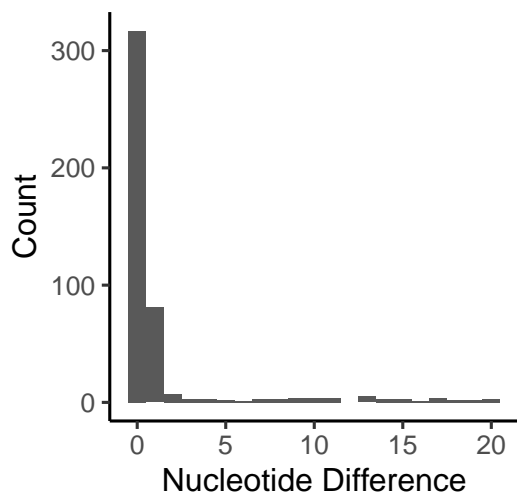


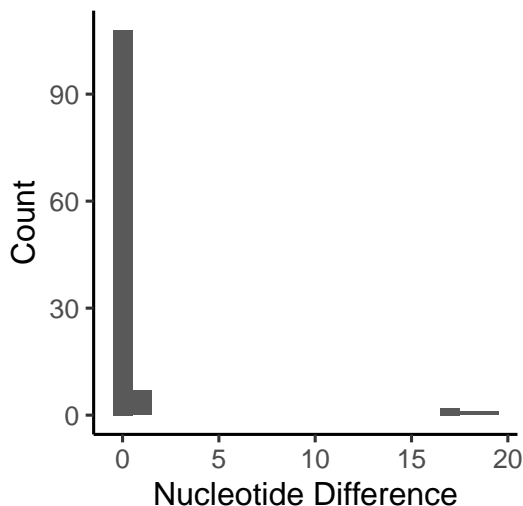
IGHV1-2*02

471 sequences assigned
317 (67.3%) exact matches, in which:
316 unique CDR3
6 unique J



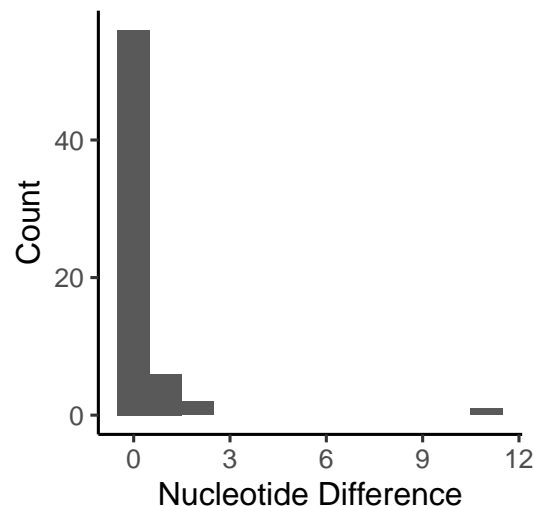
IGHV1-24*01

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



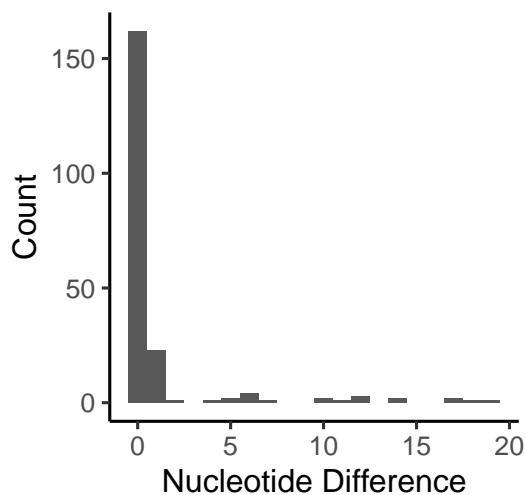
IGHV1-58*01

67 sequences assigned
56 (83.6%) exact matches, in which:
55 unique CDR3
6 unique J



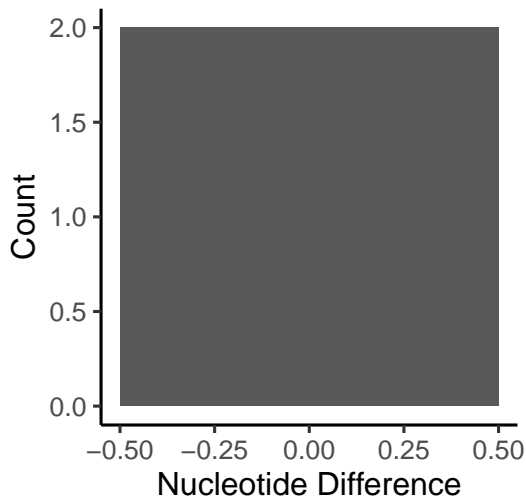
IGHV1-3*01

215 sequences assigned
162 (75.3%) exact matches, in which:
158 unique CDR3
6 unique J



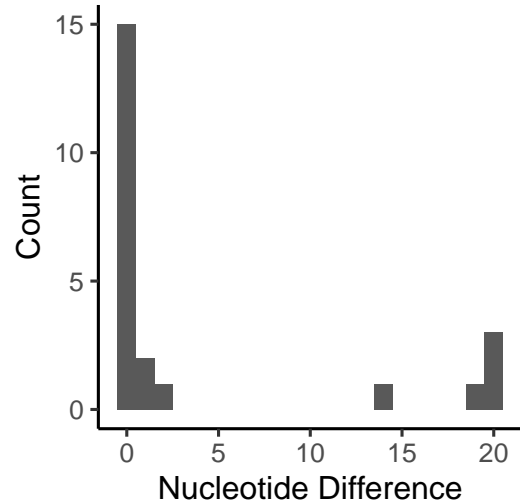
IGHV1-45*02

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



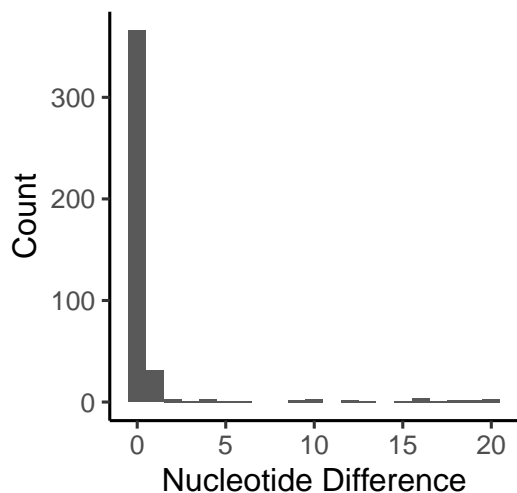
IGHV1-69-2*01

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



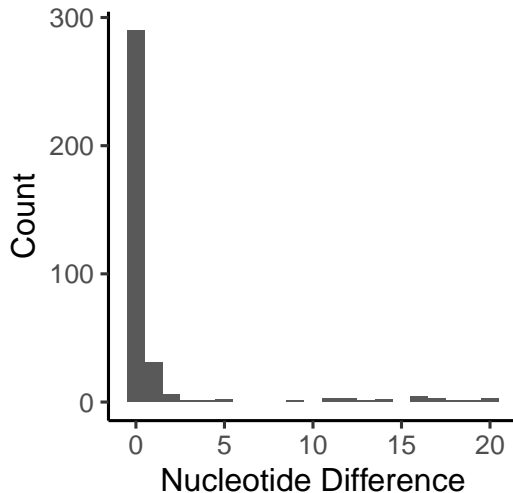
IGHV1-18*01

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



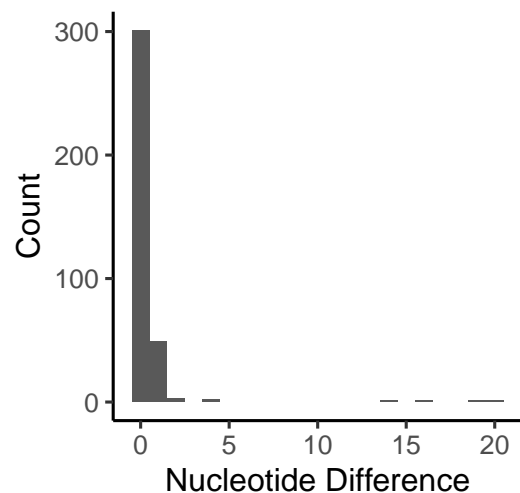
IGHV1-46*01

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



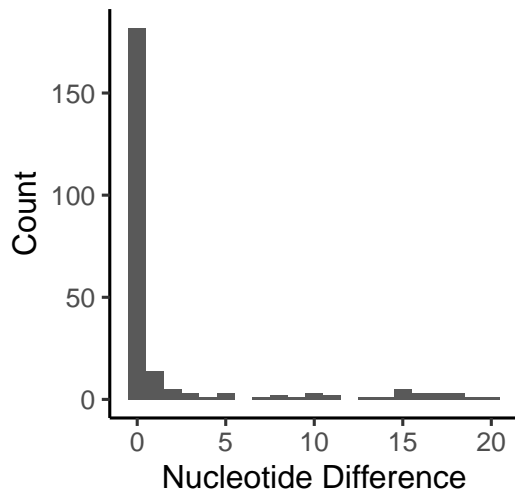
IGHV1-69*17

373 sequences assigned
301 (80.7%) exact matches, in which:
296 unique CDR3
6 unique J



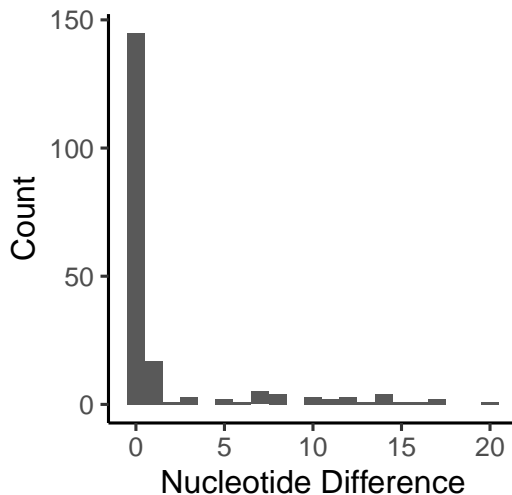
IGHV2-5*02

253 sequences assigned
182 (71.9%) exact matches, in which:
179 unique CDR3
7 unique J



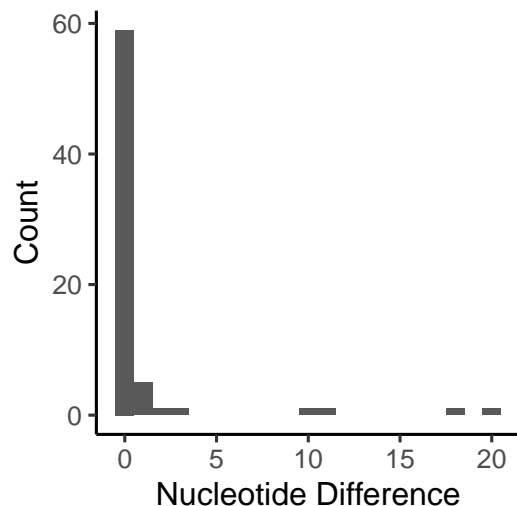
IGHV3-7*03

215 sequences assigned
145 (67.4%) exact matches, in which:
145 unique CDR3
6 unique J



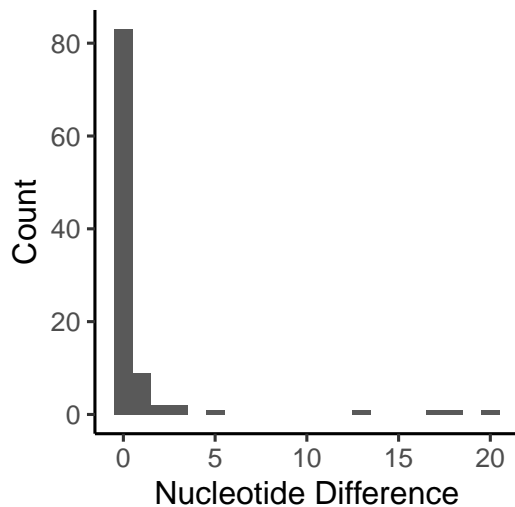
IGHV3-11*06

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



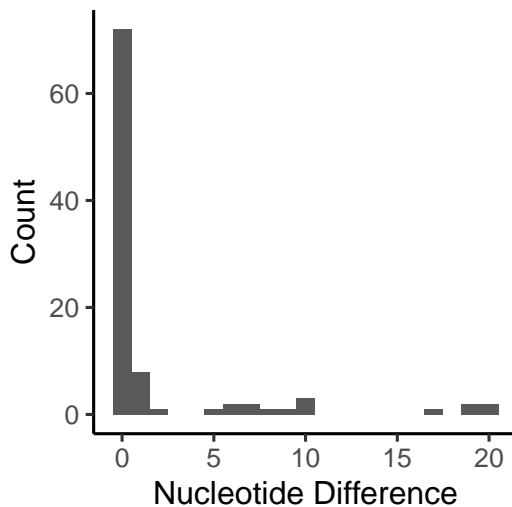
IGHV2-26*01

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



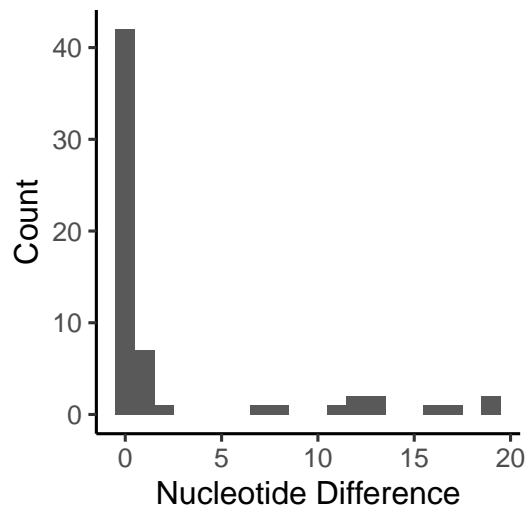
IGHV3-7*04

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



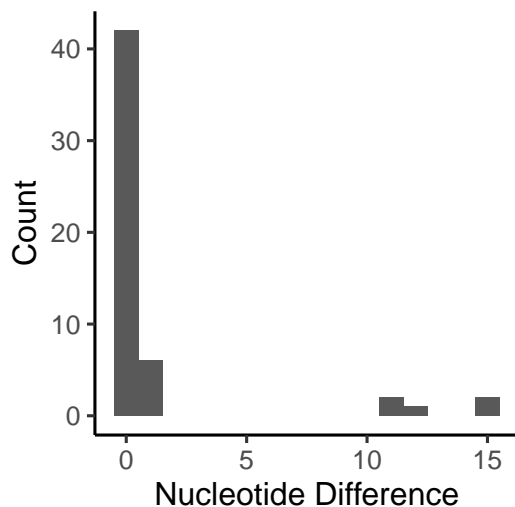
IGHV3-13*04

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



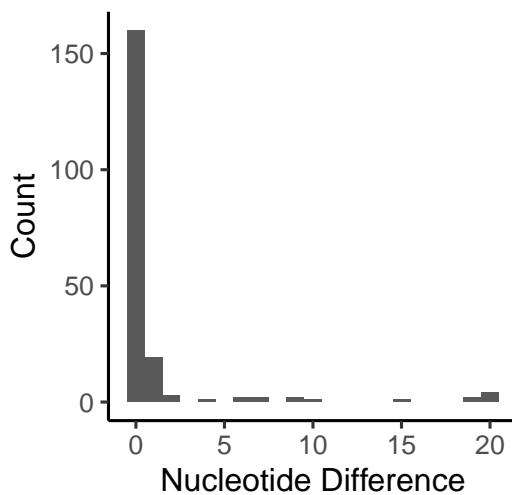
IGHV2-70*01

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



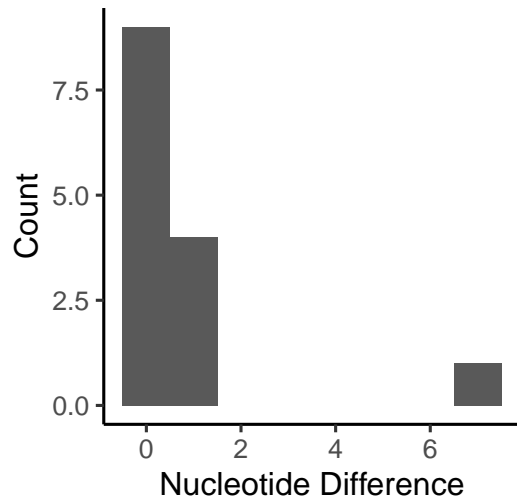
IGHV3-11*05

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



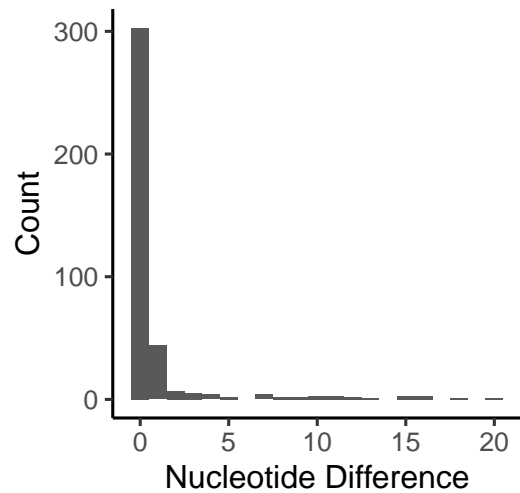
IGHV3-13*05

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



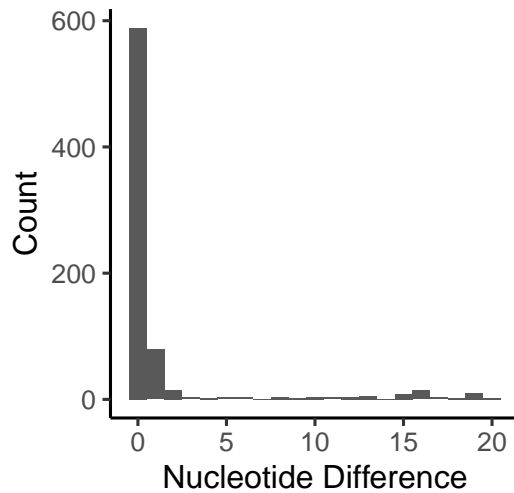
IGHV3–15*01

417 sequences assigned
303 (72.7%) exact matches, in which:
299 unique CDR3
7 unique J



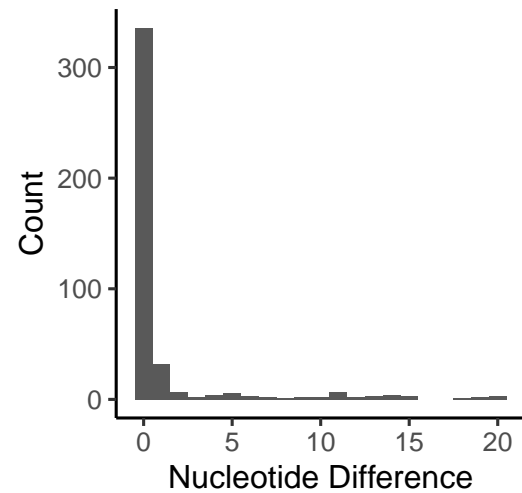
IGHV3–21*01

809 sequences assigned
589 (72.8%) exact matches, in which:
584 unique CDR3
7 unique J



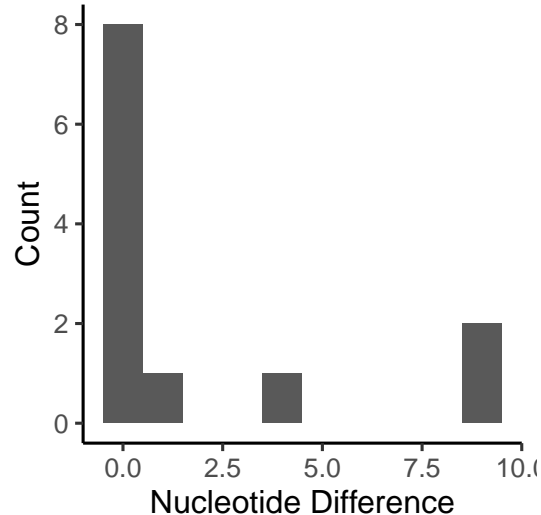
IGHV3–48*02

443 sequences assigned
336 (75.8%) exact matches, in which:
334 unique CDR3
7 unique J



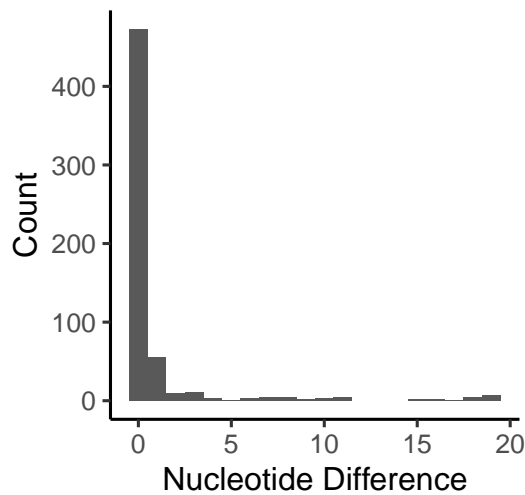
IGHV3–20*01

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



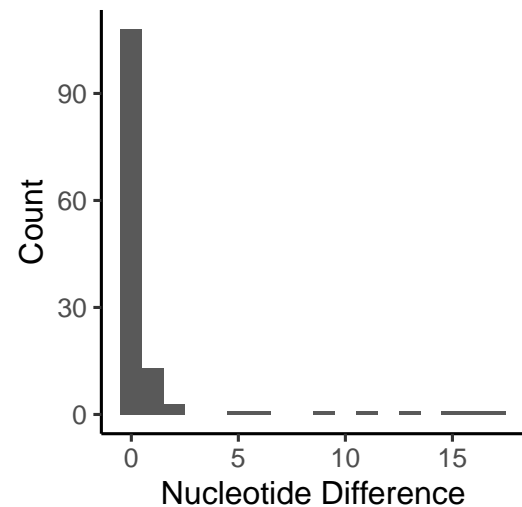
IGHV3–33*01

630 sequences assigned
473 (75.1%) exact matches, in which:
471 unique CDR3
7 unique J



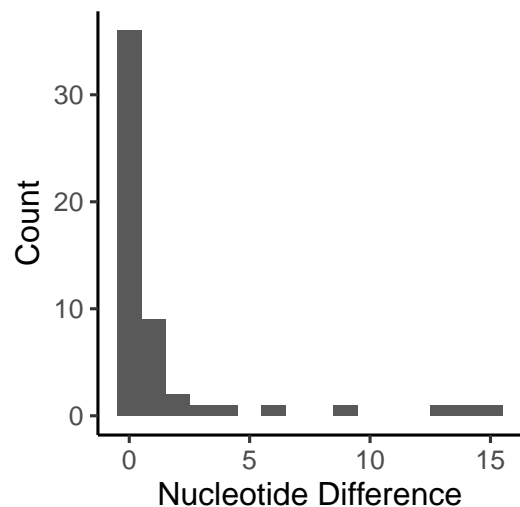
IGHV3–49*05

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



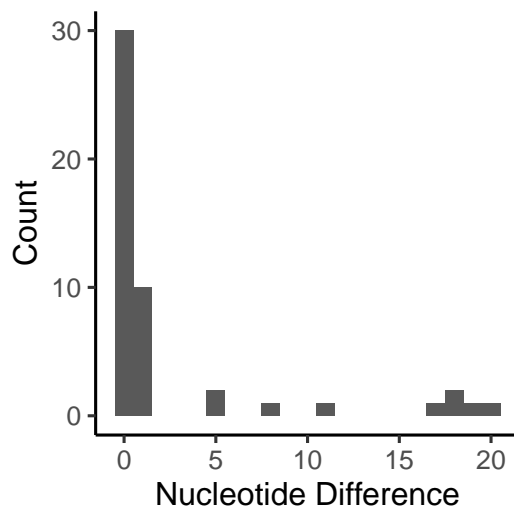
IGHV3–20*04

58 sequences assigned
36 (62.1%) exact matches, in which:
36 unique CDR3
5 unique J



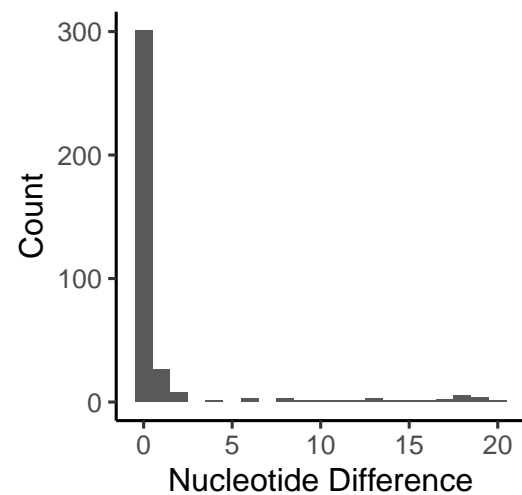
IGHV3–43*01

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



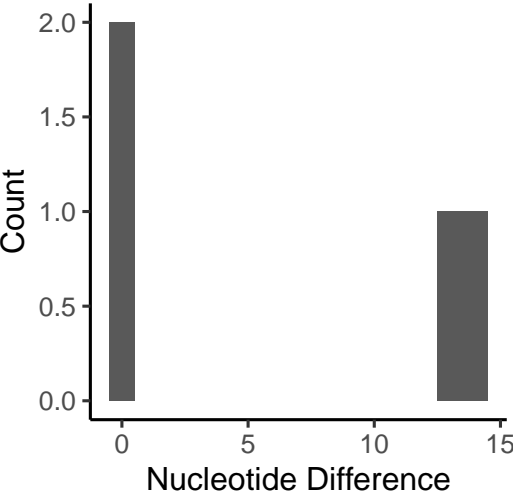
IGHV3–53*01

385 sequences assigned
301 (78.2%) exact matches, in which:
298 unique CDR3
7 unique J



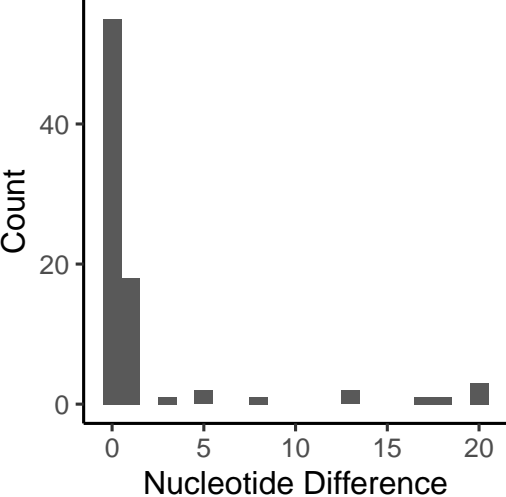
IGHV3-64*02

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



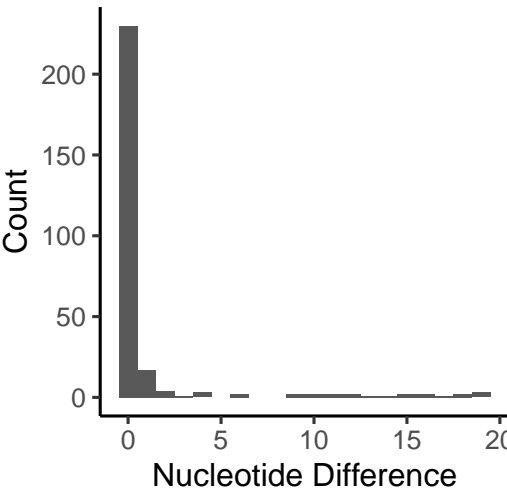
IGHV3-73*02

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



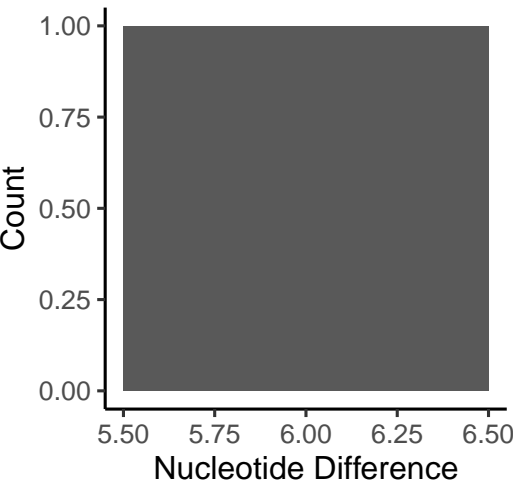
IGHV4-4*02

298 sequences assigned
230 (77.2%) exact matches, in which:
230 unique CDR3
7 unique J



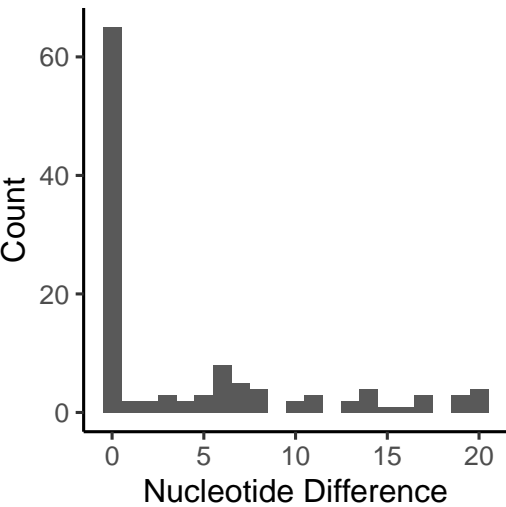
IGHV3-69-1*02

1 sequences assigned
No exact matches.



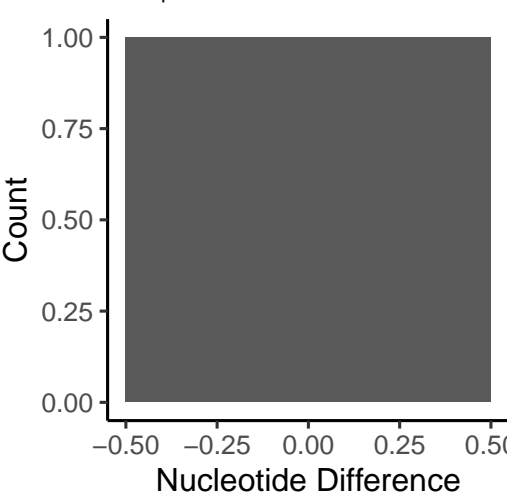
IGHV3-74*01

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



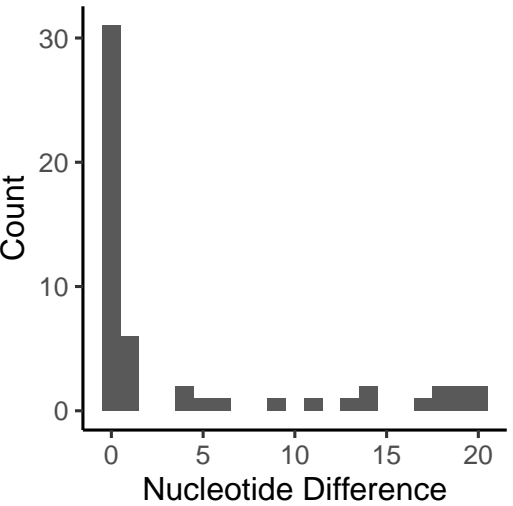
IGHV4-28*01

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



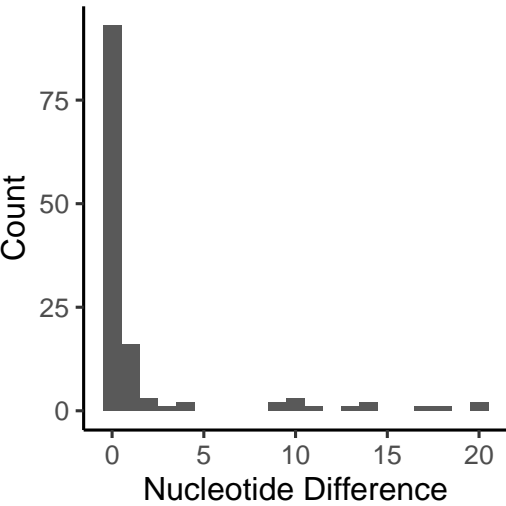
IGHV3-72*01

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



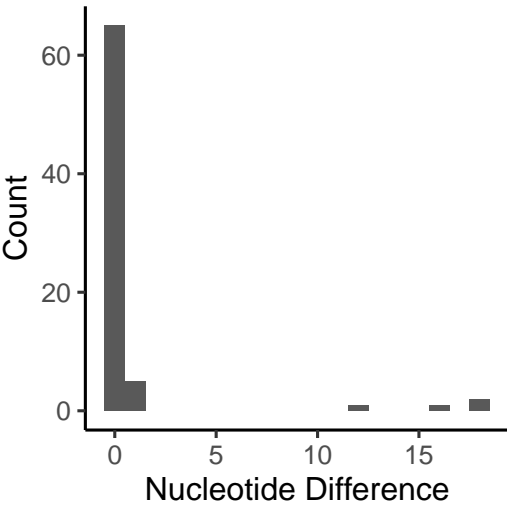
IGHV3-64D*06

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



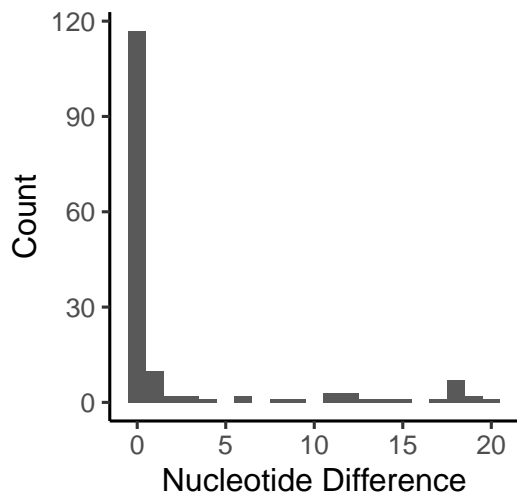
IGHV4-30-2*01

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



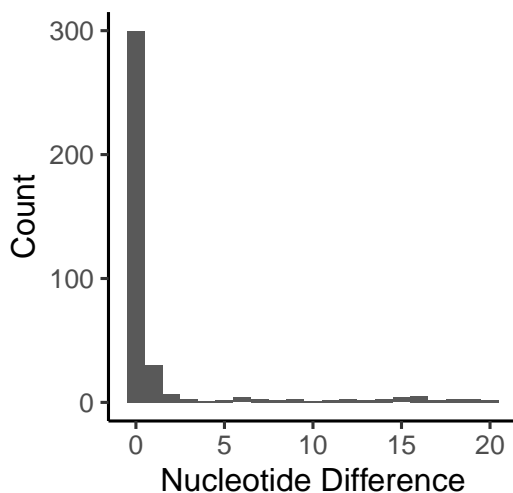
IGHV4–31*03

169 sequences assigned
117 (69.2%) exact matches, in which:
116 unique CDR3
5 unique J



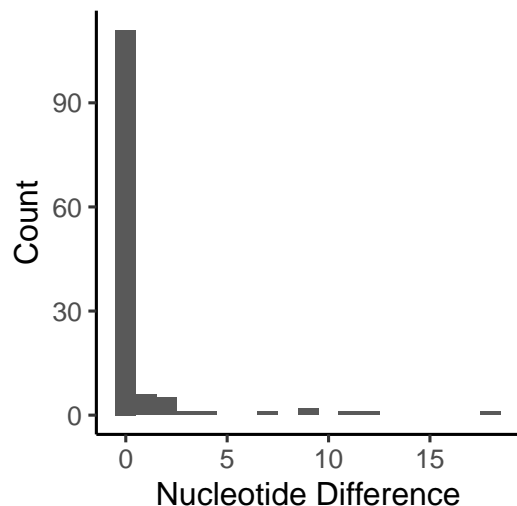
IGHV4–59*01

421 sequences assigned
300 (71.3%) exact matches, in which:
300 unique CDR3
7 unique J



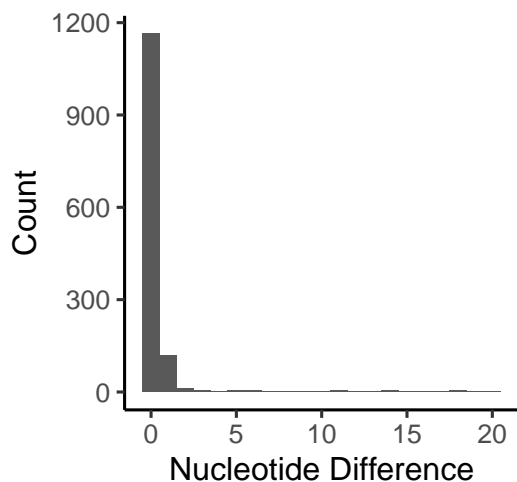
IGHV5–10–1*01

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



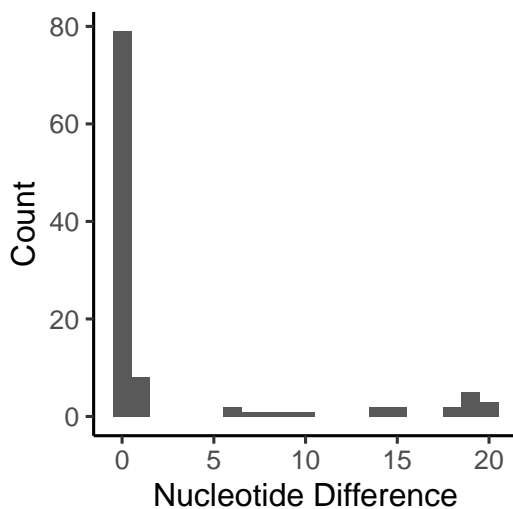
IGHV4–34*01

1393 sequences assigned
1164 (83.6%) exact matches, in which:
1158 unique CDR3
7 unique J



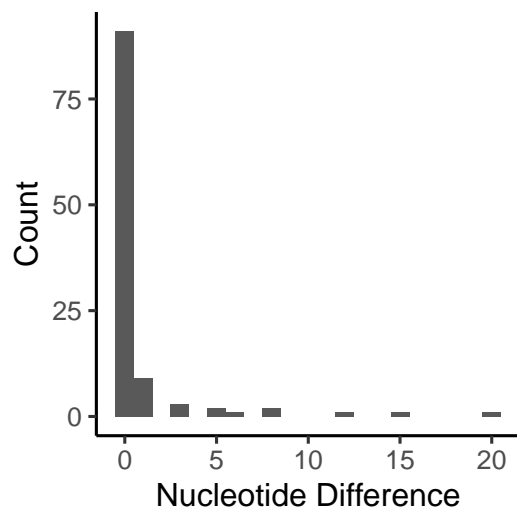
IGHV4–61*01

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



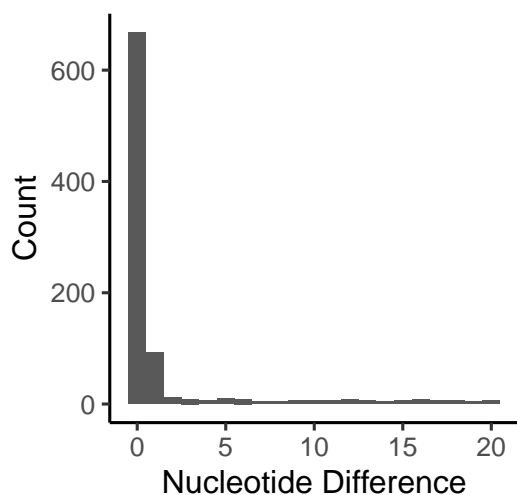
IGHV5–10–1*03

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



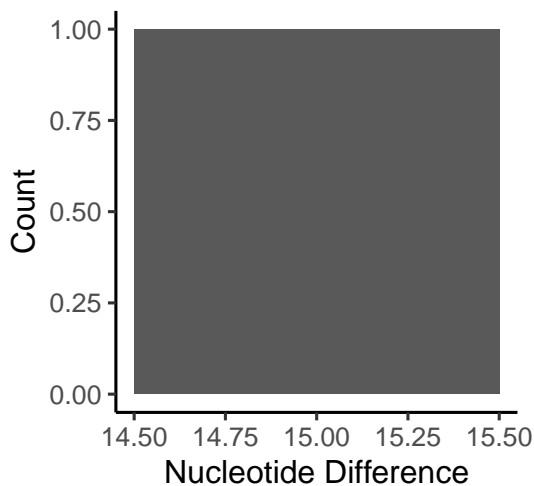
IGHV4–39*01

998 sequences assigned
668 (66.9%) exact matches, in which:
663 unique CDR3
7 unique J



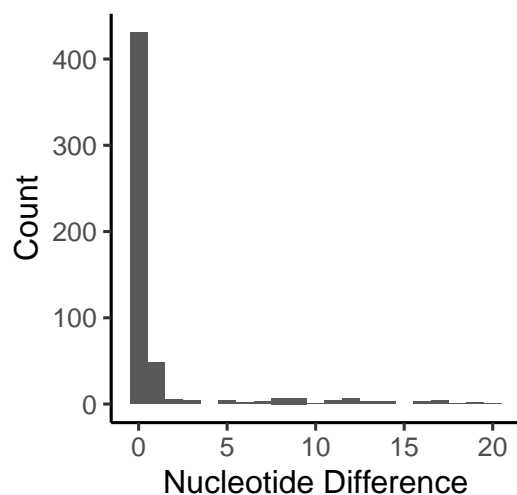
IGHV4/OR15–8*02

1 sequences assigned
No exact matches.



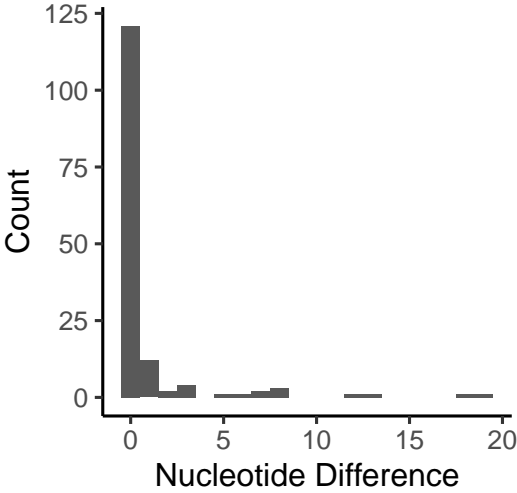
IGHV5–51*01

561 sequences assigned
431 (76.8%) exact matches, in which:
429 unique CDR3
7 unique J



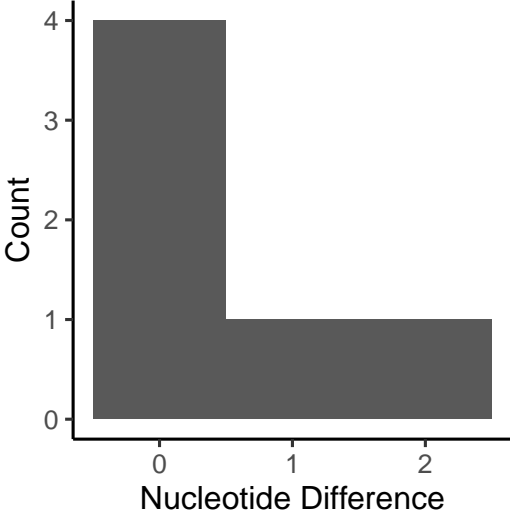
IGHV6-1*01

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

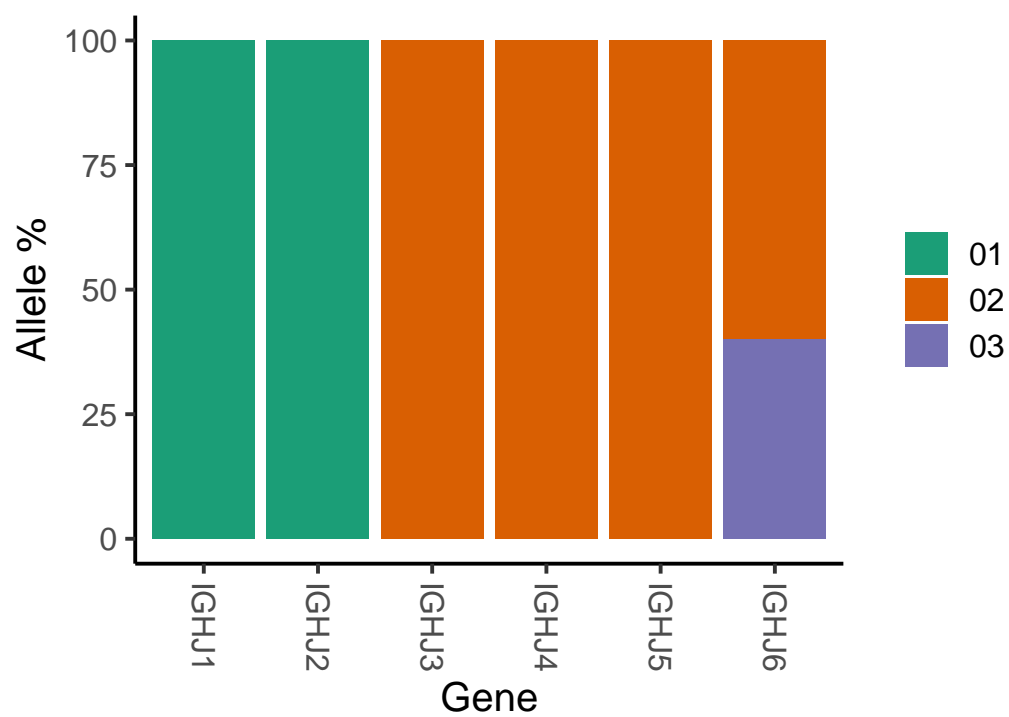


IGHV7-4-1*01

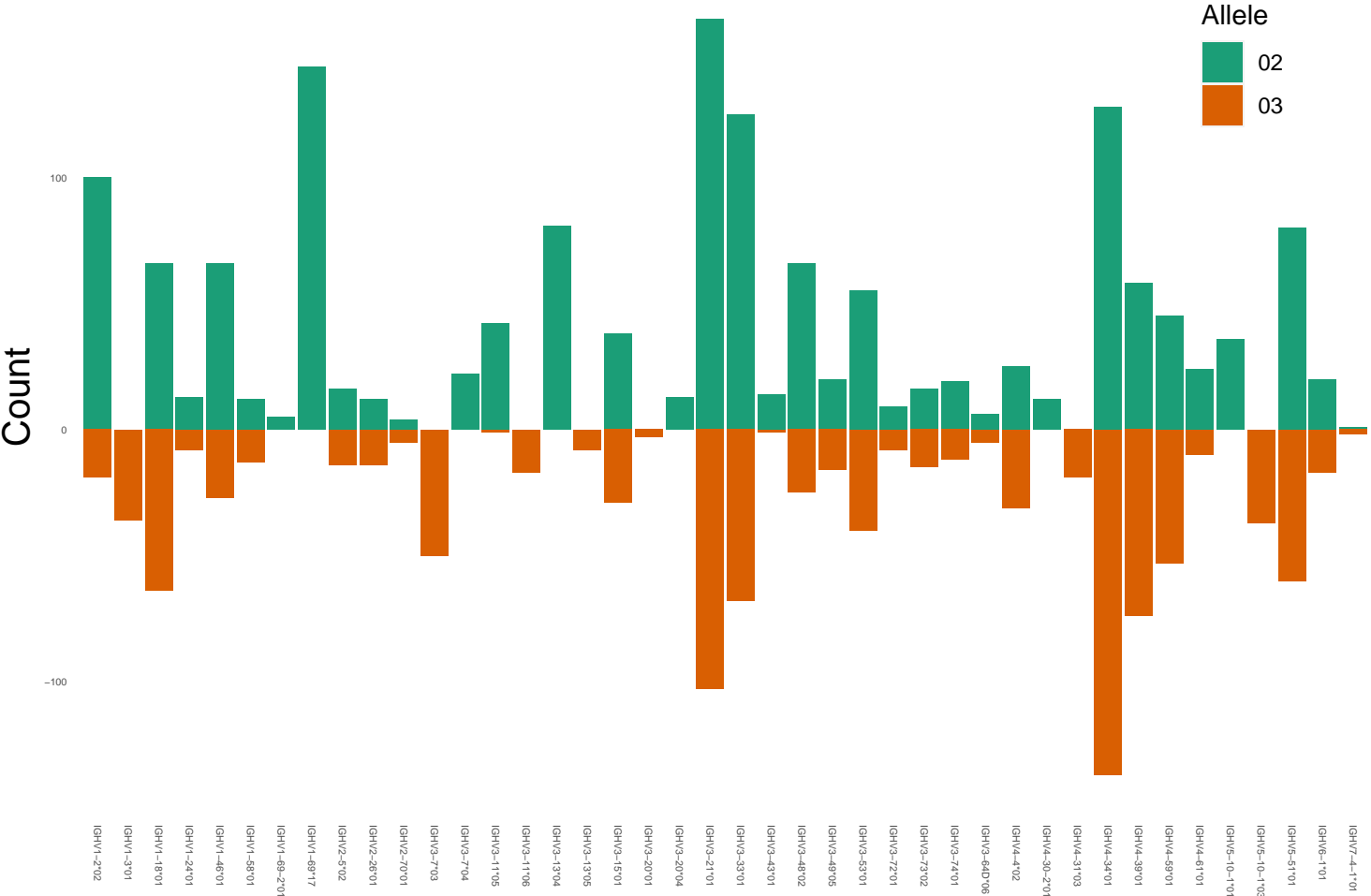
6 sequences assigned
4 (66.7%) exact matches, in which:
4 unique CDR3
3 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Novel sequence(s)IGHV4-39*01_G315A are not listed in the genotype and will be ignored.