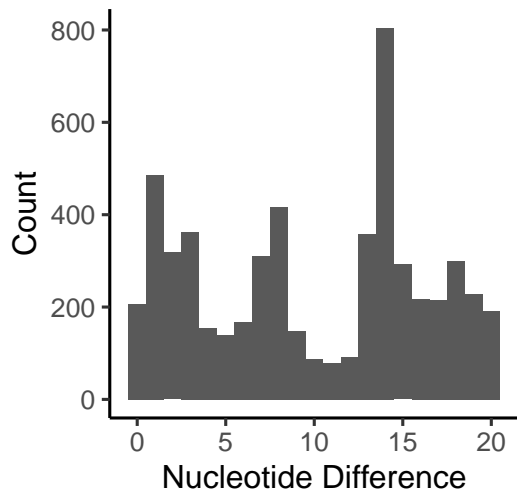


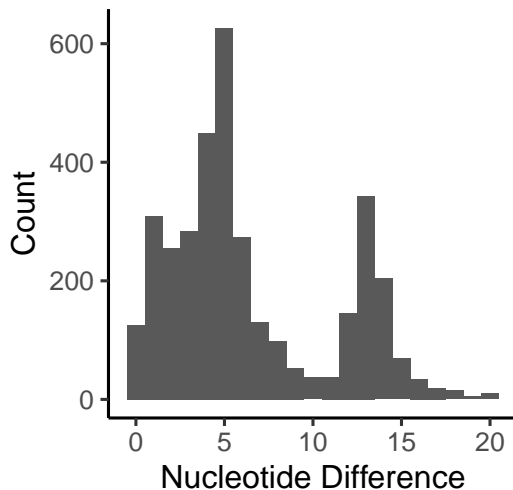
IGHV1-2*06

6633 sequences assigned
207 (3.1%) exact matches, in which:
129 unique CDR3
7 unique J



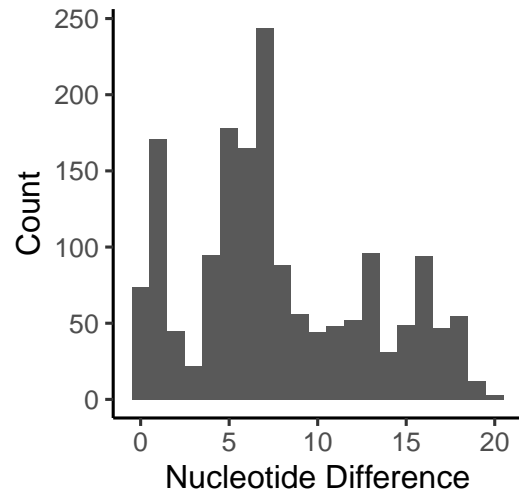
IGHV1-18*01

3727 sequences assigned
125 (3.4%) exact matches, in which:
78 unique CDR3
6 unique J



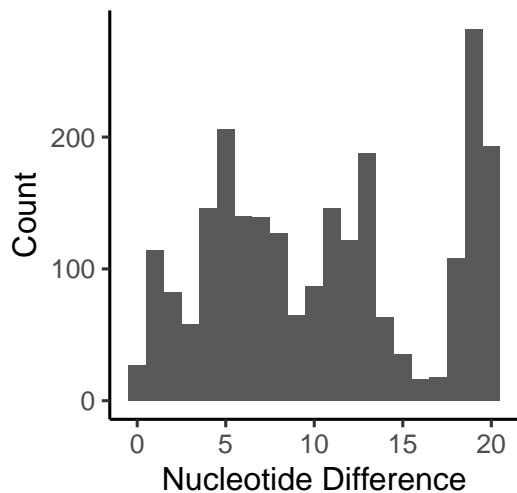
IGHV1-46*01

1981 sequences assigned
74 (3.7%) exact matches, in which:
45 unique CDR3
5 unique J



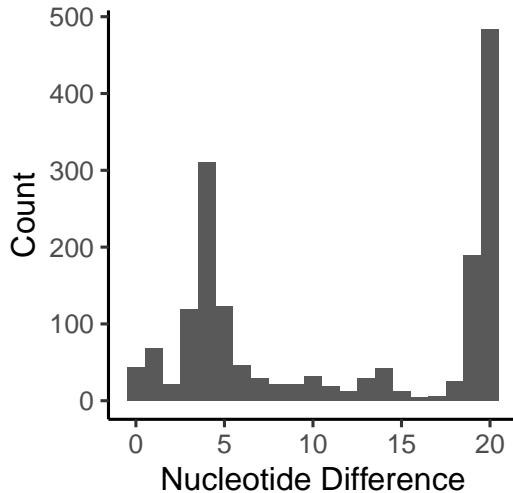
IGHV1-3*01_05

3189 sequences assigned
27 (0.8%) exact matches, in which:
18 unique CDR3
4 unique J



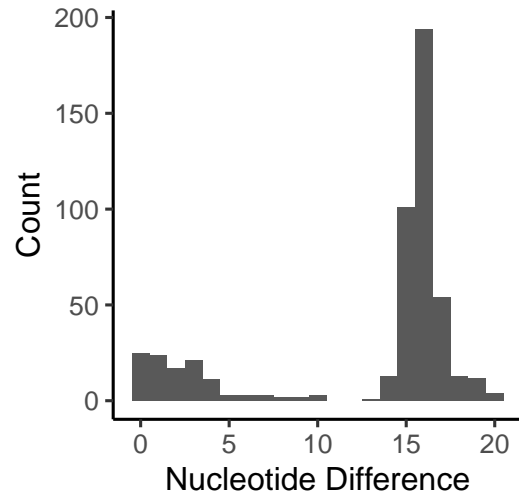
IGHV1-18*04

2753 sequences assigned
44 (1.6%) exact matches, in which:
33 unique CDR3
5 unique J



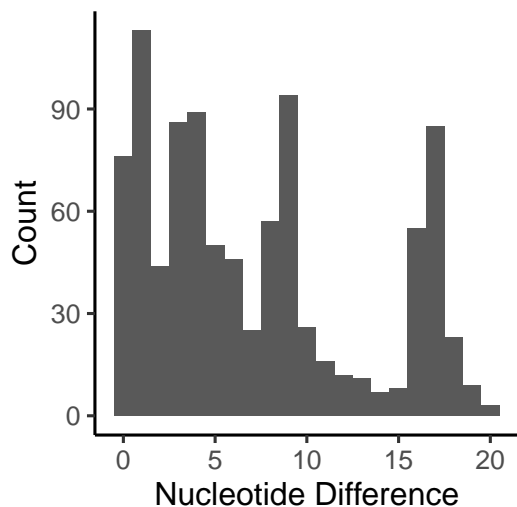
IGHV1-58*02

709 sequences assigned
25 (3.5%) exact matches, in which:
17 unique CDR3
3 unique J



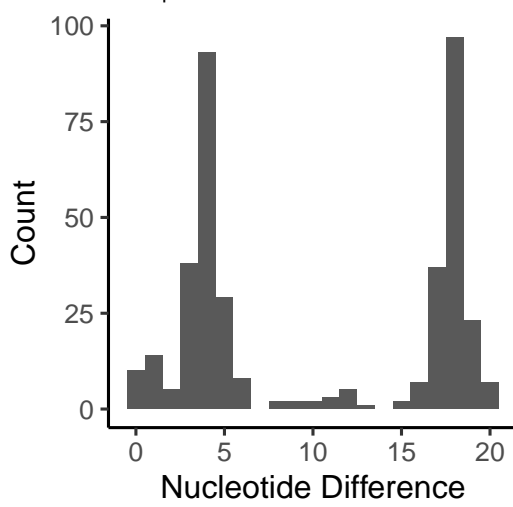
IGHV1-8*01

1073 sequences assigned
76 (7.1%) exact matches, in which:
53 unique CDR3
6 unique J



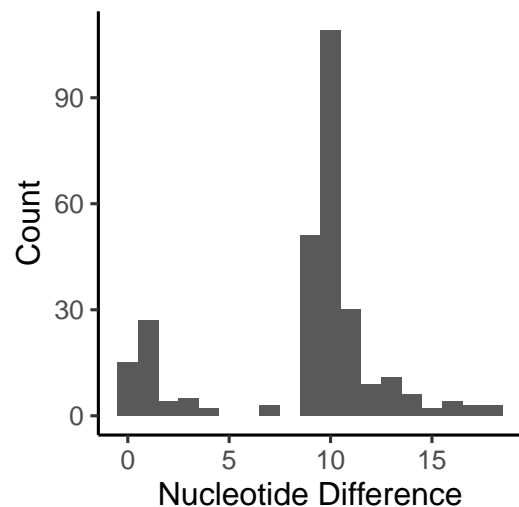
IGHV1-24*01

392 sequences assigned
10 (2.6%) exact matches, in which:
9 unique CDR3
3 unique J



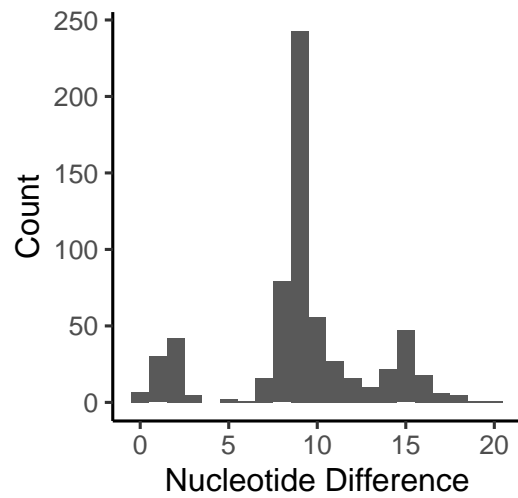
IGHV1-58*01_03

285 sequences assigned
15 (5.3%) exact matches, in which:
10 unique CDR3
4 unique J



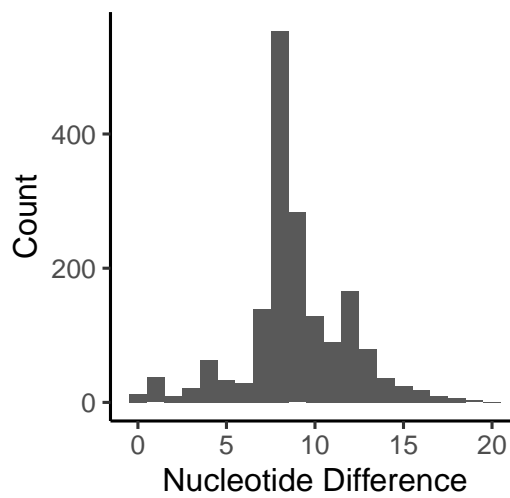
IGHV1-69*02

1043 sequences assigned
7 (0.7%) exact matches, in which:
6 unique CDR3
3 unique J



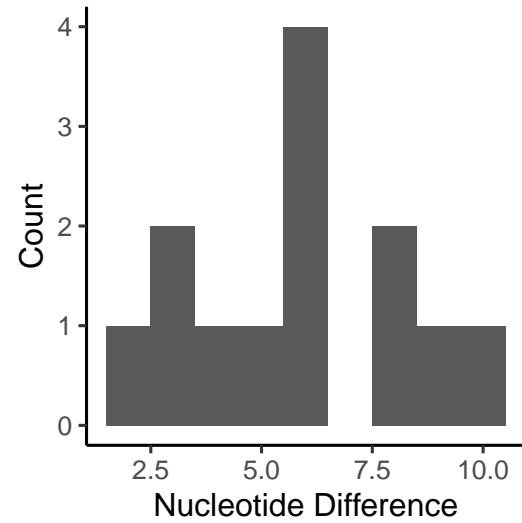
IGHV2-5*01

1945 sequences assigned
13 (0.7%) exact matches, in which:
9 unique CDR3
2 unique J



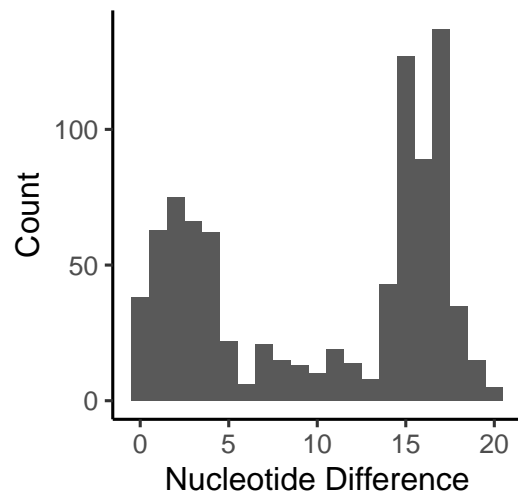
IGHV2-70*12

13 sequences assigned
No exact matches.



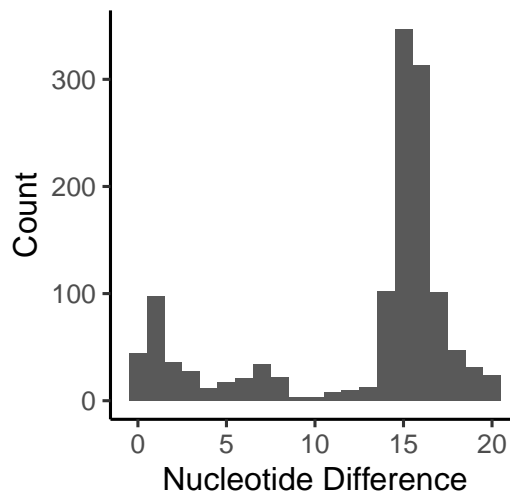
IGHV1-69*01_12_13

1107 sequences assigned
38 (3.4%) exact matches, in which:
33 unique CDR3
5 unique J



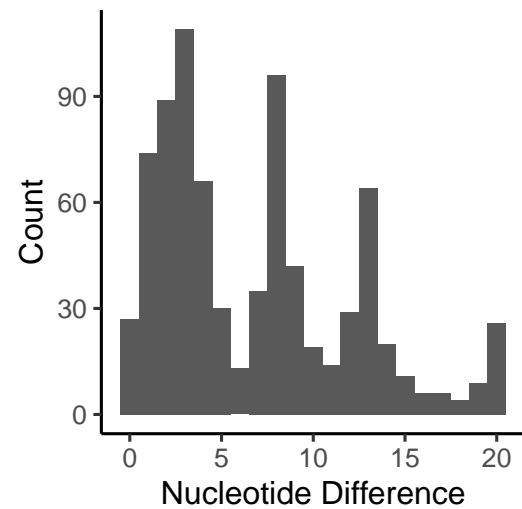
IGHV2-5*02

1701 sequences assigned
44 (2.6%) exact matches, in which:
25 unique CDR3
5 unique J



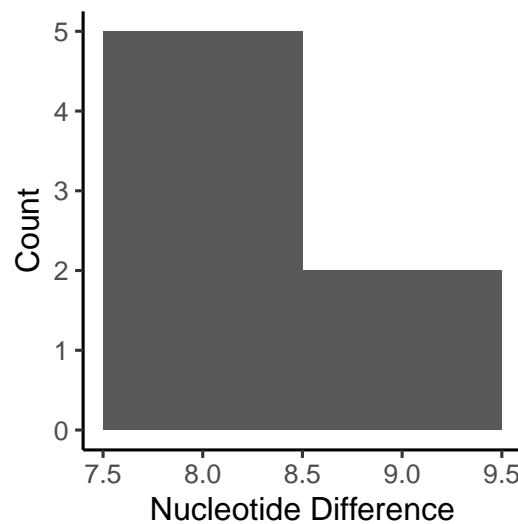
IGHV2-70*11_15

804 sequences assigned
27 (3.4%) exact matches, in which:
16 unique CDR3
3 unique J



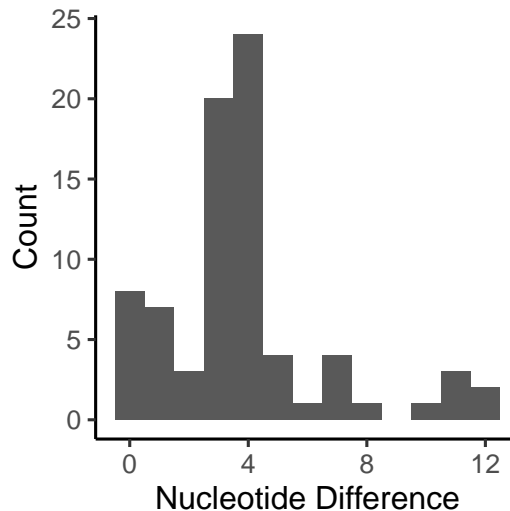
IGHV1-NL1*01

7 sequences assigned
No exact matches.



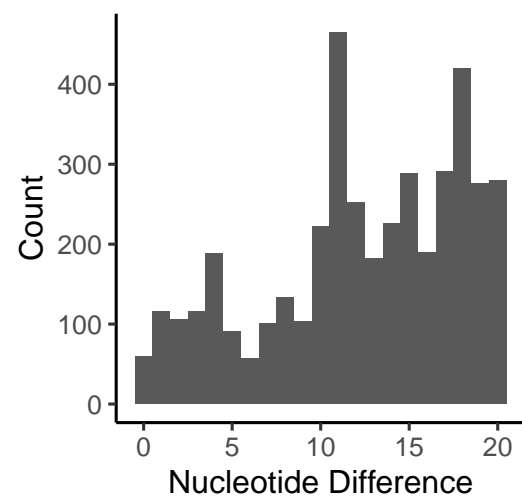
IGHV2-26*01

78 sequences assigned
8 (10.3%) exact matches, in which:
7 unique CDR3
3 unique J



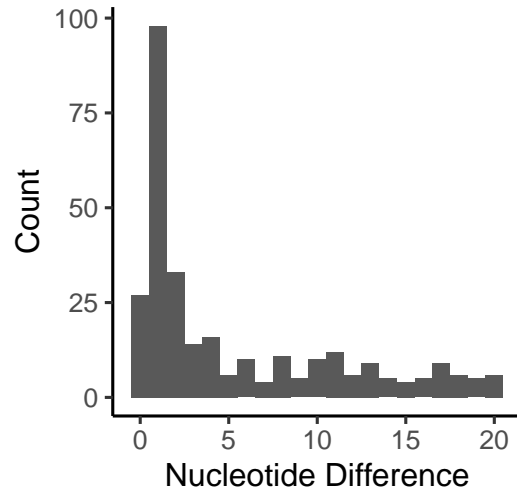
IGHV3-7*01

4745 sequences assigned
59 (1.2%) exact matches, in which:
37 unique CDR3
6 unique J



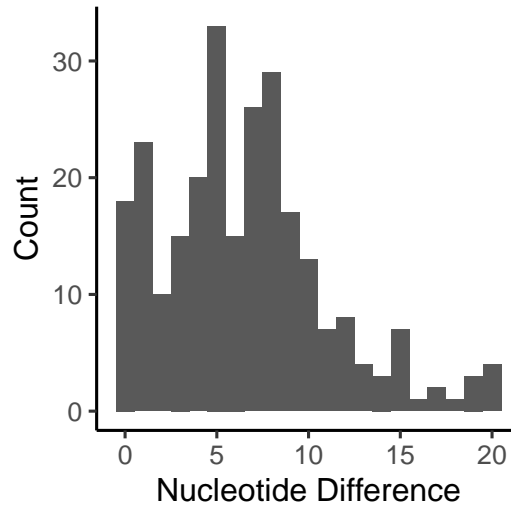
IGHV3-7*03

631 sequences assigned
27 (4.3%) exact matches, in which:
15 unique CDR3
2 unique J



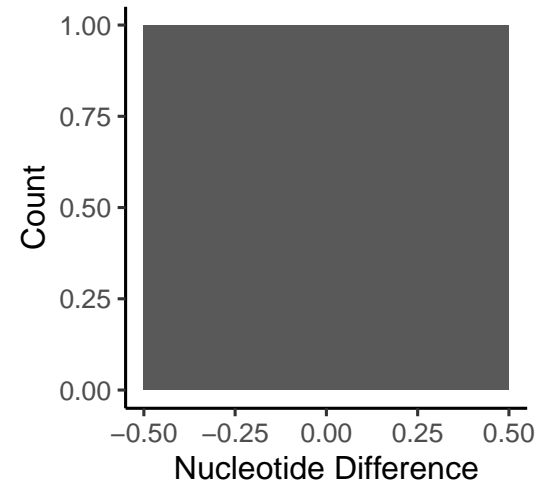
IGHV3-11*04

271 sequences assigned
18 (6.6%) exact matches, in which:
15 unique CDR3
4 unique J



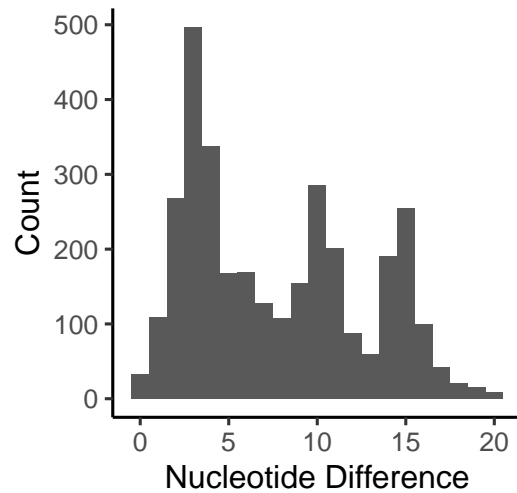
IGHV3-19*01

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



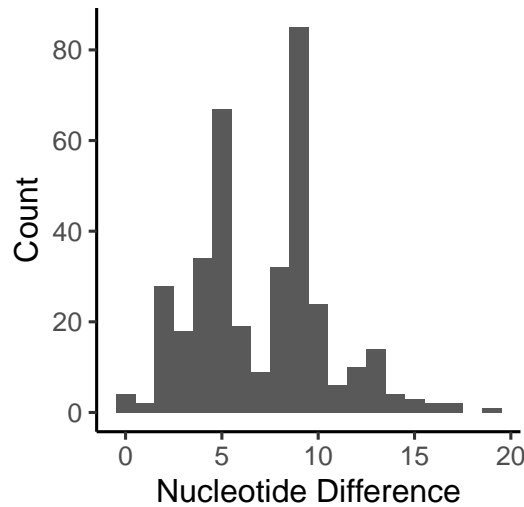
IGHV3-9*01

3289 sequences assigned
33 (1%) exact matches, in which:
20 unique CDR3
5 unique J



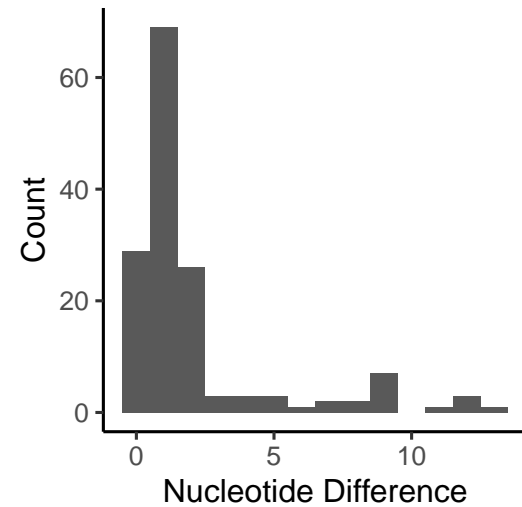
IGHV3-13*01

368 sequences assigned
4 (1.1%) exact matches, in which:
2 unique CDR3
2 unique J



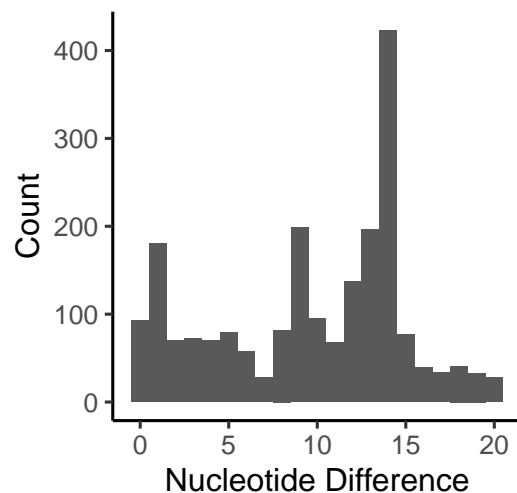
IGHV3-20*01_02

150 sequences assigned
29 (19.3%) exact matches, in which:
14 unique CDR3
3 unique J



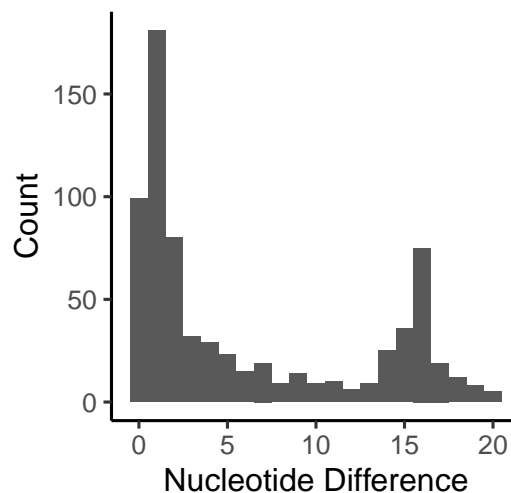
IGHV3-11*01

2432 sequences assigned
93 (3.8%) exact matches, in which:
51 unique CDR3
6 unique J



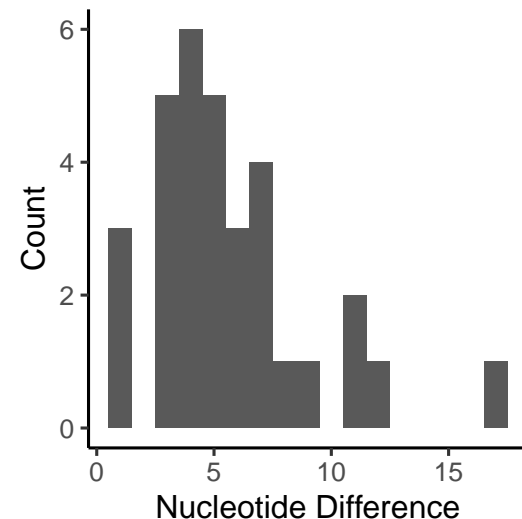
IGHV3-15*01_02

849 sequences assigned
99 (11.7%) exact matches, in which:
56 unique CDR3
6 unique J



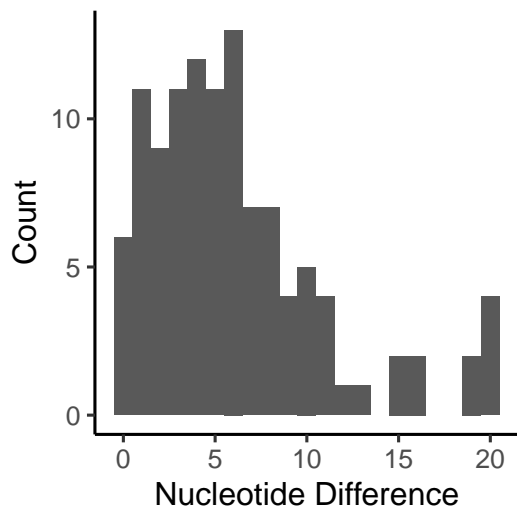
IGHV3-20*03_04

33 sequences assigned
No exact matches.



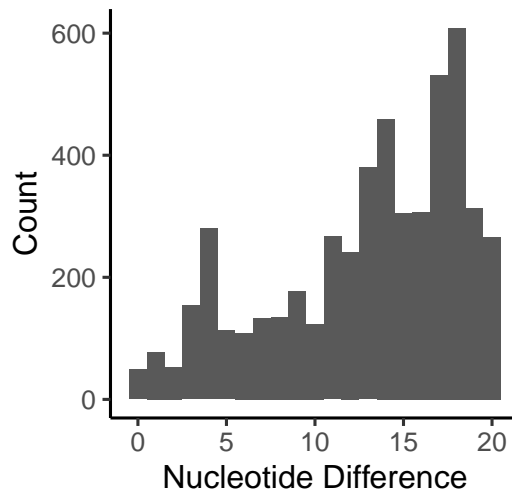
IGHV3-21*04

492 sequences assigned
6 (1.2%) exact matches, in which:
6 unique CDR3
5 unique J



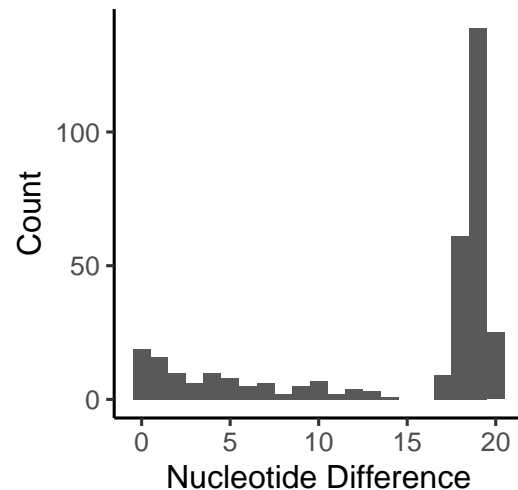
IGHV3-23*01_04

6881 sequences assigned
49 (0.7%) exact matches, in which:
33 unique CDR3
6 unique J



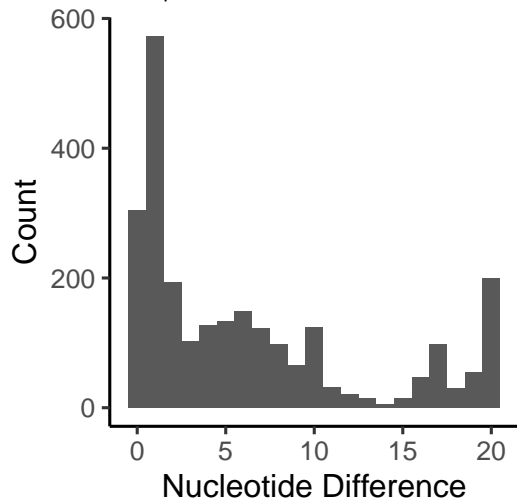
IGHV3-30*03

402 sequences assigned
19 (4.7%) exact matches, in which:
16 unique CDR3
5 unique J



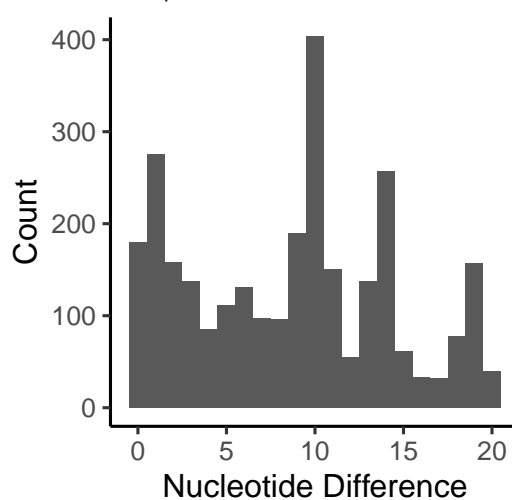
IGHV3-21*01_02

3337 sequences assigned
305 (9.1%) exact matches, in which:
177 unique CDR3
7 unique J



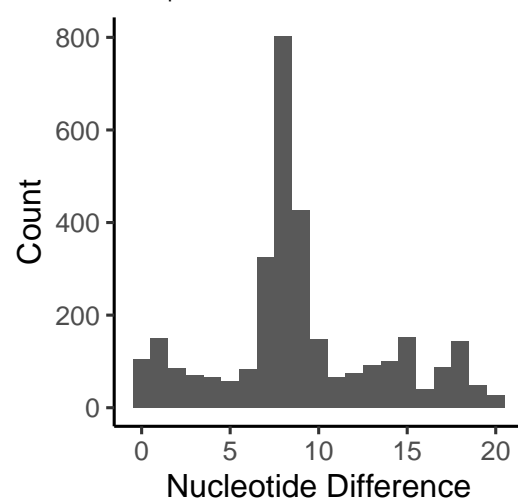
IGHV3-30-3*01

4380 sequences assigned
180 (4.1%) exact matches, in which:
112 unique CDR3
6 unique J



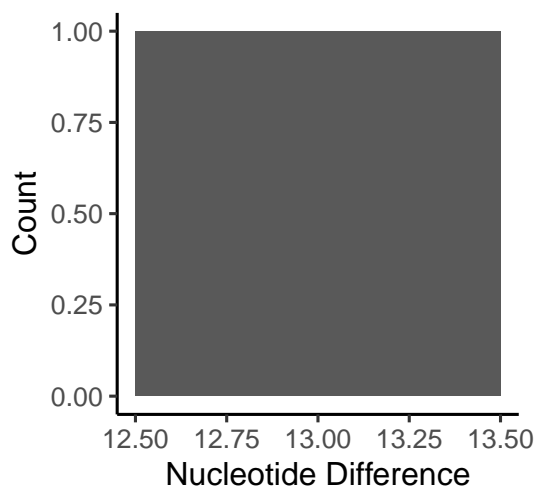
IGHV3-30*18

4187 sequences assigned
105 (2.5%) exact matches, in which:
55 unique CDR3
5 unique J



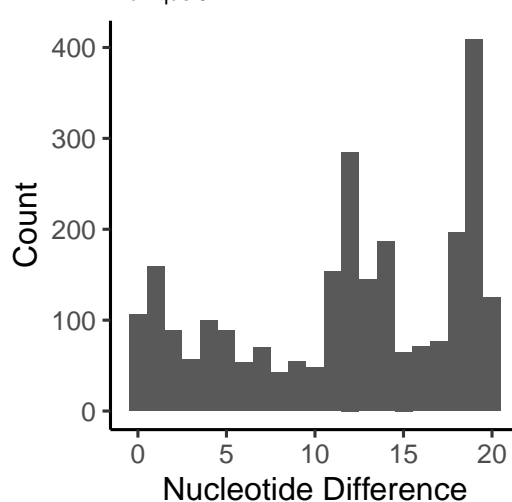
IGHV3-22*01_02

1 sequences assigned
No exact matches.



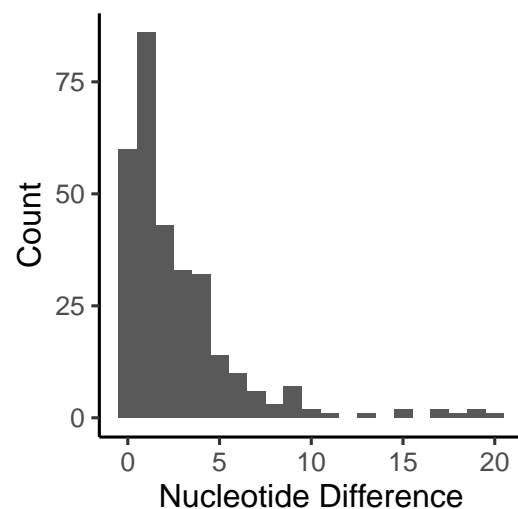
IGHV3-30*02

4013 sequences assigned
106 (2.6%) exact matches, in which:
63 unique CDR3
4 unique J



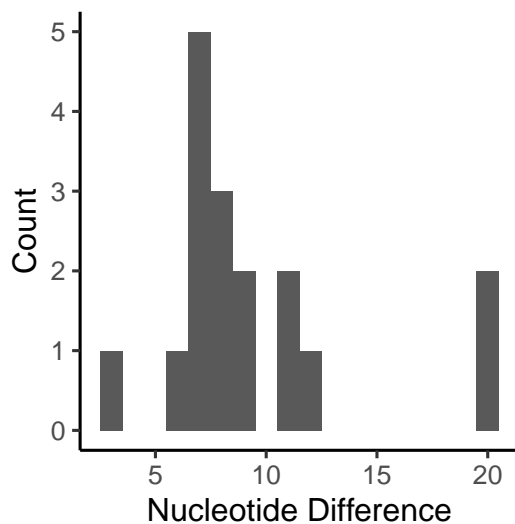
IGHV3-33*01

320 sequences assigned
60 (18.8%) exact matches, in which:
38 unique CDR3
6 unique J



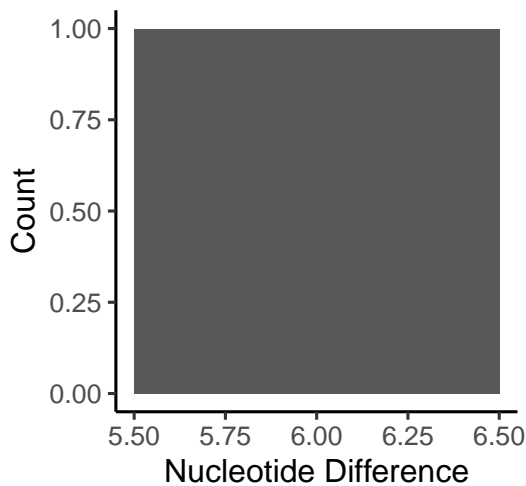
IGHV3-33*05

105 sequences assigned
No exact matches.



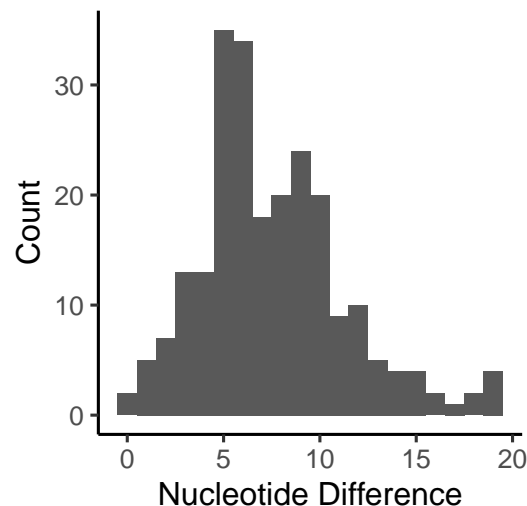
IGHV3-43*02

2 sequences assigned
No exact matches.



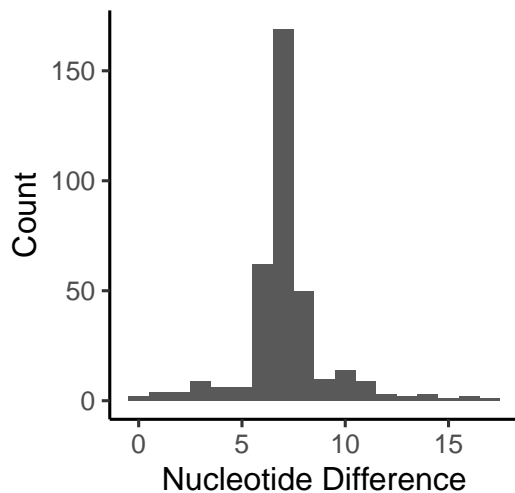
IGHV3-48*04

241 sequences assigned
2 (0.8%) exact matches, in which:
2 unique CDR3
2 unique J



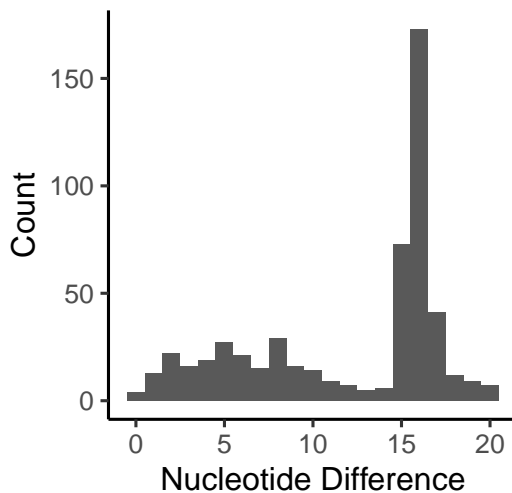
IGHV3-33*06

359 sequences assigned
2 (0.6%) exact matches, in which:
2 unique CDR3
2 unique J



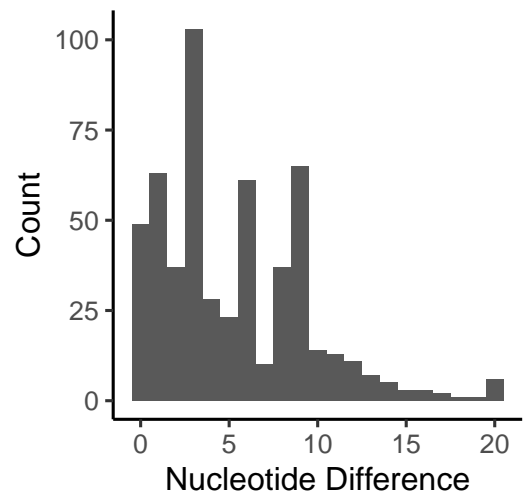
IGHV3-48*01

901 sequences assigned
4 (0.4%) exact matches, in which:
4 unique CDR3
2 unique J



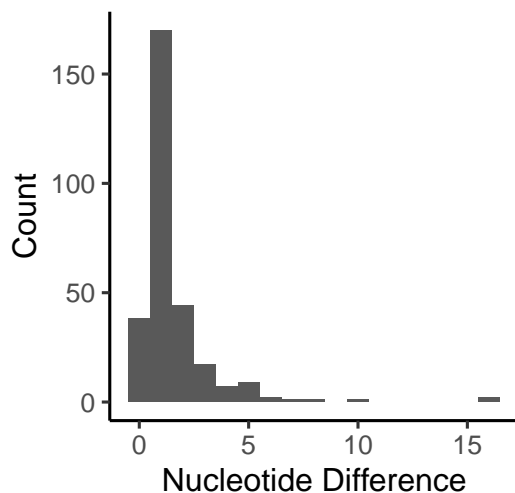
IGHV3-49*04

549 sequences assigned
49 (8.9%) exact matches, in which:
26 unique CDR3
4 unique J



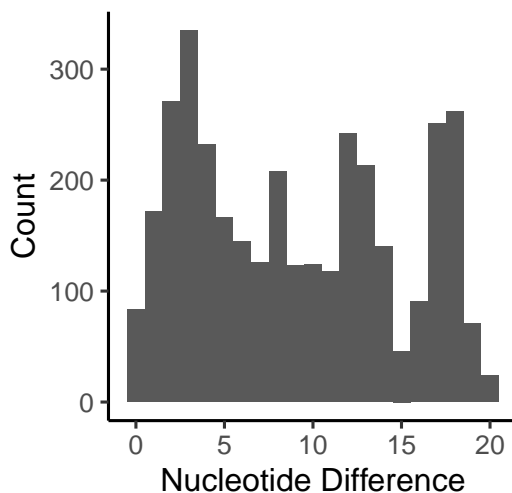
IGHV3-43*01

293 sequences assigned
38 (13%) exact matches, in which:
20 unique CDR3
1 unique J



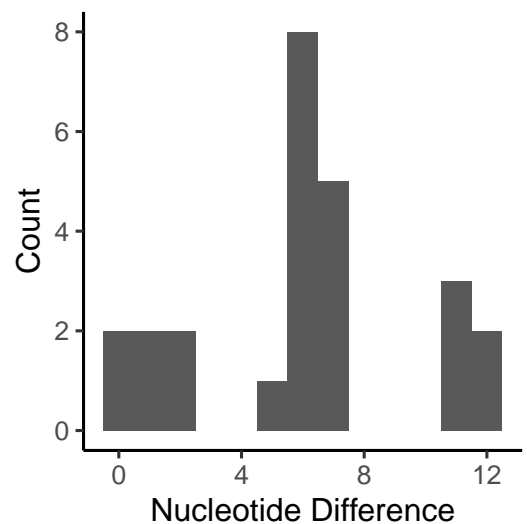
IGHV3-48*02

3970 sequences assigned
83 (2.1%) exact matches, in which:
44 unique CDR3
5 unique J



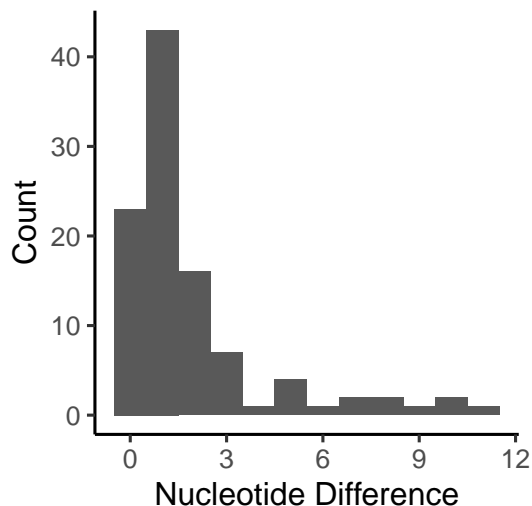
IGHV3-49*03_05

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



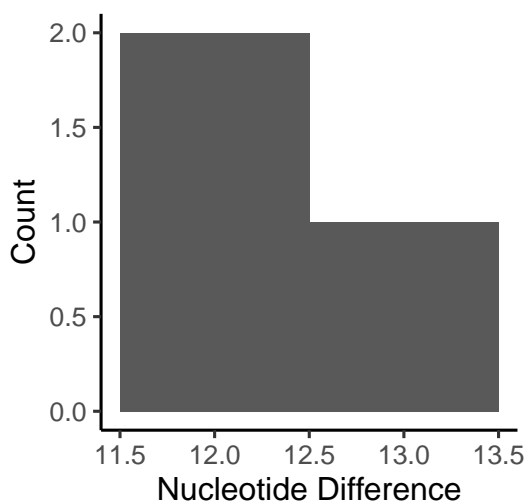
IGHV3-53*04

103 sequences assigned
23 (22.3%) exact matches, in which:
16 unique CDR3
3 unique J



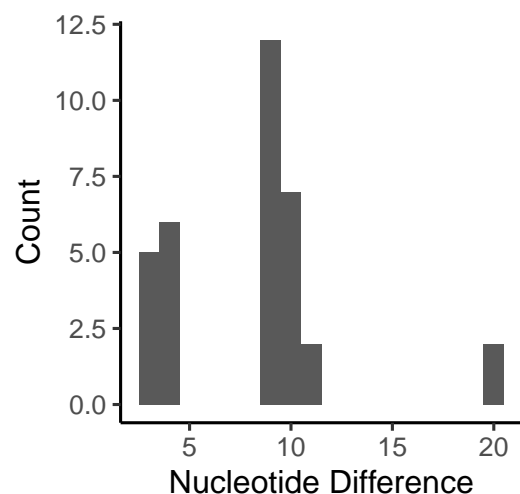
IGHV3-62*04

3 sequences assigned
No exact matches.



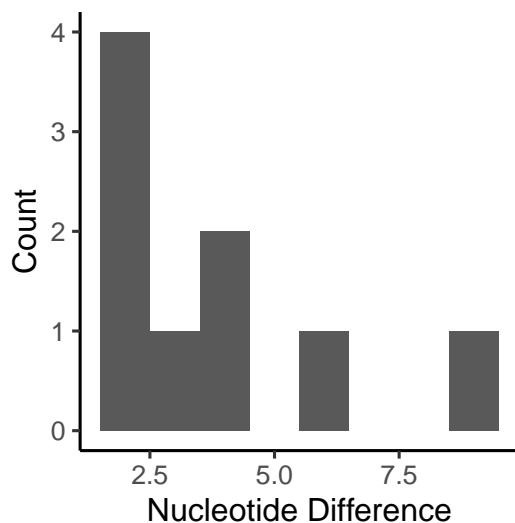
IGHV3-69-1*01

35 sequences assigned
No exact matches.



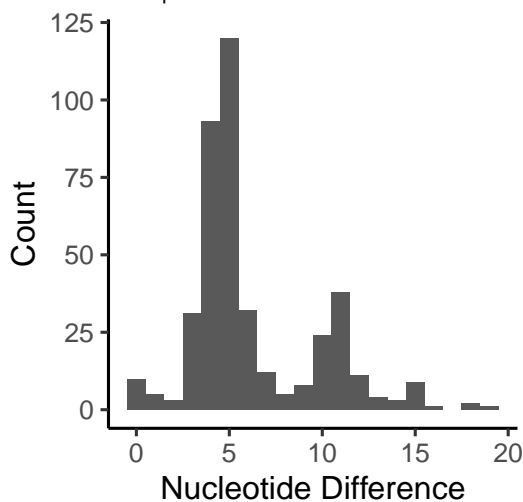
IGHV3-53*05

11 sequences assigned
No exact matches.



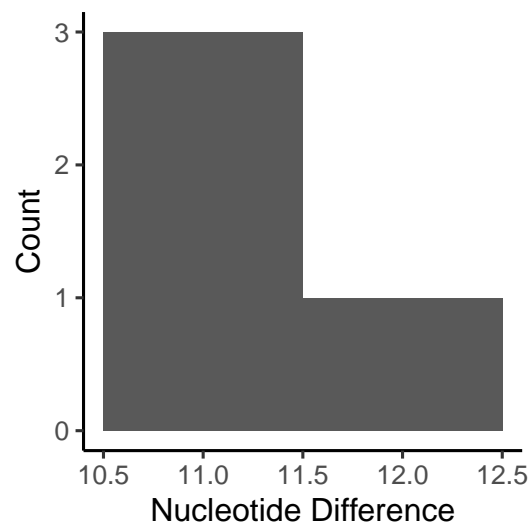
IGHV3-64*01

412 sequences assigned
10 (2.4%) exact matches, in which:
5 unique CDR3
2 unique J



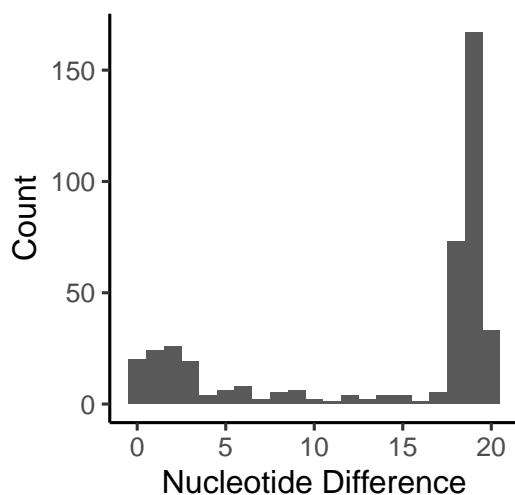
IGHV3-71*03

4 sequences assigned
No exact matches.



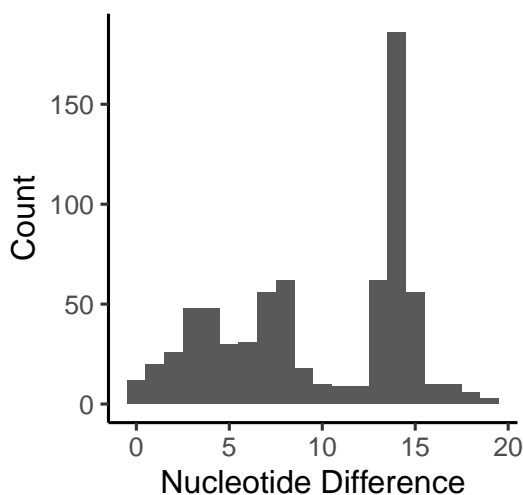
IGHV3-53*01_02

453 sequences assigned
20 (4.4%) exact matches, in which:
10 unique CDR3
3 unique J



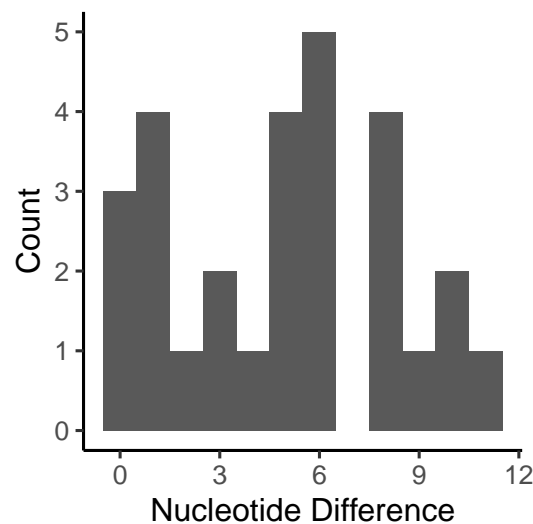
IGHV3-66*01

1749 sequences assigned
12 (0.7%) exact matches, in which:
8 unique CDR3
3 unique J



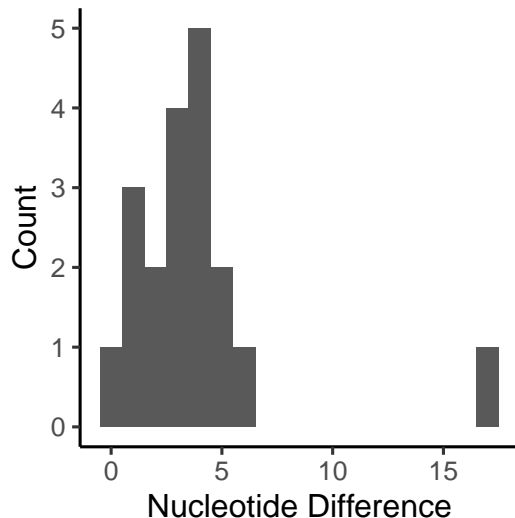
IGHV3-72*01

94 sequences assigned
3 (3.2%) exact matches, in which:
1 unique CDR3
1 unique J



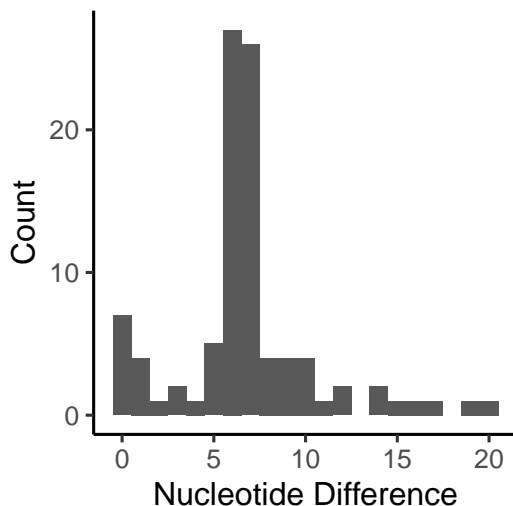
IGHV3-73*01_02

146 sequences assigned
1 (0.7%) exact matches, in which:
1 unique CDR3
1 unique J



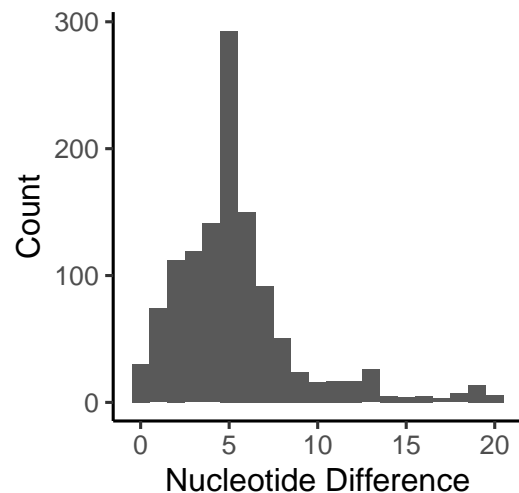
IGHV3-43D*03

196 sequences assigned
7 (3.6%) exact matches, in which:
5 unique CDR3
2 unique J



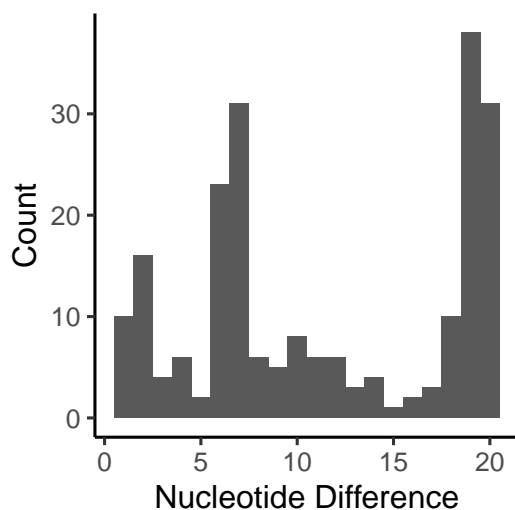
IGHV4-4*02_03

1267 sequences assigned
30 (2.4%) exact matches, in which:
21 unique CDR3
4 unique J



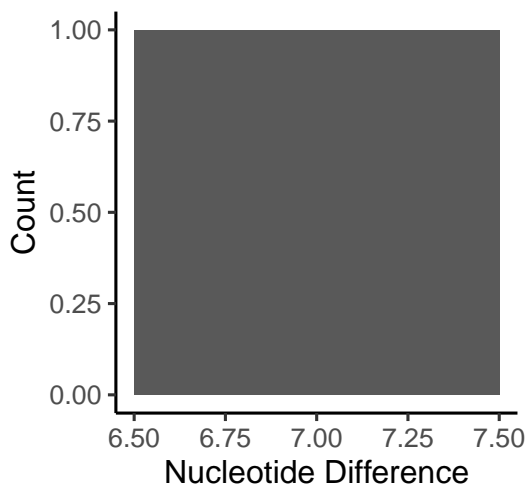
IGHV3-74*03

1152 sequences assigned
No exact matches.



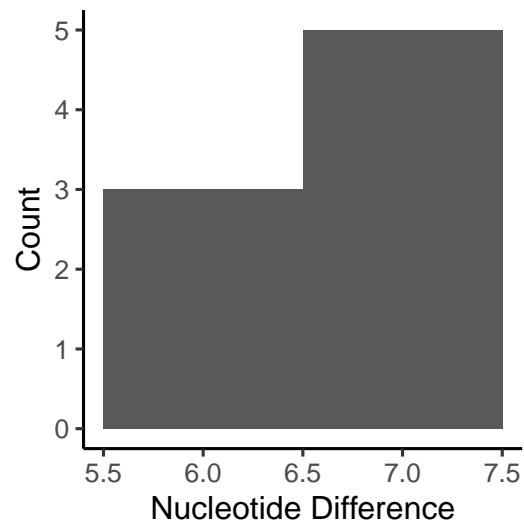
IGHV3-NL1*01

2 sequences assigned
No exact matches.



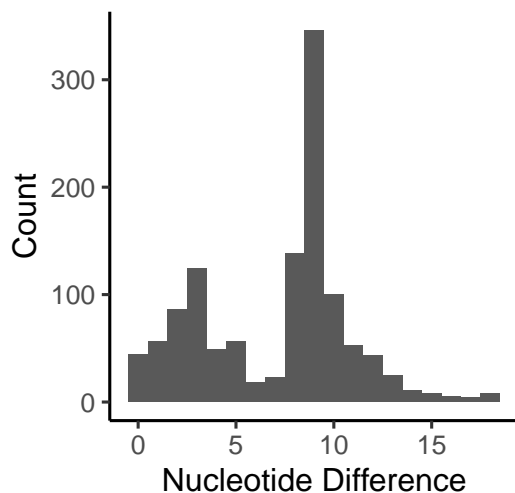
IGHV4-28*03

8 sequences assigned
No exact matches.



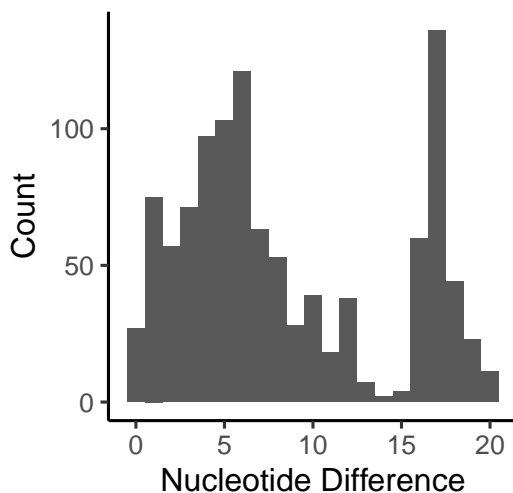
IGHV3-74*01_02

1214 sequences assigned
44 (3.6%) exact matches, in which:
27 unique CDR3
5 unique J



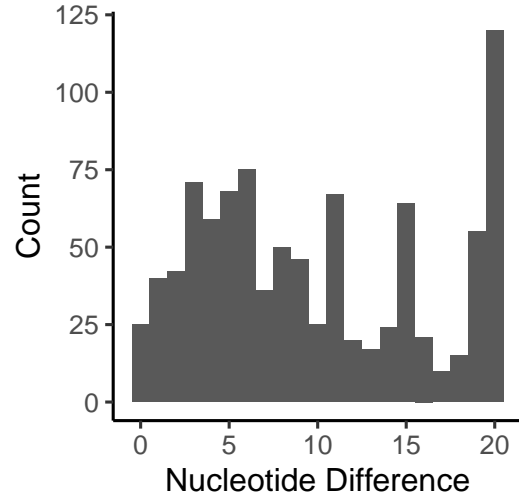
IGHV4-4*07

1145 sequences assigned
27 (2.4%) exact matches, in which:
22 unique CDR3
3 unique J



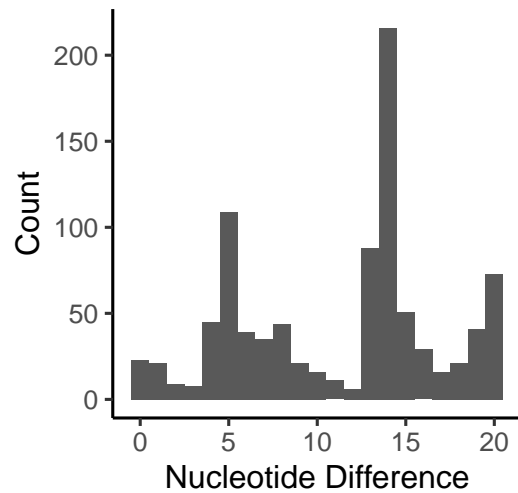
IGHV4-30-4*01

1236 sequences assigned
25 (2%) exact matches, in which:
19 unique CDR3
5 unique J



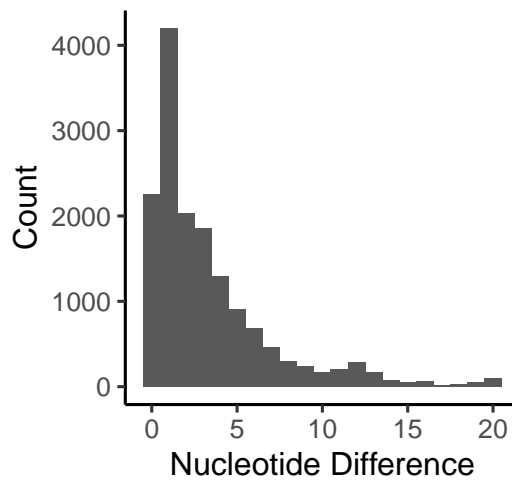
IGHV4-30-2*01

1129 sequences assigned
23 (2%) exact matches, in which:
17 unique CDR3
3 unique J



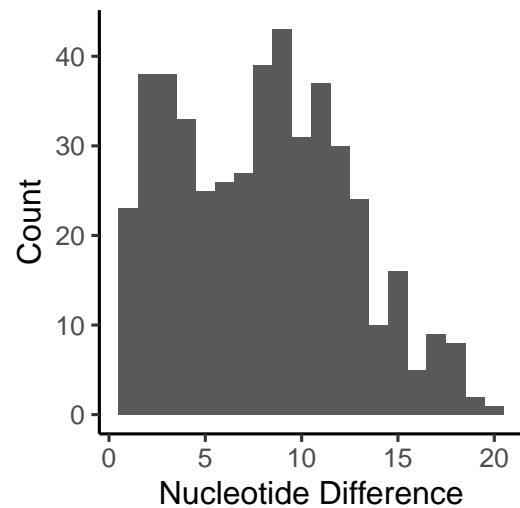
IGHV4-34*01_02

15855 sequences assigned
2260 (14.3%) exact matches, in which:
1396 unique CDR3
7 unique J



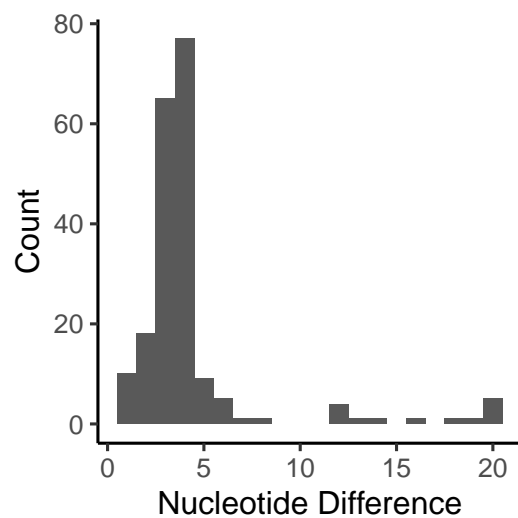
IGHV4-39*07

479 sequences assigned
No exact matches.



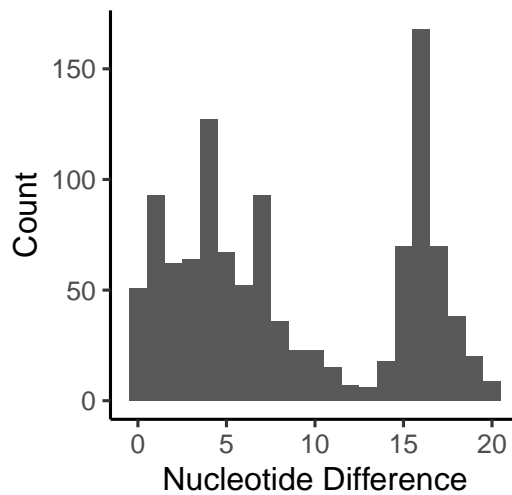
IGHV4-30-2*03

201 sequences assigned
No exact matches.



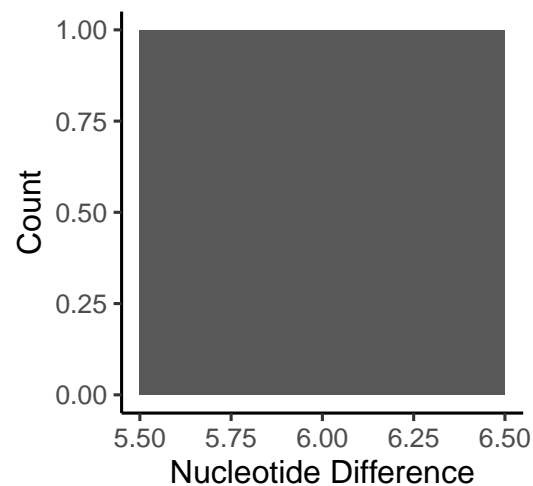
IGHV4-38-2*02

2502 sequences assigned
51 (2%) exact matches, in which:
35 unique CDR3
4 unique J



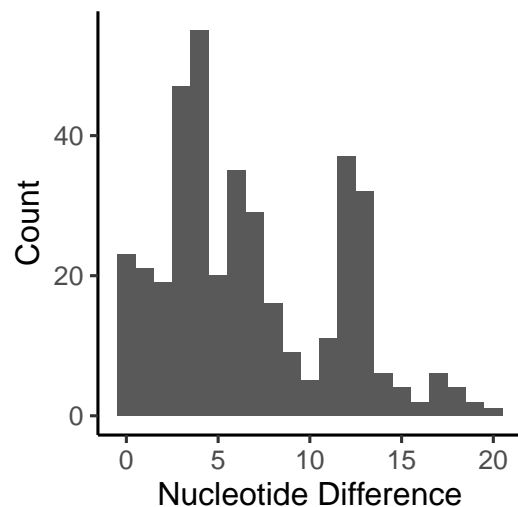
IGHV4-55*09

1 sequences assigned
No exact matches.



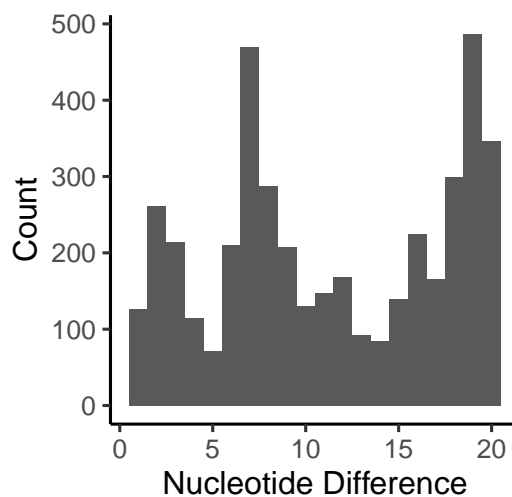
IGHV4-31*02

416 sequences assigned
23 (5.5%) exact matches, in which:
17 unique CDR3
4 unique J



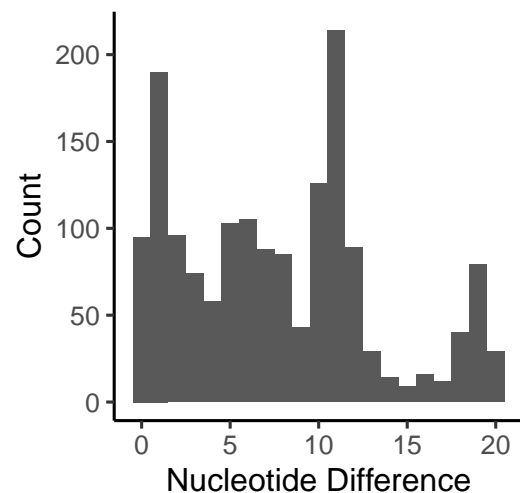
IGHV4-39*02

5209 sequences assigned
No exact matches.



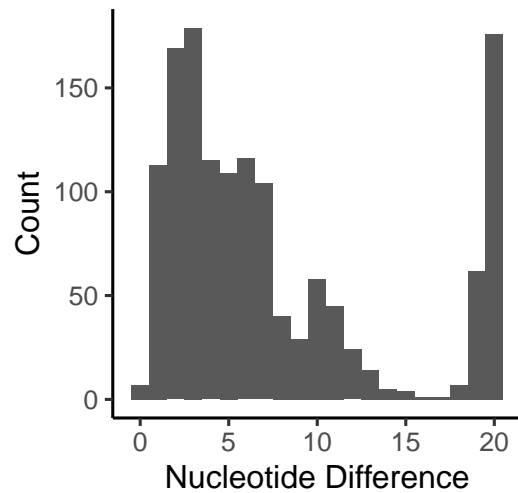
IGHV4-59*08

1856 sequences assigned
95 (5.1%) exact matches, in which:
72 unique CDR3
5 unique J



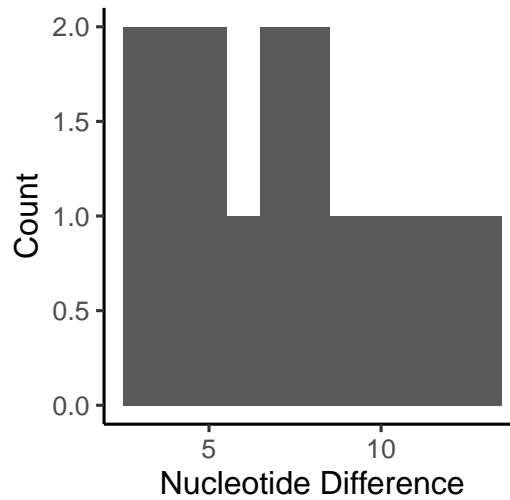
IGHV4-59*12

1606 sequences assigned
7 (0.4%) exact matches, in which:
6 unique CDR3
4 unique J



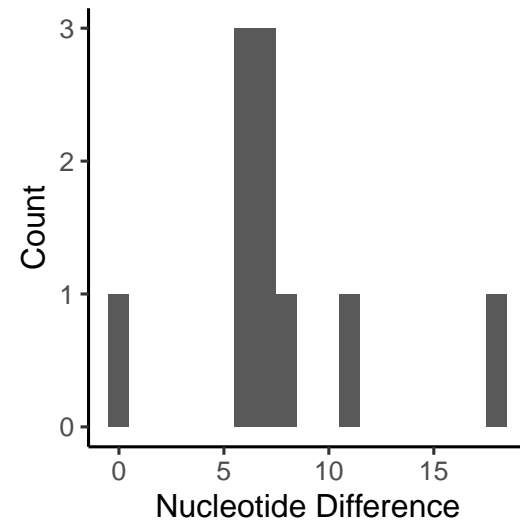
IGHV4-61*05

16 sequences assigned
No exact matches.



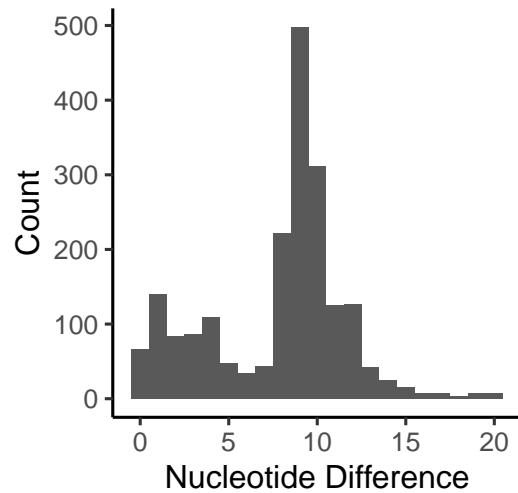
IGHV5-10-1*01_03

13 sequences assigned
1 (7.7%) exact matches, in which:
1 unique CDR3
1 unique J



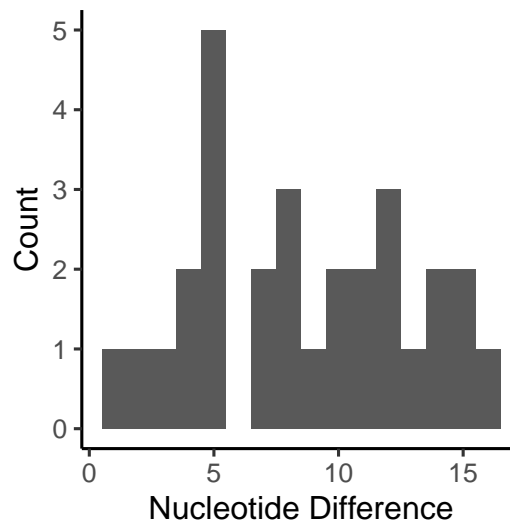
IGHV4-59*01_07

2612 sequences assigned
67 (2.6%) exact matches, in which:
49 unique CDR3
7 unique J



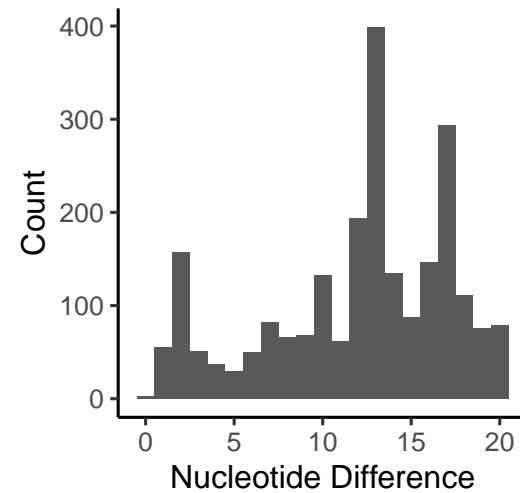
IGHV4-61*08

38 sequences assigned
No exact matches.



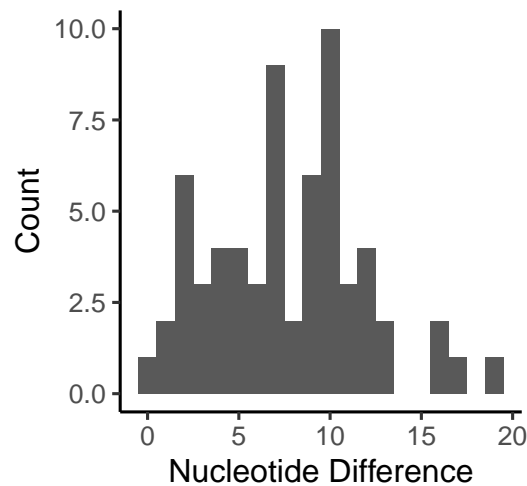
IGHV5-51*07

2406 sequences assigned
3 (0.1%) exact matches, in which:
2 unique CDR3
2 unique J



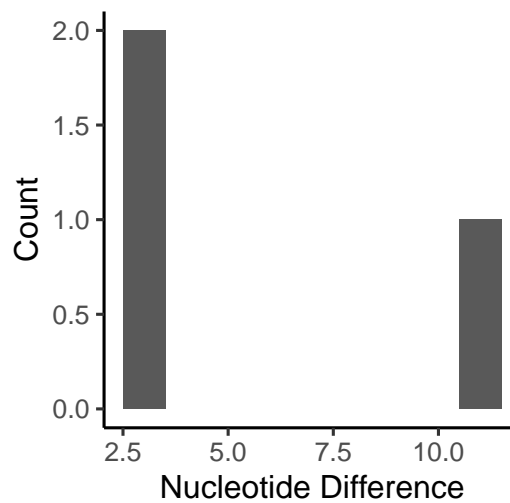
IGHV4-61*01

188 sequences assigned
1 (0.5%) exact matches, in which:
1 unique CDR3
1 unique J



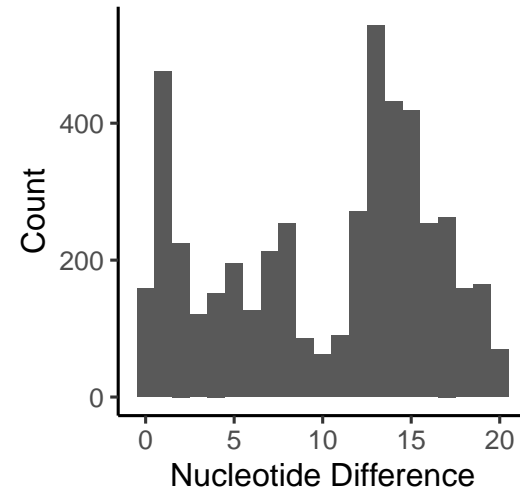
IGHV4/OR15-8*01

3 sequences assigned
No exact matches.



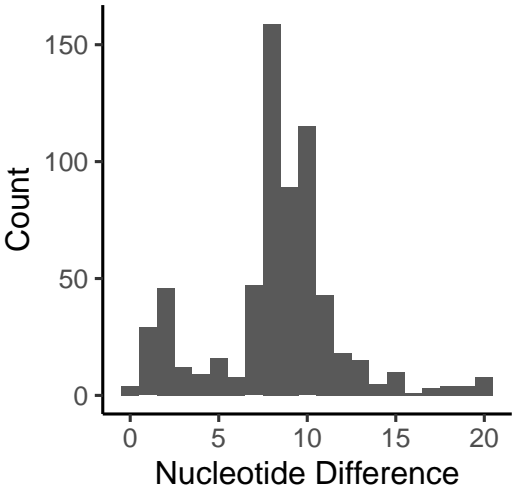
IGHV5-51*01_03

5552 sequences assigned
158 (2.8%) exact matches, in which:
76 unique CDR3
5 unique J



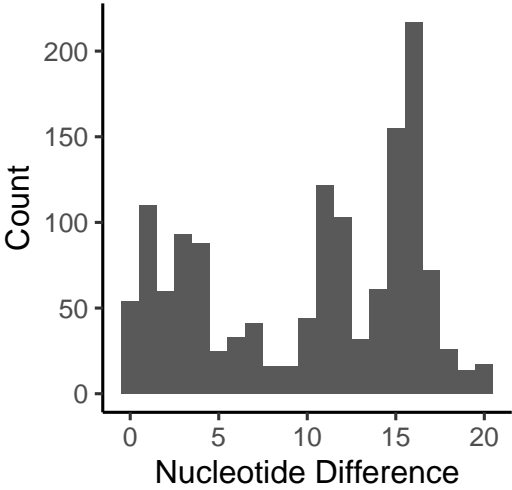
IGHV6-1*01_02

845 sequences assigned
4 (0.5%) exact matches, in which:
3 unique CDR3
2 unique J

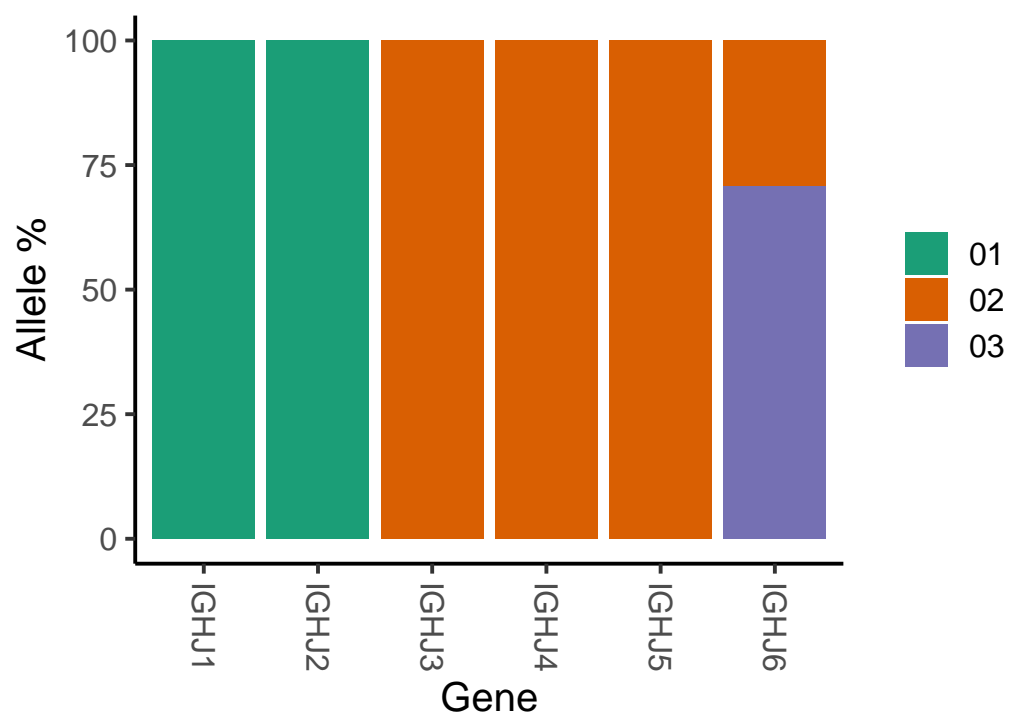


IGHV7-4-1*02

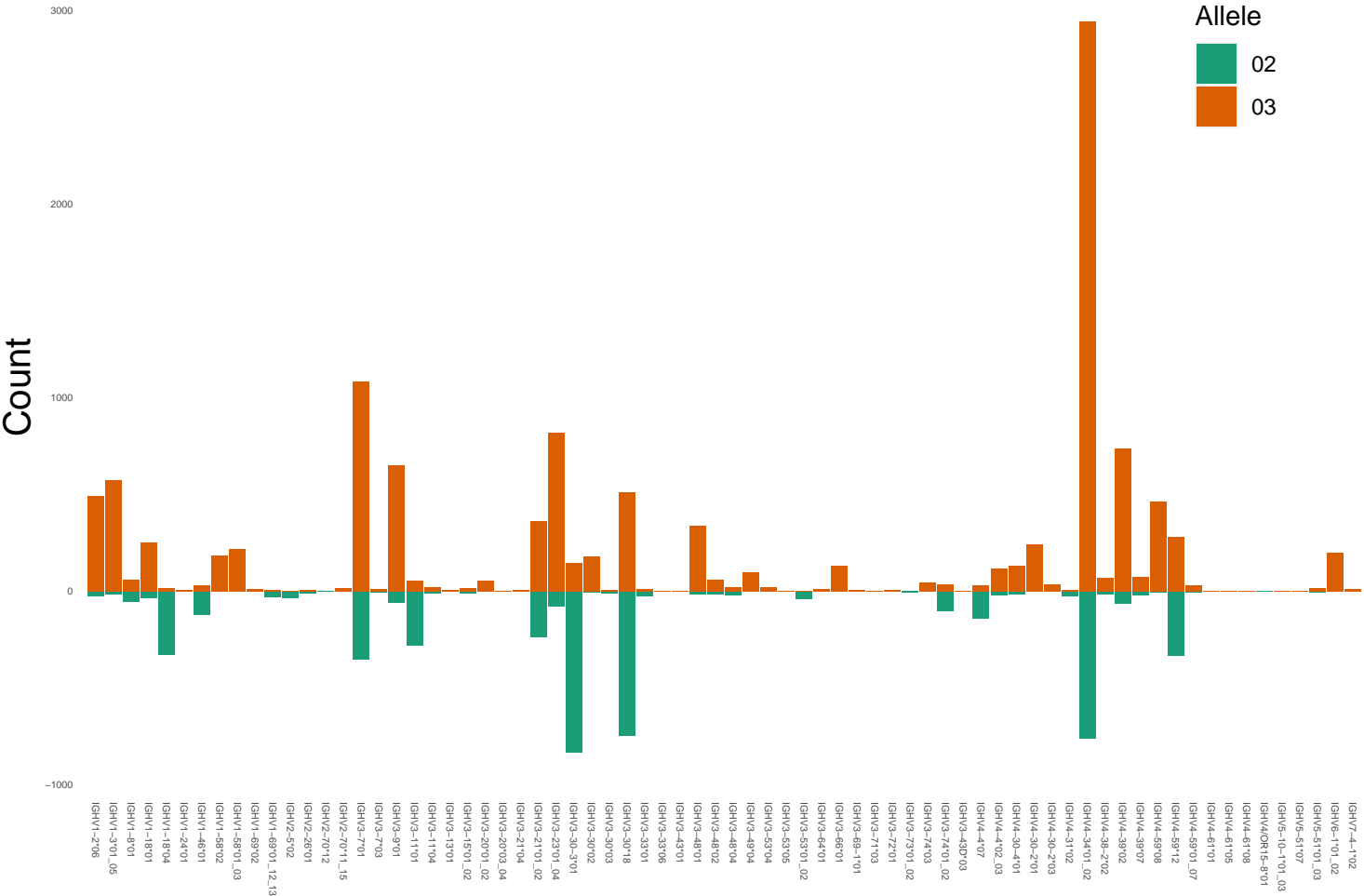
1580 sequences assigned
54 (3.4%) exact matches, in which:
36 unique CDR3
4 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.