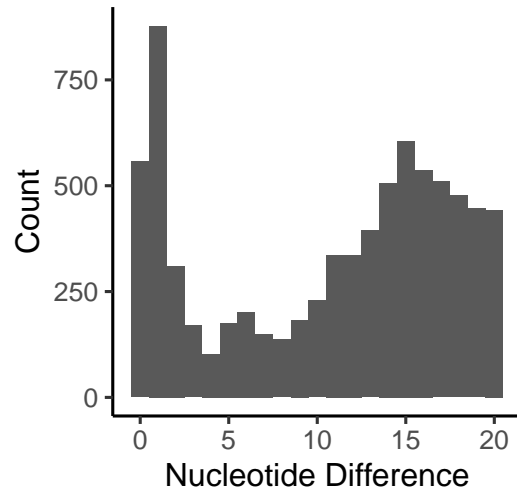


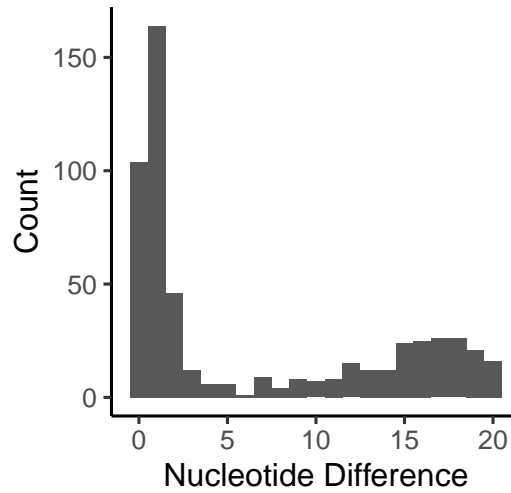
IGHV1-2*02

9923 sequences assigned
557 (5.6%) exact matches, in which:
392 unique CDR3
7 unique J



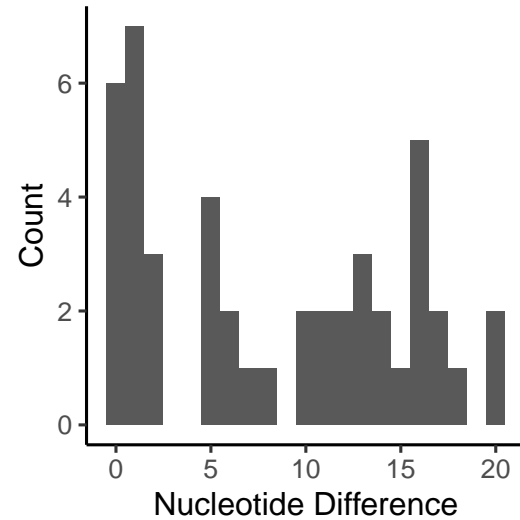
IGHV1-3*01_05

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



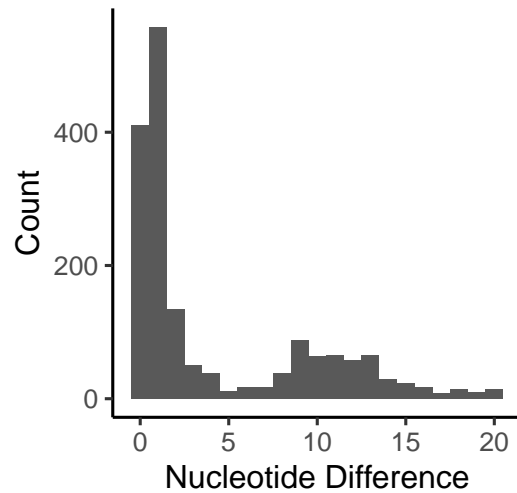
IGHV1-24*01

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



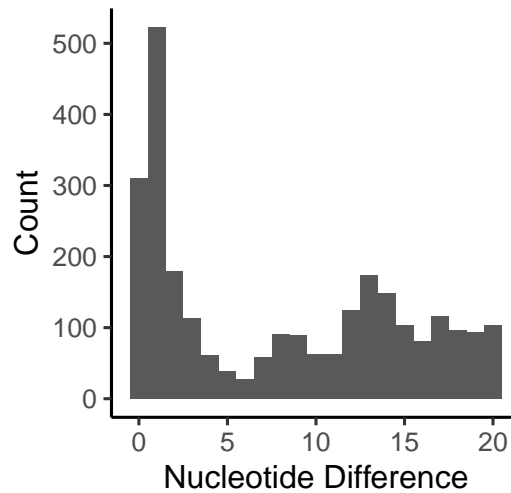
IGHV1-2*04

1788 sequences assigned
411 (23%) exact matches, in which:
296 unique CDR3
7 unique J



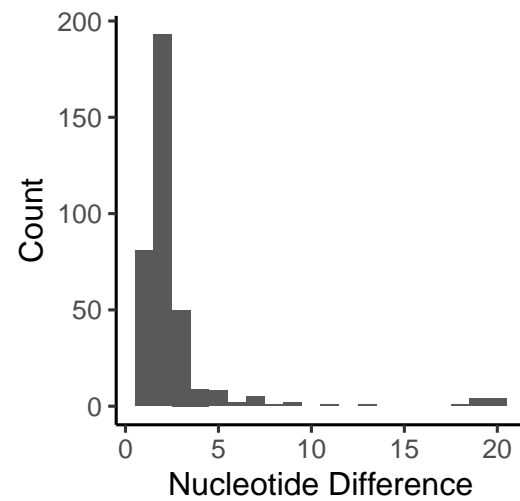
IGHV1-8*01

3539 sequences assigned
310 (8.8%) exact matches, in which:
200 unique CDR3
6 unique J



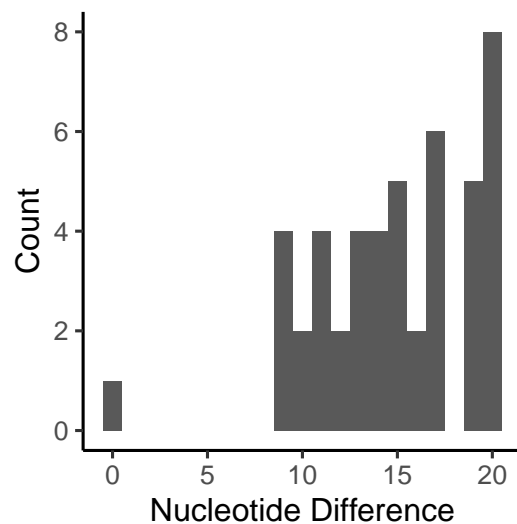
IGHV1-45*02

377 sequences assigned
No exact matches.



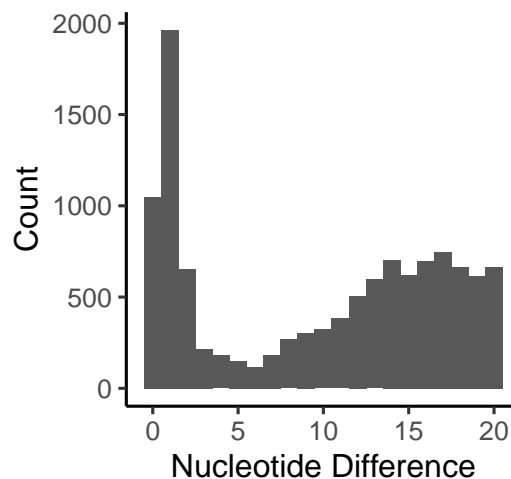
IGHV1-3*04

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



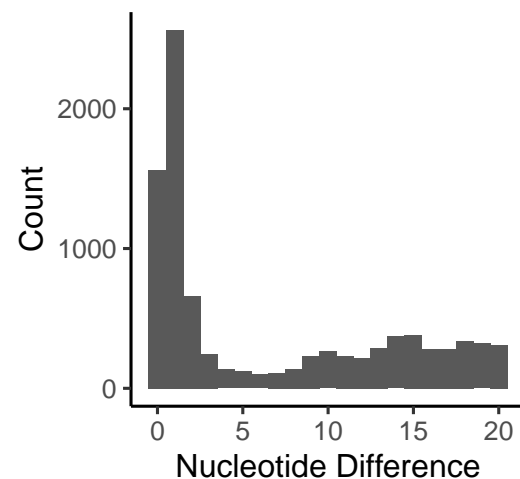
IGHV1-18*01

16042 sequences assigned
1048 (6.5%) exact matches, in which:
632 unique CDR3
7 unique J



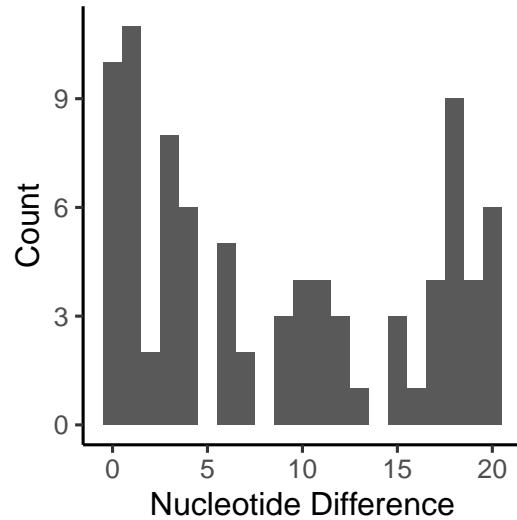
IGHV1-46*01

12688 sequences assigned
1564 (12.3%) exact matches, in which:
1046 unique CDR3
7 unique J



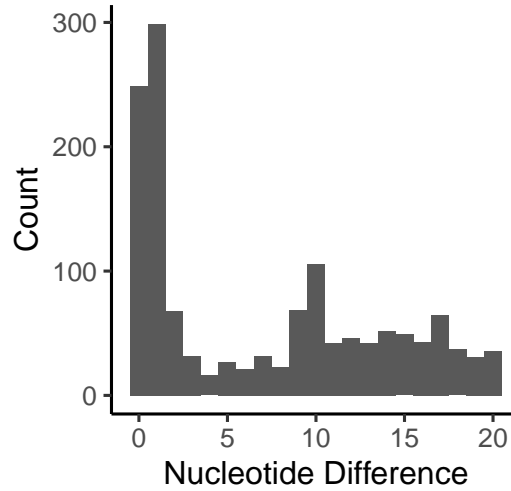
IGHV1-58*02

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



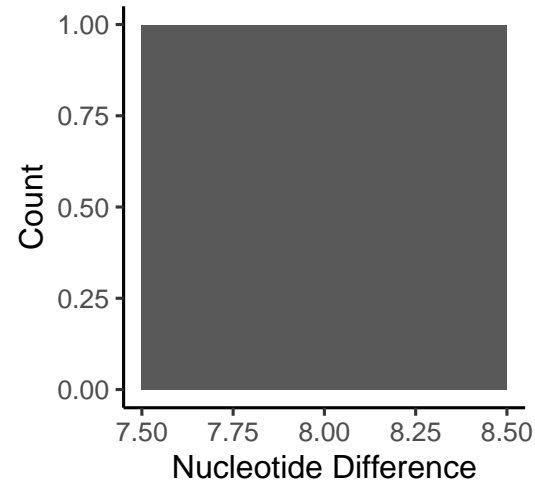
IGHV1-69*02

1816 sequences assigned
249 (13.7%) exact matches, in which:
189 unique CDR3
5 unique J



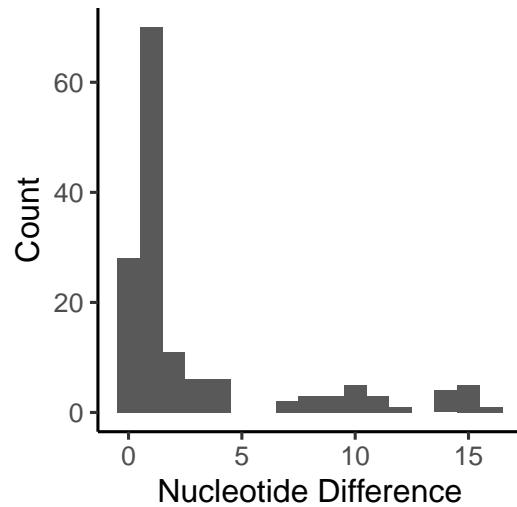
IGHV2-70*01

2 sequences assigned
No exact matches.



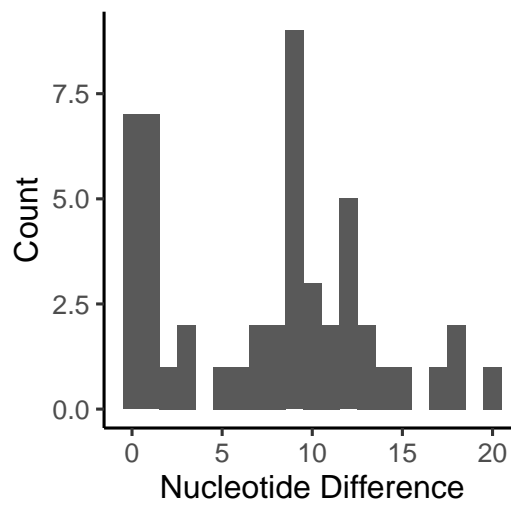
IGHV1-58*01_03

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



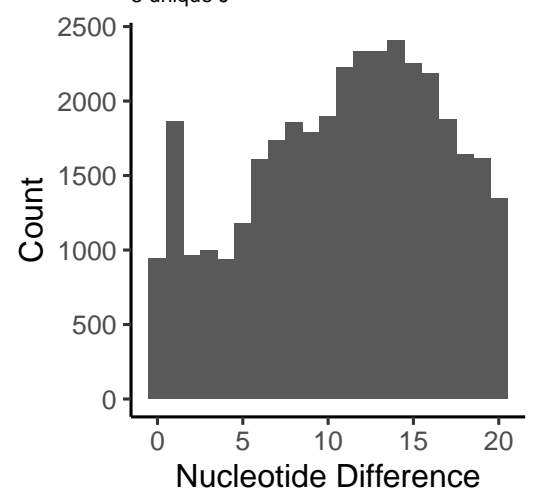
IGHV2-5*01

53 sequences assigned
7 (13.2%) exact matches, in which:
5 unique CDR3
2 unique J



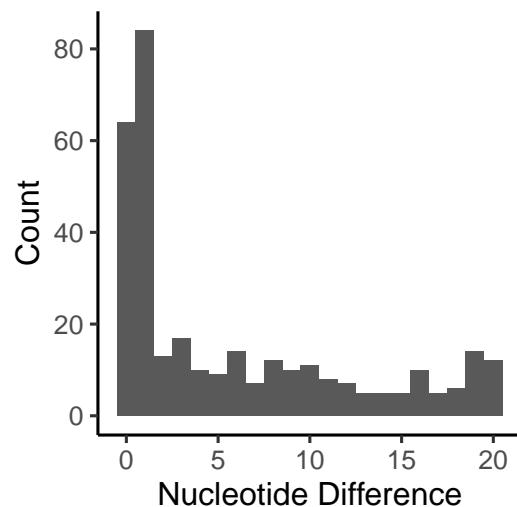
IGHV3-7*01

46371 sequences assigned
942 (2%) exact matches, in which:
535 unique CDR3
5 unique J



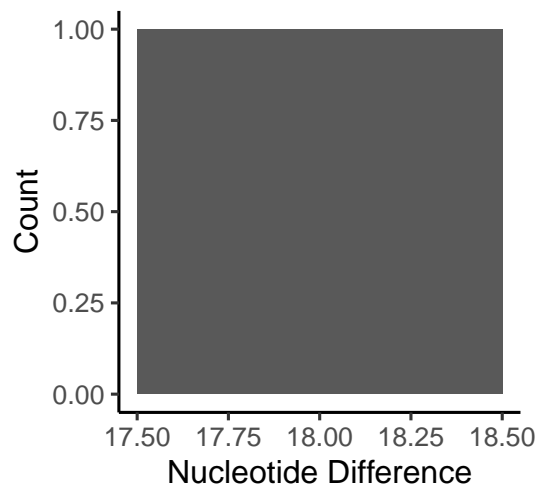
IGHV1-69-2*01

422 sequences assigned
64 (15.2%) exact matches, in which:
45 unique CDR3
3 unique J



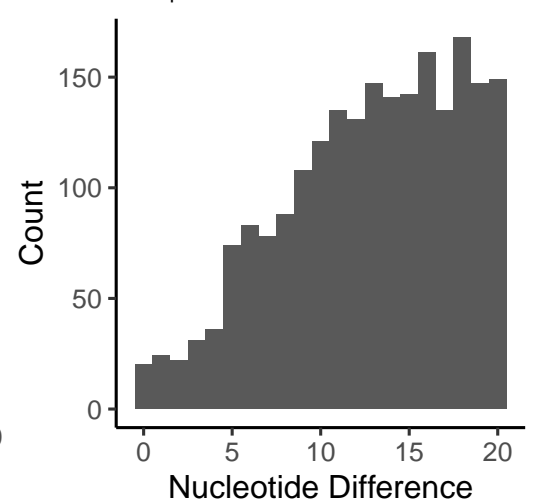
IGHV2-26*01

1 sequences assigned
No exact matches.



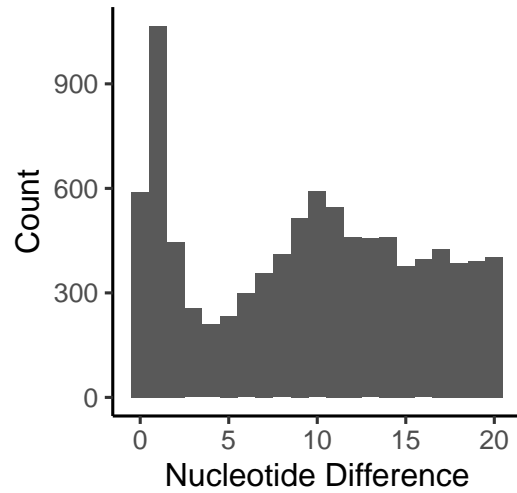
IGHV3-7*03

3064 sequences assigned
20 (0.7%) exact matches, in which:
20 unique CDR3
5 unique J



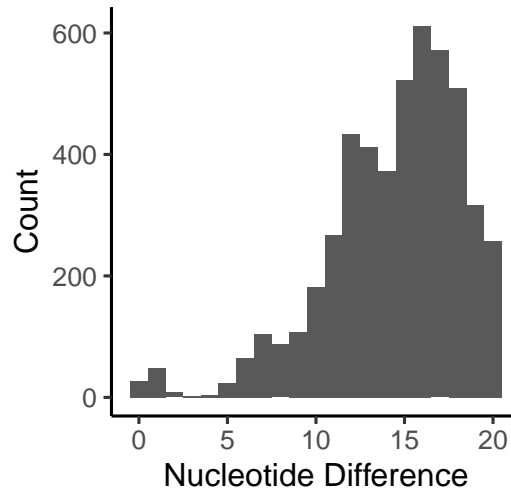
IGHV3-9*01

13490 sequences assigned
590 (4.4%) exact matches, in which:
327 unique CDR3
6 unique J



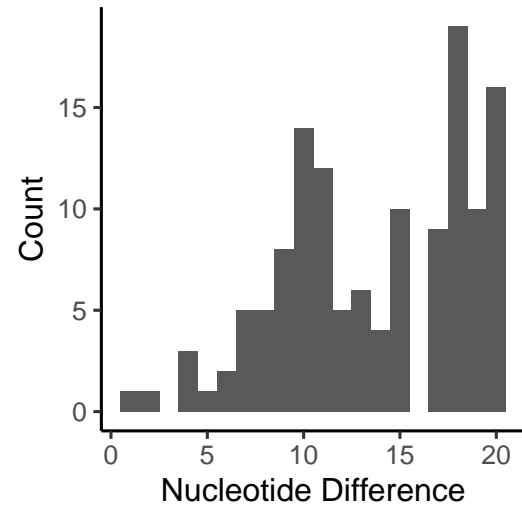
IGHV3-13*01

6575 sequences assigned
27 (0.4%) exact matches, in which:
12 unique CDR3
2 unique J



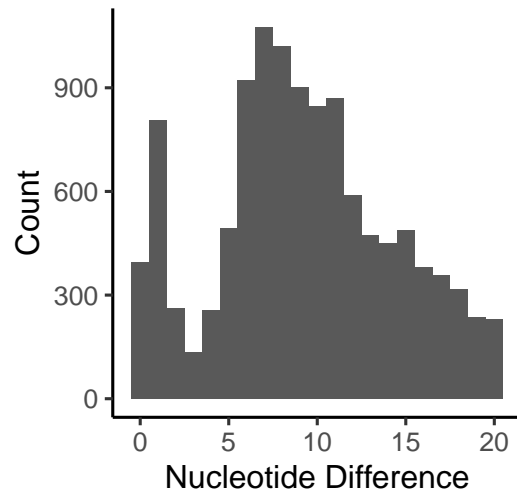
IGHV3-20*03_04

294 sequences assigned
No exact matches.



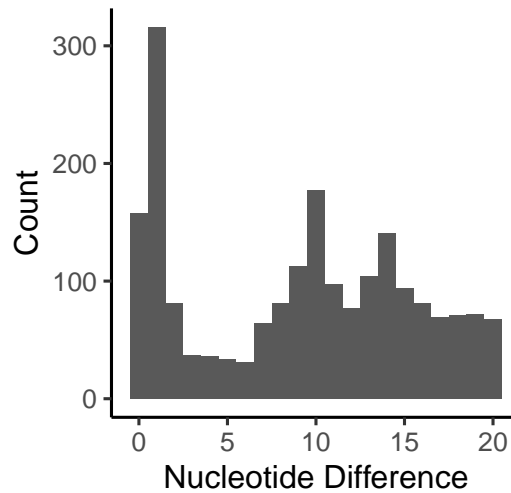
IGHV3-11*01

12704 sequences assigned
394 (3.1%) exact matches, in which:
217 unique CDR3
7 unique J



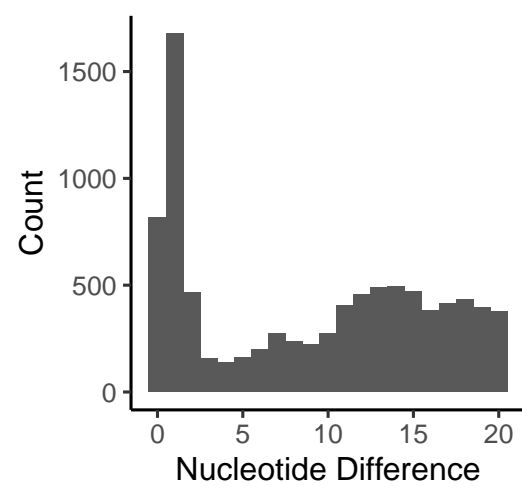
IGHV3-15*01_02

2728 sequences assigned
158 (5.8%) exact matches, in which:
102 unique CDR3
5 unique J



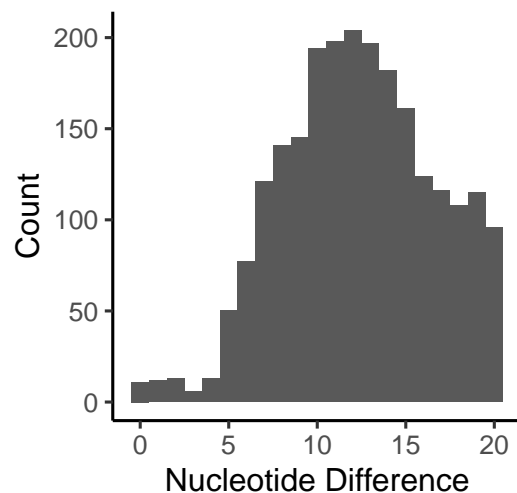
IGHV3-21*01_02

10898 sequences assigned
819 (7.5%) exact matches, in which:
458 unique CDR3
7 unique J



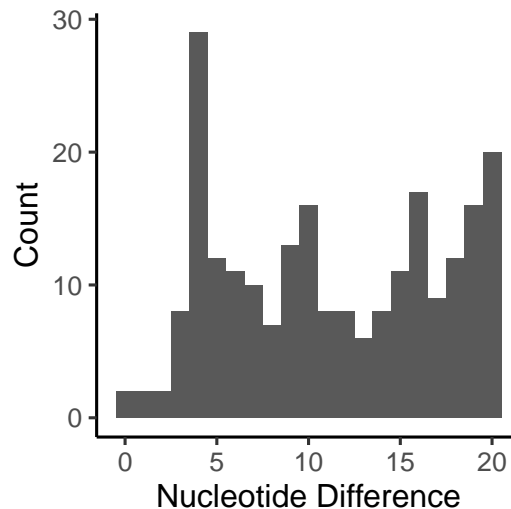
IGHV3-11*04

2748 sequences assigned
11 (0.4%) exact matches, in which:
11 unique CDR3
3 unique J



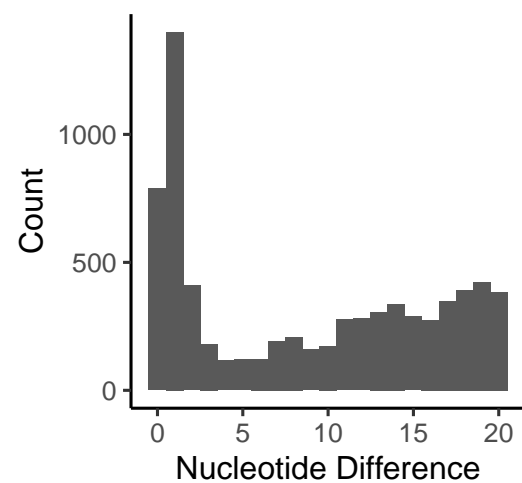
IGHV3-20*01_02

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



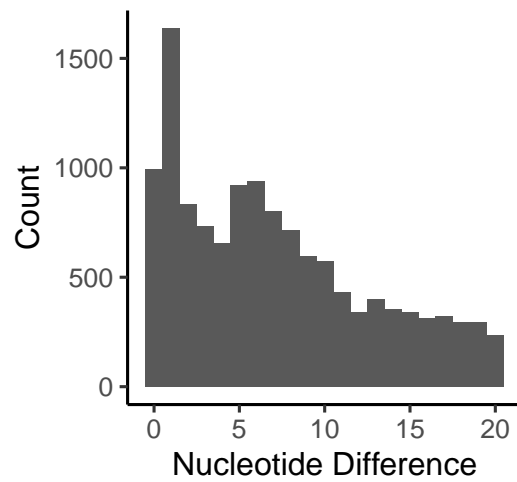
IGHV3-30-3*01

10243 sequences assigned
788 (7.7%) exact matches, in which:
455 unique CDR3
7 unique J



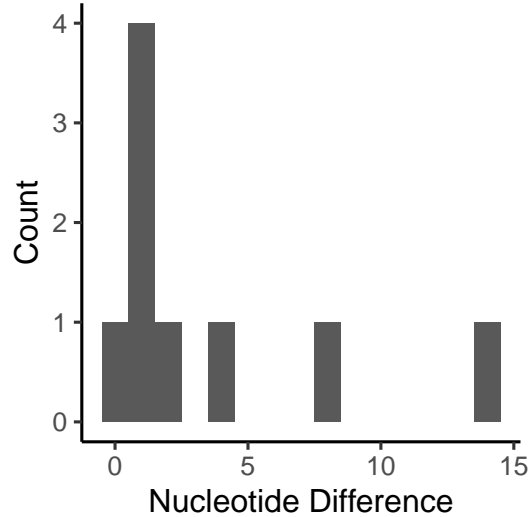
IGHV3-33*01

14102 sequences assigned
993 (7%) exact matches, in which:
529 unique CDR3
6 unique J



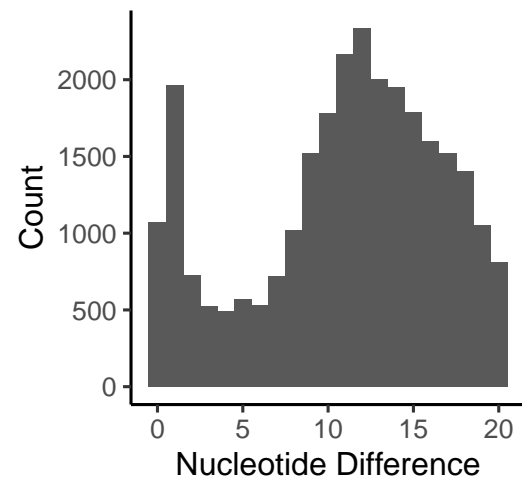
IGHV3-38-3*01

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



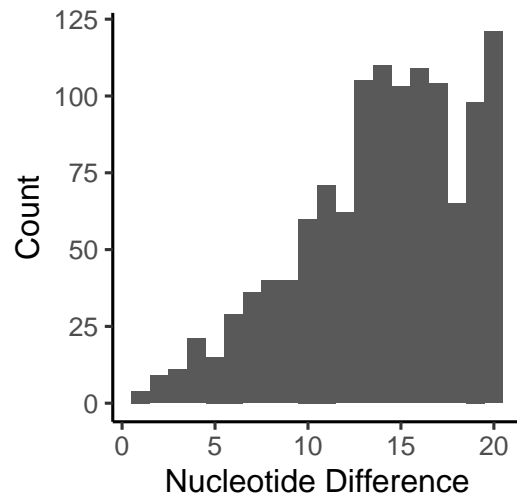
IGHV3-48*03

32383 sequences assigned
1070 (3.3%) exact matches, in which:
647 unique CDR3
7 unique J



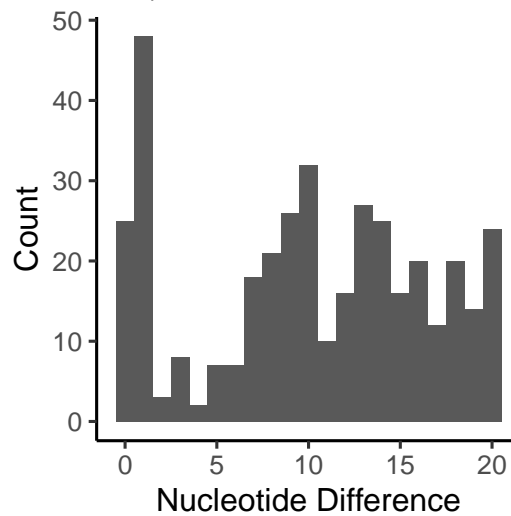
IGHV3-33*05

1955 sequences assigned
No exact matches.



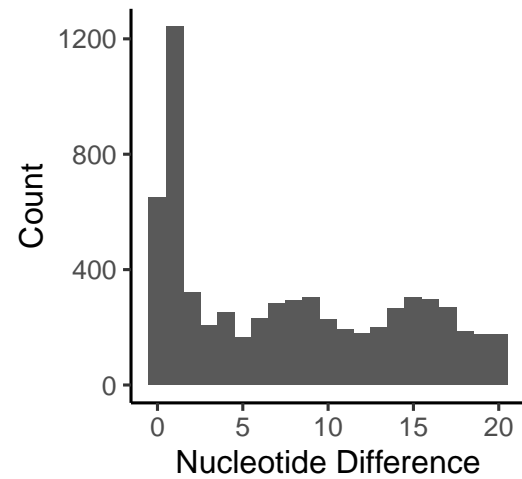
IGHV3-43*01

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



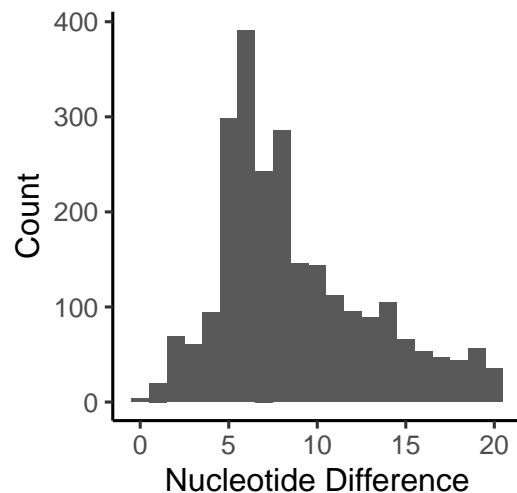
IGHV3-49*04

7788 sequences assigned
650 (8.3%) exact matches, in which:
369 unique CDR3
6 unique J



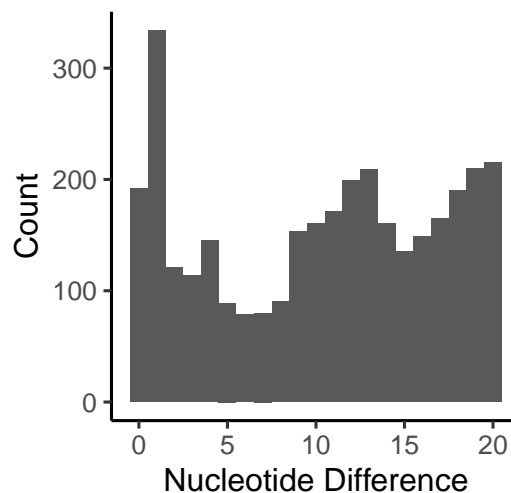
IGHV3-33*06

2685 sequences assigned
4 (0.1%) exact matches, in which:
4 unique CDR3
3 unique J



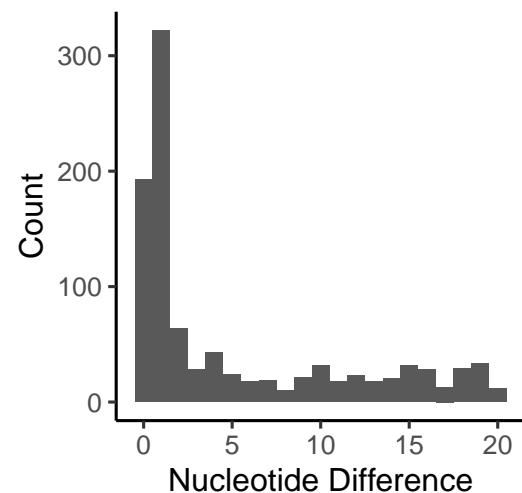
IGHV3-48*02

4702 sequences assigned
192 (4.1%) exact matches, in which:
118 unique CDR3
7 unique J



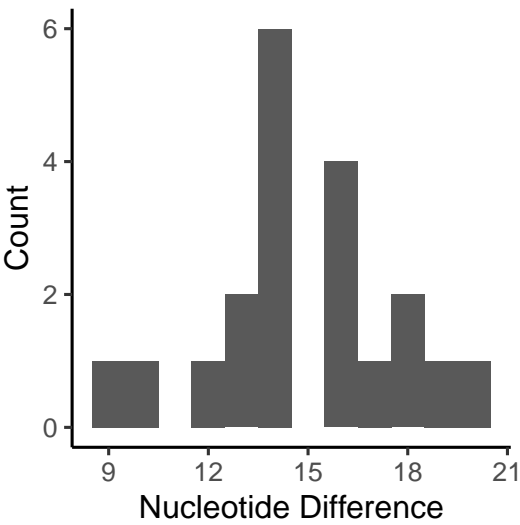
IGHV3-49*03_05

1146 sequences assigned
193 (16.8%) exact matches, in which:
98 unique CDR3
6 unique J



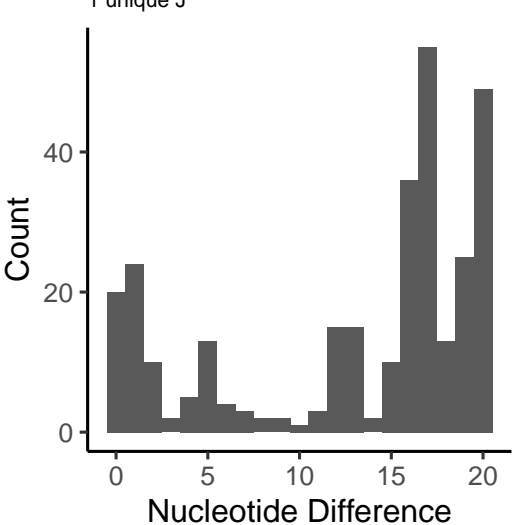
IGHV3-52*01_03

22 sequences assigned
No exact matches.



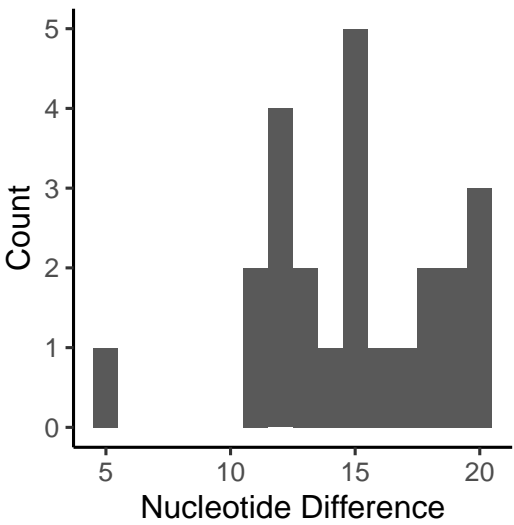
IGHV3-64*02_07

514 sequences assigned
20 (3.9%) exact matches, in which:
12 unique CDR3
1 unique J



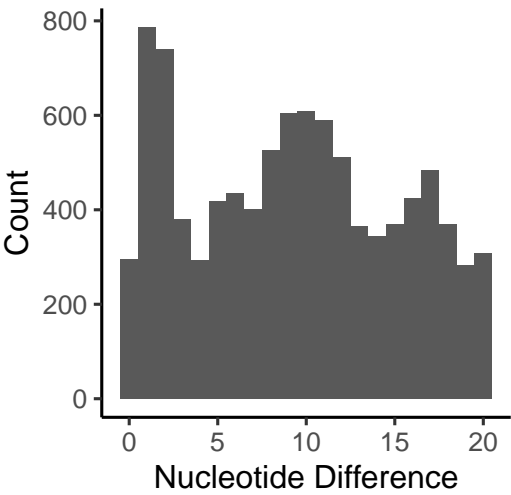
IGHV3-69-1*01

62 sequences assigned
No exact matches.



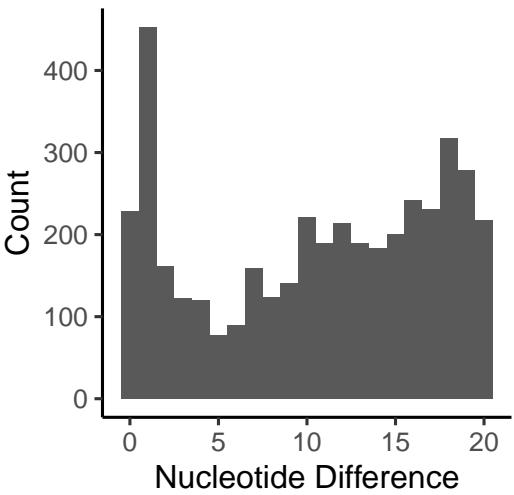
IGHV3-53*01_02

13184 sequences assigned
295 (2.2%) exact matches, in which:
194 unique CDR3
5 unique J



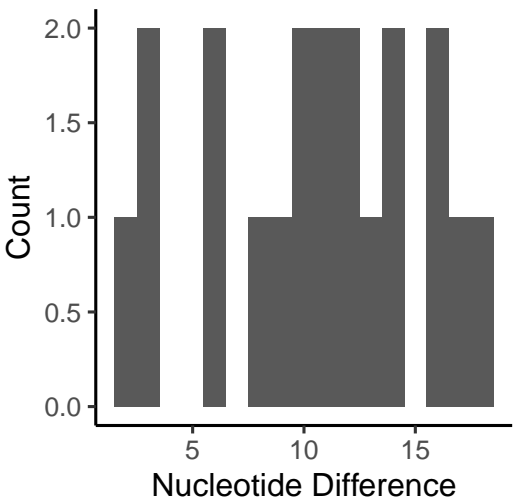
IGHV3-66*02

6144 sequences assigned
229 (3.7%) exact matches, in which:
129 unique CDR3
5 unique J



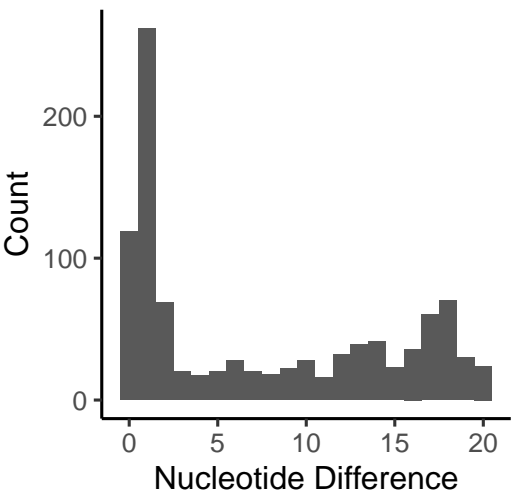
IGHV3-69-1*02

72 sequences assigned
No exact matches.



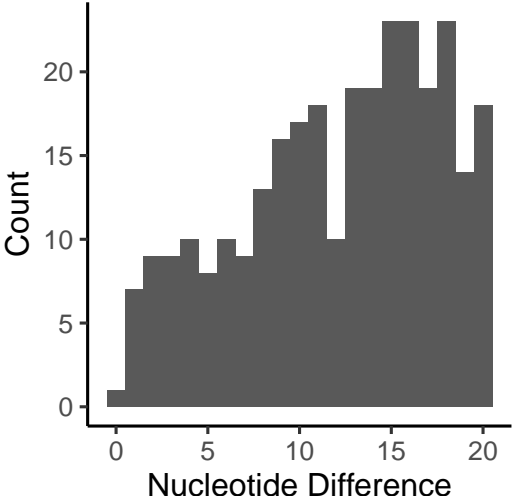
IGHV3-64*01

1153 sequences assigned
119 (10.3%) exact matches, in which:
62 unique CDR3
5 unique J



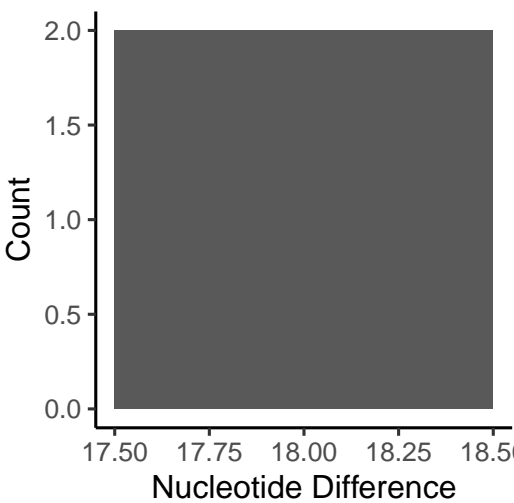
IGHV3-66*03

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



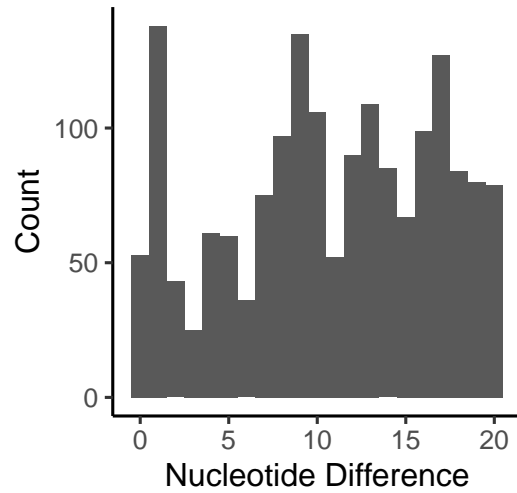
IGHV3-71*01_04

15 sequences assigned
No exact matches.



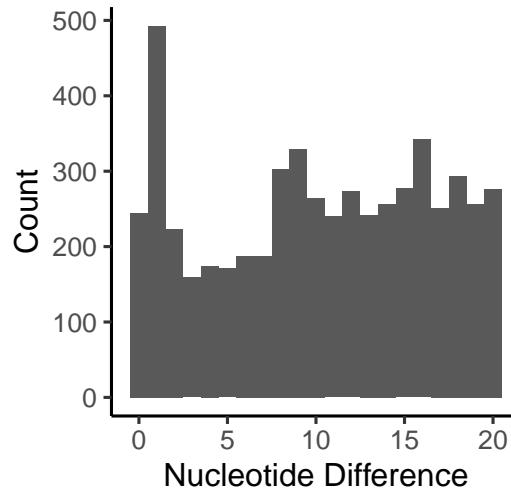
IGHV3-72*01

2476 sequences assigned
53 (2.1%) exact matches, in which:
25 unique CDR3
5 unique J



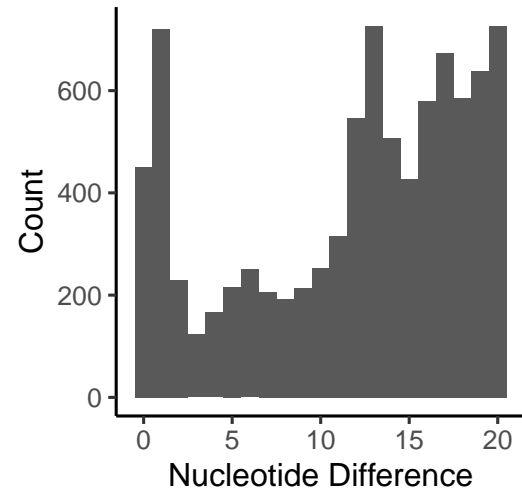
IGHV3-74*01_02

7385 sequences assigned
245 (3.3%) exact matches, in which:
138 unique CDR3
6 unique J



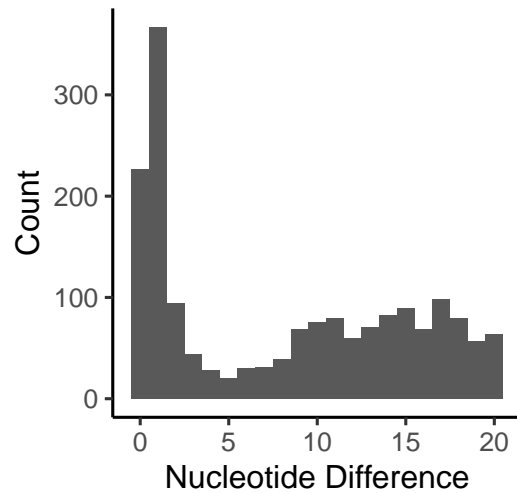
IGHV4-4*07

13761 sequences assigned
450 (3.3%) exact matches, in which:
259 unique CDR3
5 unique J



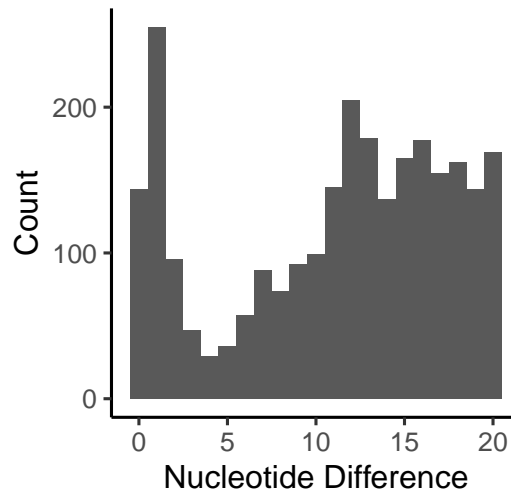
IGHV3-73*01_02

2373 sequences assigned
227 (9.6%) exact matches, in which:
128 unique CDR3
4 unique J



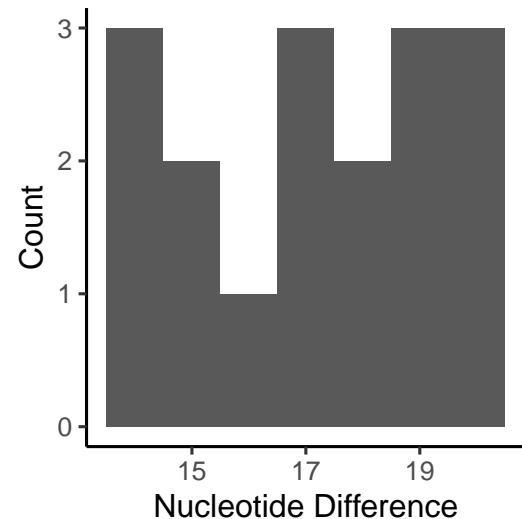
IGHV3-43D*04

3886 sequences assigned
144 (3.7%) exact matches, in which:
79 unique CDR3
3 unique J



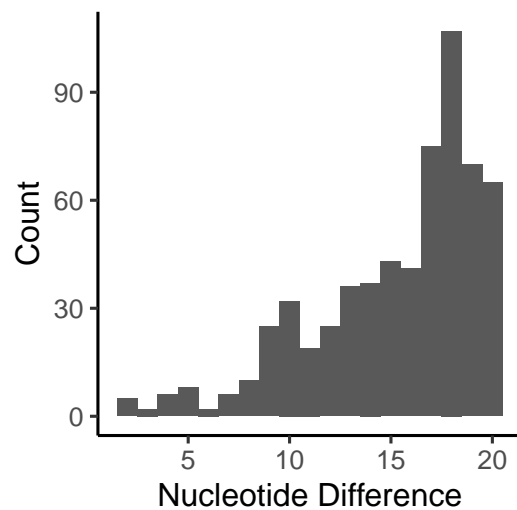
IGHV4-28*03

551 sequences assigned
No exact matches.



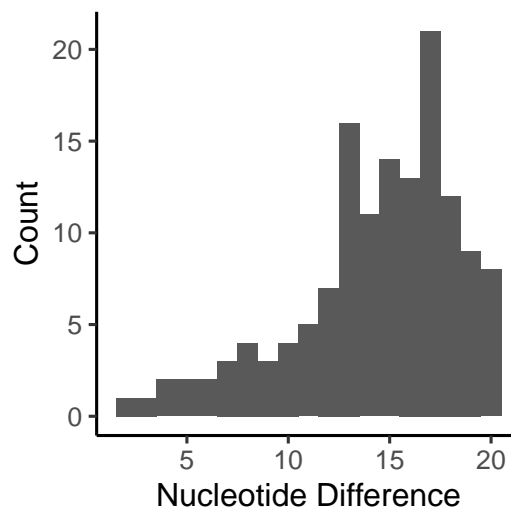
IGHV3-74*03

1250 sequences assigned
No exact matches.



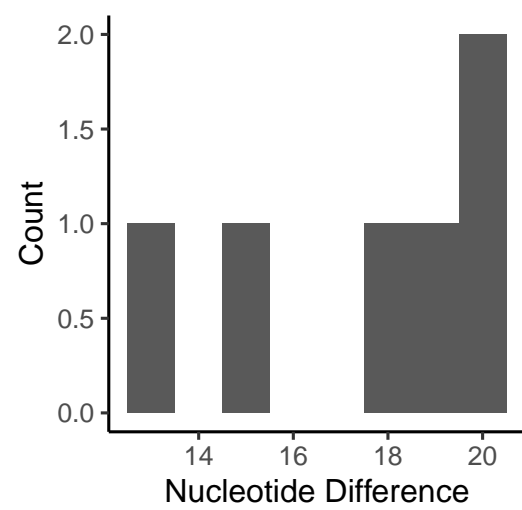
IGHV3-NL1*01

258 sequences assigned
No exact matches.



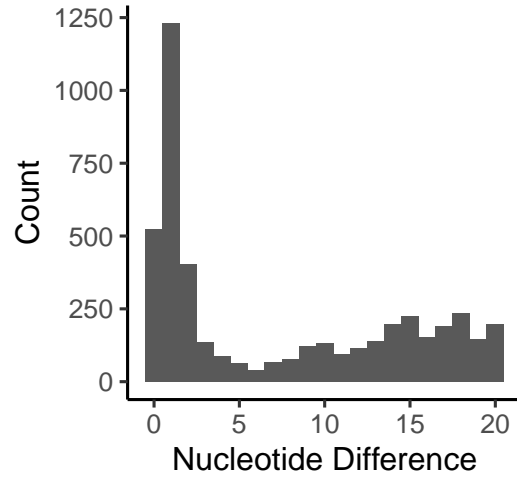
IGHV4-28*01_07

42 sequences assigned
No exact matches.



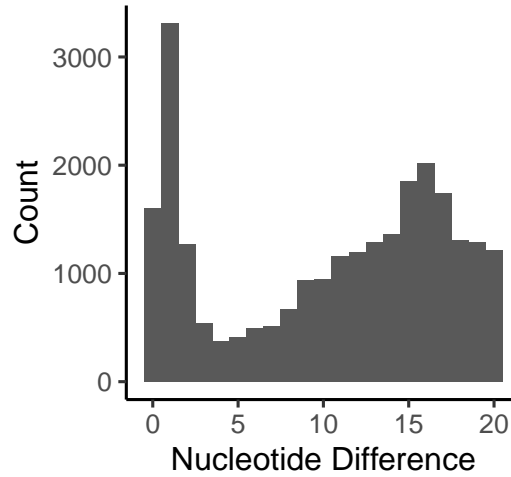
IGHV4-30-4*01

5960 sequences assigned
523 (8.8%) exact matches, in which:
259 unique CDR3
5 unique J



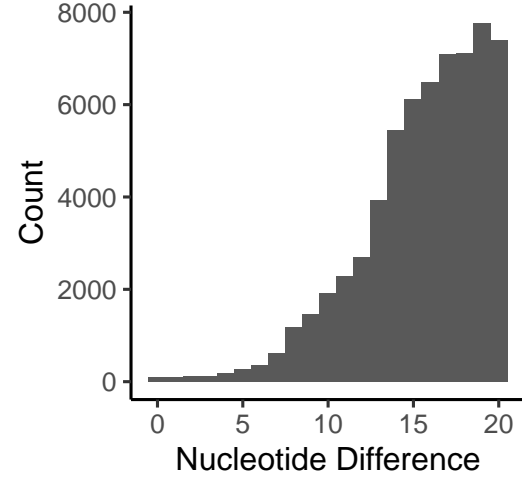
IGHV4-31*03_04

32791 sequences assigned
1603 (4.9%) exact matches, in which:
811 unique CDR3
7 unique J



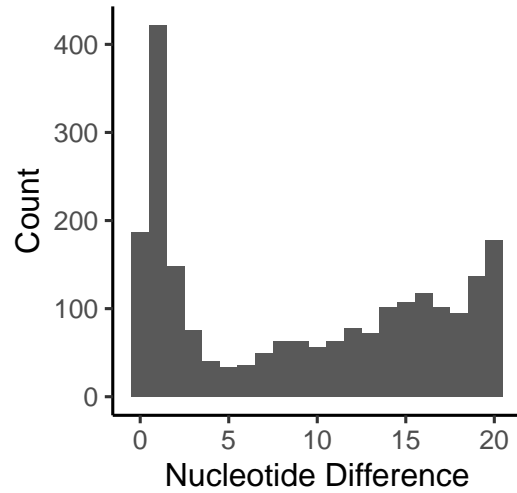
IGHV4-38-2*02

115061 sequences assigned
106 (0.1%) exact matches, in which:
88 unique CDR3
5 unique J



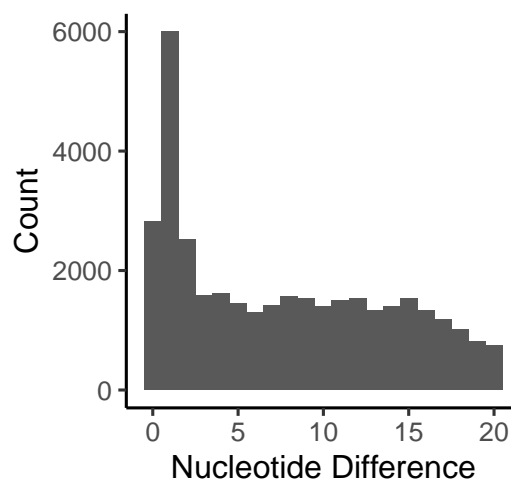
IGHV4-30-2*01

3431 sequences assigned
187 (5.5%) exact matches, in which:
102 unique CDR3
6 unique J



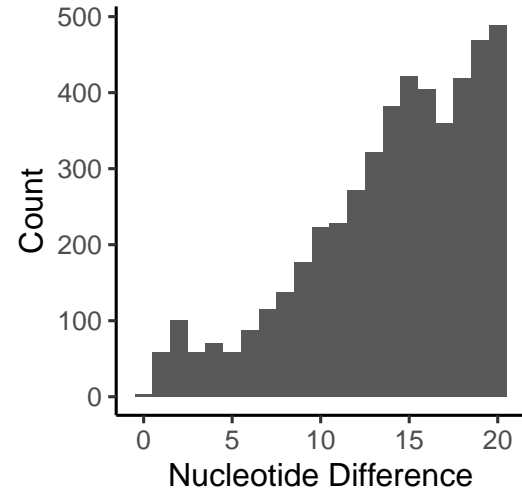
IGHV4-34*01_02

40171 sequences assigned
2822 (7%) exact matches, in which:
1445 unique CDR3
7 unique J



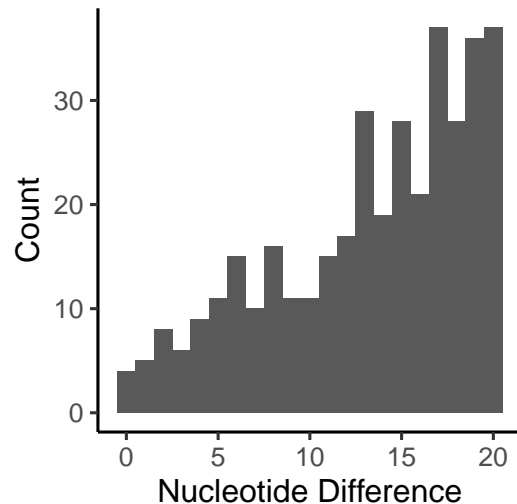
IGHV4-39*07

18108 sequences assigned
3 (0%) exact matches, in which:
3 unique CDR3
2 unique J



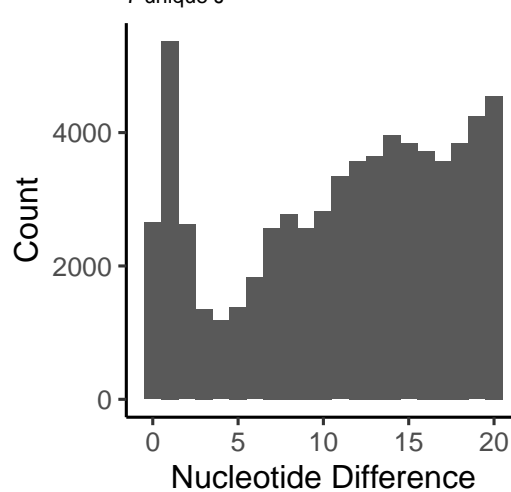
IGHV4-30-4*08

698 sequences assigned
4 (0.6%) exact matches, in which:
4 unique CDR3
3 unique J



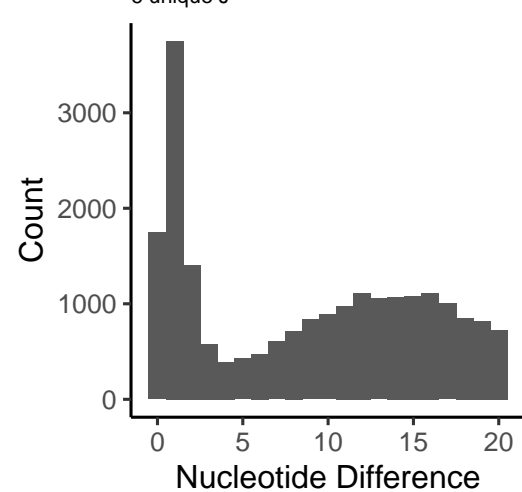
IGHV4-38-2*01

132004 sequences assigned
2652 (2%) exact matches, in which:
1434 unique CDR3
7 unique J



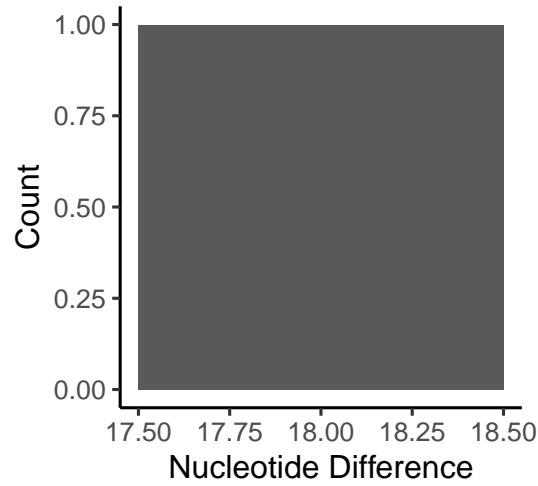
IGHV4-39*01_05

29594 sequences assigned
1745 (5.9%) exact matches, in which:
841 unique CDR3
6 unique J



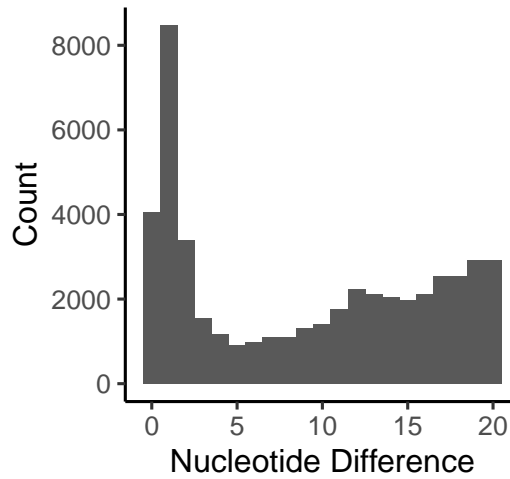
IGHV4-55*09

10 sequences assigned
No exact matches.



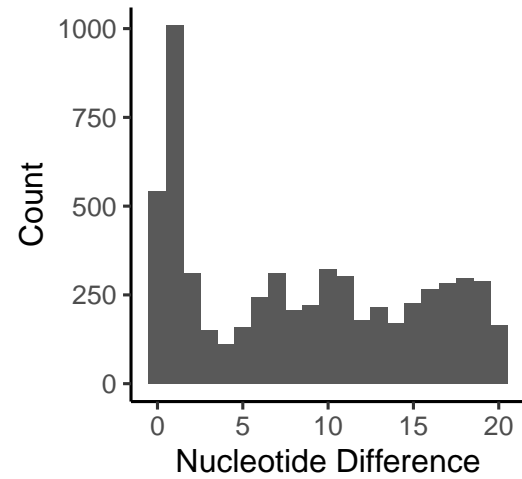
IGHV4-61*02

78449 sequences assigned
4061 (5.2%) exact matches, in which:
1965 unique CDR3
7 unique J



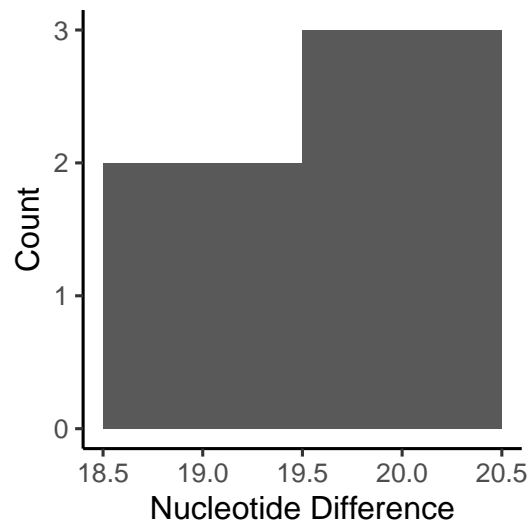
IGHV6-1*01_02

8086 sequences assigned
543 (6.7%) exact matches, in which:
317 unique CDR3
5 unique J



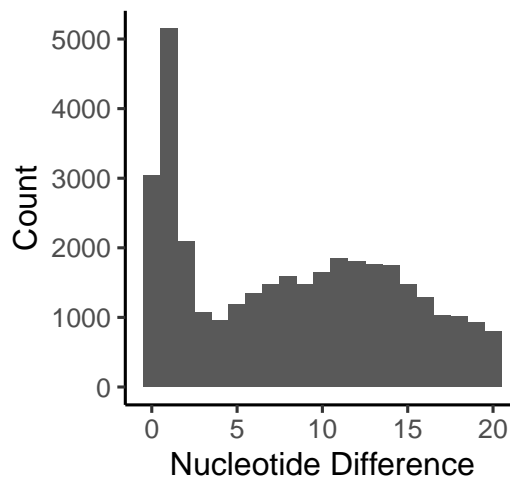
IGHV4-55*02_04_08

62 sequences assigned
No exact matches.



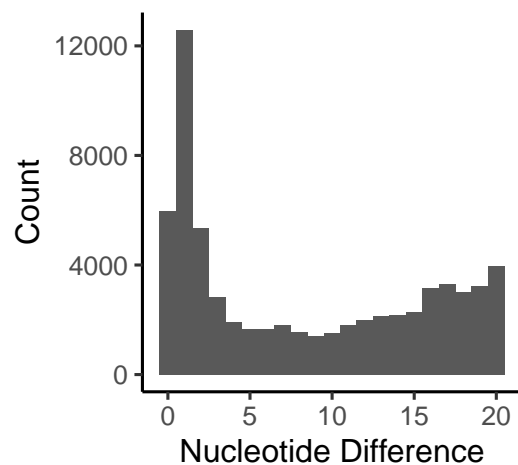
IGHV5-51*01_03

42612 sequences assigned
3045 (7.1%) exact matches, in which:
1869 unique CDR3
7 unique J



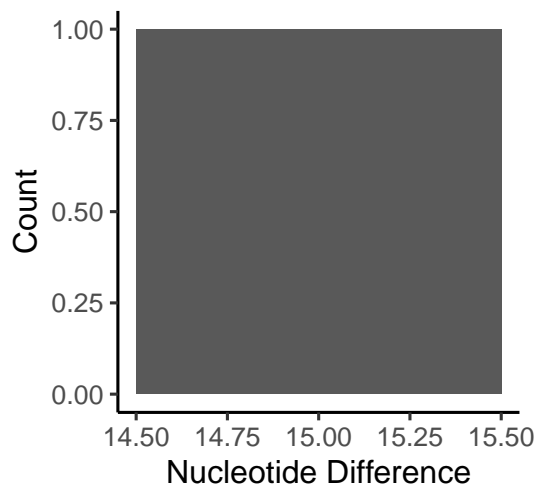
IGHV4-59*01_07

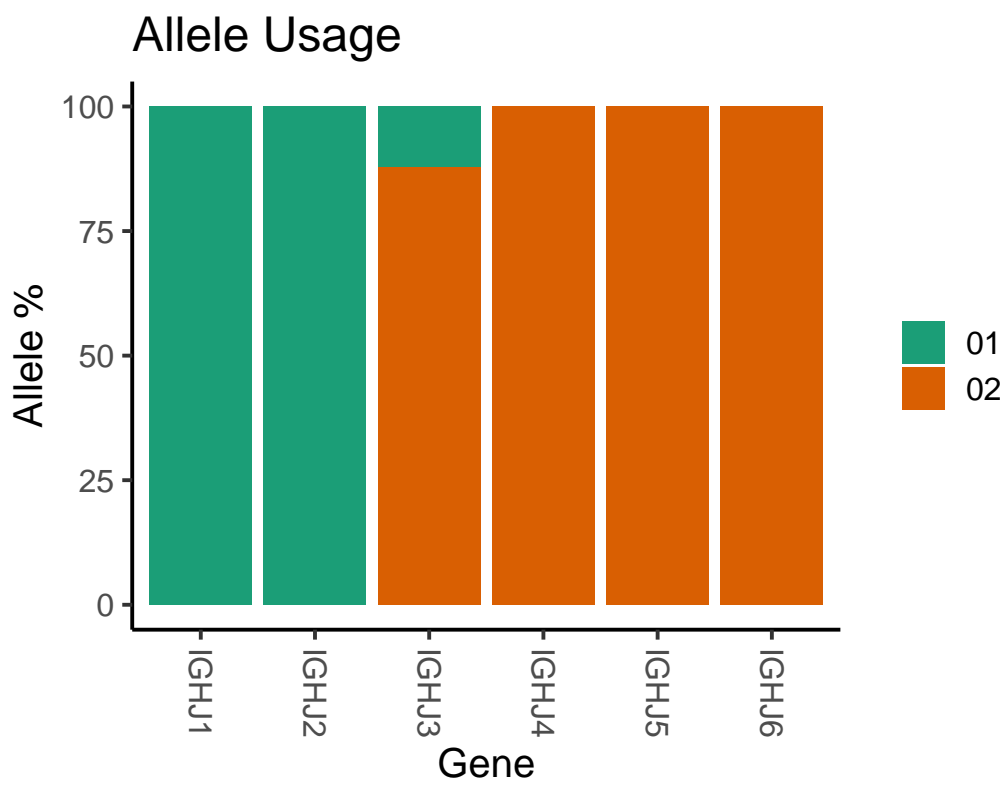
102023 sequences assigned
5985 (5.9%) exact matches, in which:
3015 unique CDR3
7 unique J



IGHV5-78*01

1 sequences assigned
No exact matches.





Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59*02_G88A are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning:IGHV4–31*02,IGHV4–31*03_04 have identical germline sequences.

Warning – no inferred sequences found.

Novel sequence(s)IGHV3–30*02_T201C are not listed in the genotype and will be ignored.