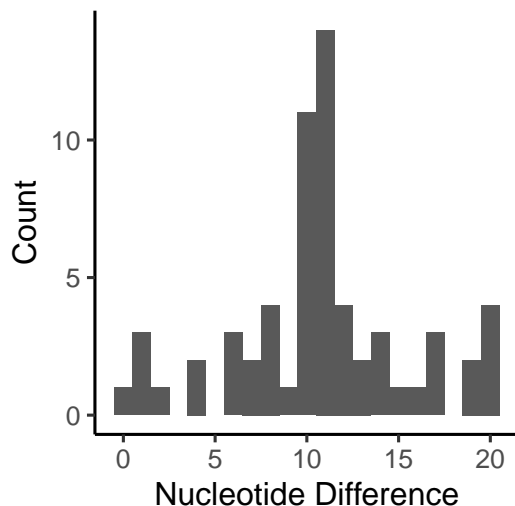


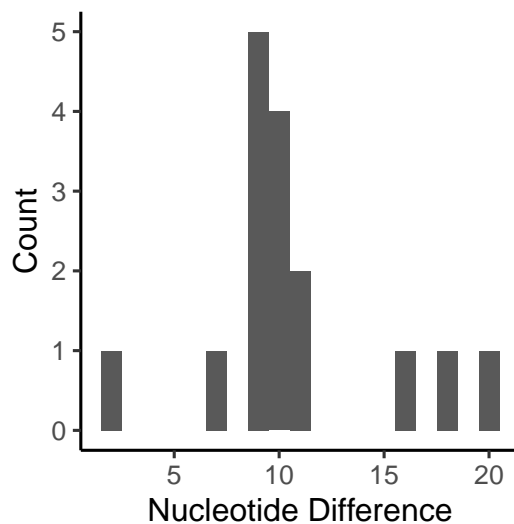
IGHV1-2*02

84 sequences assigned
1 (1.2%) exact matches, in which:
1 unique CDR3
1 unique J



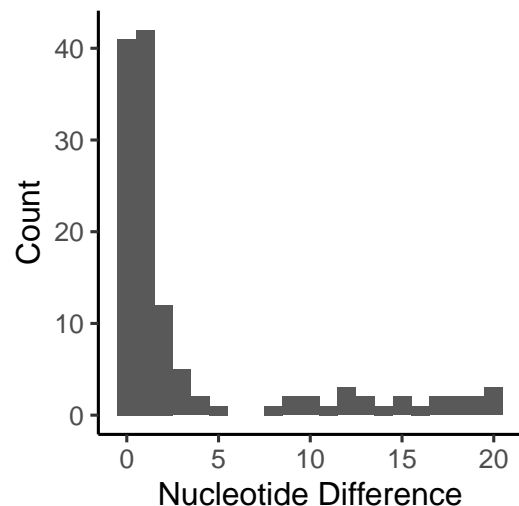
IGHV1-8*01

27 sequences assigned
No exact matches.



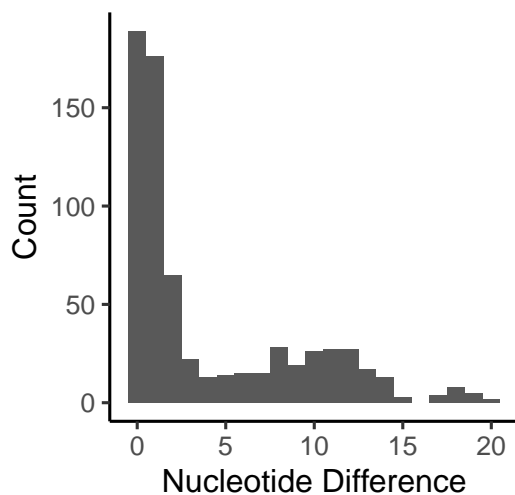
IGHV1-24*01

129 sequences assigned
41 (31.8%) exact matches, in which:
36 unique CDR3
4 unique J



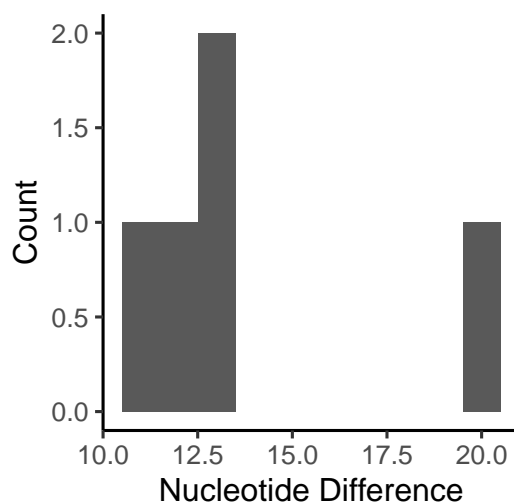
IGHV1-2*04

698 sequences assigned
189 (27.1%) exact matches, in which:
171 unique CDR3
6 unique J



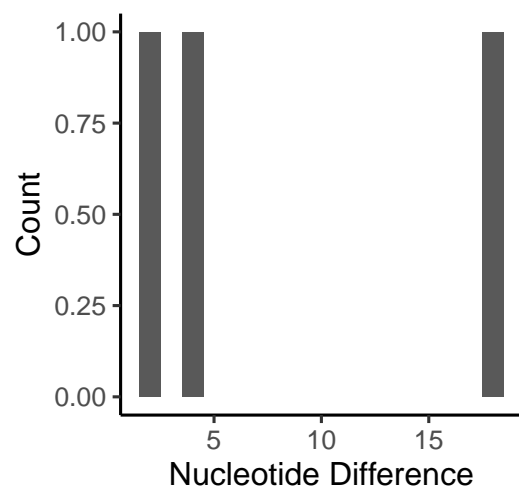
IGHV1-8*02

6 sequences assigned
No exact matches.



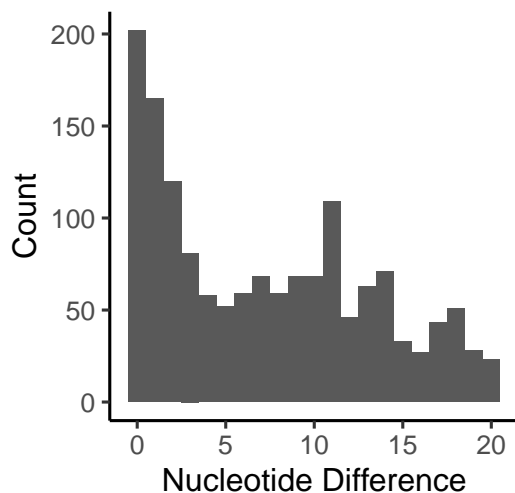
IGHV1-45*02

3 sequences assigned
No exact matches.



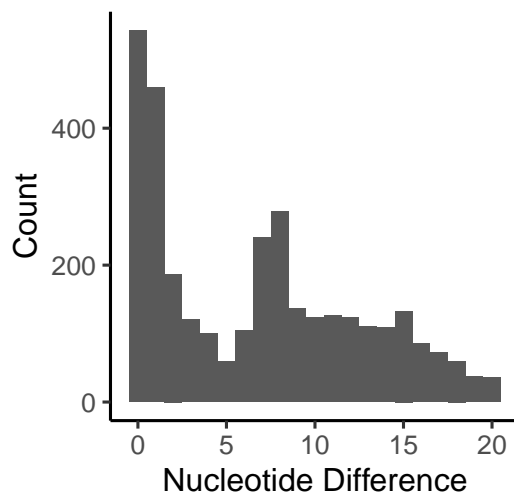
IGHV1-3*01_05

1672 sequences assigned
202 (12.1%) exact matches, in which:
190 unique CDR3
6 unique J



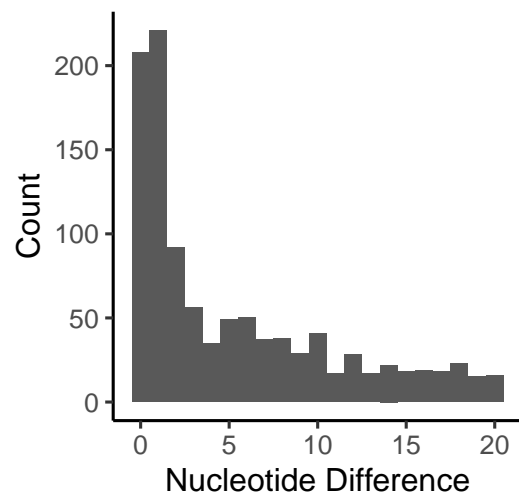
IGHV1-18*04

4576 sequences assigned
543 (11.9%) exact matches, in which:
501 unique CDR3
6 unique J



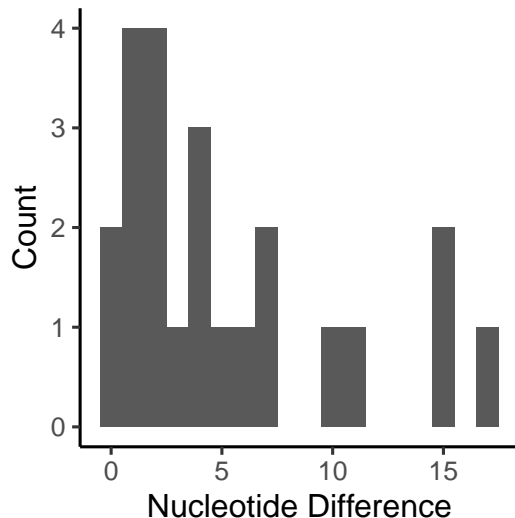
IGHV1-46*01

1423 sequences assigned
208 (14.6%) exact matches, in which:
194 unique CDR3
5 unique J



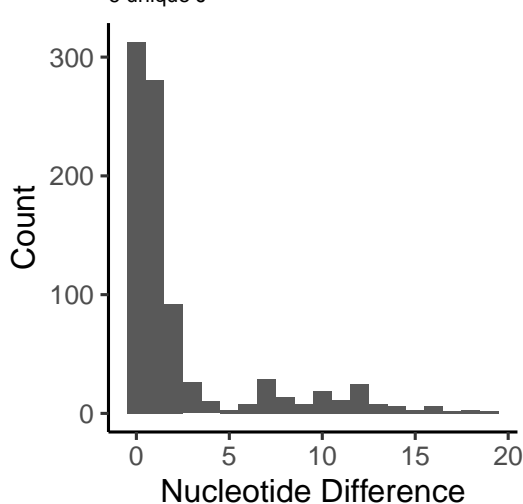
IGHV1-58*02

138 sequences assigned
2 (1.4%) exact matches, in which:
2 unique CDR3
2 unique J



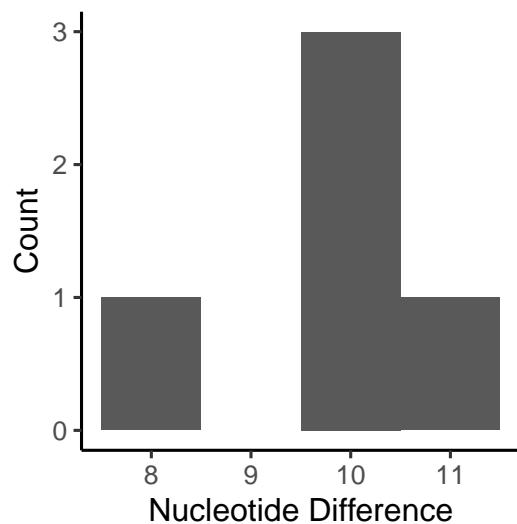
IGHV1-69*01_12_13

895 sequences assigned
313 (35%) exact matches, in which:
283 unique CDR3
6 unique J



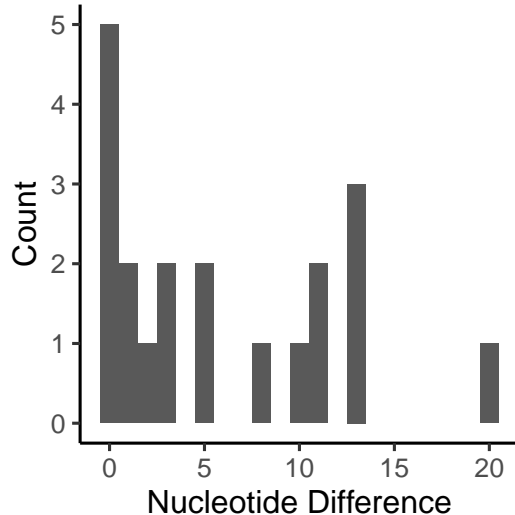
IGHV1-NL1*01

5 sequences assigned
No exact matches.



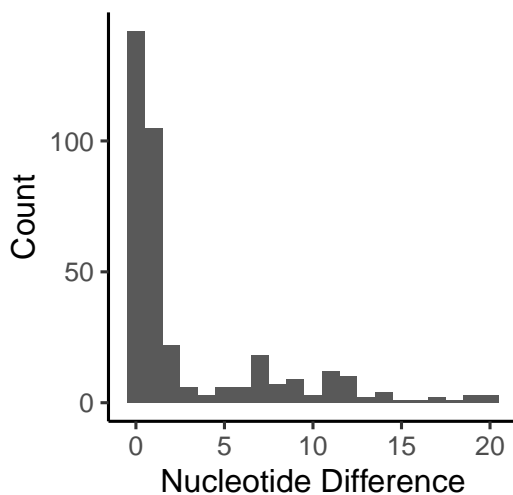
IGHV1-58*01_03

68 sequences assigned
5 (7.4%) exact matches, in which:
5 unique CDR3
4 unique J



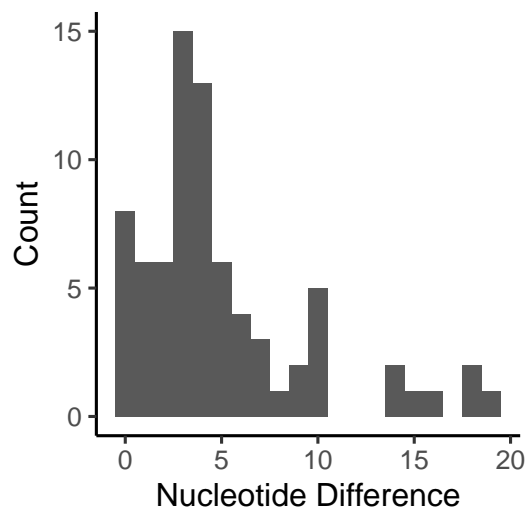
IGHV1-69*04_09

386 sequences assigned
142 (36.8%) exact matches, in which:
139 unique CDR3
5 unique J



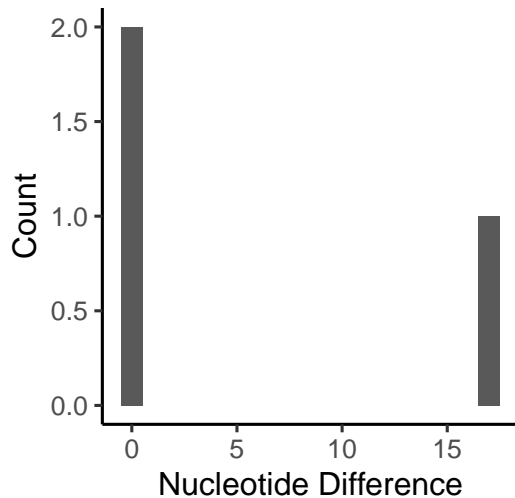
IGHV2-5*02

79 sequences assigned
8 (10.1%) exact matches, in which:
8 unique CDR3
4 unique J



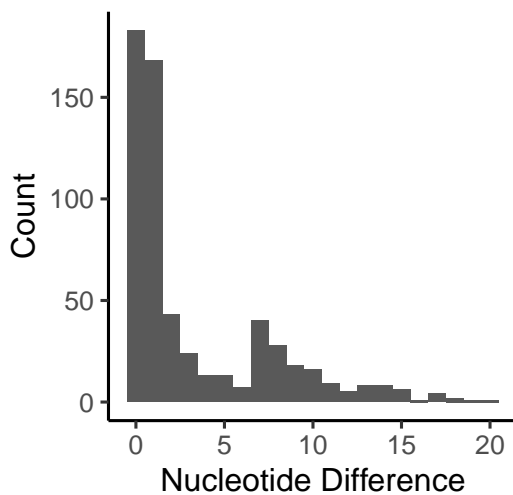
IGHV1-69-2*01

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
2 unique J



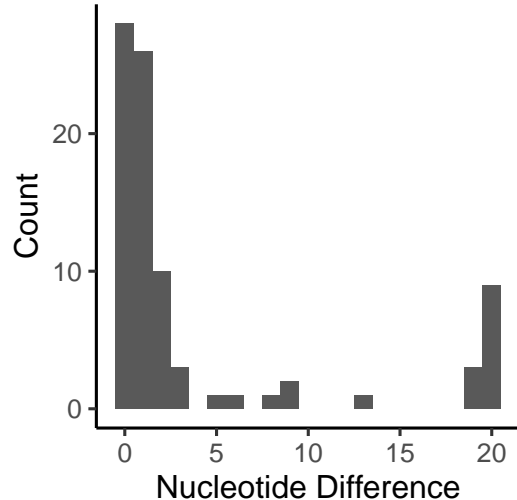
IGHV1-69*06_14

615 sequences assigned
183 (29.8%) exact matches, in which:
172 unique CDR3
6 unique J



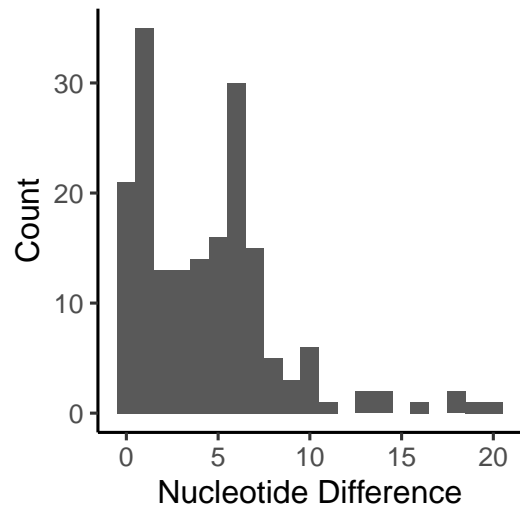
IGHV2-26*01

94 sequences assigned
28 (29.8%) exact matches, in which:
21 unique CDR3
4 unique J



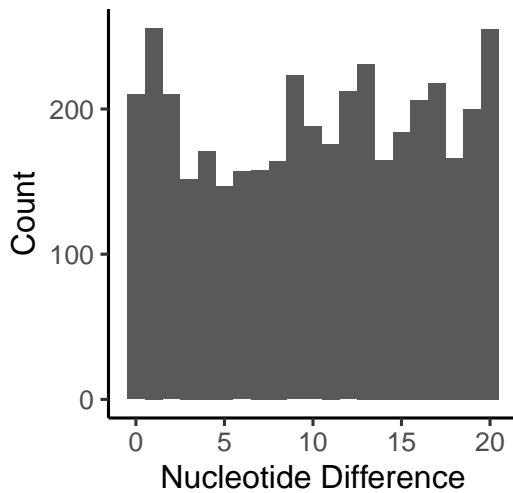
IGHV2-70*01

184 sequences assigned
21 (11.4%) exact matches, in which:
20 unique CDR3
4 unique J



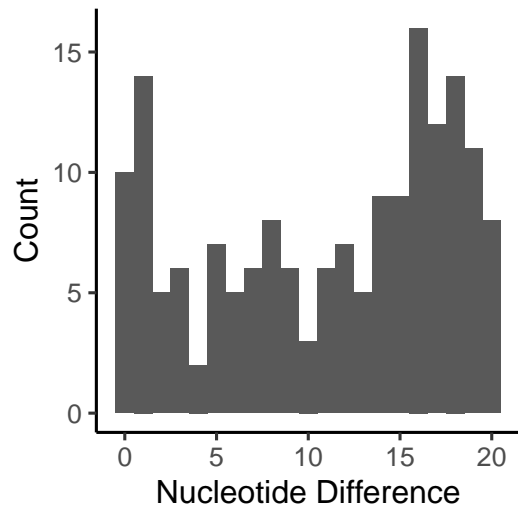
IGHV3-7*03

5488 sequences assigned
210 (3.8%) exact matches, in which:
162 unique CDR3
6 unique J



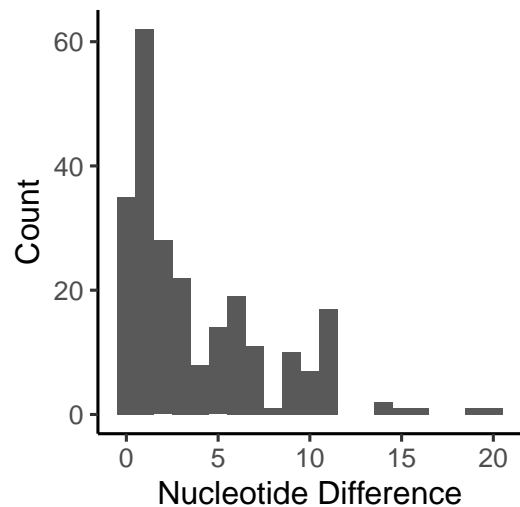
IGHV3-11*03_05

211 sequences assigned
10 (4.7%) exact matches, in which:
9 unique CDR3
2 unique J



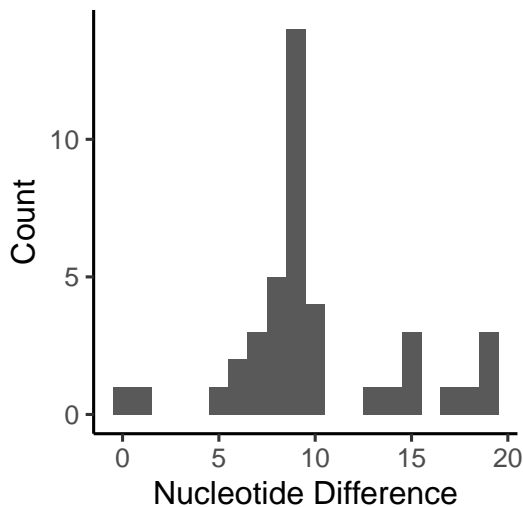
IGHV2-70*11_15

247 sequences assigned
35 (14.2%) exact matches, in which:
24 unique CDR3
4 unique J



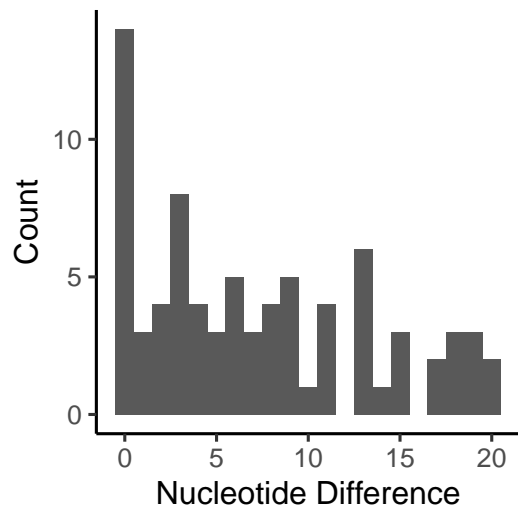
IGHV3-9*01

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



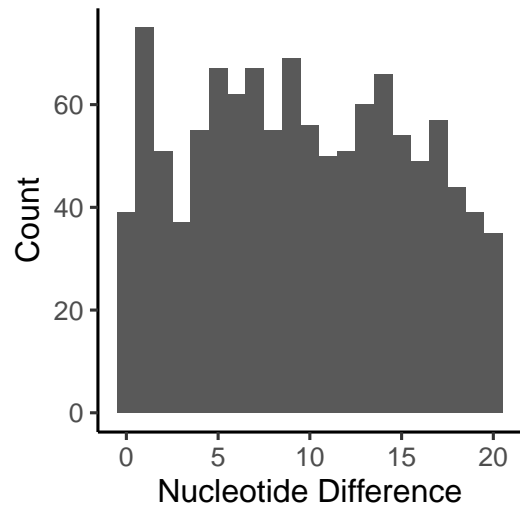
IGHV3-13*05

91 sequences assigned
14 (15.4%) exact matches, in which:
10 unique CDR3
3 unique J



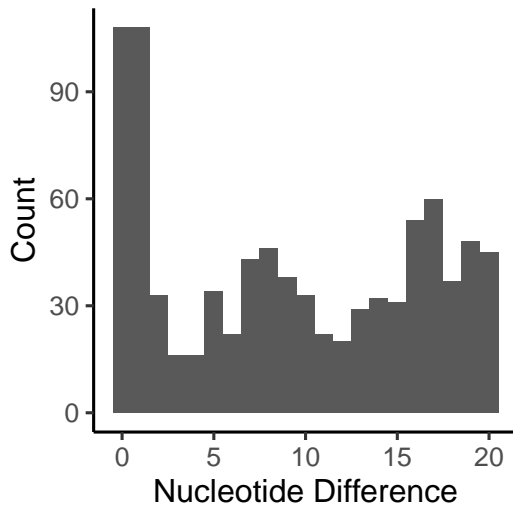
IGHV3-7*01

1432 sequences assigned
39 (2.7%) exact matches, in which:
39 unique CDR3
4 unique J



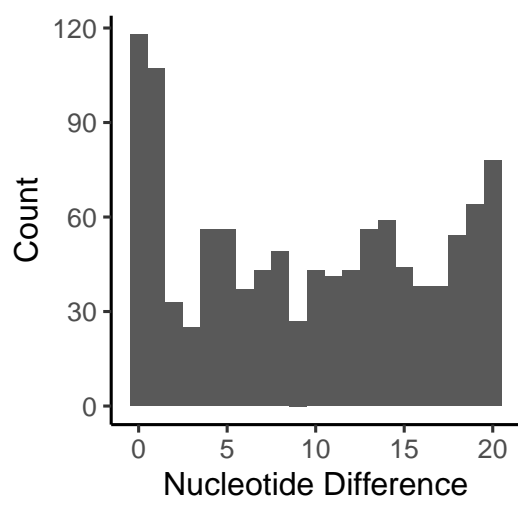
IGHV3-11*06

1014 sequences assigned
108 (10.7%) exact matches, in which:
93 unique CDR3
6 unique J



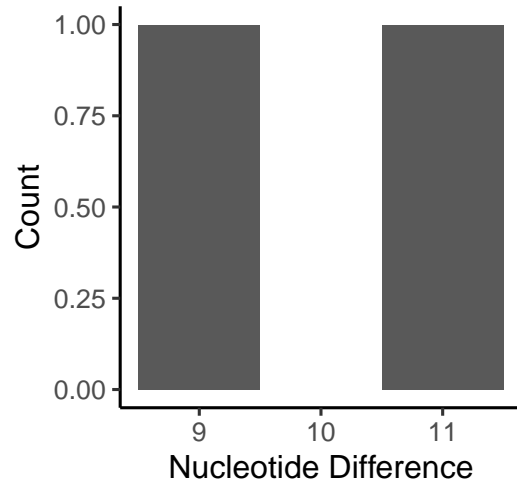
IGHV3-15*01_02

1550 sequences assigned
118 (7.6%) exact matches, in which:
80 unique CDR3
6 unique J



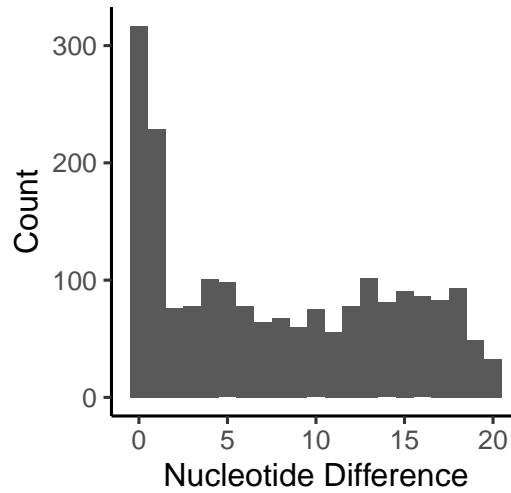
IGHV3-19*01

2 sequences assigned
No exact matches.



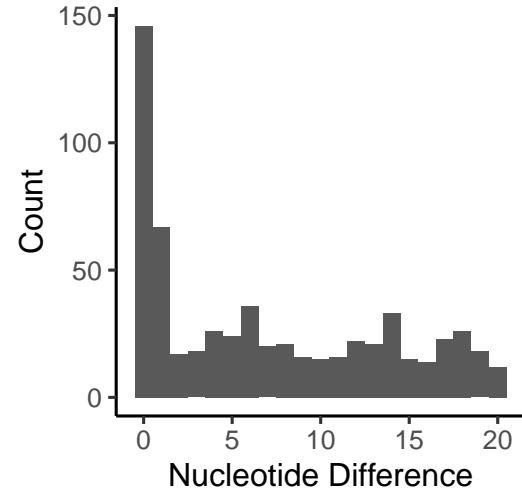
IGHV3-21*01_02

2183 sequences assigned
317 (14.5%) exact matches, in which:
263 unique CDR3
6 unique J



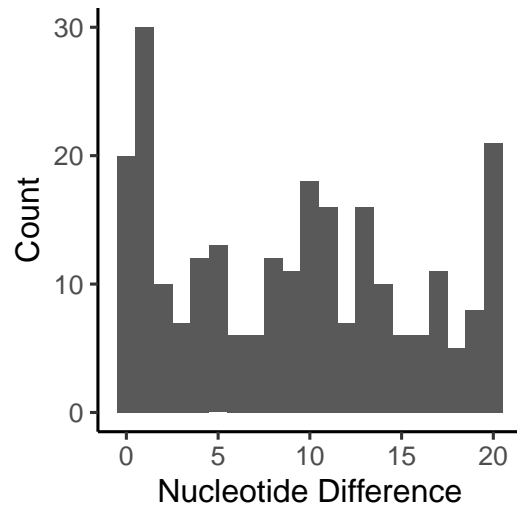
IGHV3-30*03

870 sequences assigned
146 (16.8%) exact matches, in which:
130 unique CDR3
5 unique J



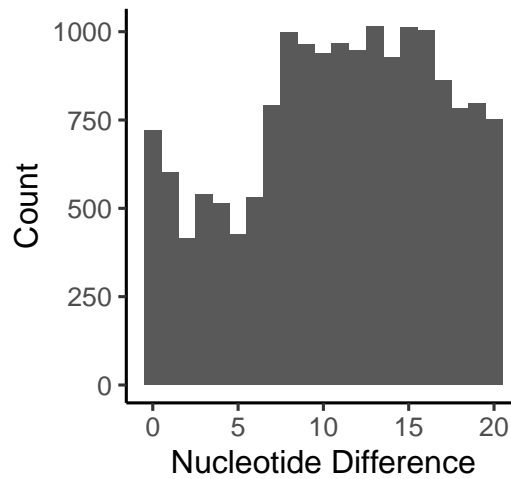
IGHV3-20*03_04

358 sequences assigned
20 (5.6%) exact matches, in which:
15 unique CDR3
5 unique J



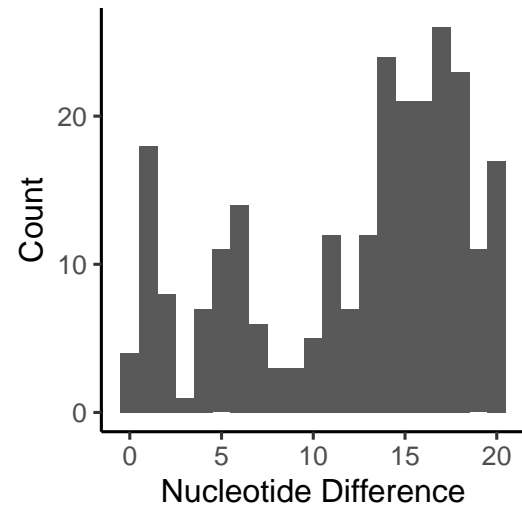
IGHV3-23*01_04

20792 sequences assigned
720 (3.5%) exact matches, in which:
582 unique CDR3
6 unique J



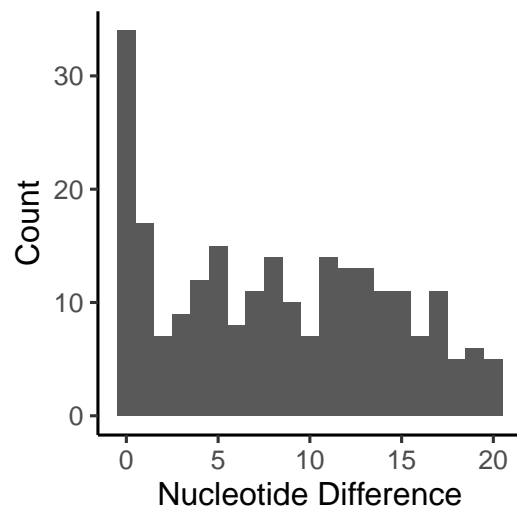
IGHV3-30*04

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



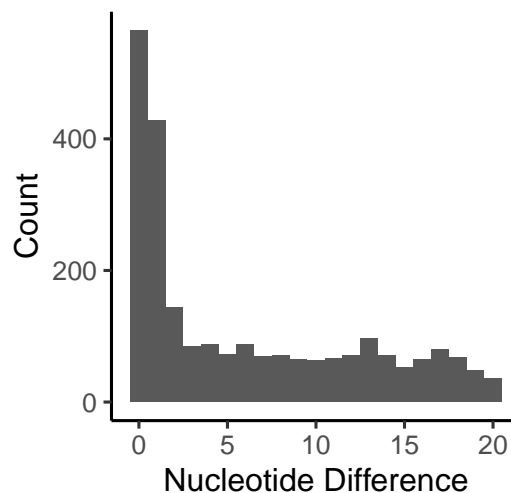
IGHV3-21*04

258 sequences assigned
34 (13.2%) exact matches, in which:
32 unique CDR3
5 unique J



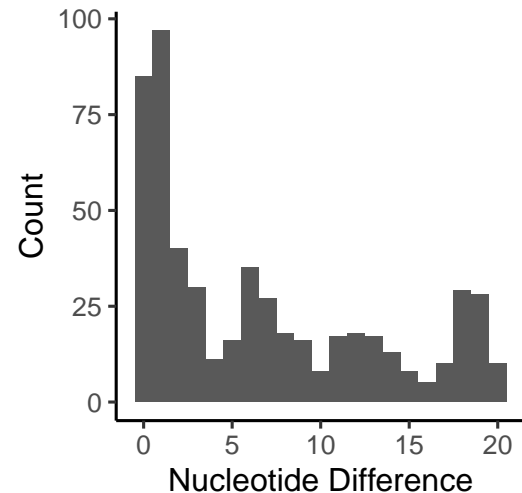
IGHV3-30-3*01

2833 sequences assigned
565 (19.9%) exact matches, in which:
457 unique CDR3
6 unique J



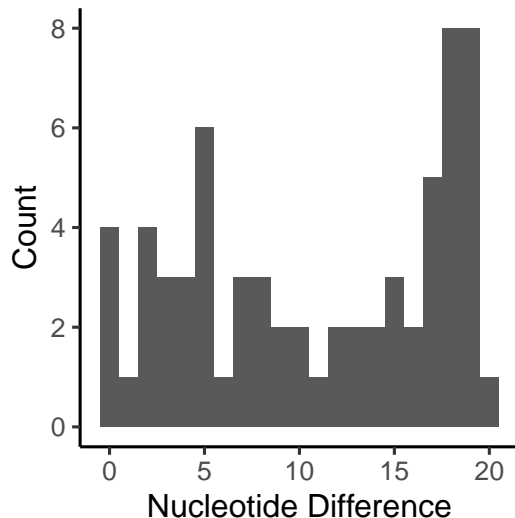
IGHV3-33*01

600 sequences assigned
85 (14.2%) exact matches, in which:
63 unique CDR3
6 unique J



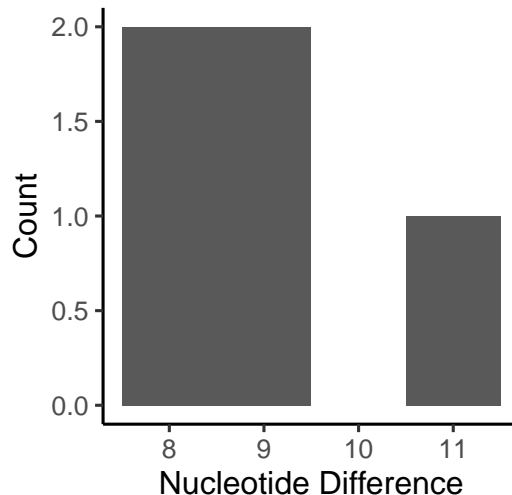
IGHV3-33*05

83 sequences assigned
4 (4.8%) exact matches, in which:
4 unique CDR3
2 unique J



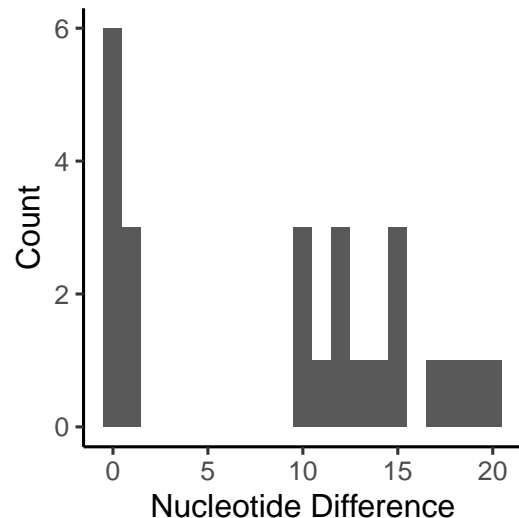
IGHV3-35*01

5 sequences assigned
No exact matches.



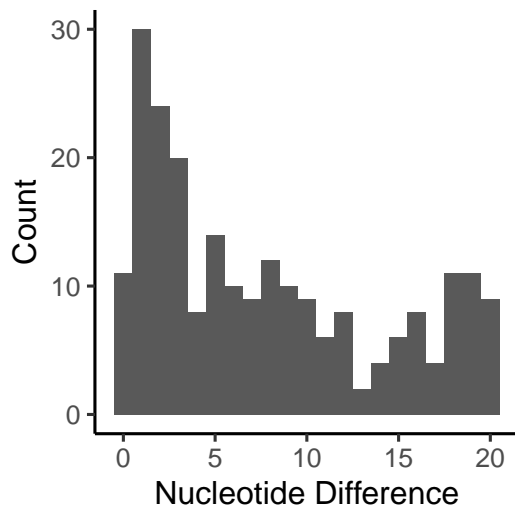
IGHV3-43*01

45 sequences assigned
6 (13.3%) exact matches, in which:
4 unique CDR3
2 unique J



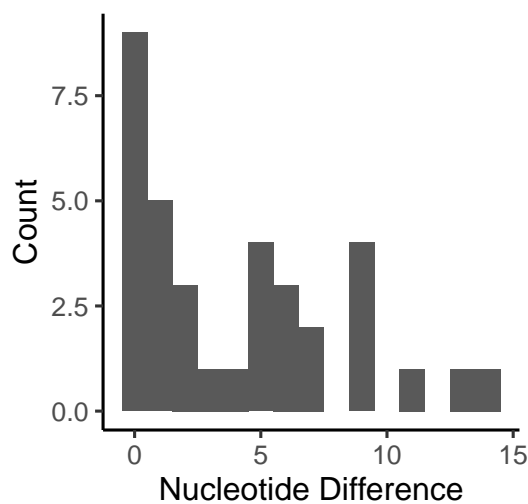
IGHV3-33*06

240 sequences assigned
11 (4.6%) exact matches, in which:
10 unique CDR3
4 unique J



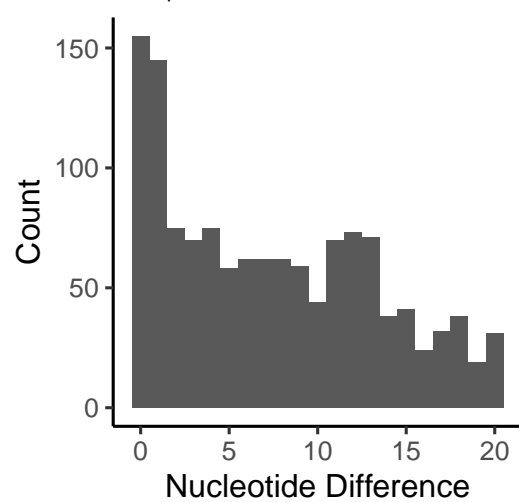
IGHV3-38-3*01

35 sequences assigned
9 (25.7%) exact matches, in which:
9 unique CDR3
2 unique J



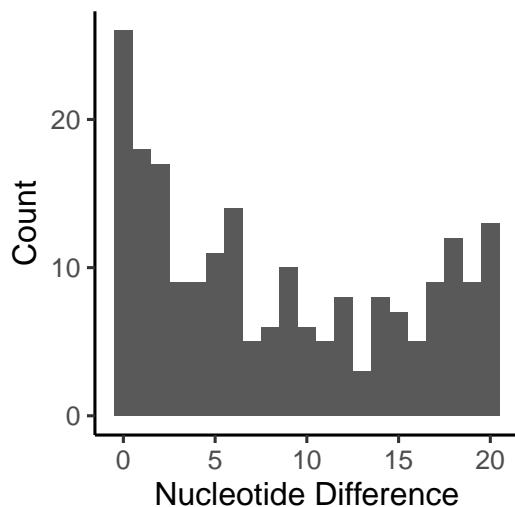
IGHV3-48*01

1429 sequences assigned
155 (10.8%) exact matches, in which:
117 unique CDR3
5 unique J



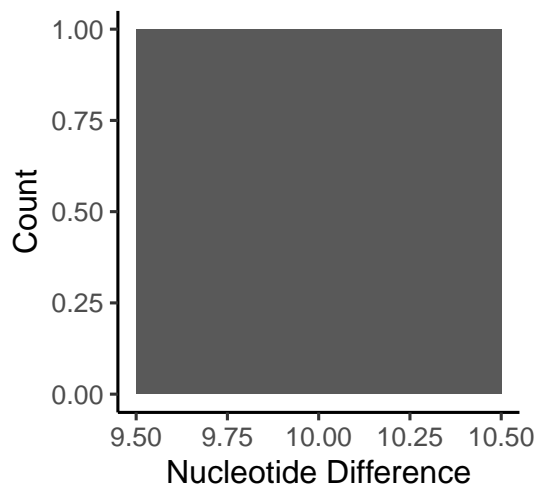
IGHV3-33*08

316 sequences assigned
26 (8.2%) exact matches, in which:
23 unique CDR3
4 unique J



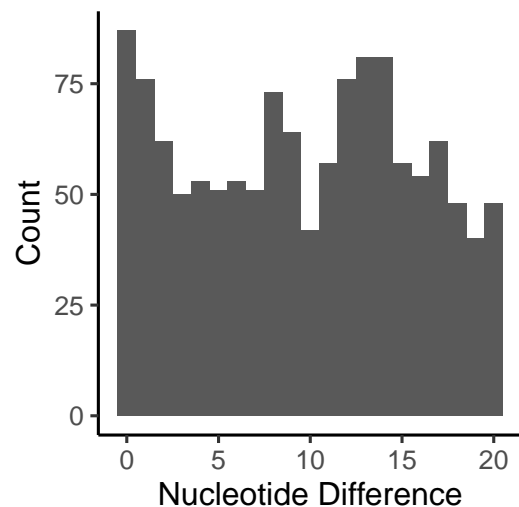
IGHV3-38*03

1 sequences assigned
No exact matches.



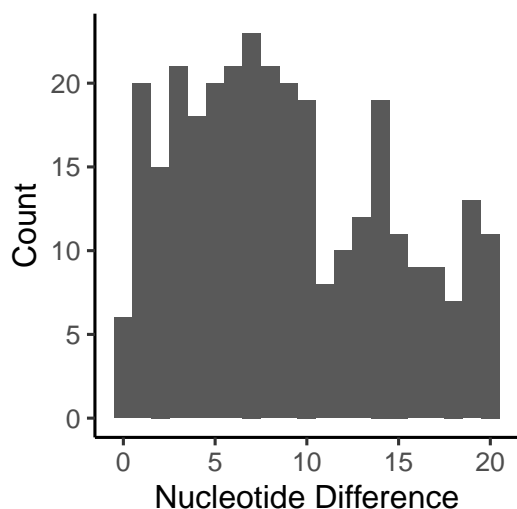
IGHV3-48*03

1522 sequences assigned
87 (5.7%) exact matches, in which:
68 unique CDR3
6 unique J



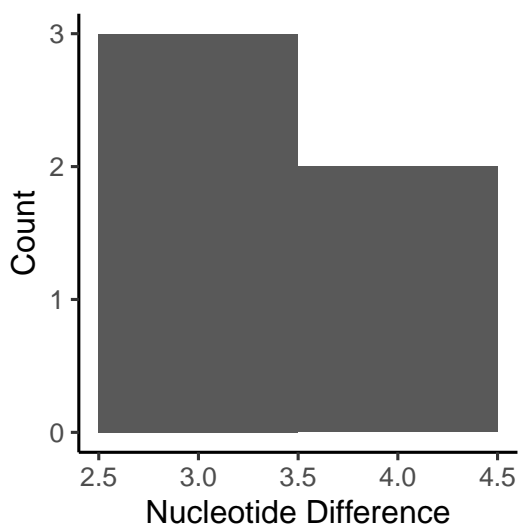
IGHV3-48*04

358 sequences assigned
6 (1.7%) exact matches, in which:
6 unique CDR3
4 unique J



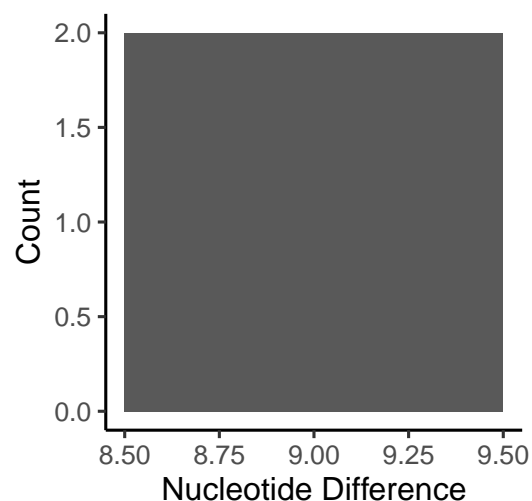
IGHV3-52*02

5 sequences assigned
No exact matches.



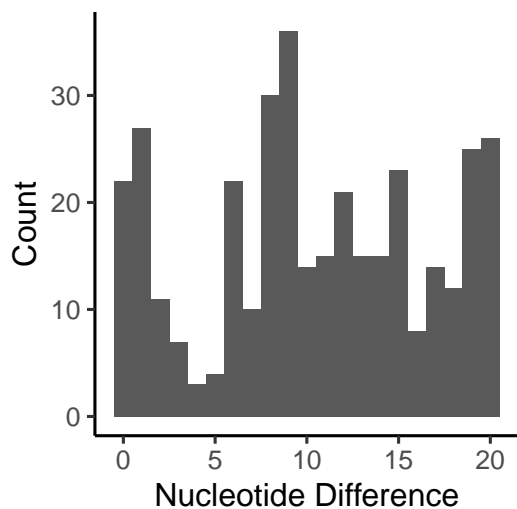
IGHV3-62*04

2 sequences assigned
No exact matches.



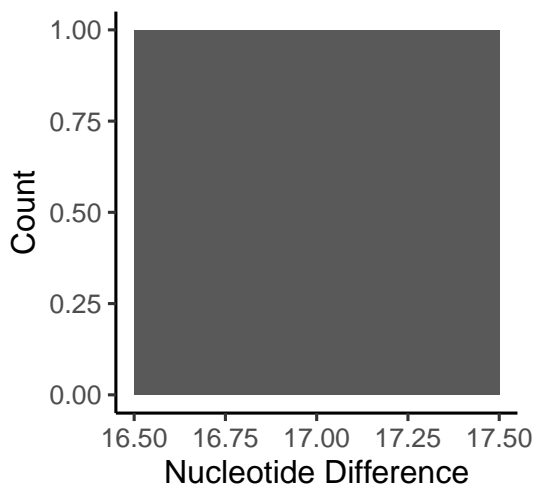
IGHV3-49*04

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



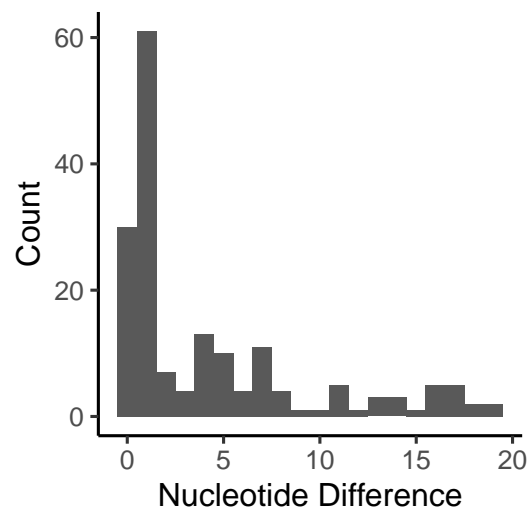
IGHV3-52*01_03

1 sequences assigned
No exact matches.



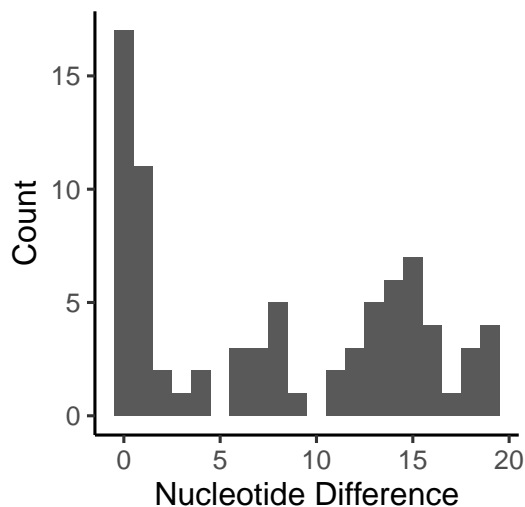
IGHV3-64*01

226 sequences assigned
30 (13.3%) exact matches, in which:
20 unique CDR3
4 unique J



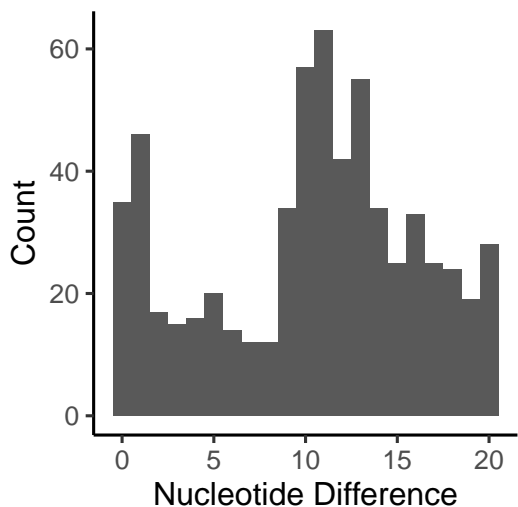
IGHV3-49*03_05

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



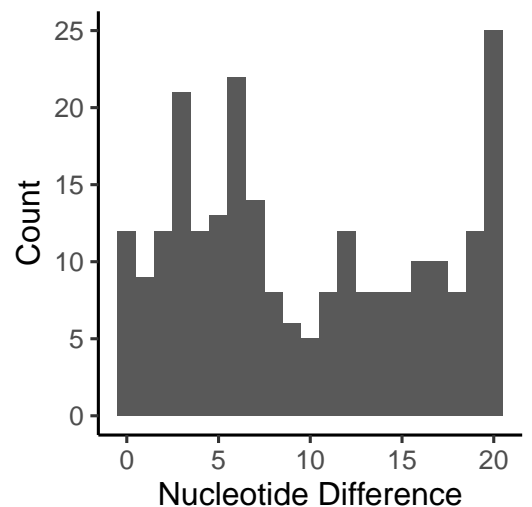
IGHV3-53*01_02

819 sequences assigned
35 (4.3%) exact matches, in which:
26 unique CDR3
5 unique J



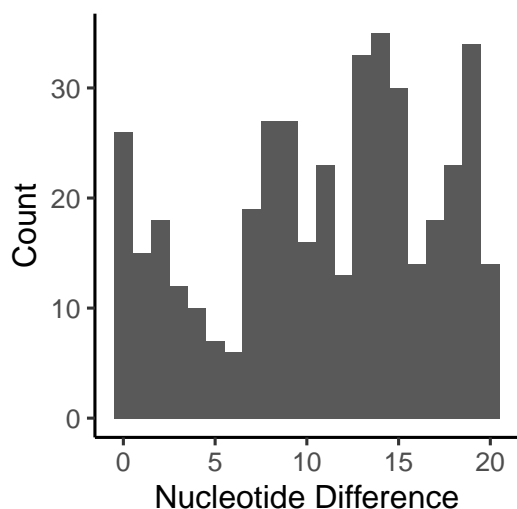
IGHV3-64*04

328 sequences assigned
12 (3.7%) exact matches, in which:
12 unique CDR3
4 unique J



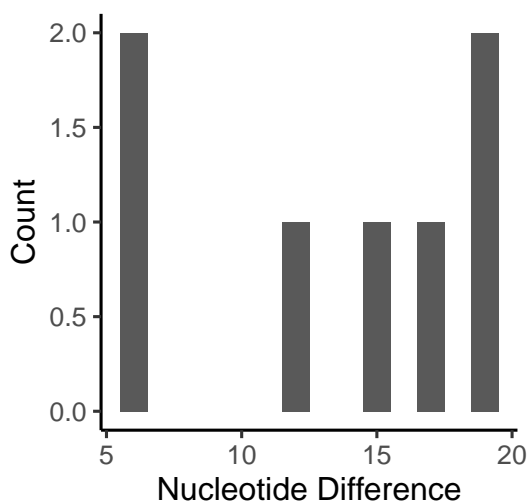
IGHV3-66*01

521 sequences assigned
26 (5%) exact matches, in which:
20 unique CDR3
4 unique J



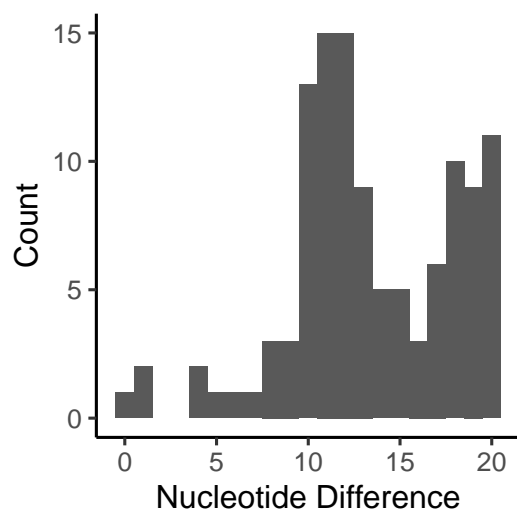
IGHV3-69-1*02

20 sequences assigned
No exact matches.



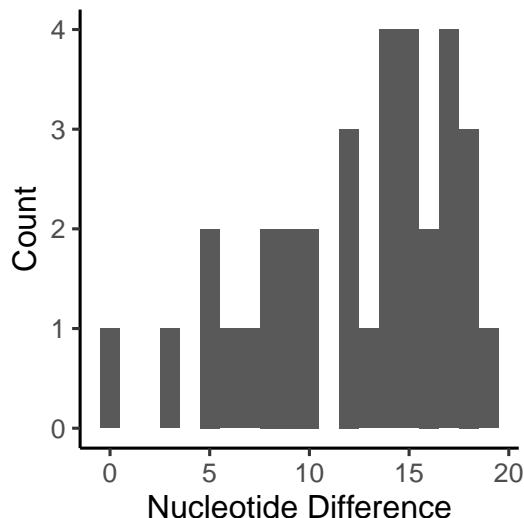
IGHV3-72*01

155 sequences assigned
1 (0.6%) exact matches, in which:
1 unique CDR3
1 unique J



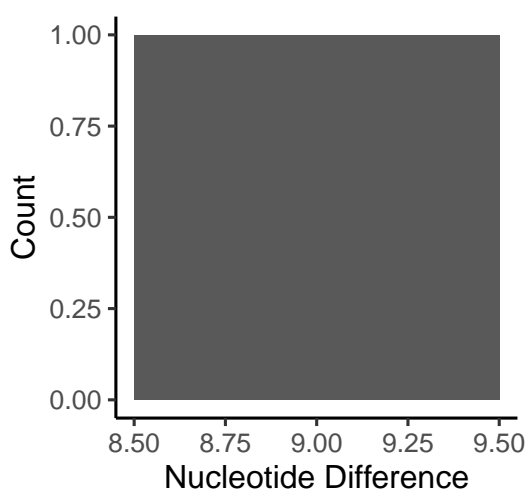
IGHV3-66*04

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



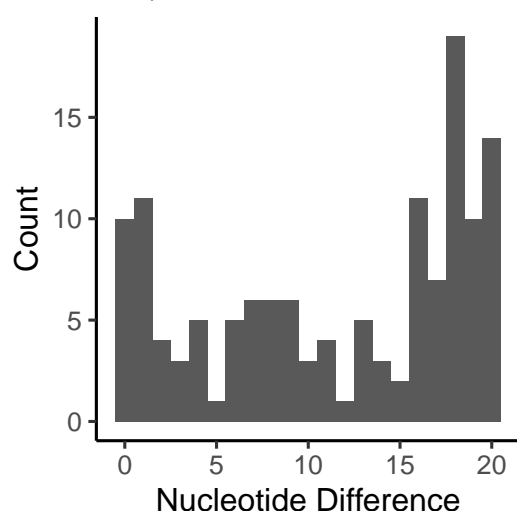
IGHV3-71*03

1 sequences assigned
No exact matches.



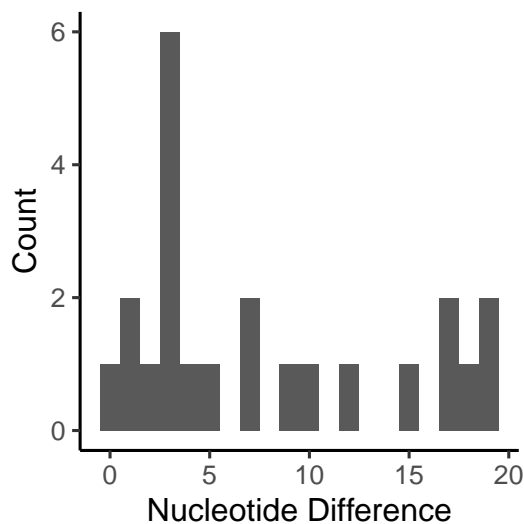
IGHV3-73*01_02

187 sequences assigned
10 (5.3%) exact matches, in which:
8 unique CDR3
4 unique J



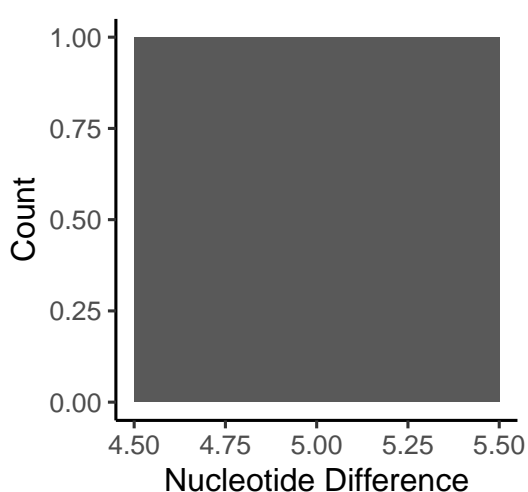
IGHV3-69-1*01

34 sequences assigned
1 (2.9%) exact matches, in which:
1 unique CDR3
1 unique J



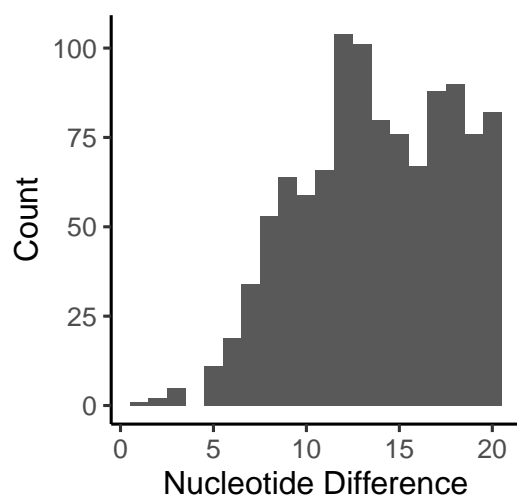
IGHV3-71*01_04

2 sequences assigned
No exact matches.



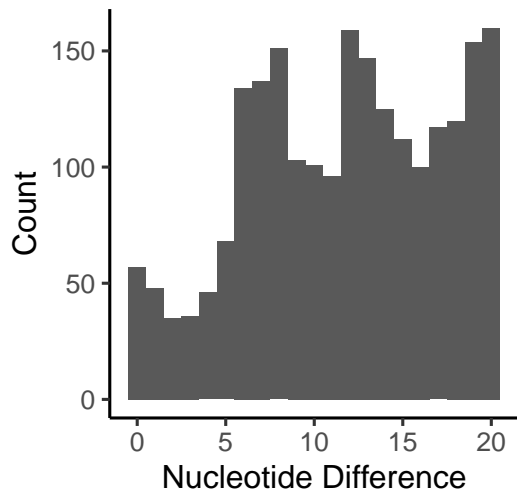
IGHV3-74*03

1874 sequences assigned
No exact matches.



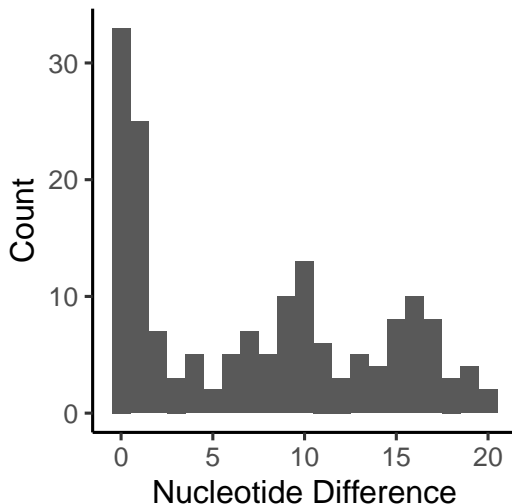
IGHV3-74*01_02

3059 sequences assigned
57 (1.9%) exact matches, in which:
48 unique CDR3
4 unique J



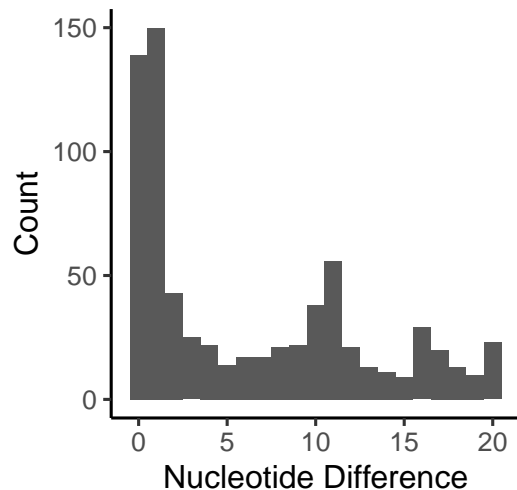
IGHV3-64D*06

266 sequences assigned
33 (12.4%) exact matches, in which:
26 unique CDR3
3 unique J



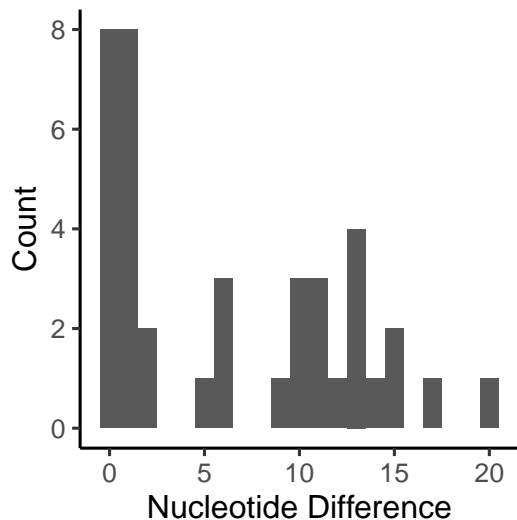
IGHV4-4*02_03

790 sequences assigned
139 (17.6%) exact matches, in which:
120 unique CDR3
6 unique J



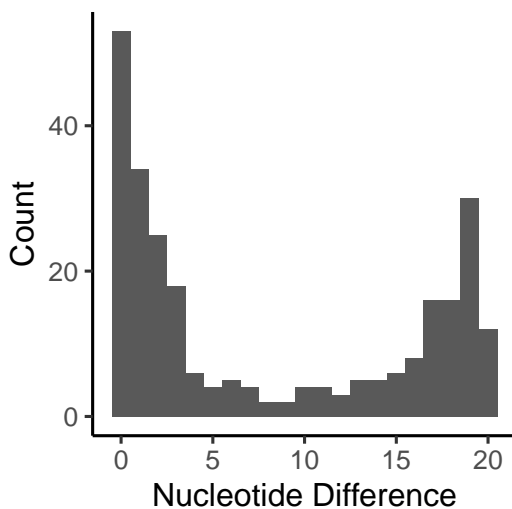
IGHV3-43D*03

43 sequences assigned
8 (18.6%) exact matches, in which:
7 unique CDR3
2 unique J



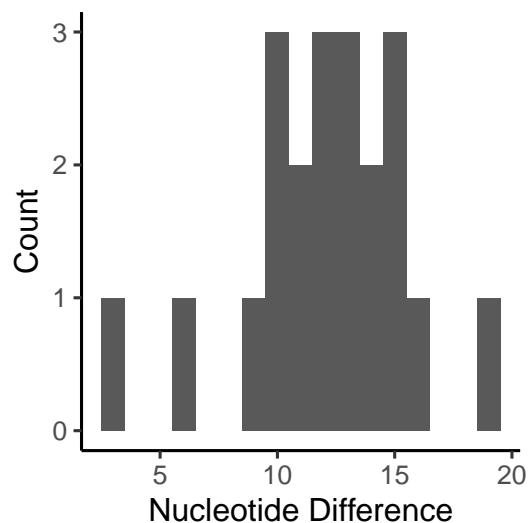
IGHV3-64D*09

305 sequences assigned
53 (17.4%) exact matches, in which:
43 unique CDR3
4 unique J



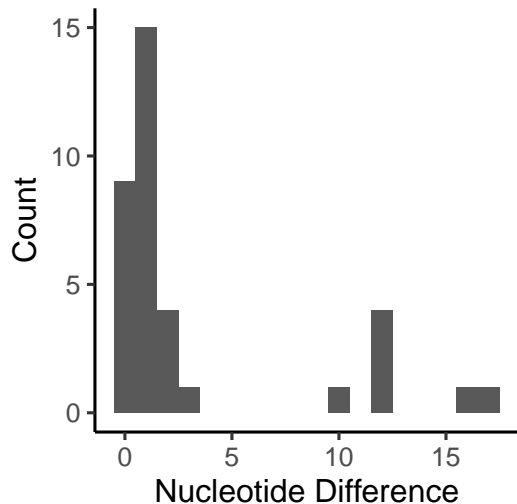
IGHV4-28*03

23 sequences assigned
No exact matches.



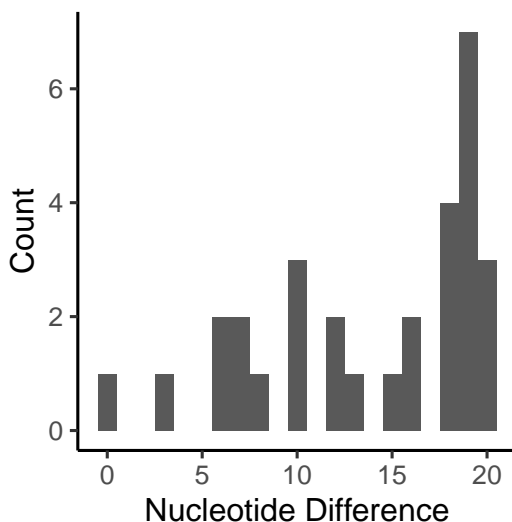
IGHV3-43D*04

57 sequences assigned
9 (15.8%) exact matches, in which:
3 unique CDR3
2 unique J



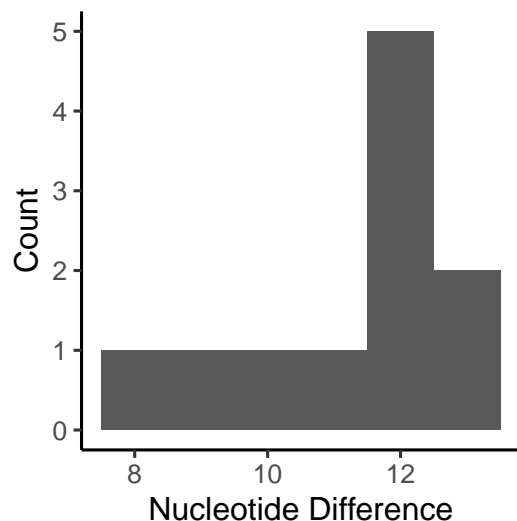
IGHV3-NL1*01

76 sequences assigned
1 (1.3%) exact matches, in which:
1 unique CDR3
1 unique J



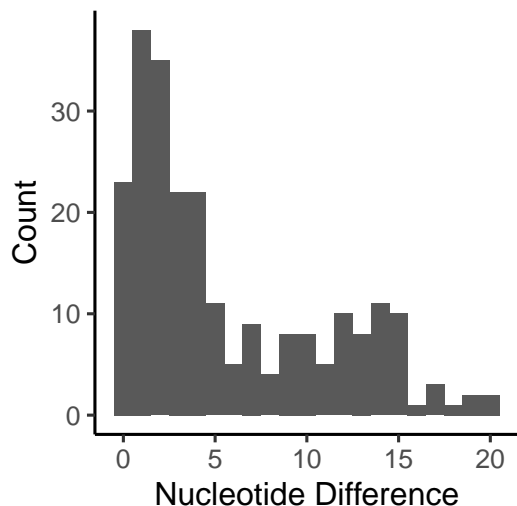
IGHV4-28*01_07

13 sequences assigned
No exact matches.



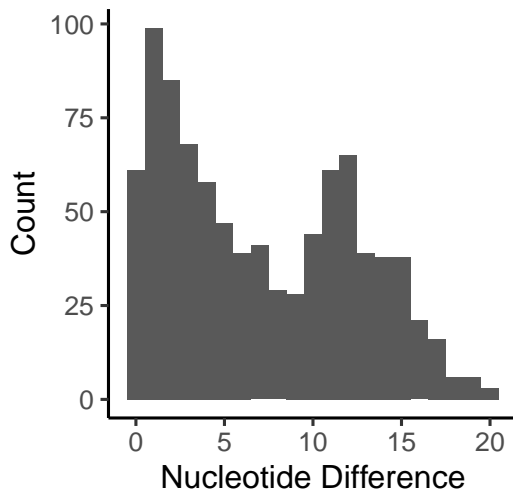
IGHV4-30-2*01

267 sequences assigned
23 (8.6%) exact matches, in which:
20 unique CDR3
5 unique J



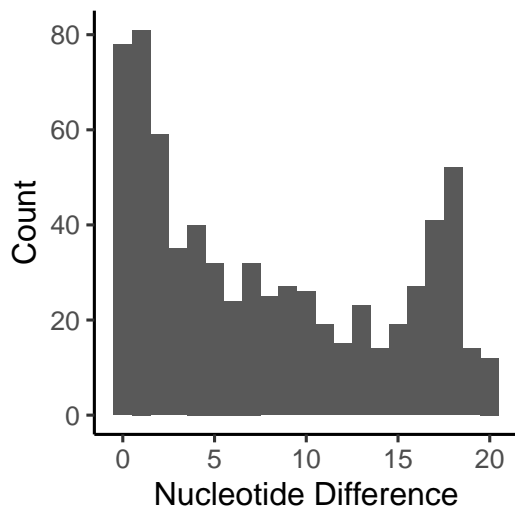
IGHV4-31*02

944 sequences assigned
61 (6.5%) exact matches, in which:
55 unique CDR3
5 unique J



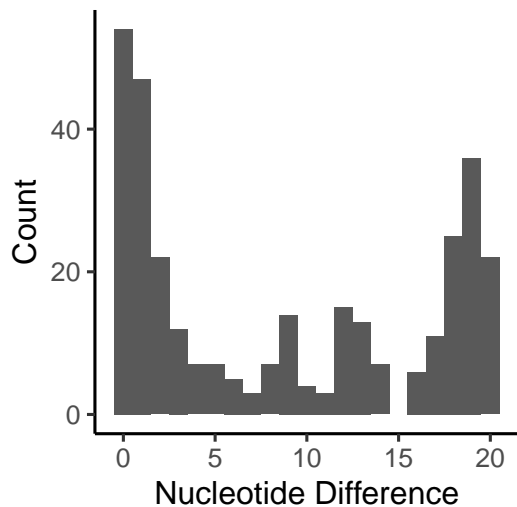
IGHV4-38-2*02

758 sequences assigned
78 (10.3%) exact matches, in which:
71 unique CDR3
4 unique J



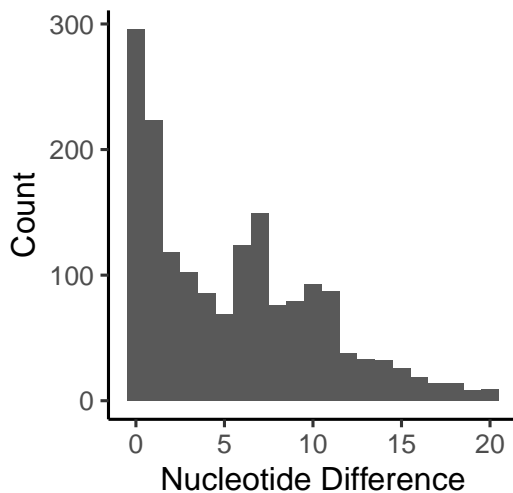
IGHV4-30-4*01

407 sequences assigned
54 (13.3%) exact matches, in which:
48 unique CDR3
6 unique J



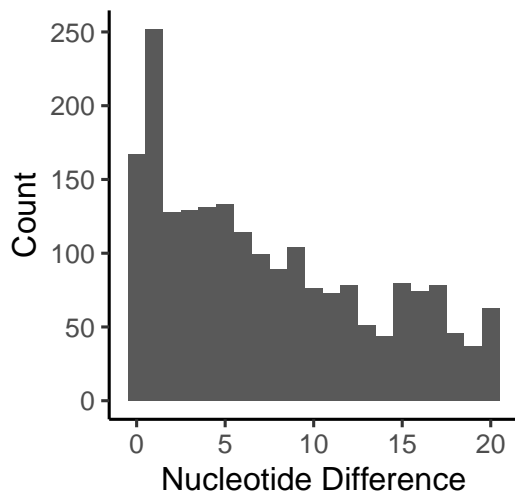
IGHV4-34*01_02

1835 sequences assigned
296 (16.1%) exact matches, in which:
267 unique CDR3
6 unique J



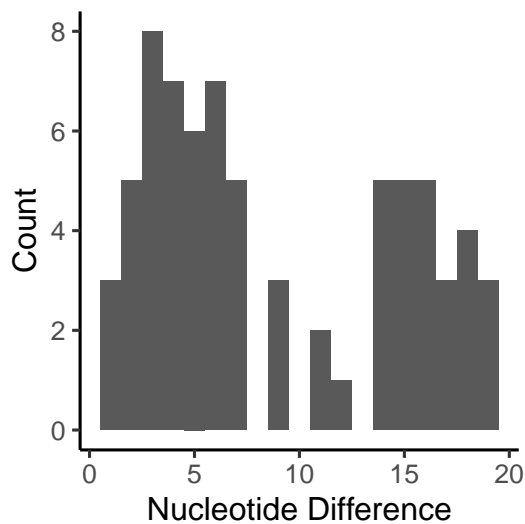
IGHV4-39*07

2263 sequences assigned
167 (7.4%) exact matches, in which:
151 unique CDR3
5 unique J



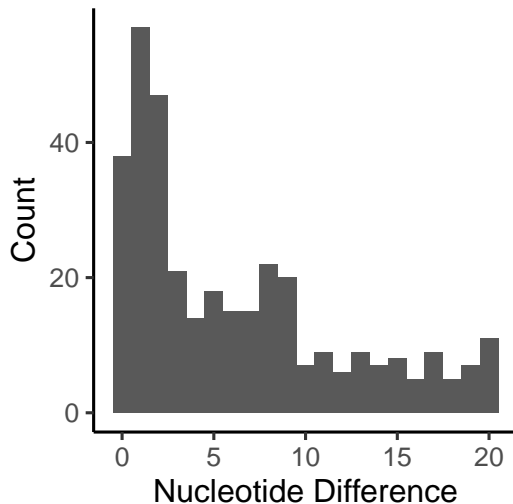
IGHV4-30-4*08

89 sequences assigned
No exact matches.



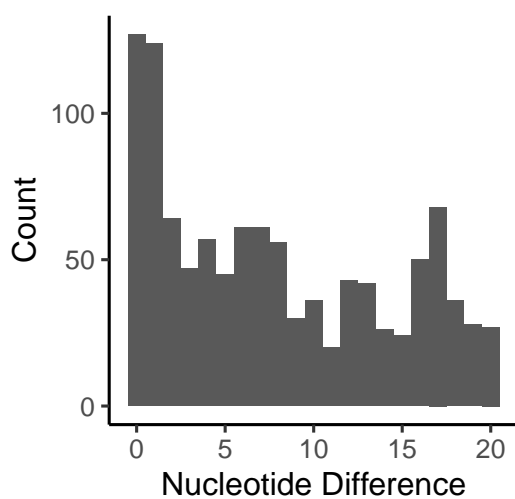
IGHV4-38-2*01

406 sequences assigned
38 (9.4%) exact matches, in which:
36 unique CDR3
4 unique J



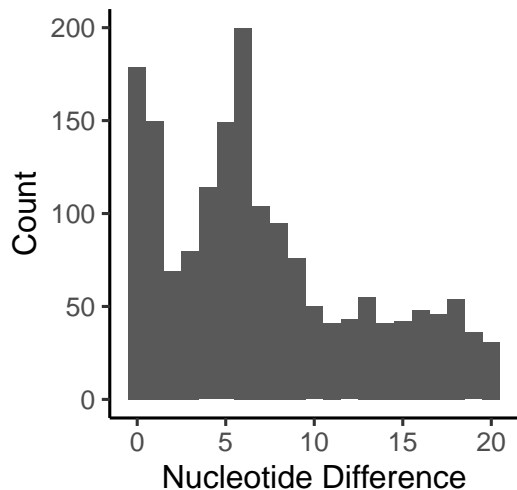
IGHV4-59*08

1385 sequences assigned
127 (9.2%) exact matches, in which:
121 unique CDR3
6 unique J



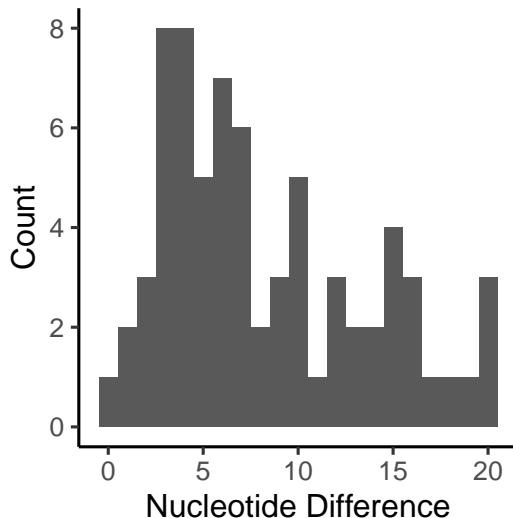
IGHV4–59*01_07

1973 sequences assigned
179 (9.1%) exact matches, in which:
171 unique CDR3
6 unique J



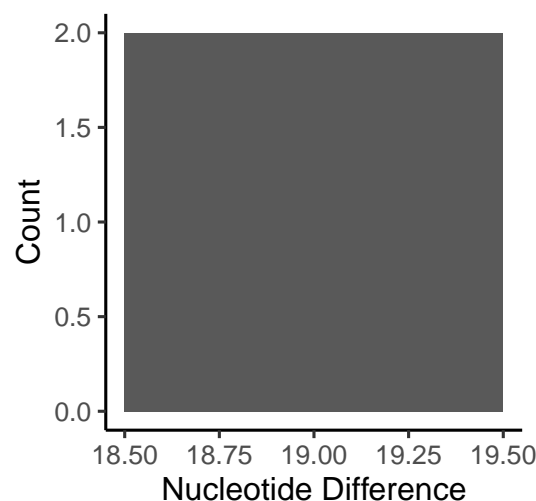
IGHV4–61*05

77 sequences assigned
1 (1.3%) exact matches, in which:
1 unique CDR3
1 unique J



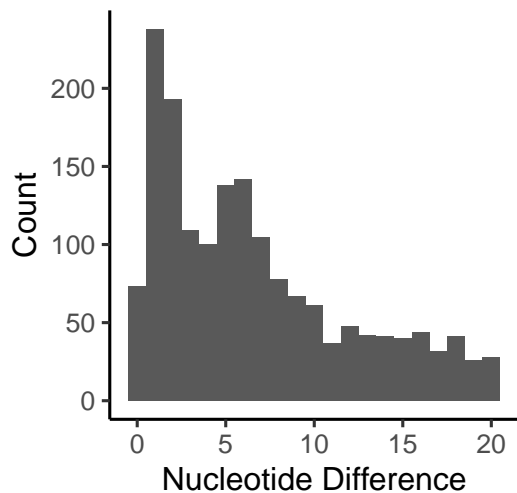
IGHV1/OR15–2*02_03

10 sequences assigned
No exact matches.



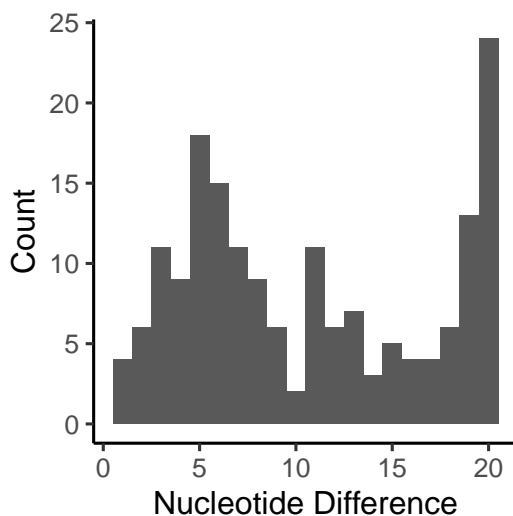
IGHV4–59*12

1897 sequences assigned
73 (3.8%) exact matches, in which:
72 unique CDR3
5 unique J



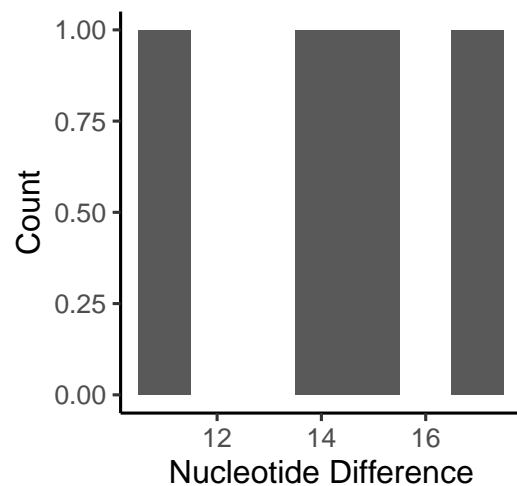
IGHV4–61*08

199 sequences assigned
No exact matches.



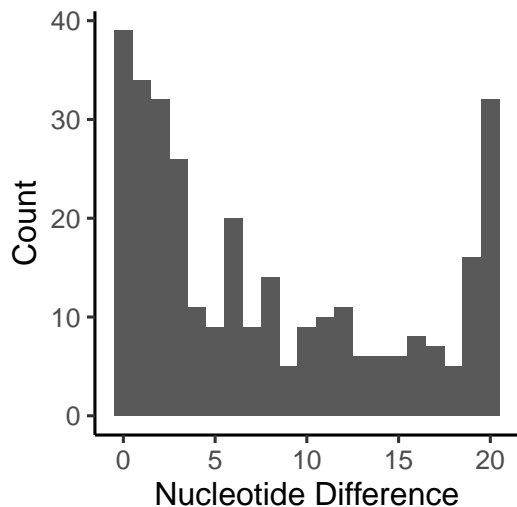
IGHV1/OR15–3*02

4 sequences assigned
No exact matches.



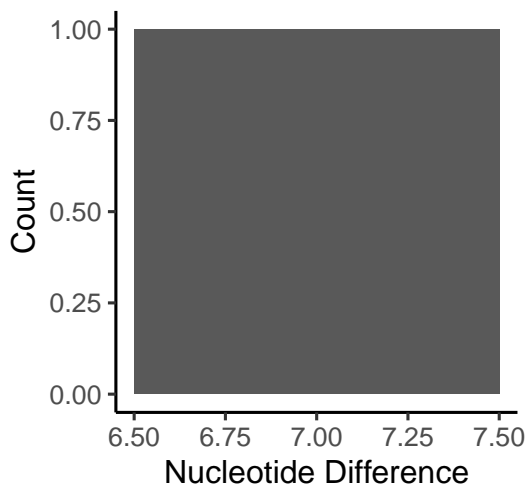
IGHV4–61*01

391 sequences assigned
39 (10%) exact matches, in which:
36 unique CDR3
4 unique J



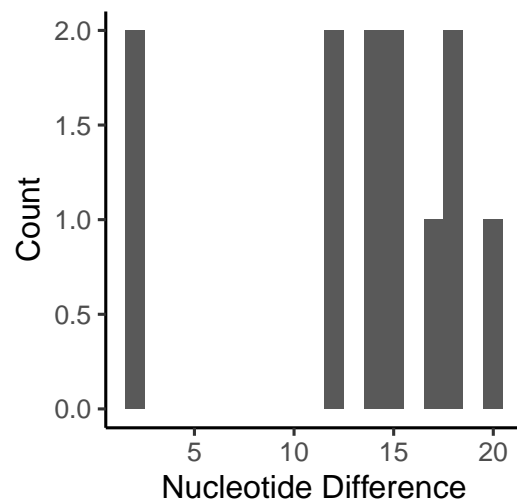
IGHV1/OR15–2*01

1 sequences assigned
No exact matches.



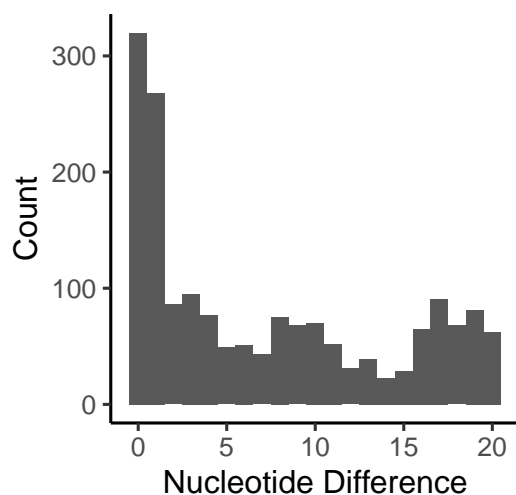
IGHV4/OR15–8*01

18 sequences assigned
No exact matches.



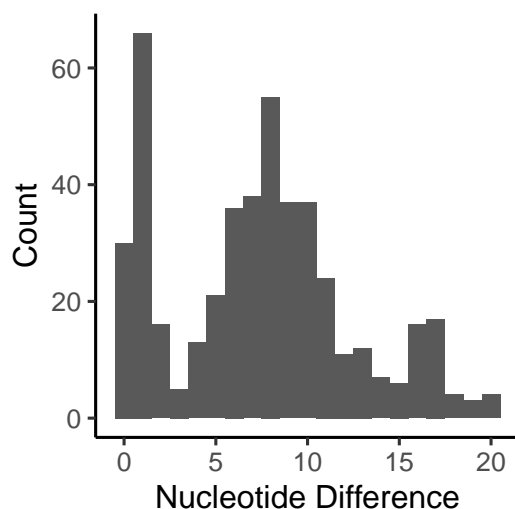
IGHV5-10-1*01_03

1870 sequences assigned
320 (17.1%) exact matches, in which:
270 unique CDR3
5 unique J



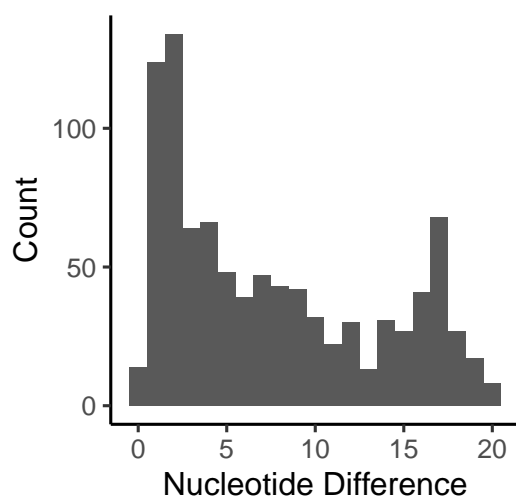
IGHV6-1*01_02

480 sequences assigned
30 (6.2%) exact matches, in which:
26 unique CDR3
4 unique J



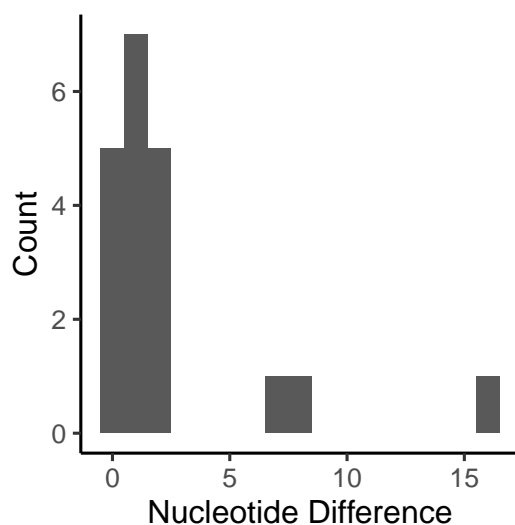
IGHV5-51*07

994 sequences assigned
14 (1.4%) exact matches, in which:
11 unique CDR3
3 unique J



IGHV7-4-1*01

20 sequences assigned
5 (25%) exact matches, in which:
5 unique CDR3
2 unique J



IGHV5-51*01_03

2920 sequences assigned
307 (10.5%) exact matches, in which:
269 unique CDR3
6 unique J

