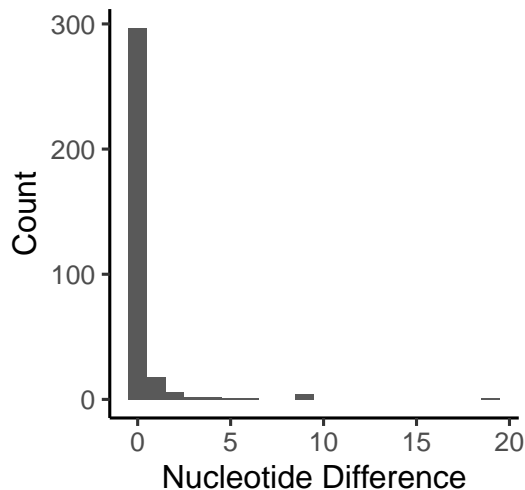


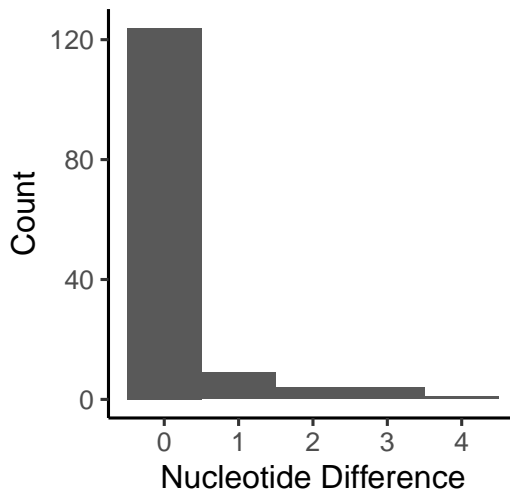
IGHV1-2*02

332 sequences assigned
297 (89.5%) exact matches, in which:
297 unique CDR3
6 unique J



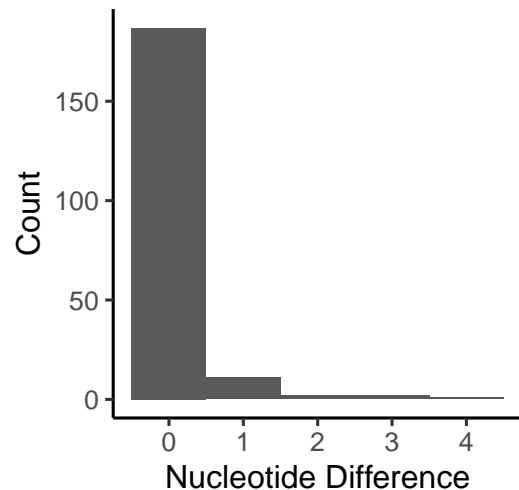
IGHV1-8*01

142 sequences assigned
124 (87.3%) exact matches, in which:
124 unique CDR3
5 unique J



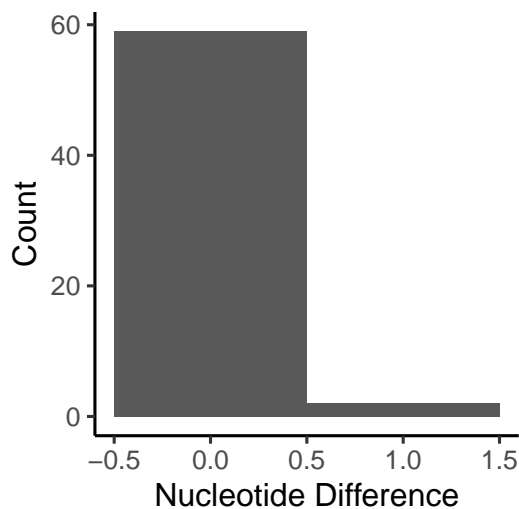
IGHV1-24*01

203 sequences assigned
187 (92.1%) exact matches, in which:
187 unique CDR3
6 unique J



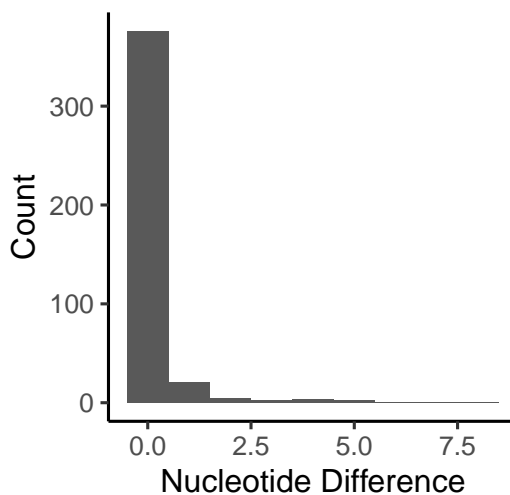
IGHV1-2*04

61 sequences assigned
59 (96.7%) exact matches, in which:
59 unique CDR3
6 unique J



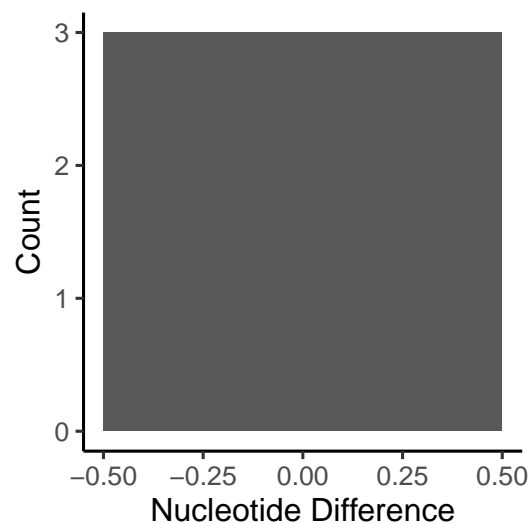
IGHV1-18*01

415 sequences assigned
376 (90.6%) exact matches, in which:
376 unique CDR3
6 unique J



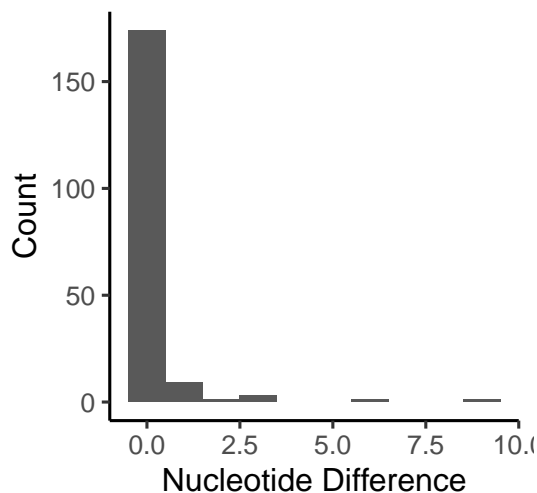
IGHV1-45*02

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



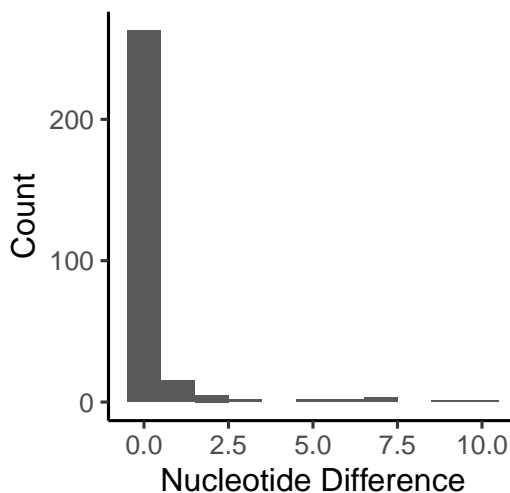
IGHV1-3*01

190 sequences assigned
174 (91.6%) exact matches, in which:
174 unique CDR3
6 unique J



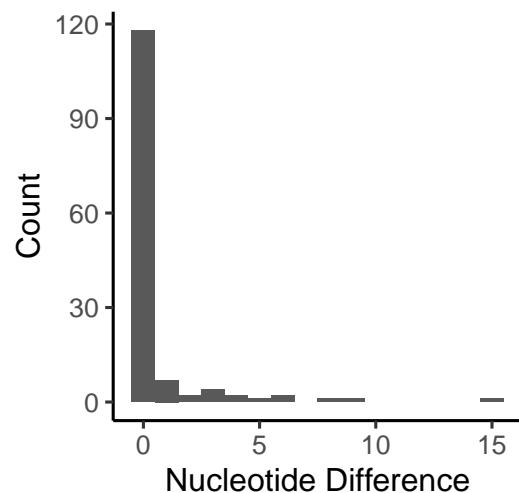
IGHV1-18*04

294 sequences assigned
263 (89.5%) exact matches, in which:
263 unique CDR3
6 unique J



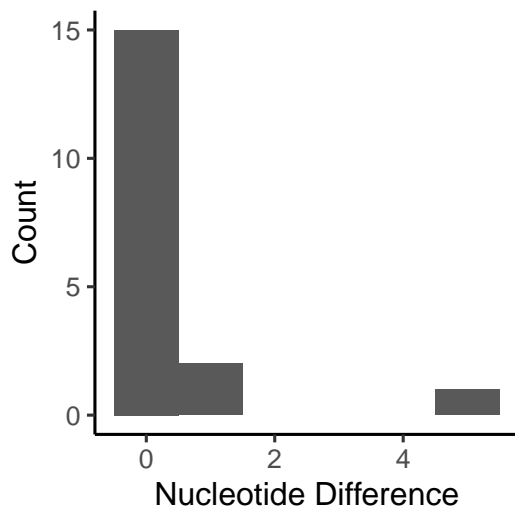
IGHV1-46*01

139 sequences assigned
118 (84.9%) exact matches, in which:
118 unique CDR3
6 unique J



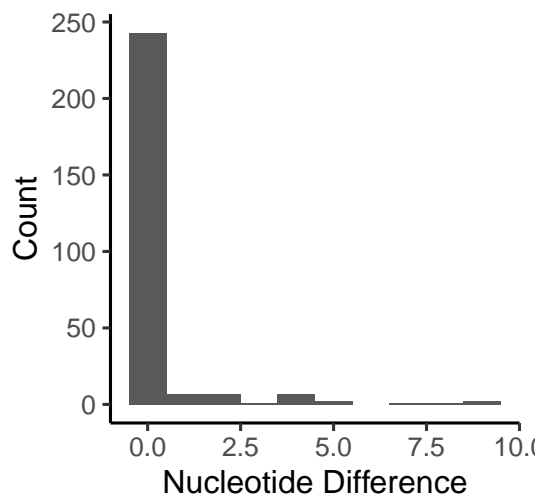
IGHV1-58*02

18 sequences assigned
15 (83.3%) exact matches, in which:
15 unique CDR3
5 unique J



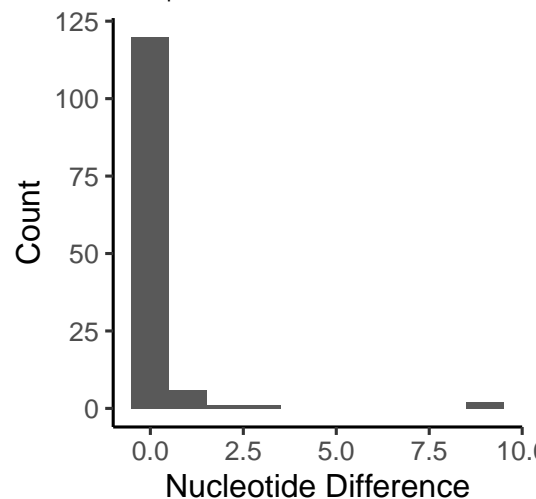
IGHV2-5*01

271 sequences assigned
243 (89.7%) exact matches, in which:
243 unique CDR3
6 unique J



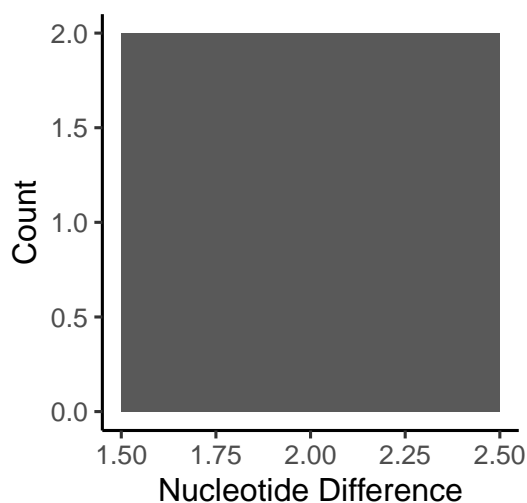
IGHV2-70*15

130 sequences assigned
120 (92.3%) exact matches, in which:
120 unique CDR3
5 unique J



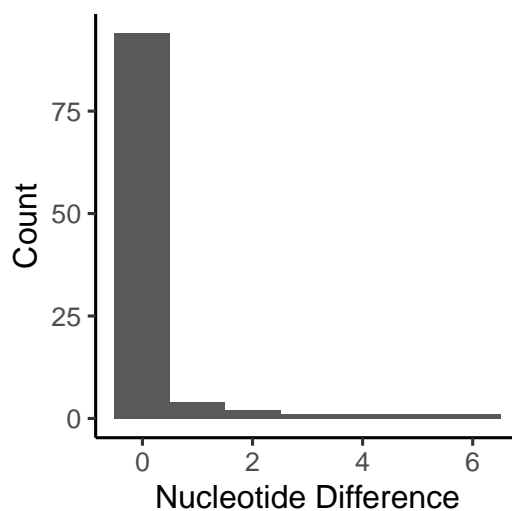
IGHV1-68*02

2 sequences assigned
No exact matches.



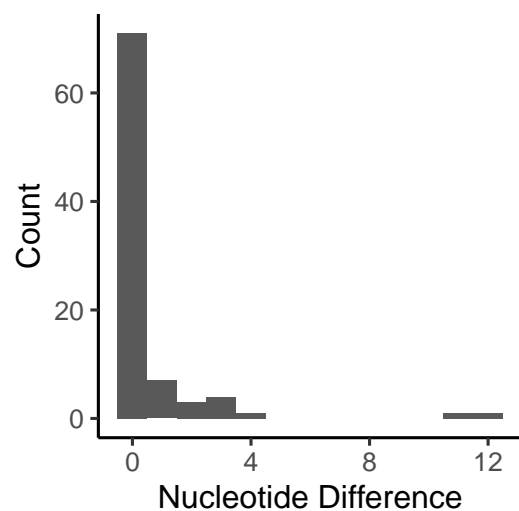
IGHV2-5*02

104 sequences assigned
94 (90.4%) exact matches, in which:
94 unique CDR3
6 unique J



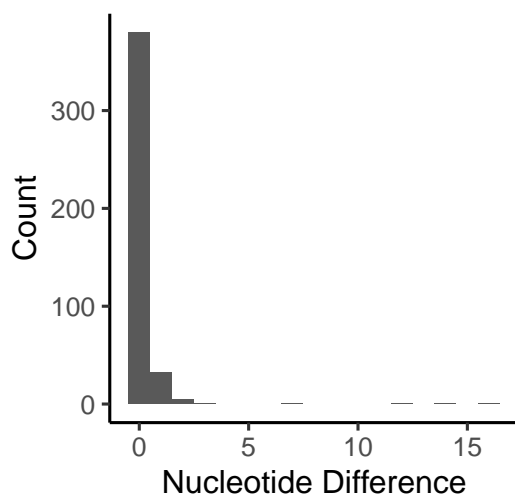
IGHV3-7*01

90 sequences assigned
71 (78.9%) exact matches, in which:
71 unique CDR3
5 unique J



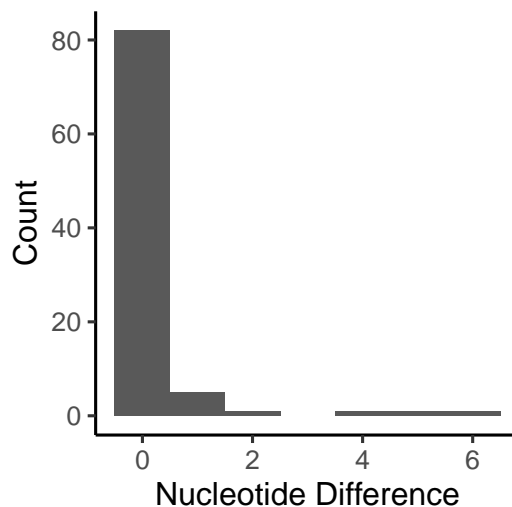
IGHV1-69*04

422 sequences assigned
380 (90%) exact matches, in which:
380 unique CDR3
6 unique J



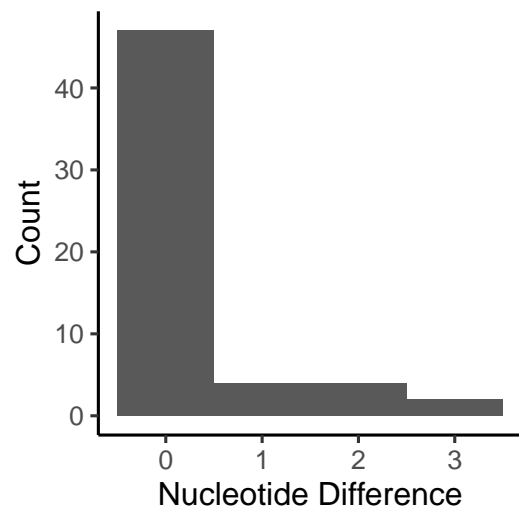
IGHV2-26*01

91 sequences assigned
82 (90.1%) exact matches, in which:
82 unique CDR3
5 unique J



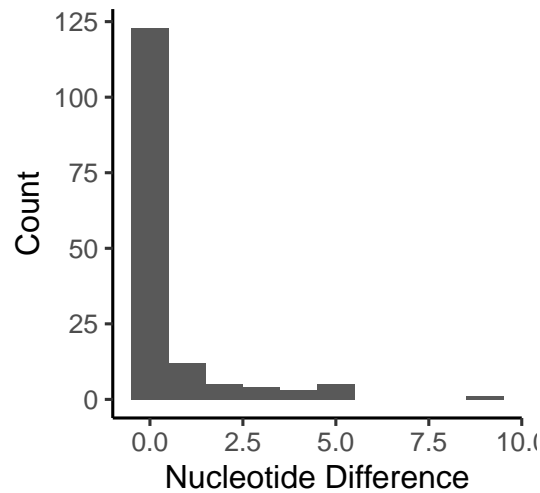
IGHV3-7*03

57 sequences assigned
47 (82.5%) exact matches, in which:
47 unique CDR3
5 unique J



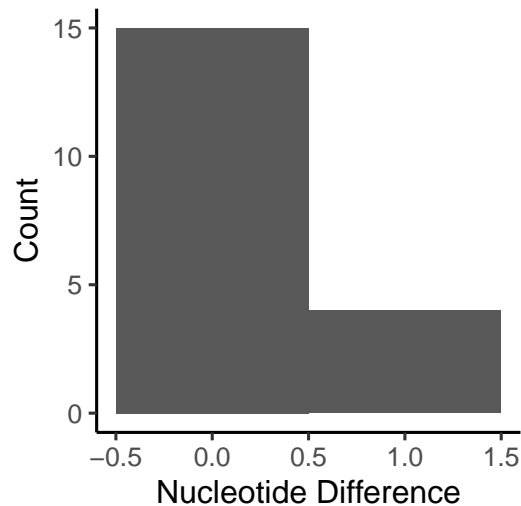
IGHV3-9*01

153 sequences assigned
123 (80.4%) exact matches, in which:
123 unique CDR3
6 unique J



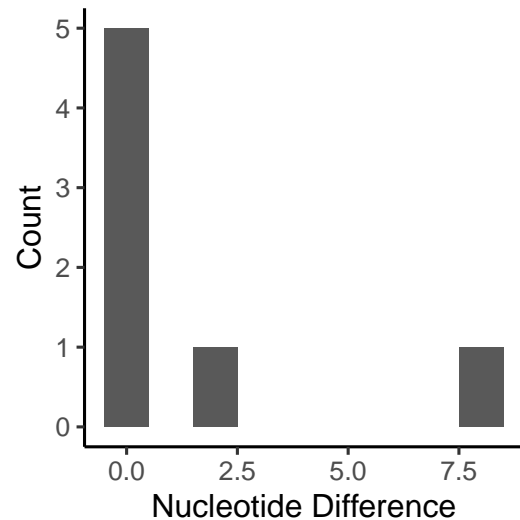
IGHV3-13*01

19 sequences assigned
15 (78.9%) exact matches, in which:
15 unique CDR3
4 unique J



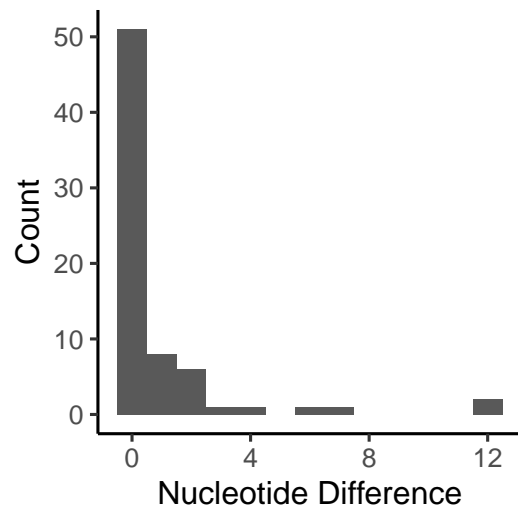
IGHV3-20*01

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



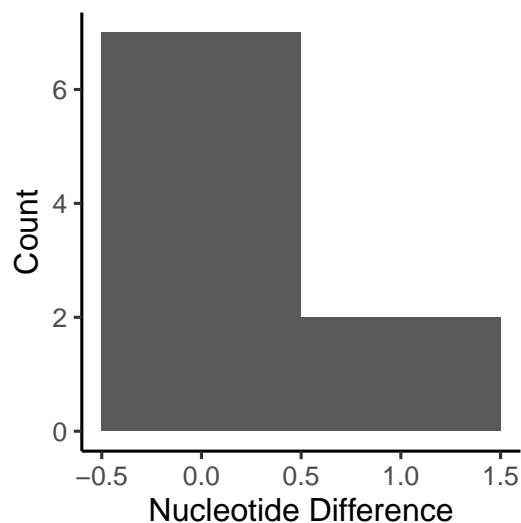
IGHV3-11*01

71 sequences assigned
51 (71.8%) exact matches, in which:
51 unique CDR3
6 unique J



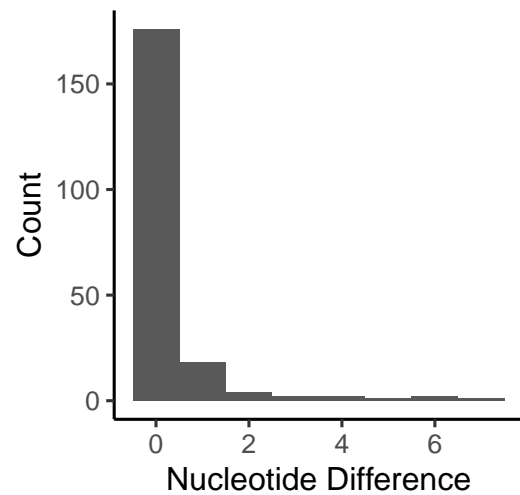
IGHV3-13*05

9 sequences assigned
7 (77.8%) exact matches, in which:
7 unique CDR3
4 unique J



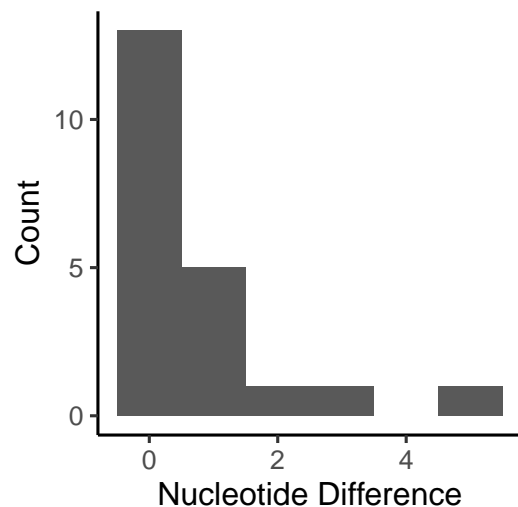
IGHV3-21*01

206 sequences assigned
176 (85.4%) exact matches, in which:
176 unique CDR3
6 unique J



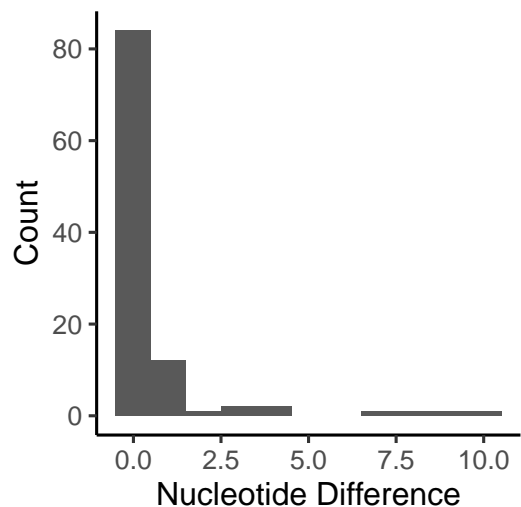
IGHV3-11*06

22 sequences assigned
13 (59.1%) exact matches, in which:
13 unique CDR3
3 unique J



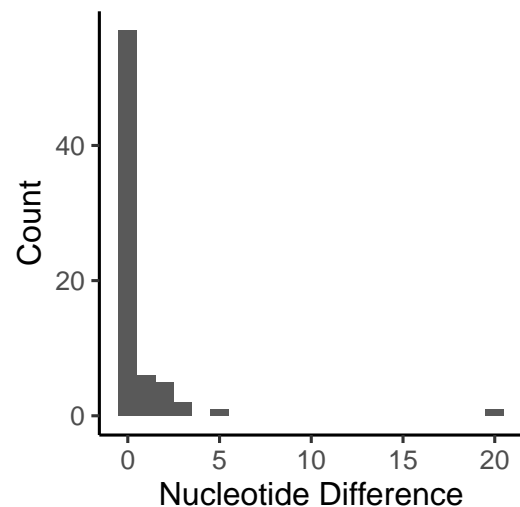
IGHV3-15*01

105 sequences assigned
84 (80%) exact matches, in which:
83 unique CDR3
6 unique J



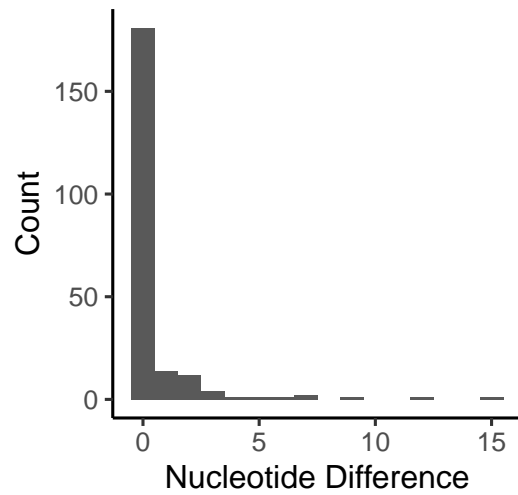
IGHV3-30-3*01

72 sequences assigned
57 (79.2%) exact matches, in which:
57 unique CDR3
4 unique J



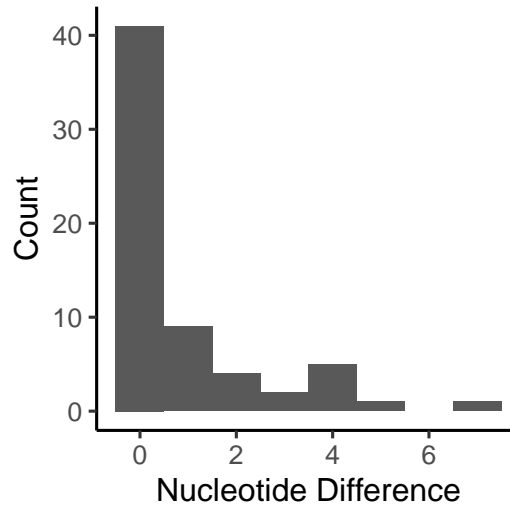
IGHV3–30*03

220 sequences assigned
181 (82.3%) exact matches, in which:
181 unique CDR3
6 unique J



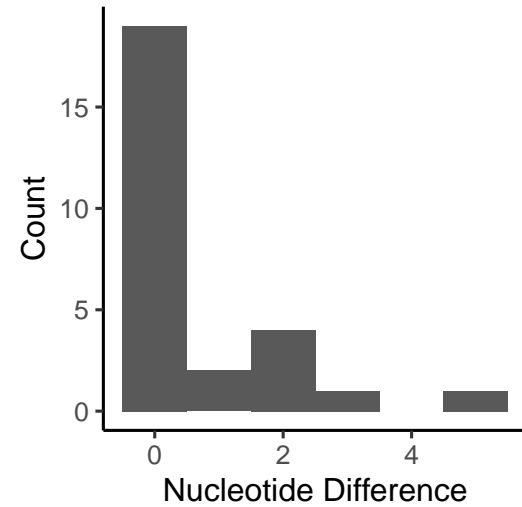
IGHV3–48*01

63 sequences assigned
41 (65.1%) exact matches, in which:
41 unique CDR3
5 unique J



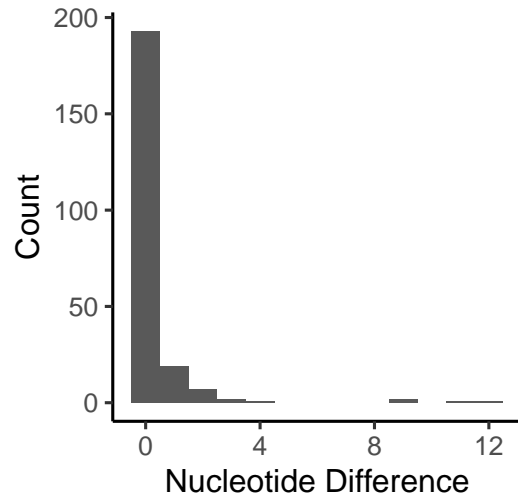
IGHV3–49*05

27 sequences assigned
19 (70.4%) exact matches, in which:
19 unique CDR3
4 unique J



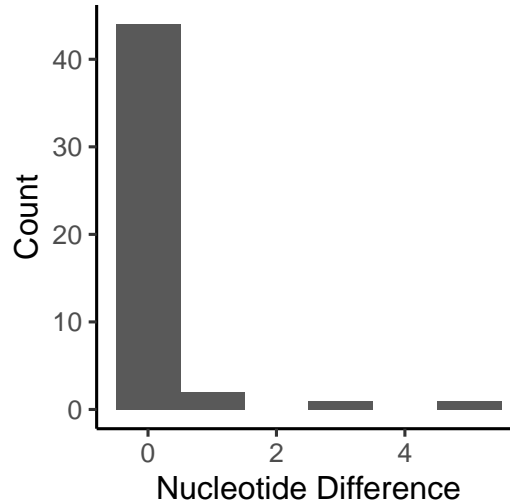
IGHV3–33*01

227 sequences assigned
193 (85%) exact matches, in which:
193 unique CDR3
6 unique J



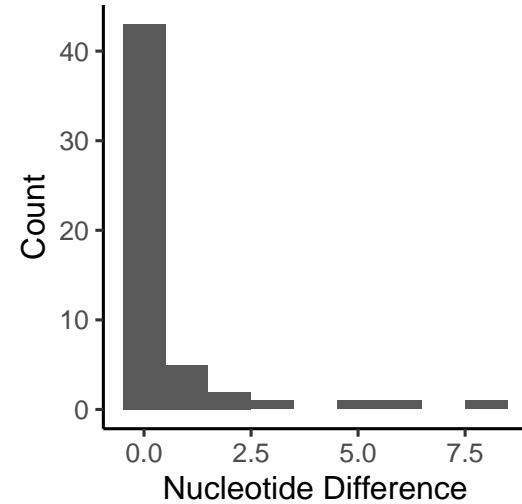
IGHV3–48*02

48 sequences assigned
44 (91.7%) exact matches, in which:
44 unique CDR3
5 unique J



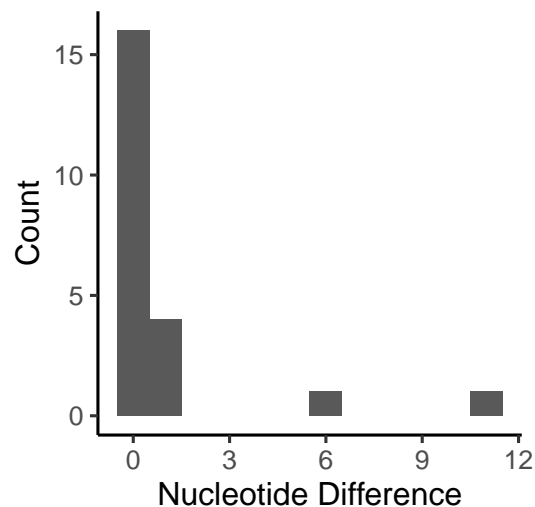
IGHV3–53*01

54 sequences assigned
43 (79.6%) exact matches, in which:
43 unique CDR3
6 unique J



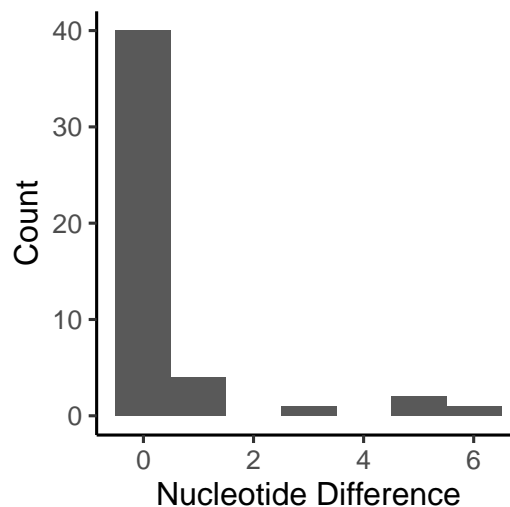
IGHV3–43*01

22 sequences assigned
16 (72.7%) exact matches, in which:
16 unique CDR3
4 unique J



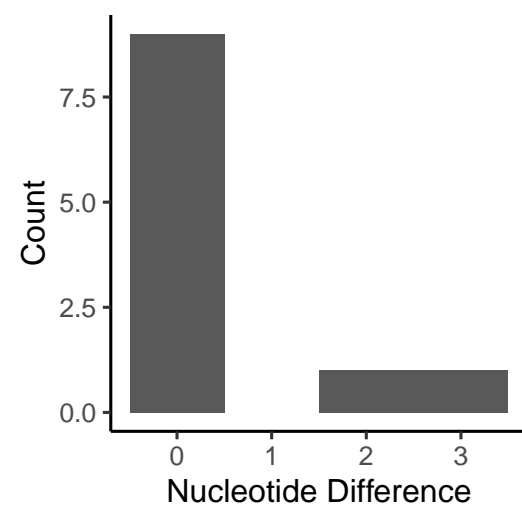
IGHV3–49*03

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



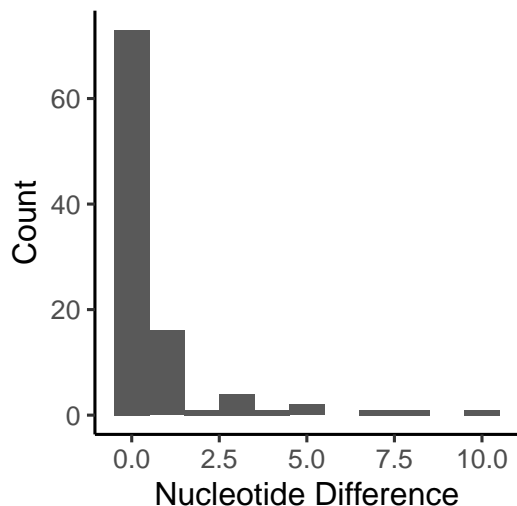
IGHV3–64*01

11 sequences assigned
9 (81.8%) exact matches, in which:
9 unique CDR3
3 unique J



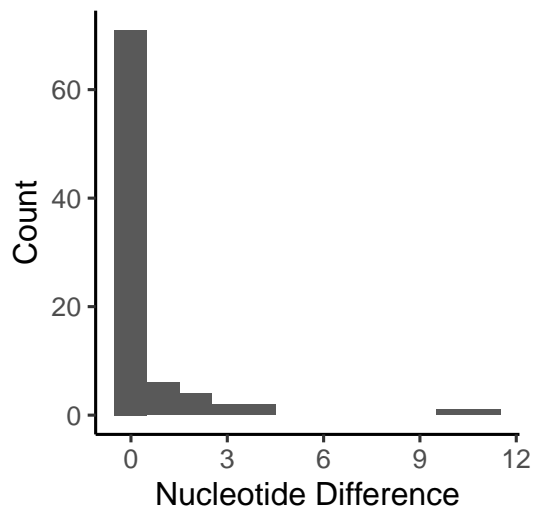
IGHV3-66*01

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



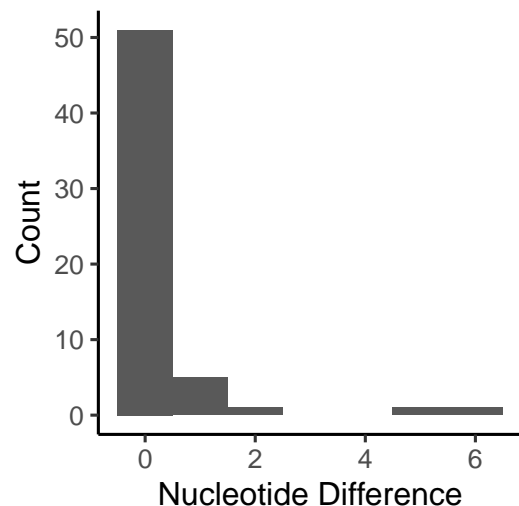
IGHV3-74*01

87 sequences assigned
71 (81.6%) exact matches, in which:
71 unique CDR3
6 unique J



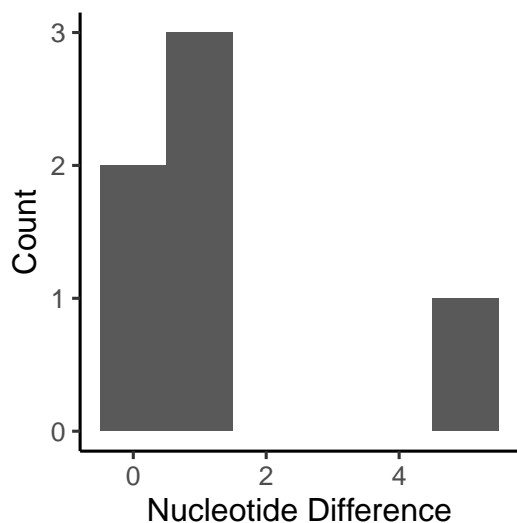
IGHV4-4*02

59 sequences assigned
51 (86.4%) exact matches, in which:
51 unique CDR3
4 unique J



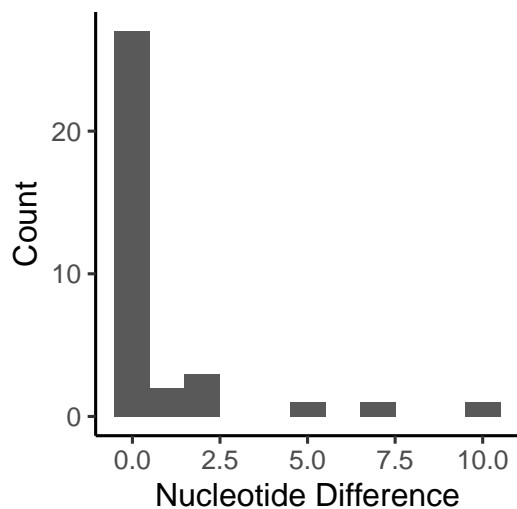
IGHV3-72*01

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
1 unique J



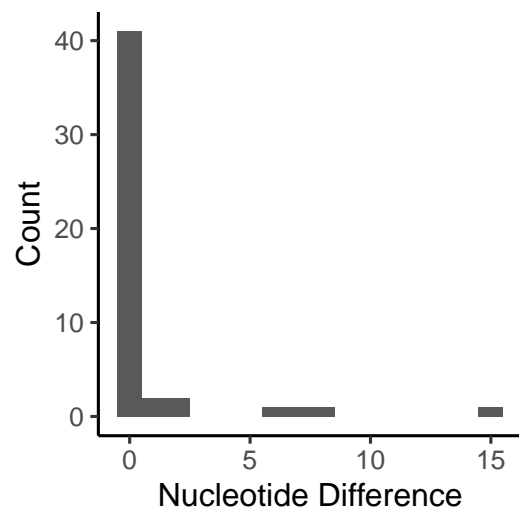
IGHV3-64D*06

35 sequences assigned
27 (77.1%) exact matches, in which:
27 unique CDR3
5 unique J



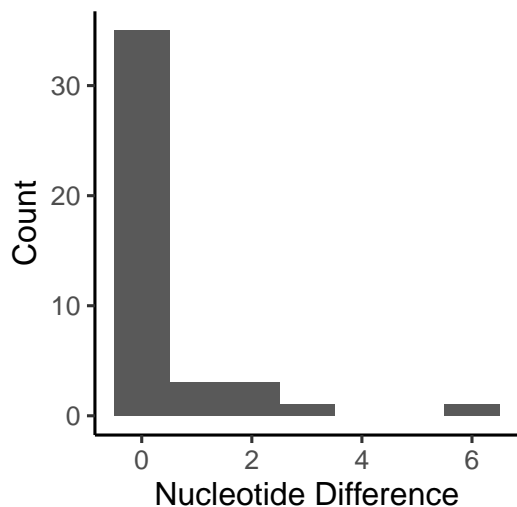
IGHV4-4*07

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



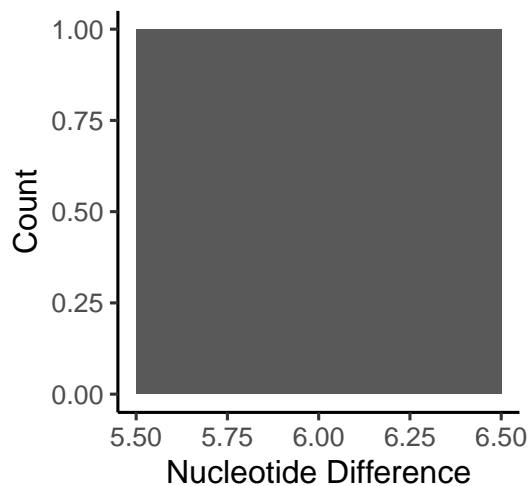
IGHV3-73*01

43 sequences assigned
35 (81.4%) exact matches, in which:
35 unique CDR3
6 unique J



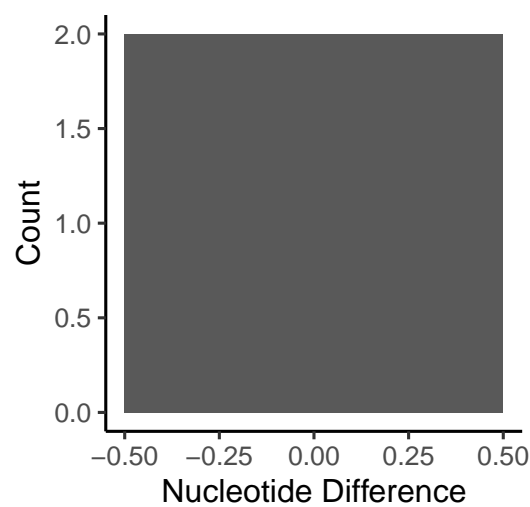
IGHV3-NL1*01

1 sequences assigned
No exact matches.



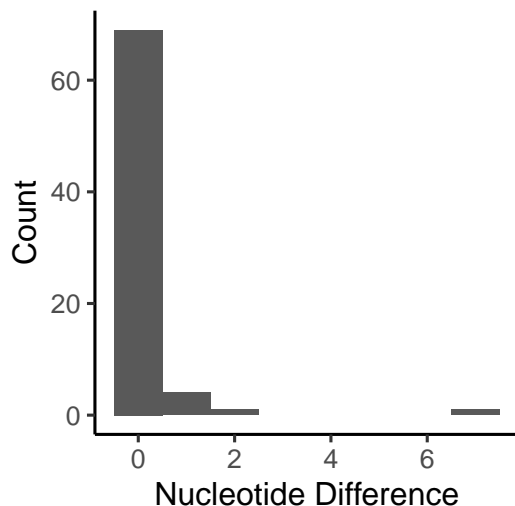
IGHV4-28*03

2 sequences assigned
2 (100%) exact matches, in which:
2 unique CDR3
1 unique J



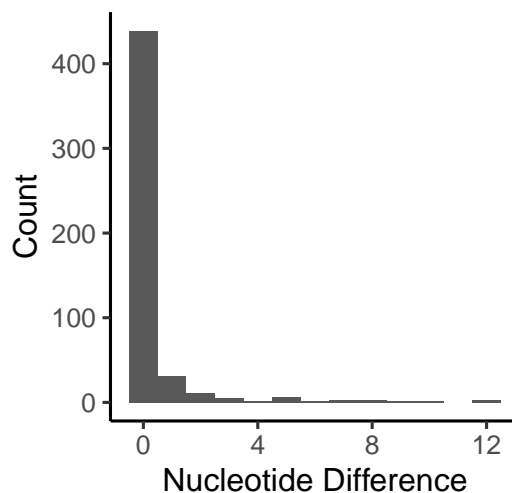
IGHV4-30-2*01

75 sequences assigned
69 (92%) exact matches, in which:
69 unique CDR3
6 unique J



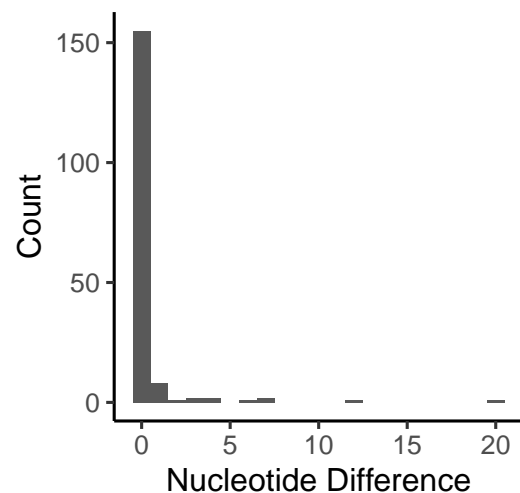
IGHV4-34*01

509 sequences assigned
439 (86.2%) exact matches, in which:
436 unique CDR3
6 unique J



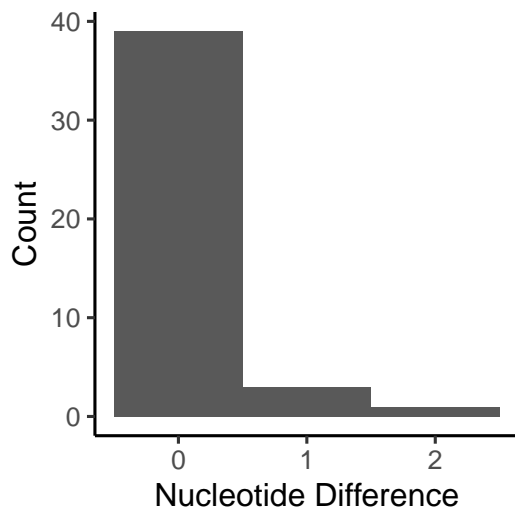
IGHV4-59*08

173 sequences assigned
155 (89.6%) exact matches, in which:
155 unique CDR3
6 unique J



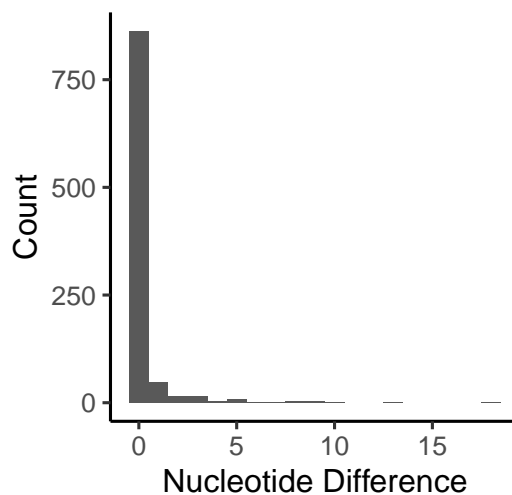
IGHV4-30-4*01

43 sequences assigned
39 (90.7%) exact matches, in which:
39 unique CDR3
5 unique J



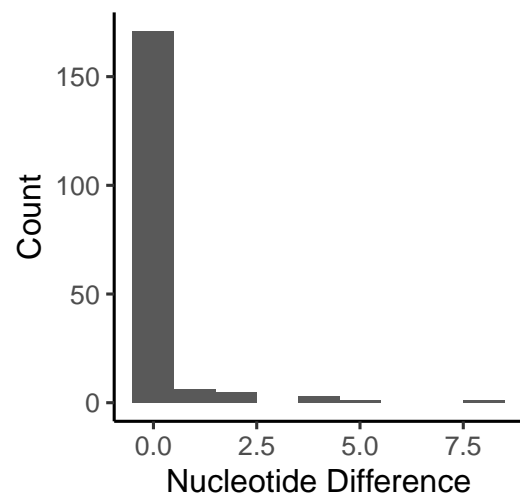
IGHV4-39*01

966 sequences assigned
863 (89.3%) exact matches, in which:
863 unique CDR3
6 unique J



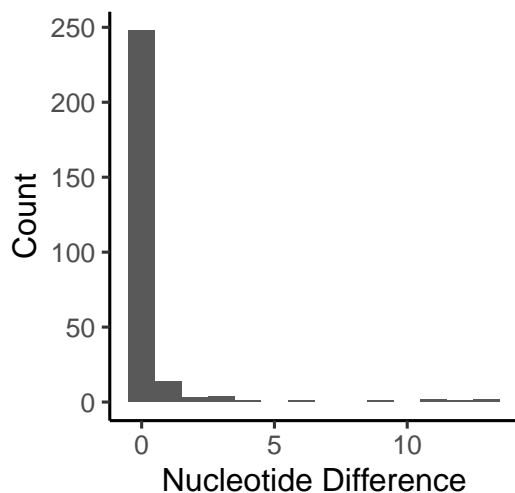
IGHV5-10-1*03

188 sequences assigned
171 (91%) exact matches, in which:
171 unique CDR3
6 unique J



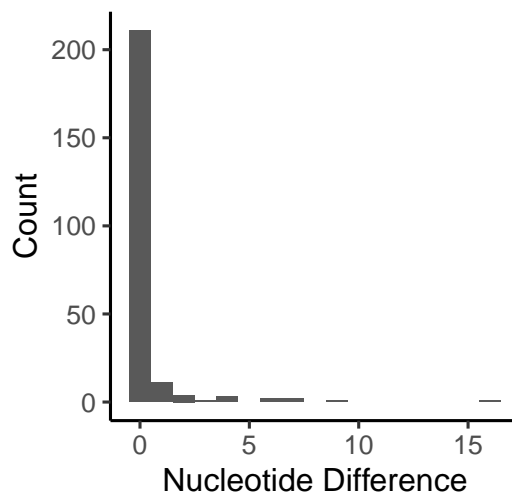
IGHV4-31*03

277 sequences assigned
248 (89.5%) exact matches, in which:
248 unique CDR3
6 unique J



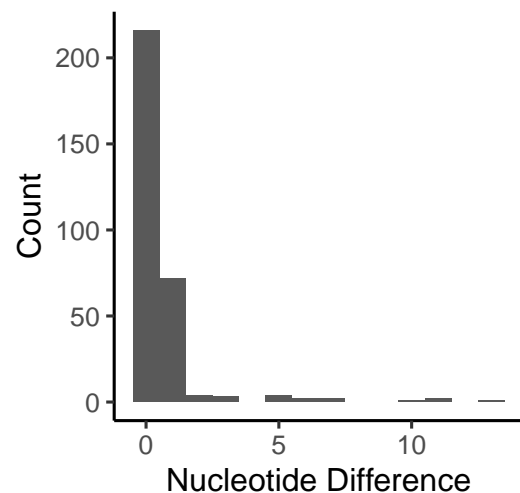
IGHV4-59*01

236 sequences assigned
211 (89.4%) exact matches, in which:
211 unique CDR3
6 unique J



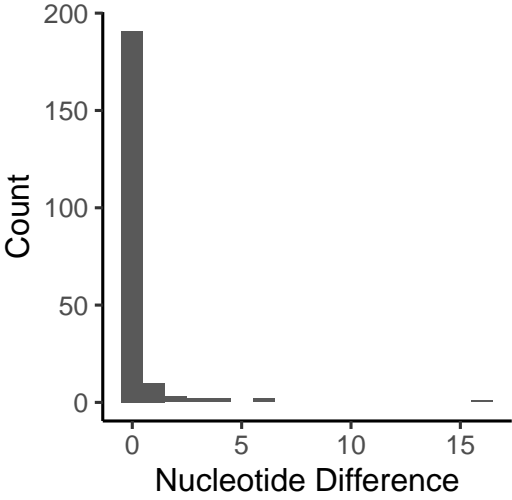
IGHV5-51*01

307 sequences assigned
216 (70.4%) exact matches, in which:
216 unique CDR3
6 unique J



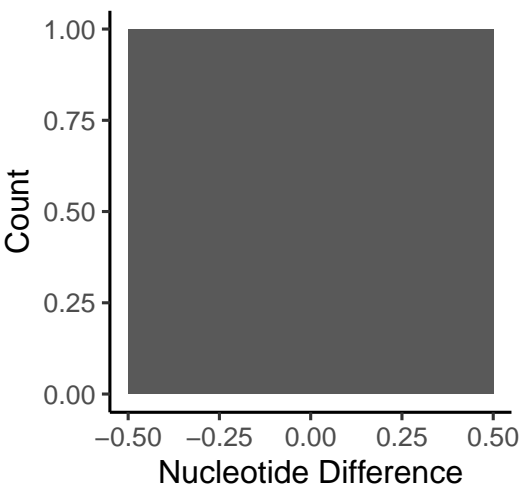
IGHV5–51*03

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



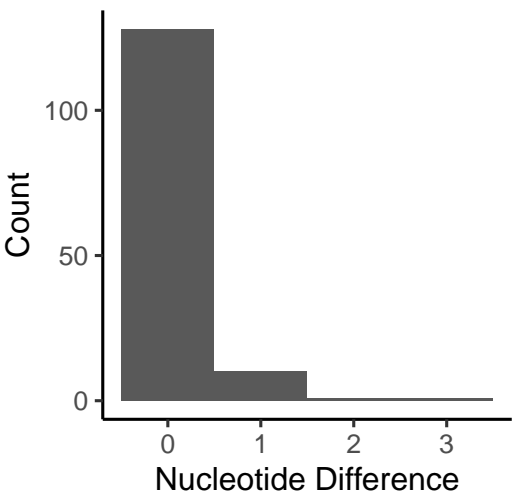
IGHV7–81*01

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



IGHV6–1*01

140 sequences assigned
128 (91.4%) exact matches, in which:
128 unique CDR3
6 unique J



IGHV7–4–1*01

2 sequences assigned
2 (100%) exact matches, in which:
2 unique CDR3
1 unique J

