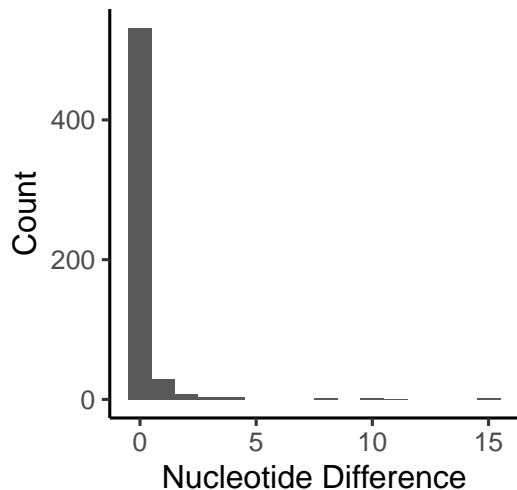


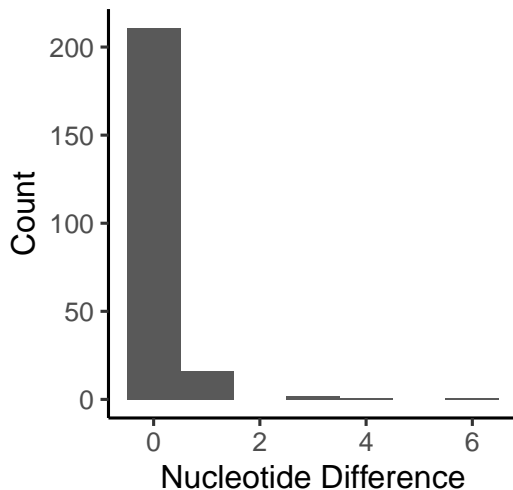
IGHV1-2*02

583 sequences assigned
532 (91.3%) exact matches, in which:
532 unique CDR3
6 unique J



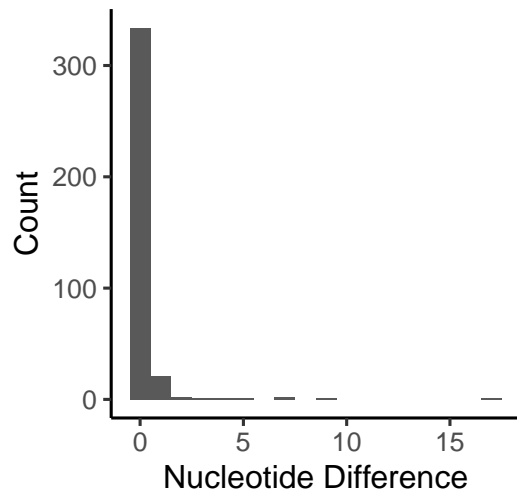
IGHV1-8*01

232 sequences assigned
211 (90.9%) exact matches, in which:
211 unique CDR3
5 unique J



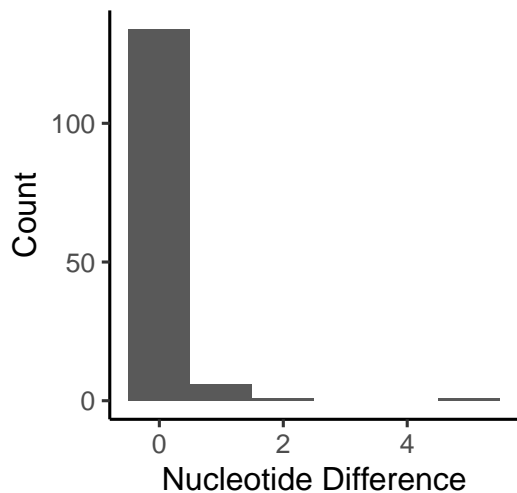
IGHV1-24*01

364 sequences assigned
334 (91.8%) exact matches, in which:
333 unique CDR3
6 unique J



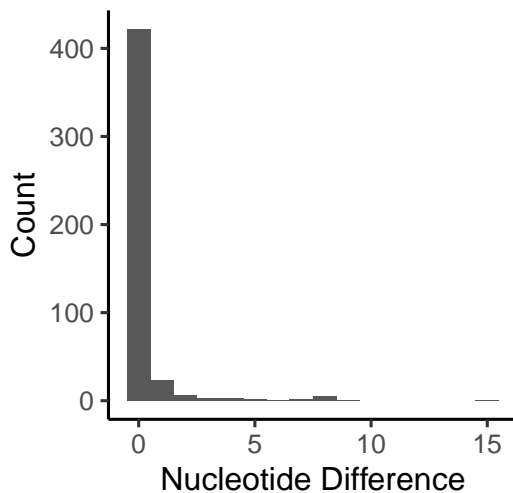
IGHV1-2*04

142 sequences assigned
134 (94.4%) exact matches, in which:
134 unique CDR3
6 unique J



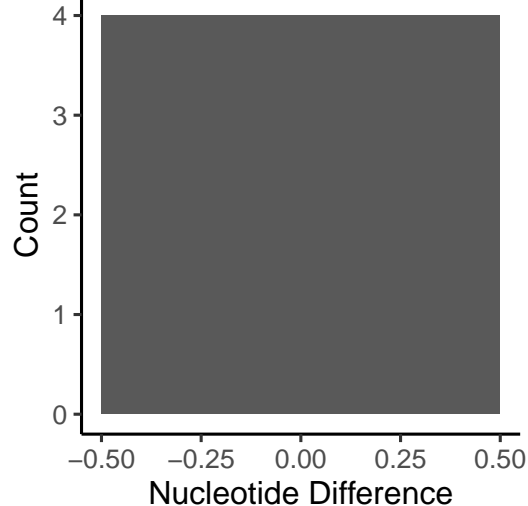
IGHV1-18*01

469 sequences assigned
422 (90%) exact matches, in which:
422 unique CDR3
6 unique J



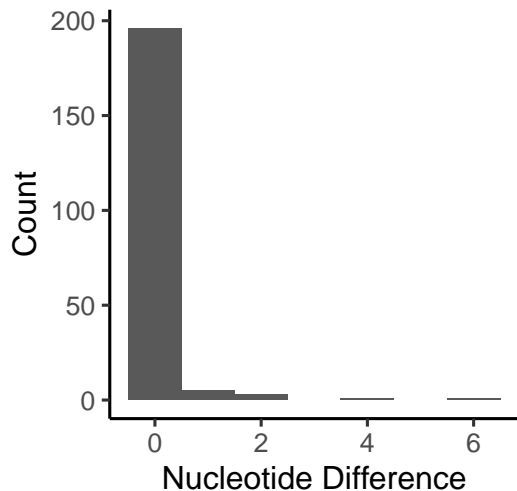
IGHV1-45*02

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



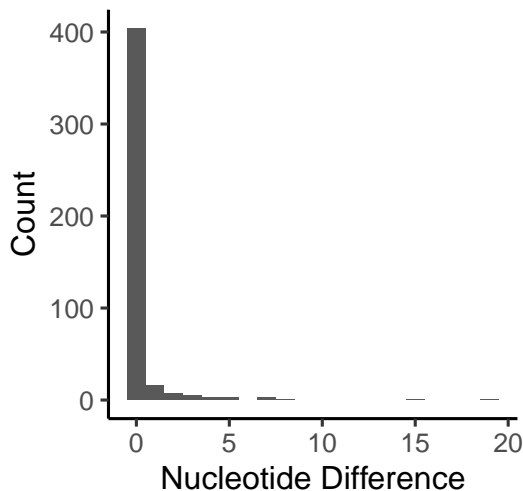
IGHV1-3*01

206 sequences assigned
196 (95.1%) exact matches, in which:
196 unique CDR3
6 unique J



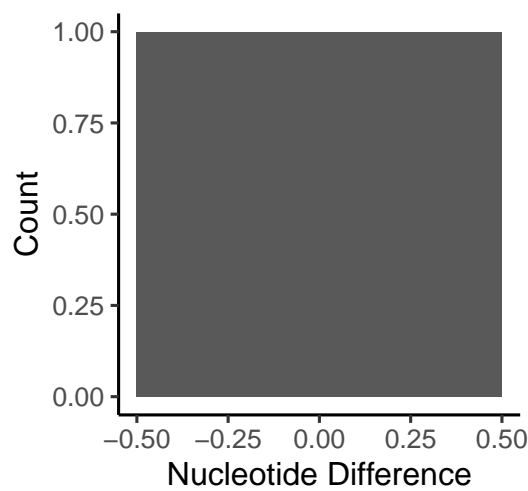
IGHV1-18*04

446 sequences assigned
404 (90.6%) exact matches, in which:
404 unique CDR3
6 unique J



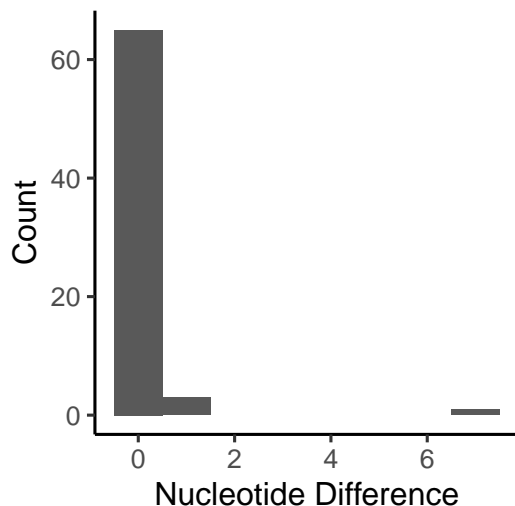
IGHV1-45*03

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



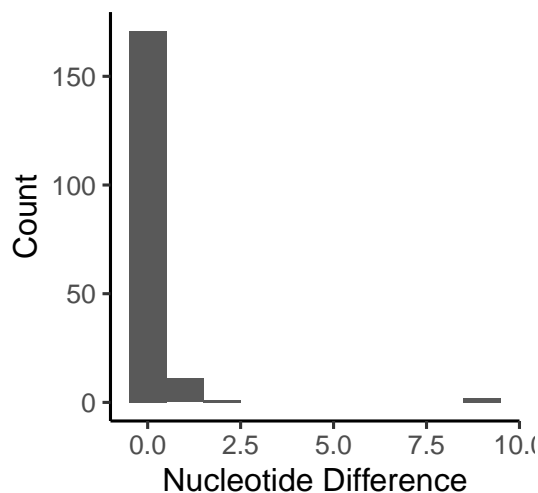
IGHV1-46*01

69 sequences assigned
65 (94.2%) exact matches, in which:
65 unique CDR3
4 unique J



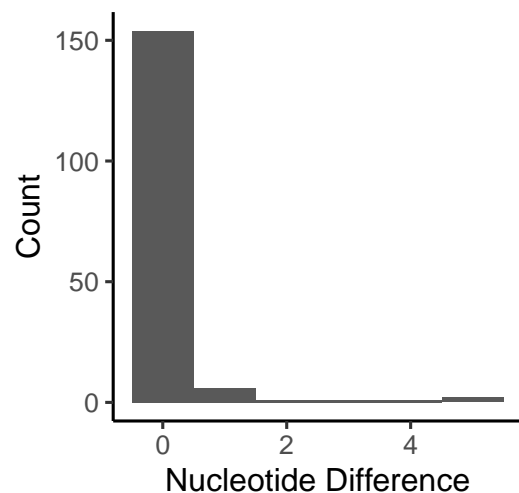
IGHV1-69*02

185 sequences assigned
171 (92.4%) exact matches, in which:
171 unique CDR3
6 unique J



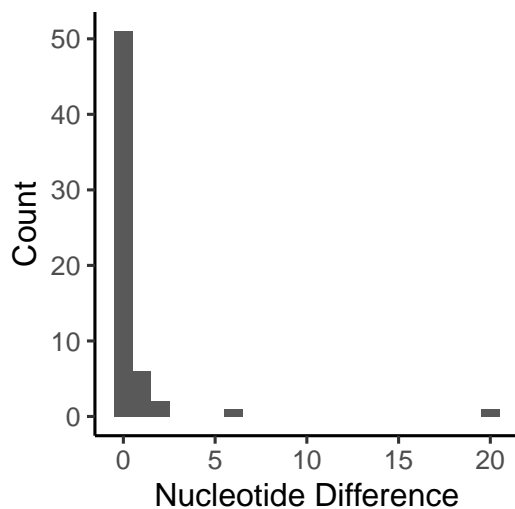
IGHV2-5*01

165 sequences assigned
154 (93.3%) exact matches, in which:
154 unique CDR3
6 unique J



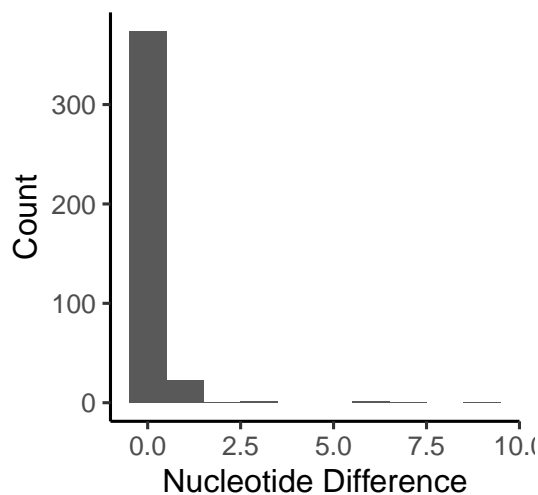
IGHV1-46*03

62 sequences assigned
51 (82.3%) exact matches, in which:
51 unique CDR3
5 unique J



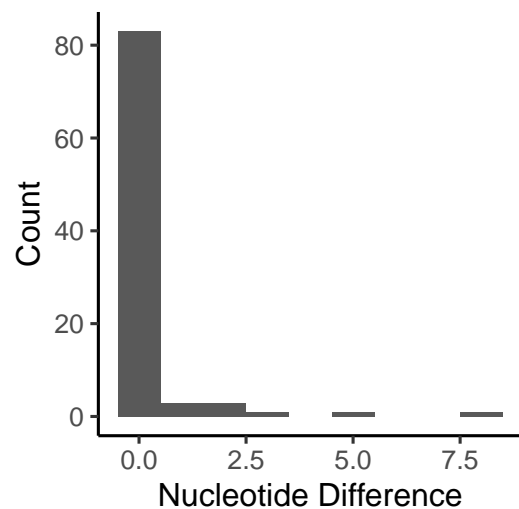
IGHV1-69*04

404 sequences assigned
374 (92.6%) exact matches, in which:
374 unique CDR3
6 unique J



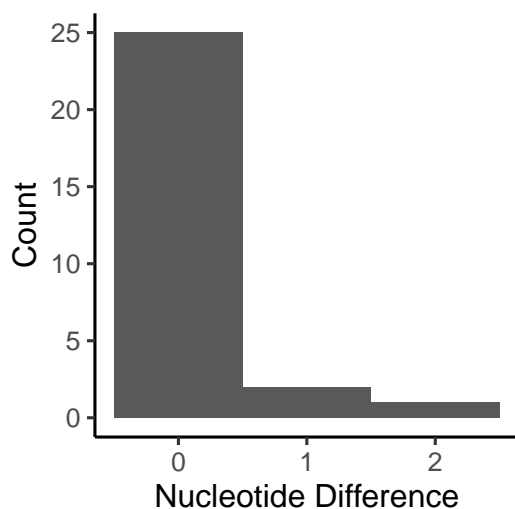
IGHV2-5*02

92 sequences assigned
83 (90.2%) exact matches, in which:
83 unique CDR3
6 unique J



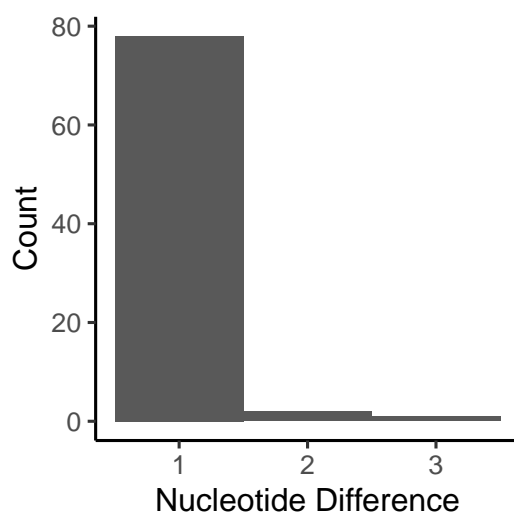
IGHV1-58*02

28 sequences assigned
25 (89.3%) exact matches, in which:
25 unique CDR3
4 unique J



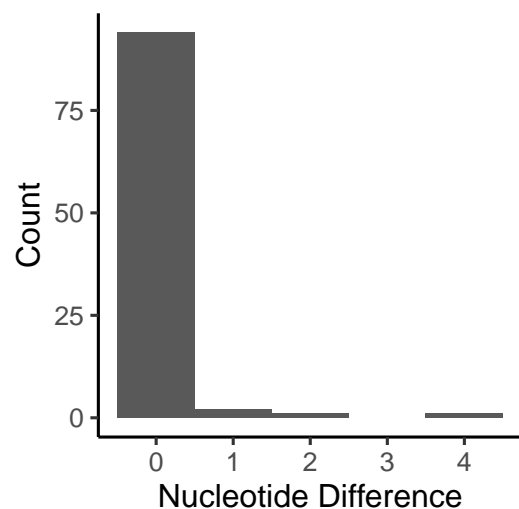
IGHV1-69*08

81 sequences assigned
No exact matches.



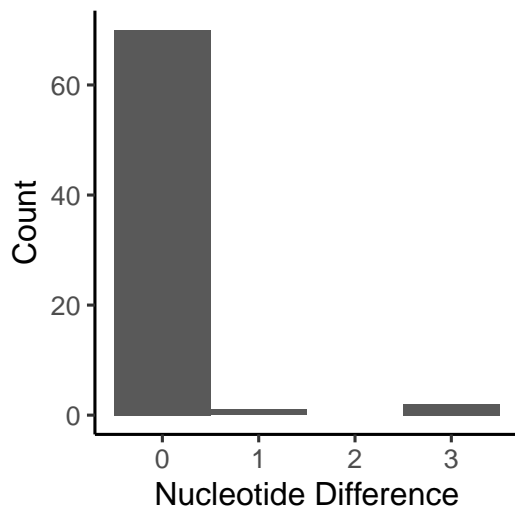
IGHV2-26*01

98 sequences assigned
94 (95.9%) exact matches, in which:
93 unique CDR3
5 unique J



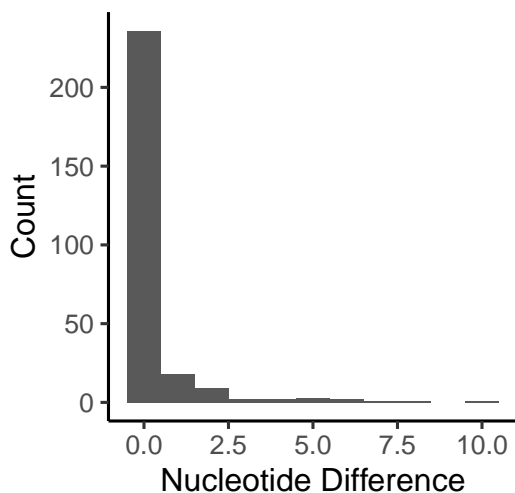
IGHV2-70*15

73 sequences assigned
70 (95.9%) exact matches, in which:
70 unique CDR3
6 unique J



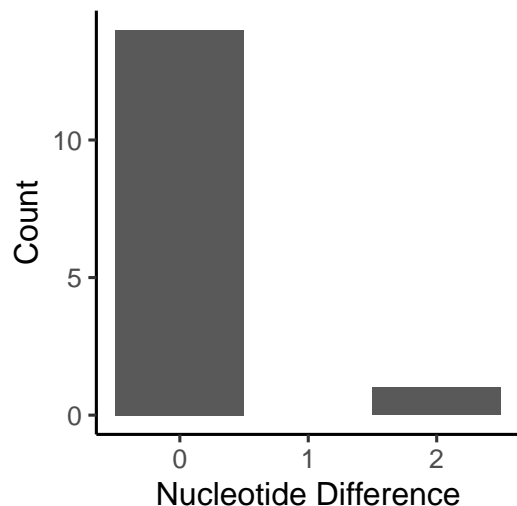
IGHV3-9*01

275 sequences assigned
236 (85.8%) exact matches, in which:
236 unique CDR3
6 unique J



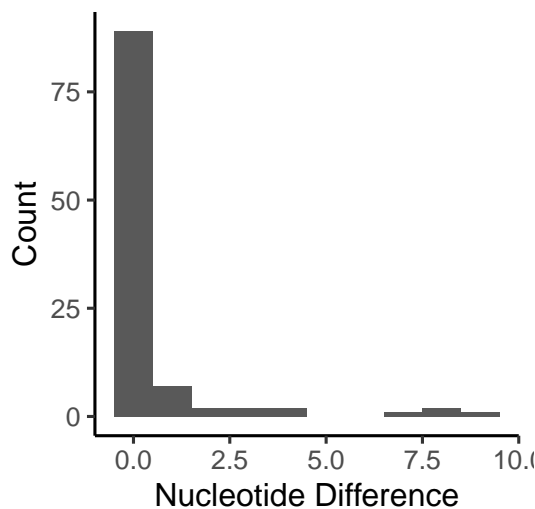
IGHV3-13*01

15 sequences assigned
14 (93.3%) exact matches, in which:
14 unique CDR3
4 unique J



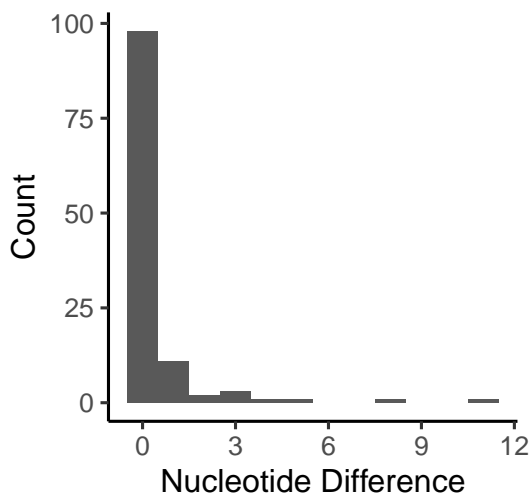
IGHV3-7*01

106 sequences assigned
89 (84%) exact matches, in which:
89 unique CDR3
6 unique J



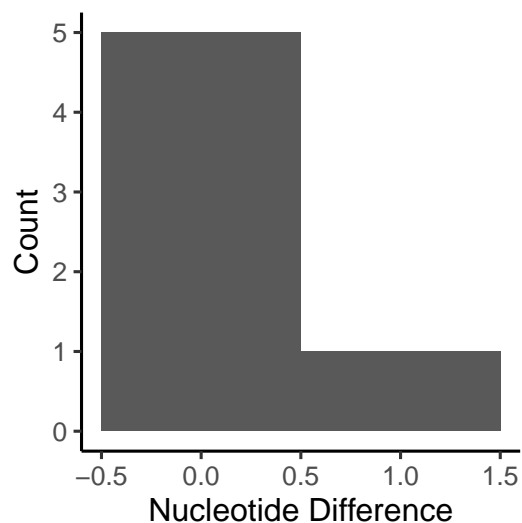
IGHV3-11*01

118 sequences assigned
98 (83.1%) exact matches, in which:
98 unique CDR3
6 unique J



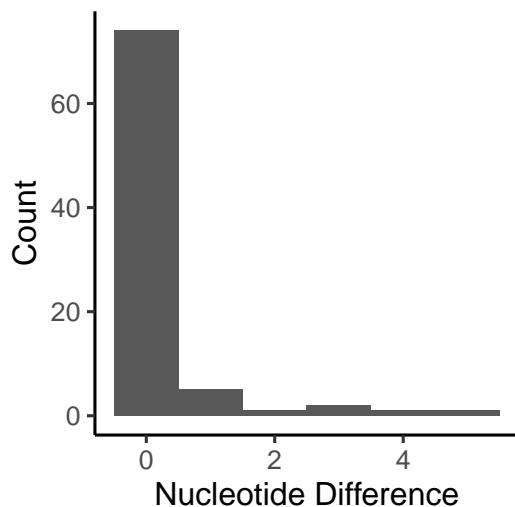
IGHV3-13*05

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



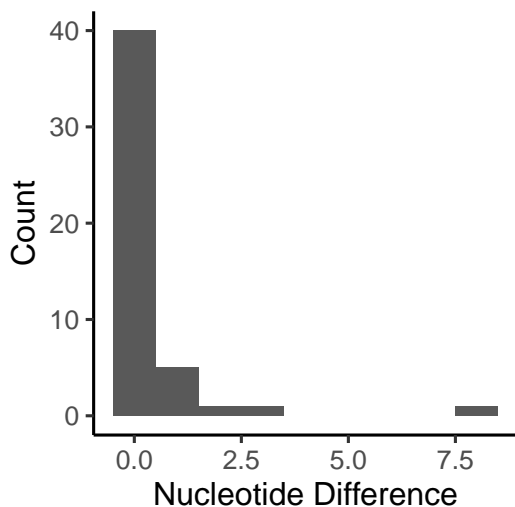
IGHV3-7*03

84 sequences assigned
74 (88.1%) exact matches, in which:
74 unique CDR3
6 unique J



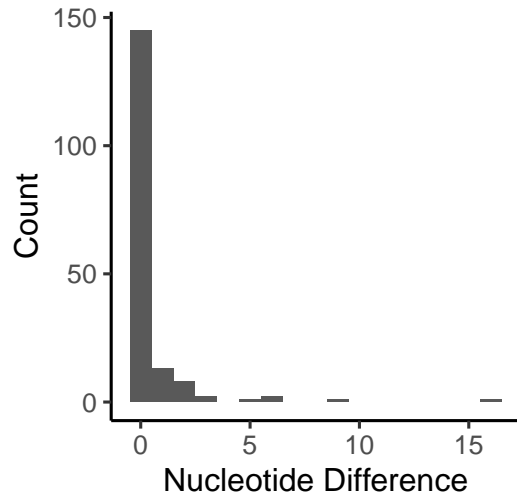
IGHV3-11*06

48 sequences assigned
40 (83.3%) exact matches, in which:
40 unique CDR3
6 unique J



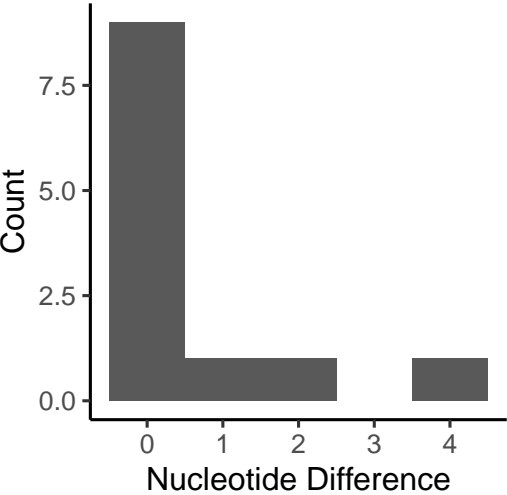
IGHV3-15*01

173 sequences assigned
145 (83.8%) exact matches, in which:
145 unique CDR3
6 unique J



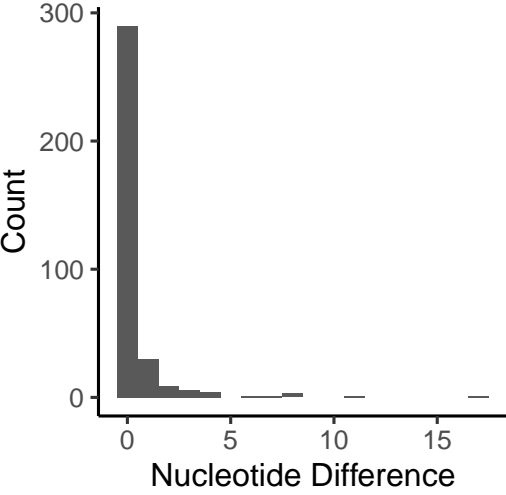
IGHV3-20*01

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



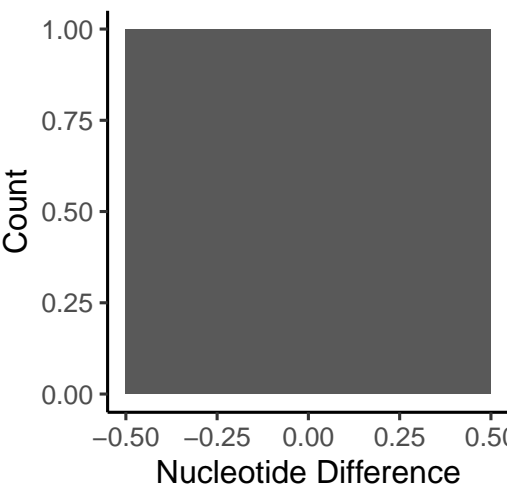
IGHV3-33*01

346 sequences assigned
290 (83.8%) exact matches, in which:
290 unique CDR3
6 unique J



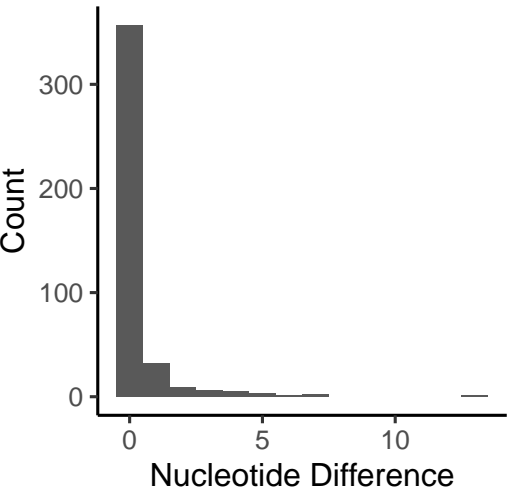
IGHV3-47*02

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



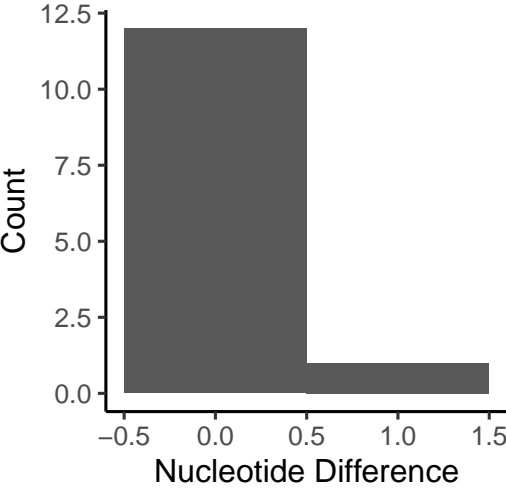
IGHV3-21*01

416 sequences assigned
357 (85.8%) exact matches, in which:
357 unique CDR3
6 unique J



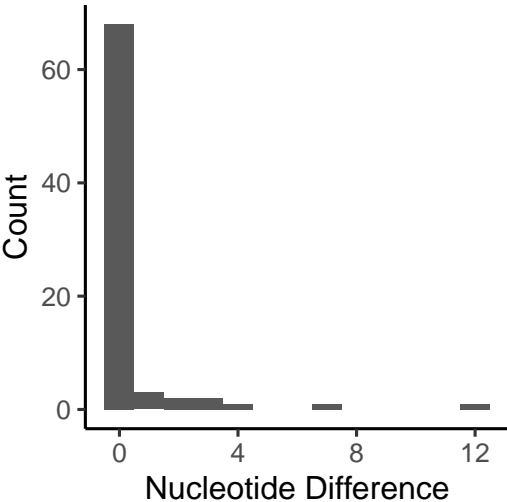
IGHV3-43*01

13 sequences assigned
12 (92.3%) exact matches, in which:
12 unique CDR3
3 unique J



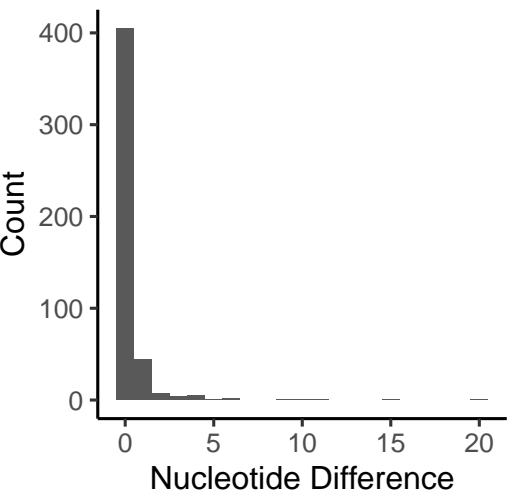
IGHV3-48*01

78 sequences assigned
68 (87.2%) exact matches, in which:
68 unique CDR3
6 unique J



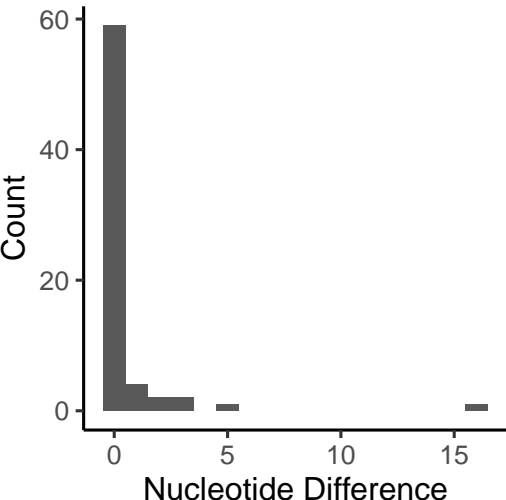
IGHV3-30-3*01

475 sequences assigned
405 (85.3%) exact matches, in which:
405 unique CDR3
6 unique J



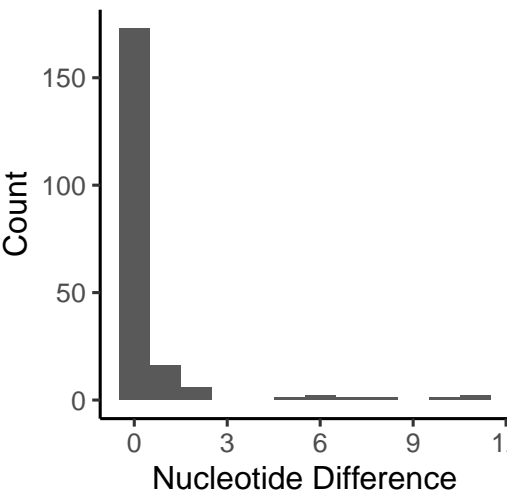
IGHV3-43*02

69 sequences assigned
59 (85.5%) exact matches, in which:
59 unique CDR3
6 unique J



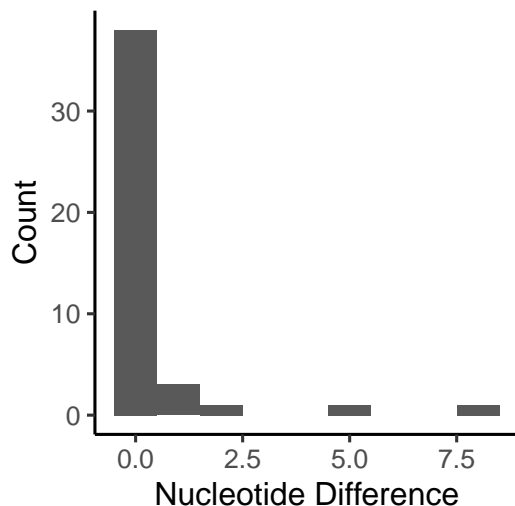
IGHV3-48*03

203 sequences assigned
173 (85.2%) exact matches, in which:
172 unique CDR3
6 unique J



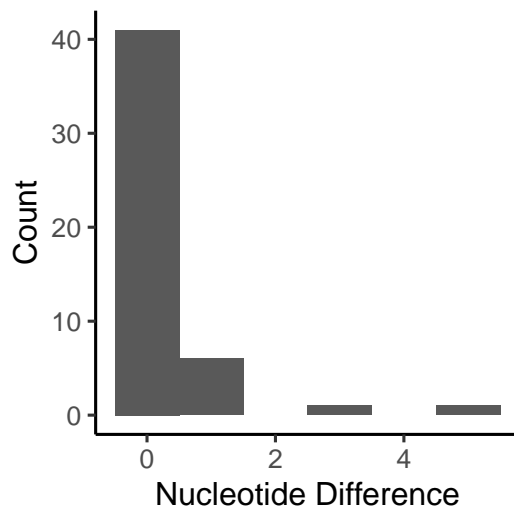
IGHV3-49*03

44 sequences assigned
38 (86.4%) exact matches, in which:
37 unique CDR3
4 unique J



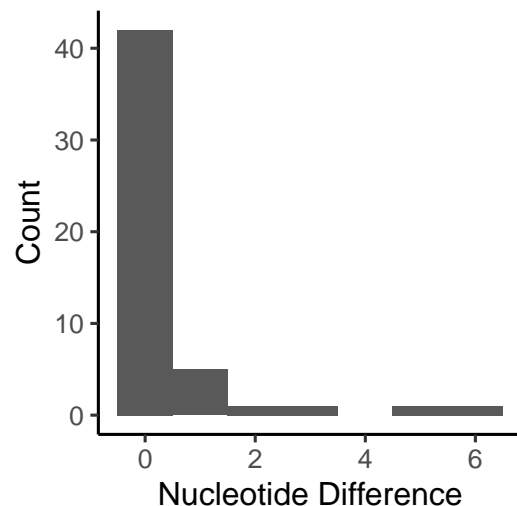
IGHV3-53*04

49 sequences assigned
41 (83.7%) exact matches, in which:
41 unique CDR3
5 unique J



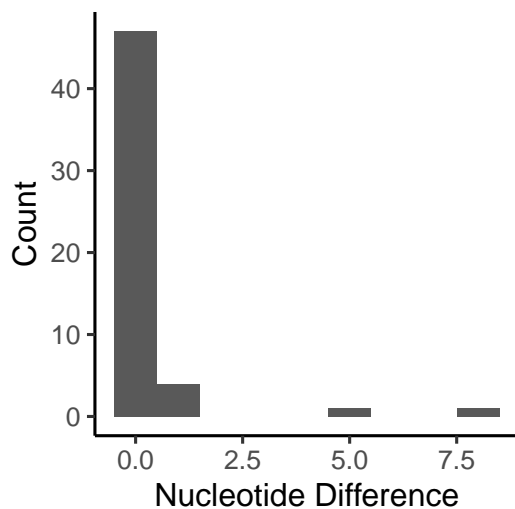
IGHV3-66*02

51 sequences assigned
42 (82.4%) exact matches, in which:
42 unique CDR3
5 unique J



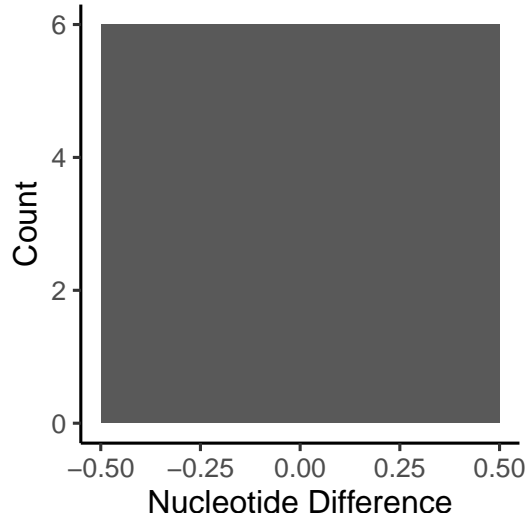
IGHV3-49*04

53 sequences assigned
47 (88.7%) exact matches, in which:
47 unique CDR3
5 unique J



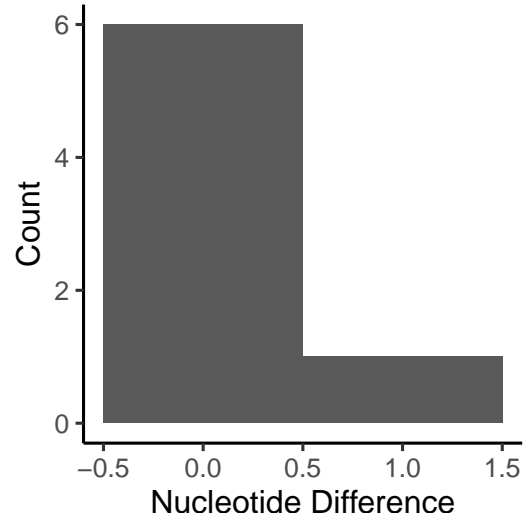
IGHV3-64*01

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



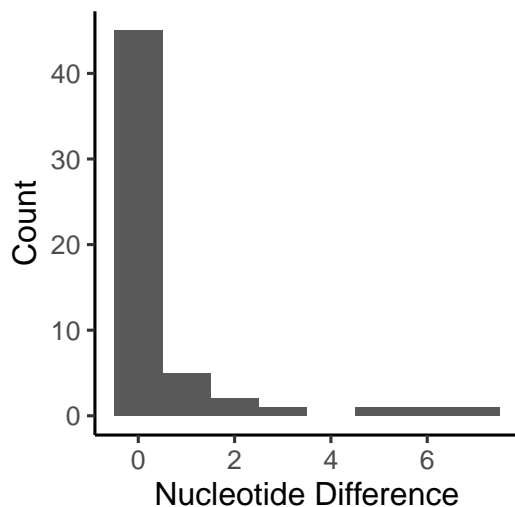
IGHV3-66*04

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



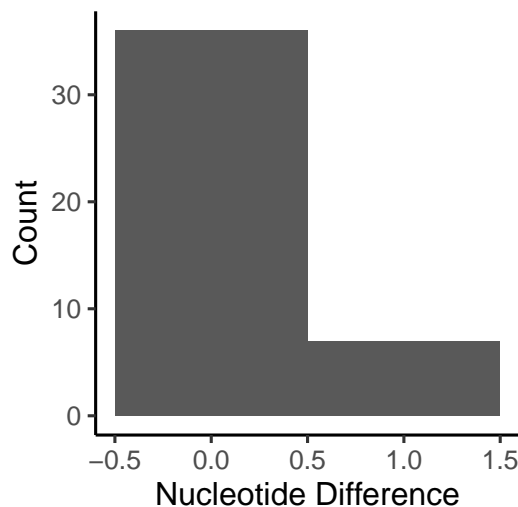
IGHV3-53*02

56 sequences assigned
45 (80.4%) exact matches, in which:
45 unique CDR3
5 unique J



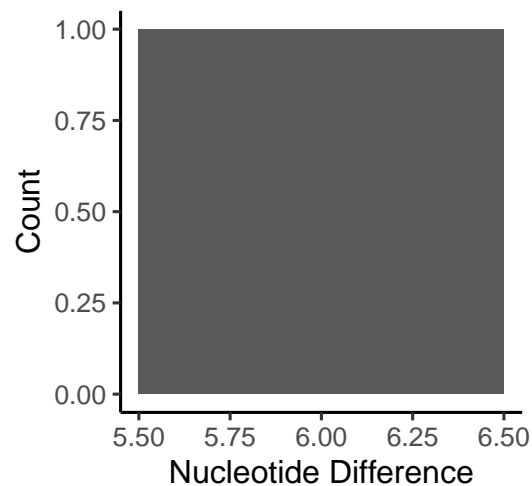
IGHV3-66*01

43 sequences assigned
36 (83.7%) exact matches, in which:
36 unique CDR3
6 unique J



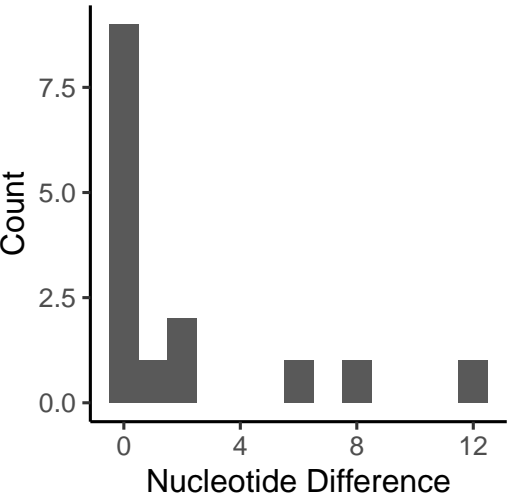
IGHV3-69-1*01

1 sequences assigned
No exact matches.



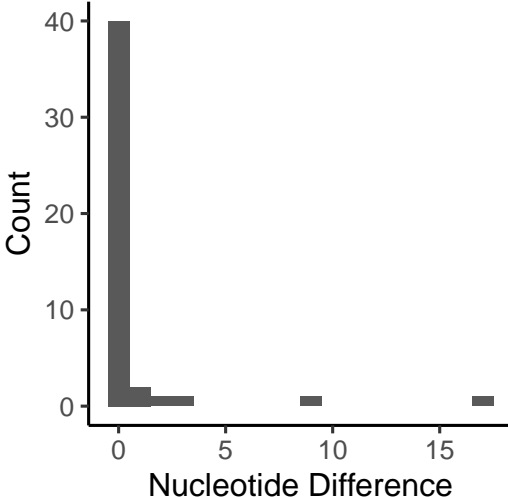
IGHV3-72*01

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



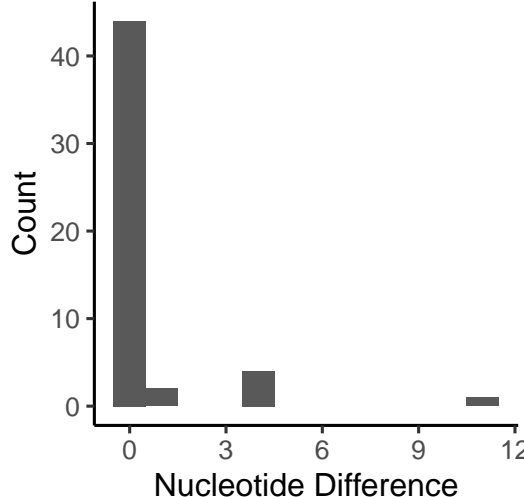
IGHV3-64D*06

46 sequences assigned
40 (87%) exact matches, in which:
40 unique CDR3
6 unique J



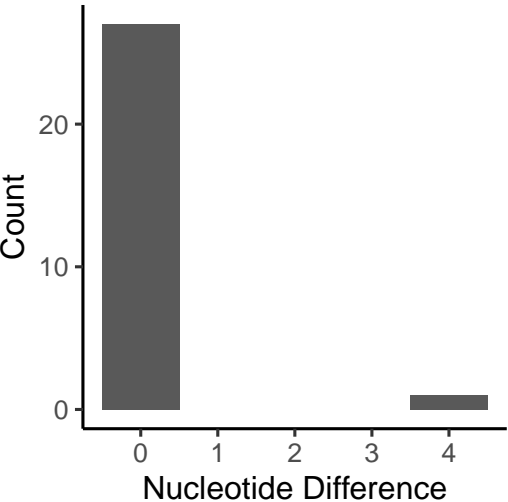
IGHV4-4*07

51 sequences assigned
44 (86.3%) exact matches, in which:
44 unique CDR3
5 unique J



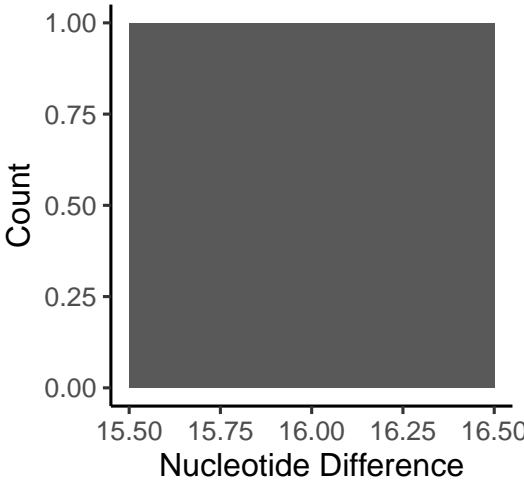
IGHV3-73*01

28 sequences assigned
27 (96.4%) exact matches, in which:
27 unique CDR3
3 unique J



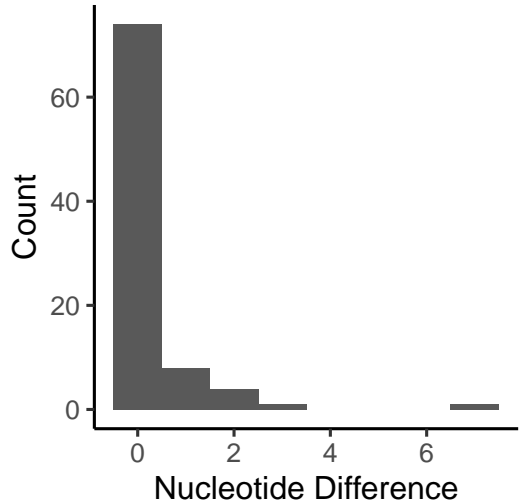
IGHV3-NL1*01

1 sequences assigned
No exact matches.



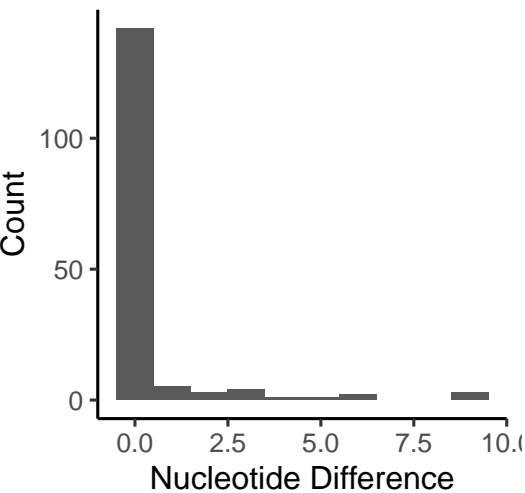
IGHV4-30-4*01

88 sequences assigned
74 (84.1%) exact matches, in which:
73 unique CDR3
5 unique J



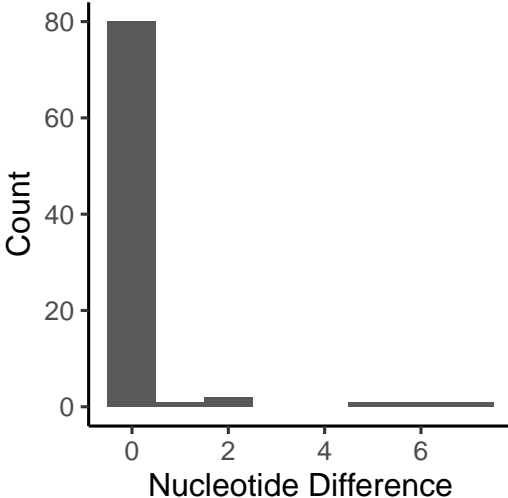
IGHV3-74*01

161 sequences assigned
142 (88.2%) exact matches, in which:
142 unique CDR3
5 unique J



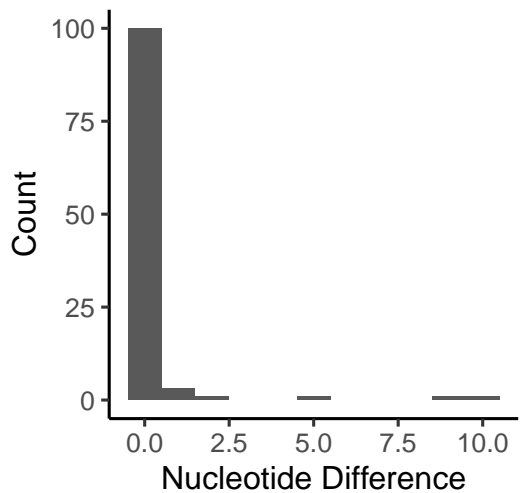
IGHV4-4*02

86 sequences assigned
80 (93%) exact matches, in which:
80 unique CDR3
5 unique J



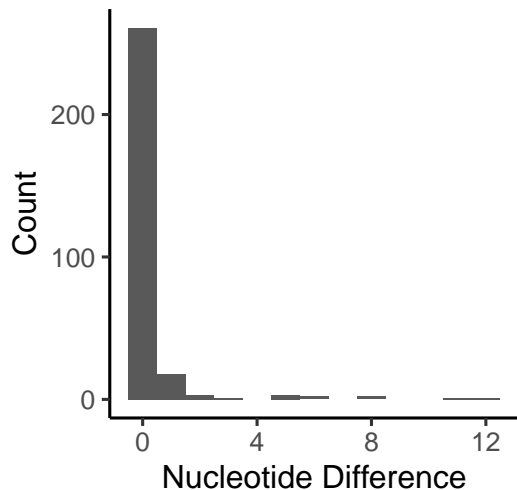
IGHV4-30-2*01

107 sequences assigned
100 (93.5%) exact matches, in which:
100 unique CDR3
6 unique J



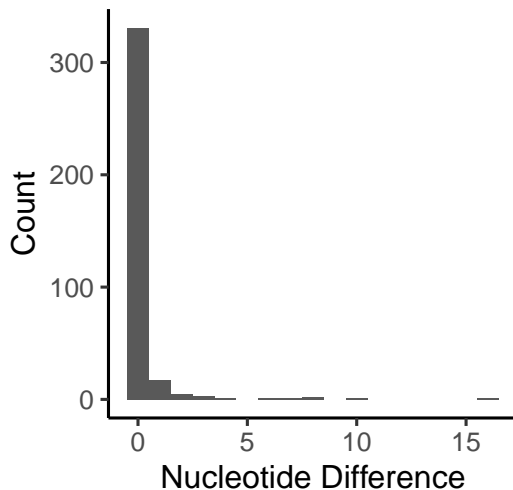
IGHV4–31*03

292 sequences assigned
261 (89.4%) exact matches, in which:
261 unique CDR3
6 unique J



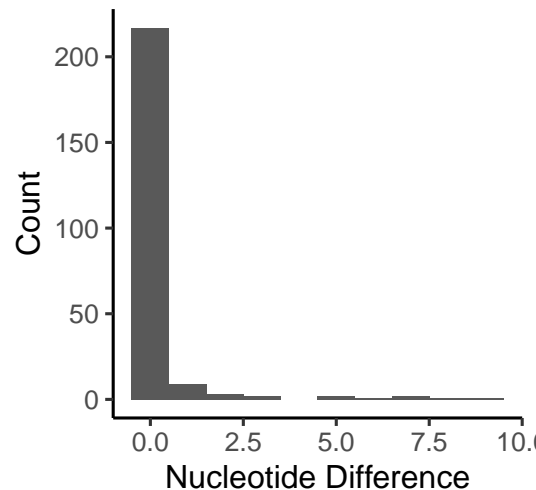
IGHV4–59*01

363 sequences assigned
331 (91.2%) exact matches, in which:
330 unique CDR3
6 unique J



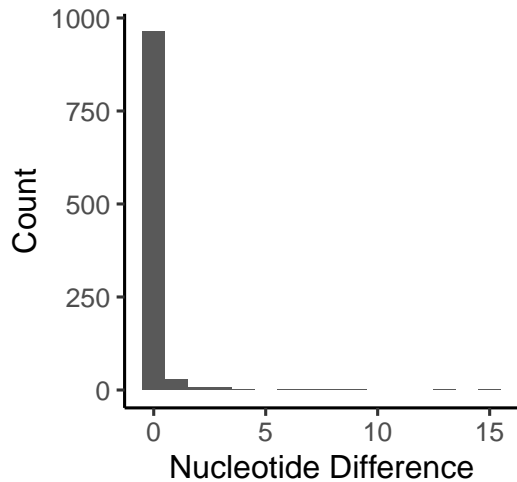
IGHV5–10–1*03

238 sequences assigned
217 (91.2%) exact matches, in which:
217 unique CDR3
5 unique J



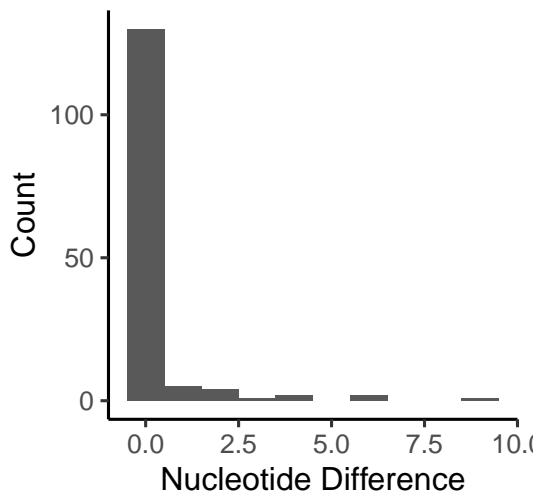
IGHV4–34*01

1014 sequences assigned
963 (95%) exact matches, in which:
962 unique CDR3
6 unique J



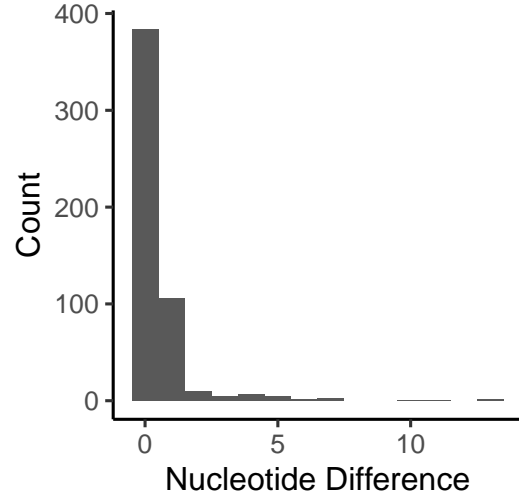
IGHV4–59*08

145 sequences assigned
130 (89.7%) exact matches, in which:
130 unique CDR3
6 unique J



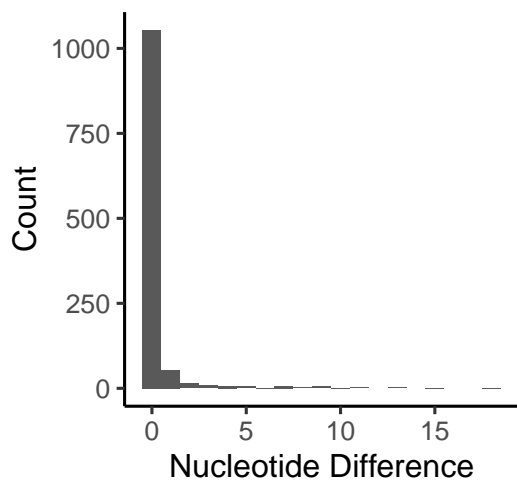
IGHV5–51*01

526 sequences assigned
384 (73%) exact matches, in which:
383 unique CDR3
6 unique J



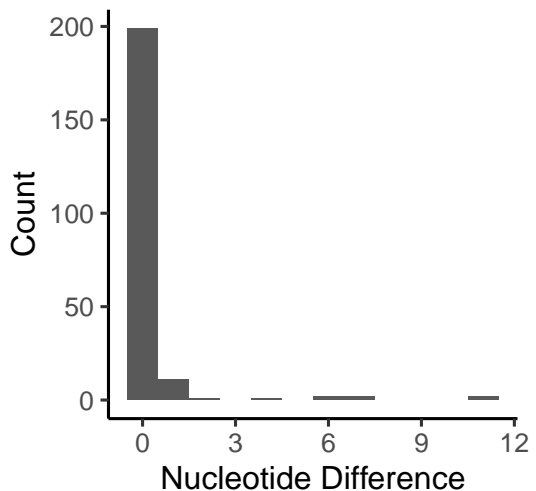
IGHV4–39*01

1164 sequences assigned
1054 (90.5%) exact matches, in which:
1049 unique CDR3
6 unique J



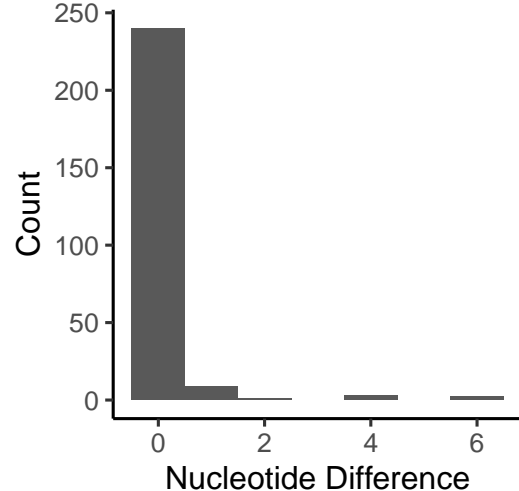
IGHV4–61*02

218 sequences assigned
199 (91.3%) exact matches, in which:
199 unique CDR3
6 unique J



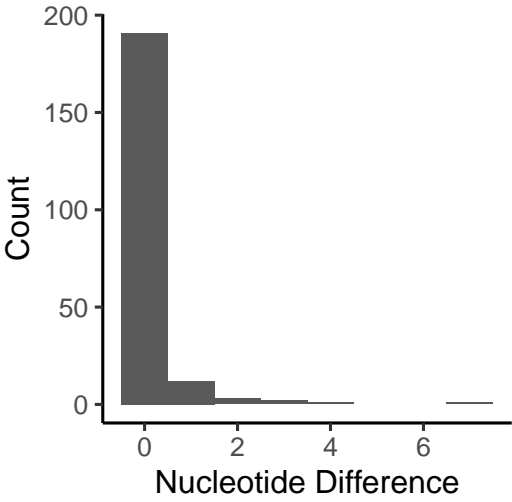
IGHV5–51*03

256 sequences assigned
240 (93.8%) exact matches, in which:
240 unique CDR3
6 unique J



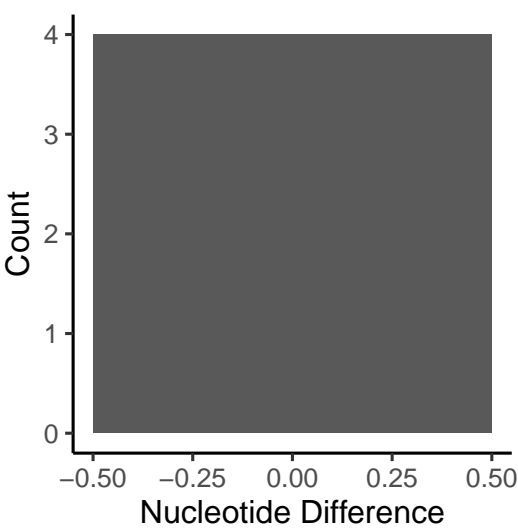
IGHV6-1*01

211 sequences assigned
191 (90.5%) exact matches, in which:
190 unique CDR3
6 unique J



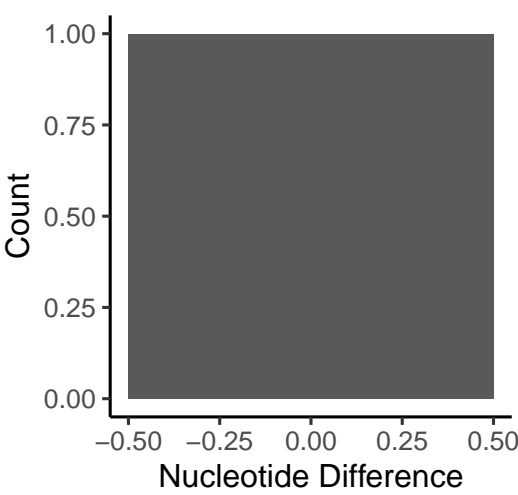
IGHV7-4-1*01

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



IGHV7-81*01

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





Novel sequence(s)IGHV1-69*08_C191TIGHV4-39*02_C258G are not listed in the genotype and will be ignored.