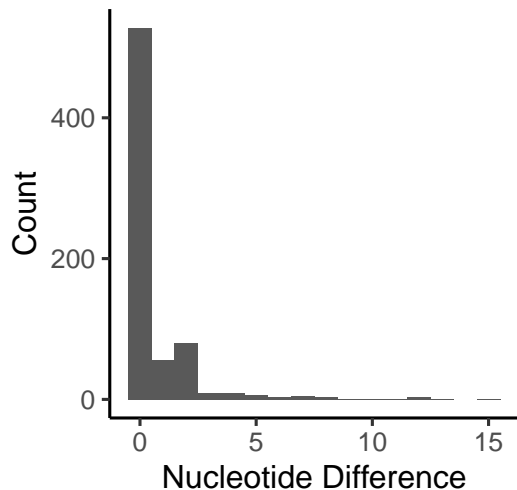


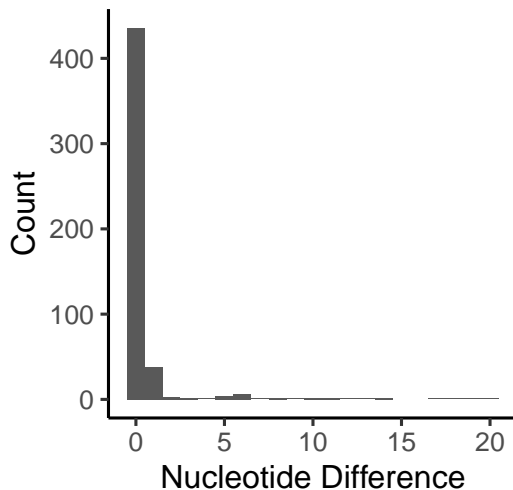
IGHV1-2*06

708 sequences assigned
528 (74.6%) exact matches, in which:
504 unique CDR3
7 unique J



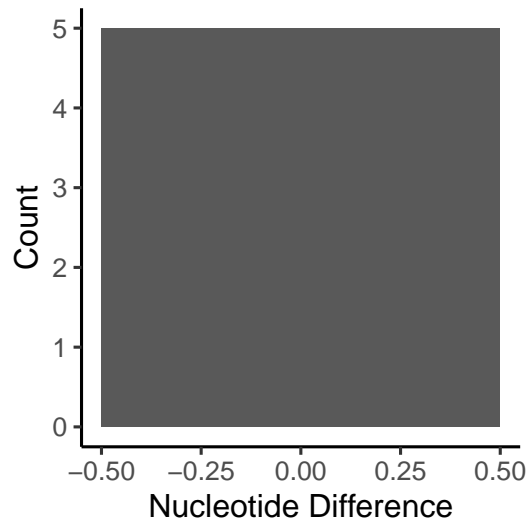
IGHV1-18*01

509 sequences assigned
436 (85.7%) exact matches, in which:
423 unique CDR3
6 unique J



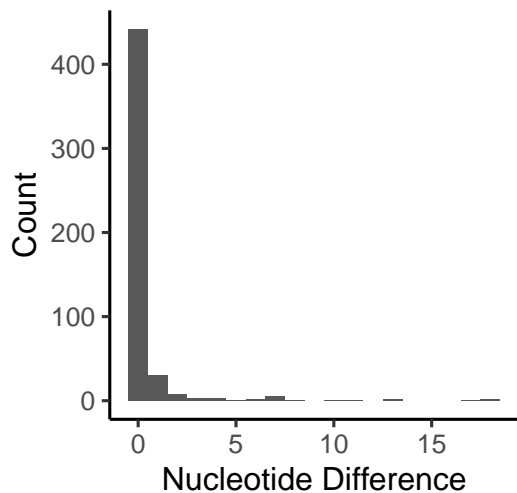
IGHV1-45*02

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



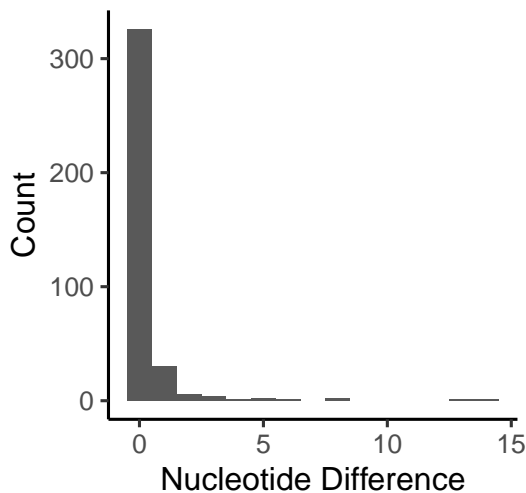
IGHV1-3*01

504 sequences assigned
442 (87.7%) exact matches, in which:
431 unique CDR3
7 unique J



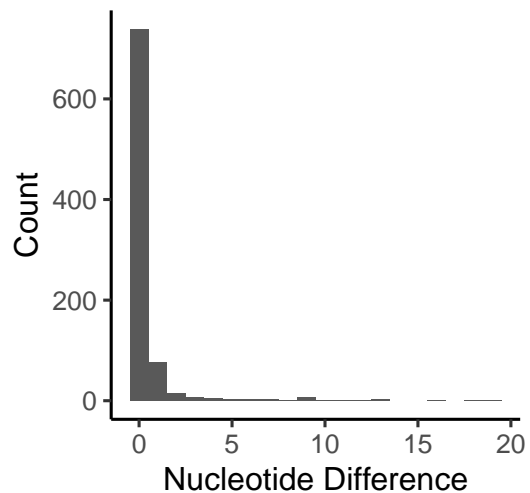
IGHV1-18*04

374 sequences assigned
326 (87.2%) exact matches, in which:
314 unique CDR3
6 unique J



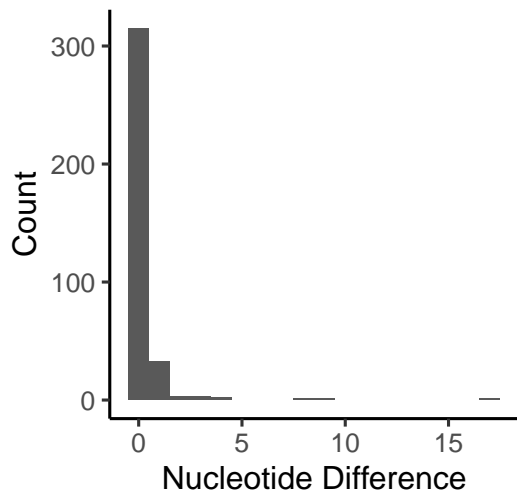
IGHV1-46*01

865 sequences assigned
739 (85.4%) exact matches, in which:
711 unique CDR3
7 unique J



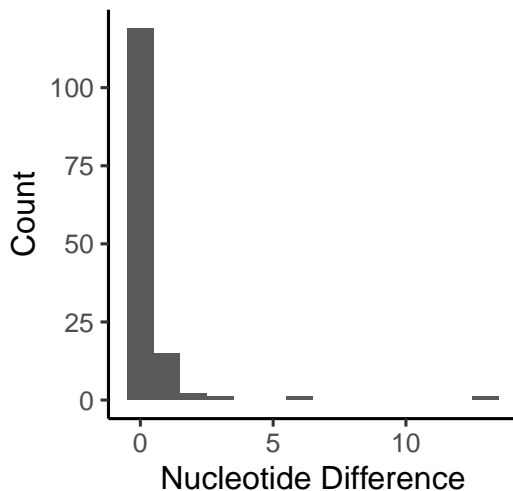
IGHV1-8*01

359 sequences assigned
315 (87.7%) exact matches, in which:
303 unique CDR3
7 unique J



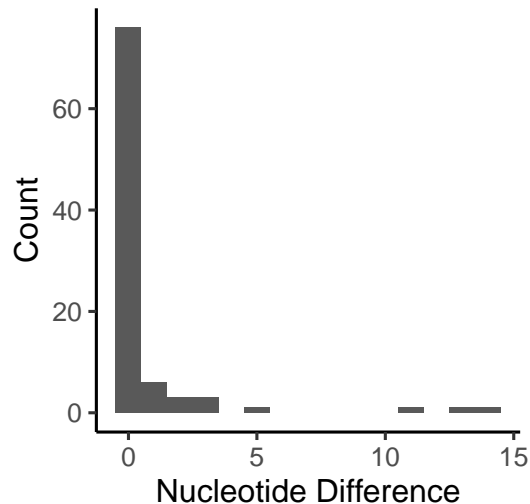
IGHV1-24*01

140 sequences assigned
119 (85%) exact matches, in which:
112 unique CDR3
7 unique J



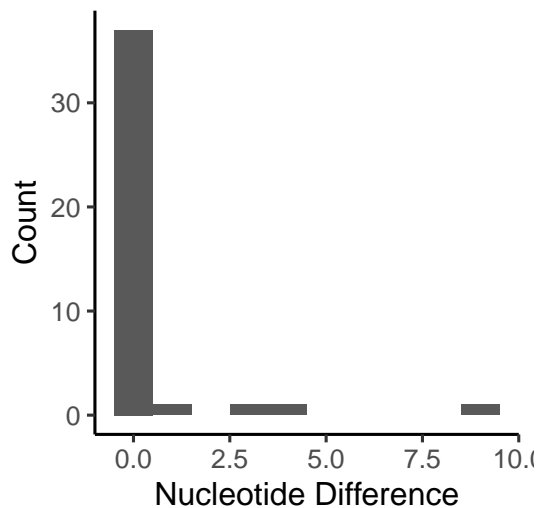
IGHV1-58*01

92 sequences assigned
76 (82.6%) exact matches, in which:
74 unique CDR3
6 unique J



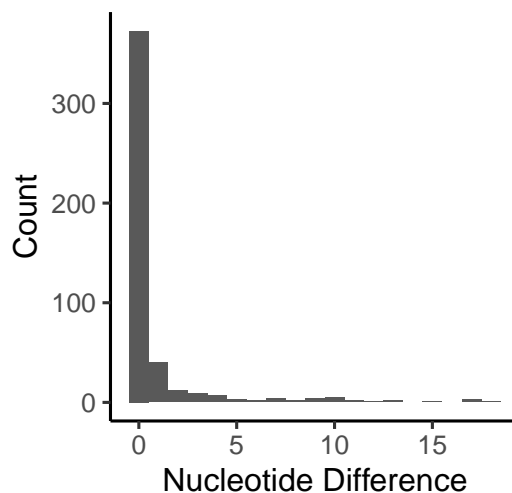
IGHV1-69-2*01

41 sequences assigned
37 (90.2%) exact matches, in which:
34 unique CDR3
5 unique J



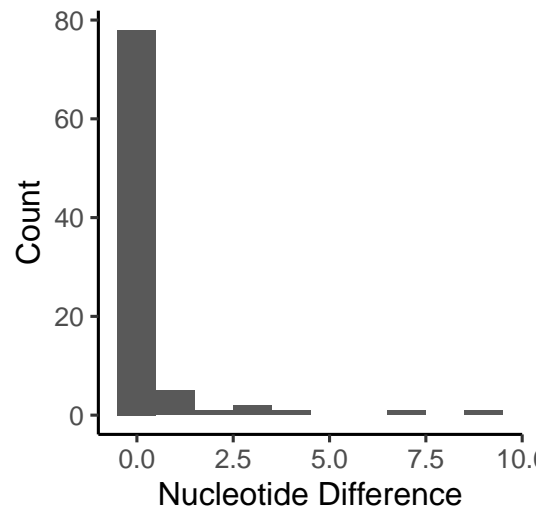
IGHV2-5*02

472 sequences assigned
373 (79%) exact matches, in which:
361 unique CDR3
7 unique J



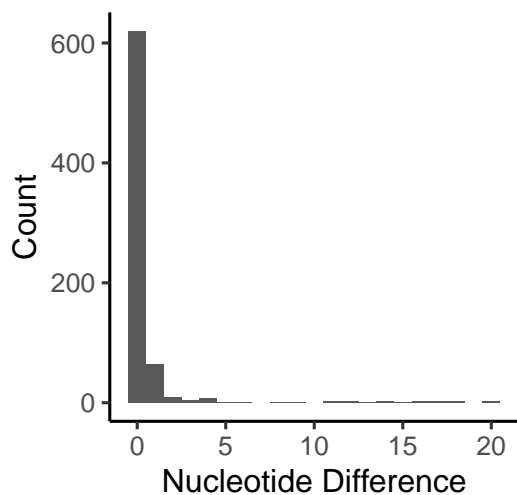
IGHV2-70*15

89 sequences assigned
78 (87.6%) exact matches, in which:
73 unique CDR3
5 unique J



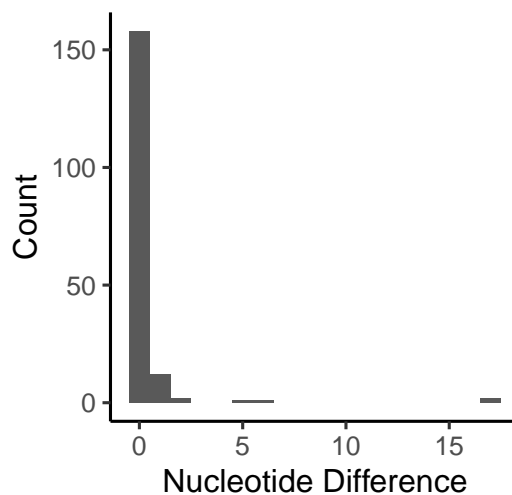
IGHV1-69*06

786 sequences assigned
620 (78.9%) exact matches, in which:
589 unique CDR3
7 unique J



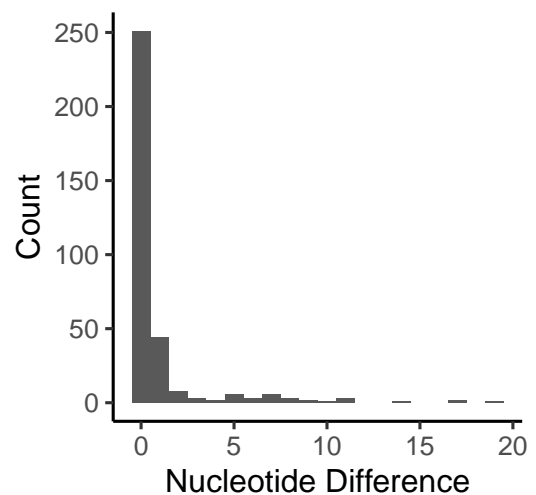
IGHV2-26*01

176 sequences assigned
158 (89.8%) exact matches, in which:
154 unique CDR3
7 unique J



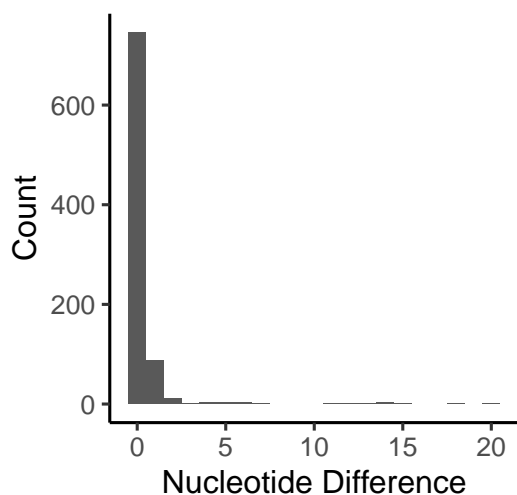
IGHV3-7*01

337 sequences assigned
251 (74.5%) exact matches, in which:
243 unique CDR3
6 unique J



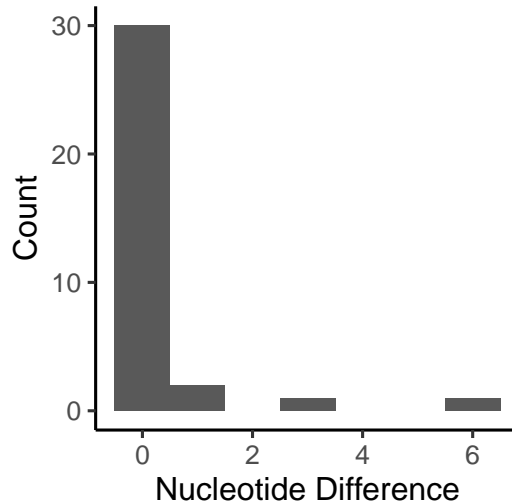
IGHV1-69*12

875 sequences assigned
746 (85.3%) exact matches, in which:
732 unique CDR3
6 unique J



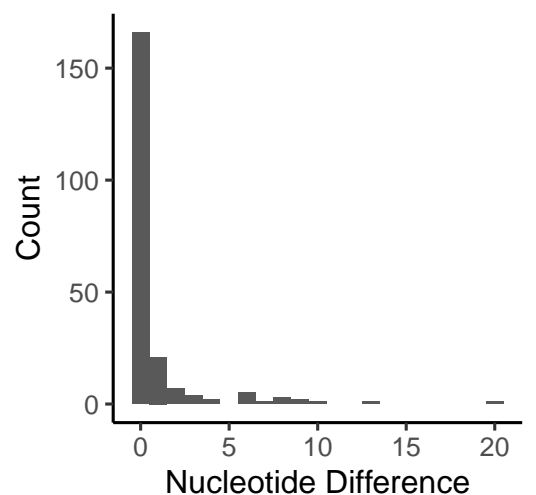
IGHV2-70*01

34 sequences assigned
30 (88.2%) exact matches, in which:
30 unique CDR3
5 unique J



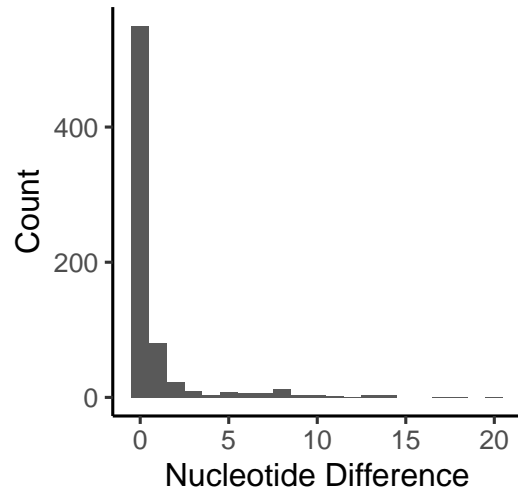
IGHV3-7*03

214 sequences assigned
166 (77.6%) exact matches, in which:
161 unique CDR3
6 unique J



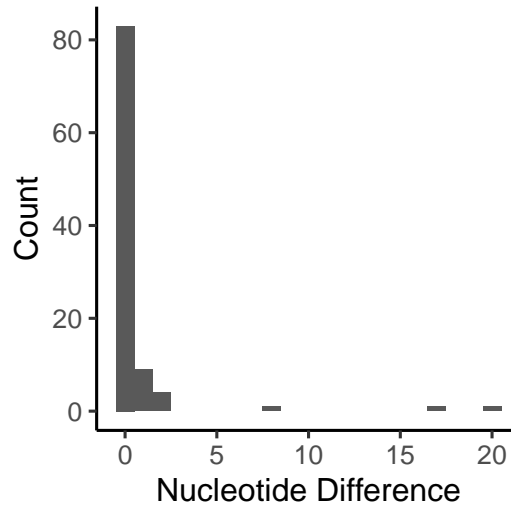
IGHV3-9*01

720 sequences assigned
550 (76.4%) exact matches, in which:
509 unique CDR3
7 unique J



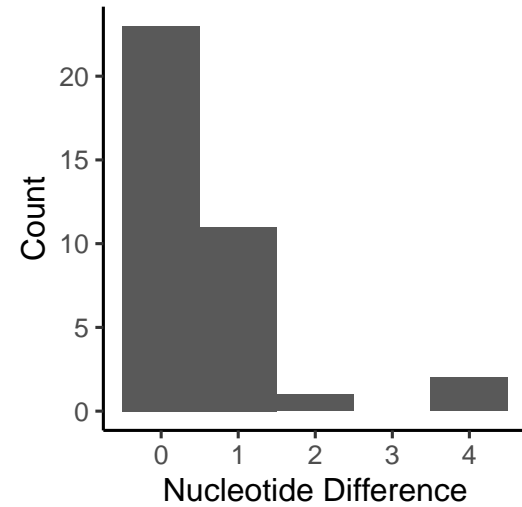
IGHV3-13*01

99 sequences assigned
83 (83.8%) exact matches, in which:
78 unique CDR3
5 unique J



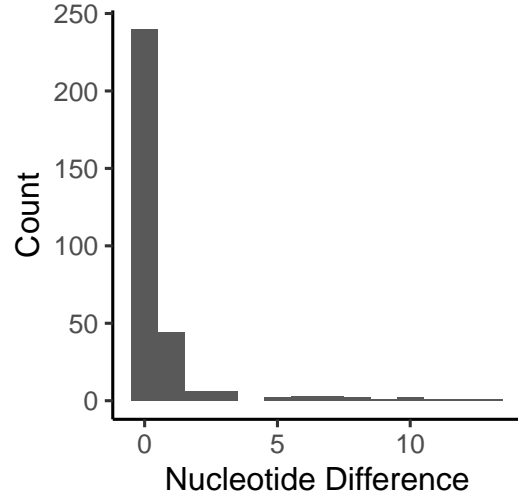
IGHV3-20*01

37 sequences assigned
23 (62.2%) exact matches, in which:
22 unique CDR3
5 unique J



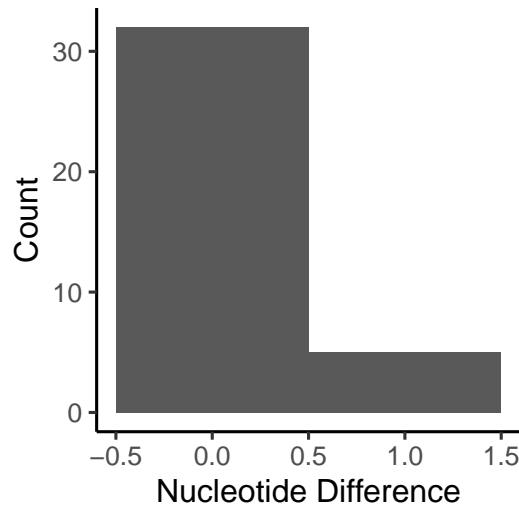
IGHV3-11*01

315 sequences assigned
240 (76.2%) exact matches, in which:
230 unique CDR3
6 unique J



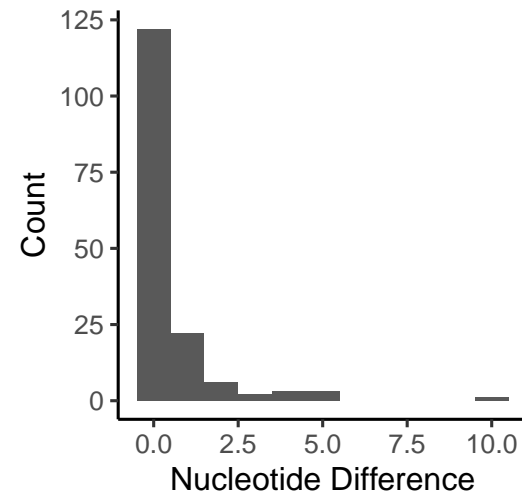
IGHV3-13*05

37 sequences assigned
32 (86.5%) exact matches, in which:
30 unique CDR3
4 unique J



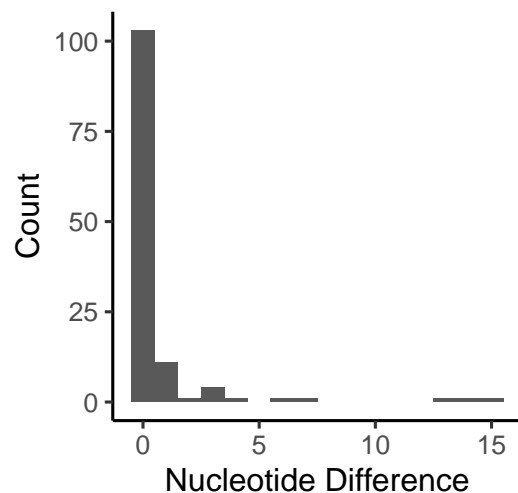
IGHV3-20*04

159 sequences assigned
122 (76.7%) exact matches, in which:
113 unique CDR3
6 unique J



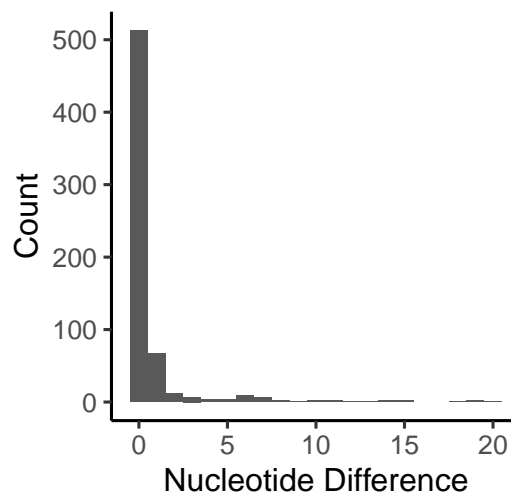
IGHV3-11*06

125 sequences assigned
103 (82.4%) exact matches, in which:
97 unique CDR3
6 unique J



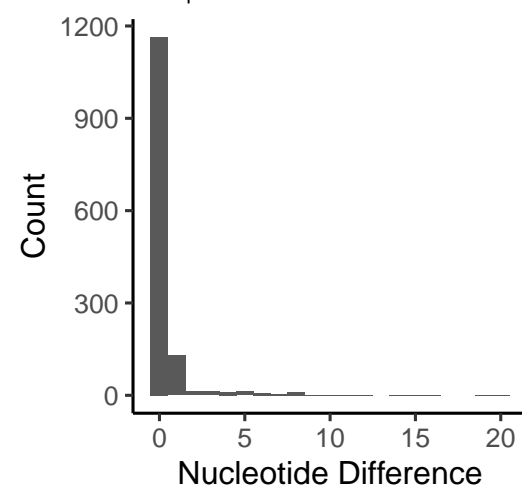
IGHV3-15*01

643 sequences assigned
513 (79.8%) exact matches, in which:
490 unique CDR3
7 unique J



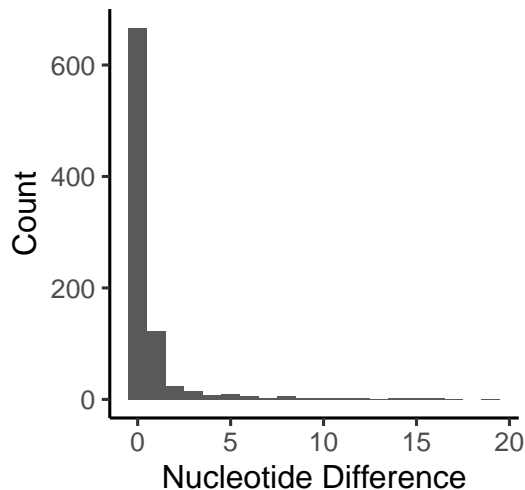
IGHV3-21*01

1375 sequences assigned
1164 (84.7%) exact matches, in which:
1103 unique CDR3
7 unique J



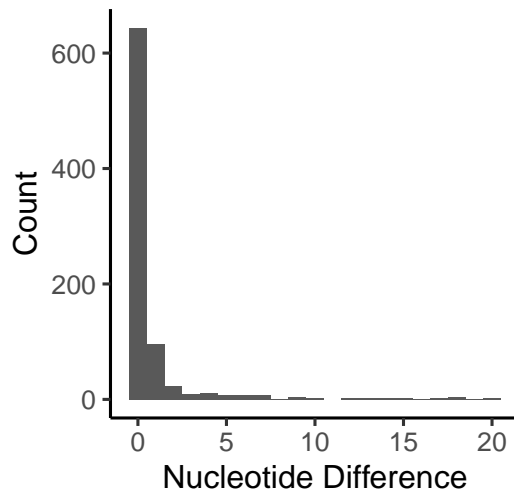
IGHV3–33*01

886 sequences assigned
667 (75.3%) exact matches, in which:
639 unique CDR3
7 unique J



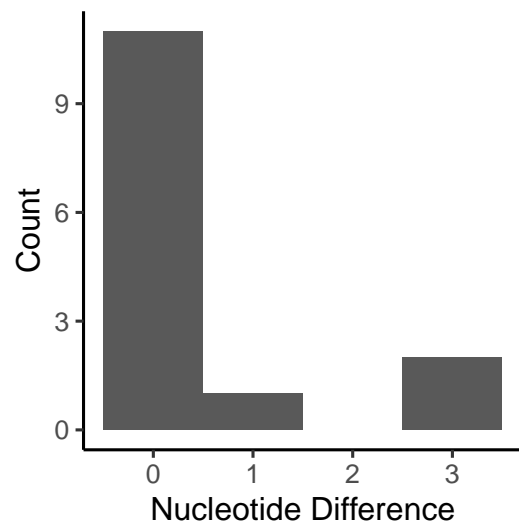
IGHV3–48*02

841 sequences assigned
644 (76.6%) exact matches, in which:
630 unique CDR3
7 unique J



IGHV3–64*02

14 sequences assigned
11 (78.6%) exact matches, in which:
10 unique CDR3
4 unique J



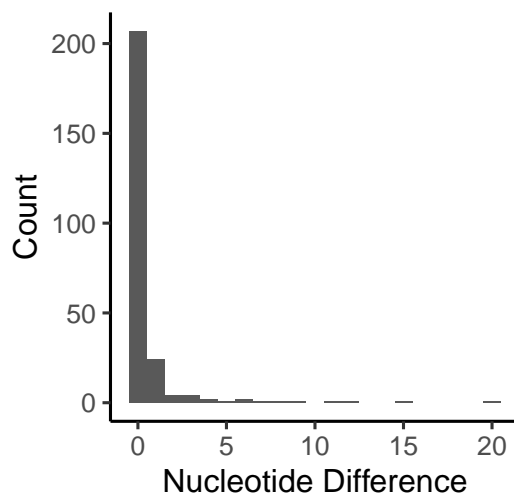
IGHV3–35*01

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



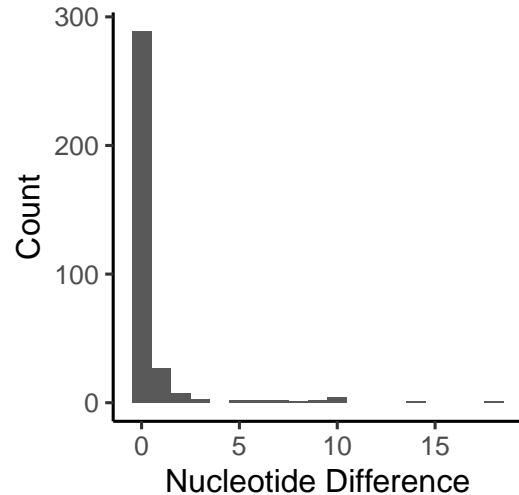
IGHV3–49*05

252 sequences assigned
207 (82.1%) exact matches, in which:
199 unique CDR3
7 unique J



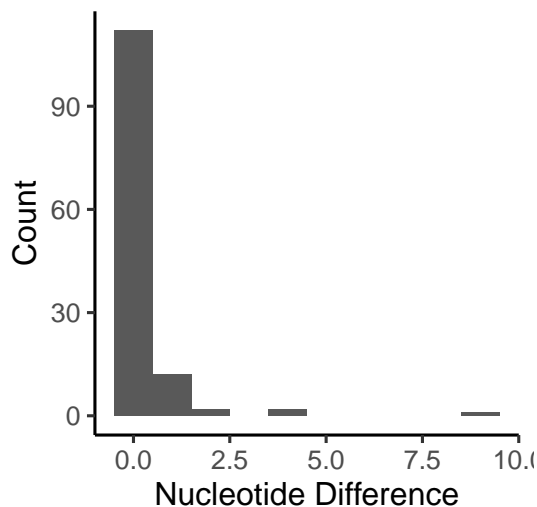
IGHV3–66*01

341 sequences assigned
289 (84.8%) exact matches, in which:
277 unique CDR3
6 unique J



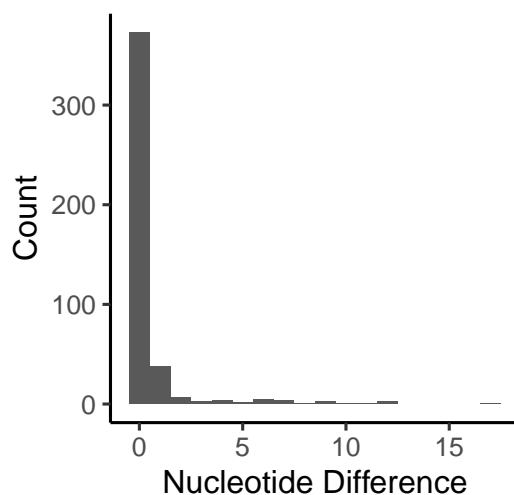
IGHV3–43*01

130 sequences assigned
112 (86.2%) exact matches, in which:
109 unique CDR3
7 unique J



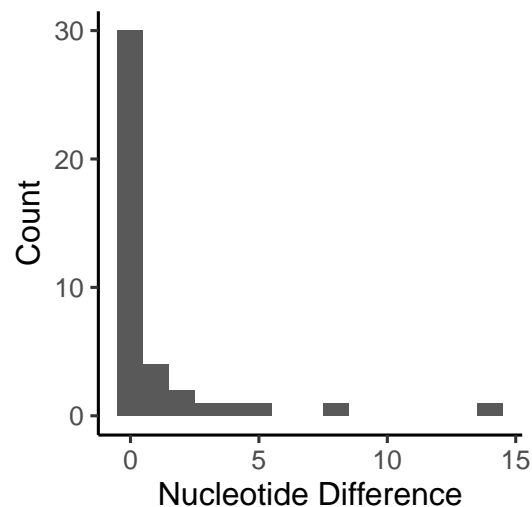
IGHV3–53*01

447 sequences assigned
373 (83.4%) exact matches, in which:
360 unique CDR3
7 unique J



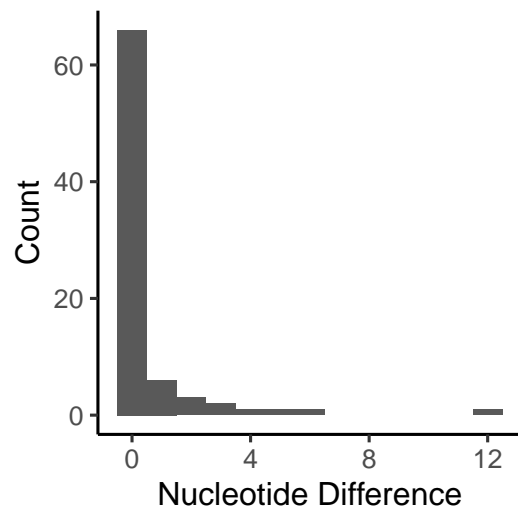
IGHV3–72*01

41 sequences assigned
30 (73.2%) exact matches, in which:
30 unique CDR3
4 unique J



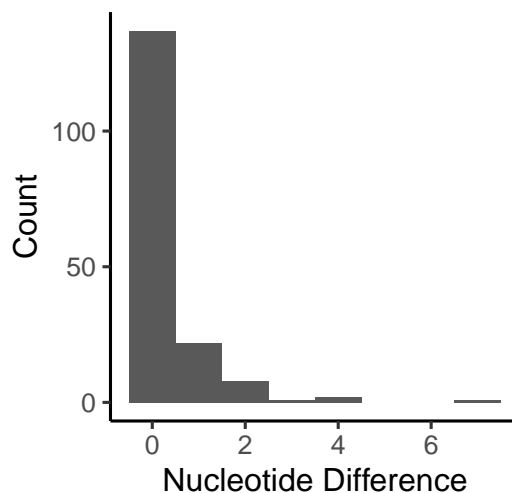
IGHV3-73*01

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



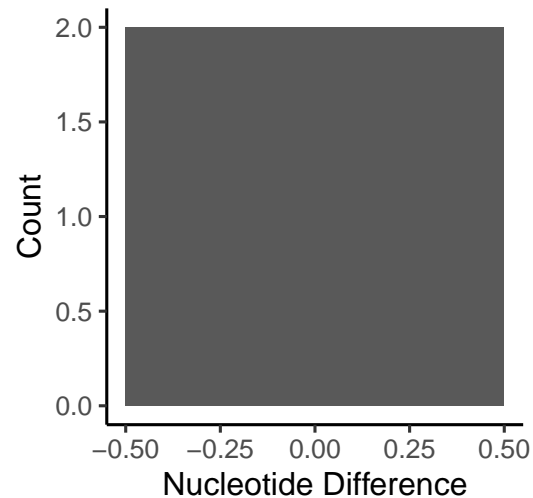
IGHV3-64D*09

171 sequences assigned
137 (80.1%) exact matches, in which:
124 unique CDR3
6 unique J



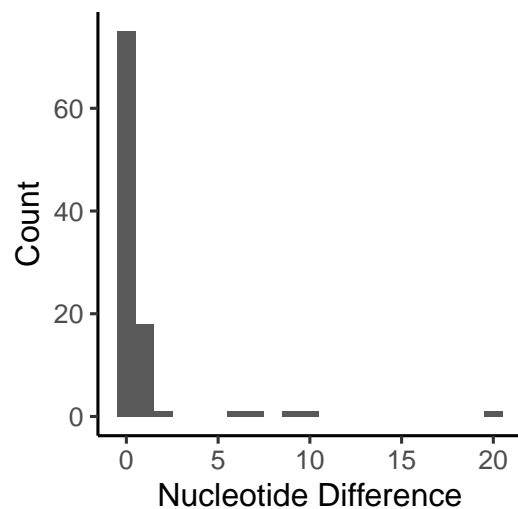
IGHV4-31*10

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



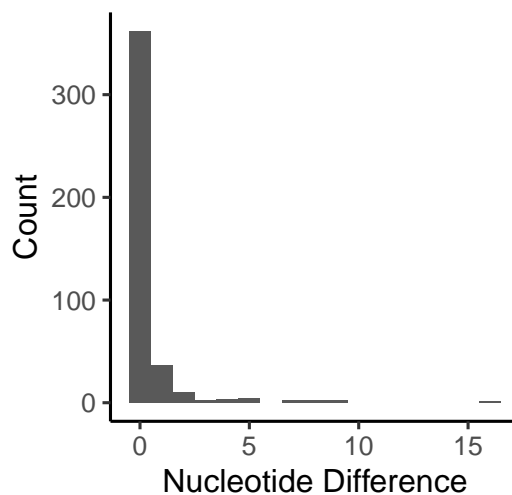
IGHV3-73*02

99 sequences assigned
75 (75.8%) exact matches, in which:
71 unique CDR3
6 unique J



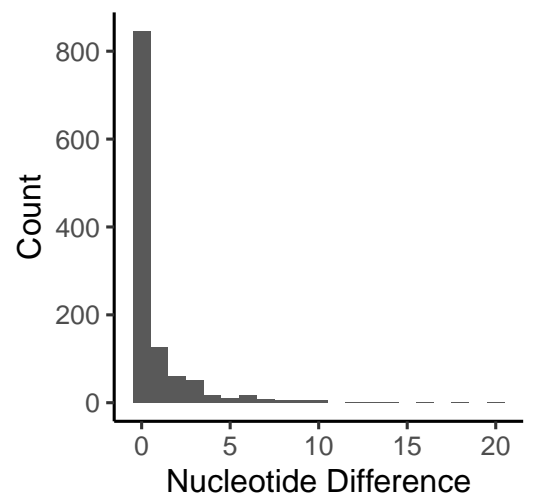
IGHV4-4*02

429 sequences assigned
362 (84.4%) exact matches, in which:
358 unique CDR3
7 unique J



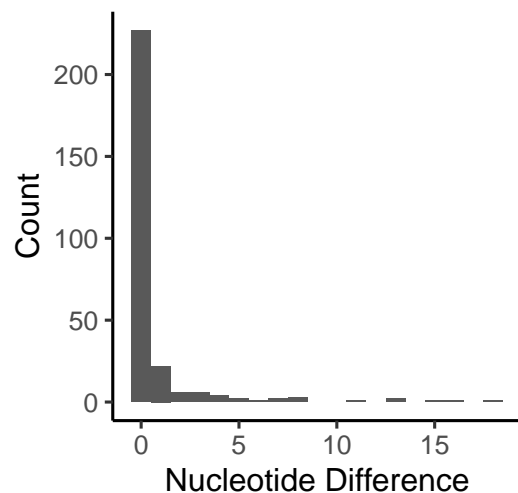
IGHV4-34*01

1173 sequences assigned
846 (72.1%) exact matches, in which:
805 unique CDR3
7 unique J



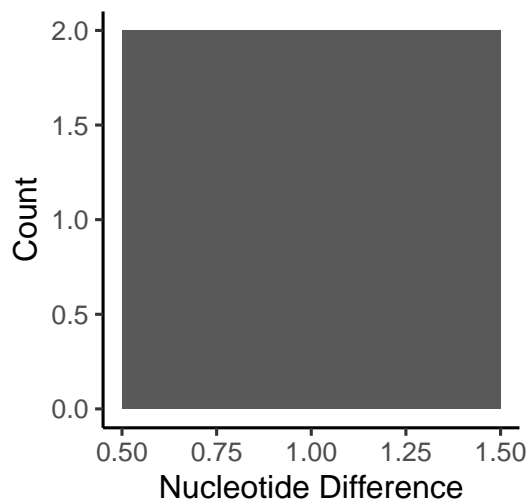
IGHV3-74*01

281 sequences assigned
227 (80.8%) exact matches, in which:
215 unique CDR3
7 unique J



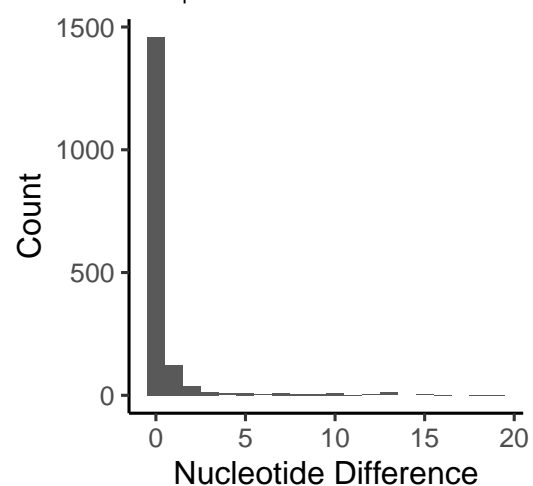
IGHV4-28*04

2 sequences assigned
No exact matches.



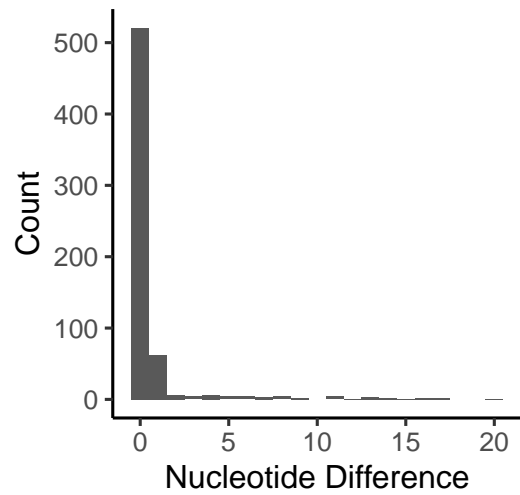
IGHV4-39*01

1716 sequences assigned
1459 (85%) exact matches, in which:
1383 unique CDR3
7 unique J



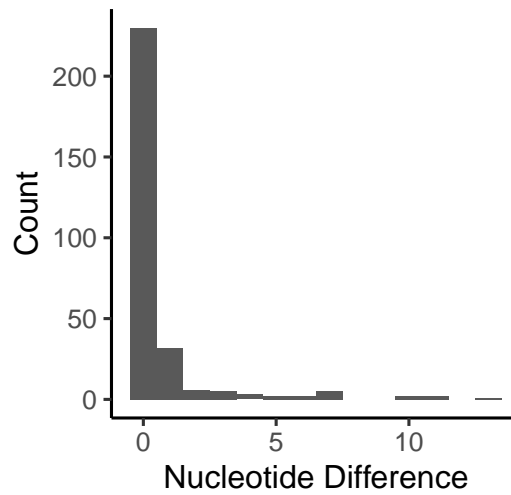
IGHV4-59*01

635 sequences assigned
521 (82%) exact matches, in which:
513 unique CDR3
7 unique J



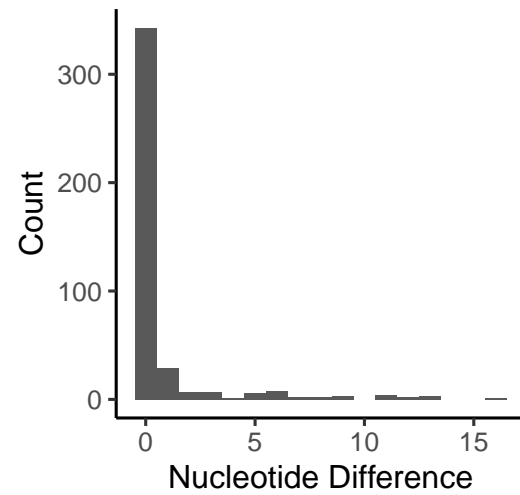
IGHV5-10-1*03

290 sequences assigned
230 (79.3%) exact matches, in which:
221 unique CDR3
6 unique J



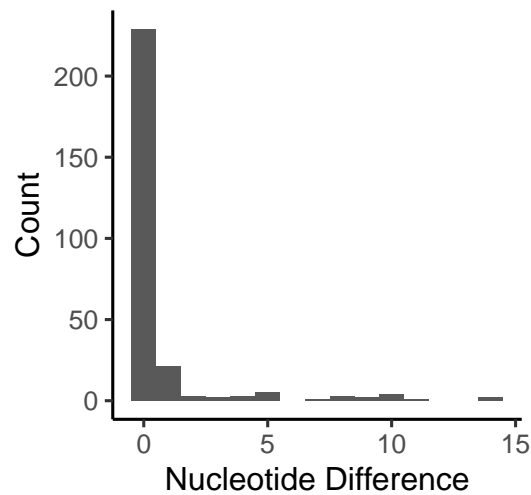
IGHV7-4-1*02

418 sequences assigned
343 (82.1%) exact matches, in which:
337 unique CDR3
6 unique J



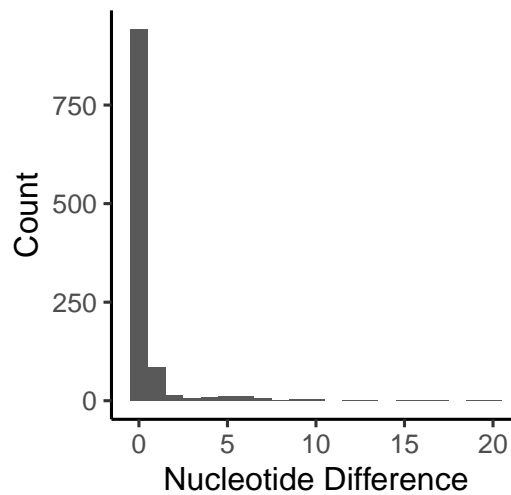
IGHV4-61*01

279 sequences assigned
229 (82.1%) exact matches, in which:
226 unique CDR3
7 unique J



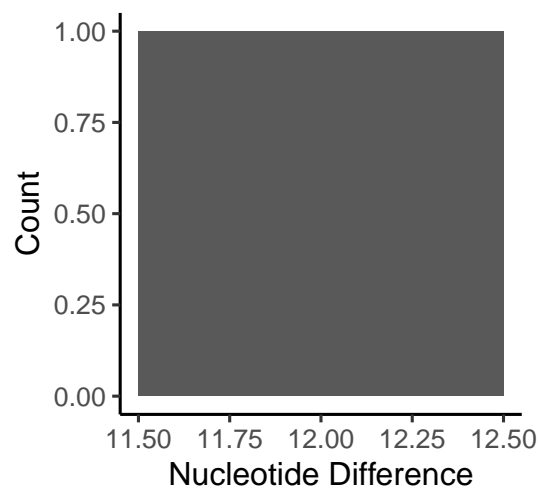
IGHV5-51*01

1109 sequences assigned
943 (85%) exact matches, in which:
903 unique CDR3
7 unique J



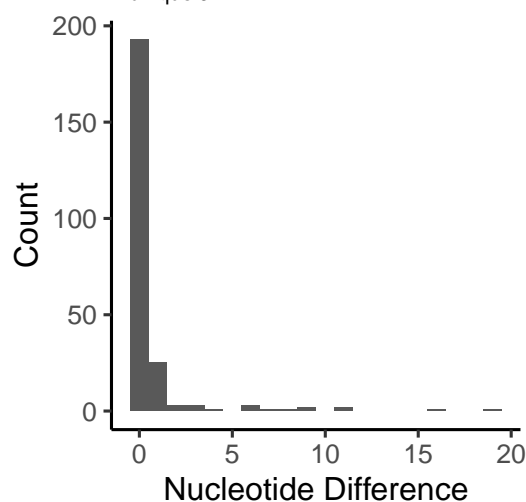
IGHV1/OR15-9*01

1 sequences assigned
No exact matches.

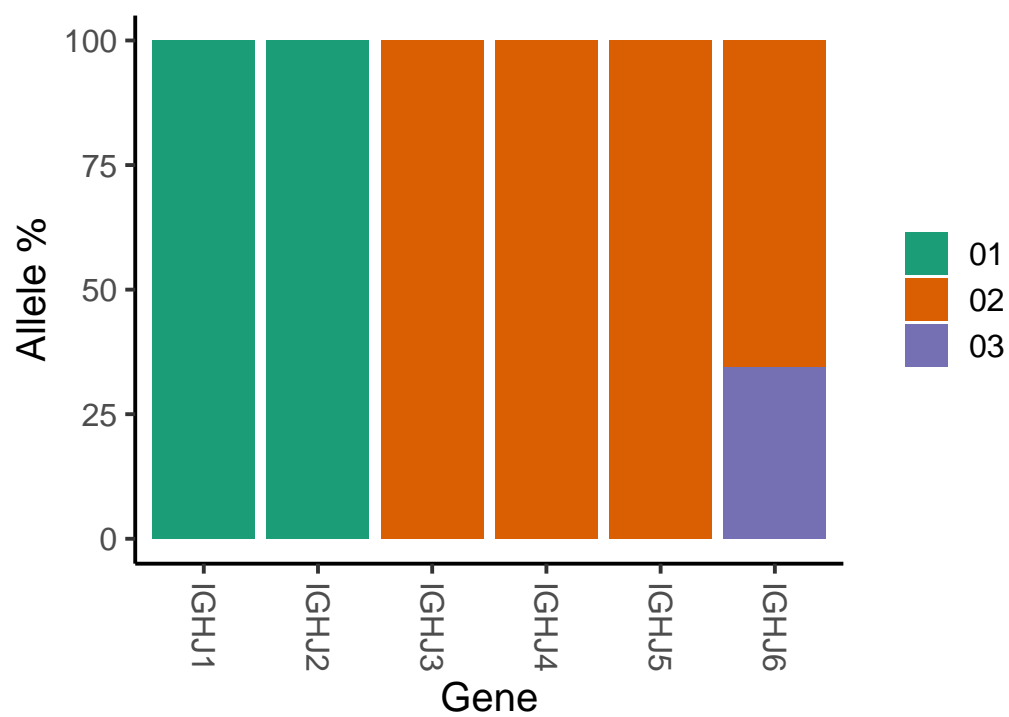


IGHV6-1*01

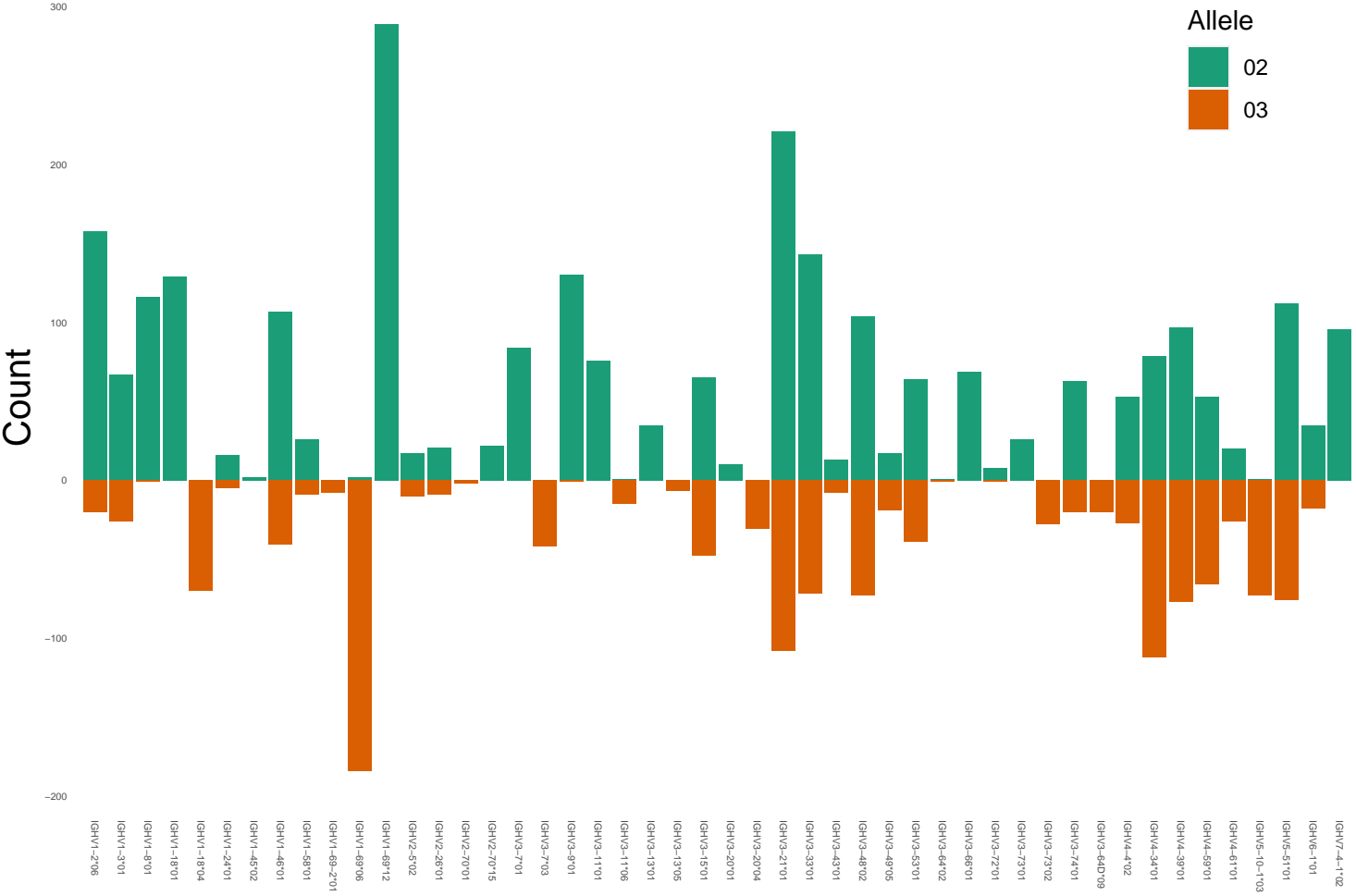
236 sequences assigned
193 (81.8%) exact matches, in which:
180 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.