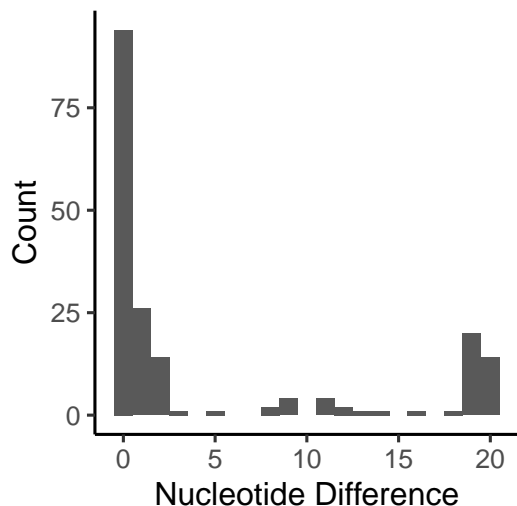


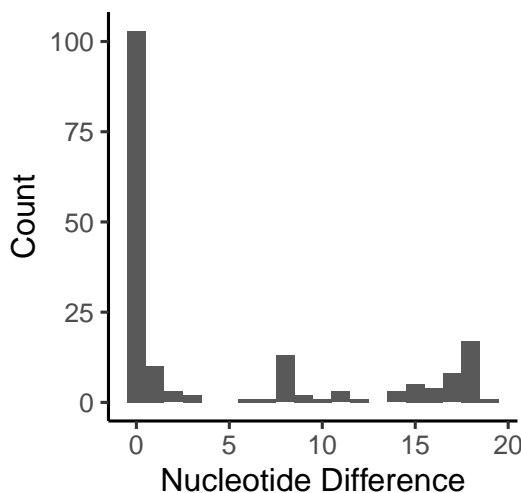
IGHV1-2*04

196 sequences assigned
94 (48%) exact matches, in which:
89 unique CDR3
5 unique J



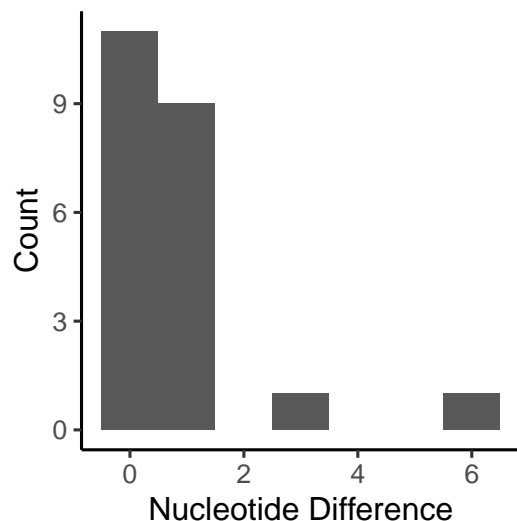
IGHV1-18*04

227 sequences assigned
103 (45.4%) exact matches, in which:
101 unique CDR3
4 unique J



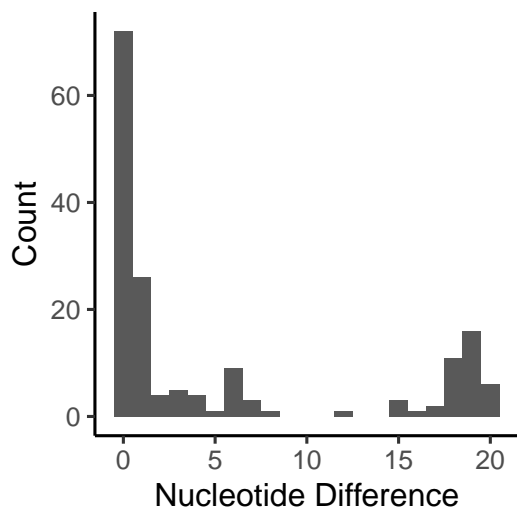
IGHV1-58*02

23 sequences assigned
11 (47.8%) exact matches, in which:
11 unique CDR3
3 unique J



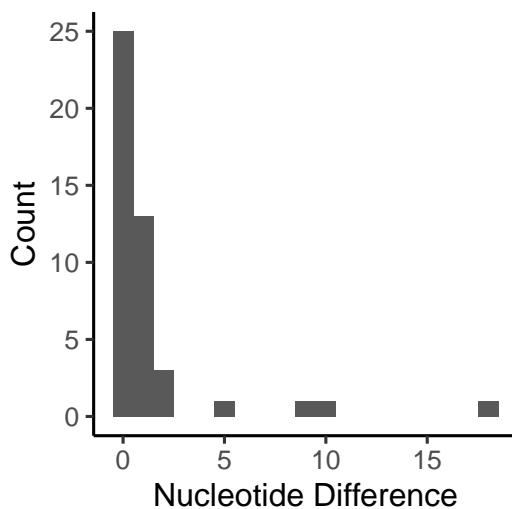
IGHV1-3*01_05

189 sequences assigned
72 (38.1%) exact matches, in which:
67 unique CDR3
4 unique J



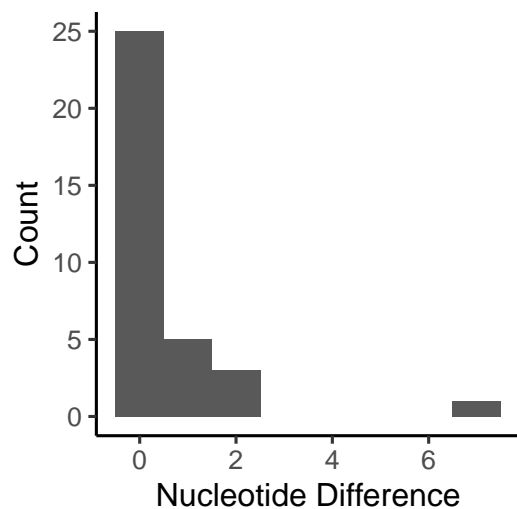
IGHV1-24*01

79 sequences assigned
25 (31.6%) exact matches, in which:
24 unique CDR3
4 unique J



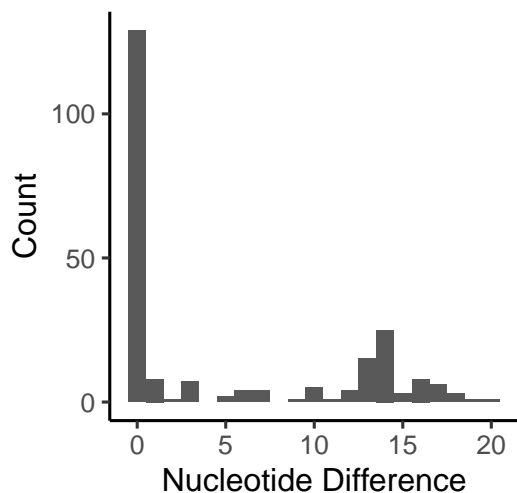
IGHV1-69*02

36 sequences assigned
25 (69.4%) exact matches, in which:
25 unique CDR3
4 unique J



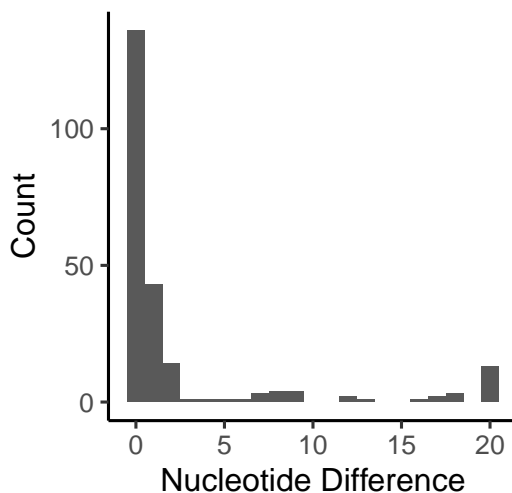
IGHV1-18*01

239 sequences assigned
129 (54%) exact matches, in which:
128 unique CDR3
4 unique J



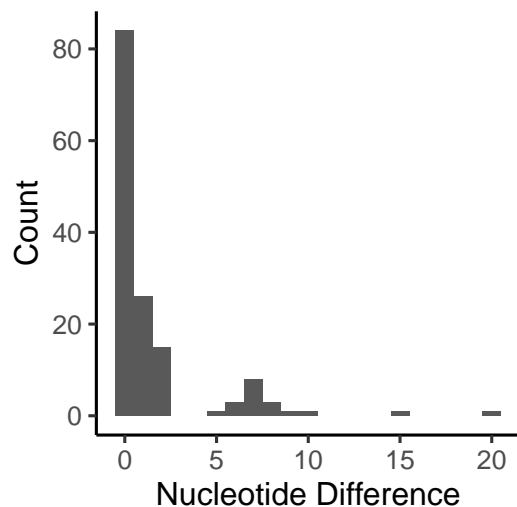
IGHV1-46*01

335 sequences assigned
136 (40.6%) exact matches, in which:
130 unique CDR3
5 unique J



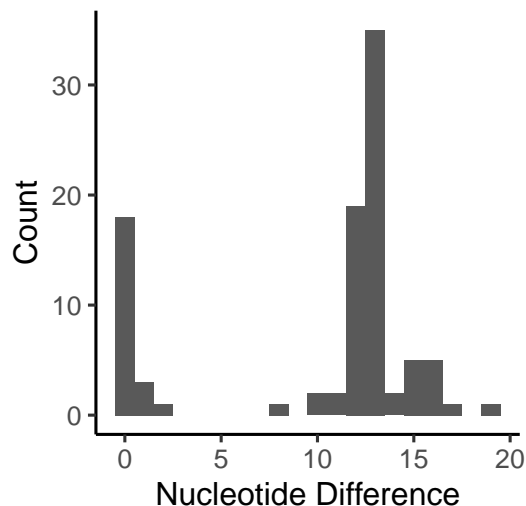
IGHV1-69*04_09

148 sequences assigned
84 (56.8%) exact matches, in which:
73 unique CDR3
5 unique J



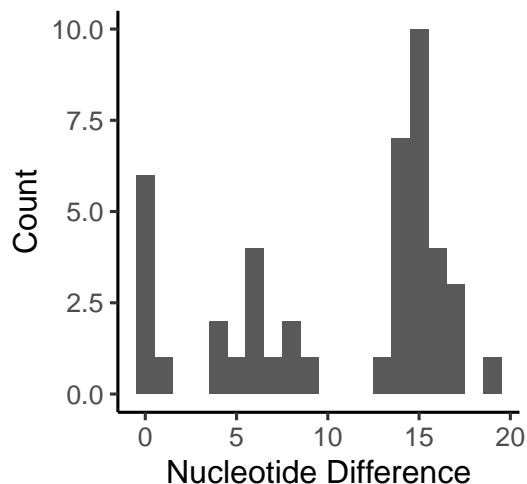
IGHV2-5*02

100 sequences assigned
18 (18%) exact matches, in which:
16 unique CDR3
3 unique J



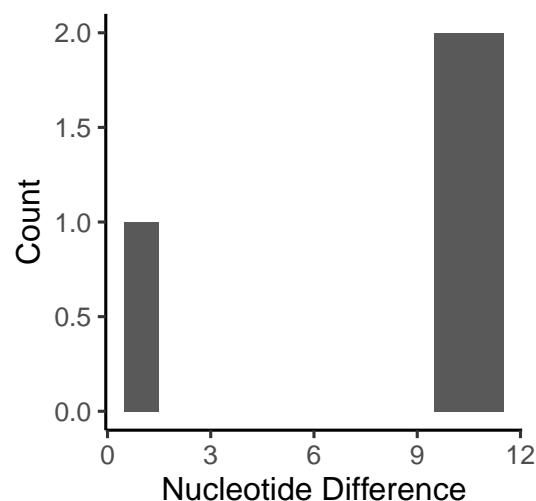
IGHV3-7*01

55 sequences assigned
6 (10.9%) exact matches, in which:
5 unique CDR3
2 unique J



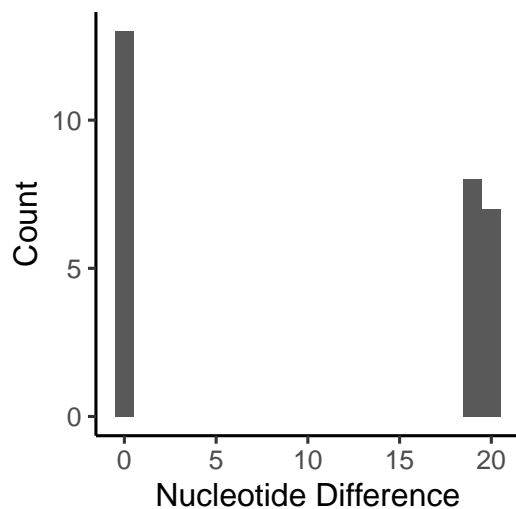
IGHV3-11*01

6 sequences assigned
No exact matches.



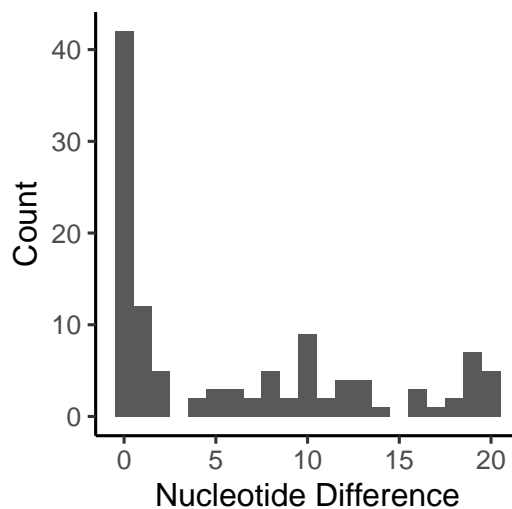
IGHV2-26*01

31 sequences assigned
13 (41.9%) exact matches, in which:
13 unique CDR3
3 unique J



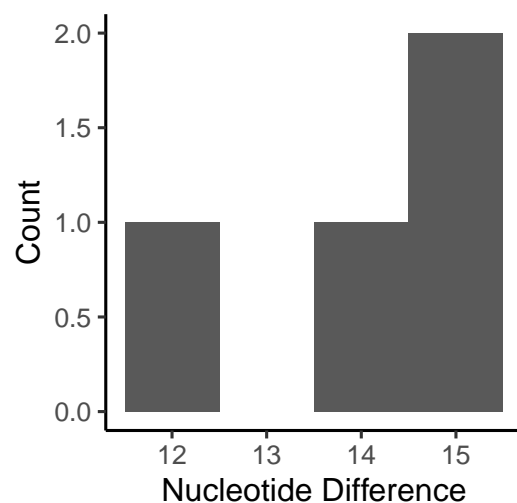
IGHV3-7*03

312 sequences assigned
42 (13.5%) exact matches, in which:
20 unique CDR3
4 unique J



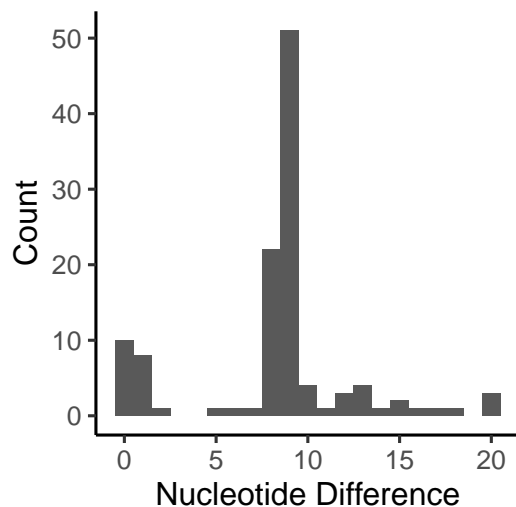
IGHV3-11*04

4 sequences assigned
No exact matches.



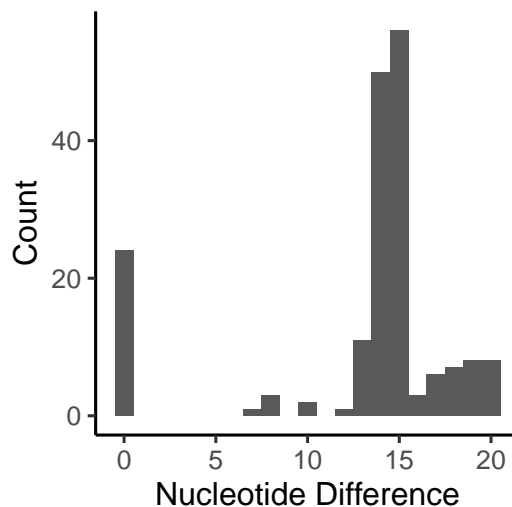
IGHV2-70*11_15

126 sequences assigned
10 (7.9%) exact matches, in which:
10 unique CDR3
3 unique J



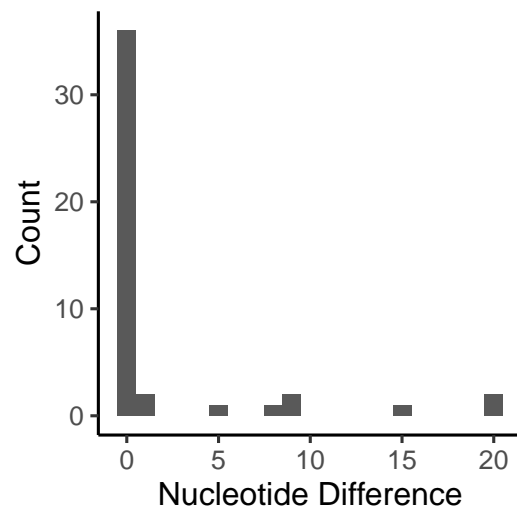
IGHV3-7*04

206 sequences assigned
24 (11.7%) exact matches, in which:
13 unique CDR3
2 unique J



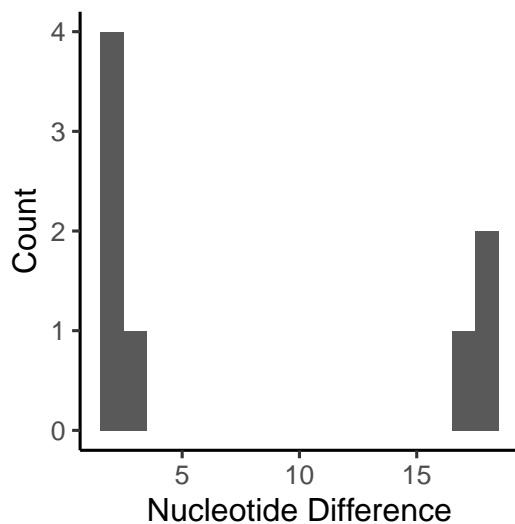
IGHV3-11*06

48 sequences assigned
36 (75%) exact matches, in which:
22 unique CDR3
4 unique J



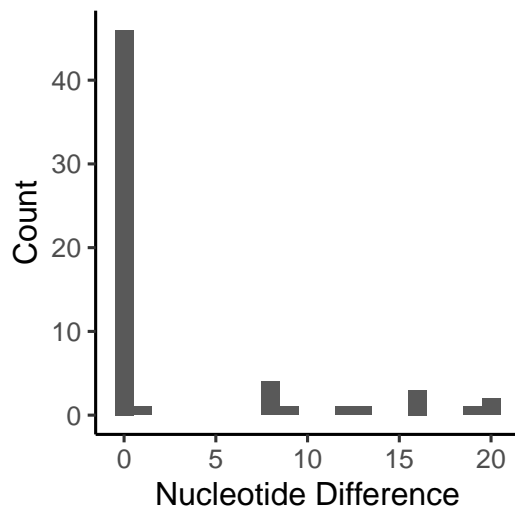
IGHV3-13*01

8 sequences assigned
No exact matches.



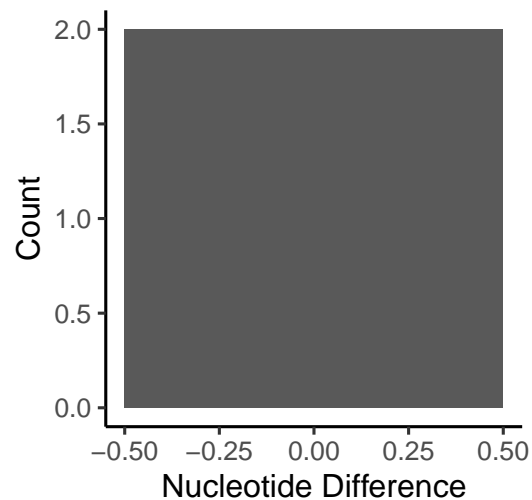
IGHV3-15*07

79 sequences assigned
46 (58.2%) exact matches, in which:
30 unique CDR3
4 unique J



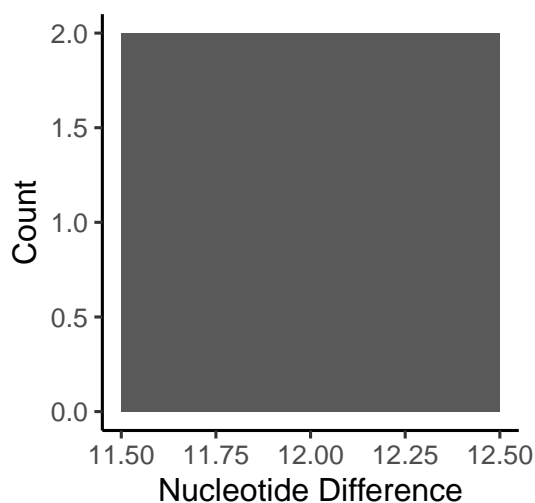
IGHV3-20*03_04

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



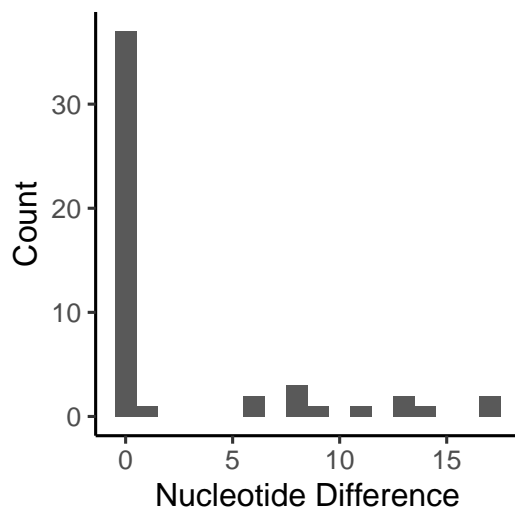
IGHV3-13*04

2 sequences assigned
No exact matches.



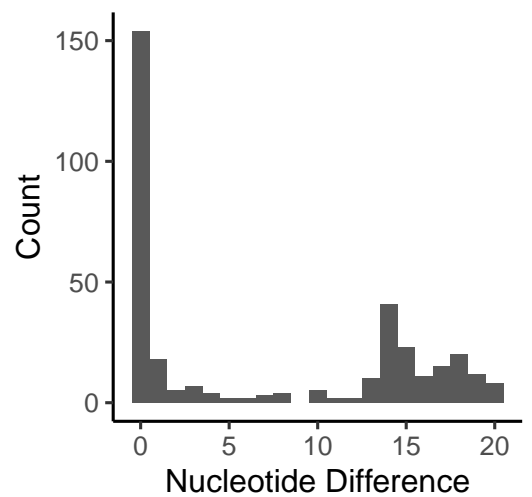
IGHV3-15*01_02

58 sequences assigned
37 (63.8%) exact matches, in which:
24 unique CDR3
4 unique J



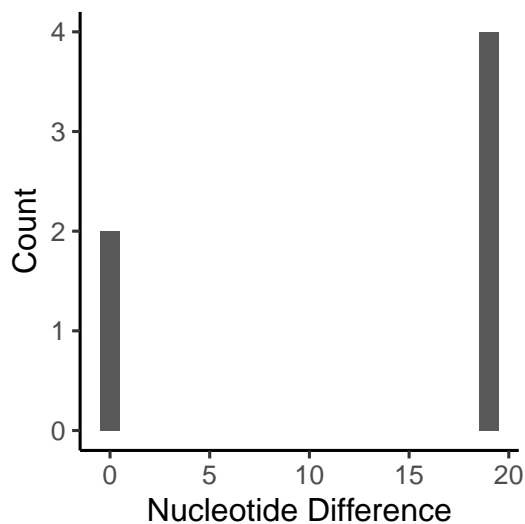
IGHV3-21*01_02

377 sequences assigned
154 (40.8%) exact matches, in which:
91 unique CDR3
4 unique J



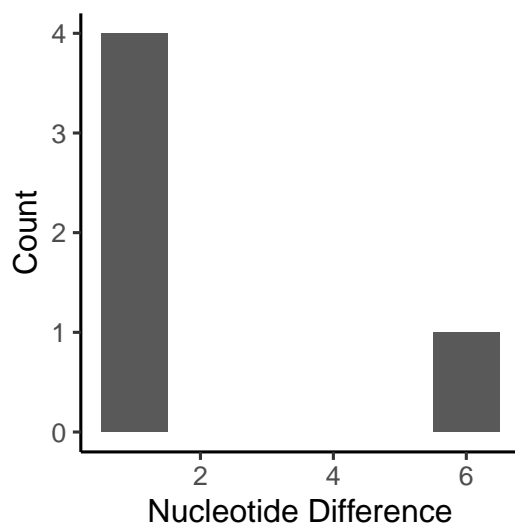
IGHV3-13*05

75 sequences assigned
2 (2.7%) exact matches, in which:
1 unique CDR3
1 unique J



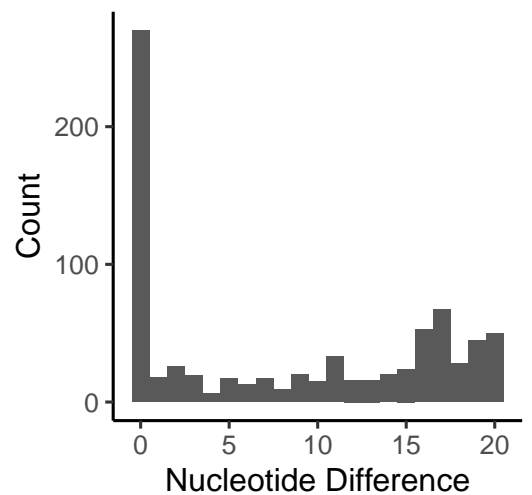
IGHV3-19*01

5 sequences assigned
No exact matches.



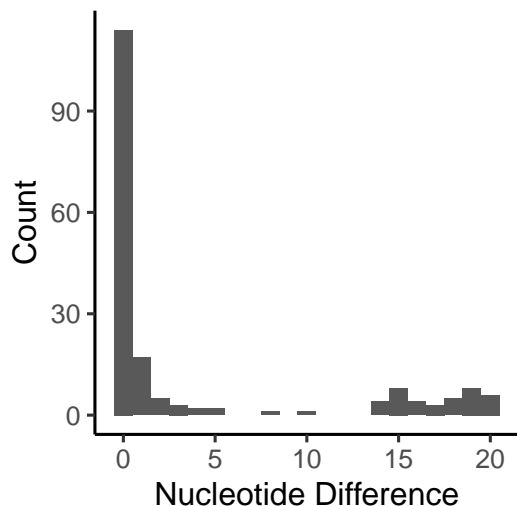
IGHV3-23*01_04

1401 sequences assigned
270 (19.3%) exact matches, in which:
172 unique CDR3
6 unique J



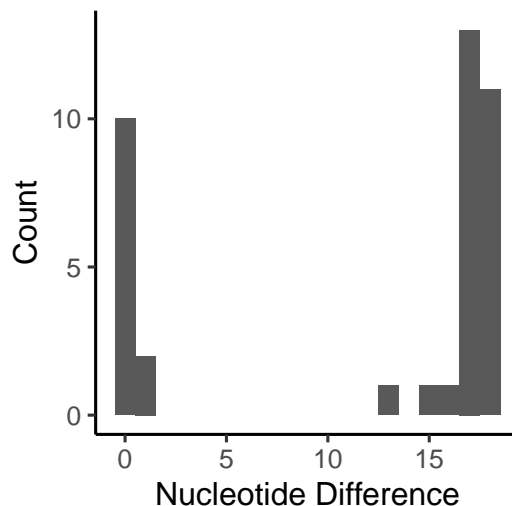
IGHV3-30-3*01

203 sequences assigned
114 (56.2%) exact matches, in which:
67 unique CDR3
6 unique J



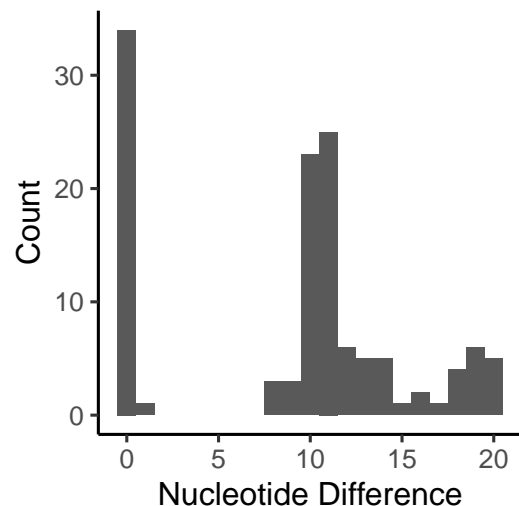
IGHV3-43*02

43 sequences assigned
10 (23.3%) exact matches, in which:
7 unique CDR3
5 unique J



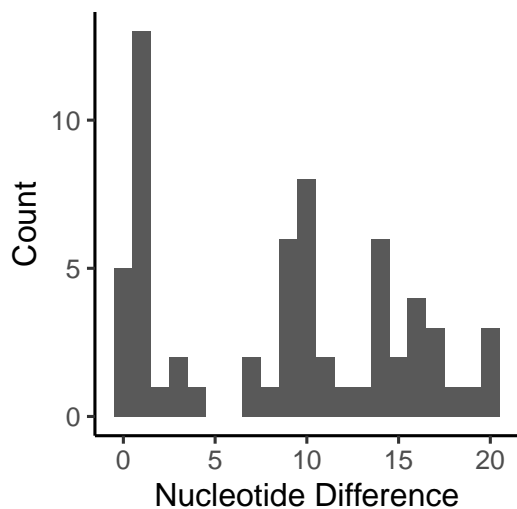
IGHV3-48*02

191 sequences assigned
34 (17.8%) exact matches, in which:
18 unique CDR3
5 unique J



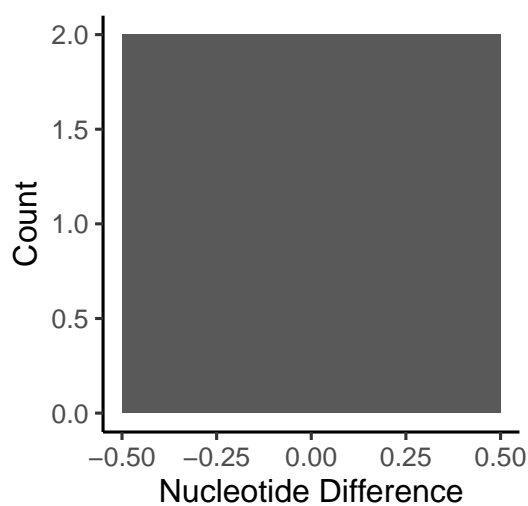
IGHV3-30*03

66 sequences assigned
5 (7.6%) exact matches, in which:
5 unique CDR3
3 unique J



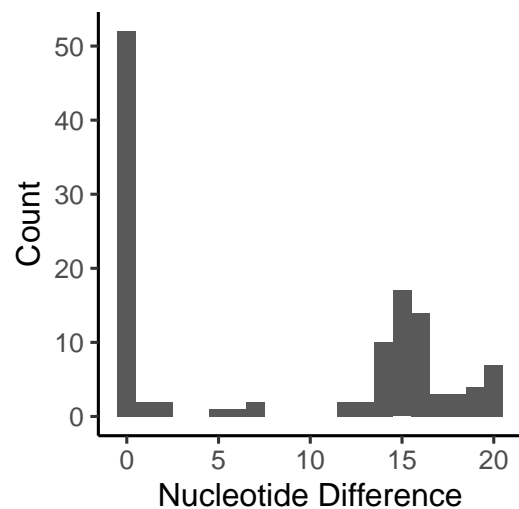
IGHV3-47*02

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



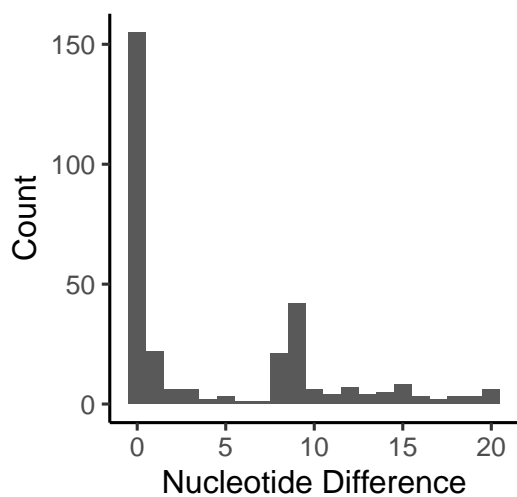
IGHV3-48*03

237 sequences assigned
52 (21.9%) exact matches, in which:
28 unique CDR3
3 unique J



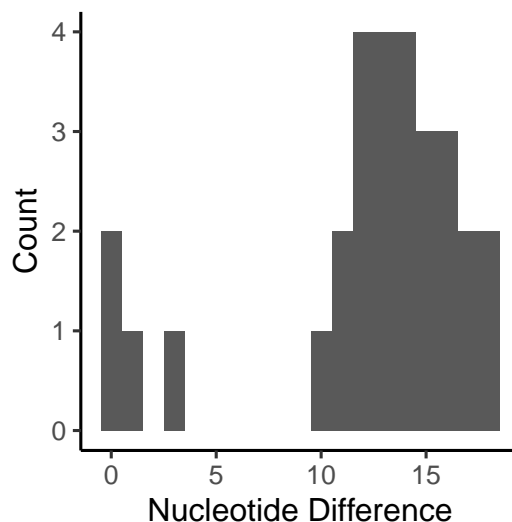
IGHV3-33*01

493 sequences assigned
155 (31.4%) exact matches, in which:
95 unique CDR3
6 unique J



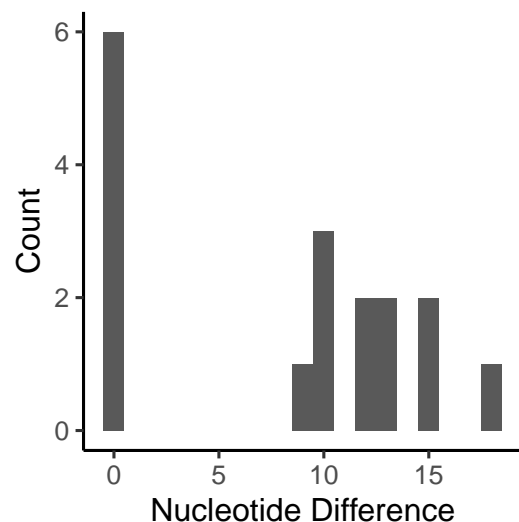
IGHV3-48*01

33 sequences assigned
2 (6.1%) exact matches, in which:
2 unique CDR3
1 unique J



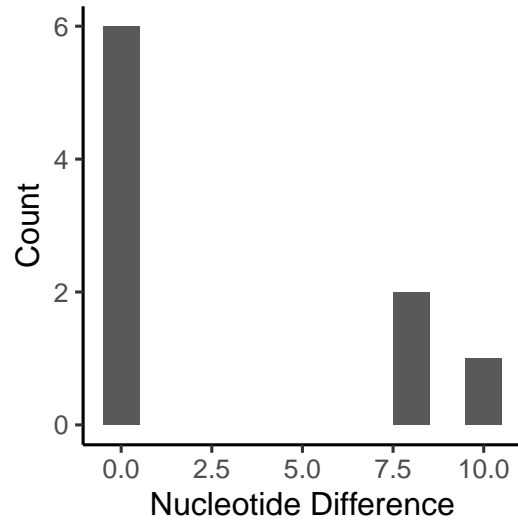
IGHV3-49*04

20 sequences assigned
6 (30%) exact matches, in which:
3 unique CDR3
2 unique J



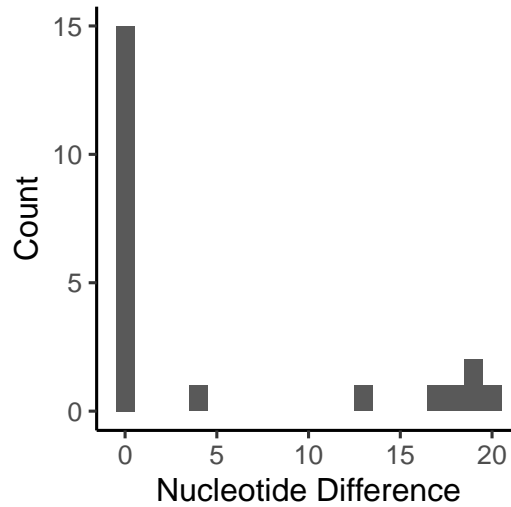
IGHV3-49*03_05

10 sequences assigned
6 (60%) exact matches, in which:
3 unique CDR3
2 unique J



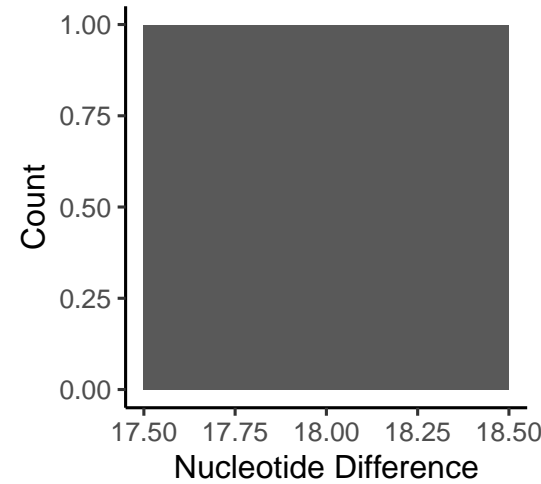
IGHV3-53*01_02

30 sequences assigned
15 (50%) exact matches, in which:
8 unique CDR3
4 unique J



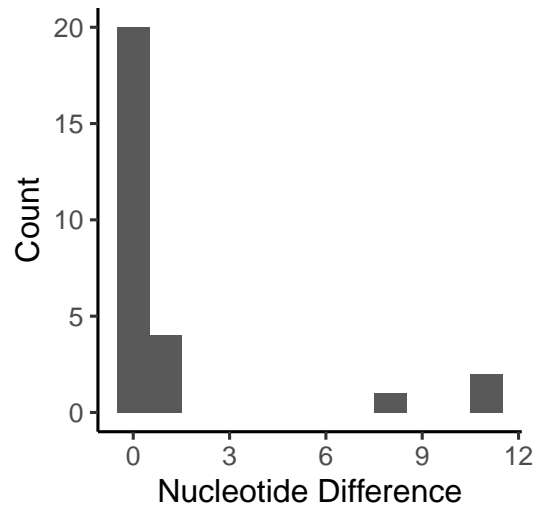
IGHV3-64*02_07

5 sequences assigned
No exact matches.



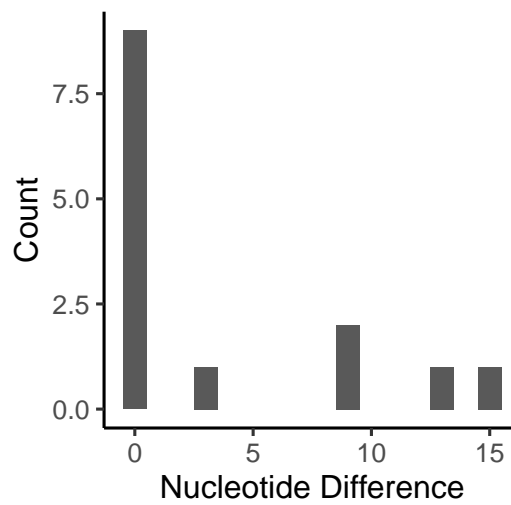
IGHV3-53*04

42 sequences assigned
20 (47.6%) exact matches, in which:
10 unique CDR3
3 unique J



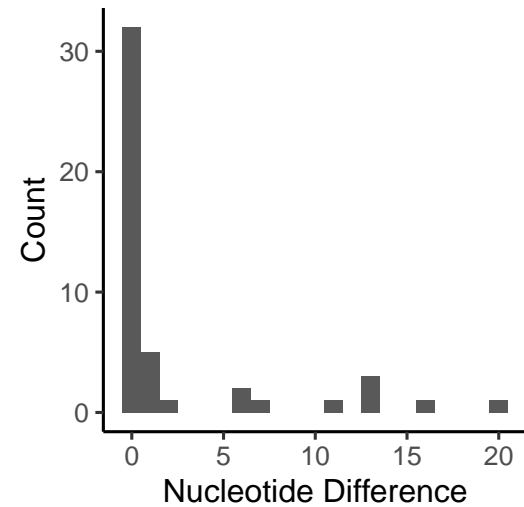
IGHV3-64*01

15 sequences assigned
9 (60%) exact matches, in which:
4 unique CDR3
3 unique J



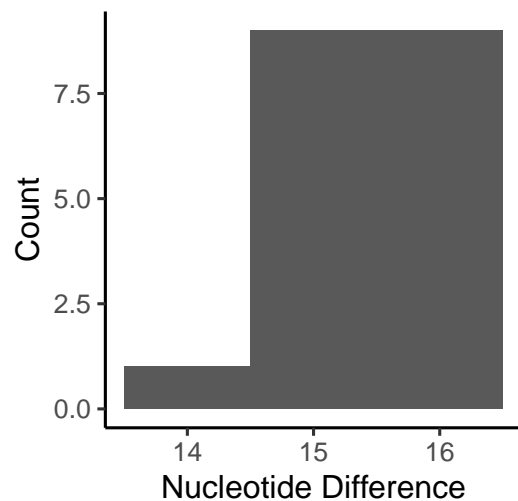
IGHV3-66*01

53 sequences assigned
32 (60.4%) exact matches, in which:
18 unique CDR3
4 unique J



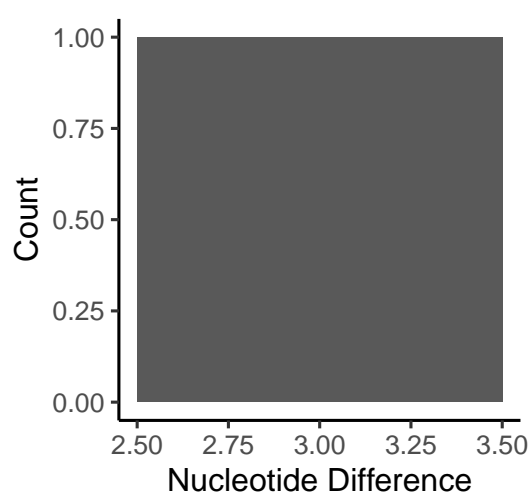
IGHV3-53*05

24 sequences assigned
No exact matches.



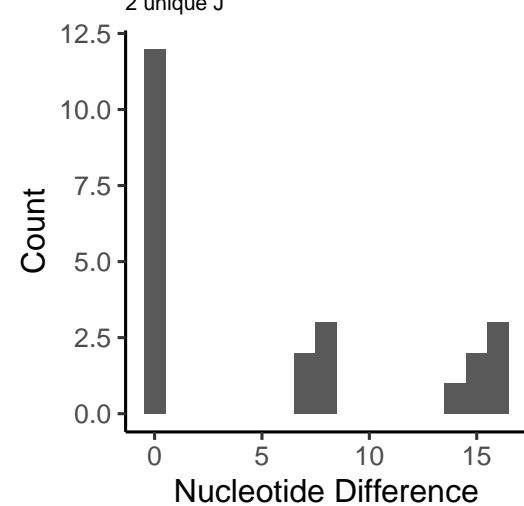
IGHV3-64*04

7 sequences assigned
No exact matches.



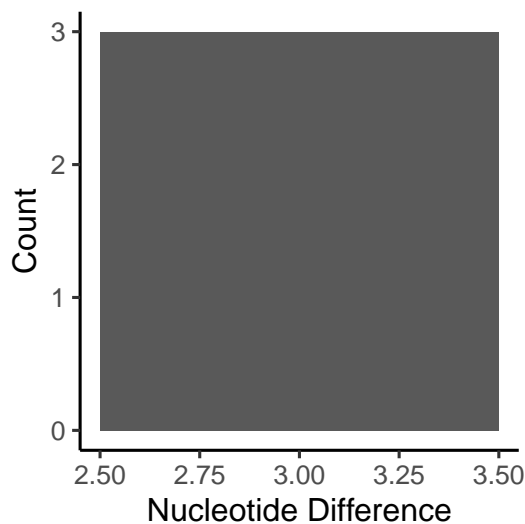
IGHV3-66*02

29 sequences assigned
12 (41.4%) exact matches, in which:
6 unique CDR3
2 unique J



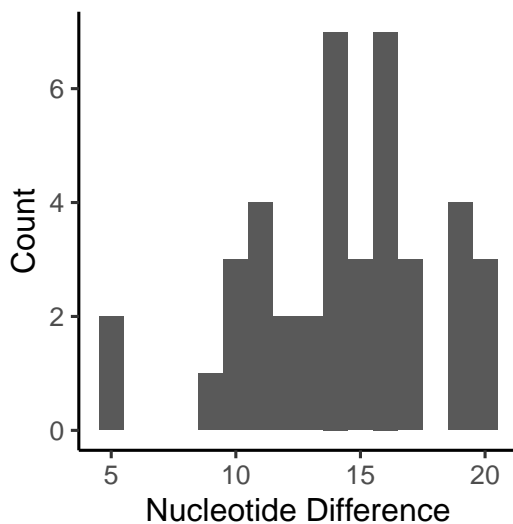
IGHV3-69-1*01

3 sequences assigned
No exact matches.



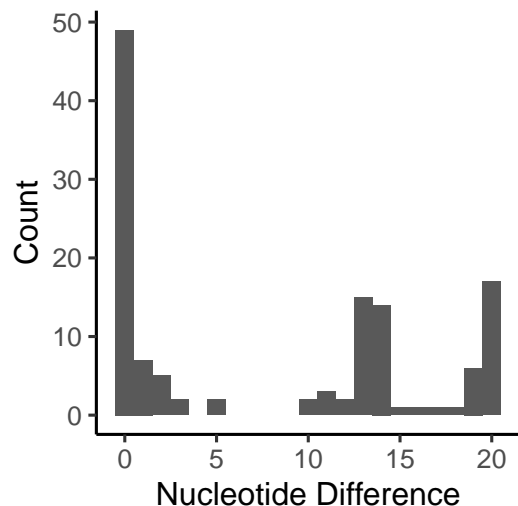
IGHV3-74*03

357 sequences assigned
No exact matches.



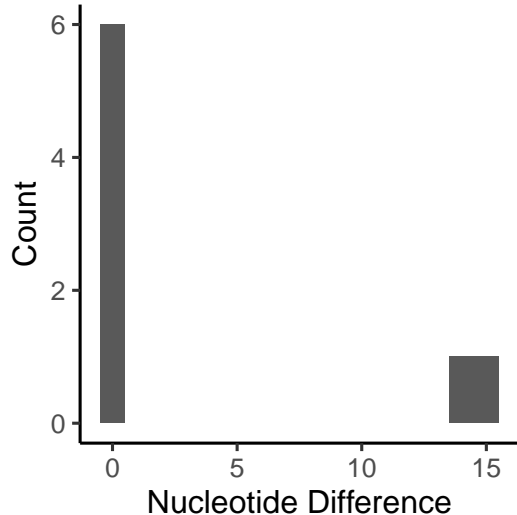
IGHV4-4*02_03

164 sequences assigned
49 (29.9%) exact matches, in which:
36 unique CDR3
3 unique J



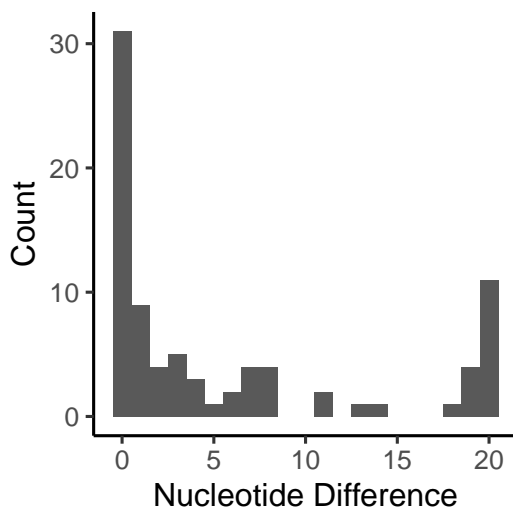
IGHV3-72*01

168 sequences assigned
6 (3.6%) exact matches, in which:
3 unique CDR3
1 unique J



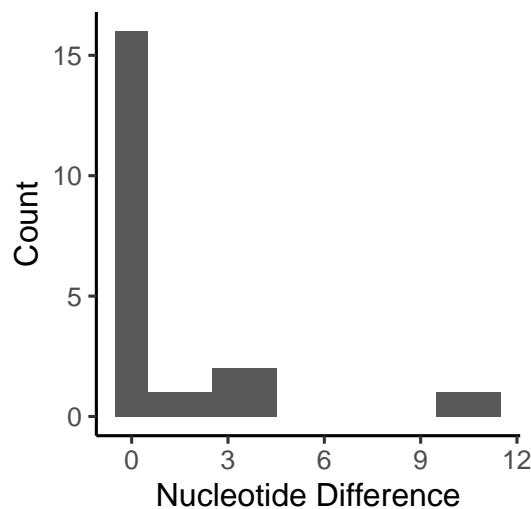
IGHV3-74*01_02

107 sequences assigned
31 (29%) exact matches, in which:
17 unique CDR3
3 unique J



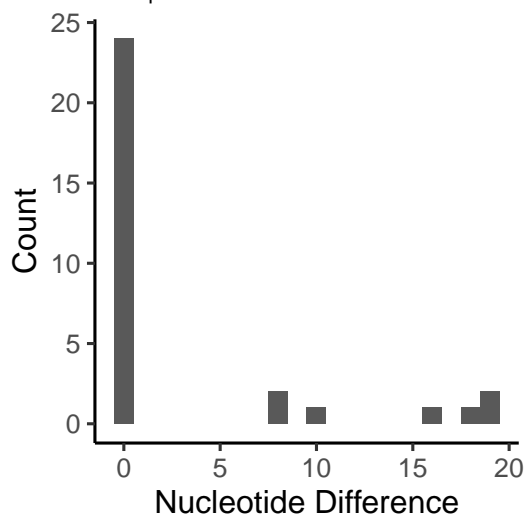
IGHV4-30-4*01

33 sequences assigned
16 (48.5%) exact matches, in which:
12 unique CDR3
3 unique J



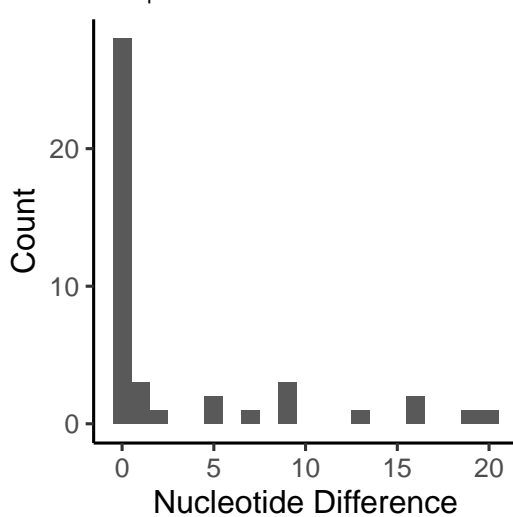
IGHV3-73*01_02

38 sequences assigned
24 (63.2%) exact matches, in which:
13 unique CDR3
3 unique J



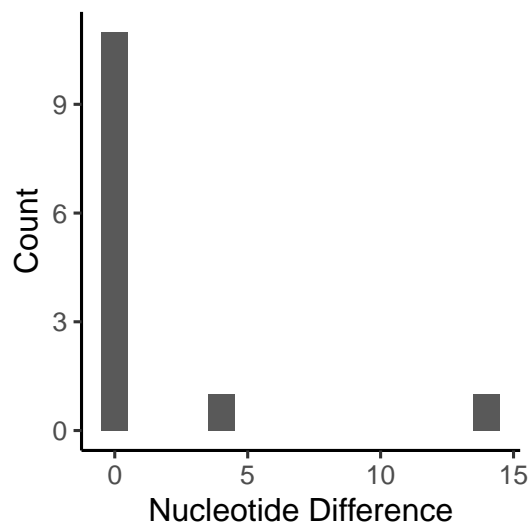
IGHV3-64D*06

251 sequences assigned
28 (11.2%) exact matches, in which:
13 unique CDR3
3 unique J



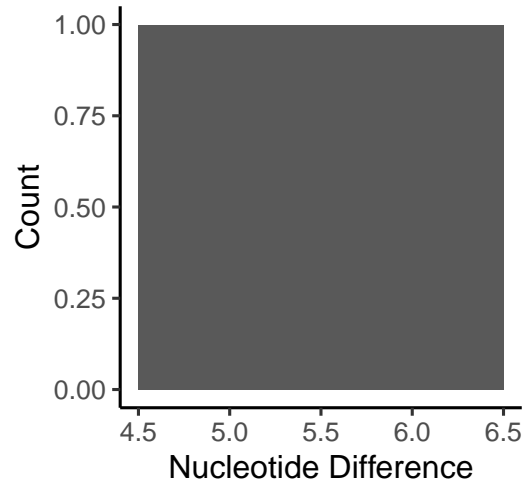
IGHV4-30-2*01

13 sequences assigned
11 (84.6%) exact matches, in which:
6 unique CDR3
4 unique J



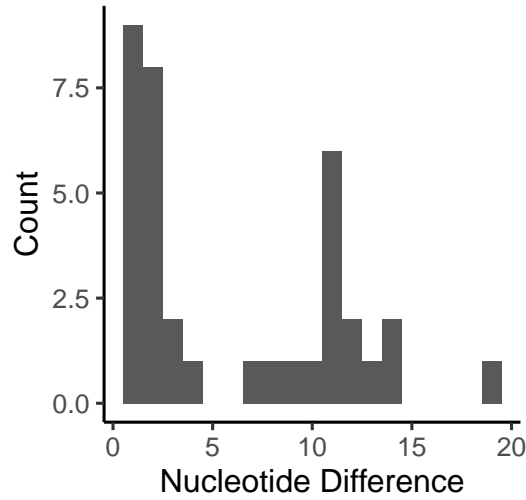
IGHV4-30-2*03

2 sequences assigned
No exact matches.



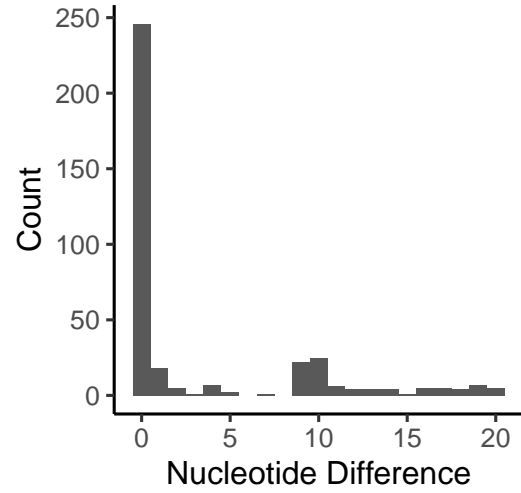
IGHV4-39*07

37 sequences assigned
No exact matches.



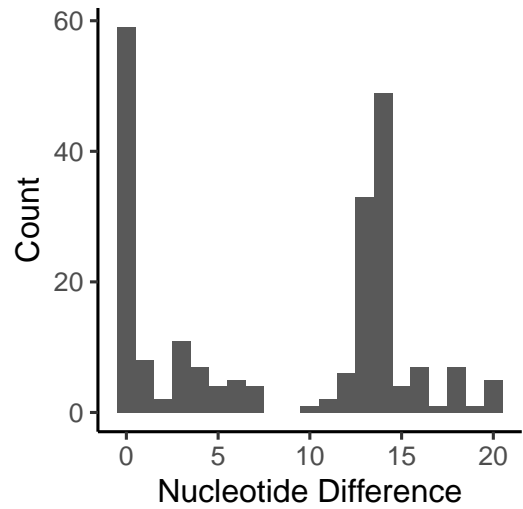
IGHV4-59*02_G88A

571 sequences assigned
246 (43.1%) exact matches, in which:
222 unique CDR3
6 unique J



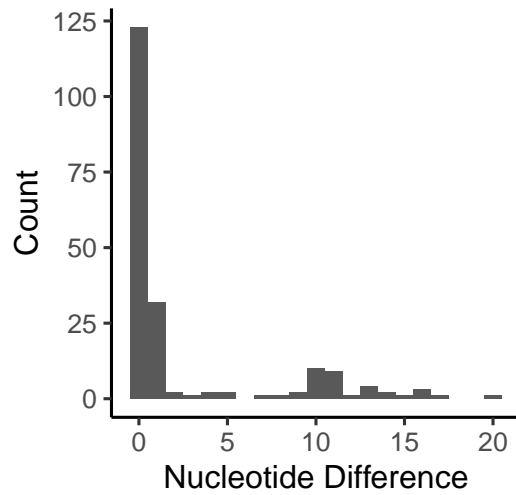
IGHV4-31*02

407 sequences assigned
59 (14.5%) exact matches, in which:
52 unique CDR3
5 unique J



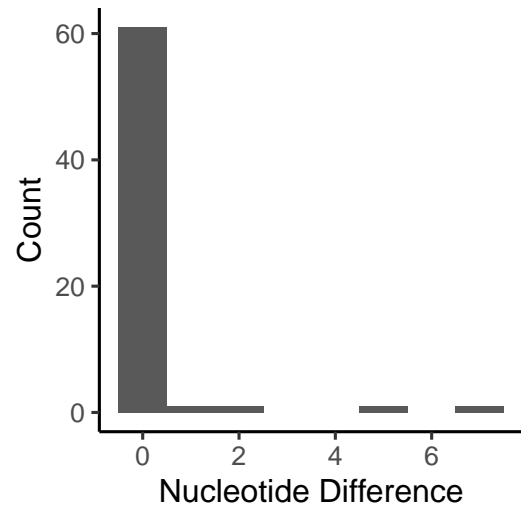
IGHV4-39*02_C258G

256 sequences assigned
123 (48%) exact matches, in which:
98 unique CDR3
4 unique J



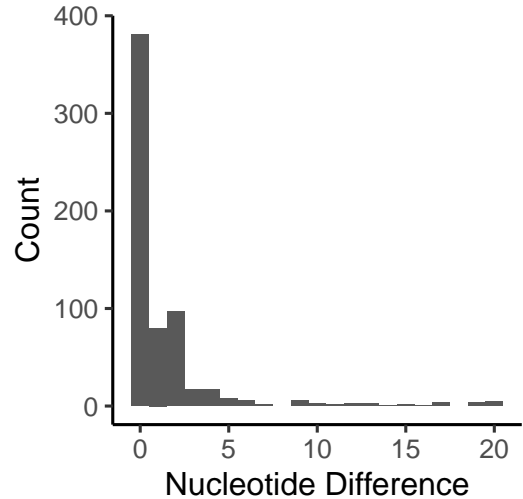
IGHV4-59*12_C300T

66 sequences assigned
61 (92.4%) exact matches, in which:
61 unique CDR3
5 unique J



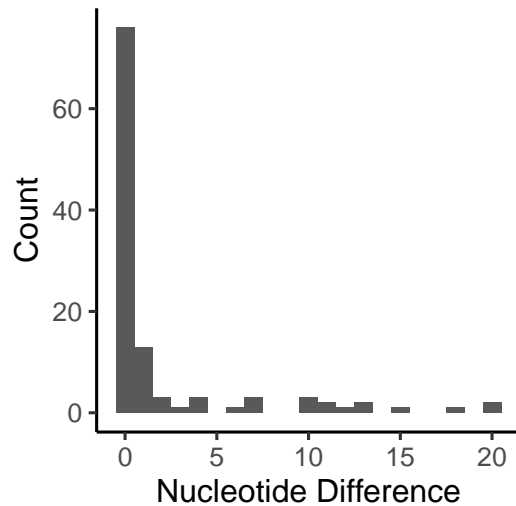
IGHV4-34*01_02

655 sequences assigned
381 (58.2%) exact matches, in which:
291 unique CDR3
6 unique J



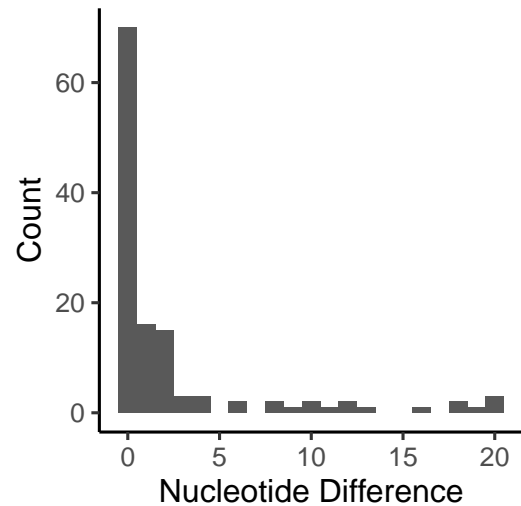
IGHV4-59*08

178 sequences assigned
76 (42.7%) exact matches, in which:
72 unique CDR3
6 unique J



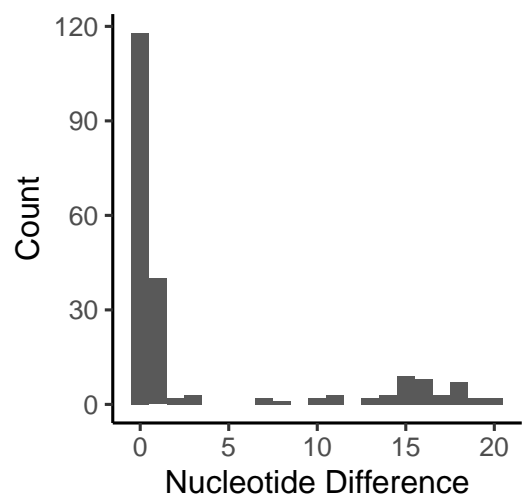
IGHV4-61*02

168 sequences assigned
70 (41.7%) exact matches, in which:
62 unique CDR3
4 unique J



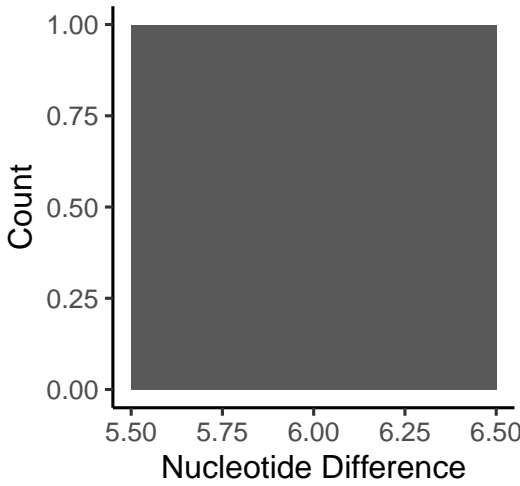
IGHV5-10-1*01_03

216 sequences assigned
118 (54.6%) exact matches, in which:
86 unique CDR3
4 unique J



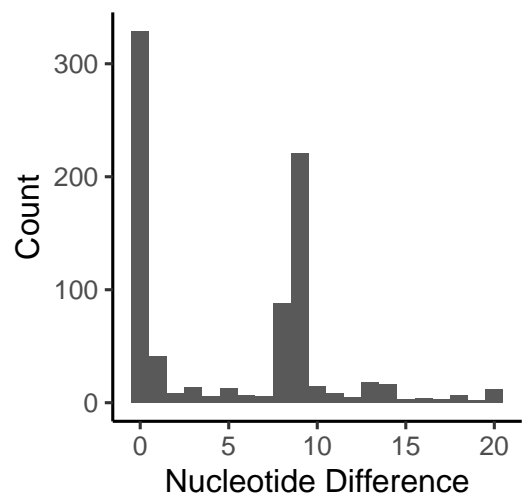
IGHV7-4-1*02

1 sequences assigned
No exact matches.



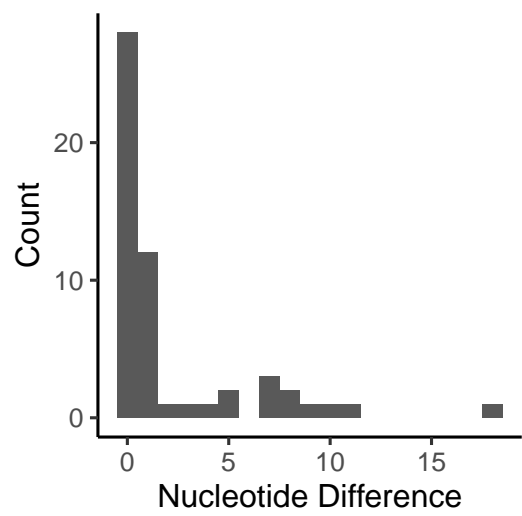
IGHV5-51*07_A128G

852 sequences assigned
329 (38.6%) exact matches, in which:
280 unique CDR3
6 unique J



IGHV6-1*01_02

290 sequences assigned
28 (9.7%) exact matches, in which:
26 unique CDR3
5 unique J





Warning – no inferred sequences found.