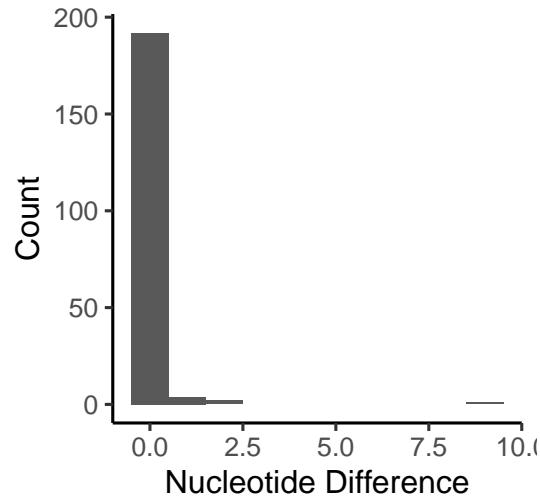


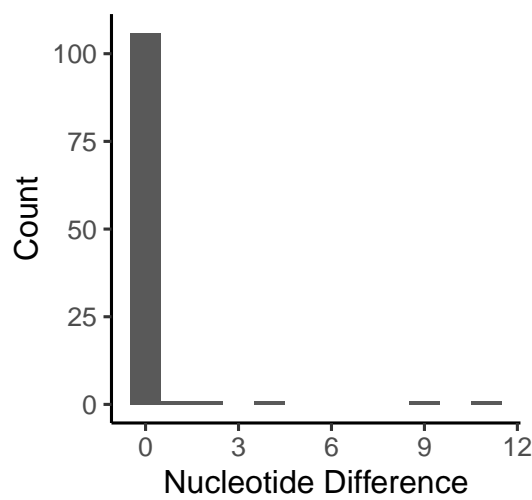
IGHV1-2*02

199 sequences assigned
192 (96.5%) exact matches, in which:
192 unique CDR3
6 unique J



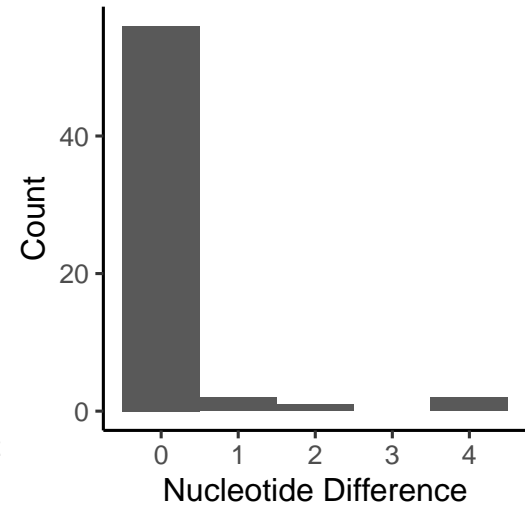
IGHV1-18*01

111 sequences assigned
106 (95.5%) exact matches, in which:
106 unique CDR3
7 unique J



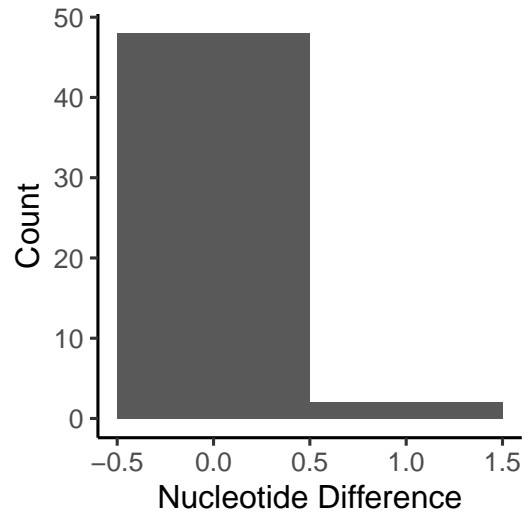
IGHV1-46*01

61 sequences assigned
56 (91.8%) exact matches, in which:
56 unique CDR3
7 unique J



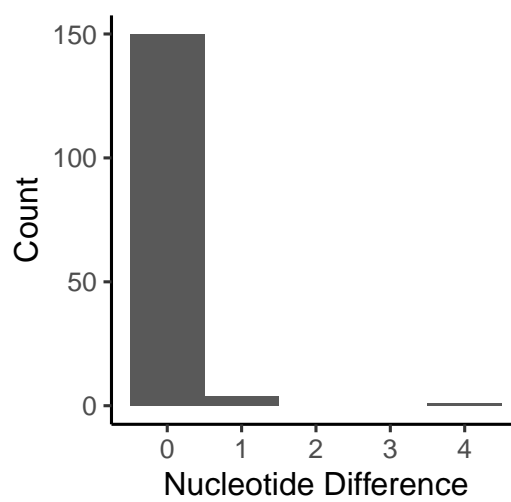
IGHV1-2*04

50 sequences assigned
48 (96%) exact matches, in which:
48 unique CDR3
5 unique J



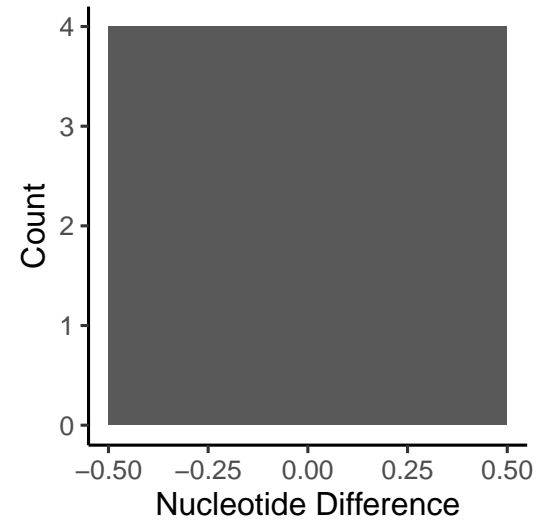
IGHV1-18*04

155 sequences assigned
150 (96.8%) exact matches, in which:
150 unique CDR3
7 unique J



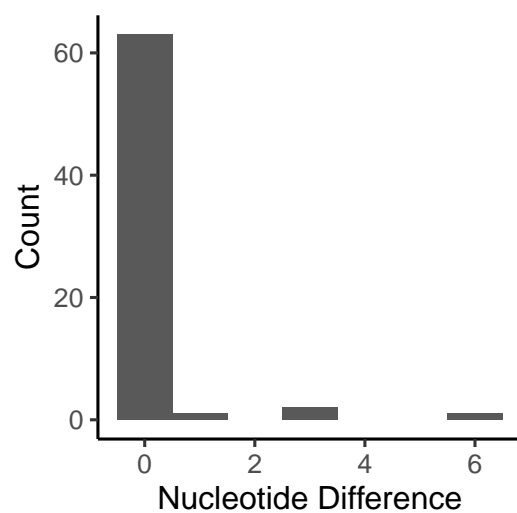
IGHV1-58*02

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



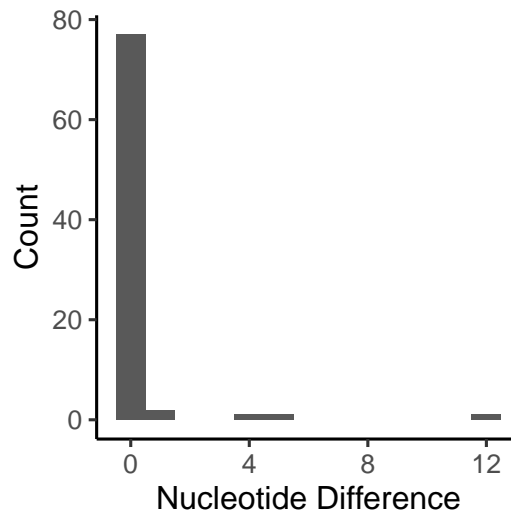
IGHV1-3*01

67 sequences assigned
63 (94%) exact matches, in which:
63 unique CDR3
5 unique J



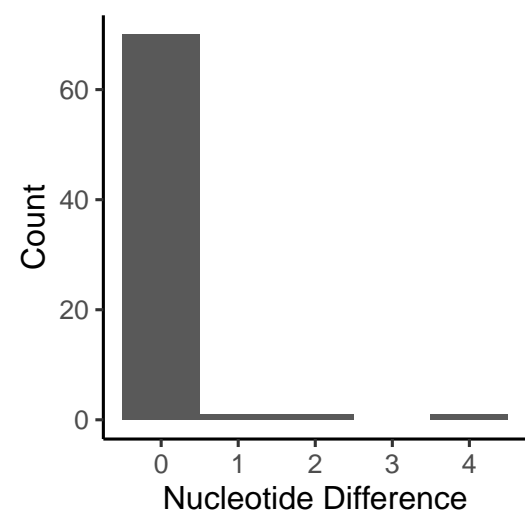
IGHV1-24*01

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



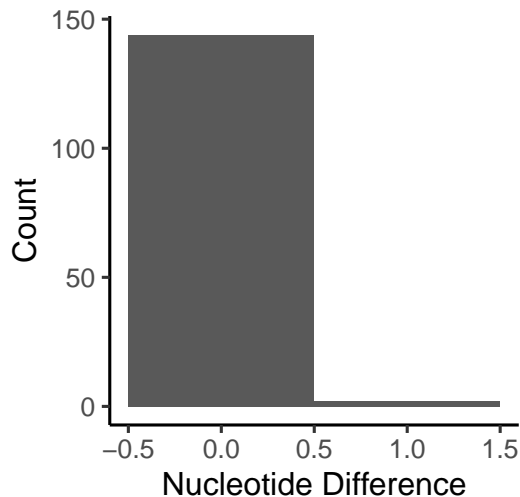
IGHV1-69*02

74 sequences assigned
70 (94.6%) exact matches, in which:
70 unique CDR3
6 unique J



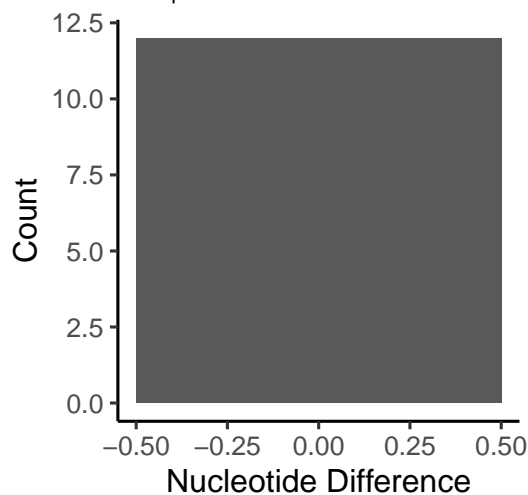
IGHV1–69*04

146 sequences assigned
144 (98.6%) exact matches, in which:
144 unique CDR3
6 unique J



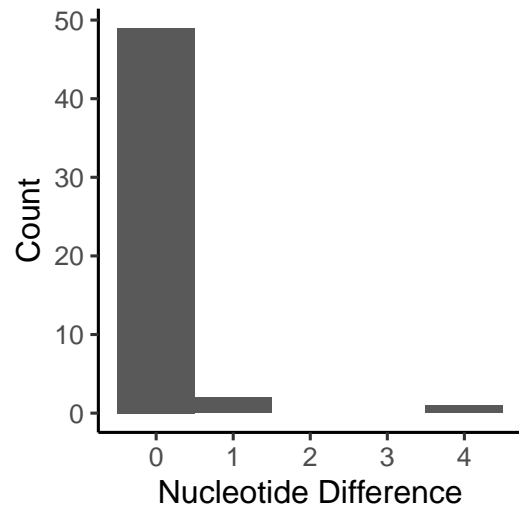
IGHV2–70*15

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



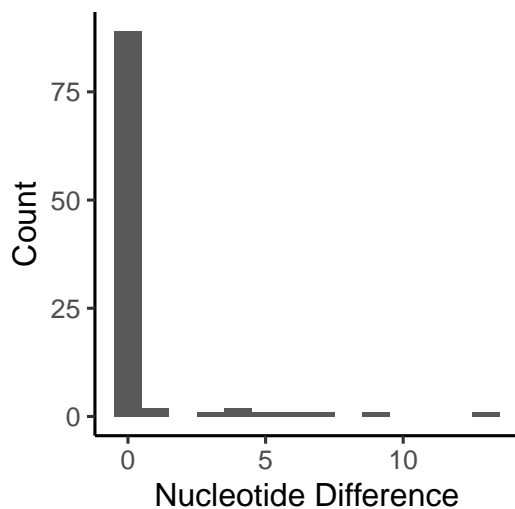
IGHV3–11*06

52 sequences assigned
49 (94.2%) exact matches, in which:
49 unique CDR3
6 unique J



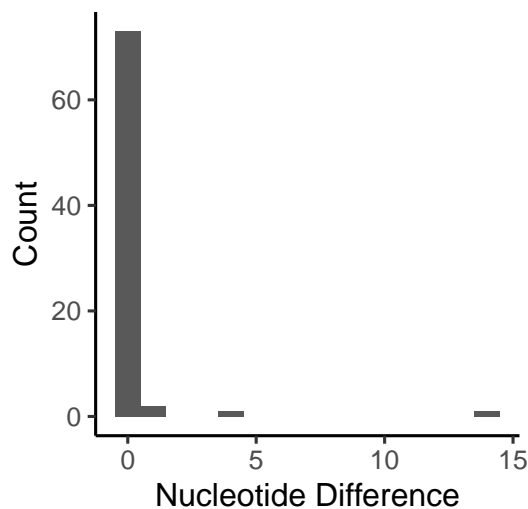
IGHV2–5*02

99 sequences assigned
89 (89.9%) exact matches, in which:
89 unique CDR3
6 unique J



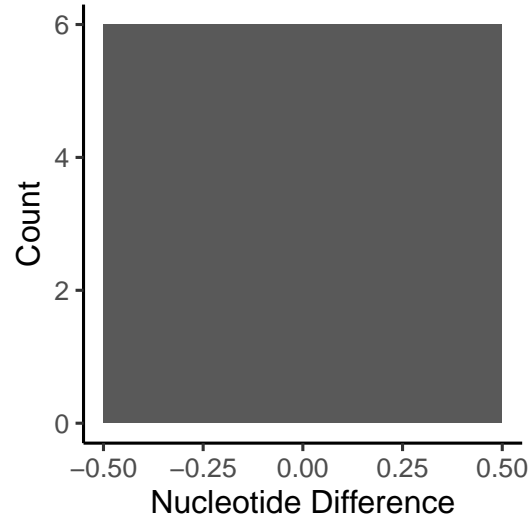
IGHV3–7*03

78 sequences assigned
73 (93.6%) exact matches, in which:
73 unique CDR3
5 unique J



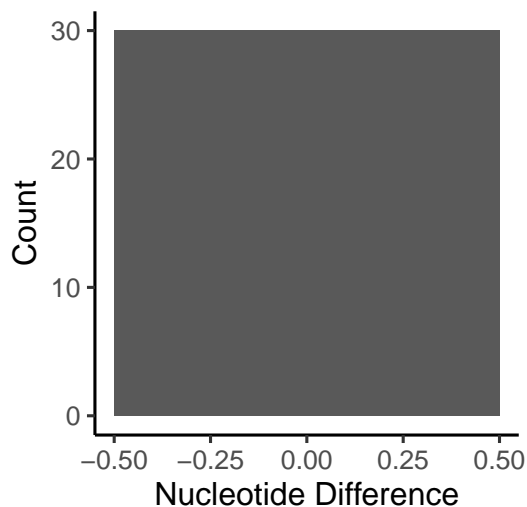
IGHV3–13*05

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



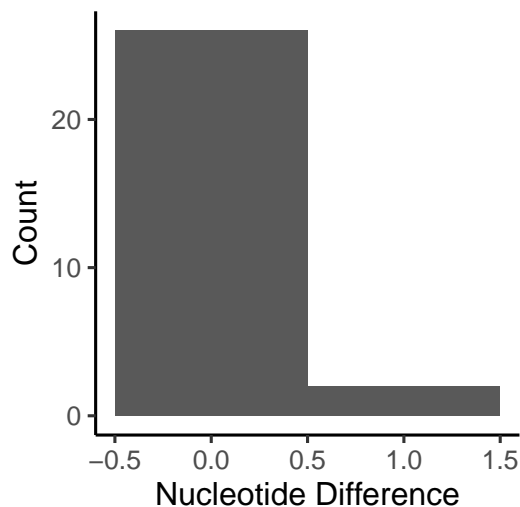
IGHV2–26*01

30 sequences assigned
30 (100%) exact matches, in which:
30 unique CDR3
6 unique J



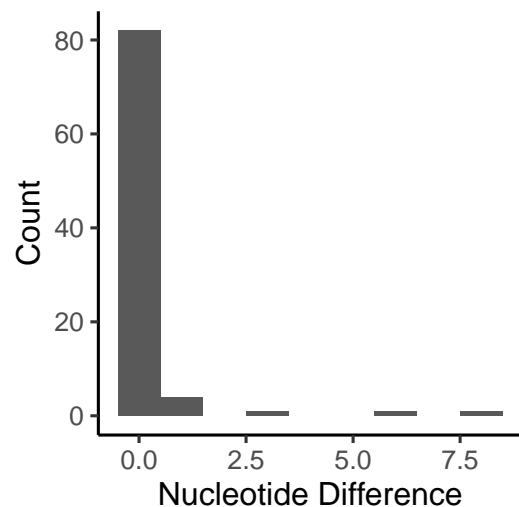
IGHV3–7*04

28 sequences assigned
26 (92.9%) exact matches, in which:
26 unique CDR3
5 unique J



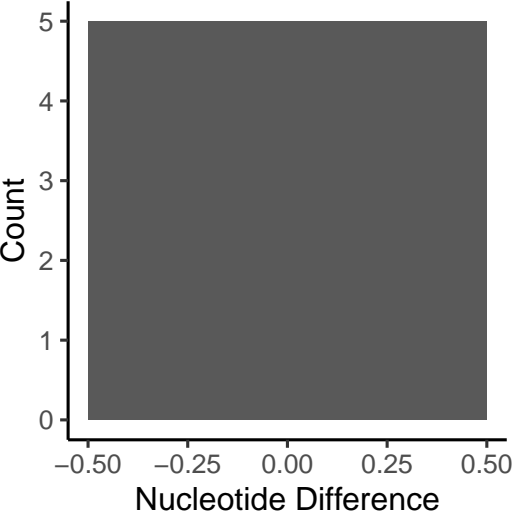
IGHV3–15*01

89 sequences assigned
82 (92.1%) exact matches, in which:
82 unique CDR3
6 unique J



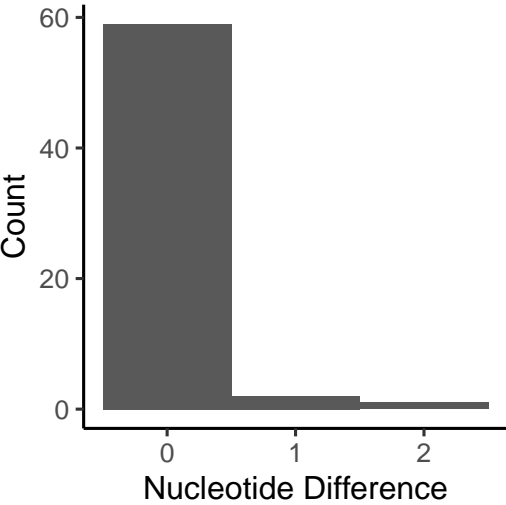
IGHV3-20*01

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



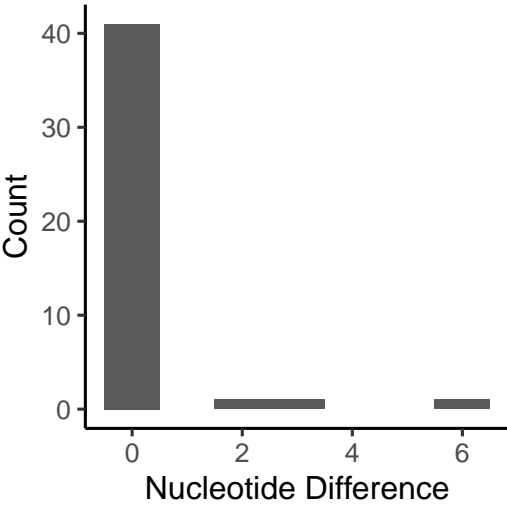
IGHV3-33*01

62 sequences assigned
59 (95.2%) exact matches, in which:
59 unique CDR3
6 unique J



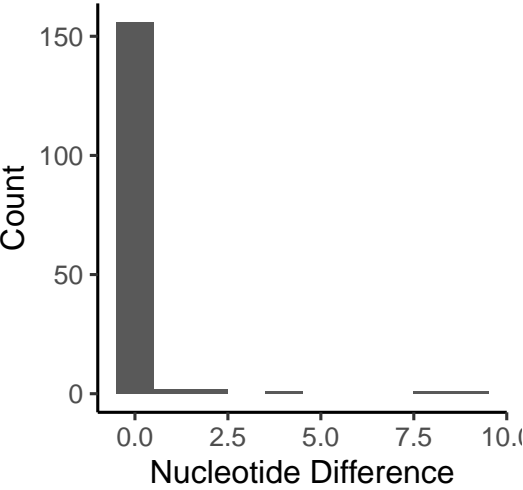
IGHV3-48*04

44 sequences assigned
41 (93.2%) exact matches, in which:
41 unique CDR3
5 unique J



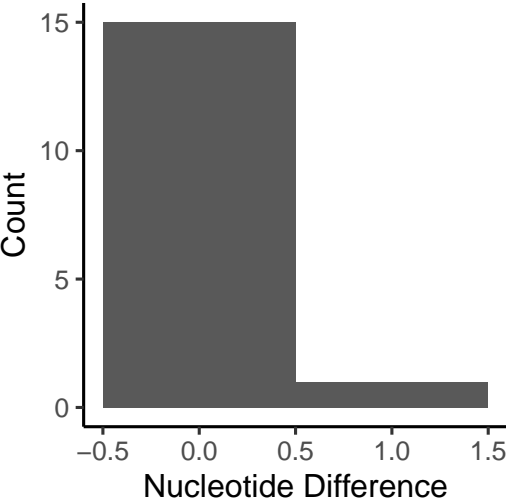
IGHV3-21*01

163 sequences assigned
156 (95.7%) exact matches, in which:
156 unique CDR3
6 unique J



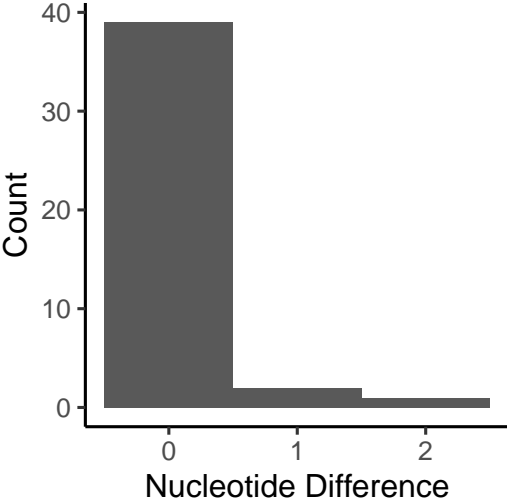
IGHV3-43*01

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



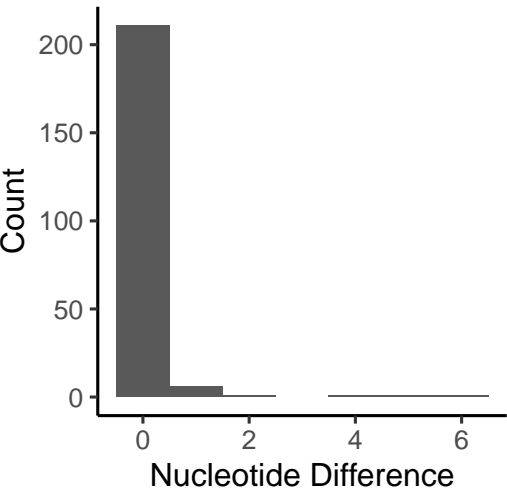
IGHV3-49*03

42 sequences assigned
39 (92.9%) exact matches, in which:
39 unique CDR3
5 unique J



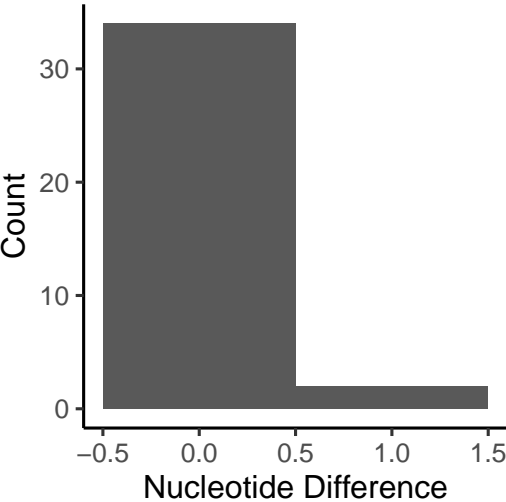
IGHV3-30-3*01

222 sequences assigned
211 (95%) exact matches, in which:
211 unique CDR3
6 unique J



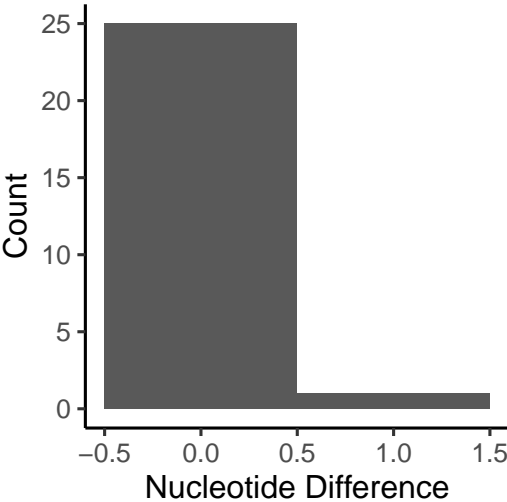
IGHV3-48*01

36 sequences assigned
34 (94.4%) exact matches, in which:
34 unique CDR3
5 unique J



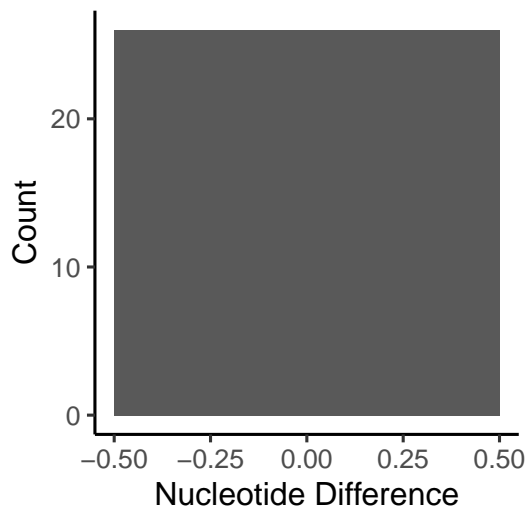
IGHV3-53*02

26 sequences assigned
25 (96.2%) exact matches, in which:
25 unique CDR3
5 unique J



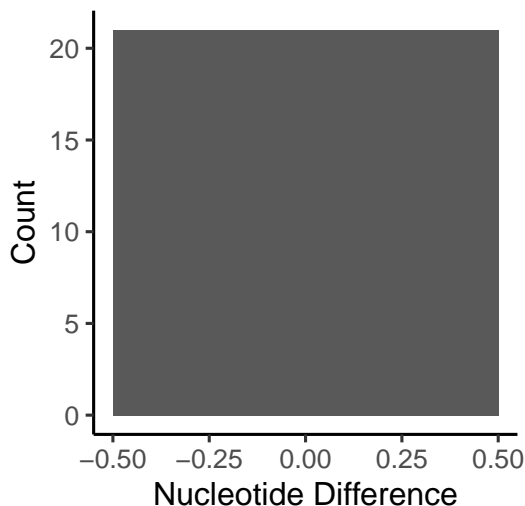
IGHV3-53*04

26 sequences assigned
26 (100%) exact matches, in which:
26 unique CDR3
4 unique J



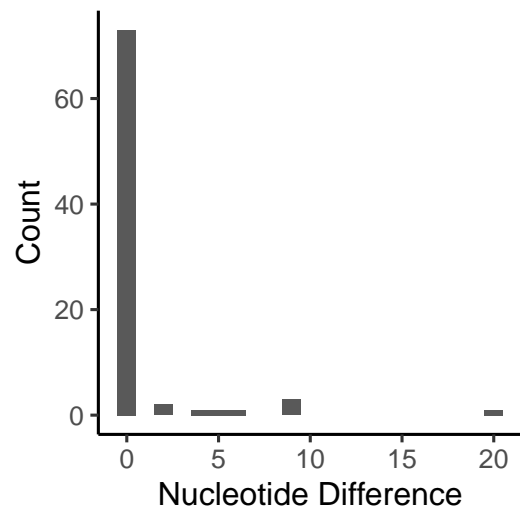
IGHV3-66*02

21 sequences assigned
21 (100%) exact matches, in which:
21 unique CDR3
5 unique J



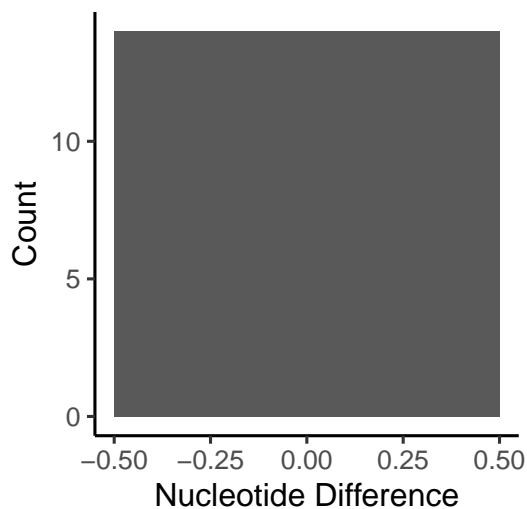
IGHV3-74*01

82 sequences assigned
73 (89%) exact matches, in which:
73 unique CDR3
6 unique J



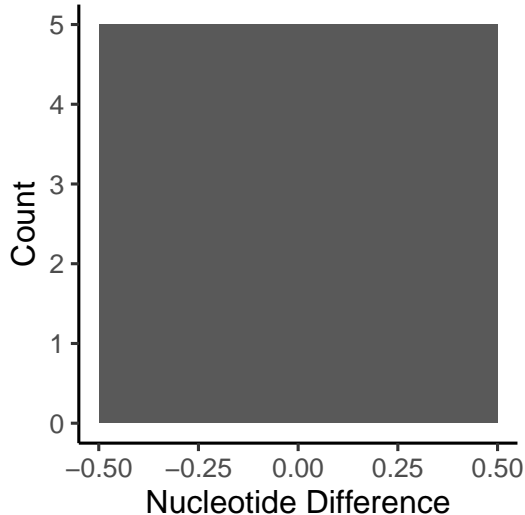
IGHV3-64*01

14 sequences assigned
14 (100%) exact matches, in which:
14 unique CDR3
6 unique J



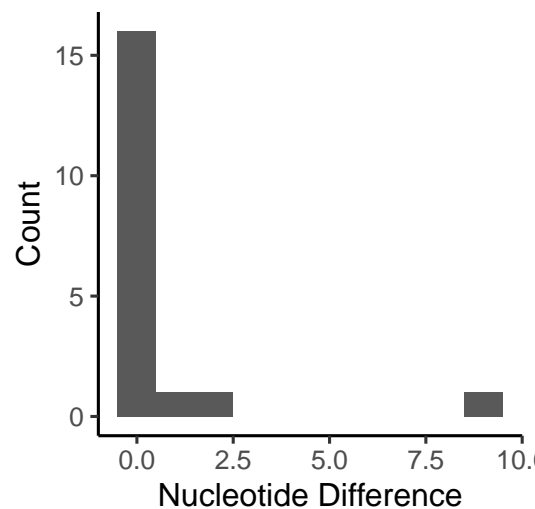
IGHV3-72*01

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



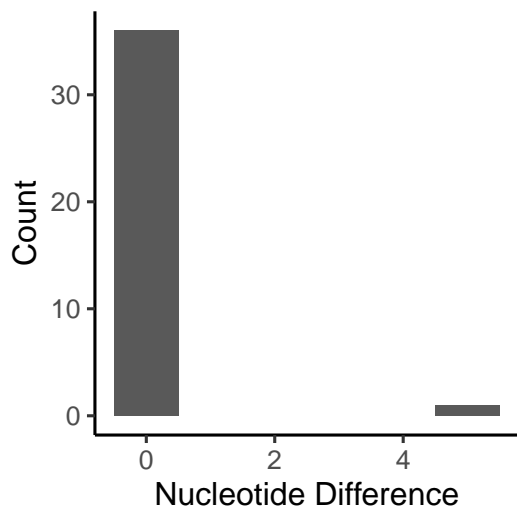
IGHV3-43D*03

19 sequences assigned
16 (84.2%) exact matches, in which:
16 unique CDR3
3 unique J



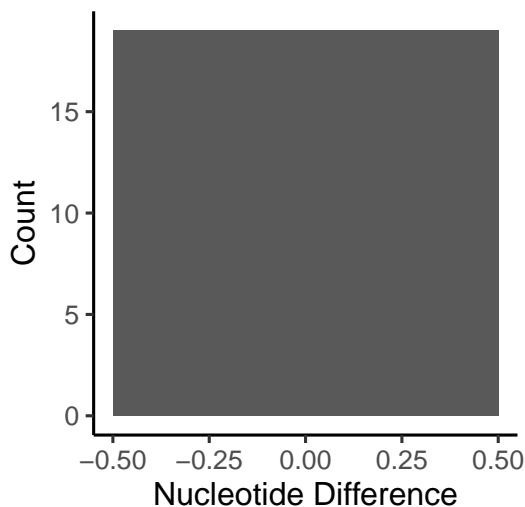
IGHV3-66*01

37 sequences assigned
36 (97.3%) exact matches, in which:
36 unique CDR3
5 unique J



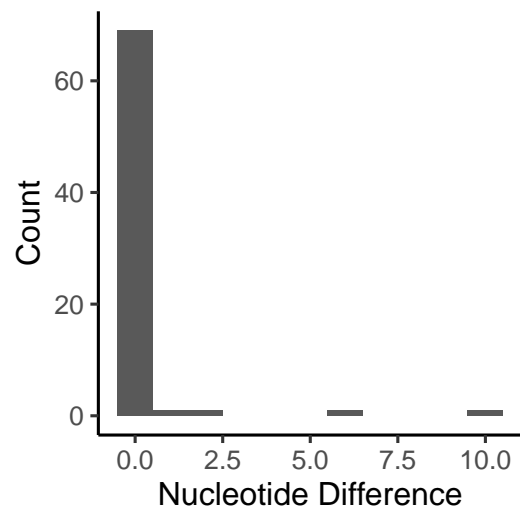
IGHV3-73*01

20 sequences assigned
19 (95%) exact matches, in which:
19 unique CDR3
5 unique J



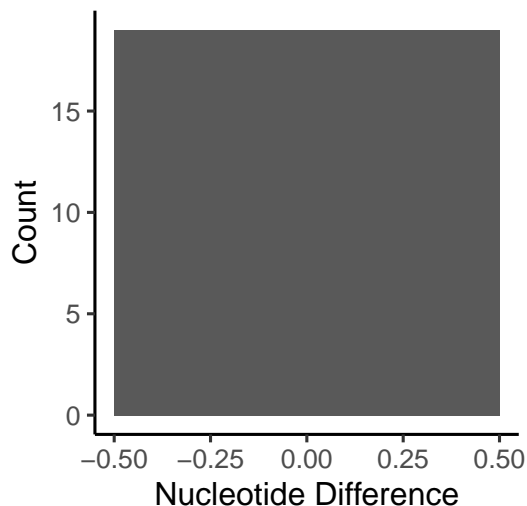
IGHV3-64D*06

73 sequences assigned
69 (94.5%) exact matches, in which:
69 unique CDR3
6 unique J



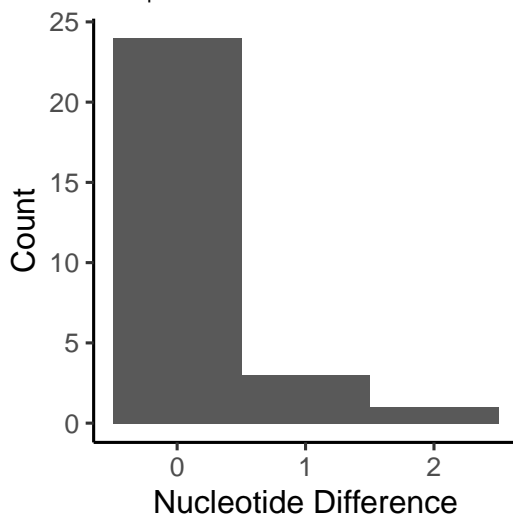
IGHV4-4*02

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



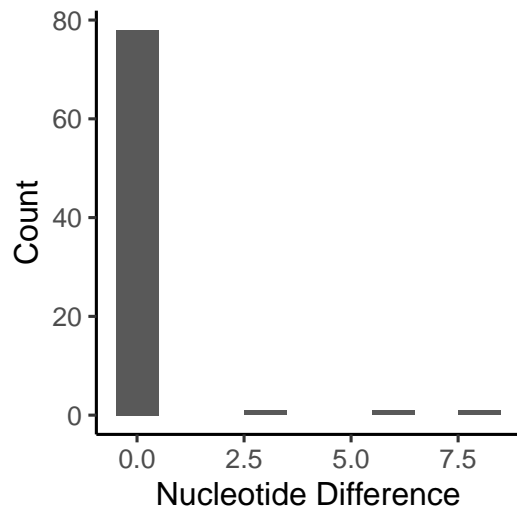
IGHV4-30-2*01

28 sequences assigned
24 (85.7%) exact matches, in which:
24 unique CDR3
6 unique J



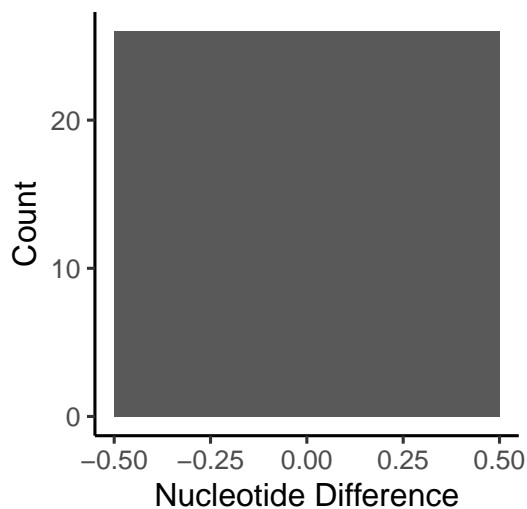
IGHV4-38-2*02

81 sequences assigned
78 (96.3%) exact matches, in which:
78 unique CDR3
4 unique J



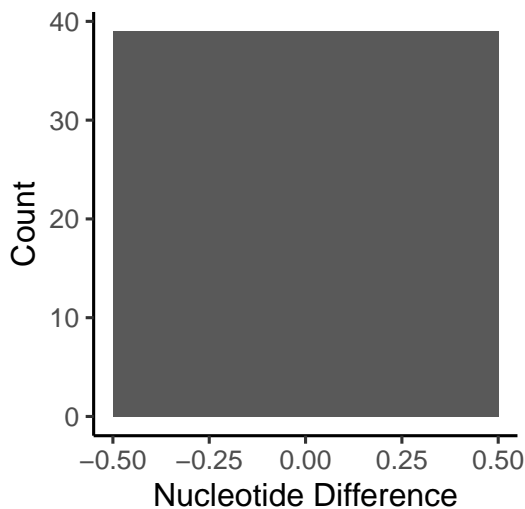
IGHV4-4*07

26 sequences assigned
26 (100%) exact matches, in which:
26 unique CDR3
5 unique J



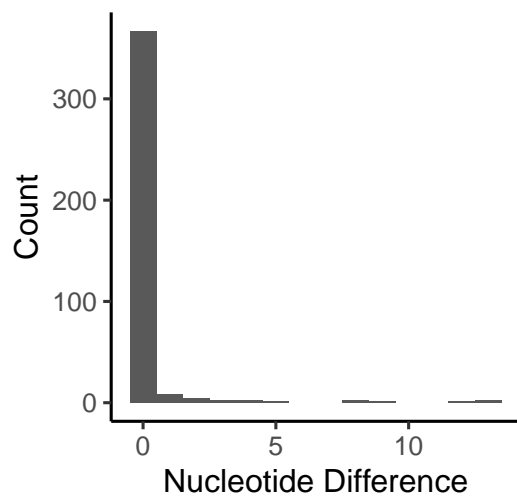
IGHV4-31*03

39 sequences assigned
39 (100%) exact matches, in which:
39 unique CDR3
5 unique J



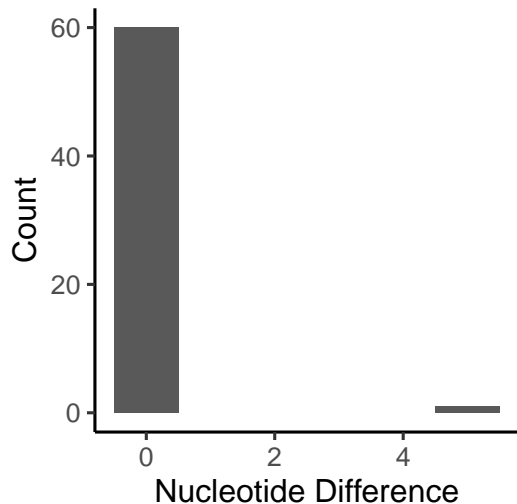
IGHV4-39*07

391 sequences assigned
367 (93.9%) exact matches, in which:
367 unique CDR3
7 unique J



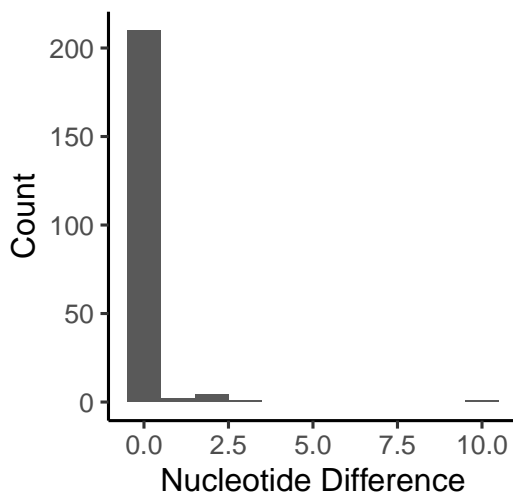
IGHV4-30-4*01

61 sequences assigned
60 (98.4%) exact matches, in which:
60 unique CDR3
6 unique J



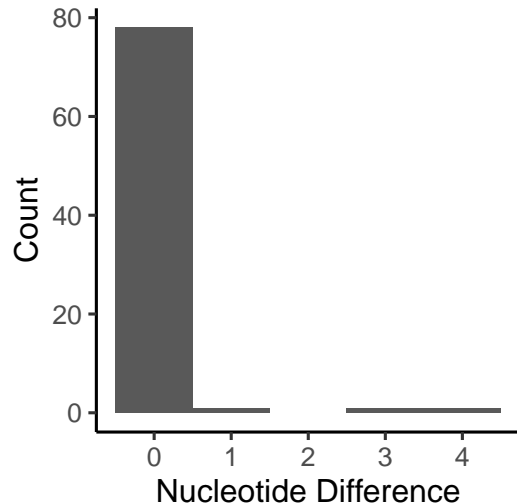
IGHV4-34*01

218 sequences assigned
210 (96.3%) exact matches, in which:
210 unique CDR3
7 unique J



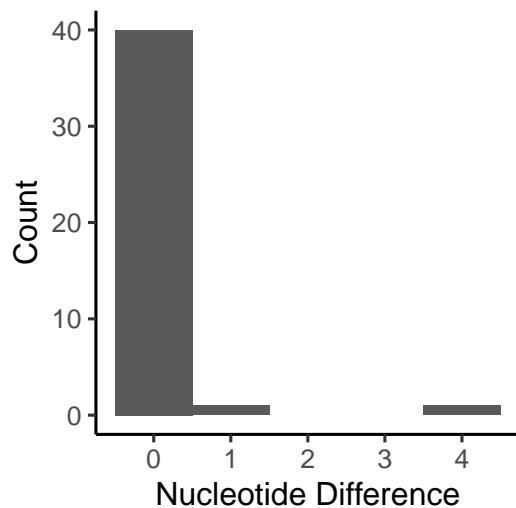
IGHV4-59*01

81 sequences assigned
78 (96.3%) exact matches, in which:
78 unique CDR3
7 unique J



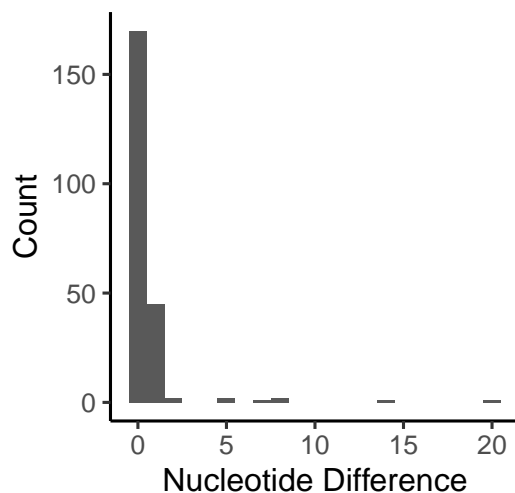
IGHV4–59*08

42 sequences assigned
40 (95.2%) exact matches, in which:
40 unique CDR3
6 unique J



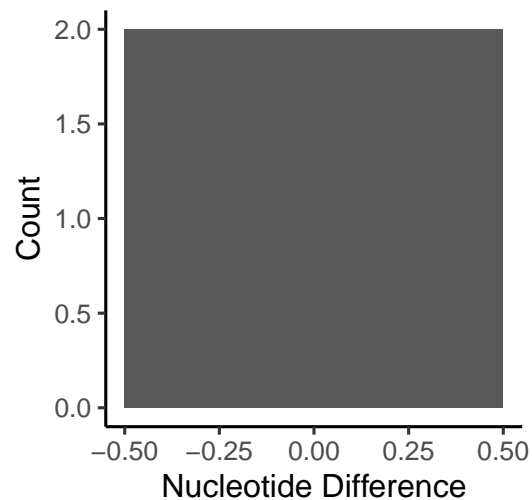
IGHV5–51*01

224 sequences assigned
170 (75.9%) exact matches, in which:
170 unique CDR3
6 unique J



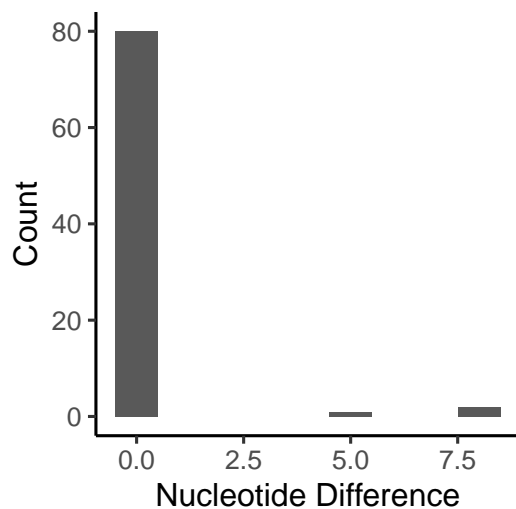
IGHV7–4–1*01

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



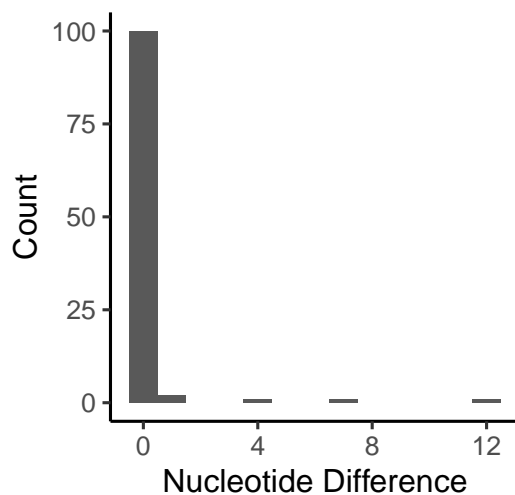
IGHV4–61*02

83 sequences assigned
80 (96.4%) exact matches, in which:
80 unique CDR3
5 unique J



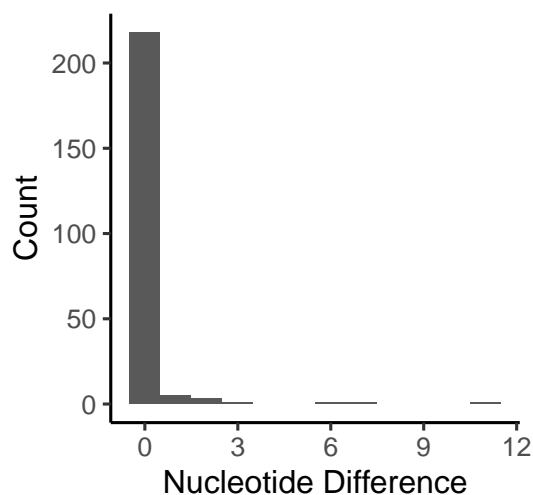
IGHV5–51*03

106 sequences assigned
100 (94.3%) exact matches, in which:
100 unique CDR3
5 unique J



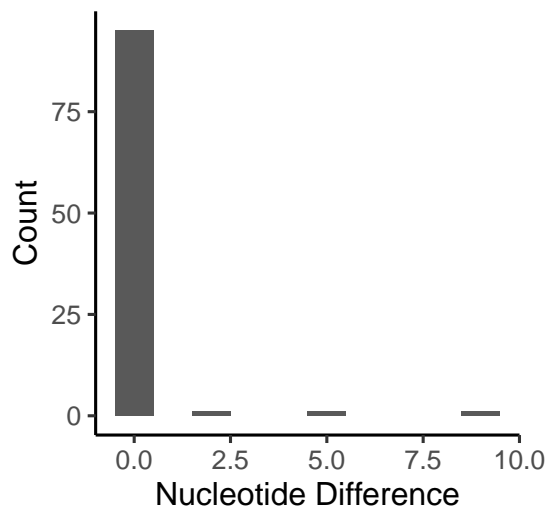
IGHV5–10–1*03

230 sequences assigned
218 (94.8%) exact matches, in which:
218 unique CDR3
6 unique J

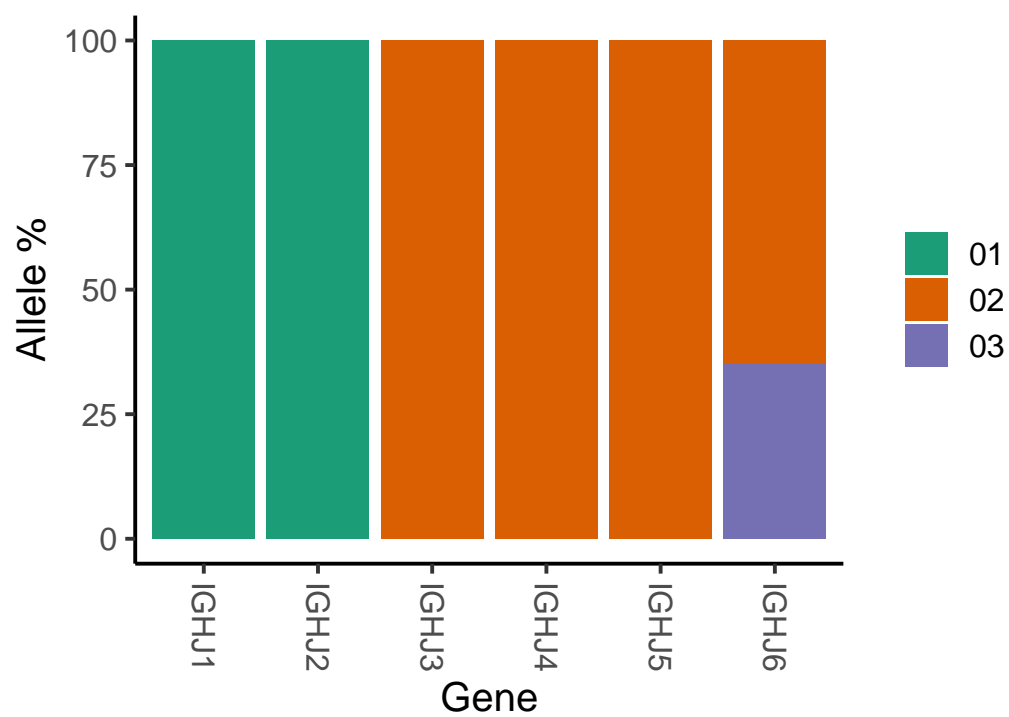


IGHV6–1*01

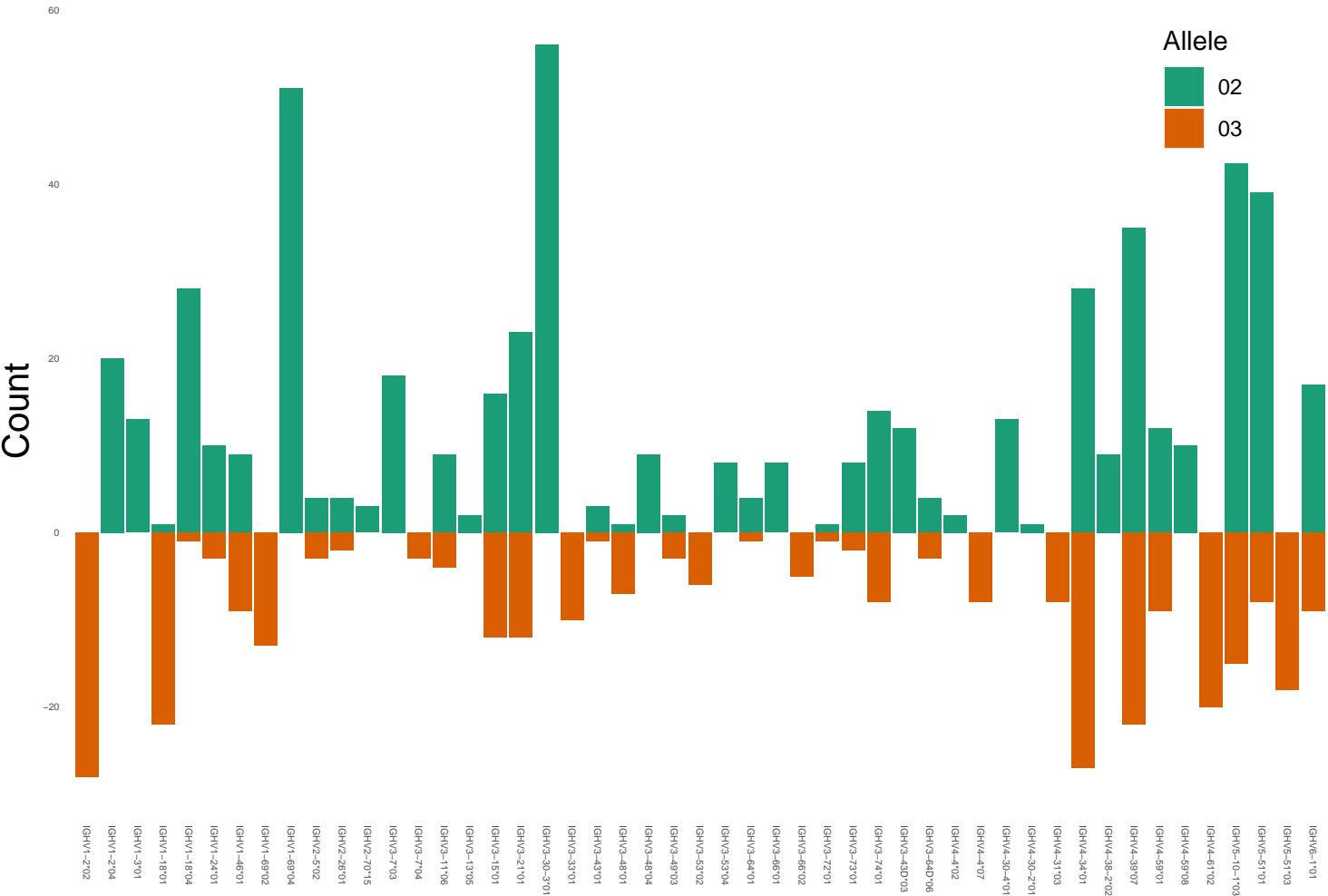
98 sequences assigned
95 (96.9%) exact matches, in which:
95 unique CDR3
6 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]