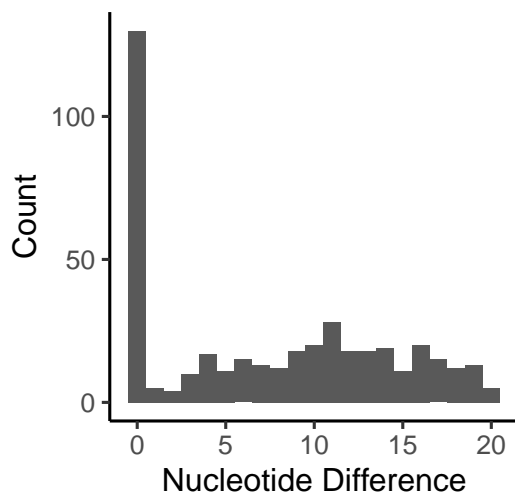


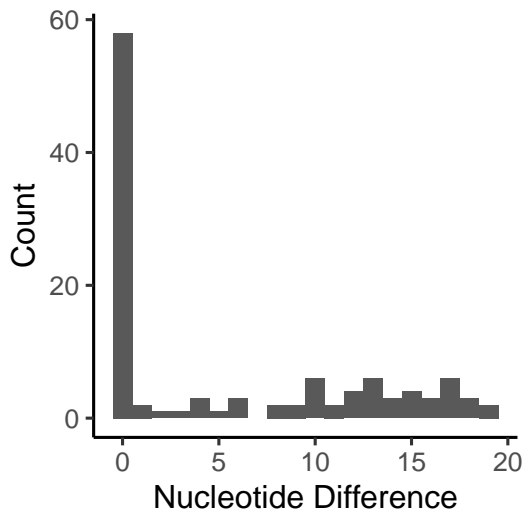
IGHV1-2*02

453 sequences assigned
130 (28.7%) exact matches, in which:
130 unique CDR3
6 unique J



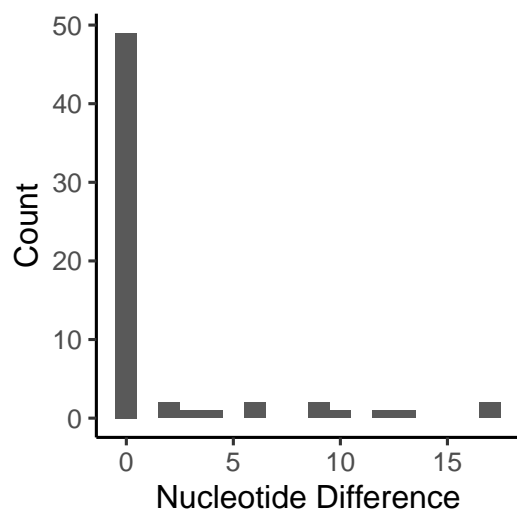
IGHV1-8*03

134 sequences assigned
58 (43.3%) exact matches, in which:
57 unique CDR3
4 unique J



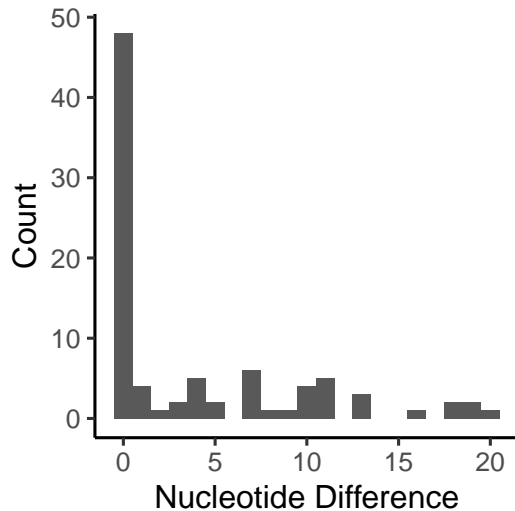
IGHV1-24*01

67 sequences assigned
49 (73.1%) exact matches, in which:
49 unique CDR3
5 unique J



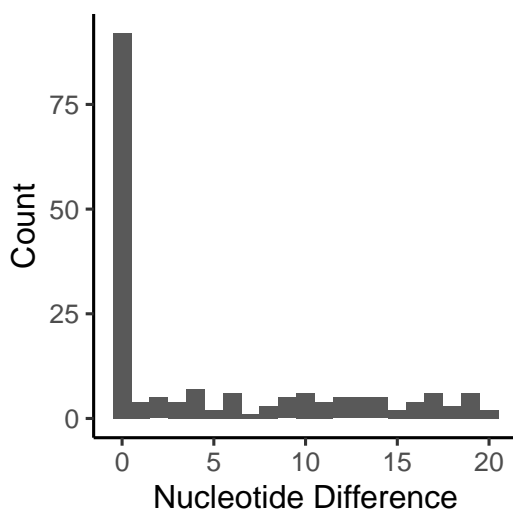
IGHV1-2*04

88 sequences assigned
48 (54.5%) exact matches, in which:
48 unique CDR3
5 unique J



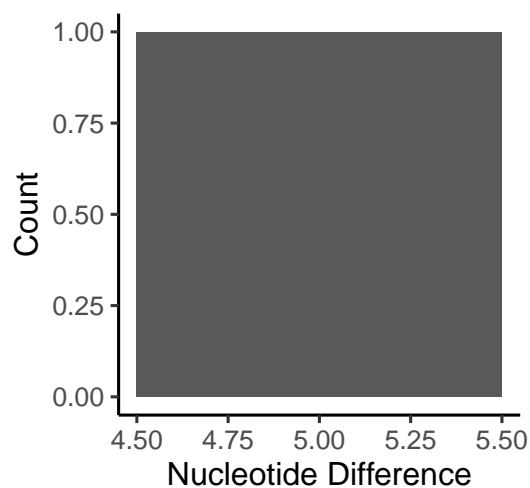
IGHV1-18*01

201 sequences assigned
92 (45.8%) exact matches, in which:
90 unique CDR3
5 unique J



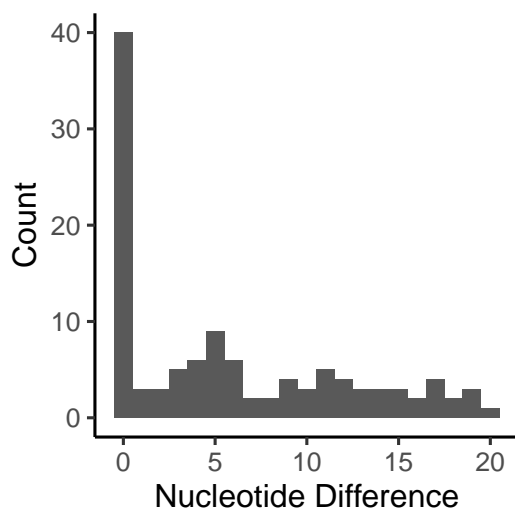
IGHV1-45*02

1 sequences assigned
No exact matches.



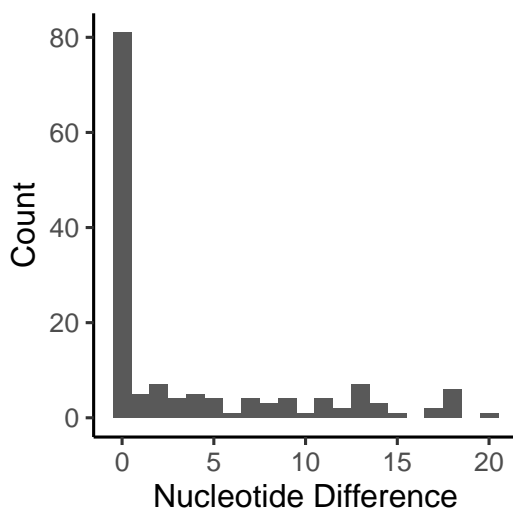
IGHV1-3*01_05

125 sequences assigned
40 (32%) exact matches, in which:
40 unique CDR3
5 unique J



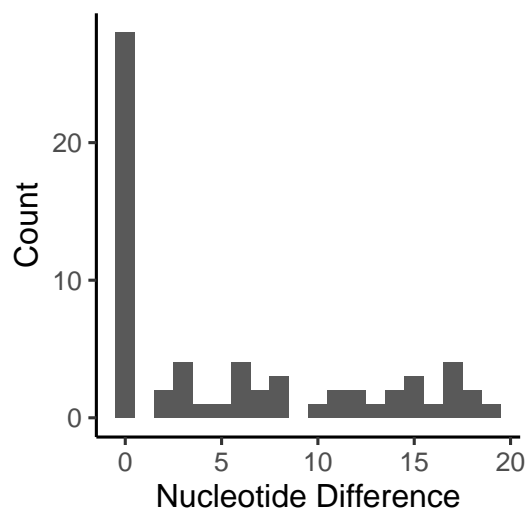
IGHV1-18*04

158 sequences assigned
81 (51.3%) exact matches, in which:
81 unique CDR3
4 unique J



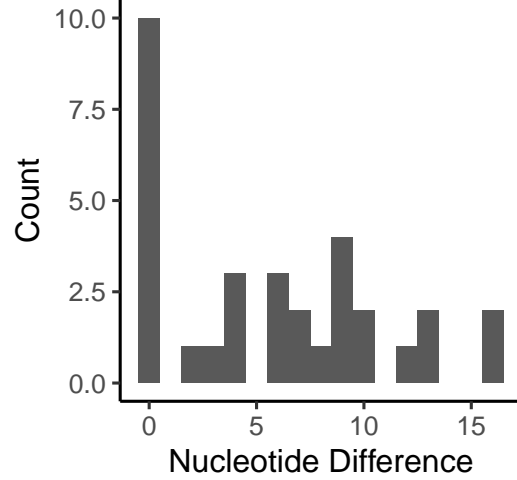
IGHV1-46*01

73 sequences assigned
28 (38.4%) exact matches, in which:
28 unique CDR3
4 unique J



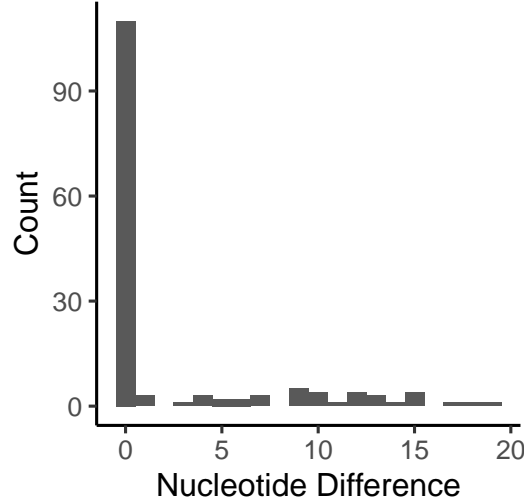
IGHV1-46*03

35 sequences assigned
10 (28.6%) exact matches, in which:
9 unique CDR3
5 unique J



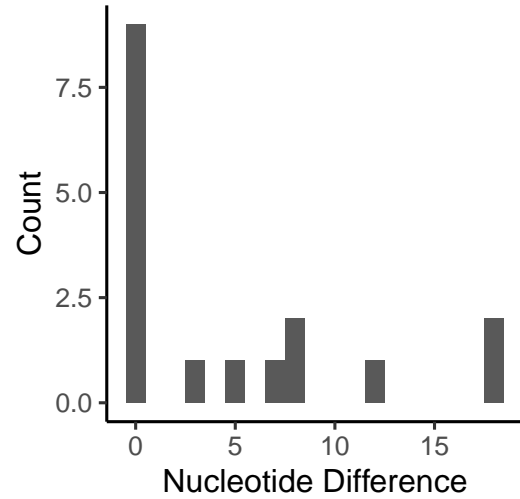
IGHV1-69*01_12_13

170 sequences assigned
110 (64.7%) exact matches, in which:
108 unique CDR3
6 unique J



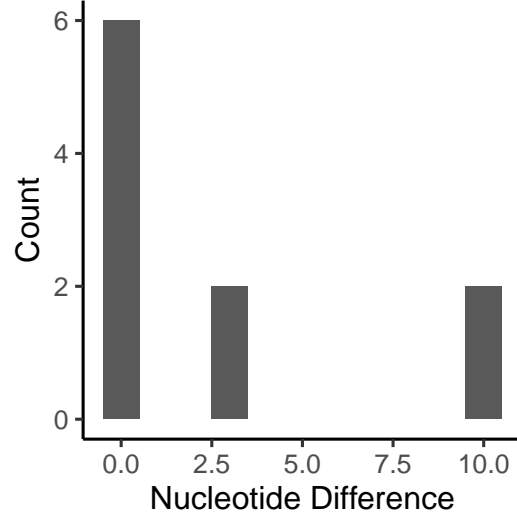
IGHV2-26*01

17 sequences assigned
9 (52.9%) exact matches, in which:
9 unique CDR3
3 unique J



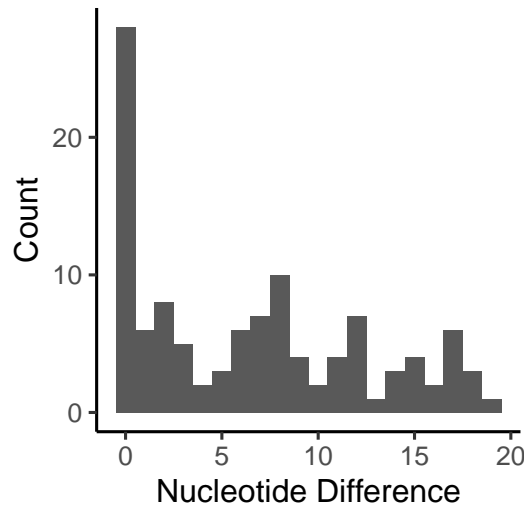
IGHV1-58*02

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



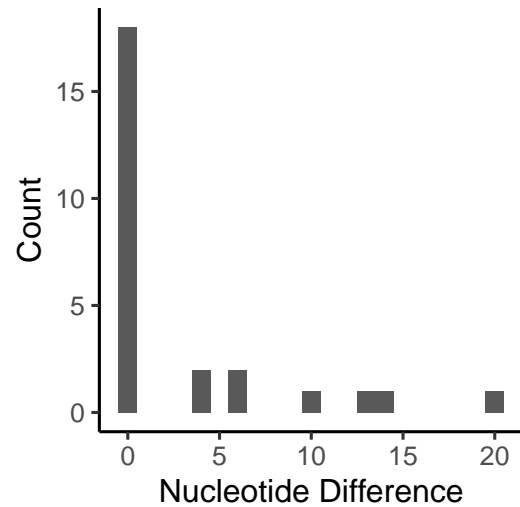
IGHV2-5*01

117 sequences assigned
28 (23.9%) exact matches, in which:
28 unique CDR3
4 unique J



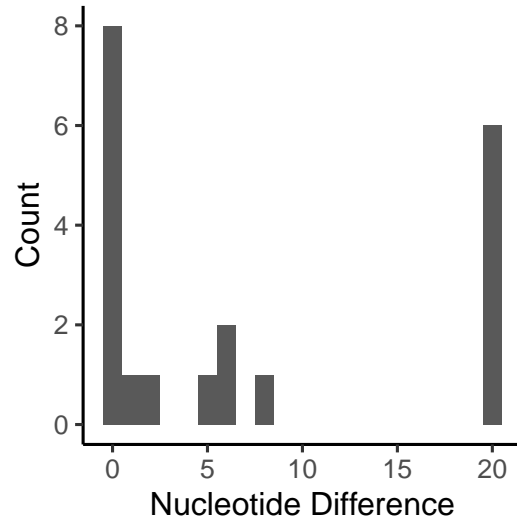
IGHV2-70*01

29 sequences assigned
18 (62.1%) exact matches, in which:
18 unique CDR3
4 unique J



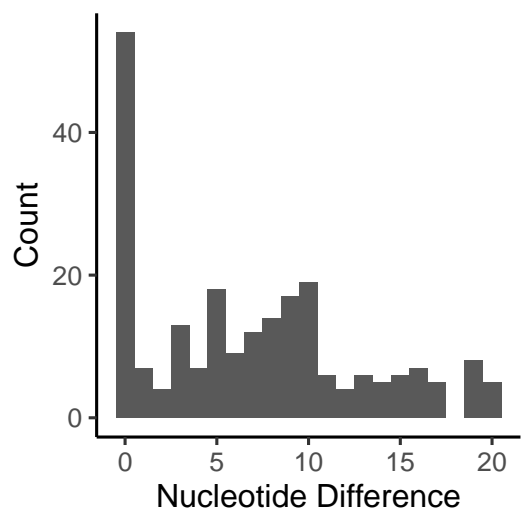
IGHV1-58*01_03

23 sequences assigned
8 (34.8%) exact matches, in which:
8 unique CDR3
3 unique J



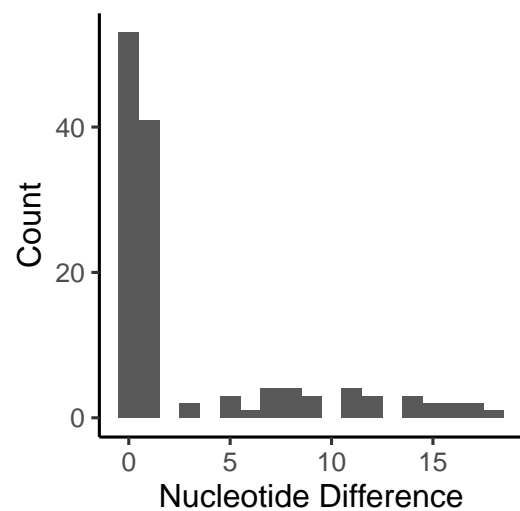
IGHV2-5*02

260 sequences assigned
54 (20.8%) exact matches, in which:
52 unique CDR3
5 unique J



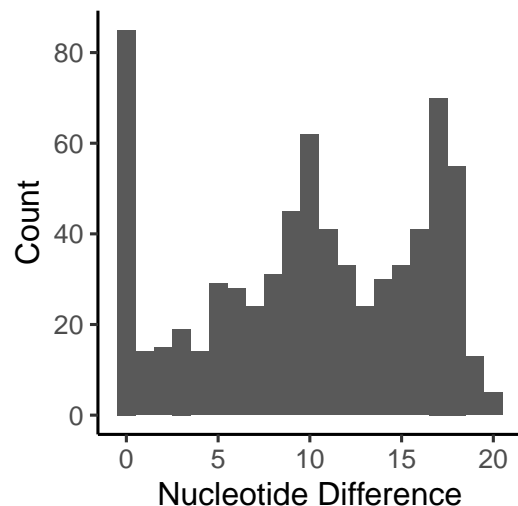
IGHV2-70*11_15

131 sequences assigned
53 (40.5%) exact matches, in which:
34 unique CDR3
3 unique J



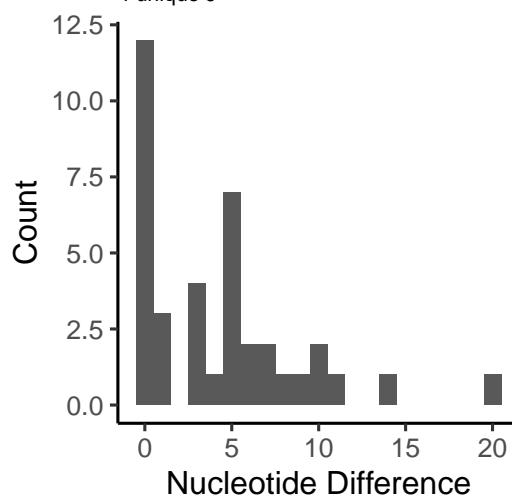
IGHV3-7*01

794 sequences assigned
85 (10.7%) exact matches, in which:
83 unique CDR3
6 unique J



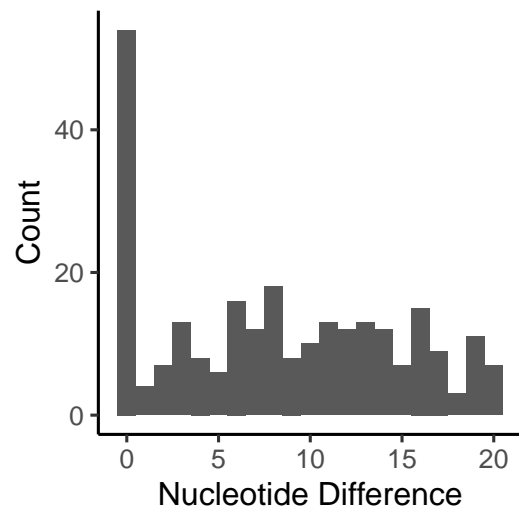
IGHV3-9*03

44 sequences assigned
12 (27.3%) exact matches, in which:
11 unique CDR3
4 unique J



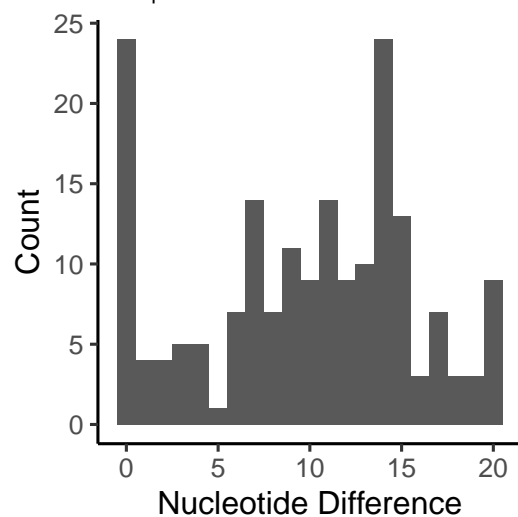
IGHV3-15*01_02

305 sequences assigned
54 (17.7%) exact matches, in which:
51 unique CDR3
6 unique J



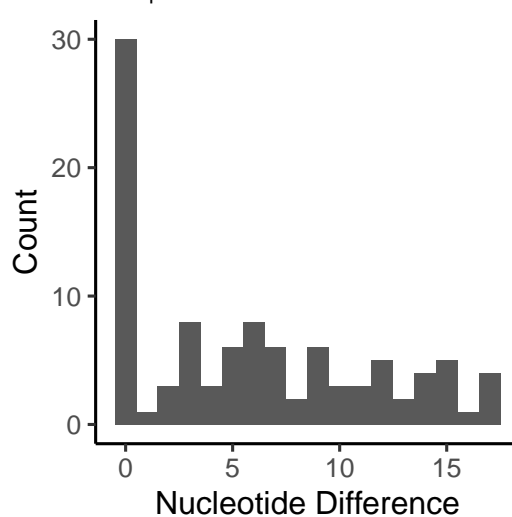
IGHV3-7*04

214 sequences assigned
24 (11.2%) exact matches, in which:
23 unique CDR3
3 unique J



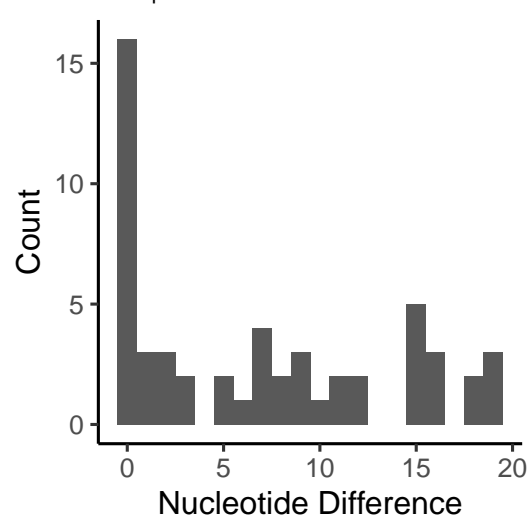
IGHV3-11*04

127 sequences assigned
30 (23.6%) exact matches, in which:
29 unique CDR3
5 unique J



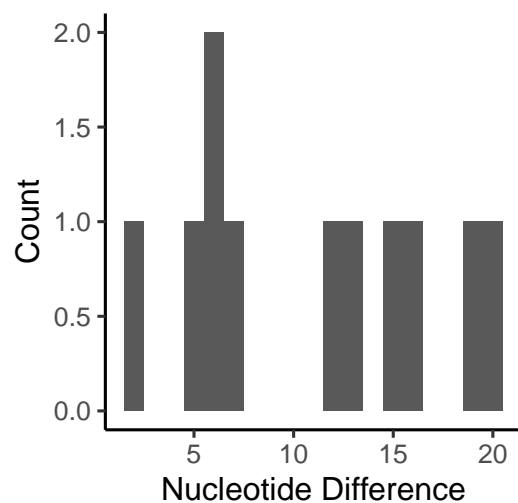
IGHV3-20*03_04

62 sequences assigned
16 (25.8%) exact matches, in which:
15 unique CDR3
4 unique J



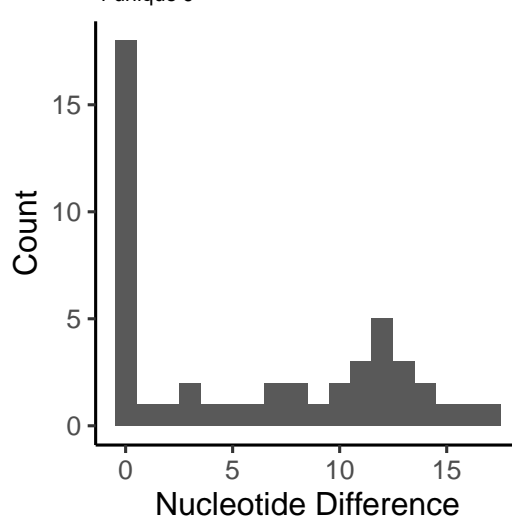
IGHV3-9*01

13 sequences assigned
No exact matches.



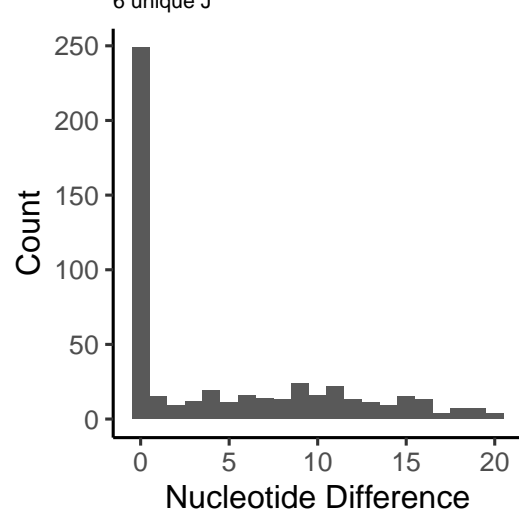
IGHV3-13*04

52 sequences assigned
18 (34.6%) exact matches, in which:
17 unique CDR3
4 unique J



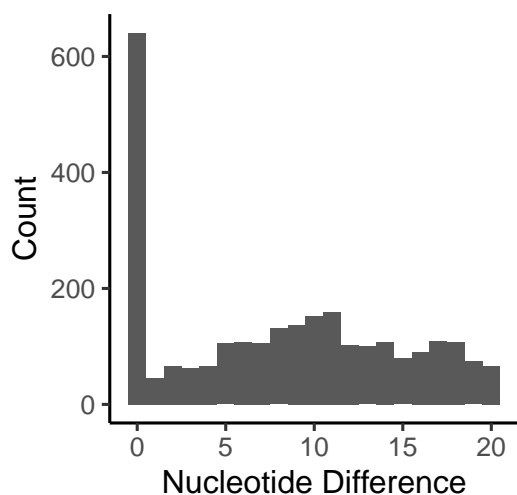
IGHV3-21*01_02

563 sequences assigned
249 (44.2%) exact matches, in which:
234 unique CDR3
6 unique J



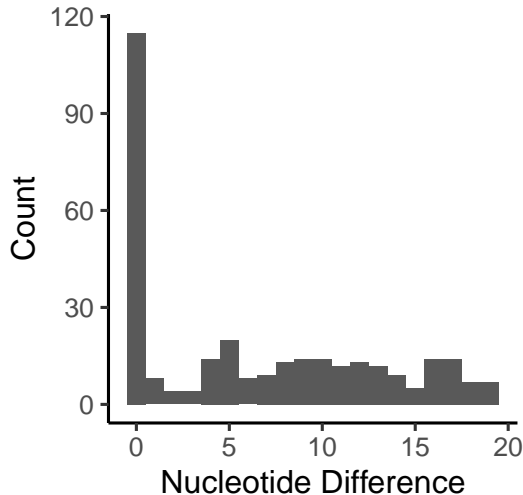
IGHV3-23*01_04

2968 sequences assigned
641 (21.6%) exact matches, in which:
598 unique CDR3
6 unique J



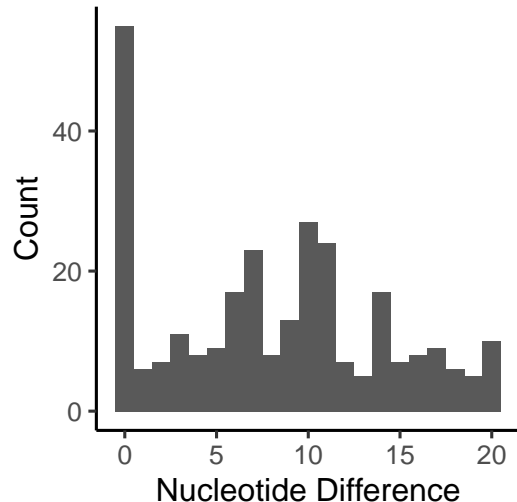
IGHV3-33*01

351 sequences assigned
115 (32.8%) exact matches, in which:
109 unique CDR3
6 unique J



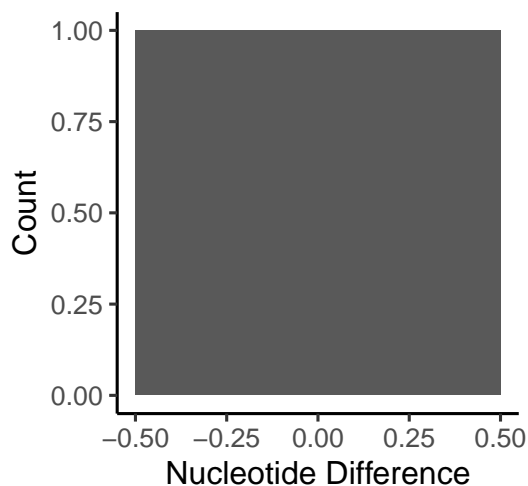
IGHV3-48*01

318 sequences assigned
55 (17.3%) exact matches, in which:
51 unique CDR3
4 unique J



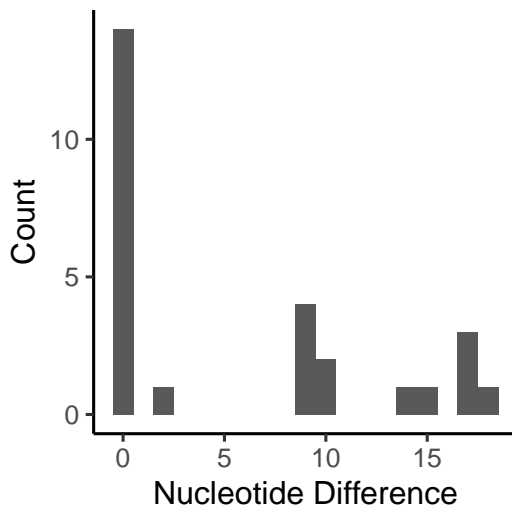
IGHV3-30-3*01

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



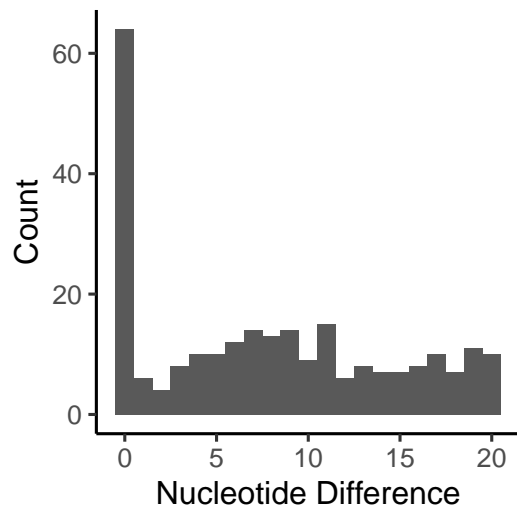
IGHV3-43*01

30 sequences assigned
14 (46.7%) exact matches, in which:
11 unique CDR3
2 unique J



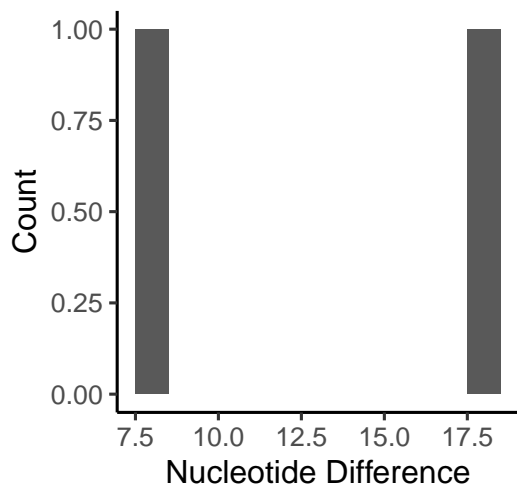
IGHV3-48*02

308 sequences assigned
64 (20.8%) exact matches, in which:
58 unique CDR3
6 unique J



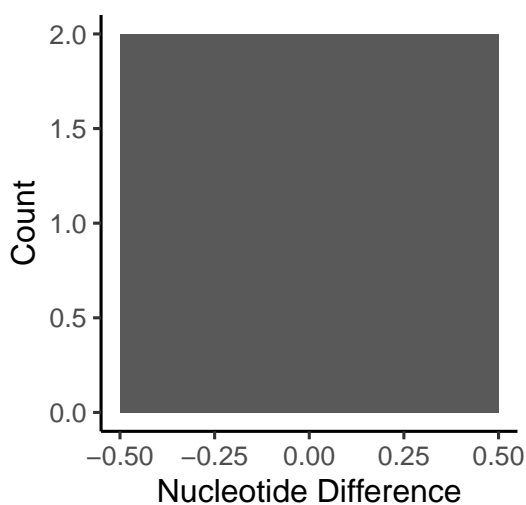
IGHV3-30-3*03

2 sequences assigned
No exact matches.



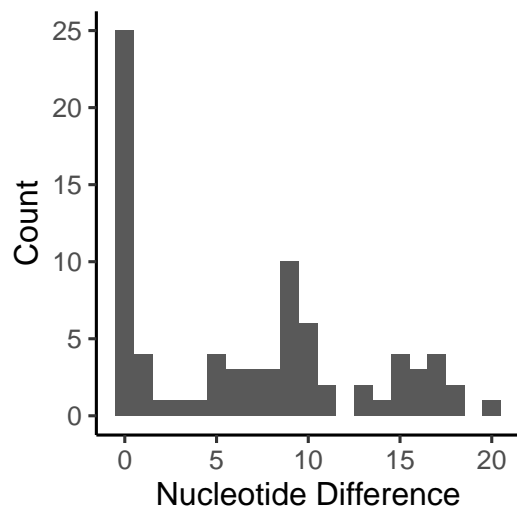
IGHV3-47*02

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



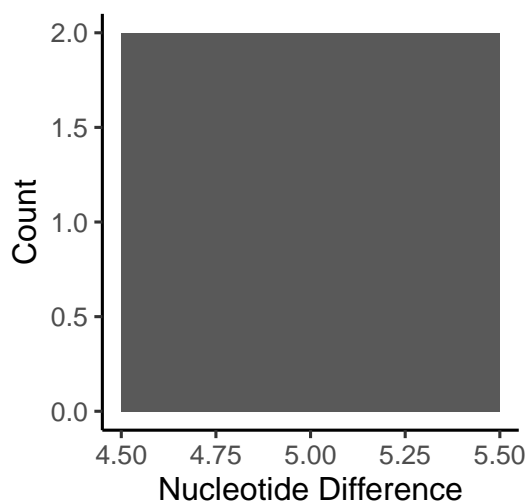
IGHV3-49*03_05

92 sequences assigned
25 (27.2%) exact matches, in which:
24 unique CDR3
4 unique J



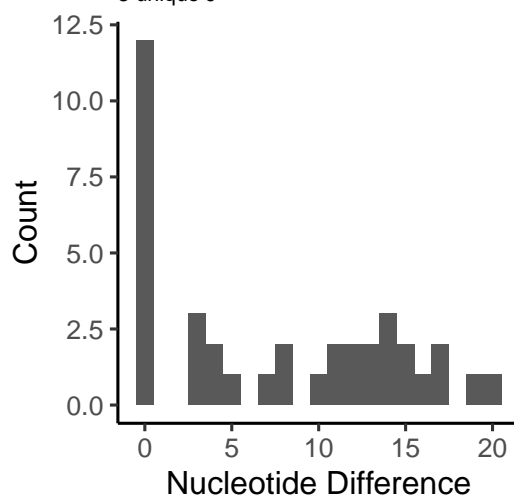
IGHV3-52*01_03

2 sequences assigned
No exact matches.



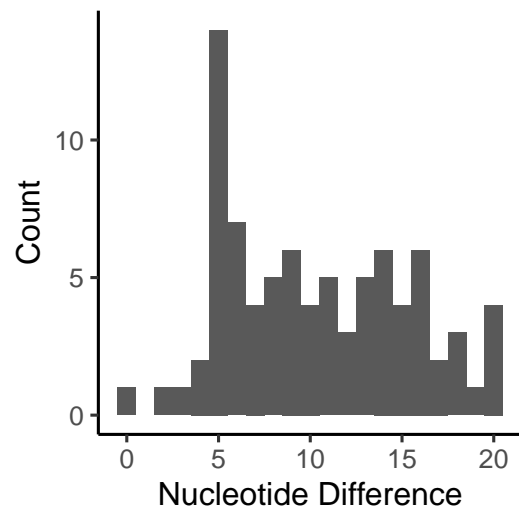
IGHV3-64*01

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



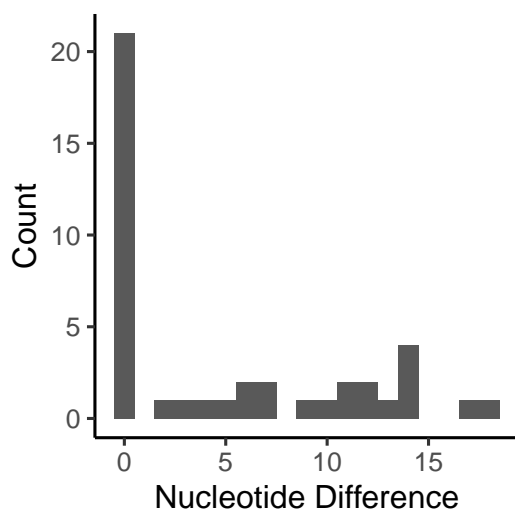
IGHV3-72*01

88 sequences assigned
1 (1.1%) exact matches, in which:
1 unique CDR3
1 unique J



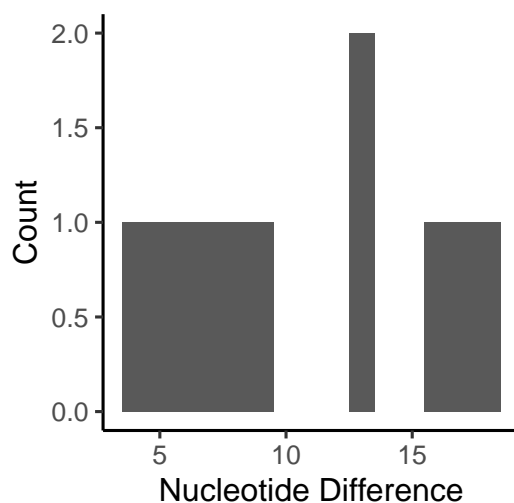
IGHV3-53*04

52 sequences assigned
21 (40.4%) exact matches, in which:
18 unique CDR3
3 unique J



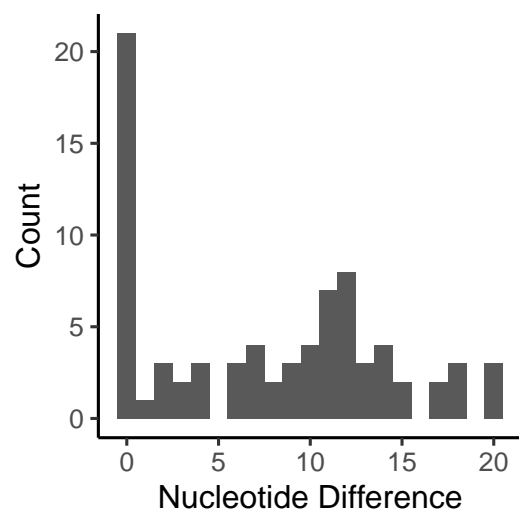
IGHV3-64*02_07

11 sequences assigned
No exact matches.



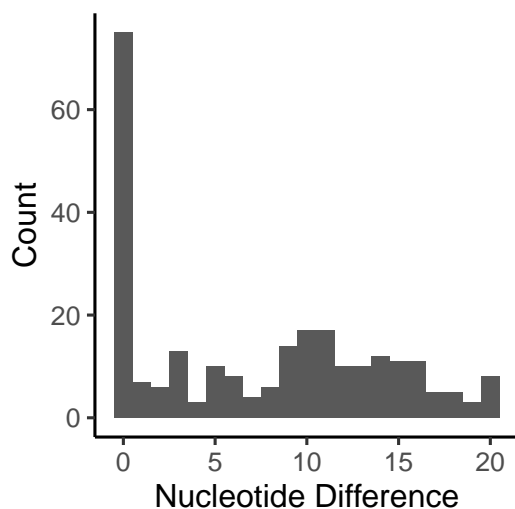
IGHV3-73*01_02

91 sequences assigned
21 (23.1%) exact matches, in which:
20 unique CDR3
4 unique J



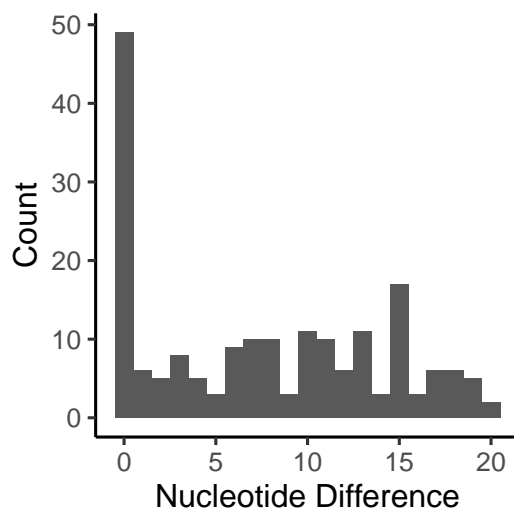
IGHV3-53*01_02

270 sequences assigned
75 (27.8%) exact matches, in which:
65 unique CDR3
5 unique J



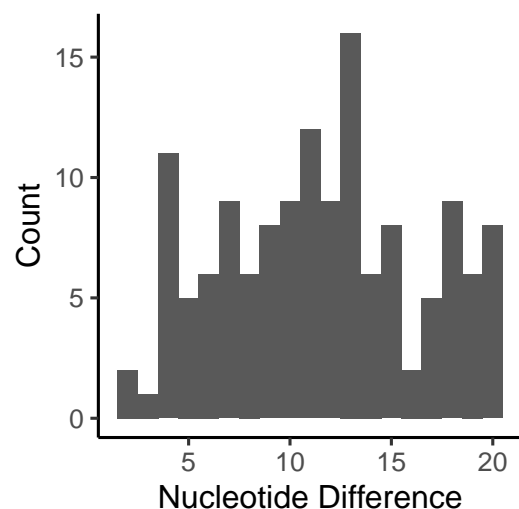
IGHV3-66*01

193 sequences assigned
49 (25.4%) exact matches, in which:
43 unique CDR3
6 unique J



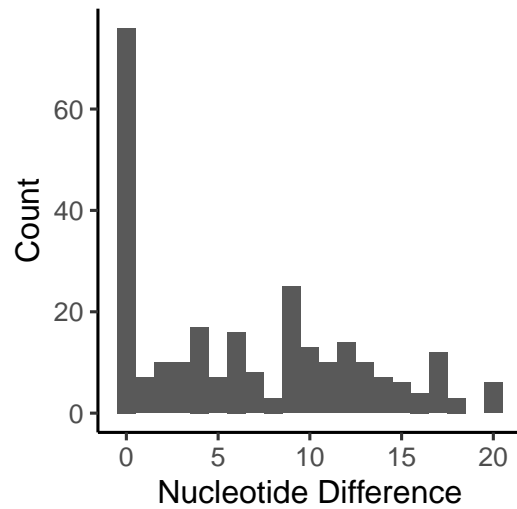
IGHV3-74*03

160 sequences assigned
No exact matches.



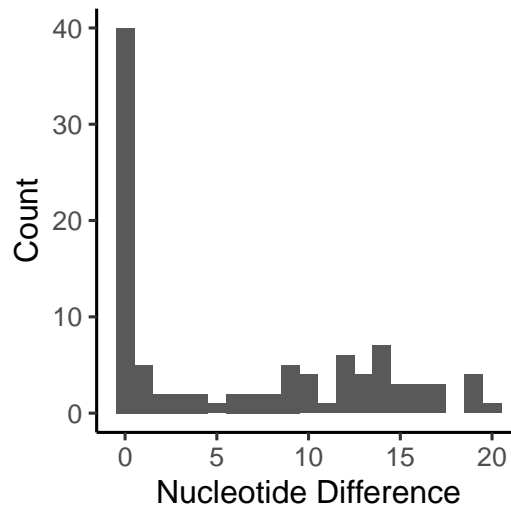
IGHV3-74*01_02

283 sequences assigned
76 (26.9%) exact matches, in which:
73 unique CDR3
5 unique J



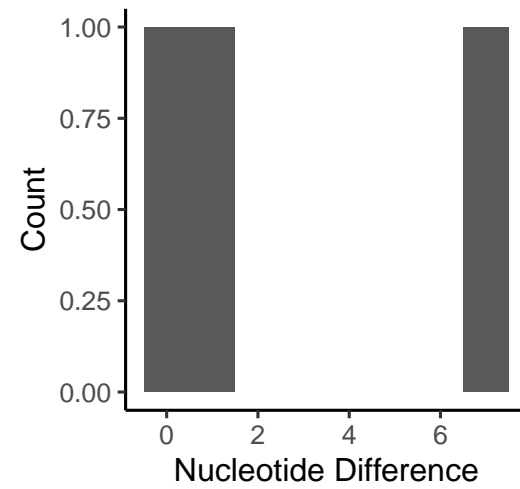
IGHV4-4*02_03

113 sequences assigned
40 (35.4%) exact matches, in which:
38 unique CDR3
6 unique J



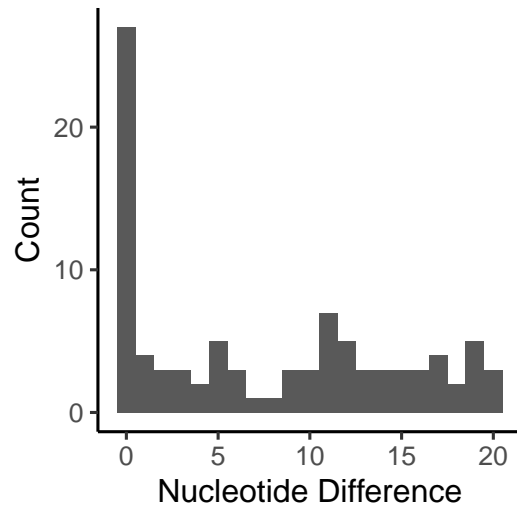
IGHV4-38-2*02

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



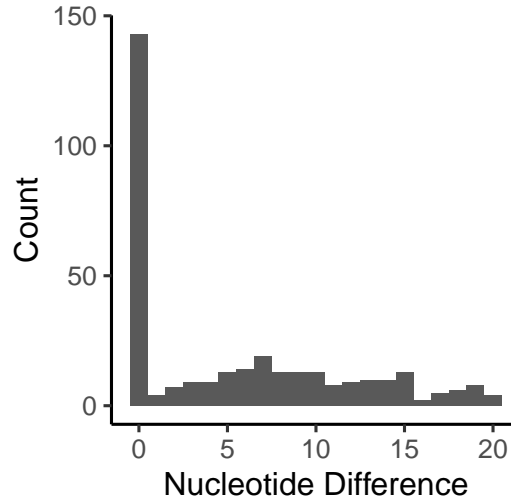
IGHV3-64D*06

110 sequences assigned
27 (24.5%) exact matches, in which:
26 unique CDR3
4 unique J



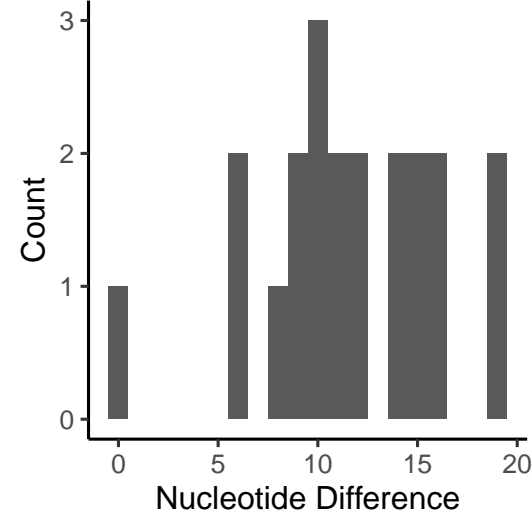
IGHV4-31*02

361 sequences assigned
143 (39.6%) exact matches, in which:
138 unique CDR3
6 unique J



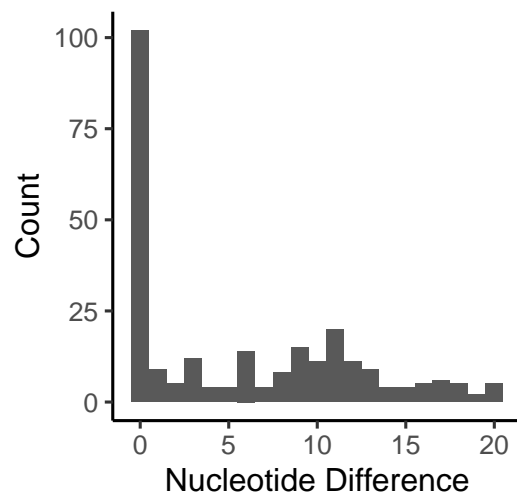
IGHV4-39*02

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



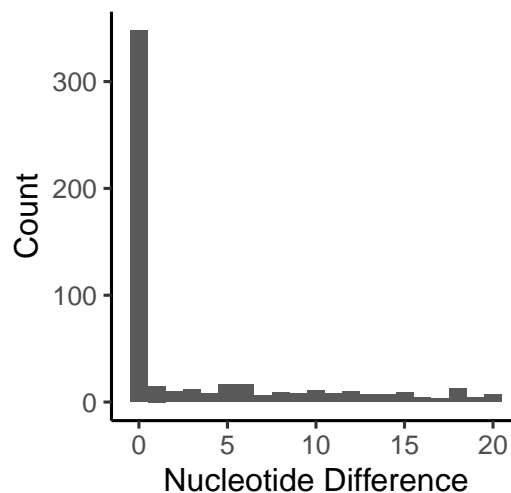
IGHV4-4*07

296 sequences assigned
102 (34.5%) exact matches, in which:
98 unique CDR3
5 unique J



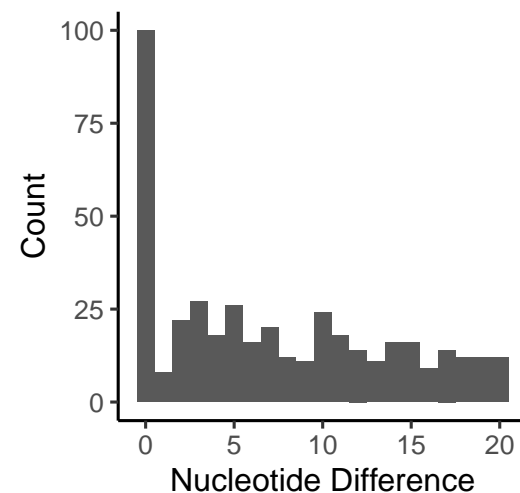
IGHV4-34*01_02

585 sequences assigned
348 (59.5%) exact matches, in which:
323 unique CDR3
6 unique J



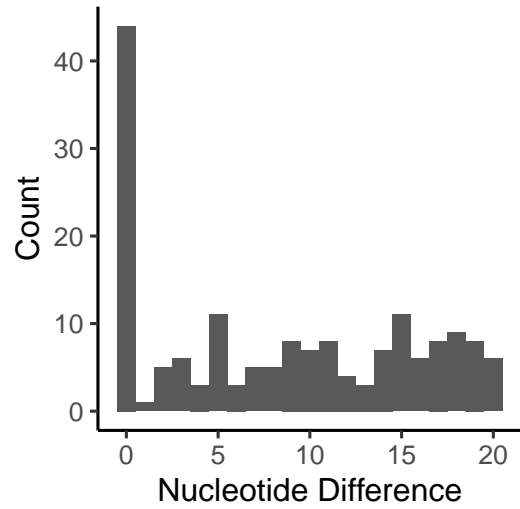
IGHV4-59*08

475 sequences assigned
100 (21.1%) exact matches, in which:
96 unique CDR3
5 unique J



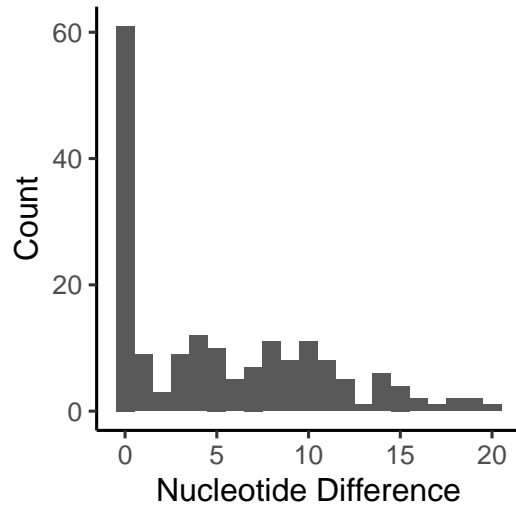
IGHV4-61*01

199 sequences assigned
44 (22.1%) exact matches, in which:
42 unique CDR3
5 unique J



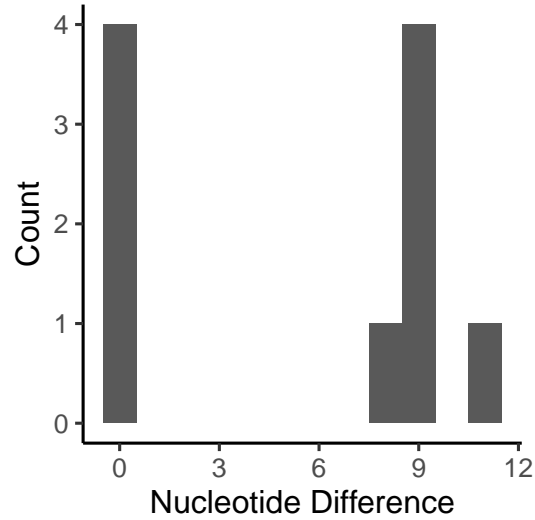
IGHV5-51*01_03

193 sequences assigned
61 (31.6%) exact matches, in which:
60 unique CDR3
5 unique J



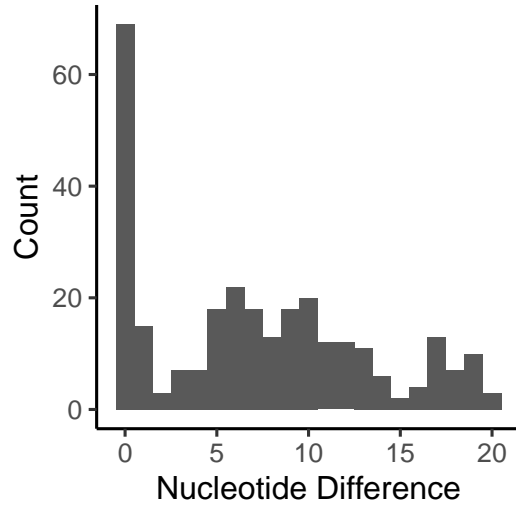
IGHV5-10-1*01_03

14 sequences assigned
4 (28.6%) exact matches, in which:
4 unique CDR3
2 unique J



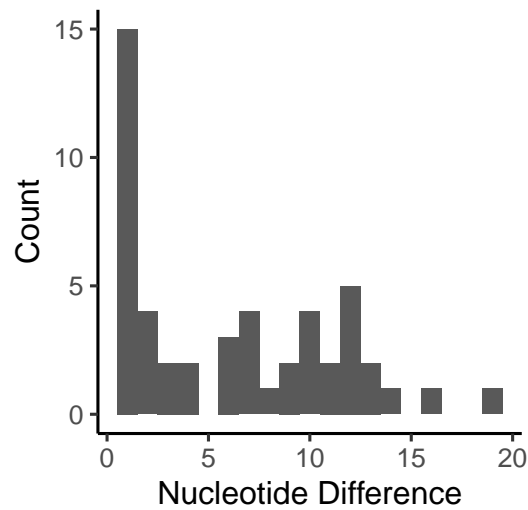
IGHV6-1*01_02

293 sequences assigned
69 (23.5%) exact matches, in which:
64 unique CDR3
5 unique J



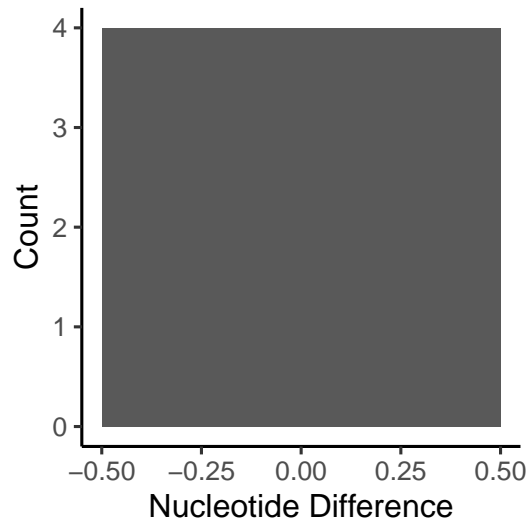
IGHV5-51*07

52 sequences assigned
No exact matches.



IGHV7-4-1*01

4 sequences assigned
4 (100%) exact matches, in which:
4 unique CDR3
2 unique J





Warning – no inferred sequences found.

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