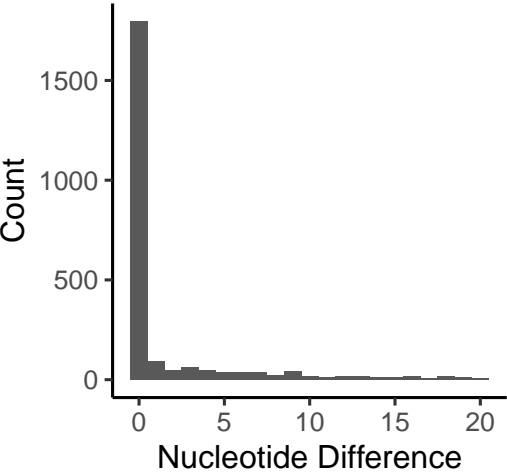


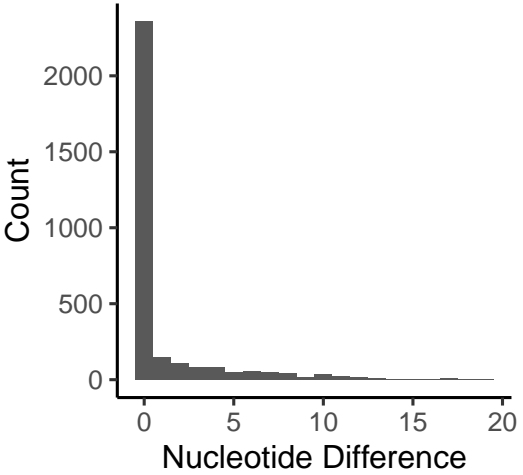
IGHV1-2*02

2403 sequences assigned
1796 (74.7%) exact matches, in which:
1790 unique CDR3
6 unique J



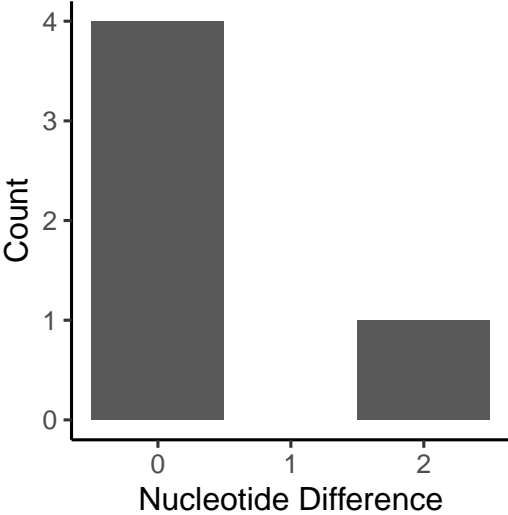
IGHV1-8*01

3109 sequences assigned
2358 (75.8%) exact matches, in which:
2347 unique CDR3
6 unique J



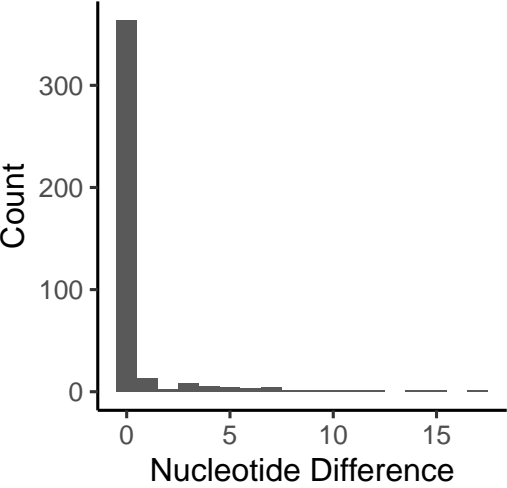
IGHV1-45*02

9 sequences assigned
4 (44.4%) exact matches, in which:
4 unique CDR3
3 unique J



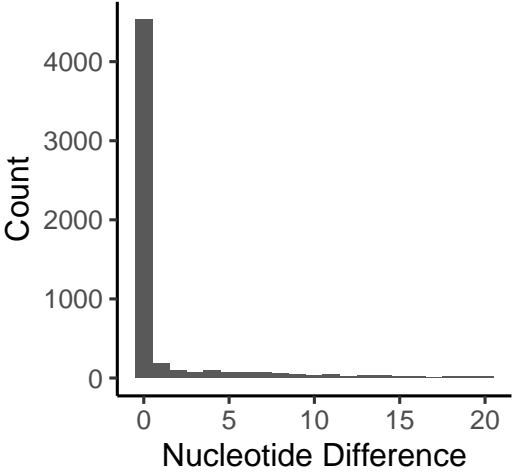
IGHV1-2*04

412 sequences assigned
364 (88.3%) exact matches, in which:
363 unique CDR3
6 unique J



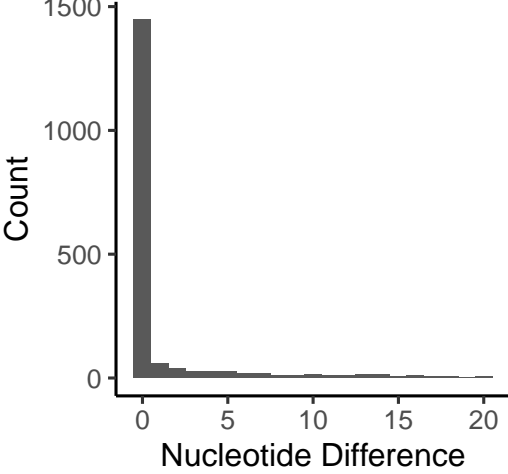
IGHV1-18*01

5597 sequences assigned
4530 (80.9%) exact matches, in which:
4514 unique CDR3
6 unique J



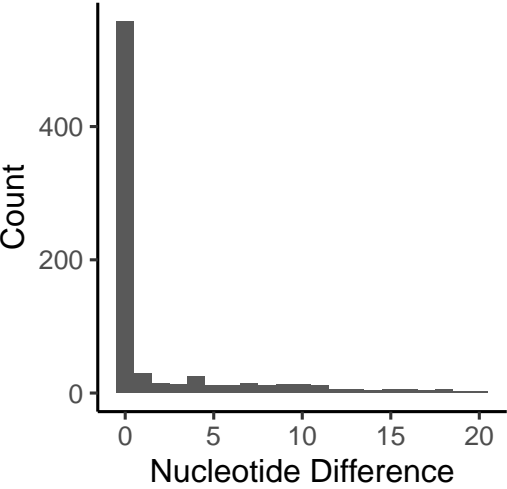
IGHV1-46*01

1796 sequences assigned
1447 (80.6%) exact matches, in which:
1445 unique CDR3
6 unique J



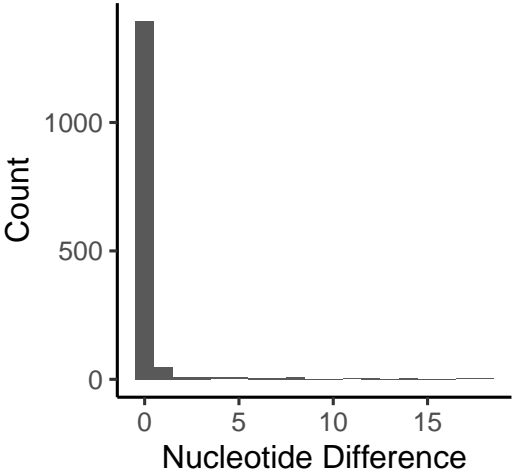
IGHV1-3*01_05

775 sequences assigned
558 (72%) exact matches, in which:
558 unique CDR3
6 unique J



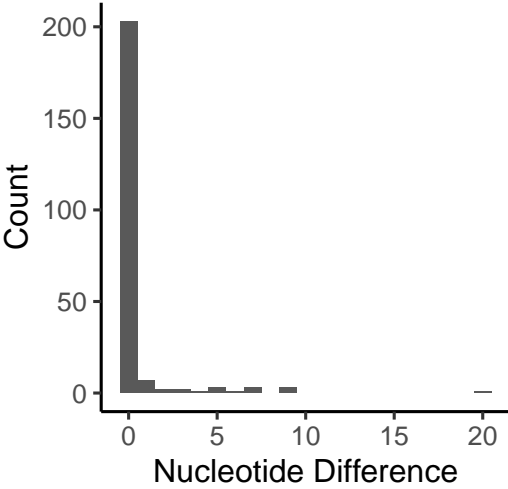
IGHV1-24*01

1520 sequences assigned
1395 (91.8%) exact matches, in which:
1388 unique CDR3
6 unique J



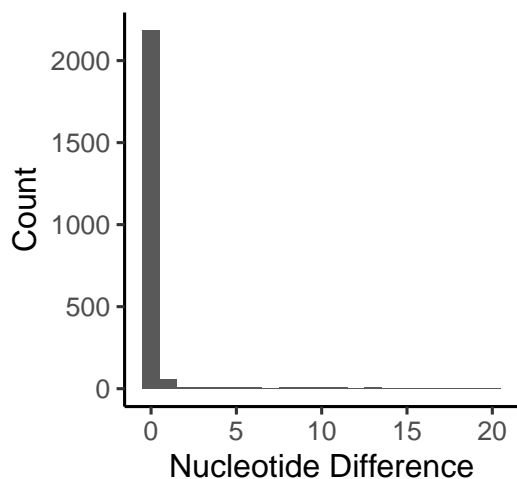
IGHV1-58*02

226 sequences assigned
203 (89.8%) exact matches, in which:
203 unique CDR3
5 unique J



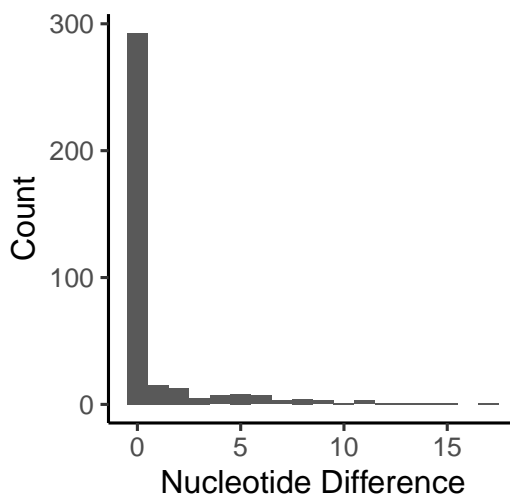
IGHV1-69*04_09

2377 sequences assigned
2184 (91.9%) exact matches, in which:
2174 unique CDR3
6 unique J



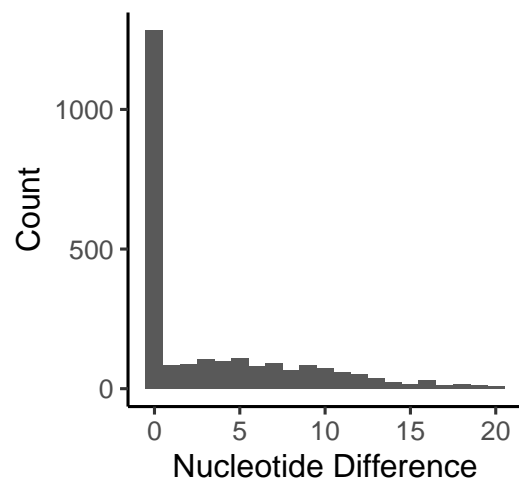
IGHV2-70*11_15

368 sequences assigned
293 (79.6%) exact matches, in which:
292 unique CDR3
4 unique J



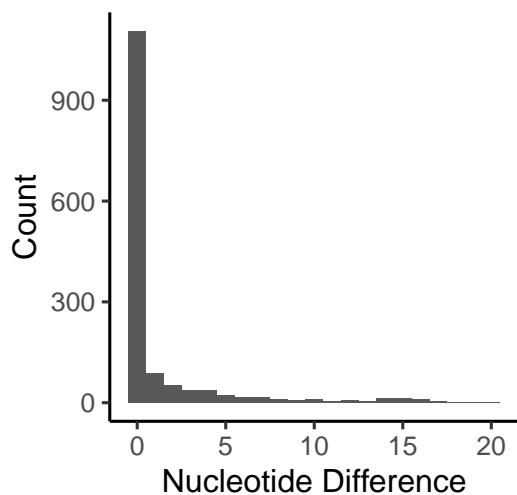
IGHV3-7*03

2447 sequences assigned
1283 (52.4%) exact matches, in which:
1236 unique CDR3
6 unique J



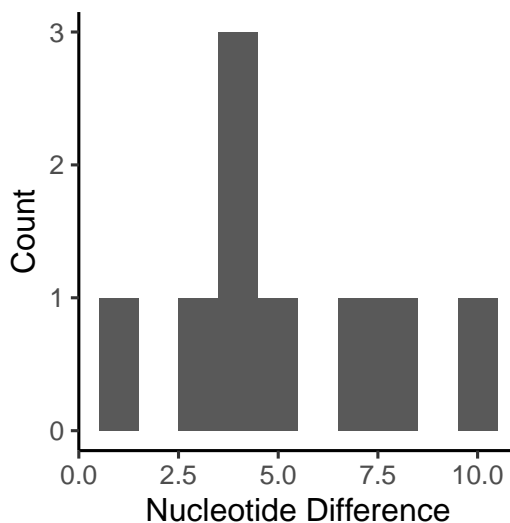
IGHV2-5*02

1481 sequences assigned
1106 (74.7%) exact matches, in which:
1101 unique CDR3
6 unique J



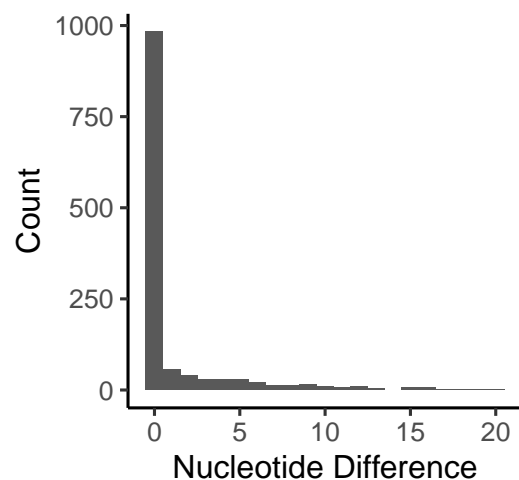
IGHV2-70D*04

9 sequences assigned
No exact matches.



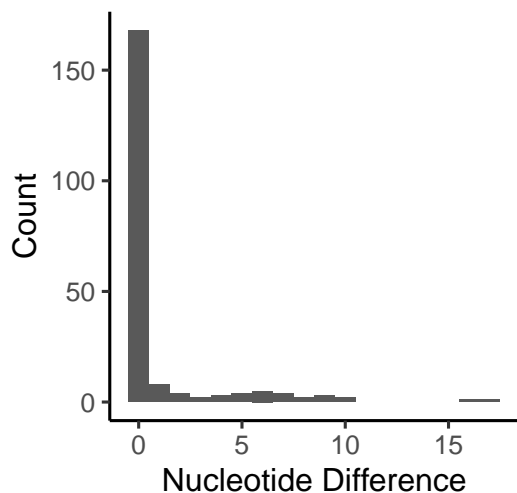
IGHV3-9*01

1293 sequences assigned
983 (76%) exact matches, in which:
966 unique CDR3
6 unique J



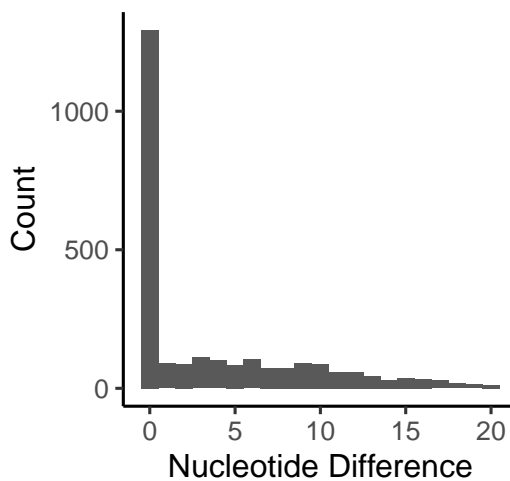
IGHV2-26*01

207 sequences assigned
168 (81.2%) exact matches, in which:
168 unique CDR3
5 unique J



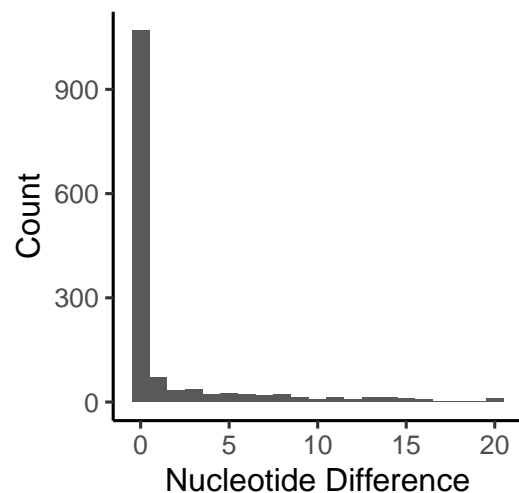
IGHV3-7*01

2563 sequences assigned
1293 (50.4%) exact matches, in which:
1246 unique CDR3
6 unique J



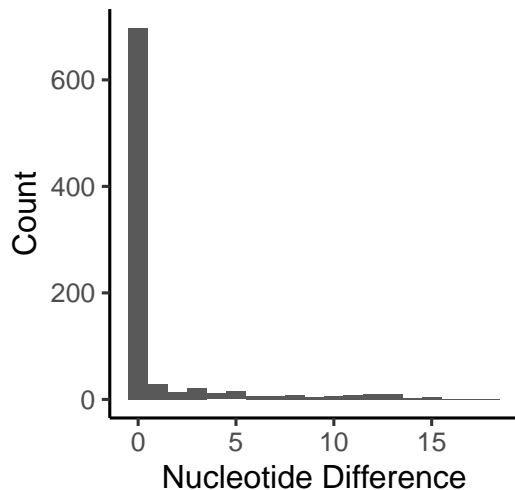
IGHV3-11*01

1435 sequences assigned
1070 (74.6%) exact matches, in which:
1041 unique CDR3
6 unique J



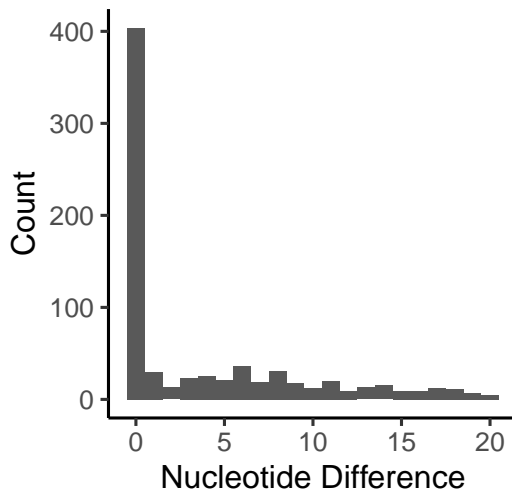
IGHV3-11*06

861 sequences assigned
698 (81.1%) exact matches, in which:
676 unique CDR3
6 unique J



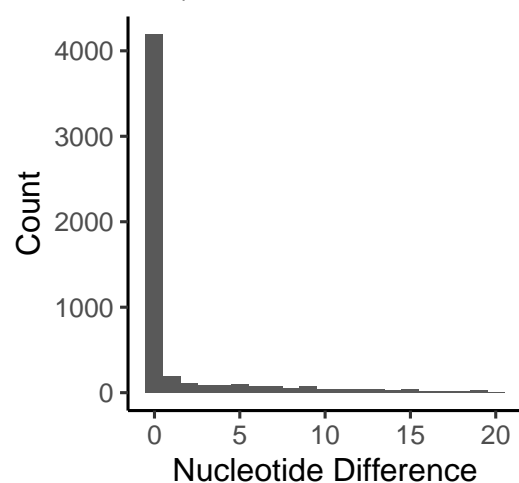
IGHV3-15*01_02

757 sequences assigned
404 (53.4%) exact matches, in which:
394 unique CDR3
6 unique J



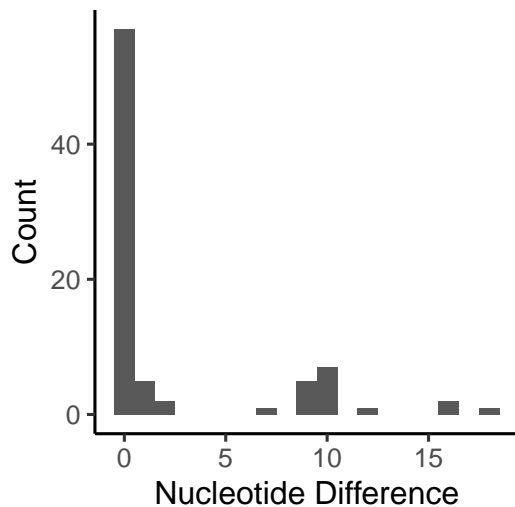
IGHV3-21*01_02

5452 sequences assigned
4192 (76.9%) exact matches, in which:
4028 unique CDR3
6 unique J



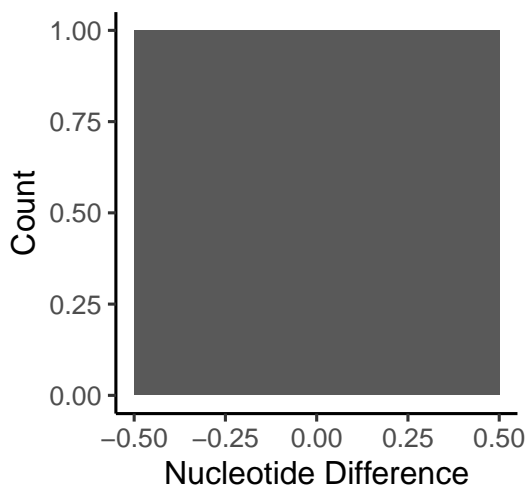
IGHV3-13*01

82 sequences assigned
57 (69.5%) exact matches, in which:
54 unique CDR3
5 unique J



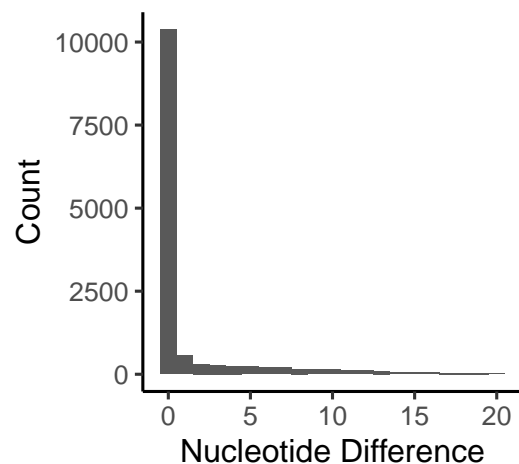
IGHV3-19*01

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



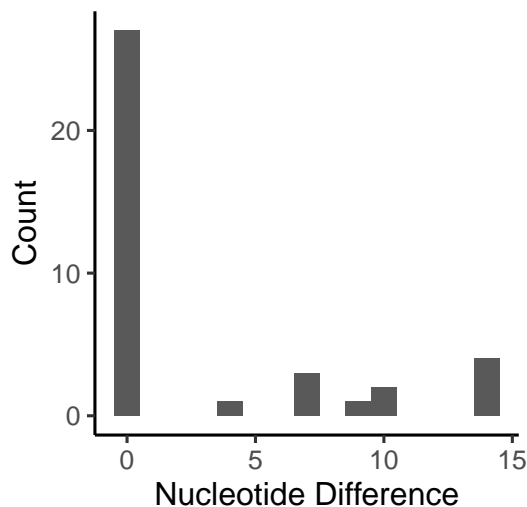
IGHV3-23*01_04

13678 sequences assigned
10378 (75.9%) exact matches, in which:
9996 unique CDR3
6 unique J



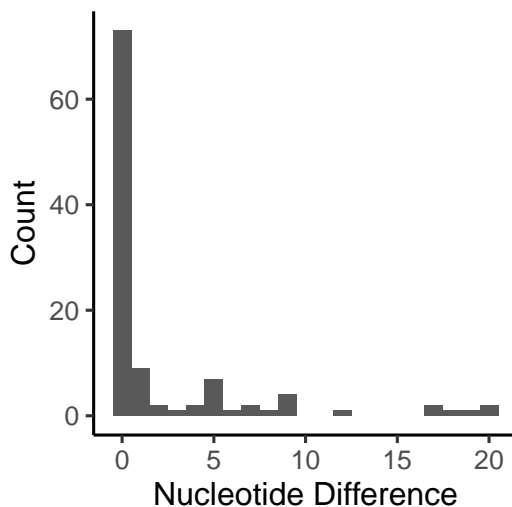
IGHV3-13*05

38 sequences assigned
27 (71.1%) exact matches, in which:
27 unique CDR3
5 unique J



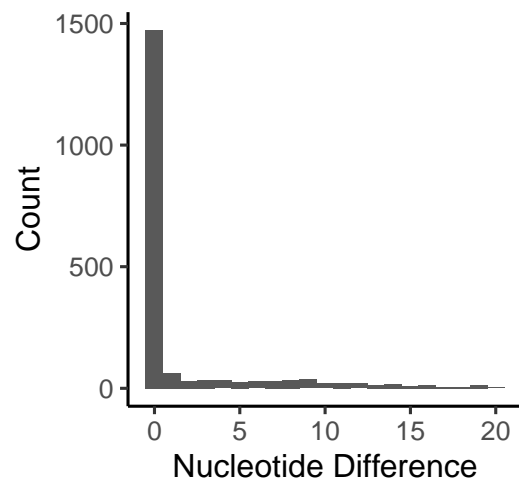
IGHV3-20*01_02

110 sequences assigned
73 (66.4%) exact matches, in which:
68 unique CDR3
5 unique J



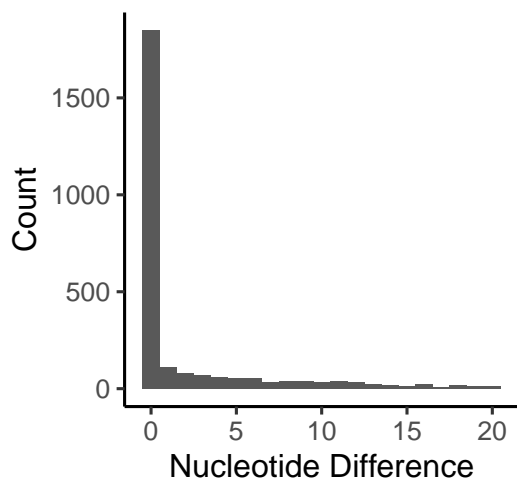
IGHV3-30-3*01

1950 sequences assigned
1473 (75.5%) exact matches, in which:
1446 unique CDR3
6 unique J



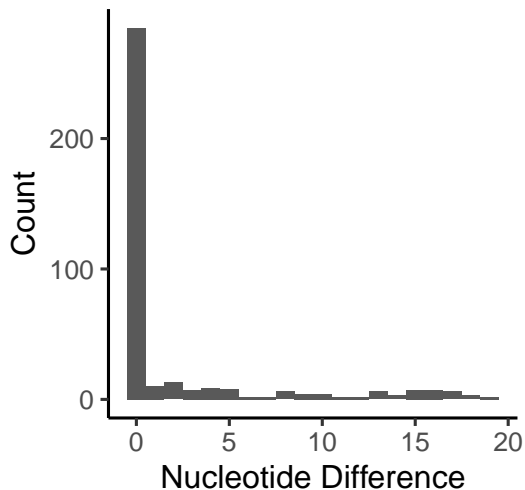
IGHV3-33*01

2655 sequences assigned
1848 (69.6%) exact matches, in which:
1805 unique CDR3
6 unique J



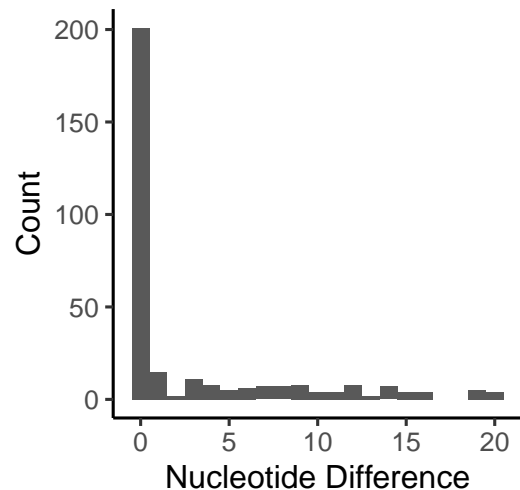
IGHV3-49*03_05

391 sequences assigned
285 (72.9%) exact matches, in which:
280 unique CDR3
5 unique J



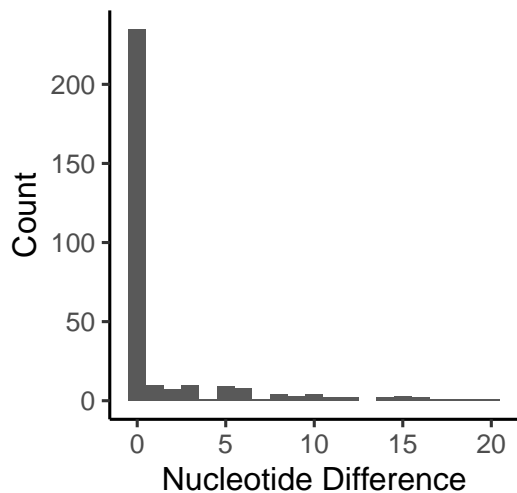
IGHV3-64*01

323 sequences assigned
201 (62.2%) exact matches, in which:
192 unique CDR3
5 unique J



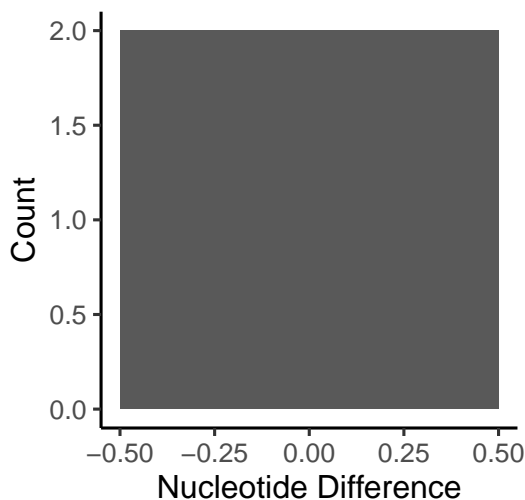
IGHV3-43*01

342 sequences assigned
235 (68.7%) exact matches, in which:
228 unique CDR3
6 unique J



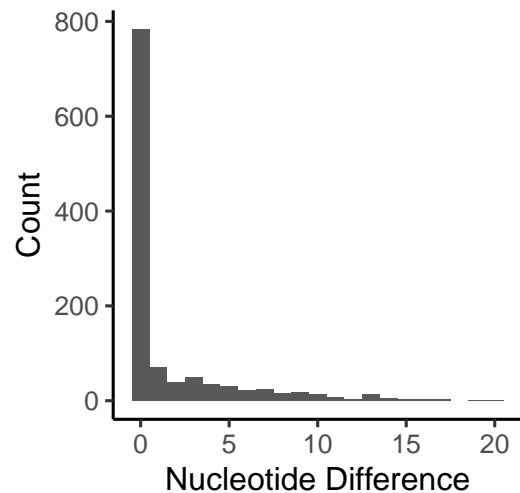
IGHV3-52*01_03

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



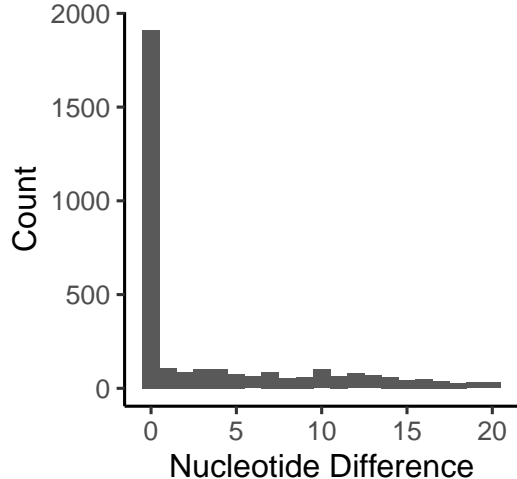
IGHV3-66*01

1148 sequences assigned
784 (68.3%) exact matches, in which:
751 unique CDR3
6 unique J



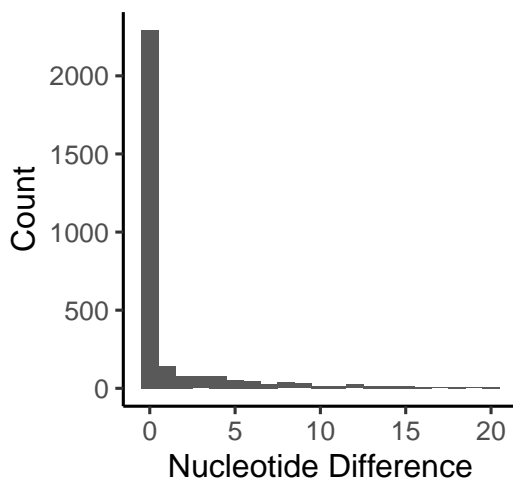
IGHV3-48*02

3362 sequences assigned
1911 (56.8%) exact matches, in which:
1823 unique CDR3
6 unique J



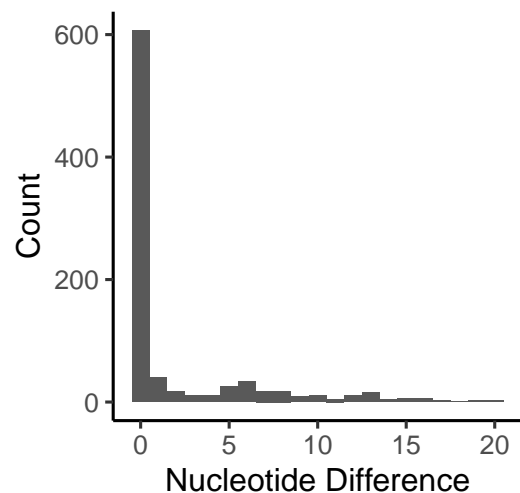
IGHV3-53*01_02

3024 sequences assigned
2293 (75.8%) exact matches, in which:
2206 unique CDR3
6 unique J



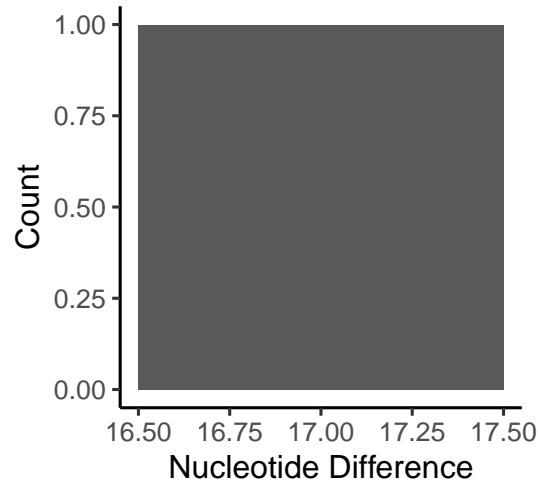
IGHV3-66*02

872 sequences assigned
607 (69.6%) exact matches, in which:
586 unique CDR3
6 unique J



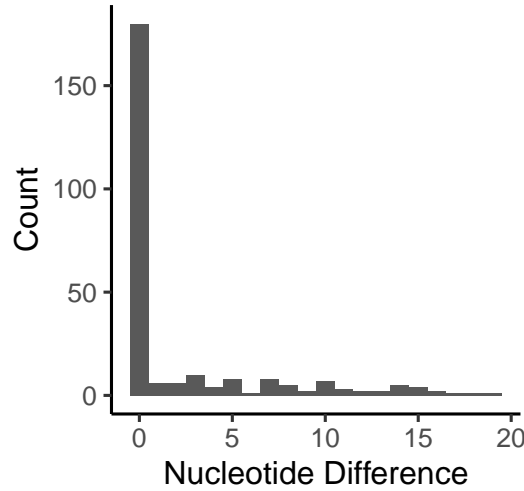
IGHV3-69-1*01

1 sequences assigned
No exact matches.



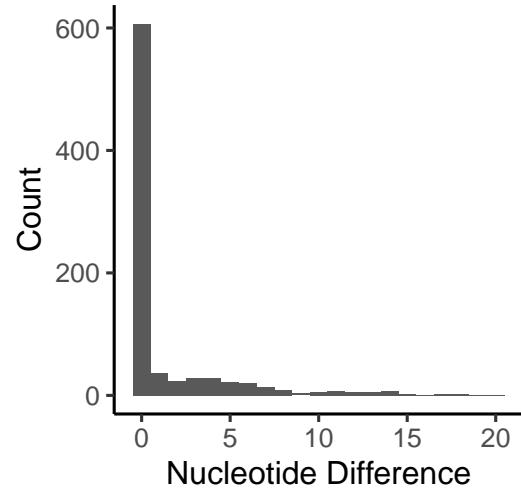
IGHV3-73*01_02

260 sequences assigned
180 (69.2%) exact matches, in which:
165 unique CDR3
5 unique J



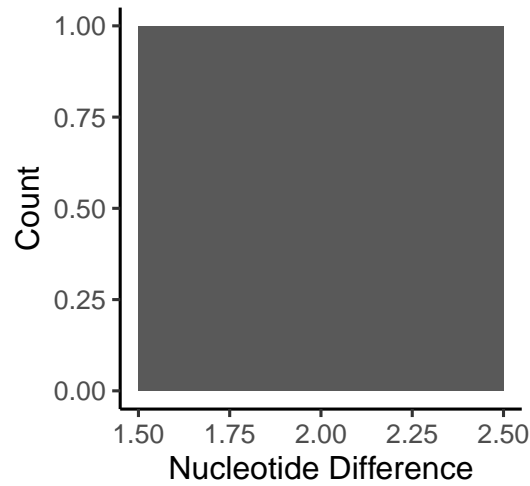
IGHV4-4*07

836 sequences assigned
607 (72.6%) exact matches, in which:
593 unique CDR3
6 unique J



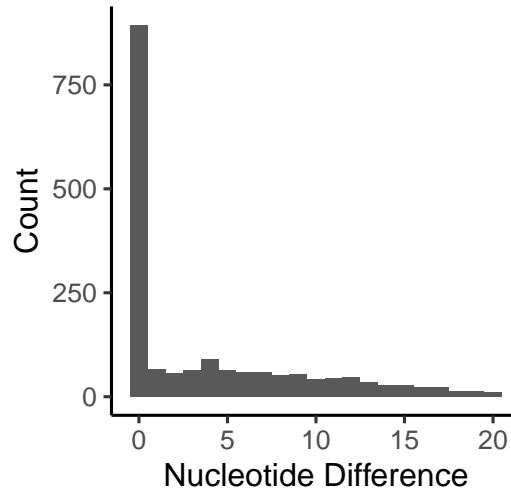
IGHV3-69-1*02

3 sequences assigned
No exact matches.



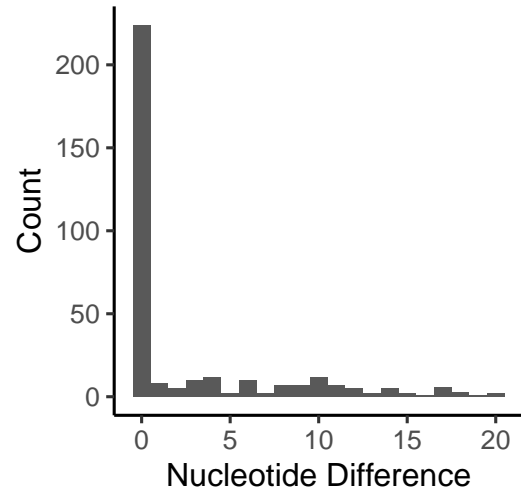
IGHV3-74*01_02

1781 sequences assigned
894 (50.2%) exact matches, in which:
864 unique CDR3
6 unique J



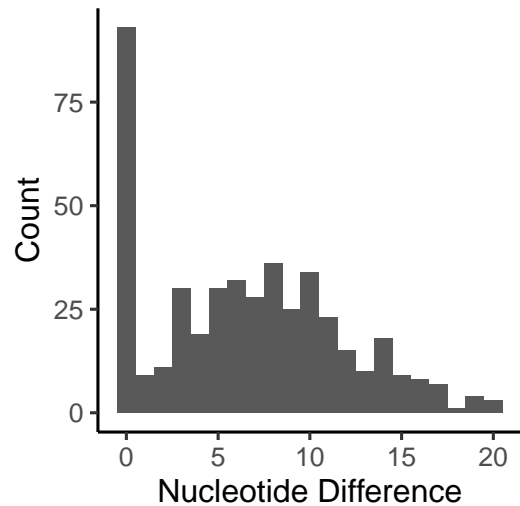
IGHV4-4*02_03

355 sequences assigned
224 (63.1%) exact matches, in which:
217 unique CDR3
6 unique J



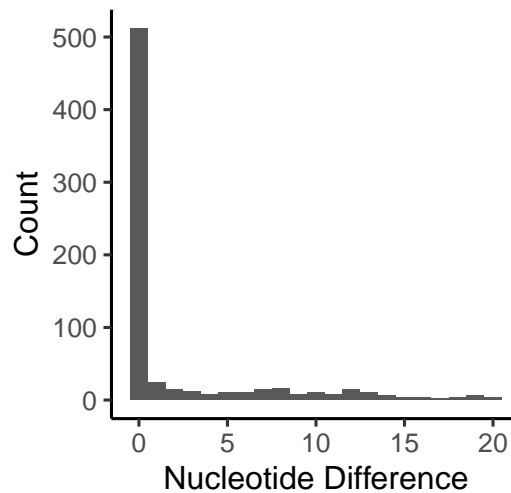
IGHV3-72*01

456 sequences assigned
93 (20.4%) exact matches, in which:
89 unique CDR3
6 unique J



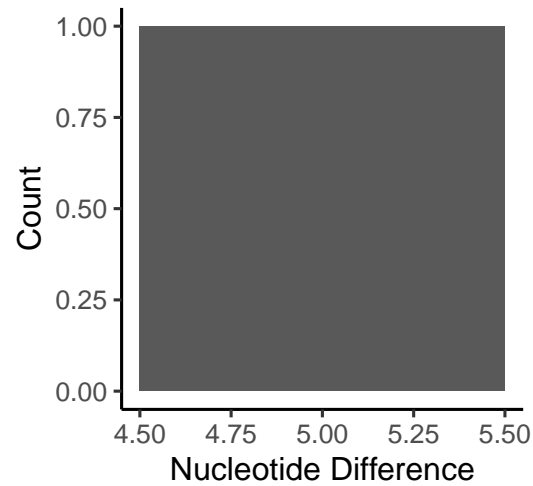
IGHV3-64D*09

710 sequences assigned
512 (72.1%) exact matches, in which:
501 unique CDR3
6 unique J



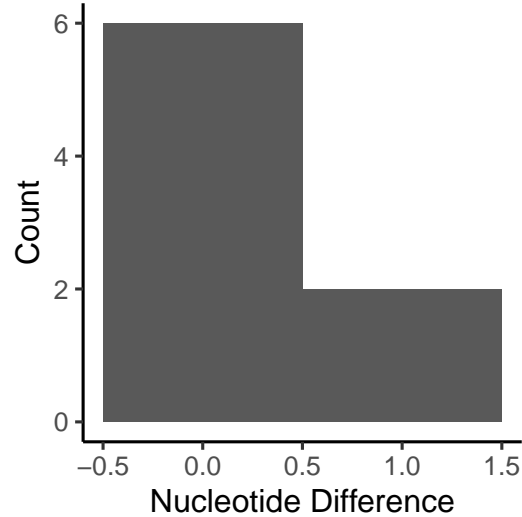
IGHV4-28*03

1 sequences assigned
No exact matches.



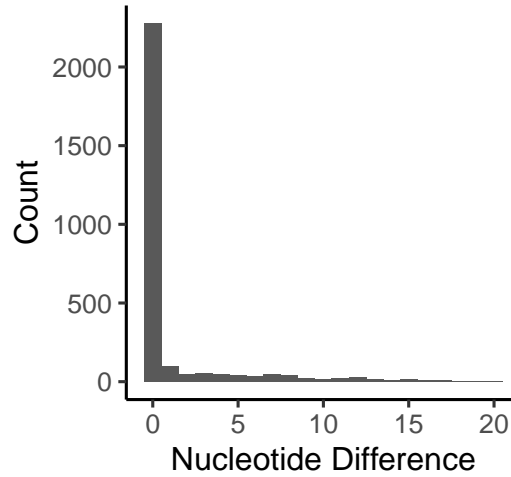
IGHV4-28*01_07

8 sequences assigned
6 (75%) exact matches, in which:
4 unique CDR3
2 unique J



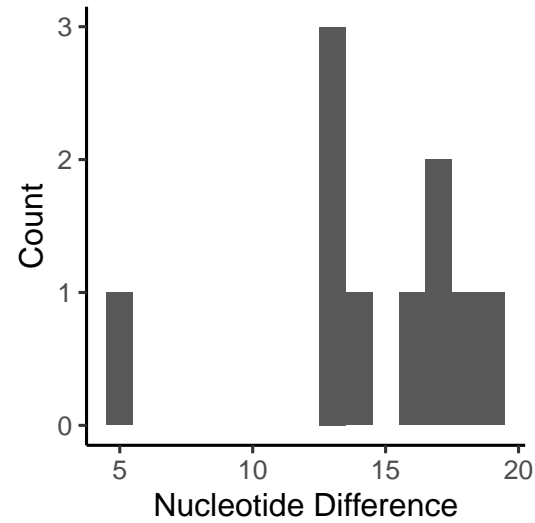
IGHV4-31*02

2857 sequences assigned
2277 (79.7%) exact matches, in which:
2243 unique CDR3
6 unique J



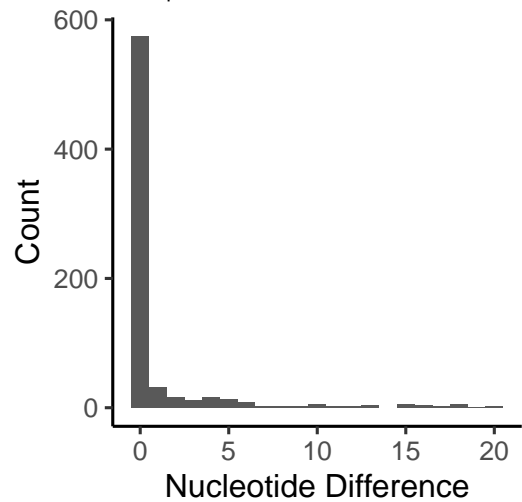
IGHV4-38-2*02

12 sequences assigned
No exact matches.



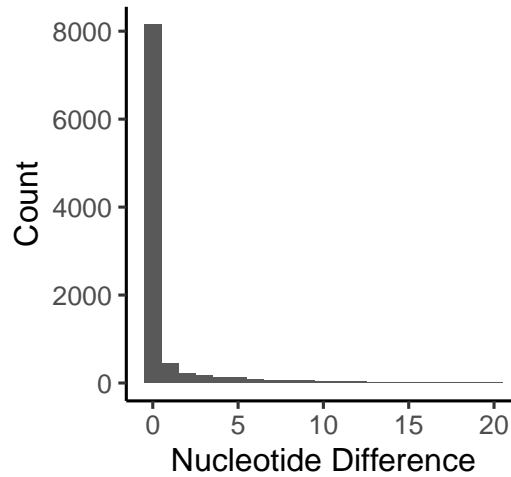
IGHV4-30-4*01

792 sequences assigned
575 (72.6%) exact matches, in which:
566 unique CDR3
6 unique J



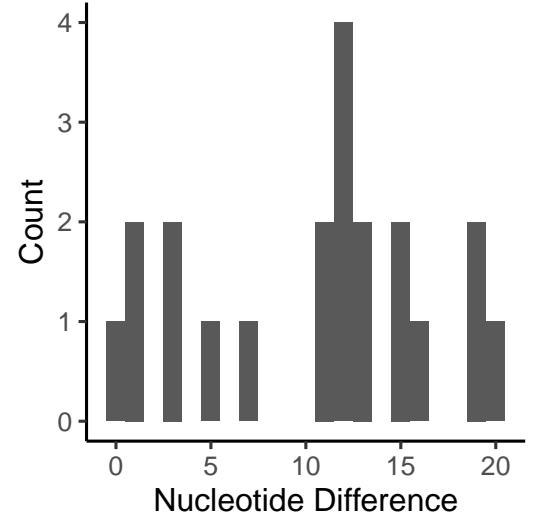
IGHV4-34*01_02

9740 sequences assigned
8147 (83.6%) exact matches, in which:
8018 unique CDR3
6 unique J



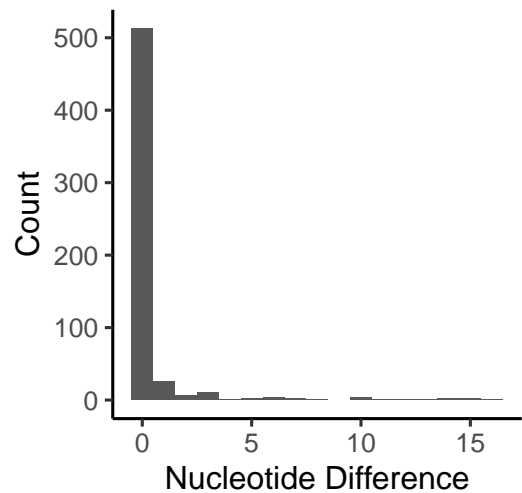
IGHV4-39*02

24 sequences assigned
1 (4.2%) exact matches, in which:
1 unique CDR3
1 unique J



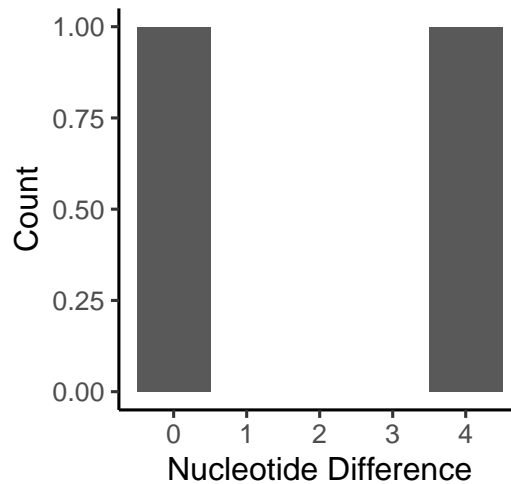
IGHV4-30-2*01

578 sequences assigned
513 (88.8%) exact matches, in which:
506 unique CDR3
6 unique J



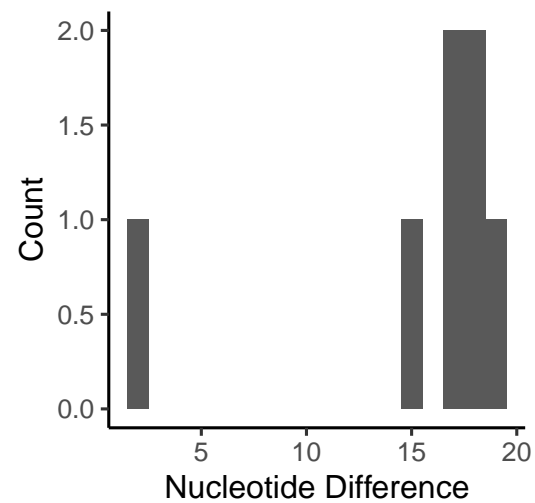
IGHV4-38-2*01

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



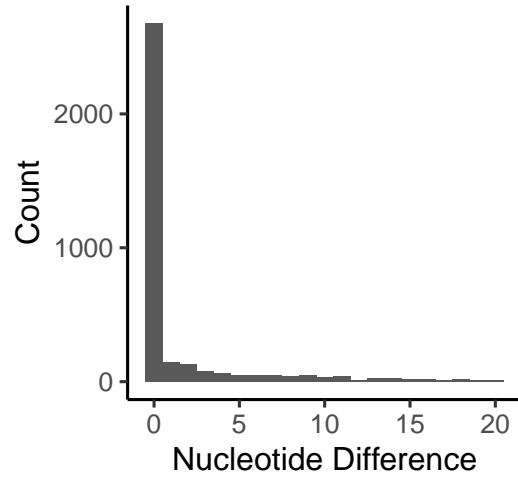
IGHV4-39*07

15 sequences assigned
No exact matches.



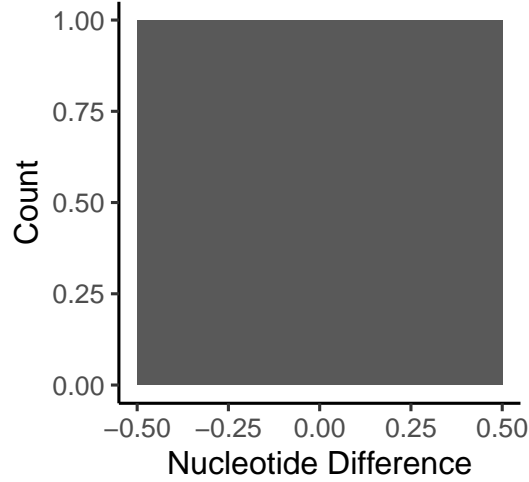
IGHV4-59*08

3593 sequences assigned
2676 (74.5%) exact matches, in which:
2584 unique CDR3
6 unique J



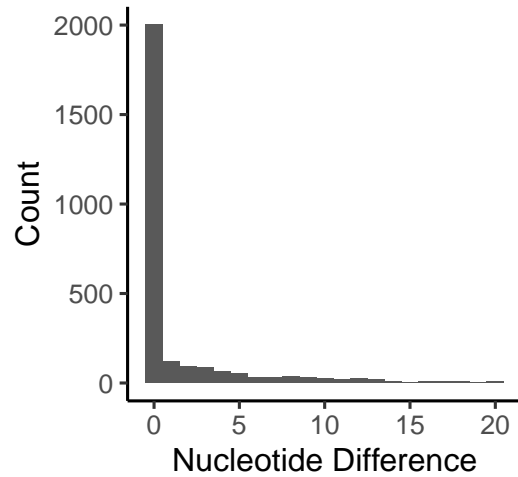
IGHV5-51*01_03

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



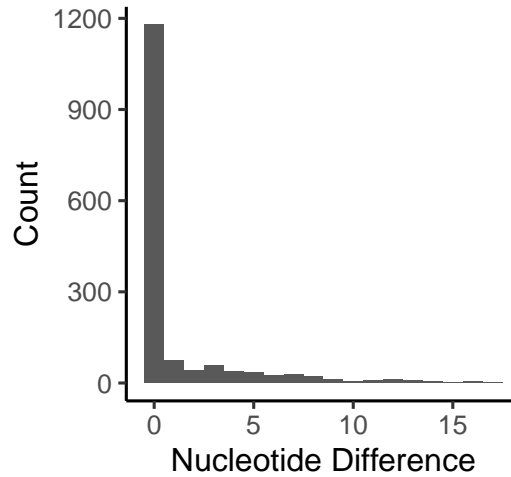
IGHV4-61*02

2719 sequences assigned
2002 (73.6%) exact matches, in which:
1962 unique CDR3
6 unique J



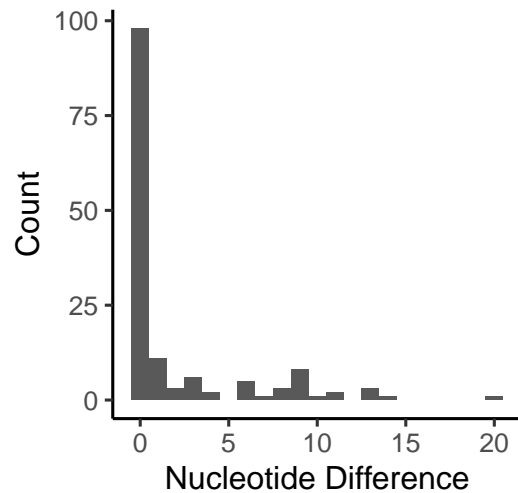
IGHV6-1*01_02

1562 sequences assigned
1179 (75.5%) exact matches, in which:
1169 unique CDR3
6 unique J



IGHV5-10-1*01_03

146 sequences assigned
98 (67.1%) exact matches, in which:
98 unique CDR3
5 unique J



IGHV7-4-1*01

9 sequences assigned
7 (77.8%) exact matches, in which:
7 unique CDR3
3 unique J

