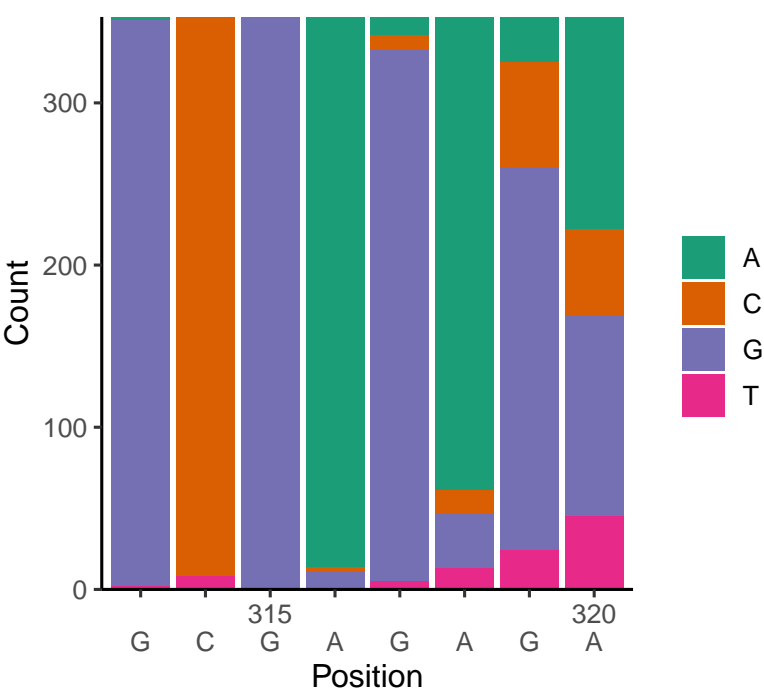
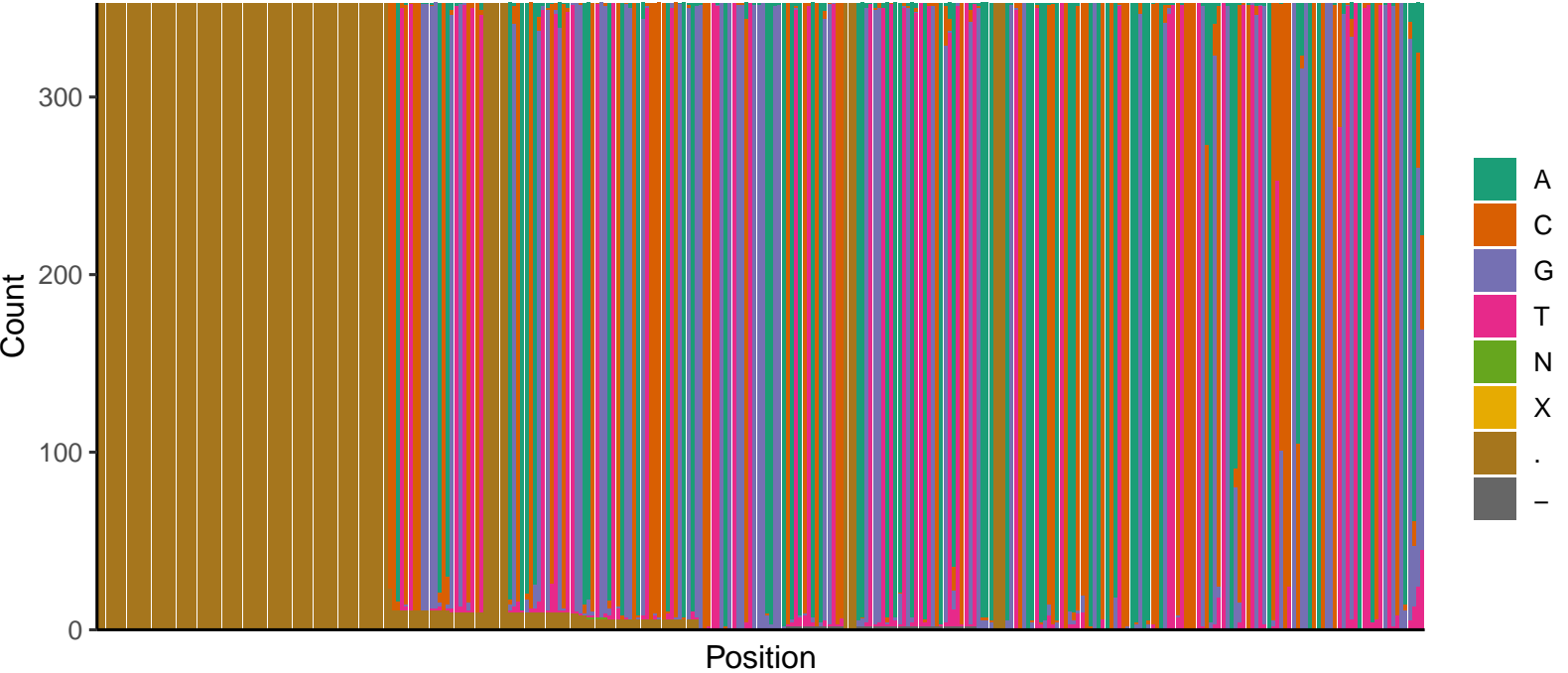


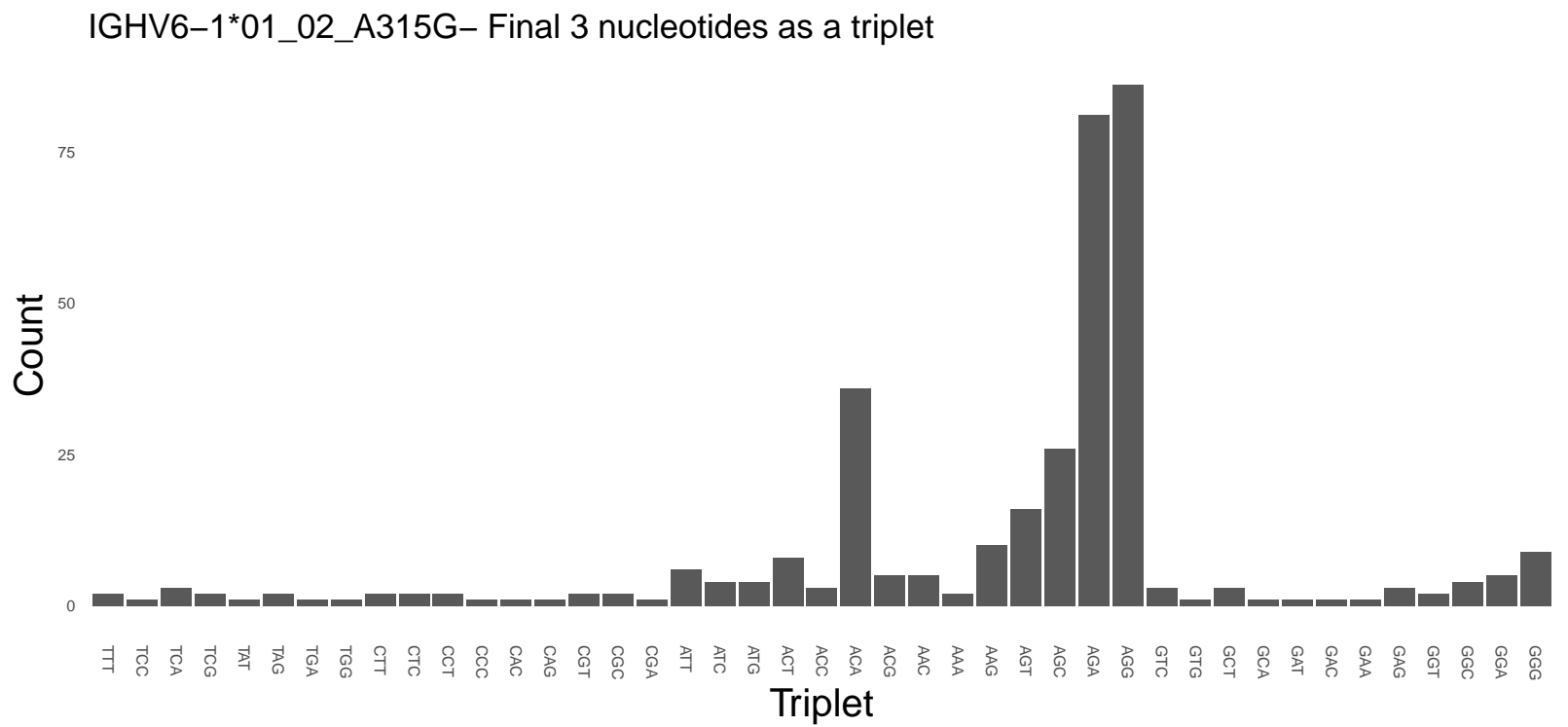
Gene IGHV6-1*01_02_A315G



Gene IGHV6-1*01_02_A315G

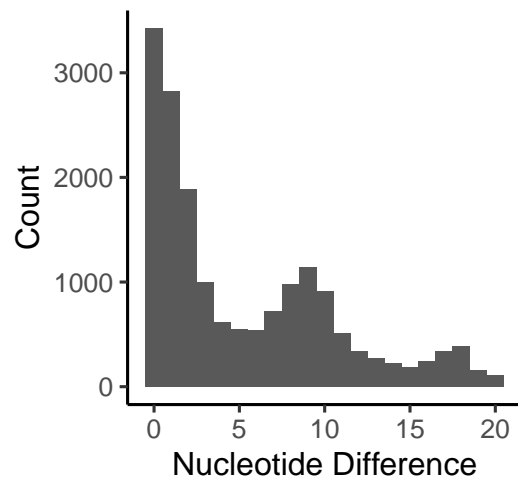


IGHV6-1*01_02_A315G- Final 3 nucleotides as a triplet



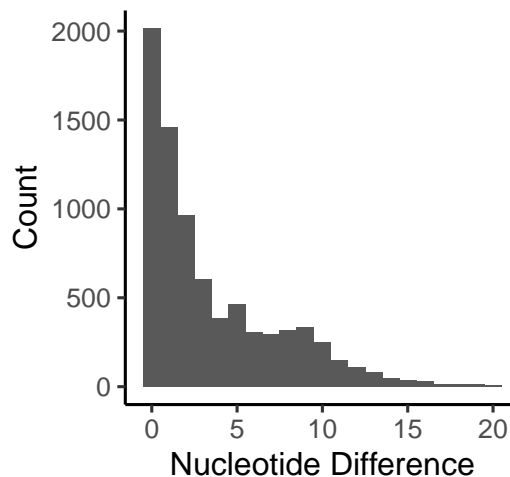
IGHV1-2*02

17947 sequences assigned
3424 (19.1%) exact matches, in which:
3100 unique CDR3
6 unique J



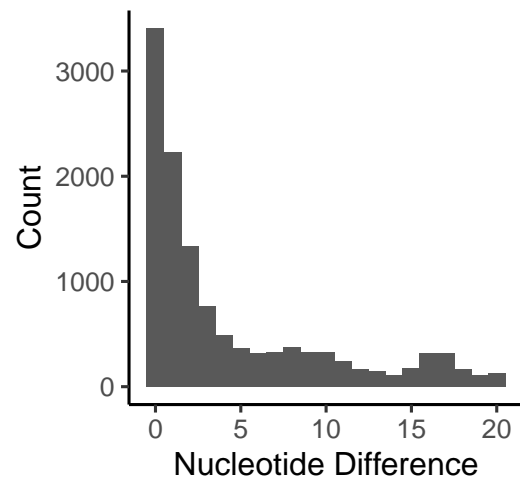
IGHV1-8*01

8003 sequences assigned
2015 (25.2%) exact matches, in which:
1866 unique CDR3
6 unique J



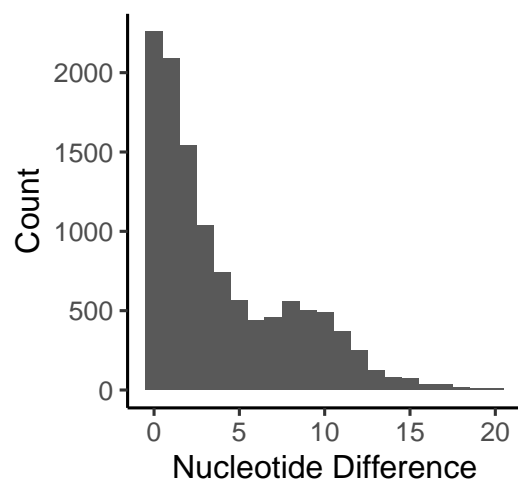
IGHV1-18*04

12883 sequences assigned
3405 (26.4%) exact matches, in which:
3133 unique CDR3
6 unique J



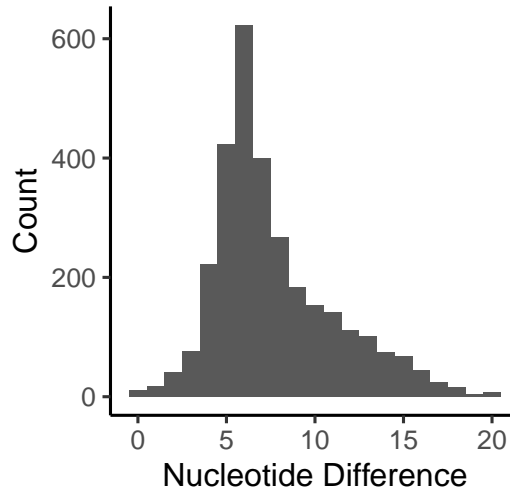
IGHV1-2*04

11691 sequences assigned
2258 (19.3%) exact matches, in which:
2014 unique CDR3
6 unique J



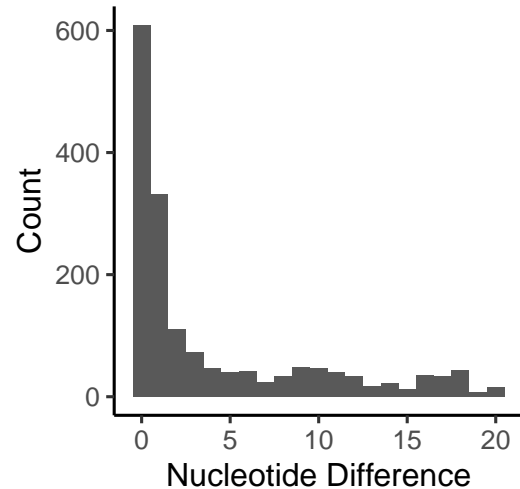
IGHV1-8*02

3036 sequences assigned
11 (0.4%) exact matches, in which:
11 unique CDR3
4 unique J



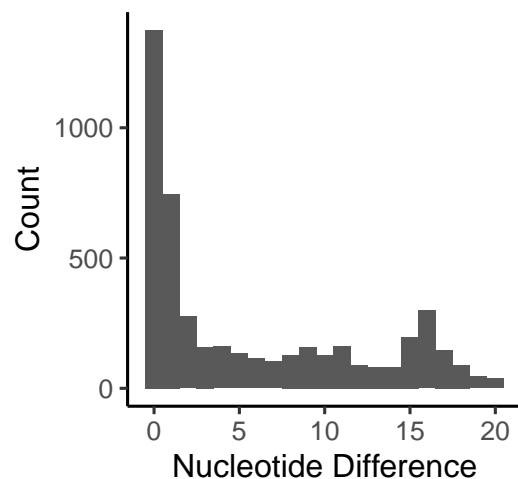
IGHV1-24*01

1740 sequences assigned
609 (35%) exact matches, in which:
549 unique CDR3
6 unique J



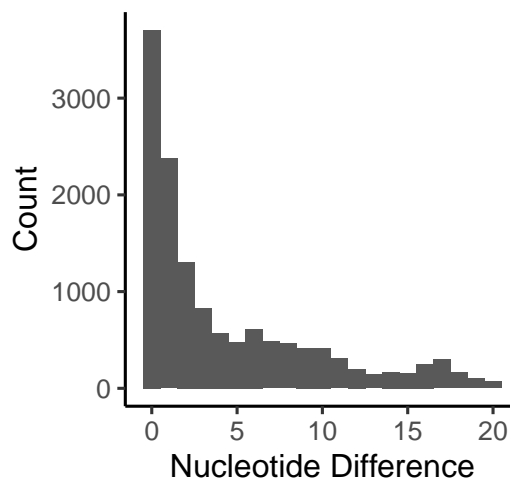
IGHV1-3*01_05

4868 sequences assigned
1375 (28.2%) exact matches, in which:
1237 unique CDR3
6 unique J



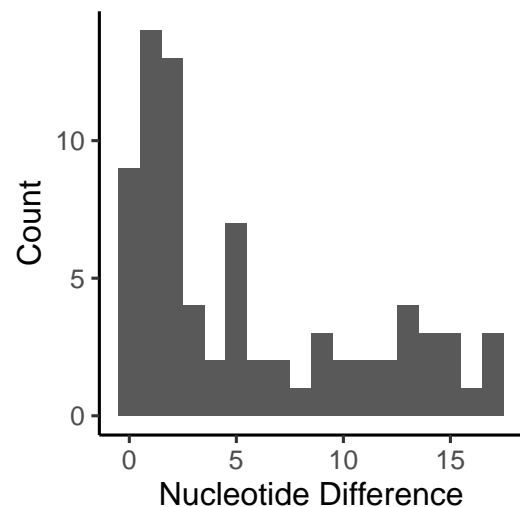
IGHV1-18*01

14368 sequences assigned
3704 (25.8%) exact matches, in which:
3379 unique CDR3
6 unique J



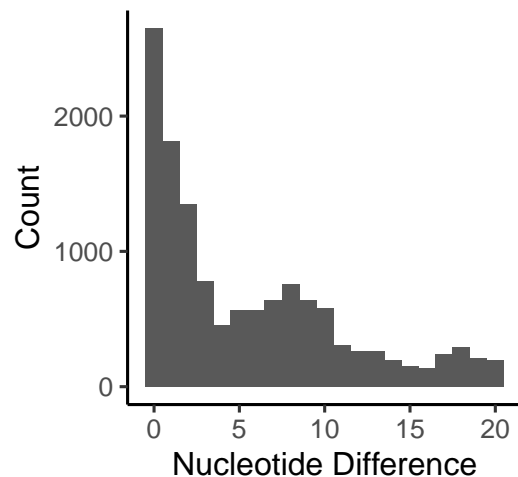
IGHV1-45*02

77 sequences assigned
9 (11.7%) exact matches, in which:
8 unique CDR3
3 unique J



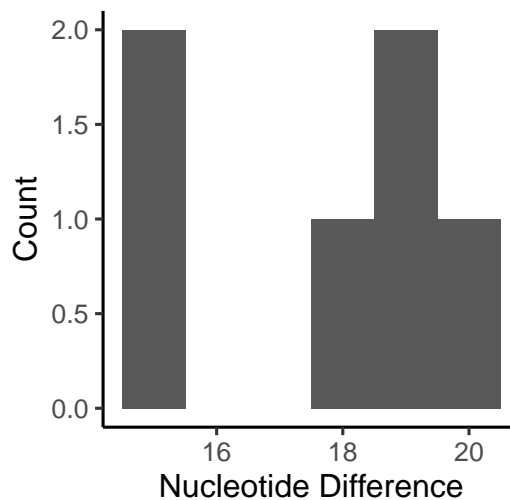
IGHV1-46*01

14648 sequences assigned
2648 (18.1%) exact matches, in which:
2453 unique CDR3
6 unique J



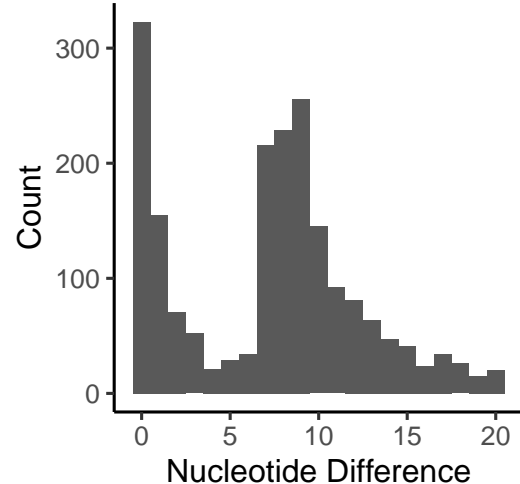
IGHV1-69-2*01

9 sequences assigned
No exact matches.



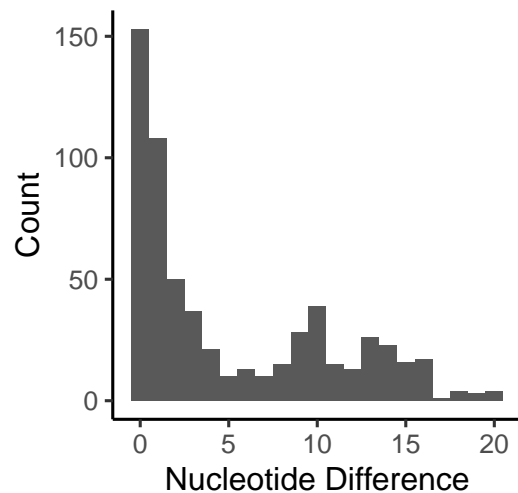
IGHV1-69*06_14

2542 sequences assigned
323 (12.7%) exact matches, in which:
316 unique CDR3
6 unique J



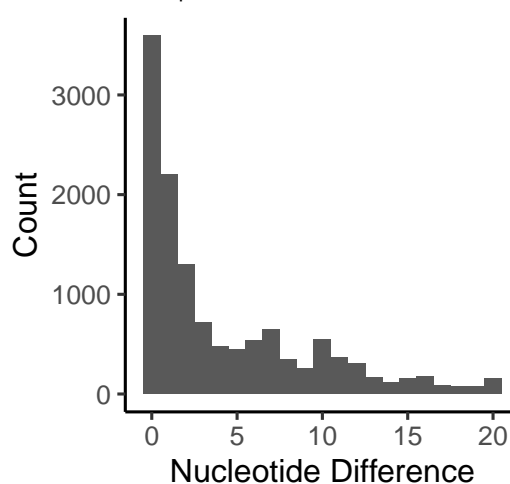
IGHV1-58*02

610 sequences assigned
153 (25.1%) exact matches, in which:
141 unique CDR3
5 unique J



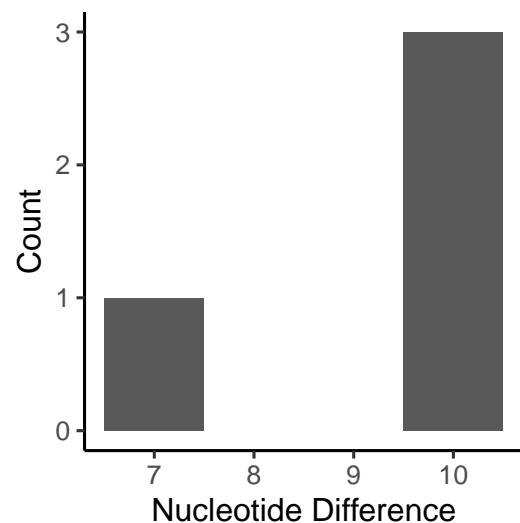
IGHV1-69*01_12_13

14155 sequences assigned
3594 (25.4%) exact matches, in which:
3364 unique CDR3
6 unique J



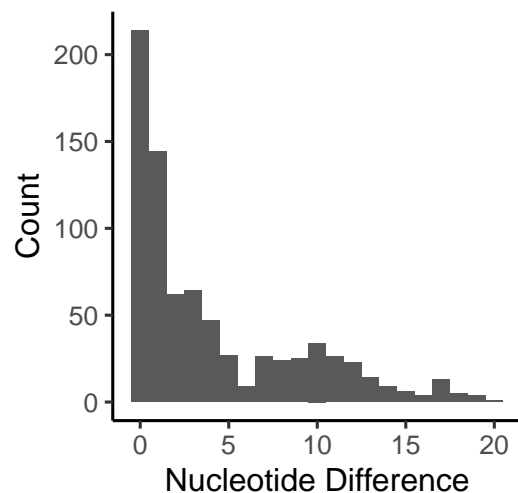
IGHV1-NL1*01

4 sequences assigned
No exact matches.



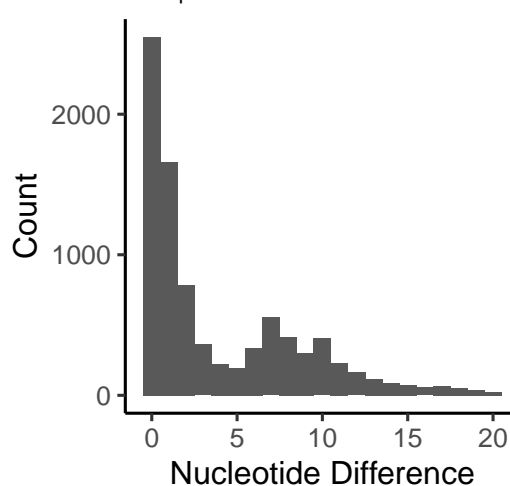
IGHV1-58*01_03

783 sequences assigned
214 (27.3%) exact matches, in which:
202 unique CDR3
6 unique J



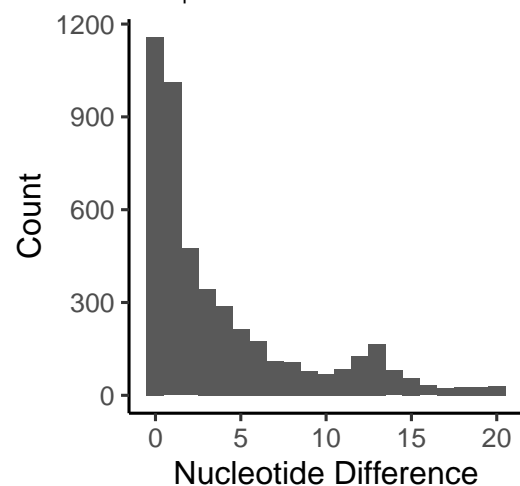
IGHV1-69*04_09

9692 sequences assigned
2549 (26.3%) exact matches, in which:
2418 unique CDR3
6 unique J



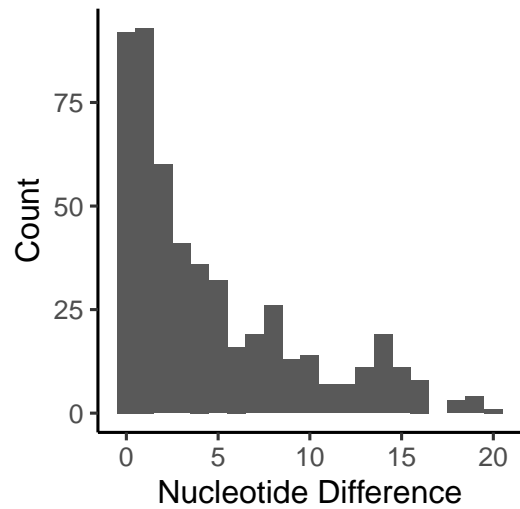
IGHV2-5*02

4933 sequences assigned
1158 (23.5%) exact matches, in which:
1034 unique CDR3
6 unique J



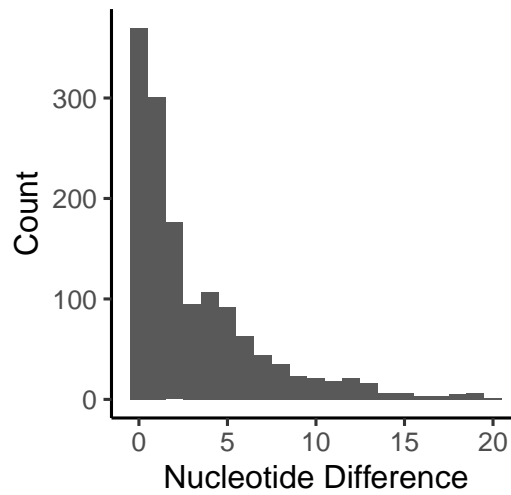
IGHV2-26*01

1098 sequences assigned
92 (8.4%) exact matches, in which:
86 unique CDR3
6 unique J



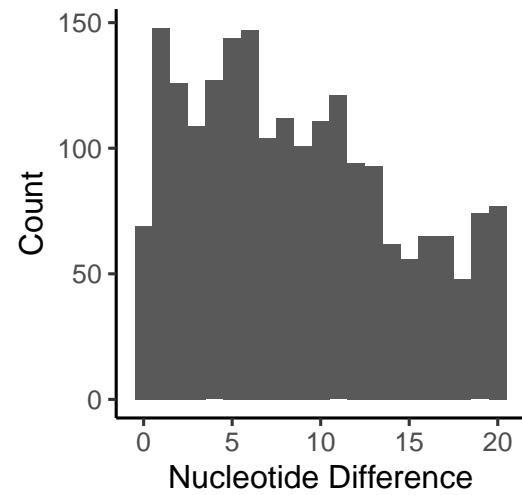
IGHV2-70*11_15

1433 sequences assigned
370 (25.8%) exact matches, in which:
320 unique CDR3
6 unique J



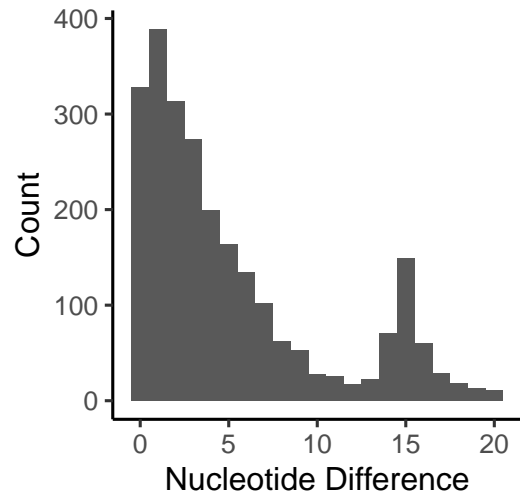
IGHV3-7*03

2883 sequences assigned
69 (2.4%) exact matches, in which:
67 unique CDR3
6 unique J



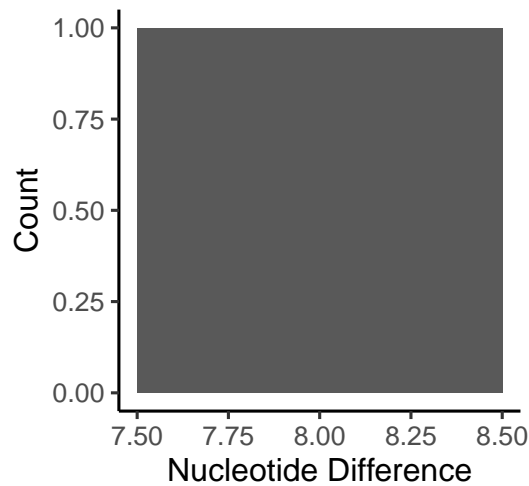
IGHV2-70*01

2489 sequences assigned
328 (13.2%) exact matches, in which:
296 unique CDR3
5 unique J



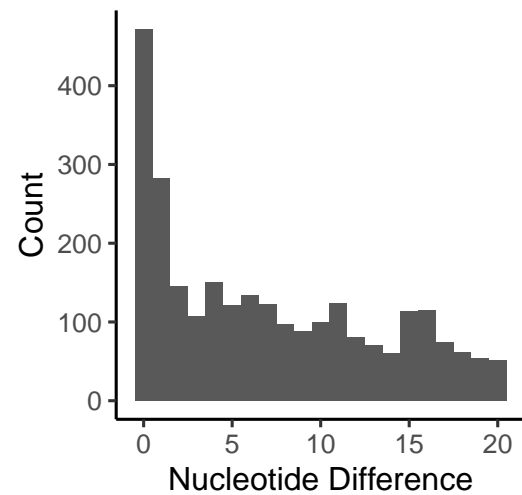
IGHV2-70D*14

1 sequences assigned
No exact matches.



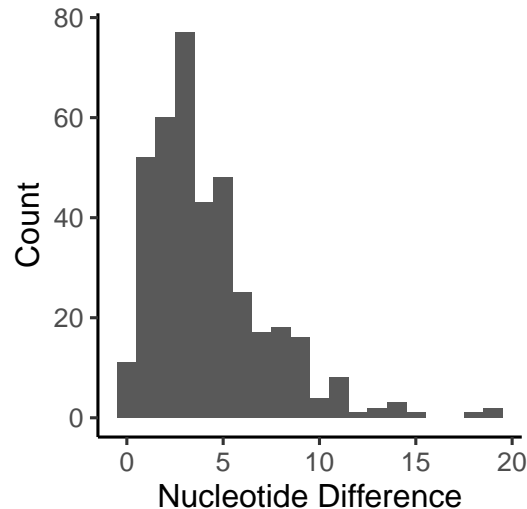
IGHV3-7*04

3454 sequences assigned
472 (13.7%) exact matches, in which:
354 unique CDR3
6 unique J



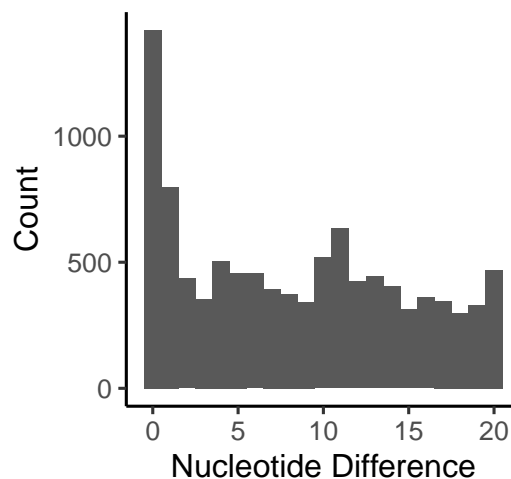
IGHV2-70*12

395 sequences assigned
11 (2.8%) exact matches, in which:
11 unique CDR3
4 unique J



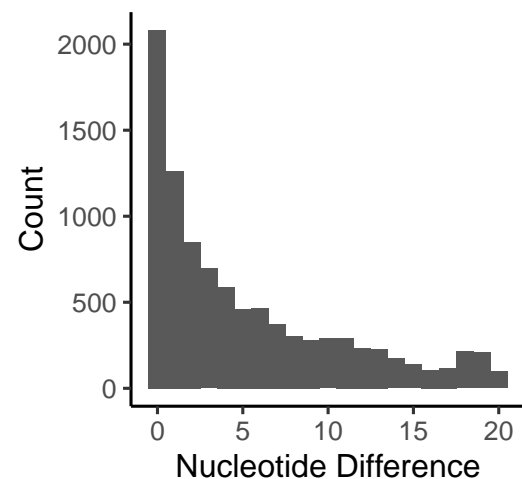
IGHV3-7*01

11332 sequences assigned
1421 (12.5%) exact matches, in which:
1121 unique CDR3
6 unique J



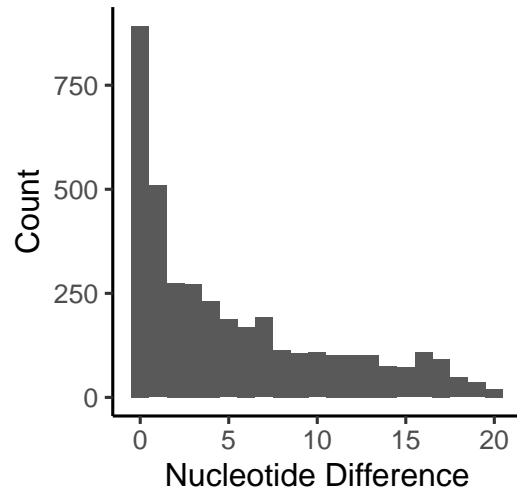
IGHV3-9*01

9818 sequences assigned
2082 (21.2%) exact matches, in which:
1502 unique CDR3
6 unique J



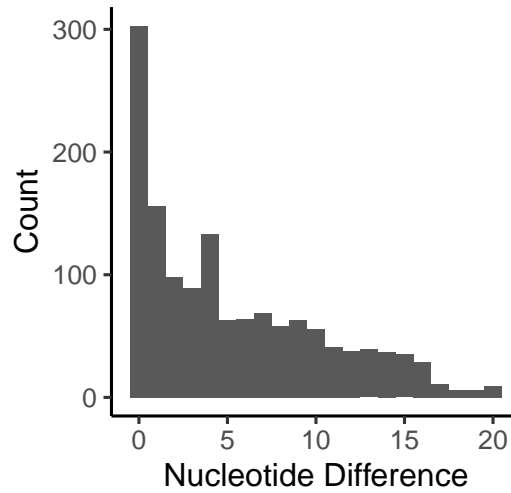
IGHV3-11*01

4015 sequences assigned
893 (22.2%) exact matches, in which:
708 unique CDR3
6 unique J



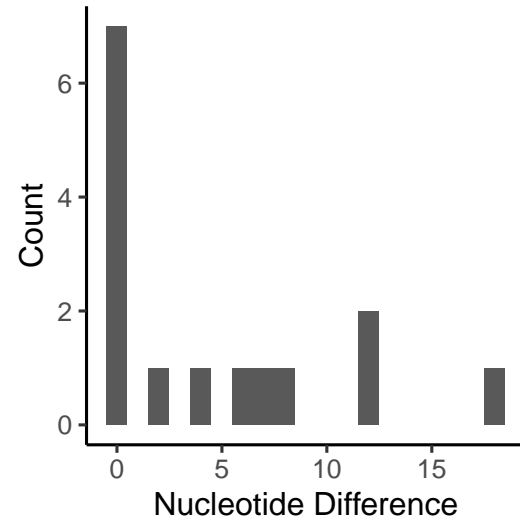
IGHV3-13*01

1437 sequences assigned
303 (21.1%) exact matches, in which:
222 unique CDR3
6 unique J



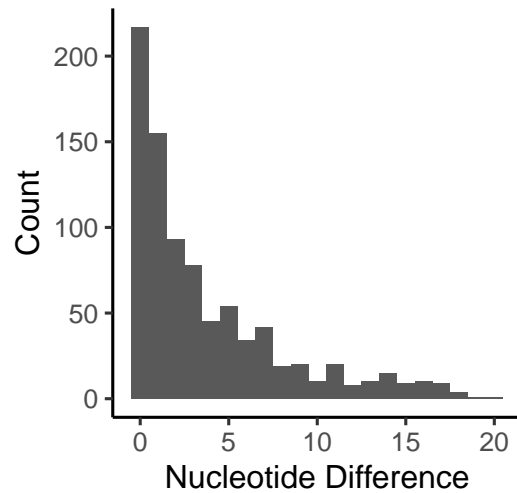
IGHV3-19*01

15 sequences assigned
7 (46.7%) exact matches, in which:
5 unique CDR3
3 unique J



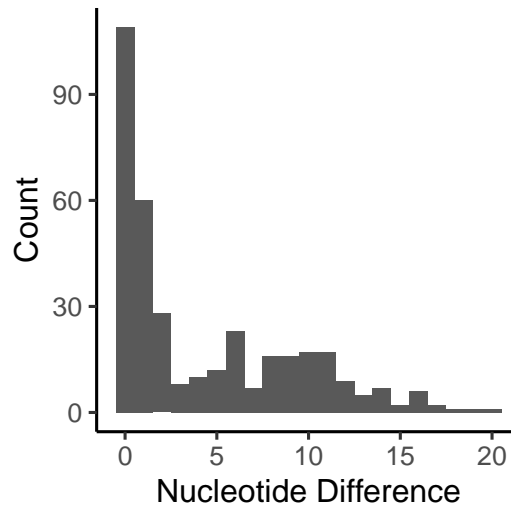
IGHV3-11*04

859 sequences assigned
217 (25.3%) exact matches, in which:
214 unique CDR3
6 unique J



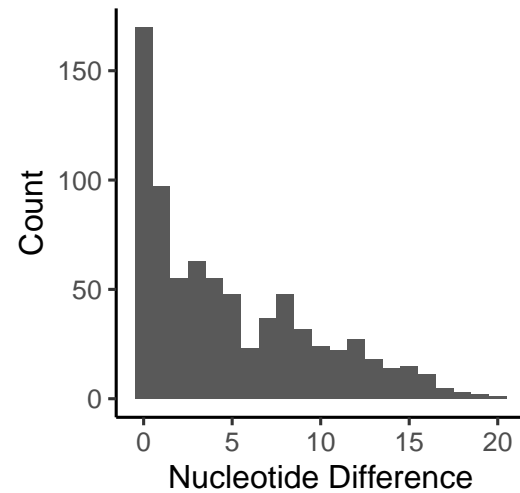
IGHV3-13*05

359 sequences assigned
109 (30.4%) exact matches, in which:
80 unique CDR3
5 unique J



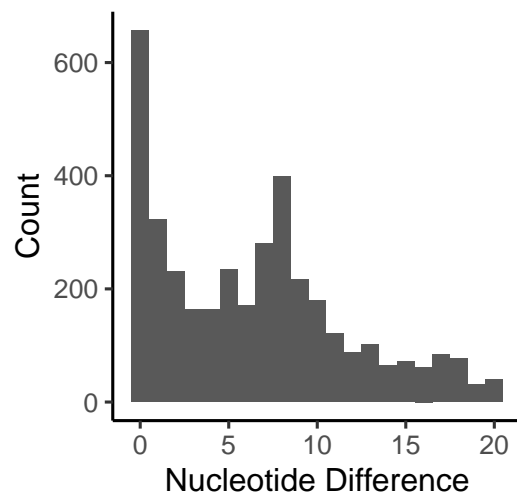
IGHV3-20*01_02

777 sequences assigned
170 (21.9%) exact matches, in which:
130 unique CDR3
6 unique J



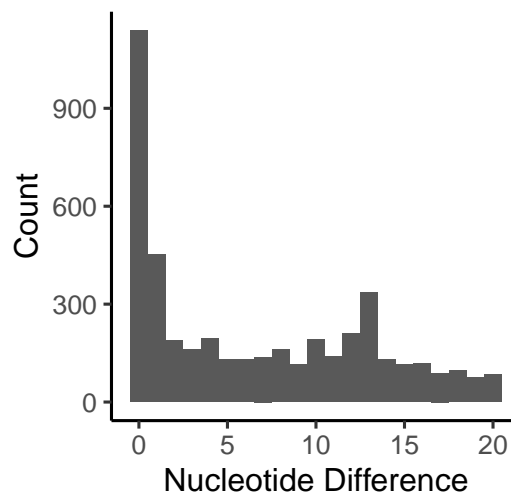
IGHV3-11*06

4051 sequences assigned
657 (16.2%) exact matches, in which:
537 unique CDR3
6 unique J



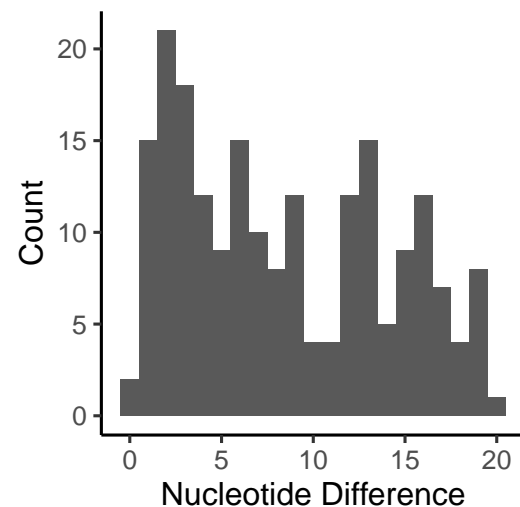
IGHV3-15*01_02

6108 sequences assigned
1139 (18.6%) exact matches, in which:
875 unique CDR3
6 unique J



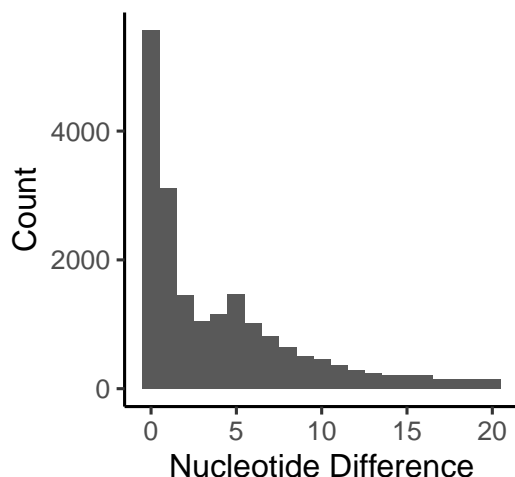
IGHV3-20*03_04

220 sequences assigned
2 (0.9%) exact matches, in which:
2 unique CDR3
2 unique J



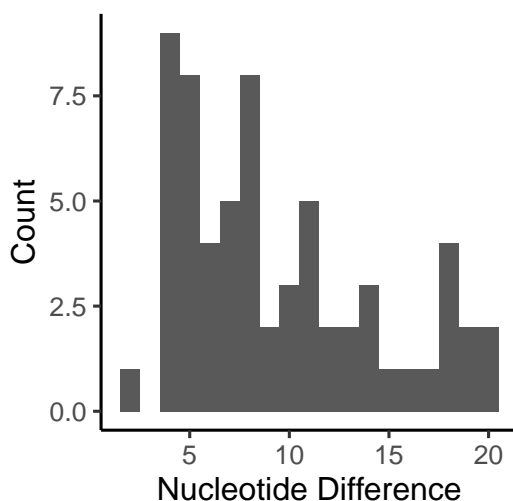
IGHV3-21*01_02

21239 sequences assigned
5563 (26.2%) exact matches, in which:
4131 unique CDR3
6 unique J



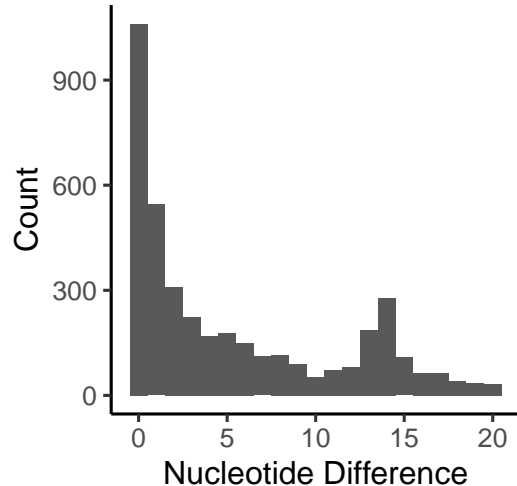
IGHV3-30-3*02

71 sequences assigned
No exact matches.



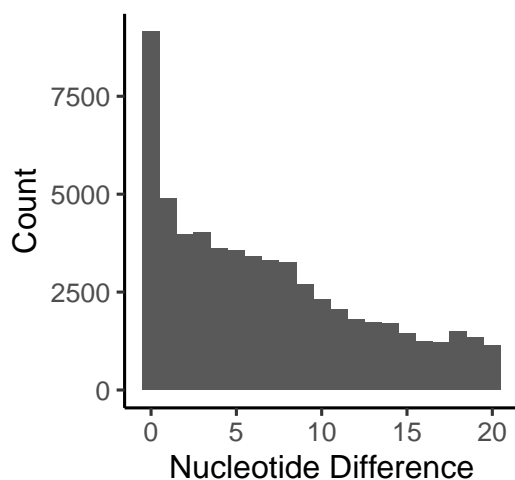
IGHV3-30*18

4169 sequences assigned
1061 (25.4%) exact matches, in which:
804 unique CDR3
6 unique J



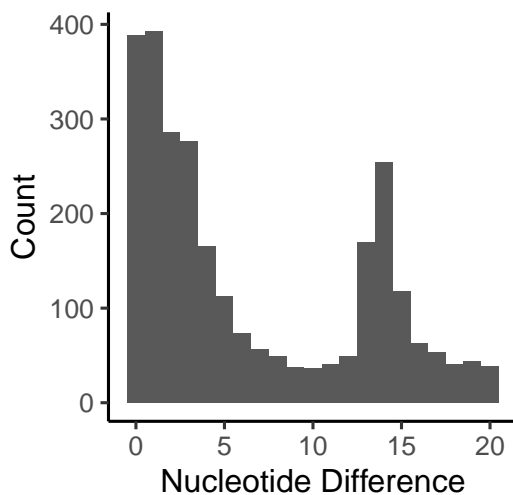
IGHV3-23*01_04

70570 sequences assigned
9148 (13%) exact matches, in which:
6344 unique CDR3
6 unique J



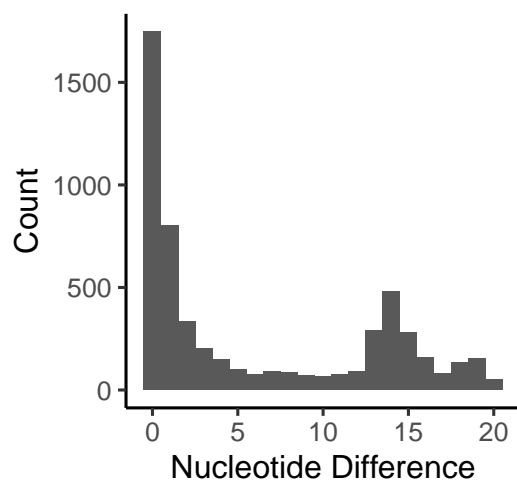
IGHV3-30*03

3126 sequences assigned
388 (12.4%) exact matches, in which:
369 unique CDR3
6 unique J



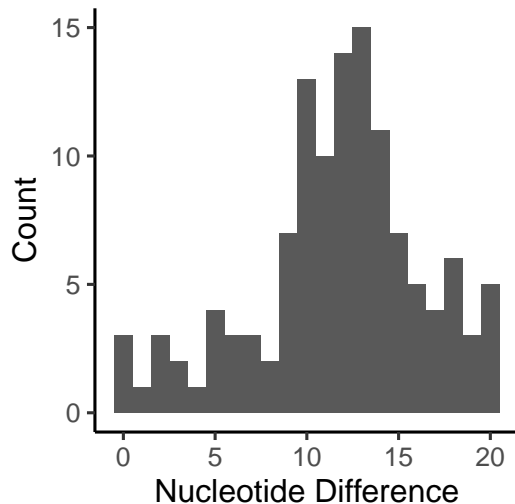
IGHV3-33*01

5877 sequences assigned
1747 (29.7%) exact matches, in which:
1437 unique CDR3
6 unique J



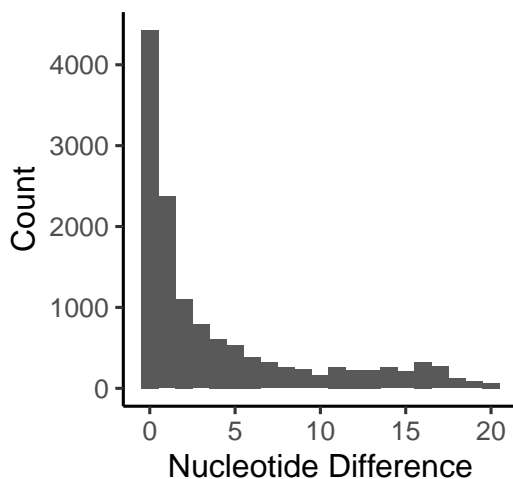
IGHV3-30-3*01

171 sequences assigned
3 (1.8%) exact matches, in which:
3 unique CDR3
1 unique J



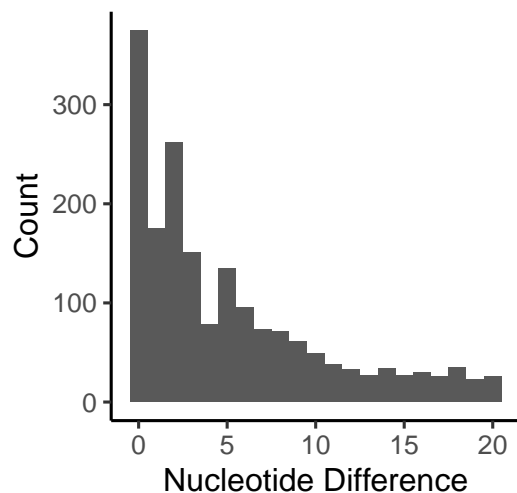
IGHV3-30*04

14531 sequences assigned
4429 (30.5%) exact matches, in which:
3462 unique CDR3
6 unique J



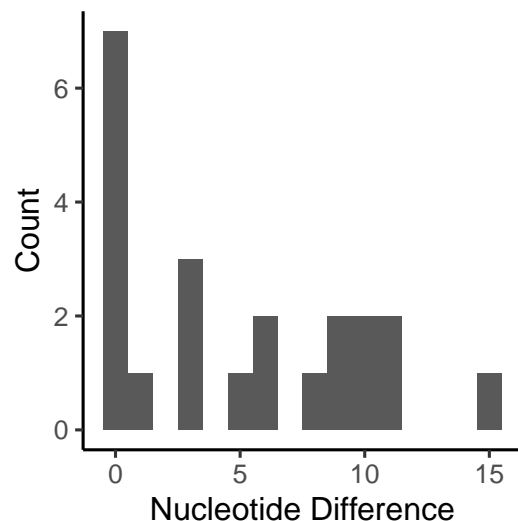
IGHV3-33*08

2022 sequences assigned
375 (18.5%) exact matches, in which:
353 unique CDR3
6 unique J



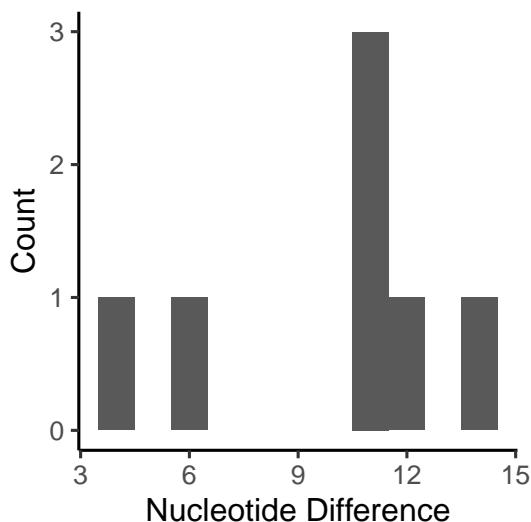
IGHV3-35*01

22 sequences assigned
7 (31.8%) exact matches, in which:
6 unique CDR3
3 unique J



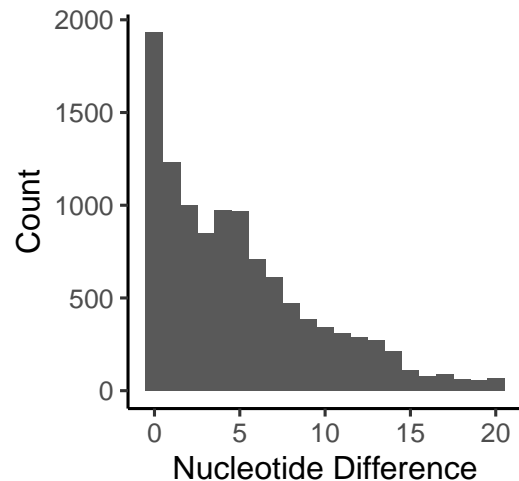
IGHV3-47*01

7 sequences assigned
No exact matches.



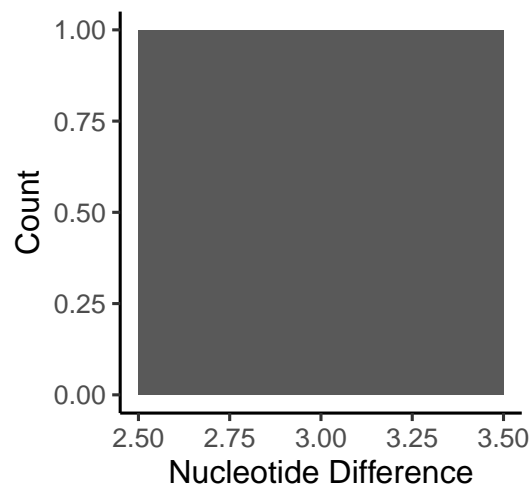
IGHV3-48*04

11455 sequences assigned
1932 (16.9%) exact matches, in which:
1527 unique CDR3
6 unique J



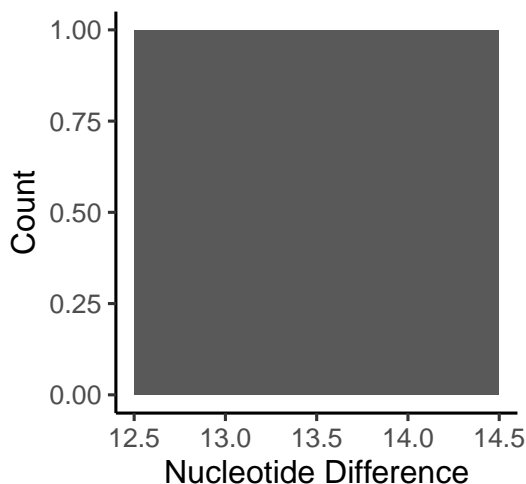
IGHV3-38-3*01

1 sequences assigned
No exact matches.



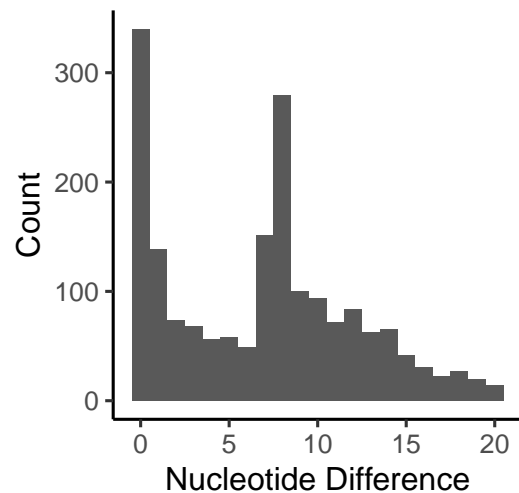
IGHV3-47*02

2 sequences assigned
No exact matches.



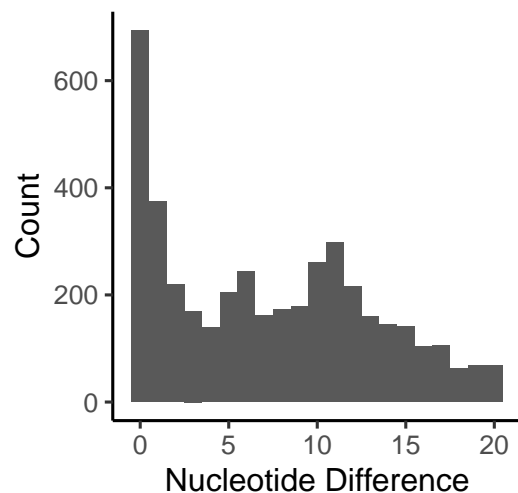
IGHV3-49*04

1944 sequences assigned
340 (17.5%) exact matches, in which:
263 unique CDR3
6 unique J



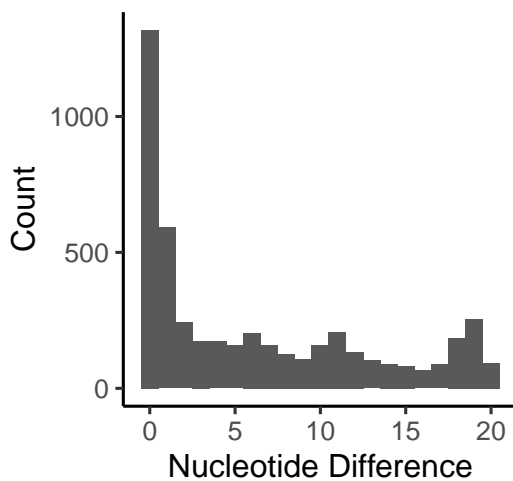
IGHV3-43*02

4833 sequences assigned
694 (14.4%) exact matches, in which:
513 unique CDR3
6 unique J



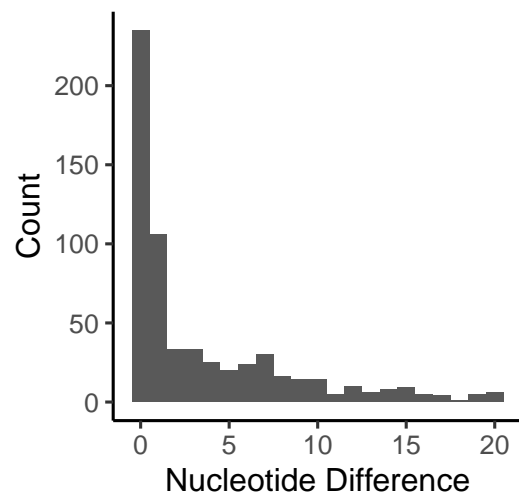
IGHV3-48*03

5097 sequences assigned
1318 (25.9%) exact matches, in which:
991 unique CDR3
6 unique J



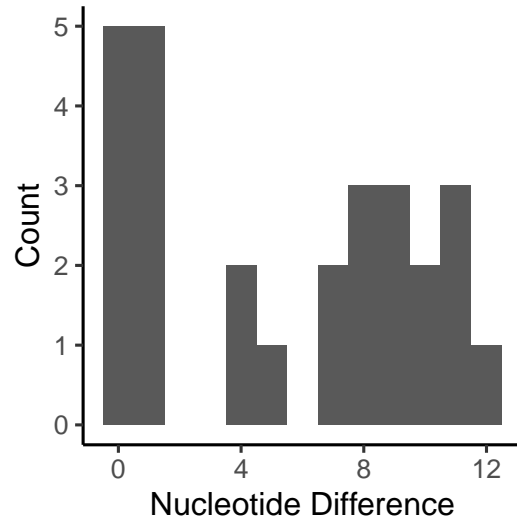
IGHV3-49*03_05

632 sequences assigned
235 (37.2%) exact matches, in which:
182 unique CDR3
6 unique J



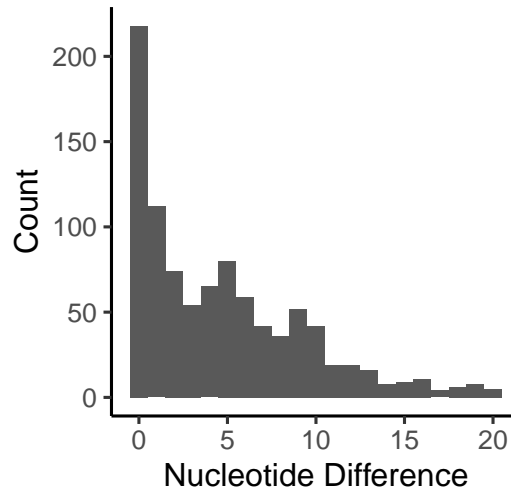
IGHV3-52*01_03

27 sequences assigned
5 (18.5%) exact matches, in which:
4 unique CDR3
2 unique J



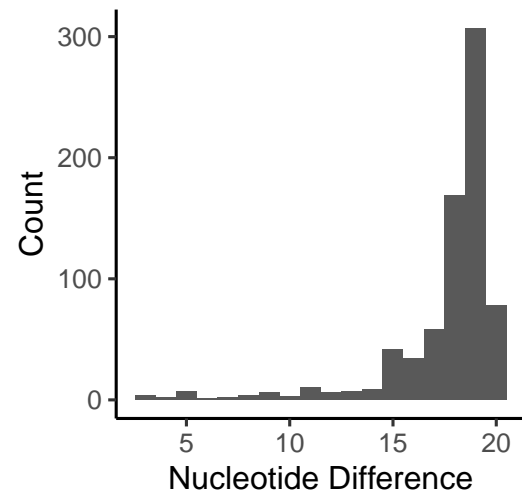
IGHV3-64*01

1606 sequences assigned
218 (13.6%) exact matches, in which:
155 unique CDR3
6 unique J



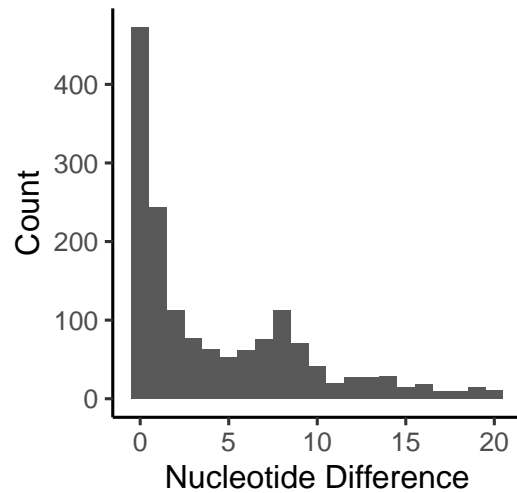
IGHV3-69-1*01

898 sequences assigned
No exact matches.



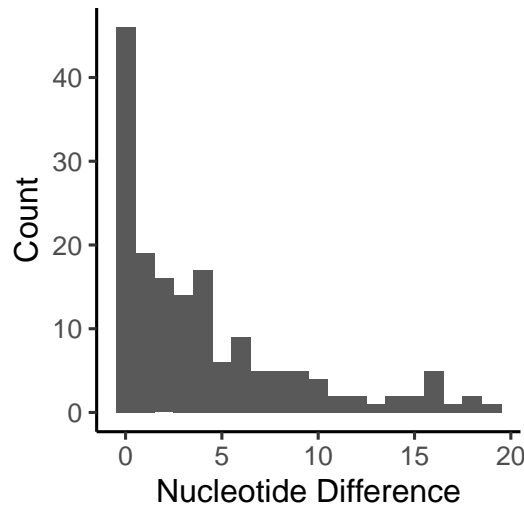
IGHV3-53*04

1621 sequences assigned
473 (29.2%) exact matches, in which:
361 unique CDR3
6 unique J



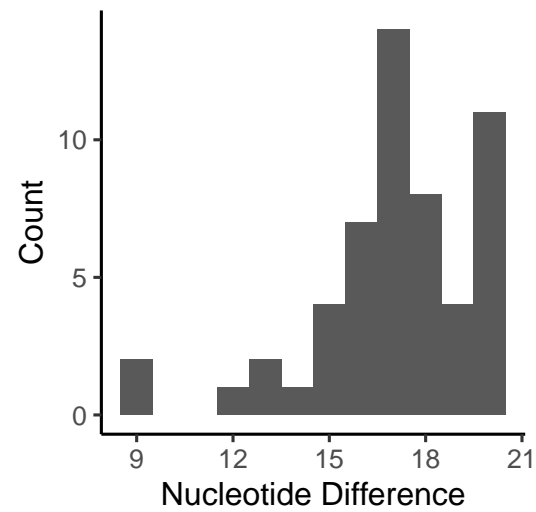
IGHV3-64*04

175 sequences assigned
46 (26.3%) exact matches, in which:
46 unique CDR3
5 unique J



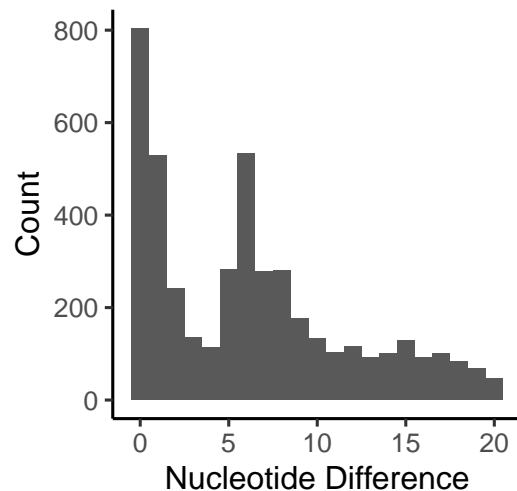
IGHV3-69-1*02

94 sequences assigned
No exact matches.



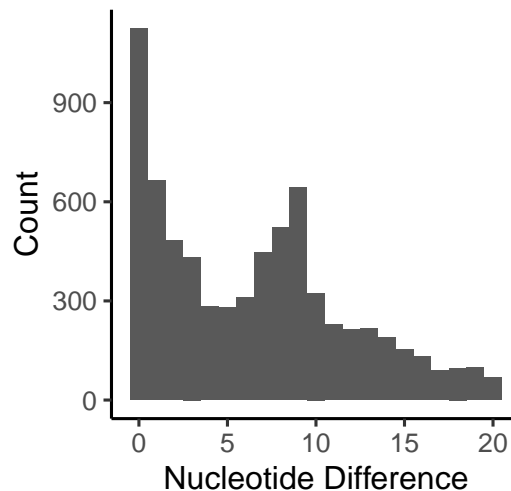
IGHV3-53*01_02

6201 sequences assigned
804 (13%) exact matches, in which:
619 unique CDR3
6 unique J



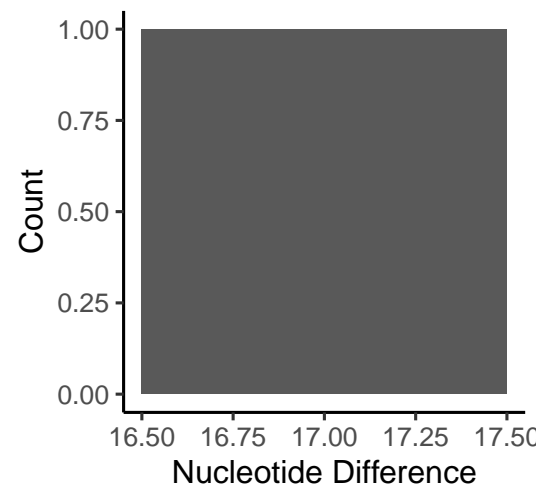
IGHV3-66*01

8011 sequences assigned
1125 (14%) exact matches, in which:
857 unique CDR3
6 unique J



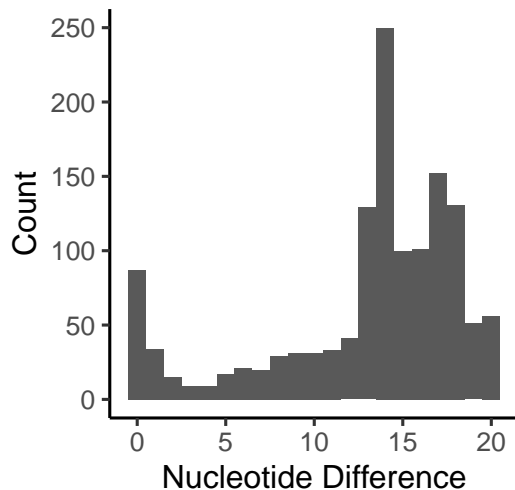
IGHV3-71*01_04

3 sequences assigned
No exact matches.



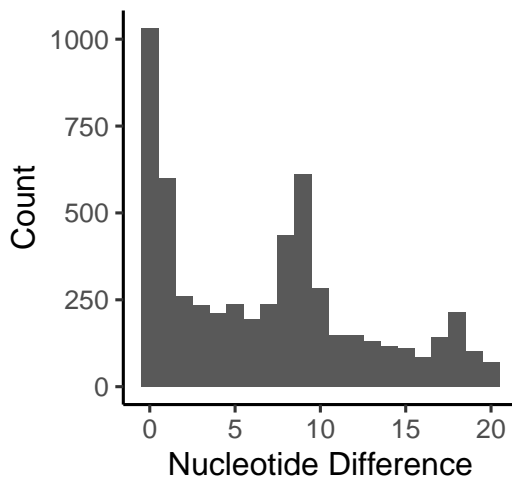
IGHV3-72*01

1961 sequences assigned
87 (4.4%) exact matches, in which:
65 unique CDR3
6 unique J



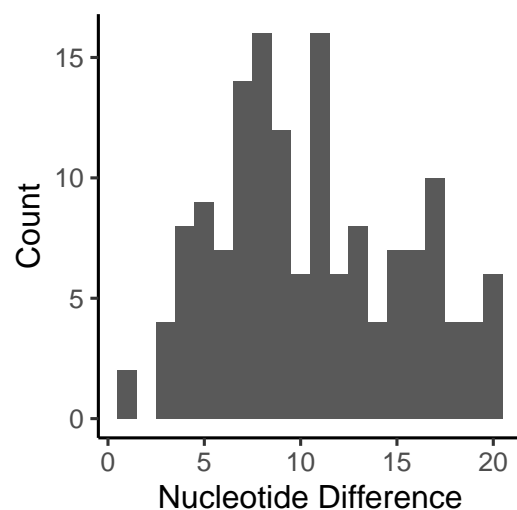
IGHV3-74*01_02

6219 sequences assigned
1031 (16.6%) exact matches, in which:
704 unique CDR3
6 unique J



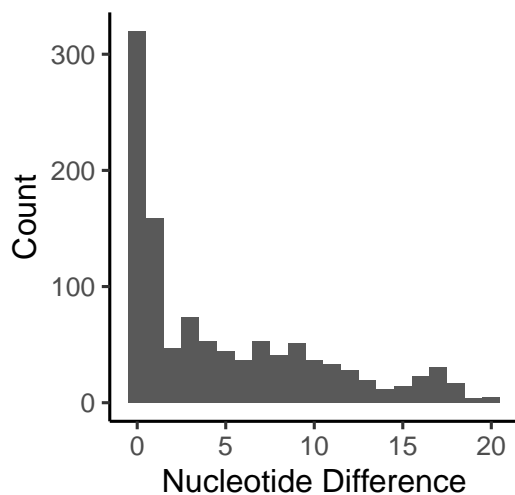
IGHV3-NL1*01

176 sequences assigned
No exact matches.



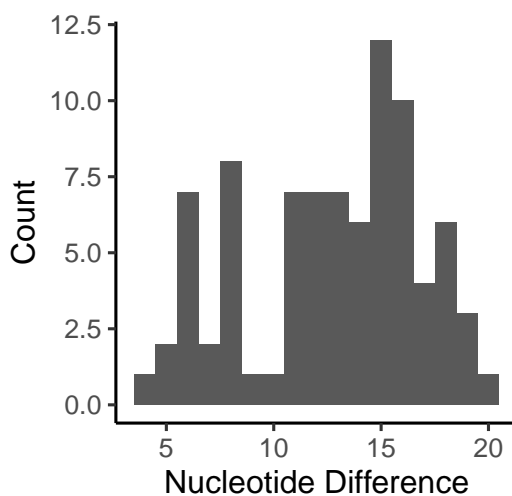
IGHV3-73*01_02

1166 sequences assigned
320 (27.4%) exact matches, in which:
252 unique CDR3
6 unique J



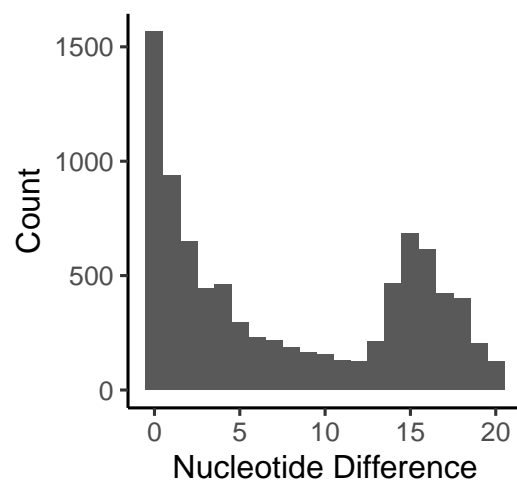
IGHV3-43D*04

93 sequences assigned
No exact matches.



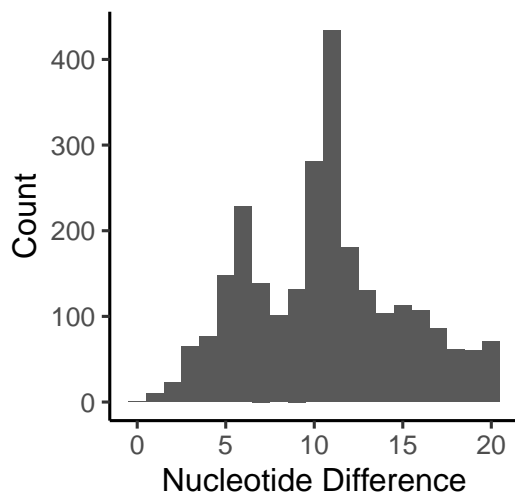
IGHV4-4*07

13361 sequences assigned
1566 (11.7%) exact matches, in which:
1460 unique CDR3
6 unique J



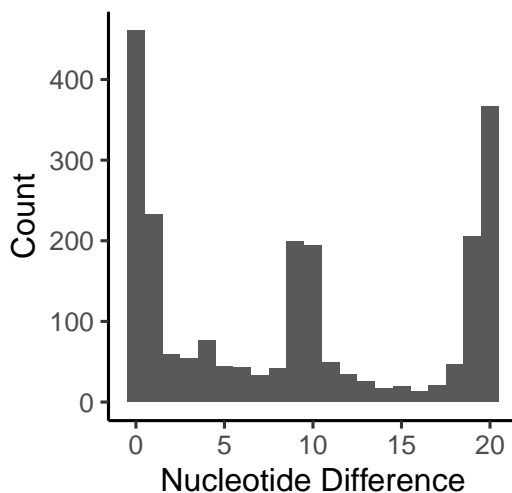
IGHV3-74*03

2916 sequences assigned
1 (0%) exact matches, in which:
1 unique CDR3
1 unique J



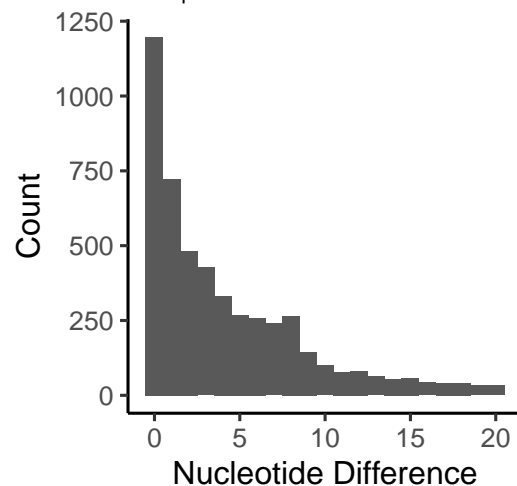
IGHV3-64D*09

2690 sequences assigned
461 (17.1%) exact matches, in which:
294 unique CDR3
6 unique J



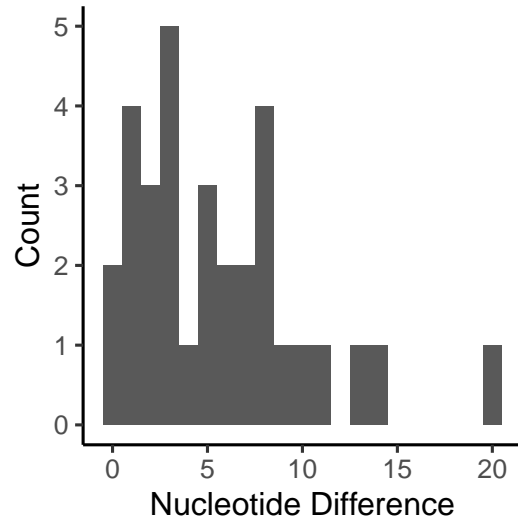
IGHV4-4*02_03

6595 sequences assigned
1197 (18.2%) exact matches, in which:
1072 unique CDR3
6 unique J



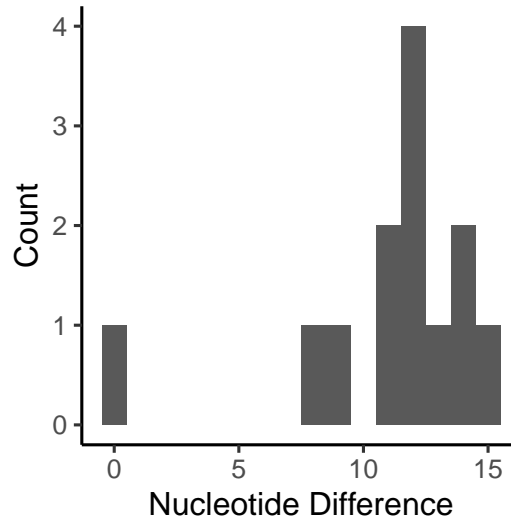
IGHV4-28*03

35 sequences assigned
2 (5.7%) exact matches, in which:
2 unique CDR3
1 unique J



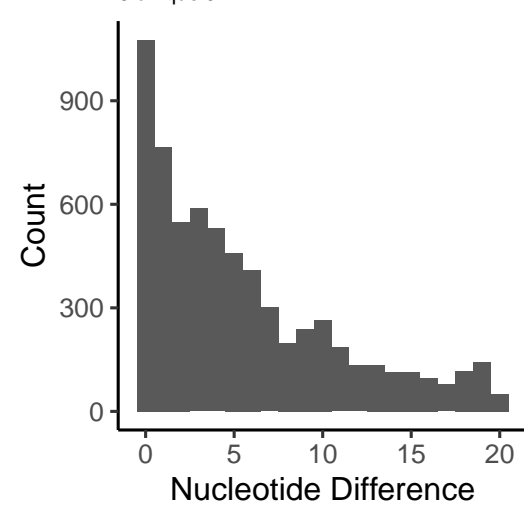
IGHV4-30-4*01

18 sequences assigned
1 (5.6%) exact matches, in which:
1 unique CDR3
1 unique J



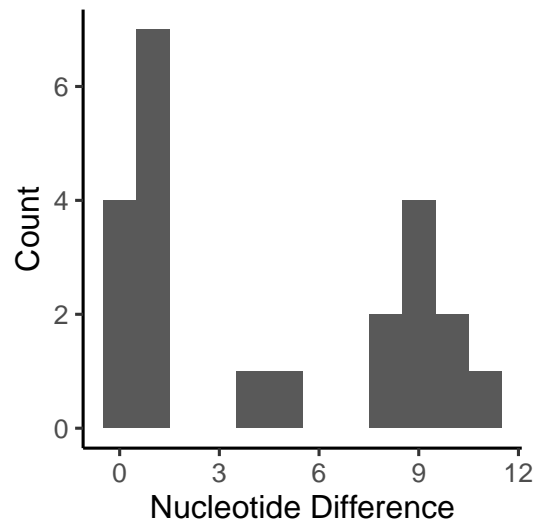
IGHV4-31*02

7496 sequences assigned
1077 (14.4%) exact matches, in which:
1010 unique CDR3
6 unique J



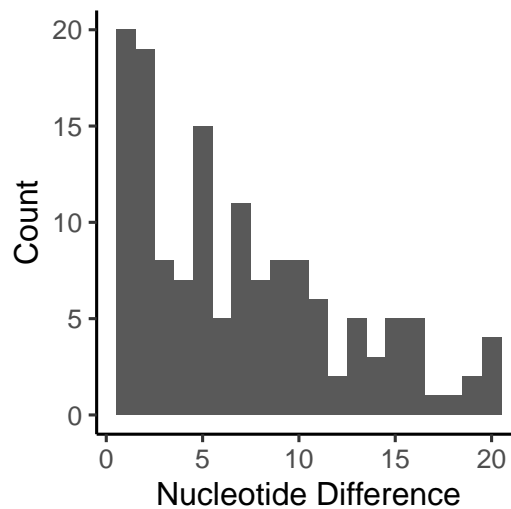
IGHV4-28*01_07

23 sequences assigned
4 (17.4%) exact matches, in which:
3 unique CDR3
2 unique J



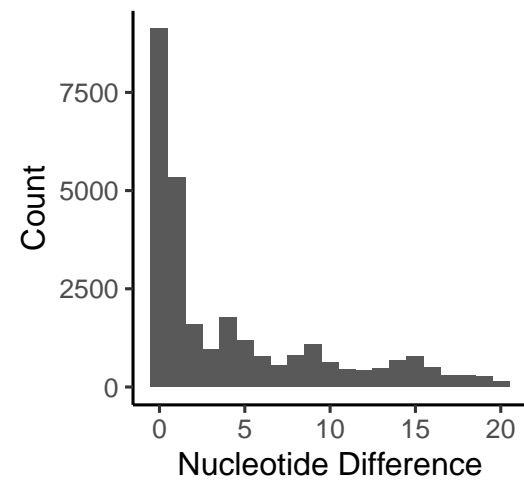
IGHV4-30-2*03

188 sequences assigned
No exact matches.



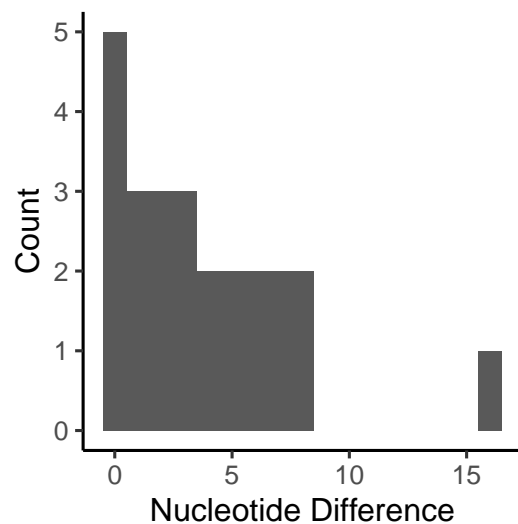
IGHV4-34*01_02

29512 sequences assigned
9121 (30.9%) exact matches, in which:
7668 unique CDR3
6 unique J



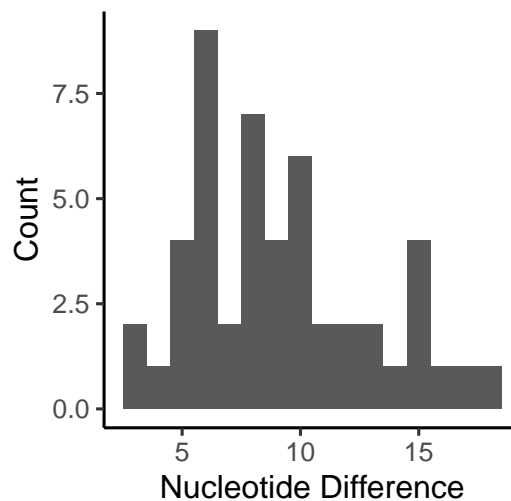
IGHV4-28*02_05

27 sequences assigned
5 (18.5%) exact matches, in which:
4 unique CDR3
4 unique J



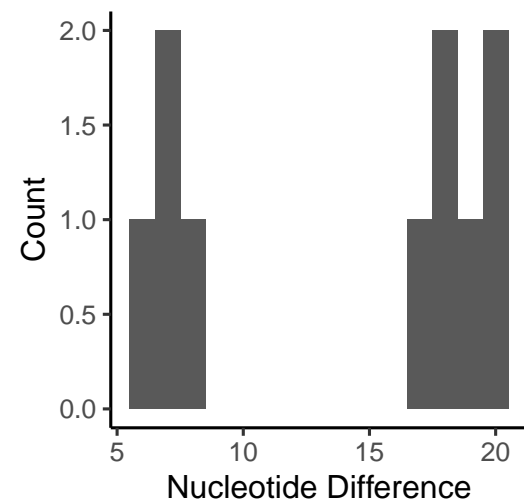
IGHV4-30-4*08

56 sequences assigned
No exact matches.



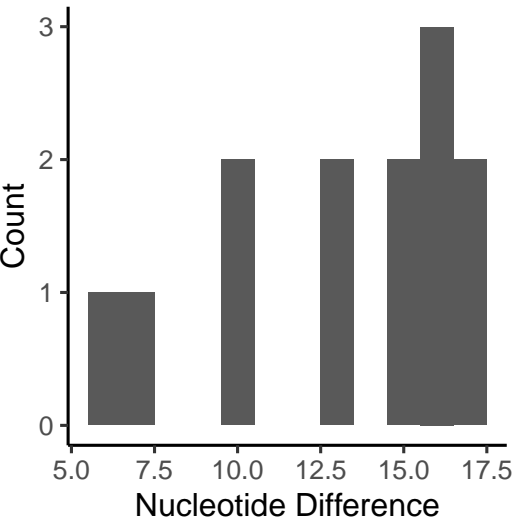
IGHV4-38-2*01

20 sequences assigned
No exact matches.



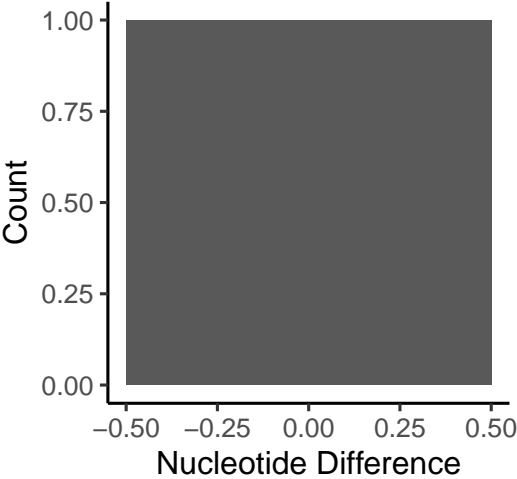
IGHV4-38-2*02

60 sequences assigned
No exact matches.



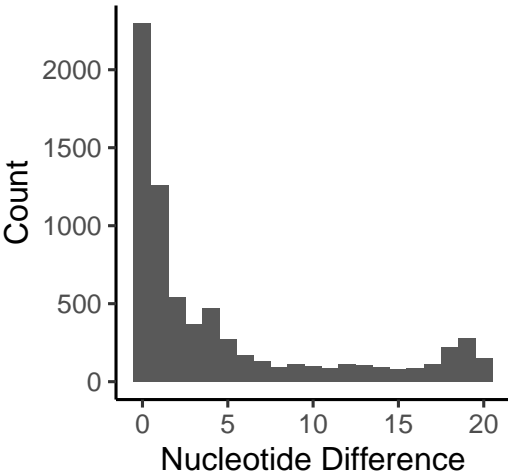
IGHV4-55*01_05

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



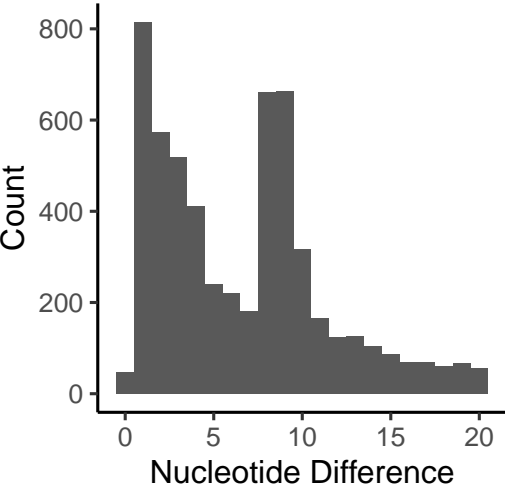
IGHV4-59*13

7773 sequences assigned
2297 (29.6%) exact matches, in which:
2125 unique CDR3
6 unique J



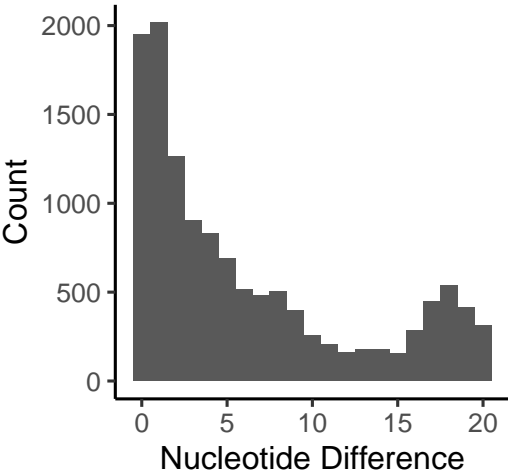
IGHV4-39*07

6036 sequences assigned
48 (0.8%) exact matches, in which:
47 unique CDR3
6 unique J



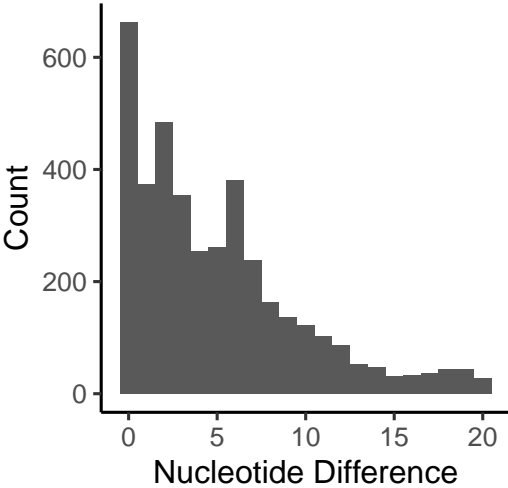
IGHV4-59*08

16100 sequences assigned
1948 (12.1%) exact matches, in which:
1770 unique CDR3
6 unique J



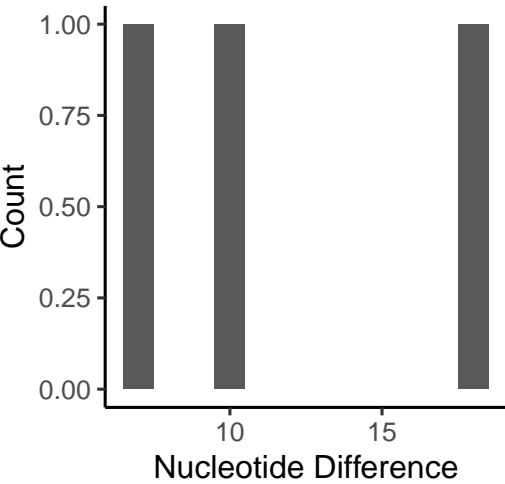
IGHV4-61*01

4094 sequences assigned
663 (16.2%) exact matches, in which:
646 unique CDR3
6 unique J



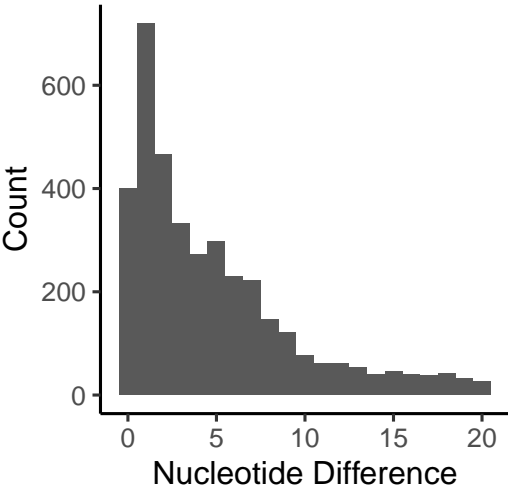
IGHV4-55*09

5 sequences assigned
No exact matches.



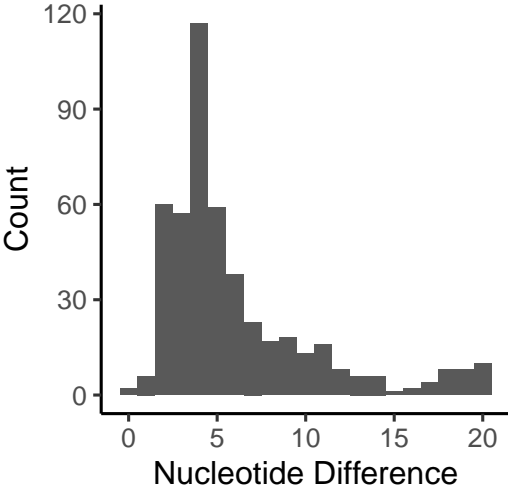
IGHV4-59*12

4339 sequences assigned
400 (9.2%) exact matches, in which:
393 unique CDR3
6 unique J



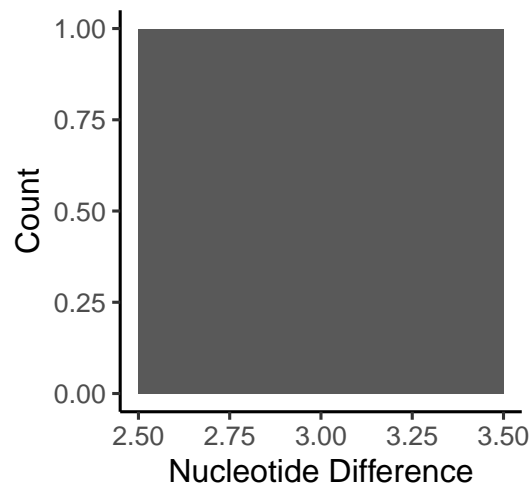
IGHV4-61*05

528 sequences assigned
2 (0.4%) exact matches, in which:
2 unique CDR3
1 unique J



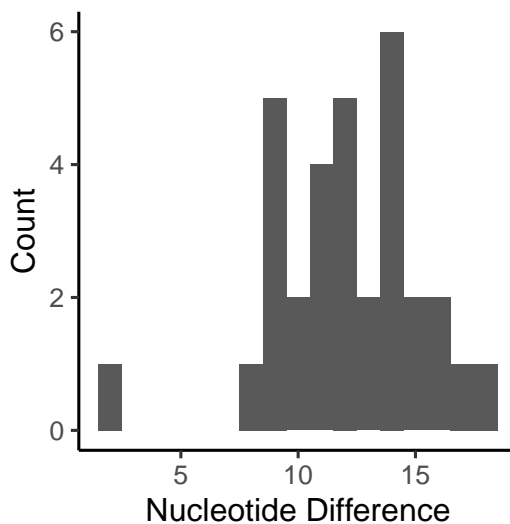
IGHV1/OR15-1*04

1 sequences assigned
No exact matches.



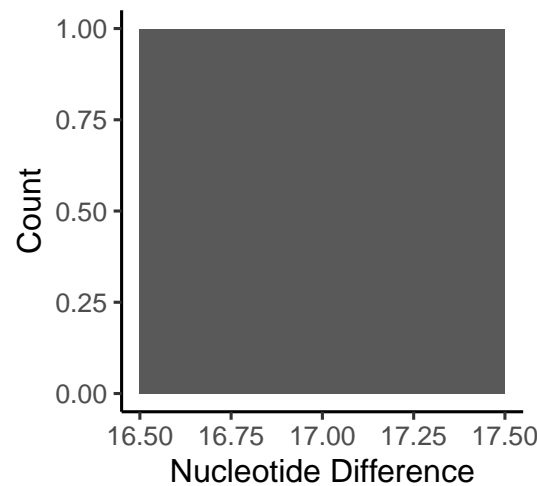
IGHV1/OR15-3*02

35 sequences assigned
No exact matches.



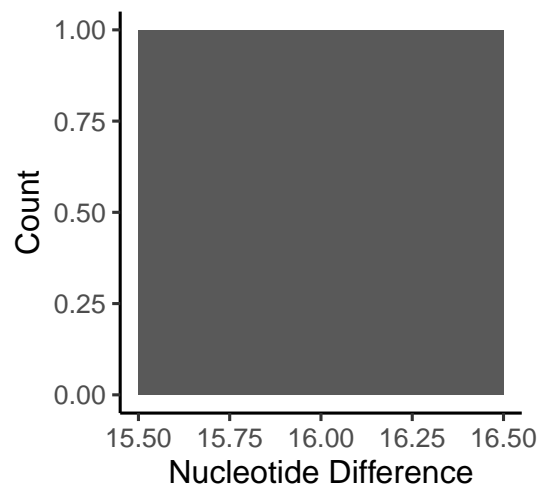
IGHV1/OR15-9*01

1 sequences assigned
No exact matches.



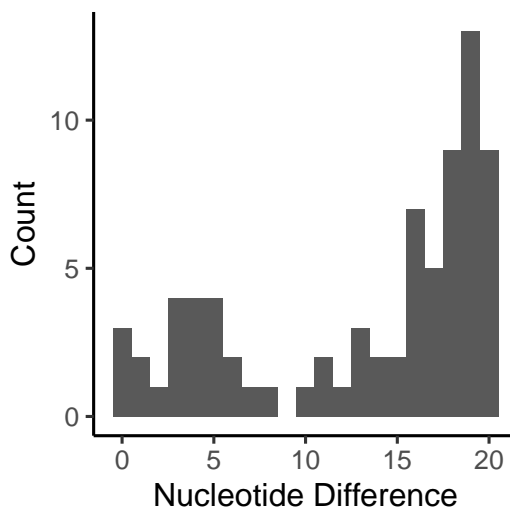
IGHV1/OR15-2*01

1 sequences assigned
No exact matches.



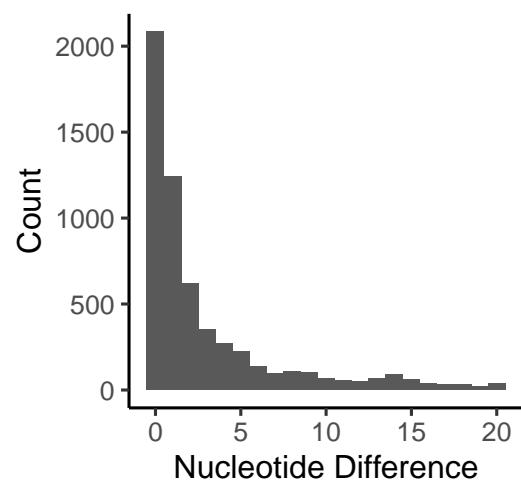
IGHV4/OR15-8*01

120 sequences assigned
3 (2.5%) exact matches, in which:
3 unique CDR3
2 unique J



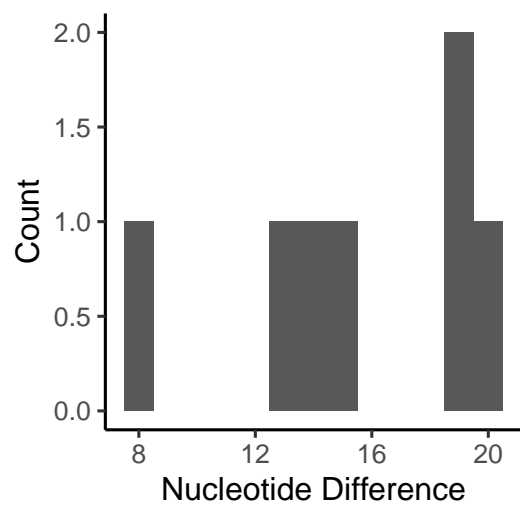
IGHV5-10-1*01_03

6321 sequences assigned
2084 (33%) exact matches, in which:
1589 unique CDR3
6 unique J



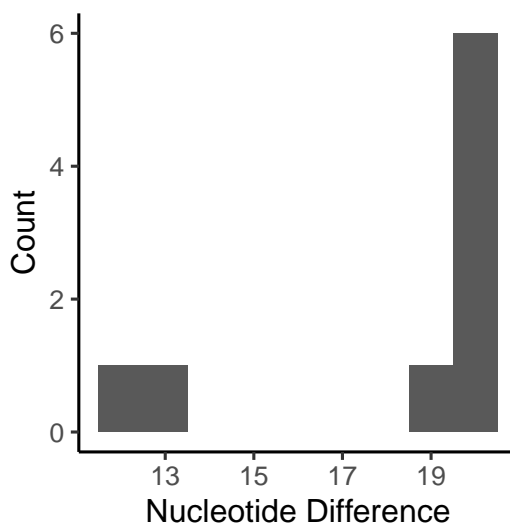
IGHV1/OR15-2*02_03

8 sequences assigned
No exact matches.



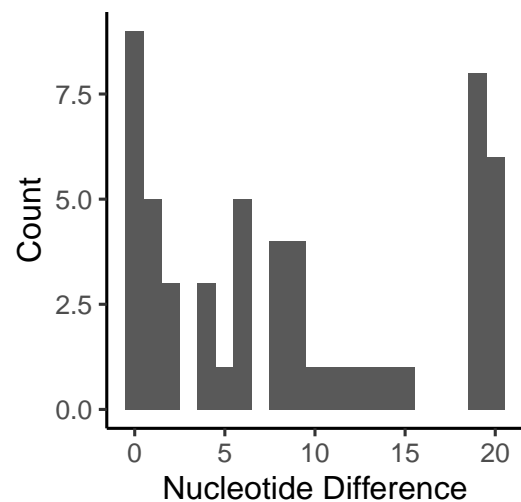
IGHV4/OR15-8*02

35 sequences assigned
No exact matches.



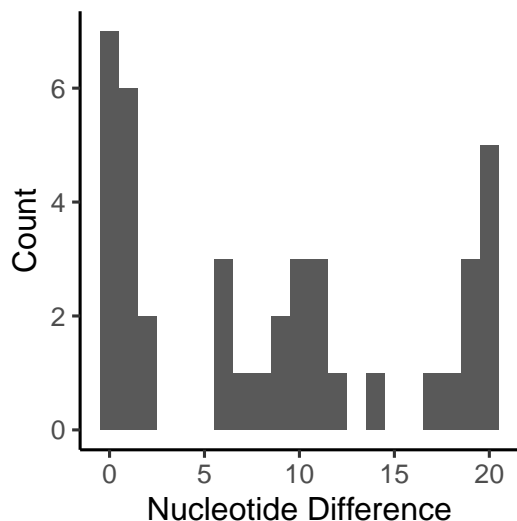
IGHV5-51*04

77 sequences assigned
9 (11.7%) exact matches, in which:
9 unique CDR3
4 unique J



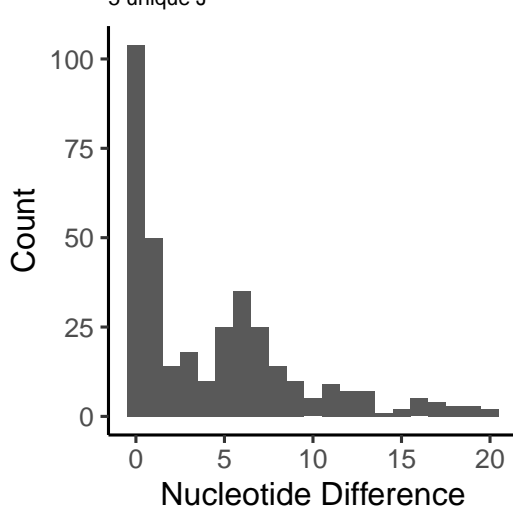
IGHV5–51*06

44 sequences assigned
7 (15.9%) exact matches, in which:
7 unique CDR3
4 unique J



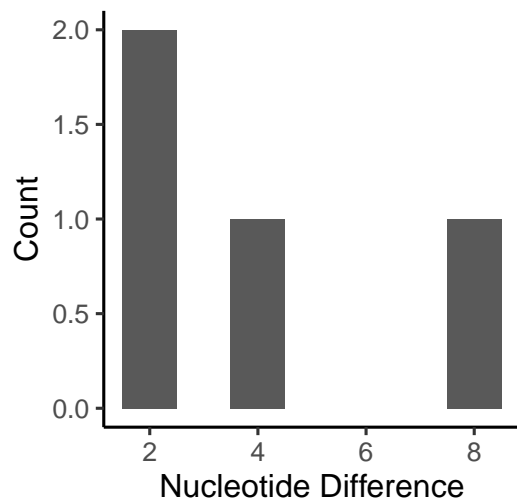
IGHV6–1*01_02_A315G

353 sequences assigned
104 (29.5%) exact matches, in which:
102 unique CDR3
5 unique J



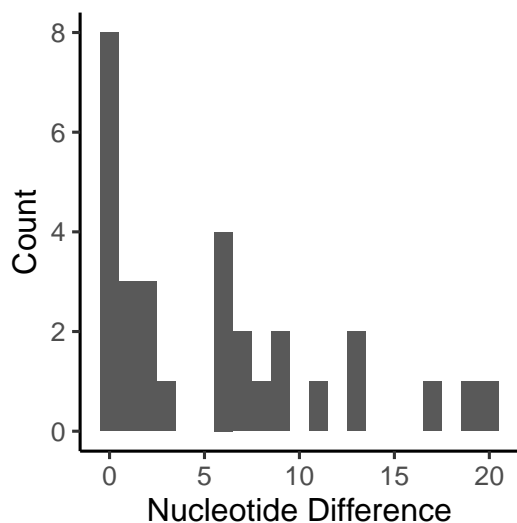
IGHV7–81*01

4 sequences assigned
No exact matches.



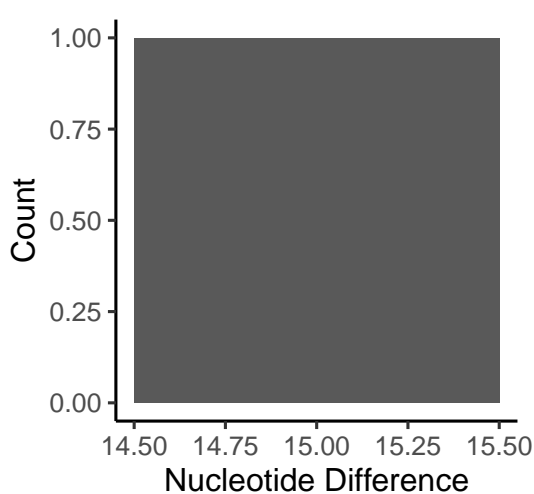
IGHV5–51*07

31 sequences assigned
8 (25.8%) exact matches, in which:
8 unique CDR3
3 unique J



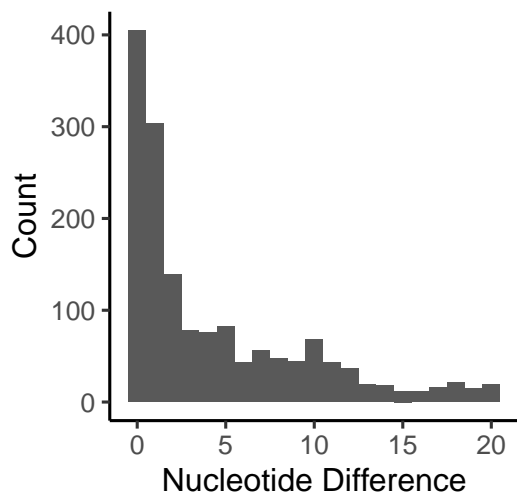
IGHV3/OR16–13*01

1 sequences assigned
No exact matches.



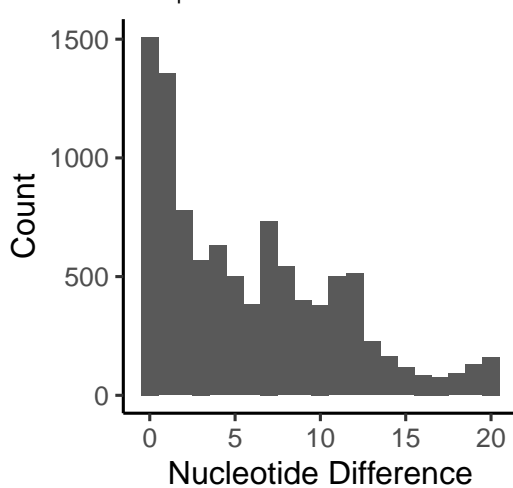
IGHV6–1*01_02

1595 sequences assigned
405 (25.4%) exact matches, in which:
366 unique CDR3
6 unique J



IGHV7–4–1*02

11610 sequences assigned
1509 (13%) exact matches, in which:
1343 unique CDR3
6 unique J



IGHV6-1*01_02_A315G

