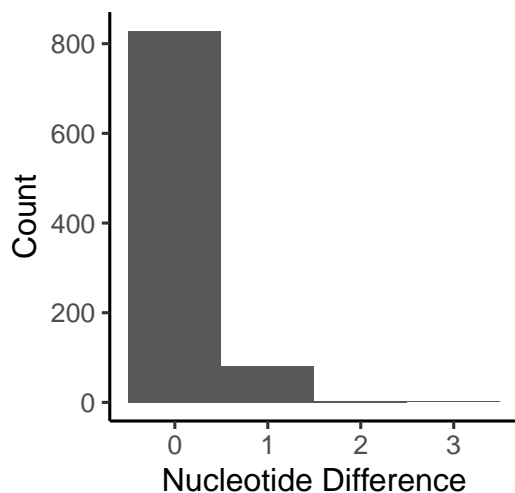


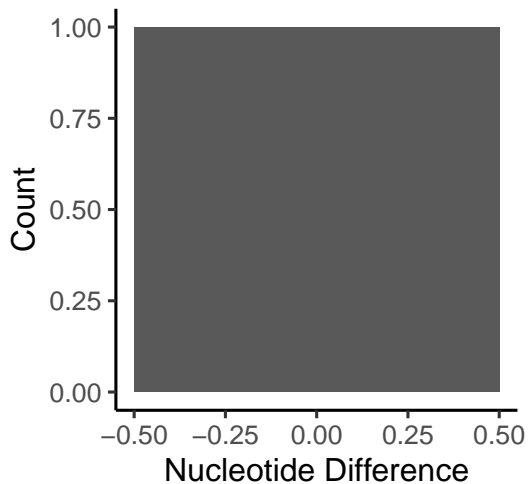
IGHV1-2*06

916 sequences assigned
829 (90.5%) exact matches, in which:
821 unique CDR3
6 unique J



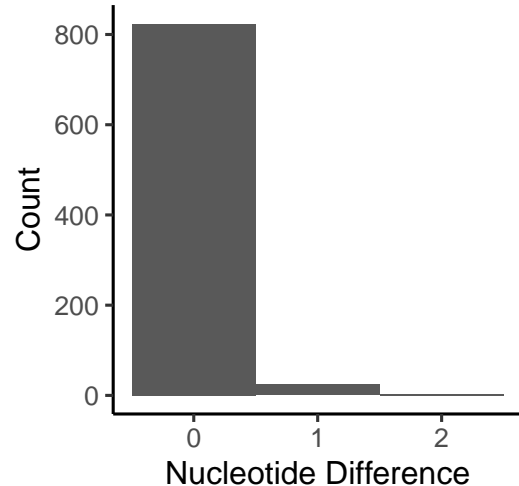
IGHV1-8*03

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



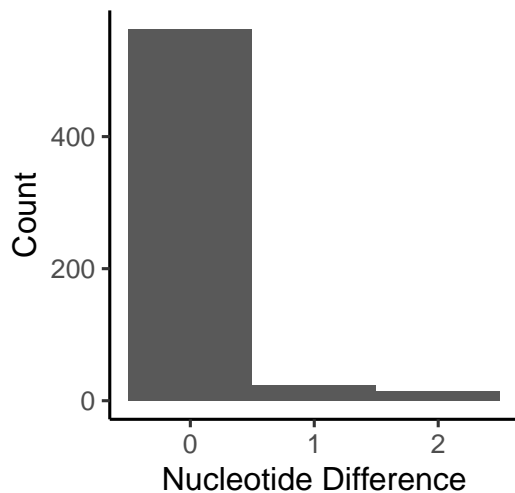
IGHV1-24*01

851 sequences assigned
824 (96.8%) exact matches, in which:
820 unique CDR3
7 unique J



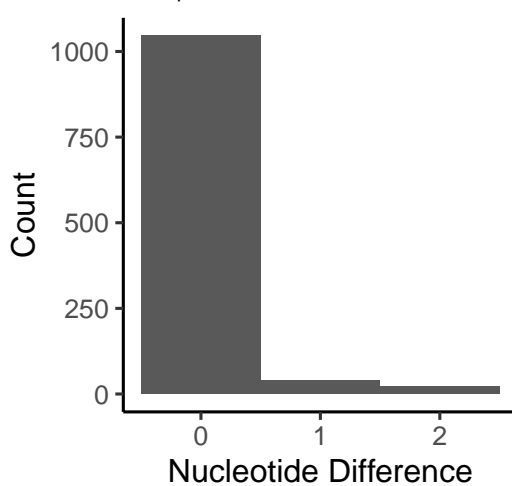
IGHV1-3*01_05

600 sequences assigned
563 (93.8%) exact matches, in which:
563 unique CDR3
7 unique J



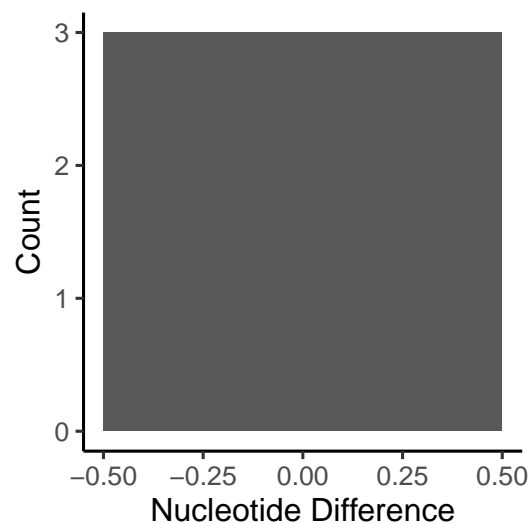
IGHV1-18*01

1108 sequences assigned
1046 (94.4%) exact matches, in which:
1039 unique CDR3
7 unique J



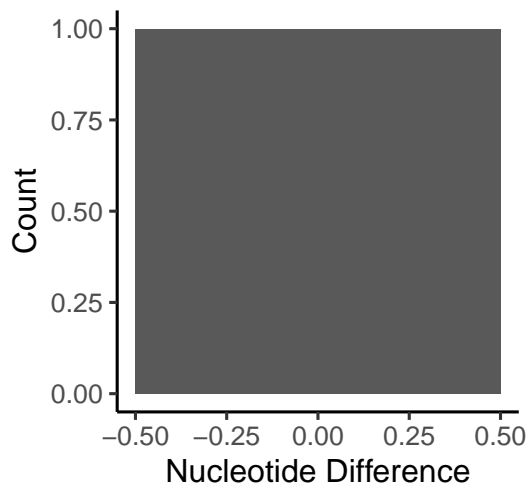
IGHV1-45*02

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



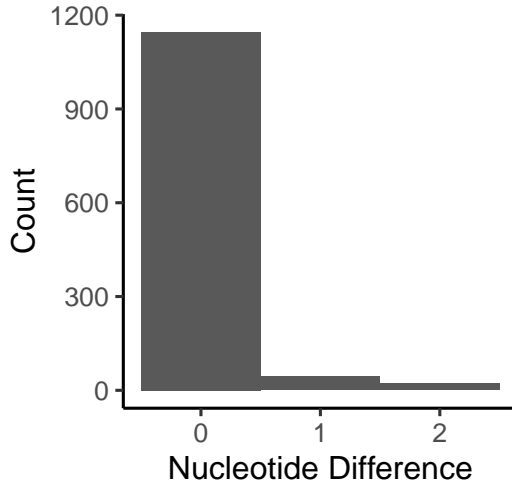
IGHV1-8*01

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



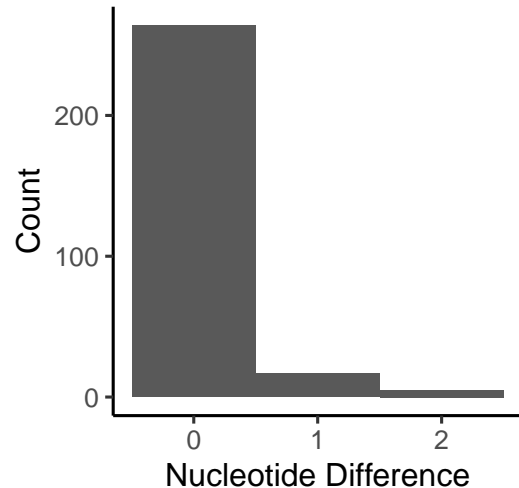
IGHV1-18*04

1212 sequences assigned
1146 (94.6%) exact matches, in which:
1138 unique CDR3
7 unique J



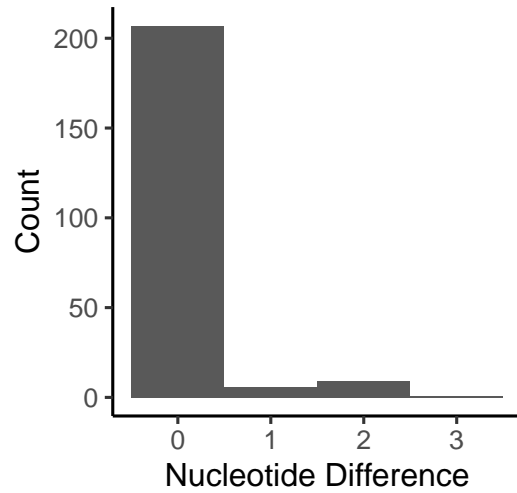
IGHV1-46*01

286 sequences assigned
264 (92.3%) exact matches, in which:
263 unique CDR3
7 unique J



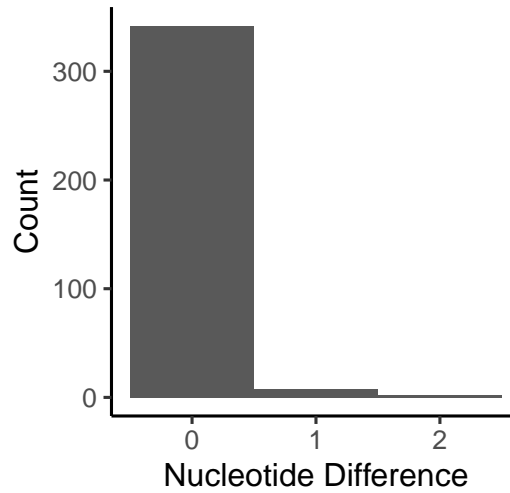
IGHV1–46*03

223 sequences assigned
207 (92.8%) exact matches, in which:
206 unique CDR3
6 unique J



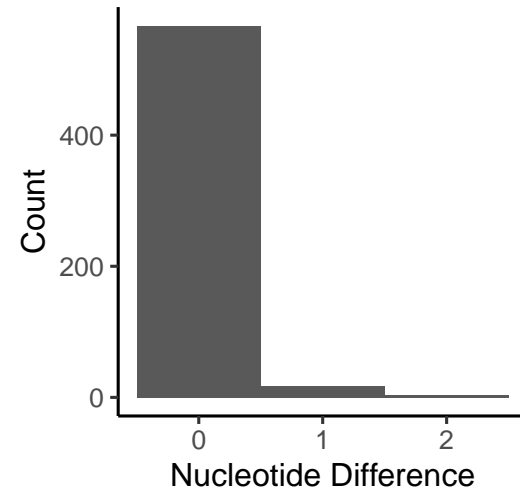
IGHV1–69*02

352 sequences assigned
342 (97.2%) exact matches, in which:
342 unique CDR3
6 unique J



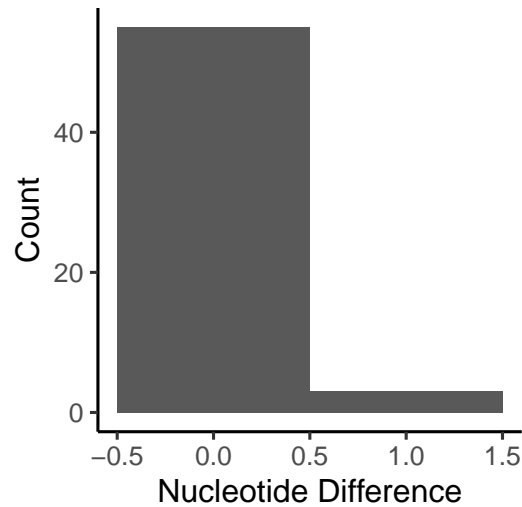
IGHV1–69*06_14

588 sequences assigned
567 (96.4%) exact matches, in which:
567 unique CDR3
7 unique J



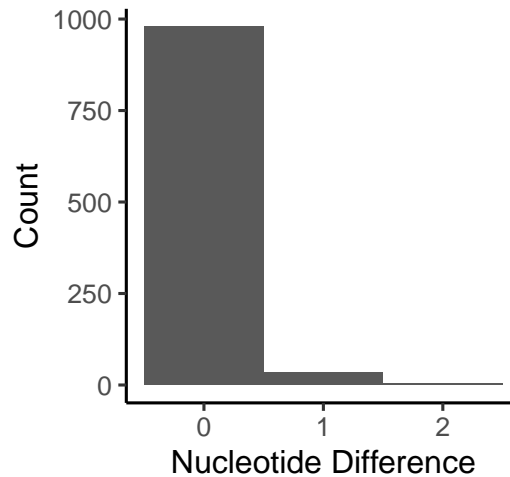
IGHV1–58*02

58 sequences assigned
55 (94.8%) exact matches, in which:
55 unique CDR3
6 unique J



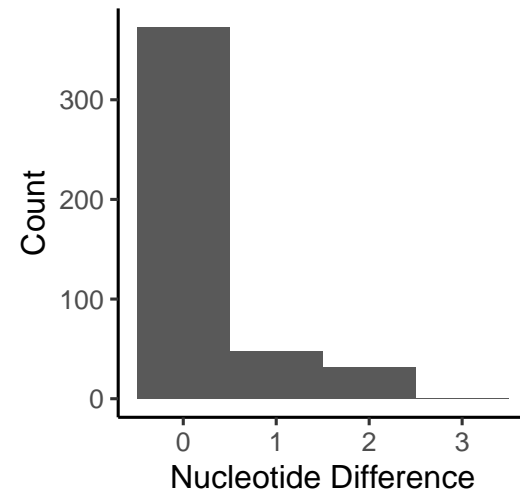
IGHV1–69*01_12_13

1018 sequences assigned
979 (96.2%) exact matches, in which:
978 unique CDR3
7 unique J



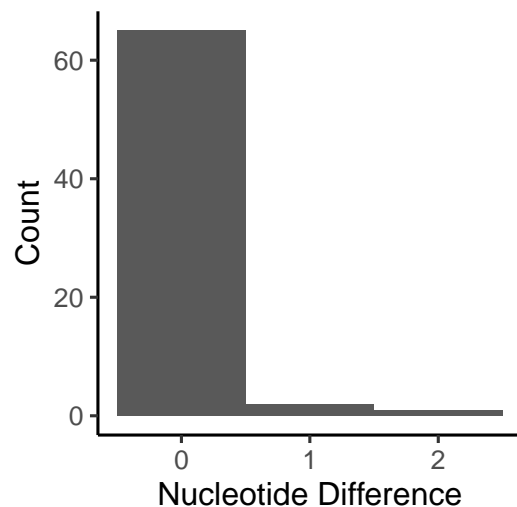
IGHV2–5*02

454 sequences assigned
373 (82.2%) exact matches, in which:
372 unique CDR3
7 unique J



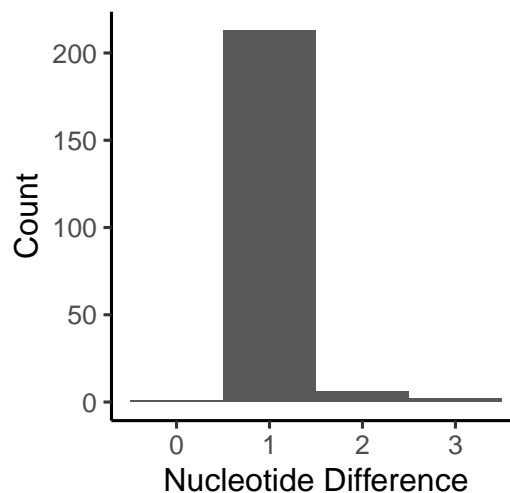
IGHV1–58*01_03

68 sequences assigned
65 (95.6%) exact matches, in which:
65 unique CDR3
6 unique J



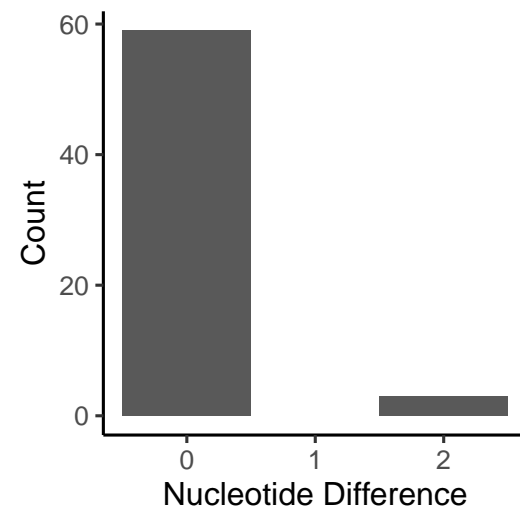
IGHV1–69*04_09

222 sequences assigned
1 (0.5%) exact matches, in which:
1 unique CDR3
1 unique J



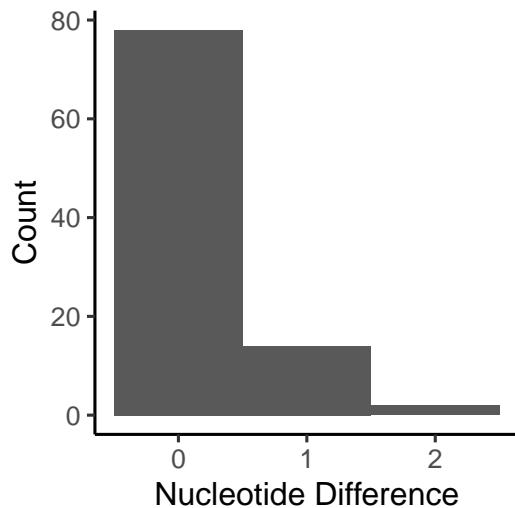
IGHV2–26*01

62 sequences assigned
59 (95.2%) exact matches, in which:
59 unique CDR3
7 unique J



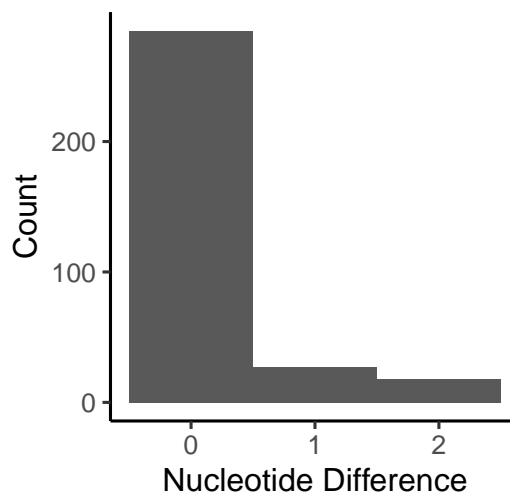
IGHV2-70*01

94 sequences assigned
78 (83%) exact matches, in which:
73 unique CDR3
5 unique J



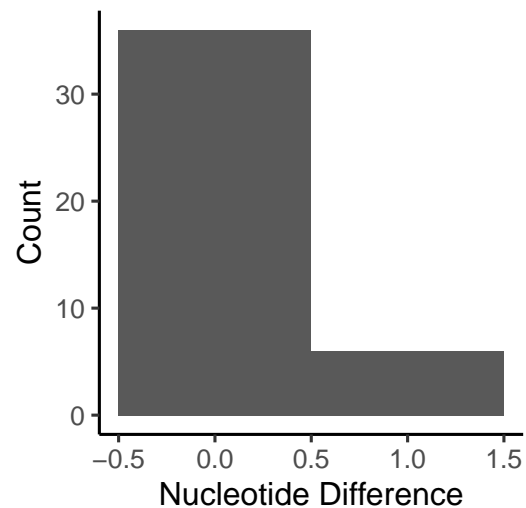
IGHV3-11*06

330 sequences assigned
285 (86.4%) exact matches, in which:
283 unique CDR3
7 unique J



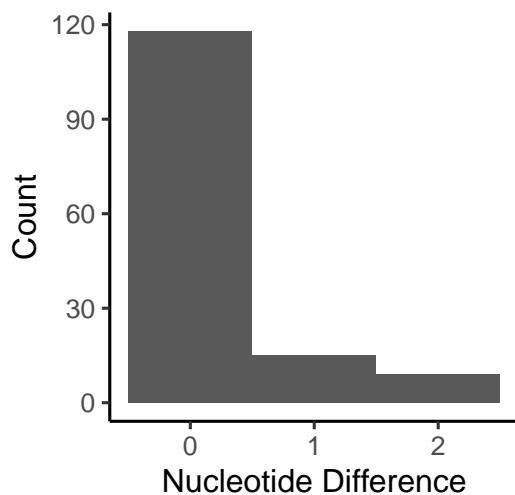
IGHV3-20*01_02

42 sequences assigned
36 (85.7%) exact matches, in which:
36 unique CDR3
5 unique J



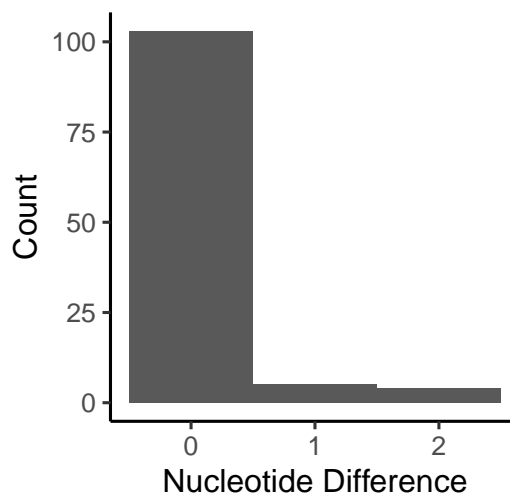
IGHV2-70*11_15

142 sequences assigned
118 (83.1%) exact matches, in which:
118 unique CDR3
6 unique J



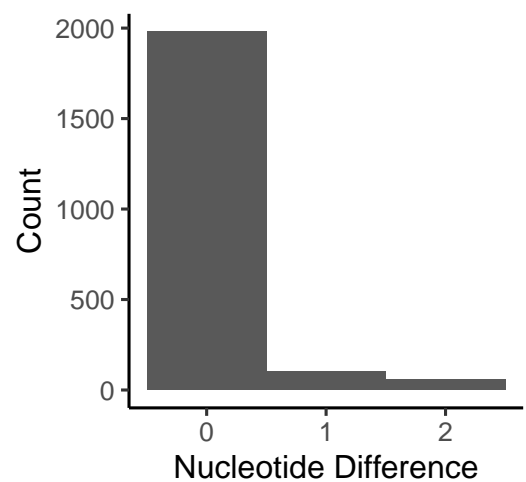
IGHV3-13*05

112 sequences assigned
103 (92%) exact matches, in which:
102 unique CDR3
6 unique J



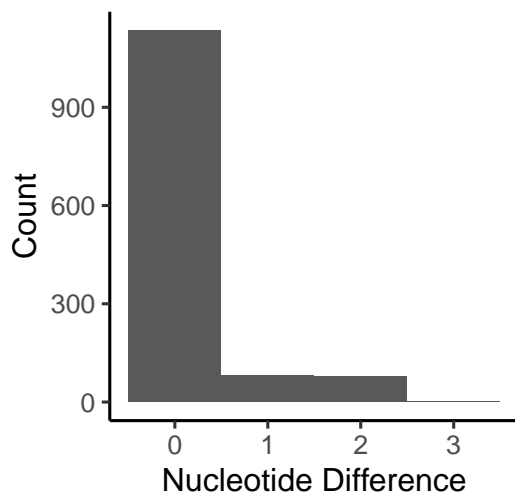
IGHV3-21*01_02

2143 sequences assigned
1980 (92.4%) exact matches, in which:
1938 unique CDR3
7 unique J



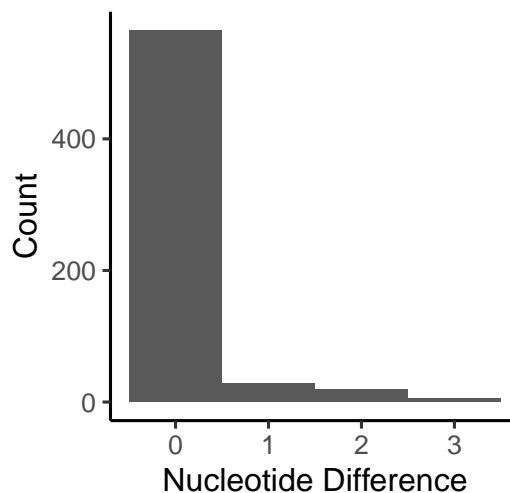
IGHV3-7*03

1295 sequences assigned
1135 (87.6%) exact matches, in which:
1111 unique CDR3
7 unique J



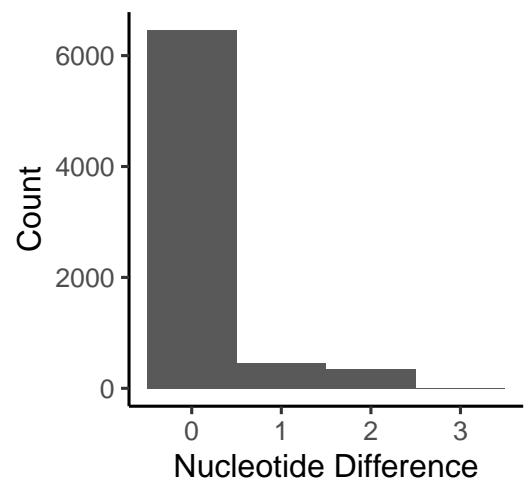
IGHV3-15*01_02

617 sequences assigned
565 (91.6%) exact matches, in which:
559 unique CDR3
7 unique J



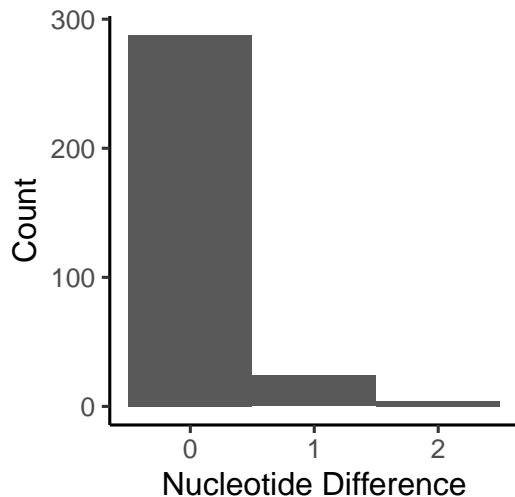
IGHV3-23*01_04

7257 sequences assigned
6461 (89%) exact matches, in which:
6325 unique CDR3
7 unique J



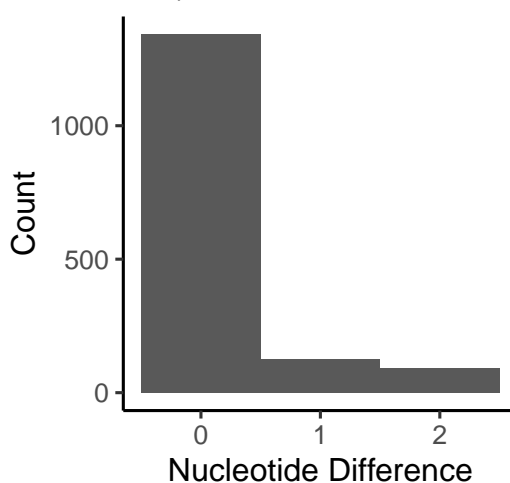
IGHV3-33*01

316 sequences assigned
288 (91.1%) exact matches, in which:
284 unique CDR3
7 unique J



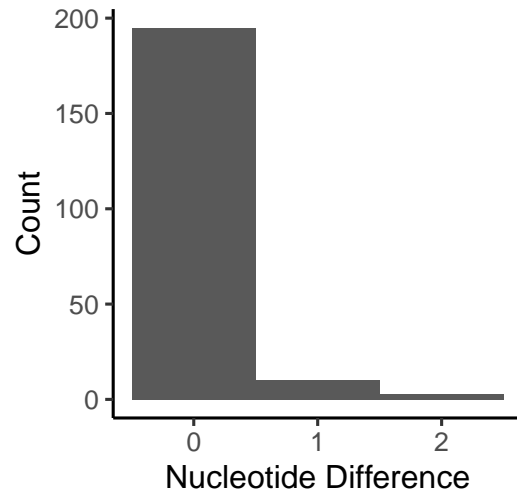
IGHV3-48*02

1556 sequences assigned
1342 (86.2%) exact matches, in which:
1316 unique CDR3
7 unique J



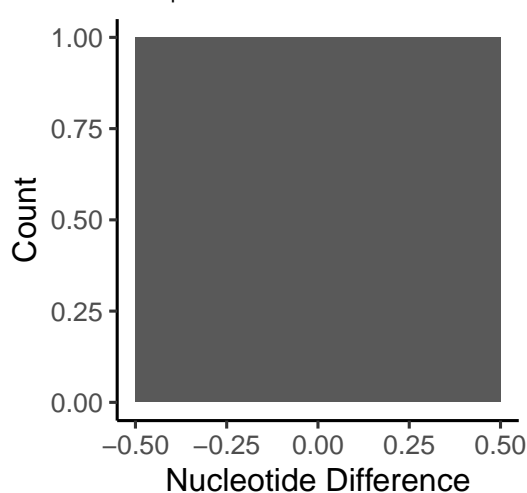
IGHV3-53*04

208 sequences assigned
195 (93.8%) exact matches, in which:
192 unique CDR3
6 unique J



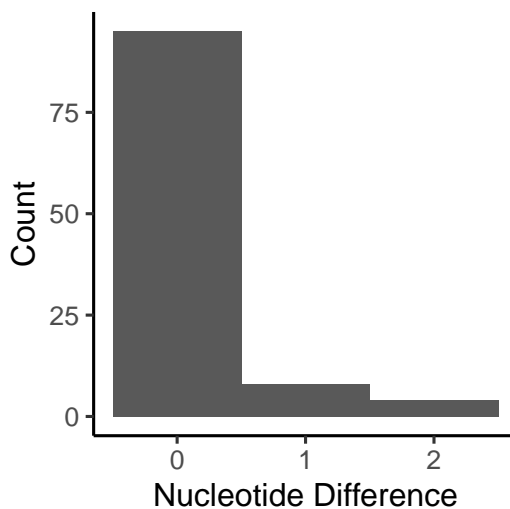
IGHV3-38-3*01

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



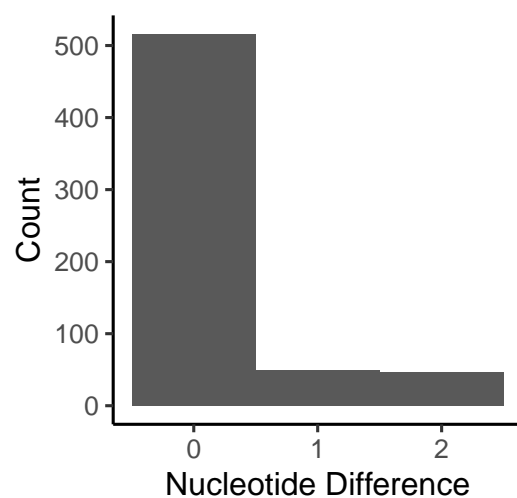
IGHV3-49*04

107 sequences assigned
95 (88.8%) exact matches, in which:
95 unique CDR3
6 unique J



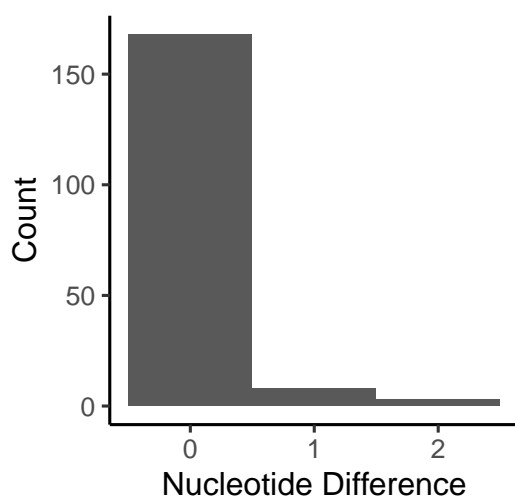
IGHV3-53*01_02

611 sequences assigned
516 (84.5%) exact matches, in which:
506 unique CDR3
7 unique J



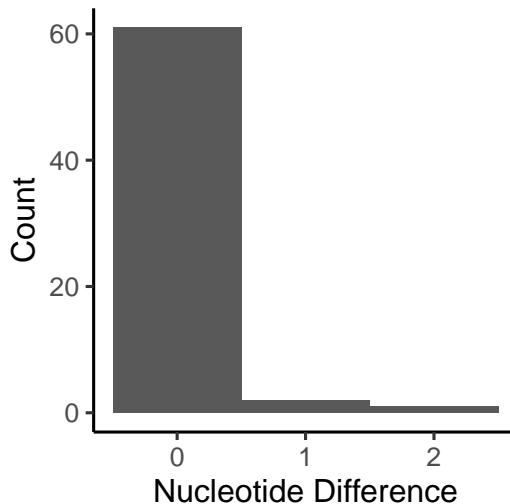
IGHV3-43*01

179 sequences assigned
168 (93.9%) exact matches, in which:
167 unique CDR3
7 unique J



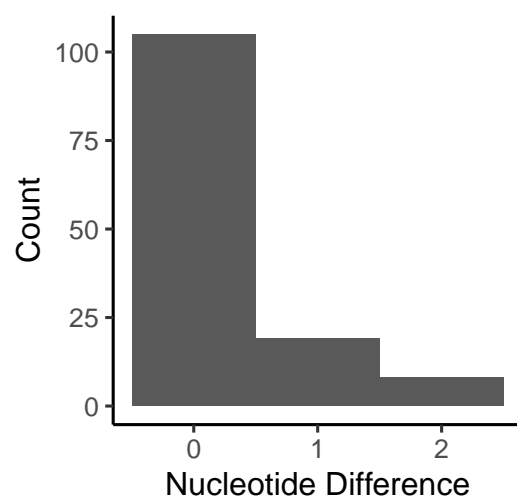
IGHV3-49*03_05

64 sequences assigned
61 (95.3%) exact matches, in which:
60 unique CDR3
6 unique J



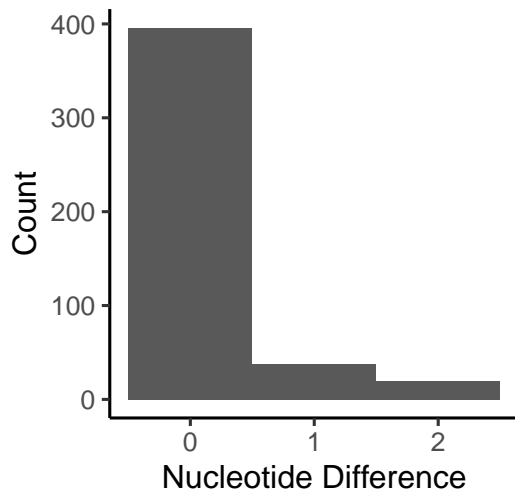
IGHV3-64*01

132 sequences assigned
105 (79.5%) exact matches, in which:
101 unique CDR3
6 unique J



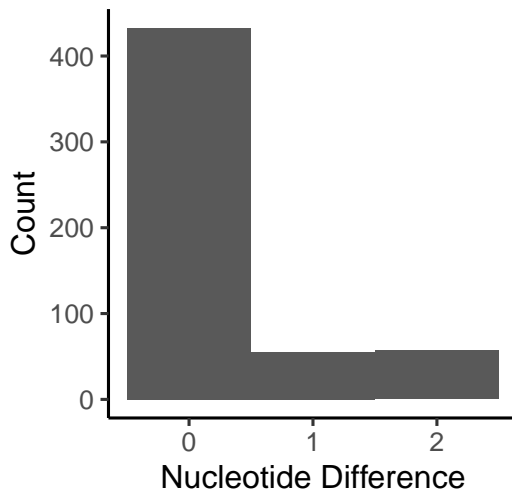
IGHV3-66*01

454 sequences assigned
396 (87.2%) exact matches, in which:
390 unique CDR3
7 unique J



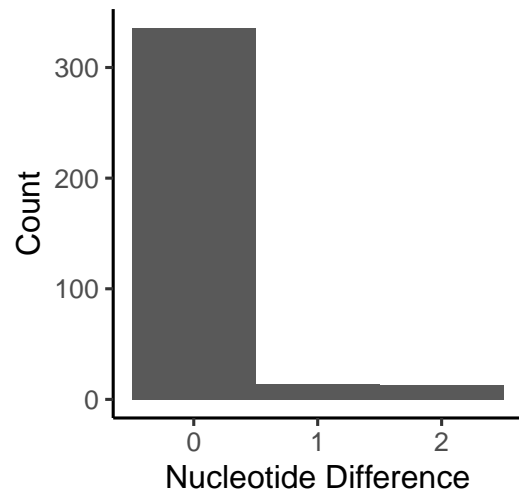
IGHV3-74*01_02

545 sequences assigned
433 (79.4%) exact matches, in which:
426 unique CDR3
7 unique J



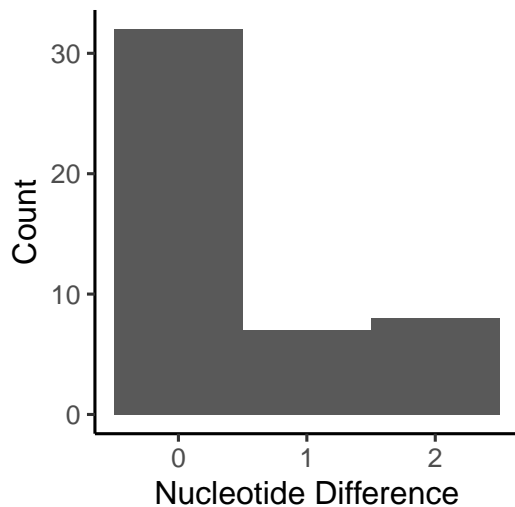
IGHV4-4*02_03

363 sequences assigned
336 (92.6%) exact matches, in which:
334 unique CDR3
6 unique J



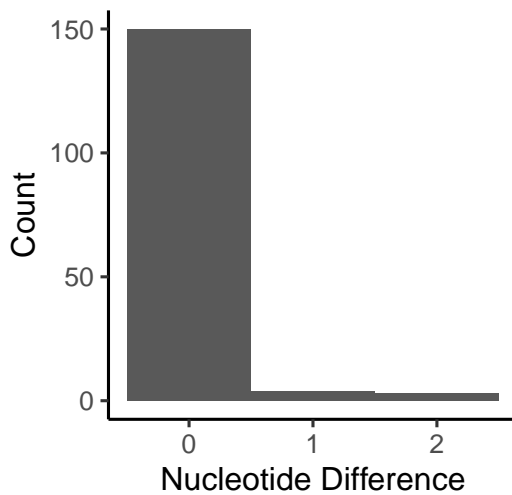
IGHV3-72*01

47 sequences assigned
32 (68.1%) exact matches, in which:
32 unique CDR3
4 unique J



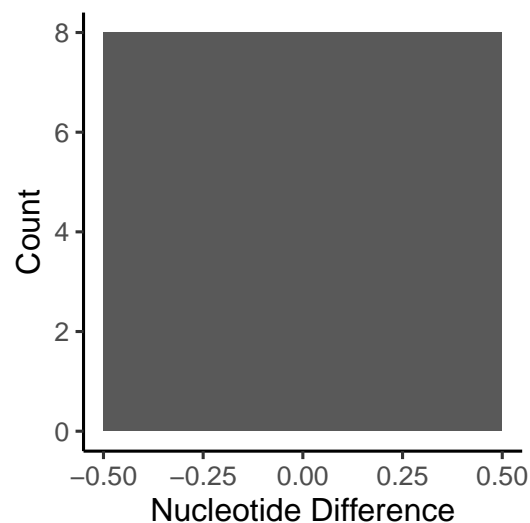
IGHV3-43D*03

157 sequences assigned
150 (95.5%) exact matches, in which:
145 unique CDR3
7 unique J



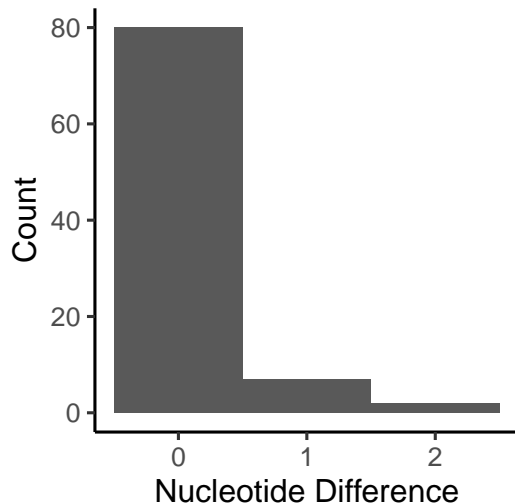
IGHV4-28*01_07

8 sequences assigned
8 (100%) exact matches, in which:
8 unique CDR3
4 unique J



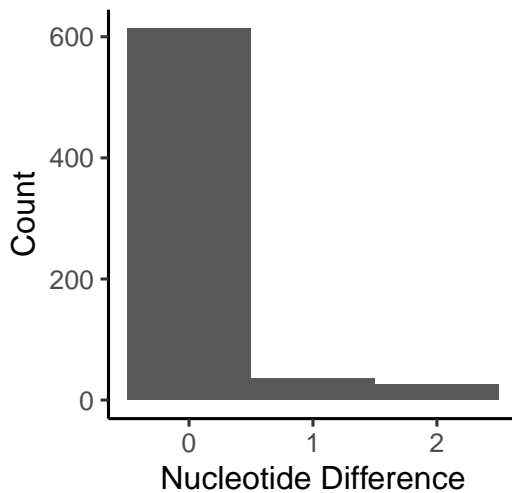
IGHV3-73*01_02

89 sequences assigned
80 (89.9%) exact matches, in which:
78 unique CDR3
6 unique J



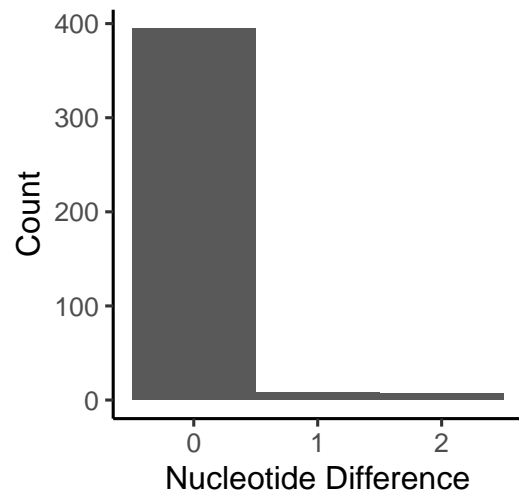
IGHV3-64D*06

676 sequences assigned
614 (90.8%) exact matches, in which:
607 unique CDR3
7 unique J



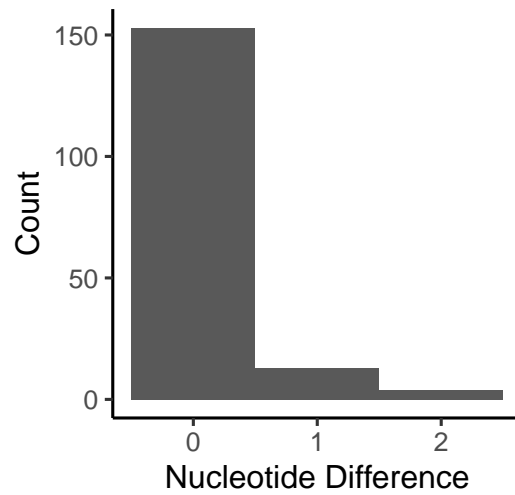
IGHV4-30-2*01

410 sequences assigned
395 (96.3%) exact matches, in which:
391 unique CDR3
6 unique J



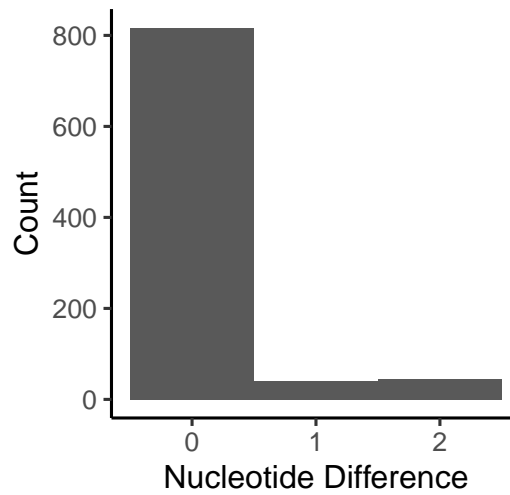
IGHV4-30-4*07

170 sequences assigned
153 (90%) exact matches, in which:
151 unique CDR3
6 unique J



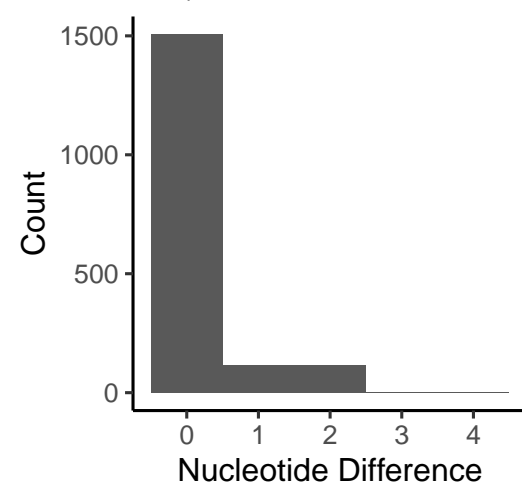
IGHV4-38-2*02

902 sequences assigned
817 (90.6%) exact matches, in which:
802 unique CDR3
6 unique J



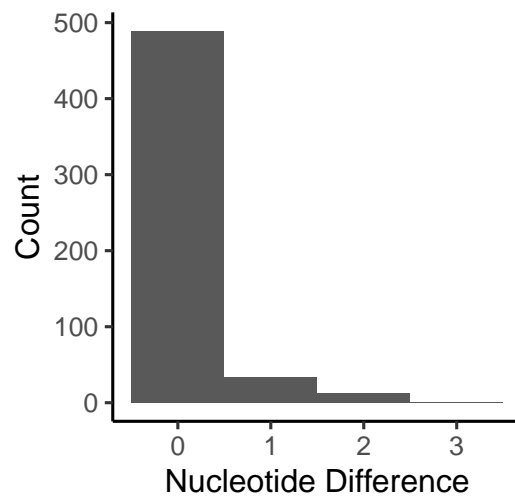
IGHV4-59*08

1743 sequences assigned
1506 (86.4%) exact matches, in which:
1479 unique CDR3
7 unique J



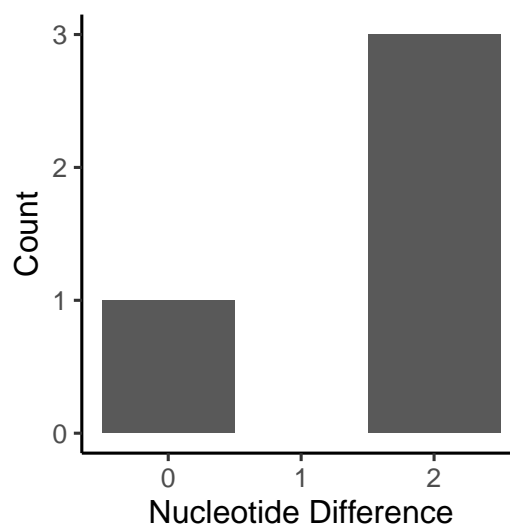
IGHV4-31*02

536 sequences assigned
489 (91.2%) exact matches, in which:
488 unique CDR3
6 unique J



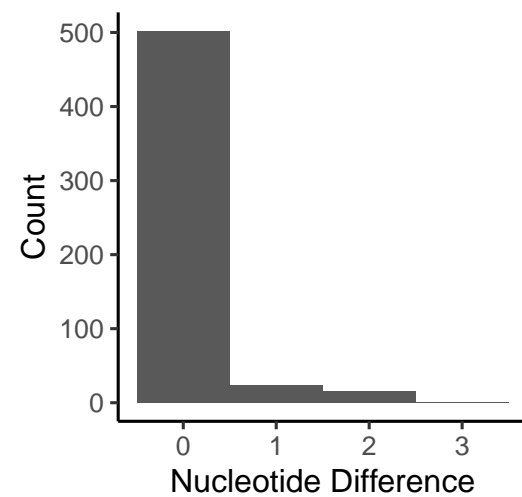
IGHV4-39*02

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



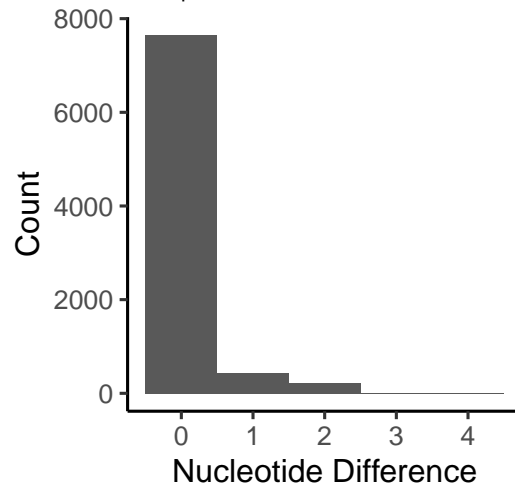
IGHV4-61*01

542 sequences assigned
502 (92.6%) exact matches, in which:
499 unique CDR3
6 unique J



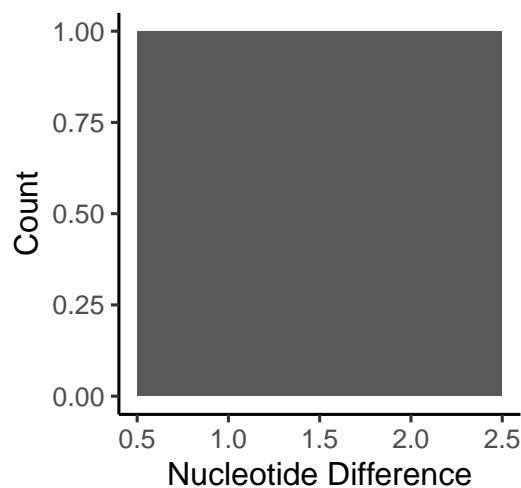
IGHV4-34*01_02

8309 sequences assigned
7650 (92.1%) exact matches, in which:
7510 unique CDR3
7 unique J



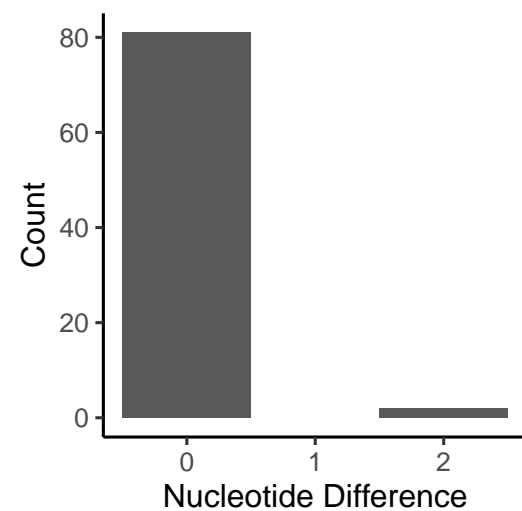
IGHV4-39*07

2 sequences assigned
No exact matches.



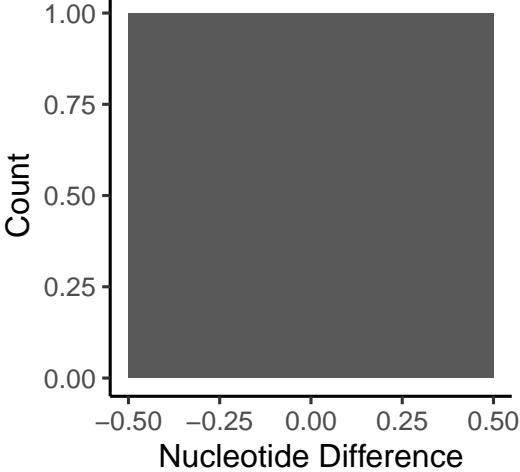
IGHV5-10-1*01_03

83 sequences assigned
81 (97.6%) exact matches, in which:
81 unique CDR3
7 unique J



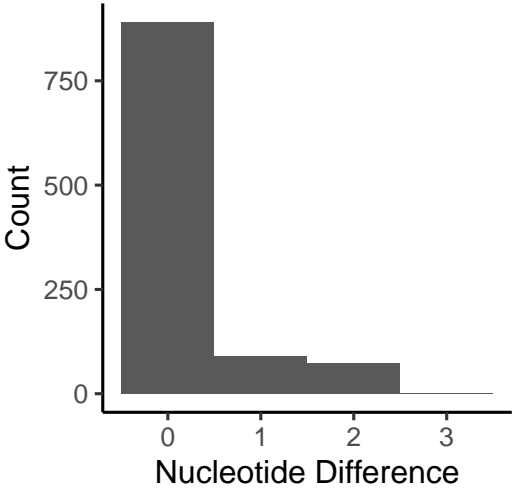
IGHV5-51*01_03

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



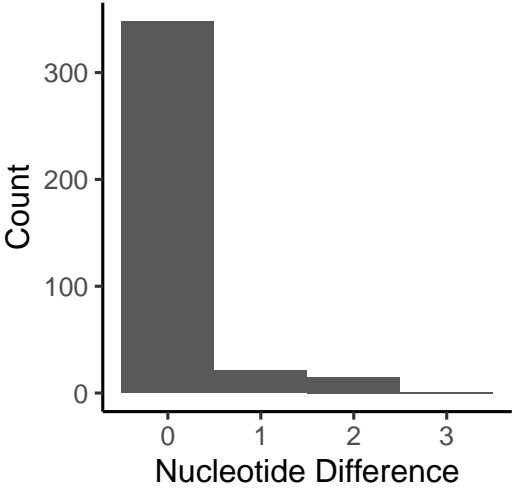
IGHV6-1*01_02

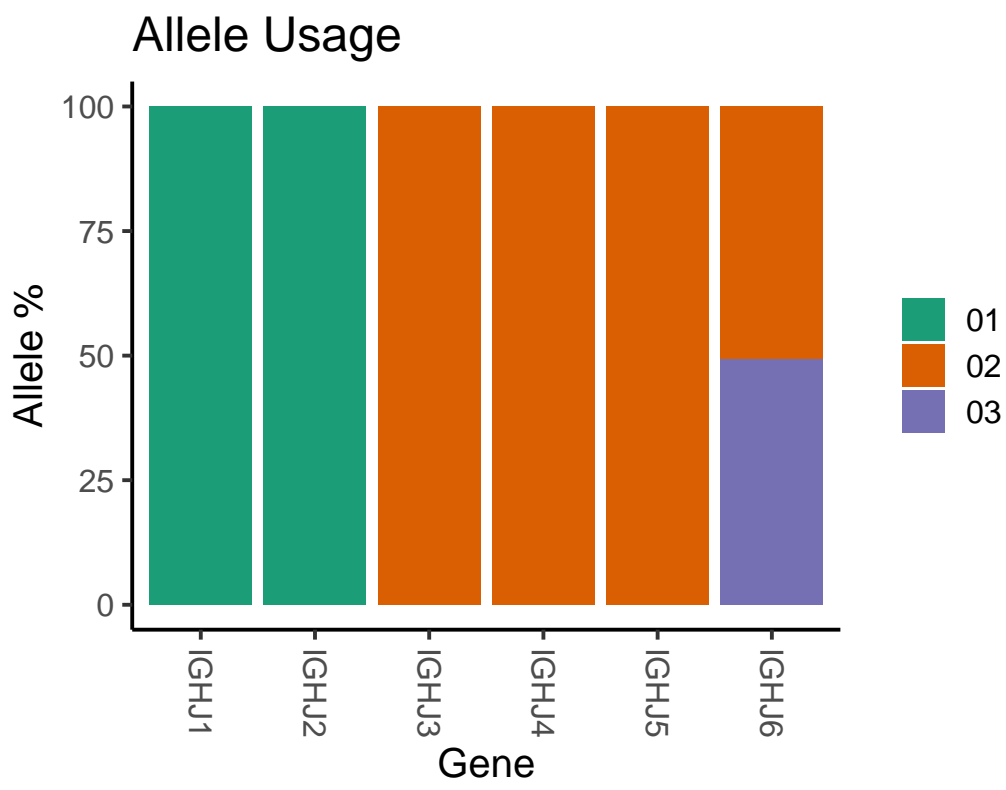
1057 sequences assigned
891 (84.3%) exact matches, in which:
871 unique CDR3
7 unique J



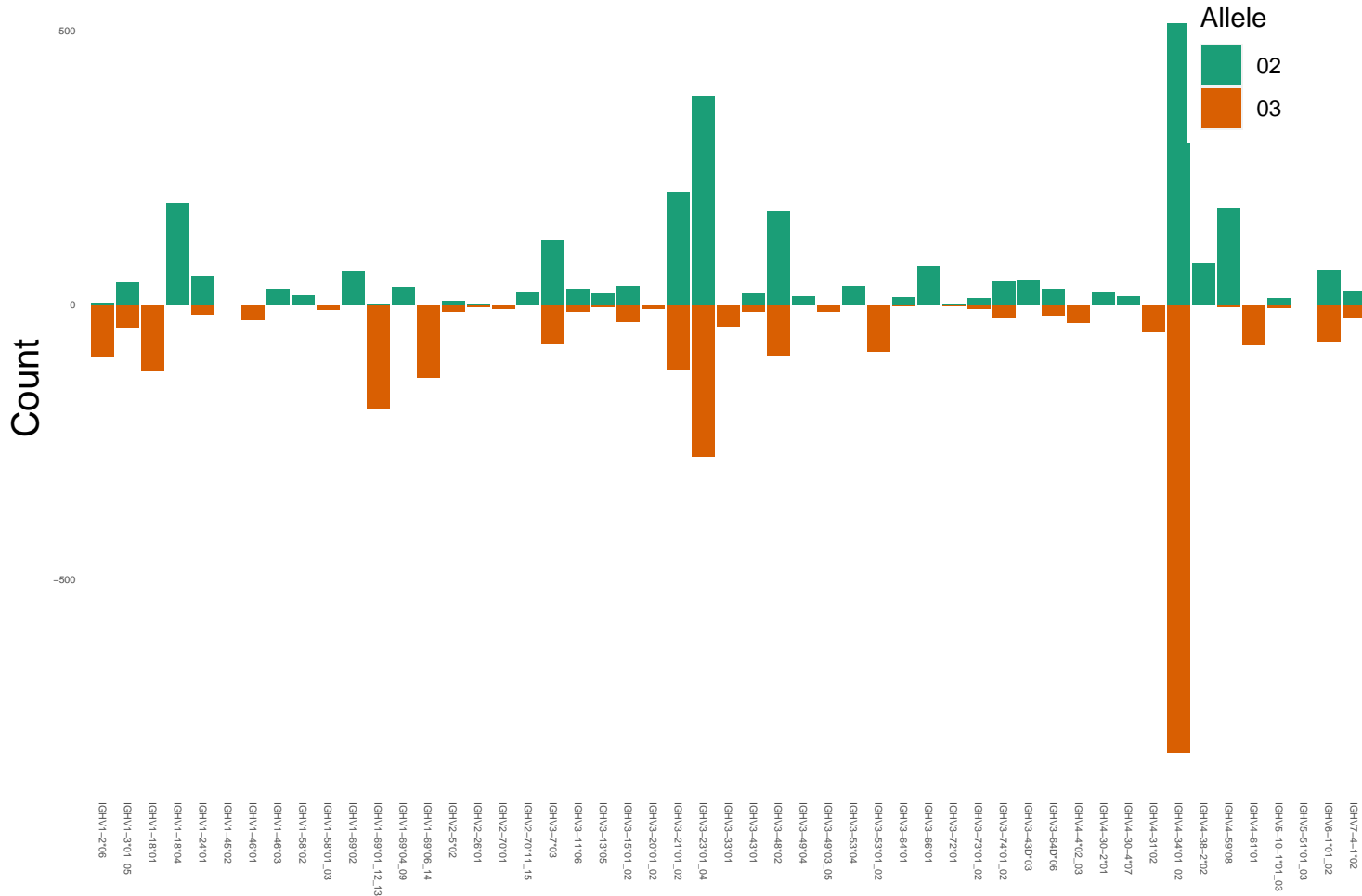
IGHV7-4-1*02

385 sequences assigned
348 (90.4%) exact matches, in which:
348 unique CDR3
7 unique J





Sequence Count by IGHJ6 allele usage



[illegible]