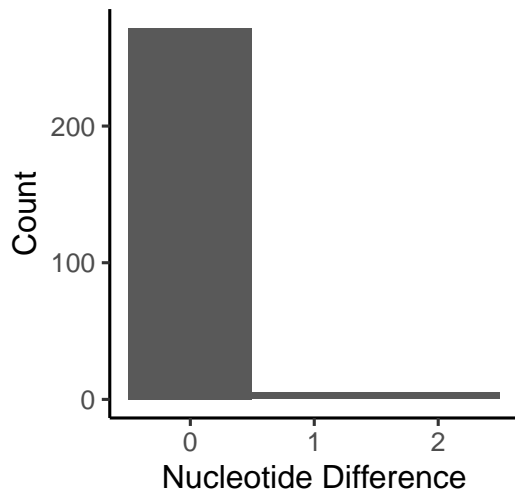


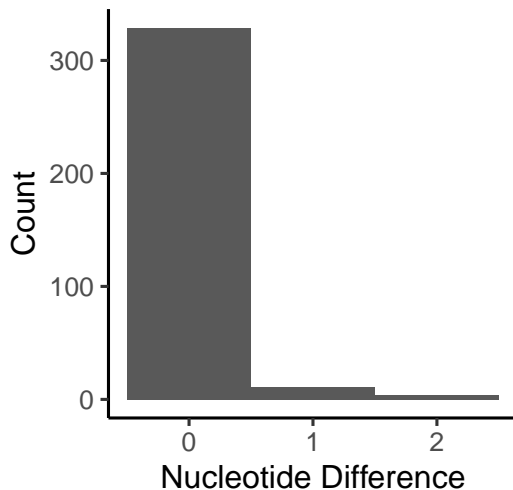
IGHV1–2*04

282 sequences assigned
272 (96.5%) exact matches, in which:
271 unique CDR3
5 unique J



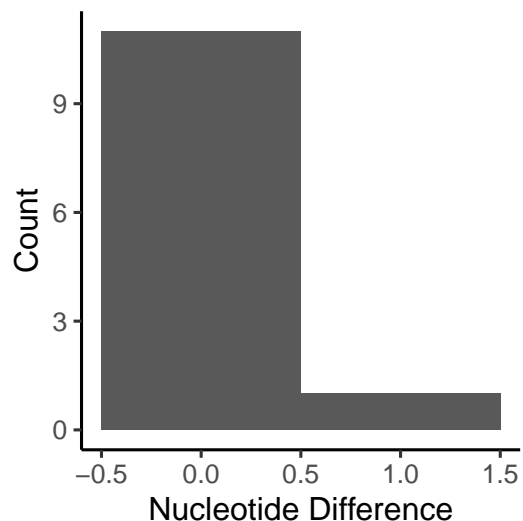
IGHV1–24*01

344 sequences assigned
329 (95.6%) exact matches, in which:
325 unique CDR3
6 unique J



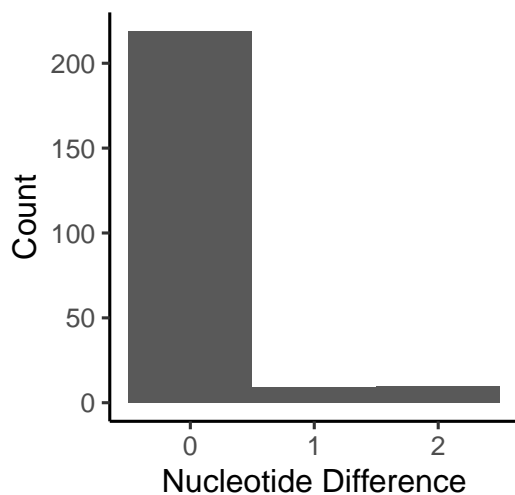
IGHV1–58*02

12 sequences assigned
11 (91.7%) exact matches, in which:
11 unique CDR3
3 unique J



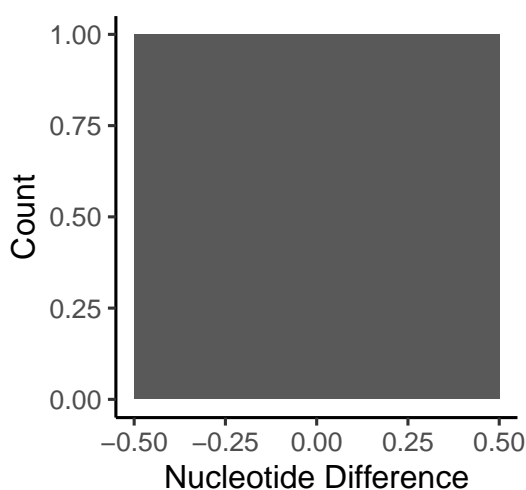
IGHV1–3*01_05

238 sequences assigned
219 (92%) exact matches, in which:
219 unique CDR3
6 unique J



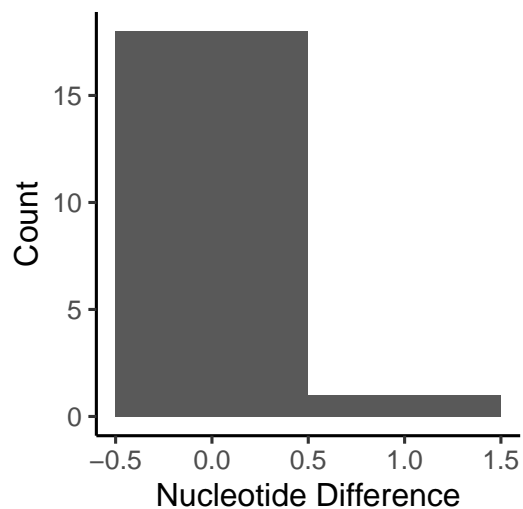
IGHV1–45*02

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



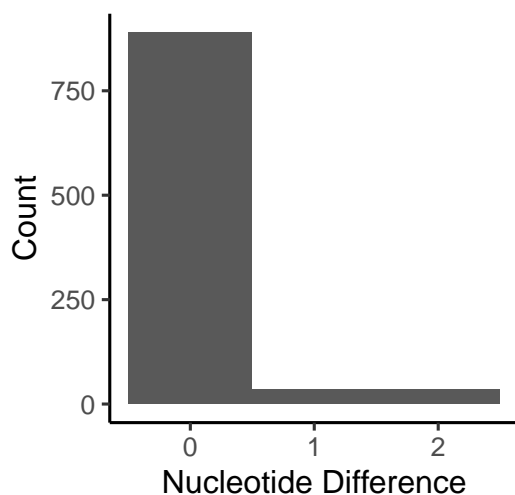
IGHV1–58*01_03

19 sequences assigned
18 (94.7%) exact matches, in which:
18 unique CDR3
4 unique J



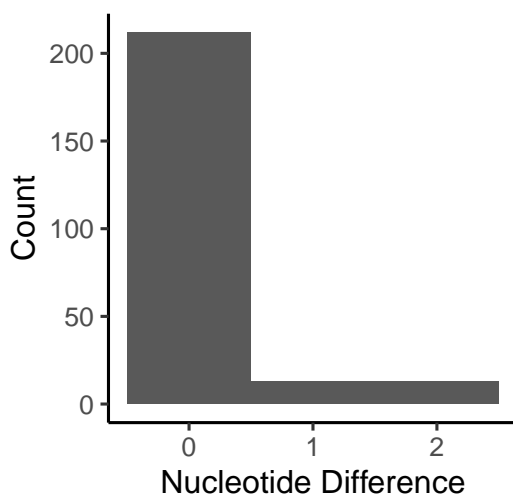
IGHV1–18*04

959 sequences assigned
890 (92.8%) exact matches, in which:
885 unique CDR3
6 unique J



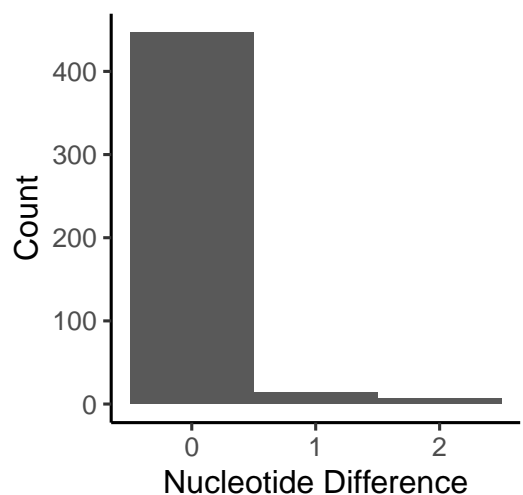
IGHV1–46*01

238 sequences assigned
212 (89.1%) exact matches, in which:
212 unique CDR3
6 unique J



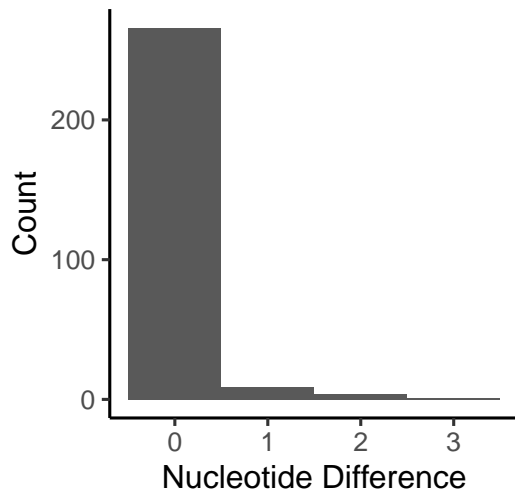
IGHV1–69*01_12_13

468 sequences assigned
447 (95.5%) exact matches, in which:
446 unique CDR3
6 unique J



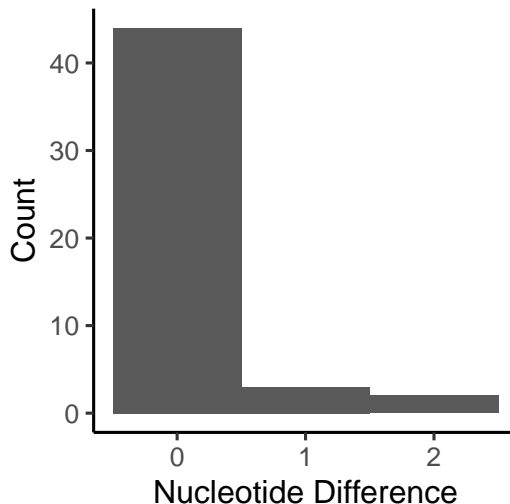
IGHV1–69*04_09

280 sequences assigned
266 (95%) exact matches, in which:
266 unique CDR3
6 unique J



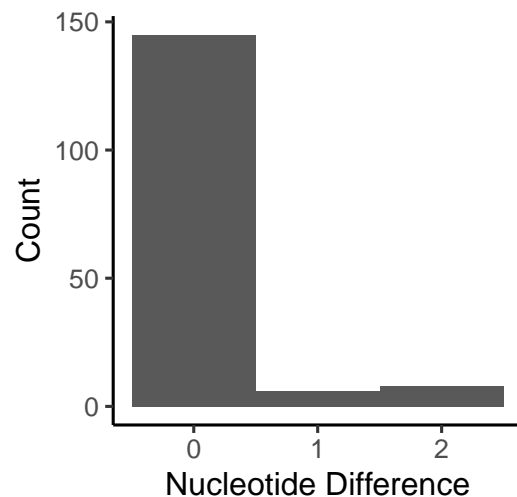
IGHV2–70*01

49 sequences assigned
44 (89.8%) exact matches, in which:
44 unique CDR3
6 unique J



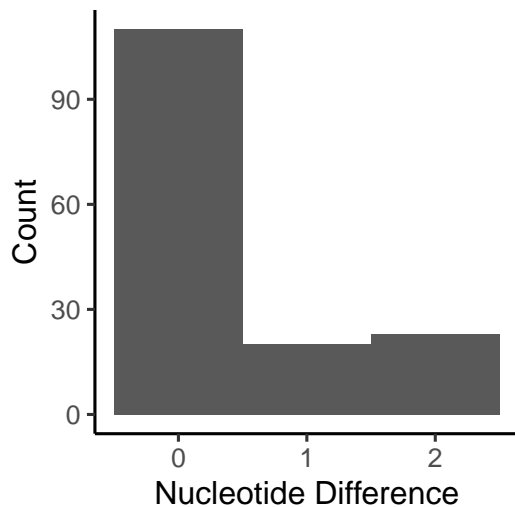
IGHV3–11*06

159 sequences assigned
145 (91.2%) exact matches, in which:
145 unique CDR3
6 unique J



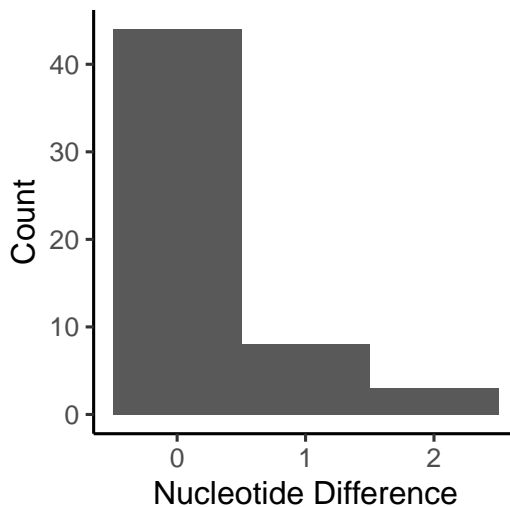
IGHV2–5*02

153 sequences assigned
110 (71.9%) exact matches, in which:
108 unique CDR3
6 unique J



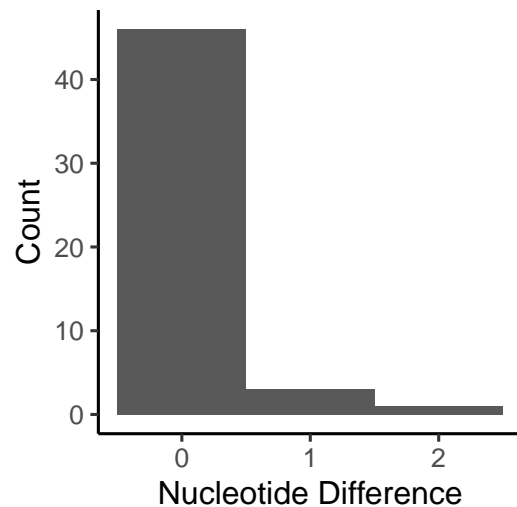
IGHV2–70*11_15

55 sequences assigned
44 (80%) exact matches, in which:
44 unique CDR3
5 unique J



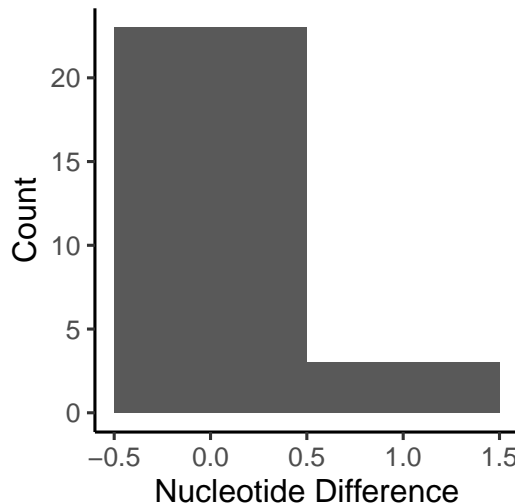
IGHV3–13*05

50 sequences assigned
46 (92%) exact matches, in which:
44 unique CDR3
5 unique J



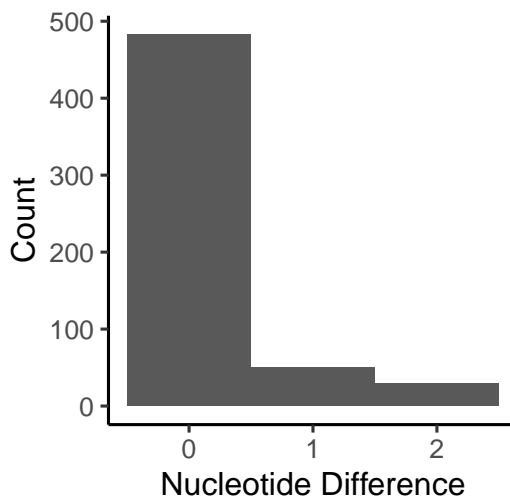
IGHV2–26*01

26 sequences assigned
23 (88.5%) exact matches, in which:
23 unique CDR3
5 unique J



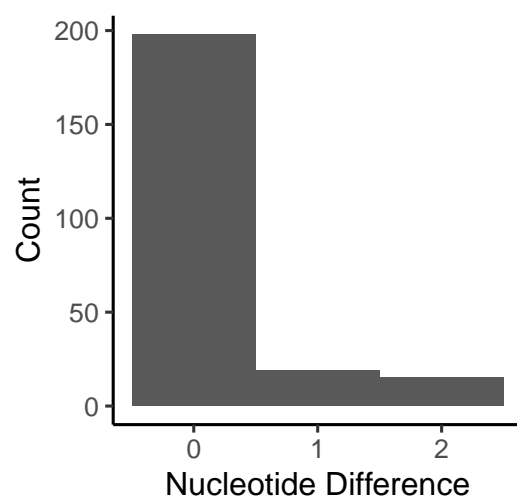
IGHV3–7*03

562 sequences assigned
483 (85.9%) exact matches, in which:
476 unique CDR3
6 unique J



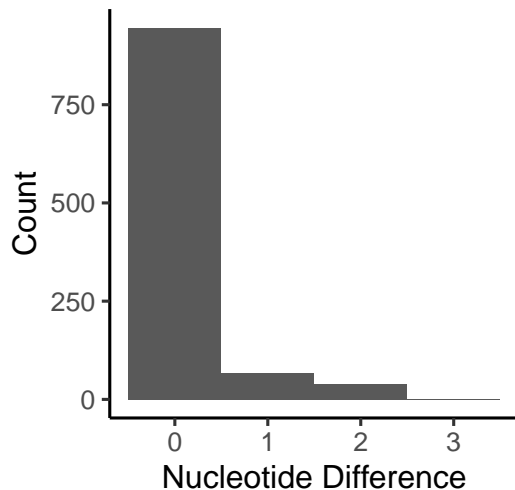
IGHV3–15*01_02

232 sequences assigned
198 (85.3%) exact matches, in which:
191 unique CDR3
6 unique J



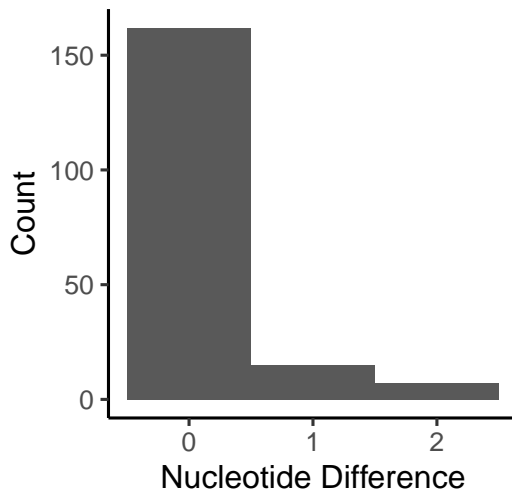
IGHV3–21*01_02

1055 sequences assigned
946 (89.7%) exact matches, in which:
924 unique CDR3
6 unique J



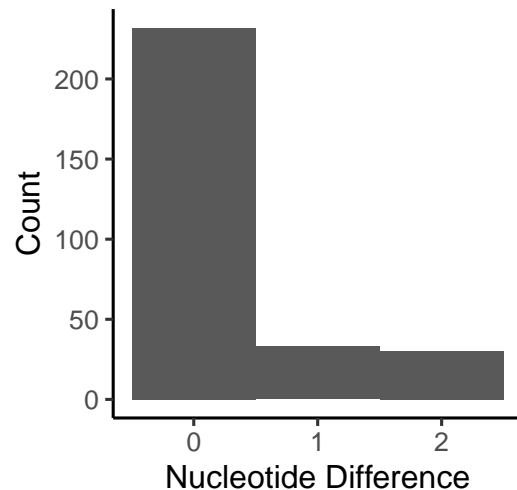
IGHV3–33*01

184 sequences assigned
162 (88%) exact matches, in which:
159 unique CDR3
6 unique J



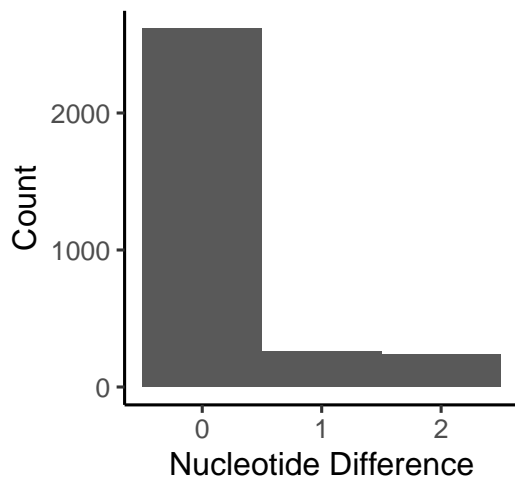
IGHV3–48*02

295 sequences assigned
232 (78.6%) exact matches, in which:
229 unique CDR3
6 unique J



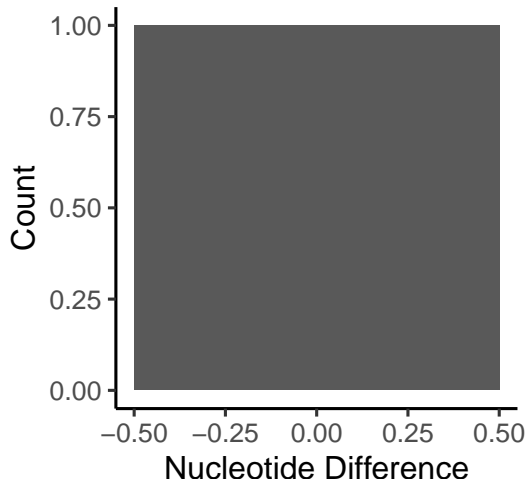
IGHV3–23*01_04

3111 sequences assigned
2615 (84.1%) exact matches, in which:
2561 unique CDR3
6 unique J



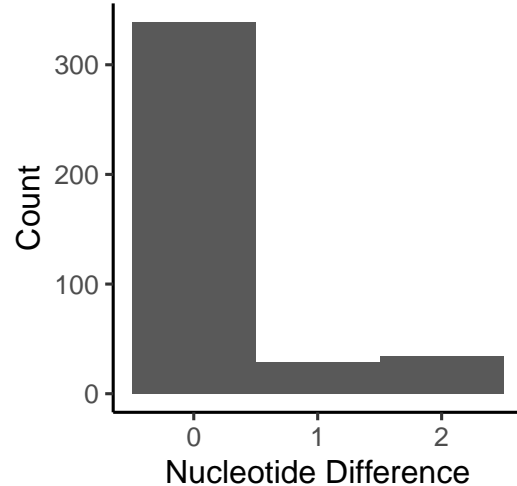
IGHV3–38–3*01

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



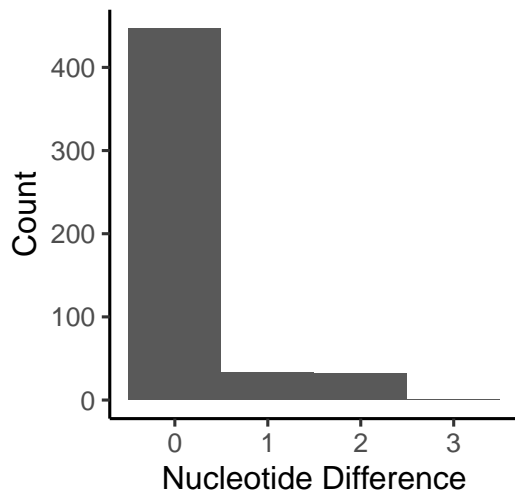
IGHV3–48*04

402 sequences assigned
339 (84.3%) exact matches, in which:
332 unique CDR3
6 unique J



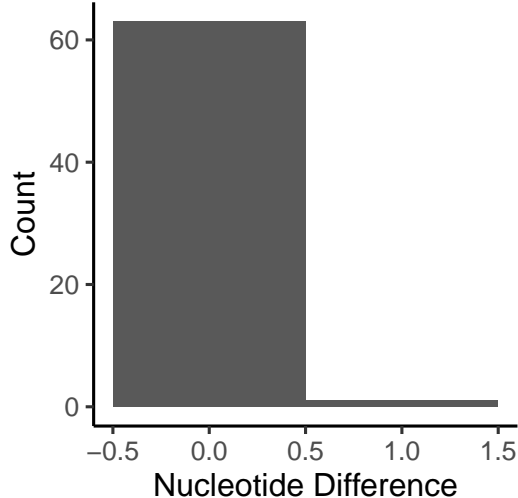
IGHV3–30–3*01

513 sequences assigned
447 (87.1%) exact matches, in which:
444 unique CDR3
6 unique J



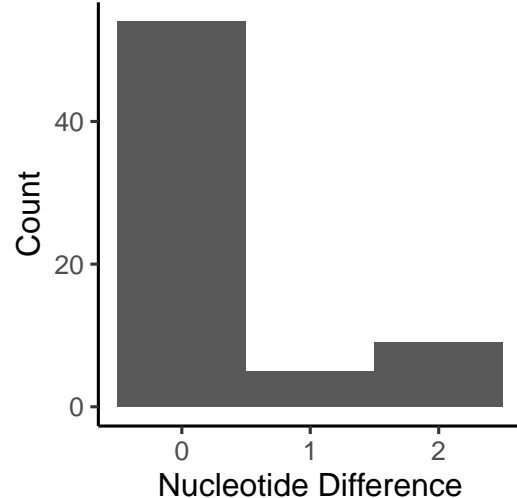
IGHV3–43*01

64 sequences assigned
63 (98.4%) exact matches, in which:
63 unique CDR3
5 unique J



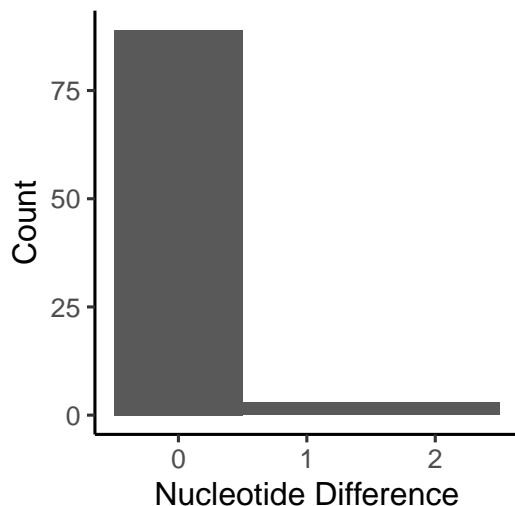
IGHV3–49*03_05

68 sequences assigned
54 (79.4%) exact matches, in which:
54 unique CDR3
5 unique J



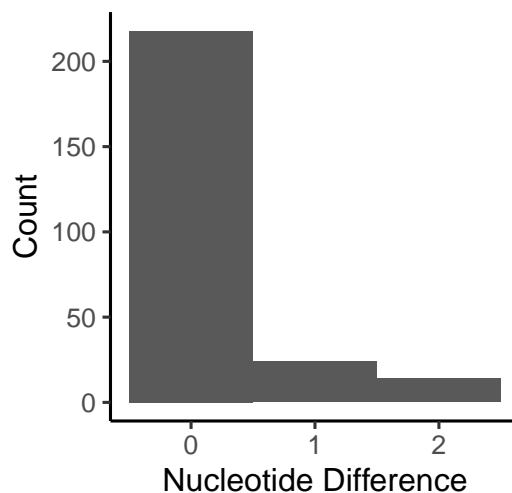
IGHV3-53*04

95 sequences assigned
89 (93.7%) exact matches, in which:
87 unique CDR3
6 unique J



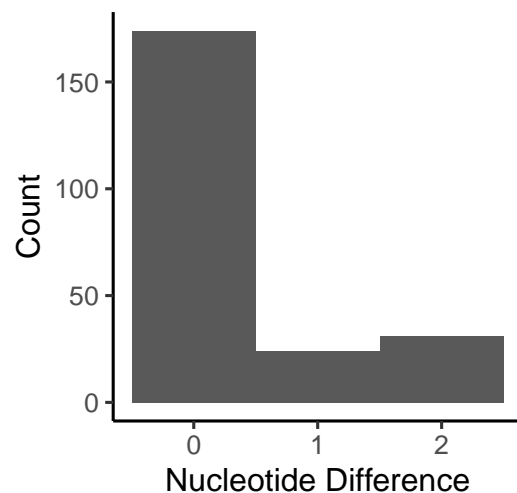
IGHV3-66*01

256 sequences assigned
218 (85.2%) exact matches, in which:
215 unique CDR3
6 unique J



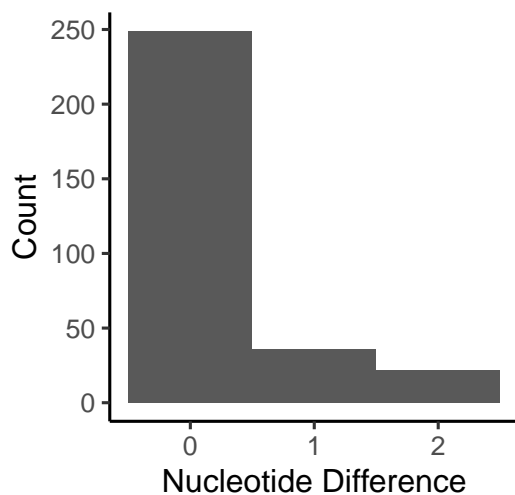
IGHV3-74*01_02

229 sequences assigned
174 (76%) exact matches, in which:
168 unique CDR3
6 unique J



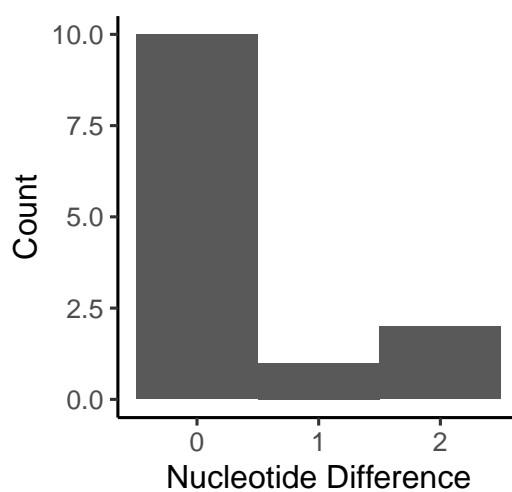
IGHV3-53*01_02

307 sequences assigned
249 (81.1%) exact matches, in which:
245 unique CDR3
6 unique J



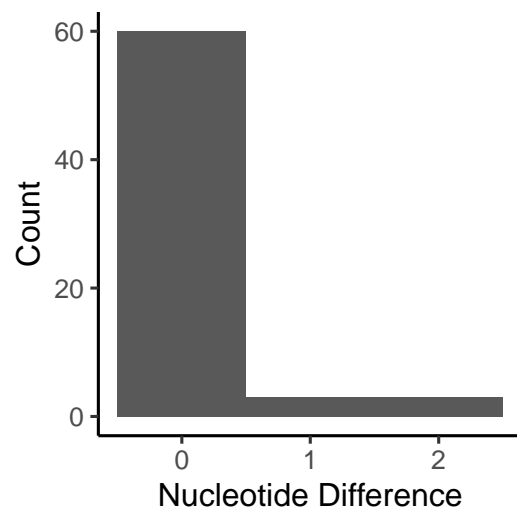
IGHV3-72*01

13 sequences assigned
10 (76.9%) exact matches, in which:
10 unique CDR3
4 unique J



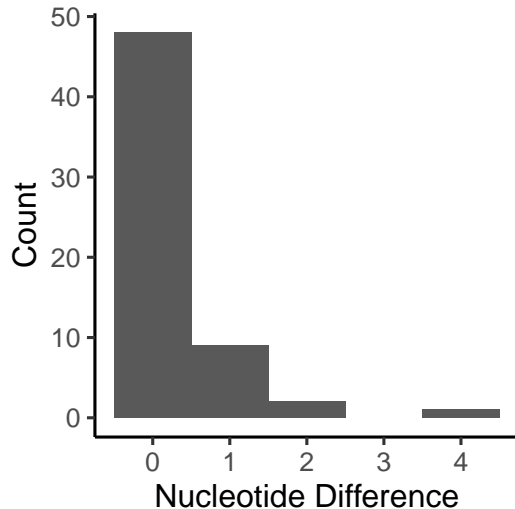
IGHV3-43D*03

66 sequences assigned
60 (90.9%) exact matches, in which:
60 unique CDR3
5 unique J



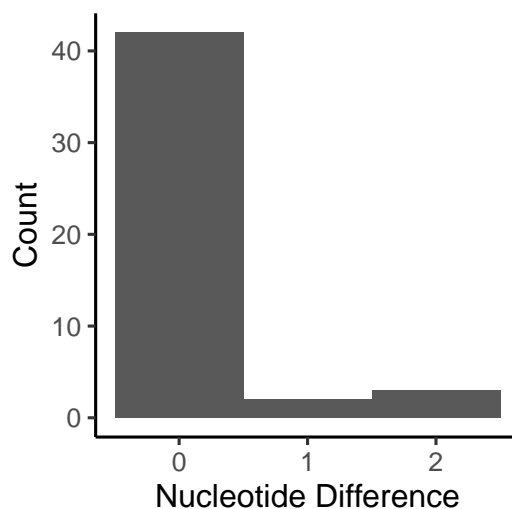
IGHV3-64*01

60 sequences assigned
48 (80%) exact matches, in which:
47 unique CDR3
5 unique J



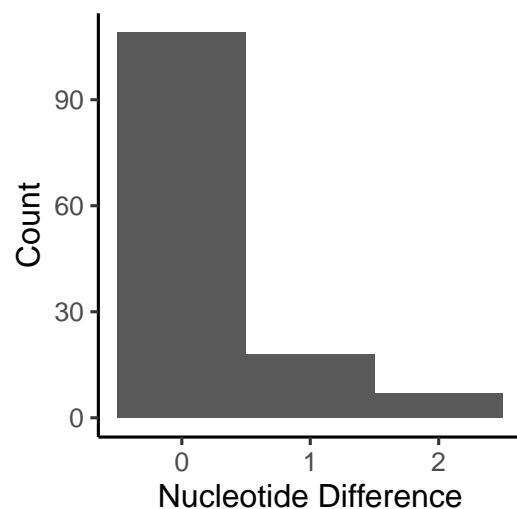
IGHV3-73*01_02

47 sequences assigned
42 (89.4%) exact matches, in which:
41 unique CDR3
4 unique J



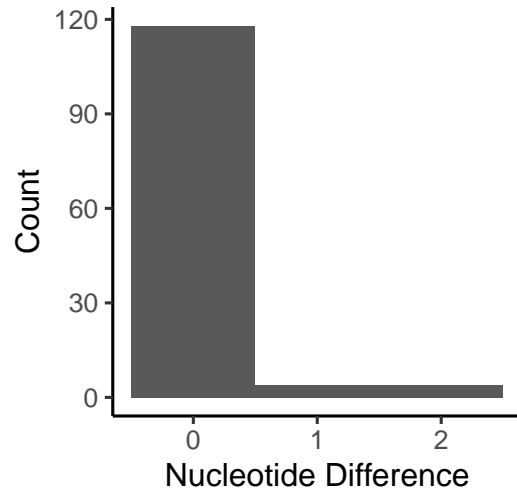
IGHV3-64D*06

134 sequences assigned
109 (81.3%) exact matches, in which:
107 unique CDR3
6 unique J



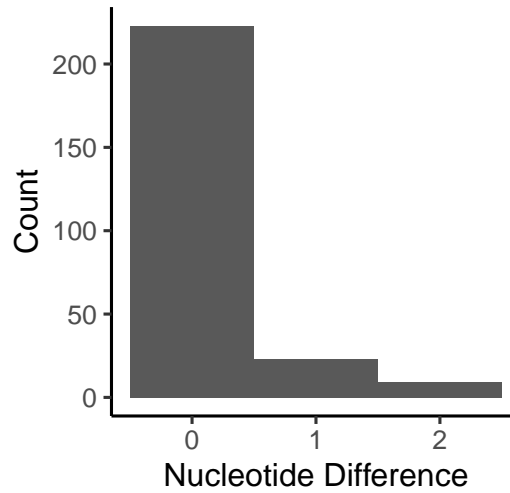
IGHV3–64D*09

126 sequences assigned
118 (93.7%) exact matches, in which:
117 unique CDR3
5 unique J



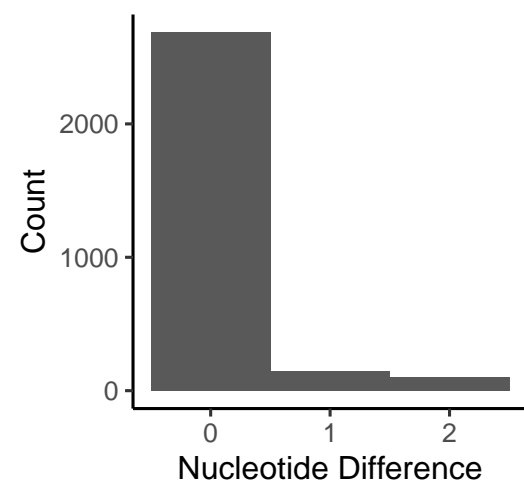
IGHV4–30–4*01

255 sequences assigned
223 (87.5%) exact matches, in which:
220 unique CDR3
6 unique J



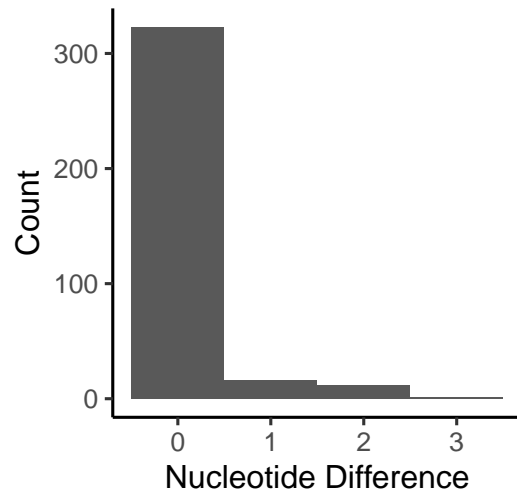
IGHV4–34*01_02

2935 sequences assigned
2686 (91.5%) exact matches, in which:
2626 unique CDR3
6 unique J



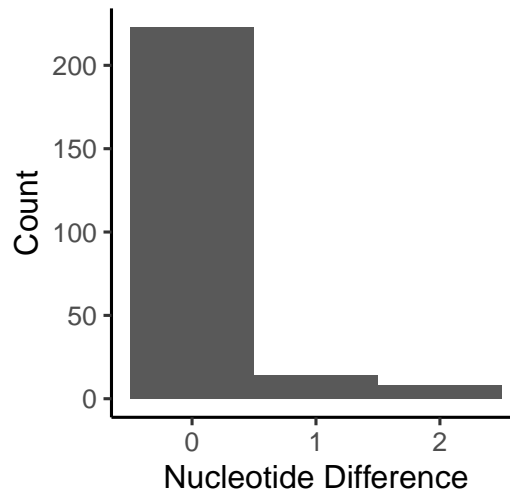
IGHV4–4*02_03

352 sequences assigned
323 (91.8%) exact matches, in which:
322 unique CDR3
6 unique J



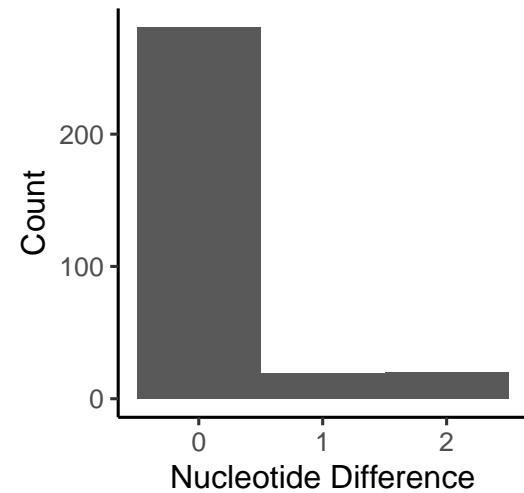
IGHV4–30–2*01

245 sequences assigned
223 (91%) exact matches, in which:
219 unique CDR3
6 unique J



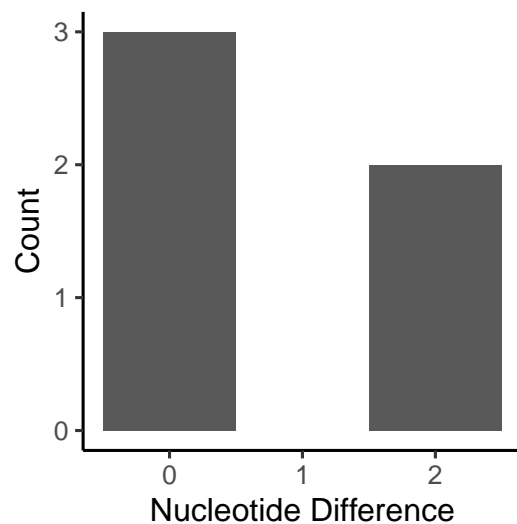
IGHV4–38–2*02

320 sequences assigned
281 (87.8%) exact matches, in which:
278 unique CDR3
6 unique J



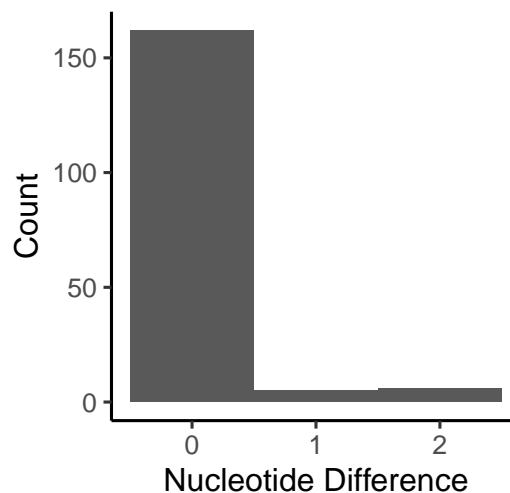
IGHV4–28*01_07

5 sequences assigned
3 (60%) exact matches, in which:
3 unique CDR3
2 unique J



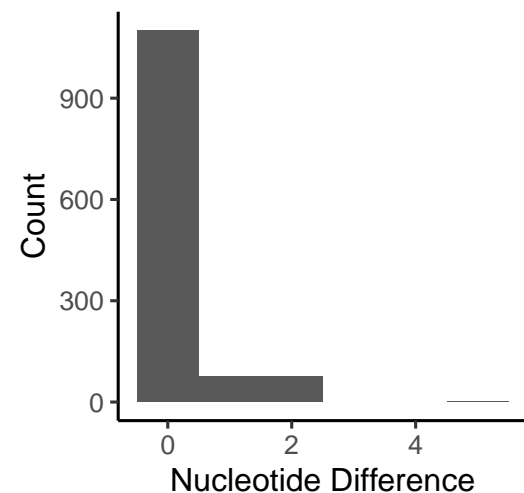
IGHV4–31*02

173 sequences assigned
162 (93.6%) exact matches, in which:
162 unique CDR3
6 unique J



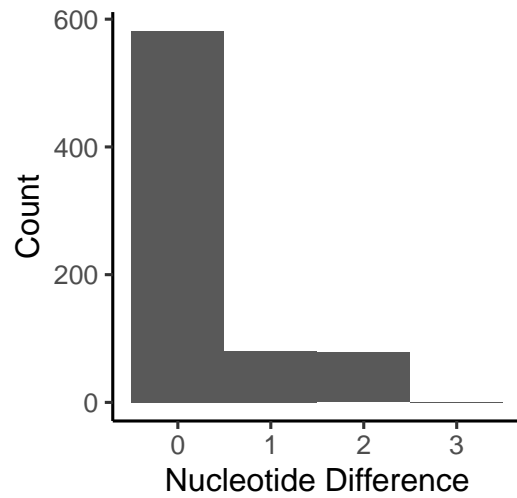
IGHV4–39*07

1254 sequences assigned
1101 (87.8%) exact matches, in which:
1087 unique CDR3
6 unique J



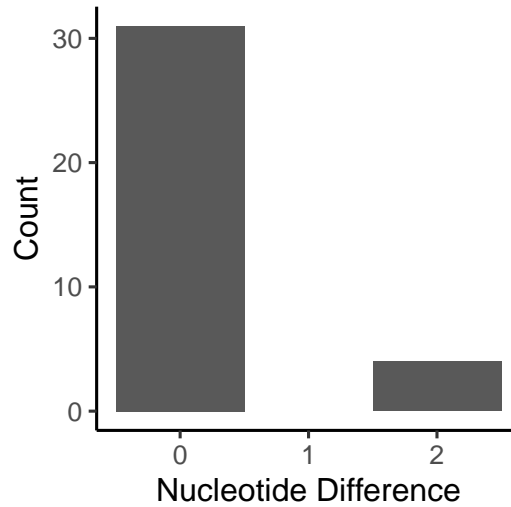
IGHV4-59*08

742 sequences assigned
582 (78.4%) exact matches, in which:
566 unique CDR3
6 unique J



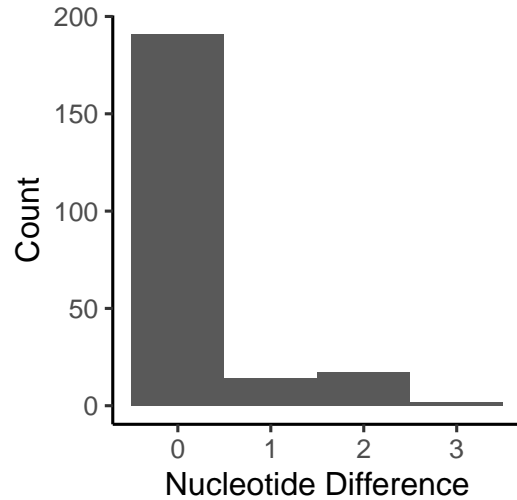
IGHV5-10-1*01_03

35 sequences assigned
31 (88.6%) exact matches, in which:
30 unique CDR3
5 unique J



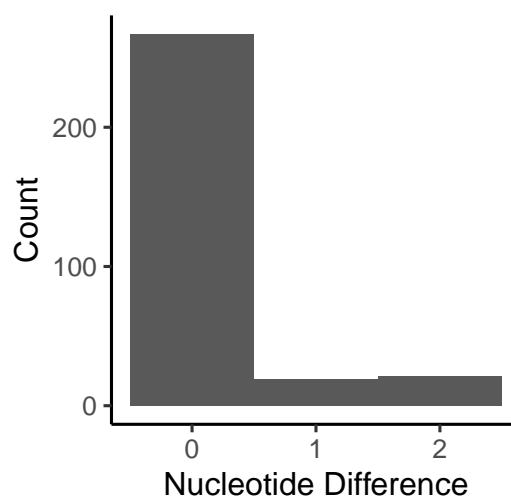
IGHV4-61*01

224 sequences assigned
191 (85.3%) exact matches, in which:
188 unique CDR3
6 unique J



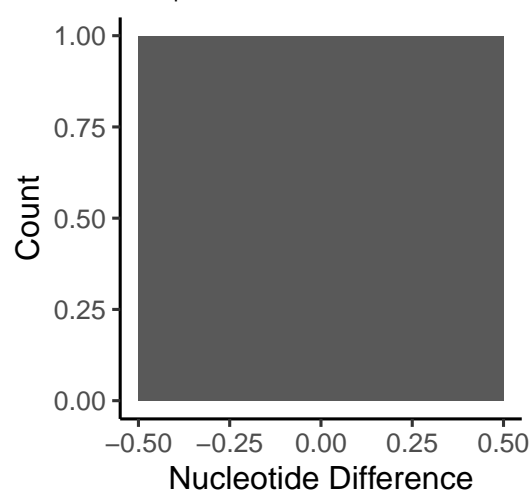
IGHV6-1*01_02

307 sequences assigned
267 (87%) exact matches, in which:
263 unique CDR3
6 unique J



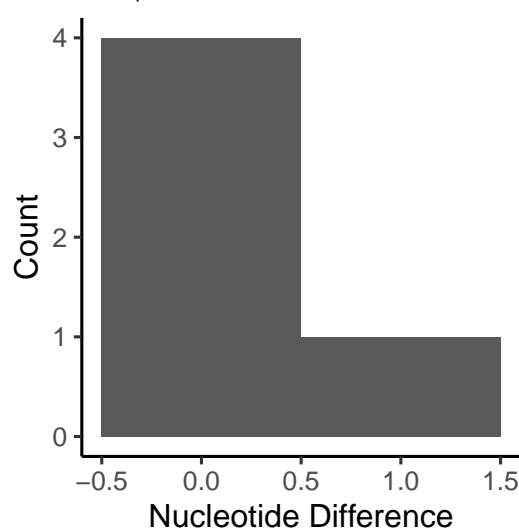
IGHV4/OR15-8*01

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



IGHV7-4-1*01

5 sequences assigned
4 (80%) exact matches, in which:
4 unique CDR3
2 unique J





[illegible]