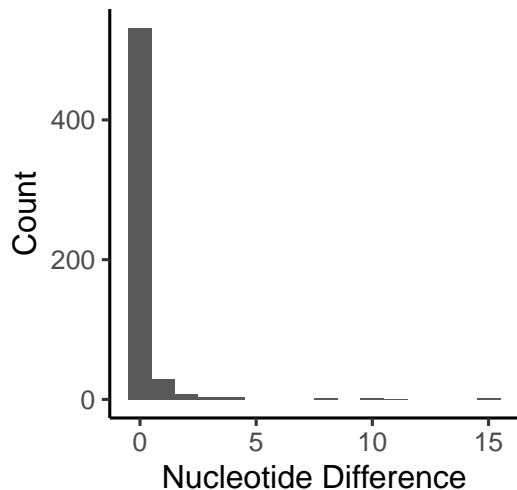


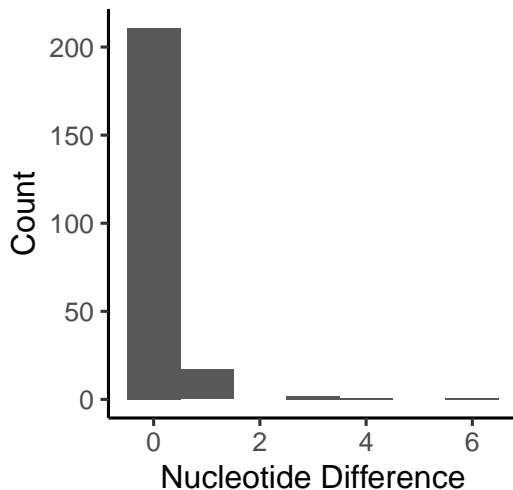
IGHV1-2*02

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



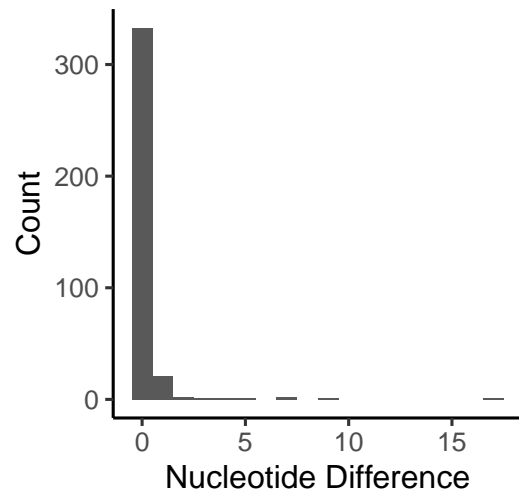
IGHV1-8*01

233 sequences assigned
211 (90.6%) exact matches, in which:
211 unique CDR3
5 unique J



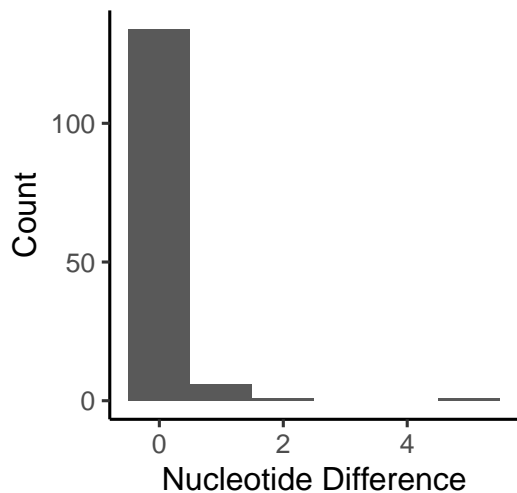
IGHV1-24*01

363 sequences assigned
333 (91.7%) exact matches, in which:
333 unique CDR3
6 unique J



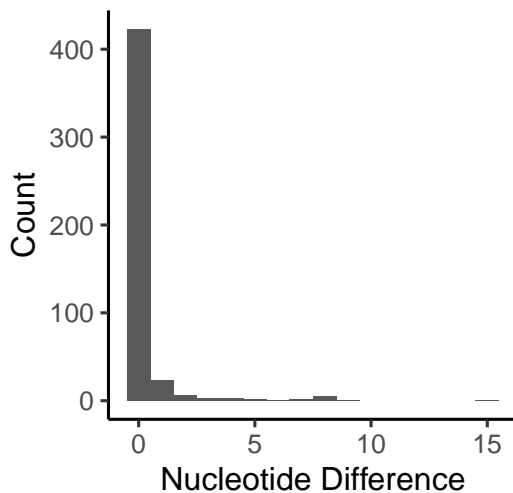
IGHV1-2*04

143 sequences assigned
134 (93.7%) exact matches, in which:
134 unique CDR3
6 unique J



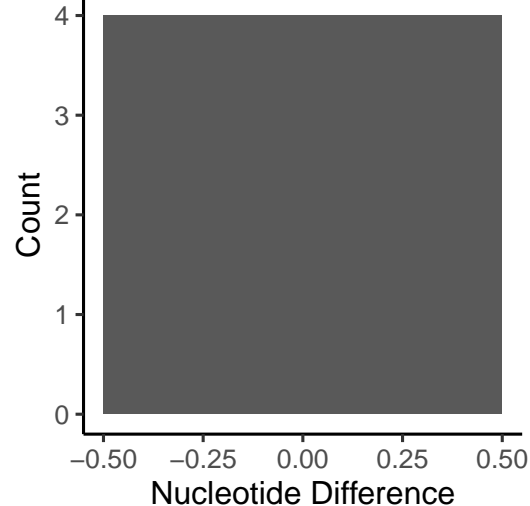
IGHV1-18*01

470 sequences assigned
423 (90%) exact matches, in which:
423 unique CDR3
6 unique J



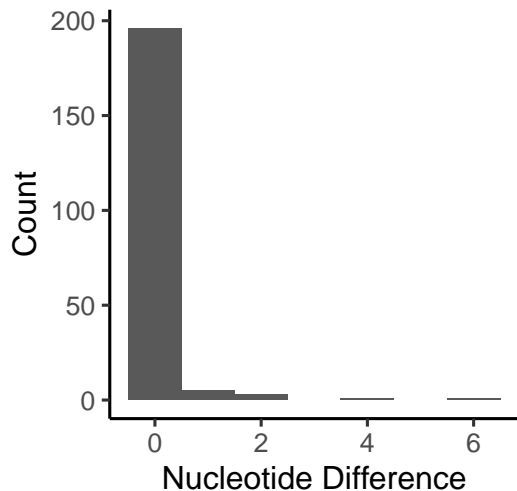
IGHV1-45*02

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



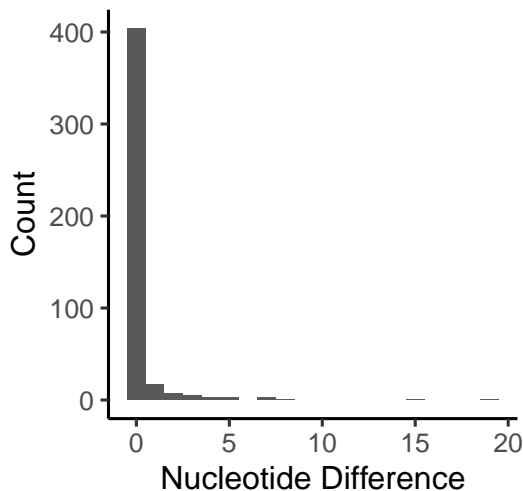
IGHV1-3*01

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



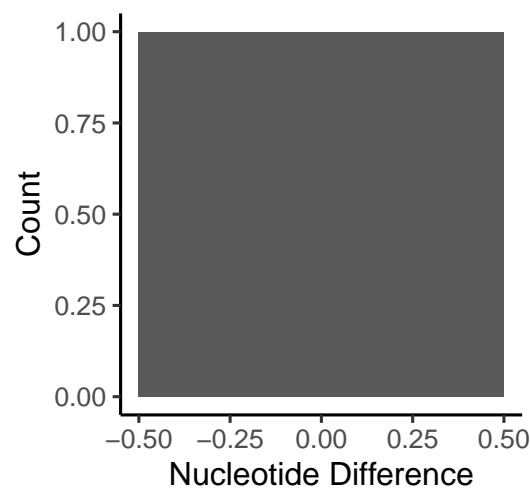
IGHV1-18*04

447 sequences assigned
404 (90.4%) exact matches, in which:
404 unique CDR3
6 unique J



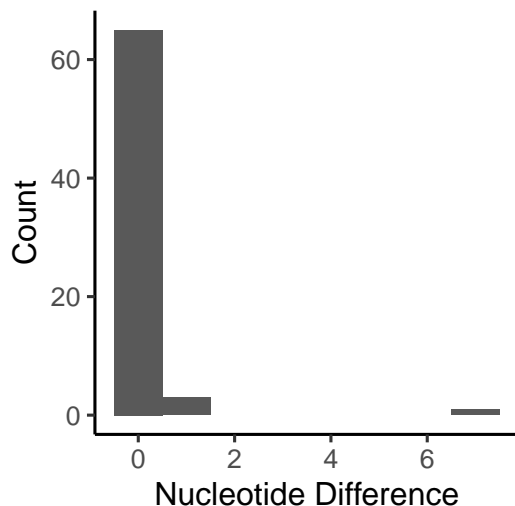
IGHV1-45*03

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



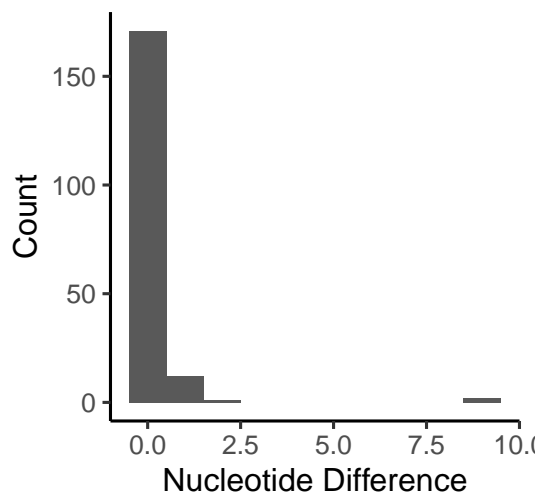
IGHV1-46*01

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



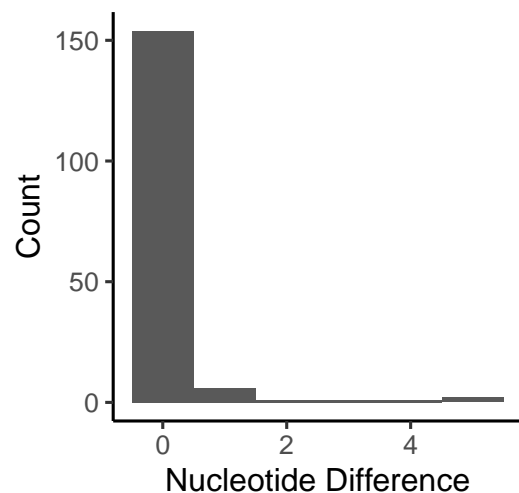
IGHV1-69*02

187 sequences assigned
171 (91.4%) exact matches, in which:
171 unique CDR3
6 unique J



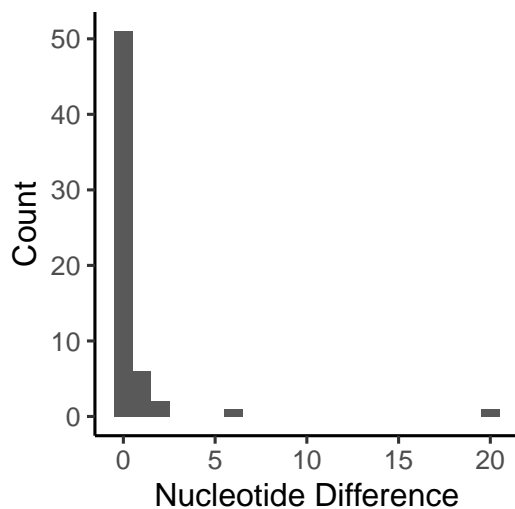
IGHV2-5*01

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



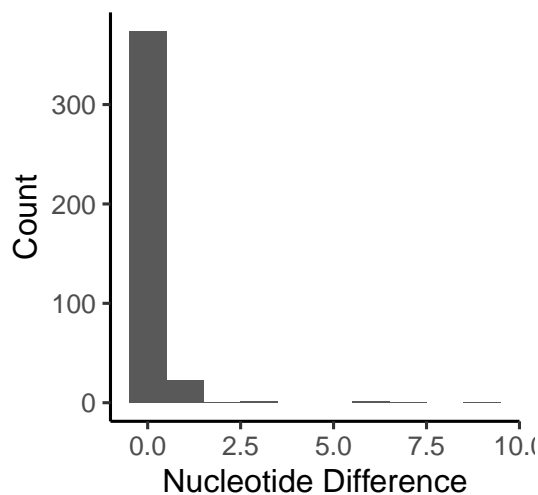
IGHV1-46*03

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



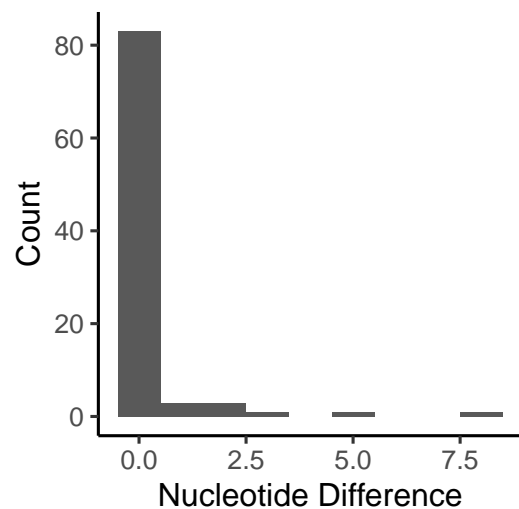
IGHV1-69*04

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



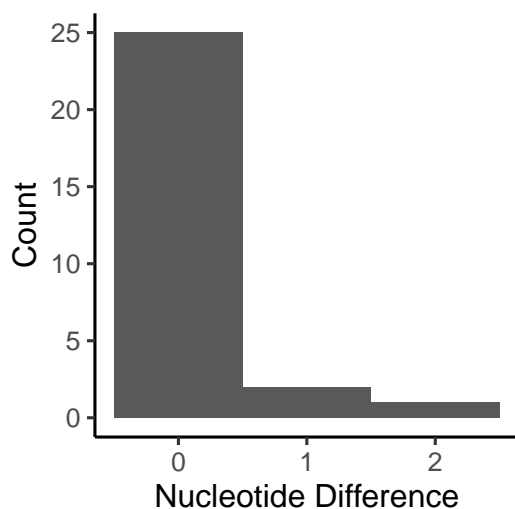
IGHV2-5*02

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



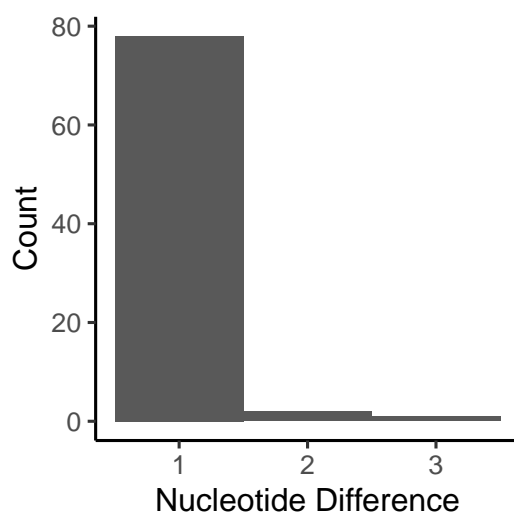
IGHV1-58*02

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



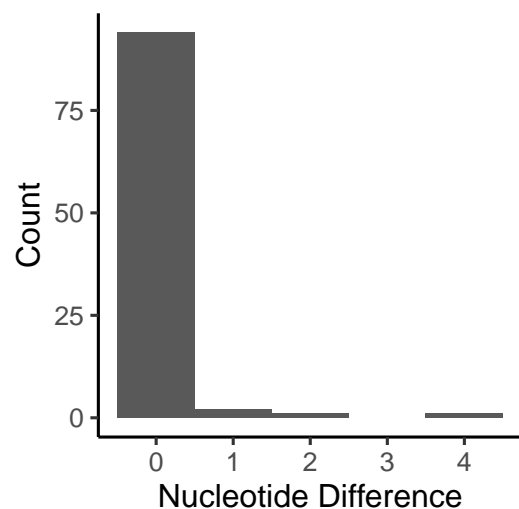
IGHV1-69*08

81 sequences assigned
No exact matches.



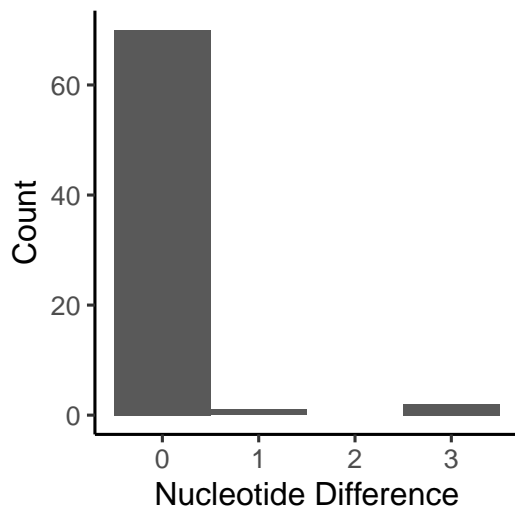
IGHV2-26*01

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



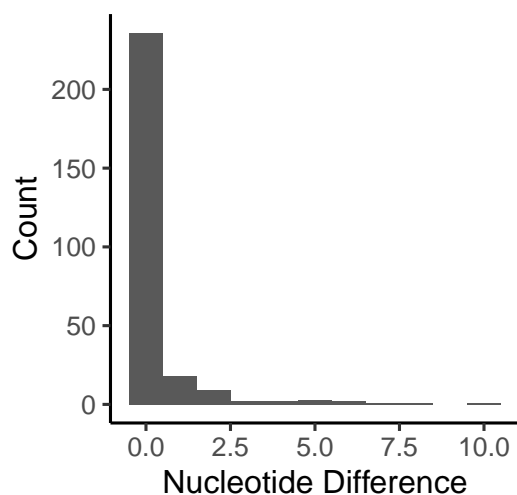
IGHV2-70*15

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



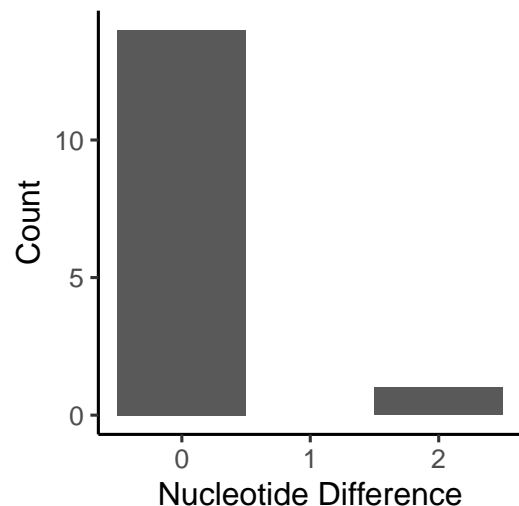
IGHV3-9*01

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



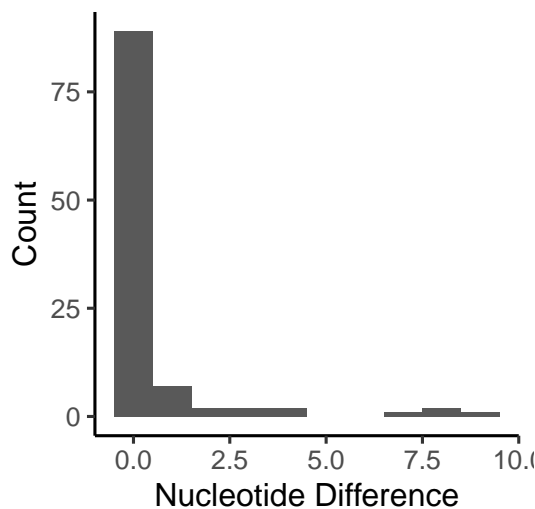
IGHV3-13*01

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



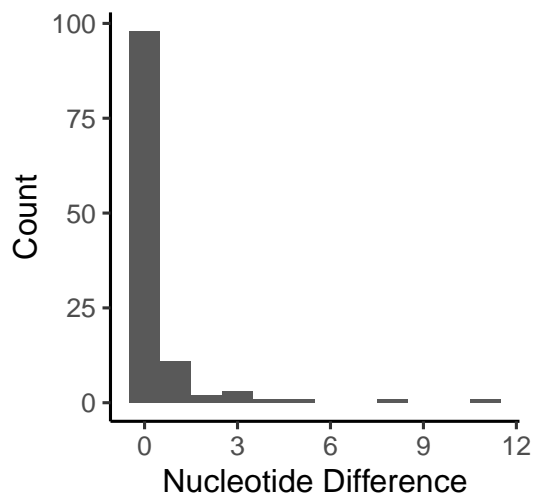
IGHV3-7*01

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



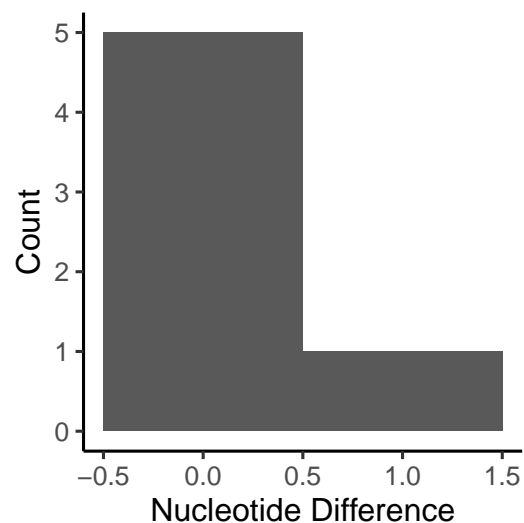
IGHV3-11*01

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



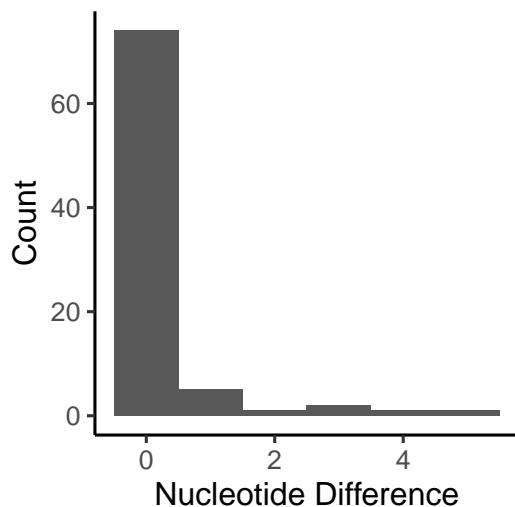
IGHV3-13*05

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



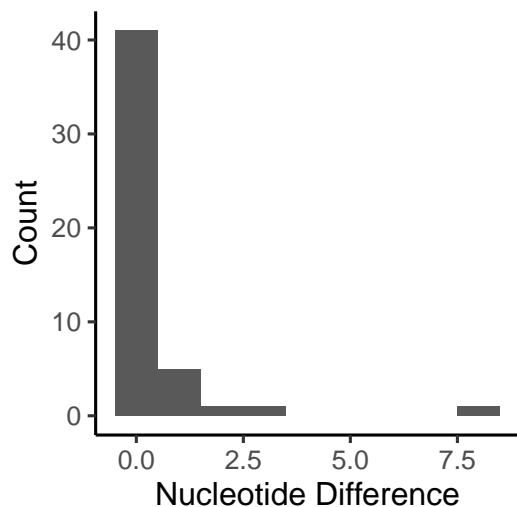
IGHV3-7*03

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



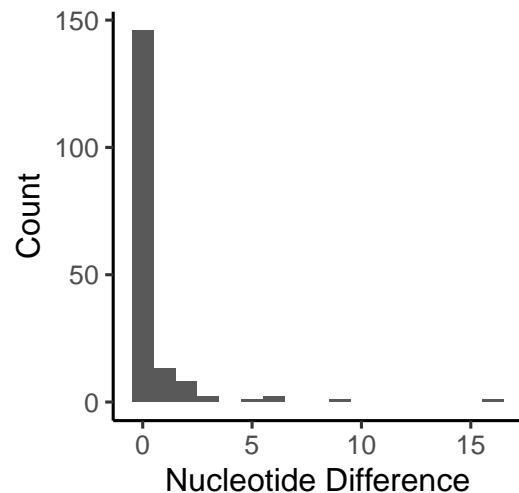
IGHV3-11*06

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



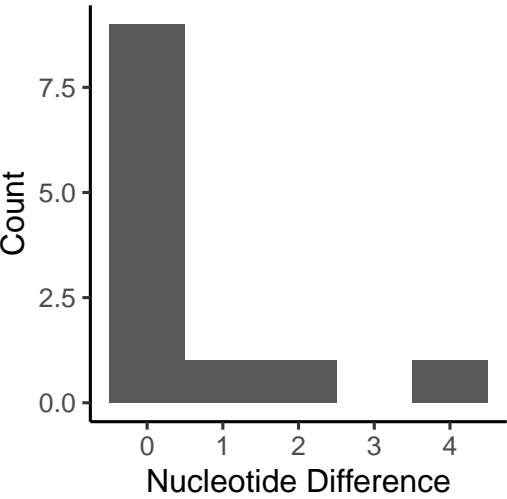
IGHV3-15*01

174 sequences assigned
146 (83.9%) exact matches, in which:
146 unique CDR3
6 unique J



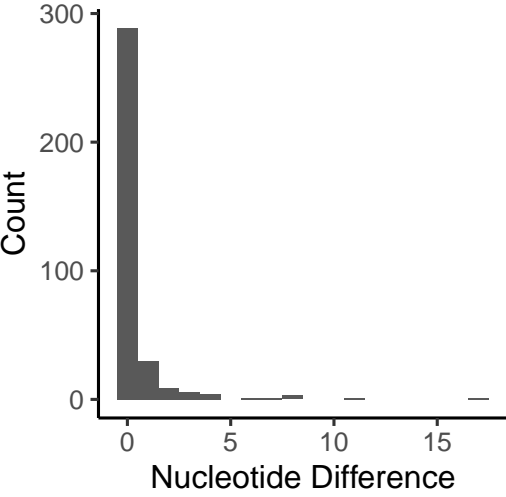
IGHV3-20*01

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



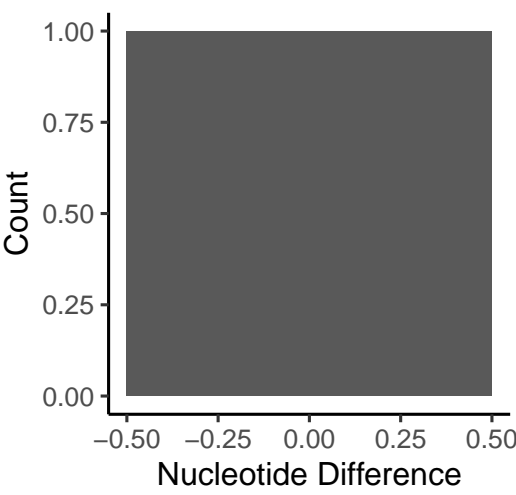
IGHV3-33*01

345 sequences assigned
289 (83.8%) exact matches, in which:
289 unique CDR3
6 unique J



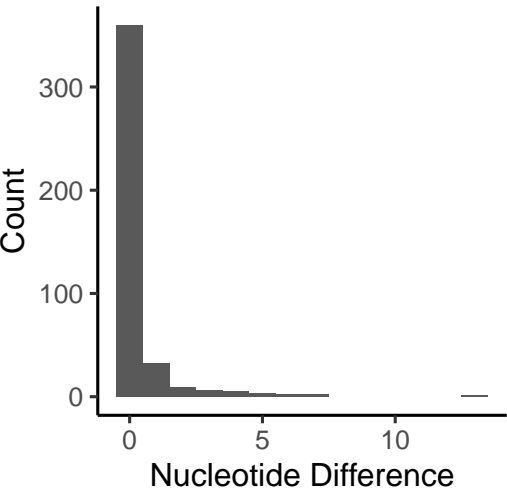
IGHV3-47*02

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



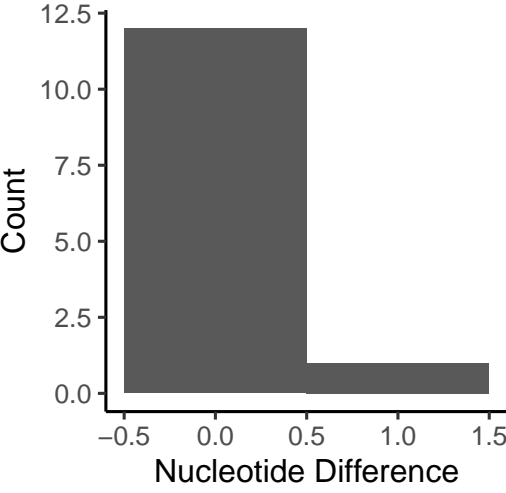
IGHV3-21*01

420 sequences assigned
360 (85.7%) exact matches, in which:
360 unique CDR3
6 unique J



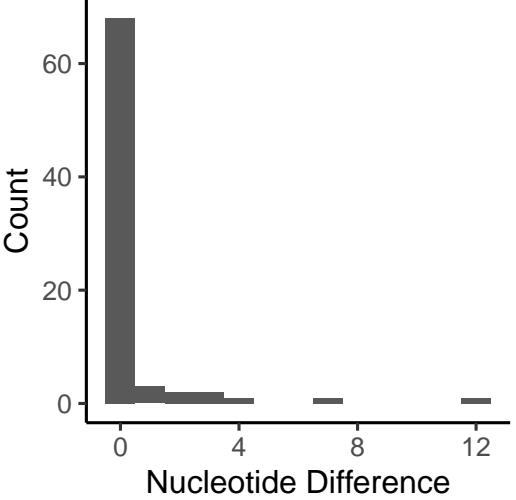
IGHV3-43*01

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



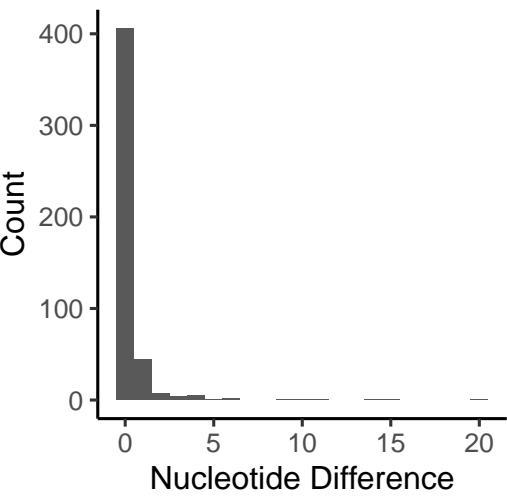
IGHV3-48*01

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



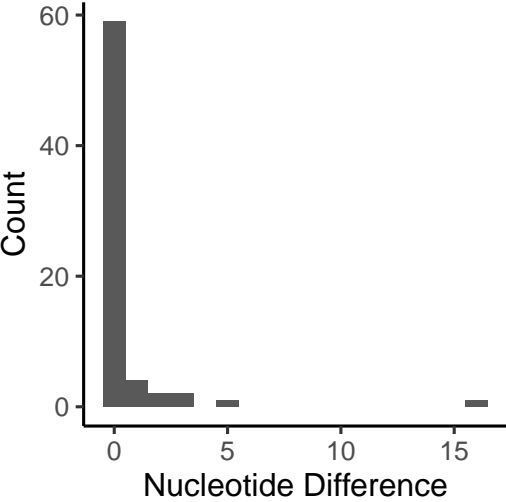
IGHV3-30-3*01

477 sequences assigned
406 (85.1%) exact matches, in which:
406 unique CDR3
6 unique J



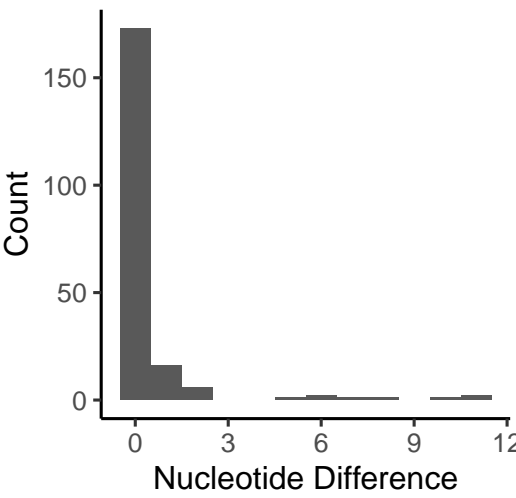
IGHV3-43*02

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



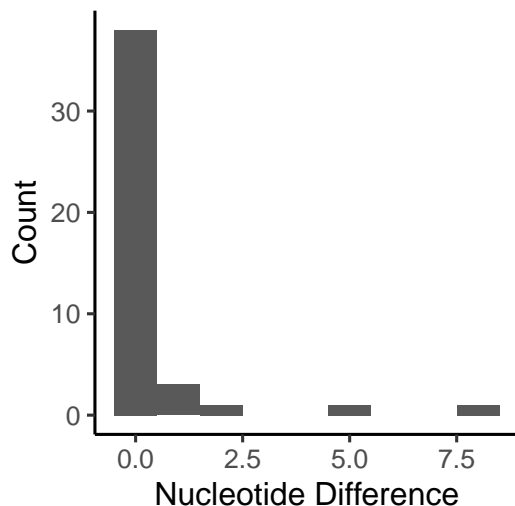
IGHV3-48*03

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



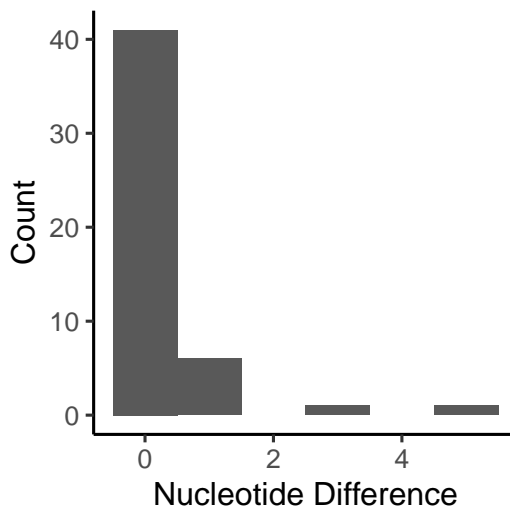
IGHV3-49*03

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



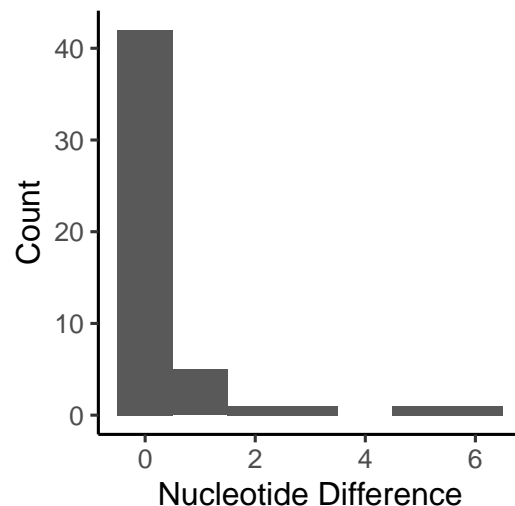
IGHV3-53*04

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



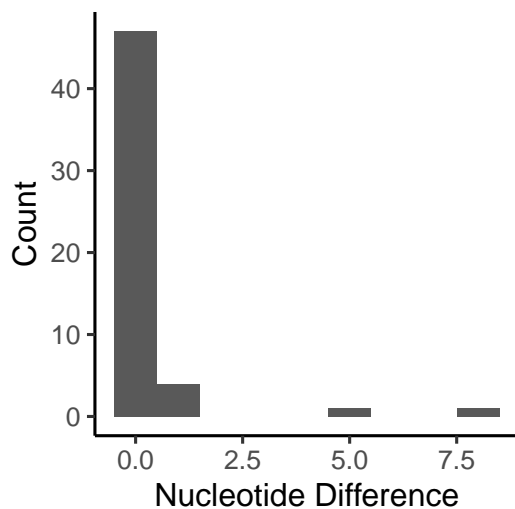
IGHV3-66*02

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



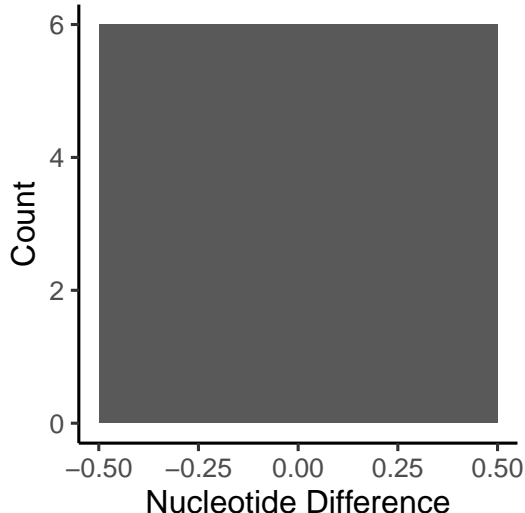
IGHV3-49*04

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



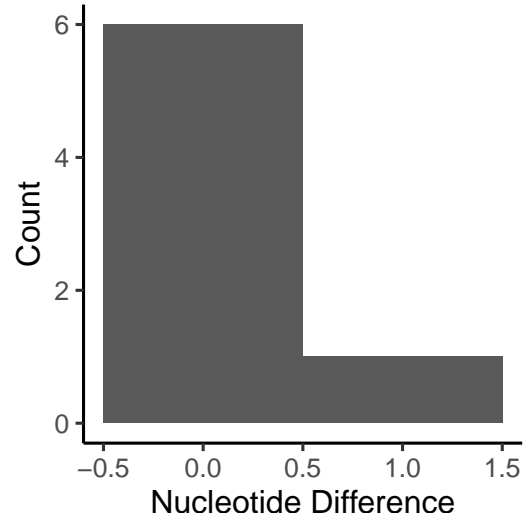
IGHV3-64*01

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



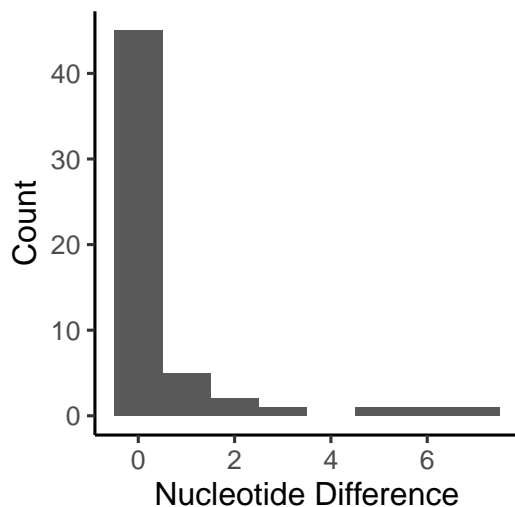
IGHV3-66*04

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



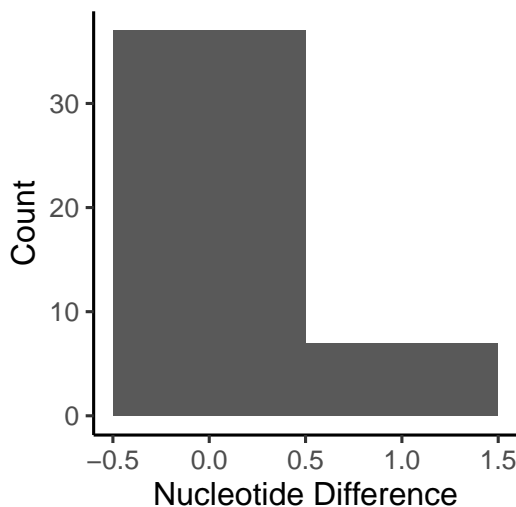
IGHV3-53*02

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



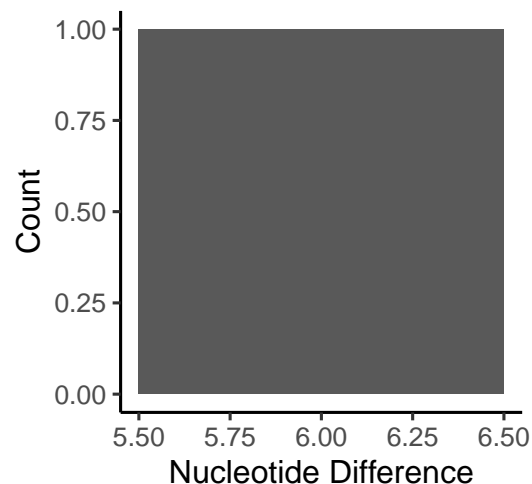
IGHV3-66*01

44 sequences assigned
37 (84.1%) exact matches, in which:
36 unique CDR3
6 unique J



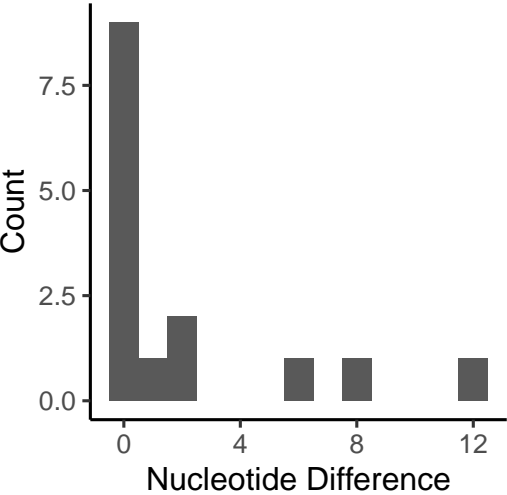
IGHV3-69-1*01

1 sequences assigned
No exact matches.



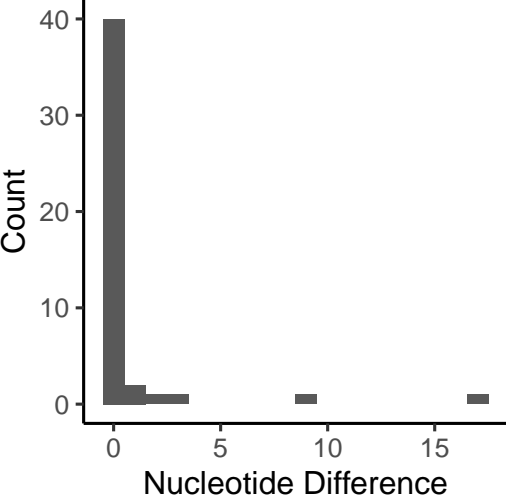
IGHV3-72*01

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



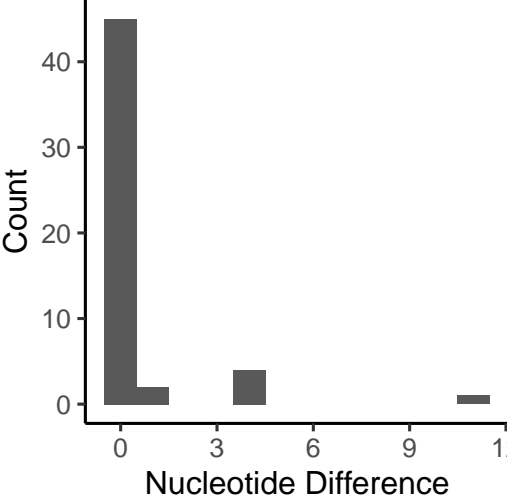
IGHV3-64D*06

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



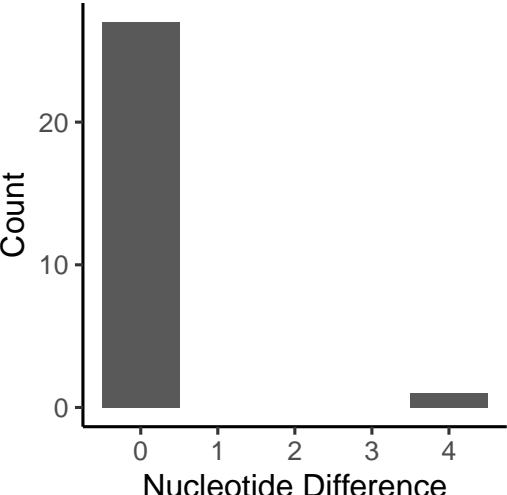
IGHV4-4*07

52 sequences assigned
45 (86.5%) exact matches, in which:
45 unique CDR3
5 unique J



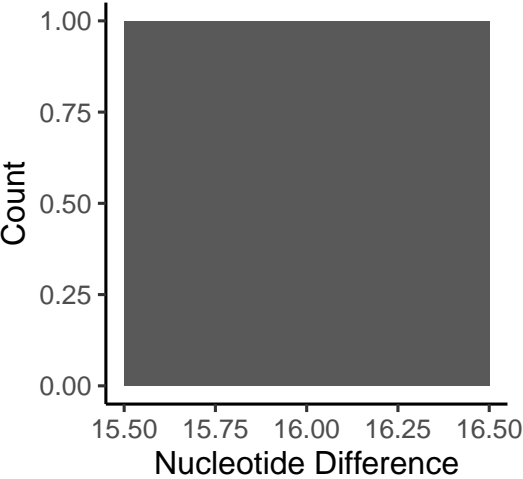
IGHV3-73*01

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



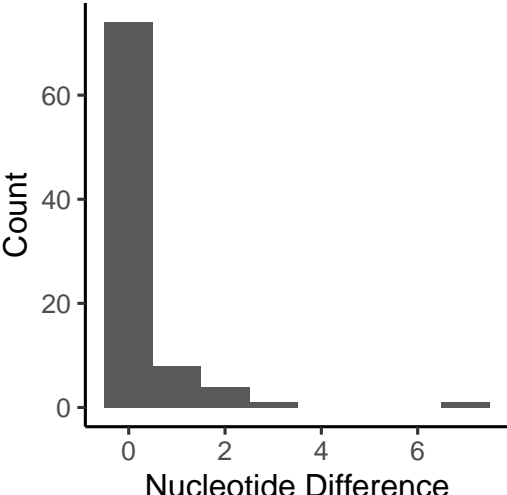
IGHV3-NL1*01

1 sequences assigned
No exact matches.



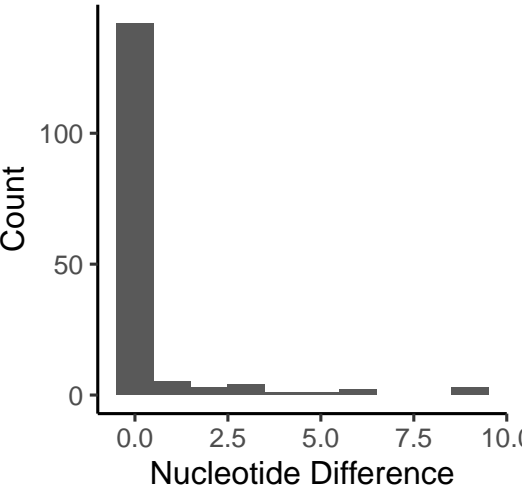
IGHV4-30-4*01

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



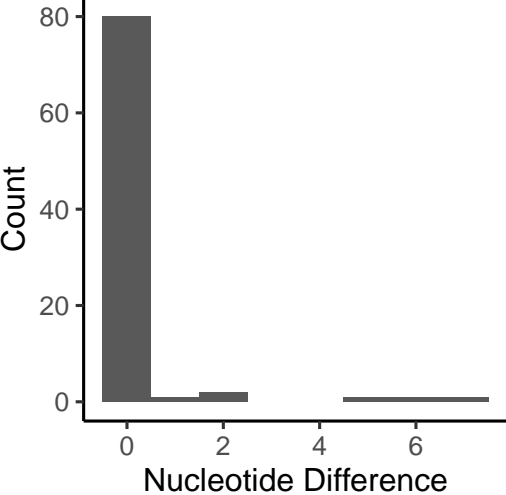
IGHV3-74*01

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



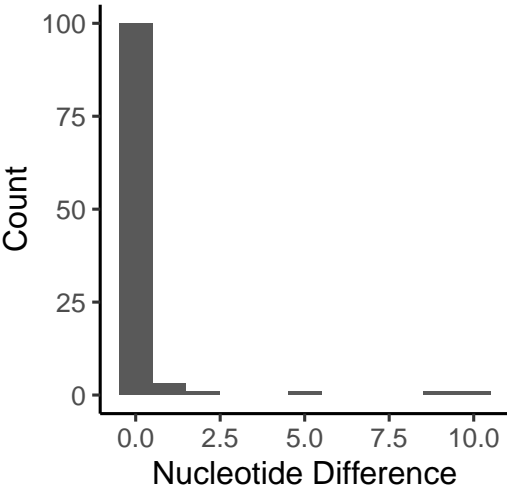
IGHV4-4*02

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



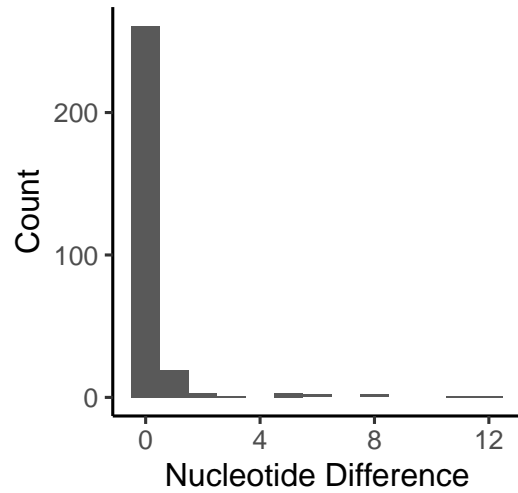
IGHV4-30-2*01

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



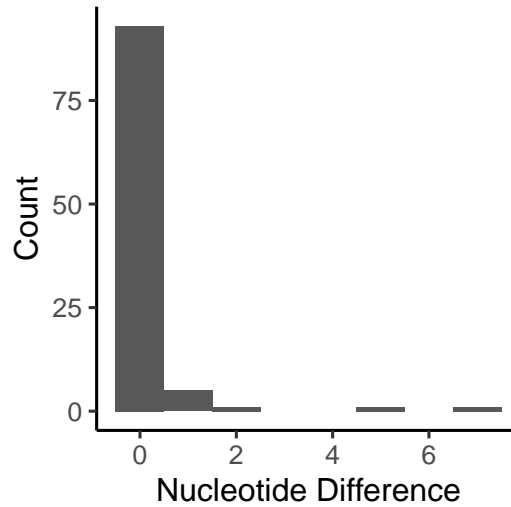
IGHV4-31*03

293 sequences assigned
261 (89.1%) exact matches, in which:
261 unique CDR3
6 unique J



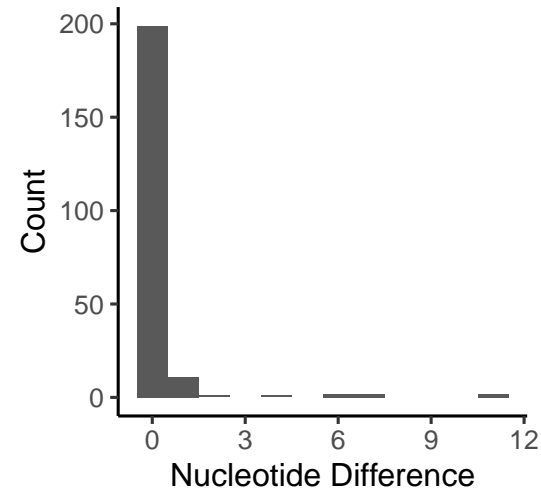
IGHV4-39*02_C258G

101 sequences assigned
93 (92.1%) exact matches, in which:
93 unique CDR3
6 unique J



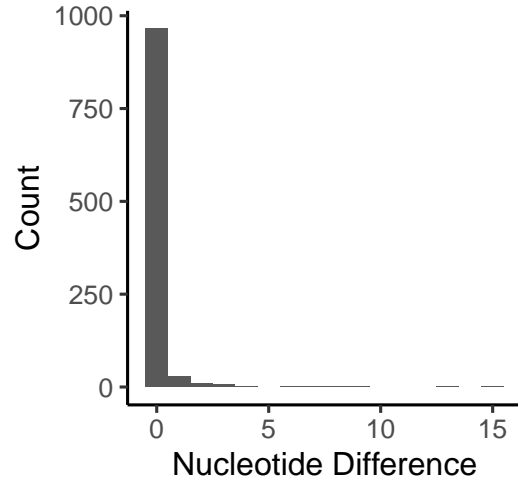
IGHV4-61*02

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



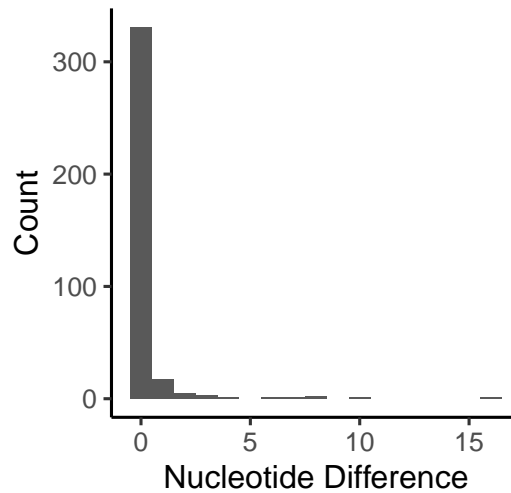
IGHV4-34*01

1017 sequences assigned
965 (94.9%) exact matches, in which:
964 unique CDR3
6 unique J



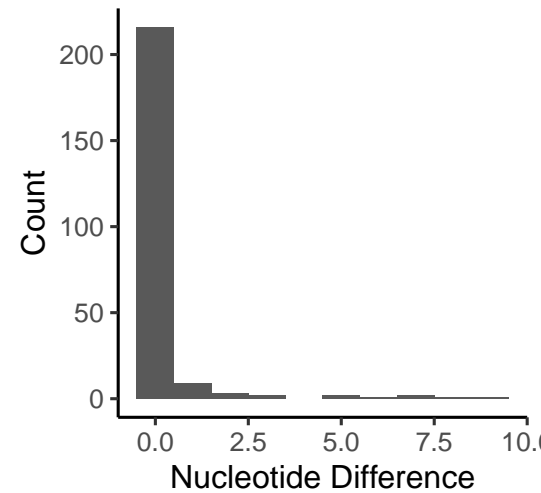
IGHV4-59*01

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



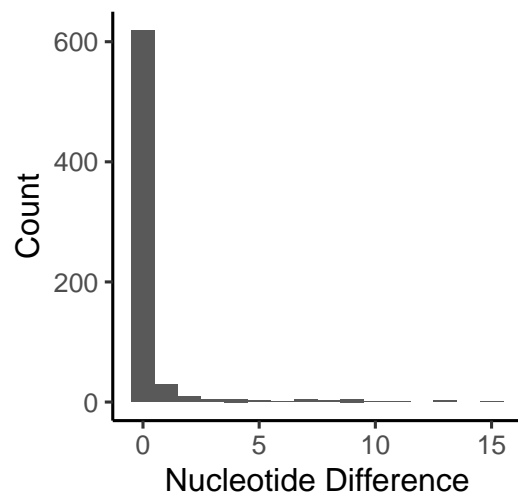
IGHV5-10-1*03

237 sequences assigned
216 (91.1%) exact matches, in which:
216 unique CDR3
5 unique J



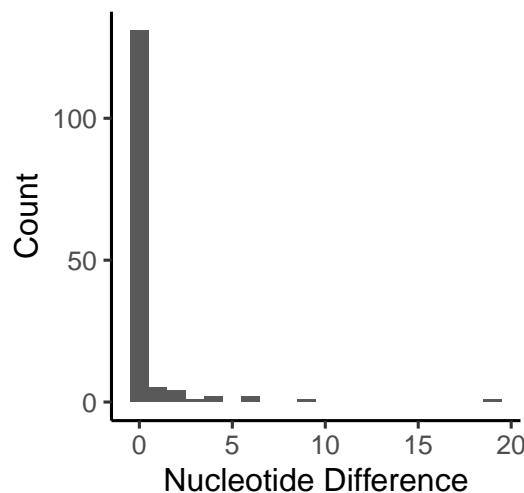
IGHV4-39*01

685 sequences assigned
619 (90.4%) exact matches, in which:
616 unique CDR3
6 unique J



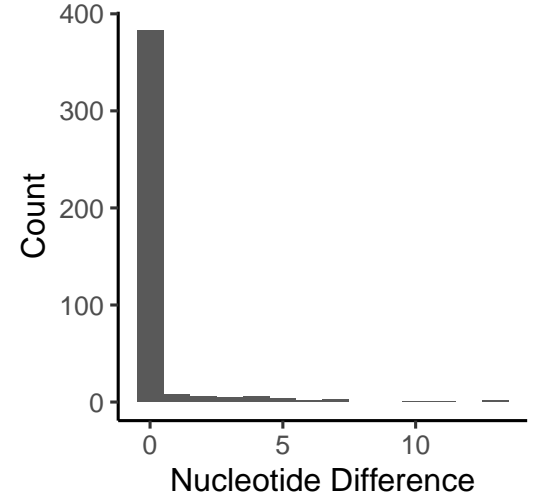
IGHV4-59*08

147 sequences assigned
131 (89.1%) exact matches, in which:
131 unique CDR3
6 unique J



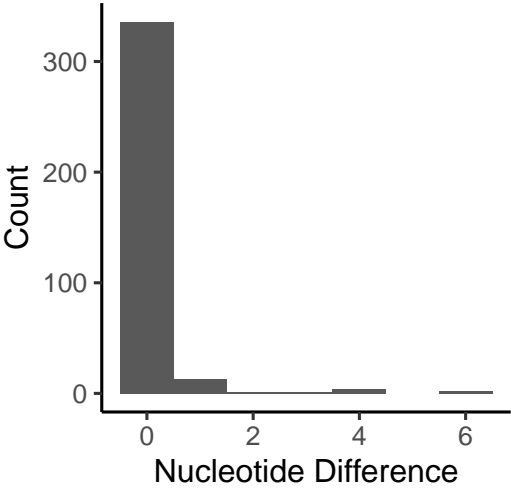
IGHV5-51*01

421 sequences assigned
383 (91%) exact matches, in which:
383 unique CDR3
6 unique J



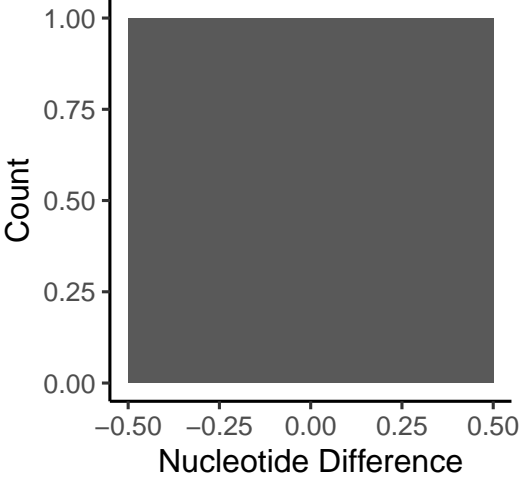
IGHV5–51*01_C45G

358 sequences assigned
336 (93.9%) exact matches, in which:
336 unique CDR3
6 unique J



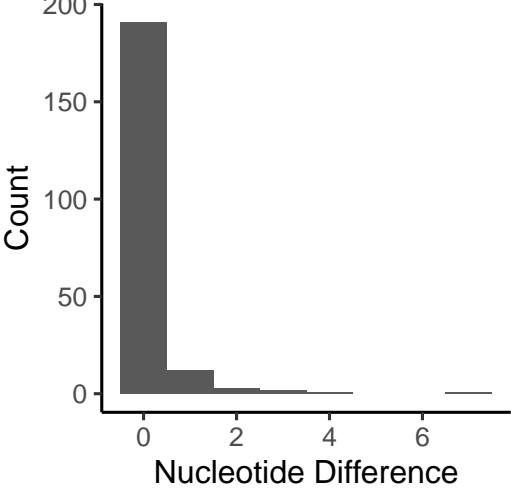
IGHV7–81*01

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



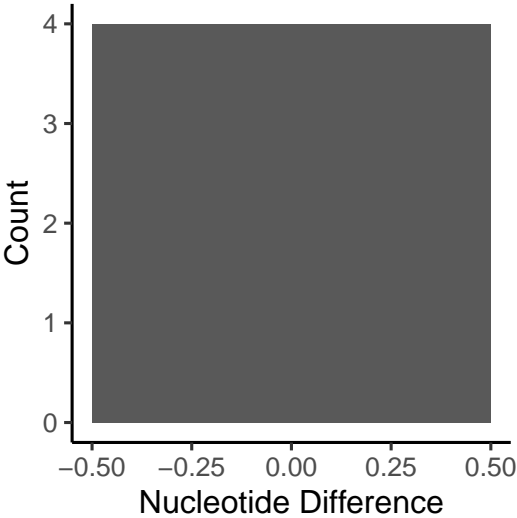
IGHV6–1*01

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





Warning – no inferred sequences found.