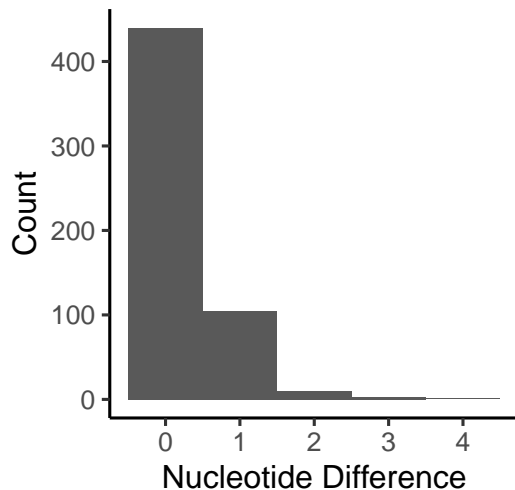


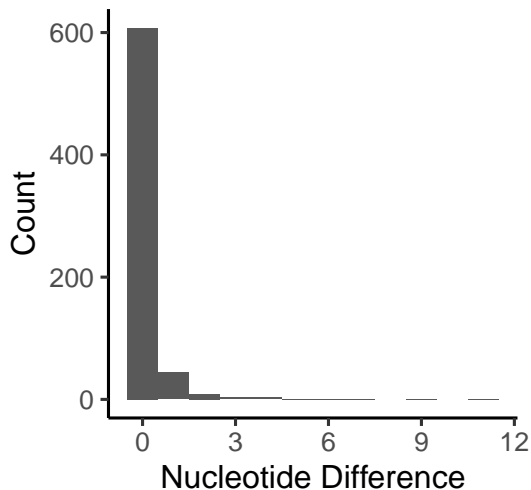
IGHV1-2*02

559 sequences assigned
440 (78.7%) exact matches, in which:
428 unique CDR3
6 unique J



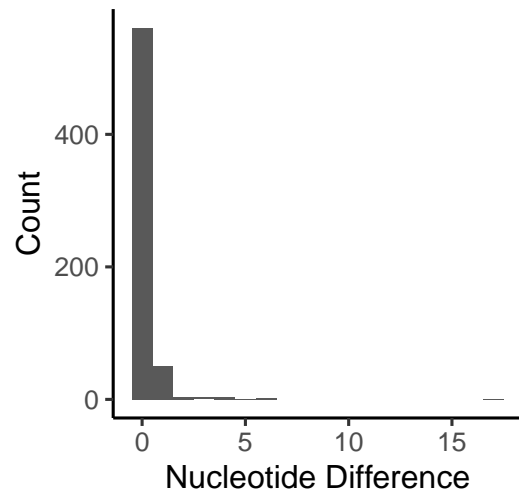
IGHV1-18*04

673 sequences assigned
608 (90.3%) exact matches, in which:
599 unique CDR3
7 unique J



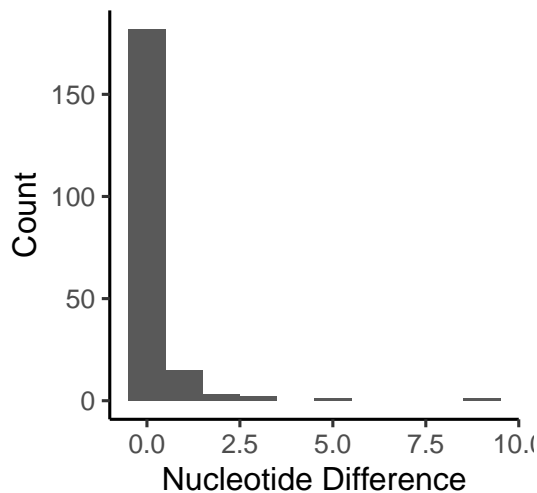
IGHV1-46*01

626 sequences assigned
561 (89.6%) exact matches, in which:
548 unique CDR3
7 unique J



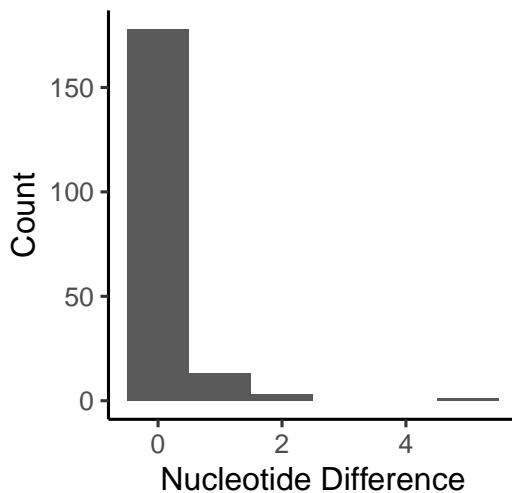
IGHV1-3*01

205 sequences assigned
182 (88.8%) exact matches, in which:
179 unique CDR3
6 unique J



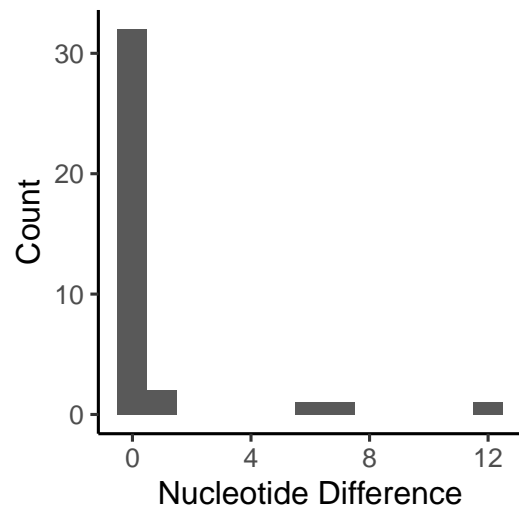
IGHV1-24*01

195 sequences assigned
178 (91.3%) exact matches, in which:
176 unique CDR3
7 unique J



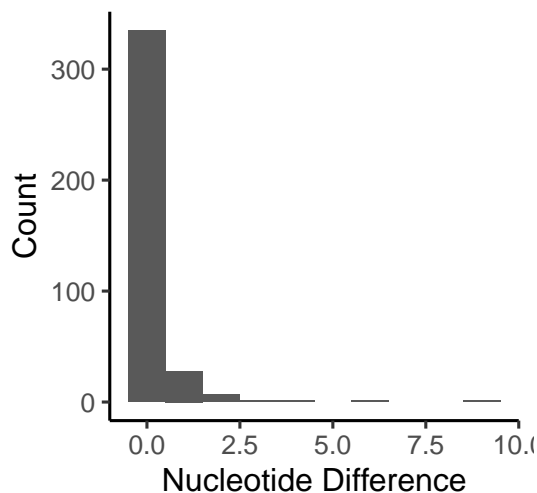
IGHV1-58*01

39 sequences assigned
32 (82.1%) exact matches, in which:
31 unique CDR3
6 unique J



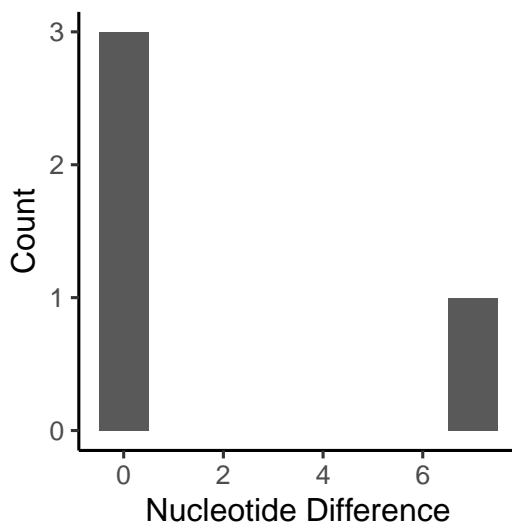
IGHV1-8*01

376 sequences assigned
335 (89.1%) exact matches, in which:
327 unique CDR3
6 unique J



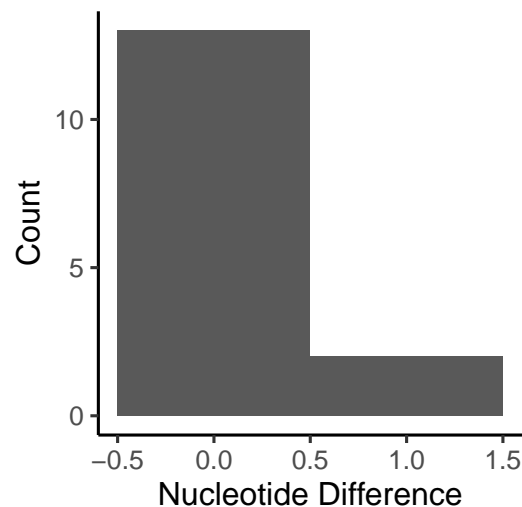
IGHV1-45*02

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



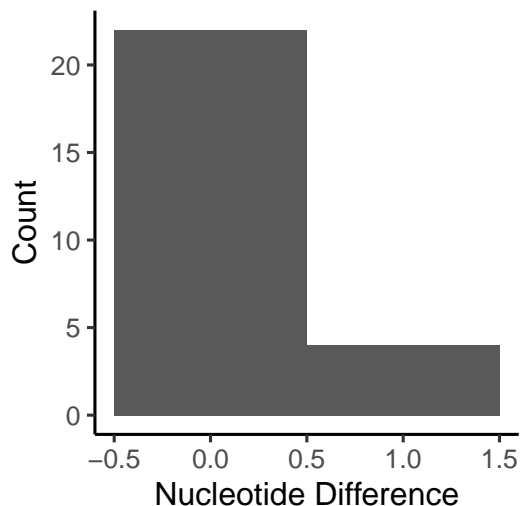
IGHV1-58*02

15 sequences assigned
13 (86.7%) exact matches, in which:
13 unique CDR3
4 unique J



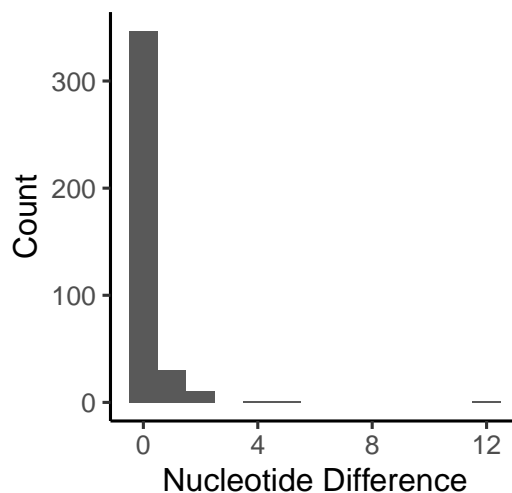
IGHV1-69-2*01

26 sequences assigned
22 (84.6%) exact matches, in which:
20 unique CDR3
4 unique J



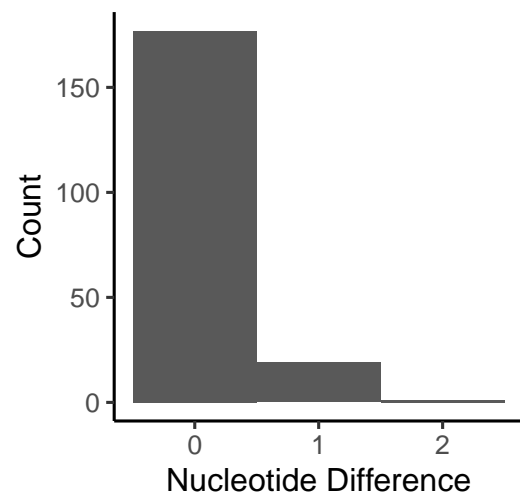
IGHV1-69*06

391 sequences assigned
347 (88.7%) exact matches, in which:
342 unique CDR3
6 unique J



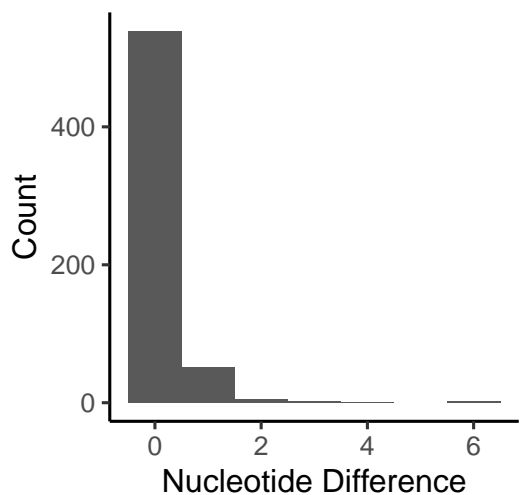
IGHV2-26*01

197 sequences assigned
177 (89.8%) exact matches, in which:
176 unique CDR3
7 unique J



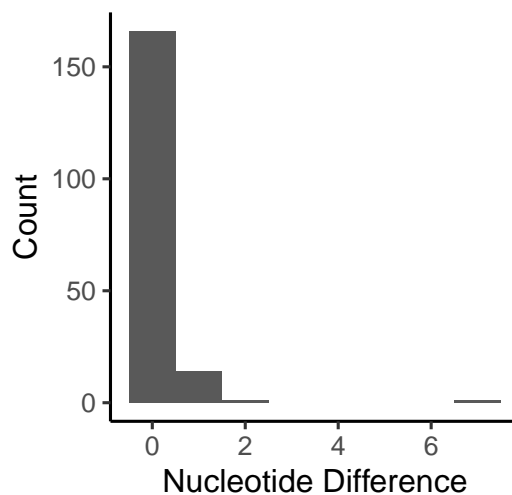
IGHV1-69*01

600 sequences assigned
539 (89.8%) exact matches, in which:
528 unique CDR3
7 unique J



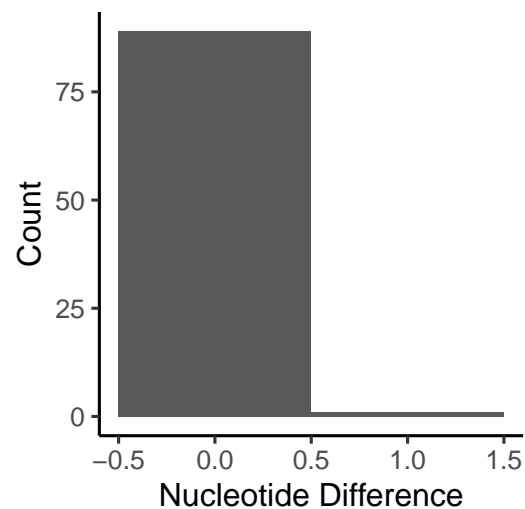
IGHV2-5*01

184 sequences assigned
166 (90.2%) exact matches, in which:
161 unique CDR3
6 unique J



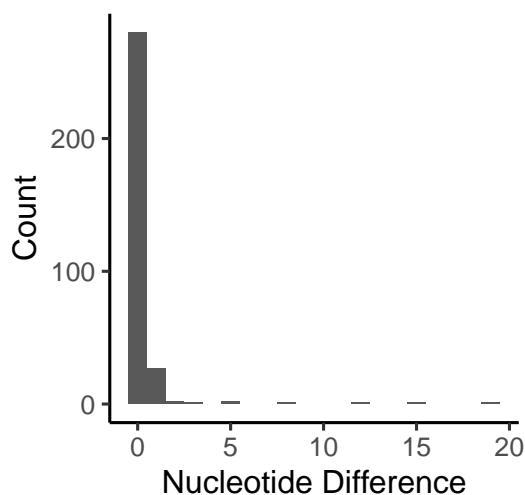
IGHV2-70*15

90 sequences assigned
89 (98.9%) exact matches, in which:
89 unique CDR3
6 unique J



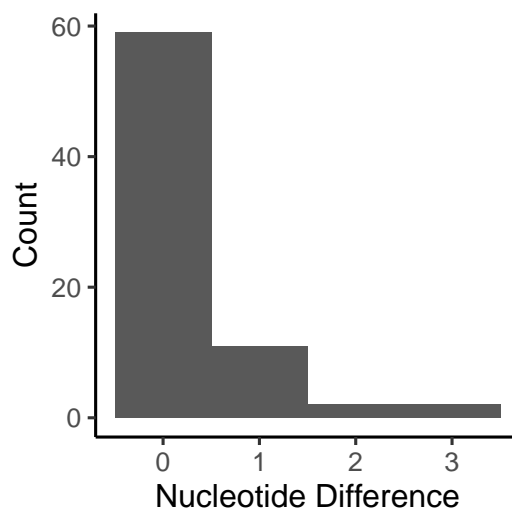
IGHV1-69*04

316 sequences assigned
280 (88.6%) exact matches, in which:
271 unique CDR3
6 unique J



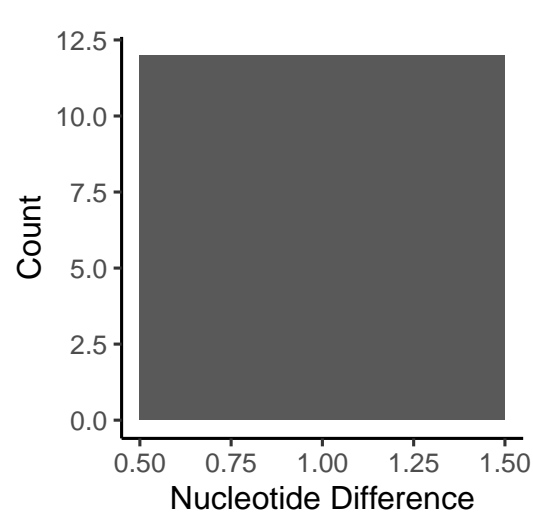
IGHV2-5*02

75 sequences assigned
59 (78.7%) exact matches, in which:
59 unique CDR3
4 unique J



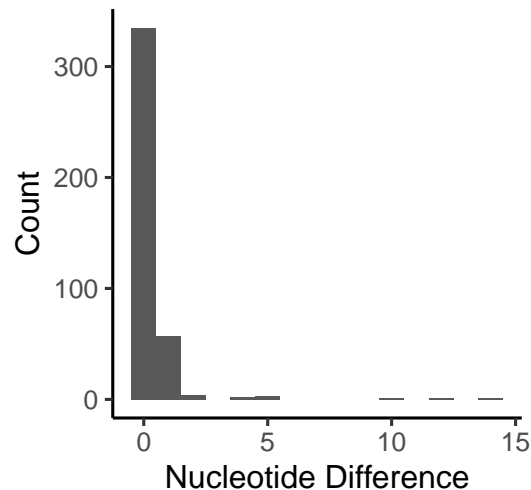
IGHV2-70D*14

12 sequences assigned
No exact matches.



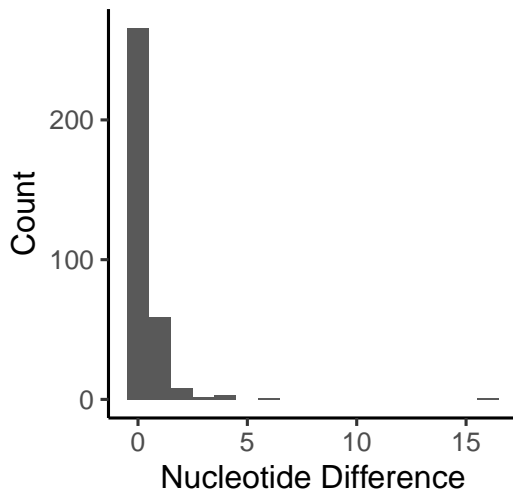
IGHV3-7*01

405 sequences assigned
335 (82.7%) exact matches, in which:
325 unique CDR3
7 unique J



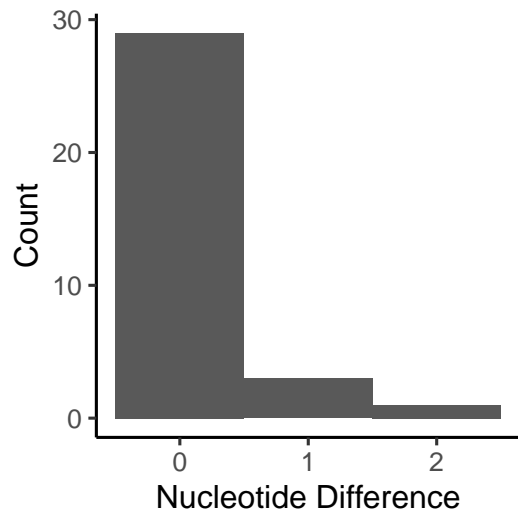
IGHV3-11*01

341 sequences assigned
266 (78%) exact matches, in which:
258 unique CDR3
6 unique J



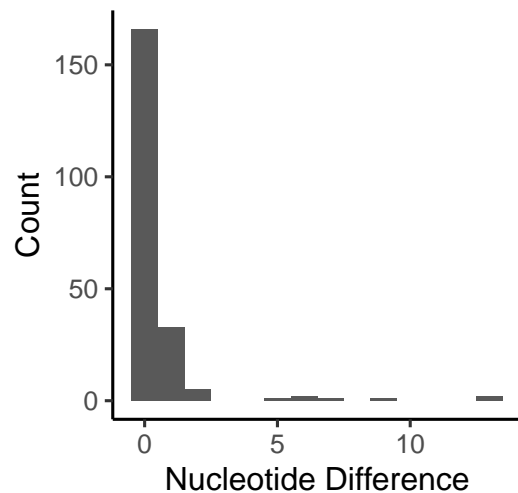
IGHV3-13*05

33 sequences assigned
29 (87.9%) exact matches, in which:
27 unique CDR3
4 unique J



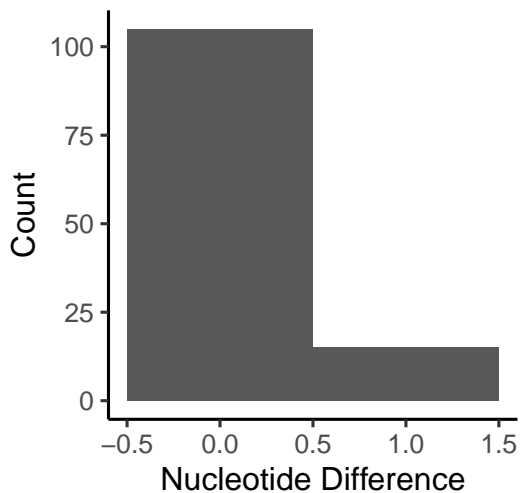
IGHV3-7*03

214 sequences assigned
166 (77.6%) exact matches, in which:
162 unique CDR3
6 unique J



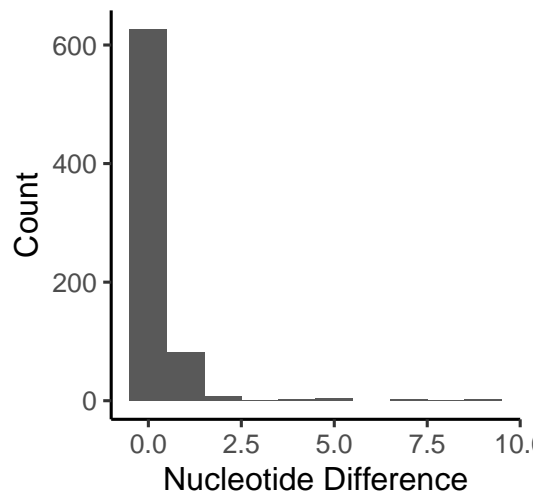
IGHV3-11*06

120 sequences assigned
105 (87.5%) exact matches, in which:
97 unique CDR3
5 unique J



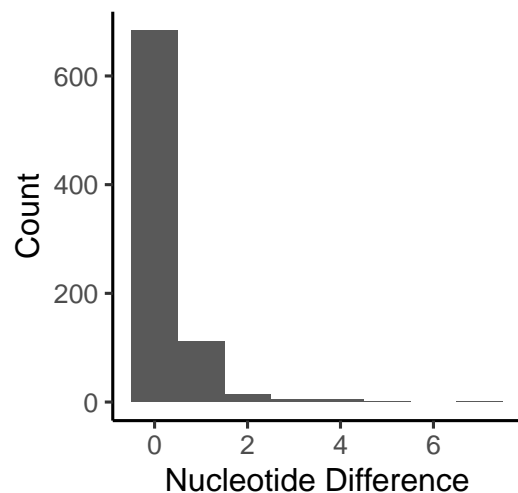
IGHV3-15*01

731 sequences assigned
627 (85.8%) exact matches, in which:
612 unique CDR3
7 unique J



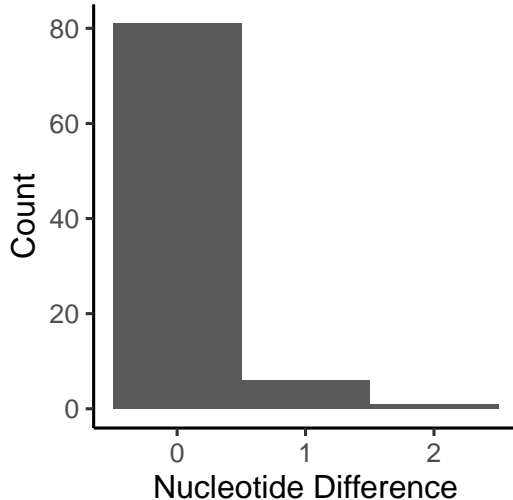
IGHV3-9*01

819 sequences assigned
684 (83.5%) exact matches, in which:
657 unique CDR3
6 unique J



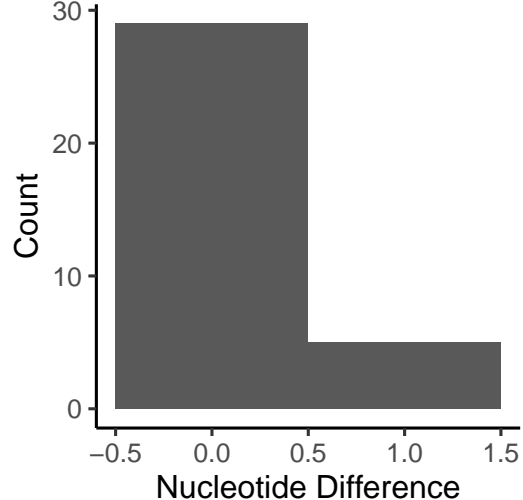
IGHV3-13*01

88 sequences assigned
81 (92%) exact matches, in which:
78 unique CDR3
5 unique J



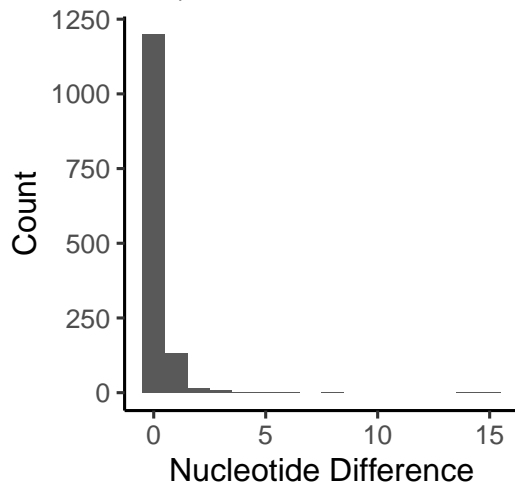
IGHV3-20*01

34 sequences assigned
29 (85.3%) exact matches, in which:
29 unique CDR3
5 unique J



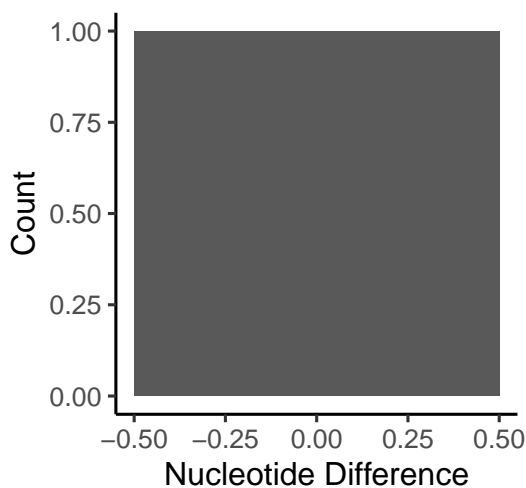
IGHV3-21*01

1369 sequences assigned
1199 (87.6%) exact matches, in which:
1146 unique CDR3
7 unique J



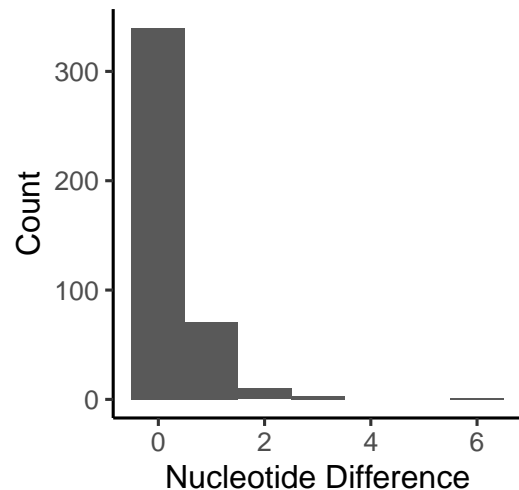
IGHV3-30-3*01

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



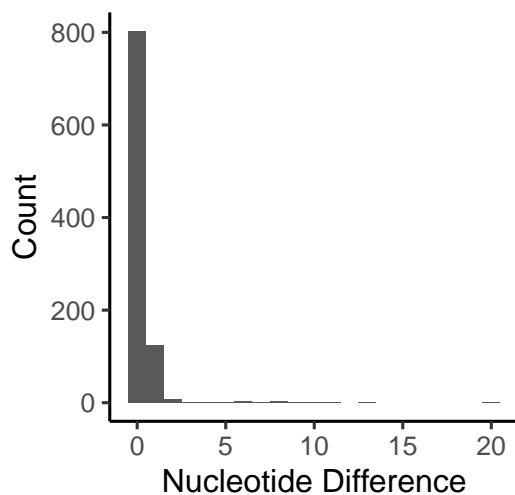
IGHV3-33*08

425 sequences assigned
340 (80%) exact matches, in which:
318 unique CDR3
7 unique J



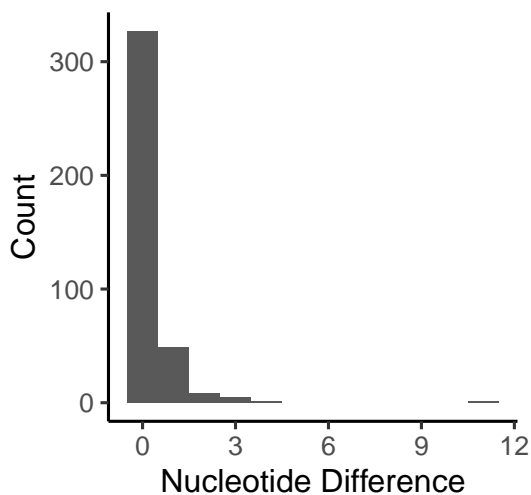
IGHV3-23*01

955 sequences assigned
803 (84.1%) exact matches, in which:
781 unique CDR3
6 unique J



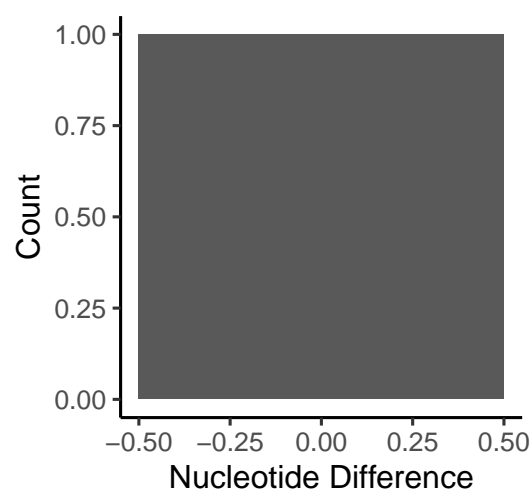
IGHV3-30*18

391 sequences assigned
327 (83.6%) exact matches, in which:
320 unique CDR3
6 unique J



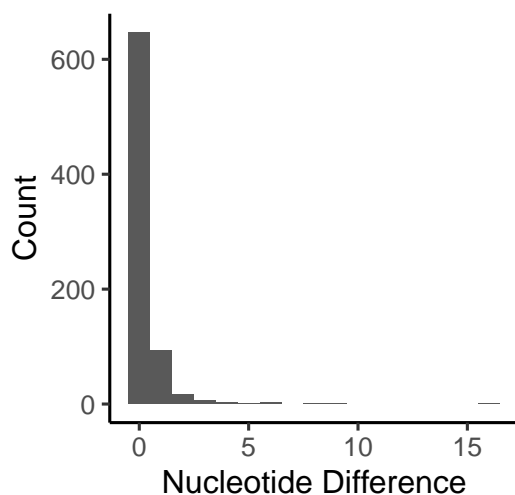
IGHV3-35*01

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



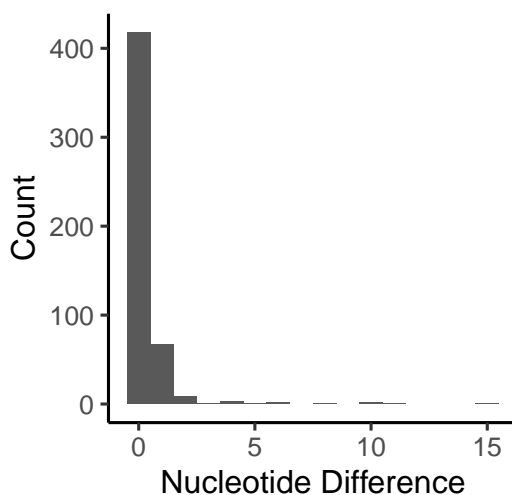
IGHV3-23*04

771 sequences assigned
647 (83.9%) exact matches, in which:
621 unique CDR3
6 unique J



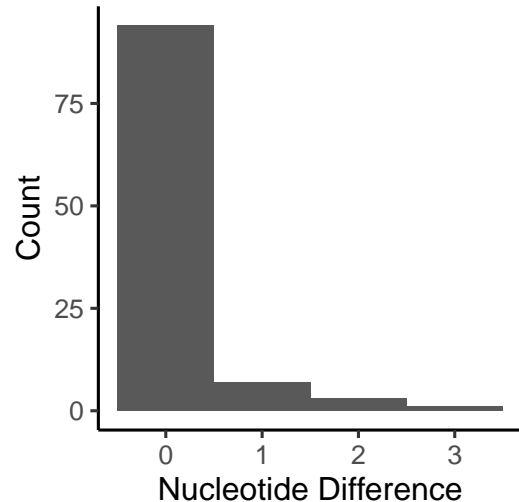
IGHV3-33*01

505 sequences assigned
418 (82.8%) exact matches, in which:
394 unique CDR3
7 unique J



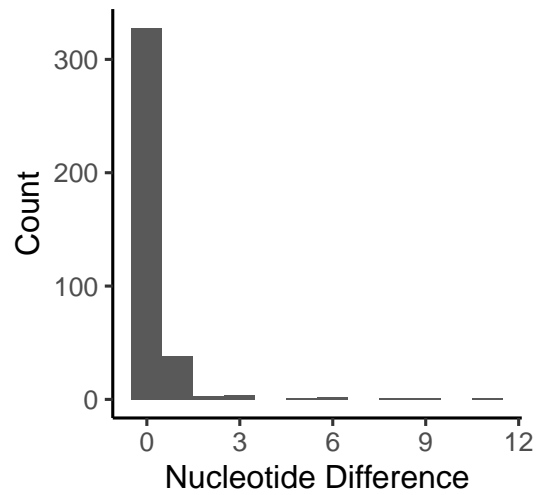
IGHV3-43*01

105 sequences assigned
94 (89.5%) exact matches, in which:
89 unique CDR3
7 unique J



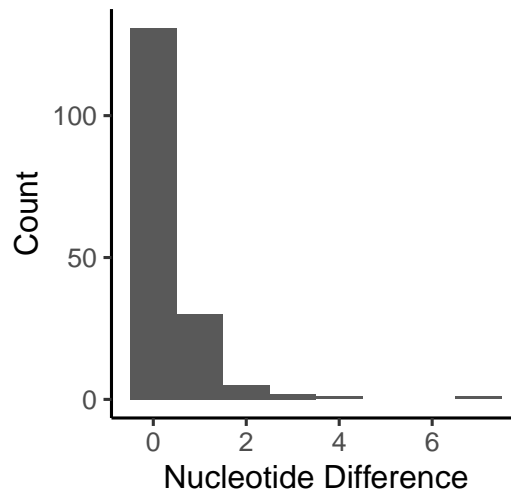
IGHV3-48*01

379 sequences assigned
328 (86.5%) exact matches, in which:
315 unique CDR3
6 unique J



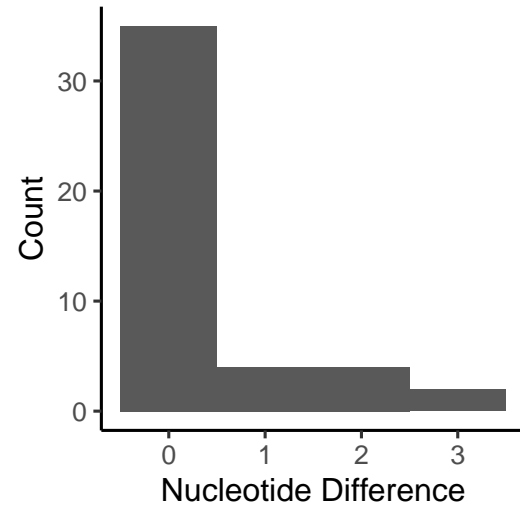
IGHV3-49*04

170 sequences assigned
131 (77.1%) exact matches, in which:
128 unique CDR3
6 unique J



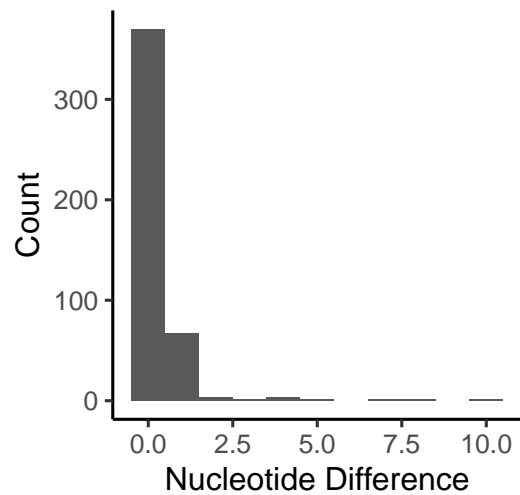
IGHV3-64*01

45 sequences assigned
35 (77.8%) exact matches, in which:
32 unique CDR3
3 unique J



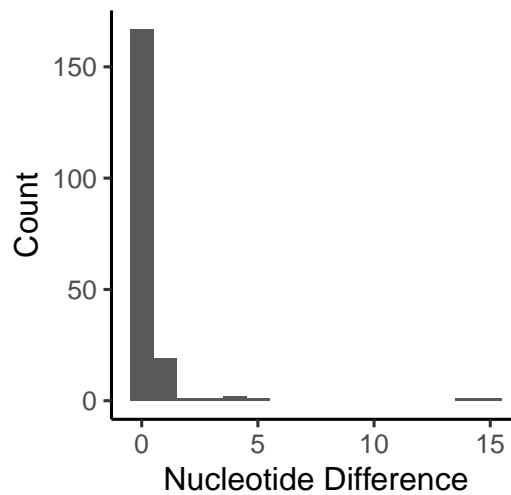
IGHV3-48*03

448 sequences assigned
370 (82.6%) exact matches, in which:
362 unique CDR3
7 unique J



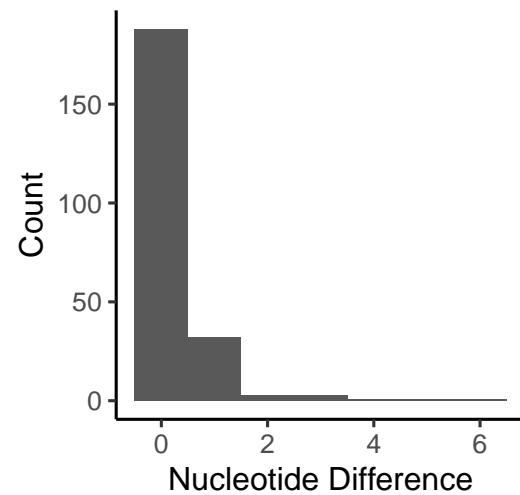
IGHV3-53*01

193 sequences assigned
167 (86.5%) exact matches, in which:
161 unique CDR3
6 unique J



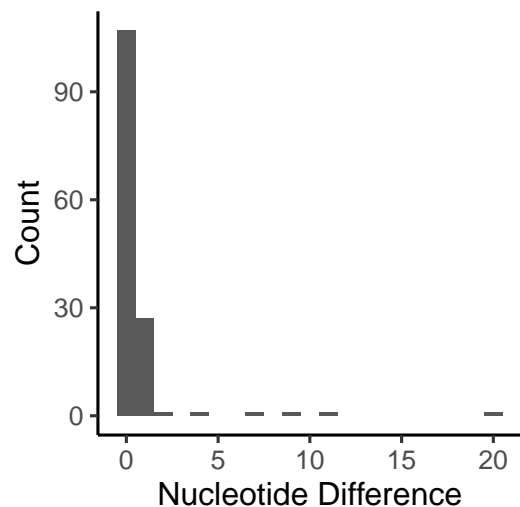
IGHV3-66*01

229 sequences assigned
188 (82.1%) exact matches, in which:
175 unique CDR3
6 unique J



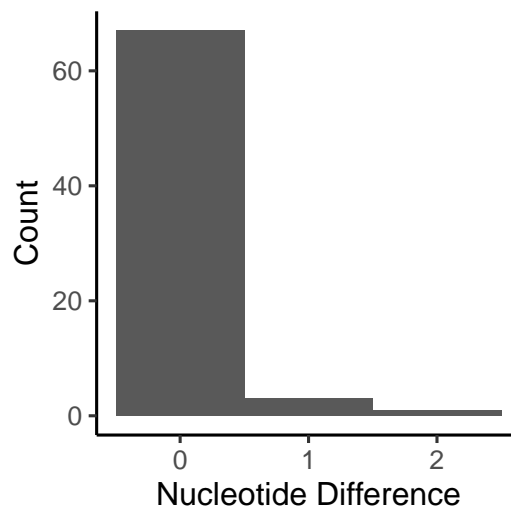
IGHV3-49*03

140 sequences assigned
107 (76.4%) exact matches, in which:
103 unique CDR3
5 unique J



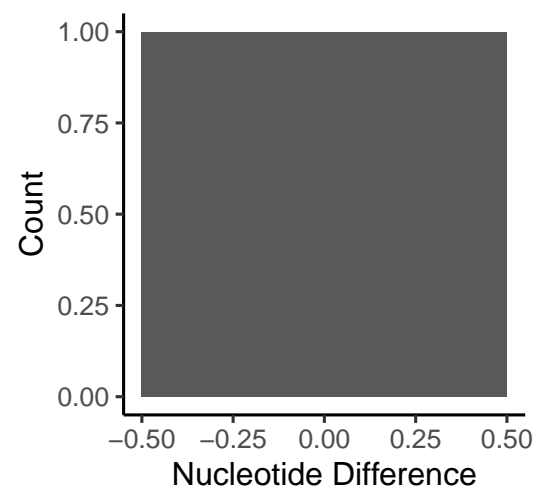
IGHV3-53*02

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



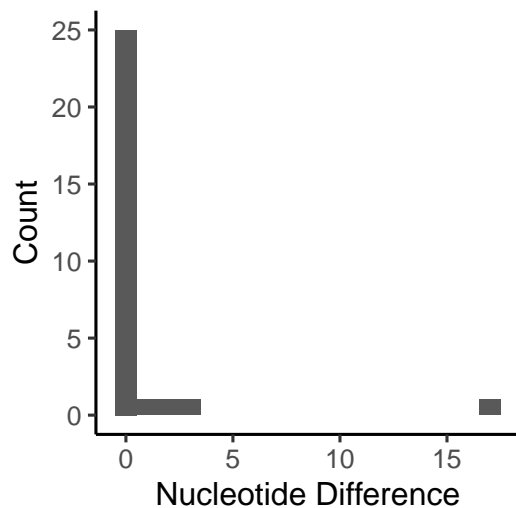
IGHV3-69-1*01

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



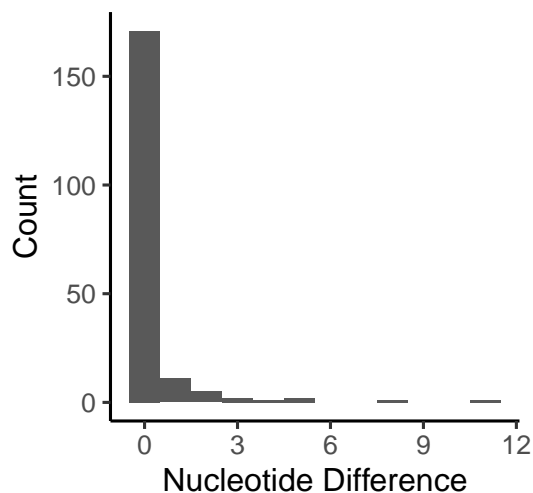
IGHV3-72*01

30 sequences assigned
25 (83.3%) exact matches, in which:
25 unique CDR3
5 unique J



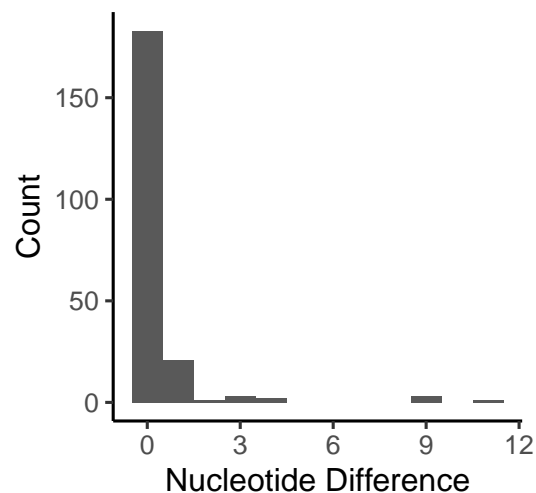
IGHV3-74*01

194 sequences assigned
171 (88.1%) exact matches, in which:
166 unique CDR3
7 unique J



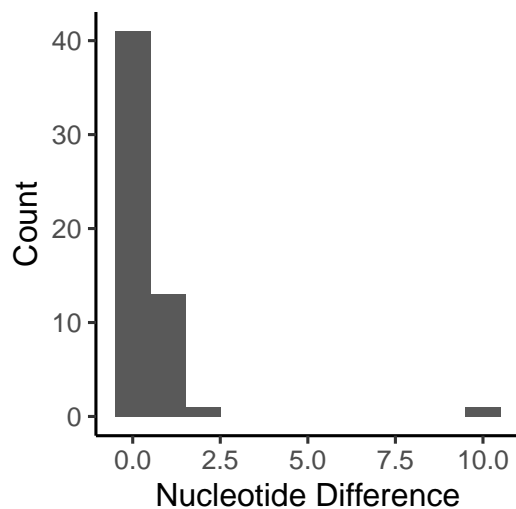
IGHV4-4*07

214 sequences assigned
183 (85.5%) exact matches, in which:
183 unique CDR3
6 unique J



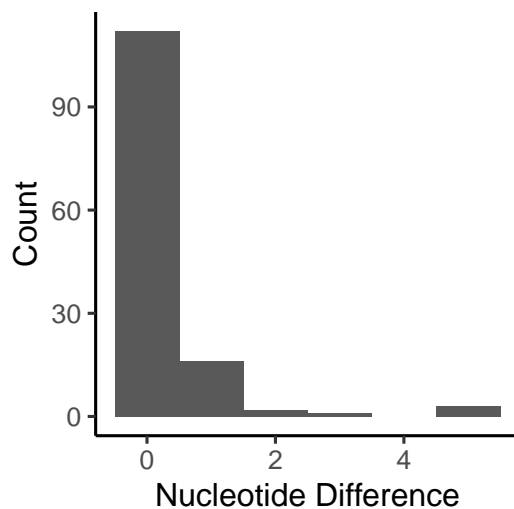
IGHV3-73*01

56 sequences assigned
41 (73.2%) exact matches, in which:
40 unique CDR3
5 unique J



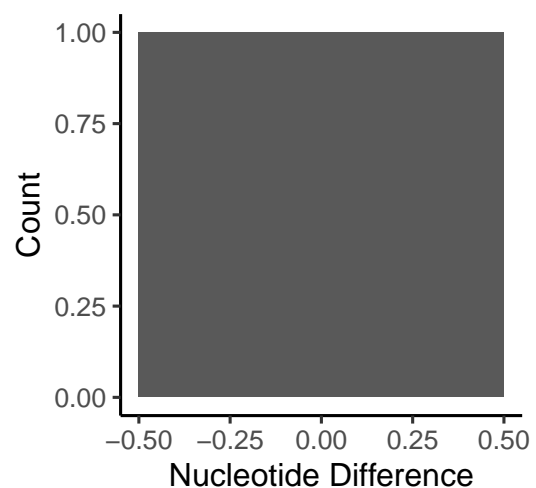
IGHV3-64D*06

134 sequences assigned
112 (83.6%) exact matches, in which:
106 unique CDR3
6 unique J



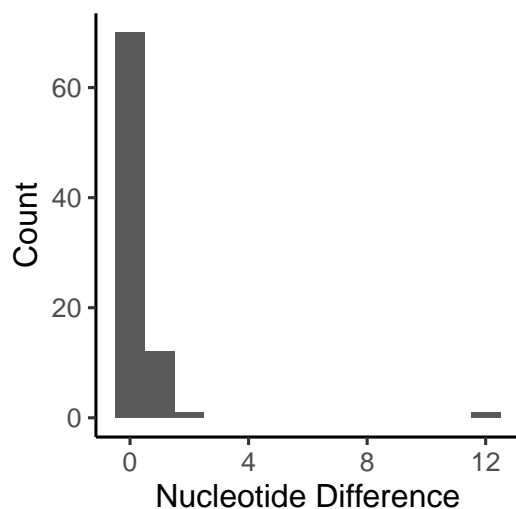
IGHV4-28*03

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



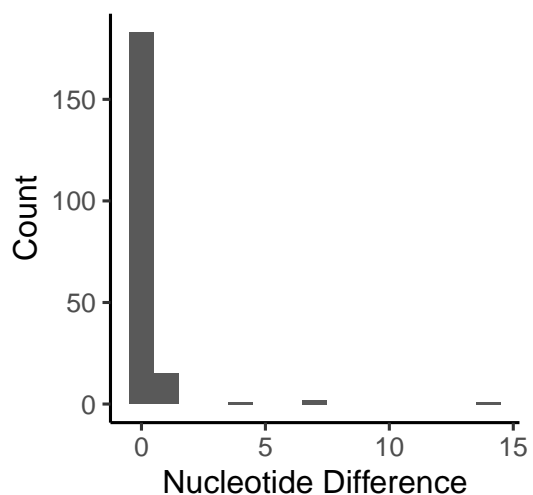
IGHV3-73*02

84 sequences assigned
70 (83.3%) exact matches, in which:
69 unique CDR3
5 unique J



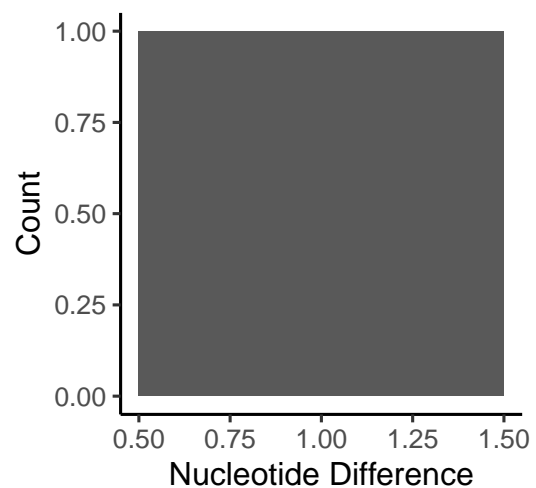
IGHV4-4*02

202 sequences assigned
183 (90.6%) exact matches, in which:
183 unique CDR3
6 unique J



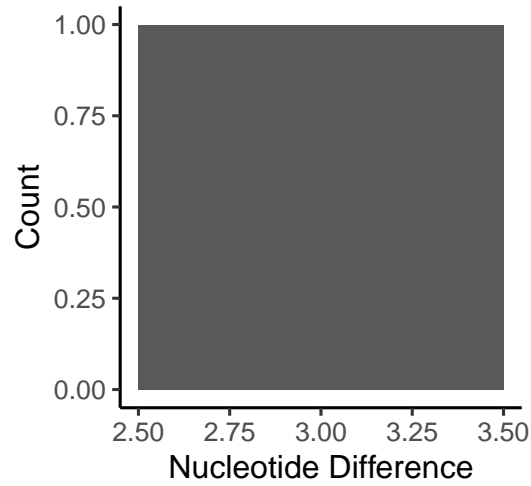
IGHV4-28*04

1 sequences assigned
No exact matches.



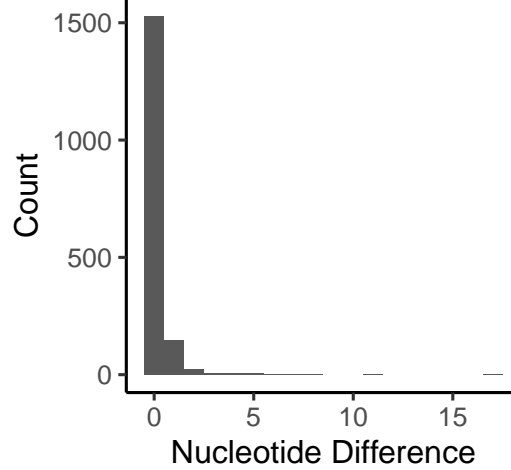
IGHV4-30-4*07

1 sequences assigned
No exact matches.



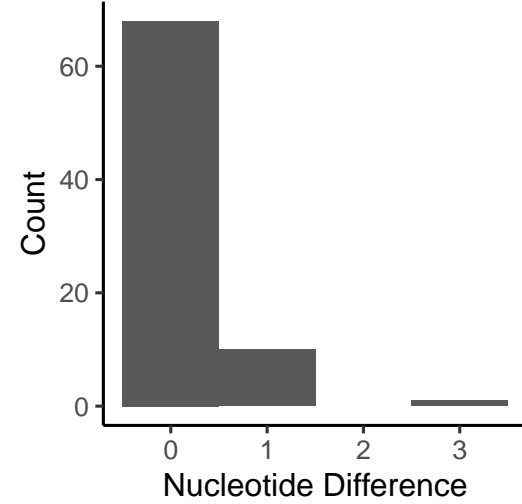
IGHV4-39*01

1730 sequences assigned
1527 (88.3%) exact matches, in which:
1476 unique CDR3
7 unique J



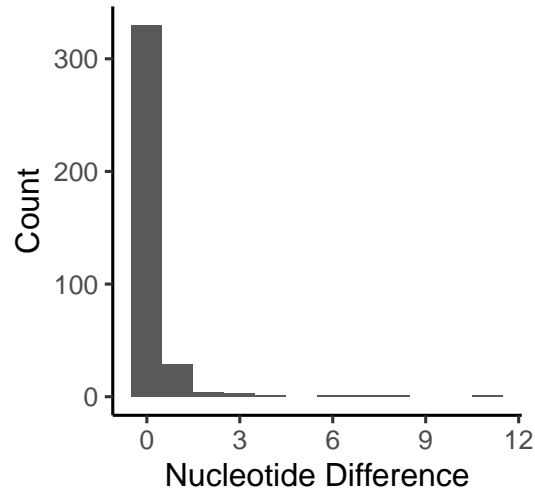
IGHV4-61*01

79 sequences assigned
68 (86.1%) exact matches, in which:
66 unique CDR3
5 unique J



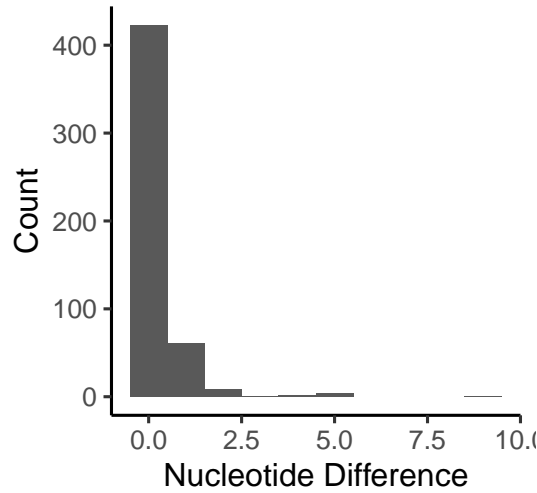
IGHV4-31*03

373 sequences assigned
330 (88.5%) exact matches, in which:
323 unique CDR3
6 unique J



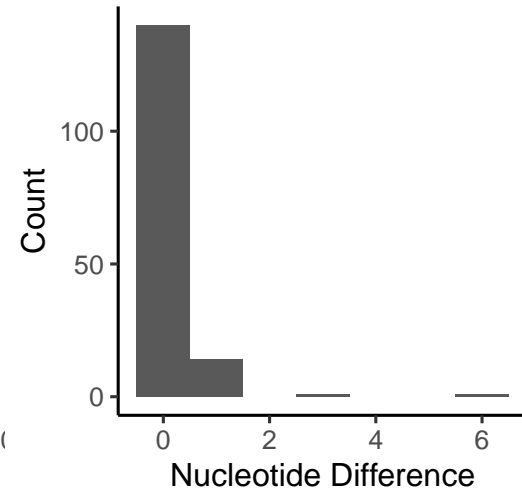
IGHV4-59*01

502 sequences assigned
423 (84.3%) exact matches, in which:
418 unique CDR3
7 unique J



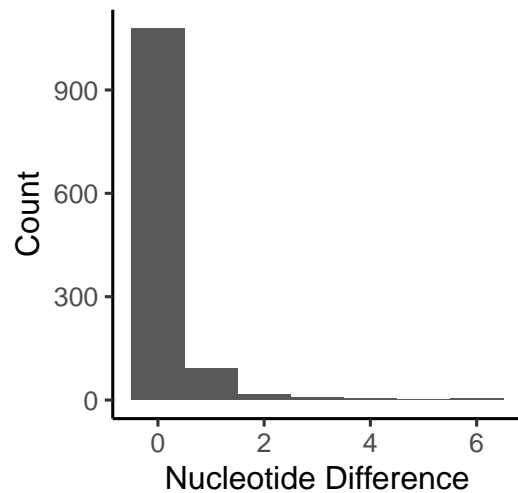
IGHV5-10-1*03

156 sequences assigned
140 (89.7%) exact matches, in which:
137 unique CDR3
7 unique J



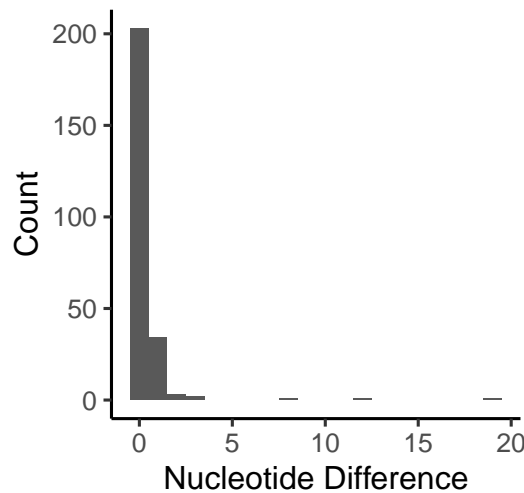
IGHV4-34*01

1205 sequences assigned
1079 (89.5%) exact matches, in which:
1051 unique CDR3
7 unique J



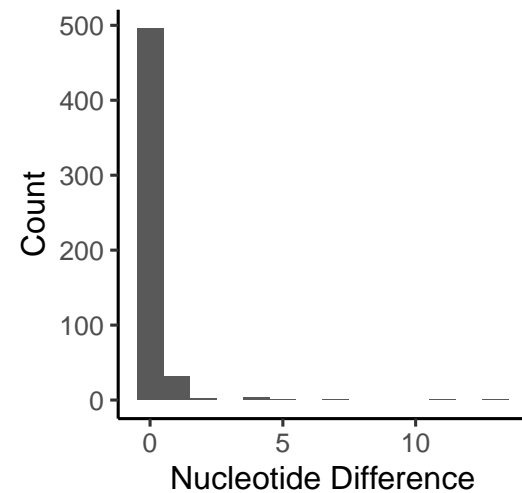
IGHV4-59*08

245 sequences assigned
203 (82.9%) exact matches, in which:
201 unique CDR3
7 unique J



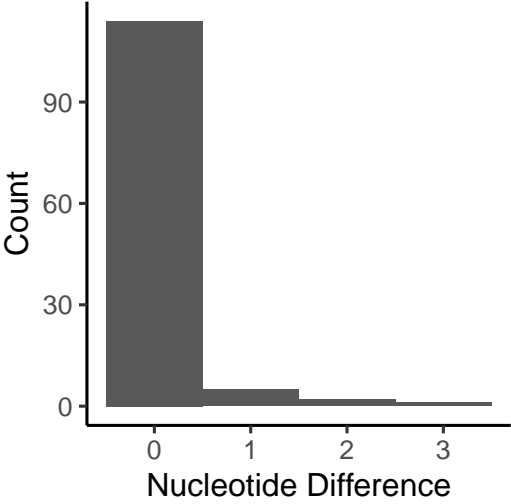
IGHV5-51*01

538 sequences assigned
496 (92.2%) exact matches, in which:
487 unique CDR3
7 unique J



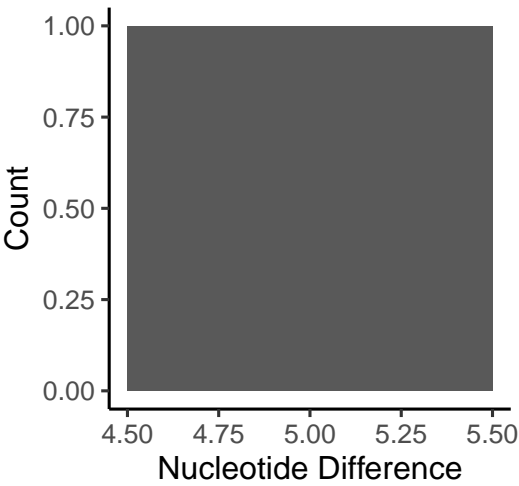
IGHV6-1*01

122 sequences assigned
114 (93.4%) exact matches, in which:
113 unique CDR3
7 unique J



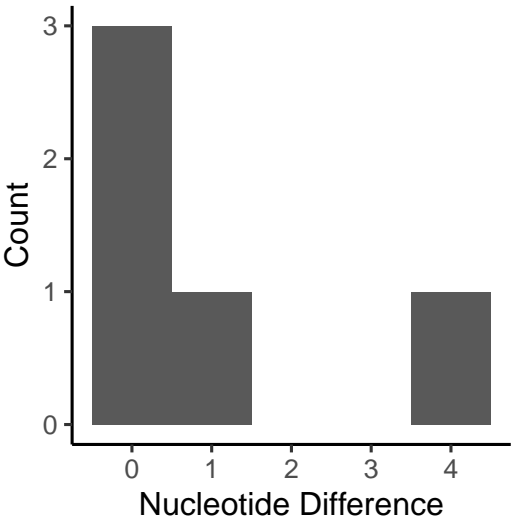
IGHV3/OR16-15*02

1 sequences assigned
No exact matches.

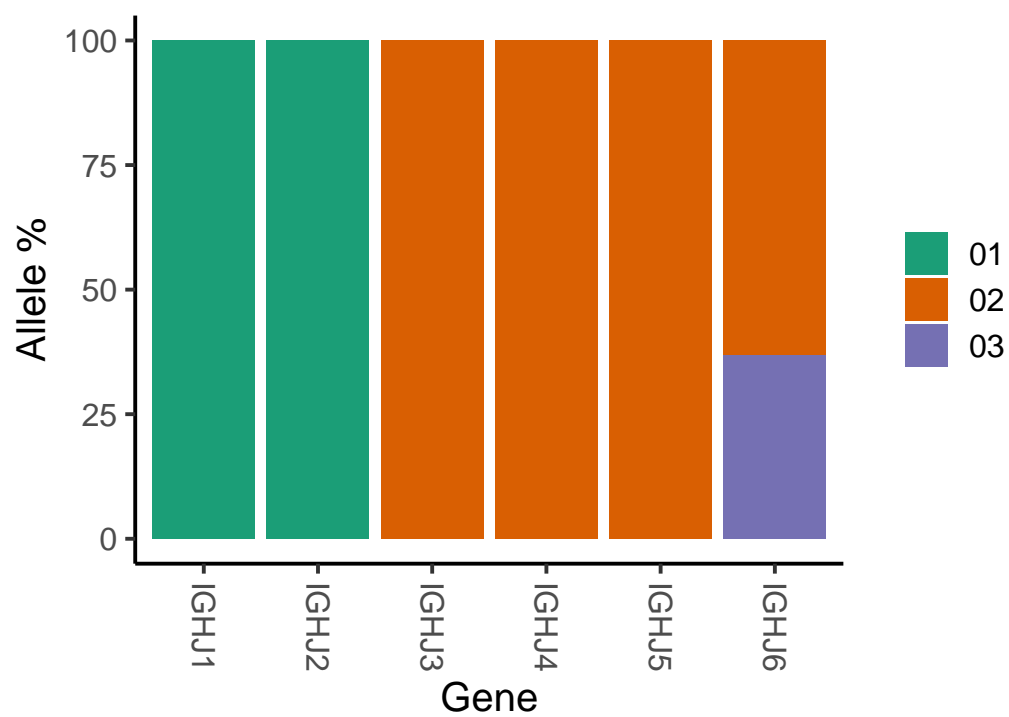


IGHV7-4-1*01

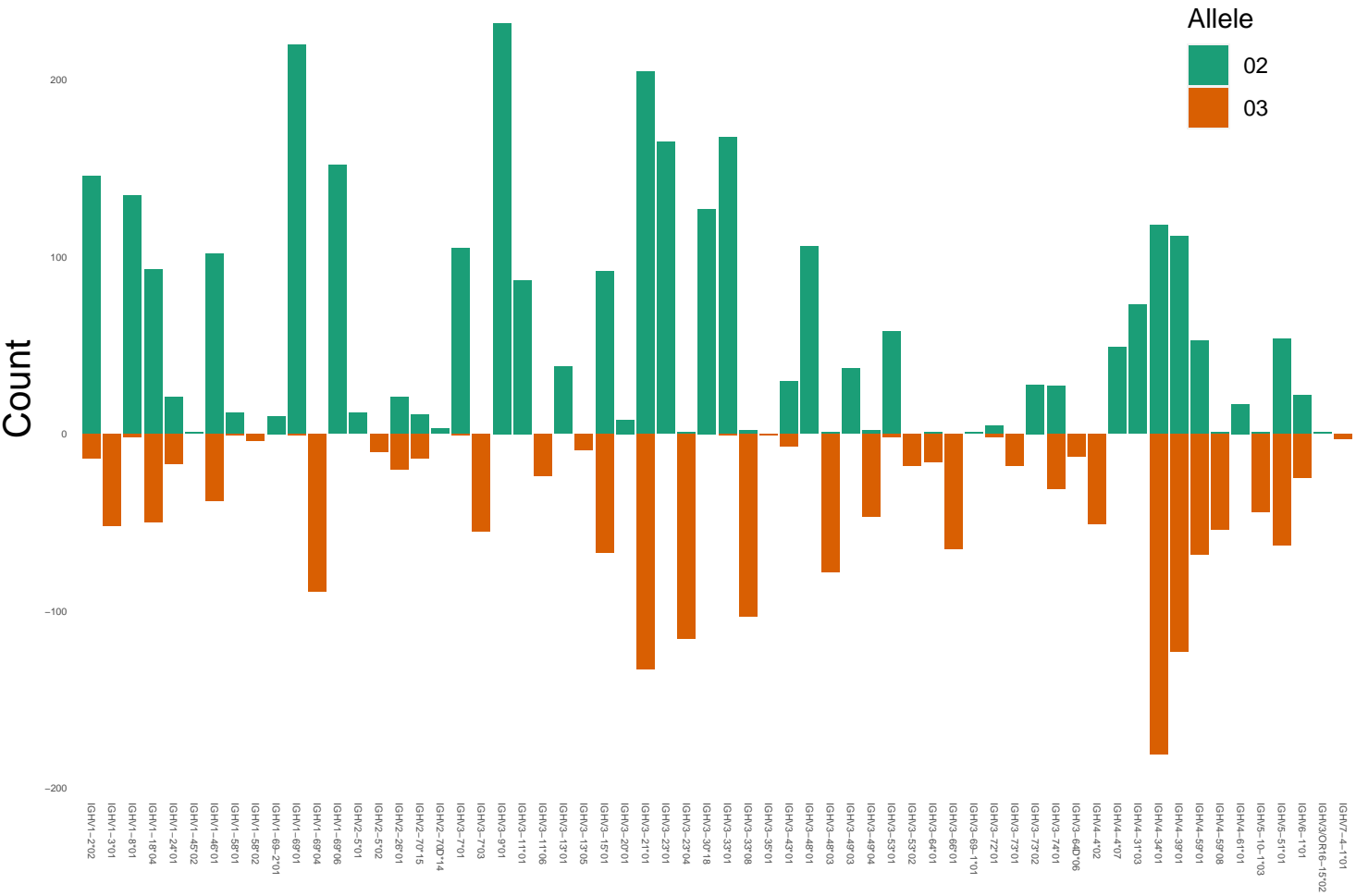
5 sequences assigned
3 (60%) exact matches, in which:
3 unique CDR3
2 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.