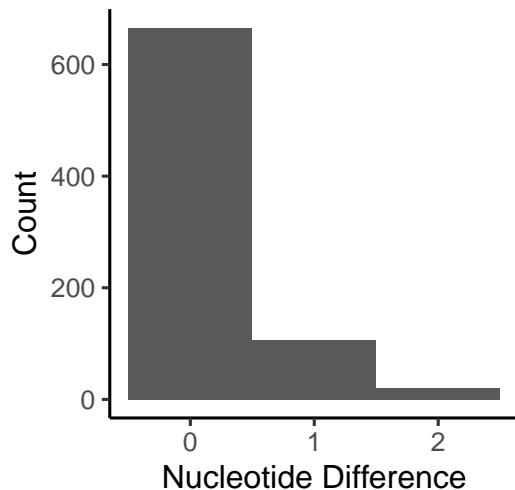


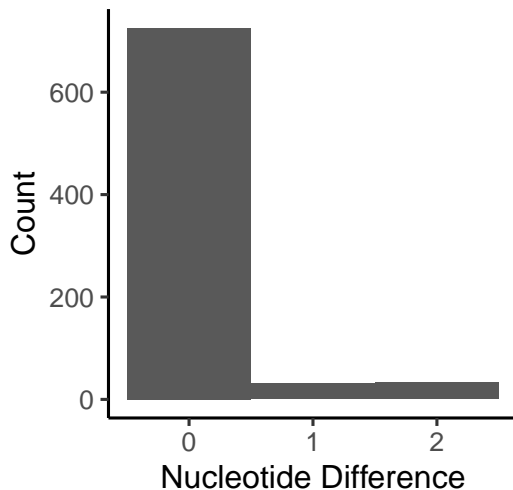
IGHV1-2*02

794 sequences assigned
666 (83.9%) exact matches, in which:
666 unique CDR3
6 unique J



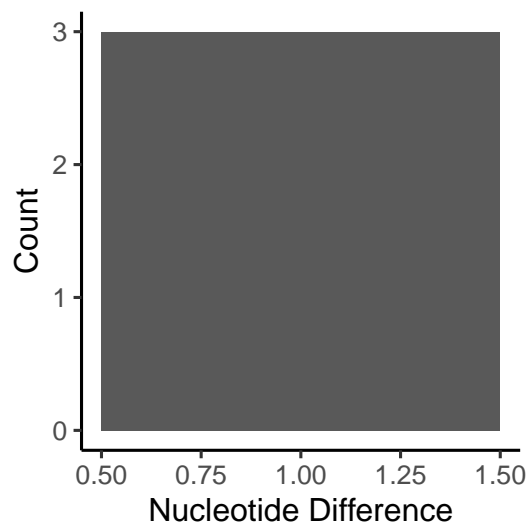
IGHV1-18*01

790 sequences assigned
726 (91.9%) exact matches, in which:
725 unique CDR3
6 unique J



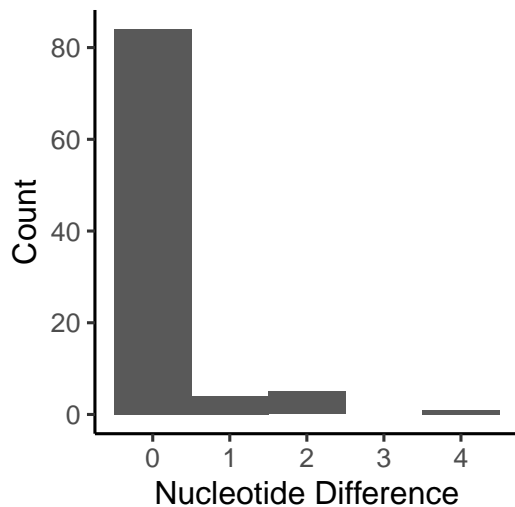
IGHV1-38-4*01

3 sequences assigned
No exact matches.



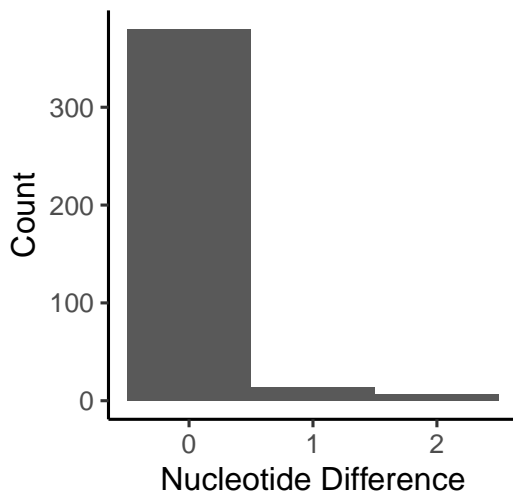
IGHV1-3*01_05

94 sequences assigned
84 (89.4%) exact matches, in which:
84 unique CDR3
5 unique J



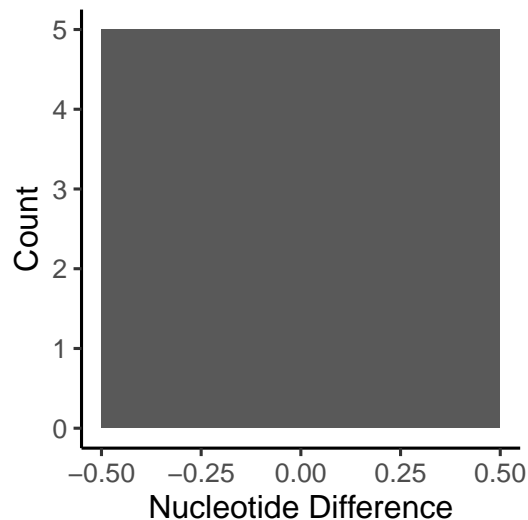
IGHV1-18*04

401 sequences assigned
380 (94.8%) exact matches, in which:
379 unique CDR3
6 unique J



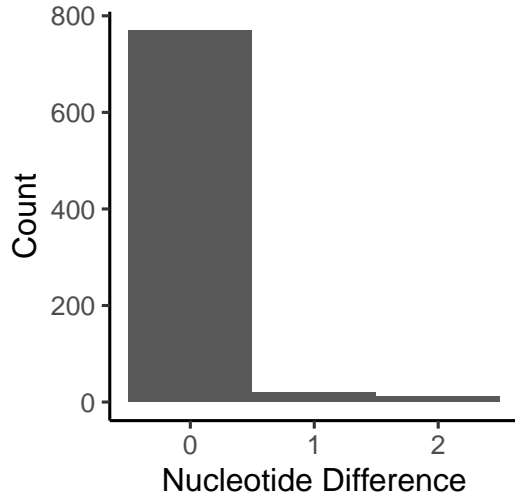
IGHV1-45*02

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



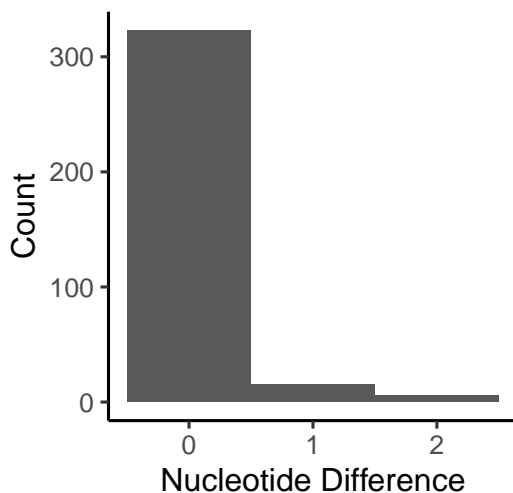
IGHV1-8*01

802 sequences assigned
770 (96%) exact matches, in which:
770 unique CDR3
6 unique J



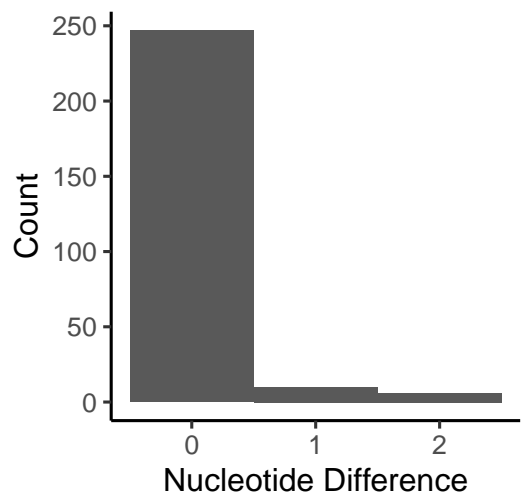
IGHV1-24*01

344 sequences assigned
323 (93.9%) exact matches, in which:
323 unique CDR3
6 unique J



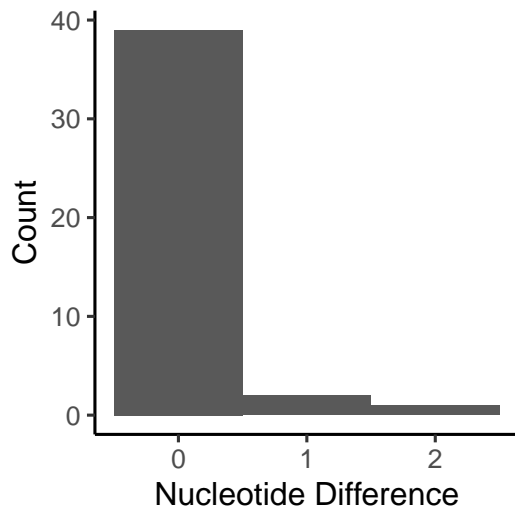
IGHV1-46*03

263 sequences assigned
247 (93.9%) exact matches, in which:
247 unique CDR3
6 unique J



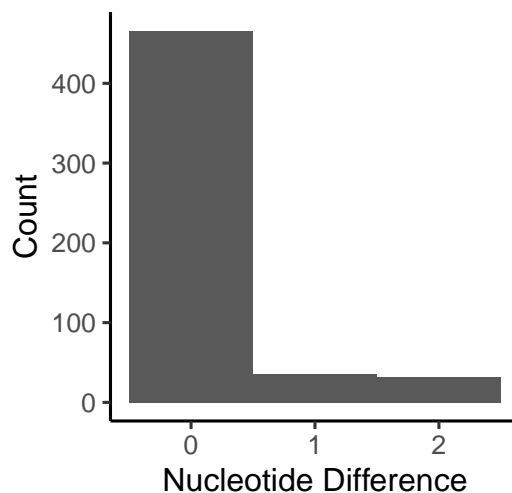
IGHV1–58*02

42 sequences assigned
39 (92.9%) exact matches, in which:
39 unique CDR3
5 unique J



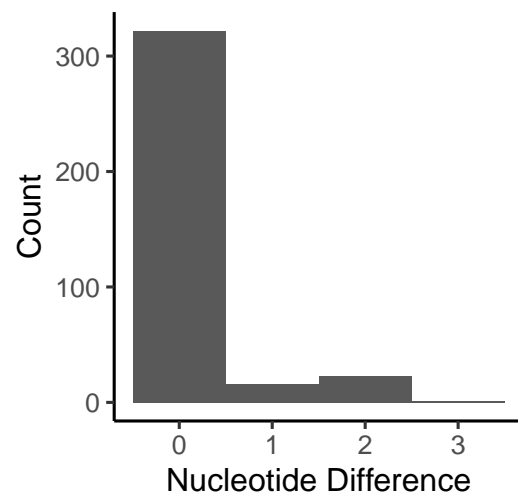
IGHV2–5*01

534 sequences assigned
466 (87.3%) exact matches, in which:
462 unique CDR3
6 unique J



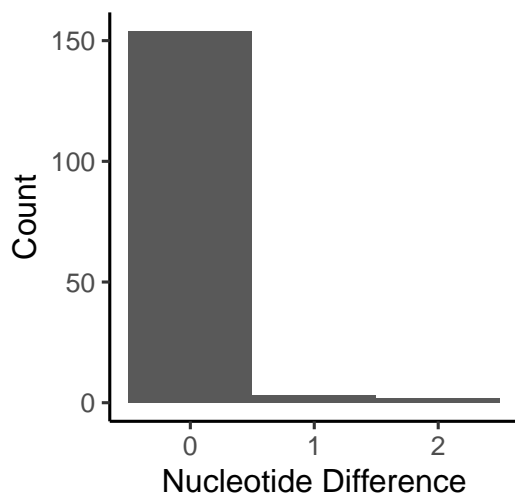
IGHV3–7*01

362 sequences assigned
322 (89%) exact matches, in which:
314 unique CDR3
6 unique J



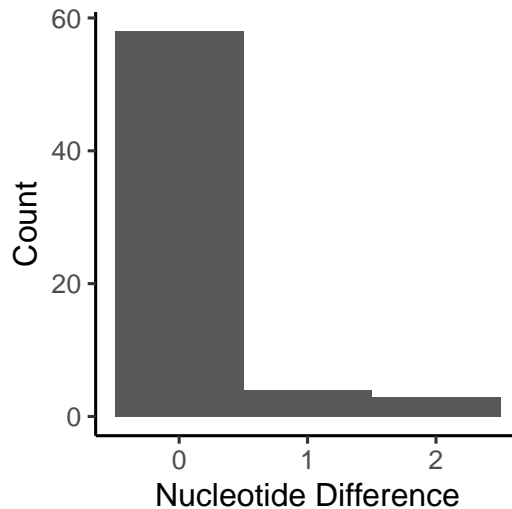
IGHV1–69*02

159 sequences assigned
154 (96.9%) exact matches, in which:
154 unique CDR3
6 unique J



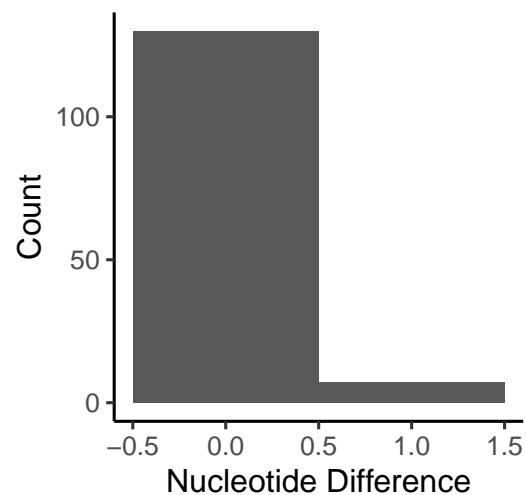
IGHV2–26*01

65 sequences assigned
58 (89.2%) exact matches, in which:
58 unique CDR3
4 unique J



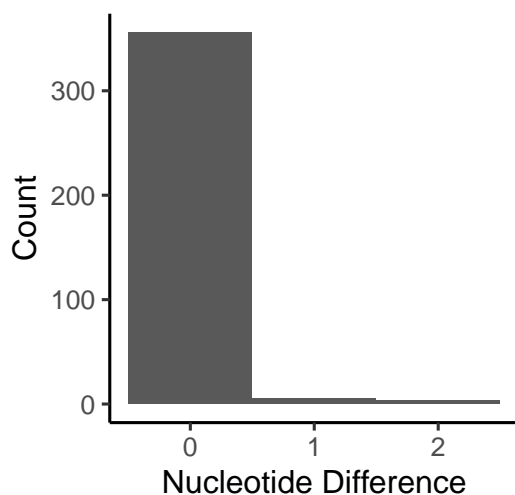
IGHV3–7*05

137 sequences assigned
130 (94.9%) exact matches, in which:
126 unique CDR3
5 unique J



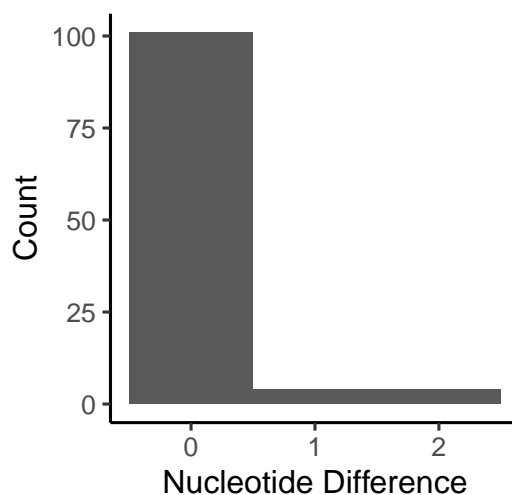
IGHV1–69*05

364 sequences assigned
356 (97.8%) exact matches, in which:
356 unique CDR3
6 unique J



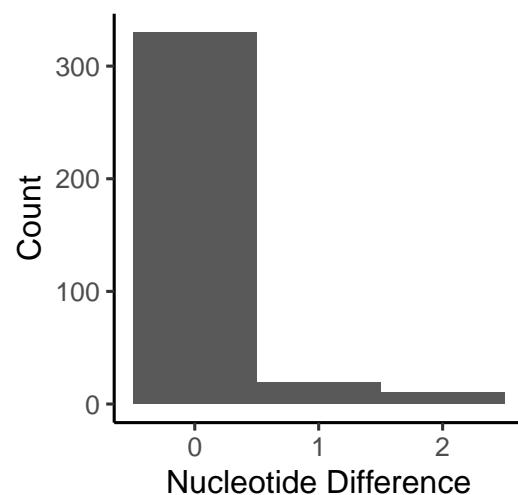
IGHV2–70*11_15

109 sequences assigned
101 (92.7%) exact matches, in which:
99 unique CDR3
5 unique J



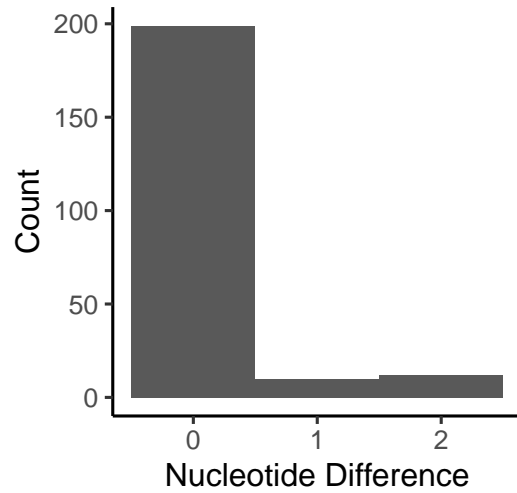
IGHV3–9*01

359 sequences assigned
330 (91.9%) exact matches, in which:
322 unique CDR3
6 unique J



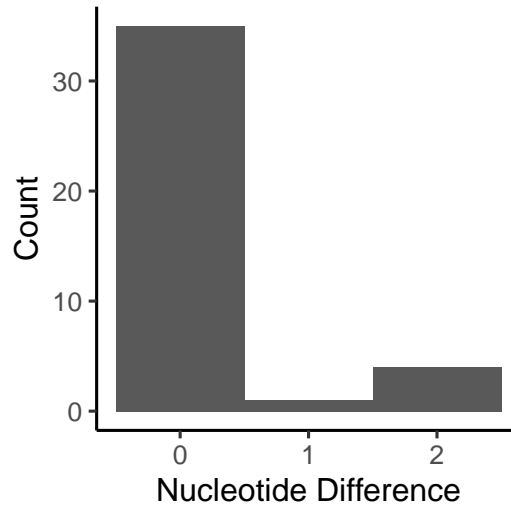
IGHV3-11*01

221 sequences assigned
199 (90%) exact matches, in which:
195 unique CDR3
6 unique J



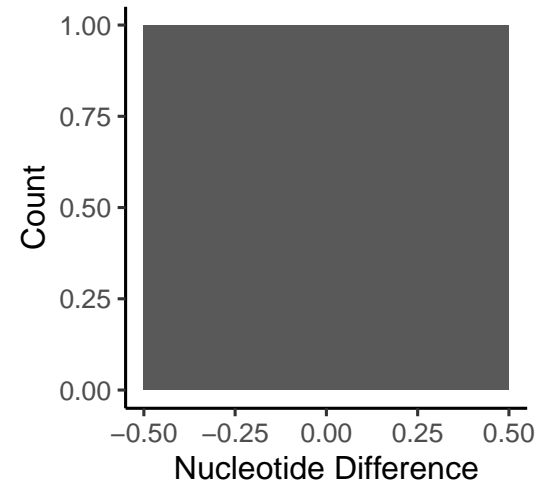
IGHV3-20*01_02

40 sequences assigned
35 (87.5%) exact matches, in which:
34 unique CDR3
5 unique J



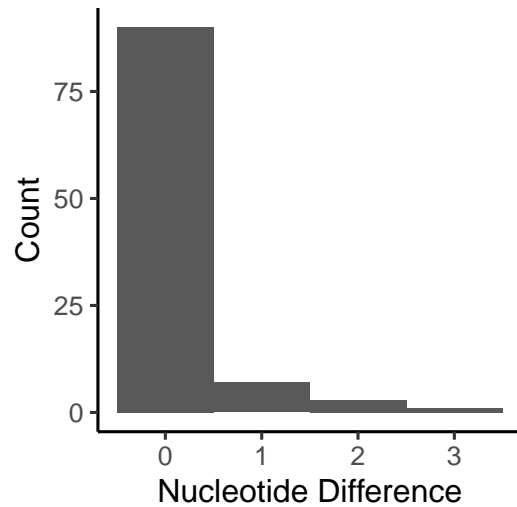
IGHV3-38-3*01

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



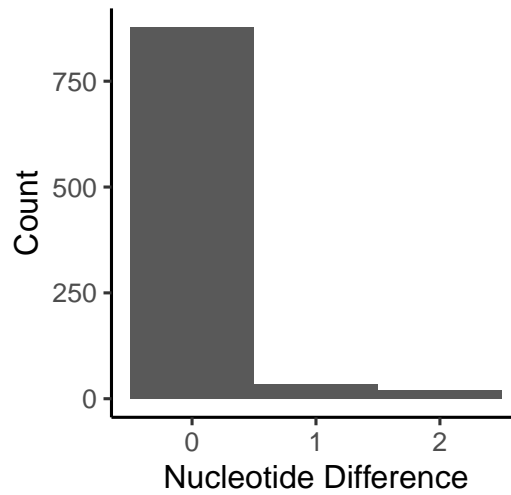
IGHV3-13*01

101 sequences assigned
90 (89.1%) exact matches, in which:
86 unique CDR3
5 unique J



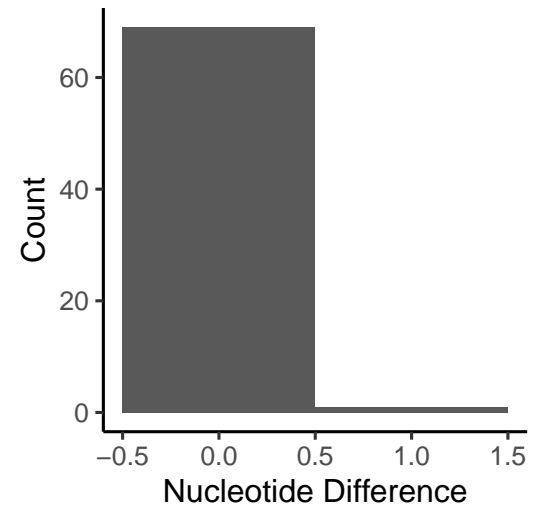
IGHV3-21*01_02

931 sequences assigned
878 (94.3%) exact matches, in which:
846 unique CDR3
6 unique J



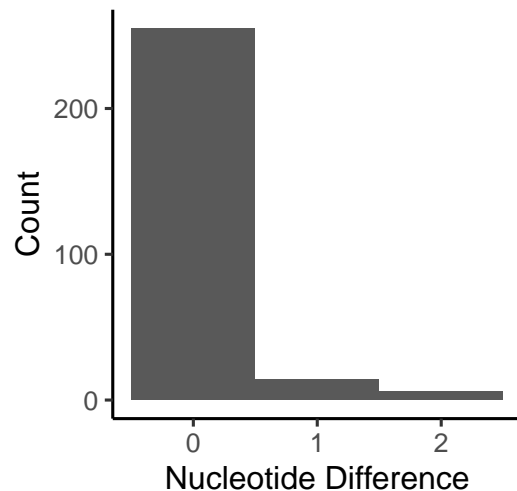
IGHV3-43*01

70 sequences assigned
69 (98.6%) exact matches, in which:
68 unique CDR3
6 unique J



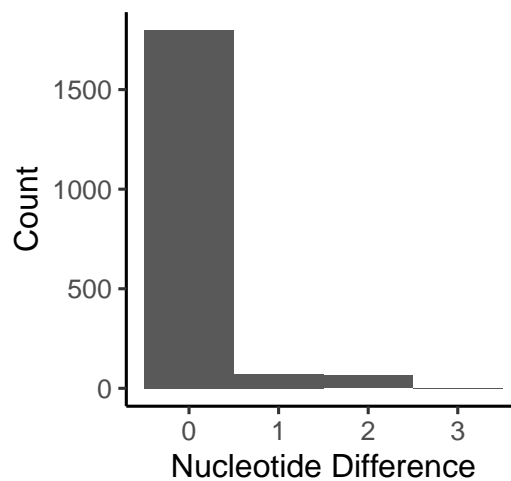
IGHV3-15*01_02

275 sequences assigned
255 (92.7%) exact matches, in which:
253 unique CDR3
6 unique J



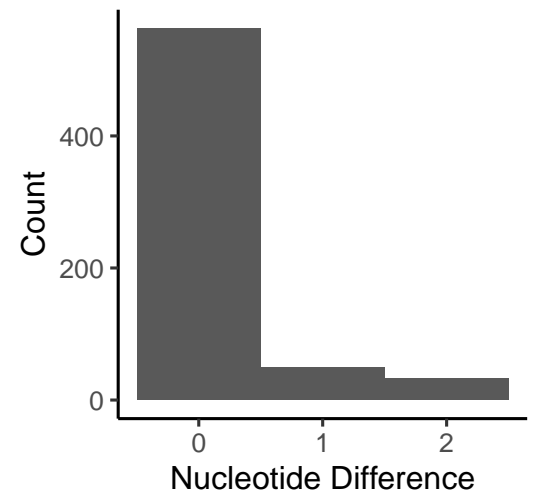
IGHV3-23*01_04

1938 sequences assigned
1799 (92.8%) exact matches, in which:
1736 unique CDR3
6 unique J



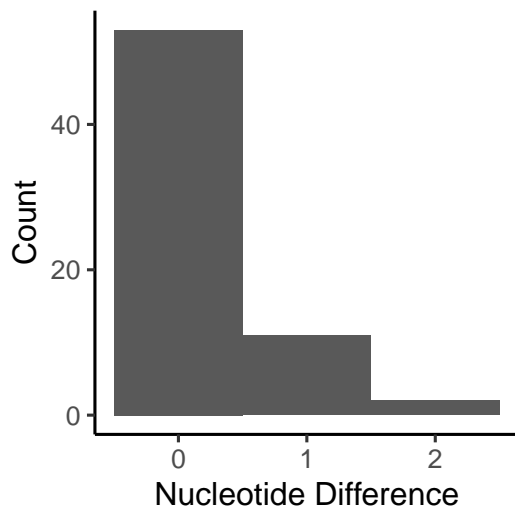
IGHV3-48*01

645 sequences assigned
563 (87.3%) exact matches, in which:
545 unique CDR3
6 unique J



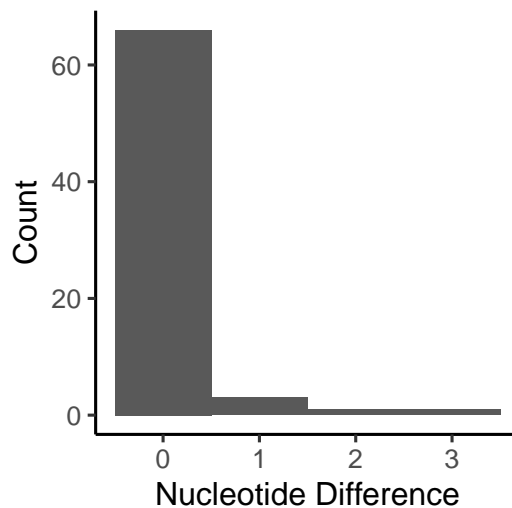
IGHV3-49*03_05

66 sequences assigned
53 (80.3%) exact matches, in which:
53 unique CDR3
5 unique J



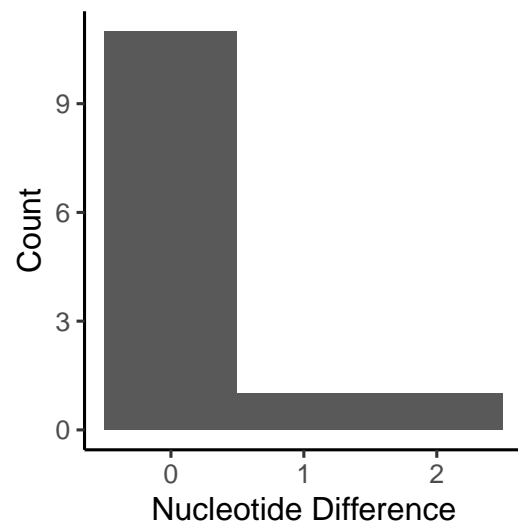
IGHV3-64*01

71 sequences assigned
66 (93%) exact matches, in which:
64 unique CDR3
5 unique J



IGHV3-72*01

13 sequences assigned
11 (84.6%) exact matches, in which:
11 unique CDR3
5 unique J



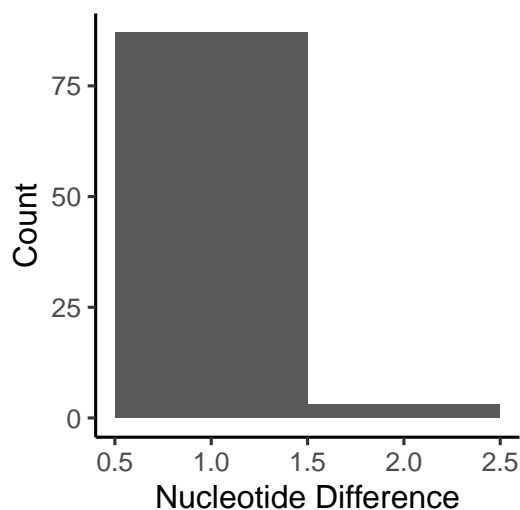
IGHV3-52*02

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



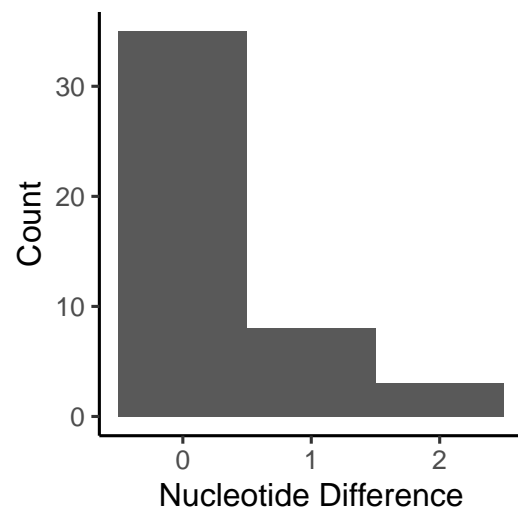
IGHV3-66*01

90 sequences assigned
No exact matches.



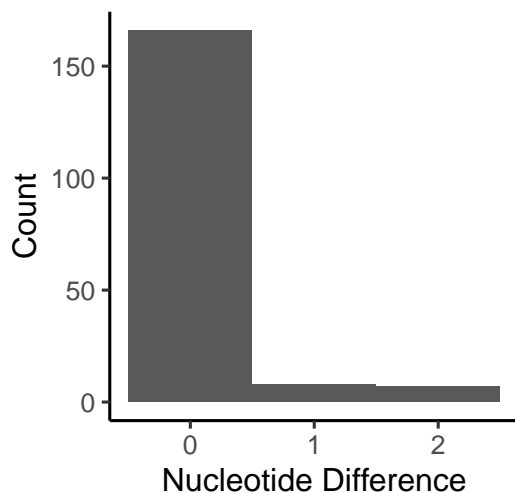
IGHV3-73*01_02

46 sequences assigned
35 (76.1%) exact matches, in which:
35 unique CDR3
5 unique J



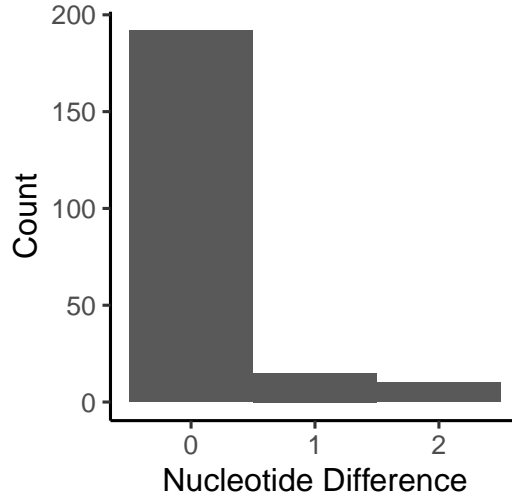
IGHV3-53*01_02

181 sequences assigned
166 (91.7%) exact matches, in which:
159 unique CDR3
6 unique J



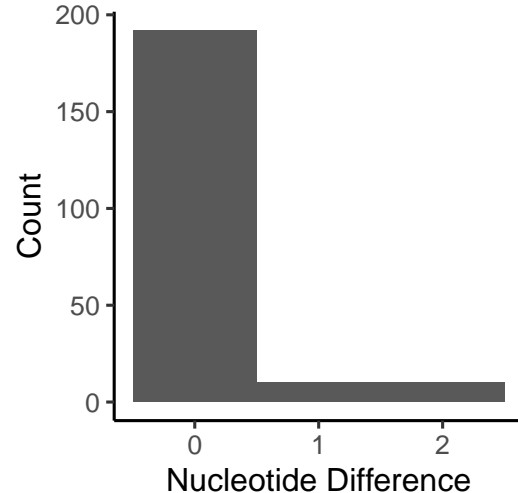
IGHV3-66*02

217 sequences assigned
192 (88.5%) exact matches, in which:
186 unique CDR3
6 unique J



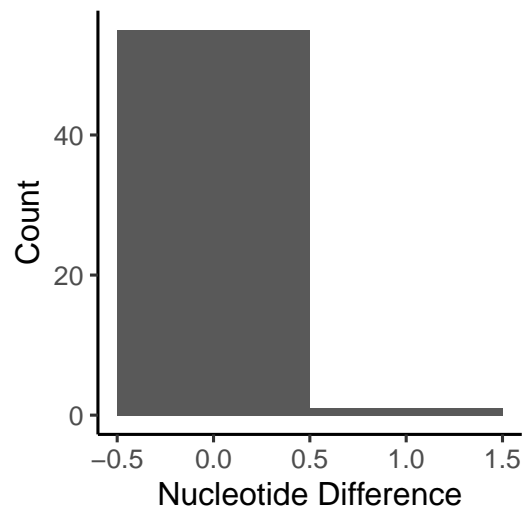
IGHV3-74*01_02

212 sequences assigned
192 (90.6%) exact matches, in which:
189 unique CDR3
6 unique J



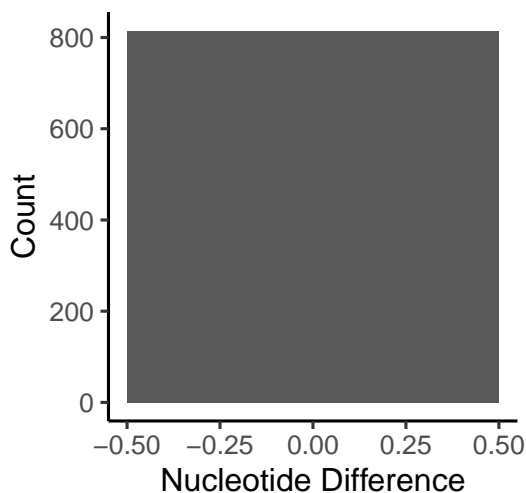
IGHV3-43D*04

56 sequences assigned
55 (98.2%) exact matches, in which:
55 unique CDR3
4 unique J



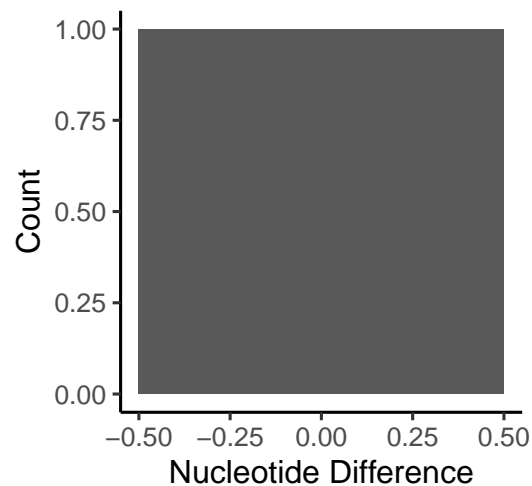
IGHV4-4*09

815 sequences assigned
815 (100%) exact matches, in which:
794 unique CDR3
6 unique J



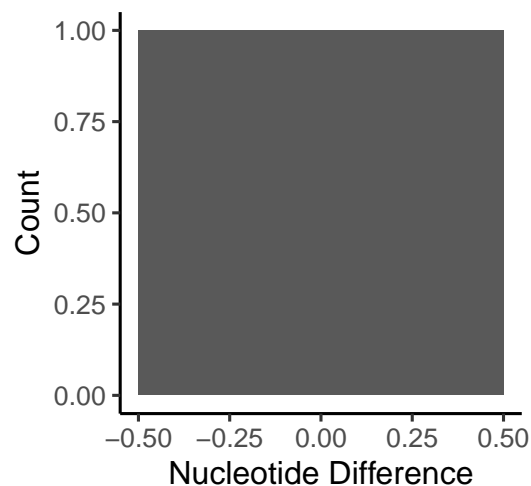
IGHV4-30-2*01

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



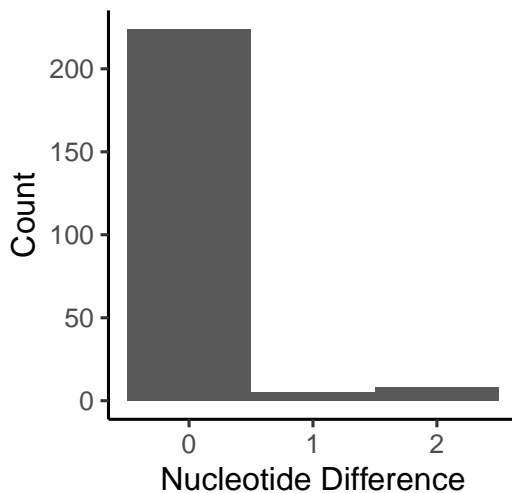
IGHV3-64D*06

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



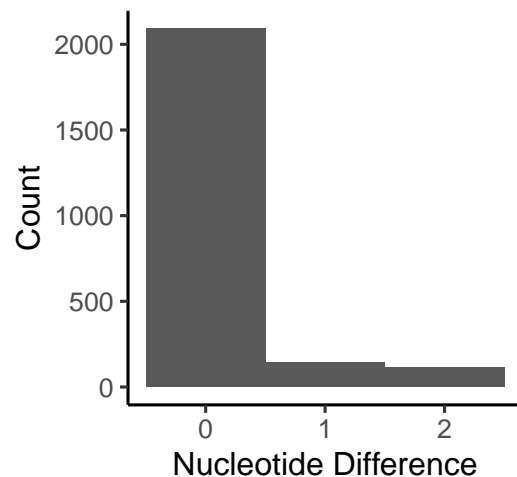
IGHV4-4*02_03

237 sequences assigned
224 (94.5%) exact matches, in which:
219 unique CDR3
6 unique J



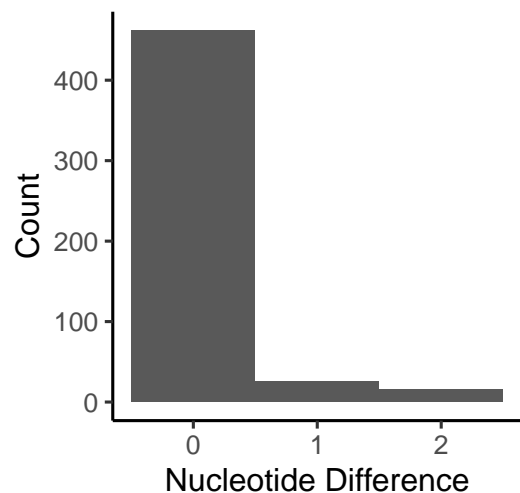
IGHV4-34*01_02

2347 sequences assigned
2091 (89.1%) exact matches, in which:
2002 unique CDR3
6 unique J



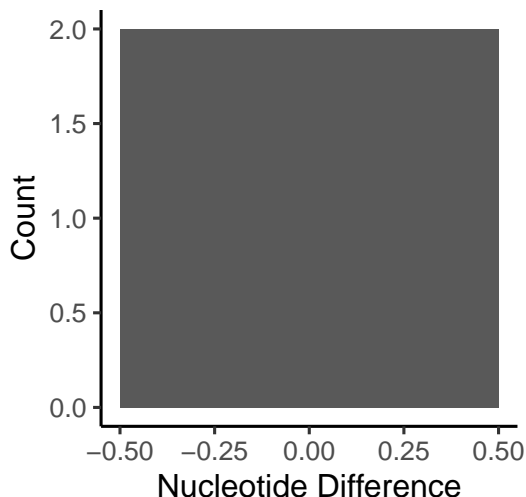
IGHV4-4*07

504 sequences assigned
462 (91.7%) exact matches, in which:
446 unique CDR3
5 unique J



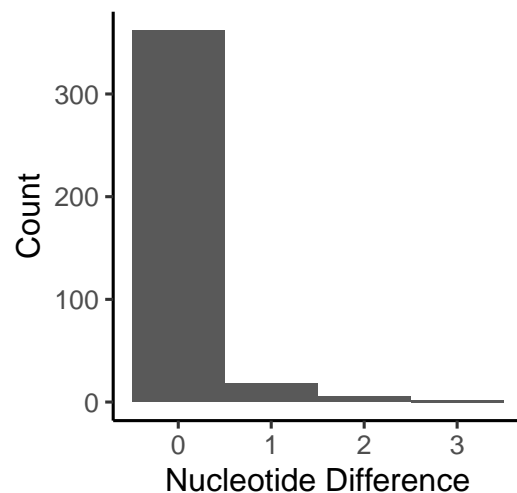
IGHV4-28*02_05

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



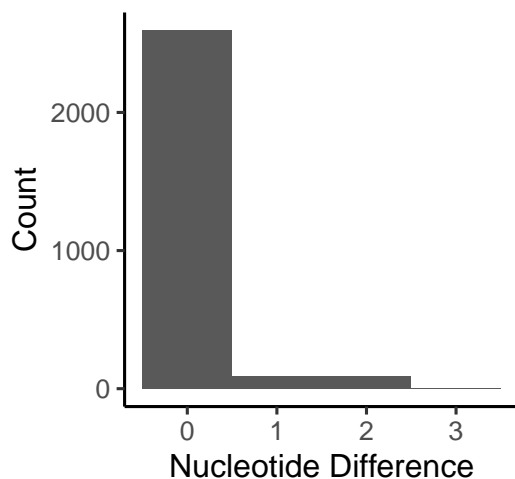
IGHV4-38-2*02_A70G

387 sequences assigned
362 (93.5%) exact matches, in which:
347 unique CDR3
6 unique J



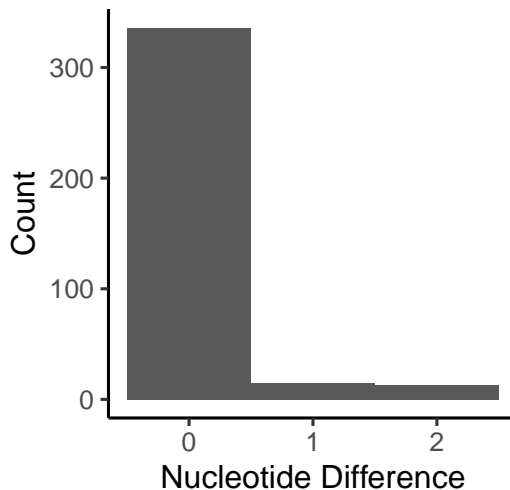
IGHV4-39*02_C258G

2785 sequences assigned
2594 (93.1%) exact matches, in which:
2494 unique CDR3
6 unique J



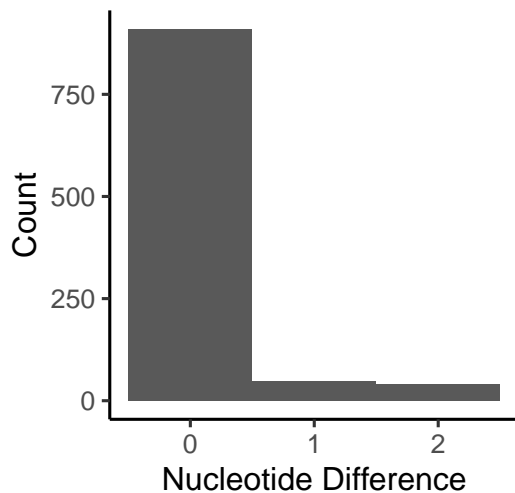
IGHV5-51*07_A128G

364 sequences assigned
336 (92.3%) exact matches, in which:
336 unique CDR3
6 unique J



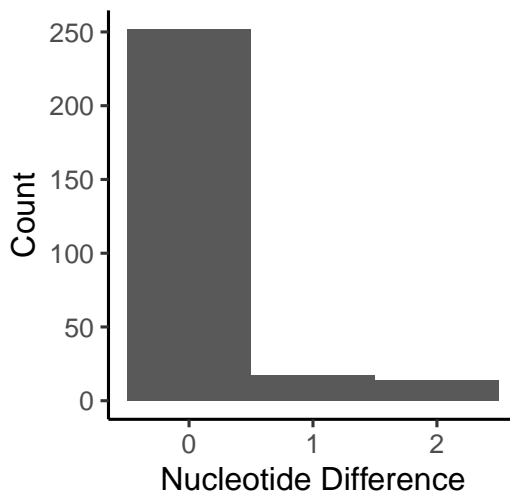
IGHV4-59*02_G88A

997 sequences assigned
910 (91.3%) exact matches, in which:
871 unique CDR3
6 unique J



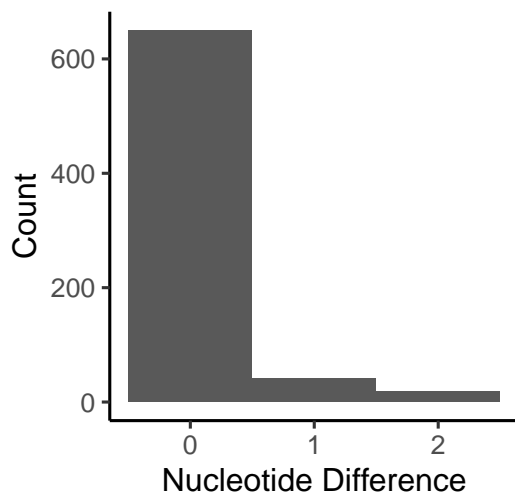
IGHV6-1*01_02

283 sequences assigned
252 (89%) exact matches, in which:
252 unique CDR3
6 unique J



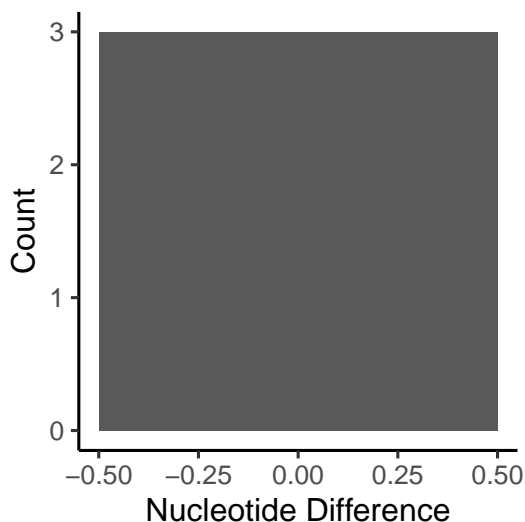
IGHV4-61*02

709 sequences assigned
650 (91.7%) exact matches, in which:
640 unique CDR3
6 unique J



IGHV7-4-1*01

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





Warning – no inferred sequences found.