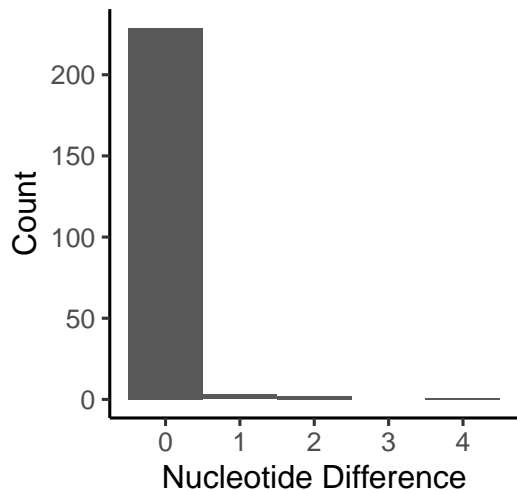


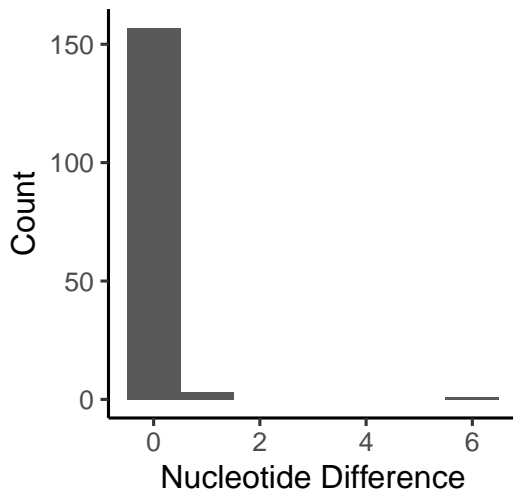
IGHV1-2*04

235 sequences assigned
229 (97.4%) exact matches, in which:
229 unique CDR3
6 unique J



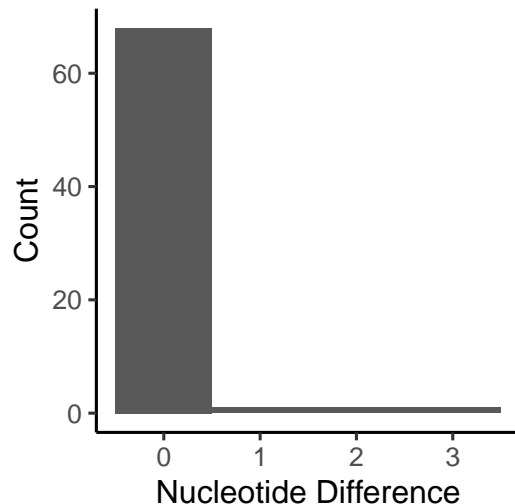
IGHV1-24*01

161 sequences assigned
157 (97.5%) exact matches, in which:
157 unique CDR3
7 unique J



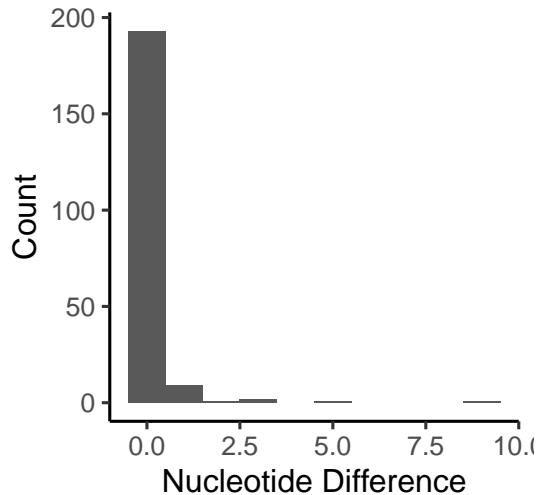
IGHV1-46*03

71 sequences assigned
68 (95.8%) exact matches, in which:
68 unique CDR3
5 unique J



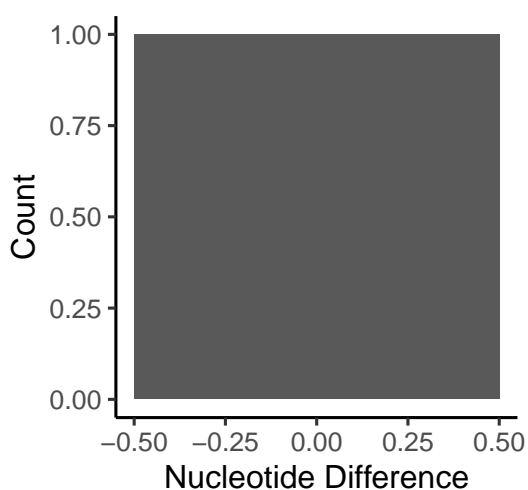
IGHV1-3*01

207 sequences assigned
193 (93.2%) exact matches, in which:
193 unique CDR3
7 unique J



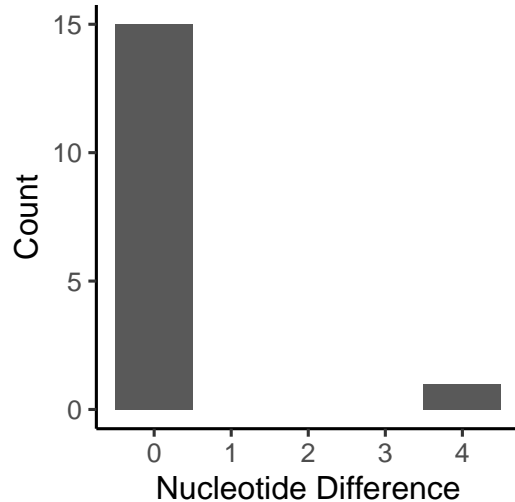
IGHV1-38-4*01

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



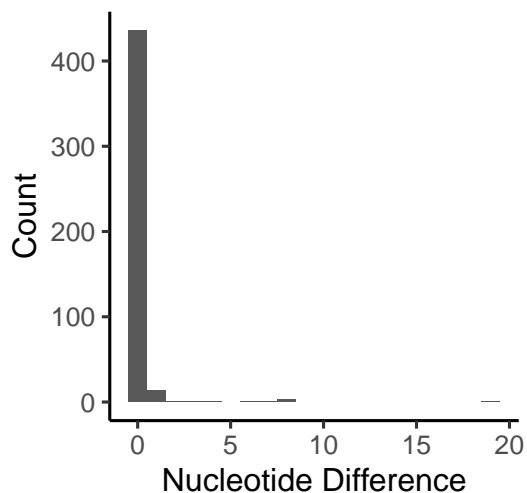
IGHV1-58*02

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



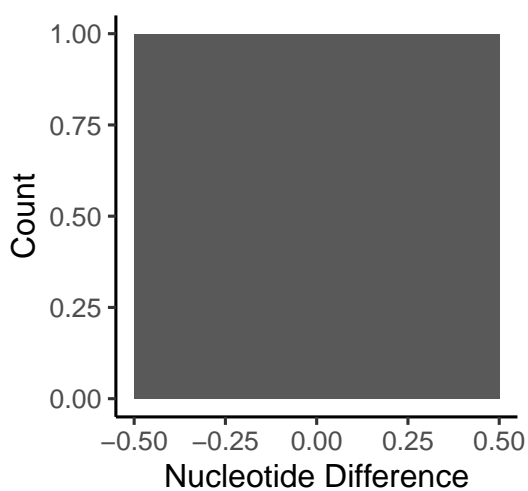
IGHV1-18*04

459 sequences assigned
436 (95%) exact matches, in which:
436 unique CDR3
7 unique J



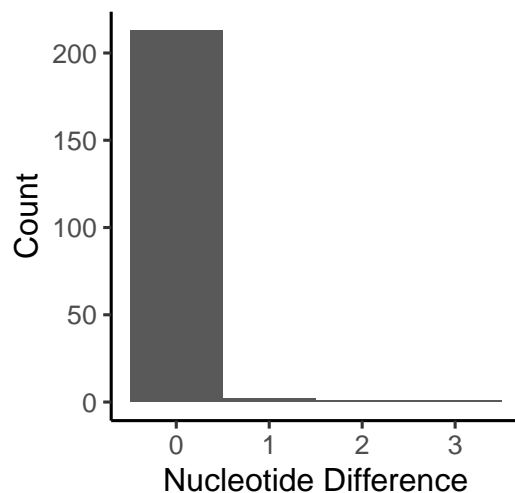
IGHV1-45*02

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



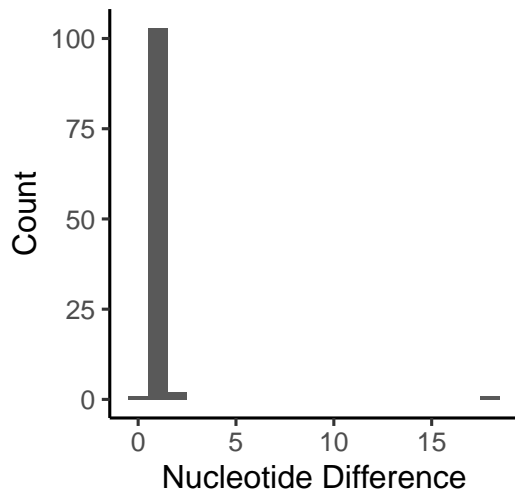
IGHV1-69*02

217 sequences assigned
213 (98.2%) exact matches, in which:
213 unique CDR3
7 unique J



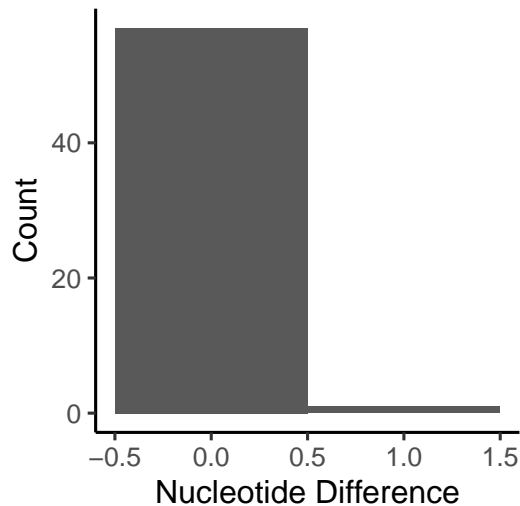
IGHV1–69*08

107 sequences assigned
1 (0.9%) exact matches, in which:
1 unique CDR3
1 unique J



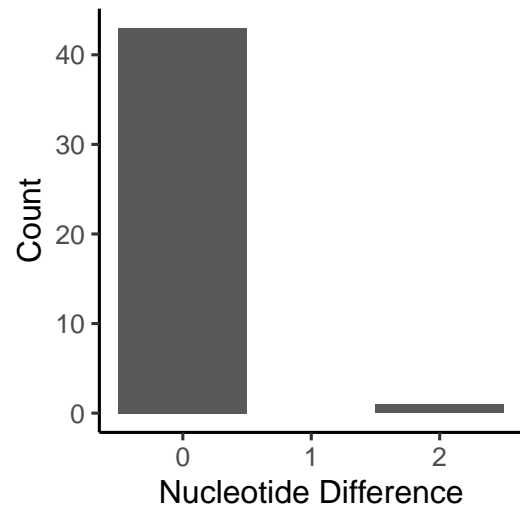
IGHV2–26*01

58 sequences assigned
57 (98.3%) exact matches, in which:
57 unique CDR3
6 unique J



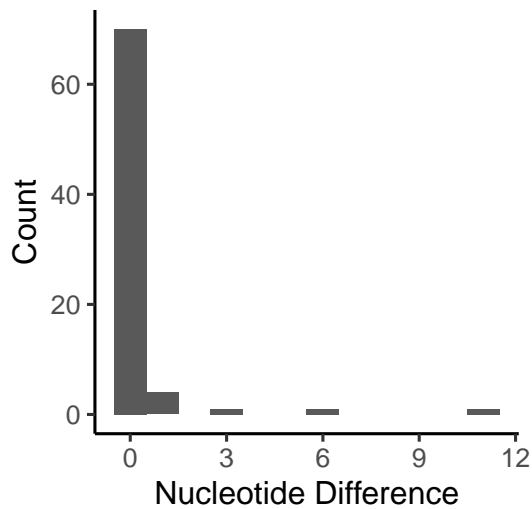
IGHV3–7*05

44 sequences assigned
43 (97.7%) exact matches, in which:
43 unique CDR3
5 unique J



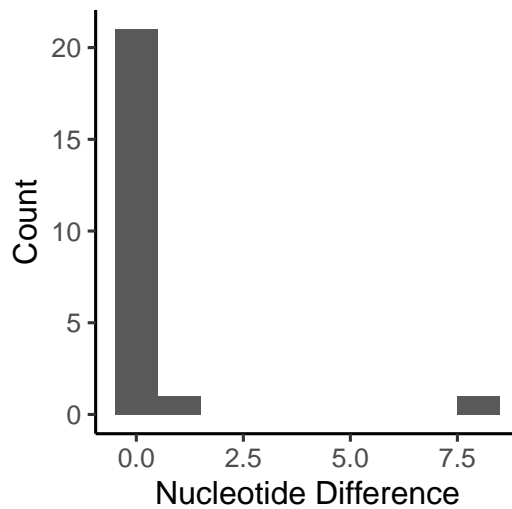
IGHV2–5*01

77 sequences assigned
70 (90.9%) exact matches, in which:
70 unique CDR3
6 unique J



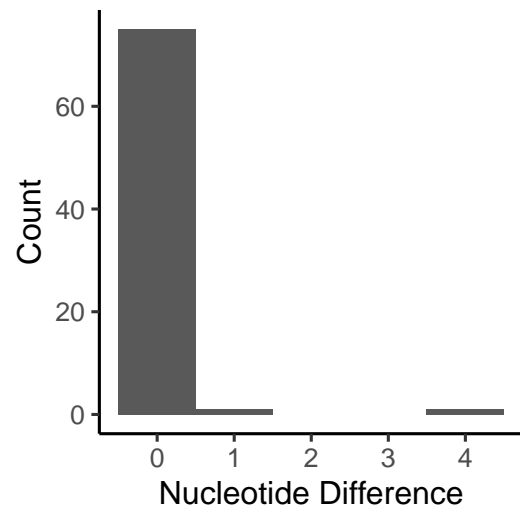
IGHV2–70*15

23 sequences assigned
21 (91.3%) exact matches, in which:
21 unique CDR3
5 unique J



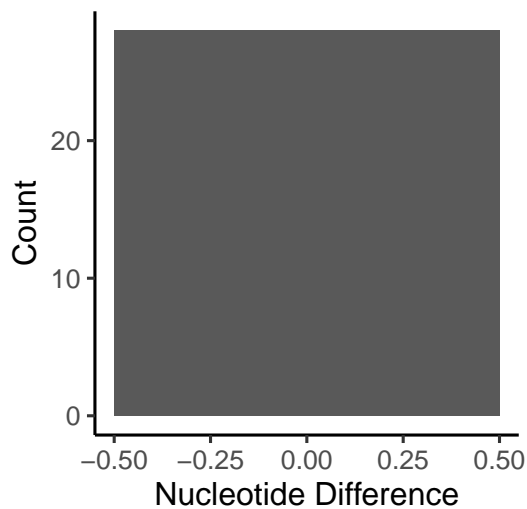
IGHV3–11*06

77 sequences assigned
75 (97.4%) exact matches, in which:
75 unique CDR3
7 unique J



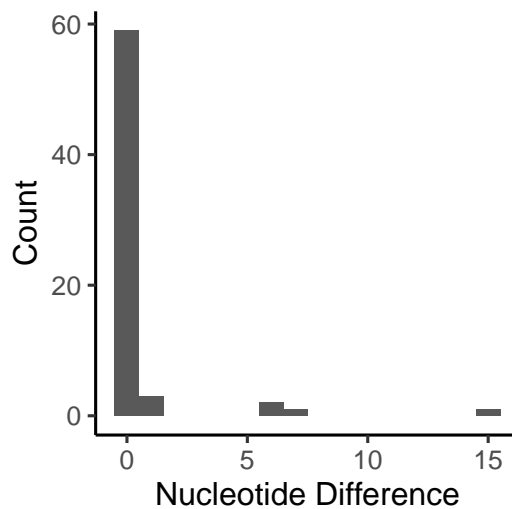
IGHV2–5*02

28 sequences assigned
28 (100%) exact matches, in which:
28 unique CDR3
4 unique J



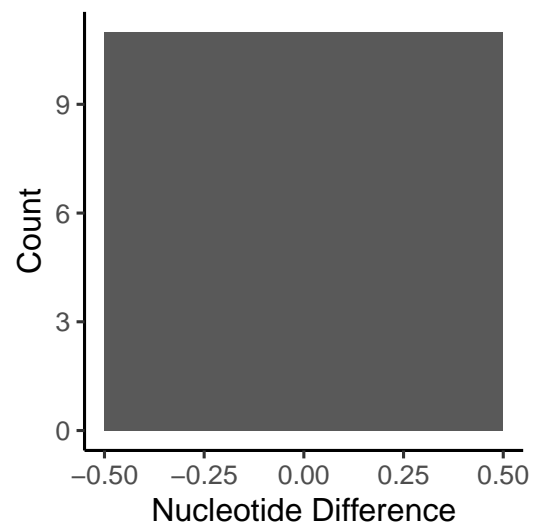
IGHV3–7*03

66 sequences assigned
59 (89.4%) exact matches, in which:
59 unique CDR3
4 unique J



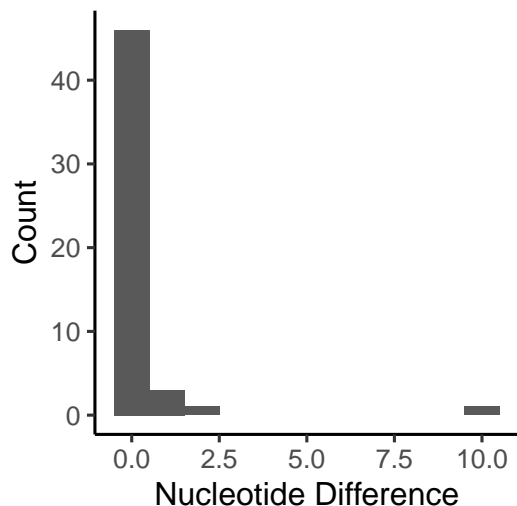
IGHV3–13*05

11 sequences assigned
11 (100%) exact matches, in which:
11 unique CDR3
5 unique J



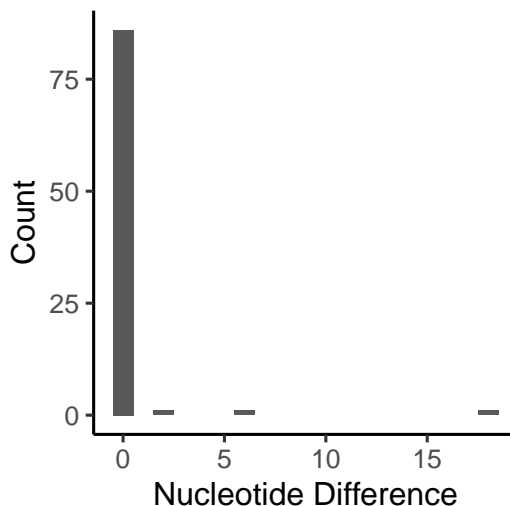
IGHV3-15*01

51 sequences assigned
46 (90.2%) exact matches, in which:
46 unique CDR3
4 unique J



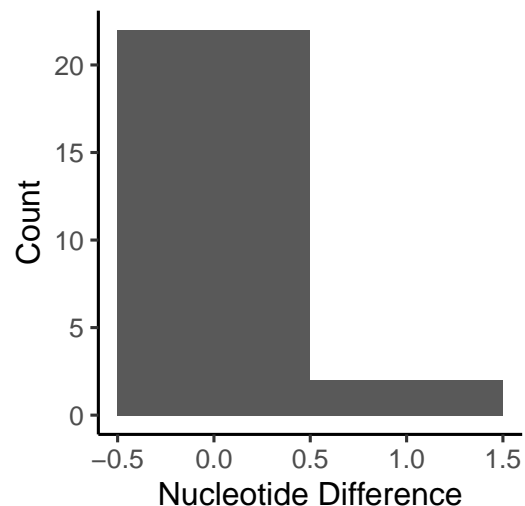
IGHV3-23*04

89 sequences assigned
86 (96.6%) exact matches, in which:
86 unique CDR3
6 unique J



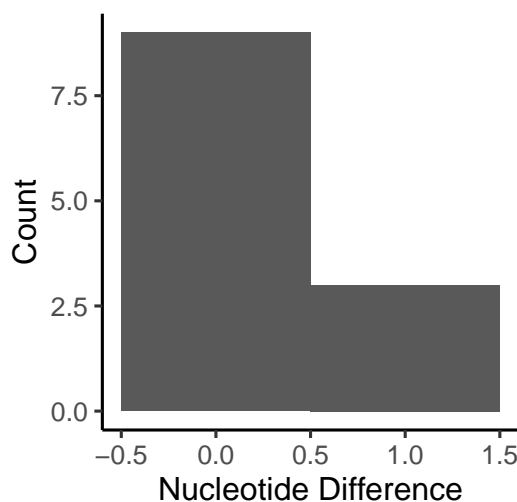
IGHV3-43*01

24 sequences assigned
22 (91.7%) exact matches, in which:
22 unique CDR3
4 unique J



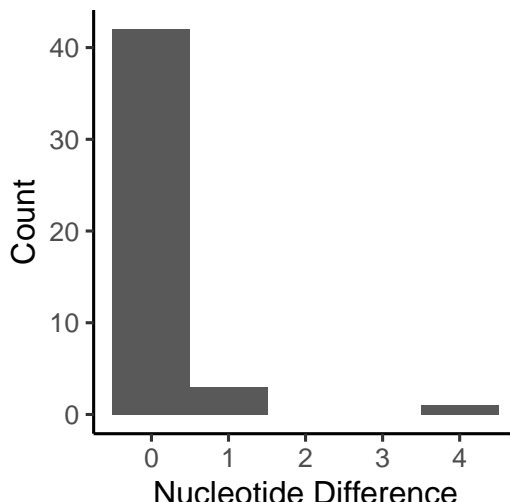
IGHV3-20*01

12 sequences assigned
9 (75%) exact matches, in which:
9 unique CDR3
4 unique J



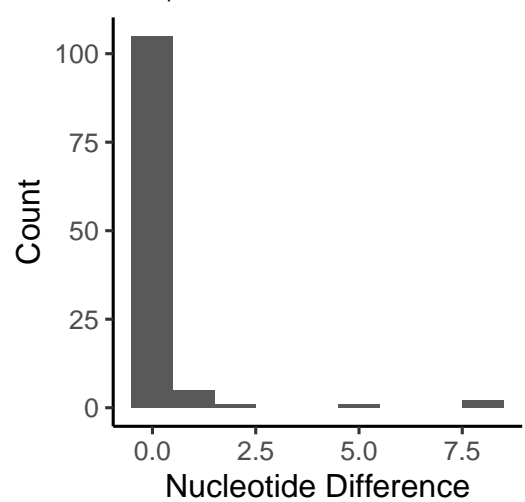
IGHV3-30-5*01

46 sequences assigned
42 (91.3%) exact matches, in which:
42 unique CDR3
6 unique J



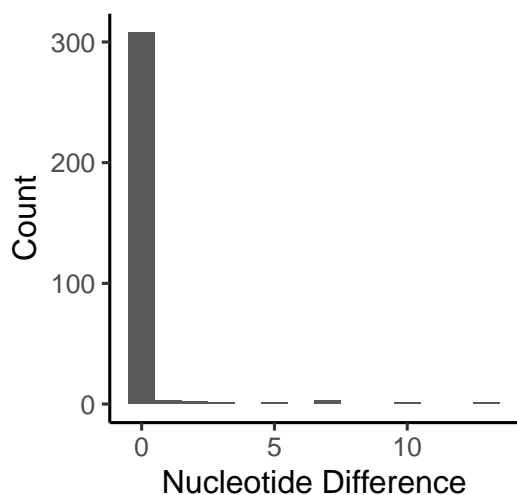
IGHV3-48*01

114 sequences assigned
105 (92.1%) exact matches, in which:
105 unique CDR3
5 unique J



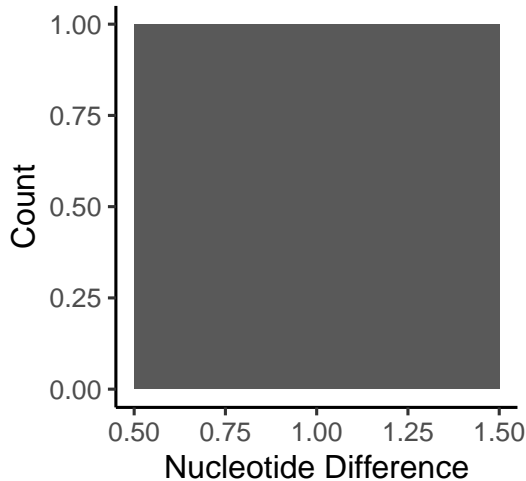
IGHV3-21*01

320 sequences assigned
308 (96.2%) exact matches, in which:
307 unique CDR3
7 unique J



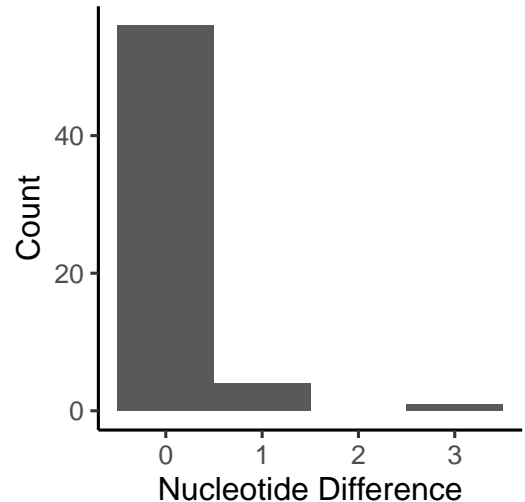
IGHV3-38-3*01

1 sequences assigned
No exact matches.



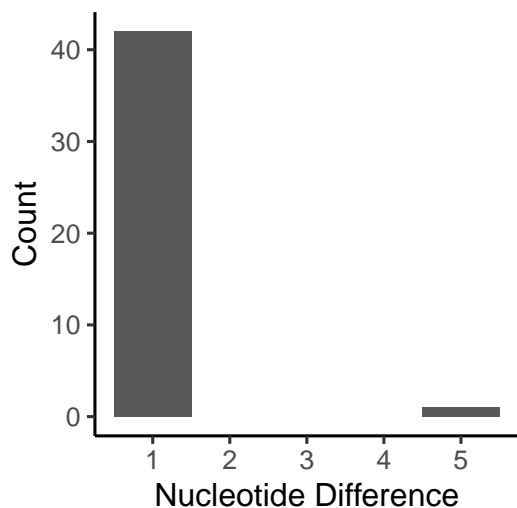
IGHV3-48*02

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



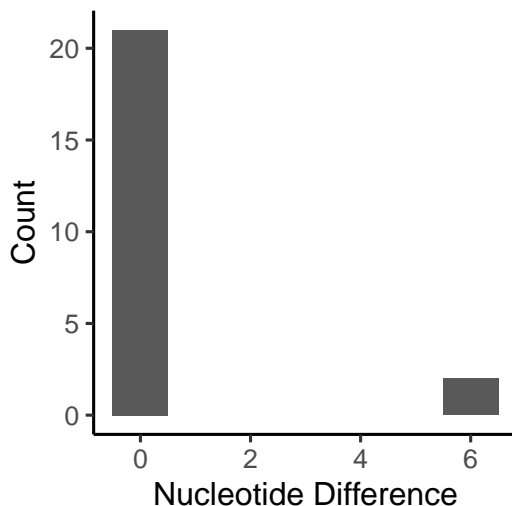
IGHV3-49*03

43 sequences assigned
No exact matches.



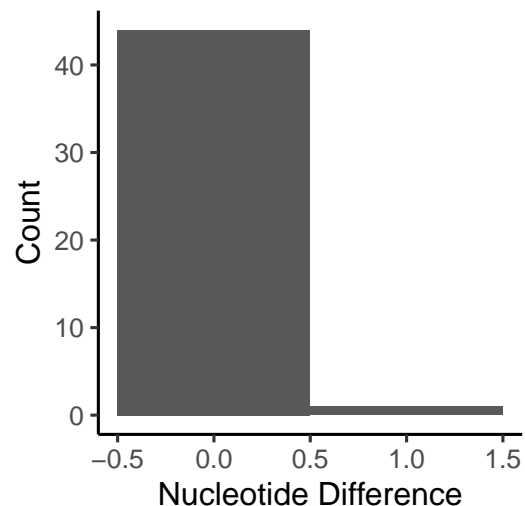
IGHV3-53*04

23 sequences assigned
21 (91.3%) exact matches, in which:
21 unique CDR3
4 unique J



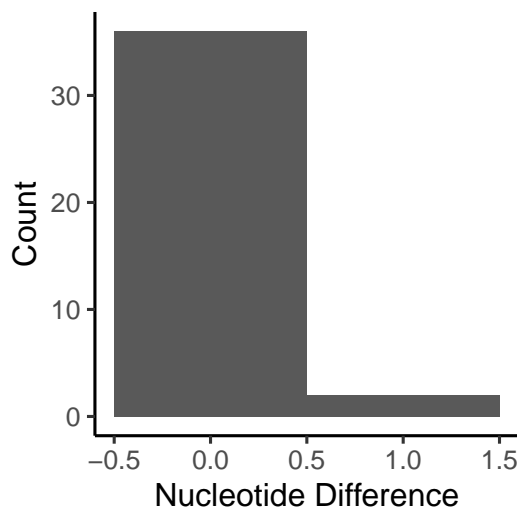
IGHV3-66*02

45 sequences assigned
44 (97.8%) exact matches, in which:
44 unique CDR3
6 unique J



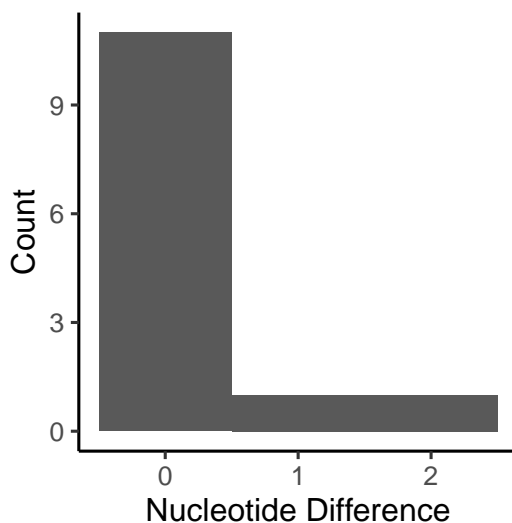
IGHV3-49*04

38 sequences assigned
36 (94.7%) exact matches, in which:
36 unique CDR3
4 unique J



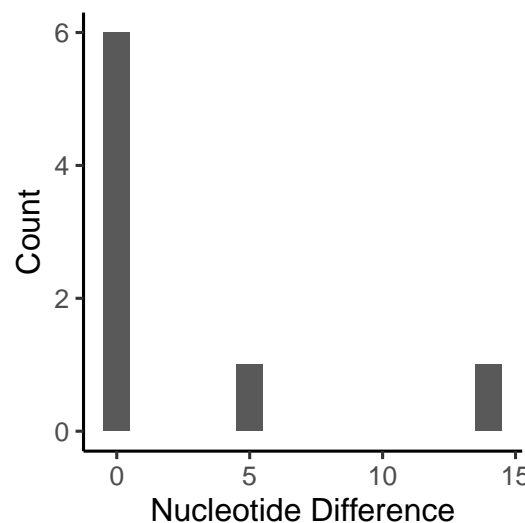
IGHV3-64*01

13 sequences assigned
11 (84.6%) exact matches, in which:
11 unique CDR3
5 unique J



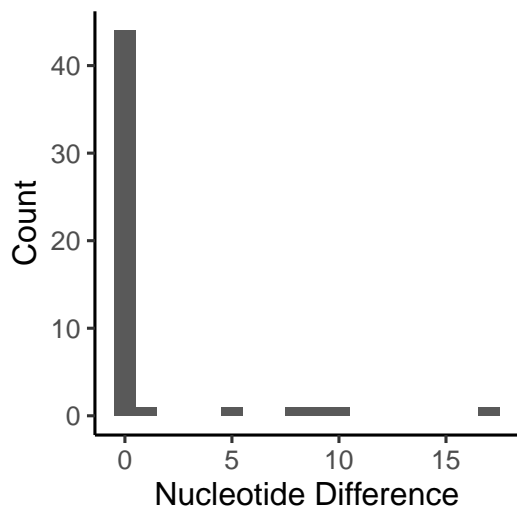
IGHV3-72*01

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



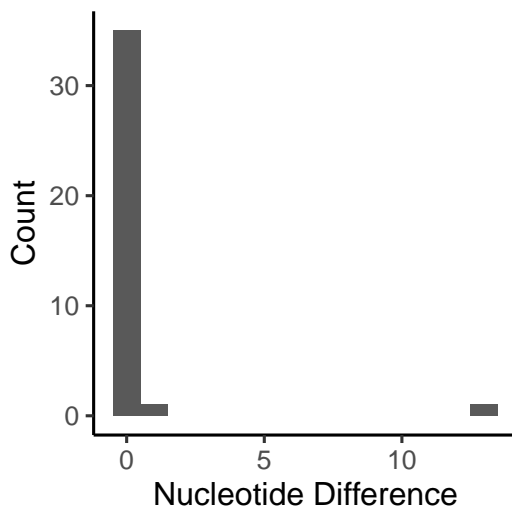
IGHV3-53*02

50 sequences assigned
44 (88%) exact matches, in which:
44 unique CDR3
5 unique J



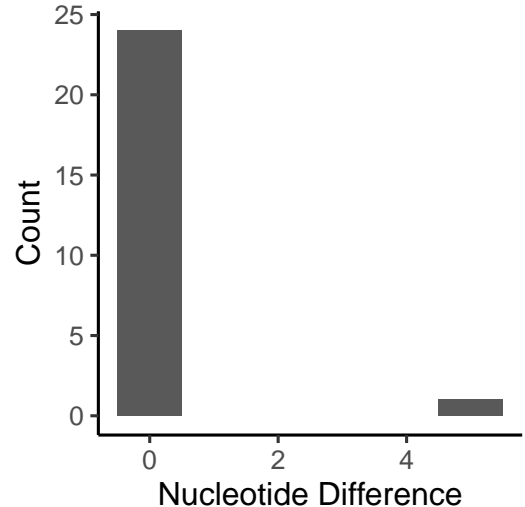
IGHV3-66*01

37 sequences assigned
35 (94.6%) exact matches, in which:
35 unique CDR3
4 unique J



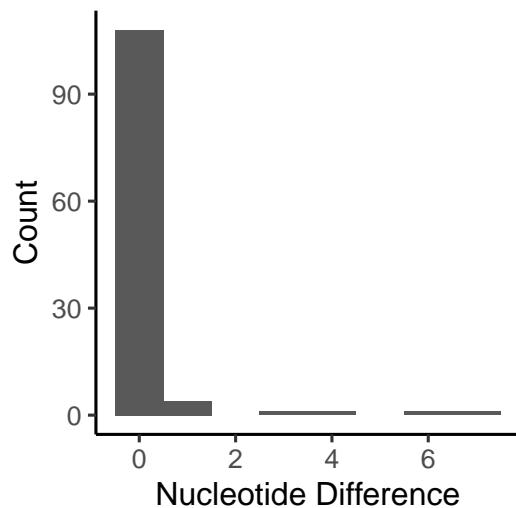
IGHV3-73*01

25 sequences assigned
24 (96%) exact matches, in which:
24 unique CDR3
5 unique J



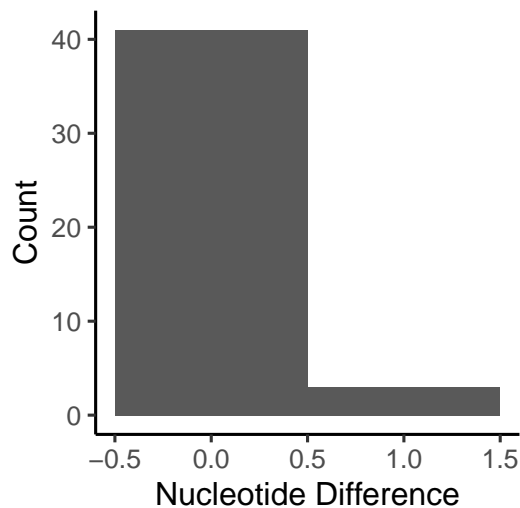
IGHV3-74*01

116 sequences assigned
108 (93.1%) exact matches, in which:
108 unique CDR3
6 unique J



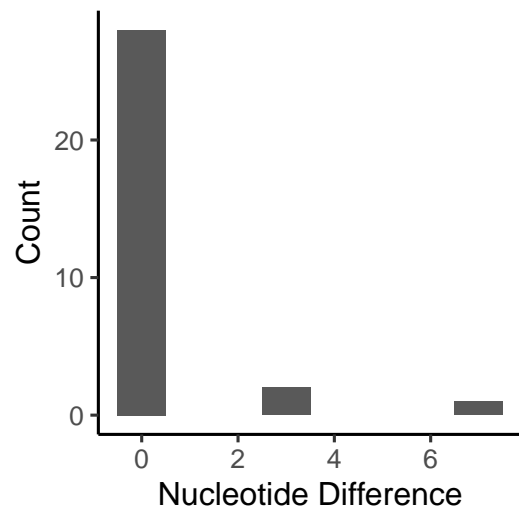
IGHV3-64D*09

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



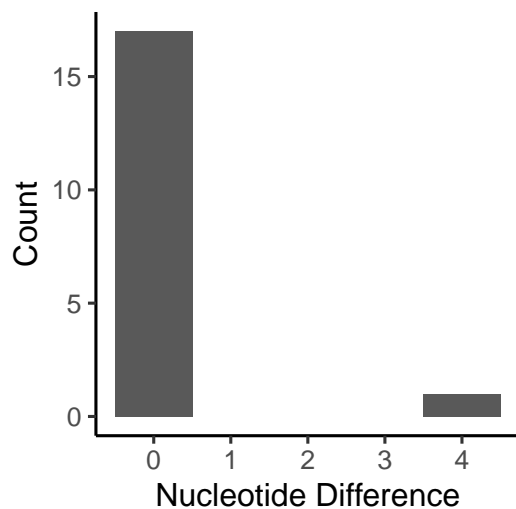
IGHV4-30-2*01

31 sequences assigned
28 (90.3%) exact matches, in which:
28 unique CDR3
4 unique J



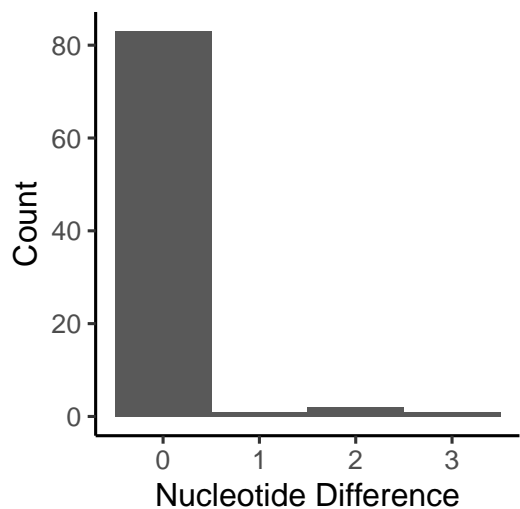
IGHV3-43D*03

18 sequences assigned
17 (94.4%) exact matches, in which:
17 unique CDR3
3 unique J



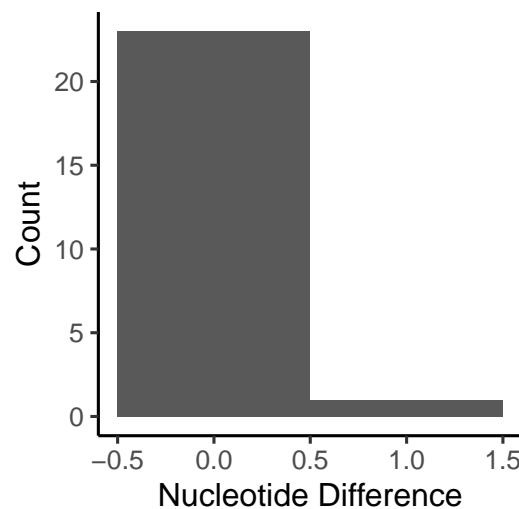
IGHV4-4*02

87 sequences assigned
83 (95.4%) exact matches, in which:
83 unique CDR3
6 unique J



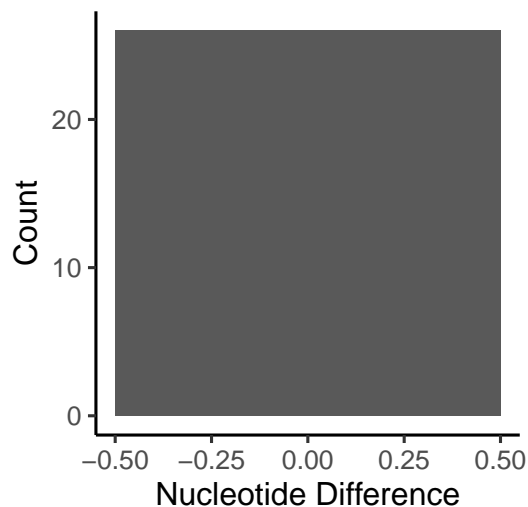
IGHV4-30-4*07

24 sequences assigned
23 (95.8%) exact matches, in which:
23 unique CDR3
5 unique J



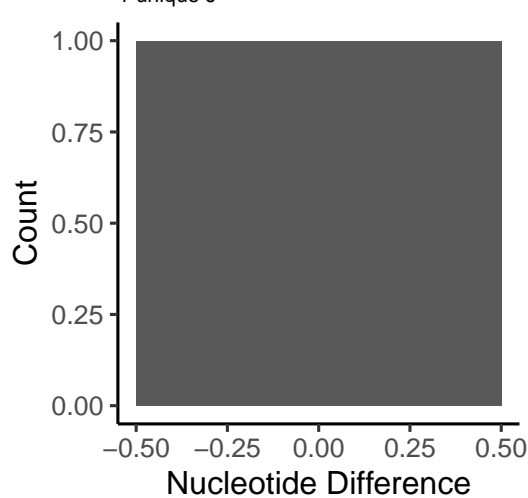
IGHV3-64D*06

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



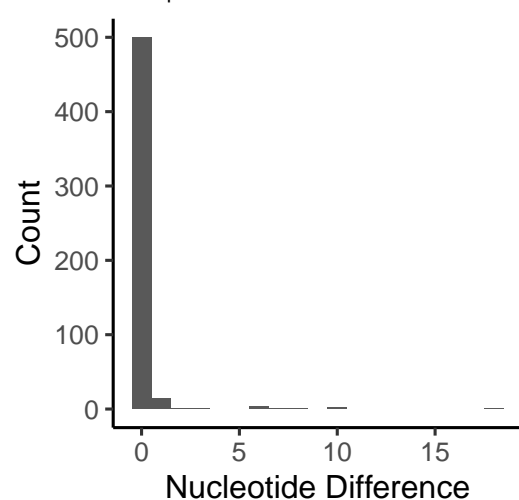
IGHV4-28*05

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



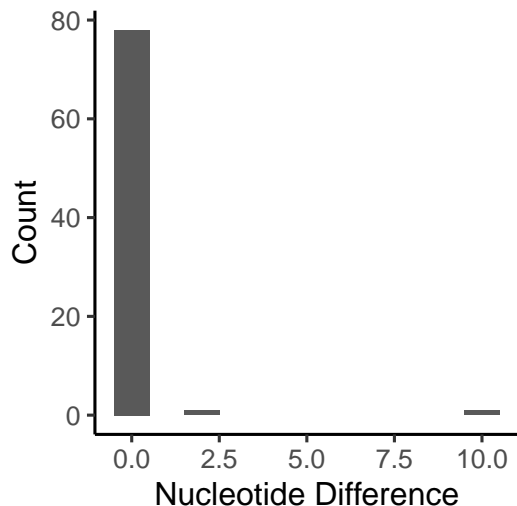
IGHV4-34*01

525 sequences assigned
500 (95.2%) exact matches, in which:
499 unique CDR3
7 unique J



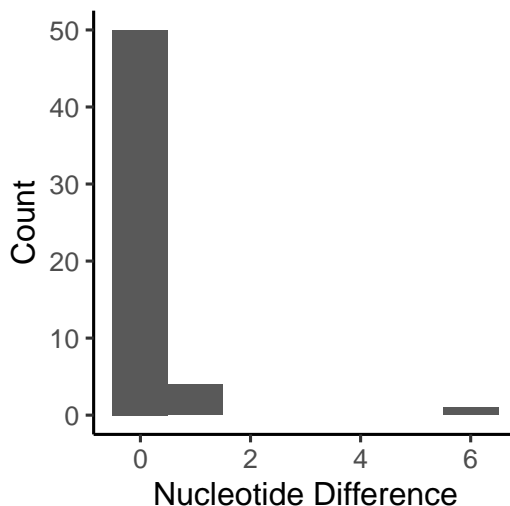
IGHV4-38-2*02

80 sequences assigned
78 (97.5%) exact matches, in which:
78 unique CDR3
6 unique J



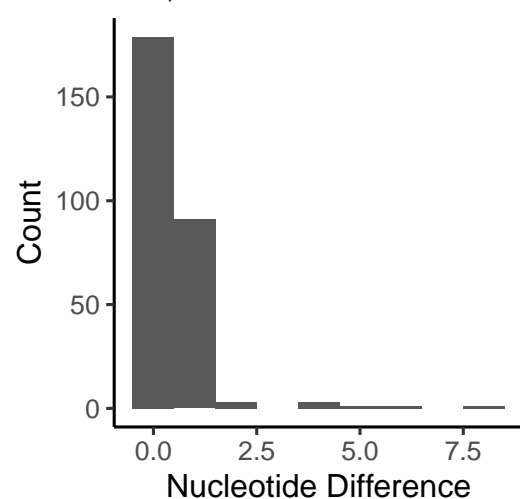
IGHV4-59*08

55 sequences assigned
50 (90.9%) exact matches, in which:
50 unique CDR3
5 unique J



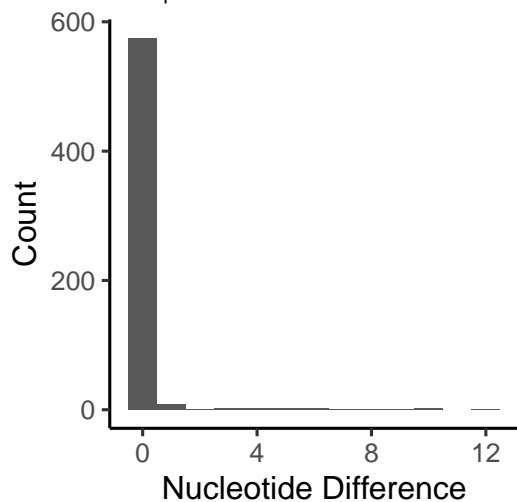
IGHV5-51*01

280 sequences assigned
179 (63.9%) exact matches, in which:
179 unique CDR3
5 unique J



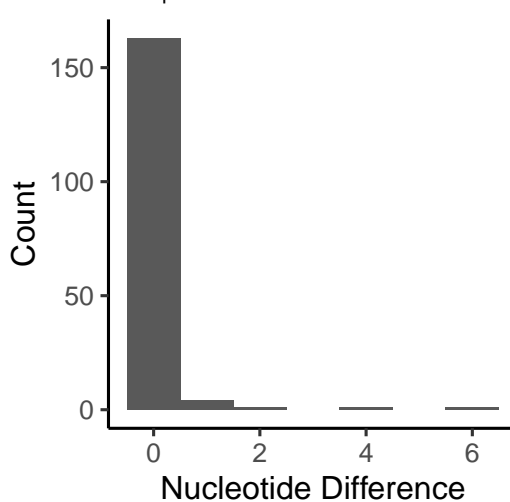
IGHV4-39*01

600 sequences assigned
575 (95.8%) exact matches, in which:
575 unique CDR3
7 unique J



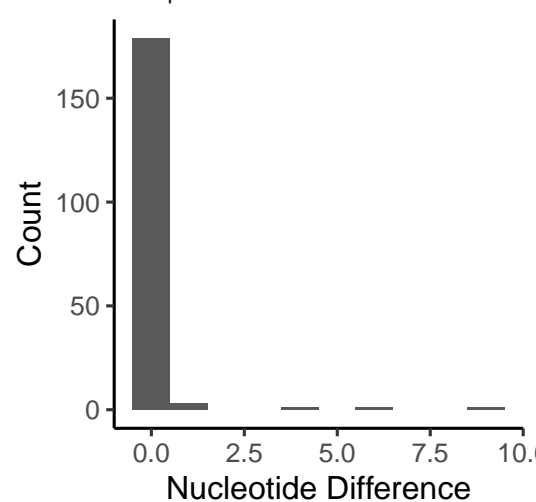
IGHV4-61*02

170 sequences assigned
163 (95.9%) exact matches, in which:
163 unique CDR3
7 unique J



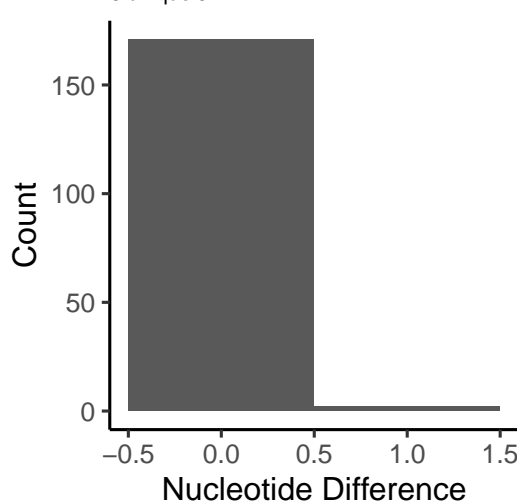
IGHV5-51*03

185 sequences assigned
179 (96.8%) exact matches, in which:
179 unique CDR3
7 unique J



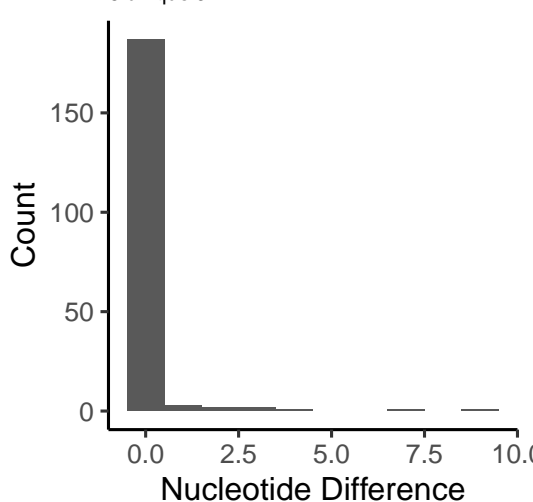
IGHV4-59*01

173 sequences assigned
171 (98.8%) exact matches, in which:
171 unique CDR3
6 unique J



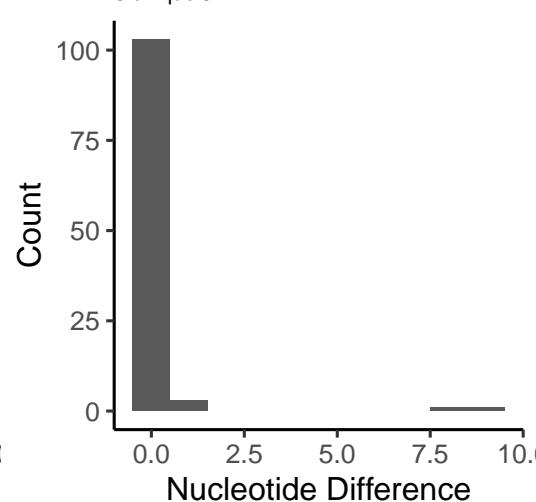
IGHV5-10-1*03

198 sequences assigned
187 (94.4%) exact matches, in which:
187 unique CDR3
6 unique J



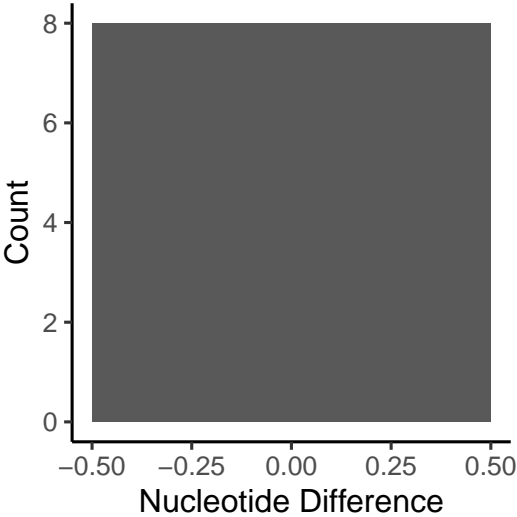
IGHV6-1*01

108 sequences assigned
103 (95.4%) exact matches, in which:
103 unique CDR3
6 unique J

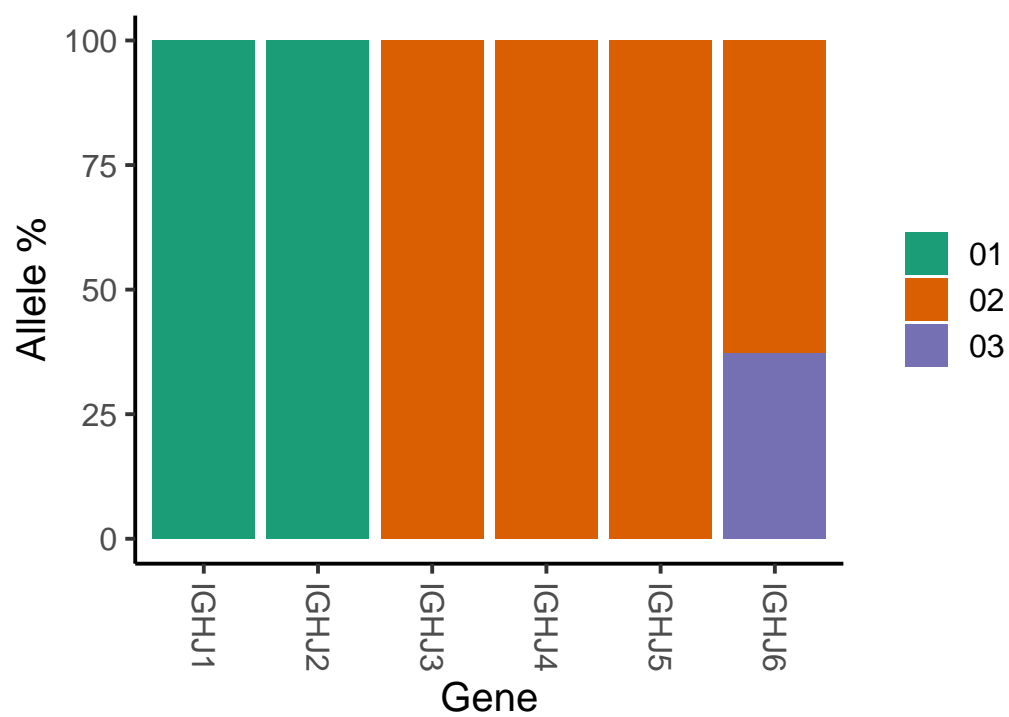


IGHV7-4-1*01

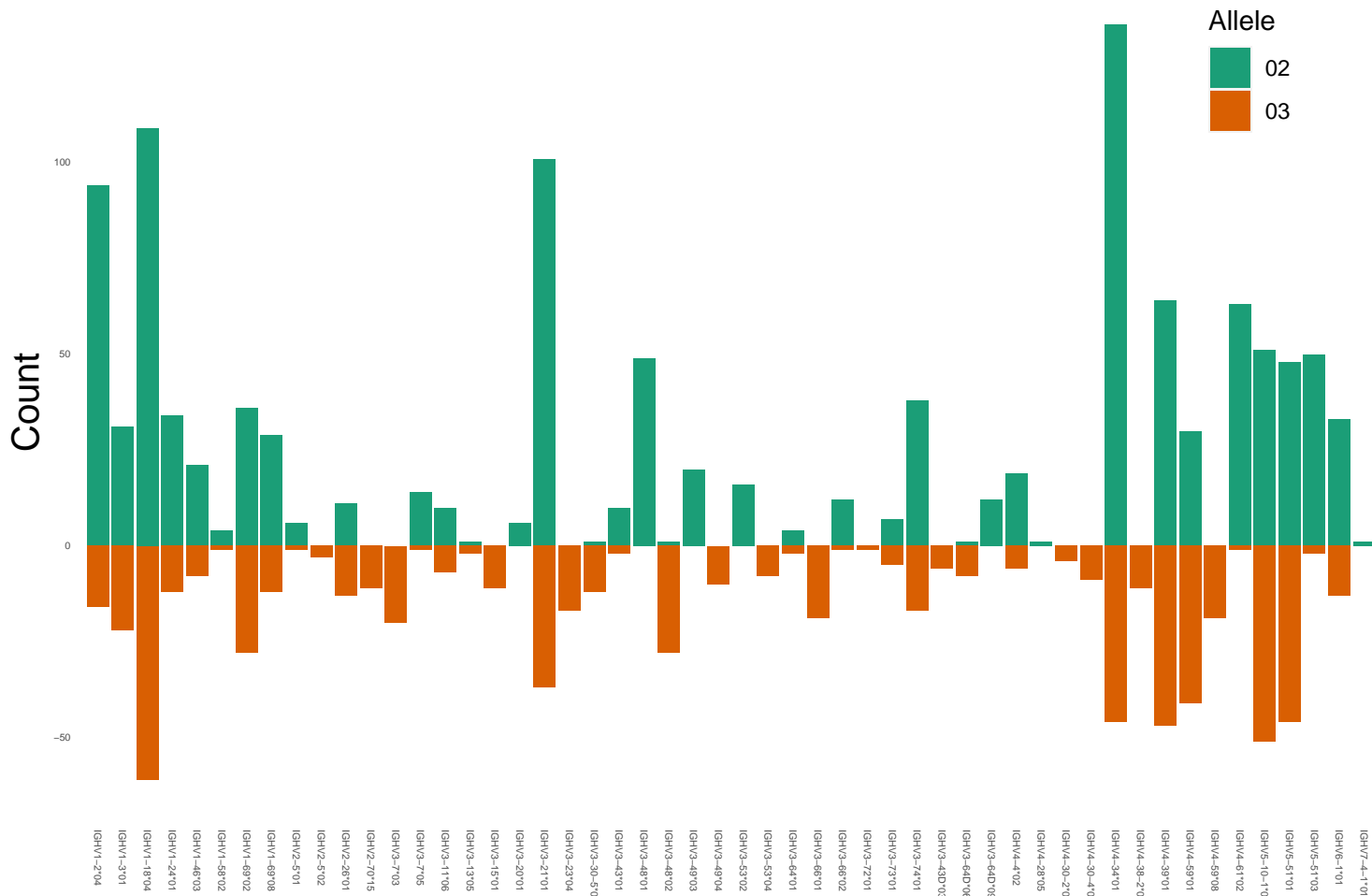
8 sequences assigned
8 (100%) exact matches, in which:
8 unique CDR3
3 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]