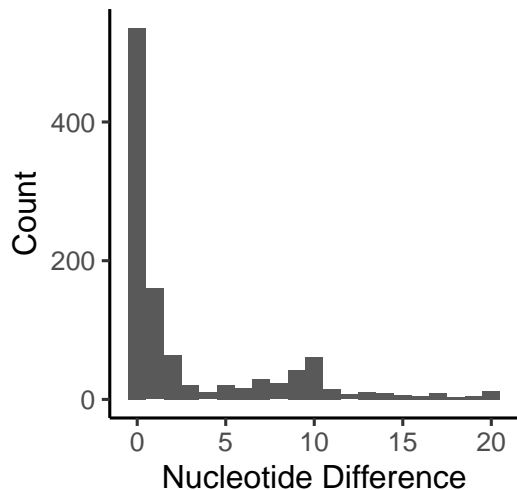


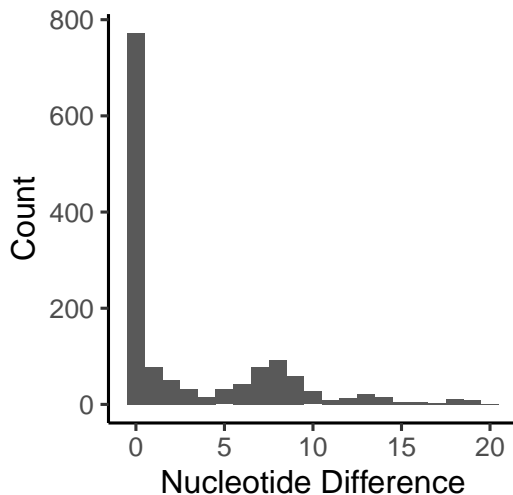
IGHV1-2*02

1120 sequences assigned
536 (47.9%) exact matches, in which:
526 unique CDR3
7 unique J



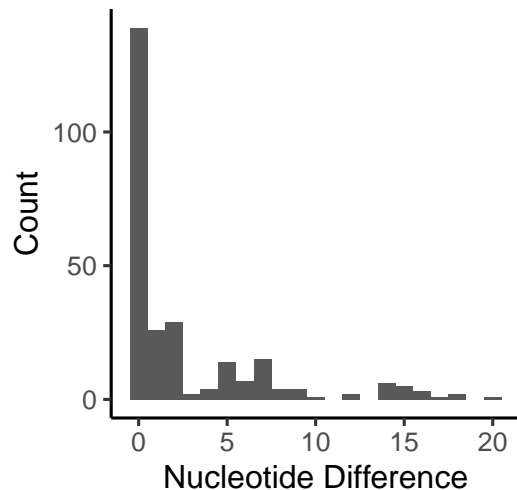
IGHV1-18*01

1436 sequences assigned
773 (53.8%) exact matches, in which:
758 unique CDR3
7 unique J



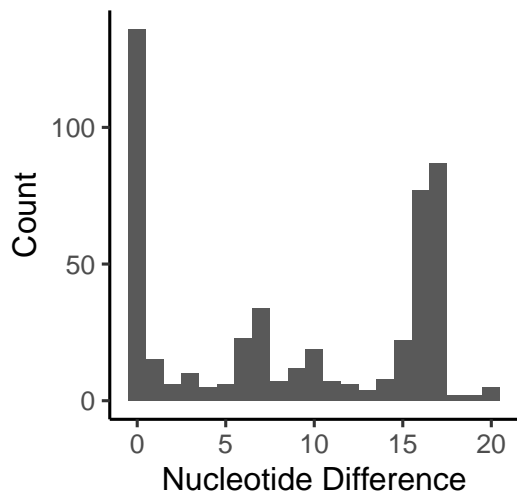
IGHV1-46*01

266 sequences assigned
139 (52.3%) exact matches, in which:
137 unique CDR3
7 unique J



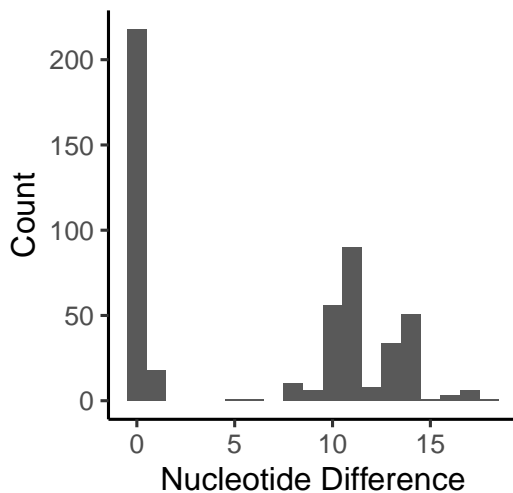
IGHV1-3*01_05

511 sequences assigned
136 (26.6%) exact matches, in which:
132 unique CDR3
7 unique J



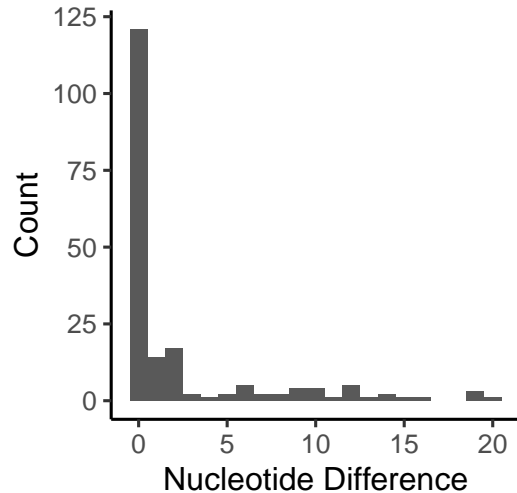
IGHV1-24*01

510 sequences assigned
218 (42.7%) exact matches, in which:
217 unique CDR3
7 unique J



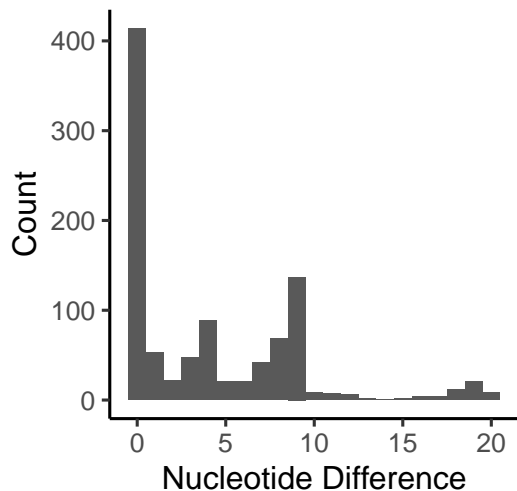
IGHV1-46*03

194 sequences assigned
121 (62.4%) exact matches, in which:
120 unique CDR3
6 unique J



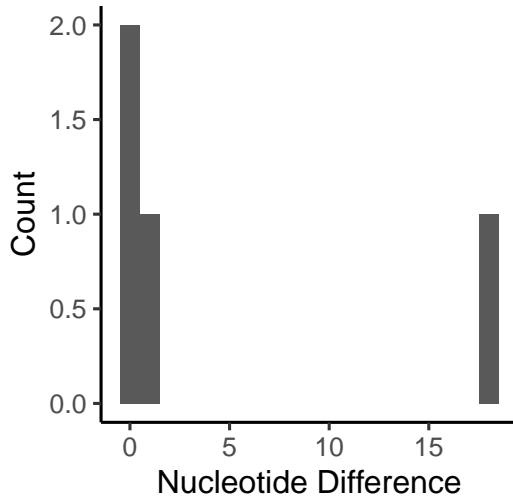
IGHV1-8*01

1000 sequences assigned
414 (41.4%) exact matches, in which:
406 unique CDR3
7 unique J



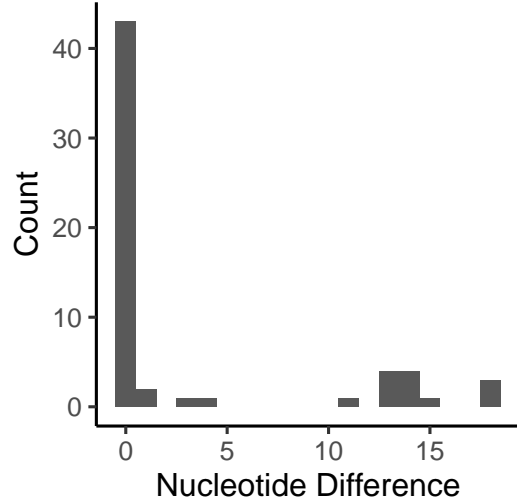
IGHV1-45*02

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



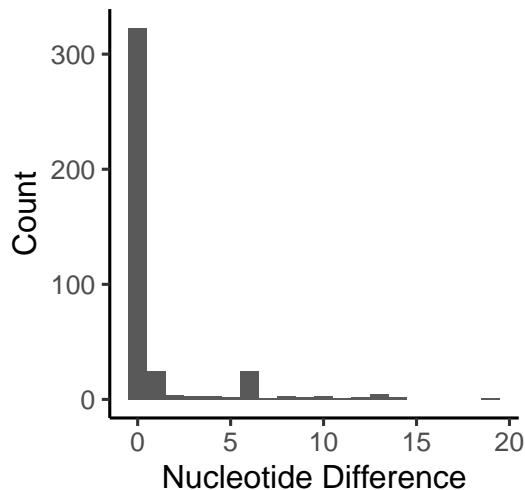
IGHV1-58*02

61 sequences assigned
43 (70.5%) exact matches, in which:
42 unique CDR3
6 unique J



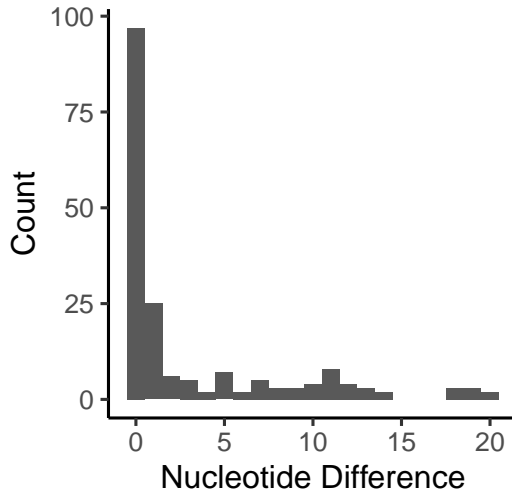
IGHV1-69*04_09

434 sequences assigned
323 (74.4%) exact matches, in which:
318 unique CDR3
7 unique J



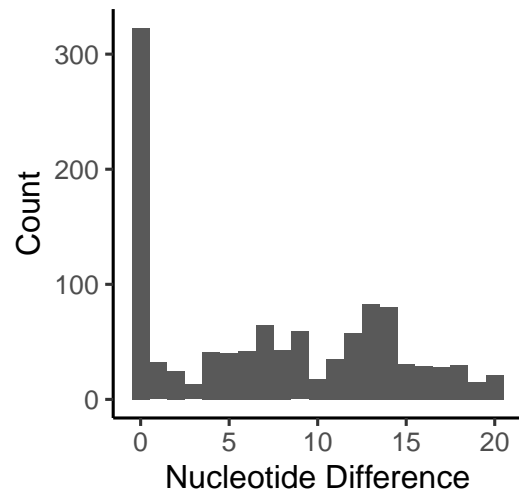
IGHV2-5*02

192 sequences assigned
97 (50.5%) exact matches, in which:
91 unique CDR3
7 unique J



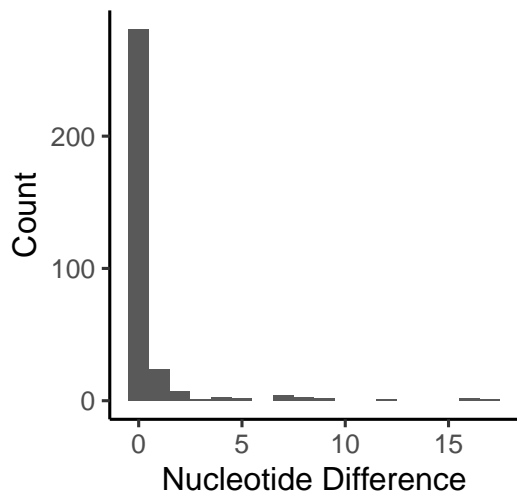
IGHV3-7*01

1198 sequences assigned
323 (27%) exact matches, in which:
202 unique CDR3
7 unique J



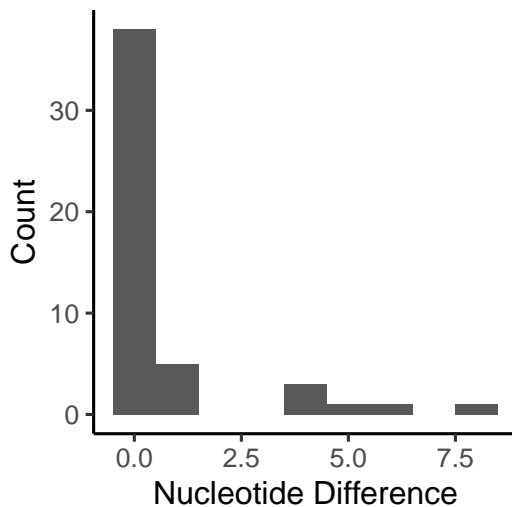
IGHV1-69*04_09_G112A

336 sequences assigned
281 (83.6%) exact matches, in which:
278 unique CDR3
7 unique J



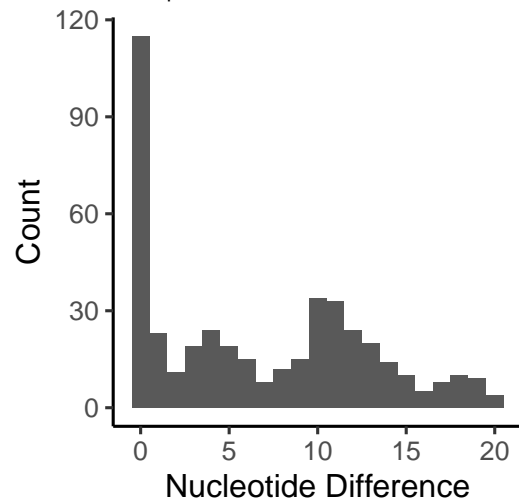
IGHV2-26*01

51 sequences assigned
38 (74.5%) exact matches, in which:
37 unique CDR3
6 unique J



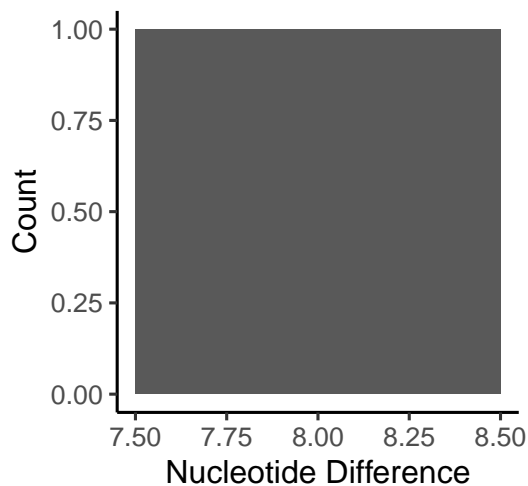
IGHV3-7*04

480 sequences assigned
115 (24%) exact matches, in which:
66 unique CDR3
5 unique J



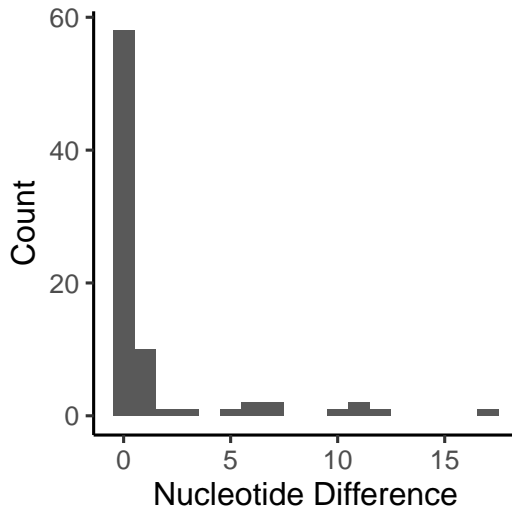
IGHV1-NL1*01

1 sequences assigned
No exact matches.



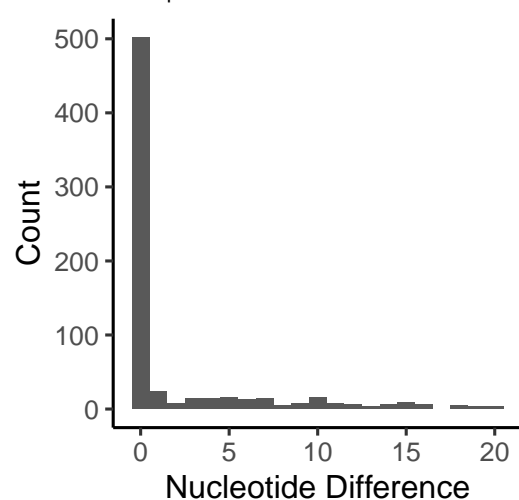
IGHV2-70*11_15

80 sequences assigned
58 (72.5%) exact matches, in which:
58 unique CDR3
5 unique J



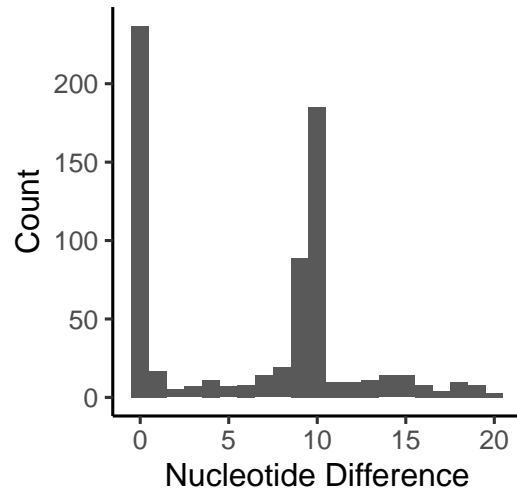
IGHV3-9*01

705 sequences assigned
502 (71.2%) exact matches, in which:
313 unique CDR3
6 unique J



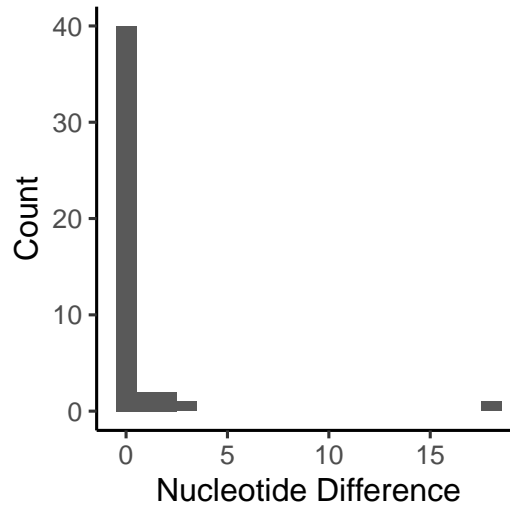
IGHV3-11*01

813 sequences assigned
237 (29.2%) exact matches, in which:
153 unique CDR3
5 unique J



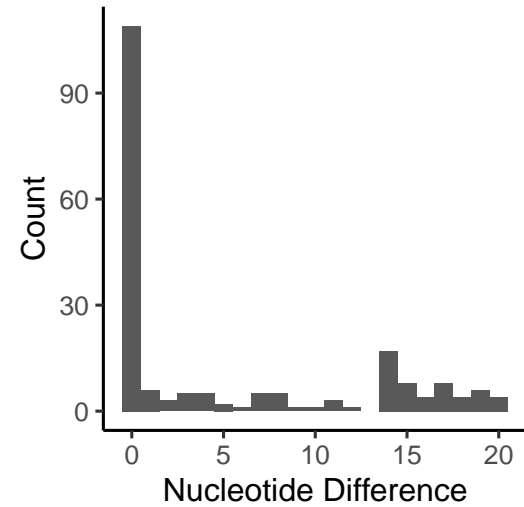
IGHV3-13*04

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



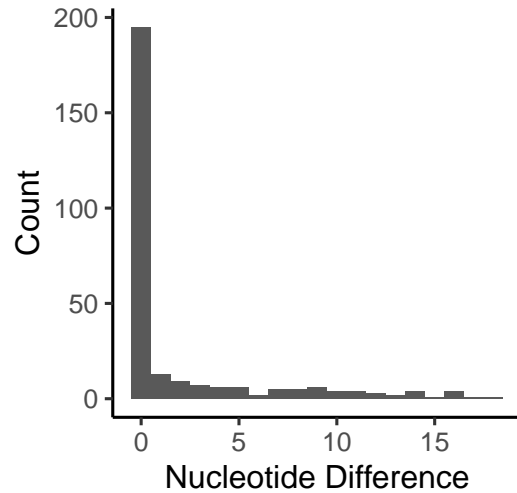
IGHV3-20*03_04

233 sequences assigned
109 (46.8%) exact matches, in which:
66 unique CDR3
5 unique J



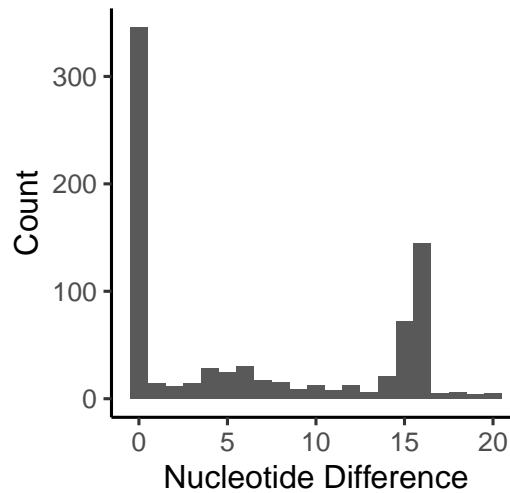
IGHV3-11*06_T300C

310 sequences assigned
195 (62.9%) exact matches, in which:
121 unique CDR3
5 unique J



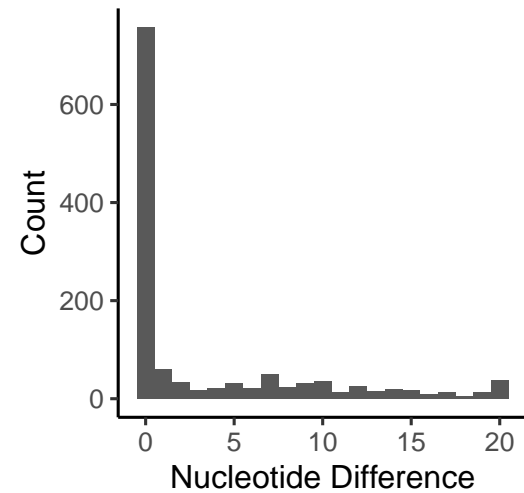
IGHV3-15*01_02

866 sequences assigned
346 (40%) exact matches, in which:
235 unique CDR3
7 unique J



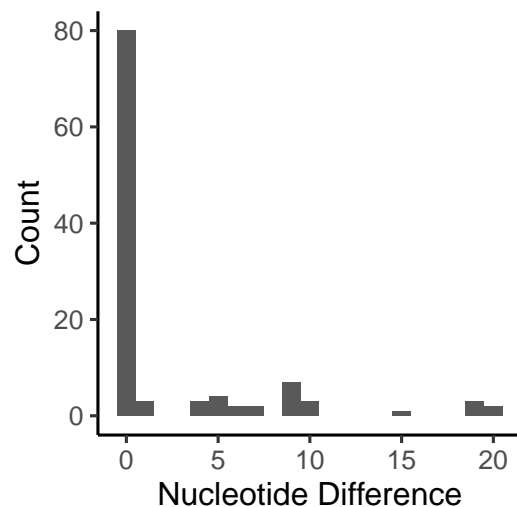
IGHV3-21*01_02

1411 sequences assigned
758 (53.7%) exact matches, in which:
461 unique CDR3
7 unique J



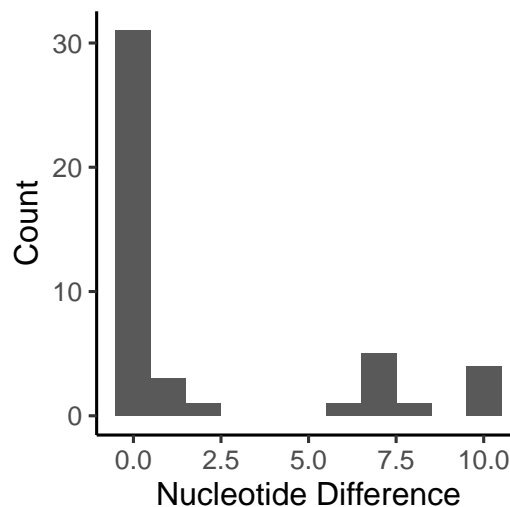
IGHV3-13*01

117 sequences assigned
80 (68.4%) exact matches, in which:
45 unique CDR3
5 unique J



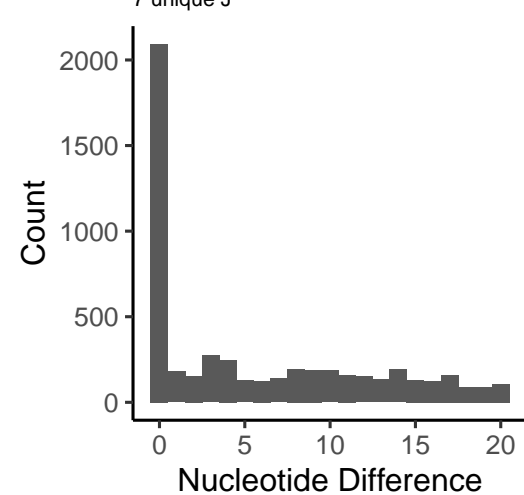
IGHV3-20*01_02

48 sequences assigned
31 (64.6%) exact matches, in which:
22 unique CDR3
5 unique J



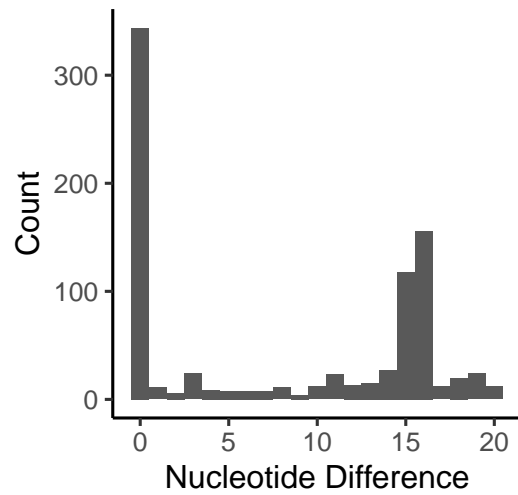
IGHV3-23*01_04

7073 sequences assigned
2093 (29.6%) exact matches, in which:
1299 unique CDR3
7 unique J



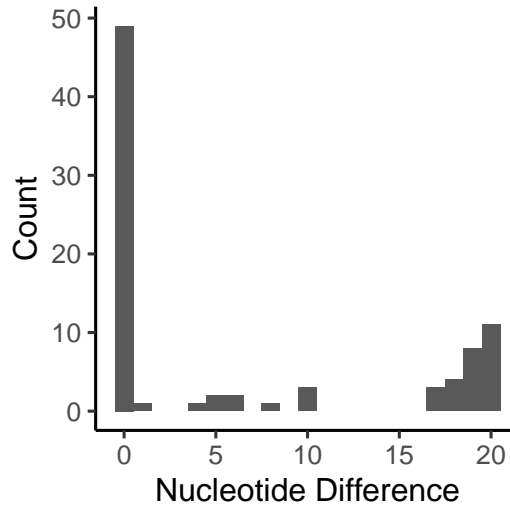
IGHV3-30*01

894 sequences assigned
344 (38.5%) exact matches, in which:
220 unique CDR3
7 unique J



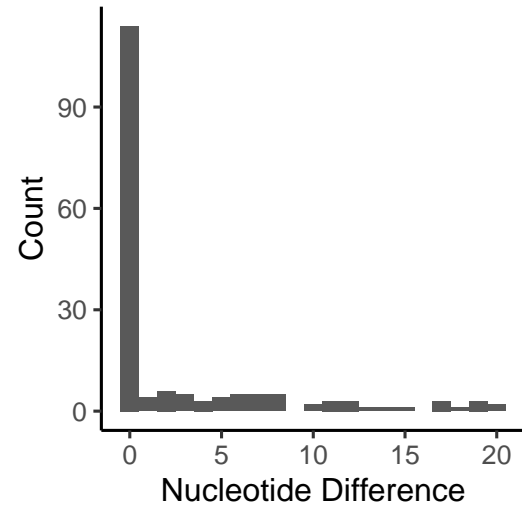
IGHV3-43*01

155 sequences assigned
49 (31.6%) exact matches, in which:
31 unique CDR3
6 unique J



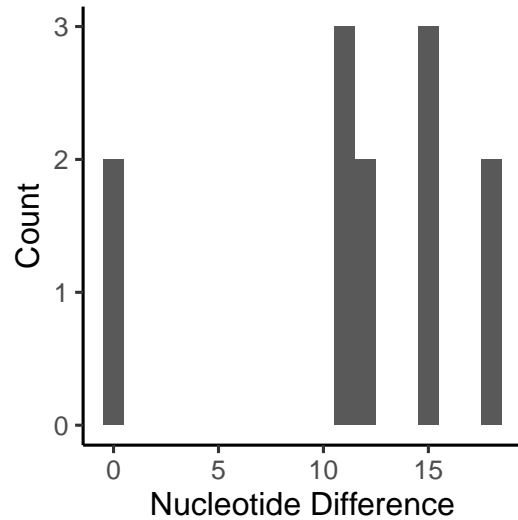
IGHV3-49*03_05

187 sequences assigned
114 (61%) exact matches, in which:
83 unique CDR3
6 unique J



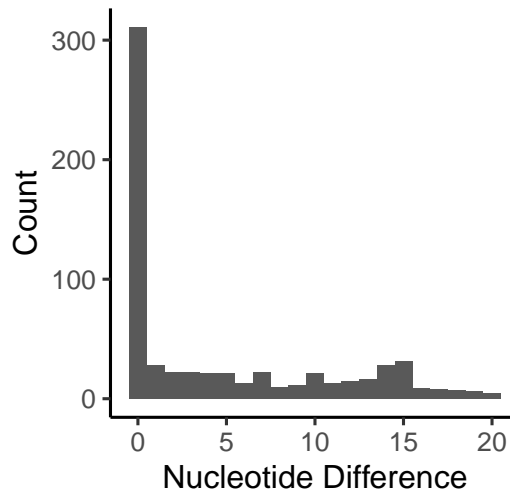
IGHV3-30-3*03

30 sequences assigned
2 (6.7%) exact matches, in which:
2 unique CDR3
1 unique J



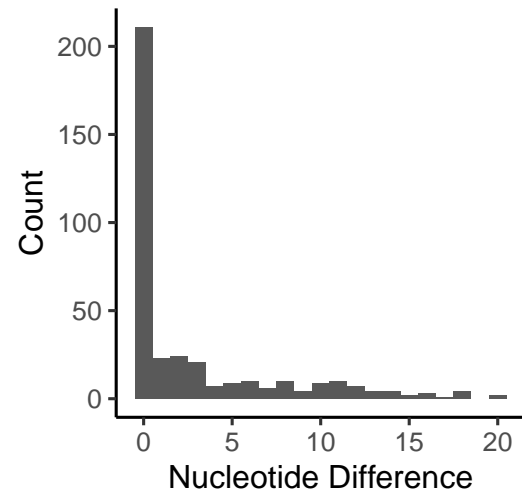
IGHV3-48*01

699 sequences assigned
311 (44.5%) exact matches, in which:
185 unique CDR3
6 unique J



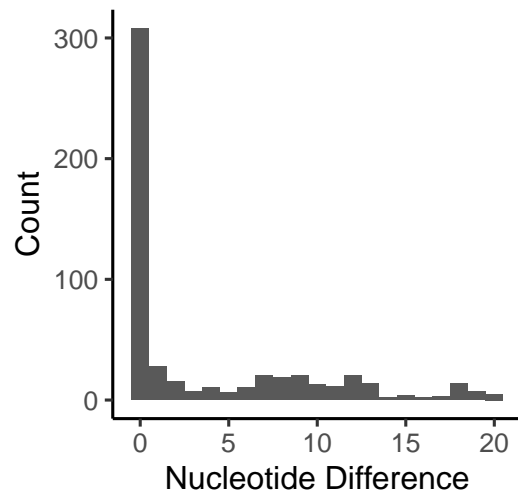
IGHV3-53*01_02

387 sequences assigned
211 (54.5%) exact matches, in which:
130 unique CDR3
7 unique J



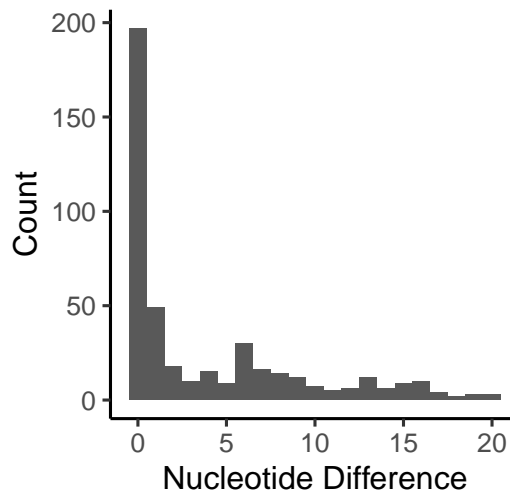
IGHV3-33*01

600 sequences assigned
308 (51.3%) exact matches, in which:
193 unique CDR3
7 unique J



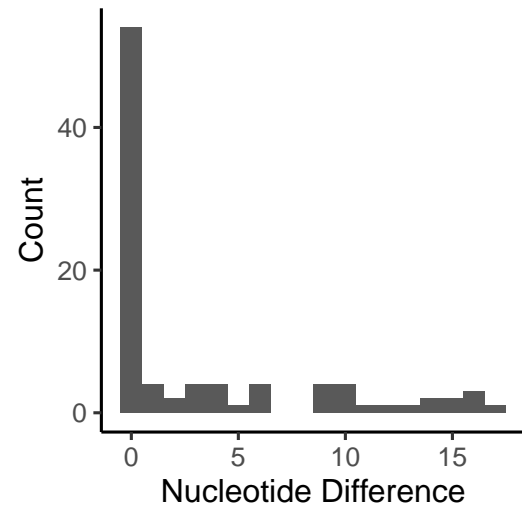
IGHV3-48*02

448 sequences assigned
197 (44%) exact matches, in which:
115 unique CDR3
6 unique J



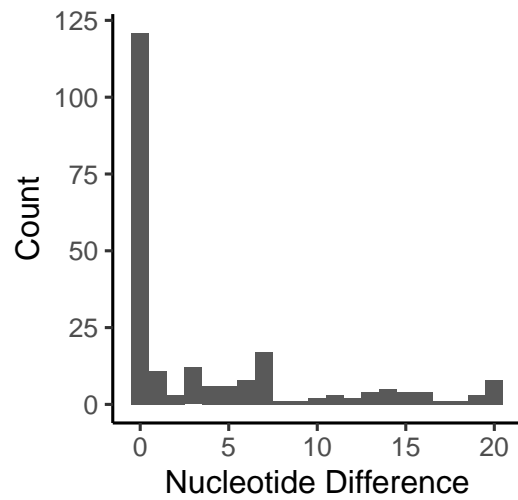
IGHV3-64*01

102 sequences assigned
54 (52.9%) exact matches, in which:
33 unique CDR3
5 unique J



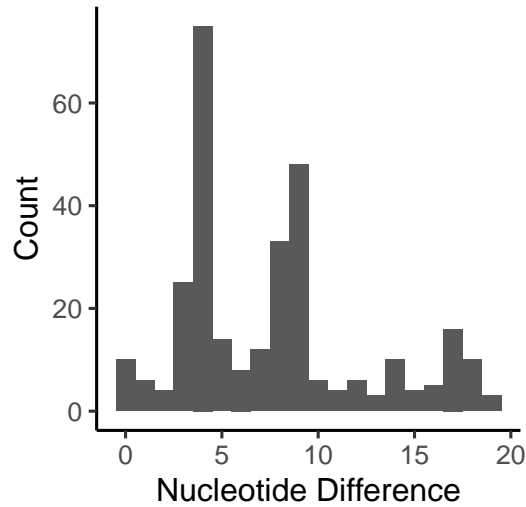
IGHV3-66*01

287 sequences assigned
121 (42.2%) exact matches, in which:
71 unique CDR3
4 unique J



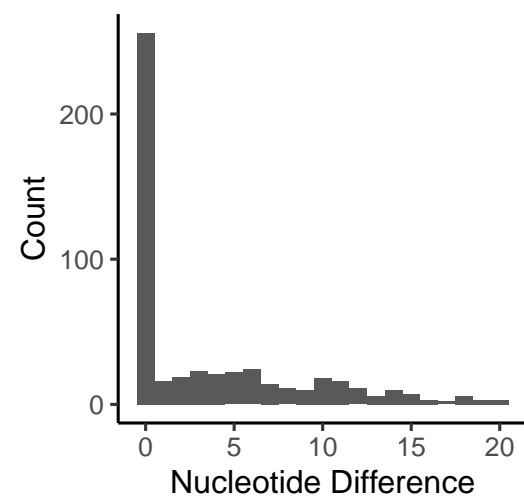
IGHV3-72*01

304 sequences assigned
10 (3.3%) exact matches, in which:
7 unique CDR3
5 unique J



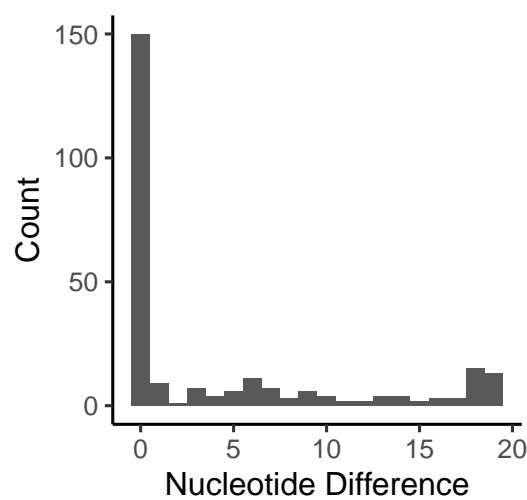
IGHV3-74*01_02

535 sequences assigned
256 (47.9%) exact matches, in which:
158 unique CDR3
5 unique J



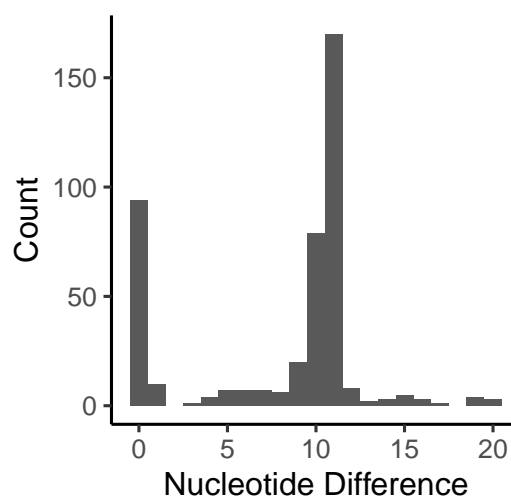
IGHV3-66*02

281 sequences assigned
150 (53.4%) exact matches, in which:
95 unique CDR3
6 unique J



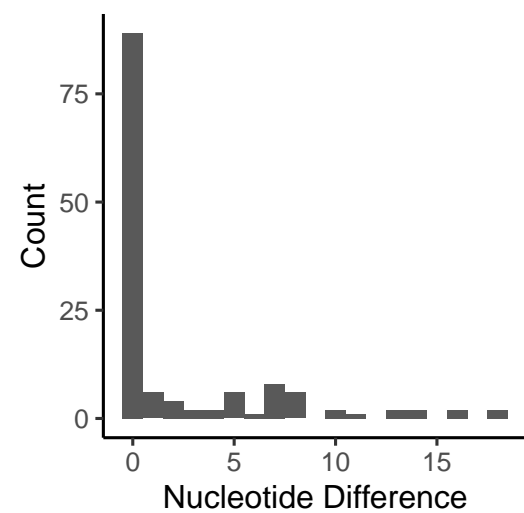
IGHV3-73*01_02

439 sequences assigned
94 (21.4%) exact matches, in which:
56 unique CDR3
7 unique J



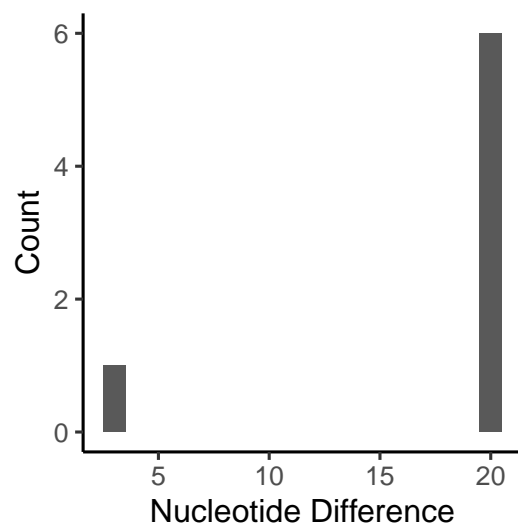
IGHV3-64D*06

161 sequences assigned
89 (55.3%) exact matches, in which:
48 unique CDR3
7 unique J



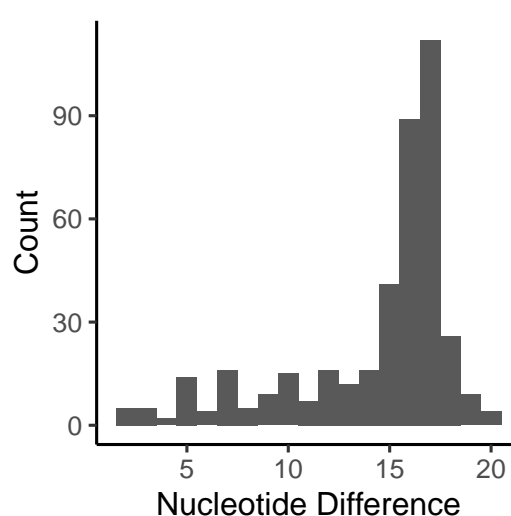
IGHV3-69-1*01

13 sequences assigned
No exact matches.



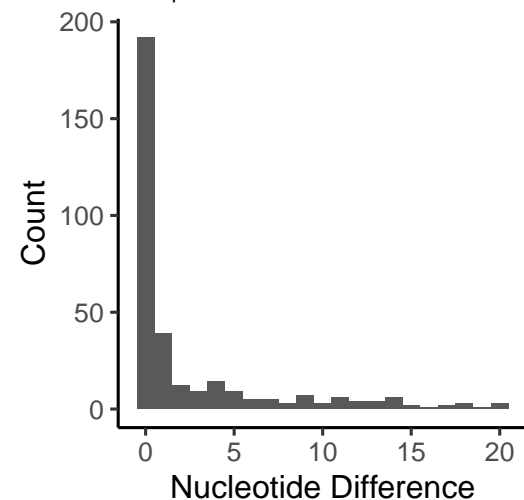
IGHV3-74*03

464 sequences assigned
No exact matches.



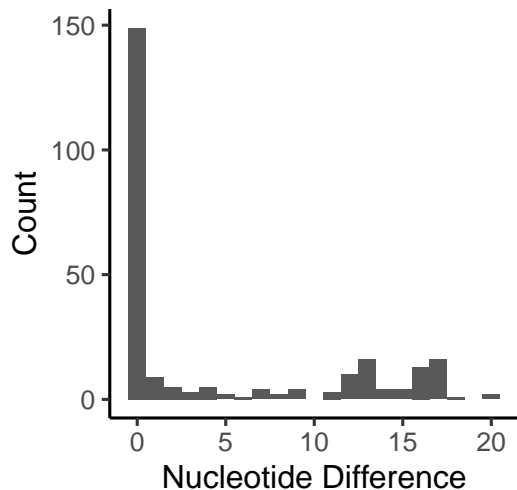
IGHV4-4*07

373 sequences assigned
192 (51.5%) exact matches, in which:
186 unique CDR3
7 unique J



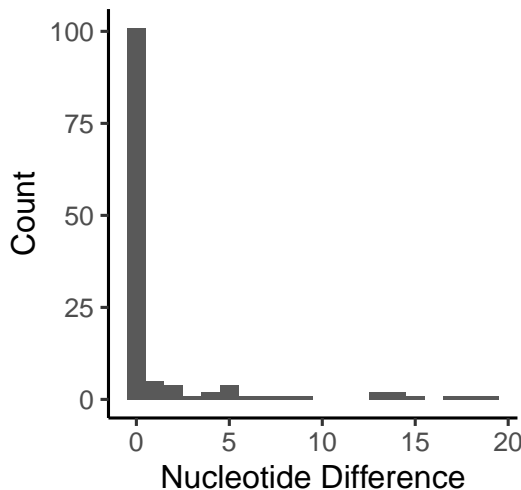
IGHV4-4*02_03

293 sequences assigned
149 (50.9%) exact matches, in which:
145 unique CDR3
7 unique J



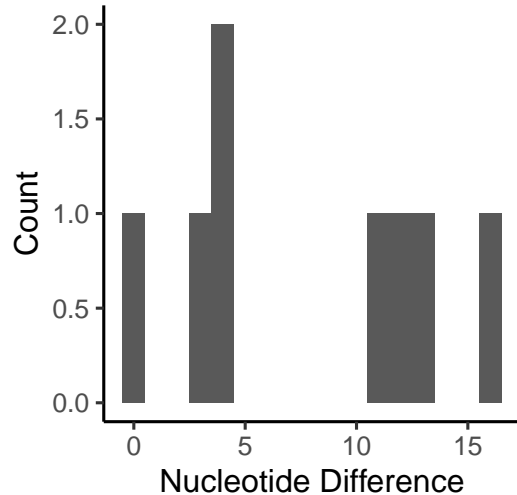
IGHV4-30-2*01

143 sequences assigned
101 (70.6%) exact matches, in which:
92 unique CDR3
6 unique J



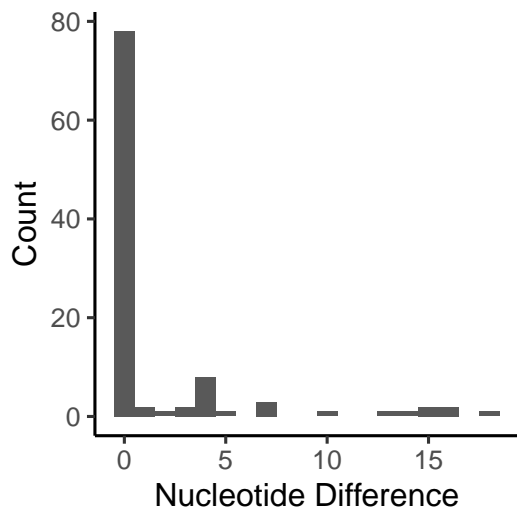
IGHV4-31*02

11 sequences assigned
1 (9.1%) exact matches, in which:
1 unique CDR3
1 unique J



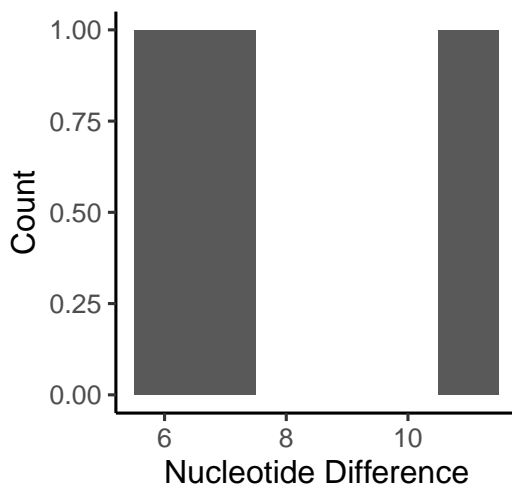
IGHV4-4*07_G234A_G291A

104 sequences assigned
78 (75%) exact matches, in which:
78 unique CDR3
7 unique J



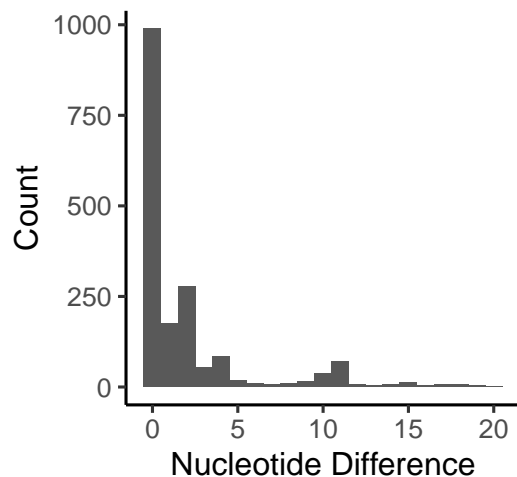
IGHV4-30-4*07

3 sequences assigned
No exact matches.



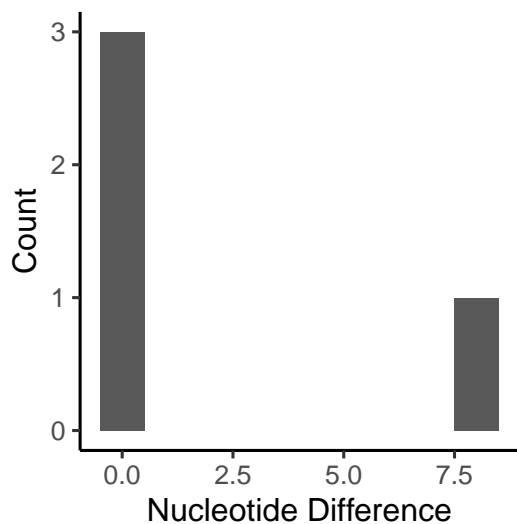
IGHV4-34*01_02

1872 sequences assigned
989 (52.8%) exact matches, in which:
928 unique CDR3
7 unique J



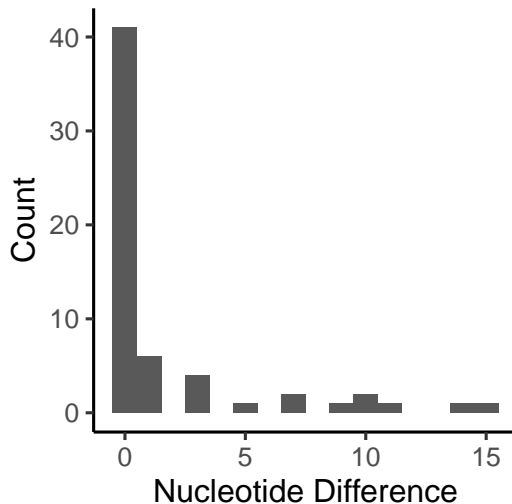
IGHV4-28*01_07

4 sequences assigned
3 (75%) exact matches, in which:
3 unique CDR3
2 unique J



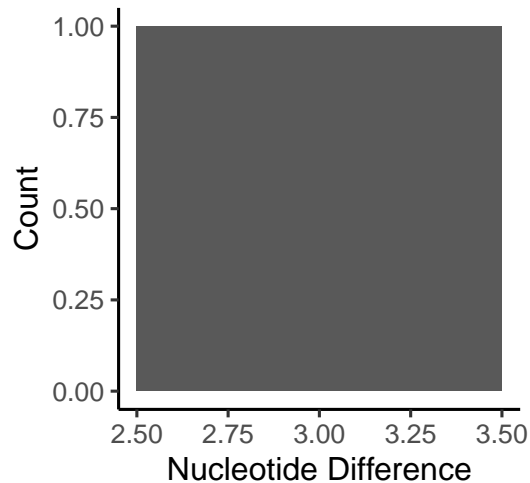
IGHV4-31*01

61 sequences assigned
41 (67.2%) exact matches, in which:
39 unique CDR3
6 unique J



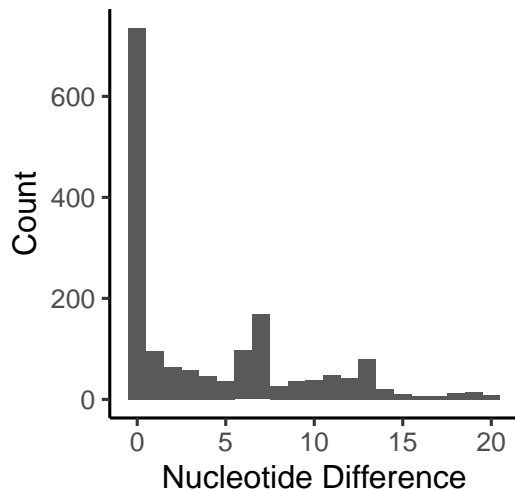
IGHV4-38-2*02

1 sequences assigned
No exact matches.



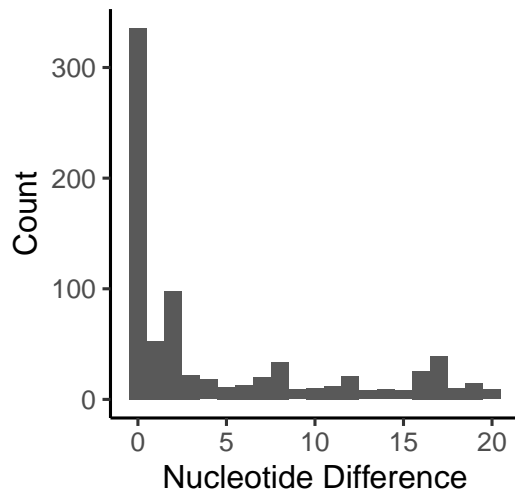
IGHV4–39*02_C258G

1795 sequences assigned
736 (41%) exact matches, in which:
694 unique CDR3
7 unique J



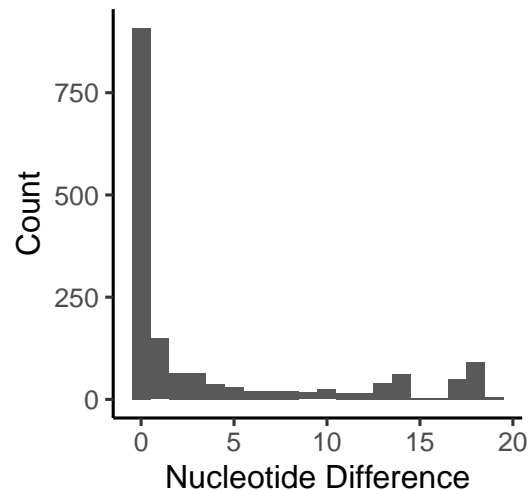
IGHV4–61*02

861 sequences assigned
336 (39%) exact matches, in which:
329 unique CDR3
7 unique J



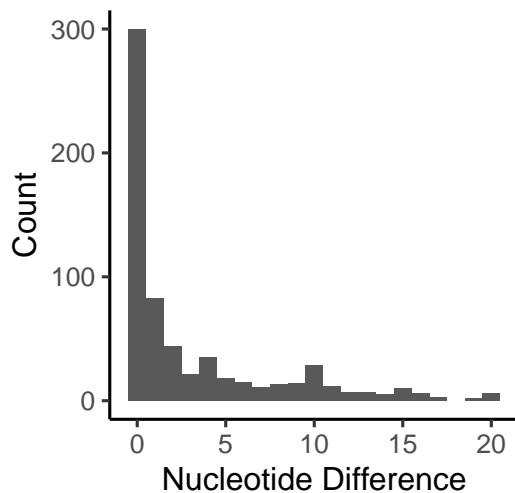
IGHV5–51*07_A128G

1734 sequences assigned
909 (52.4%) exact matches, in which:
616 unique CDR3
7 unique J



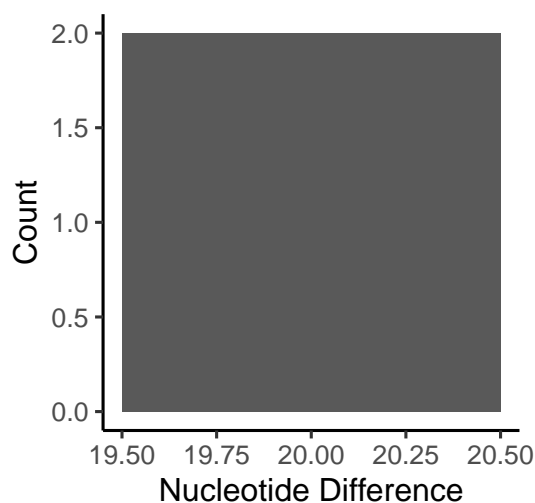
IGHV4–59*08

733 sequences assigned
300 (40.9%) exact matches, in which:
290 unique CDR3
7 unique J



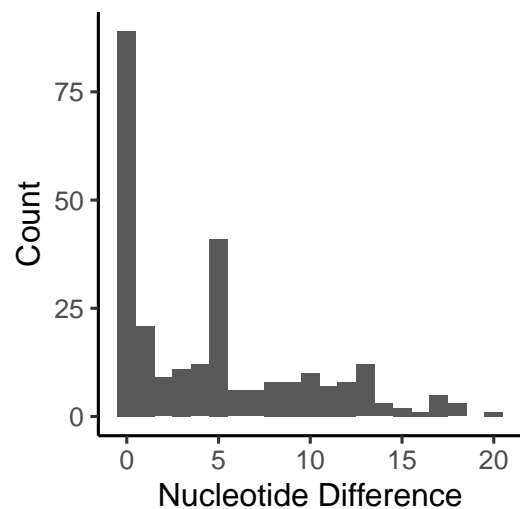
IGHV4/OR15–8*02

2 sequences assigned
No exact matches.



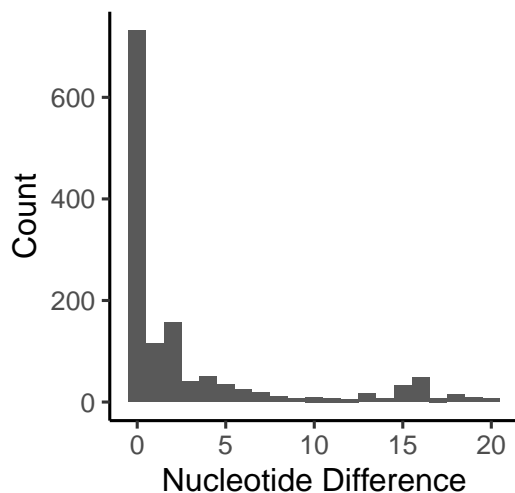
IGHV6–1*01_02

263 sequences assigned
89 (33.8%) exact matches, in which:
89 unique CDR3
7 unique J



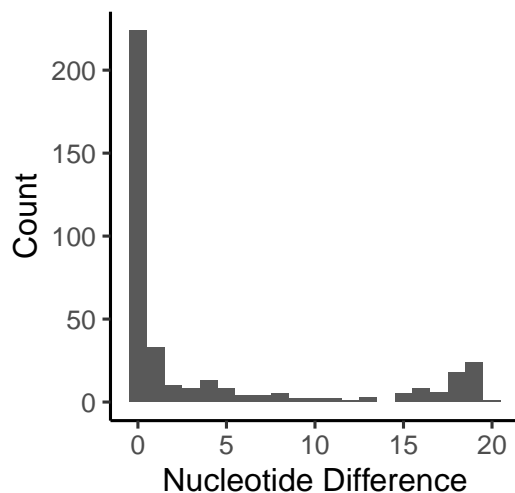
IGHV4–59*02_G88A

1557 sequences assigned
732 (47%) exact matches, in which:
702 unique CDR3
7 unique J



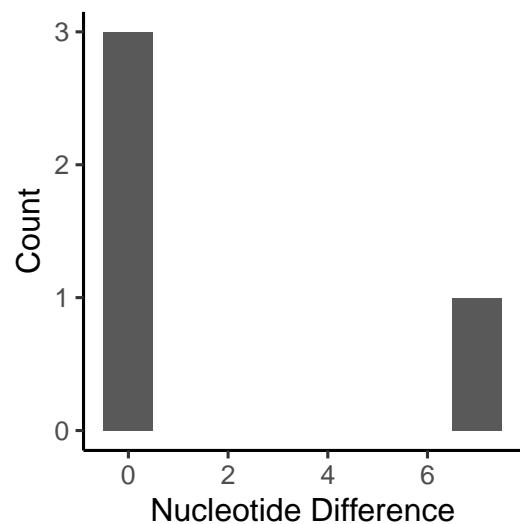
IGHV5–10–1*01_03

402 sequences assigned
224 (55.7%) exact matches, in which:
160 unique CDR3
7 unique J

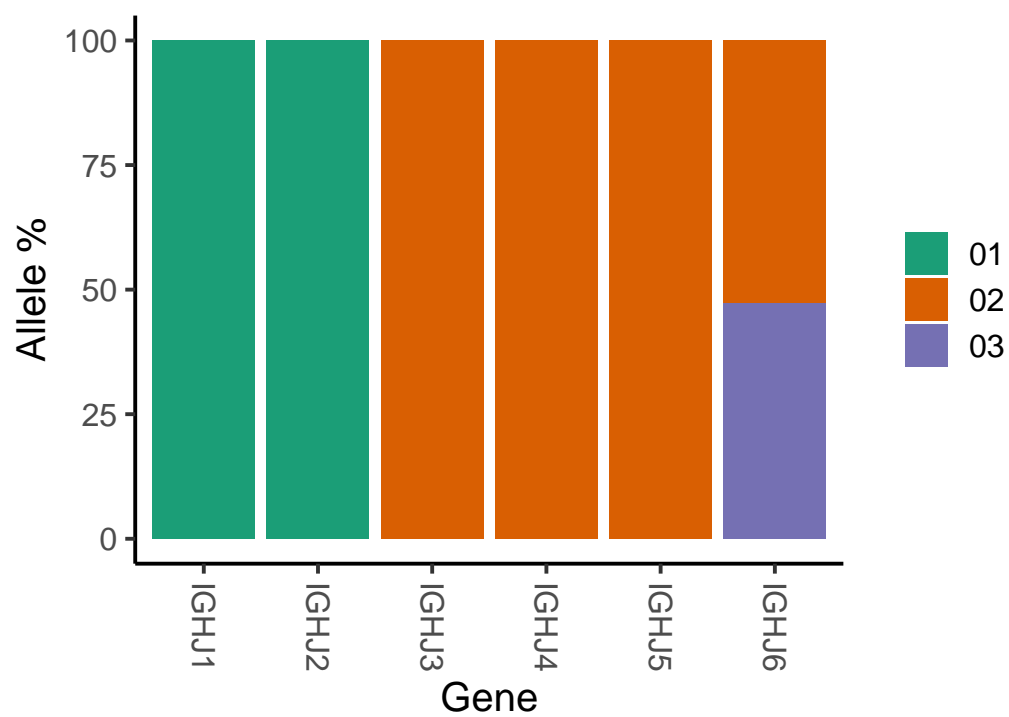


IGHV7–4–1*01

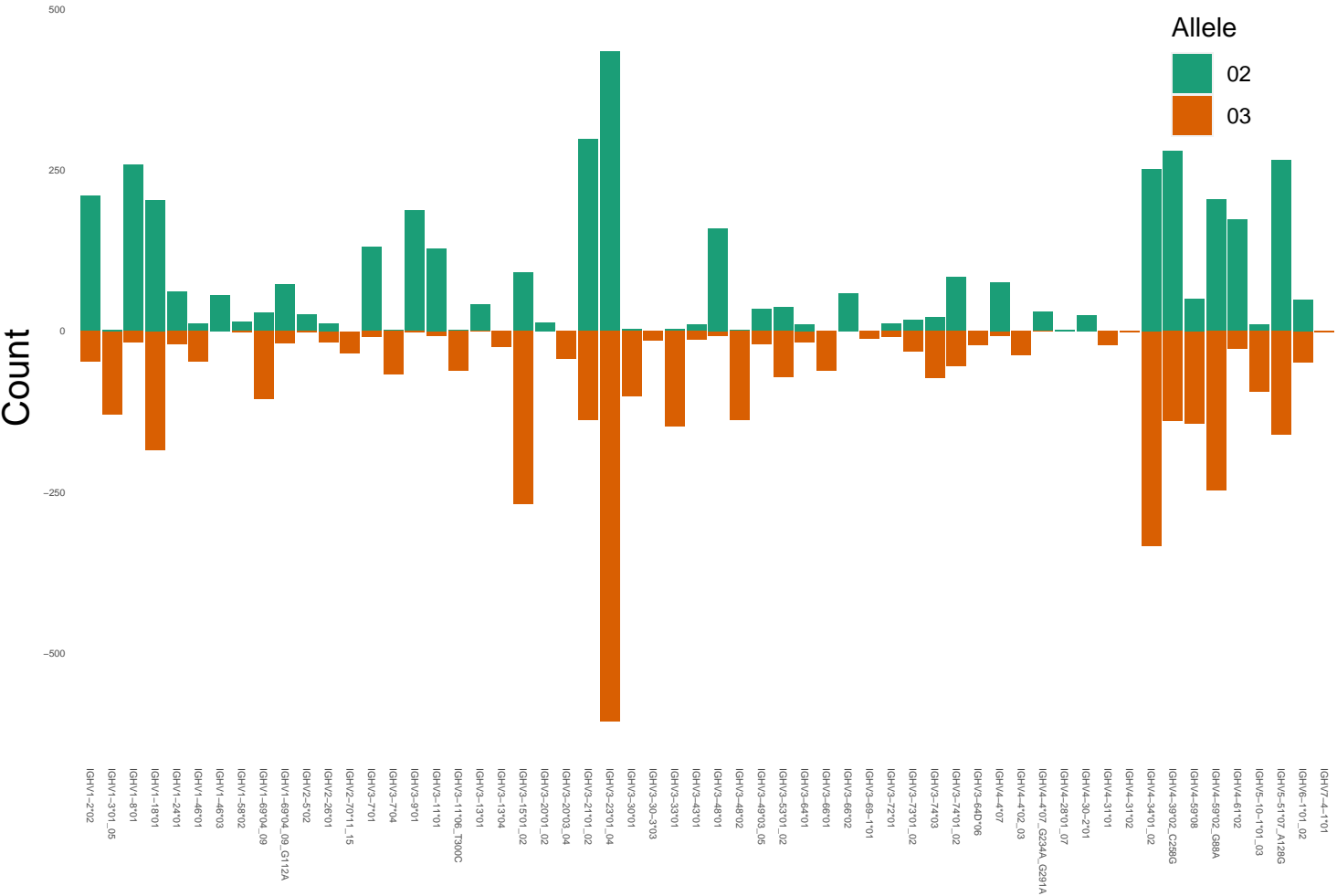
4 sequences assigned
3 (75%) exact matches, in which:
3 unique CDR3
2 unique J



Allele Usage



Sequence Count byIGHJ6 allele usage



Warning – no inferred sequences found.