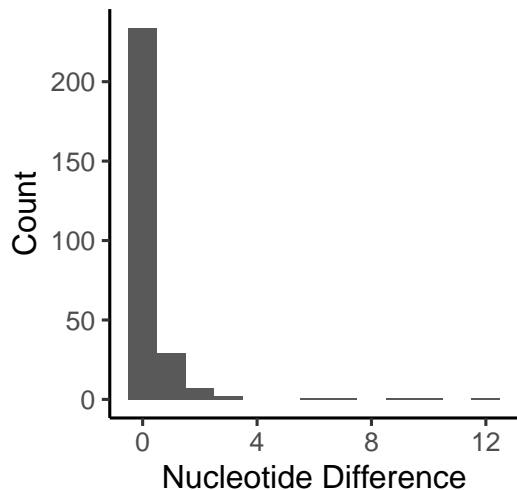


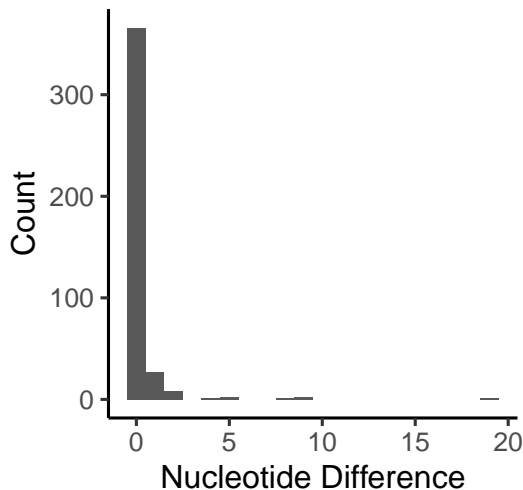
IGHV1-2*02

277 sequences assigned
234 (84.5%) exact matches, in which:
232 unique CDR3
6 unique J



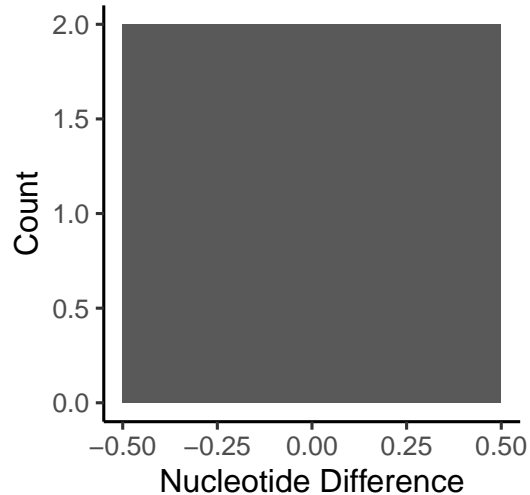
IGHV1-8*01

408 sequences assigned
366 (89.7%) exact matches, in which:
364 unique CDR3
7 unique J



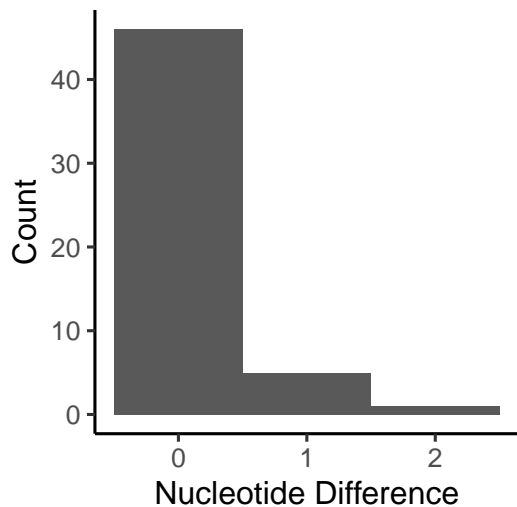
IGHV1-45*02

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



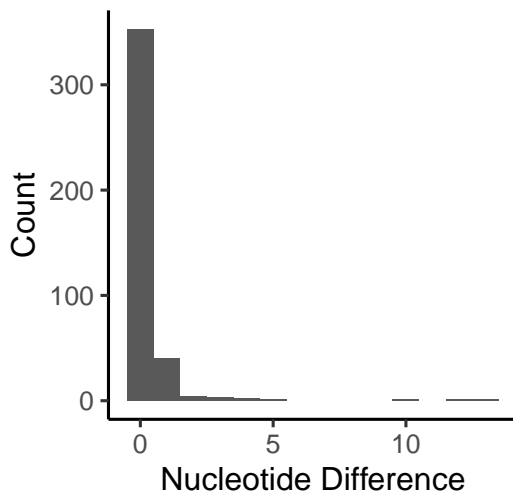
IGHV1-2*04

52 sequences assigned
46 (88.5%) exact matches, in which:
45 unique CDR3
5 unique J



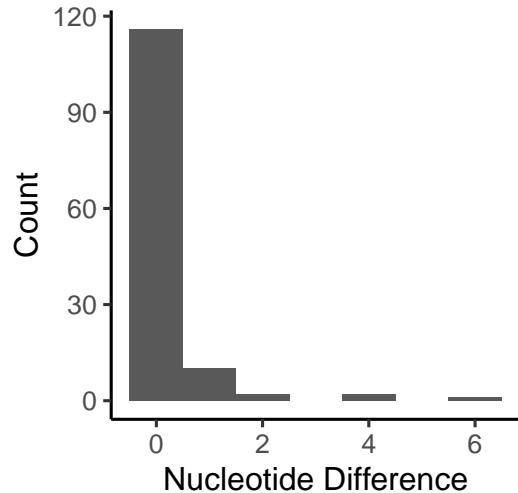
IGHV1-18*01

407 sequences assigned
353 (86.7%) exact matches, in which:
351 unique CDR3
7 unique J



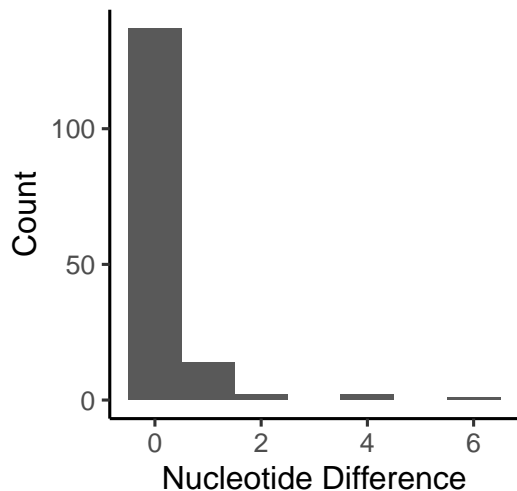
IGHV1-46*01

131 sequences assigned
116 (88.5%) exact matches, in which:
116 unique CDR3
5 unique J



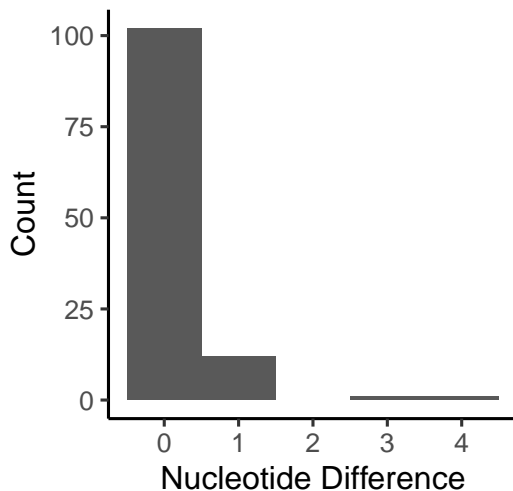
IGHV1-3*01

159 sequences assigned
137 (86.2%) exact matches, in which:
136 unique CDR3
6 unique J



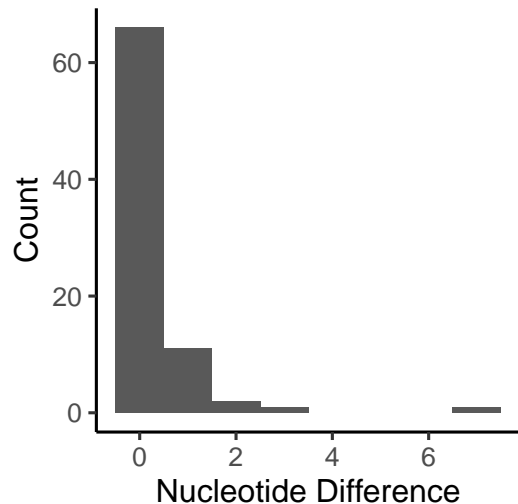
IGHV1-24*01

116 sequences assigned
102 (87.9%) exact matches, in which:
101 unique CDR3
6 unique J



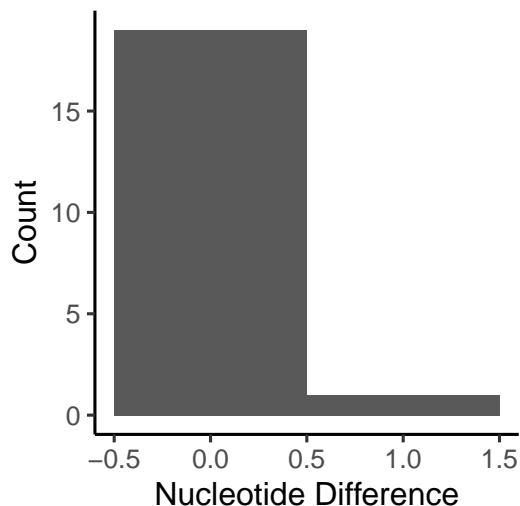
IGHV1-46*03

81 sequences assigned
66 (81.5%) exact matches, in which:
66 unique CDR3
4 unique J



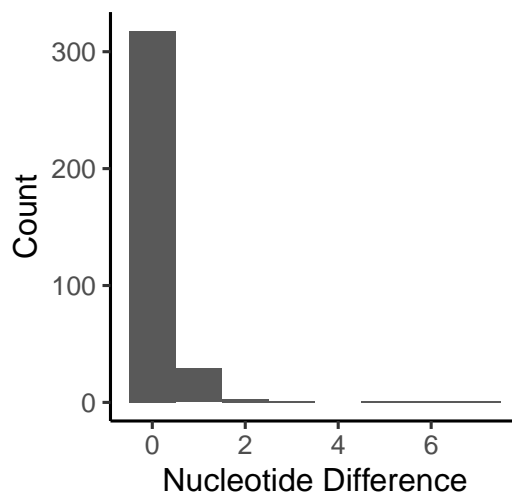
IGHV1–58*01

20 sequences assigned
19 (95%) exact matches, in which:
19 unique CDR3
3 unique J



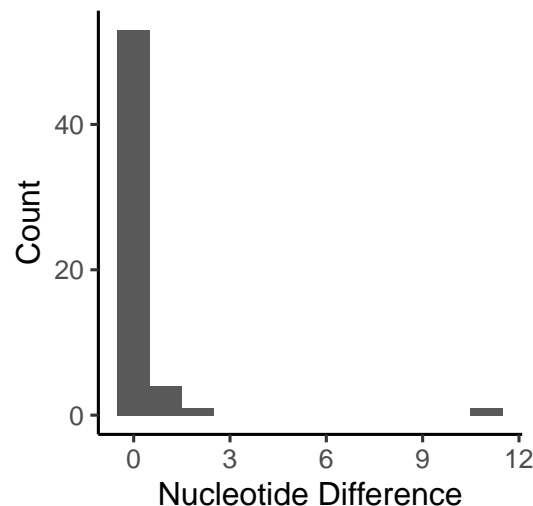
IGHV1–69*09

359 sequences assigned
318 (88.6%) exact matches, in which:
315 unique CDR3
7 unique J



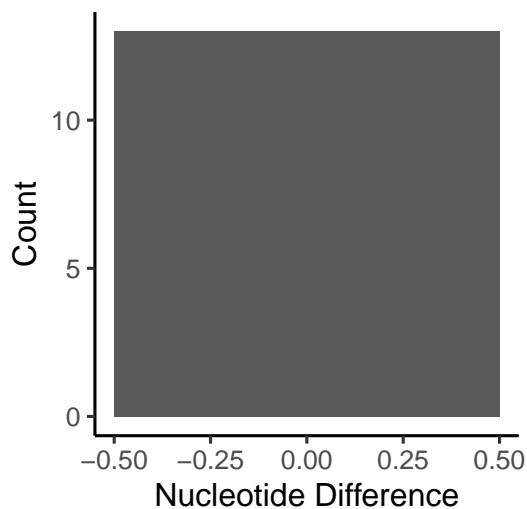
IGHV2–26*01

59 sequences assigned
53 (89.8%) exact matches, in which:
52 unique CDR3
7 unique J



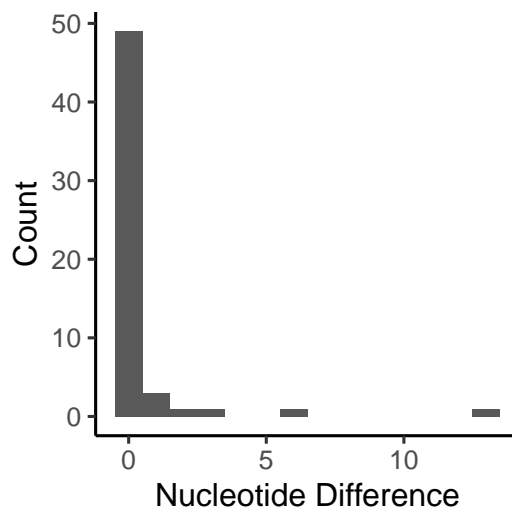
IGHV1–58*02

13 sequences assigned
13 (100%) exact matches, in which:
13 unique CDR3
4 unique J



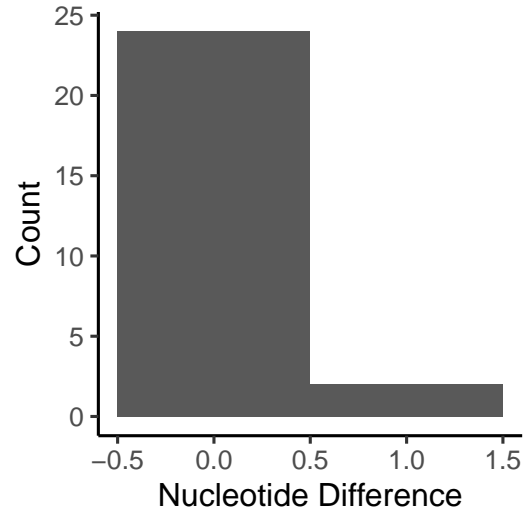
IGHV2–5*01

56 sequences assigned
49 (87.5%) exact matches, in which:
49 unique CDR3
4 unique J



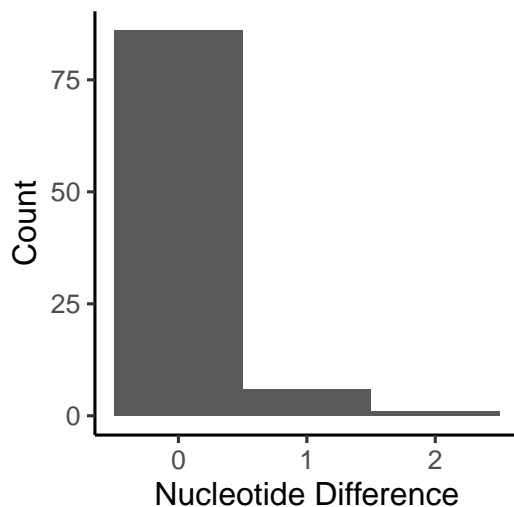
IGHV2–70*01

26 sequences assigned
24 (92.3%) exact matches, in which:
24 unique CDR3
5 unique J



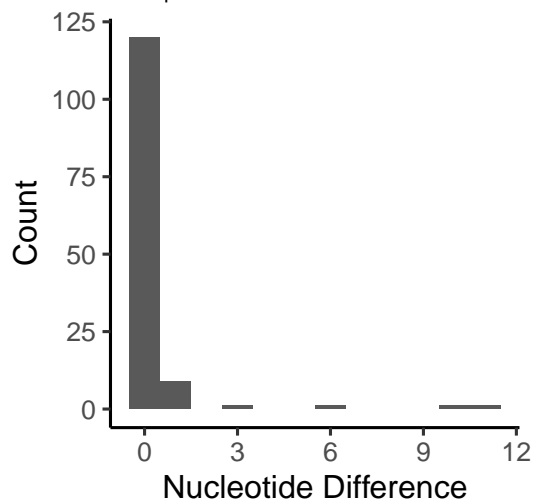
IGHV1–69*02

93 sequences assigned
86 (92.5%) exact matches, in which:
85 unique CDR3
6 unique J



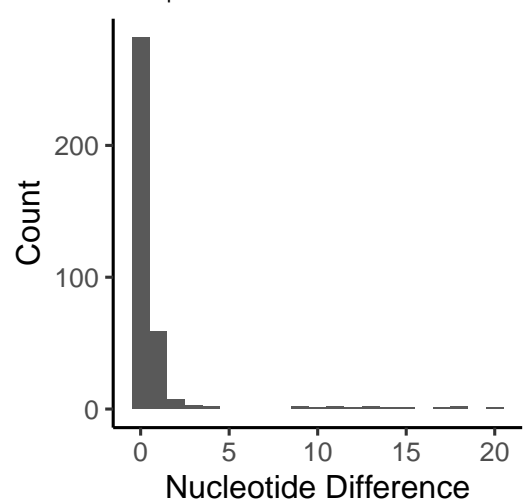
IGHV2–5*02

133 sequences assigned
120 (90.2%) exact matches, in which:
120 unique CDR3
6 unique J



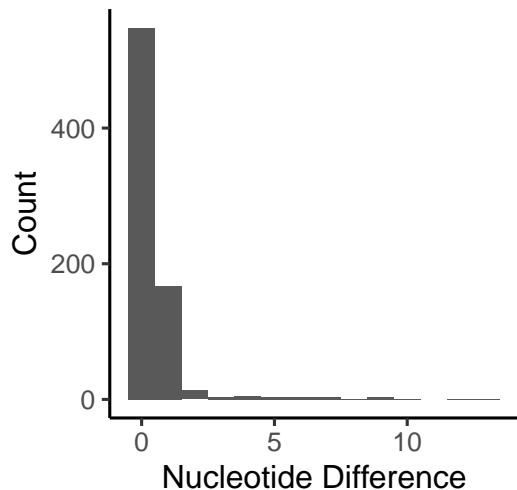
IGHV3–7*01

376 sequences assigned
282 (75%) exact matches, in which:
281 unique CDR3
7 unique J



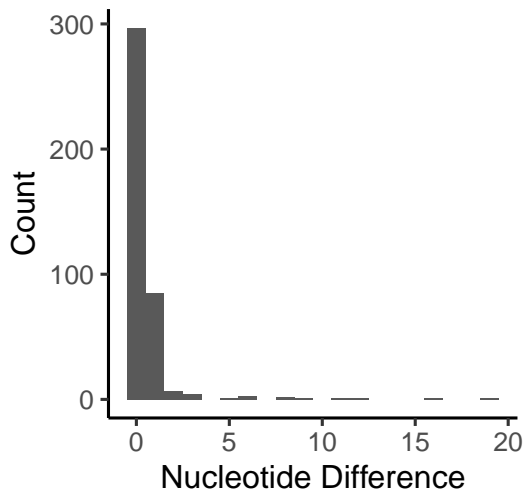
IGHV3-9*01

754 sequences assigned
548 (72.7%) exact matches, in which:
533 unique CDR3
7 unique J



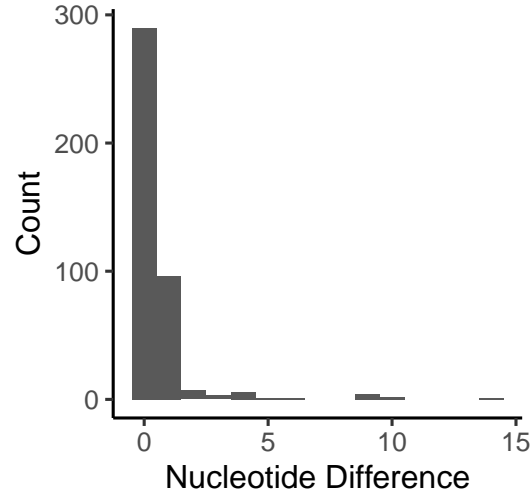
IGHV3-15*01

405 sequences assigned
297 (73.3%) exact matches, in which:
293 unique CDR3
7 unique J



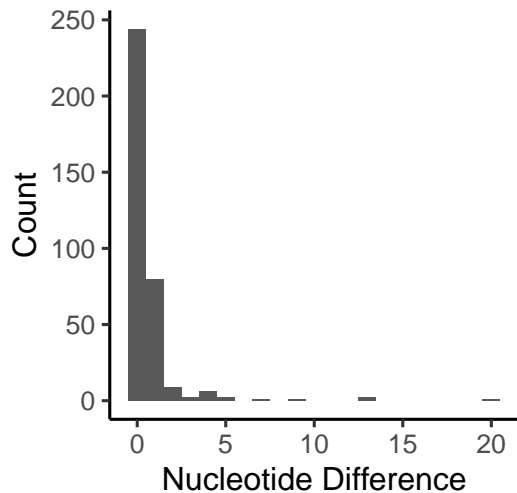
IGHV3-30-3*01

412 sequences assigned
290 (70.4%) exact matches, in which:
289 unique CDR3
6 unique J



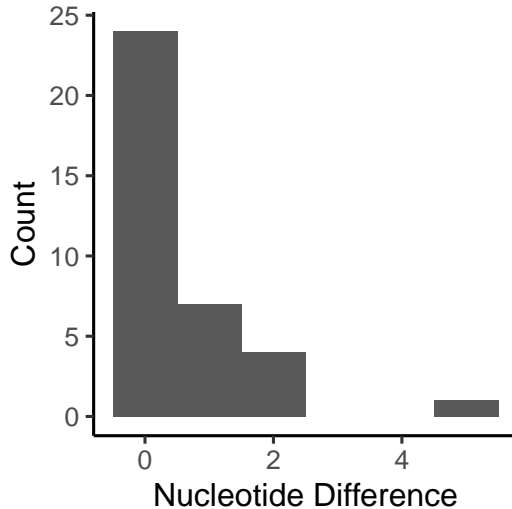
IGHV3-11*01

348 sequences assigned
244 (70.1%) exact matches, in which:
243 unique CDR3
7 unique J



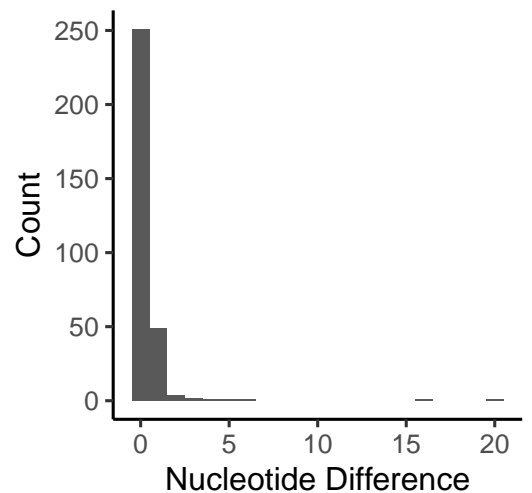
IGHV3-20*01

36 sequences assigned
24 (66.7%) exact matches, in which:
23 unique CDR3
5 unique J



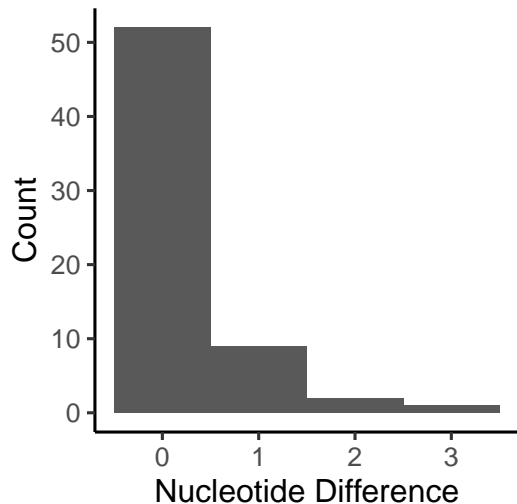
IGHV3-30*01

314 sequences assigned
251 (79.9%) exact matches, in which:
247 unique CDR3
7 unique J



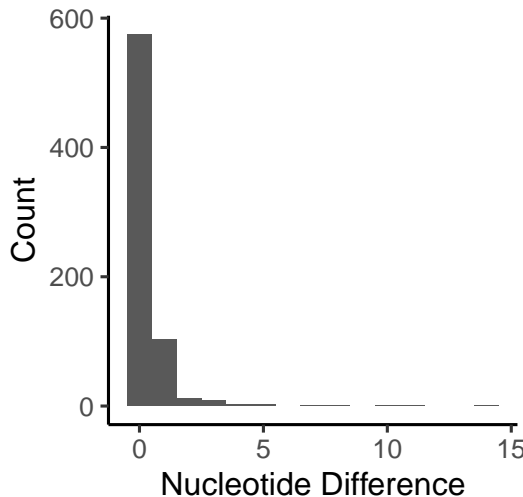
IGHV3-13*01

64 sequences assigned
52 (81.2%) exact matches, in which:
51 unique CDR3
7 unique J



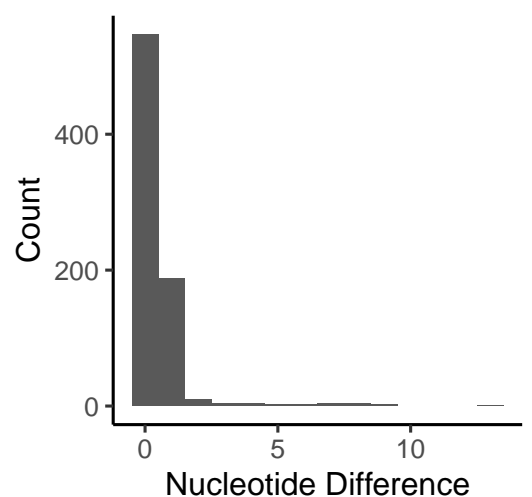
IGHV3-21*01

709 sequences assigned
575 (81.1%) exact matches, in which:
568 unique CDR3
7 unique J



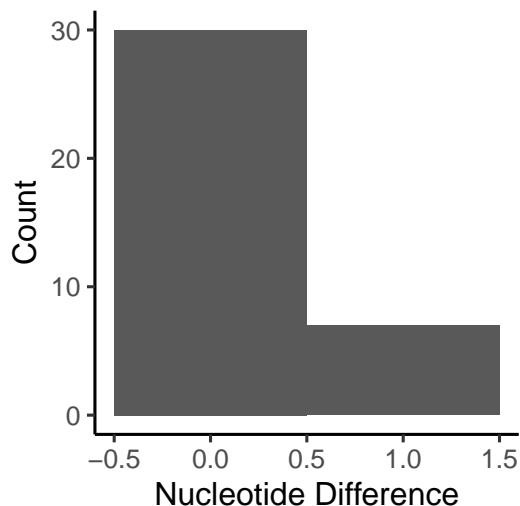
IGHV3-33*01

767 sequences assigned
547 (71.3%) exact matches, in which:
540 unique CDR3
7 unique J



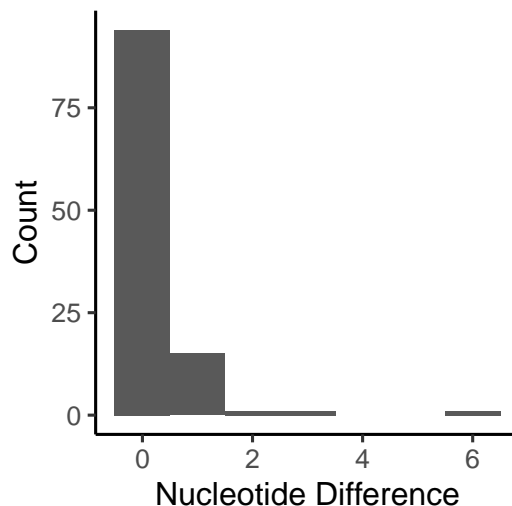
IGHV3-43*01

37 sequences assigned
30 (81.1%) exact matches, in which:
30 unique CDR3
6 unique J



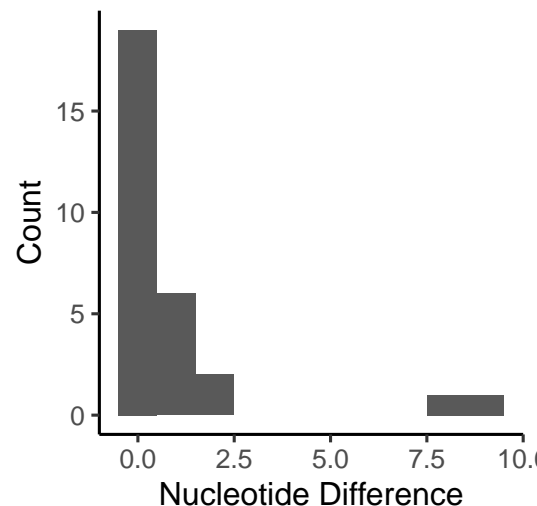
IGHV3-49*03

112 sequences assigned
94 (83.9%) exact matches, in which:
94 unique CDR3
6 unique J



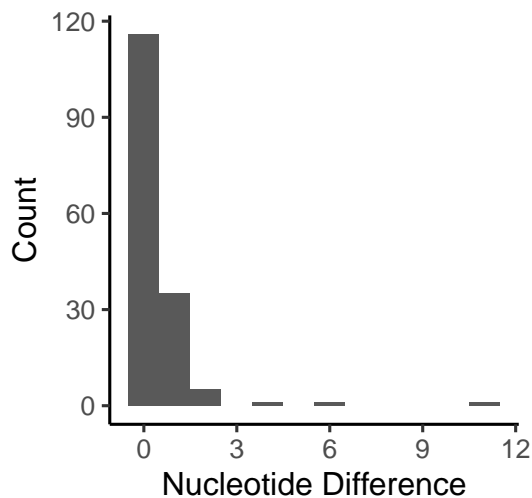
IGHV3-64*01

29 sequences assigned
19 (65.5%) exact matches, in which:
19 unique CDR3
3 unique J



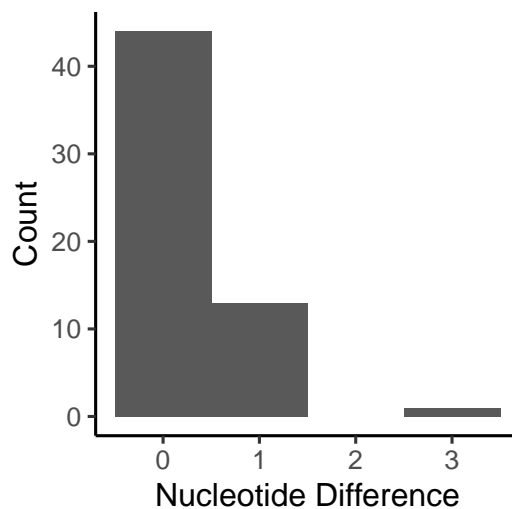
IGHV3-48*01

159 sequences assigned
116 (73%) exact matches, in which:
114 unique CDR3
6 unique J



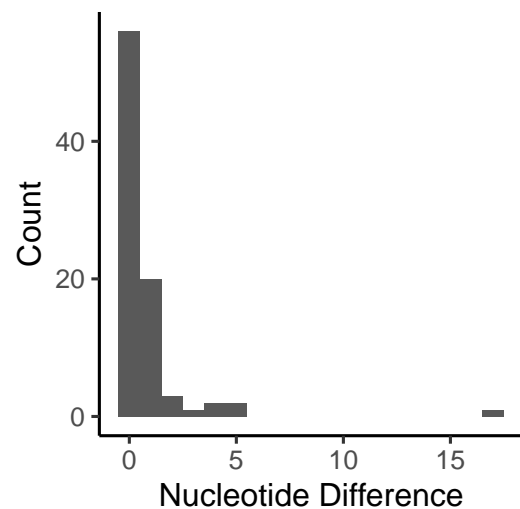
IGHV3-49*05

58 sequences assigned
44 (75.9%) exact matches, in which:
44 unique CDR3
6 unique J



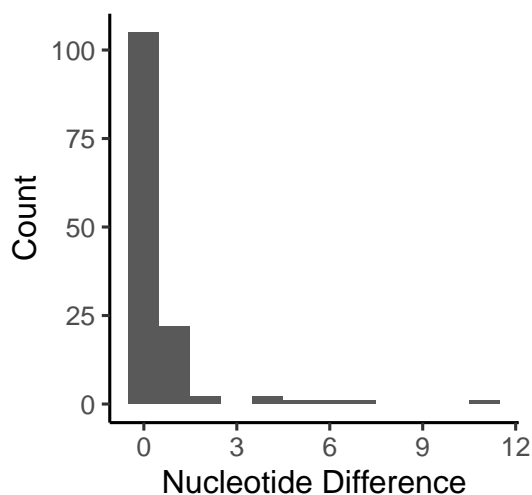
IGHV3-66*02

85 sequences assigned
56 (65.9%) exact matches, in which:
55 unique CDR3
4 unique J



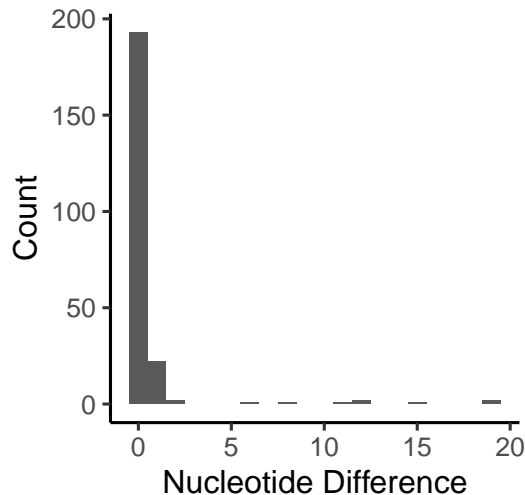
IGHV3-48*02

135 sequences assigned
105 (77.8%) exact matches, in which:
104 unique CDR3
5 unique J



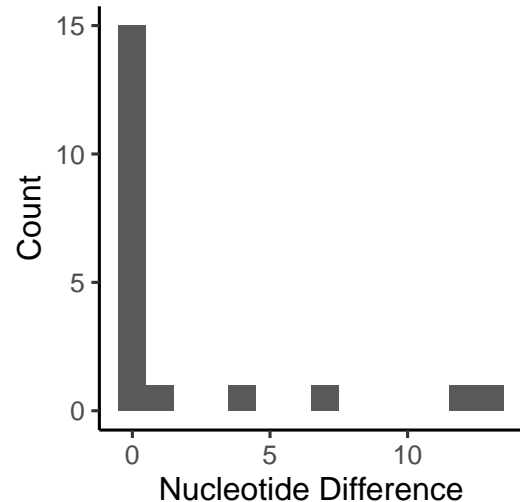
IGHV3-53*01

225 sequences assigned
193 (85.8%) exact matches, in which:
192 unique CDR3
7 unique J



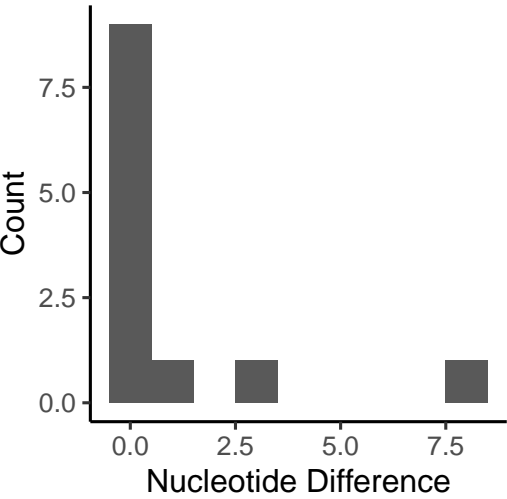
IGHV3-72*01

20 sequences assigned
15 (75%) exact matches, in which:
15 unique CDR3
5 unique J



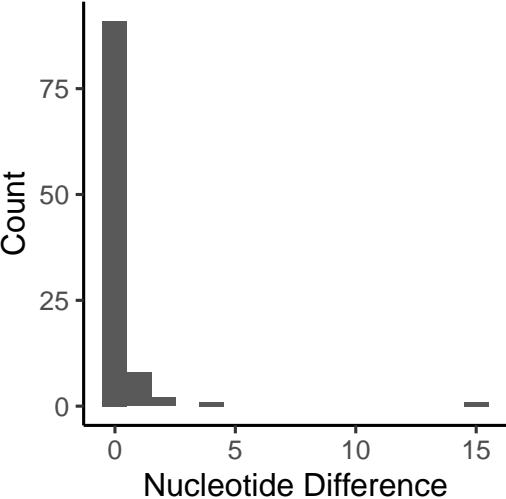
IGHV3-73*01

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



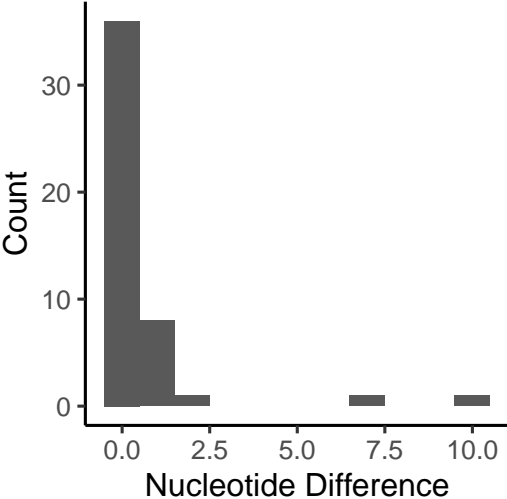
IGHV4-4*02

103 sequences assigned
91 (88.3%) exact matches, in which:
91 unique CDR3
5 unique J



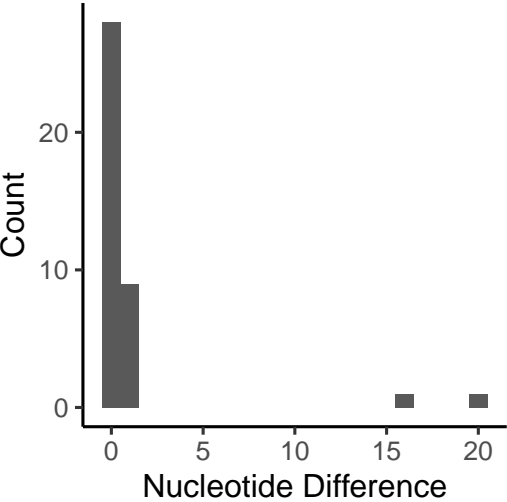
IGHV4-30-2*01

47 sequences assigned
36 (76.6%) exact matches, in which:
36 unique CDR3
6 unique J



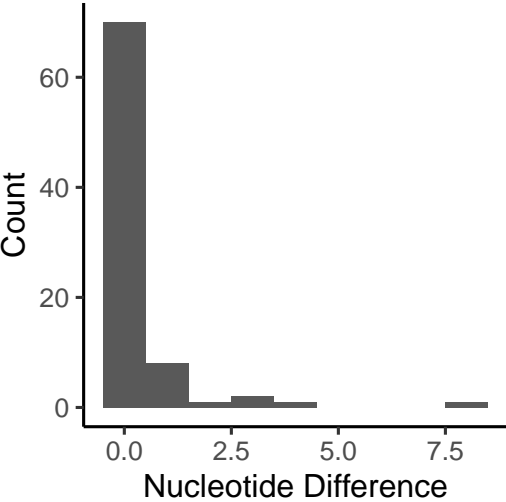
IGHV3-73*02

39 sequences assigned
28 (71.8%) exact matches, in which:
28 unique CDR3
4 unique J



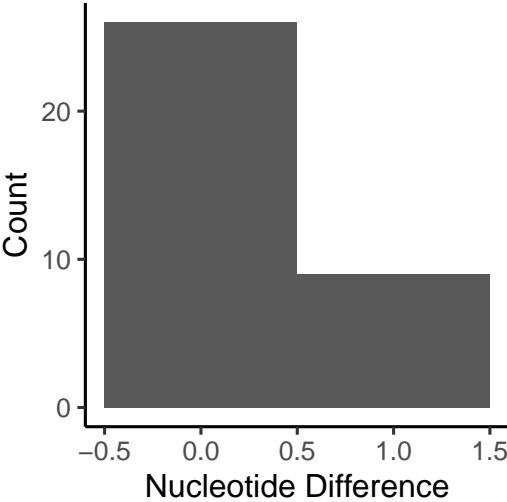
IGHV4-4*07

83 sequences assigned
70 (84.3%) exact matches, in which:
70 unique CDR3
6 unique J



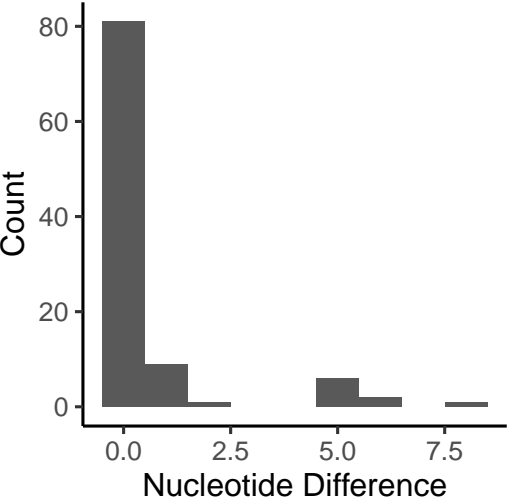
IGHV4-31*01

35 sequences assigned
26 (74.3%) exact matches, in which:
26 unique CDR3
5 unique J



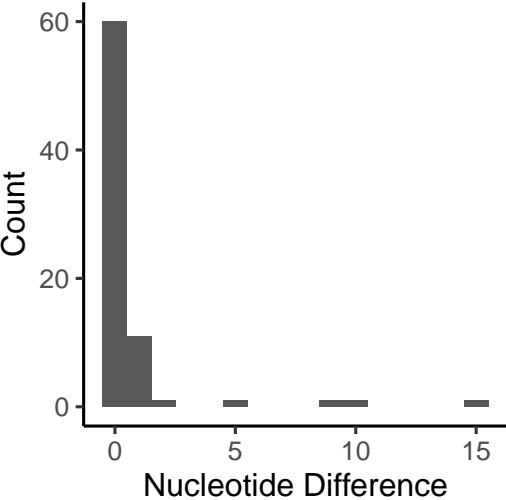
IGHV3-74*01

101 sequences assigned
81 (80.2%) exact matches, in which:
81 unique CDR3
7 unique J



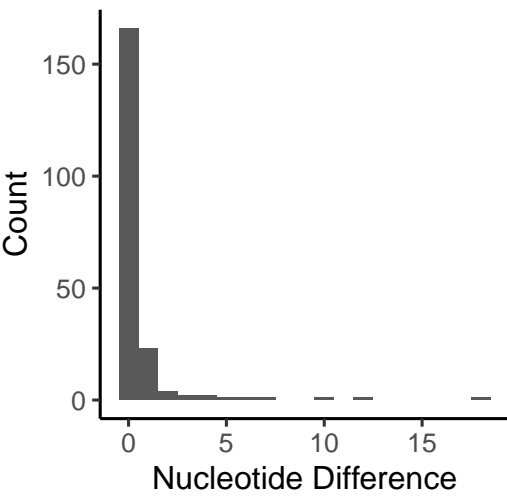
IGHV4-30-4*01

76 sequences assigned
60 (78.9%) exact matches, in which:
60 unique CDR3
6 unique J



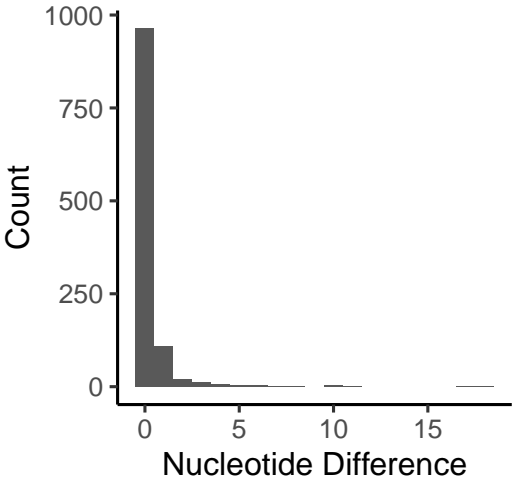
IGHV4-31*03

203 sequences assigned
166 (81.8%) exact matches, in which:
165 unique CDR3
6 unique J



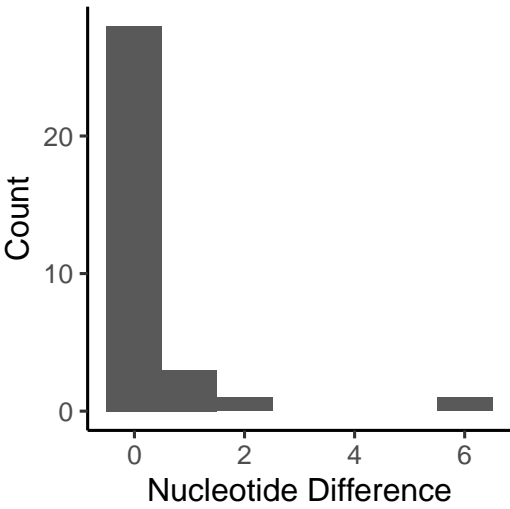
IGHV4–34*01

1124 sequences assigned
964 (85.8%) exact matches, in which:
952 unique CDR3
7 unique J



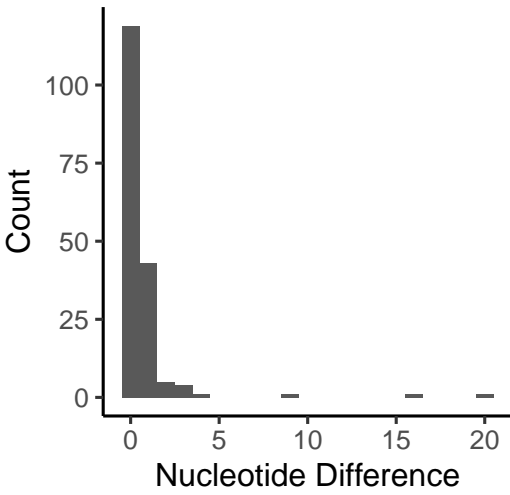
IGHV4–61*01

33 sequences assigned
28 (84.8%) exact matches, in which:
28 unique CDR3
4 unique J



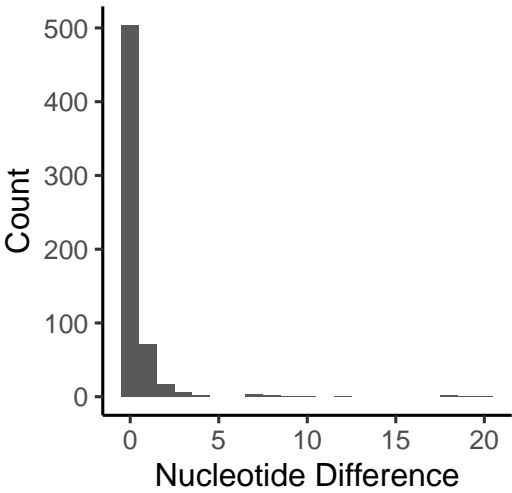
IGHV5–51*01

175 sequences assigned
119 (68%) exact matches, in which:
118 unique CDR3
7 unique J



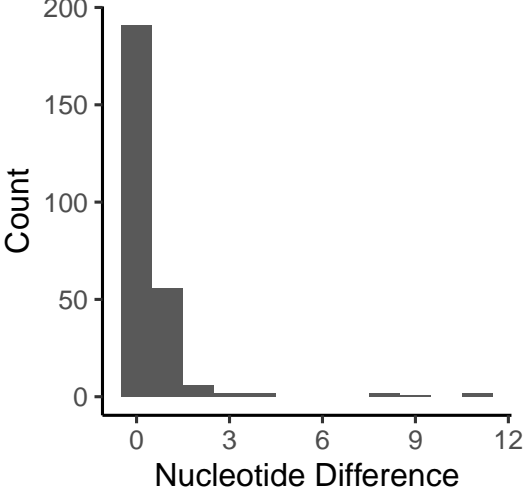
IGHV4–39*01

612 sequences assigned
504 (82.4%) exact matches, in which:
501 unique CDR3
7 unique J



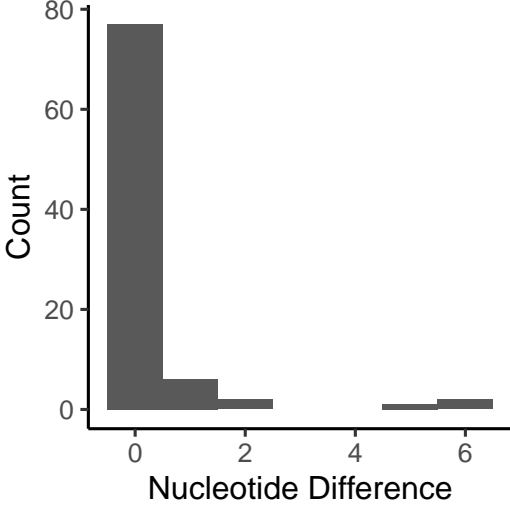
IGHV4–61*02

262 sequences assigned
191 (72.9%) exact matches, in which:
191 unique CDR3
6 unique J



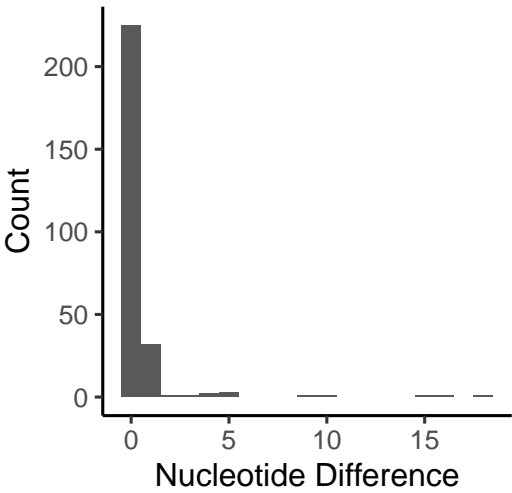
IGHV5–51*03

88 sequences assigned
77 (87.5%) exact matches, in which:
76 unique CDR3
7 unique J



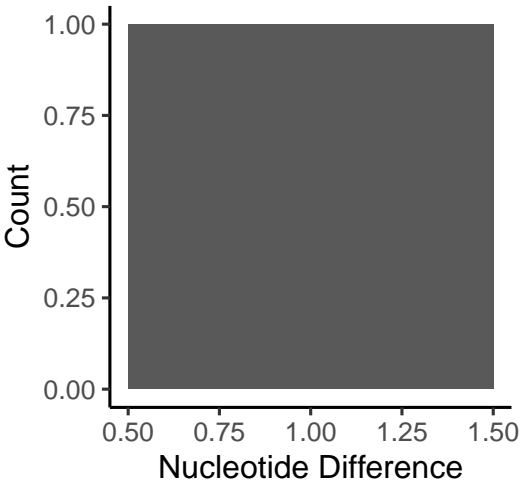
IGHV4–59*01

272 sequences assigned
225 (82.7%) exact matches, in which:
224 unique CDR3
6 unique J



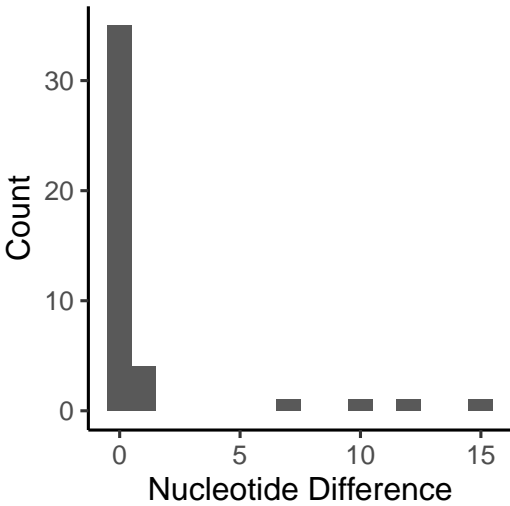
IGHV1/OR15–2*01

1 sequences assigned
No exact matches.



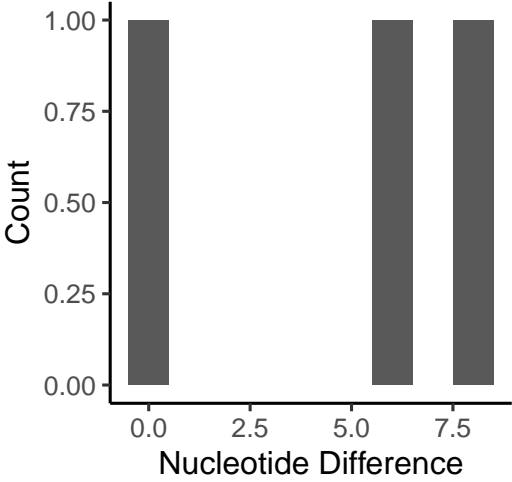
IGHV6–1*01

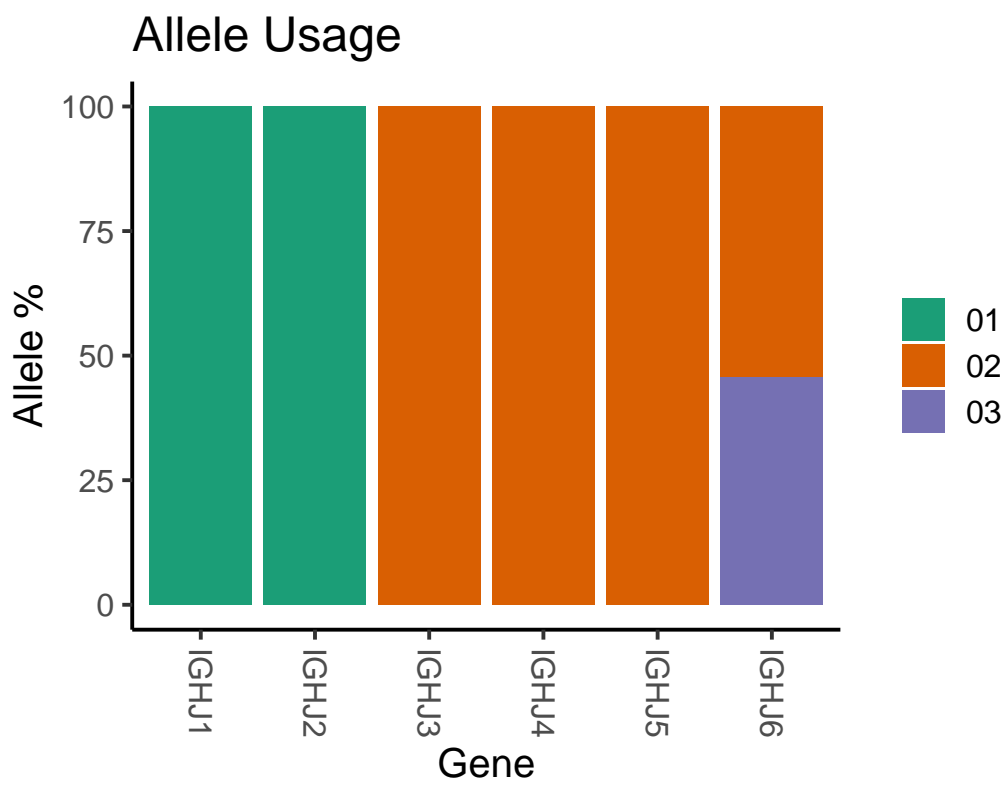
43 sequences assigned
35 (81.4%) exact matches, in which:
35 unique CDR3
6 unique J



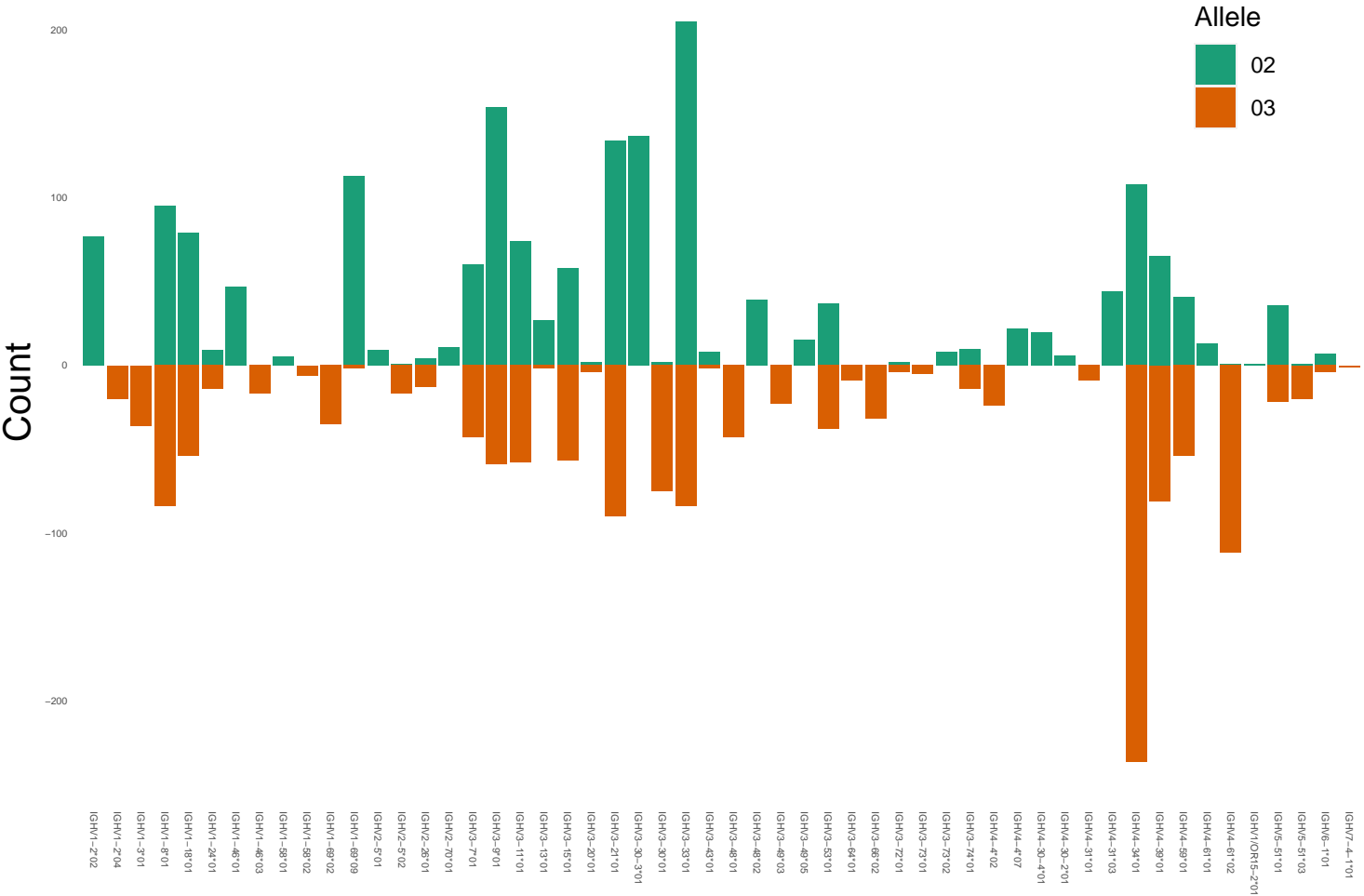
IGHV7-4-1*01

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





Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.