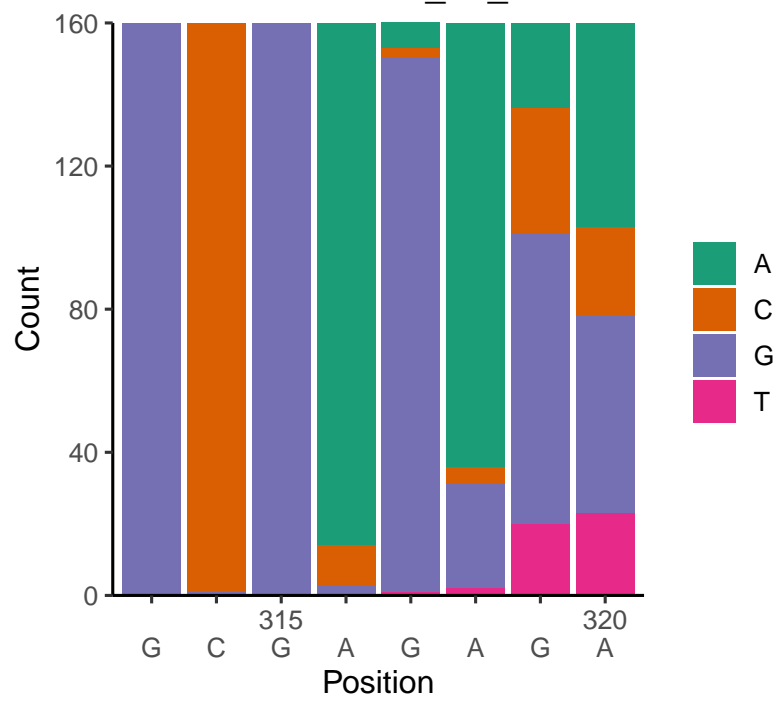
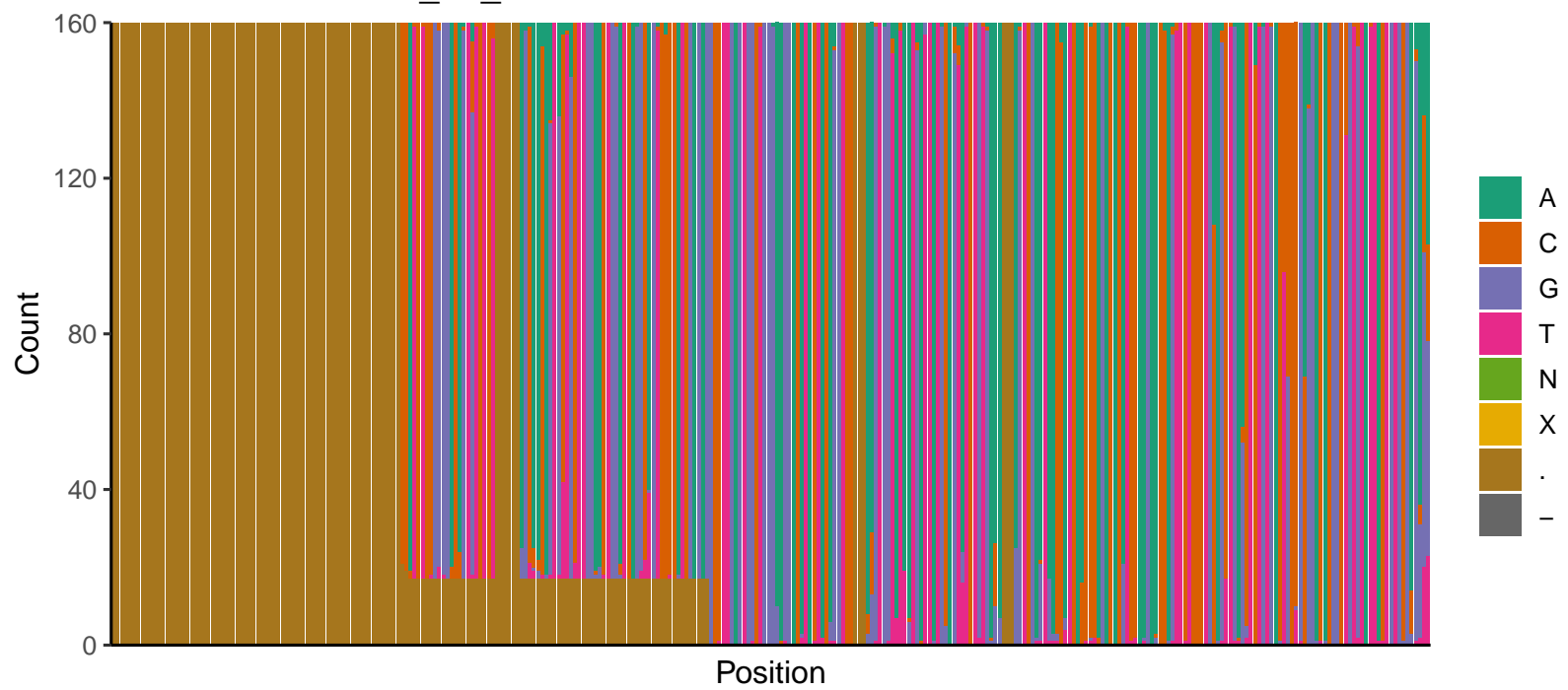


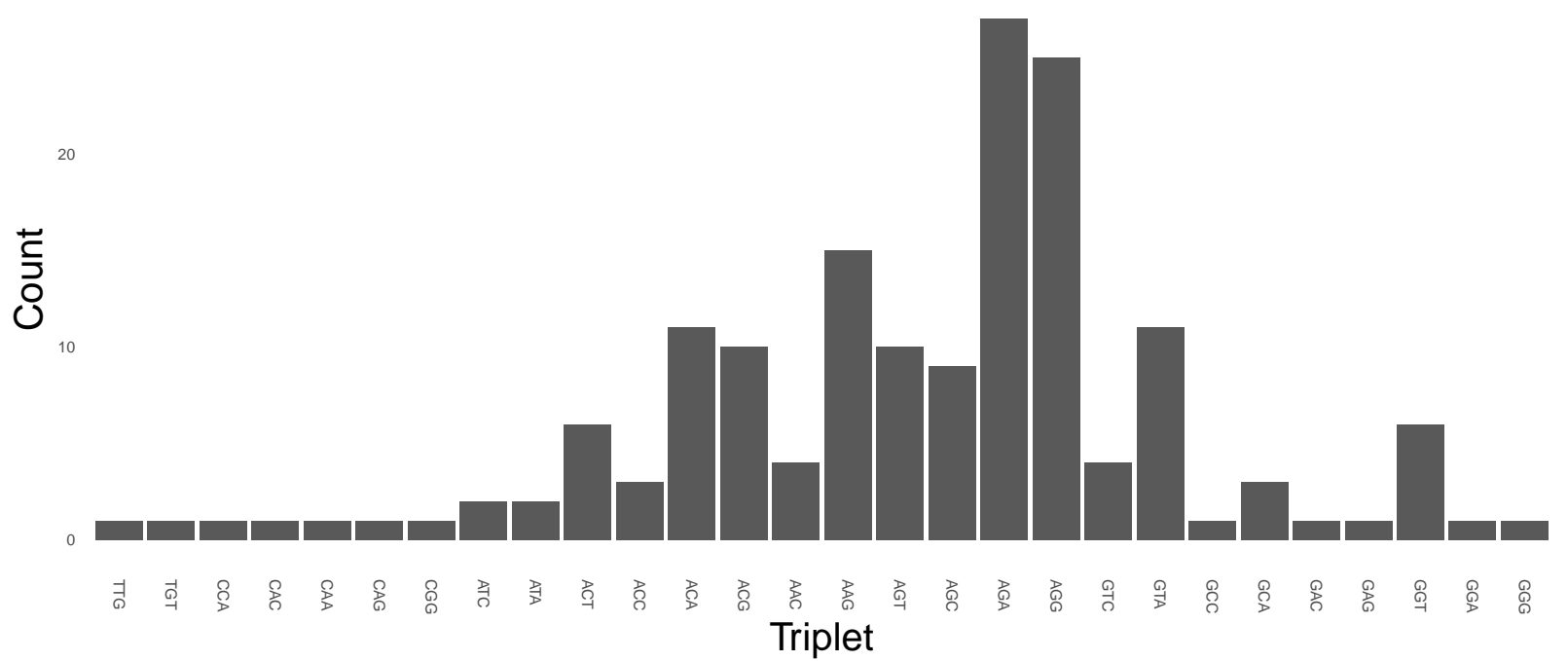
Gene IGHV6-1*01_02_A315G



Gene IGHV6-1*01_02_A315G

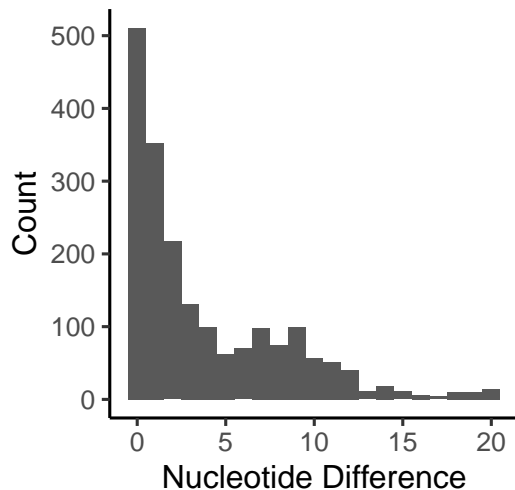


IGHV6-1*01_02_A315G- Final 3 nucleotides as a triplet



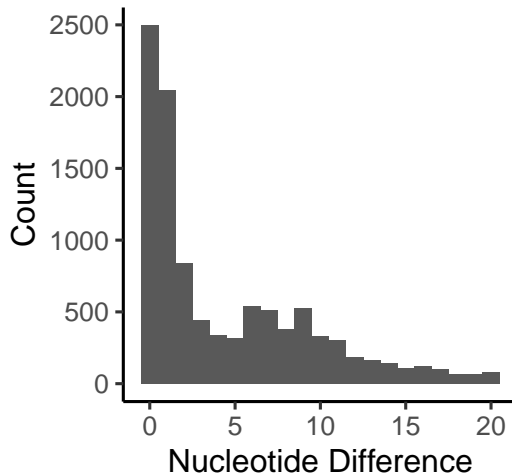
IGHV1-2*04

1981 sequences assigned
511 (25.8%) exact matches, in which:
452 unique CDR3
6 unique J



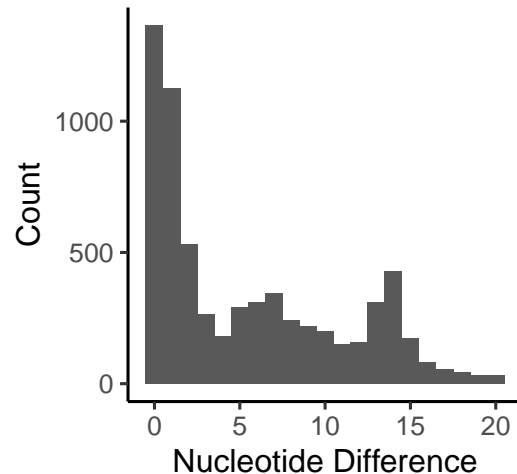
IGHV1-18*01

10889 sequences assigned
2496 (22.9%) exact matches, in which:
2190 unique CDR3
6 unique J



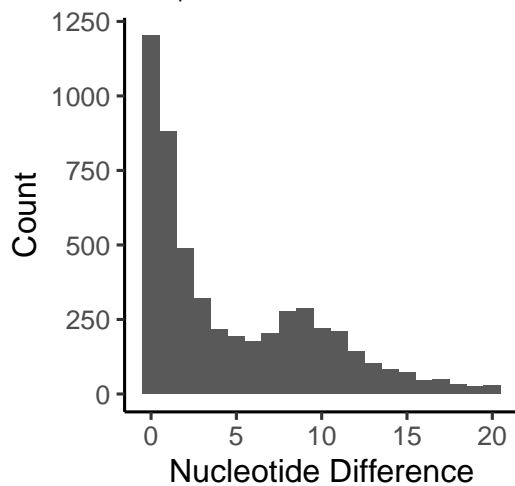
IGHV1-46*01

6743 sequences assigned
1365 (20.2%) exact matches, in which:
1228 unique CDR3
6 unique J



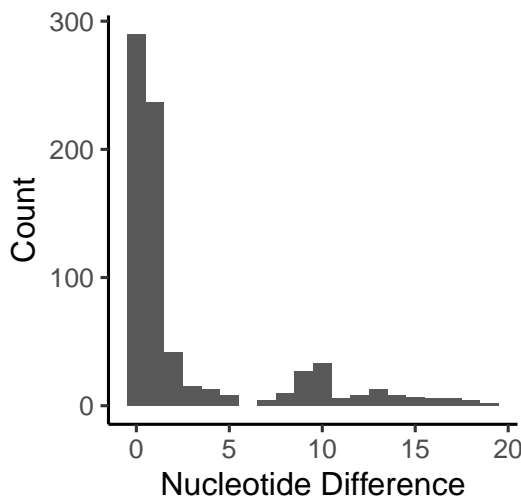
IGHV1-3*01_05

6140 sequences assigned
1202 (19.6%) exact matches, in which:
1007 unique CDR3
6 unique J



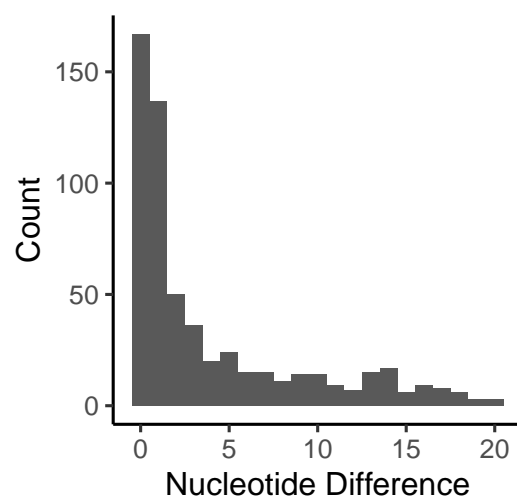
IGHV1-24*01

752 sequences assigned
290 (38.6%) exact matches, in which:
237 unique CDR3
6 unique J



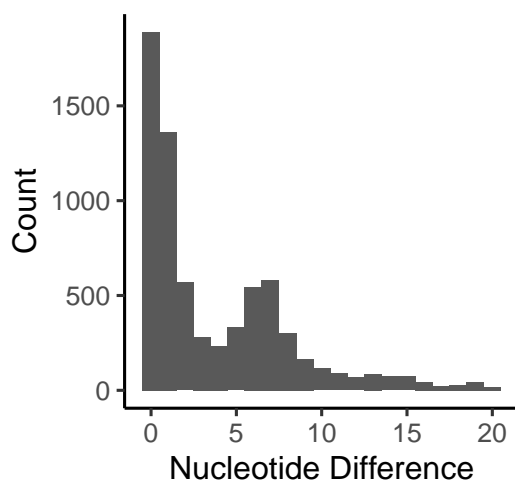
IGHV1-58*02

602 sequences assigned
167 (27.7%) exact matches, in which:
152 unique CDR3
5 unique J



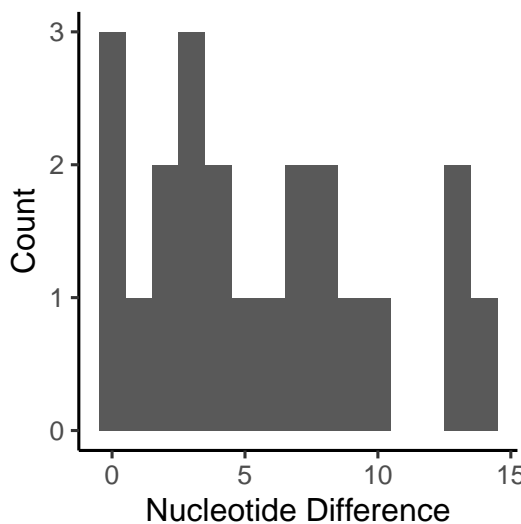
IGHV1-8*01

7240 sequences assigned
1889 (26.1%) exact matches, in which:
1671 unique CDR3
6 unique J



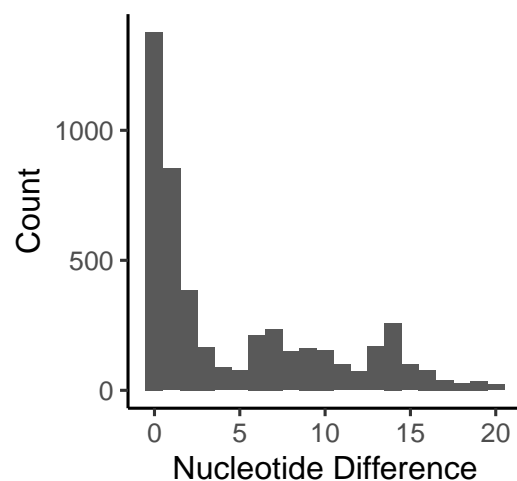
IGHV1-45*02

22 sequences assigned
3 (13.6%) exact matches, in which:
3 unique CDR3
3 unique J



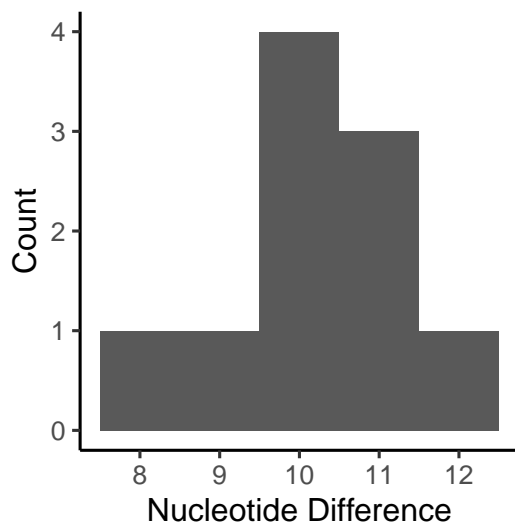
IGHV1-69*04_09

4941 sequences assigned
1378 (27.9%) exact matches, in which:
1268 unique CDR3
6 unique J



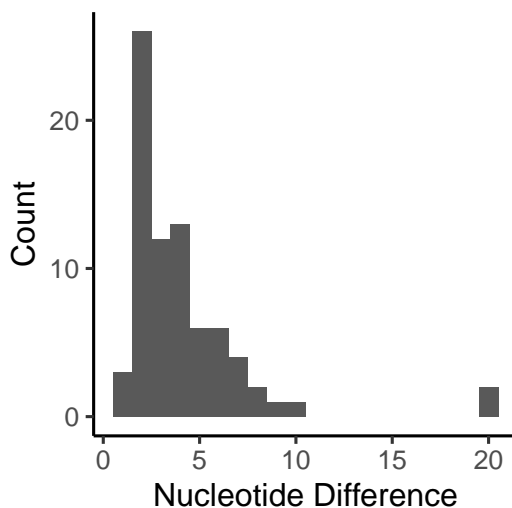
IGHV1–NL1*01

10 sequences assigned
No exact matches.



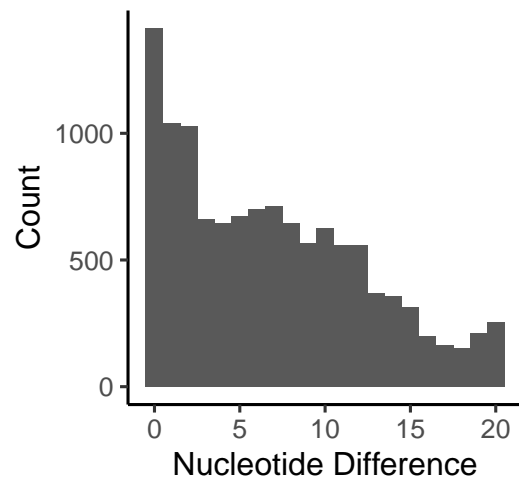
IGHV2–70*12

76 sequences assigned
No exact matches.



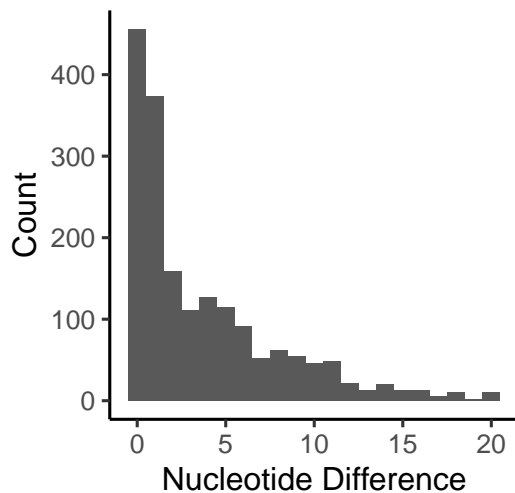
IGHV3–7*01

12691 sequences assigned
1414 (11.1%) exact matches, in which:
1044 unique CDR3
6 unique J



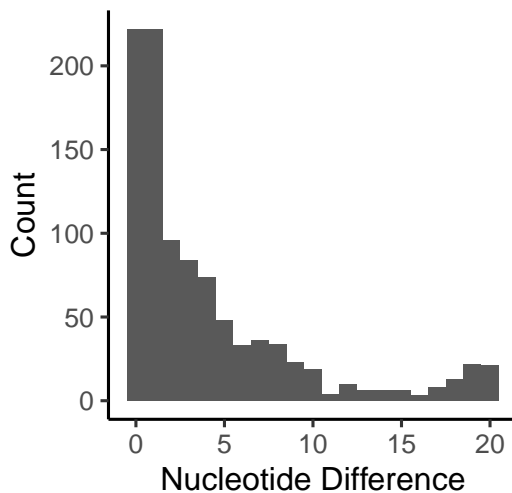
IGHV2–5*02

2218 sequences assigned
456 (20.6%) exact matches, in which:
399 unique CDR3
6 unique J



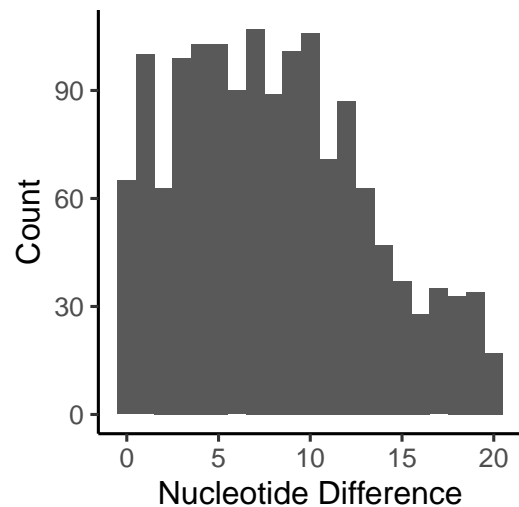
IGHV2–70*11_15

1030 sequences assigned
222 (21.6%) exact matches, in which:
190 unique CDR3
6 unique J



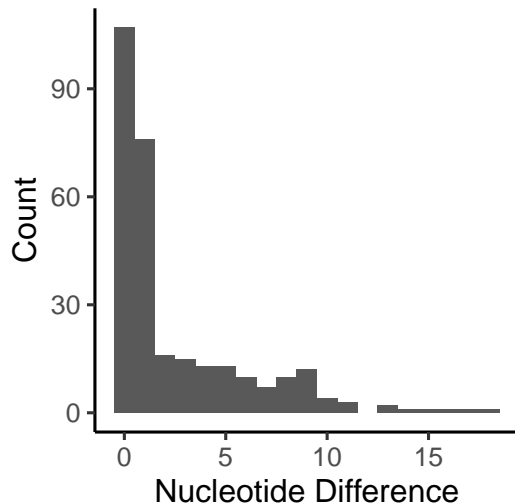
IGHV3–7*03

1585 sequences assigned
65 (4.1%) exact matches, in which:
60 unique CDR3
6 unique J



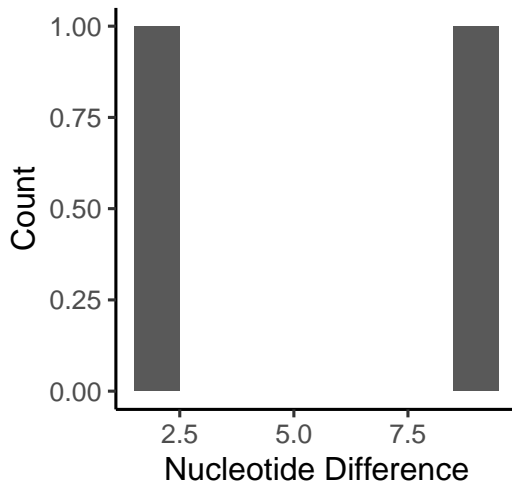
IGHV2–26*01

294 sequences assigned
107 (36.4%) exact matches, in which:
100 unique CDR3
5 unique J



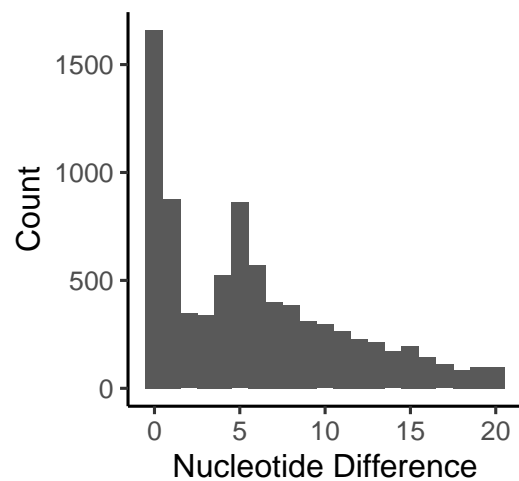
IGHV2–70D*14

2 sequences assigned
No exact matches.



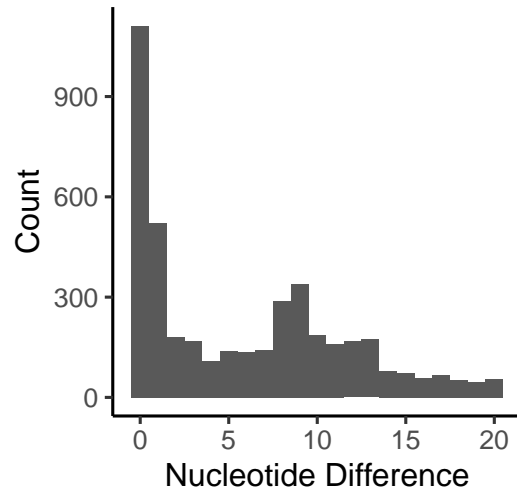
IGHV3–9*01

9380 sequences assigned
1660 (17.7%) exact matches, in which:
1110 unique CDR3
6 unique J



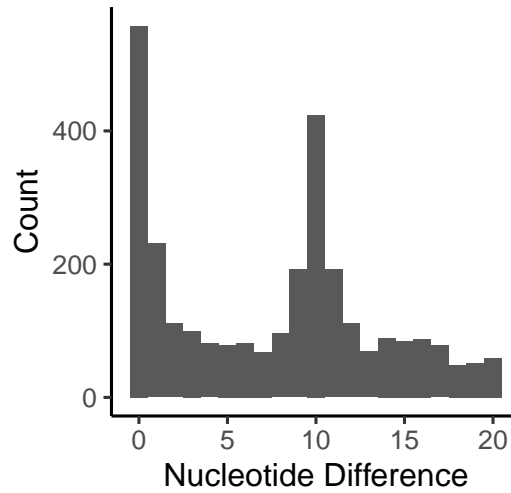
IGHV3-11*01

4431 sequences assigned
1112 (25.1%) exact matches, in which:
795 unique CDR3
6 unique J



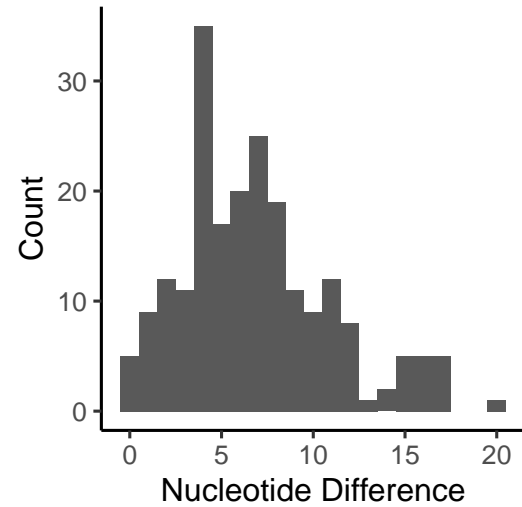
IGHV3-15*01_02

3105 sequences assigned
558 (18%) exact matches, in which:
405 unique CDR3
6 unique J



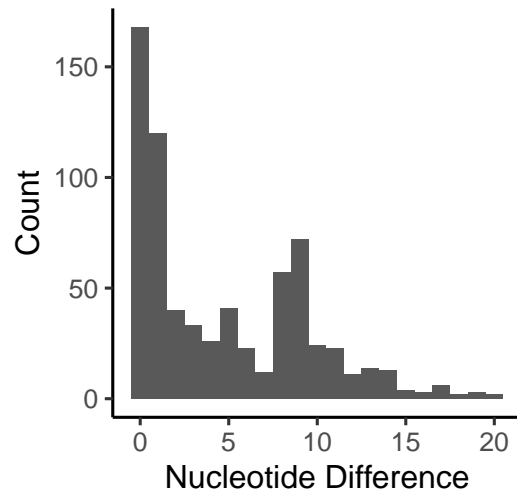
IGHV3-20*03_04

247 sequences assigned
5 (2%) exact matches, in which:
4 unique CDR3
3 unique J



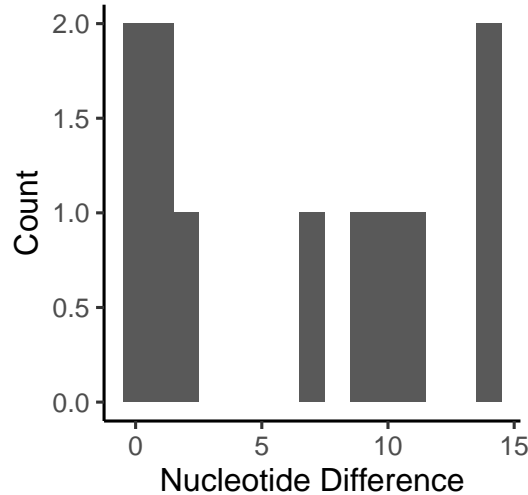
IGHV3-11*04

703 sequences assigned
168 (23.9%) exact matches, in which:
162 unique CDR3
6 unique J



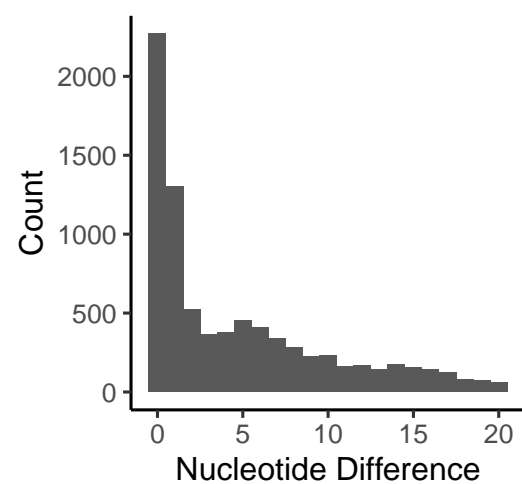
IGHV3-19*01

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



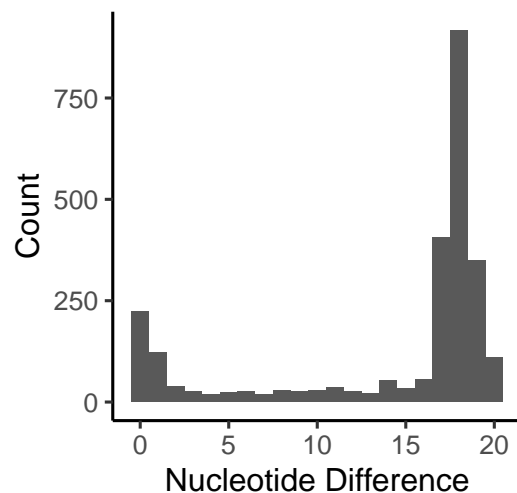
IGHV3-21*01_02

8931 sequences assigned
2270 (25.4%) exact matches, in which:
1596 unique CDR3
6 unique J



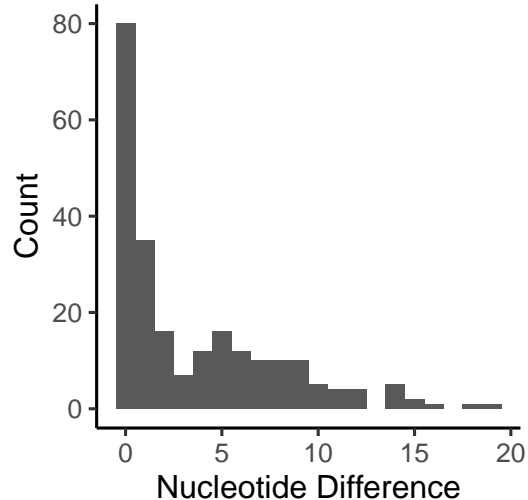
IGHV3-13*01

2822 sequences assigned
224 (7.9%) exact matches, in which:
142 unique CDR3
5 unique J



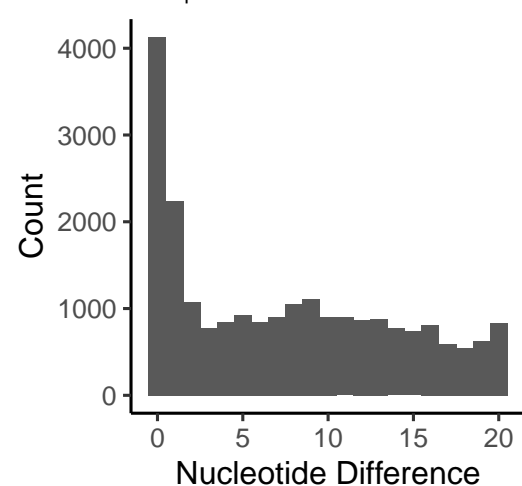
IGHV3-20*01_02

233 sequences assigned
80 (34.3%) exact matches, in which:
53 unique CDR3
5 unique J



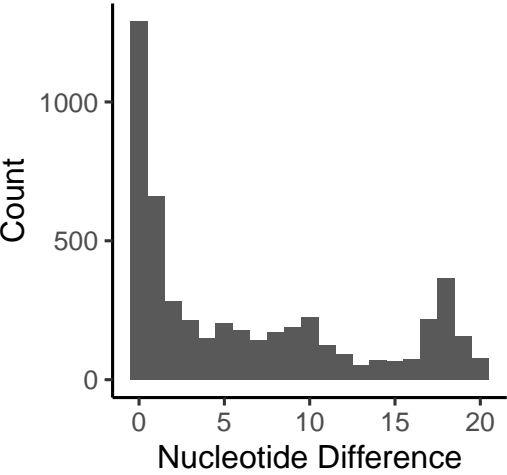
IGHV3-23*01_04

31361 sequences assigned
4129 (13.2%) exact matches, in which:
2737 unique CDR3
6 unique J



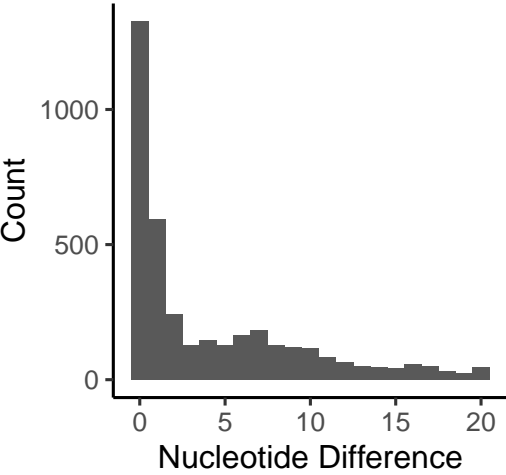
IGHV3-30-3*01

5395 sequences assigned
1290 (23.9%) exact matches, in which:
947 unique CDR3
6 unique J



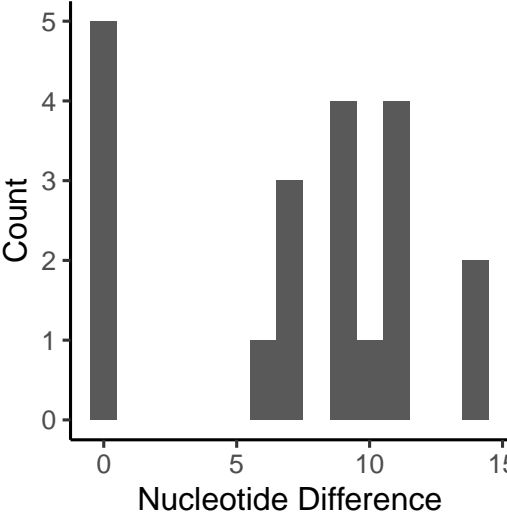
IGHV3-33*01

4151 sequences assigned
1326 (31.9%) exact matches, in which:
997 unique CDR3
6 unique J



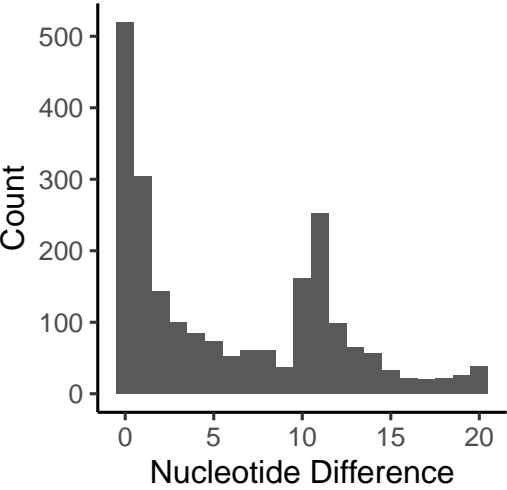
IGHV3-35*01

21 sequences assigned
5 (23.8%) exact matches, in which:
4 unique CDR3
3 unique J



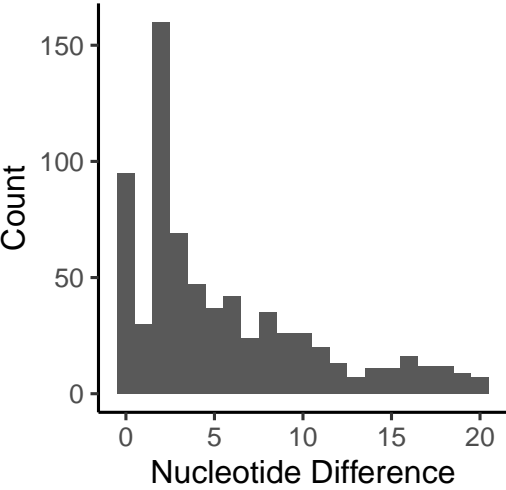
IGHV3-30*03

2656 sequences assigned
520 (19.6%) exact matches, in which:
482 unique CDR3
6 unique J



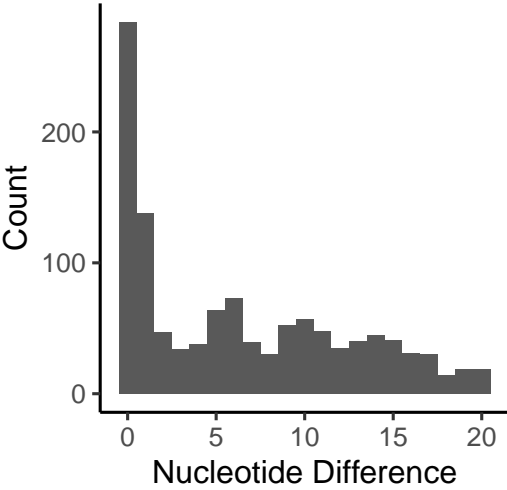
IGHV3-33*06

744 sequences assigned
95 (12.8%) exact matches, in which:
93 unique CDR3
6 unique J



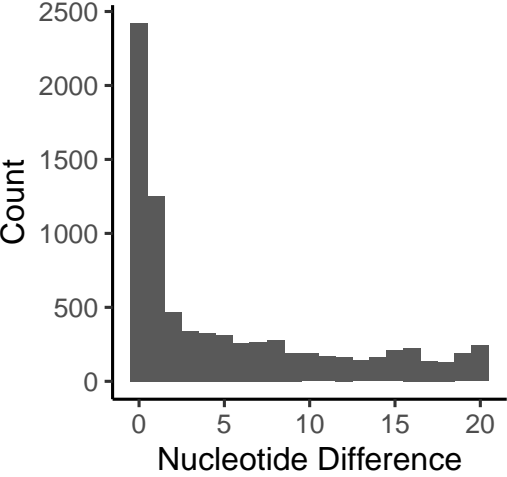
IGHV3-43*02

1568 sequences assigned
284 (18.1%) exact matches, in which:
197 unique CDR3
6 unique J



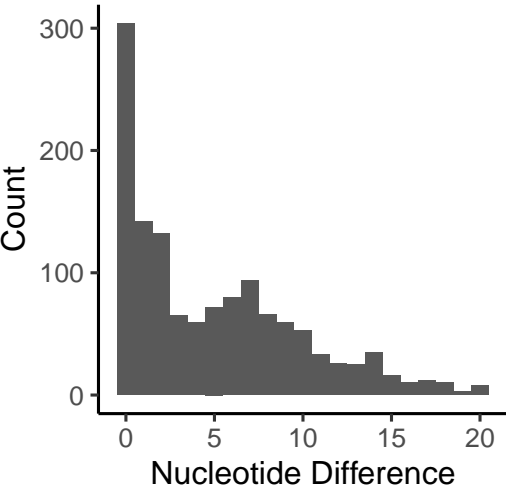
IGHV3-30*18

16068 sequences assigned
2422 (15.1%) exact matches, in which:
1661 unique CDR3
6 unique J



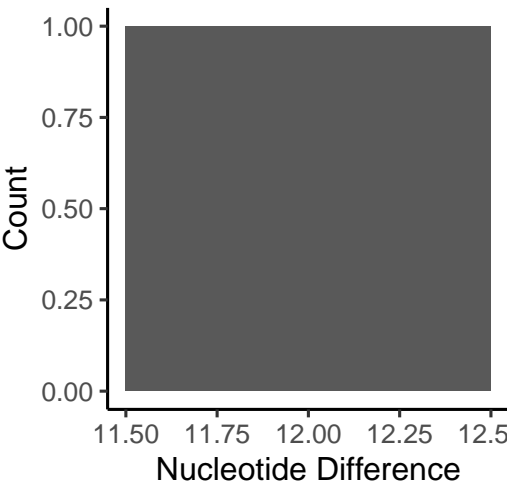
IGHV3-33*08

1420 sequences assigned
304 (21.4%) exact matches, in which:
274 unique CDR3
6 unique J



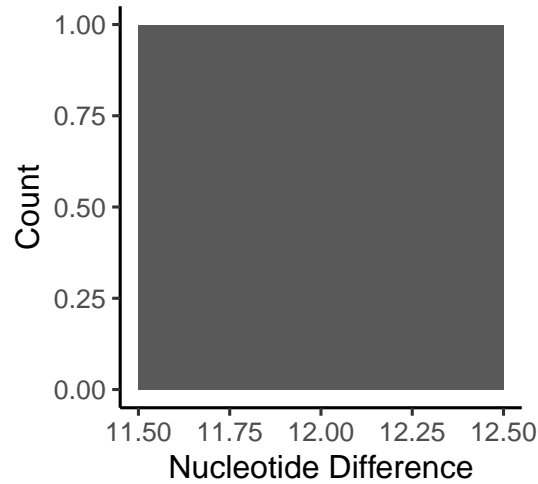
IGHV3-47*01

1 sequences assigned
No exact matches.



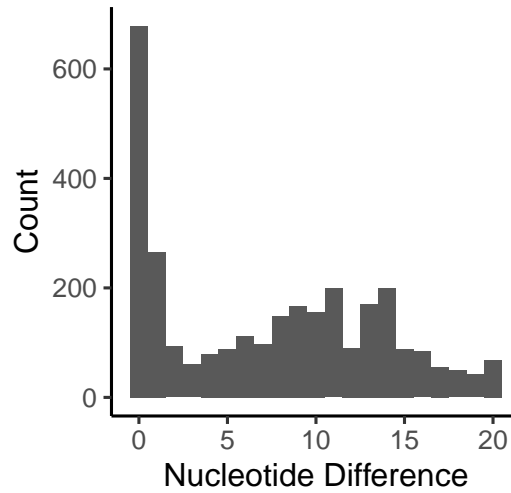
IGHV3-47*02

1 sequences assigned
No exact matches.



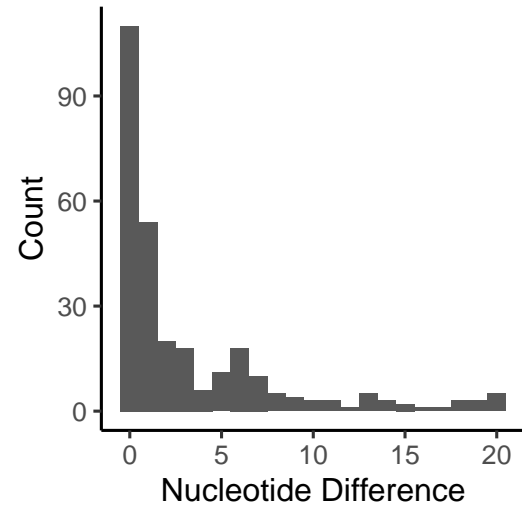
IGHV3-48*03

4410 sequences assigned
679 (15.4%) exact matches, in which:
488 unique CDR3
6 unique J



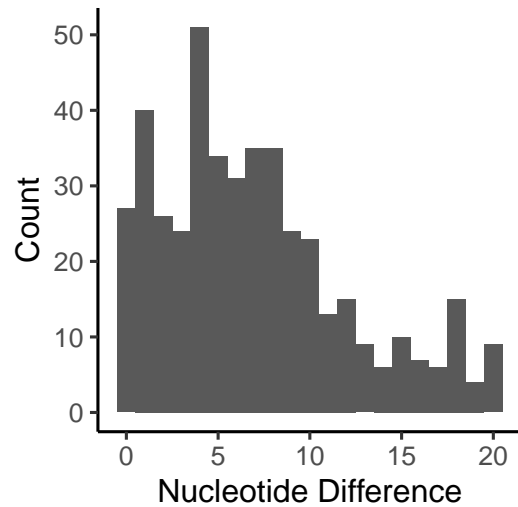
IGHV3-49*03_05

295 sequences assigned
110 (37.3%) exact matches, in which:
76 unique CDR3
5 unique J



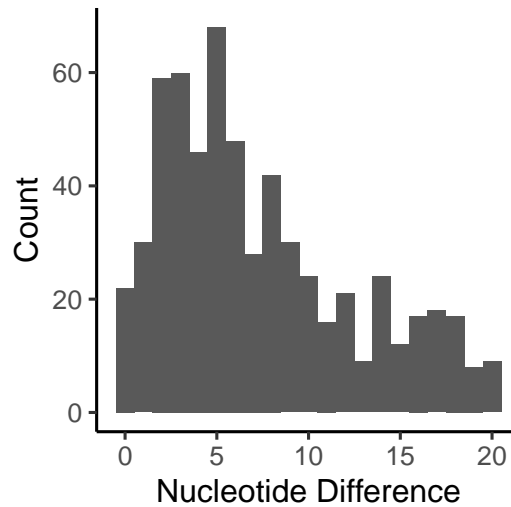
IGHV3-48*01

471 sequences assigned
27 (5.7%) exact matches, in which:
27 unique CDR3
5 unique J



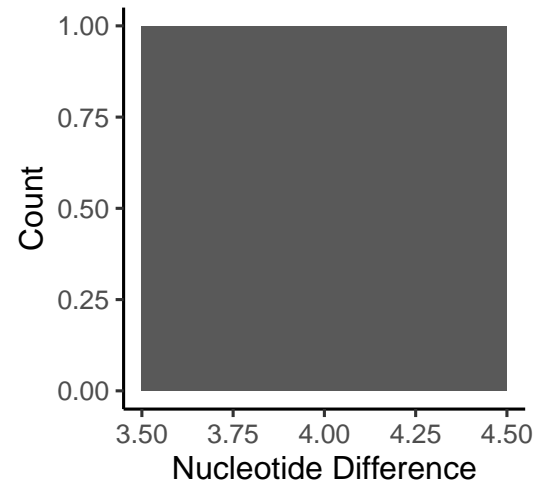
IGHV3-48*04

651 sequences assigned
22 (3.4%) exact matches, in which:
22 unique CDR3
3 unique J



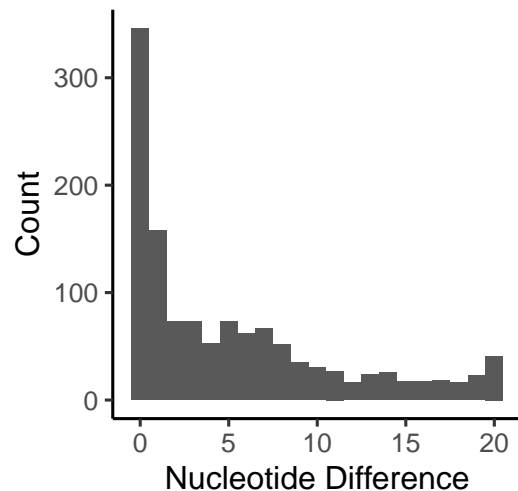
IGHV3-52*01_03

1 sequences assigned
No exact matches.



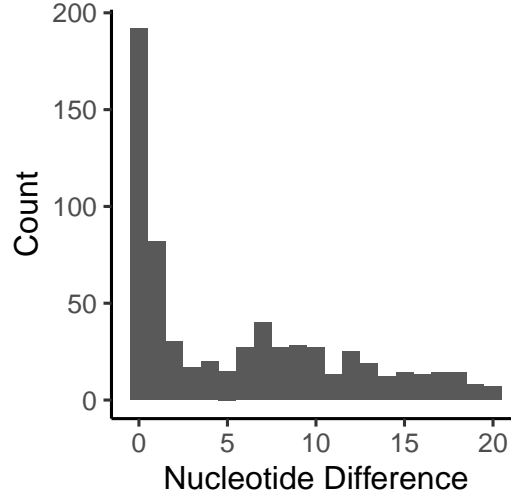
IGHV3-48*02

1321 sequences assigned
346 (26.2%) exact matches, in which:
244 unique CDR3
6 unique J



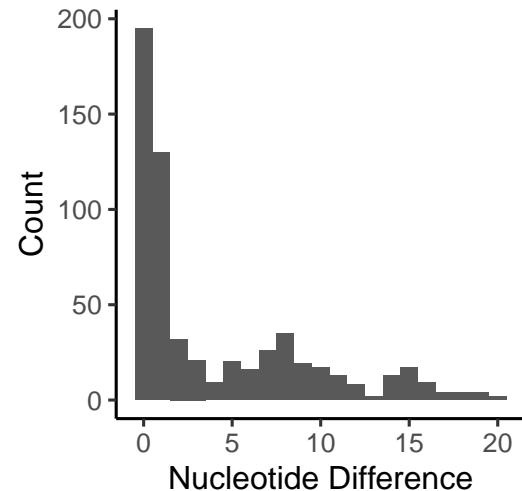
IGHV3-49*04

718 sequences assigned
192 (26.7%) exact matches, in which:
142 unique CDR3
5 unique J



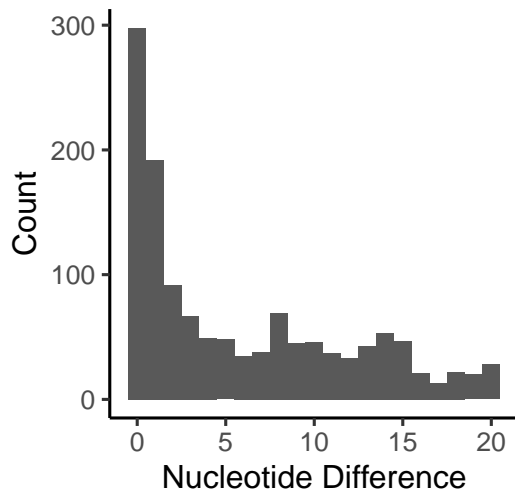
IGHV3-53*04

659 sequences assigned
195 (29.6%) exact matches, in which:
141 unique CDR3
5 unique J



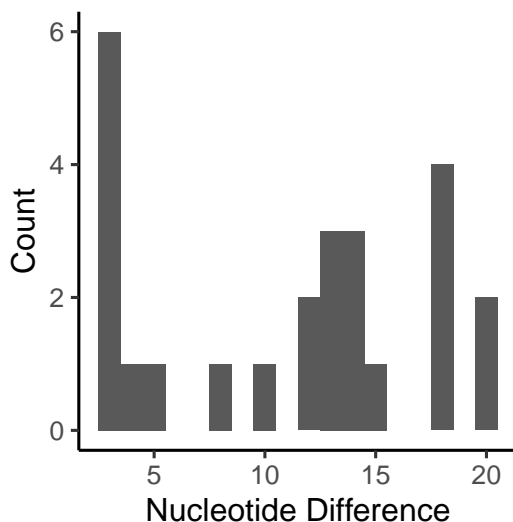
IGHV3-53*01_02

1408 sequences assigned
298 (21.2%) exact matches, in which:
211 unique CDR3
6 unique J



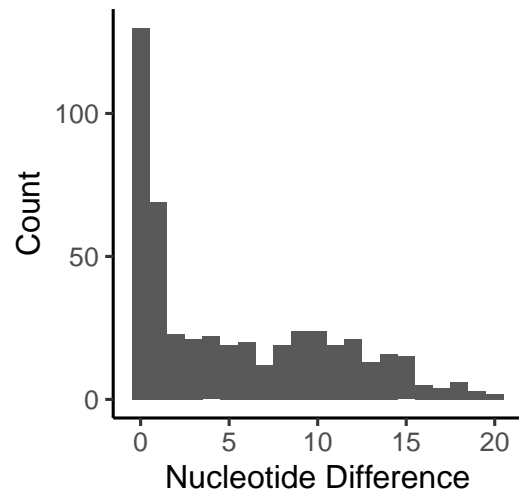
IGHV3-69-1*01

40 sequences assigned
No exact matches.



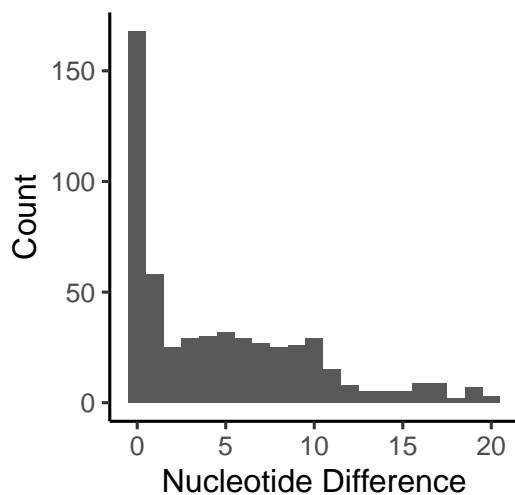
IGHV3-73*01_02

508 sequences assigned
130 (25.6%) exact matches, in which:
83 unique CDR3
5 unique J



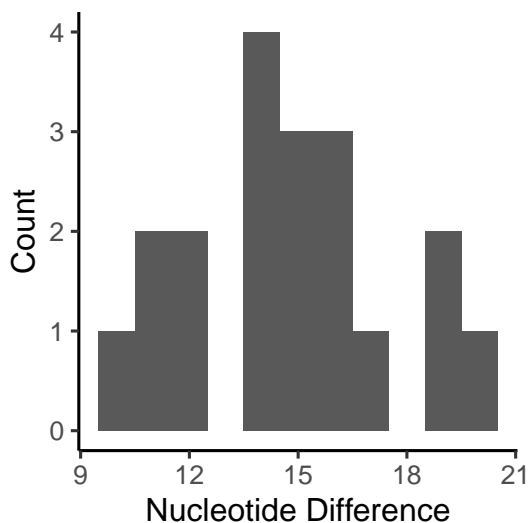
IGHV3-64*01

582 sequences assigned
168 (28.9%) exact matches, in which:
124 unique CDR3
6 unique J



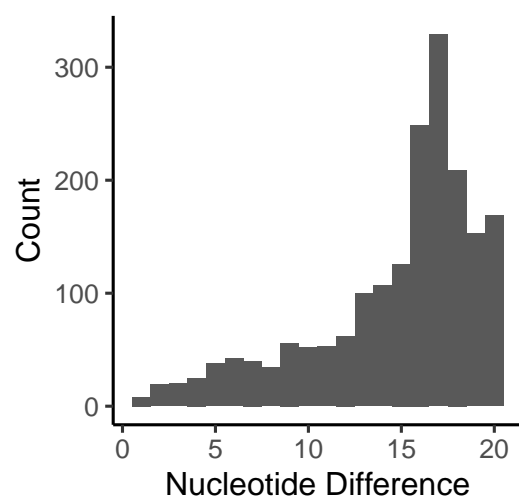
IGHV3-69-1*02

47 sequences assigned
No exact matches.



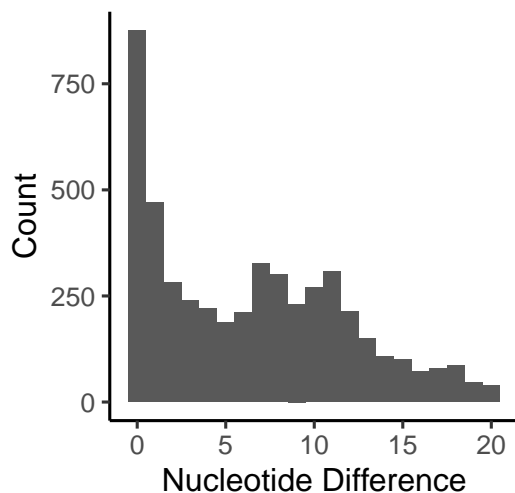
IGHV3-74*03

2335 sequences assigned
No exact matches.



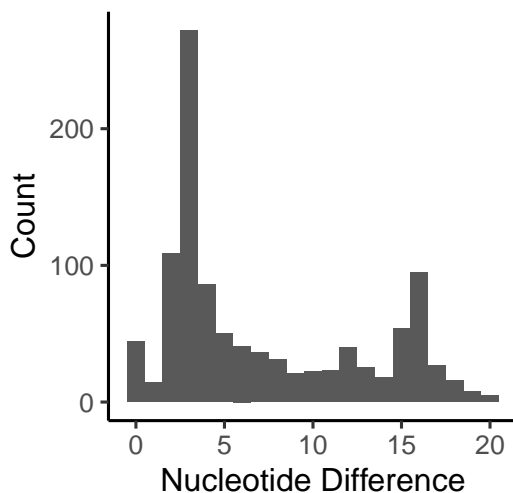
IGHV3-66*01

5242 sequences assigned
876 (16.7%) exact matches, in which:
647 unique CDR3
6 unique J



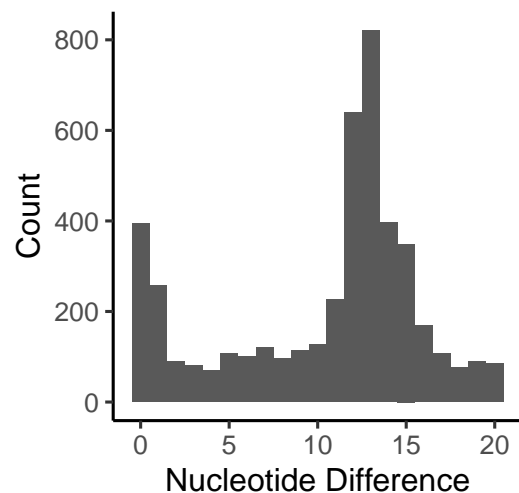
IGHV3-72*01

1121 sequences assigned
44 (3.9%) exact matches, in which:
33 unique CDR3
4 unique J



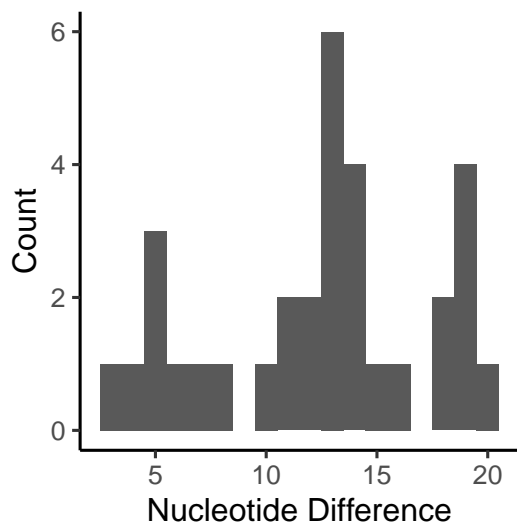
IGHV3-74*01_02

5077 sequences assigned
395 (7.8%) exact matches, in which:
255 unique CDR3
5 unique J



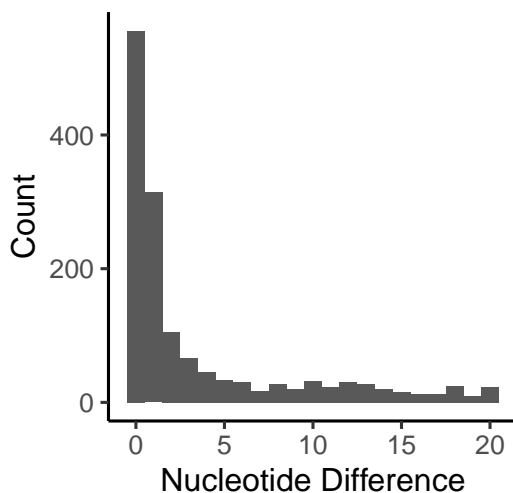
IGHV3-43D*04

34 sequences assigned
No exact matches.



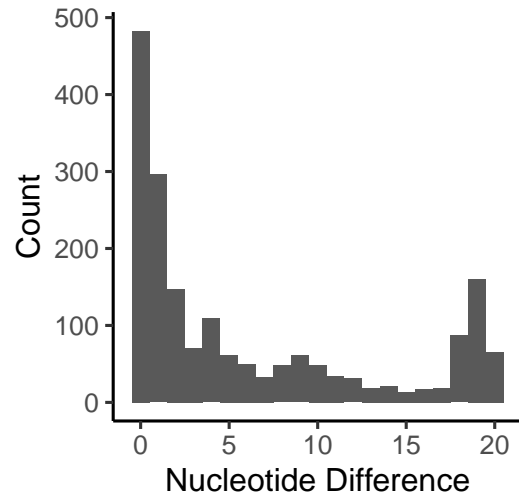
IGHV4-4*02_03

1584 sequences assigned
556 (35.1%) exact matches, in which:
503 unique CDR3
6 unique J



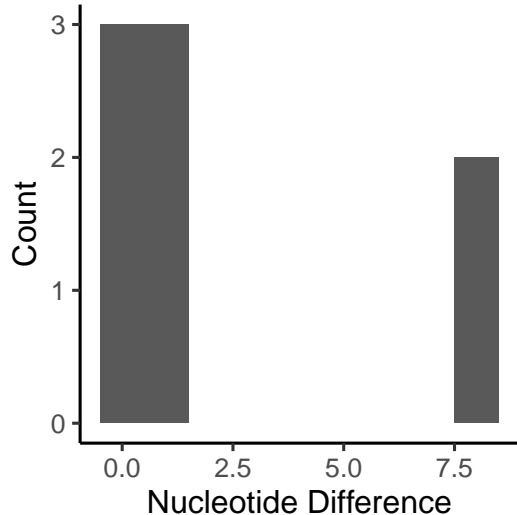
IGHV4-30-2*01

2113 sequences assigned
483 (22.9%) exact matches, in which:
364 unique CDR3
6 unique J



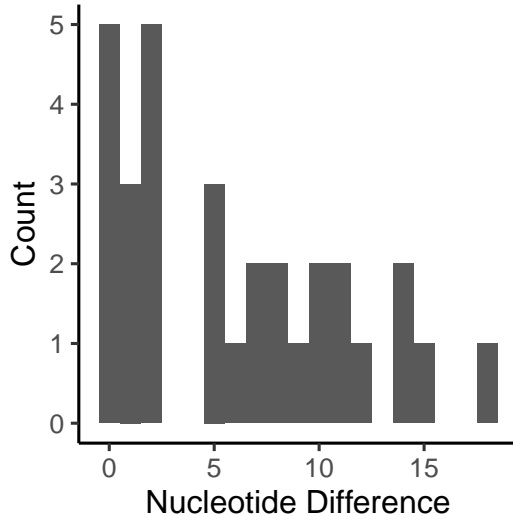
IGHV3-64D*06

28 sequences assigned
3 (10.7%) exact matches, in which:
2 unique CDR3
2 unique J



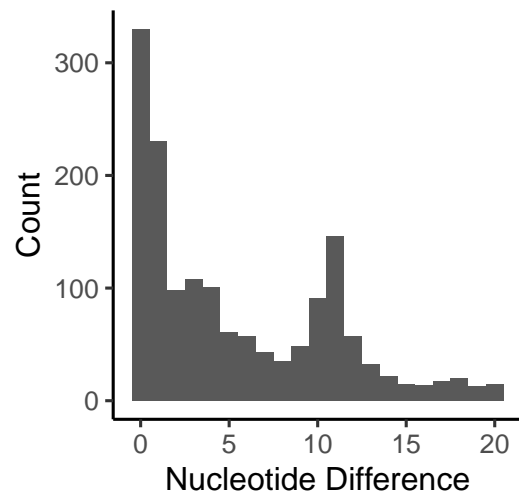
IGHV4-28*03

31 sequences assigned
5 (16.1%) exact matches, in which:
4 unique CDR3
3 unique J



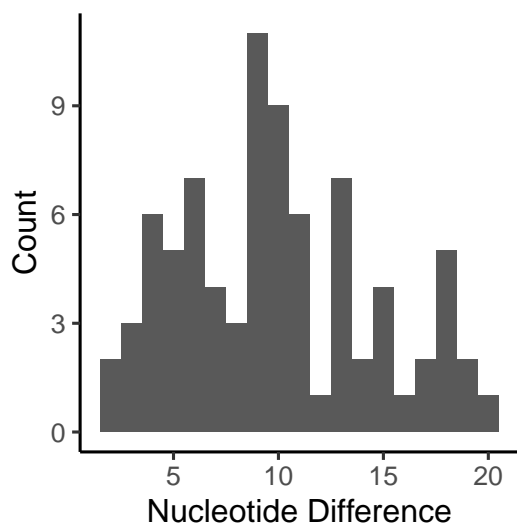
IGHV4-30-4*01

1656 sequences assigned
330 (19.9%) exact matches, in which:
287 unique CDR3
6 unique J



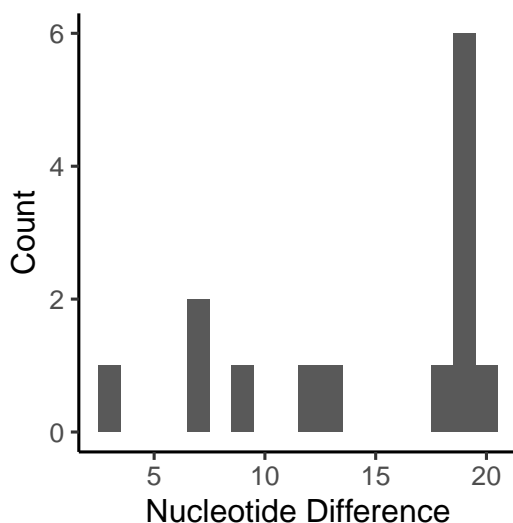
IGHV3-NL1*01

91 sequences assigned
No exact matches.



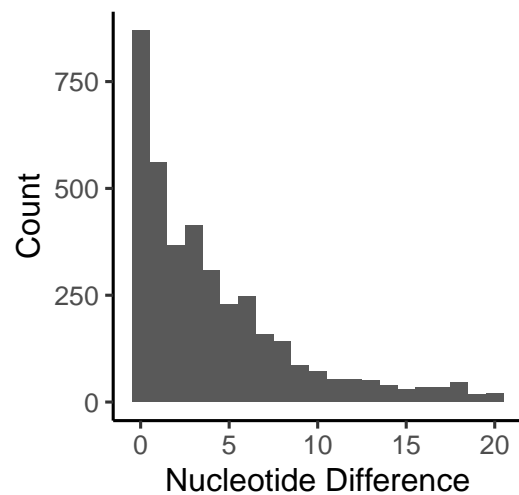
IGHV4-28*01_07

16 sequences assigned
No exact matches.



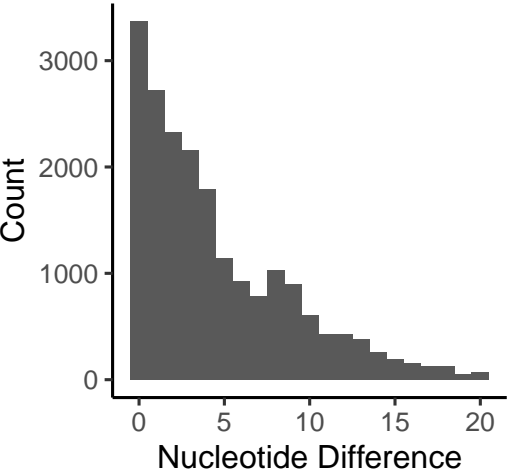
IGHV4-31*02

4392 sequences assigned
870 (19.8%) exact matches, in which:
776 unique CDR3
6 unique J



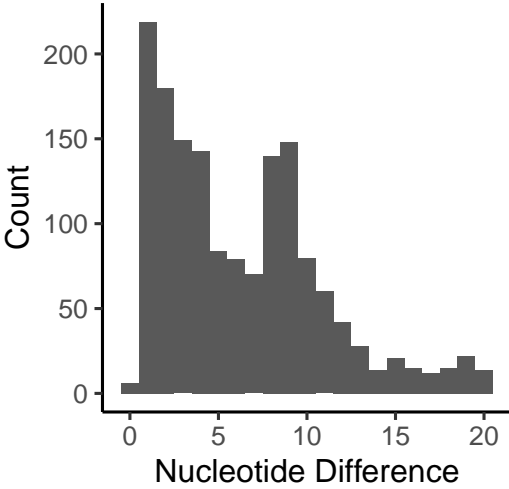
IGHV4-34*01_02

20379 sequences assigned
3369 (16.5%) exact matches, in which:
2747 unique CDR3
6 unique J



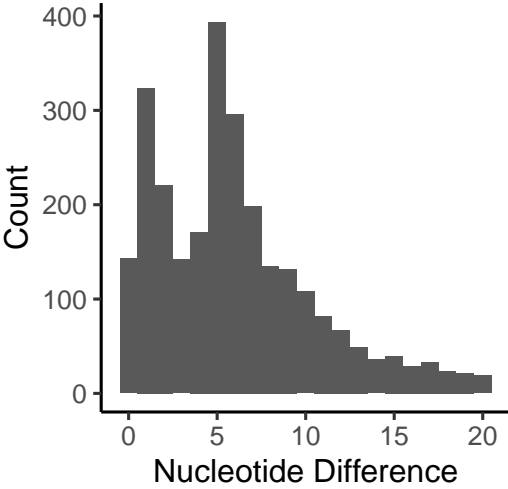
IGHV4-39*07

1808 sequences assigned
6 (0.3%) exact matches, in which:
6 unique CDR3
2 unique J



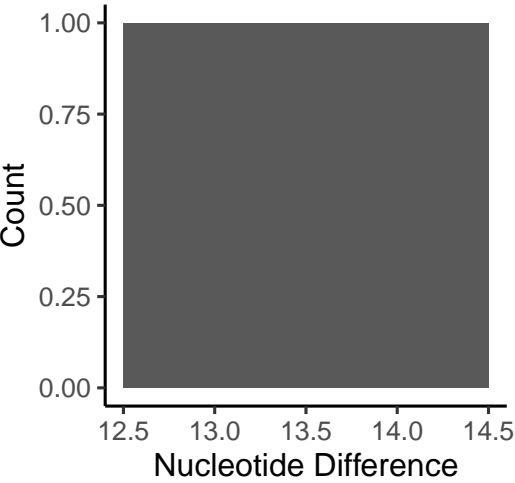
IGHV4-59*12

2846 sequences assigned
143 (5%) exact matches, in which:
143 unique CDR3
5 unique J



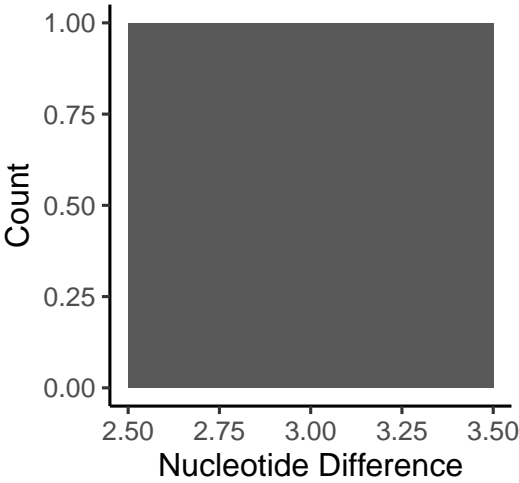
IGHV4-38-2*01

3 sequences assigned
No exact matches.



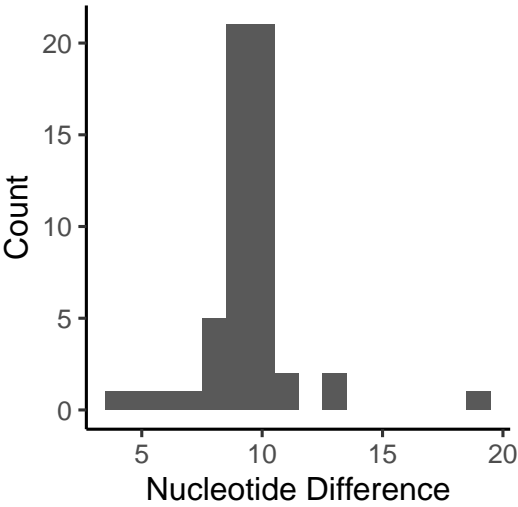
IGHV4-55*09

1 sequences assigned
No exact matches.



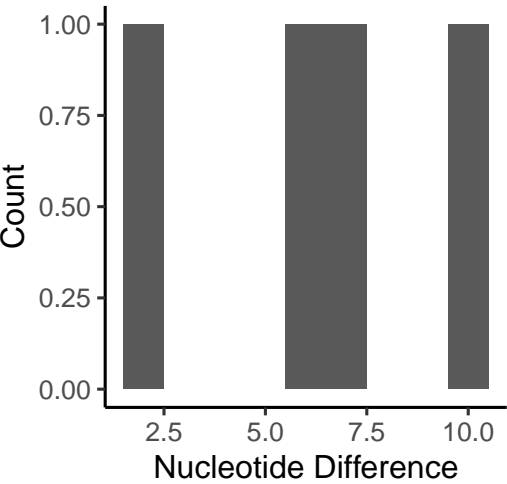
IGHV4-61*03

56 sequences assigned
No exact matches.



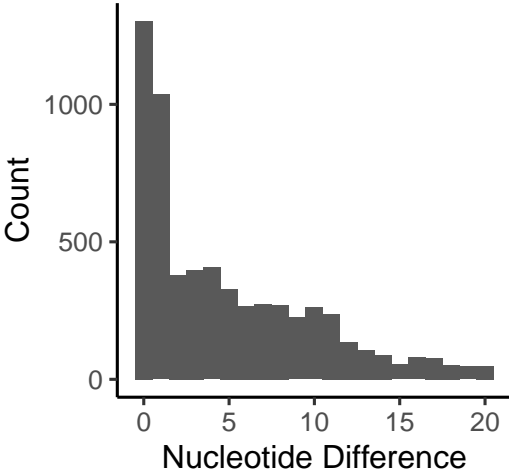
IGHV4-38-2*02

6 sequences assigned
No exact matches.



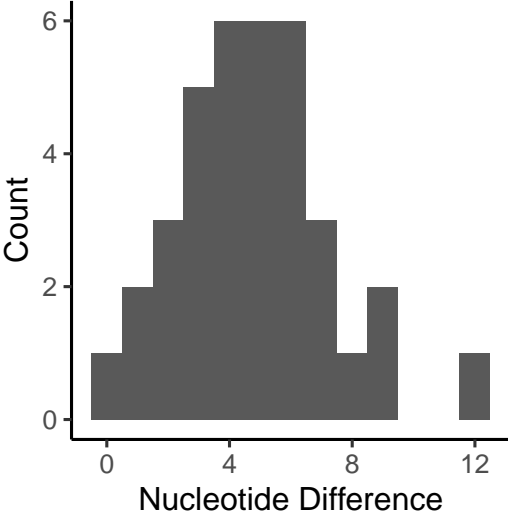
IGHV4-59*08

6906 sequences assigned
1303 (18.9%) exact matches, in which:
1137 unique CDR3
6 unique J



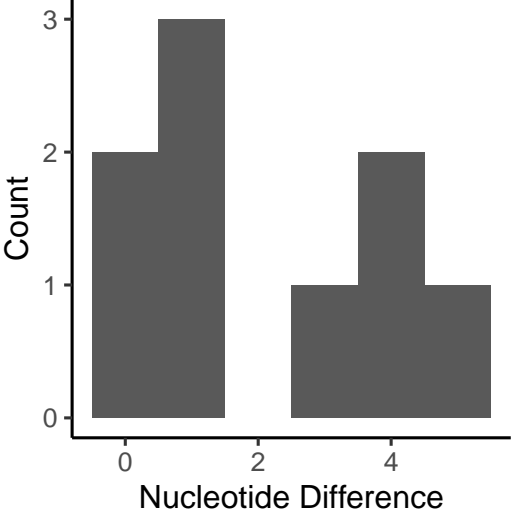
IGHV4-61*05

36 sequences assigned
1 (2.8%) exact matches, in which:
1 unique CDR3
1 unique J



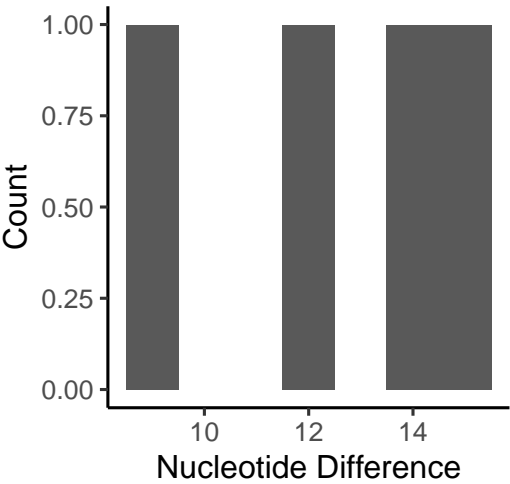
IGHV4-61*06

9 sequences assigned
2 (22.2%) exact matches, in which:
2 unique CDR3
1 unique J



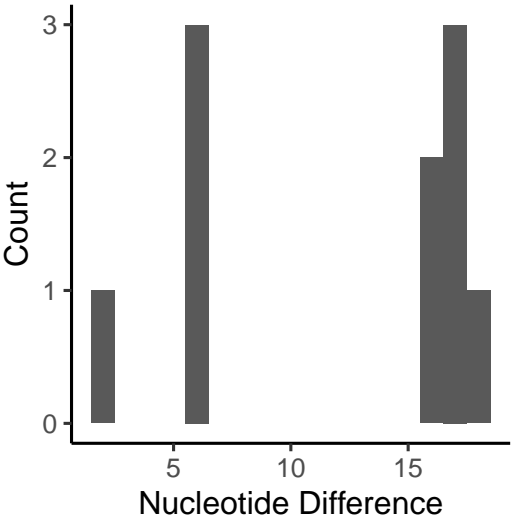
IGHV1/OR15-3*02

4 sequences assigned
No exact matches.



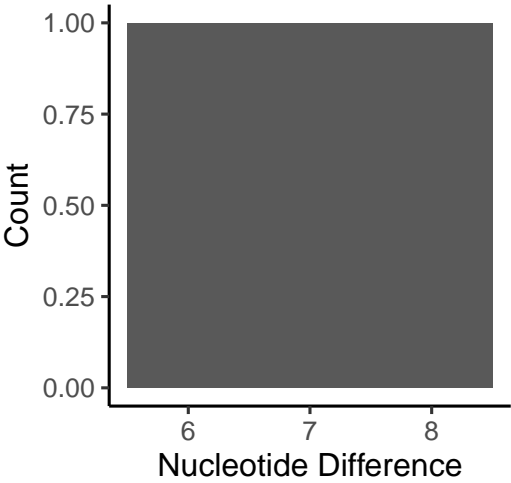
IGHV5-10-1*01_03

13 sequences assigned
No exact matches.



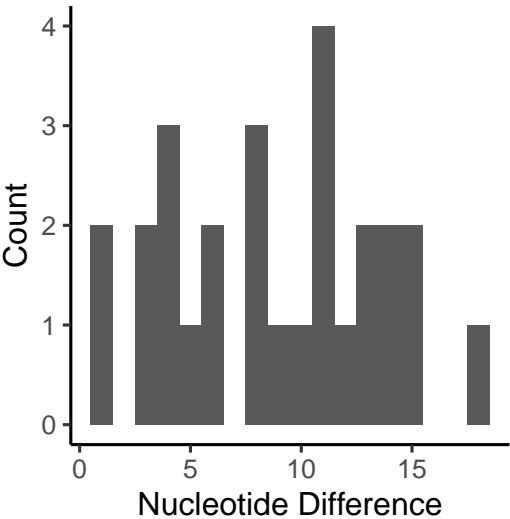
IGHV1/OR15-1*04

3 sequences assigned
No exact matches.



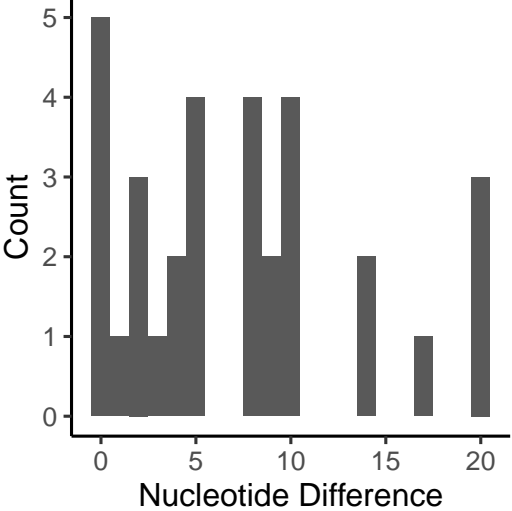
IGHV4/OR15-8*01

28 sequences assigned
No exact matches.



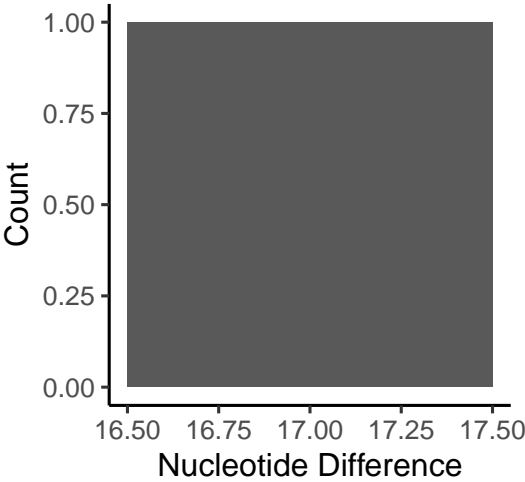
IGHV5-51*04

42 sequences assigned
5 (11.9%) exact matches, in which:
5 unique CDR3
2 unique J



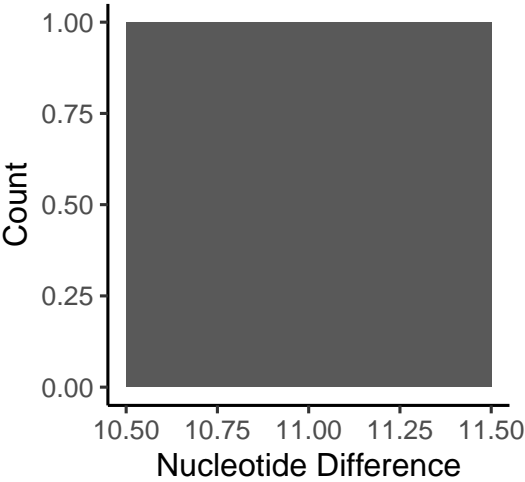
IGHV1/OR15-2*02_03

2 sequences assigned
No exact matches.



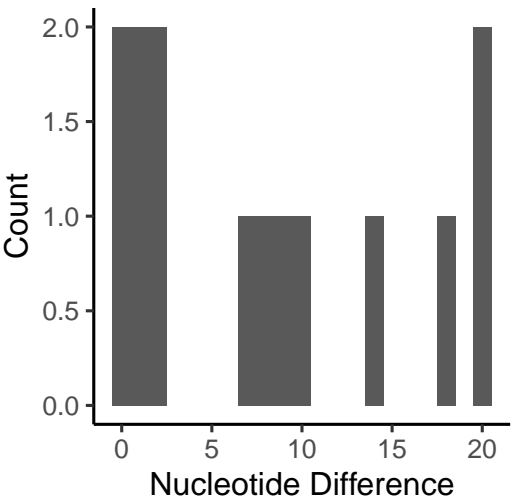
IGHV1/OR15-9*01

1 sequences assigned
No exact matches.



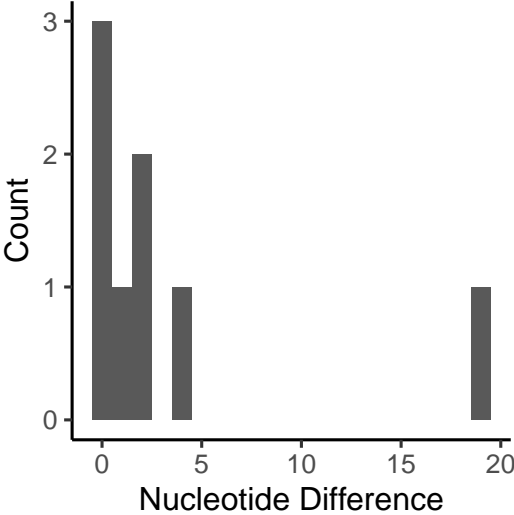
IGHV5-51*06

111 sequences assigned
2 (1.8%) exact matches, in which:
2 unique CDR3
2 unique J



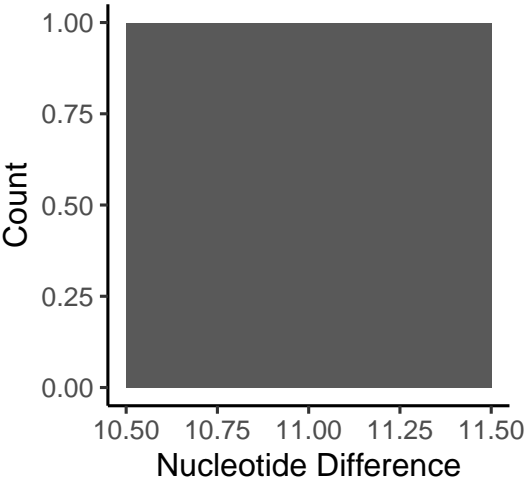
IGHV5-51*07

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



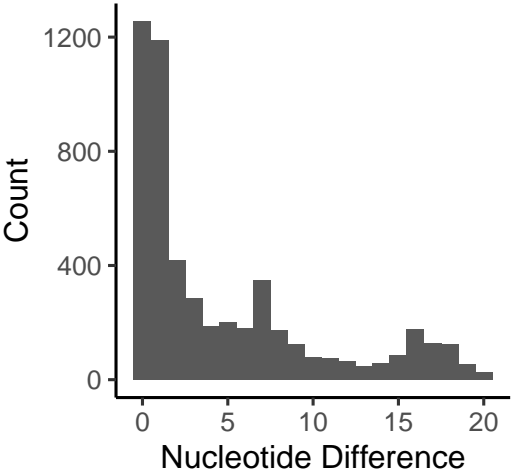
IGHV3/OR16-6*02

1 sequences assigned
No exact matches.



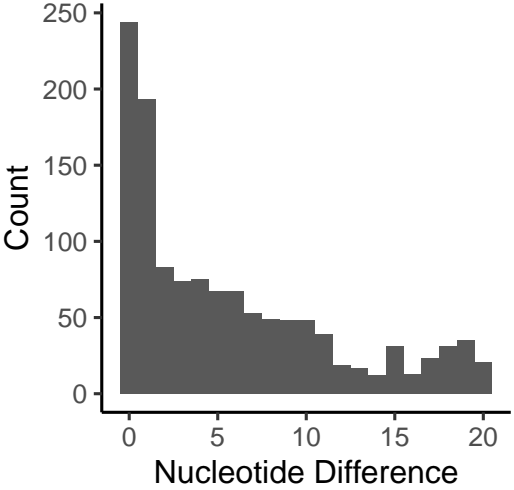
IGHV7-4-1*02

5358 sequences assigned
1255 (23.4%) exact matches, in which:
1077 unique CDR3
6 unique J



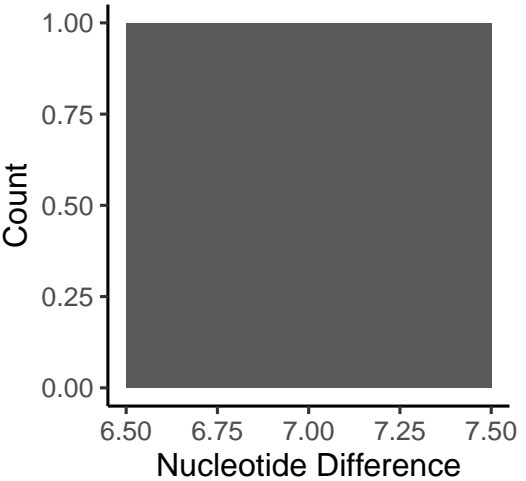
IGHV6-1*01_02

1466 sequences assigned
244 (16.6%) exact matches, in which:
212 unique CDR3
6 unique J



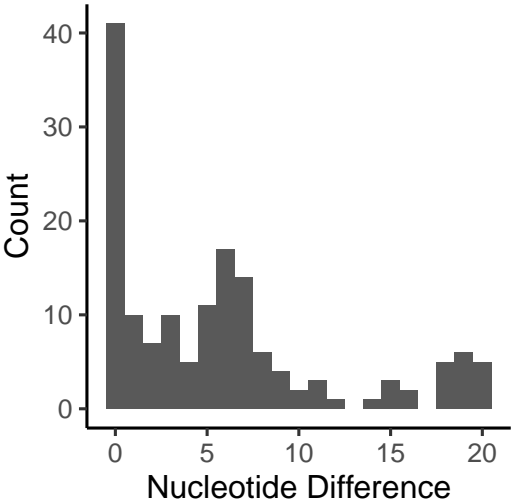
IGHV3/OR16-9*01

1 sequences assigned
No exact matches.



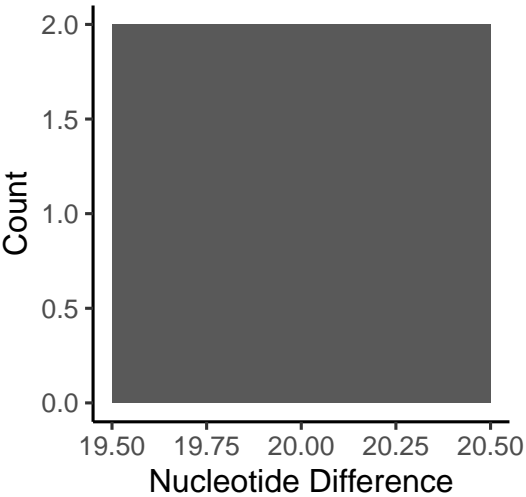
IGHV6-1*01_02_A315G

160 sequences assigned
41 (25.6%) exact matches, in which:
41 unique CDR3
5 unique J



IGHV3/OR16-13*01

2 sequences assigned
No exact matches.



IGHV6-1*01_02_A315G

