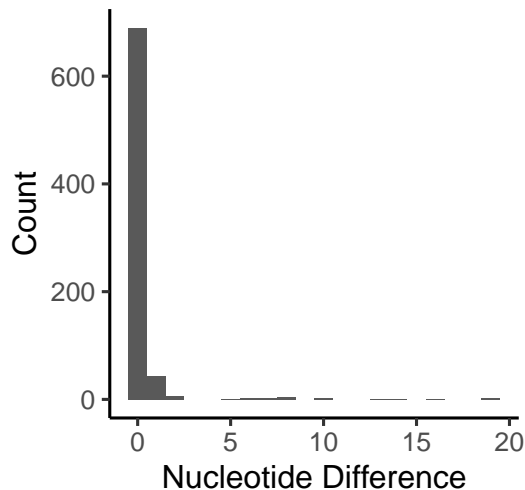


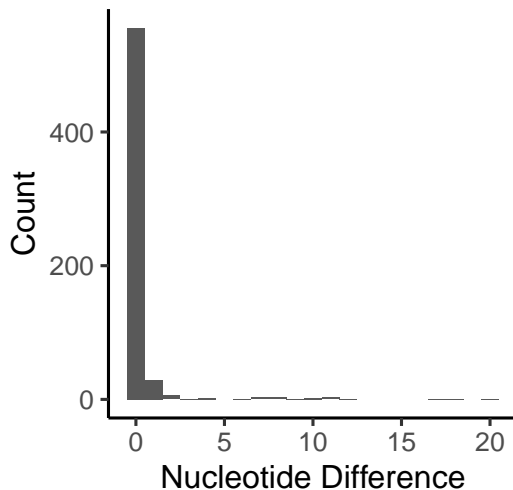
IGHV1-2*02

758 sequences assigned
690 (91%) exact matches, in which:
687 unique CDR3
6 unique J



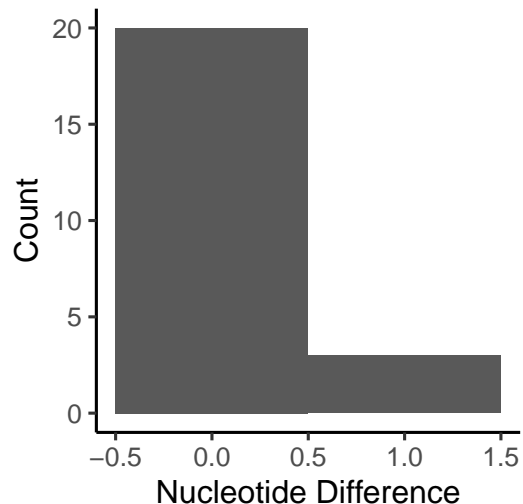
IGHV1-18*01

611 sequences assigned
556 (91%) exact matches, in which:
554 unique CDR3
6 unique J



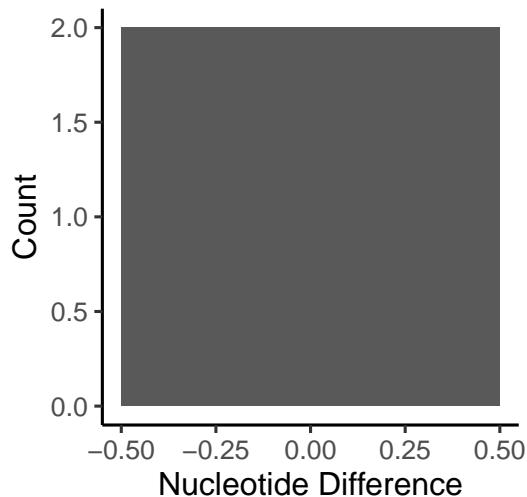
IGHV1-58*01

23 sequences assigned
20 (87%) exact matches, in which:
20 unique CDR3
5 unique J



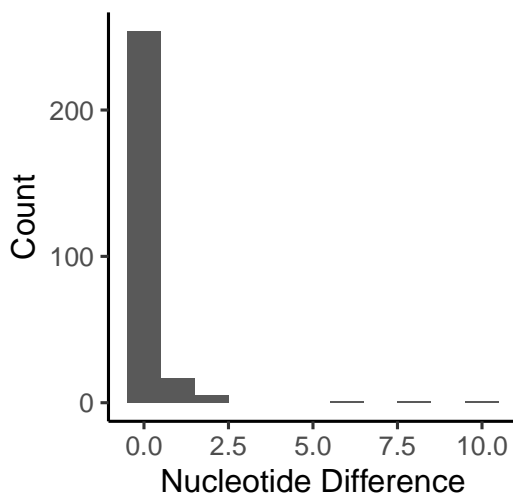
IGHV1-3*02

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



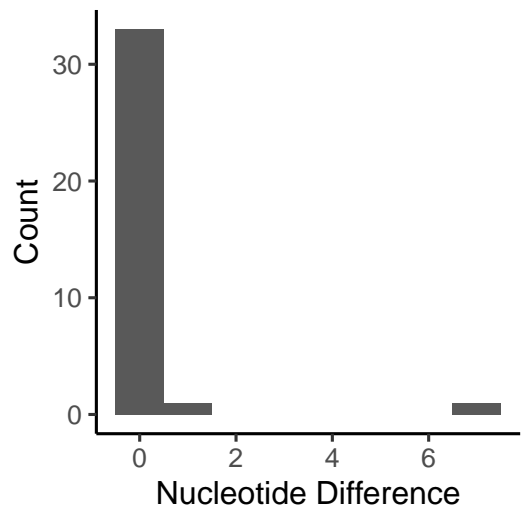
IGHV1-24*01

279 sequences assigned
254 (91%) exact matches, in which:
254 unique CDR3
6 unique J



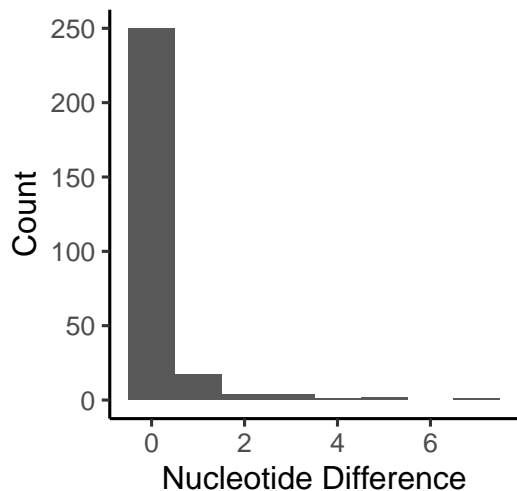
IGHV1-69-2*01

35 sequences assigned
33 (94.3%) exact matches, in which:
33 unique CDR3
5 unique J



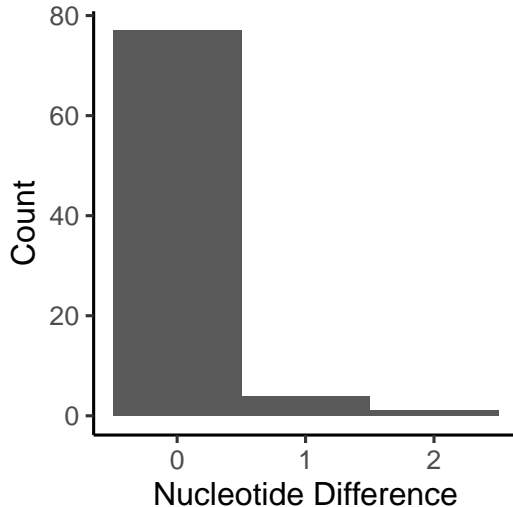
IGHV1-8*01

280 sequences assigned
250 (89.3%) exact matches, in which:
250 unique CDR3
6 unique J



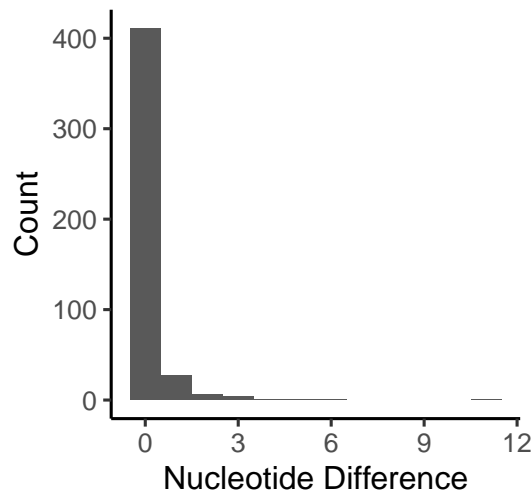
IGHV1-46*01

82 sequences assigned
77 (93.9%) exact matches, in which:
77 unique CDR3
6 unique J



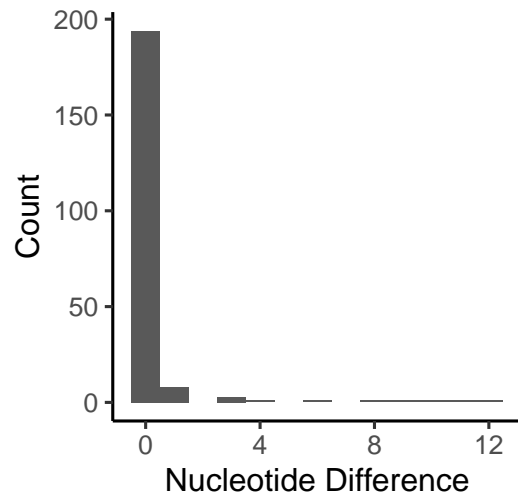
IGHV1-69*06

452 sequences assigned
411 (90.9%) exact matches, in which:
411 unique CDR3
6 unique J



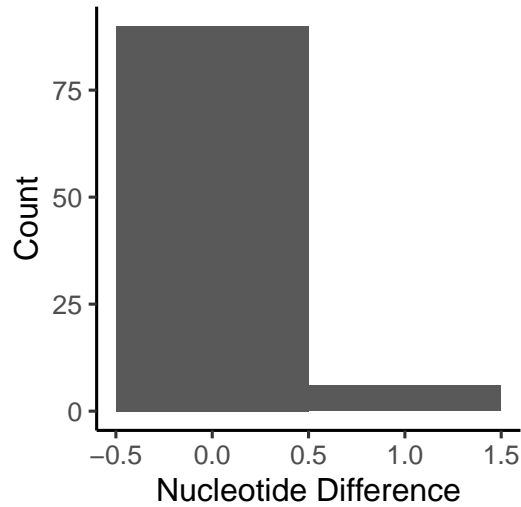
IGHV2-5*01

213 sequences assigned
194 (91.1%) exact matches, in which:
194 unique CDR3
6 unique J



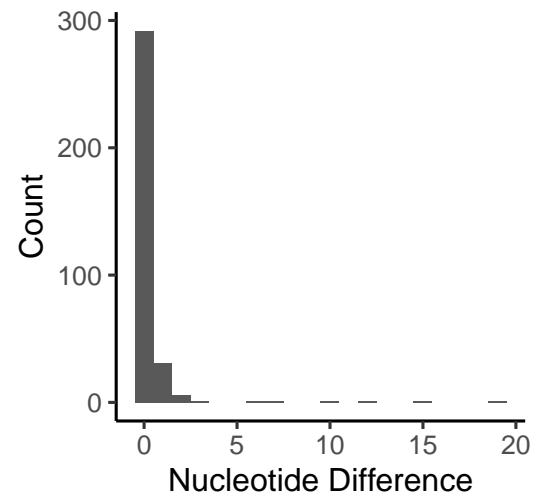
IGHV2-70*01

96 sequences assigned
90 (93.8%) exact matches, in which:
90 unique CDR3
5 unique J



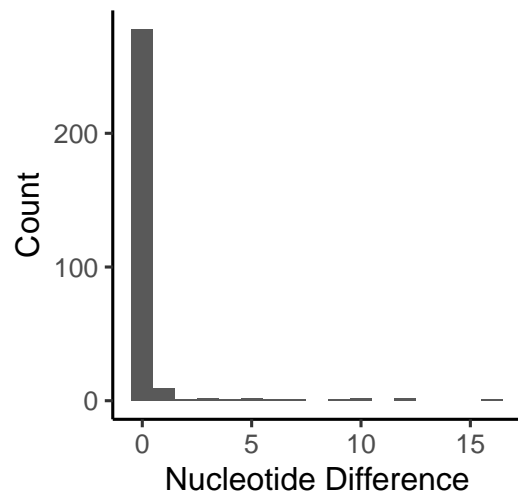
IGHV3-9*01

336 sequences assigned
292 (86.9%) exact matches, in which:
291 unique CDR3
6 unique J



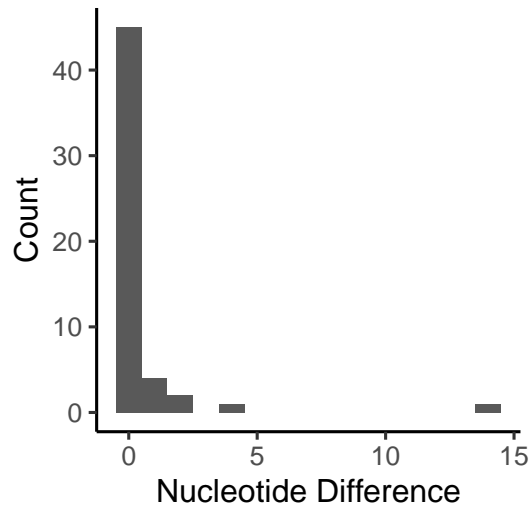
IGHV2-5*02

301 sequences assigned
278 (92.4%) exact matches, in which:
278 unique CDR3
6 unique J



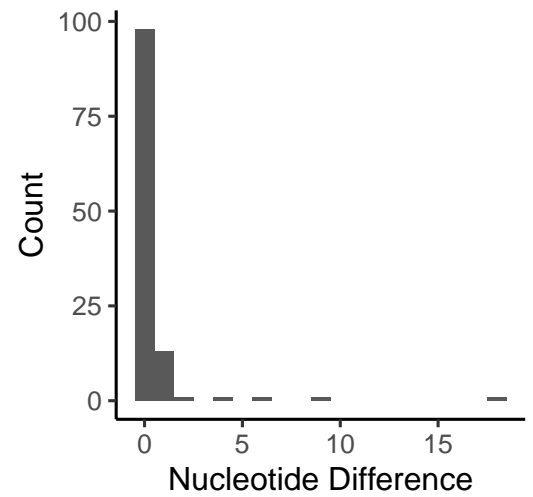
IGHV3-7*01

53 sequences assigned
45 (84.9%) exact matches, in which:
45 unique CDR3
6 unique J



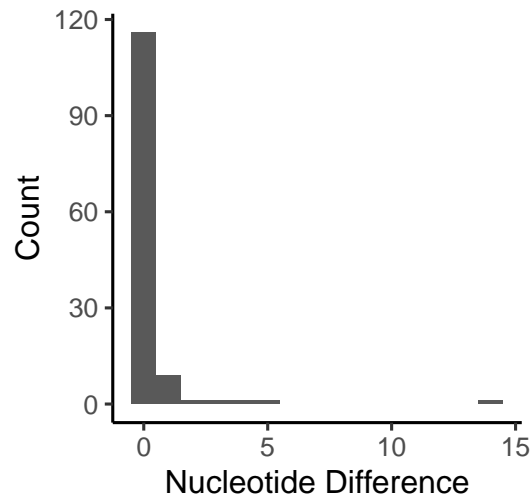
IGHV3-11*01

116 sequences assigned
98 (84.5%) exact matches, in which:
98 unique CDR3
5 unique J



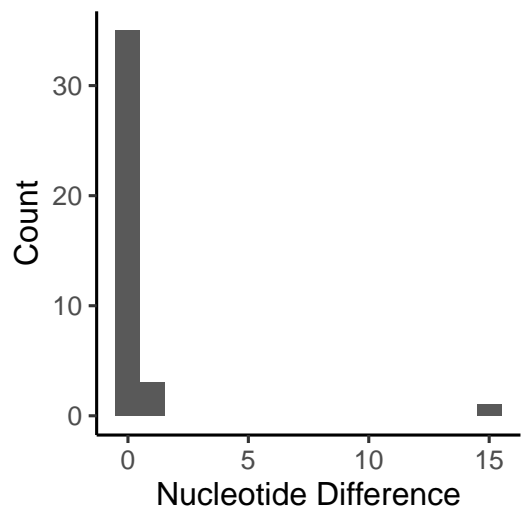
IGHV2-26*01

130 sequences assigned
116 (89.2%) exact matches, in which:
116 unique CDR3
5 unique J



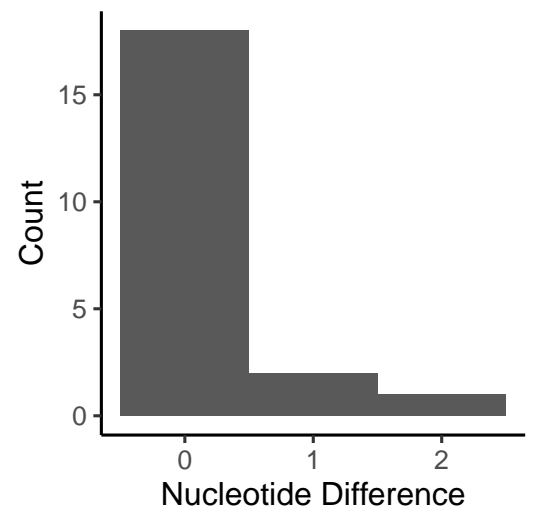
IGHV3-7*04

39 sequences assigned
35 (89.7%) exact matches, in which:
35 unique CDR3
5 unique J



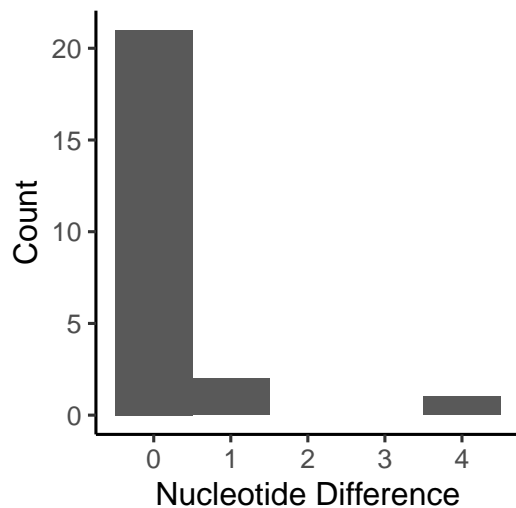
IGHV3-13*01

21 sequences assigned
18 (85.7%) exact matches, in which:
18 unique CDR3
5 unique J



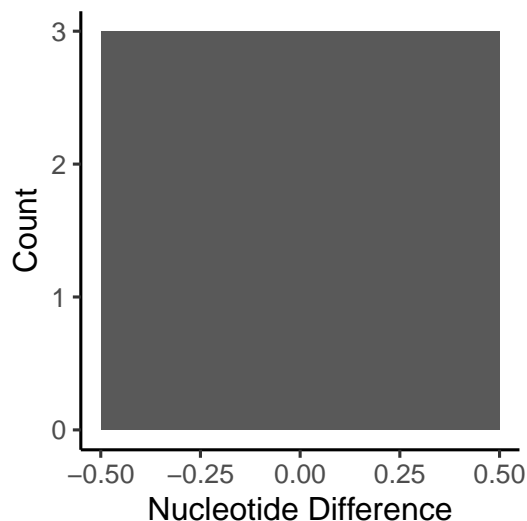
IGHV3-15*01

24 sequences assigned
21 (87.5%) exact matches, in which:
21 unique CDR3
3 unique J



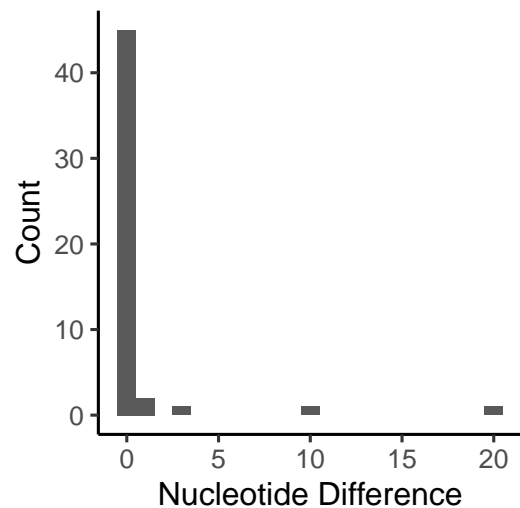
IGHV3-20*04

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



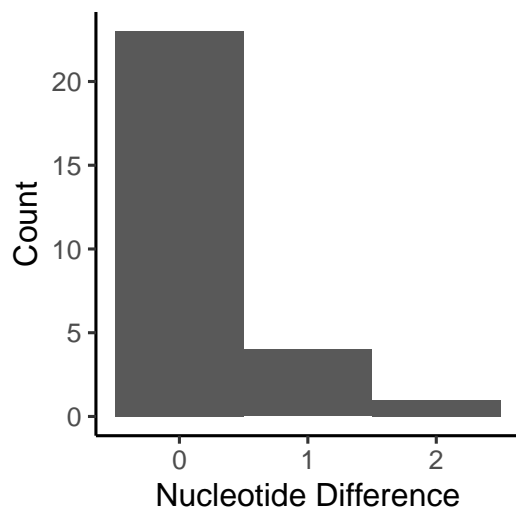
IGHV3-33*01

50 sequences assigned
45 (90%) exact matches, in which:
45 unique CDR3
4 unique J



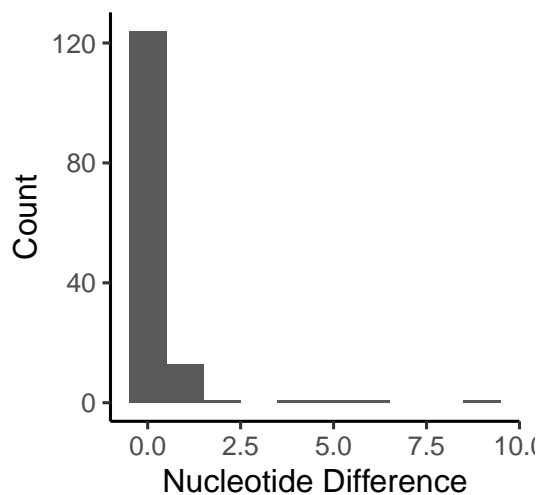
IGHV3-15*07

28 sequences assigned
23 (82.1%) exact matches, in which:
23 unique CDR3
4 unique J



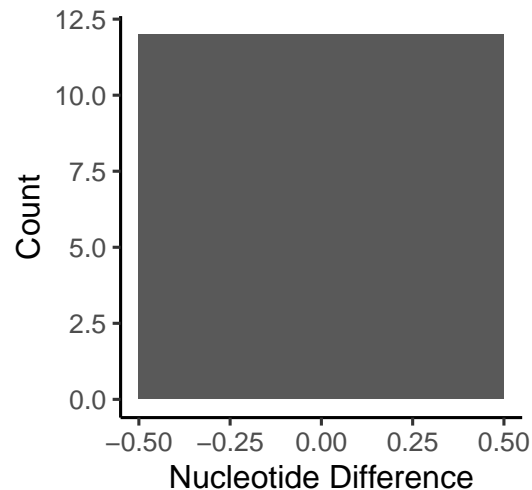
IGHV3-21*01

142 sequences assigned
124 (87.3%) exact matches, in which:
124 unique CDR3
6 unique J



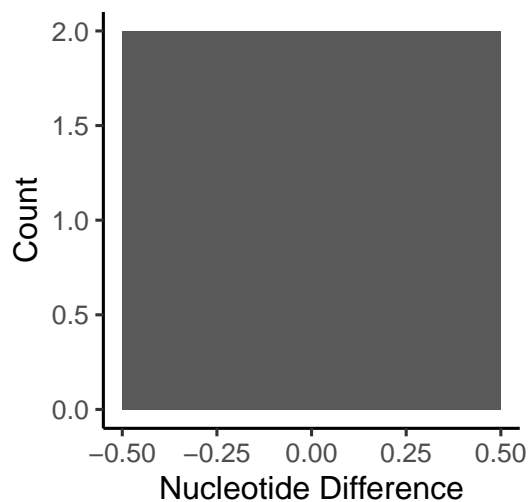
IGHV3-43*01

12 sequences assigned
12 (100%) exact matches, in which:
12 unique CDR3
4 unique J



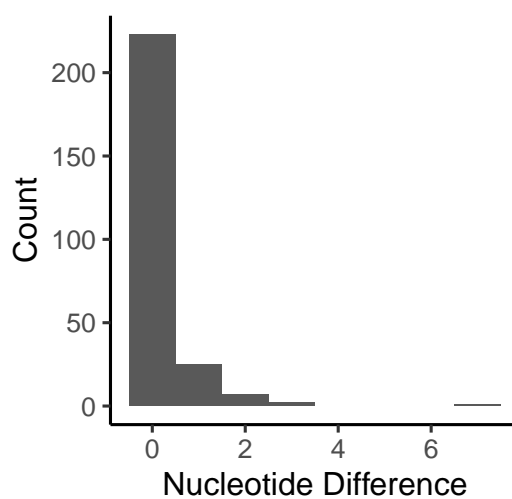
IGHV3-20*01

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



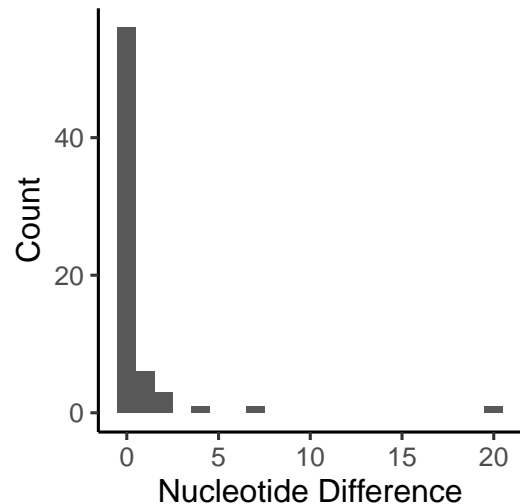
IGHV3-30-3*01

258 sequences assigned
223 (86.4%) exact matches, in which:
223 unique CDR3
6 unique J



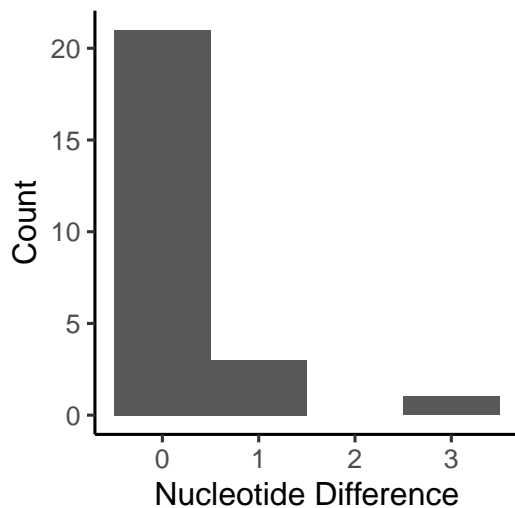
IGHV3-48*02

69 sequences assigned
56 (81.2%) exact matches, in which:
56 unique CDR3
5 unique J



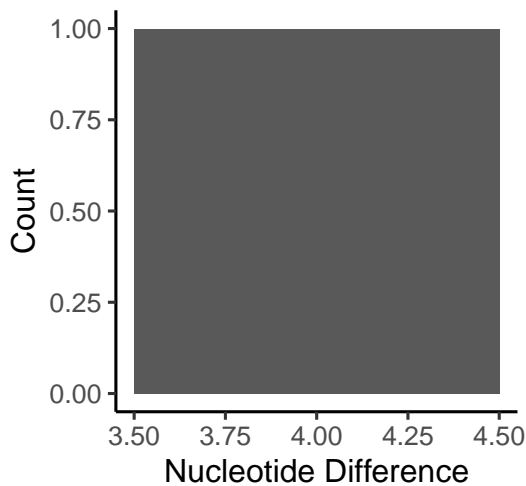
IGHV3-49*05

25 sequences assigned
21 (84%) exact matches, in which:
21 unique CDR3
3 unique J



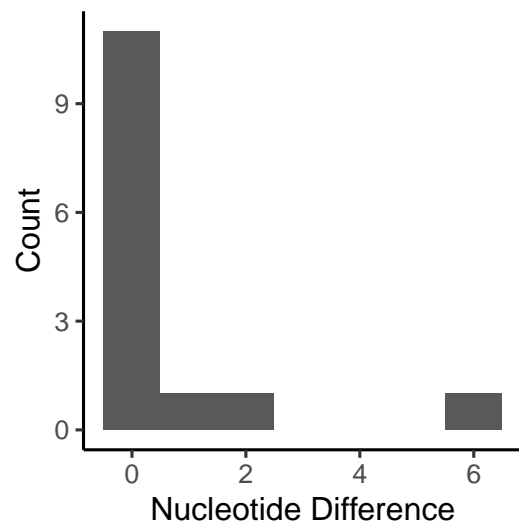
IGHV3-66*03

1 sequences assigned
No exact matches.



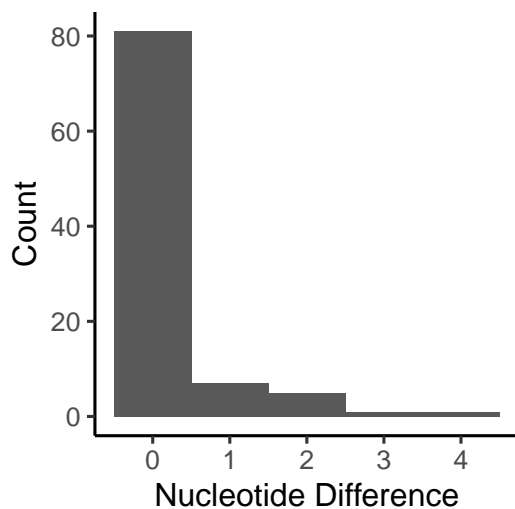
IGHV3-73*02

14 sequences assigned
11 (78.6%) exact matches, in which:
11 unique CDR3
3 unique J



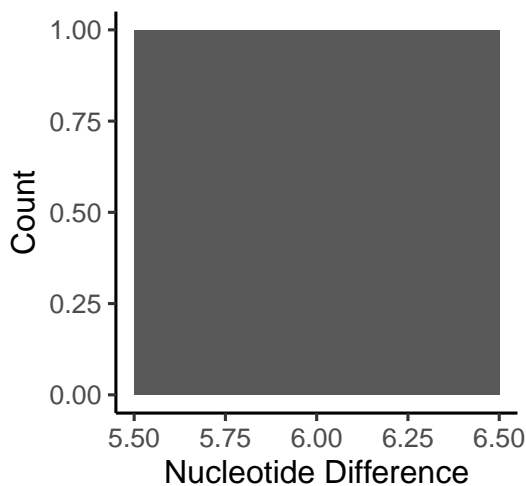
IGHV3-53*01

95 sequences assigned
81 (85.3%) exact matches, in which:
81 unique CDR3
5 unique J



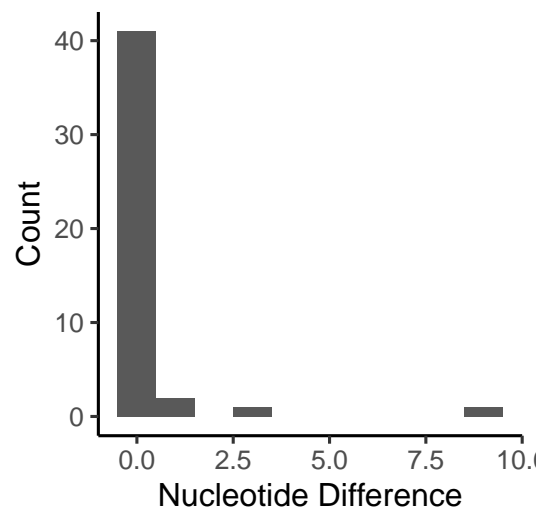
IGHV3-69-1*01

1 sequences assigned
No exact matches.



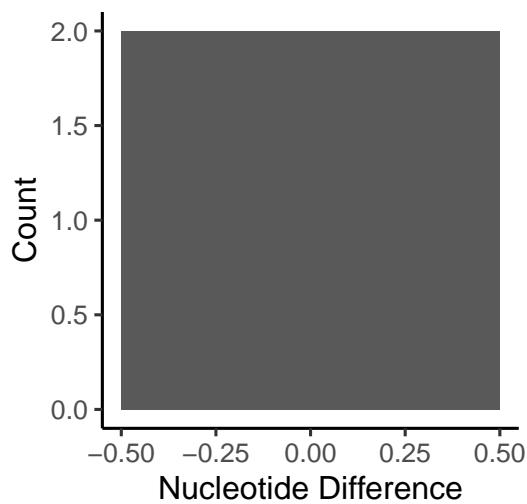
IGHV3-74*01

45 sequences assigned
41 (91.1%) exact matches, in which:
40 unique CDR3
5 unique J



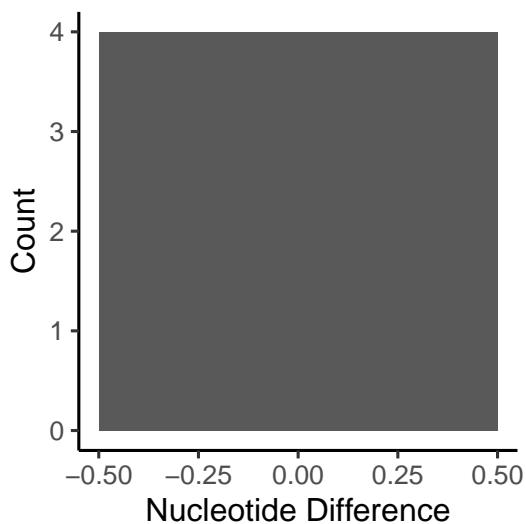
IGHV3-64*02

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



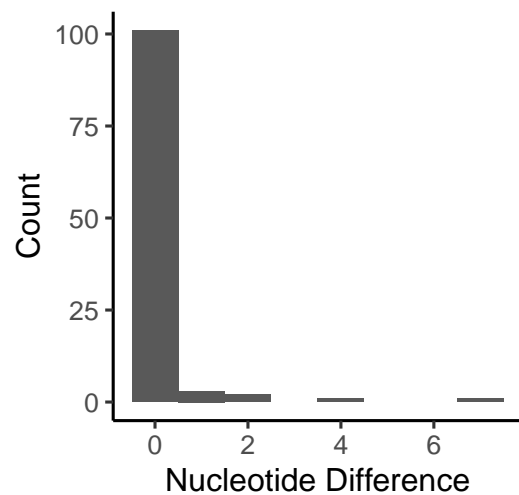
IGHV3-72*01

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



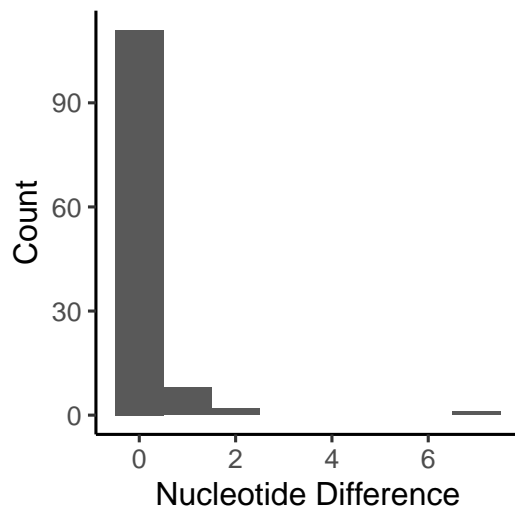
IGHV4-4*07

108 sequences assigned
101 (93.5%) exact matches, in which:
101 unique CDR3
6 unique J



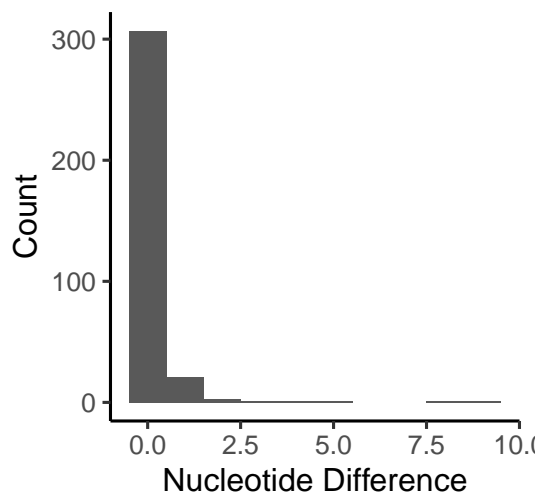
IGHV4-30-4*01

122 sequences assigned
111 (91%) exact matches, in which:
110 unique CDR3
6 unique J



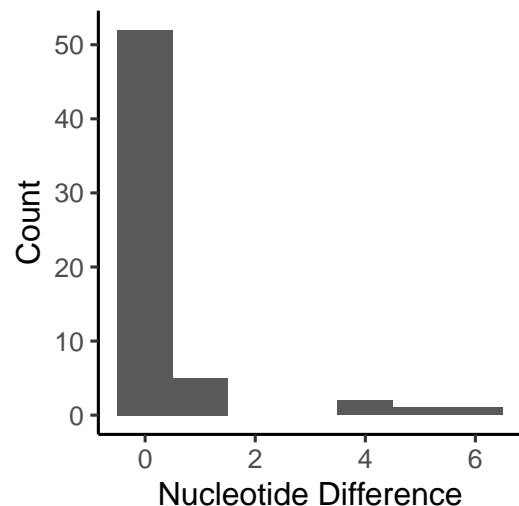
IGHV4-34*01

336 sequences assigned
307 (91.4%) exact matches, in which:
307 unique CDR3
6 unique J



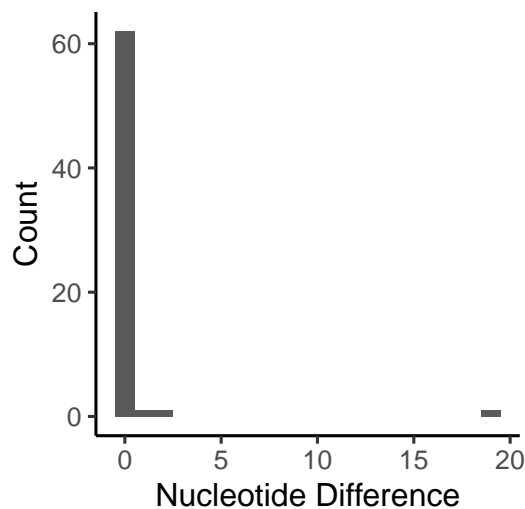
IGHV4-61*01

61 sequences assigned
52 (85.2%) exact matches, in which:
52 unique CDR3
5 unique J



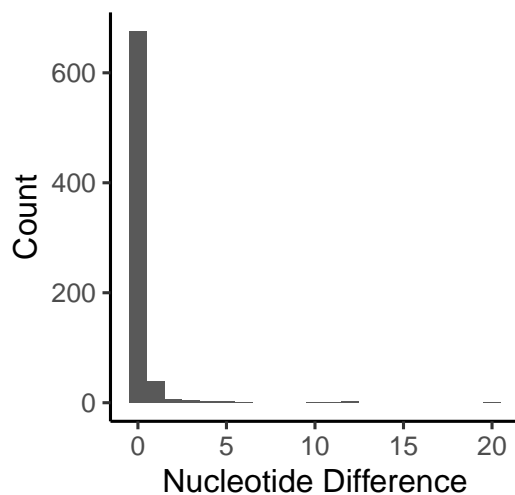
IGHV4-30-2*01

65 sequences assigned
62 (95.4%) exact matches, in which:
62 unique CDR3
6 unique J



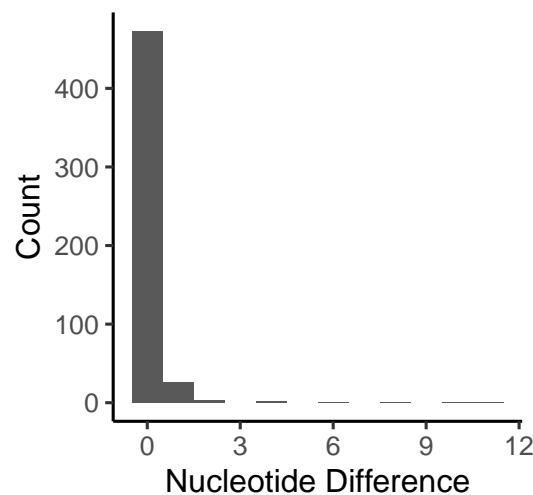
IGHV4-39*01

741 sequences assigned
676 (91.2%) exact matches, in which:
676 unique CDR3
6 unique J



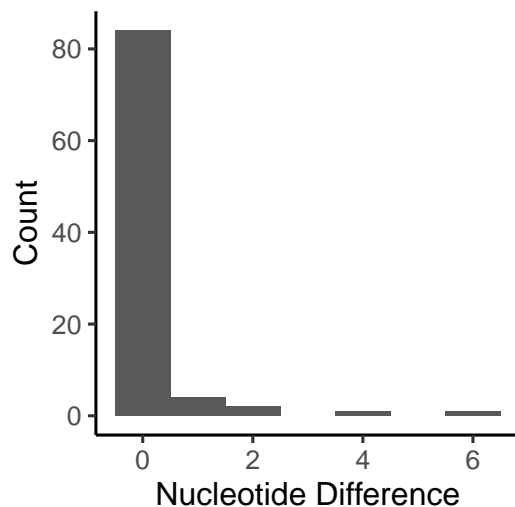
IGHV5-51*01

509 sequences assigned
473 (92.9%) exact matches, in which:
473 unique CDR3
6 unique J



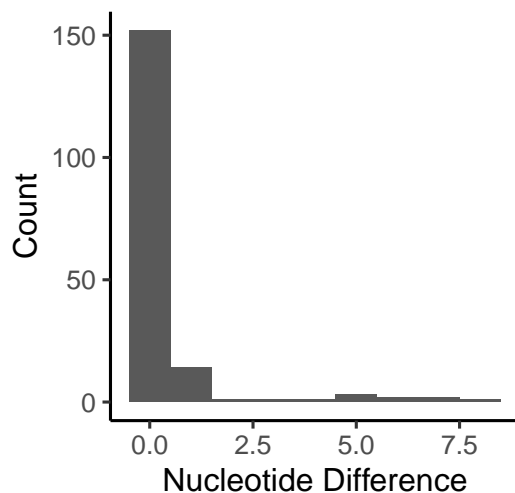
IGHV4-31*03

93 sequences assigned
84 (90.3%) exact matches, in which:
83 unique CDR3
5 unique J



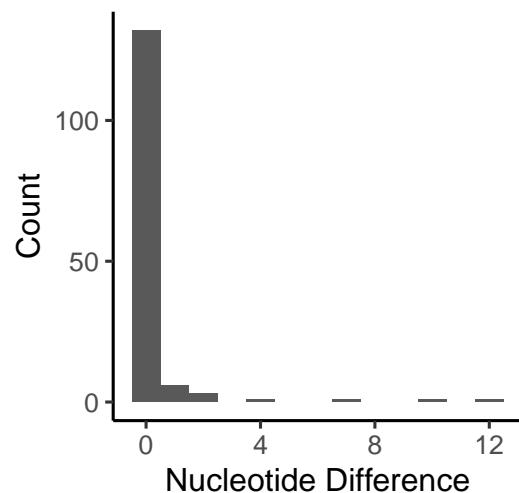
IGHV4-59*01

177 sequences assigned
152 (85.9%) exact matches, in which:
152 unique CDR3
6 unique J



IGHV6-1*01

145 sequences assigned
132 (91%) exact matches, in which:
132 unique CDR3
6 unique J





[illegible]