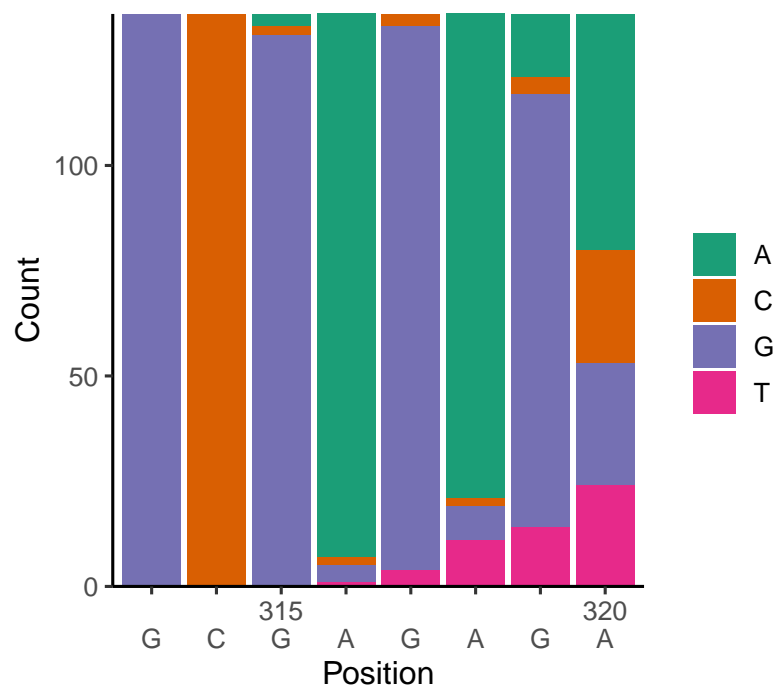
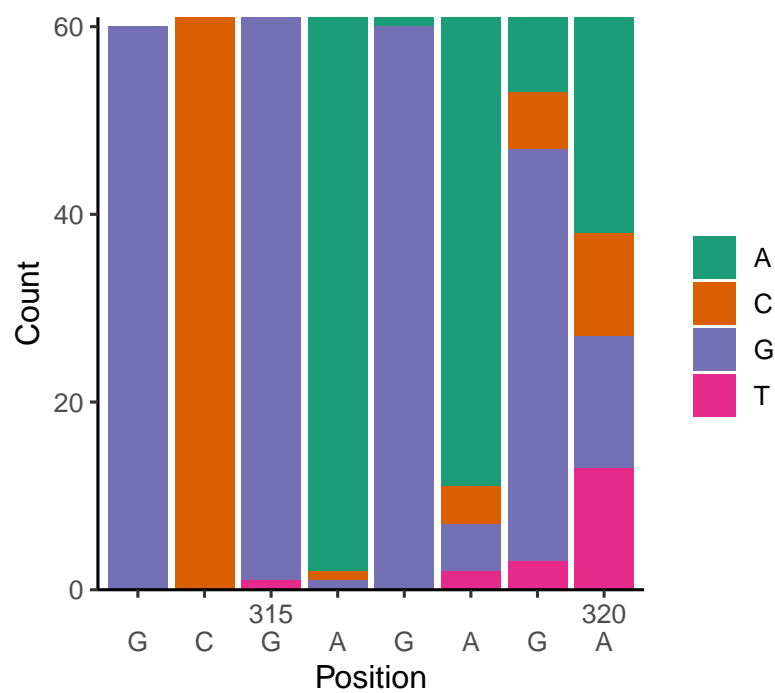


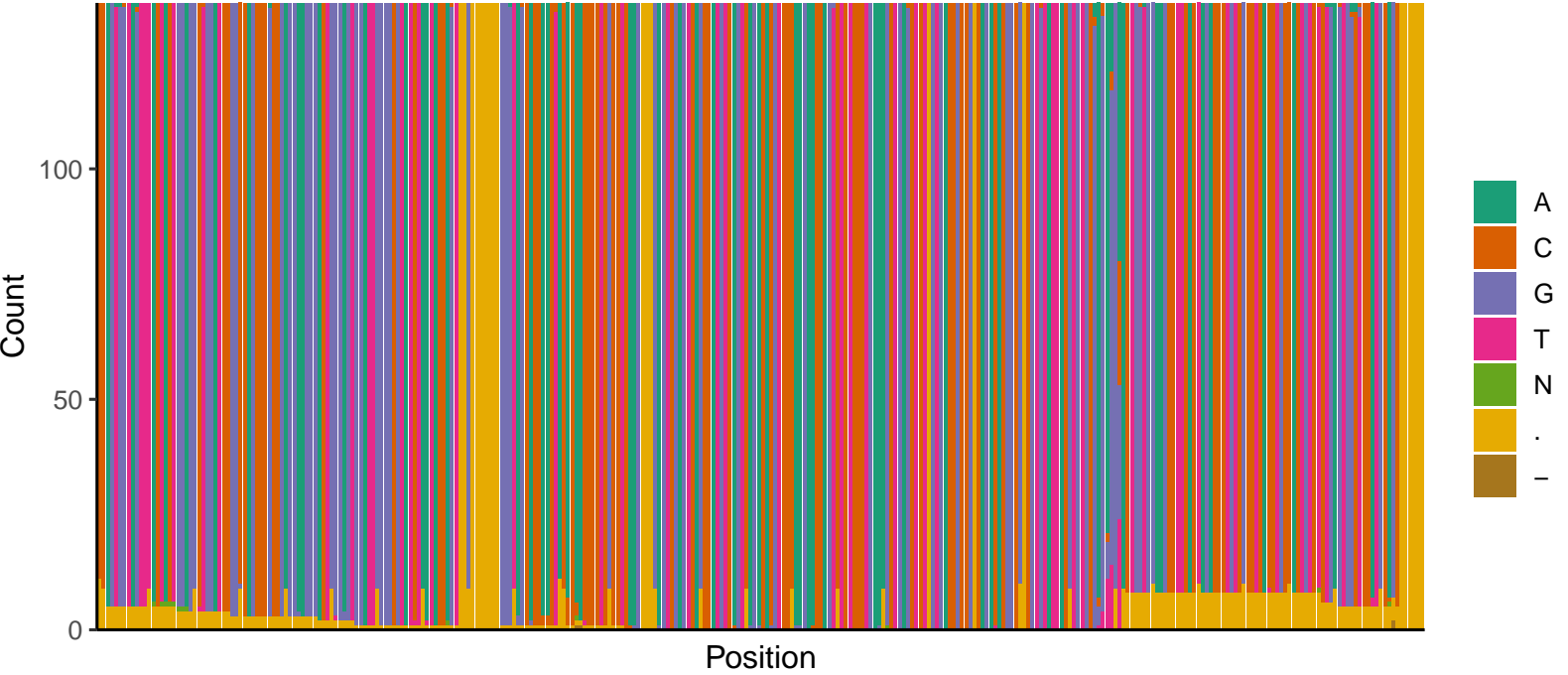
Gene IGHV4-61*02_A234G



Gene IGHV4-59*01_G267A



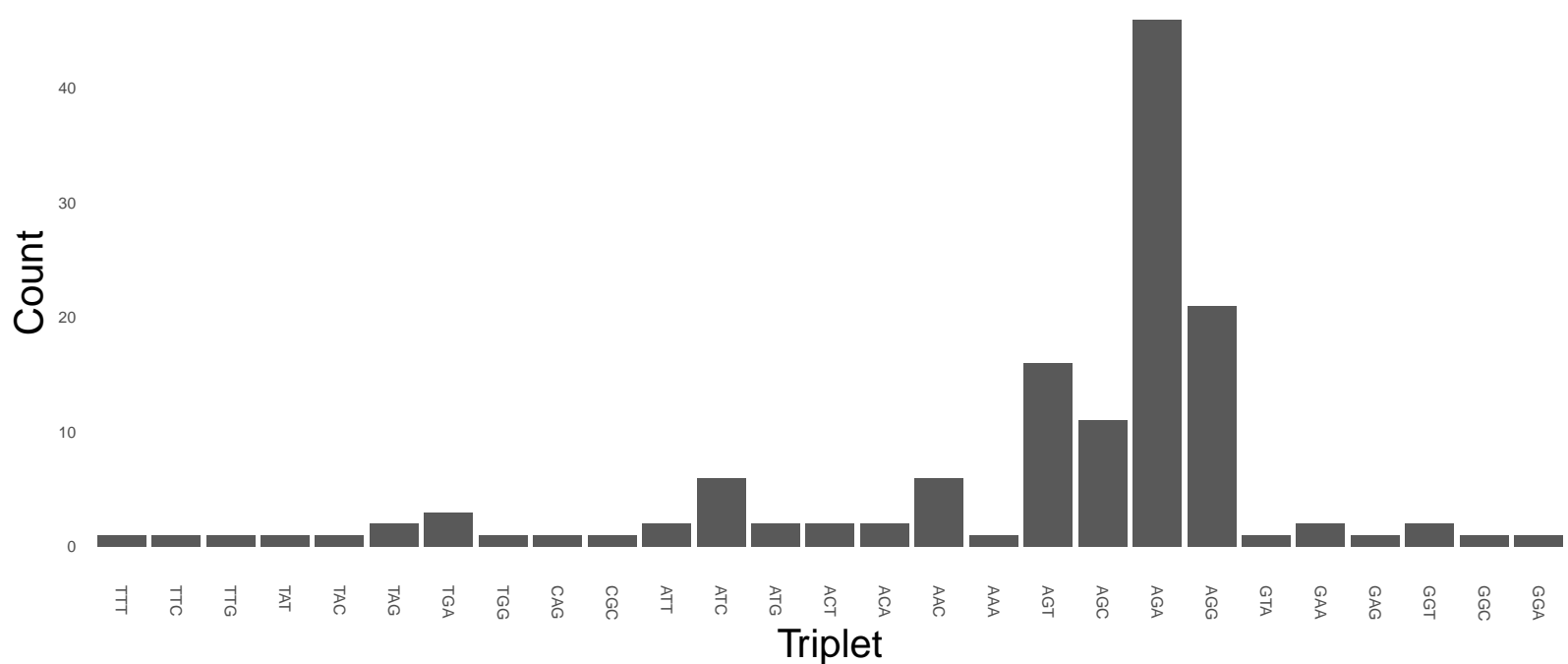
Gene IGHV4-61*02_A234G



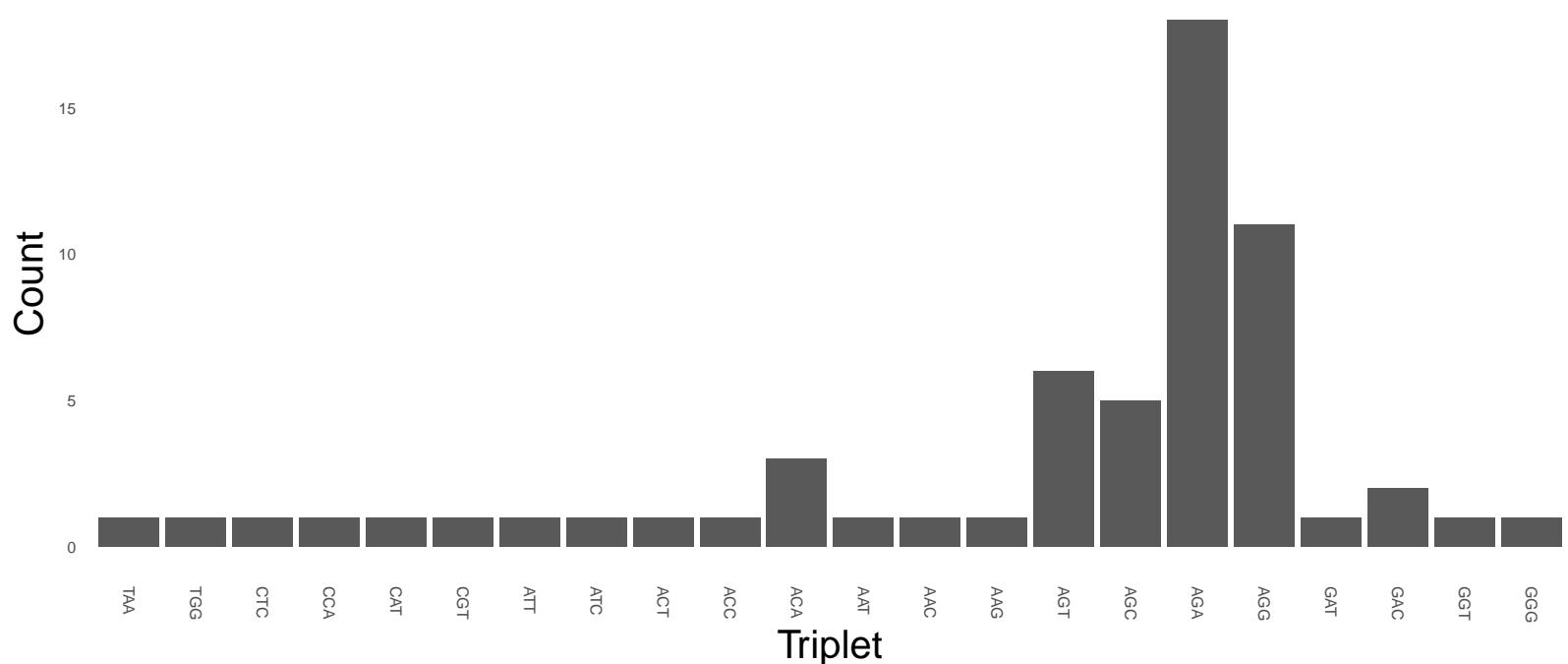
Gene IGHV4-59*01_G267A



IGHV4–61*02_A234G– Final 3 nucleotides as a triplet

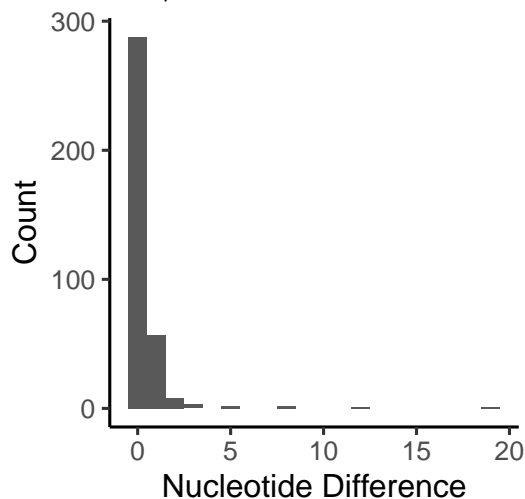


IGHV4–59*01_G267A– Final 3 nucleotides as a triplet



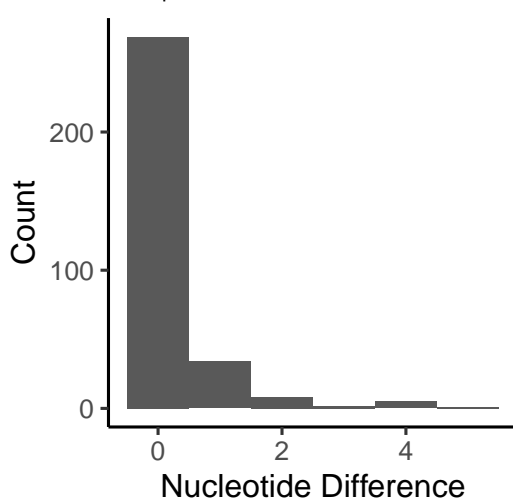
IGHV1–2*02

362 sequences assigned
288 (79.6%) exact matches, in which:
285 unique CDR3
7 unique J



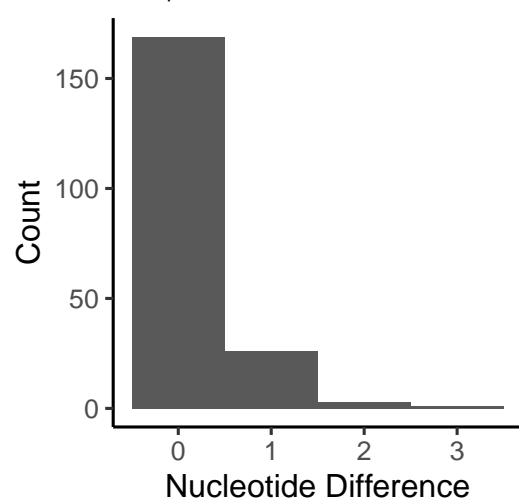
IGHV1–18*01

319 sequences assigned
269 (84.3%) exact matches, in which:
265 unique CDR3
7 unique J



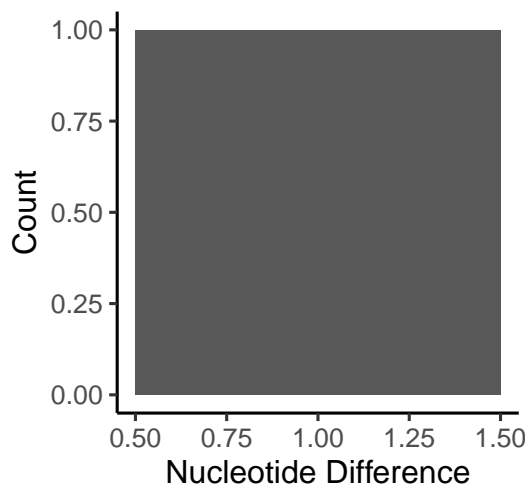
IGHV1–46*01

199 sequences assigned
169 (84.9%) exact matches, in which:
168 unique CDR3
7 unique J



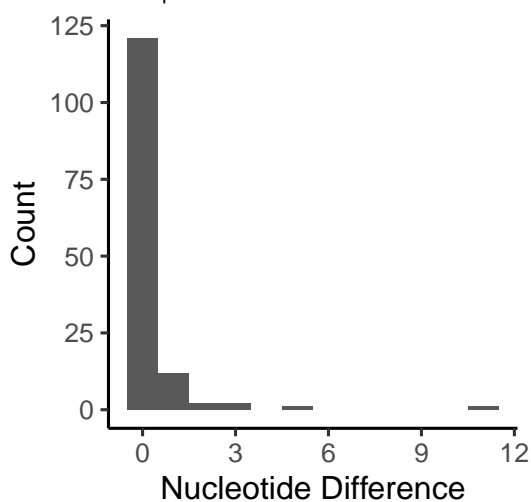
IGHV1–3*02

1 sequences assigned
No exact matches.



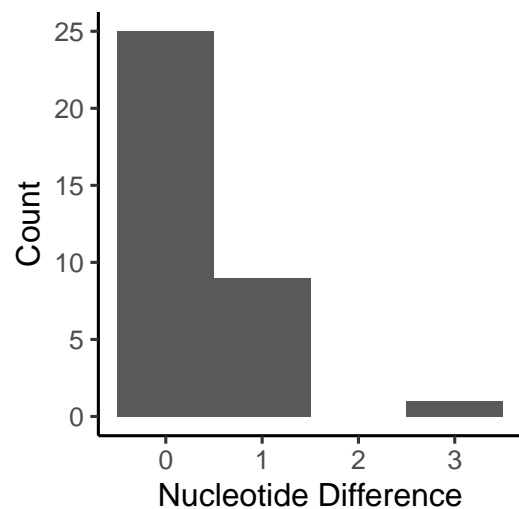
IGHV1–24*01

139 sequences assigned
121 (87.1%) exact matches, in which:
120 unique CDR3
6 unique J



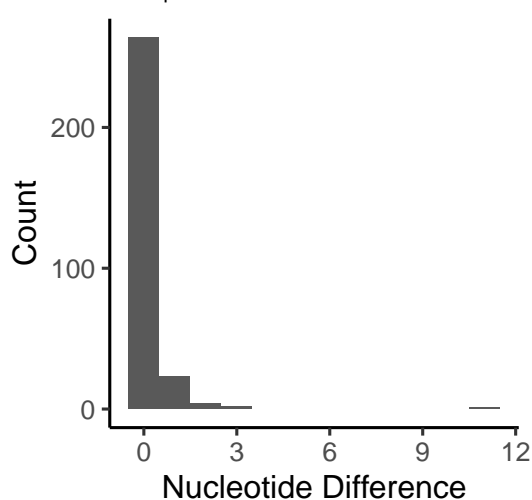
IGHV1–58*01

35 sequences assigned
25 (71.4%) exact matches, in which:
25 unique CDR3
7 unique J



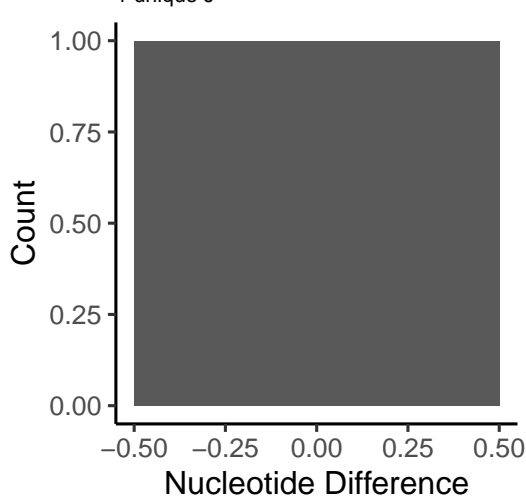
IGHV1–8*01

295 sequences assigned
264 (89.5%) exact matches, in which:
262 unique CDR3
7 unique J



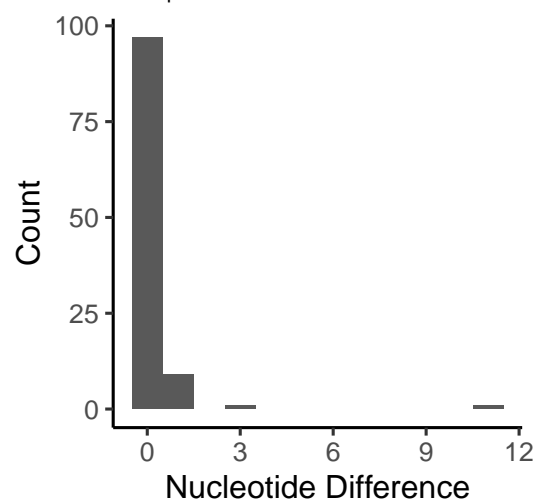
IGHV1–45*02

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



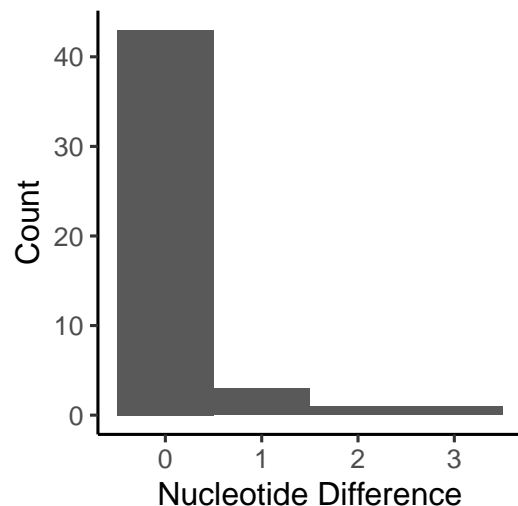
IGHV2–5*01

108 sequences assigned
97 (89.8%) exact matches, in which:
97 unique CDR3
6 unique J



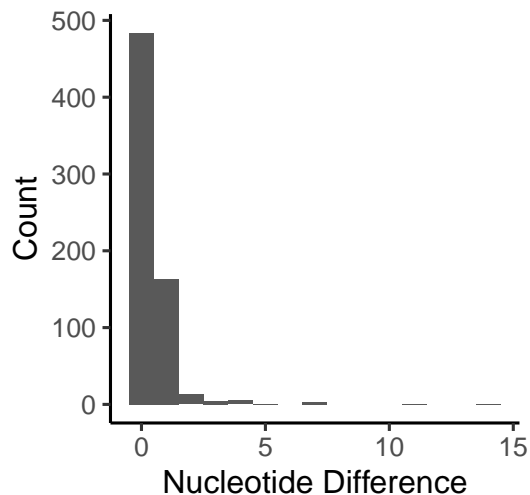
IGHV2-26*01

48 sequences assigned
43 (89.6%) exact matches, in which:
42 unique CDR3
6 unique J



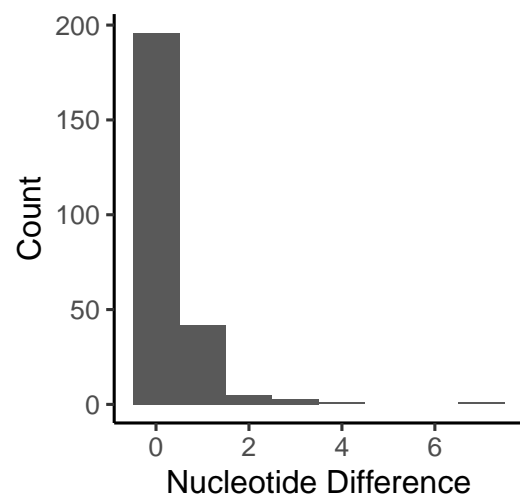
IGHV3-9*01

676 sequences assigned
484 (71.6%) exact matches, in which:
476 unique CDR3
7 unique J



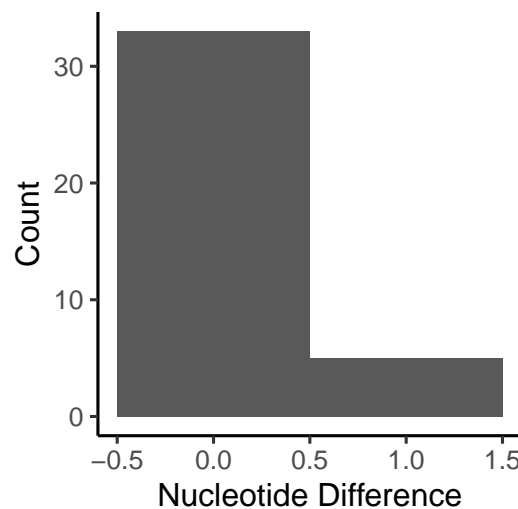
IGHV3-15*01

249 sequences assigned
196 (78.7%) exact matches, in which:
194 unique CDR3
7 unique J



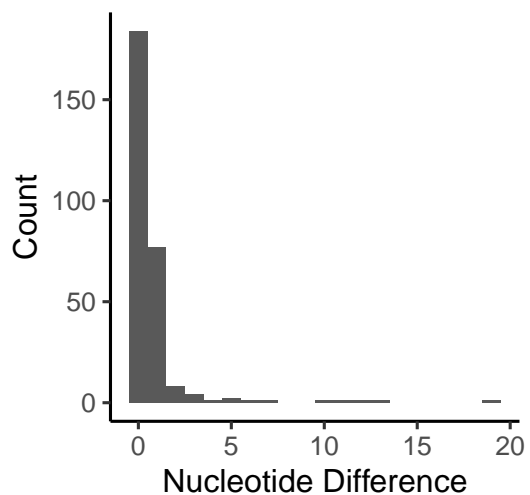
IGHV2-70*01

38 sequences assigned
33 (86.8%) exact matches, in which:
33 unique CDR3
5 unique J



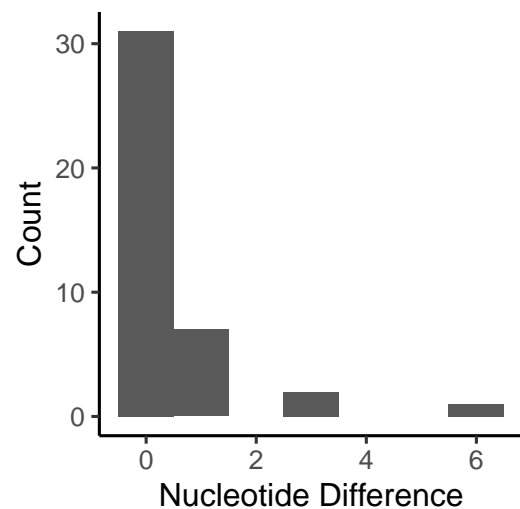
IGHV3-11*01

283 sequences assigned
184 (65%) exact matches, in which:
181 unique CDR3
6 unique J



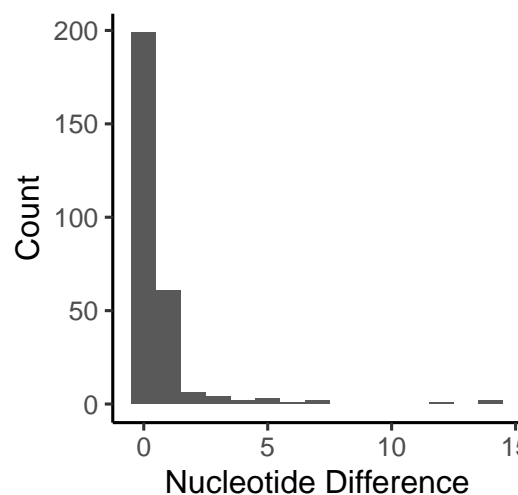
IGHV3-20*01

41 sequences assigned
31 (75.6%) exact matches, in which:
29 unique CDR3
6 unique J



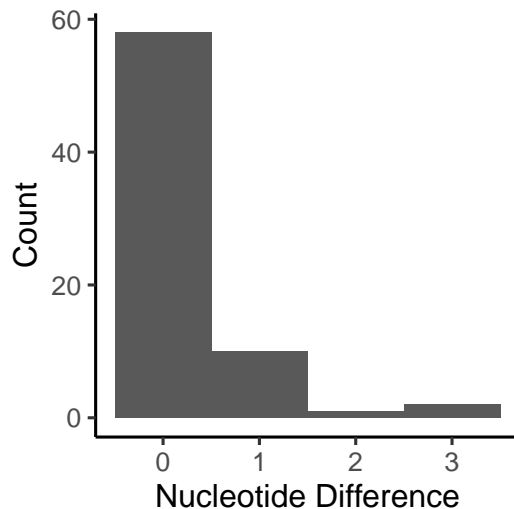
IGHV3-7*01

282 sequences assigned
199 (70.6%) exact matches, in which:
196 unique CDR3
7 unique J



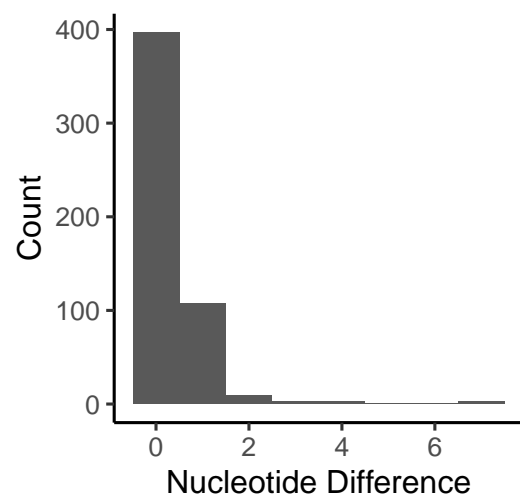
IGHV3-13*01

71 sequences assigned
58 (81.7%) exact matches, in which:
58 unique CDR3
6 unique J



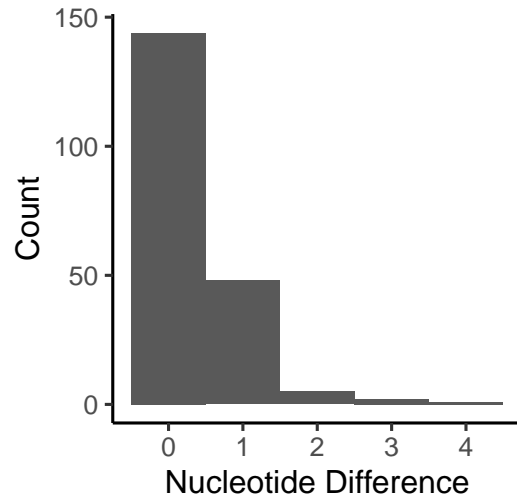
IGHV3-21*01

524 sequences assigned
397 (75.8%) exact matches, in which:
389 unique CDR3
7 unique J



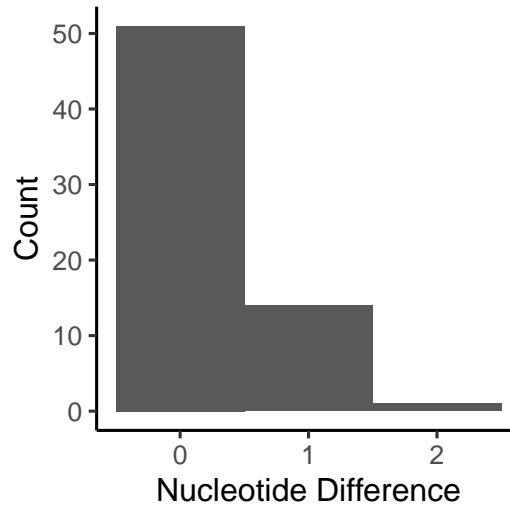
IGHV3-30-3*01

200 sequences assigned
144 (72%) exact matches, in which:
139 unique CDR3
6 unique J



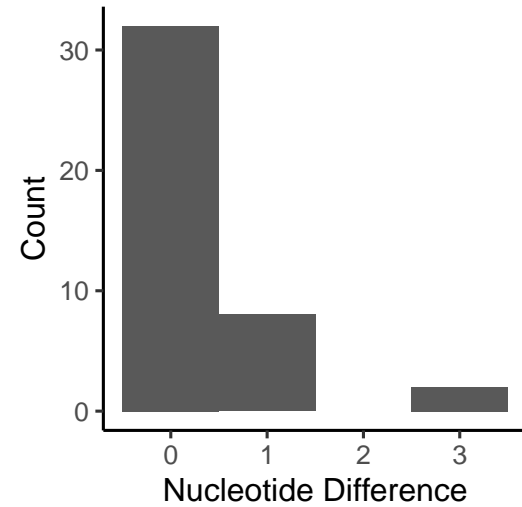
IGHV3-48*01

66 sequences assigned
51 (77.3%) exact matches, in which:
51 unique CDR3
5 unique J



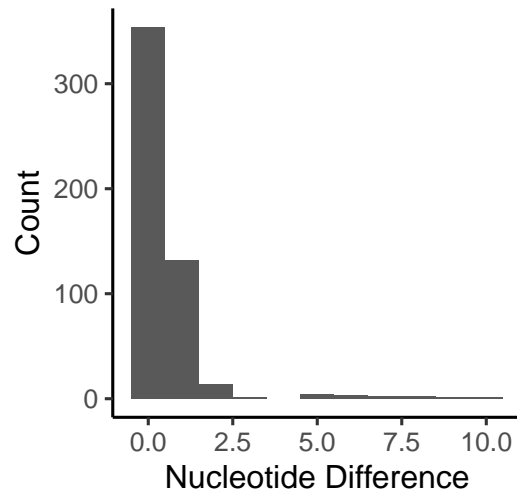
IGHV3-49*05

42 sequences assigned
32 (76.2%) exact matches, in which:
32 unique CDR3
5 unique J



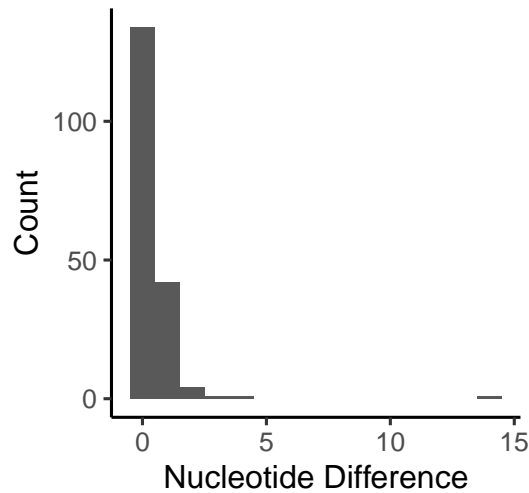
IGHV3-33*01

514 sequences assigned
354 (68.9%) exact matches, in which:
348 unique CDR3
7 unique J



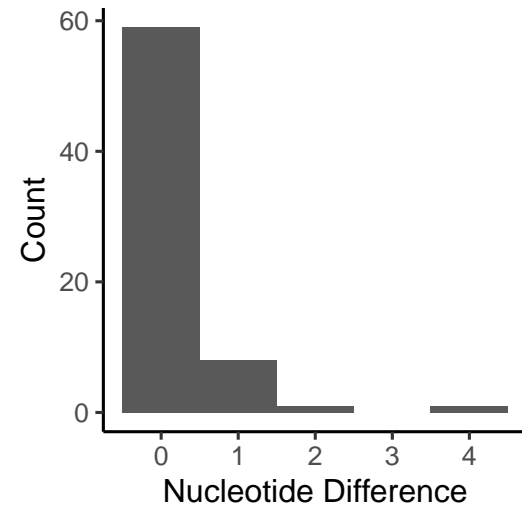
IGHV3-48*02

183 sequences assigned
134 (73.2%) exact matches, in which:
131 unique CDR3
6 unique J



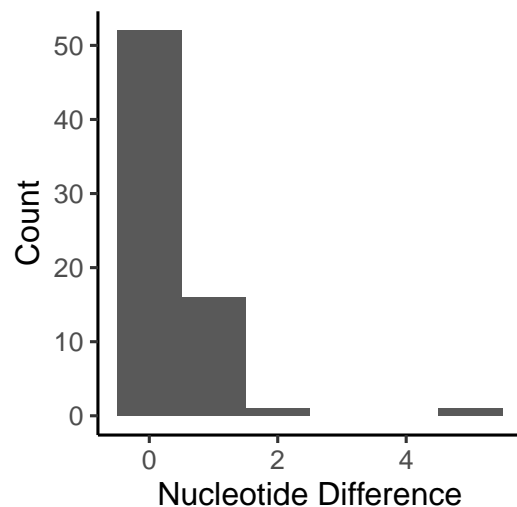
IGHV3-53*02

69 sequences assigned
59 (85.5%) exact matches, in which:
58 unique CDR3
6 unique J



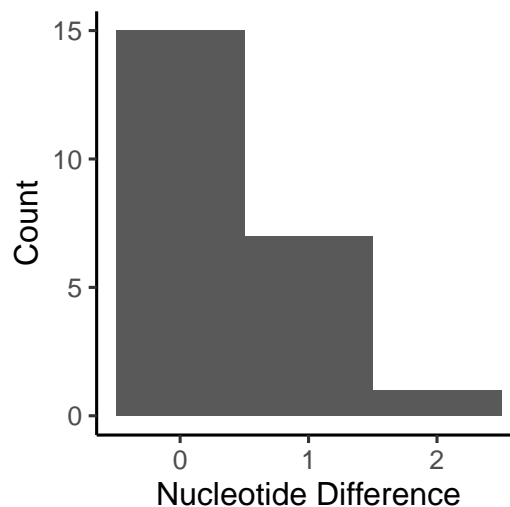
IGHV3-43*01

70 sequences assigned
52 (74.3%) exact matches, in which:
52 unique CDR3
5 unique J



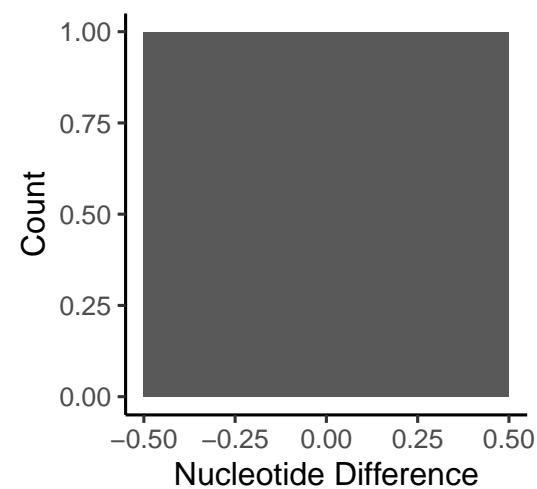
IGHV3-49*03

23 sequences assigned
15 (65.2%) exact matches, in which:
14 unique CDR3
5 unique J



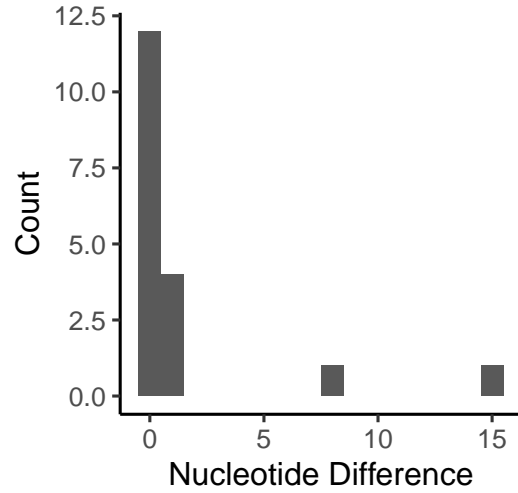
IGHV3-64*02

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



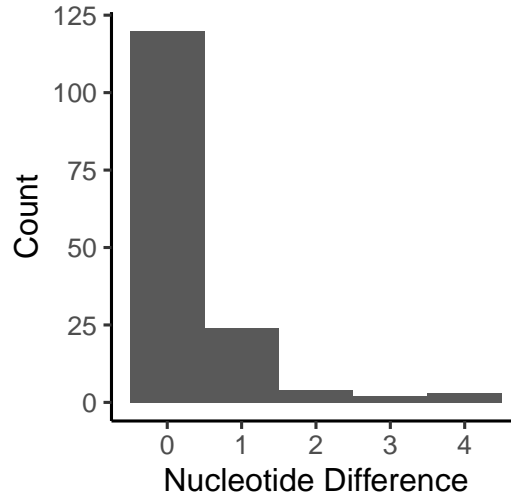
IGHV3-72*01

18 sequences assigned
12 (66.7%) exact matches, in which:
11 unique CDR3
3 unique J



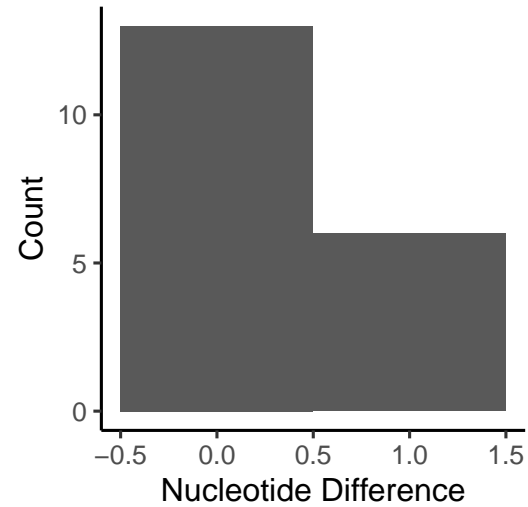
IGHV4-4*07

154 sequences assigned
120 (77.9%) exact matches, in which:
118 unique CDR3
7 unique J



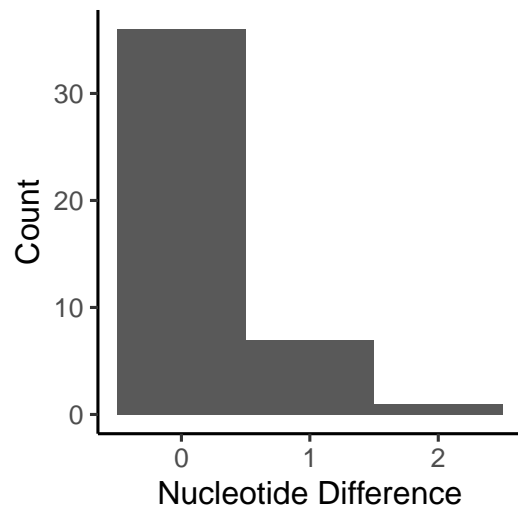
IGHV4-30-2*01

19 sequences assigned
13 (68.4%) exact matches, in which:
13 unique CDR3
4 unique J



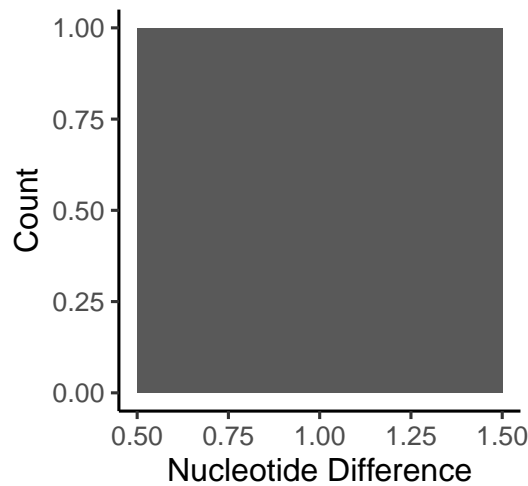
IGHV3-73*02

44 sequences assigned
36 (81.8%) exact matches, in which:
35 unique CDR3
5 unique J



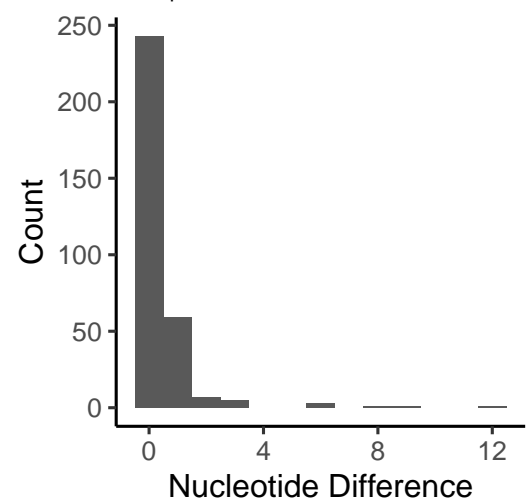
IGHV4-28*04

1 sequences assigned
No exact matches.



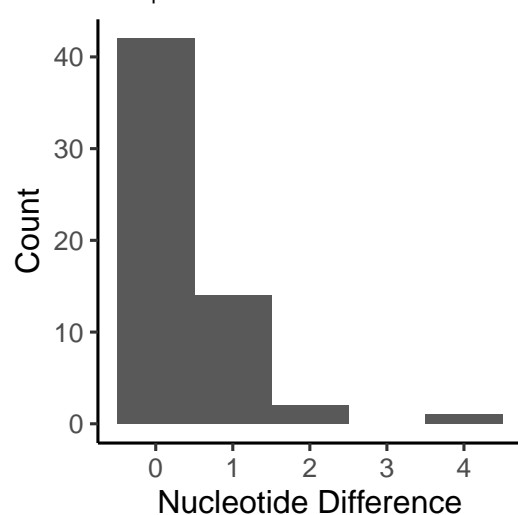
IGHV4-31*03

320 sequences assigned
243 (75.9%) exact matches, in which:
238 unique CDR3
7 unique J



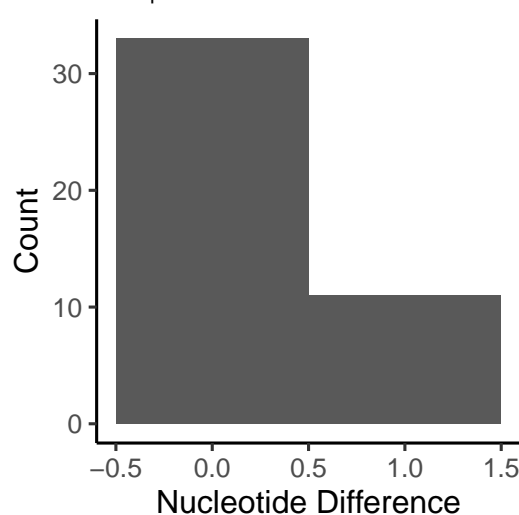
IGHV3-74*01

59 sequences assigned
42 (71.2%) exact matches, in which:
40 unique CDR3
5 unique J



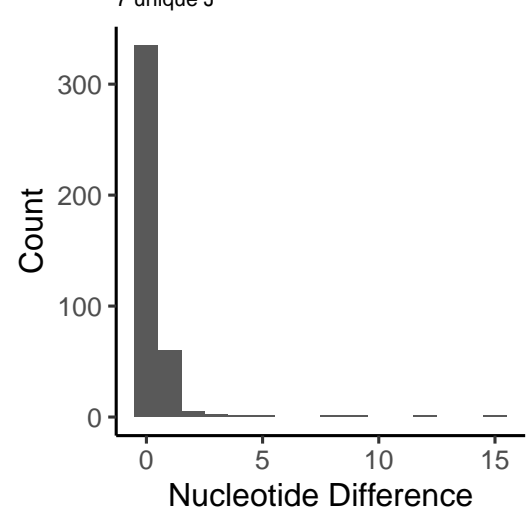
IGHV4-30-4*01

45 sequences assigned
33 (73.3%) exact matches, in which:
33 unique CDR3
5 unique J



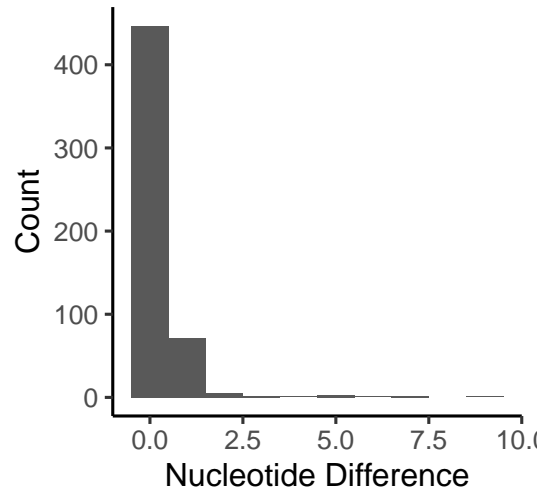
IGHV4-34*01

409 sequences assigned
335 (81.9%) exact matches, in which:
330 unique CDR3
7 unique J



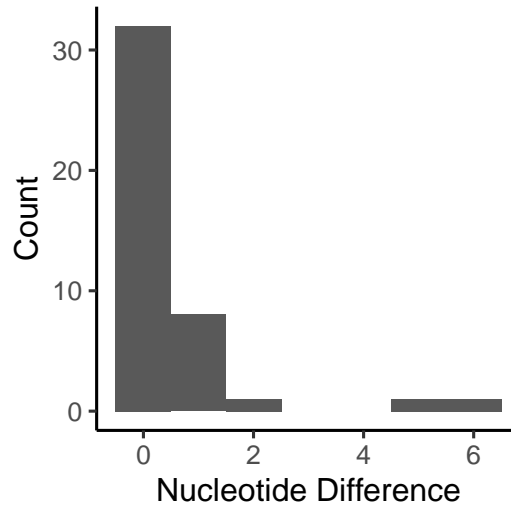
IGHV4-39*01

534 sequences assigned
447 (83.7%) exact matches, in which:
440 unique CDR3
7 unique J



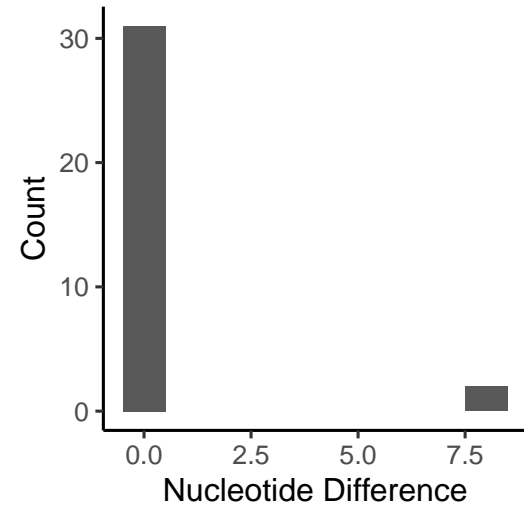
IGHV4-61*01

44 sequences assigned
32 (72.7%) exact matches, in which:
32 unique CDR3
5 unique J



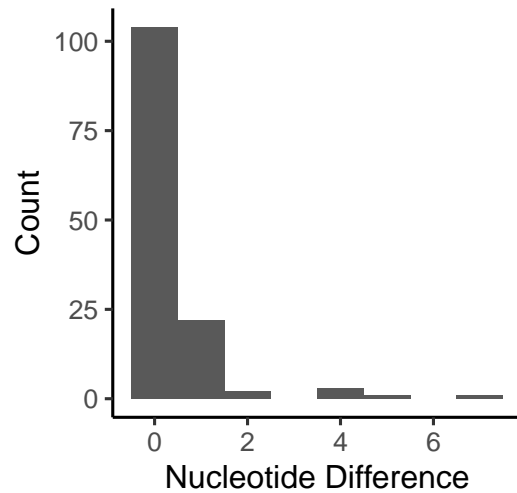
IGHV5-51*03

33 sequences assigned
31 (93.9%) exact matches, in which:
31 unique CDR3
6 unique J



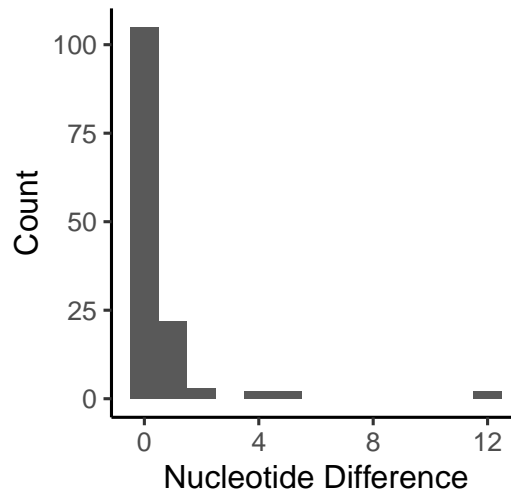
IGHV4-59*01

133 sequences assigned
104 (78.2%) exact matches, in which:
103 unique CDR3
5 unique J



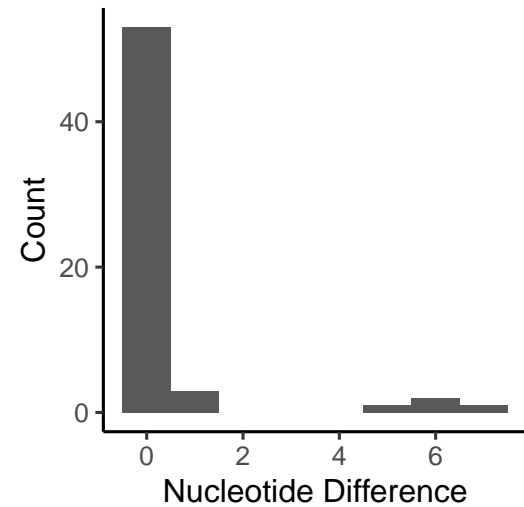
IGHV4-61*02_A234G

136 sequences assigned
105 (77.2%) exact matches, in which:
105 unique CDR3
6 unique J



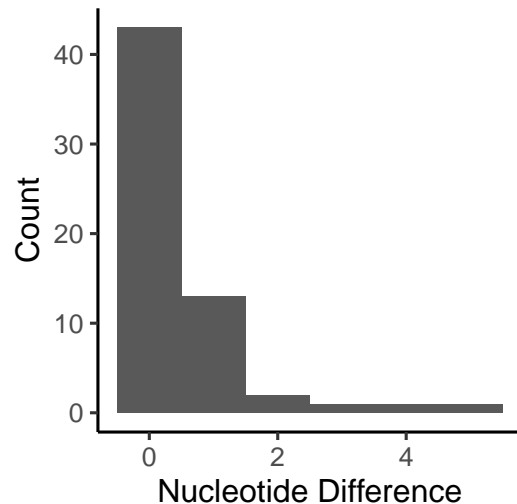
IGHV6-1*01

60 sequences assigned
53 (88.3%) exact matches, in which:
52 unique CDR3
6 unique J



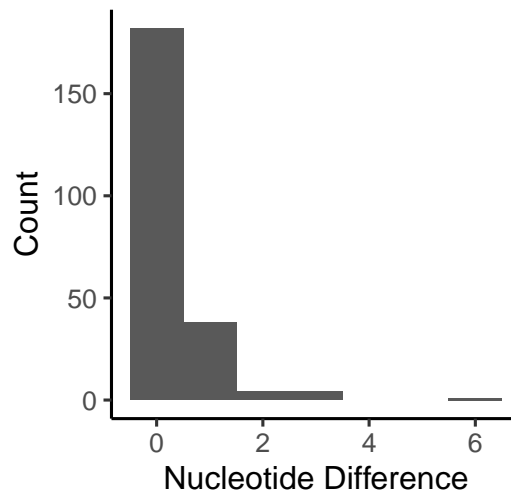
IGHV4-59*01_G267A

61 sequences assigned
43 (70.5%) exact matches, in which:
43 unique CDR3
5 unique J

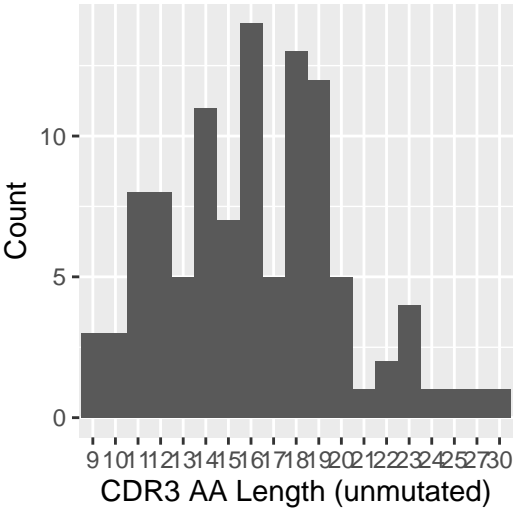


IGHV5-51*01

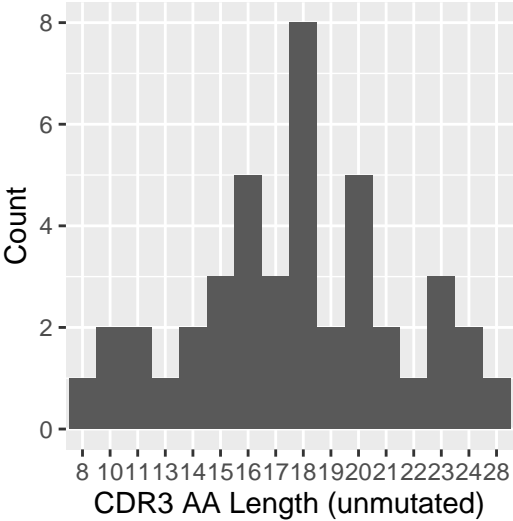
229 sequences assigned
182 (79.5%) exact matches, in which:
182 unique CDR3
6 unique J



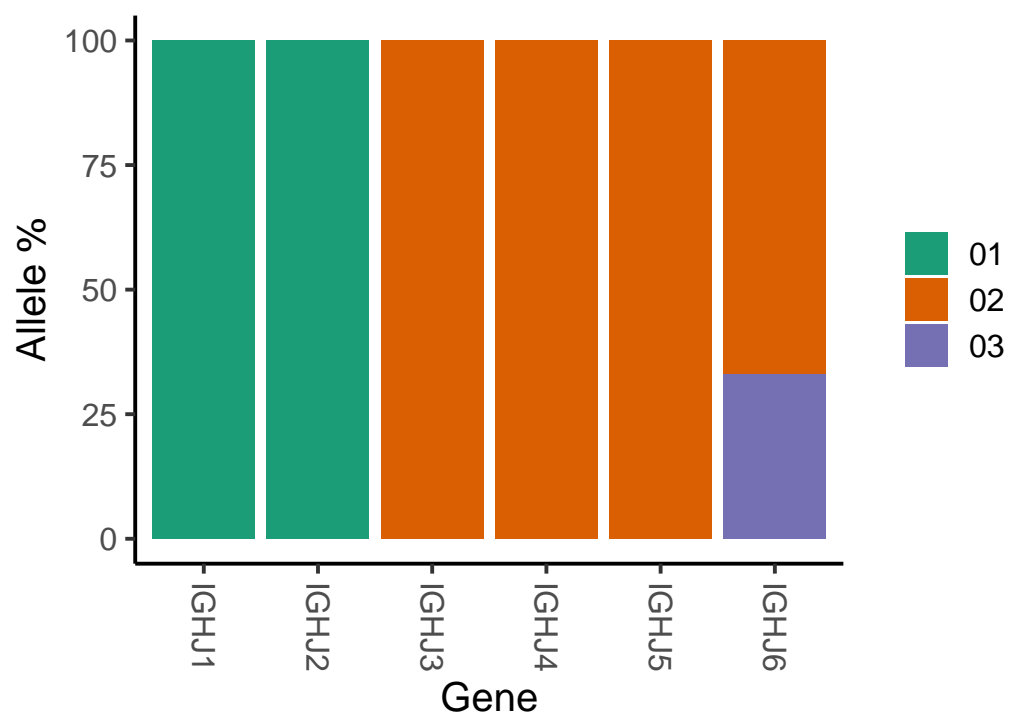
IGHV4-61*02_A234G



IGHV4-59*01_G267A



Allele Usage



Sequence Count by IGHJ6 allele usage

