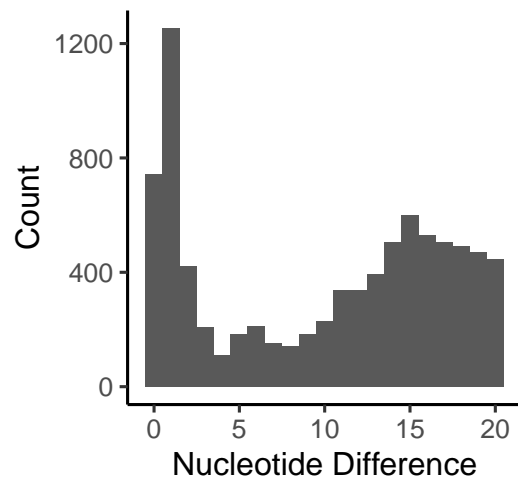


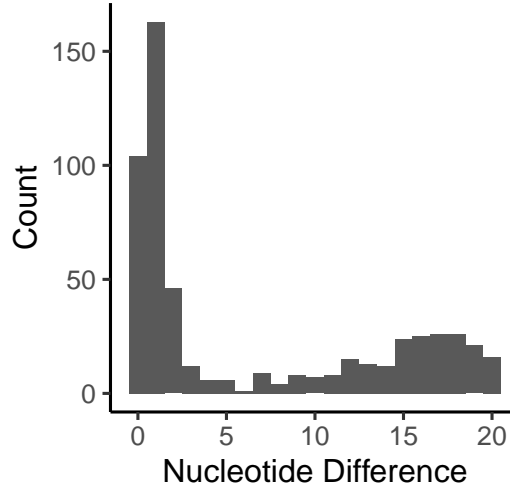
IGHV1-2*02

10688 sequences assigned
743 (7%) exact matches, in which:
473 unique CDR3
7 unique J



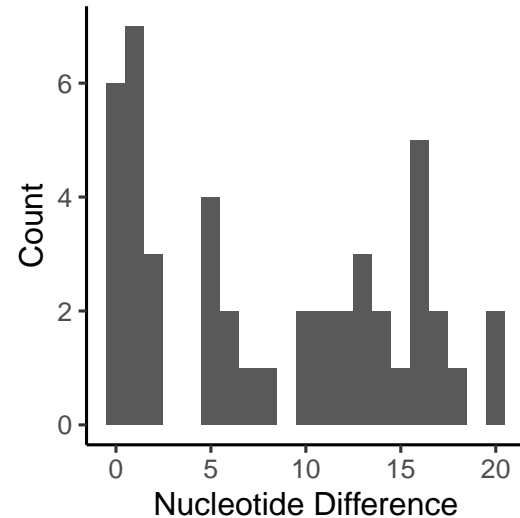
IGHV1-3*01_05

706 sequences assigned
104 (14.7%) exact matches, in which:
72 unique CDR3
6 unique J



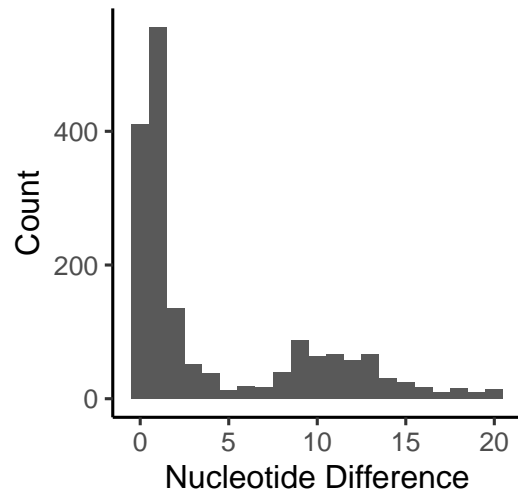
IGHV1-24*01

62 sequences assigned
6 (9.7%) exact matches, in which:
5 unique CDR3
3 unique J



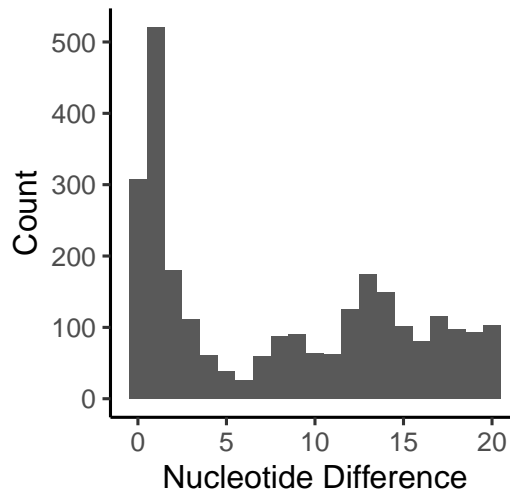
IGHV1-2*04

1788 sequences assigned
410 (22.9%) exact matches, in which:
296 unique CDR3
7 unique J



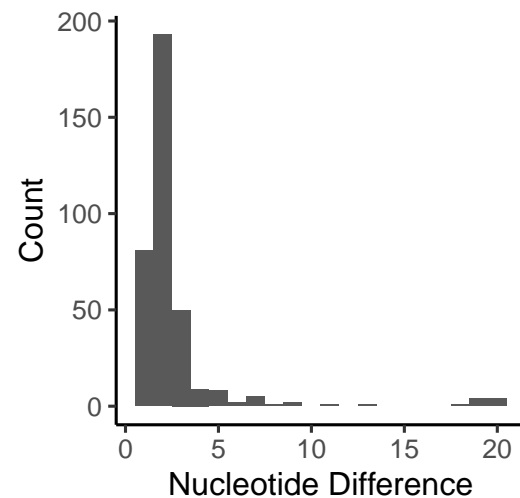
IGHV1-8*01

3524 sequences assigned
307 (8.7%) exact matches, in which:
197 unique CDR3
6 unique J



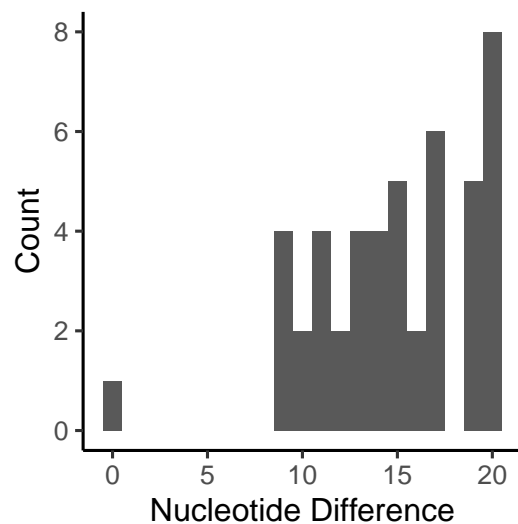
IGHV1-45*02

377 sequences assigned
No exact matches.



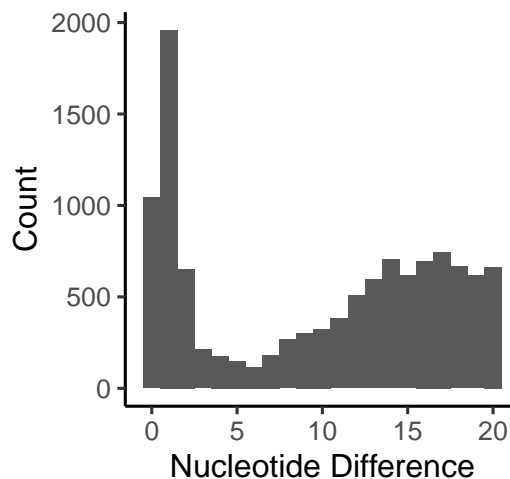
IGHV1-3*04

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



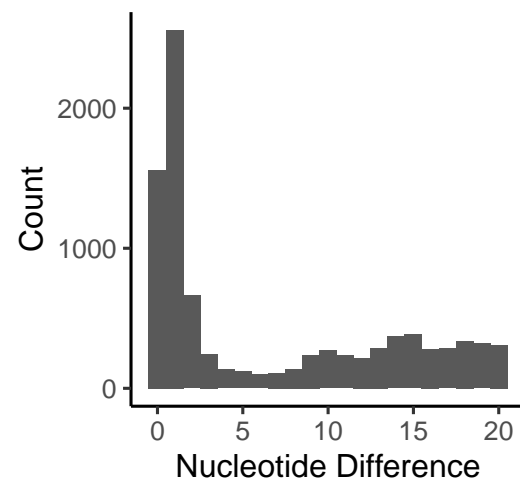
IGHV1-18*01

16005 sequences assigned
1043 (6.5%) exact matches, in which:
630 unique CDR3
7 unique J



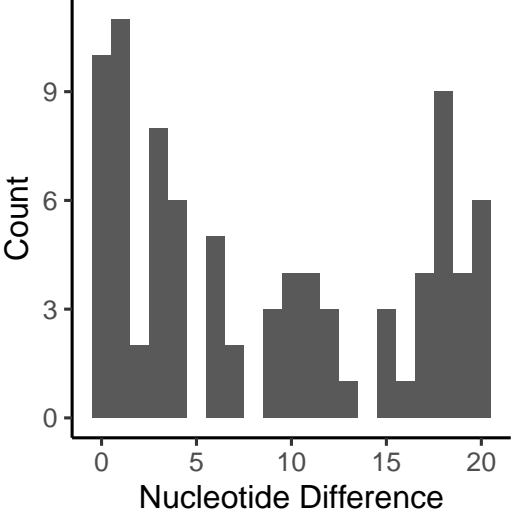
IGHV1-46*01

12933 sequences assigned
1560 (12.1%) exact matches, in which:
1045 unique CDR3
7 unique J



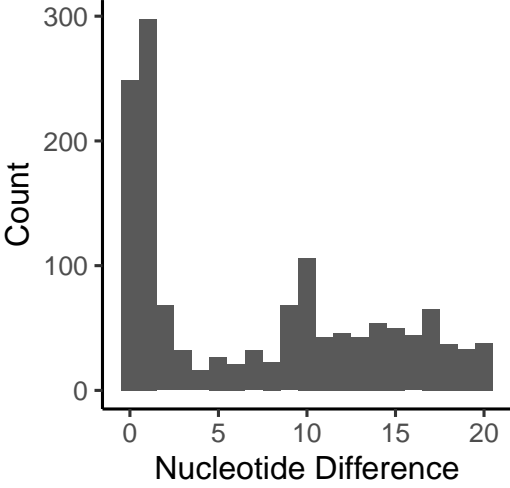
IGHV1-58*02

94 sequences assigned
10 (10.6%) exact matches, in which:
8 unique CDR3
2 unique J



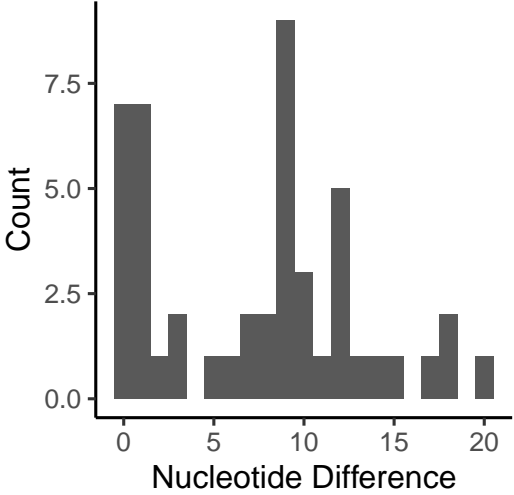
IGHV1-69*02

1840 sequences assigned
249 (13.5%) exact matches, in which:
189 unique CDR3
5 unique J



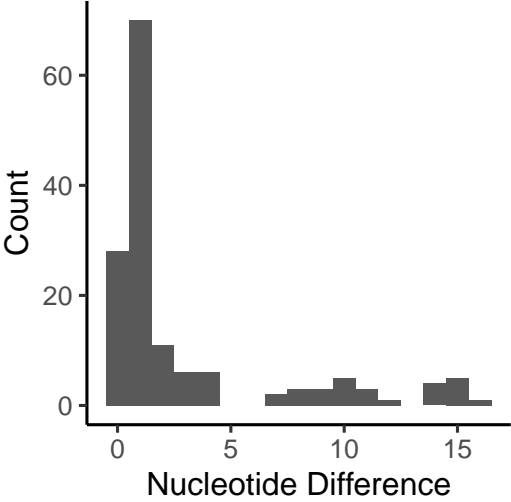
IGHV2-5*01

51 sequences assigned
7 (13.7%) exact matches, in which:
5 unique CDR3
2 unique J



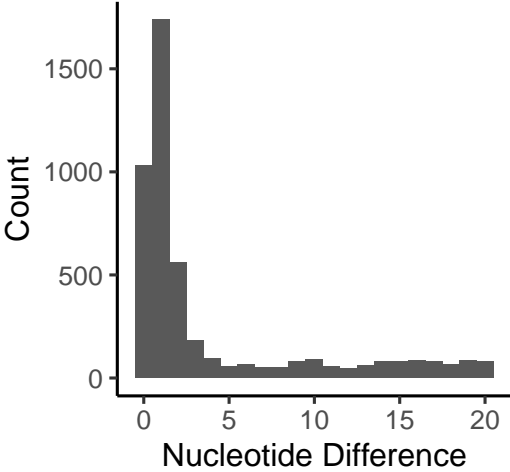
IGHV1-58*01_03

162 sequences assigned
28 (17.3%) exact matches, in which:
18 unique CDR3
2 unique J



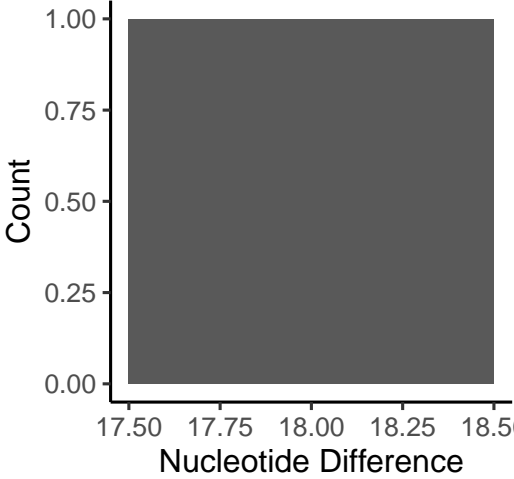
IGHV1-69*01_12_13

6126 sequences assigned
1033 (16.9%) exact matches, in which:
705 unique CDR3
7 unique J



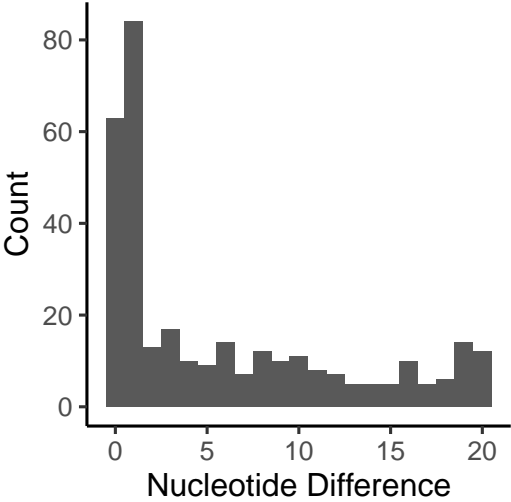
IGHV2-26*01

1 sequences assigned
No exact matches.



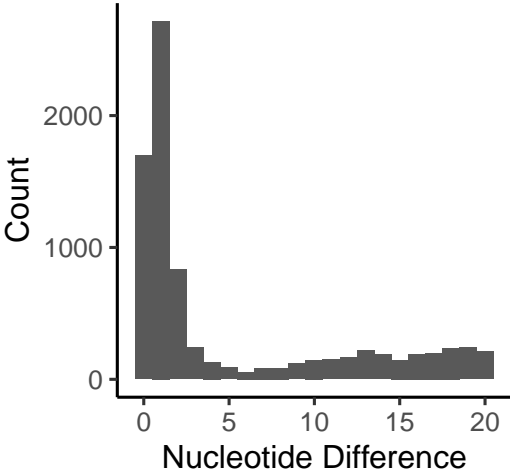
IGHV1-69-2*01

421 sequences assigned
63 (15%) exact matches, in which:
44 unique CDR3
3 unique J



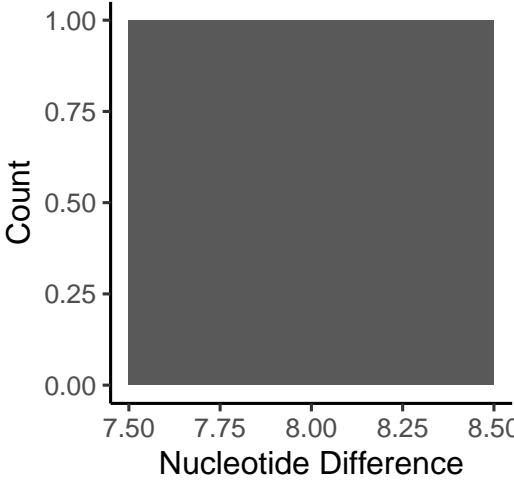
IGHV1-69*15_18

10084 sequences assigned
1698 (16.8%) exact matches, in which:
1146 unique CDR3
7 unique J



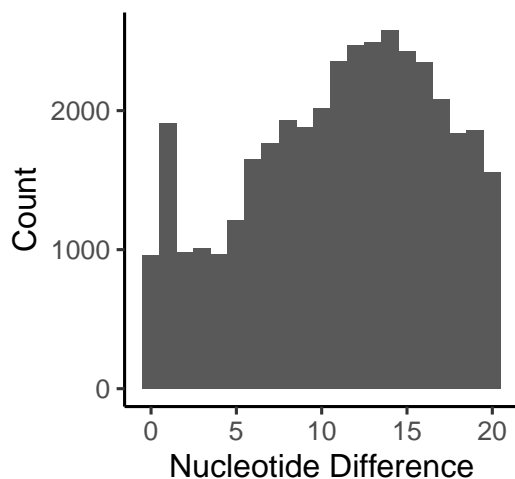
IGHV2-70*01

2 sequences assigned
No exact matches.



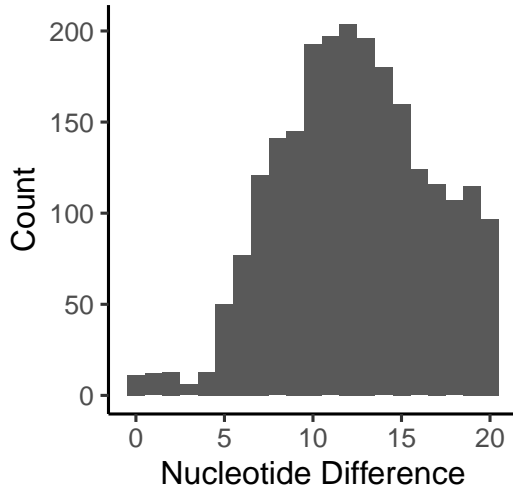
IGHV3-7*01

52155 sequences assigned
959 (1.8%) exact matches, in which:
544 unique CDR3
5 unique J



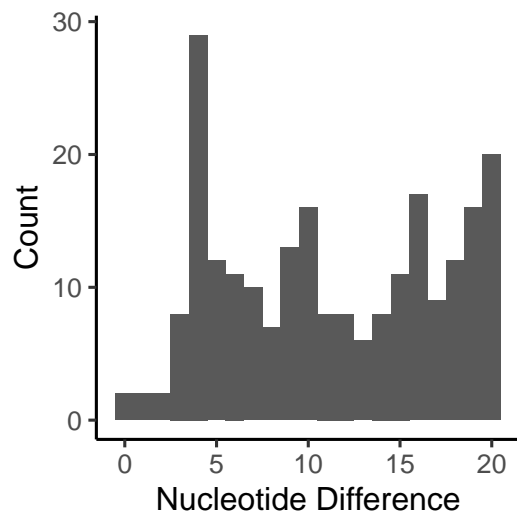
IGHV3-11*04

2740 sequences assigned
11 (0.4%) exact matches, in which:
11 unique CDR3
3 unique J



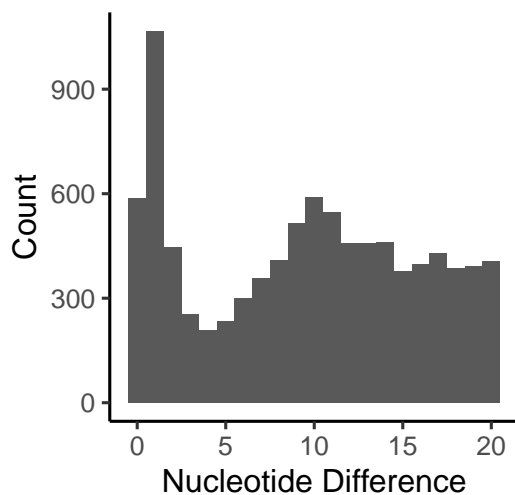
IGHV3-20*01_02

277 sequences assigned
2 (0.7%) exact matches, in which:
2 unique CDR3
2 unique J



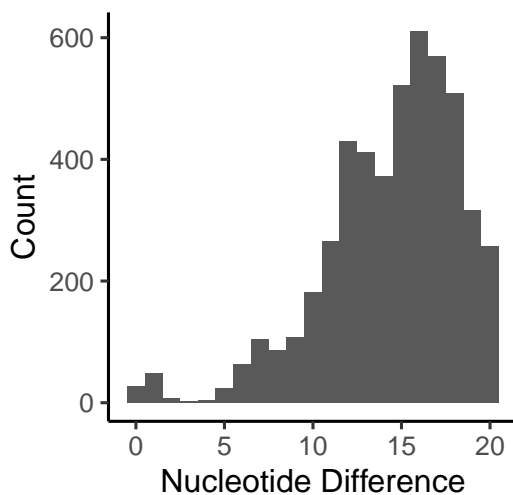
IGHV3-9*01

13495 sequences assigned
587 (4.3%) exact matches, in which:
324 unique CDR3
6 unique J



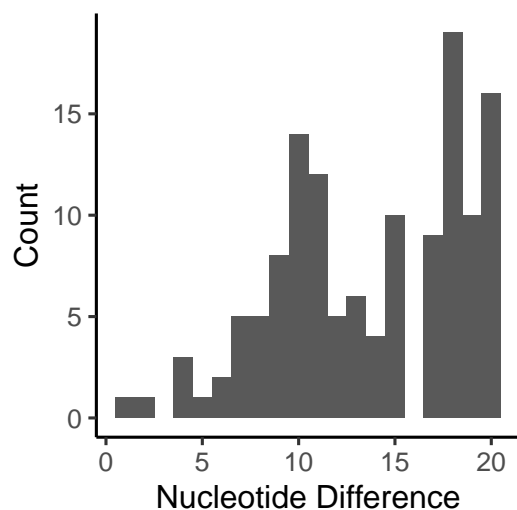
IGHV3-13*01

6567 sequences assigned
27 (0.4%) exact matches, in which:
12 unique CDR3
2 unique J



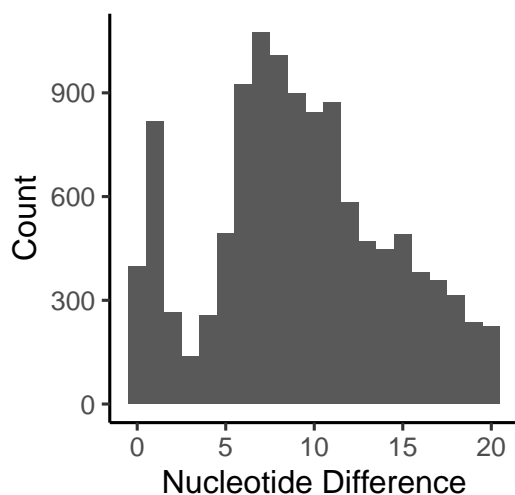
IGHV3-20*03_04

293 sequences assigned
No exact matches.



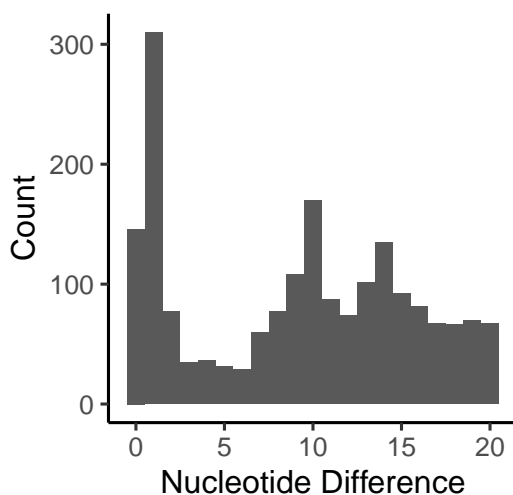
IGHV3-11*01

12656 sequences assigned
397 (3.1%) exact matches, in which:
219 unique CDR3
7 unique J



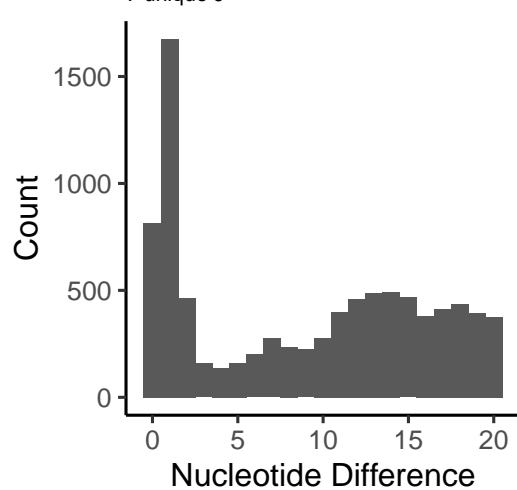
IGHV3-15*01_02

2639 sequences assigned
146 (5.5%) exact matches, in which:
98 unique CDR3
5 unique J



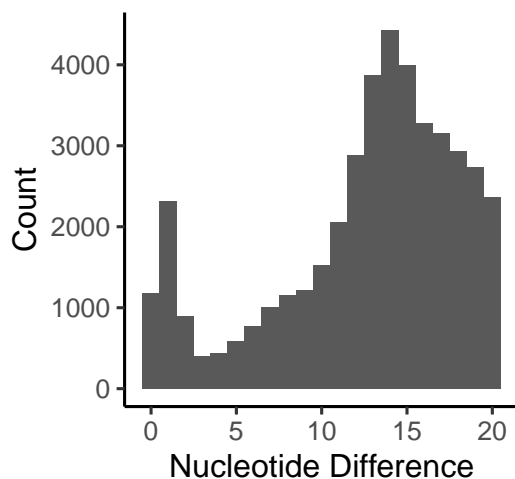
IGHV3-21*01_02

10930 sequences assigned
814 (7.4%) exact matches, in which:
458 unique CDR3
7 unique J



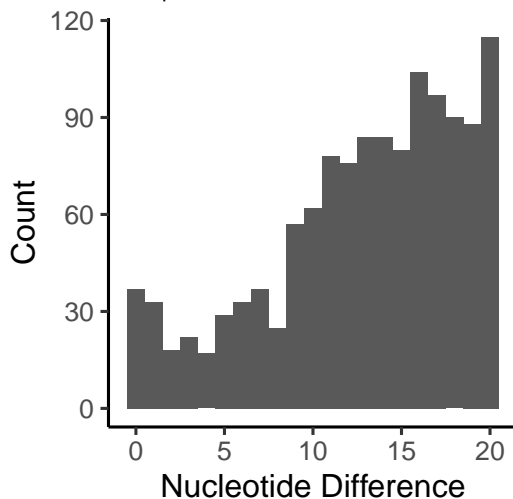
IGHV3-23*01_04

59241 sequences assigned
1177 (2%) exact matches, in which:
659 unique CDR3
6 unique J



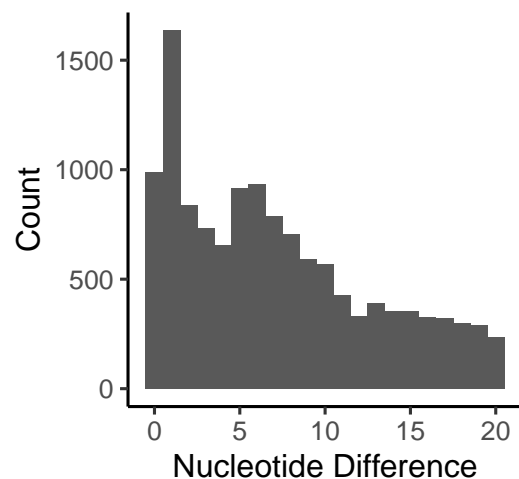
IGHV3-30*03

2351 sequences assigned
37 (1.6%) exact matches, in which:
34 unique CDR3
4 unique J



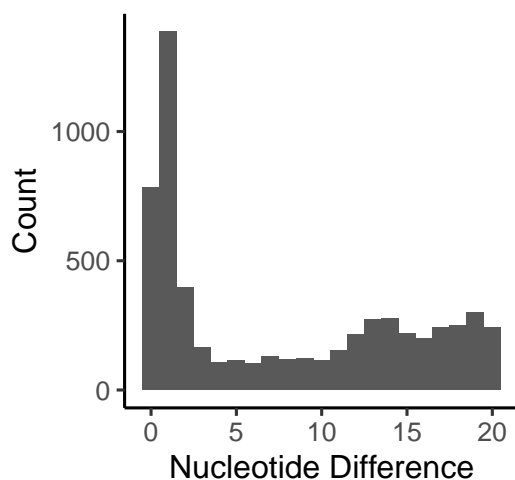
IGHV3-33*01

14037 sequences assigned
990 (7.1%) exact matches, in which:
529 unique CDR3
6 unique J



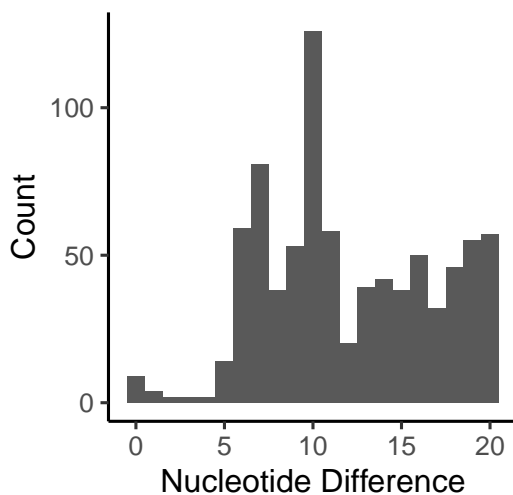
IGHV3-30-3*01

7794 sequences assigned
785 (10.1%) exact matches, in which:
454 unique CDR3
7 unique J



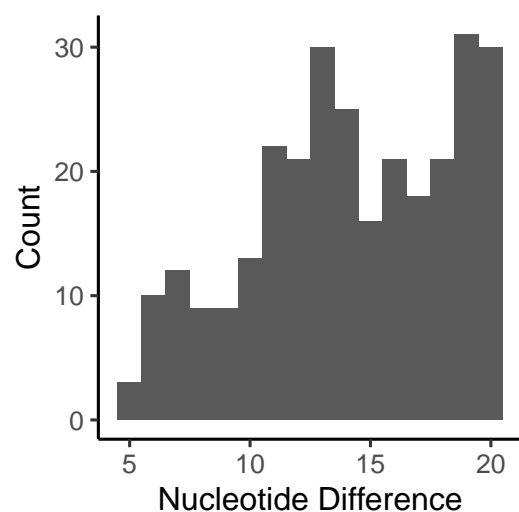
IGHV3-30*04

1202 sequences assigned
9 (0.7%) exact matches, in which:
5 unique CDR3
3 unique J



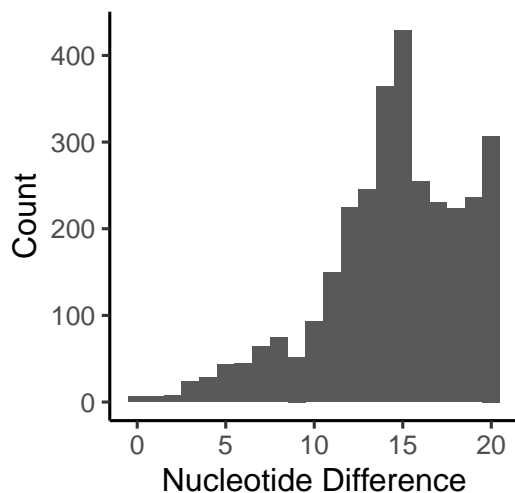
IGHV3-33*05

557 sequences assigned
No exact matches.



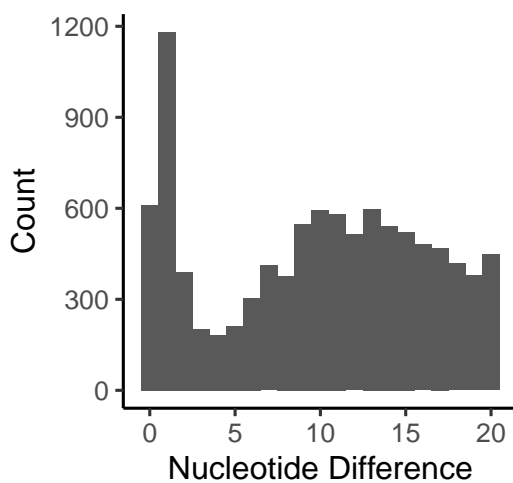
IGHV3-30*02

6662 sequences assigned
6 (0.1%) exact matches, in which:
6 unique CDR3
2 unique J



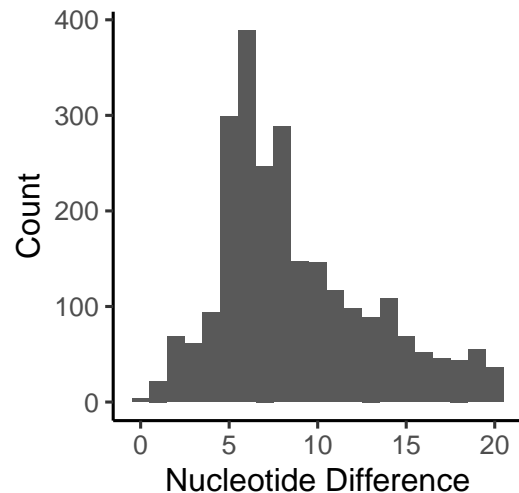
IGHV3-30*18

12245 sequences assigned
610 (5%) exact matches, in which:
343 unique CDR3
7 unique J



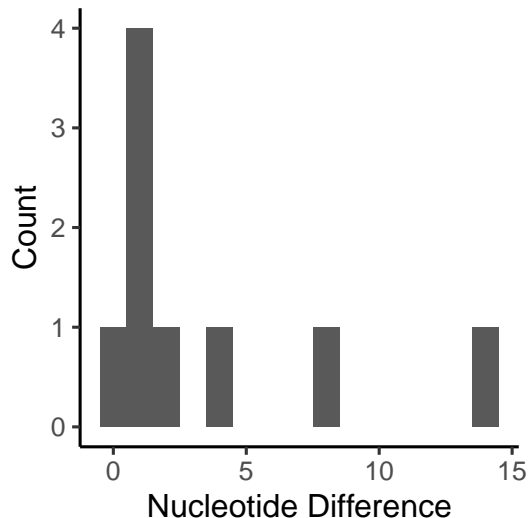
IGHV3-33*06

2707 sequences assigned
4 (0.1%) exact matches, in which:
4 unique CDR3
3 unique J



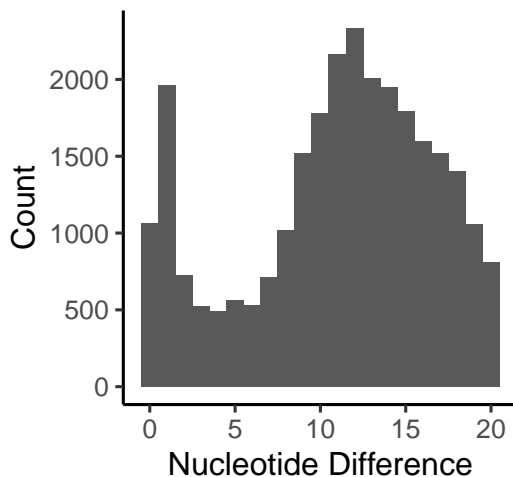
IGHV3-38-3*01

9 sequences assigned
1 (11.1%) exact matches, in which:
1 unique CDR3
1 unique J



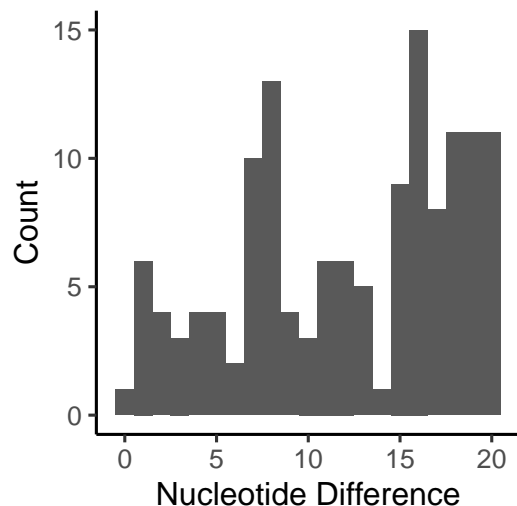
IGHV3-48*03

32393 sequences assigned
1066 (3.3%) exact matches, in which:
646 unique CDR3
7 unique J



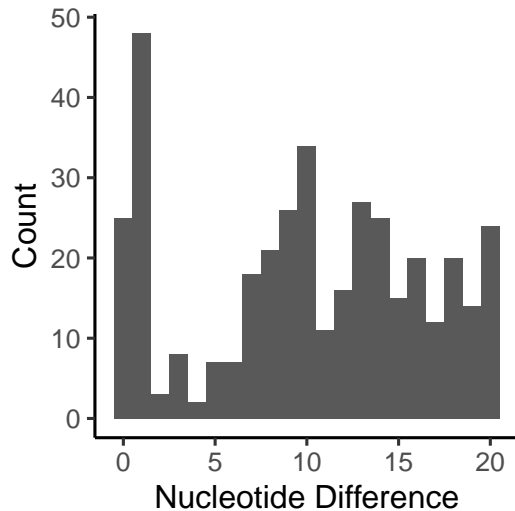
IGHV3-53*05

451 sequences assigned
1 (0.2%) exact matches, in which:
1 unique CDR3
1 unique J



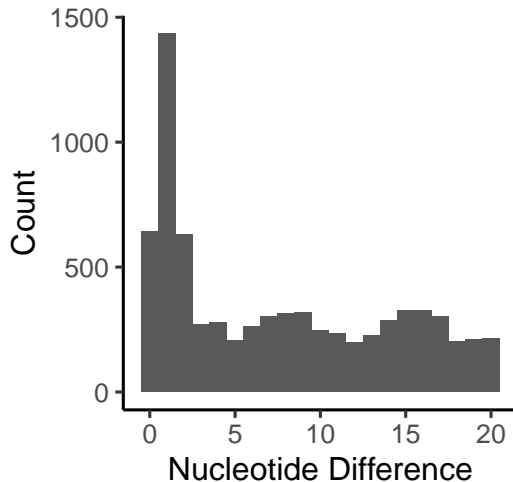
IGHV3-43*01

508 sequences assigned
25 (4.9%) exact matches, in which:
19 unique CDR3
3 unique J



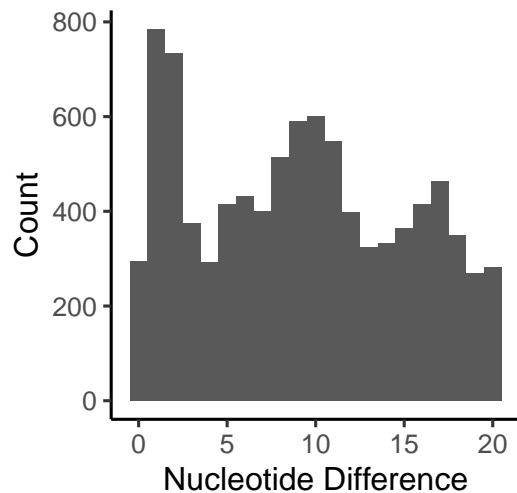
IGHV3-49*04

9024 sequences assigned
644 (7.1%) exact matches, in which:
367 unique CDR3
6 unique J



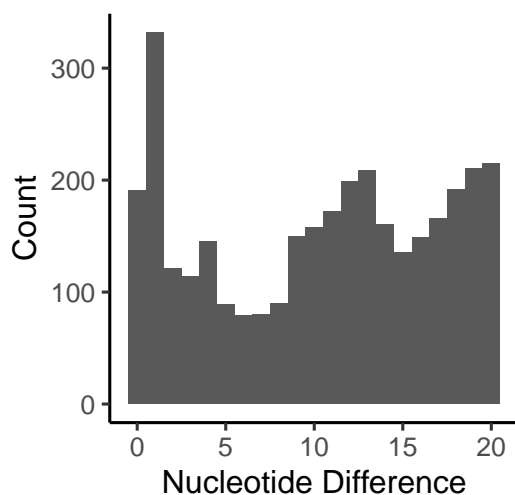
IGHV3-53*01_02

12186 sequences assigned
295 (2.4%) exact matches, in which:
195 unique CDR3
5 unique J



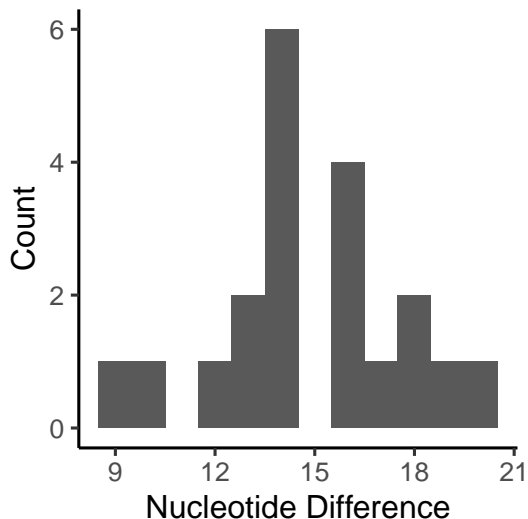
IGHV3-48*02

4703 sequences assigned
191 (4.1%) exact matches, in which:
117 unique CDR3
7 unique J



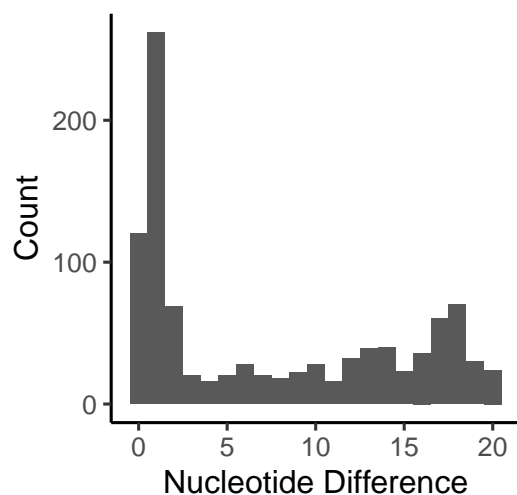
IGHV3-52*01_03

22 sequences assigned
No exact matches.



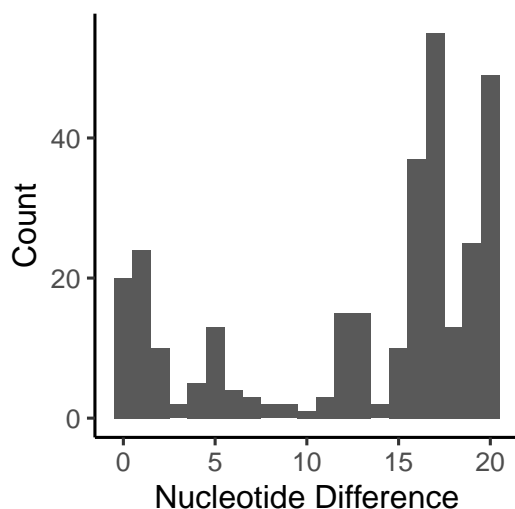
IGHV3-64*01

1152 sequences assigned
120 (10.4%) exact matches, in which:
63 unique CDR3
5 unique J



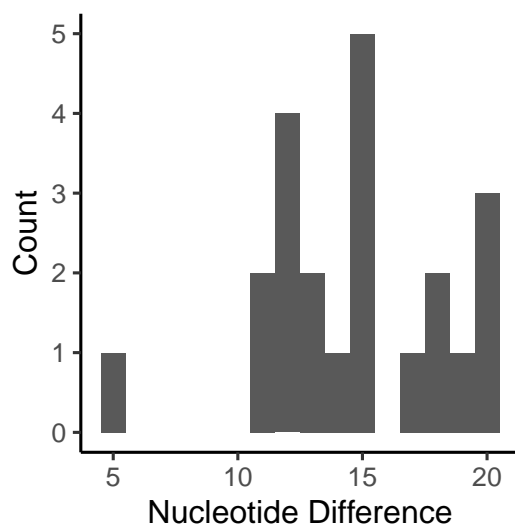
IGHV3-64*02_07

522 sequences assigned
20 (3.8%) exact matches, in which:
12 unique CDR3
1 unique J



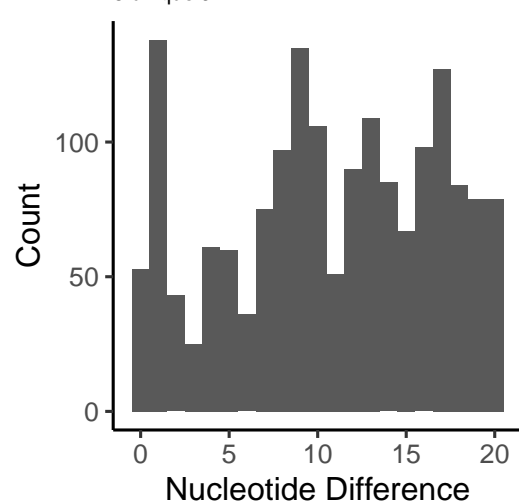
IGHV3-69-1*01

54 sequences assigned
No exact matches.



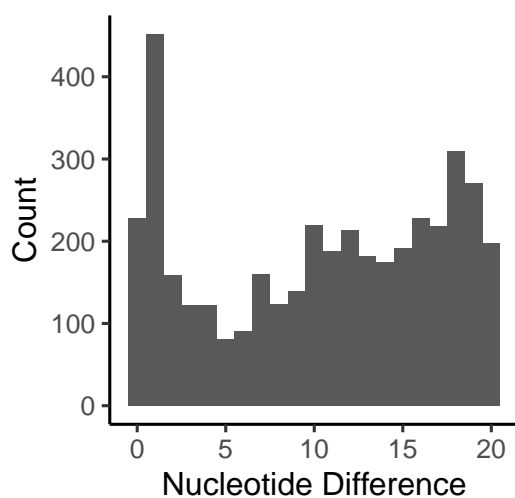
IGHV3-72*01

2470 sequences assigned
53 (2.1%) exact matches, in which:
25 unique CDR3
5 unique J



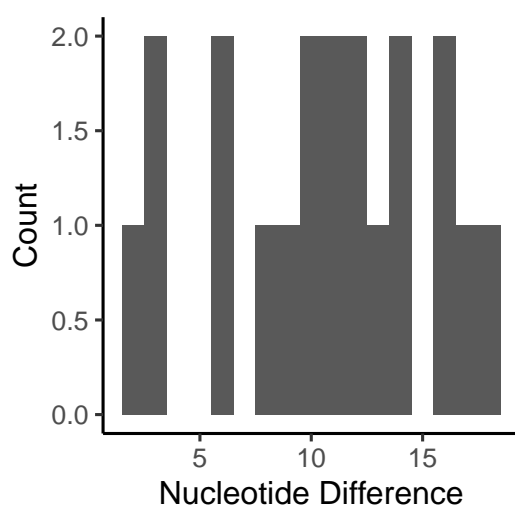
IGHV3-66*02

5686 sequences assigned
228 (4%) exact matches, in which:
129 unique CDR3
5 unique J



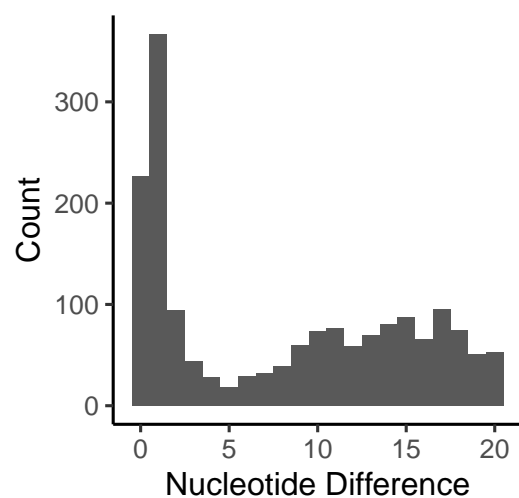
IGHV3-69-1*02

72 sequences assigned
No exact matches.



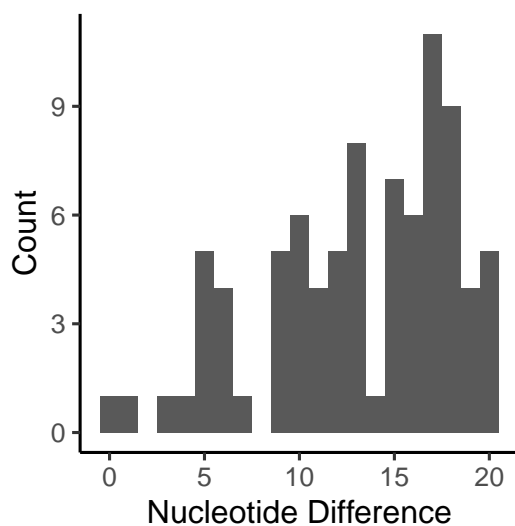
IGHV3-73*01_02

2269 sequences assigned
227 (10%) exact matches, in which:
128 unique CDR3
4 unique J



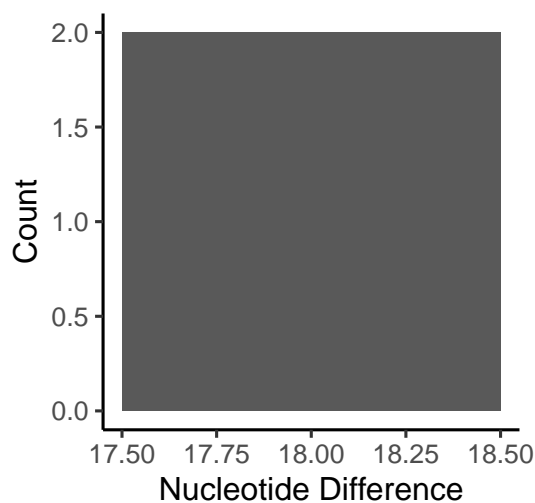
IGHV3-66*03

221 sequences assigned
1 (0.5%) exact matches, in which:
1 unique CDR3
1 unique J



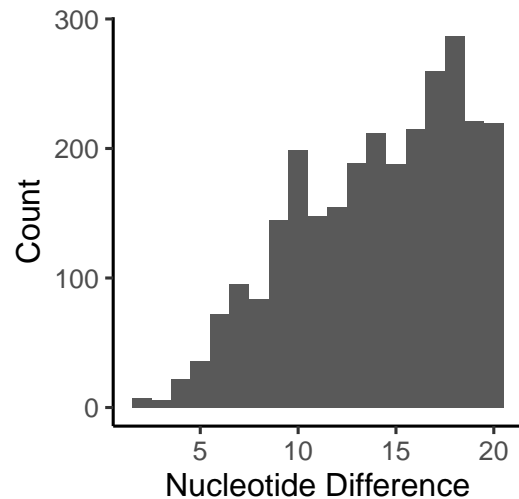
IGHV3-71*01_04

15 sequences assigned
No exact matches.



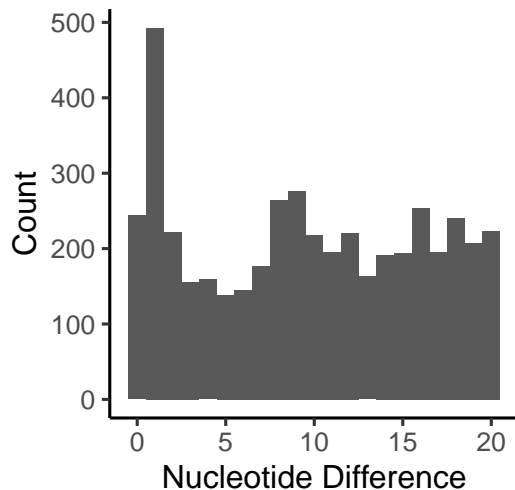
IGHV3-74*03

4611 sequences assigned
No exact matches.



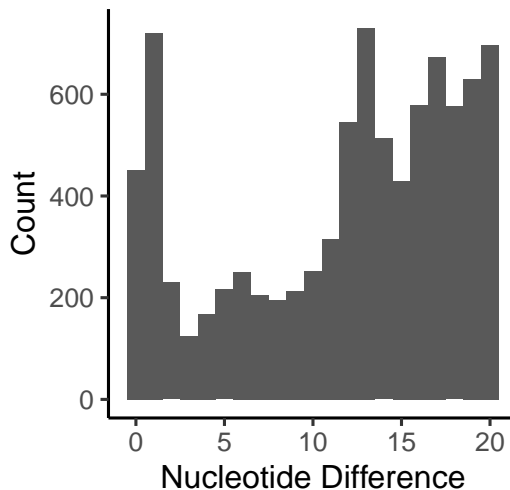
IGHV3-74*01_02

6075 sequences assigned
244 (4%) exact matches, in which:
137 unique CDR3
6 unique J



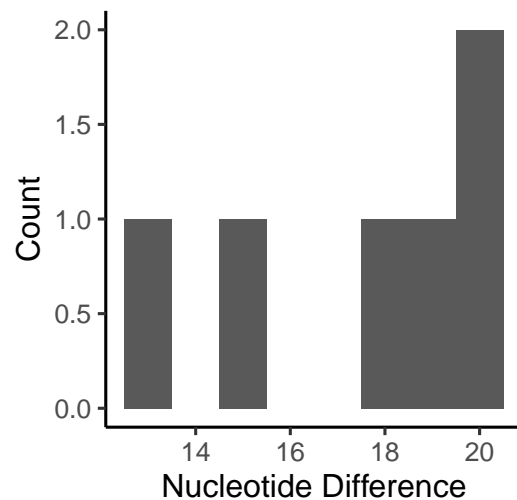
IGHV4-4*07

13518 sequences assigned
451 (3.3%) exact matches, in which:
260 unique CDR3
5 unique J



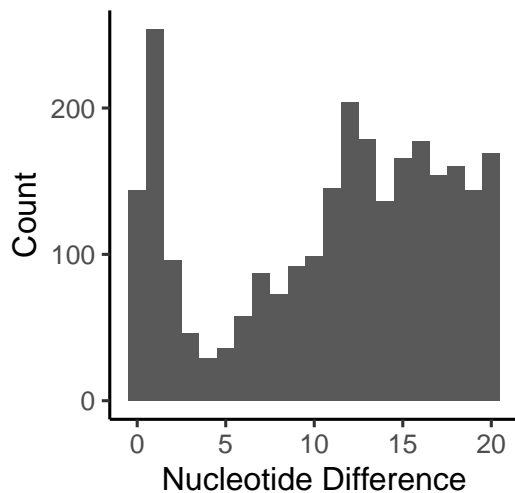
IGHV4-28*01_07

37 sequences assigned
No exact matches.



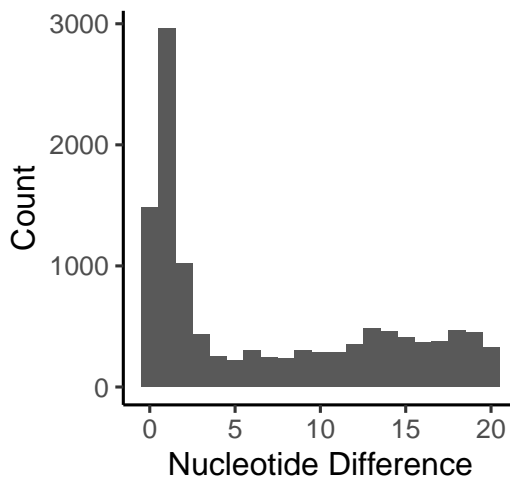
IGHV3-43D*04

3883 sequences assigned
144 (3.7%) exact matches, in which:
79 unique CDR3
3 unique J



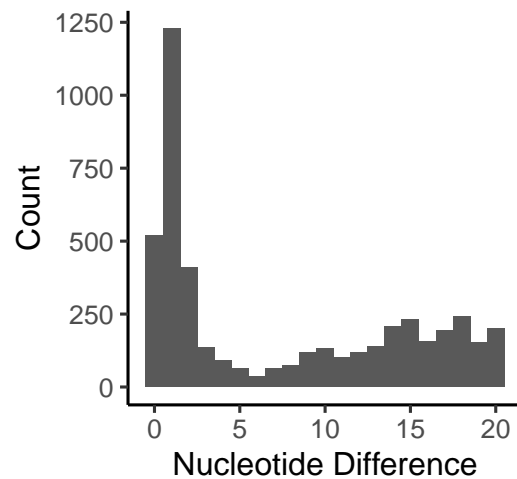
IGHV4-4*02_03

15457 sequences assigned
1482 (9.6%) exact matches, in which:
786 unique CDR3
6 unique J



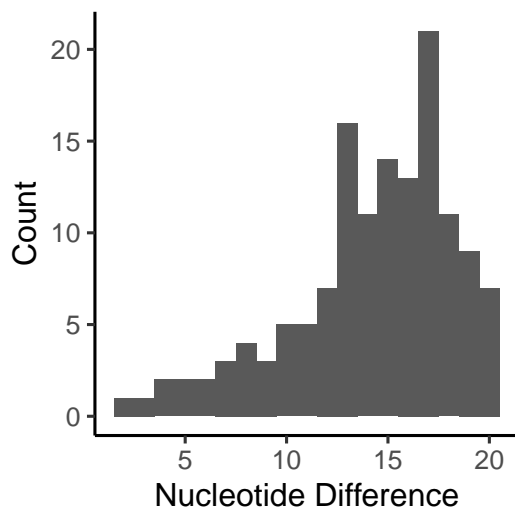
IGHV4-30-4*01

6036 sequences assigned
521 (8.6%) exact matches, in which:
258 unique CDR3
5 unique J



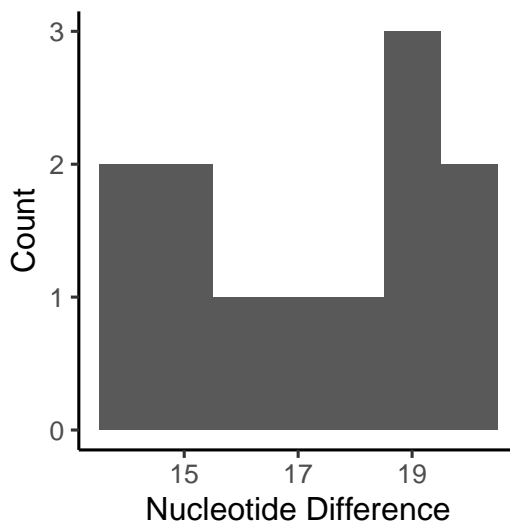
IGHV3-NL1*01

250 sequences assigned
No exact matches.



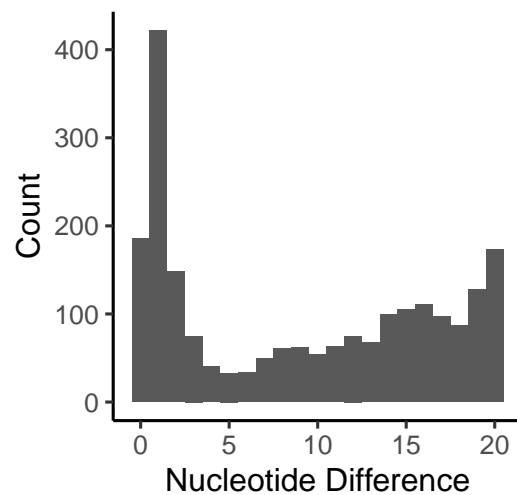
IGHV4-28*03

388 sequences assigned
No exact matches.



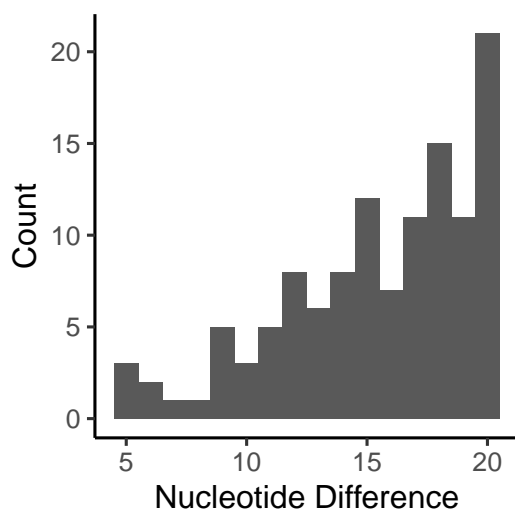
IGHV4-30-2*01

3249 sequences assigned
186 (5.7%) exact matches, in which:
102 unique CDR3
6 unique J



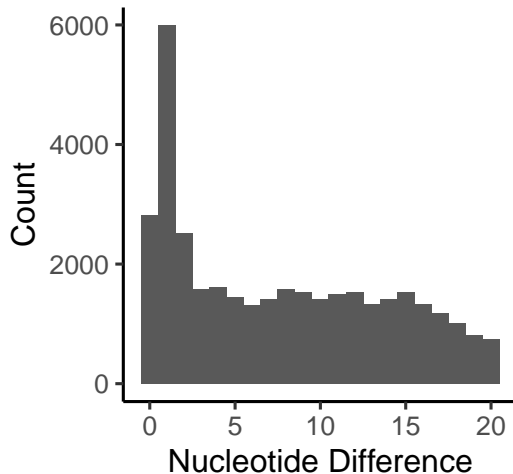
IGHV4-30-2*03

222 sequences assigned
No exact matches.



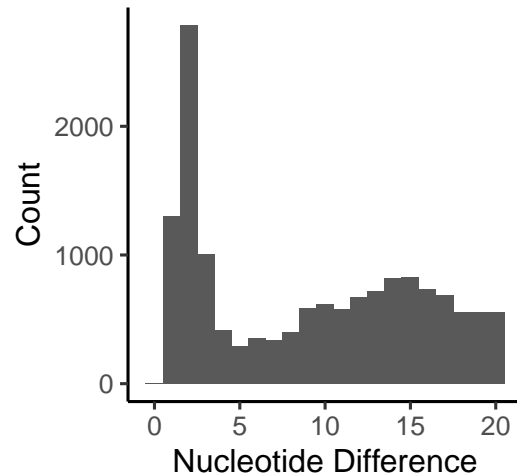
IGHV4-34*01_02

40162 sequences assigned
2814 (7%) exact matches, in which:
1444 unique CDR3
7 unique J



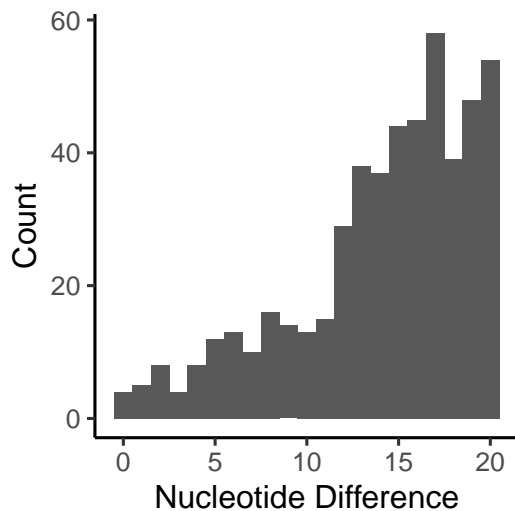
IGHV4-39*02

19371 sequences assigned
1 (0%) exact matches, in which:
1 unique CDR3
1 unique J



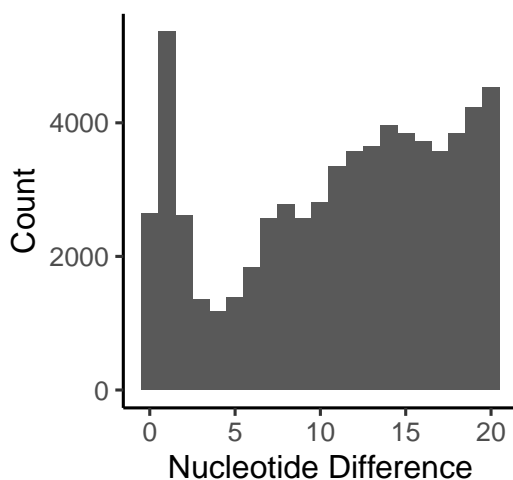
IGHV4-30-4*08

936 sequences assigned
4 (0.4%) exact matches, in which:
4 unique CDR3
3 unique J



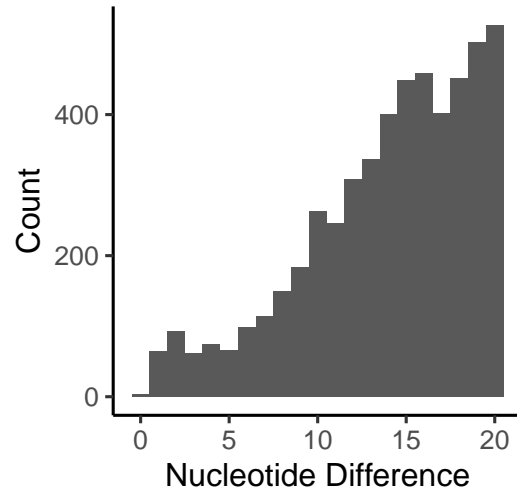
IGHV4-38-2*01

131357 sequences assigned
2647 (2%) exact matches, in which:
1433 unique CDR3
7 unique J



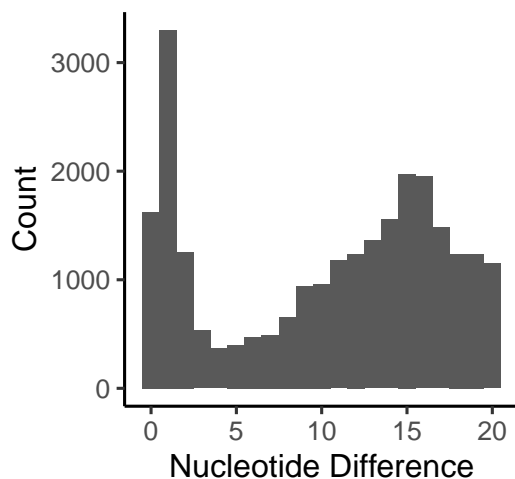
IGHV4-39*07

18144 sequences assigned
3 (0%) exact matches, in which:
3 unique CDR3
2 unique J



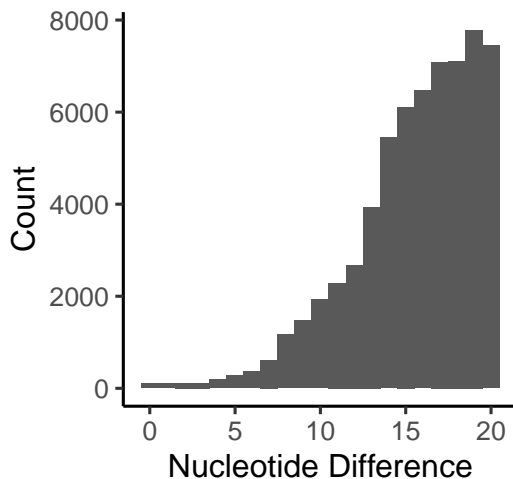
IGHV4-31*02

32350 sequences assigned
1626 (5%) exact matches, in which:
821 unique CDR3
7 unique J



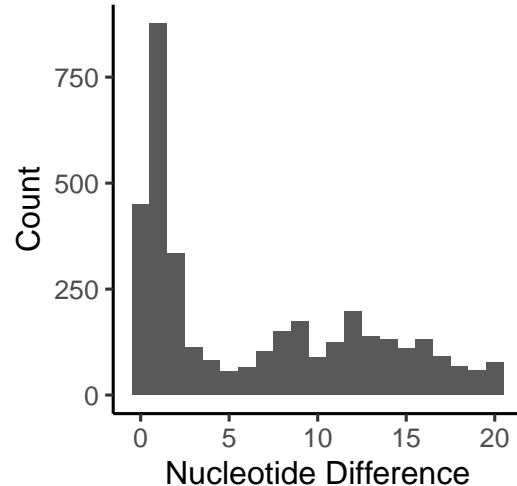
IGHV4-38-2*02

116251 sequences assigned
106 (0.1%) exact matches, in which:
88 unique CDR3
5 unique J



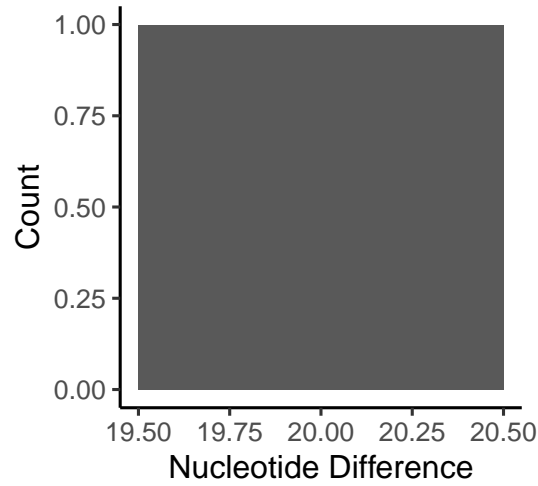
IGHV4-39*01_05

5099 sequences assigned
449 (8.8%) exact matches, in which:
204 unique CDR3
5 unique J



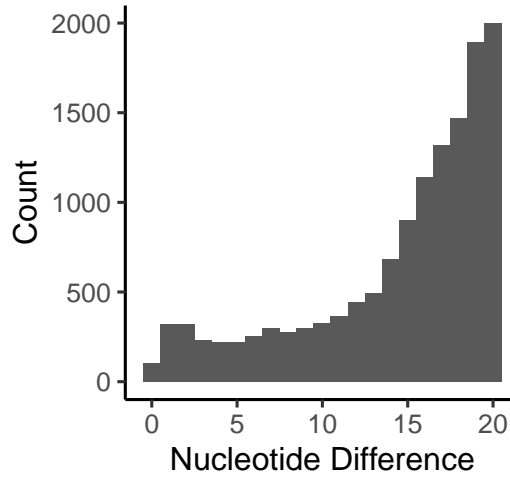
IGHV4-55*09

21 sequences assigned
No exact matches.



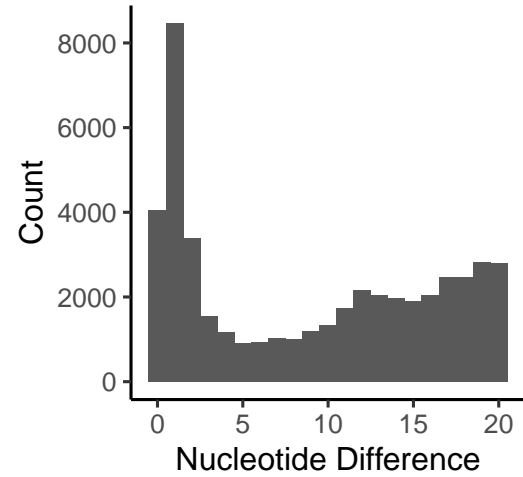
IGHV4-59*12

27183 sequences assigned
102 (0.4%) exact matches, in which:
88 unique CDR3
6 unique J



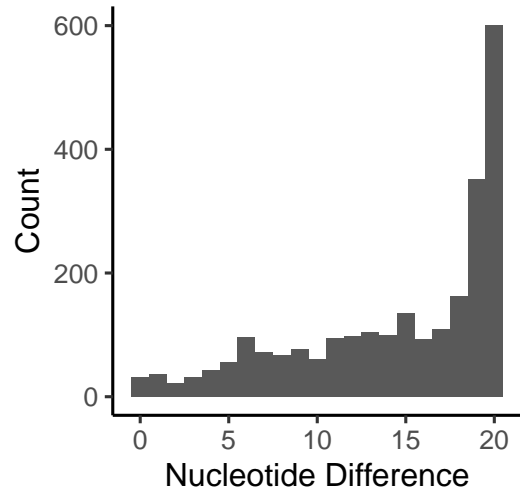
IGHV4-61*02

74320 sequences assigned
4047 (5.4%) exact matches, in which:
1965 unique CDR3
7 unique J



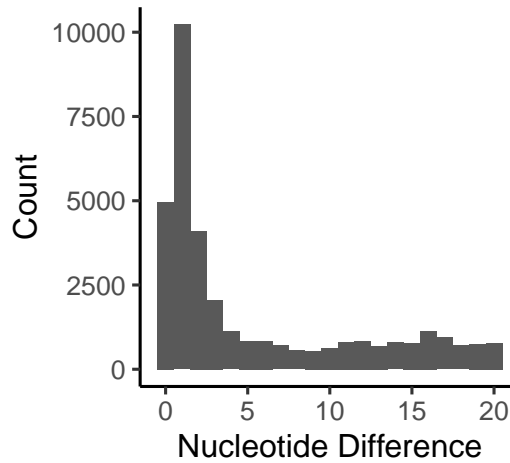
IGHV4-59*02

6318 sequences assigned
32 (0.5%) exact matches, in which:
26 unique CDR3
6 unique J



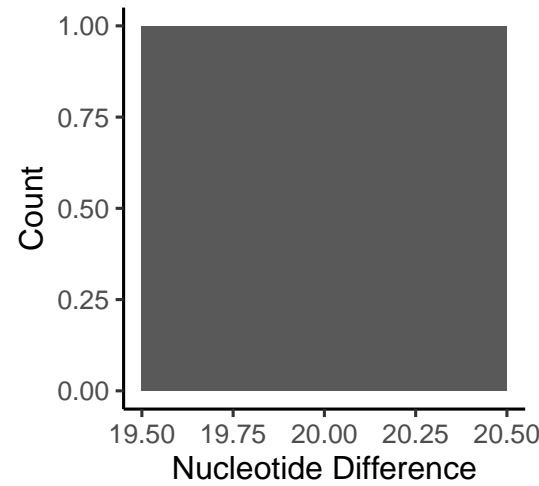
IGHV4-59*01_07

41062 sequences assigned
4959 (12.1%) exact matches, in which:
2507 unique CDR3
7 unique J



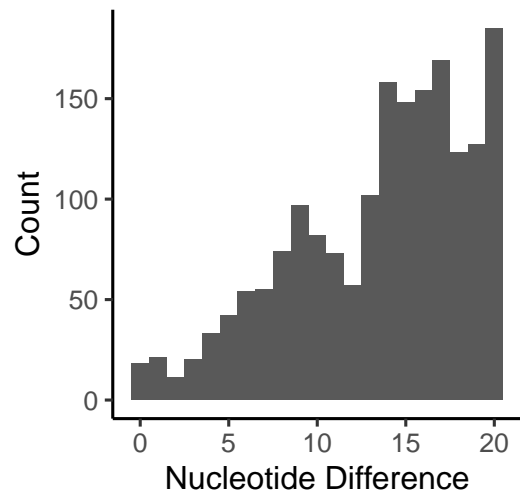
IGHV1/OR15-2*02_03

8 sequences assigned
No exact matches.



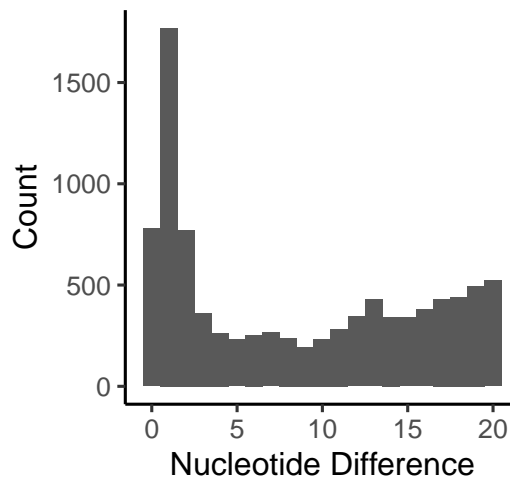
IGHV4-59*11

4960 sequences assigned
18 (0.4%) exact matches, in which:
15 unique CDR3
4 unique J



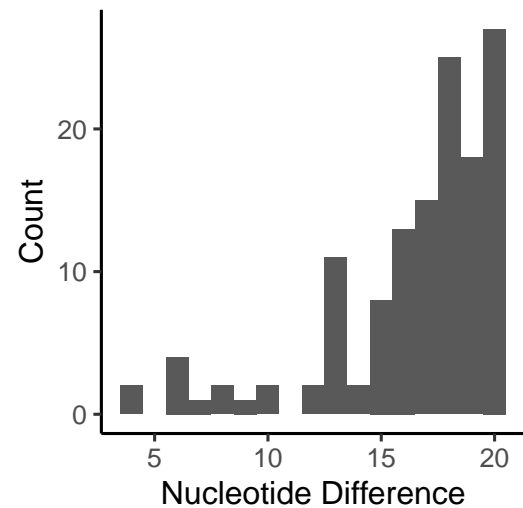
IGHV4-61*01

14031 sequences assigned
779 (5.6%) exact matches, in which:
394 unique CDR3
7 unique J



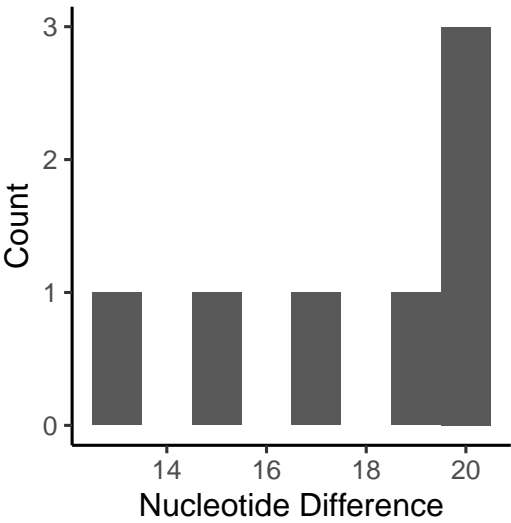
IGHV4/OR15-8*01

429 sequences assigned
No exact matches.



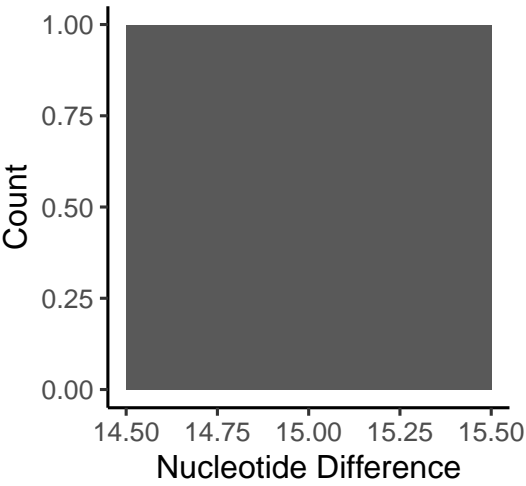
IGHV4/OR15-8*02

572 sequences assigned
No exact matches.



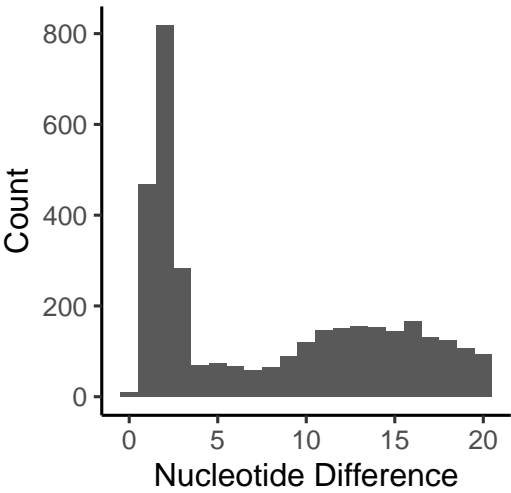
IGHV5-78*01

1 sequences assigned
No exact matches.



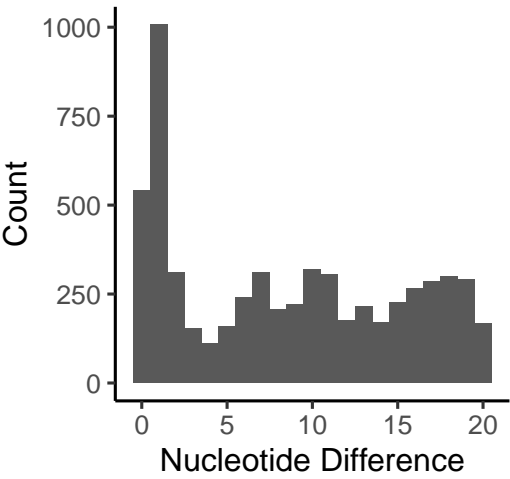
IGHV5-51*07

3900 sequences assigned
9 (0.2%) exact matches, in which:
9 unique CDR3
4 unique J



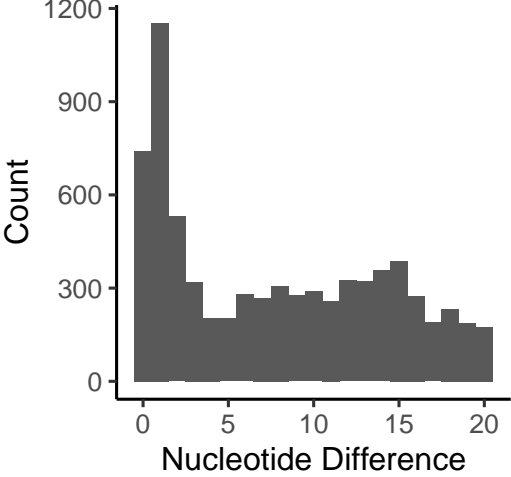
IGHV6-1*01_02

8071 sequences assigned
540 (6.7%) exact matches, in which:
317 unique CDR3
5 unique J

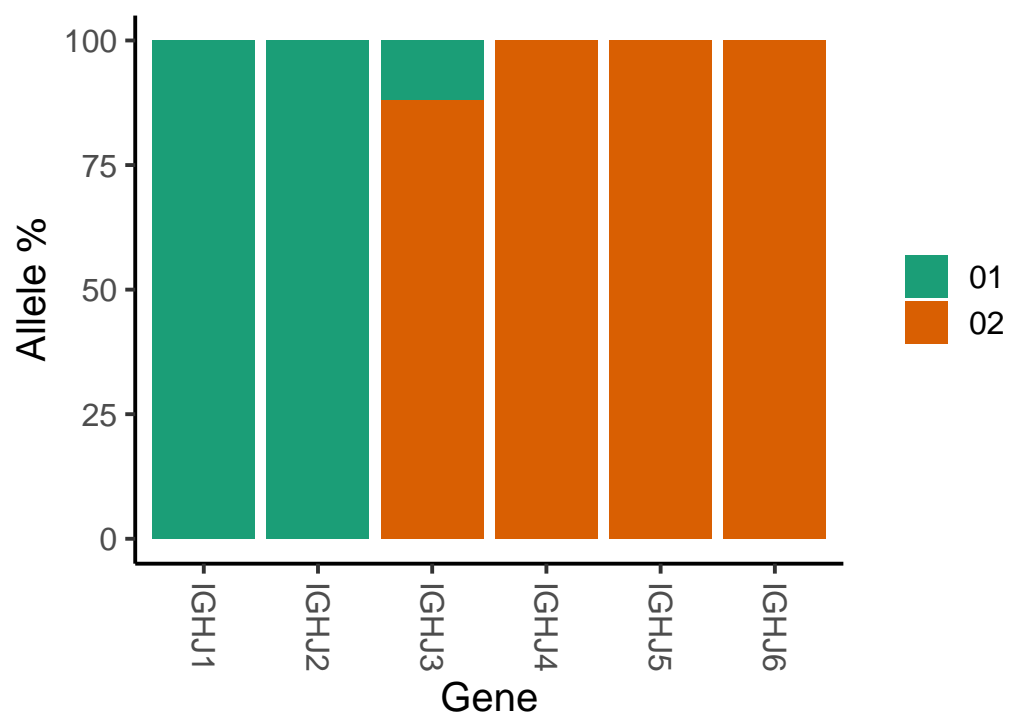


IGHV5-51*01_03

8335 sequences assigned
742 (8.9%) exact matches, in which:
458 unique CDR3
6 unique J



Allele Usage



Warning – no inferred sequences found.