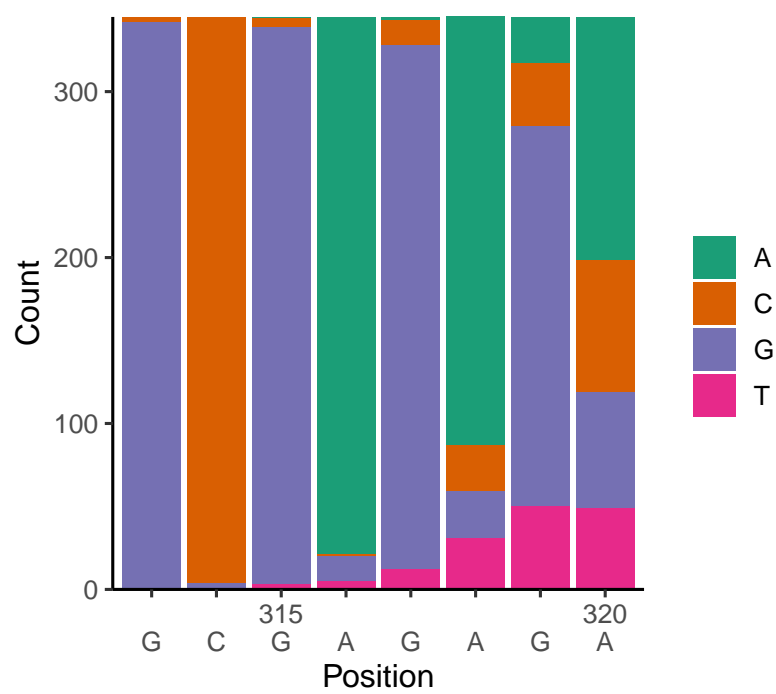
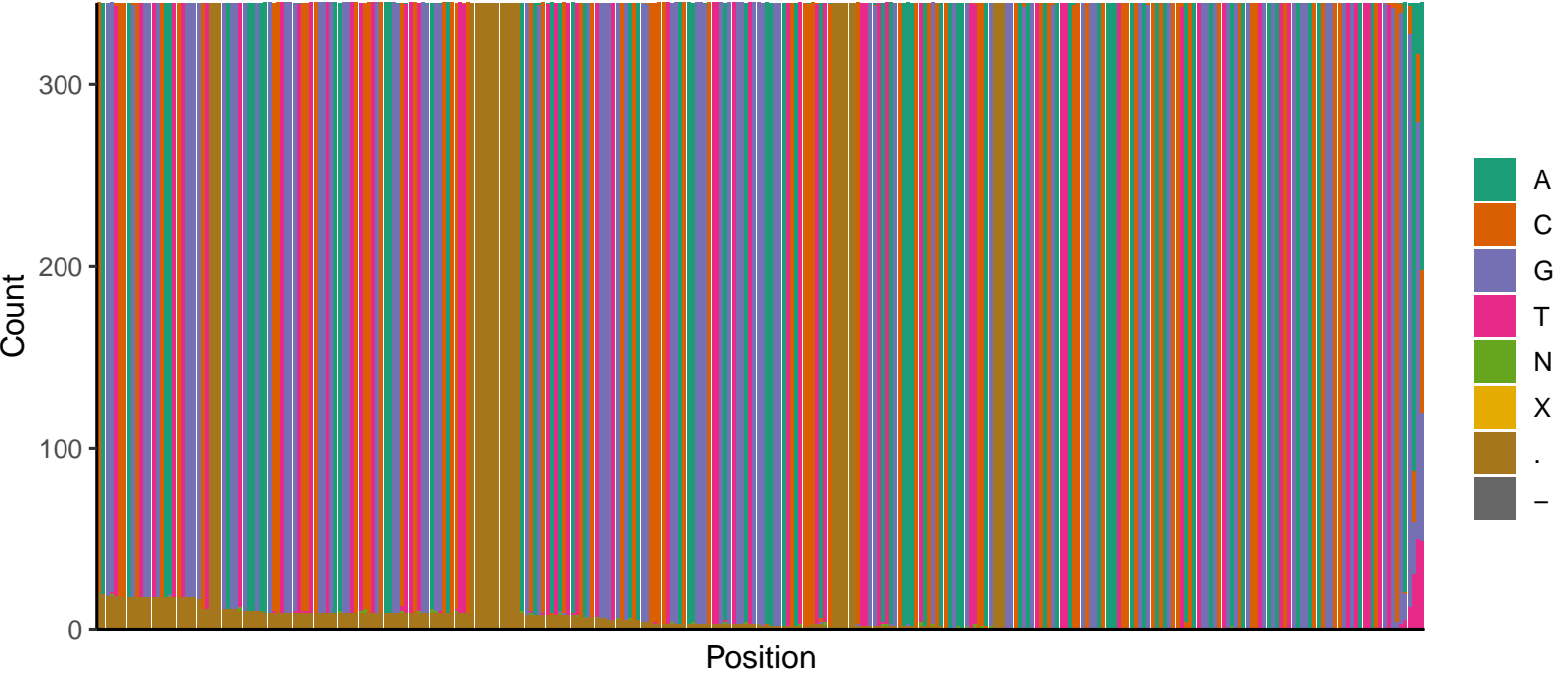


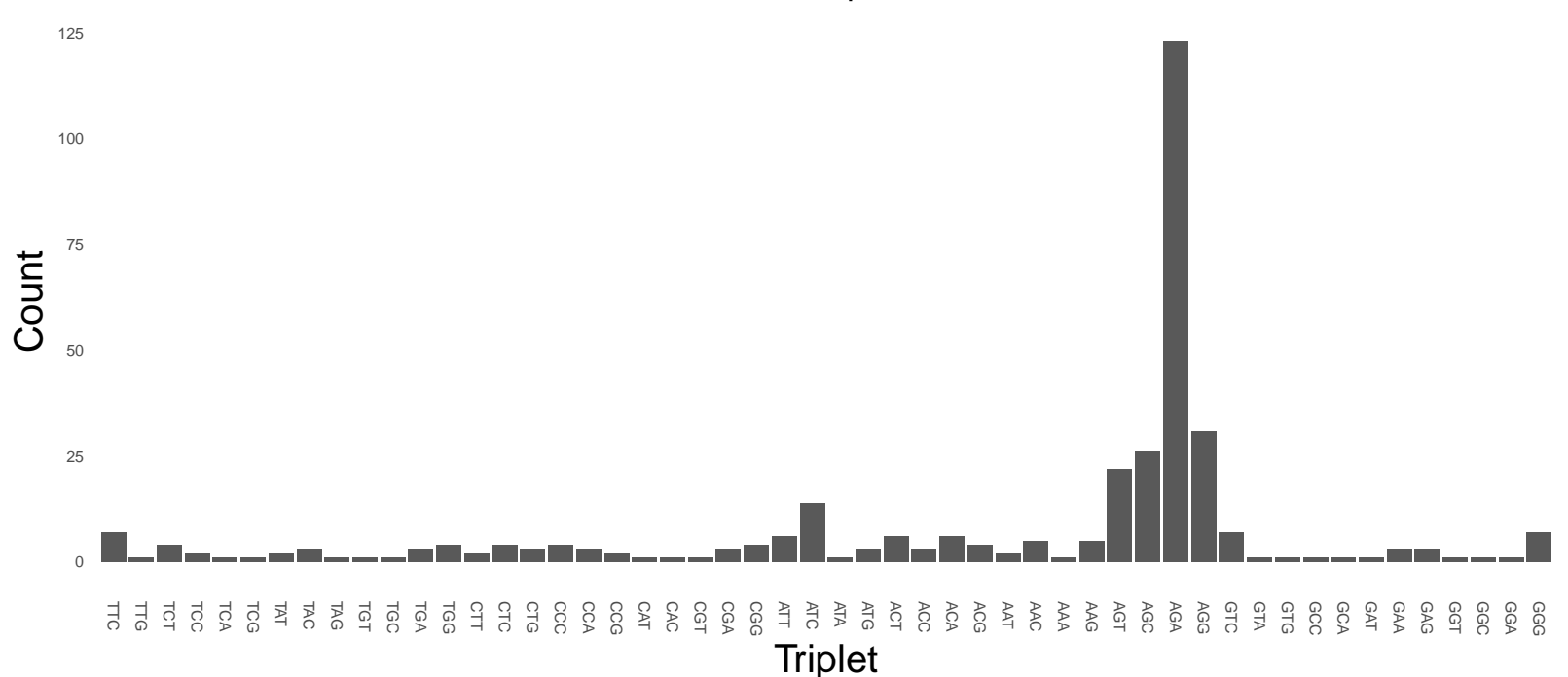
Gene IGHV1-69*08_C191T



Gene IGHV1-69*08_C191T

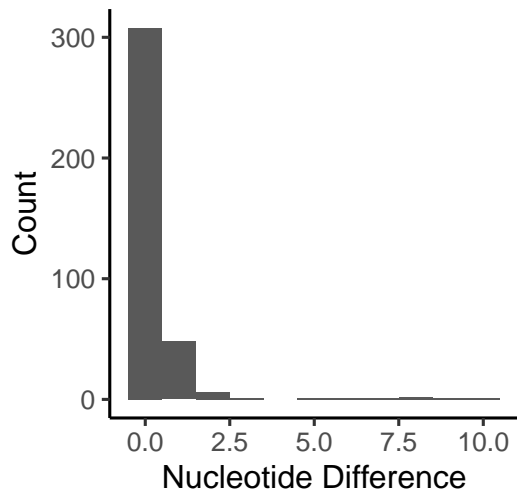


IGHV1-69*08_C191T- Final 3 nucleotides as a triplet



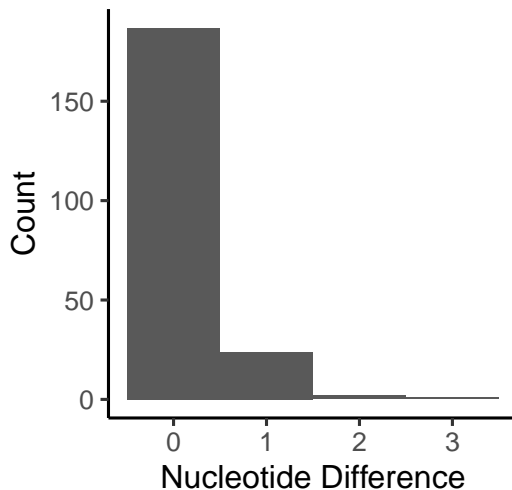
IGHV1-2*02

371 sequences assigned
308 (83%) exact matches, in which:
299 unique CDR3
6 unique J



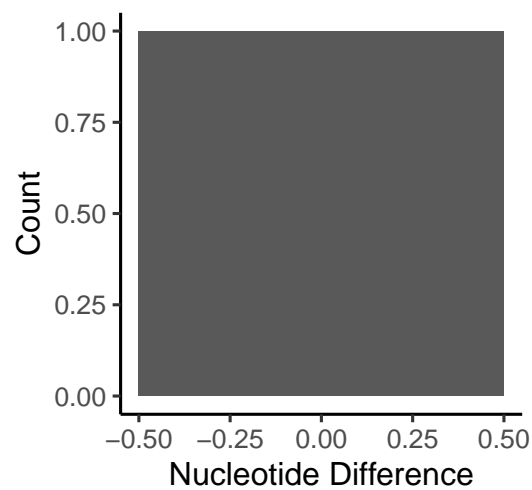
IGHV1-8*01

214 sequences assigned
187 (87.4%) exact matches, in which:
184 unique CDR3
5 unique J



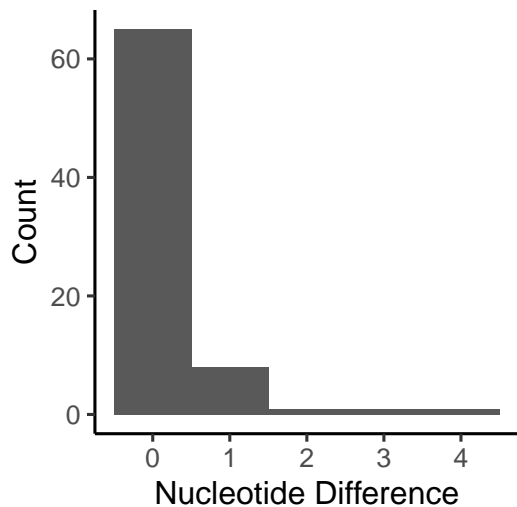
IGHV1-45*02

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



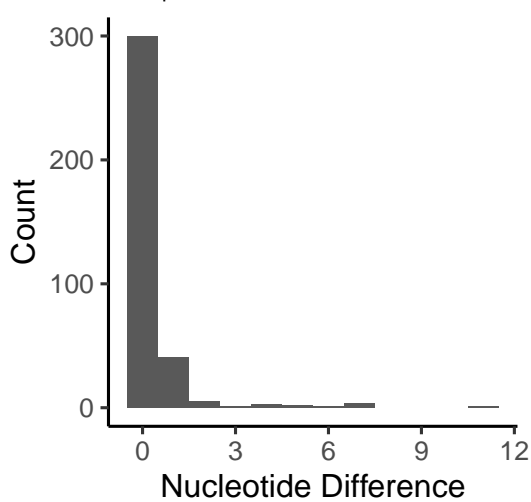
IGHV1-2*04

76 sequences assigned
65 (85.5%) exact matches, in which:
65 unique CDR3
4 unique J



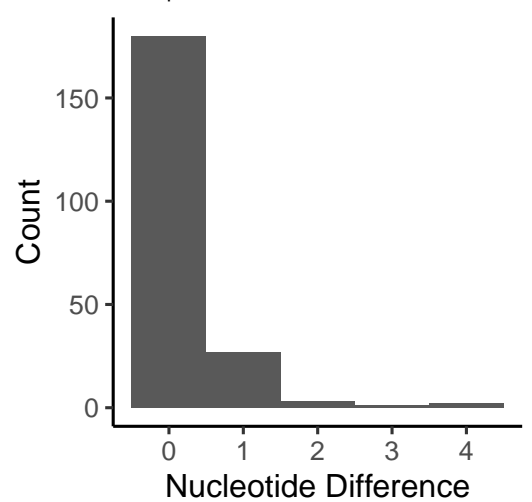
IGHV1-18*01

358 sequences assigned
300 (83.8%) exact matches, in which:
290 unique CDR3
6 unique J



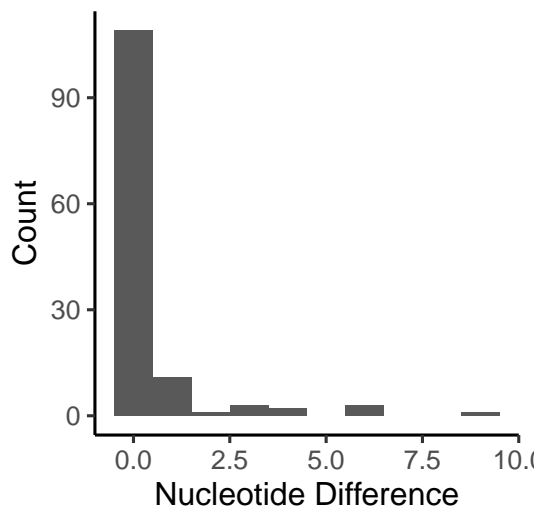
IGHV1-46*01

213 sequences assigned
180 (84.5%) exact matches, in which:
177 unique CDR3
6 unique J



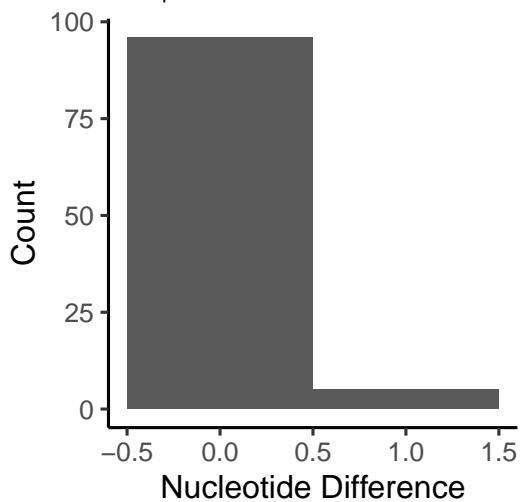
IGHV1-3*01

130 sequences assigned
109 (83.8%) exact matches, in which:
106 unique CDR3
5 unique J



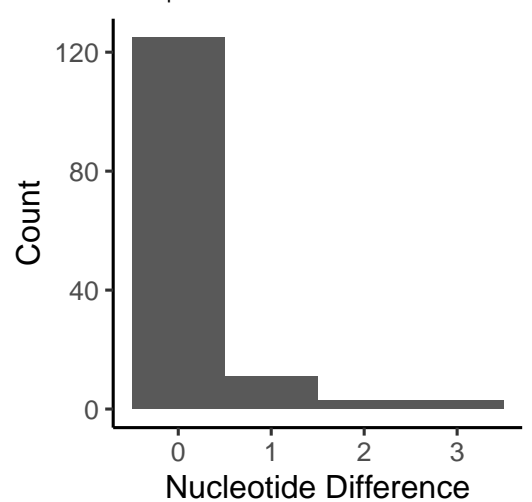
IGHV1-24*01

101 sequences assigned
96 (95%) exact matches, in which:
96 unique CDR3
5 unique J



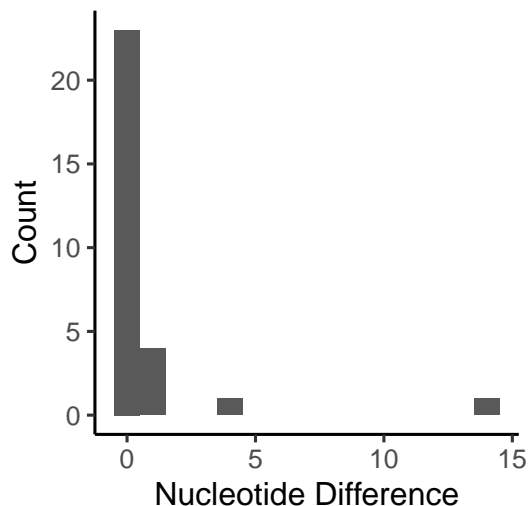
IGHV1-46*03

142 sequences assigned
125 (88%) exact matches, in which:
124 unique CDR3
4 unique J



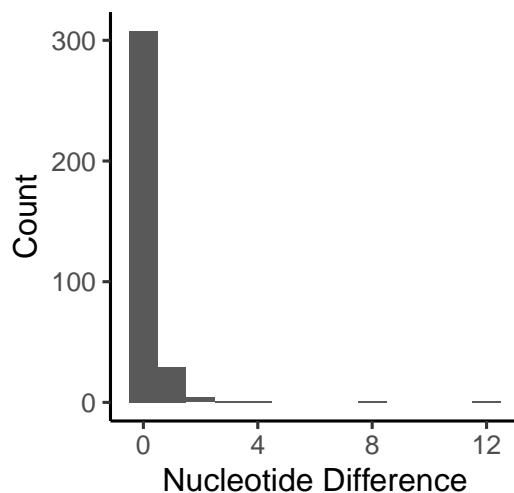
IGHV1-58*01

29 sequences assigned
23 (79.3%) exact matches, in which:
23 unique CDR3
4 unique J



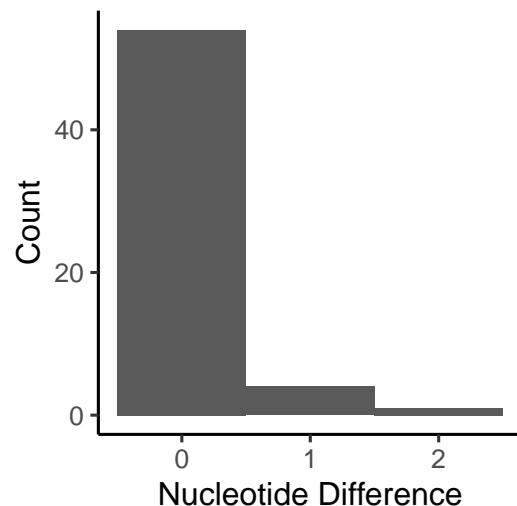
IGHV1-69*08_C191T

345 sequences assigned
308 (89.3%) exact matches, in which:
301 unique CDR3
6 unique J



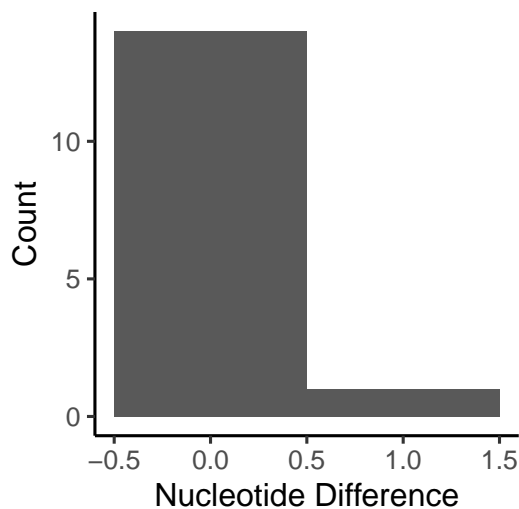
IGHV2-26*01

59 sequences assigned
54 (91.5%) exact matches, in which:
54 unique CDR3
5 unique J



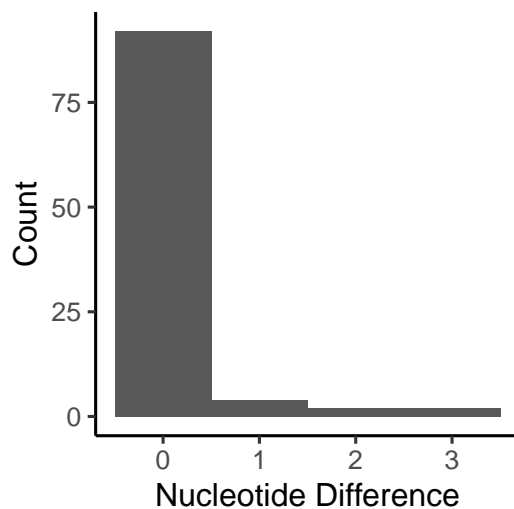
IGHV1-58*02

15 sequences assigned
14 (93.3%) exact matches, in which:
14 unique CDR3
3 unique J



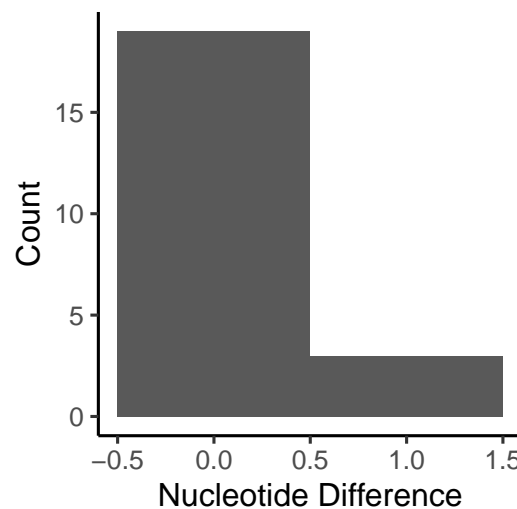
IGHV2-5*01

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



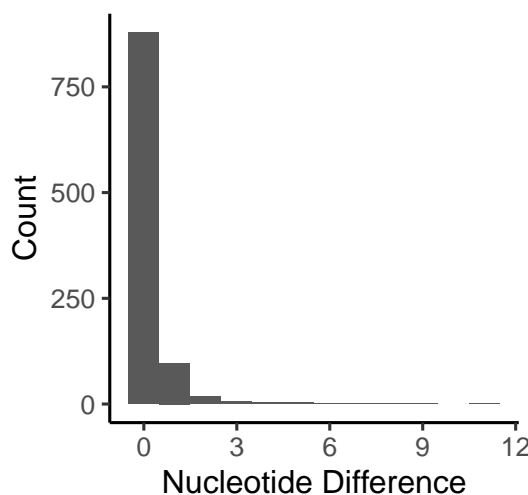
IGHV2-70*01

22 sequences assigned
19 (86.4%) exact matches, in which:
19 unique CDR3
4 unique J



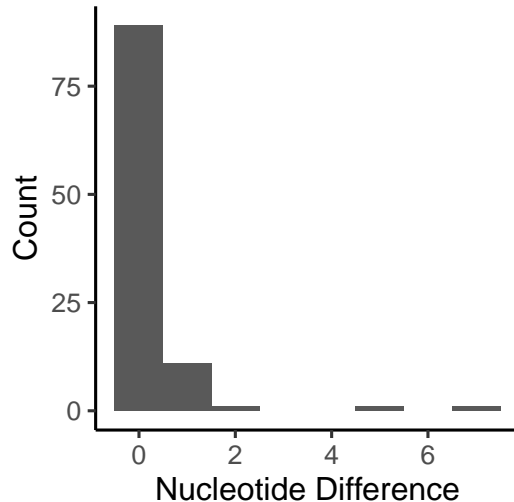
IGHV1-69*01

1011 sequences assigned
879 (86.9%) exact matches, in which:
857 unique CDR3
6 unique J



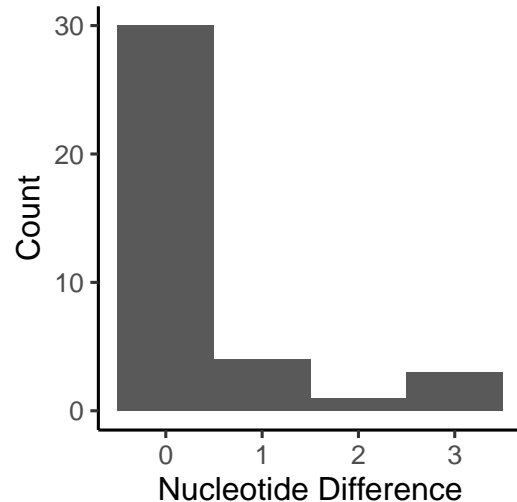
IGHV2-5*02

103 sequences assigned
89 (86.4%) exact matches, in which:
88 unique CDR3
5 unique J



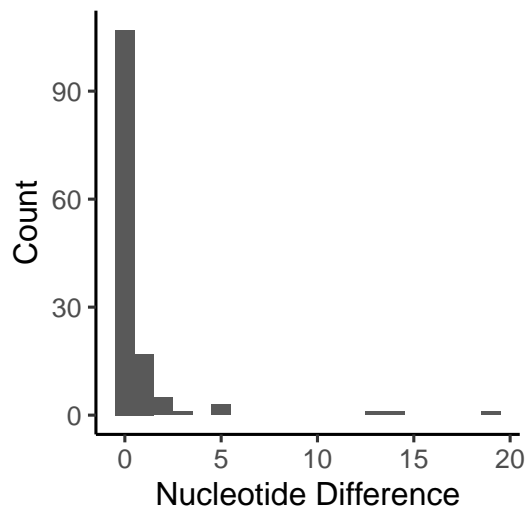
IGHV2-70*15

38 sequences assigned
30 (78.9%) exact matches, in which:
30 unique CDR3
4 unique J



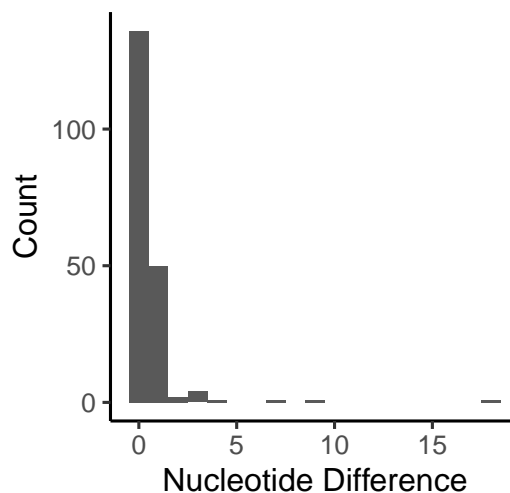
IGHV3-7*01

136 sequences assigned
107 (78.7%) exact matches, in which:
103 unique CDR3
6 unique J



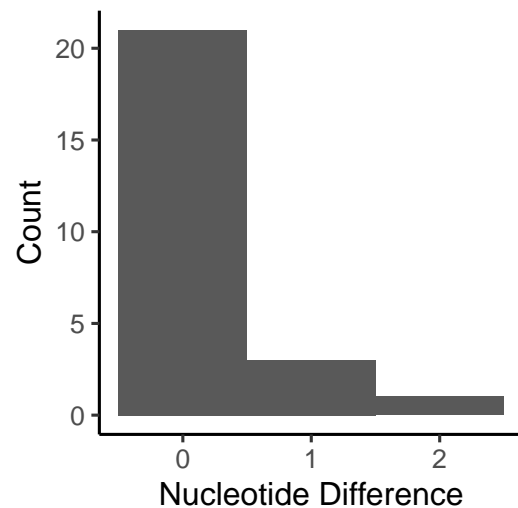
IGHV3-11*01

196 sequences assigned
136 (69.4%) exact matches, in which:
135 unique CDR3
6 unique J



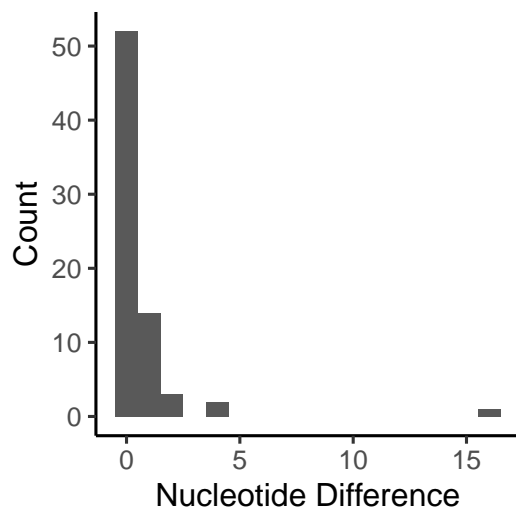
IGHV3-13*04

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



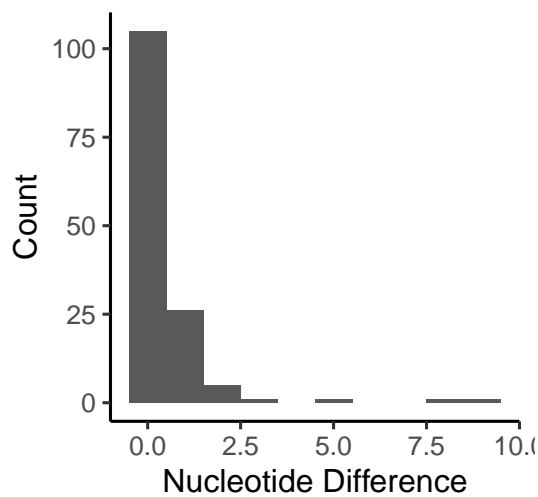
IGHV3-7*04

72 sequences assigned
52 (72.2%) exact matches, in which:
52 unique CDR3
5 unique J



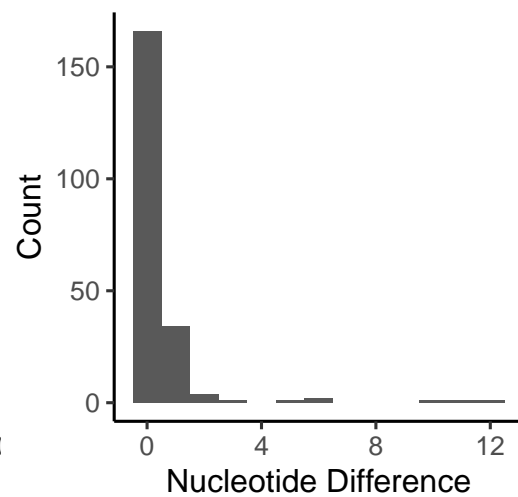
IGHV3-11*05

140 sequences assigned
105 (75%) exact matches, in which:
104 unique CDR3
6 unique J



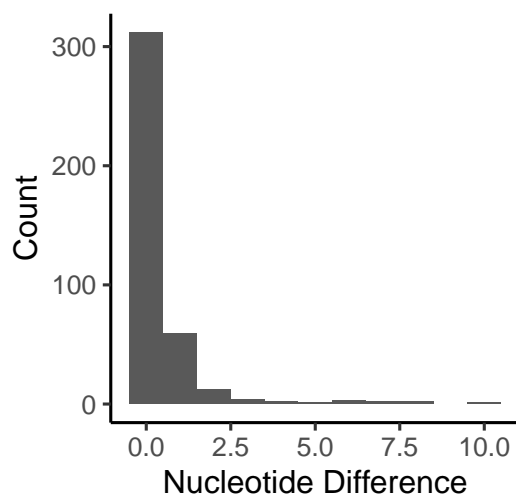
IGHV3-15*01

211 sequences assigned
166 (78.7%) exact matches, in which:
165 unique CDR3
6 unique J



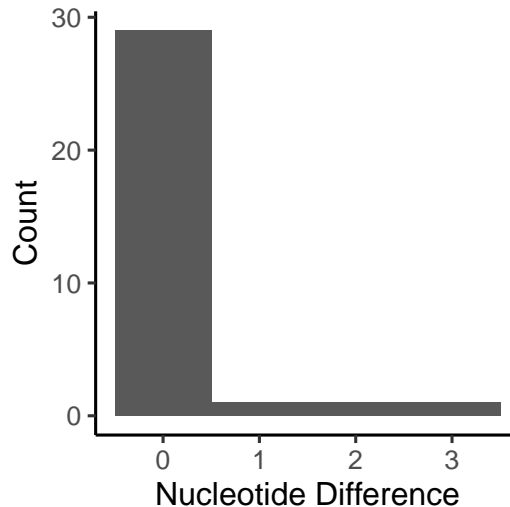
IGHV3-9*01

398 sequences assigned
312 (78.4%) exact matches, in which:
305 unique CDR3
6 unique J



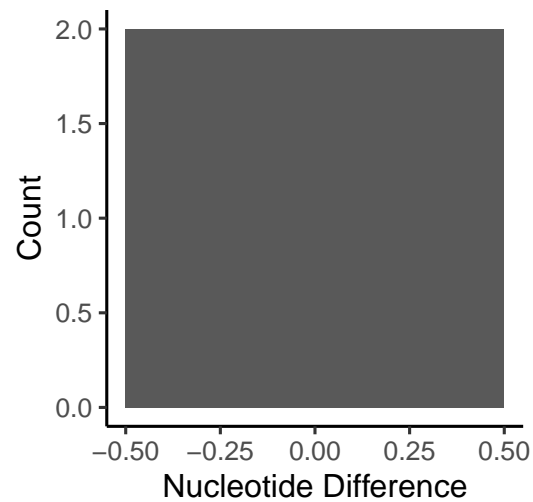
IGHV3-13*01

32 sequences assigned
29 (90.6%) exact matches, in which:
29 unique CDR3
5 unique J



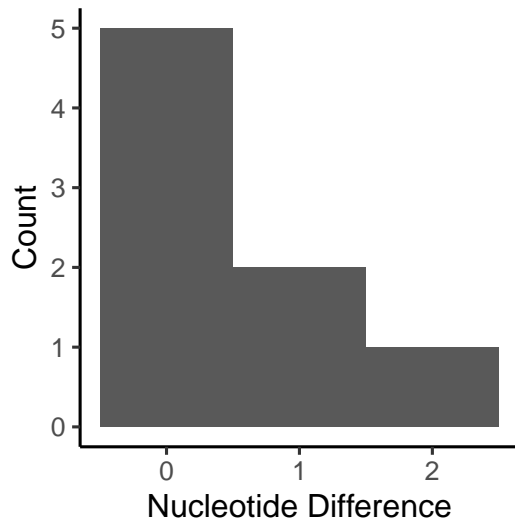
IGHV3-19*01

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



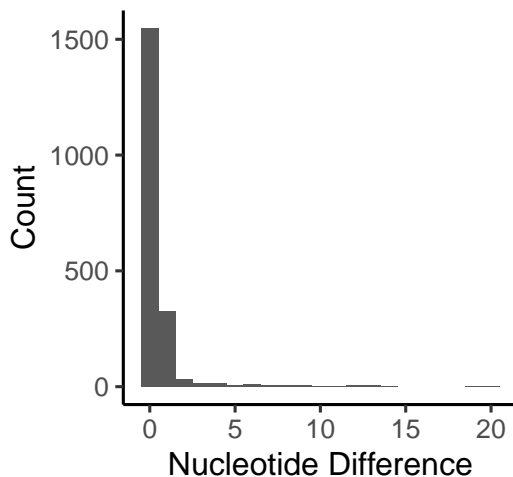
IGHV3-20*01

8 sequences assigned
5 (62.5%) exact matches, in which:
4 unique CDR3
2 unique J



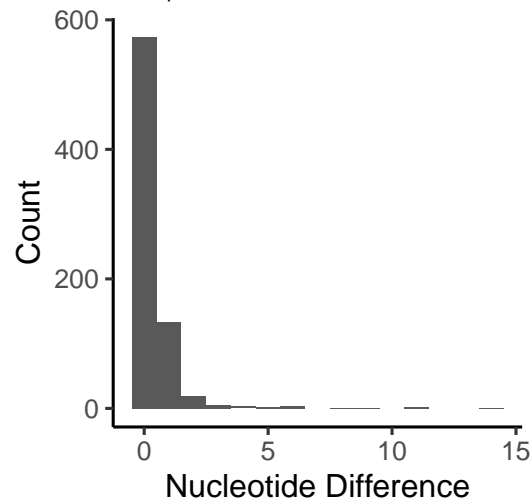
IGHV3-23*01

1989 sequences assigned
1547 (77.8%) exact matches, in which:
1515 unique CDR3
6 unique J



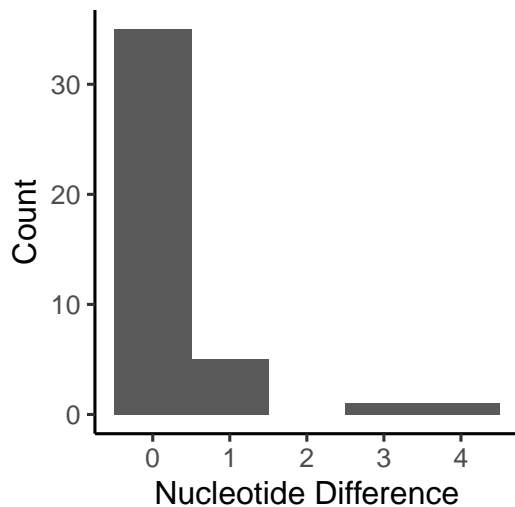
IGHV3-33*01

748 sequences assigned
574 (76.7%) exact matches, in which:
556 unique CDR3
6 unique J



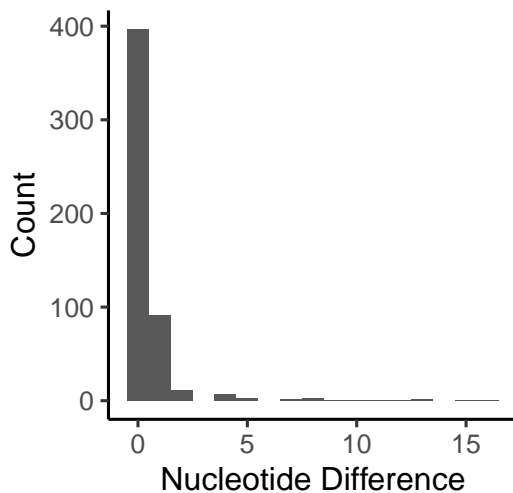
IGHV3-20*04

42 sequences assigned
35 (83.3%) exact matches, in which:
34 unique CDR3
4 unique J



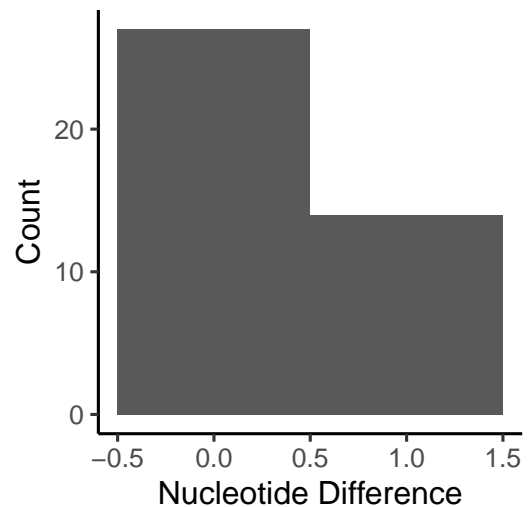
IGHV3-30-3*01

522 sequences assigned
397 (76.1%) exact matches, in which:
385 unique CDR3
6 unique J



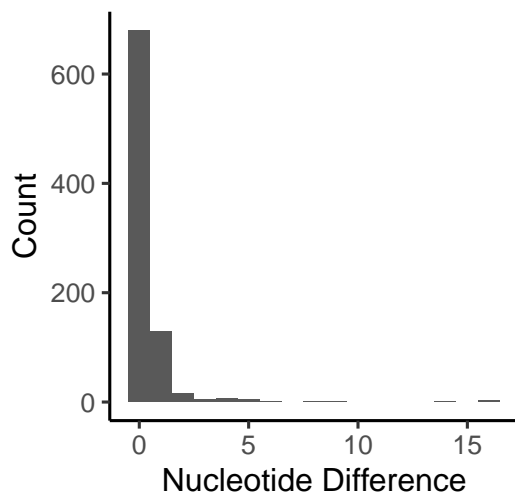
IGHV3-43*01

41 sequences assigned
27 (65.9%) exact matches, in which:
27 unique CDR3
5 unique J



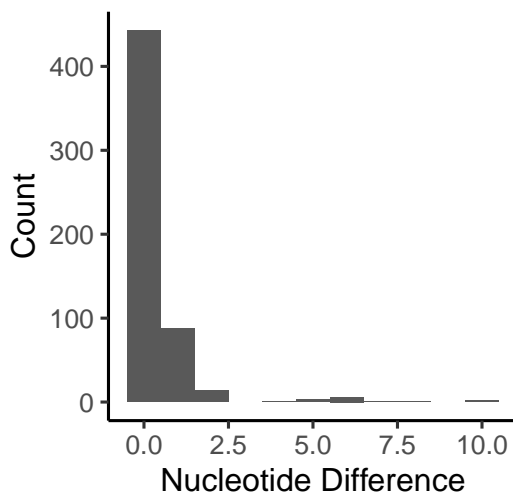
IGHV3-21*01

846 sequences assigned
680 (80.4%) exact matches, in which:
667 unique CDR3
6 unique J



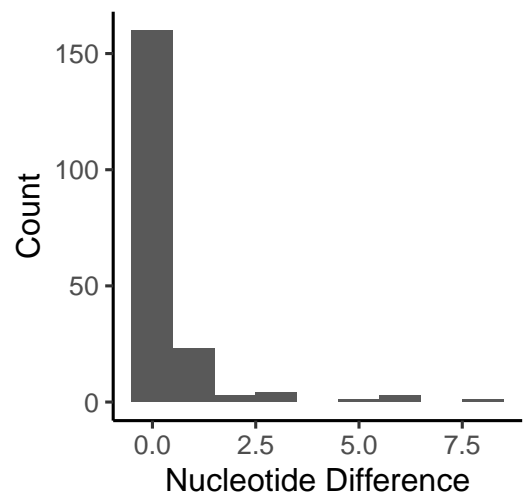
IGHV3-30*18

559 sequences assigned
443 (79.2%) exact matches, in which:
425 unique CDR3
6 unique J



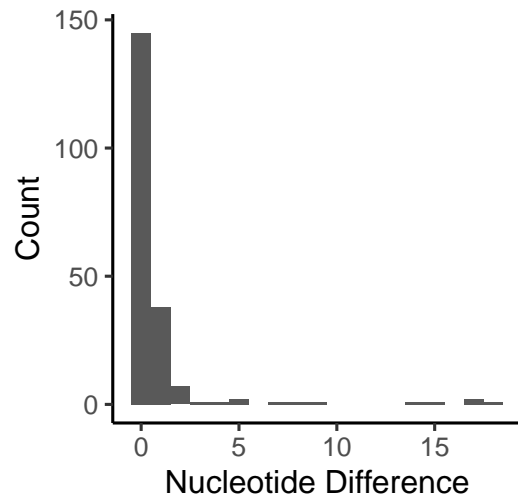
IGHV3-48*01

195 sequences assigned
160 (82.1%) exact matches, in which:
159 unique CDR3
6 unique J



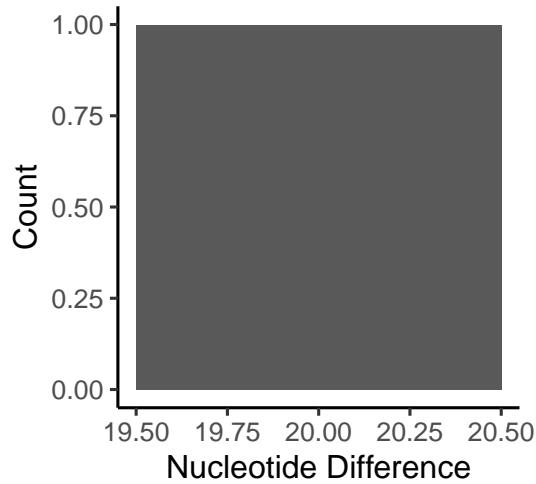
IGHV3-48*02

203 sequences assigned
145 (71.4%) exact matches, in which:
144 unique CDR3
6 unique J



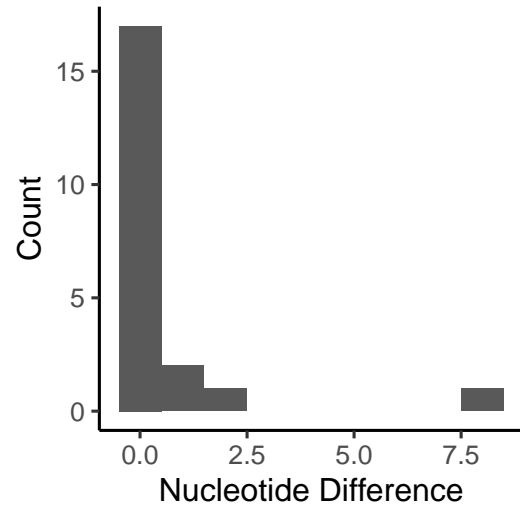
IGHV3-52*01

1 sequences assigned
No exact matches.



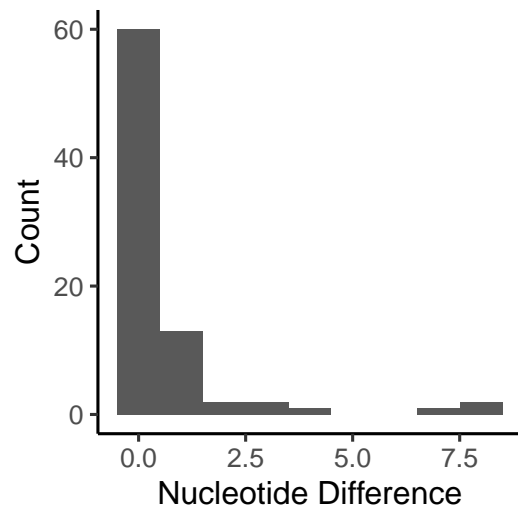
IGHV3-64*01

21 sequences assigned
17 (81%) exact matches, in which:
17 unique CDR3
4 unique J



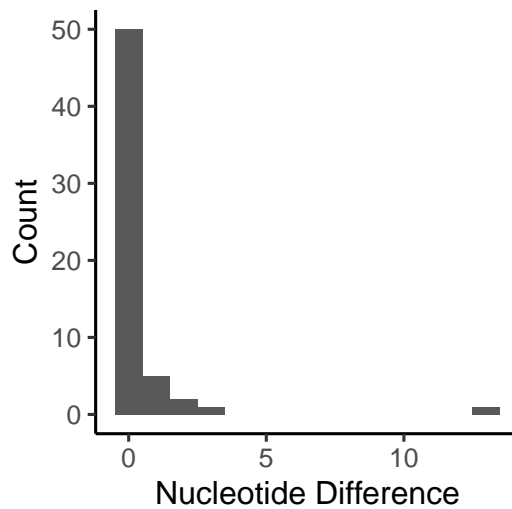
IGHV3-49*03

90 sequences assigned
60 (66.7%) exact matches, in which:
60 unique CDR3
6 unique J



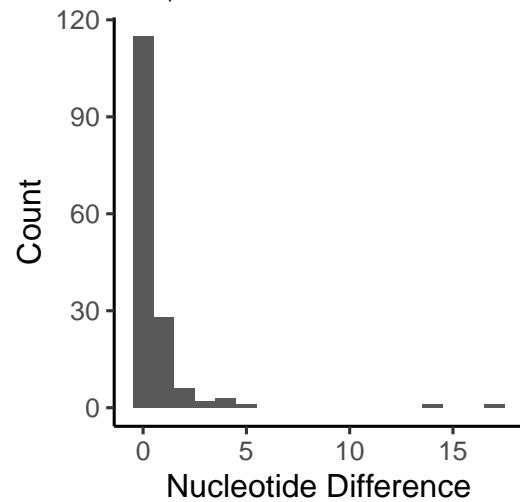
IGHV3-53*02

59 sequences assigned
50 (84.7%) exact matches, in which:
50 unique CDR3
5 unique J



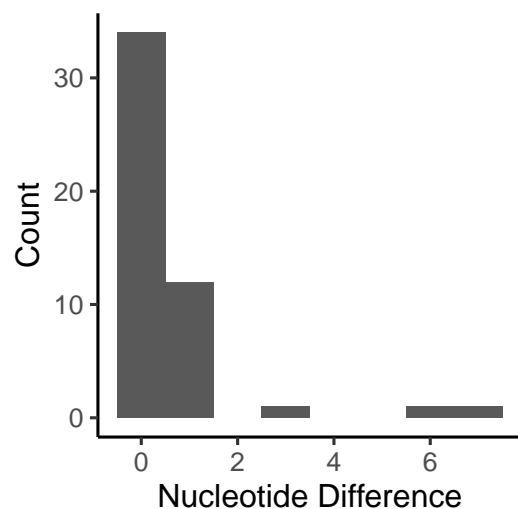
IGHV3-66*01

158 sequences assigned
115 (72.8%) exact matches, in which:
111 unique CDR3
6 unique J



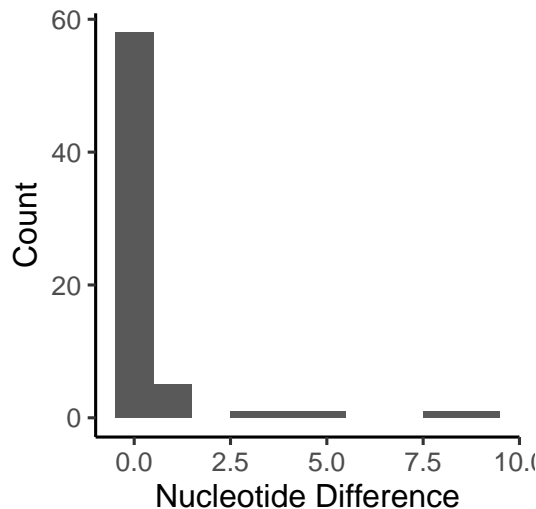
IGHV3-49*05

49 sequences assigned
34 (69.4%) exact matches, in which:
34 unique CDR3
4 unique J



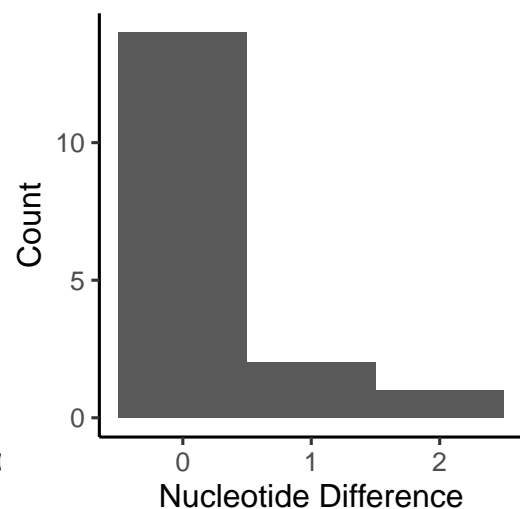
IGHV3-53*04

68 sequences assigned
58 (85.3%) exact matches, in which:
56 unique CDR3
5 unique J



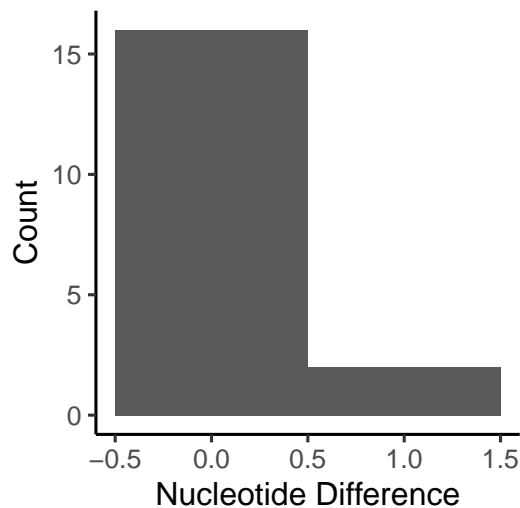
IGHV3-72*01

17 sequences assigned
14 (82.4%) exact matches, in which:
14 unique CDR3
4 unique J



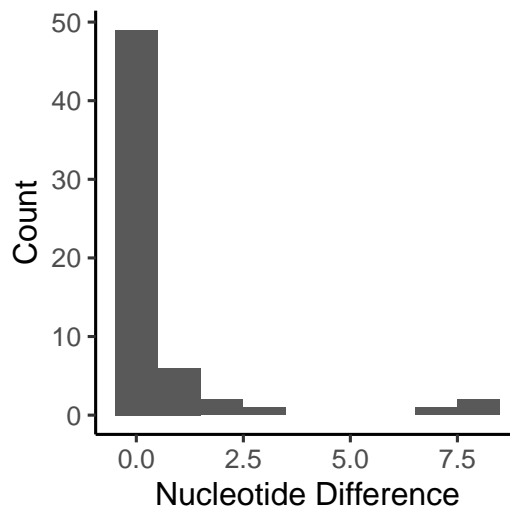
IGHV3-73*01

18 sequences assigned
16 (88.9%) exact matches, in which:
15 unique CDR3
4 unique J



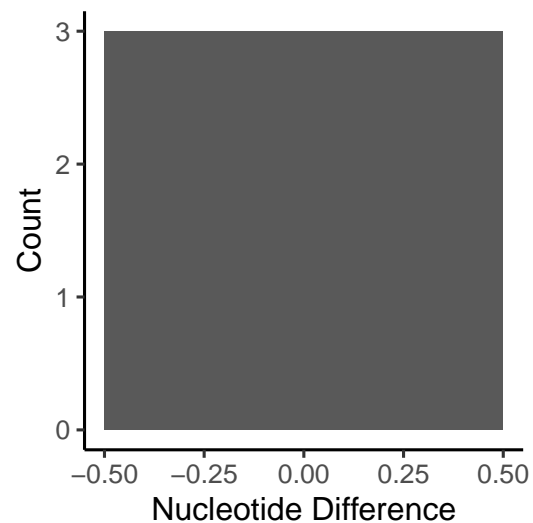
IGHV3-64D*06

61 sequences assigned
49 (80.3%) exact matches, in which:
44 unique CDR3
4 unique J



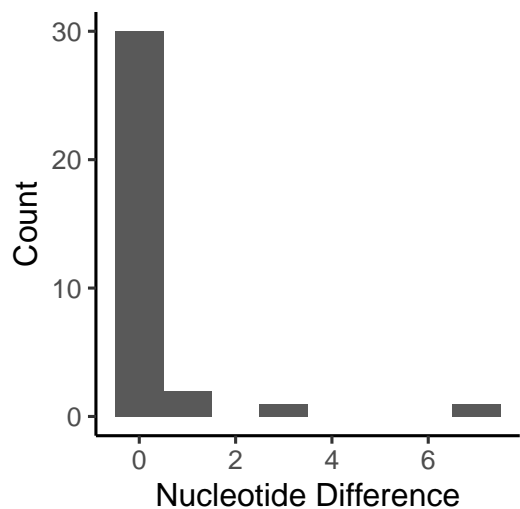
IGHV4-28*01

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



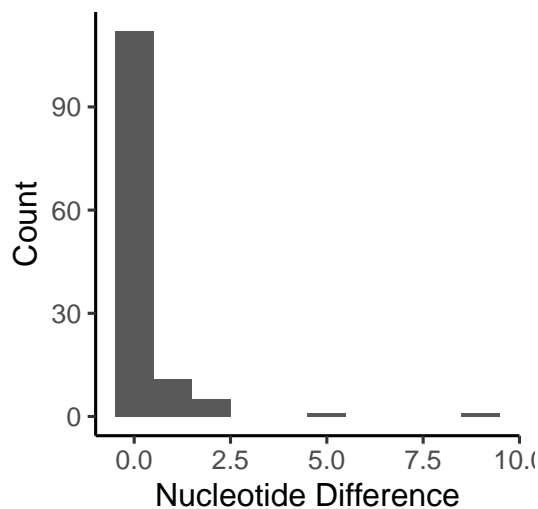
IGHV3-73*02

34 sequences assigned
30 (88.2%) exact matches, in which:
30 unique CDR3
5 unique J



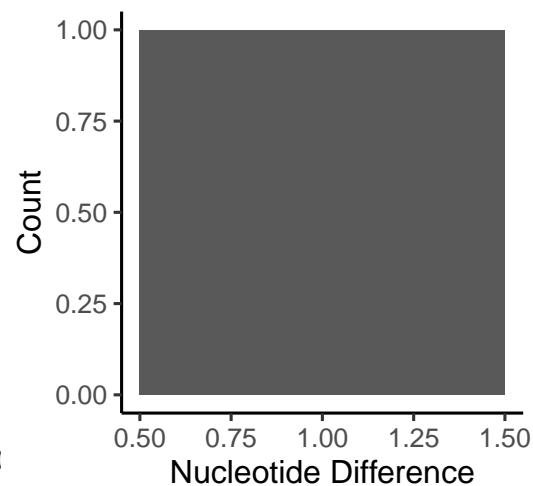
IGHV4-4*02

130 sequences assigned
112 (86.2%) exact matches, in which:
112 unique CDR3
6 unique J



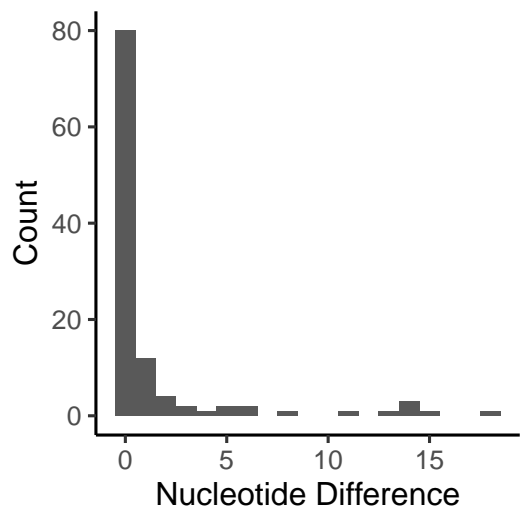
IGHV4-28*04

1 sequences assigned
No exact matches.



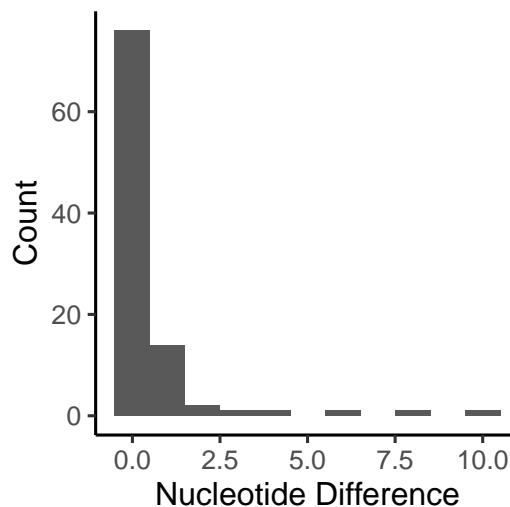
IGHV3-74*01

111 sequences assigned
80 (72.1%) exact matches, in which:
79 unique CDR3
6 unique J



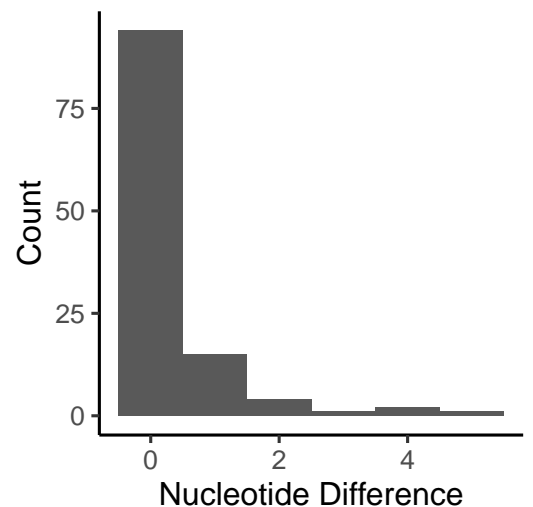
IGHV4-4*07

97 sequences assigned
76 (78.4%) exact matches, in which:
74 unique CDR3
5 unique J



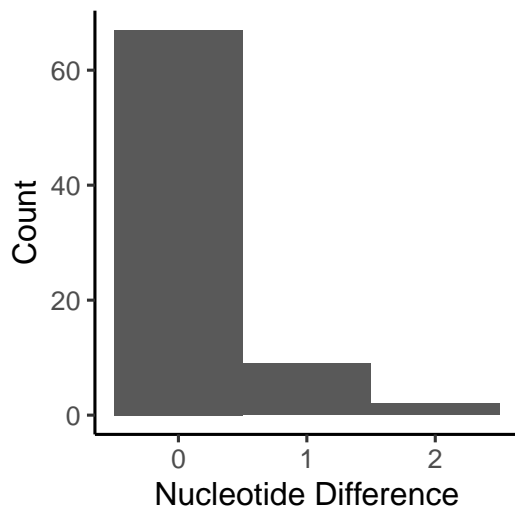
IGHV4-30-4*01

117 sequences assigned
94 (80.3%) exact matches, in which:
91 unique CDR3
5 unique J



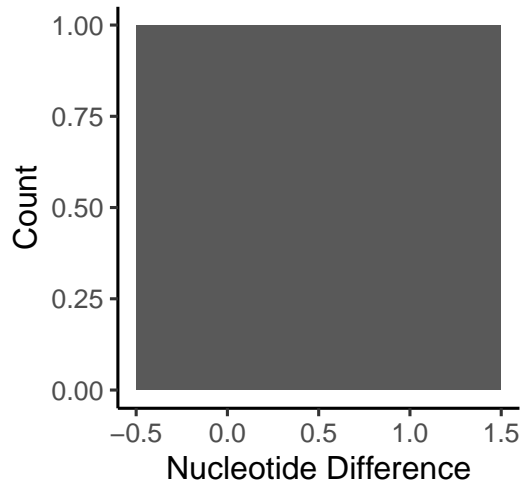
IGHV4-30-2*01

78 sequences assigned
67 (85.9%) exact matches, in which:
64 unique CDR3
5 unique J



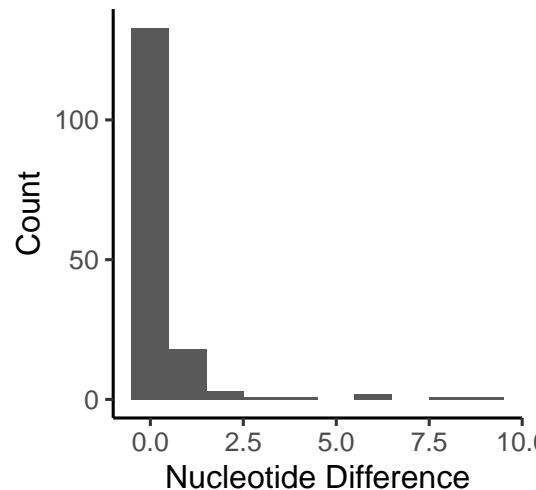
IGHV4-38-2*02

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



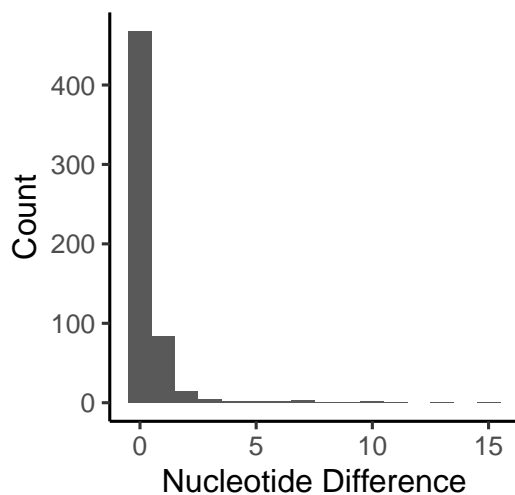
IGHV4-59*08

160 sequences assigned
133 (83.1%) exact matches, in which:
133 unique CDR3
6 unique J



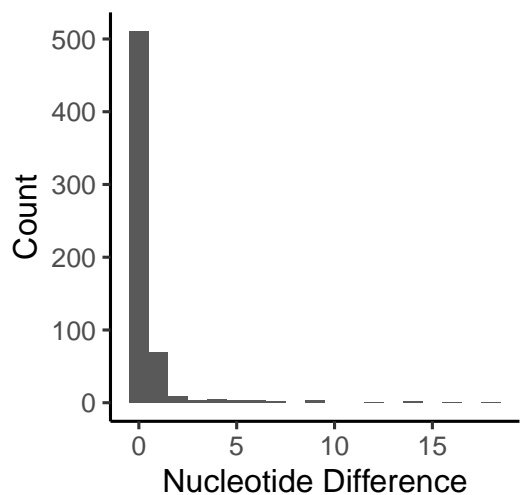
IGHV4-31*03

589 sequences assigned
468 (79.5%) exact matches, in which:
464 unique CDR3
6 unique J



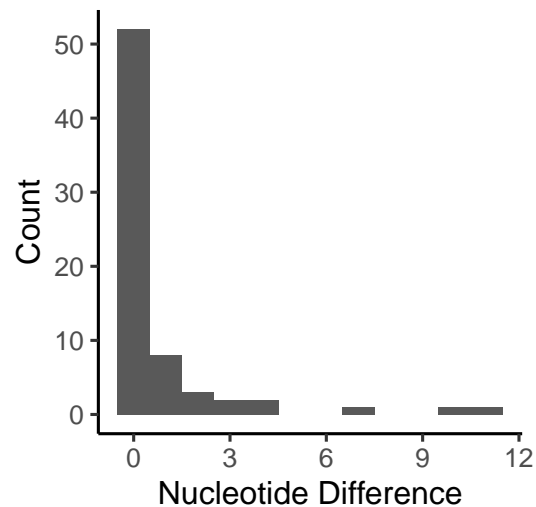
IGHV4-39*01

616 sequences assigned
511 (83%) exact matches, in which:
502 unique CDR3
6 unique J



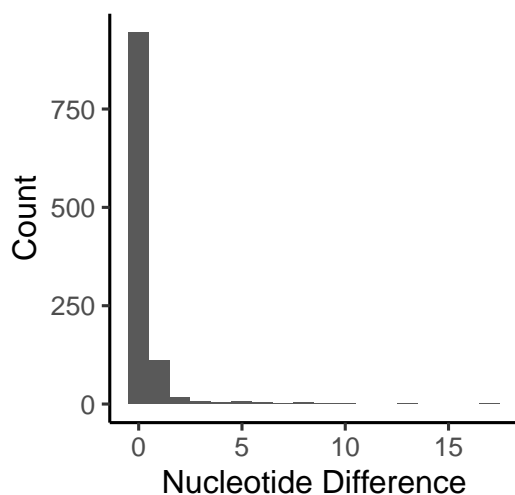
IGHV4-61*01

70 sequences assigned
52 (74.3%) exact matches, in which:
51 unique CDR3
5 unique J



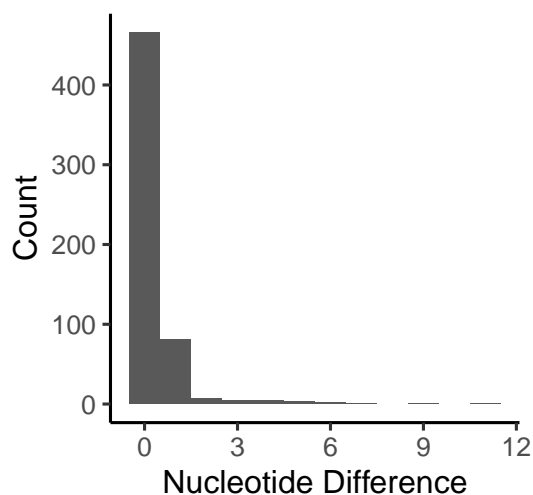
IGHV4-34*01

1101 sequences assigned
945 (85.8%) exact matches, in which:
933 unique CDR3
6 unique J



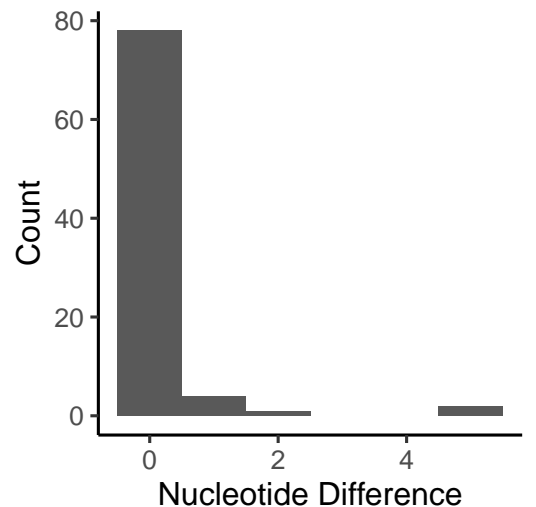
IGHV4-59*01

571 sequences assigned
466 (81.6%) exact matches, in which:
460 unique CDR3
6 unique J



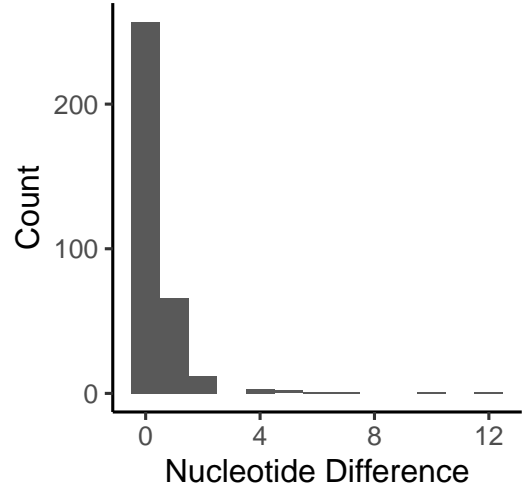
IGHV5-10-1*01

85 sequences assigned
78 (91.8%) exact matches, in which:
77 unique CDR3
6 unique J



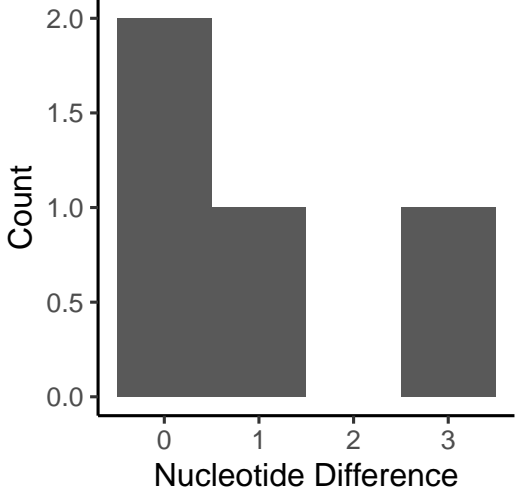
IGHV5-51*01

344 sequences assigned
257 (74.7%) exact matches, in which:
254 unique CDR3
6 unique J



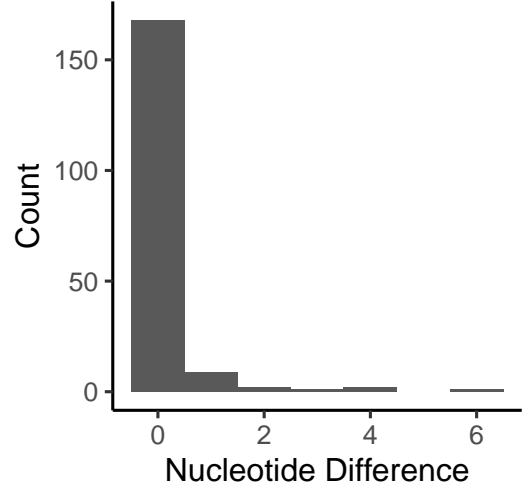
IGHV7-4-1*01

4 sequences assigned
2 (50%) exact matches, in which:
2 unique CDR3
2 unique J



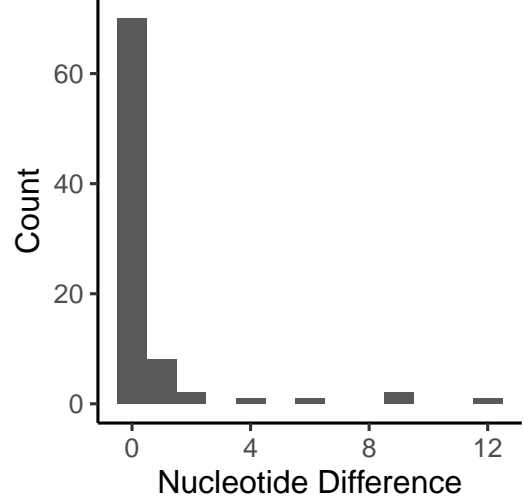
IGHV5-51*03

183 sequences assigned
168 (91.8%) exact matches, in which:
164 unique CDR3
6 unique J



IGHV6-1*01

85 sequences assigned
70 (82.4%) exact matches, in which:
70 unique CDR3
5 unique J



IGHV1-69*08_C191T

