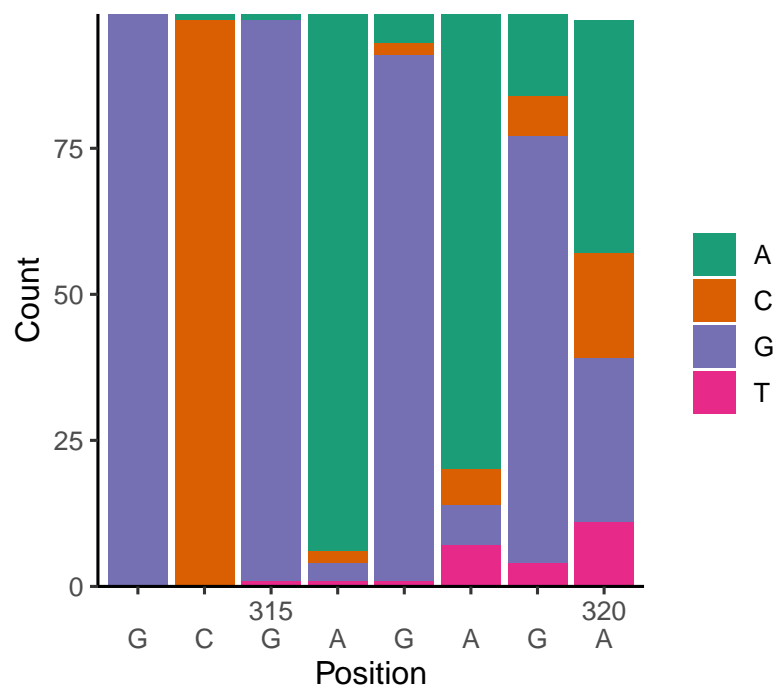
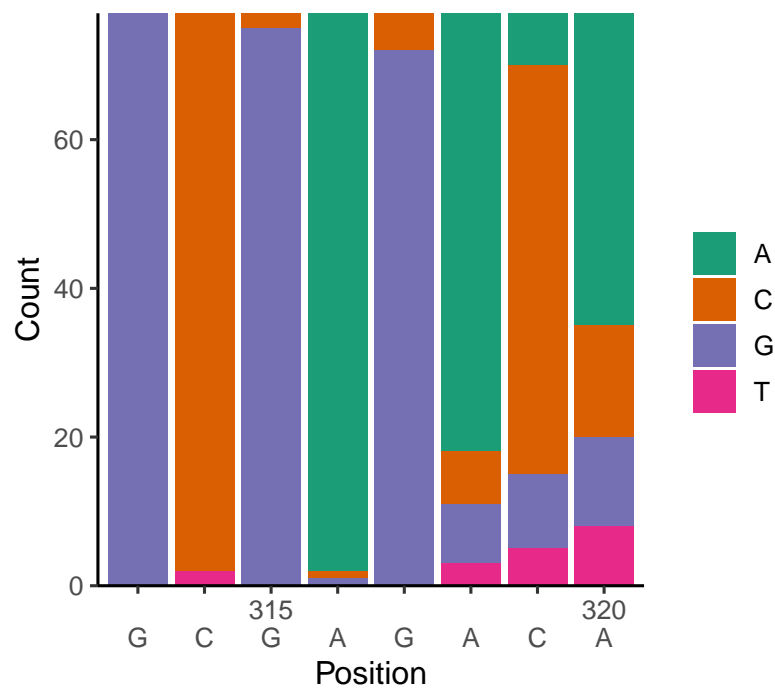


Gene IGHV1-69*08_C191T



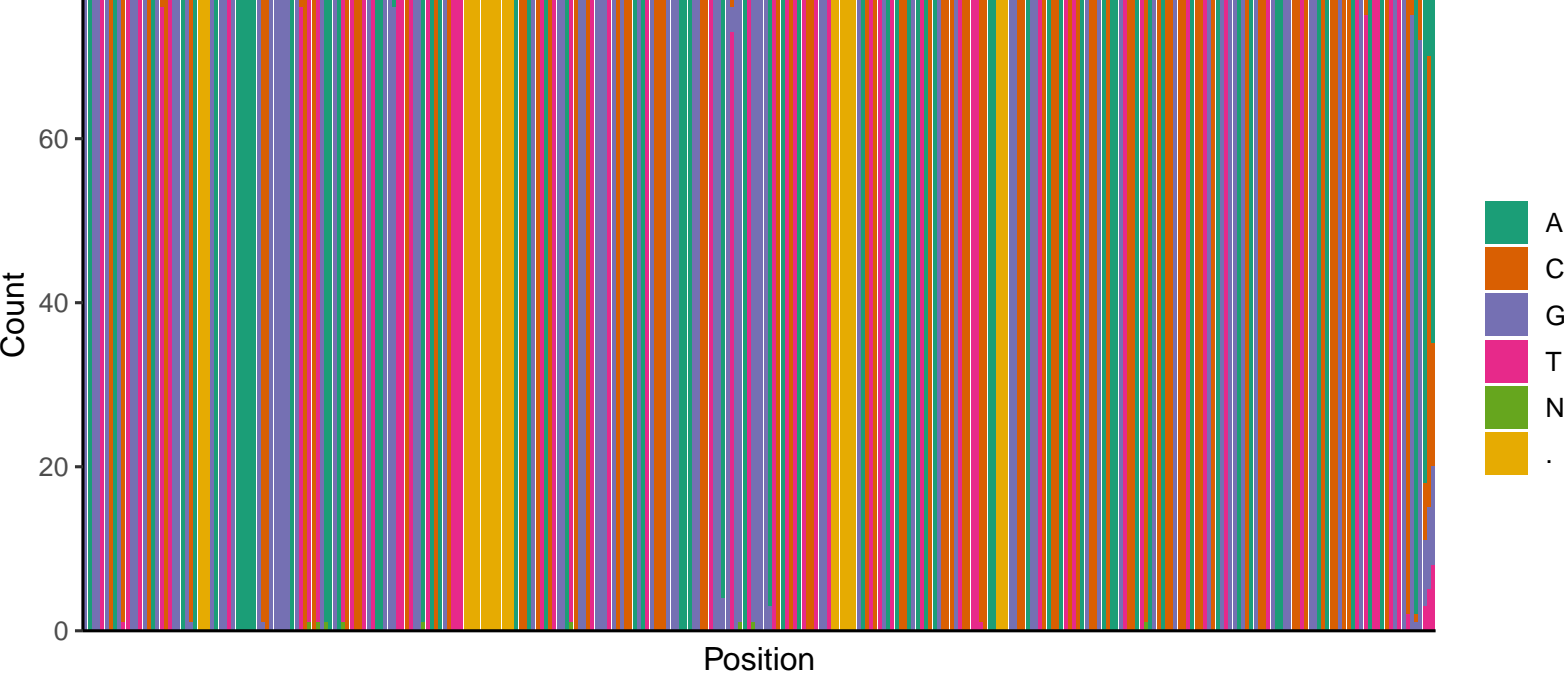
Gene IGHV5-51*01_C45G



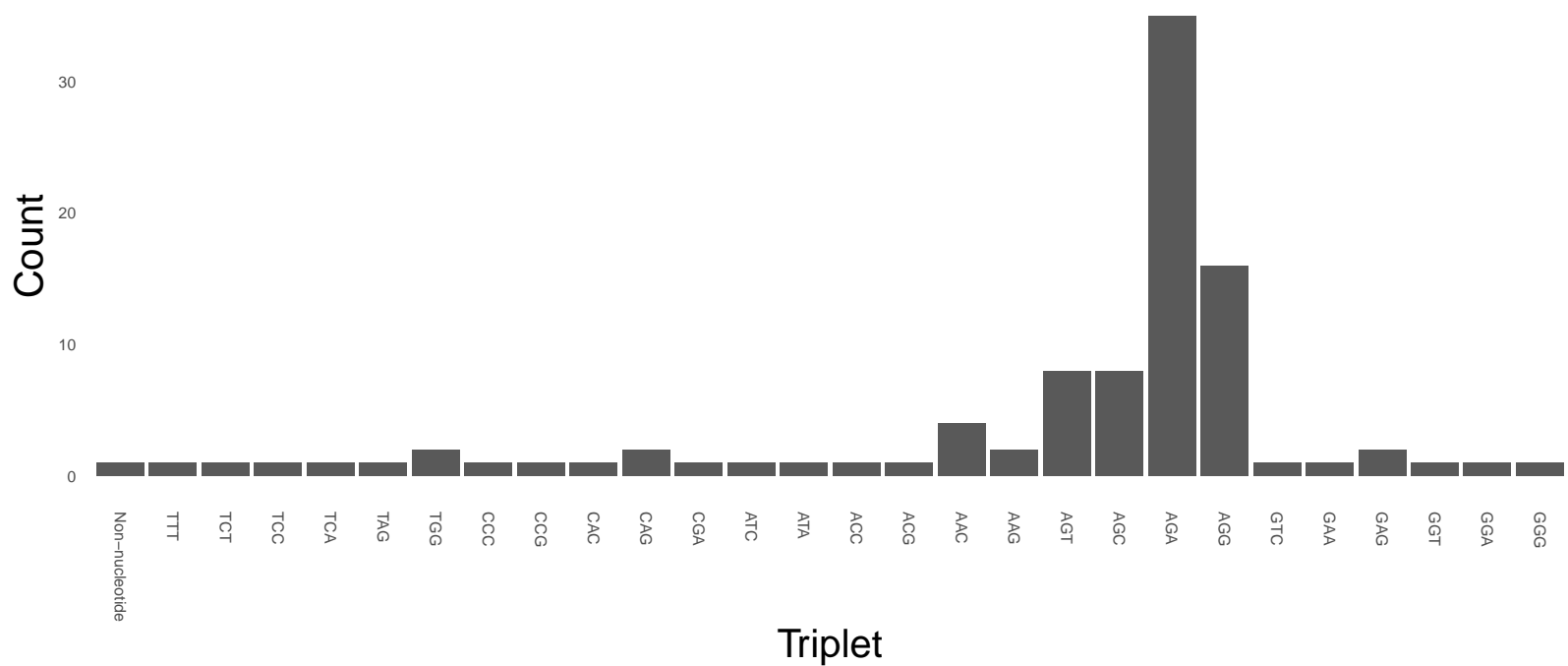
Gene IGHV1-69*08_C191T



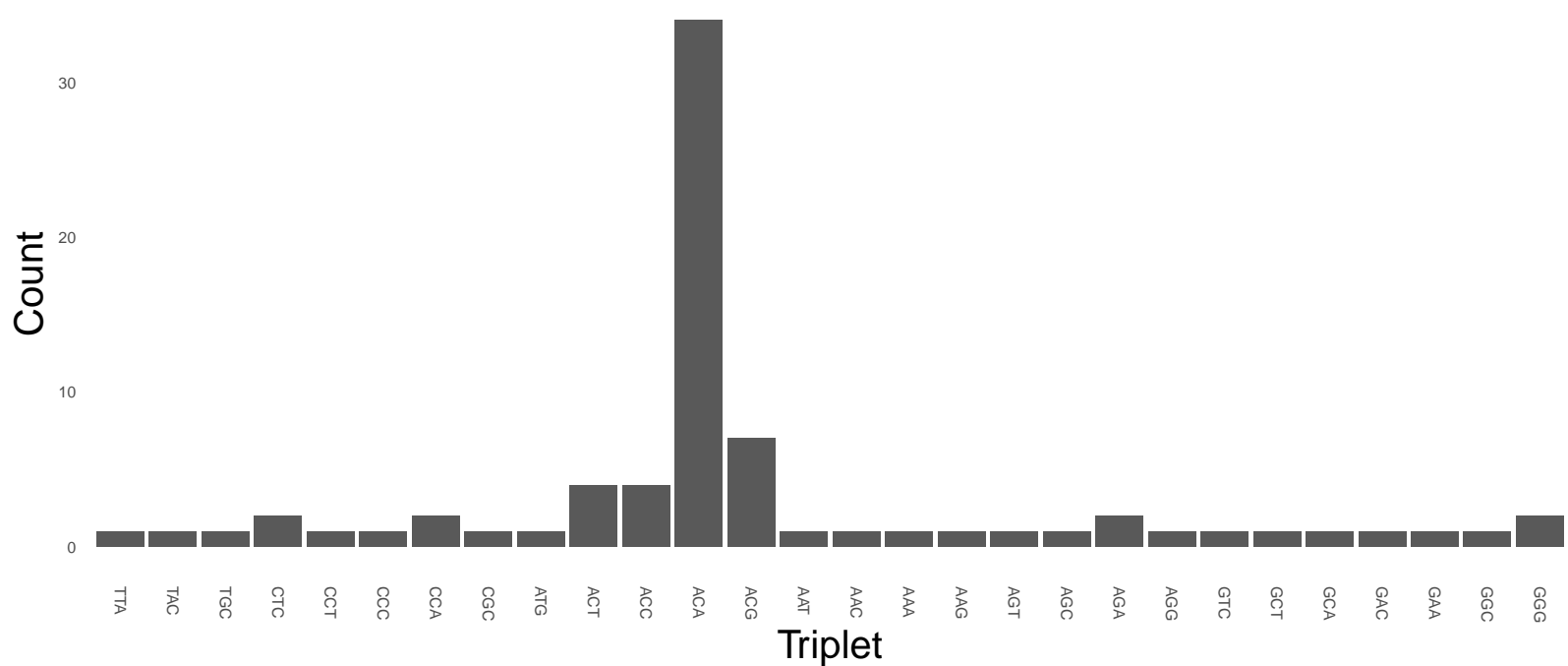
Gene IGHV5-51*01_C45G



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

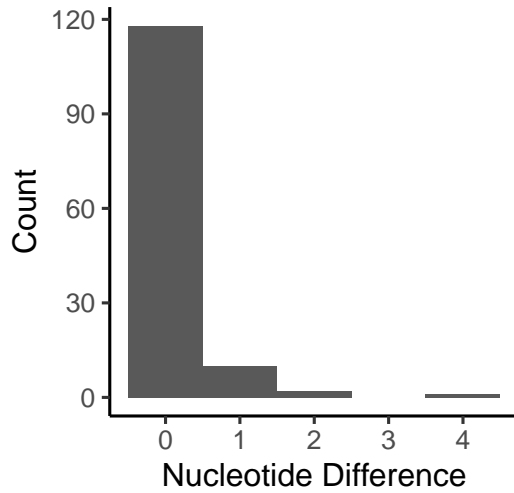


IGHV5-51*01_C45G- Final 3 nucleotides as a triplet



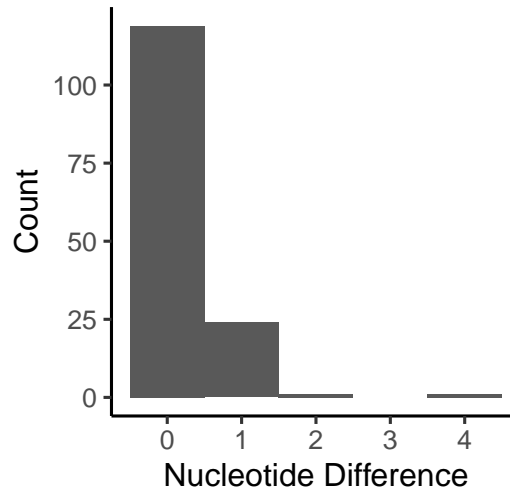
IGHV1–2*04

131 sequences assigned
118 (90.1%) exact matches, in which:
118 unique CDR3
5 unique J



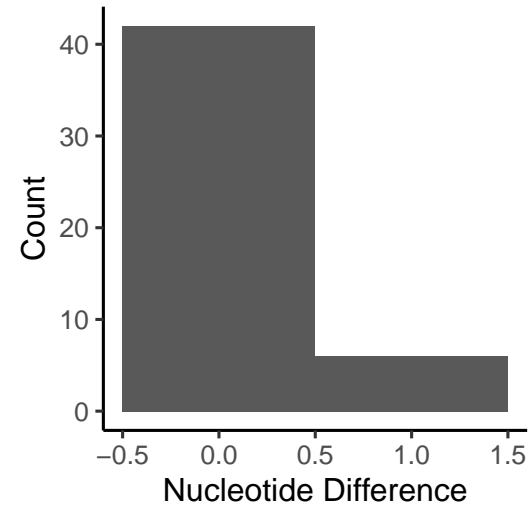
IGHV1–18*01

145 sequences assigned
119 (82.1%) exact matches, in which:
119 unique CDR3
5 unique J



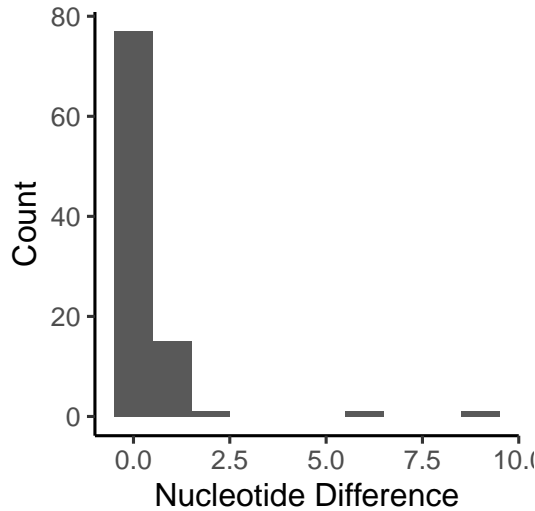
IGHV1–46*01

48 sequences assigned
42 (87.5%) exact matches, in which:
42 unique CDR3
5 unique J



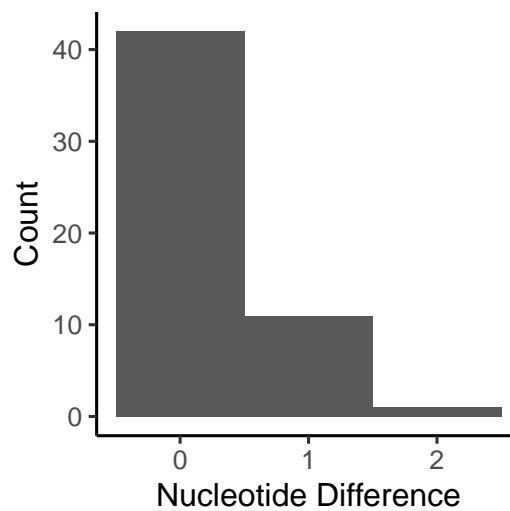
IGHV1–3*01

95 sequences assigned
77 (81.1%) exact matches, in which:
76 unique CDR3
6 unique J



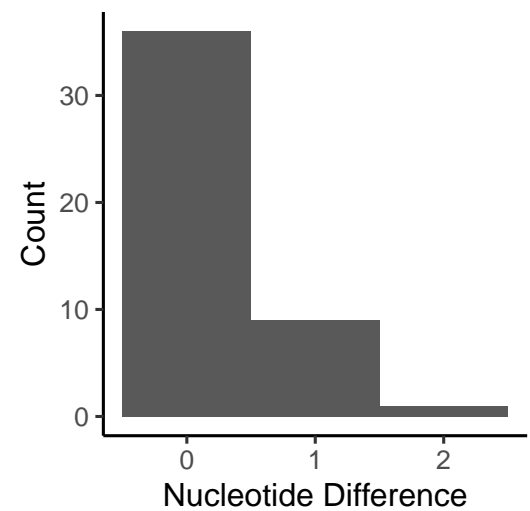
IGHV1–24*01

54 sequences assigned
42 (77.8%) exact matches, in which:
42 unique CDR3
6 unique J



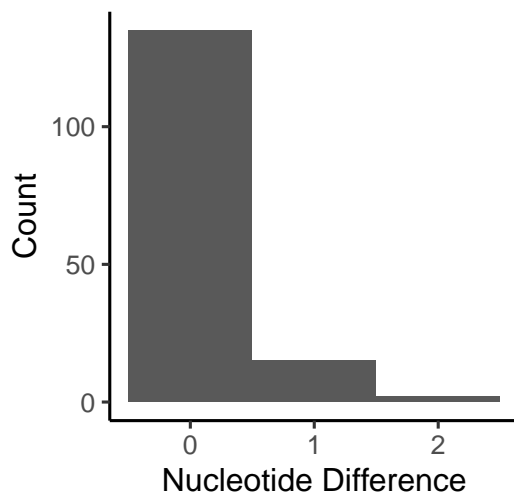
IGHV1–46*03

46 sequences assigned
36 (78.3%) exact matches, in which:
36 unique CDR3
5 unique J



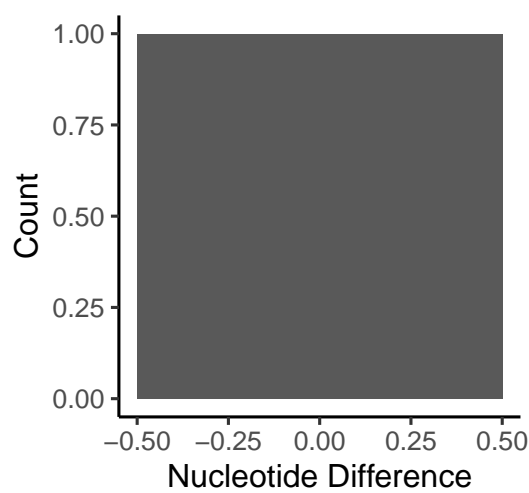
IGHV1–8*01

152 sequences assigned
135 (88.8%) exact matches, in which:
135 unique CDR3
4 unique J



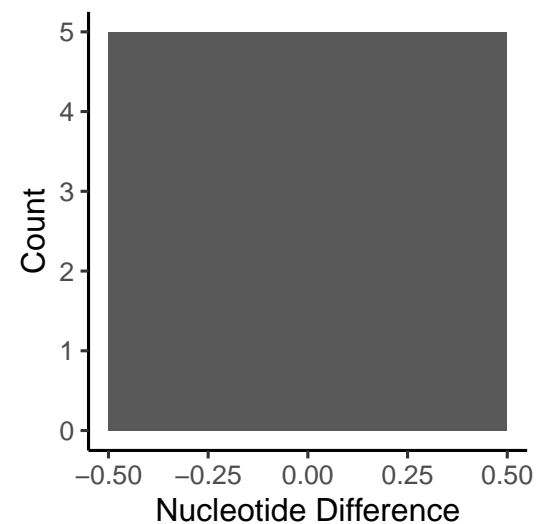
IGHV1–45*02

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



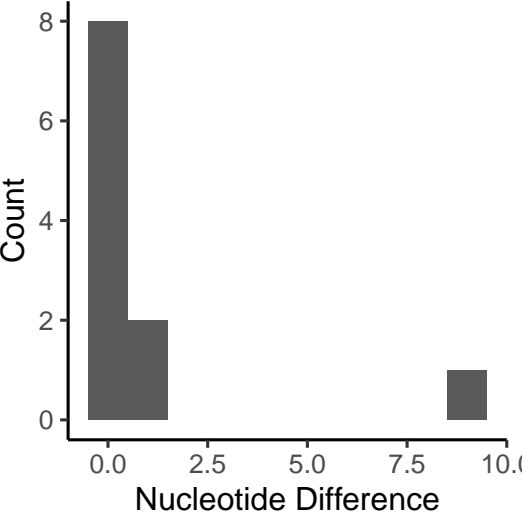
IGHV1–58*01

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



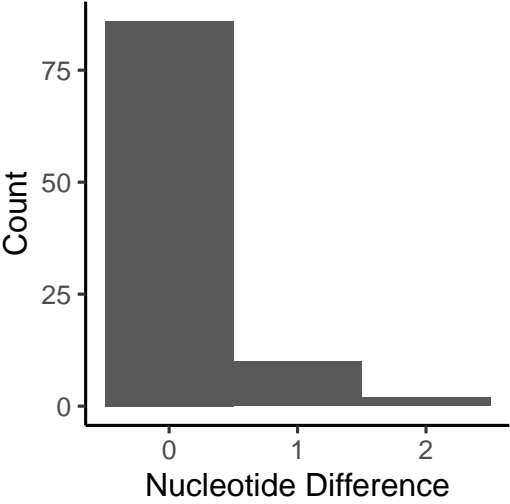
IGHV1-58*02

11 sequences assigned
8 (72.7%) exact matches, in which:
8 unique CDR3
3 unique J



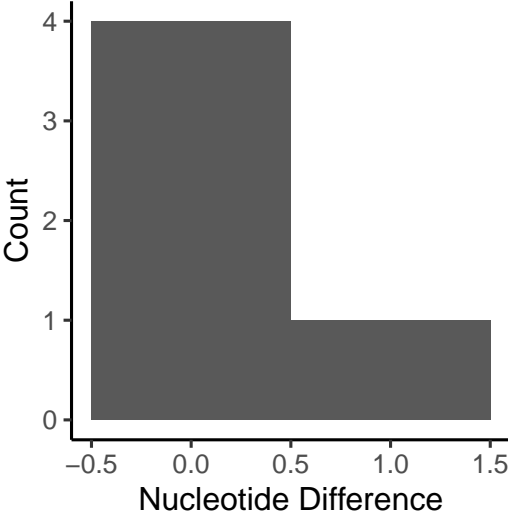
IGHV1-69*08_C191T

98 sequences assigned
86 (87.8%) exact matches, in which:
86 unique CDR3
6 unique J



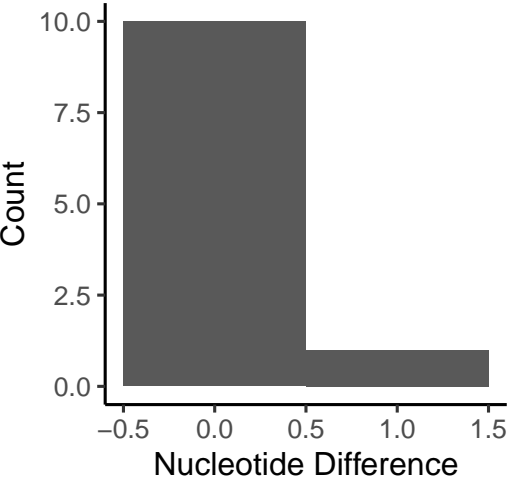
IGHV2-70*01

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



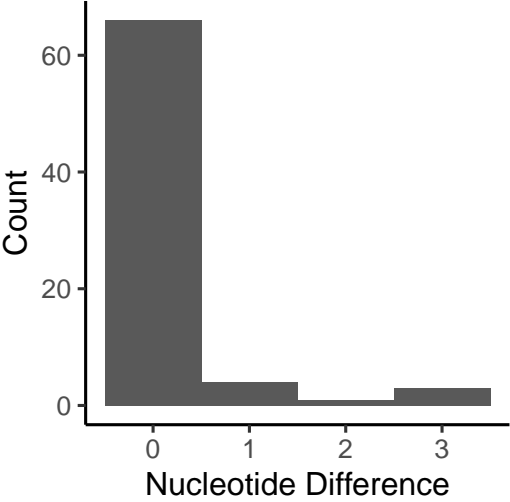
IGHV1-69-2*01

11 sequences assigned
10 (90.9%) exact matches, in which:
10 unique CDR3
3 unique J



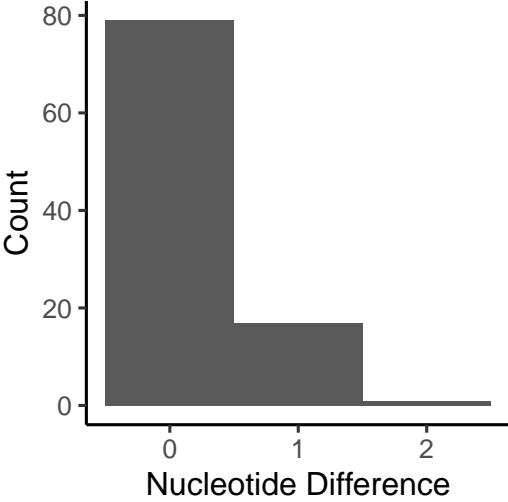
IGHV2-5*02

74 sequences assigned
66 (89.2%) exact matches, in which:
66 unique CDR3
6 unique J



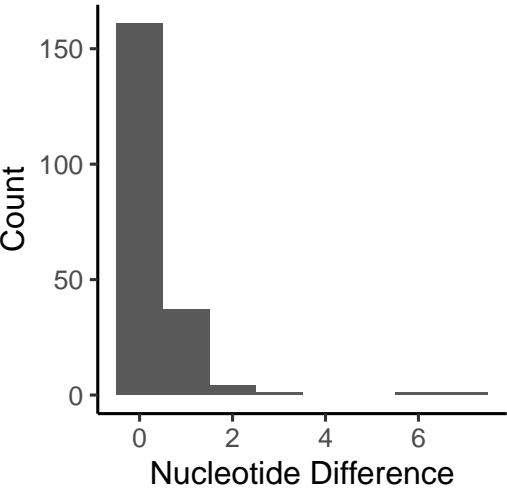
IGHV3-7*01

97 sequences assigned
79 (81.4%) exact matches, in which:
79 unique CDR3
5 unique J



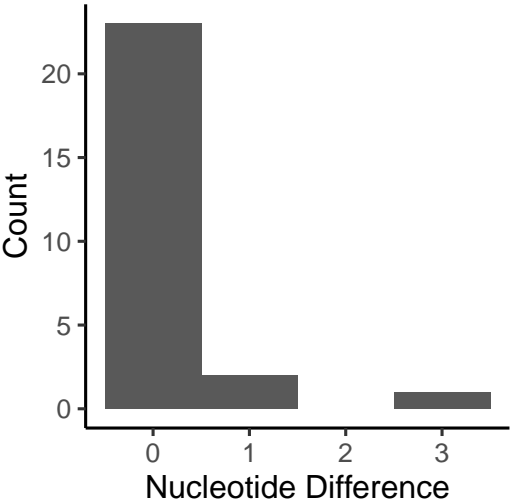
IGHV1-69*06

205 sequences assigned
161 (78.5%) exact matches, in which:
159 unique CDR3
5 unique J



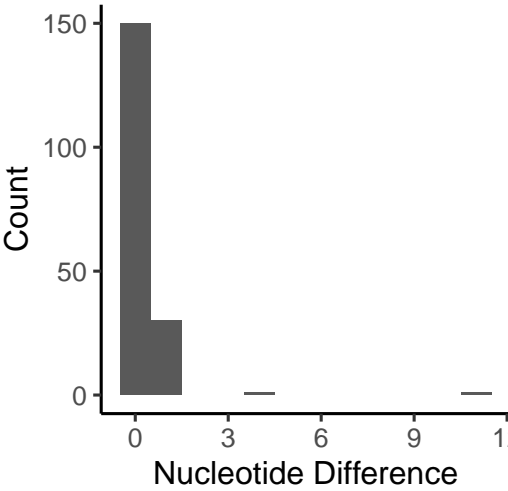
IGHV2-26*01

26 sequences assigned
23 (88.5%) exact matches, in which:
23 unique CDR3
5 unique J



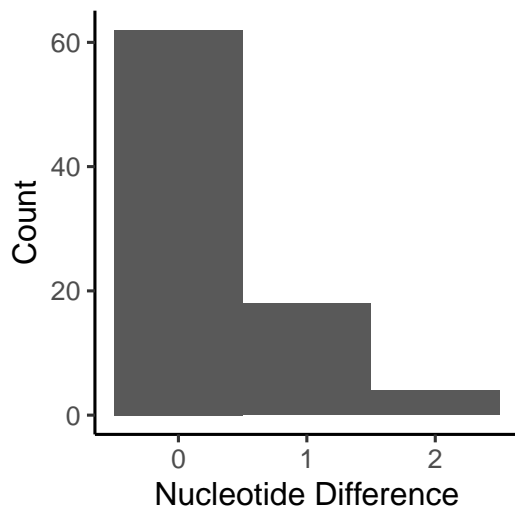
IGHV3-9*01

182 sequences assigned
150 (82.4%) exact matches, in which:
150 unique CDR3
6 unique J



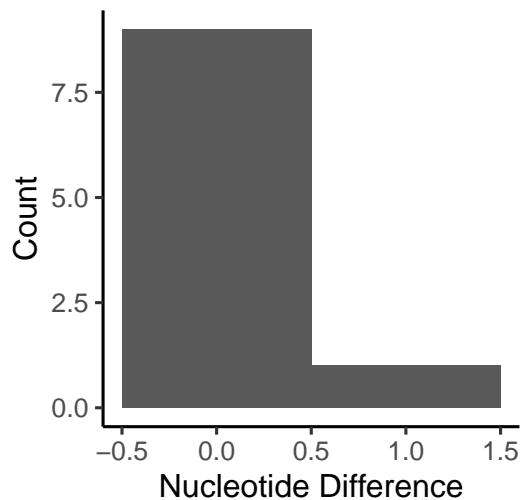
IGHV3-11*01

84 sequences assigned
62 (73.8%) exact matches, in which:
62 unique CDR3
4 unique J



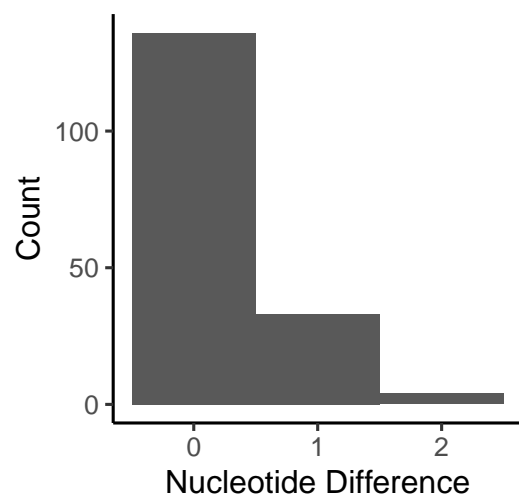
IGHV3-20*01

10 sequences assigned
9 (90%) exact matches, in which:
9 unique CDR3
4 unique J



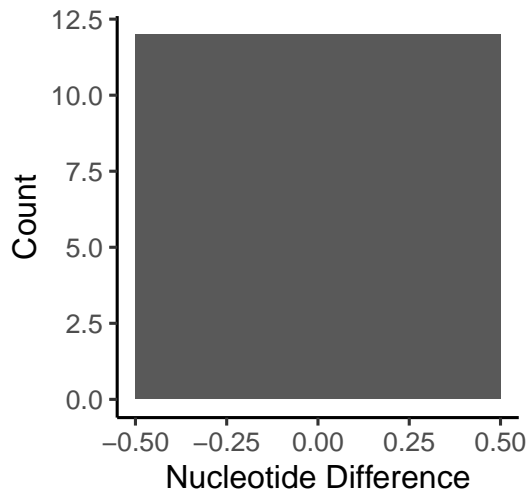
IGHV3-33*01

173 sequences assigned
136 (78.6%) exact matches, in which:
136 unique CDR3
6 unique J



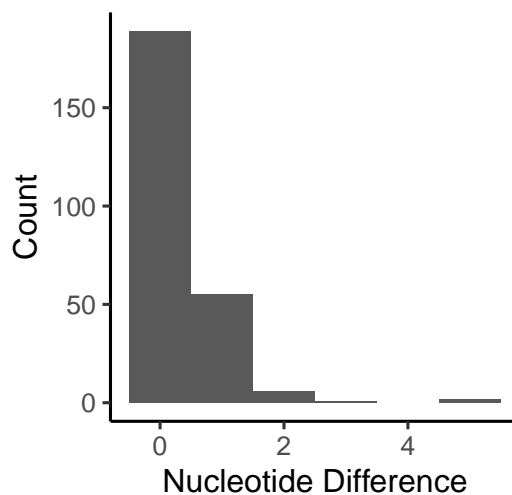
IGHV3-13*01

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



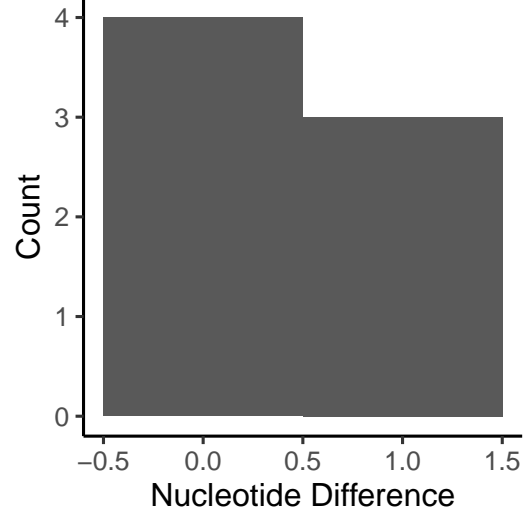
IGHV3-21*01

253 sequences assigned
189 (74.7%) exact matches, in which:
189 unique CDR3
6 unique J



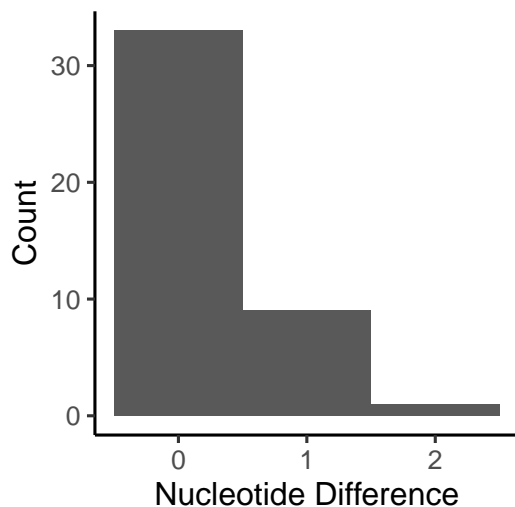
IGHV3-43*01

7 sequences assigned
4 (57.1%) exact matches, in which:
4 unique CDR3
2 unique J



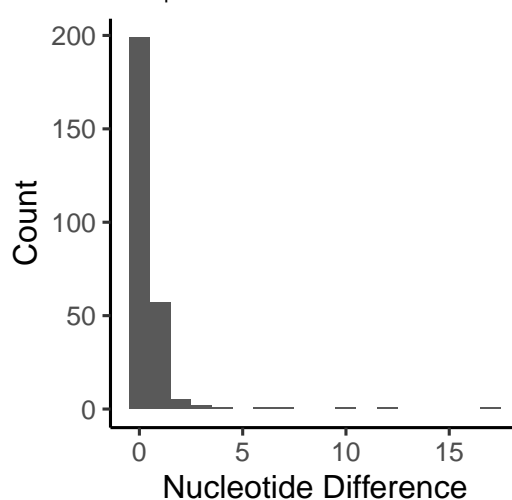
IGHV3-15*01

43 sequences assigned
33 (76.7%) exact matches, in which:
33 unique CDR3
5 unique J



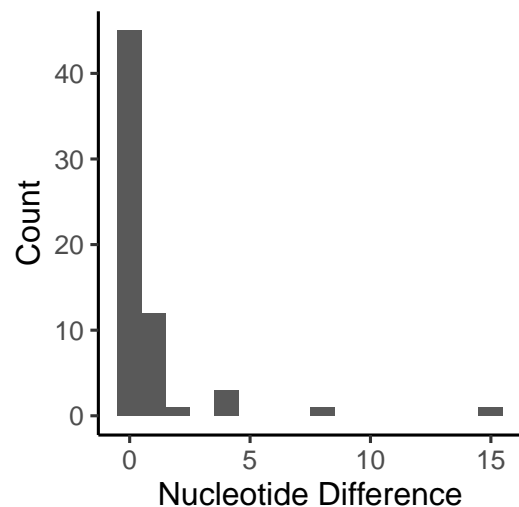
IGHV3-30-3*01

269 sequences assigned
199 (74%) exact matches, in which:
199 unique CDR3
6 unique J



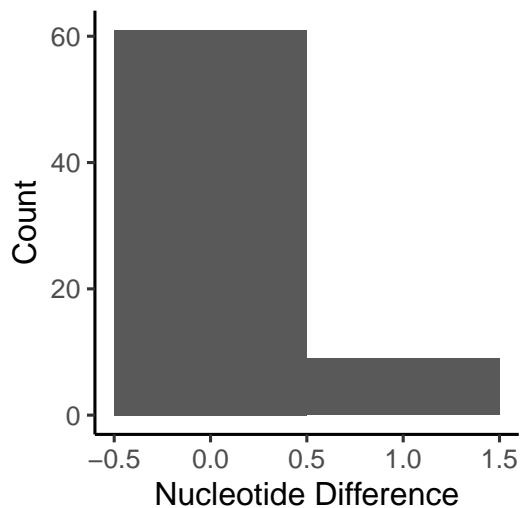
IGHV3-48*01

63 sequences assigned
45 (71.4%) exact matches, in which:
45 unique CDR3
5 unique J



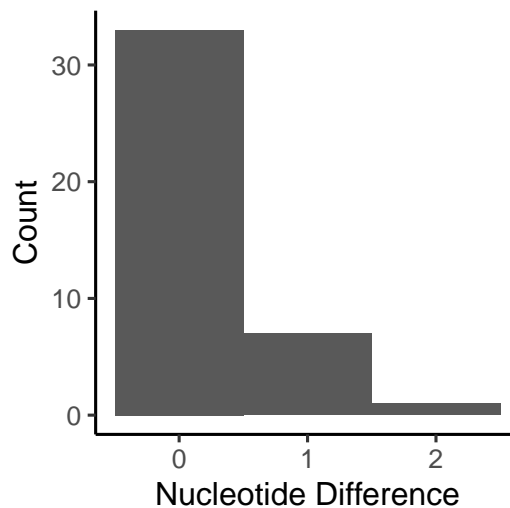
IGHV3-48*03

70 sequences assigned
61 (87.1%) exact matches, in which:
60 unique CDR3
4 unique J



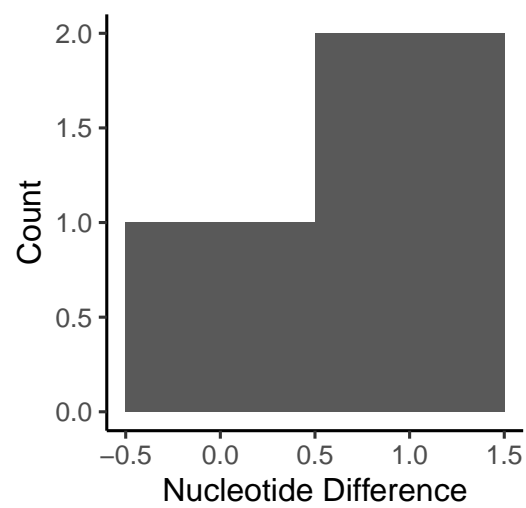
IGHV3-53*02

41 sequences assigned
33 (80.5%) exact matches, in which:
33 unique CDR3
4 unique J



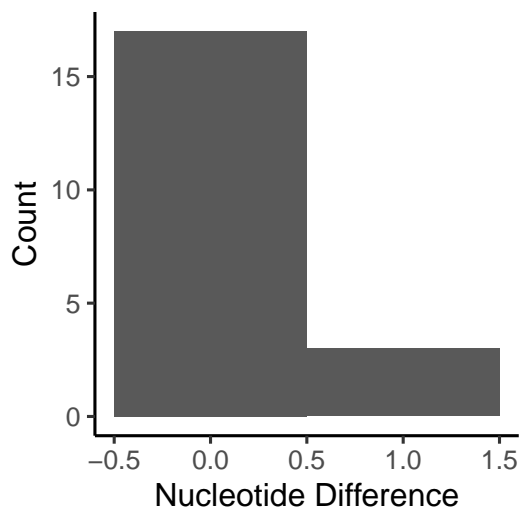
IGHV3-72*01

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



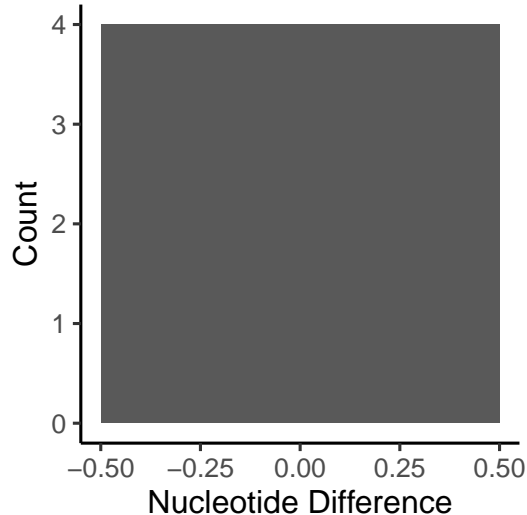
IGHV3-49*03

20 sequences assigned
17 (85%) exact matches, in which:
16 unique CDR3
4 unique J



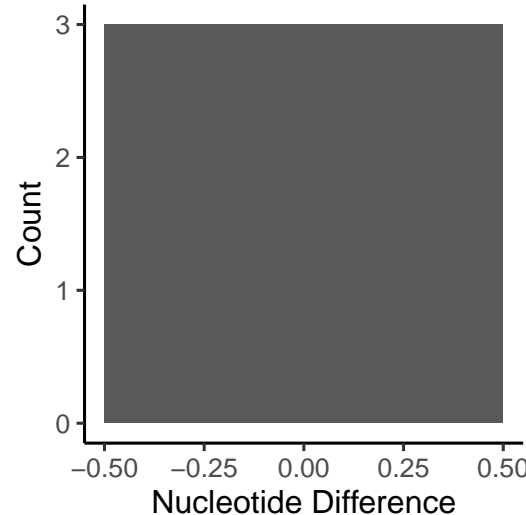
IGHV3-64*01

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



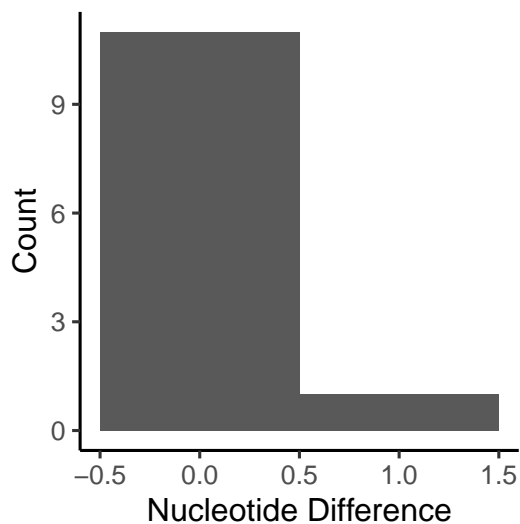
IGHV3-73*01

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



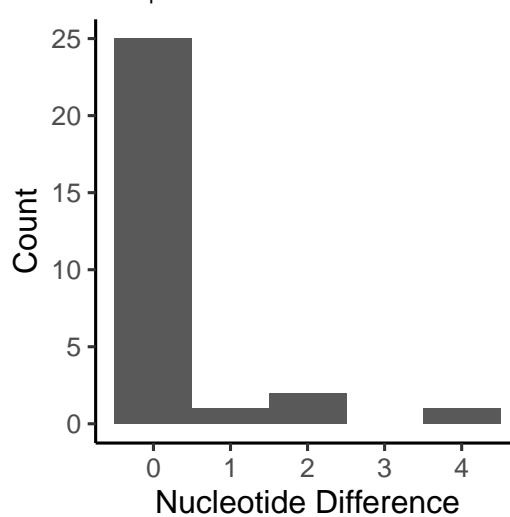
IGHV3-49*04

12 sequences assigned
11 (91.7%) exact matches, in which:
11 unique CDR3
4 unique J



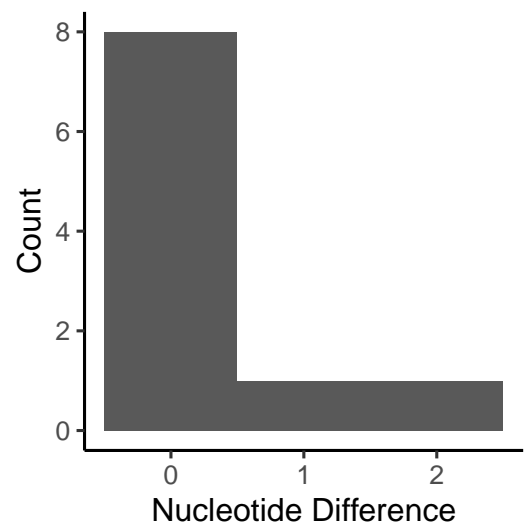
IGHV3-66*02

29 sequences assigned
25 (86.2%) exact matches, in which:
25 unique CDR3
4 unique J



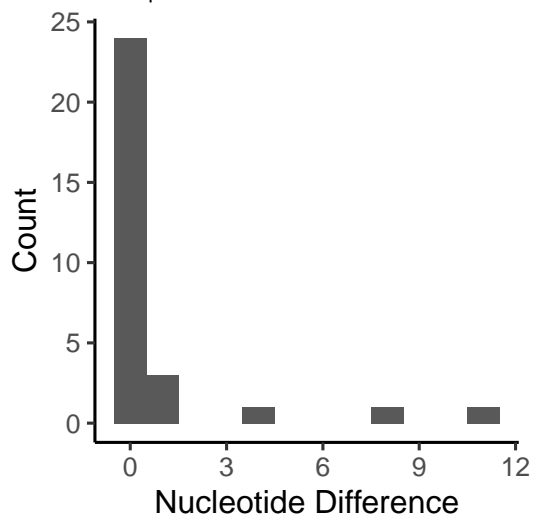
IGHV3-73*02

10 sequences assigned
8 (80%) exact matches, in which:
8 unique CDR3
4 unique J



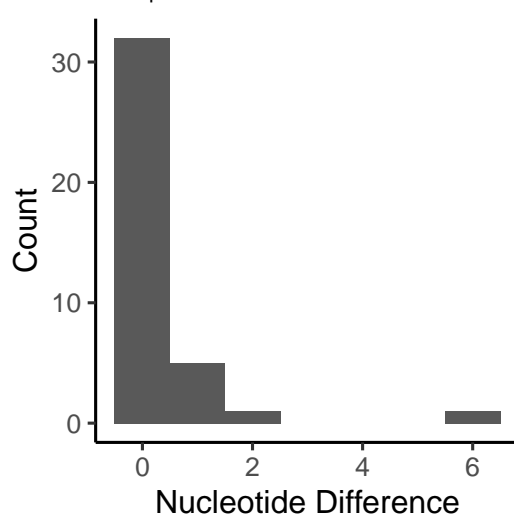
IGHV3-74*01

30 sequences assigned
24 (80%) exact matches, in which:
24 unique CDR3
4 unique J



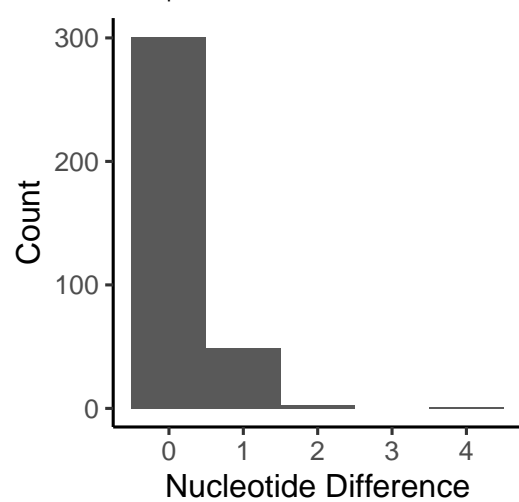
IGHV4-30-2*01

39 sequences assigned
32 (82.1%) exact matches, in which:
32 unique CDR3
5 unique J



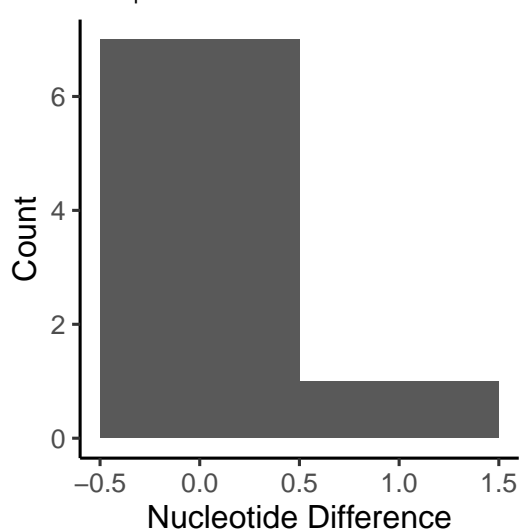
IGHV4-34*01

354 sequences assigned
301 (85%) exact matches, in which:
300 unique CDR3
6 unique J



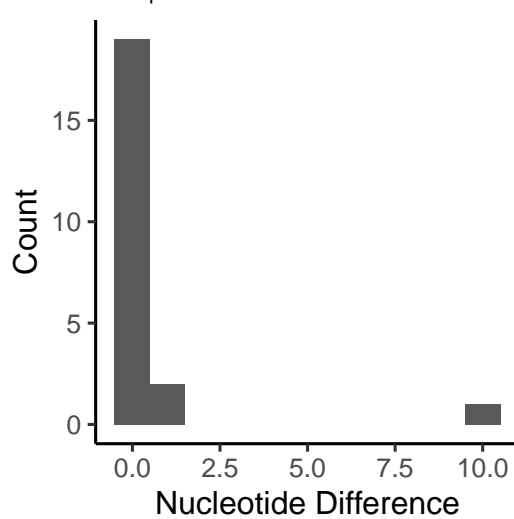
IGHV3-43D*04

8 sequences assigned
7 (87.5%) exact matches, in which:
7 unique CDR3
4 unique J



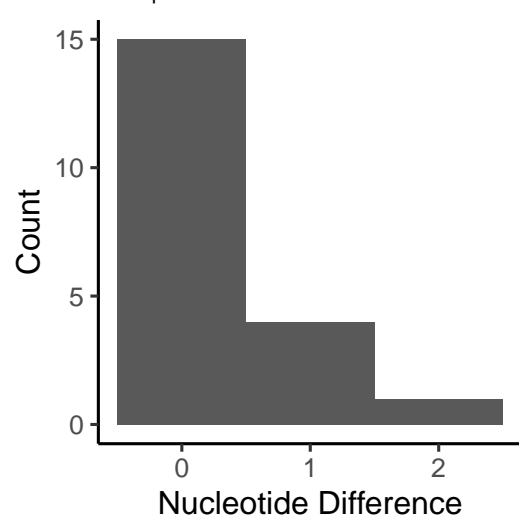
IGHV4-30-4*01

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



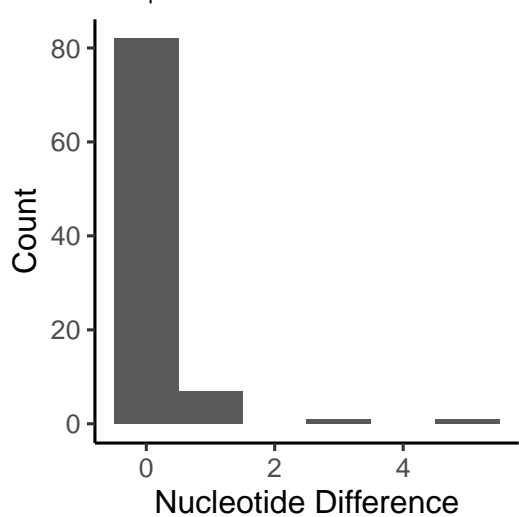
IGHV4-38-2*01

20 sequences assigned
15 (75%) exact matches, in which:
15 unique CDR3
4 unique J



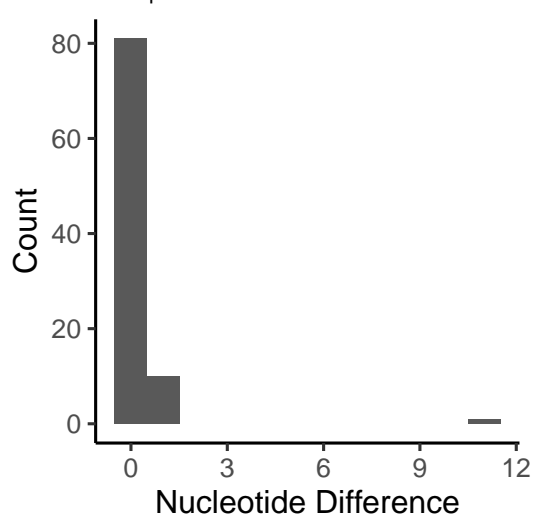
IGHV4-4*02

92 sequences assigned
82 (89.1%) exact matches, in which:
82 unique CDR3
5 unique J



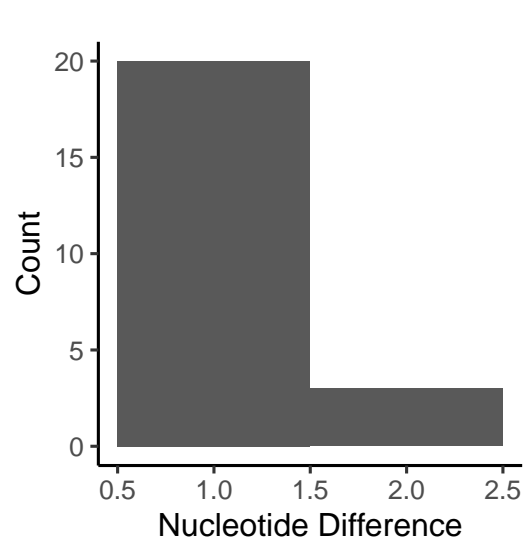
IGHV4-31*03

92 sequences assigned
81 (88%) exact matches, in which:
81 unique CDR3
5 unique J



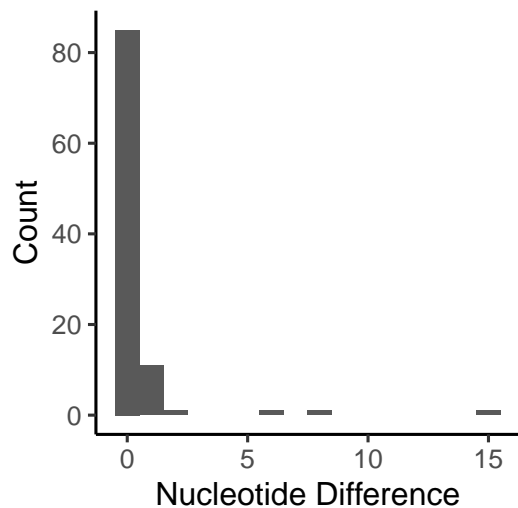
IGHV4-38-2*02

23 sequences assigned
No exact matches.



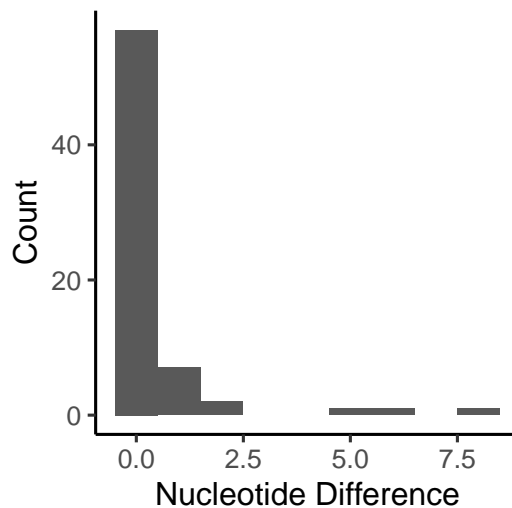
IGHV4-39*01

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



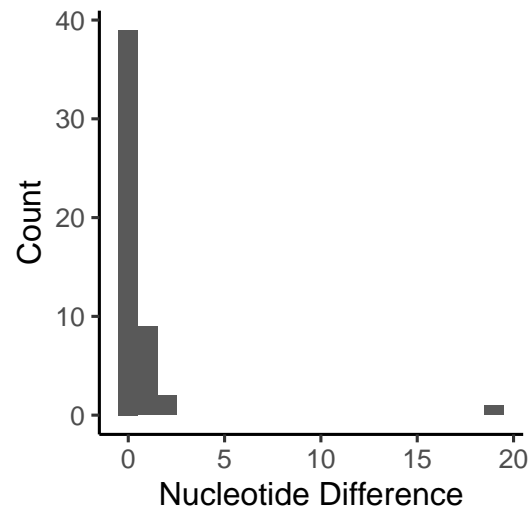
IGHV4-61*02

69 sequences assigned
57 (82.6%) exact matches, in which:
56 unique CDR3
6 unique J



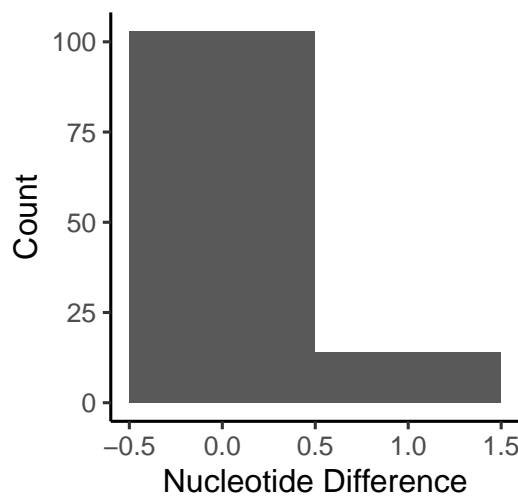
IGHV6-1*01

51 sequences assigned
39 (76.5%) exact matches, in which:
39 unique CDR3
5 unique J



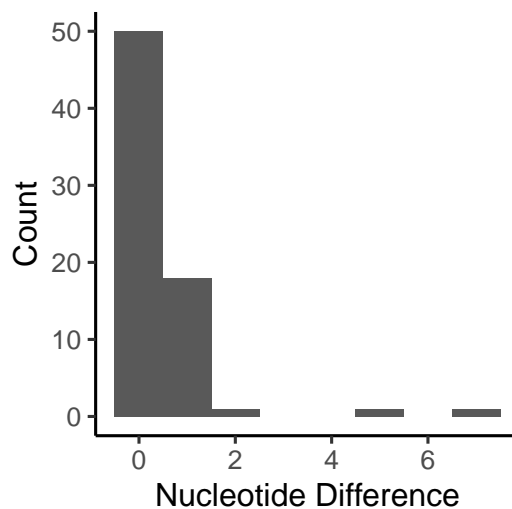
IGHV4-59*01

117 sequences assigned
103 (88%) exact matches, in which:
103 unique CDR3
6 unique J



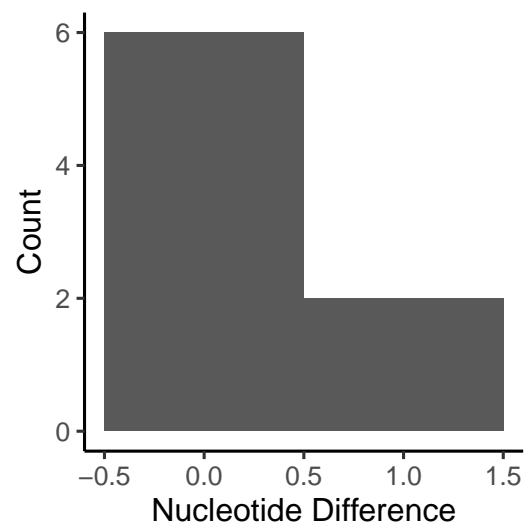
IGHV5-51*01

72 sequences assigned
50 (69.4%) exact matches, in which:
50 unique CDR3
6 unique J



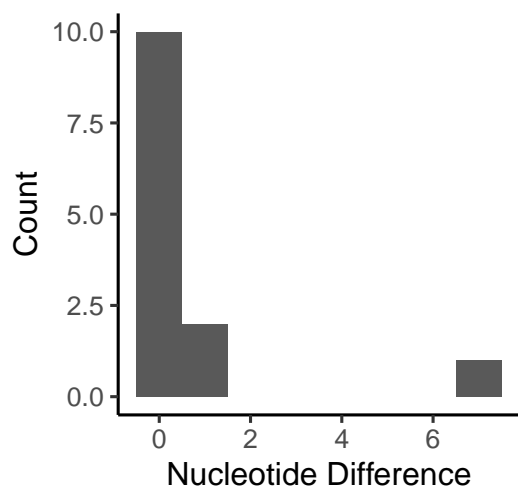
IGHV7-4-1*01

8 sequences assigned
6 (75%) exact matches, in which:
6 unique CDR3
3 unique J



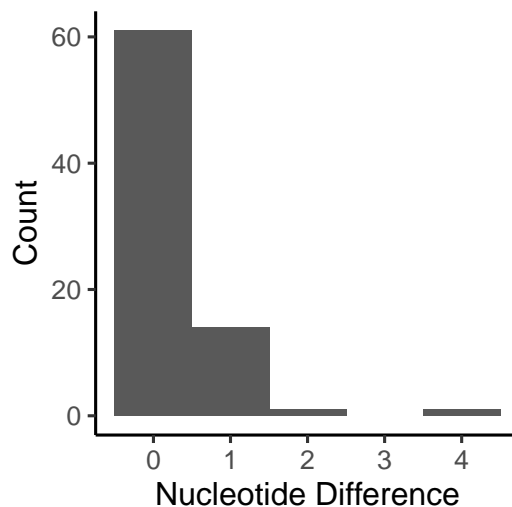
IGHV4-61*01

13 sequences assigned
10 (76.9%) exact matches, in which:
10 unique CDR3
4 unique J



IGHV5-51*01_C45G

77 sequences assigned
61 (79.2%) exact matches, in which:
61 unique CDR3
5 unique J





[illegible]