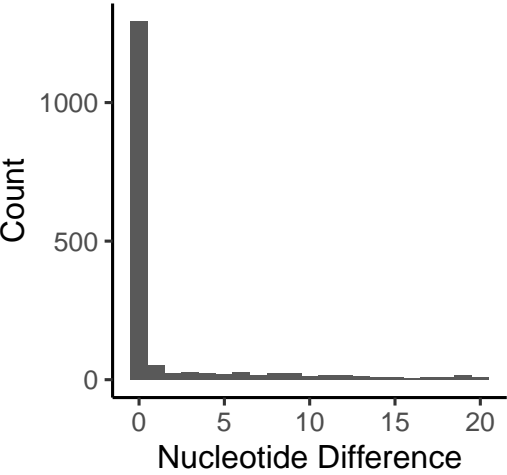


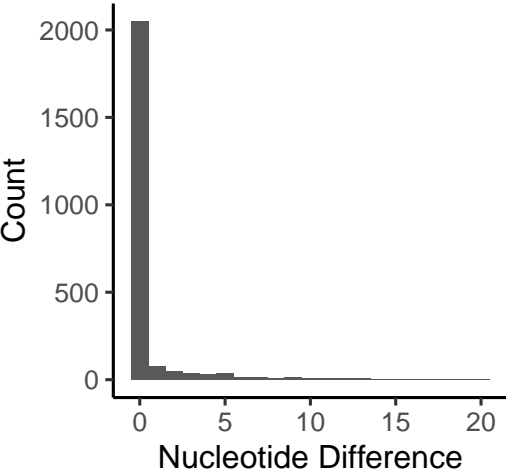
IGHV1-2*02

1725 sequences assigned
1293 (75%) exact matches, in which:
1285 unique CDR3
6 unique J



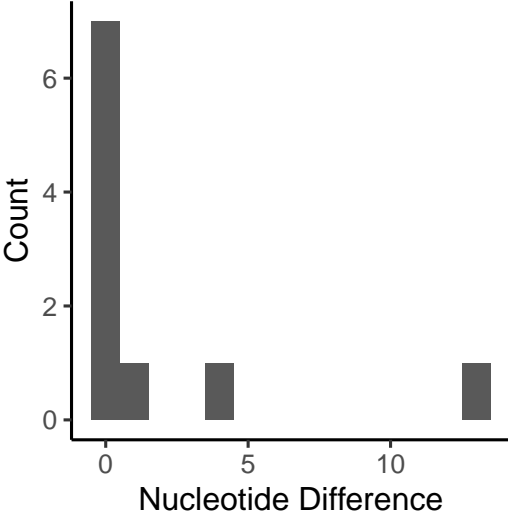
IGHV1-8*01

2405 sequences assigned
2049 (85.2%) exact matches, in which:
2028 unique CDR3
6 unique J



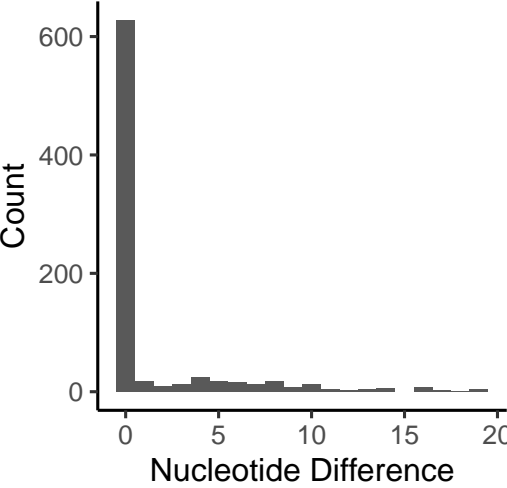
IGHV1-45*02

10 sequences assigned
7 (70%) exact matches, in which:
7 unique CDR3
3 unique J



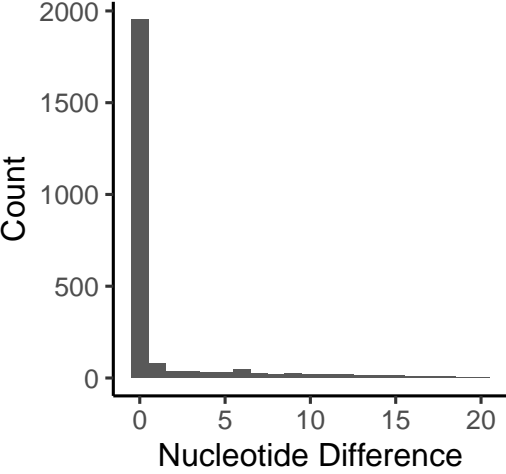
IGHV1-2*06

815 sequences assigned
628 (77.1%) exact matches, in which:
623 unique CDR3
6 unique J



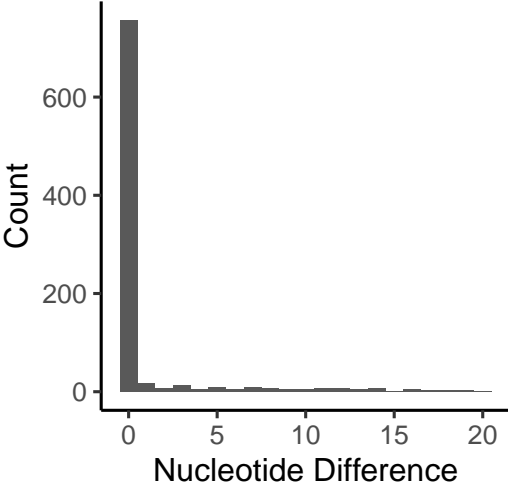
IGHV1-18*01

2435 sequences assigned
1952 (80.2%) exact matches, in which:
1937 unique CDR3
6 unique J



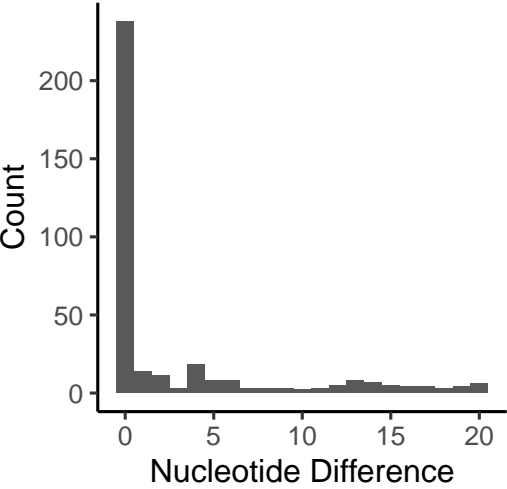
IGHV1-46*01

913 sequences assigned
757 (82.9%) exact matches, in which:
755 unique CDR3
6 unique J



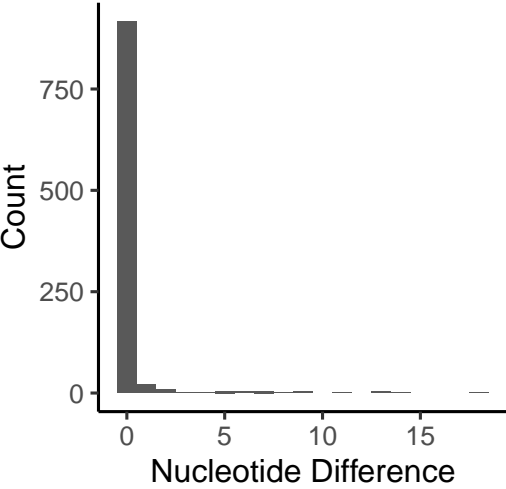
IGHV1-3*01_05

367 sequences assigned
238 (64.9%) exact matches, in which:
237 unique CDR3
6 unique J



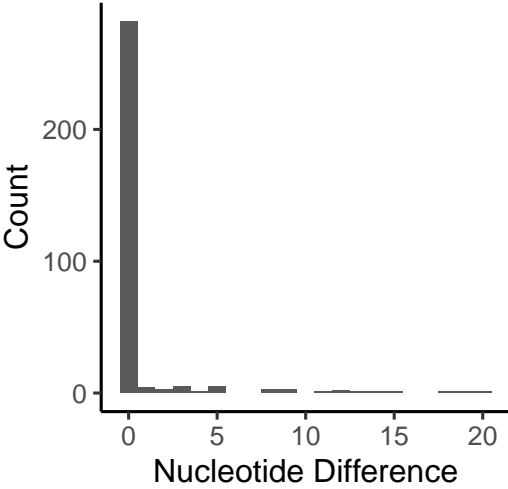
IGHV1-24*01

979 sequences assigned
917 (93.7%) exact matches, in which:
910 unique CDR3
6 unique J



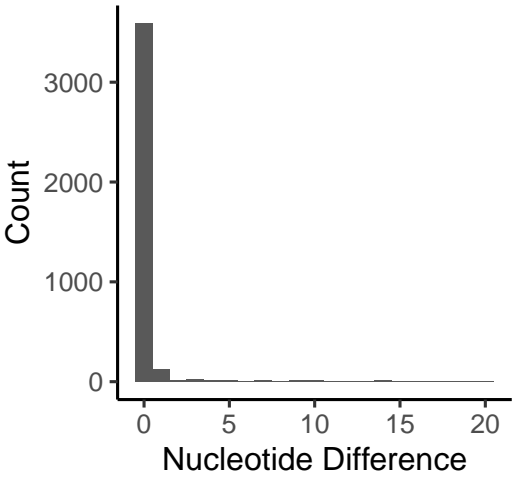
IGHV1-58*01_03

320 sequences assigned
282 (88.1%) exact matches, in which:
279 unique CDR3
6 unique J



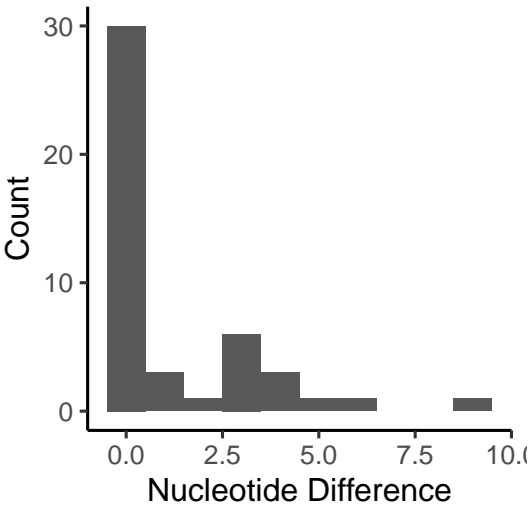
IGHV1-69*01_12_13

3933 sequences assigned
3589 (91.3%) exact matches, in which:
3554 unique CDR3
6 unique J



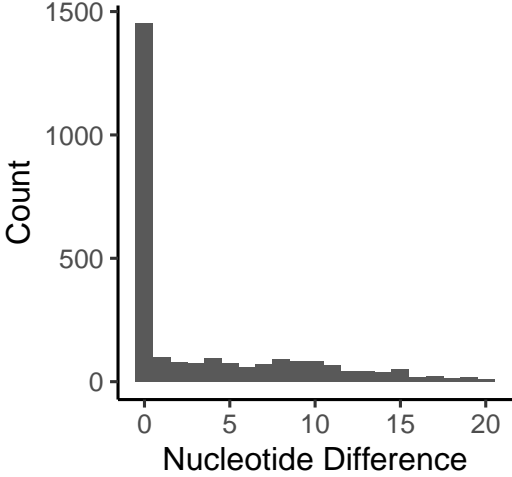
IGHV2-26*01

46 sequences assigned
30 (65.2%) exact matches, in which:
30 unique CDR3
4 unique J



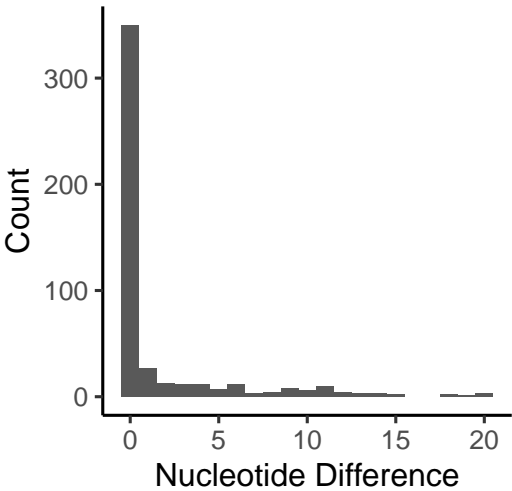
IGHV3-7*01

2639 sequences assigned
1452 (55%) exact matches, in which:
1367 unique CDR3
6 unique J



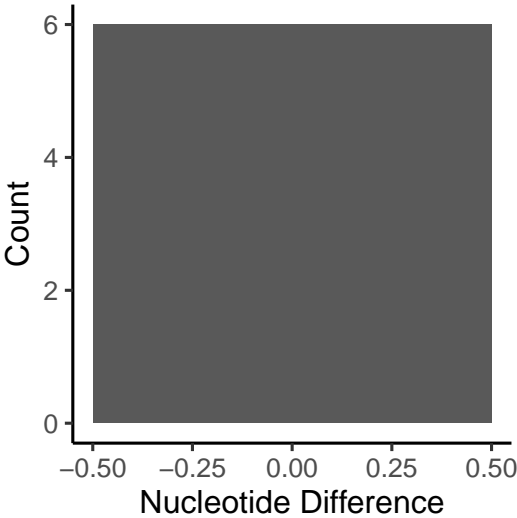
IGHV2-5*01

487 sequences assigned
350 (71.9%) exact matches, in which:
344 unique CDR3
6 unique J



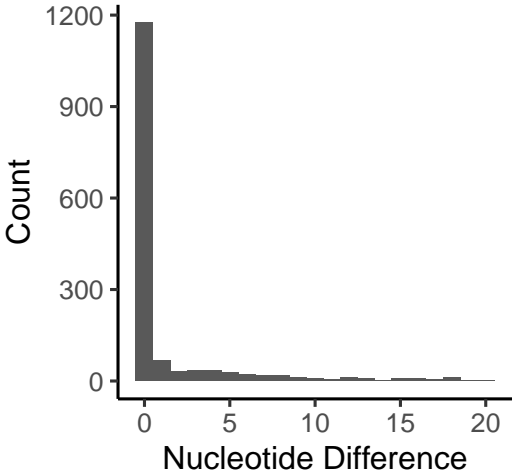
IGHV2-26*04

6 sequences assigned
6 (100%) exact matches, in which:
6 unique CDR3
3 unique J



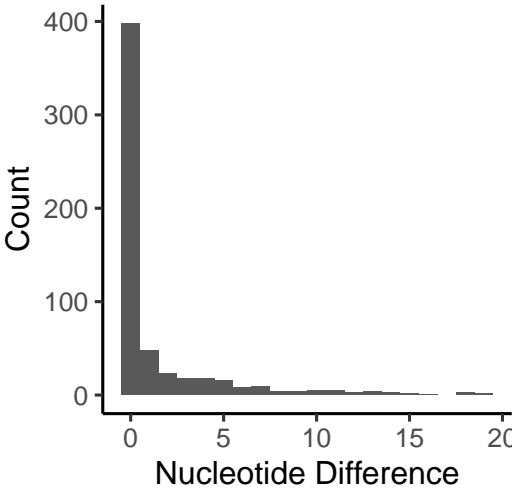
IGHV3-9*01

1509 sequences assigned
1175 (77.9%) exact matches, in which:
1126 unique CDR3
6 unique J



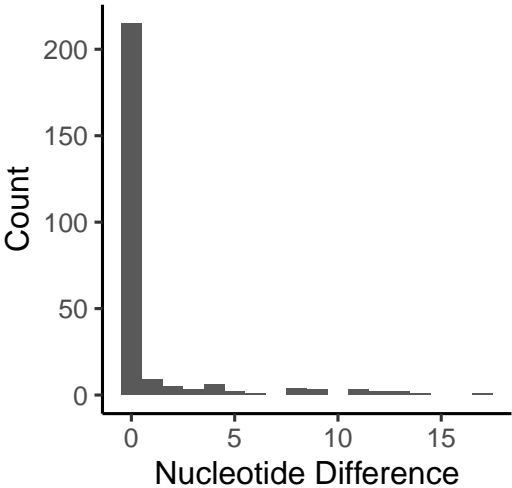
IGHV2-5*02

576 sequences assigned
398 (69.1%) exact matches, in which:
387 unique CDR3
6 unique J



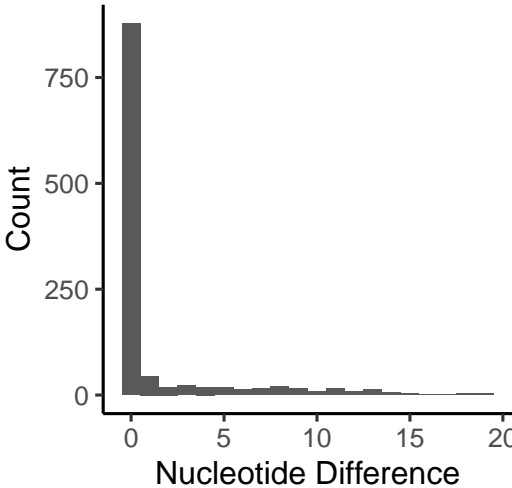
IGHV2-70*01

257 sequences assigned
215 (83.7%) exact matches, in which:
214 unique CDR3
6 unique J



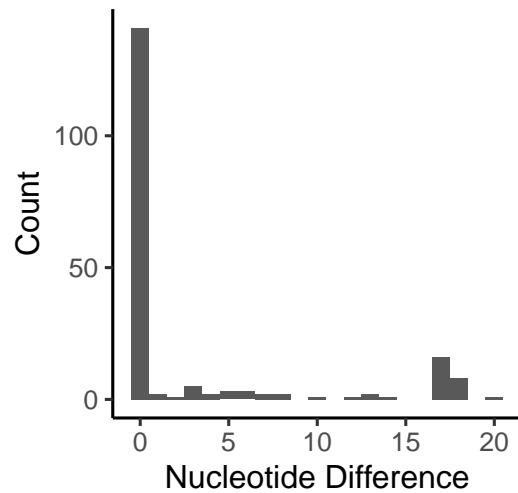
IGHV3-11*01

1144 sequences assigned
878 (76.7%) exact matches, in which:
812 unique CDR3
6 unique J



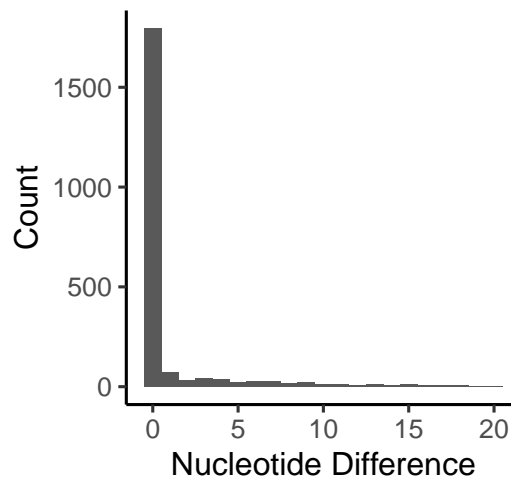
IGHV3-13*01

194 sequences assigned
141 (72.7%) exact matches, in which:
138 unique CDR3
6 unique J



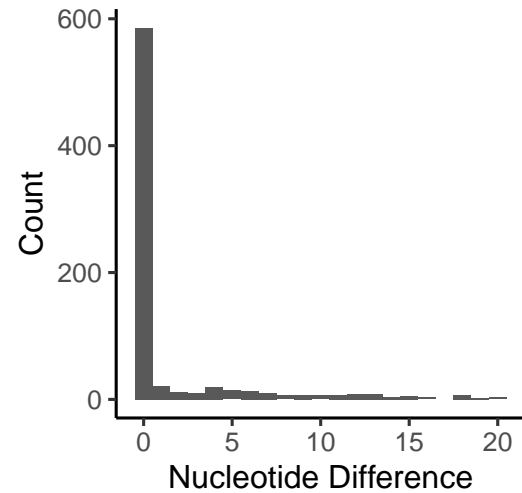
IGHV3-21*01_02

2207 sequences assigned
1795 (81.3%) exact matches, in which:
1665 unique CDR3
6 unique J



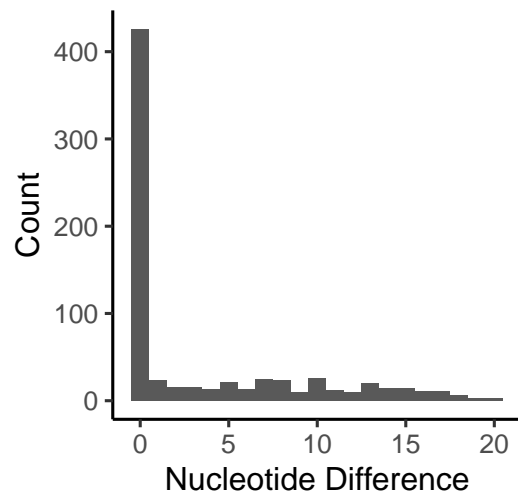
IGHV3-33*01

778 sequences assigned
586 (75.3%) exact matches, in which:
552 unique CDR3
6 unique J



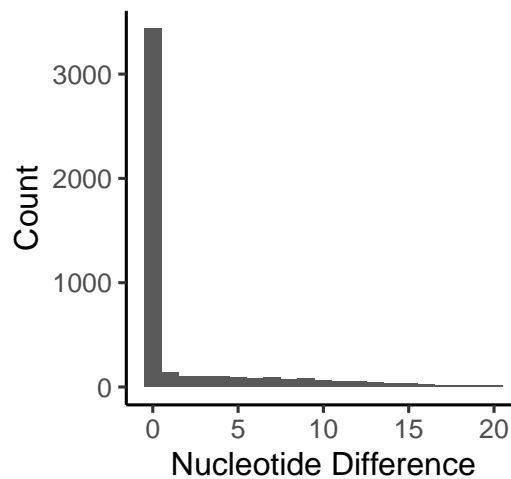
IGHV3-15*01_02

745 sequences assigned
426 (57.2%) exact matches, in which:
408 unique CDR3
6 unique J



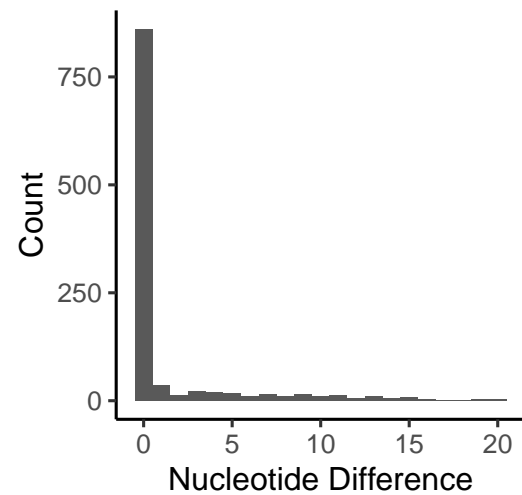
IGHV3-23*01_04

4751 sequences assigned
3435 (72.3%) exact matches, in which:
3173 unique CDR3
6 unique J



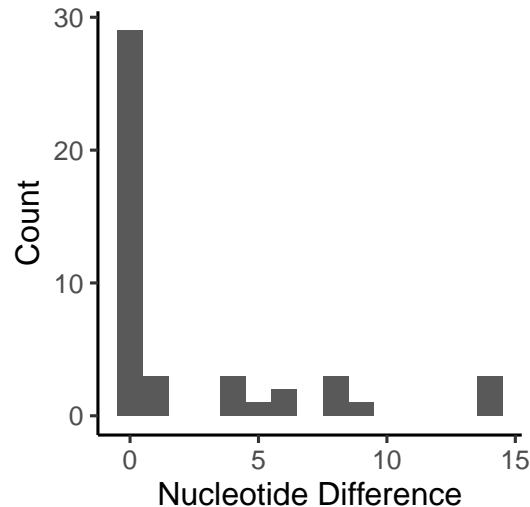
IGHV3-33*08

1107 sequences assigned
861 (77.8%) exact matches, in which:
824 unique CDR3
6 unique J



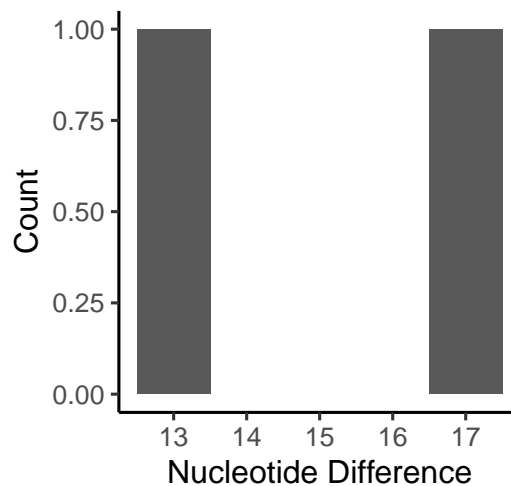
IGHV3-20*01_02

45 sequences assigned
29 (64.4%) exact matches, in which:
28 unique CDR3
5 unique J



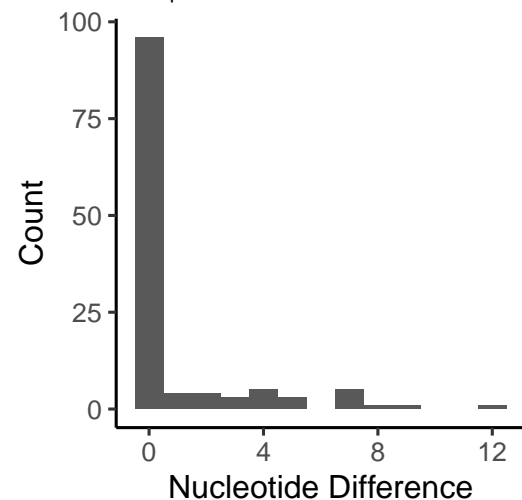
IGHV3-30-3*03

2 sequences assigned
No exact matches.



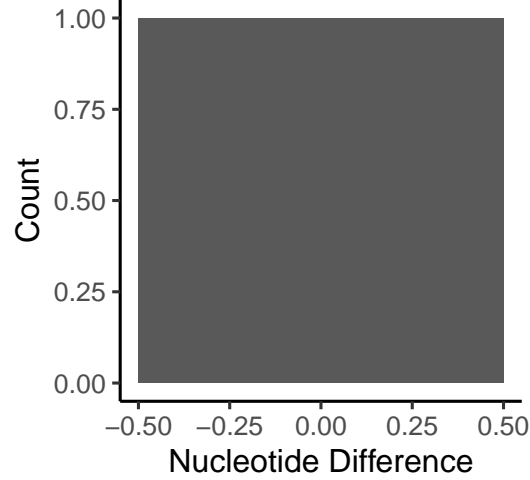
IGHV3-43*01

124 sequences assigned
96 (77.4%) exact matches, in which:
90 unique CDR3
5 unique J



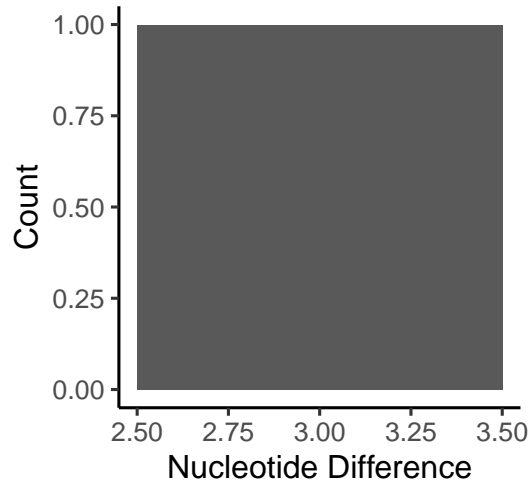
IGHV3-47*02

1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



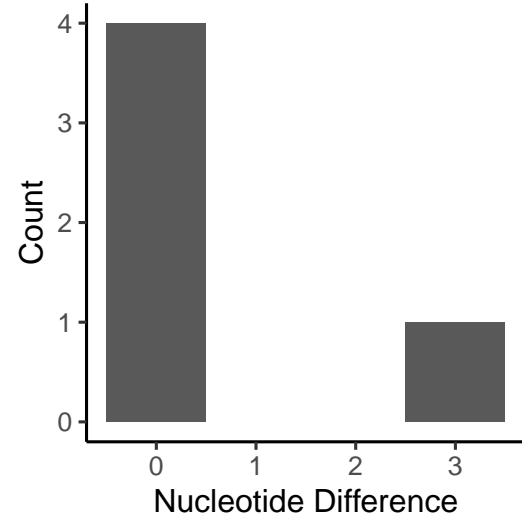
IGHV3-52*01_03

1 sequences assigned
No exact matches.



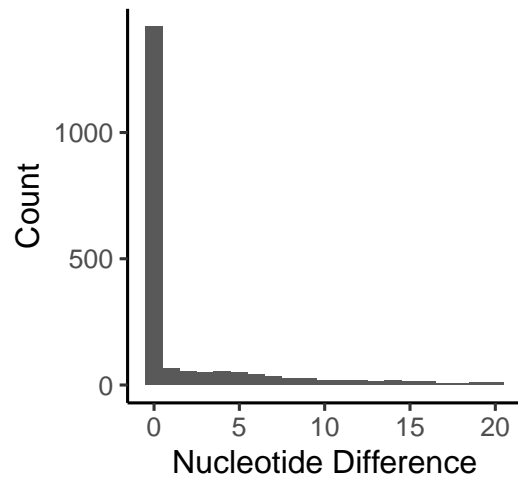
IGHV3-66*03

5 sequences assigned
4 (80%) exact matches, in which:
4 unique CDR3
3 unique J



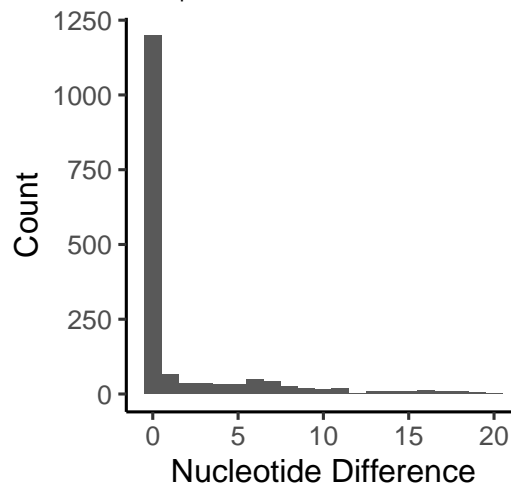
IGHV3-48*02

1967 sequences assigned
1419 (72.1%) exact matches, in which:
1280 unique CDR3
6 unique J



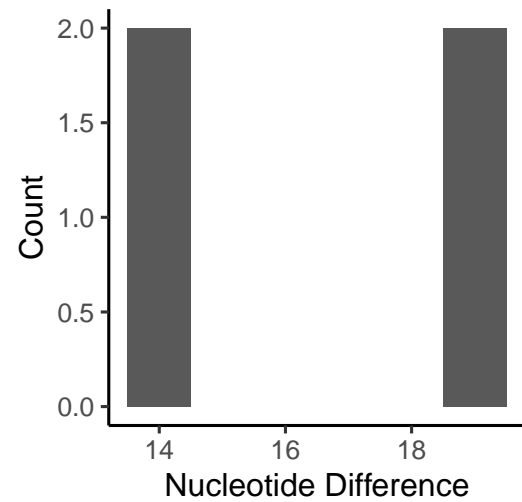
IGHV3-53*01_02

1642 sequences assigned
1198 (73%) exact matches, in which:
1103 unique CDR3
6 unique J



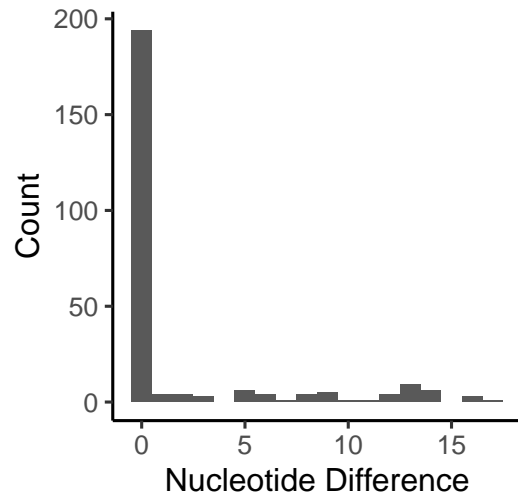
IGHV3-66*04

7 sequences assigned
No exact matches.



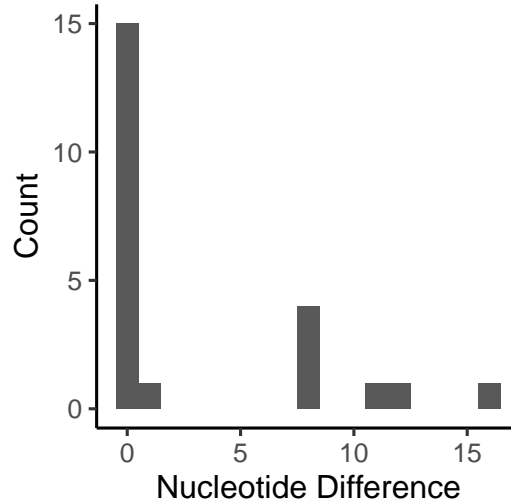
IGHV3-49*03_05

254 sequences assigned
194 (76.4%) exact matches, in which:
190 unique CDR3
6 unique J



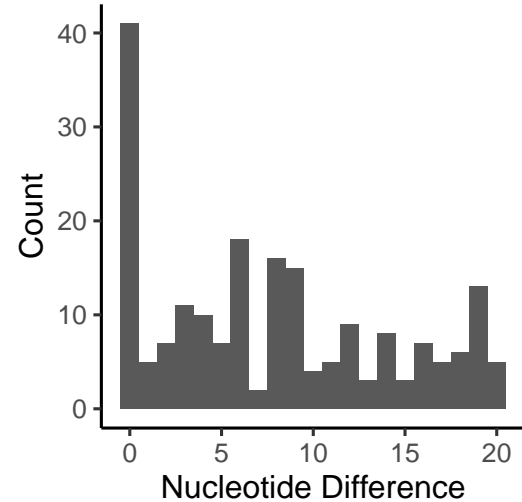
IGHV3-64*02_07

25 sequences assigned
15 (60%) exact matches, in which:
13 unique CDR3
4 unique J



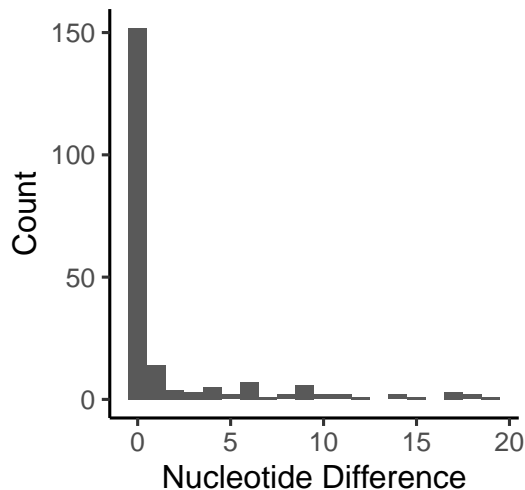
IGHV3-72*01

208 sequences assigned
41 (19.7%) exact matches, in which:
39 unique CDR3
5 unique J



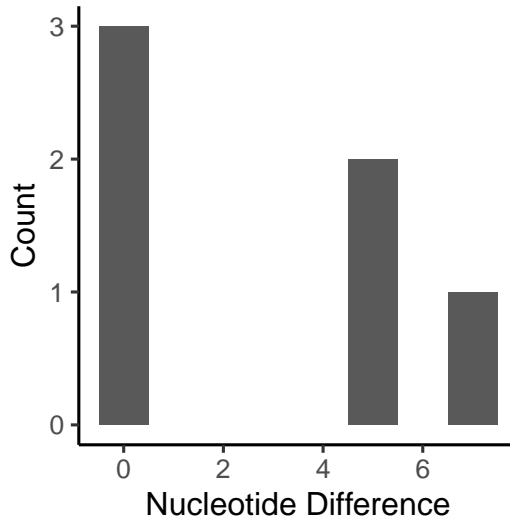
IGHV3-73*01_02

212 sequences assigned
152 (71.7%) exact matches, in which:
140 unique CDR3
5 unique J



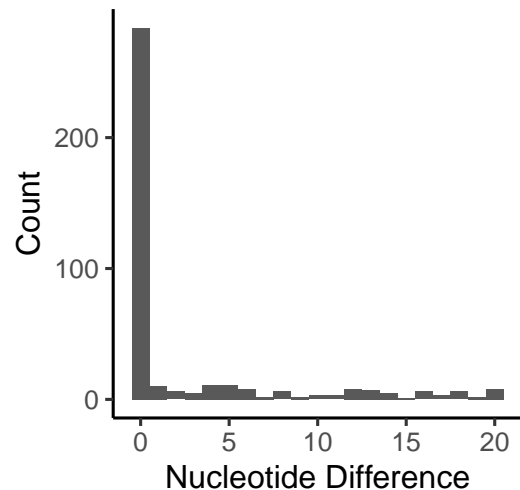
IGHV3-64D*06

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



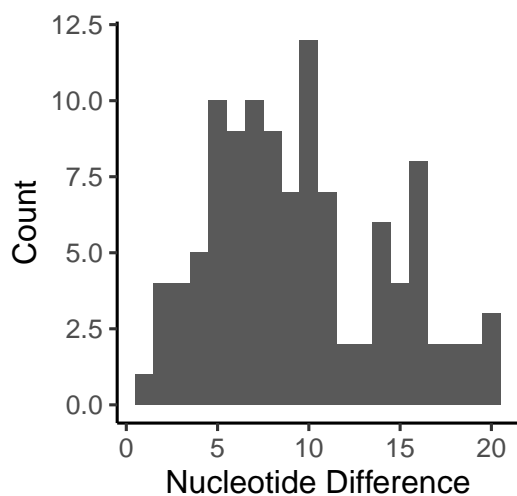
IGHV4-4*02_03

419 sequences assigned
284 (67.8%) exact matches, in which:
278 unique CDR3
6 unique J



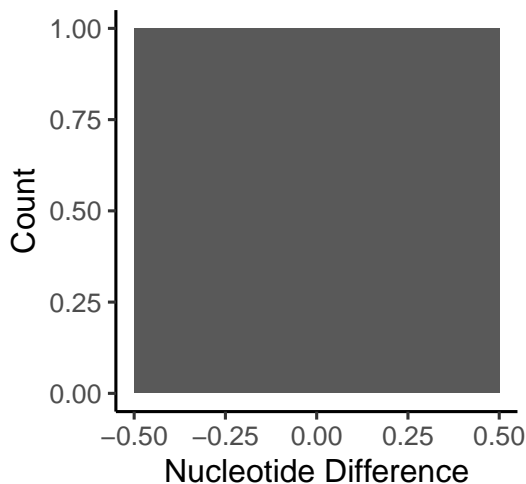
IGHV3-74*03

126 sequences assigned
No exact matches.



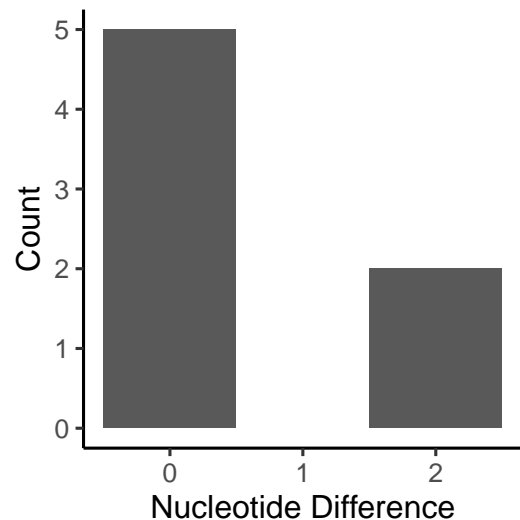
IGHV3-64D*08

1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



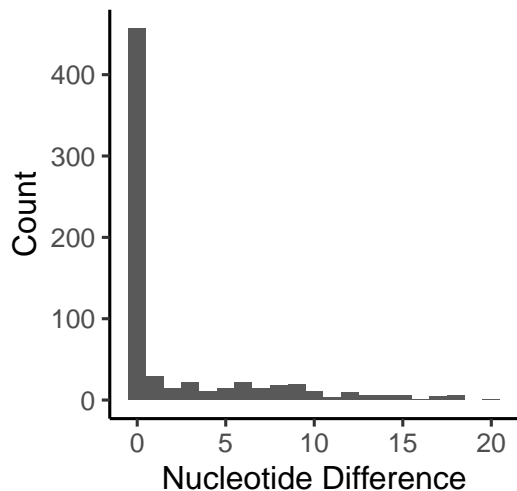
IGHV4-28*01_07

7 sequences assigned
5 (71.4%) exact matches, in which:
5 unique CDR3
4 unique J



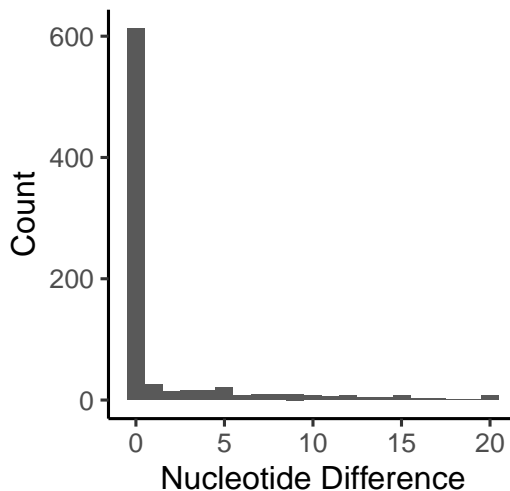
IGHV3-74*01_02

670 sequences assigned
457 (68.2%) exact matches, in which:
431 unique CDR3
6 unique J



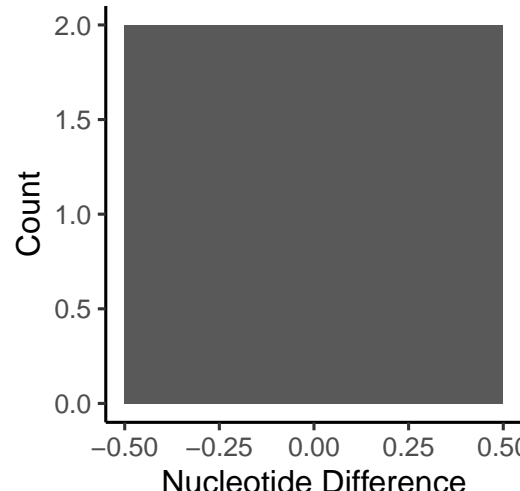
IGHV4-4*07

797 sequences assigned
613 (76.9%) exact matches, in which:
579 unique CDR3
6 unique J



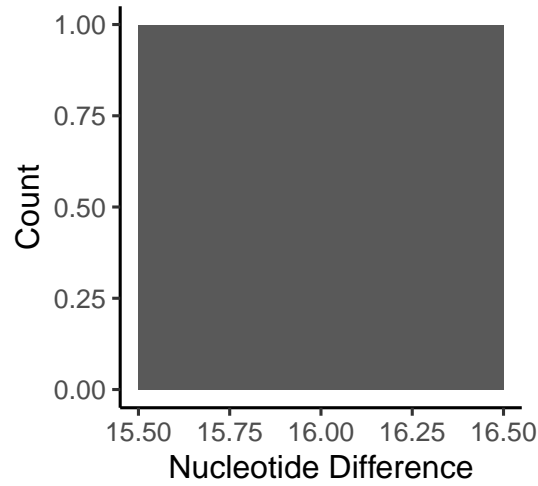
IGHV4-28*02_05

2 sequences assigned
2 (100%) exact matches, in which:
2 unique CDR3
1 unique J



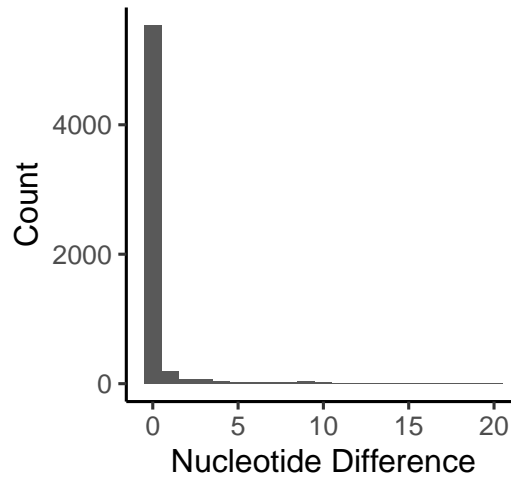
IGHV4-30-2*01

1 sequences assigned
No exact matches.



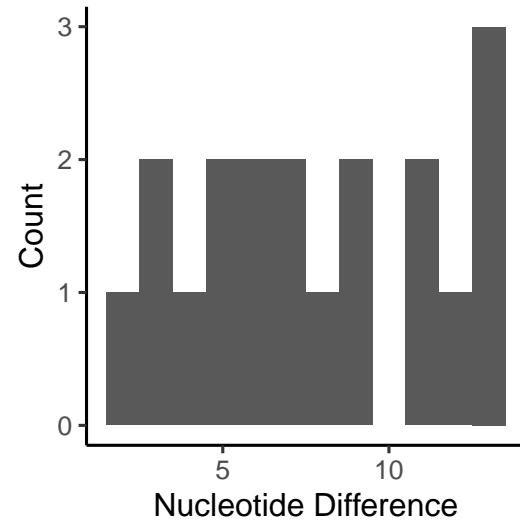
IGHV4-34*01_02

6188 sequences assigned
5535 (89.4%) exact matches, in which:
5219 unique CDR3
6 unique J



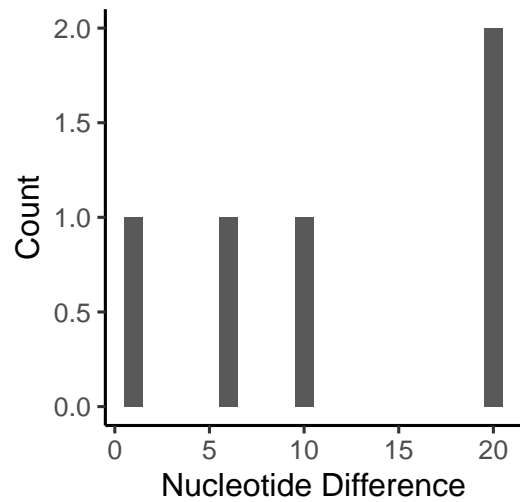
IGHV4-39*02

27 sequences assigned
No exact matches.



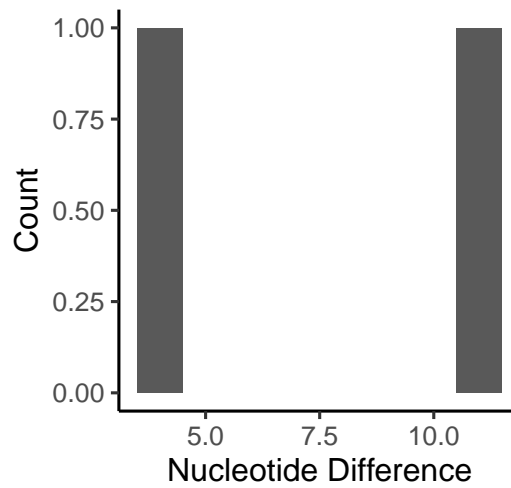
IGHV4-31*02

5 sequences assigned
No exact matches.



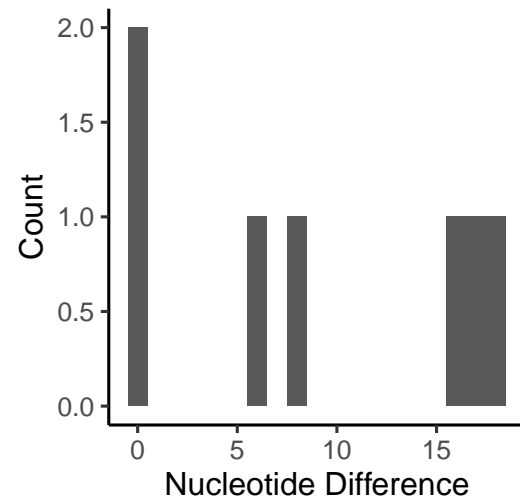
IGHV4-38-2*01

2 sequences assigned
No exact matches.



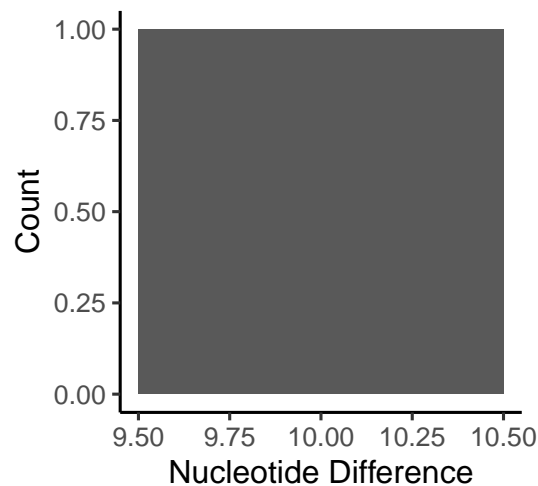
IGHV4-39*07

8 sequences assigned
2 (25%) exact matches, in which:
2 unique CDR3
1 unique J



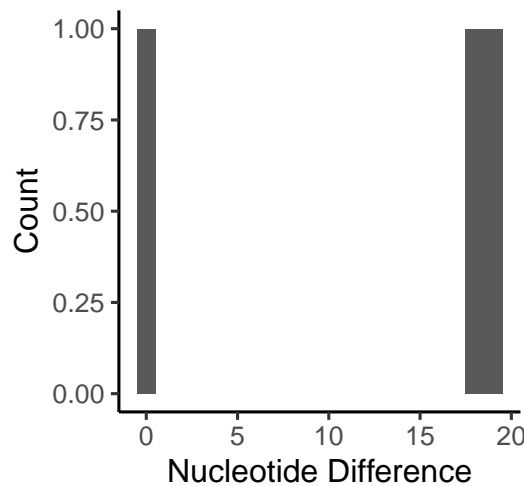
IGHV4-31*03_04

2 sequences assigned
No exact matches.



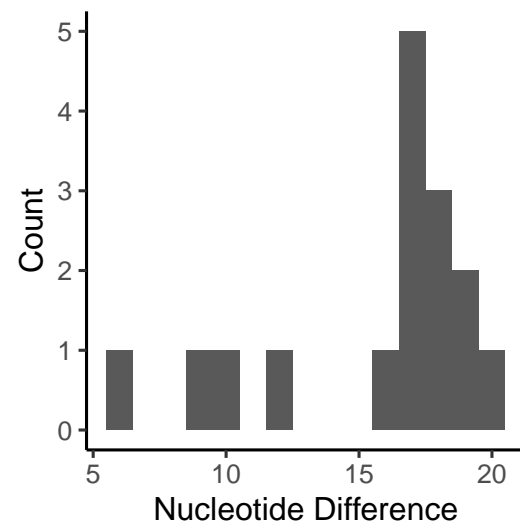
IGHV4-38-2*02

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



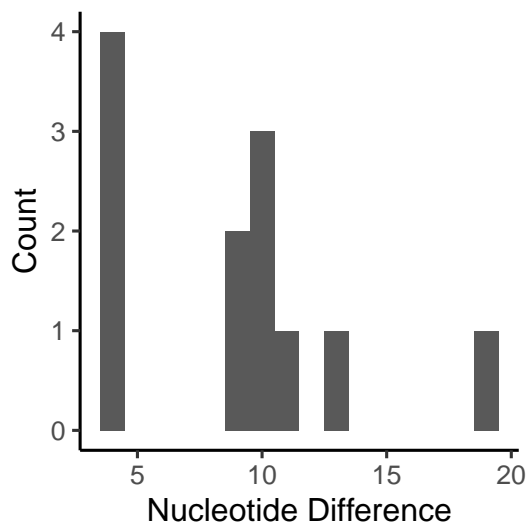
IGHV4-59*02

18 sequences assigned
No exact matches.



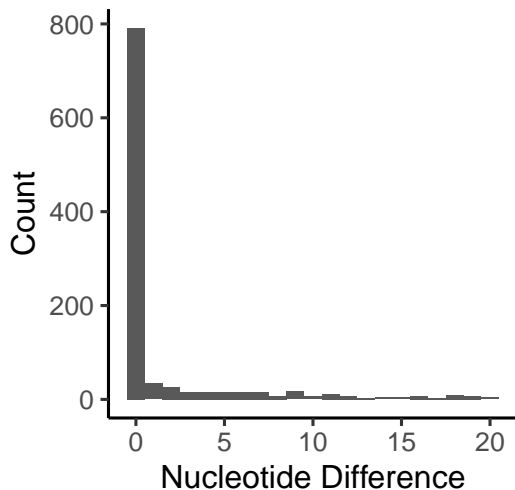
IGHV4-59*11

12 sequences assigned
No exact matches.



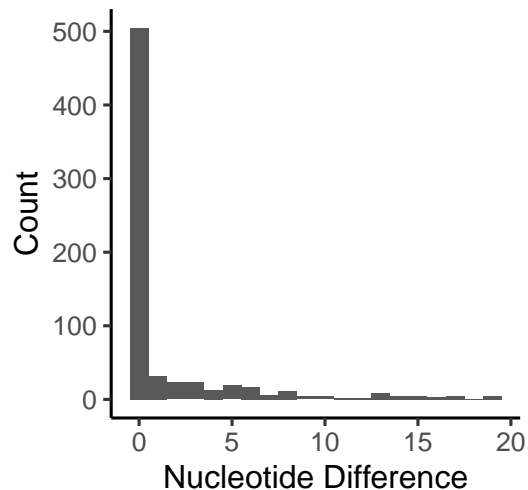
IGHV4-61*01

1026 sequences assigned
792 (77.2%) exact matches, in which:
747 unique CDR3
6 unique J



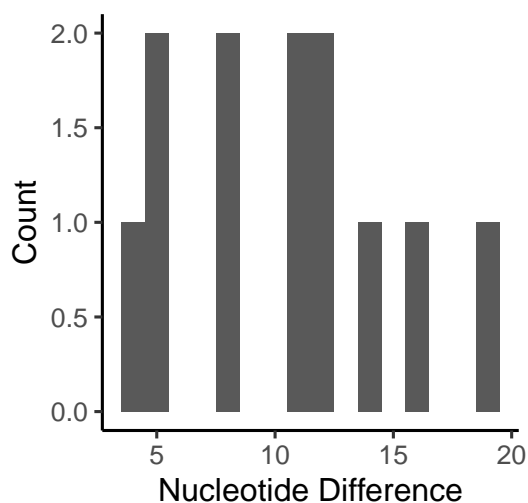
IGHV6-1*01_02

702 sequences assigned
505 (71.9%) exact matches, in which:
499 unique CDR3
6 unique J



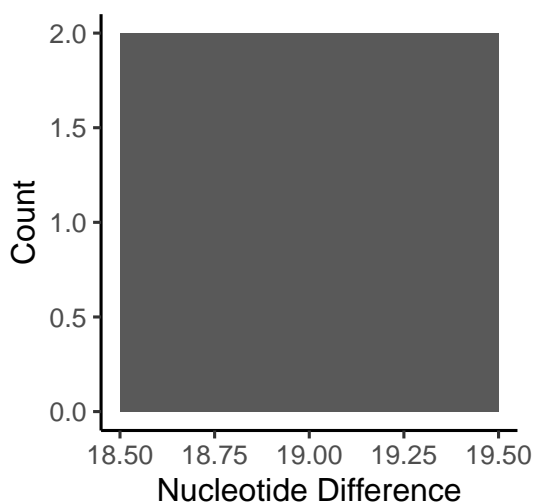
IGHV4-59*12

13 sequences assigned
No exact matches.



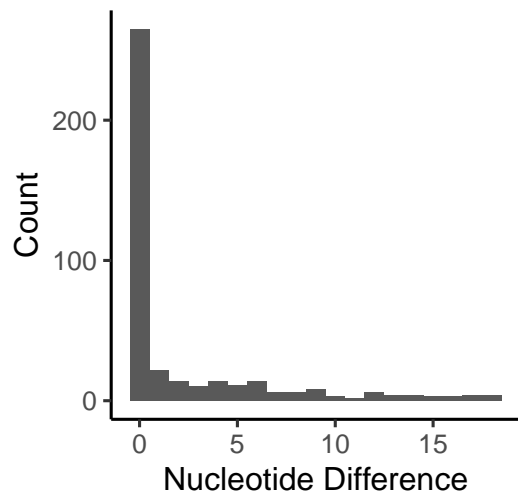
IGHV4/OR15-8*02

2 sequences assigned
No exact matches.



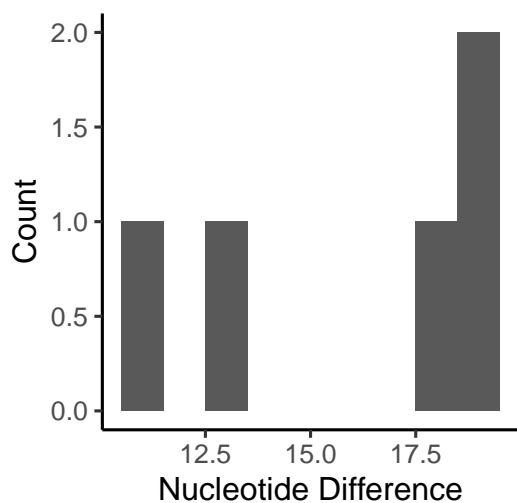
IGHV7-4-1*02

405 sequences assigned
265 (65.4%) exact matches, in which:
258 unique CDR3
6 unique J



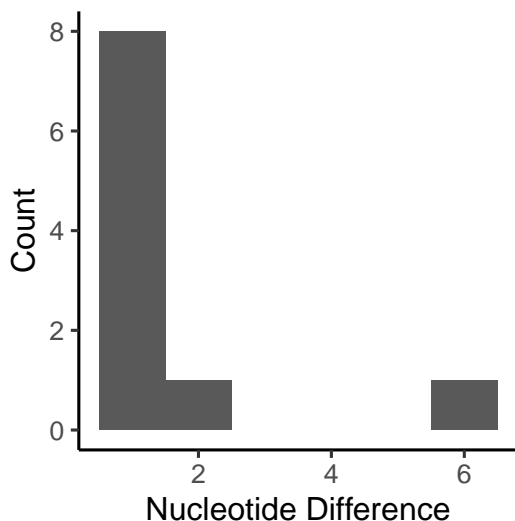
IGHV4-59*13

8 sequences assigned
No exact matches.



IGHV5-51*04

10 sequences assigned
No exact matches.





[illegible]