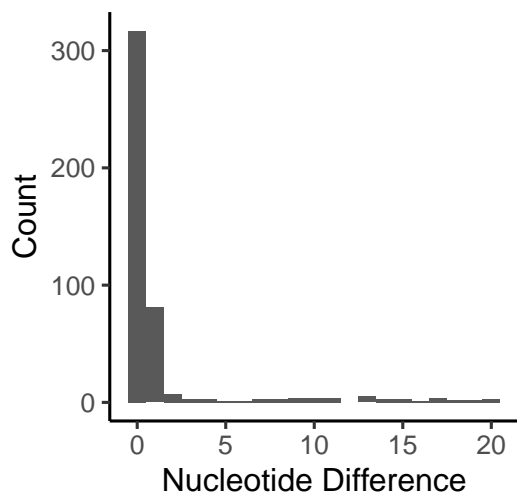


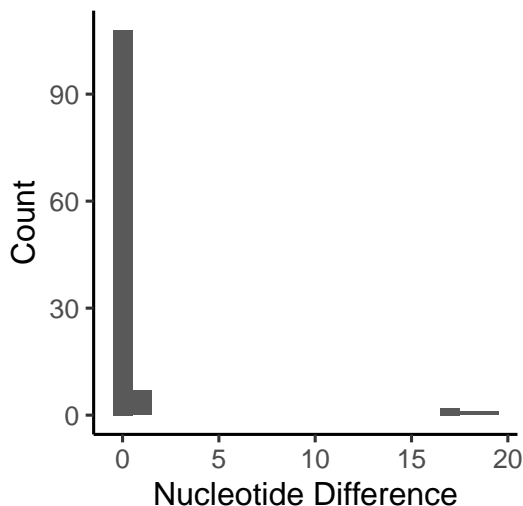
IGHV1-2*02

470 sequences assigned
317 (67.4%) exact matches, in which:
316 unique CDR3
6 unique J



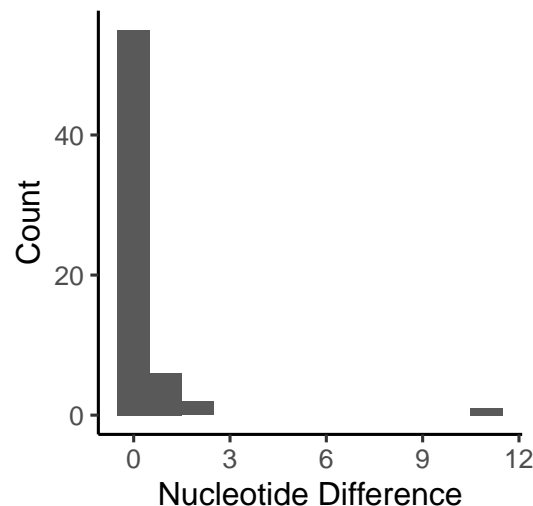
IGHV1-24*01

130 sequences assigned
108 (83.1%) exact matches, in which:
108 unique CDR3
7 unique J



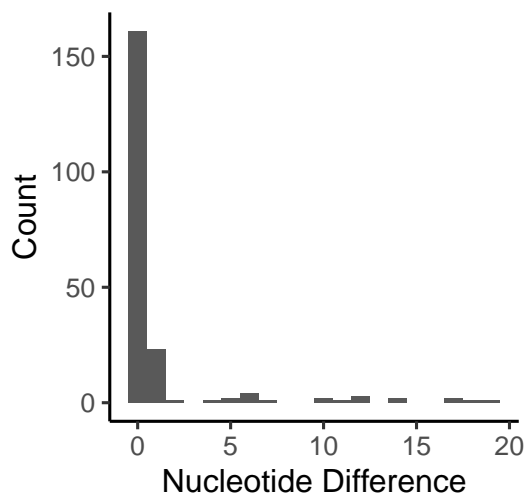
IGHV1-58*01

66 sequences assigned
55 (83.3%) exact matches, in which:
55 unique CDR3
6 unique J



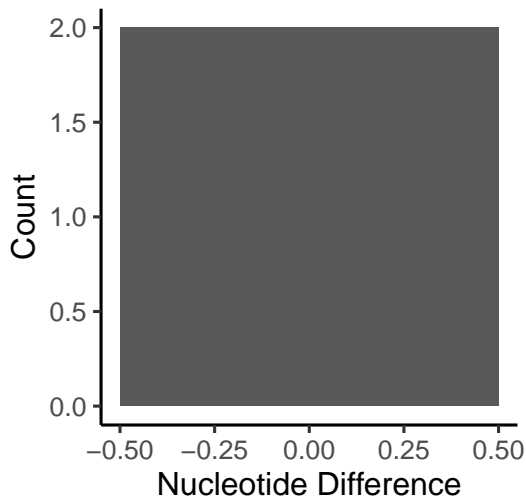
IGHV1-3*01

214 sequences assigned
161 (75.2%) exact matches, in which:
158 unique CDR3
6 unique J



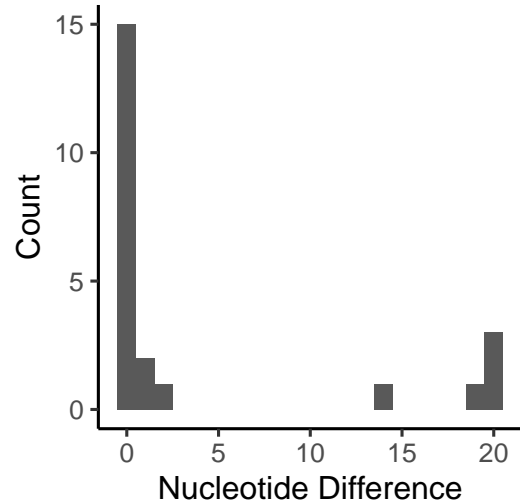
IGHV1-45*02

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



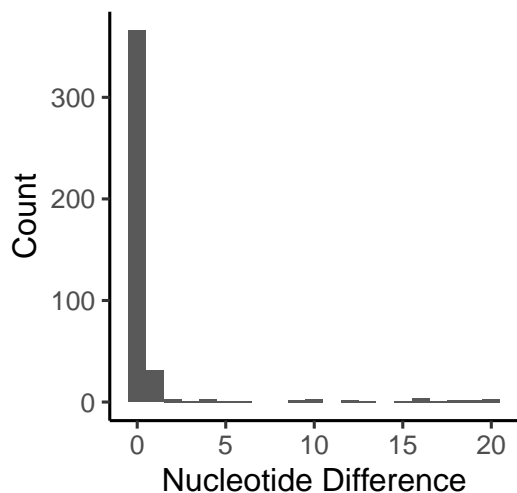
IGHV1-69-2*01

27 sequences assigned
15 (55.6%) exact matches, in which:
15 unique CDR3
4 unique J



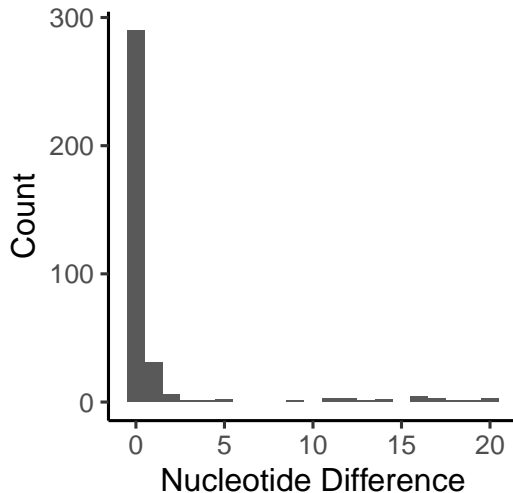
IGHV1-18*01

442 sequences assigned
366 (82.8%) exact matches, in which:
365 unique CDR3
7 unique J



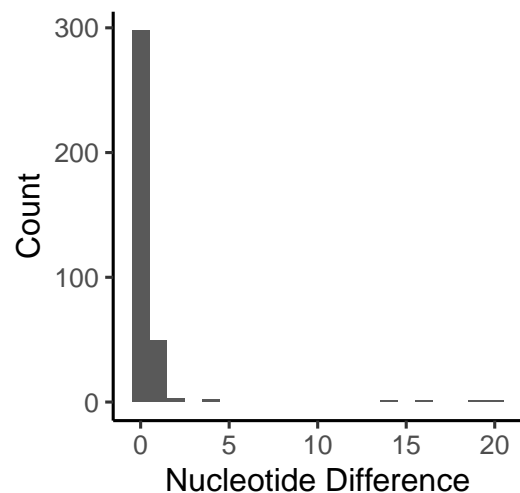
IGHV1-46*01

390 sequences assigned
290 (74.4%) exact matches, in which:
290 unique CDR3
7 unique J



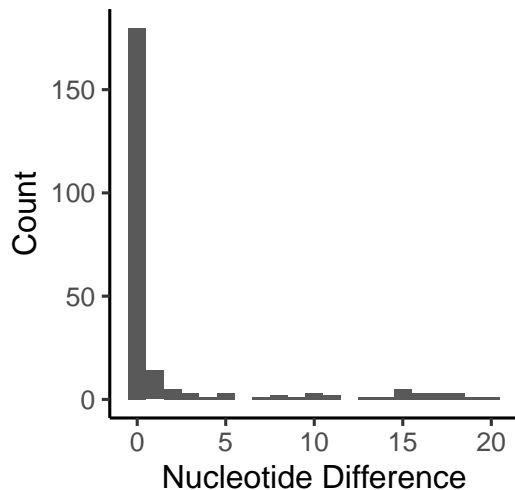
IGHV1-69*17

370 sequences assigned
298 (80.5%) exact matches, in which:
297 unique CDR3
6 unique J



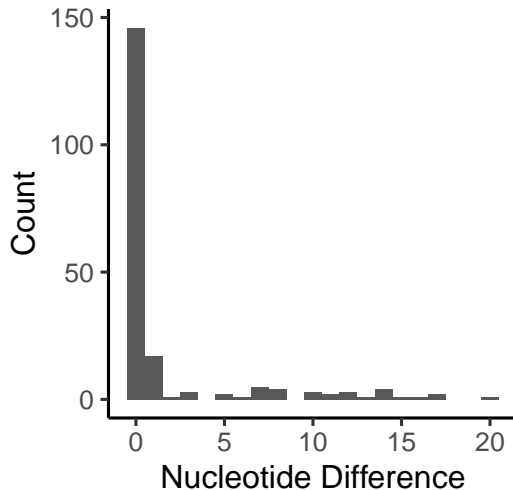
IGHV2-5*02

251 sequences assigned
180 (71.7%) exact matches, in which:
179 unique CDR3
7 unique J



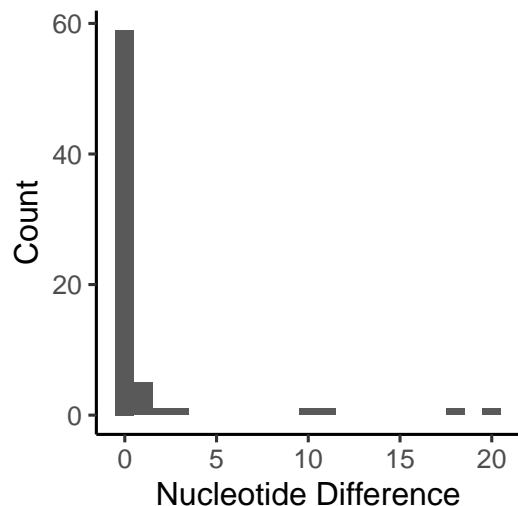
IGHV3-7*03

216 sequences assigned
146 (67.6%) exact matches, in which:
146 unique CDR3
6 unique J



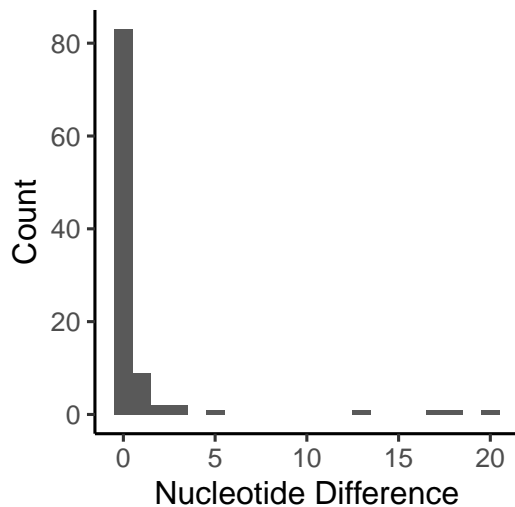
IGHV3-11*06

78 sequences assigned
59 (75.6%) exact matches, in which:
59 unique CDR3
4 unique J



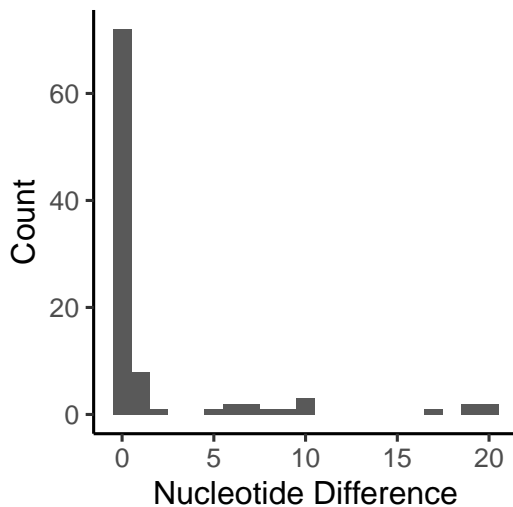
IGHV2-26*01

101 sequences assigned
83 (82.2%) exact matches, in which:
83 unique CDR3
6 unique J



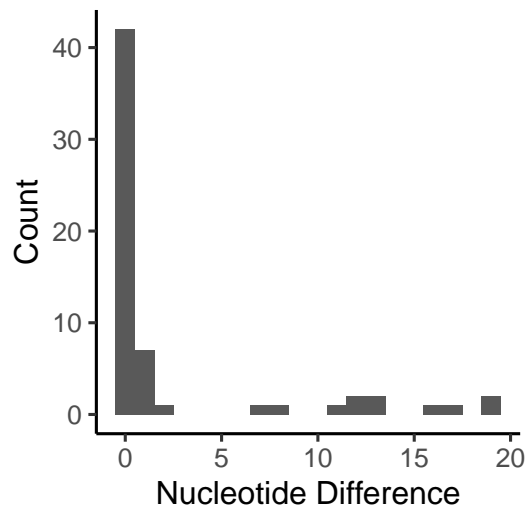
IGHV3-7*04

99 sequences assigned
72 (72.7%) exact matches, in which:
72 unique CDR3
5 unique J



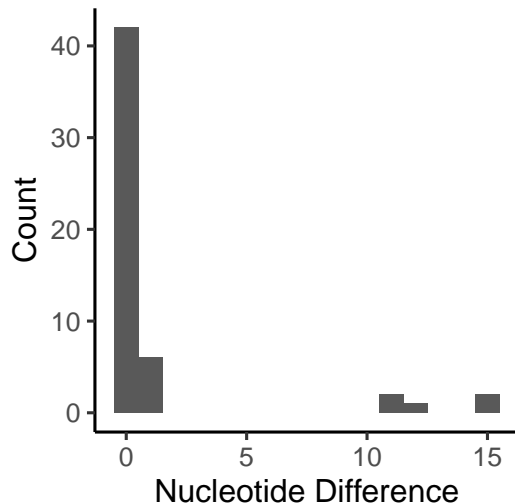
IGHV3-13*04

110 sequences assigned
42 (38.2%) exact matches, in which:
42 unique CDR3
5 unique J



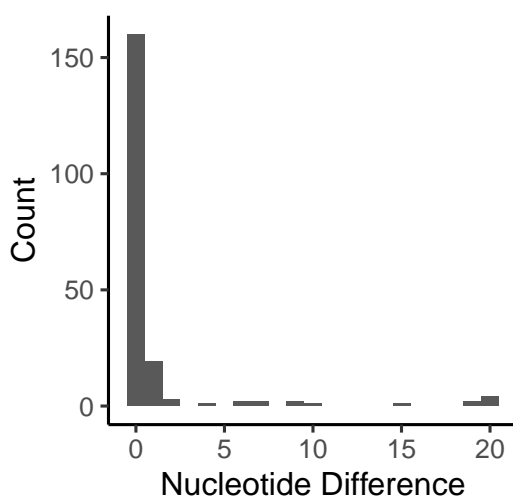
IGHV2-70*01

56 sequences assigned
42 (75%) exact matches, in which:
42 unique CDR3
6 unique J



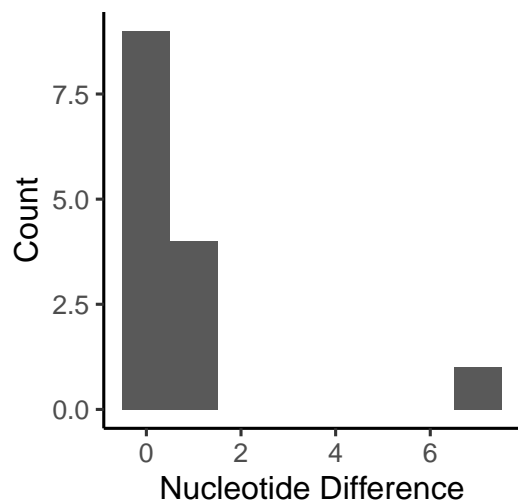
IGHV3-11*05

215 sequences assigned
160 (74.4%) exact matches, in which:
160 unique CDR3
7 unique J



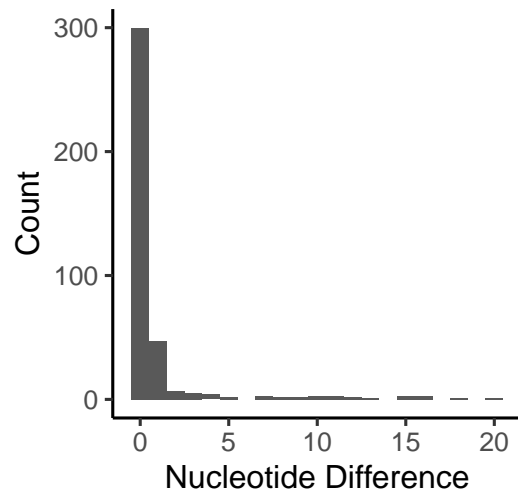
IGHV3-13*05

14 sequences assigned
9 (64.3%) exact matches, in which:
9 unique CDR3
4 unique J



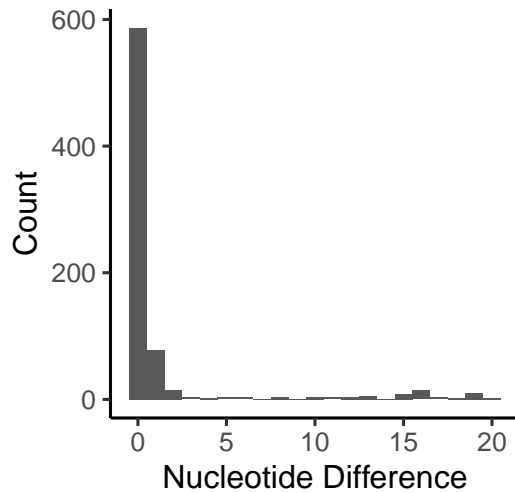
IGHV3–15*01

416 sequences assigned
300 (72.1%) exact matches, in which:
299 unique CDR3
7 unique J



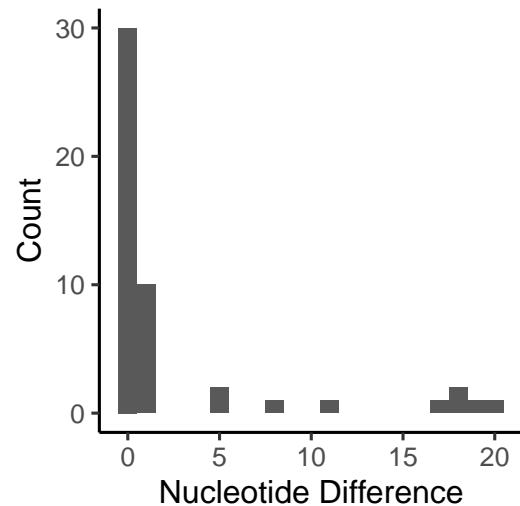
IGHV3–21*01

805 sequences assigned
587 (72.9%) exact matches, in which:
584 unique CDR3
7 unique J



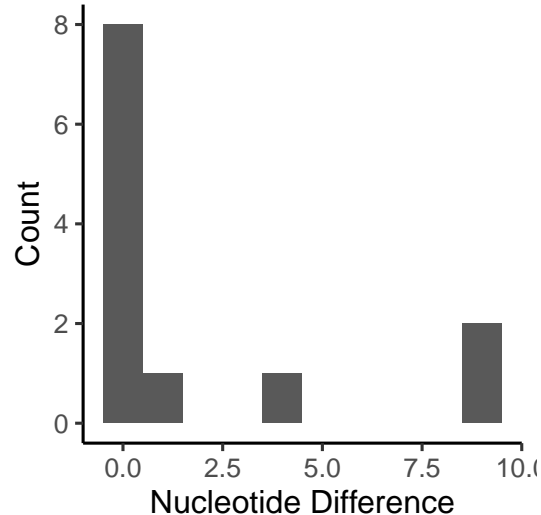
IGHV3–43*01

55 sequences assigned
30 (54.5%) exact matches, in which:
30 unique CDR3
6 unique J



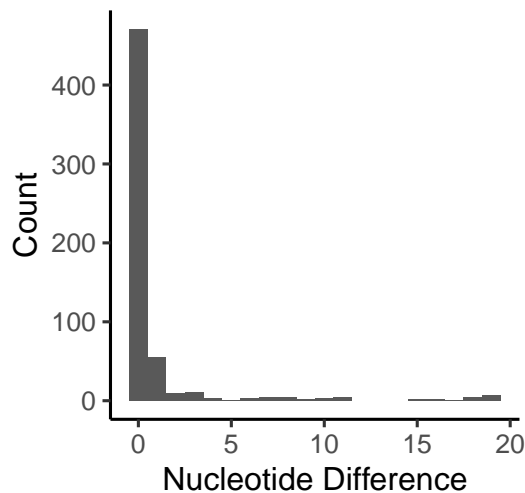
IGHV3–20*01

15 sequences assigned
8 (53.3%) exact matches, in which:
8 unique CDR3
3 unique J



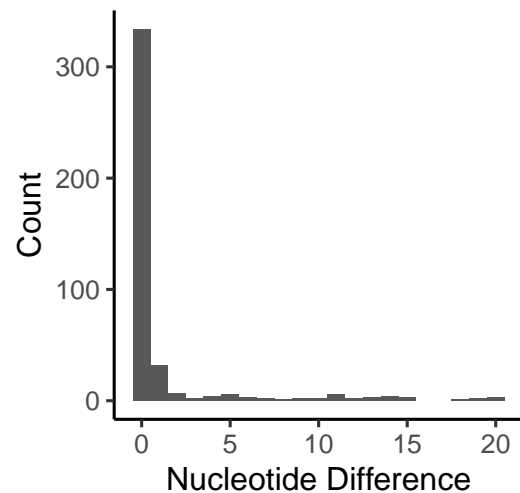
IGHV3–33*01

628 sequences assigned
471 (75%) exact matches, in which:
471 unique CDR3
7 unique J



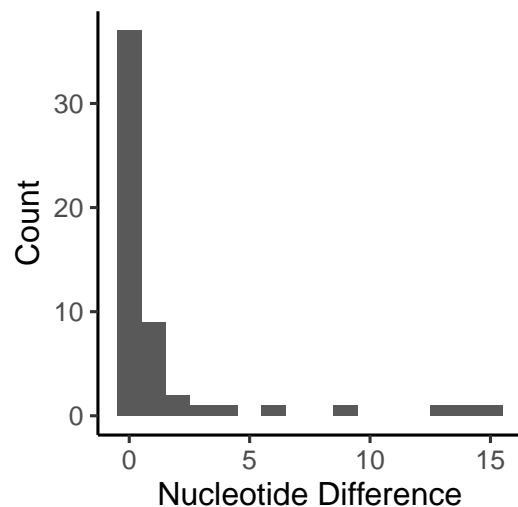
IGHV3–48*02

441 sequences assigned
334 (75.7%) exact matches, in which:
334 unique CDR3
7 unique J



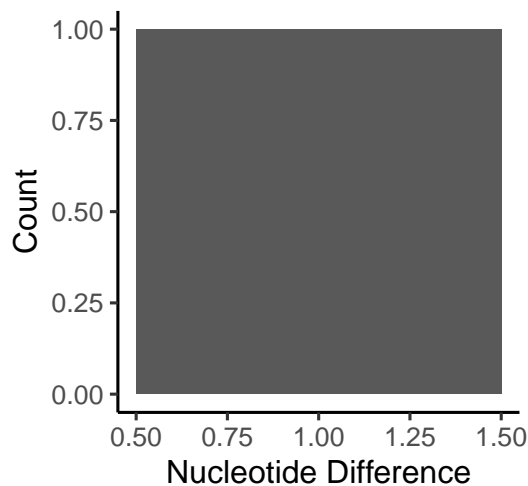
IGHV3–20*04

59 sequences assigned
37 (62.7%) exact matches, in which:
37 unique CDR3
5 unique J



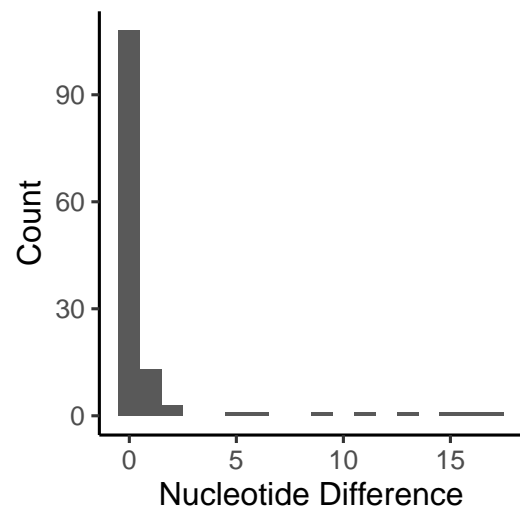
IGHV3–35*01

1 sequences assigned
No exact matches.



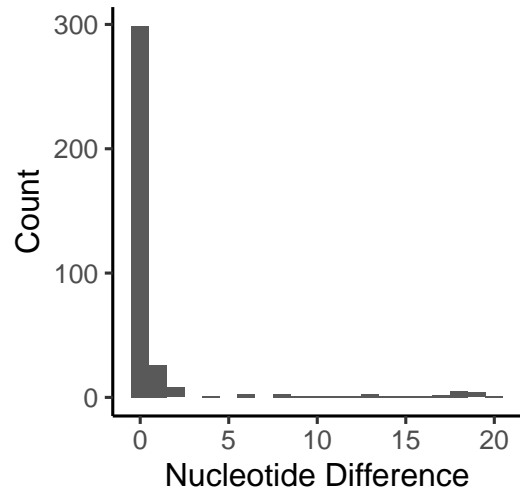
IGHV3–49*05

146 sequences assigned
108 (74%) exact matches, in which:
108 unique CDR3
7 unique J



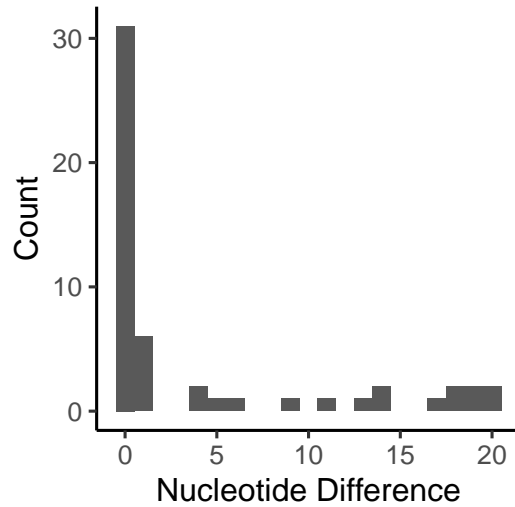
IGHV3-53*01

383 sequences assigned
299 (78.1%) exact matches, in which:
298 unique CDR3
7 unique J



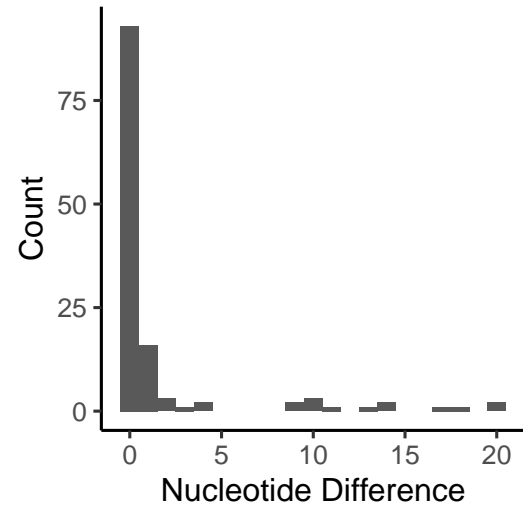
IGHV3-72*01

56 sequences assigned
31 (55.4%) exact matches, in which:
31 unique CDR3
6 unique J



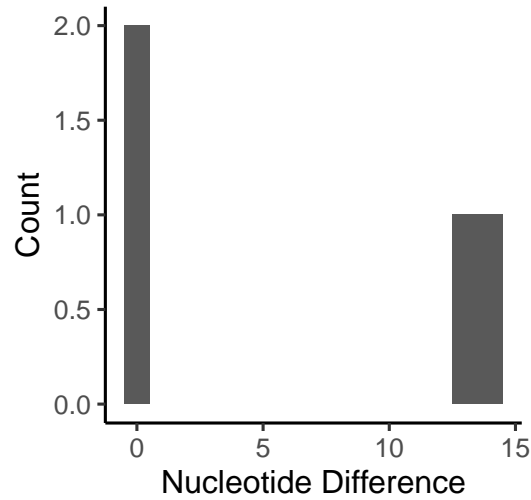
IGHV3-64D*06

137 sequences assigned
93 (67.9%) exact matches, in which:
93 unique CDR3
7 unique J



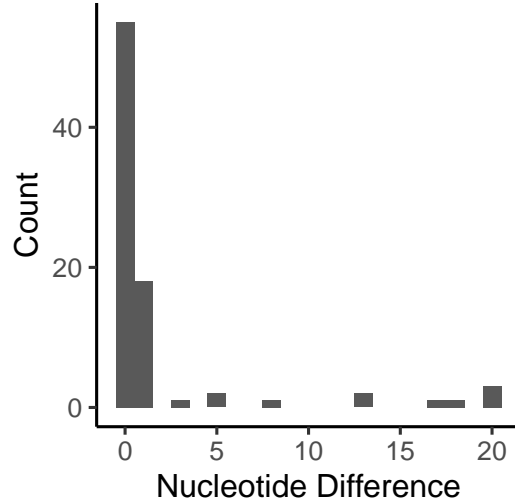
IGHV3-64*02

4 sequences assigned
2 (50%) exact matches, in which:
2 unique CDR3
1 unique J



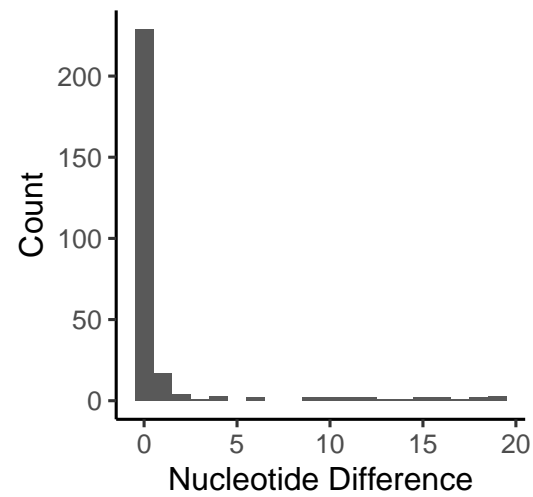
IGHV3-73*02

94 sequences assigned
55 (58.5%) exact matches, in which:
55 unique CDR3
6 unique J



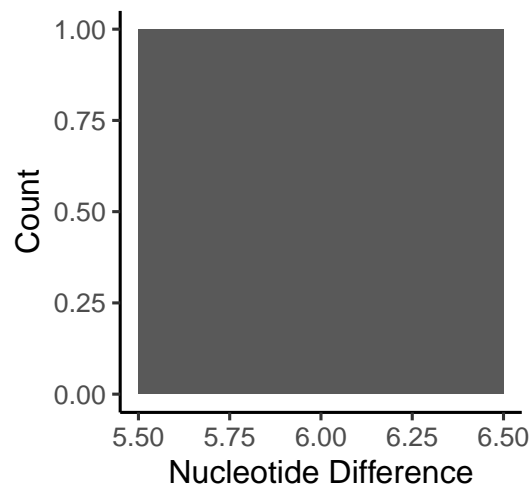
IGHV4-4*02

299 sequences assigned
229 (76.6%) exact matches, in which:
229 unique CDR3
7 unique J



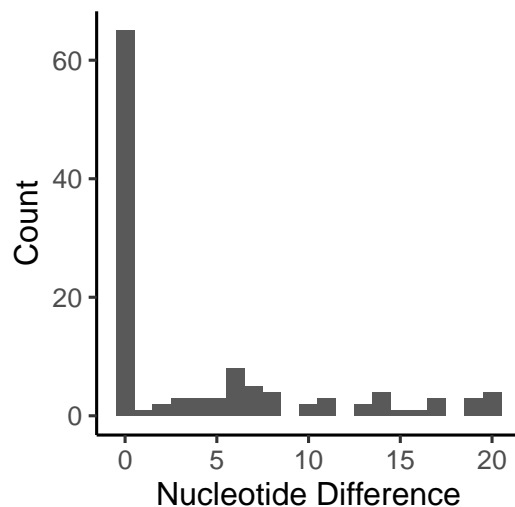
IGHV3-69-1*02

1 sequences assigned
No exact matches.



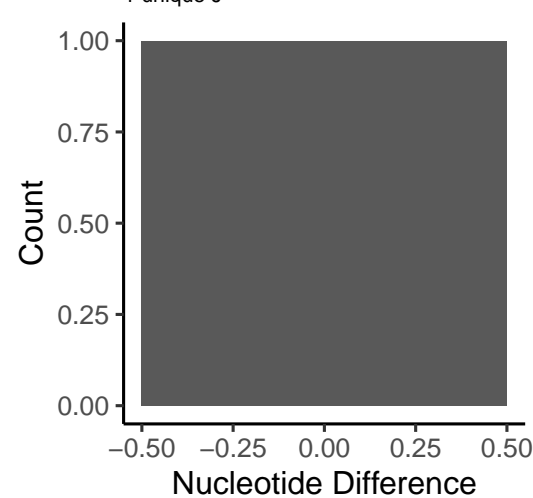
IGHV3-74*01

128 sequences assigned
65 (50.8%) exact matches, in which:
64 unique CDR3
5 unique J



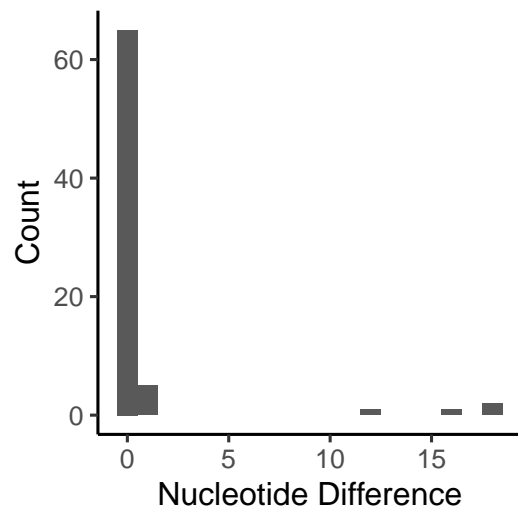
IGHV4-28*01

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



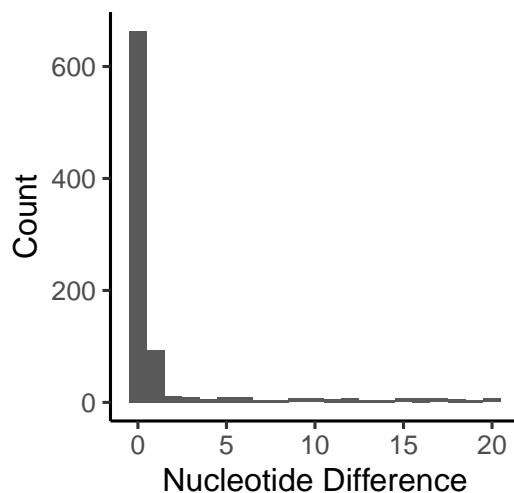
IGHV4-30-2*01

77 sequences assigned
65 (84.4%) exact matches, in which:
65 unique CDR3
5 unique J



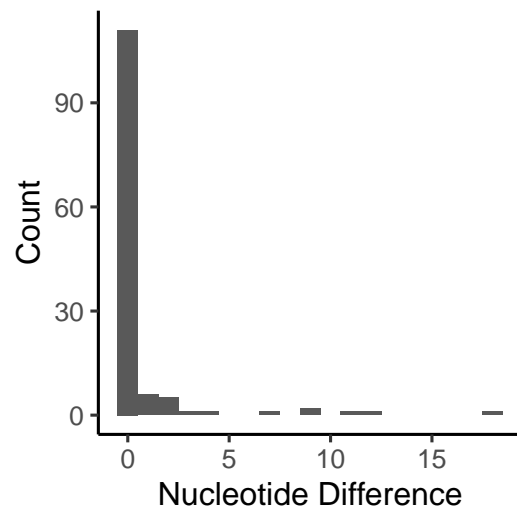
IGHV4-39*01

993 sequences assigned
664 (66.9%) exact matches, in which:
663 unique CDR3
7 unique J



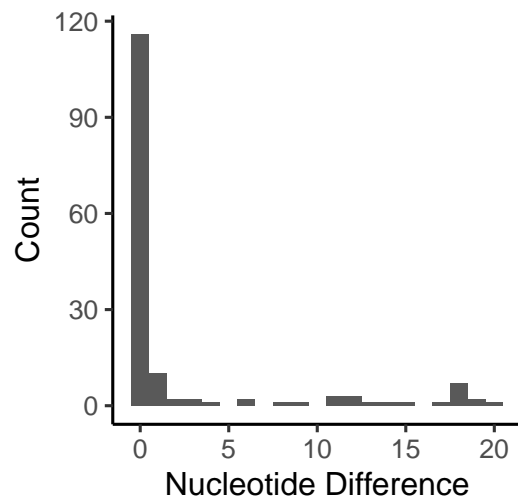
IGHV5-10-1*01

146 sequences assigned
111 (76%) exact matches, in which:
110 unique CDR3
6 unique J



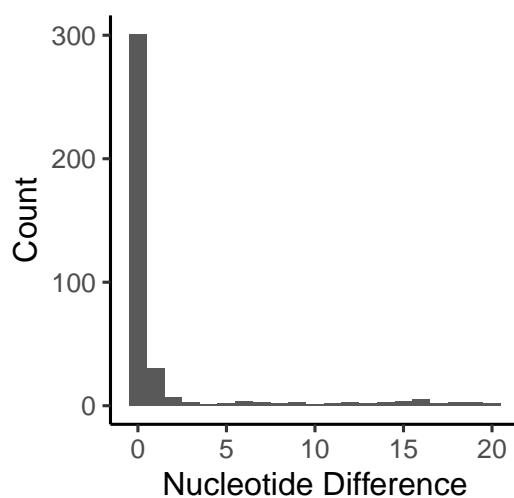
IGHV4-31*03

168 sequences assigned
116 (69%) exact matches, in which:
116 unique CDR3
5 unique J



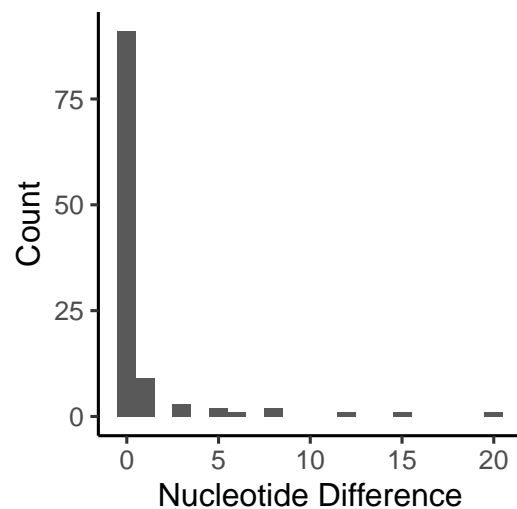
IGHV4-59*01

422 sequences assigned
301 (71.3%) exact matches, in which:
301 unique CDR3
7 unique J



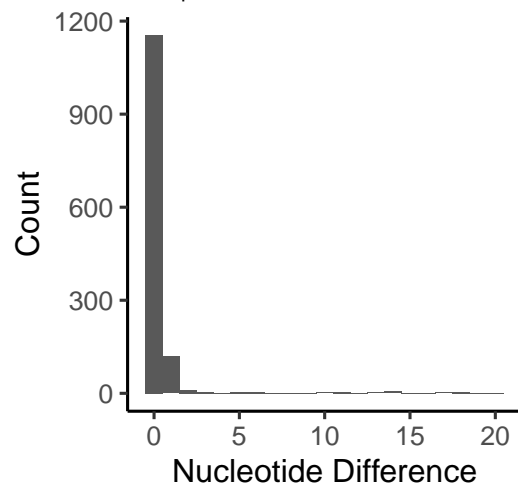
IGHV5-10-1*03

120 sequences assigned
91 (75.8%) exact matches, in which:
91 unique CDR3
6 unique J



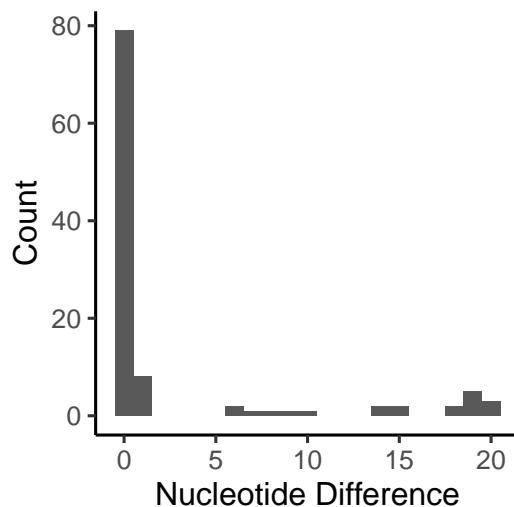
IGHV4-34*01

1384 sequences assigned
1155 (83.5%) exact matches, in which:
1153 unique CDR3
7 unique J



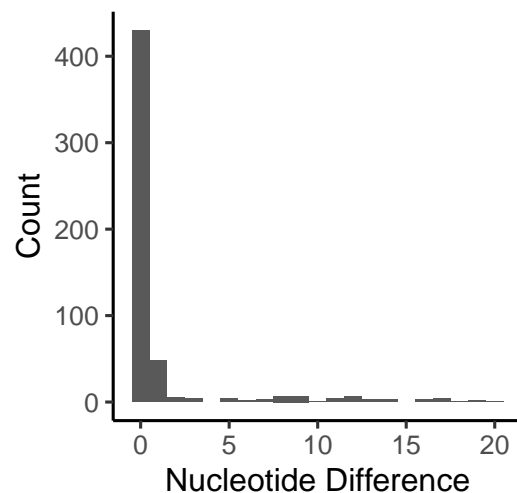
IGHV4-61*01

128 sequences assigned
79 (61.7%) exact matches, in which:
79 unique CDR3
6 unique J



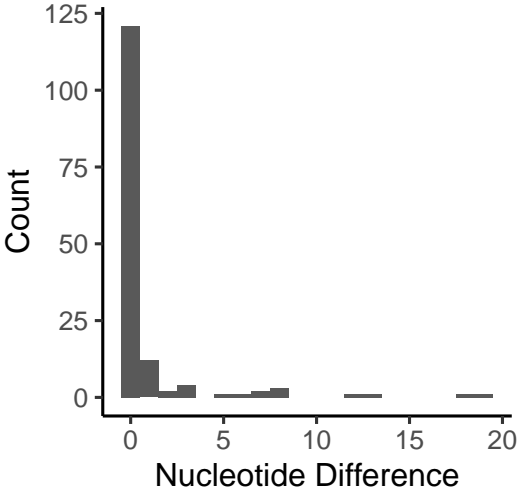
IGHV5-51*01

560 sequences assigned
430 (76.8%) exact matches, in which:
429 unique CDR3
7 unique J



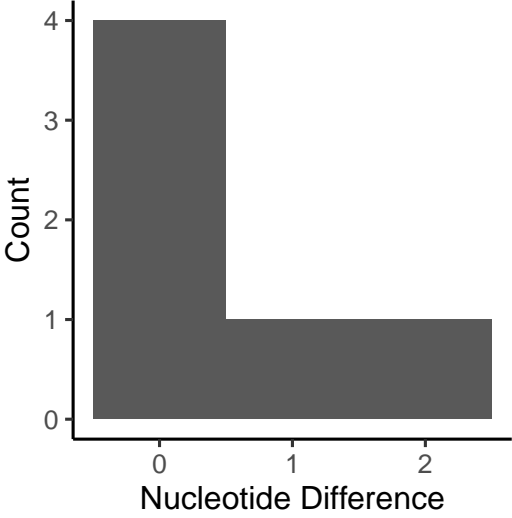
IGHV6-1*01

165 sequences assigned
121 (73.3%) exact matches, in which:
120 unique CDR3
7 unique J

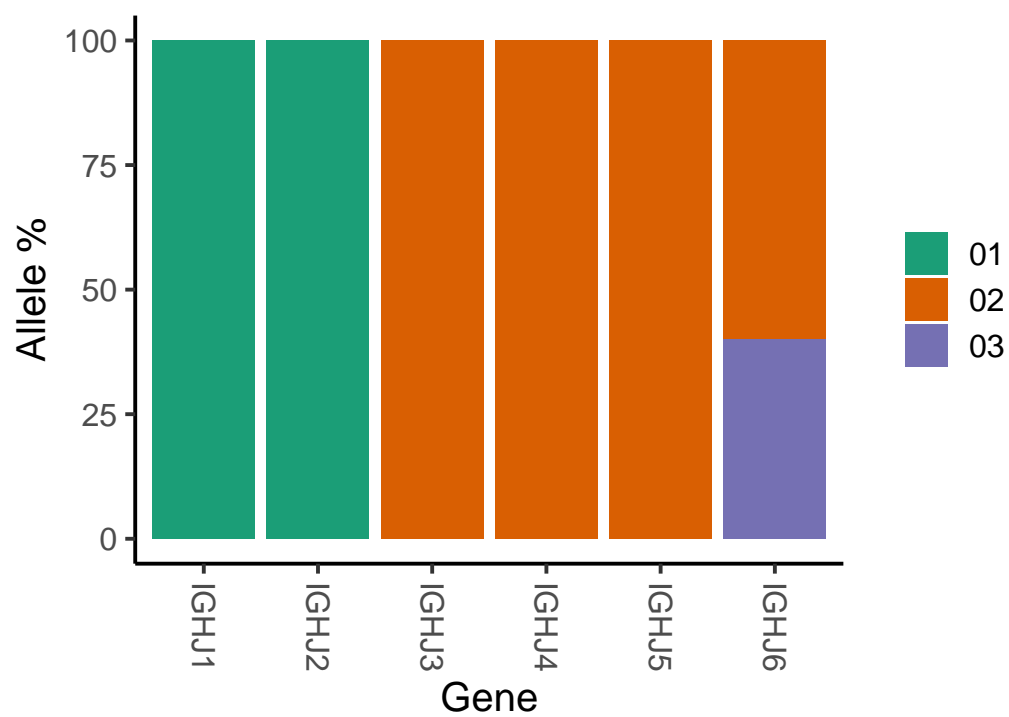


IGHV7-4-1*01

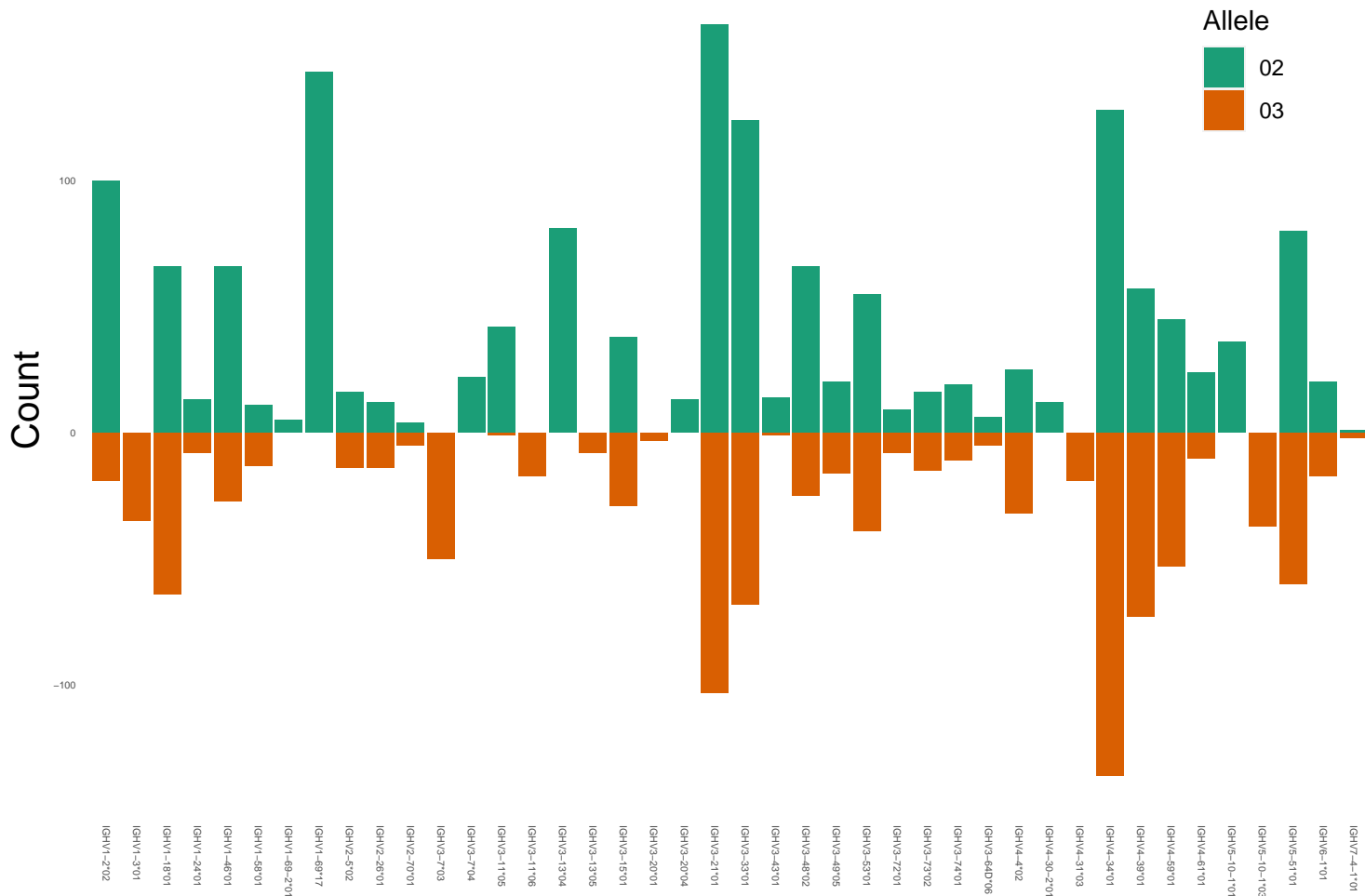
6 sequences assigned
4 (66.7%) exact matches, in which:
4 unique CDR3
3 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]