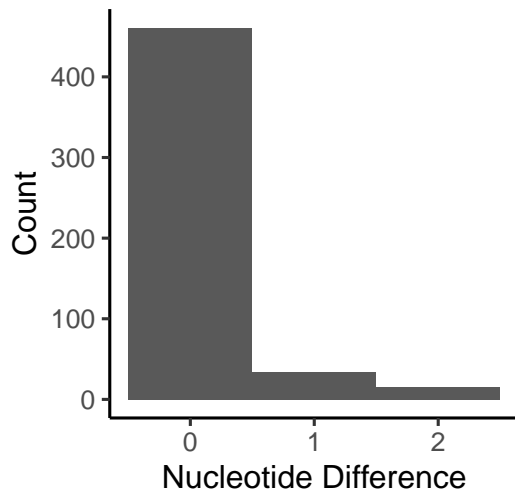


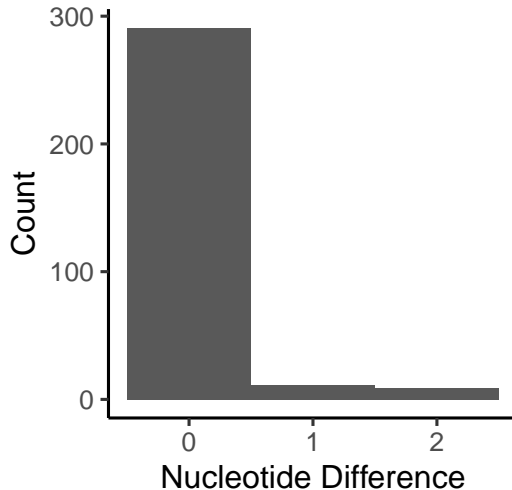
IGHV1–2*02

510 sequences assigned
461 (90.4%) exact matches, in which:
459 unique CDR3
6 unique J



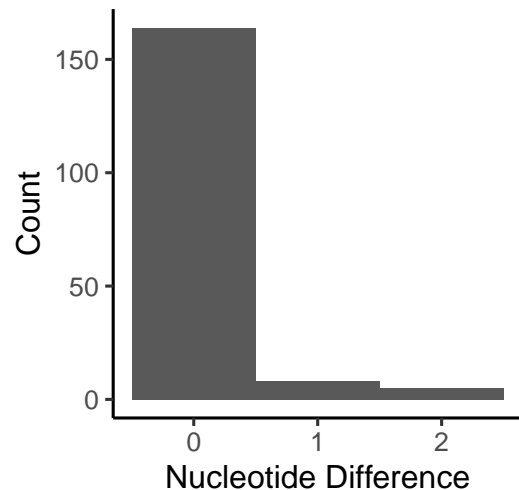
IGHV1–8*01

311 sequences assigned
291 (93.6%) exact matches, in which:
290 unique CDR3
6 unique J



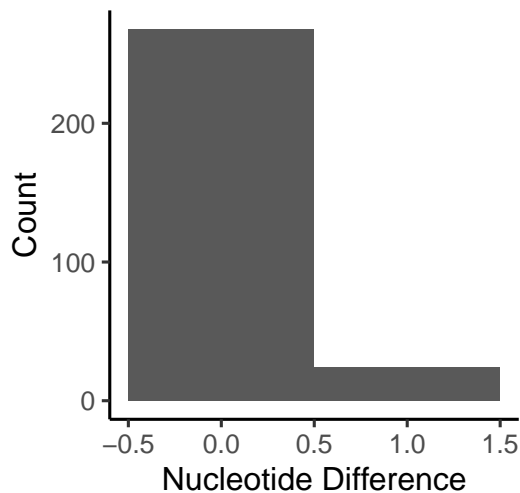
IGHV1–46*01

177 sequences assigned
164 (92.7%) exact matches, in which:
164 unique CDR3
5 unique J



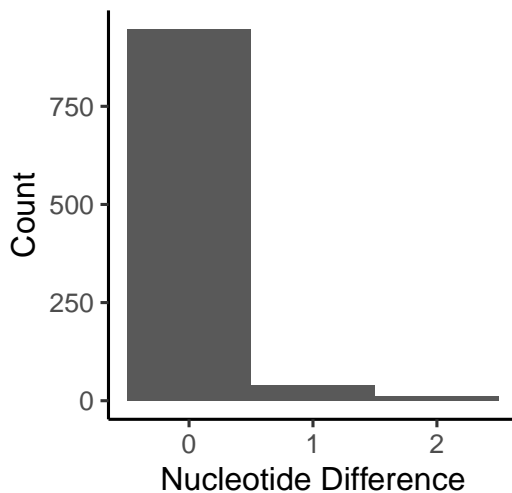
IGHV1–2*06

292 sequences assigned
268 (91.8%) exact matches, in which:
264 unique CDR3
6 unique J



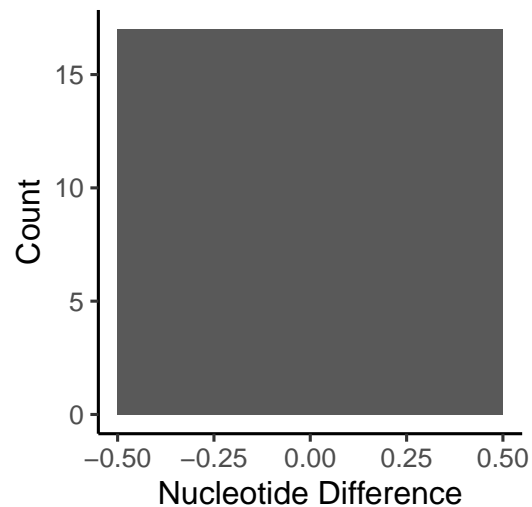
IGHV1–18*01

997 sequences assigned
947 (95%) exact matches, in which:
947 unique CDR3
6 unique J



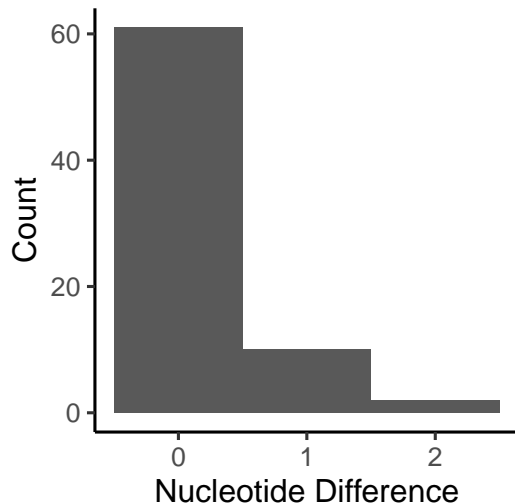
IGHV1–58*02

17 sequences assigned
17 (100%) exact matches, in which:
17 unique CDR3
5 unique J



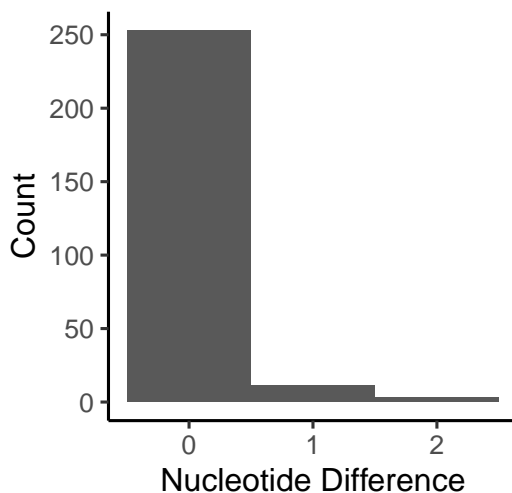
IGHV1–3*01_05

73 sequences assigned
61 (83.6%) exact matches, in which:
61 unique CDR3
6 unique J



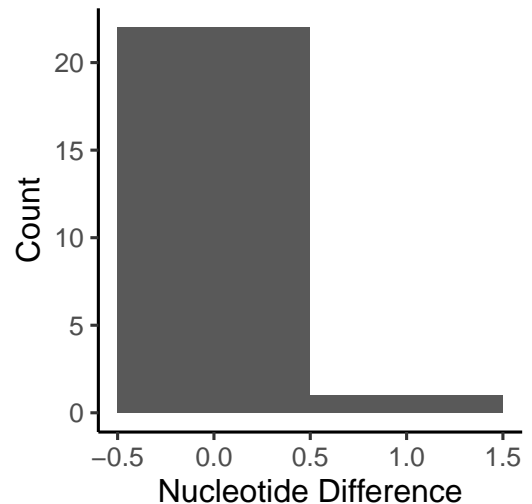
IGHV1–24*01

267 sequences assigned
253 (94.8%) exact matches, in which:
253 unique CDR3
6 unique J



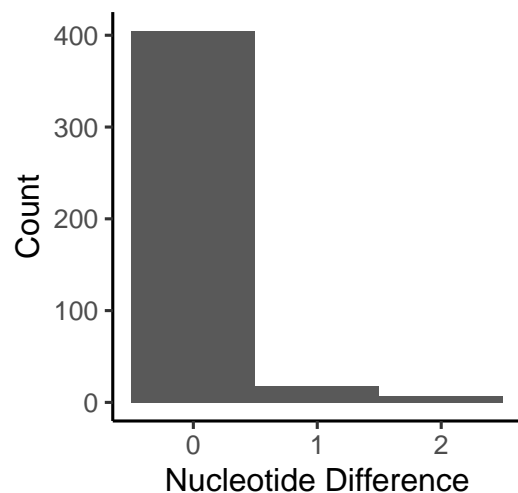
IGHV1–58*01_03

23 sequences assigned
22 (95.7%) exact matches, in which:
22 unique CDR3
4 unique J



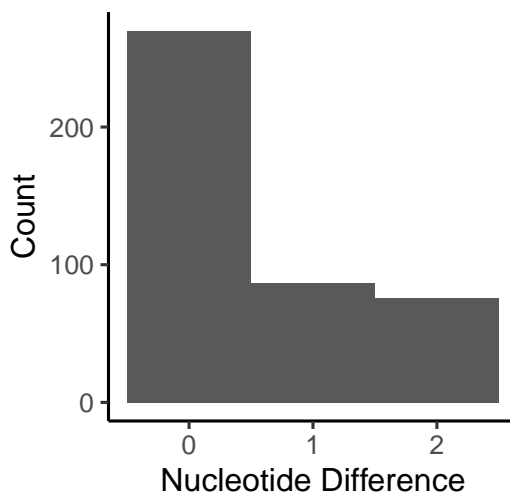
IGHV1-69*01_12_13

430 sequences assigned
405 (94.2%) exact matches, in which:
405 unique CDR3
6 unique J



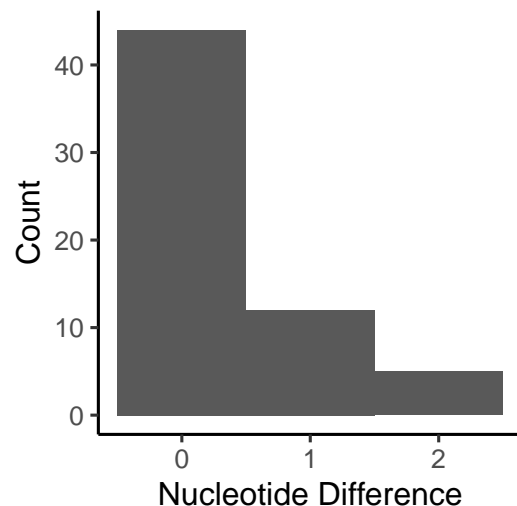
IGHV2-5*02

433 sequences assigned
270 (62.4%) exact matches, in which:
243 unique CDR3
6 unique J



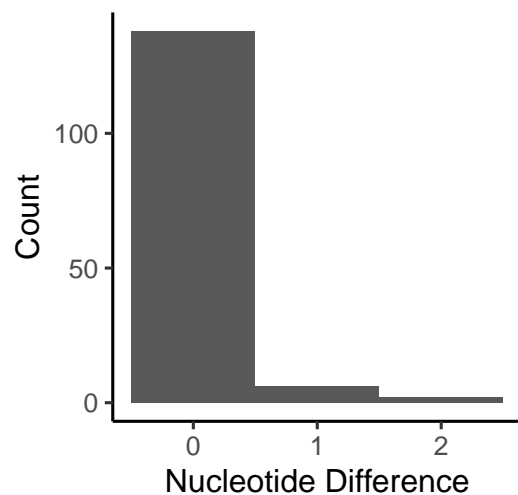
IGHV2-70*11_15

61 sequences assigned
44 (72.1%) exact matches, in which:
44 unique CDR3
5 unique J



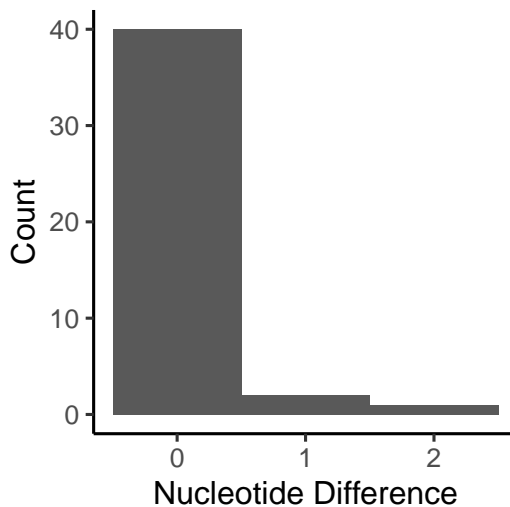
IGHV1-69*04_09

146 sequences assigned
138 (94.5%) exact matches, in which:
138 unique CDR3
6 unique J



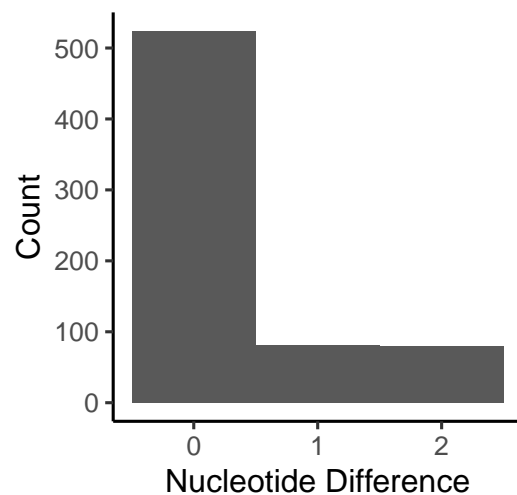
IGHV2-26*01

43 sequences assigned
40 (93%) exact matches, in which:
40 unique CDR3
6 unique J



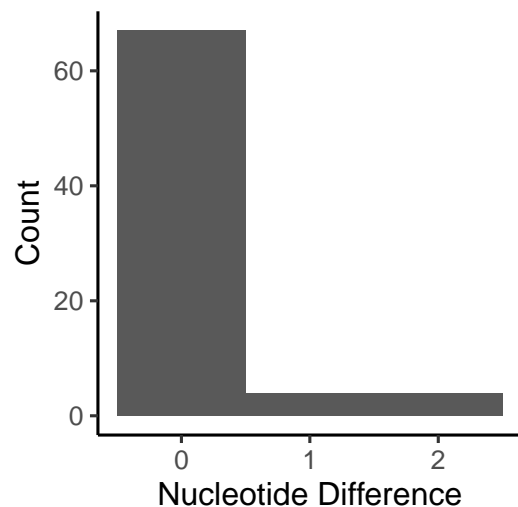
IGHV3-7*01

684 sequences assigned
524 (76.6%) exact matches, in which:
456 unique CDR3
6 unique J



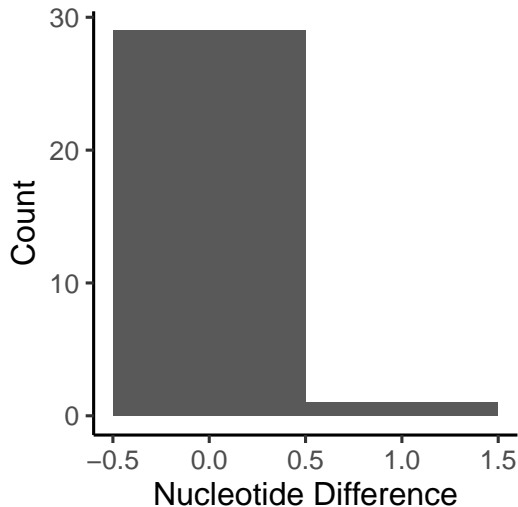
IGHV2-5*01

75 sequences assigned
67 (89.3%) exact matches, in which:
67 unique CDR3
6 unique J



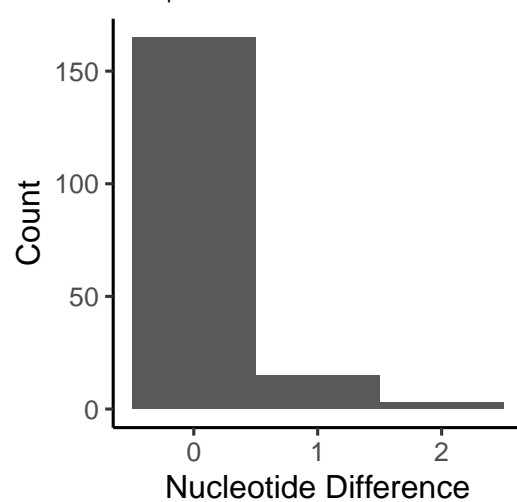
IGHV2-70*01

30 sequences assigned
29 (96.7%) exact matches, in which:
29 unique CDR3
5 unique J



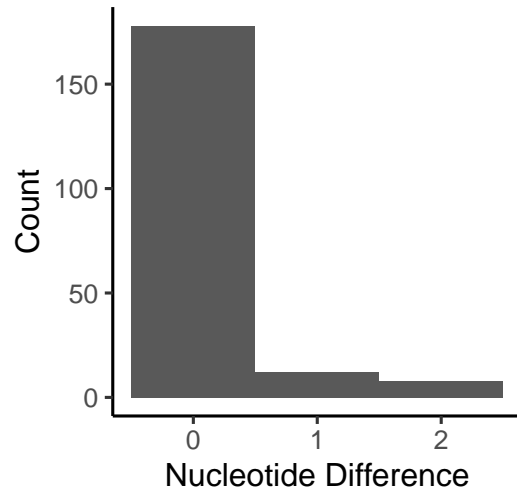
IGHV3-9*01

183 sequences assigned
165 (90.2%) exact matches, in which:
157 unique CDR3
6 unique J



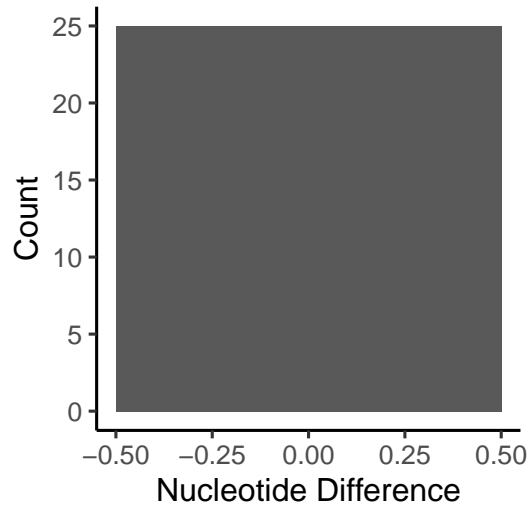
IGHV3-11*01

198 sequences assigned
178 (89.9%) exact matches, in which:
164 unique CDR3
6 unique J



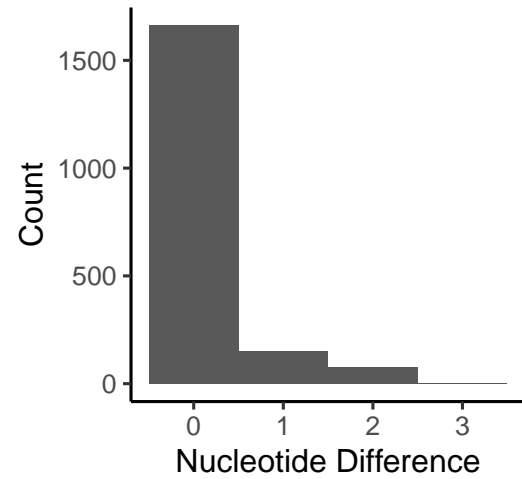
IGHV3-13*05

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



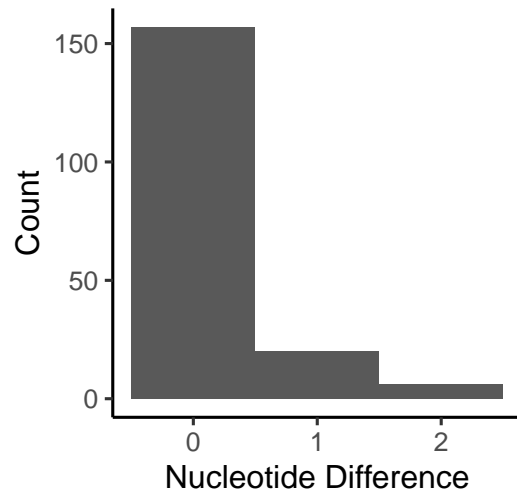
IGHV3-21*01_02

1895 sequences assigned
1662 (87.7%) exact matches, in which:
1386 unique CDR3
6 unique J



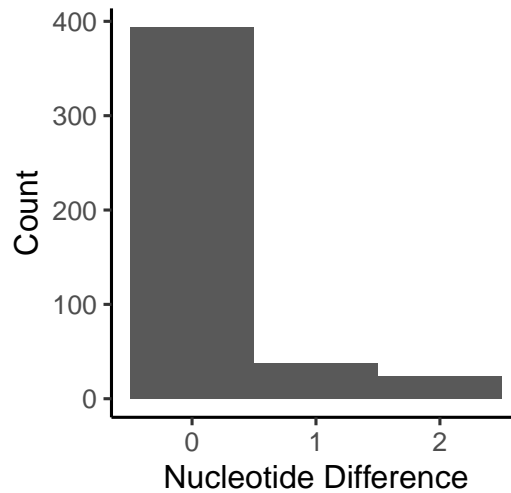
IGHV3-11*06

183 sequences assigned
157 (85.8%) exact matches, in which:
143 unique CDR3
6 unique J



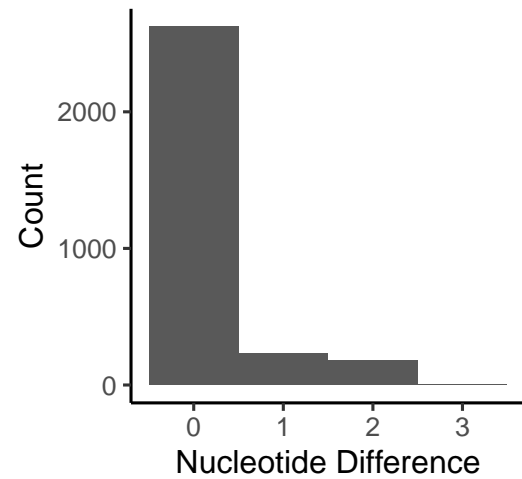
IGHV3-15*01_02

456 sequences assigned
394 (86.4%) exact matches, in which:
337 unique CDR3
6 unique J



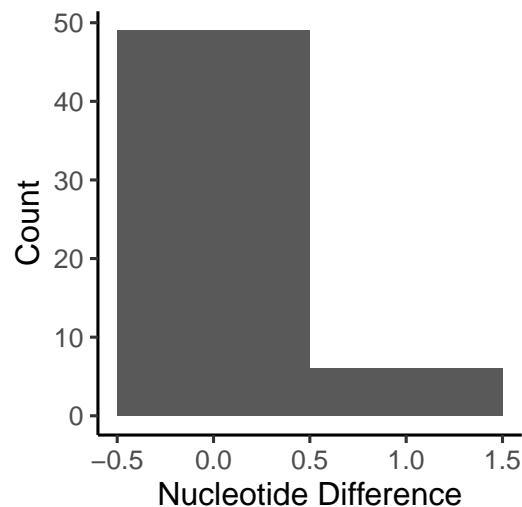
IGHV3-23*01_04

3033 sequences assigned
2623 (86.5%) exact matches, in which:
2386 unique CDR3
6 unique J



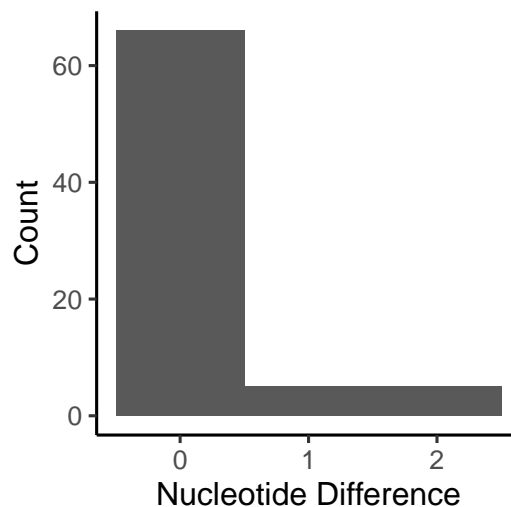
IGHV3-13*01

55 sequences assigned
49 (89.1%) exact matches, in which:
44 unique CDR3
5 unique J



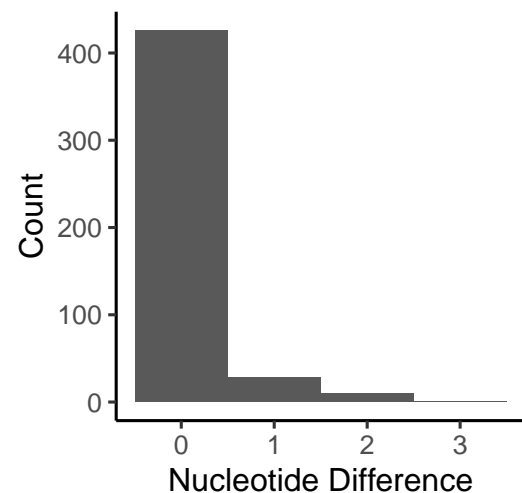
IGHV3-20*01_02

76 sequences assigned
66 (86.8%) exact matches, in which:
63 unique CDR3
5 unique J



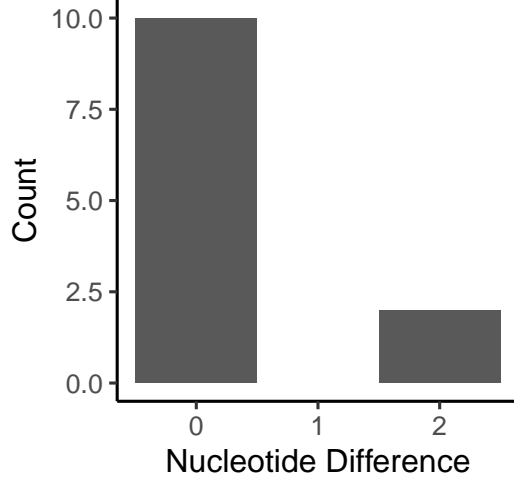
IGHV3-30-3*01

465 sequences assigned
426 (91.6%) exact matches, in which:
410 unique CDR3
6 unique J



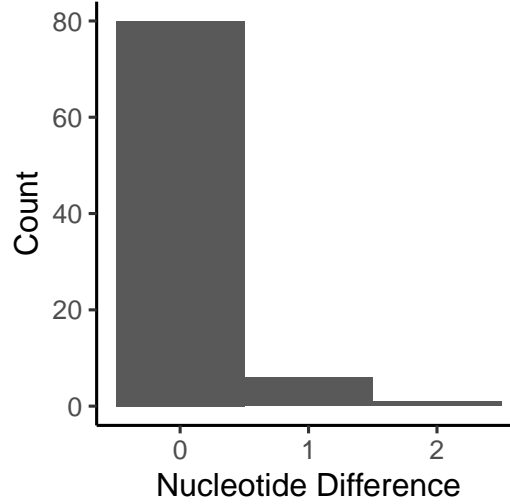
IGHV3-30*03

12 sequences assigned
10 (83.3%) exact matches, in which:
9 unique CDR3
3 unique J



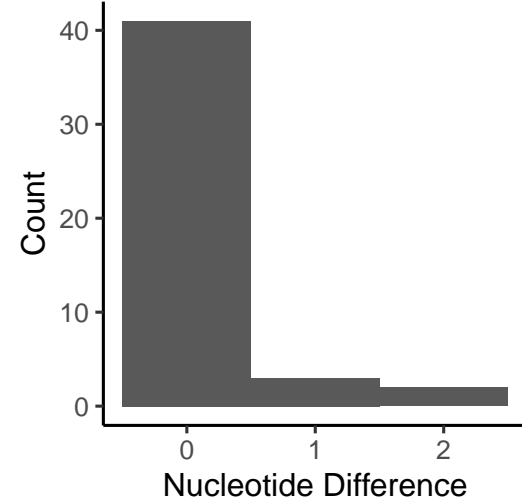
IGHV3-43*02

87 sequences assigned
80 (92%) exact matches, in which:
78 unique CDR3
4 unique J



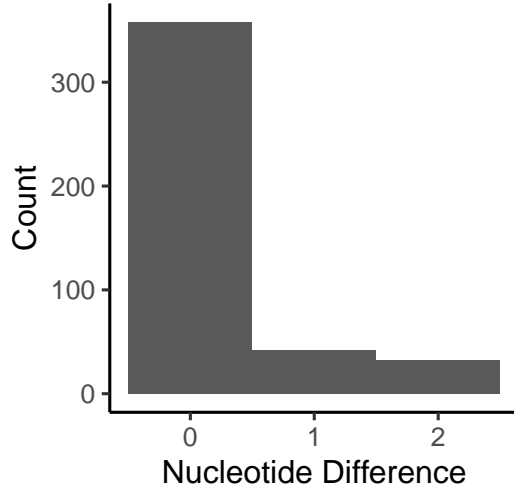
IGHV3-49*04

46 sequences assigned
41 (89.1%) exact matches, in which:
39 unique CDR3
4 unique J



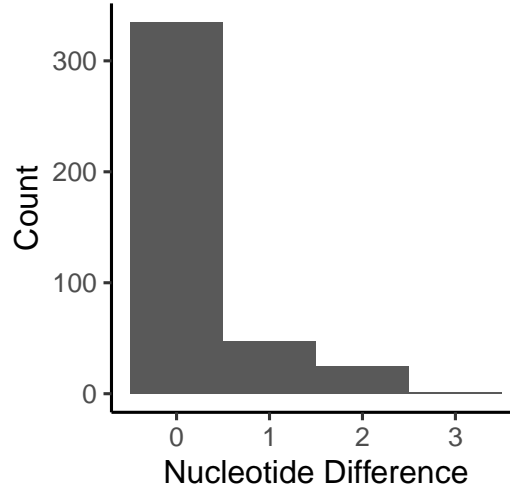
IGHV3-33*01

432 sequences assigned
358 (82.9%) exact matches, in which:
325 unique CDR3
6 unique J



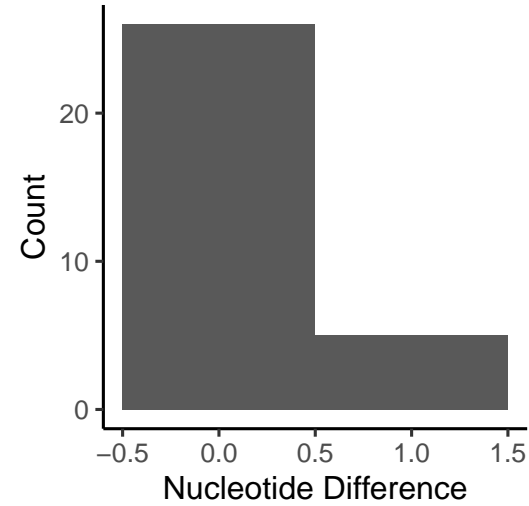
IGHV3-48*02

408 sequences assigned
335 (82.1%) exact matches, in which:
289 unique CDR3
6 unique J



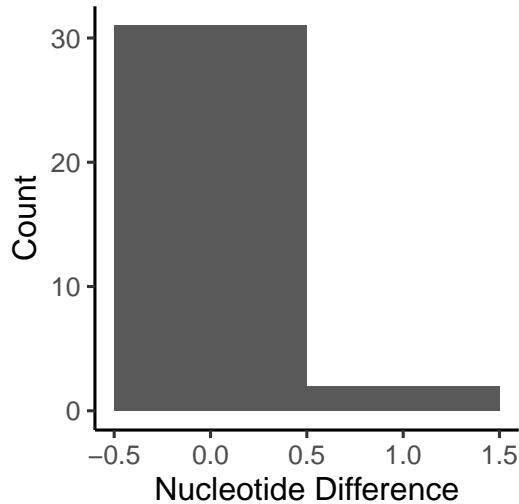
IGHV3-49*03_05

31 sequences assigned
26 (83.9%) exact matches, in which:
25 unique CDR3
5 unique J



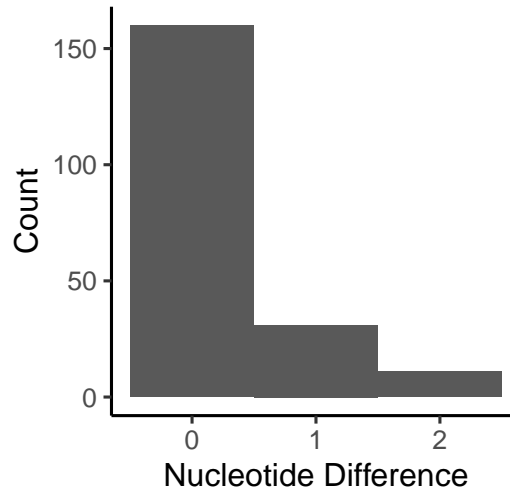
IGHV3-43*01

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



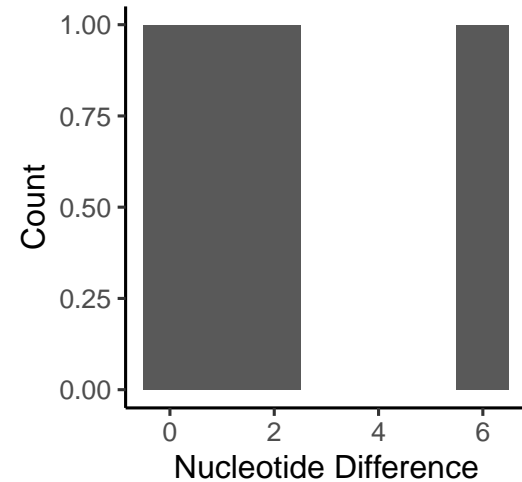
IGHV3-48*03

202 sequences assigned
160 (79.2%) exact matches, in which:
149 unique CDR3
6 unique J



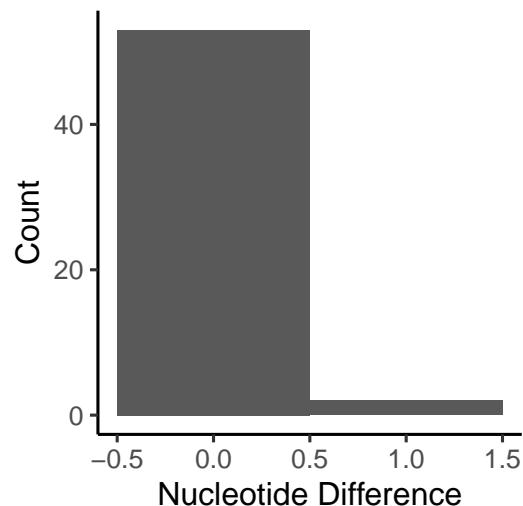
IGHV3-52*01_03

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



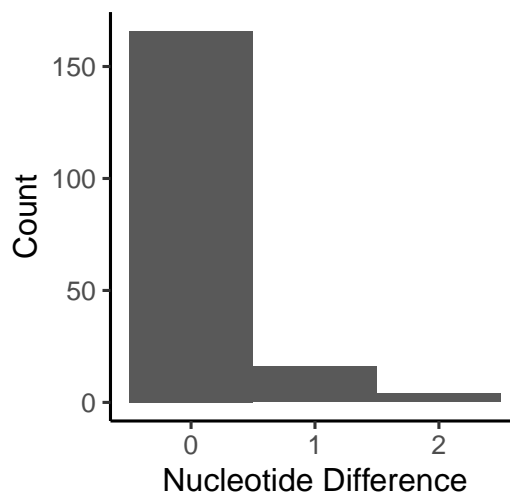
IGHV3-53*04

55 sequences assigned
53 (96.4%) exact matches, in which:
52 unique CDR3
5 unique J



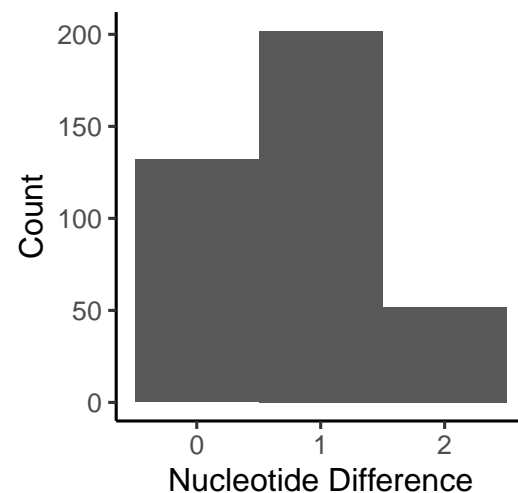
IGHV3-66*01

186 sequences assigned
166 (89.2%) exact matches, in which:
154 unique CDR3
5 unique J



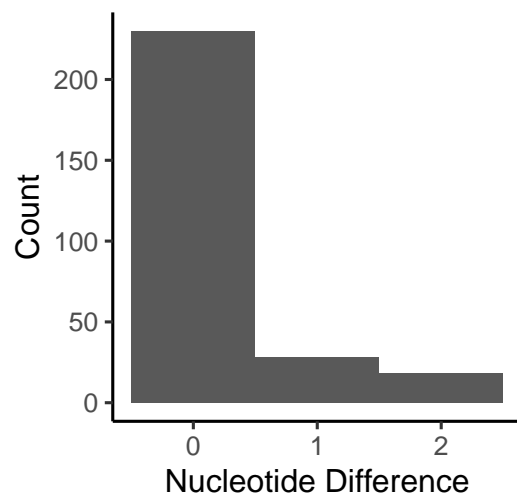
IGHV3-74*01_02

386 sequences assigned
132 (34.2%) exact matches, in which:
112 unique CDR3
6 unique J



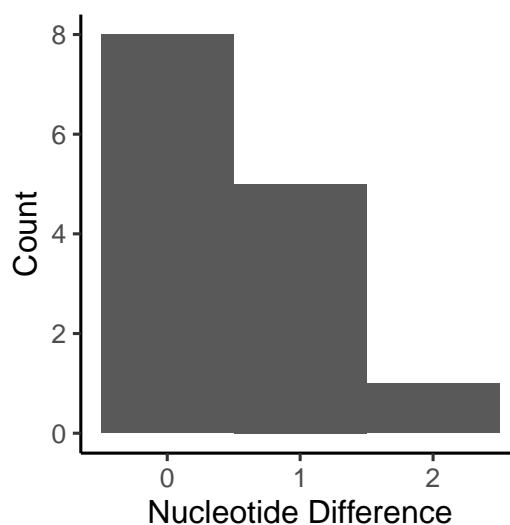
IGHV3-53*01_02

276 sequences assigned
230 (83.3%) exact matches, in which:
209 unique CDR3
6 unique J



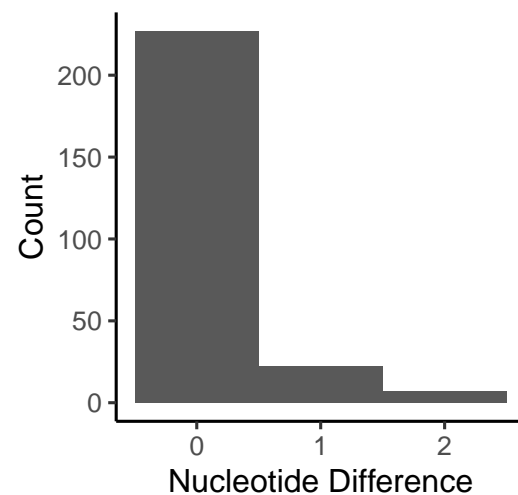
IGHV3-72*01

14 sequences assigned
8 (57.1%) exact matches, in which:
7 unique CDR3
3 unique J



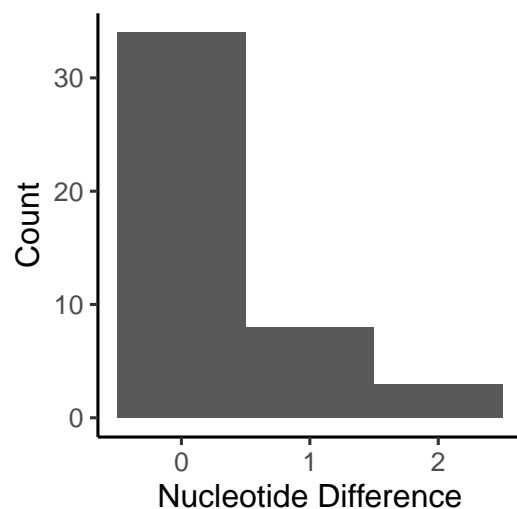
IGHV3-64D*06

256 sequences assigned
227 (88.7%) exact matches, in which:
220 unique CDR3
6 unique J



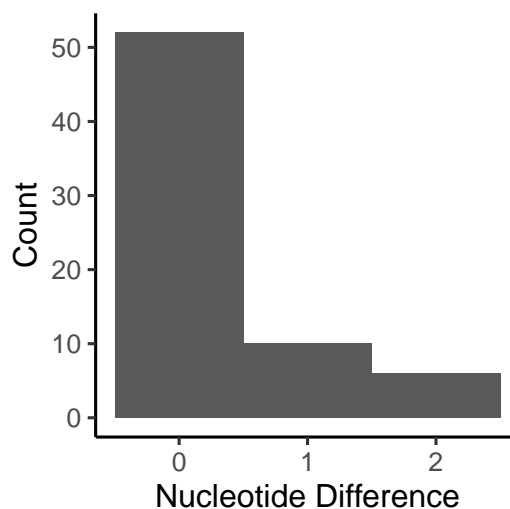
IGHV3-64*01

45 sequences assigned
34 (75.6%) exact matches, in which:
32 unique CDR3
5 unique J



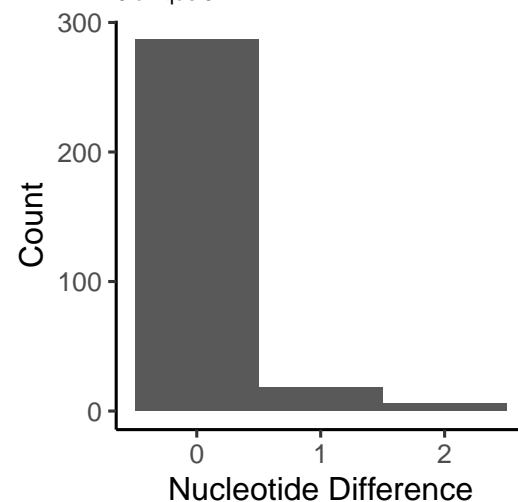
IGHV3-73*01_02

68 sequences assigned
52 (76.5%) exact matches, in which:
38 unique CDR3
4 unique J



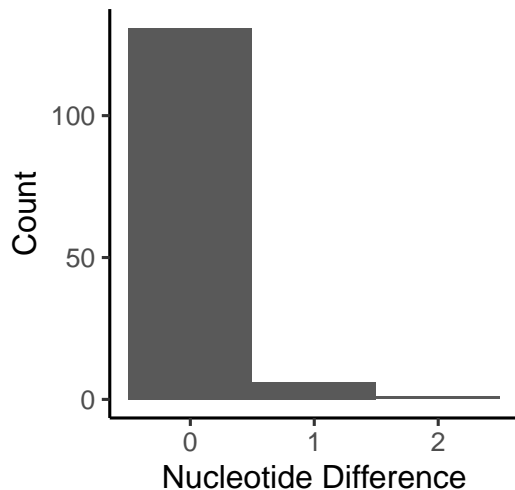
IGHV4-4*07

311 sequences assigned
287 (92.3%) exact matches, in which:
280 unique CDR3
6 unique J



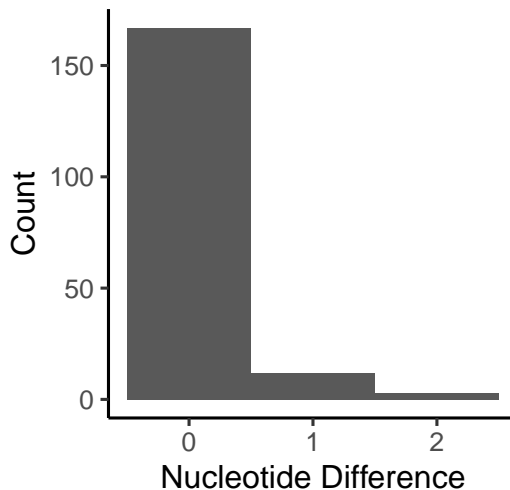
IGHV4-4*02_03

138 sequences assigned
131 (94.9%) exact matches, in which:
127 unique CDR3
6 unique J



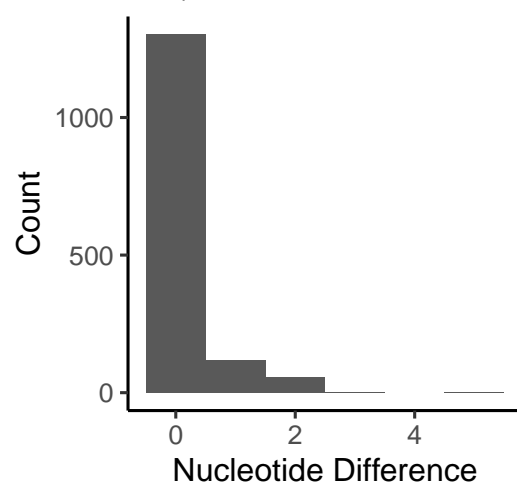
IGHV4-30-4*01

182 sequences assigned
167 (91.8%) exact matches, in which:
163 unique CDR3
6 unique J



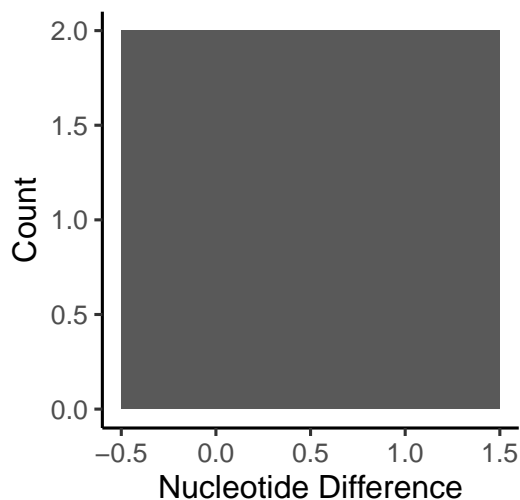
IGHV4-39*02_C258G

1479 sequences assigned
1302 (88%) exact matches, in which:
1230 unique CDR3
6 unique J



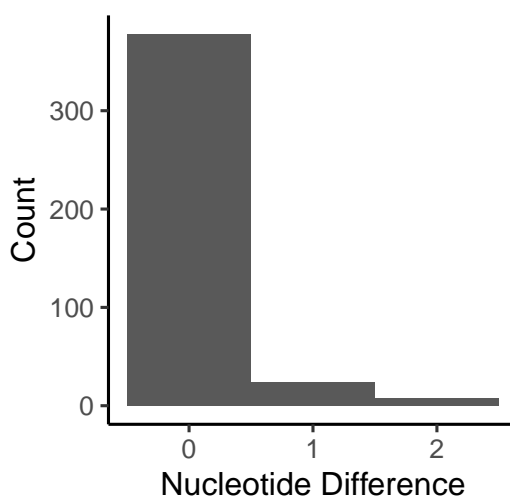
IGHV4-28*01_07

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



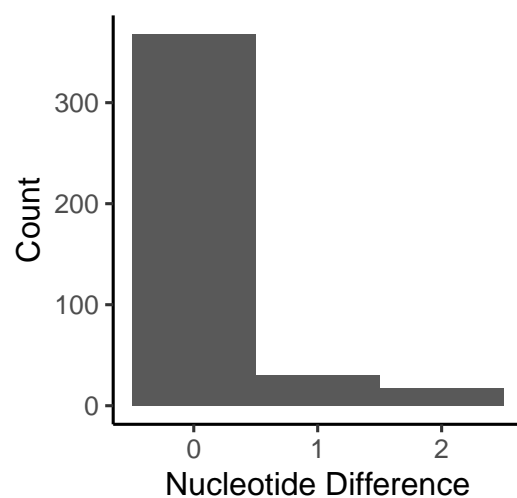
IGHV4-31*02

410 sequences assigned
378 (92.2%) exact matches, in which:
369 unique CDR3
6 unique J



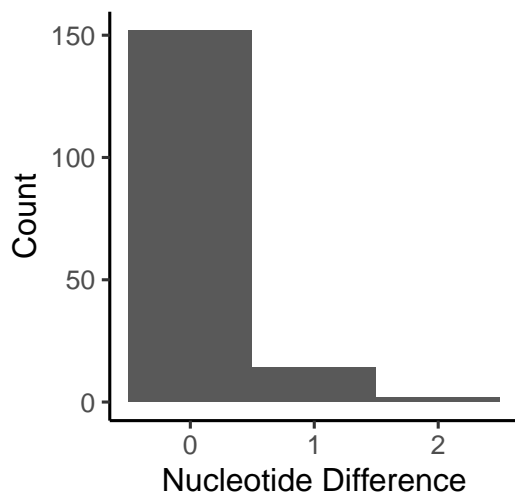
IGHV4-59*08

415 sequences assigned
368 (88.7%) exact matches, in which:
363 unique CDR3
6 unique J



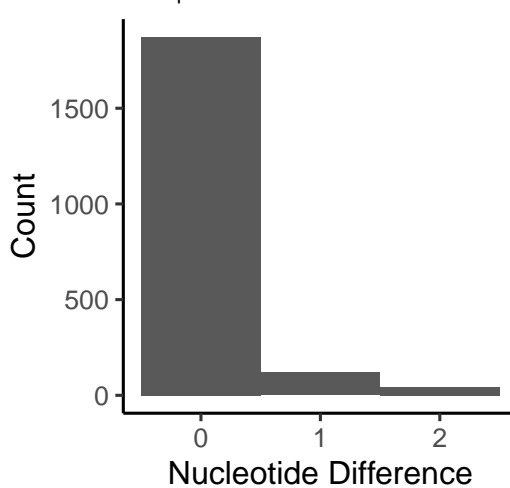
IGHV4-30-2*01

168 sequences assigned
152 (90.5%) exact matches, in which:
151 unique CDR3
6 unique J



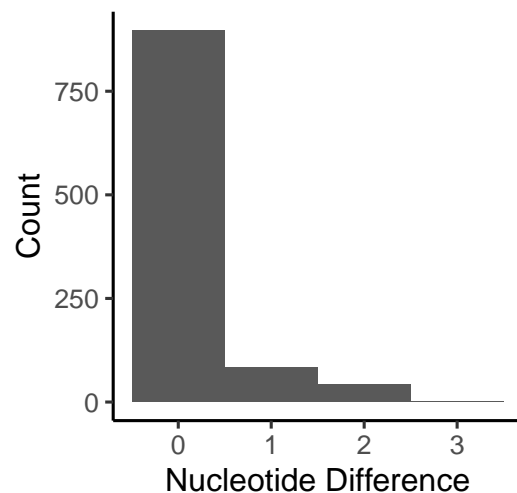
IGHV4-34*01_02

2036 sequences assigned
1872 (91.9%) exact matches, in which:
1845 unique CDR3
6 unique J



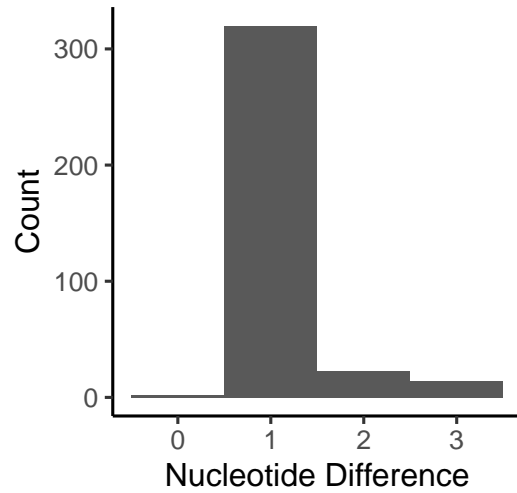
IGHV4-59*01_07

1024 sequences assigned
897 (87.6%) exact matches, in which:
871 unique CDR3
6 unique J



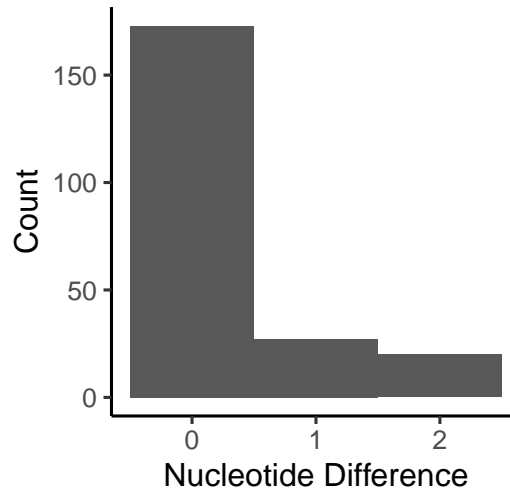
IGHV4–59*12

359 sequences assigned
2 (0.6%) exact matches, in which:
2 unique CDR3
2 unique J



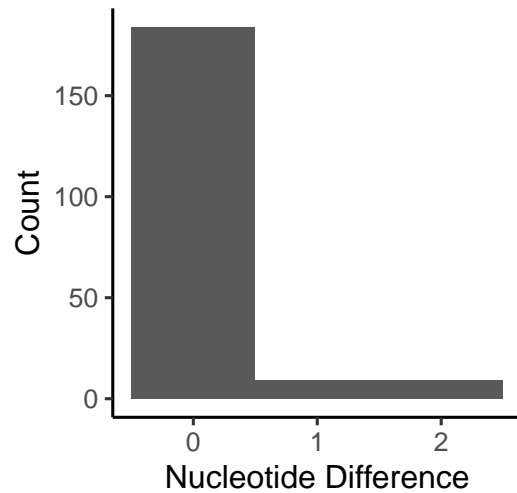
IGHV5–51*07_A128G

220 sequences assigned
173 (78.6%) exact matches, in which:
171 unique CDR3
6 unique J



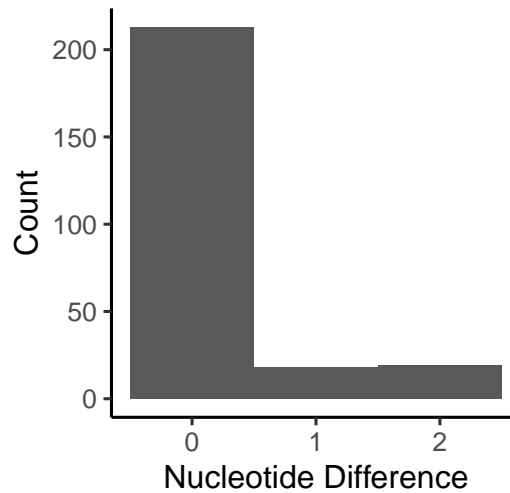
IGHV4–61*01

202 sequences assigned
184 (91.1%) exact matches, in which:
176 unique CDR3
6 unique J



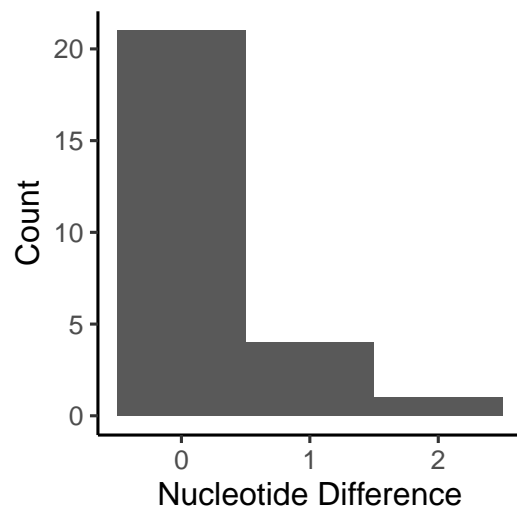
IGHV6–1*01_02

250 sequences assigned
213 (85.2%) exact matches, in which:
212 unique CDR3
6 unique J



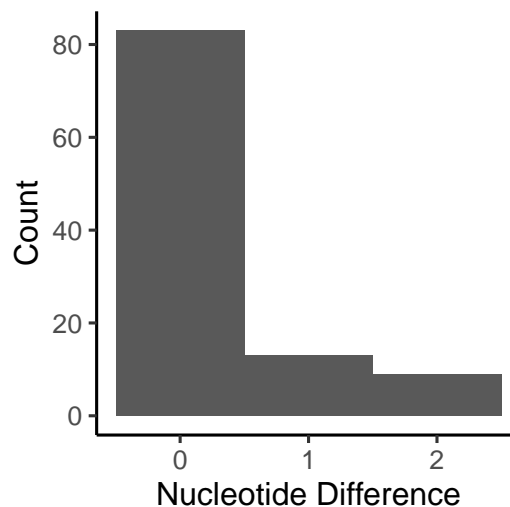
IGHV5–10–1*01_03

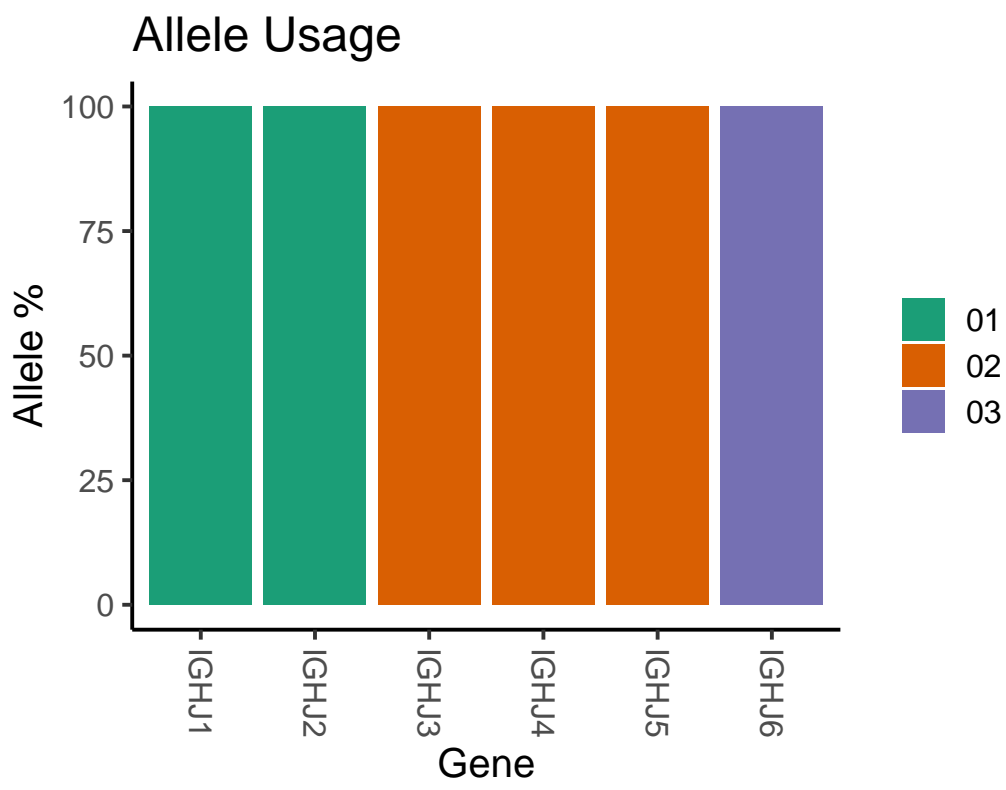
26 sequences assigned
21 (80.8%) exact matches, in which:
21 unique CDR3
4 unique J



IGHV7–4–1*02

105 sequences assigned
83 (79%) exact matches, in which:
82 unique CDR3
5 unique J





Warning – no inferred sequences found.