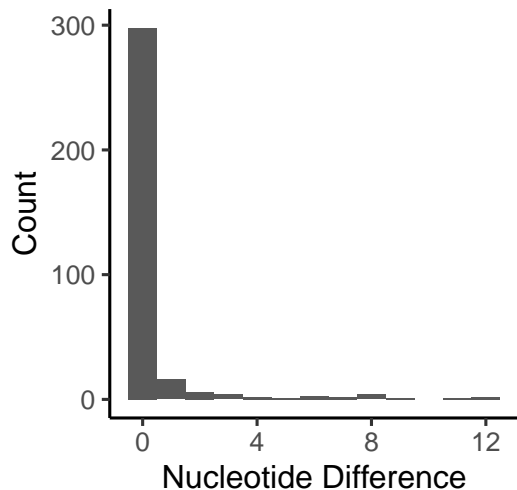


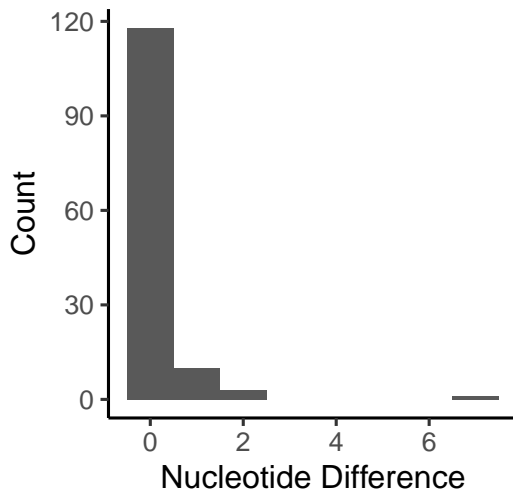
IGHV1-2*02

342 sequences assigned
298 (87.1%) exact matches, in which:
298 unique CDR3
6 unique J



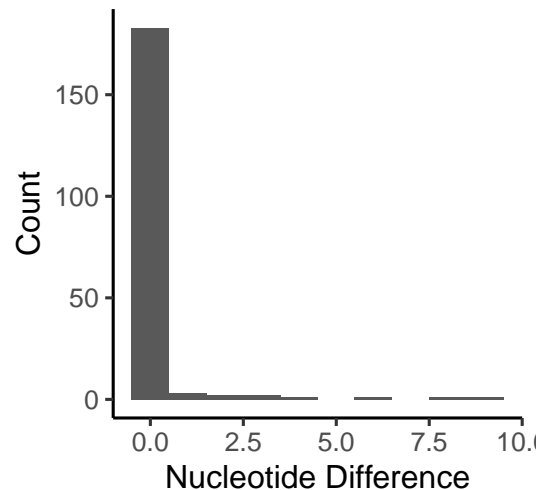
IGHV1-8*01

132 sequences assigned
118 (89.4%) exact matches, in which:
118 unique CDR3
5 unique J



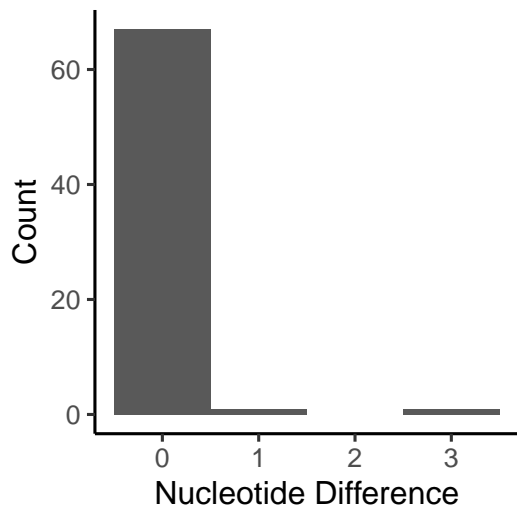
IGHV1-24*01

194 sequences assigned
183 (94.3%) exact matches, in which:
182 unique CDR3
6 unique J



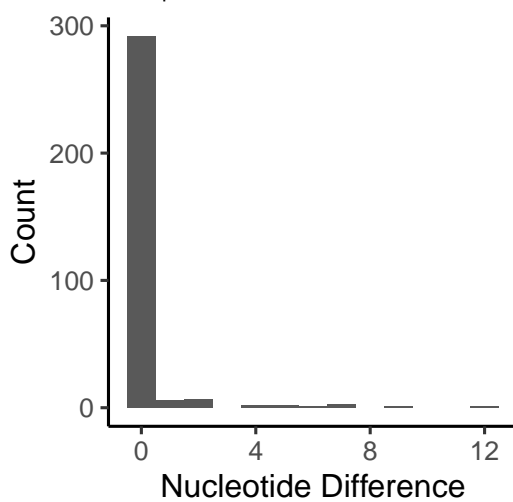
IGHV1-2*04

69 sequences assigned
67 (97.1%) exact matches, in which:
67 unique CDR3
5 unique J



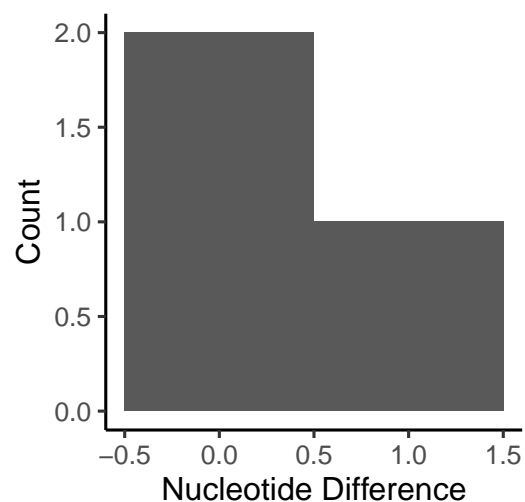
IGHV1-18*01

315 sequences assigned
292 (92.7%) exact matches, in which:
292 unique CDR3
7 unique J



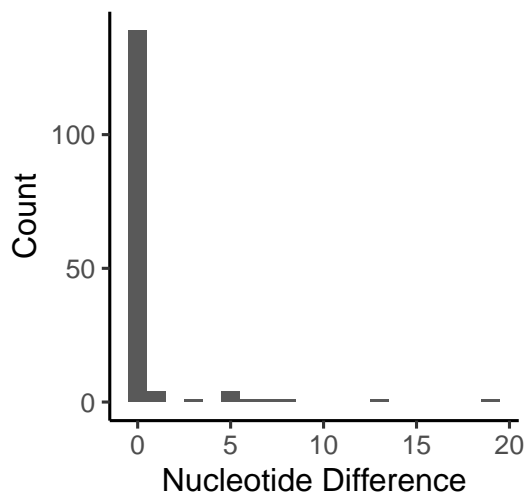
IGHV1-45*02

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
2 unique J



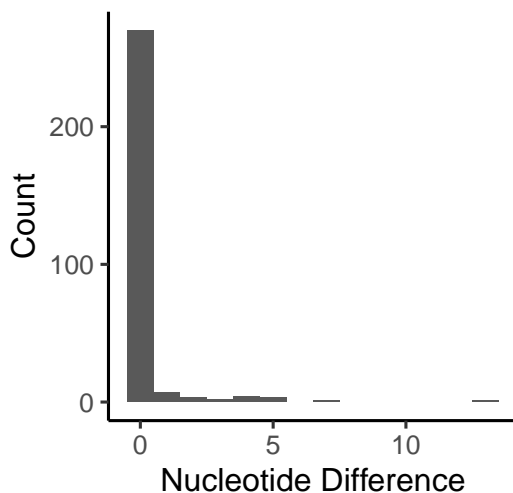
IGHV1-3*01

154 sequences assigned
139 (90.3%) exact matches, in which:
139 unique CDR3
6 unique J



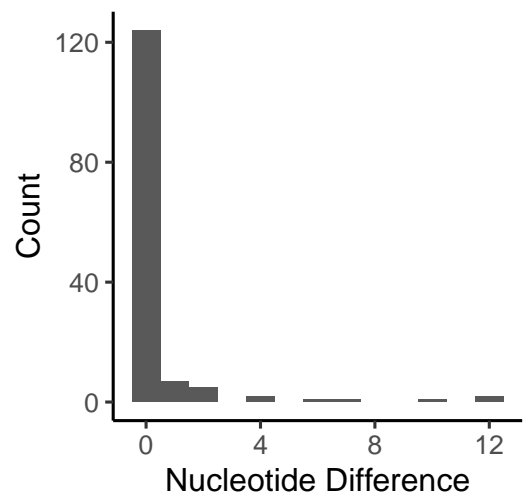
IGHV1-18*04

291 sequences assigned
270 (92.8%) exact matches, in which:
270 unique CDR3
7 unique J



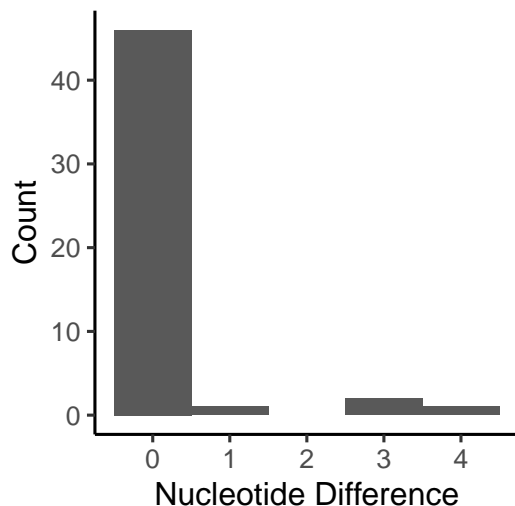
IGHV1-46*01

143 sequences assigned
124 (86.7%) exact matches, in which:
124 unique CDR3
7 unique J



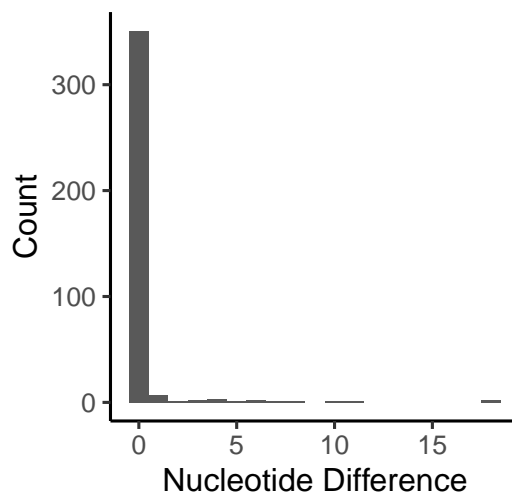
IGHV1-46*03

50 sequences assigned
46 (92%) exact matches, in which:
46 unique CDR3
6 unique J



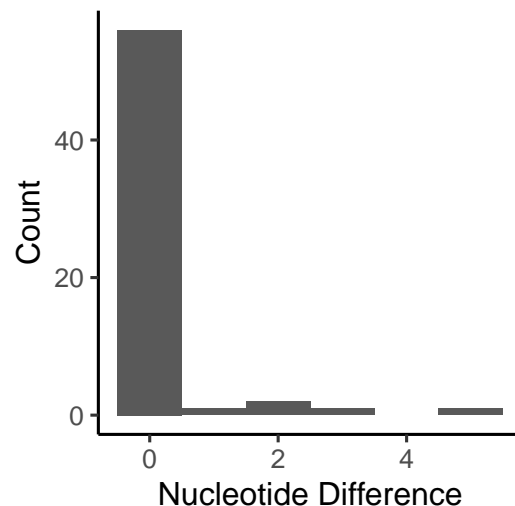
IGHV1-69*06

381 sequences assigned
351 (92.1%) exact matches, in which:
351 unique CDR3
7 unique J



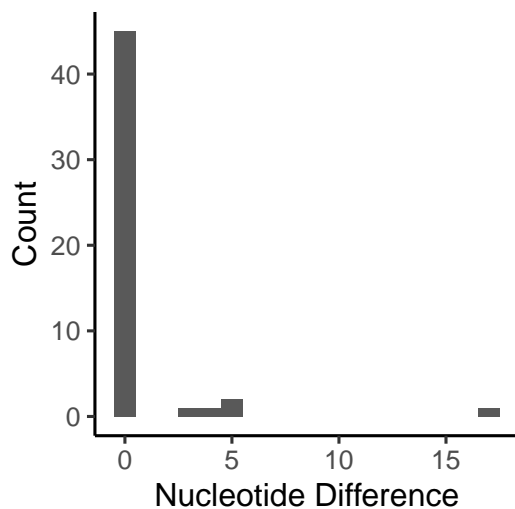
IGHV2-26*01

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



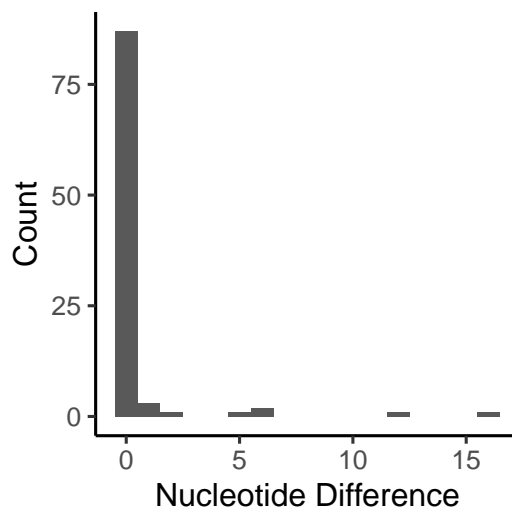
IGHV1-58*01

51 sequences assigned
45 (88.2%) exact matches, in which:
45 unique CDR3
5 unique J



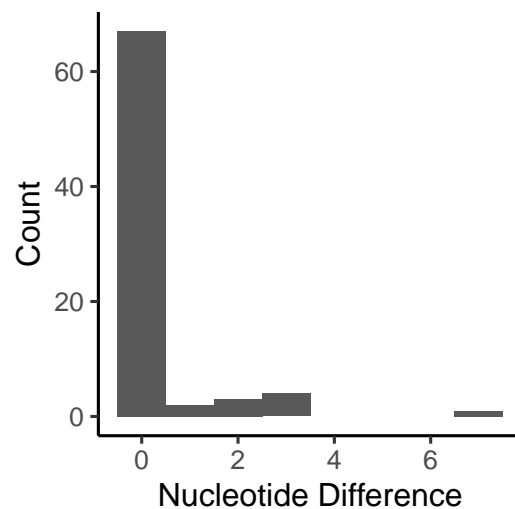
IGHV2-5*01

96 sequences assigned
87 (90.6%) exact matches, in which:
87 unique CDR3
5 unique J



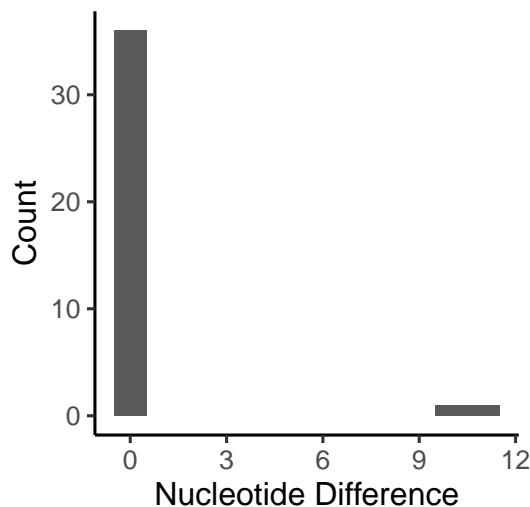
IGHV2-70*01

77 sequences assigned
67 (87%) exact matches, in which:
67 unique CDR3
6 unique J



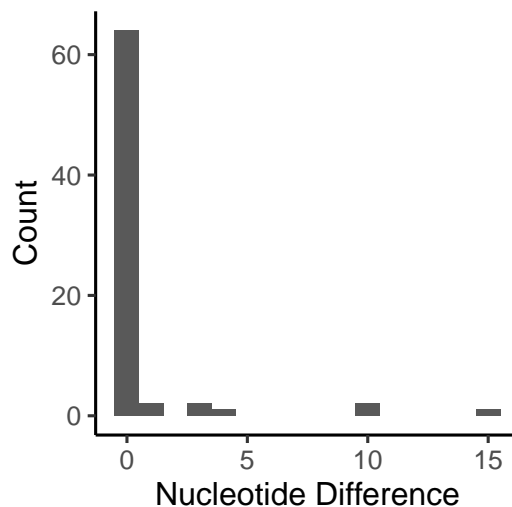
IGHV1-69-2*01

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



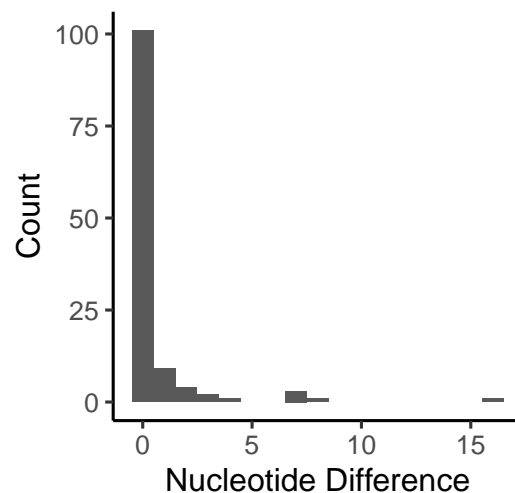
IGHV2-5*02

72 sequences assigned
64 (88.9%) exact matches, in which:
64 unique CDR3
5 unique J



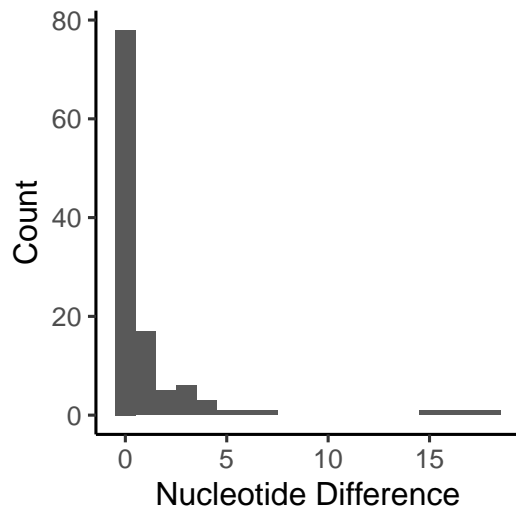
IGHV3-7*01

123 sequences assigned
101 (82.1%) exact matches, in which:
101 unique CDR3
5 unique J



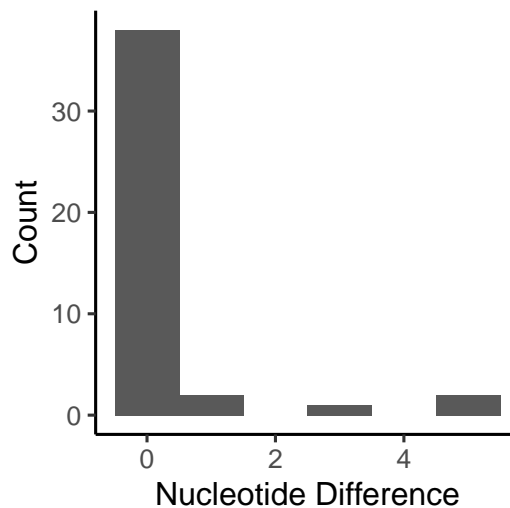
IGHV3-7*03

119 sequences assigned
78 (65.5%) exact matches, in which:
77 unique CDR3
6 unique J



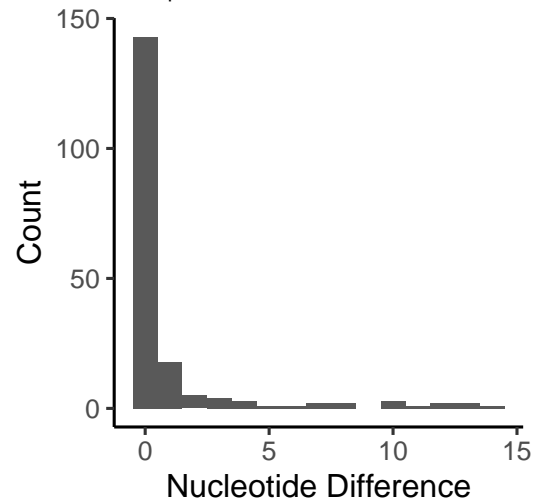
IGHV3-11*06

43 sequences assigned
38 (88.4%) exact matches, in which:
38 unique CDR3
4 unique J



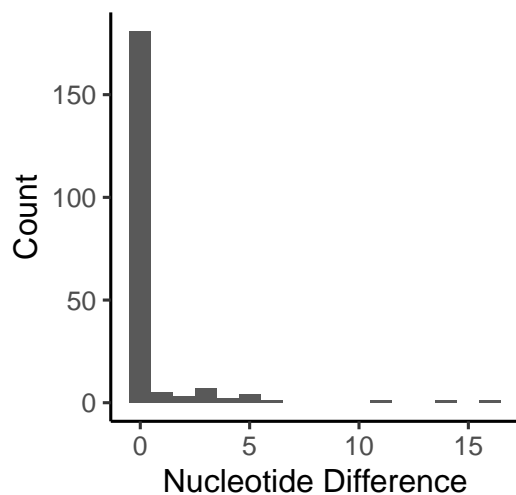
IGHV3-15*01

190 sequences assigned
143 (75.3%) exact matches, in which:
143 unique CDR3
7 unique J



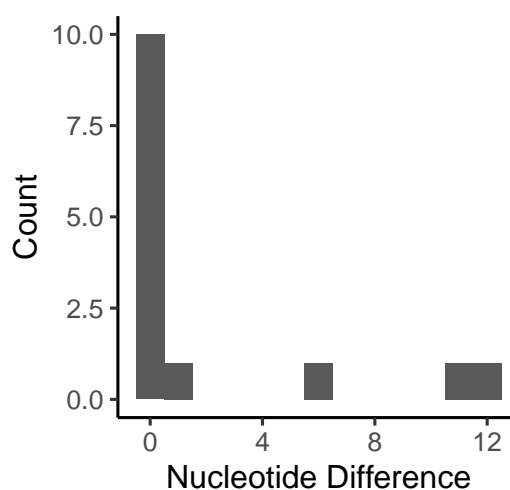
IGHV3-9*01

206 sequences assigned
181 (87.9%) exact matches, in which:
181 unique CDR3
7 unique J



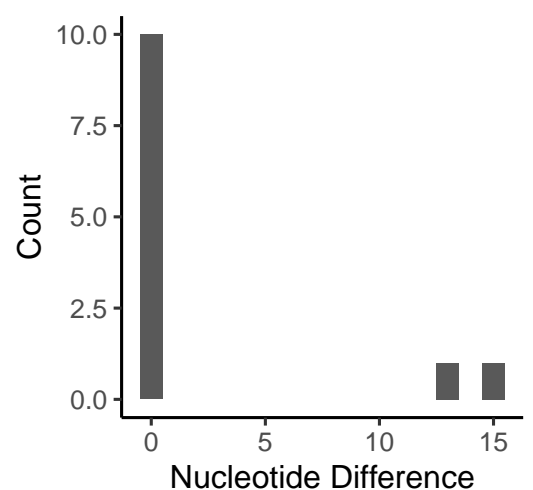
IGHV3-13*01

14 sequences assigned
10 (71.4%) exact matches, in which:
10 unique CDR3
5 unique J



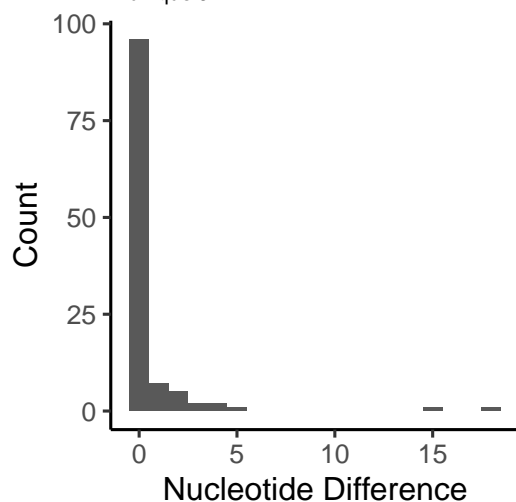
IGHV3-20*01

12 sequences assigned
10 (83.3%) exact matches, in which:
10 unique CDR3
3 unique J



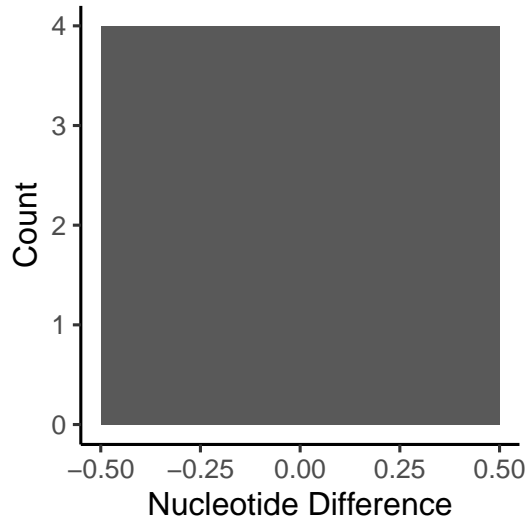
IGHV3-11*01

116 sequences assigned
96 (82.8%) exact matches, in which:
96 unique CDR3
7 unique J



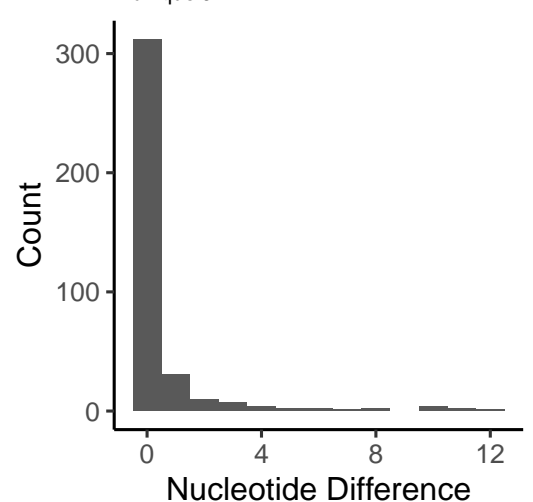
IGHV3-13*05

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



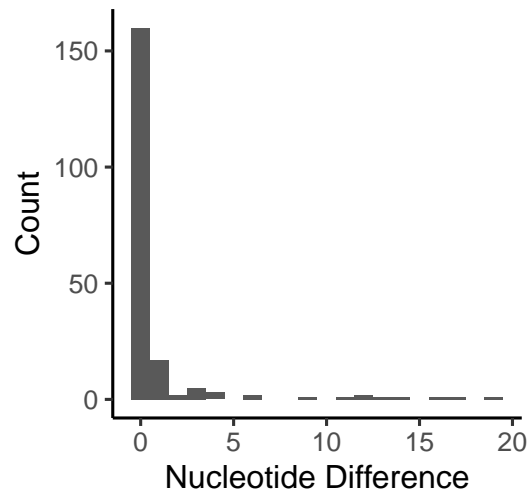
IGHV3-21*01

379 sequences assigned
312 (82.3%) exact matches, in which:
312 unique CDR3
7 unique J



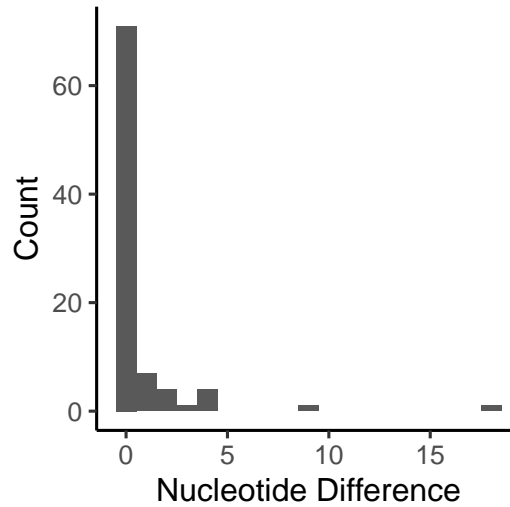
IGHV3-30-3*01

200 sequences assigned
160 (80%) exact matches, in which:
160 unique CDR3
7 unique J



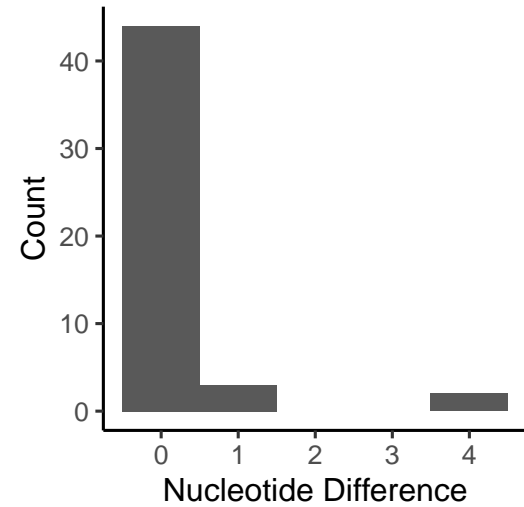
IGHV3-48*01

89 sequences assigned
71 (79.8%) exact matches, in which:
71 unique CDR3
6 unique J



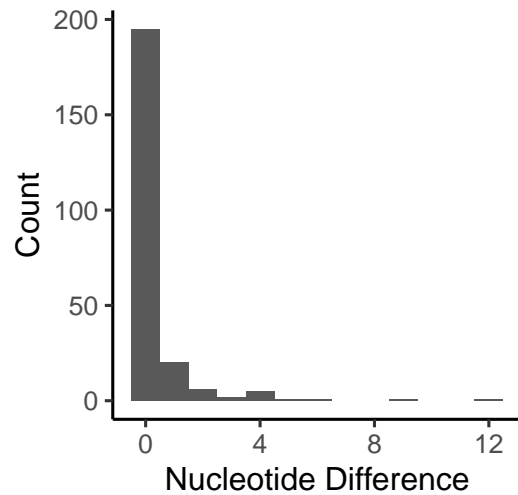
IGHV3-49*05

49 sequences assigned
44 (89.8%) exact matches, in which:
44 unique CDR3
5 unique J



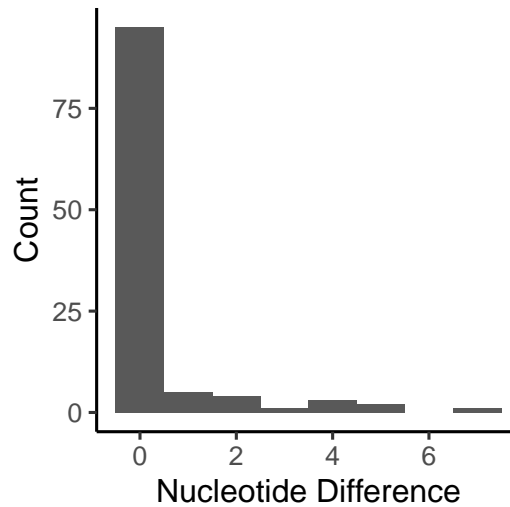
IGHV3-33*01

233 sequences assigned
195 (83.7%) exact matches, in which:
195 unique CDR3
7 unique J



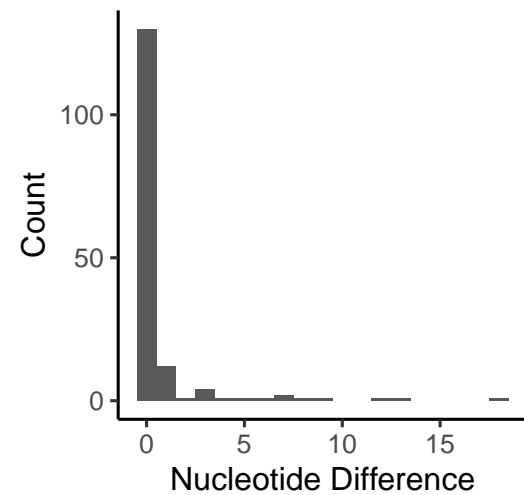
IGHV3-48*02

111 sequences assigned
95 (85.6%) exact matches, in which:
95 unique CDR3
6 unique J



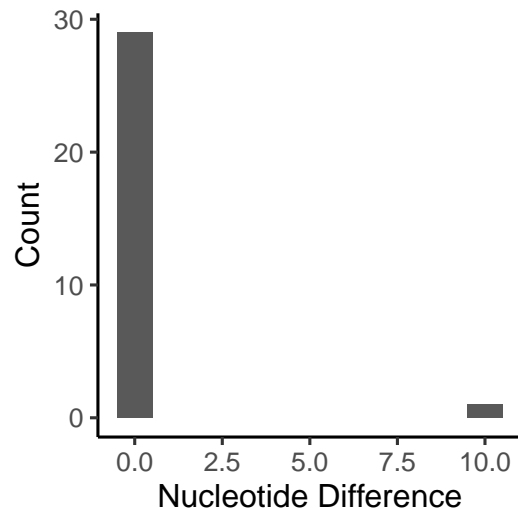
IGHV3-53*01

160 sequences assigned
130 (81.2%) exact matches, in which:
129 unique CDR3
6 unique J



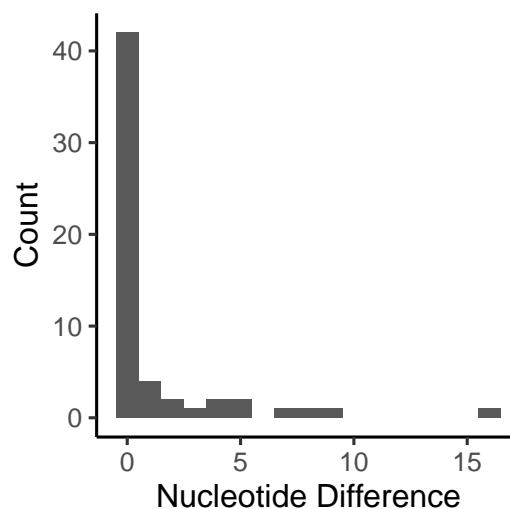
IGHV3-43*01

30 sequences assigned
29 (96.7%) exact matches, in which:
29 unique CDR3
4 unique J



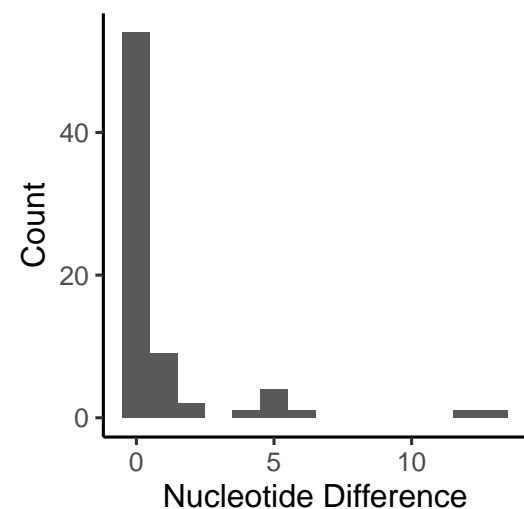
IGHV3-49*03

58 sequences assigned
42 (72.4%) exact matches, in which:
42 unique CDR3
6 unique J



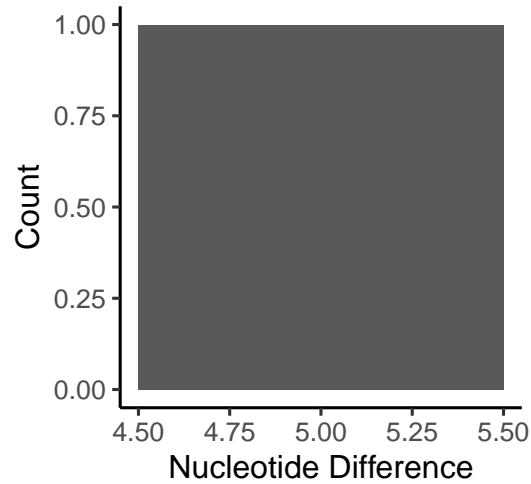
IGHV3-53*02

74 sequences assigned
54 (73%) exact matches, in which:
54 unique CDR3
5 unique J



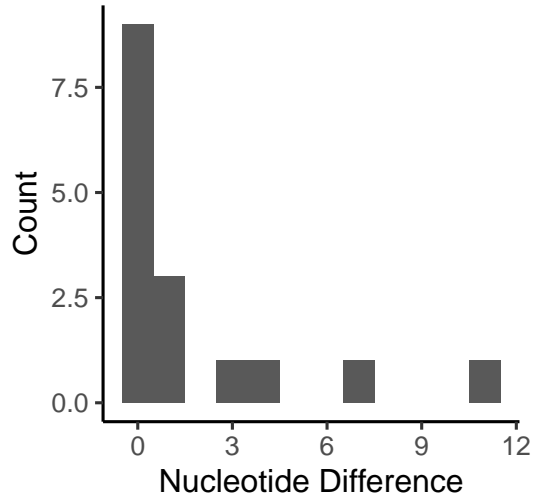
IGHV3-64*02

1 sequences assigned
No exact matches.



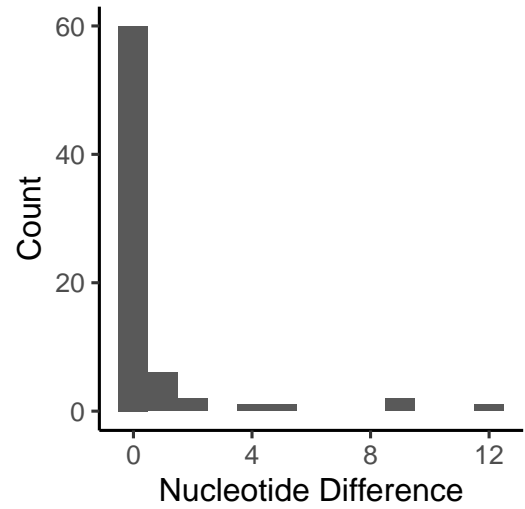
IGHV3-72*01

16 sequences assigned
9 (56.2%) exact matches, in which:
9 unique CDR3
3 unique J



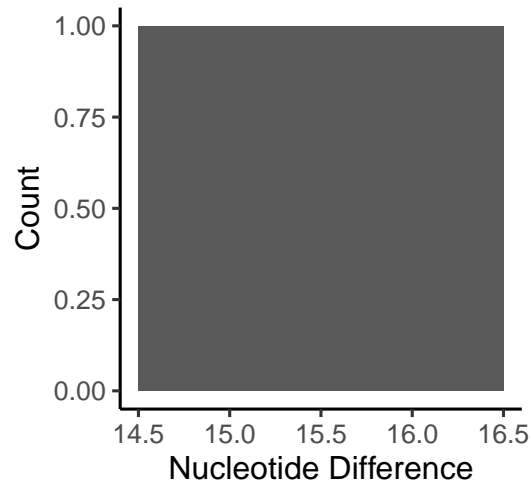
IGHV3-64D*09

73 sequences assigned
60 (82.2%) exact matches, in which:
60 unique CDR3
5 unique J



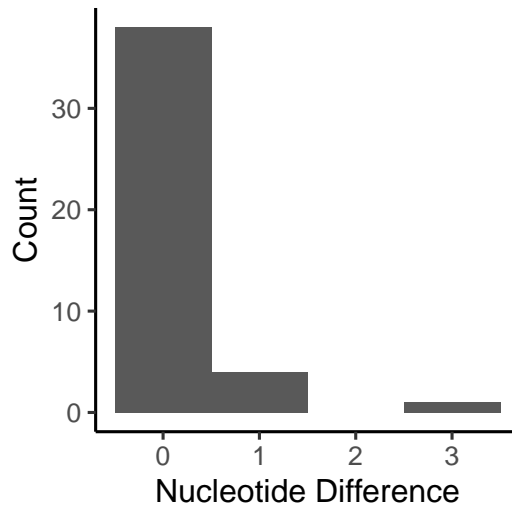
IGHV3-64*04

2 sequences assigned
No exact matches.



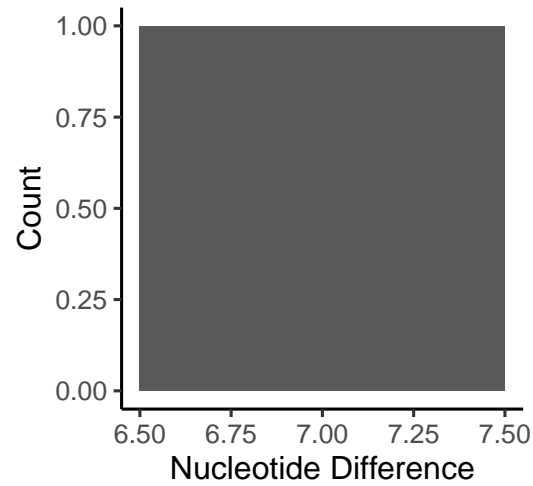
IGHV3-73*02

43 sequences assigned
38 (88.4%) exact matches, in which:
38 unique CDR3
6 unique J



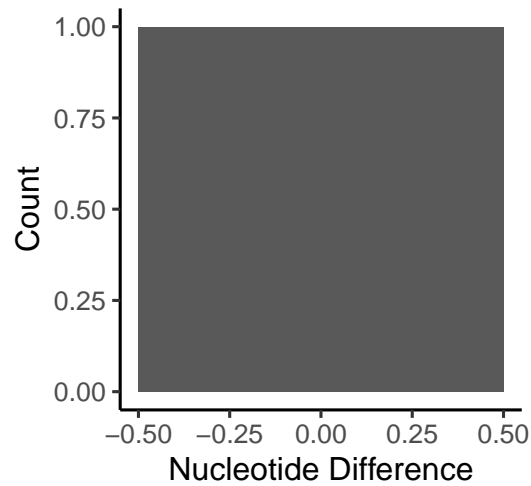
IGHV3-NL1*01

1 sequences assigned
No exact matches.



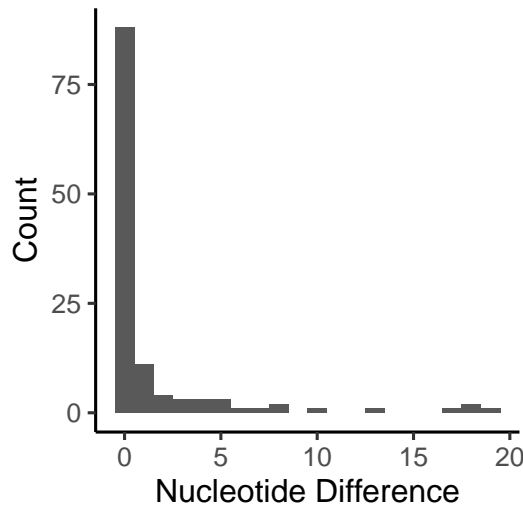
IGHV3-66*03

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



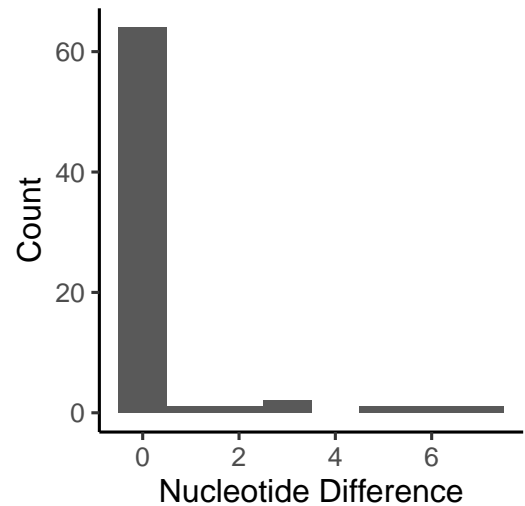
IGHV3-74*01

123 sequences assigned
88 (71.5%) exact matches, in which:
88 unique CDR3
6 unique J



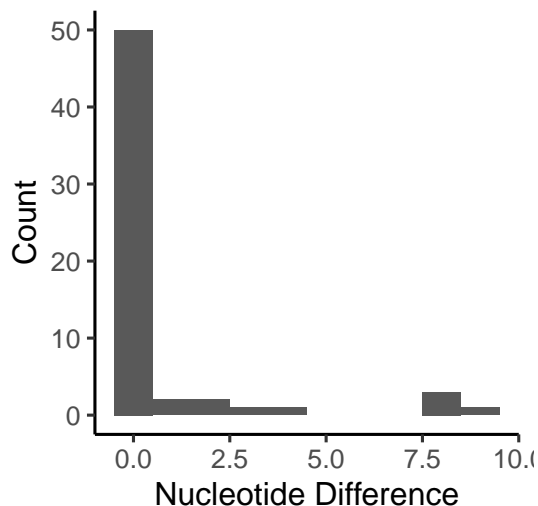
IGHV4-4*02

71 sequences assigned
64 (90.1%) exact matches, in which:
64 unique CDR3
7 unique J



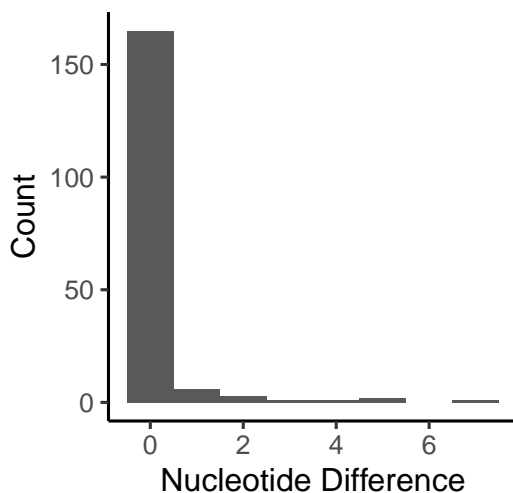
IGHV4-4*07

60 sequences assigned
50 (83.3%) exact matches, in which:
50 unique CDR3
6 unique J



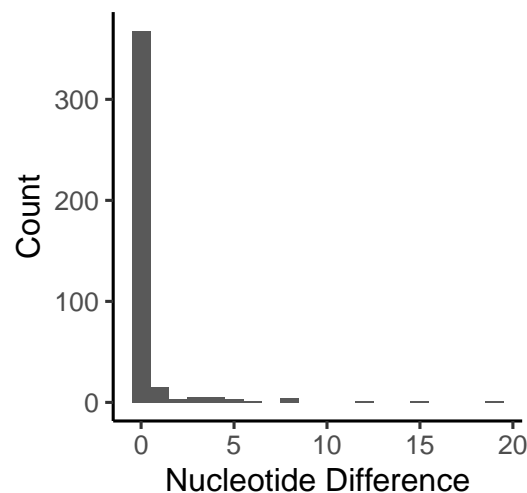
IGHV4-31*03

179 sequences assigned
165 (92.2%) exact matches, in which:
165 unique CDR3
5 unique J



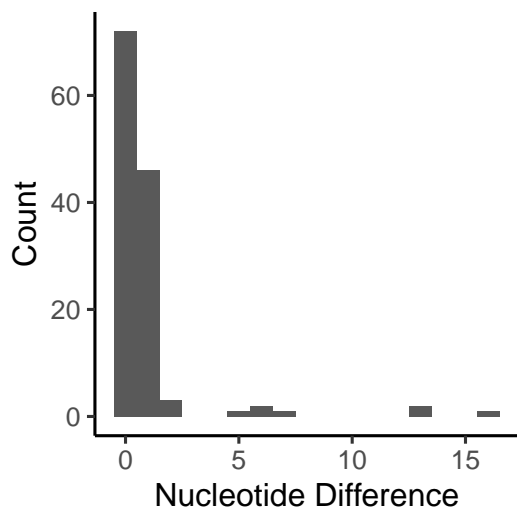
IGHV4-39*07

408 sequences assigned
368 (90.2%) exact matches, in which:
368 unique CDR3
7 unique J



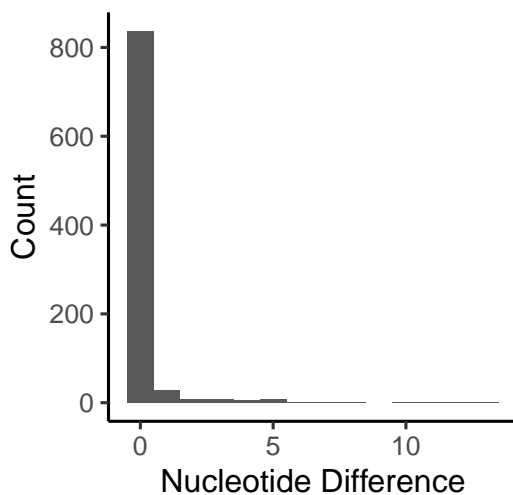
IGHV4-30-2*01

128 sequences assigned
72 (56.2%) exact matches, in which:
72 unique CDR3
7 unique J



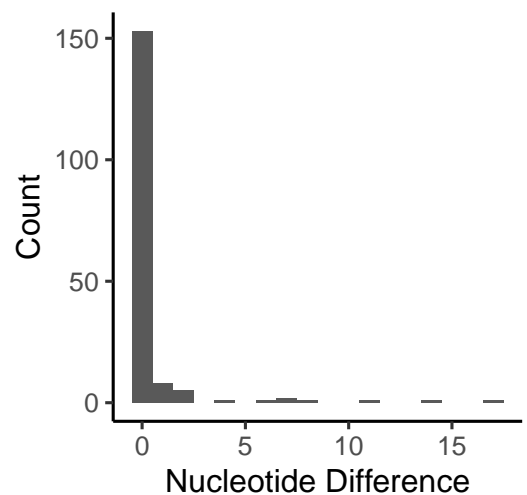
IGHV4-34*01

908 sequences assigned
837 (92.2%) exact matches, in which:
837 unique CDR3
7 unique J



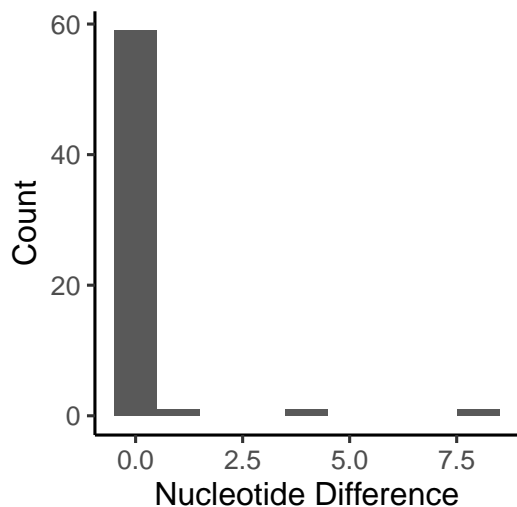
IGHV4-59*01

174 sequences assigned
153 (87.9%) exact matches, in which:
153 unique CDR3
7 unique J



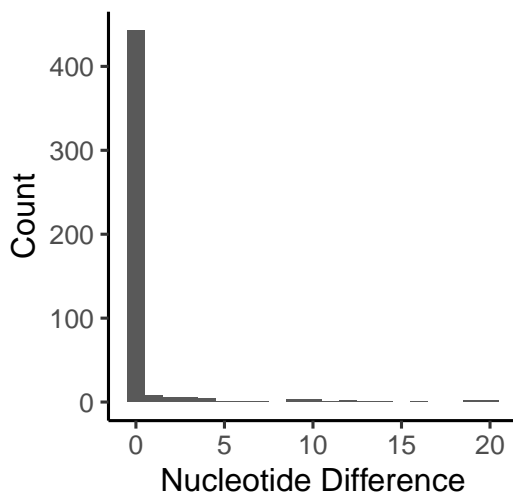
IGHV4-30-4*01

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



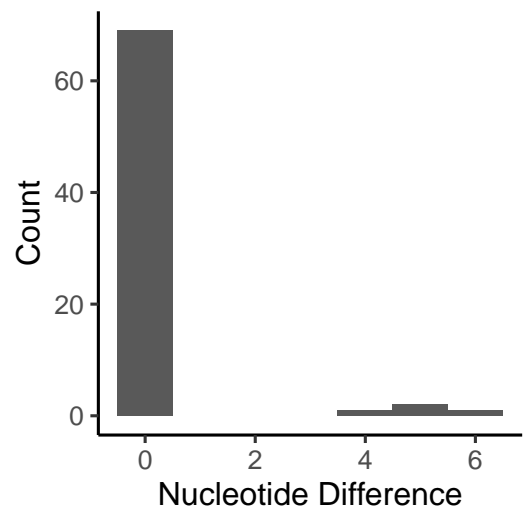
IGHV4-39*01

488 sequences assigned
443 (90.8%) exact matches, in which:
443 unique CDR3
7 unique J



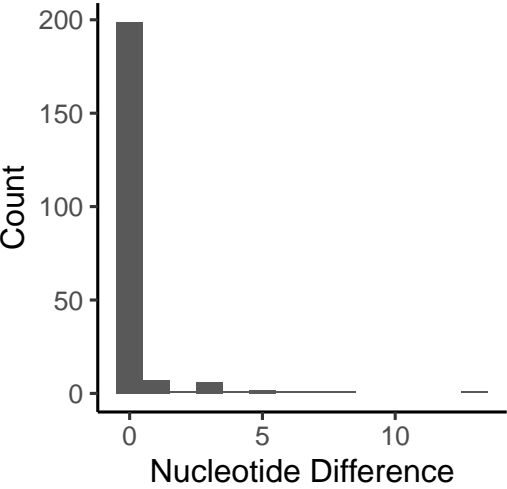
IGHV4-61*01

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



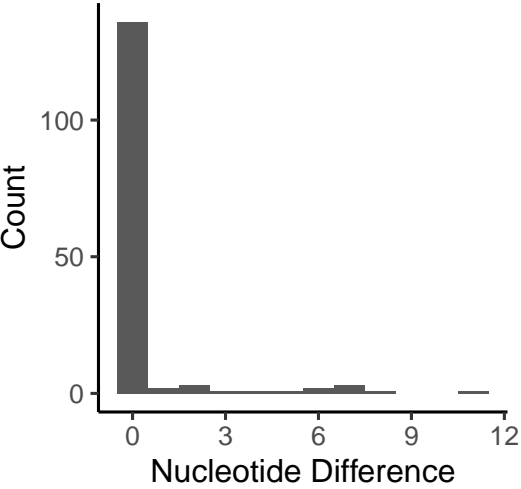
IGHV5-10-1*03

220 sequences assigned
199 (90.5%) exact matches, in which:
199 unique CDR3
7 unique J



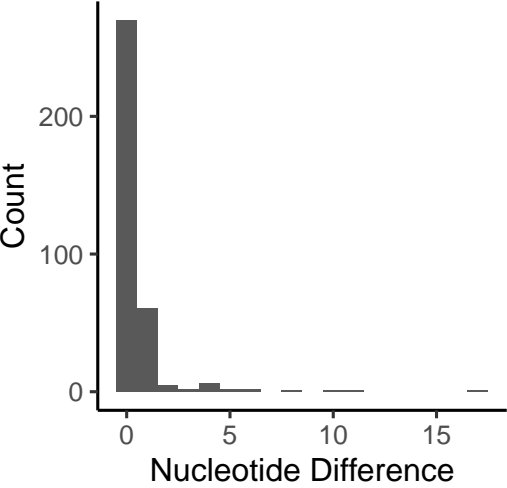
IGHV6-1*01

151 sequences assigned
136 (90.1%) exact matches, in which:
136 unique CDR3
7 unique J



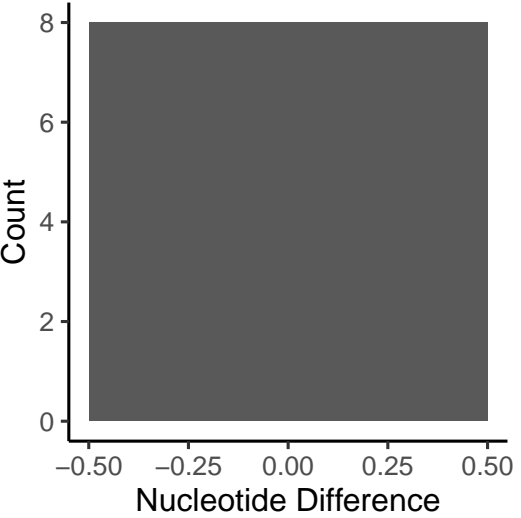
IGHV5-51*01

352 sequences assigned
270 (76.7%) exact matches, in which:
270 unique CDR3
7 unique J



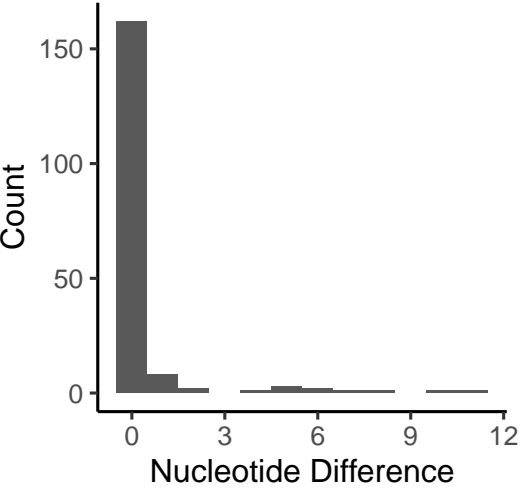
IGHV7-4-1*01

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

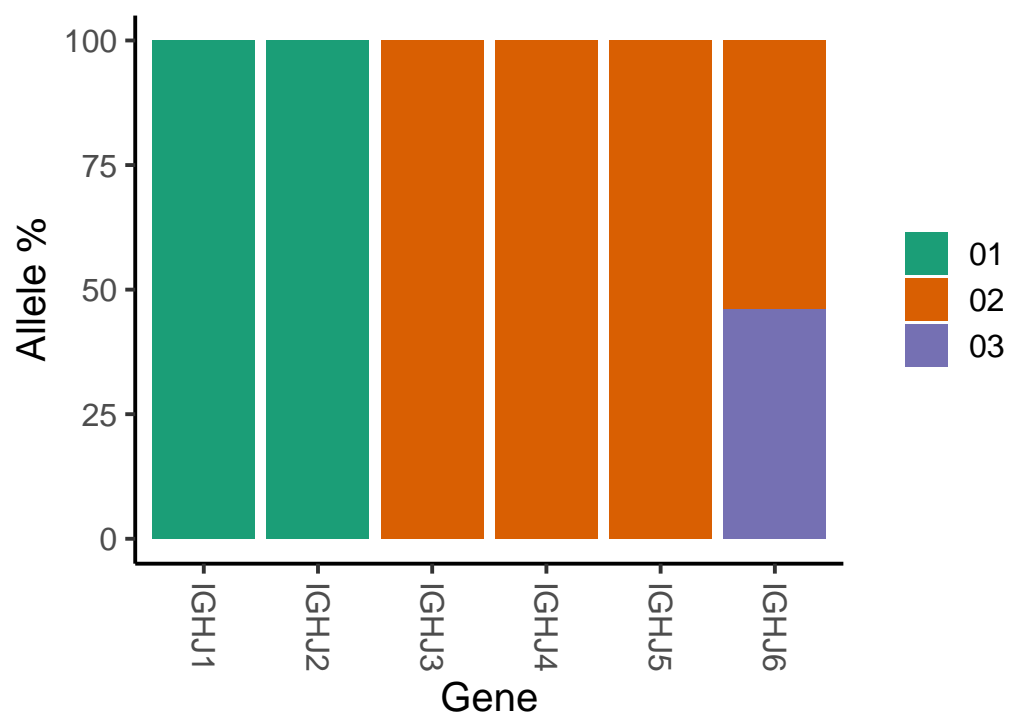


IGHV5-51*03

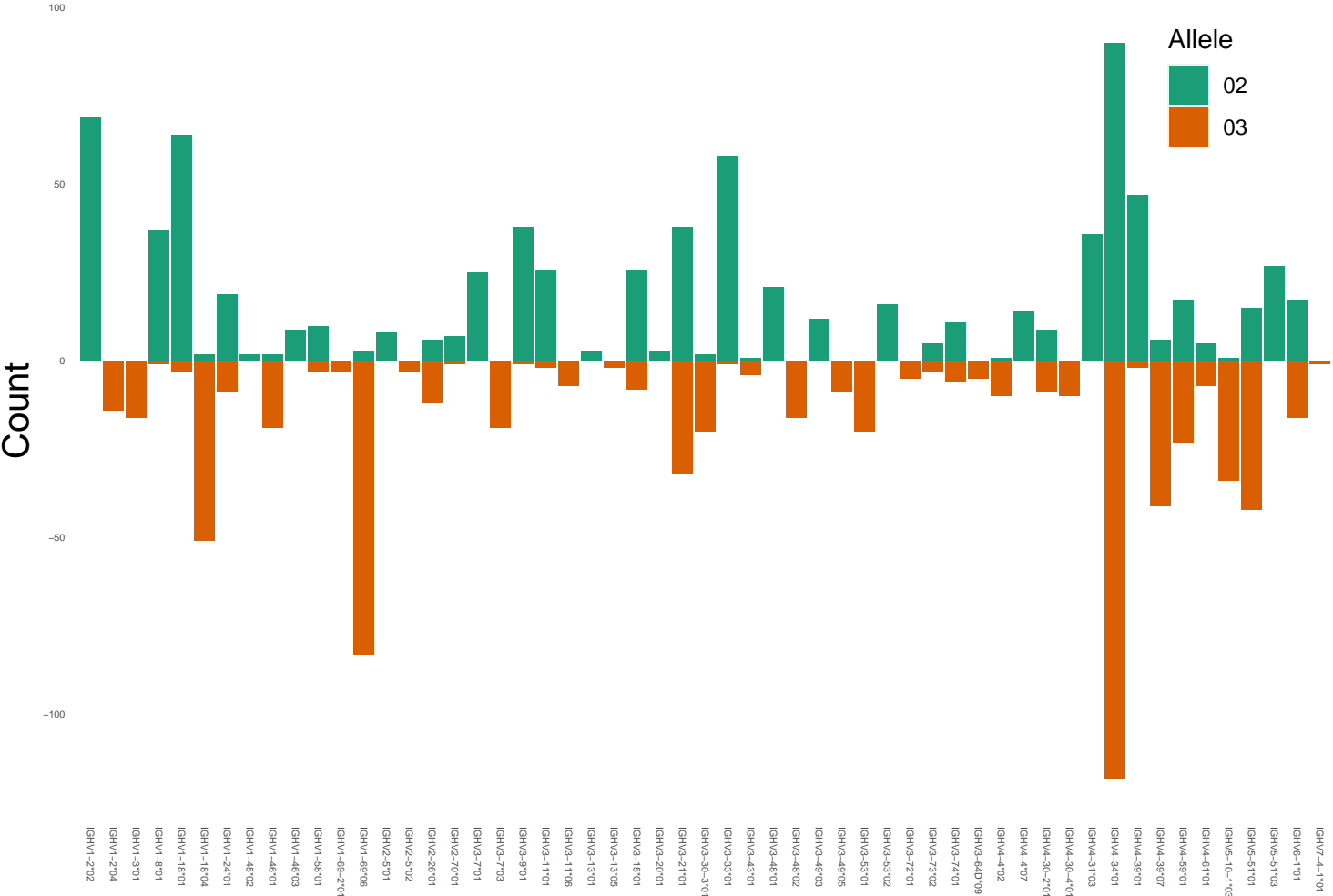
182 sequences assigned
162 (89%) exact matches, in which:
162 unique CDR3
6 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]