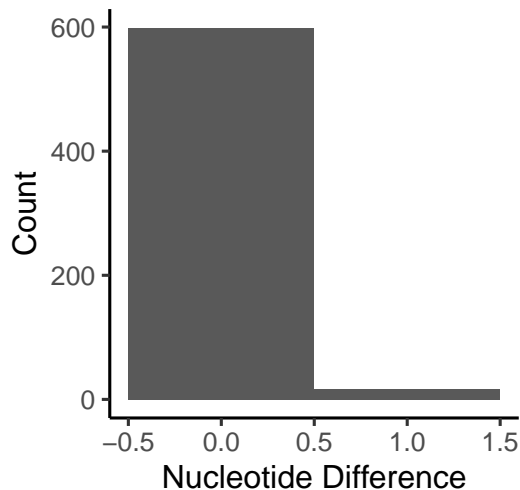


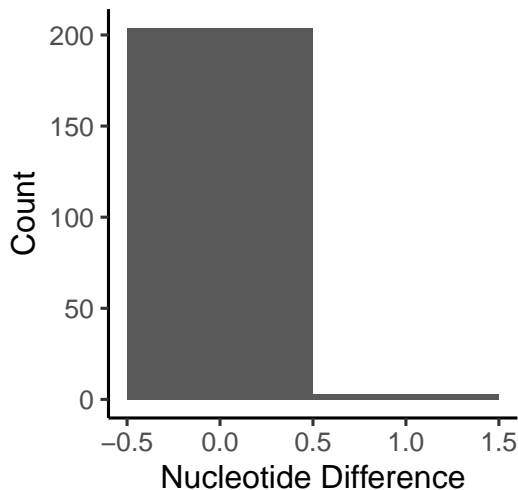
IGHV1-2*06

616 sequences assigned
599 (97.2%) exact matches, in which:
596 unique CDR3
6 unique J



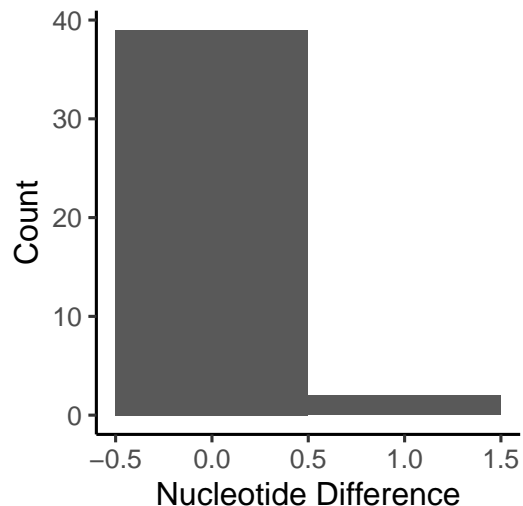
IGHV1-24*01

207 sequences assigned
204 (98.6%) exact matches, in which:
203 unique CDR3
6 unique J



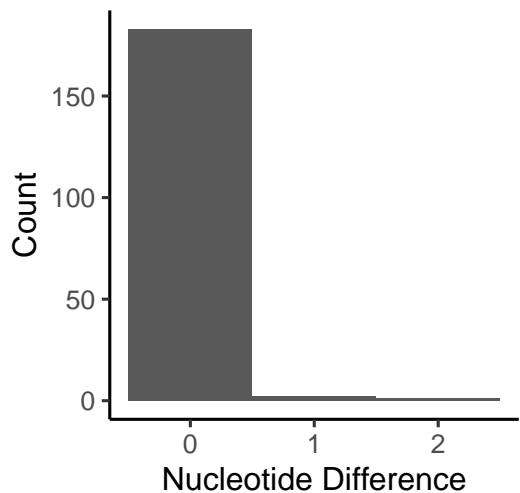
IGHV1-58*02

41 sequences assigned
39 (95.1%) exact matches, in which:
39 unique CDR3
5 unique J



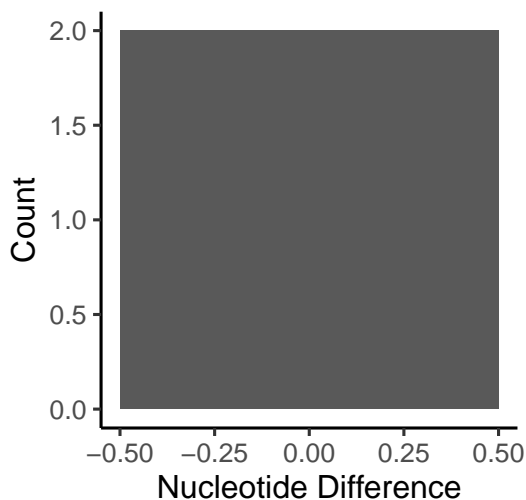
IGHV1-8*01

186 sequences assigned
183 (98.4%) exact matches, in which:
183 unique CDR3
6 unique J



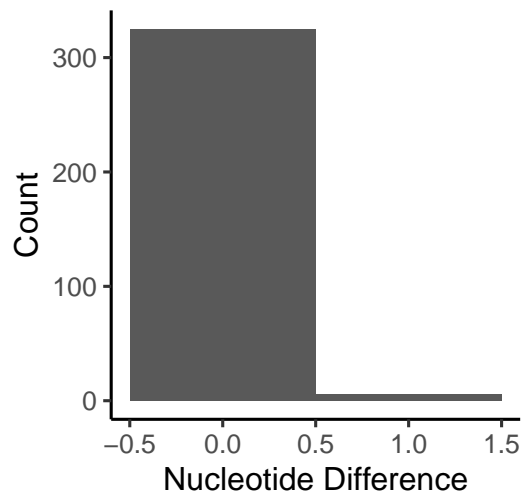
IGHV1-45*02

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



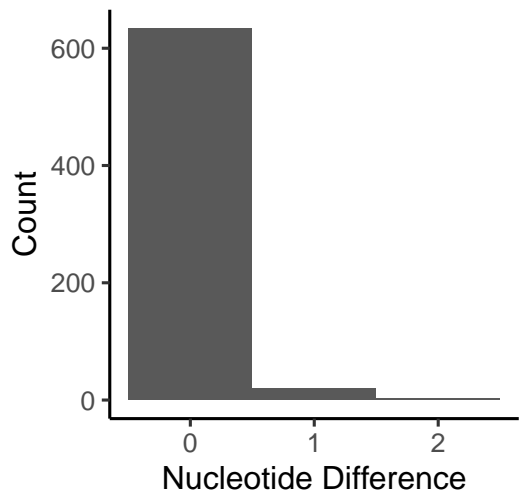
IGHV1-69*10

331 sequences assigned
325 (98.2%) exact matches, in which:
325 unique CDR3
6 unique J



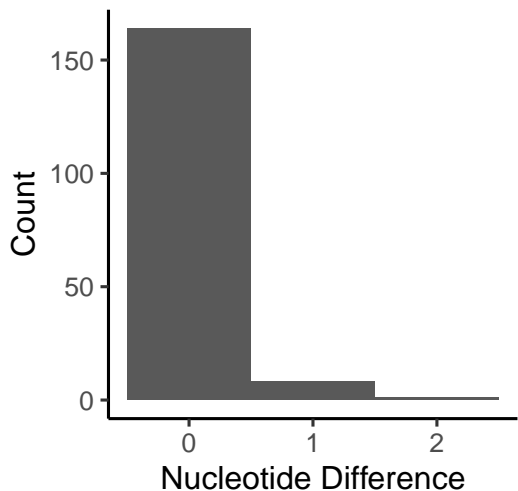
IGHV1-18*01

656 sequences assigned
634 (96.6%) exact matches, in which:
633 unique CDR3
6 unique J



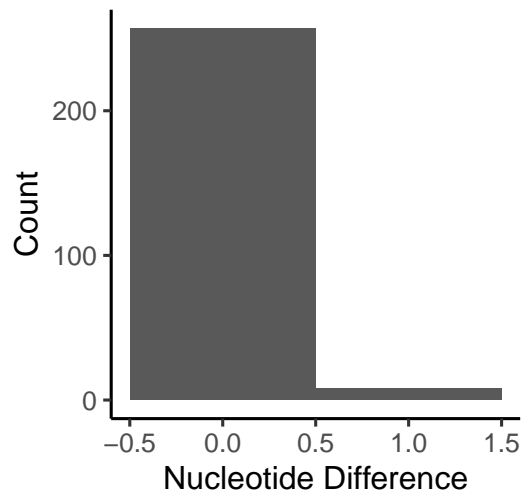
IGHV1-46*01

173 sequences assigned
164 (94.8%) exact matches, in which:
163 unique CDR3
6 unique J



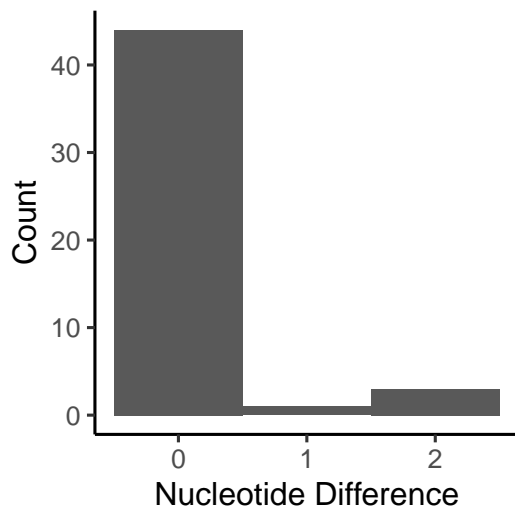
IGHV1-69*04_09

265 sequences assigned
257 (97%) exact matches, in which:
257 unique CDR3
6 unique J



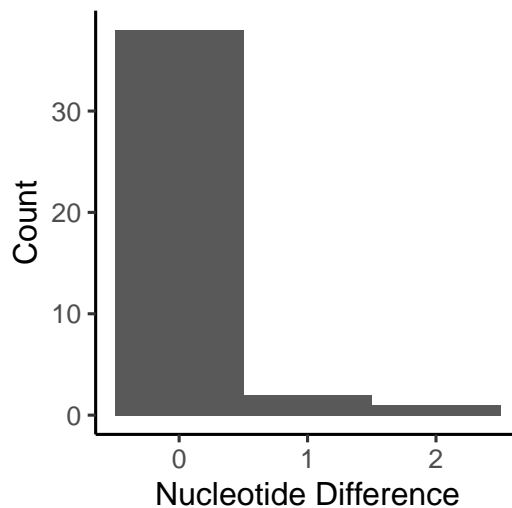
IGHV2-5*01

48 sequences assigned
44 (91.7%) exact matches, in which:
44 unique CDR3
6 unique J



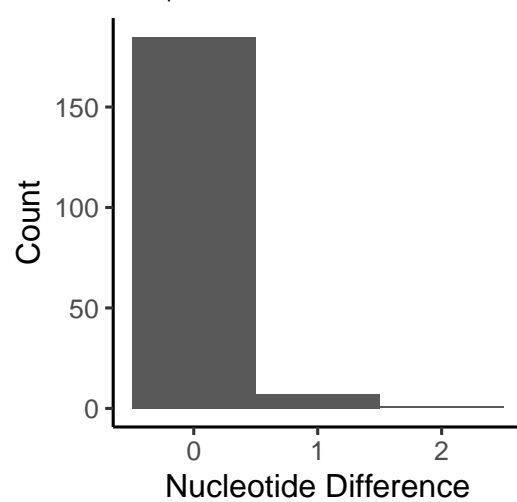
IGHV2-70*11_15

41 sequences assigned
38 (92.7%) exact matches, in which:
37 unique CDR3
4 unique J



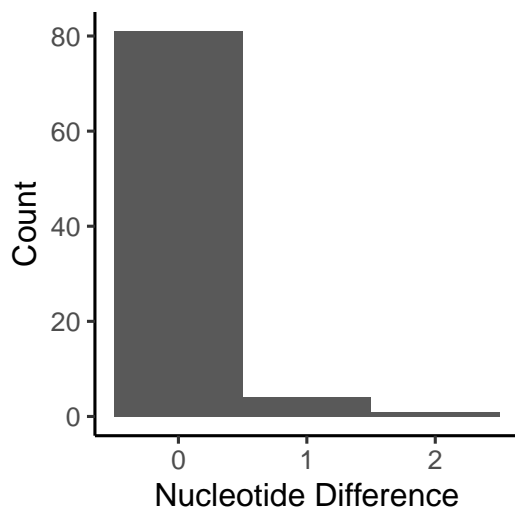
IGHV3-9*01

193 sequences assigned
185 (95.9%) exact matches, in which:
177 unique CDR3
6 unique J



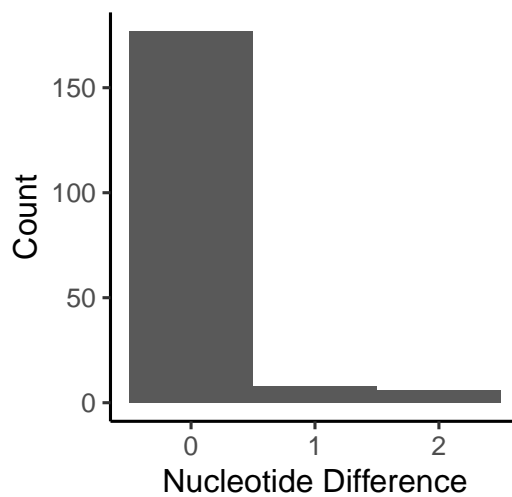
IGHV2-5*02

86 sequences assigned
81 (94.2%) exact matches, in which:
81 unique CDR3
6 unique J



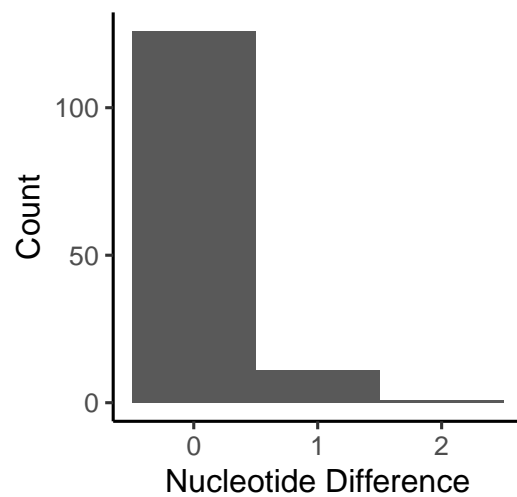
IGHV3-7*01

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



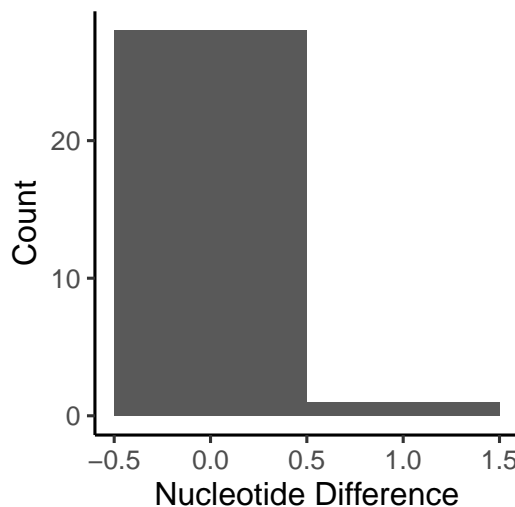
IGHV3-11*01

138 sequences assigned
126 (91.3%) exact matches, in which:
123 unique CDR3
6 unique J



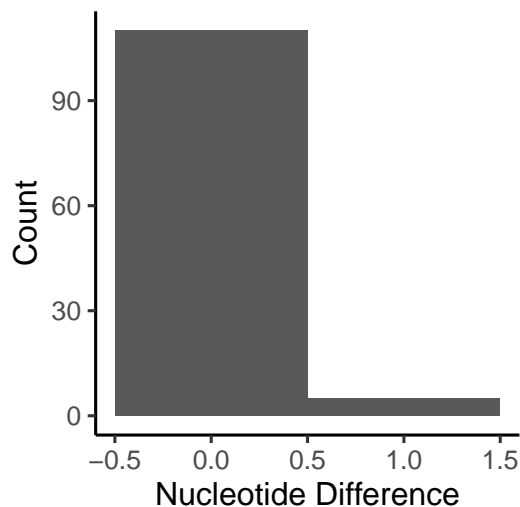
IGHV2-26*01

29 sequences assigned
28 (96.6%) exact matches, in which:
28 unique CDR3
5 unique J



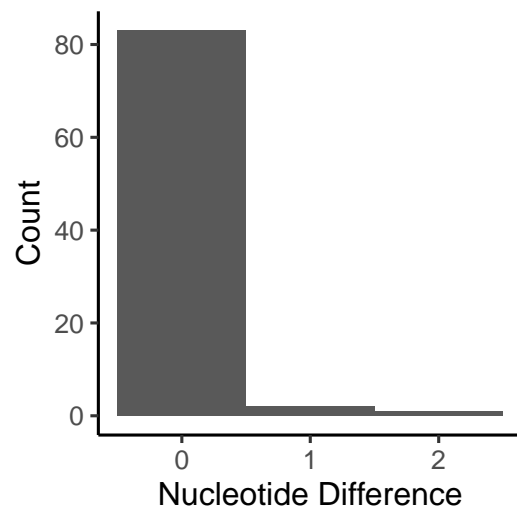
IGHV3-7*05

115 sequences assigned
110 (95.7%) exact matches, in which:
110 unique CDR3
6 unique J



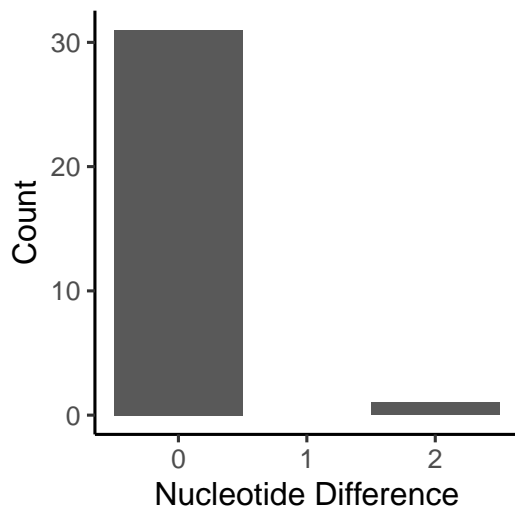
IGHV3-11*06

86 sequences assigned
83 (96.5%) exact matches, in which:
82 unique CDR3
4 unique J



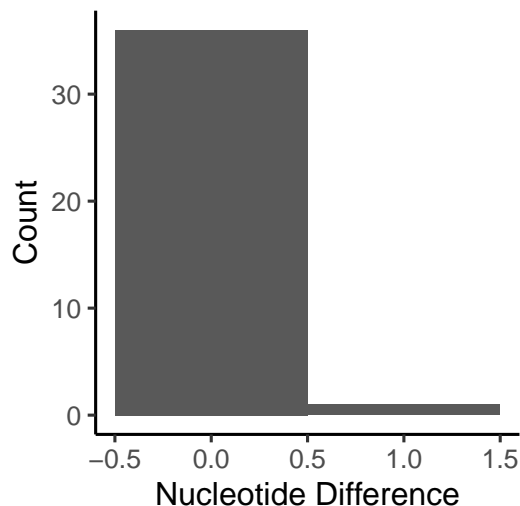
IGHV3-13*01

32 sequences assigned
31 (96.9%) exact matches, in which:
30 unique CDR3
4 unique J



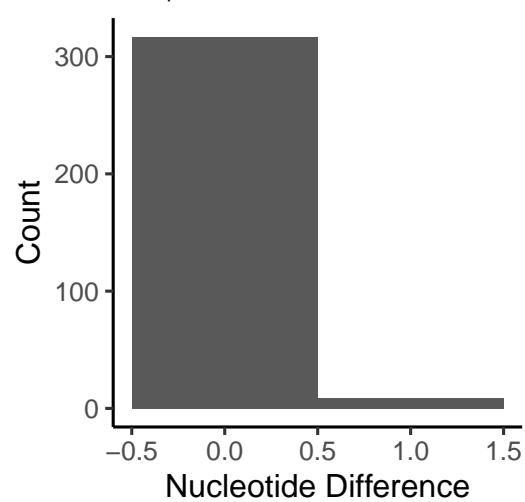
IGHV3-20*01_02

37 sequences assigned
36 (97.3%) exact matches, in which:
35 unique CDR3
5 unique J



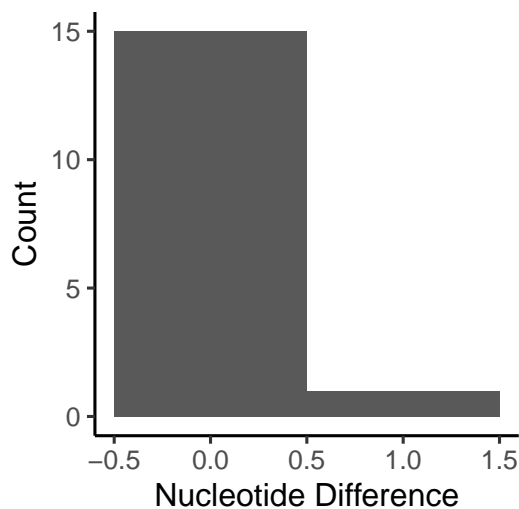
IGHV3-30-3*01

326 sequences assigned
317 (97.2%) exact matches, in which:
311 unique CDR3
6 unique J



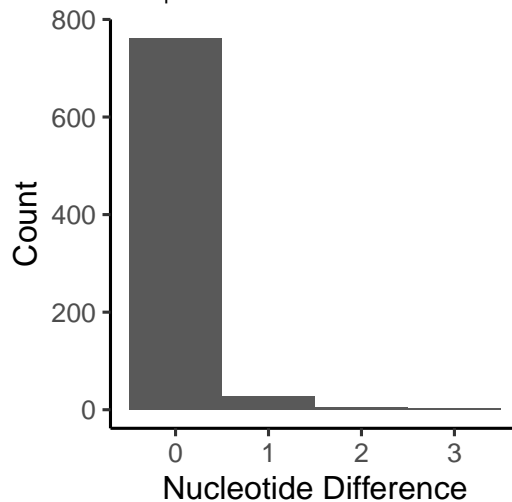
IGHV3-13*05

16 sequences assigned
15 (93.8%) exact matches, in which:
15 unique CDR3
5 unique J



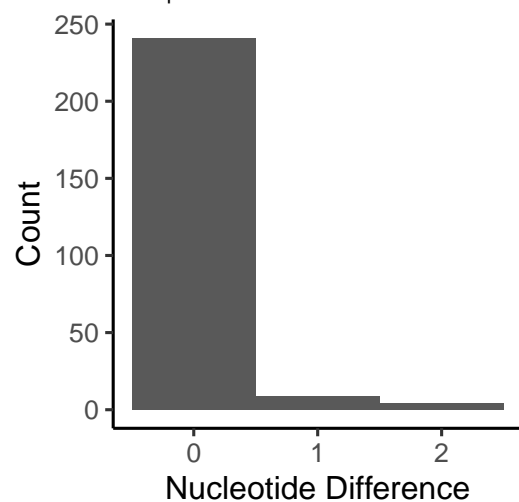
IGHV3-21*01_02

797 sequences assigned
762 (95.6%) exact matches, in which:
742 unique CDR3
6 unique J



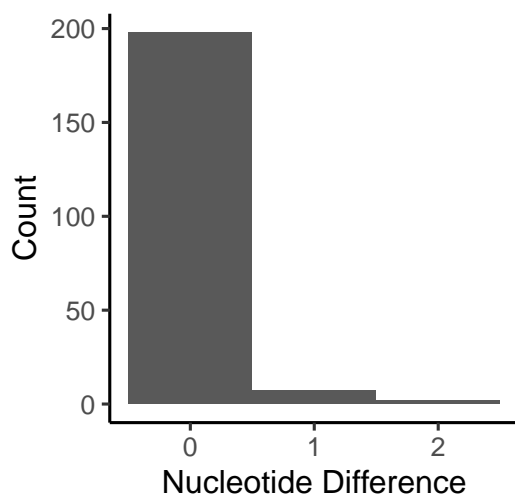
IGHV3-33*06

254 sequences assigned
241 (94.9%) exact matches, in which:
235 unique CDR3
6 unique J



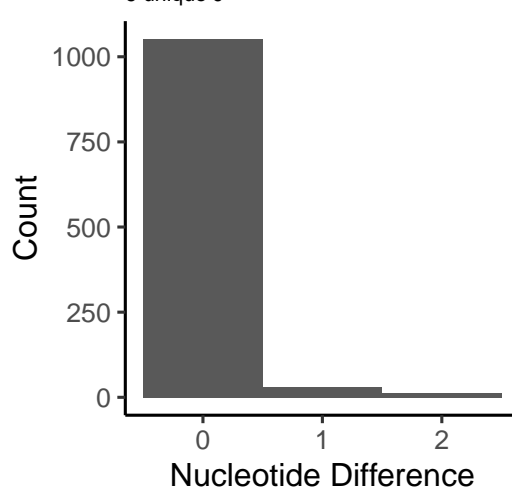
IGHV3-15*01_02

207 sequences assigned
198 (95.7%) exact matches, in which:
197 unique CDR3
6 unique J



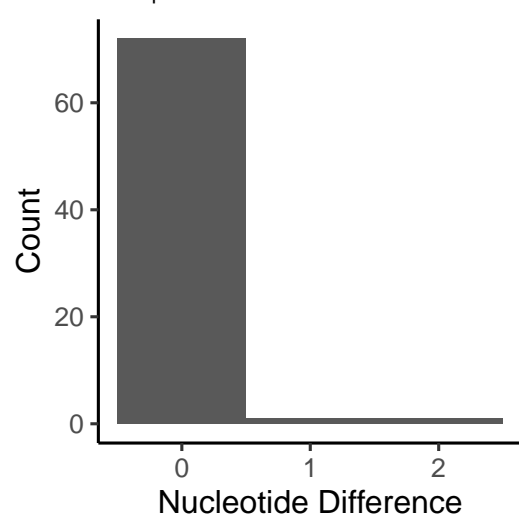
IGHV3-23*01_04

1095 sequences assigned
1052 (96.1%) exact matches, in which:
1008 unique CDR3
6 unique J



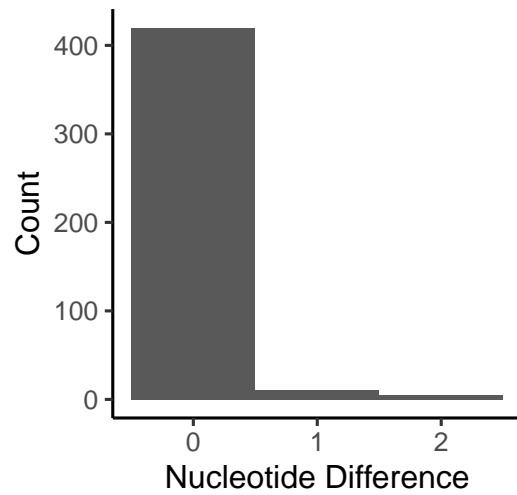
IGHV3-43*01

74 sequences assigned
72 (97.3%) exact matches, in which:
71 unique CDR3
5 unique J



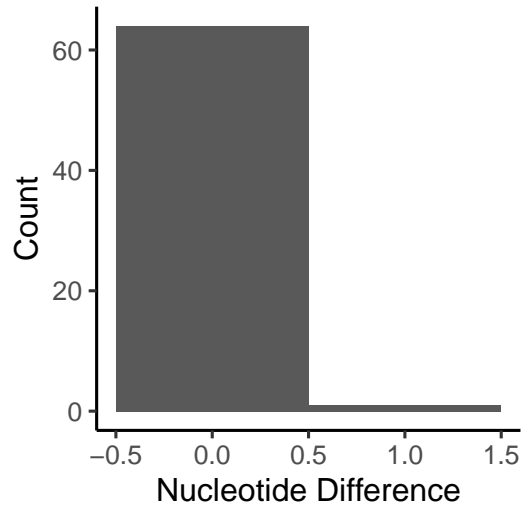
IGHV3-48*04

436 sequences assigned
420 (96.3%) exact matches, in which:
405 unique CDR3
6 unique J



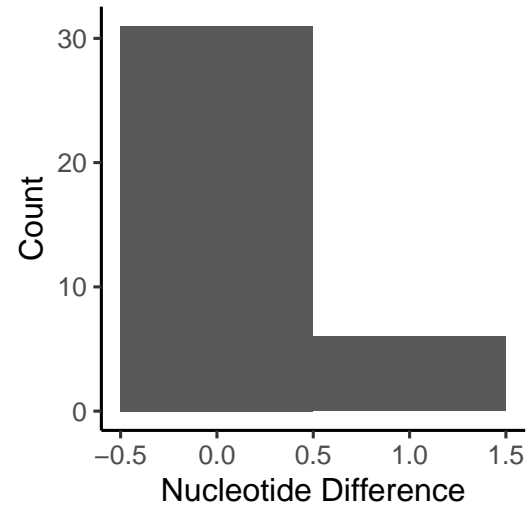
IGHV3-64*01

65 sequences assigned
64 (98.5%) exact matches, in which:
62 unique CDR3
5 unique J



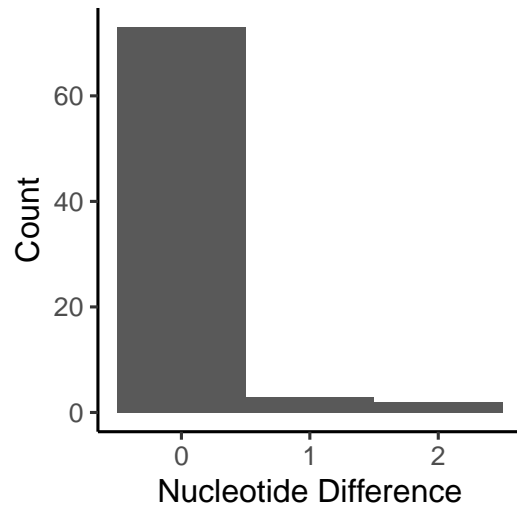
IGHV3-73*01_02

37 sequences assigned
31 (83.8%) exact matches, in which:
30 unique CDR3
4 unique J



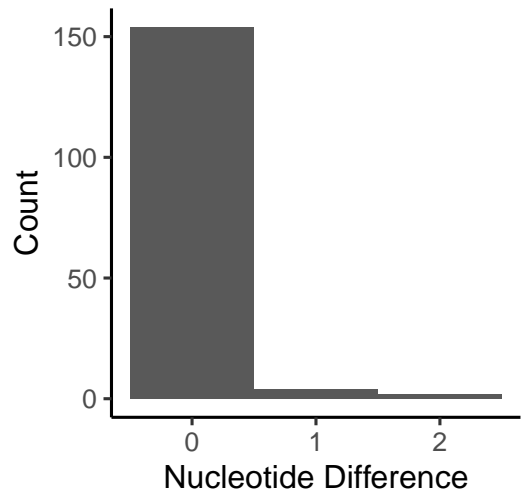
IGHV3-49*03_05

78 sequences assigned
73 (93.6%) exact matches, in which:
71 unique CDR3
6 unique J



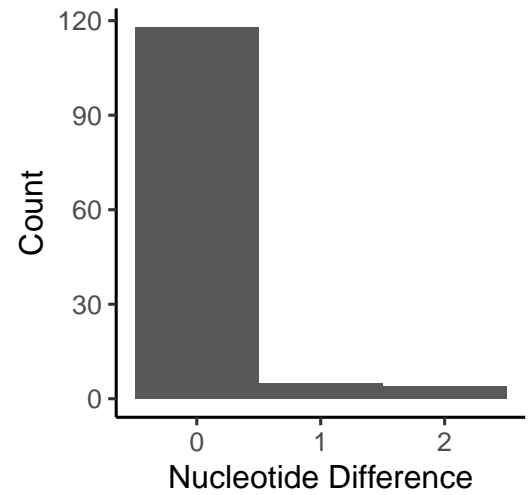
IGHV3-66*01

160 sequences assigned
154 (96.2%) exact matches, in which:
149 unique CDR3
6 unique J



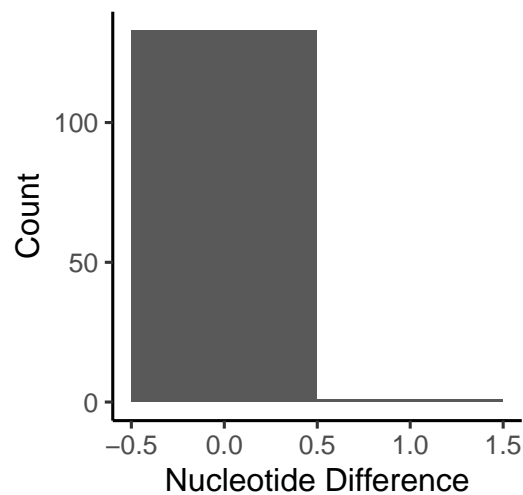
IGHV3-74*01_02

127 sequences assigned
118 (92.9%) exact matches, in which:
112 unique CDR3
6 unique J



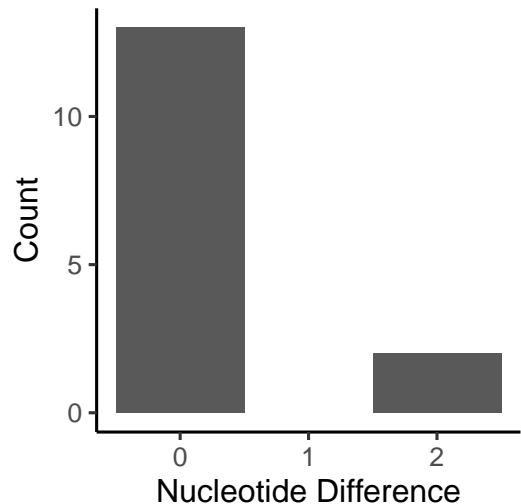
IGHV3-53*04

134 sequences assigned
133 (99.3%) exact matches, in which:
128 unique CDR3
5 unique J



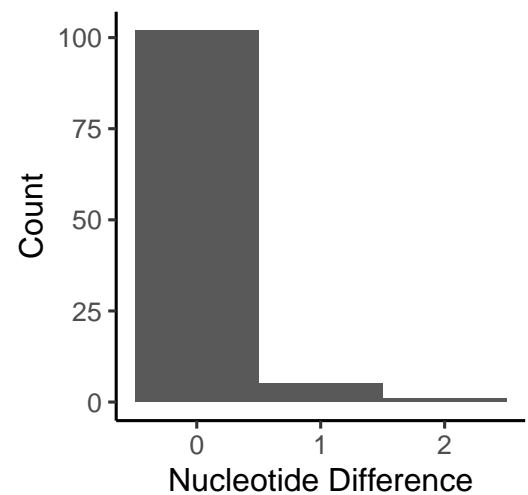
IGHV3-72*01

15 sequences assigned
13 (86.7%) exact matches, in which:
13 unique CDR3
2 unique J



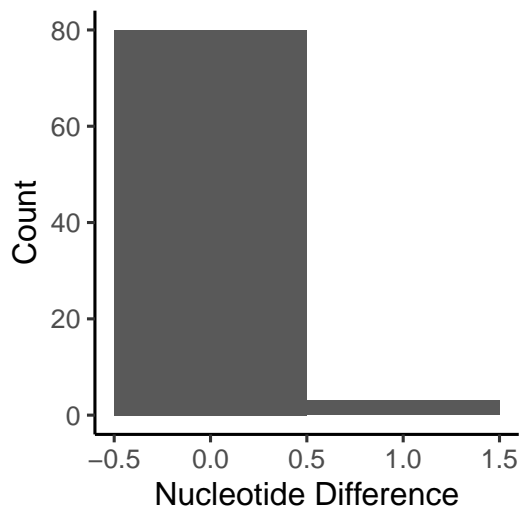
IGHV3-43D*03

108 sequences assigned
102 (94.4%) exact matches, in which:
99 unique CDR3
6 unique J



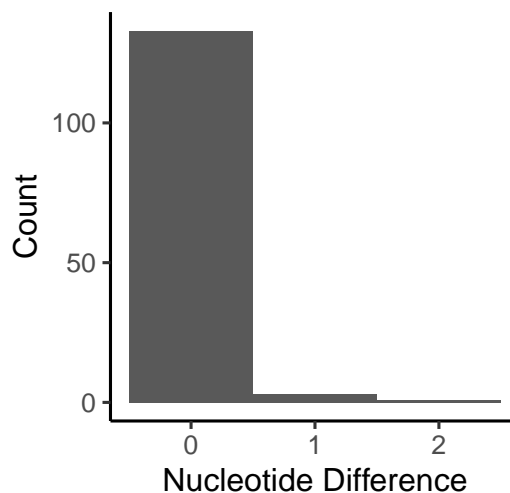
IGHV3-64D*06

83 sequences assigned
80 (96.4%) exact matches, in which:
74 unique CDR3
5 unique J



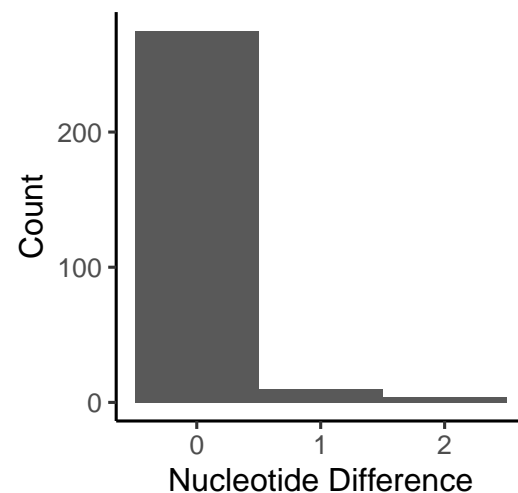
IGHV4-30-4*01

137 sequences assigned
133 (97.1%) exact matches, in which:
130 unique CDR3
5 unique J



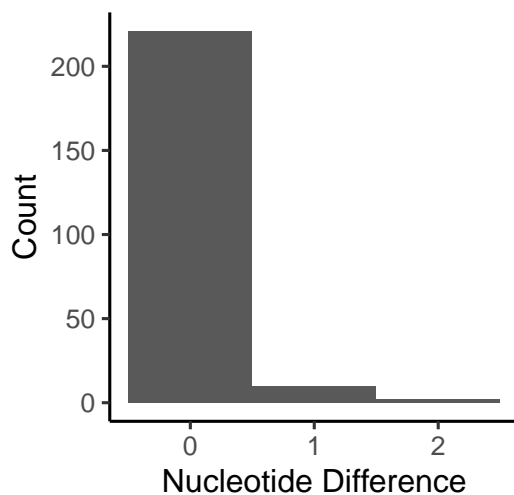
IGHV4-38-2*02

289 sequences assigned
275 (95.2%) exact matches, in which:
270 unique CDR3
6 unique J



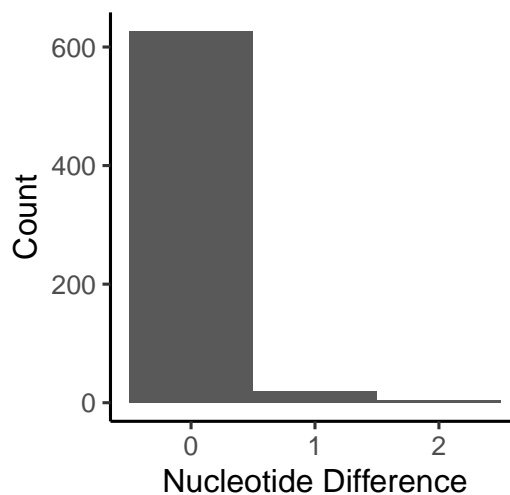
IGHV4-4*02_03

233 sequences assigned
221 (94.8%) exact matches, in which:
219 unique CDR3
6 unique J



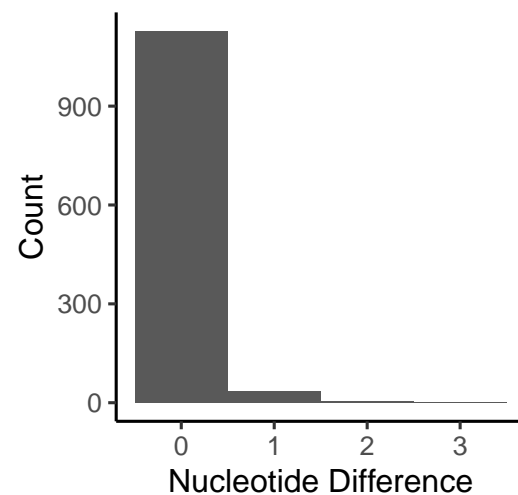
IGHV4-31*02

651 sequences assigned
627 (96.3%) exact matches, in which:
619 unique CDR3
6 unique J



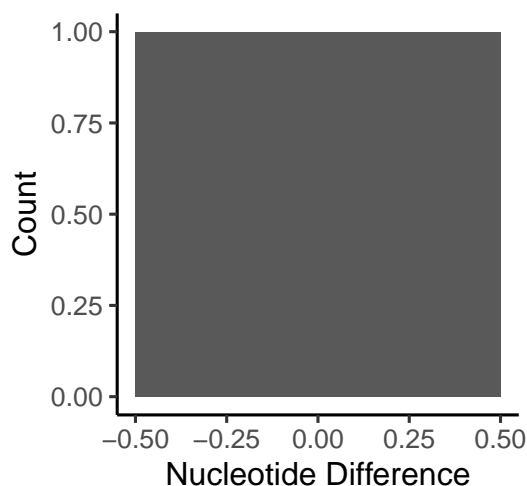
IGHV4-39*07

1168 sequences assigned
1128 (96.6%) exact matches, in which:
1078 unique CDR3
6 unique J



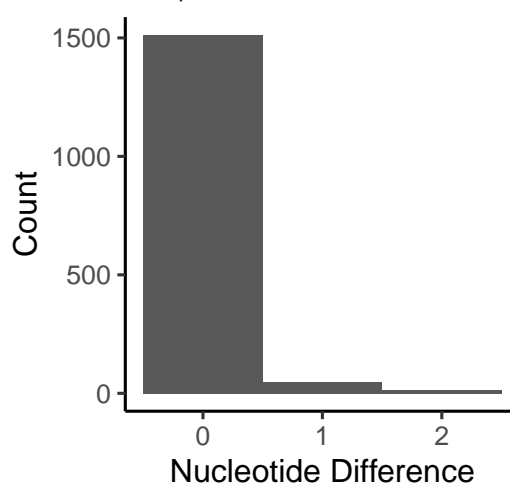
IGHV4-28*01_07

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



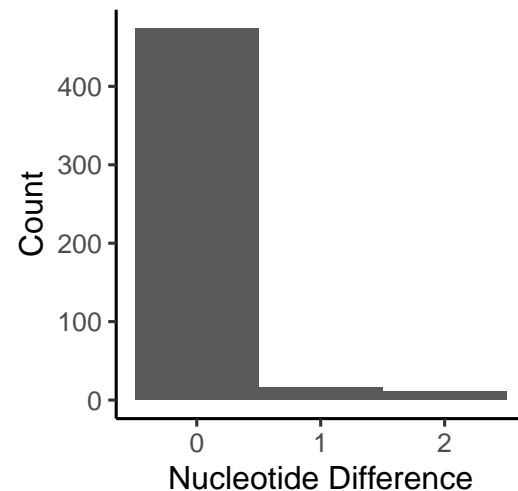
IGHV4-34*01_02

1574 sequences assigned
1512 (96.1%) exact matches, in which:
1462 unique CDR3
6 unique J



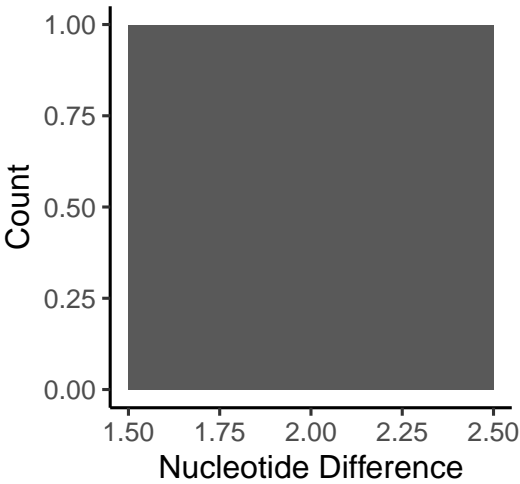
IGHV4-59*08

501 sequences assigned
474 (94.6%) exact matches, in which:
461 unique CDR3
6 unique J



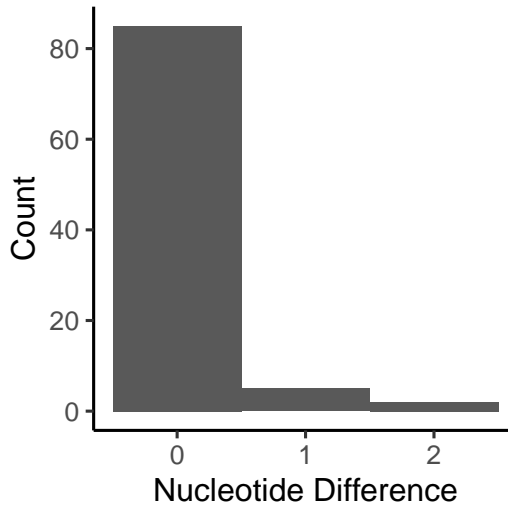
IGHV4-61*01

1 sequences assigned
No exact matches.



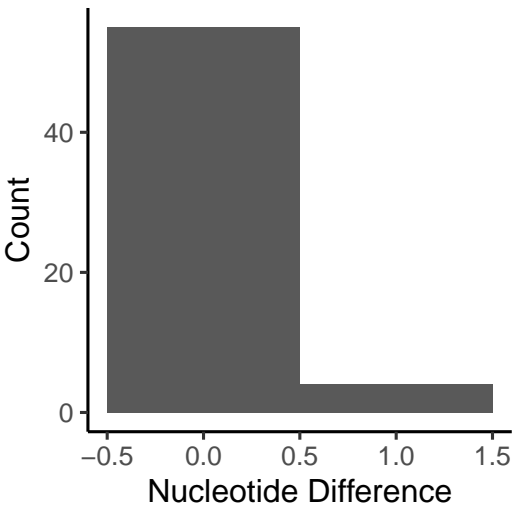
IGHV6-1*01_02

92 sequences assigned
85 (92.4%) exact matches, in which:
85 unique CDR3
5 unique J



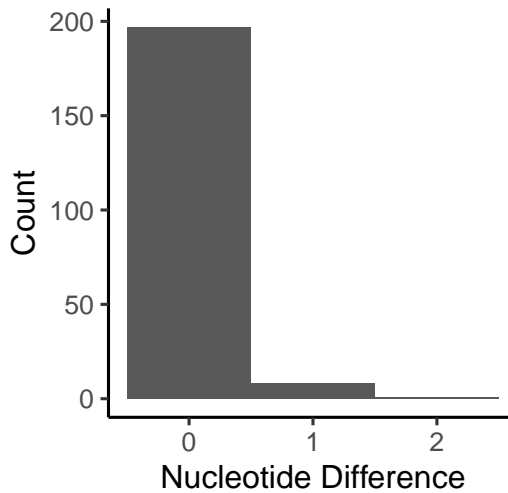
IGHV5-10-1*01_03

59 sequences assigned
55 (93.2%) exact matches, in which:
55 unique CDR3
5 unique J



IGHV7-4-1*02

206 sequences assigned
197 (95.6%) exact matches, in which:
197 unique CDR3
5 unique J



IGHV5-51*01_03

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

