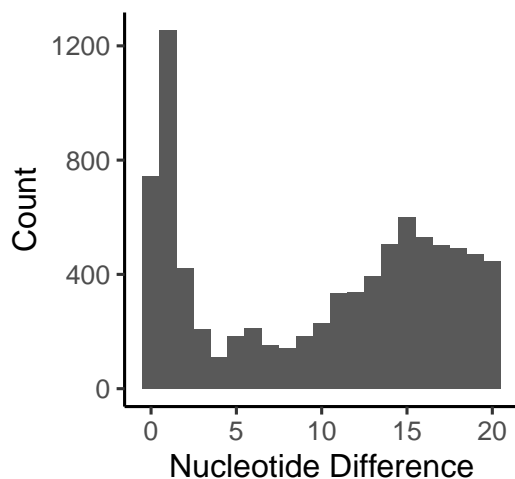


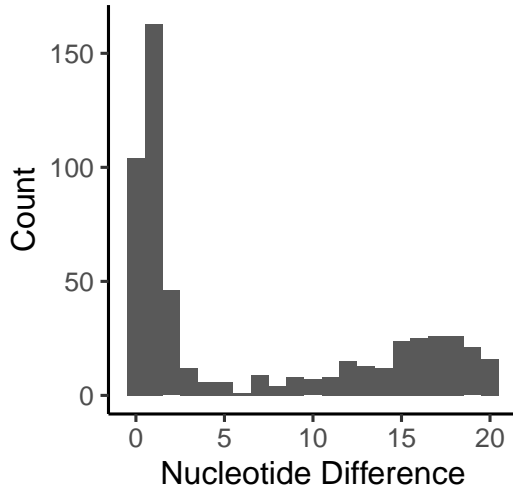
IGHV1-2*02

10695 sequences assigned
745 (7%) exact matches, in which:
473 unique CDR3
7 unique J



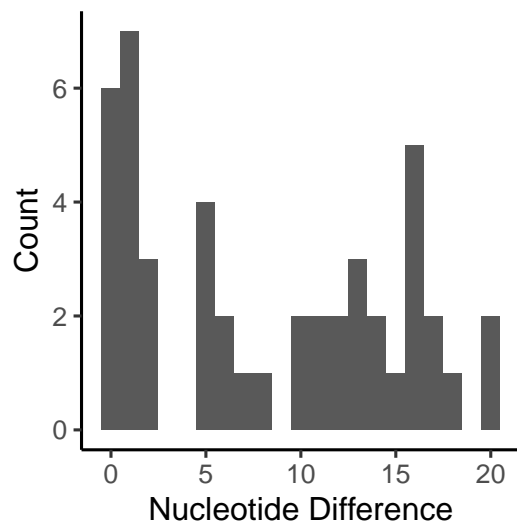
IGHV1-3*01_05

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



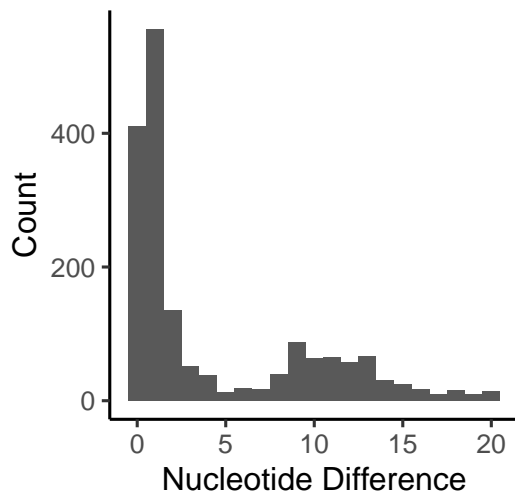
IGHV1-24*01

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



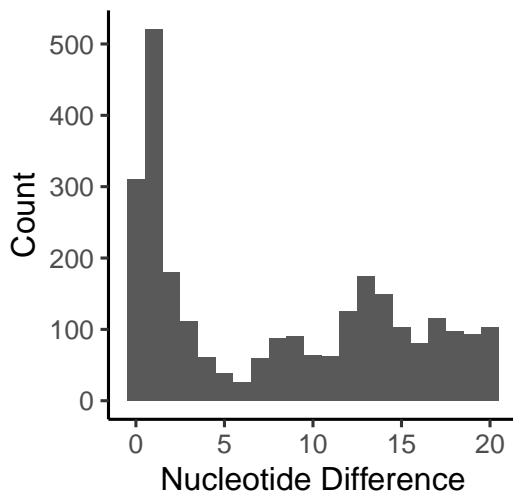
IGHV1-2*04

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



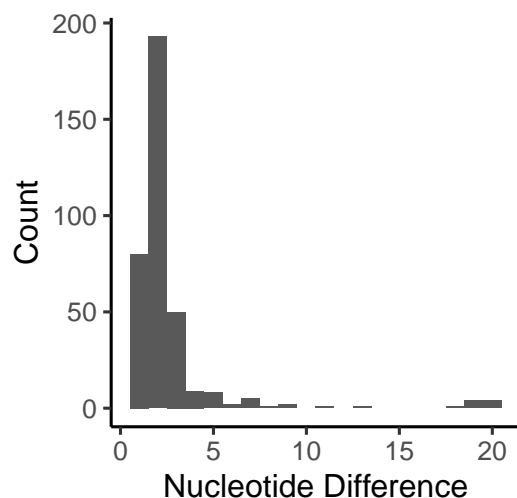
IGHV1-8*01

3527 sequences assigned
310 (8.8%) exact matches, in which:
200 unique CDR3
6 unique J



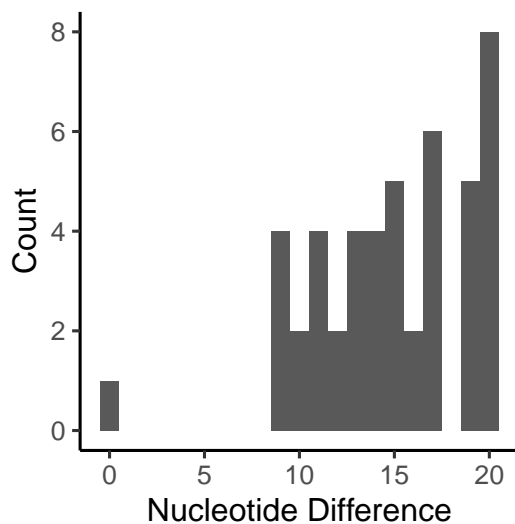
IGHV1-45*02

376 sequences assigned
No exact matches.



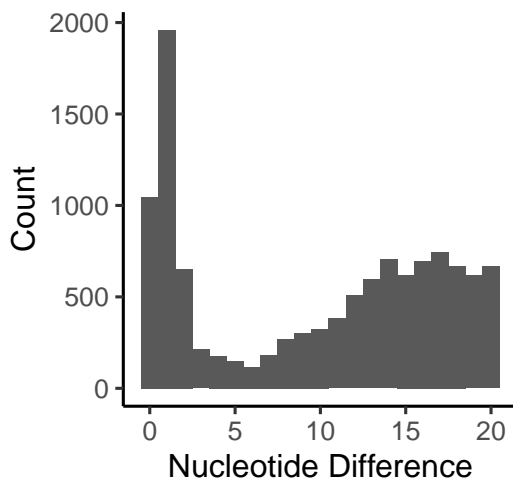
IGHV1-3*04

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



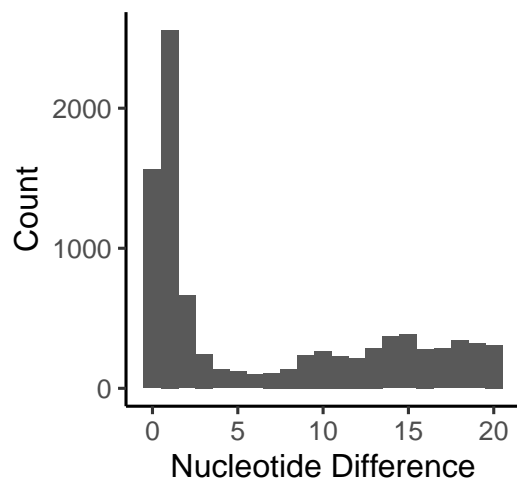
IGHV1-18*01

16019 sequences assigned
1046 (6.5%) exact matches, in which:
631 unique CDR3
7 unique J



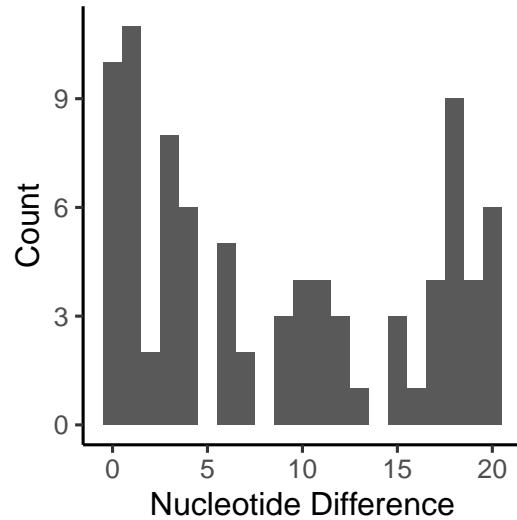
IGHV1-46*01

12934 sequences assigned
1562 (12.1%) exact matches, in which:
1044 unique CDR3
7 unique J



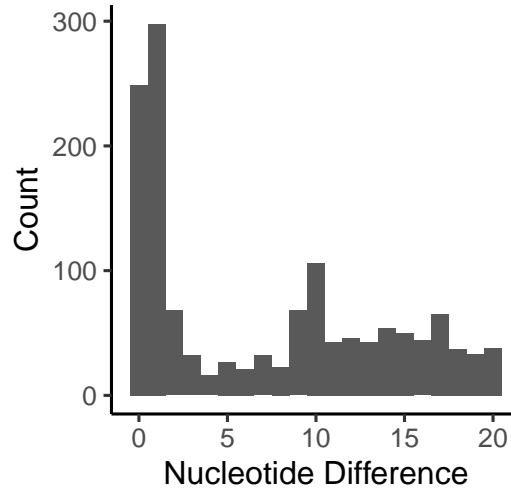
IGHV1-58*02

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



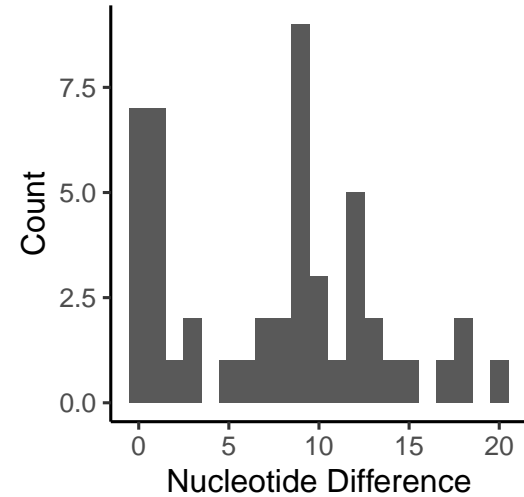
IGHV1-69*02

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



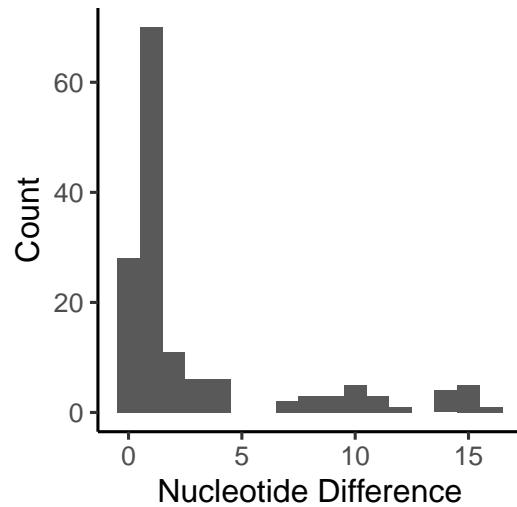
IGHV2-5*01

52 sequences assigned
7 (13.5%) exact matches, in which:
5 unique CDR3
2 unique J



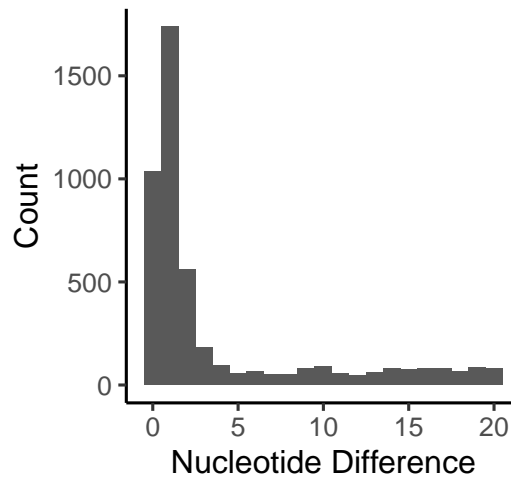
IGHV1-58*01_03

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



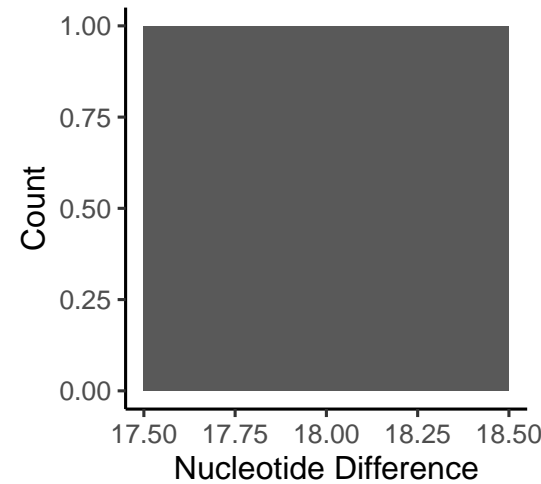
IGHV1-69*01_12_13

6128 sequences assigned
1036 (16.9%) exact matches, in which:
705 unique CDR3
7 unique J



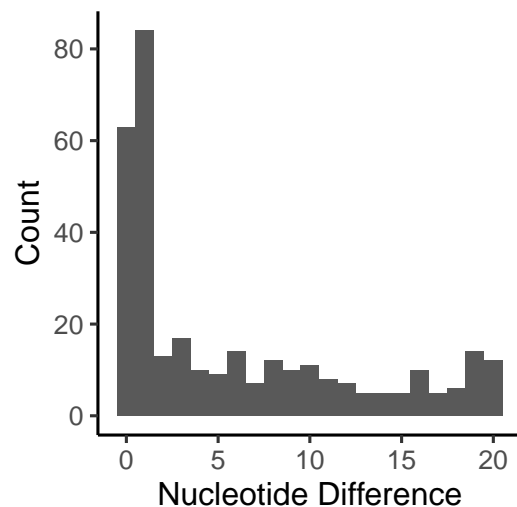
IGHV2-26*01

1 sequences assigned
No exact matches.



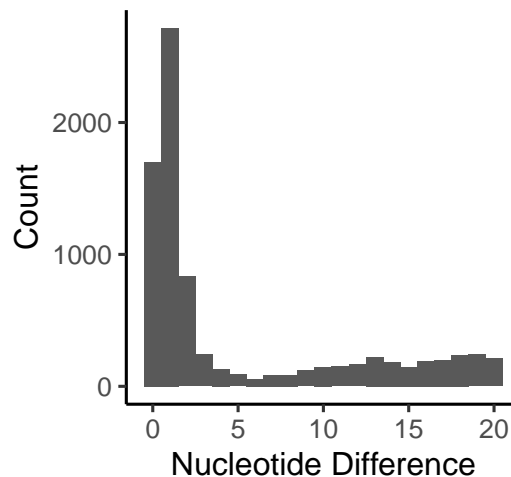
IGHV1-69-2*01

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



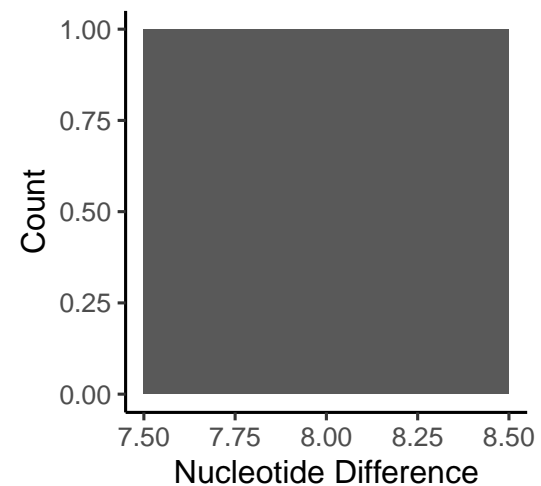
IGHV1-69*15_18

10088 sequences assigned
1700 (16.9%) exact matches, in which:
1146 unique CDR3
7 unique J



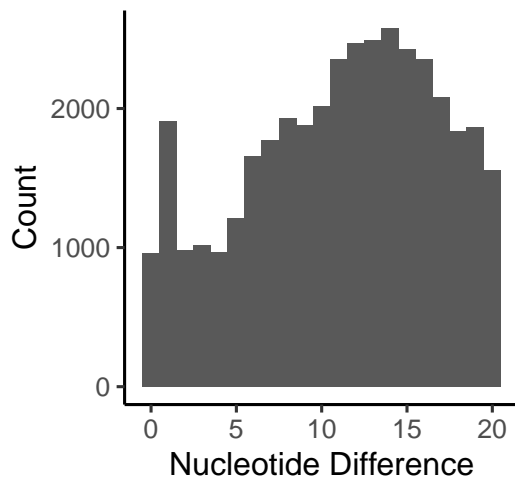
IGHV2-70*01

2 sequences assigned
No exact matches.



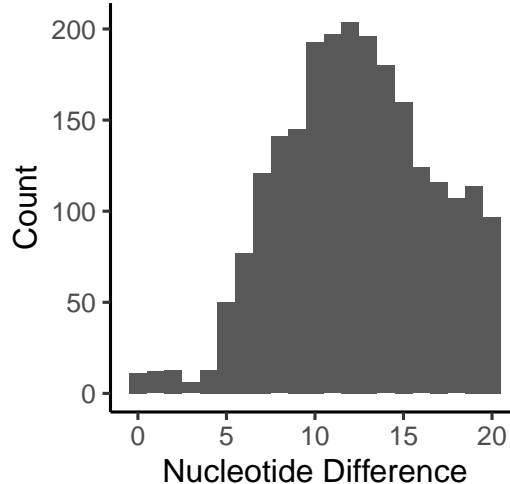
IGHV3-7*01

52201 sequences assigned
960 (1.8%) exact matches, in which:
544 unique CDR3
5 unique J



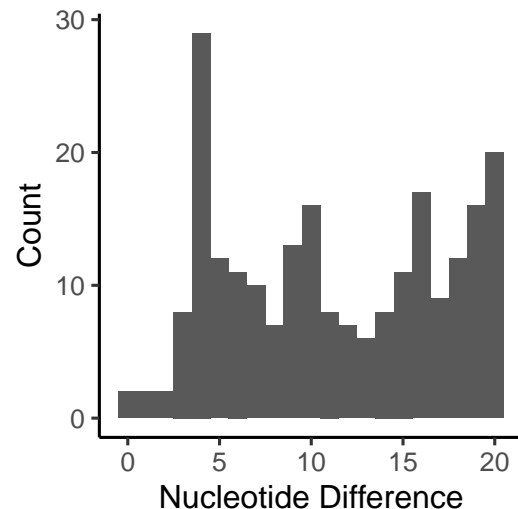
IGHV3-11*04

2741 sequences assigned
11 (0.4%) exact matches, in which:
11 unique CDR3
3 unique J



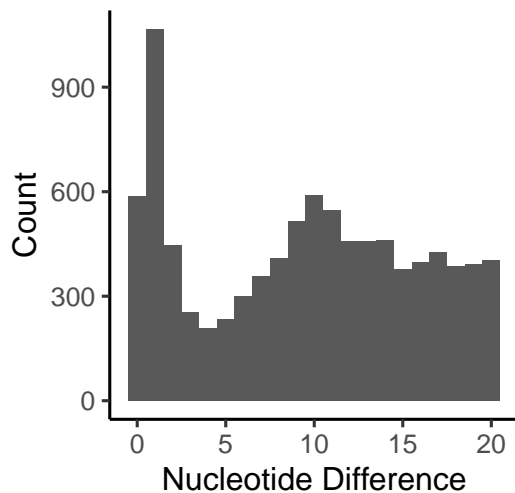
IGHV3-20*01_02

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



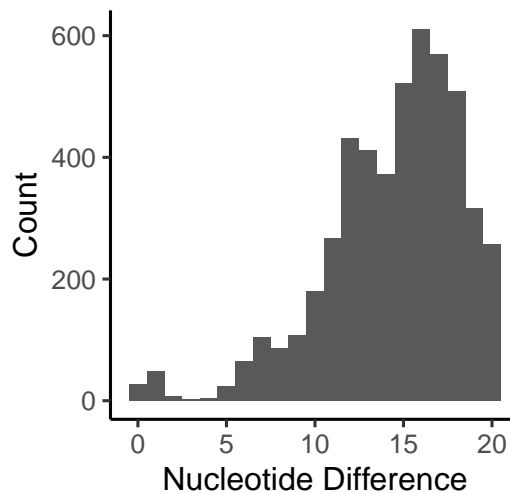
IGHV3-9*01

13497 sequences assigned
587 (4.3%) exact matches, in which:
324 unique CDR3
6 unique J



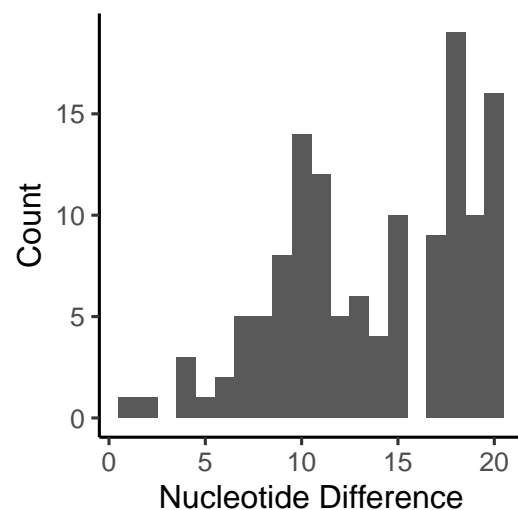
IGHV3-13*01

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



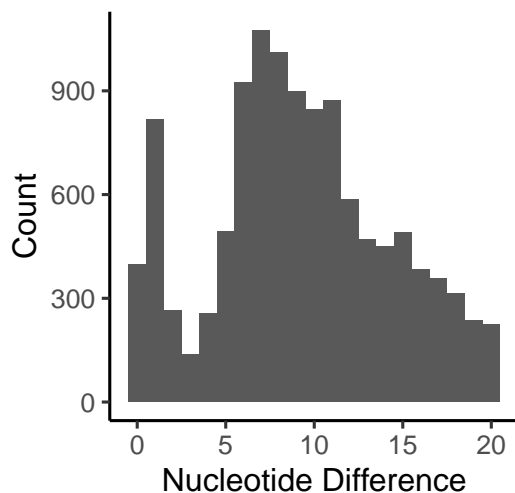
IGHV3-20*03_04

294 sequences assigned
No exact matches.



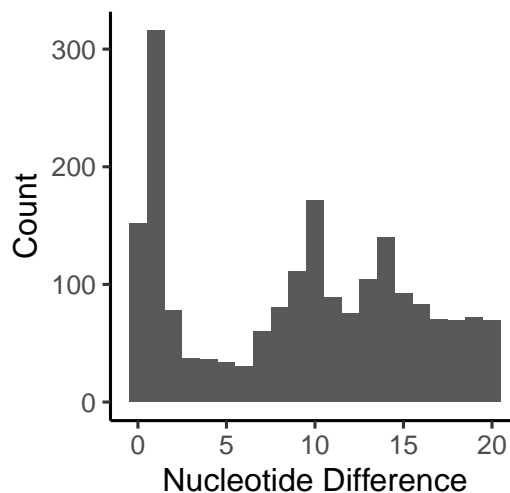
IGHV3-11*01

12676 sequences assigned
399 (3.1%) exact matches, in which:
219 unique CDR3
7 unique J



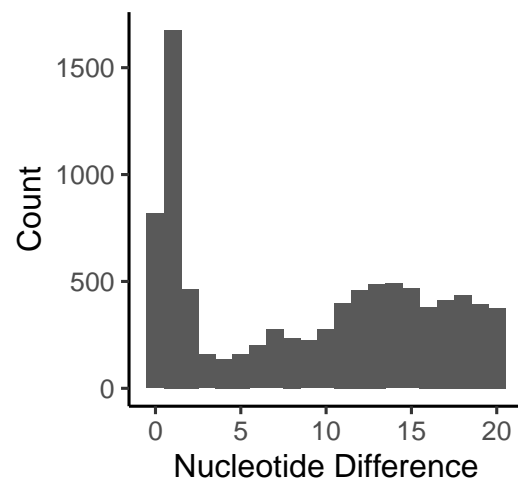
IGHV3-15*01_02

2698 sequences assigned
152 (5.6%) exact matches, in which:
100 unique CDR3
5 unique J



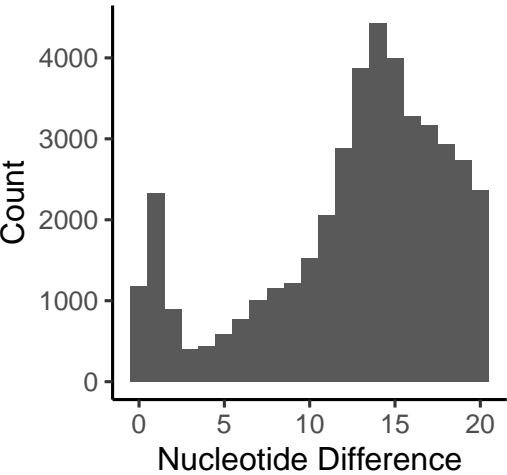
IGHV3-21*01_02

10945 sequences assigned
818 (7.5%) exact matches, in which:
458 unique CDR3
7 unique J



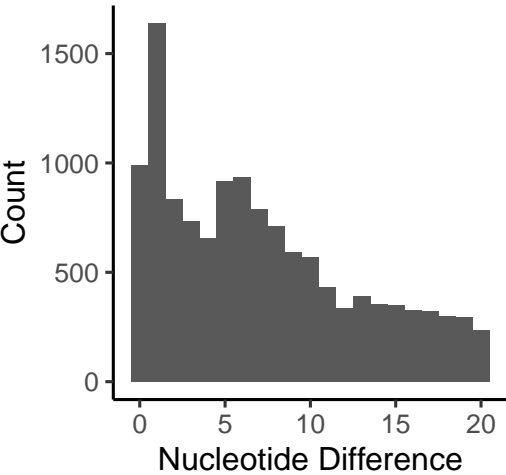
IGHV3-23*01_04

59264 sequences assigned
1178 (2%) exact matches, in which:
659 unique CDR3
6 unique J



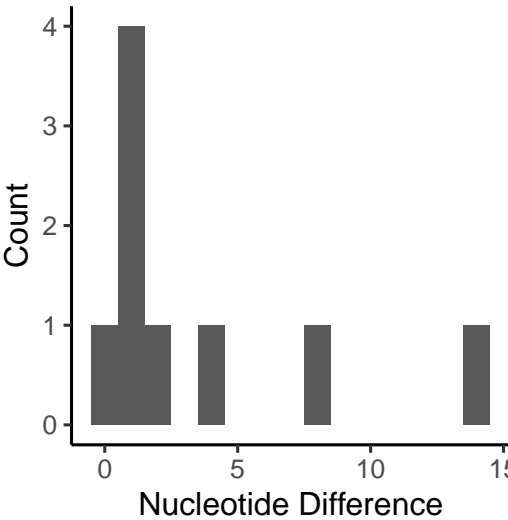
IGHV3-33*01

14053 sequences assigned
990 (7%) exact matches, in which:
529 unique CDR3
6 unique J



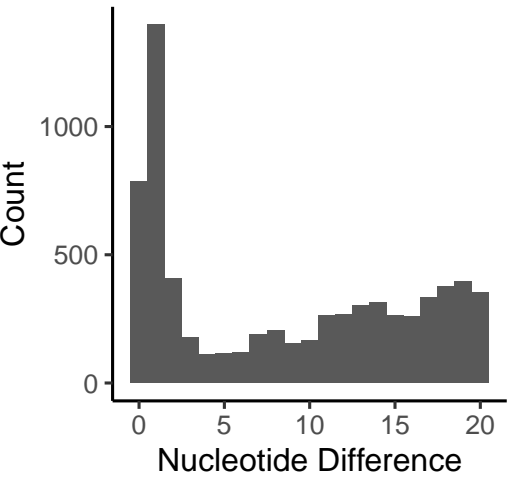
IGHV3-38-3*01

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



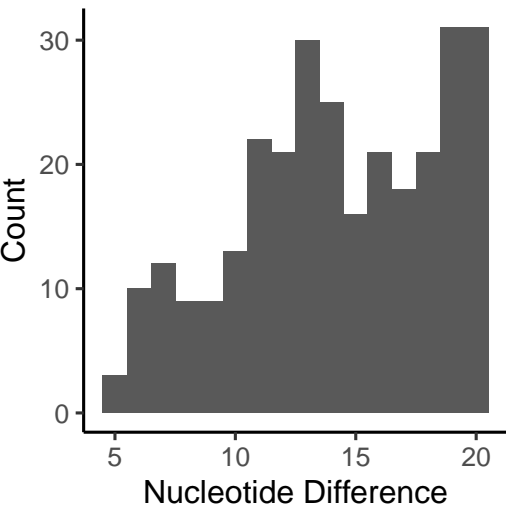
IGHV3-30-3*01

9637 sequences assigned
786 (8.2%) exact matches, in which:
454 unique CDR3
7 unique J



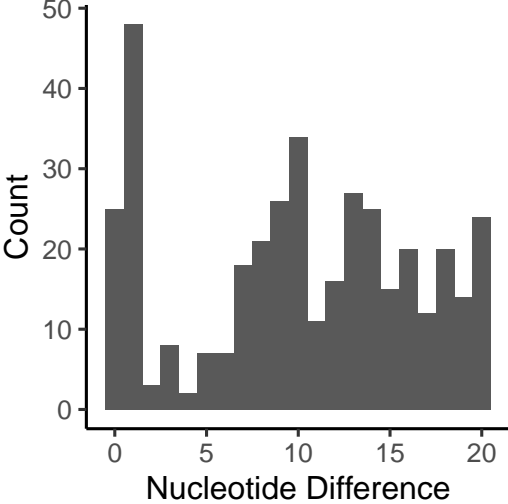
IGHV3-33*05

561 sequences assigned
No exact matches.



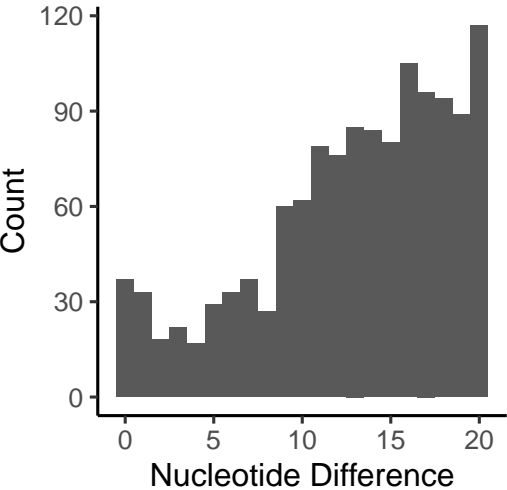
IGHV3-43*01

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



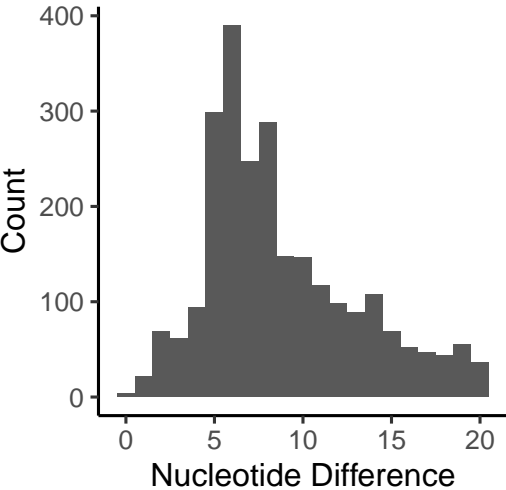
IGHV3-30*03

2403 sequences assigned
37 (1.5%) exact matches, in which:
34 unique CDR3
4 unique J



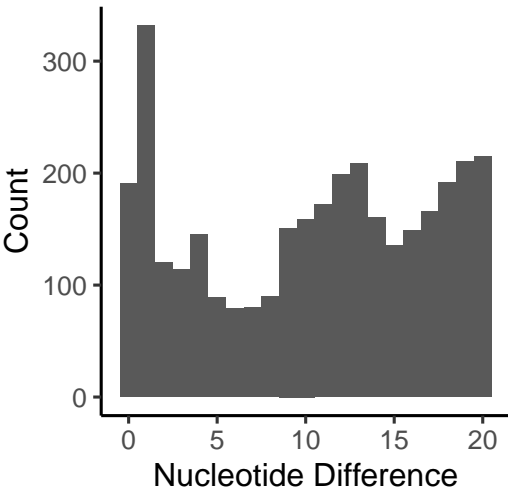
IGHV3-33*06

2711 sequences assigned
4 (0.1%) exact matches, in which:
4 unique CDR3
3 unique J



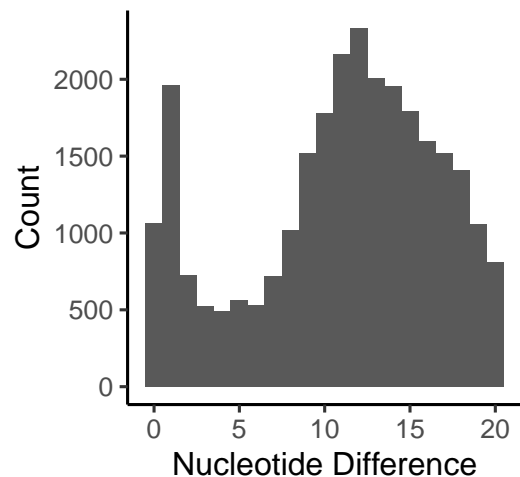
IGHV3-48*02

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



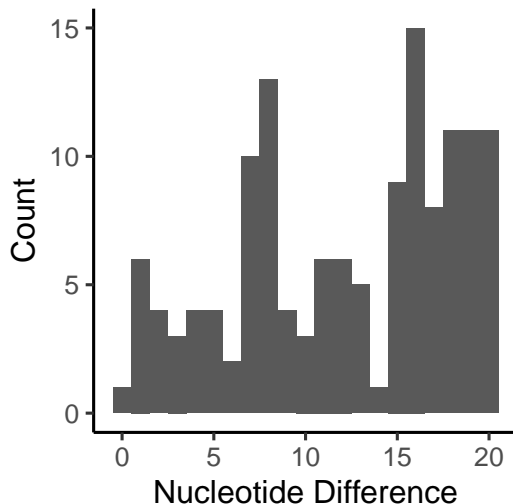
IGHV3-48*03

32401 sequences assigned
1067 (3.3%) exact matches, in which:
646 unique CDR3
7 unique J



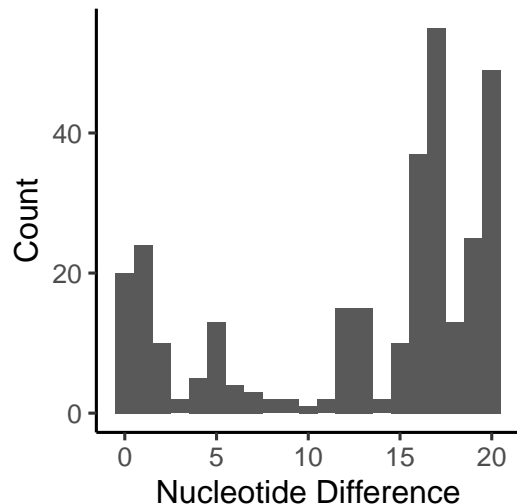
IGHV3-53*05

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



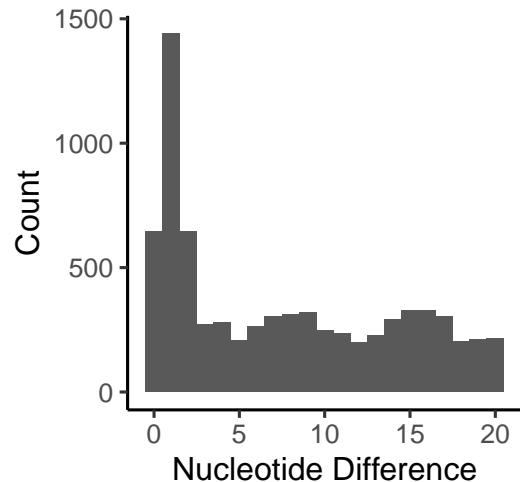
IGHV3-64*02_07

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



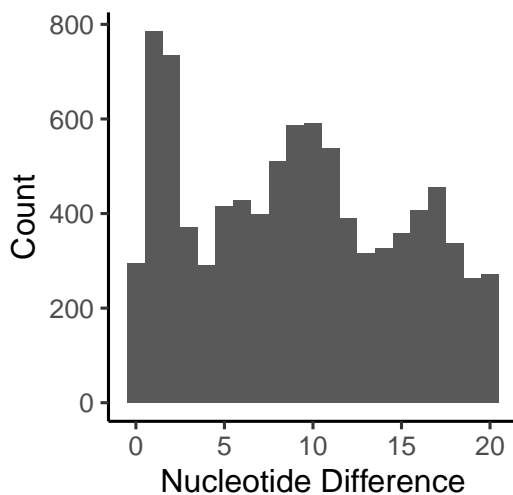
IGHV3-49*04

9050 sequences assigned
647 (7.1%) exact matches, in which:
367 unique CDR3
6 unique J



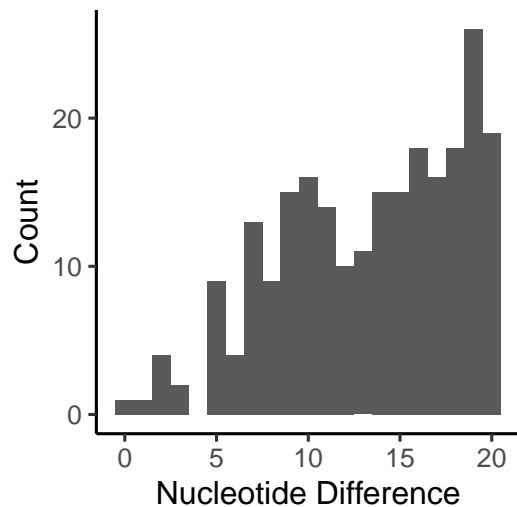
IGHV3-53*01_02

12019 sequences assigned
296 (2.5%) exact matches, in which:
195 unique CDR3
5 unique J



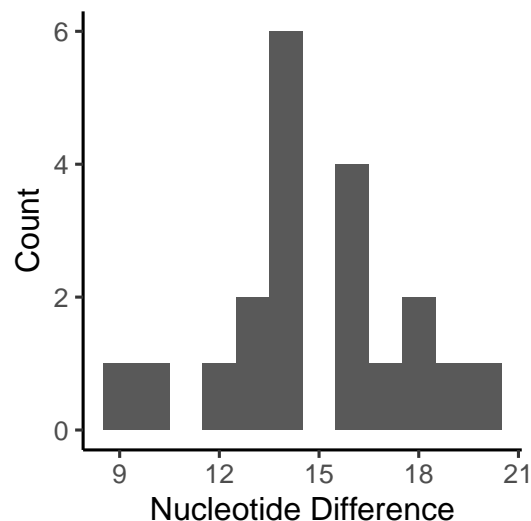
IGHV3-66*01

353 sequences assigned
1 (0.3%) exact matches, in which:
1 unique CDR3
1 unique J



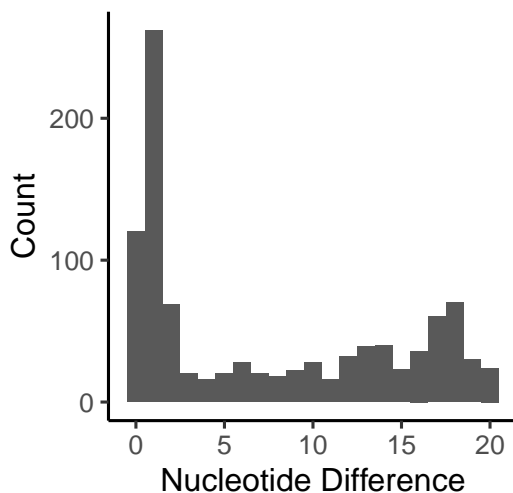
IGHV3-52*01_03

22 sequences assigned
No exact matches.



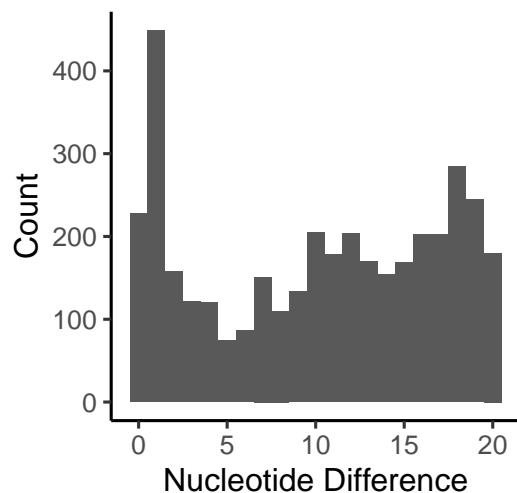
IGHV3-64*01

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



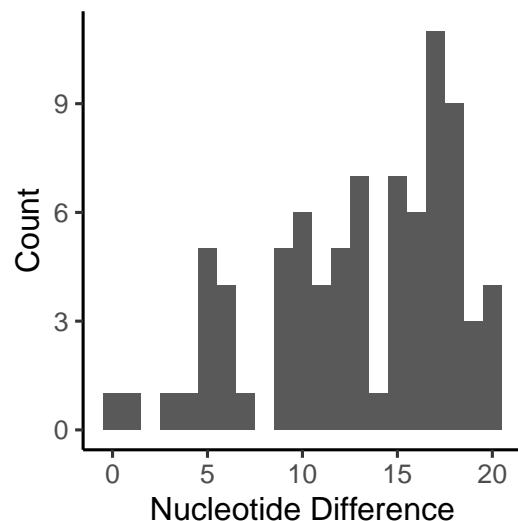
IGHV3-66*02

5261 sequences assigned
228 (4.3%) exact matches, in which:
129 unique CDR3
5 unique J



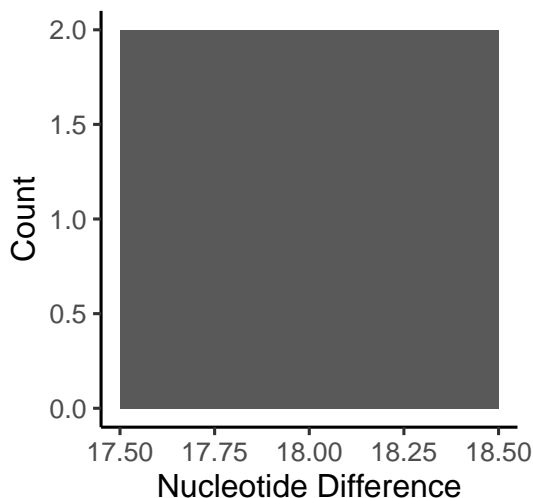
IGHV3-66*03

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



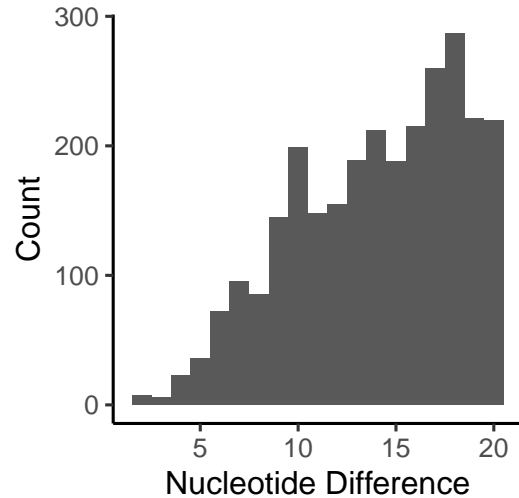
IGHV3-71*01_04

15 sequences assigned
No exact matches.



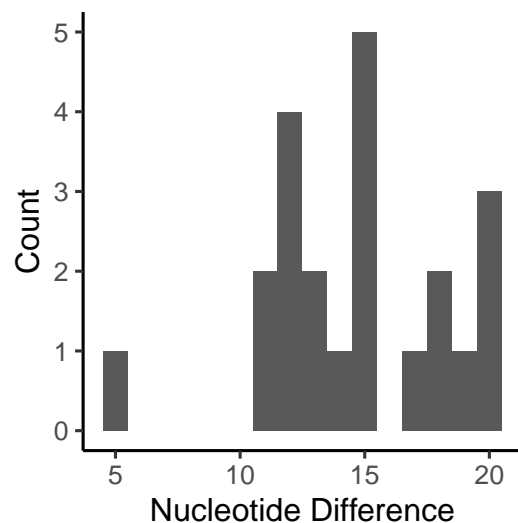
IGHV3-74*03

4615 sequences assigned
No exact matches.



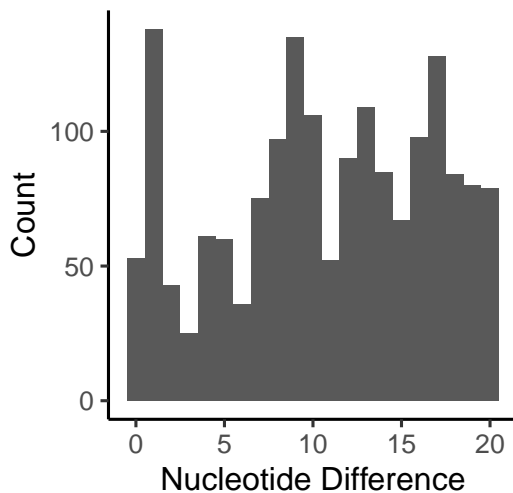
IGHV3-69-1*01

54 sequences assigned
No exact matches.



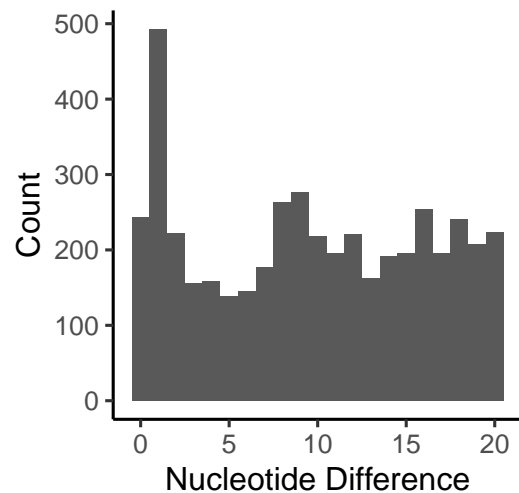
IGHV3-72*01

2475 sequences assigned
53 (2.1%) exact matches, in which:
25 unique CDR3
5 unique J



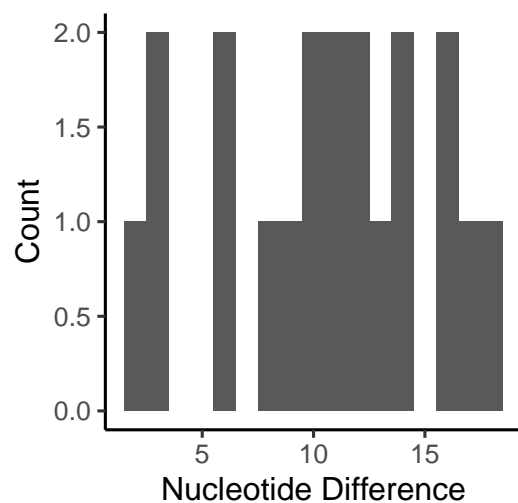
IGHV3-74*01_02

6078 sequences assigned
244 (4%) exact matches, in which:
137 unique CDR3
6 unique J



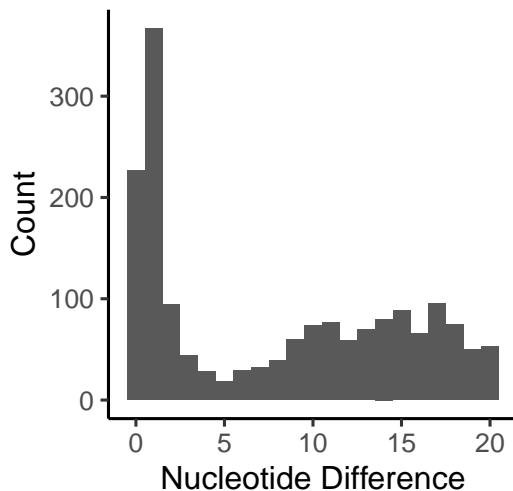
IGHV3-69-1*02

70 sequences assigned
No exact matches.



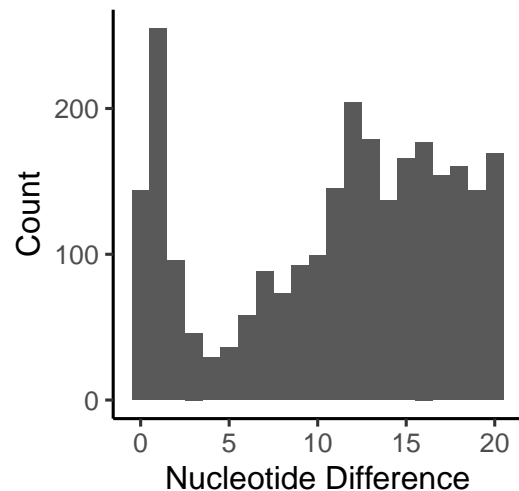
IGHV3-73*01_02

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



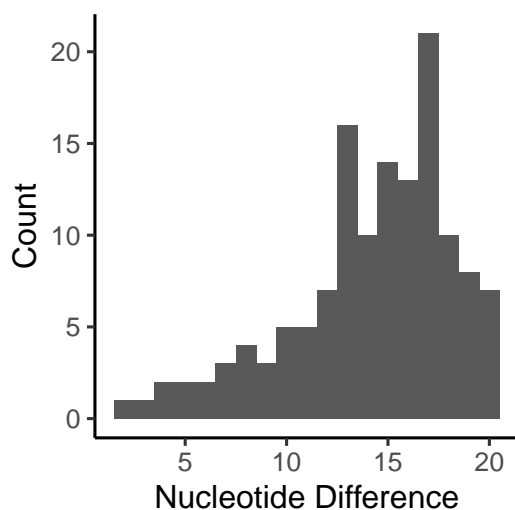
IGHV3-43D*04

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



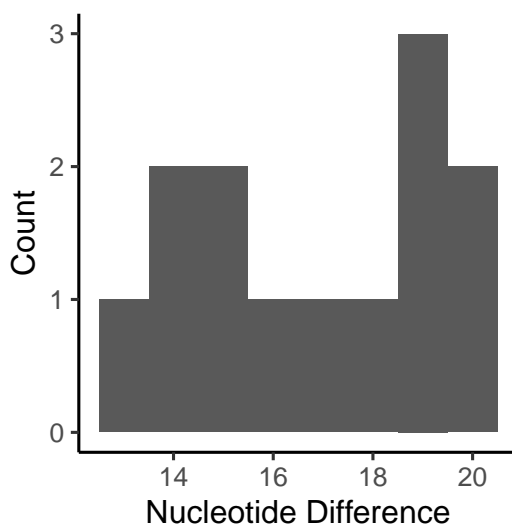
IGHV3–NL1*01

247 sequences assigned
No exact matches.



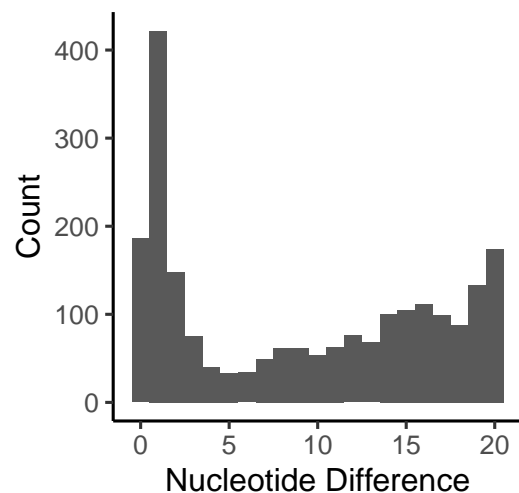
IGHV4–28*03

392 sequences assigned
No exact matches.



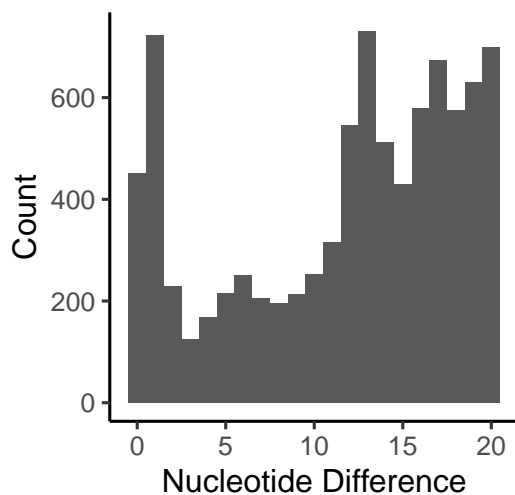
IGHV4–30–2*01

3297 sequences assigned
186 (5.6%) exact matches, in which:
102 unique CDR3
6 unique J



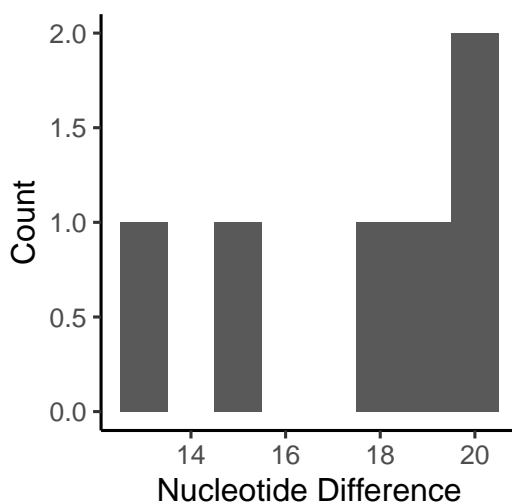
IGHV4–4*07

13527 sequences assigned
452 (3.3%) exact matches, in which:
260 unique CDR3
5 unique J



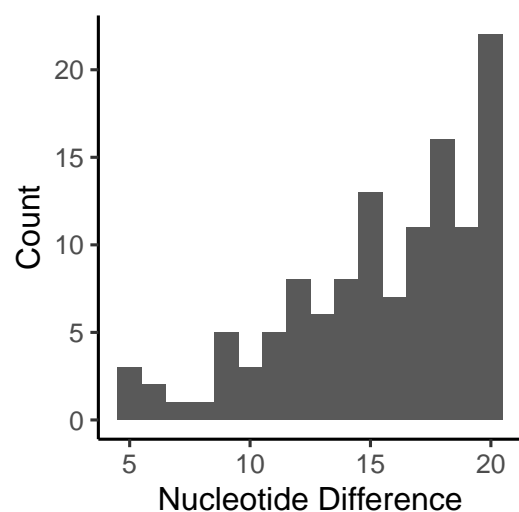
IGHV4–28*01_07

38 sequences assigned
No exact matches.



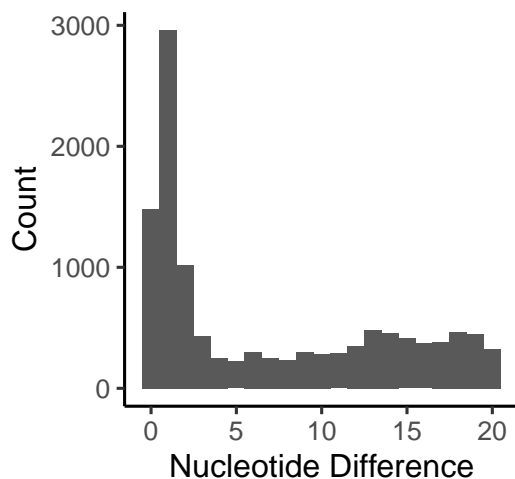
IGHV4–30–2*03

239 sequences assigned
No exact matches.



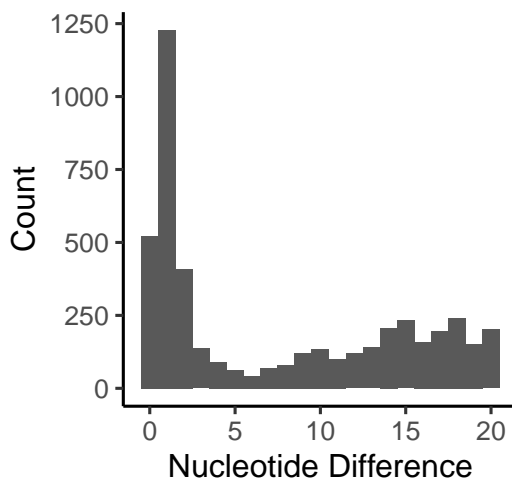
IGHV4–4*02_03

15472 sequences assigned
1484 (9.6%) exact matches, in which:
786 unique CDR3
6 unique J



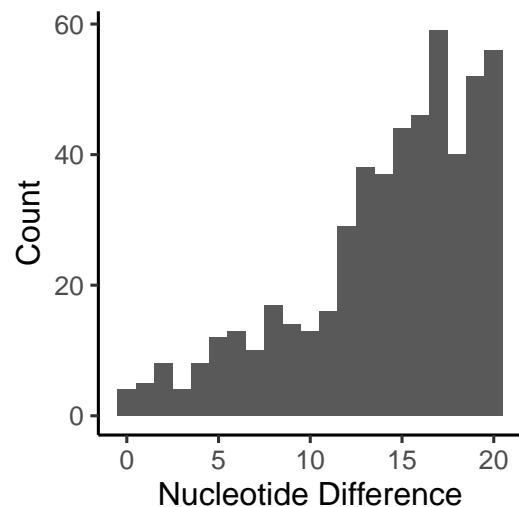
IGHV4–30–4*01

6129 sequences assigned
523 (8.5%) exact matches, in which:
259 unique CDR3
5 unique J



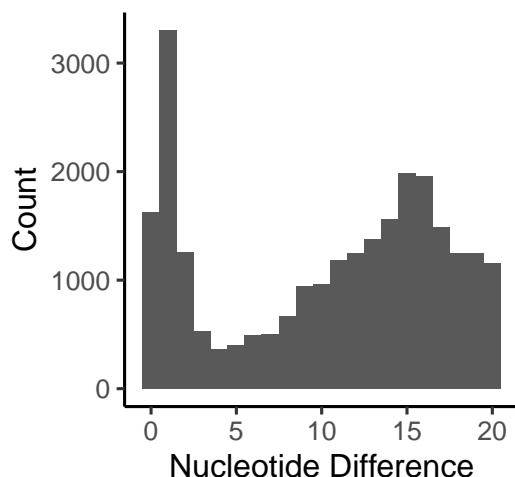
IGHV4–30–4*08

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



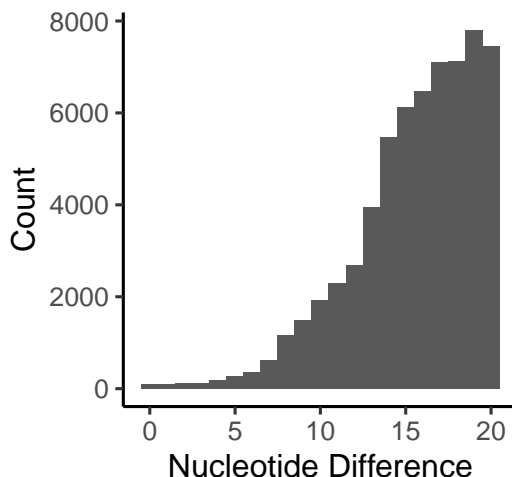
IGHV4-31*02

32622 sequences assigned
1628 (5%) exact matches, in which:
821 unique CDR3
7 unique J



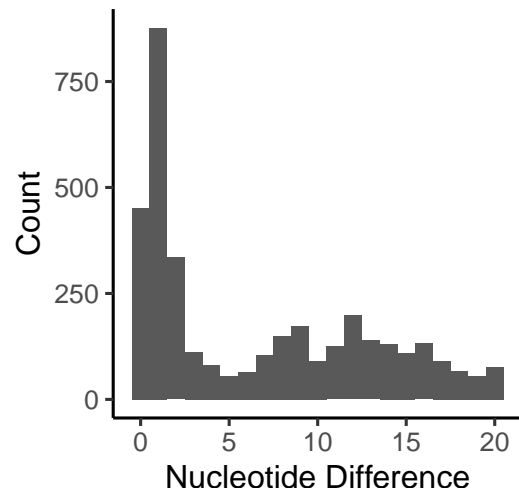
IGHV4-38-2*02

116491 sequences assigned
106 (0.1%) exact matches, in which:
88 unique CDR3
5 unique J



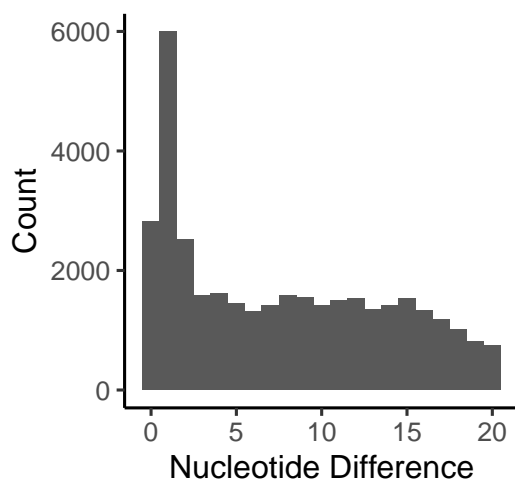
IGHV4-39*01_05

5109 sequences assigned
452 (8.8%) exact matches, in which:
204 unique CDR3
5 unique J



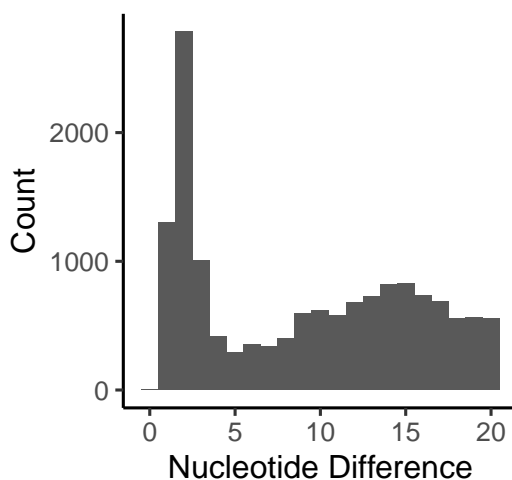
IGHV4-34*01_02

40205 sequences assigned
2820 (7%) exact matches, in which:
1445 unique CDR3
7 unique J



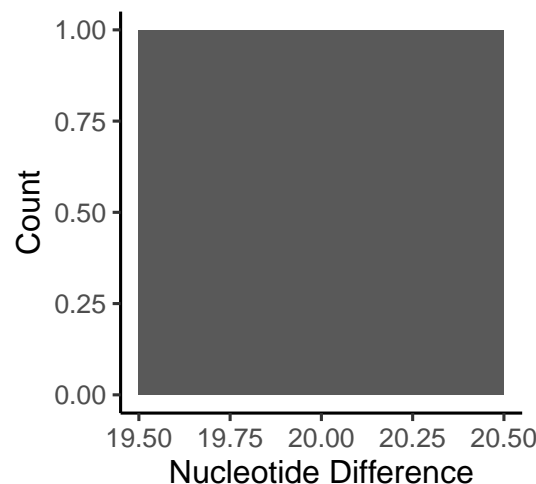
IGHV4-39*02

19390 sequences assigned
1 (0%) exact matches, in which:
1 unique CDR3
1 unique J



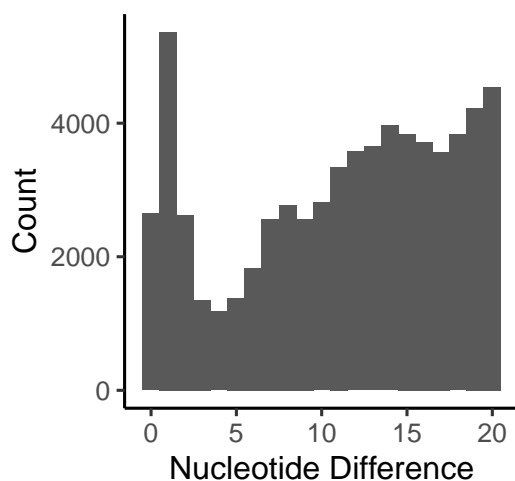
IGHV4-55*09

22 sequences assigned
No exact matches.



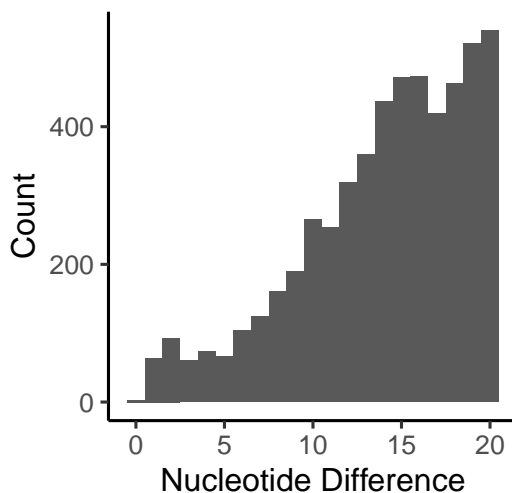
IGHV4-38-2*01

131451 sequences assigned
2650 (2%) exact matches, in which:
1433 unique CDR3
7 unique J



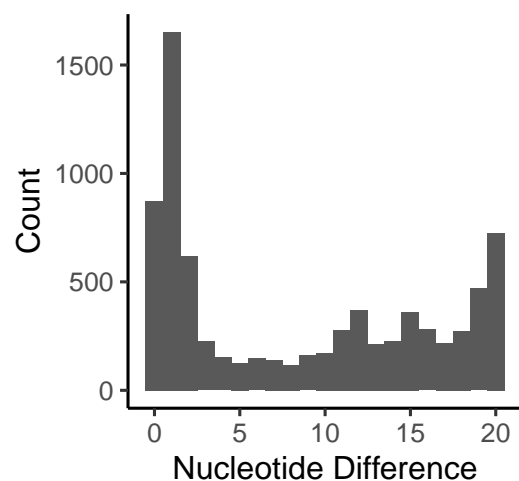
IGHV4-39*07

18934 sequences assigned
3 (0%) exact matches, in which:
3 unique CDR3
2 unique J



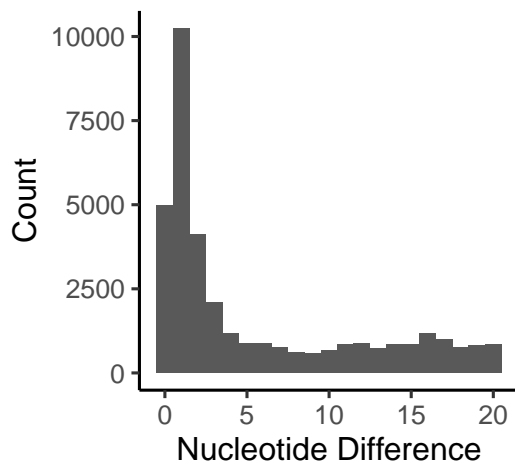
IGHV4-59*02

12165 sequences assigned
872 (7.2%) exact matches, in which:
408 unique CDR3
7 unique J



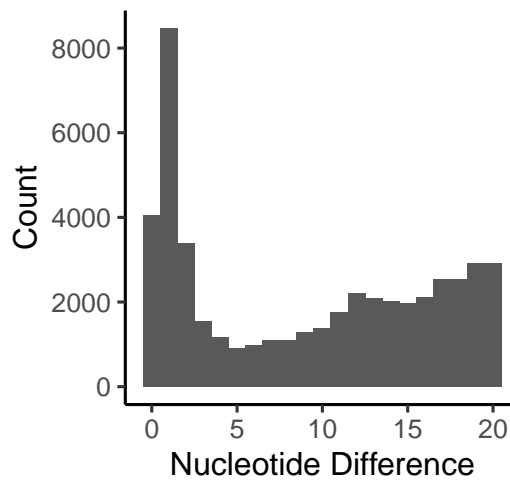
IGHV4-59*01_07

42180 sequences assigned
4986 (11.8%) exact matches, in which:
2510 unique CDR3
7 unique J



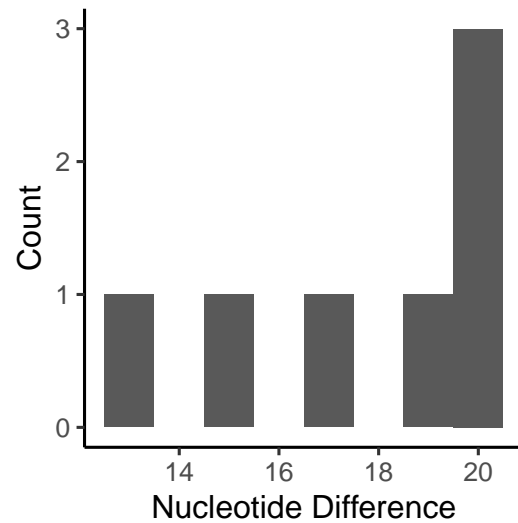
IGHV4-61*02

77697 sequences assigned
4057 (5.2%) exact matches, in which:
1965 unique CDR3
7 unique J



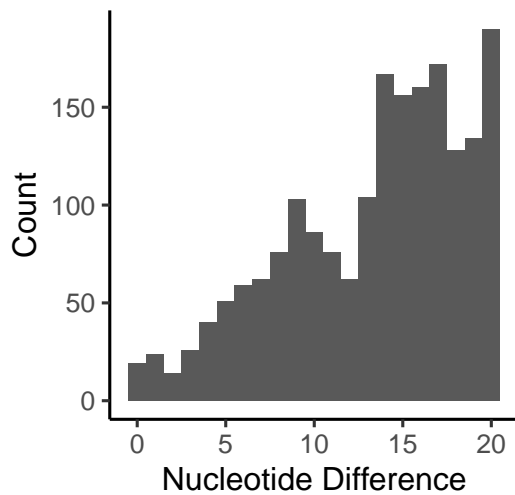
IGHV4/OR15-8*02

572 sequences assigned
No exact matches.



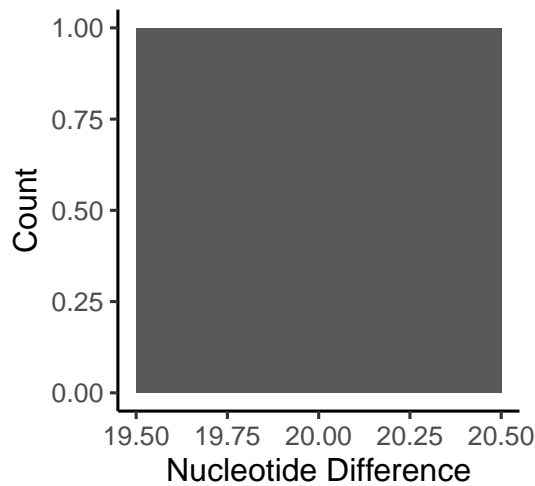
IGHV4-59*11

5101 sequences assigned
19 (0.4%) exact matches, in which:
16 unique CDR3
4 unique J



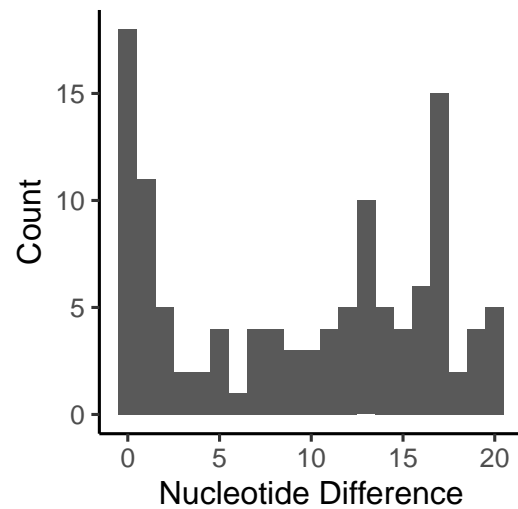
IGHV1/OR15-2*02_03

8 sequences assigned
No exact matches.



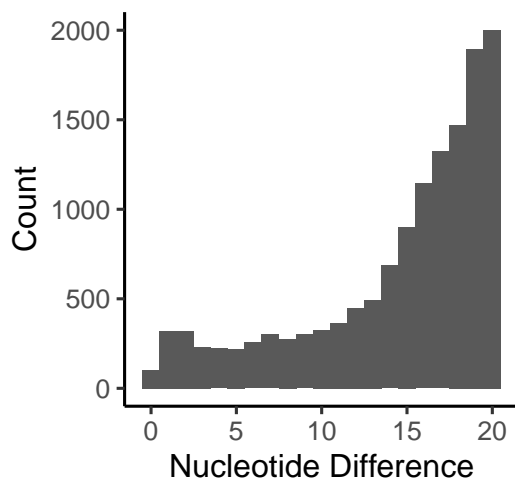
IGHV5-51*04

164 sequences assigned
18 (11%) exact matches, in which:
17 unique CDR3
4 unique J



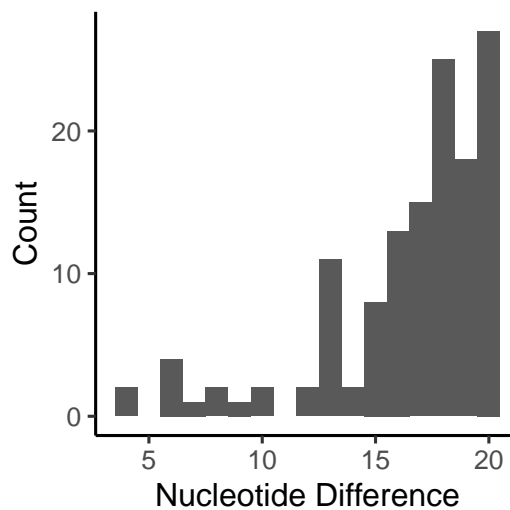
IGHV4-59*12

27237 sequences assigned
102 (0.4%) exact matches, in which:
88 unique CDR3
6 unique J



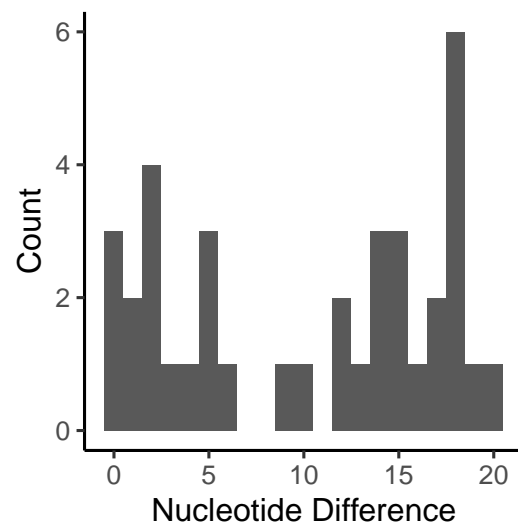
IGHV4/OR15-8*01

430 sequences assigned
No exact matches.



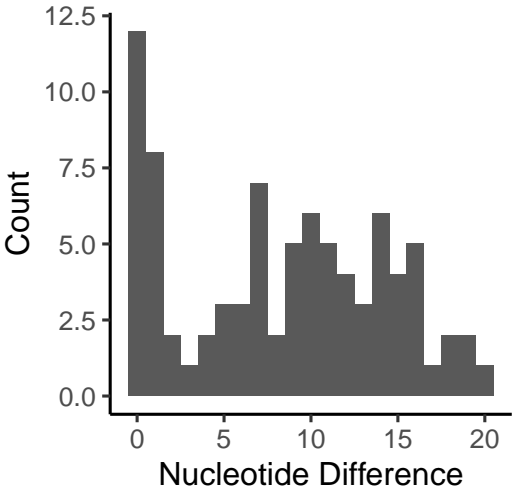
IGHV5-51*06

73 sequences assigned
3 (4.1%) exact matches, in which:
3 unique CDR3
3 unique J



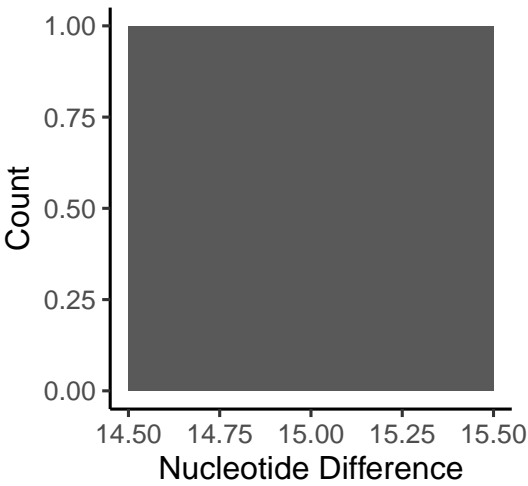
IGHV5-51*07

98 sequences assigned
12 (12.2%) exact matches, in which:
12 unique CDR3
4 unique J



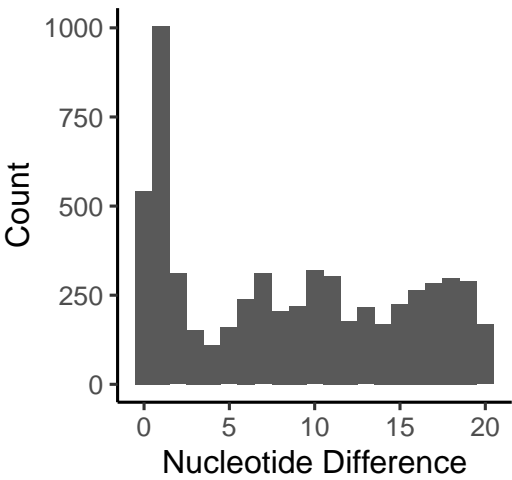
IGHV5-78*01

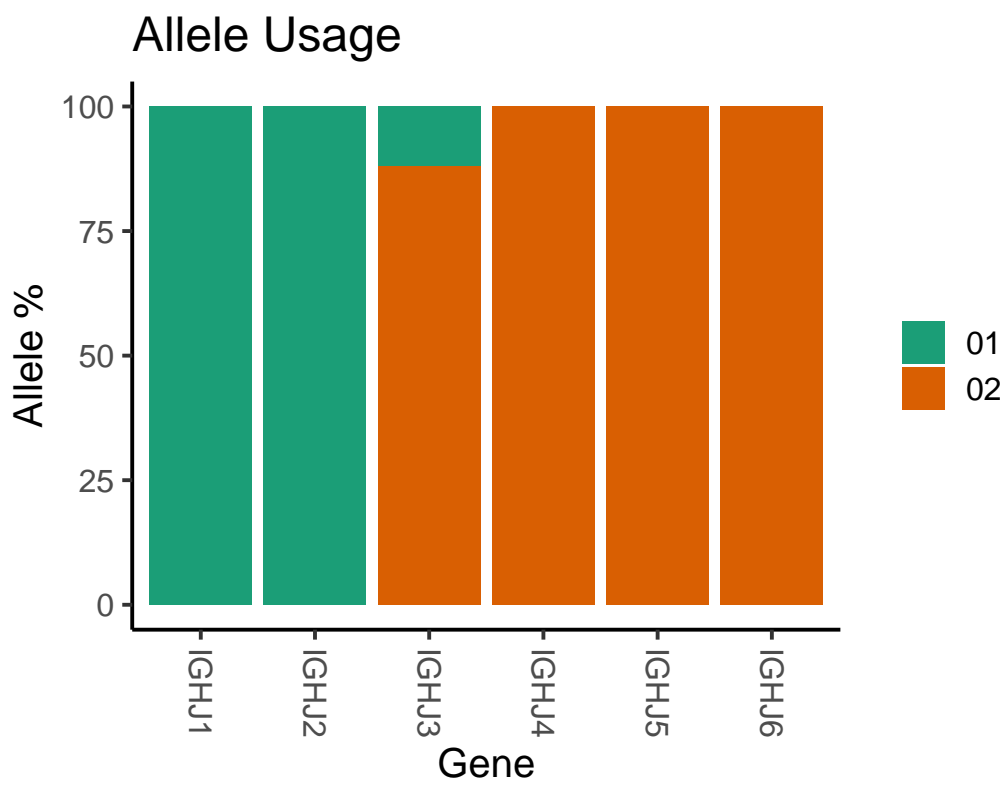
1 sequences assigned
No exact matches.



IGHV6-1*01_02

8073 sequences assigned
542 (6.7%) exact matches, in which:
317 unique CDR3
5 unique J





Warning – no inferred sequences found.