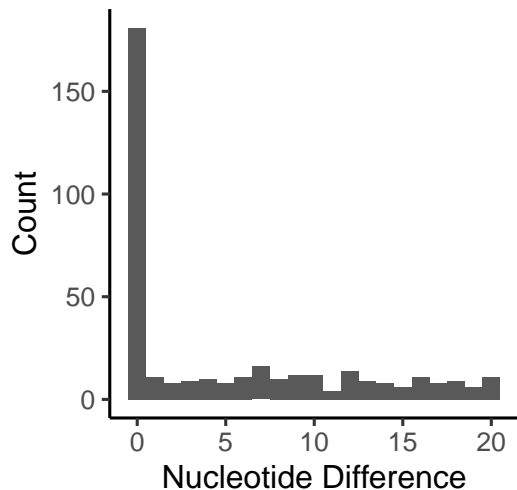


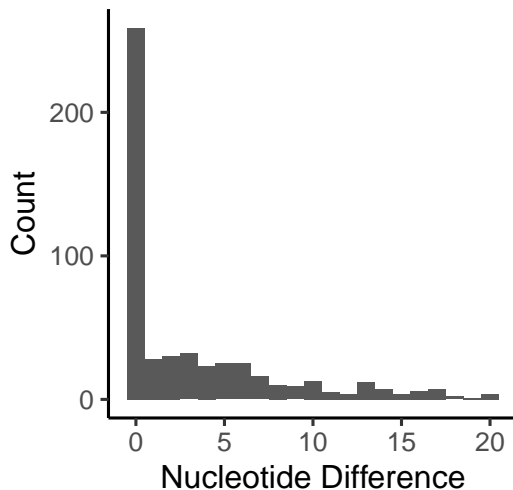
IGHV1-2*02

403 sequences assigned
181 (44.9%) exact matches, in which:
181 unique CDR3
6 unique J



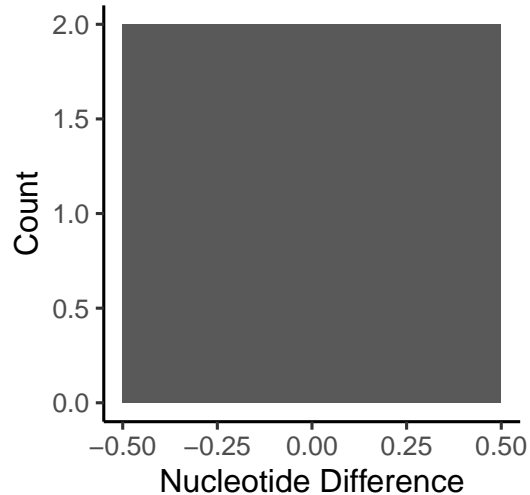
IGHV1-8*01

554 sequences assigned
259 (46.8%) exact matches, in which:
258 unique CDR3
6 unique J



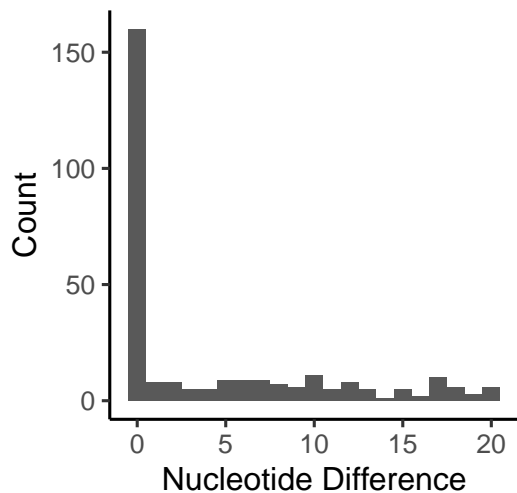
IGHV1-45*02

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



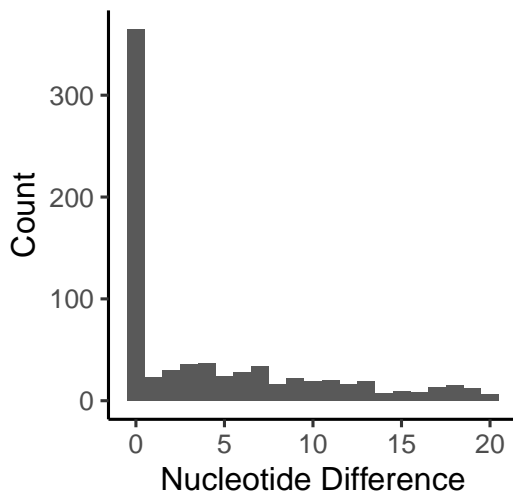
IGHV1-2*06

352 sequences assigned
160 (45.5%) exact matches, in which:
160 unique CDR3
6 unique J



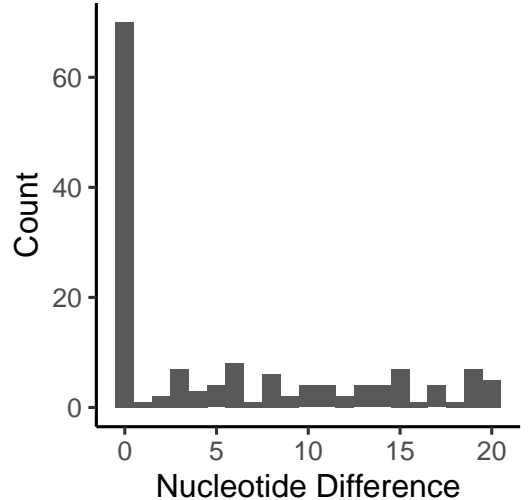
IGHV1-18*01

842 sequences assigned
365 (43.3%) exact matches, in which:
364 unique CDR3
7 unique J



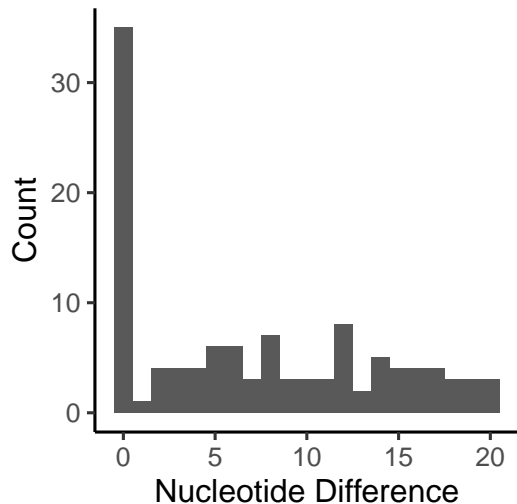
IGHV1-46*01

178 sequences assigned
70 (39.3%) exact matches, in which:
68 unique CDR3
6 unique J



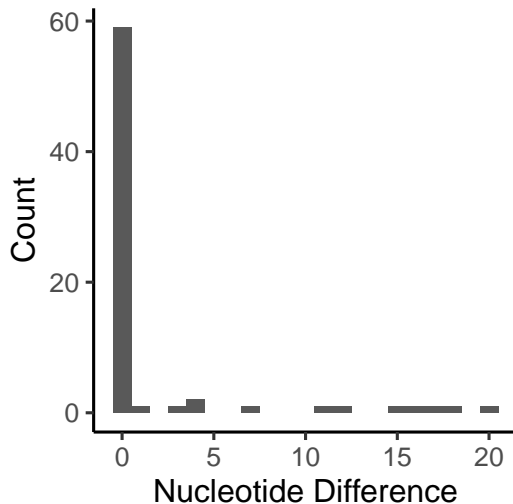
IGHV1-3*01_05

135 sequences assigned
35 (25.9%) exact matches, in which:
34 unique CDR3
4 unique J



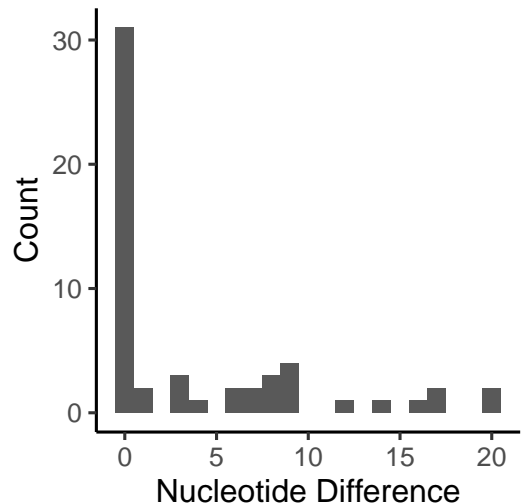
IGHV1-24*01

74 sequences assigned
59 (79.7%) exact matches, in which:
59 unique CDR3
7 unique J



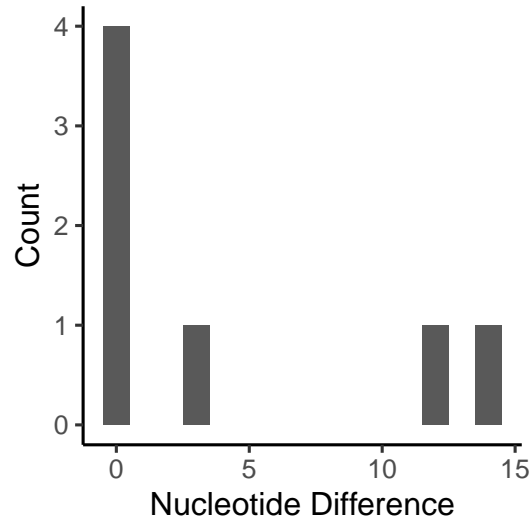
IGHV1-46*03

60 sequences assigned
31 (51.7%) exact matches, in which:
31 unique CDR3
5 unique J



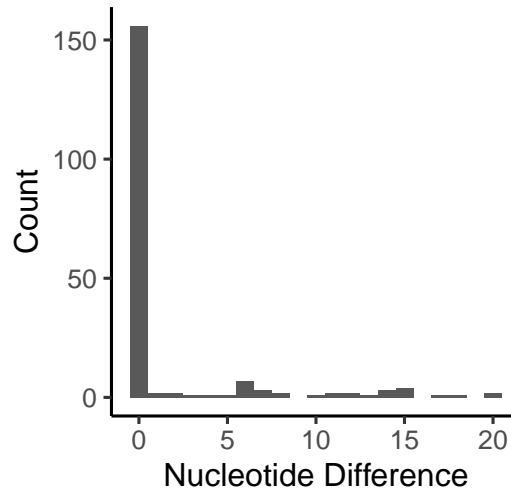
IGHV1-58*02

7 sequences assigned
4 (57.1%) exact matches, in which:
4 unique CDR3
2 unique J



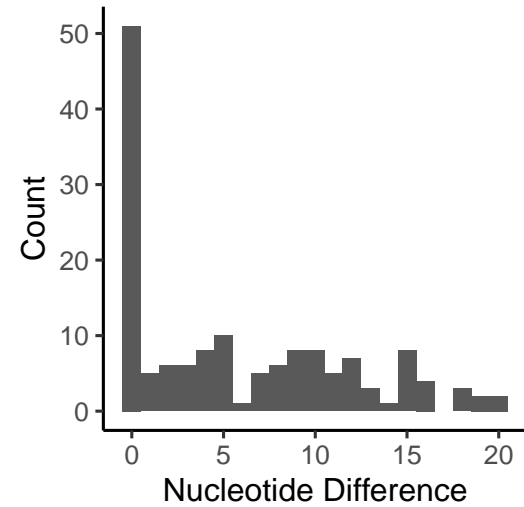
IGHV1-69*01_12_13

204 sequences assigned
156 (76.5%) exact matches, in which:
155 unique CDR3
6 unique J



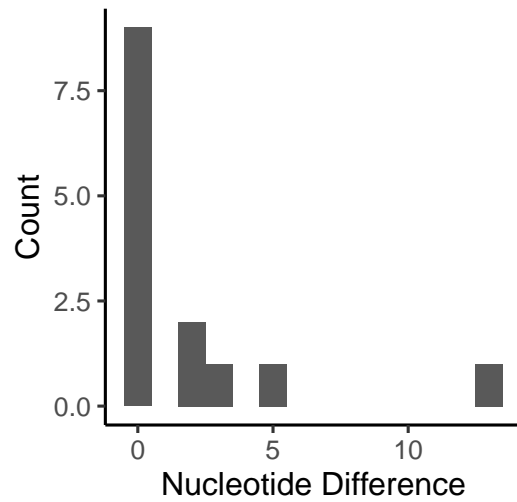
IGHV2-5*02

156 sequences assigned
51 (32.7%) exact matches, in which:
51 unique CDR3
6 unique J



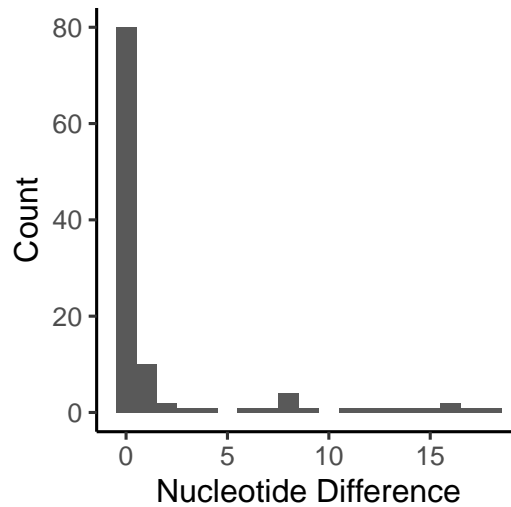
IGHV1-58*01_03

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



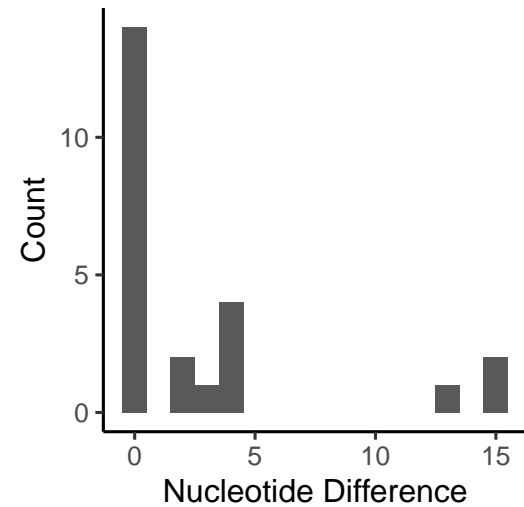
IGHV1-69*04_09

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



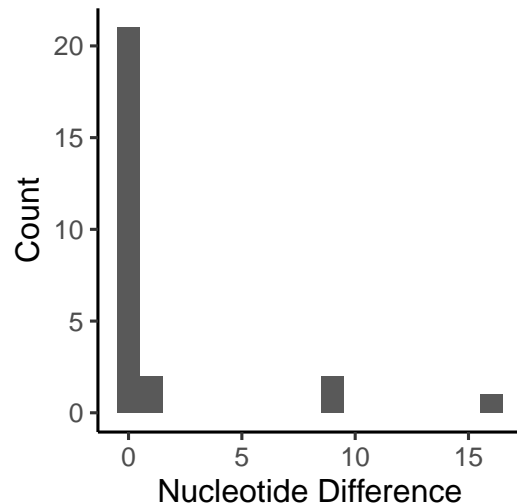
IGHV2-26*01

26 sequences assigned
14 (53.8%) exact matches, in which:
14 unique CDR3
5 unique J



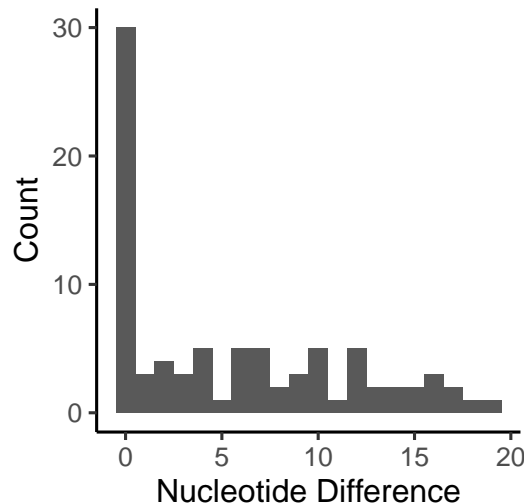
IGHV1-69*02

31 sequences assigned
21 (67.7%) exact matches, in which:
21 unique CDR3
6 unique J



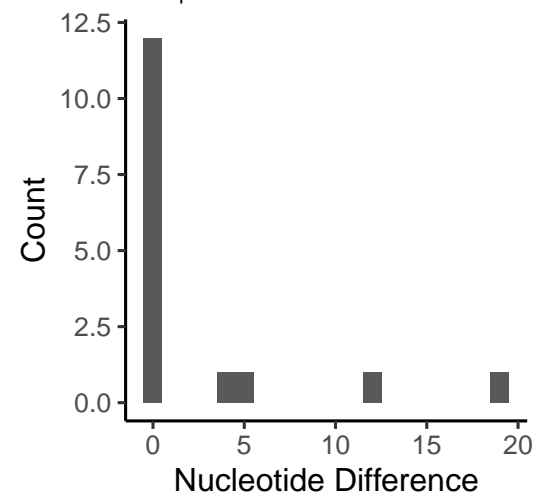
IGHV2-5*01

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



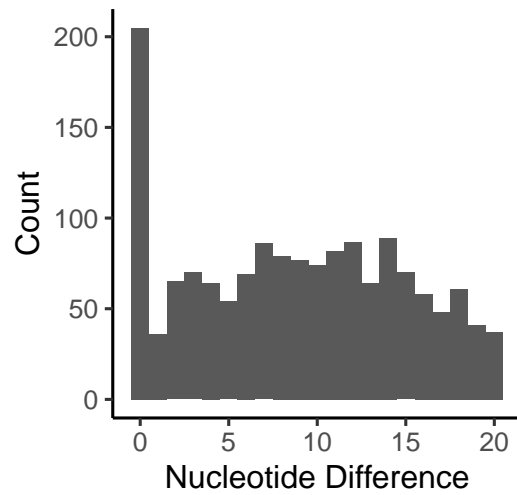
IGHV2-70*01

17 sequences assigned
12 (70.6%) exact matches, in which:
11 unique CDR3
3 unique J



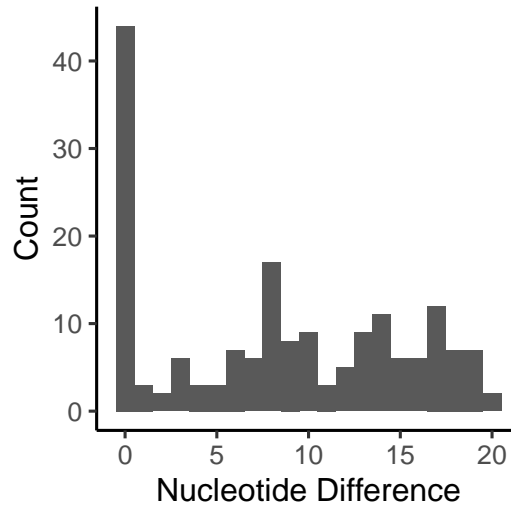
IGHV3-7*01

1699 sequences assigned
205 (12.1%) exact matches, in which:
198 unique CDR3
7 unique J



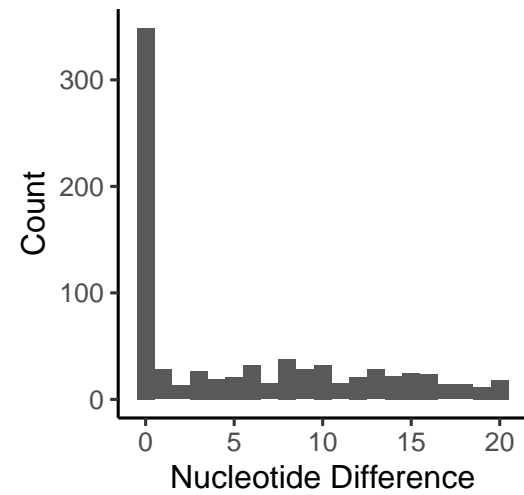
IGHV3-13*01

191 sequences assigned
44 (23%) exact matches, in which:
43 unique CDR3
6 unique J



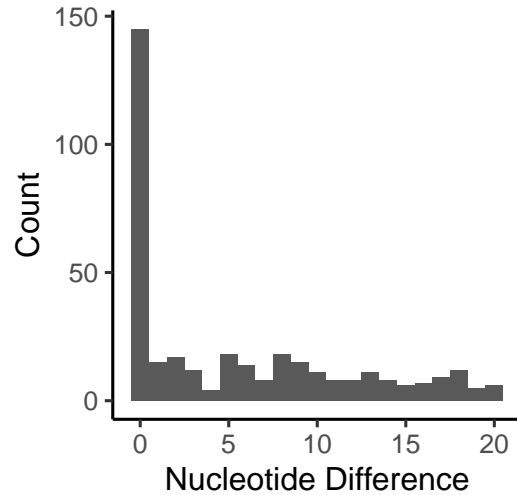
IGHV3-21*01_02

873 sequences assigned
349 (40%) exact matches, in which:
342 unique CDR3
7 unique J



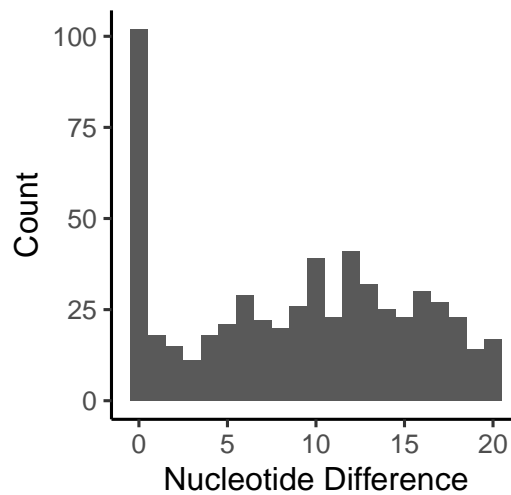
IGHV3-9*01

414 sequences assigned
145 (35%) exact matches, in which:
142 unique CDR3
7 unique J



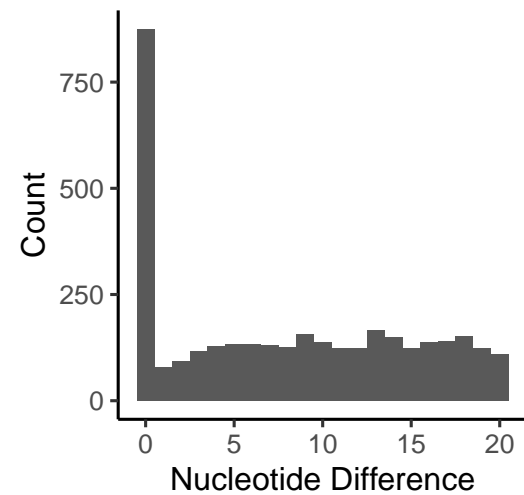
IGHV3-15*01_02

656 sequences assigned
102 (15.5%) exact matches, in which:
100 unique CDR3
7 unique J



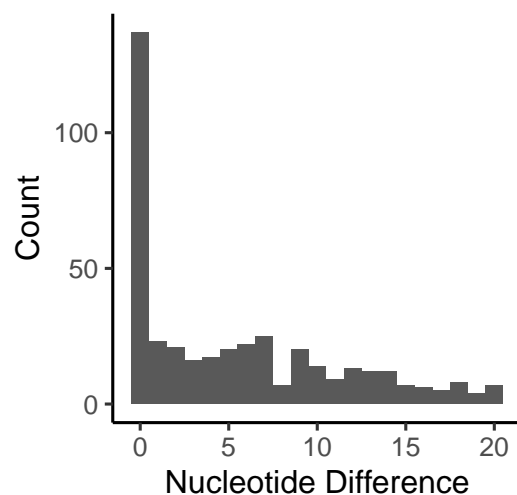
IGHV3-23*01_04

4217 sequences assigned
875 (20.7%) exact matches, in which:
843 unique CDR3
7 unique J



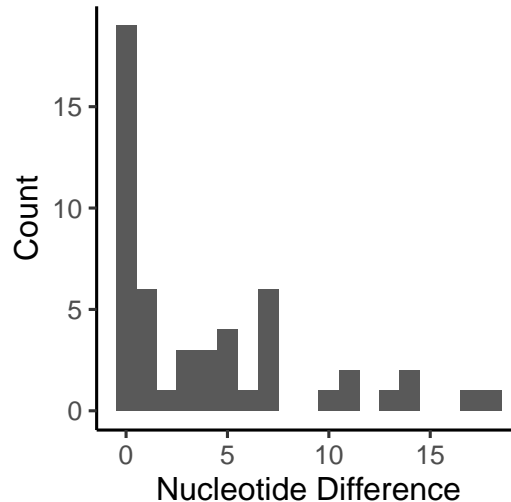
IGHV3-11*01

465 sequences assigned
137 (29.5%) exact matches, in which:
135 unique CDR3
7 unique J



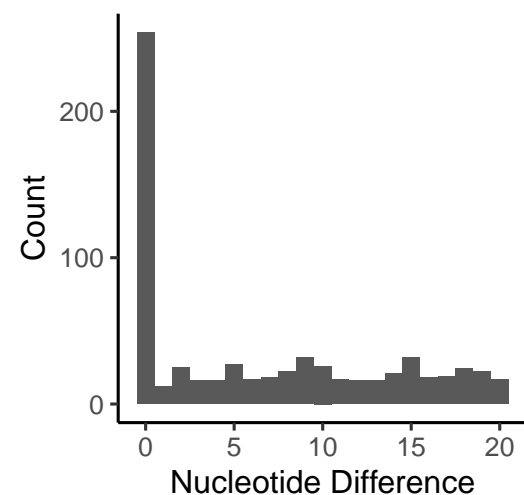
IGHV3-20*01_02

53 sequences assigned
19 (35.8%) exact matches, in which:
19 unique CDR3
6 unique J



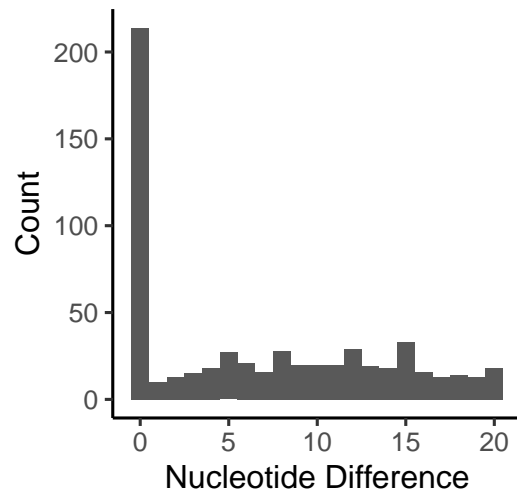
IGHV3-30-3*01

833 sequences assigned
254 (30.5%) exact matches, in which:
254 unique CDR3
7 unique J



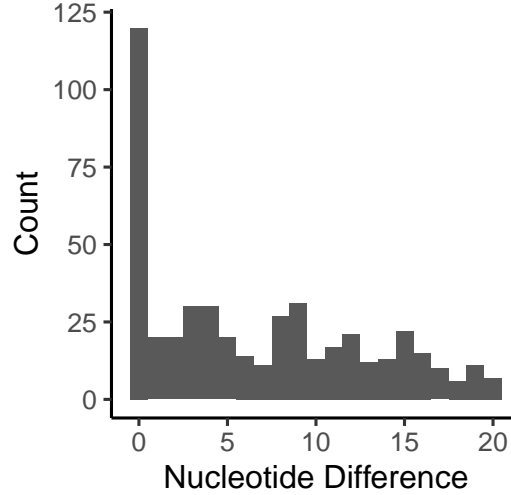
IGHV3-33*01

693 sequences assigned
214 (30.9%) exact matches, in which:
210 unique CDR3
7 unique J



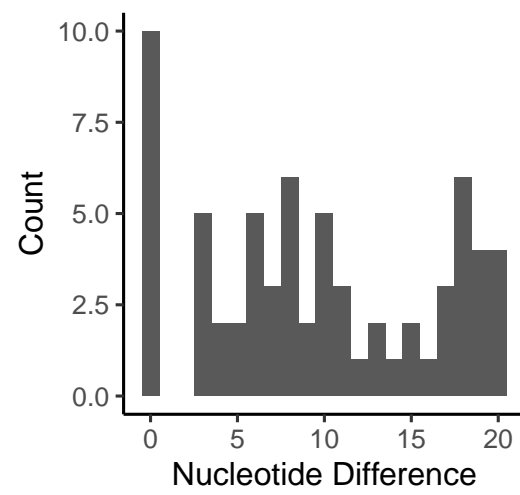
IGHV3-48*02

526 sequences assigned
120 (22.8%) exact matches, in which:
111 unique CDR3
5 unique J



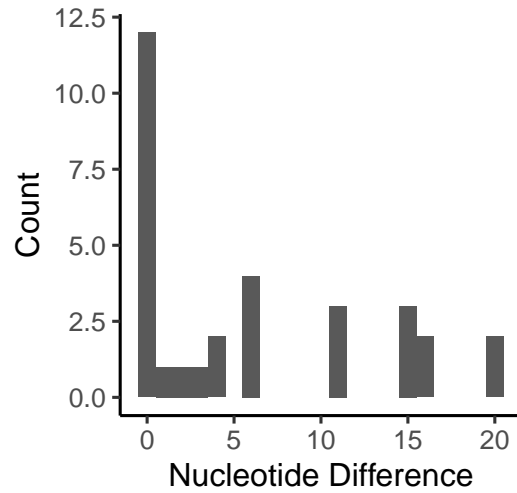
IGHV3-64*01

68 sequences assigned
10 (14.7%) exact matches, in which:
9 unique CDR3
3 unique J



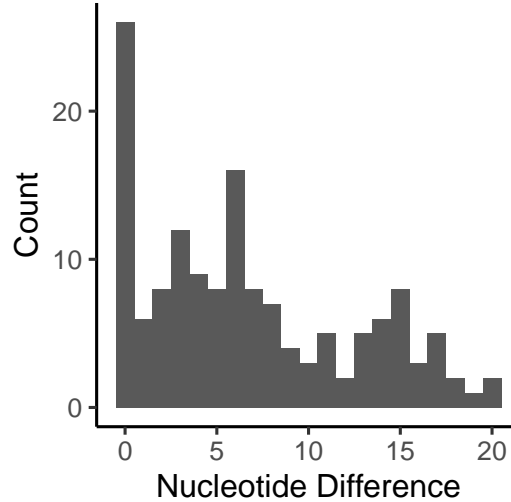
IGHV3-43*01

41 sequences assigned
12 (29.3%) exact matches, in which:
12 unique CDR3
4 unique J



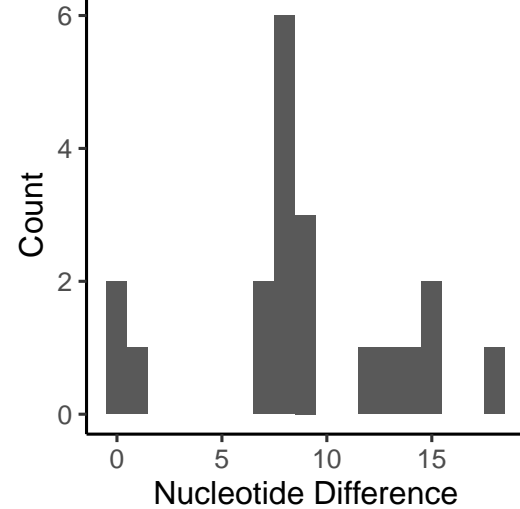
IGHV3-49*03_05

169 sequences assigned
26 (15.4%) exact matches, in which:
26 unique CDR3
5 unique J



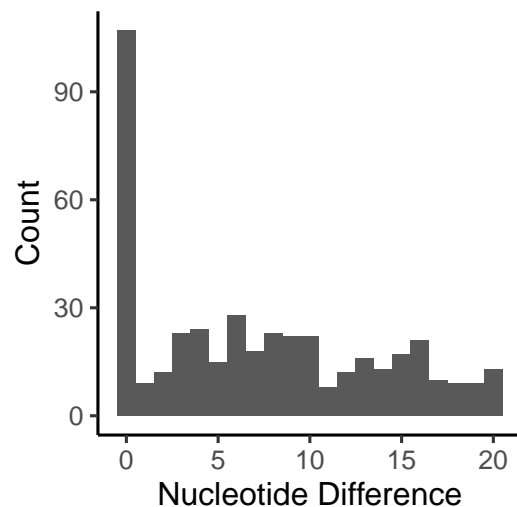
IGHV3-64*02_07

22 sequences assigned
2 (9.1%) exact matches, in which:
2 unique CDR3
1 unique J



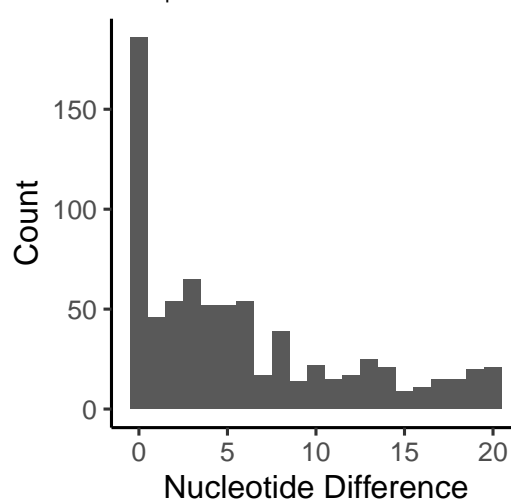
IGHV3-48*01

481 sequences assigned
107 (22.2%) exact matches, in which:
98 unique CDR3
6 unique J



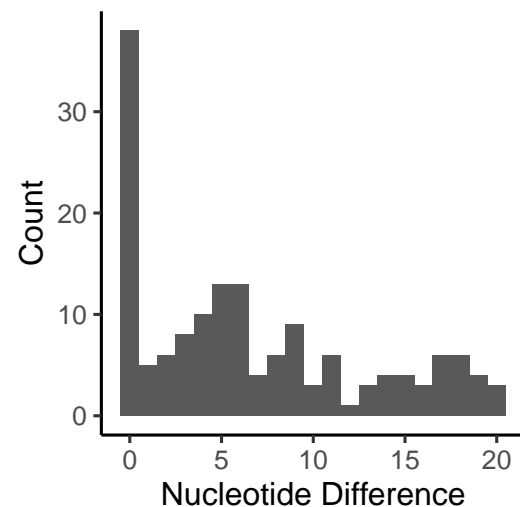
IGHV3-53*01_02

855 sequences assigned
186 (21.8%) exact matches, in which:
176 unique CDR3
6 unique J



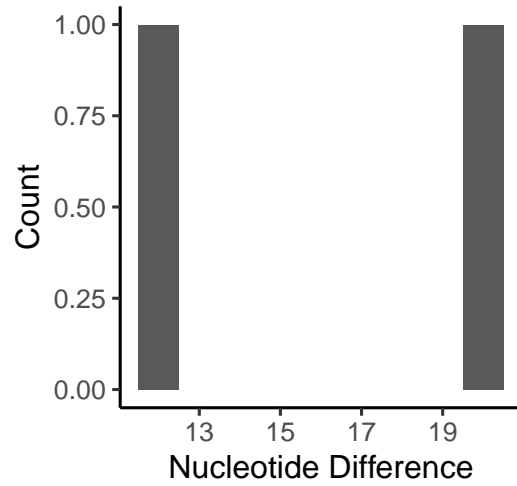
IGHV3-66*02

190 sequences assigned
38 (20%) exact matches, in which:
37 unique CDR3
4 unique J



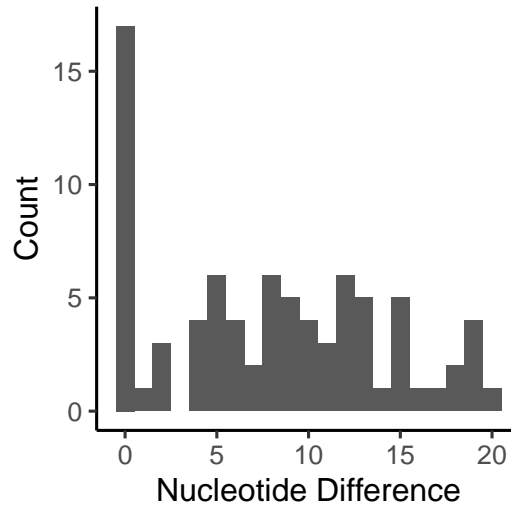
IGHV3-69-1*01

2 sequences assigned
No exact matches.



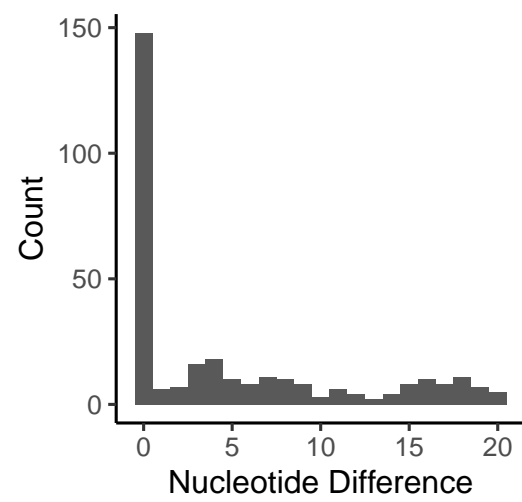
IGHV3-73*01_02

89 sequences assigned
17 (19.1%) exact matches, in which:
17 unique CDR3
3 unique J



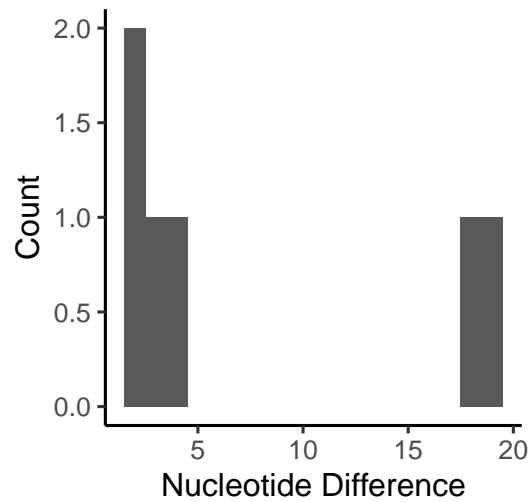
IGHV4-4*07

358 sequences assigned
148 (41.3%) exact matches, in which:
145 unique CDR3
6 unique J



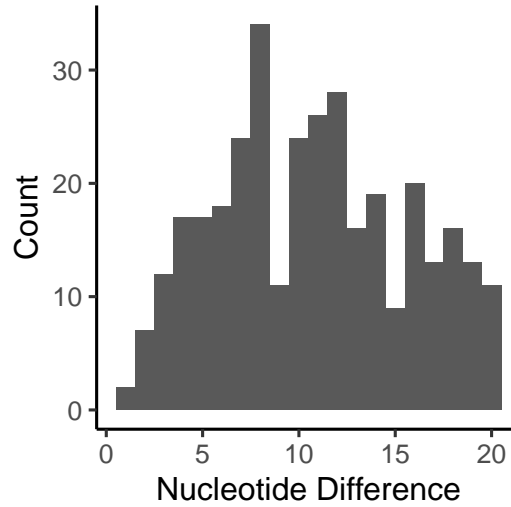
IGHV3-69-1*02

10 sequences assigned
No exact matches.



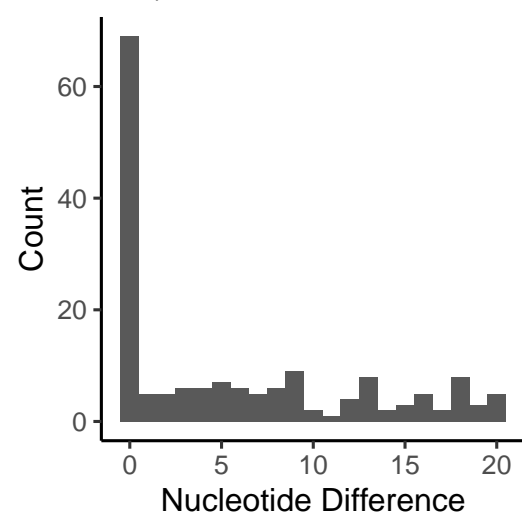
IGHV3-74*03

386 sequences assigned
No exact matches.



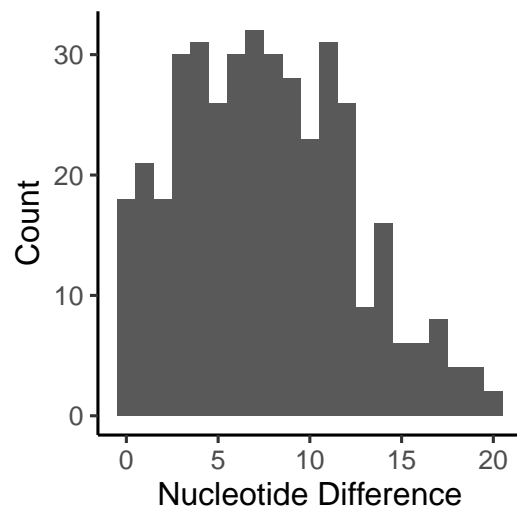
IGHV4-4*02_03

236 sequences assigned
69 (29.2%) exact matches, in which:
69 unique CDR3
4 unique J



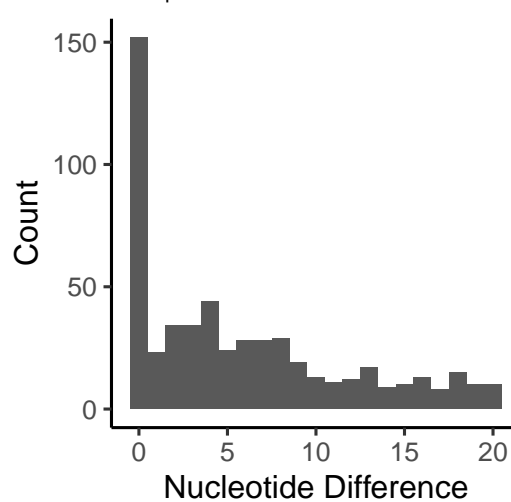
IGHV3-72*01

411 sequences assigned
18 (4.4%) exact matches, in which:
14 unique CDR3
5 unique J



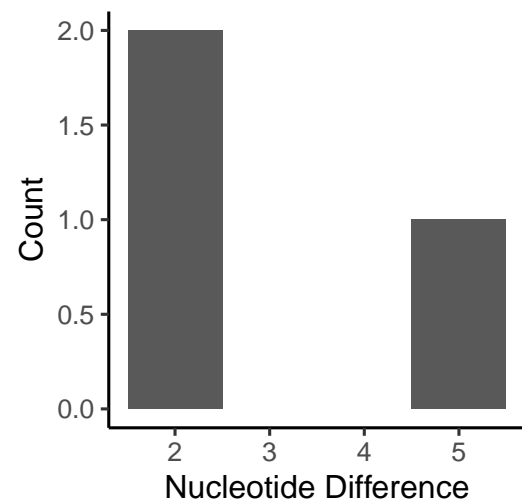
IGHV3-74*01_02

593 sequences assigned
152 (25.6%) exact matches, in which:
142 unique CDR3
7 unique J



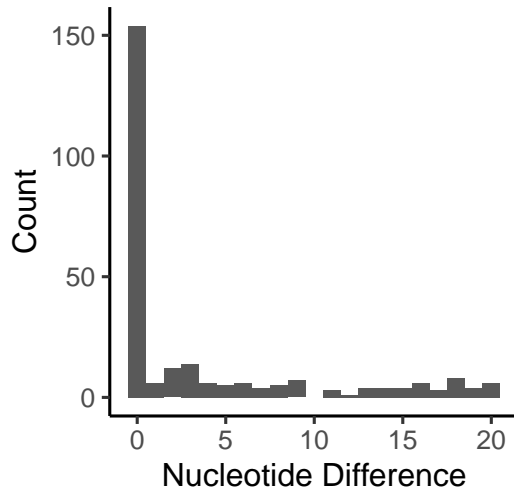
IGHV4-28*01_07

3 sequences assigned
No exact matches.



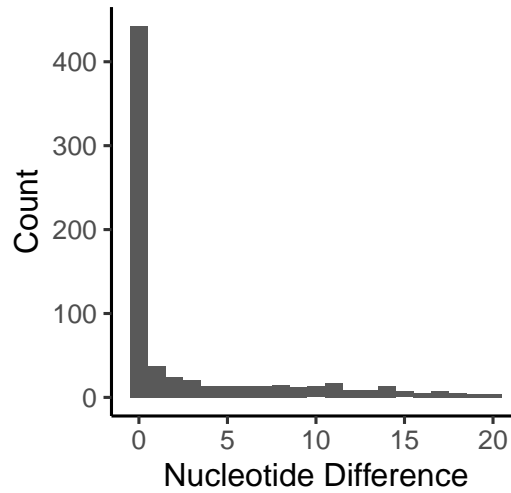
IGHV4-30-4*01

307 sequences assigned
154 (50.2%) exact matches, in which:
151 unique CDR3
7 unique J



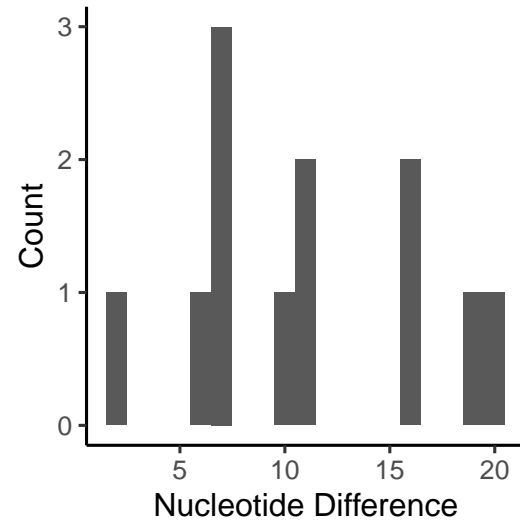
IGHV4-34*01_02

754 sequences assigned
443 (58.8%) exact matches, in which:
441 unique CDR3
7 unique J



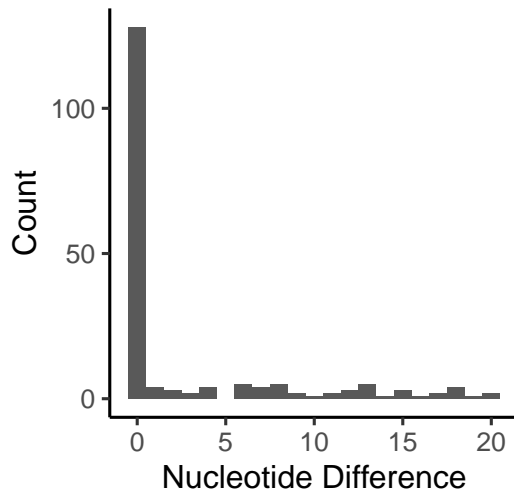
IGHV4-59*02

17 sequences assigned
No exact matches.



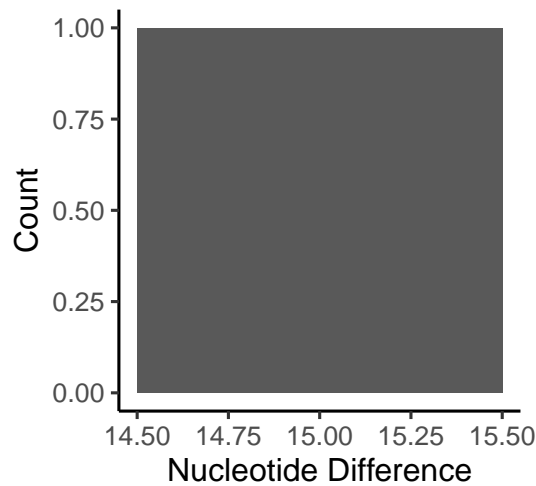
IGHV4-30-2*01

199 sequences assigned
128 (64.3%) exact matches, in which:
125 unique CDR3
6 unique J



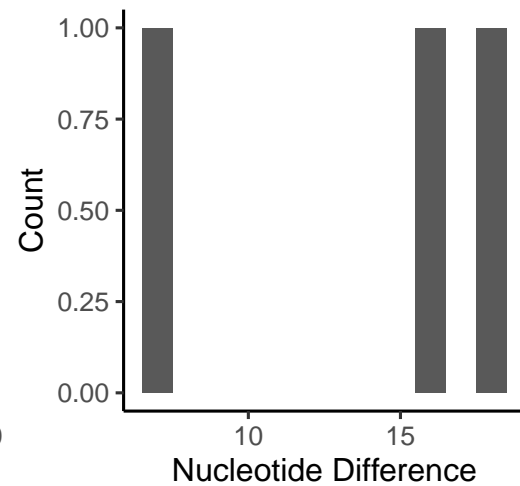
IGHV4-38-2*02

1 sequences assigned
No exact matches.



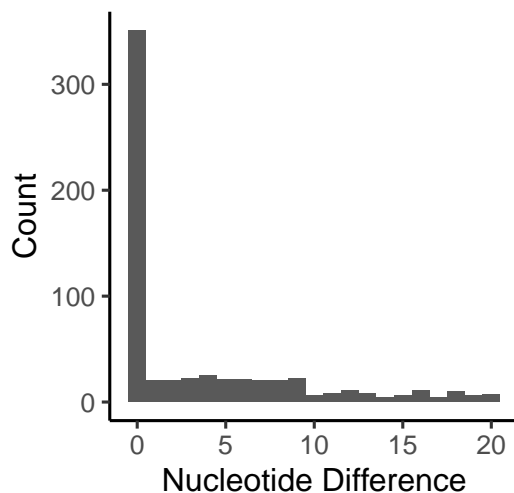
IGHV4-59*08

11 sequences assigned
No exact matches.



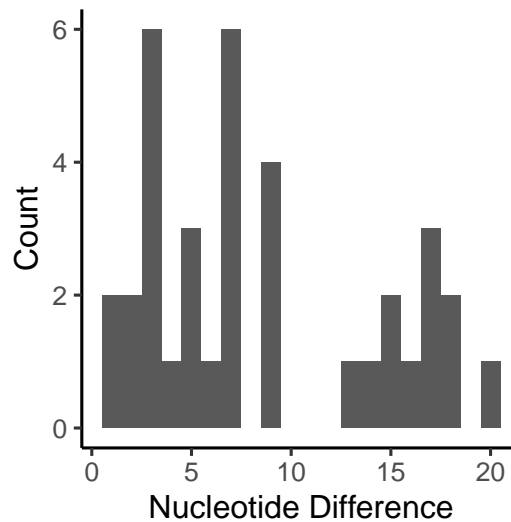
IGHV4-31*02

681 sequences assigned
351 (51.5%) exact matches, in which:
347 unique CDR3
7 unique J



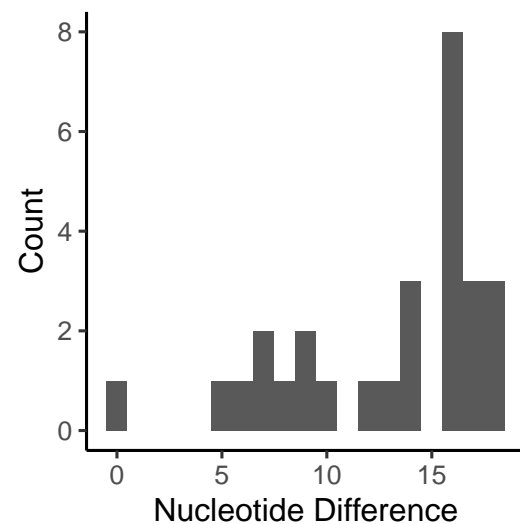
IGHV4-39*02

56 sequences assigned
No exact matches.



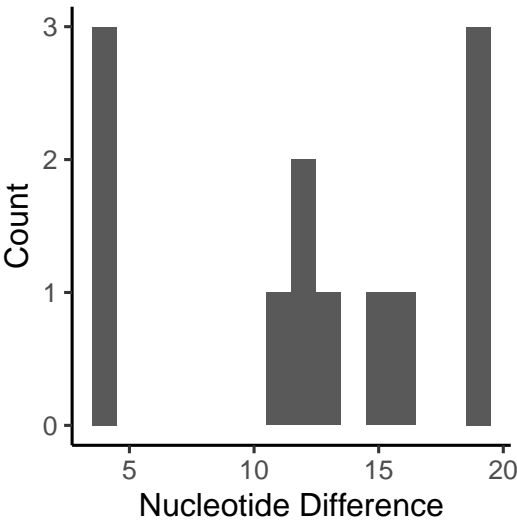
IGHV4-59*11

38 sequences assigned
1 (2.6%) exact matches, in which:
1 unique CDR3
1 unique J



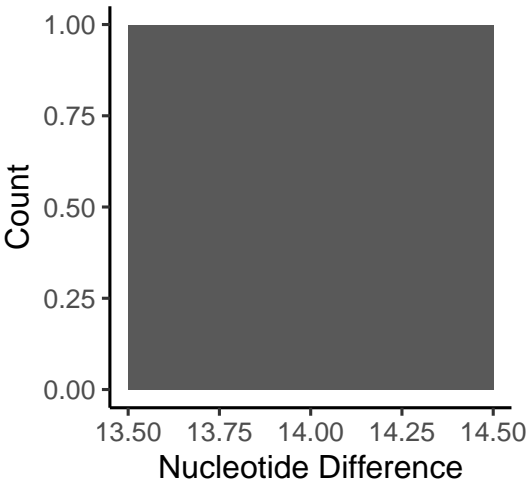
IGHV4-59*13

14 sequences assigned
No exact matches.



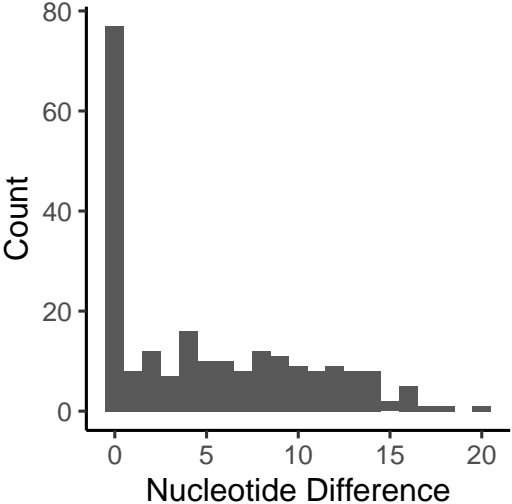
IGHV4/OR15-8*02

3 sequences assigned
No exact matches.



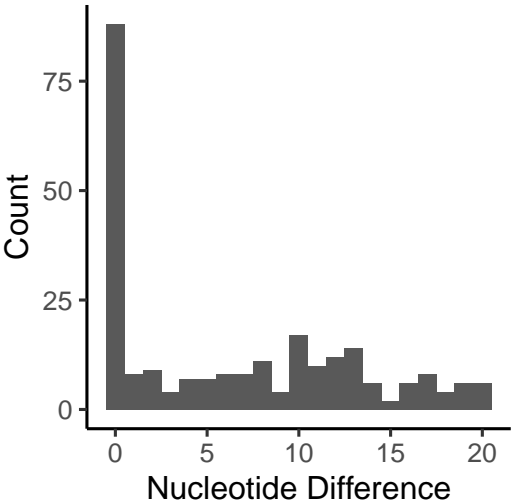
IGHV6-1*01_02

237 sequences assigned
77 (32.5%) exact matches, in which:
77 unique CDR3
6 unique J



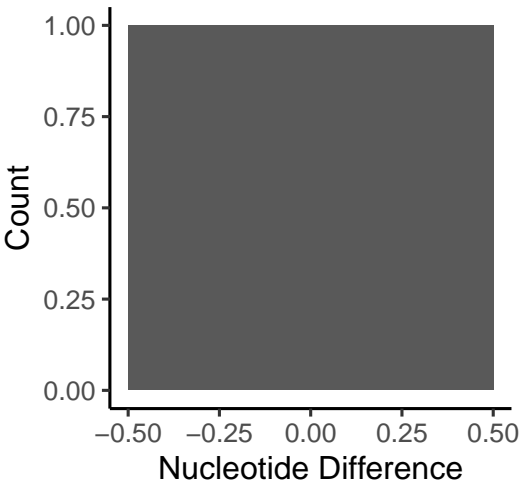
IGHV4-61*01

278 sequences assigned
88 (31.7%) exact matches, in which:
85 unique CDR3
5 unique J



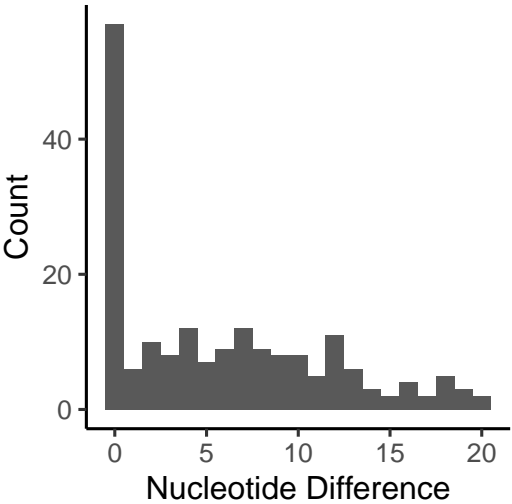
IGHV5-51*07

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



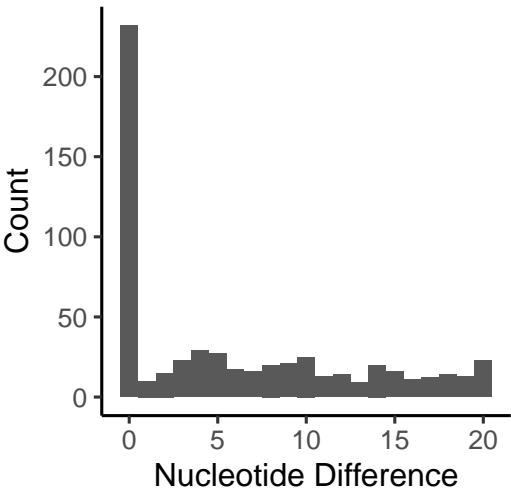
IGHV7-4-1*02

197 sequences assigned
57 (28.9%) exact matches, in which:
57 unique CDR3
6 unique J



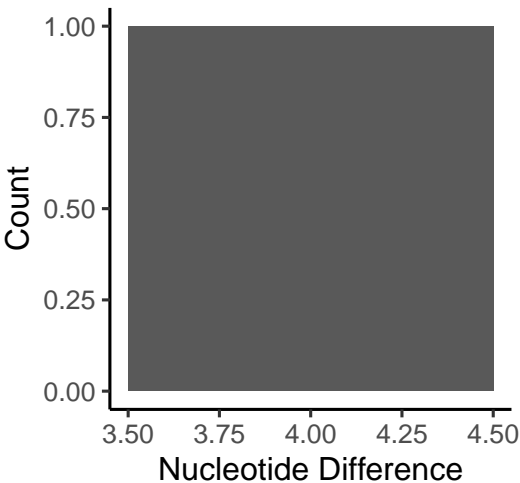
IGHV4-61*02

669 sequences assigned
232 (34.7%) exact matches, in which:
226 unique CDR3
6 unique J

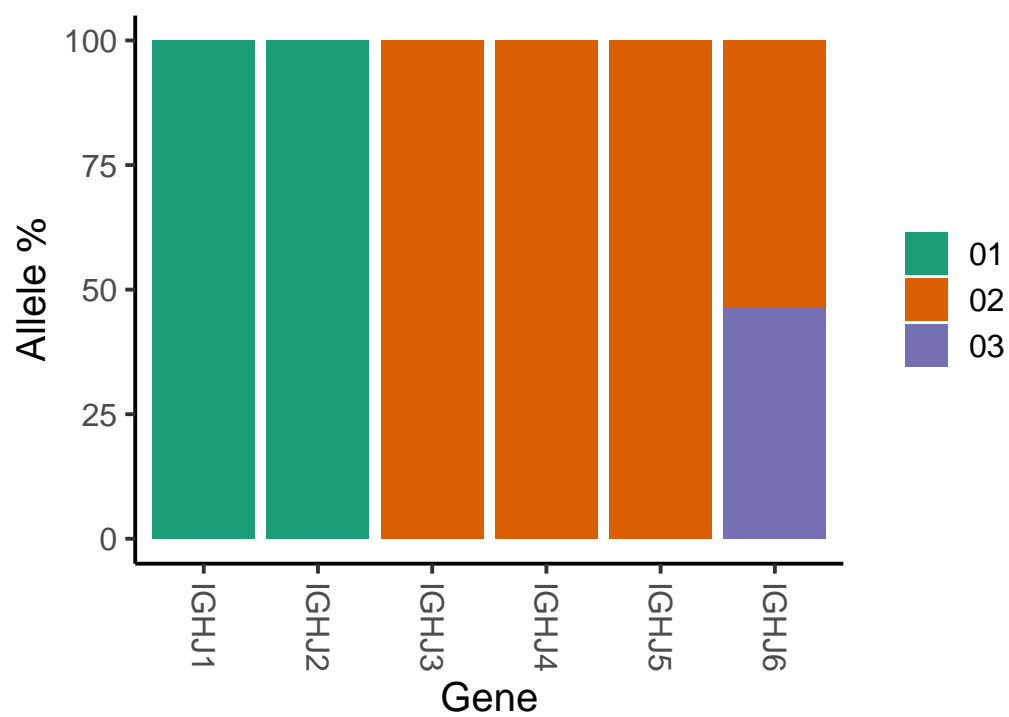


IGHV5-51*01_03

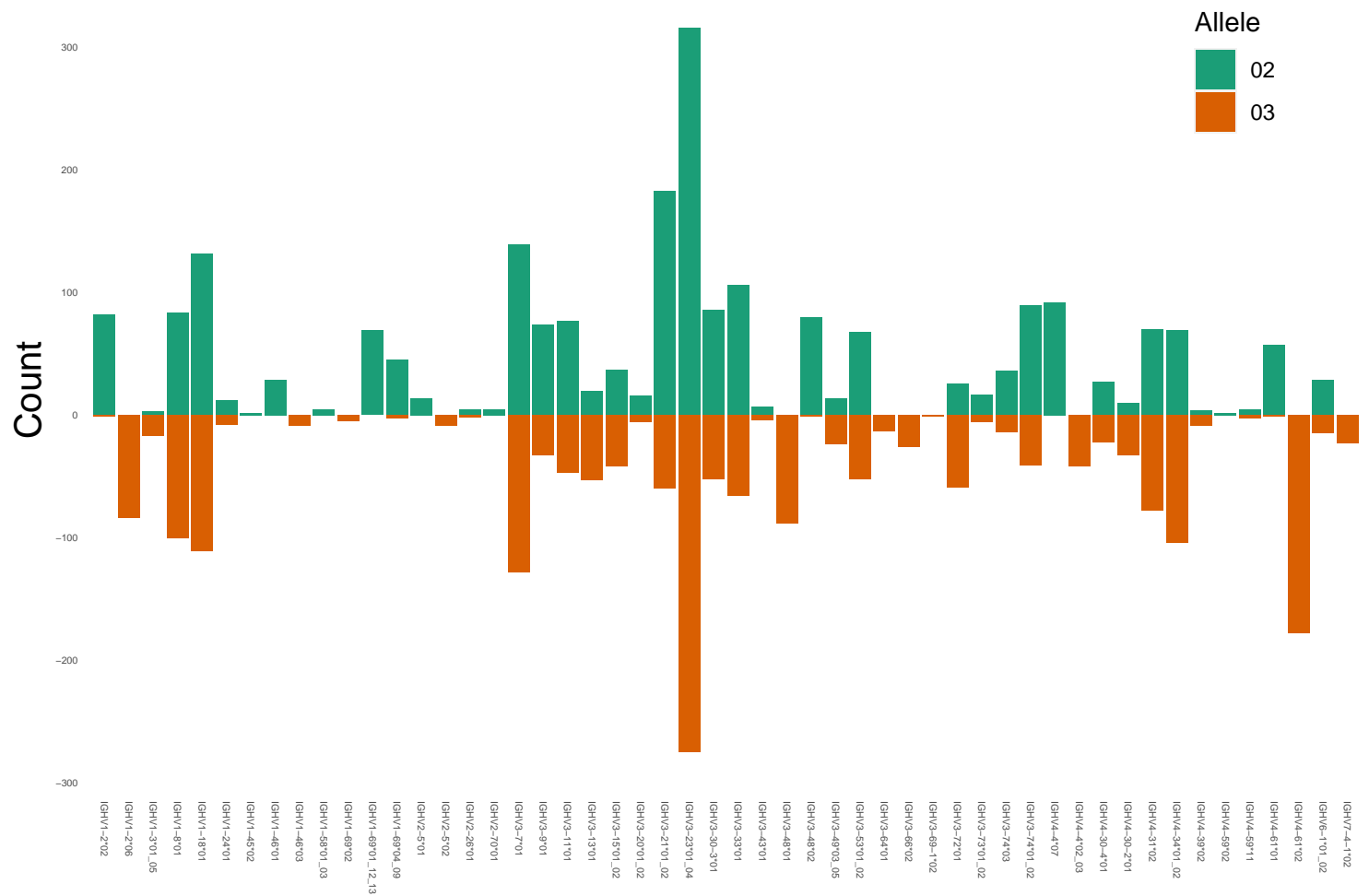
1 sequences assigned
No exact matches.



Allele Usage



Sequence Count byIGHJ6 allele usage



Warning – no inferred sequences found.