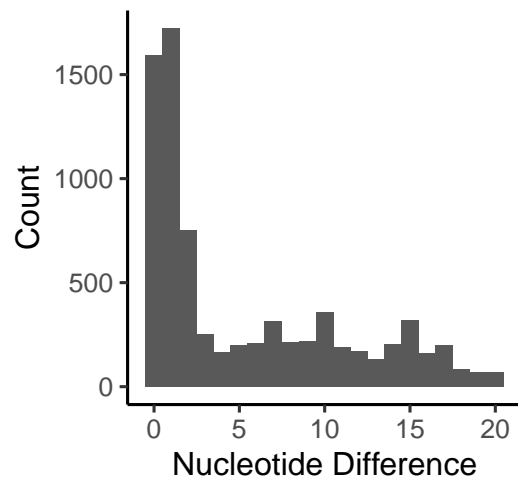


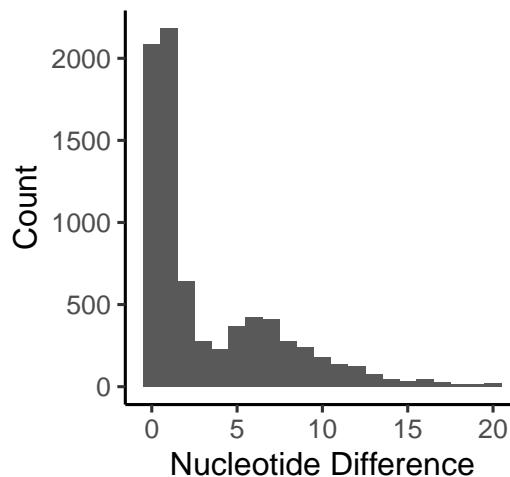
IGHV1-2*02

8542 sequences assigned
1591 (18.6%) exact matches, in which:
1307 unique CDR3
6 unique J



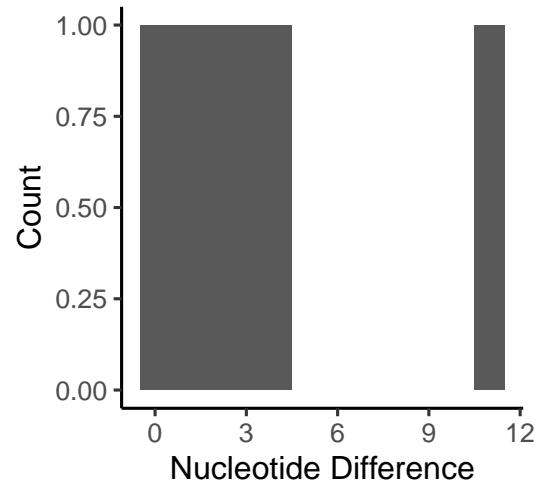
IGHV1-8*01

9048 sequences assigned
2085 (23%) exact matches, in which:
1764 unique CDR3
6 unique J



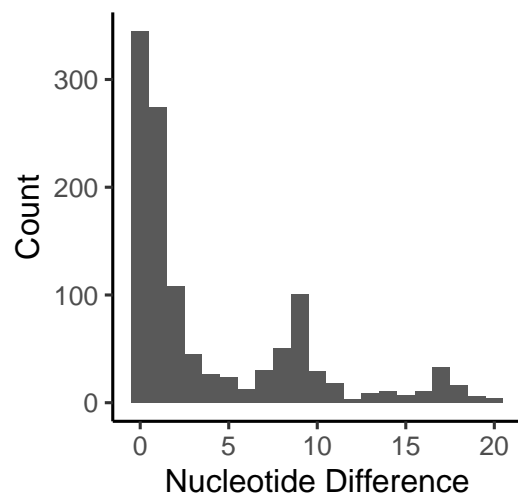
IGHV1-45*02

6 sequences assigned
1 (16.7%) exact matches, in which:
1 unique CDR3
1 unique J



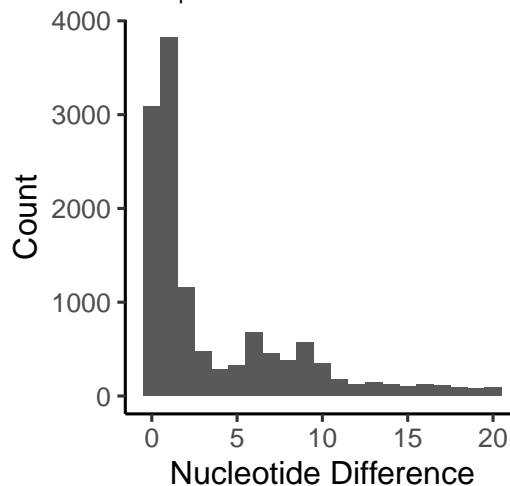
IGHV1-2*04

1169 sequences assigned
345 (29.5%) exact matches, in which:
292 unique CDR3
6 unique J



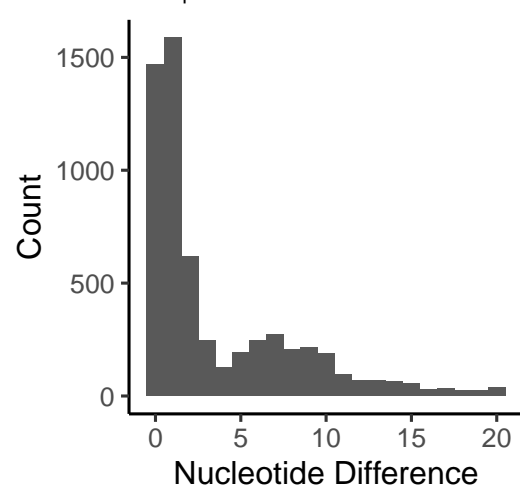
IGHV1-18*01

15542 sequences assigned
3091 (19.9%) exact matches, in which:
2531 unique CDR3
6 unique J



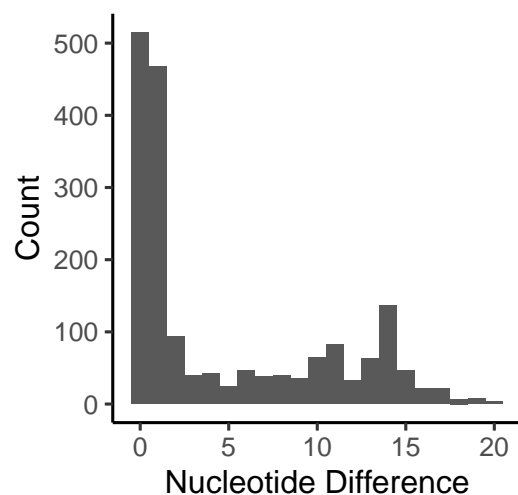
IGHV1-46*01

6424 sequences assigned
1467 (22.8%) exact matches, in which:
1264 unique CDR3
6 unique J



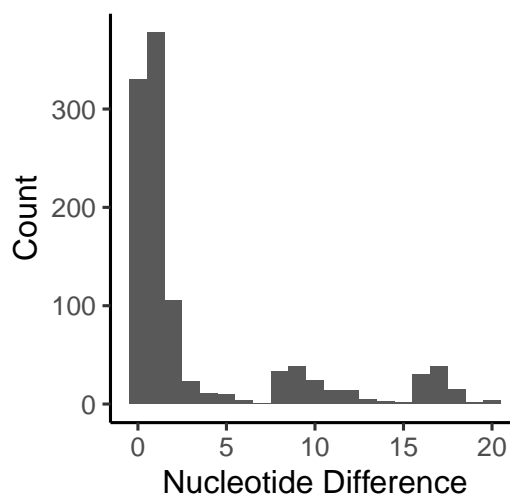
IGHV1-3*01_05

1993 sequences assigned
515 (25.8%) exact matches, in which:
422 unique CDR3
6 unique J



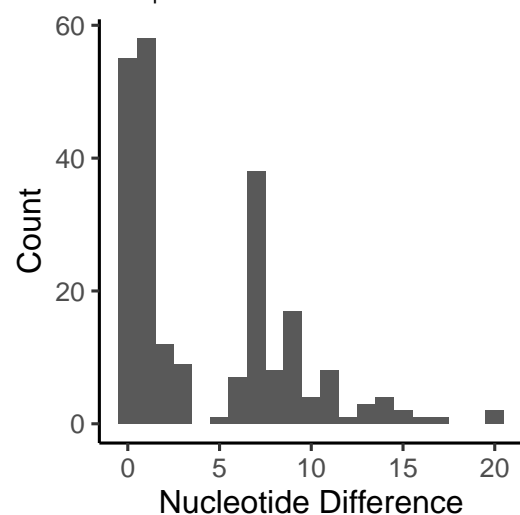
IGHV1-24*01

1129 sequences assigned
330 (29.2%) exact matches, in which:
273 unique CDR3
6 unique J



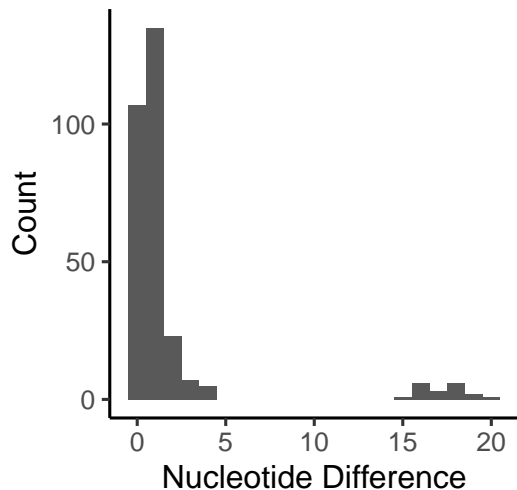
IGHV1-58*02

253 sequences assigned
55 (21.7%) exact matches, in which:
42 unique CDR3
5 unique J



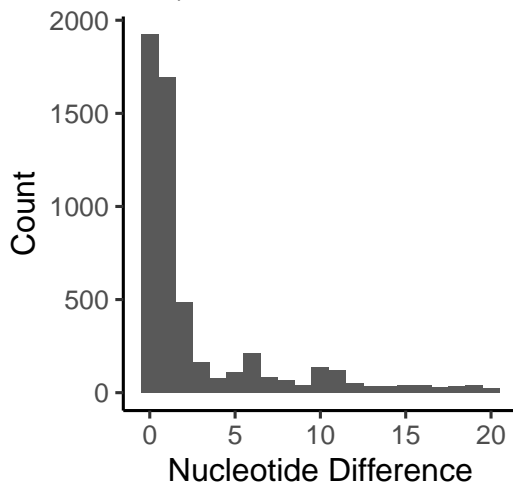
IGHV1–58*01_03

378 sequences assigned
107 (28.3%) exact matches, in which:
96 unique CDR3
5 unique J



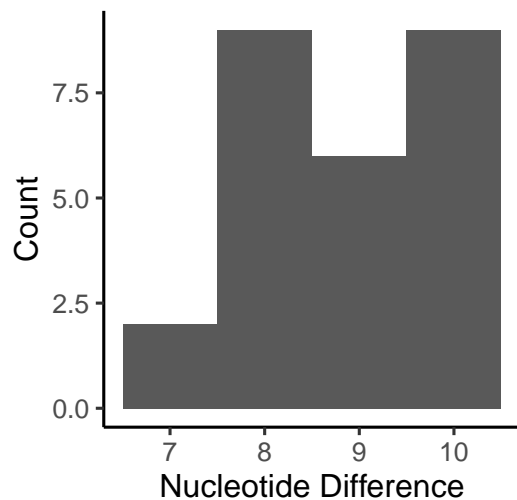
IGHV1–69*01_12_13

5583 sequences assigned
1924 (34.5%) exact matches, in which:
1672 unique CDR3
6 unique J



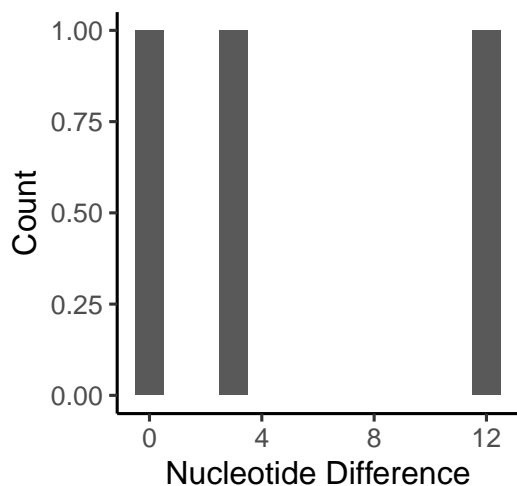
IGHV1–NL1*01

26 sequences assigned
No exact matches.



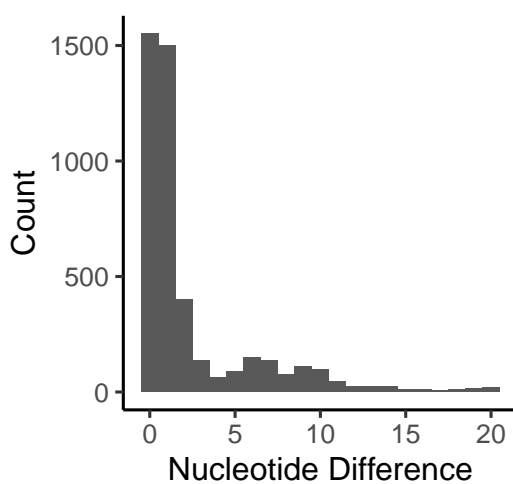
IGHV1–68*02_03

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



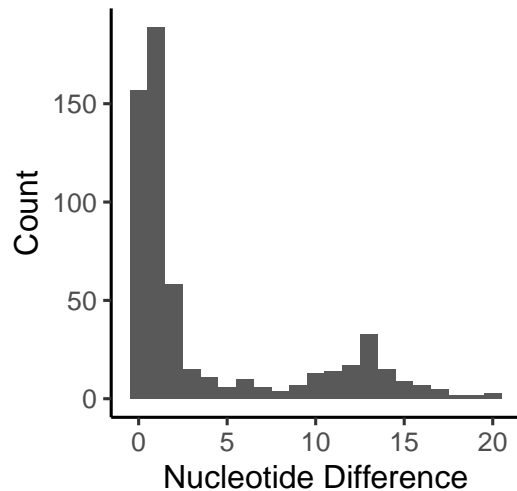
IGHV1–69*04_09

4865 sequences assigned
1551 (31.9%) exact matches, in which:
1363 unique CDR3
6 unique J



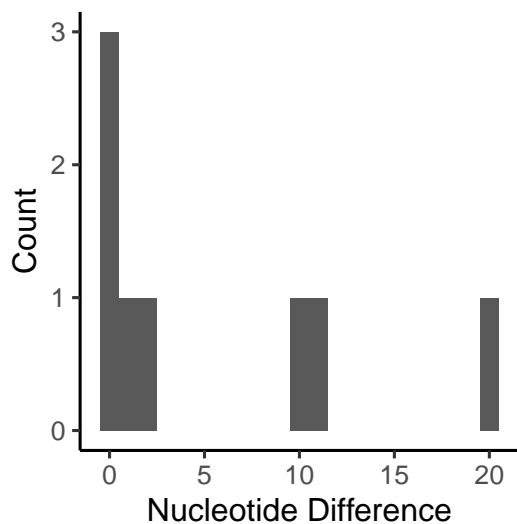
IGHV2–5*01

615 sequences assigned
157 (25.5%) exact matches, in which:
133 unique CDR3
4 unique J



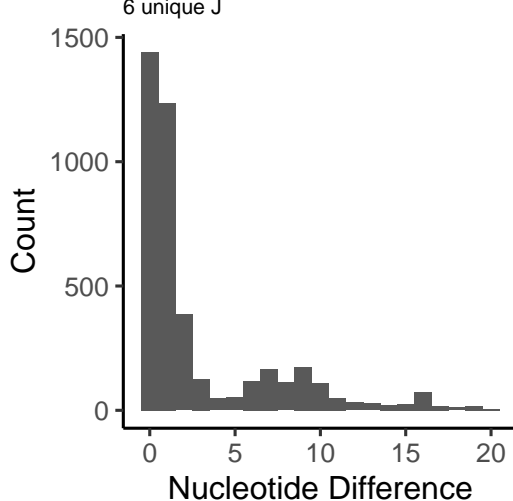
IGHV1–69–2*01

15 sequences assigned
3 (20%) exact matches, in which:
3 unique CDR3
2 unique J



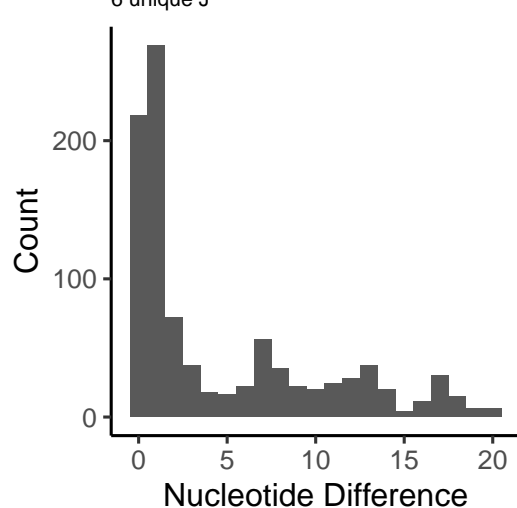
IGHV1–69*06_14

4691 sequences assigned
1441 (30.7%) exact matches, in which:
1282 unique CDR3
6 unique J



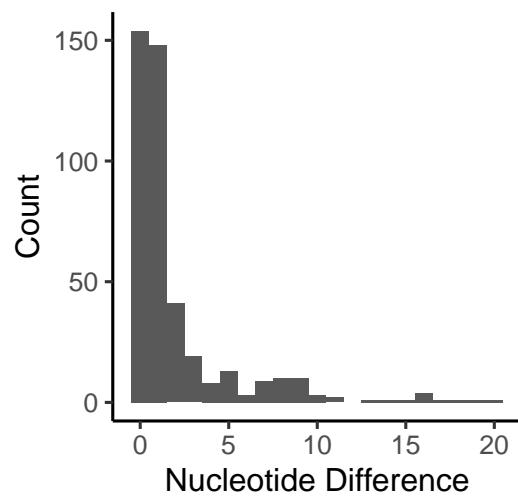
IGHV2–5*02

1030 sequences assigned
218 (21.2%) exact matches, in which:
192 unique CDR3
6 unique J



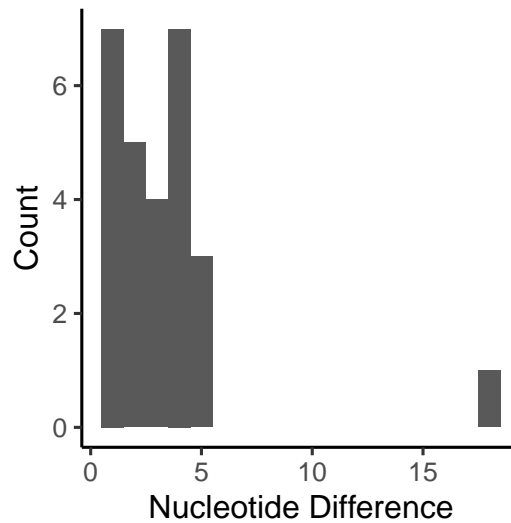
IGHV2-26*01

433 sequences assigned
154 (35.6%) exact matches, in which:
131 unique CDR3
5 unique J



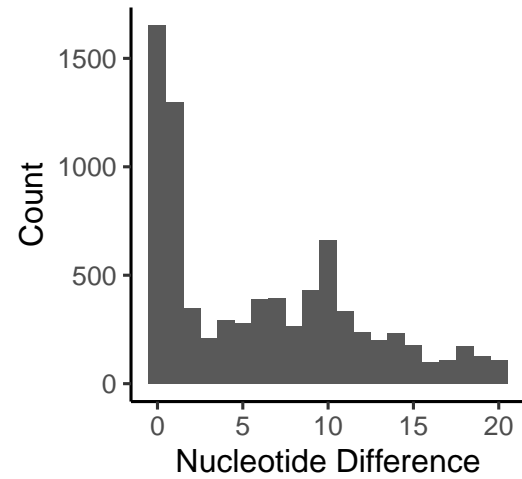
IGHV2-70*12

28 sequences assigned
No exact matches.



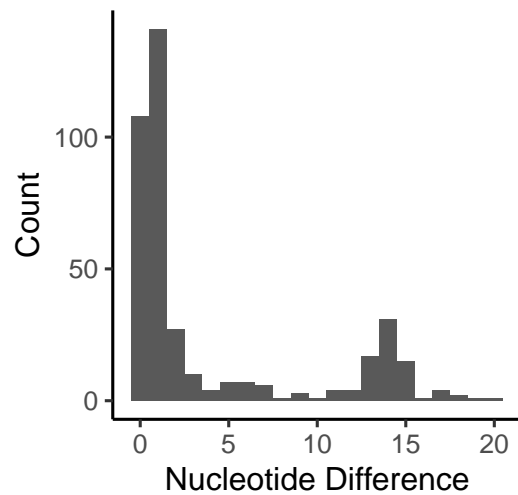
IGHV3-7*01

8722 sequences assigned
1652 (18.9%) exact matches, in which:
1092 unique CDR3
6 unique J



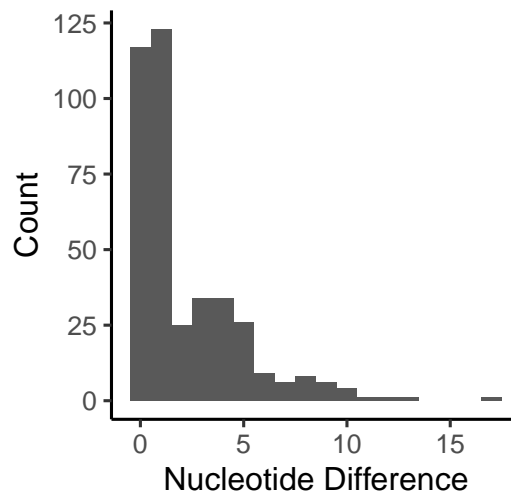
IGHV2-70*01

407 sequences assigned
108 (26.5%) exact matches, in which:
82 unique CDR3
4 unique J



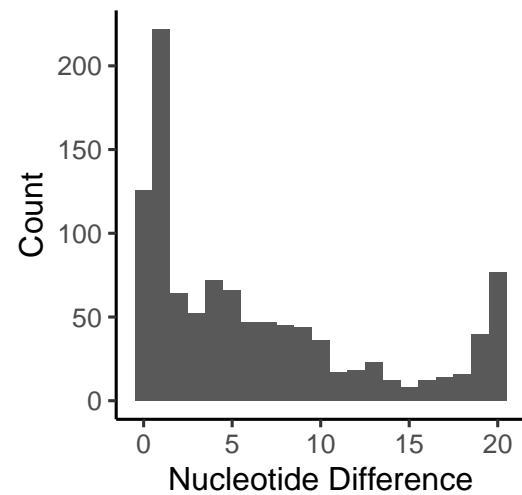
IGHV2-70*11_15

400 sequences assigned
117 (29.2%) exact matches, in which:
95 unique CDR3
4 unique J



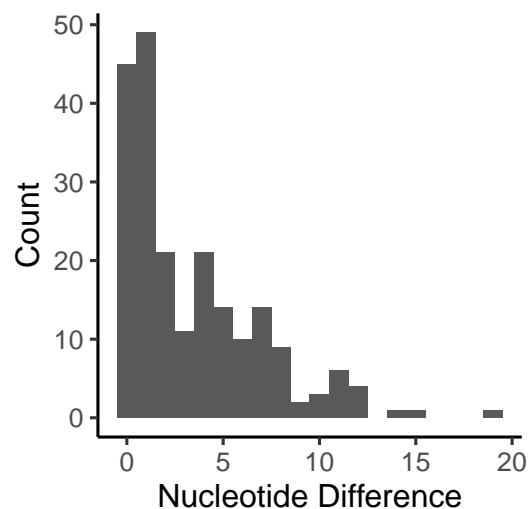
IGHV3-7*03

2054 sequences assigned
126 (6.1%) exact matches, in which:
108 unique CDR3
6 unique J



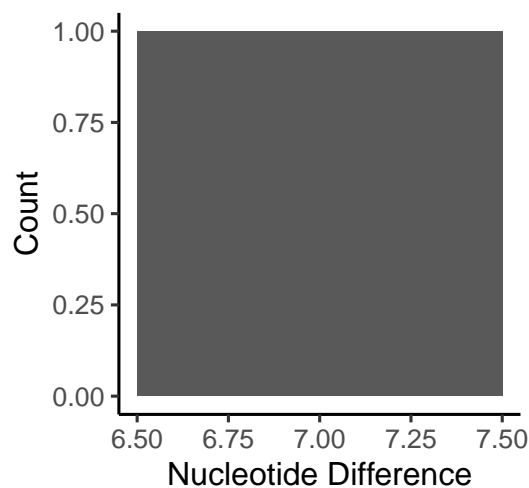
IGHV2-70*04

214 sequences assigned
45 (21%) exact matches, in which:
39 unique CDR3
4 unique J



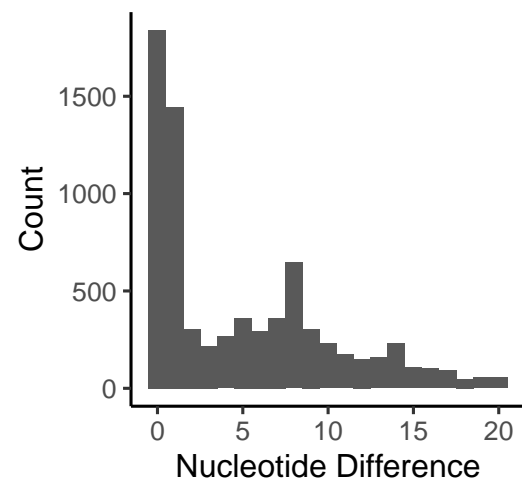
IGHV2-70D*14

1 sequences assigned
No exact matches.



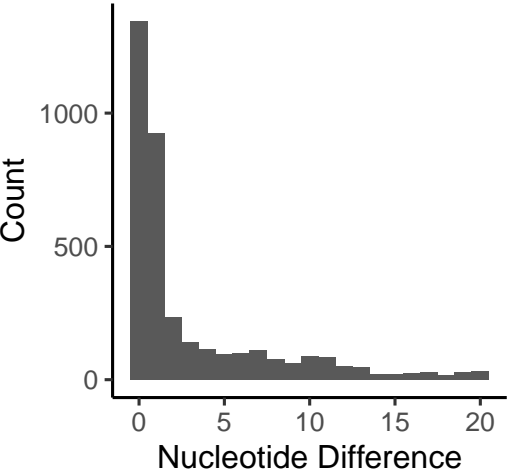
IGHV3-9*01

7618 sequences assigned
1840 (24.2%) exact matches, in which:
1070 unique CDR3
6 unique J



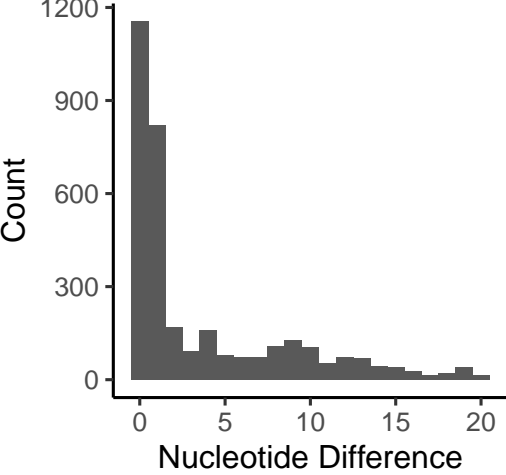
IGHV3-11*01

4743 sequences assigned
1344 (28.3%) exact matches, in which:
857 unique CDR3
6 unique J



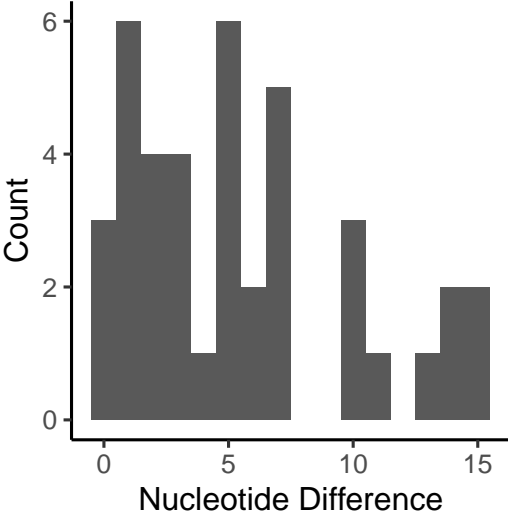
IGHV3-15*01_02

3615 sequences assigned
1155 (32%) exact matches, in which:
697 unique CDR3
6 unique J



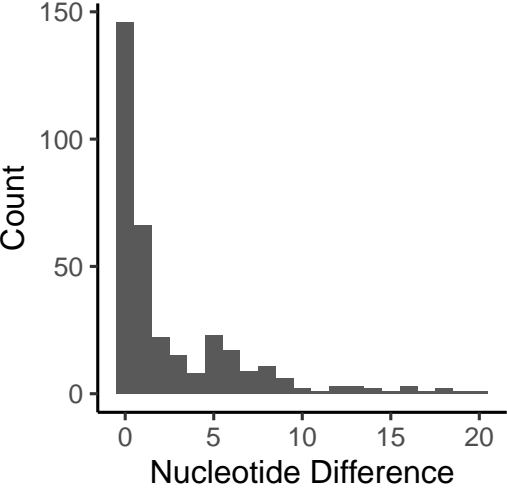
IGHV3-20*03_04

42 sequences assigned
3 (7.1%) exact matches, in which:
3 unique CDR3
2 unique J



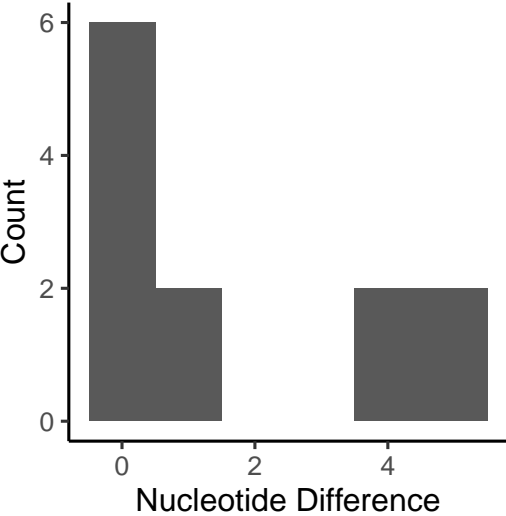
IGHV3-11*04

350 sequences assigned
146 (41.7%) exact matches, in which:
143 unique CDR3
5 unique J



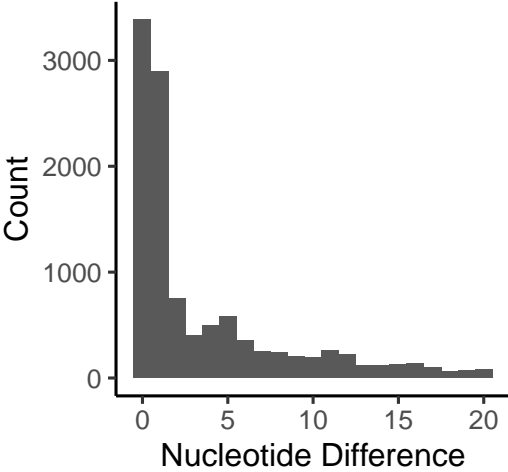
IGHV3-19*01

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



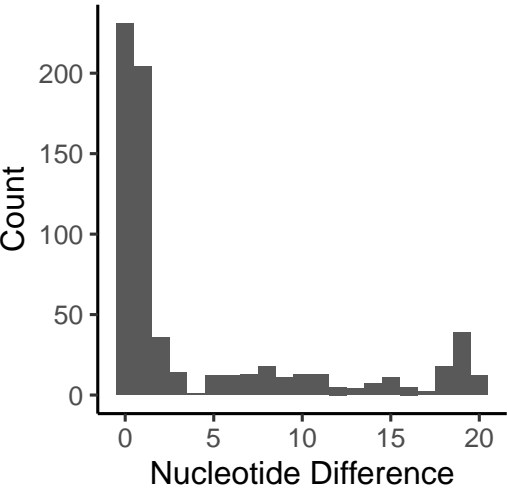
IGHV3-21*01_02

12082 sequences assigned
3384 (28%) exact matches, in which:
2078 unique CDR3
6 unique J



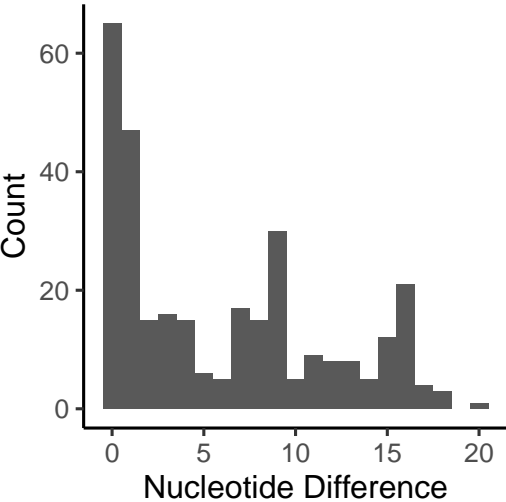
IGHV3-13*01

722 sequences assigned
231 (32%) exact matches, in which:
141 unique CDR3
5 unique J



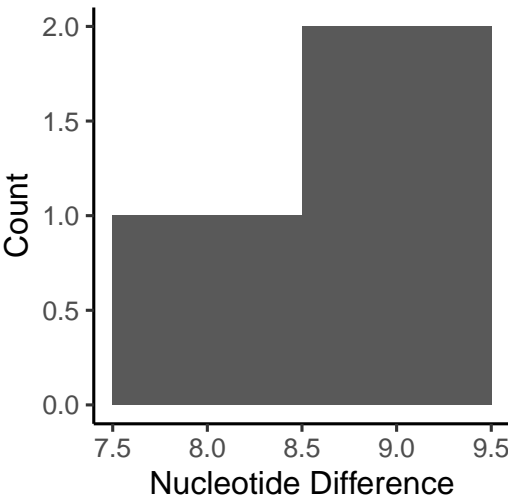
IGHV3-20*01_02

308 sequences assigned
65 (21.1%) exact matches, in which:
43 unique CDR3
5 unique J



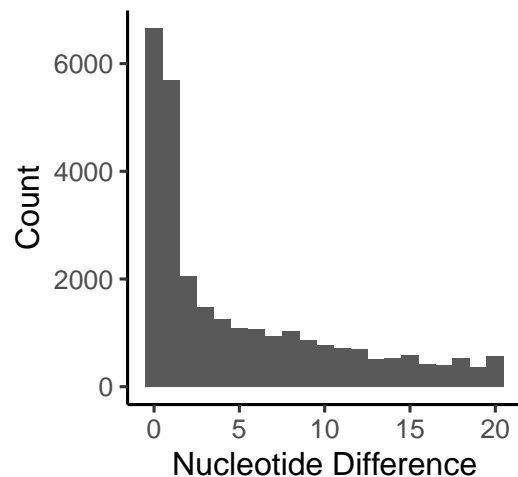
IGHV3-22*01_02

3 sequences assigned
No exact matches.



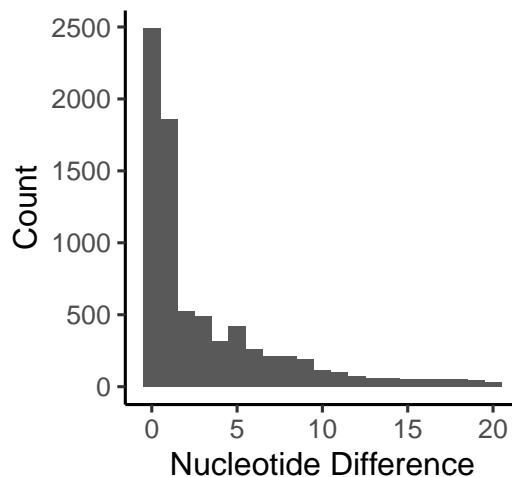
IGHV3-23*01_04

35432 sequences assigned
6654 (18.8%) exact matches, in which:
3817 unique CDR3
6 unique J



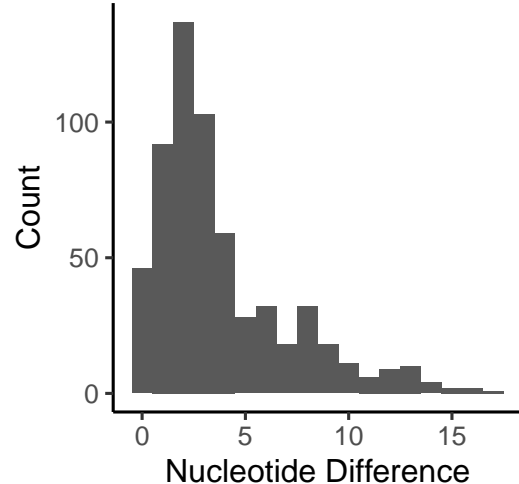
IGHV3-30*04

8786 sequences assigned
2490 (28.3%) exact matches, in which:
1595 unique CDR3
6 unique J



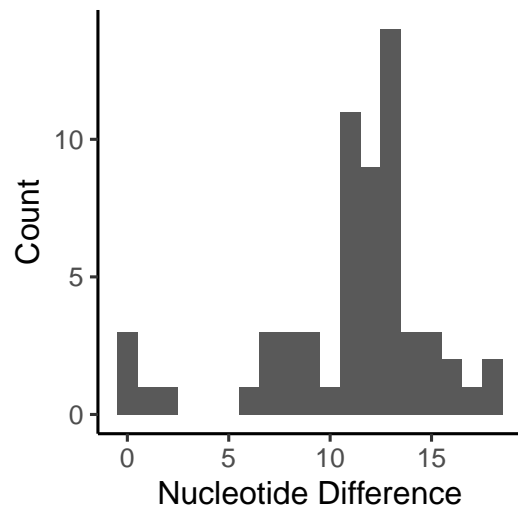
IGHV3-33*06

611 sequences assigned
46 (7.5%) exact matches, in which:
44 unique CDR3
5 unique J



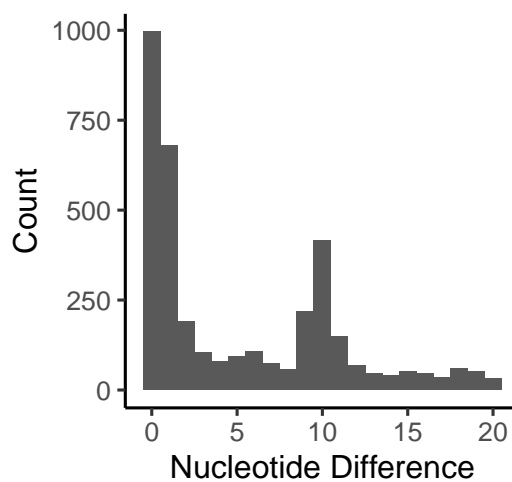
IGHV3-30-3*01

72 sequences assigned
3 (4.2%) exact matches, in which:
3 unique CDR3
2 unique J



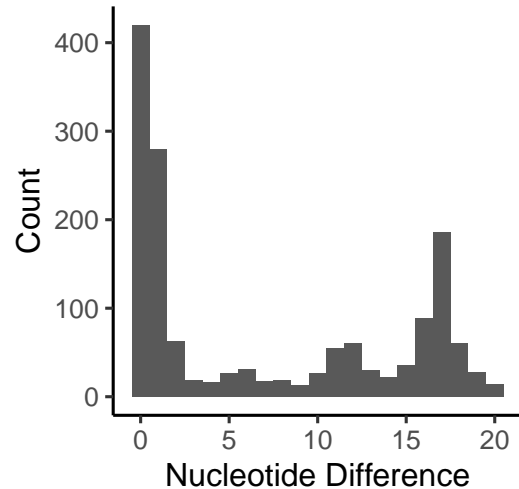
IGHV3-30*18

3872 sequences assigned
996 (25.7%) exact matches, in which:
643 unique CDR3
6 unique J



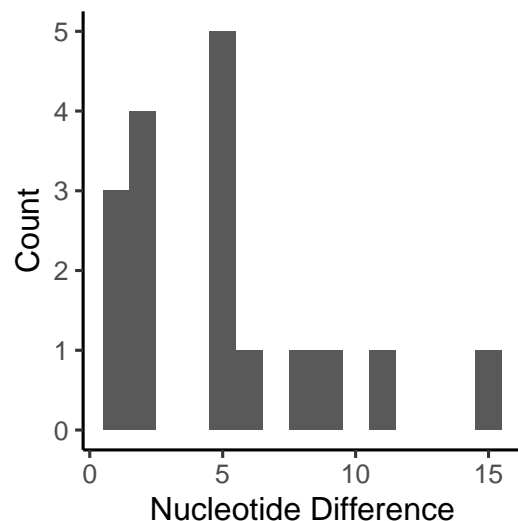
IGHV3-43*02

1592 sequences assigned
420 (26.4%) exact matches, in which:
242 unique CDR3
6 unique J



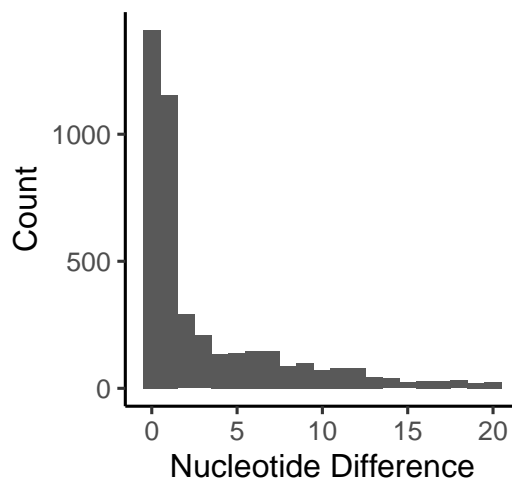
IGHV3-30-3*02

20 sequences assigned
No exact matches.



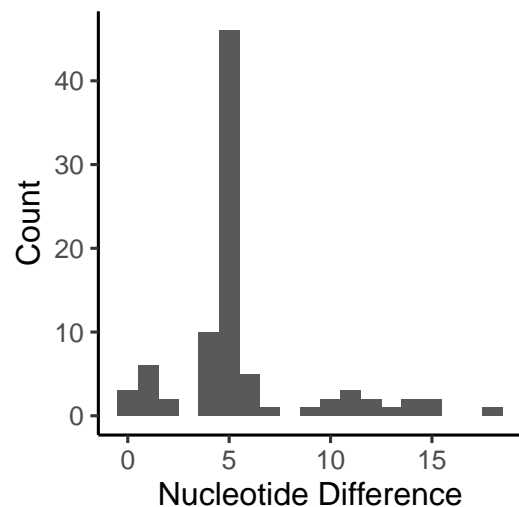
IGHV3-33*01

4415 sequences assigned
1410 (31.9%) exact matches, in which:
917 unique CDR3
6 unique J



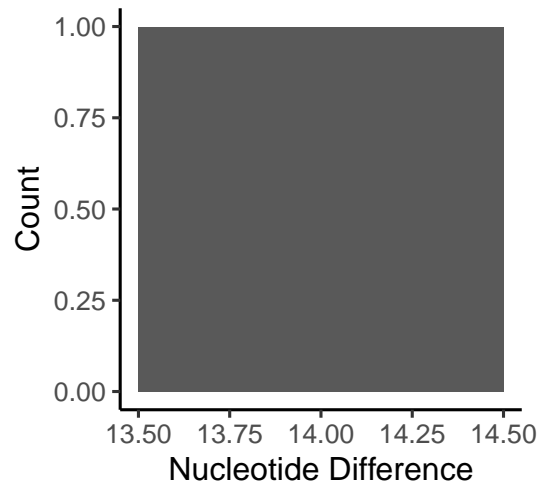
IGHV3-47*01

87 sequences assigned
3 (3.4%) exact matches, in which:
2 unique CDR3
1 unique J



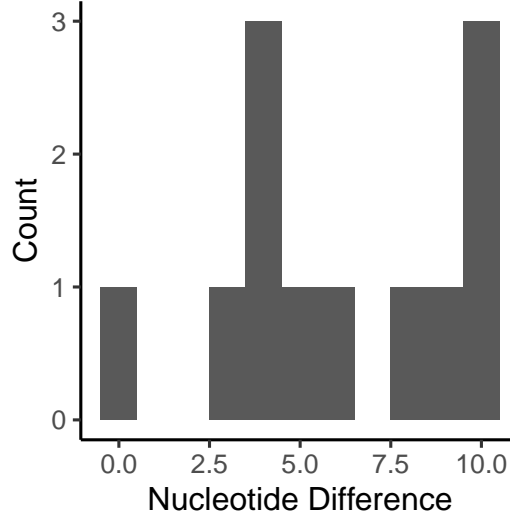
IGHV3-47*02

1 sequences assigned
No exact matches.



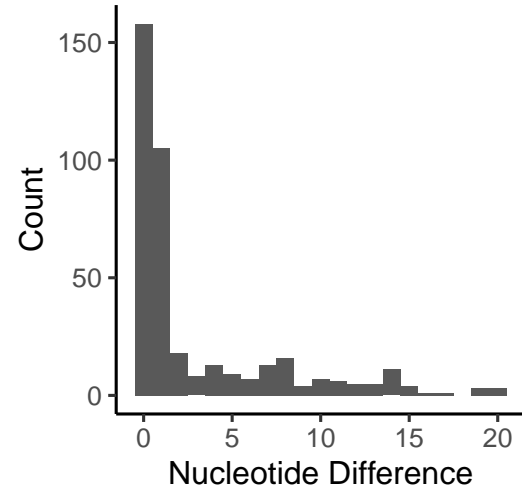
IGHV3-52*01_03

12 sequences assigned
1 (8.3%) exact matches, in which:
1 unique CDR3
1 unique J



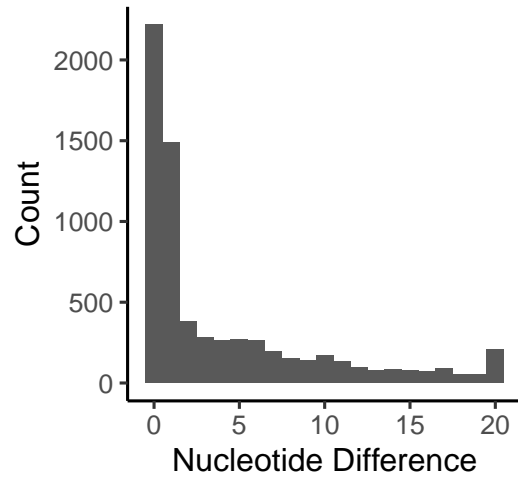
IGHV3-64*01

401 sequences assigned
158 (39.4%) exact matches, in which:
99 unique CDR3
5 unique J



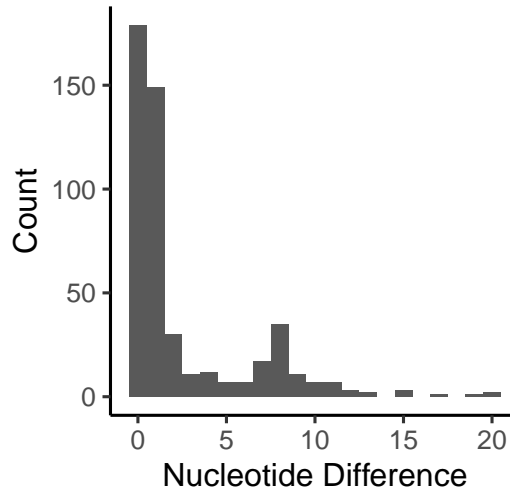
IGHV3-48*03

8005 sequences assigned
2218 (27.7%) exact matches, in which:
1337 unique CDR3
6 unique J



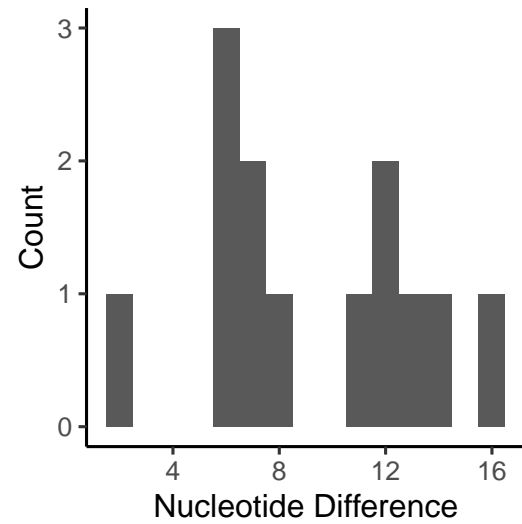
IGHV3-53*04

498 sequences assigned
179 (35.9%) exact matches, in which:
115 unique CDR3
6 unique J



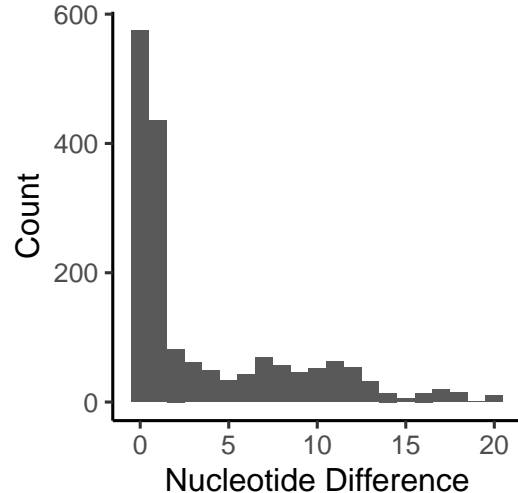
IGHV3-64*04

29 sequences assigned
No exact matches.



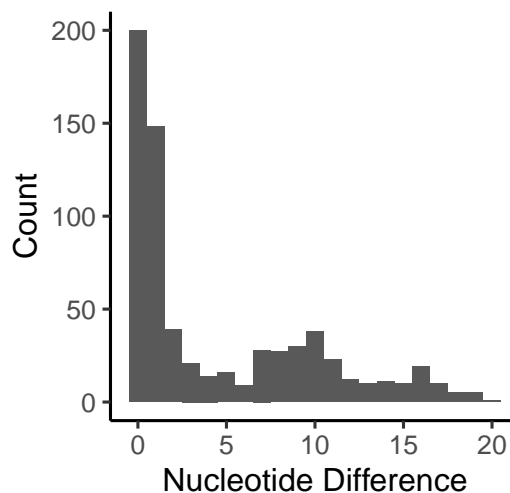
IGHV3-49*04

2107 sequences assigned
575 (27.3%) exact matches, in which:
352 unique CDR3
6 unique J



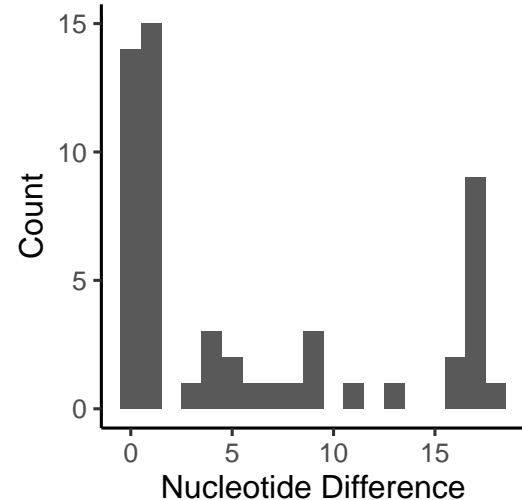
IGHV3-53*01_02

708 sequences assigned
200 (28.2%) exact matches, in which:
117 unique CDR3
5 unique J



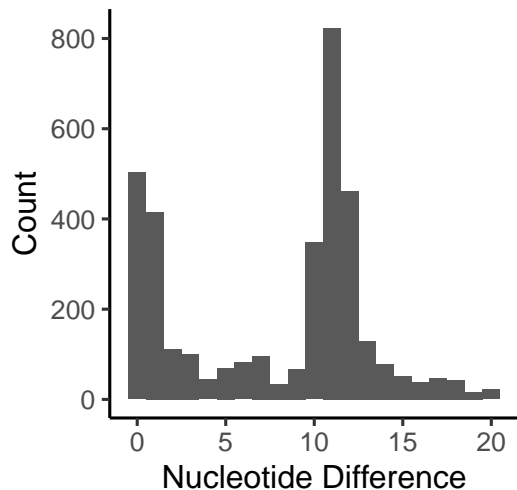
IGHV3-64*02_07

100 sequences assigned
14 (14%) exact matches, in which:
10 unique CDR3
2 unique J



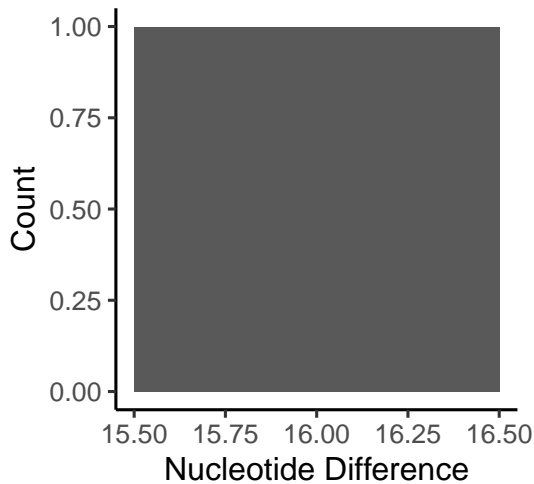
IGHV3-66*01

3728 sequences assigned
503 (13.5%) exact matches, in which:
319 unique CDR3
5 unique J



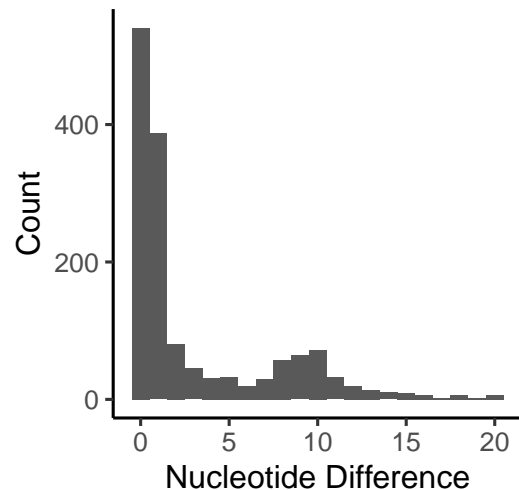
IGHV3-71*03

1 sequences assigned
No exact matches.



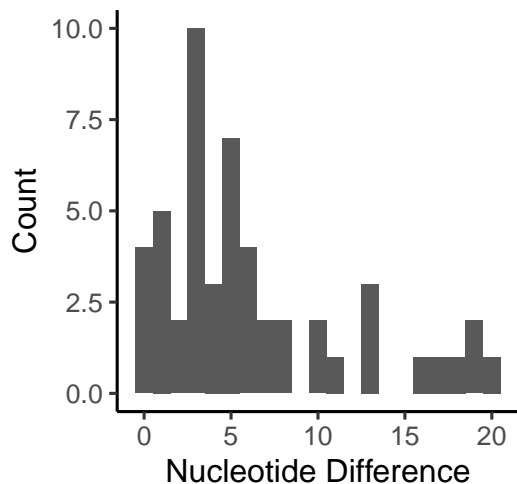
IGHV3-73*01_02

1925 sequences assigned
541 (28.1%) exact matches, in which:
313 unique CDR3
6 unique J



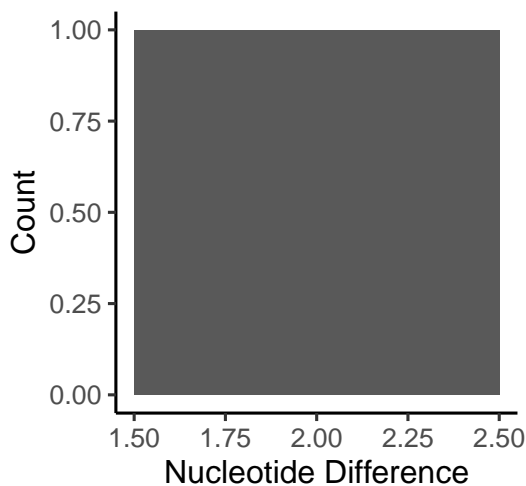
IGHV3-69-1*01

51 sequences assigned
4 (7.8%) exact matches, in which:
4 unique CDR3
2 unique J



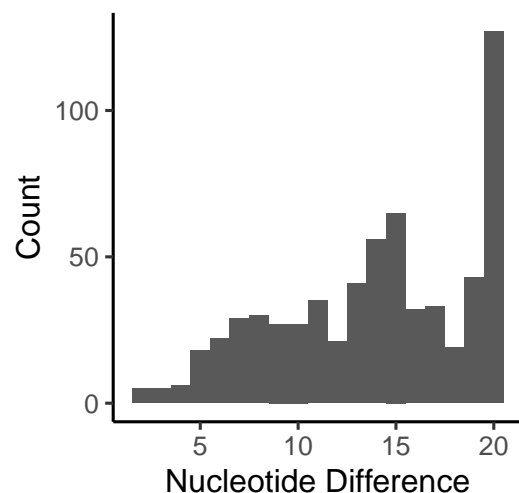
IGHV3-71*01_04

1 sequences assigned
No exact matches.



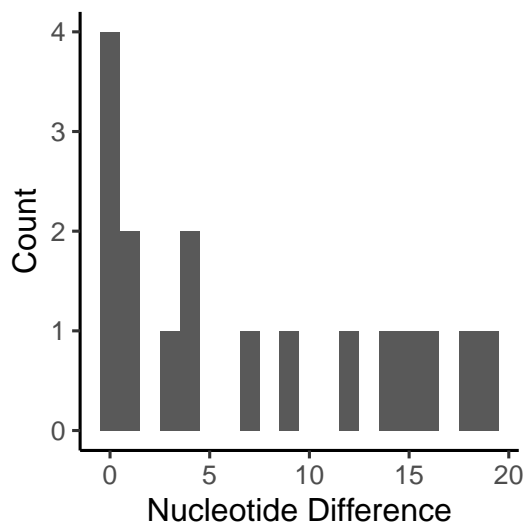
IGHV3-74*03

1062 sequences assigned
No exact matches.



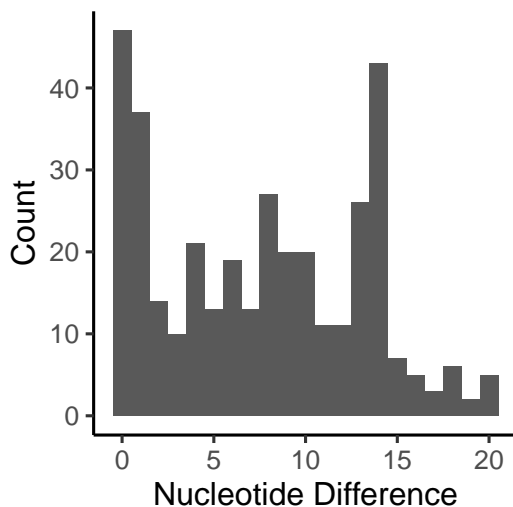
IGHV3-69-1*02

17 sequences assigned
4 (23.5%) exact matches, in which:
4 unique CDR3
2 unique J



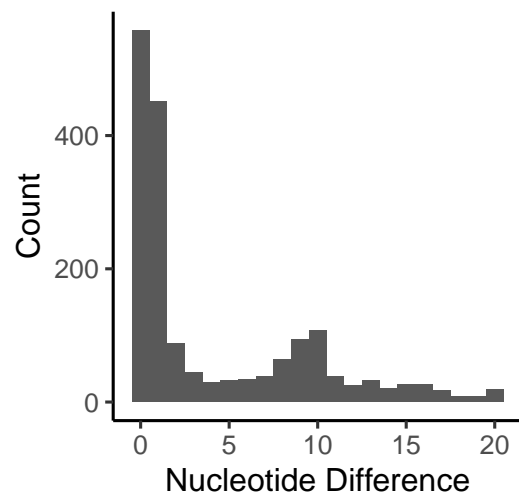
IGHV3-72*01

513 sequences assigned
47 (9.2%) exact matches, in which:
28 unique CDR3
4 unique J



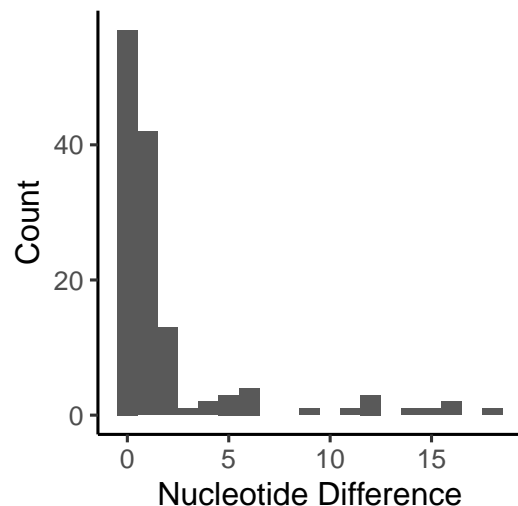
IGHV3-74*01_02

1868 sequences assigned
558 (29.9%) exact matches, in which:
304 unique CDR3
6 unique J



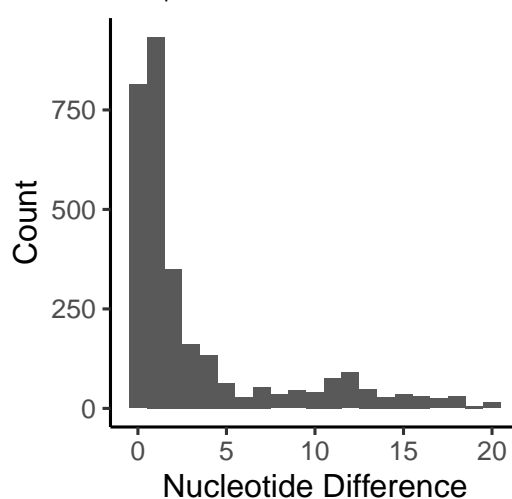
IGHV3-43D*04

135 sequences assigned
57 (42.2%) exact matches, in which:
33 unique CDR3
4 unique J



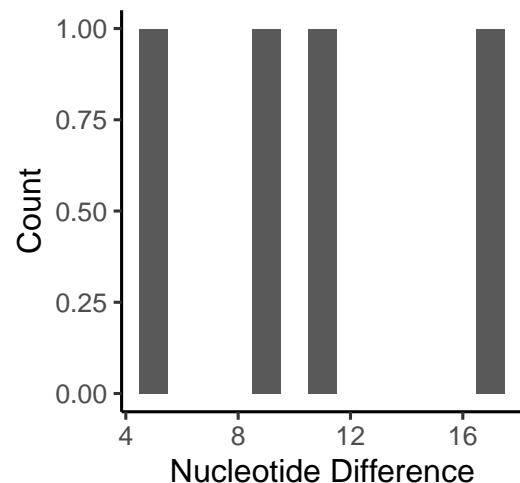
IGHV4-4*07

3196 sequences assigned
814 (25.5%) exact matches, in which:
694 unique CDR3
6 unique J



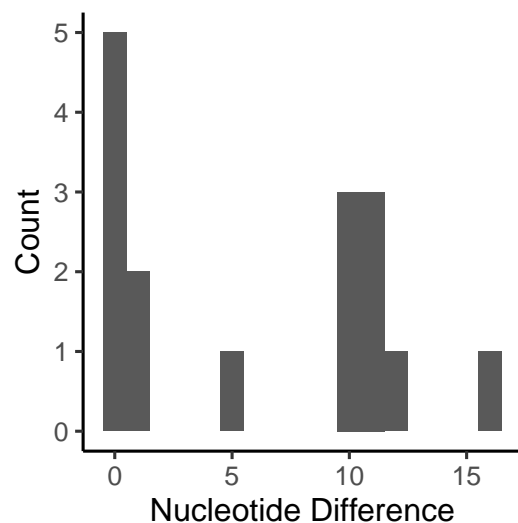
IGHV4-28*02_05

4 sequences assigned
No exact matches.



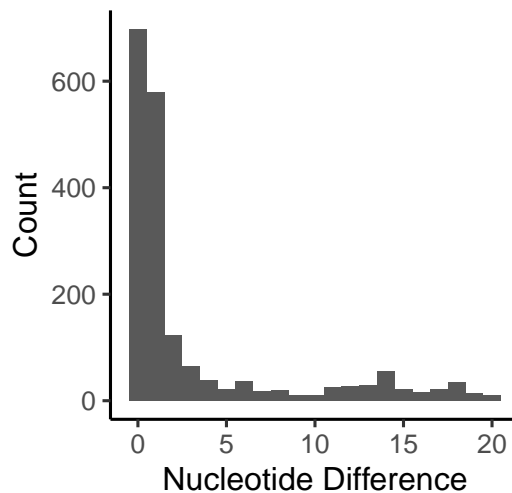
IGHV3-64D*06

16 sequences assigned
5 (31.2%) exact matches, in which:
3 unique CDR3
2 unique J



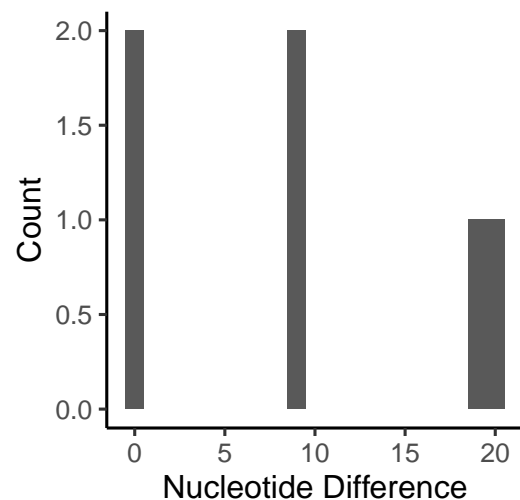
IGHV4-4*02_03

2199 sequences assigned
698 (31.7%) exact matches, in which:
573 unique CDR3
6 unique J



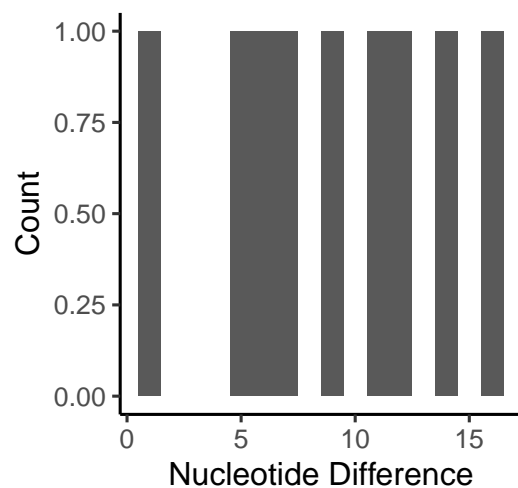
IGHV4-30-2*01

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



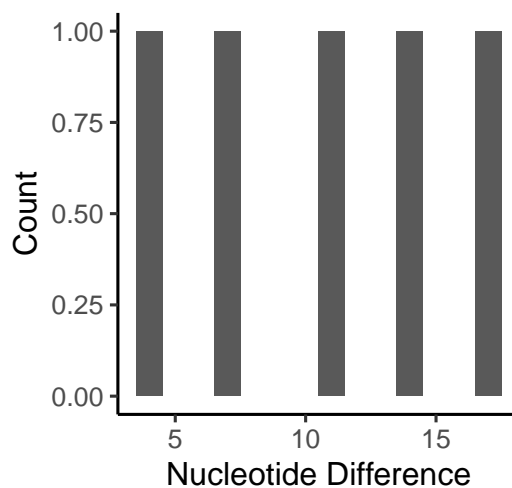
IGHV3-NL1*01

26 sequences assigned
No exact matches.



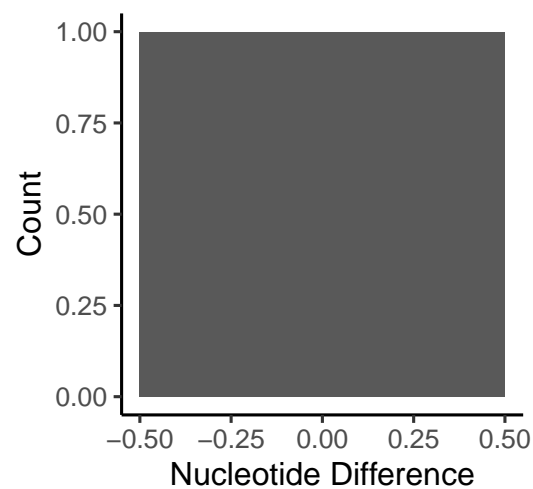
IGHV4-28*03

5 sequences assigned
No exact matches.



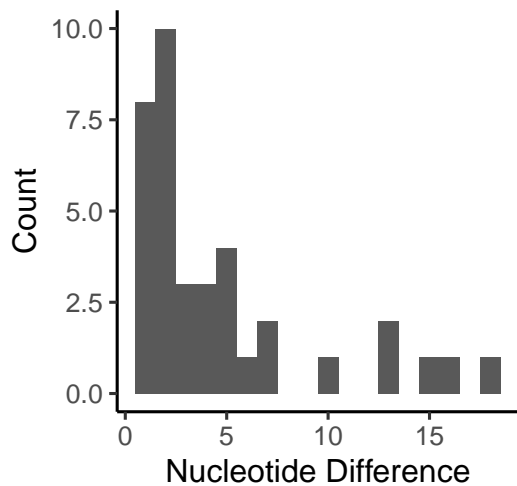
IGHV4-30-4*01

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



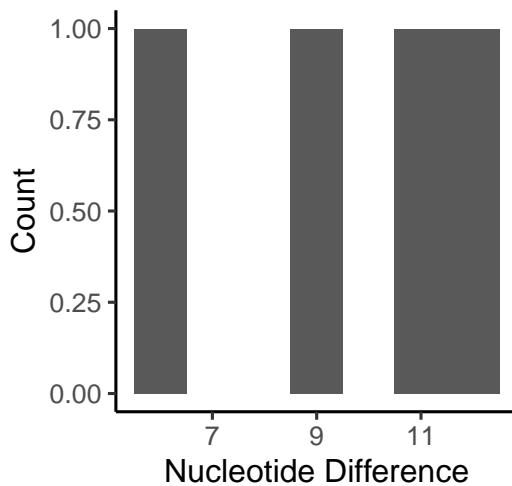
IGHV4-30-2*03

44 sequences assigned
No exact matches.



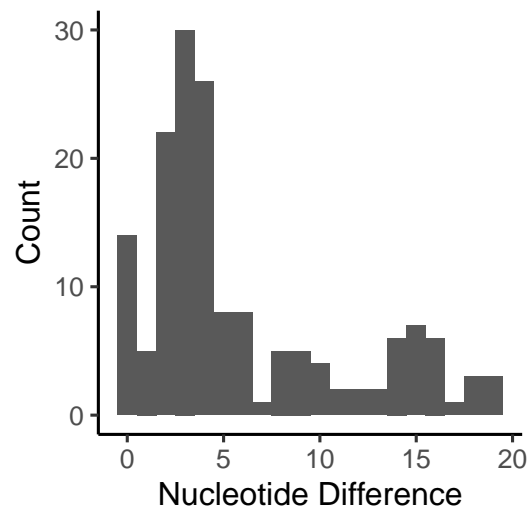
IGHV4-30-4*08

15 sequences assigned
No exact matches.



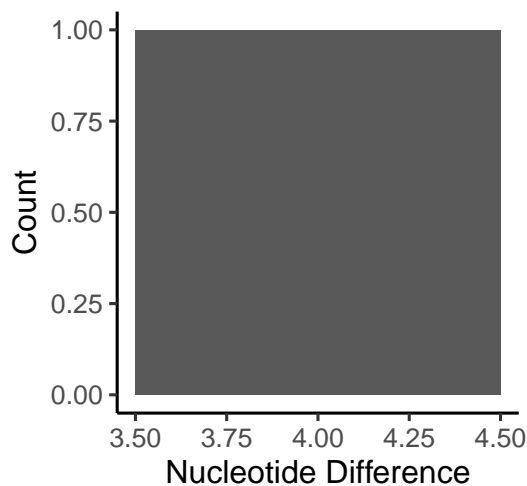
IGHV4-38-2*02

891 sequences assigned
14 (1.6%) exact matches, in which:
12 unique CDR3
3 unique J



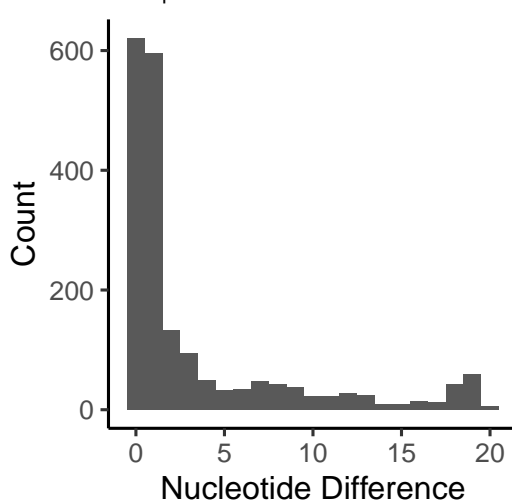
IGHV4-30-2*04

1 sequences assigned
No exact matches.



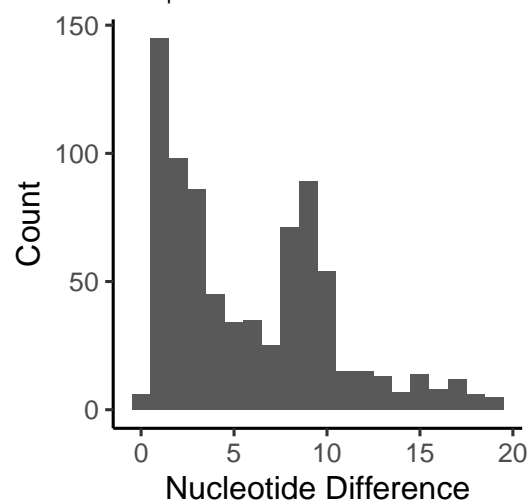
IGHV4-31*02

2480 sequences assigned
621 (25%) exact matches, in which:
537 unique CDR3
5 unique J



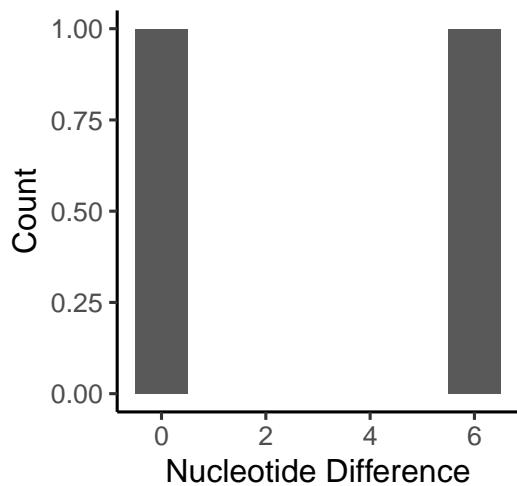
IGHV4-39*07

811 sequences assigned
6 (0.7%) exact matches, in which:
6 unique CDR3
4 unique J



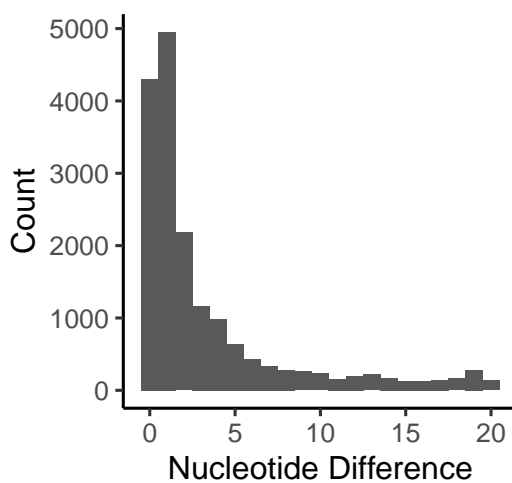
IGHV4-30-4*07

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



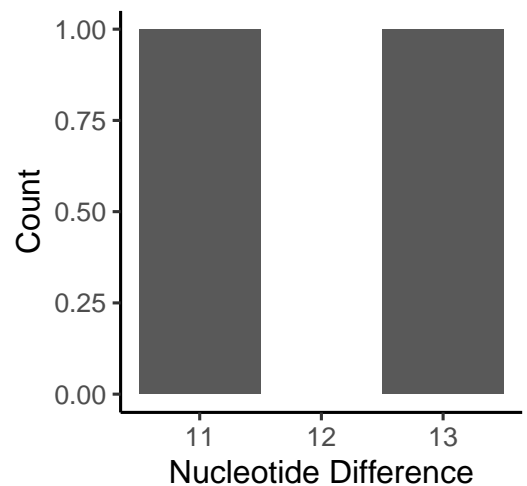
IGHV4-34*01_02

19401 sequences assigned
4305 (22.2%) exact matches, in which:
3254 unique CDR3
6 unique J



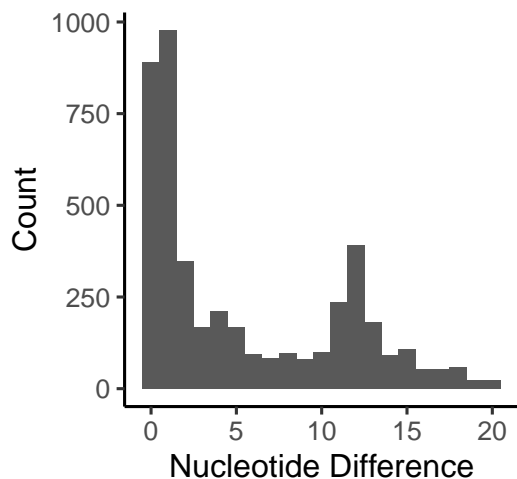
IGHV4-55*09

2 sequences assigned
No exact matches.



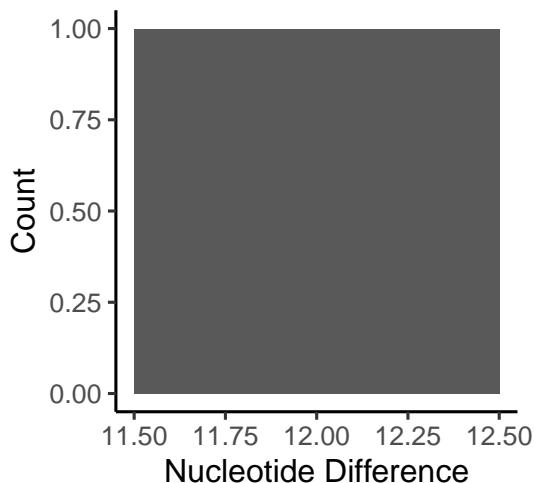
IGHV4-59*08

4638 sequences assigned
891 (19.2%) exact matches, in which:
723 unique CDR3
6 unique J



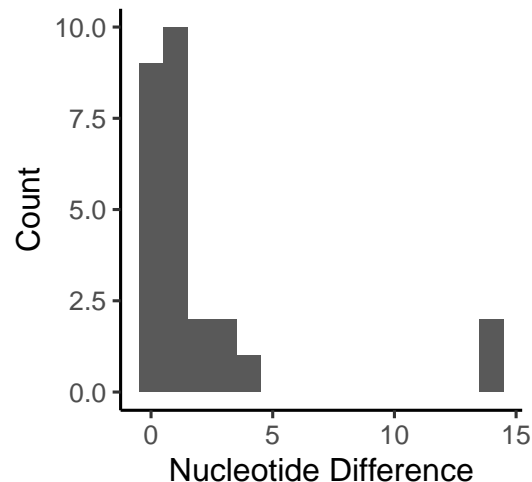
IGHV1/OR15-2*02_03

2 sequences assigned
No exact matches.



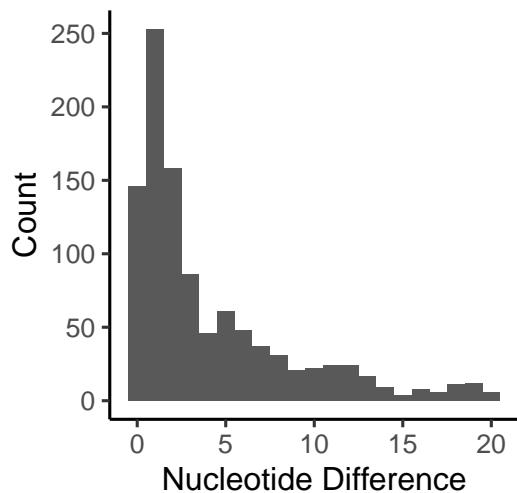
IGHV5-10-1*01_03

26 sequences assigned
9 (34.6%) exact matches, in which:
7 unique CDR3
4 unique J



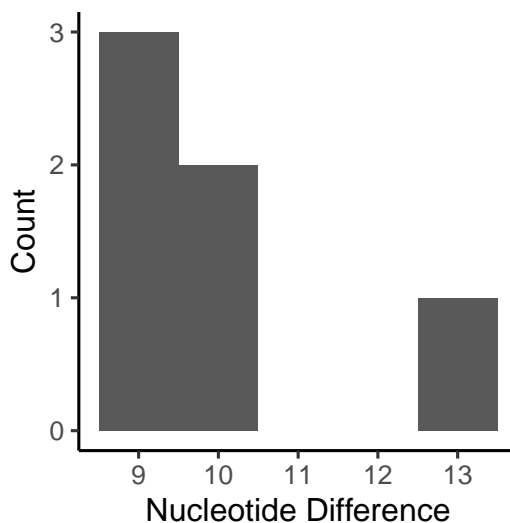
IGHV4-59*12

2647 sequences assigned
146 (5.5%) exact matches, in which:
143 unique CDR3
6 unique J



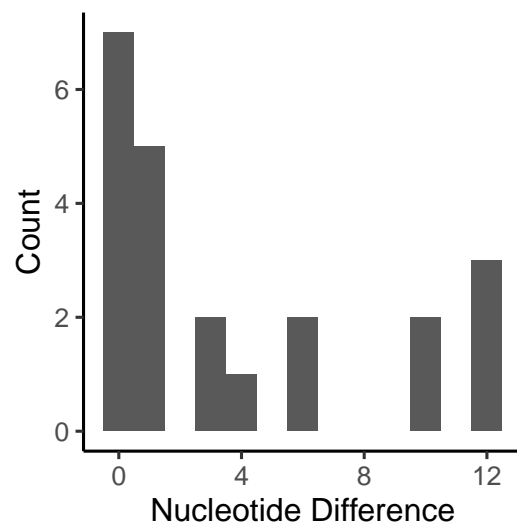
IGHV1/OR15-3*02

6 sequences assigned
No exact matches.



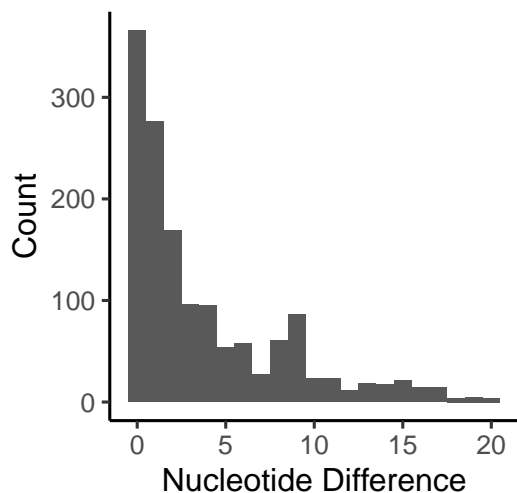
IGHV5-51*04

23 sequences assigned
7 (30.4%) exact matches, in which:
7 unique CDR3
3 unique J



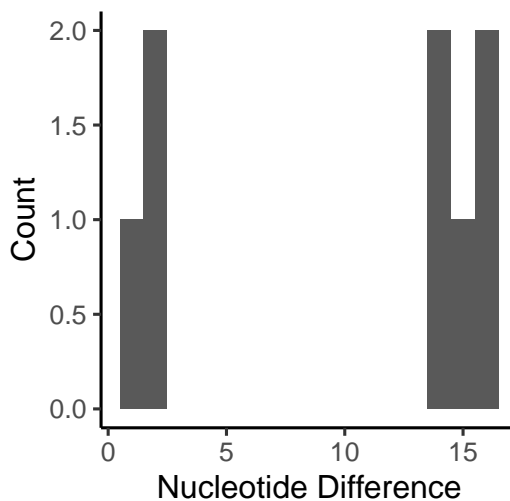
IGHV4-61*01

1542 sequences assigned
366 (23.7%) exact matches, in which:
325 unique CDR3
5 unique J



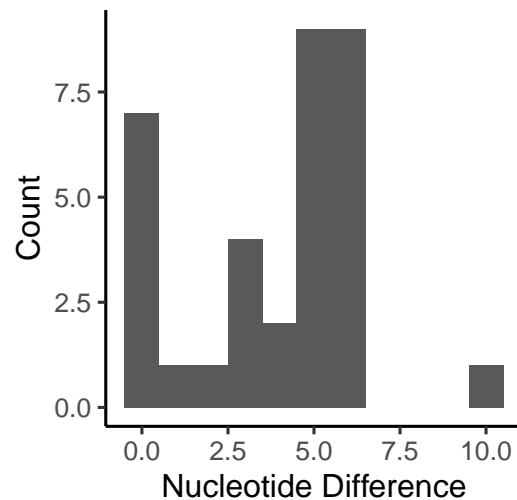
IGHV4/OR15-8*01

23 sequences assigned
No exact matches.



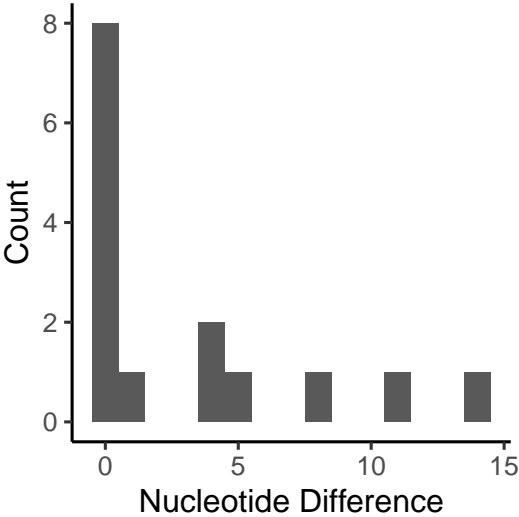
IGHV5-51*06

35 sequences assigned
7 (20%) exact matches, in which:
7 unique CDR3
3 unique J



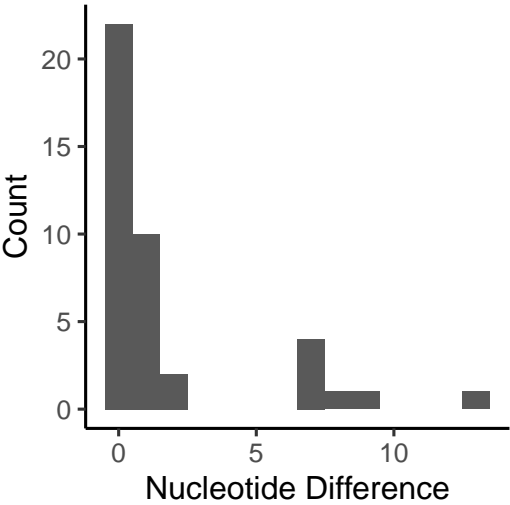
IGHV5-51*07

18 sequences assigned
8 (44.4%) exact matches, in which:
8 unique CDR3
4 unique J



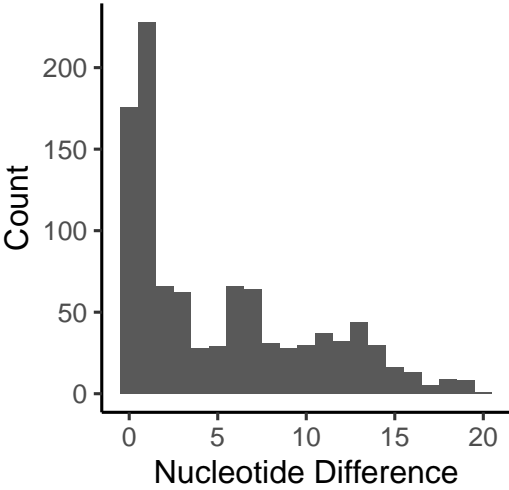
IGHV7-4-1*01

41 sequences assigned
22 (53.7%) exact matches, in which:
18 unique CDR3
5 unique J



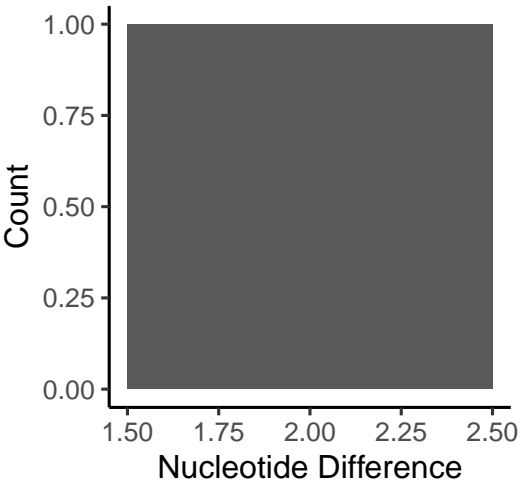
IGHV6-1*01_02

1076 sequences assigned
176 (16.4%) exact matches, in which:
143 unique CDR3
5 unique J



IGHV3/OR16-9*01

1 sequences assigned
No exact matches.





Warning – no inferred sequences found.