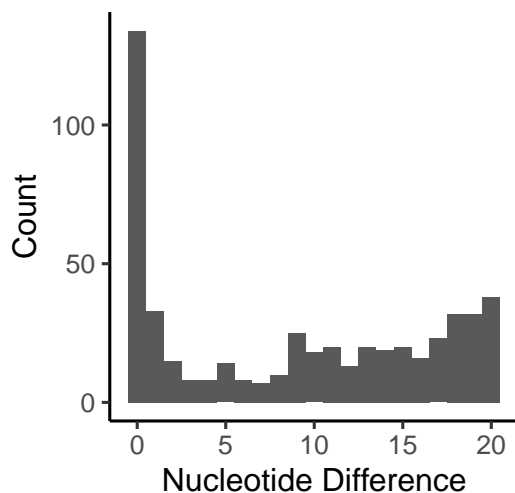


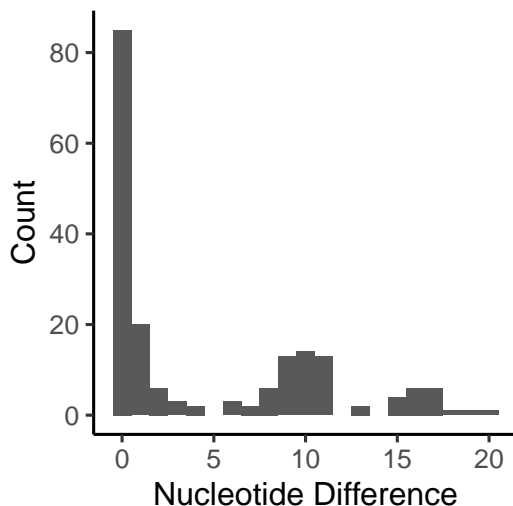
IGHV1-2*02

874 sequences assigned
134 (15.3%) exact matches, in which:
133 unique CDR3
6 unique J



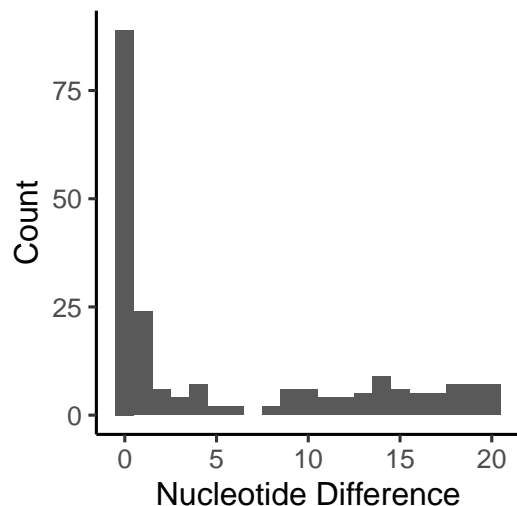
IGHV1-8*01

243 sequences assigned
85 (35%) exact matches, in which:
85 unique CDR3
5 unique J



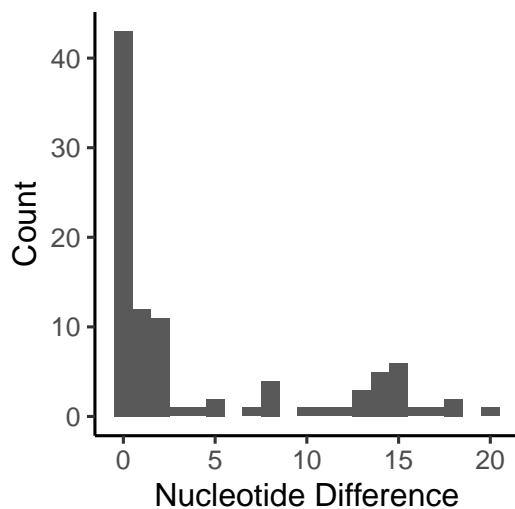
IGHV1-24*01

267 sequences assigned
89 (33.3%) exact matches, in which:
89 unique CDR3
5 unique J



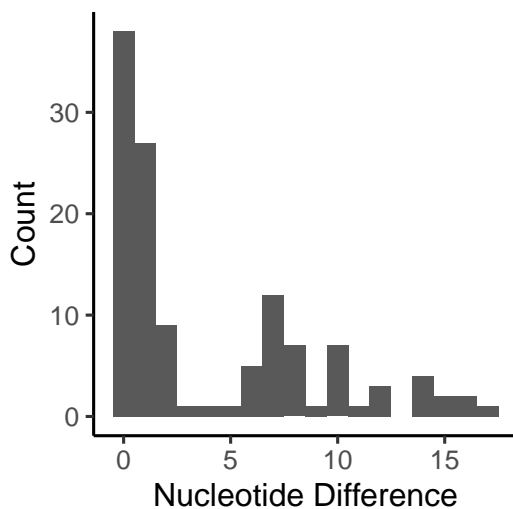
IGHV1-2*04

128 sequences assigned
43 (33.6%) exact matches, in which:
41 unique CDR3
4 unique J



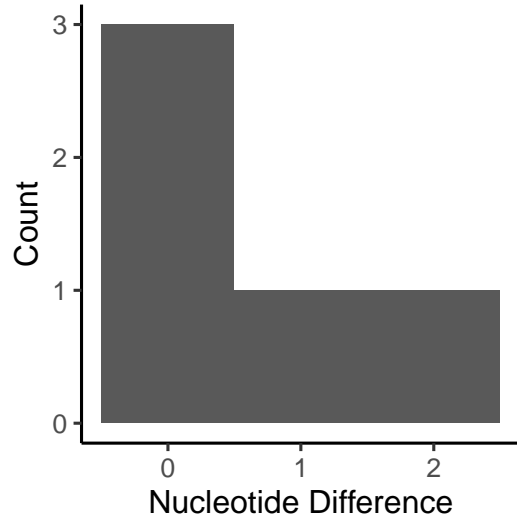
IGHV1-8*03

160 sequences assigned
38 (23.8%) exact matches, in which:
36 unique CDR3
6 unique J



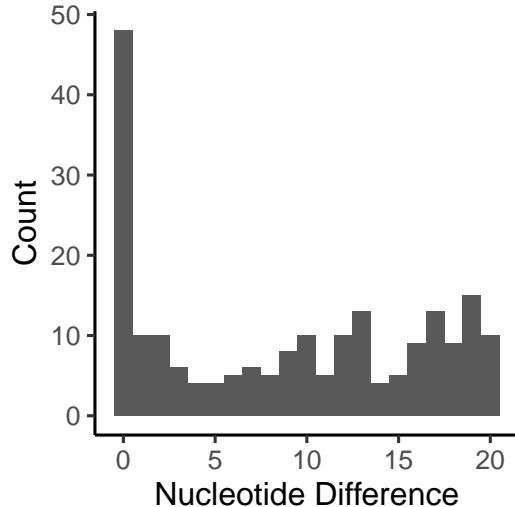
IGHV1-45*02

6 sequences assigned
3 (50%) exact matches, in which:
3 unique CDR3
2 unique J



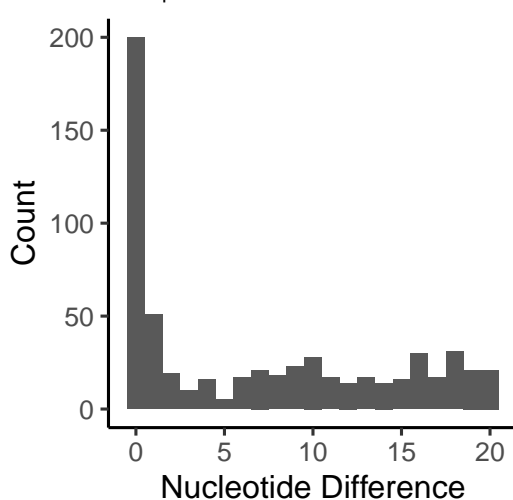
IGHV1-3*01

581 sequences assigned
48 (8.3%) exact matches, in which:
48 unique CDR3
5 unique J



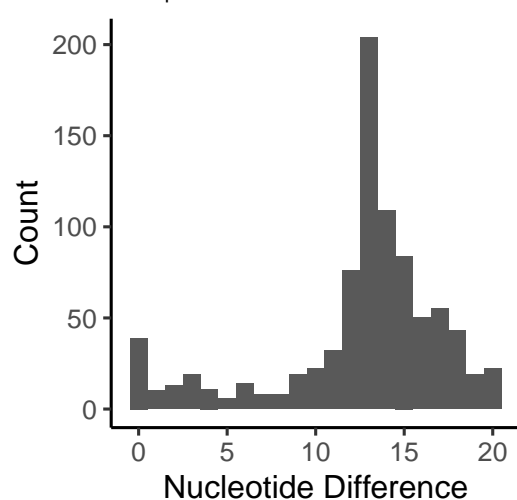
IGHV1-18*01

977 sequences assigned
200 (20.5%) exact matches, in which:
199 unique CDR3
5 unique J



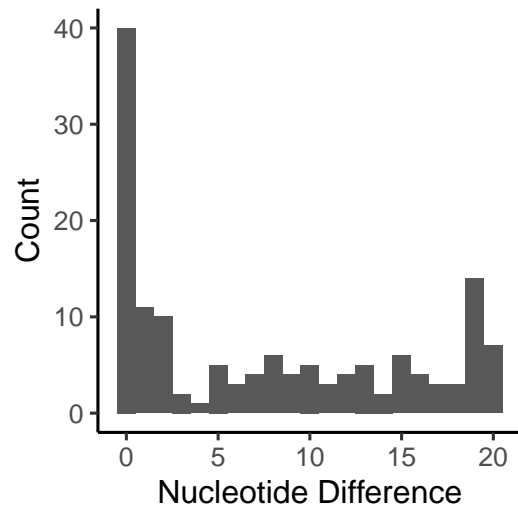
IGHV1-46*01

1834 sequences assigned
39 (2.1%) exact matches, in which:
39 unique CDR3
5 unique J



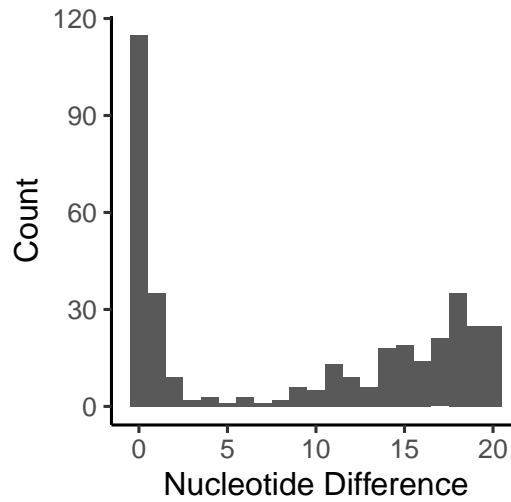
IGHV1-46*03

291 sequences assigned
40 (13.7%) exact matches, in which:
37 unique CDR3
4 unique J



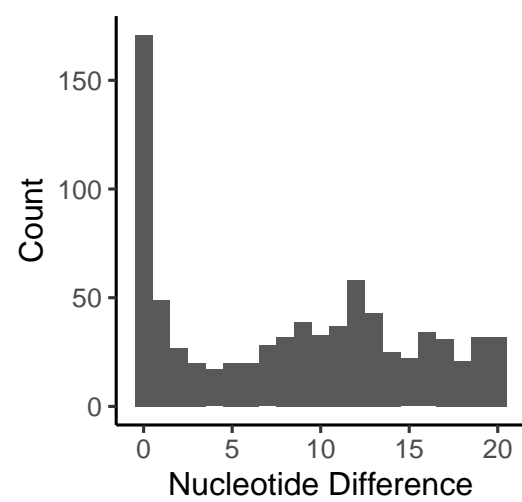
IGHV1-69*04

601 sequences assigned
115 (19.1%) exact matches, in which:
114 unique CDR3
4 unique J



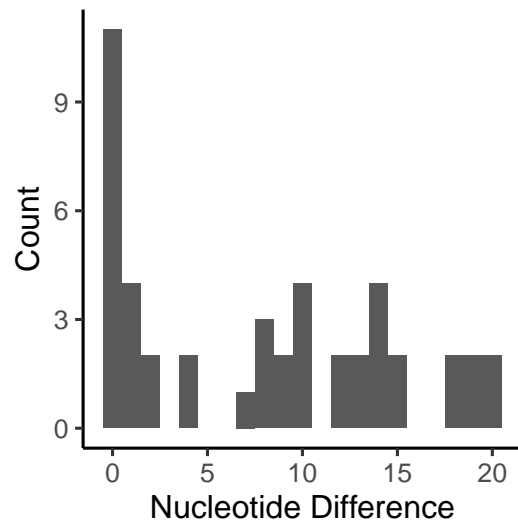
IGHV2-5*01

1003 sequences assigned
171 (17%) exact matches, in which:
171 unique CDR3
6 unique J



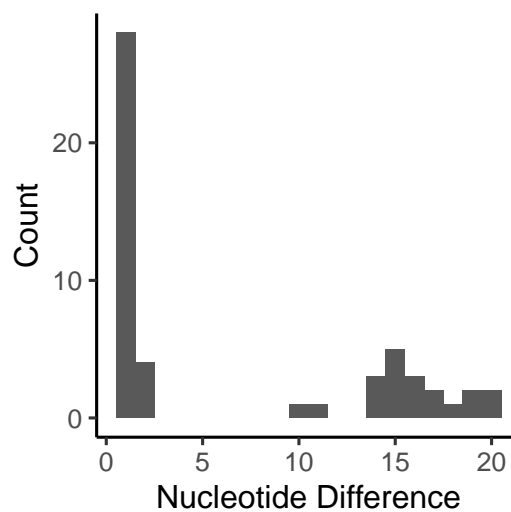
IGHV1-58*02

67 sequences assigned
11 (16.4%) exact matches, in which:
11 unique CDR3
4 unique J



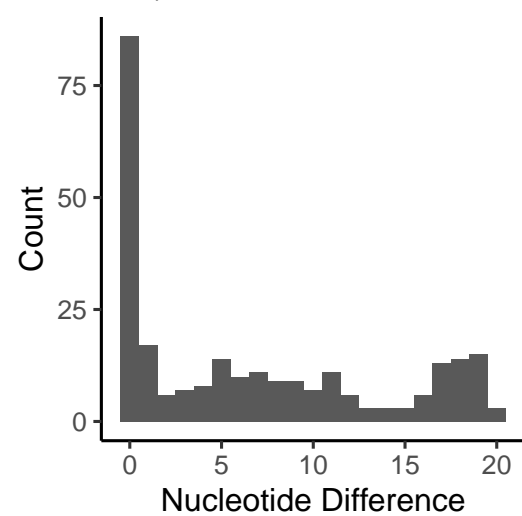
IGHV1-69*08

105 sequences assigned
No exact matches.



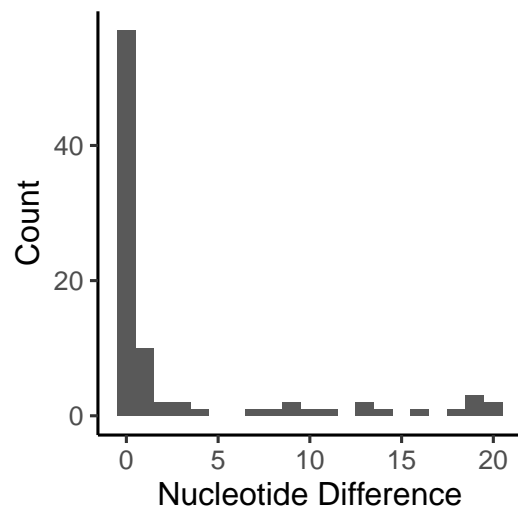
IGHV2-26*01

295 sequences assigned
86 (29.2%) exact matches, in which:
86 unique CDR3
5 unique J



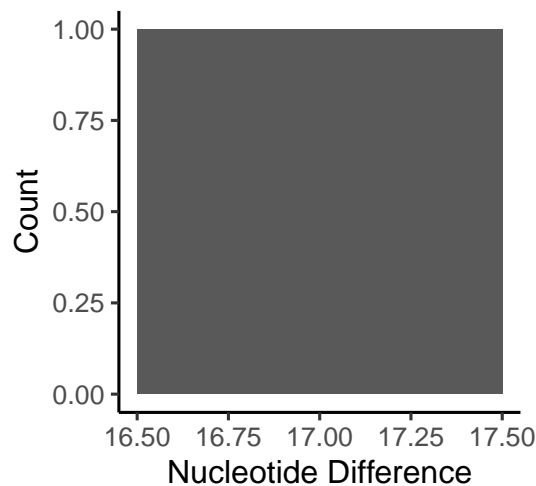
IGHV1-69*02

148 sequences assigned
57 (38.5%) exact matches, in which:
57 unique CDR3
5 unique J



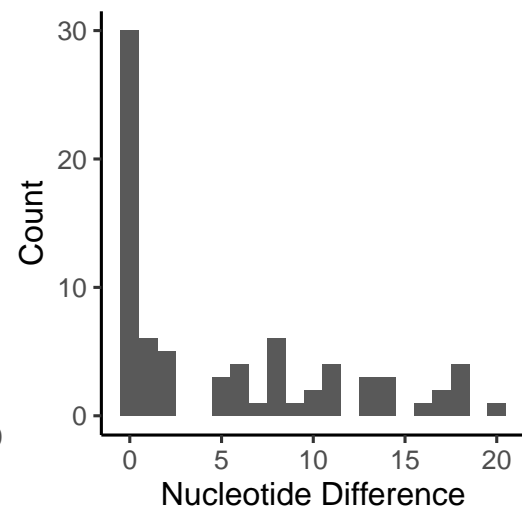
IGHV1-69D*01

1 sequences assigned
No exact matches.



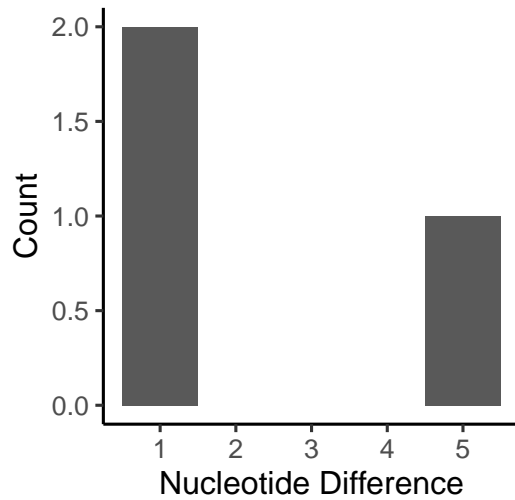
IGHV2-70*15

89 sequences assigned
30 (33.7%) exact matches, in which:
30 unique CDR3
5 unique J



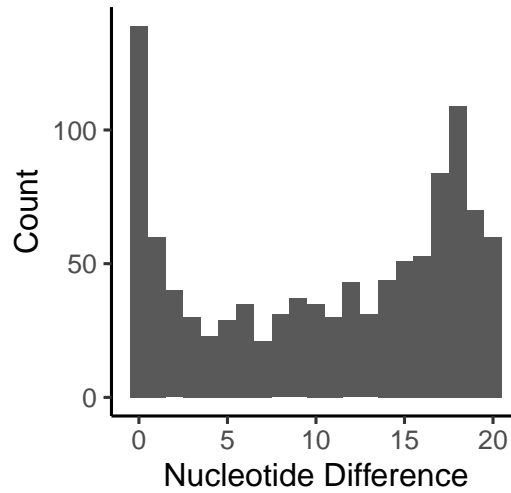
IGHV2-70D*04

3 sequences assigned
No exact matches.



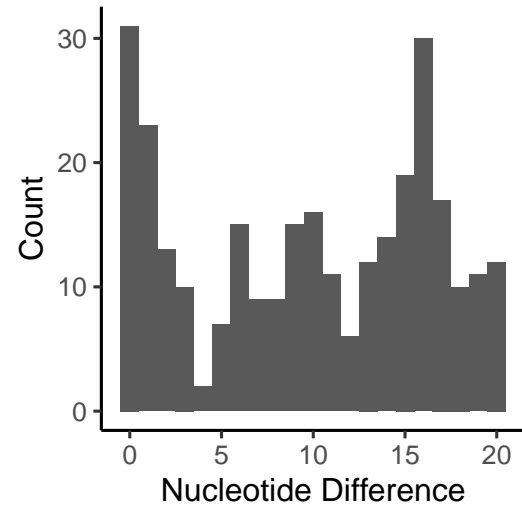
IGHV3-9*01

2333 sequences assigned
139 (6%) exact matches, in which:
136 unique CDR3
6 unique J



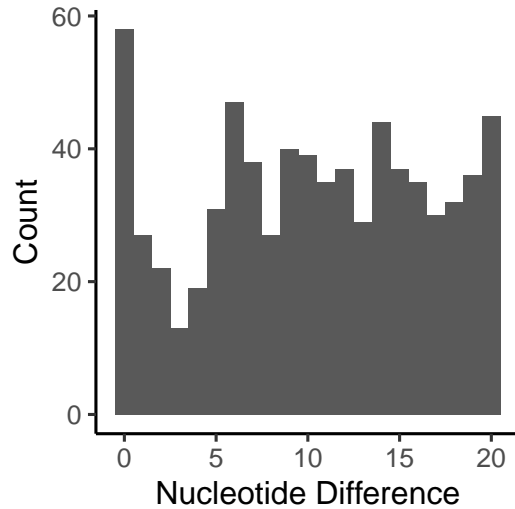
IGHV3-11*04

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



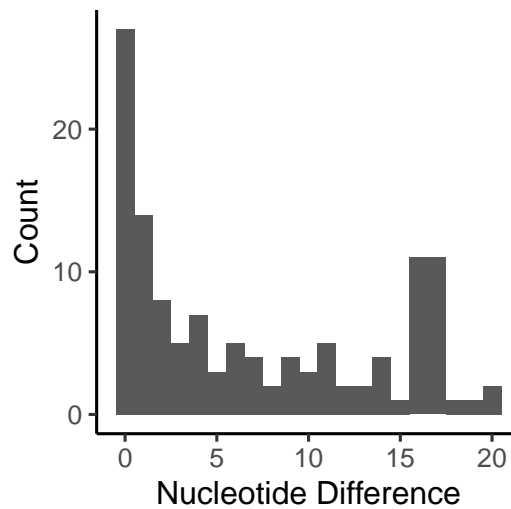
IGHV3-7*01

1065 sequences assigned
58 (5.4%) exact matches, in which:
56 unique CDR3
5 unique J



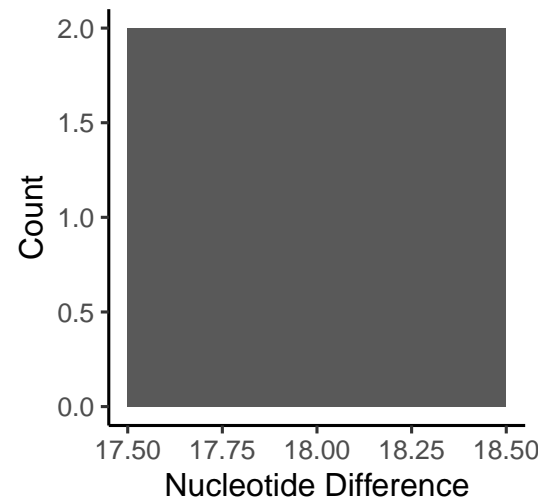
IGHV3-9*03

136 sequences assigned
27 (19.9%) exact matches, in which:
26 unique CDR3
5 unique J



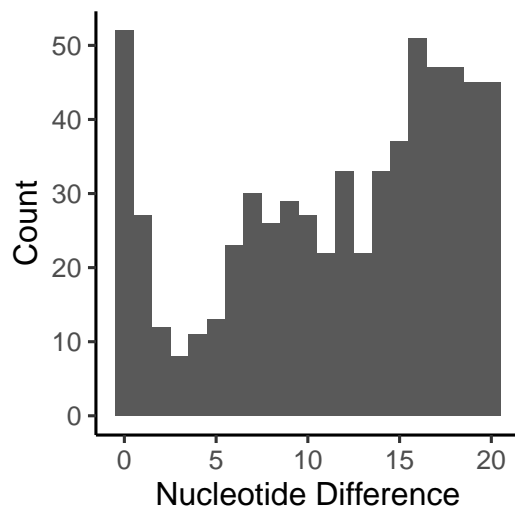
IGHV3-11*06

2 sequences assigned
No exact matches.



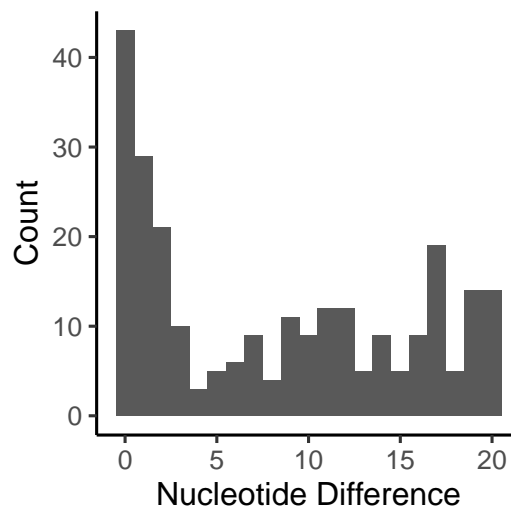
IGHV3-7*03

978 sequences assigned
52 (5.3%) exact matches, in which:
52 unique CDR3
5 unique J



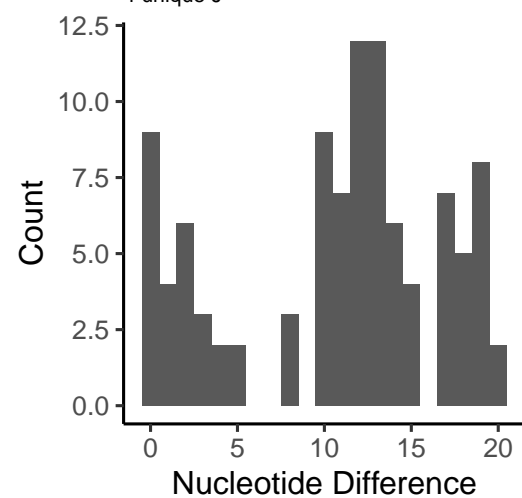
IGHV3-11*01

638 sequences assigned
43 (6.7%) exact matches, in which:
42 unique CDR3
5 unique J



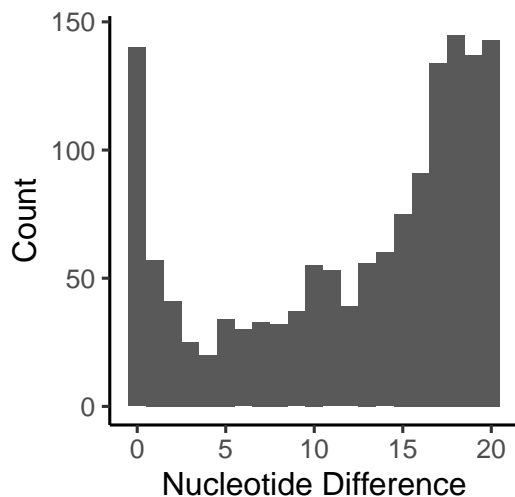
IGHV3-13*01

137 sequences assigned
9 (6.6%) exact matches, in which:
9 unique CDR3
4 unique J



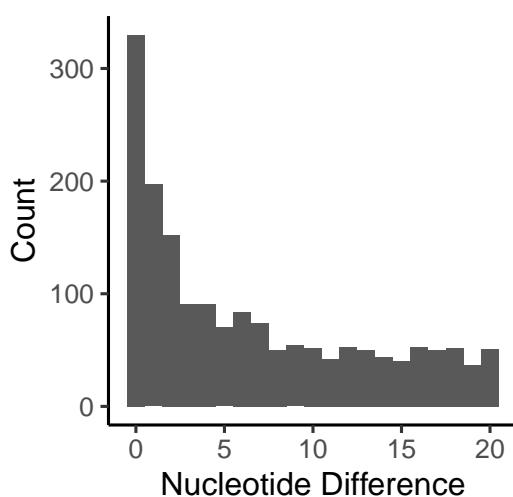
IGHV3-15*01

2723 sequences assigned
140 (5.1%) exact matches, in which:
139 unique CDR3
4 unique J



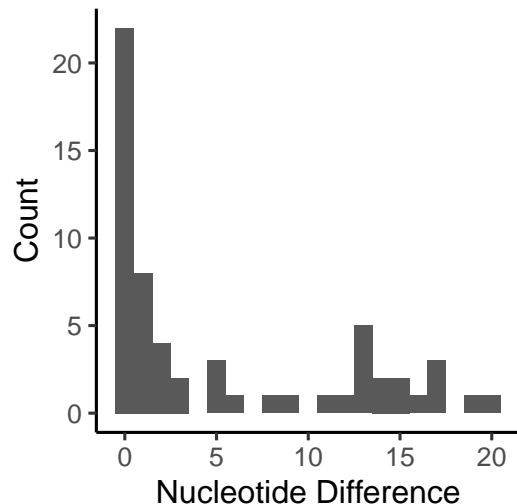
IGHV3-21*01

2462 sequences assigned
330 (13.4%) exact matches, in which:
295 unique CDR3
6 unique J



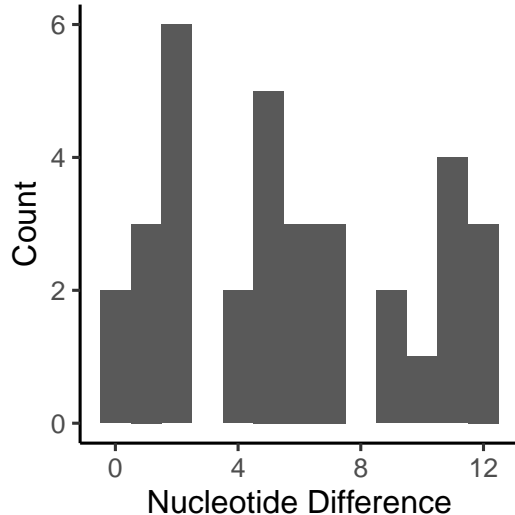
IGHV3-43*01

128 sequences assigned
22 (17.2%) exact matches, in which:
22 unique CDR3
3 unique J



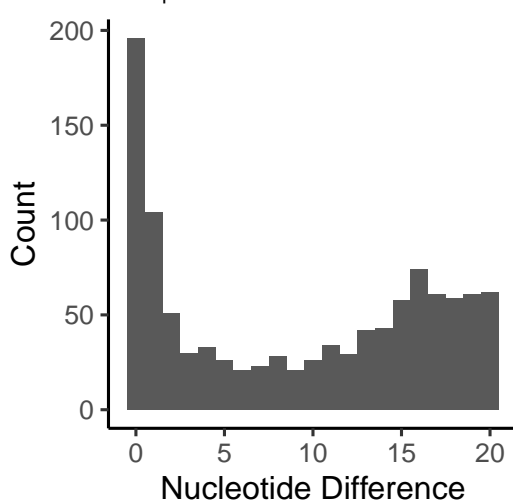
IGHV3-20*01

34 sequences assigned
2 (5.9%) exact matches, in which:
2 unique CDR3
2 unique J



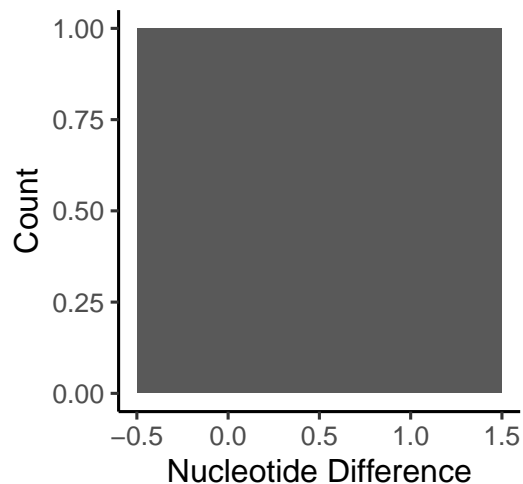
IGHV3-33*01

1873 sequences assigned
196 (10.5%) exact matches, in which:
193 unique CDR3
6 unique J



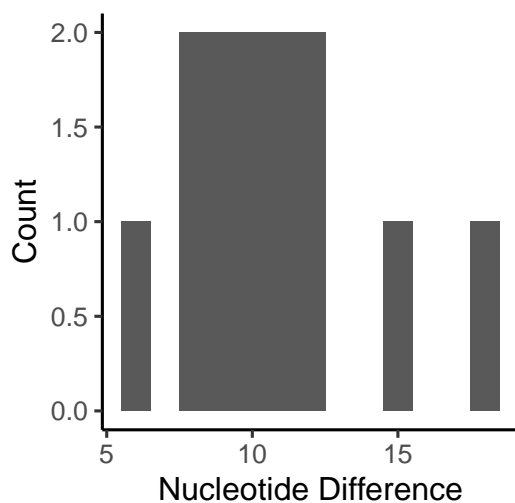
IGHV3-47*01

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



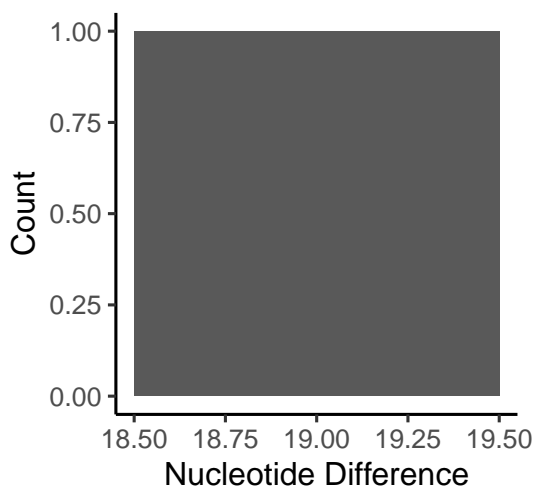
IGHV3-20*04

18 sequences assigned
No exact matches.



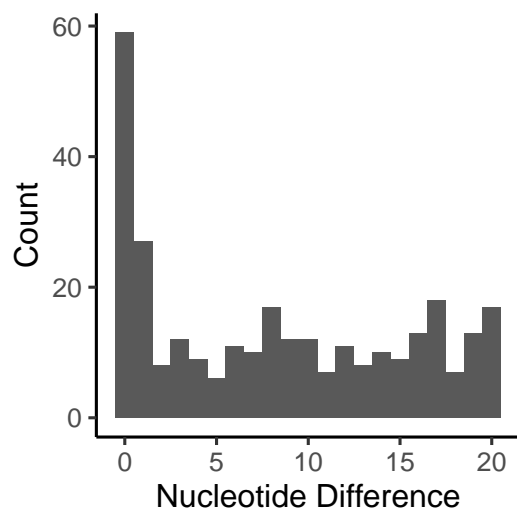
IGHV3-41*02

1 sequences assigned
No exact matches.



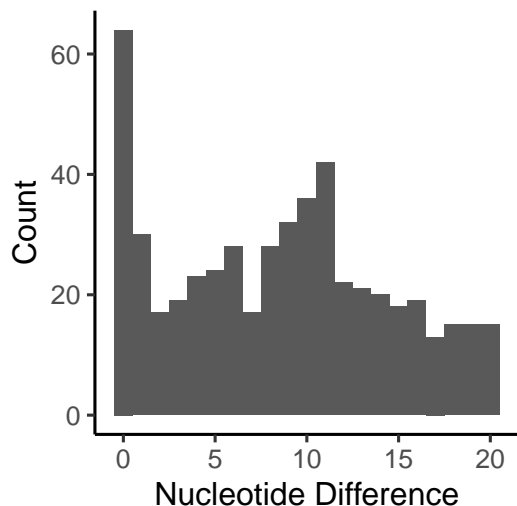
IGHV3-48*01

500 sequences assigned
59 (11.8%) exact matches, in which:
59 unique CDR3
5 unique J



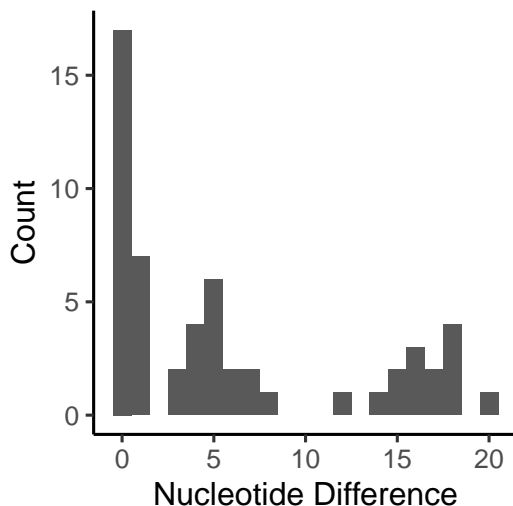
IGHV3-48*04

745 sequences assigned
64 (8.6%) exact matches, in which:
61 unique CDR3
5 unique J



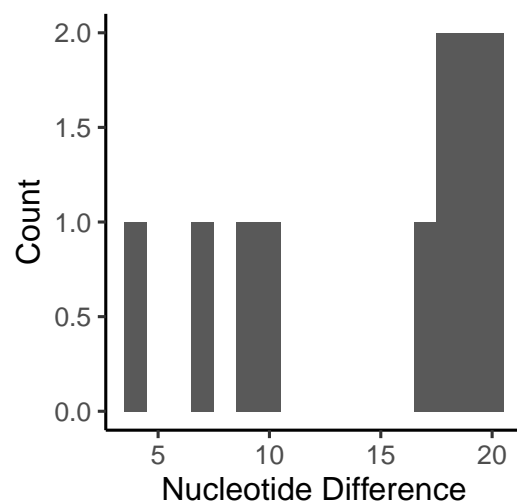
IGHV3-53*04

77 sequences assigned
17 (22.1%) exact matches, in which:
17 unique CDR3
4 unique J



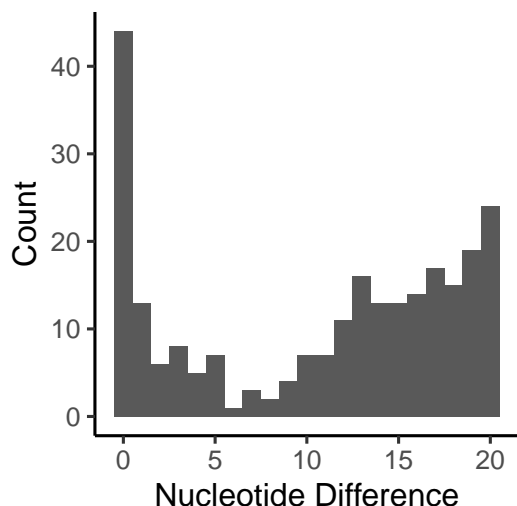
IGHV3-64*07

40 sequences assigned
No exact matches.



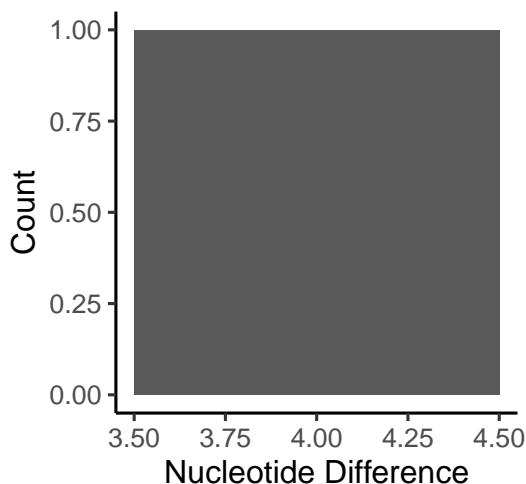
IGHV3-49*03

398 sequences assigned
44 (11.1%) exact matches, in which:
43 unique CDR3
6 unique J



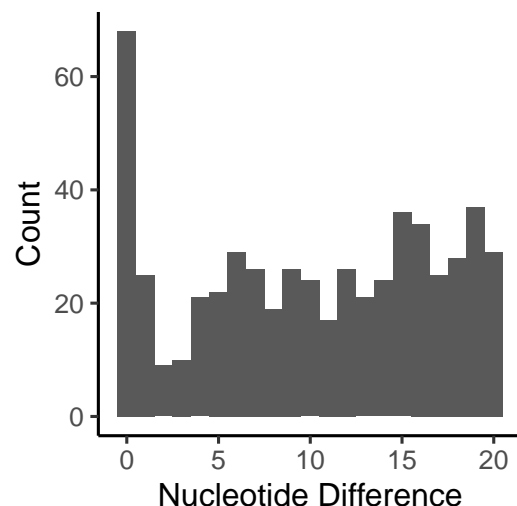
IGHV3-62*04

1 sequences assigned
No exact matches.



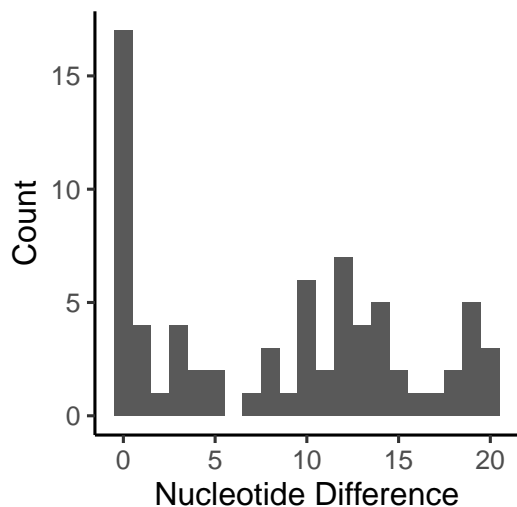
IGHV3-66*01

2707 sequences assigned
68 (2.5%) exact matches, in which:
64 unique CDR3
5 unique J



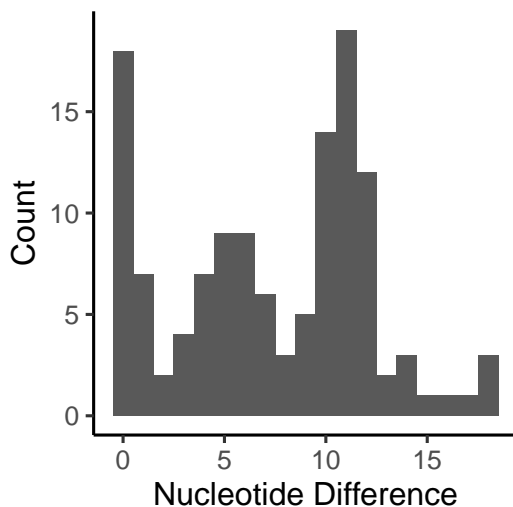
IGHV3-53*02

132 sequences assigned
17 (12.9%) exact matches, in which:
17 unique CDR3
3 unique J



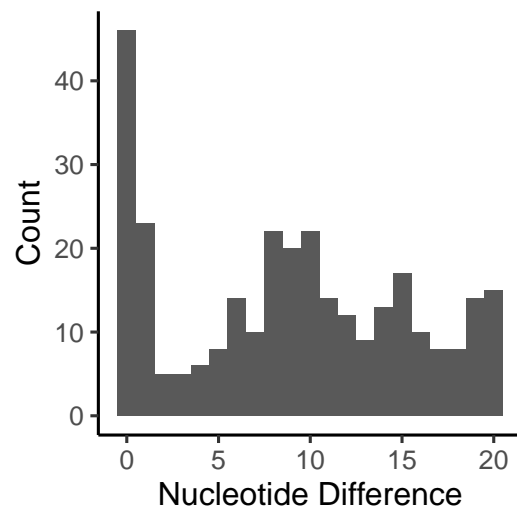
IGHV3-64*01

177 sequences assigned
18 (10.2%) exact matches, in which:
18 unique CDR3
4 unique J



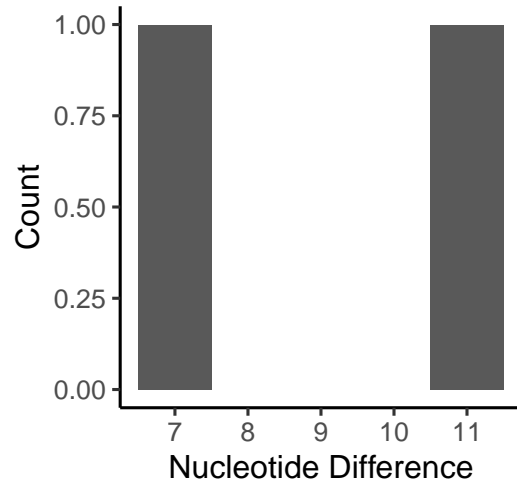
IGHV3-66*02

458 sequences assigned
46 (10%) exact matches, in which:
46 unique CDR3
6 unique J



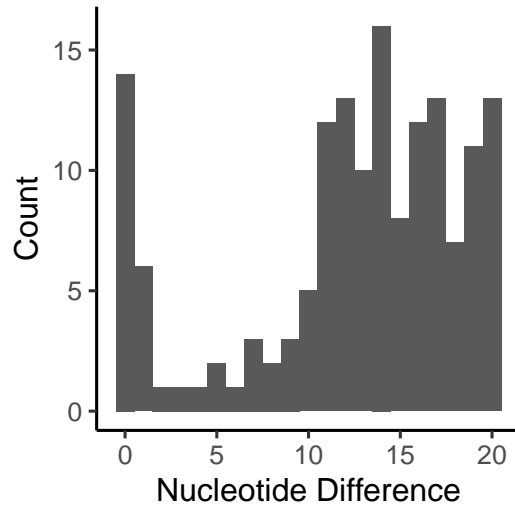
IGHV3-69-1*01

3 sequences assigned
No exact matches.



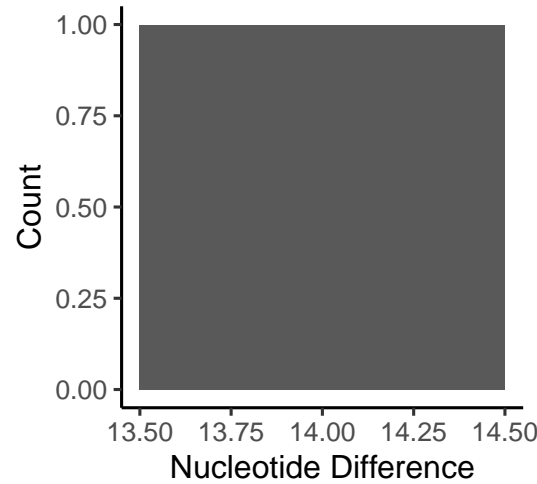
IGHV3-73*01

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



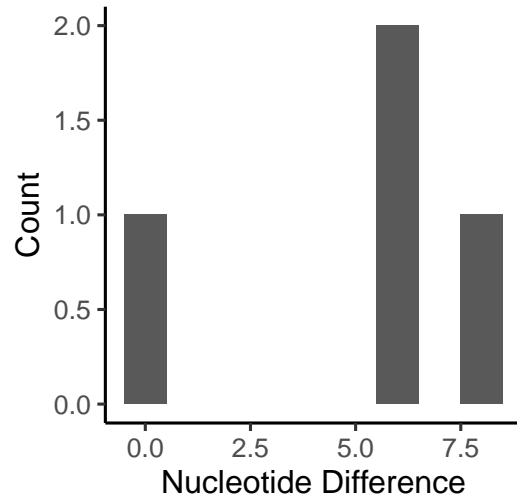
IGHV3-64D*06

1 sequences assigned
No exact matches.



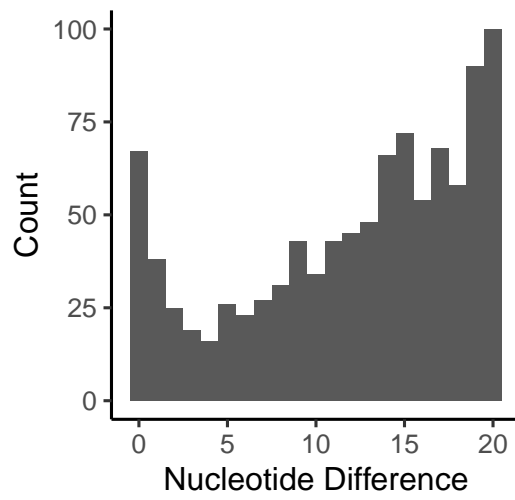
IGHV3-69-1*02

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



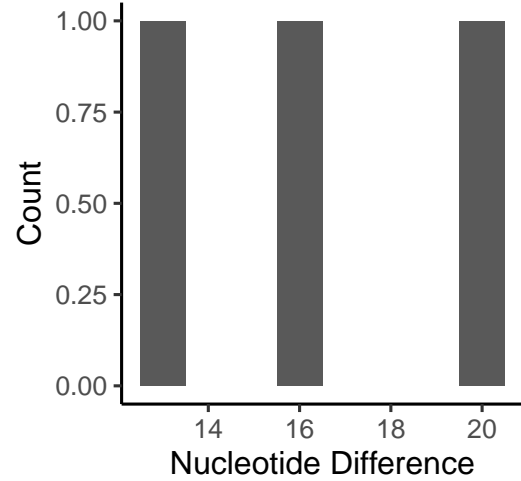
IGHV3-74*01

1704 sequences assigned
67 (3.9%) exact matches, in which:
64 unique CDR3
5 unique J



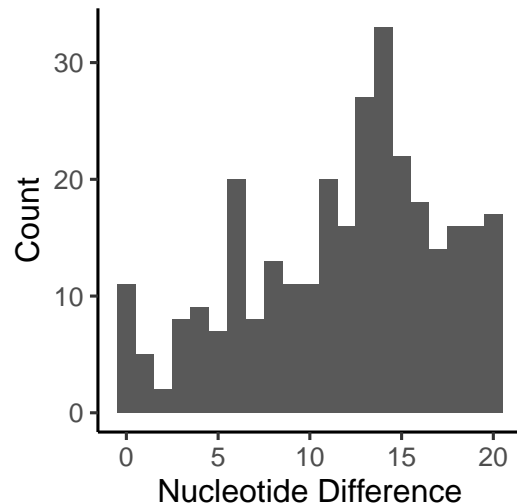
IGHV3-NL1*01

4 sequences assigned
No exact matches.



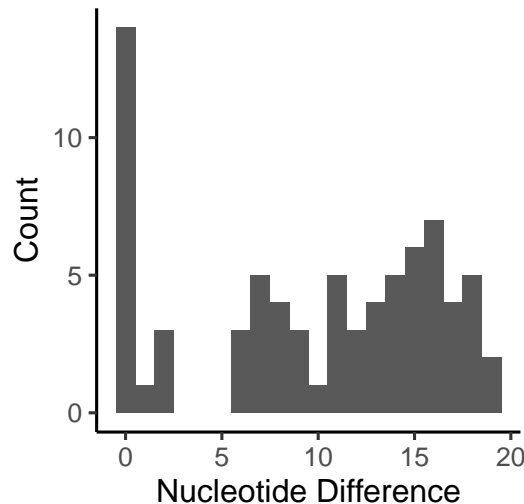
IGHV3-72*01

479 sequences assigned
11 (2.3%) exact matches, in which:
11 unique CDR3
3 unique J



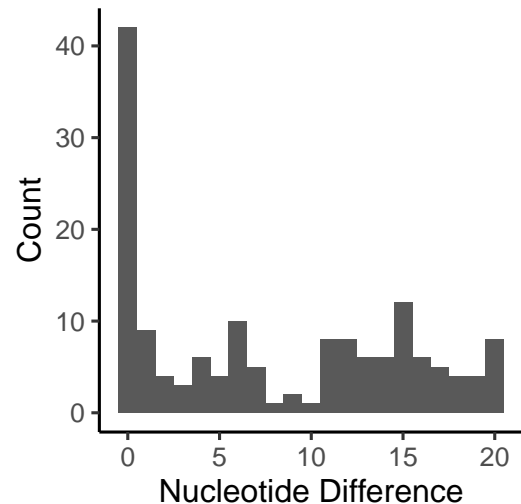
IGHV3-43D*03

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



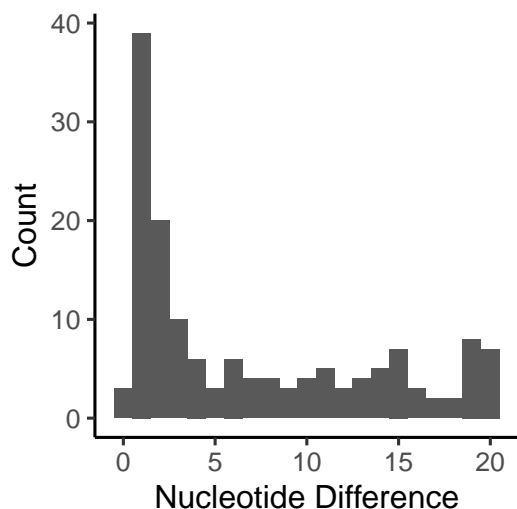
IGHV4-4*02

227 sequences assigned
42 (18.5%) exact matches, in which:
41 unique CDR3
5 unique J



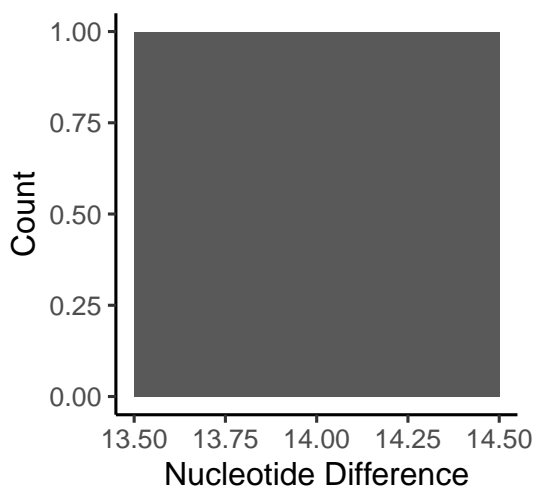
IGHV4-4*07

327 sequences assigned
3 (0.9%) exact matches, in which:
3 unique CDR3
2 unique J



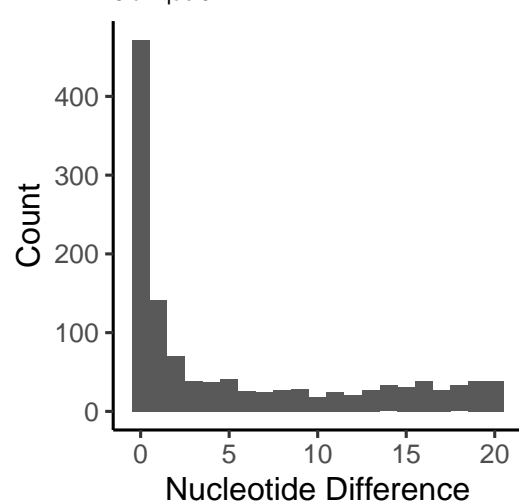
IGHV4-30-4*03

1 sequences assigned
No exact matches.



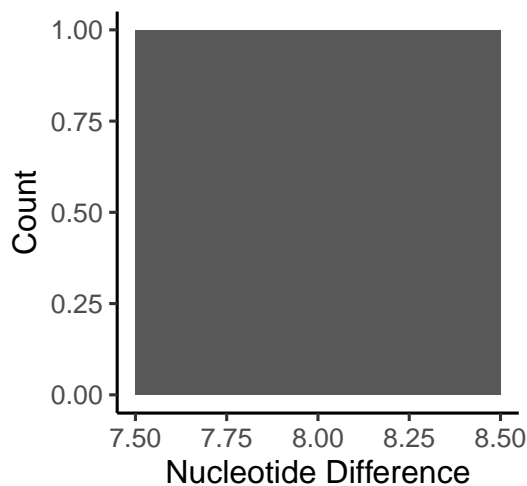
IGHV4-34*01

1662 sequences assigned
472 (28.4%) exact matches, in which:
466 unique CDR3
6 unique J



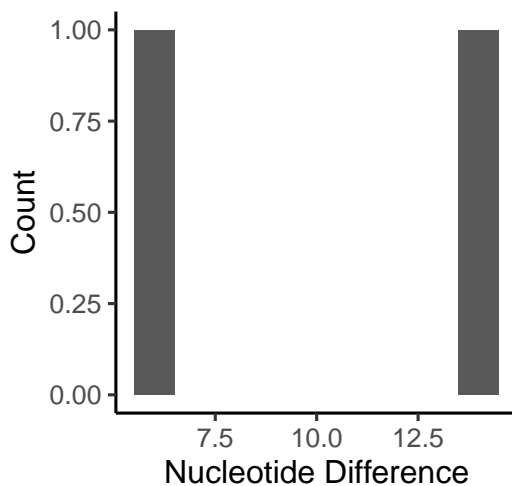
IGHV4-28*03

7 sequences assigned
No exact matches.



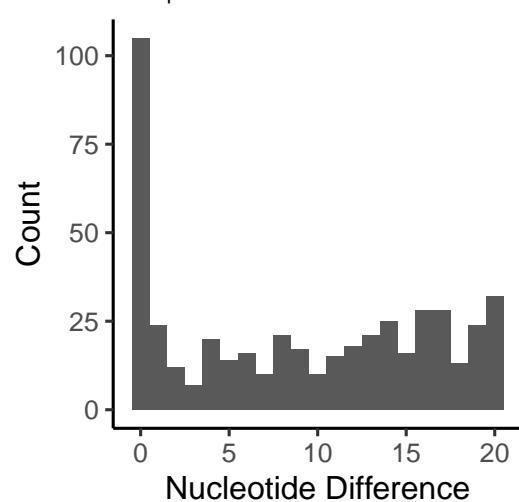
IGHV4-30-4*07

3 sequences assigned
No exact matches.



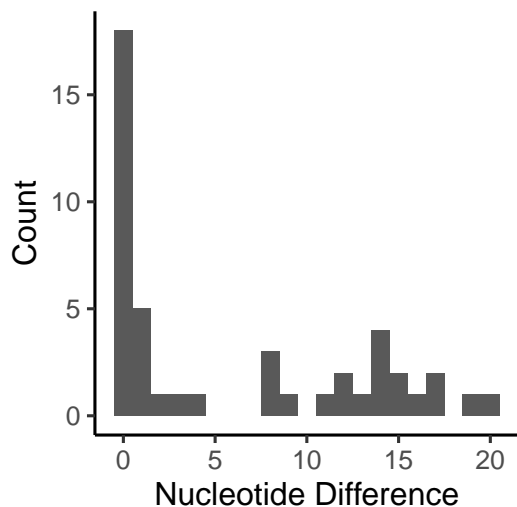
IGHV4-38-2*02

725 sequences assigned
105 (14.5%) exact matches, in which:
104 unique CDR3
6 unique J



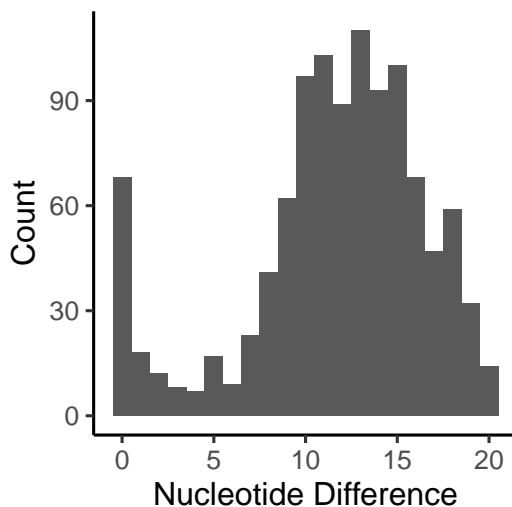
IGHV4-30-2*01

68 sequences assigned
18 (26.5%) exact matches, in which:
18 unique CDR3
4 unique J



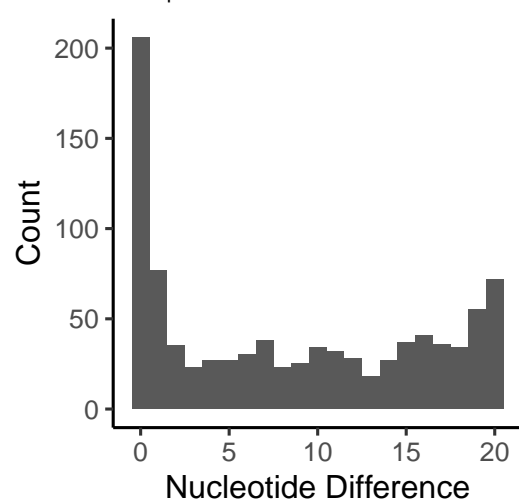
IGHV4-31*03

1501 sequences assigned
68 (4.5%) exact matches, in which:
66 unique CDR3
5 unique J



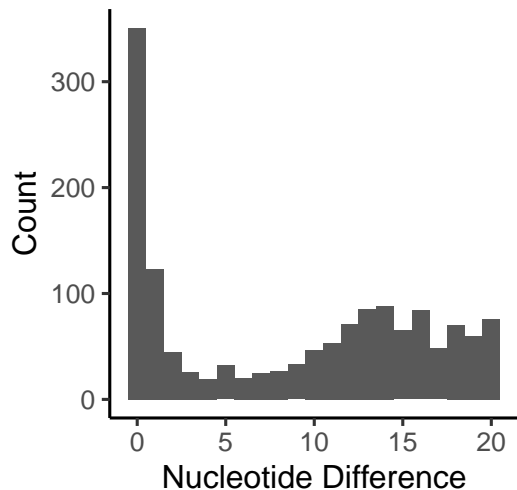
IGHV4-39*01

2370 sequences assigned
206 (8.7%) exact matches, in which:
206 unique CDR3
6 unique J



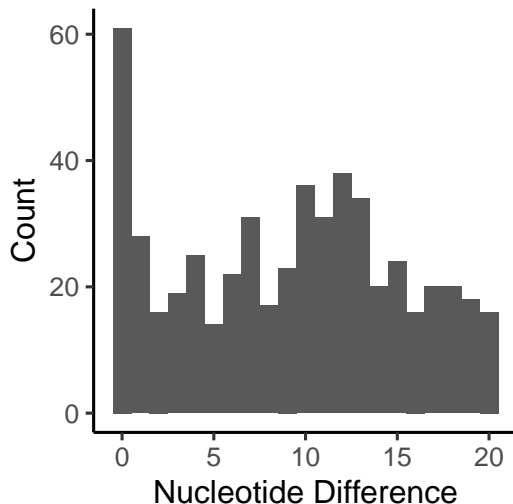
IGHV4–39*07

2159 sequences assigned
351 (16.3%) exact matches, in which:
342 unique CDR3
6 unique J



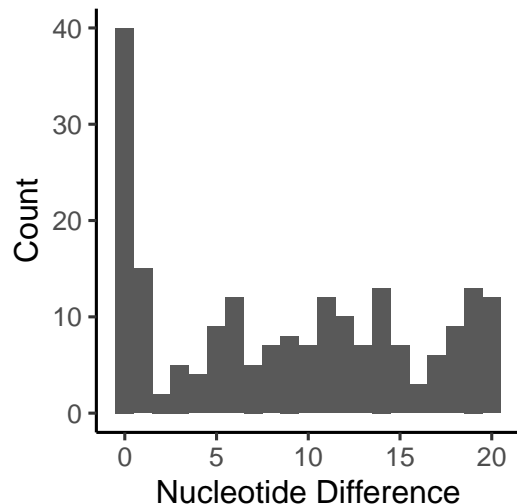
IGHV4–59*08

714 sequences assigned
61 (8.5%) exact matches, in which:
60 unique CDR3
5 unique J



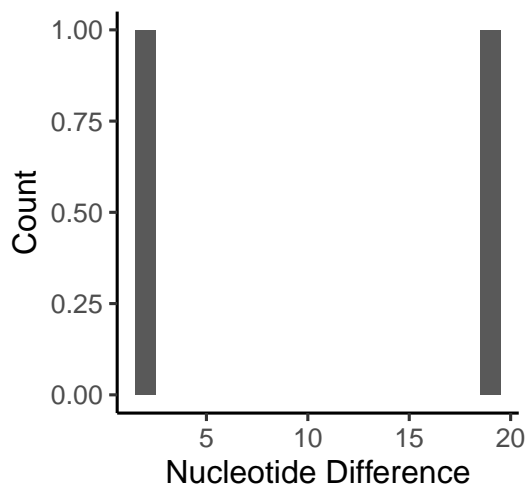
IGHV5–51*03

346 sequences assigned
40 (11.6%) exact matches, in which:
40 unique CDR3
5 unique J



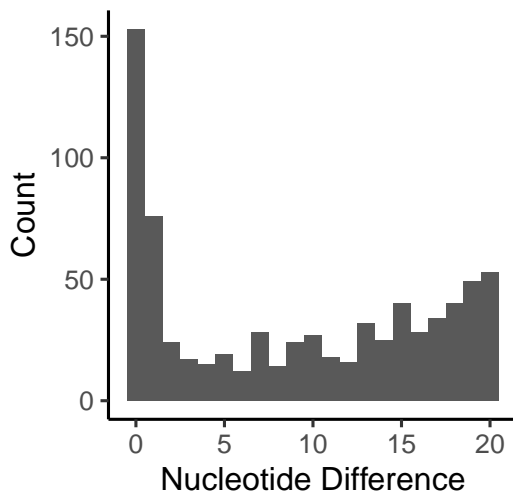
IGHV4–55*09

2 sequences assigned
No exact matches.



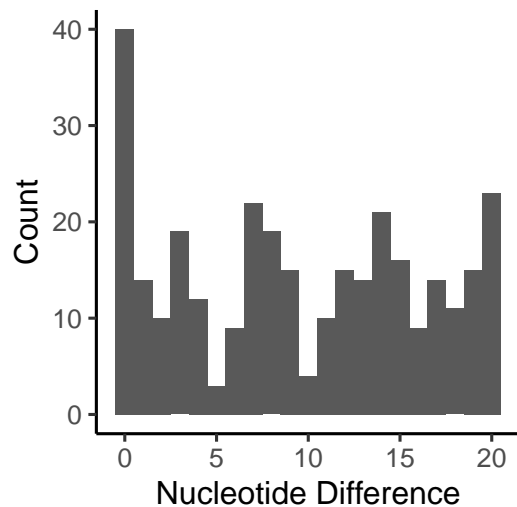
IGHV4–61*02

1272 sequences assigned
153 (12%) exact matches, in which:
149 unique CDR3
6 unique J



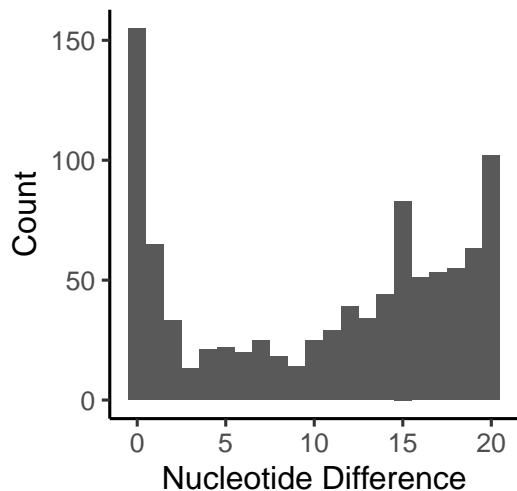
IGHV6–1*01

571 sequences assigned
40 (7%) exact matches, in which:
40 unique CDR3
5 unique J



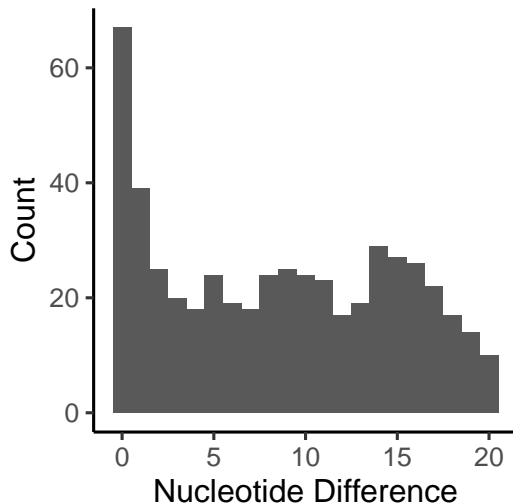
IGHV4–59*01

2038 sequences assigned
155 (7.6%) exact matches, in which:
151 unique CDR3
6 unique J



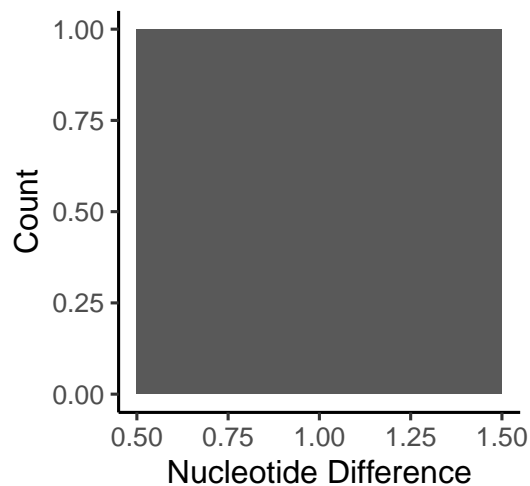
IGHV5–51*01

707 sequences assigned
67 (9.5%) exact matches, in which:
67 unique CDR3
5 unique J



IGHV7–81*01

1 sequences assigned
No exact matches.





Warning – no inferred sequences found.

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