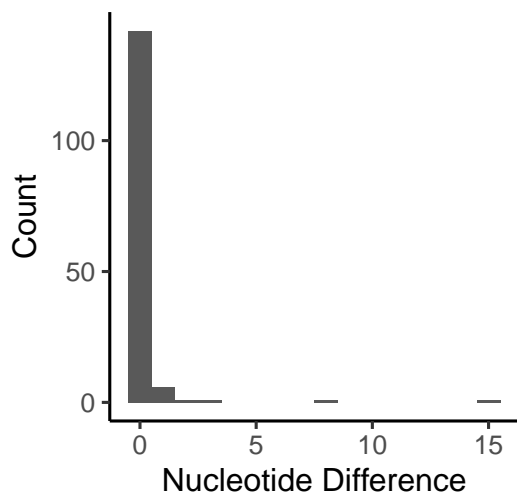


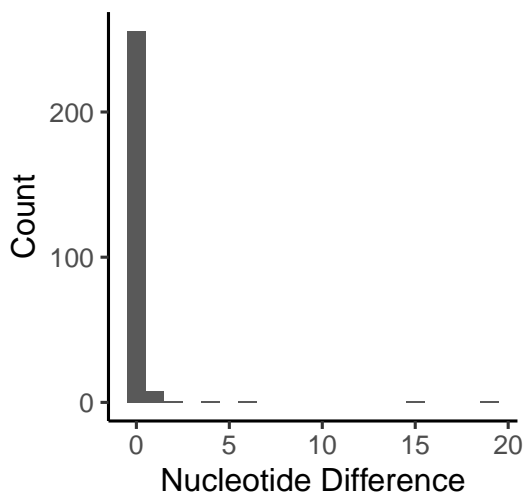
IGHV1-2*04

152 sequences assigned
142 (93.4%) exact matches, in which:
142 unique CDR3
6 unique J



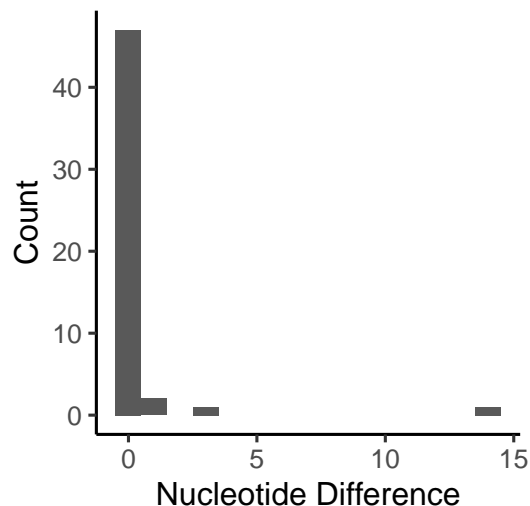
IGHV1-24*01

269 sequences assigned
256 (95.2%) exact matches, in which:
255 unique CDR3
7 unique J



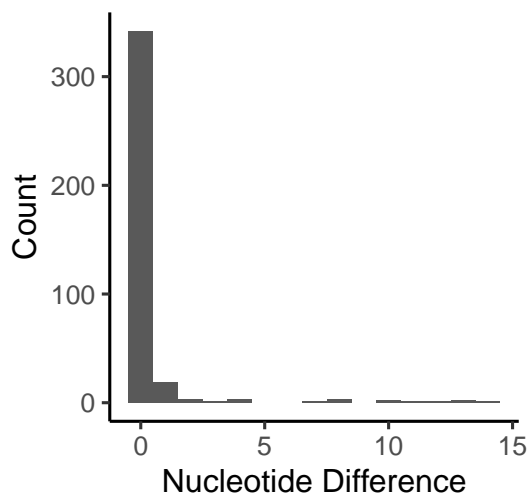
IGHV1-46*04

51 sequences assigned
47 (92.2%) exact matches, in which:
47 unique CDR3
7 unique J



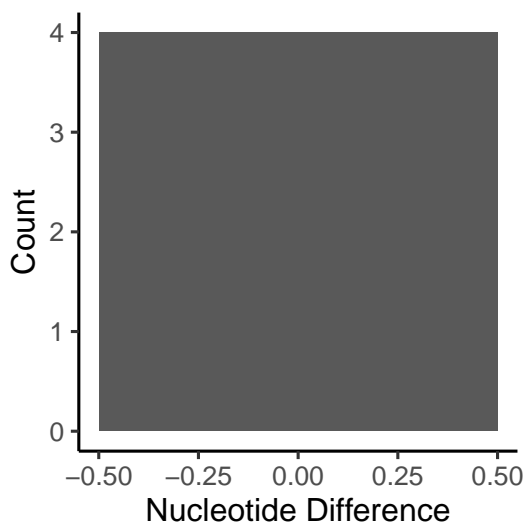
IGHV1-3*01

381 sequences assigned
342 (89.8%) exact matches, in which:
342 unique CDR3
7 unique J



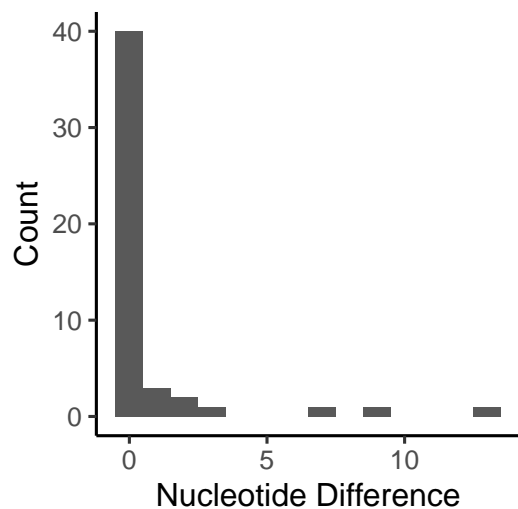
IGHV1-45*02

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



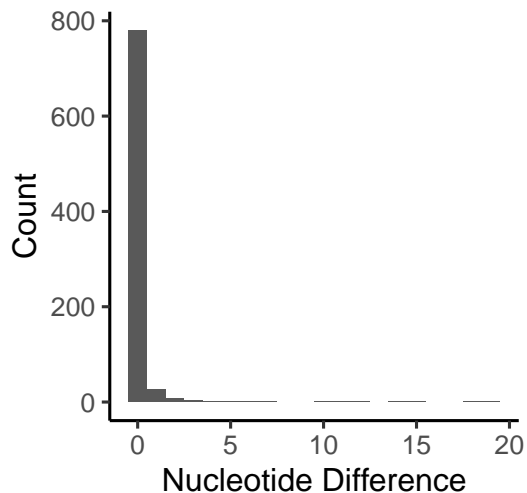
IGHV1-58*01

49 sequences assigned
40 (81.6%) exact matches, in which:
40 unique CDR3
7 unique J



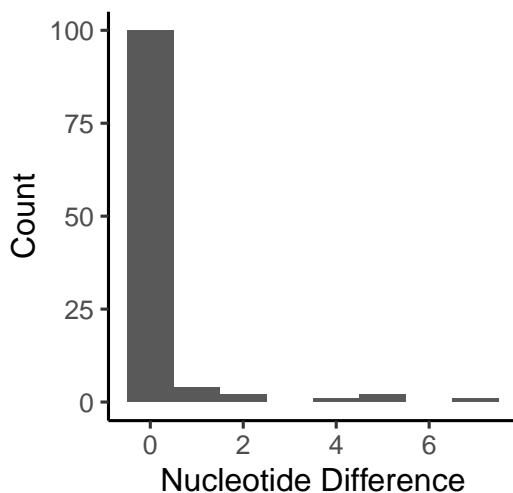
IGHV1-18*04

836 sequences assigned
780 (93.3%) exact matches, in which:
780 unique CDR3
7 unique J



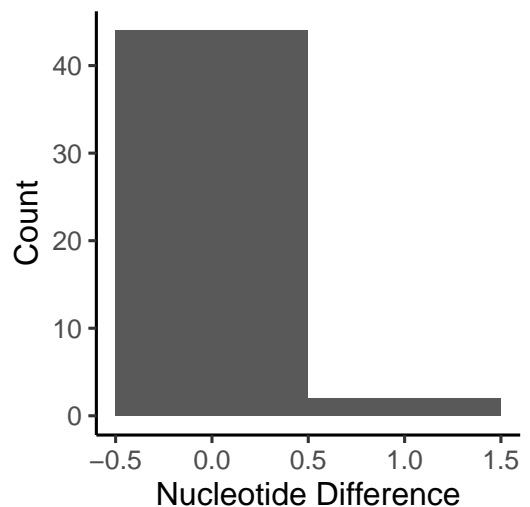
IGHV1-46*01

110 sequences assigned
100 (90.9%) exact matches, in which:
100 unique CDR3
6 unique J



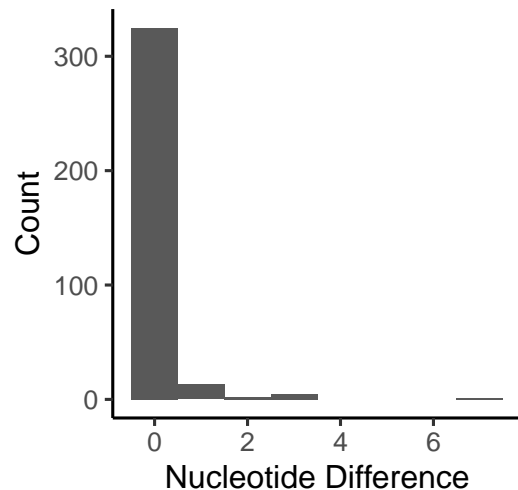
IGHV1-69-2*01

46 sequences assigned
44 (95.7%) exact matches, in which:
44 unique CDR3
5 unique J



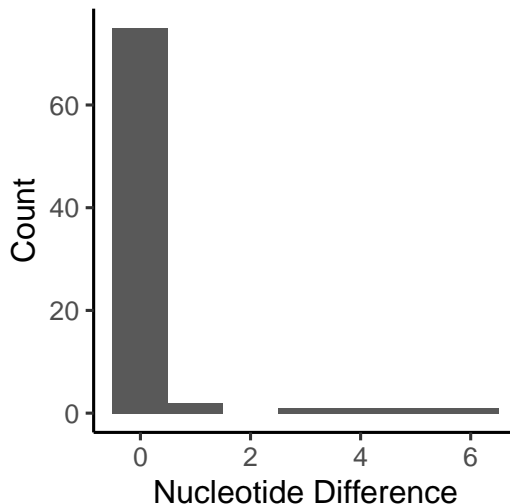
IGHV1–69*17

346 sequences assigned
325 (93.9%) exact matches, in which:
324 unique CDR3
7 unique J



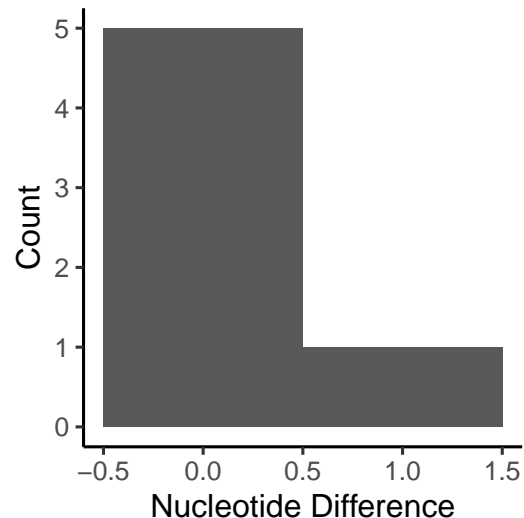
IGHV2–70*01

81 sequences assigned
75 (92.6%) exact matches, in which:
75 unique CDR3
6 unique J



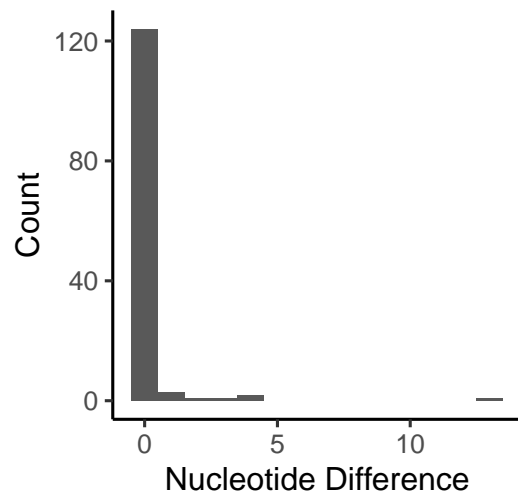
IGHV3–13*05

6 sequences assigned
5 (83.3%) exact matches, in which:
5 unique CDR3
3 unique J



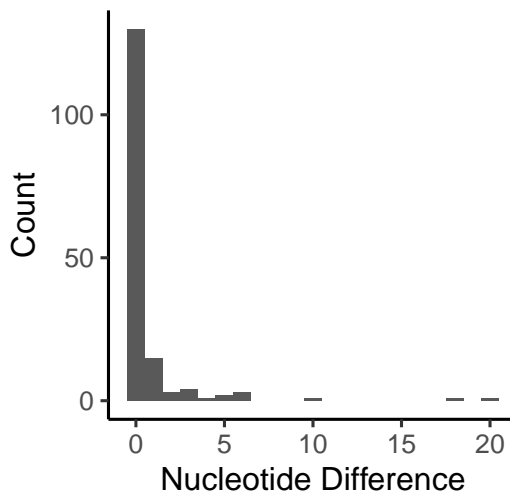
IGHV2–5*02

132 sequences assigned
124 (93.9%) exact matches, in which:
124 unique CDR3
7 unique J



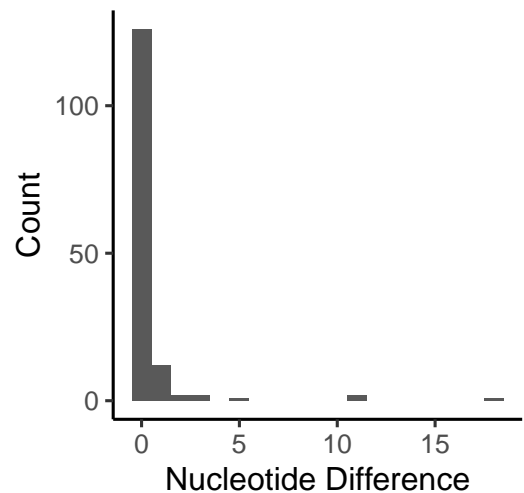
IGHV3–7*03

161 sequences assigned
130 (80.7%) exact matches, in which:
130 unique CDR3
7 unique J



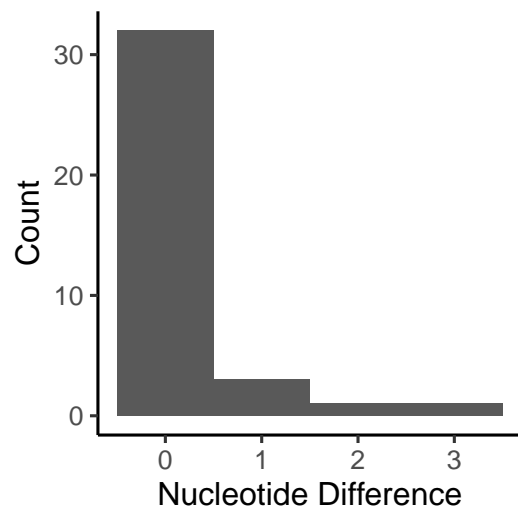
IGHV3–15*01

146 sequences assigned
126 (86.3%) exact matches, in which:
126 unique CDR3
5 unique J



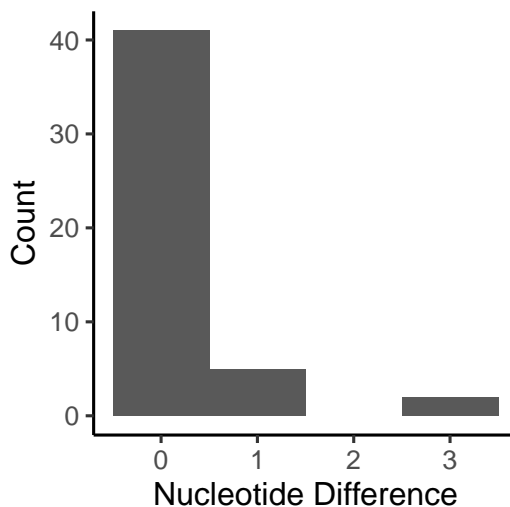
IGHV2–26*01

37 sequences assigned
32 (86.5%) exact matches, in which:
32 unique CDR3
5 unique J



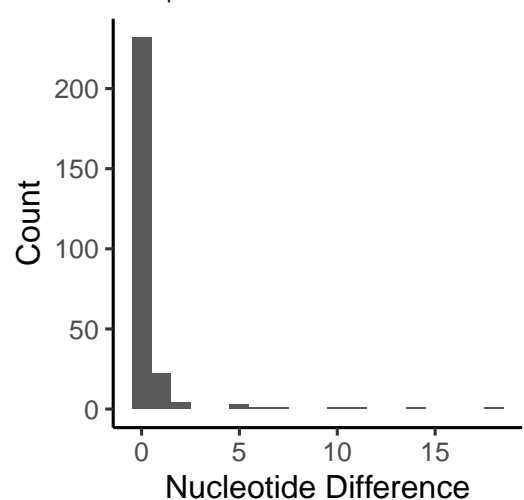
IGHV3–11*06

48 sequences assigned
41 (85.4%) exact matches, in which:
41 unique CDR3
6 unique J



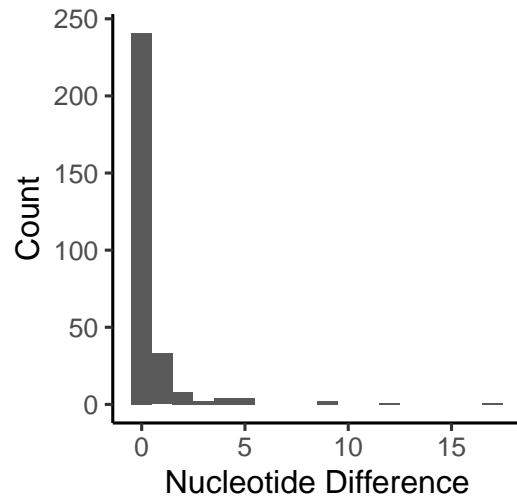
IGHV3–21*01

267 sequences assigned
232 (86.9%) exact matches, in which:
232 unique CDR3
6 unique J



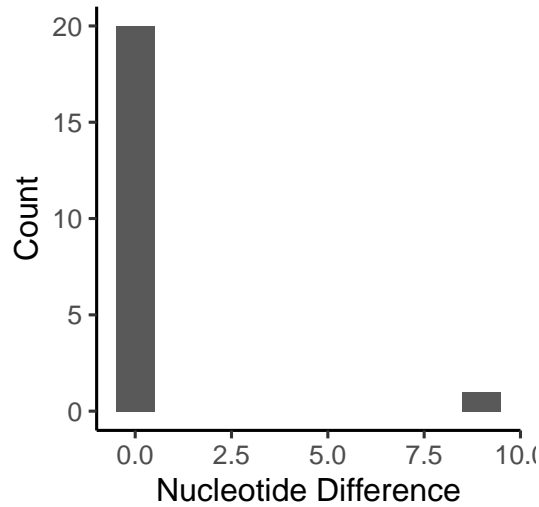
IGHV3-33*01

296 sequences assigned
241 (81.4%) exact matches, in which:
241 unique CDR3
7 unique J



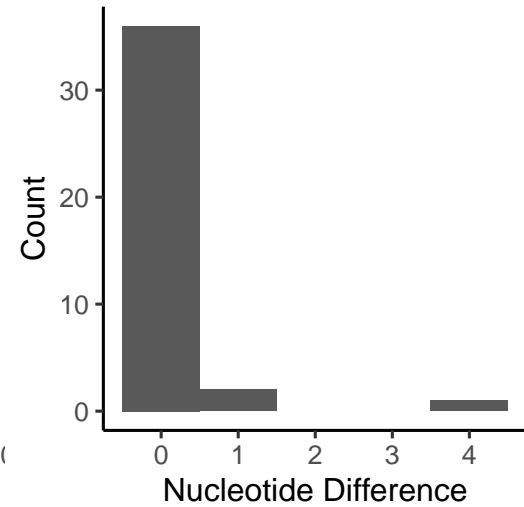
IGHV3-43*01

21 sequences assigned
20 (95.2%) exact matches, in which:
20 unique CDR3
5 unique J



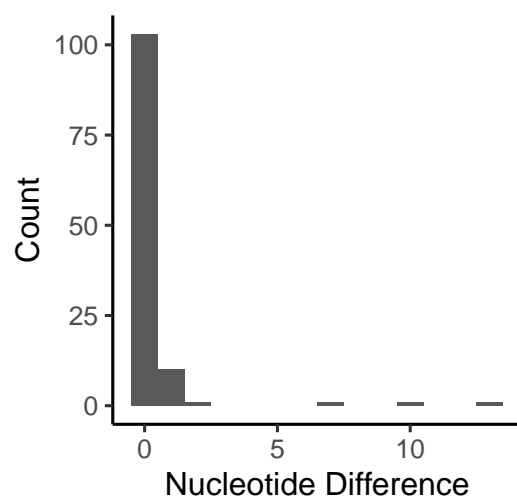
IGHV3-49*03

39 sequences assigned
36 (92.3%) exact matches, in which:
36 unique CDR3
6 unique J



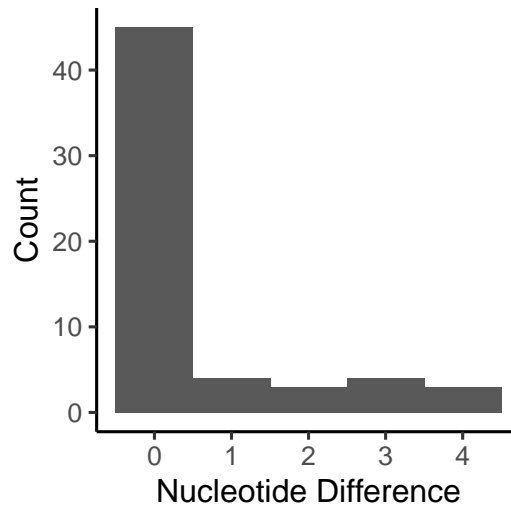
IGHV3-33*08

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



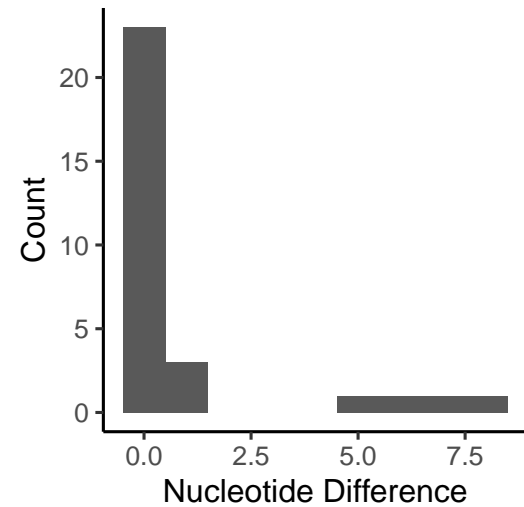
IGHV3-48*01

59 sequences assigned
45 (76.3%) exact matches, in which:
45 unique CDR3
6 unique J



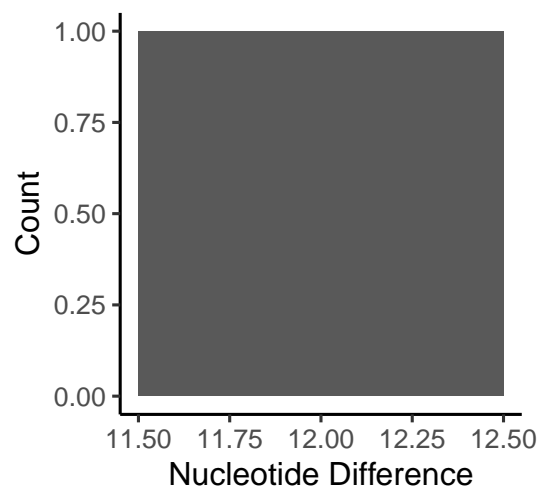
IGHV3-49*05

30 sequences assigned
23 (76.7%) exact matches, in which:
23 unique CDR3
5 unique J



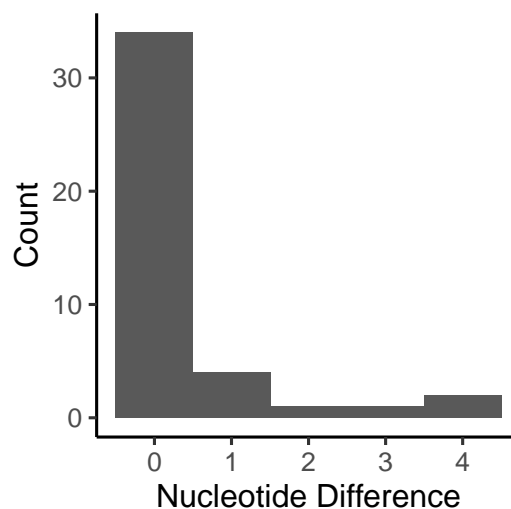
IGHV3-38-3*01

1 sequences assigned
No exact matches.



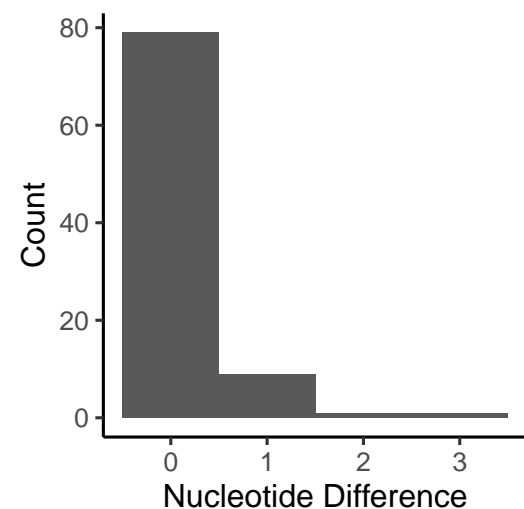
IGHV3-48*02

42 sequences assigned
34 (81%) exact matches, in which:
34 unique CDR3
5 unique J



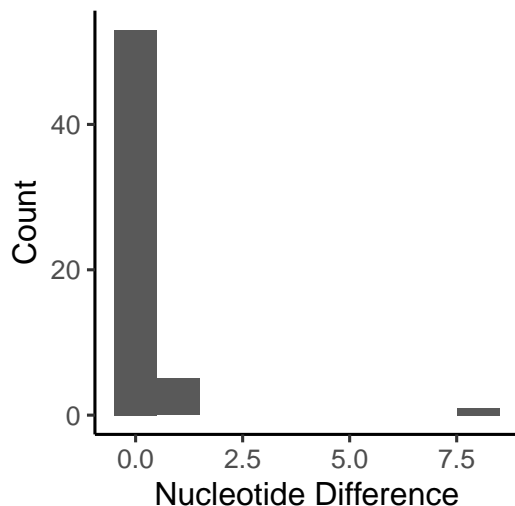
IGHV3-53*01

90 sequences assigned
79 (87.8%) exact matches, in which:
79 unique CDR3
7 unique J



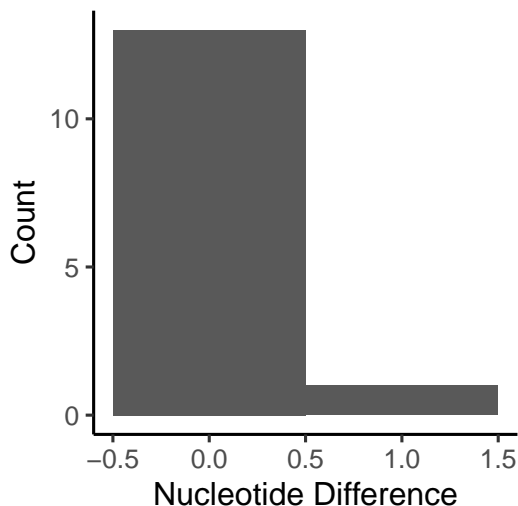
IGHV3-53*02

59 sequences assigned
53 (89.8%) exact matches, in which:
53 unique CDR3
5 unique J



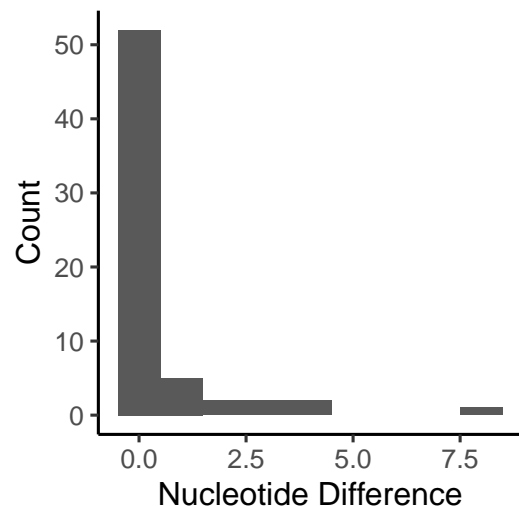
IGHV3-73*01

14 sequences assigned
13 (92.9%) exact matches, in which:
13 unique CDR3
4 unique J



IGHV3-64D*06

64 sequences assigned
52 (81.2%) exact matches, in which:
52 unique CDR3
7 unique J



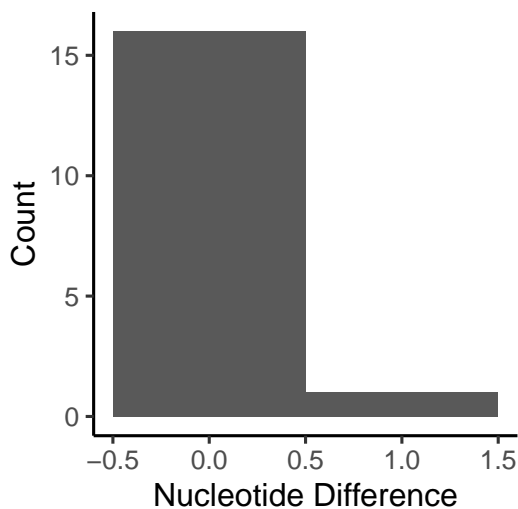
IGHV3-64*02

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



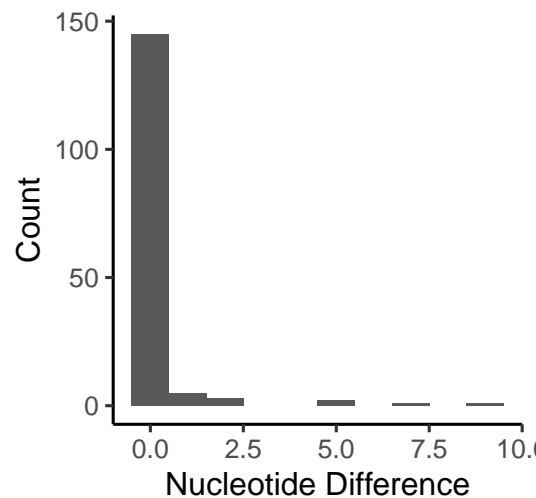
IGHV3-73*02

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



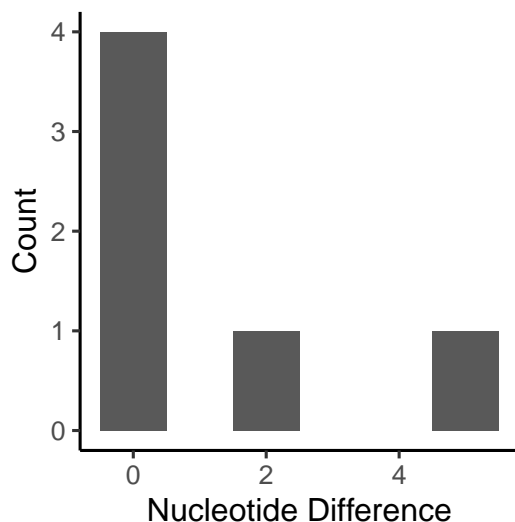
IGHV4-4*02

157 sequences assigned
145 (92.4%) exact matches, in which:
145 unique CDR3
7 unique J



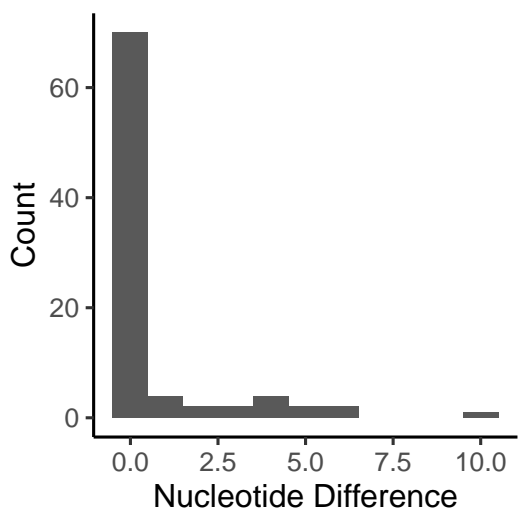
IGHV3-72*01

6 sequences assigned
4 (66.7%) exact matches, in which:
4 unique CDR3
3 unique J



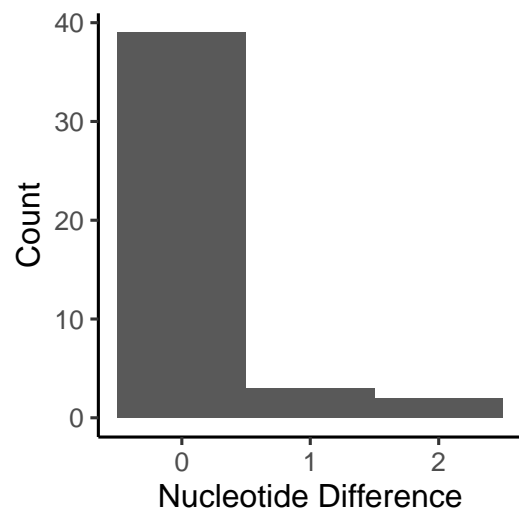
IGHV3-74*01

87 sequences assigned
70 (80.5%) exact matches, in which:
70 unique CDR3
7 unique J



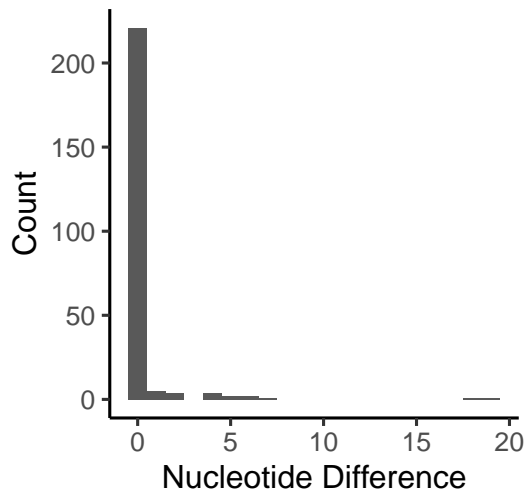
IGHV4-30-2*01

45 sequences assigned
39 (86.7%) exact matches, in which:
39 unique CDR3
7 unique J



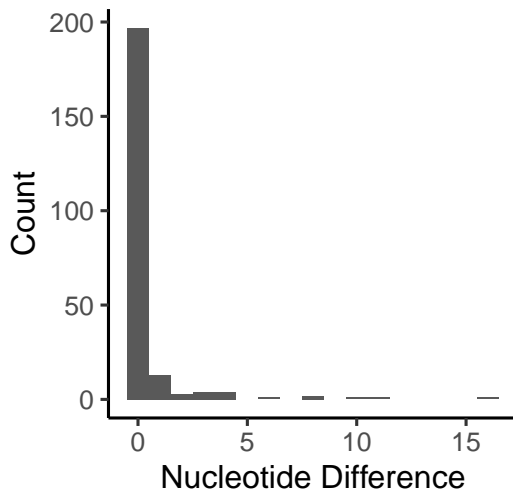
IGHV4–31*03

241 sequences assigned
221 (91.7%) exact matches, in which:
221 unique CDR3
7 unique J



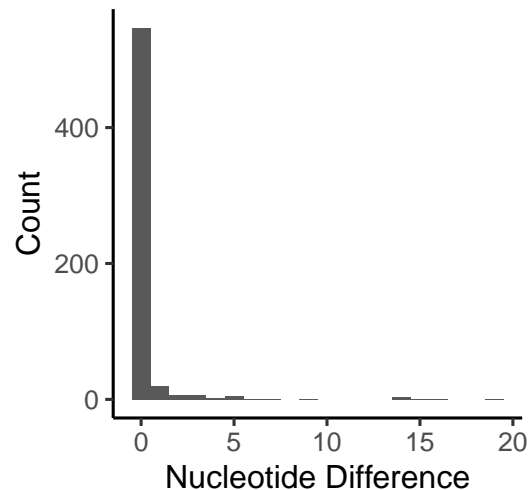
IGHV4–59*01

227 sequences assigned
197 (86.8%) exact matches, in which:
197 unique CDR3
7 unique J



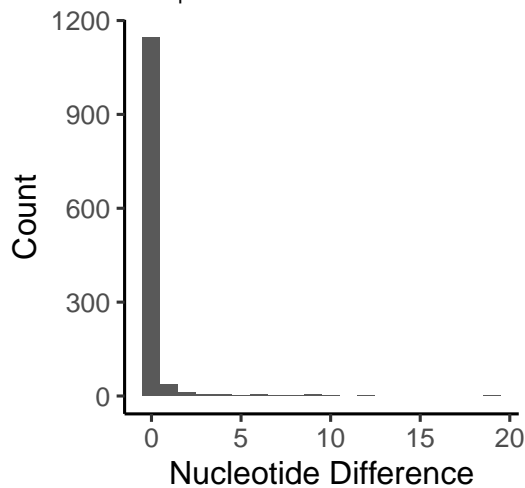
IGHV5–51*01

596 sequences assigned
547 (91.8%) exact matches, in which:
546 unique CDR3
7 unique J



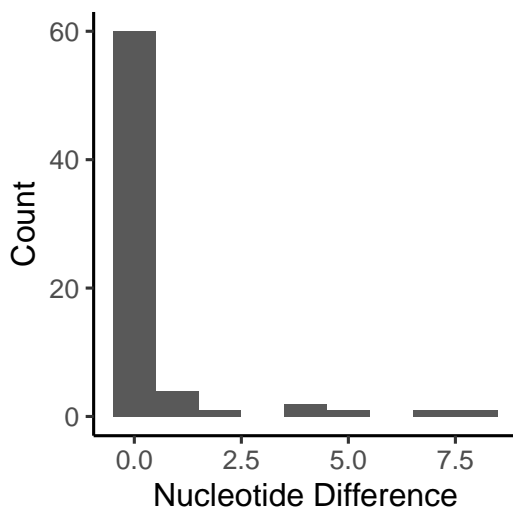
IGHV4–34*01

1220 sequences assigned
1145 (93.9%) exact matches, in which:
1145 unique CDR3
7 unique J



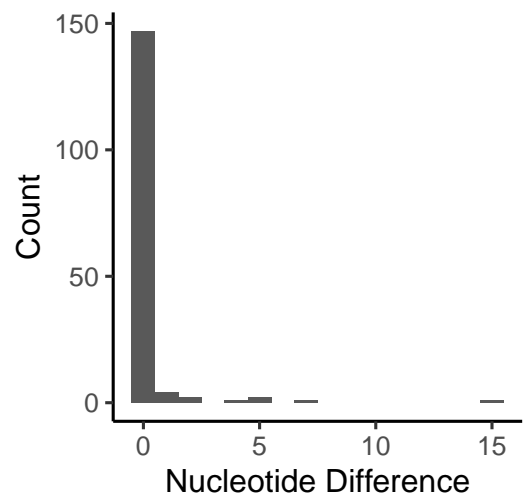
IGHV4–61*01

70 sequences assigned
60 (85.7%) exact matches, in which:
60 unique CDR3
7 unique J



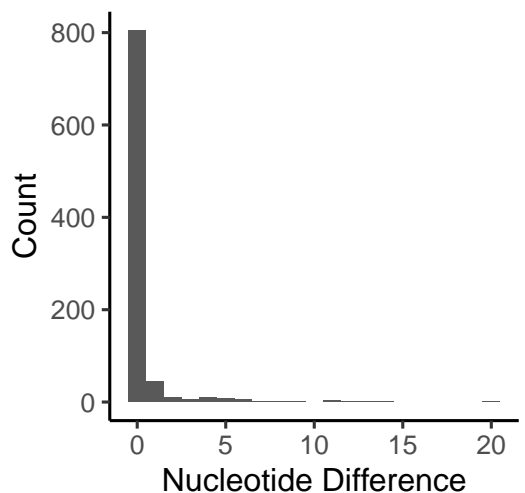
IGHV6–1*01

158 sequences assigned
147 (93%) exact matches, in which:
146 unique CDR3
7 unique J



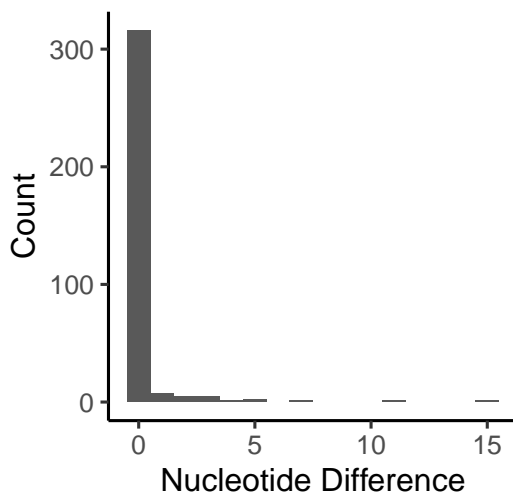
IGHV4–39*01

901 sequences assigned
805 (89.3%) exact matches, in which:
805 unique CDR3
7 unique J



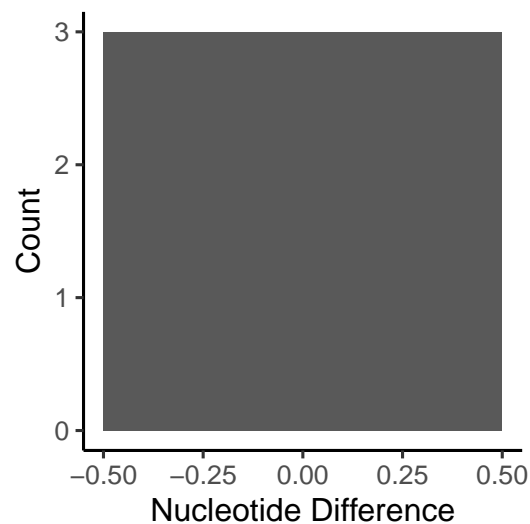
IGHV5–10–1*03

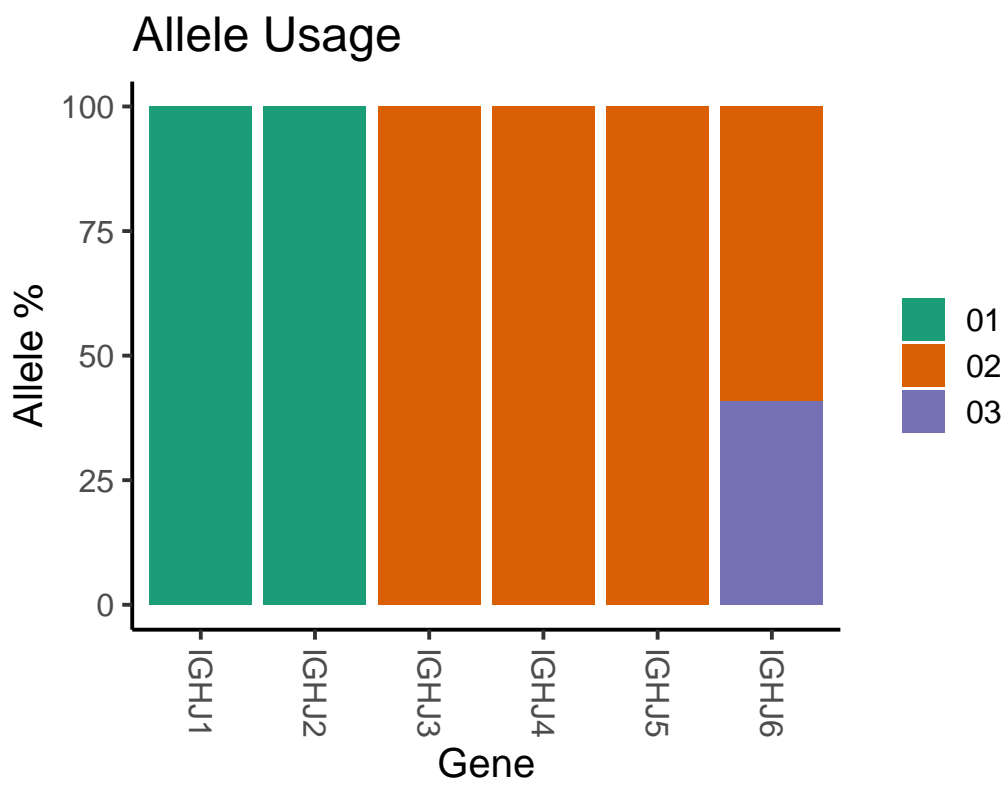
339 sequences assigned
316 (93.2%) exact matches, in which:
316 unique CDR3
7 unique J



IGHV7–4–1*01

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





Sequence Count by IGHJ6 allele usage



[illegible]