHV3-15*01

408 sequences assigned
290 (71.1%) exact matches, in which:
284 unique CDR3
7 unique J



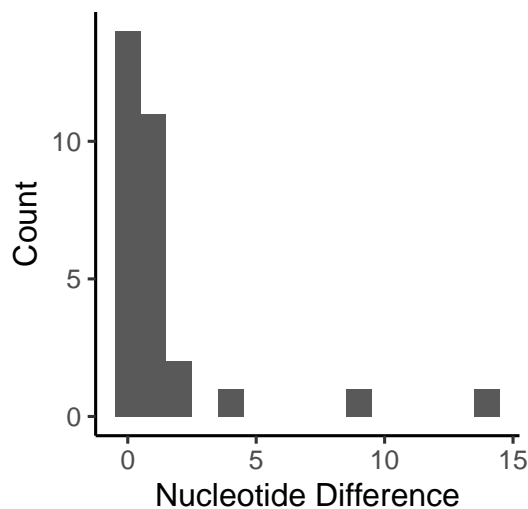
IGHV3-9*01

516 sequences assigned
376 (72.9%) exact matches, in which:
371 unique CDR3
6 unique J



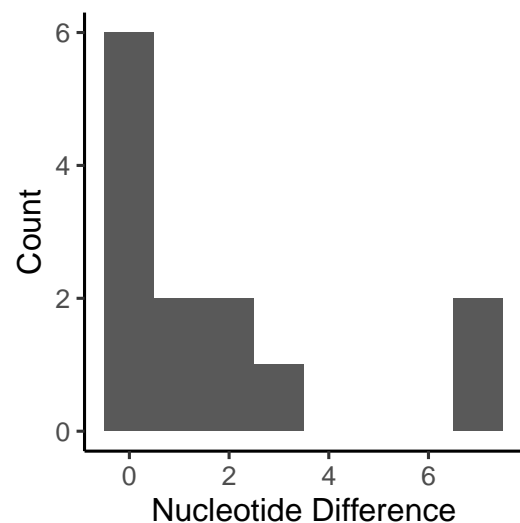
IGHV3-13*01

30 sequences assigned
14 (46.7%) exact matches, in which:
14 unique CDR3
4 unique J



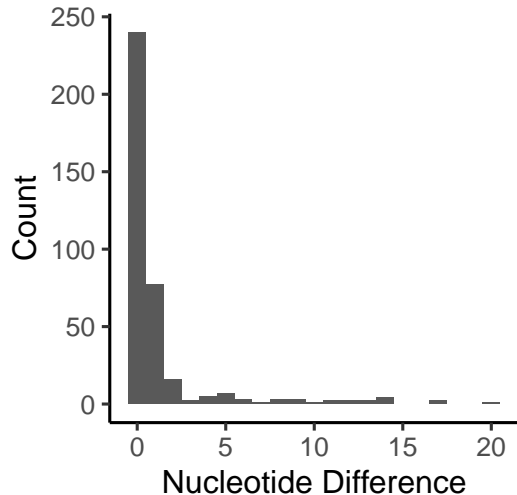
IGHV3-20*01

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



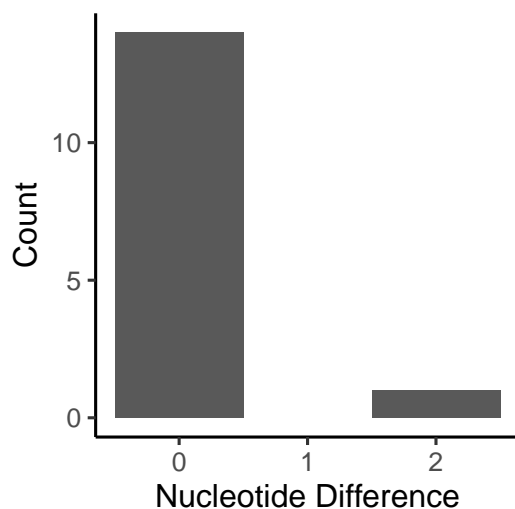
IGHV3-11*01

377 sequences assigned
240 (63.7%) exact matches, in which:
236 unique CDR3
6 unique J



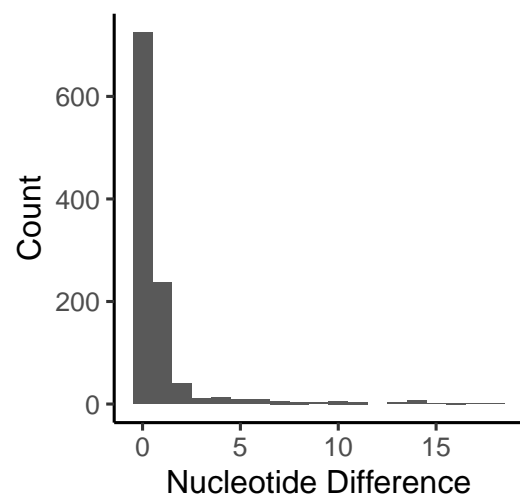
IGHV3-13*05

15 sequences assigned
14 (93.3%) exact matches, in which:
14 unique CDR3
5 unique J



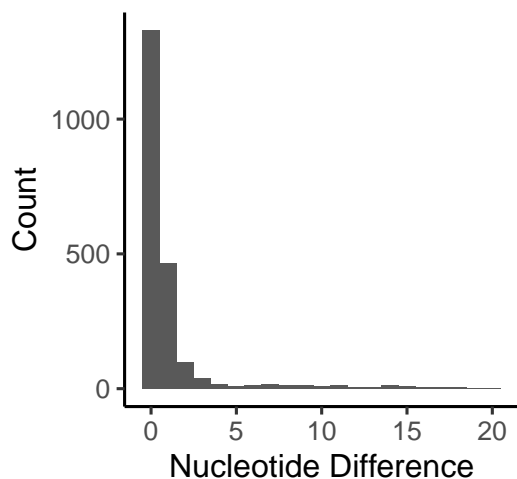
IGHV3-21*01

1083 sequences assigned
725 (66.9%) exact matches, in which:
713 unique CDR3
7 unique J



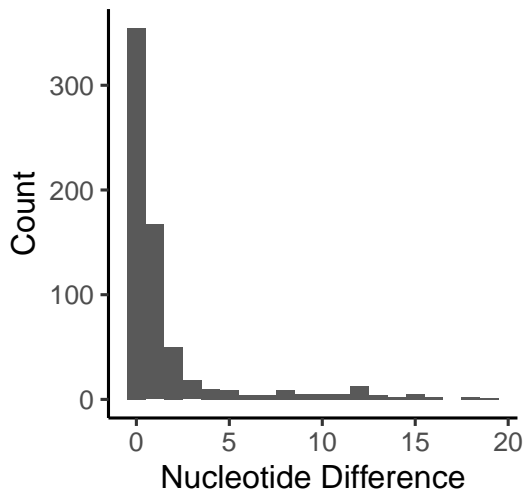
IGHV3-23*01

2104 sequences assigned
1329 (63.2%) exact matches, in which:
1312 unique CDR3
7 unique J



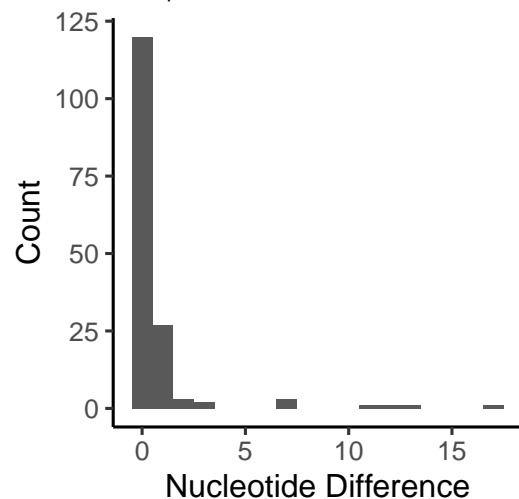
IGHV3-33*01

673 sequences assigned
355 (52.7%) exact matches, in which:
354 unique CDR3
7 unique J



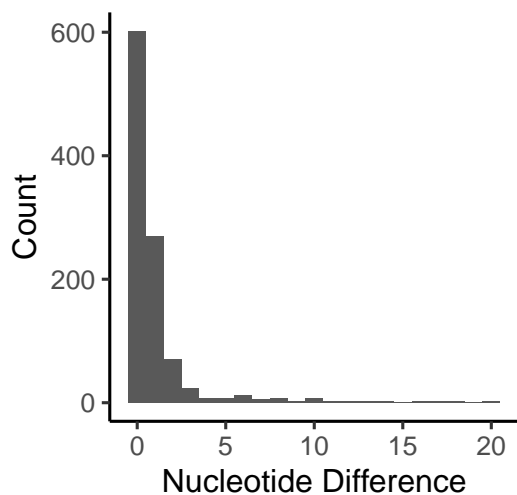
IGHV3-48*02

160 sequences assigned
120 (75%) exact matches, in which:
120 unique CDR3
6 unique J



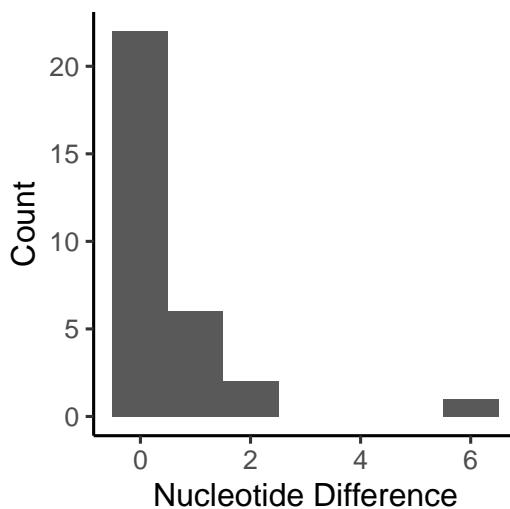
IGHV3-30-3*01

1045 sequences assigned
602 (57.6%) exact matches, in which:
594 unique CDR3
7 unique J



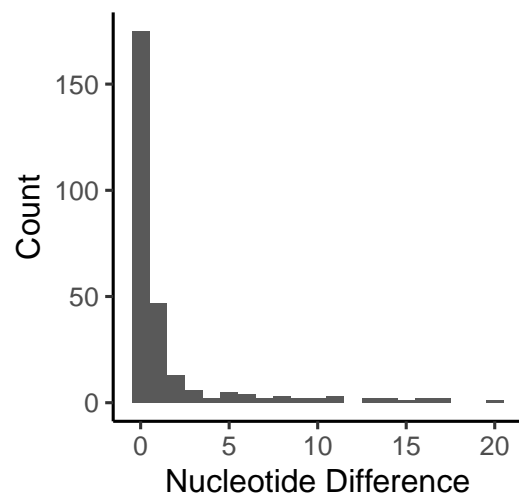
IGHV3-43*01

31 sequences assigned
22 (71%) exact matches, in which:
22 unique CDR3
5 unique J



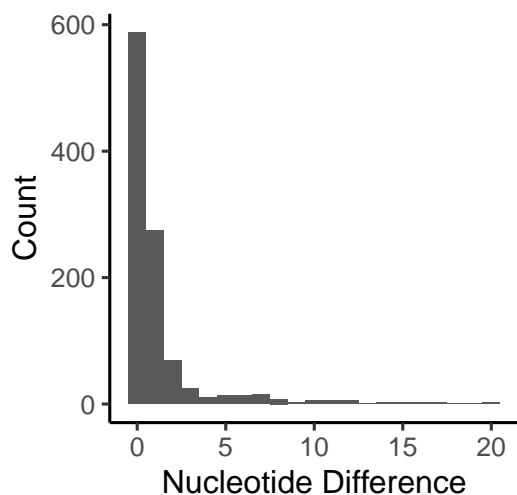
IGHV3-48*03

276 sequences assigned
175 (63.4%) exact matches, in which:
175 unique CDR3
6 unique J



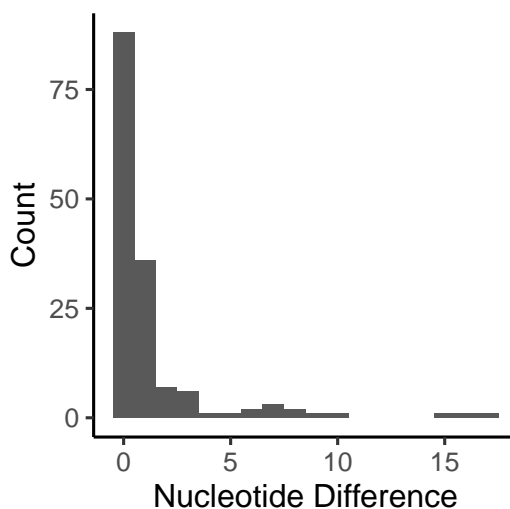
IGHV3-30*18

1061 sequences assigned
588 (55.4%) exact matches, in which:
587 unique CDR3
7 unique J



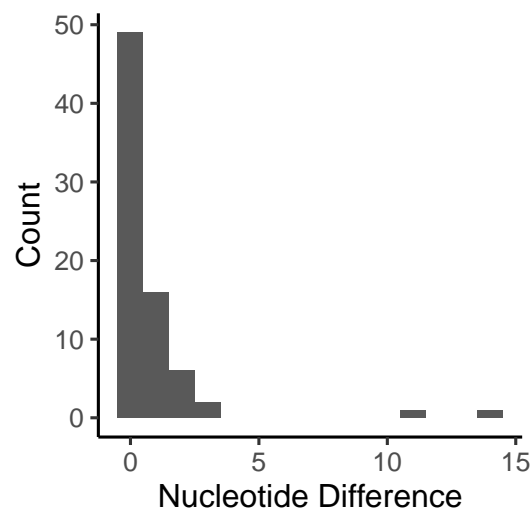
IGHV3-43*02

152 sequences assigned
88 (57.9%) exact matches, in which:
88 unique CDR3
5 unique J



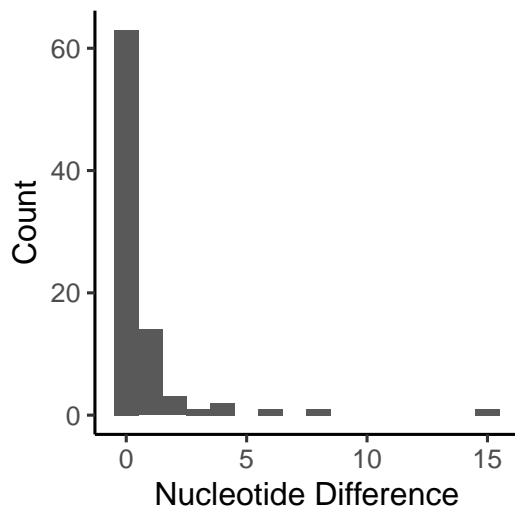
IGHV3-49*04

76 sequences assigned
49 (64.5%) exact matches, in which:
43 unique CDR3
5 unique J



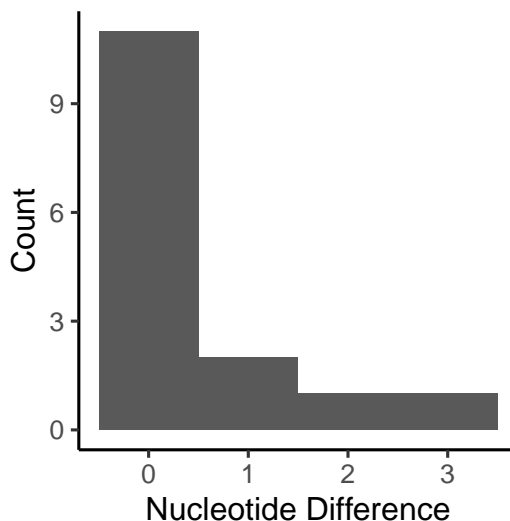
IGHV3-49*05

86 sequences assigned
63 (73.3%) exact matches, in which:
63 unique CDR3
6 unique J



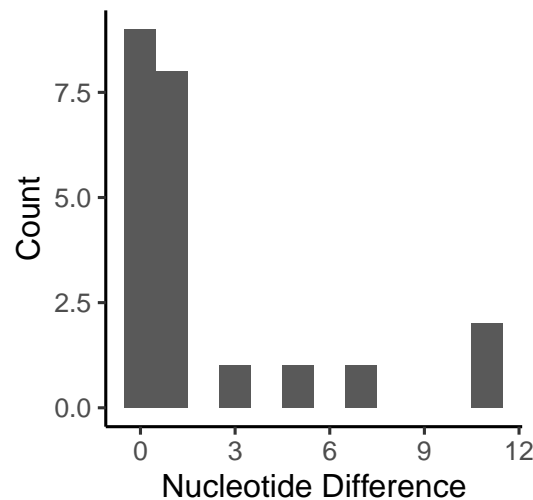
IGHV3-64*01

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



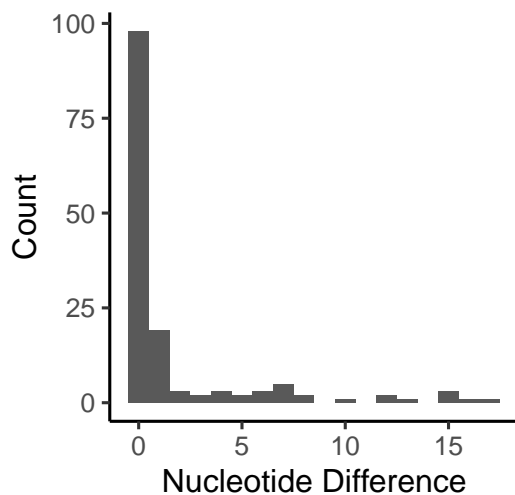
IGHV3-73*01

22 sequences assigned
9 (40.9%) exact matches, in which:
9 unique CDR3
3 unique J



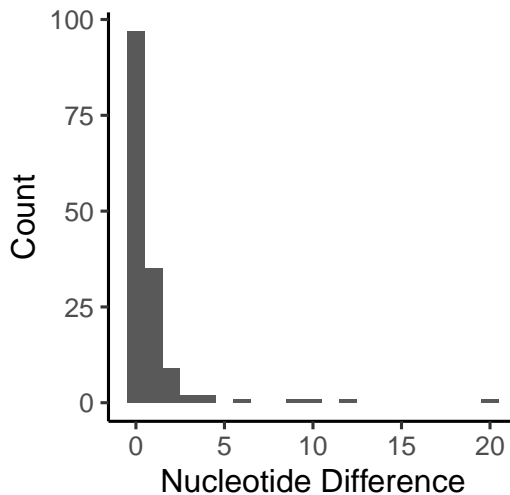
IGHV3-53*01

152 sequences assigned
98 (64.5%) exact matches, in which:
96 unique CDR3
5 unique J



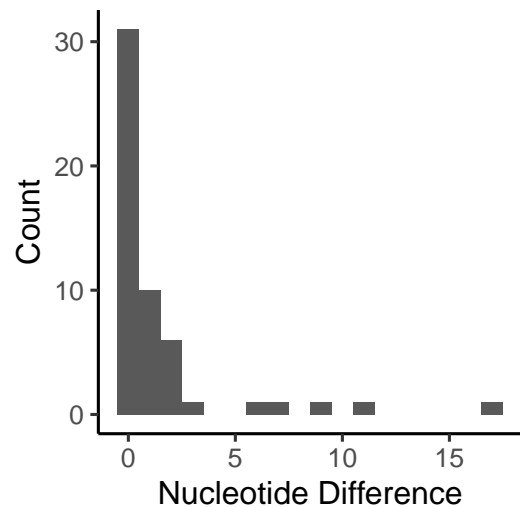
IGHV3-66*01

150 sequences assigned
97 (64.7%) exact matches, in which:
96 unique CDR3
6 unique J



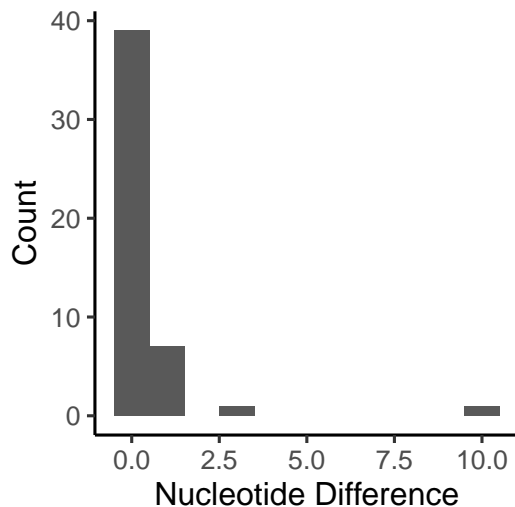
IGHV3-73*02

53 sequences assigned
31 (58.5%) exact matches, in which:
29 unique CDR3
4 unique J



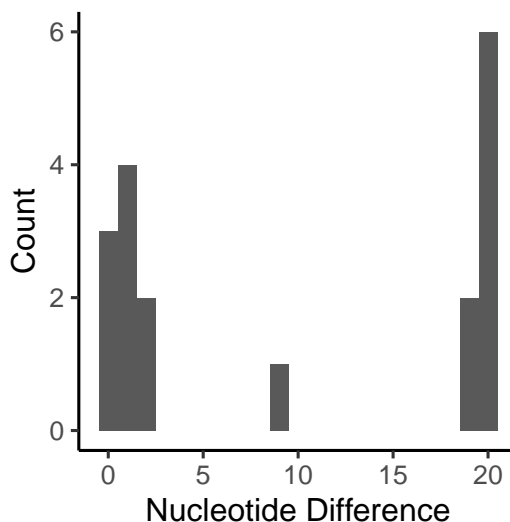
IGHV3-53*04

48 sequences assigned
39 (81.2%) exact matches, in which:
39 unique CDR3
5 unique J



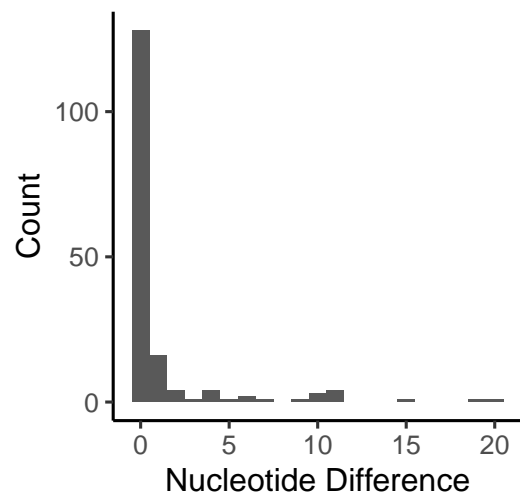
IGHV3-72*01

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



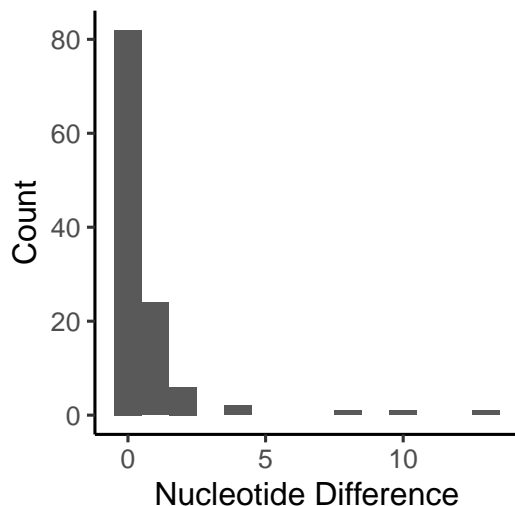
IGHV3-74*01

170 sequences assigned
128 (75.3%) exact matches, in which:
127 unique CDR3
7 unique J



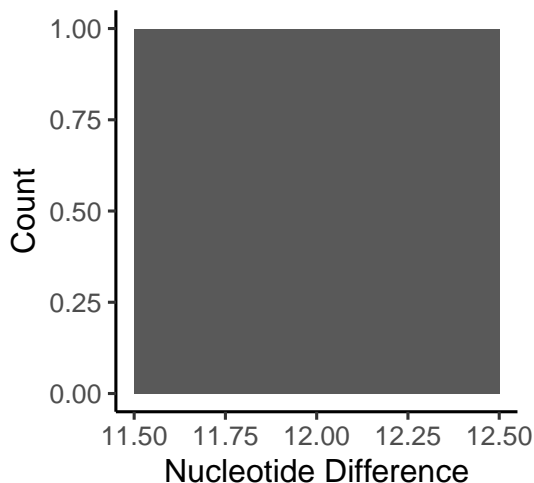
IGHV3-64D*06

118 sequences assigned
82 (69.5%) exact matches, in which:
82 unique CDR3
6 unique J



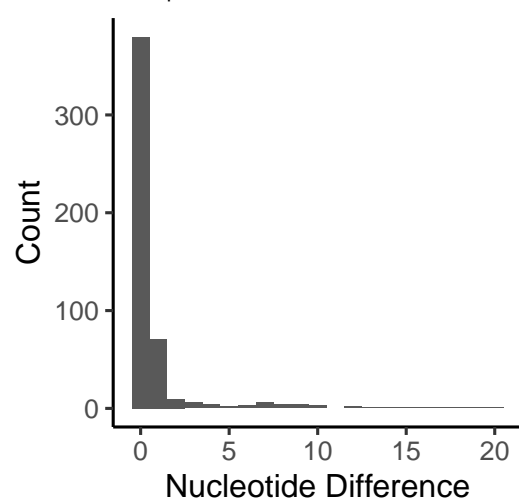
IGHV4-28*01

1 sequences assigned
No exact matches.



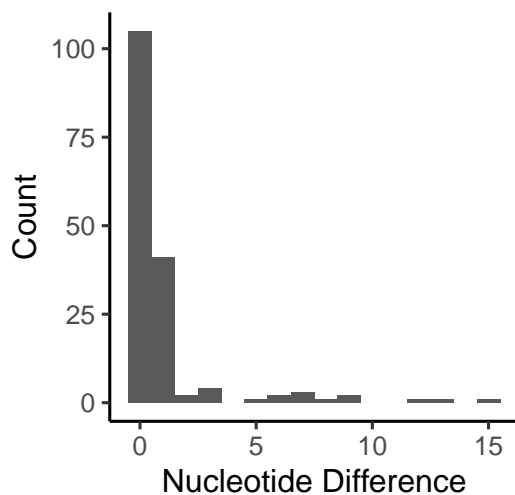
IGHV4-31*03

507 sequences assigned
380 (75%) exact matches, in which:
379 unique CDR3
7 unique J



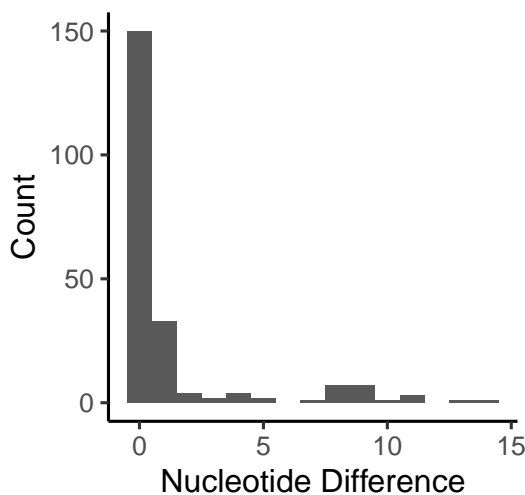
IGHV4-4*07

165 sequences assigned
105 (63.6%) exact matches, in which:
104 unique CDR3
5 unique J



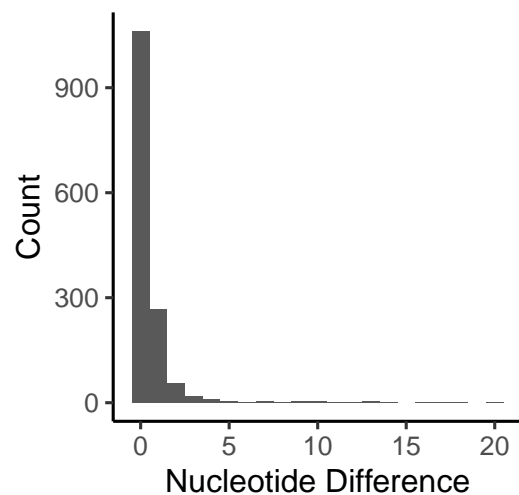
IGHV4-30-4*01

218 sequences assigned
150 (68.8%) exact matches, in which:
148 unique CDR3
5 unique J



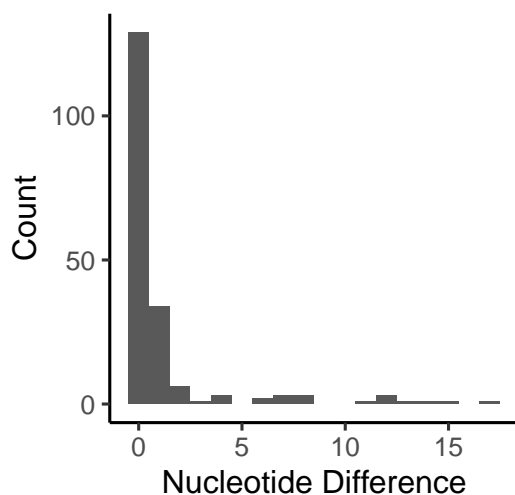
IGHV4-34*01

1451 sequences assigned
1062 (73.2%) exact matches, in which:
1036 unique CDR3
7 unique J



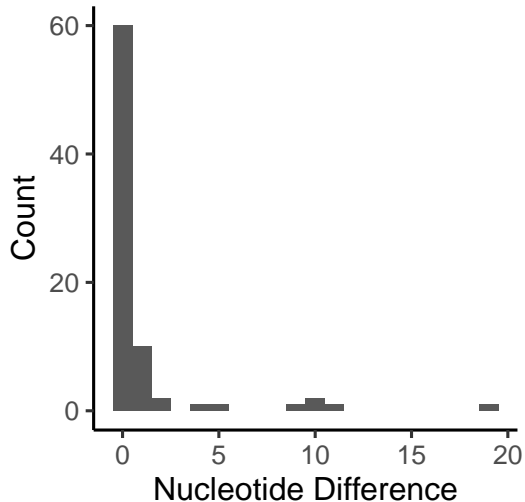
IGHV4-4*02_C20T

191 sequences assigned
129 (67.5%) exact matches, in which:
127 unique CDR3
6 unique J



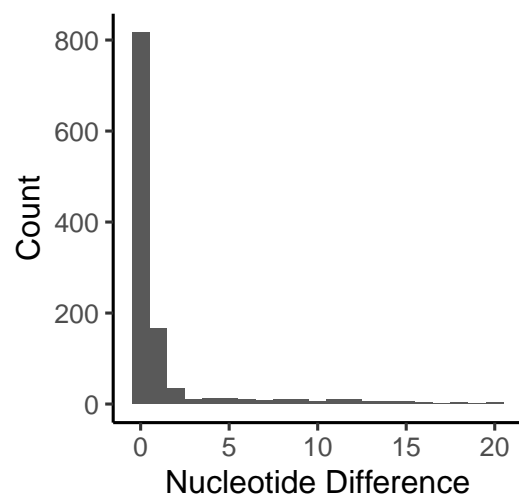
IGHV4-30-2*01

79 sequences assigned
60 (75.9%) exact matches, in which:
60 unique CDR3
6 unique J



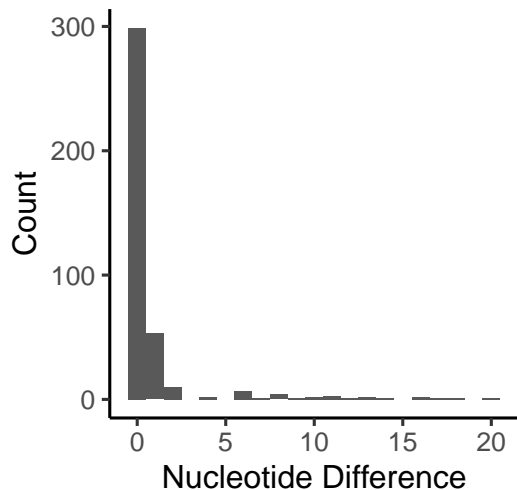
IGHV4-39*01

1152 sequences assigned
817 (70.9%) exact matches, in which:
805 unique CDR3
7 unique J



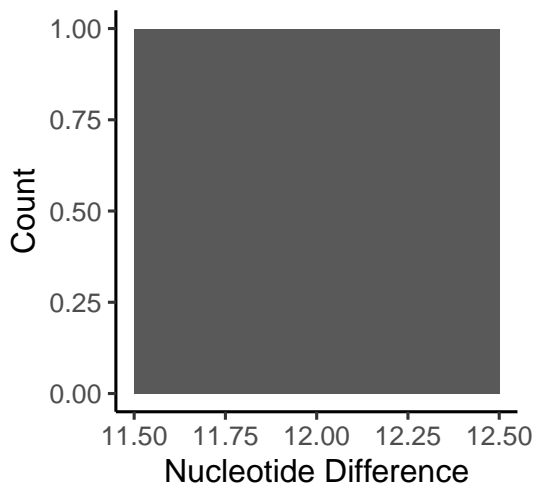
IGHV4–59*01

395 sequences assigned
299 (75.7%) exact matches, in which:
296 unique CDR3
7 unique J



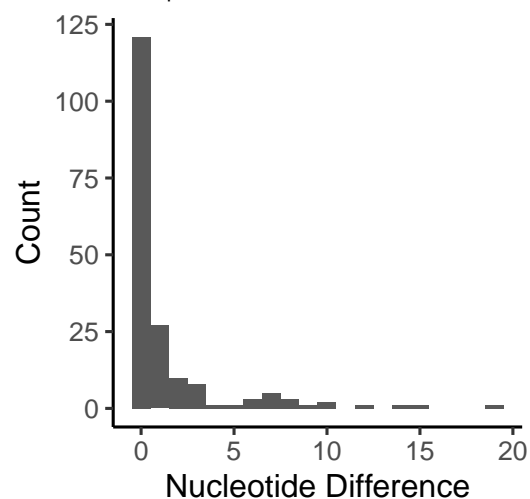
IGHV1/OR15–9*01

1 sequences assigned
No exact matches.



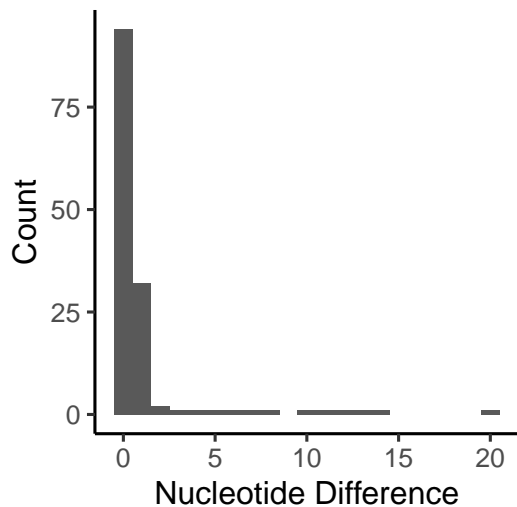
IGHV6–1*01

186 sequences assigned
121 (65.1%) exact matches, in which:
120 unique CDR3
6 unique J



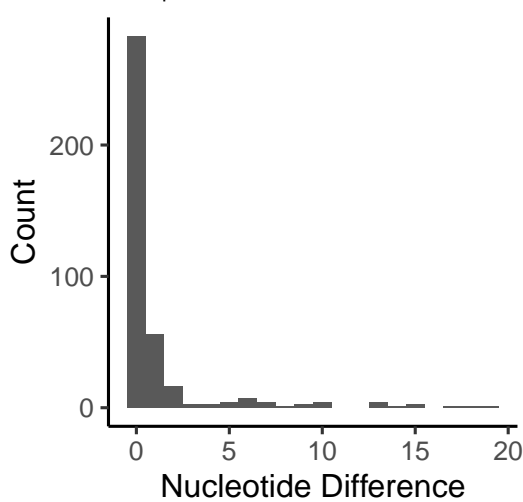
IGHV4–59*08

142 sequences assigned
94 (66.2%) exact matches, in which:
92 unique CDR3
6 unique J



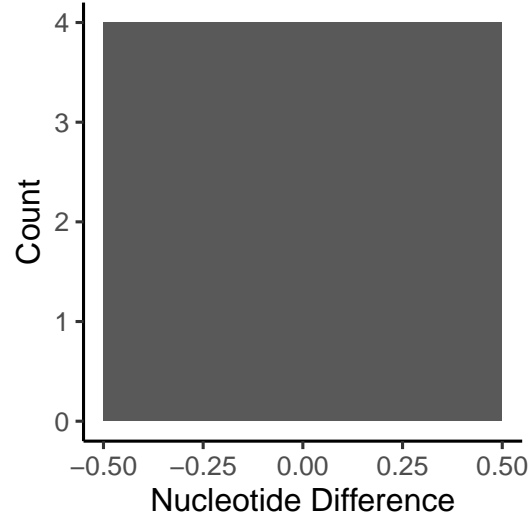
IGHV5–10–1*03

397 sequences assigned
283 (71.3%) exact matches, in which:
281 unique CDR3
6 unique J



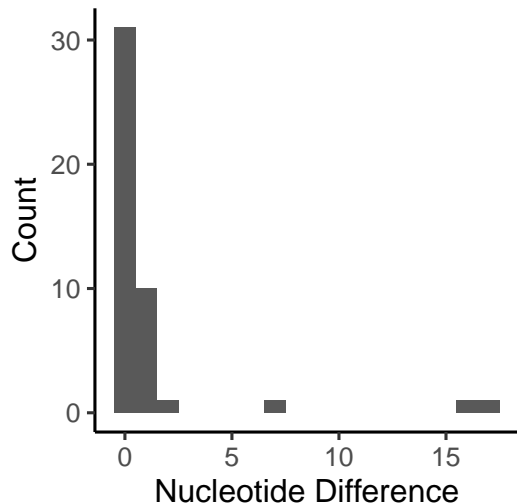
IGHV7–4–1*01

4 sequences assigned
4 (100%) exact matches, in which:
4 unique CDR3
3 unique J



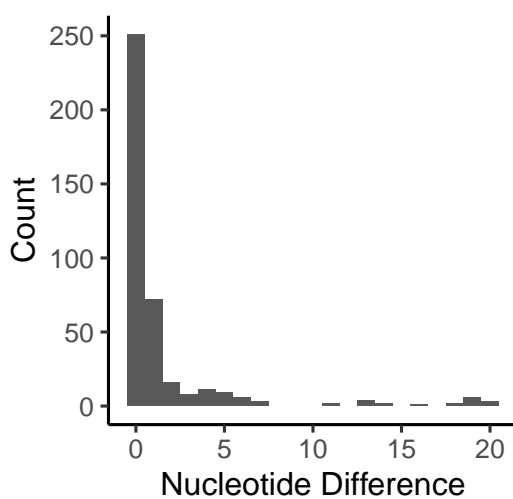
IGHV4–61*01

46 sequences assigned
31 (67.4%) exact matches, in which:
31 unique CDR3
4 unique J

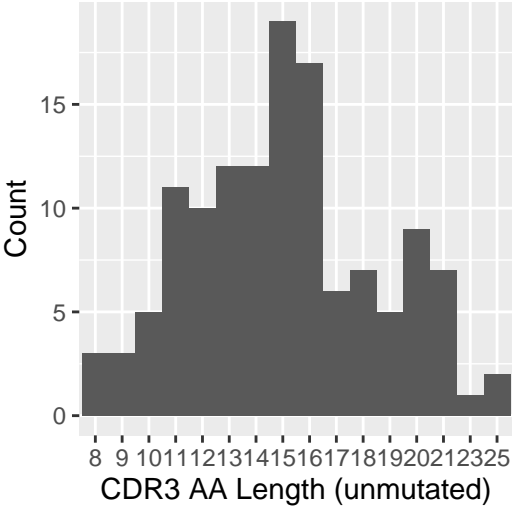


IGHV5–51*01

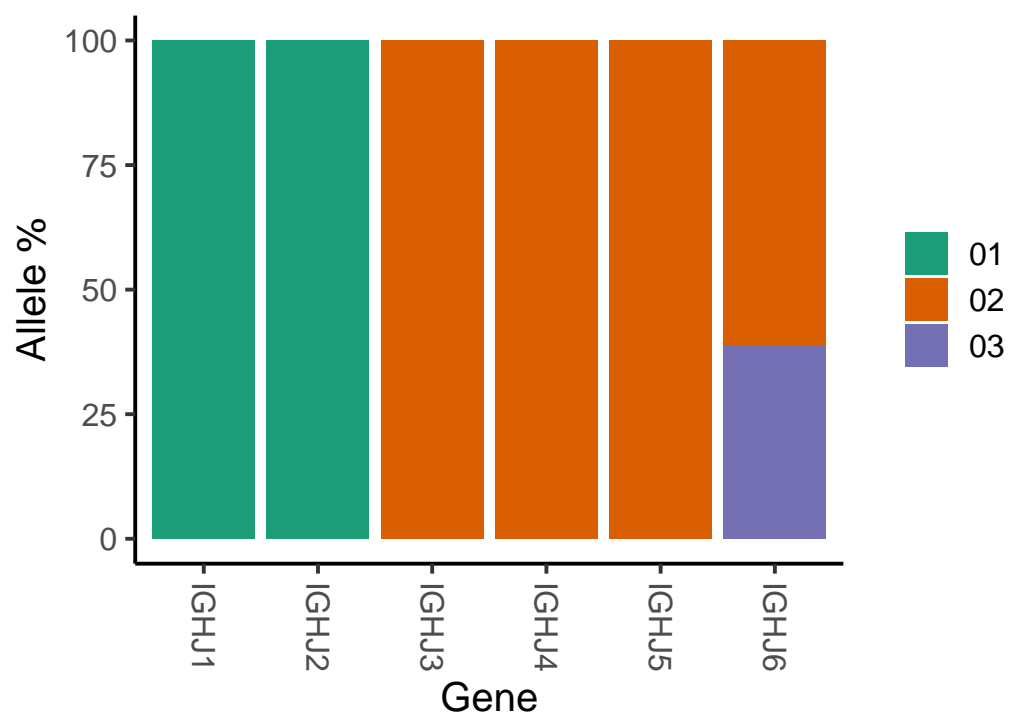
402 sequences assigned
251 (62.4%) exact matches, in which:
246 unique CDR3
6 unique J



IGHV4-4*02_C20T



Allele Usage



Sequence Count by IGHJ6 allele usage

