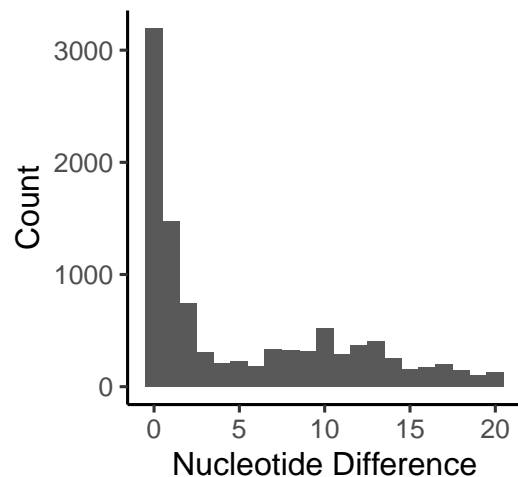


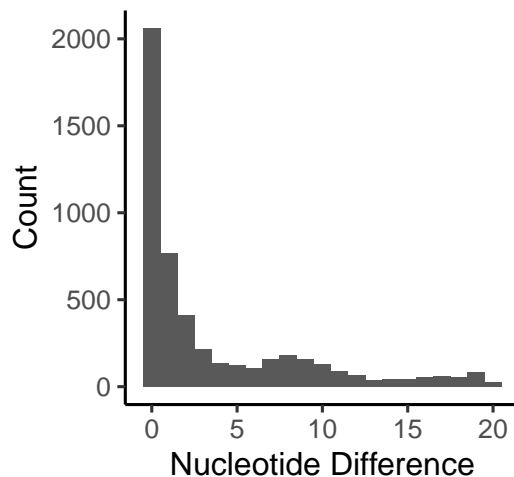
IGHV1-2*02

12426 sequences assigned
3194 (25.7%) exact matches, in which:
2998 unique CDR3
6 unique J



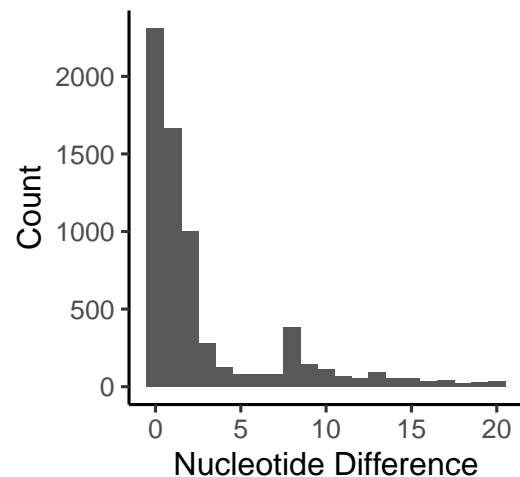
IGHV1-8*01

5194 sequences assigned
2060 (39.7%) exact matches, in which:
1984 unique CDR3
6 unique J



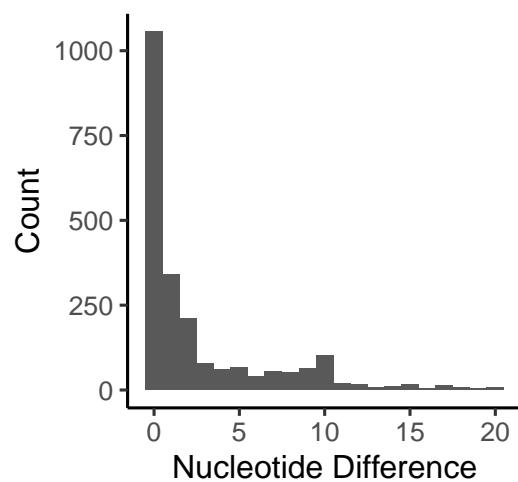
IGHV1-18*04

6955 sequences assigned
2309 (33.2%) exact matches, in which:
2076 unique CDR3
6 unique J



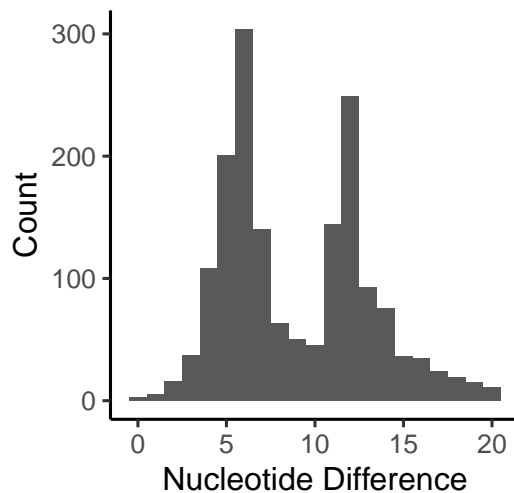
IGHV1-2*04

2251 sequences assigned
1056 (46.9%) exact matches, in which:
1028 unique CDR3
6 unique J



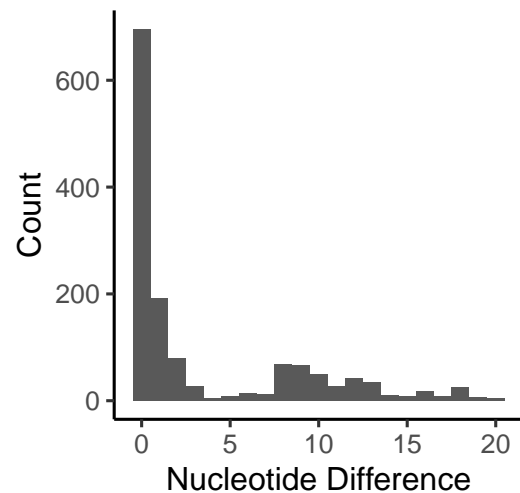
IGHV1-8*02

1729 sequences assigned
3 (0.2%) exact matches, in which:
3 unique CDR3
2 unique J



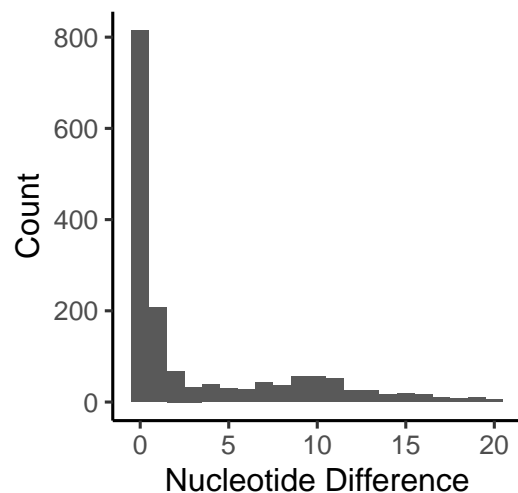
IGHV1-24*01

1468 sequences assigned
696 (47.4%) exact matches, in which:
662 unique CDR3
6 unique J



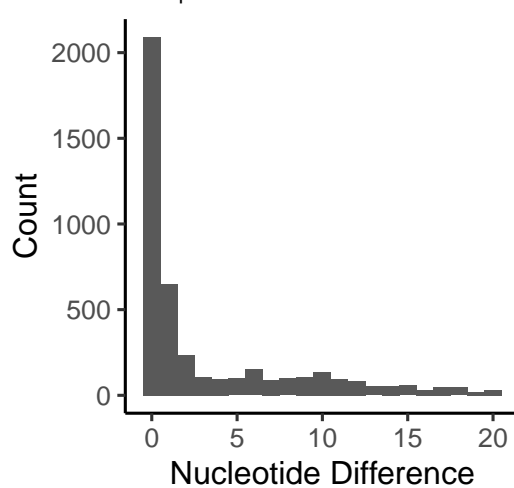
IGHV1-3*01_05

2309 sequences assigned
815 (35.3%) exact matches, in which:
775 unique CDR3
6 unique J



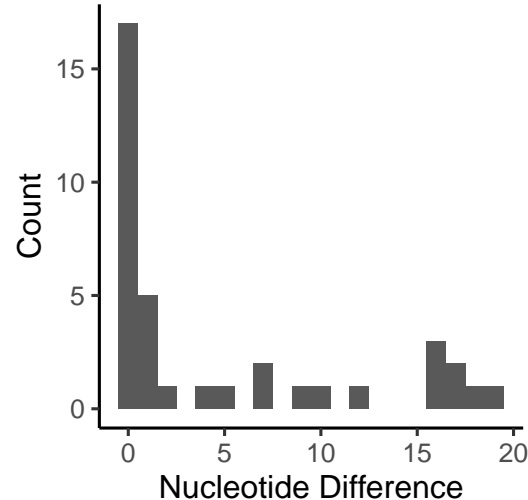
IGHV1-18*01

4795 sequences assigned
2091 (43.6%) exact matches, in which:
2026 unique CDR3
6 unique J



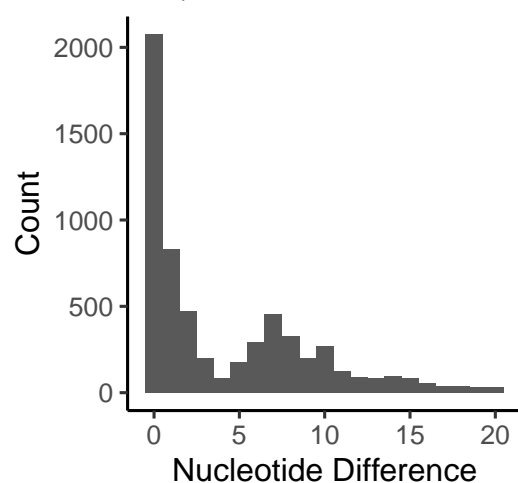
IGHV1-45*02

43 sequences assigned
17 (39.5%) exact matches, in which:
14 unique CDR3
5 unique J



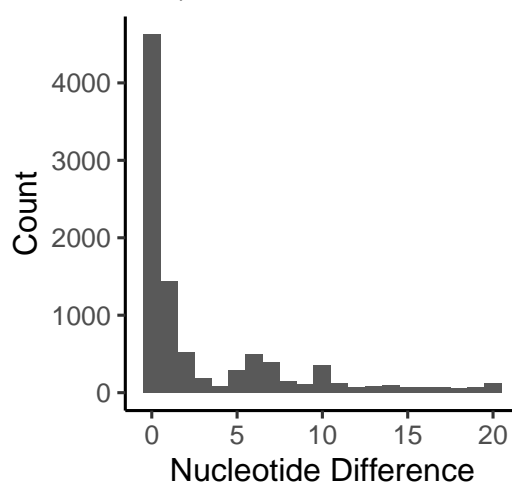
IGHV1-46*01

6261 sequences assigned
2075 (33.1%) exact matches, in which:
1988 unique CDR3
6 unique J



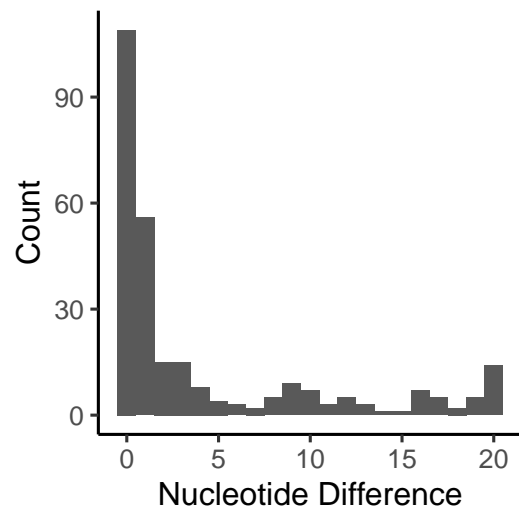
IGHV1-69*01_12_13

10024 sequences assigned
4626 (46.1%) exact matches, in which:
4516 unique CDR3
6 unique J



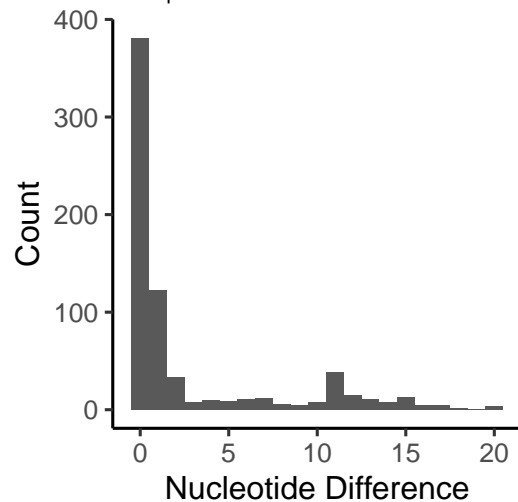
IGHV2-5*01

307 sequences assigned
109 (35.5%) exact matches, in which:
106 unique CDR3
6 unique J



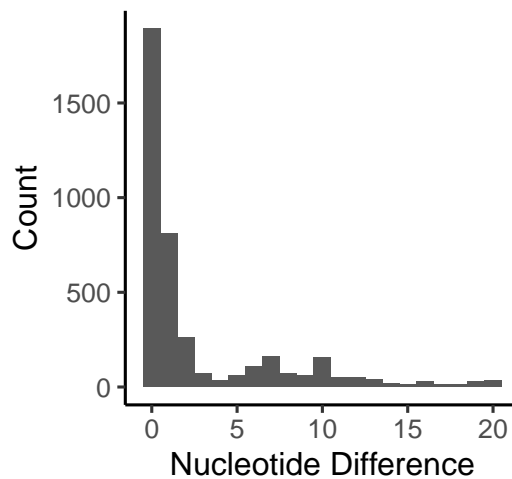
IGHV1-58*01_03

742 sequences assigned
381 (51.3%) exact matches, in which:
371 unique CDR3
6 unique J



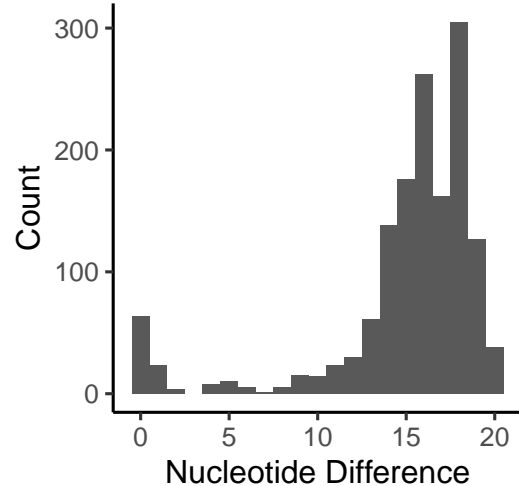
IGHV1-69*04_09

4228 sequences assigned
1892 (44.7%) exact matches, in which:
1854 unique CDR3
6 unique J



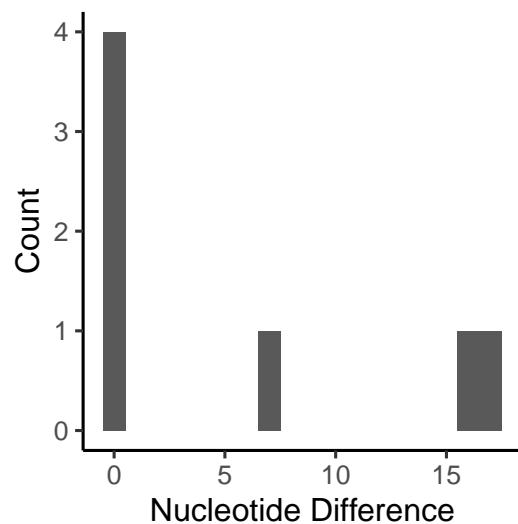
IGHV2-5*02

2365 sequences assigned
64 (2.7%) exact matches, in which:
63 unique CDR3
6 unique J



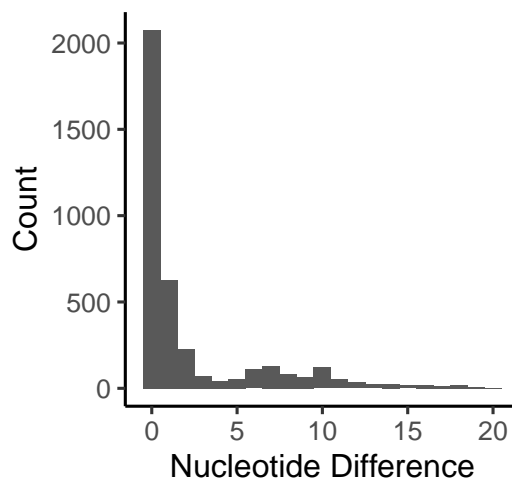
IGHV1-69-2*01

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



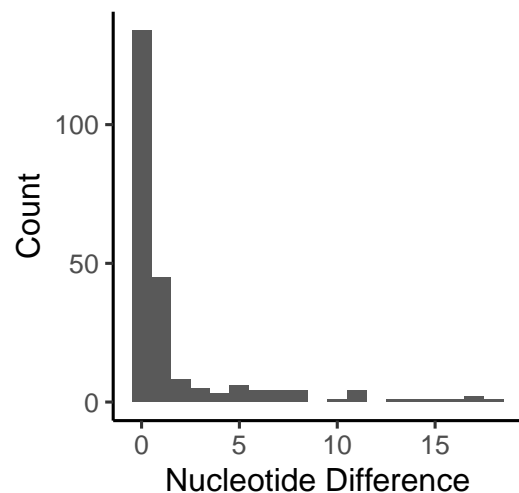
IGHV1-69*06_14

3965 sequences assigned
2075 (52.3%) exact matches, in which:
2035 unique CDR3
6 unique J



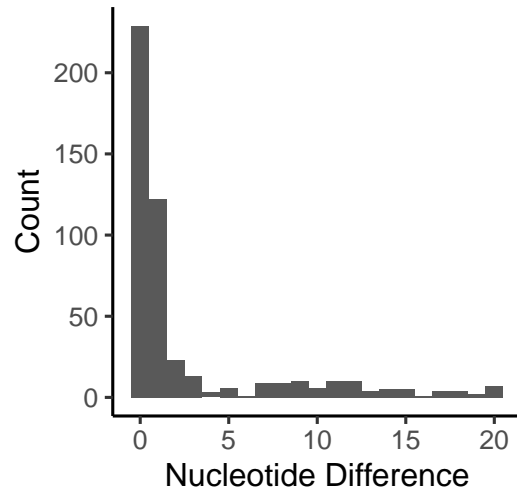
IGHV2-26*01

232 sequences assigned
134 (57.8%) exact matches, in which:
132 unique CDR3
6 unique J



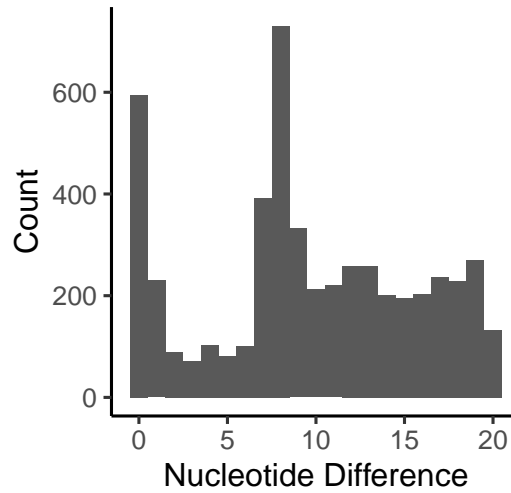
IGHV2-70*01

562 sequences assigned
229 (40.7%) exact matches, in which:
224 unique CDR3
6 unique J



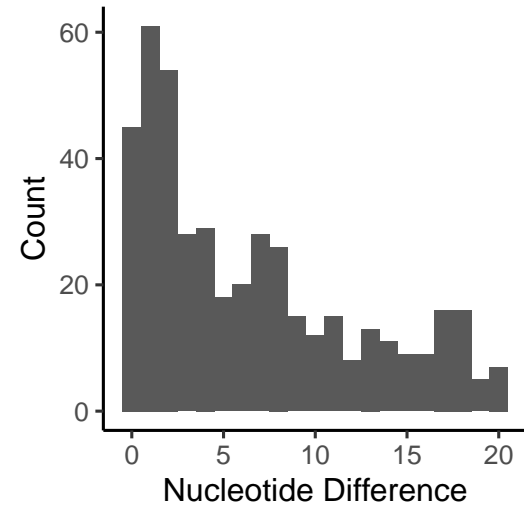
IGHV3-7*03

5576 sequences assigned
594 (10.7%) exact matches, in which:
509 unique CDR3
6 unique J



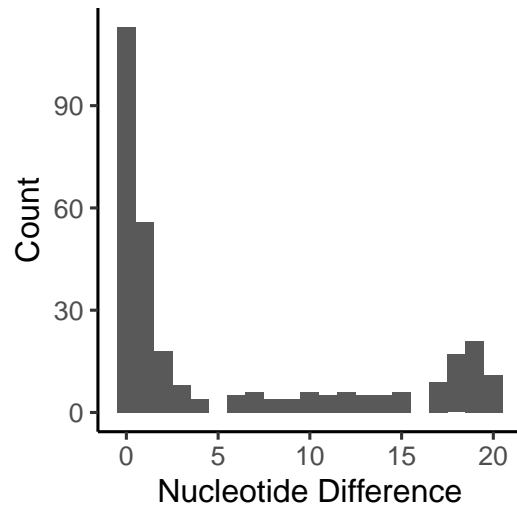
IGHV3-11*04

482 sequences assigned
45 (9.3%) exact matches, in which:
45 unique CDR3
5 unique J



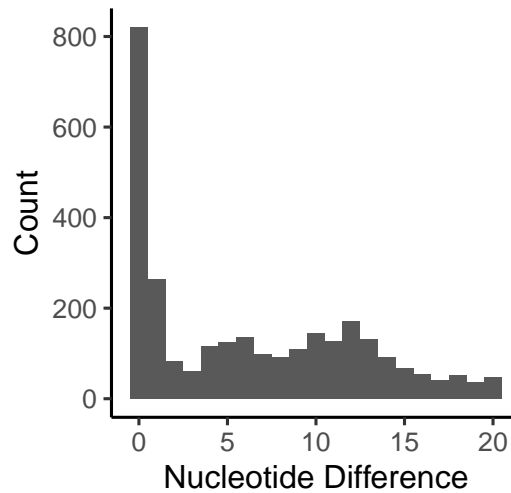
IGHV2-70*04

582 sequences assigned
113 (19.4%) exact matches, in which:
109 unique CDR3
5 unique J



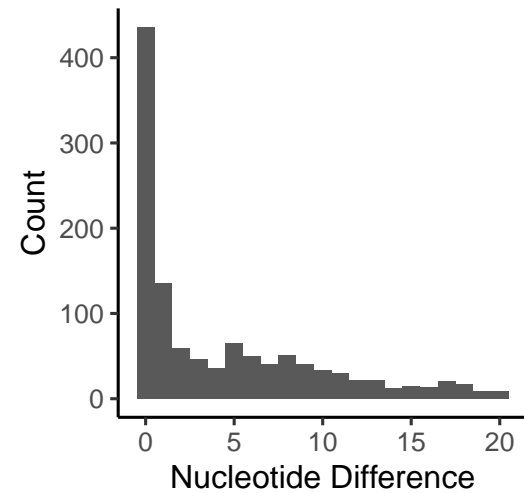
IGHV3-9*01

3438 sequences assigned
821 (23.9%) exact matches, in which:
707 unique CDR3
6 unique J



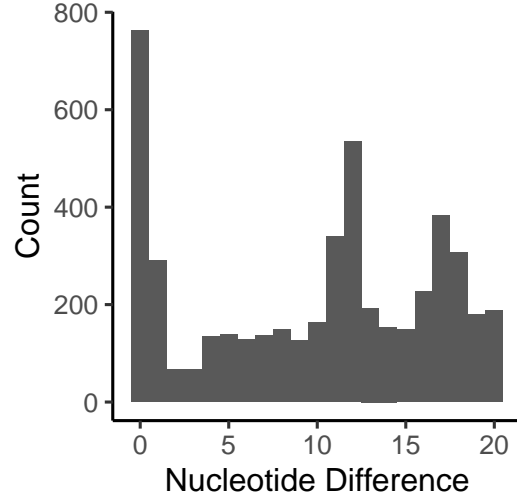
IGHV3-11*06

1396 sequences assigned
436 (31.2%) exact matches, in which:
381 unique CDR3
6 unique J



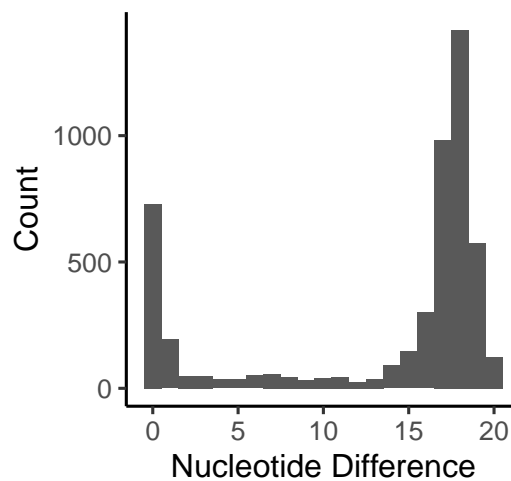
IGHV3-7*01

5454 sequences assigned
763 (14%) exact matches, in which:
686 unique CDR3
6 unique J



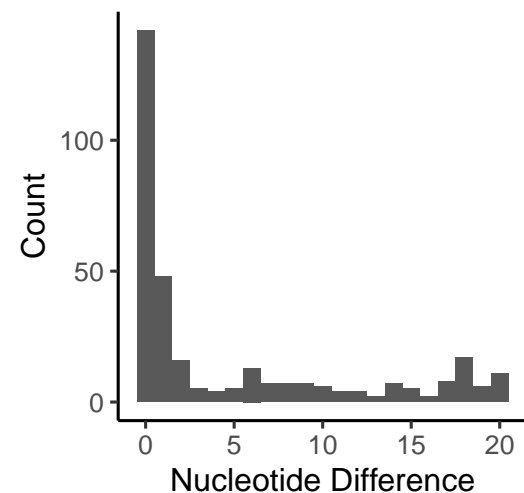
IGHV3-11*01

5885 sequences assigned
730 (12.4%) exact matches, in which:
646 unique CDR3
6 unique J



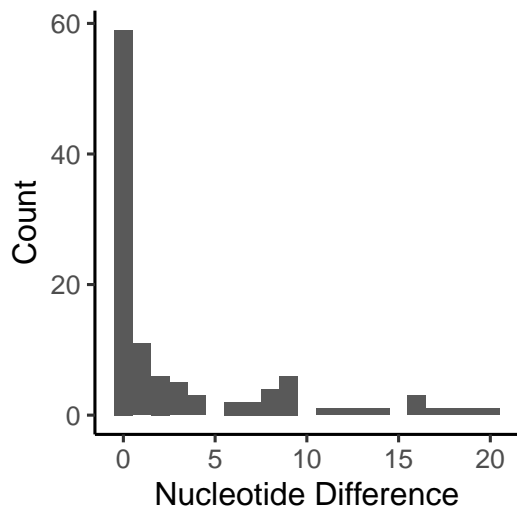
IGHV3-13*01

342 sequences assigned
142 (41.5%) exact matches, in which:
126 unique CDR3
6 unique J



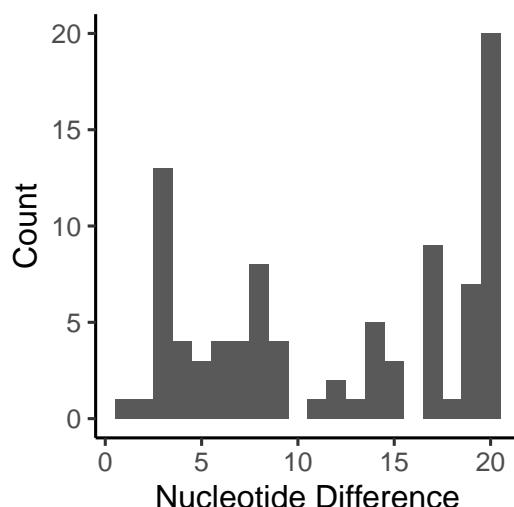
IGHV3-13*05

117 sequences assigned
59 (50.4%) exact matches, in which:
47 unique CDR3
5 unique J



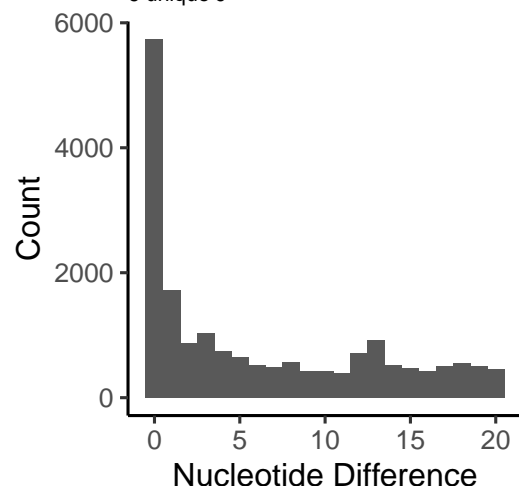
IGHV3-20*03_04

423 sequences assigned
No exact matches.



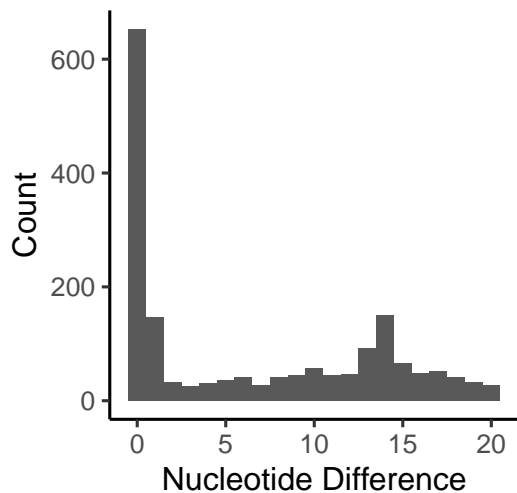
IGHV3-23*01_04

22375 sequences assigned
5734 (25.6%) exact matches, in which:
4804 unique CDR3
6 unique J



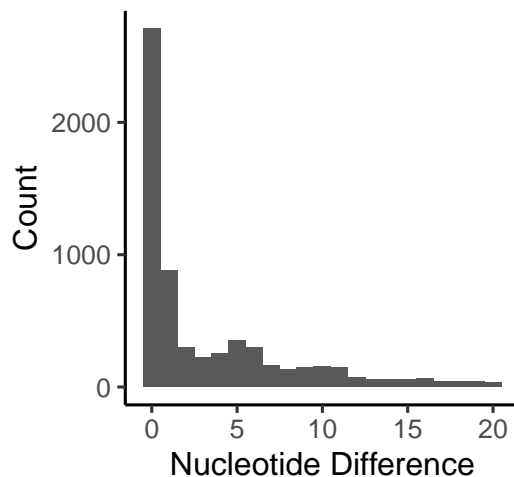
IGHV3-15*01_02

2200 sequences assigned
653 (29.7%) exact matches, in which:
572 unique CDR3
6 unique J



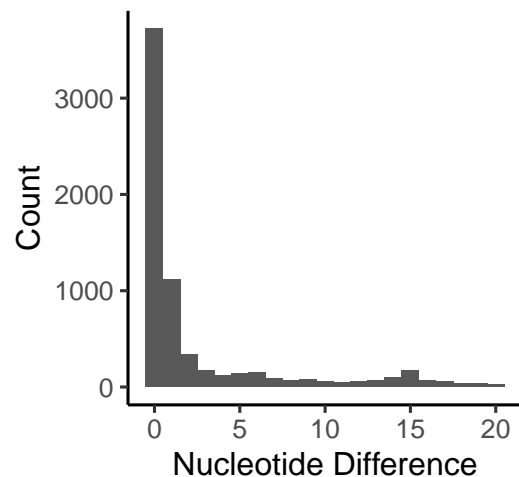
IGHV3-21*01_02

6664 sequences assigned
2708 (40.6%) exact matches, in which:
2286 unique CDR3
6 unique J



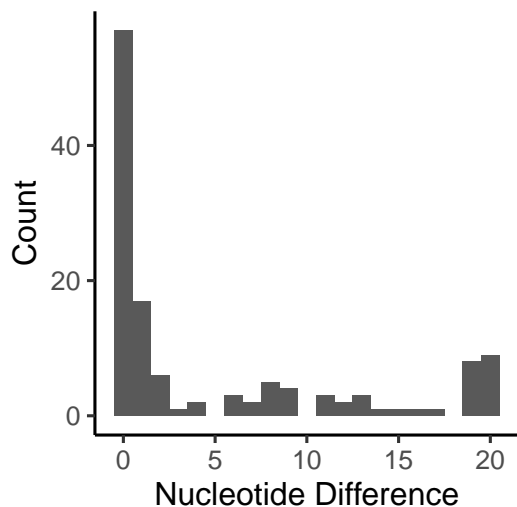
IGHV3-30-3*01

7069 sequences assigned
3721 (52.6%) exact matches, in which:
3216 unique CDR3
6 unique J



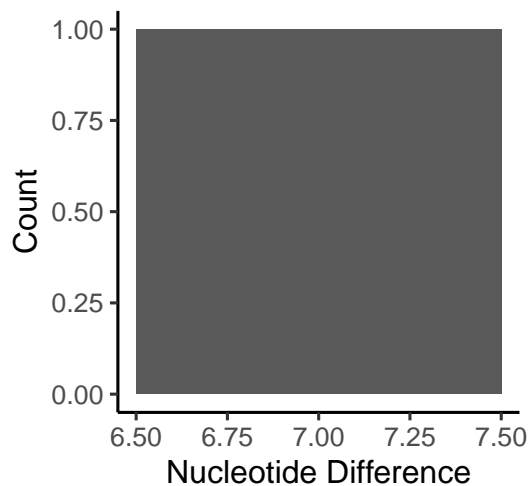
IGHV3-20*01_02

139 sequences assigned
57 (41%) exact matches, in which:
52 unique CDR3
5 unique J



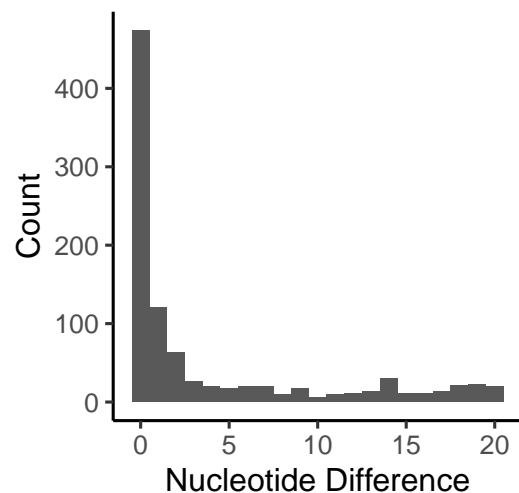
IGHV3-22*01_02

1 sequences assigned
No exact matches.



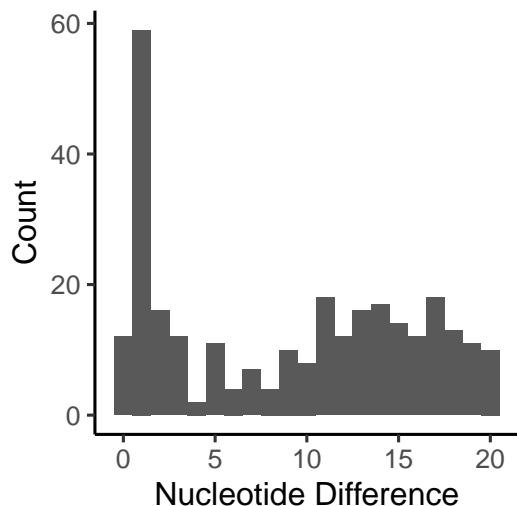
IGHV3-30*03

1103 sequences assigned
474 (43%) exact matches, in which:
461 unique CDR3
6 unique J



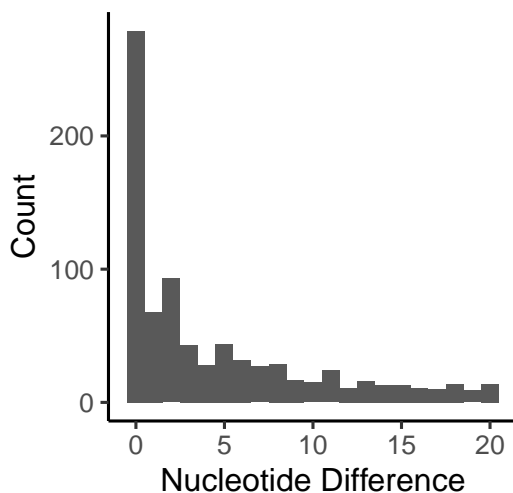
IGHV3-30*04

473 sequences assigned
12 (2.5%) exact matches, in which:
12 unique CDR3
4 unique J



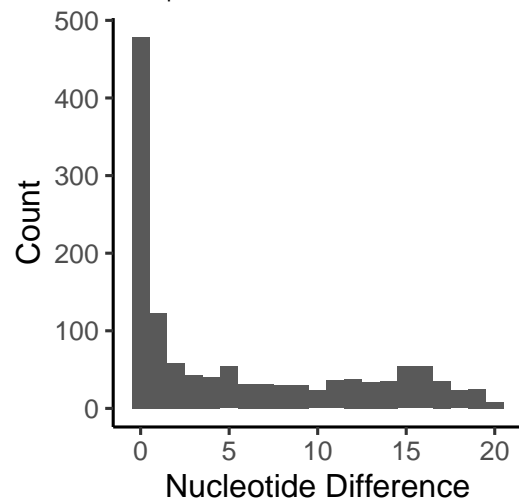
IGHV3-33*08

879 sequences assigned
279 (31.7%) exact matches, in which:
273 unique CDR3
6 unique J



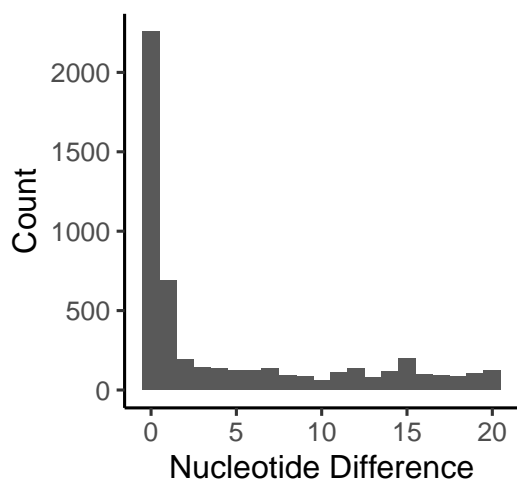
IGHV3-48*02

1684 sequences assigned
479 (28.4%) exact matches, in which:
406 unique CDR3
6 unique J



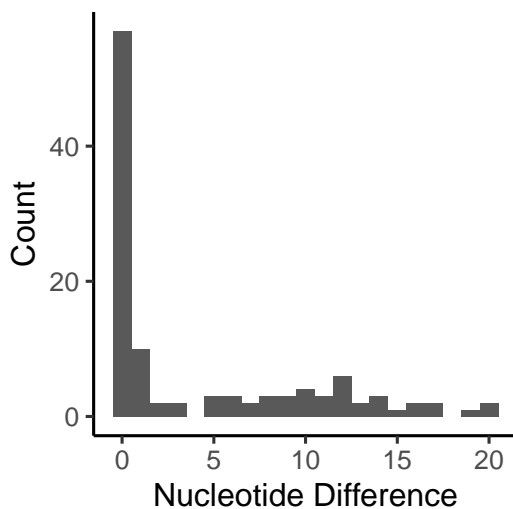
IGHV3-30*18

11432 sequences assigned
2256 (19.7%) exact matches, in which:
1988 unique CDR3
6 unique J



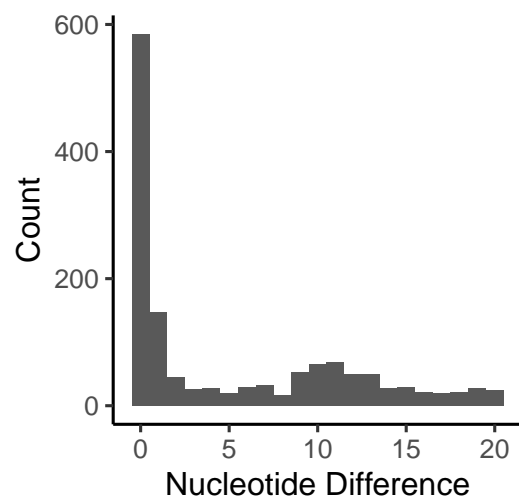
IGHV3-43*01

118 sequences assigned
57 (48.3%) exact matches, in which:
50 unique CDR3
5 unique J



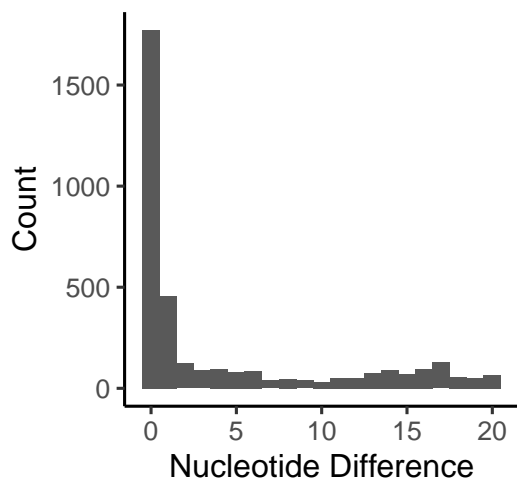
IGHV3-48*03

1485 sequences assigned
585 (39.4%) exact matches, in which:
511 unique CDR3
6 unique J



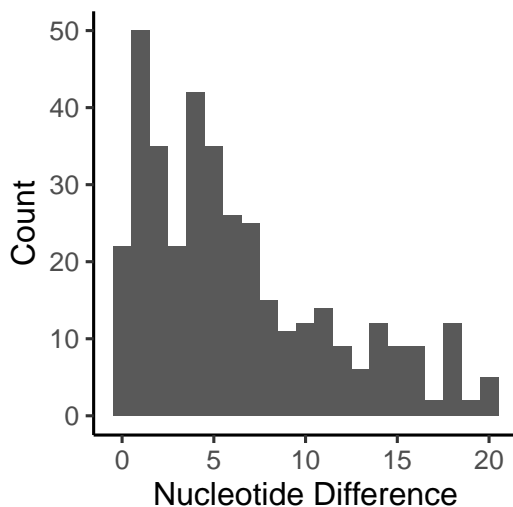
IGHV3-33*01

3946 sequences assigned
1772 (44.9%) exact matches, in which:
1585 unique CDR3
6 unique J



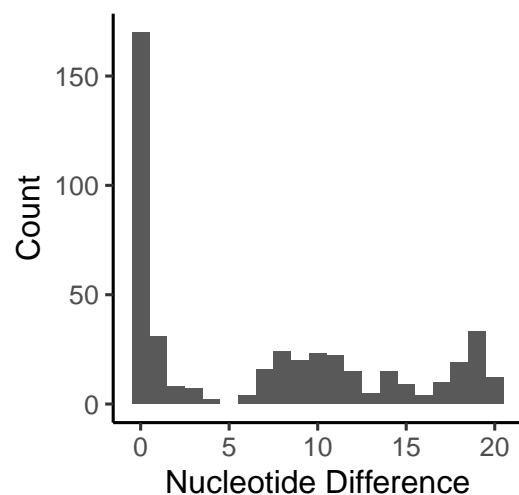
IGHV3-48*01

423 sequences assigned
22 (5.2%) exact matches, in which:
22 unique CDR3
5 unique J



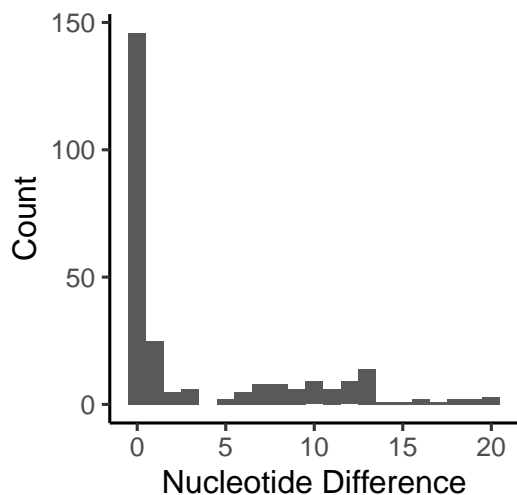
IGHV3-49*04

544 sequences assigned
170 (31.2%) exact matches, in which:
148 unique CDR3
5 unique J



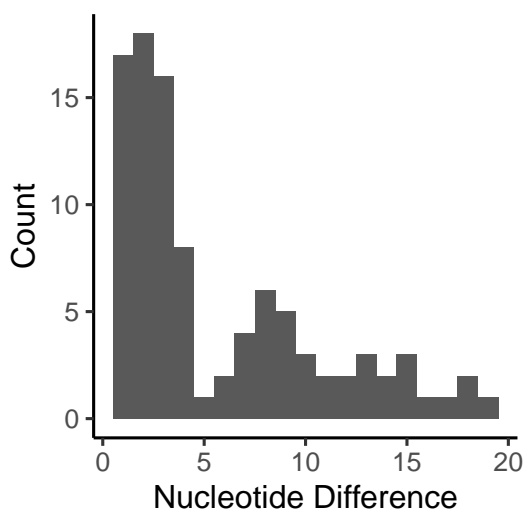
IGHV3-49*03_05

283 sequences assigned
146 (51.6%) exact matches, in which:
129 unique CDR3
6 unique J



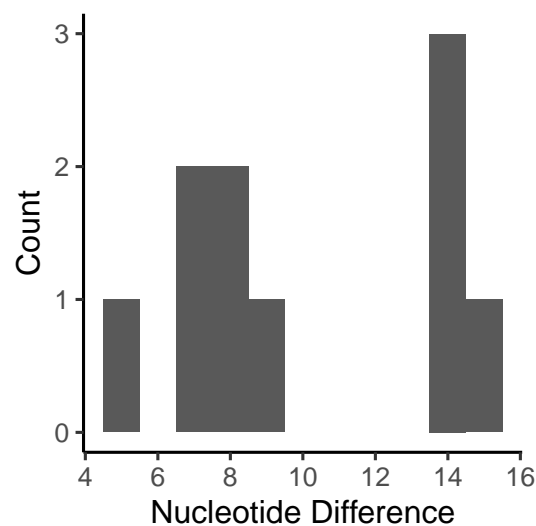
IGHV3-64*04

102 sequences assigned
No exact matches.



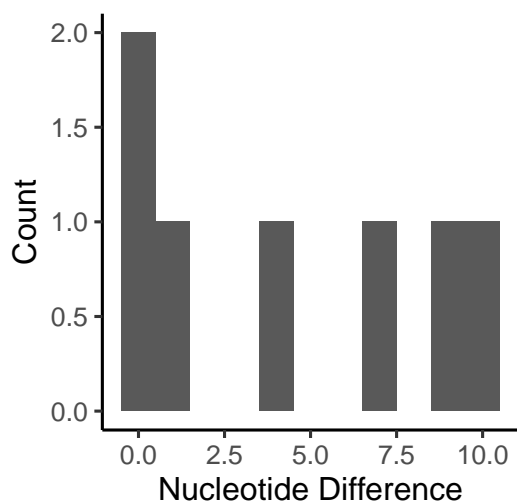
IGHV3-66*02

14 sequences assigned
No exact matches.



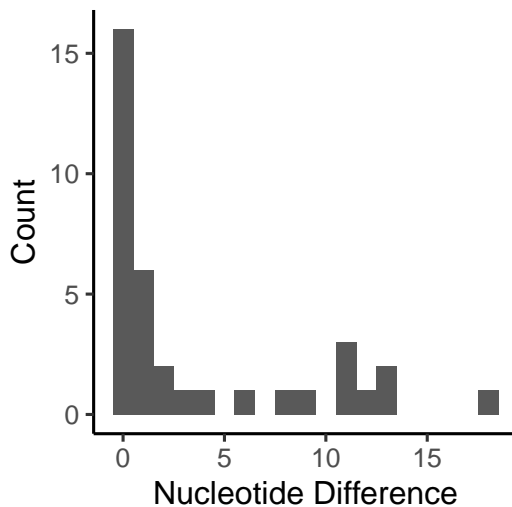
IGHV3-52*01_03

7 sequences assigned
2 (28.6%) exact matches, in which:
2 unique CDR3
2 unique J



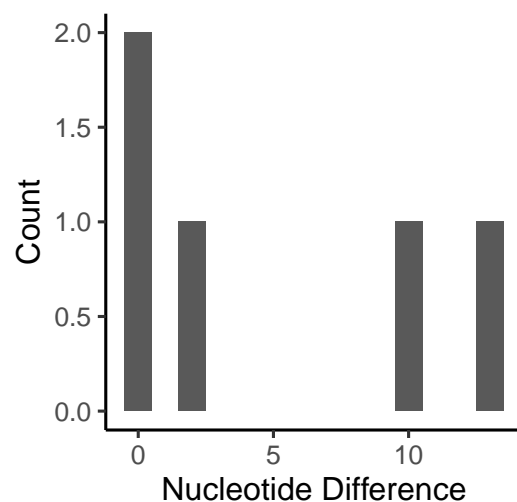
IGHV3-64*02_07

52 sequences assigned
16 (30.8%) exact matches, in which:
15 unique CDR3
3 unique J



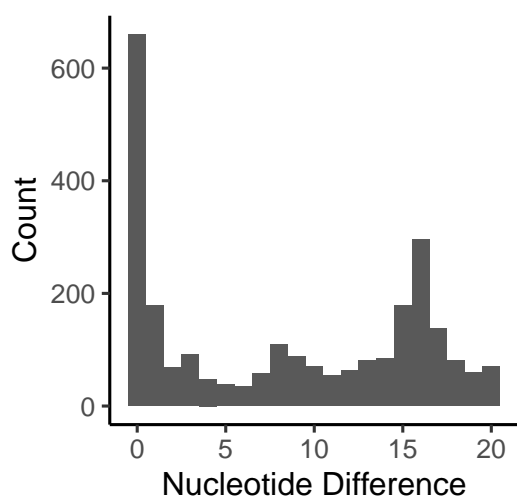
IGHV3-66*03

5 sequences assigned
2 (40%) exact matches, in which:
2 unique CDR3
2 unique J



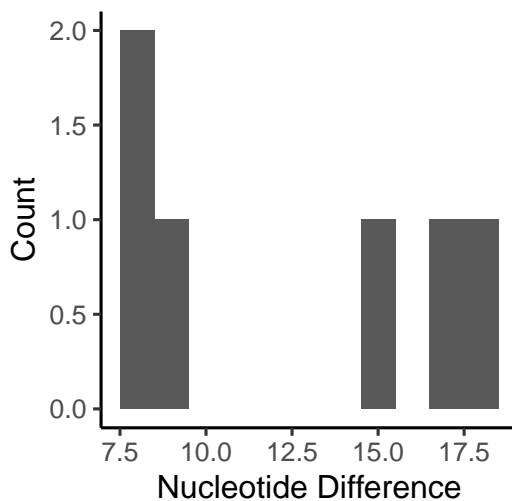
IGHV3-53*01_02

3616 sequences assigned
660 (18.3%) exact matches, in which:
579 unique CDR3
6 unique J



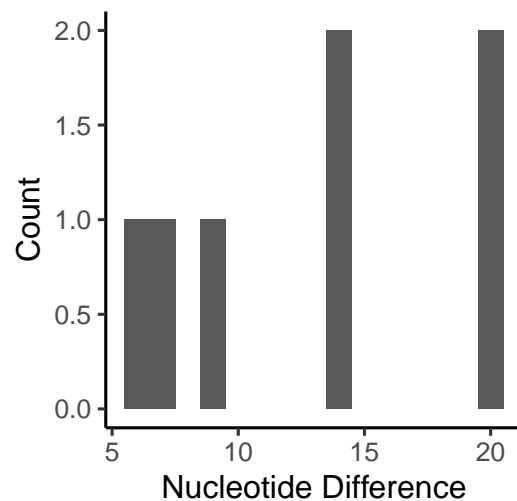
IGHV3-66*01

9 sequences assigned
No exact matches.



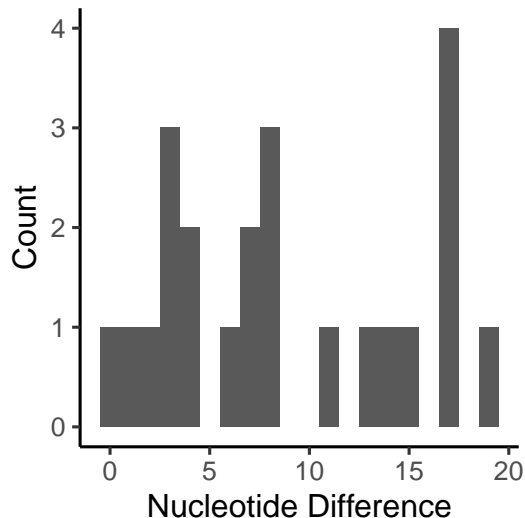
IGHV3-66*04

17 sequences assigned
No exact matches.



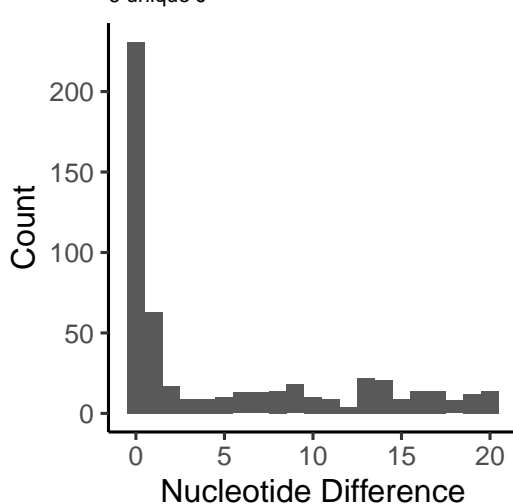
IGHV3-69-1*01

35 sequences assigned
1 (2.9%) exact matches, in which:
1 unique CDR3
1 unique J



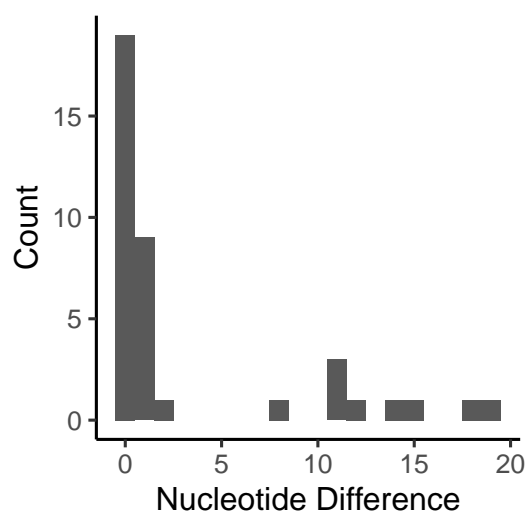
IGHV3-73*01_02

558 sequences assigned
231 (41.4%) exact matches, in which:
206 unique CDR3
6 unique J



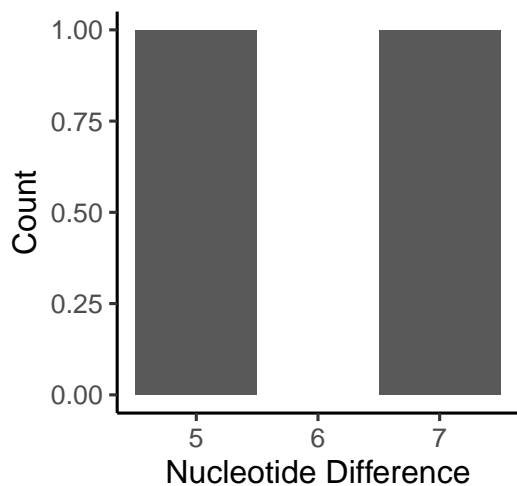
IGHV3-43D*04

58 sequences assigned
19 (32.8%) exact matches, in which:
16 unique CDR3
4 unique J



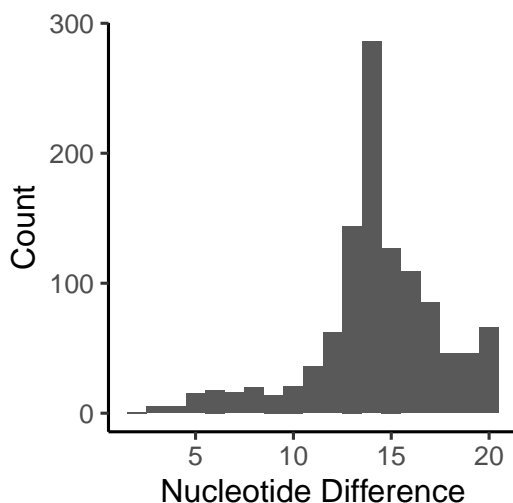
IGHV3-69-1*02

3 sequences assigned
No exact matches.



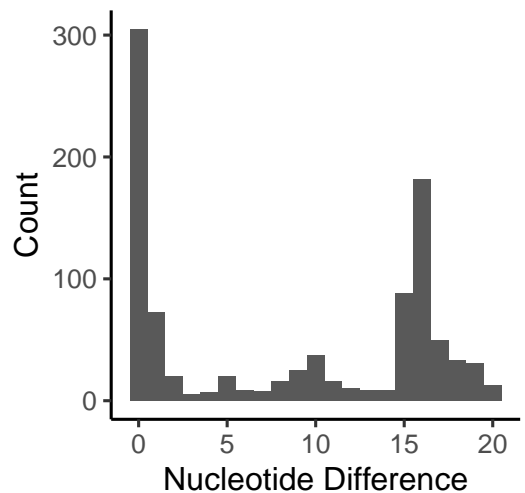
IGHV3-74*03

1556 sequences assigned
No exact matches.



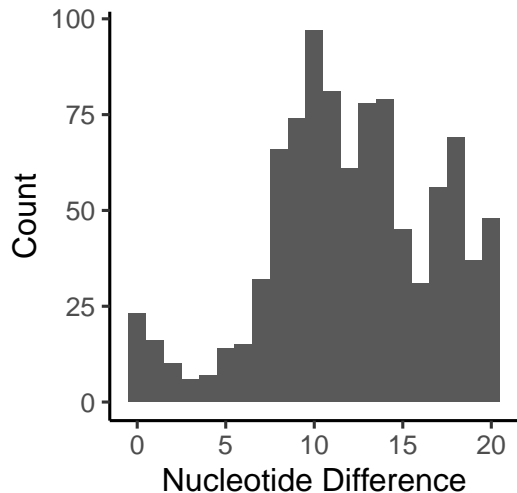
IGHV3-64D*06

1051 sequences assigned
305 (29%) exact matches, in which:
249 unique CDR3
6 unique J



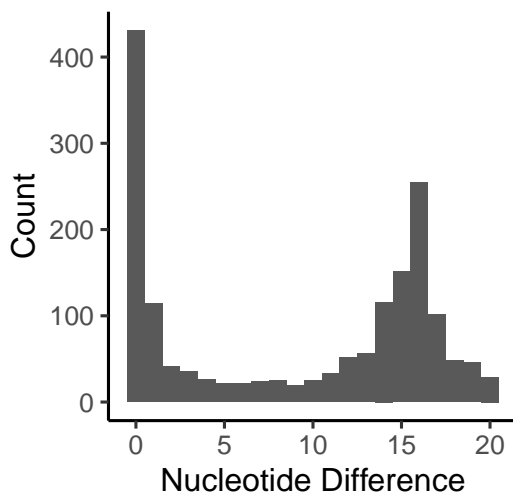
IGHV3-72*01

1065 sequences assigned
23 (2.2%) exact matches, in which:
21 unique CDR3
4 unique J



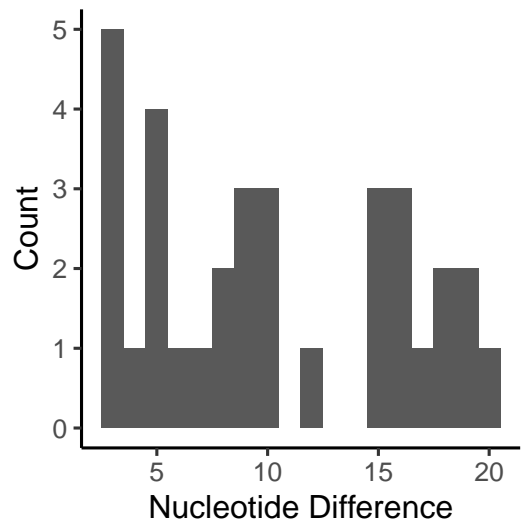
IGHV3-74*01_02

1916 sequences assigned
431 (22.5%) exact matches, in which:
364 unique CDR3
6 unique J



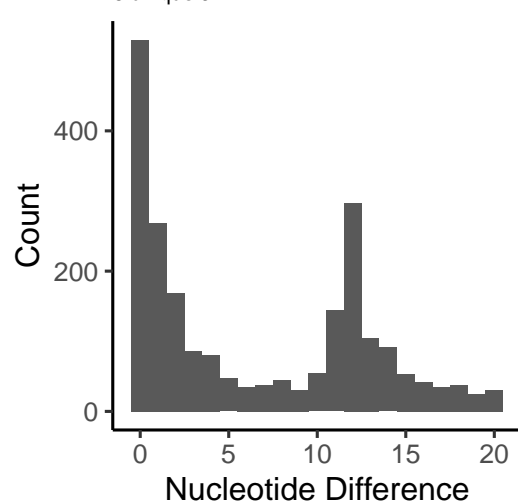
IGHV3-NL1*01

62 sequences assigned
No exact matches.



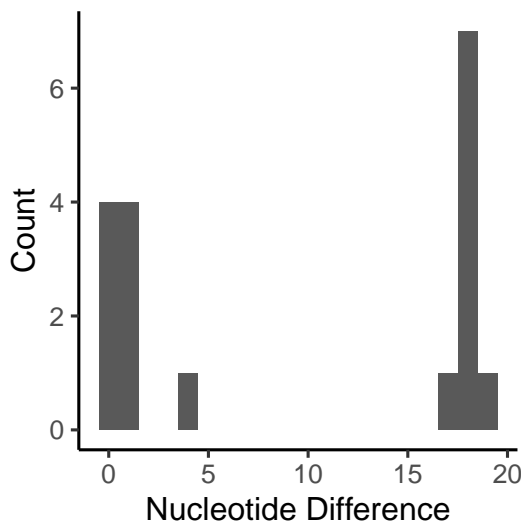
IGHV4-4*07

2492 sequences assigned
530 (21.3%) exact matches, in which:
514 unique CDR3
6 unique J



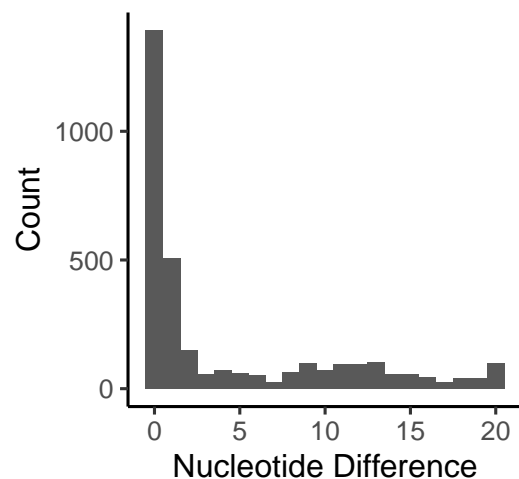
IGHV4-28*01_07

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



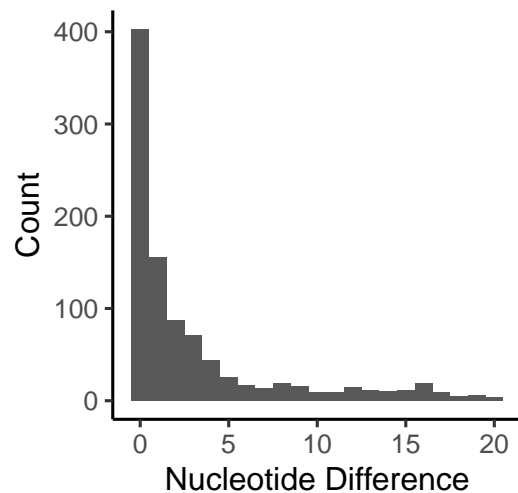
IGHV4-31*02

3827 sequences assigned
1392 (36.4%) exact matches, in which:
1351 unique CDR3
6 unique J



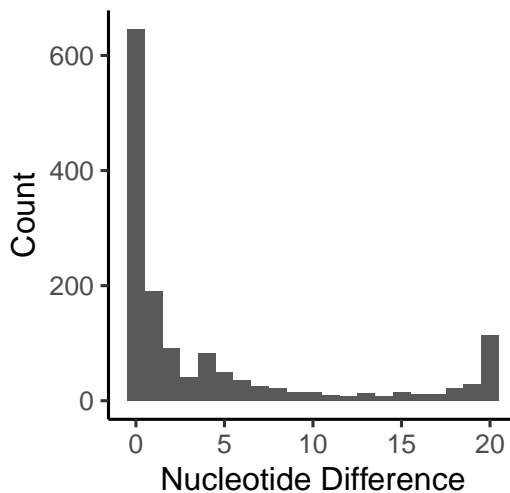
IGHV4-4*02_03

1426 sequences assigned
403 (28.3%) exact matches, in which:
387 unique CDR3
6 unique J



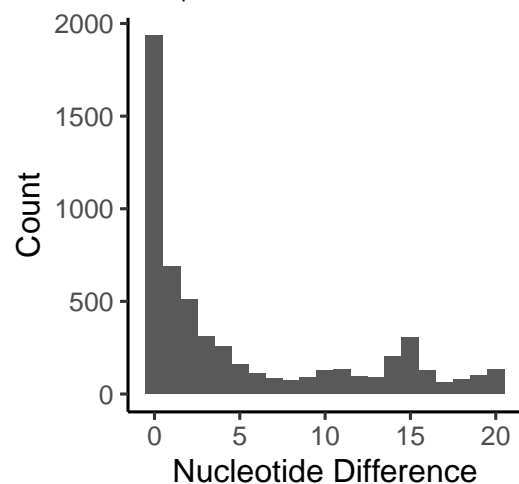
IGHV4-30-2*01

2094 sequences assigned
646 (30.9%) exact matches, in which:
601 unique CDR3
6 unique J



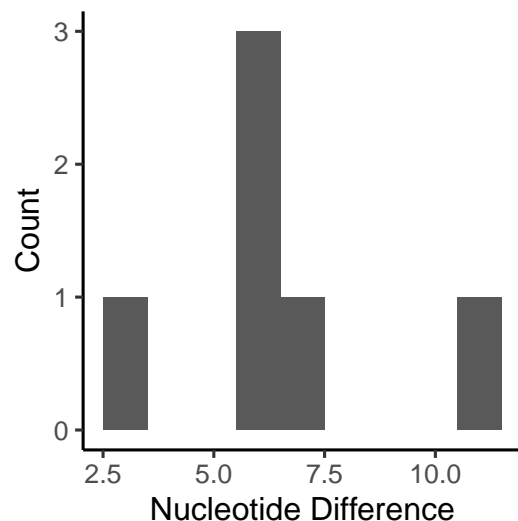
IGHV4-34*01_02

6254 sequences assigned
1934 (30.9%) exact matches, in which:
1849 unique CDR3
6 unique J



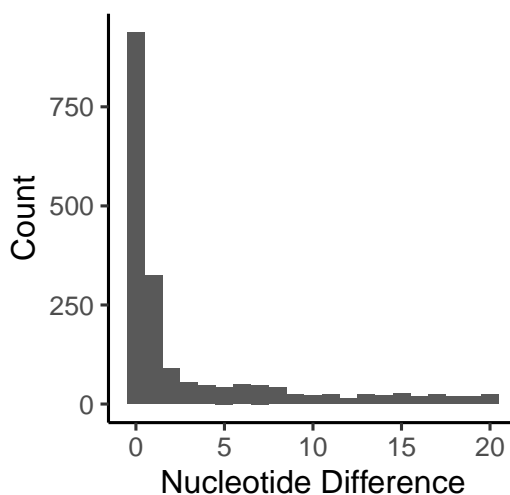
IGHV4-28*03

7 sequences assigned
No exact matches.



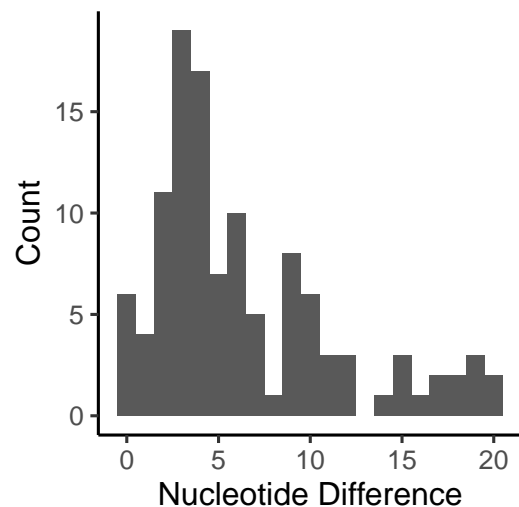
IGHV4-30-4*01

2092 sequences assigned
938 (44.8%) exact matches, in which:
907 unique CDR3
6 unique J



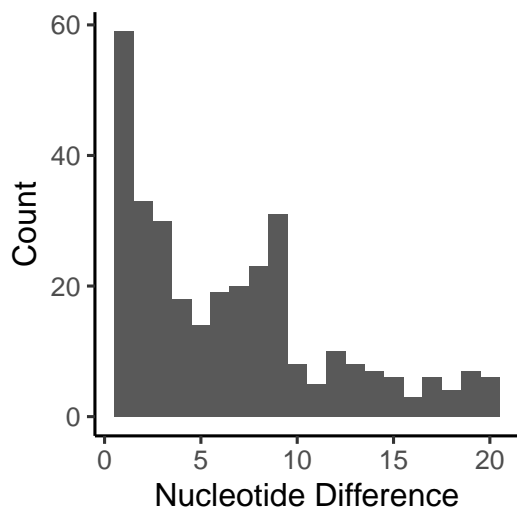
IGHV4-38-2*02

137 sequences assigned
6 (4.4%) exact matches, in which:
6 unique CDR3
3 unique J



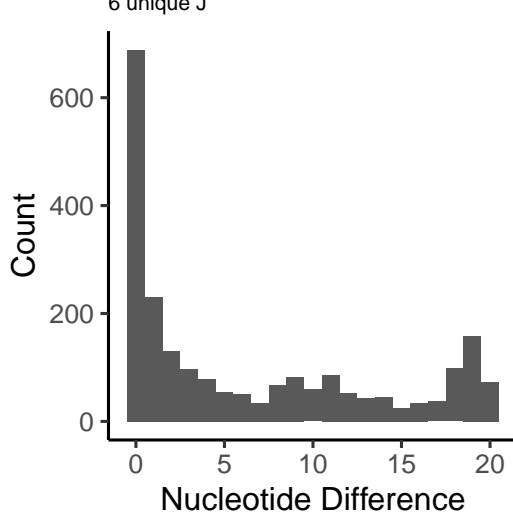
IGHV4–39*07

401 sequences assigned
No exact matches.



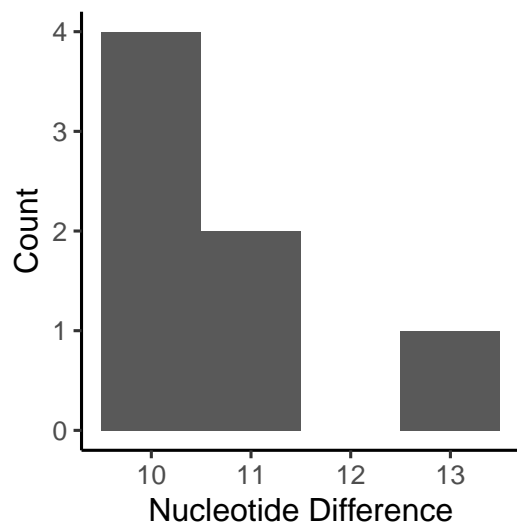
IGHV4–61*01

2486 sequences assigned
689 (27.7%) exact matches, in which:
676 unique CDR3
6 unique J



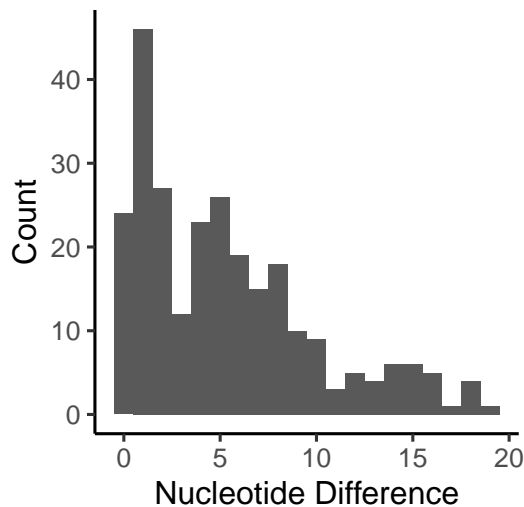
IGHV1/OR15–3*02

7 sequences assigned
No exact matches.



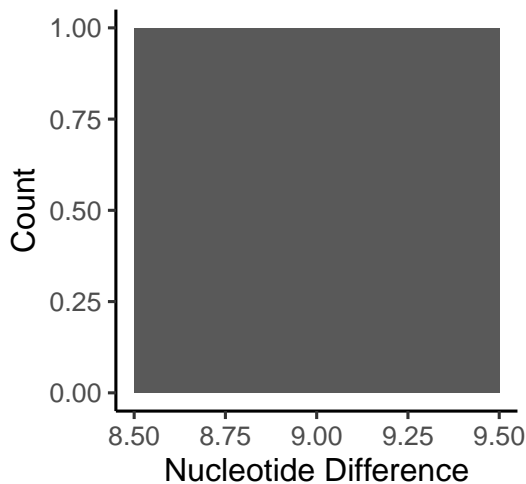
IGHV4–59*08

324 sequences assigned
24 (7.4%) exact matches, in which:
24 unique CDR3
5 unique J



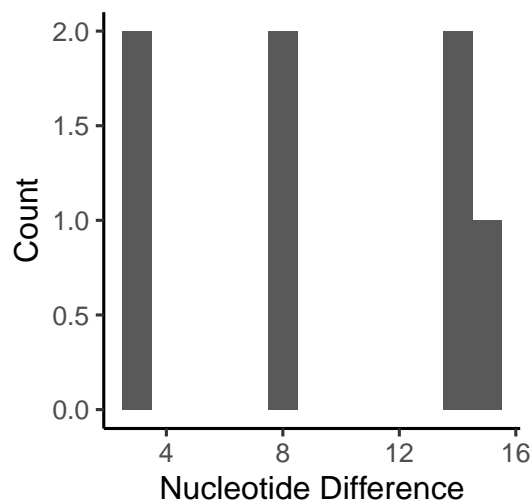
IGHV1/OR15–1*04

1 sequences assigned
No exact matches.



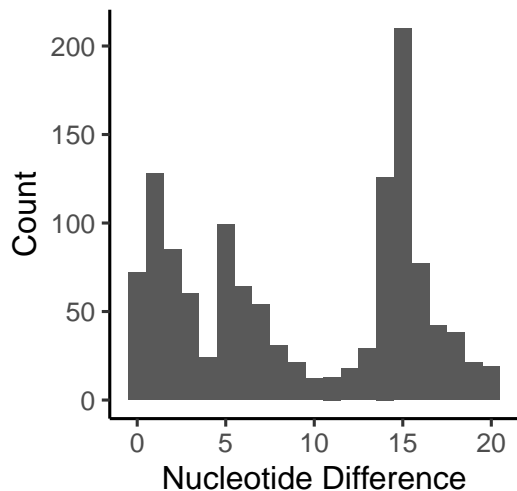
IGHV4/OR15–8*01

31 sequences assigned
No exact matches.



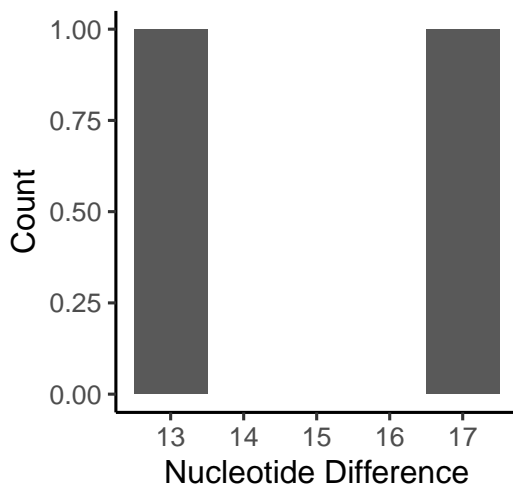
IGHV4–59*12

1599 sequences assigned
72 (4.5%) exact matches, in which:
72 unique CDR3
6 unique J



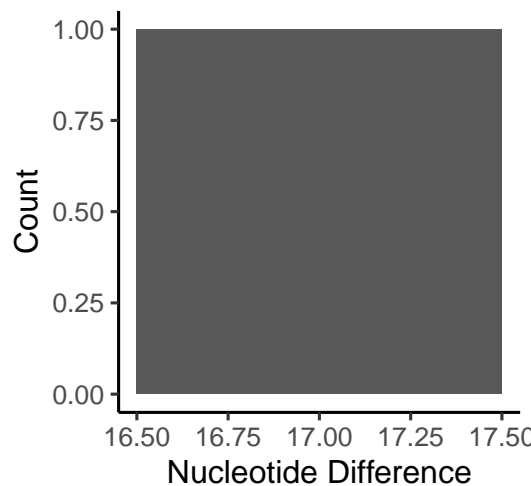
IGHV1/OR15–2*02_03

2 sequences assigned
No exact matches.



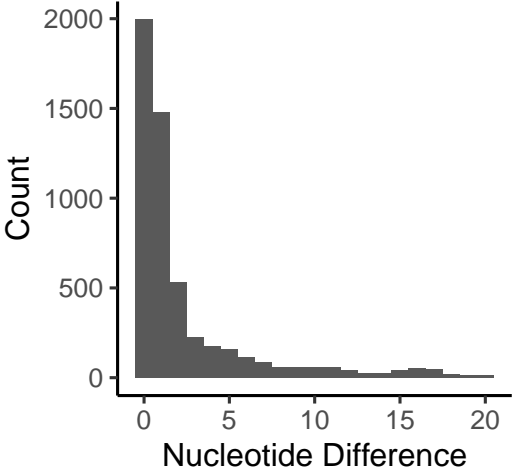
IGHV4/OR15–8*02

4 sequences assigned
No exact matches.



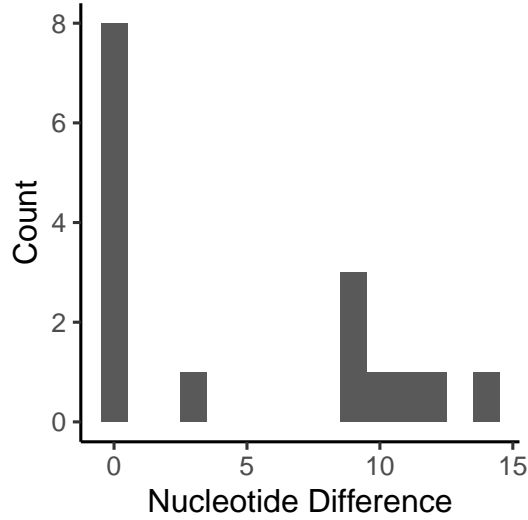
IGHV5-10-1*01_03

5428 sequences assigned
1996 (36.8%) exact matches, in which:
1685 unique CDR3
6 unique J



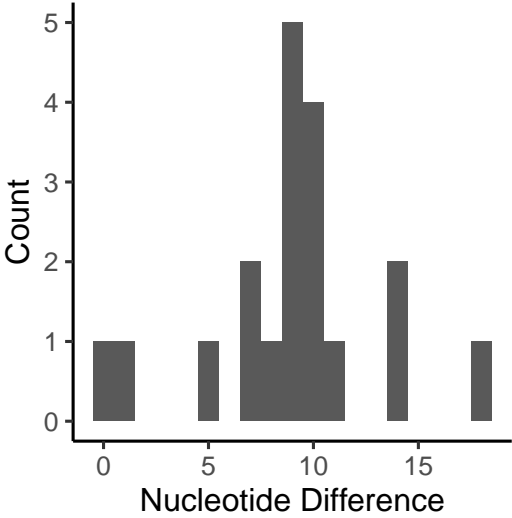
IGHV5-51*07

17 sequences assigned
8 (47.1%) exact matches, in which:
8 unique CDR3
4 unique J



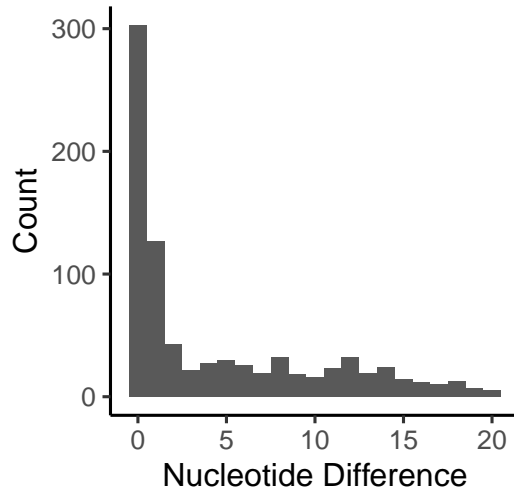
IGHV5-51*04

26 sequences assigned
1 (3.8%) exact matches, in which:
1 unique CDR3
1 unique J



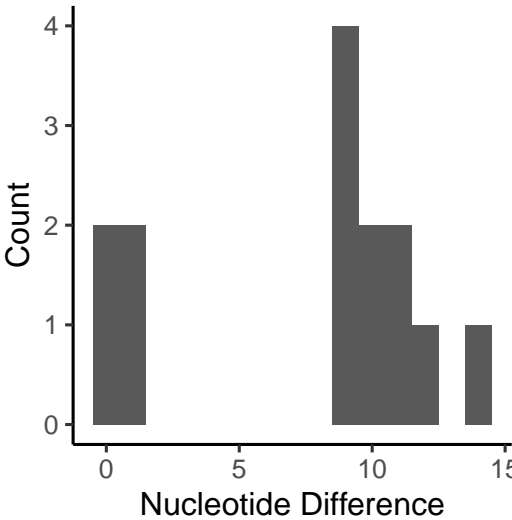
IGHV6-1*01_02

1133 sequences assigned
303 (26.7%) exact matches, in which:
292 unique CDR3
6 unique J



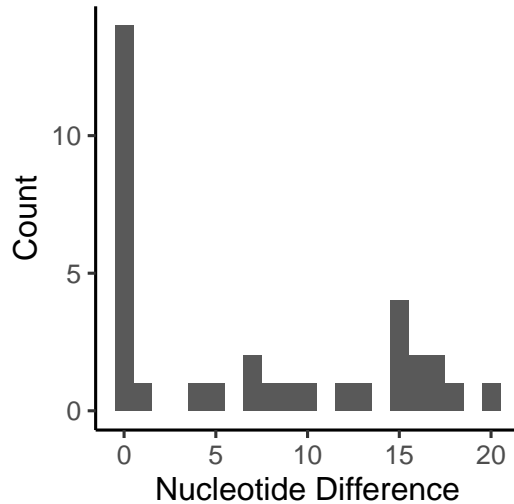
IGHV5-51*06

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



IGHV7-4-1*01

35 sequences assigned
14 (40%) exact matches, in which:
14 unique CDR3
3 unique J





Warning – no inferred sequences found.