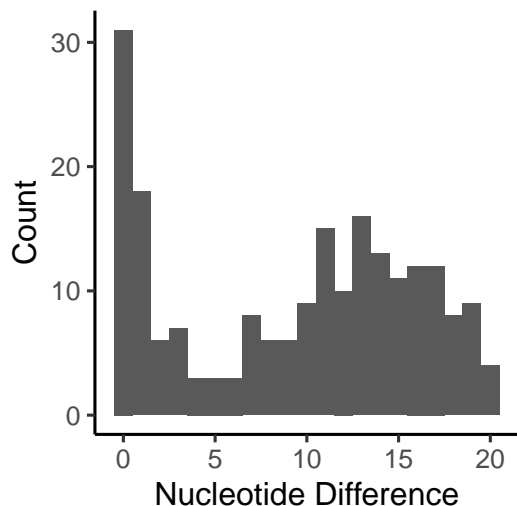


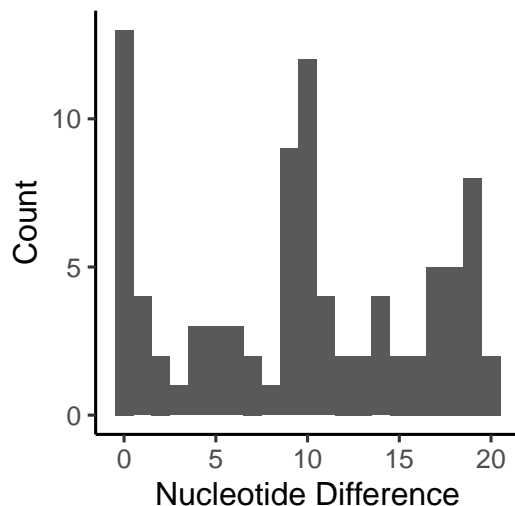
IGHV1-2*02

274 sequences assigned
31 (11.3%) exact matches, in which:
31 unique CDR3
5 unique J



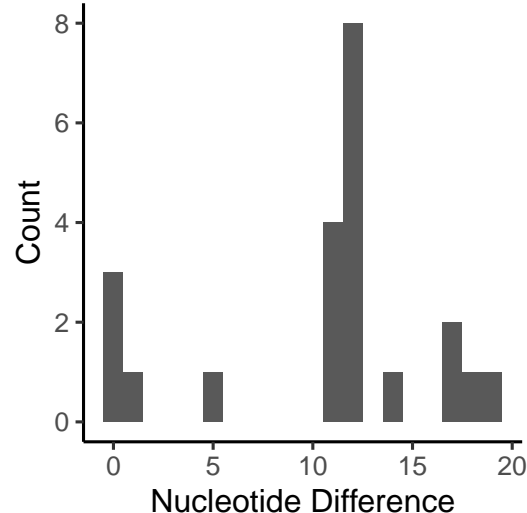
IGHV1-8*01

108 sequences assigned
13 (12%) exact matches, in which:
13 unique CDR3
4 unique J



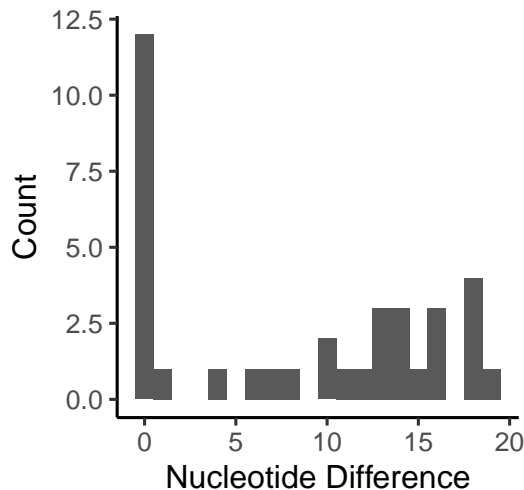
IGHV1-24*01

24 sequences assigned
3 (12.5%) exact matches, in which:
3 unique CDR3
2 unique J



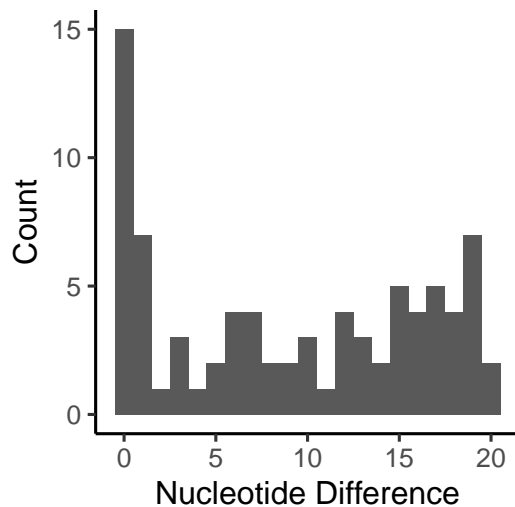
IGHV1-3*01

54 sequences assigned
12 (22.2%) exact matches, in which:
12 unique CDR3
3 unique J



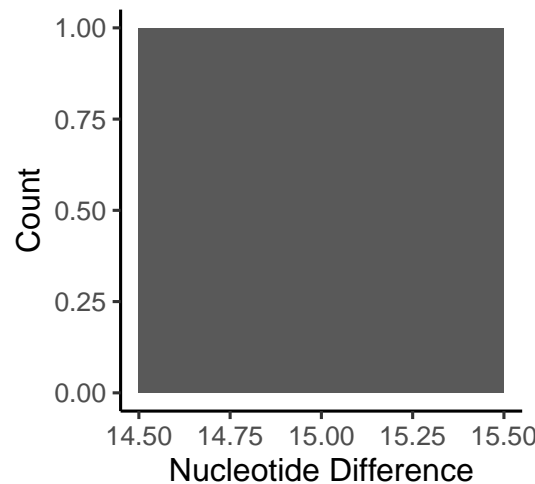
IGHV1-18*01

120 sequences assigned
15 (12.5%) exact matches, in which:
15 unique CDR3
3 unique J



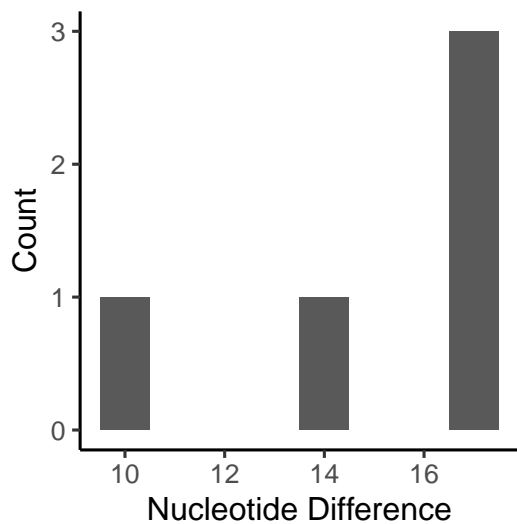
IGHV1-45*02

1 sequences assigned
No exact matches.



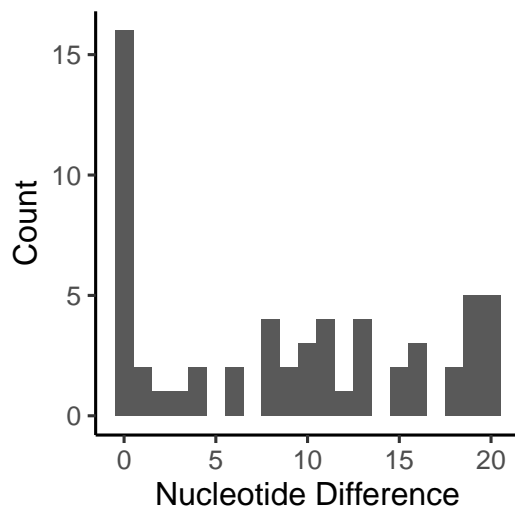
IGHV1-3*04

14 sequences assigned
No exact matches.



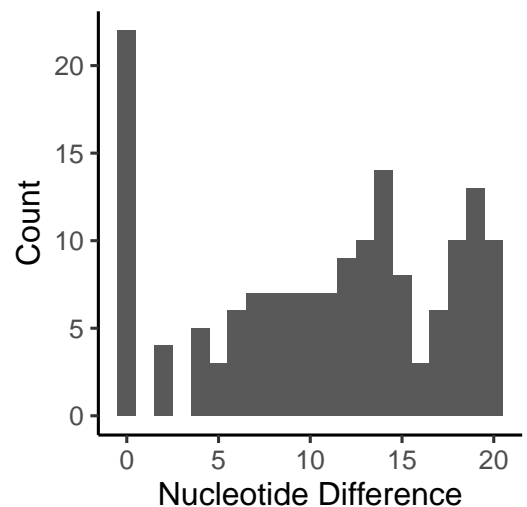
IGHV1-18*04

93 sequences assigned
16 (17.2%) exact matches, in which:
16 unique CDR3
4 unique J



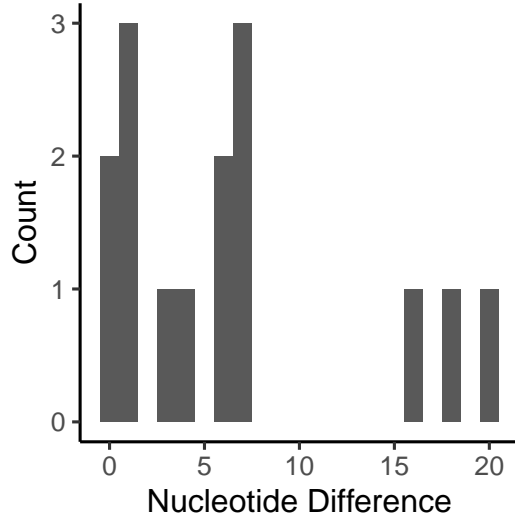
IGHV1-46*01

217 sequences assigned
22 (10.1%) exact matches, in which:
22 unique CDR3
4 unique J



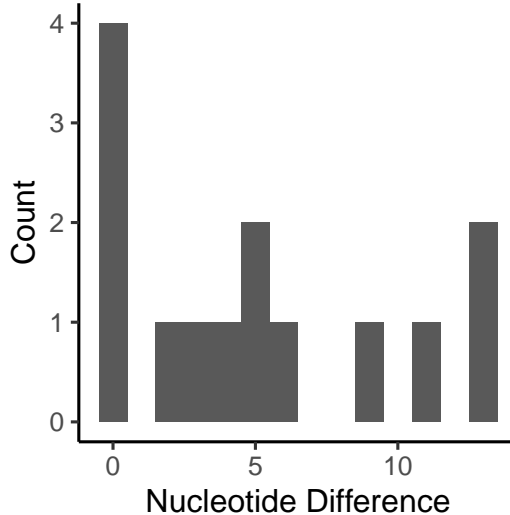
IGHV1–58*01

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



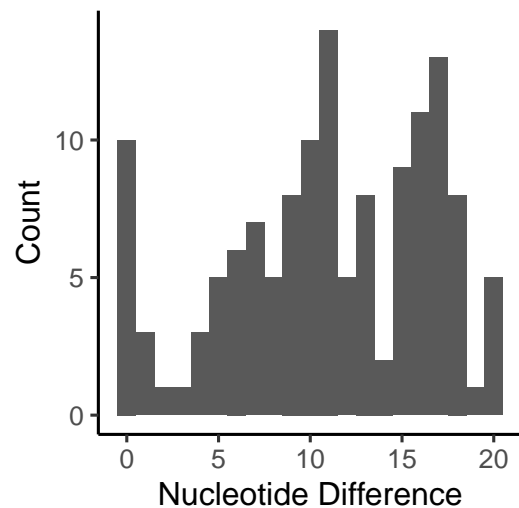
IGHV2–70*01

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



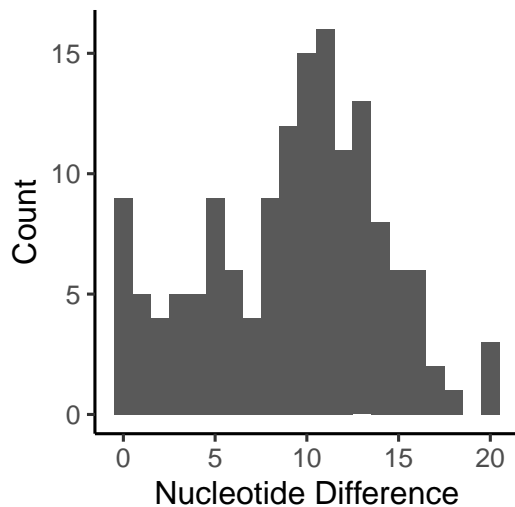
IGHV3–7*03

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



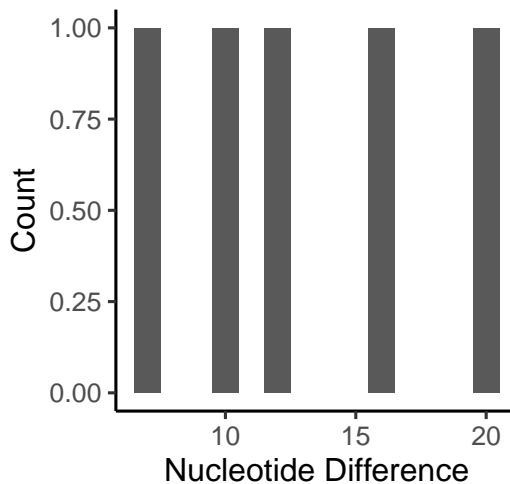
IGHV2–5*02

181 sequences assigned
9 (5%) exact matches, in which:
9 unique CDR3
2 unique J



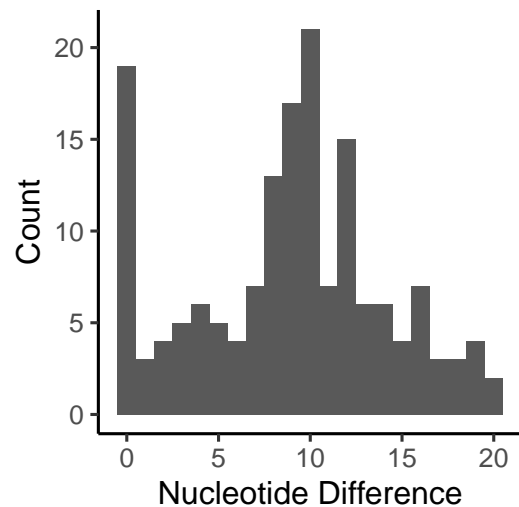
IGHV2–70*13

6 sequences assigned
No exact matches.



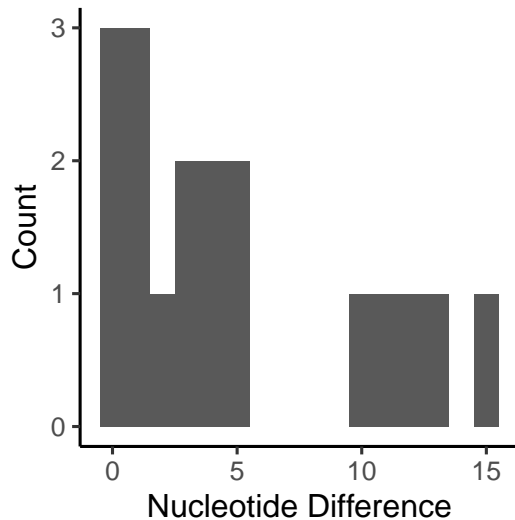
IGHV3–9*01

208 sequences assigned
19 (9.1%) exact matches, in which:
19 unique CDR3
5 unique J



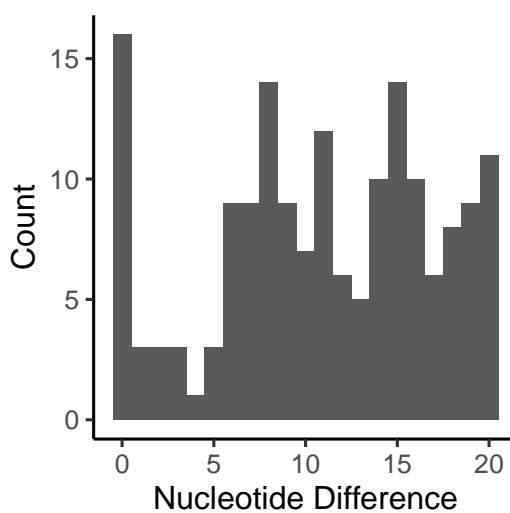
IGHV2–26*01

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



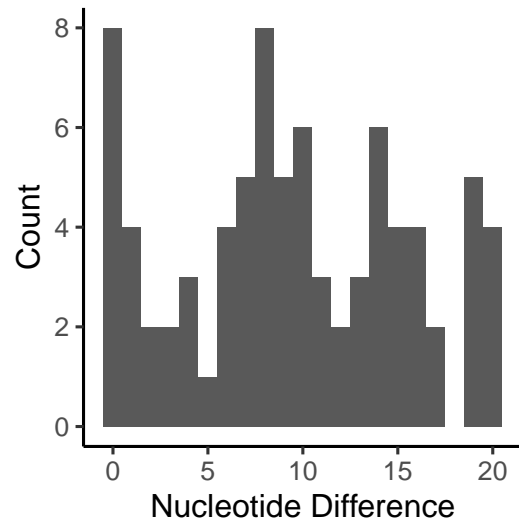
IGHV3–7*01

243 sequences assigned
16 (6.6%) exact matches, in which:
16 unique CDR3
5 unique J



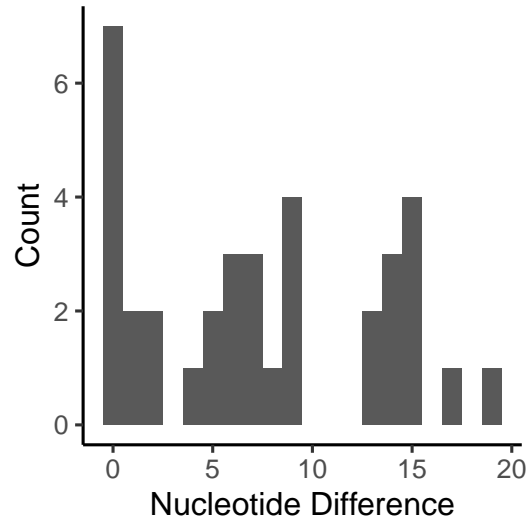
IGHV3–11*01

95 sequences assigned
8 (8.4%) exact matches, in which:
8 unique CDR3
3 unique J



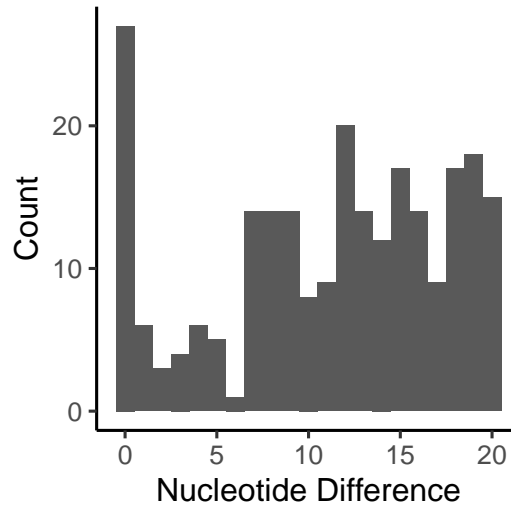
IGHV3-11*06

38 sequences assigned
7 (18.4%) exact matches, in which:
7 unique CDR3
2 unique J



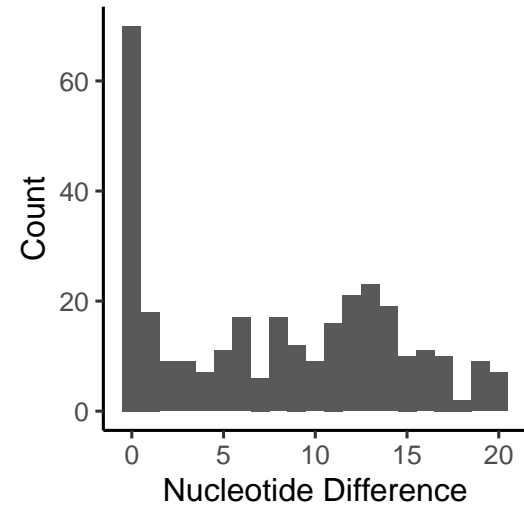
IGHV3-15*01

327 sequences assigned
27 (8.3%) exact matches, in which:
27 unique CDR3
5 unique J



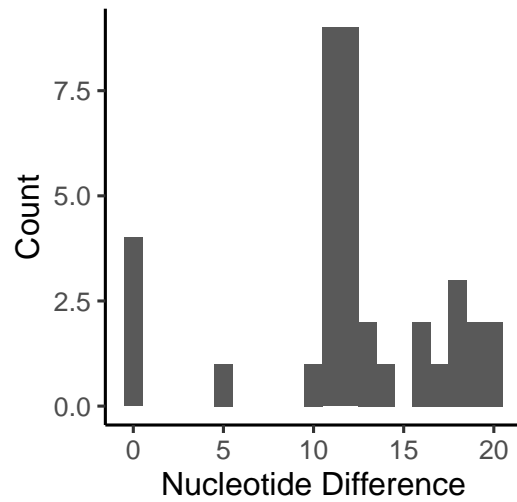
IGHV3-21*01

359 sequences assigned
70 (19.5%) exact matches, in which:
70 unique CDR3
6 unique J



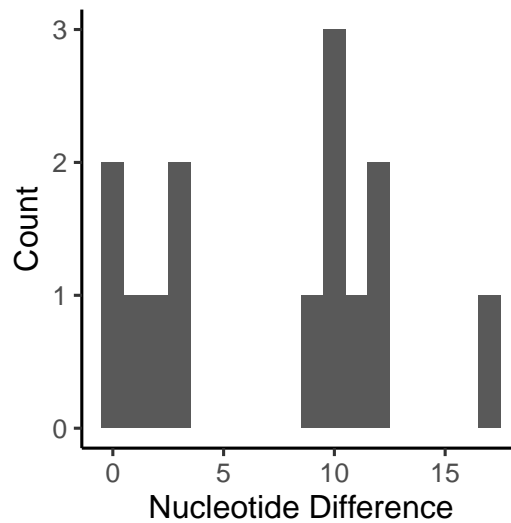
IGHV3-13*01

47 sequences assigned
4 (8.5%) exact matches, in which:
4 unique CDR3
3 unique J



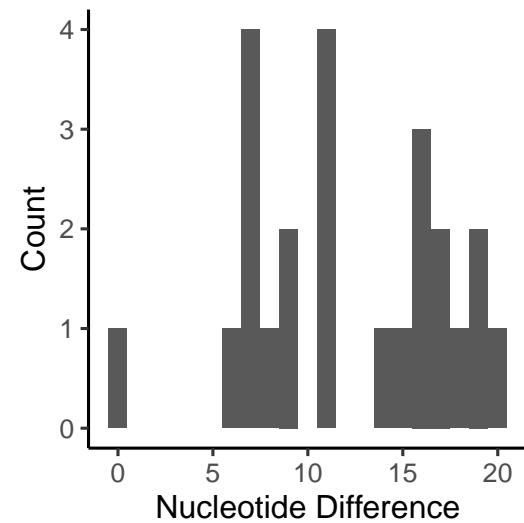
IGHV3-20*01

15 sequences assigned
2 (13.3%) exact matches, in which:
2 unique CDR3
2 unique J



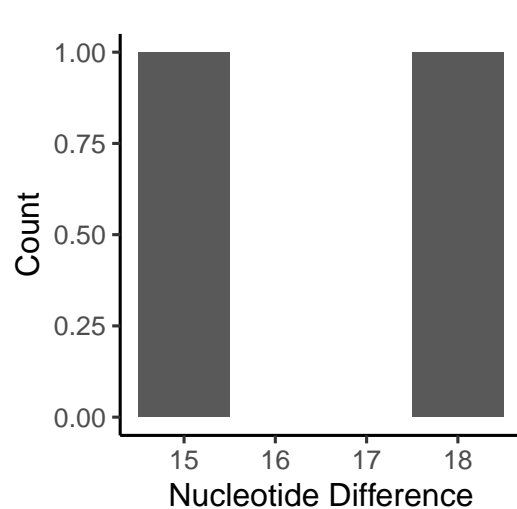
IGHV3-21*02

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



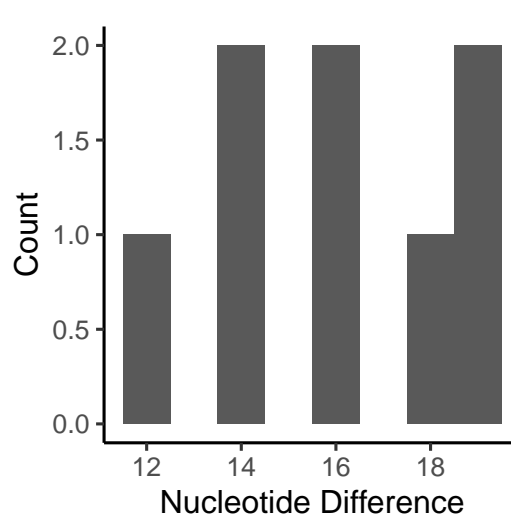
IGHV3-13*05

3 sequences assigned
No exact matches.



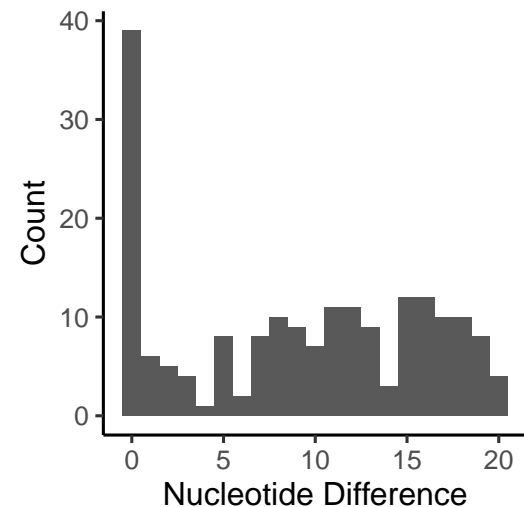
IGHV3-20*04

9 sequences assigned
No exact matches.



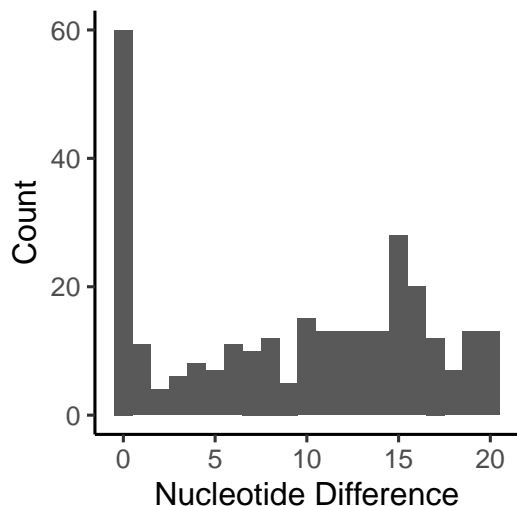
IGHV3-30-3*01

240 sequences assigned
39 (16.2%) exact matches, in which:
39 unique CDR3
4 unique J



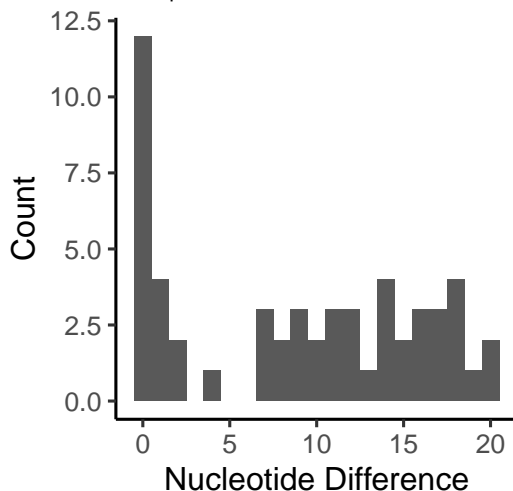
IGHV3-33*01

393 sequences assigned
60 (15.3%) exact matches, in which:
59 unique CDR3
5 unique J



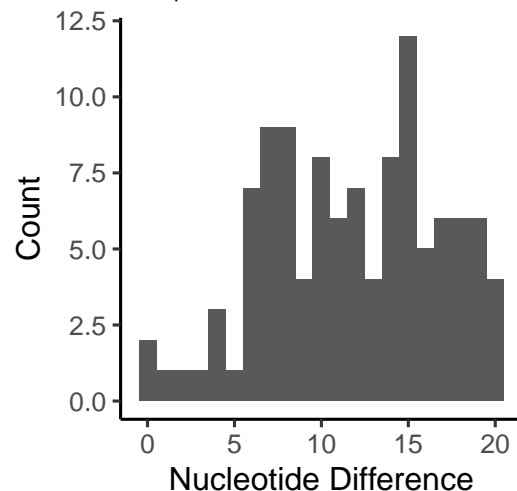
IGHV3-49*05

79 sequences assigned
12 (15.2%) exact matches, in which:
12 unique CDR3
5 unique J



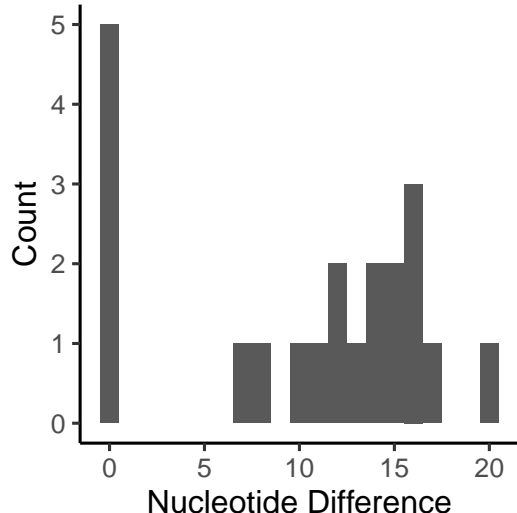
IGHV3-72*01

125 sequences assigned
2 (1.6%) exact matches, in which:
2 unique CDR3
2 unique J



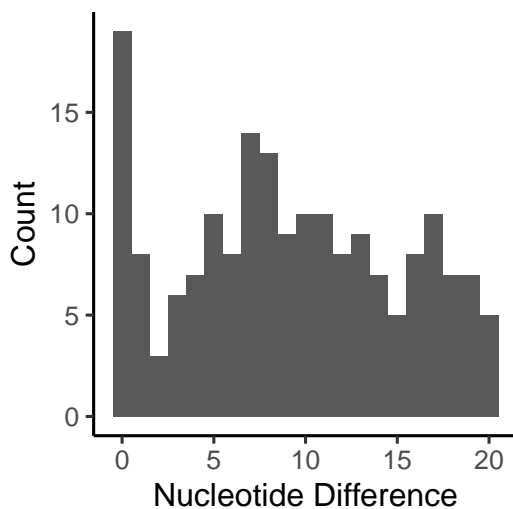
IGHV3-43*01

29 sequences assigned
5 (17.2%) exact matches, in which:
5 unique CDR3
2 unique J



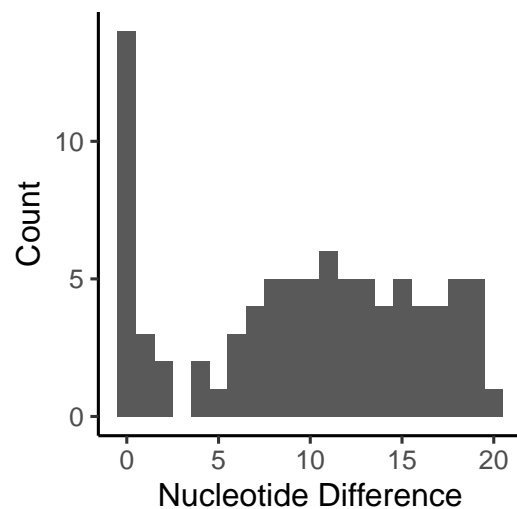
IGHV3-53*01

257 sequences assigned
19 (7.4%) exact matches, in which:
19 unique CDR3
6 unique J



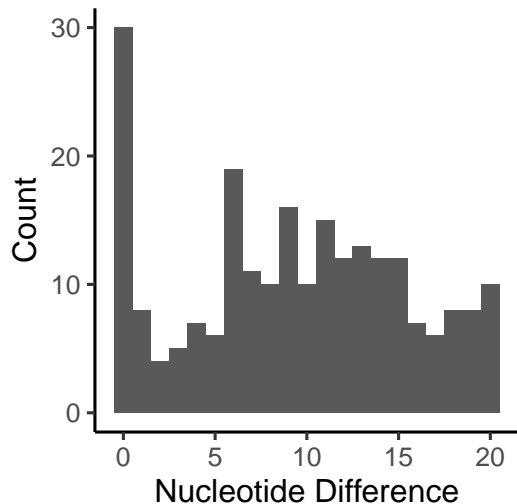
IGHV3-73*02

116 sequences assigned
14 (12.1%) exact matches, in which:
14 unique CDR3
4 unique J



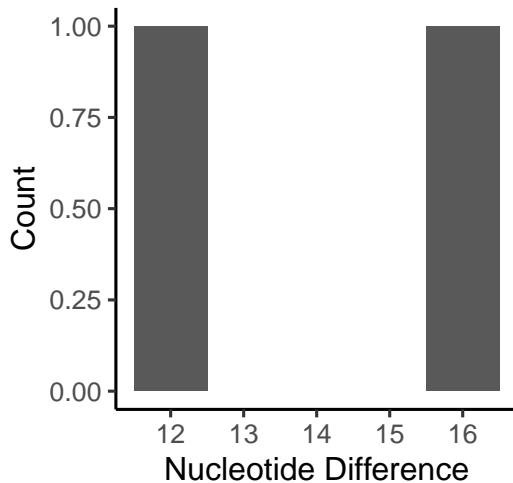
IGHV3-48*02

279 sequences assigned
30 (10.8%) exact matches, in which:
29 unique CDR3
3 unique J



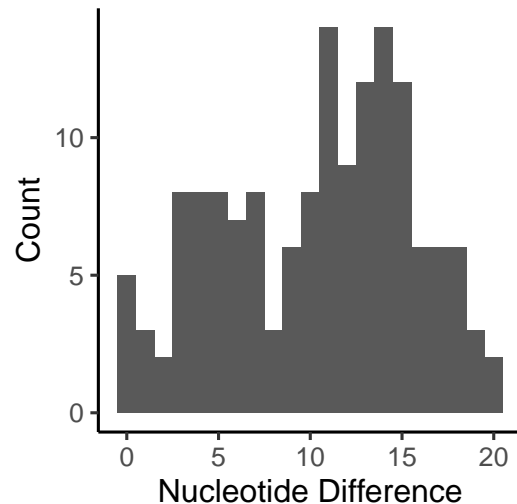
IGHV3-64*02

4 sequences assigned
No exact matches.



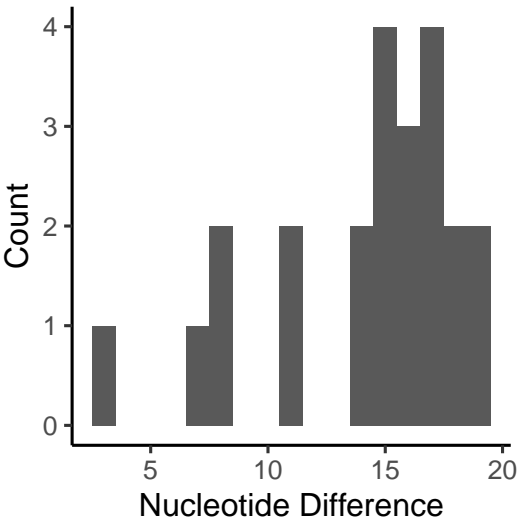
IGHV3-74*01

172 sequences assigned
5 (2.9%) exact matches, in which:
5 unique CDR3
2 unique J



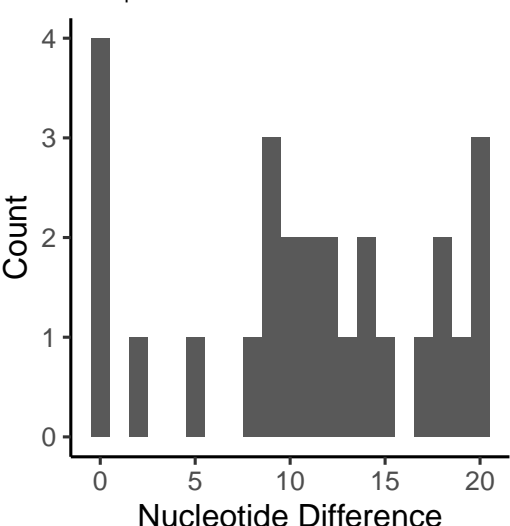
IGHV3-74*03

31 sequences assigned
No exact matches.



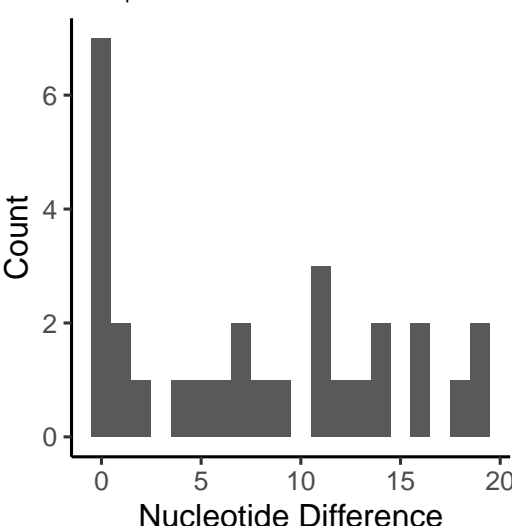
IGHV4-4*02

45 sequences assigned
4 (8.9%) exact matches, in which:
4 unique CDR3
2 unique J



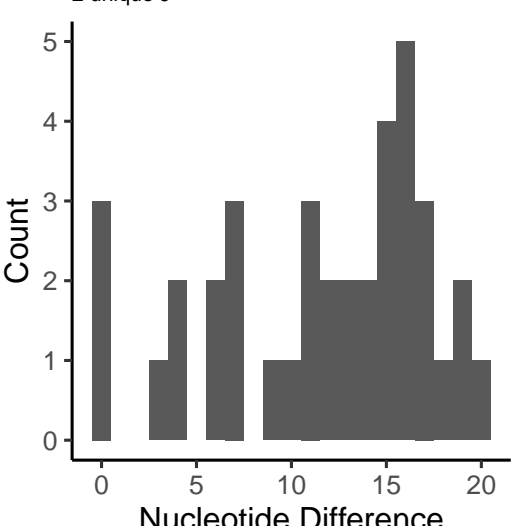
IGHV4-30-4*01

43 sequences assigned
7 (16.3%) exact matches, in which:
7 unique CDR3
3 unique J



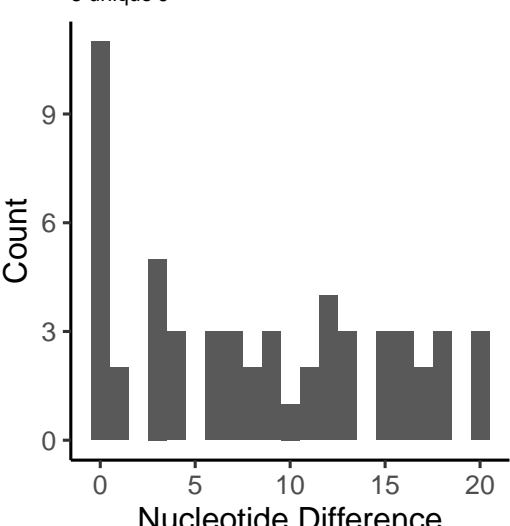
IGHV3-64D*06

47 sequences assigned
3 (6.4%) exact matches, in which:
3 unique CDR3
2 unique J



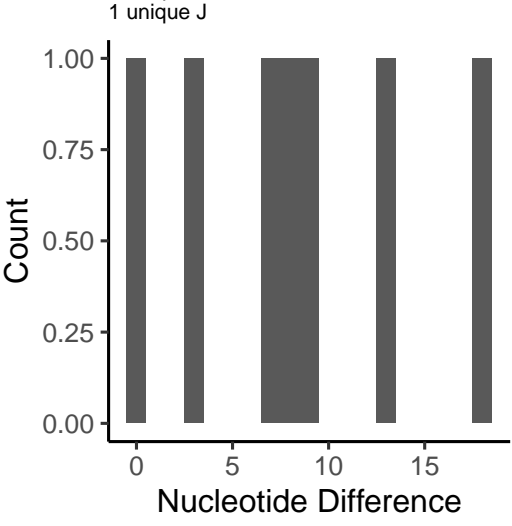
IGHV4-4*07

94 sequences assigned
11 (11.7%) exact matches, in which:
11 unique CDR3
5 unique J



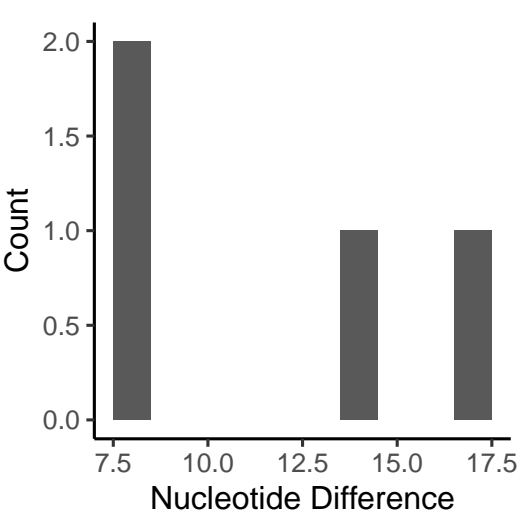
IGHV4-30-2*01

13 sequences assigned
1 (7.7%) exact matches, in which:
1 unique CDR3
1 unique J



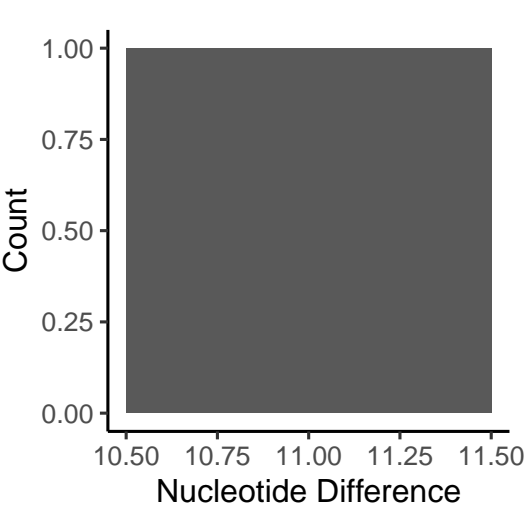
IGHV3-64D*08

6 sequences assigned
No exact matches.



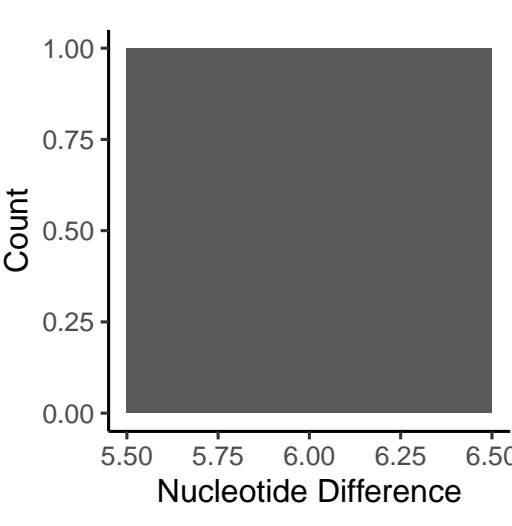
IGHV4-28*07

1 sequences assigned
No exact matches.



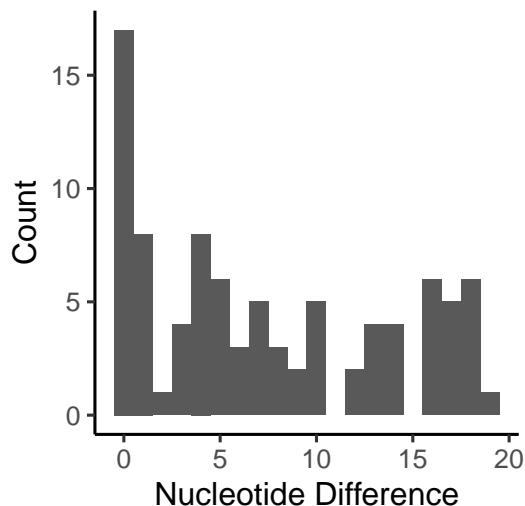
IGHV4-30-2*06

2 sequences assigned
No exact matches.



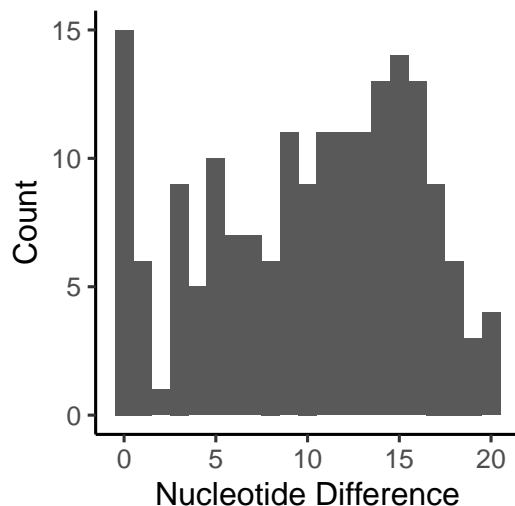
IGHV4-31*03

142 sequences assigned
17 (12%) exact matches, in which:
17 unique CDR3
4 unique J



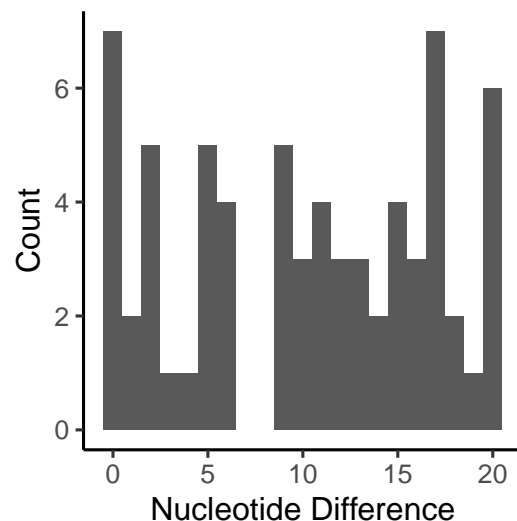
IGHV4-59*01

268 sequences assigned
15 (5.6%) exact matches, in which:
15 unique CDR3
4 unique J



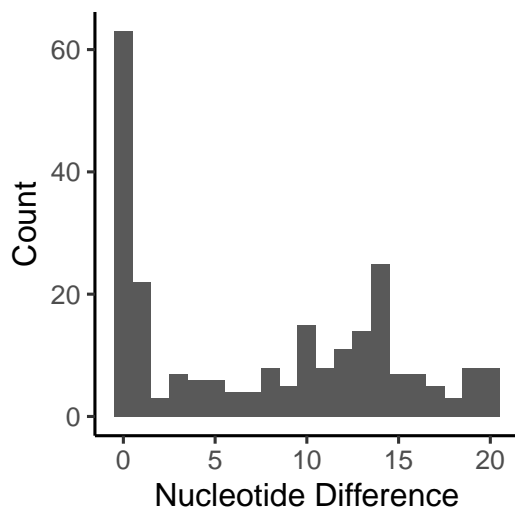
IGHV5-10-1*03

92 sequences assigned
7 (7.6%) exact matches, in which:
7 unique CDR3
3 unique J



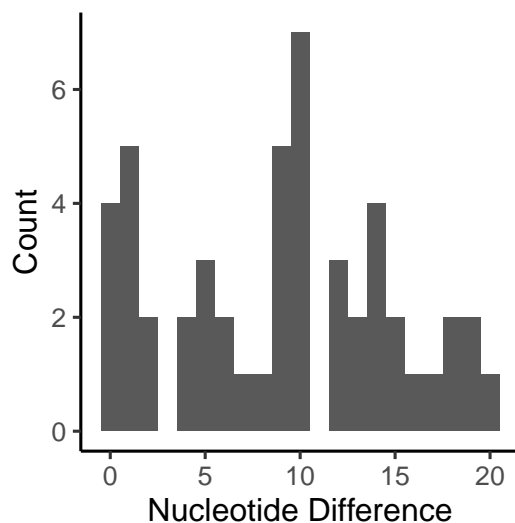
IGHV4-34*01

311 sequences assigned
63 (20.3%) exact matches, in which:
63 unique CDR3
5 unique J



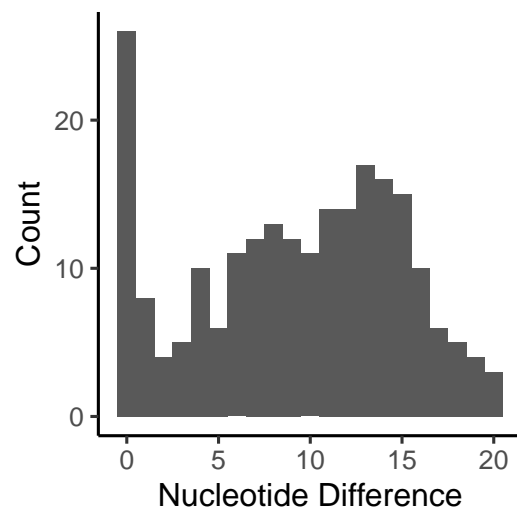
IGHV4-61*01

63 sequences assigned
4 (6.3%) exact matches, in which:
4 unique CDR3
2 unique J



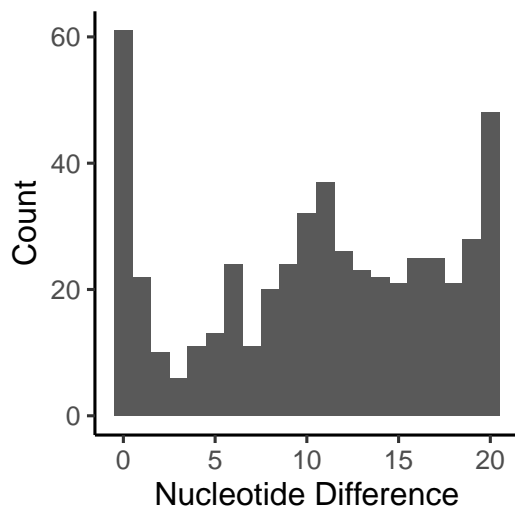
IGHV5-51*01

272 sequences assigned
26 (9.6%) exact matches, in which:
26 unique CDR3
6 unique J



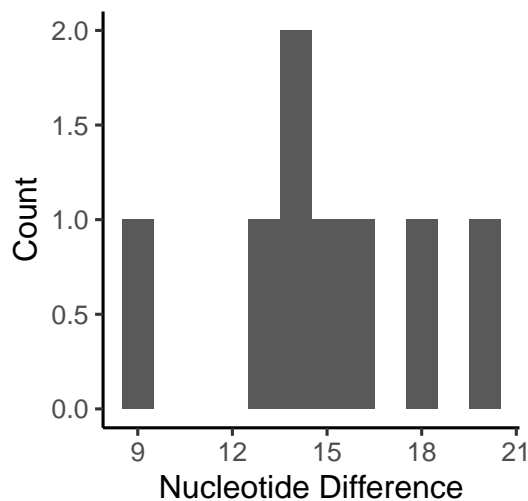
IGHV4-39*01

698 sequences assigned
61 (8.7%) exact matches, in which:
60 unique CDR3
5 unique J



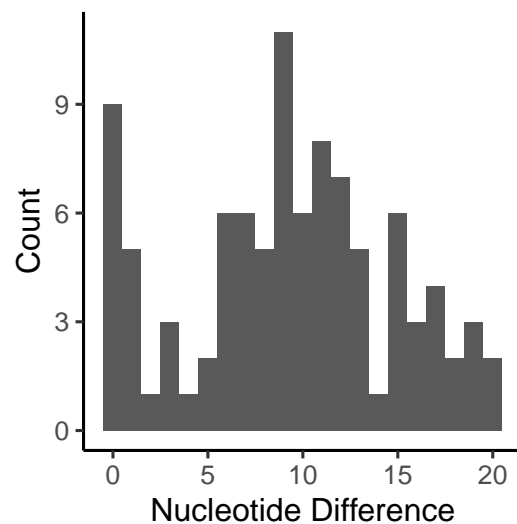
IGHV4-61*08

14 sequences assigned
No exact matches.



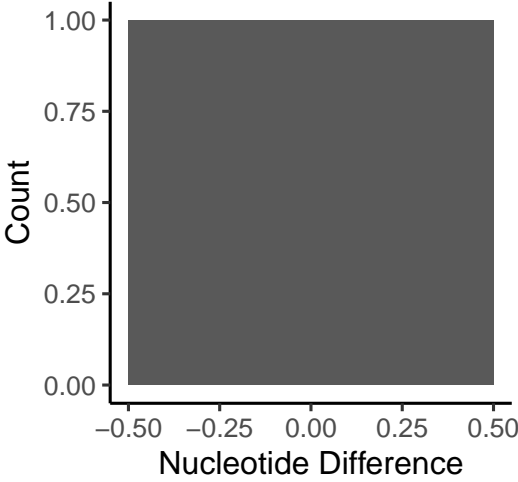
IGHV6-1*01

107 sequences assigned
9 (8.4%) exact matches, in which:
9 unique CDR3
4 unique J



IGHV7-4-1*01

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





[illegible]