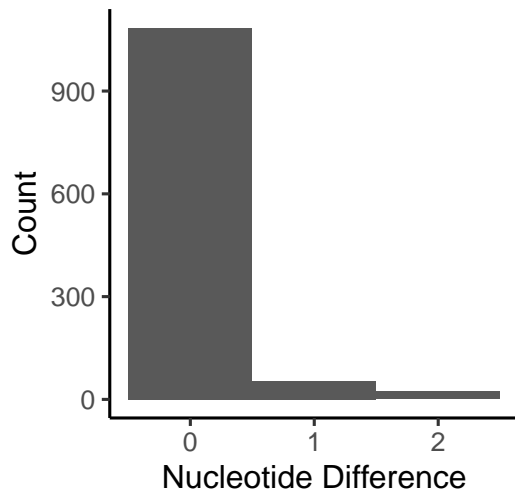


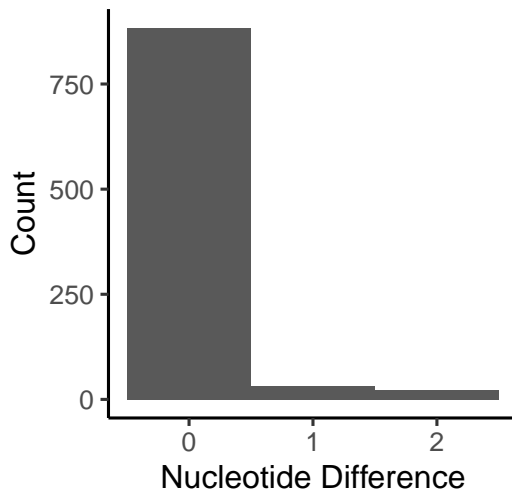
IGHV1–2*02

1161 sequences assigned
1085 (93.5%) exact matches, in which:
1082 unique CDR3
7 unique J



IGHV1–18*01

939 sequences assigned
884 (94.1%) exact matches, in which:
880 unique CDR3
7 unique J



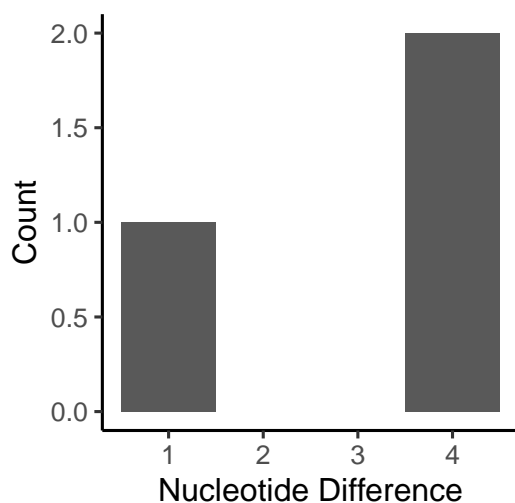
IGHV1–45*03

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



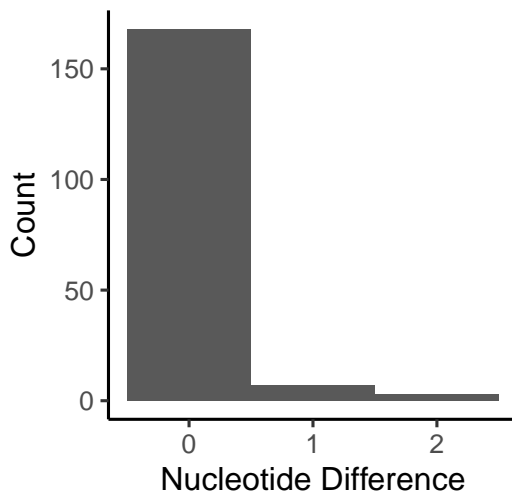
IGHV1–3*02

3 sequences assigned
No exact matches.



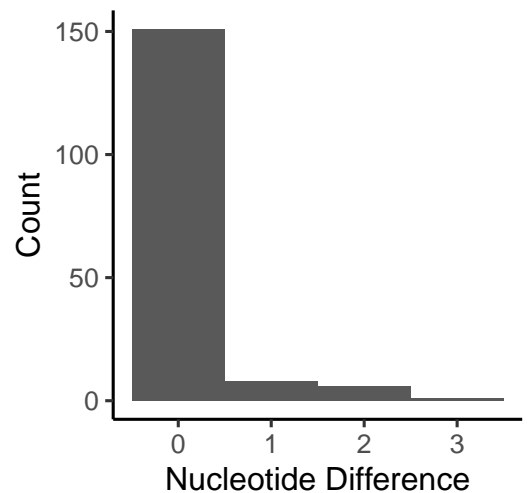
IGHV1–24*01

178 sequences assigned
168 (94.4%) exact matches, in which:
168 unique CDR3
7 unique J



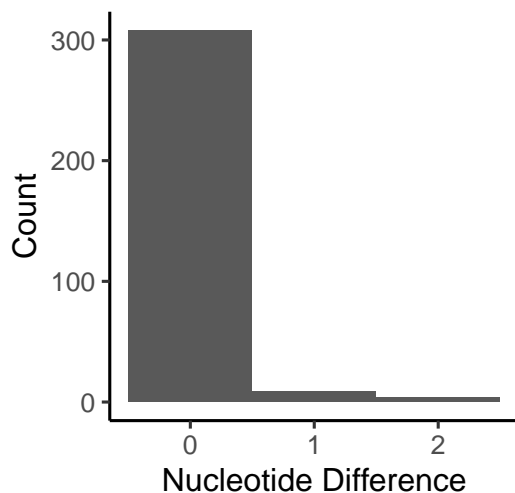
IGHV1–46*01

166 sequences assigned
151 (91%) exact matches, in which:
151 unique CDR3
6 unique J



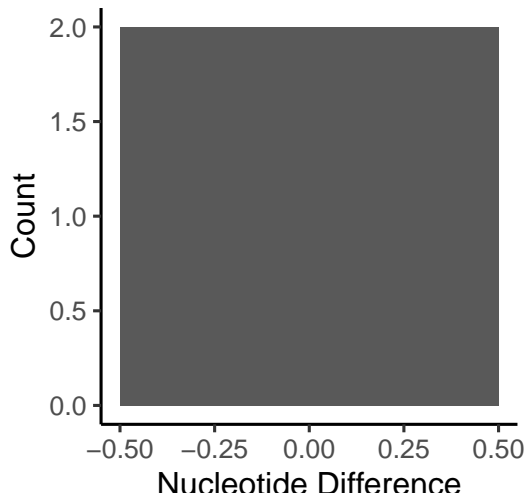
IGHV1–8*01

321 sequences assigned
308 (96%) exact matches, in which:
306 unique CDR3
6 unique J



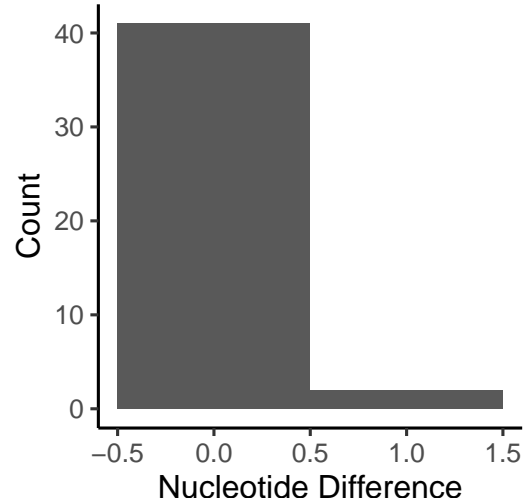
IGHV1–45*02

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



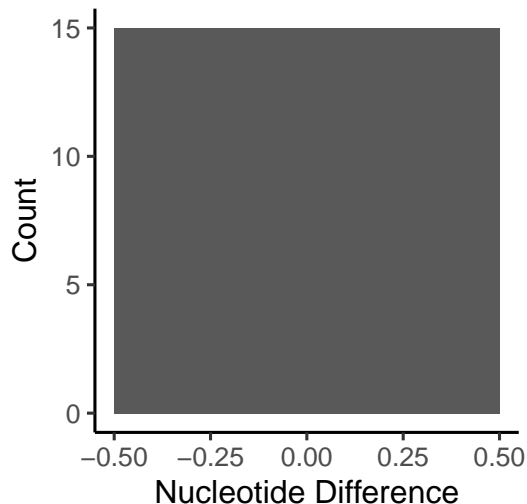
IGHV1–46*03

43 sequences assigned
41 (95.3%) exact matches, in which:
40 unique CDR3
6 unique J



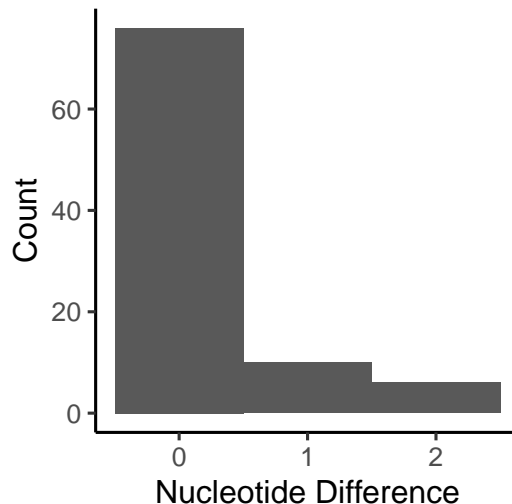
IGHV1–58*02

15 sequences assigned
15 (100%) exact matches, in which:
15 unique CDR3
3 unique J



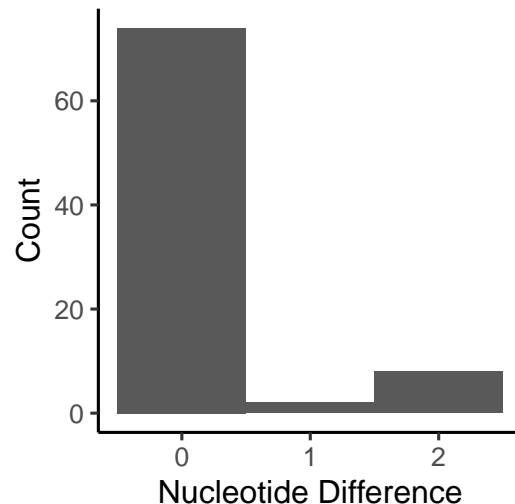
IGHV2–5*01

92 sequences assigned
76 (82.6%) exact matches, in which:
75 unique CDR3
6 unique J



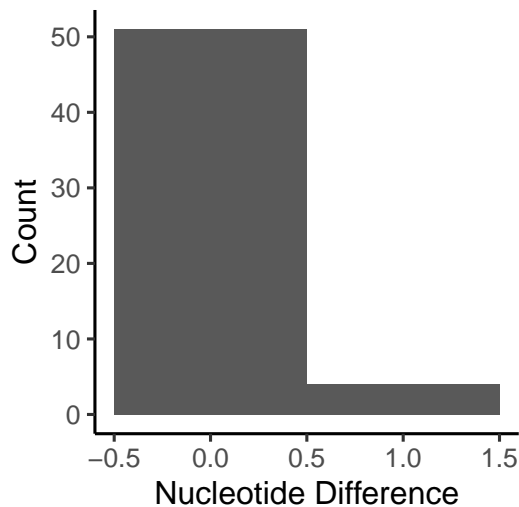
IGHV2–70*01

84 sequences assigned
74 (88.1%) exact matches, in which:
74 unique CDR3
6 unique J



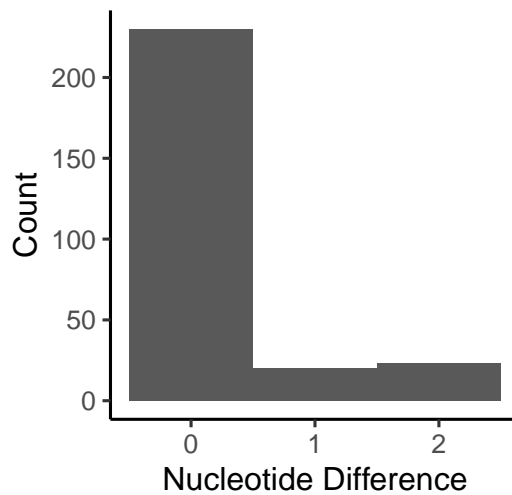
IGHV1–58*01_03

55 sequences assigned
51 (92.7%) exact matches, in which:
51 unique CDR3
5 unique J



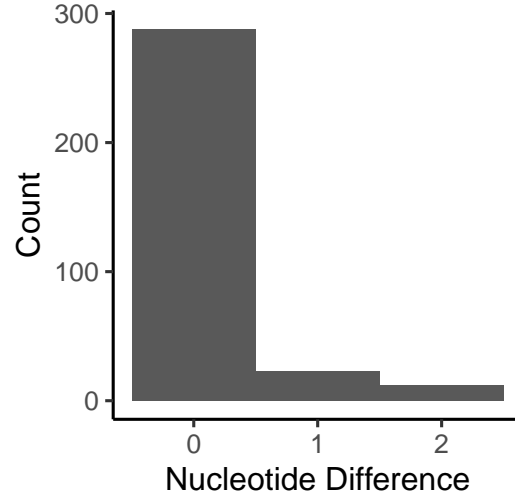
IGHV2–5*02

273 sequences assigned
230 (84.2%) exact matches, in which:
227 unique CDR3
6 unique J



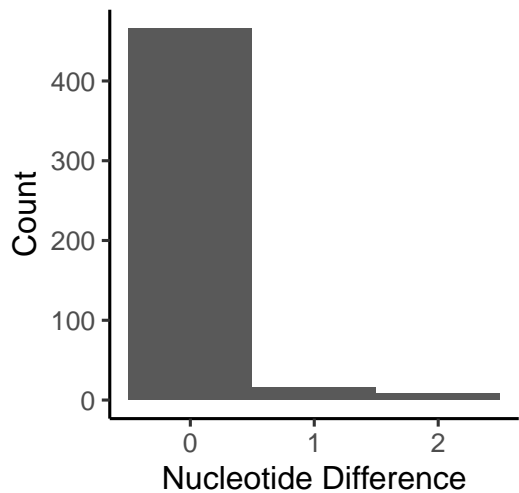
IGHV3–7*01

323 sequences assigned
288 (89.2%) exact matches, in which:
269 unique CDR3
6 unique J



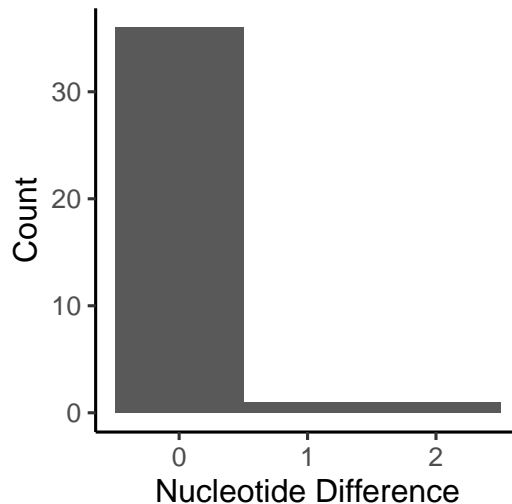
IGHV1–69*06_14

490 sequences assigned
466 (95.1%) exact matches, in which:
466 unique CDR3
7 unique J



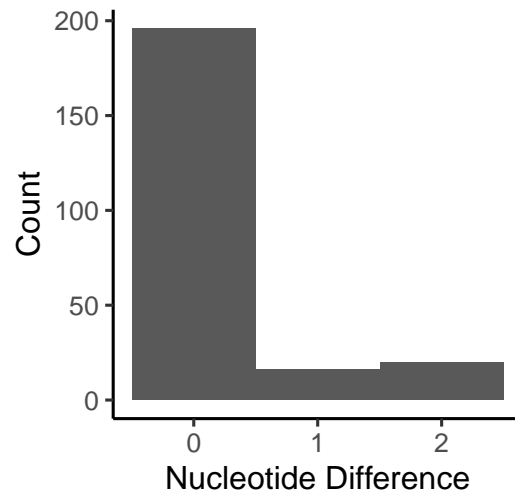
IGHV2–26*01

38 sequences assigned
36 (94.7%) exact matches, in which:
36 unique CDR3
6 unique J



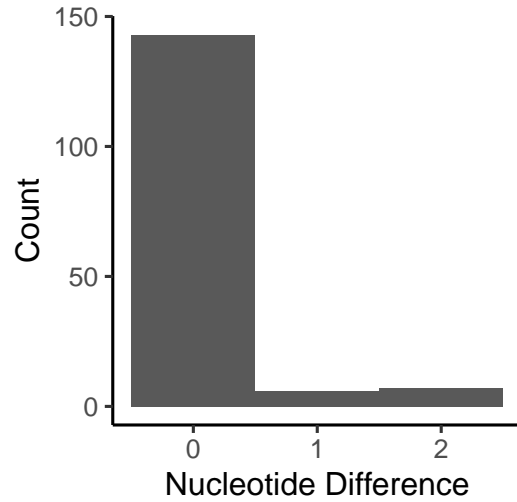
IGHV3–7*04

232 sequences assigned
196 (84.5%) exact matches, in which:
181 unique CDR3
6 unique J



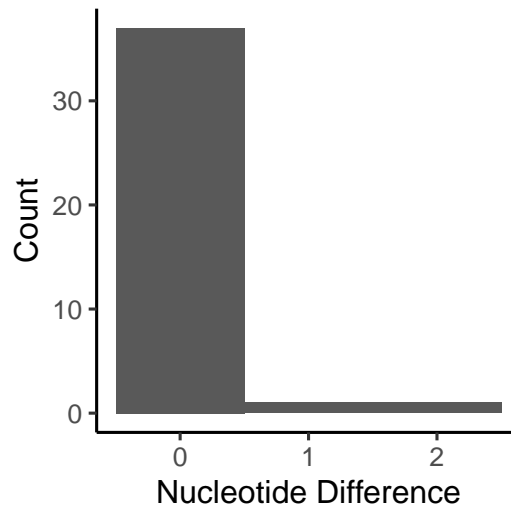
IGHV3-9*01

156 sequences assigned
143 (91.7%) exact matches, in which:
140 unique CDR3
6 unique J



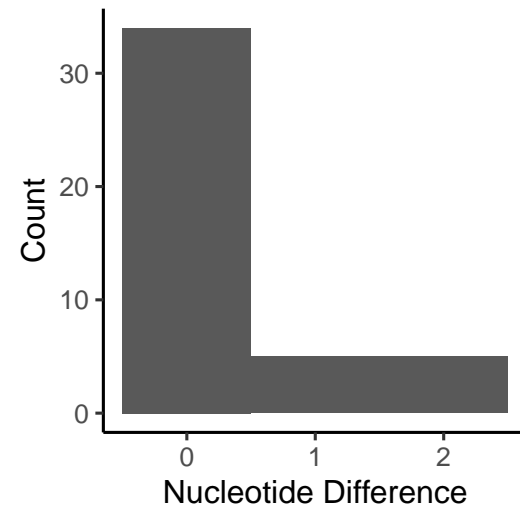
IGHV3-13*01

39 sequences assigned
37 (94.9%) exact matches, in which:
37 unique CDR3
5 unique J



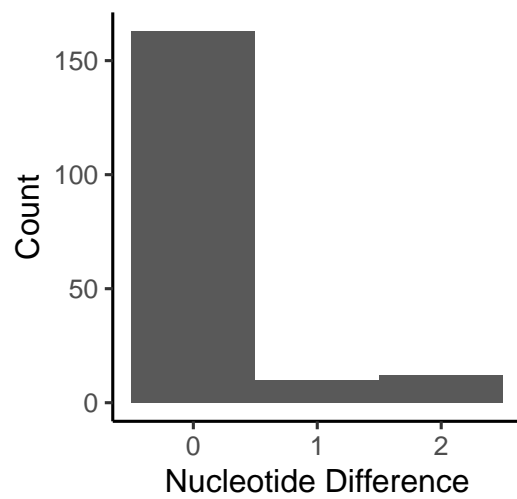
IGHV3-20*01_02

44 sequences assigned
34 (77.3%) exact matches, in which:
33 unique CDR3
6 unique J



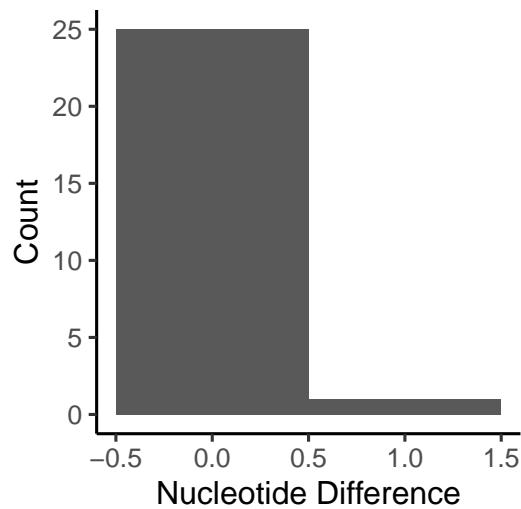
IGHV3-11*01

185 sequences assigned
163 (88.1%) exact matches, in which:
158 unique CDR3
6 unique J



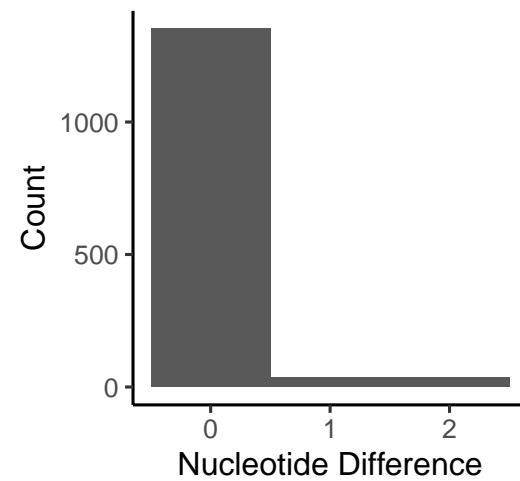
IGHV3-13*05

26 sequences assigned
25 (96.2%) exact matches, in which:
24 unique CDR3
4 unique J



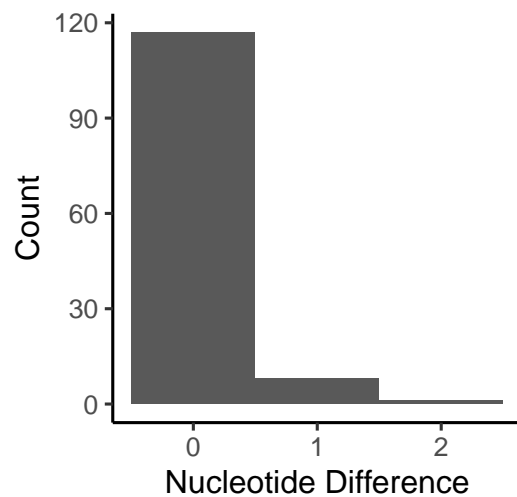
IGHV3-21*01_02

1423 sequences assigned
1352 (95%) exact matches, in which:
1252 unique CDR3
7 unique J



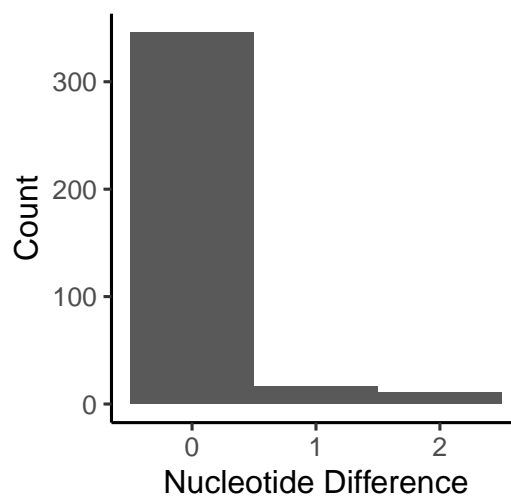
IGHV3-11*06

126 sequences assigned
117 (92.9%) exact matches, in which:
112 unique CDR3
6 unique J



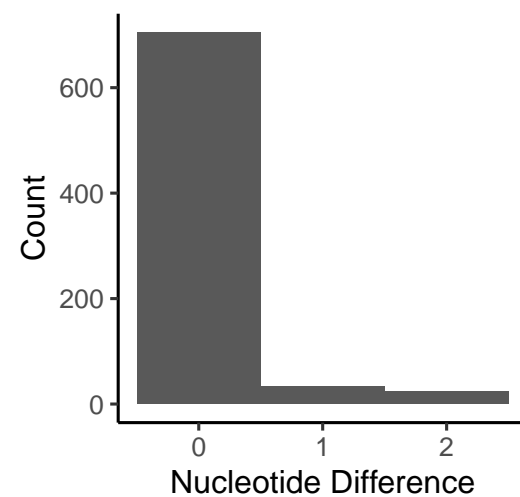
IGHV3-15*01_02

373 sequences assigned
346 (92.8%) exact matches, in which:
330 unique CDR3
7 unique J



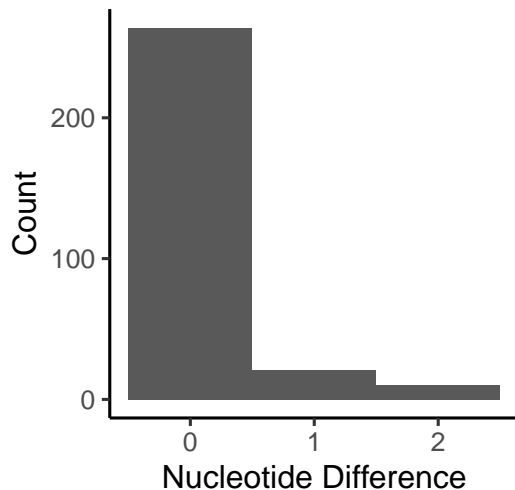
IGHV3-30-3*01

762 sequences assigned
705 (92.5%) exact matches, in which:
686 unique CDR3
7 unique J



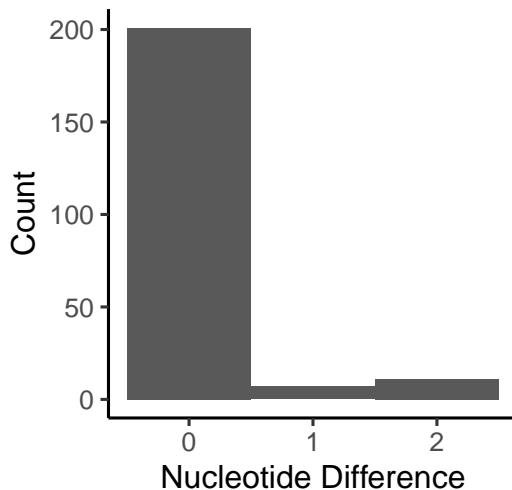
IGHV3–33*01

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



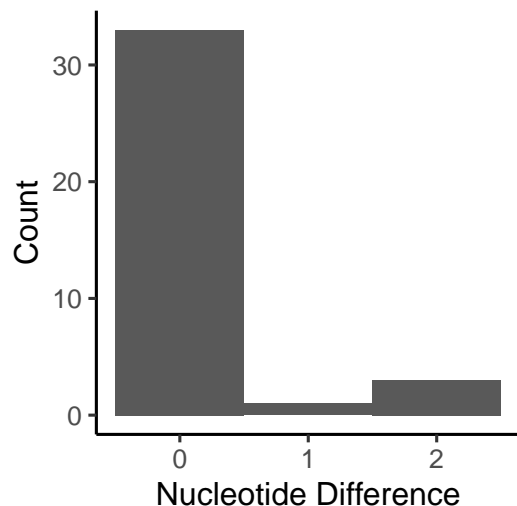
IGHV3–48*01

219 sequences assigned
201 (91.8%) exact matches, in which:
183 unique CDR3
6 unique J



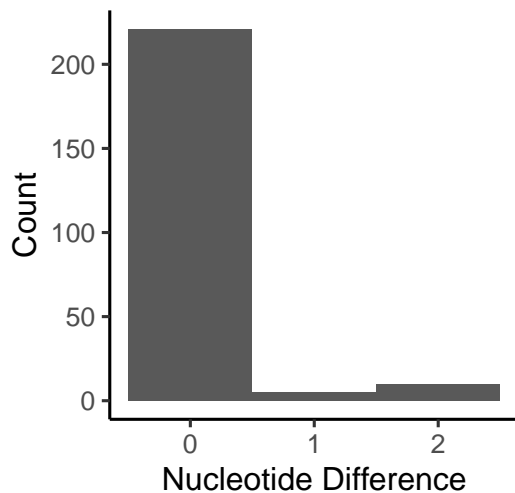
IGHV3–49*03_05

37 sequences assigned
33 (89.2%) exact matches, in which:
31 unique CDR3
5 unique J



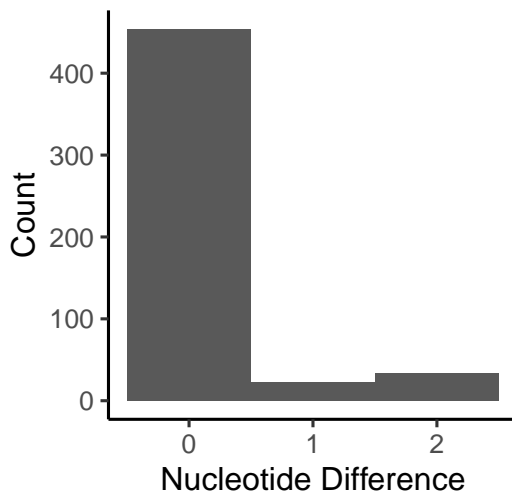
IGHV3–43*02

236 sequences assigned
221 (93.6%) exact matches, in which:
205 unique CDR3
6 unique J



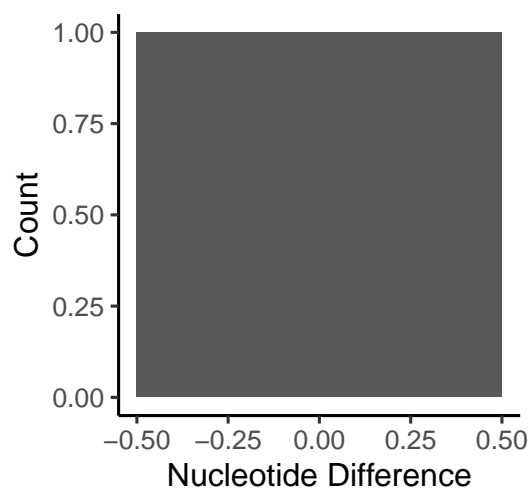
IGHV3–48*03

510 sequences assigned
454 (89%) exact matches, in which:
435 unique CDR3
6 unique J



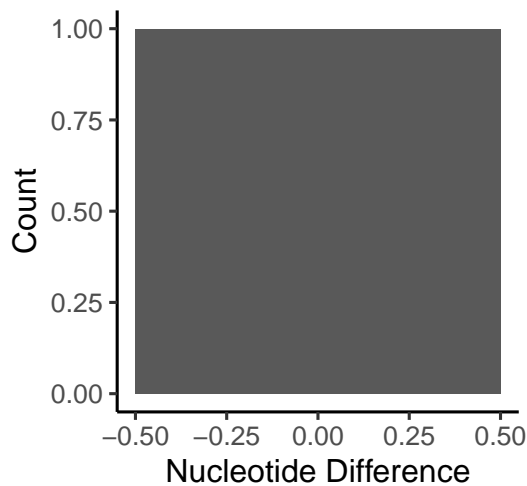
IGHV3–52*01_03

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



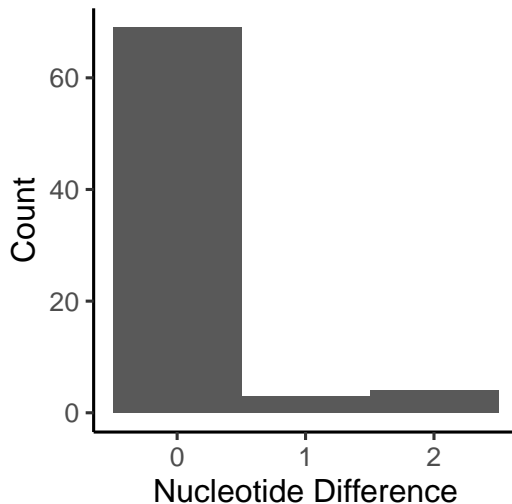
IGHV3–47*02

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



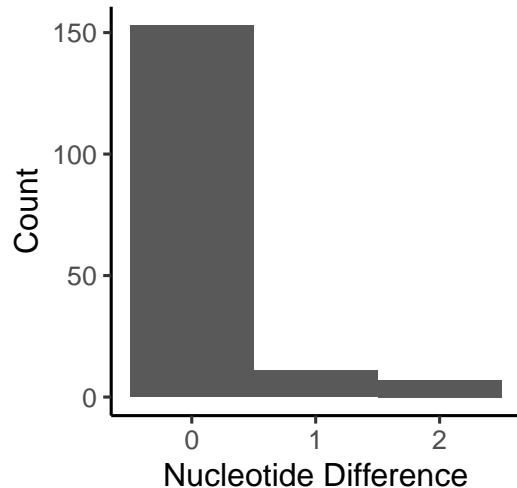
IGHV3–49*04

76 sequences assigned
69 (90.8%) exact matches, in which:
69 unique CDR3
5 unique J



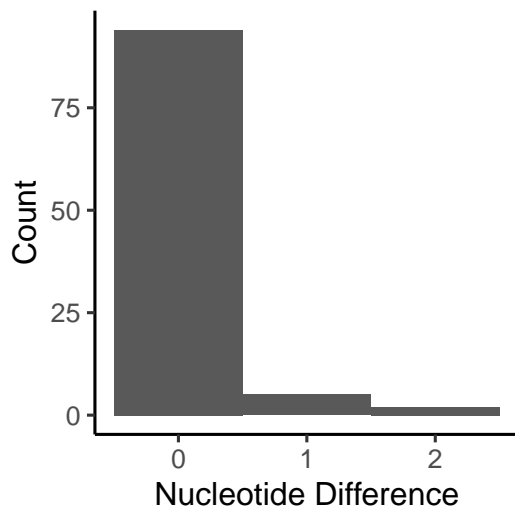
IGHV3–53*04

171 sequences assigned
153 (89.5%) exact matches, in which:
144 unique CDR3
7 unique J



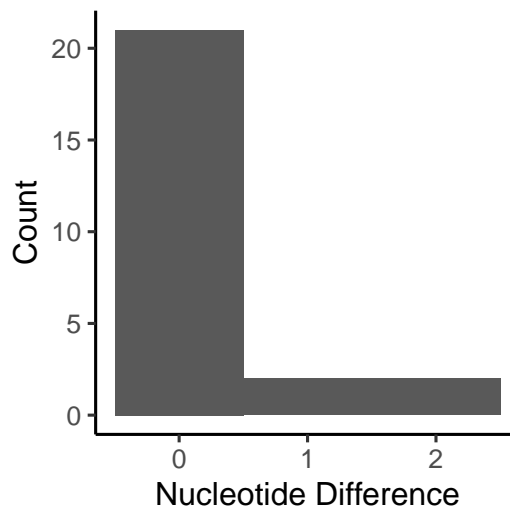
IGHV3-53*01_02

101 sequences assigned
94 (93.1%) exact matches, in which:
86 unique CDR3
5 unique J



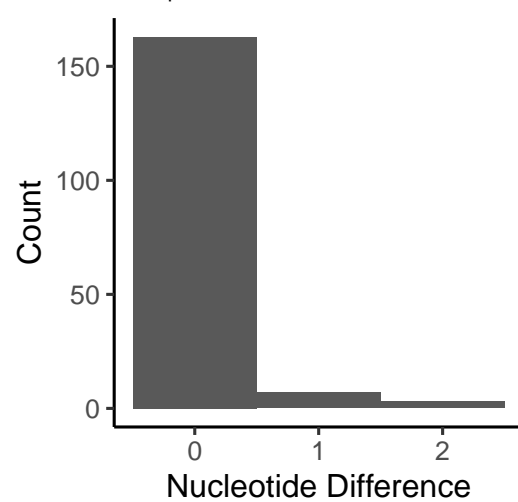
IGHV3-72*01

25 sequences assigned
21 (84%) exact matches, in which:
21 unique CDR3
6 unique J



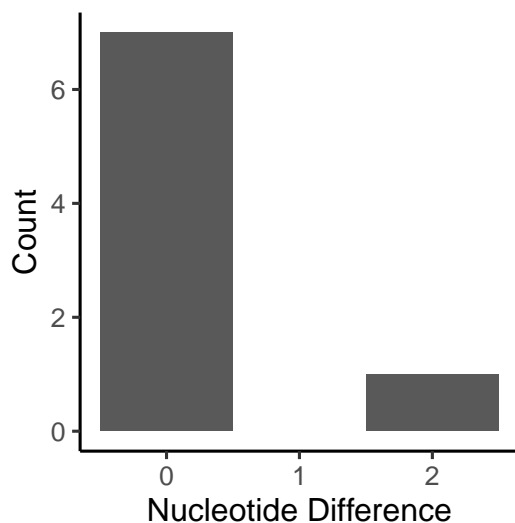
IGHV3-64D*06

173 sequences assigned
163 (94.2%) exact matches, in which:
153 unique CDR3
6 unique J



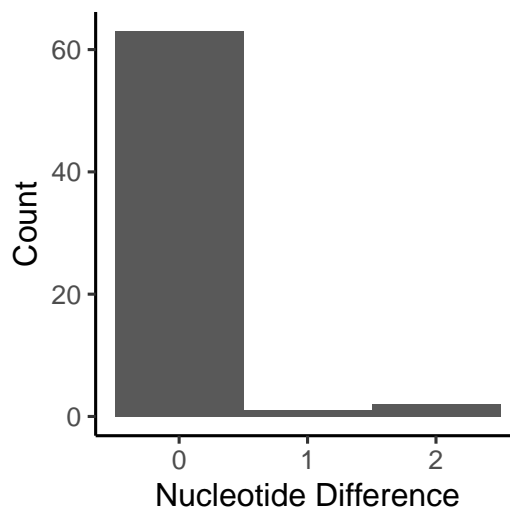
IGHV3-64*02_07

8 sequences assigned
7 (87.5%) exact matches, in which:
7 unique CDR3
3 unique J



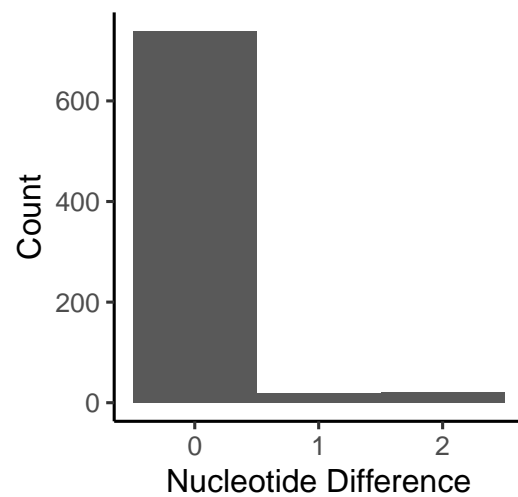
IGHV3-73*01_02

66 sequences assigned
63 (95.5%) exact matches, in which:
62 unique CDR3
6 unique J



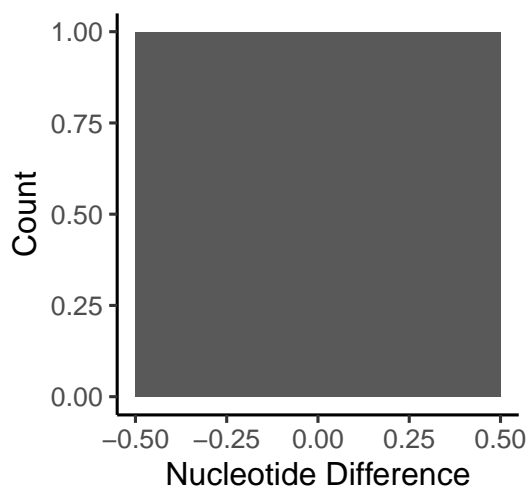
IGHV4-4*07

777 sequences assigned
739 (95.1%) exact matches, in which:
695 unique CDR3
7 unique J



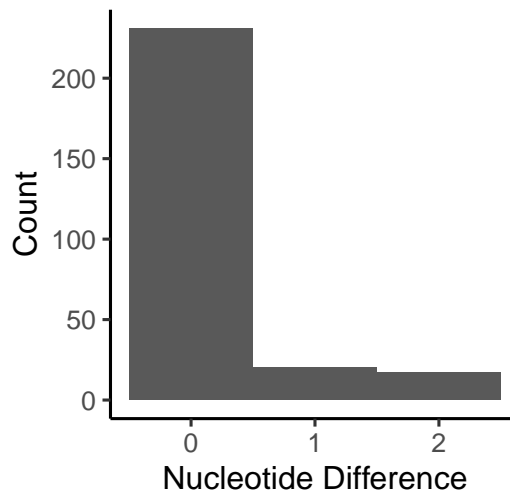
IGHV3-66*03

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



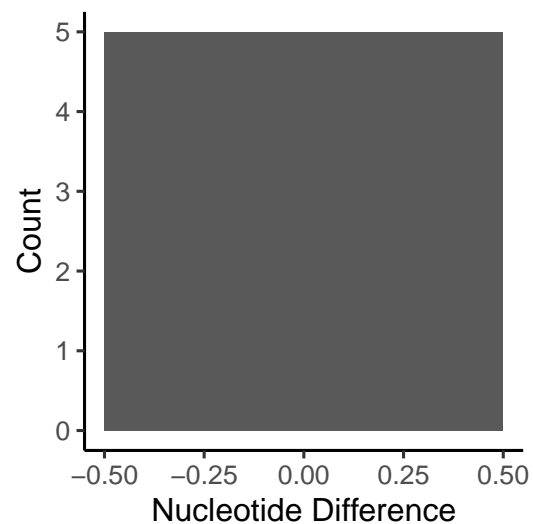
IGHV3-74*01_02

268 sequences assigned
231 (86.2%) exact matches, in which:
209 unique CDR3
7 unique J



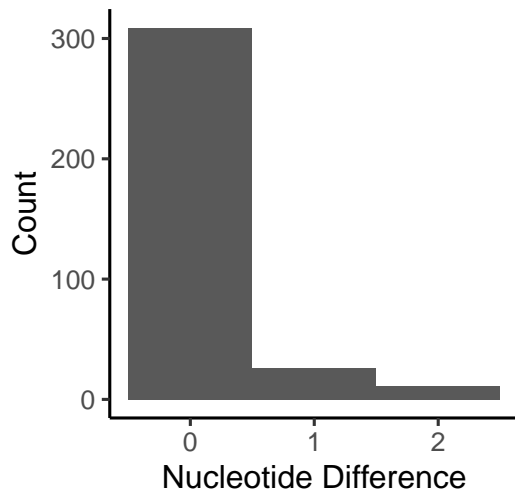
IGHV4-28*01_07

5 sequences assigned
5 (100%) exact matches, in which:
5 unique CDR3
3 unique J



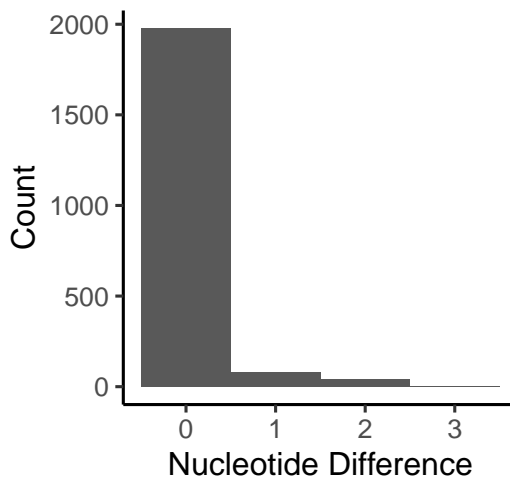
IGHV4-30-4*01

346 sequences assigned
309 (89.3%) exact matches, in which:
299 unique CDR3
7 unique J



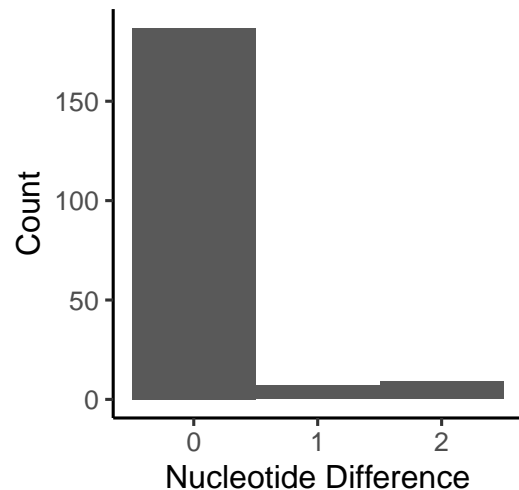
IGHV4-34*01_02

2095 sequences assigned
1977 (94.4%) exact matches, in which:
1826 unique CDR3
7 unique J



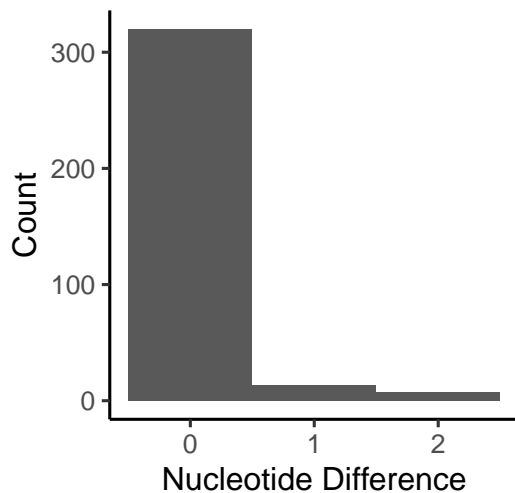
IGHV4-61*01

203 sequences assigned
187 (92.1%) exact matches, in which:
177 unique CDR3
6 unique J



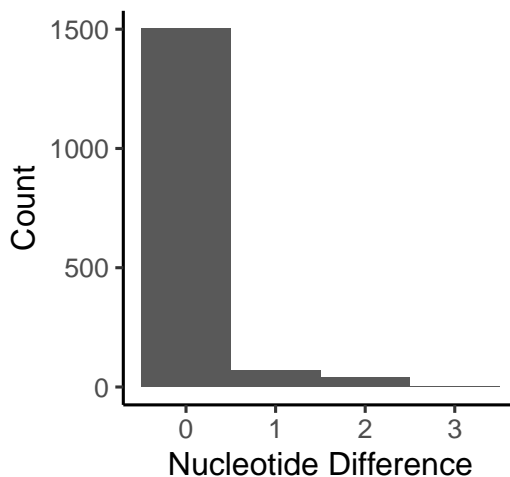
IGHV4-30-2*01

340 sequences assigned
320 (94.1%) exact matches, in which:
304 unique CDR3
7 unique J



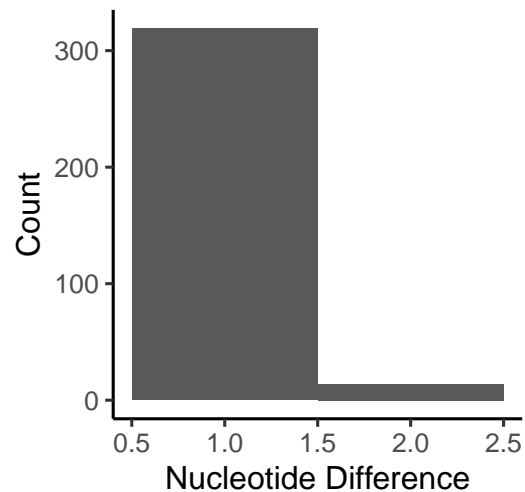
IGHV4-39*01_05

1616 sequences assigned
1502 (92.9%) exact matches, in which:
1427 unique CDR3
7 unique J



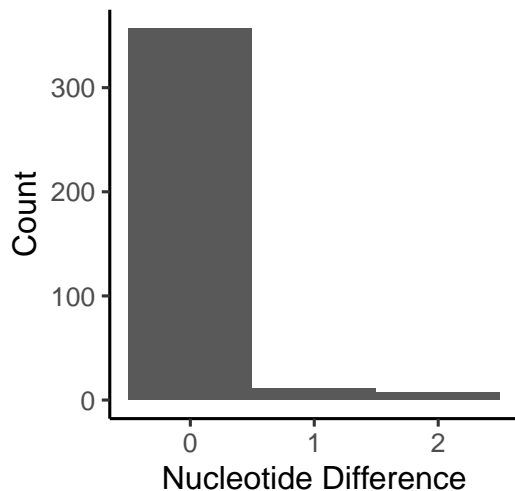
IGHV4-61*02

333 sequences assigned
No exact matches.



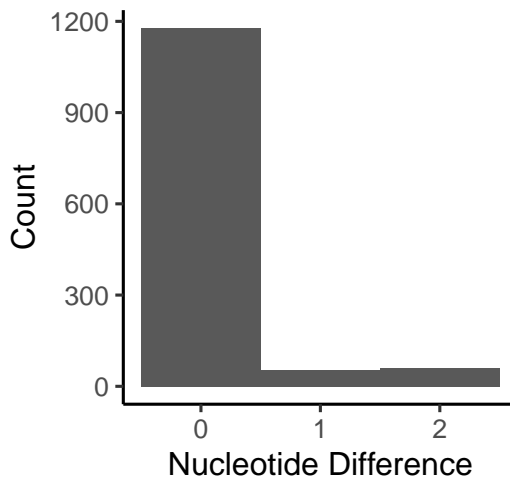
IGHV4-31*03_04

375 sequences assigned
357 (95.2%) exact matches, in which:
353 unique CDR3
7 unique J



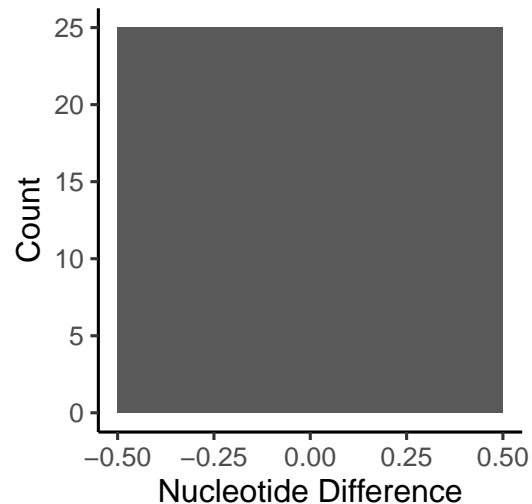
IGHV4-59*01_07

1291 sequences assigned
1178 (91.2%) exact matches, in which:
1127 unique CDR3
7 unique J



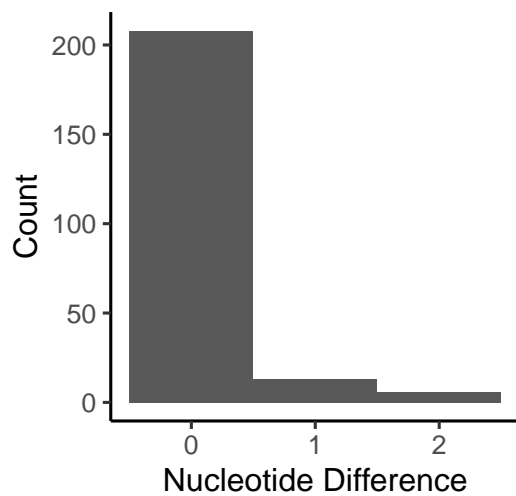
IGHV5-10-1*01_03

25 sequences assigned
25 (100%) exact matches, in which:
25 unique CDR3
4 unique J



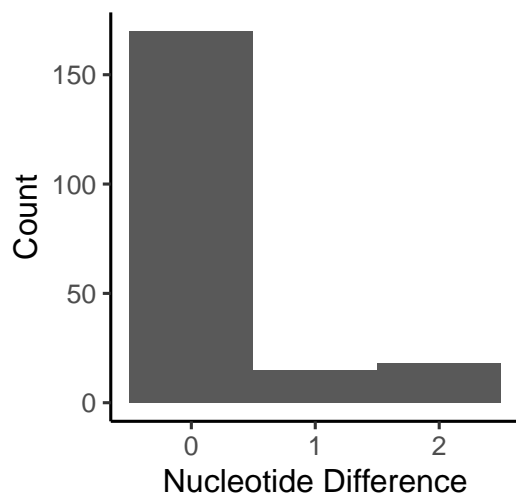
IGHV5–51*01_03

227 sequences assigned
208 (91.6%) exact matches, in which:
208 unique CDR3
7 unique J

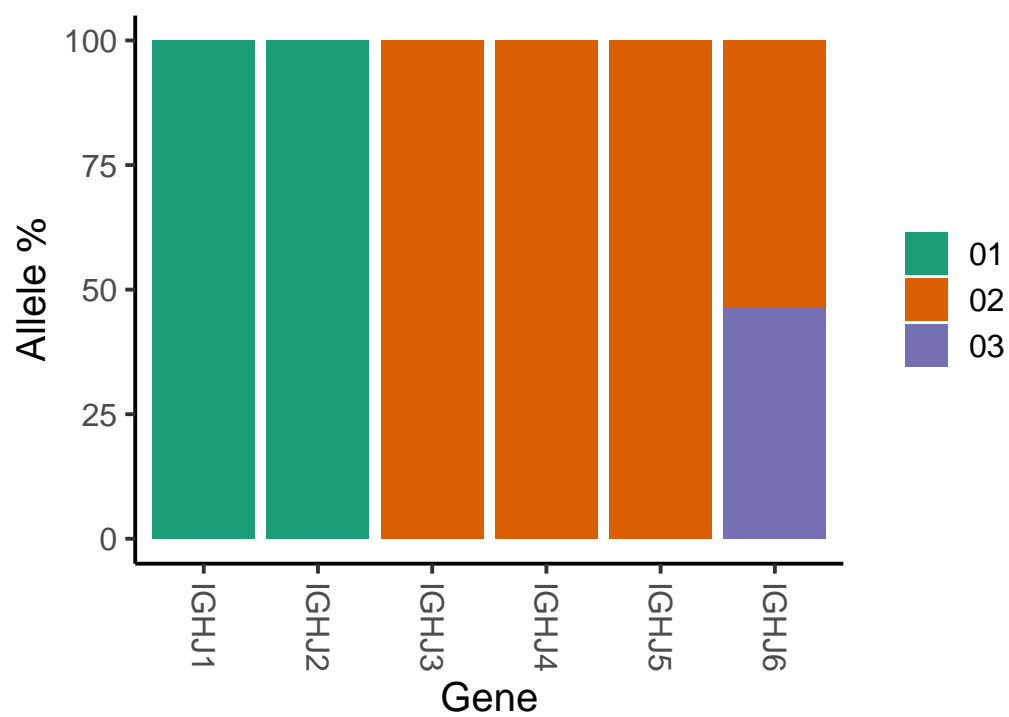


IGHV6–1*01_02

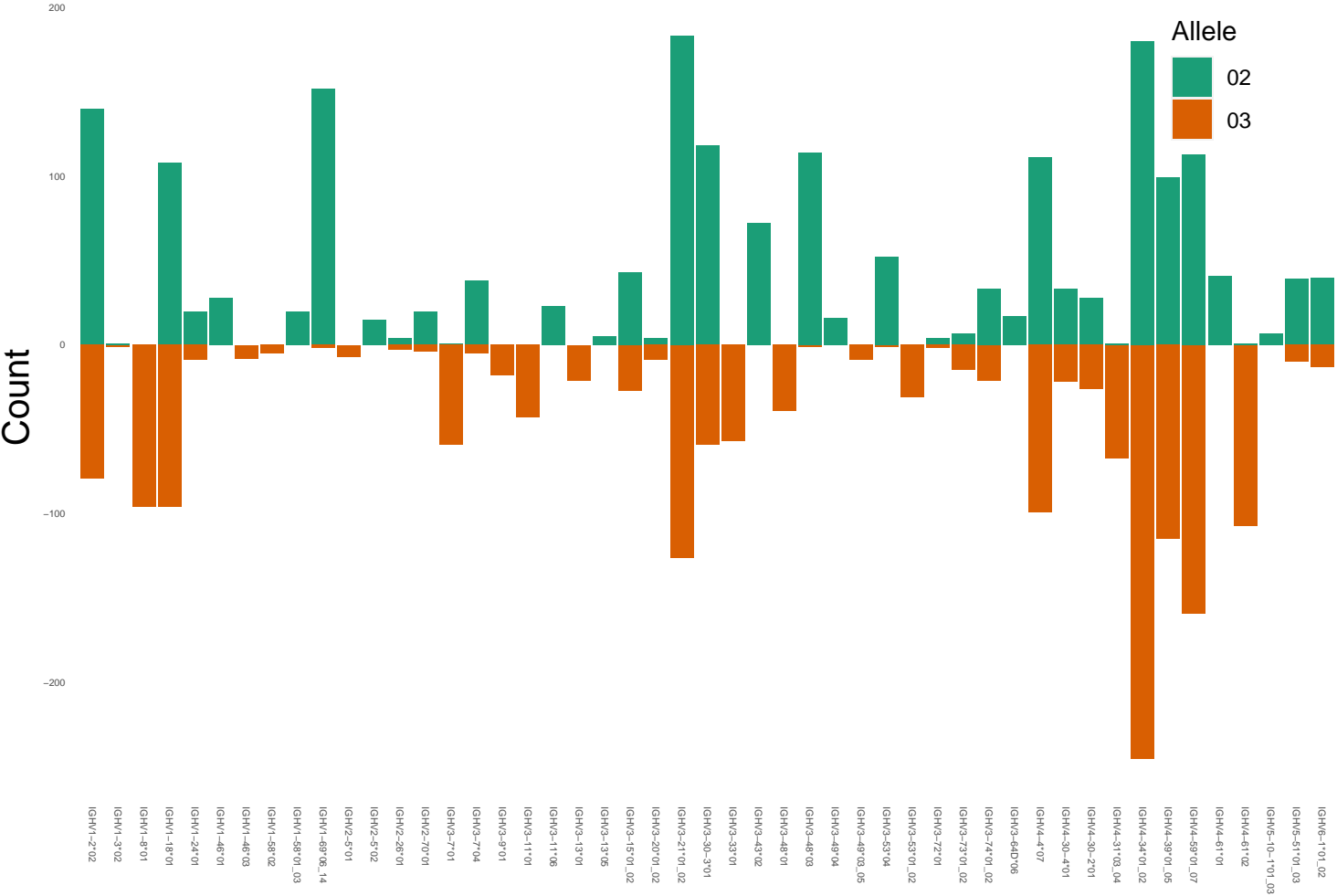
203 sequences assigned
170 (83.7%) exact matches, in which:
170 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Novel sequence(s) IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV4-59*02_G88A are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s) IGHV1-69*04_09_G112A IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV4-59*02_G88A are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV4-59*02_G88A are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s) IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.