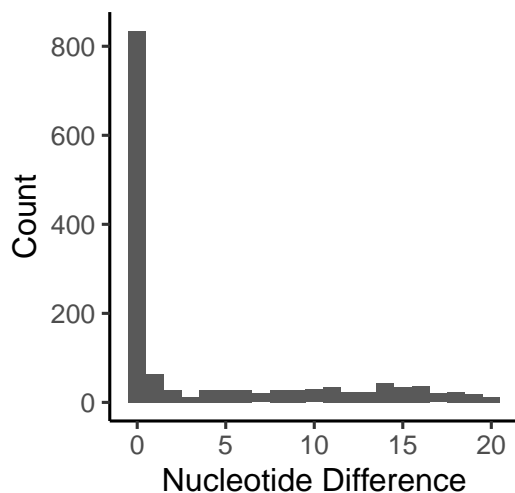


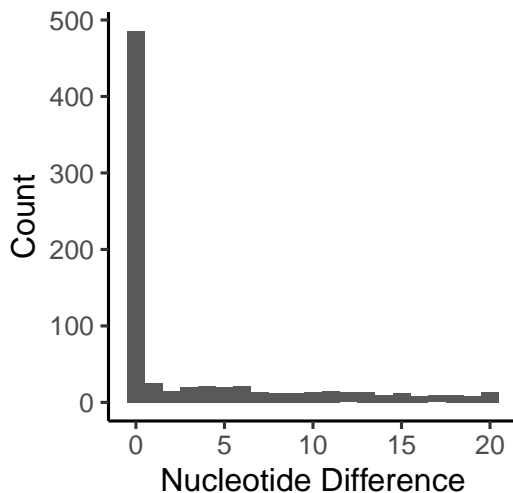
IGHV1-2*02

1487 sequences assigned
835 (56.2%) exact matches, in which:
816 unique CDR3
6 unique J



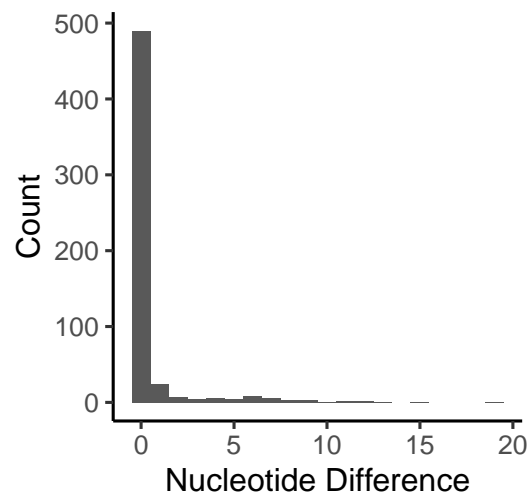
IGHV1-3*01_05

820 sequences assigned
486 (59.3%) exact matches, in which:
484 unique CDR3
7 unique J



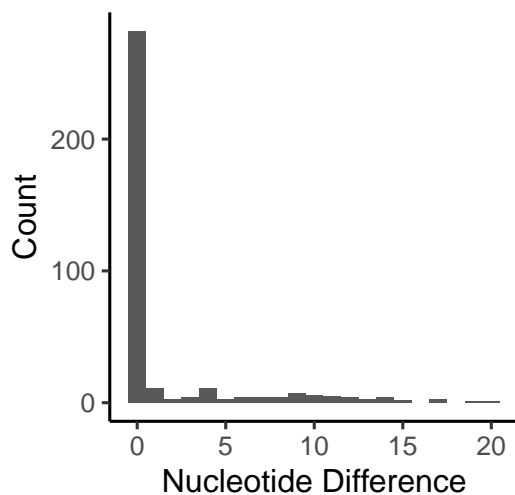
IGHV1-24*01

569 sequences assigned
490 (86.1%) exact matches, in which:
483 unique CDR3
7 unique J



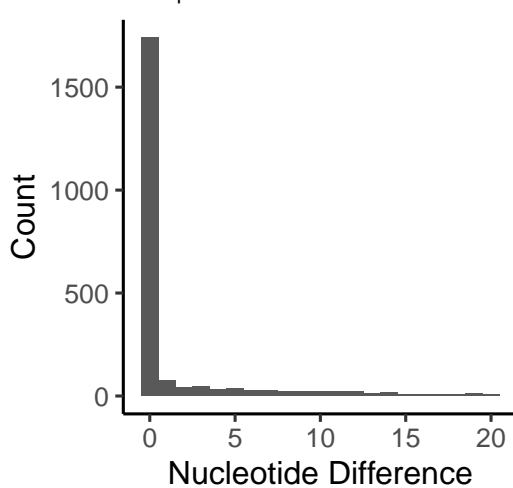
IGHV1-2*04

364 sequences assigned
282 (77.5%) exact matches, in which:
281 unique CDR3
7 unique J



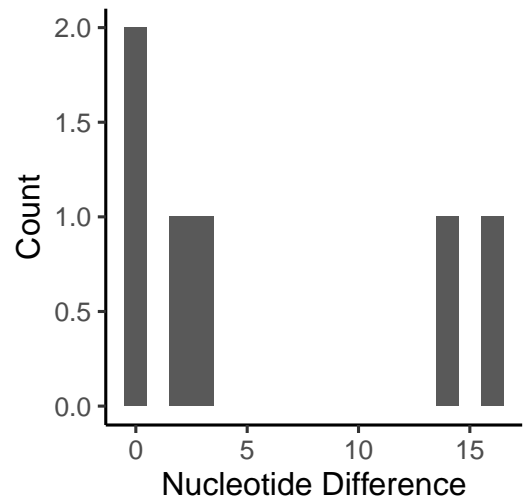
IGHV1-8*01

2236 sequences assigned
1740 (77.8%) exact matches, in which:
1713 unique CDR3
7 unique J



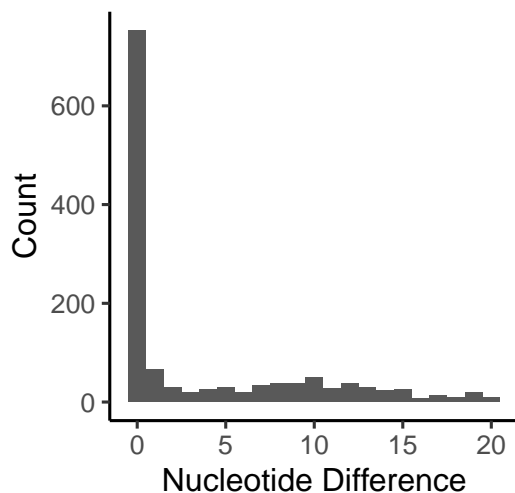
IGHV1-45*02

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



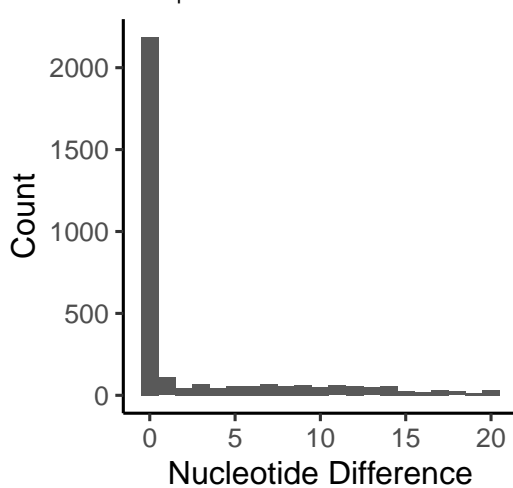
IGHV1-2*06

1411 sequences assigned
753 (53.4%) exact matches, in which:
726 unique CDR3
7 unique J



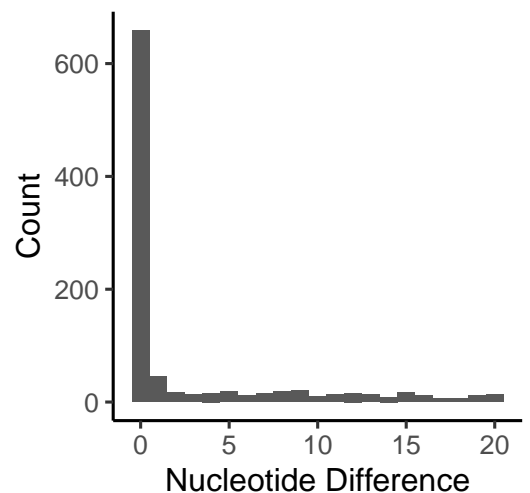
IGHV1-18*01

3325 sequences assigned
2187 (65.8%) exact matches, in which:
2150 unique CDR3
7 unique J



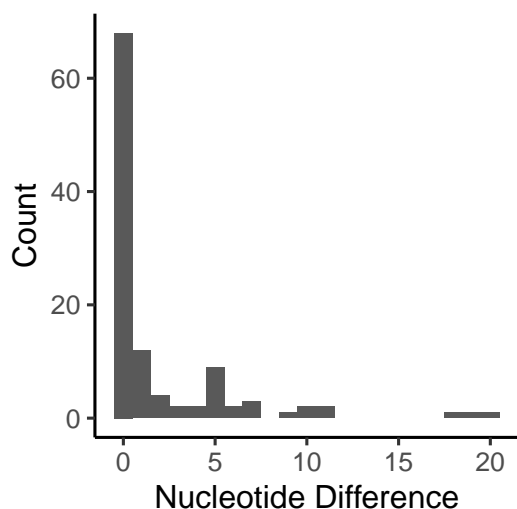
IGHV1-46*01

1023 sequences assigned
659 (64.4%) exact matches, in which:
651 unique CDR3
7 unique J



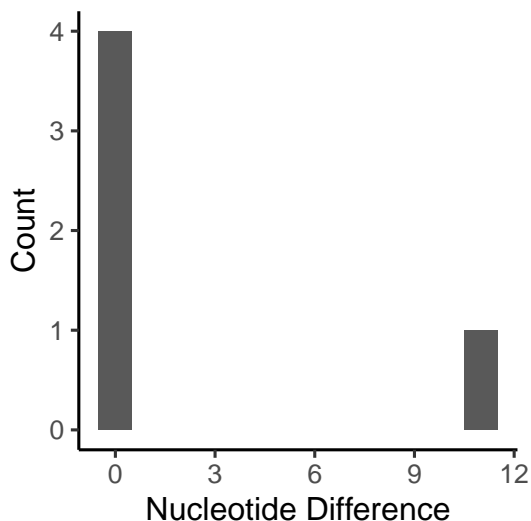
IGHV1-58*02

111 sequences assigned
68 (61.3%) exact matches, in which:
66 unique CDR3
5 unique J



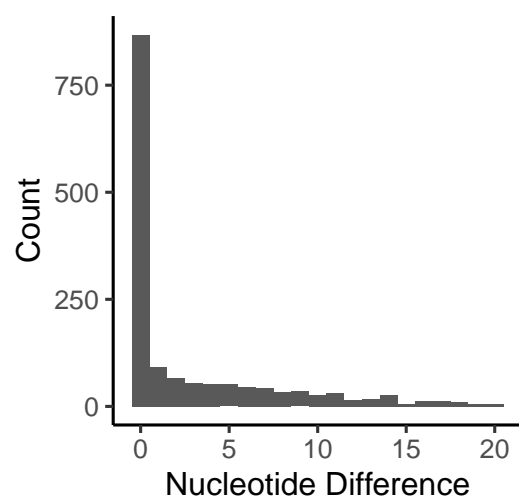
IGHV1-69-2*01

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



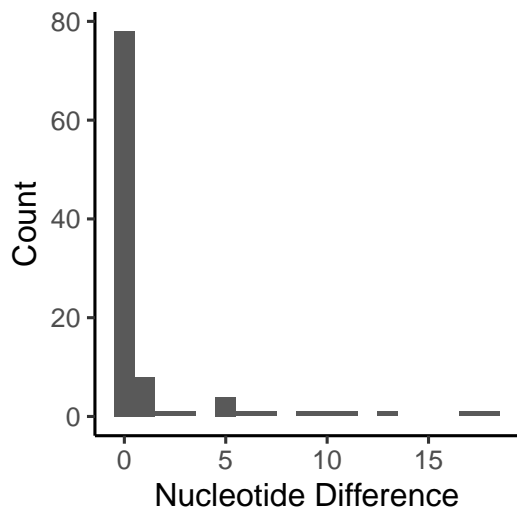
IGHV2-5*02

1551 sequences assigned
868 (56%) exact matches, in which:
858 unique CDR3
7 unique J



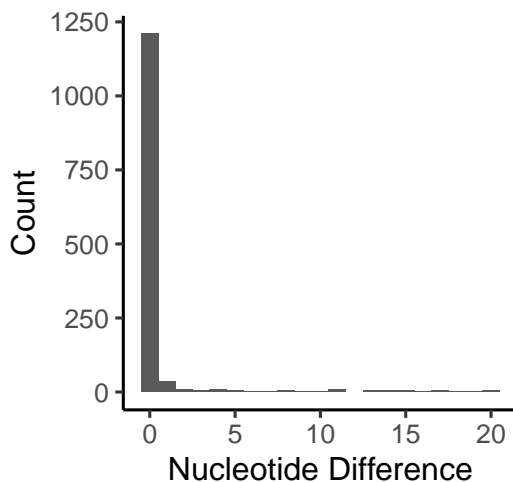
IGHV1-58*01_03

100 sequences assigned
78 (78%) exact matches, in which:
78 unique CDR3
7 unique J



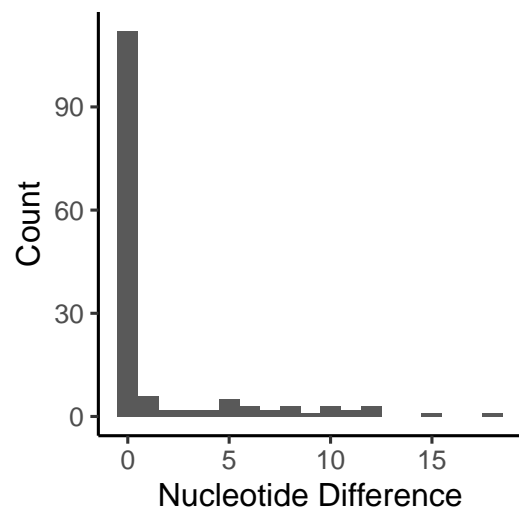
IGHV1-69*01_12_13

1339 sequences assigned
1210 (90.4%) exact matches, in which:
1210 unique CDR3
7 unique J



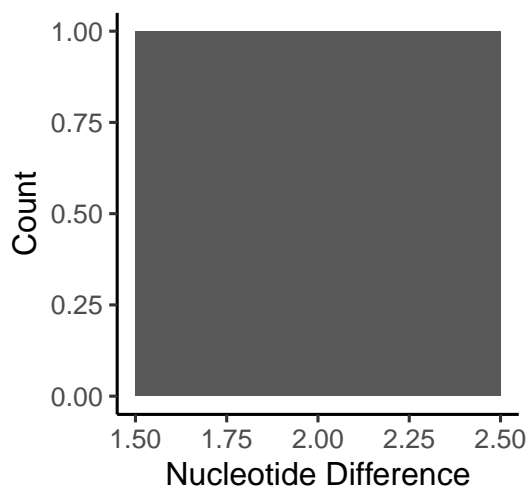
IGHV2-26*01

149 sequences assigned
112 (75.2%) exact matches, in which:
111 unique CDR3
6 unique J



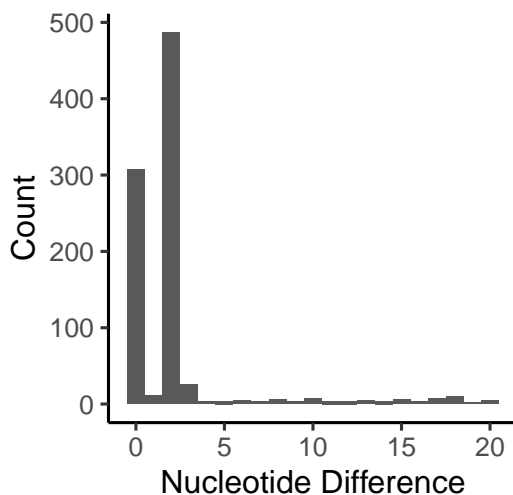
IGHV1-68*02_03

1 sequences assigned
No exact matches.



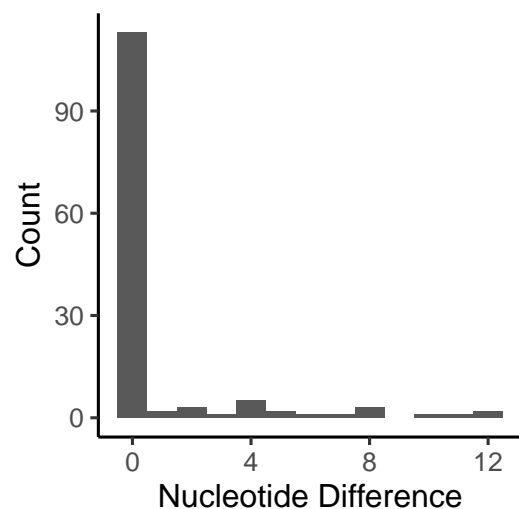
IGHV1-69*06_14

936 sequences assigned
307 (32.8%) exact matches, in which:
307 unique CDR3
6 unique J



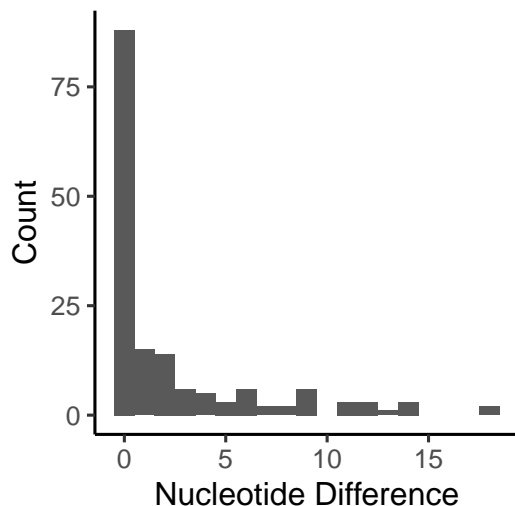
IGHV2-70*01

136 sequences assigned
113 (83.1%) exact matches, in which:
113 unique CDR3
6 unique J



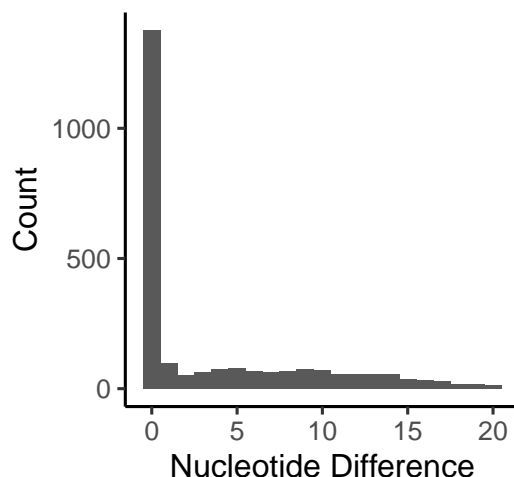
IGHV2-70*04

161 sequences assigned
88 (54.7%) exact matches, in which:
87 unique CDR3
6 unique J



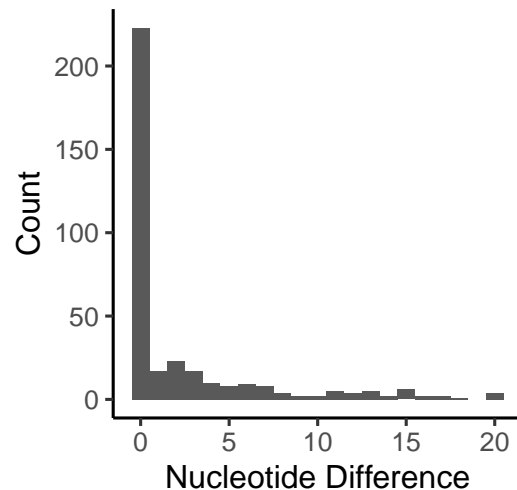
IGHV3-11*01

2541 sequences assigned
1376 (54.2%) exact matches, in which:
1320 unique CDR3
7 unique J



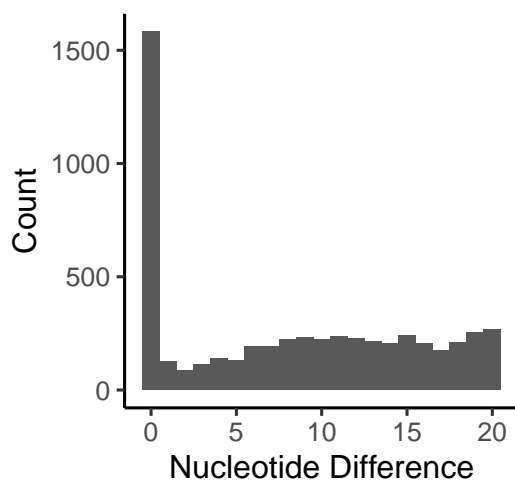
IGHV3-20*01_02

357 sequences assigned
223 (62.5%) exact matches, in which:
208 unique CDR3
7 unique J



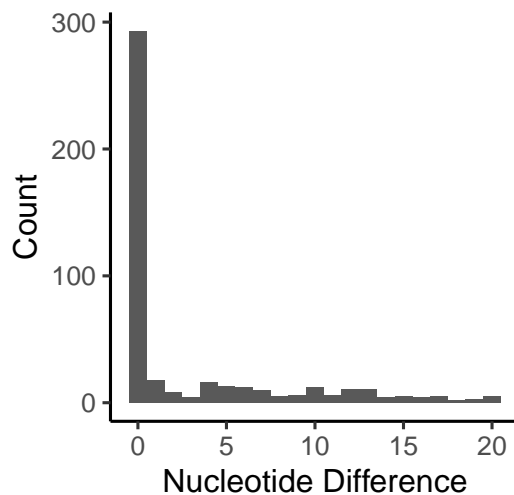
IGHV3-7*01

6490 sequences assigned
1582 (24.4%) exact matches, in which:
1528 unique CDR3
7 unique J



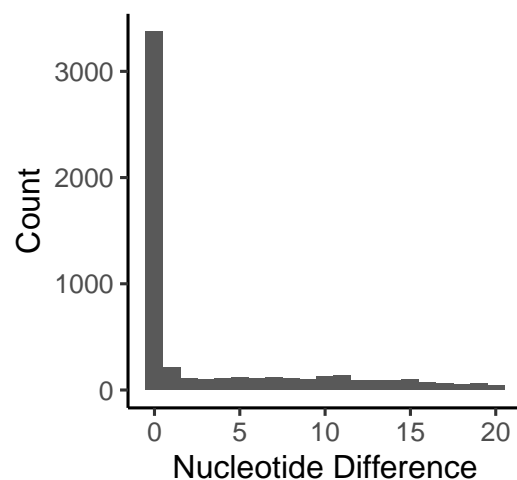
IGHV3-13*01

481 sequences assigned
293 (60.9%) exact matches, in which:
286 unique CDR3
6 unique J



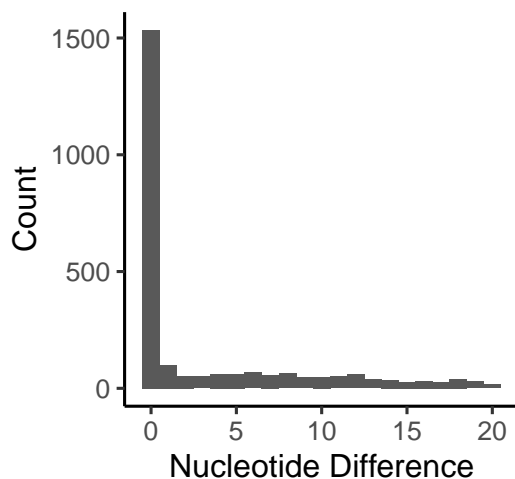
IGHV3-21*01_02

5639 sequences assigned
3373 (59.8%) exact matches, in which:
3202 unique CDR3
7 unique J



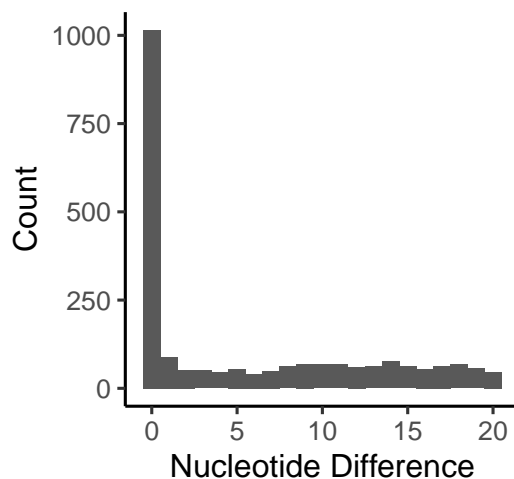
IGHV3-9*01

2607 sequences assigned
1534 (58.8%) exact matches, in which:
1487 unique CDR3
7 unique J



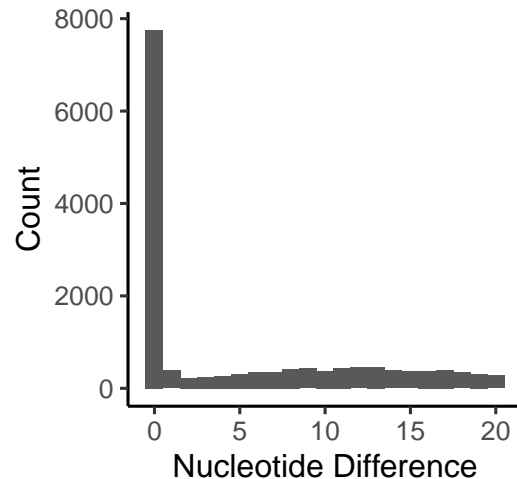
IGHV3-15*01_02

2434 sequences assigned
1015 (41.7%) exact matches, in which:
969 unique CDR3
7 unique J



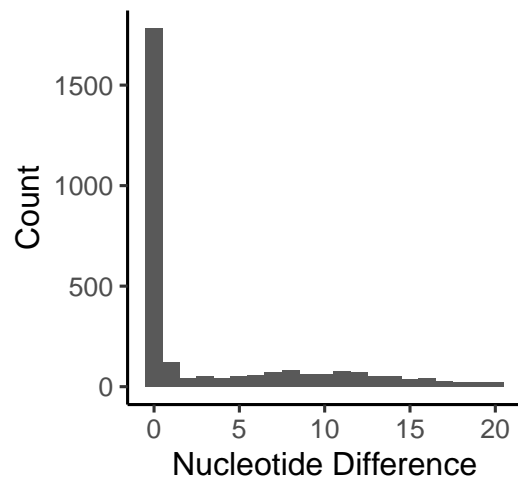
IGHV3-23*01_04

16314 sequences assigned
7753 (47.5%) exact matches, in which:
7397 unique CDR3
7 unique J



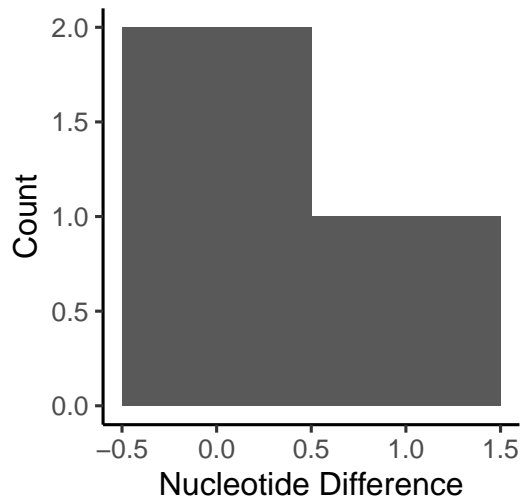
IGHV3-30-3*01

3030 sequences assigned
1782 (58.8%) exact matches, in which:
1728 unique CDR3
7 unique J



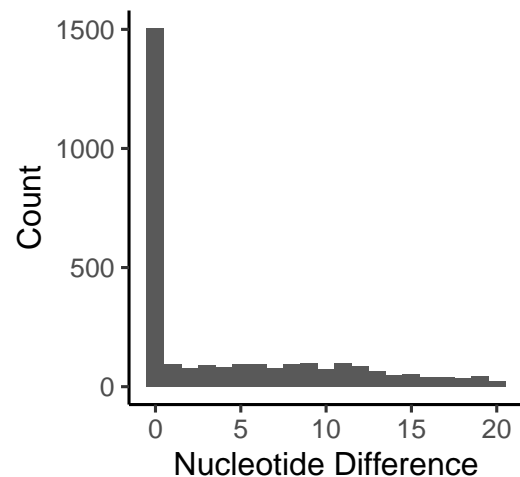
IGHV3-35*01

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
2 unique J



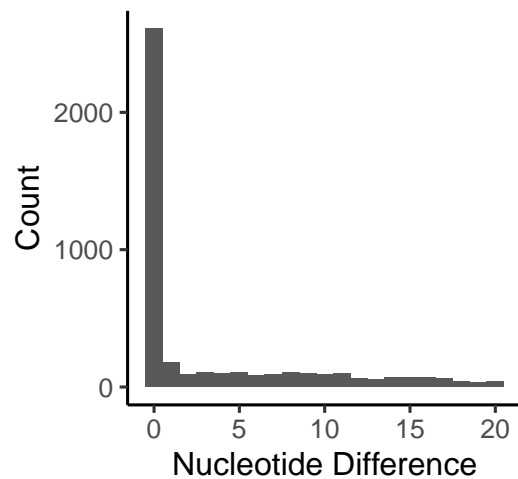
IGHV3-48*03

3051 sequences assigned
1504 (49.3%) exact matches, in which:
1464 unique CDR3
7 unique J



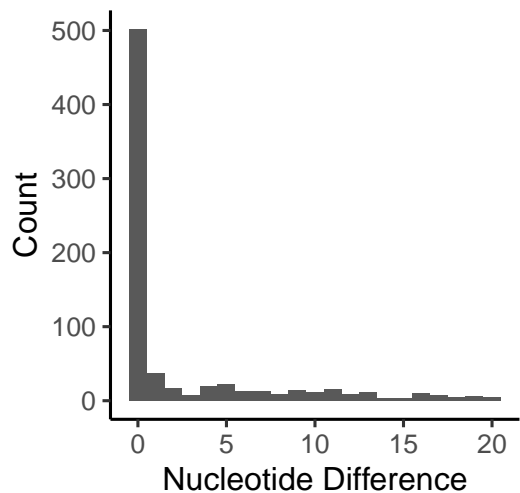
IGHV3-30*18

4439 sequences assigned
2609 (58.8%) exact matches, in which:
2508 unique CDR3
7 unique J



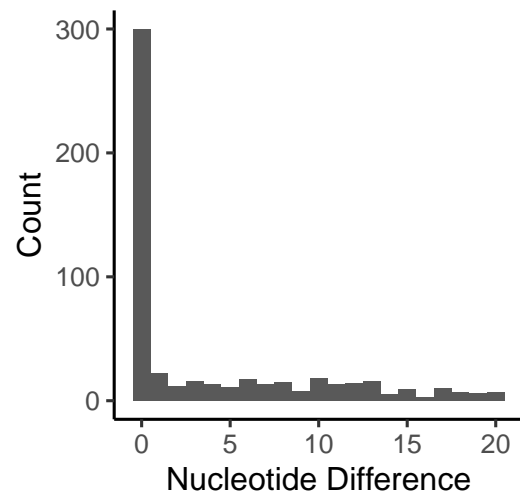
IGHV3-43*02

781 sequences assigned
502 (64.3%) exact matches, in which:
479 unique CDR3
7 unique J



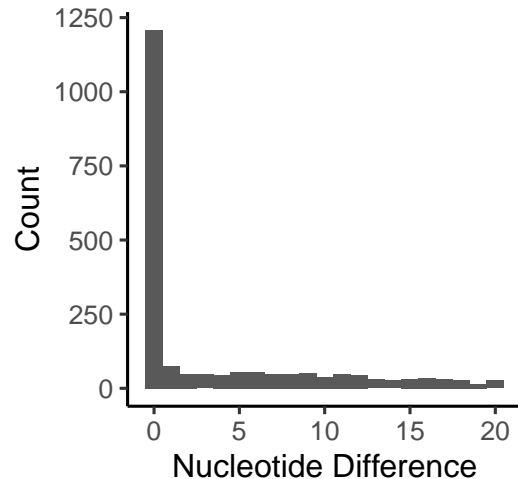
IGHV3-49*04

561 sequences assigned
300 (53.5%) exact matches, in which:
293 unique CDR3
7 unique J



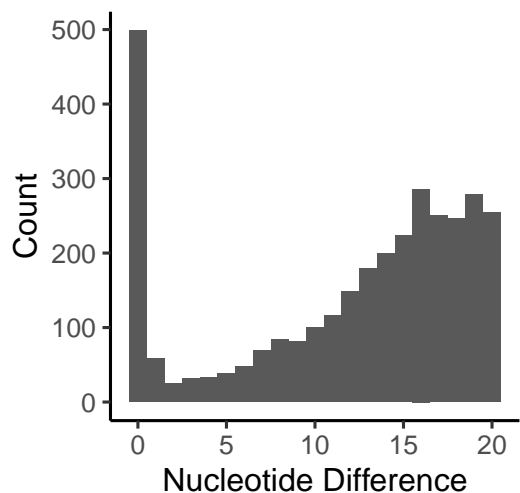
IGHV3-33*01

2136 sequences assigned
1208 (56.6%) exact matches, in which:
1166 unique CDR3
7 unique J



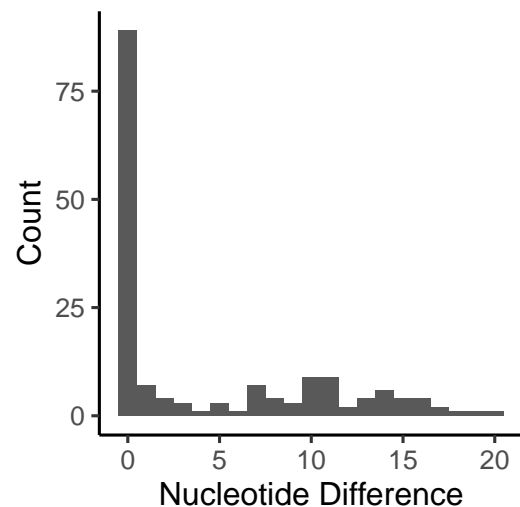
IGHV3-48*01

4671 sequences assigned
499 (10.7%) exact matches, in which:
473 unique CDR3
6 unique J



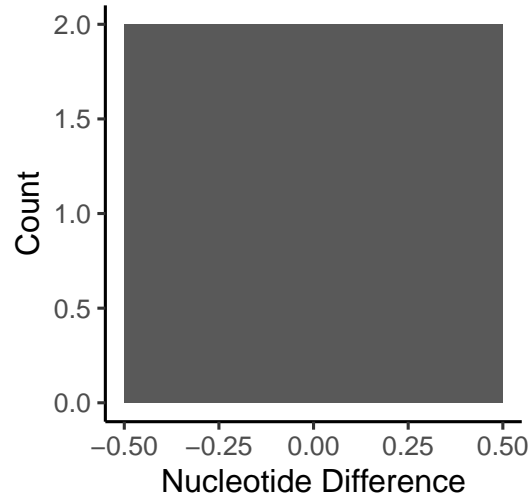
IGHV3-49*03_05

197 sequences assigned
89 (45.2%) exact matches, in which:
86 unique CDR3
5 unique J



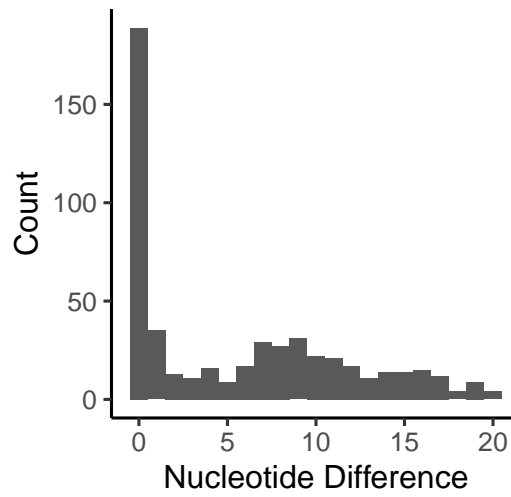
IGHV3-52*01_03

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



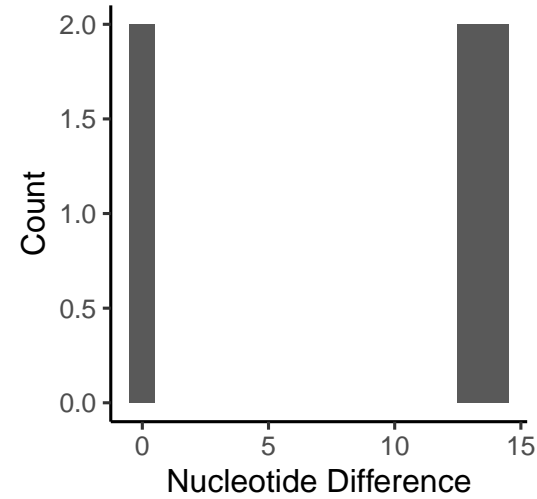
IGHV3-64*01

612 sequences assigned
189 (30.9%) exact matches, in which:
178 unique CDR3
5 unique J



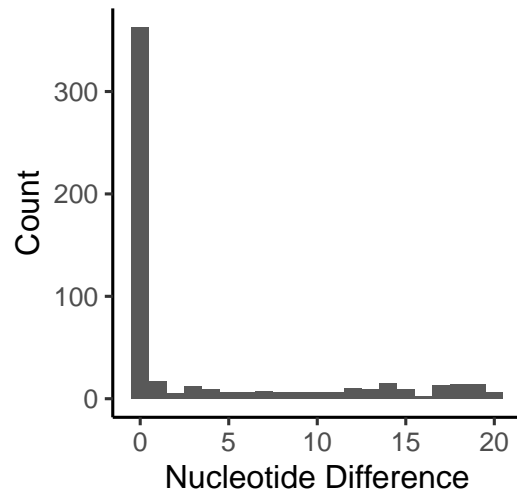
IGHV3-69-1*02

18 sequences assigned
2 (11.1%) exact matches, in which:
2 unique CDR3
2 unique J



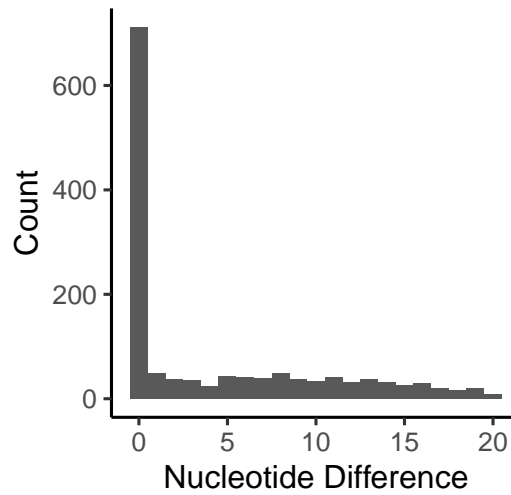
IGHV3-53*04

609 sequences assigned
363 (59.6%) exact matches, in which:
349 unique CDR3
7 unique J



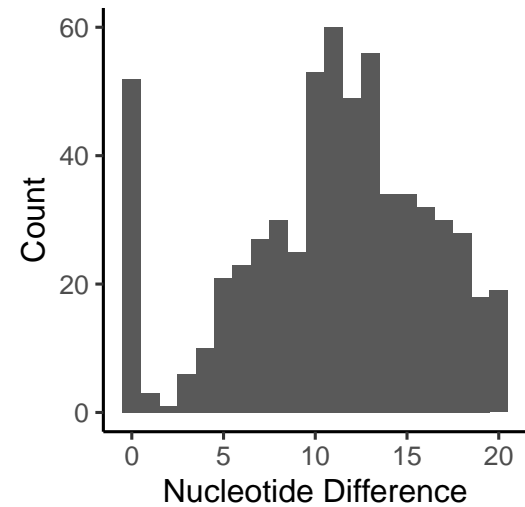
IGHV3-66*02

1450 sequences assigned
712 (49.1%) exact matches, in which:
661 unique CDR3
6 unique J



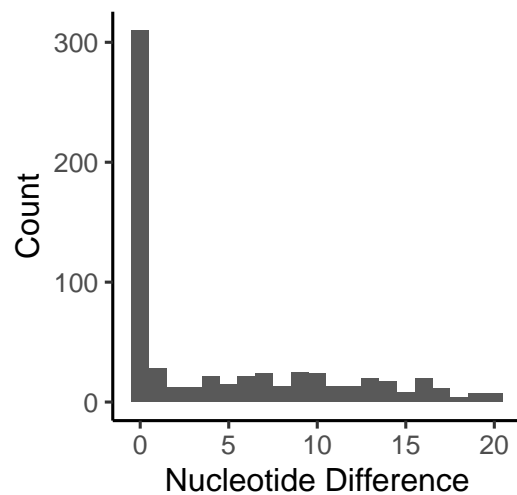
IGHV3-72*01

665 sequences assigned
52 (7.8%) exact matches, in which:
52 unique CDR3
6 unique J



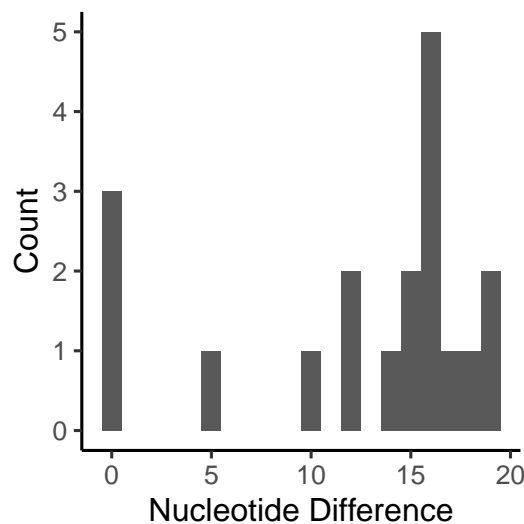
IGHV3-53*01_02

655 sequences assigned
310 (47.3%) exact matches, in which:
300 unique CDR3
6 unique J



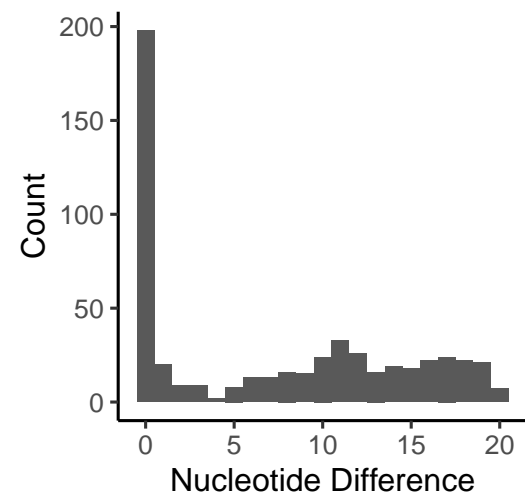
IGHV3-69-1*01

107 sequences assigned
3 (2.8%) exact matches, in which:
3 unique CDR3
2 unique J



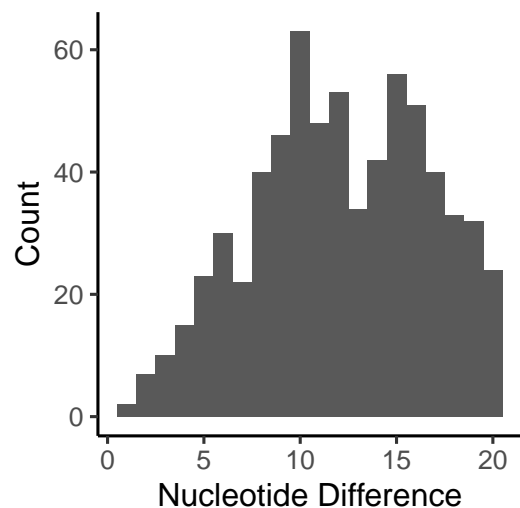
IGHV3-73*01_02

563 sequences assigned
198 (35.2%) exact matches, in which:
189 unique CDR3
7 unique J



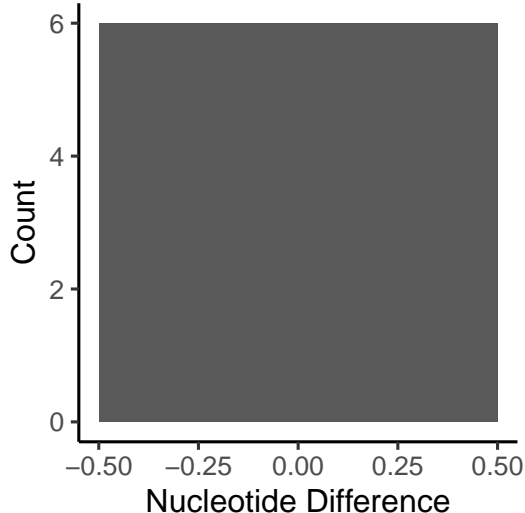
IGHV3-74*03

817 sequences assigned
No exact matches.



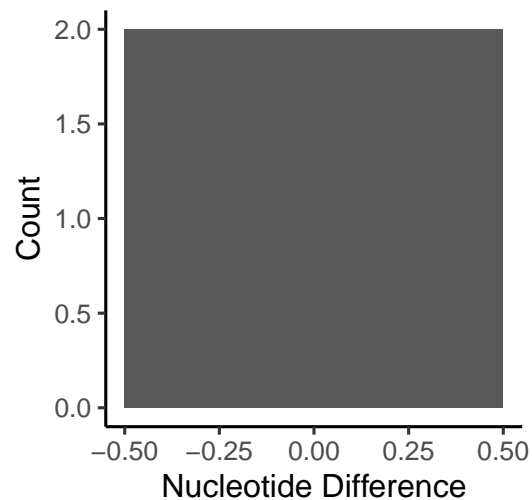
IGHV3-64D*06

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



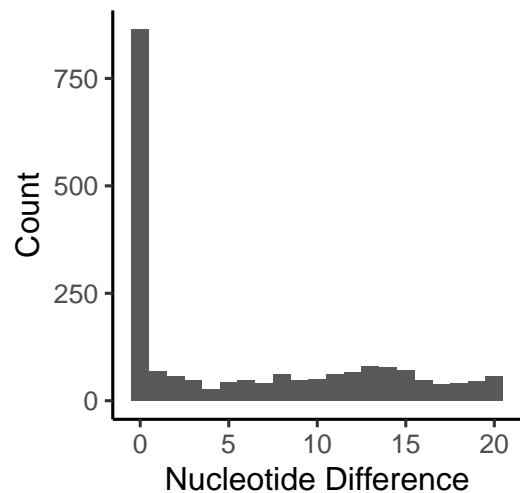
IGHV4-28*03

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



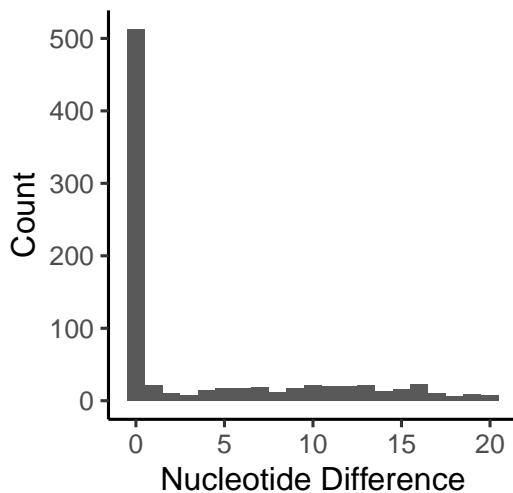
IGHV3-74*01_02

2071 sequences assigned
865 (41.8%) exact matches, in which:
829 unique CDR3
7 unique J



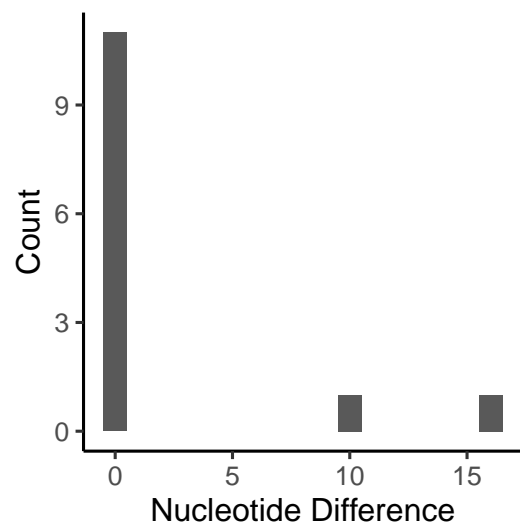
IGHV4-4*07

888 sequences assigned
513 (57.8%) exact matches, in which:
486 unique CDR3
6 unique J



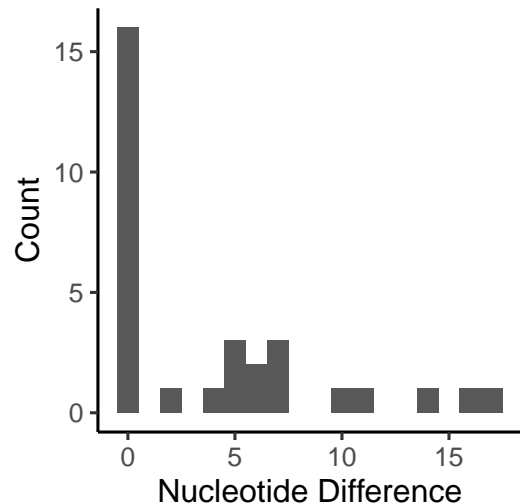
IGHV4-28*01_07

13 sequences assigned
11 (84.6%) exact matches, in which:
9 unique CDR3
3 unique J



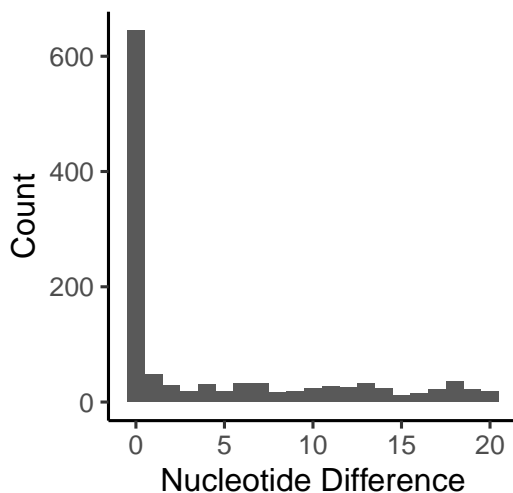
IGHV3-43D*04

32 sequences assigned
16 (50%) exact matches, in which:
16 unique CDR3
2 unique J



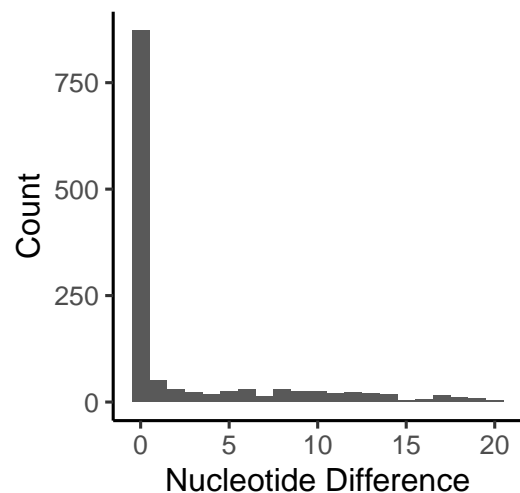
IGHV4-4*02_03

1206 sequences assigned
645 (53.5%) exact matches, in which:
626 unique CDR3
7 unique J



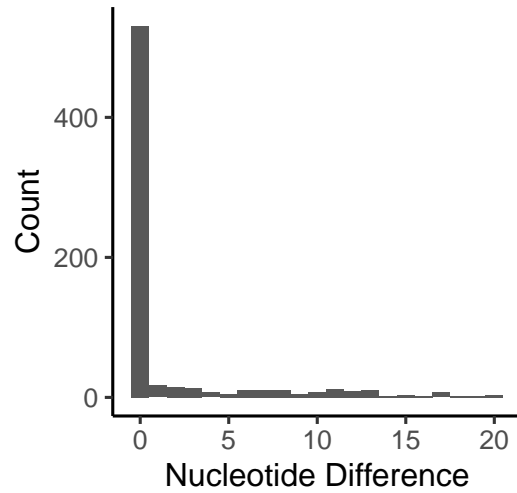
IGHV4-30-4*01

1302 sequences assigned
873 (67.1%) exact matches, in which:
851 unique CDR3
7 unique J



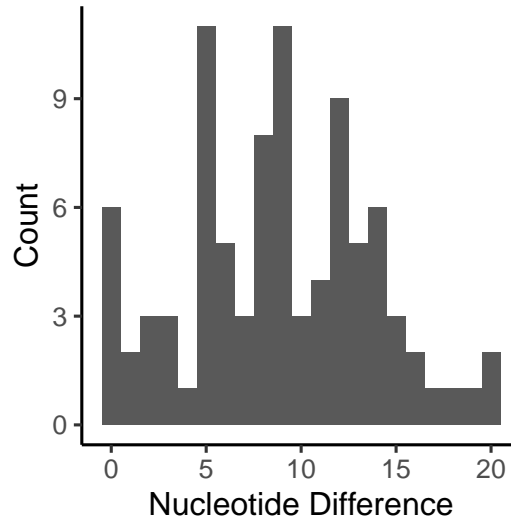
IGHV4-30-2*01

706 sequences assigned
531 (75.2%) exact matches, in which:
506 unique CDR3
7 unique J



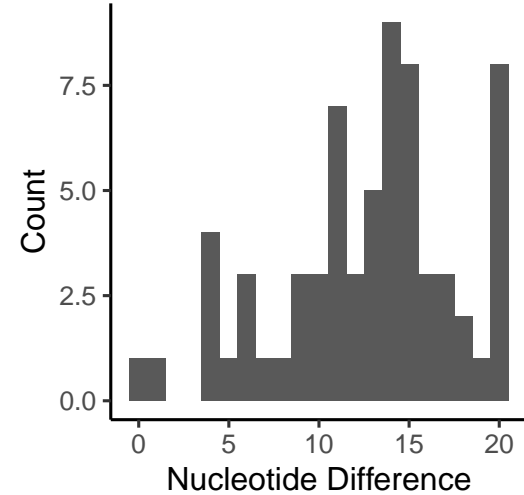
IGHV4-38-2*02

99 sequences assigned
6 (6.1%) exact matches, in which:
6 unique CDR3
3 unique J



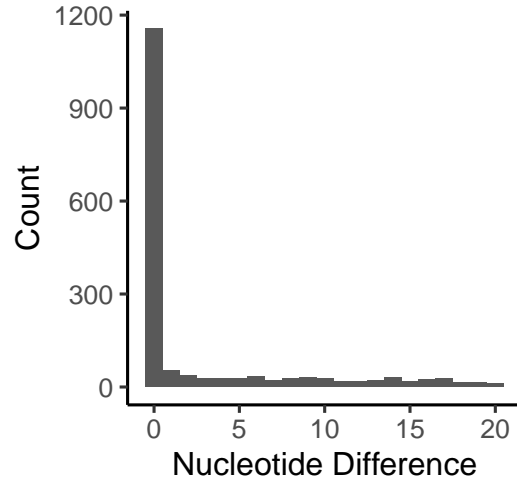
IGHV4-59*11

87 sequences assigned
1 (1.1%) exact matches, in which:
1 unique CDR3
1 unique J



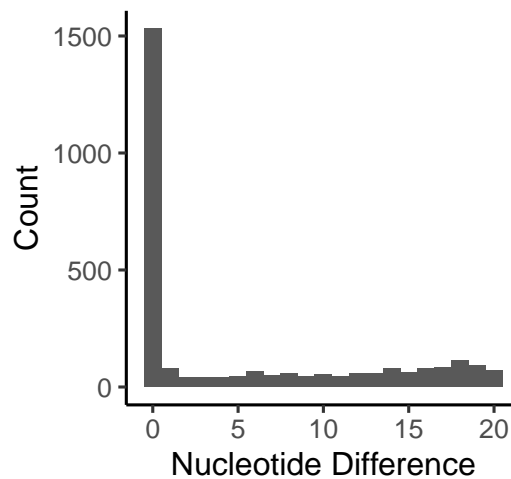
IGHV4-31*02

1725 sequences assigned
1156 (67%) exact matches, in which:
1125 unique CDR3
7 unique J



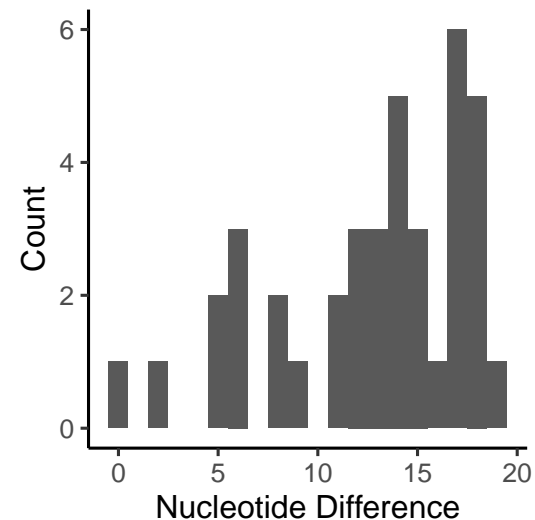
IGHV4-39*07

3741 sequences assigned
1531 (40.9%) exact matches, in which:
1454 unique CDR3
6 unique J



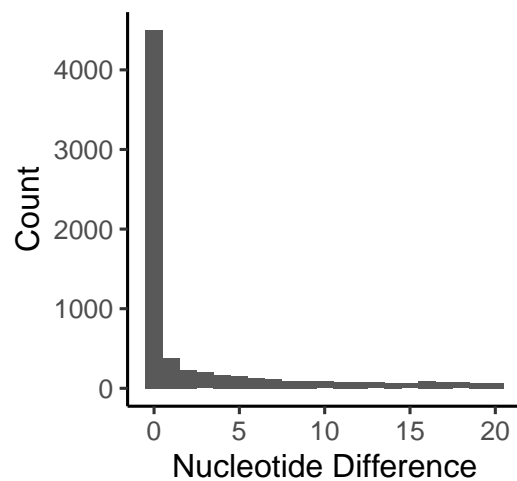
IGHV4-59*12

52 sequences assigned
1 (1.9%) exact matches, in which:
1 unique CDR3
1 unique J



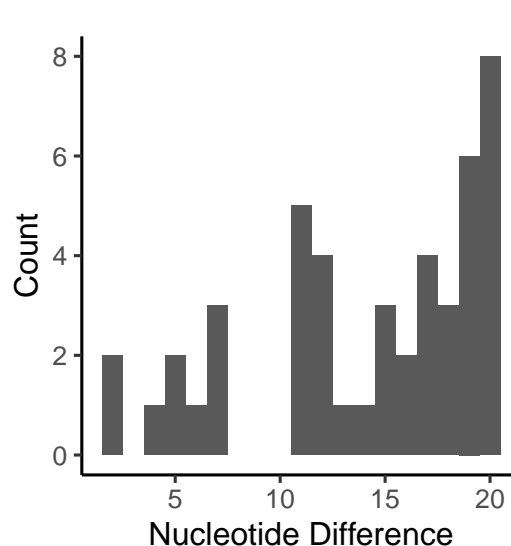
IGHV4-34*01_02

7405 sequences assigned
4500 (60.8%) exact matches, in which:
4287 unique CDR3
7 unique J



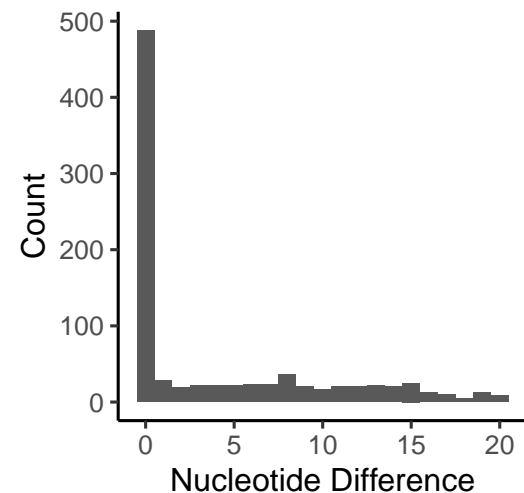
IGHV4-59*02

69 sequences assigned
No exact matches.



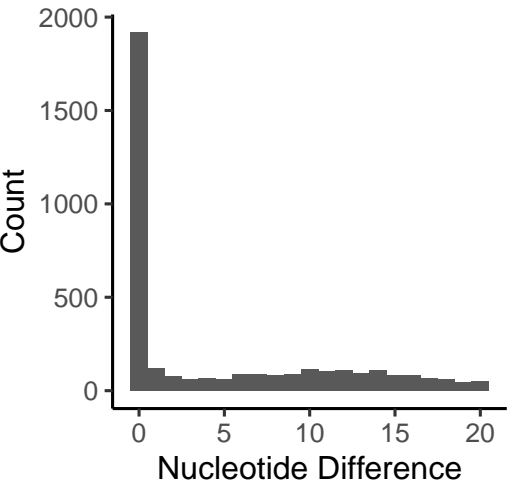
IGHV4-61*01

942 sequences assigned
488 (51.8%) exact matches, in which:
480 unique CDR3
7 unique J



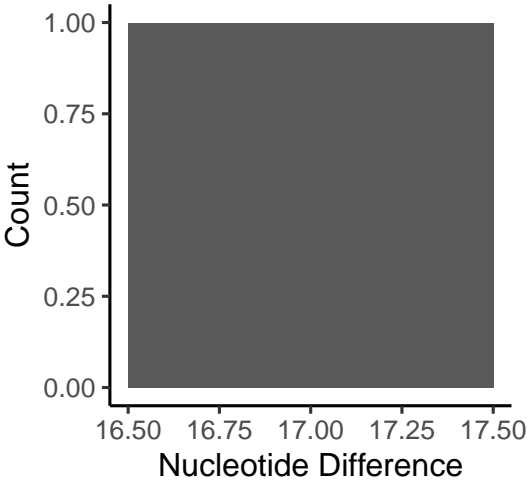
IGHV4–61*02

3764 sequences assigned
1918 (51%) exact matches, in which:
1836 unique CDR3
6 unique J



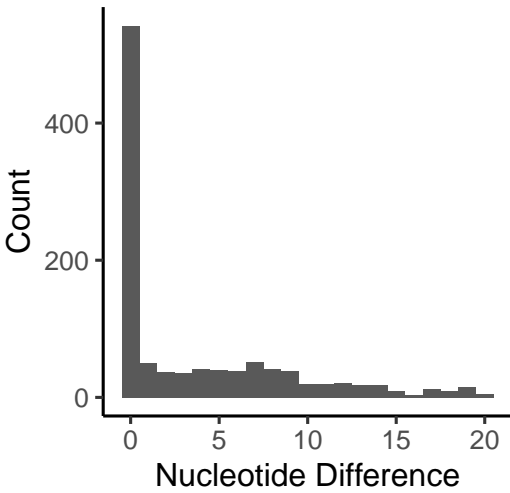
IGHV4/OR15–8*03

1 sequences assigned
No exact matches.



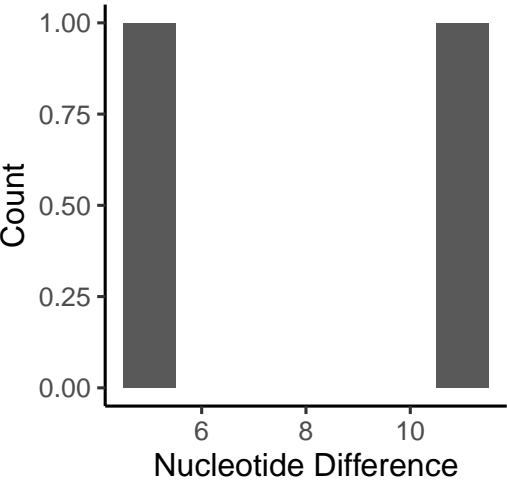
IGHV6–1*01_02

1083 sequences assigned
542 (50%) exact matches, in which:
514 unique CDR3
7 unique J



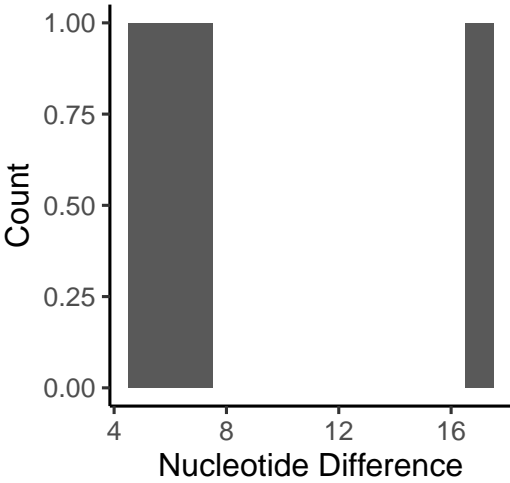
IGHV4/OR15–8*01

2 sequences assigned
No exact matches.



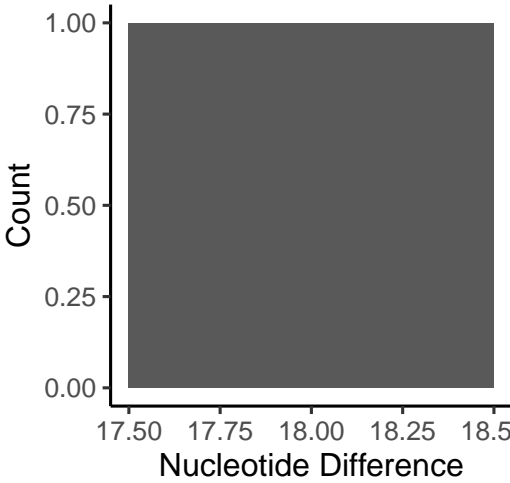
IGHV5–51*04

4 sequences assigned
No exact matches.



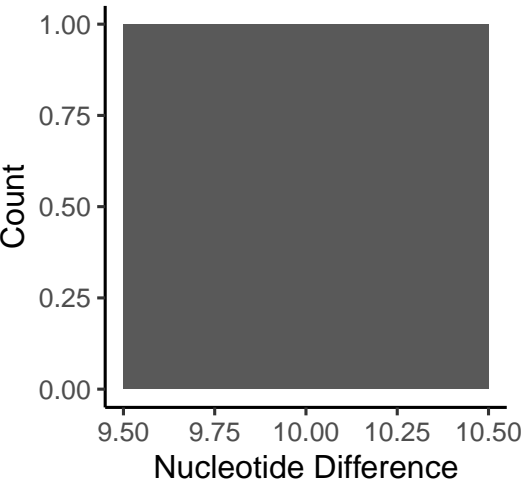
IGHV3/OR16–9*01

1 sequences assigned
No exact matches.



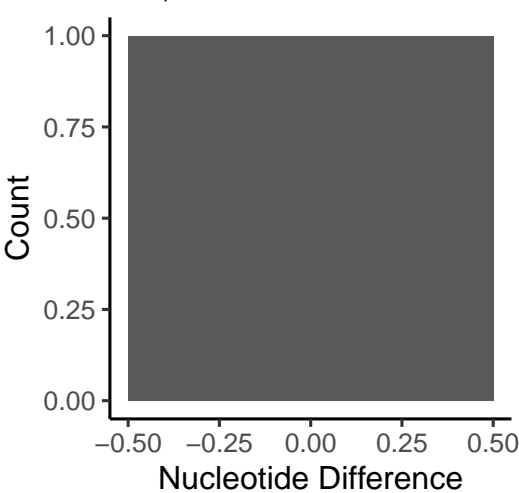
IGHV4/OR15–8*02

2 sequences assigned
No exact matches.



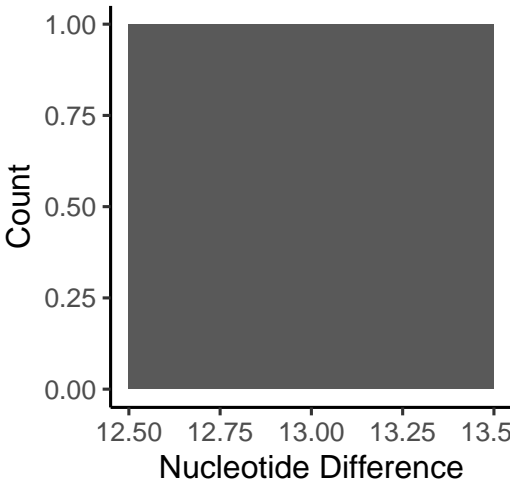
IGHV5–51*07

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



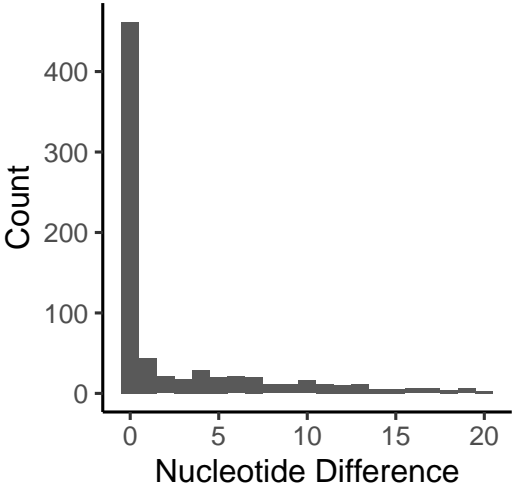
IGHV3/OR16–13*01

1 sequences assigned
No exact matches.

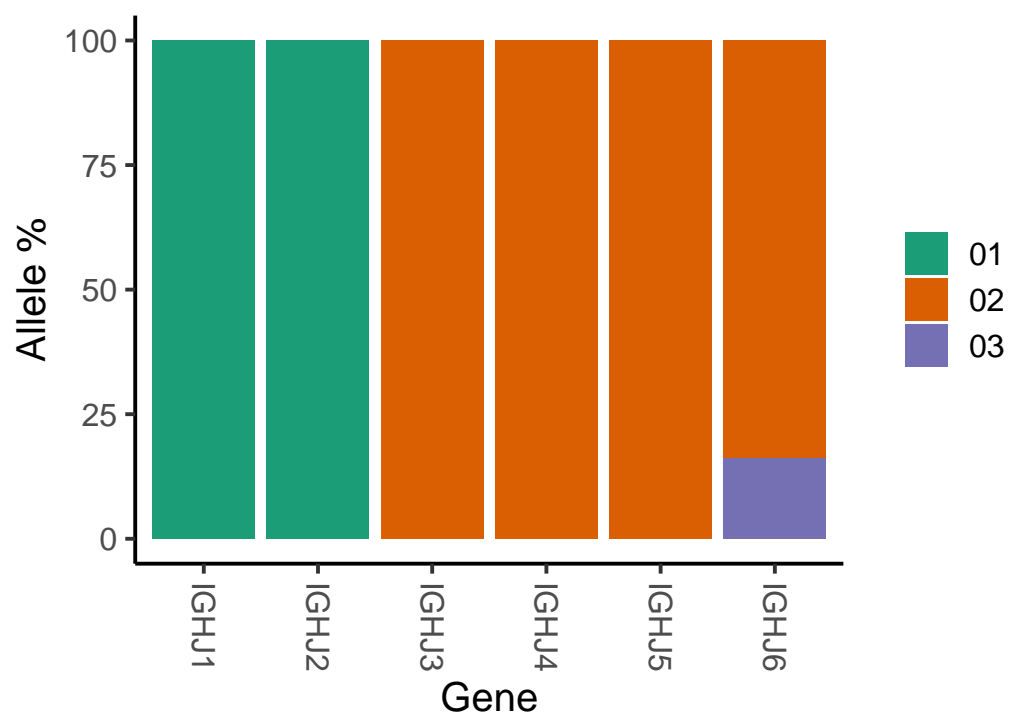


IGHV7-4-1*02

783 sequences assigned
462 (59%) exact matches, in which:
455 unique CDR3
7 unique J



Allele Usage



Warning – no inferred sequences found.