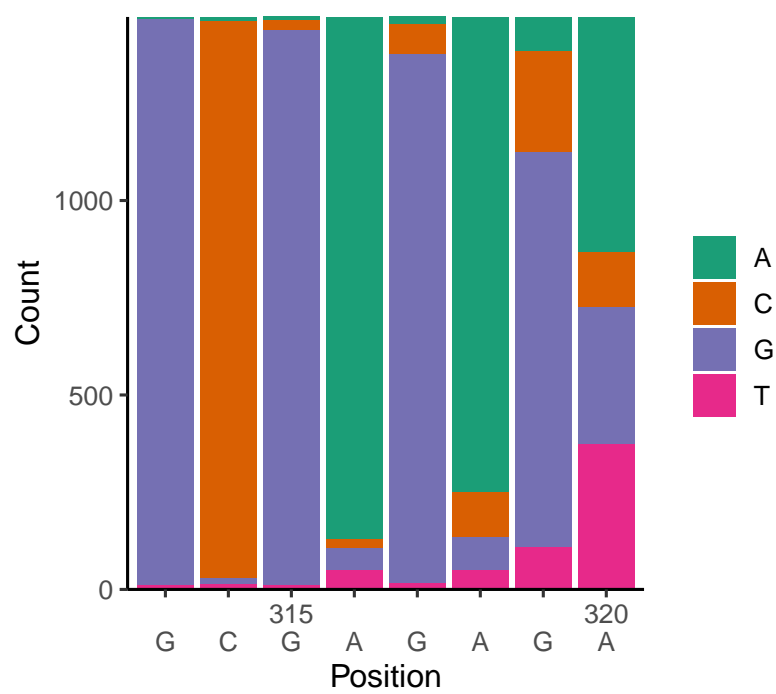


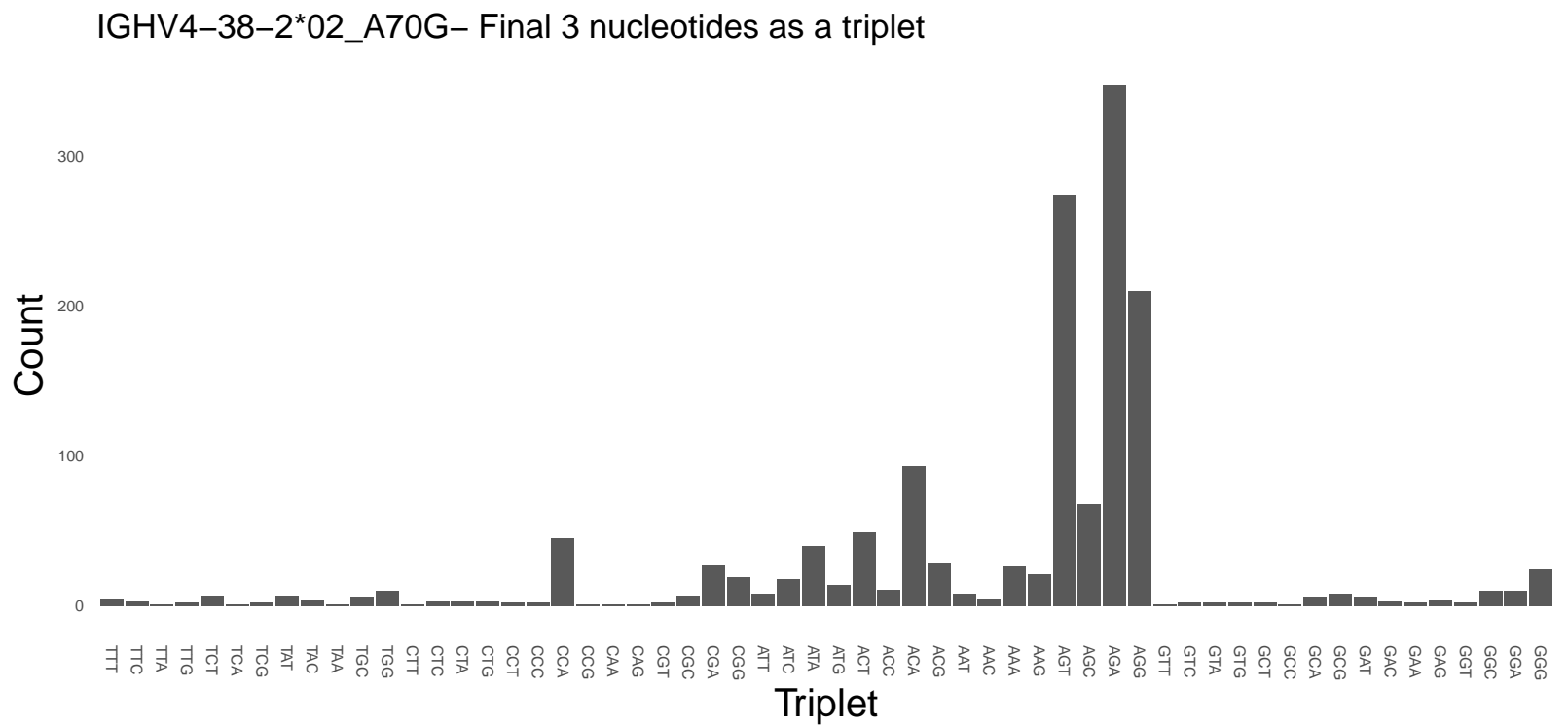
Gene IGHV4-38-2*02_A70G



Gene IGHV4-38-2*02_A70G

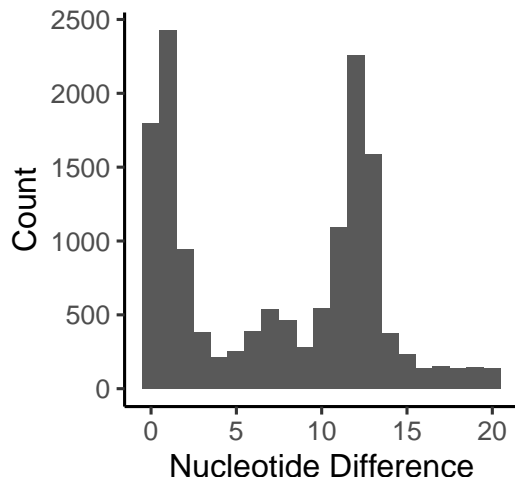


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



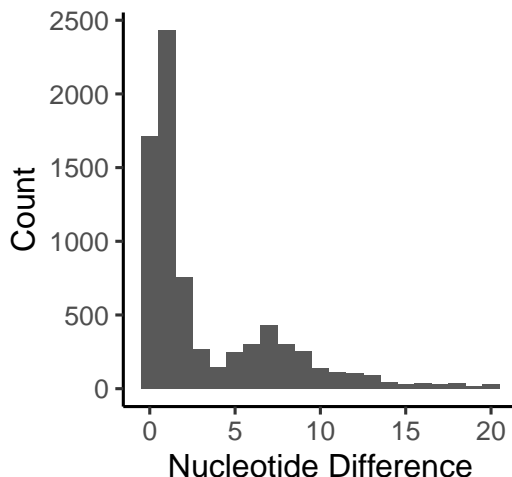
IGHV1-2*02

15956 sequences assigned
1795 (11.2%) exact matches, in which:
1391 unique CDR3
6 unique J



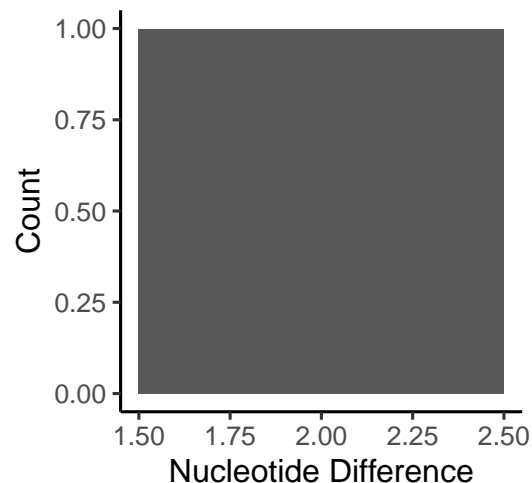
IGHV1-8*01

8613 sequences assigned
1713 (19.9%) exact matches, in which:
1349 unique CDR3
6 unique J



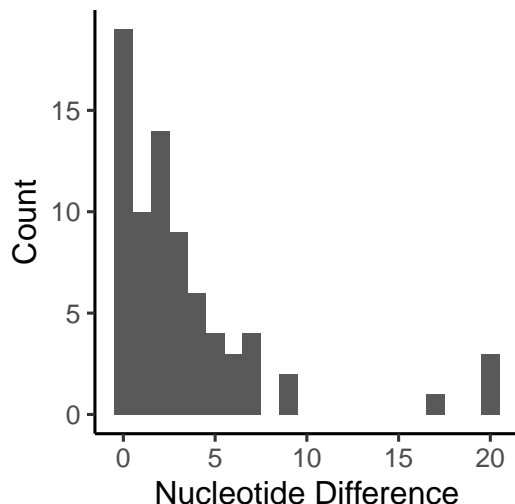
IGHV1-38-4*01

1 sequences assigned
No exact matches.



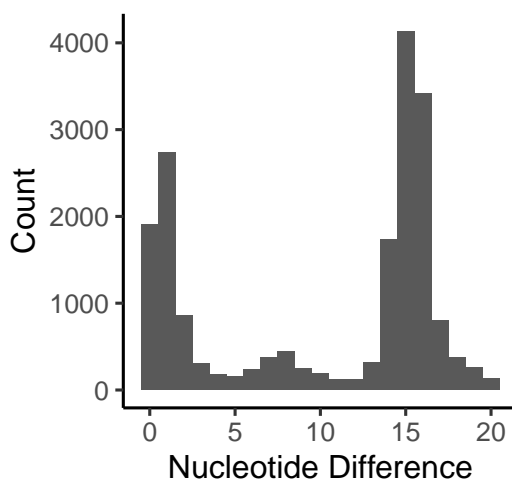
IGHV1-3*02

77 sequences assigned
19 (24.7%) exact matches, in which:
19 unique CDR3
4 unique J



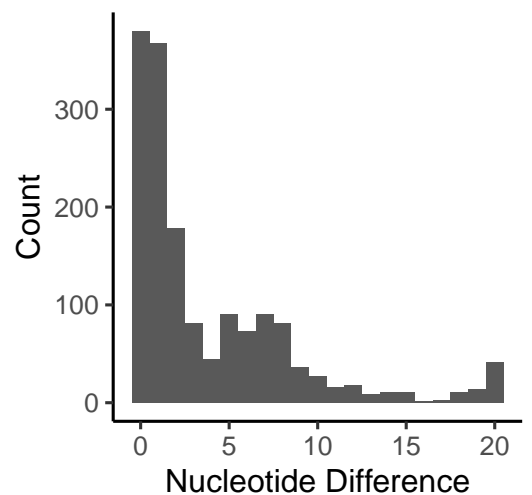
IGHV1-18*04

20075 sequences assigned
1903 (9.5%) exact matches, in which:
1483 unique CDR3
6 unique J



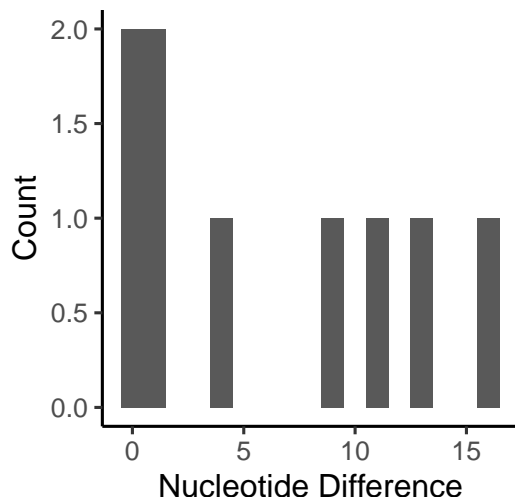
IGHV1-46*01

1724 sequences assigned
380 (22%) exact matches, in which:
326 unique CDR3
6 unique J



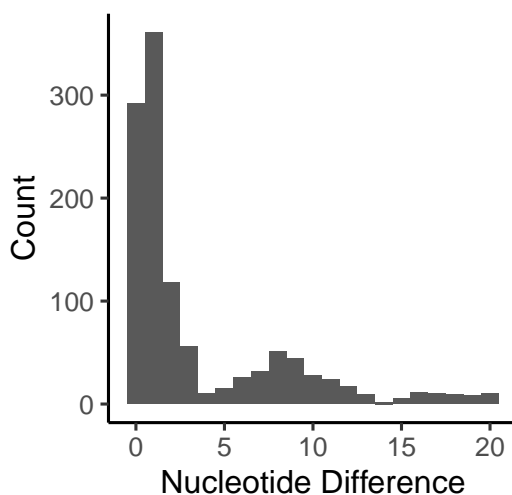
IGHV1-3*01_05

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



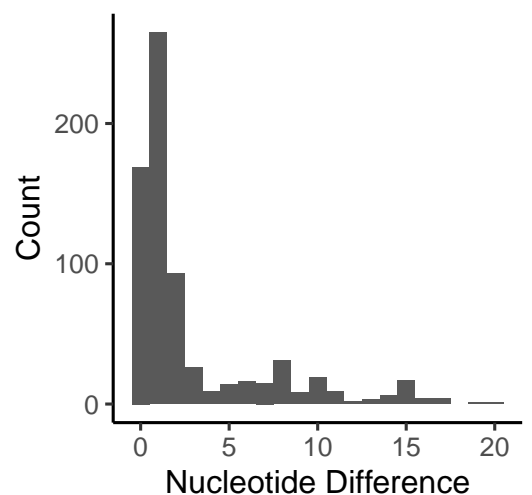
IGHV1-24*01

1154 sequences assigned
292 (25.3%) exact matches, in which:
226 unique CDR3
6 unique J



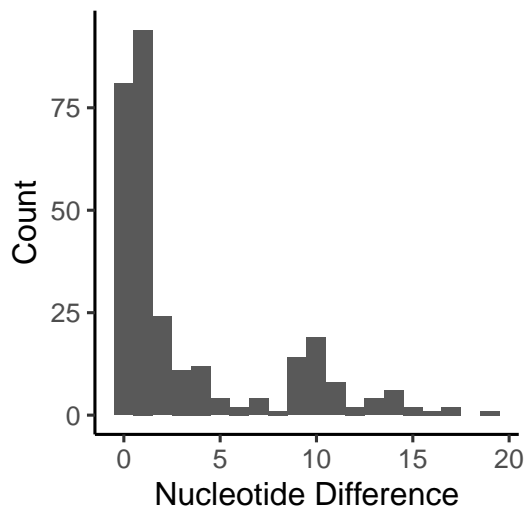
IGHV1-46*03

833 sequences assigned
169 (20.3%) exact matches, in which:
106 unique CDR3
5 unique J



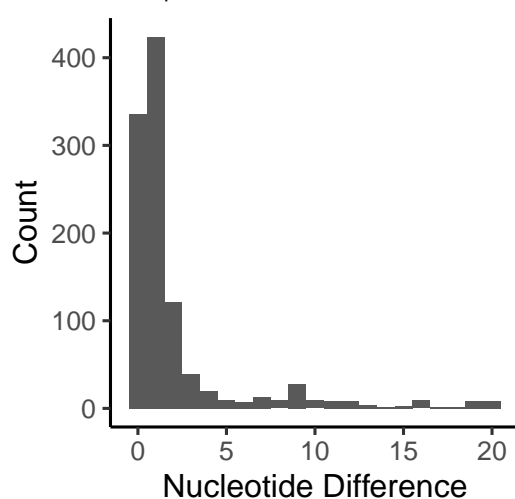
IGHV1-58*02

544 sequences assigned
81 (14.9%) exact matches, in which:
67 unique CDR3
6 unique J



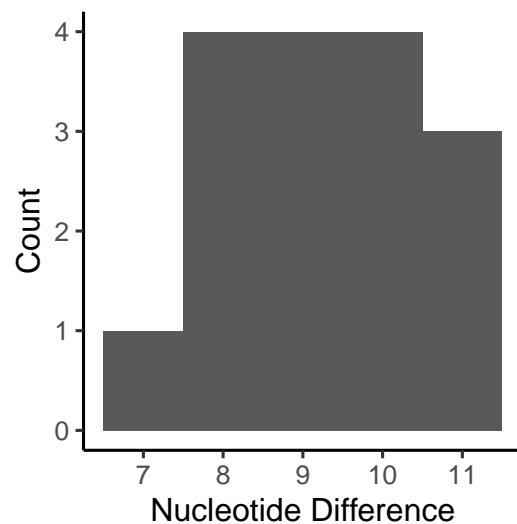
IGHV1-69*02

1122 sequences assigned
336 (29.9%) exact matches, in which:
278 unique CDR3
6 unique J



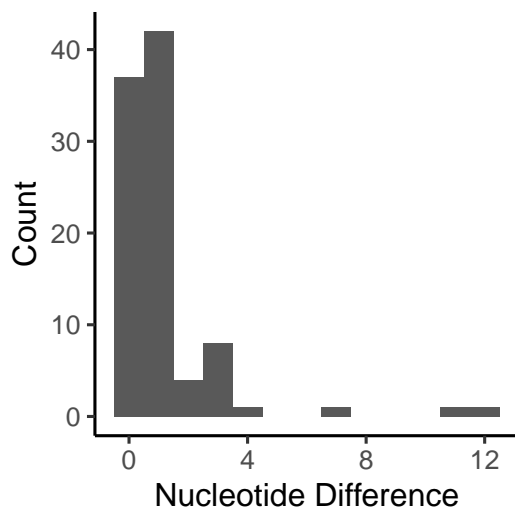
IGHV1-NL1*01

16 sequences assigned
No exact matches.



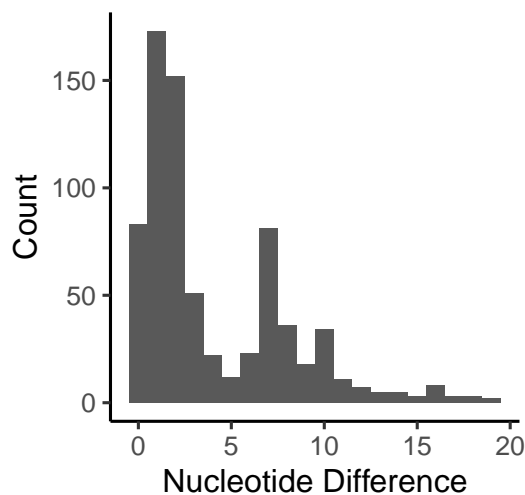
IGHV1-58*01_03

96 sequences assigned
37 (38.5%) exact matches, in which:
31 unique CDR3
4 unique J



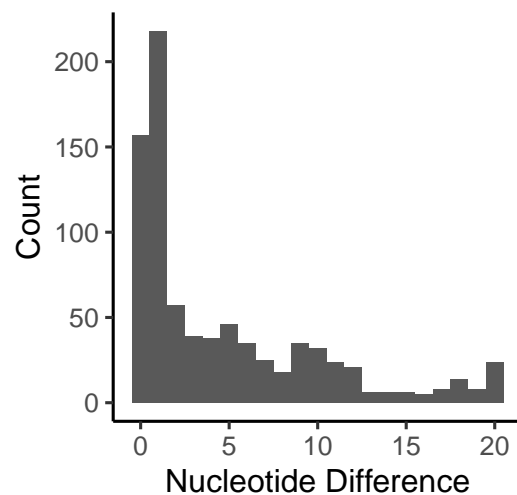
IGHV1-69*04_09

748 sequences assigned
83 (11.1%) exact matches, in which:
80 unique CDR3
5 unique J



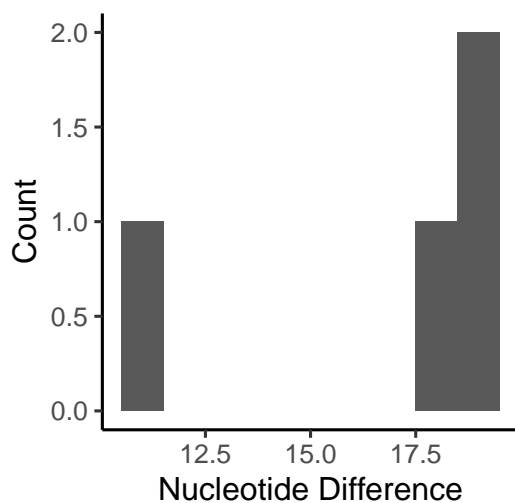
IGHV2-5*02

1109 sequences assigned
157 (14.2%) exact matches, in which:
121 unique CDR3
5 unique J



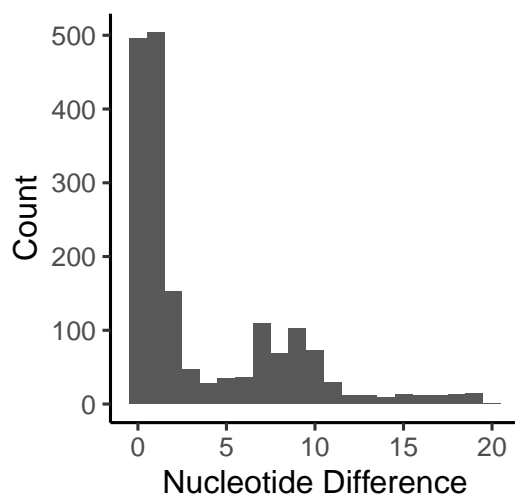
IGHV1-69-2*01

5 sequences assigned
No exact matches.



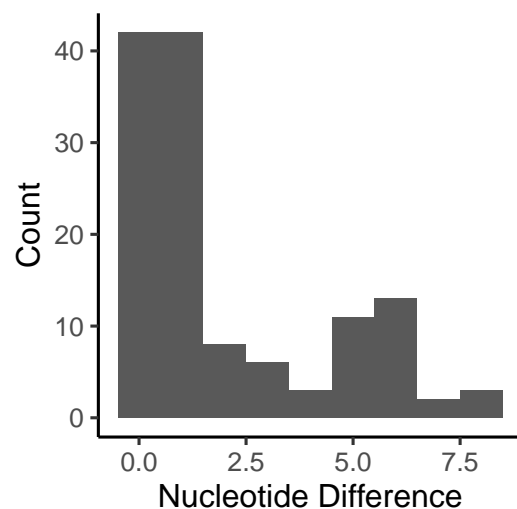
IGHV1-69*06_14

1892 sequences assigned
496 (26.2%) exact matches, in which:
436 unique CDR3
6 unique J



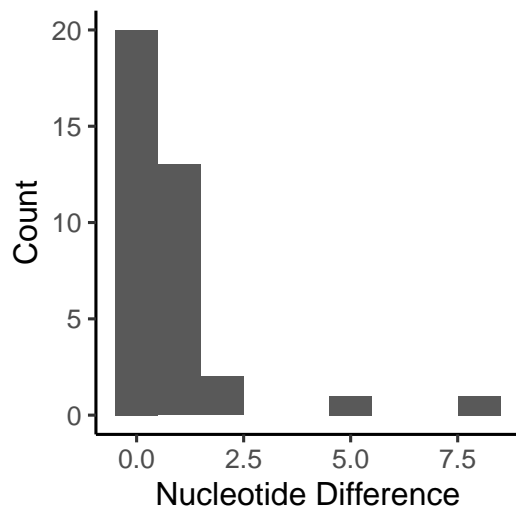
IGHV2-26*01

139 sequences assigned
42 (30.2%) exact matches, in which:
30 unique CDR3
4 unique J



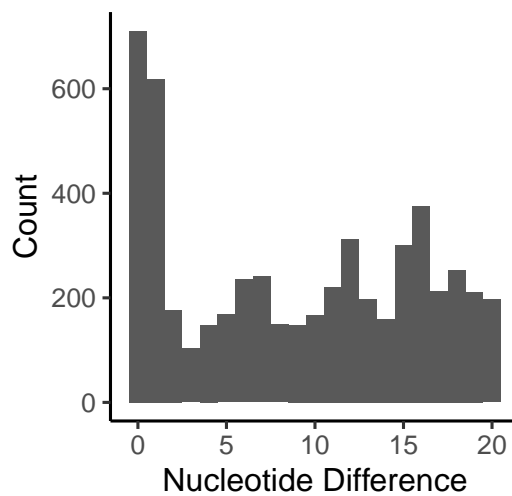
IGHV2-26*02

37 sequences assigned
20 (54.1%) exact matches, in which:
18 unique CDR3
4 unique J



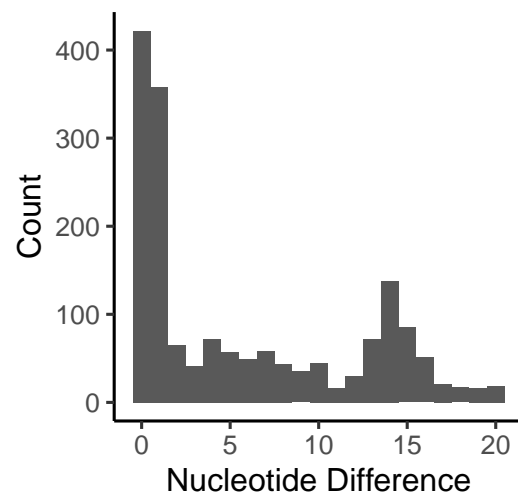
IGHV3-7*01

6563 sequences assigned
711 (10.8%) exact matches, in which:
499 unique CDR3
6 unique J



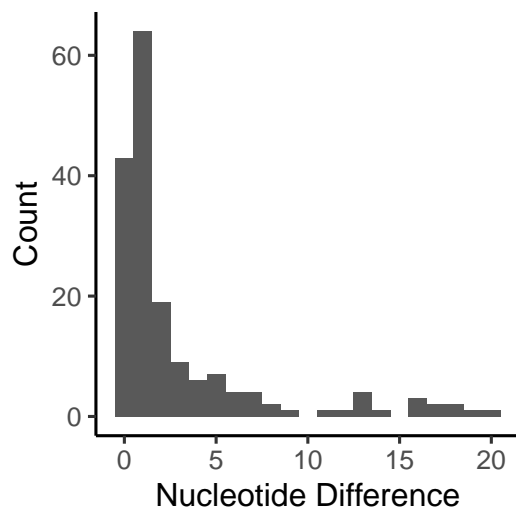
IGHV3-11*01

1885 sequences assigned
422 (22.4%) exact matches, in which:
269 unique CDR3
6 unique J



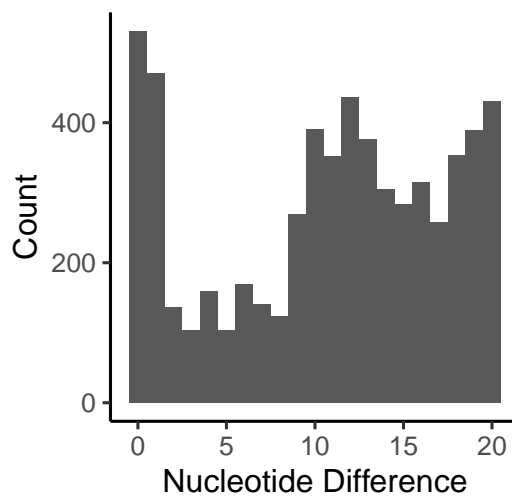
IGHV2-70*01

200 sequences assigned
43 (21.5%) exact matches, in which:
32 unique CDR3
4 unique J



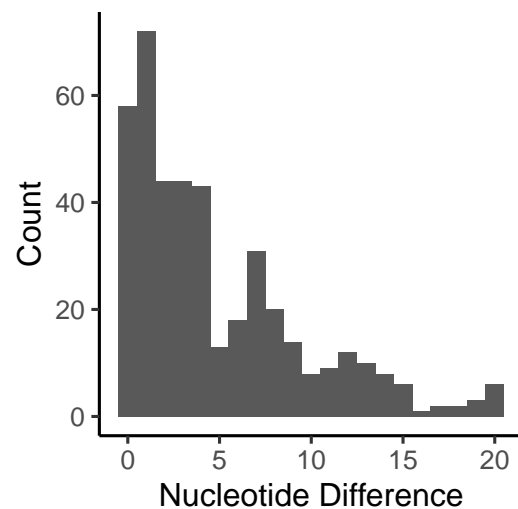
IGHV3-7*03

8014 sequences assigned
531 (6.6%) exact matches, in which:
342 unique CDR3
5 unique J



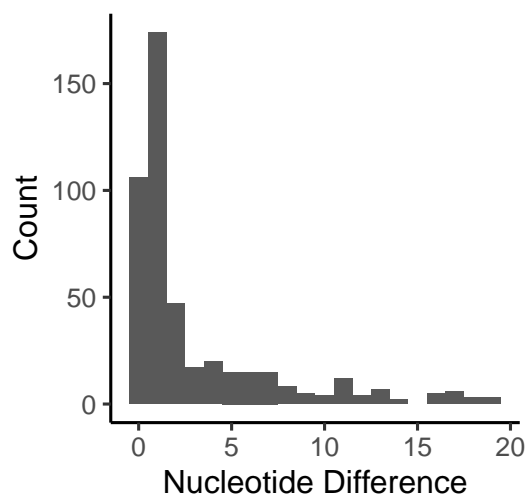
IGHV3-11*04

439 sequences assigned
58 (13.2%) exact matches, in which:
54 unique CDR3
4 unique J



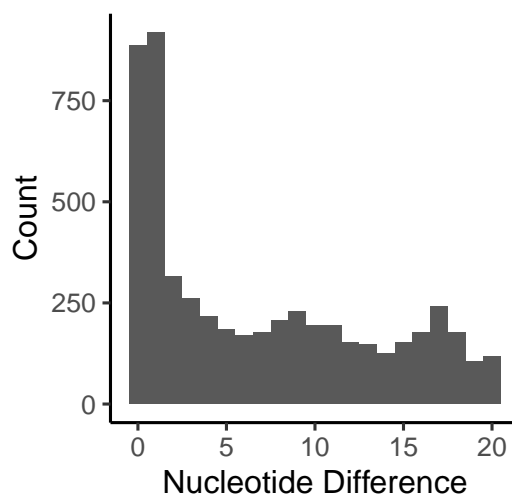
IGHV2-70*11_15

480 sequences assigned
106 (22.1%) exact matches, in which:
77 unique CDR3
5 unique J



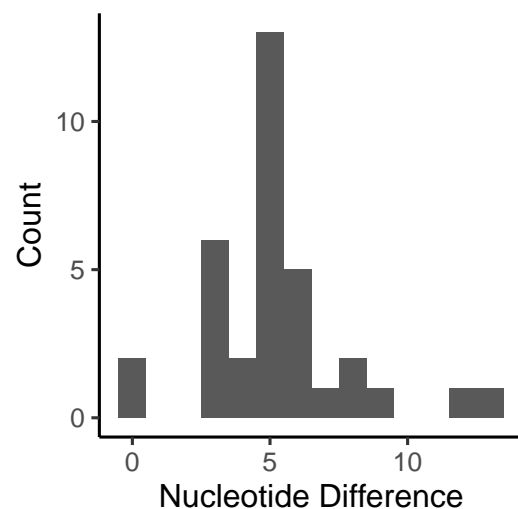
IGHV3-9*01

6378 sequences assigned
887 (13.9%) exact matches, in which:
485 unique CDR3
6 unique J



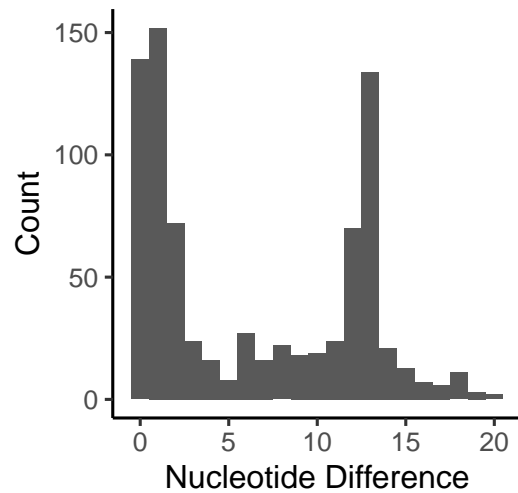
IGHV3-11*06

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



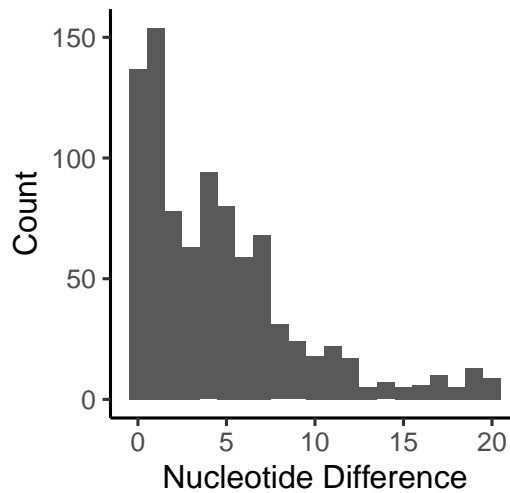
IGHV3-13*01

1082 sequences assigned
139 (12.8%) exact matches, in which:
91 unique CDR3
5 unique J



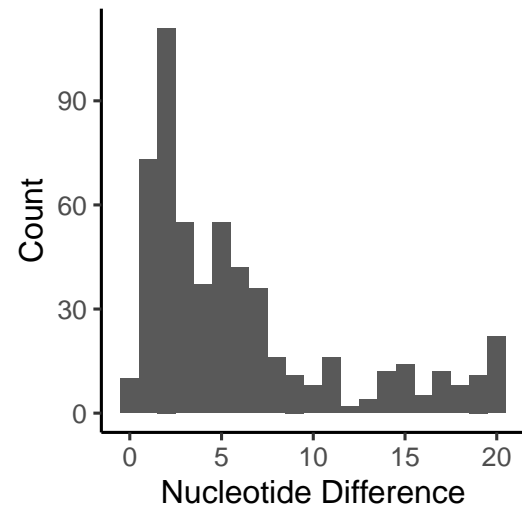
IGHV3-21*04

1259 sequences assigned
137 (10.9%) exact matches, in which:
120 unique CDR3
5 unique J



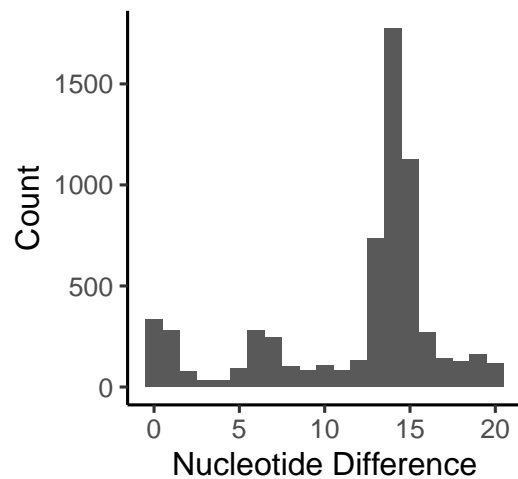
IGHV3-33*05

655 sequences assigned
10 (1.5%) exact matches, in which:
10 unique CDR3
4 unique J



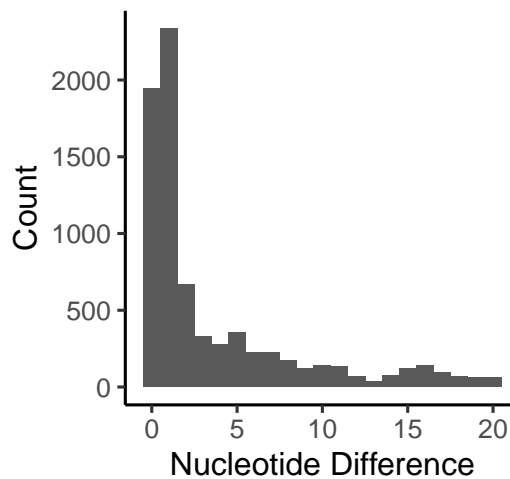
IGHV3-15*01_02

6843 sequences assigned
333 (4.9%) exact matches, in which:
188 unique CDR3
6 unique J



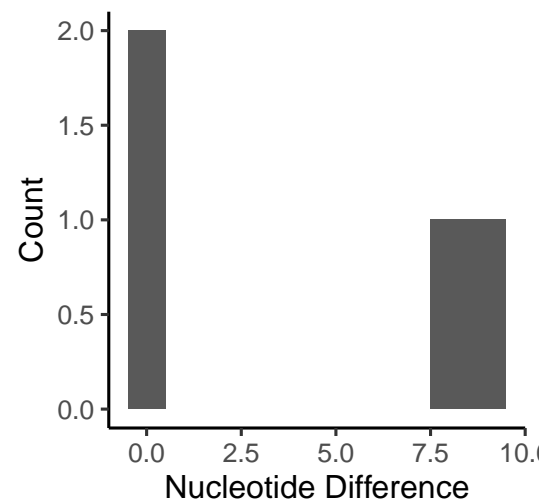
IGHV3-21*01_02

9053 sequences assigned
1947 (21.5%) exact matches, in which:
1181 unique CDR3
6 unique J



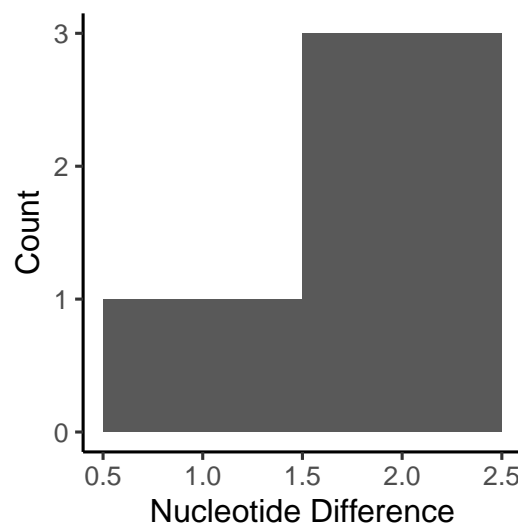
IGHV3-35*01

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



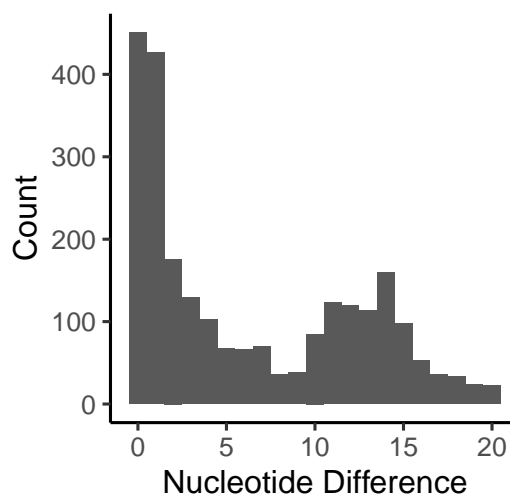
IGHV3-20*03_04

8 sequences assigned
No exact matches.



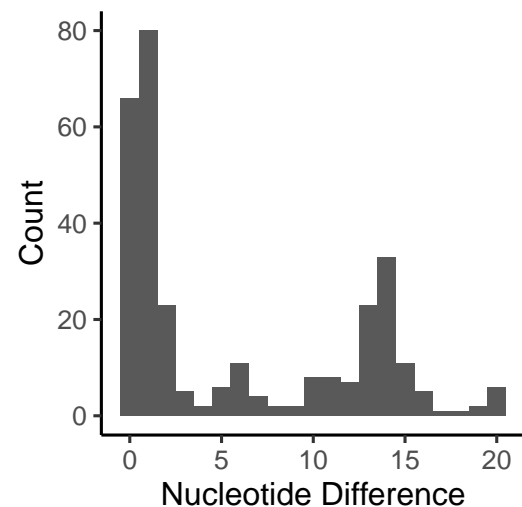
IGHV3-33*01

3394 sequences assigned
451 (13.3%) exact matches, in which:
302 unique CDR3
5 unique J



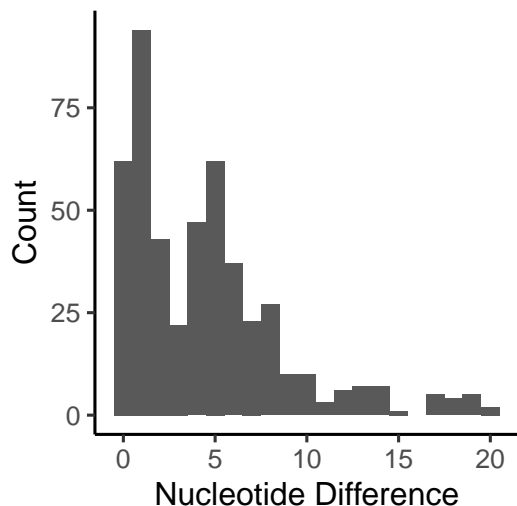
IGHV3-43*01

425 sequences assigned
66 (15.5%) exact matches, in which:
38 unique CDR3
4 unique J



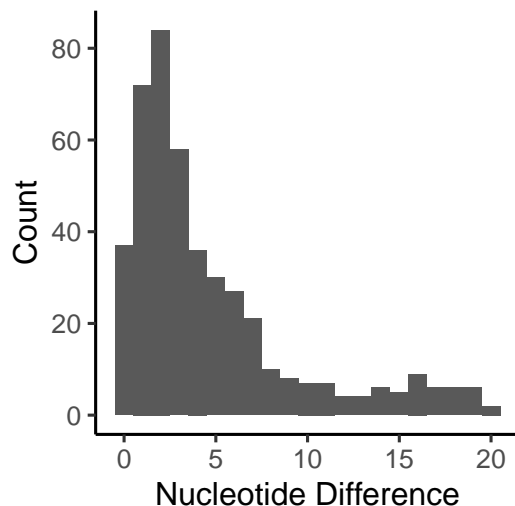
IGHV3-48*01

527 sequences assigned
62 (11.8%) exact matches, in which:
59 unique CDR3
5 unique J



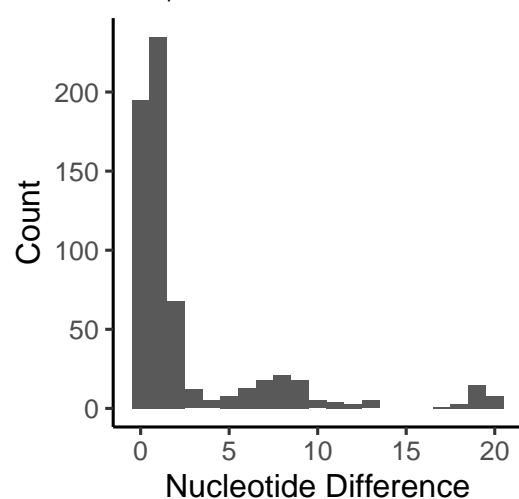
IGHV3-48*04

499 sequences assigned
37 (7.4%) exact matches, in which:
35 unique CDR3
4 unique J



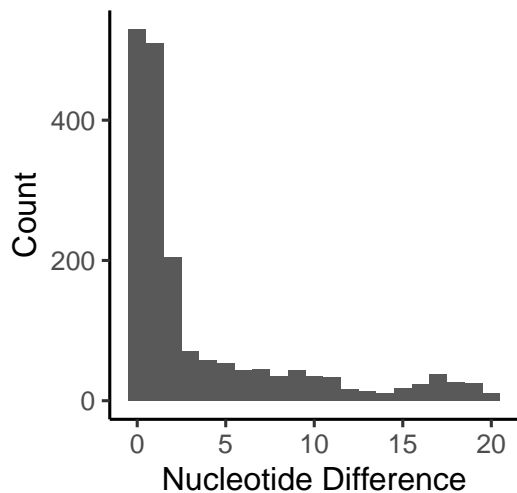
IGHV3-53*04

666 sequences assigned
195 (29.3%) exact matches, in which:
132 unique CDR3
5 unique J



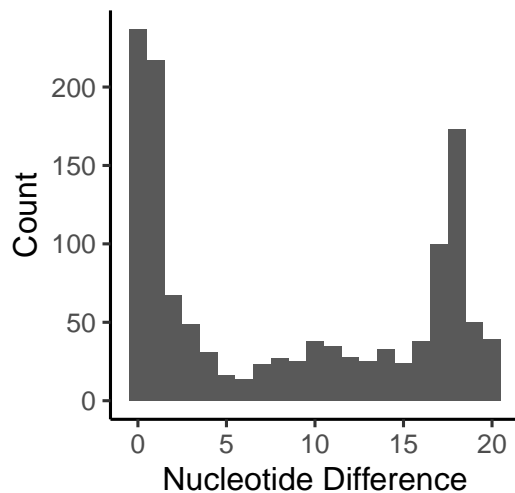
IGHV3-48*02

2303 sequences assigned
530 (23%) exact matches, in which:
322 unique CDR3
6 unique J



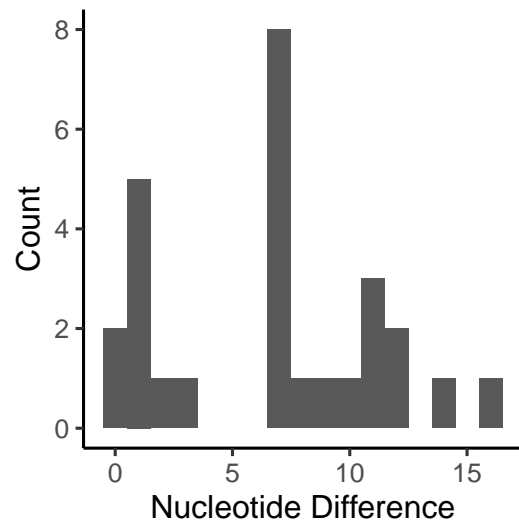
IGHV3-49*04

1893 sequences assigned
237 (12.5%) exact matches, in which:
133 unique CDR3
6 unique J



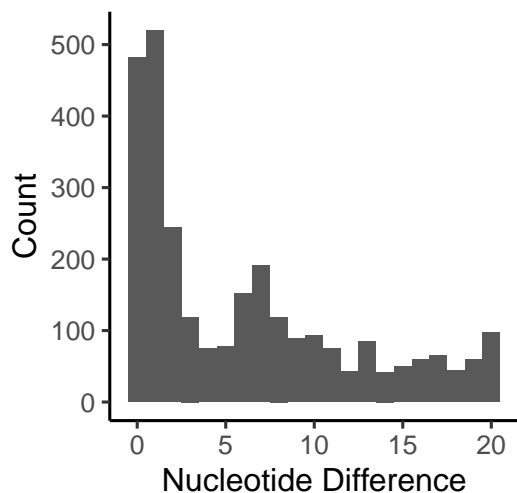
IGHV3-53*05

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



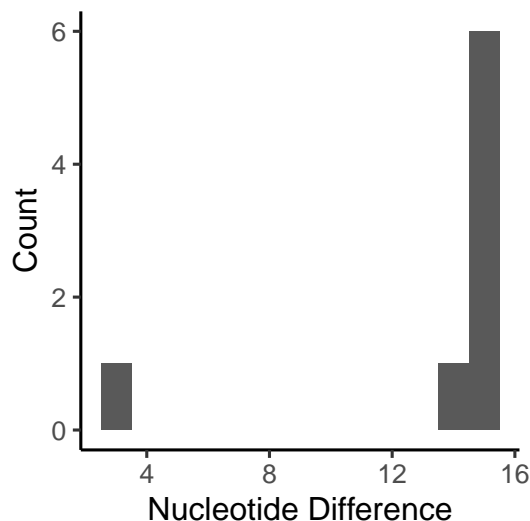
IGHV3-48*03

3864 sequences assigned
482 (12.5%) exact matches, in which:
287 unique CDR3
6 unique J



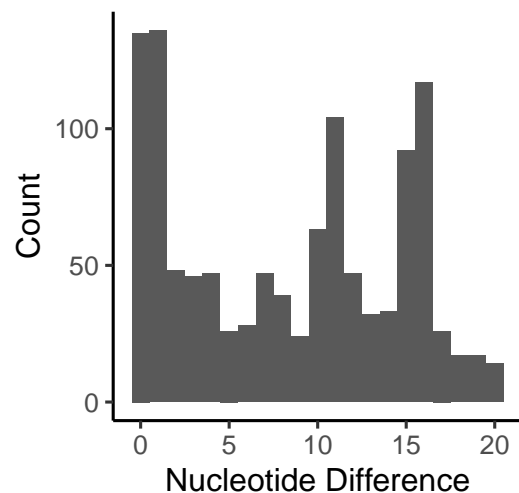
IGHV3-52*01_03

8 sequences assigned
No exact matches.



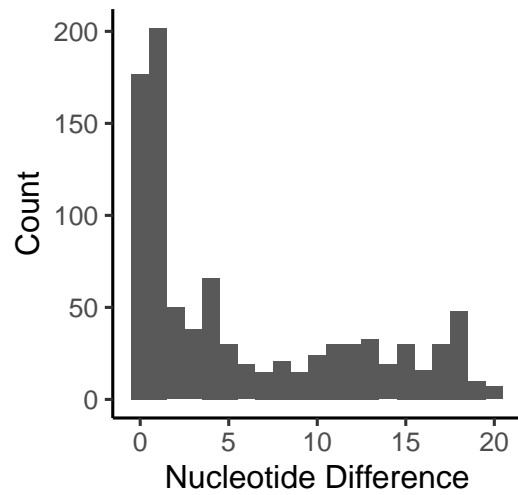
IGHV3-53*01_02

1403 sequences assigned
135 (9.6%) exact matches, in which:
91 unique CDR3
5 unique J



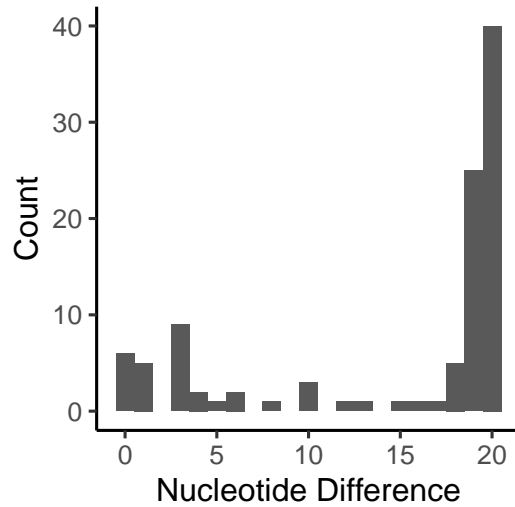
IGHV3-64*01

1012 sequences assigned
177 (17.5%) exact matches, in which:
112 unique CDR3
5 unique J



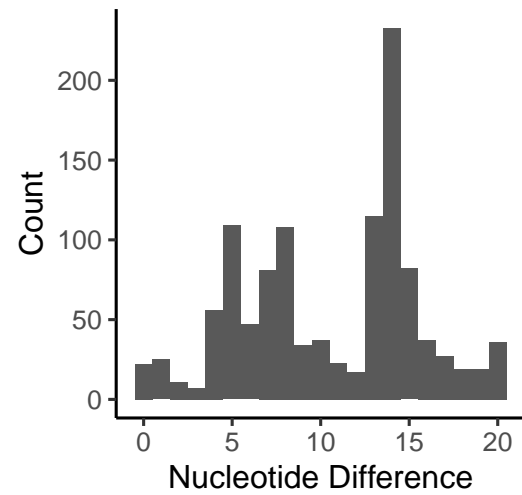
IGHV3-69-1*01

405 sequences assigned
6 (1.5%) exact matches, in which:
3 unique CDR3
2 unique J



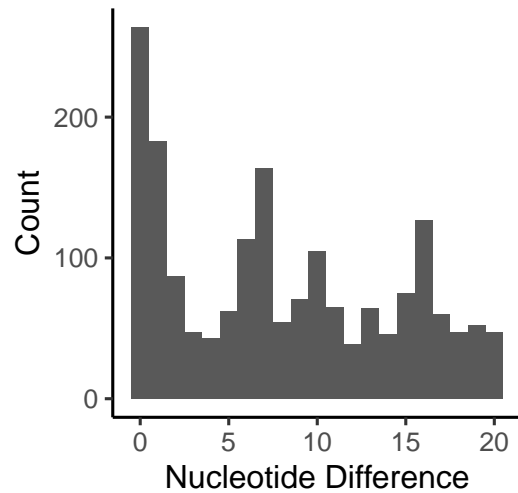
IGHV3-72*01

1297 sequences assigned
22 (1.7%) exact matches, in which:
17 unique CDR3
4 unique J



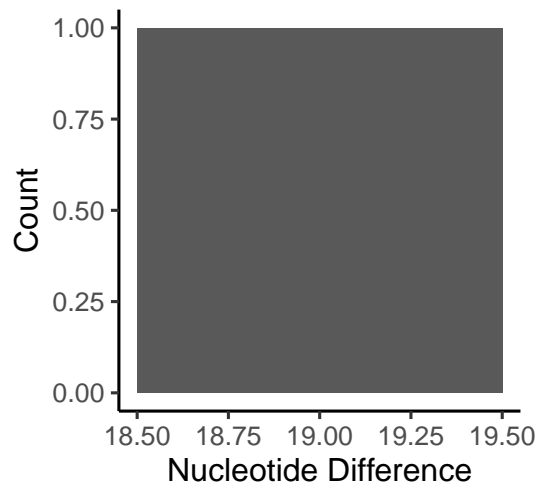
IGHV3-66*01

2492 sequences assigned
264 (10.6%) exact matches, in which:
182 unique CDR3
5 unique J



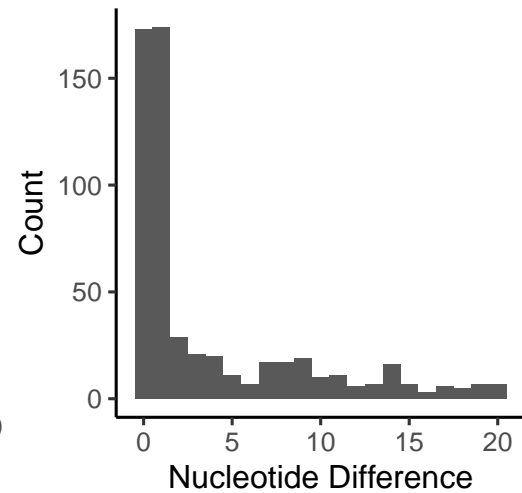
IGHV3-69-1*02

14 sequences assigned
No exact matches.



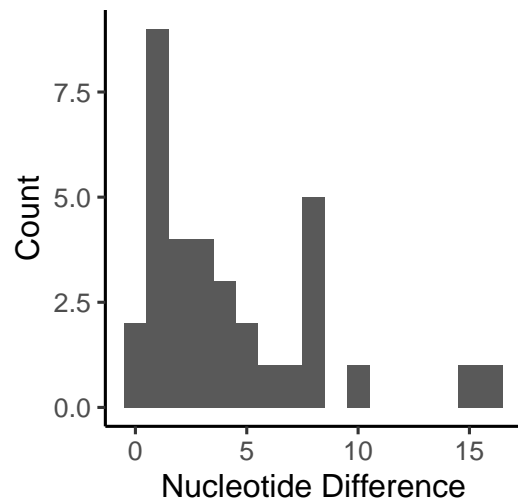
IGHV3-73*01_02

734 sequences assigned
173 (23.6%) exact matches, in which:
96 unique CDR3
5 unique J



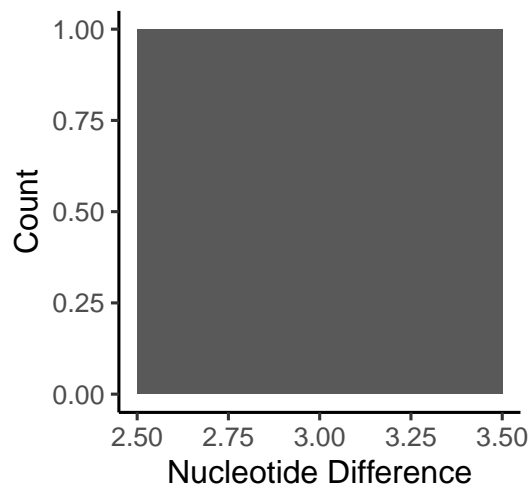
IGHV3-66*03

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



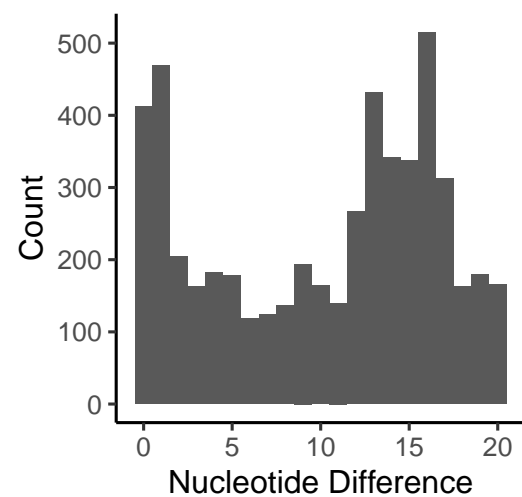
IGHV3-71*03

1 sequences assigned
No exact matches.



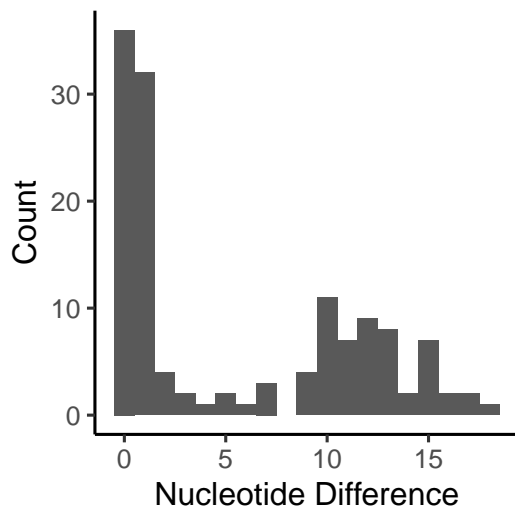
IGHV3-74*01_02

7595 sequences assigned
412 (5.4%) exact matches, in which:
269 unique CDR3
6 unique J



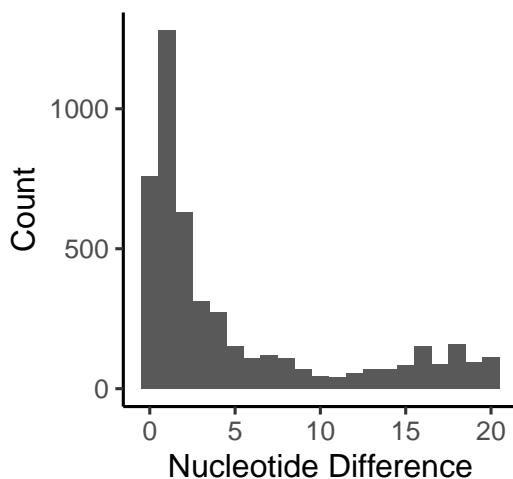
IGHV3-43D*04

141 sequences assigned
36 (25.5%) exact matches, in which:
21 unique CDR3
2 unique J



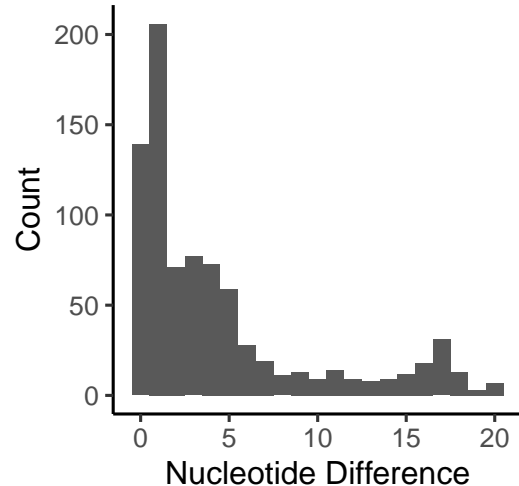
IGHV4-4*07

5537 sequences assigned
761 (13.7%) exact matches, in which:
592 unique CDR3
6 unique J



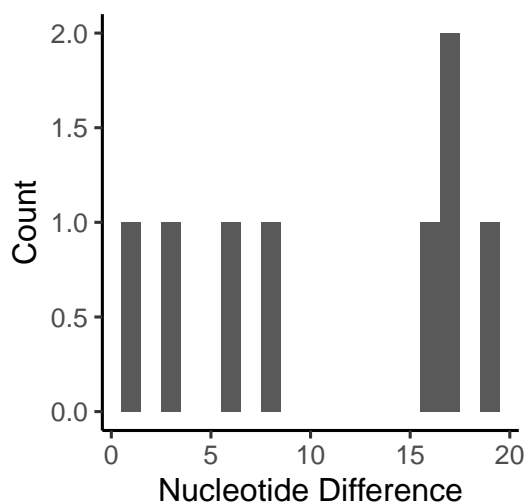
IGHV4-30-4*01

860 sequences assigned
139 (16.2%) exact matches, in which:
108 unique CDR3
5 unique J



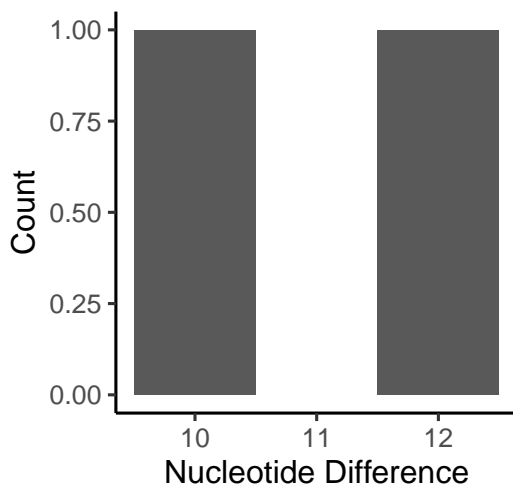
IGHV3-64D*06

12 sequences assigned
No exact matches.



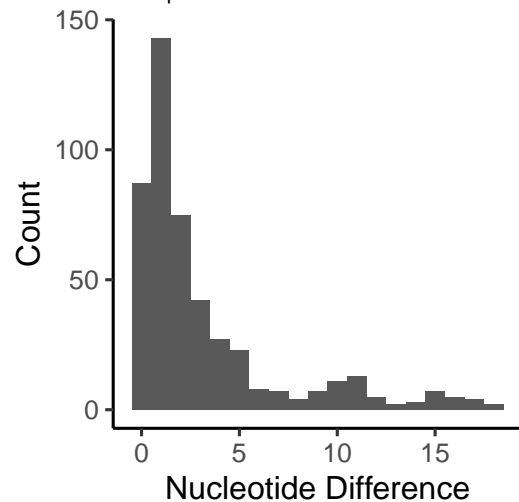
IGHV4-28*03

2 sequences assigned
No exact matches.



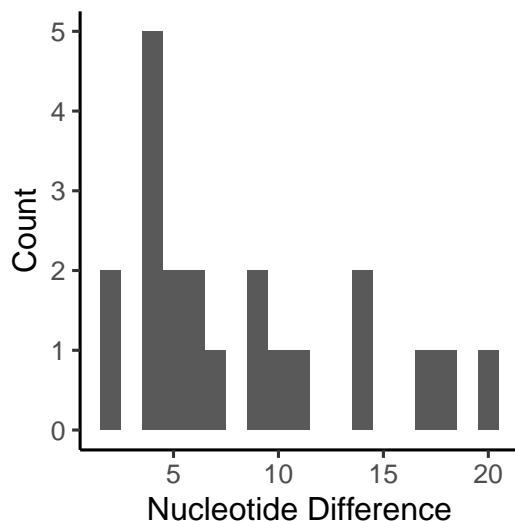
IGHV4-30-2*01

492 sequences assigned
87 (17.7%) exact matches, in which:
64 unique CDR3
5 unique J



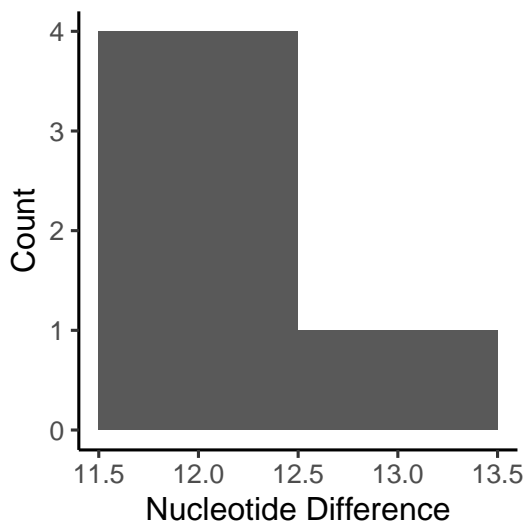
IGHV3-NL1*01

35 sequences assigned
No exact matches.



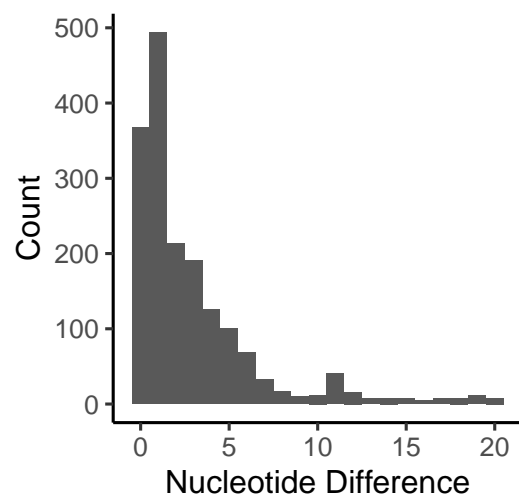
IGHV4-28*01_07

5 sequences assigned
No exact matches.



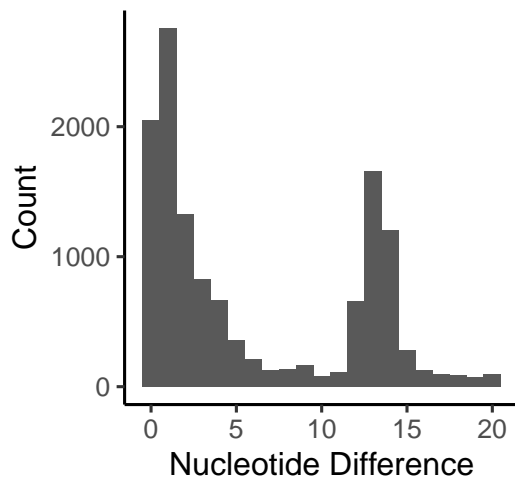
IGHV4-31*03_04

1830 sequences assigned
367 (20.1%) exact matches, in which:
289 unique CDR3
6 unique J



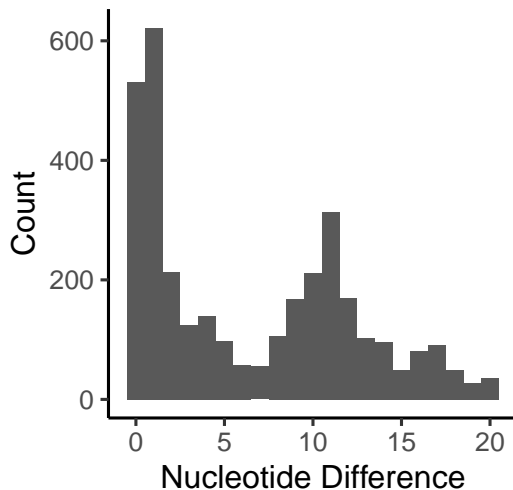
IGHV4-34*01_02

14177 sequences assigned
2053 (14.5%) exact matches, in which:
1523 unique CDR3
6 unique J



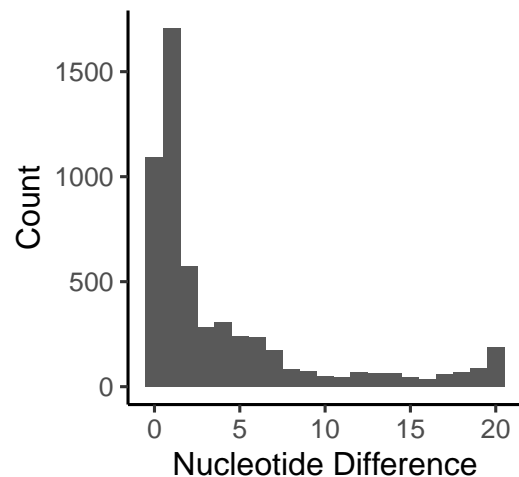
IGHV4-39*01_05

3826 sequences assigned
531 (13.9%) exact matches, in which:
404 unique CDR3
6 unique J



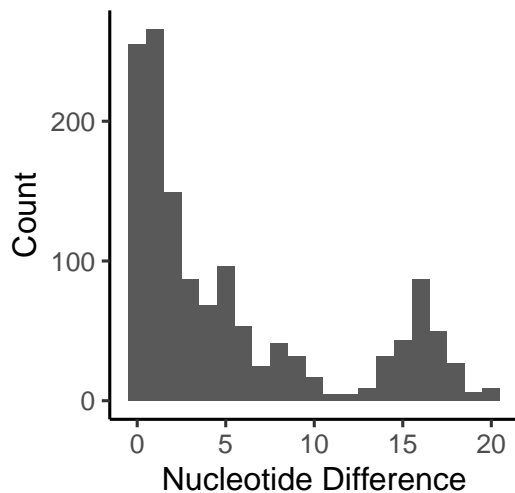
IGHV4-59*01_07

7933 sequences assigned
1093 (13.8%) exact matches, in which:
871 unique CDR3
5 unique J



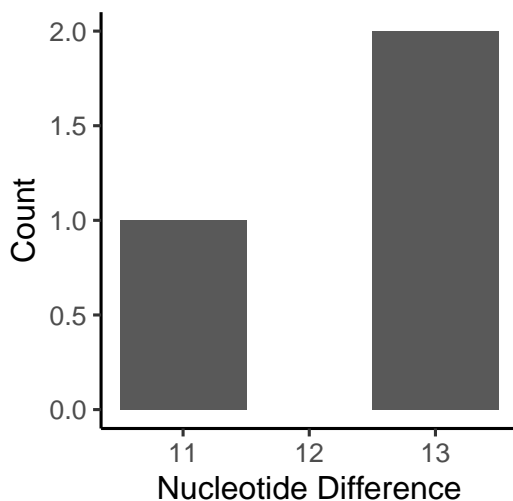
IGHV4-38-2*02_A70G

1472 sequences assigned
255 (17.3%) exact matches, in which:
197 unique CDR3
5 unique J



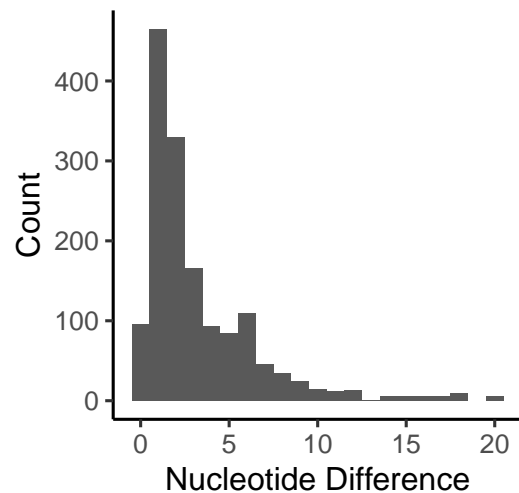
IGHV4-55*02_04_08

3 sequences assigned
No exact matches.



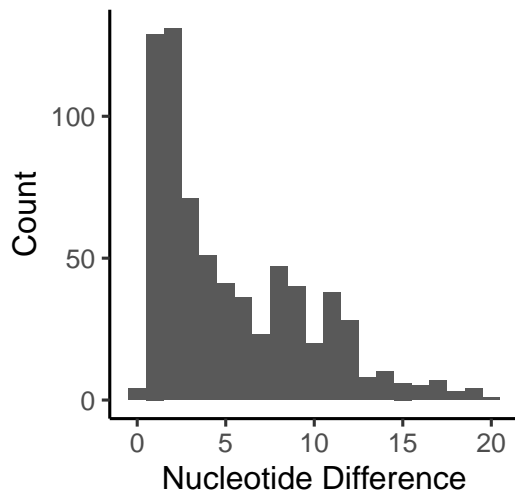
IGHV4-59*12

1811 sequences assigned
96 (5.3%) exact matches, in which:
93 unique CDR3
5 unique J



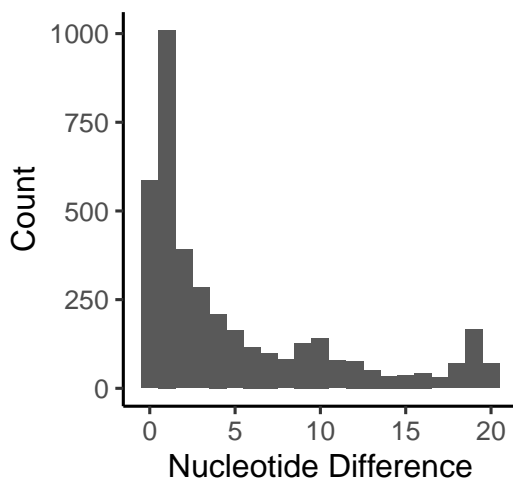
IGHV4-39*07

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



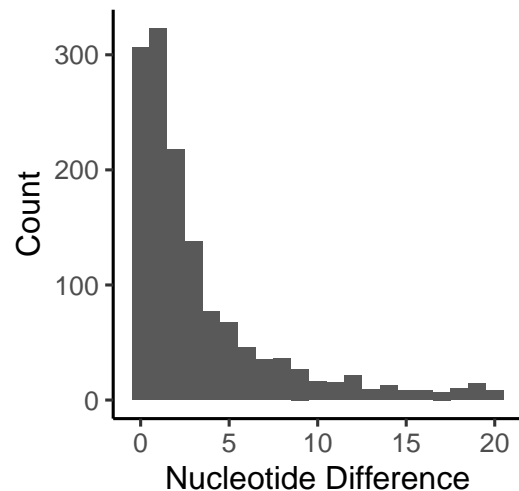
IGHV4-59*08

4286 sequences assigned
586 (13.7%) exact matches, in which:
453 unique CDR3
6 unique J



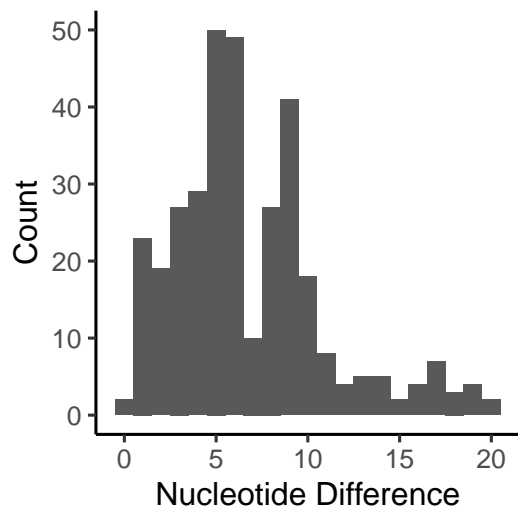
IGHV4-61*01

1434 sequences assigned
306 (21.3%) exact matches, in which:
264 unique CDR3
5 unique J



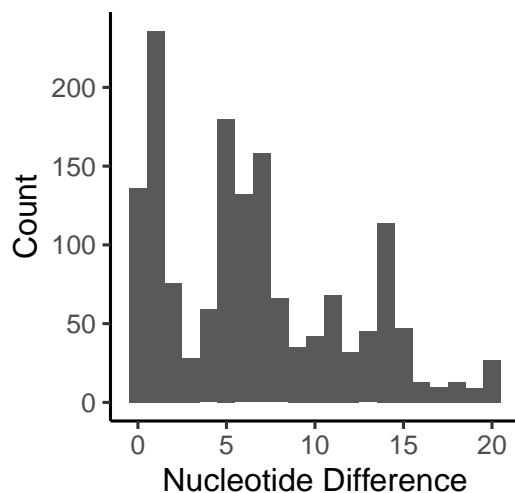
IGHV4-61*08

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



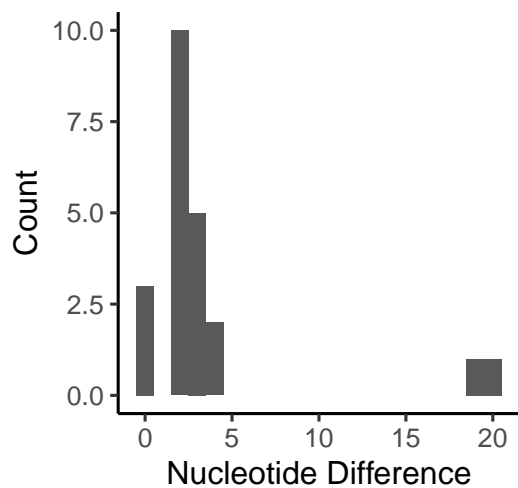
IGHV6-1*01_02

1603 sequences assigned
136 (8.5%) exact matches, in which:
111 unique CDR3
4 unique J



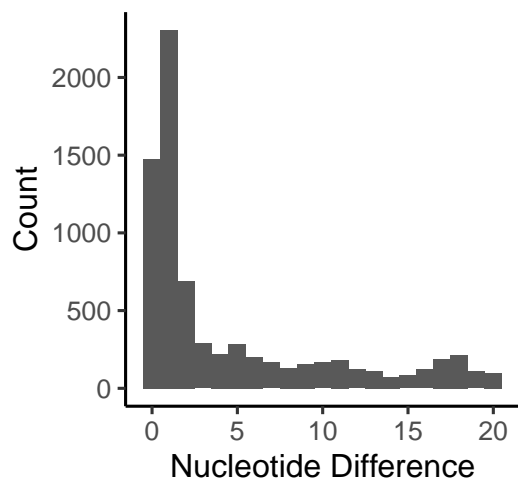
IGHV5-10-1*01_03

23 sequences assigned
3 (13%) exact matches, in which:
3 unique CDR3
2 unique J



IGHV5-51*01_03

8271 sequences assigned
1475 (17.8%) exact matches, in which:
764 unique CDR3
6 unique J





Novel sequence(s) IGHV1-69*01_12_13_G238A IGHV3-48*03_T303G are not listed in the genotype and will be ignored.

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

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

Novel sequence(s) IGHV4-59*02_G88A are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV3-30*01_T288C IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV3-30*03_T288C are not listed in the genotype and will be ignored.

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

Warning - no inferred sequences found.

Warning - no inferred sequences found.

Novel sequence(s) IGHV3-33*01_G75C IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV3-33*01_G75C IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s) IGHV3-30*03_T288C IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored.