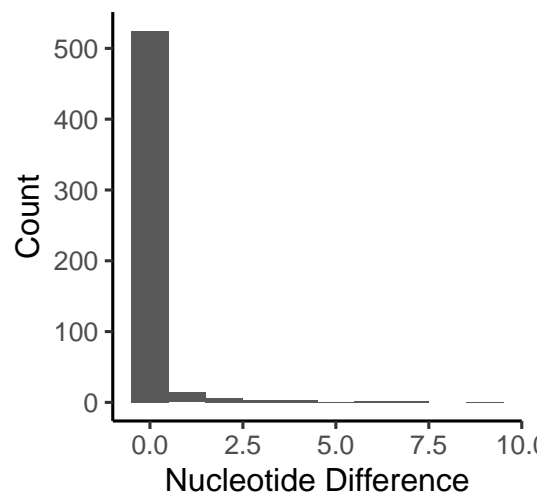


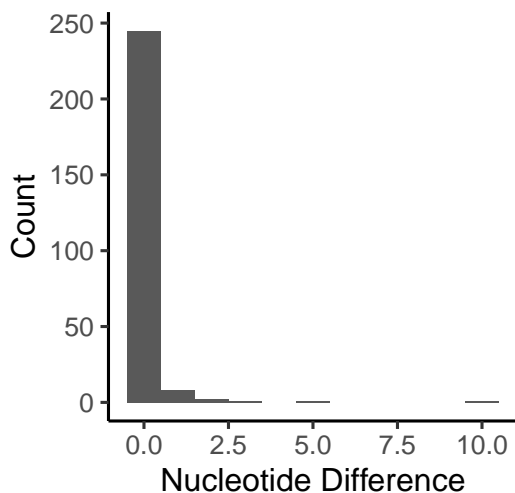
IGHV1-2*02

557 sequences assigned
525 (94.3%) exact matches, in which:
525 unique CDR3
6 unique J



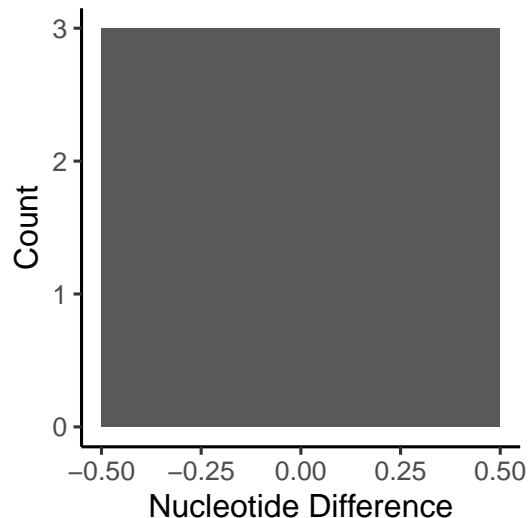
IGHV1-8*01

258 sequences assigned
245 (95%) exact matches, in which:
245 unique CDR3
5 unique J



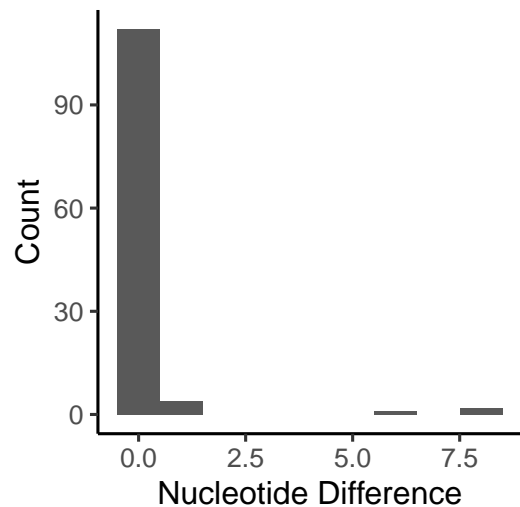
IGHV1-45*02

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



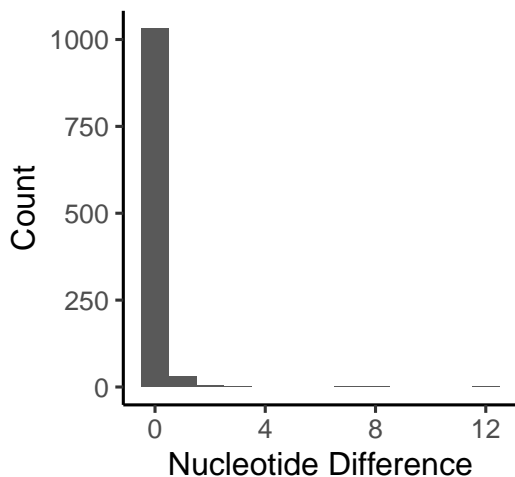
IGHV1-2*04

119 sequences assigned
112 (94.1%) exact matches, in which:
111 unique CDR3
5 unique J



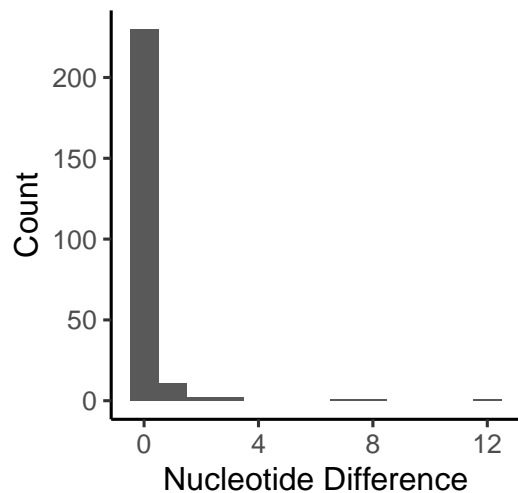
IGHV1-18*01

1069 sequences assigned
1031 (96.4%) exact matches, in which:
1029 unique CDR3
6 unique J



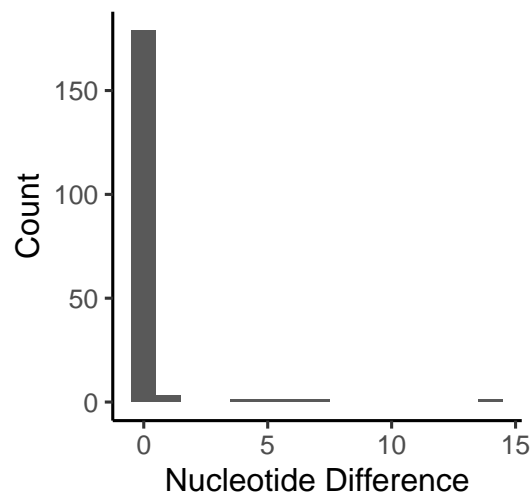
IGHV1-46*01

248 sequences assigned
230 (92.7%) exact matches, in which:
230 unique CDR3
6 unique J



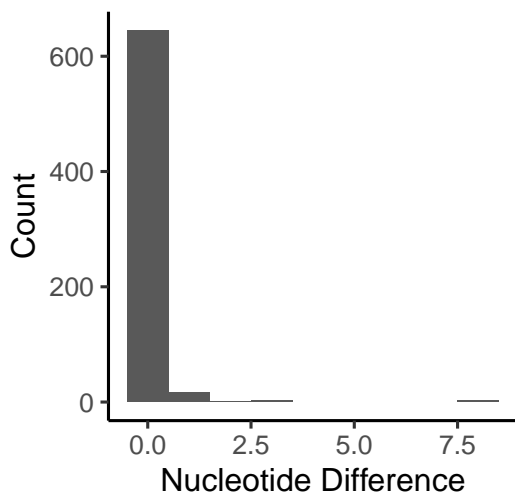
IGHV1-3*01

188 sequences assigned
179 (95.2%) exact matches, in which:
179 unique CDR3
6 unique J



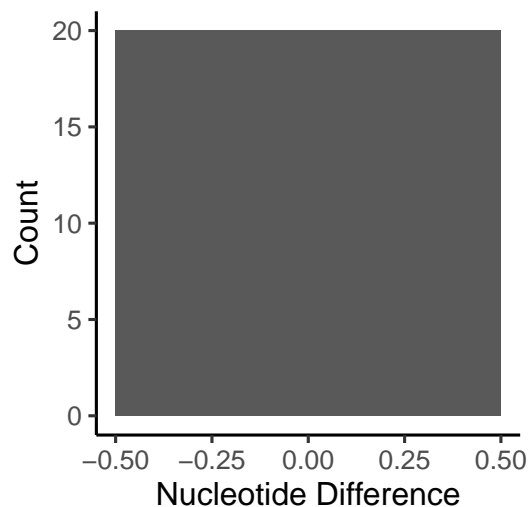
IGHV1-24*01

667 sequences assigned
645 (96.7%) exact matches, in which:
645 unique CDR3
6 unique J



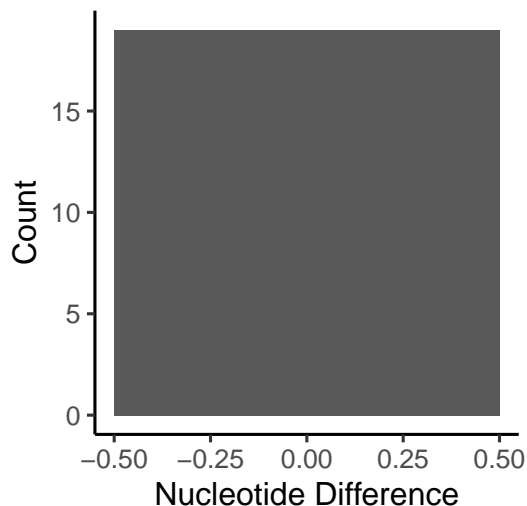
IGHV1-58*01

20 sequences assigned
20 (100%) exact matches, in which:
20 unique CDR3
4 unique J



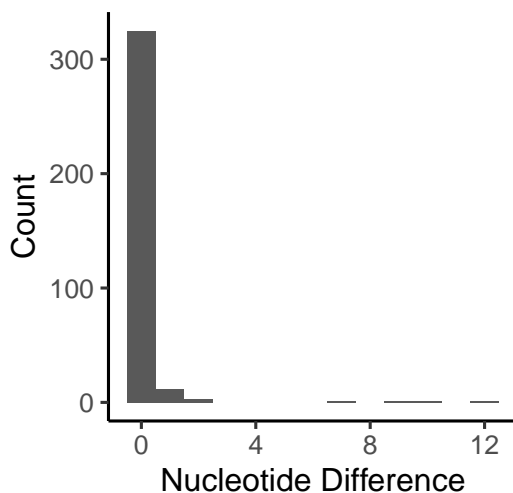
IGHV1-58*02

19 sequences assigned
19 (100%) exact matches, in which:
19 unique CDR3
5 unique J



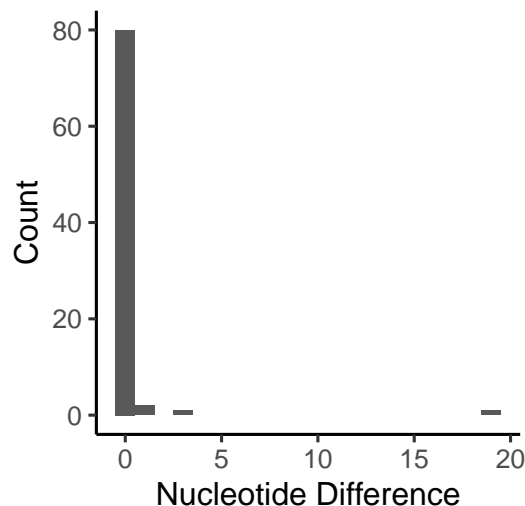
IGHV1-69*06

344 sequences assigned
325 (94.5%) exact matches, in which:
325 unique CDR3
6 unique J



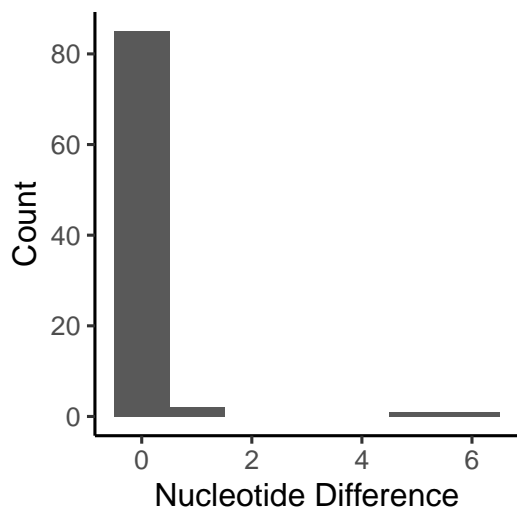
IGHV2-26*01

84 sequences assigned
80 (95.2%) exact matches, in which:
80 unique CDR3
6 unique J



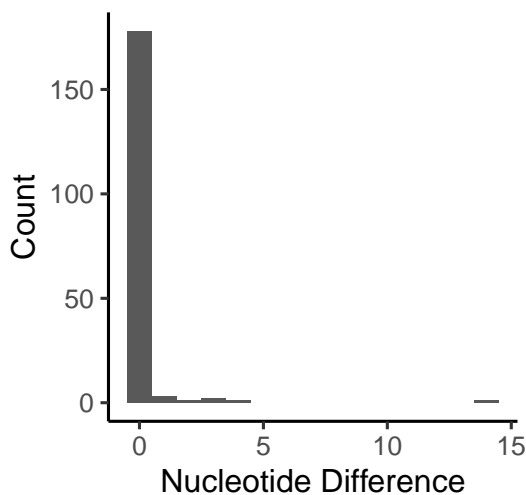
IGHV1-69-2*01

89 sequences assigned
85 (95.5%) exact matches, in which:
84 unique CDR3
4 unique J



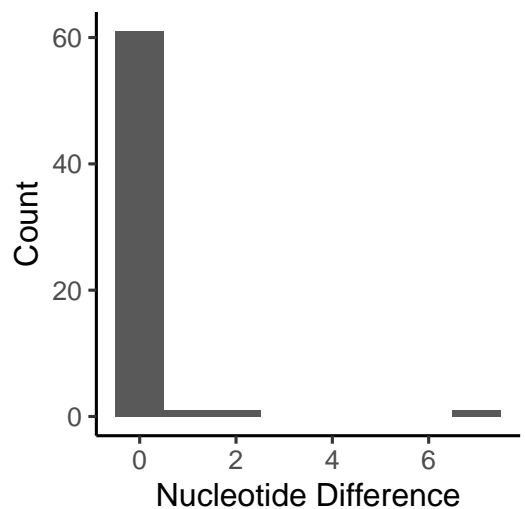
IGHV2-5*01

186 sequences assigned
178 (95.7%) exact matches, in which:
178 unique CDR3
6 unique J



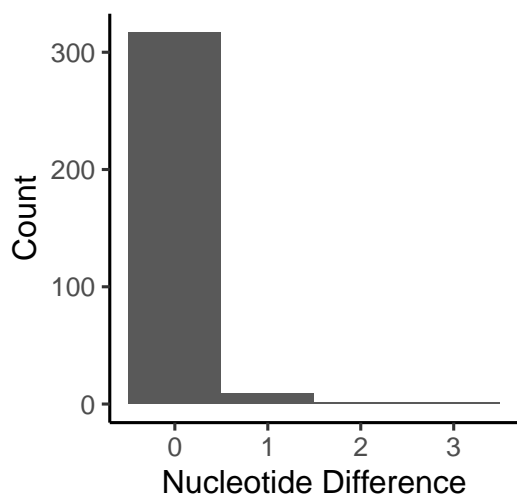
IGHV2-70*01

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



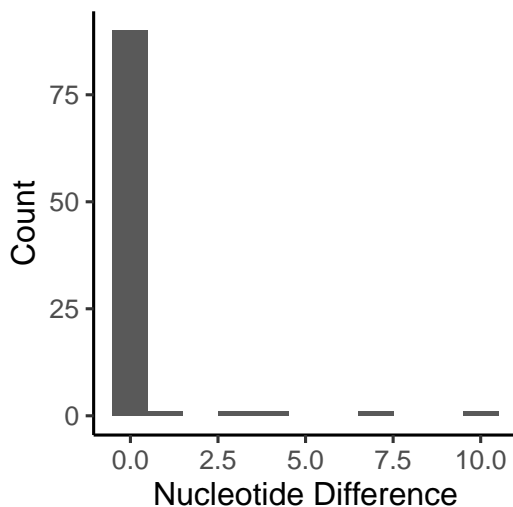
IGHV1-69*04

328 sequences assigned
317 (96.6%) exact matches, in which:
317 unique CDR3
6 unique J



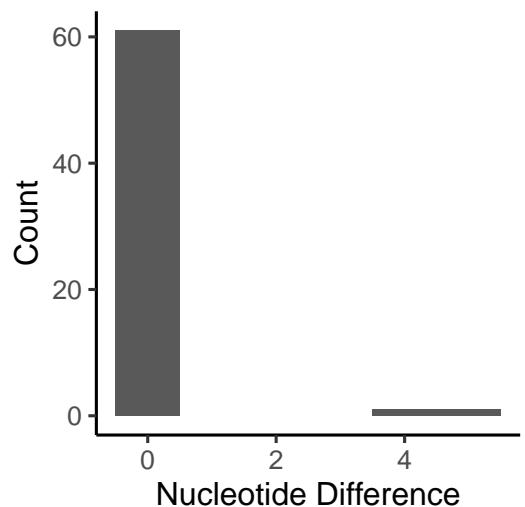
IGHV2-5*02

95 sequences assigned
90 (94.7%) exact matches, in which:
90 unique CDR3
6 unique J



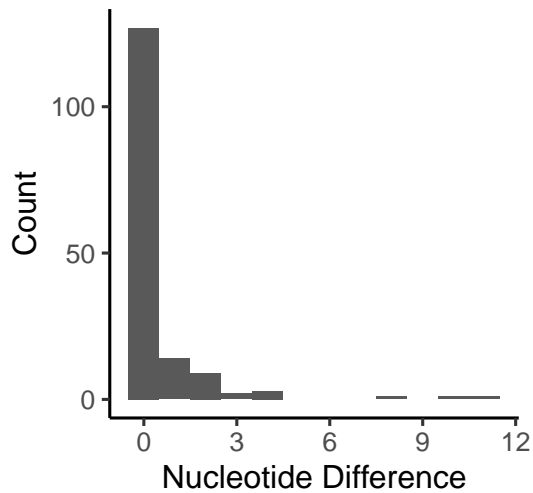
IGHV2-70*15

63 sequences assigned
61 (96.8%) exact matches, in which:
61 unique CDR3
5 unique J



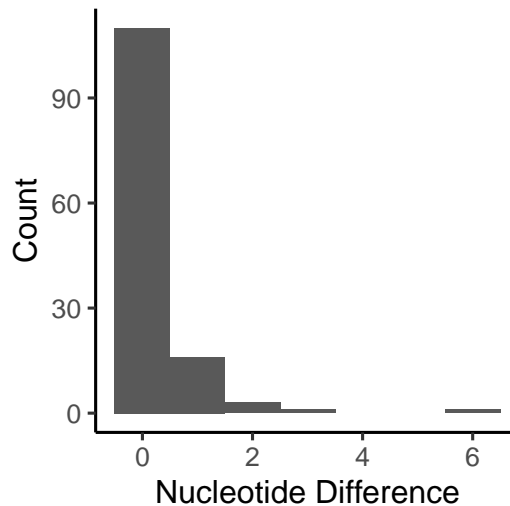
IGHV3-7*01

160 sequences assigned
127 (79.4%) exact matches, in which:
126 unique CDR3
5 unique J



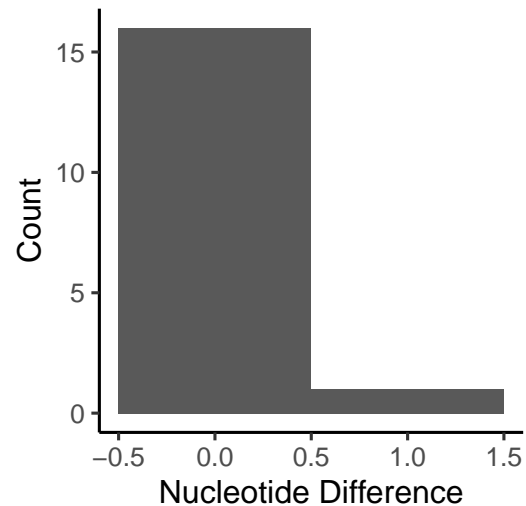
IGHV3-11*01

131 sequences assigned
110 (84%) exact matches, in which:
110 unique CDR3
6 unique J



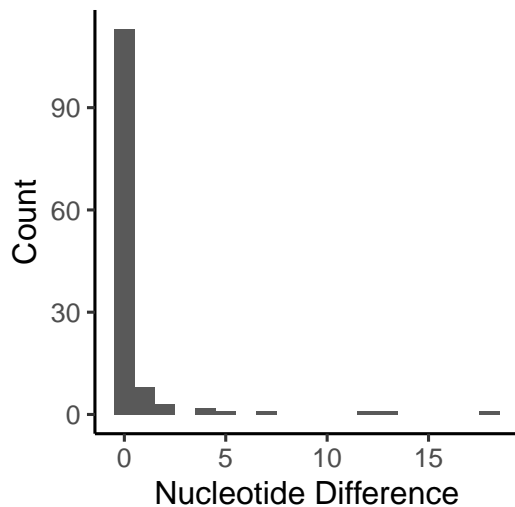
IGHV3-13*05

17 sequences assigned
16 (94.1%) exact matches, in which:
16 unique CDR3
4 unique J



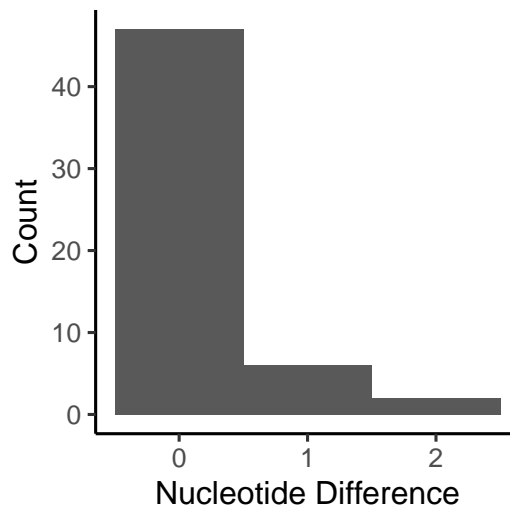
IGHV3-7*03

132 sequences assigned
113 (85.6%) exact matches, in which:
113 unique CDR3
6 unique J



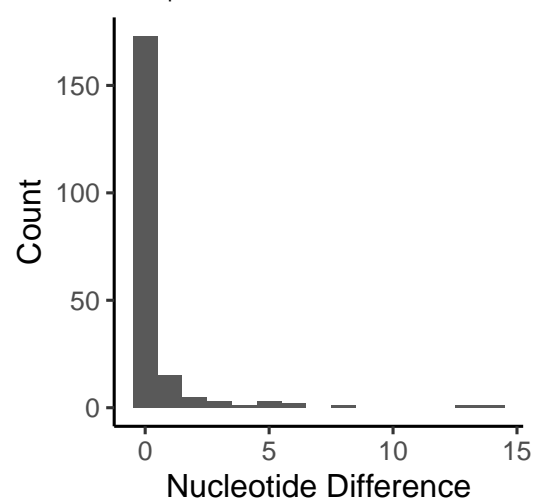
IGHV3-11*06

55 sequences assigned
47 (85.5%) exact matches, in which:
47 unique CDR3
6 unique J



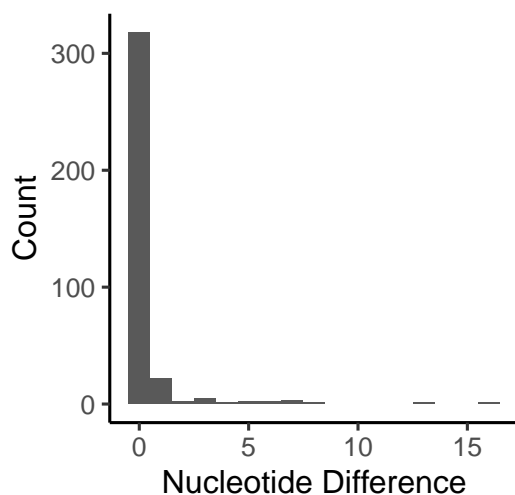
IGHV3-15*01

205 sequences assigned
173 (84.4%) exact matches, in which:
173 unique CDR3
6 unique J



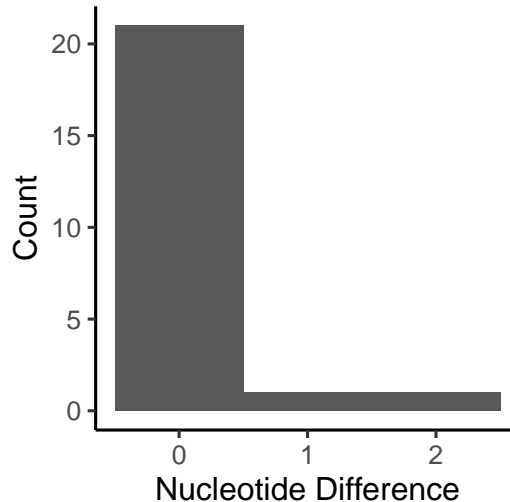
IGHV3-9*01

358 sequences assigned
318 (88.8%) exact matches, in which:
318 unique CDR3
6 unique J



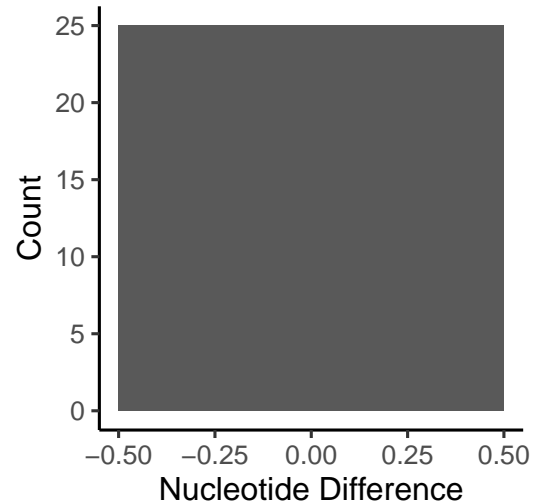
IGHV3-13*01

23 sequences assigned
21 (91.3%) exact matches, in which:
21 unique CDR3
4 unique J



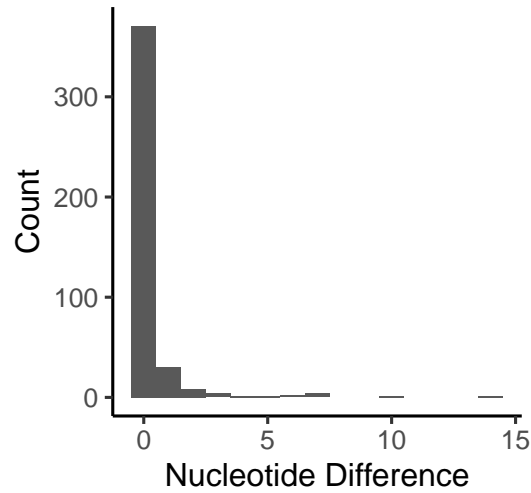
IGHV3-20*01

25 sequences assigned
25 (100%) exact matches, in which:
25 unique CDR3
5 unique J



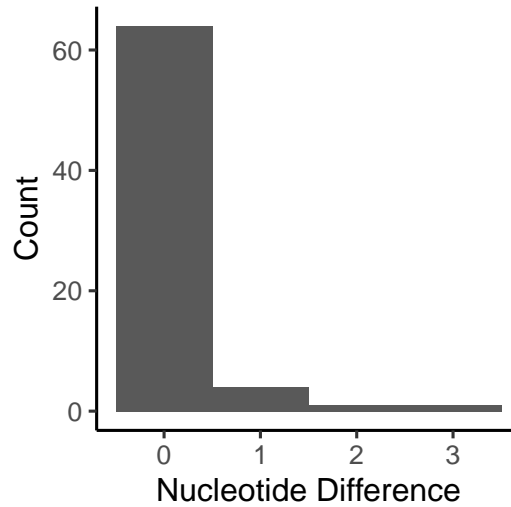
IGHV3–21*01

423 sequences assigned
371 (87.7%) exact matches, in which:
371 unique CDR3
6 unique J



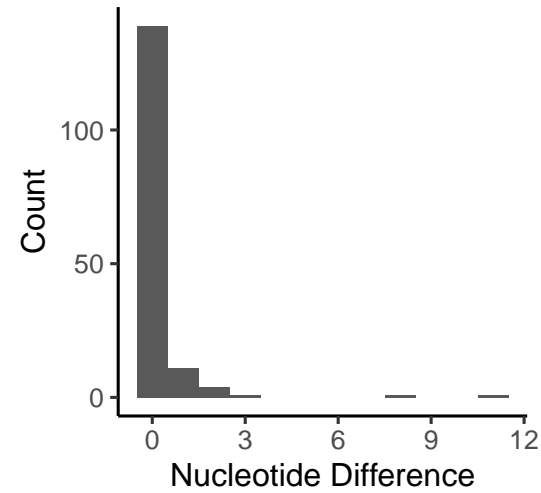
IGHV3–43*01

70 sequences assigned
64 (91.4%) exact matches, in which:
64 unique CDR3
5 unique J



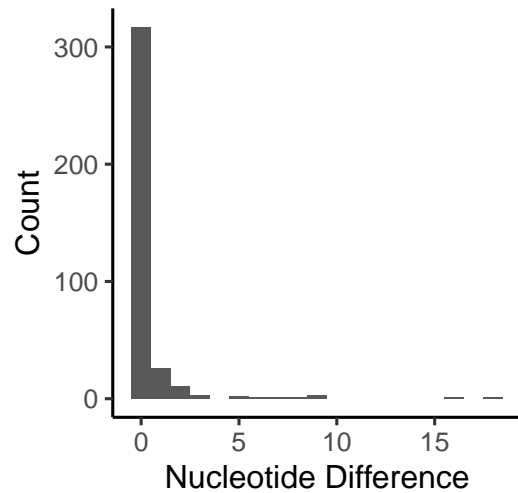
IGHV3–53*01

157 sequences assigned
139 (88.5%) exact matches, in which:
139 unique CDR3
6 unique J



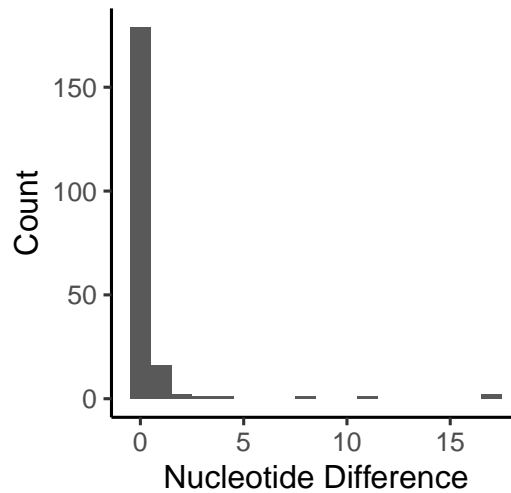
IGHV3–30–3*01

367 sequences assigned
317 (86.4%) exact matches, in which:
317 unique CDR3
6 unique J



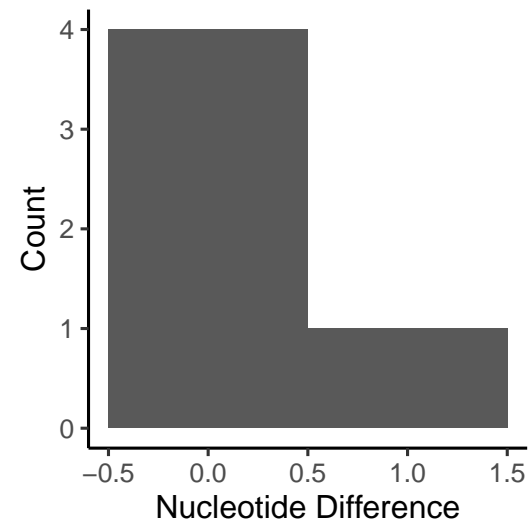
IGHV3–48*01

204 sequences assigned
179 (87.7%) exact matches, in which:
178 unique CDR3
6 unique J



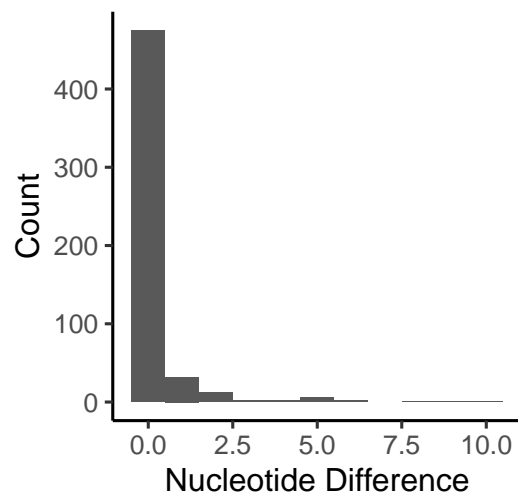
IGHV3–64*01

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



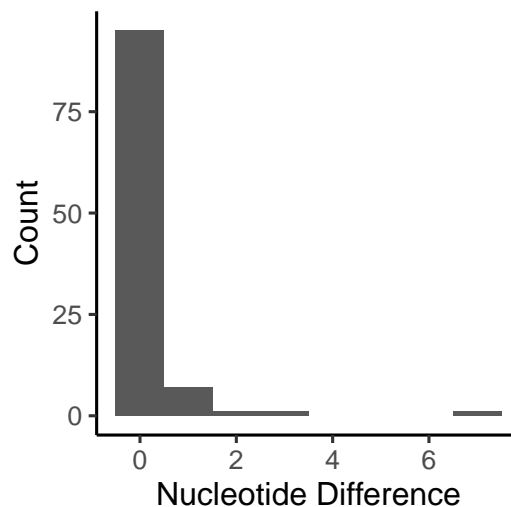
IGHV3–33*01

534 sequences assigned
475 (89%) exact matches, in which:
475 unique CDR3
6 unique J



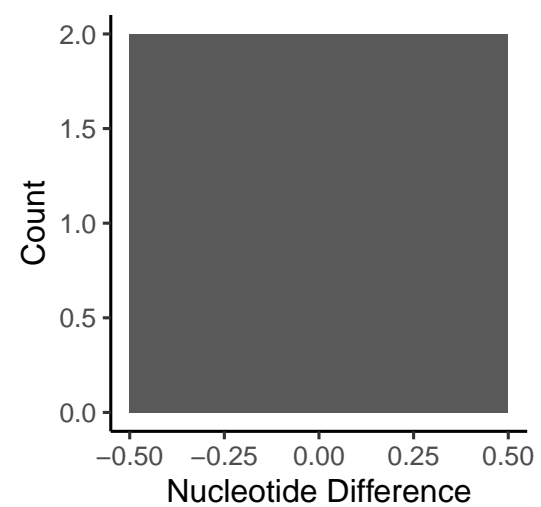
IGHV3–49*03

105 sequences assigned
95 (90.5%) exact matches, in which:
94 unique CDR3
5 unique J



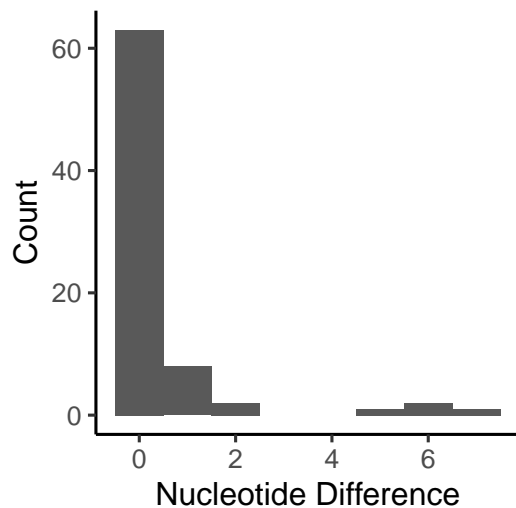
IGHV3–64*02

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



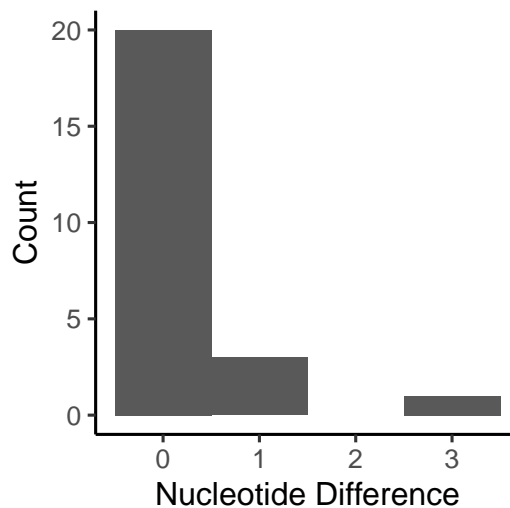
IGHV3-66*01

78 sequences assigned
63 (80.8%) exact matches, in which:
63 unique CDR3
6 unique J



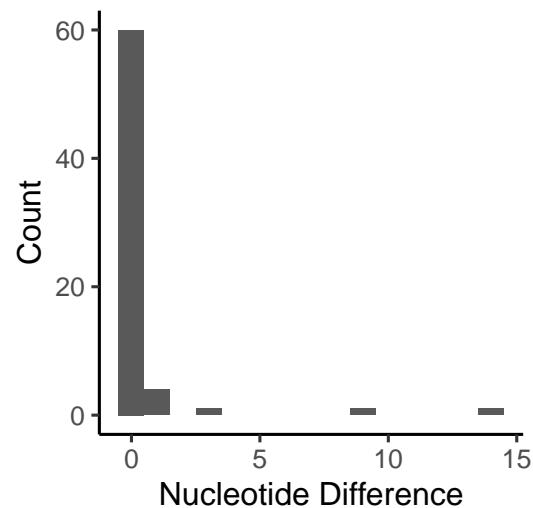
IGHV3-73*01

24 sequences assigned
20 (83.3%) exact matches, in which:
20 unique CDR3
4 unique J



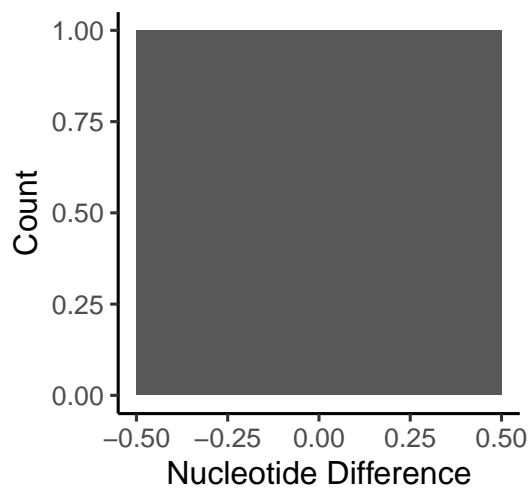
IGHV3-64D*09

67 sequences assigned
60 (89.6%) exact matches, in which:
60 unique CDR3
6 unique J



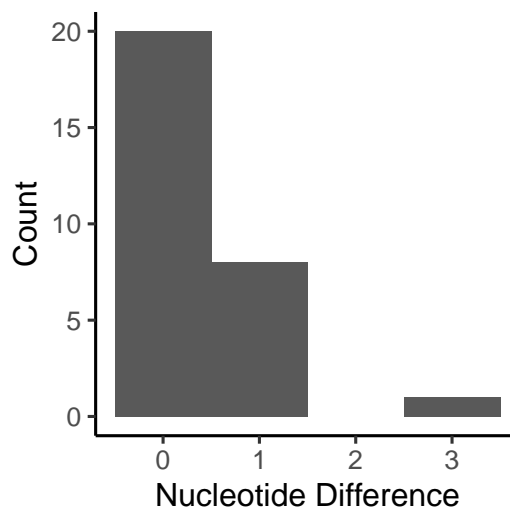
IGHV3-69-1*01

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



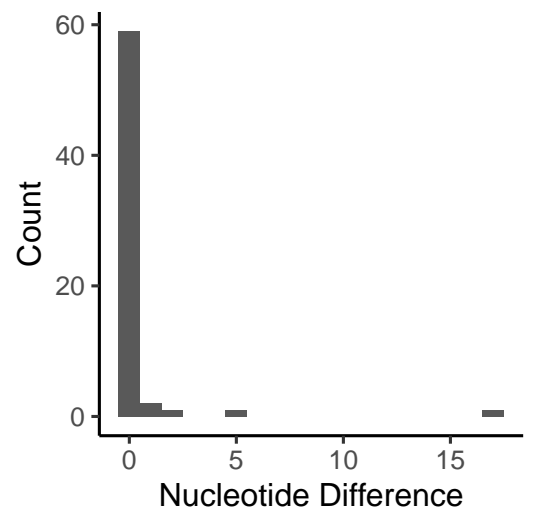
IGHV3-73*02

29 sequences assigned
20 (69%) exact matches, in which:
20 unique CDR3
4 unique J



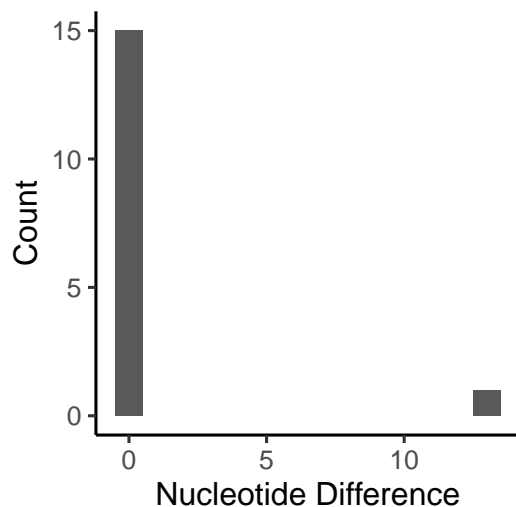
IGHV4-4*02

64 sequences assigned
59 (92.2%) exact matches, in which:
59 unique CDR3
5 unique J



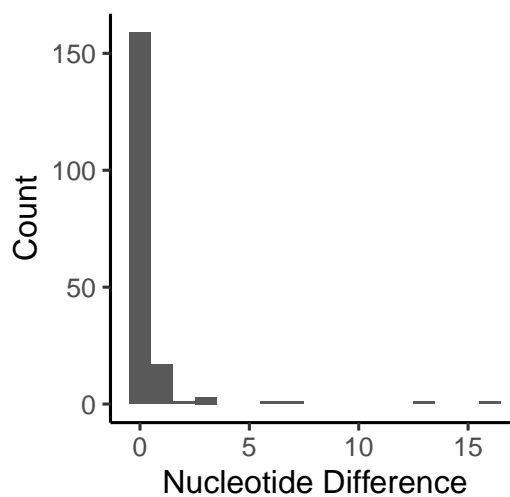
IGHV3-72*01

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



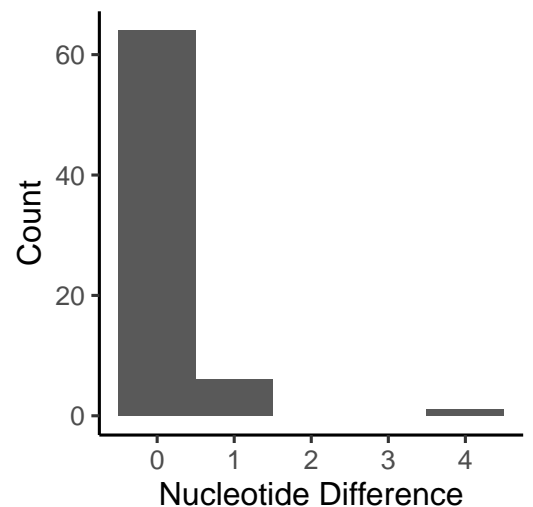
IGHV3-74*01

184 sequences assigned
159 (86.4%) exact matches, in which:
159 unique CDR3
6 unique J



IGHV4-4*07

71 sequences assigned
64 (90.1%) exact matches, in which:
64 unique CDR3
5 unique J



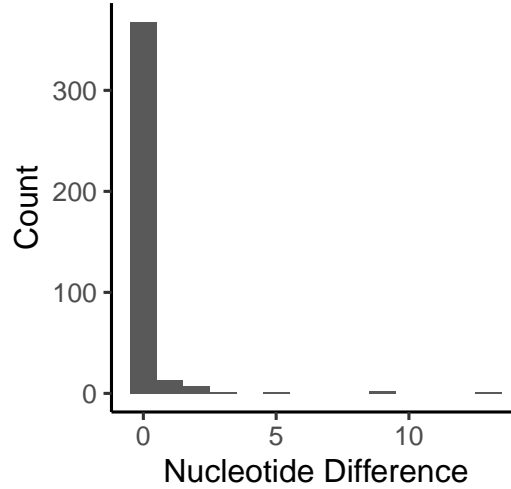
IGHV4-28*01

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



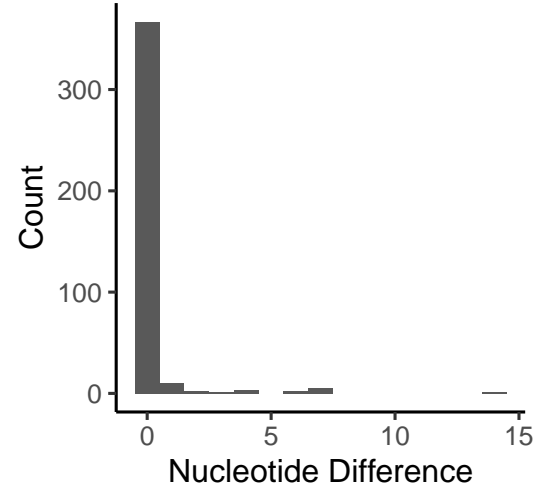
IGHV4-31*03

393 sequences assigned
368 (93.6%) exact matches, in which:
367 unique CDR3
6 unique J



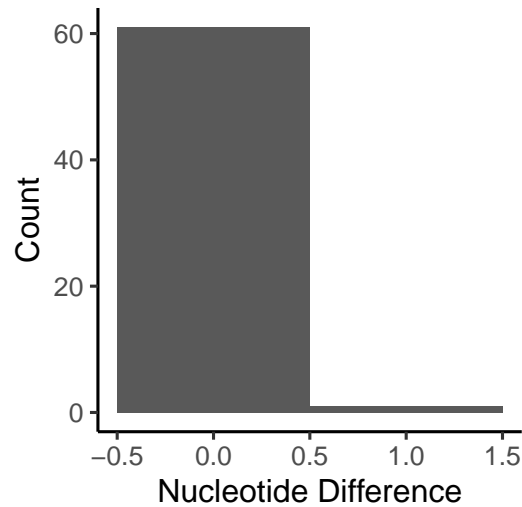
IGHV4-59*01

392 sequences assigned
367 (93.6%) exact matches, in which:
366 unique CDR3
6 unique J



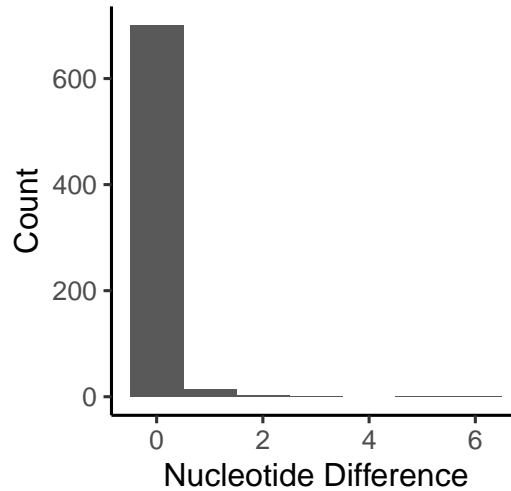
IGHV4-30-2*01

62 sequences assigned
61 (98.4%) exact matches, in which:
61 unique CDR3
6 unique J



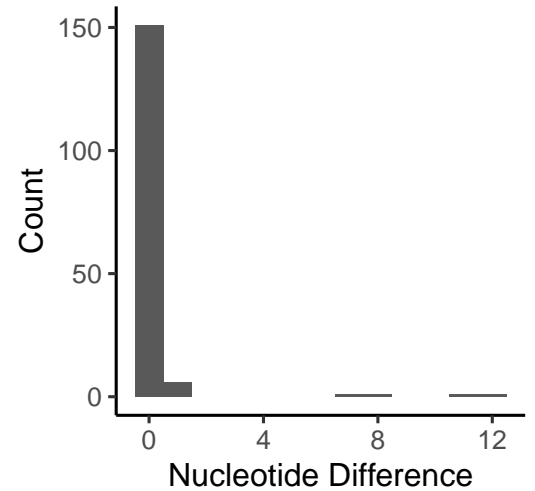
IGHV4-34*01

721 sequences assigned
701 (97.2%) exact matches, in which:
701 unique CDR3
6 unique J



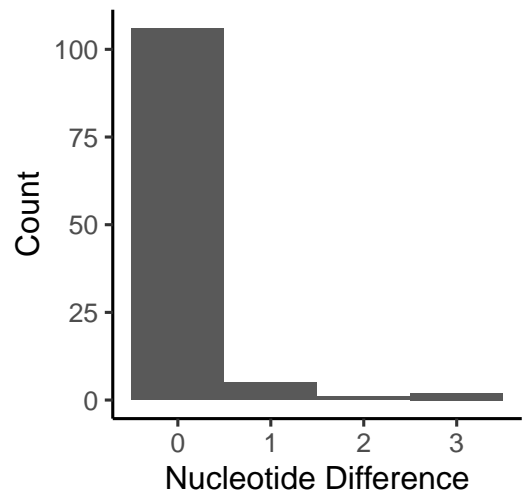
IGHV4-59*08

161 sequences assigned
151 (93.8%) exact matches, in which:
151 unique CDR3
6 unique J



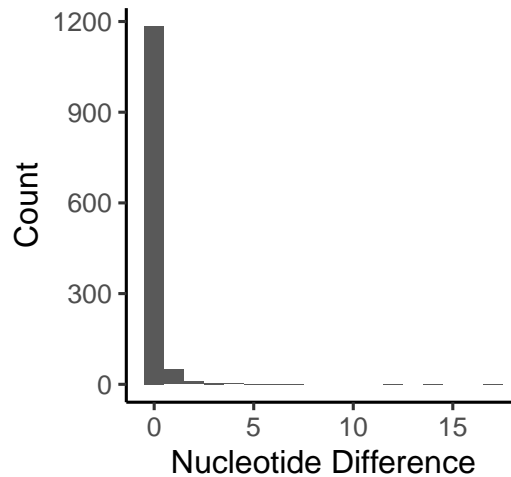
IGHV4-30-4*01

114 sequences assigned
106 (93%) exact matches, in which:
106 unique CDR3
6 unique J



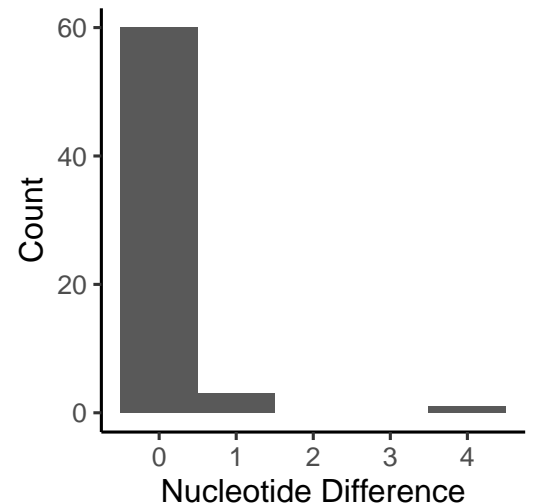
IGHV4-39*01

1258 sequences assigned
1185 (94.2%) exact matches, in which:
1184 unique CDR3
6 unique J



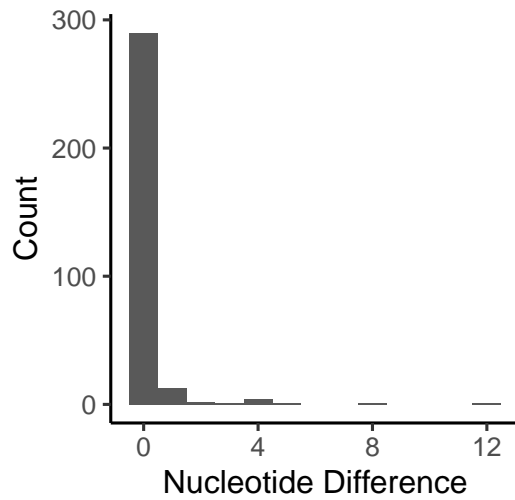
IGHV4-61*01

64 sequences assigned
60 (93.8%) exact matches, in which:
60 unique CDR3
5 unique J



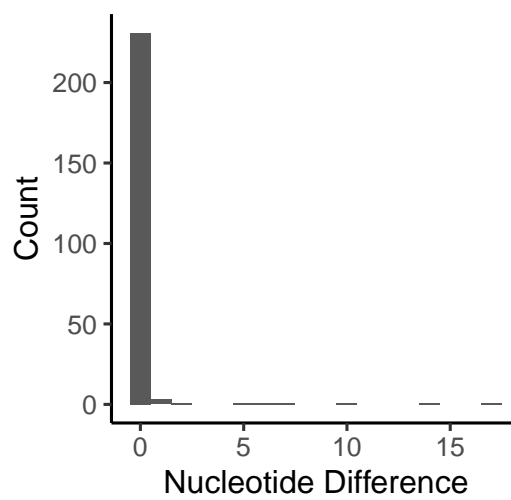
IGHV5-10-1*03

314 sequences assigned
290 (92.4%) exact matches, in which:
288 unique CDR3
6 unique J



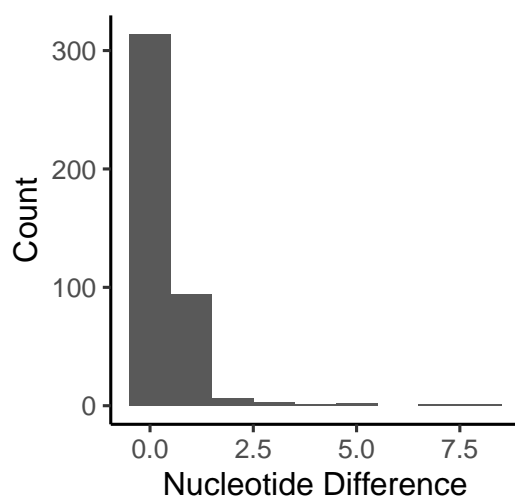
IGHV6-1*01

241 sequences assigned
231 (95.9%) exact matches, in which:
230 unique CDR3
6 unique J



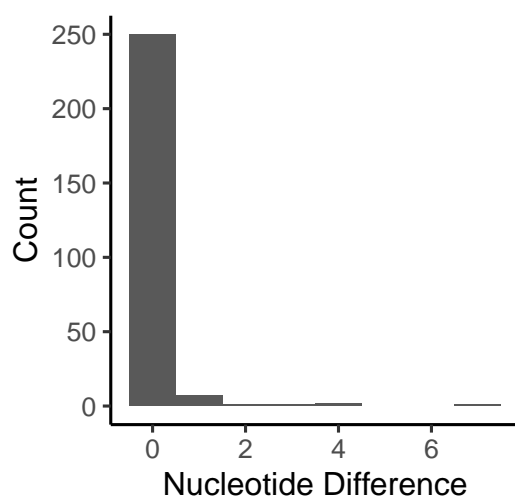
IGHV5-51*01

423 sequences assigned
314 (74.2%) exact matches, in which:
314 unique CDR3
6 unique J



IGHV5-51*03

263 sequences assigned
250 (95.1%) exact matches, in which:
249 unique CDR3
6 unique J





[illegible]