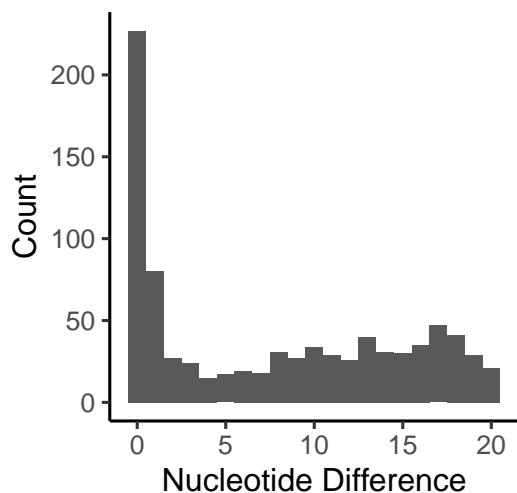


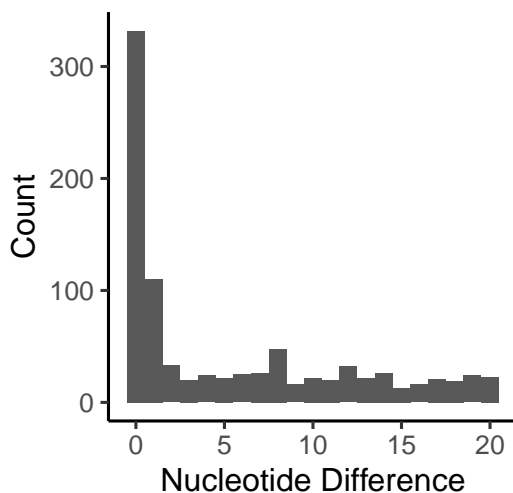
IGHV1-2*02

1422 sequences assigned
227 (16%) exact matches, in which:
226 unique CDR3
6 unique J



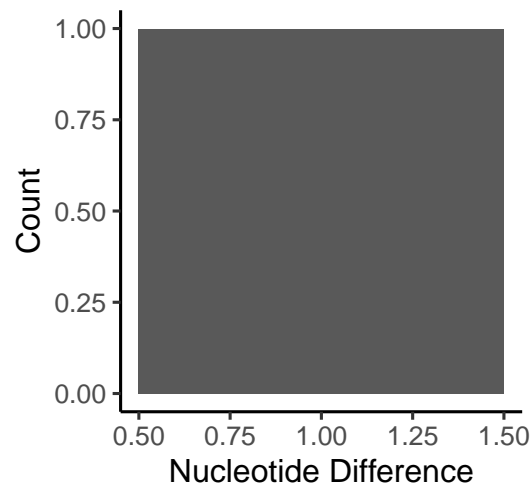
IGHV1-8*01

1098 sequences assigned
332 (30.2%) exact matches, in which:
331 unique CDR3
5 unique J



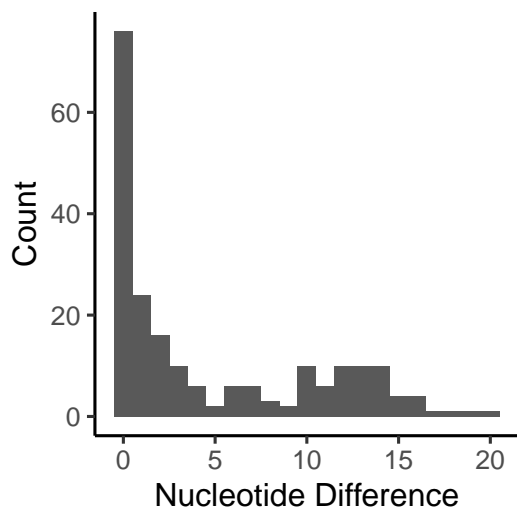
IGHV1-45*01

9 sequences assigned
No exact matches.



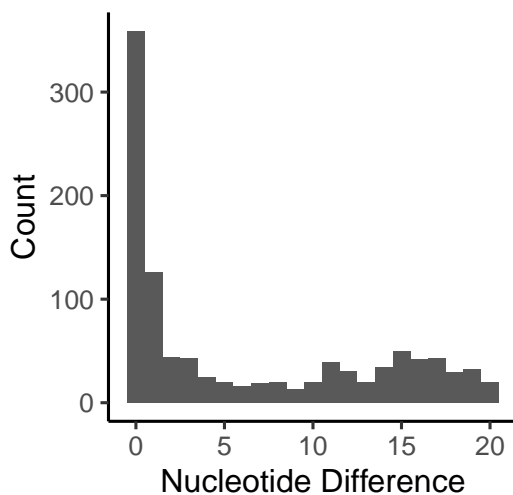
IGHV1-2*04

287 sequences assigned
76 (26.5%) exact matches, in which:
76 unique CDR3
5 unique J



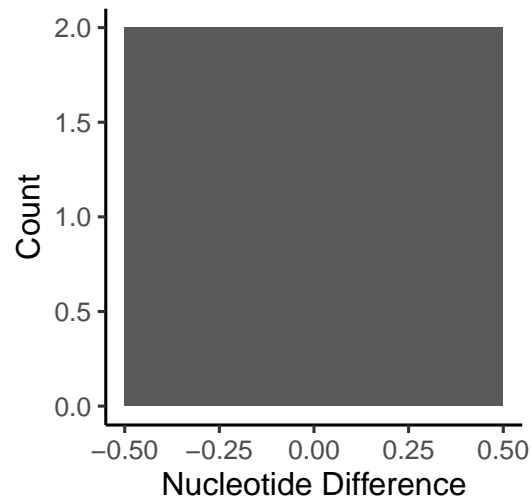
IGHV1-18*01

1628 sequences assigned
359 (22.1%) exact matches, in which:
356 unique CDR3
6 unique J



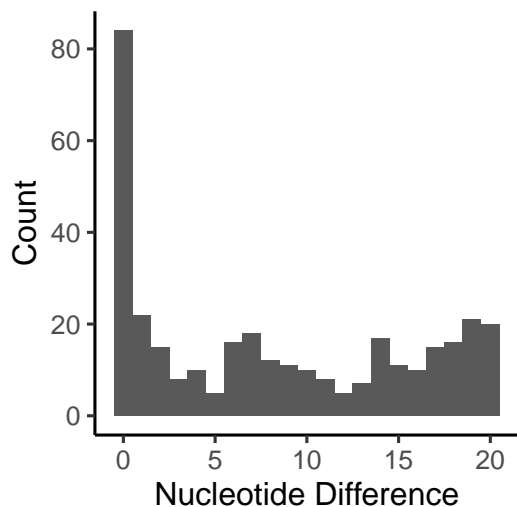
IGHV1-45*02

11 sequences assigned
2 (18.2%) exact matches, in which:
2 unique CDR3
1 unique J



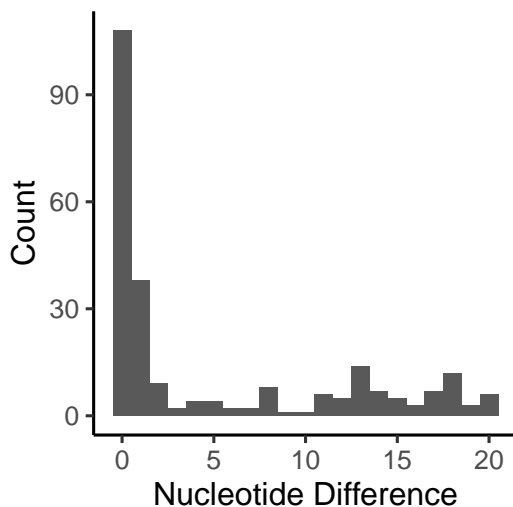
IGHV1-3*01

521 sequences assigned
84 (16.1%) exact matches, in which:
81 unique CDR3
5 unique J



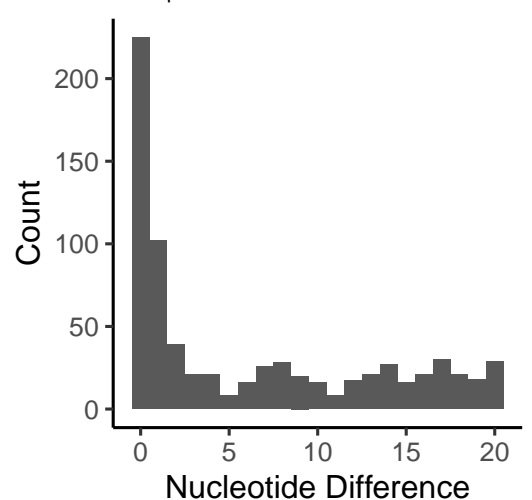
IGHV1-24*01

329 sequences assigned
108 (32.8%) exact matches, in which:
107 unique CDR3
6 unique J



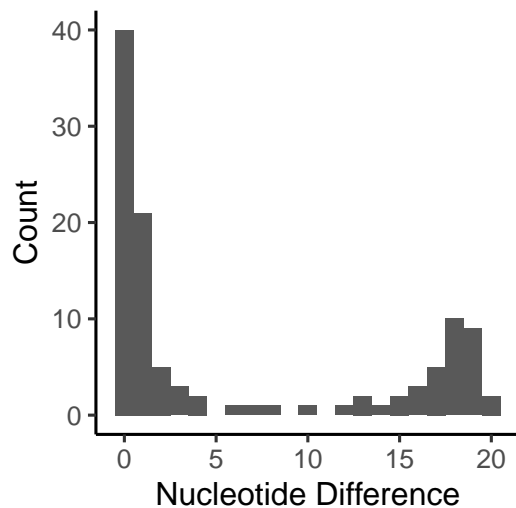
IGHV1-46*01

1173 sequences assigned
225 (19.2%) exact matches, in which:
220 unique CDR3
6 unique J



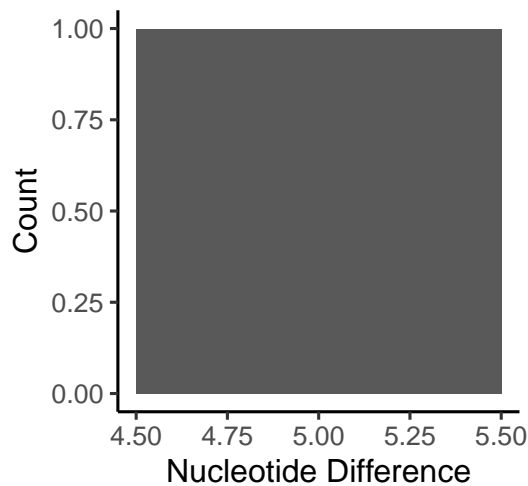
IGHV1-58*01

158 sequences assigned
40 (25.3%) exact matches, in which:
40 unique CDR3
6 unique J



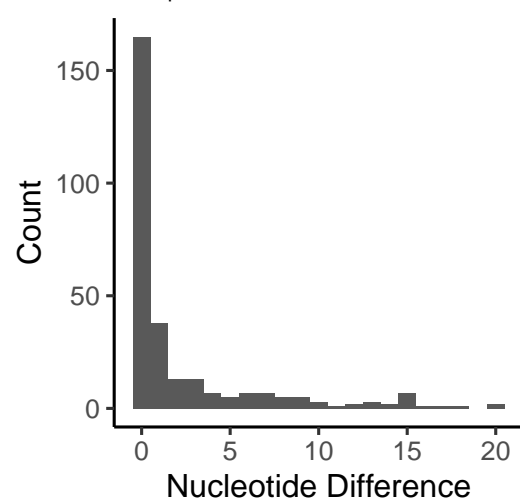
IGHV1-NL1*01

1 sequences assigned
No exact matches.



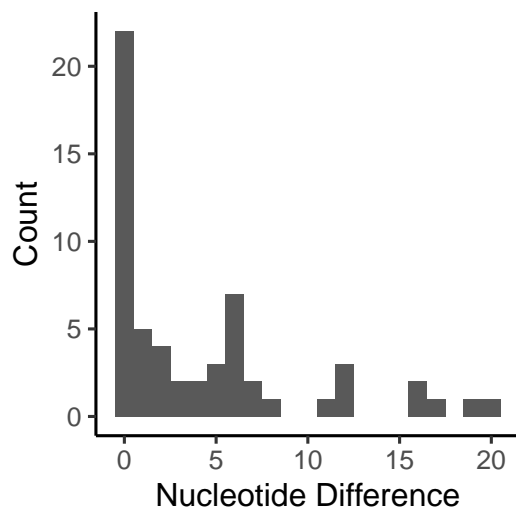
IGHV2-26*01

303 sequences assigned
165 (54.5%) exact matches, in which:
164 unique CDR3
6 unique J



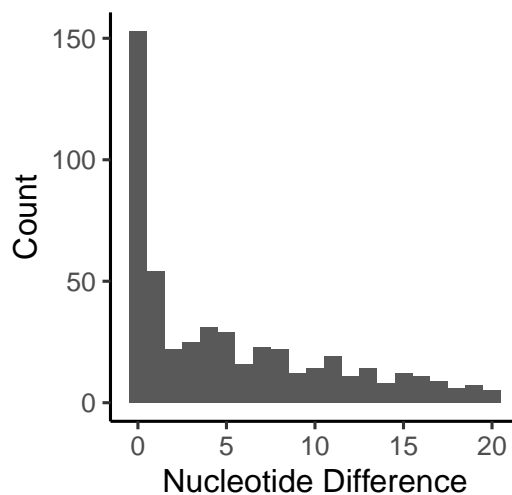
IGHV1-69-2*01

110 sequences assigned
22 (20%) exact matches, in which:
22 unique CDR3
4 unique J



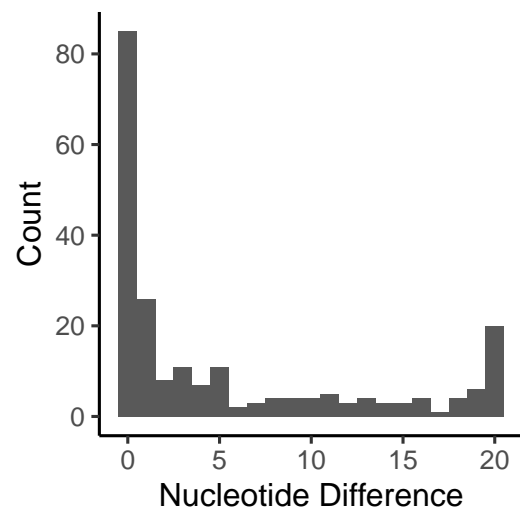
IGHV2-5*01

575 sequences assigned
153 (26.6%) exact matches, in which:
147 unique CDR3
6 unique J



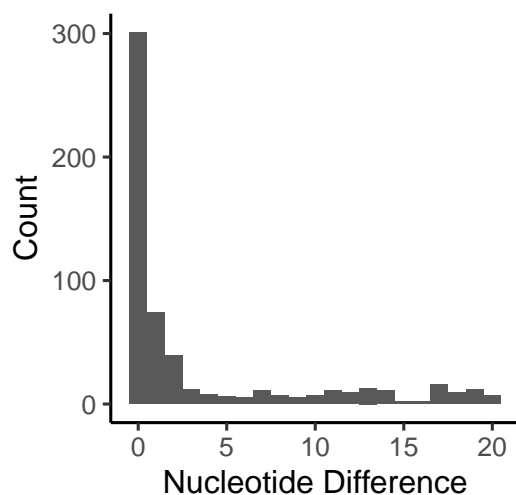
IGHV2-70*01

283 sequences assigned
85 (30%) exact matches, in which:
85 unique CDR3
4 unique J



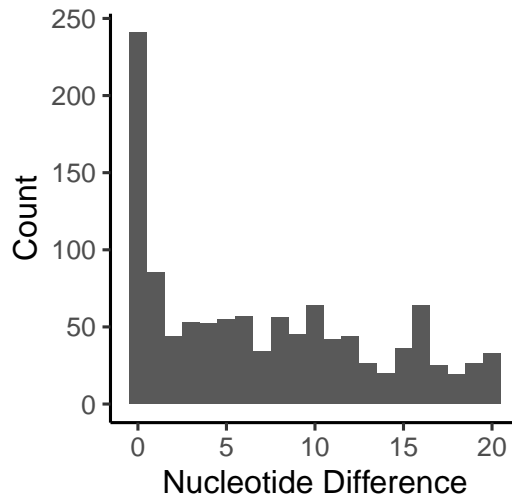
IGHV1-69*06

902 sequences assigned
301 (33.4%) exact matches, in which:
292 unique CDR3
6 unique J



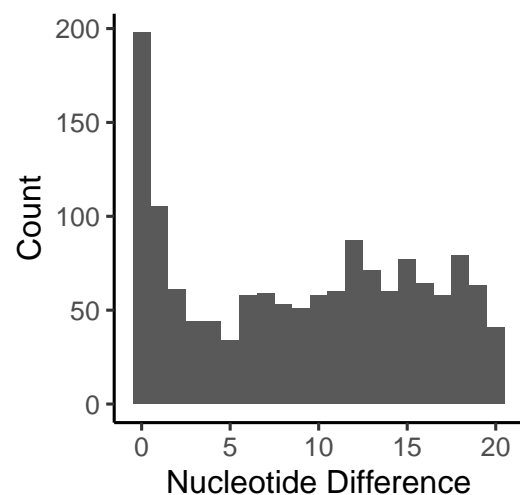
IGHV2-5*02

1417 sequences assigned
241 (17%) exact matches, in which:
236 unique CDR3
6 unique J



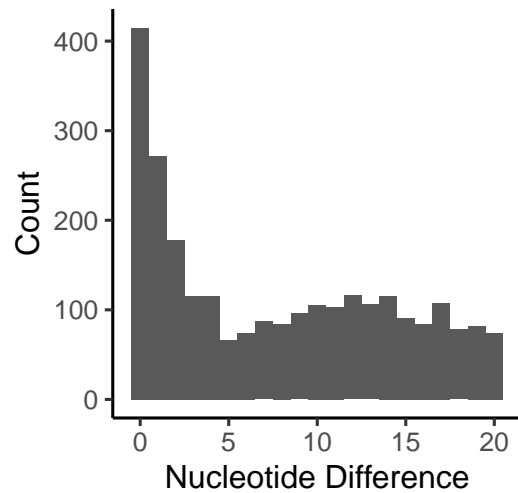
IGHV3-7*01

1971 sequences assigned
198 (10%) exact matches, in which:
194 unique CDR3
6 unique J



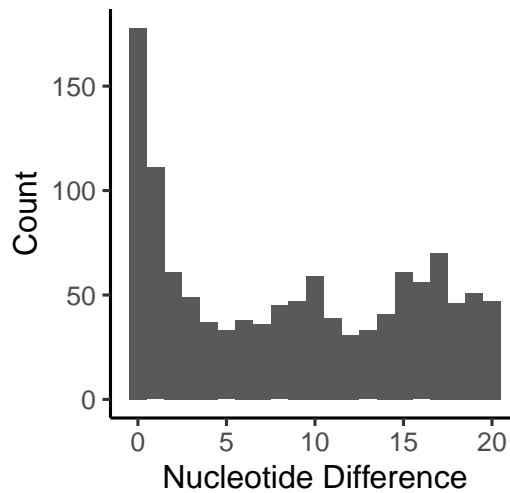
IGHV3-9*01

3361 sequences assigned
415 (12.3%) exact matches, in which:
412 unique CDR3
6 unique J



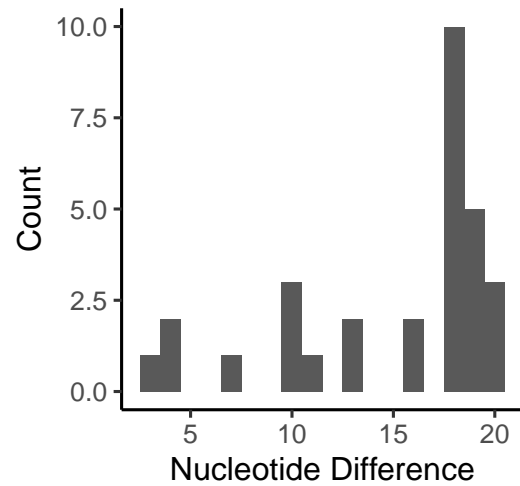
IGHV3-15*01

1682 sequences assigned
178 (10.6%) exact matches, in which:
169 unique CDR3
6 unique J



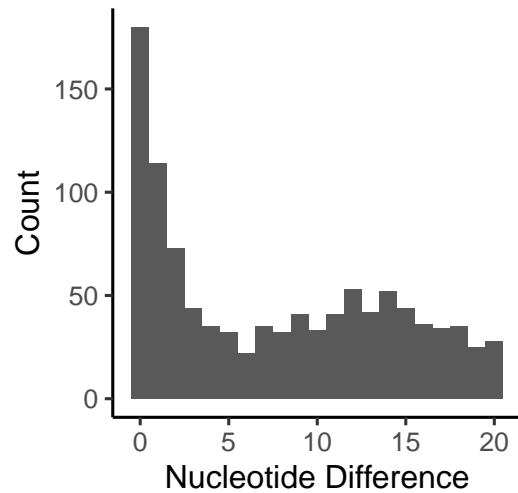
IGHV3-20*04

83 sequences assigned
No exact matches.



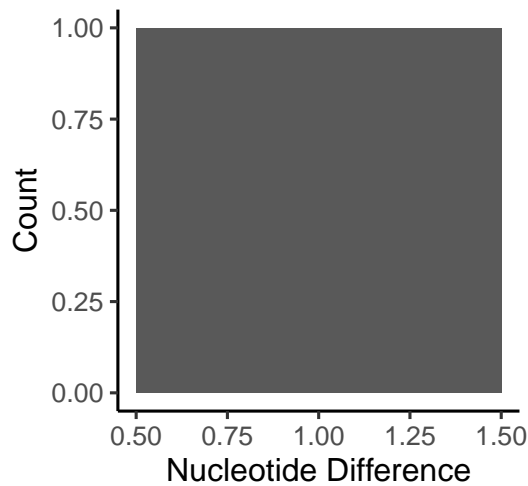
IGHV3-11*01

1515 sequences assigned
180 (11.9%) exact matches, in which:
177 unique CDR3
6 unique J



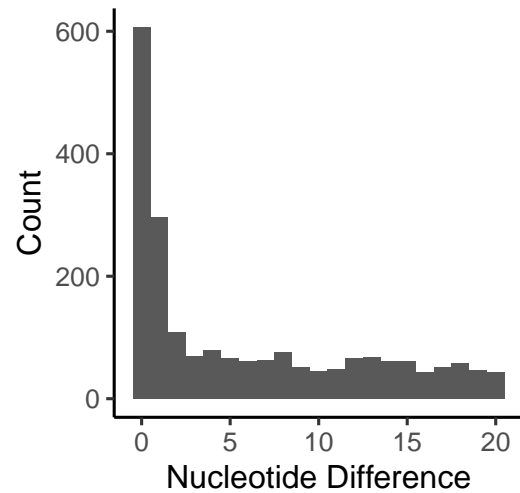
IGHV3-19*01

1 sequences assigned
No exact matches.



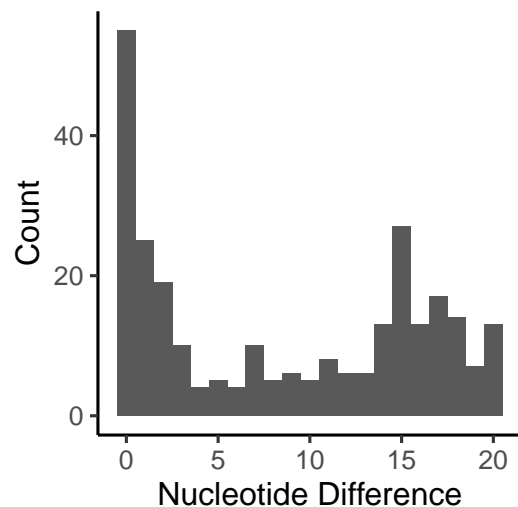
IGHV3-21*01

2780 sequences assigned
607 (21.8%) exact matches, in which:
600 unique CDR3
6 unique J



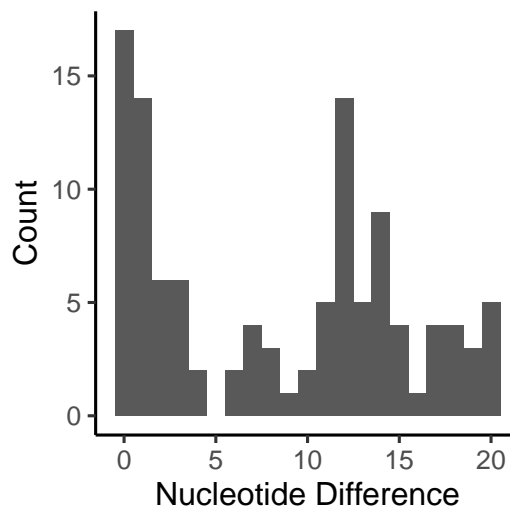
IGHV3-13*01

353 sequences assigned
55 (15.6%) exact matches, in which:
54 unique CDR3
5 unique J



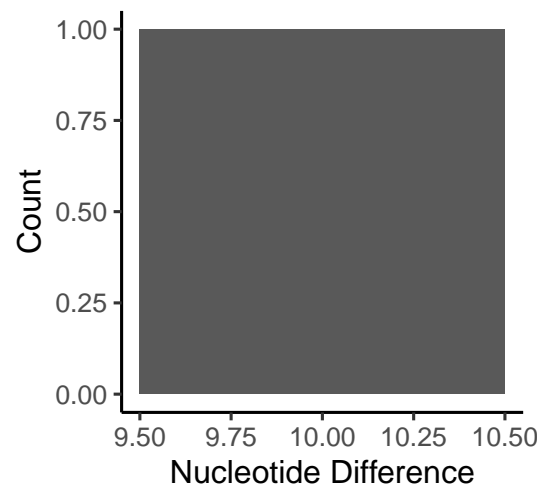
IGHV3-20*01

157 sequences assigned
17 (10.8%) exact matches, in which:
17 unique CDR3
5 unique J



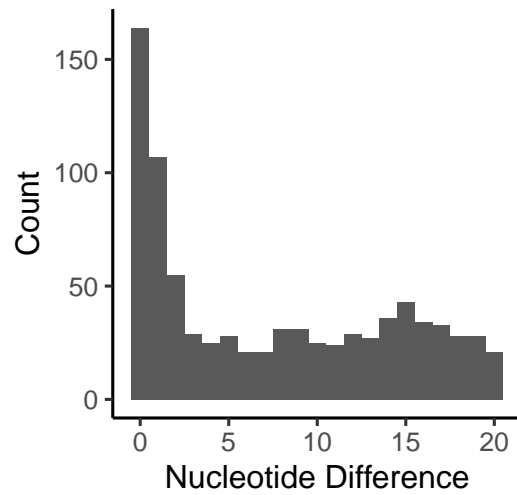
IGHV3-25*04

1 sequences assigned
No exact matches.



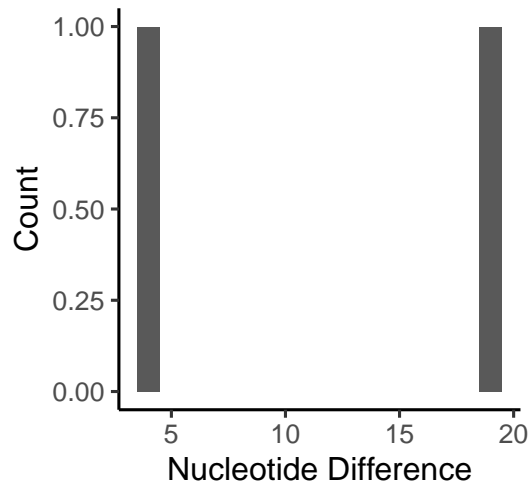
IGHV3-30-3*01

1214 sequences assigned
164 (13.5%) exact matches, in which:
161 unique CDR3
6 unique J



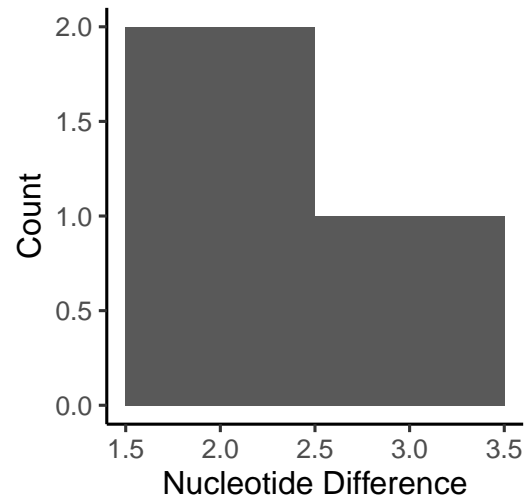
IGHV3-41*02

2 sequences assigned
No exact matches.



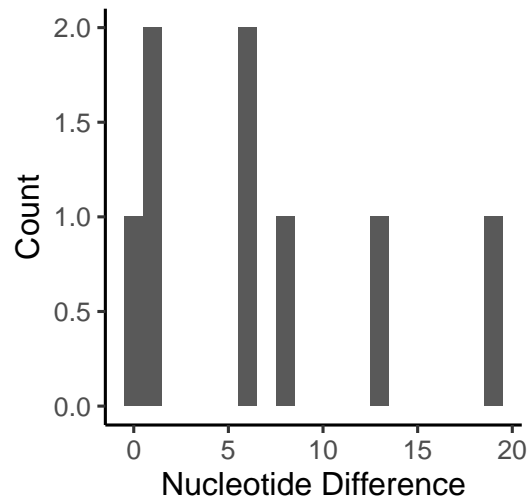
IGHV3-47*02

3 sequences assigned
No exact matches.



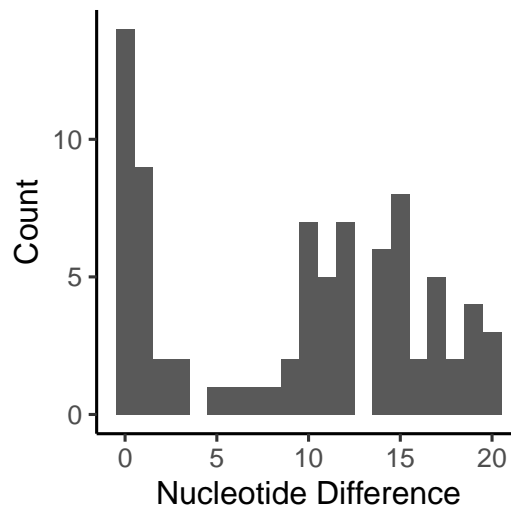
IGHV3-30-3*02

12 sequences assigned
1 (8.3%) exact matches, in which:
1 unique CDR3
1 unique J



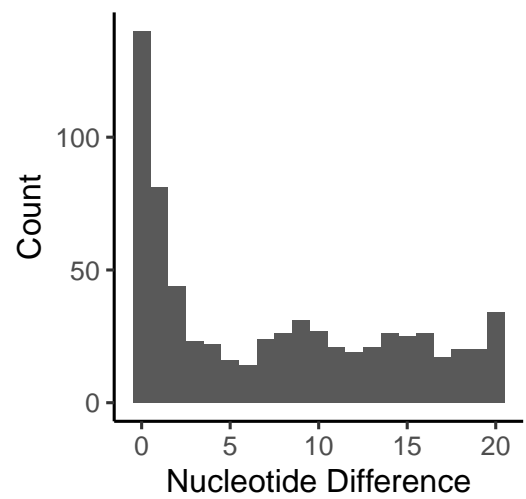
IGHV3-43*01

93 sequences assigned
14 (15.1%) exact matches, in which:
14 unique CDR3
4 unique J



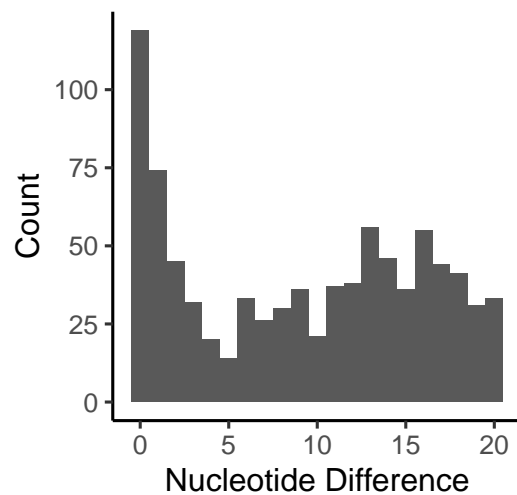
IGHV3-48*02

1092 sequences assigned
140 (12.8%) exact matches, in which:
139 unique CDR3
5 unique J



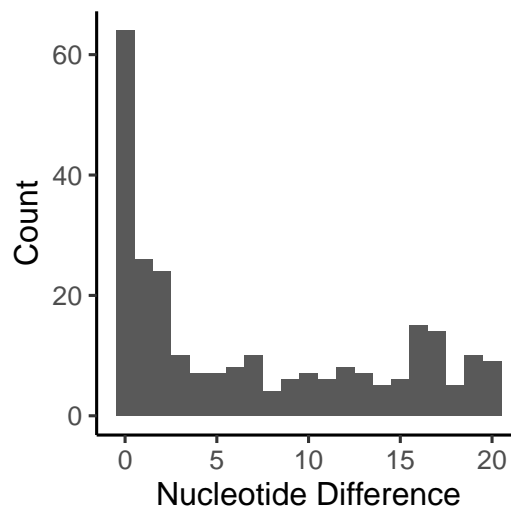
IGHV3-33*01

1256 sequences assigned
119 (9.5%) exact matches, in which:
115 unique CDR3
6 unique J



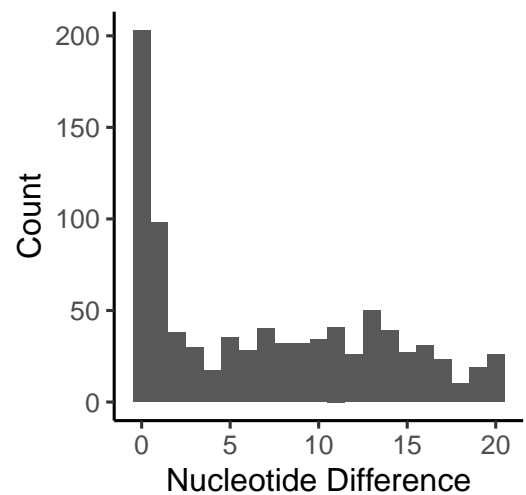
IGHV3-43*02

455 sequences assigned
64 (14.1%) exact matches, in which:
64 unique CDR3
5 unique J



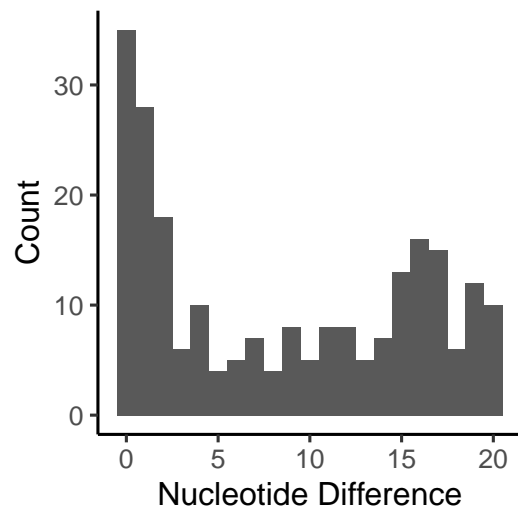
IGHV3-48*03

1177 sequences assigned
203 (17.2%) exact matches, in which:
199 unique CDR3
5 unique J



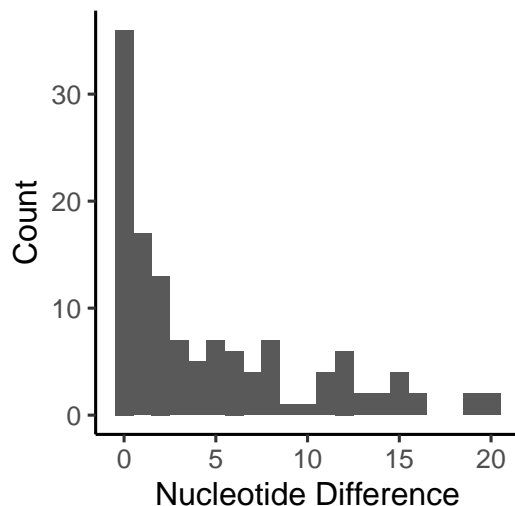
IGHV3-49*04

332 sequences assigned
35 (10.5%) exact matches, in which:
34 unique CDR3
5 unique J



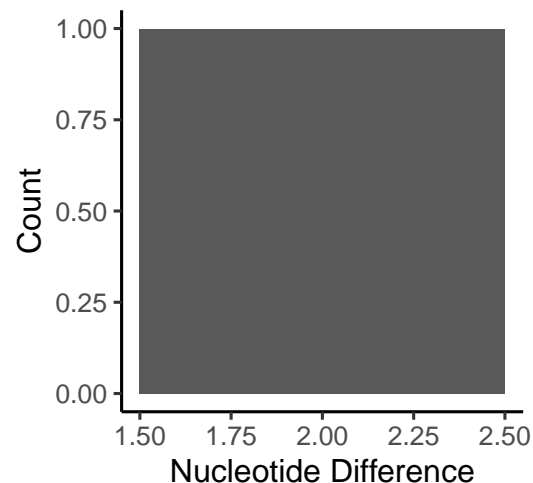
IGHV3-53*04

157 sequences assigned
36 (22.9%) exact matches, in which:
36 unique CDR3
5 unique J



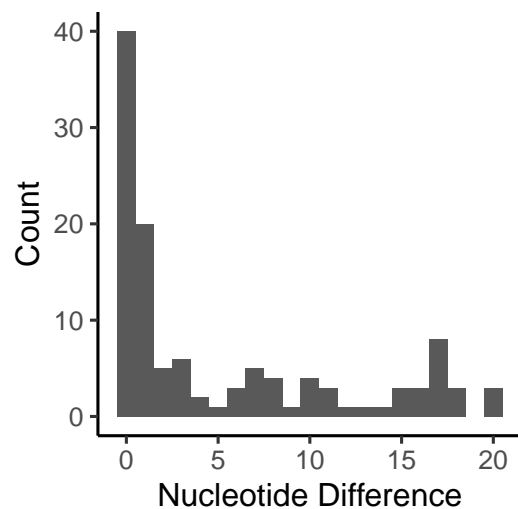
IGHV3-66*01

1 sequences assigned
No exact matches.



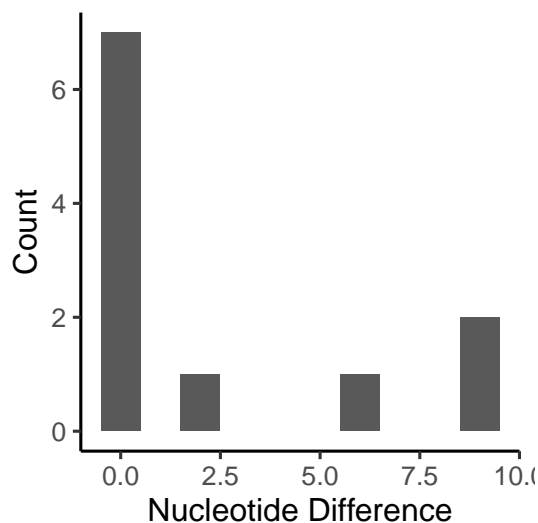
IGHV3-49*05

153 sequences assigned
40 (26.1%) exact matches, in which:
40 unique CDR3
6 unique J



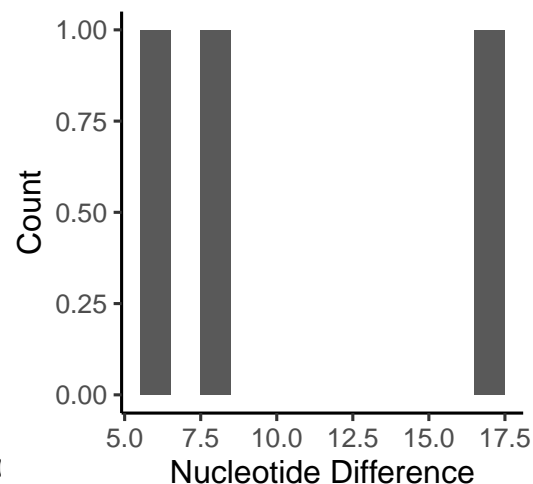
IGHV3-64*02

28 sequences assigned
7 (25%) exact matches, in which:
7 unique CDR3
3 unique J



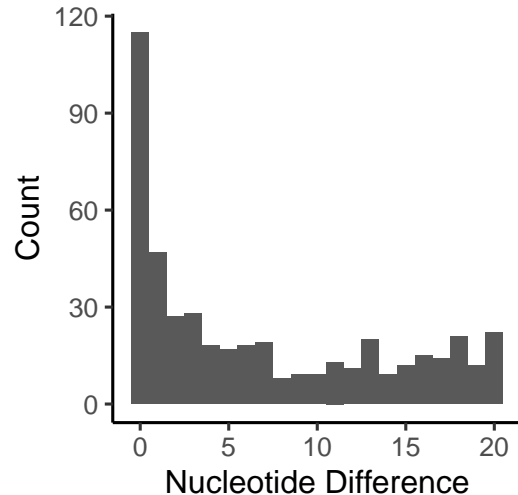
IGHV3-66*03

3 sequences assigned
No exact matches.



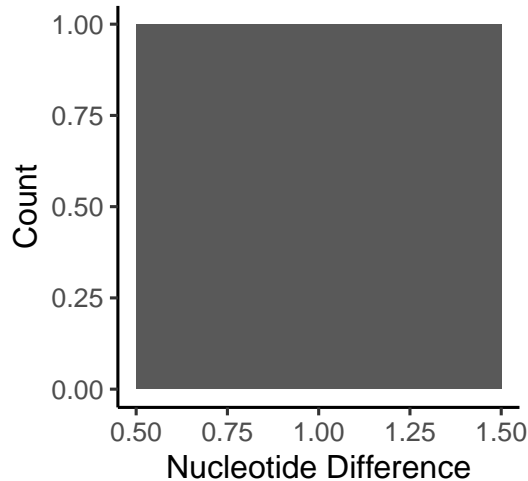
IGHV3-53*01

715 sequences assigned
115 (16.1%) exact matches, in which:
115 unique CDR3
5 unique J



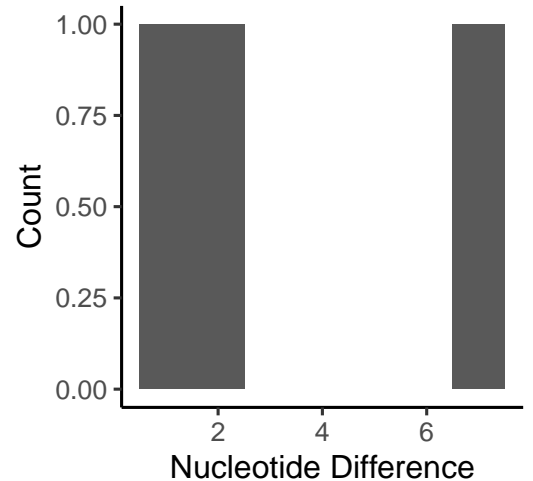
IGHV3-64*04

1 sequences assigned
No exact matches.



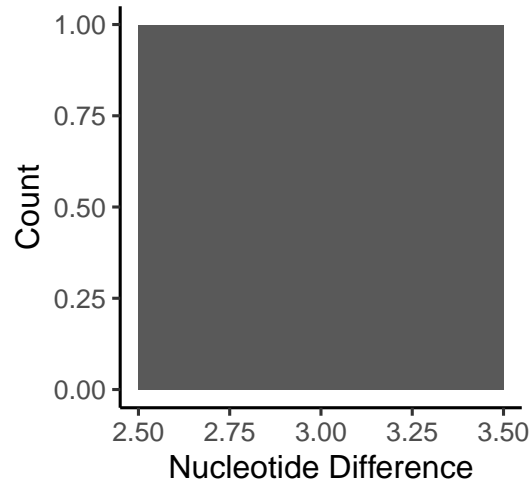
IGHV3-66*04

3 sequences assigned
No exact matches.



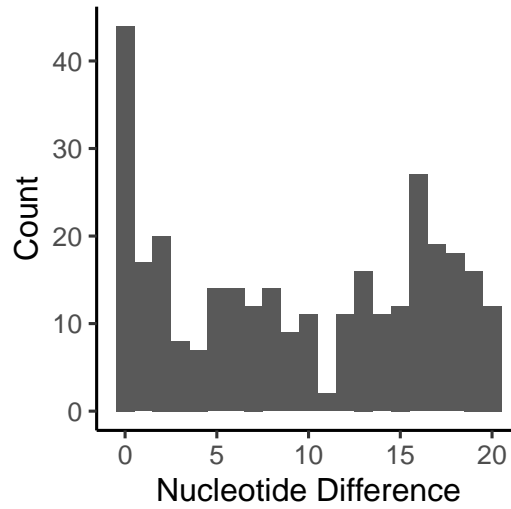
IGHV3-69-1*01

4 sequences assigned
No exact matches.



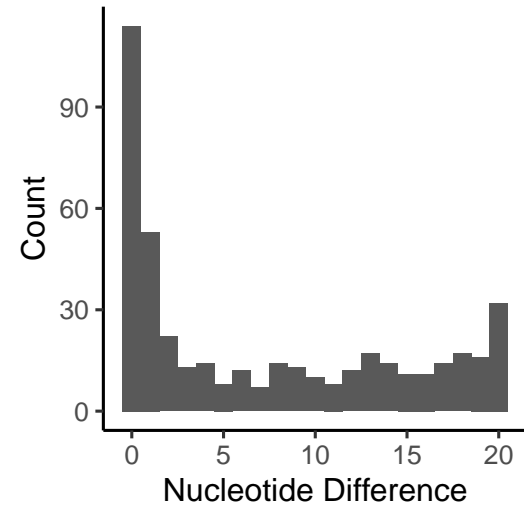
IGHV3-73*02

423 sequences assigned
44 (10.4%) exact matches, in which:
42 unique CDR3
4 unique J



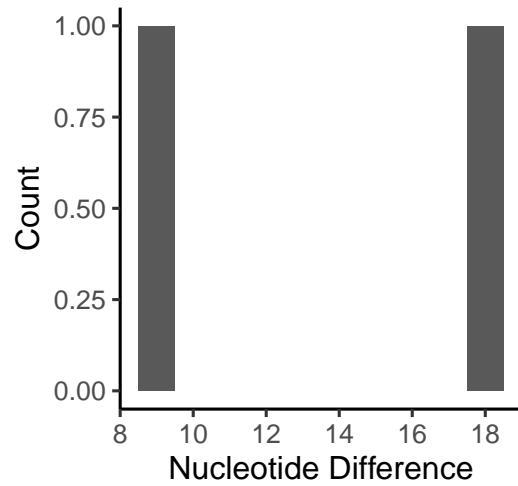
IGHV4-4*07

692 sequences assigned
114 (16.5%) exact matches, in which:
114 unique CDR3
5 unique J



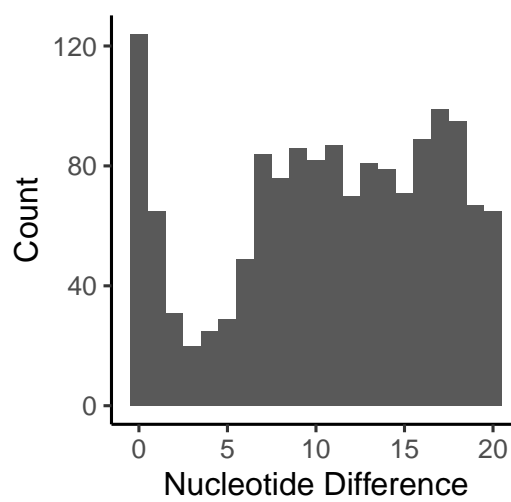
IGHV3-69-1*02

15 sequences assigned
No exact matches.



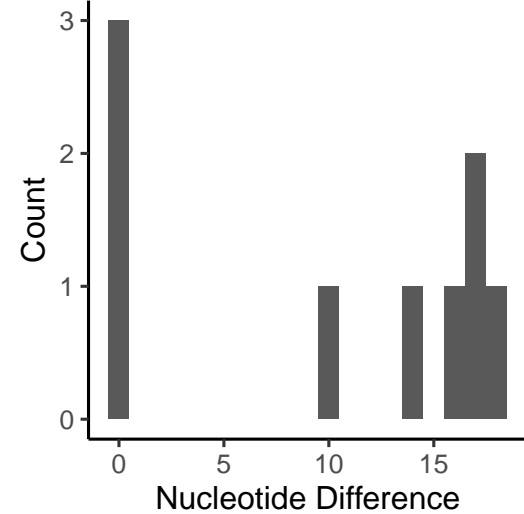
IGHV3-74*01

2102 sequences assigned
124 (5.9%) exact matches, in which:
122 unique CDR3
6 unique J



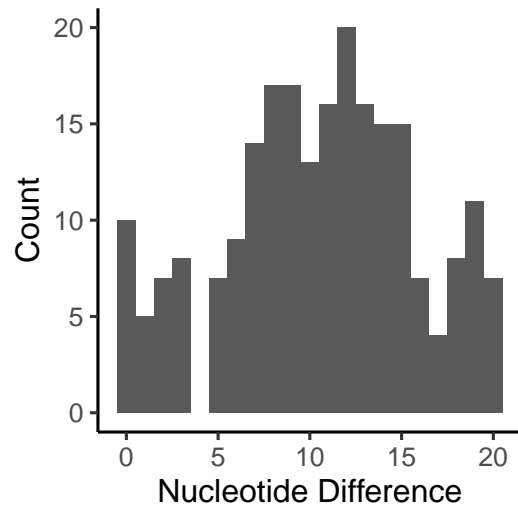
IGHV4-28*01

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



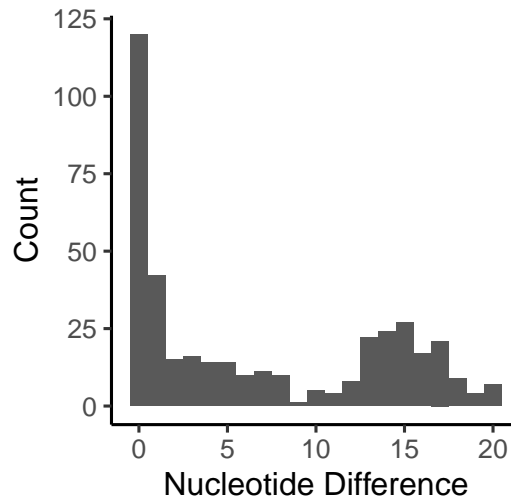
IGHV3-72*01

302 sequences assigned
10 (3.3%) exact matches, in which:
10 unique CDR3
4 unique J



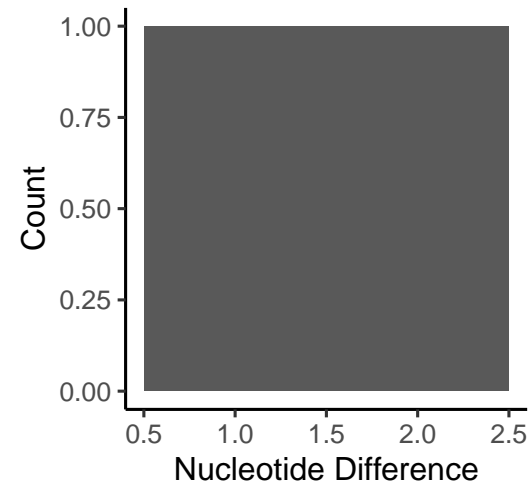
IGHV4-4*02

636 sequences assigned
120 (18.9%) exact matches, in which:
119 unique CDR3
5 unique J



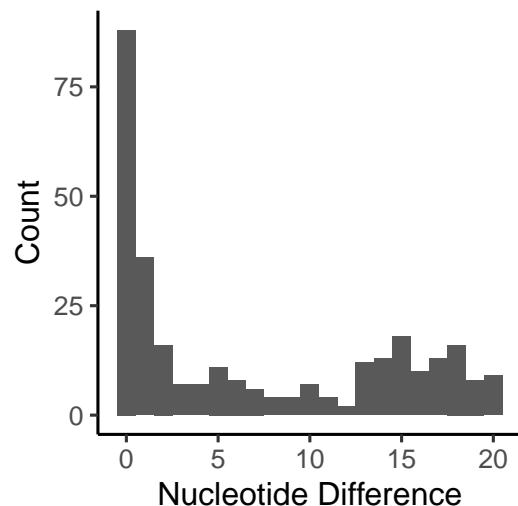
IGHV4-28*04

2 sequences assigned
No exact matches.



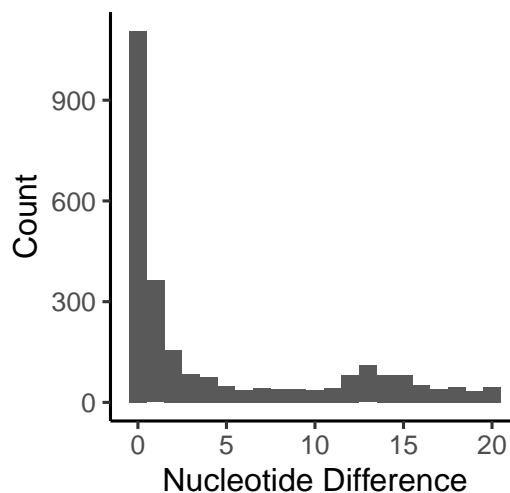
IGHV4-30-2*01

429 sequences assigned
88 (20.5%) exact matches, in which:
88 unique CDR3
6 unique J



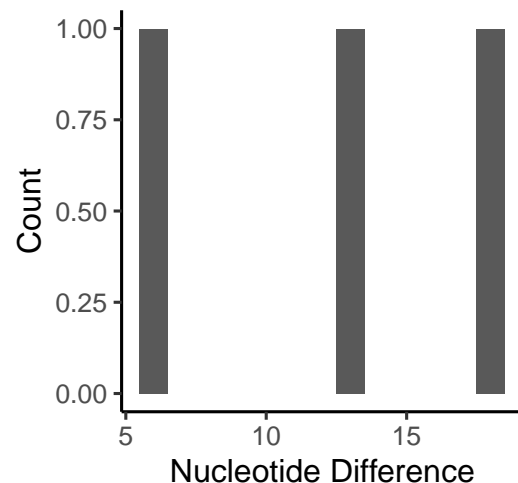
IGHV4-34*01

3389 sequences assigned
1107 (32.7%) exact matches, in which:
1088 unique CDR3
6 unique J



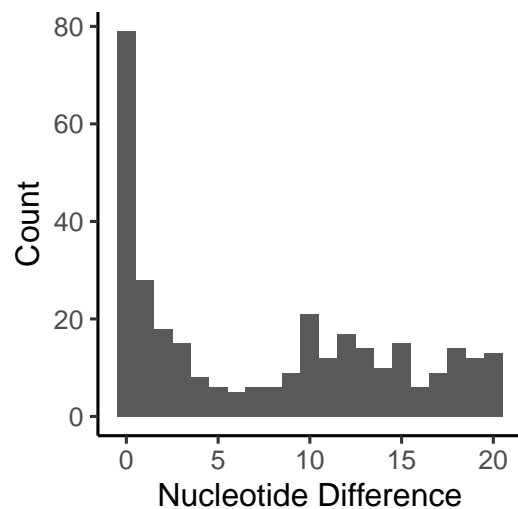
IGHV4-55*01

3 sequences assigned
No exact matches.



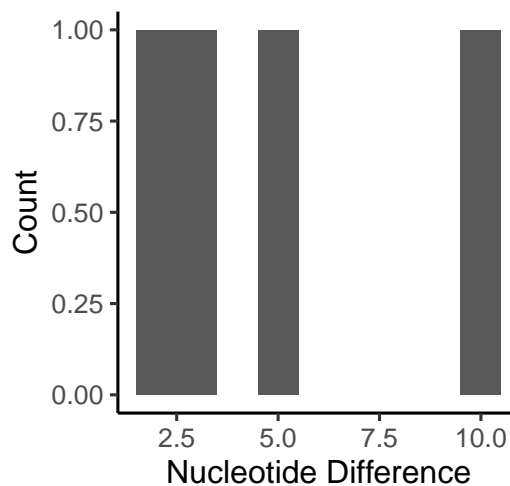
IGHV4-30-4*01

497 sequences assigned
79 (15.9%) exact matches, in which:
78 unique CDR3
5 unique J



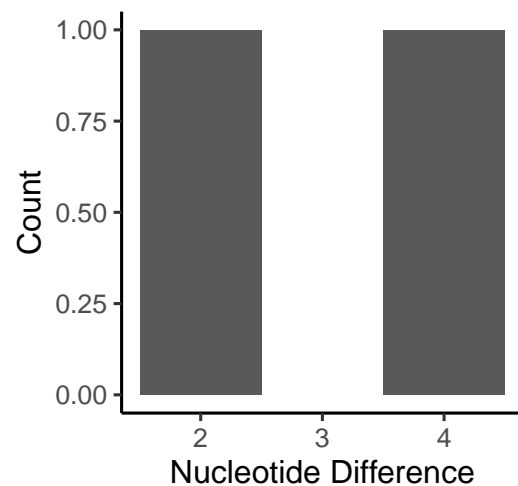
IGHV4-38-2*02

5 sequences assigned
No exact matches.



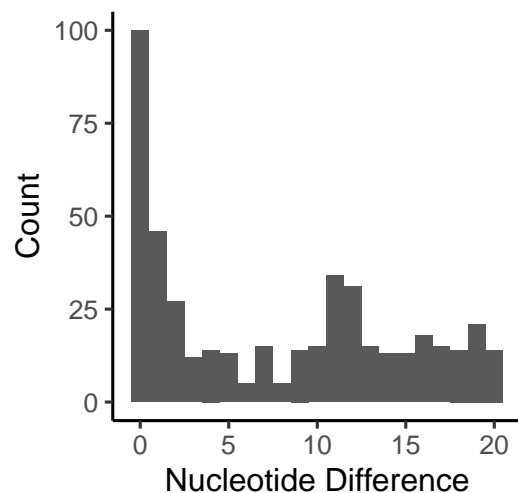
IGHV4-55*08

2 sequences assigned
No exact matches.



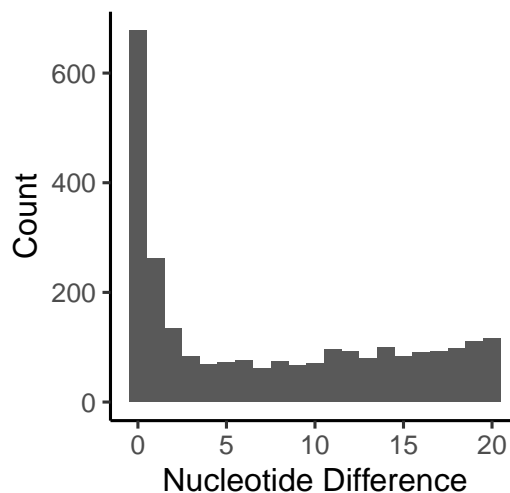
IGHV4-31*03

632 sequences assigned
100 (15.8%) exact matches, in which:
100 unique CDR3
6 unique J



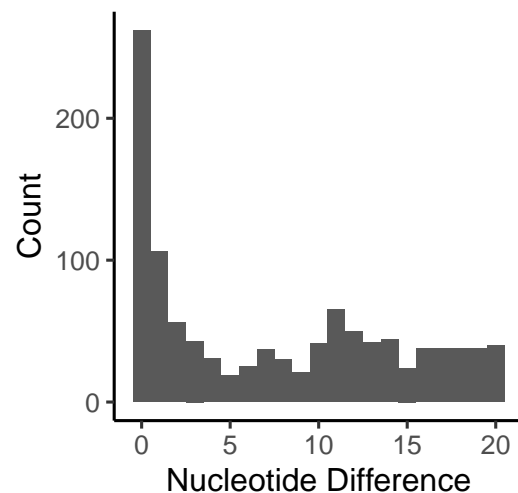
IGHV4-39*01

4256 sequences assigned
678 (15.9%) exact matches, in which:
665 unique CDR3
6 unique J



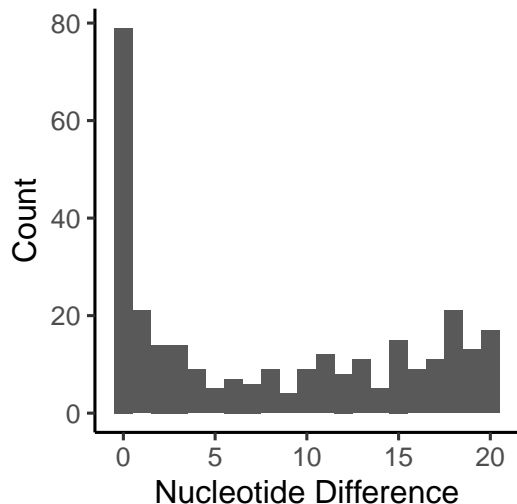
IGHV4-59*01

1551 sequences assigned
262 (16.9%) exact matches, in which:
261 unique CDR3
6 unique J



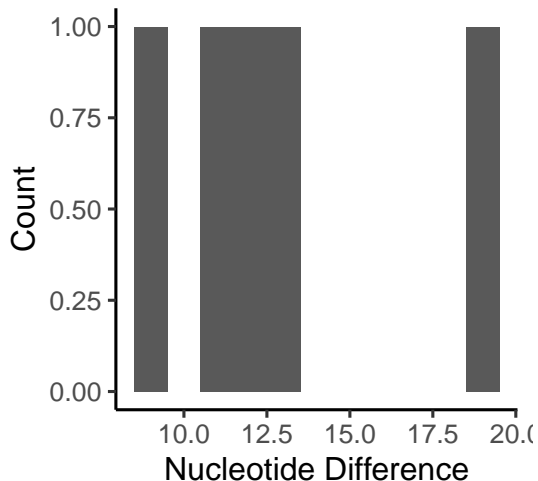
IGHV4-61*01

563 sequences assigned
79 (14%) exact matches, in which:
79 unique CDR3
6 unique J



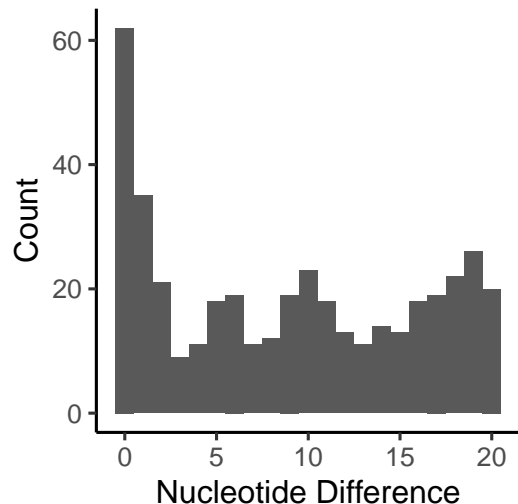
IGHV4/OR15-8*02

15 sequences assigned
No exact matches.



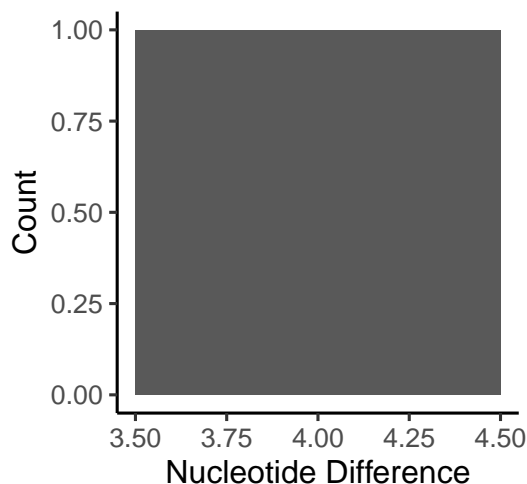
IGHV6-1*01

523 sequences assigned
62 (11.9%) exact matches, in which:
60 unique CDR3
5 unique J



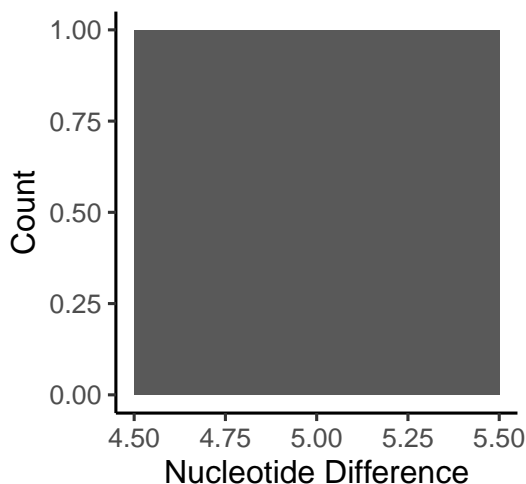
IGHV1/OR15-1*04

1 sequences assigned
No exact matches.



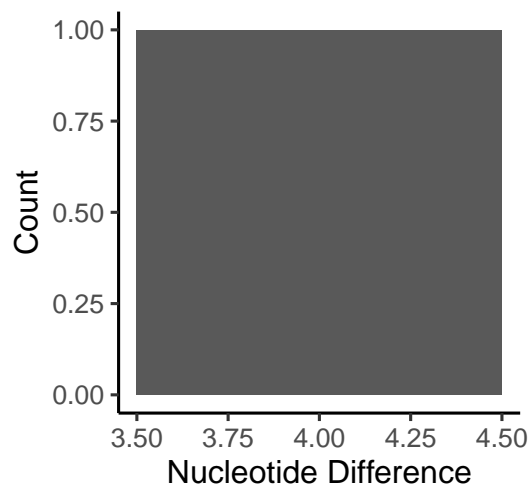
IGHV1/OR15-9*01

1 sequences assigned
No exact matches.



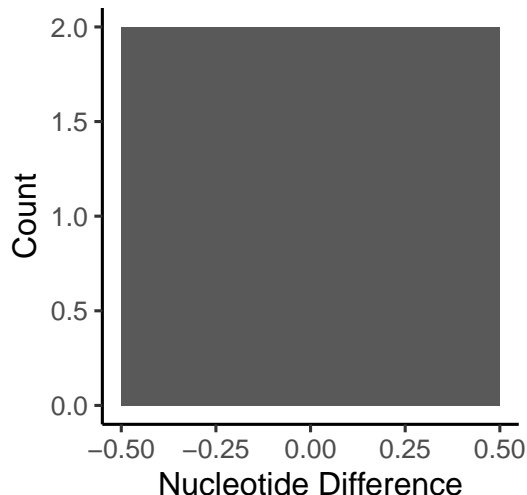
IGHV3/OR16-12*01

2 sequences assigned
No exact matches.



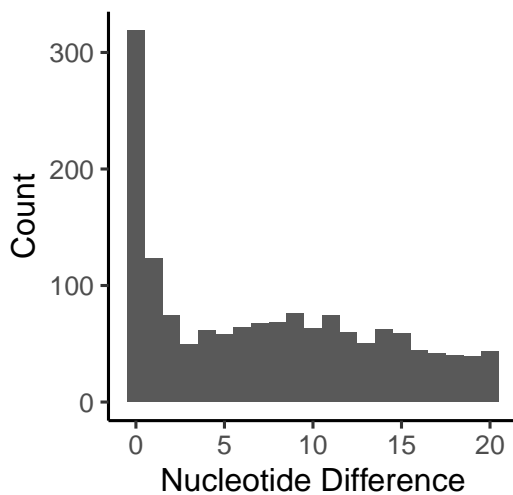
IGHV4/OR15-8*01

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



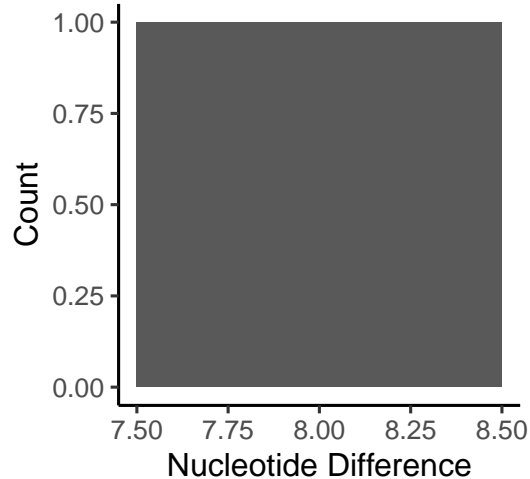
IGHV5-51*01

1936 sequences assigned
319 (16.5%) exact matches, in which:
317 unique CDR3
6 unique J



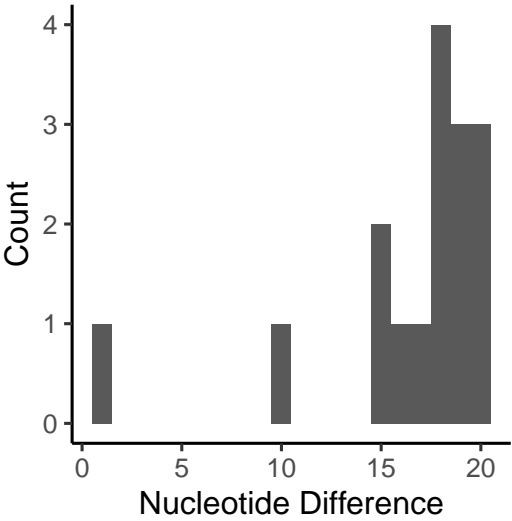
IGHV3/OR16-13*01

1 sequences assigned
No exact matches.



IGHV7-4-1*01

17 sequences assigned
No exact matches.





Warning – no inferred sequences found.