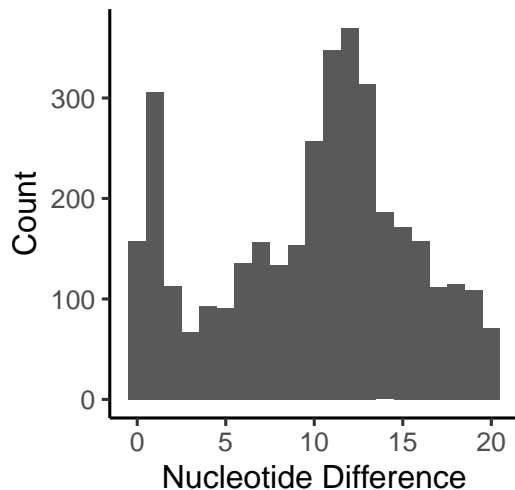


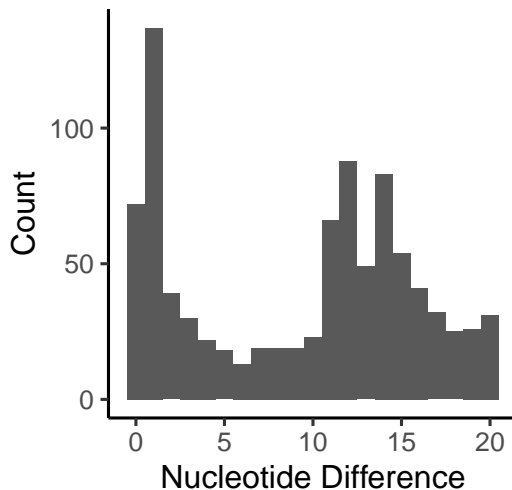
IGHV1-2*02

4273 sequences assigned
158 (3.7%) exact matches, in which:
121 unique CDR3
5 unique J



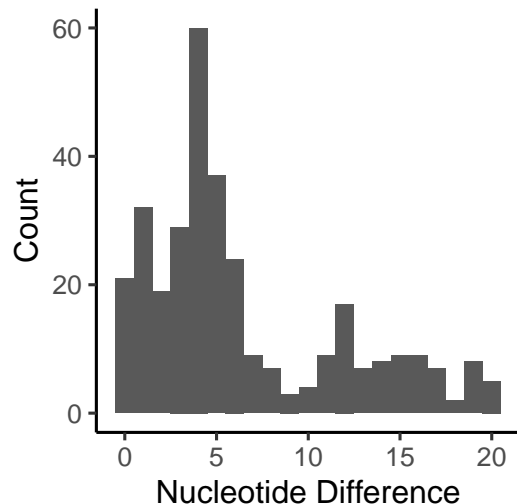
IGHV1-8*01

1094 sequences assigned
72 (6.6%) exact matches, in which:
52 unique CDR3
5 unique J



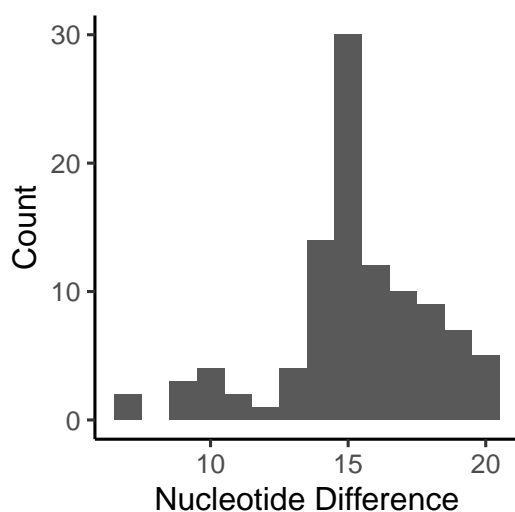
IGHV1-24*01

434 sequences assigned
21 (4.8%) exact matches, in which:
16 unique CDR3
4 unique J



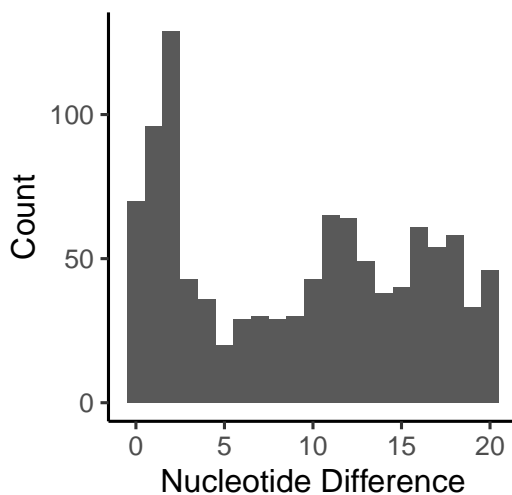
IGHV1-3*04

175 sequences assigned
No exact matches.



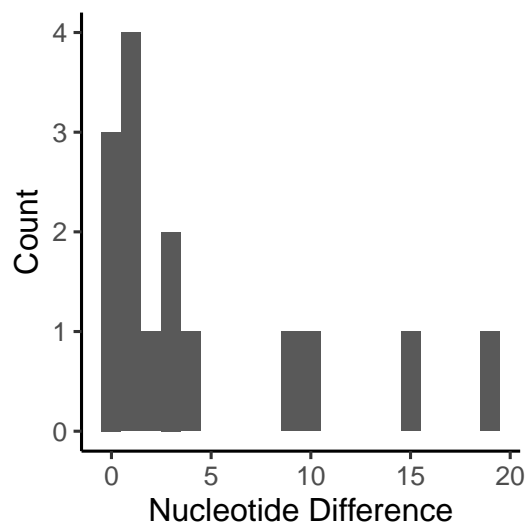
IGHV1-18*01

1242 sequences assigned
70 (5.6%) exact matches, in which:
55 unique CDR3
4 unique J



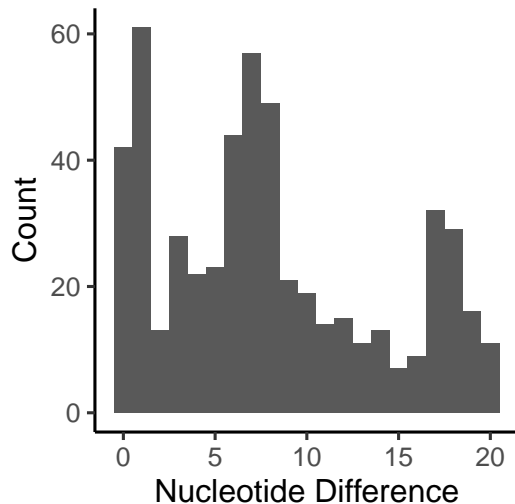
IGHV1-45*02

16 sequences assigned
3 (18.8%) exact matches, in which:
2 unique CDR3
1 unique J



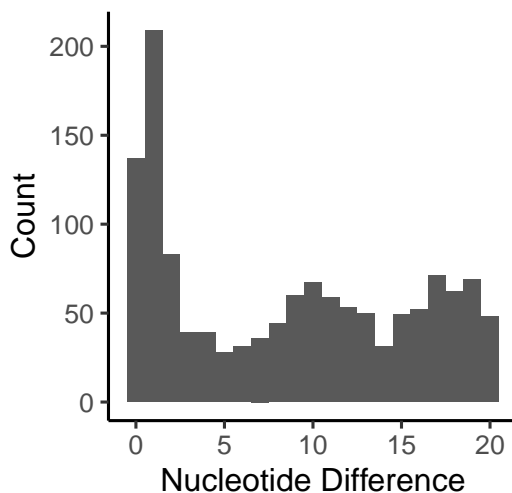
IGHV1-3*01_05

1163 sequences assigned
42 (3.6%) exact matches, in which:
31 unique CDR3
5 unique J



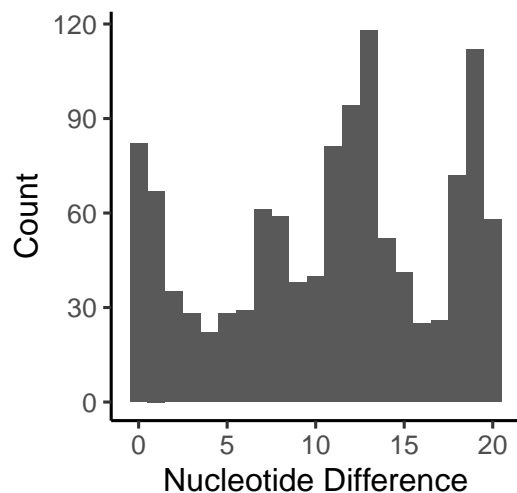
IGHV1-18*04

1552 sequences assigned
137 (8.8%) exact matches, in which:
105 unique CDR3
5 unique J



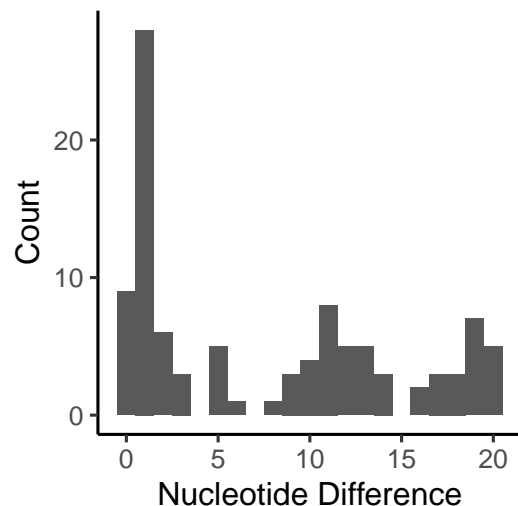
IGHV1-46*01

1479 sequences assigned
82 (5.5%) exact matches, in which:
73 unique CDR3
6 unique J



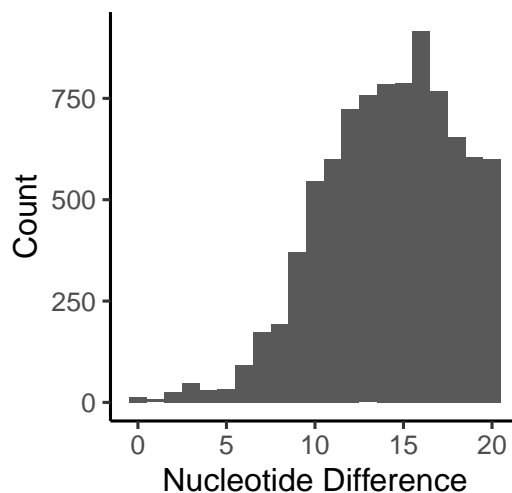
IGHV1-58*01_03

126 sequences assigned
9 (7.1%) exact matches, in which:
8 unique CDR3
4 unique J



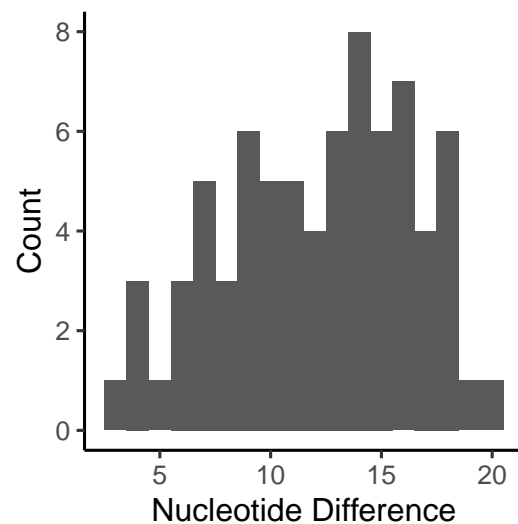
IGHV2-5*01

10001 sequences assigned
13 (0.1%) exact matches, in which:
11 unique CDR3
3 unique J



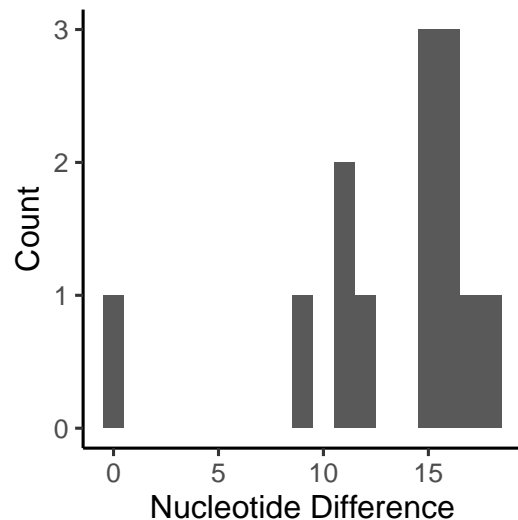
IGHV2-70*12

87 sequences assigned
No exact matches.



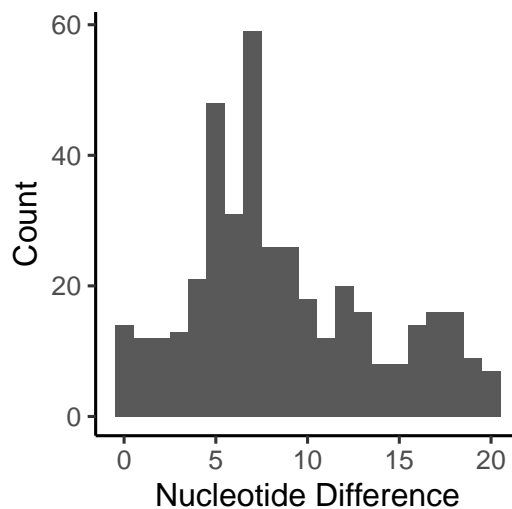
IGHV1-69-2*01

14 sequences assigned
1 (7.1%) exact matches, in which:
1 unique CDR3
1 unique J



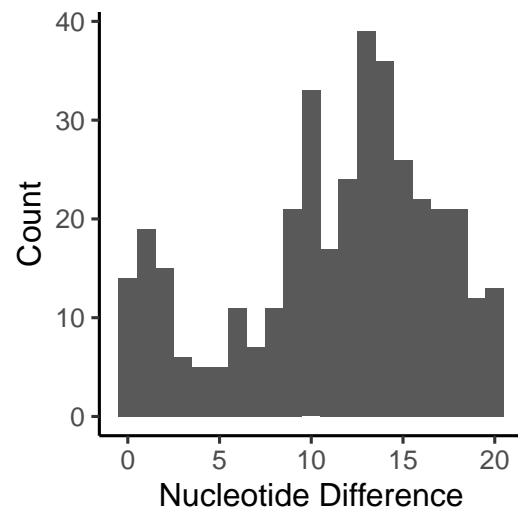
IGHV2-5*02

452 sequences assigned
14 (3.1%) exact matches, in which:
13 unique CDR3
3 unique J



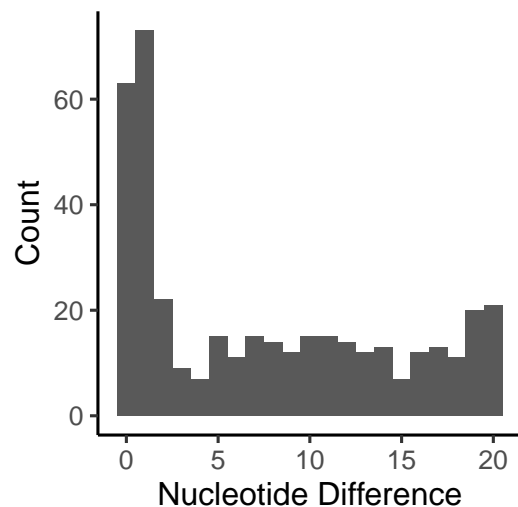
IGHV2-70*11_15

547 sequences assigned
14 (2.6%) exact matches, in which:
14 unique CDR3
3 unique J



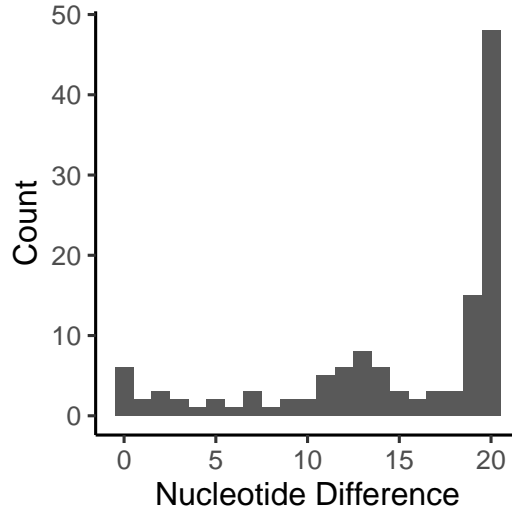
IGHV1-69*06_14

544 sequences assigned
63 (11.6%) exact matches, in which:
55 unique CDR3
5 unique J



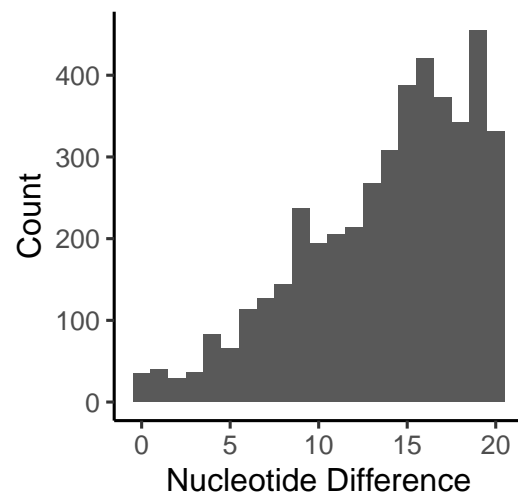
IGHV2-26*01

162 sequences assigned
6 (3.7%) exact matches, in which:
6 unique CDR3
4 unique J



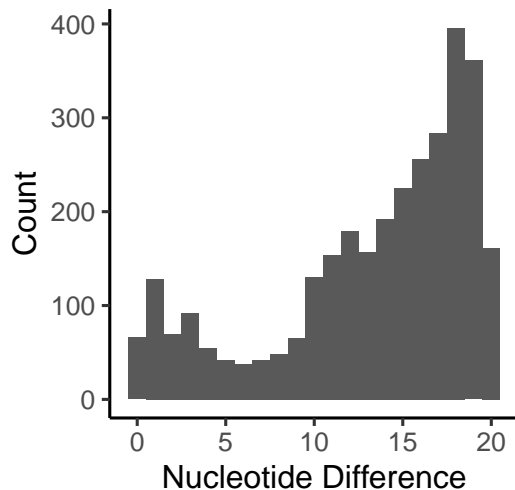
IGHV3-7*01

5709 sequences assigned
35 (0.6%) exact matches, in which:
32 unique CDR3
4 unique J



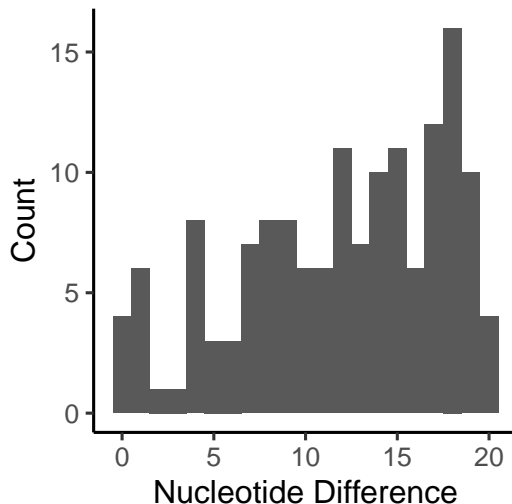
IGHV3-7*03

3669 sequences assigned
66 (1.8%) exact matches, in which:
46 unique CDR3
4 unique J



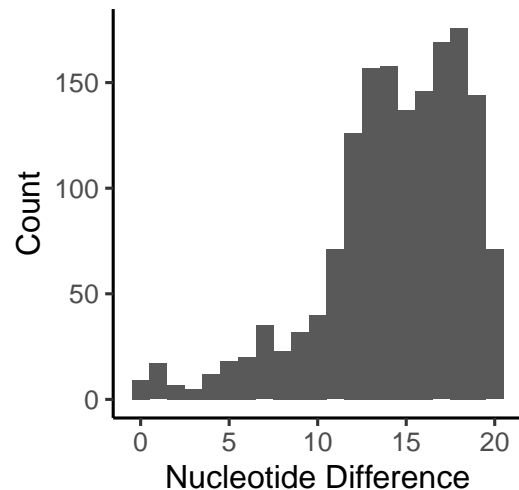
IGHV3-11*04

189 sequences assigned
4 (2.1%) exact matches, in which:
4 unique CDR3
1 unique J



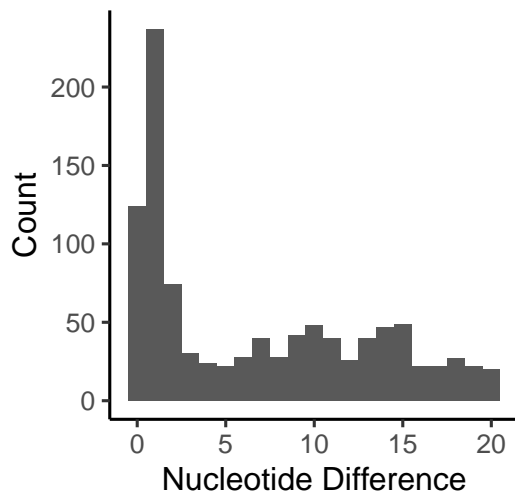
IGHV3-15*07

1878 sequences assigned
9 (0.5%) exact matches, in which:
8 unique CDR3
2 unique J



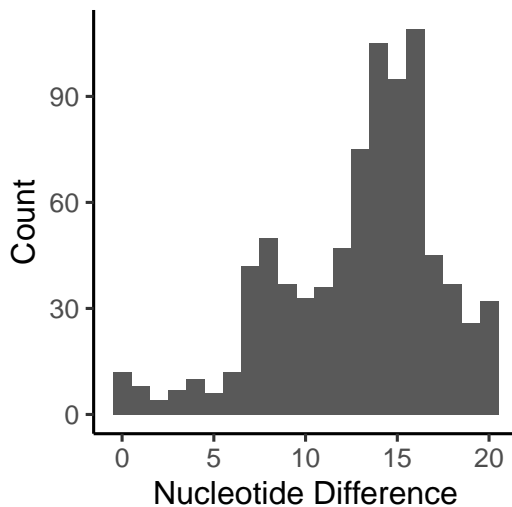
IGHV3-9*01

1122 sequences assigned
124 (11.1%) exact matches, in which:
87 unique CDR3
5 unique J



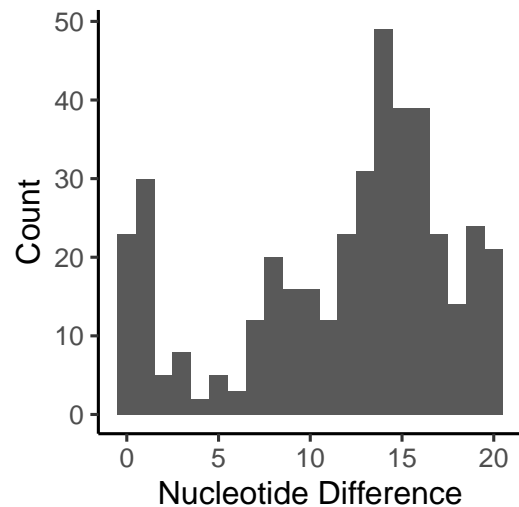
IGHV3-11*06

908 sequences assigned
12 (1.3%) exact matches, in which:
11 unique CDR3
4 unique J



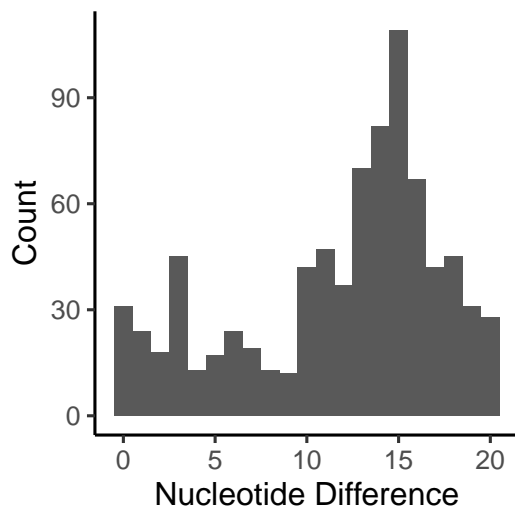
IGHV3-15*01_02

644 sequences assigned
23 (3.6%) exact matches, in which:
20 unique CDR3
4 unique J



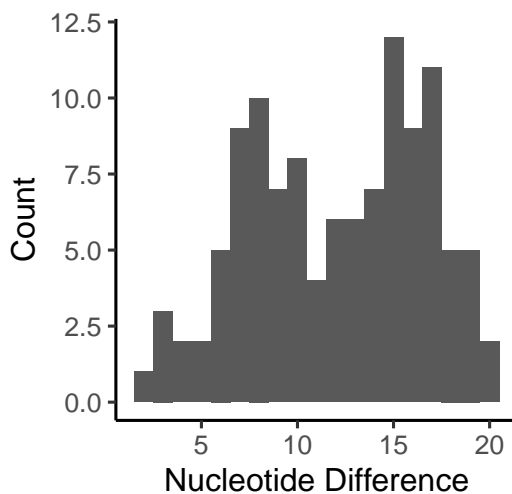
IGHV3-11*01

1034 sequences assigned
31 (3%) exact matches, in which:
30 unique CDR3
5 unique J



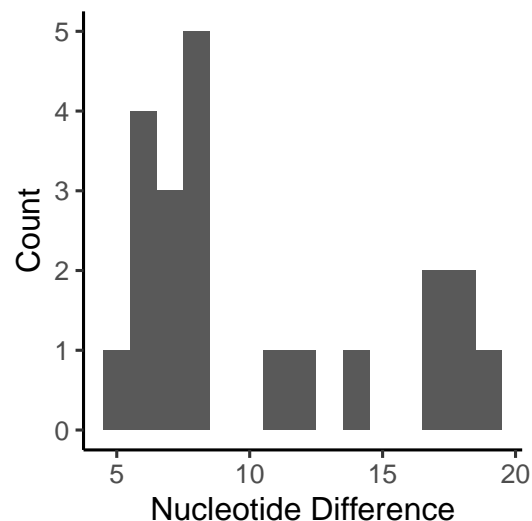
IGHV3-13*01

129 sequences assigned
No exact matches.



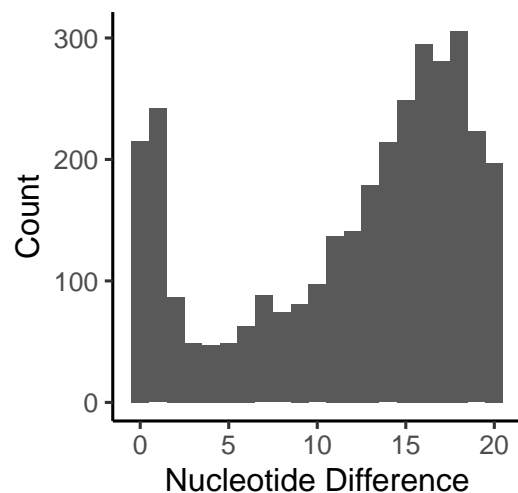
IGHV3-20*03_04

29 sequences assigned
No exact matches.



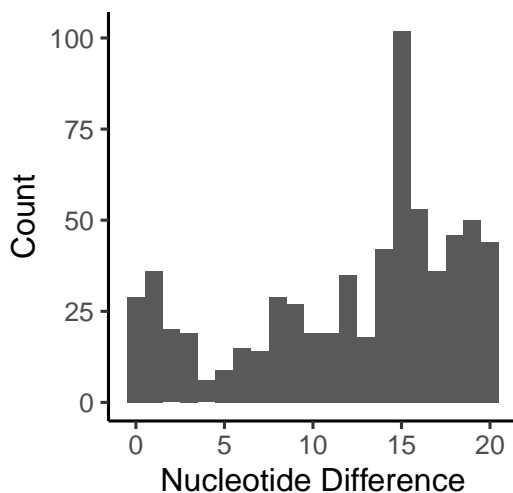
IGHV3-21*01_02

4327 sequences assigned
215 (5%) exact matches, in which:
178 unique CDR3
6 unique J



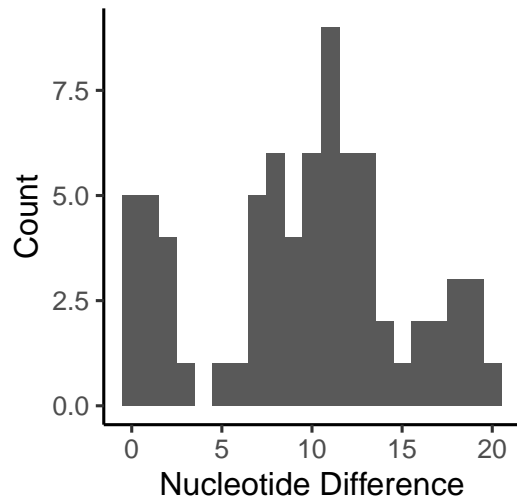
IGHV3-33*01

1082 sequences assigned
29 (2.7%) exact matches, in which:
28 unique CDR3
4 unique J



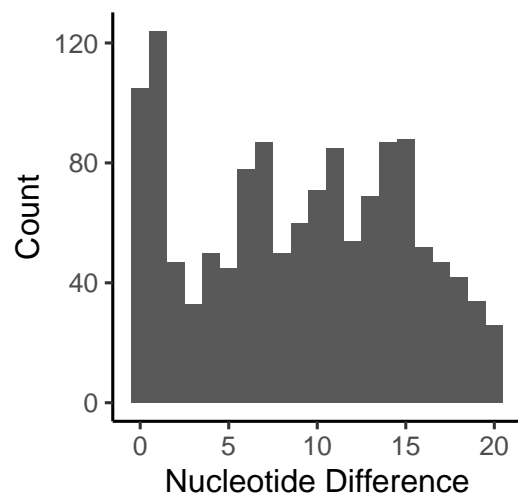
IGHV3-43*01

92 sequences assigned
5 (5.4%) exact matches, in which:
4 unique CDR3
1 unique J



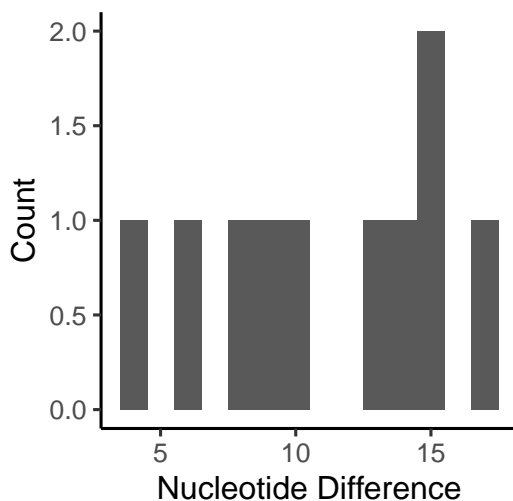
IGHV3-30-3*01

1630 sequences assigned
105 (6.4%) exact matches, in which:
87 unique CDR3
4 unique J



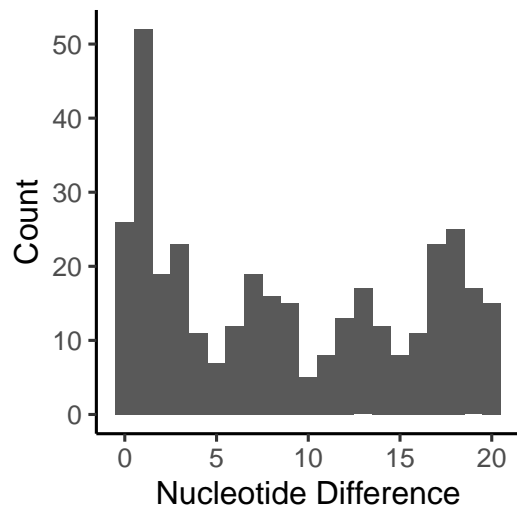
IGHV3-33*05

23 sequences assigned
No exact matches.



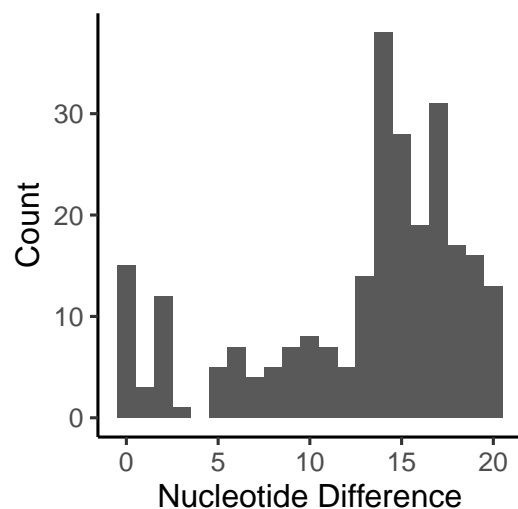
IGHV3-48*02

762 sequences assigned
26 (3.4%) exact matches, in which:
18 unique CDR3
3 unique J



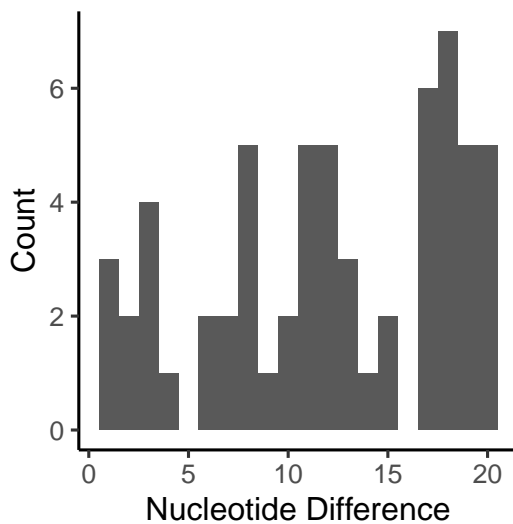
IGHV3-30*03

373 sequences assigned
15 (4%) exact matches, in which:
15 unique CDR3
3 unique J



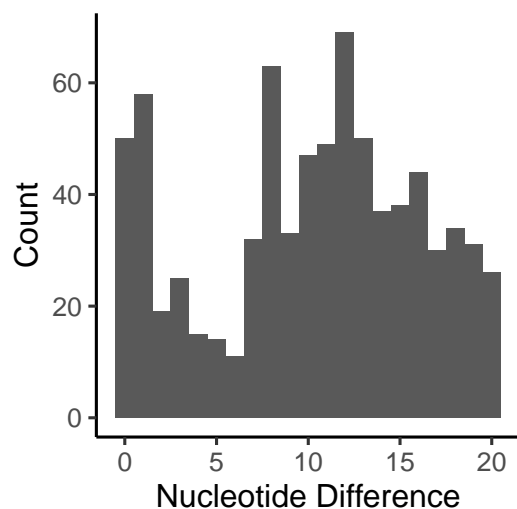
IGHV3-33*06

100 sequences assigned
No exact matches.



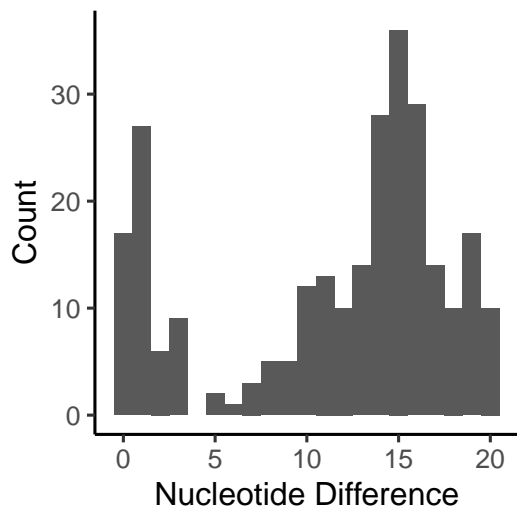
IGHV3-48*04

1019 sequences assigned
50 (4.9%) exact matches, in which:
34 unique CDR3
5 unique J



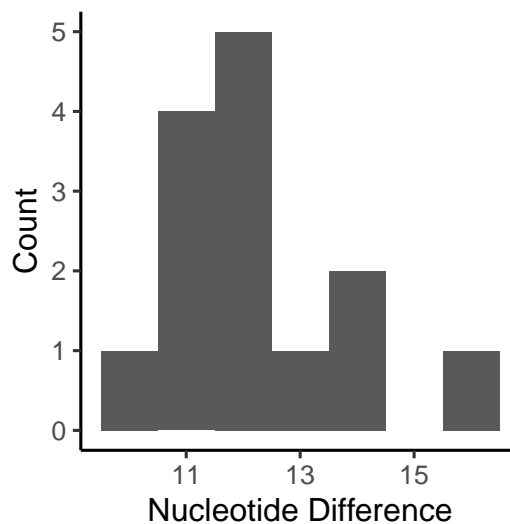
IGHV3-49*03_05

415 sequences assigned
17 (4.1%) exact matches, in which:
14 unique CDR3
3 unique J



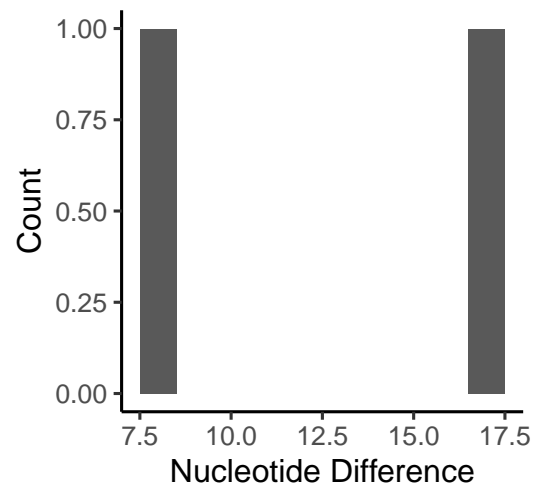
IGHV3-64*02_07

16 sequences assigned
No exact matches.



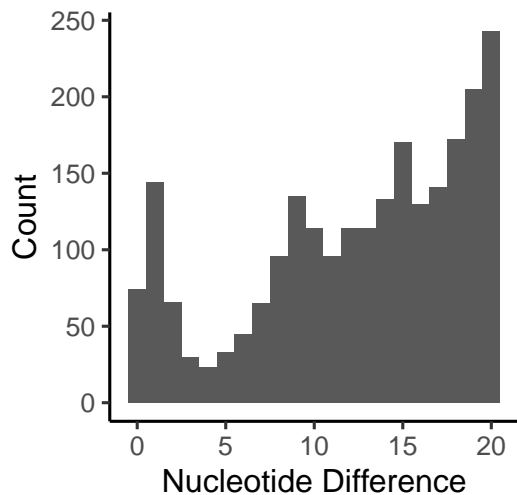
IGHV3-69-1*02

17 sequences assigned
No exact matches.



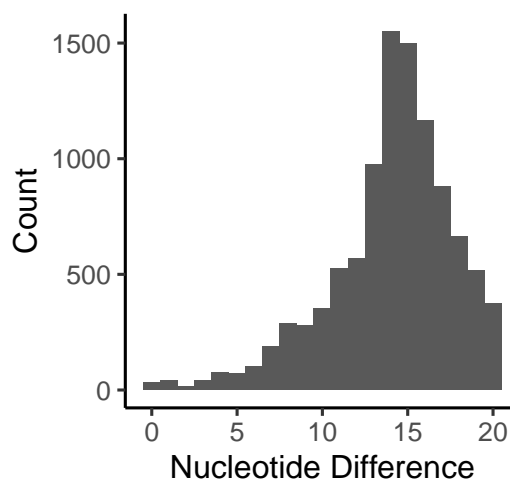
IGHV3-53*01_02

6764 sequences assigned
74 (1.1%) exact matches, in which:
59 unique CDR3
5 unique J



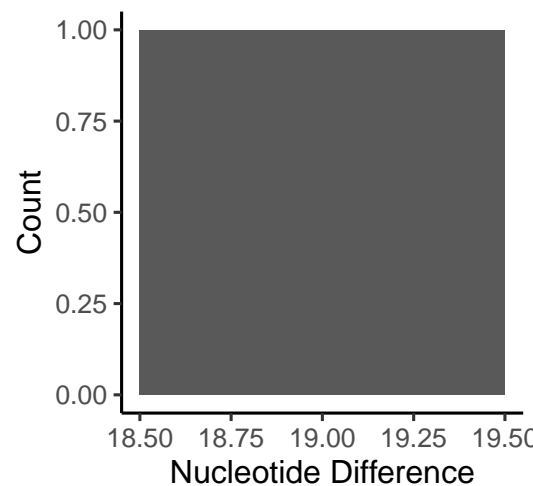
IGHV3-66*01

11399 sequences assigned
31 (0.3%) exact matches, in which:
27 unique CDR3
4 unique J



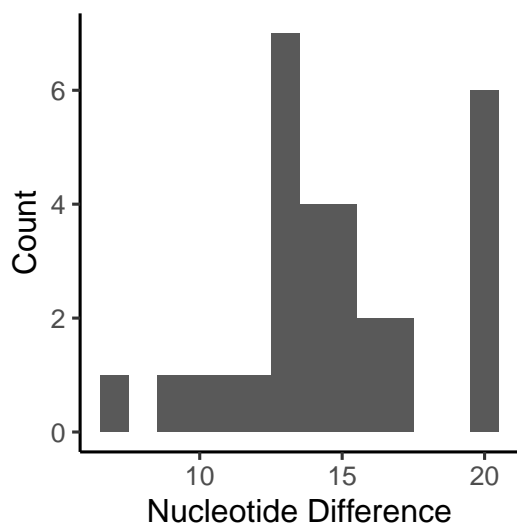
IGHV3-71*01_04

9 sequences assigned
No exact matches.



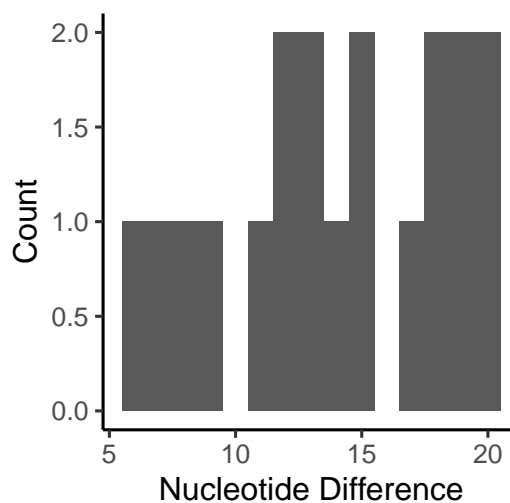
IGHV3-64*04

37 sequences assigned
No exact matches.



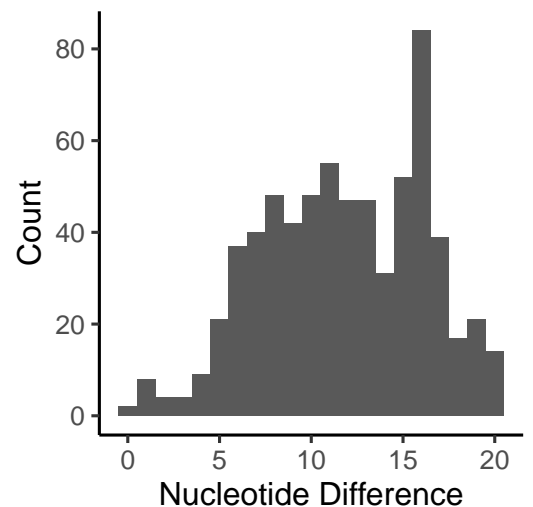
IGHV3-69-1*01

37 sequences assigned
No exact matches.



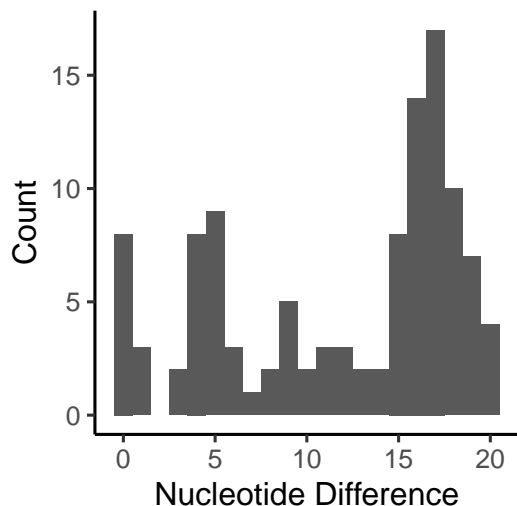
IGHV3-72*01

716 sequences assigned
2 (0.3%) exact matches, in which:
2 unique CDR3
2 unique J



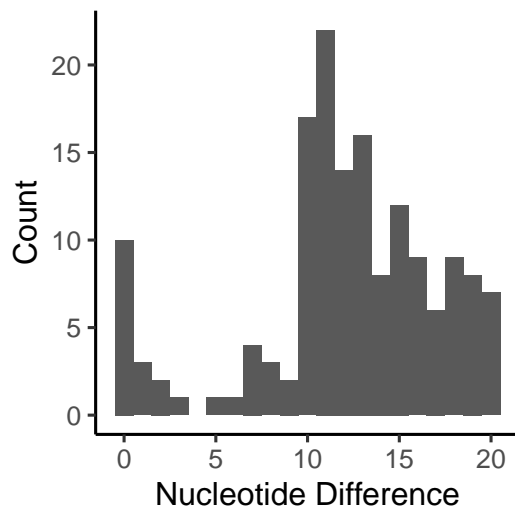
IGHV3-73*01_02

152 sequences assigned
8 (5.3%) exact matches, in which:
8 unique CDR3
2 unique J



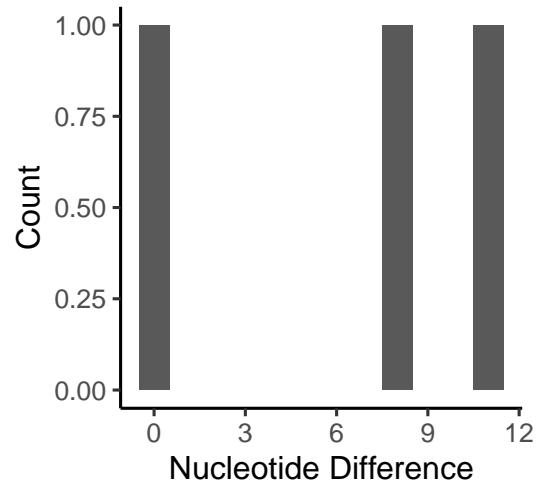
IGHV3-64D*09

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



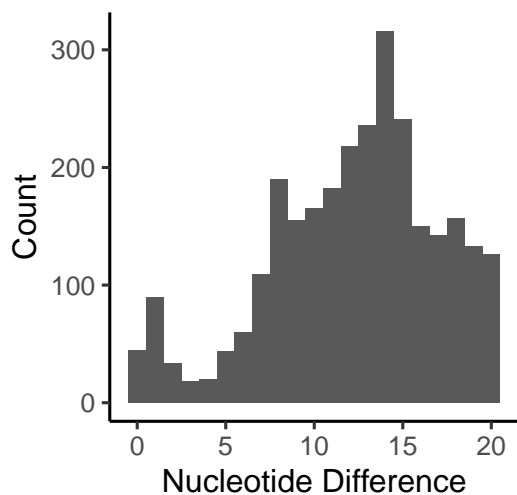
IGHV4-28*03

5 sequences assigned
1 (20%) exact matches, in which:
1 unique CDR3
1 unique J



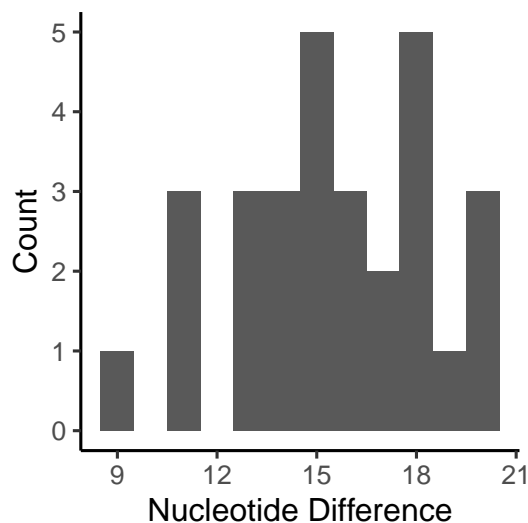
IGHV3-74*01_02

3315 sequences assigned
45 (1.4%) exact matches, in which:
38 unique CDR3
5 unique J



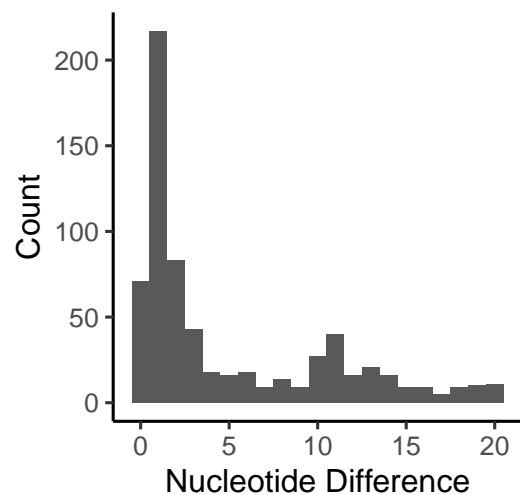
IGHV3-NL1*01

50 sequences assigned
No exact matches.



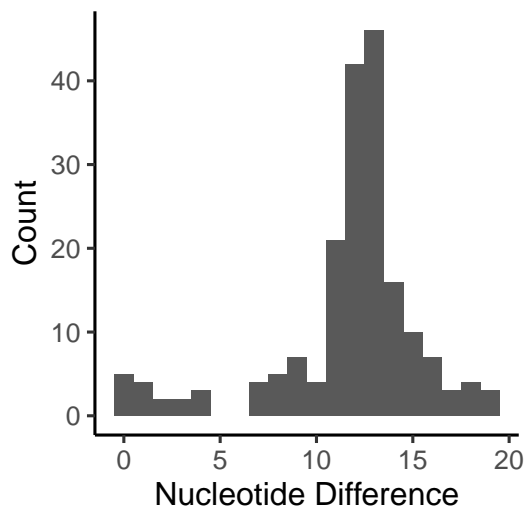
IGHV4-30-2*01

800 sequences assigned
71 (8.9%) exact matches, in which:
51 unique CDR3
6 unique J



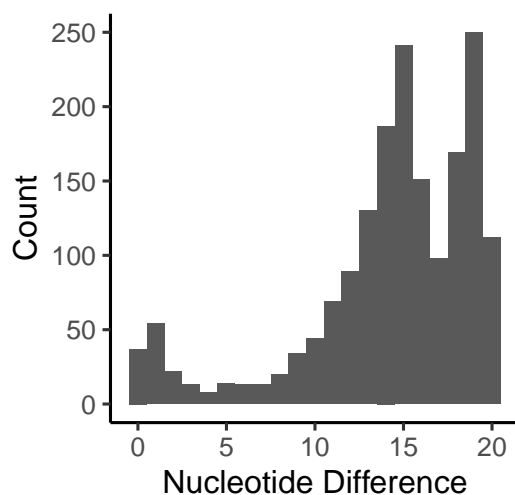
IGHV3-43D*03

209 sequences assigned
5 (2.4%) exact matches, in which:
5 unique CDR3
2 unique J



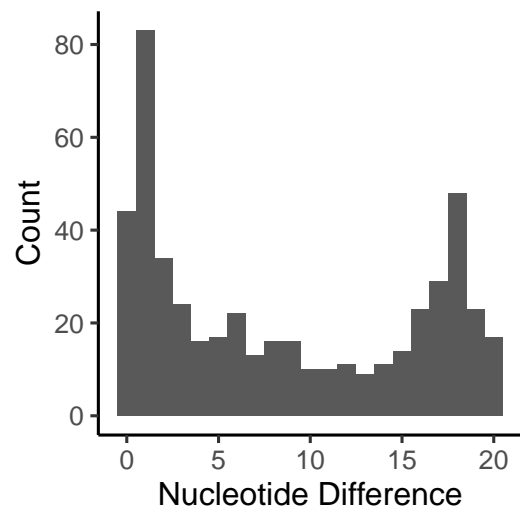
IGHV4-4*07

2057 sequences assigned
37 (1.8%) exact matches, in which:
26 unique CDR3
3 unique J



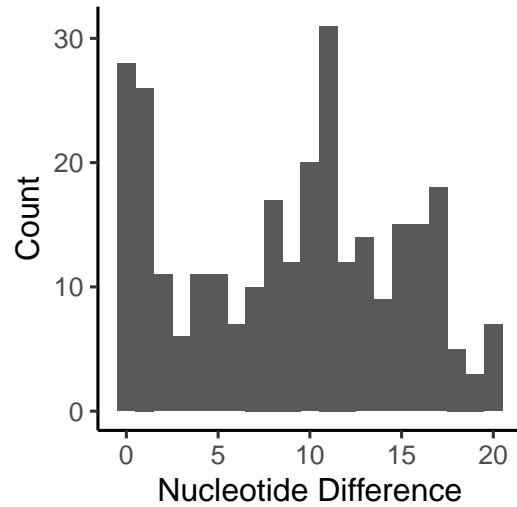
IGHV4-30-4*01

545 sequences assigned
44 (8.1%) exact matches, in which:
38 unique CDR3
5 unique J



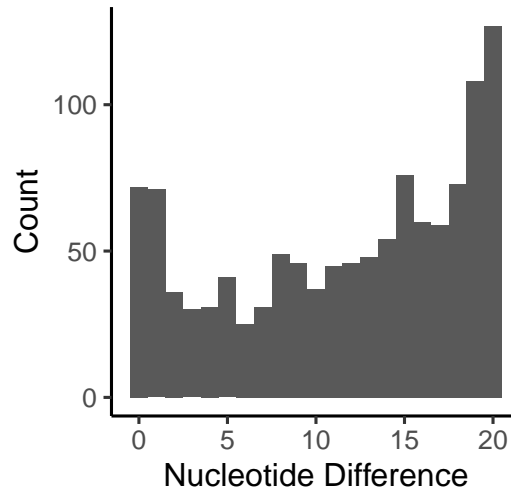
IGHV4-31*03_04

372 sequences assigned
28 (7.5%) exact matches, in which:
24 unique CDR3
6 unique J



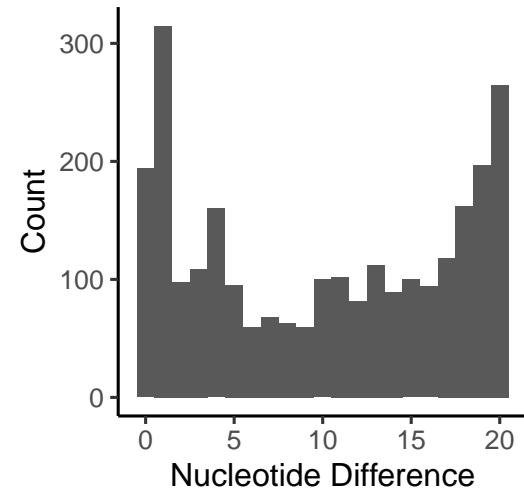
IGHV4-39*07

1844 sequences assigned
72 (3.9%) exact matches, in which:
60 unique CDR3
5 unique J



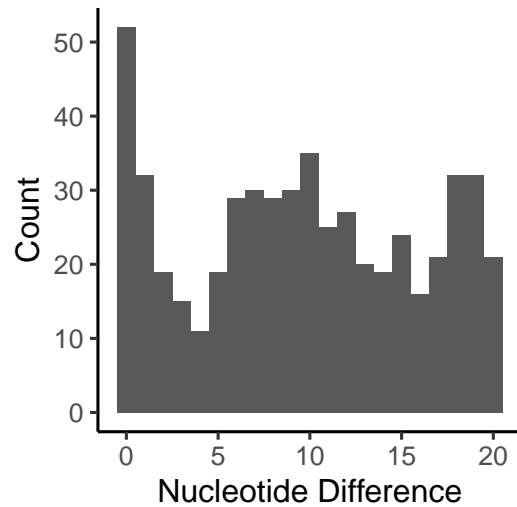
IGHV4-59*01_07

4301 sequences assigned
194 (4.5%) exact matches, in which:
143 unique CDR3
7 unique J



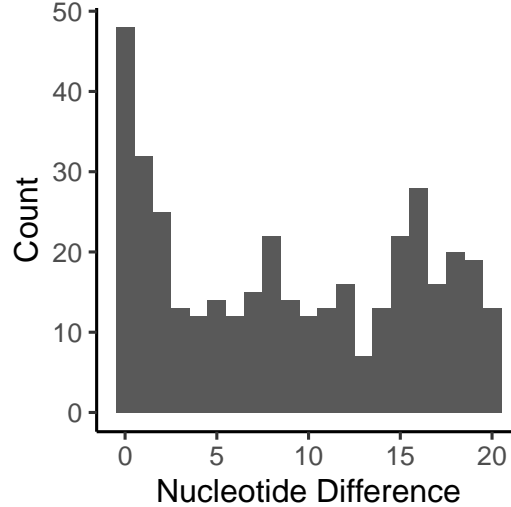
IGHV4-34*01_02

748 sequences assigned
52 (7%) exact matches, in which:
49 unique CDR3
6 unique J



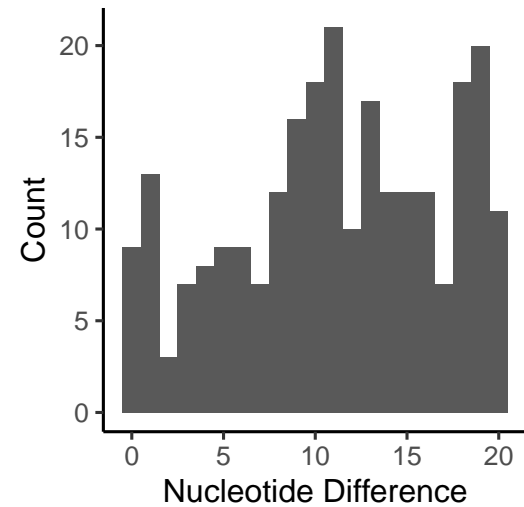
IGHV4-39*01_05

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



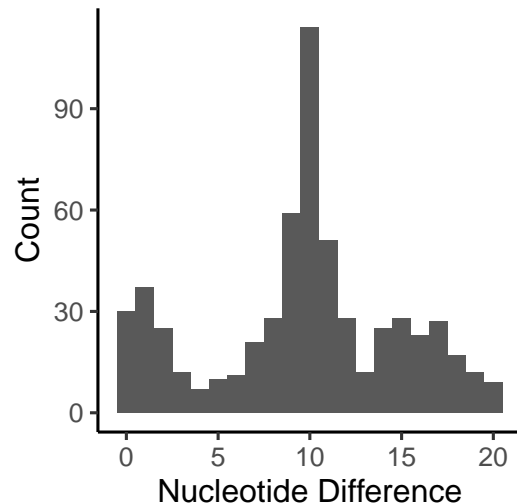
IGHV4-59*12

376 sequences assigned
9 (2.4%) exact matches, in which:
9 unique CDR3
3 unique J



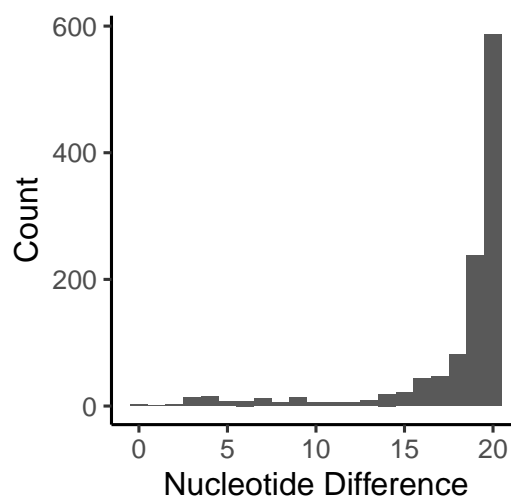
IGHV4-38-2*02

687 sequences assigned
30 (4.4%) exact matches, in which:
26 unique CDR3
6 unique J



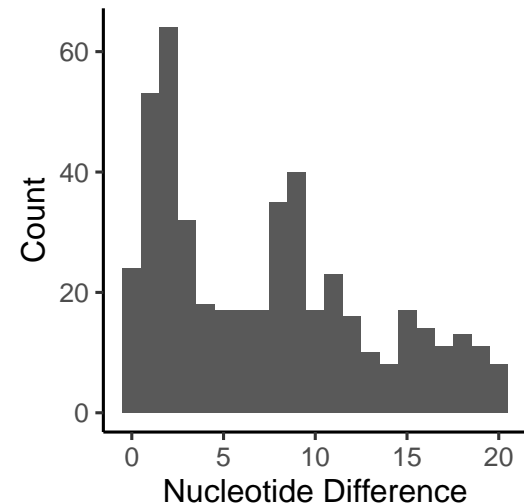
IGHV4-59*02

15604 sequences assigned
2 (0%) exact matches, in which:
2 unique CDR3
2 unique J



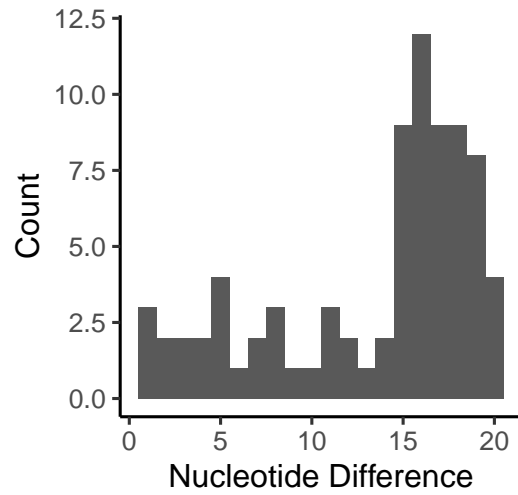
IGHV4-61*01

696 sequences assigned
24 (3.4%) exact matches, in which:
24 unique CDR3
4 unique J



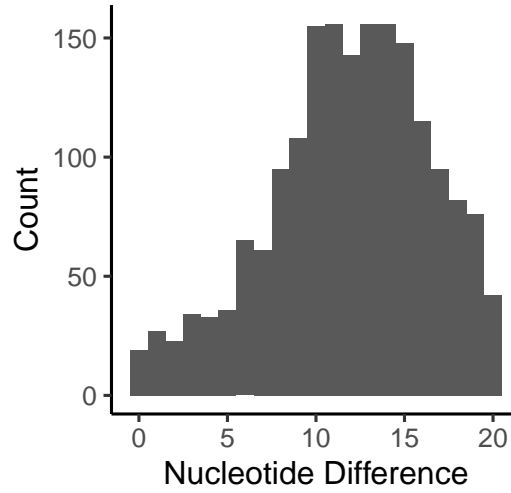
IGHV4-61*08

154 sequences assigned
No exact matches.



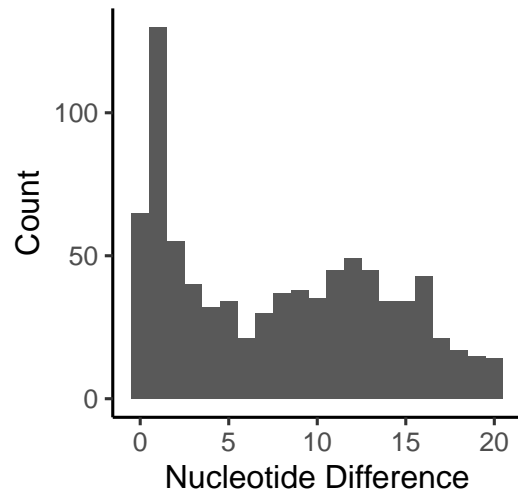
IGHV6-1*01_02

2104 sequences assigned
19 (0.9%) exact matches, in which:
17 unique CDR3
3 unique J



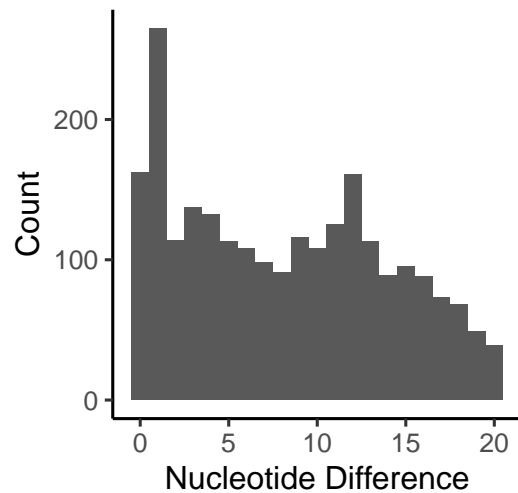
IGHV5-10-1*01_03

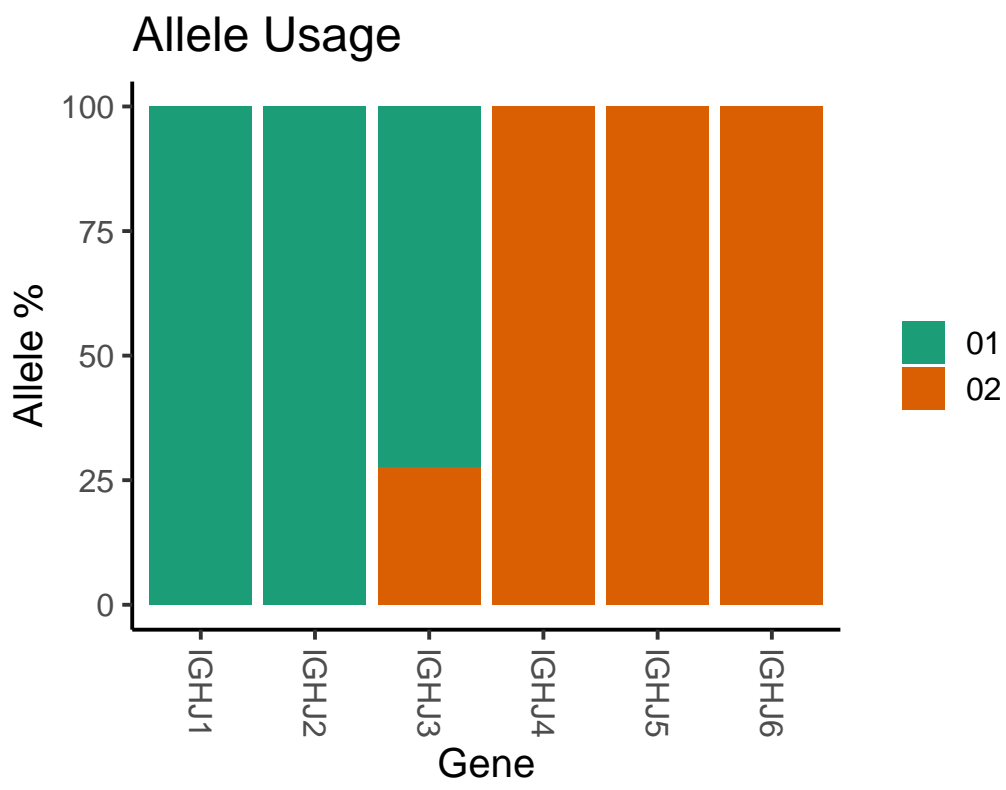
1096 sequences assigned
65 (5.9%) exact matches, in which:
52 unique CDR3
5 unique J



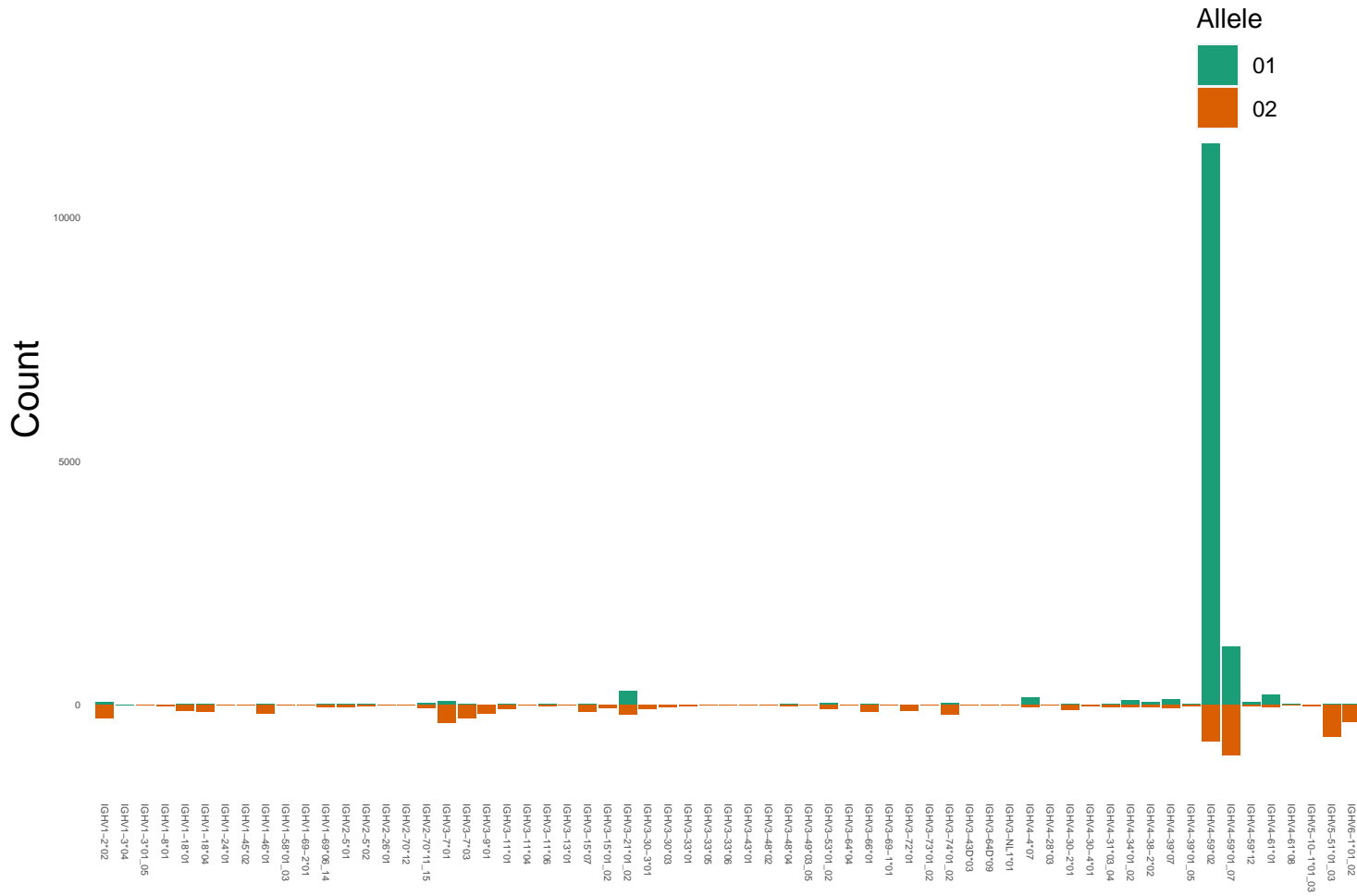
IGHV5-51*01_03

2587 sequences assigned
162 (6.3%) exact matches, in which:
122 unique CDR3
6 unique J





Sequence Count by IGHJ3 allele usage



Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.