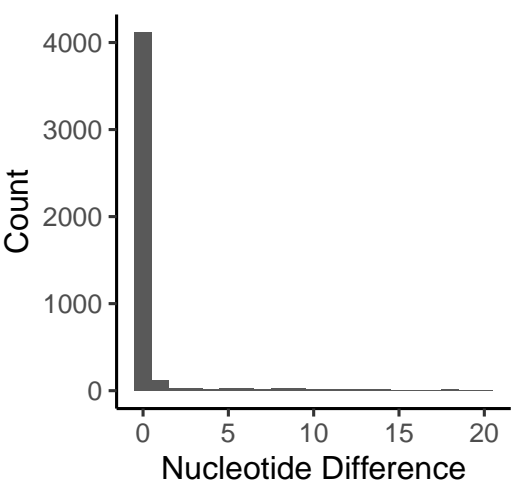


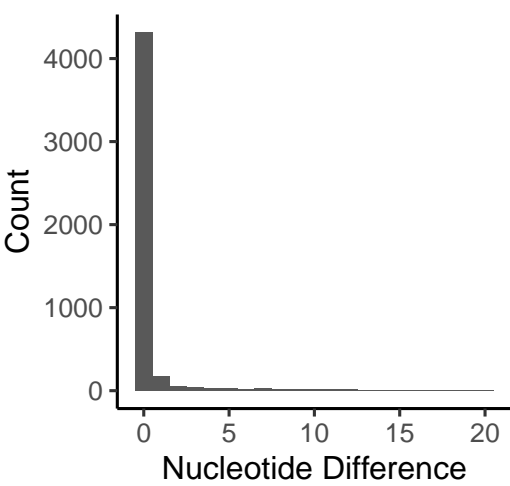
IGHV1-2*02

4639 sequences assigned
4116 (88.7%) exact matches, in which:
4097 unique CDR3
6 unique J



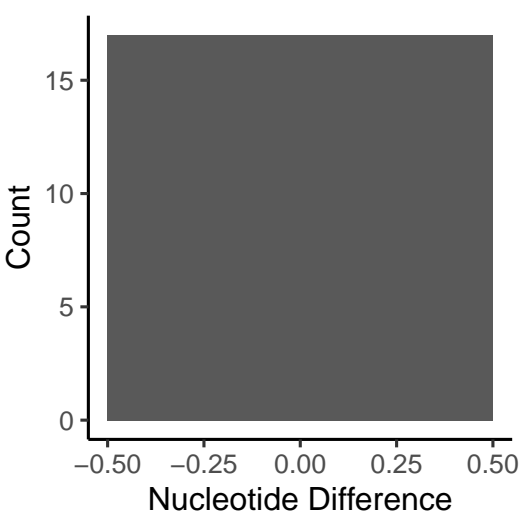
IGHV1-8*01

4861 sequences assigned
4315 (88.8%) exact matches, in which:
4299 unique CDR3
6 unique J



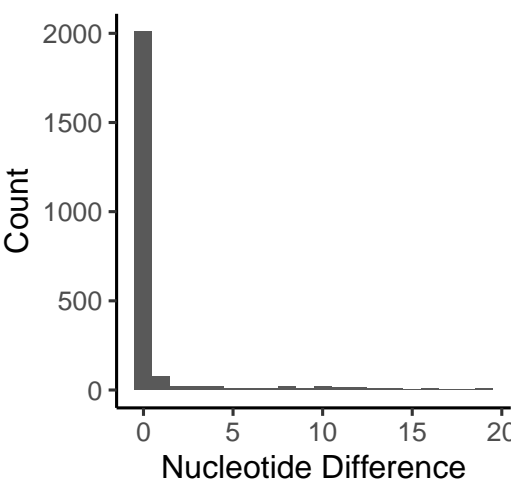
IGHV1-45*02

17 sequences assigned
17 (100%) exact matches, in which:
17 unique CDR3
3 unique J



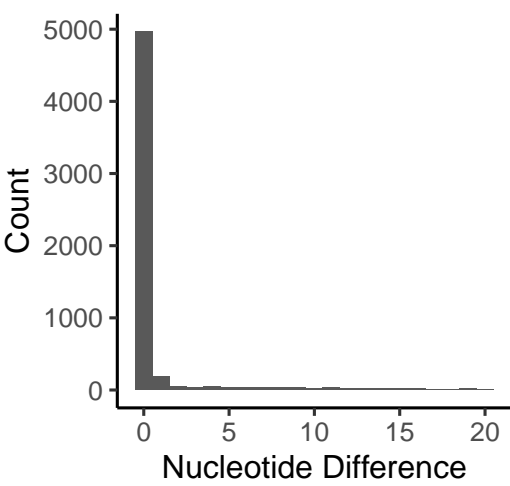
IGHV1-2*06

2304 sequences assigned
2009 (87.2%) exact matches, in which:
2003 unique CDR3
6 unique J



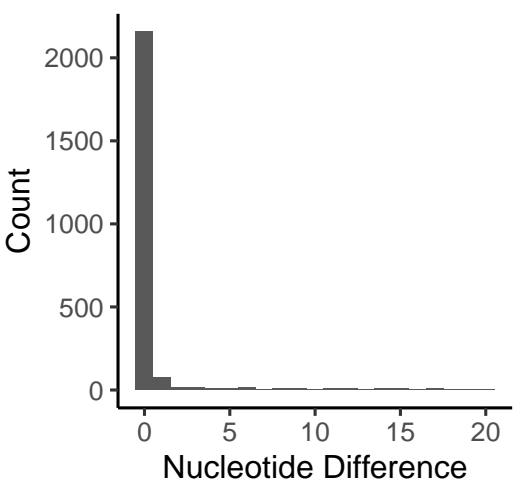
IGHV1-18*01

5704 sequences assigned
4965 (87%) exact matches, in which:
4948 unique CDR3
6 unique J



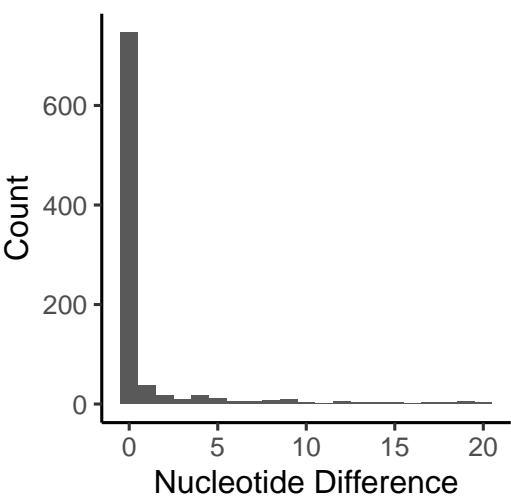
IGHV1-46*01

2404 sequences assigned
2157 (89.7%) exact matches, in which:
2148 unique CDR3
6 unique J



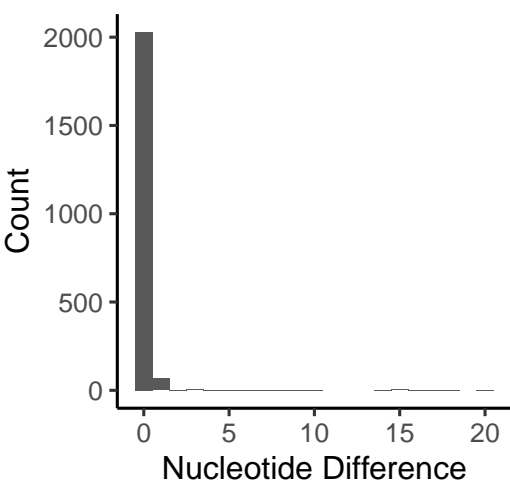
IGHV1-3*01_05

925 sequences assigned
747 (80.8%) exact matches, in which:
743 unique CDR3
6 unique J



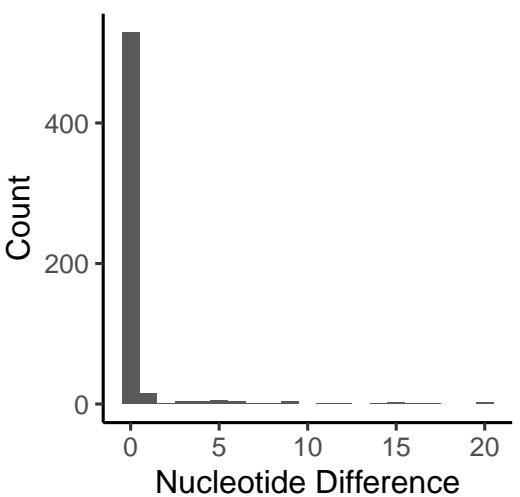
IGHV1-24*01

2136 sequences assigned
2029 (95%) exact matches, in which:
2020 unique CDR3
6 unique J



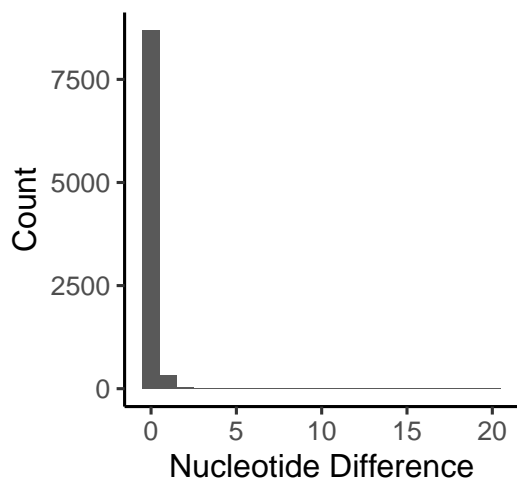
IGHV1-58*01_03

579 sequences assigned
529 (91.4%) exact matches, in which:
528 unique CDR3
6 unique J



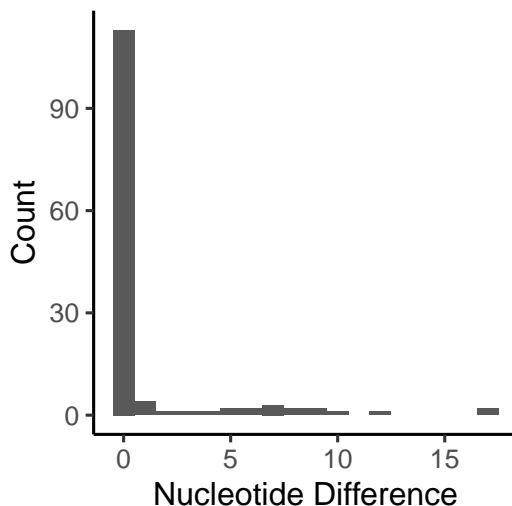
IGHV1-69*01_12_13

9353 sequences assigned
8688 (92.9%) exact matches, in which:
8666 unique CDR3
6 unique J



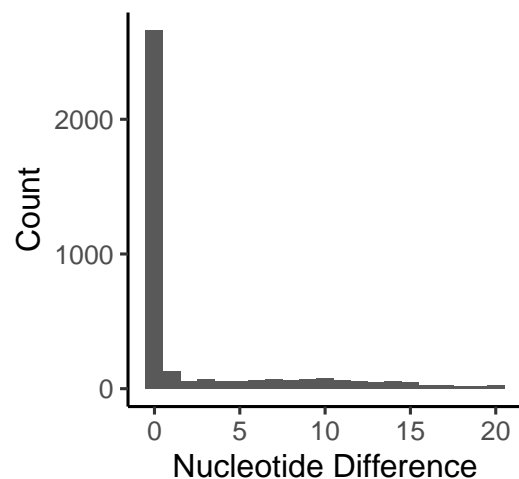
IGHV2-26*01

135 sequences assigned
113 (83.7%) exact matches, in which:
113 unique CDR3
5 unique J



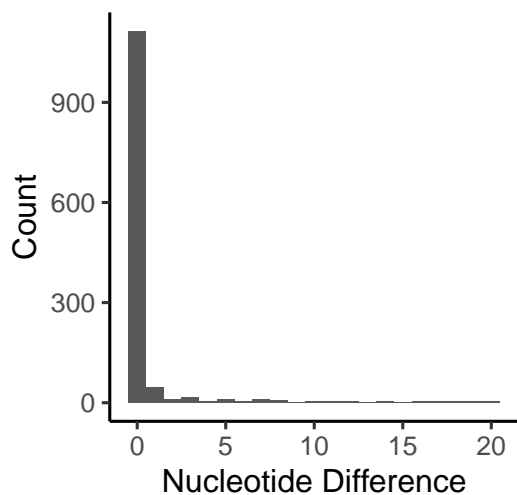
IGHV3-7*01

3854 sequences assigned
2660 (69%) exact matches, in which:
2528 unique CDR3
6 unique J



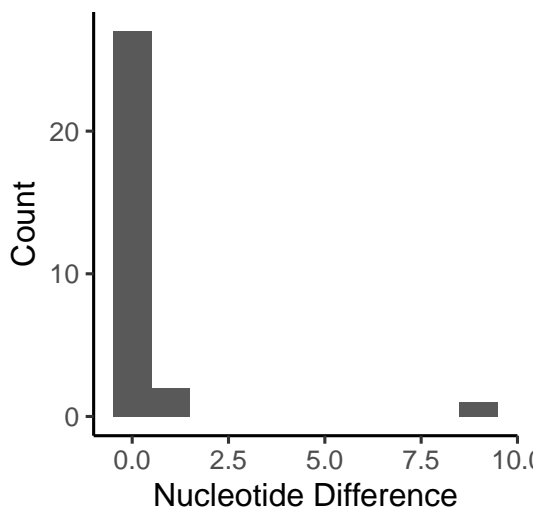
IGHV2-5*01

1286 sequences assigned
1114 (86.6%) exact matches, in which:
1106 unique CDR3
6 unique J



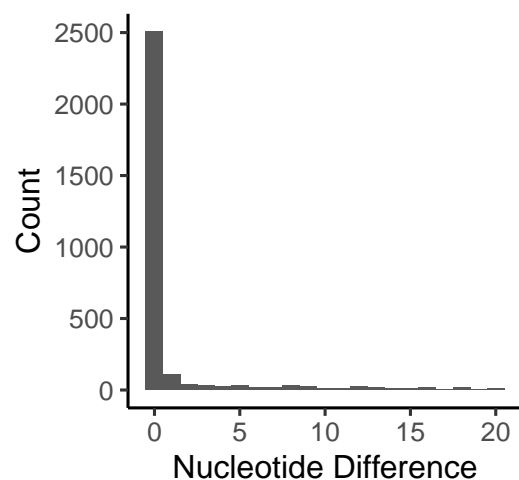
IGHV2-26*04

30 sequences assigned
27 (90%) exact matches, in which:
27 unique CDR3
4 unique J



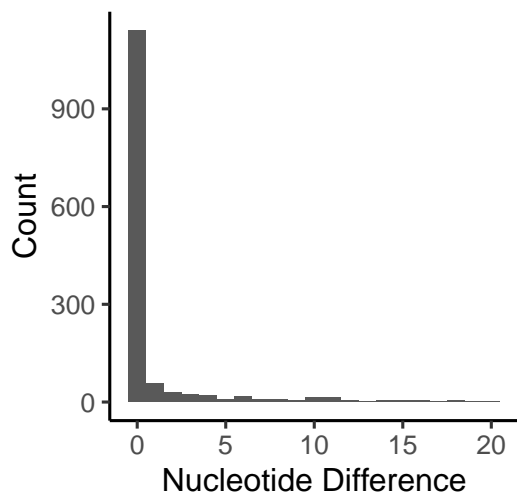
IGHV3-9*01

3019 sequences assigned
2506 (83%) exact matches, in which:
2426 unique CDR3
6 unique J



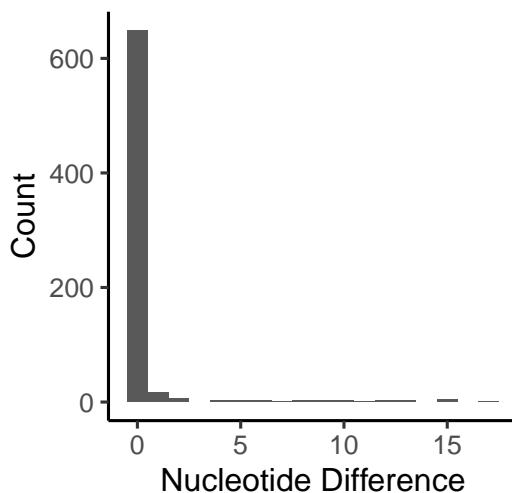
IGHV2-5*02

1403 sequences assigned
1141 (81.3%) exact matches, in which:
1133 unique CDR3
6 unique J



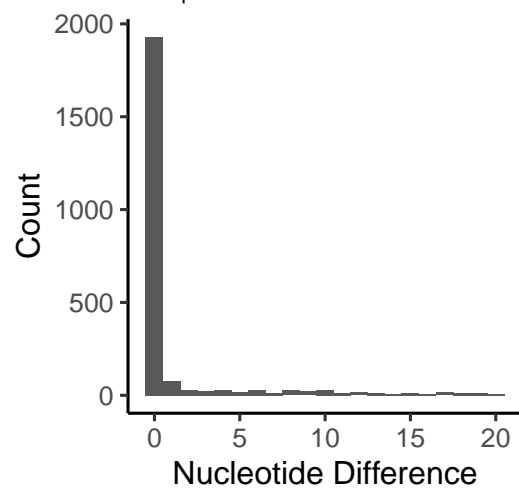
IGHV2-70*01

708 sequences assigned
649 (91.7%) exact matches, in which:
644 unique CDR3
6 unique J



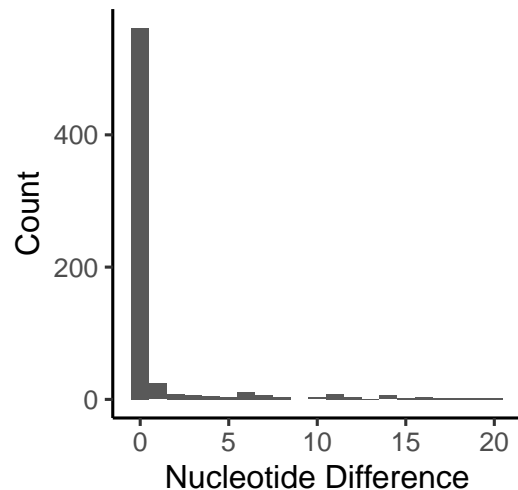
IGHV3-11*01

2378 sequences assigned
1929 (81.1%) exact matches, in which:
1839 unique CDR3
6 unique J



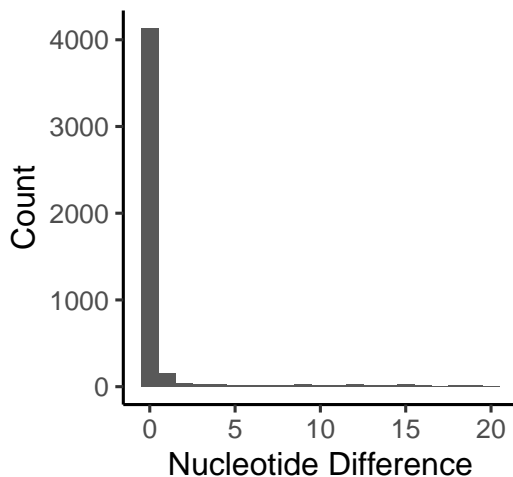
IGHV3-13*01

673 sequences assigned
562 (83.5%) exact matches, in which:
532 unique CDR3
5 unique J



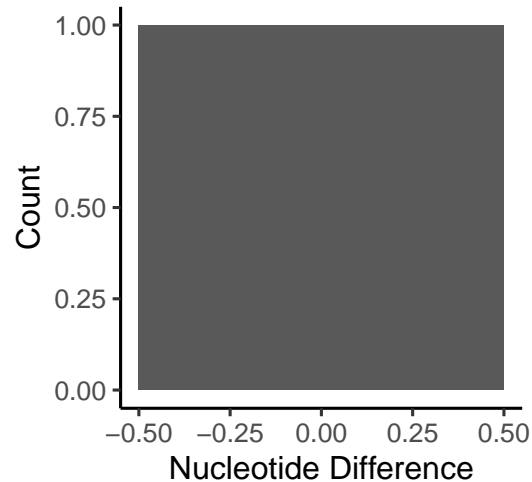
IGHV3-21*01_02

4722 sequences assigned
4131 (87.5%) exact matches, in which:
3897 unique CDR3
6 unique J



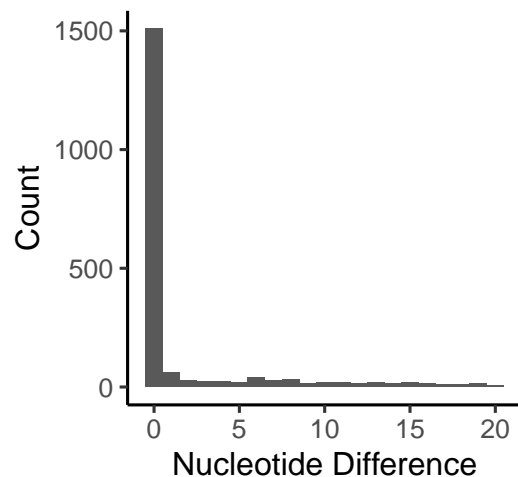
IGHV3-30-3*01

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



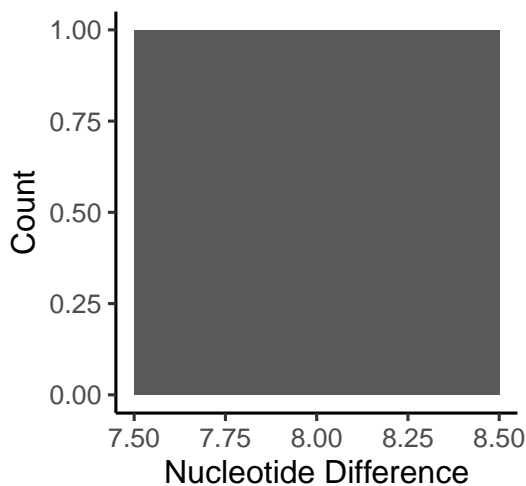
IGHV3-15*01_02

2044 sequences assigned
1509 (73.8%) exact matches, in which:
1461 unique CDR3
6 unique J



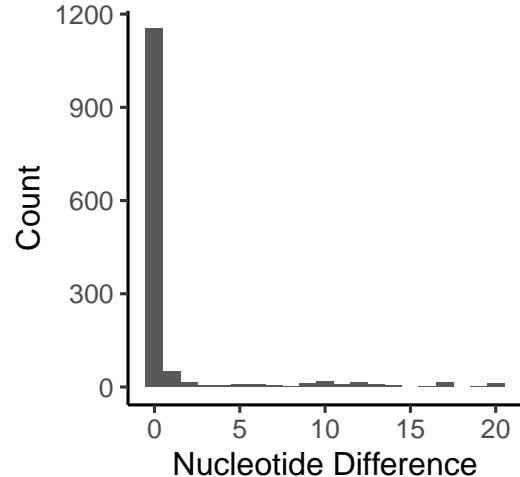
IGHV3-22*01_02

1 sequences assigned
No exact matches.



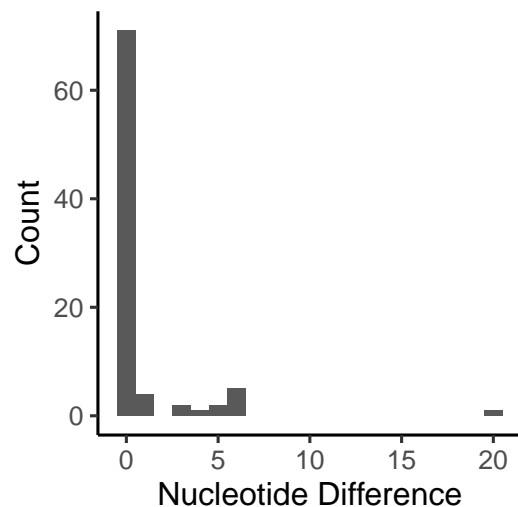
IGHV3-33*01

1355 sequences assigned
1153 (85.1%) exact matches, in which:
1115 unique CDR3
6 unique J



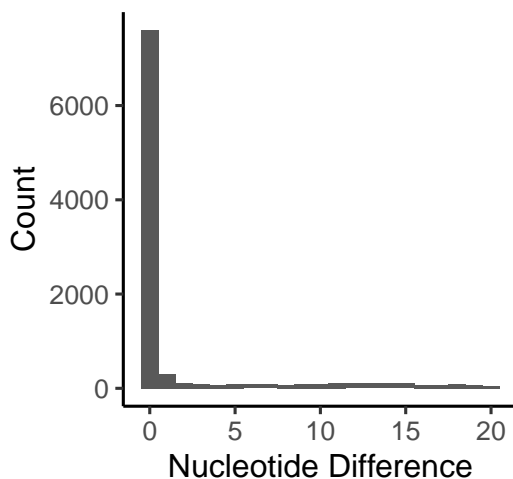
IGHV3-20*01_02

87 sequences assigned
71 (81.6%) exact matches, in which:
71 unique CDR3
6 unique J



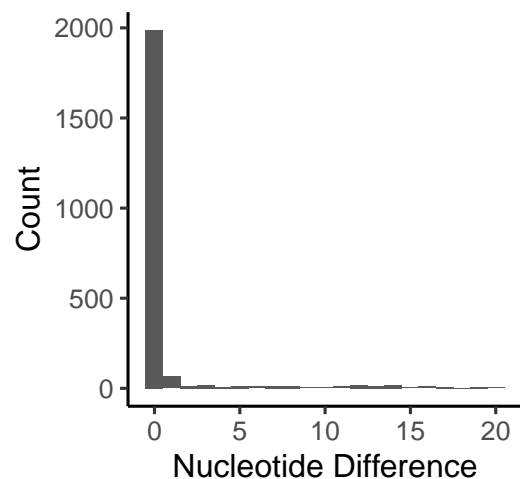
IGHV3-23*01_04

9815 sequences assigned
7602 (77.5%) exact matches, in which:
7019 unique CDR3
6 unique J



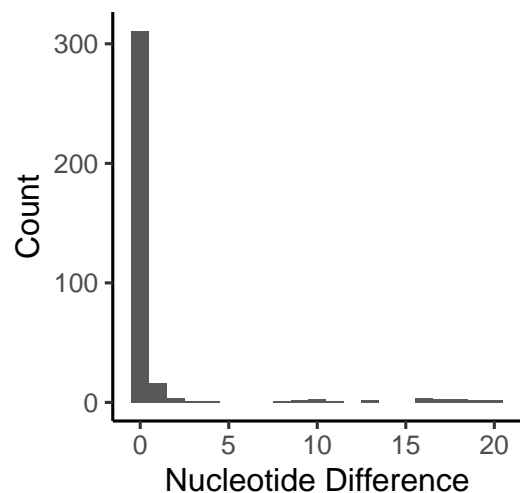
IGHV3-33*08

2261 sequences assigned
1988 (87.9%) exact matches, in which:
1904 unique CDR3
6 unique J



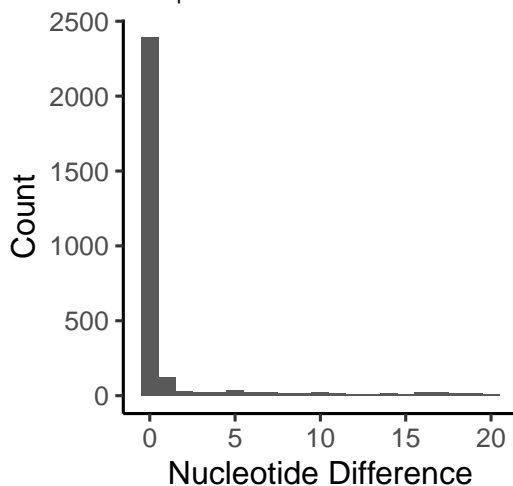
IGHV3-43*01

363 sequences assigned
311 (85.7%) exact matches, in which:
299 unique CDR3
6 unique J



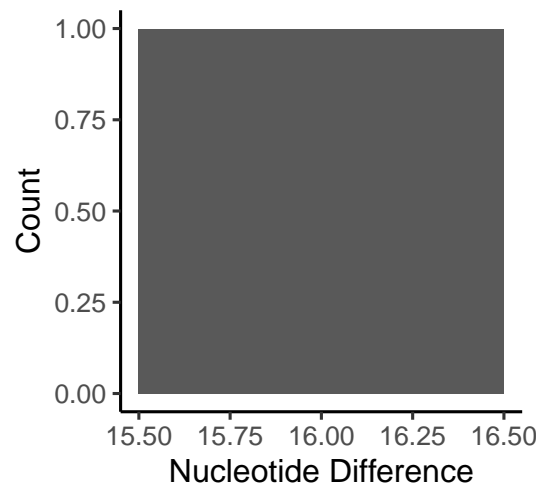
IGHV3-53*01_02

2940 sequences assigned
2392 (81.4%) exact matches, in which:
2233 unique CDR3
6 unique J



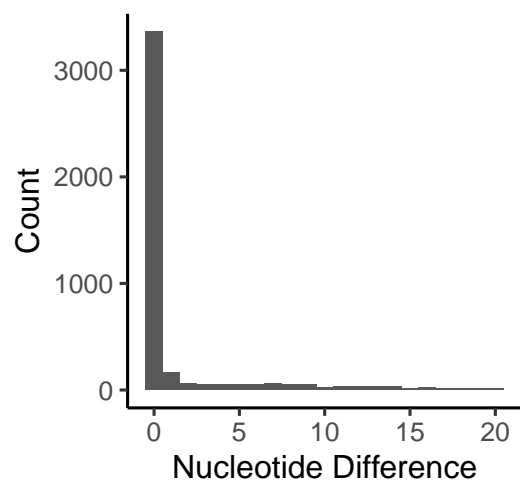
IGHV3-69-1*01

1 sequences assigned
No exact matches.



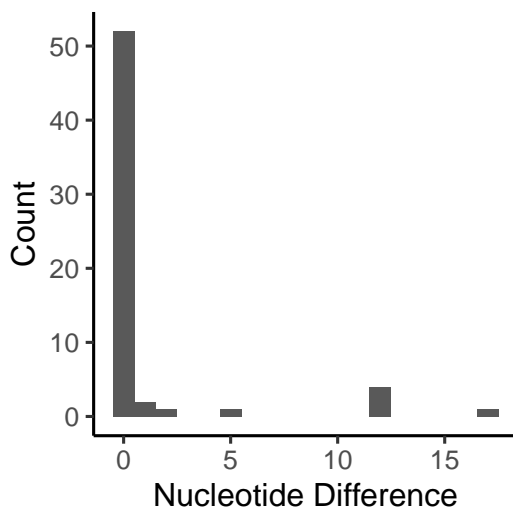
IGHV3-48*02

4271 sequences assigned
3362 (78.7%) exact matches, in which:
3165 unique CDR3
6 unique J



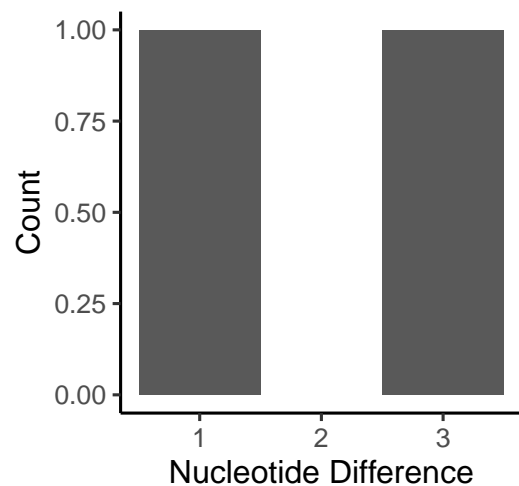
IGHV3-64*02_07

63 sequences assigned
52 (82.5%) exact matches, in which:
47 unique CDR3
5 unique J



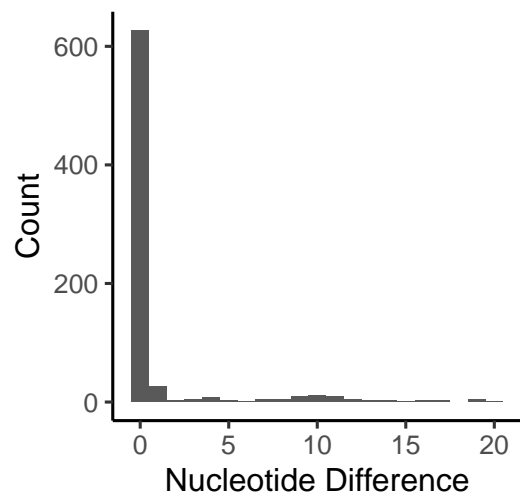
IGHV3-69-1*02

2 sequences assigned
No exact matches.



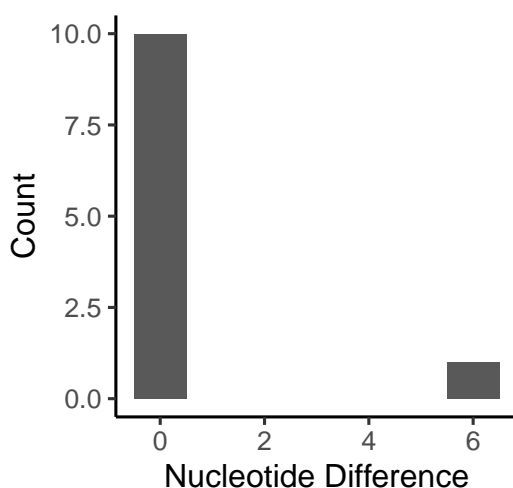
IGHV3-49*03_05

744 sequences assigned
627 (84.3%) exact matches, in which:
611 unique CDR3
6 unique J



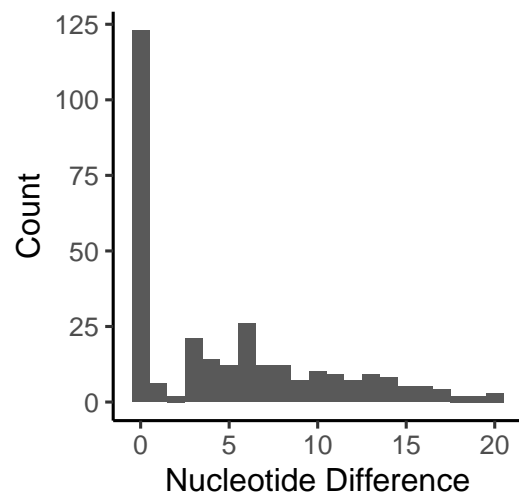
IGHV3-66*03

11 sequences assigned
10 (90.9%) exact matches, in which:
10 unique CDR3
4 unique J



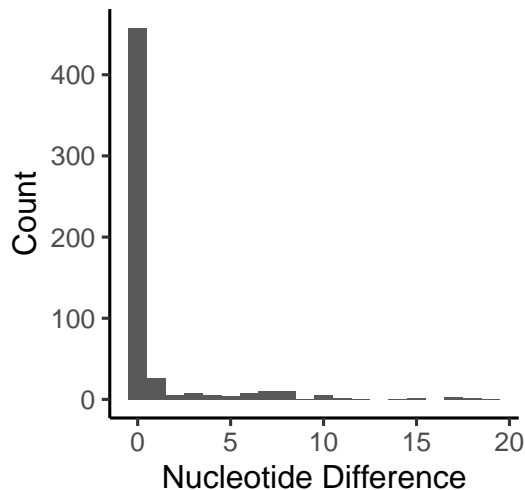
IGHV3-72*01

302 sequences assigned
123 (40.7%) exact matches, in which:
118 unique CDR3
5 unique J



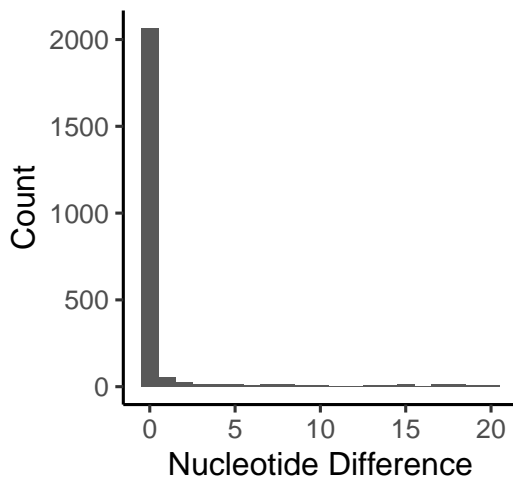
IGHV3–73*01_02

564 sequences assigned
458 (81.2%) exact matches, in which:
429 unique CDR3
6 unique J



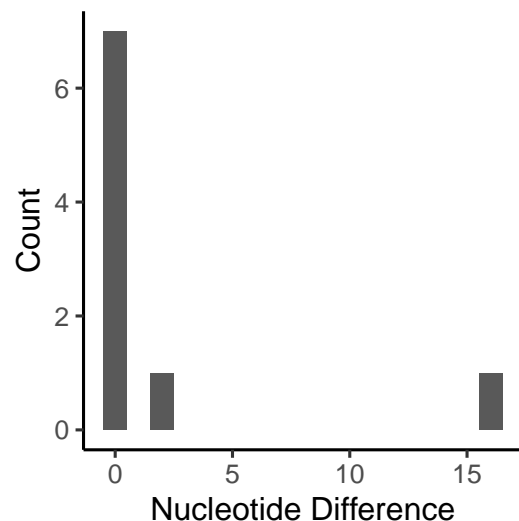
IGHV4–4*07

2361 sequences assigned
2064 (87.4%) exact matches, in which:
1931 unique CDR3
6 unique J



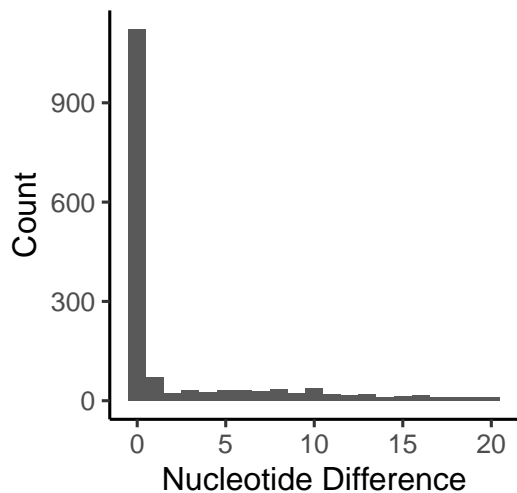
IGHV4–28*01_07

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



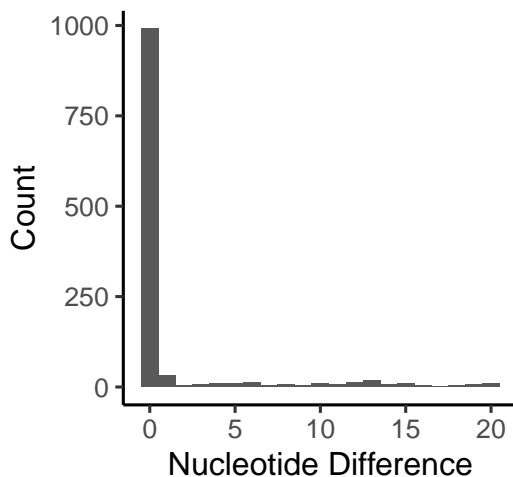
IGHV3–74*01_02

1652 sequences assigned
1123 (68%) exact matches, in which:
1052 unique CDR3
6 unique J



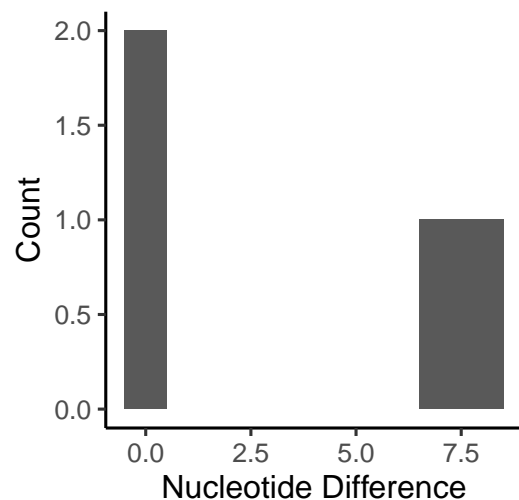
IGHV4–4*02_03

1195 sequences assigned
991 (82.9%) exact matches, in which:
962 unique CDR3
6 unique J



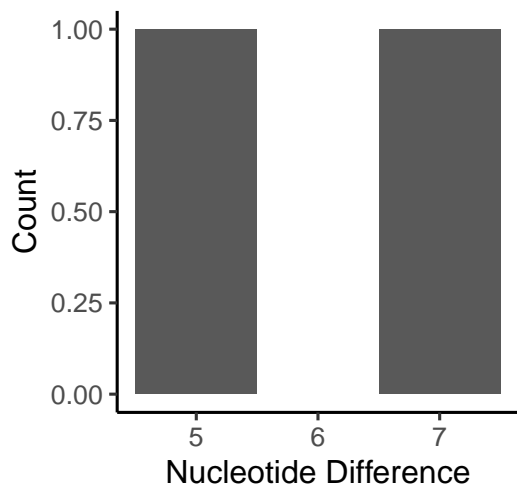
IGHV4–28*02_05

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



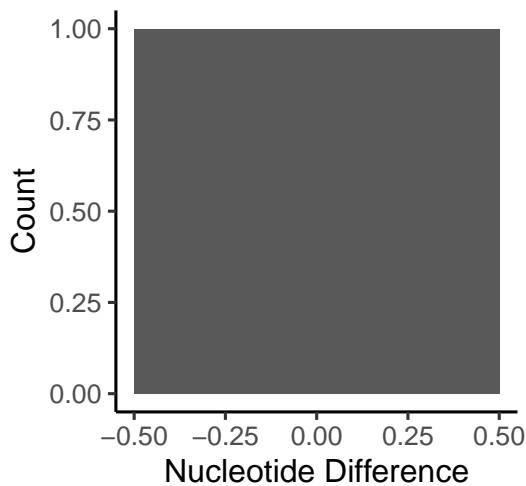
IGHV3–64D*09

2 sequences assigned
No exact matches.



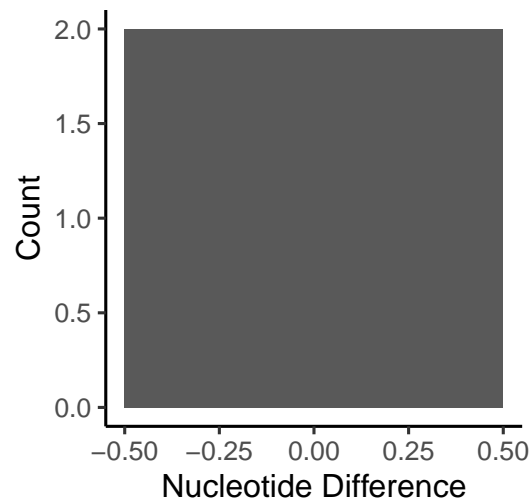
IGHV4–28*03

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



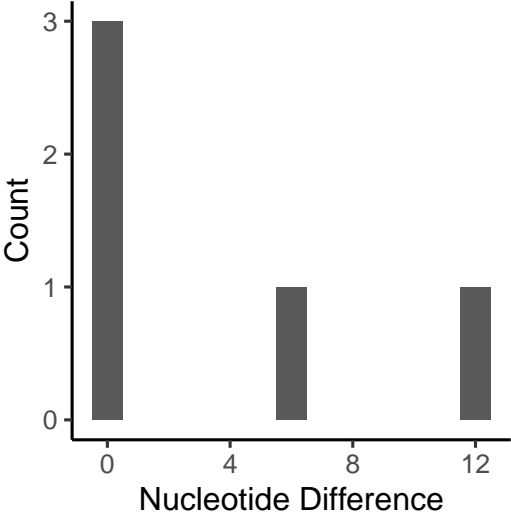
IGHV4–30–4*01

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



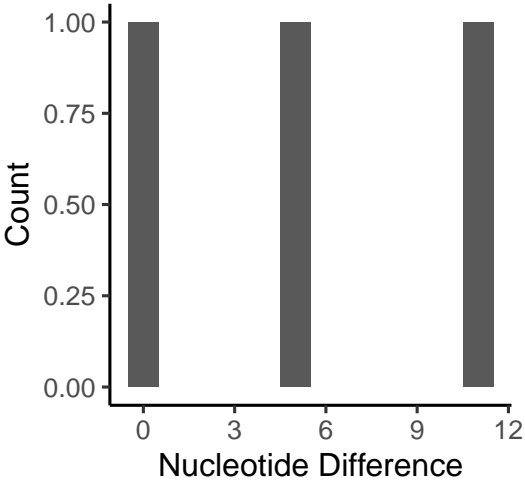
IGHV4-30-2*01

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



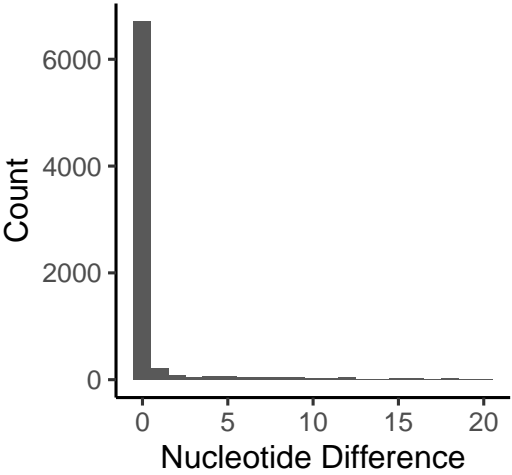
IGHV4-38-2*01

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



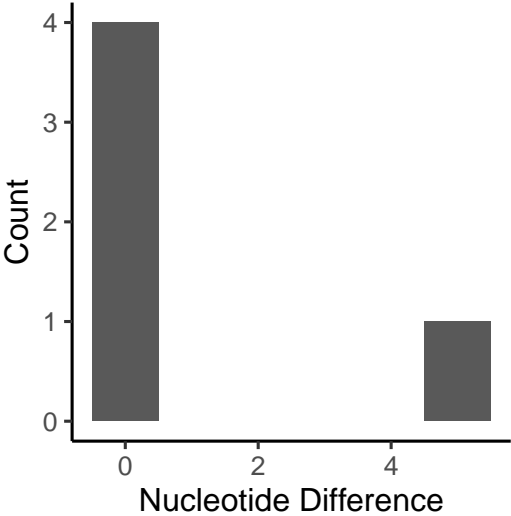
IGHV4-59*02_G88A

7697 sequences assigned
6709 (87.2%) exact matches, in which:
6343 unique CDR3
6 unique J



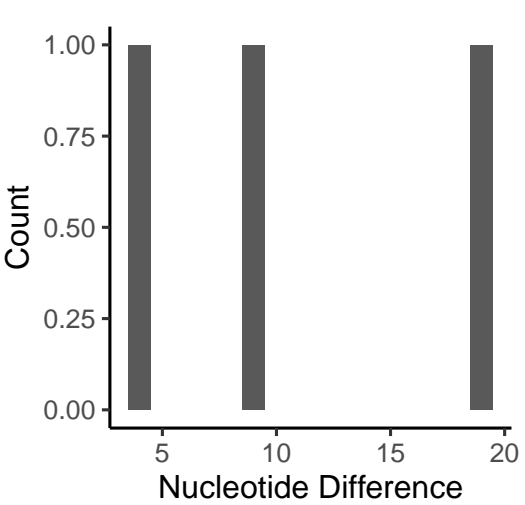
IGHV4-31*02

6 sequences assigned
4 (66.7%) exact matches, in which:
4 unique CDR3
2 unique J



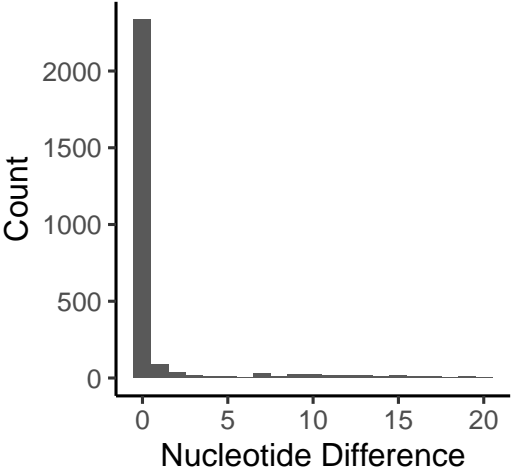
IGHV4-38-2*02

3 sequences assigned
No exact matches.



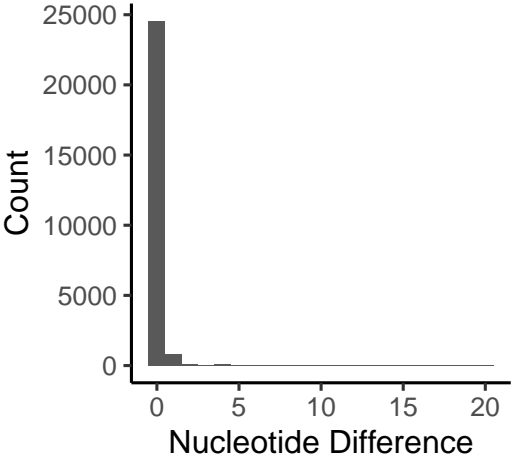
IGHV4-61*01

2744 sequences assigned
2334 (85.1%) exact matches, in which:
2223 unique CDR3
6 unique J



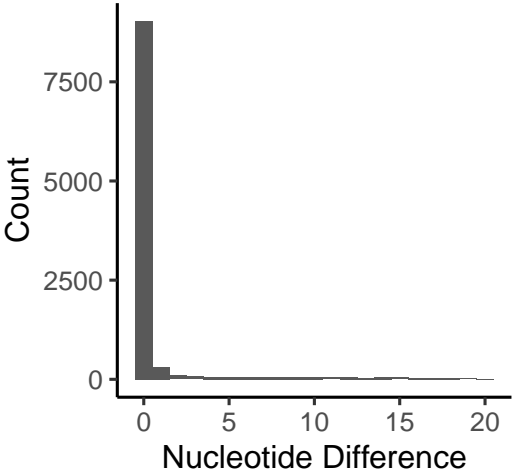
IGHV4-34*01_02

26142 sequences assigned
24567 (94%) exact matches, in which:
22665 unique CDR3
6 unique J



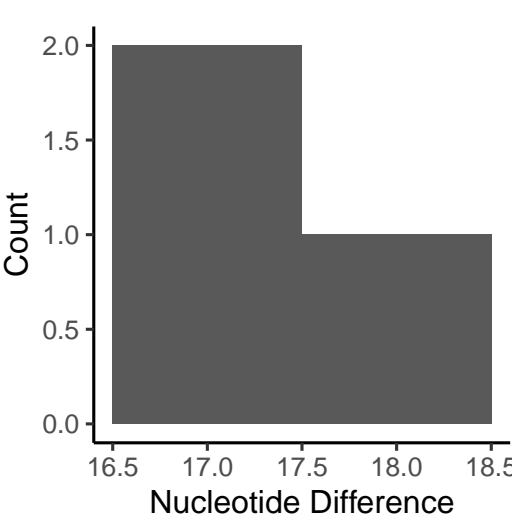
IGHV4-39*02_C258G

10484 sequences assigned
9032 (86.2%) exact matches, in which:
8653 unique CDR3
6 unique J



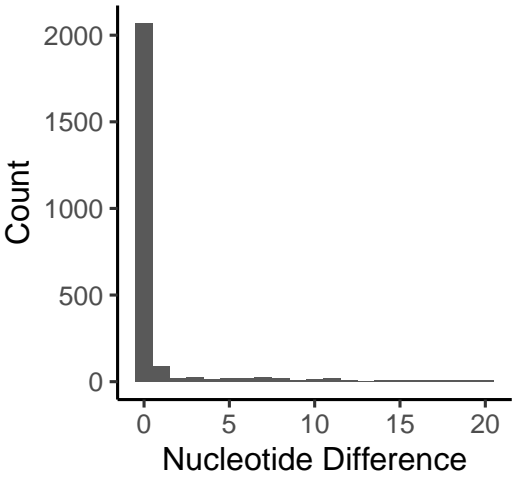
IGHV4/OR15-8*01

3 sequences assigned
No exact matches.



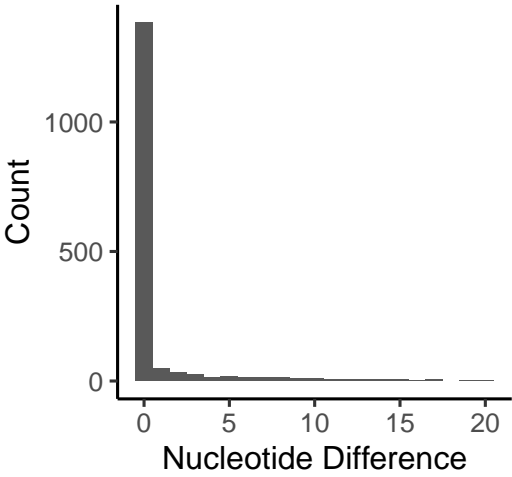
IGHV5-51*07_A128G

2442 sequences assigned
2068 (84.7%) exact matches, in which:
2062 unique CDR3
6 unique J



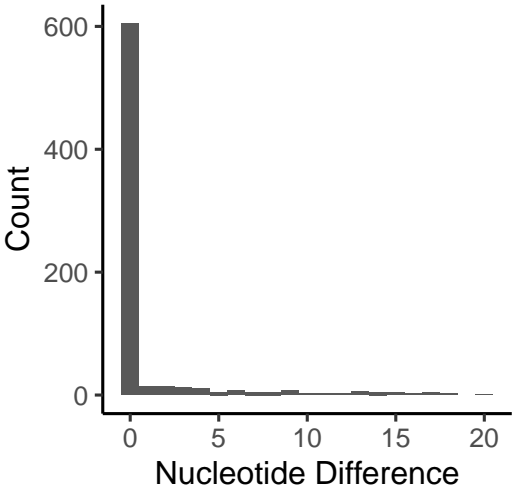
IGHV6-1*01_02

1644 sequences assigned
1383 (84.1%) exact matches, in which:
1377 unique CDR3
6 unique J



IGHV7-4-1*02

728 sequences assigned
605 (83.1%) exact matches, in which:
604 unique CDR3
6 unique J





Warning – no inferred sequences found.