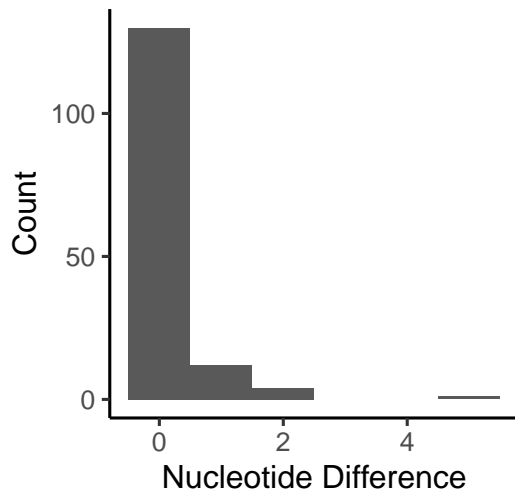


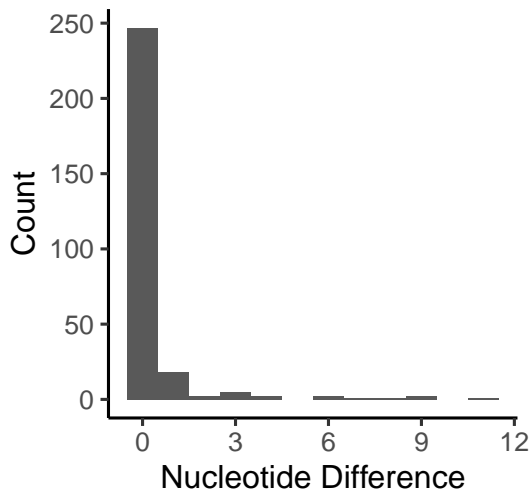
IGHV1-2*04

147 sequences assigned
130 (88.4%) exact matches, in which:
130 unique CDR3
7 unique J



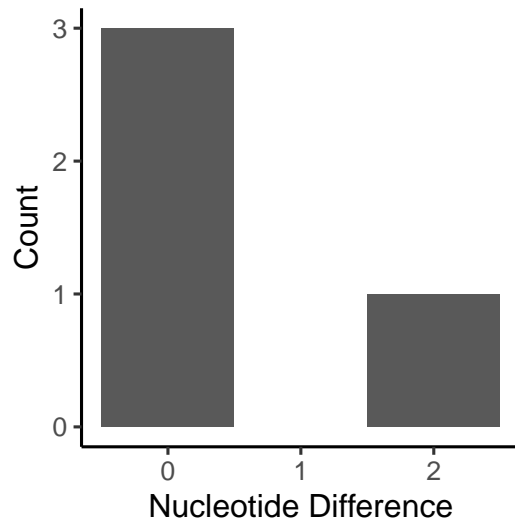
IGHV1-8*01

281 sequences assigned
247 (87.9%) exact matches, in which:
247 unique CDR3
7 unique J



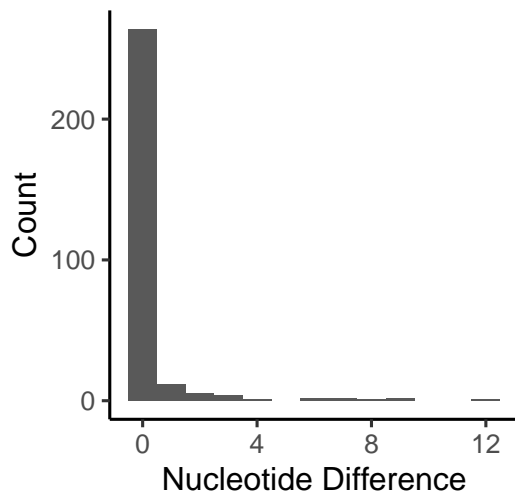
IGHV1-45*02

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



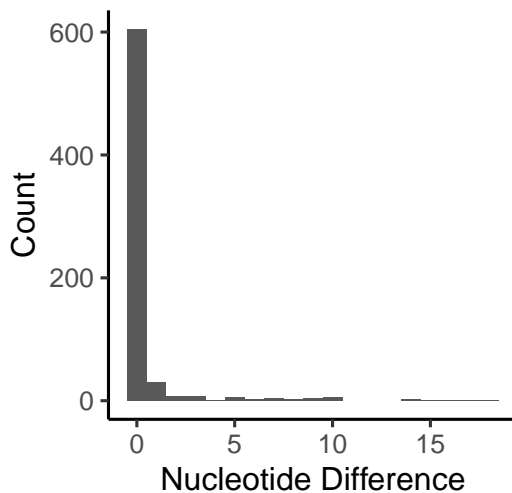
IGHV1-2*06

296 sequences assigned
264 (89.2%) exact matches, in which:
264 unique CDR3
7 unique J



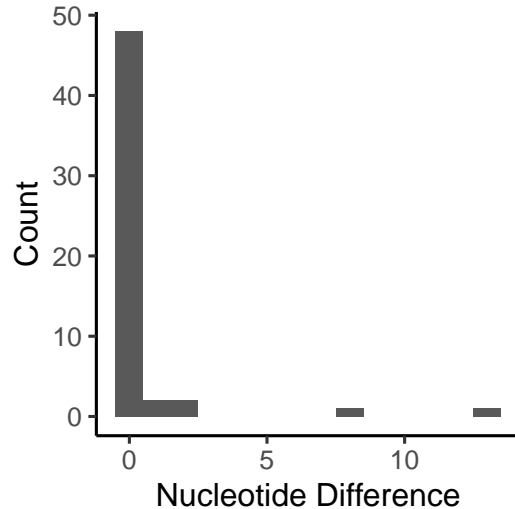
IGHV1-18*01

688 sequences assigned
605 (87.9%) exact matches, in which:
605 unique CDR3
7 unique J



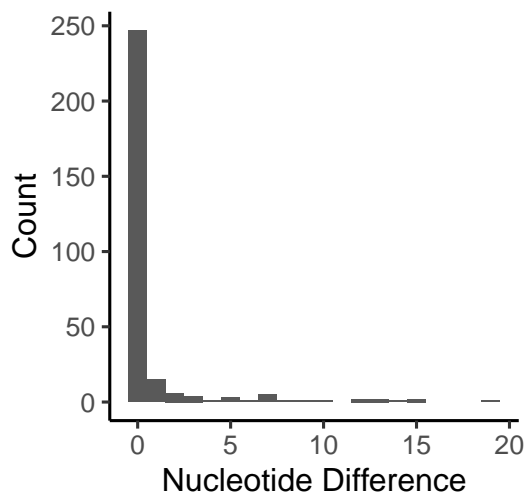
IGHV1-46*01

54 sequences assigned
48 (88.9%) exact matches, in which:
48 unique CDR3
4 unique J



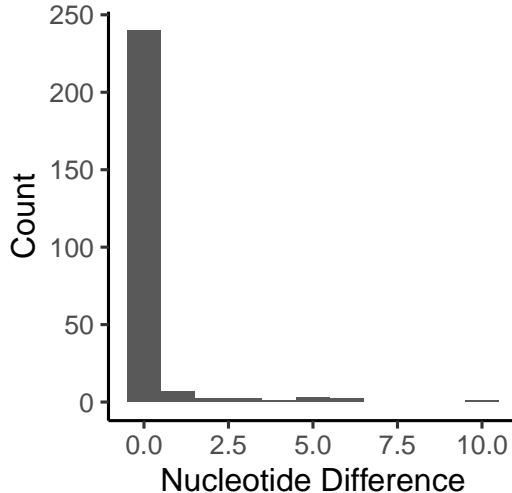
IGHV1-3*01

293 sequences assigned
247 (84.3%) exact matches, in which:
247 unique CDR3
7 unique J



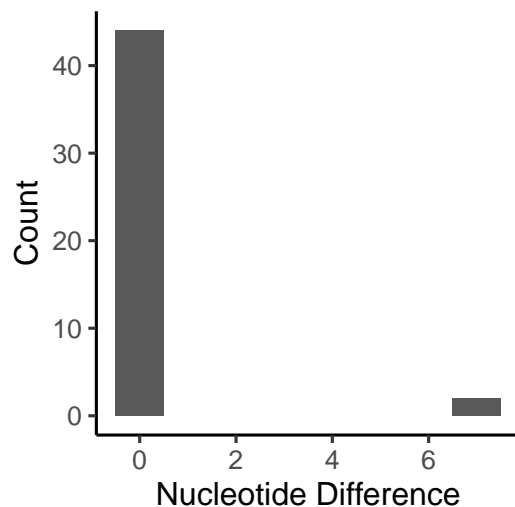
IGHV1-24*01

258 sequences assigned
240 (93%) exact matches, in which:
240 unique CDR3
7 unique J



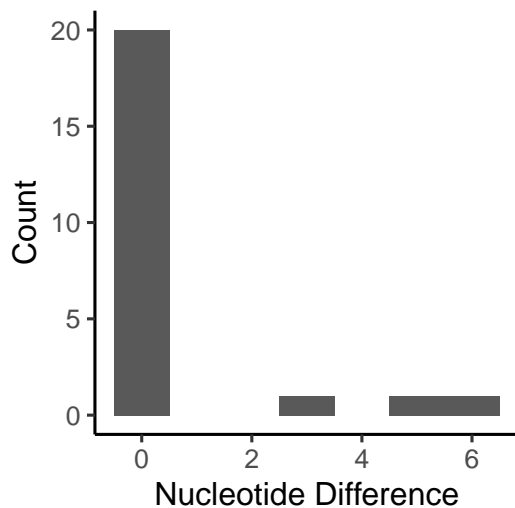
IGHV1-46*03

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



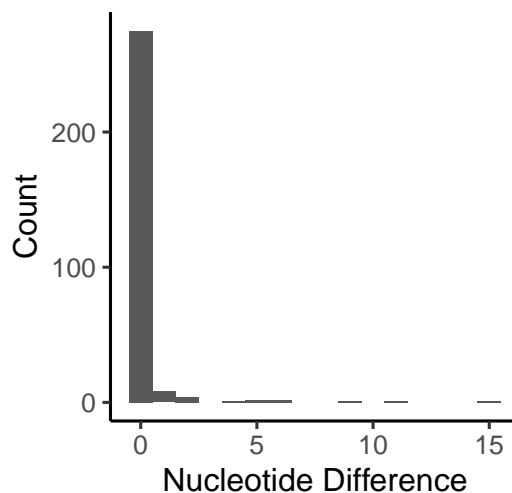
IGHV1-58*01

23 sequences assigned
20 (87%) exact matches, in which:
20 unique CDR3
5 unique J



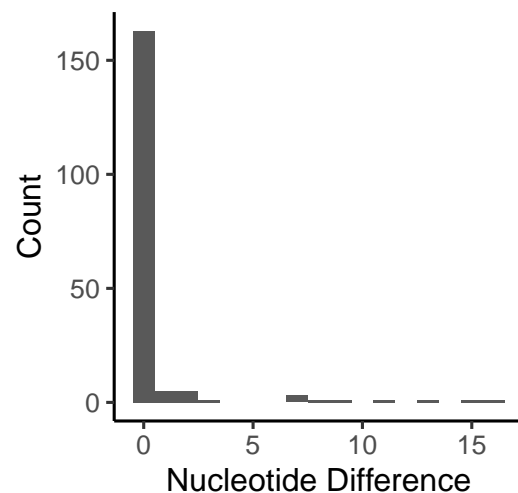
IGHV1-69*04

295 sequences assigned
275 (93.2%) exact matches, in which:
275 unique CDR3
7 unique J



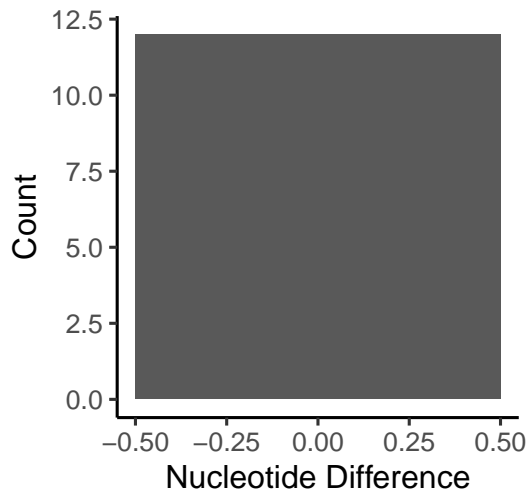
IGHV2-5*02

183 sequences assigned
163 (89.1%) exact matches, in which:
163 unique CDR3
6 unique J



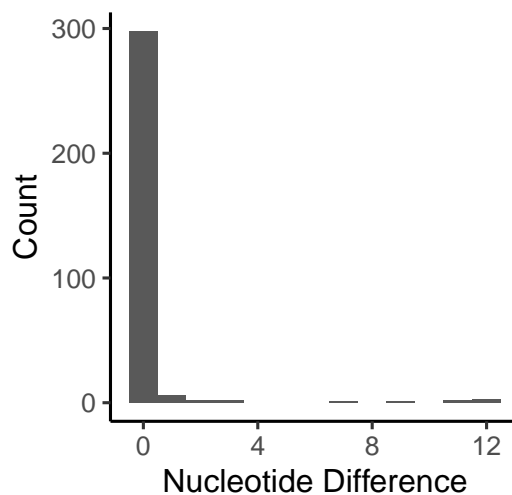
IGHV1-58*02

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



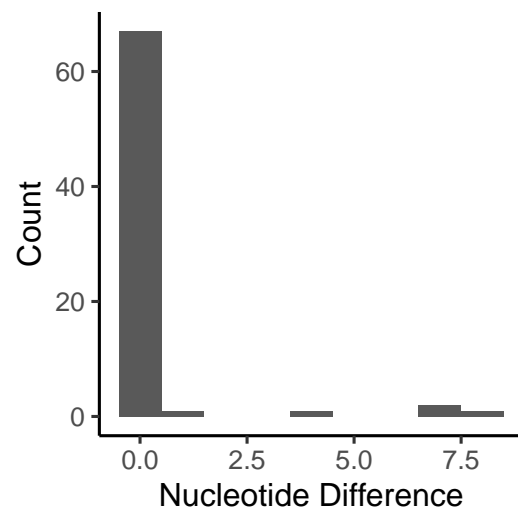
IGHV1-69*06

315 sequences assigned
298 (94.6%) exact matches, in which:
298 unique CDR3
7 unique J



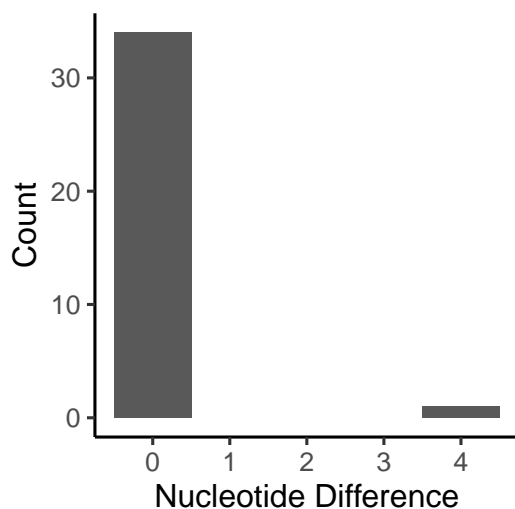
IGHV2-26*01

72 sequences assigned
67 (93.1%) exact matches, in which:
67 unique CDR3
7 unique J



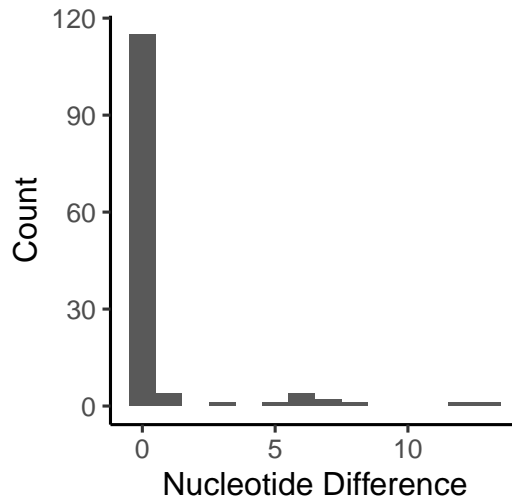
IGHV1-69-2*01

35 sequences assigned
34 (97.1%) exact matches, in which:
34 unique CDR3
6 unique J



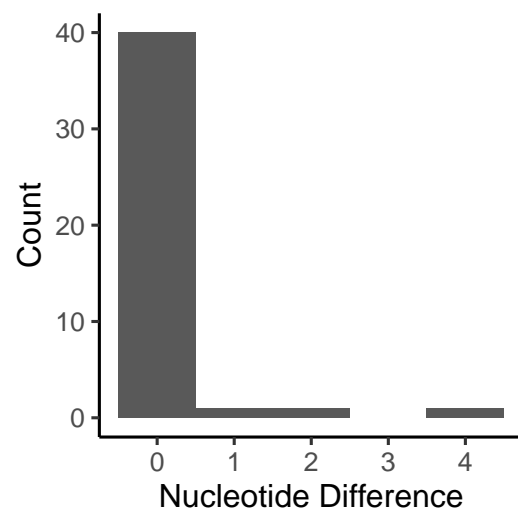
IGHV2-5*01

130 sequences assigned
115 (88.5%) exact matches, in which:
115 unique CDR3
6 unique J



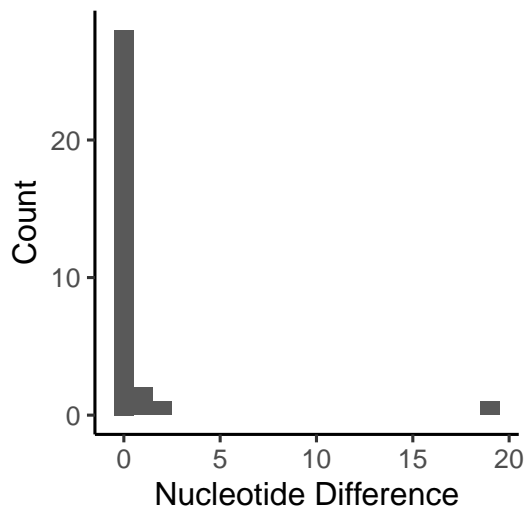
IGHV2-70*01

43 sequences assigned
40 (93%) exact matches, in which:
40 unique CDR3
6 unique J



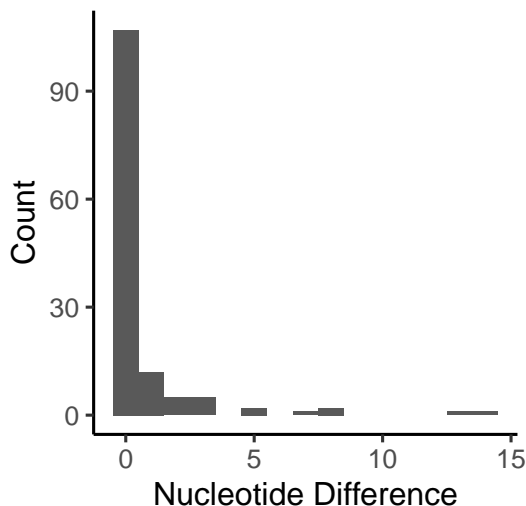
IGHV2-70*15

32 sequences assigned
28 (87.5%) exact matches, in which:
28 unique CDR3
5 unique J



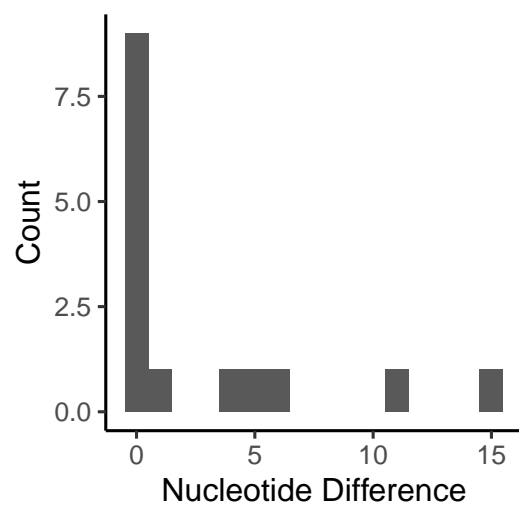
IGHV3-11*01

137 sequences assigned
107 (78.1%) exact matches, in which:
107 unique CDR3
6 unique J



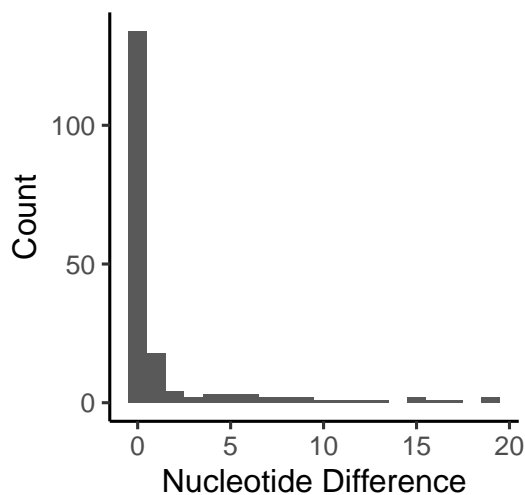
IGHV3-20*01

15 sequences assigned
9 (60%) exact matches, in which:
9 unique CDR3
5 unique J



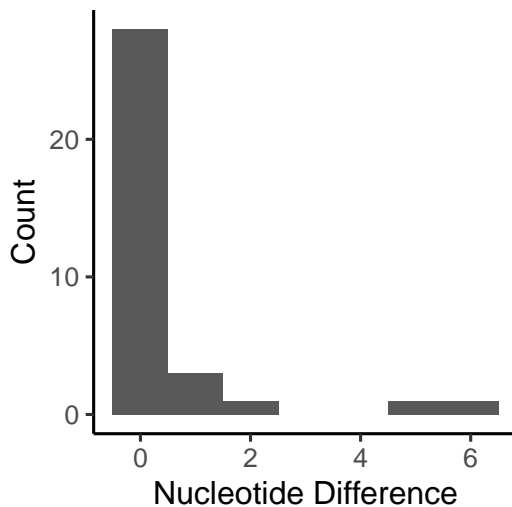
IGHV3-7*01

185 sequences assigned
134 (72.4%) exact matches, in which:
134 unique CDR3
7 unique J



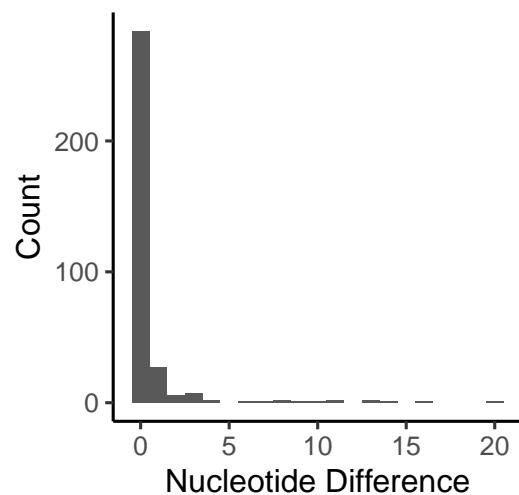
IGHV3-13*01

34 sequences assigned
28 (82.4%) exact matches, in which:
28 unique CDR3
6 unique J



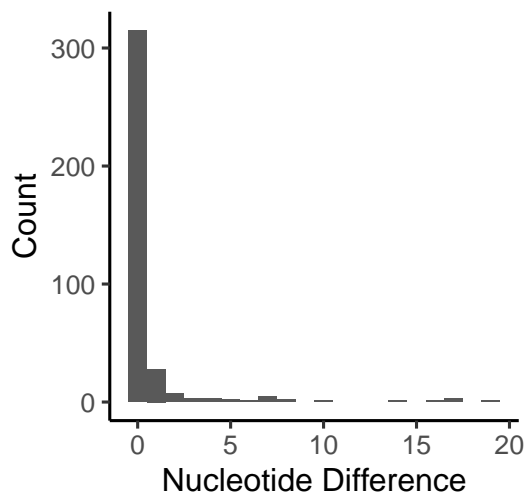
IGHV3-21*01

339 sequences assigned
284 (83.8%) exact matches, in which:
284 unique CDR3
7 unique J



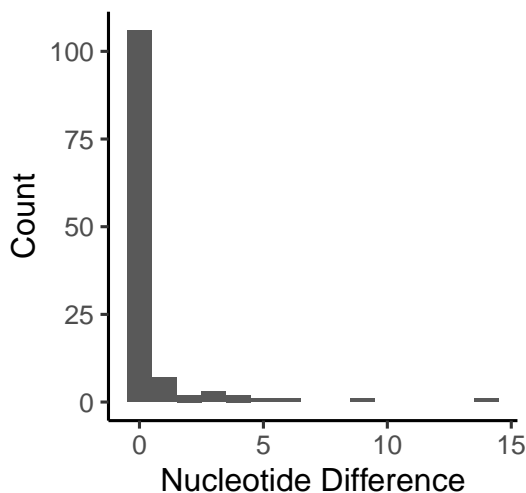
IGHV3-9*01

373 sequences assigned
315 (84.5%) exact matches, in which:
315 unique CDR3
7 unique J



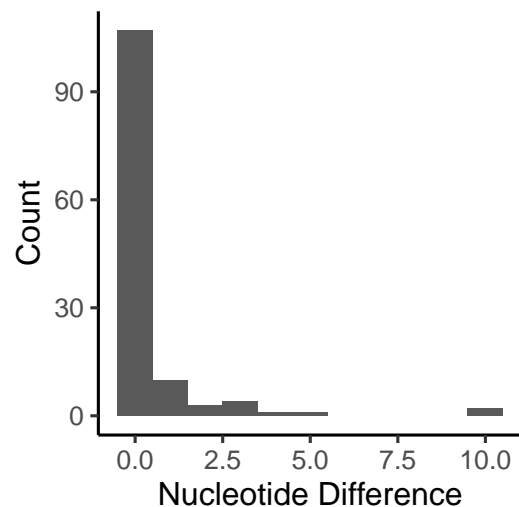
IGHV3-15*01

125 sequences assigned
106 (84.8%) exact matches, in which:
106 unique CDR3
7 unique J



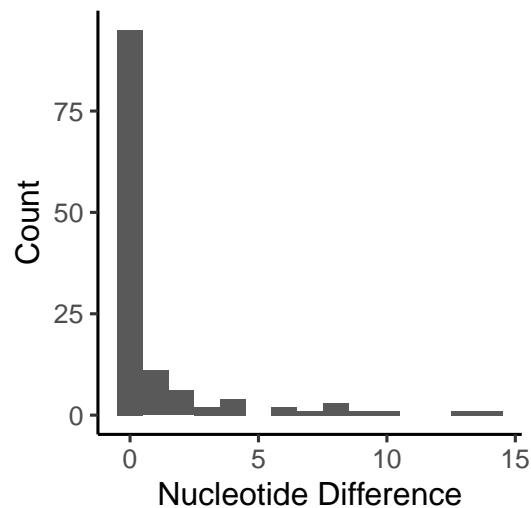
IGHV3-30-3*01

129 sequences assigned
107 (82.9%) exact matches, in which:
107 unique CDR3
7 unique J



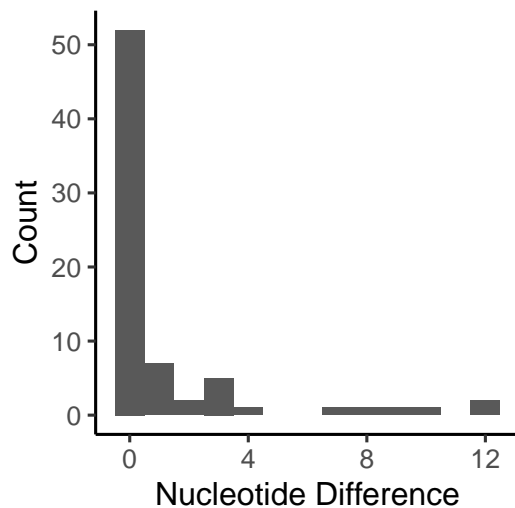
IGHV3-30*01

128 sequences assigned
95 (74.2%) exact matches, in which:
95 unique CDR3
7 unique J



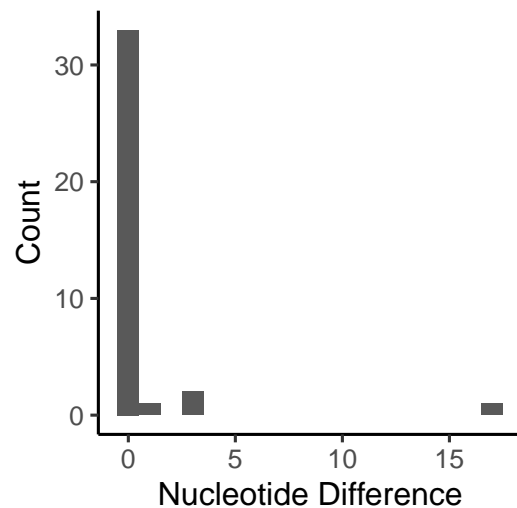
IGHV3-48*02

73 sequences assigned
52 (71.2%) exact matches, in which:
52 unique CDR3
7 unique J



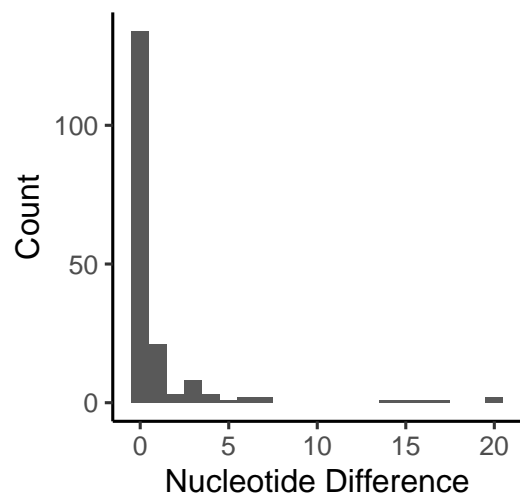
IGHV3-49*05

37 sequences assigned
33 (89.2%) exact matches, in which:
33 unique CDR3
4 unique J



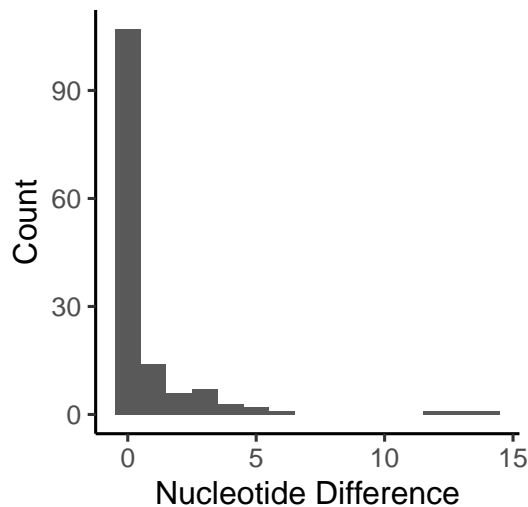
IGHV3-33*01

180 sequences assigned
134 (74.4%) exact matches, in which:
134 unique CDR3
7 unique J



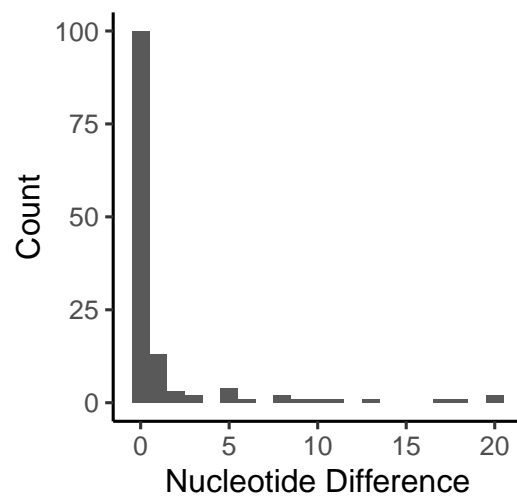
IGHV3-48*03

145 sequences assigned
107 (73.8%) exact matches, in which:
107 unique CDR3
6 unique J



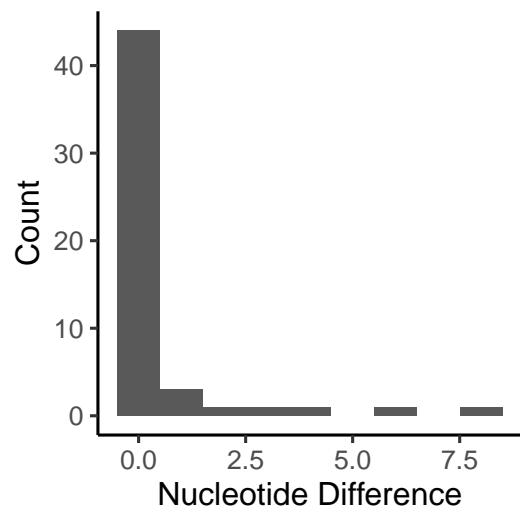
IGHV3-53*01

135 sequences assigned
100 (74.1%) exact matches, in which:
100 unique CDR3
6 unique J



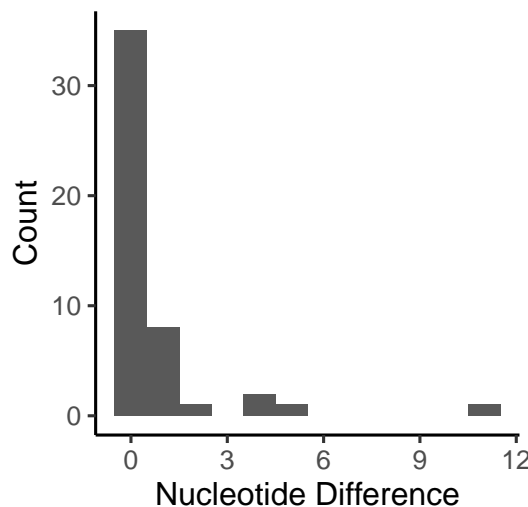
IGHV3-43*02

52 sequences assigned
44 (84.6%) exact matches, in which:
44 unique CDR3
5 unique J



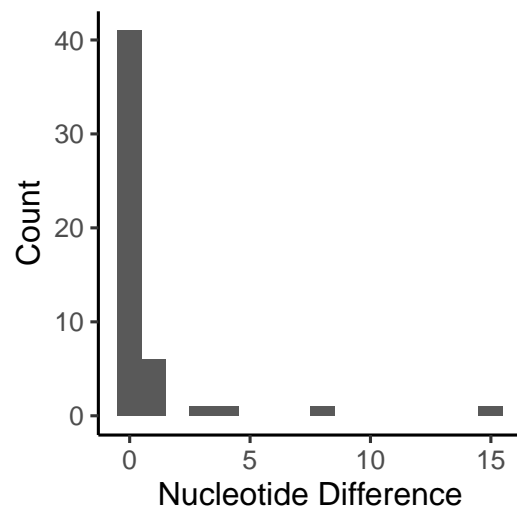
IGHV3-49*04

48 sequences assigned
35 (72.9%) exact matches, in which:
35 unique CDR3
7 unique J



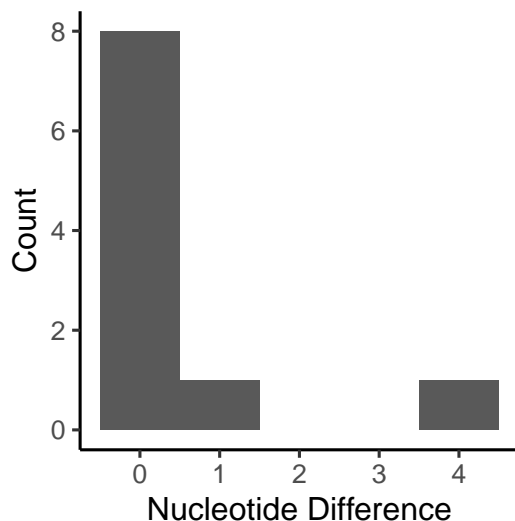
IGHV3-53*04

52 sequences assigned
41 (78.8%) exact matches, in which:
41 unique CDR3
5 unique J



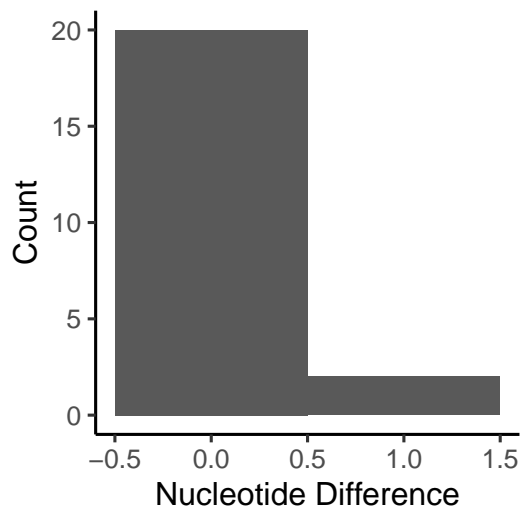
IGHV3-64*01

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



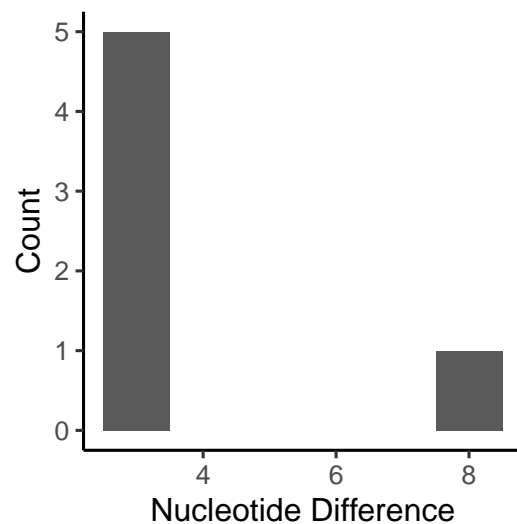
IGHV3-73*01

22 sequences assigned
20 (90.9%) exact matches, in which:
20 unique CDR3
4 unique J



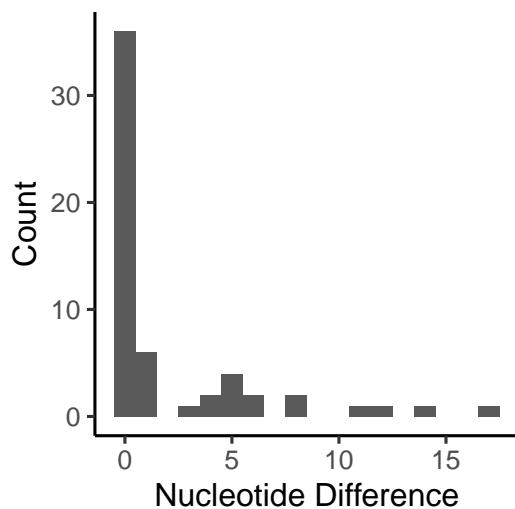
IGHV3-43D*04

6 sequences assigned
No exact matches.



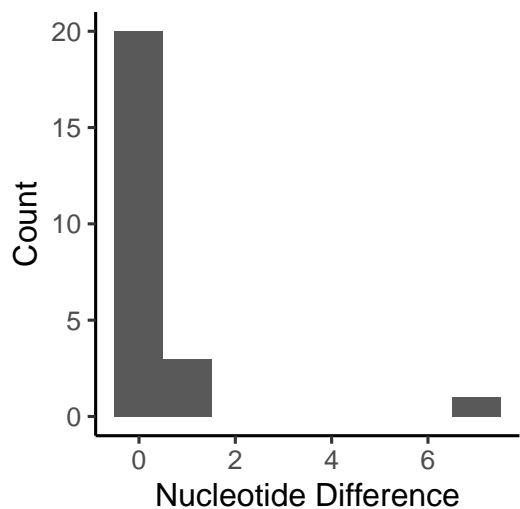
IGHV3-66*01

57 sequences assigned
36 (63.2%) exact matches, in which:
36 unique CDR3
5 unique J



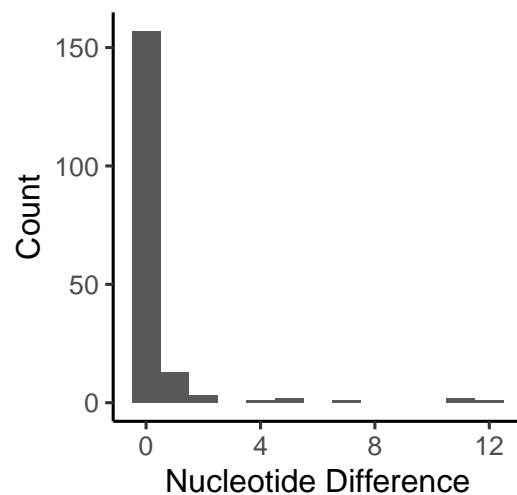
IGHV3-73*02

25 sequences assigned
20 (80%) exact matches, in which:
20 unique CDR3
5 unique J



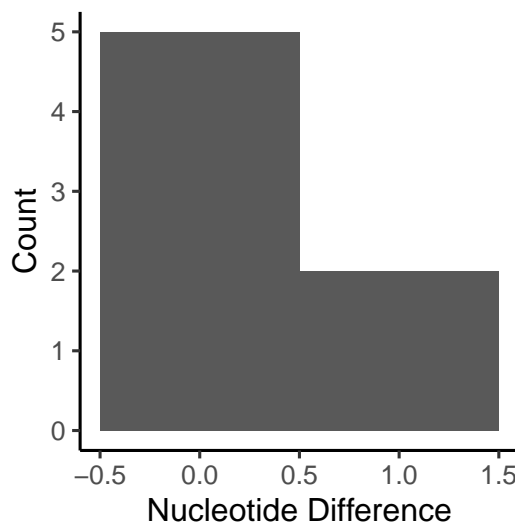
IGHV4-4*02

180 sequences assigned
157 (87.2%) exact matches, in which:
157 unique CDR3
7 unique J



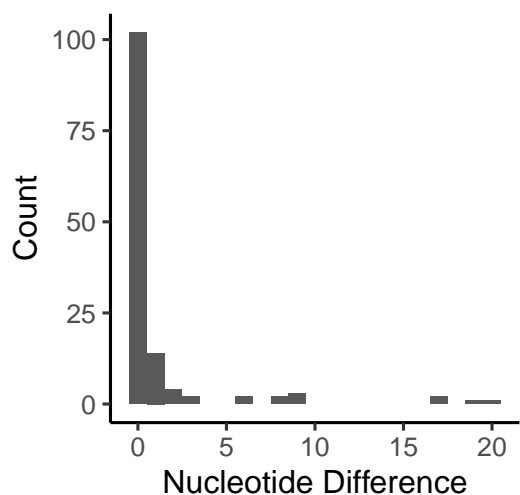
IGHV3-72*01

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



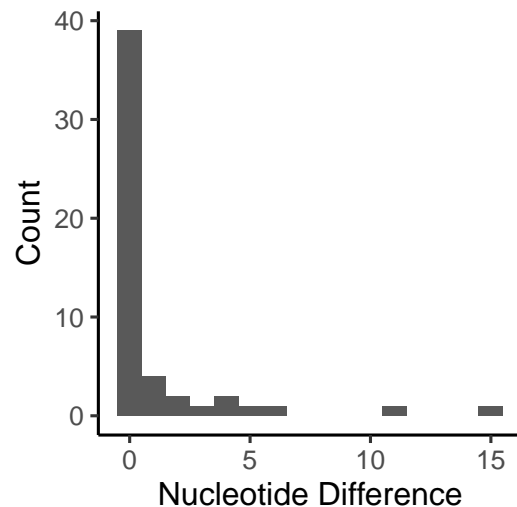
IGHV3-74*01

135 sequences assigned
102 (75.6%) exact matches, in which:
102 unique CDR3
7 unique J



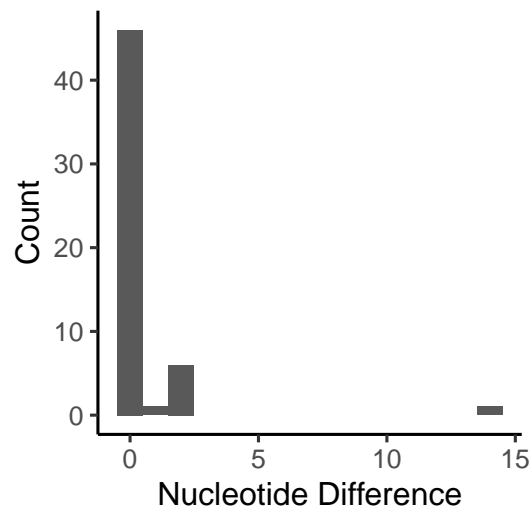
IGHV4-30-4*01

52 sequences assigned
39 (75%) exact matches, in which:
39 unique CDR3
6 unique J



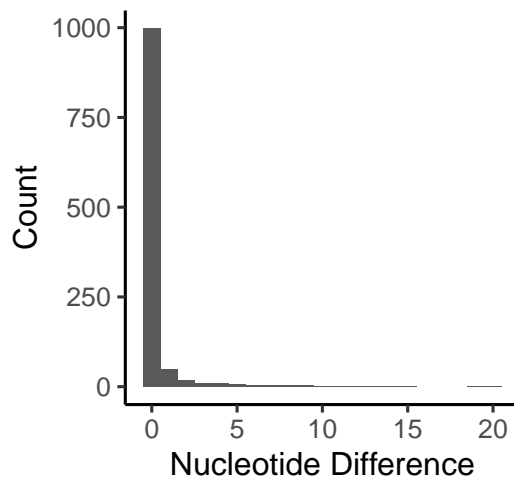
IGHV4-30-2*01

54 sequences assigned
46 (85.2%) exact matches, in which:
46 unique CDR3
6 unique J



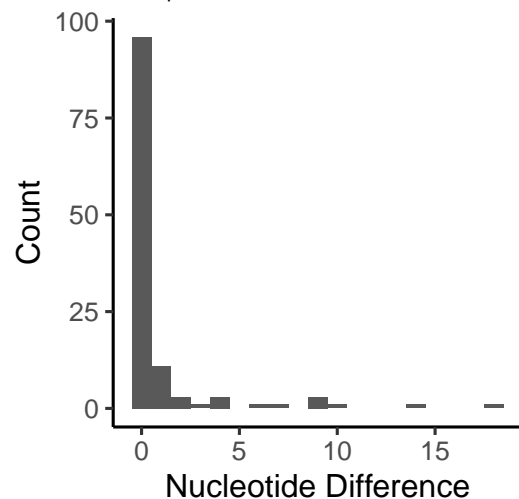
IGHV4-34*01

1121 sequences assigned
998 (89%) exact matches, in which:
998 unique CDR3
7 unique J



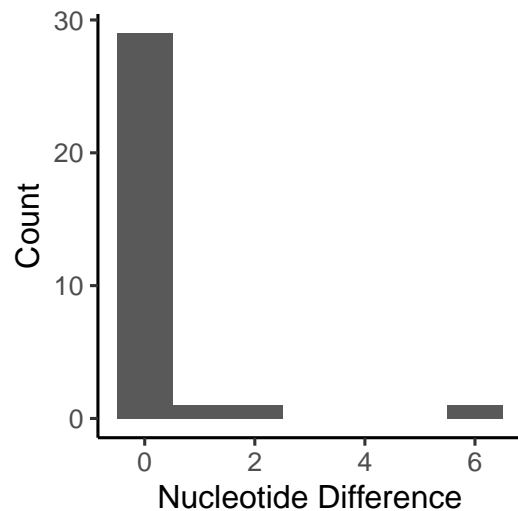
IGHV4-59*08

122 sequences assigned
96 (78.7%) exact matches, in which:
96 unique CDR3
6 unique J



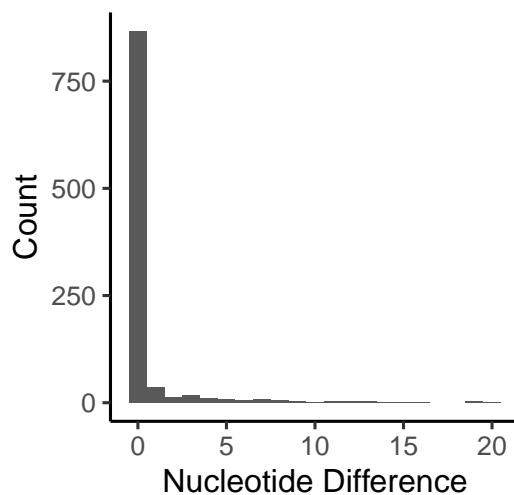
IGHV4-31*01

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



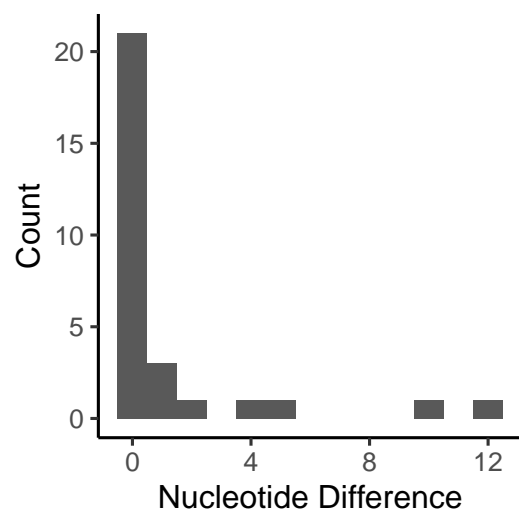
IGHV4-39*01

998 sequences assigned
867 (86.9%) exact matches, in which:
866 unique CDR3
7 unique J



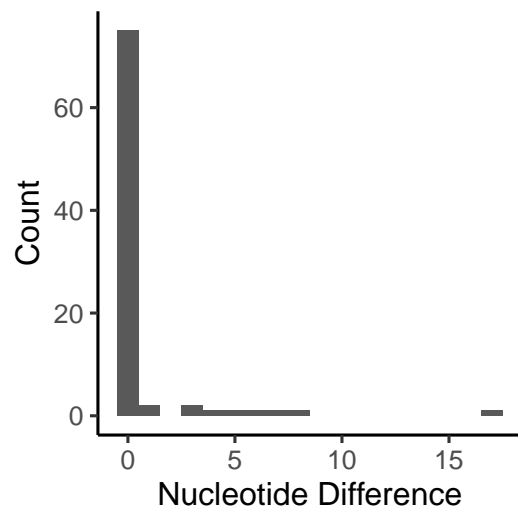
IGHV4-61*01

29 sequences assigned
21 (72.4%) exact matches, in which:
21 unique CDR3
4 unique J



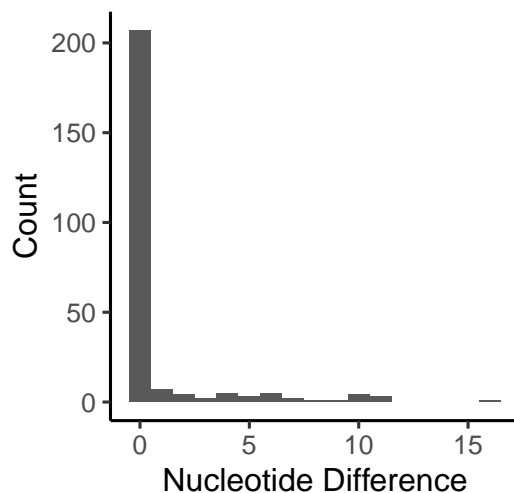
IGHV4-31*03

85 sequences assigned
75 (88.2%) exact matches, in which:
75 unique CDR3
5 unique J



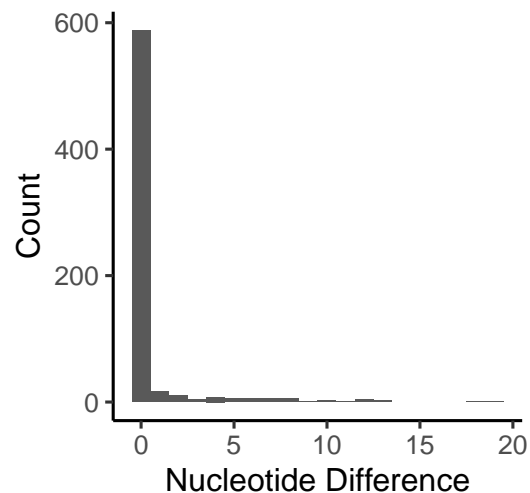
IGHV4-59*01

245 sequences assigned
207 (84.5%) exact matches, in which:
207 unique CDR3
7 unique J



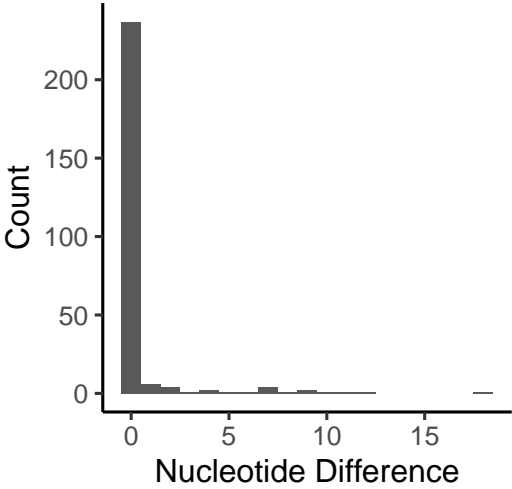
IGHV5-51*01

663 sequences assigned
588 (88.7%) exact matches, in which:
588 unique CDR3
7 unique J



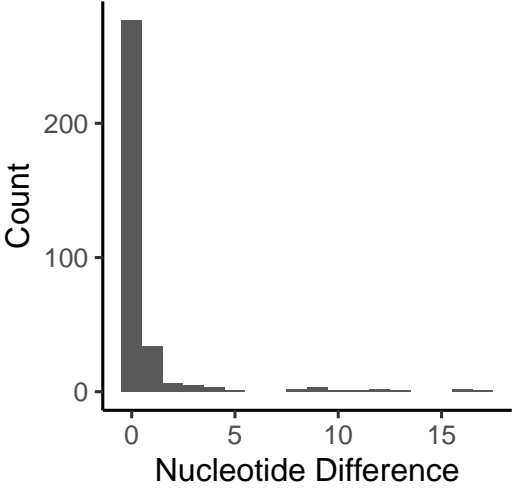
IGHV6-1*01

264 sequences assigned
237 (89.8%) exact matches, in which:
237 unique CDR3
7 unique J

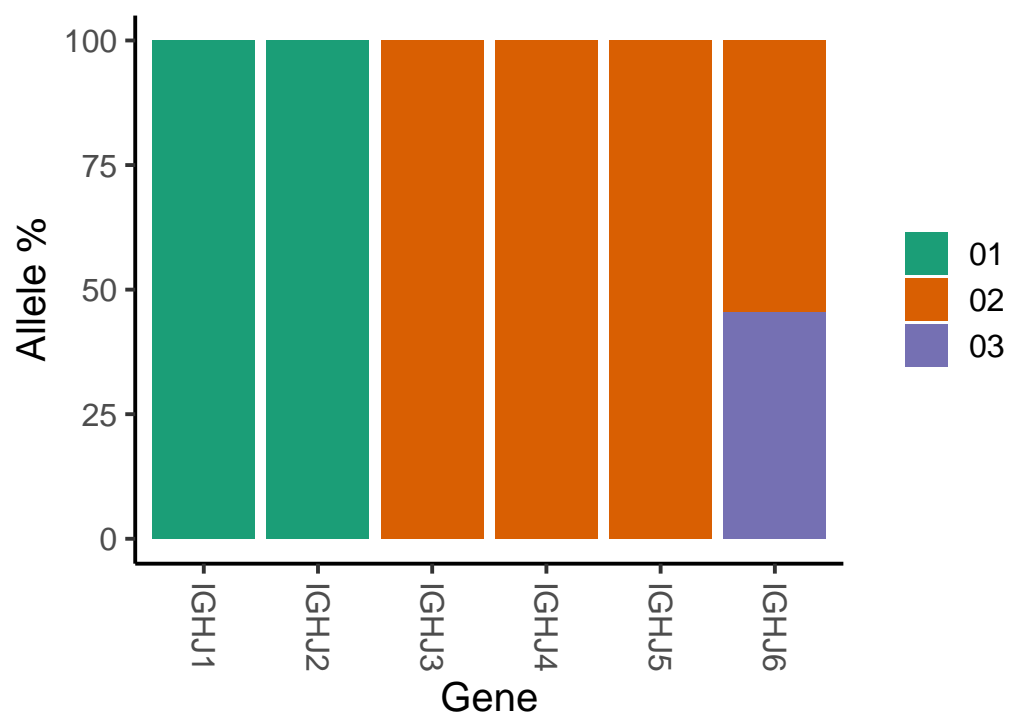


IGHV7-4-1*02

339 sequences assigned
277 (81.7%) exact matches, in which:
277 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.