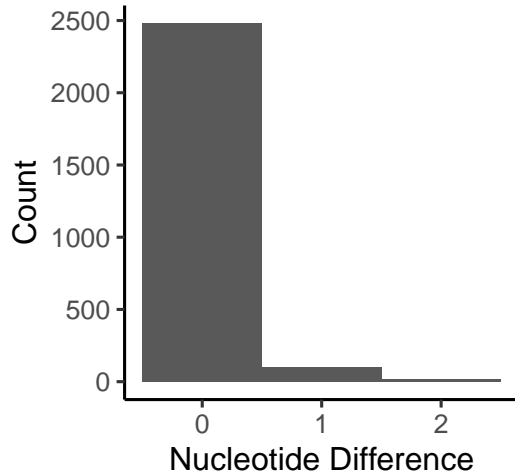


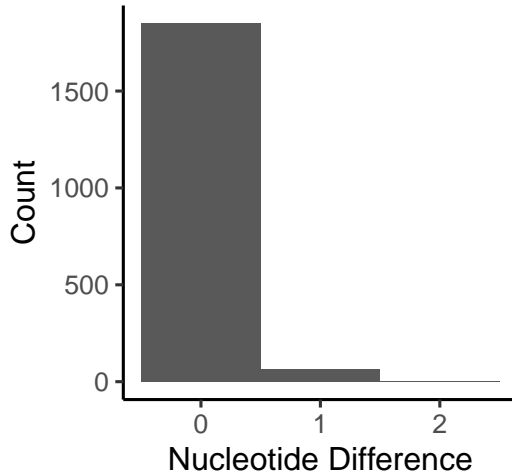
IGHV1-2*02

2596 sequences assigned
2480 (95.5%) exact matches, in which:
2472 unique CDR3
6 unique J



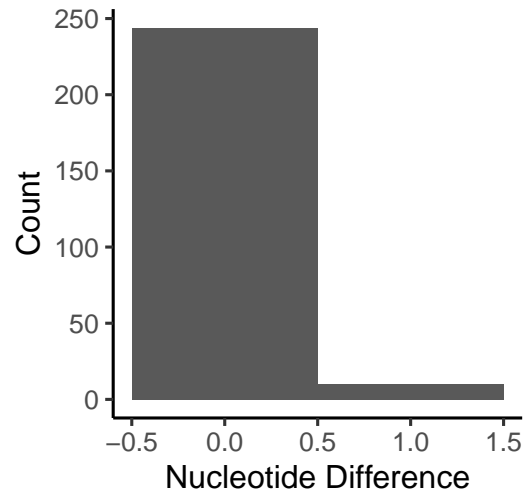
IGHV1-18*01

1917 sequences assigned
1849 (96.5%) exact matches, in which:
1846 unique CDR3
6 unique J



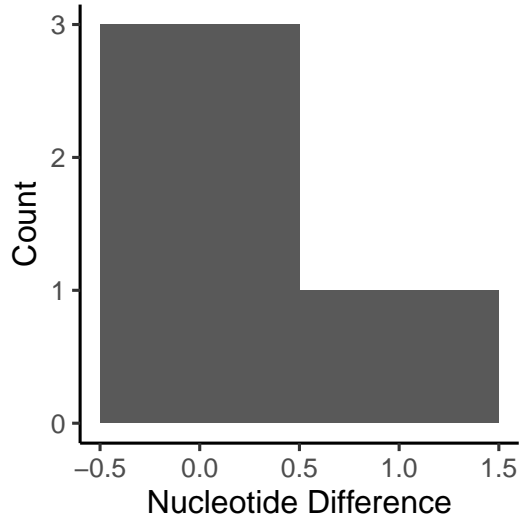
IGHV1-46*01

254 sequences assigned
244 (96.1%) exact matches, in which:
244 unique CDR3
6 unique J



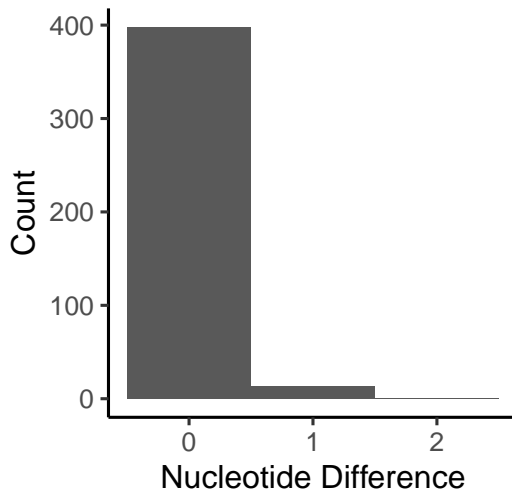
IGHV1-3*02

4 sequences assigned
3 (75%) exact matches, in which:
3 unique CDR3
2 unique J



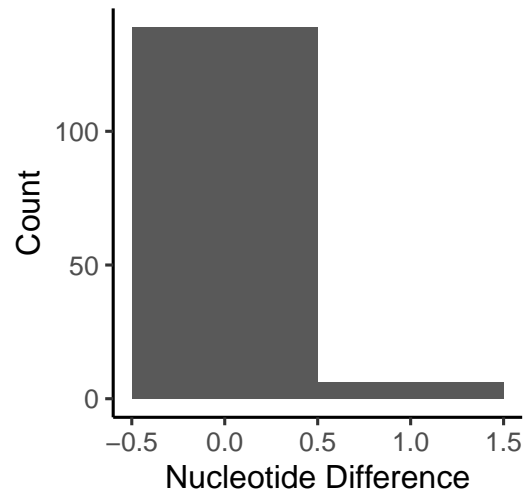
IGHV1-24*01

412 sequences assigned
398 (96.6%) exact matches, in which:
396 unique CDR3
6 unique J



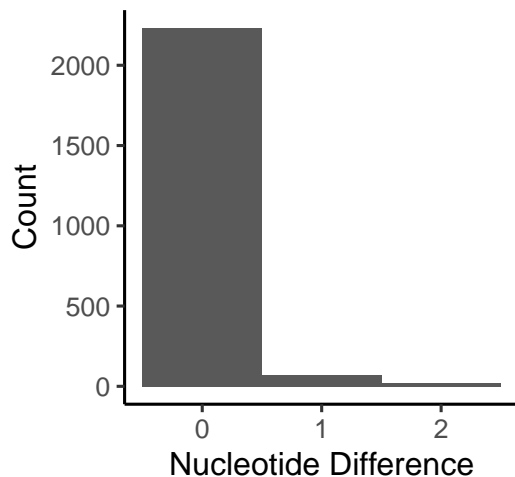
IGHV1-46*03

145 sequences assigned
139 (95.9%) exact matches, in which:
139 unique CDR3
5 unique J



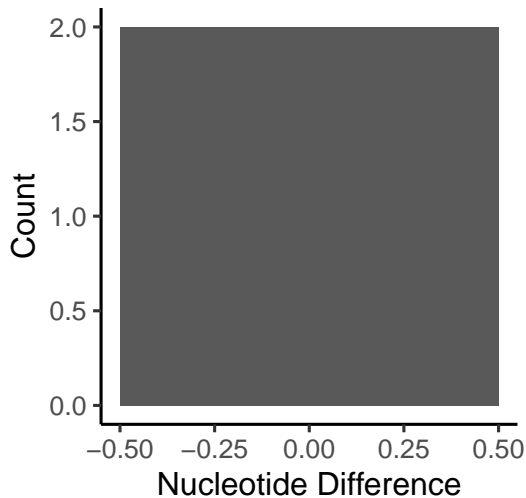
IGHV1-8*01

2324 sequences assigned
2232 (96%) exact matches, in which:
2225 unique CDR3
6 unique J



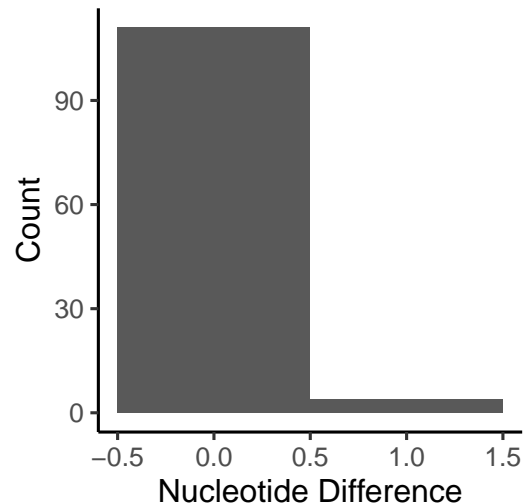
IGHV1-45*02

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



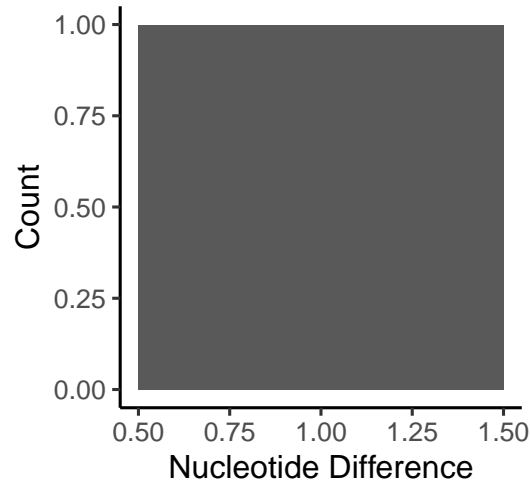
IGHV1-58*01_03

115 sequences assigned
111 (96.5%) exact matches, in which:
111 unique CDR3
5 unique J



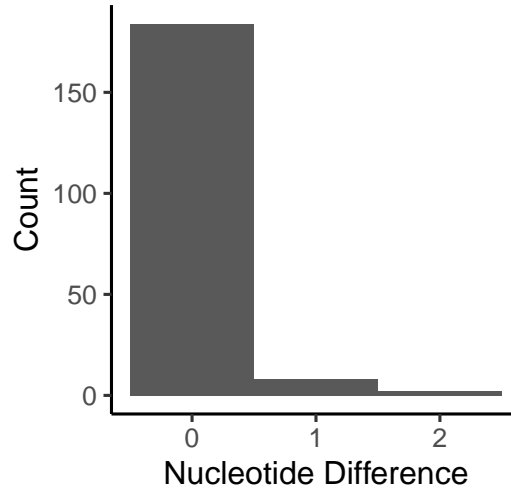
IGHV1-68*01

1 sequences assigned
No exact matches.



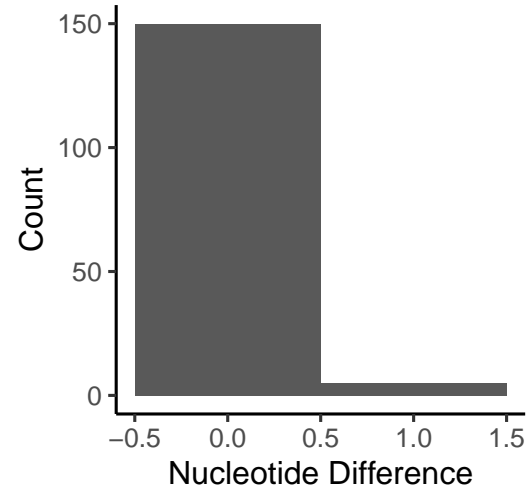
IGHV2-5*01

194 sequences assigned
184 (94.8%) exact matches, in which:
180 unique CDR3
6 unique J



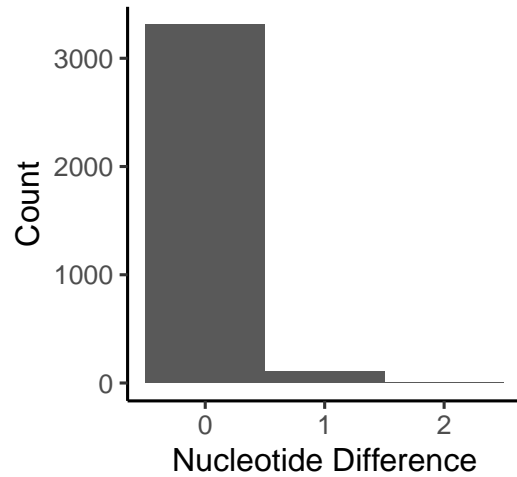
IGHV2-70*01

155 sequences assigned
150 (96.8%) exact matches, in which:
149 unique CDR3
5 unique J



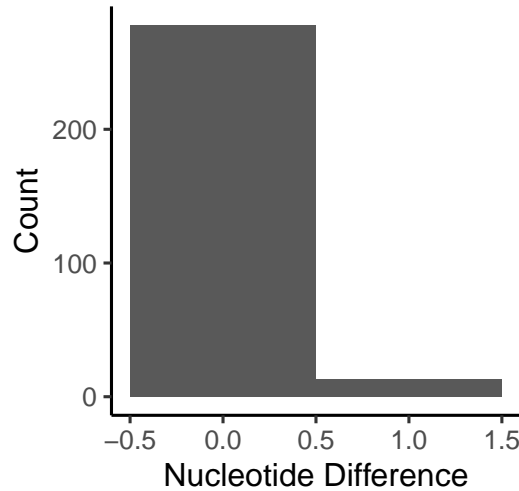
IGHV1-69*01_12_13

3424 sequences assigned
3310 (96.7%) exact matches, in which:
3306 unique CDR3
6 unique J



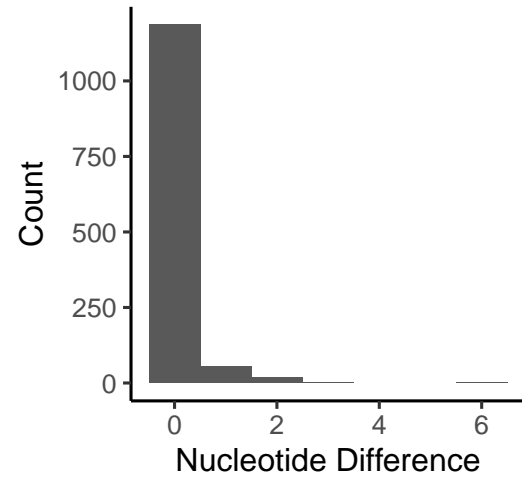
IGHV2-5*02

291 sequences assigned
278 (95.5%) exact matches, in which:
278 unique CDR3
6 unique J



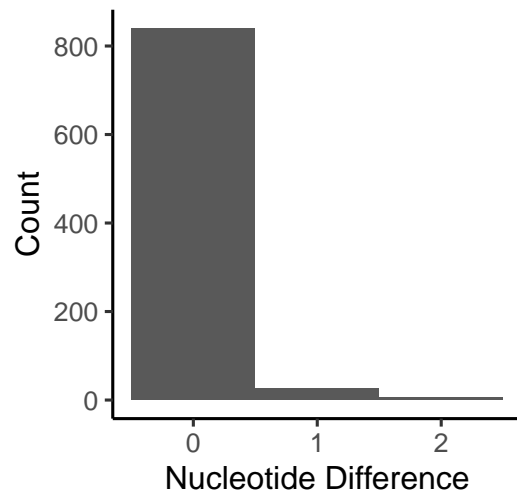
IGHV3-7*01

1261 sequences assigned
1186 (94.1%) exact matches, in which:
1163 unique CDR3
6 unique J



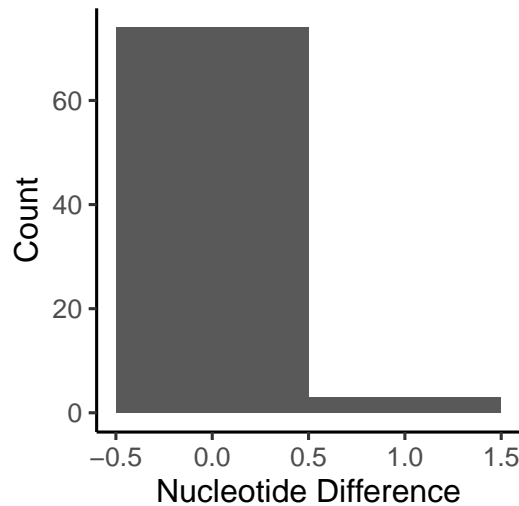
IGHV1-69*06_14

872 sequences assigned
840 (96.3%) exact matches, in which:
840 unique CDR3
6 unique J



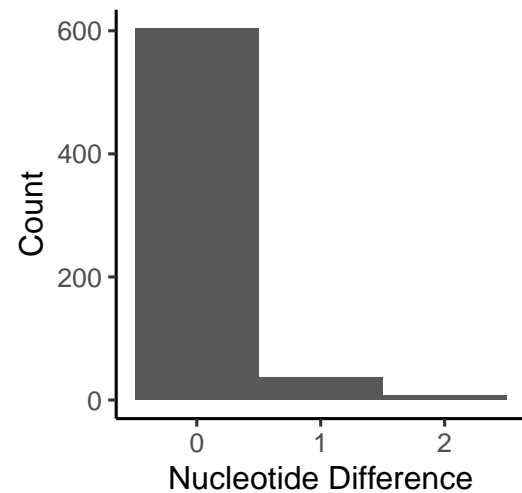
IGHV2-26*01

77 sequences assigned
74 (96.1%) exact matches, in which:
73 unique CDR3
5 unique J



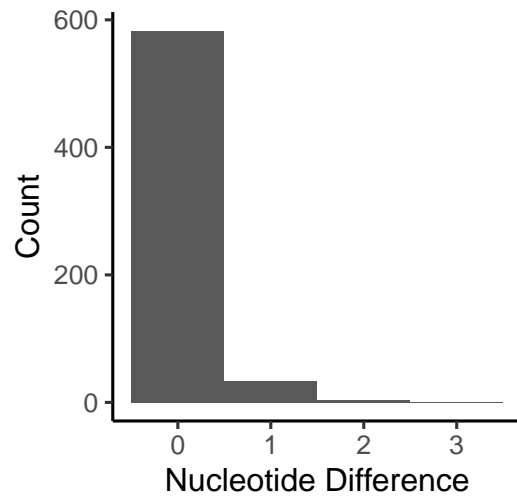
IGHV3-9*01

647 sequences assigned
604 (93.4%) exact matches, in which:
596 unique CDR3
6 unique J



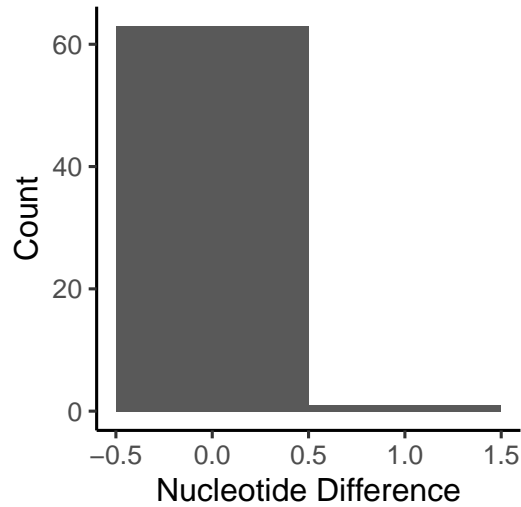
IGHV3-11*01

621 sequences assigned
583 (93.9%) exact matches, in which:
578 unique CDR3
6 unique J



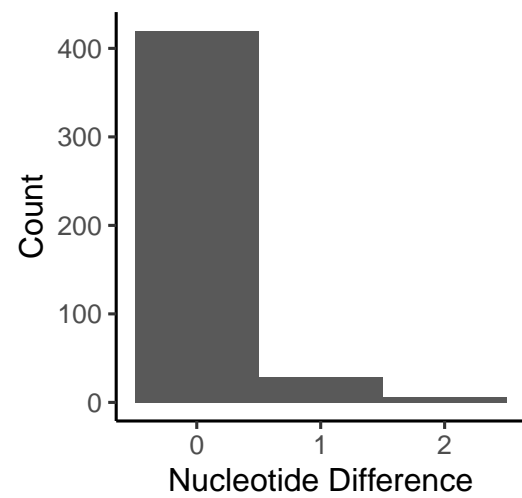
IGHV3-20*01_02

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



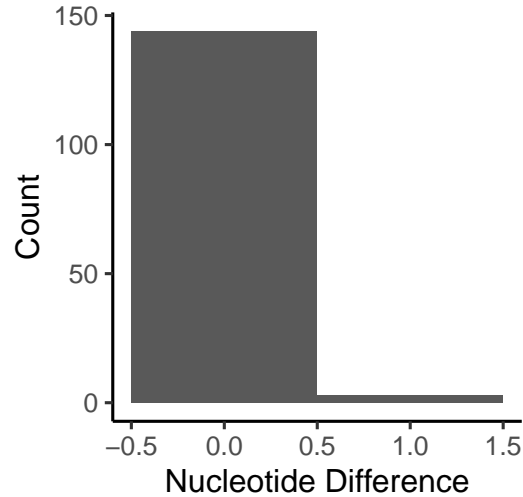
IGHV3-30*03

455 sequences assigned
420 (92.3%) exact matches, in which:
419 unique CDR3
6 unique J



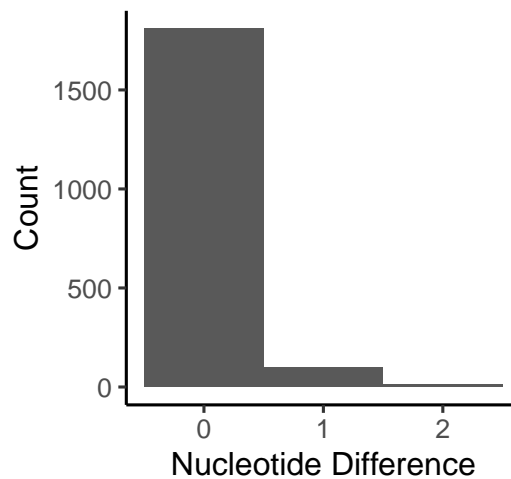
IGHV3-13*01

147 sequences assigned
144 (98%) exact matches, in which:
143 unique CDR3
5 unique J



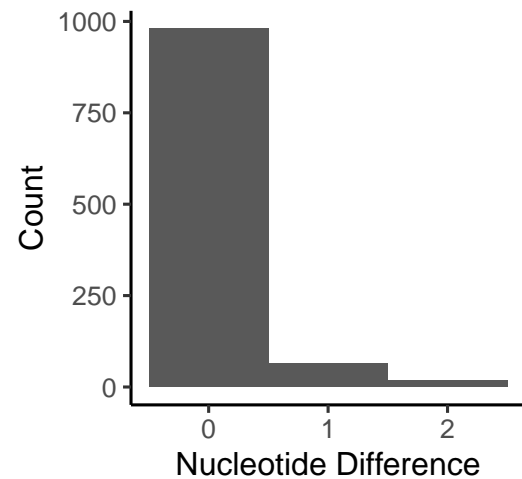
IGHV3-21*01_02

1924 sequences assigned
1809 (94%) exact matches, in which:
1792 unique CDR3
6 unique J



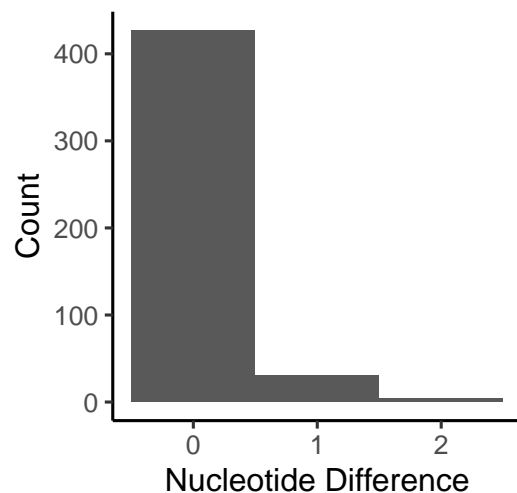
IGHV3-33*01

1063 sequences assigned
980 (92.2%) exact matches, in which:
976 unique CDR3
6 unique J



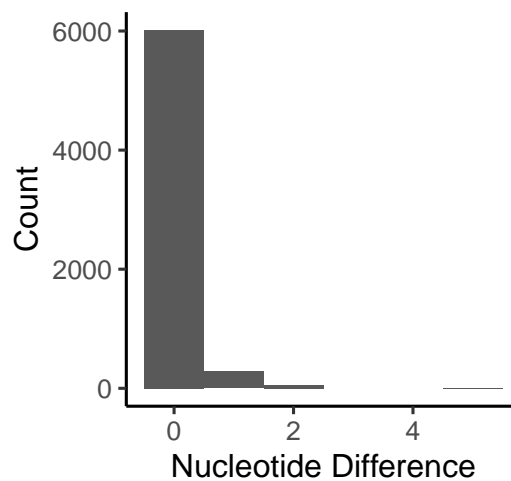
IGHV3-15*01_02

461 sequences assigned
427 (92.6%) exact matches, in which:
424 unique CDR3
6 unique J



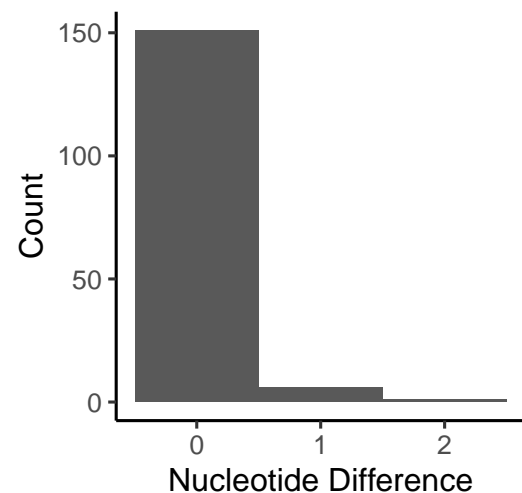
IGHV3-23*01_04

6350 sequences assigned
6016 (94.7%) exact matches, in which:
5958 unique CDR3
6 unique J



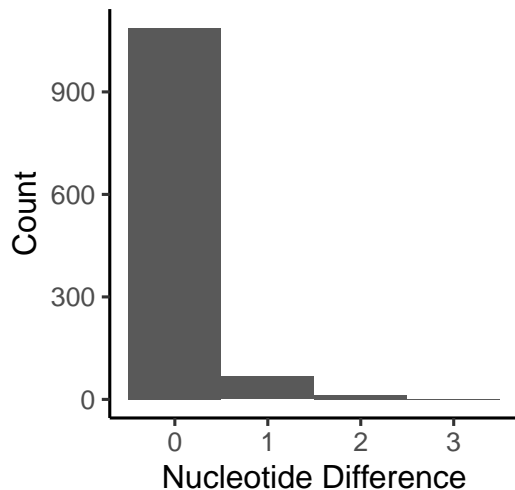
IGHV3-43*01

158 sequences assigned
151 (95.6%) exact matches, in which:
151 unique CDR3
6 unique J



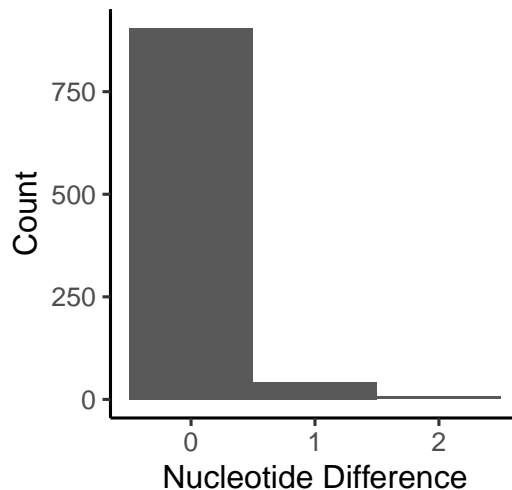
IGHV3-48*02

1170 sequences assigned
1088 (93%) exact matches, in which:
1069 unique CDR3
6 unique J



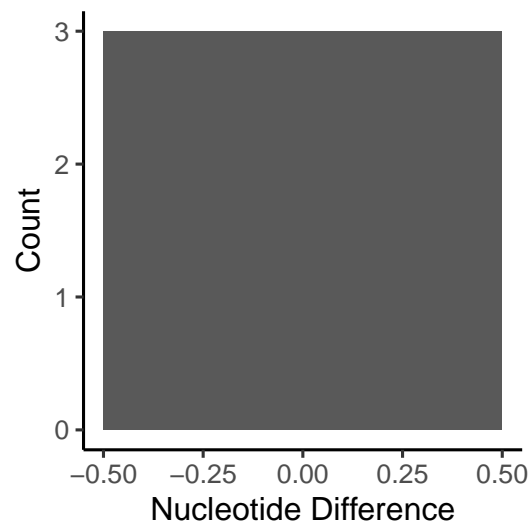
IGHV3-53*01_02

955 sequences assigned
906 (94.9%) exact matches, in which:
897 unique CDR3
6 unique J



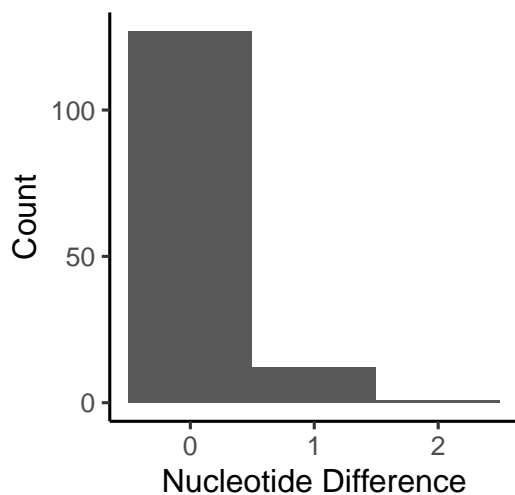
IGHV3-69-1*01

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



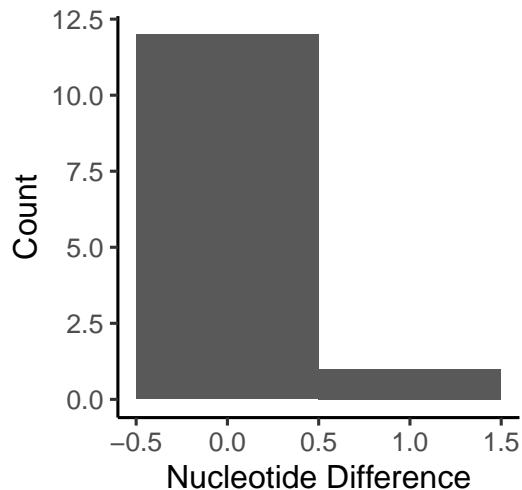
IGHV3-49*03_05

140 sequences assigned
127 (90.7%) exact matches, in which:
127 unique CDR3
6 unique J



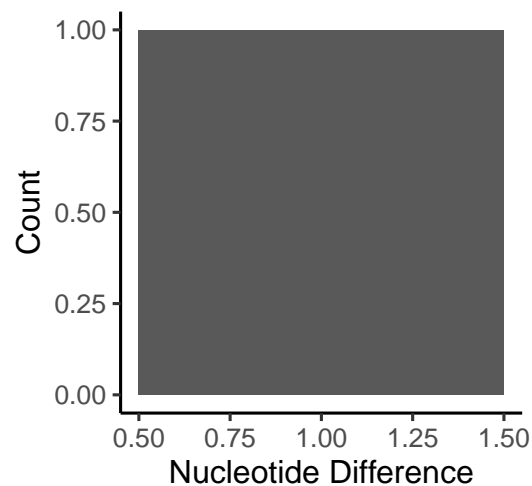
IGHV3-64*02_07

13 sequences assigned
12 (92.3%) exact matches, in which:
12 unique CDR3
3 unique J



IGHV3-71*01_04

1 sequences assigned
No exact matches.



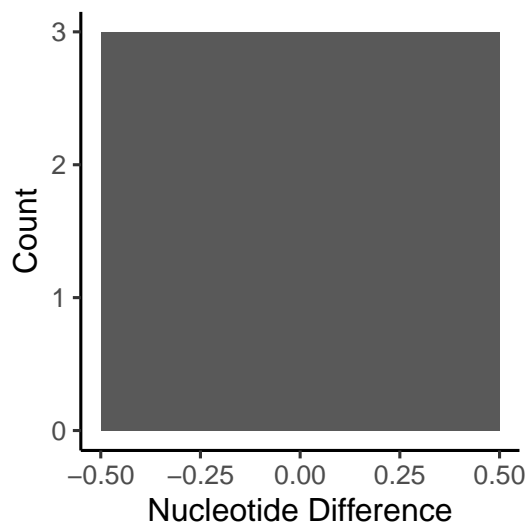
IGHV3-52*01_03

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



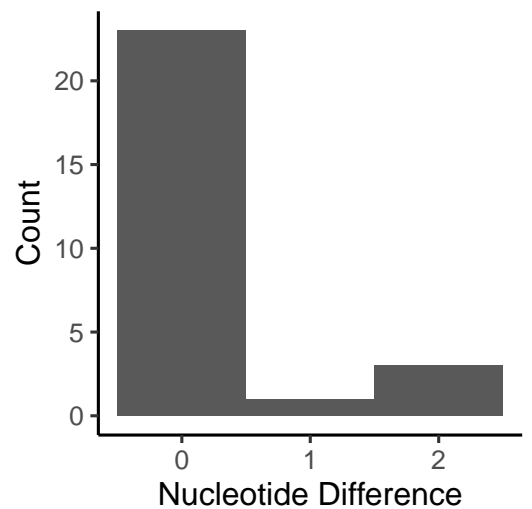
IGHV3-66*03

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



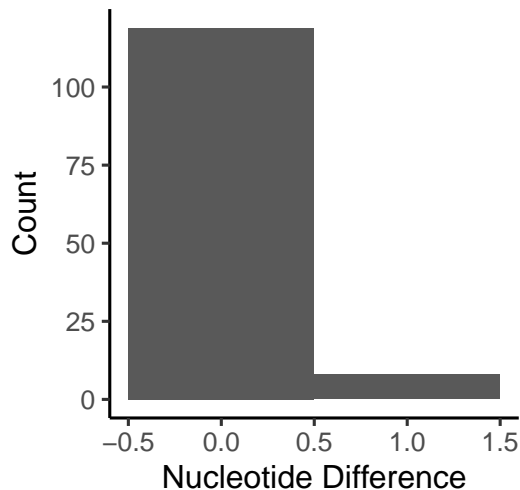
IGHV3-72*01

27 sequences assigned
23 (85.2%) exact matches, in which:
23 unique CDR3
4 unique J



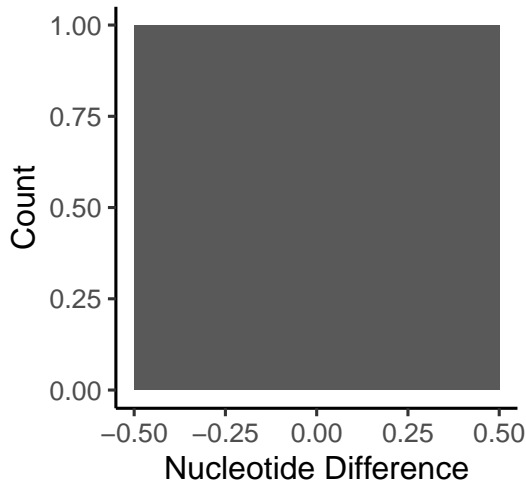
IGHV3–73*01_02

127 sequences assigned
119 (93.7%) exact matches, in which:
118 unique CDR3
6 unique J



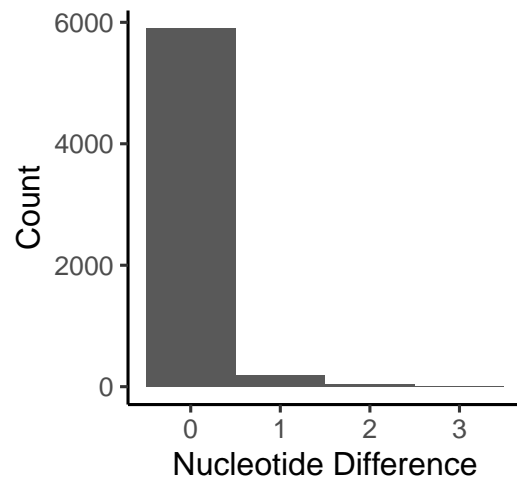
IGHV4–28*03

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



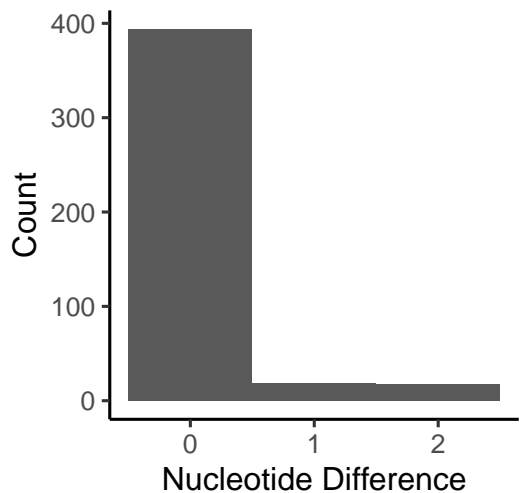
IGHV4–34*01_02

6130 sequences assigned
5900 (96.2%) exact matches, in which:
5828 unique CDR3
6 unique J



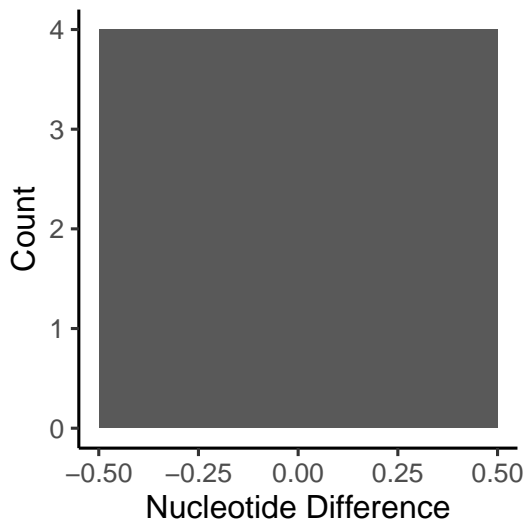
IGHV3–74*01_02

431 sequences assigned
394 (91.4%) exact matches, in which:
385 unique CDR3
6 unique J



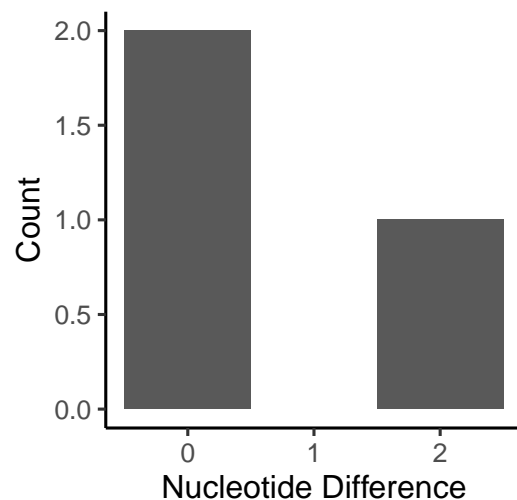
IGHV4–28*01_07

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



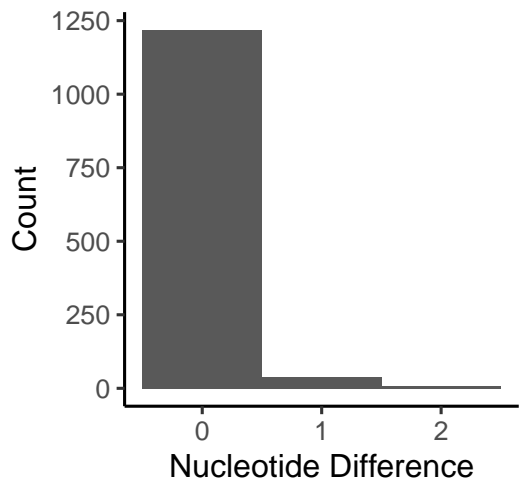
IGHV4–39*07

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
1 unique J



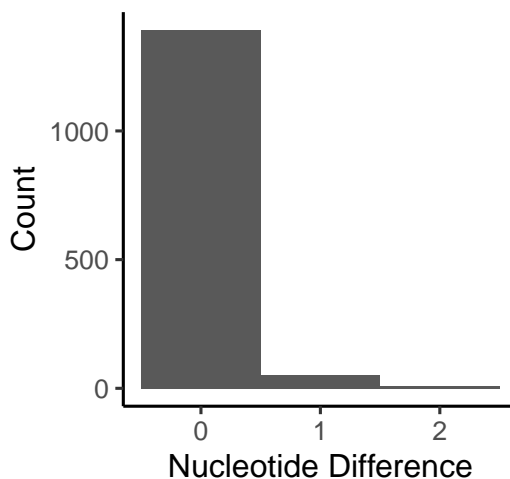
IGHV4–4*07

1265 sequences assigned
1218 (96.3%) exact matches, in which:
1207 unique CDR3
6 unique J



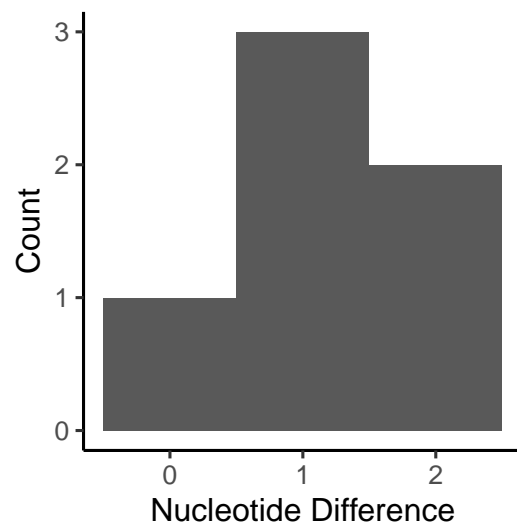
IGHV4–31*02

1452 sequences assigned
1392 (95.9%) exact matches, in which:
1385 unique CDR3
6 unique J



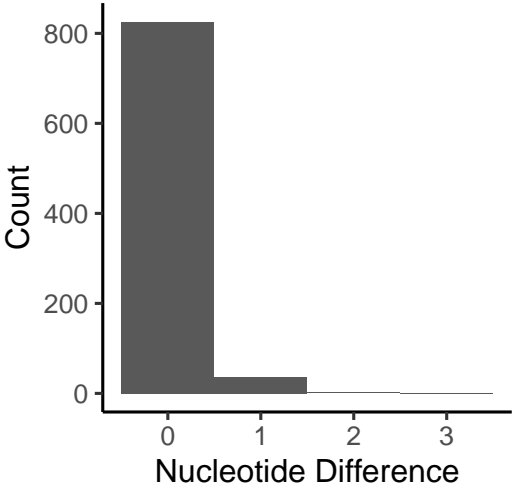
IGHV4–59*12

6 sequences assigned
1 (16.7%) exact matches, in which:
1 unique CDR3
1 unique J



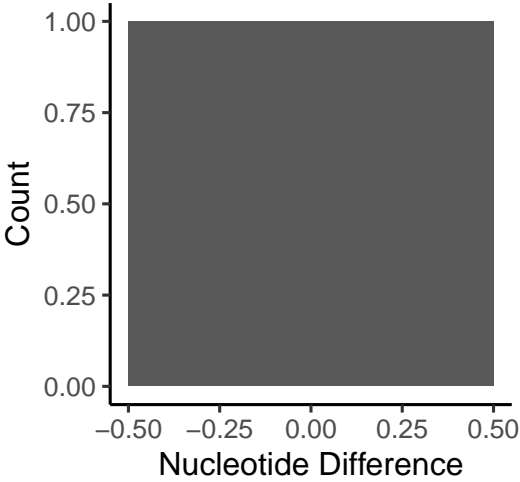
IGHV4–61*01

866 sequences assigned
826 (95.4%) exact matches, in which:
820 unique CDR3
6 unique J



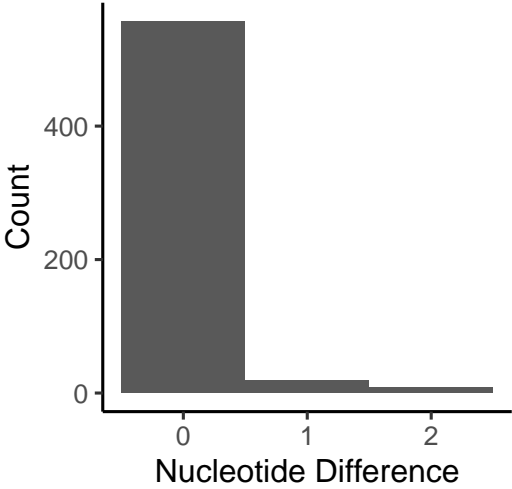
IGHV5–51*01_03

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



IGHV6–1*01_02

584 sequences assigned
557 (95.4%) exact matches, in which:
553 unique CDR3
6 unique J





[illegible]