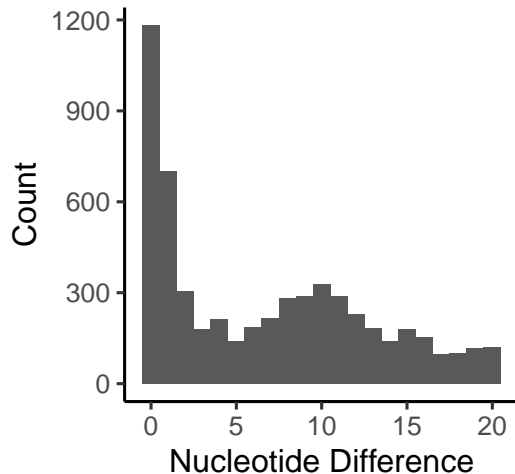


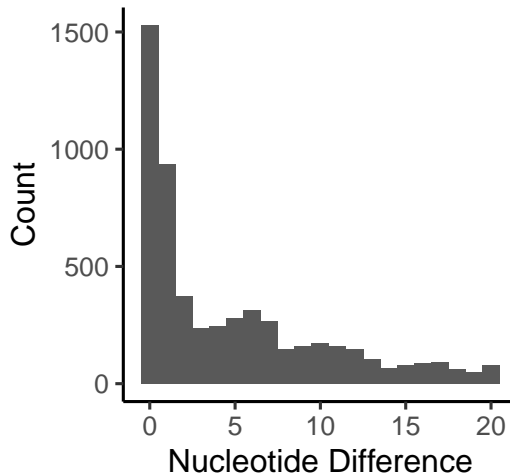
IGHV1-2*02

6665 sequences assigned
1182 (17.7%) exact matches, in which:
1088 unique CDR3
6 unique J



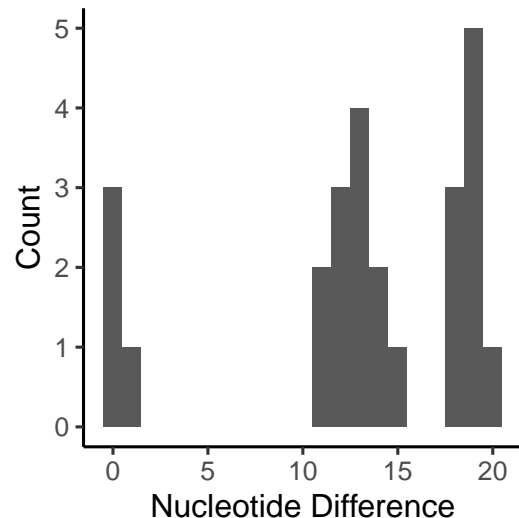
IGHV1-8*01

6502 sequences assigned
1528 (23.5%) exact matches, in which:
1367 unique CDR3
6 unique J



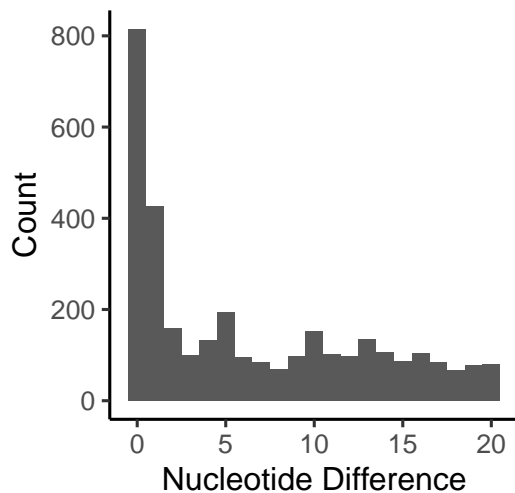
IGHV1-45*02

31 sequences assigned
3 (9.7%) exact matches, in which:
3 unique CDR3
2 unique J



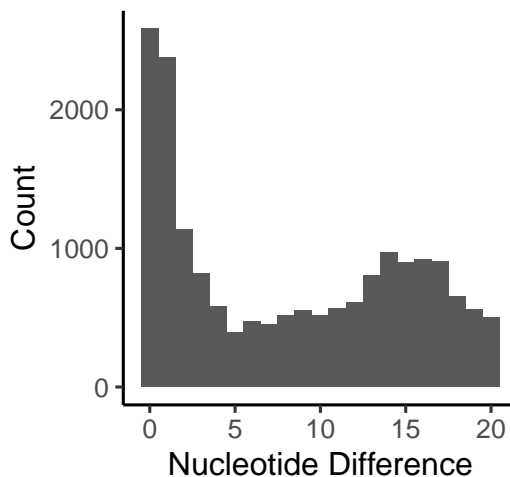
IGHV1-2*06

4284 sequences assigned
815 (19%) exact matches, in which:
760 unique CDR3
6 unique J



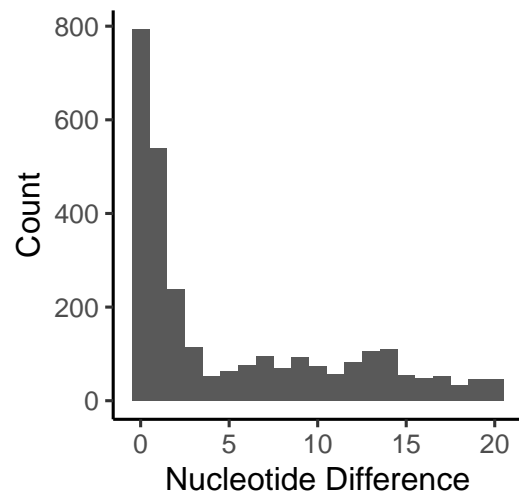
IGHV1-18*01

20519 sequences assigned
2585 (12.6%) exact matches, in which:
2246 unique CDR3
6 unique J



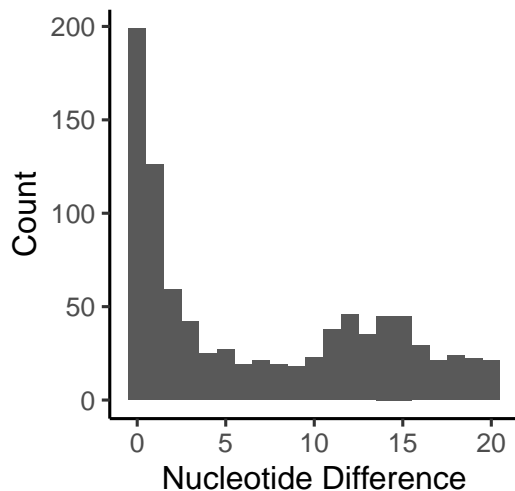
IGHV1-46*01

3255 sequences assigned
794 (24.4%) exact matches, in which:
724 unique CDR3
6 unique J



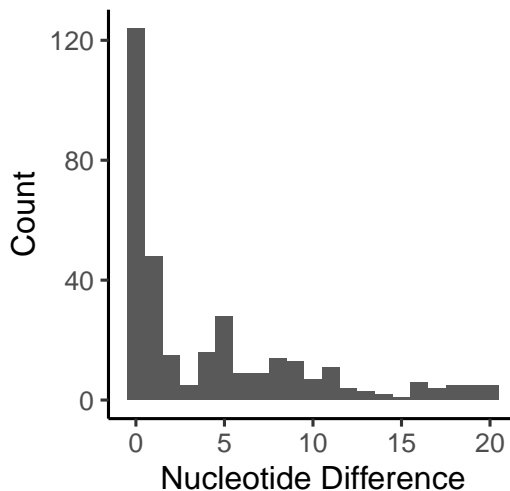
IGHV1-3*01_05

1122 sequences assigned
199 (17.7%) exact matches, in which:
176 unique CDR3
5 unique J



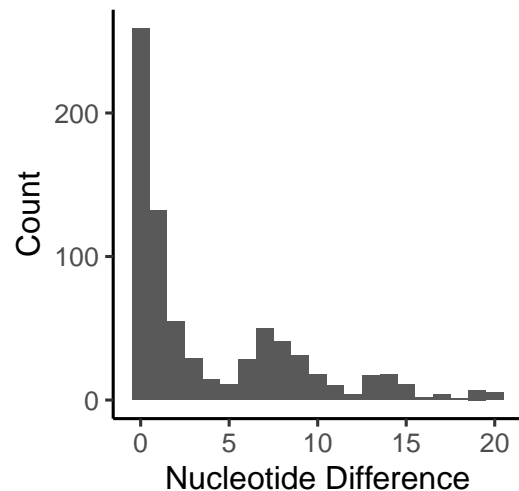
IGHV1-24*01

380 sequences assigned
124 (32.6%) exact matches, in which:
119 unique CDR3
6 unique J



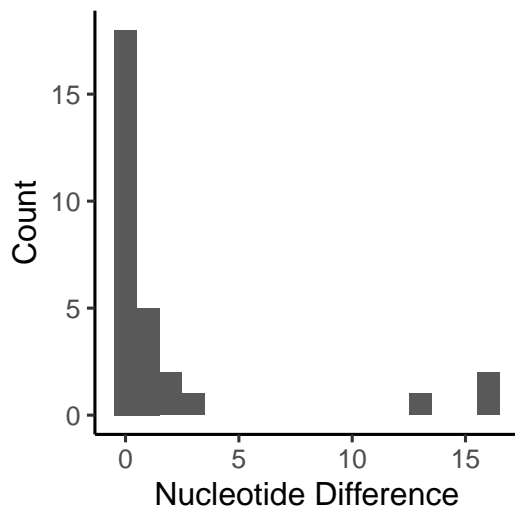
IGHV1-46*03

922 sequences assigned
259 (28.1%) exact matches, in which:
228 unique CDR3
6 unique J



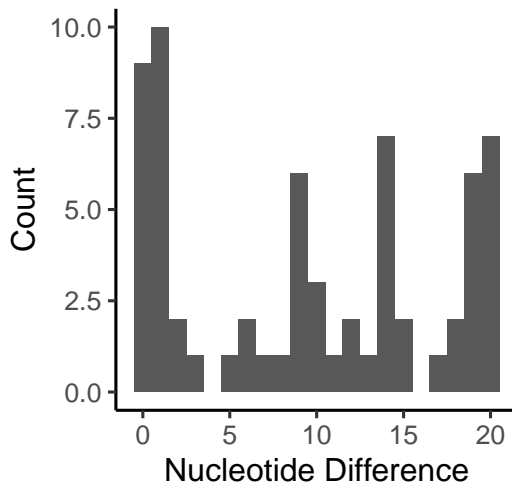
IGHV1-58*02

35 sequences assigned
18 (51.4%) exact matches, in which:
17 unique CDR3
4 unique J



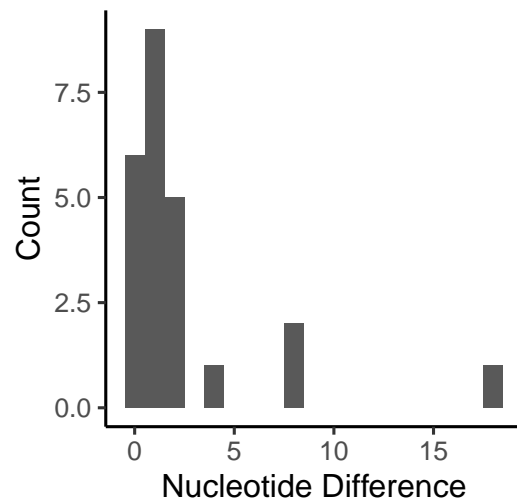
IGHV2-5*01

91 sequences assigned
9 (9.9%) exact matches, in which:
7 unique CDR3
3 unique J



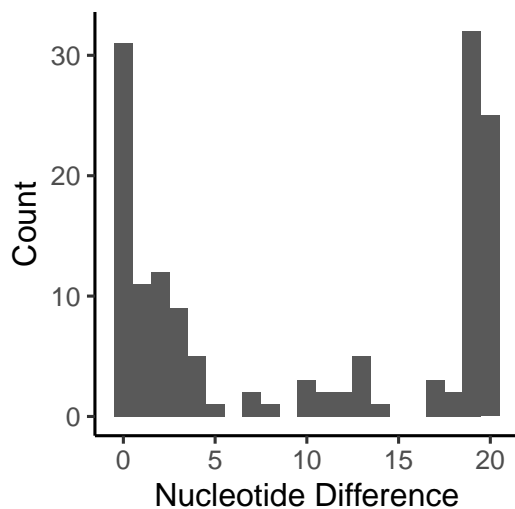
IGHV2-70*01

27 sequences assigned
6 (22.2%) exact matches, in which:
6 unique CDR3
4 unique J



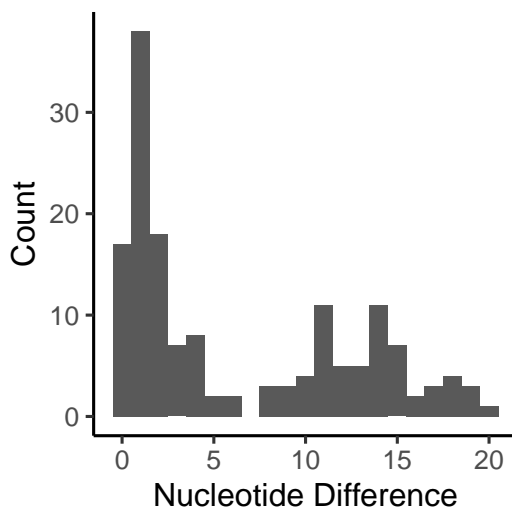
IGHV1-58*01_03

253 sequences assigned
31 (12.3%) exact matches, in which:
31 unique CDR3
5 unique J



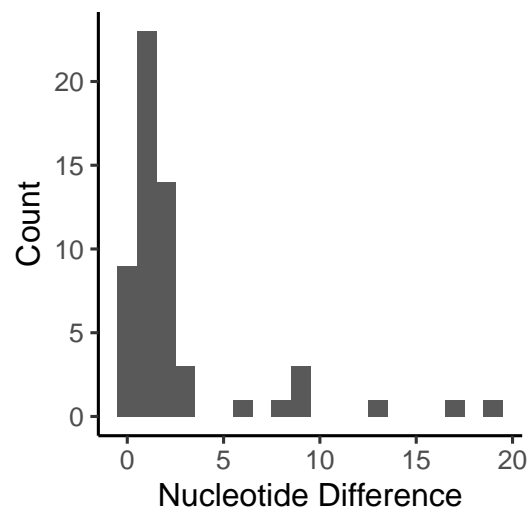
IGHV2-5*02

169 sequences assigned
17 (10.1%) exact matches, in which:
14 unique CDR3
4 unique J



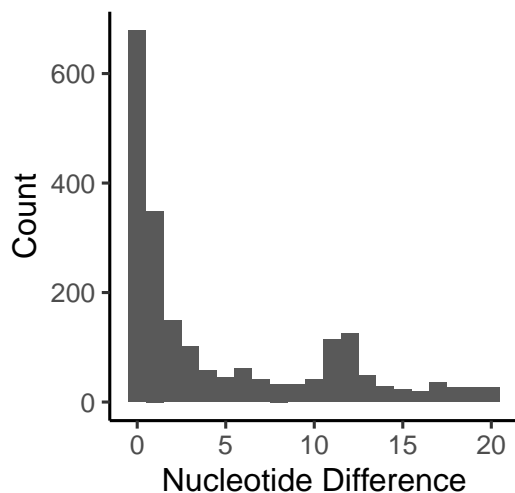
IGHV2-70*11_15

63 sequences assigned
9 (14.3%) exact matches, in which:
8 unique CDR3
2 unique J



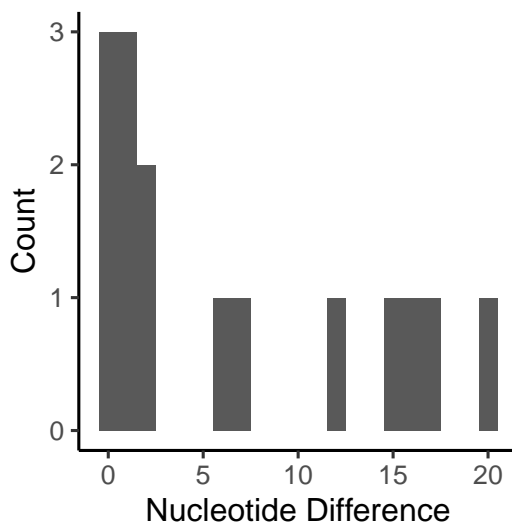
IGHV1-69*04_09

2613 sequences assigned
679 (26%) exact matches, in which:
636 unique CDR3
6 unique J



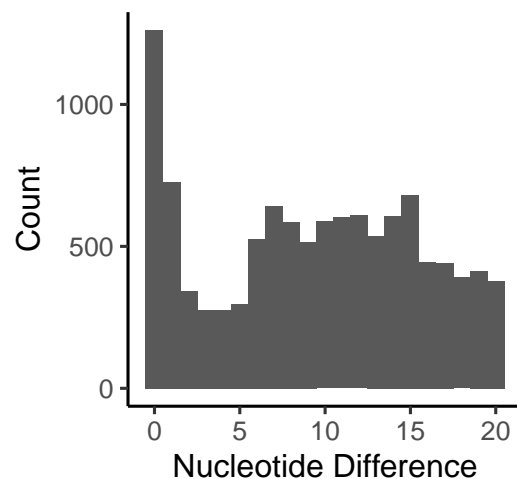
IGHV2-26*01

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



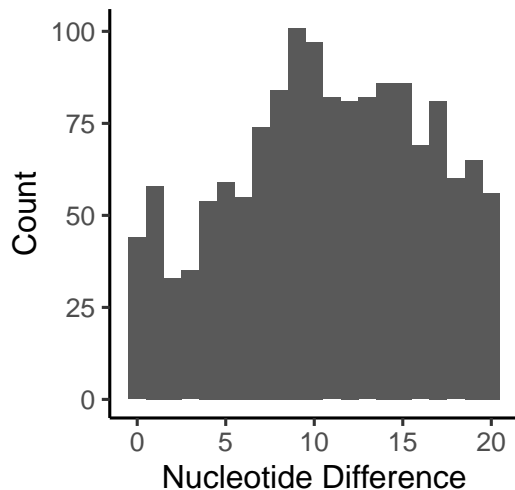
IGHV3-7*01

12678 sequences assigned
1262 (10%) exact matches, in which:
1144 unique CDR3
6 unique J



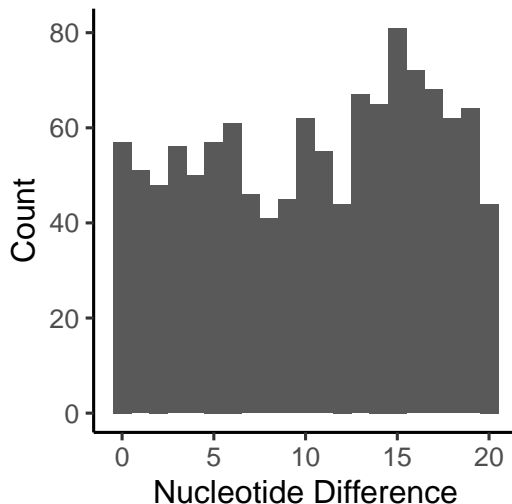
IGHV3-7*03

1655 sequences assigned
44 (2.7%) exact matches, in which:
44 unique CDR3
6 unique J



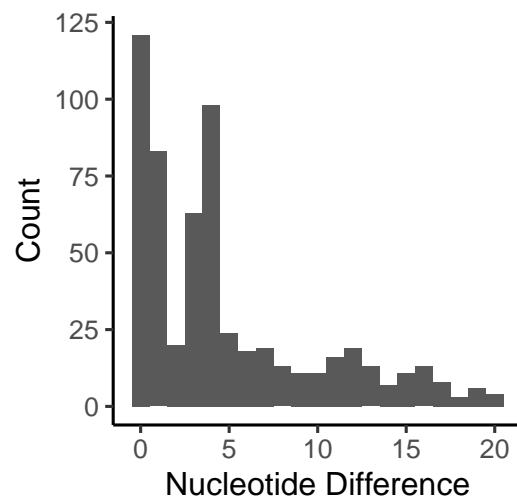
IGHV3-11*04

1453 sequences assigned
57 (3.9%) exact matches, in which:
57 unique CDR3
5 unique J



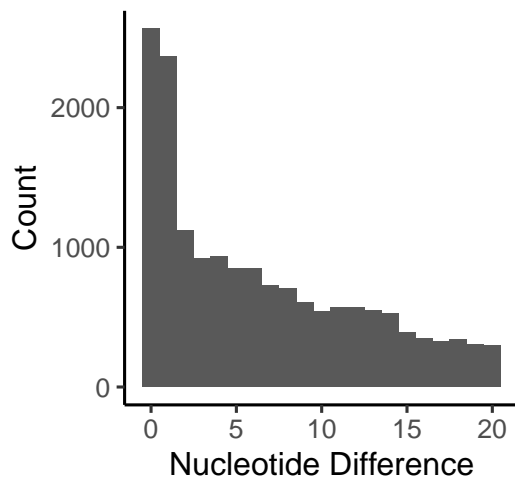
IGHV3-20*01_02

598 sequences assigned
121 (20.2%) exact matches, in which:
104 unique CDR3
5 unique J



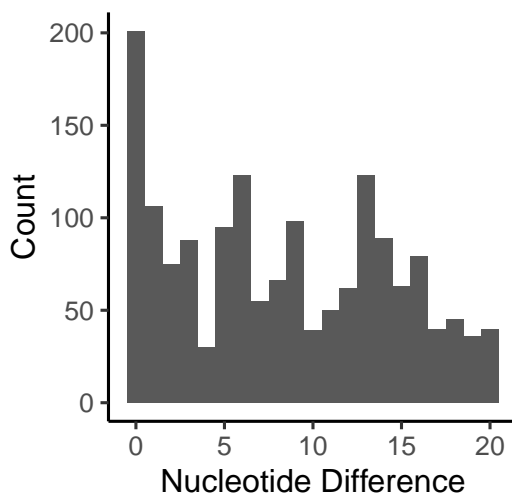
IGHV3-9*01

18559 sequences assigned
2565 (13.8%) exact matches, in which:
2137 unique CDR3
6 unique J



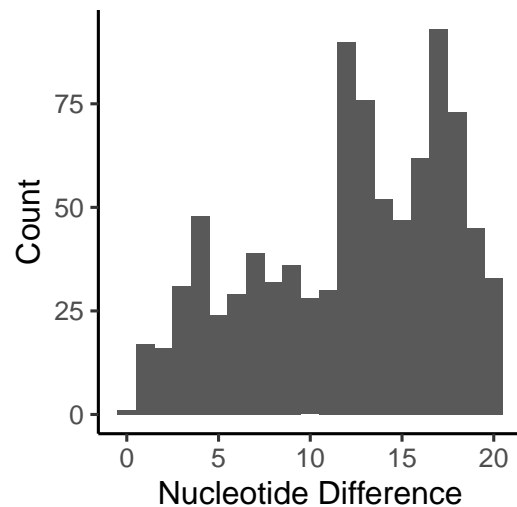
IGHV3-13*01

1871 sequences assigned
201 (10.7%) exact matches, in which:
179 unique CDR3
6 unique J



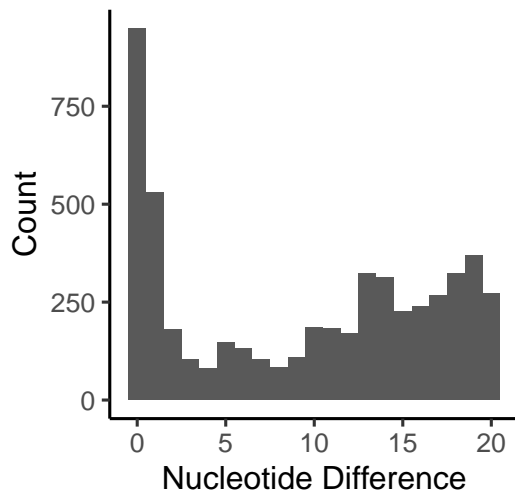
IGHV3-20*03_04

1038 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



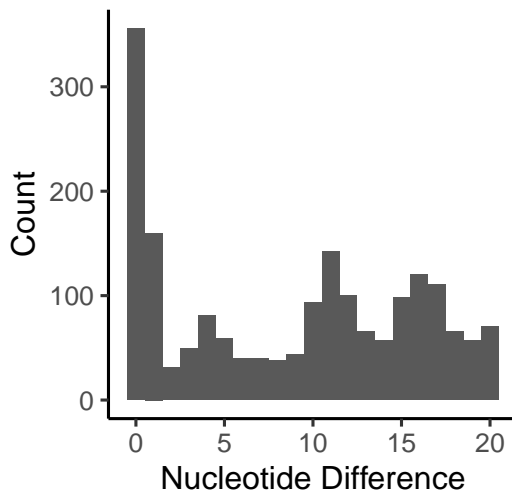
IGHV3-11*01

6988 sequences assigned
949 (13.6%) exact matches, in which:
878 unique CDR3
6 unique J



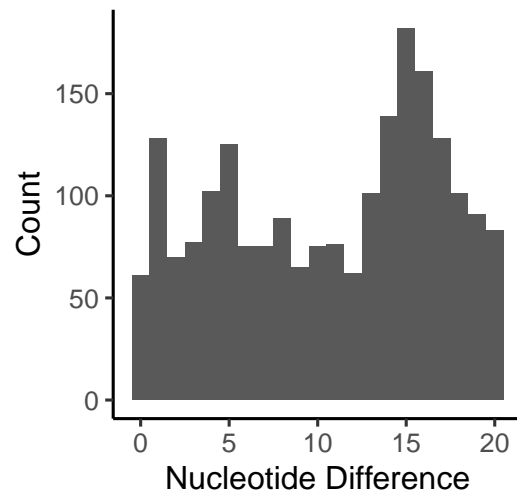
IGHV3-15*01_02

2417 sequences assigned
356 (14.7%) exact matches, in which:
331 unique CDR3
6 unique J



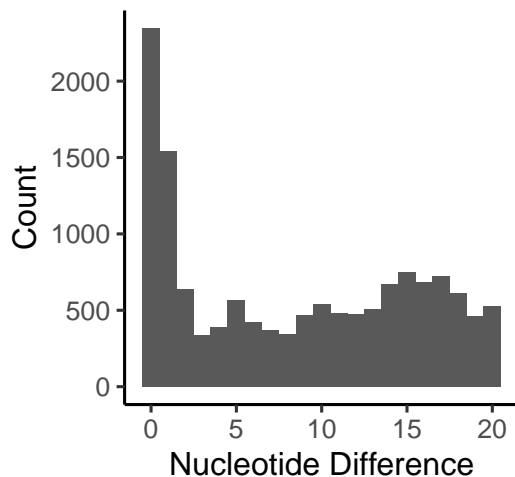
IGHV3-21*04

2601 sequences assigned
61 (2.3%) exact matches, in which:
61 unique CDR3
6 unique J



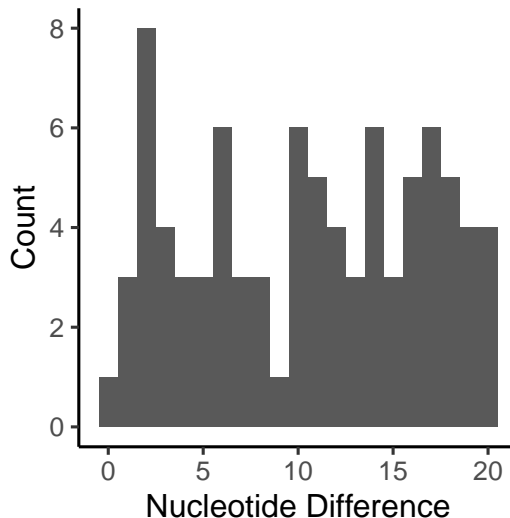
IGHV3-21*01_02

17589 sequences assigned
2345 (13.3%) exact matches, in which:
2064 unique CDR3
6 unique J



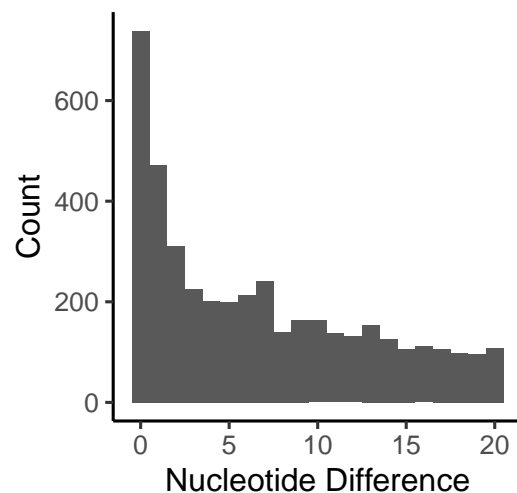
IGHV3-33*05

128 sequences assigned
1 (0.8%) exact matches, in which:
1 unique CDR3
1 unique J



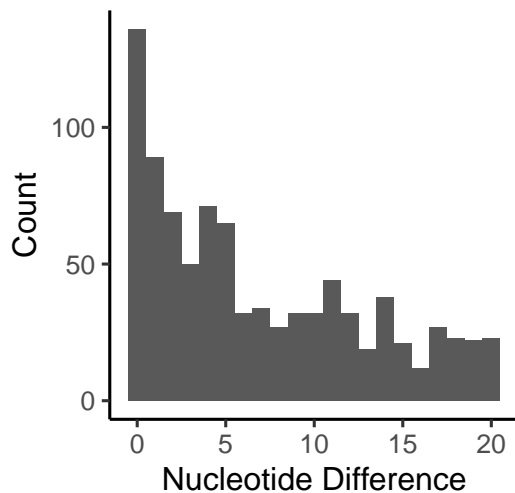
IGHV3-48*01

4883 sequences assigned
739 (15.1%) exact matches, in which:
656 unique CDR3
6 unique J



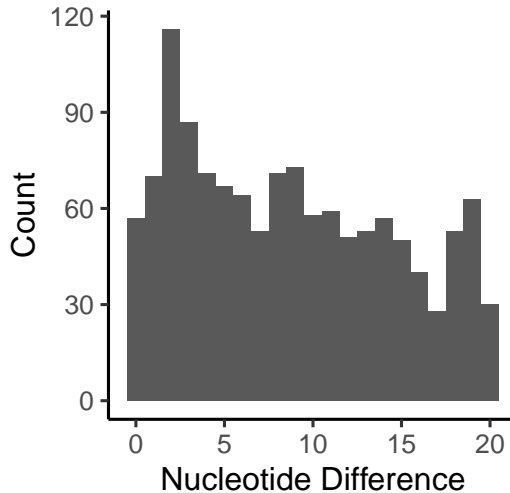
IGHV3-30*03

1069 sequences assigned
136 (12.7%) exact matches, in which:
134 unique CDR3
5 unique J



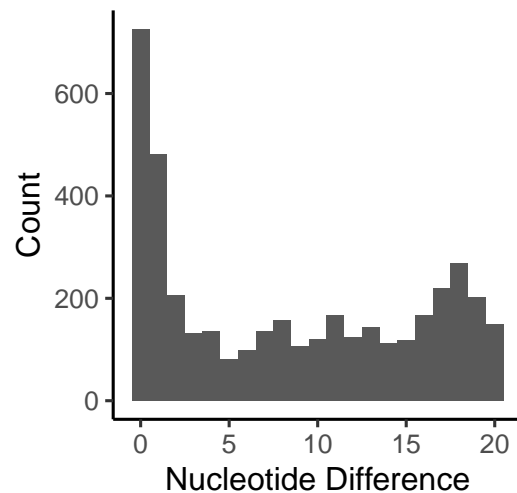
IGHV3-33*06

2184 sequences assigned
57 (2.6%) exact matches, in which:
51 unique CDR3
5 unique J



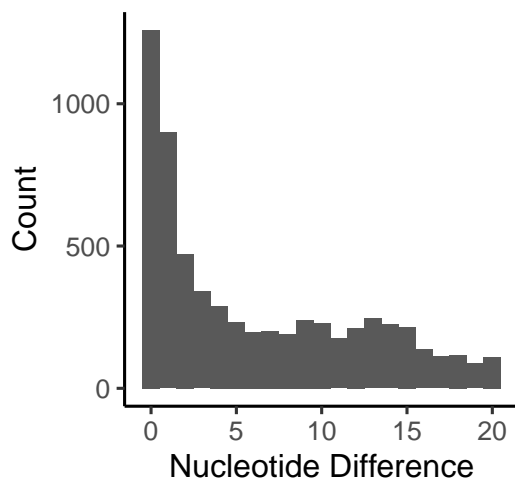
IGHV3-48*02

4968 sequences assigned
726 (14.6%) exact matches, in which:
624 unique CDR3
6 unique J



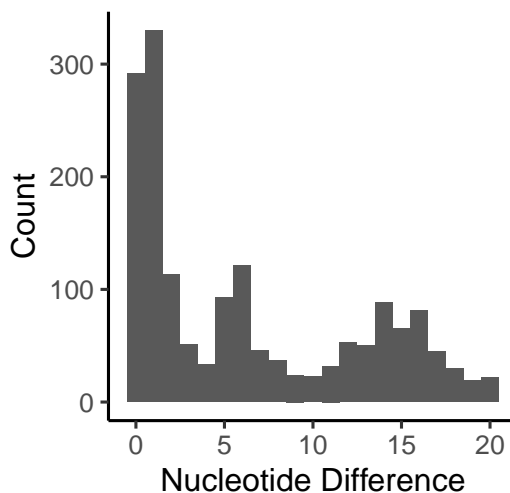
IGHV3-33*01

7012 sequences assigned
1259 (18%) exact matches, in which:
1134 unique CDR3
6 unique J



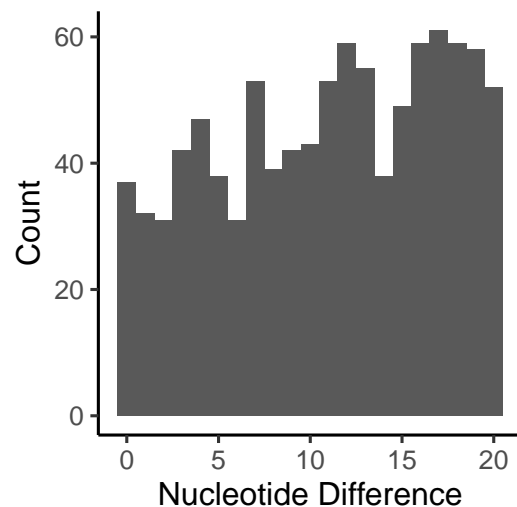
IGHV3-43*01

1824 sequences assigned
292 (16%) exact matches, in which:
225 unique CDR3
6 unique J



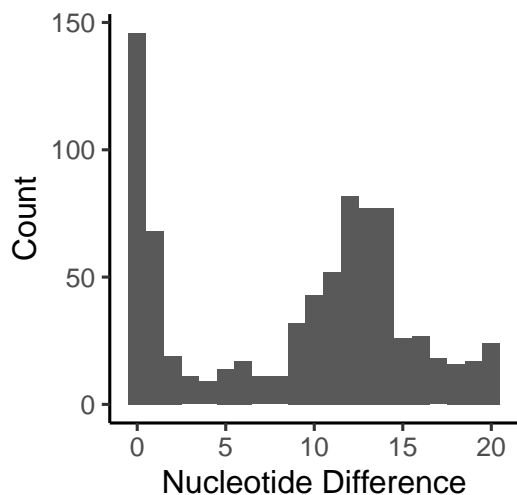
IGHV3-48*04

1392 sequences assigned
37 (2.7%) exact matches, in which:
37 unique CDR3
6 unique J



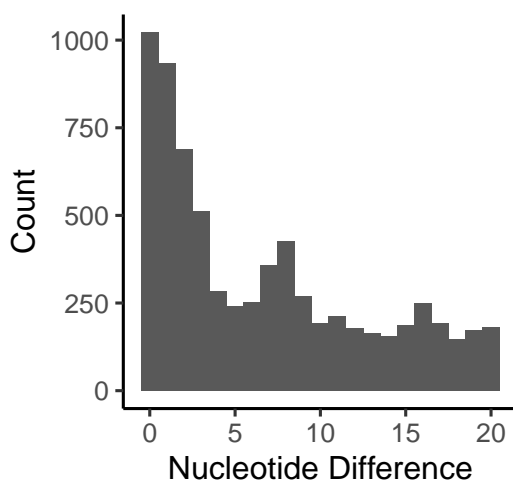
IGHV3-49*03_05

1015 sequences assigned
146 (14.4%) exact matches, in which:
138 unique CDR3
6 unique J



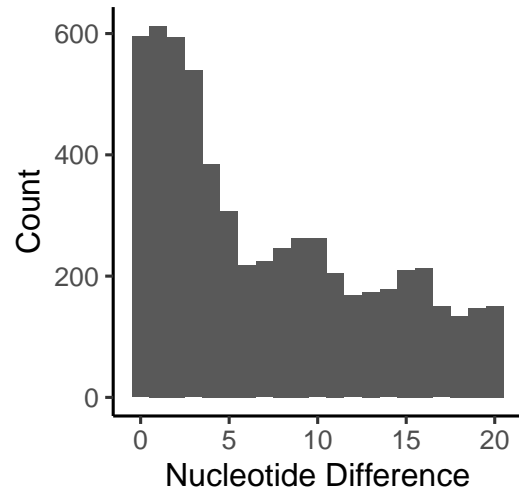
IGHV3-53*01_02

8369 sequences assigned
1022 (12.2%) exact matches, in which:
859 unique CDR3
6 unique J



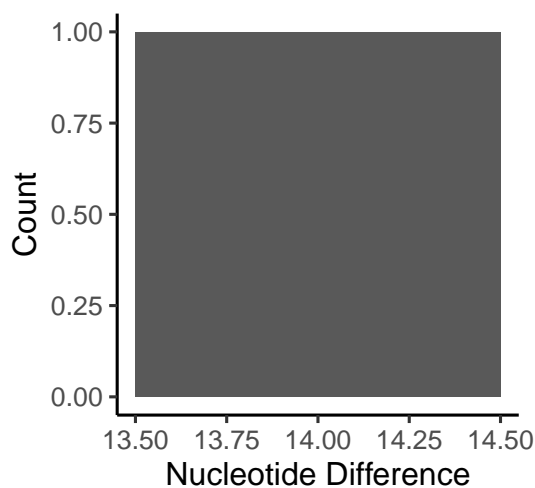
IGHV3-66*01

7251 sequences assigned
595 (8.2%) exact matches, in which:
533 unique CDR3
6 unique J



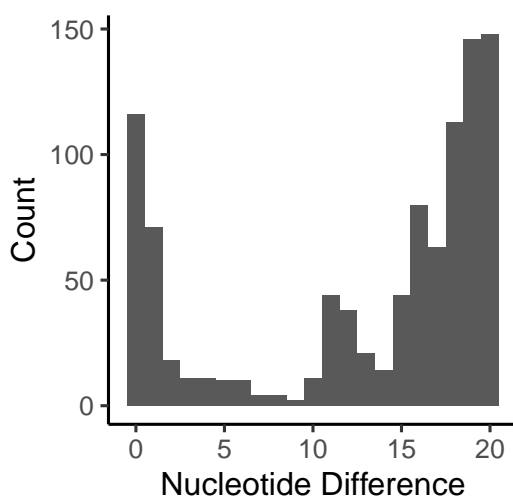
IGHV3-52*02

1 sequences assigned
No exact matches.



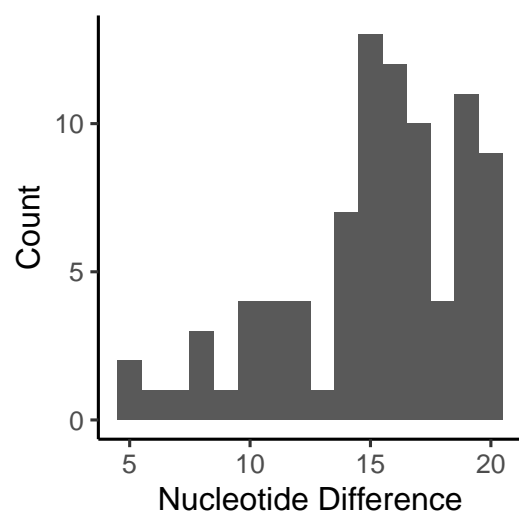
IGHV3-64*01

3485 sequences assigned
116 (3.3%) exact matches, in which:
103 unique CDR3
6 unique J



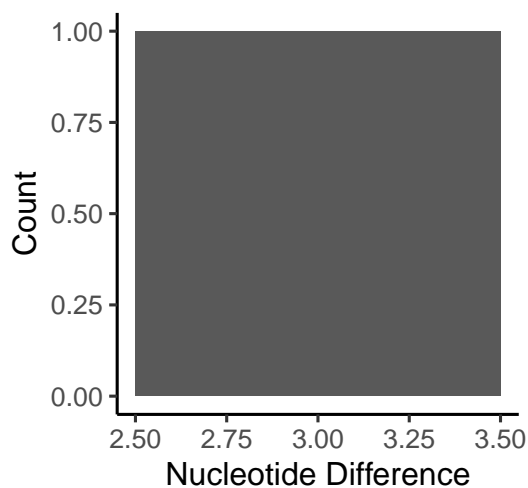
IGHV3-69-1*01

177 sequences assigned
No exact matches.



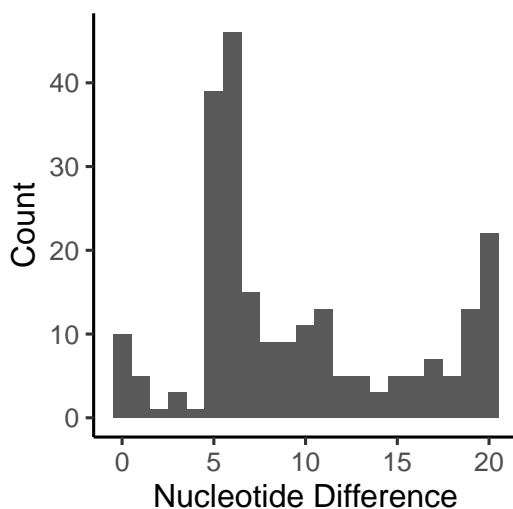
IGHV3-52*01_03

1 sequences assigned
No exact matches.



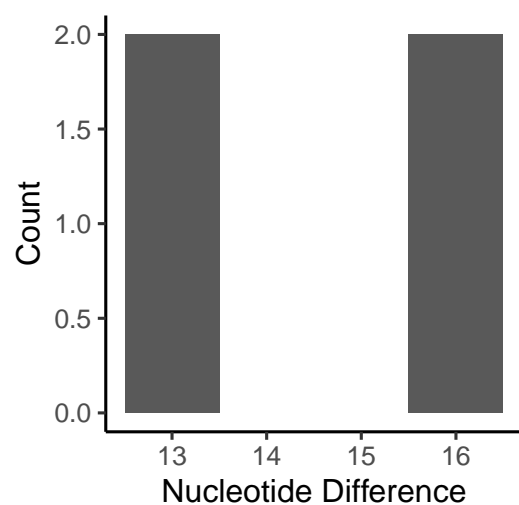
IGHV3-64*02_07

1523 sequences assigned
10 (0.7%) exact matches, in which:
10 unique CDR3
3 unique J



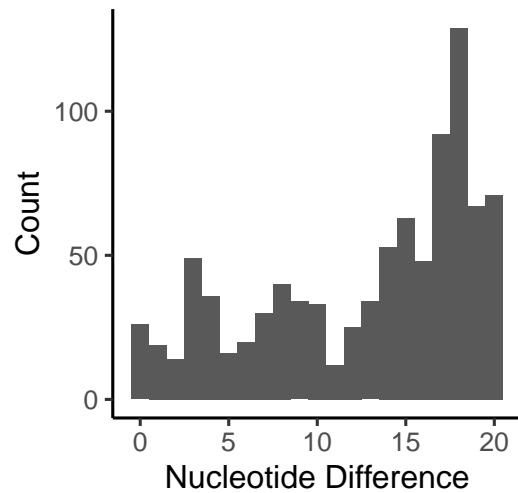
IGHV3-69-1*02

182 sequences assigned
No exact matches.



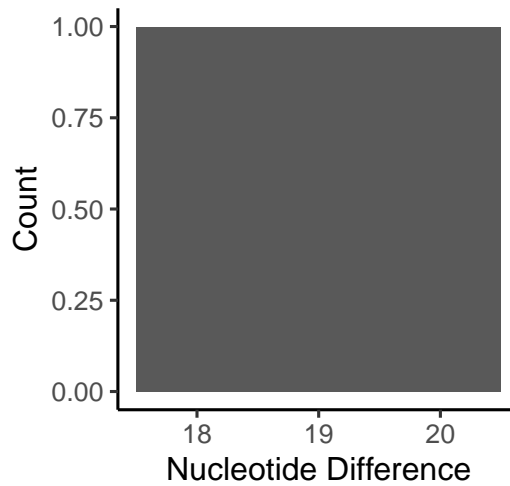
IGHV3-72*01

1315 sequences assigned
26 (2%) exact matches, in which:
25 unique CDR3
4 unique J



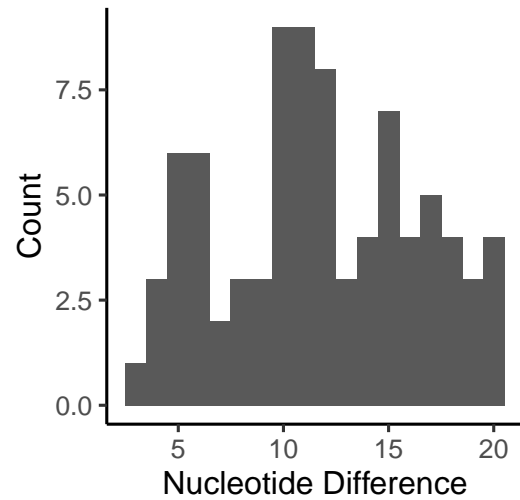
IGHV3-43D*03

4 sequences assigned
No exact matches.



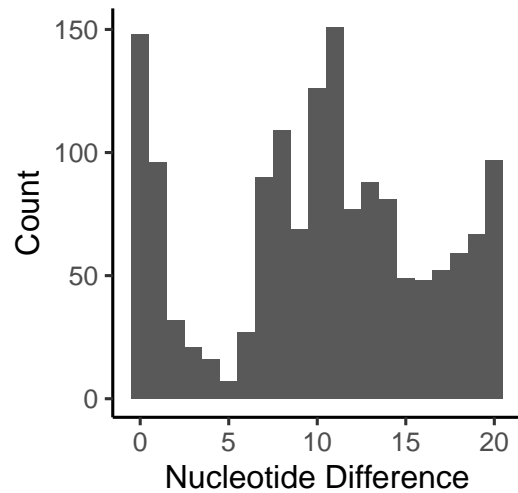
IGHV3-NL1*01

156 sequences assigned
No exact matches.



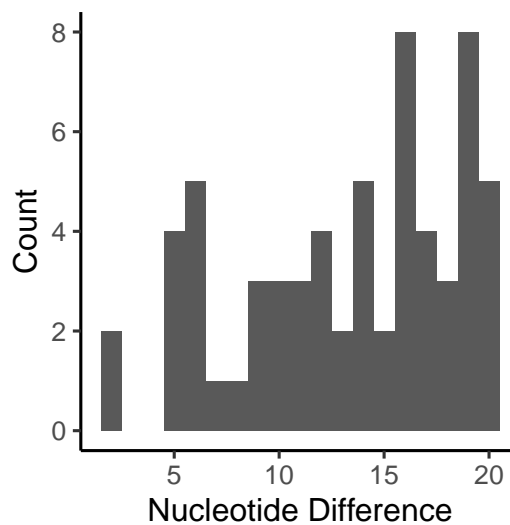
IGHV3-73*01_02

2271 sequences assigned
148 (6.5%) exact matches, in which:
136 unique CDR3
6 unique J



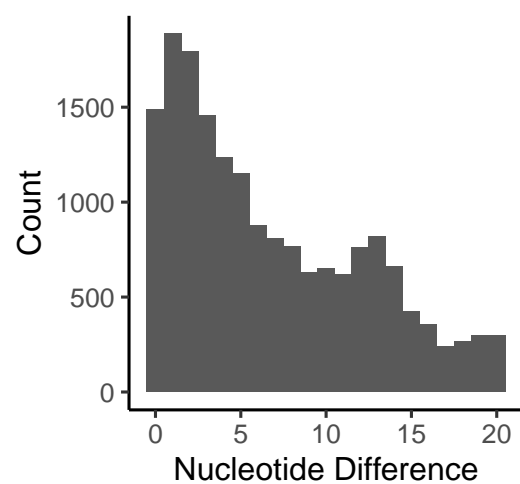
IGHV3-43D*04

80 sequences assigned
No exact matches.



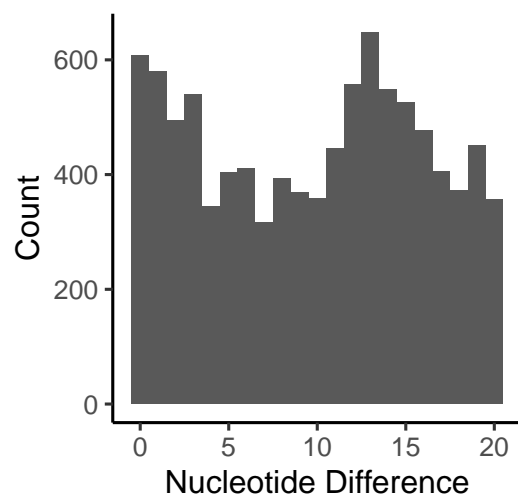
IGHV4-4*07

20861 sequences assigned
1486 (7.1%) exact matches, in which:
1172 unique CDR3
6 unique J



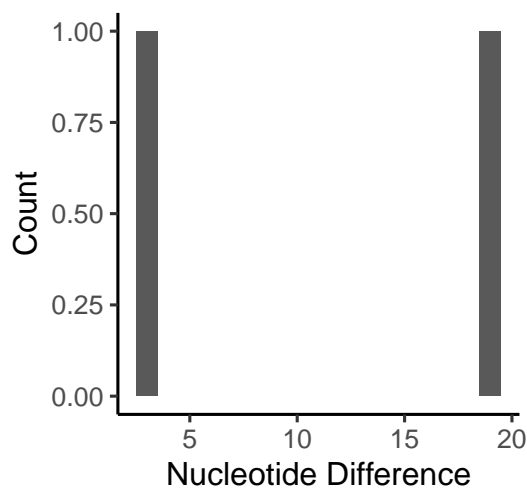
IGHV3-74*01_02

11474 sequences assigned
608 (5.3%) exact matches, in which:
521 unique CDR3
6 unique J



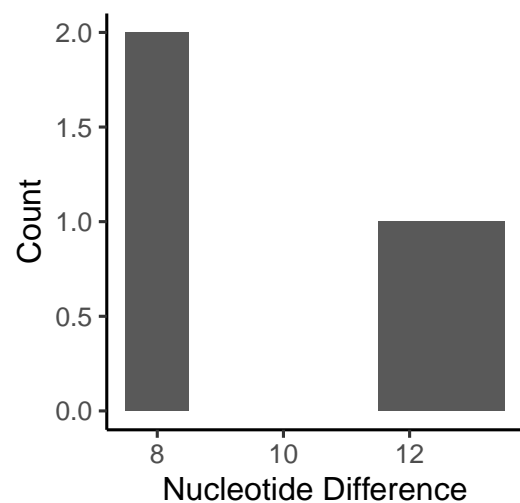
IGHV3-64D*06

4 sequences assigned
No exact matches.



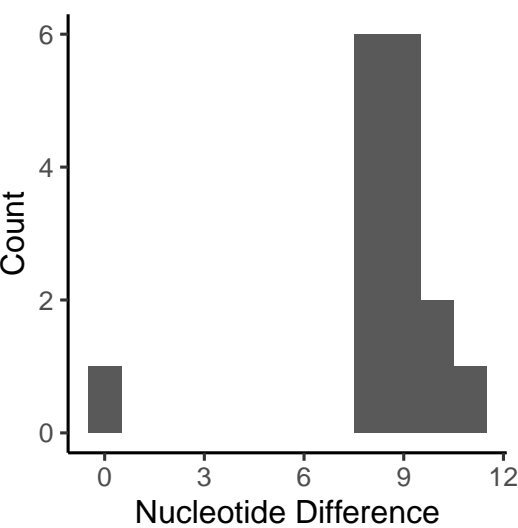
IGHV4-28*03

5 sequences assigned
No exact matches.



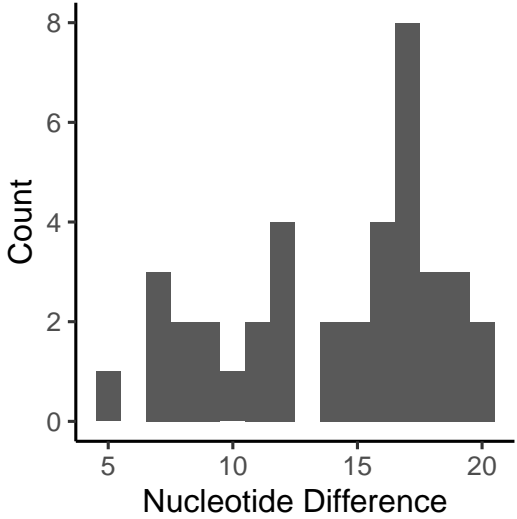
IGHV4-28*01_07

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



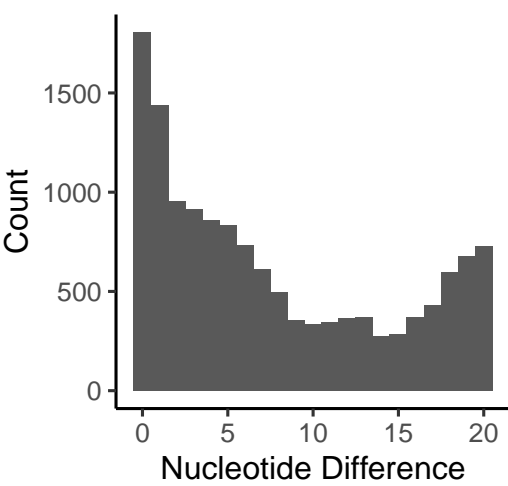
IGHV4-30-2*03

108 sequences assigned
No exact matches.



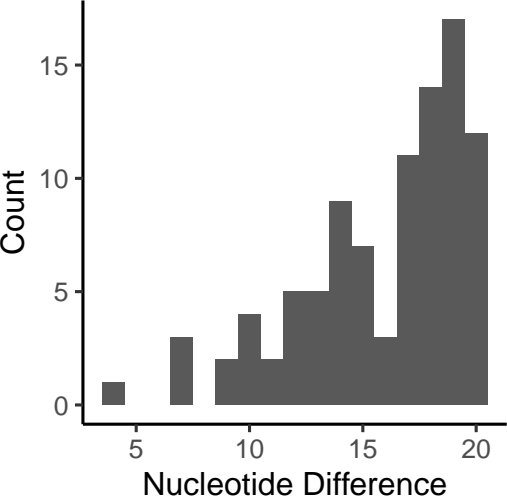
IGHV4-31*03_04

18014 sequences assigned
1805 (10%) exact matches, in which:
1460 unique CDR3
6 unique J



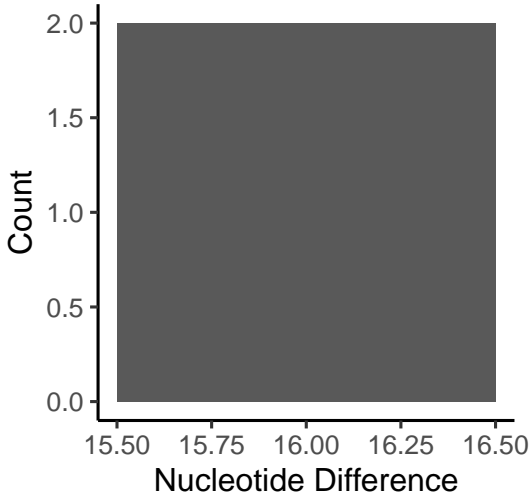
IGHV4-30-4*01

193 sequences assigned
No exact matches.



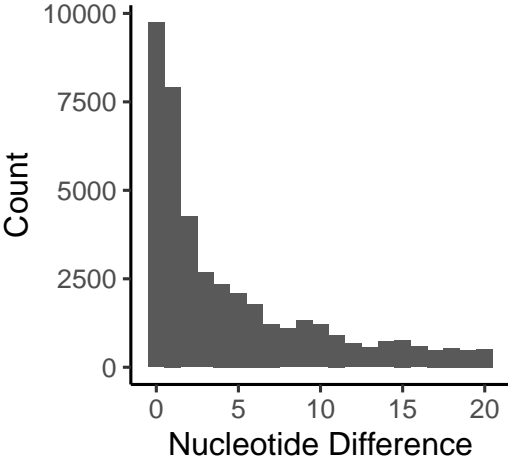
IGHV4-30-2*06

6 sequences assigned
No exact matches.



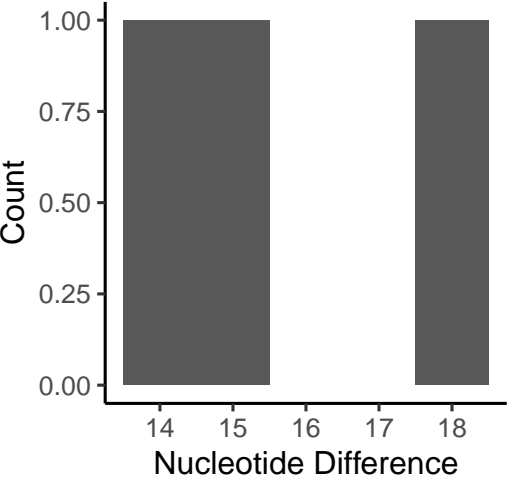
IGHV4-34*01_02

46632 sequences assigned
9744 (20.9%) exact matches, in which:
7790 unique CDR3
6 unique J



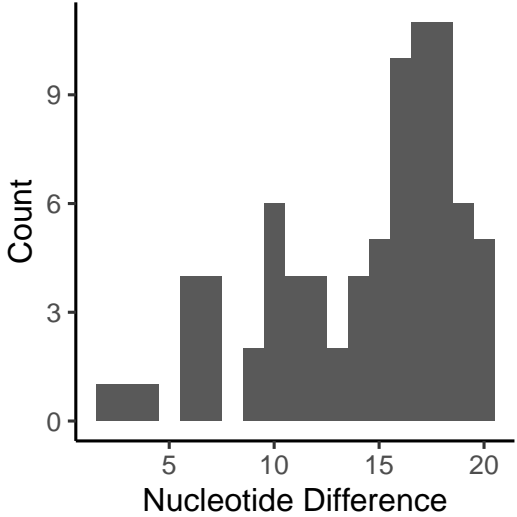
IGHV4-30-2*01

6 sequences assigned
No exact matches.



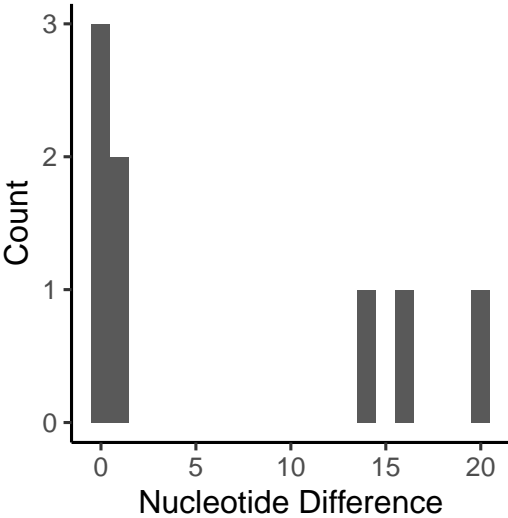
IGHV4-30-4*08

148 sequences assigned
No exact matches.



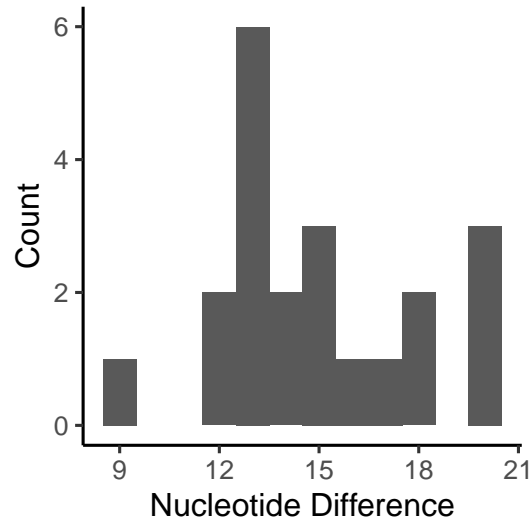
IGHV4-38-2*01

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



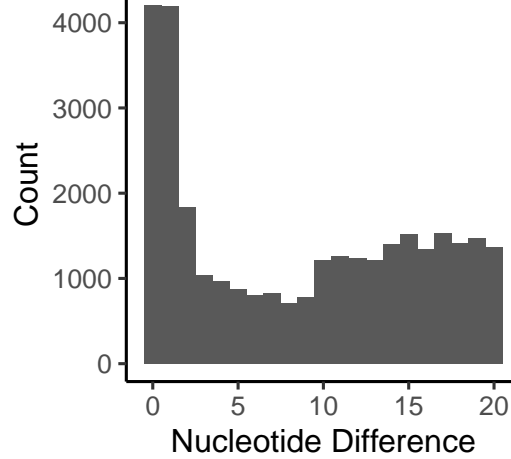
IGHV4-38-2*02

38 sequences assigned
No exact matches.



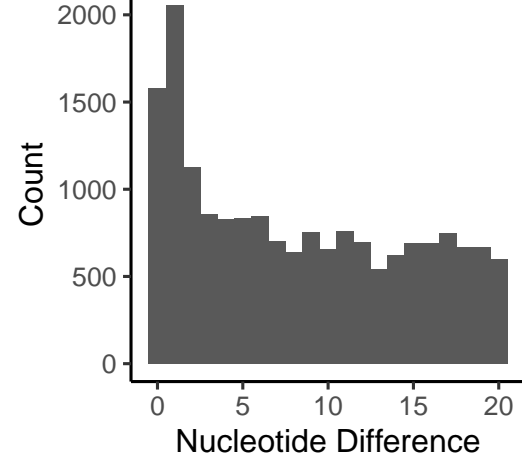
IGHV4-39*01_05

43427 sequences assigned
4203 (9.7%) exact matches, in which:
3260 unique CDR3
6 unique J



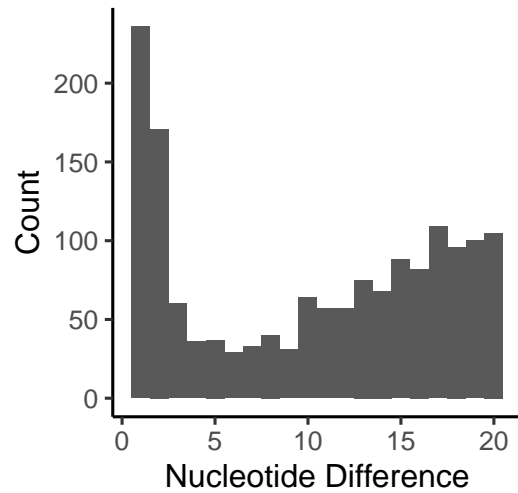
IGHV4-59*08

20966 sequences assigned
1580 (7.5%) exact matches, in which:
1173 unique CDR3
6 unique J



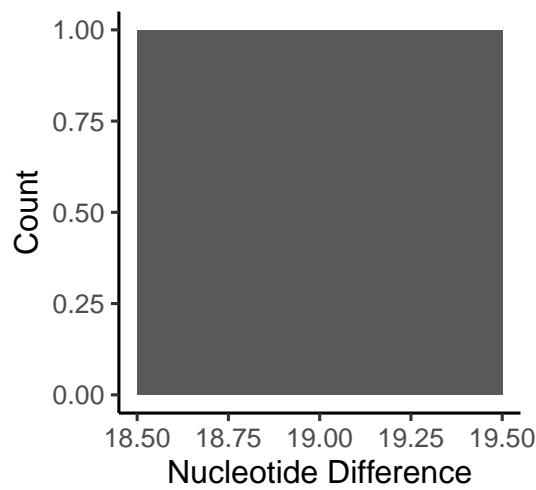
IGHV4-39*02

3887 sequences assigned
No exact matches.



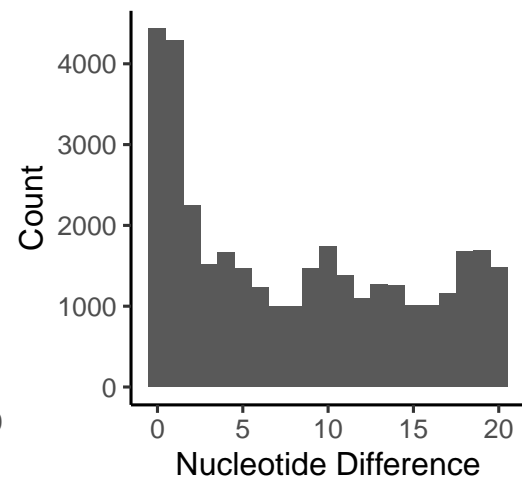
IGHV4-55*09

4 sequences assigned
No exact matches.



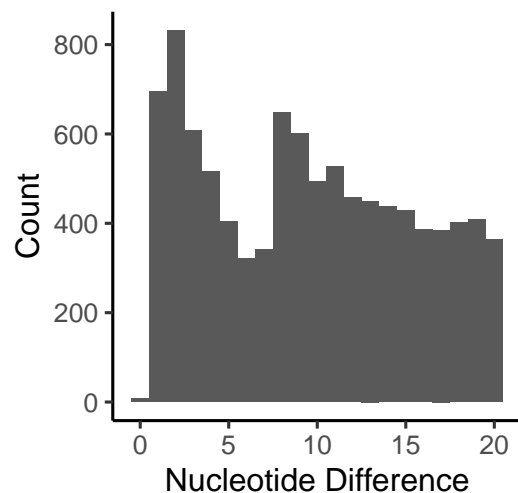
IGHV4-59*01_07

44522 sequences assigned
4434 (10%) exact matches, in which:
3388 unique CDR3
6 unique J



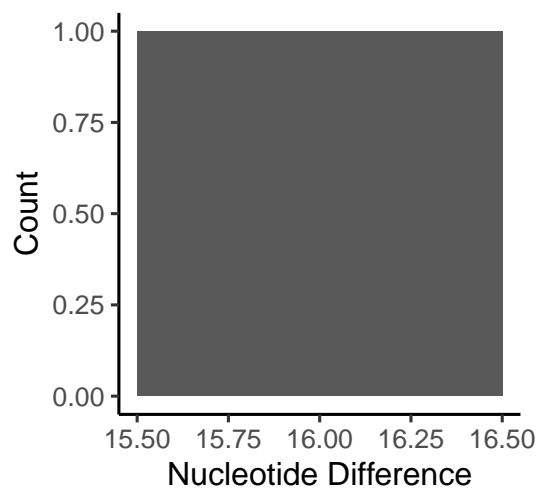
IGHV4-39*07

11504 sequences assigned
8 (0.1%) exact matches, in which:
7 unique CDR3
5 unique J



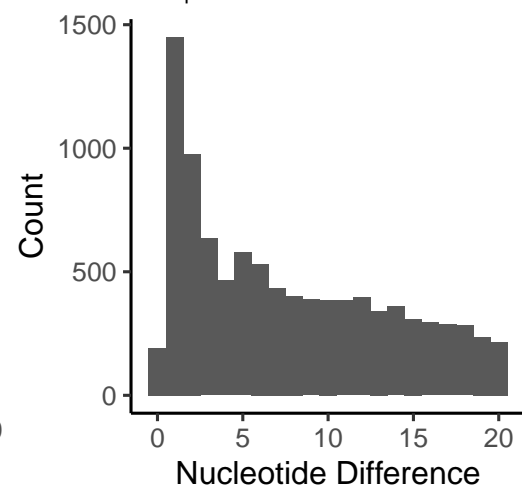
IGHV4-55*02_04_08

10 sequences assigned
No exact matches.



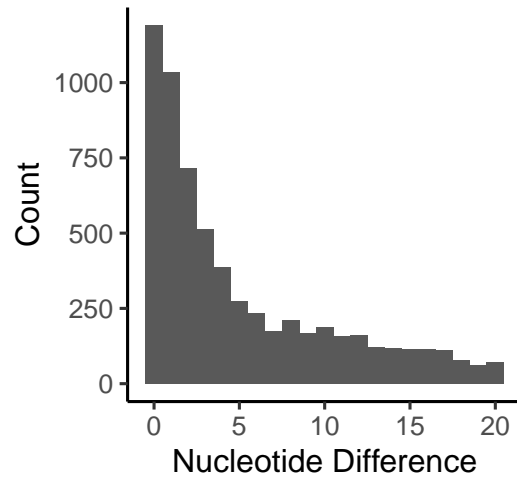
IGHV4-59*12

11380 sequences assigned
192 (1.7%) exact matches, in which:
177 unique CDR3
6 unique J



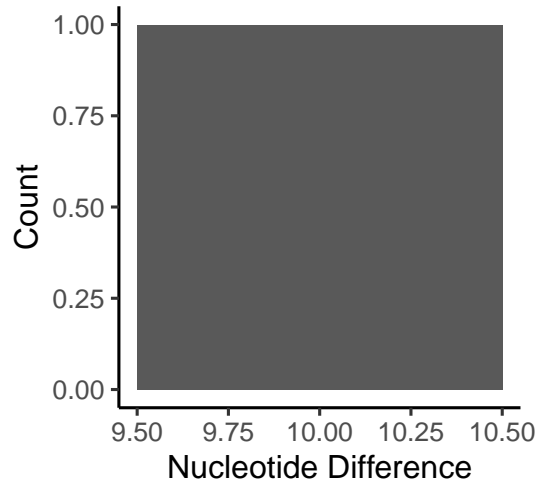
IGHV4-61*01

6690 sequences assigned
1190 (17.8%) exact matches, in which:
929 unique CDR3
6 unique J



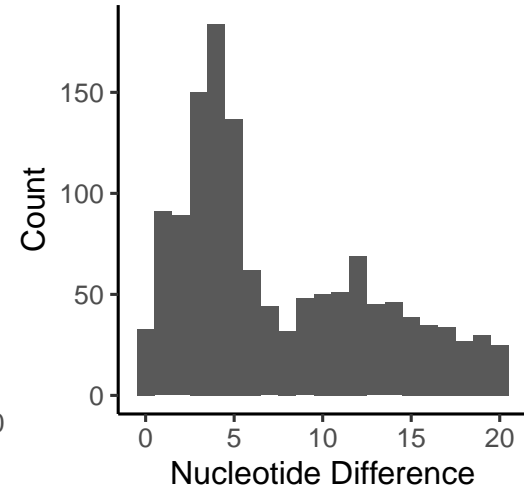
IGHV5-10-1*01_03

1 sequences assigned
No exact matches.



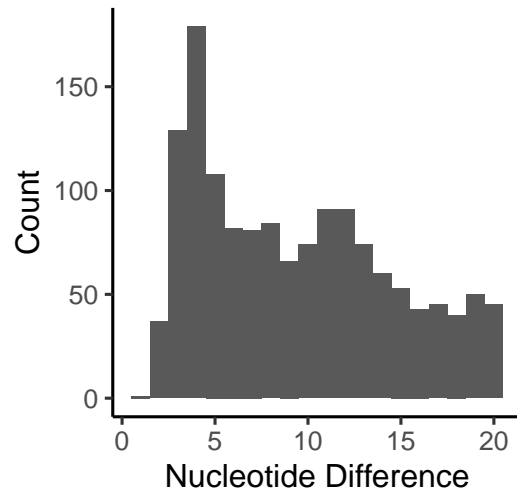
IGHV7-4-1*02

1643 sequences assigned
33 (2%) exact matches, in which:
32 unique CDR3
4 unique J



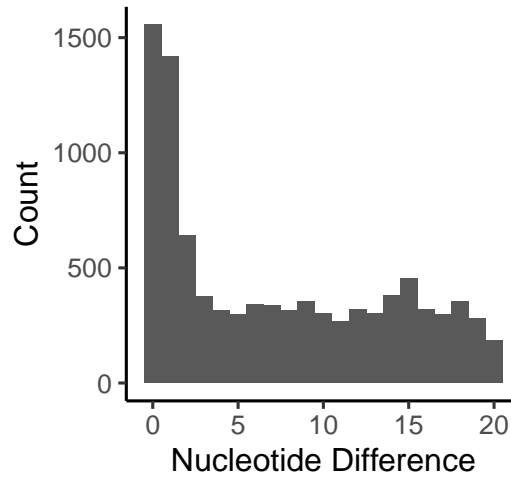
IGHV4-61*05

1711 sequences assigned
No exact matches.



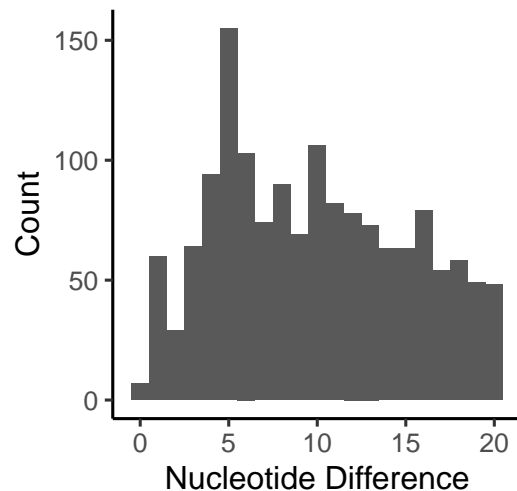
IGHV5-51*01_03

11450 sequences assigned
1556 (13.6%) exact matches, in which:
1345 unique CDR3
6 unique J



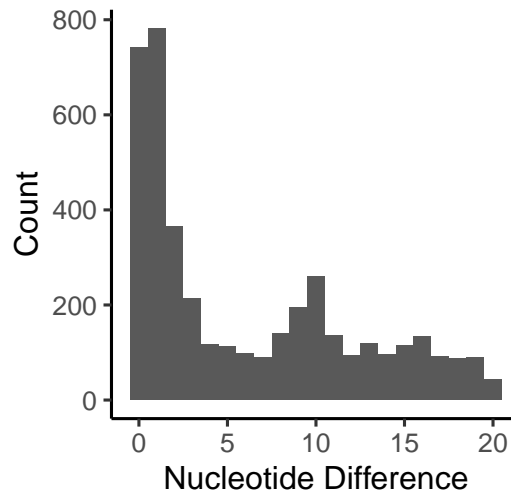
IGHV4-61*08

1795 sequences assigned
7 (0.4%) exact matches, in which:
7 unique CDR3
3 unique J



IGHV6-1*01_02

4520 sequences assigned
741 (16.4%) exact matches, in which:
581 unique CDR3
6 unique J





Warning – no inferred sequences found.

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