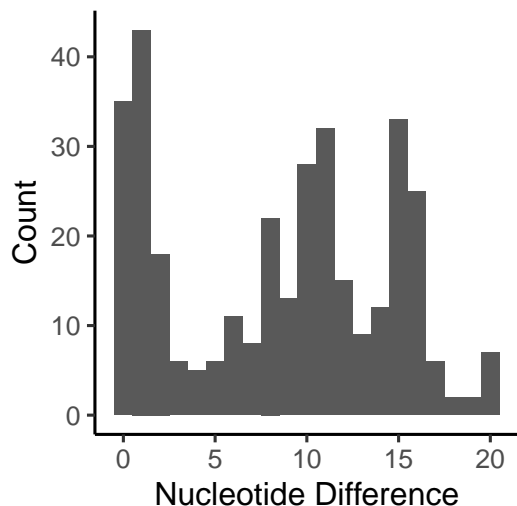


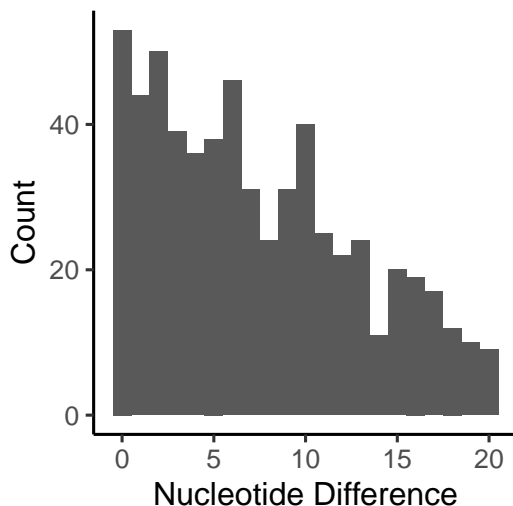
IGHV1-2*04

512 sequences assigned
35 (6.8%) exact matches, in which:
28 unique CDR3
5 unique J



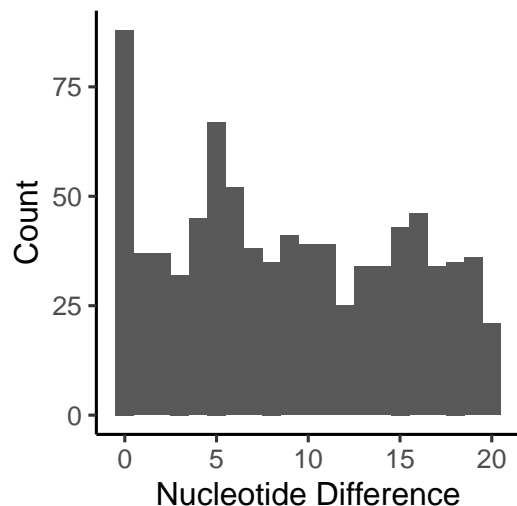
IGHV1-8*01

943 sequences assigned
53 (5.6%) exact matches, in which:
50 unique CDR3
6 unique J



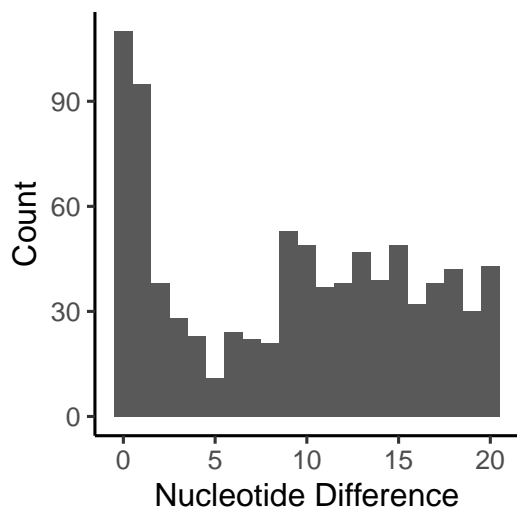
IGHV1-46*01

1479 sequences assigned
88 (5.9%) exact matches, in which:
83 unique CDR3
6 unique J



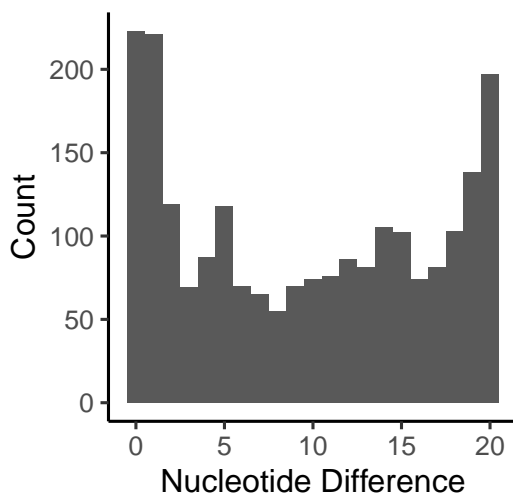
IGHV1-3*01

1340 sequences assigned
110 (8.2%) exact matches, in which:
101 unique CDR3
6 unique J



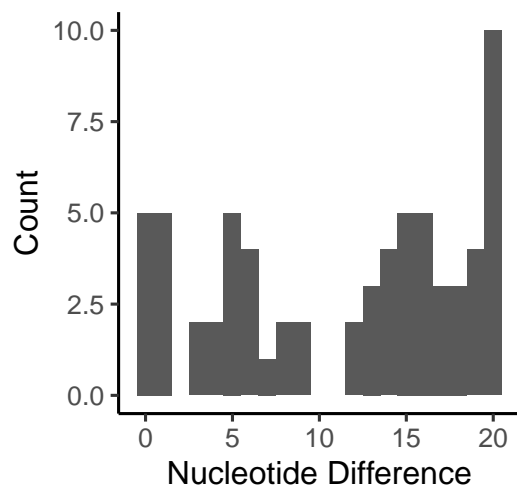
IGHV1-18*01

5097 sequences assigned
223 (4.4%) exact matches, in which:
198 unique CDR3
7 unique J



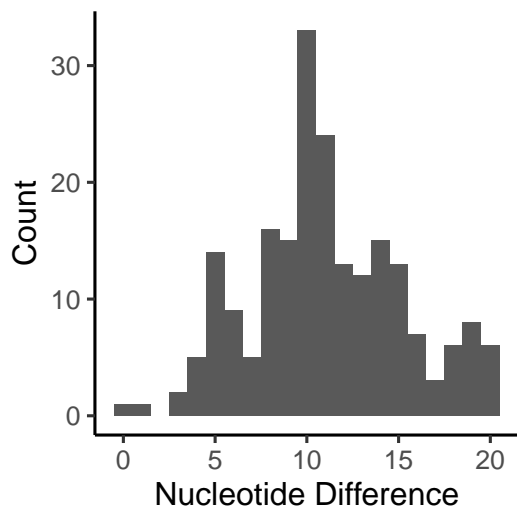
IGHV1-58*01

89 sequences assigned
5 (5.6%) exact matches, in which:
5 unique CDR3
3 unique J



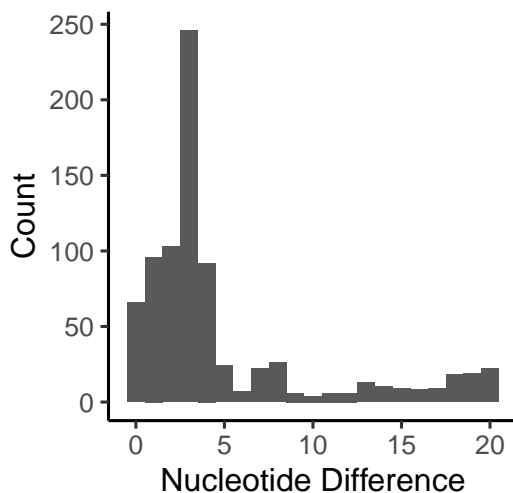
IGHV1-3*04

373 sequences assigned
1 (0.3%) exact matches, in which:
1 unique CDR3
1 unique J



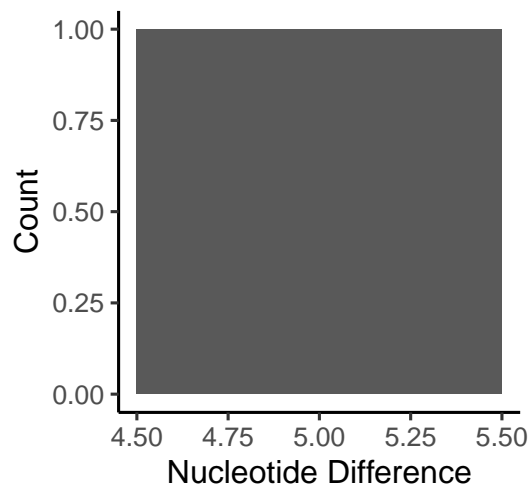
IGHV1-24*01

961 sequences assigned
66 (6.9%) exact matches, in which:
60 unique CDR3
7 unique J



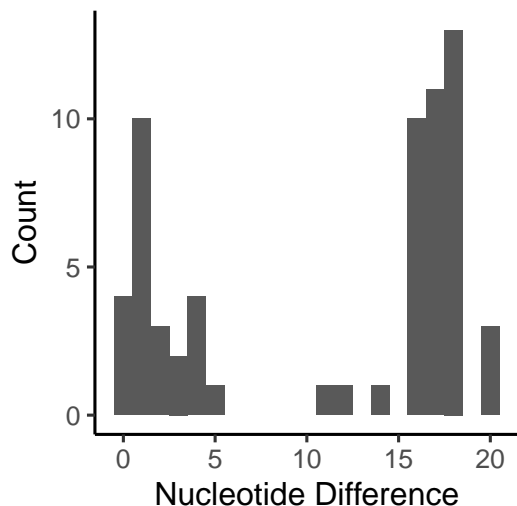
IGHV1-68*02

1 sequences assigned
No exact matches.



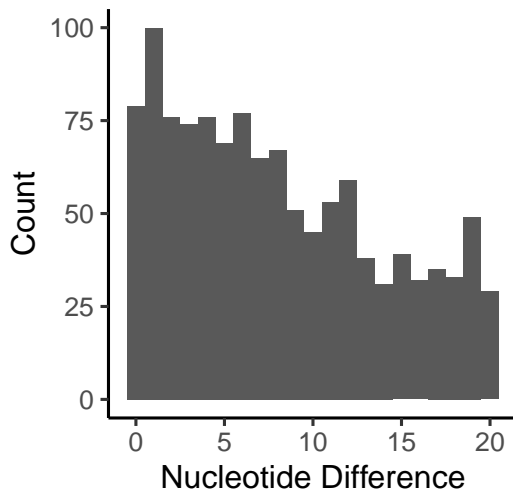
IGHV1-69-2*01

129 sequences assigned
4 (3.1%) exact matches, in which:
4 unique CDR3
3 unique J



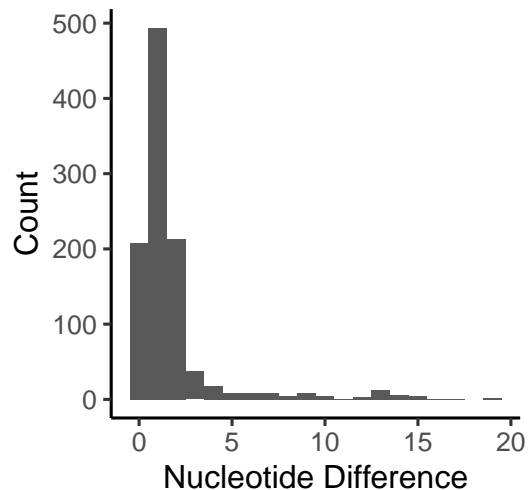
IGHV2-5*02

1390 sequences assigned
79 (5.7%) exact matches, in which:
74 unique CDR3
5 unique J



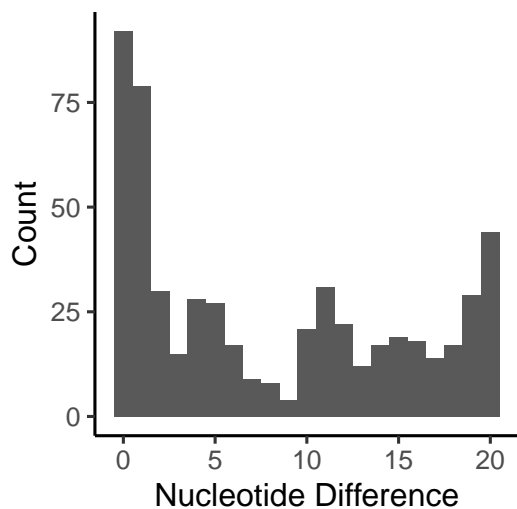
IGHV2-70*15

1070 sequences assigned
208 (19.4%) exact matches, in which:
77 unique CDR3
4 unique J



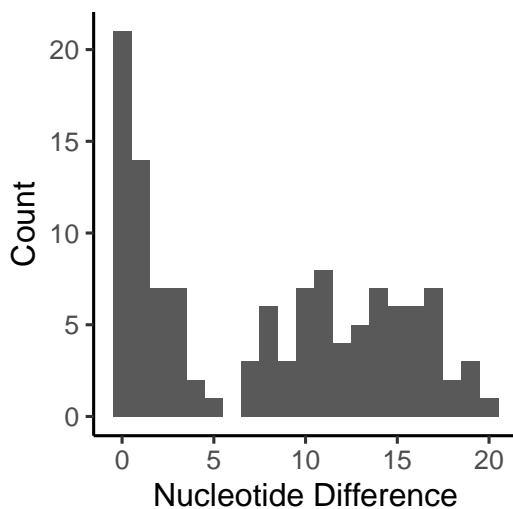
IGHV1-69*04

1241 sequences assigned
92 (7.4%) exact matches, in which:
88 unique CDR3
6 unique J



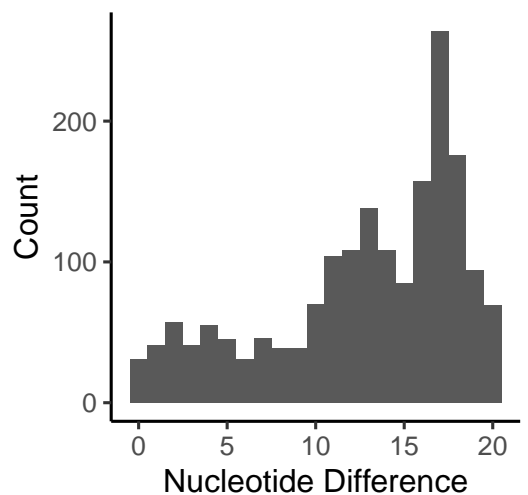
IGHV2-26*01

126 sequences assigned
21 (16.7%) exact matches, in which:
20 unique CDR3
6 unique J



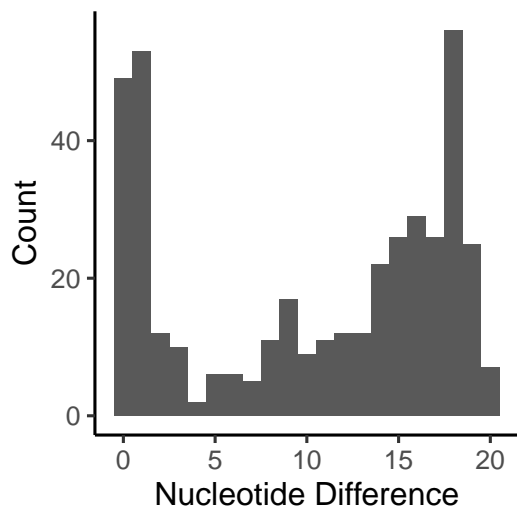
IGHV3-7*01

2152 sequences assigned
31 (1.4%) exact matches, in which:
31 unique CDR3
5 unique J



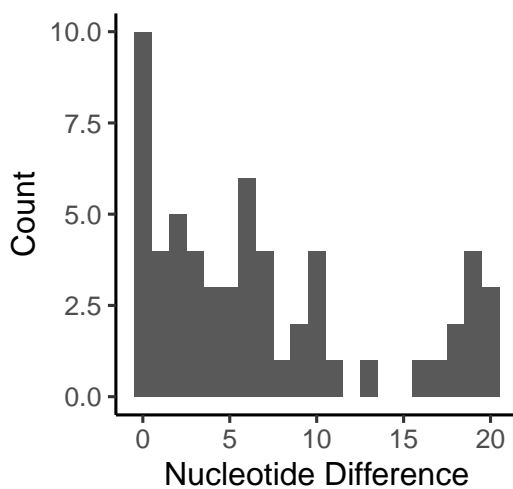
IGHV1-69*06

737 sequences assigned
49 (6.6%) exact matches, in which:
40 unique CDR3
4 unique J



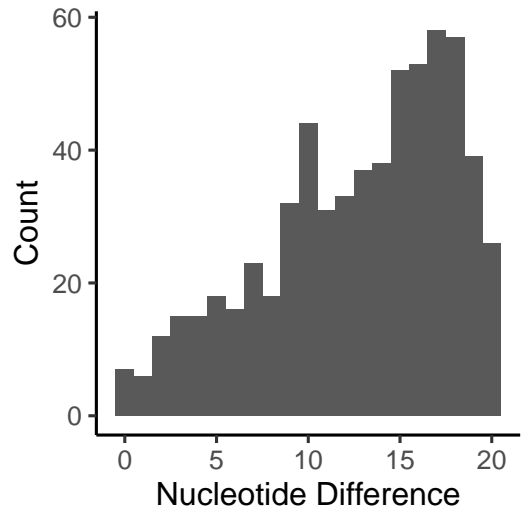
IGHV2-70*01

75 sequences assigned
10 (13.3%) exact matches, in which:
10 unique CDR3
4 unique J



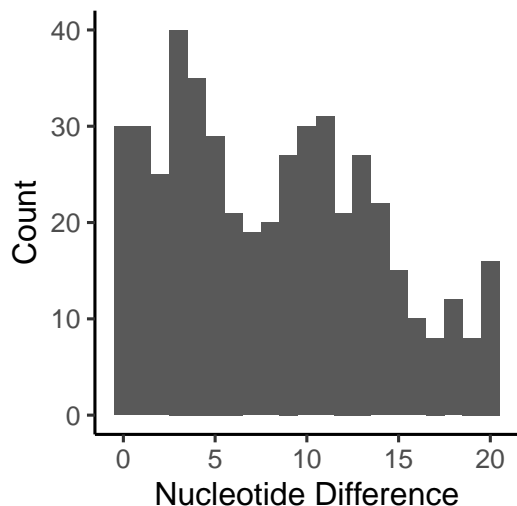
IGHV3-7*04

1096 sequences assigned
7 (0.6%) exact matches, in which:
7 unique CDR3
3 unique J



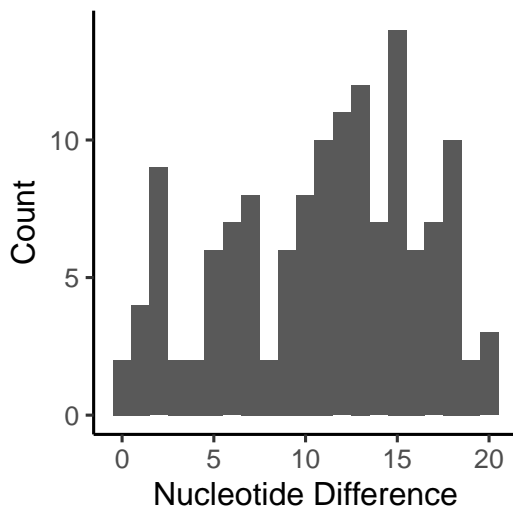
IGHV3-9*01

711 sequences assigned
30 (4.2%) exact matches, in which:
28 unique CDR3
5 unique J



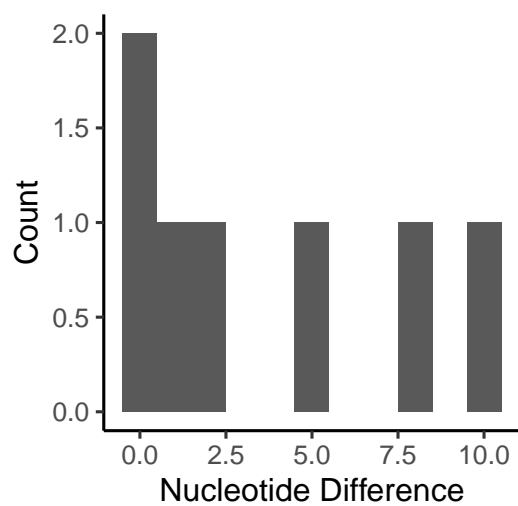
IGHV3-13*01

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



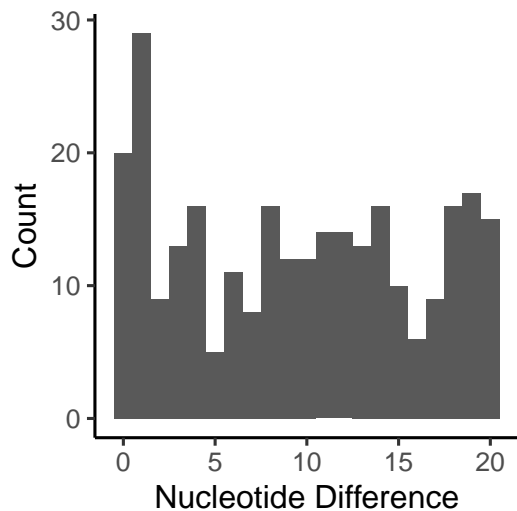
IGHV3-20*01

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



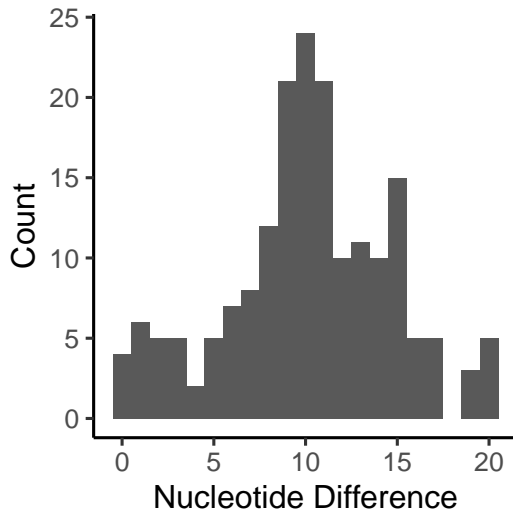
IGHV3-11*01

426 sequences assigned
20 (4.7%) exact matches, in which:
19 unique CDR3
4 unique J



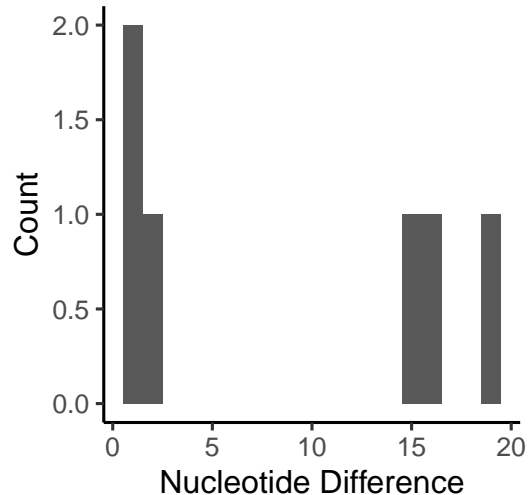
IGHV3-15*01

267 sequences assigned
4 (1.5%) exact matches, in which:
4 unique CDR3
3 unique J



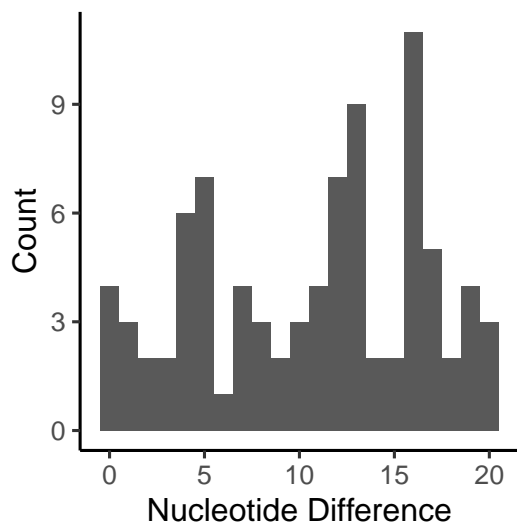
IGHV3-20*04

12 sequences assigned
No exact matches.



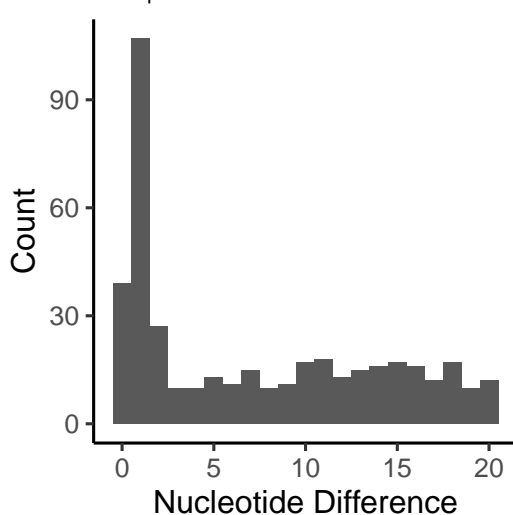
IGHV3-11*06

144 sequences assigned
4 (2.8%) exact matches, in which:
4 unique CDR3
2 unique J



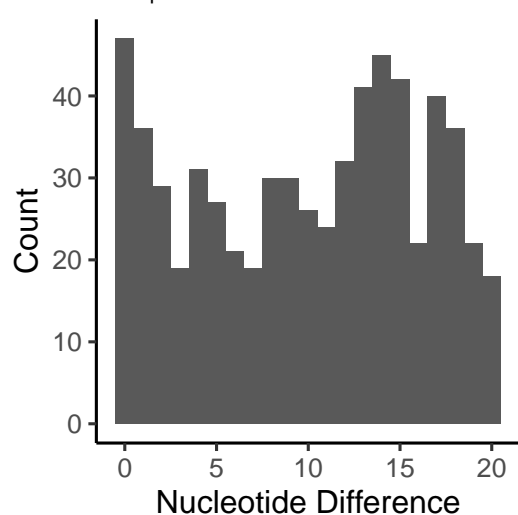
IGHV3-15*07

583 sequences assigned
39 (6.7%) exact matches, in which:
25 unique CDR3
3 unique J



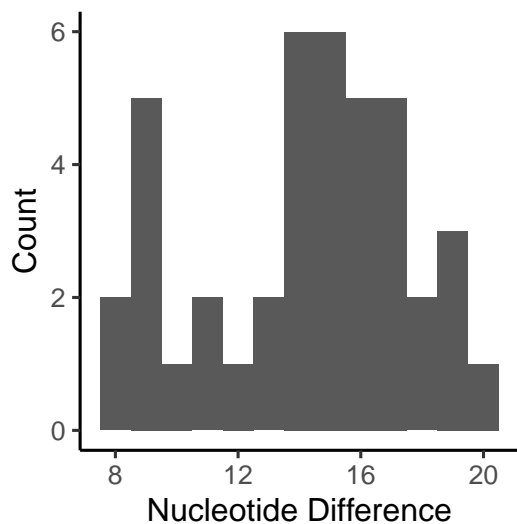
IGHV3-21*01

1062 sequences assigned
47 (4.4%) exact matches, in which:
43 unique CDR3
7 unique J



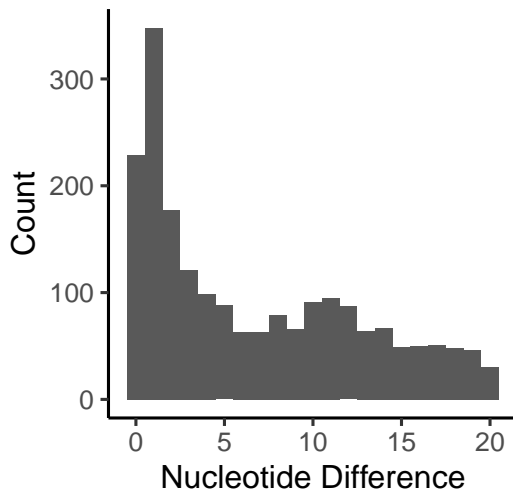
IGHV3-21*02

215 sequences assigned
No exact matches.



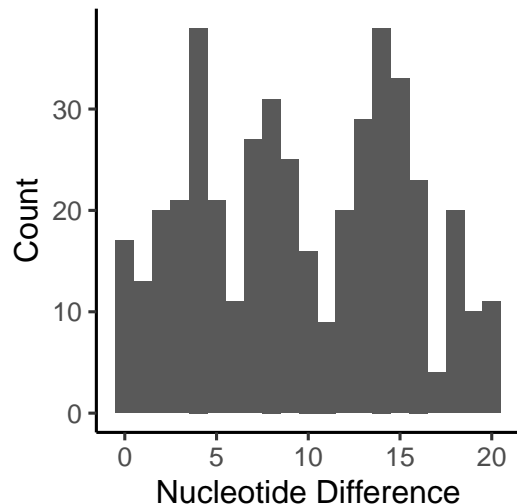
IGHV3-33*01

2532 sequences assigned
229 (9%) exact matches, in which:
158 unique CDR3
6 unique J



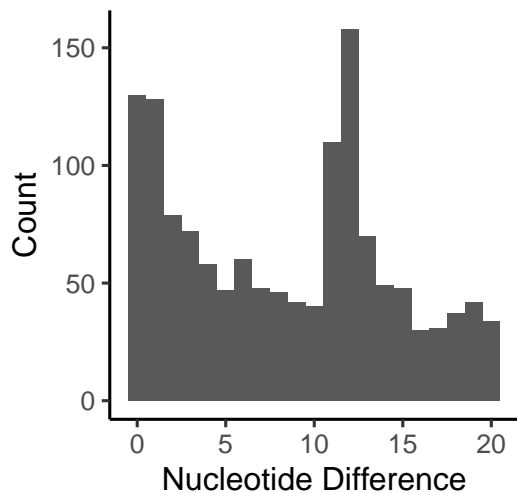
IGHV3-48*02

642 sequences assigned
17 (2.6%) exact matches, in which:
14 unique CDR3
4 unique J



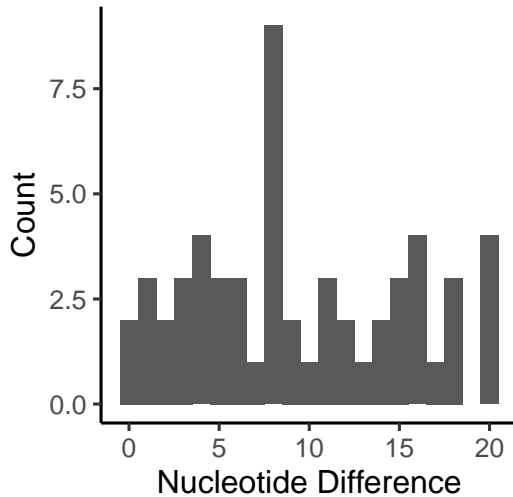
IGHV3-30-3*01

1886 sequences assigned
130 (6.9%) exact matches, in which:
117 unique CDR3
7 unique J



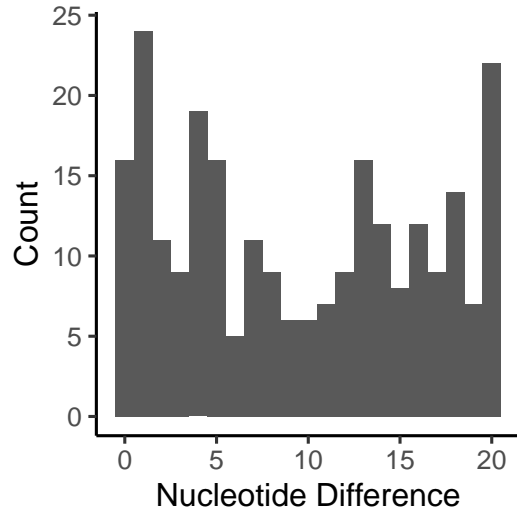
IGHV3-43*01

92 sequences assigned
2 (2.2%) exact matches, in which:
2 unique CDR3
2 unique J



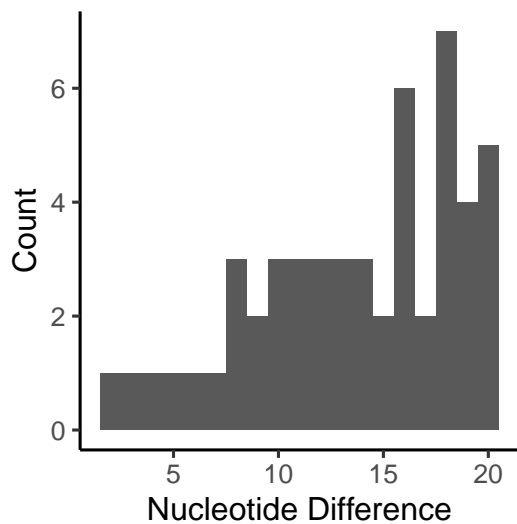
IGHV3-49*03

326 sequences assigned
16 (4.9%) exact matches, in which:
13 unique CDR3
4 unique J



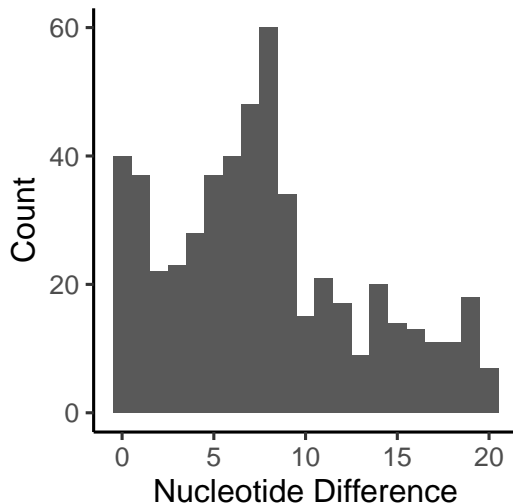
IGHV3-30*04

153 sequences assigned
No exact matches.



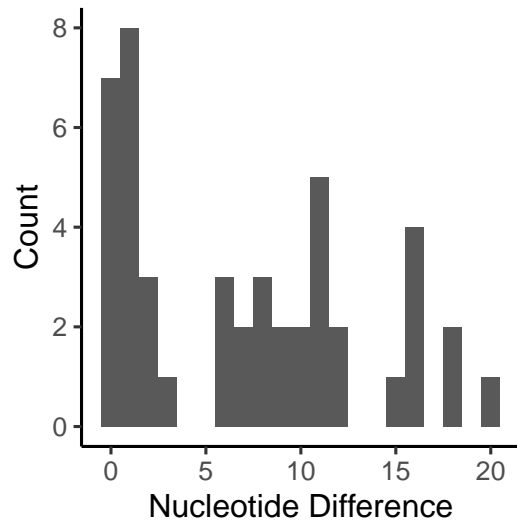
IGHV3-48*01

723 sequences assigned
40 (5.5%) exact matches, in which:
34 unique CDR3
4 unique J



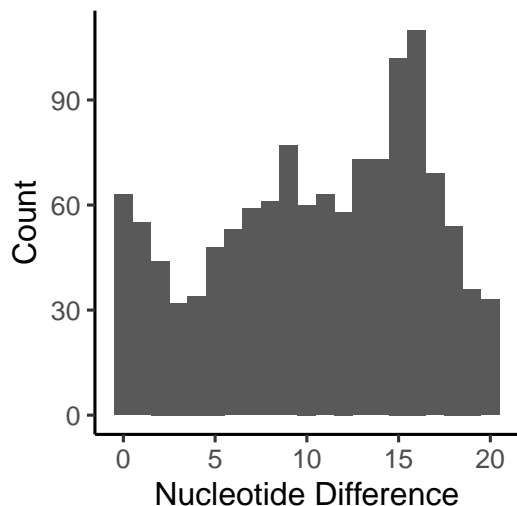
IGHV3-49*05

83 sequences assigned
7 (8.4%) exact matches, in which:
7 unique CDR3
3 unique J



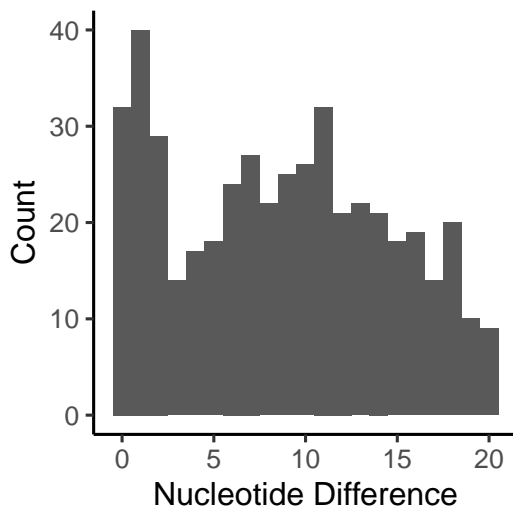
IGHV3-53*01

1955 sequences assigned
63 (3.2%) exact matches, in which:
62 unique CDR3
6 unique J



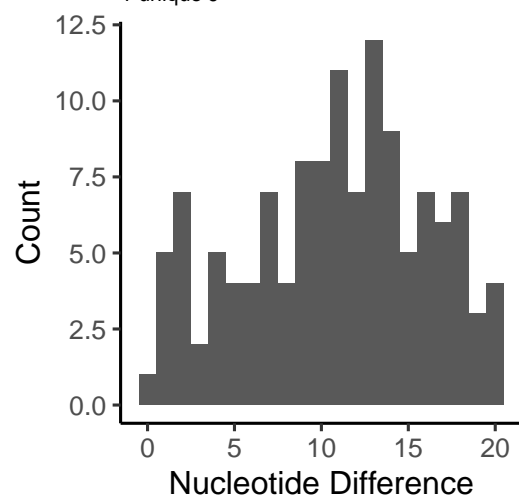
IGHV3-66*01

560 sequences assigned
32 (5.7%) exact matches, in which:
29 unique CDR3
4 unique J



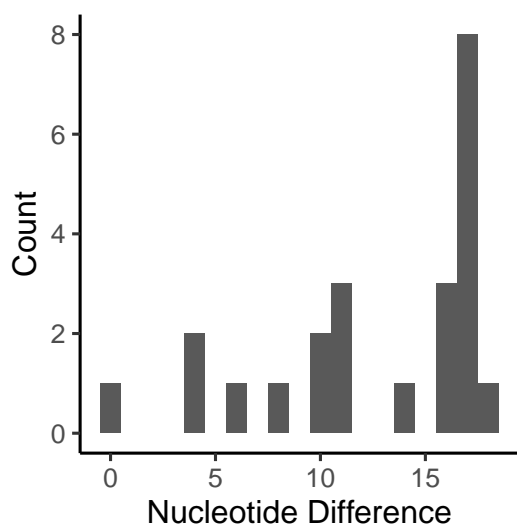
IGHV3-72*01

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



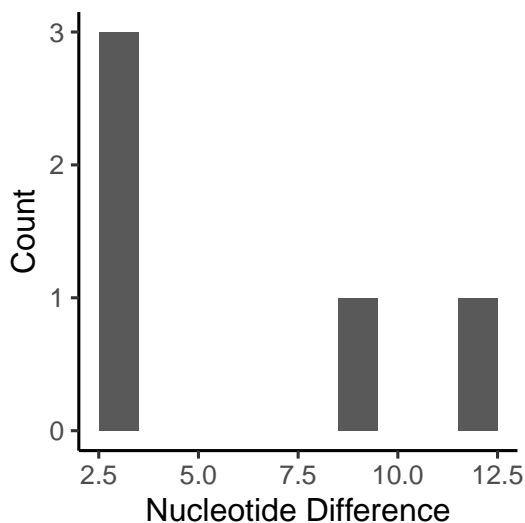
IGHV3-64*02

26 sequences assigned
1 (3.8%) exact matches, in which:
1 unique CDR3
1 unique J



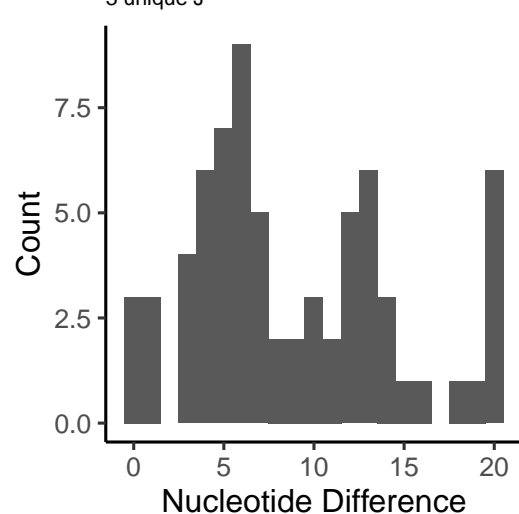
IGHV3-69-1*01

10 sequences assigned
No exact matches.



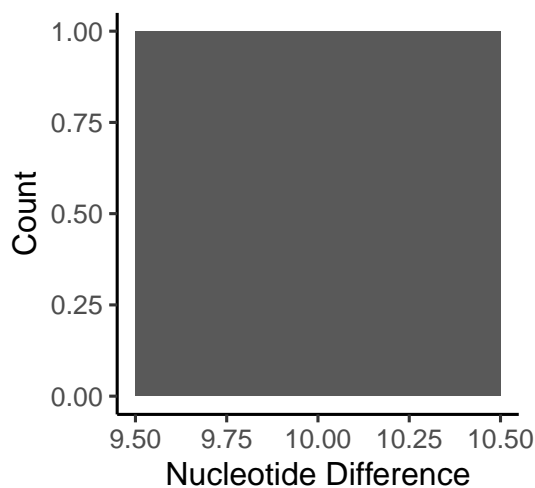
IGHV3-73*01

102 sequences assigned
3 (2.9%) exact matches, in which:
3 unique CDR3
3 unique J



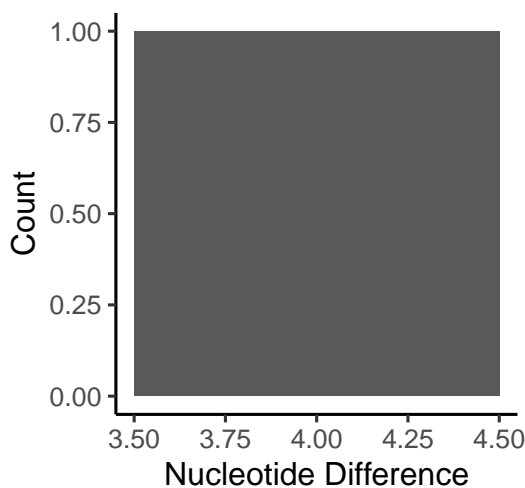
IGHV3-64*04

1 sequences assigned
No exact matches.



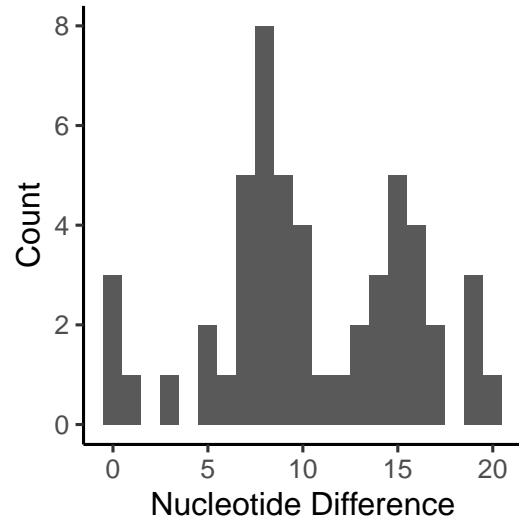
IGHV3-69-1*02

8 sequences assigned
No exact matches.



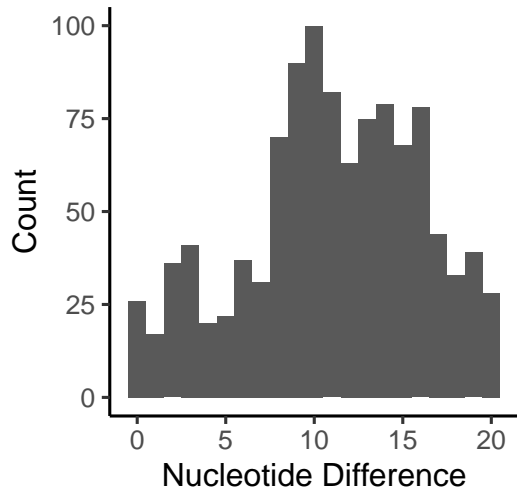
IGHV3-73*02

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



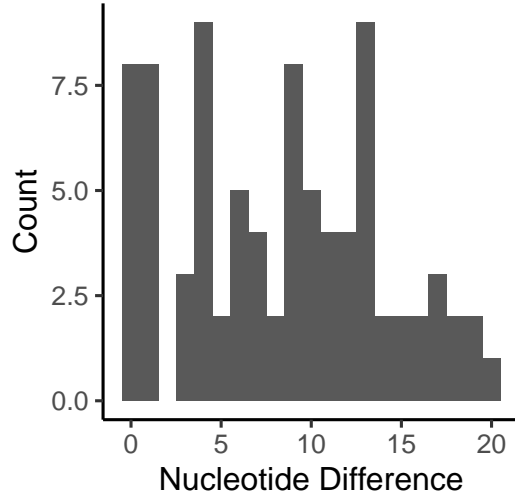
IGHV3–74*01

1480 sequences assigned
26 (1.8%) exact matches, in which:
21 unique CDR3
5 unique J



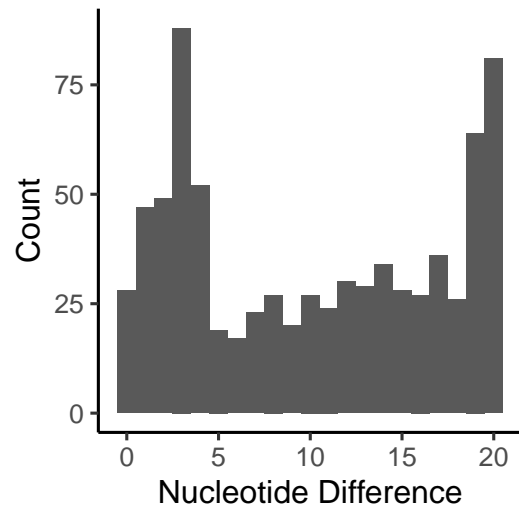
IGHV3–64D*06

90 sequences assigned
8 (8.9%) exact matches, in which:
7 unique CDR3
1 unique J



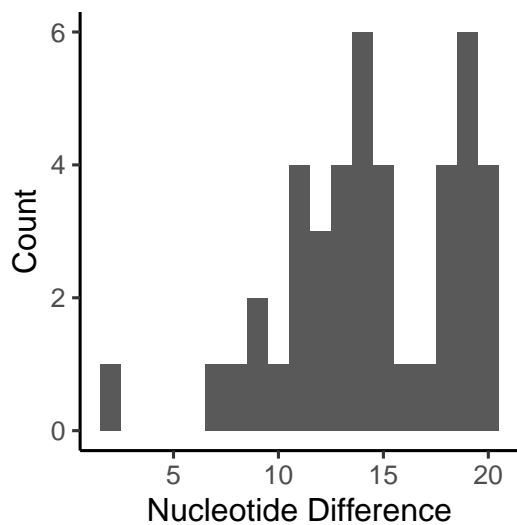
IGHV4–4*02

1241 sequences assigned
28 (2.3%) exact matches, in which:
22 unique CDR3
7 unique J



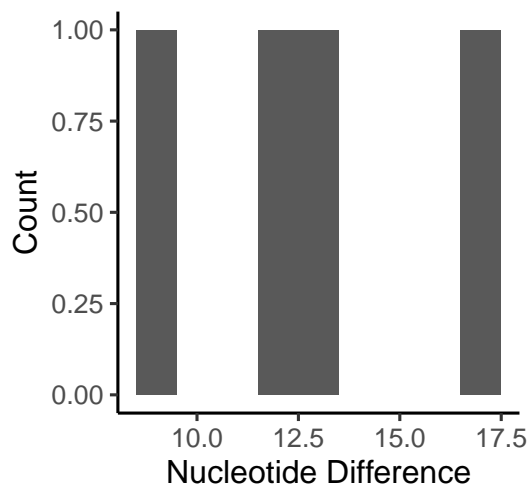
IGHV3–74*03

266 sequences assigned
No exact matches.



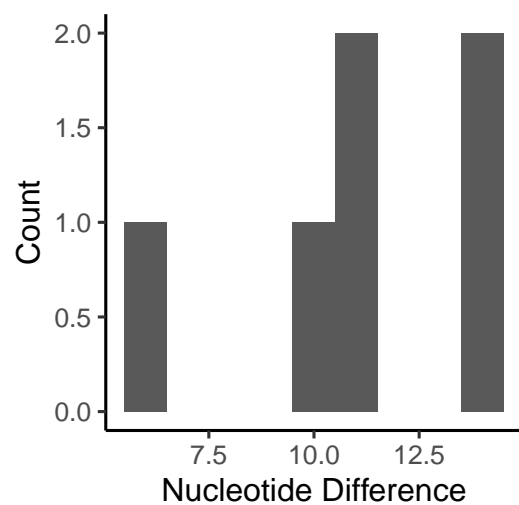
IGHV3–64D*08

8 sequences assigned
No exact matches.



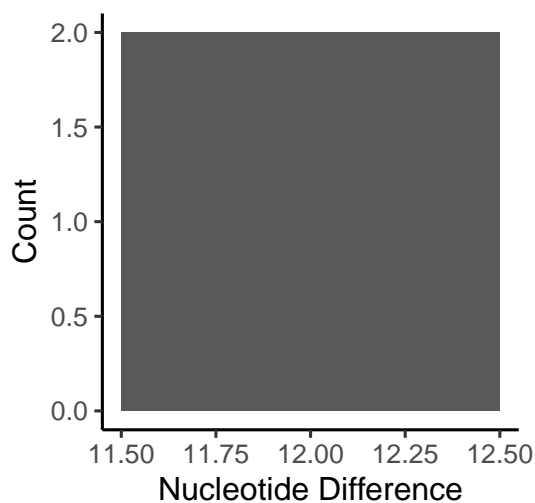
IGHV4–28*01

6 sequences assigned
No exact matches.



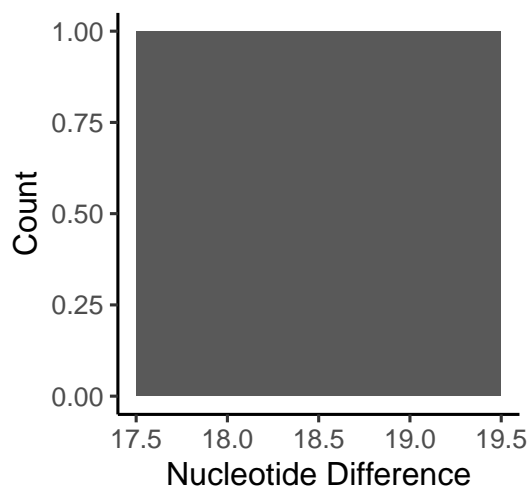
IGHV3–43D*04

8 sequences assigned
No exact matches.



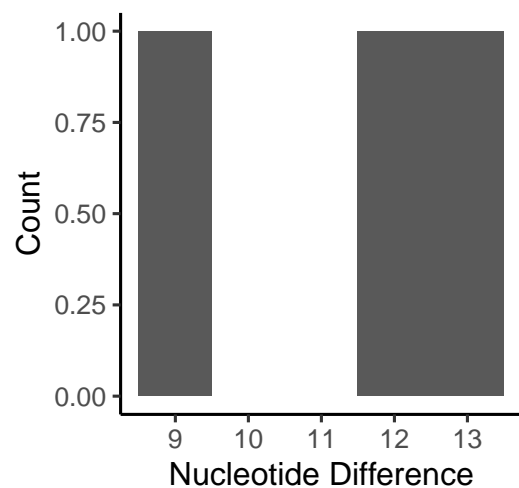
IGHV3–NL1*01

2 sequences assigned
No exact matches.



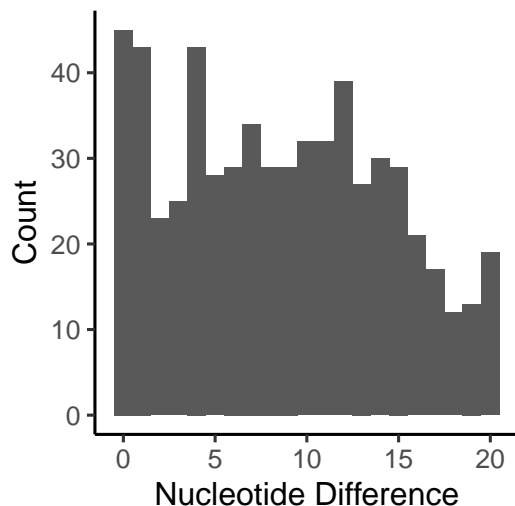
IGHV4–28*07

3 sequences assigned
No exact matches.



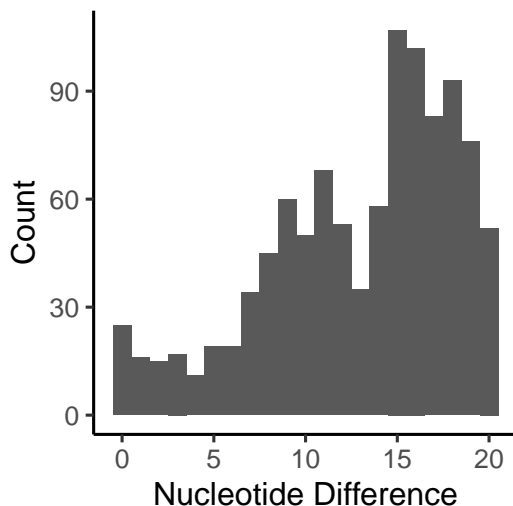
IGHV4-30-4*01

839 sequences assigned
45 (5.4%) exact matches, in which:
43 unique CDR3
6 unique J



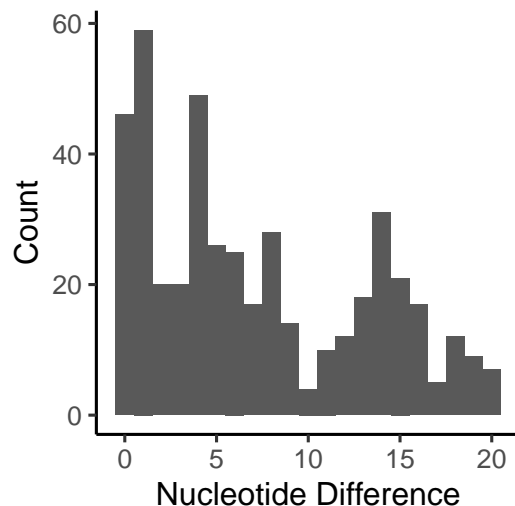
IGHV4-34*01

1528 sequences assigned
25 (1.6%) exact matches, in which:
20 unique CDR3
6 unique J



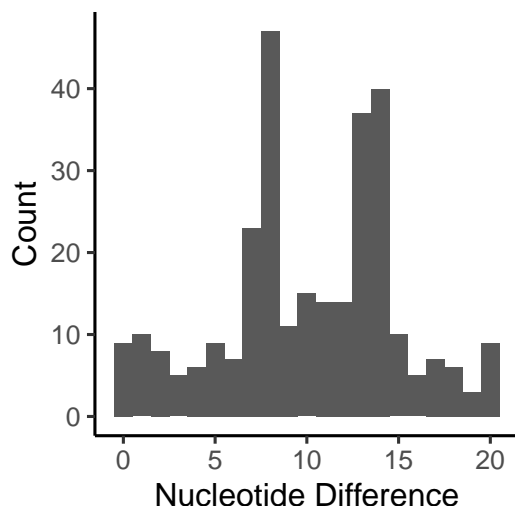
IGHV4-61*01

572 sequences assigned
46 (8%) exact matches, in which:
28 unique CDR3
6 unique J



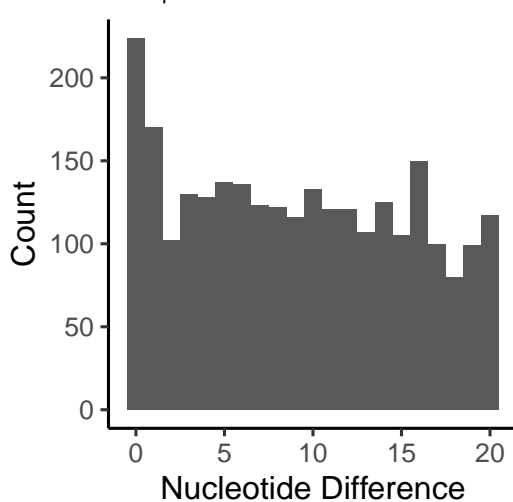
IGHV4-30-2*01

517 sequences assigned
9 (1.7%) exact matches, in which:
8 unique CDR3
4 unique J



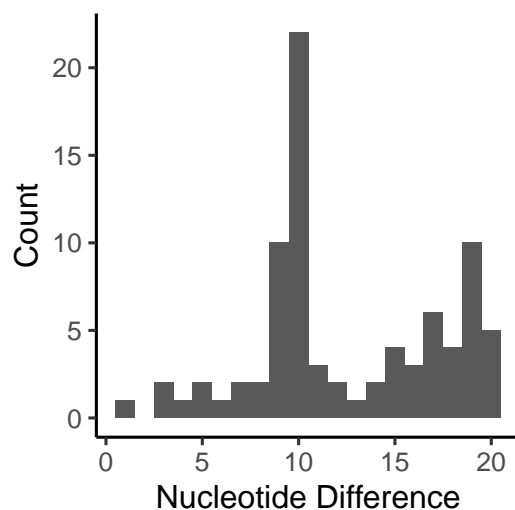
IGHV4-39*01

4495 sequences assigned
224 (5%) exact matches, in which:
202 unique CDR3
7 unique J



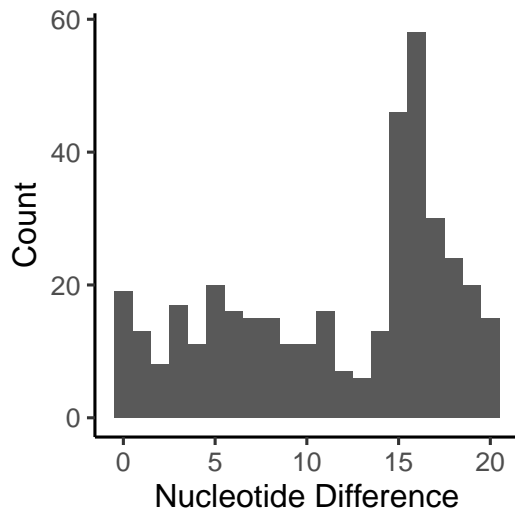
IGHV4-61*08

110 sequences assigned
No exact matches.



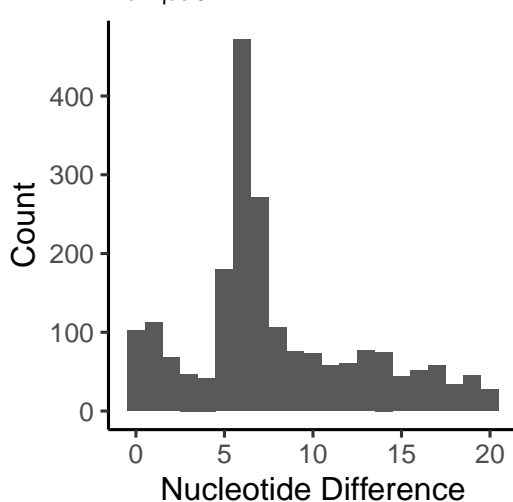
IGHV4-31*03

663 sequences assigned
19 (2.9%) exact matches, in which:
17 unique CDR3
6 unique J



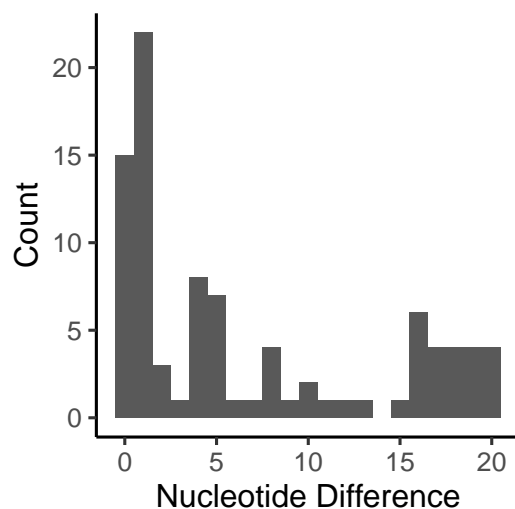
IGHV4-59*01

2853 sequences assigned
102 (3.6%) exact matches, in which:
76 unique CDR3
7 unique J



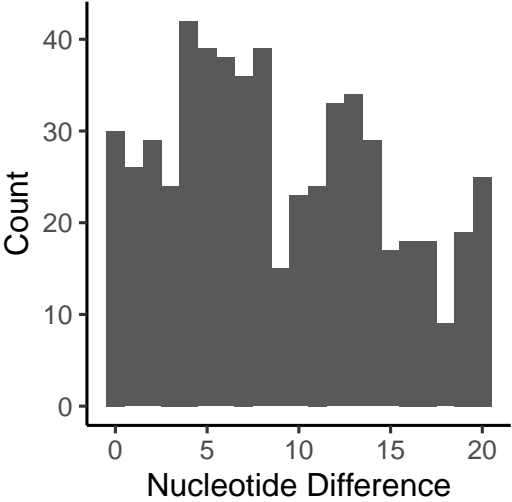
IGHV5-10-1*03

139 sequences assigned
15 (10.8%) exact matches, in which:
10 unique CDR3
3 unique J



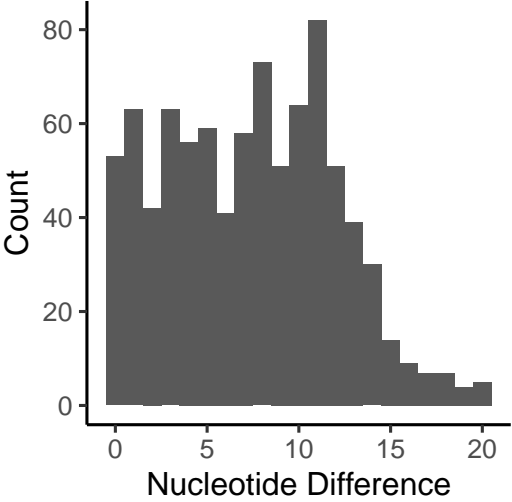
IGHV5-51*01

973 sequences assigned
30 (3.1%) exact matches, in which:
27 unique CDR3
5 unique J



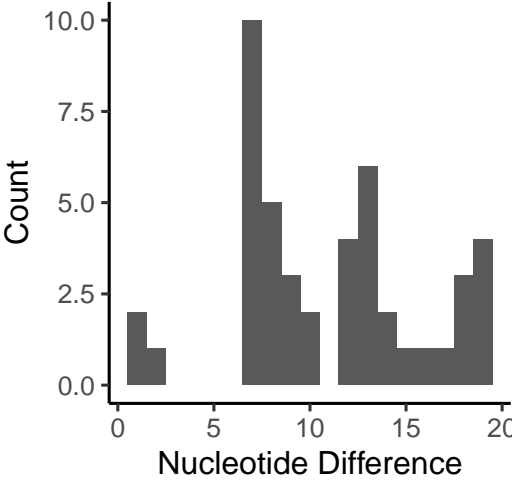
IGHV6-1*01

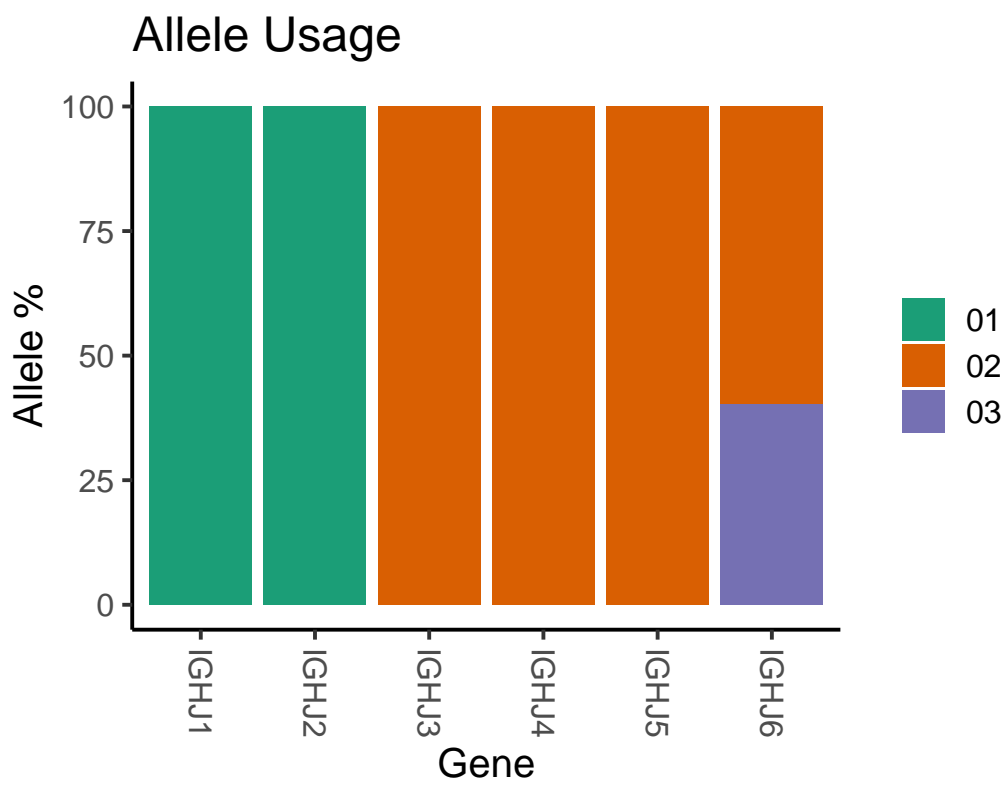
946 sequences assigned
53 (5.6%) exact matches, in which:
48 unique CDR3
5 unique J



IGHV7-4-1*01

80 sequences assigned
No exact matches.





Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.