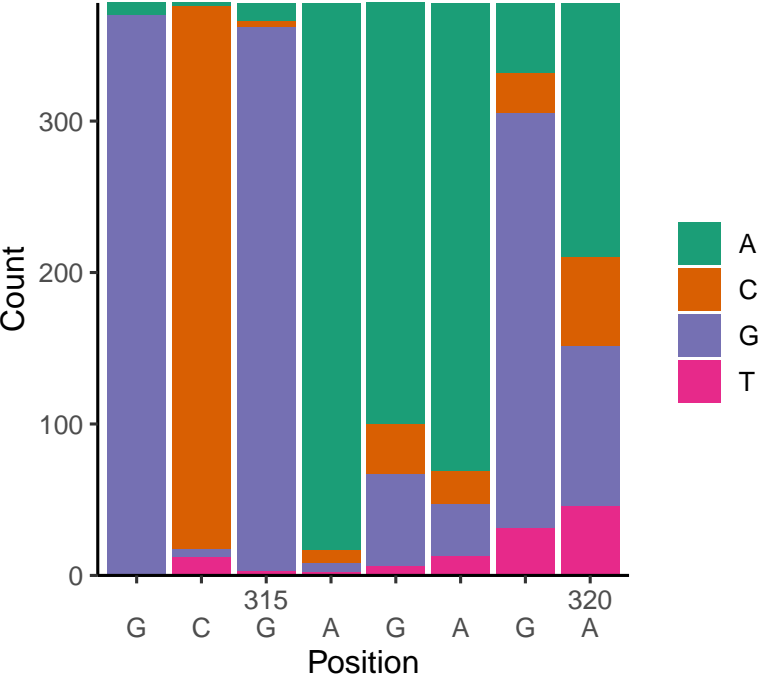


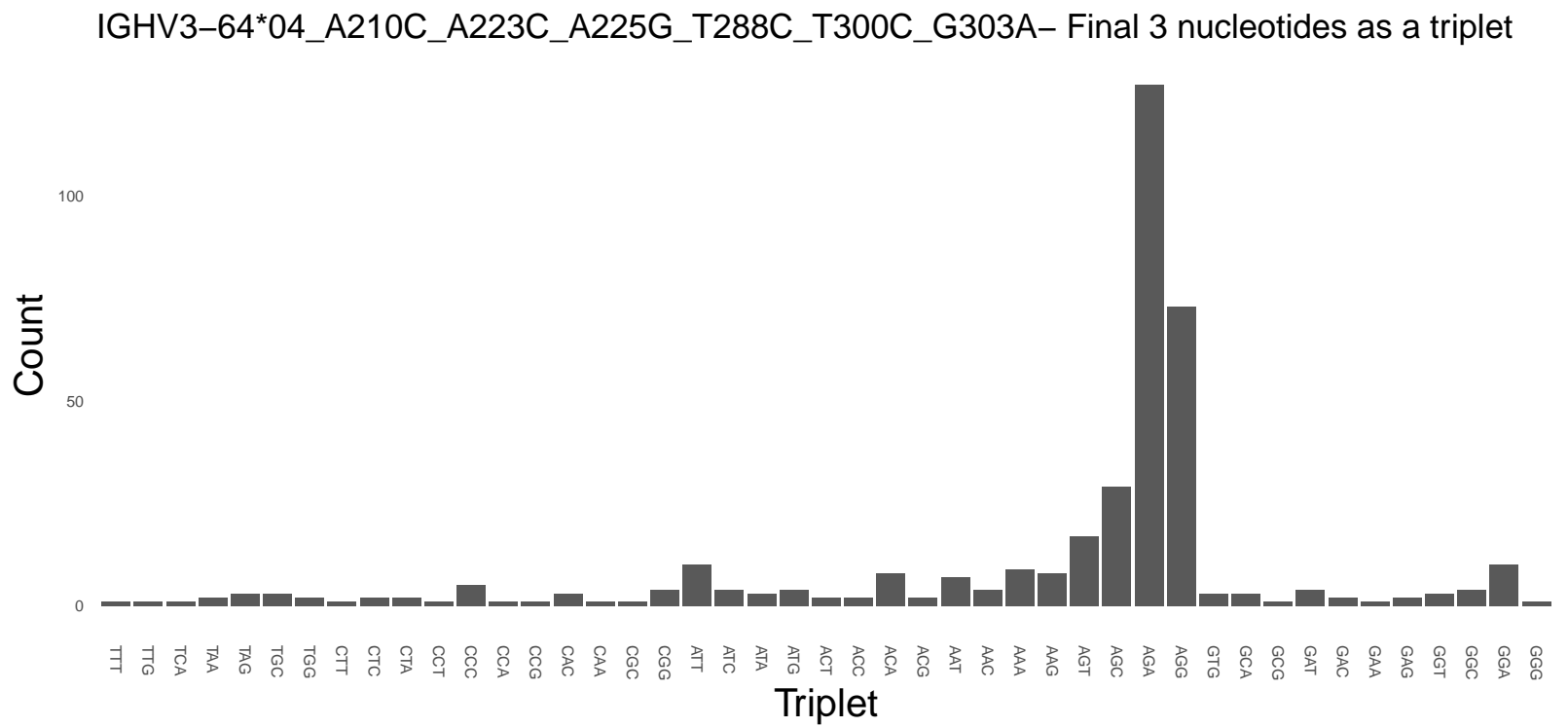
Gene IGHV3-64*04_A210C_A223C_A225G_T288C_T300C_G303A



Gene IGHV3-64*04 A210C A223C A225G T288C T300C G303A

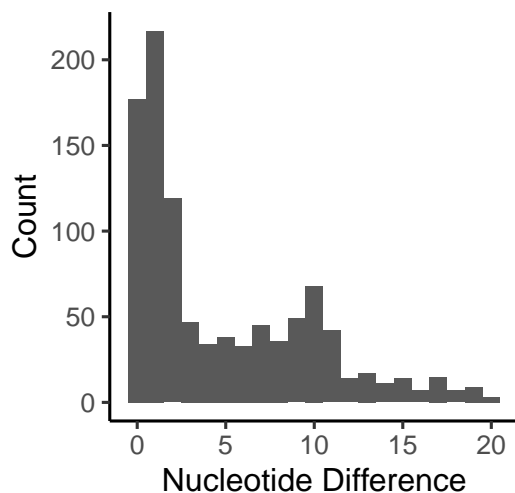


IGHV3-64*04_A210C_A223C_A225G_T288C_T300C_G303A- Final 3 nucleotides as a triplet



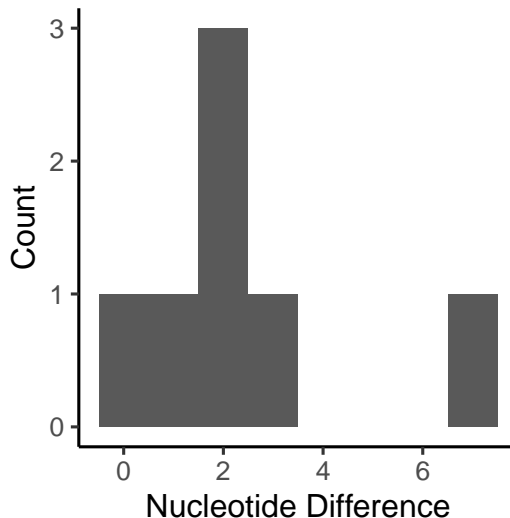
IGHV1-2*04

1008 sequences assigned
177 (17.6%) exact matches, in which:
149 unique CDR3
6 unique J



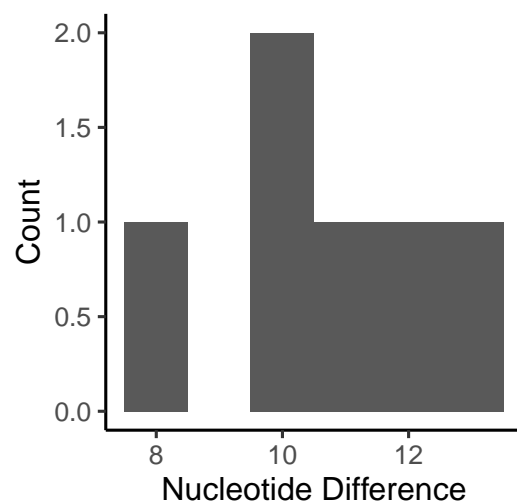
IGHV1-8*01

8 sequences assigned
1 (12.5%) exact matches, in which:
1 unique CDR3
1 unique J



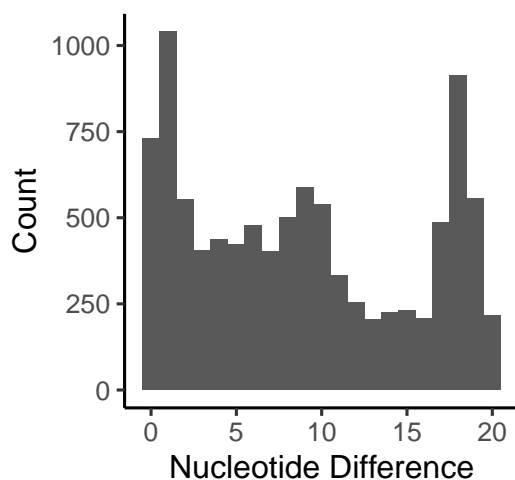
IGHV1-45*02

6 sequences assigned
No exact matches.



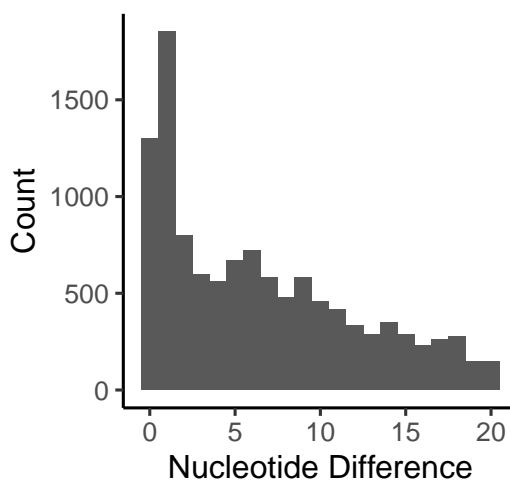
IGHV1-2*06

10436 sequences assigned
731 (7%) exact matches, in which:
563 unique CDR3
7 unique J



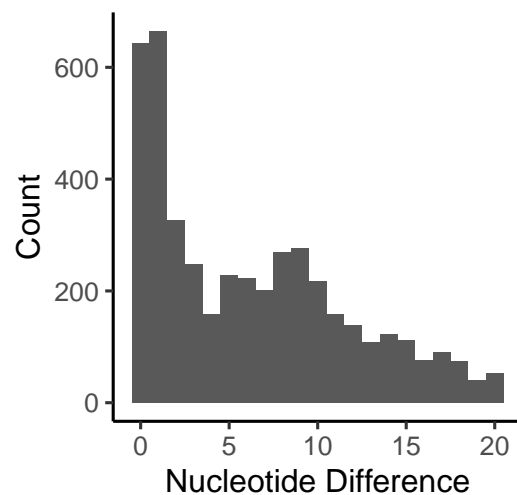
IGHV1-18*01

12459 sequences assigned
1300 (10.4%) exact matches, in which:
991 unique CDR3
7 unique J



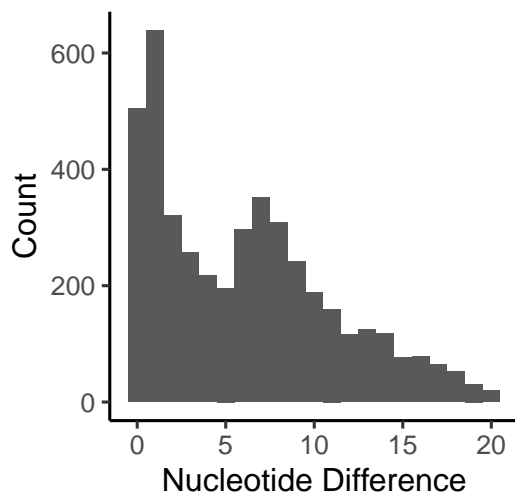
IGHV1-46*01

7583 sequences assigned
643 (8.5%) exact matches, in which:
540 unique CDR3
7 unique J



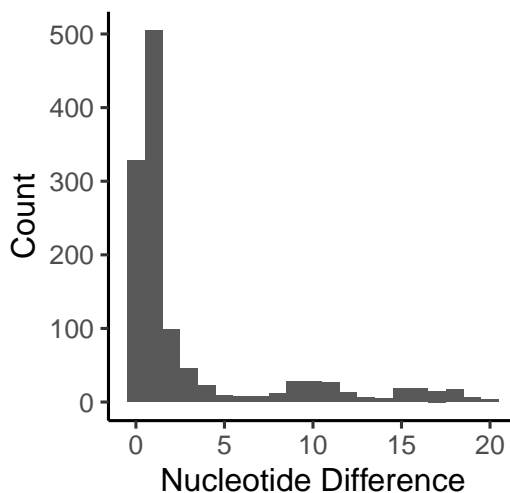
IGHV1-3*01_05

4667 sequences assigned
505 (10.8%) exact matches, in which:
404 unique CDR3
7 unique J



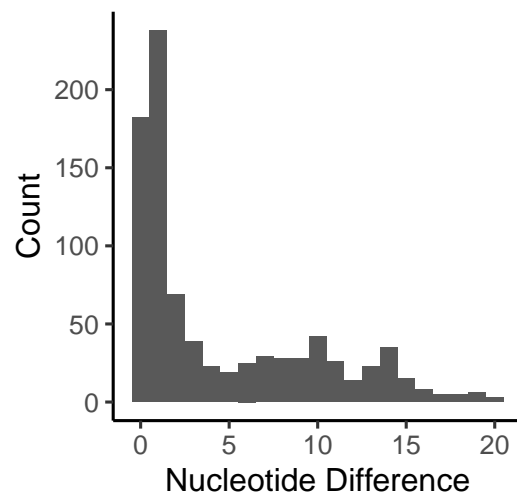
IGHV1-24*01

1231 sequences assigned
328 (26.6%) exact matches, in which:
208 unique CDR3
6 unique J



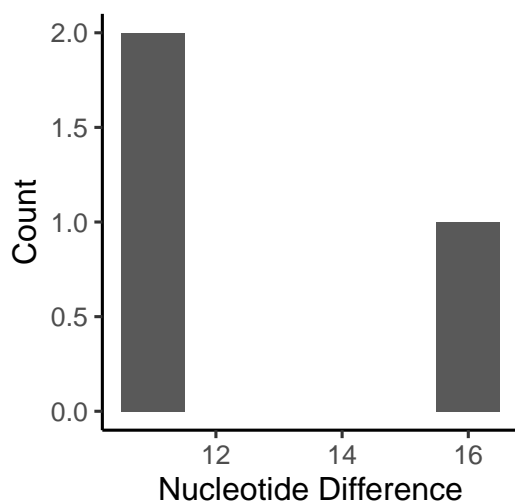
IGHV1-58*01_03

878 sequences assigned
182 (20.7%) exact matches, in which:
146 unique CDR3
7 unique J



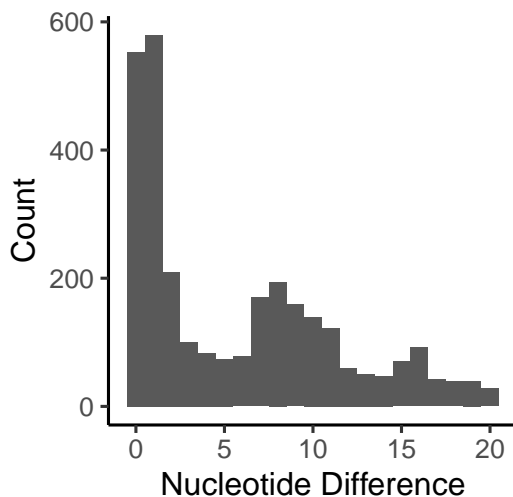
IGHV1-68*01

3 sequences assigned
No exact matches.



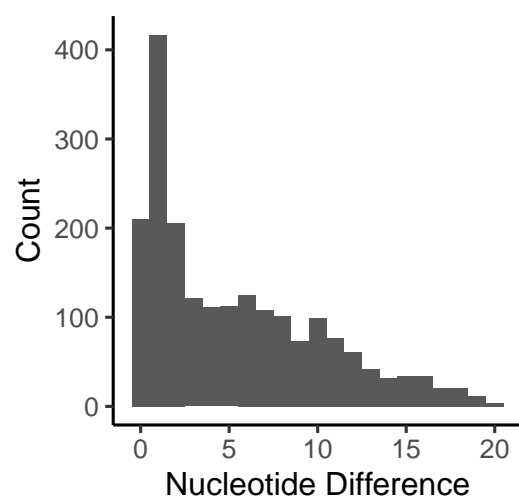
IGHV1-69*06_14

3251 sequences assigned
553 (17%) exact matches, in which:
476 unique CDR3
7 unique J



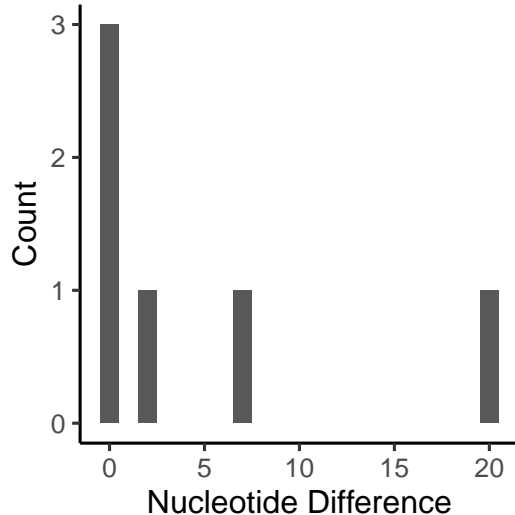
IGHV2-5*02

2179 sequences assigned
210 (9.6%) exact matches, in which:
150 unique CDR3
5 unique J



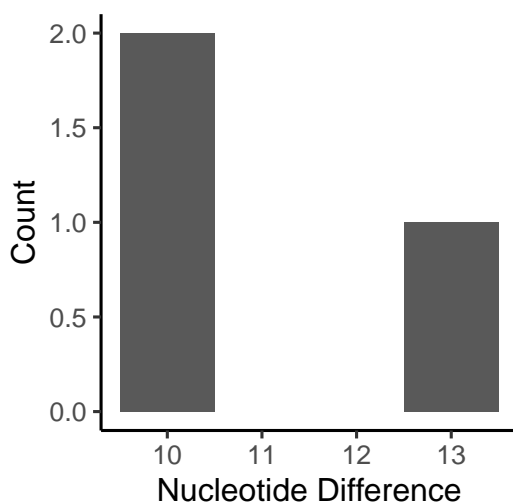
IGHV1-69-2*01

7 sequences assigned
3 (42.9%) exact matches, in which:
3 unique CDR3
2 unique J



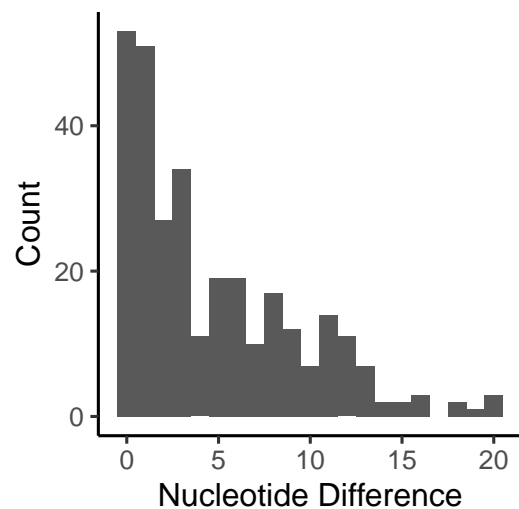
IGHV1-NL1*01

3 sequences assigned
No exact matches.



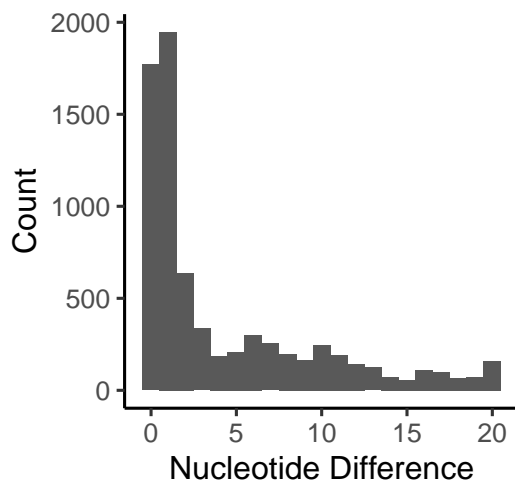
IGHV2-26*01

312 sequences assigned
53 (17%) exact matches, in which:
44 unique CDR3
6 unique J



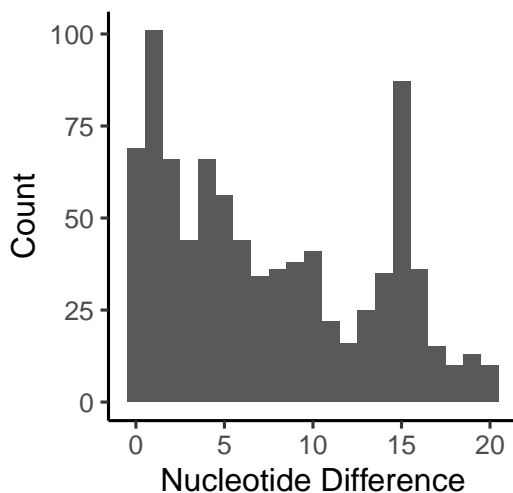
IGHV1-69*01_12_13

7881 sequences assigned
1771 (22.5%) exact matches, in which:
1452 unique CDR3
7 unique J



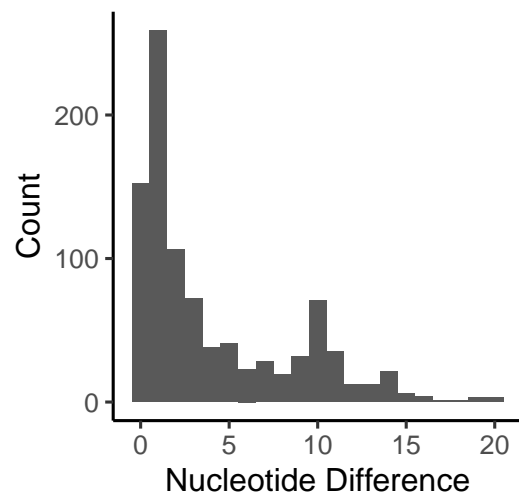
IGHV2-5*01

963 sequences assigned
69 (7.2%) exact matches, in which:
57 unique CDR3
5 unique J



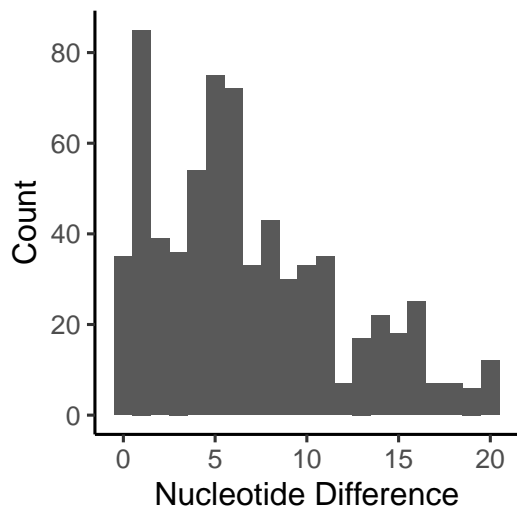
IGHV2-70*01

996 sequences assigned
152 (15.3%) exact matches, in which:
105 unique CDR3
6 unique J



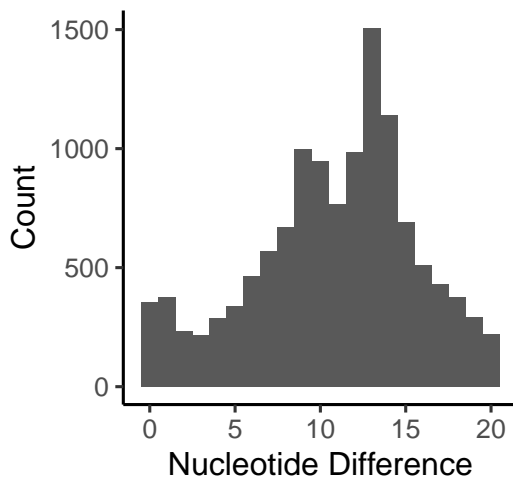
IGHV2-70*04

712 sequences assigned
35 (4.9%) exact matches, in which:
28 unique CDR3
6 unique J



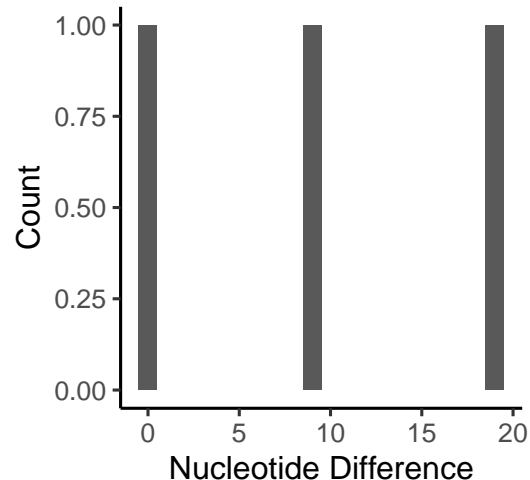
IGHV3-7*01

13303 sequences assigned
356 (2.7%) exact matches, in which:
244 unique CDR3
7 unique J



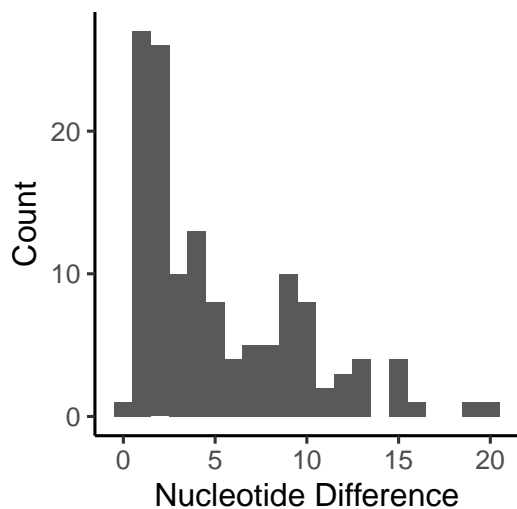
IGHV3-9*01

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



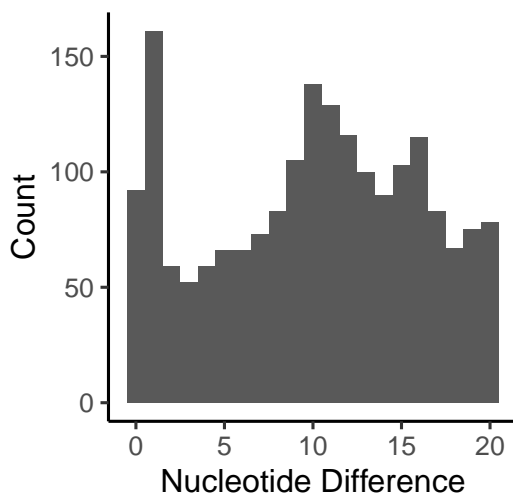
IGHV2-70*12

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



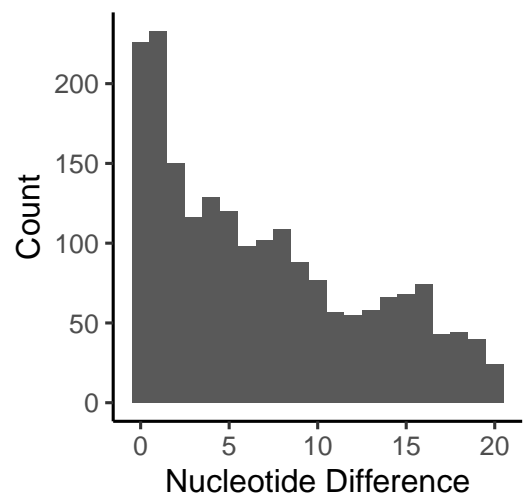
IGHV3-7*03

2437 sequences assigned
92 (3.8%) exact matches, in which:
53 unique CDR3
6 unique J



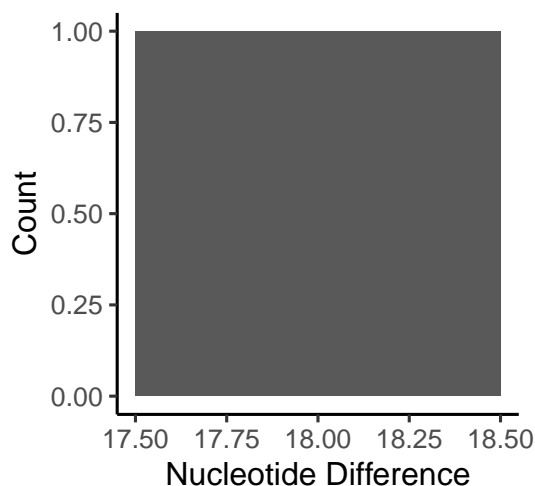
IGHV3-11*06

2090 sequences assigned
226 (10.8%) exact matches, in which:
133 unique CDR3
7 unique J



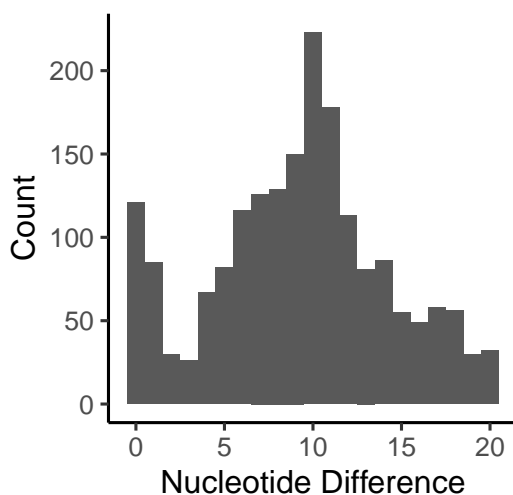
IGHV2-70D*14

1 sequences assigned
No exact matches.



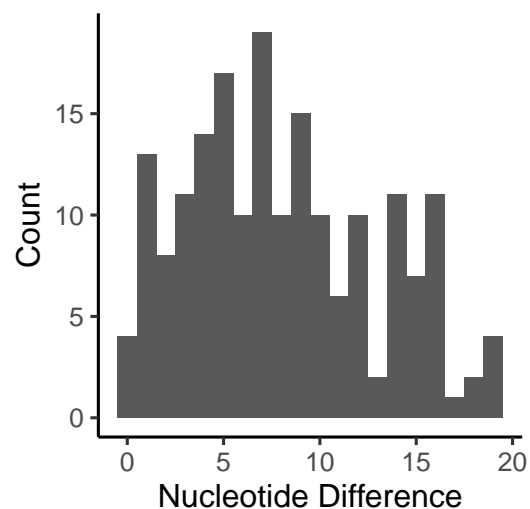
IGHV3-7*05

1993 sequences assigned
121 (6.1%) exact matches, in which:
80 unique CDR3
7 unique J



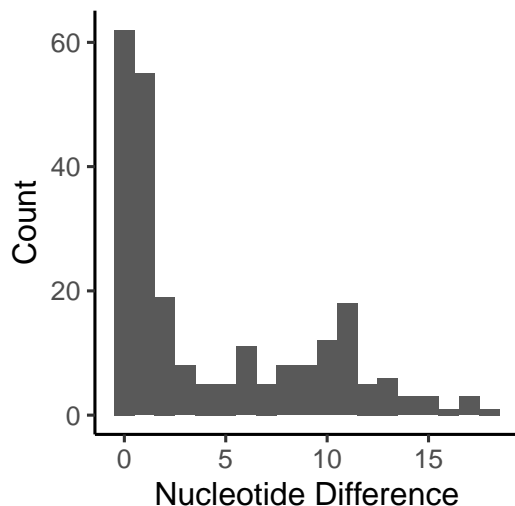
IGHV3-11*03_05

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



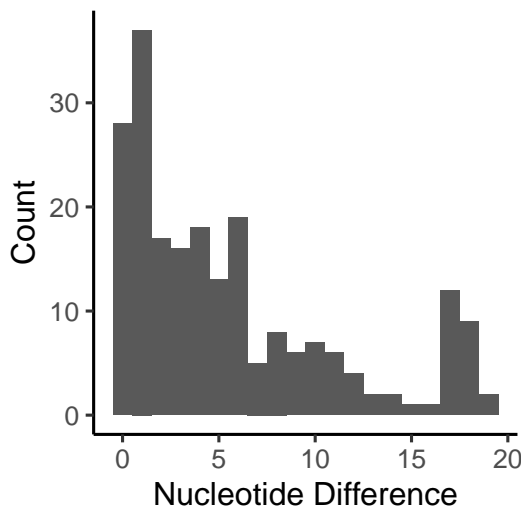
IGHV3-13*05

238 sequences assigned
62 (26.1%) exact matches, in which:
44 unique CDR3
7 unique J



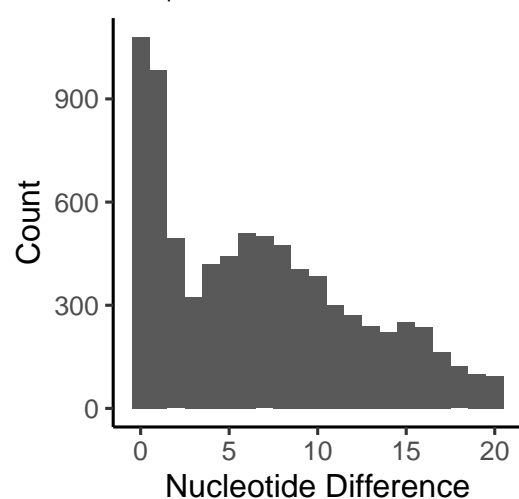
IGHV3-20*01_02

216 sequences assigned
28 (13%) exact matches, in which:
14 unique CDR3
4 unique J



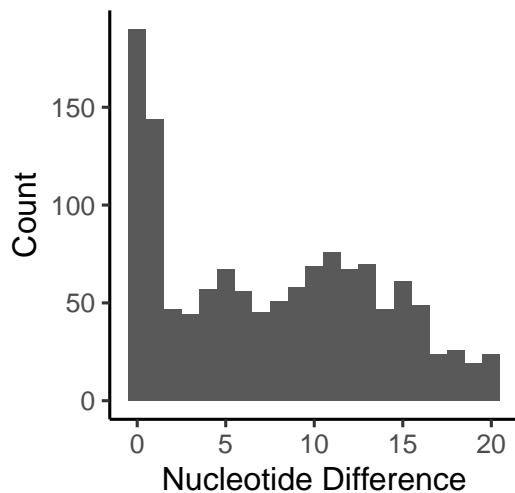
IGHV3-21*01_02

14690 sequences assigned
1081 (7.4%) exact matches, in which:
679 unique CDR3
7 unique J



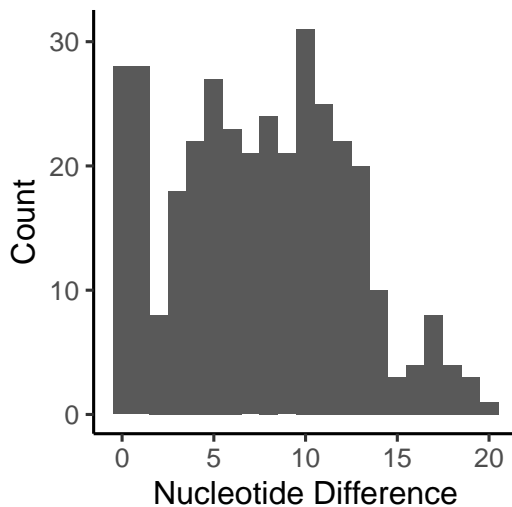
IGHV3-15*07

1396 sequences assigned
190 (13.6%) exact matches, in which:
124 unique CDR3
6 unique J



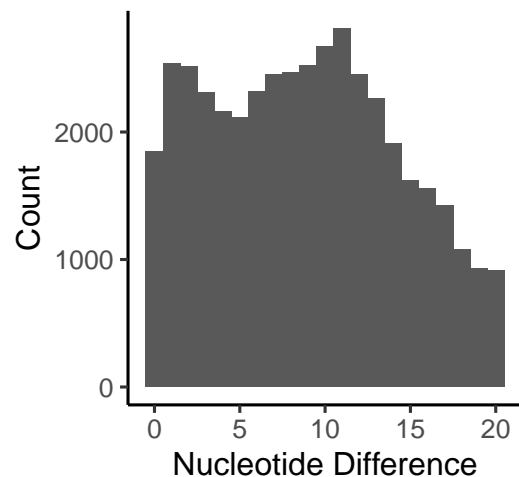
IGHV3-20*03_04

363 sequences assigned
28 (7.7%) exact matches, in which:
16 unique CDR3
3 unique J



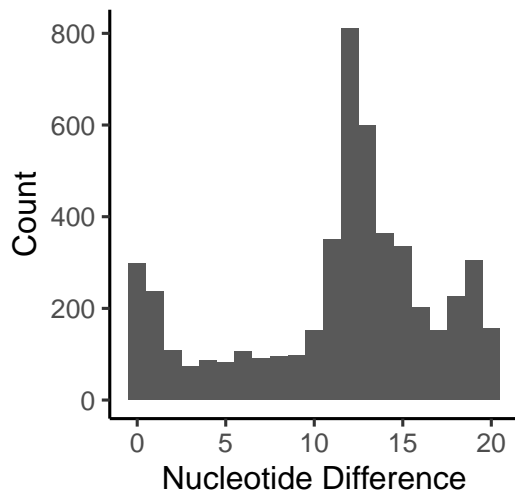
IGHV3-23*01_04

53527 sequences assigned
1847 (3.5%) exact matches, in which:
1104 unique CDR3
7 unique J



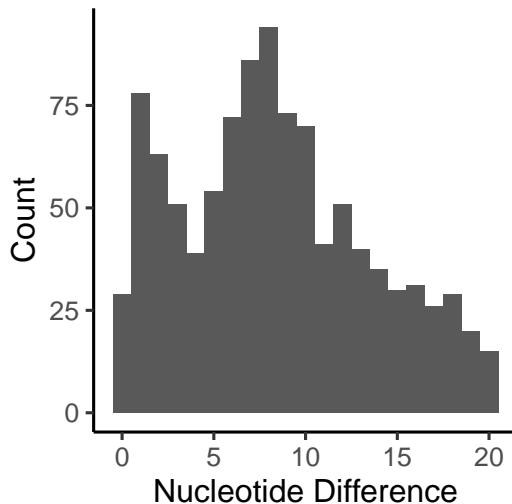
IGHV3-15*01_02

5250 sequences assigned
297 (5.7%) exact matches, in which:
195 unique CDR3
7 unique J



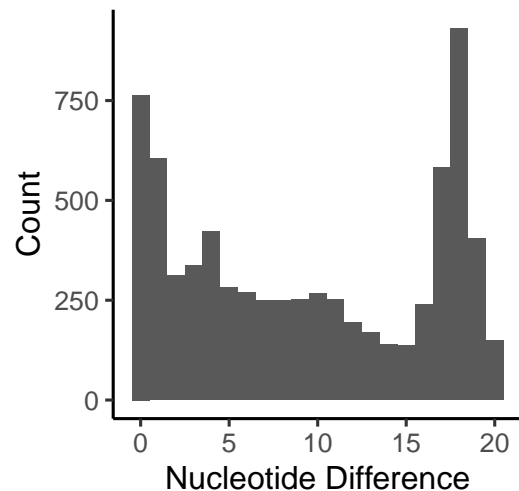
IGHV3-21*04

1120 sequences assigned
29 (2.6%) exact matches, in which:
29 unique CDR3
6 unique J



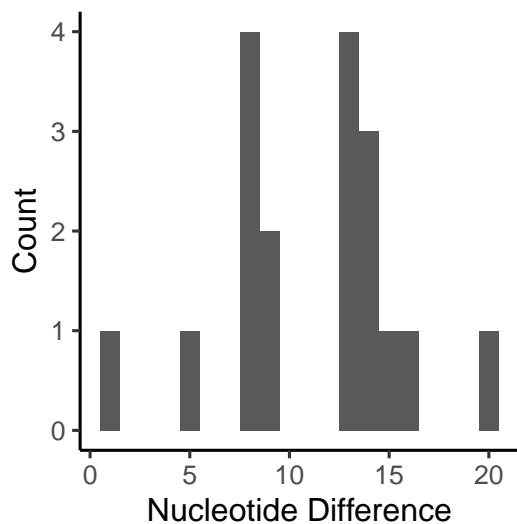
IGHV3-30*01

7774 sequences assigned
764 (9.8%) exact matches, in which:
503 unique CDR3
7 unique J



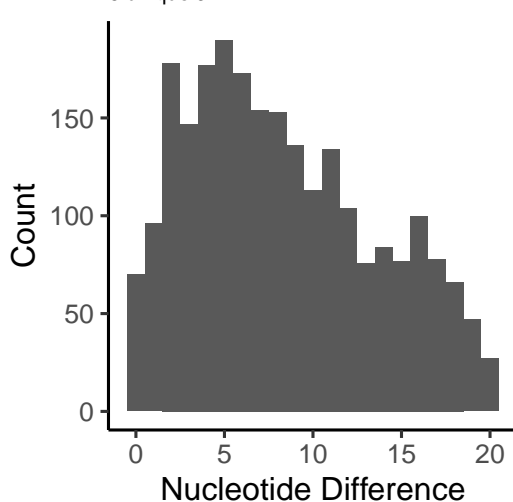
IGHV3-30-3*01

25 sequences assigned
No exact matches.



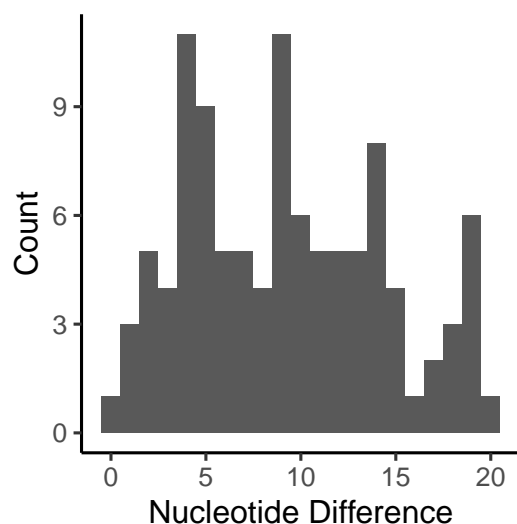
IGHV3-30*07

2525 sequences assigned
70 (2.8%) exact matches, in which:
66 unique CDR3
6 unique J



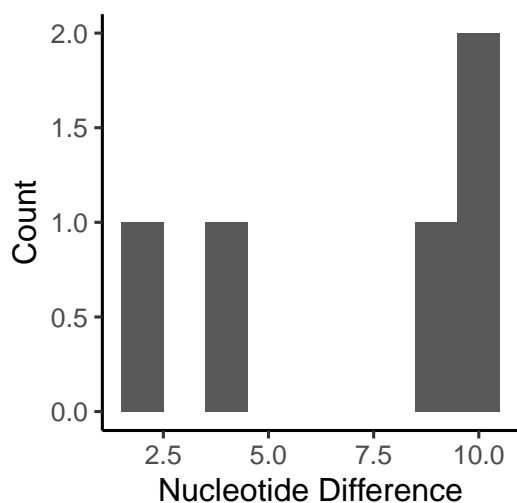
IGHV3-33*05

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



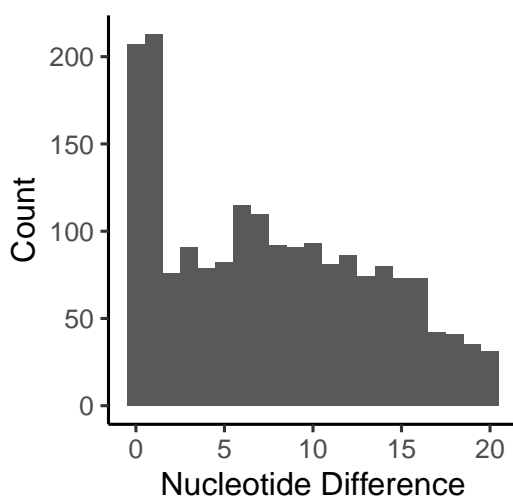
IGHV3-30-3*02

8 sequences assigned
No exact matches.



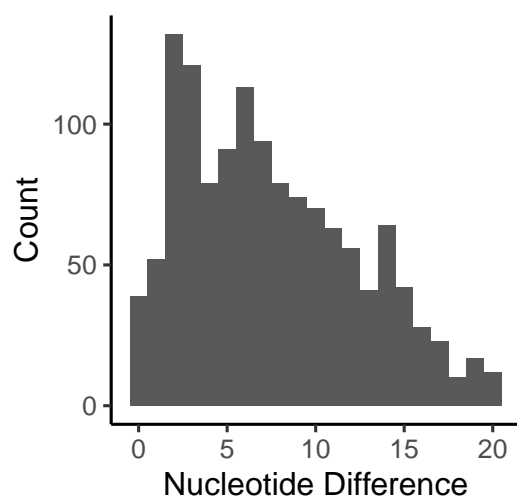
IGHV3-30*18

2668 sequences assigned
207 (7.8%) exact matches, in which:
124 unique CDR3
7 unique J



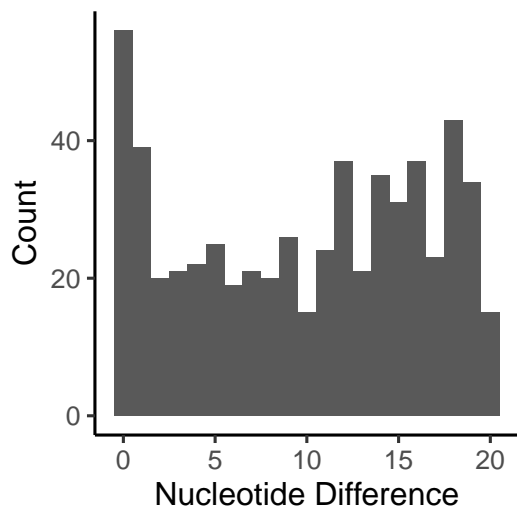
IGHV3-33*06

1354 sequences assigned
39 (2.9%) exact matches, in which:
39 unique CDR3
6 unique J



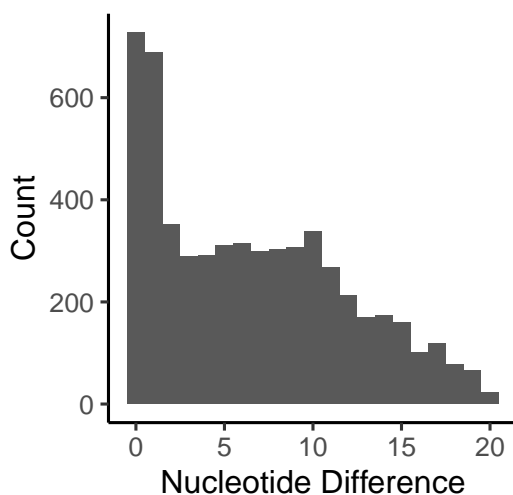
IGHV3-30*03

940 sequences assigned
56 (6%) exact matches, in which:
56 unique CDR3
5 unique J



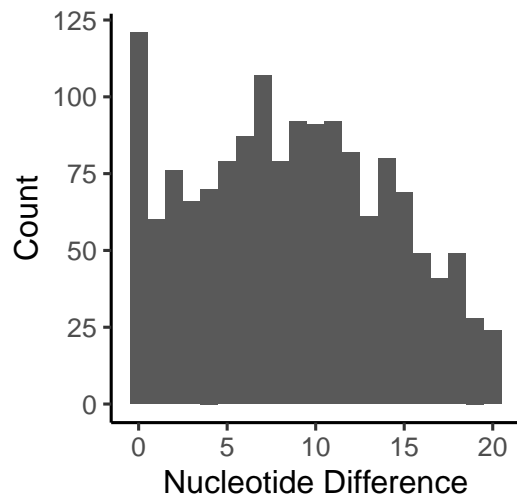
IGHV3-33*01

5863 sequences assigned
728 (12.4%) exact matches, in which:
482 unique CDR3
7 unique J



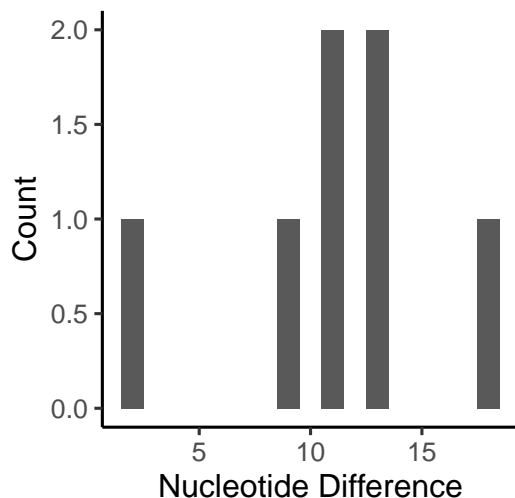
IGHV3-33*08

1619 sequences assigned
121 (7.5%) exact matches, in which:
93 unique CDR3
7 unique J



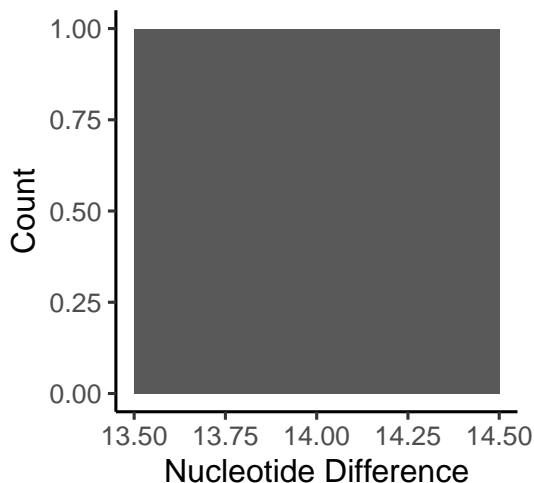
IGHV3-35*01

7 sequences assigned
No exact matches.



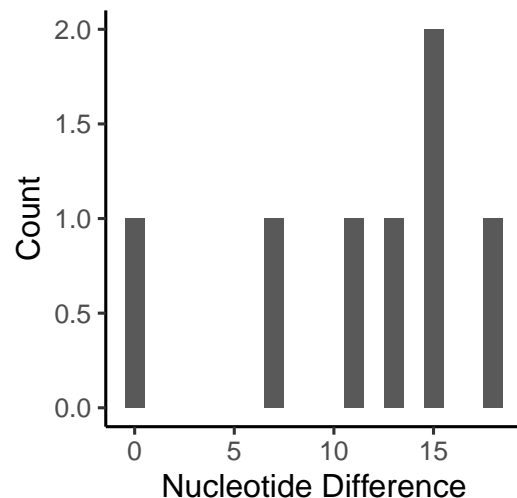
IGHV3-47*02

1 sequences assigned
No exact matches.



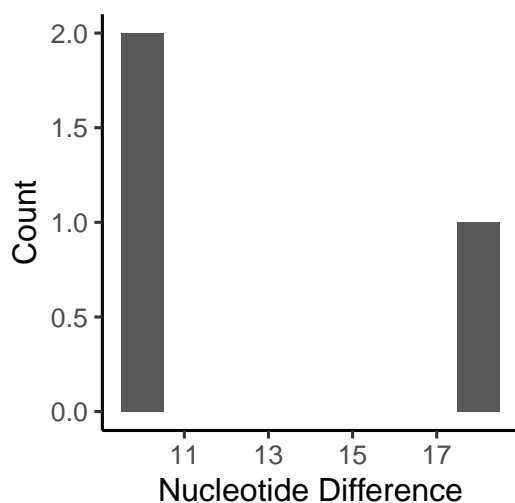
IGHV3-52*01_03

7 sequences assigned
1 (14.3%) exact matches, in which:
1 unique CDR3
1 unique J



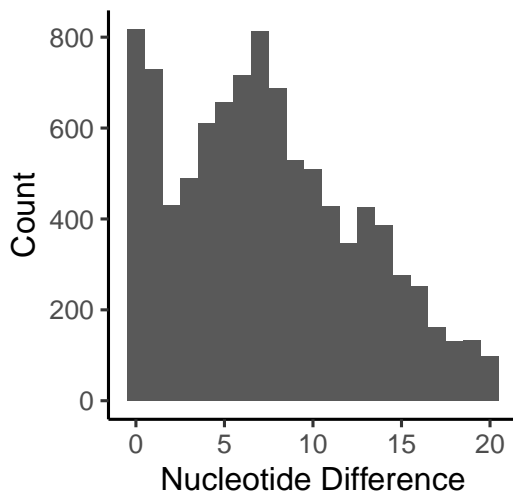
IGHV3-43*01

4 sequences assigned
No exact matches.



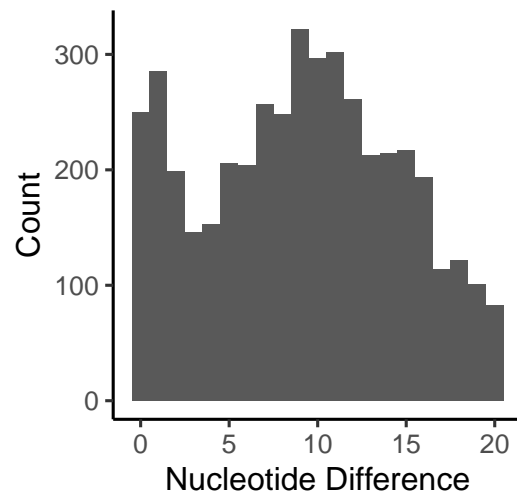
IGHV3-48*03

10133 sequences assigned
818 (8.1%) exact matches, in which:
491 unique CDR3
7 unique J



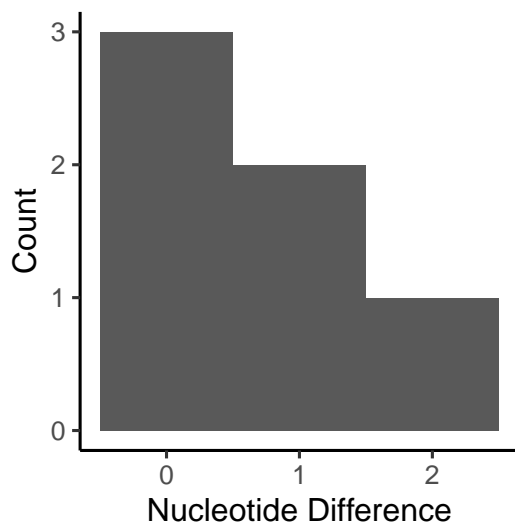
IGHV3-53*01_02

5215 sequences assigned
250 (4.8%) exact matches, in which:
148 unique CDR3
7 unique J



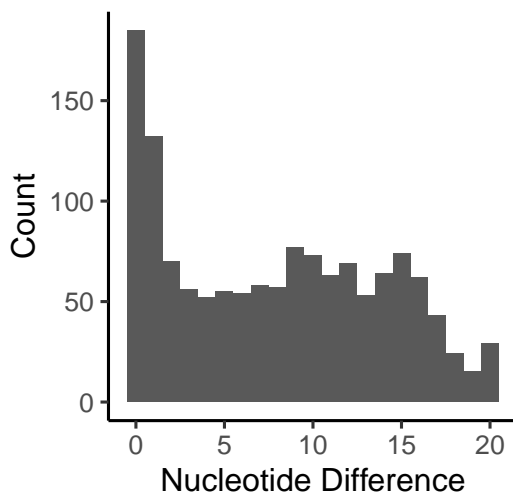
IGHV3-47*01

6 sequences assigned
3 (50%) exact matches, in which:
2 unique CDR3
1 unique J



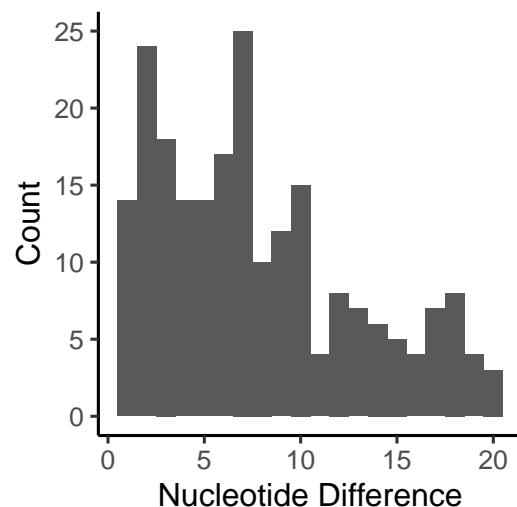
IGHV3-49*04

1498 sequences assigned
185 (12.3%) exact matches, in which:
115 unique CDR3
7 unique J



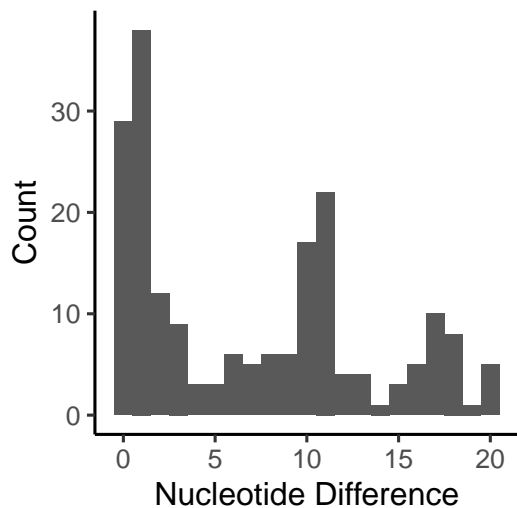
IGHV3-64*04

226 sequences assigned
No exact matches.



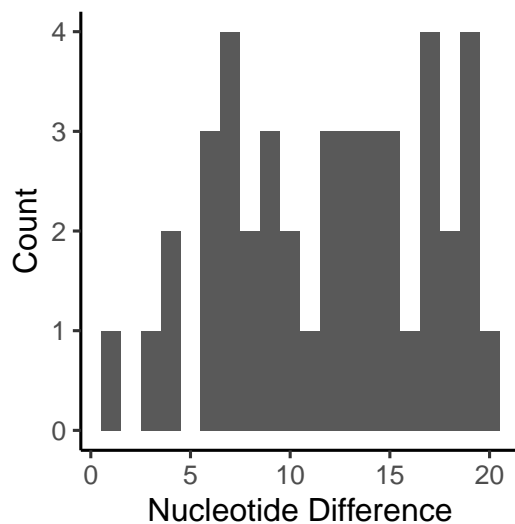
IGHV3-64*02_07

198 sequences assigned
29 (14.6%) exact matches, in which:
18 unique CDR3
4 unique J



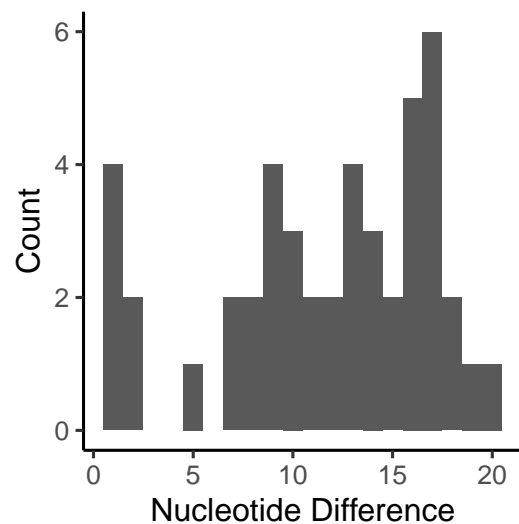
IGHV3-66*02

52 sequences assigned
No exact matches.



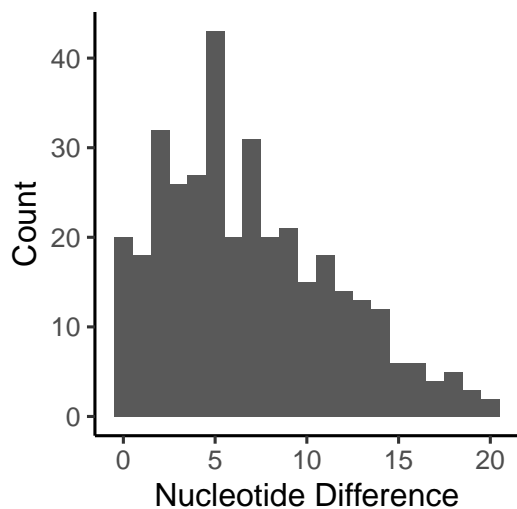
IGHV3-69-1*01

57 sequences assigned
No exact matches.



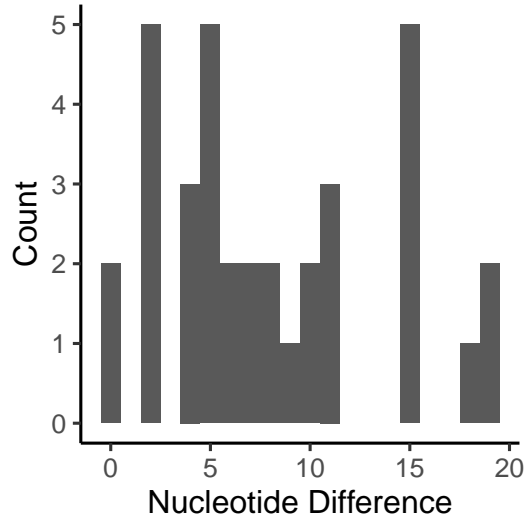
IGHV3-64*04_A210C_A210D

378 sequences assigned
20 (5.3%) exact matches, in which:
20 unique CDR3
7 unique J



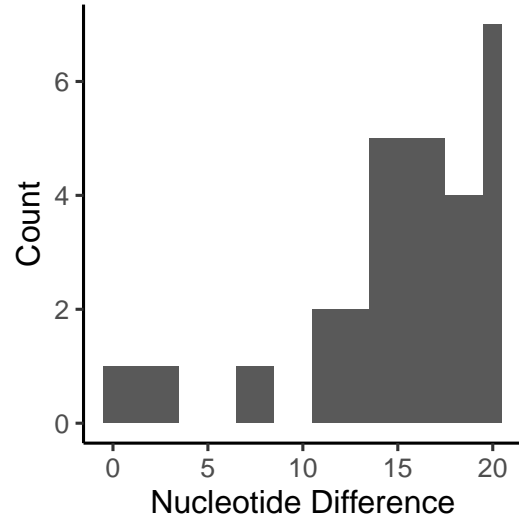
IGHV3-66*03

36 sequences assigned
2 (5.6%) exact matches, in which:
2 unique CDR3
1 unique J



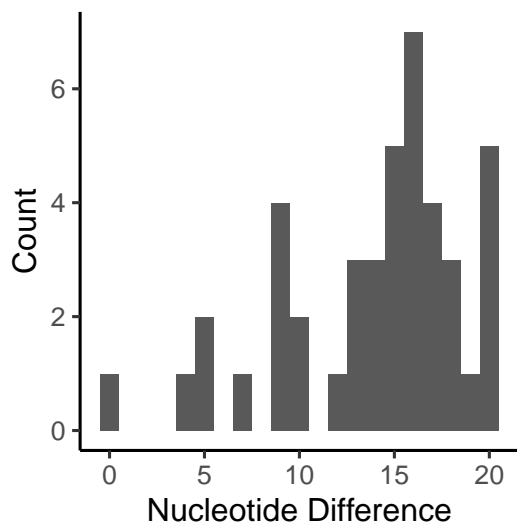
IGHV3-69-1*02

60 sequences assigned
1 (1.7%) exact matches, in which:
1 unique CDR3
1 unique J



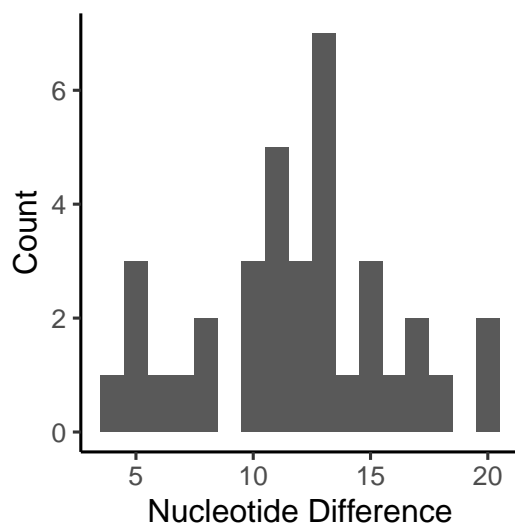
IGHV3-66*01

59 sequences assigned
1 (1.7%) exact matches, in which:
1 unique CDR3
1 unique J



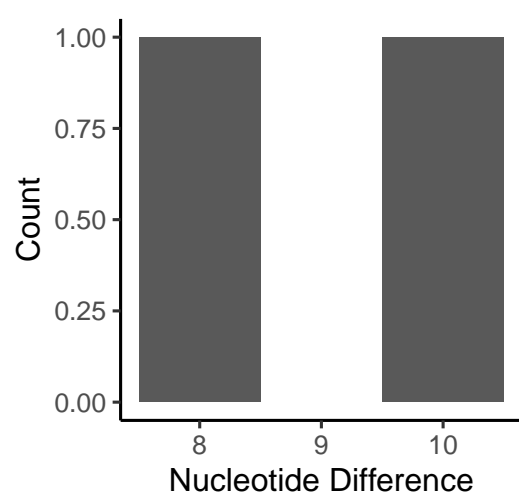
IGHV3-66*04

37 sequences assigned
No exact matches.



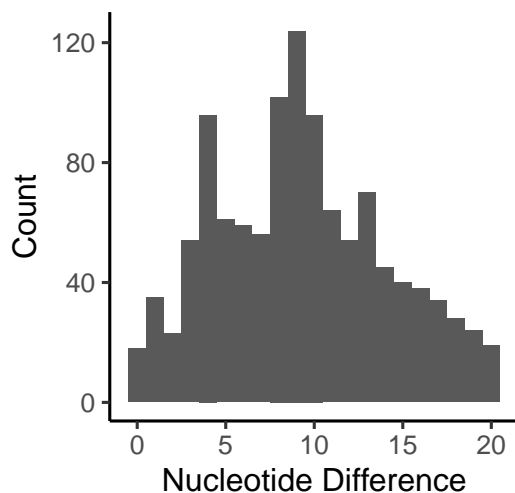
IGHV3-71*01_04

2 sequences assigned
No exact matches.



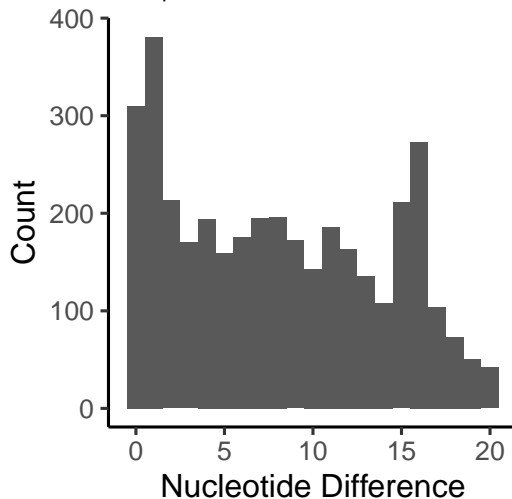
IGHV3-72*01

1190 sequences assigned
18 (1.5%) exact matches, in which:
11 unique CDR3
4 unique J



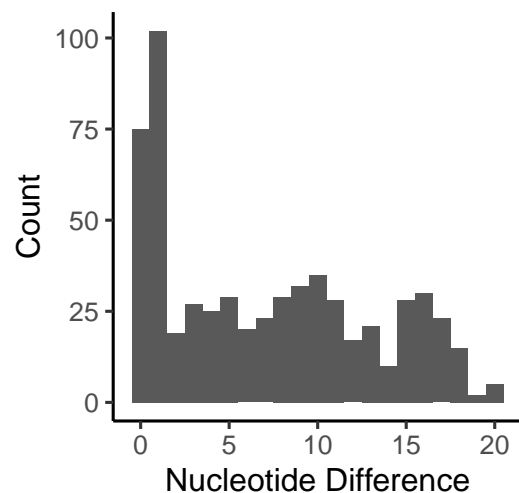
IGHV3-74*01_02

4012 sequences assigned
310 (7.7%) exact matches, in which:
170 unique CDR3
6 unique J



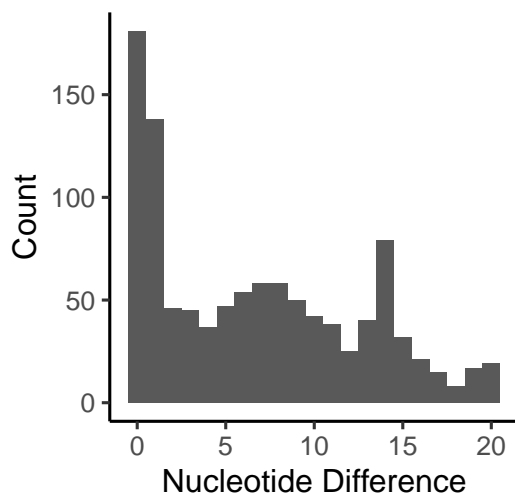
IGHV3-64D*08

691 sequences assigned
75 (10.9%) exact matches, in which:
43 unique CDR3
6 unique J



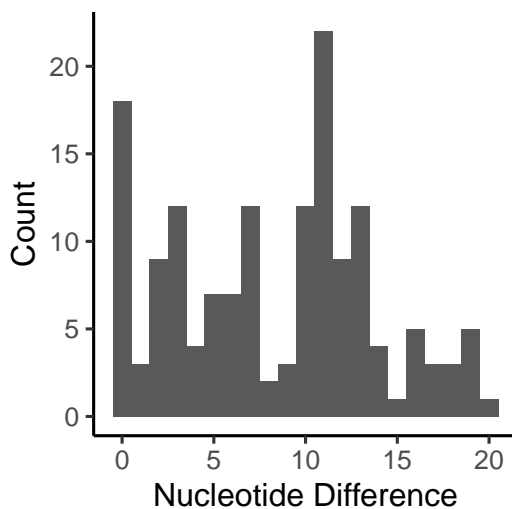
IGHV3-73*01_02

1165 sequences assigned
181 (15.5%) exact matches, in which:
105 unique CDR3
6 unique J



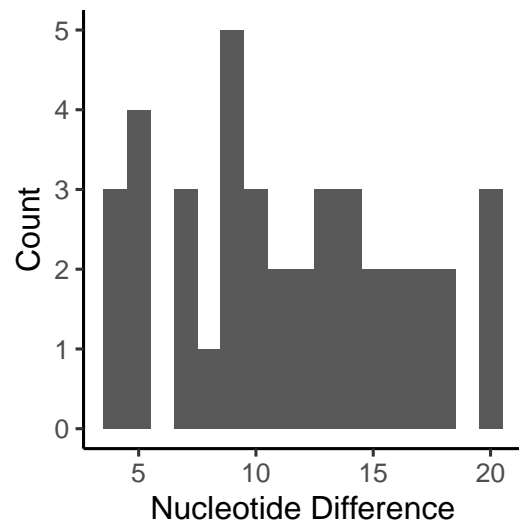
IGHV3-43D*04

158 sequences assigned
18 (11.4%) exact matches, in which:
10 unique CDR3
4 unique J



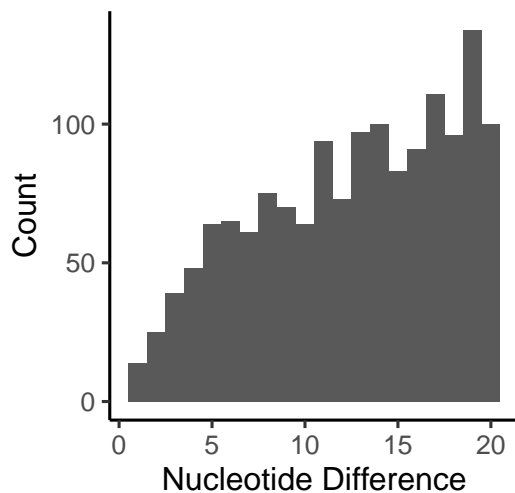
IGHV3-NL1*01

55 sequences assigned
No exact matches.



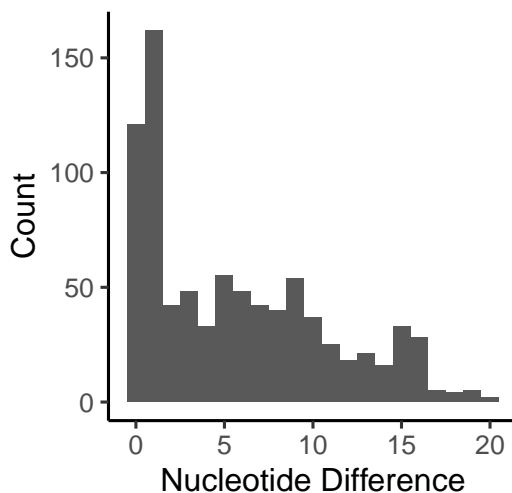
IGHV3-74*03

5560 sequences assigned
No exact matches.



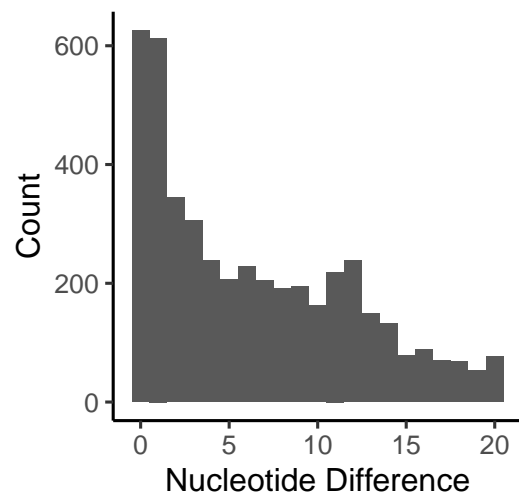
IGHV3-64D*06

883 sequences assigned
121 (13.7%) exact matches, in which:
60 unique CDR3
6 unique J



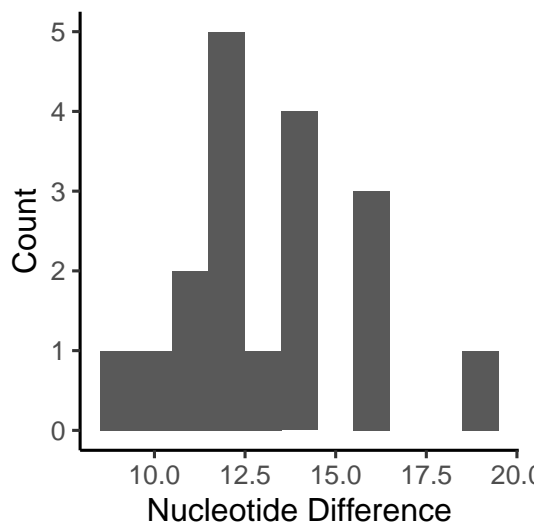
IGHV4-4*02_03

5047 sequences assigned
626 (12.4%) exact matches, in which:
422 unique CDR3
7 unique J



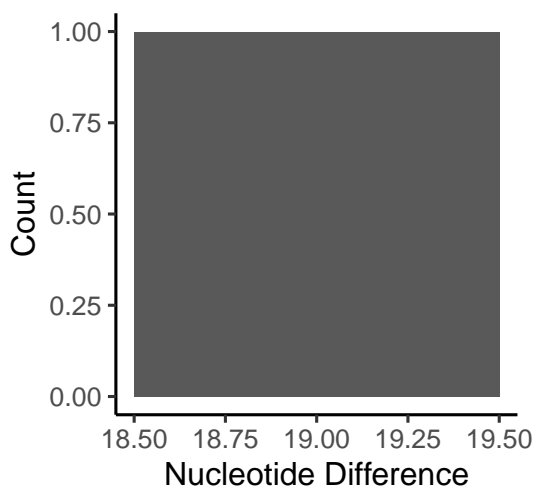
IGHV4-28*03

20 sequences assigned
No exact matches.



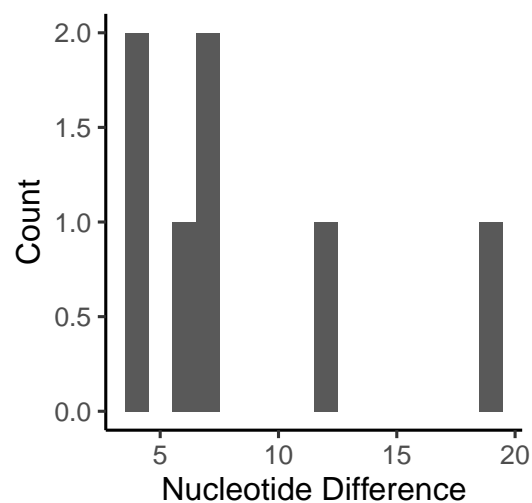
IGHV4-30-2*01

2 sequences assigned
No exact matches.



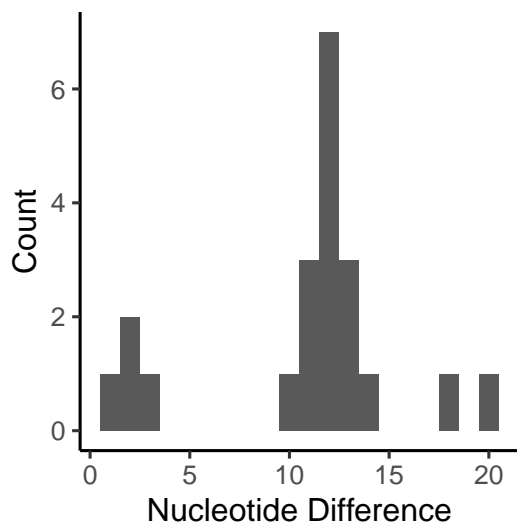
IGHV4-30-2*04

8 sequences assigned
No exact matches.



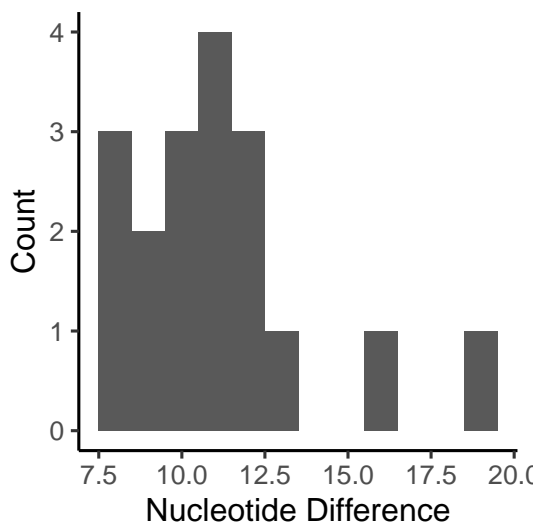
IGHV4-28*01_07

21 sequences assigned
No exact matches.



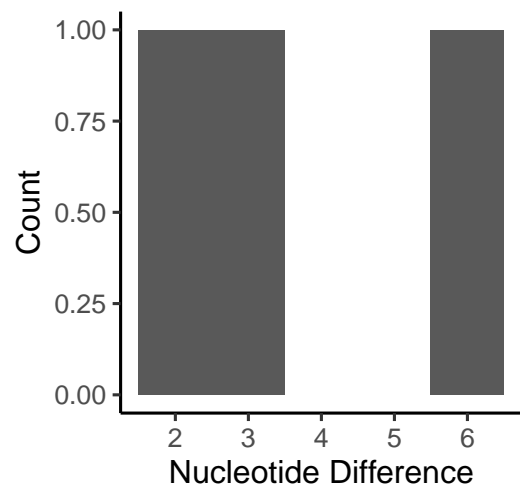
IGHV4-30-4*01

20 sequences assigned
No exact matches.



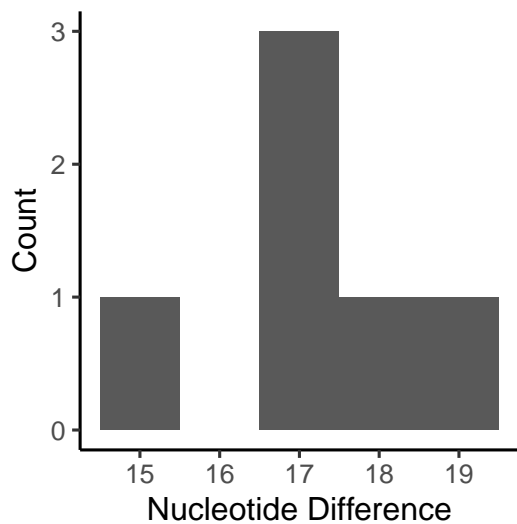
IGHV4-30-4*07

3 sequences assigned
No exact matches.



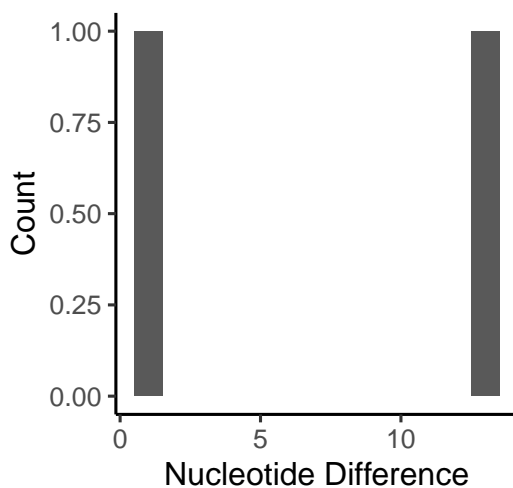
IGHV4-28*02_05

7 sequences assigned
No exact matches.



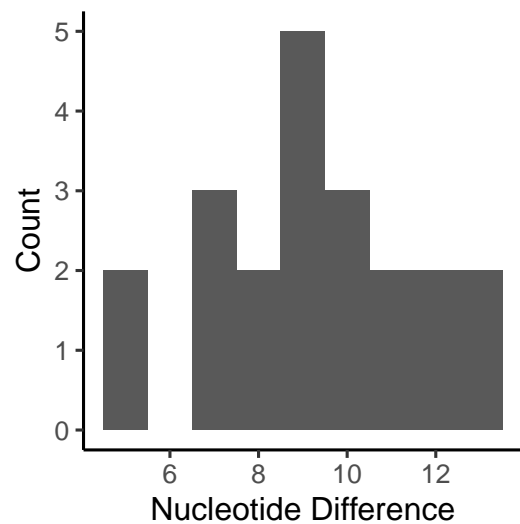
IGHV4-30-2*03

2 sequences assigned
No exact matches.



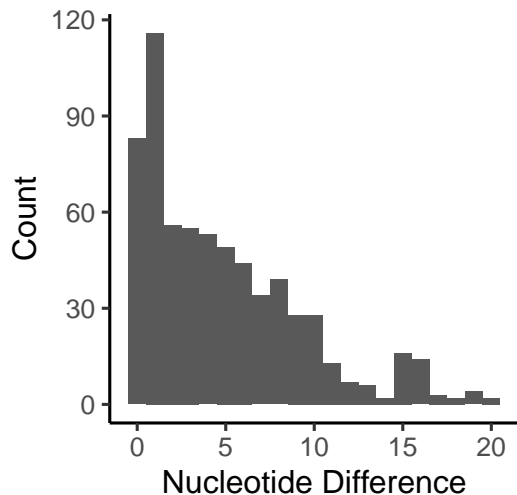
IGHV4-30-4*08

21 sequences assigned
No exact matches.



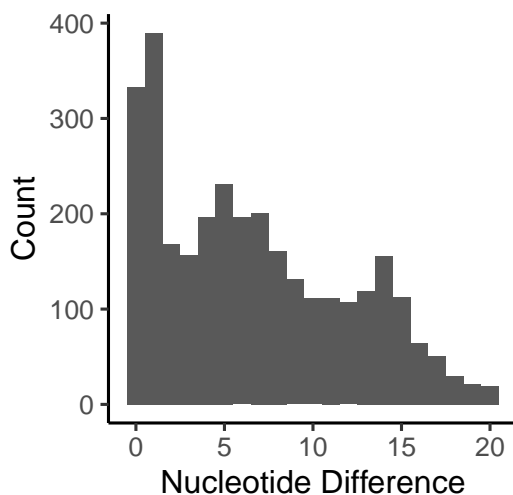
IGHV4-31*01

669 sequences assigned
83 (12.4%) exact matches, in which:
72 unique CDR3
5 unique J



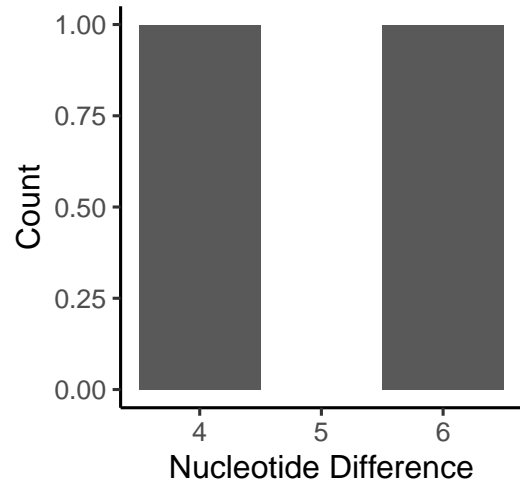
IGHV4-38-2*01

3195 sequences assigned
333 (10.4%) exact matches, in which:
272 unique CDR3
7 unique J



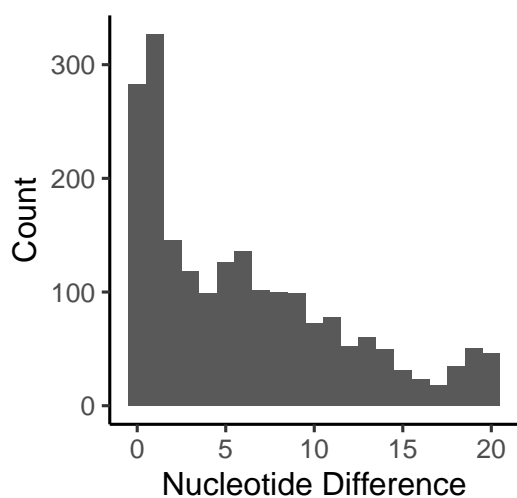
IGHV4-55*09

2 sequences assigned
No exact matches.



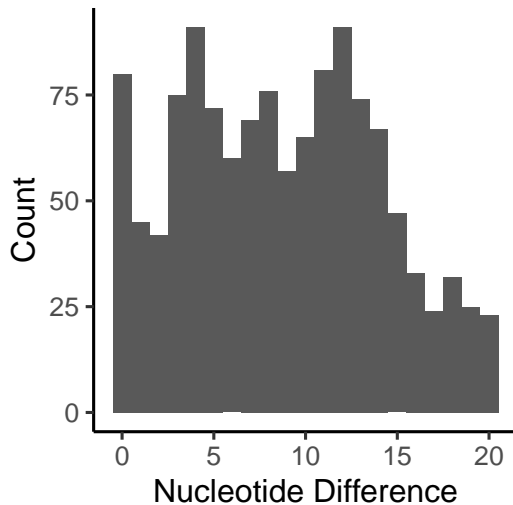
IGHV4-31*02

2370 sequences assigned
283 (11.9%) exact matches, in which:
218 unique CDR3
7 unique J



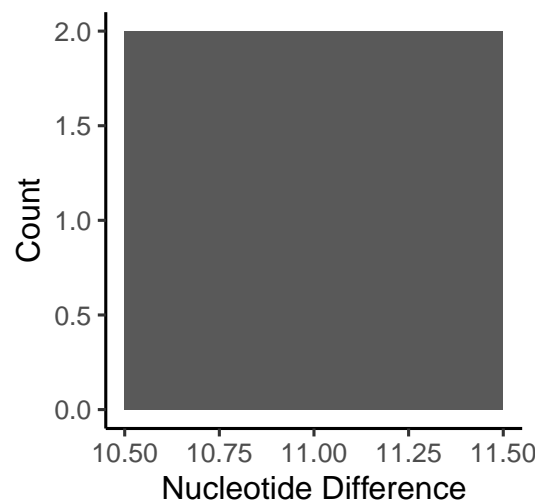
IGHV4-38-2*02

1385 sequences assigned
80 (5.8%) exact matches, in which:
65 unique CDR3
6 unique J



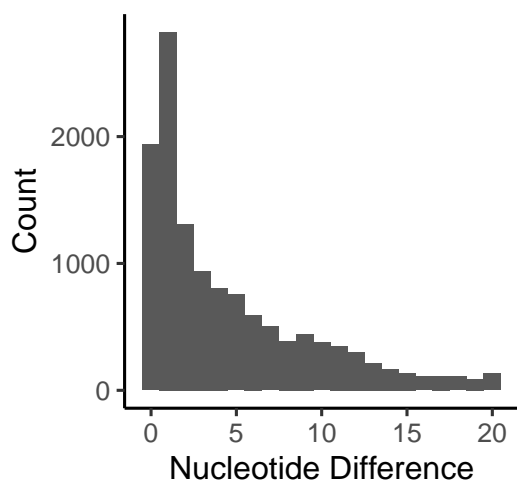
IGHV4-55*01_05

2 sequences assigned
No exact matches.



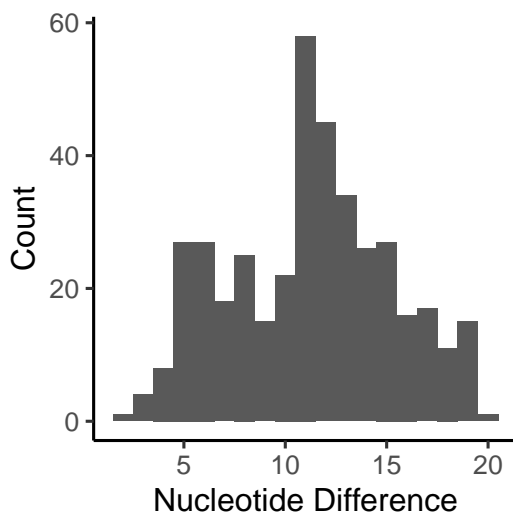
IGHV4-34*01_02

14206 sequences assigned
1939 (13.6%) exact matches, in which:
1264 unique CDR3
7 unique J



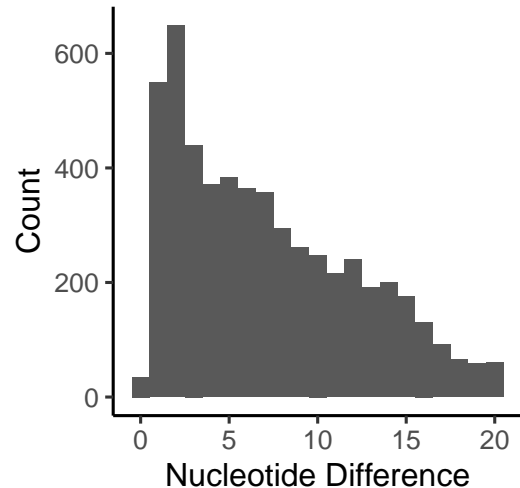
IGHV4-39*07

418 sequences assigned
No exact matches.



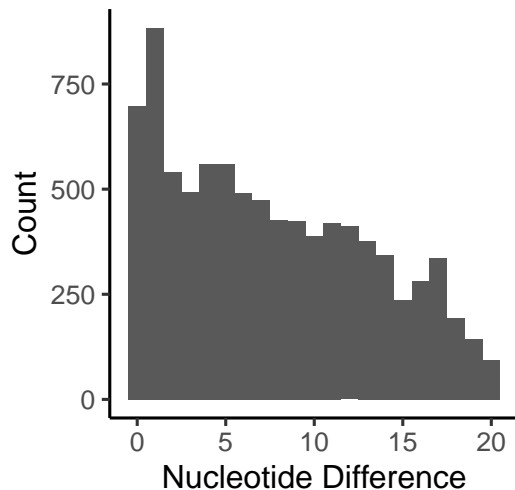
IGHV4-59*12

5737 sequences assigned
35 (0.6%) exact matches, in which:
35 unique CDR3
7 unique J



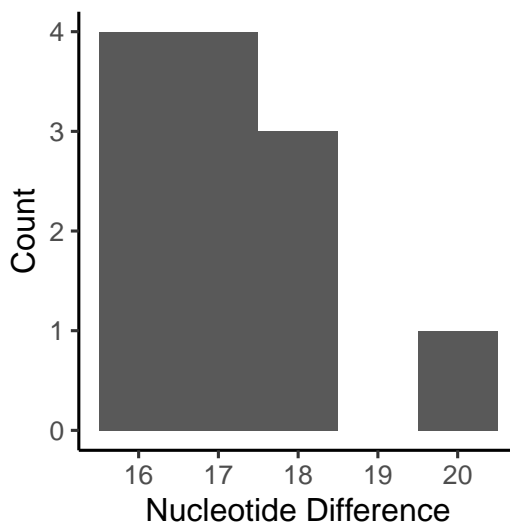
IGHV4-59*01_07

10039 sequences assigned
697 (6.9%) exact matches, in which:
572 unique CDR3
7 unique J



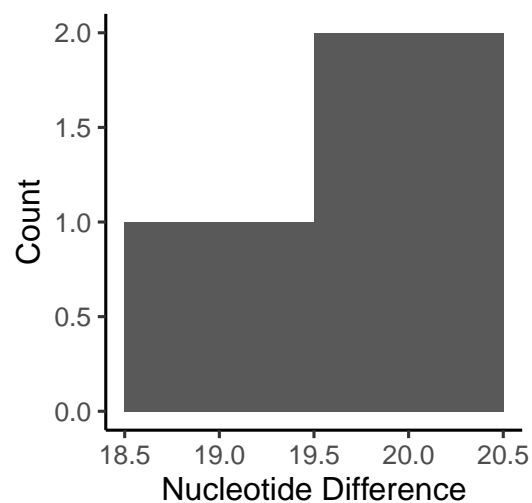
IGHV1/OR15-2*02_03

12 sequences assigned
No exact matches.



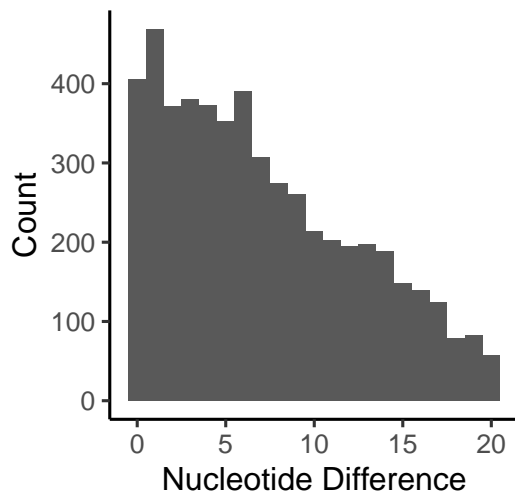
IGHV4/OR15-8*02

10 sequences assigned
No exact matches.



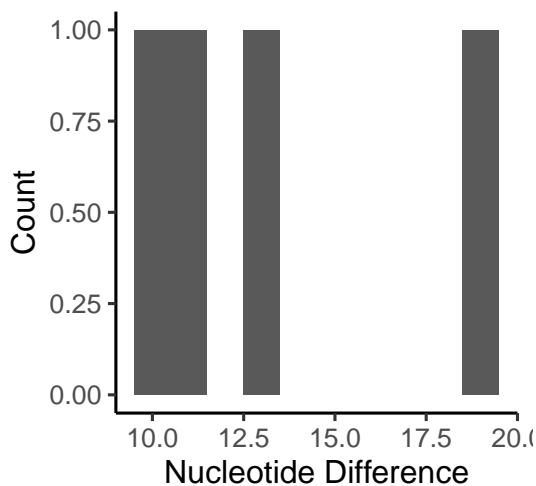
IGHV4-61*01

9204 sequences assigned
406 (4.4%) exact matches, in which:
344 unique CDR3
7 unique J



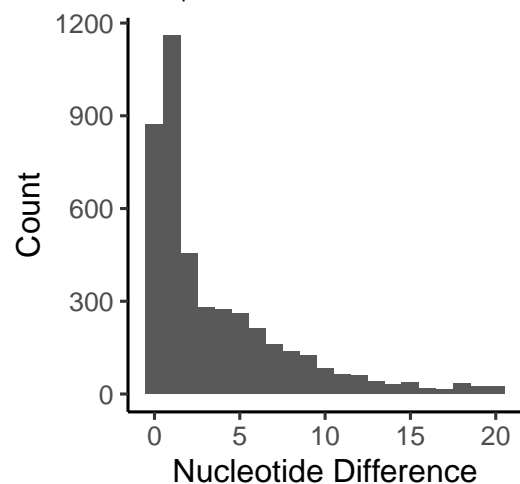
IGHV1/OR15-3*02

8 sequences assigned
No exact matches.



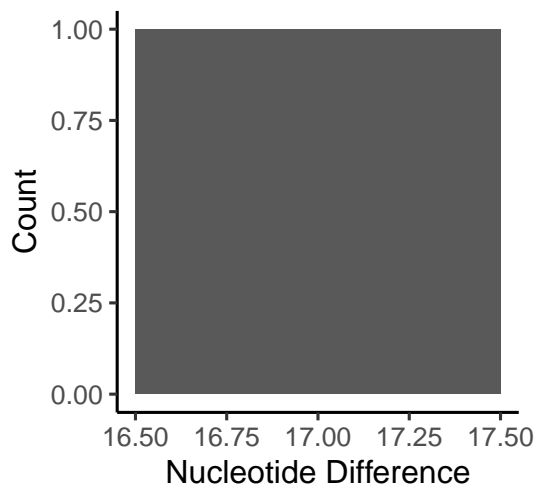
IGHV5-10-1*01_03

4617 sequences assigned
873 (18.9%) exact matches, in which:
538 unique CDR3
7 unique J



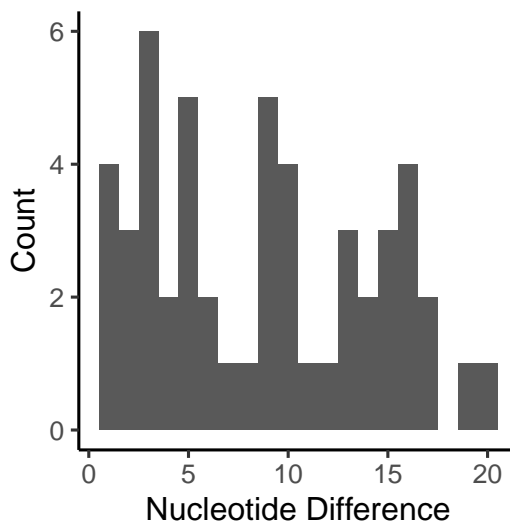
IGHV1/OR15-1*04

1 sequences assigned
No exact matches.



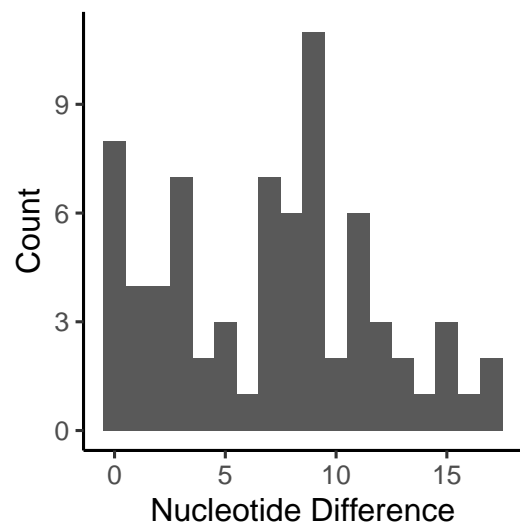
IGHV4/OR15-8*01

61 sequences assigned
No exact matches.



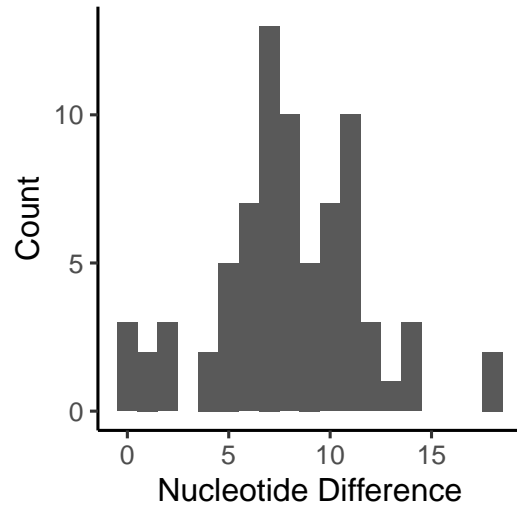
IGHV5-51*04

76 sequences assigned
8 (10.5%) exact matches, in which:
8 unique CDR3
5 unique J



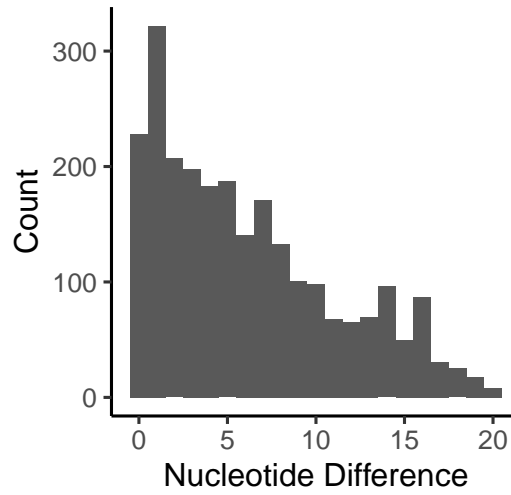
IGHV5-51*06

76 sequences assigned
3 (3.9%) exact matches, in which:
3 unique CDR3
2 unique J



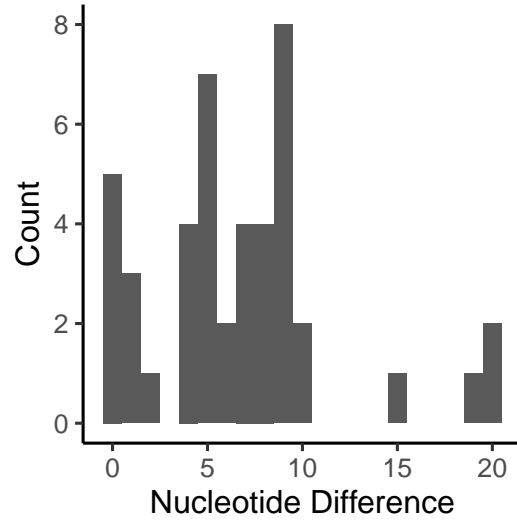
IGHV7-4-1*02

2538 sequences assigned
228 (9%) exact matches, in which:
182 unique CDR3
7 unique J



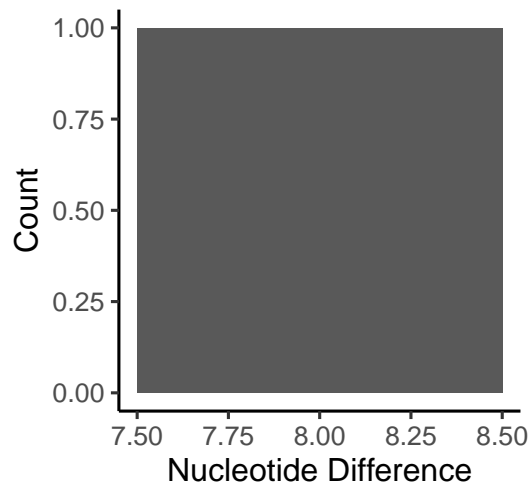
IGHV5-51*07

44 sequences assigned
5 (11.4%) exact matches, in which:
5 unique CDR3
3 unique J



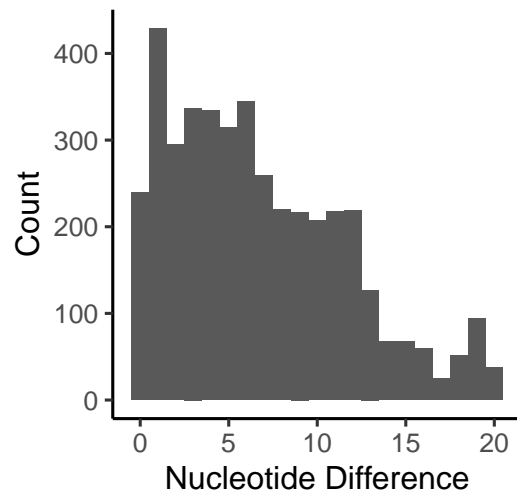
IGHV7-81*01

1 sequences assigned
No exact matches.

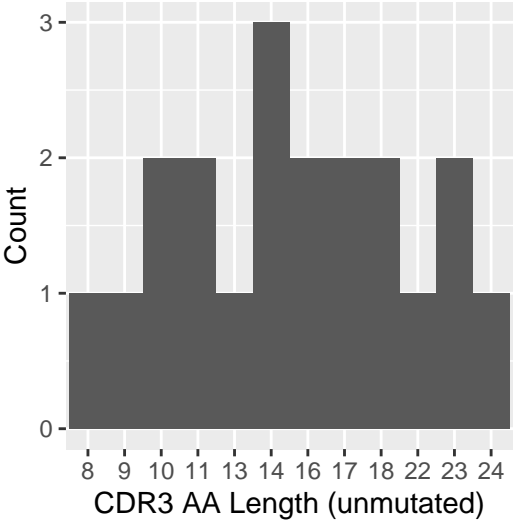


IGHV6-1*01_02

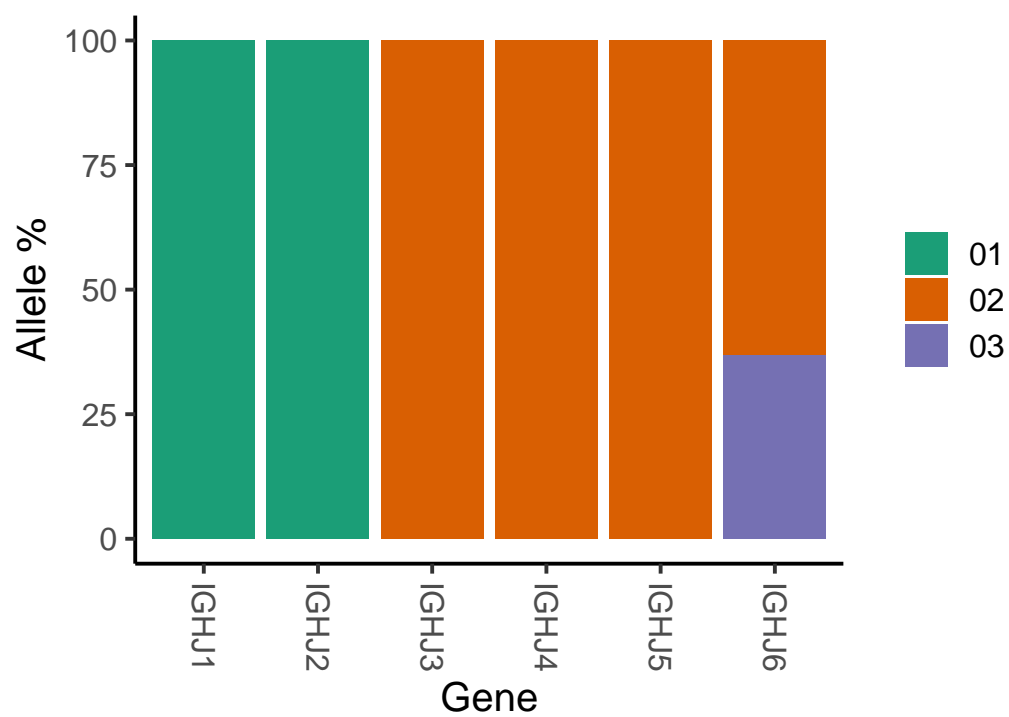
4380 sequences assigned
240 (5.5%) exact matches, in which:
190 unique CDR3
7 unique J



IGHV3-64*04_A210C_A223C_A225G_T288C_T300C_G303A



Allele Usage



Sequence Count byIGHJ6 allele usage

