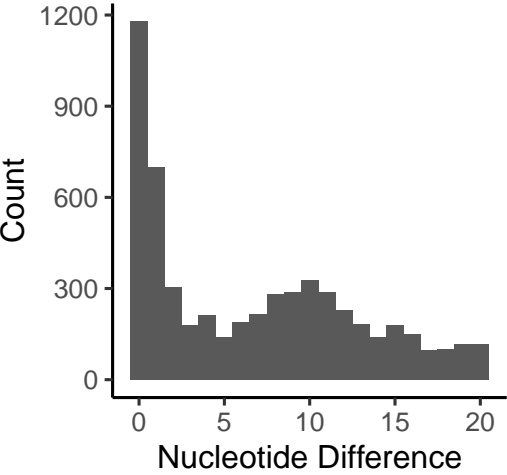


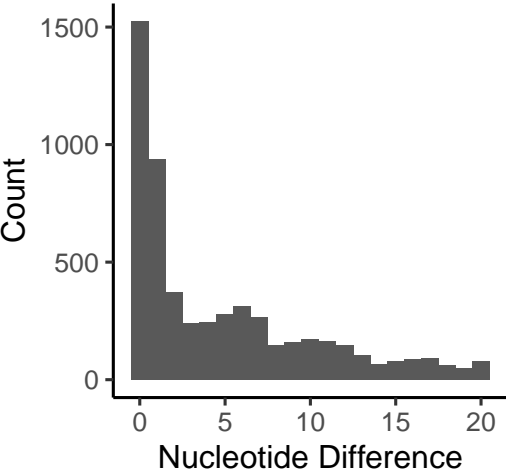
IGHV1-2*02

6642 sequences assigned
1179 (17.8%) exact matches, in which:
1085 unique CDR3
6 unique J



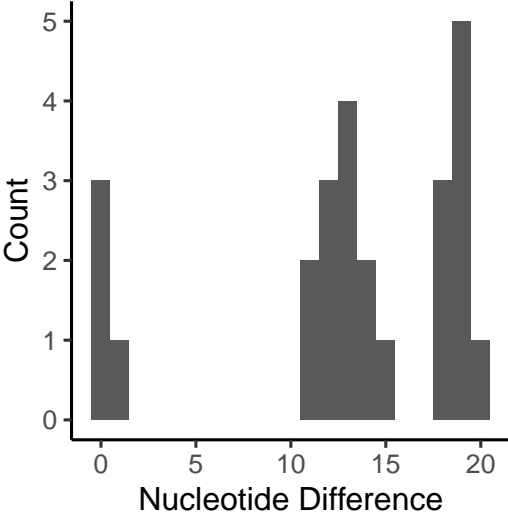
IGHV1-8*01

6497 sequences assigned
1524 (23.5%) exact matches, in which:
1362 unique CDR3
6 unique J



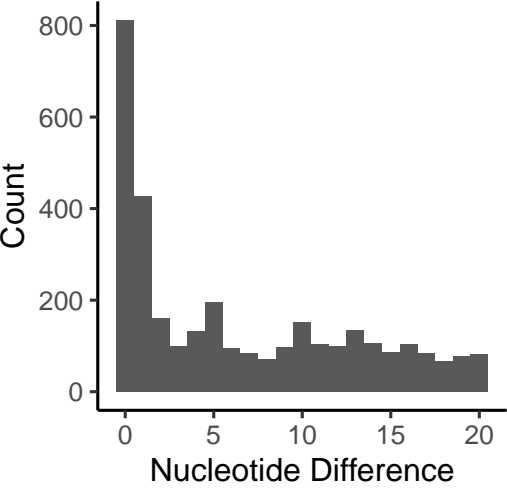
IGHV1-45*02

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



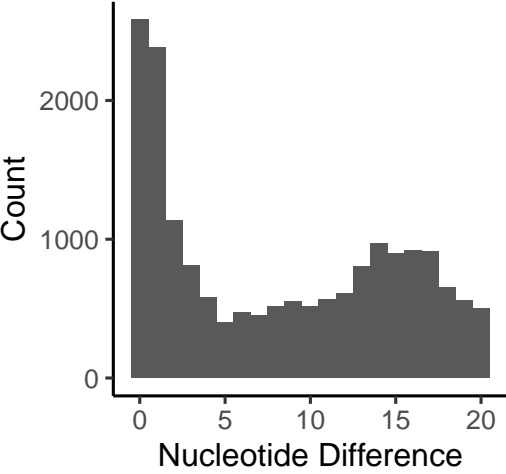
IGHV1-2*06

4274 sequences assigned
812 (19%) exact matches, in which:
758 unique CDR3
6 unique J



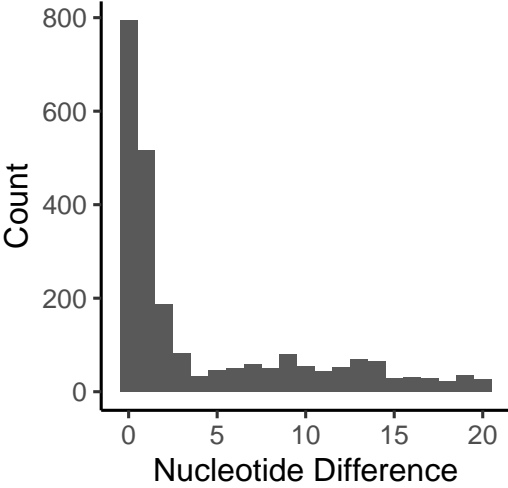
IGHV1-18*01

20479 sequences assigned
2582 (12.6%) exact matches, in which:
2245 unique CDR3
6 unique J



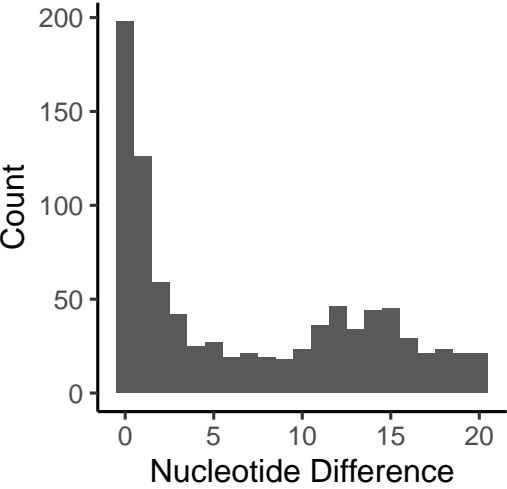
IGHV1-46*01

2516 sequences assigned
795 (31.6%) exact matches, in which:
724 unique CDR3
6 unique J



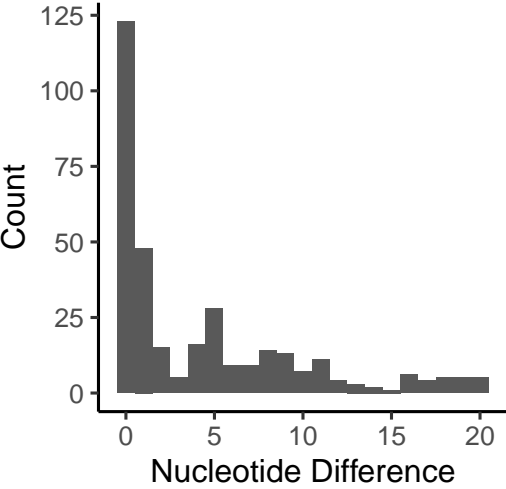
IGHV1-3*01_05

1116 sequences assigned
198 (17.7%) exact matches, in which:
176 unique CDR3
5 unique J



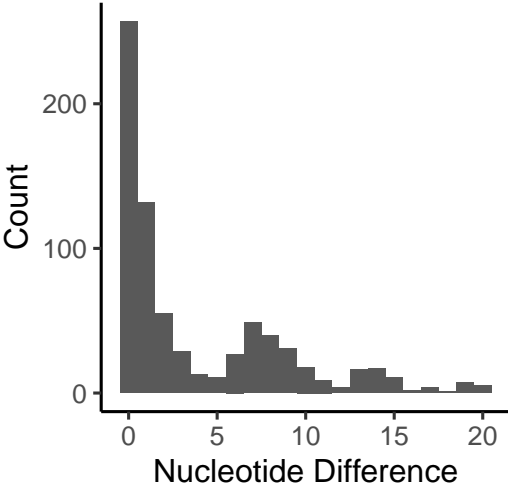
IGHV1-24*01

378 sequences assigned
123 (32.5%) exact matches, in which:
119 unique CDR3
6 unique J



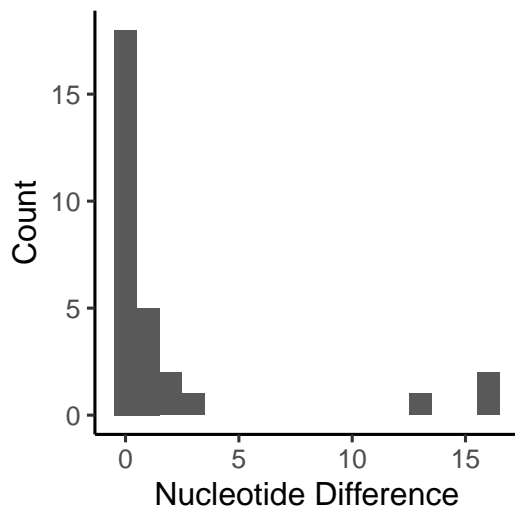
IGHV1-46*03

886 sequences assigned
257 (29%) exact matches, in which:
226 unique CDR3
6 unique J



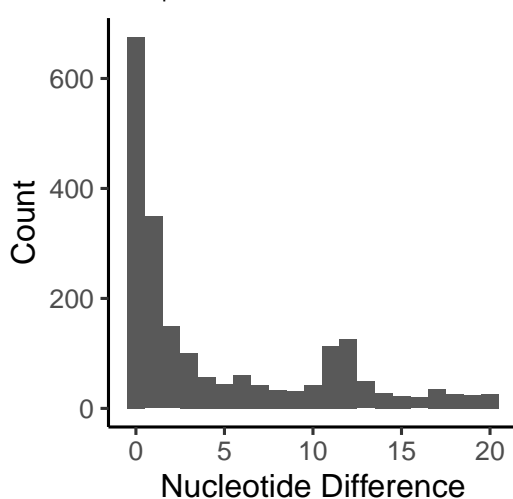
IGHV1-58*02

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



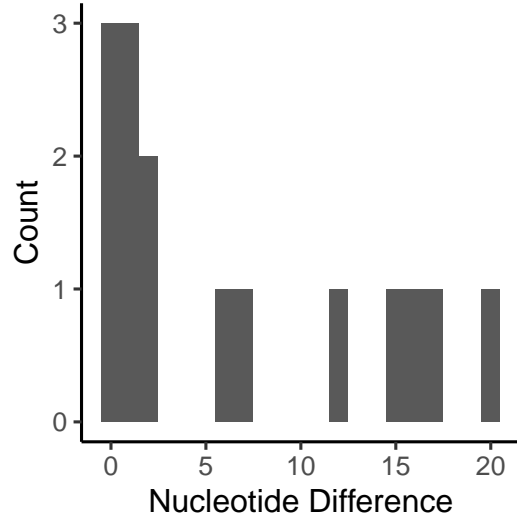
IGHV1-69*04_09

2653 sequences assigned
676 (25.5%) exact matches, in which:
634 unique CDR3
6 unique J



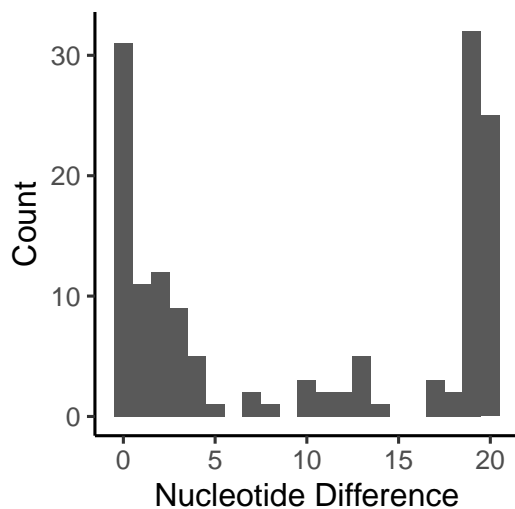
IGHV2-26*01

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



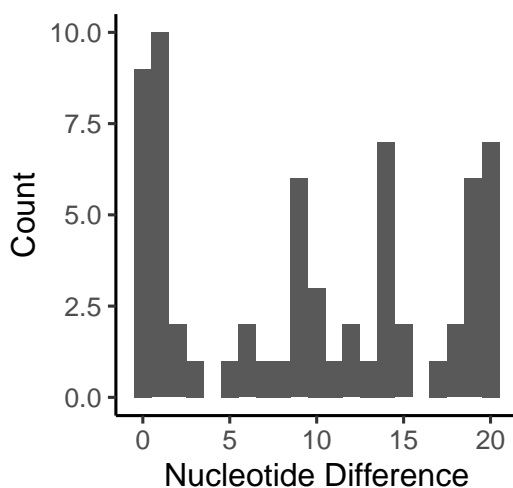
IGHV1-58*01_03

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



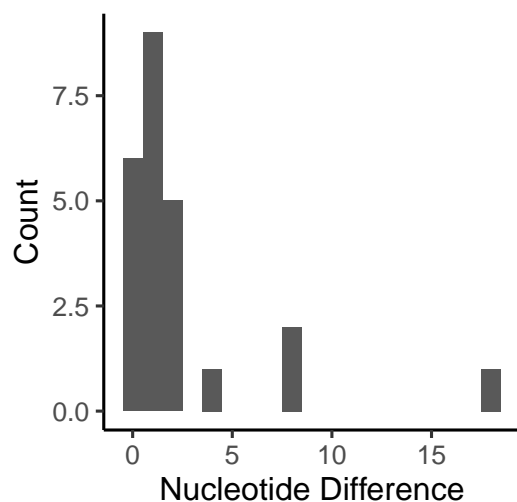
IGHV2-5*01

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



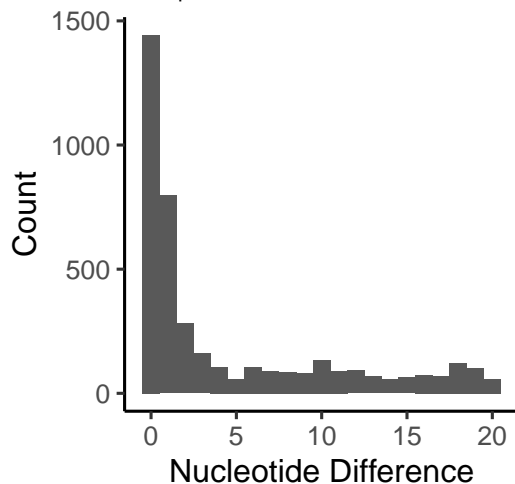
IGHV2-70*01

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



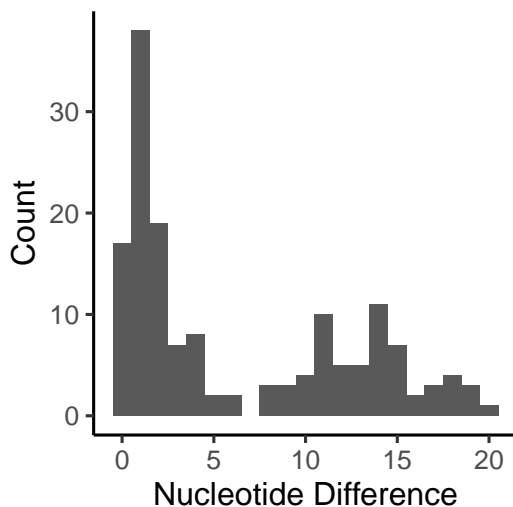
IGHV1-69*01_12_13

5628 sequences assigned
1443 (25.6%) exact matches, in which:
1347 unique CDR3
6 unique J



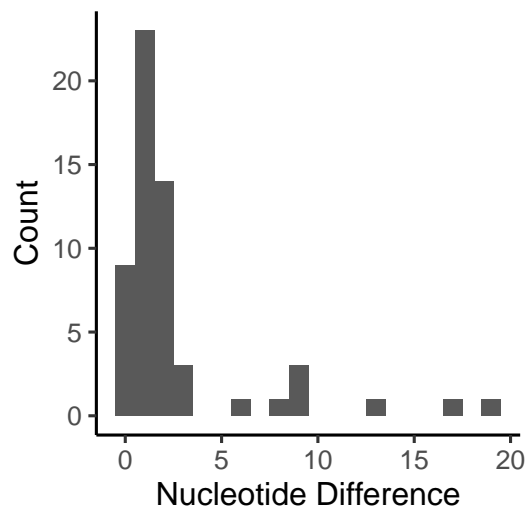
IGHV2-5*02

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



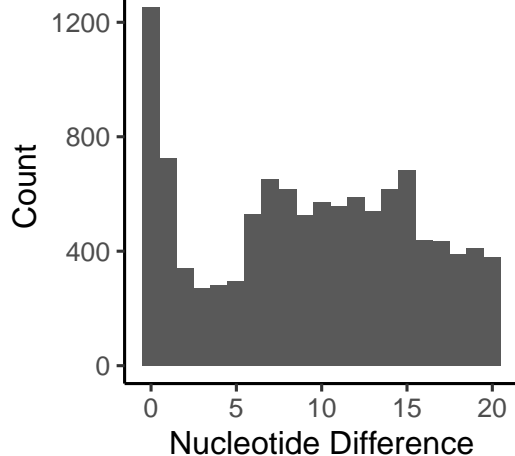
IGHV2-70*11_15

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



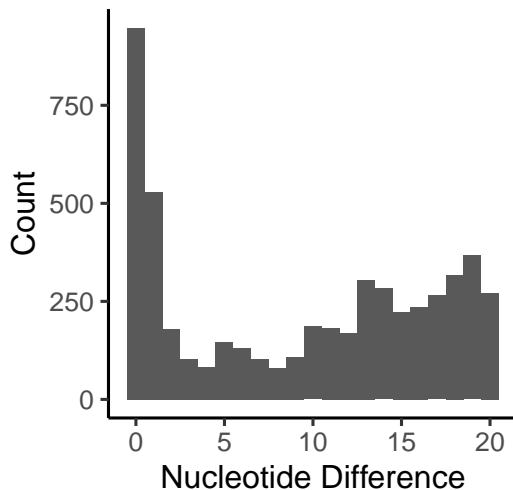
IGHV3-7*01

12626 sequences assigned
1252 (9.9%) exact matches, in which:
1133 unique CDR3
6 unique J



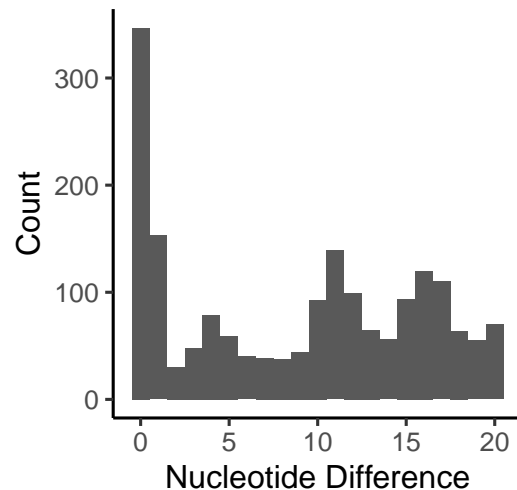
IGHV3-11*01

6918 sequences assigned
948 (13.7%) exact matches, in which:
878 unique CDR3
6 unique J



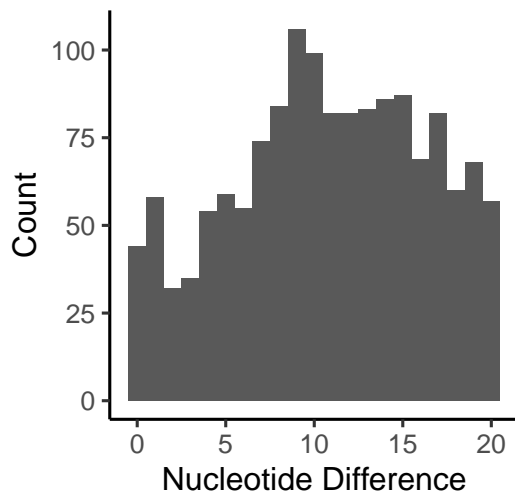
IGHV3-15*01_02

2382 sequences assigned
347 (14.6%) exact matches, in which:
323 unique CDR3
6 unique J



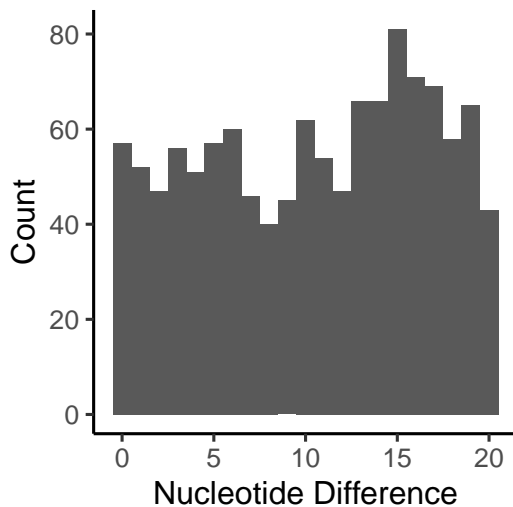
IGHV3-7*03

1670 sequences assigned
44 (2.6%) exact matches, in which:
44 unique CDR3
6 unique J



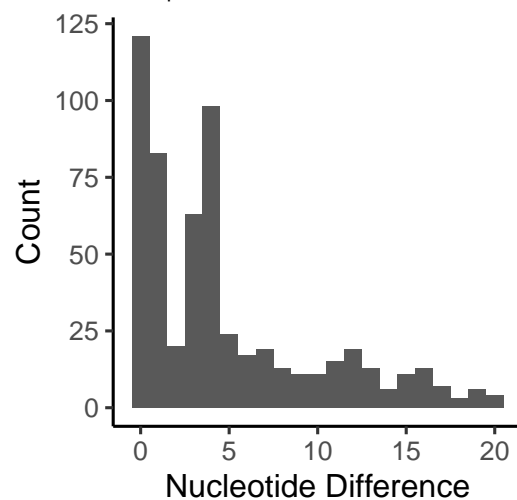
IGHV3-11*04

1458 sequences assigned
57 (3.9%) exact matches, in which:
57 unique CDR3
5 unique J



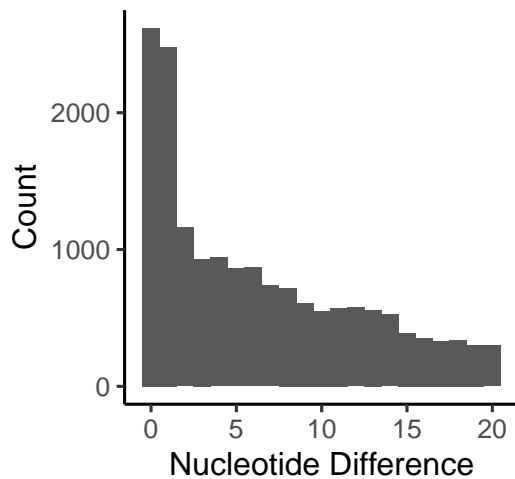
IGHV3-20*01_02

594 sequences assigned
121 (20.4%) exact matches, in which:
104 unique CDR3
5 unique J



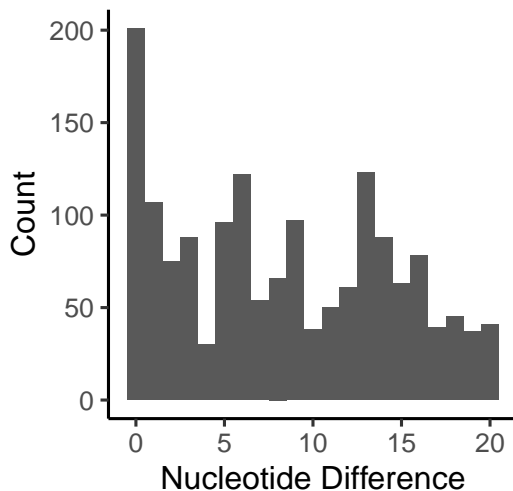
IGHV3-9*01

18868 sequences assigned
2619 (13.9%) exact matches, in which:
2158 unique CDR3
6 unique J



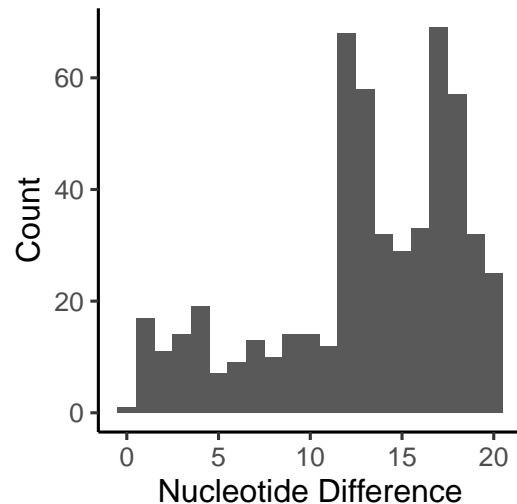
IGHV3-13*01

1868 sequences assigned
201 (10.8%) exact matches, in which:
179 unique CDR3
6 unique J



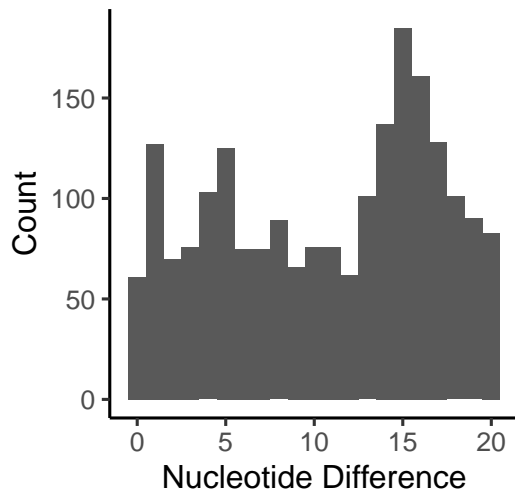
IGHV3-20*03_04

614 sequences assigned
1 (0.2%) exact matches, in which:
1 unique CDR3
1 unique J



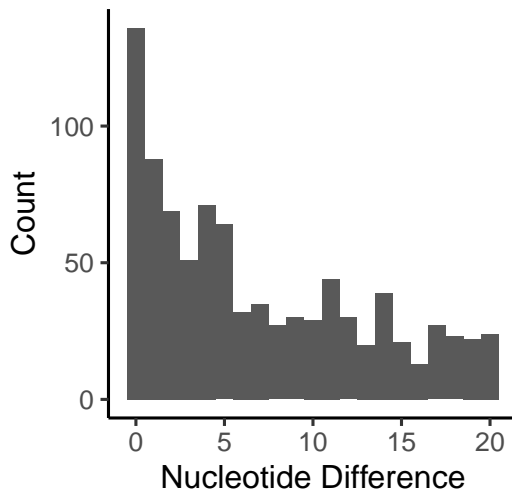
IGHV3-21*04

2603 sequences assigned
61 (2.3%) exact matches, in which:
61 unique CDR3
6 unique J



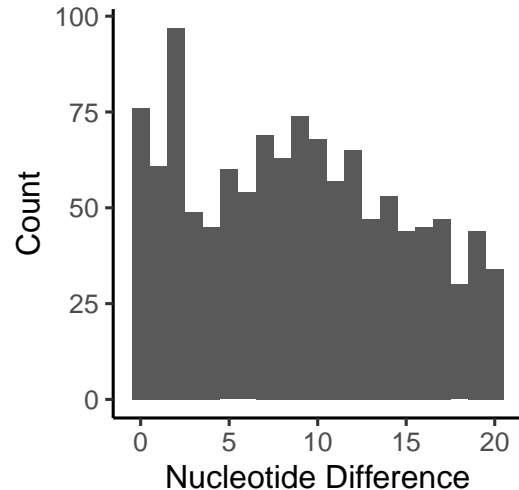
IGHV3-30*03

1061 sequences assigned
136 (12.8%) exact matches, in which:
134 unique CDR3
5 unique J



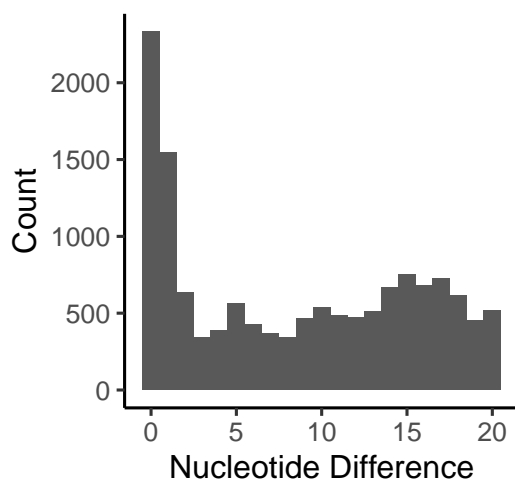
IGHV3-33*08

1467 sequences assigned
76 (5.2%) exact matches, in which:
72 unique CDR3
5 unique J



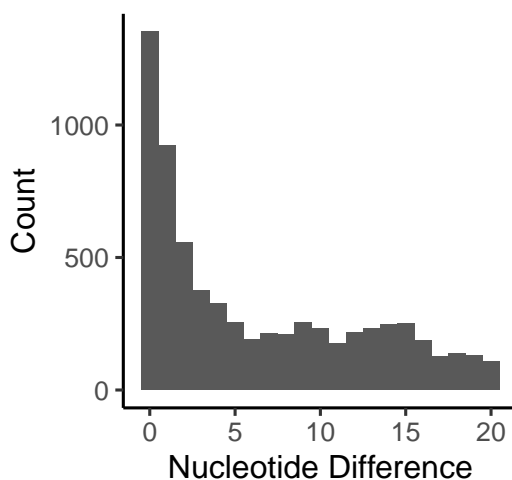
IGHV3-21*01_02

17504 sequences assigned
2332 (13.3%) exact matches, in which:
2053 unique CDR3
6 unique J



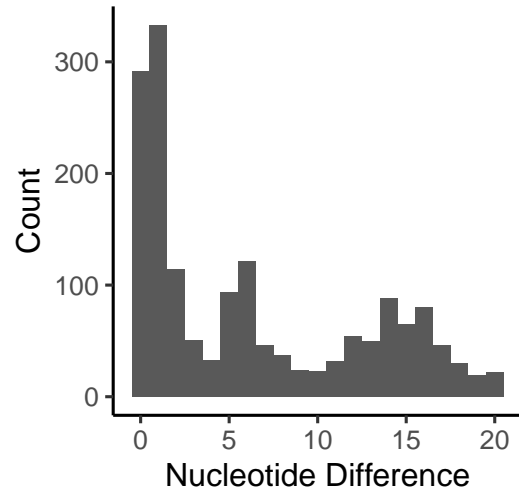
IGHV3-33*01

8276 sequences assigned
1352 (16.3%) exact matches, in which:
1219 unique CDR3
6 unique J



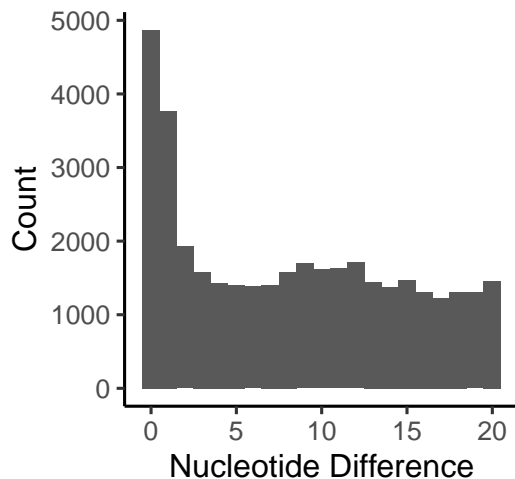
IGHV3-43*01

1829 sequences assigned
292 (16%) exact matches, in which:
225 unique CDR3
6 unique J



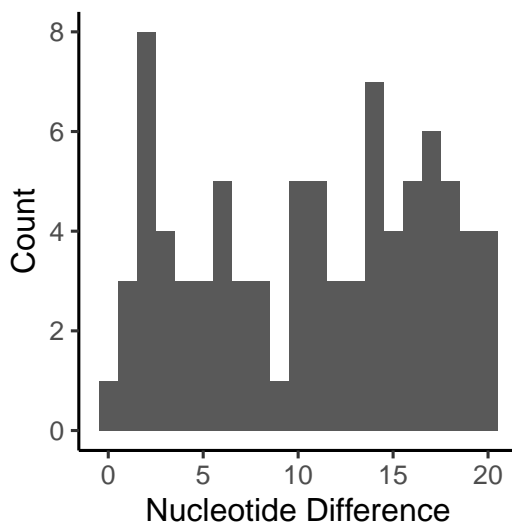
IGHV3-23*01_04

46594 sequences assigned
4868 (10.4%) exact matches, in which:
4168 unique CDR3
6 unique J



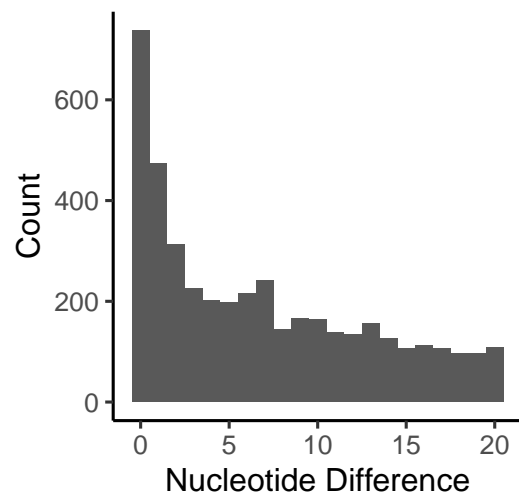
IGHV3-33*05

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



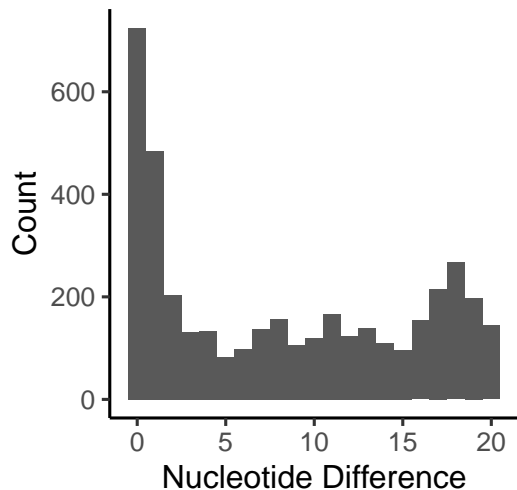
IGHV3-48*01

4900 sequences assigned
738 (15.1%) exact matches, in which:
655 unique CDR3
6 unique J



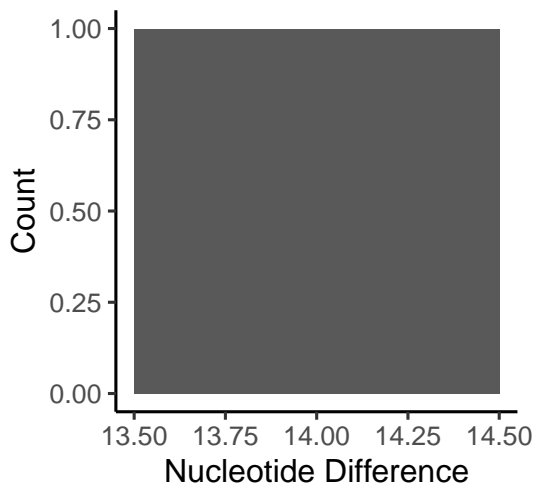
IGHV3-48*02

4904 sequences assigned
725 (14.8%) exact matches, in which:
624 unique CDR3
6 unique J



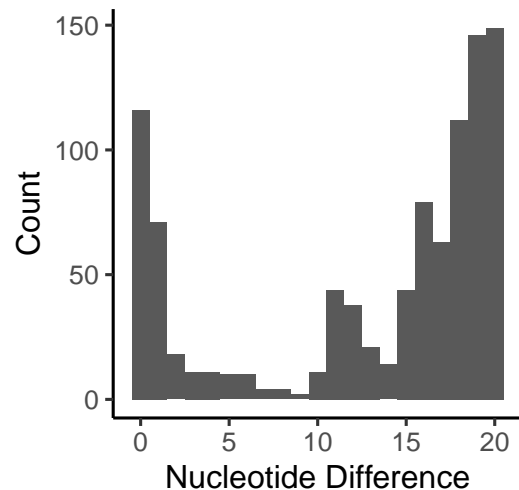
IGHV3-52*02

1 sequences assigned
No exact matches.



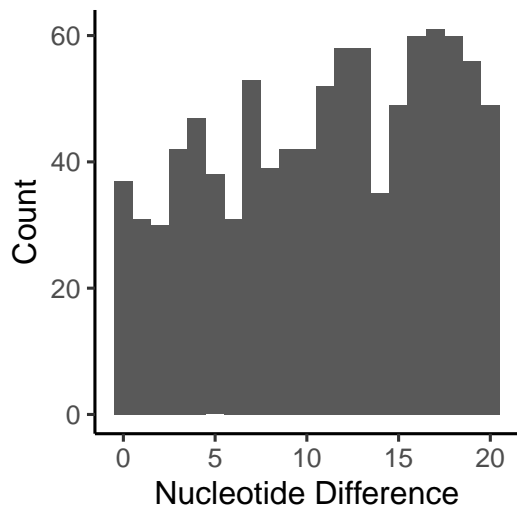
IGHV3-64*01

3490 sequences assigned
116 (3.3%) exact matches, in which:
103 unique CDR3
6 unique J



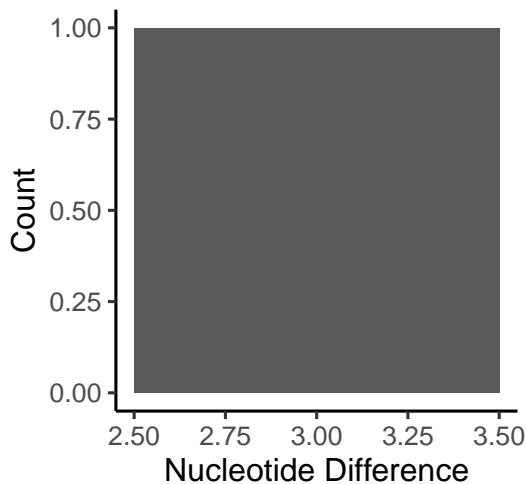
IGHV3-48*04

1378 sequences assigned
37 (2.7%) exact matches, in which:
37 unique CDR3
6 unique J



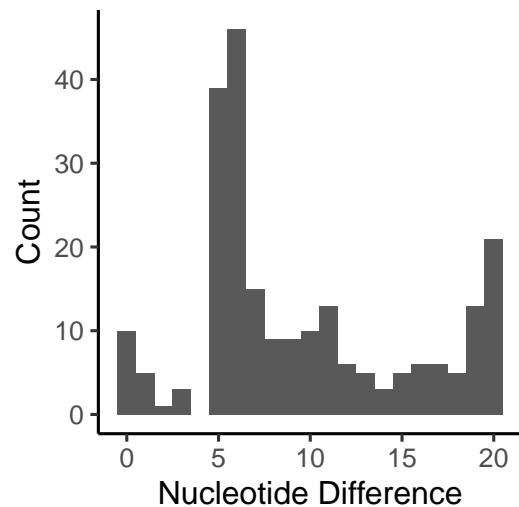
IGHV3-52*01_03

1 sequences assigned
No exact matches.



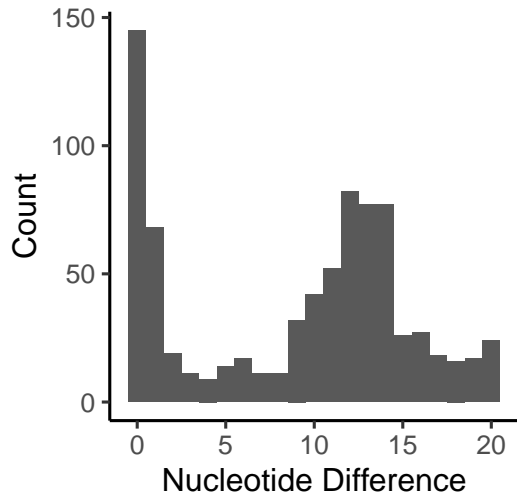
IGHV3-64*02_07

1500 sequences assigned
10 (0.7%) exact matches, in which:
10 unique CDR3
3 unique J



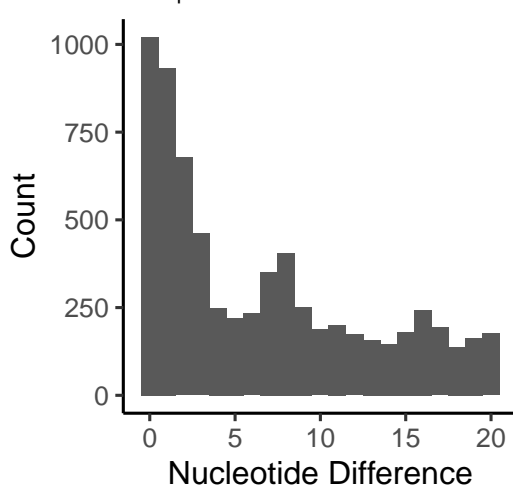
IGHV3-49*03_05

1013 sequences assigned
145 (14.3%) exact matches, in which:
137 unique CDR3
6 unique J



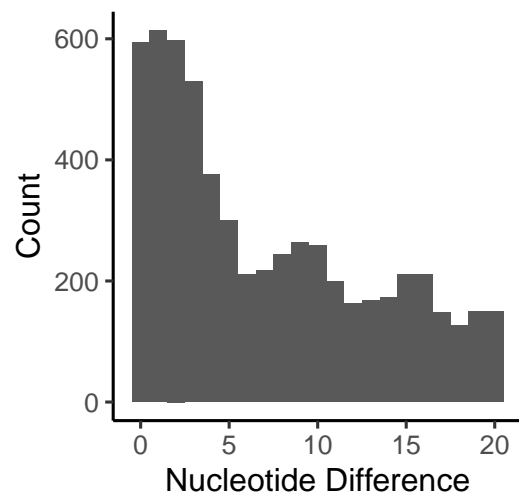
IGHV3-53*01_02

8047 sequences assigned
1021 (12.7%) exact matches, in which:
859 unique CDR3
6 unique J



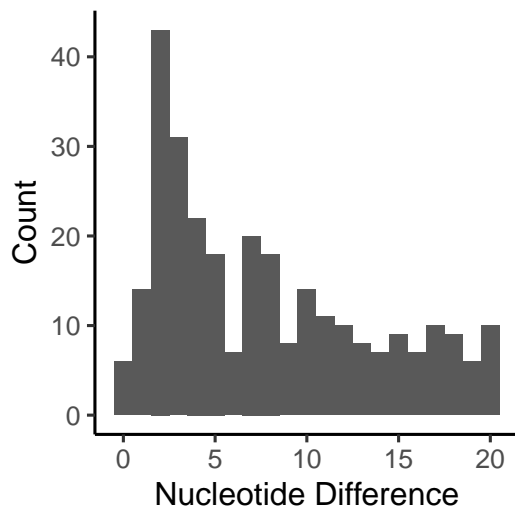
IGHV3-66*01

7162 sequences assigned
594 (8.3%) exact matches, in which:
532 unique CDR3
6 unique J



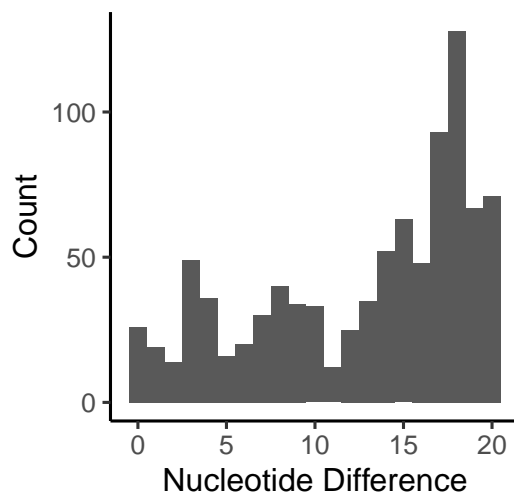
IGHV3-66*03

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



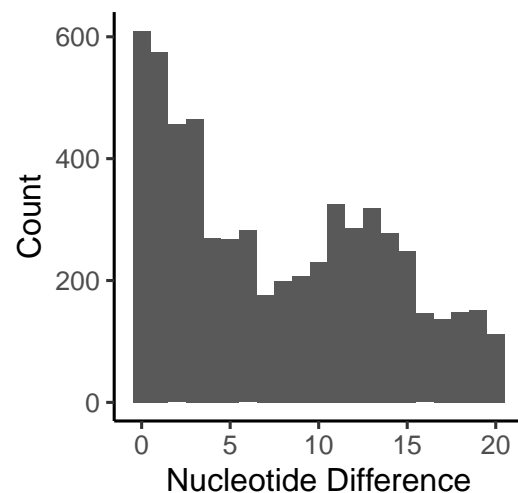
IGHV3-72*01

1314 sequences assigned
26 (2%) exact matches, in which:
25 unique CDR3
4 unique J



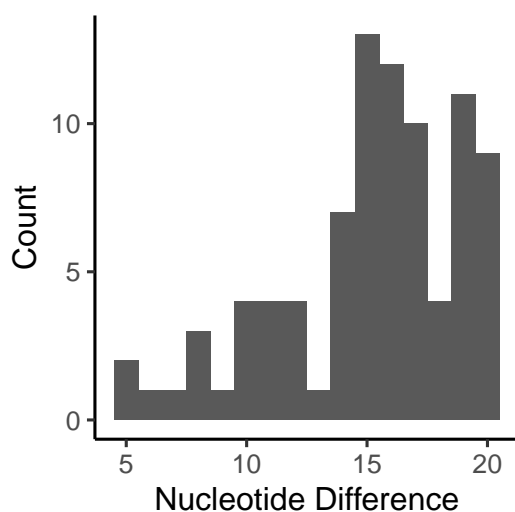
IGHV3-74*01_02

6506 sequences assigned
610 (9.4%) exact matches, in which:
522 unique CDR3
6 unique J



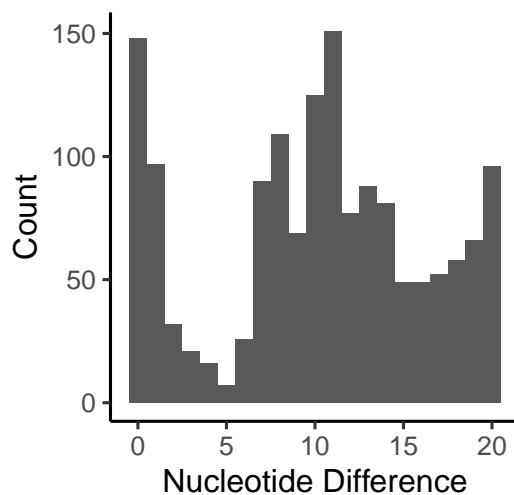
IGHV3-69-1*01

178 sequences assigned
No exact matches.



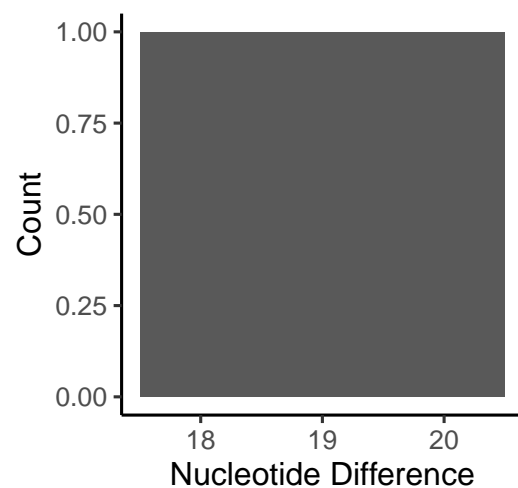
IGHV3-73*01_02

2270 sequences assigned
148 (6.5%) exact matches, in which:
136 unique CDR3
6 unique J



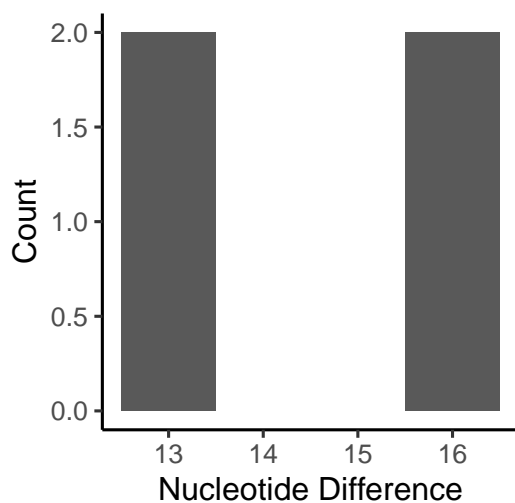
IGHV3-43D*03

4 sequences assigned
No exact matches.



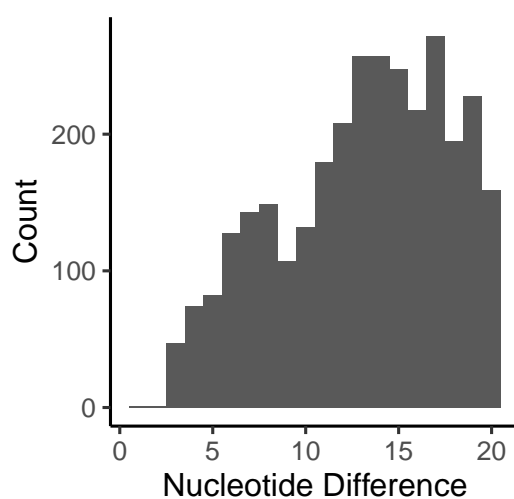
IGHV3-69-1*02

182 sequences assigned
No exact matches.



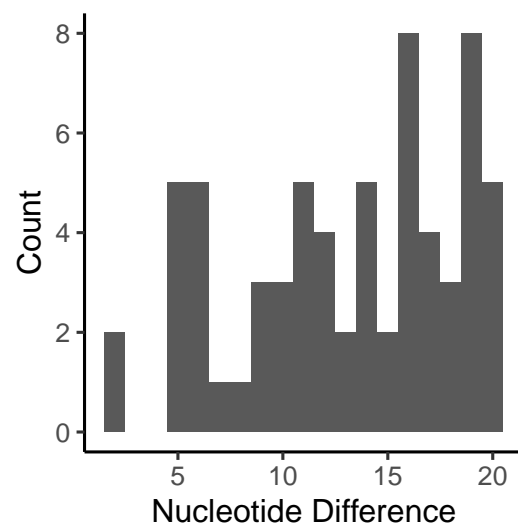
IGHV3-74*03

4024 sequences assigned
No exact matches.



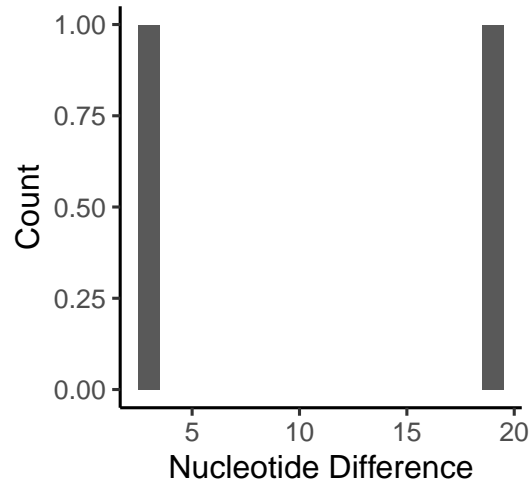
IGHV3-43D*04

83 sequences assigned
No exact matches.



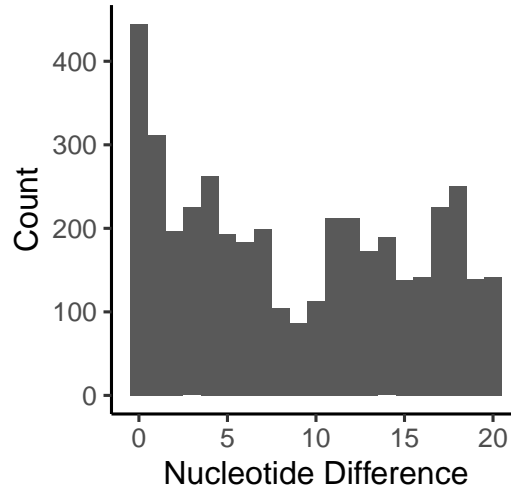
IGHV3-64D*06

5 sequences assigned
No exact matches.



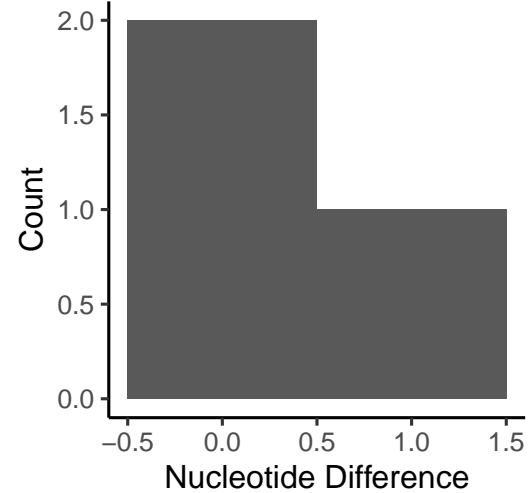
IGHV4-4*02_03

5279 sequences assigned
445 (8.4%) exact matches, in which:
389 unique CDR3
6 unique J



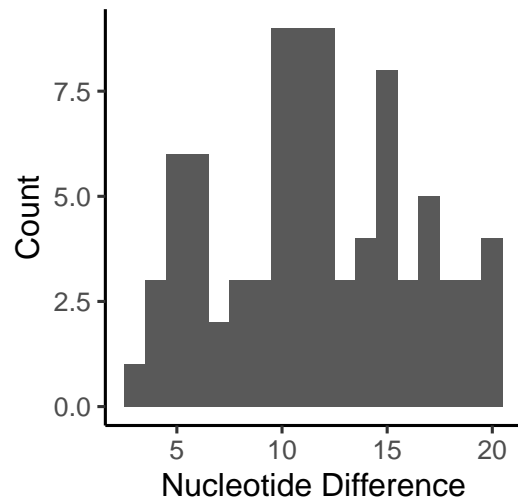
IGHV4-28*02_05

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



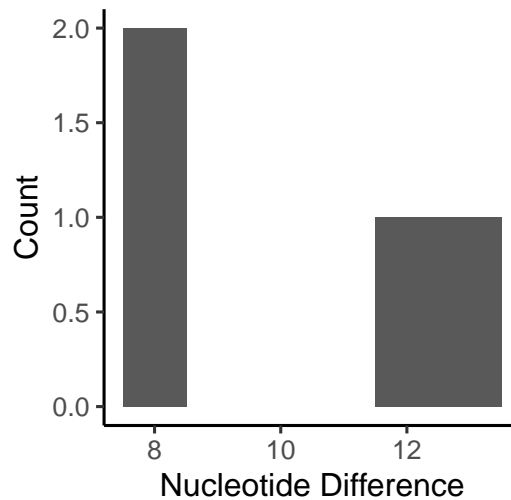
IGHV3-NL1*01

155 sequences assigned
No exact matches.



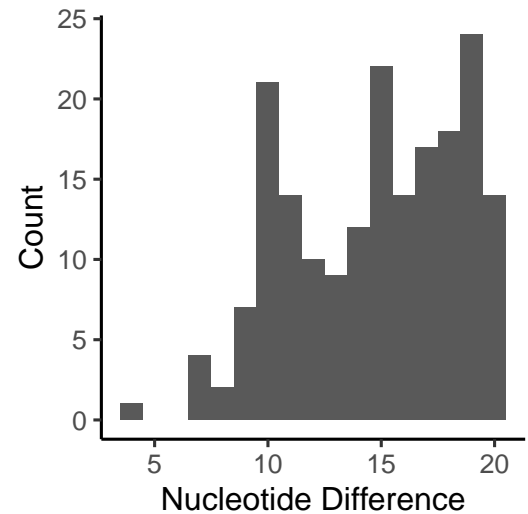
IGHV4-28*03

5 sequences assigned
No exact matches.



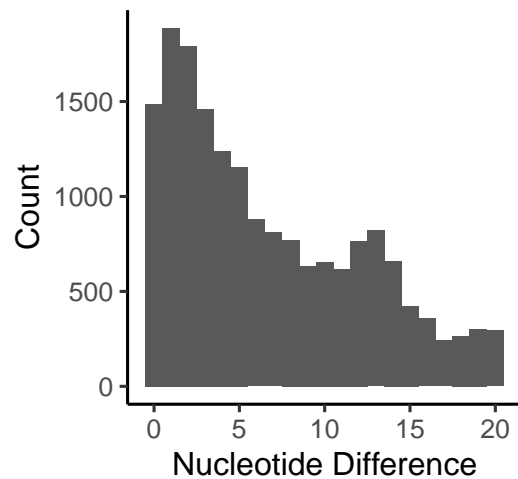
IGHV4-30-4*01

314 sequences assigned
No exact matches.



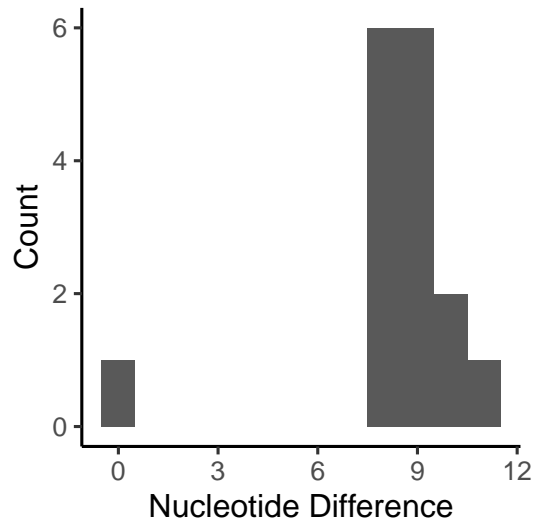
IGHV4-4*07

20852 sequences assigned
1486 (7.1%) exact matches, in which:
1172 unique CDR3
6 unique J



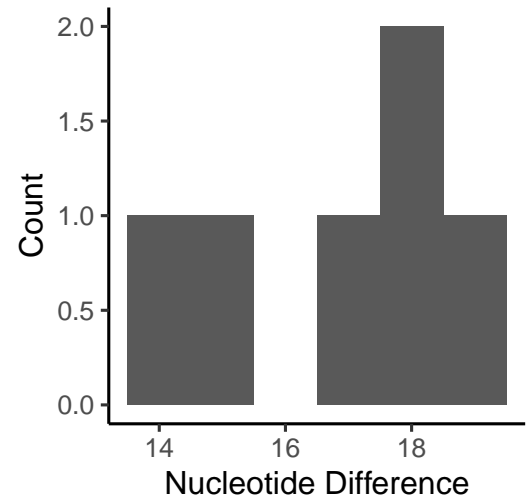
IGHV4-28*01_07

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



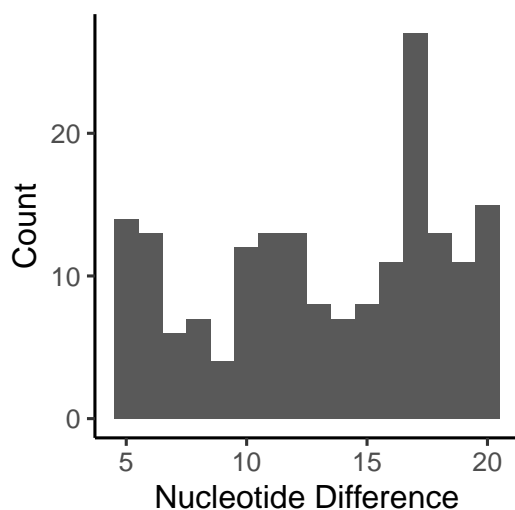
IGHV4-30-2*01

13 sequences assigned
No exact matches.



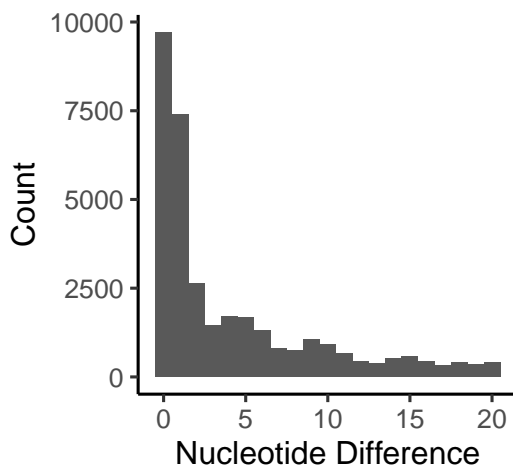
IGHV4-30-2*03

597 sequences assigned
No exact matches.



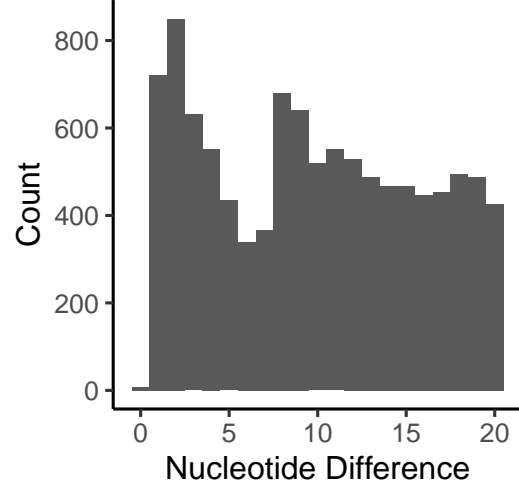
IGHV4-34*01_02

37704 sequences assigned
9714 (25.8%) exact matches, in which:
7764 unique CDR3
6 unique J



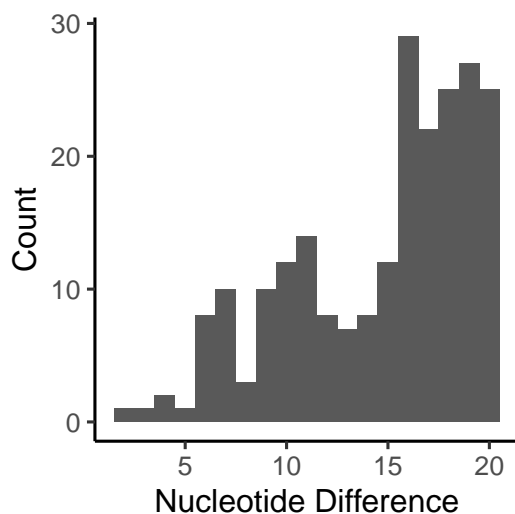
IGHV4-39*07

14552 sequences assigned
8 (0.1%) exact matches, in which:
7 unique CDR3
5 unique J



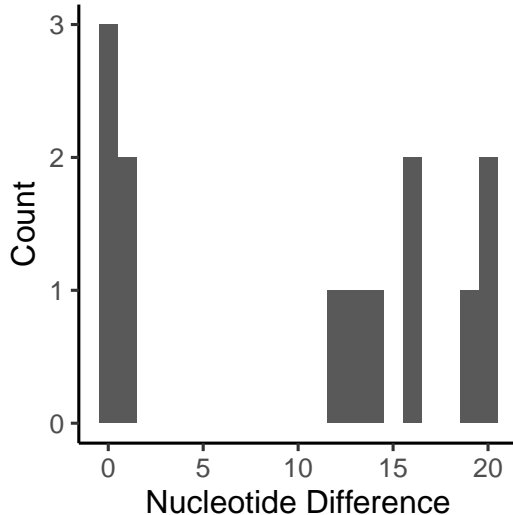
IGHV4-30-4*08

412 sequences assigned
No exact matches.



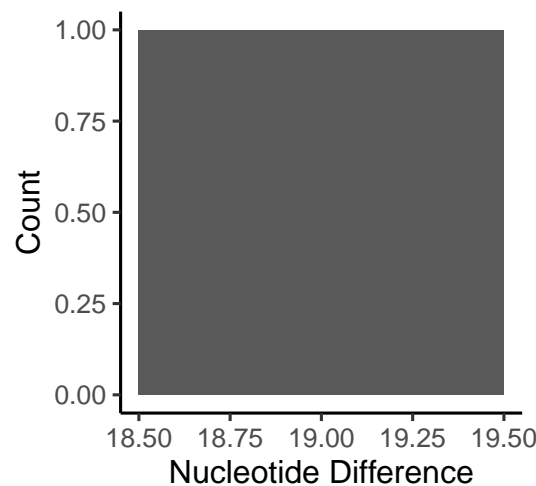
IGHV4-38-2*01

24 sequences assigned
3 (12.5%) exact matches, in which:
2 unique CDR3
1 unique J



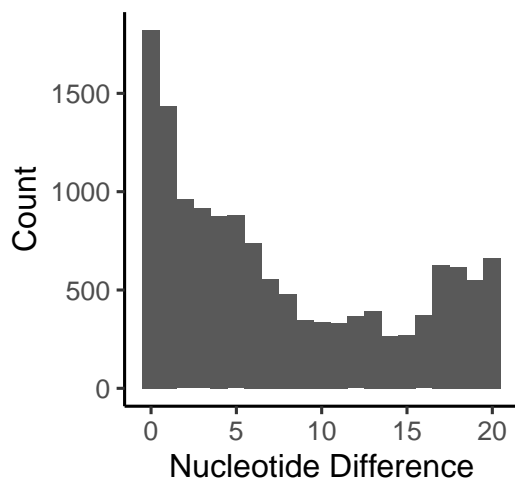
IGHV4-55*09

8 sequences assigned
No exact matches.



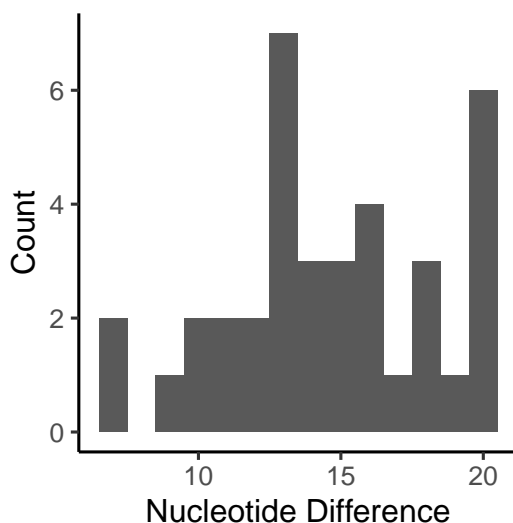
IGHV4-31*02

17915 sequences assigned
1822 (10.2%) exact matches, in which:
1466 unique CDR3
6 unique J



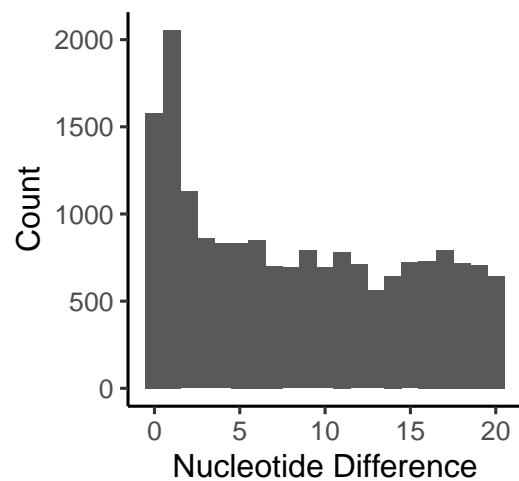
IGHV4-38-2*02

163 sequences assigned
No exact matches.



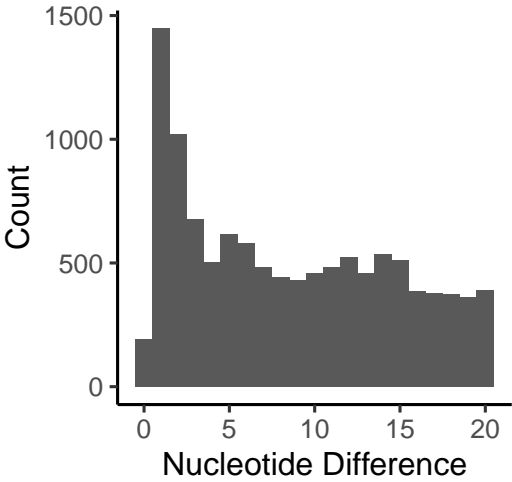
IGHV4-59*08

21645 sequences assigned
1579 (7.3%) exact matches, in which:
1171 unique CDR3
6 unique J



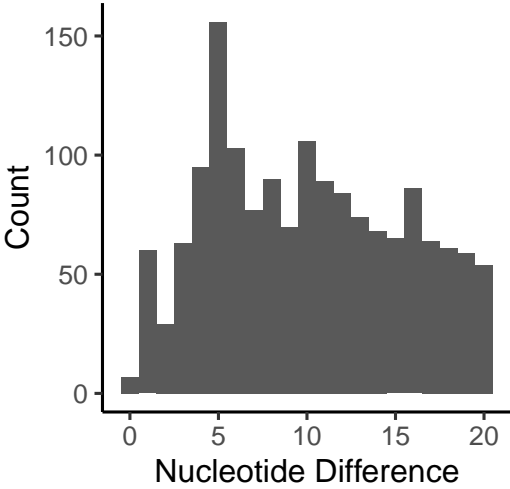
IGHV4-59*12

15186 sequences assigned
191 (1.3%) exact matches, in which:
175 unique CDR3
6 unique J



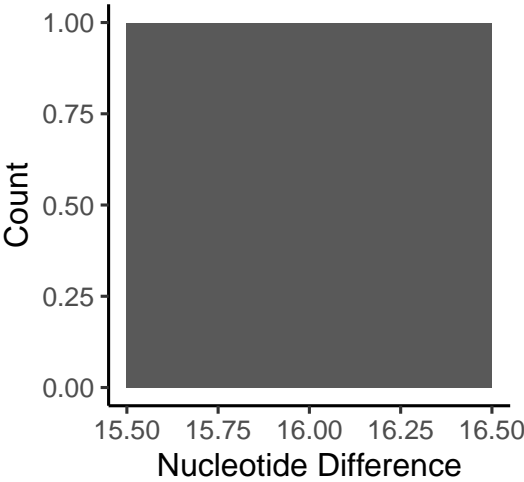
IGHV4-61*08

1890 sequences assigned
7 (0.4%) exact matches, in which:
7 unique CDR3
3 unique J



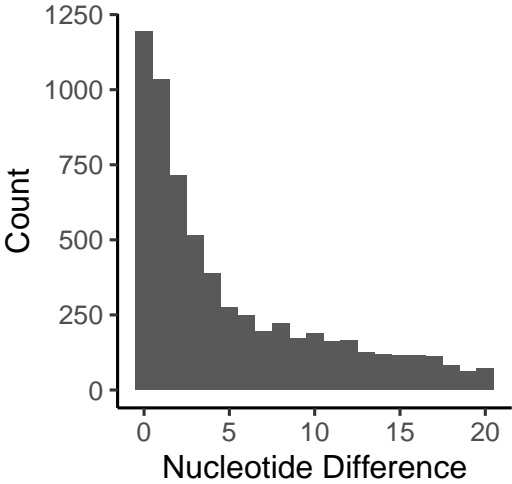
IGHV1/OR15-3*03

1 sequences assigned
No exact matches.



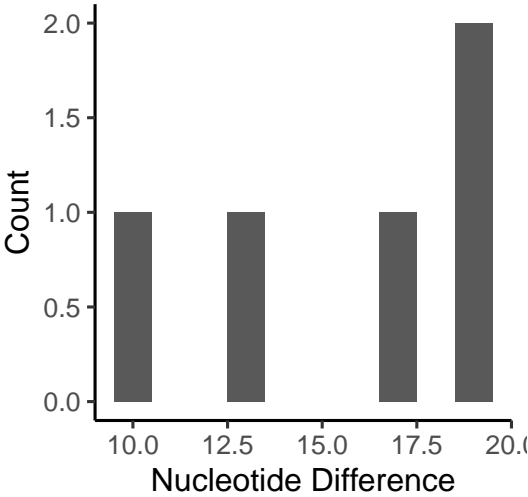
IGHV4-61*01

6771 sequences assigned
1193 (17.6%) exact matches, in which:
932 unique CDR3
6 unique J



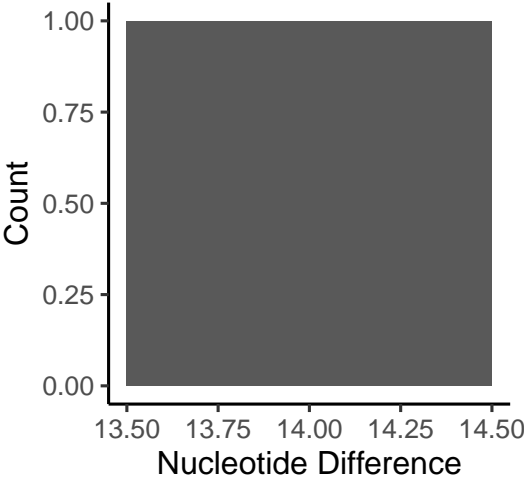
IGHV1/OR15-2*02_03

9 sequences assigned
No exact matches.



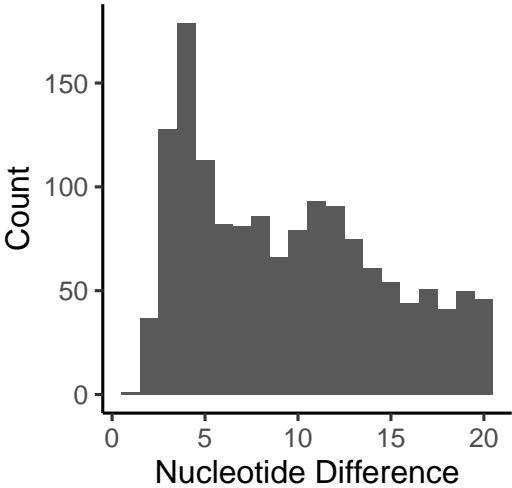
IGHV1/OR15-4*01

1 sequences assigned
No exact matches.



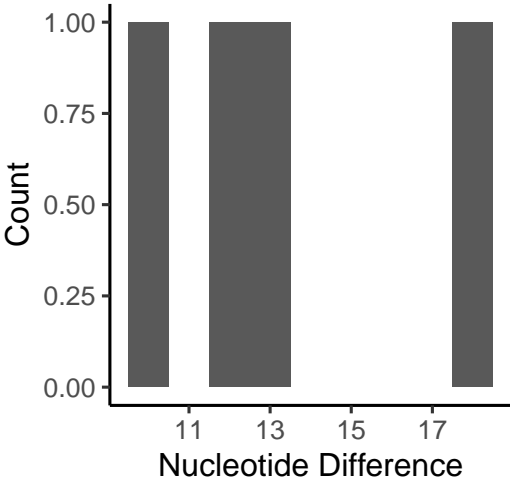
IGHV4-61*05

1727 sequences assigned
No exact matches.



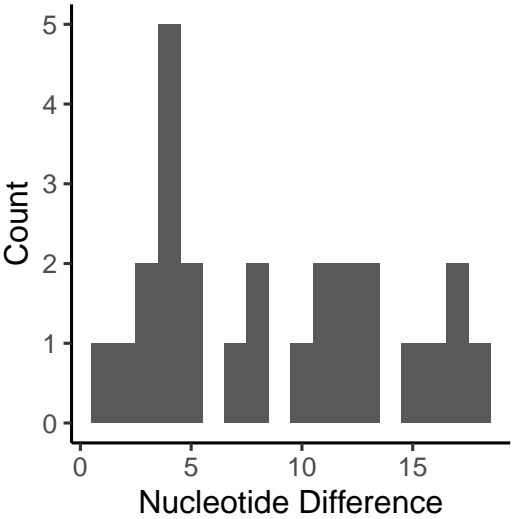
IGHV1/OR15-3*02

4 sequences assigned
No exact matches.



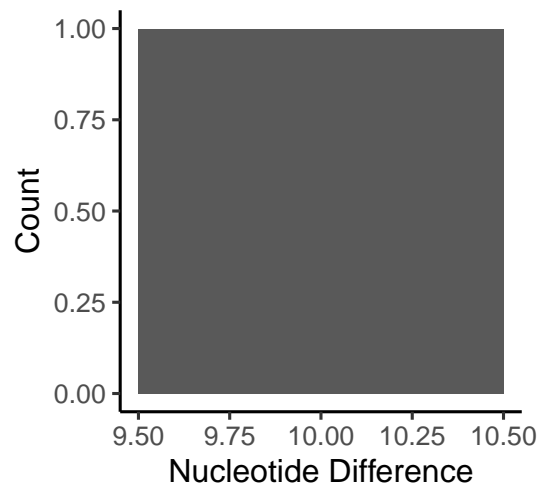
IGHV4/OR15-8*01

55 sequences assigned
No exact matches.



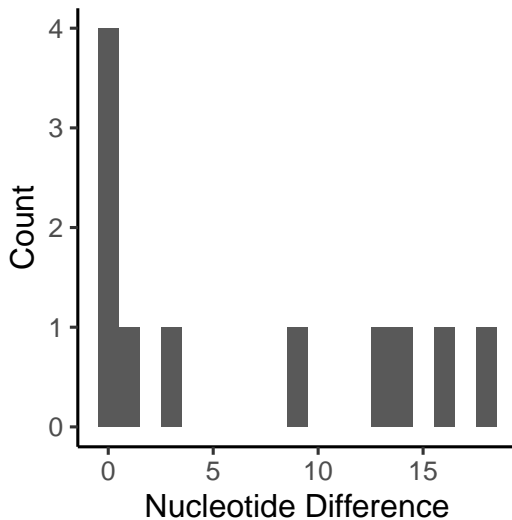
IGHV5-10-1*01_03

1 sequences assigned
No exact matches.



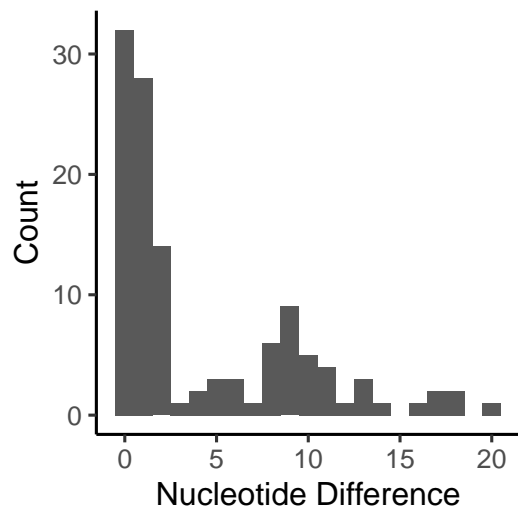
IGHV5-51*07

12 sequences assigned
4 (33.3%) exact matches, in which:
4 unique CDR3
2 unique J



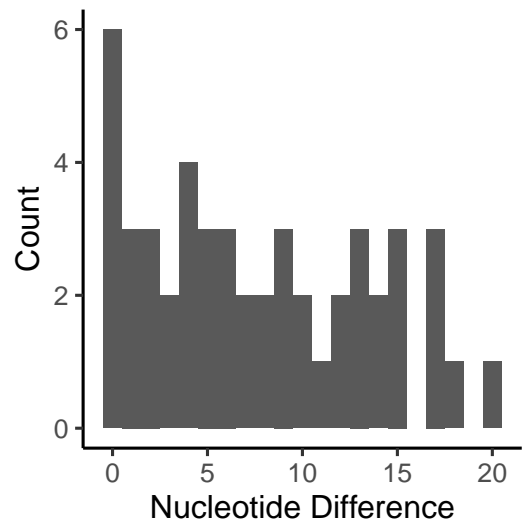
IGHV7-4-1*02

138 sequences assigned
32 (23.2%) exact matches, in which:
31 unique CDR3
4 unique J



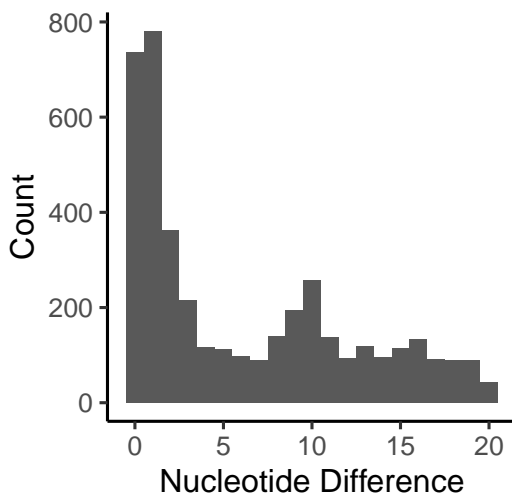
IGHV5-51*04

67 sequences assigned
6 (9%) exact matches, in which:
6 unique CDR3
4 unique J



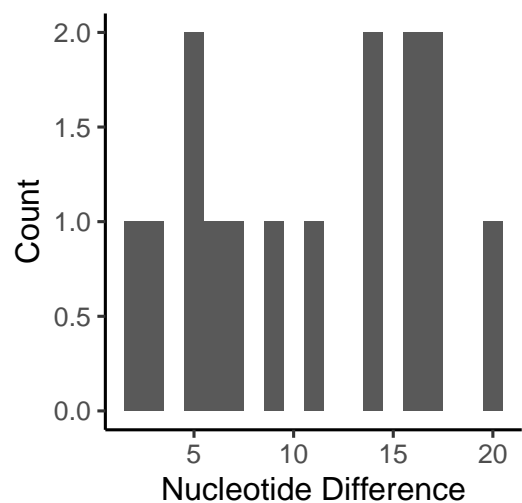
IGHV6-1*01_02

4512 sequences assigned
737 (16.3%) exact matches, in which:
580 unique CDR3
6 unique J



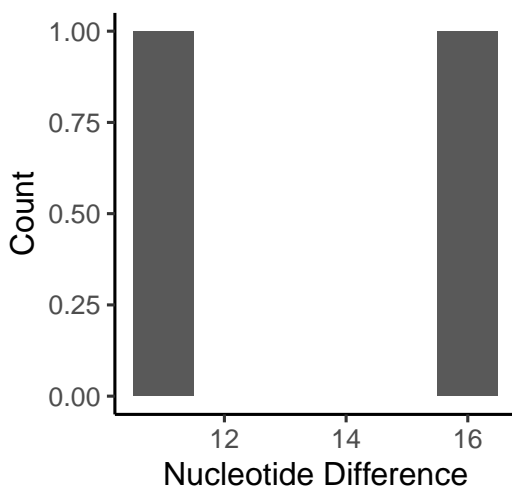
IGHV5-51*06

19 sequences assigned
No exact matches.



IGHV3/OR16-13*01

2 sequences assigned
No exact matches.





Warning – no inferred sequences found.