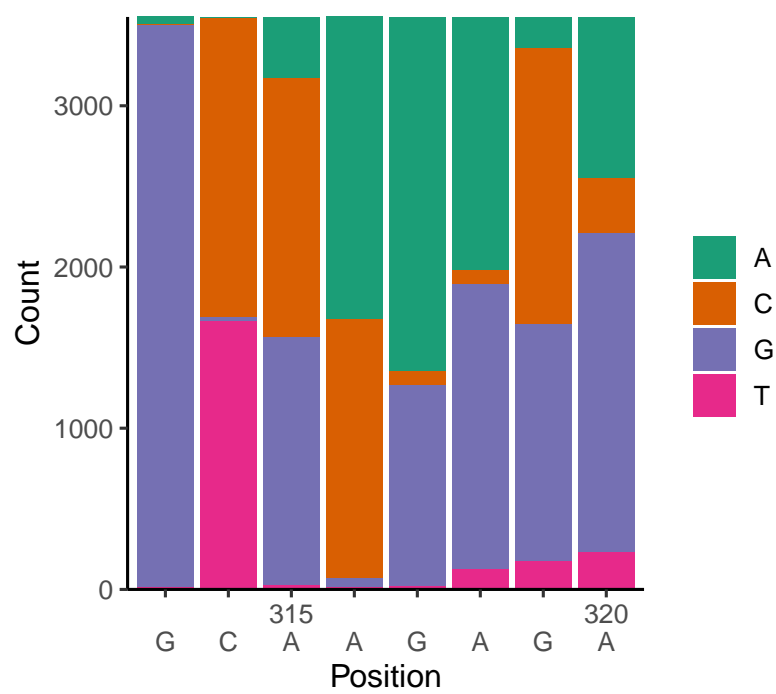
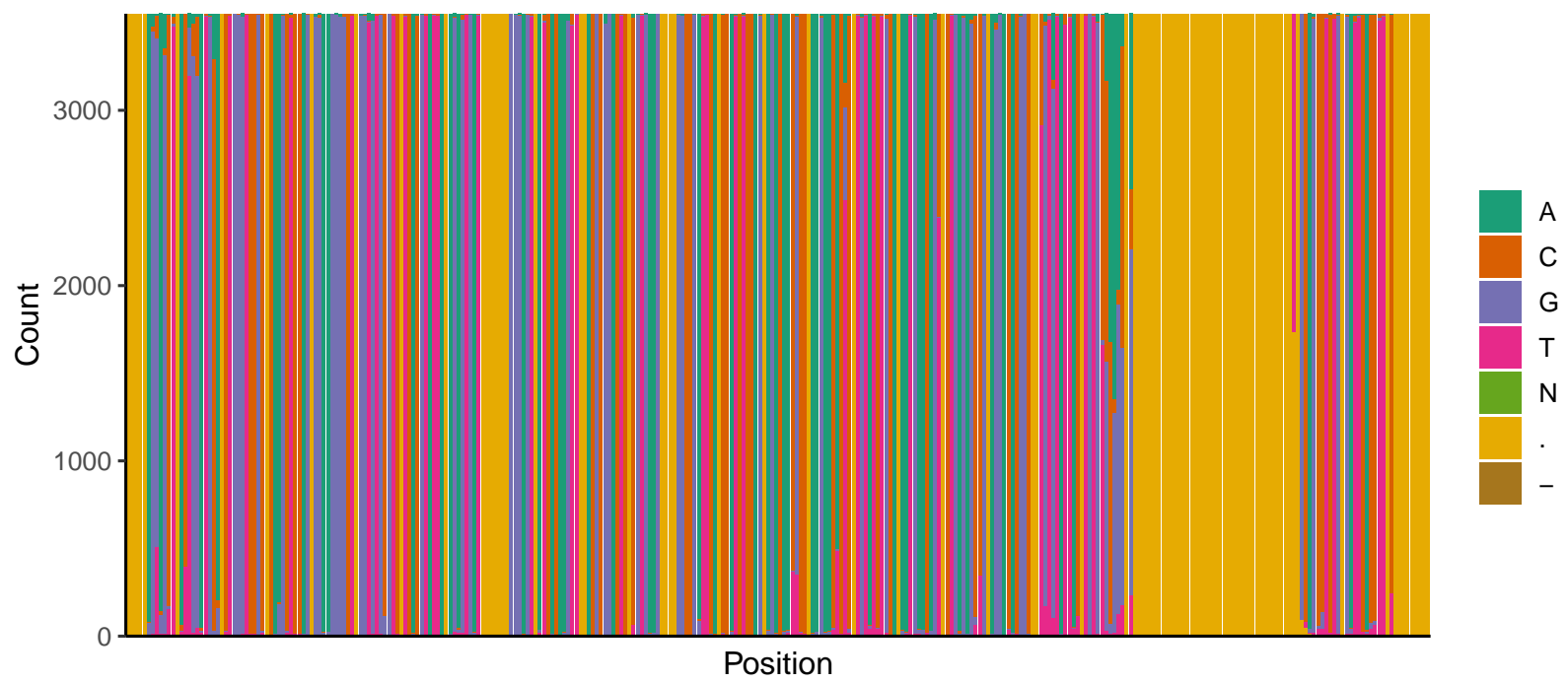
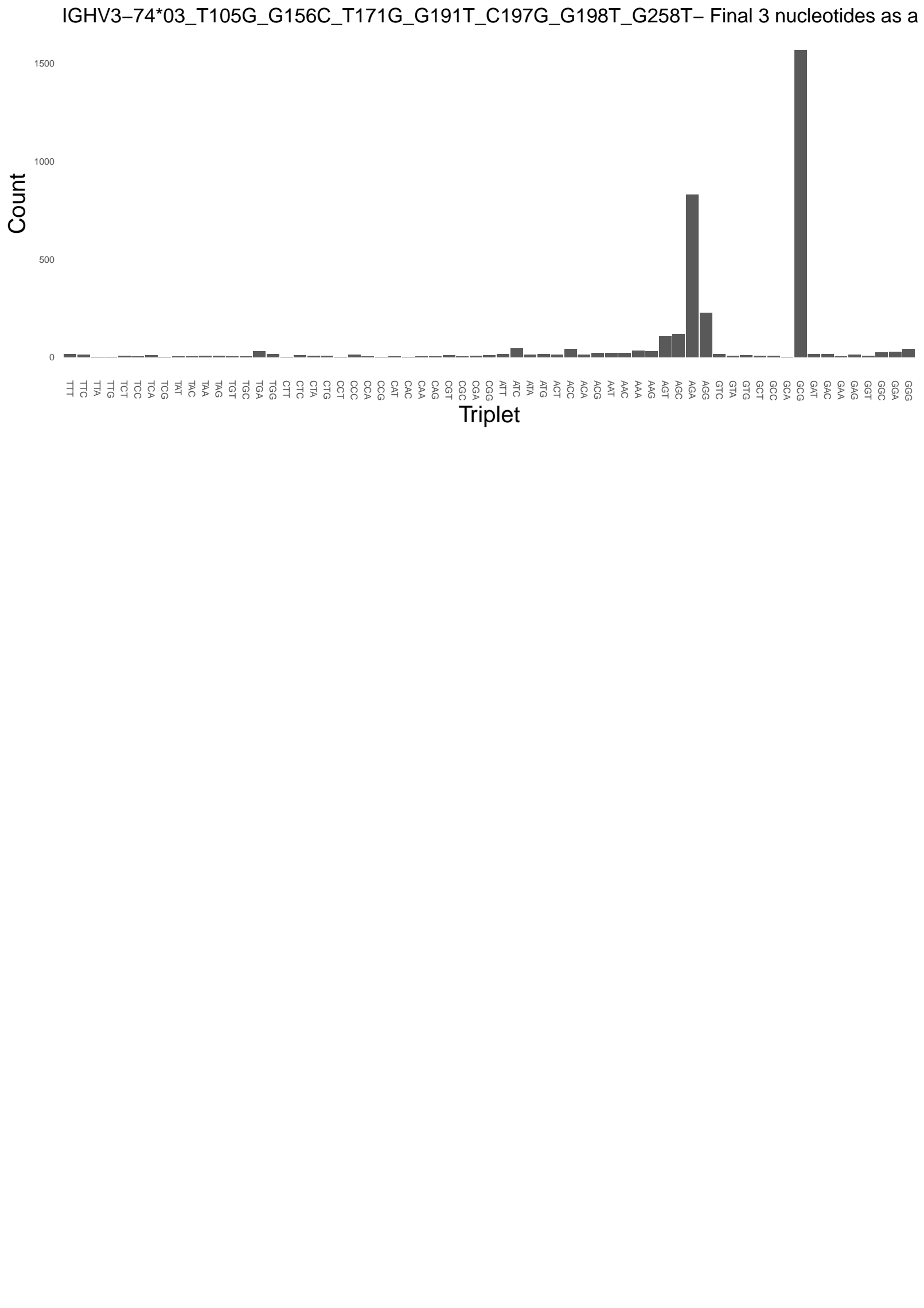


Gene IGHV3-74*03_T105G_G156C_T171G_G191T_C197G_G198T_G258T



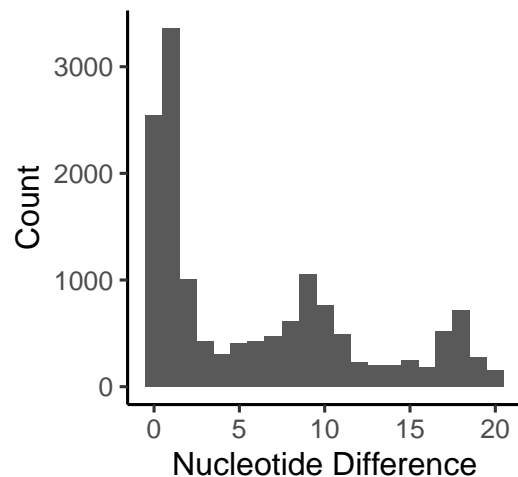
Gene IGHV3-74*03_T105G_G156C_T171G_G191T_C197G_G198T_G258T





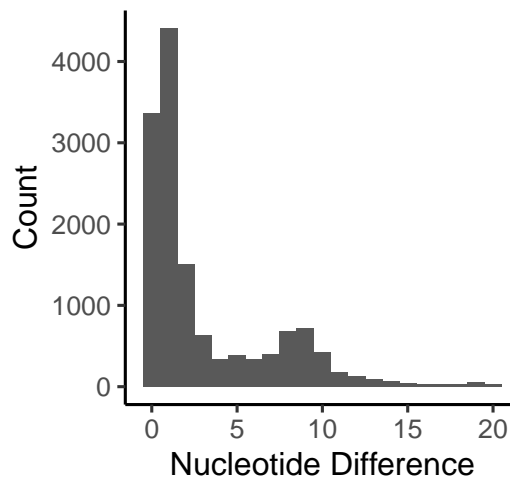
IGHV1-2*02

15166 sequences assigned
2548 (16.8%) exact matches, in which:
2007 unique CDR3
6 unique J



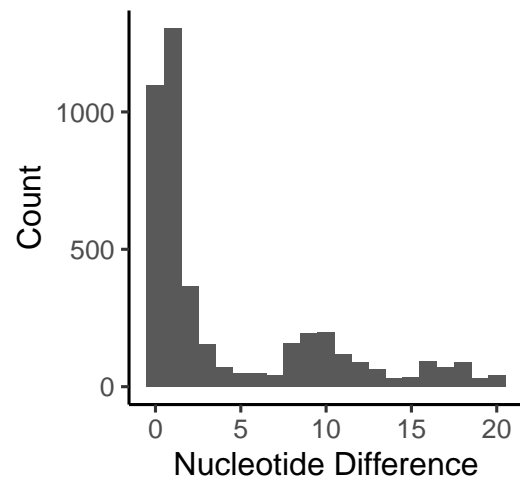
IGHV1-8*01

14702 sequences assigned
3361 (22.9%) exact matches, in which:
2676 unique CDR3
6 unique J



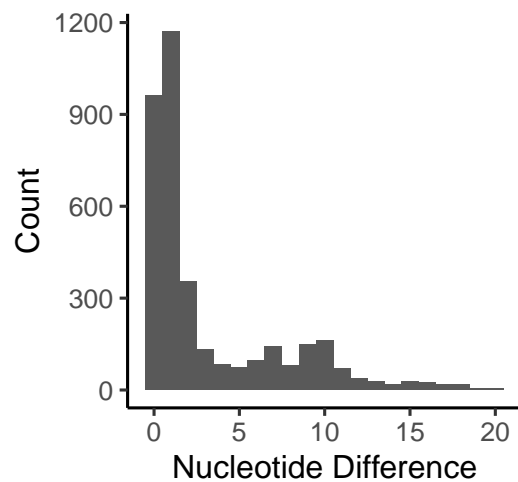
IGHV1-24*01

4830 sequences assigned
1097 (22.7%) exact matches, in which:
915 unique CDR3
6 unique J



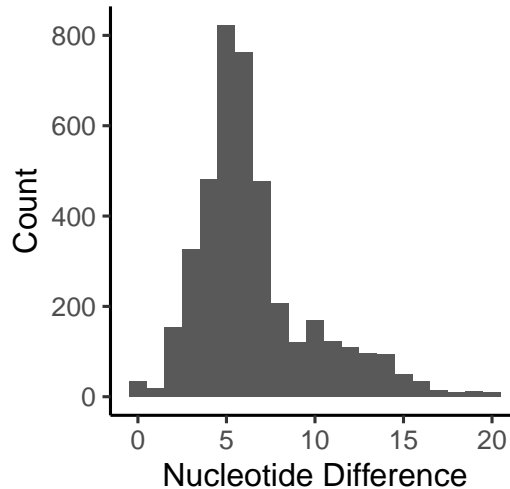
IGHV1-2*04

3672 sequences assigned
961 (26.2%) exact matches, in which:
807 unique CDR3
6 unique J



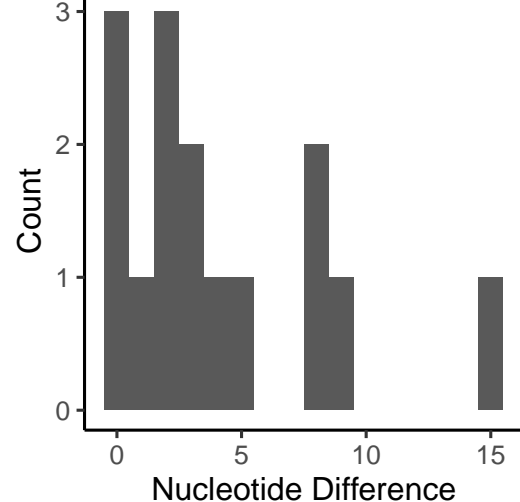
IGHV1-8*02

4246 sequences assigned
35 (0.8%) exact matches, in which:
35 unique CDR3
4 unique J



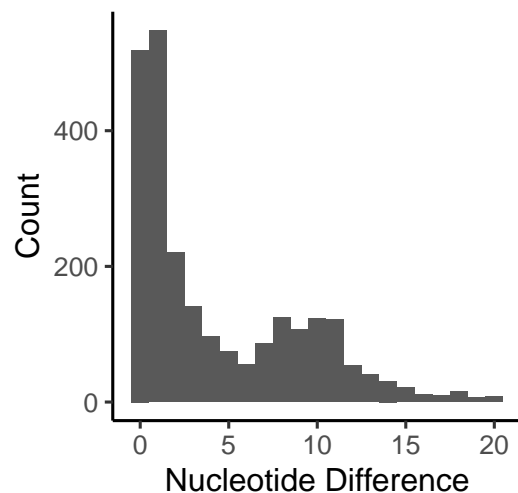
IGHV1-45*02

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



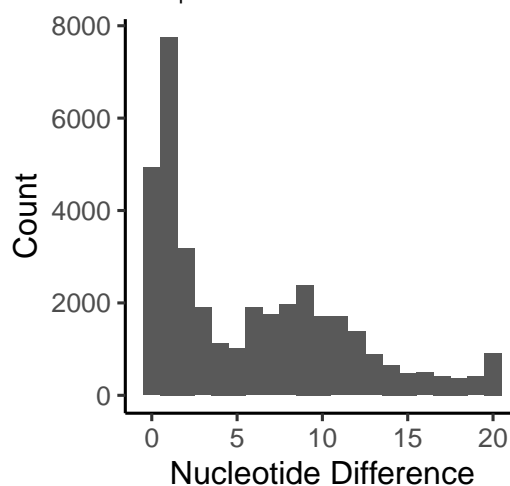
IGHV1-3*01_05

2807 sequences assigned
519 (18.5%) exact matches, in which:
406 unique CDR3
6 unique J



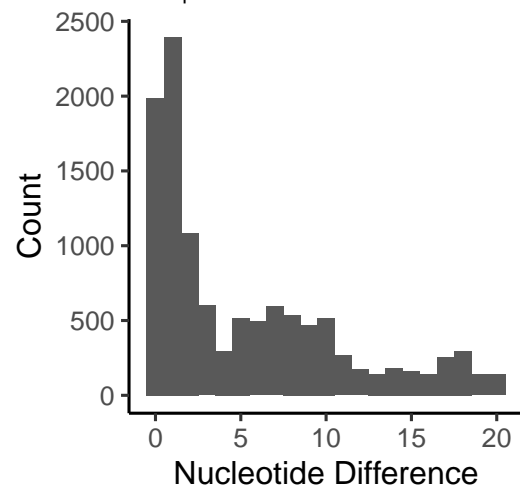
IGHV1-18*01

48125 sequences assigned
4932 (10.2%) exact matches, in which:
3694 unique CDR3
6 unique J



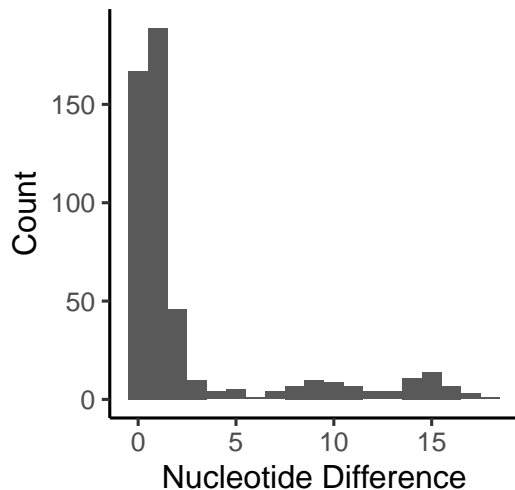
IGHV1-46*01

11988 sequences assigned
1987 (16.6%) exact matches, in which:
1599 unique CDR3
6 unique J



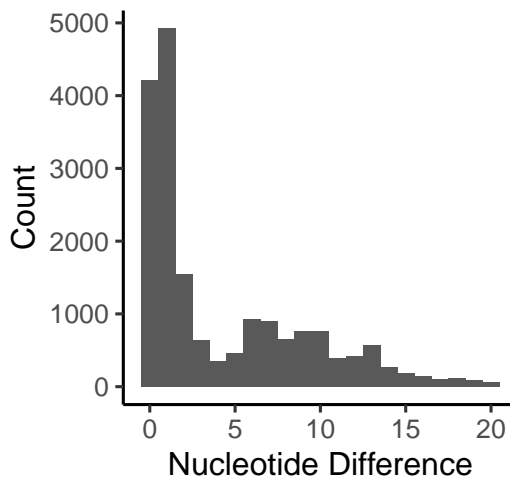
IGHV1–58*01_03

525 sequences assigned
167 (31.8%) exact matches, in which:
137 unique CDR3
6 unique J



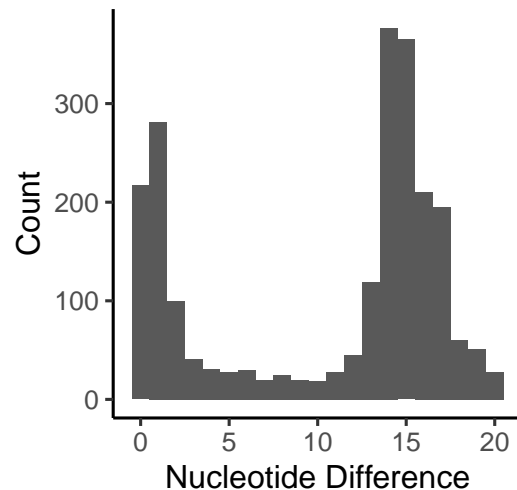
IGHV1–69*05

19147 sequences assigned
4211 (22%) exact matches, in which:
3429 unique CDR3
6 unique J



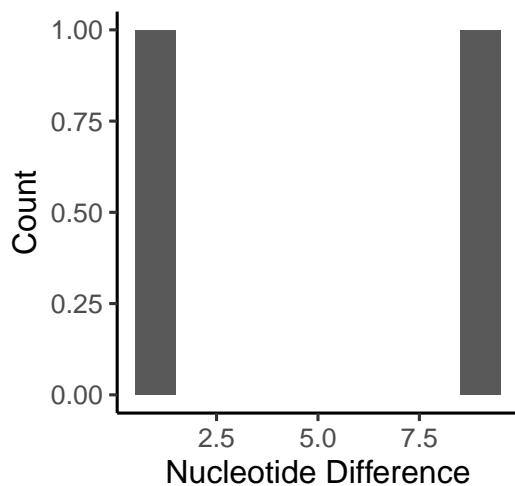
IGHV2–5*01

2362 sequences assigned
217 (9.2%) exact matches, in which:
180 unique CDR3
6 unique J



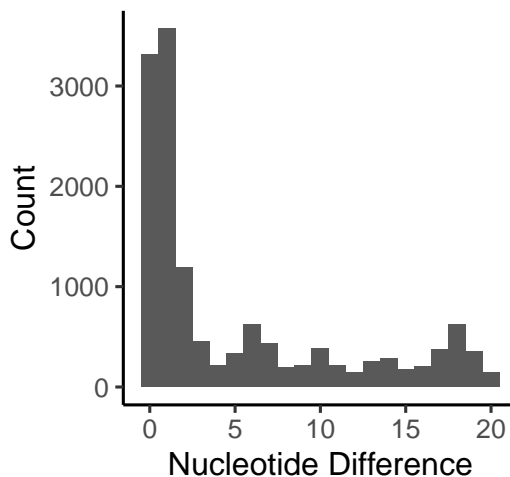
IGHV1–68*01

2 sequences assigned
No exact matches.



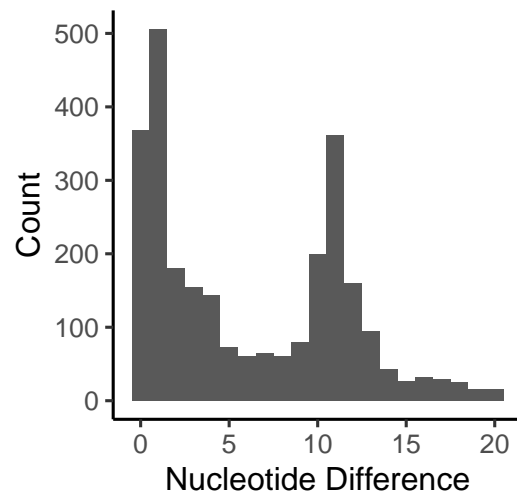
IGHV1–69*01_12_13

14587 sequences assigned
3316 (22.7%) exact matches, in which:
2721 unique CDR3
6 unique J



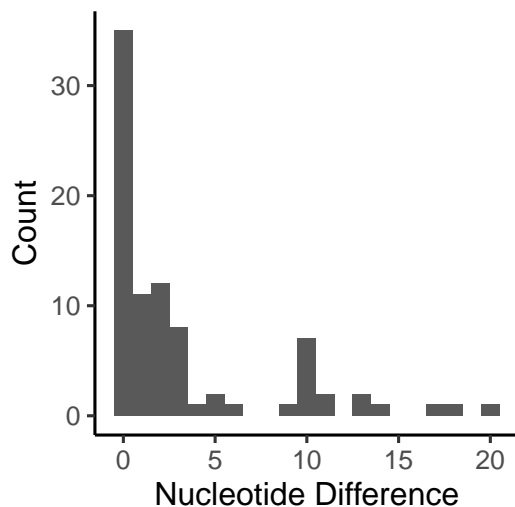
IGHV2–5*02

2804 sequences assigned
368 (13.1%) exact matches, in which:
257 unique CDR3
6 unique J



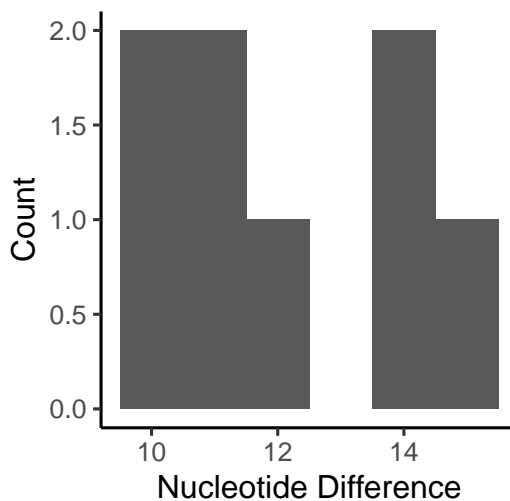
IGHV1–69–2*01

106 sequences assigned
35 (33%) exact matches, in which:
31 unique CDR3
4 unique J



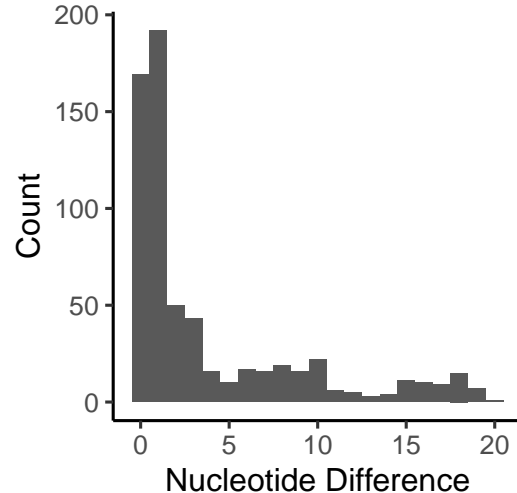
IGHV1–NL1*01

8 sequences assigned
No exact matches.



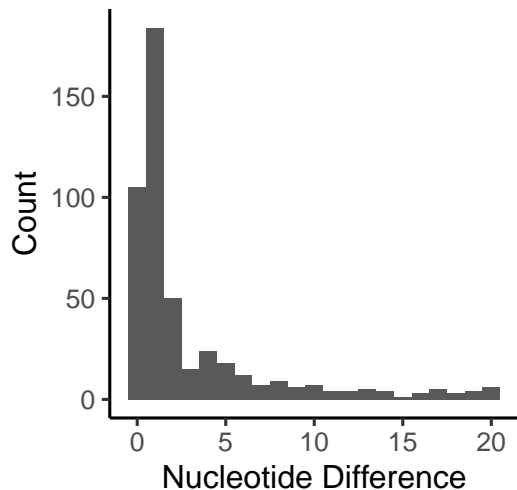
IGHV2–26*01

675 sequences assigned
169 (25%) exact matches, in which:
134 unique CDR3
5 unique J



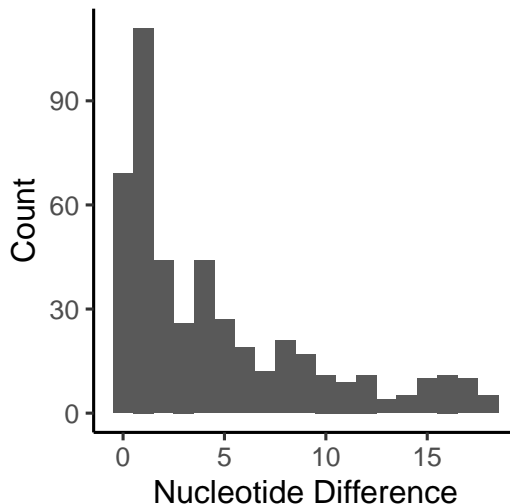
IGHV2-70*01

488 sequences assigned
105 (21.5%) exact matches, in which:
74 unique CDR3
5 unique J



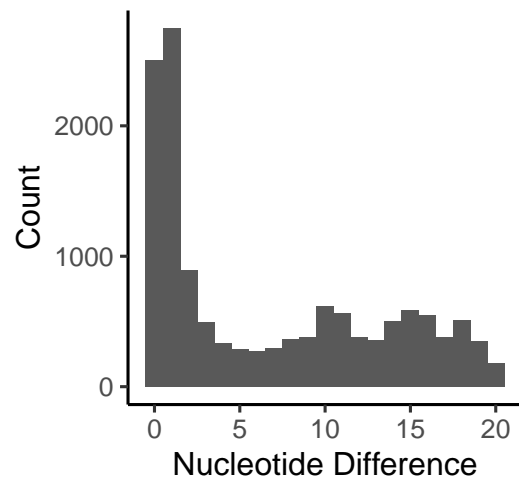
IGHV2-70D*14

468 sequences assigned
69 (14.7%) exact matches, in which:
49 unique CDR3
4 unique J



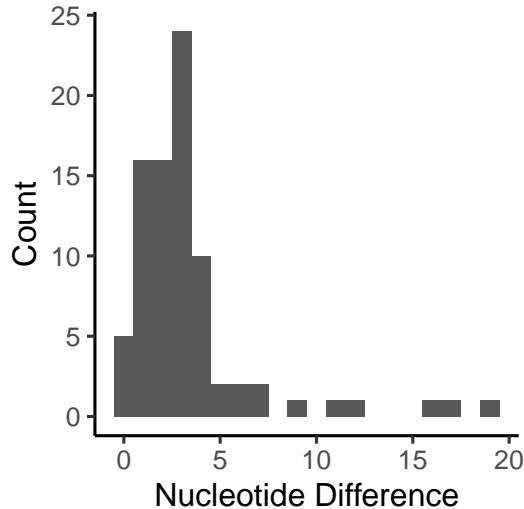
IGHV3-9*01

14401 sequences assigned
2504 (17.4%) exact matches, in which:
1415 unique CDR3
6 unique J



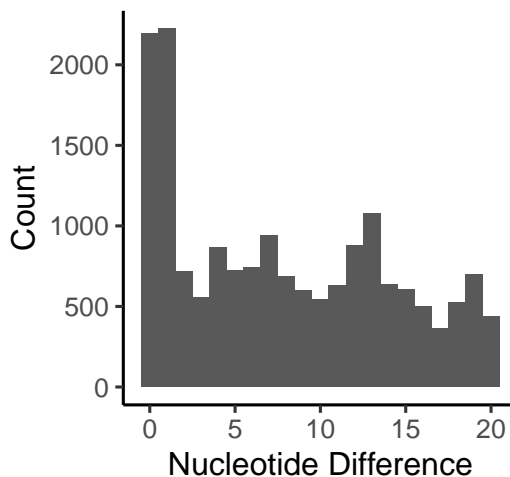
IGHV2-70*12

83 sequences assigned
5 (6%) exact matches, in which:
5 unique CDR3
4 unique J



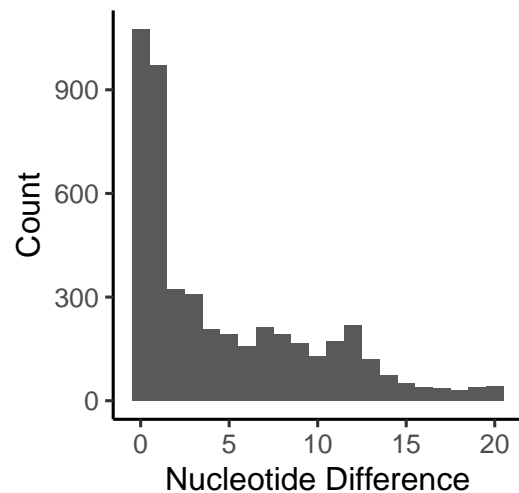
IGHV3-7*01

18024 sequences assigned
2193 (12.2%) exact matches, in which:
1492 unique CDR3
6 unique J



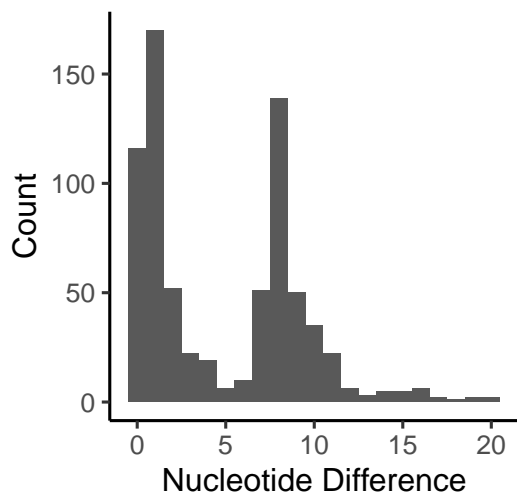
IGHV3-11*01

5859 sequences assigned
1076 (18.4%) exact matches, in which:
717 unique CDR3
6 unique J



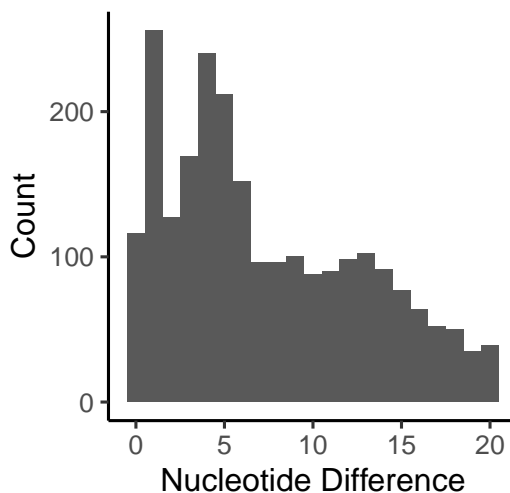
IGHV2-70*20

733 sequences assigned
116 (15.8%) exact matches, in which:
89 unique CDR3
5 unique J



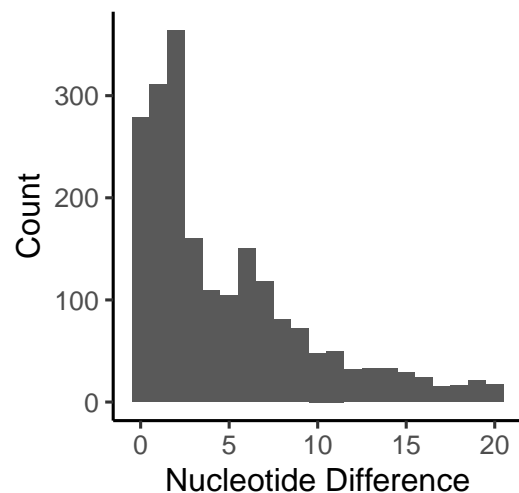
IGHV3-7*03

2622 sequences assigned
116 (4.4%) exact matches, in which:
106 unique CDR3
5 unique J



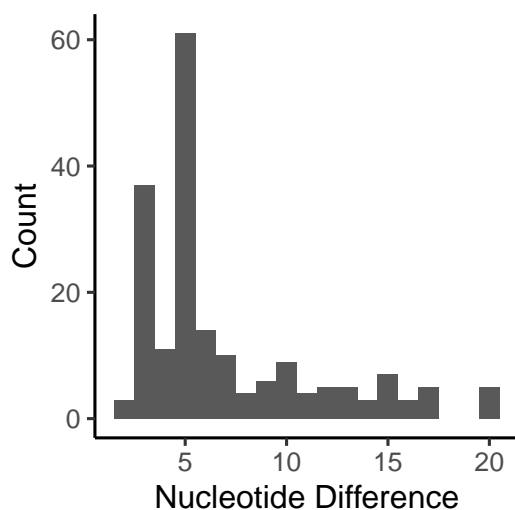
IGHV3-11*04

2179 sequences assigned
279 (12.8%) exact matches, in which:
264 unique CDR3
6 unique J



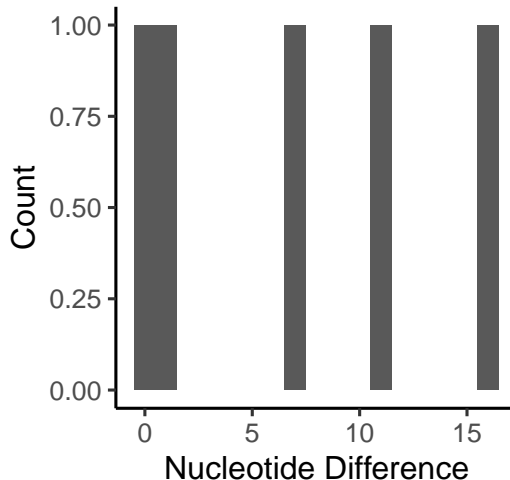
IGHV3-11*06

242 sequences assigned
No exact matches.



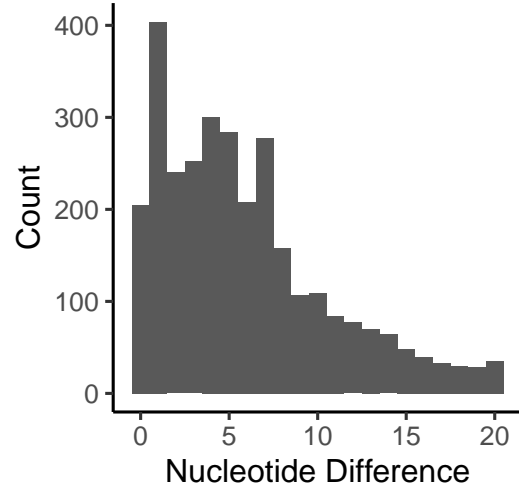
IGHV3-19*01

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



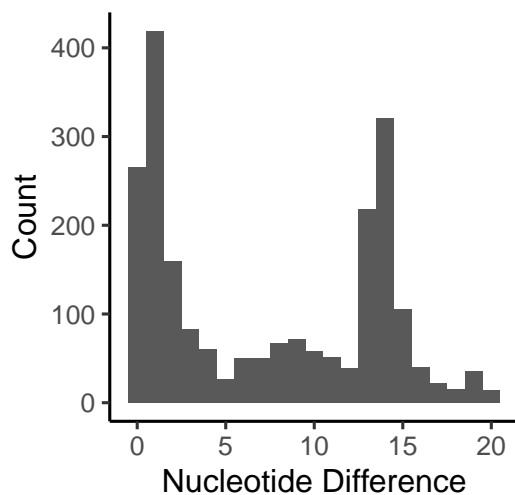
IGHV3-21*04

3400 sequences assigned
205 (6%) exact matches, in which:
180 unique CDR3
6 unique J



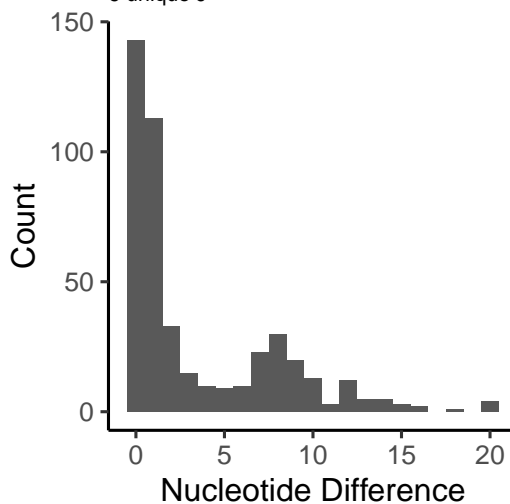
IGHV3-13*01

2279 sequences assigned
265 (11.6%) exact matches, in which:
178 unique CDR3
6 unique J



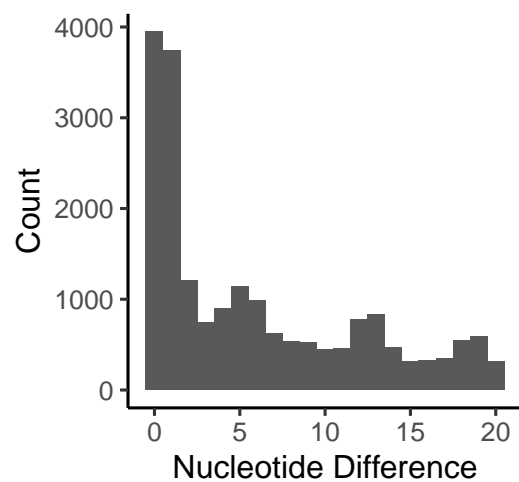
IGHV3-20*01_02

475 sequences assigned
143 (30.1%) exact matches, in which:
75 unique CDR3
6 unique J



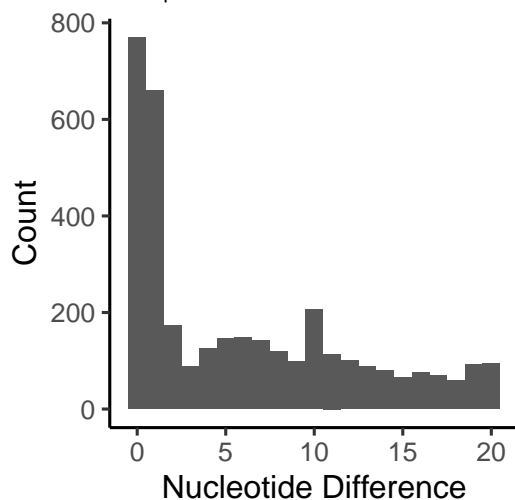
IGHV3-21*01_02

25120 sequences assigned
3948 (15.7%) exact matches, in which:
2417 unique CDR3
6 unique J



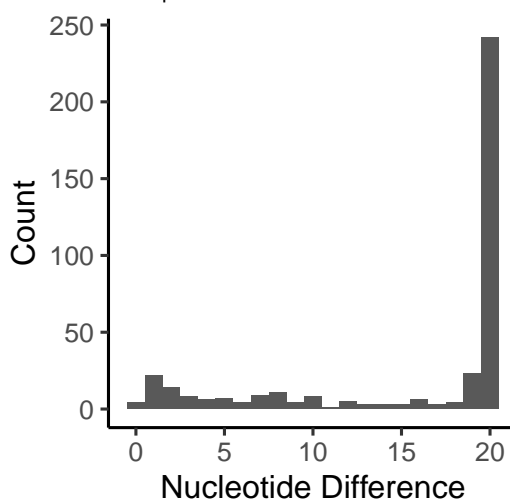
IGHV3-15*01_02

5205 sequences assigned
770 (14.8%) exact matches, in which:
459 unique CDR3
6 unique J



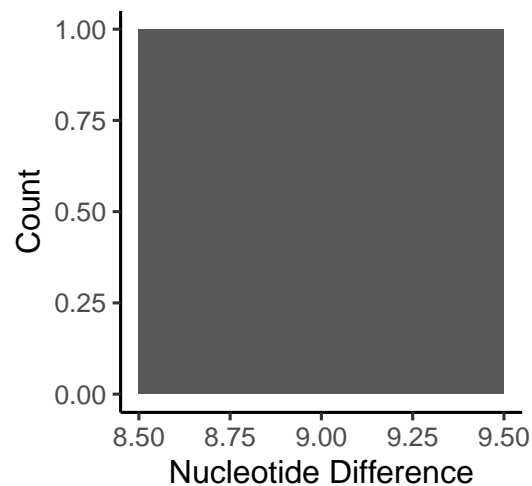
IGHV3-20*03_04

1341 sequences assigned
4 (0.3%) exact matches, in which:
4 unique CDR3
1 unique J



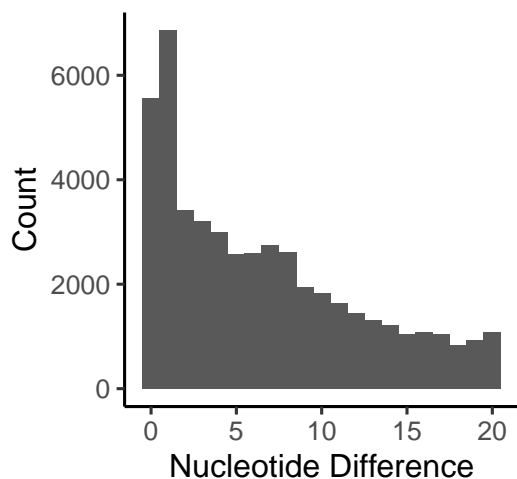
IGHV3-22*01_02

1 sequences assigned
No exact matches.



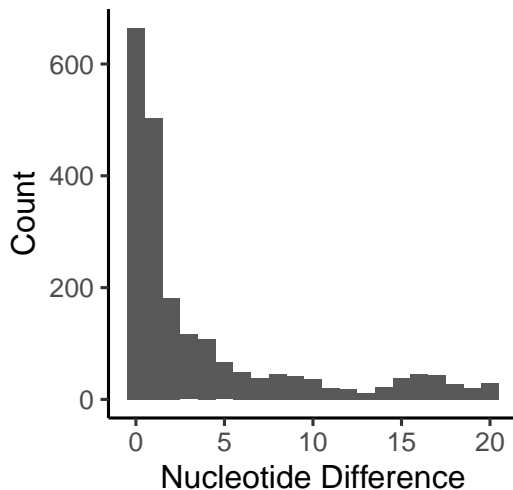
IGHV3-23*01_04

58858 sequences assigned
5557 (9.4%) exact matches, in which:
3131 unique CDR3
6 unique J



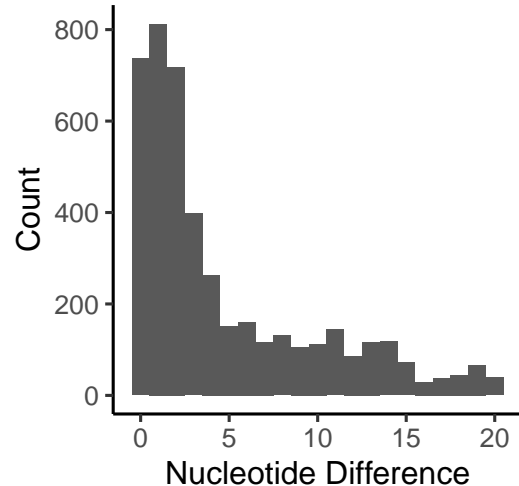
IGHV3-30*03

3820 sequences assigned
665 (17.4%) exact matches, in which:
574 unique CDR3
6 unique J



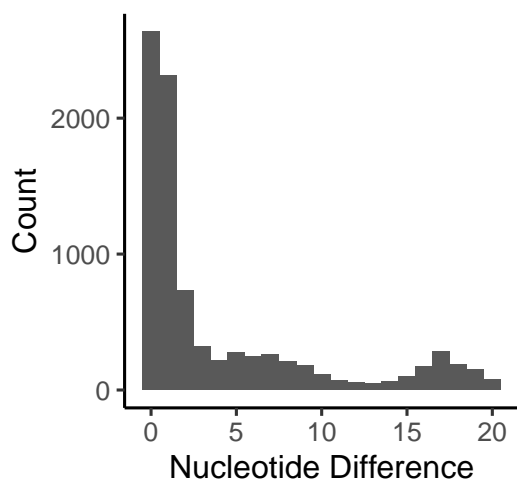
IGHV3-33*06

4687 sequences assigned
737 (15.7%) exact matches, in which:
496 unique CDR3
6 unique J



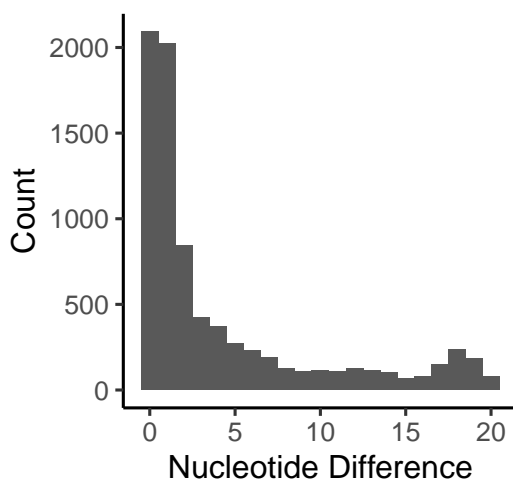
IGHV3-30-3*01

9423 sequences assigned
2636 (28%) exact matches, in which:
1734 unique CDR3
6 unique J



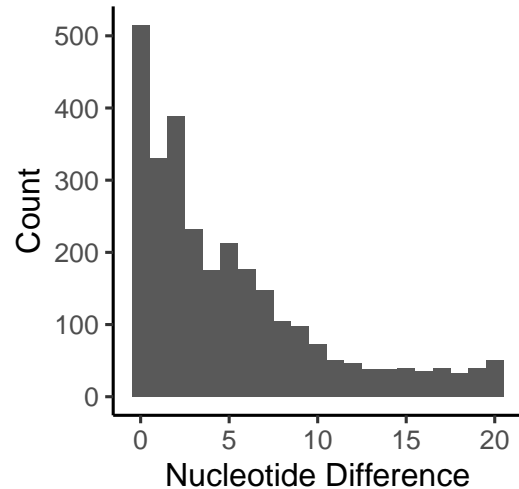
IGHV3-33*01

8620 sequences assigned
2092 (24.3%) exact matches, in which:
1394 unique CDR3
6 unique J



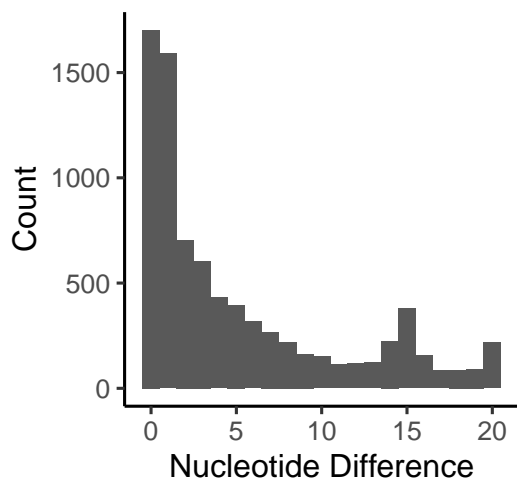
IGHV3-33*08

3145 sequences assigned
515 (16.4%) exact matches, in which:
376 unique CDR3
6 unique J



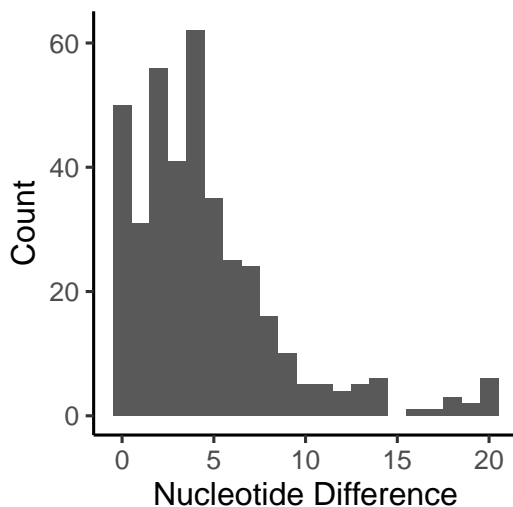
IGHV3-30*01

9706 sequences assigned
1702 (17.5%) exact matches, in which:
1161 unique CDR3
6 unique J



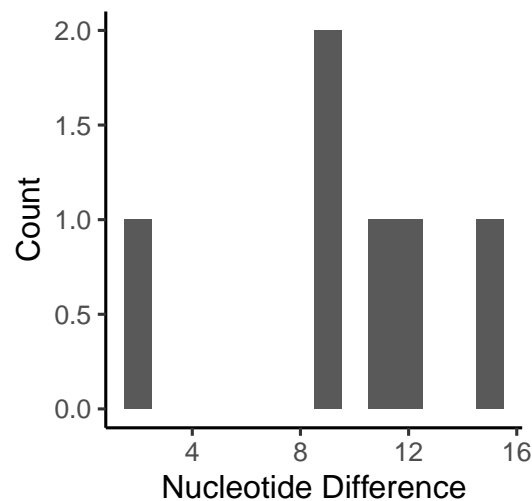
IGHV3-33*05

449 sequences assigned
50 (11.1%) exact matches, in which:
48 unique CDR3
5 unique J



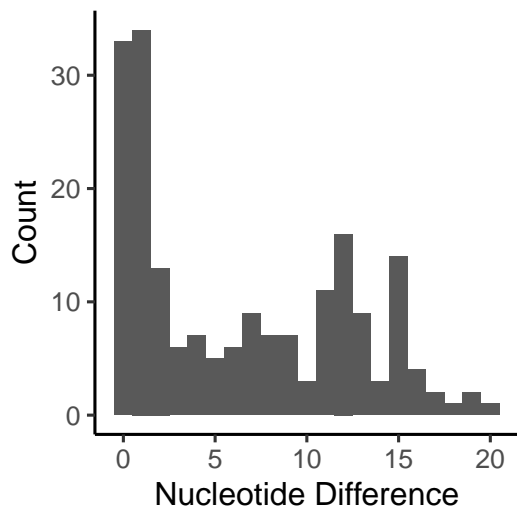
IGHV3-35*01

6 sequences assigned
No exact matches.



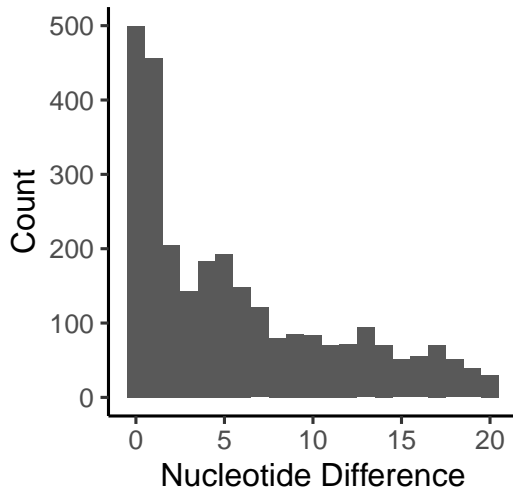
IGHV3-43*01

327 sequences assigned
33 (10.1%) exact matches, in which:
18 unique CDR3
4 unique J



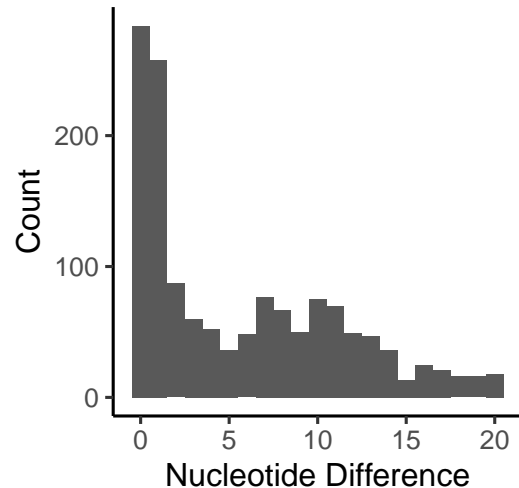
IGHV3-48*01

3078 sequences assigned
500 (16.2%) exact matches, in which:
350 unique CDR3
6 unique J



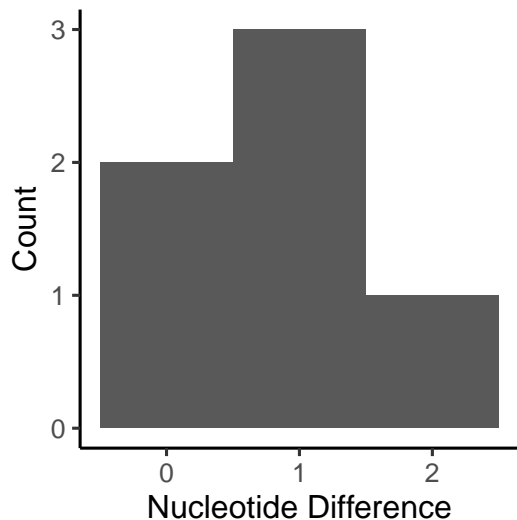
IGHV3-49*04

1587 sequences assigned
284 (17.9%) exact matches, in which:
167 unique CDR3
6 unique J



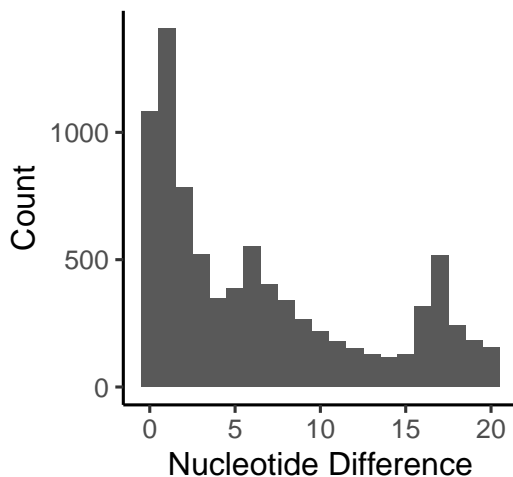
IGHV3-47*01

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



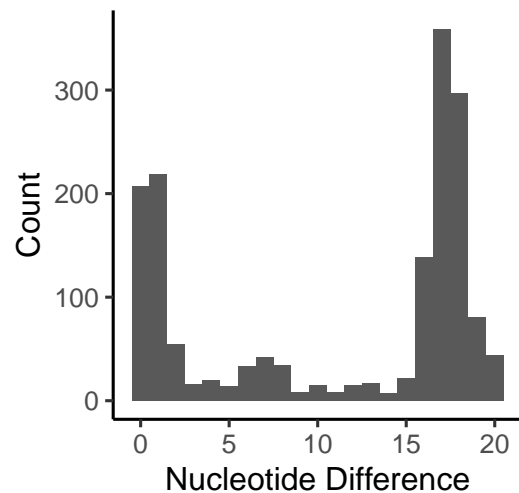
IGHV3-48*03

10544 sequences assigned
1084 (10.3%) exact matches, in which:
667 unique CDR3
6 unique J



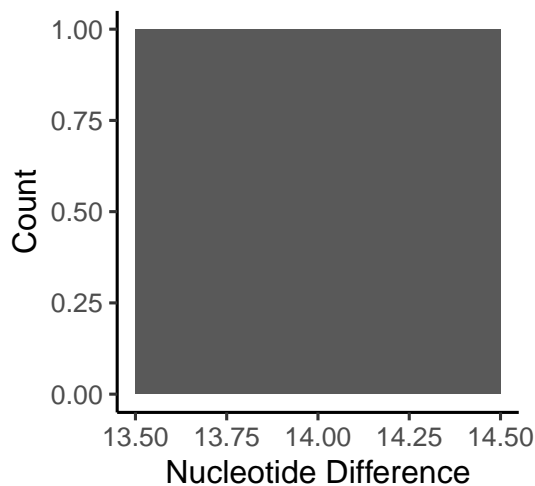
IGHV3-49*03_05

1802 sequences assigned
207 (11.5%) exact matches, in which:
124 unique CDR3
6 unique J



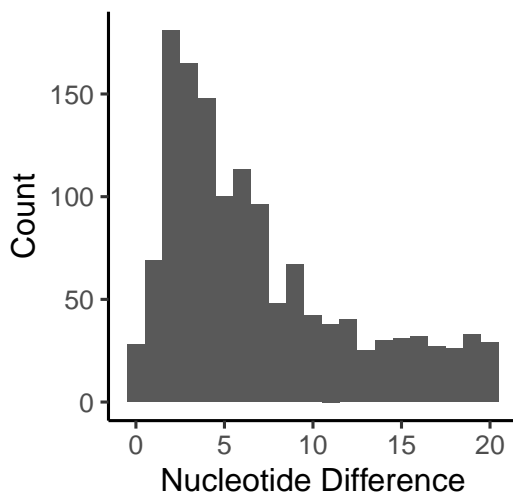
IGHV3-47*02

1 sequences assigned
No exact matches.



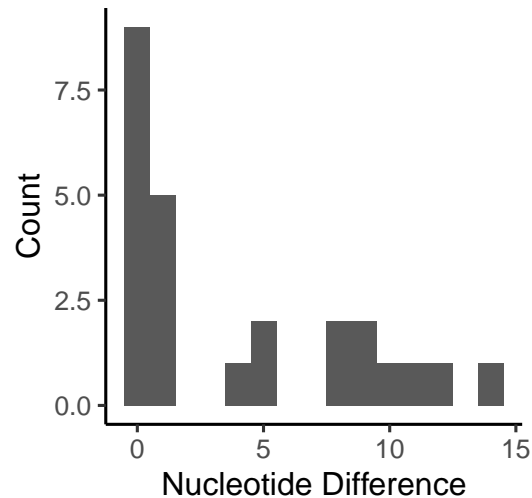
IGHV3-48*04

1558 sequences assigned
28 (1.8%) exact matches, in which:
28 unique CDR3
5 unique J



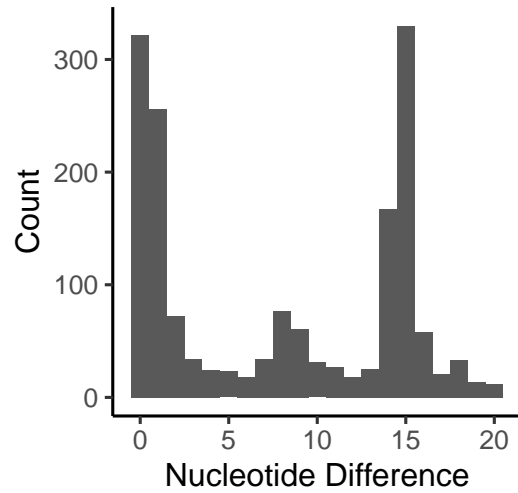
IGHV3-52*01_03

25 sequences assigned
9 (36%) exact matches, in which:
6 unique CDR3
3 unique J



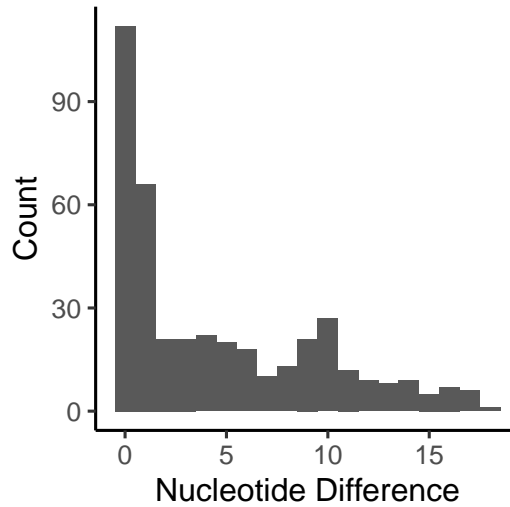
IGHV3-53*04

1702 sequences assigned
322 (18.9%) exact matches, in which:
225 unique CDR3
6 unique J



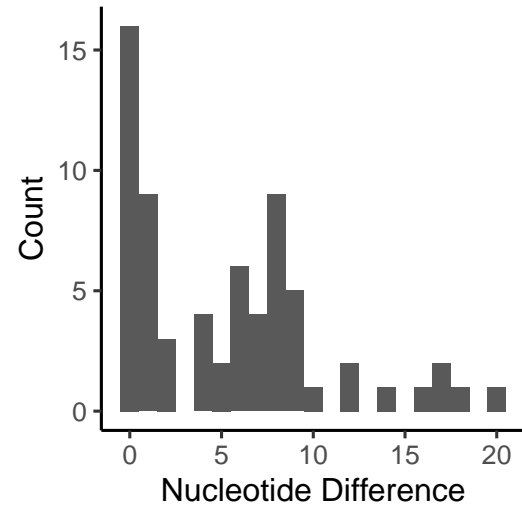
IGHV3-64*02_07

441 sequences assigned
112 (25.4%) exact matches, in which:
80 unique CDR3
6 unique J



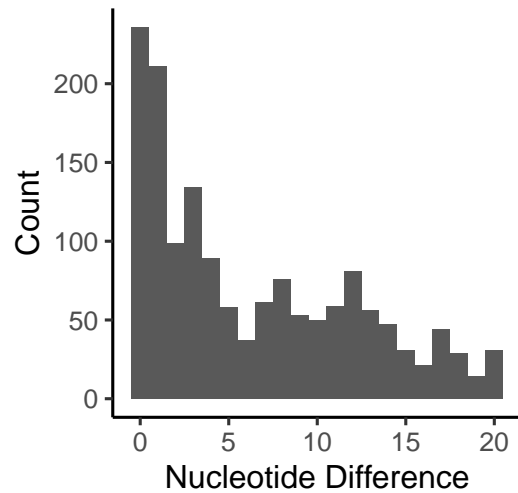
IGHV3-66*03

68 sequences assigned
16 (23.5%) exact matches, in which:
14 unique CDR3
4 unique J



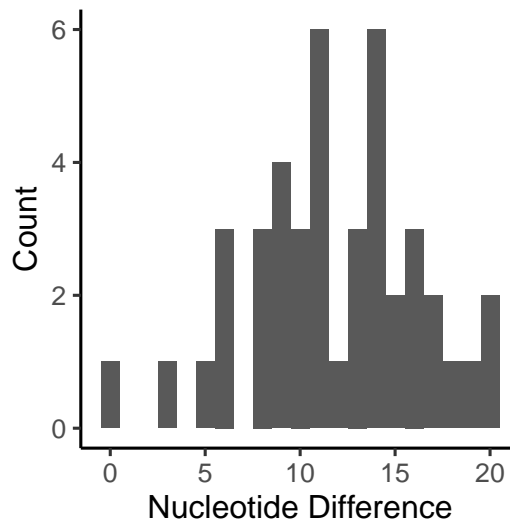
IGHV3-53*01_02

1616 sequences assigned
236 (14.6%) exact matches, in which:
154 unique CDR3
6 unique J



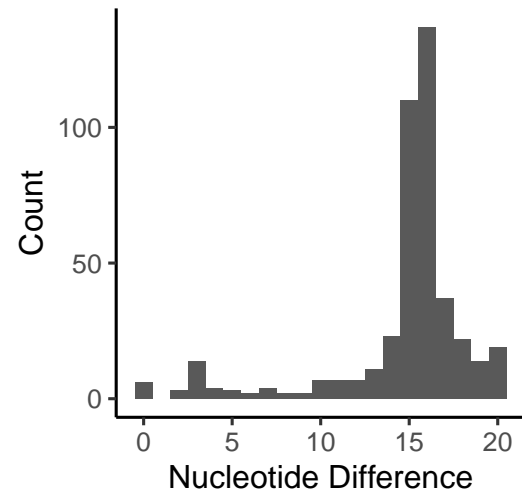
IGHV3-66*01

48 sequences assigned
1 (2.1%) exact matches, in which:
1 unique CDR3
1 unique J



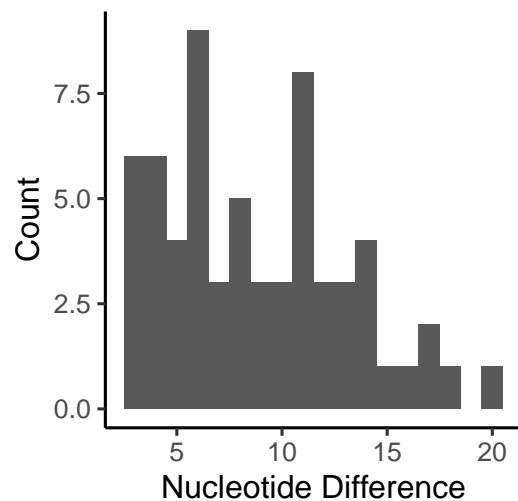
IGHV3-69-1*01

526 sequences assigned
6 (1.1%) exact matches, in which:
6 unique CDR3
3 unique J



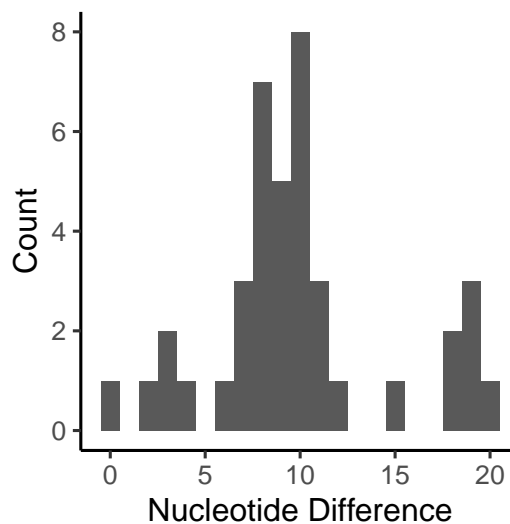
IGHV3-64*04

85 sequences assigned
No exact matches.



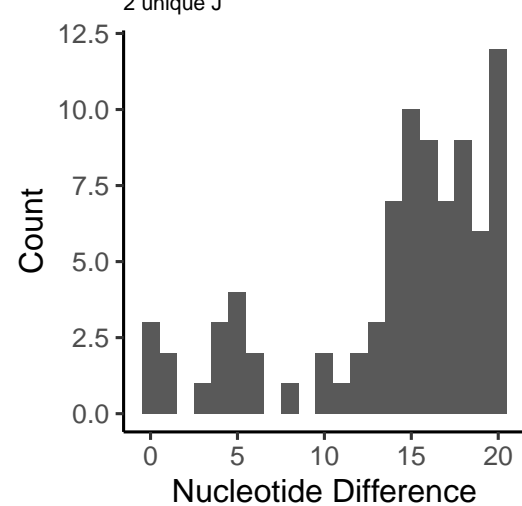
IGHV3-66*02

44 sequences assigned
1 (2.3%) exact matches, in which:
1 unique CDR3
1 unique J



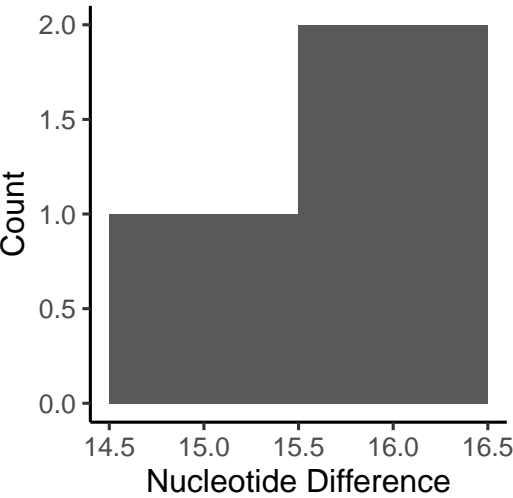
IGHV3-69-1*02

441 sequences assigned
3 (0.7%) exact matches, in which:
3 unique CDR3
2 unique J



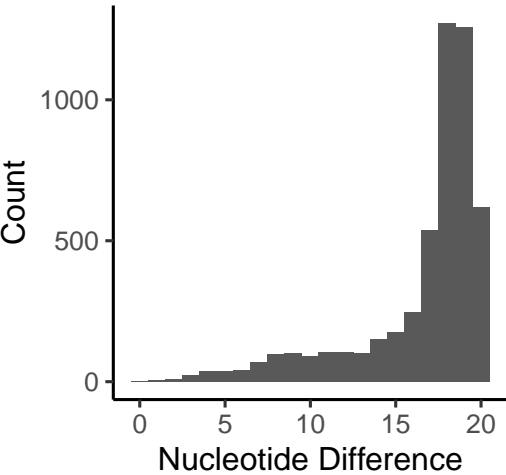
IGHV3-71*01_04

5 sequences assigned
No exact matches.



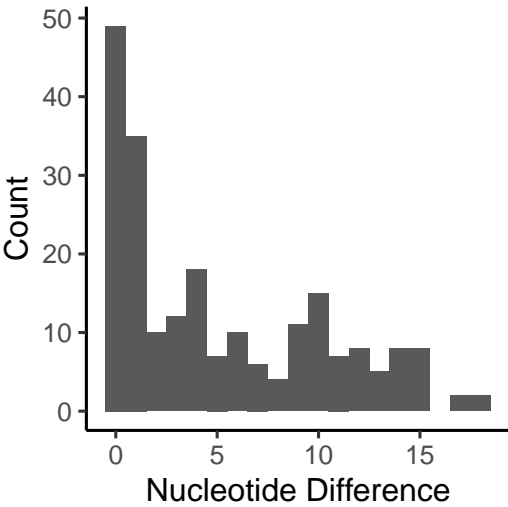
IGHV3-74*03

6466 sequences assigned
1 (0%) exact matches, in which:
1 unique CDR3
1 unique J



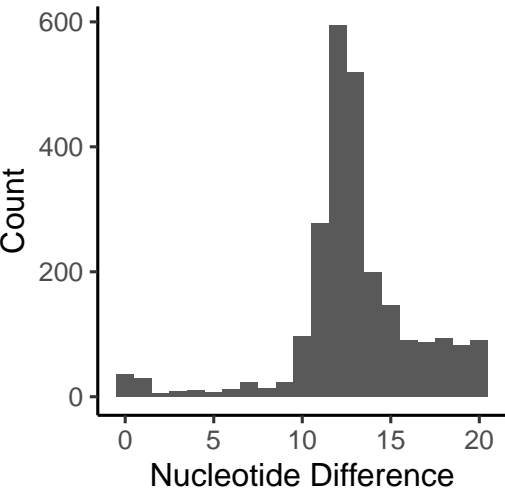
IGHV3-43D*04

221 sequences assigned
49 (22.2%) exact matches, in which:
39 unique CDR3
3 unique J



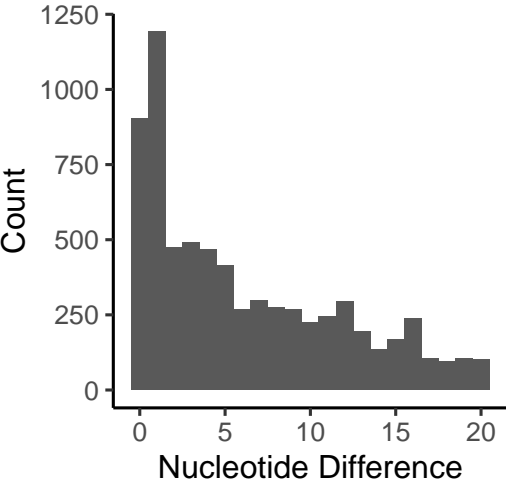
IGHV3-72*01

2707 sequences assigned
36 (1.3%) exact matches, in which:
25 unique CDR3
4 unique J



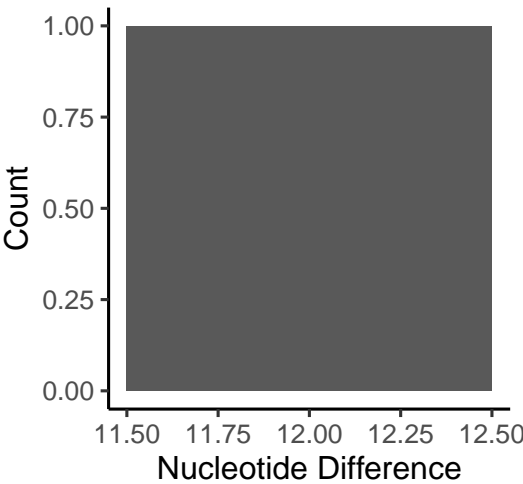
IGHV3-74*01_02

7338 sequences assigned
902 (12.3%) exact matches, in which:
606 unique CDR3
6 unique J



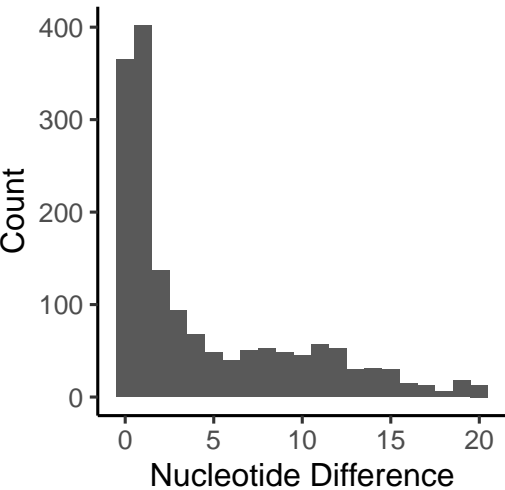
IGHV3-64D*08

1 sequences assigned
No exact matches.



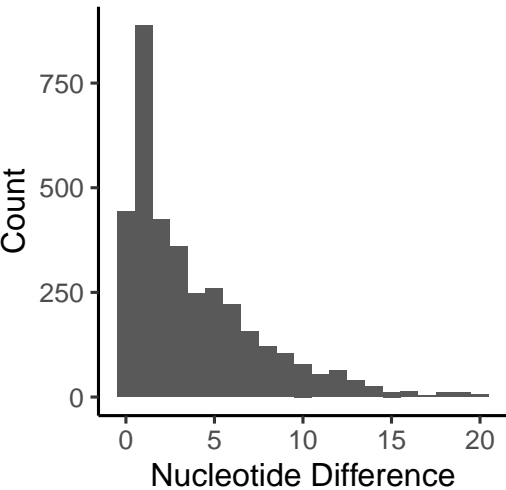
IGHV3-73*01_02

1935 sequences assigned
365 (18.9%) exact matches, in which:
237 unique CDR3
6 unique J



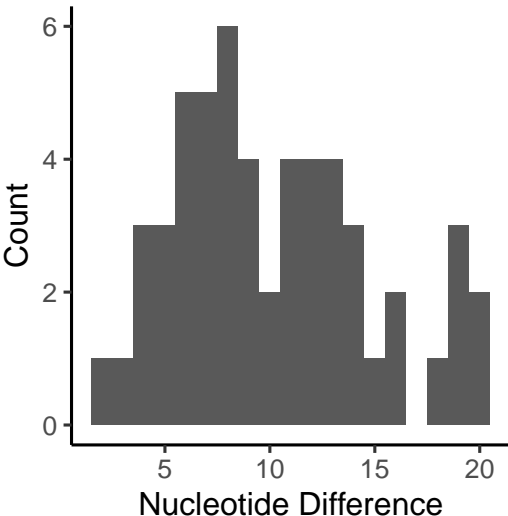
IGHV3-74*03_T105G_G'

3551 sequences assigned
444 (12.5%) exact matches, in which:
300 unique CDR3
6 unique J



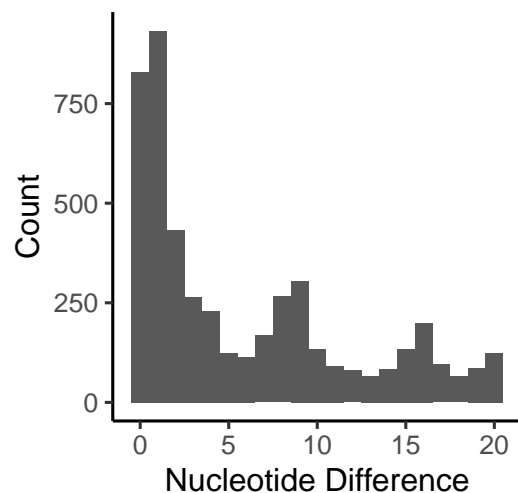
IGHV3-NL1*01

76 sequences assigned
No exact matches.



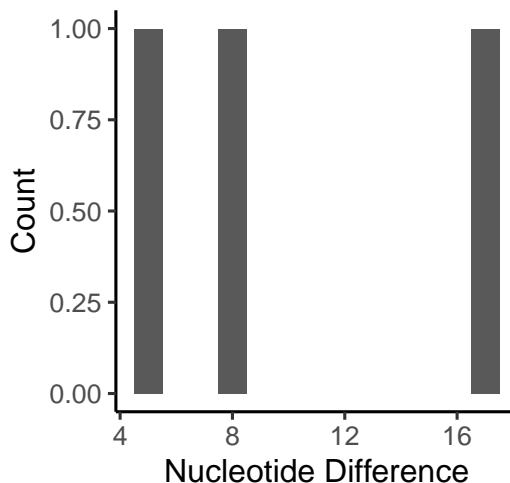
IGHV4-4*07

6124 sequences assigned
829 (13.5%) exact matches, in which:
641 unique CDR3
6 unique J



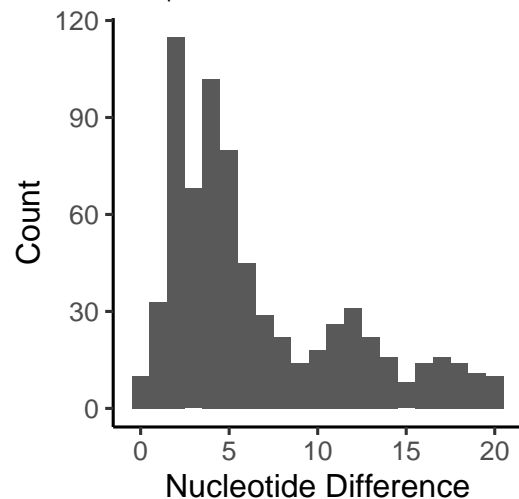
IGHV4-28*01_07

4 sequences assigned
No exact matches.



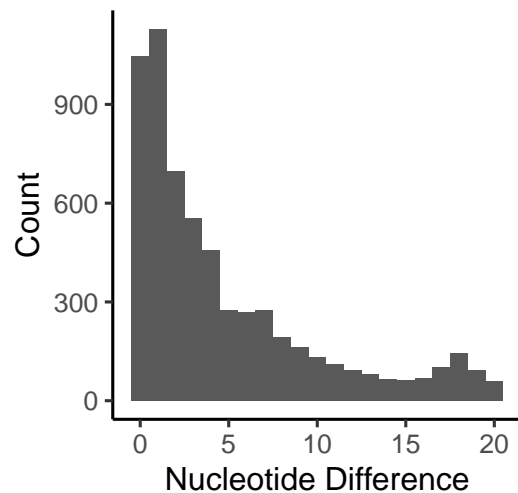
IGHV4-30-4*08

1131 sequences assigned
10 (0.9%) exact matches, in which:
9 unique CDR3
3 unique J



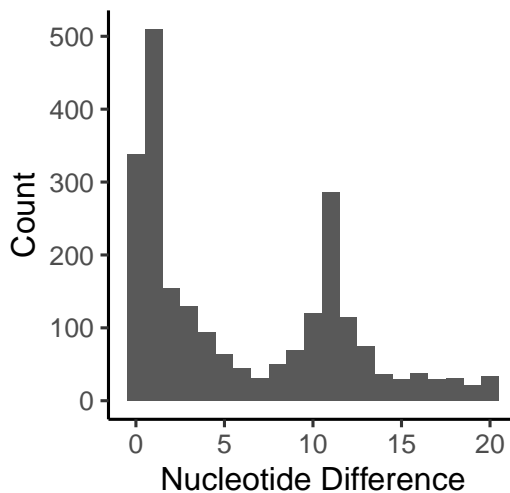
IGHV4-4*02_03

6699 sequences assigned
1046 (15.6%) exact matches, in which:
757 unique CDR3
6 unique J



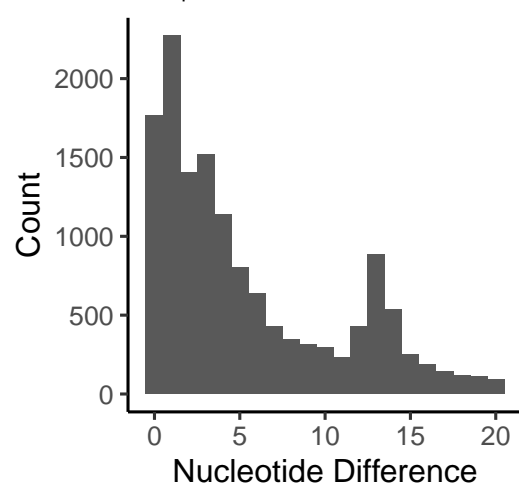
IGHV4-30-4*01

3362 sequences assigned
338 (10.1%) exact matches, in which:
230 unique CDR3
6 unique J



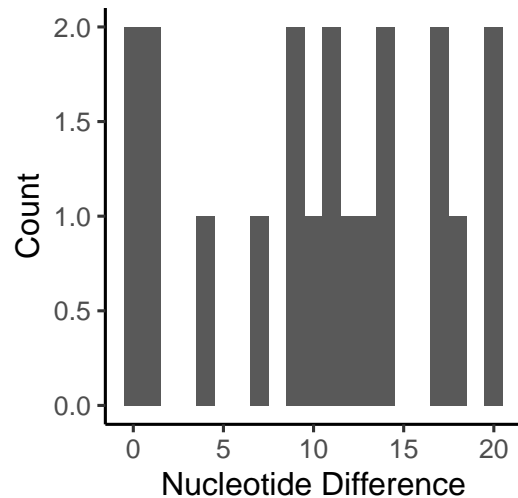
IGHV4-31*02

15319 sequences assigned
1765 (11.5%) exact matches, in which:
1369 unique CDR3
6 unique J



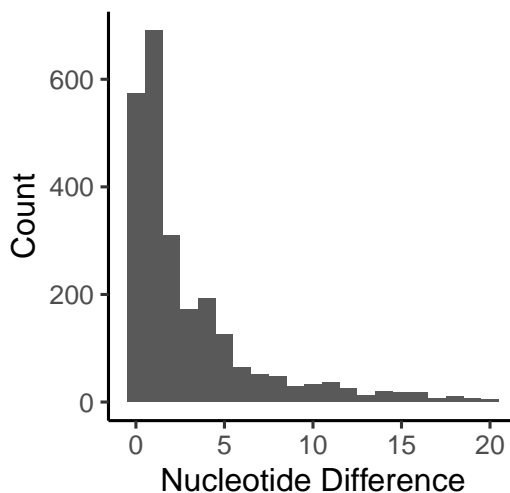
IGHV4-28*03

22 sequences assigned
2 (9.1%) exact matches, in which:
2 unique CDR3
2 unique J



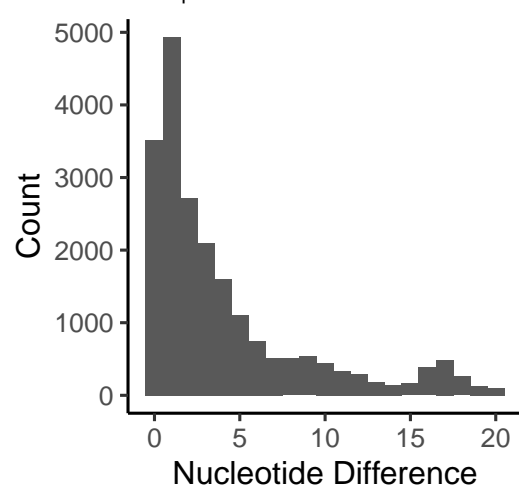
IGHV4-30-2*01

2632 sequences assigned
573 (21.8%) exact matches, in which:
400 unique CDR3
6 unique J



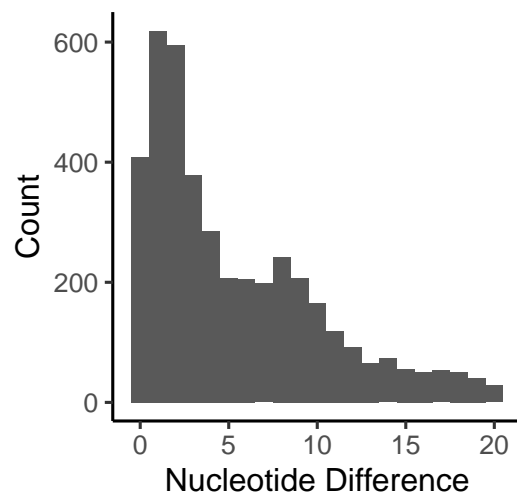
IGHV4-34*01_02

22118 sequences assigned
3514 (15.9%) exact matches, in which:
2424 unique CDR3
6 unique J



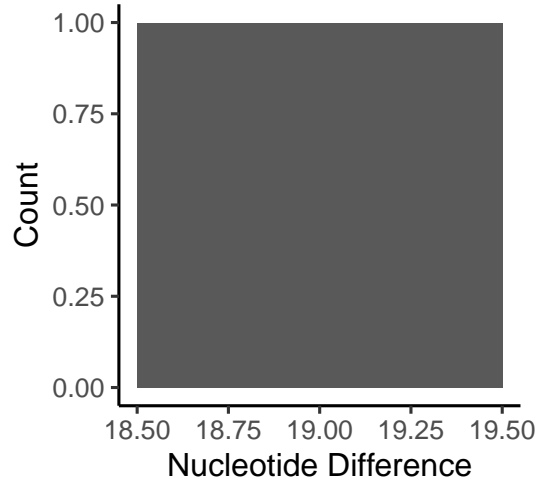
IGHV4-38-2*01

4393 sequences assigned
408 (9.3%) exact matches, in which:
337 unique CDR3
6 unique J



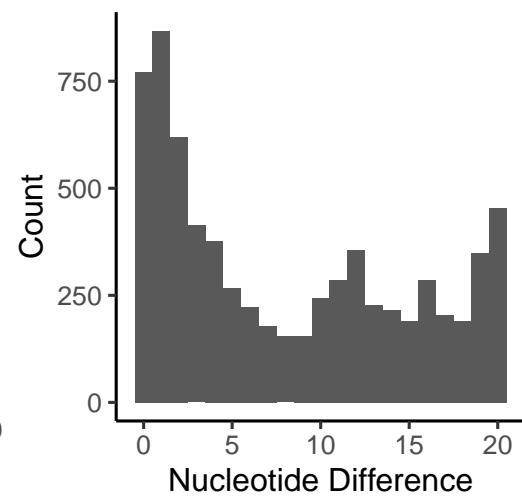
IGHV4-55*09

1 sequences assigned
No exact matches.



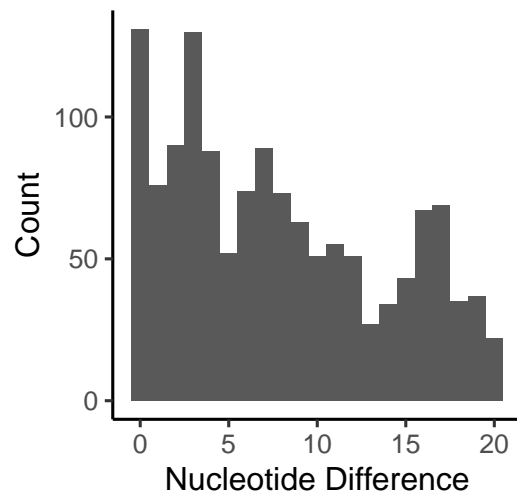
IGHV4-61*01

7660 sequences assigned
771 (10.1%) exact matches, in which:
659 unique CDR3
6 unique J



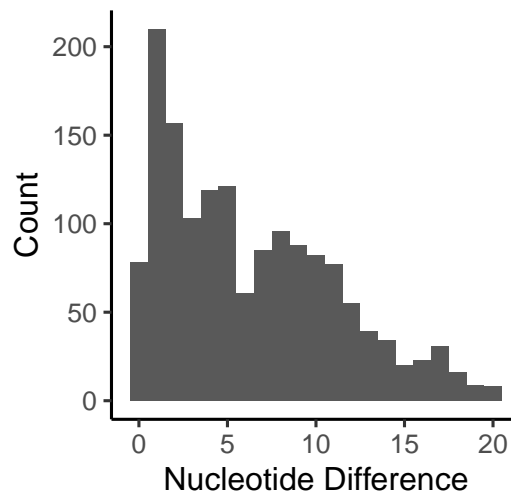
IGHV4-38-2*02

1584 sequences assigned
131 (8.3%) exact matches, in which:
105 unique CDR3
6 unique J



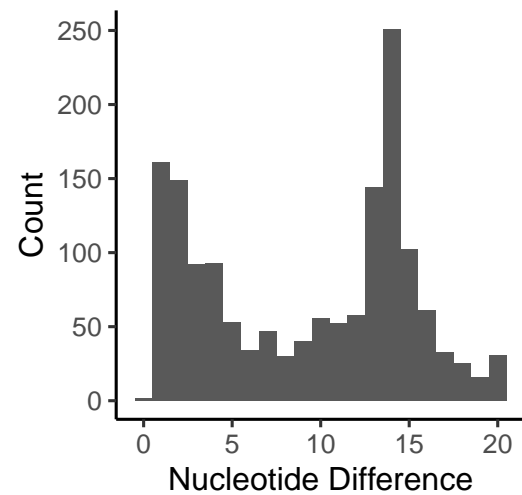
IGHV4-59*08

2253 sequences assigned
78 (3.5%) exact matches, in which:
70 unique CDR3
6 unique J



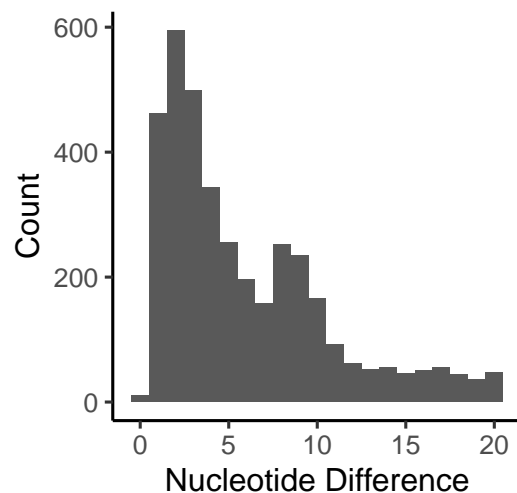
IGHV4-61*08

1722 sequences assigned
2 (0.1%) exact matches, in which:
2 unique CDR3
2 unique J



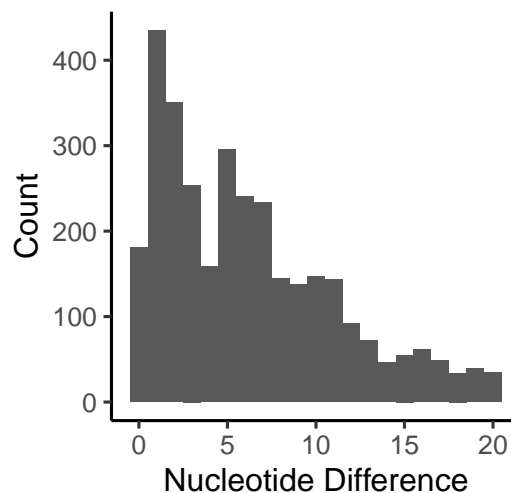
IGHV4-39*07

4000 sequences assigned
10 (0.2%) exact matches, in which:
10 unique CDR3
5 unique J



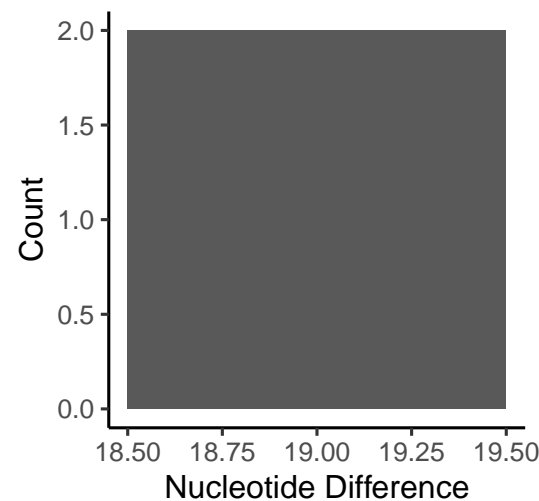
IGHV4-59*12

3574 sequences assigned
181 (5.1%) exact matches, in which:
178 unique CDR3
6 unique J



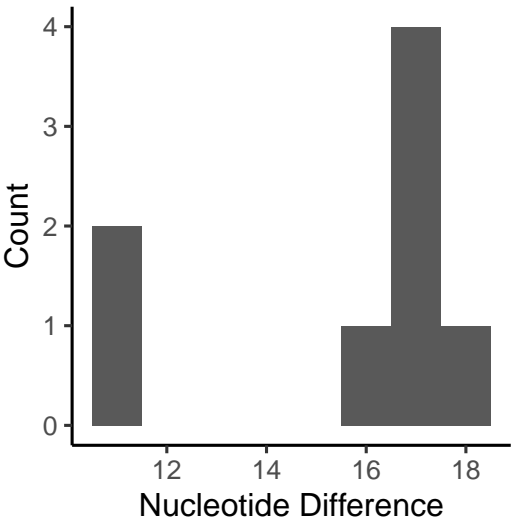
IGHV1/OR15-1*04

2 sequences assigned
No exact matches.



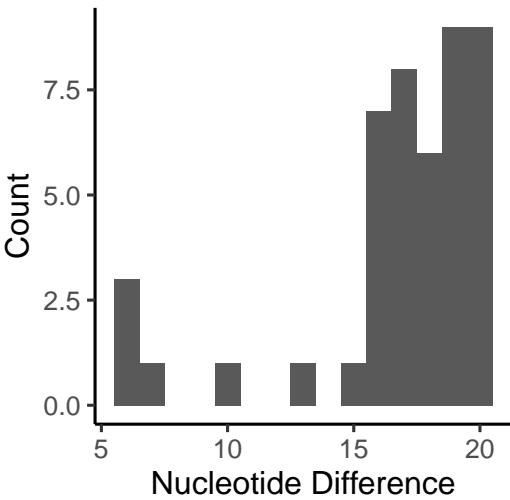
IGHV1/OR15-2*02_03

10 sequences assigned
No exact matches.



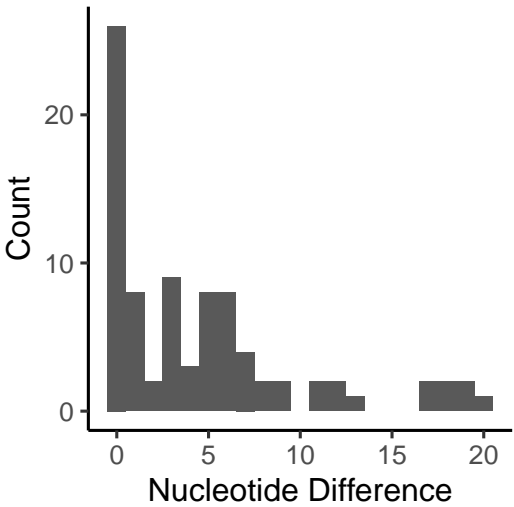
IGHV4/OR15-8*02

1597 sequences assigned
No exact matches.



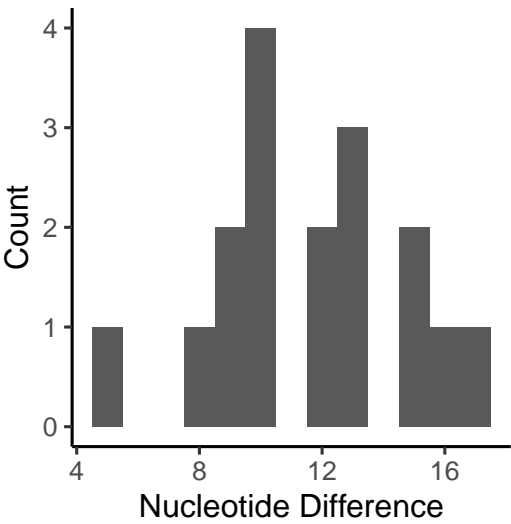
IGHV5-51*04

119 sequences assigned
26 (21.8%) exact matches, in which:
26 unique CDR3
4 unique J



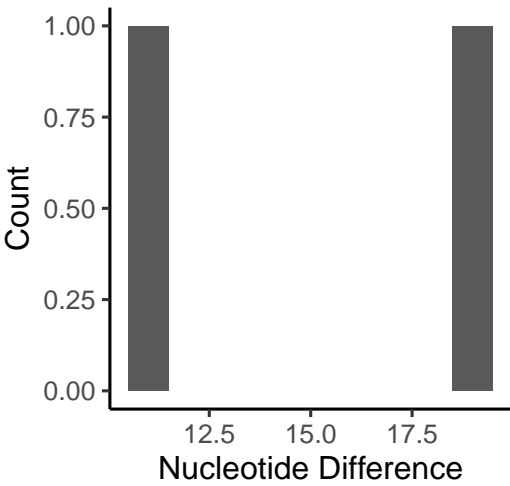
IGHV1/OR15-3*02

17 sequences assigned
No exact matches.



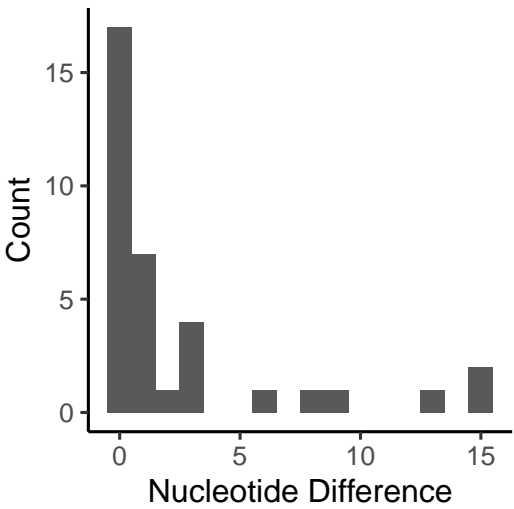
IGHV1/OR15-9*01

2 sequences assigned
No exact matches.



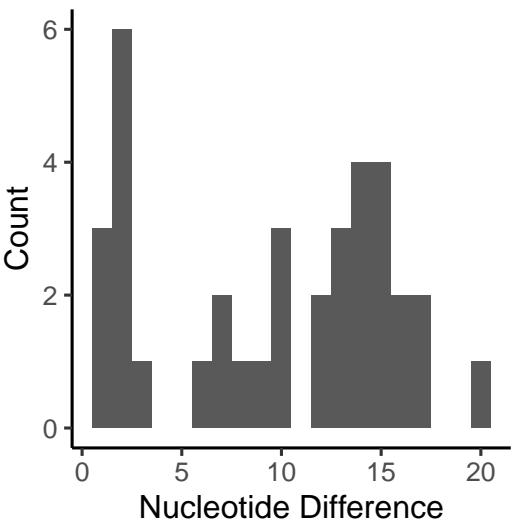
IGHV5-51*06

37 sequences assigned
17 (45.9%) exact matches, in which:
17 unique CDR3
4 unique J



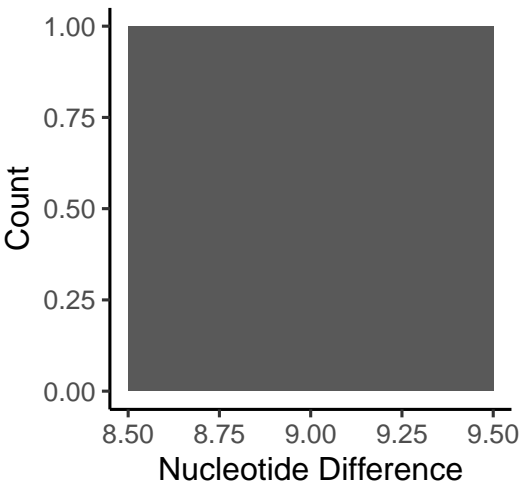
IGHV4/OR15-8*01

45 sequences assigned
No exact matches.



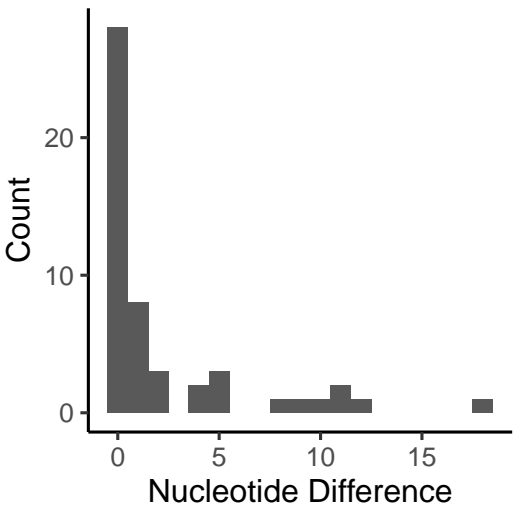
IGHV5-10-1*01_03

2 sequences assigned
No exact matches.



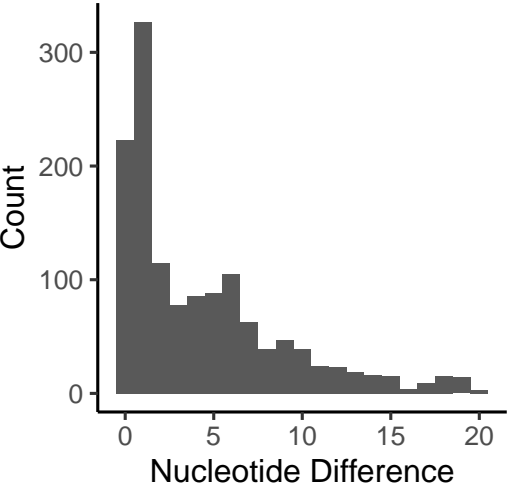
IGHV5-51*07

56 sequences assigned
28 (50%) exact matches, in which:
28 unique CDR3
4 unique J



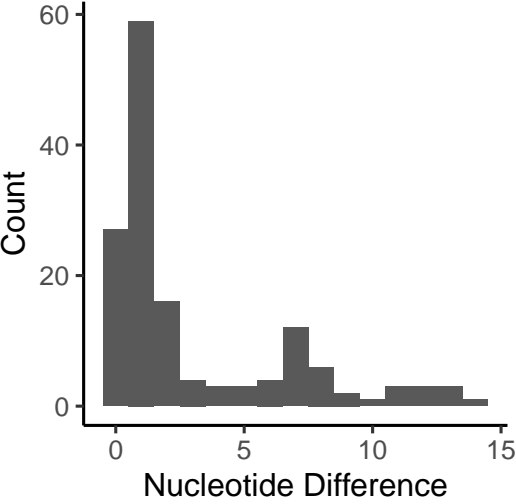
IGHV6-1*01_02

1374 sequences assigned
223 (16.2%) exact matches, in which:
168 unique CDR3
6 unique J



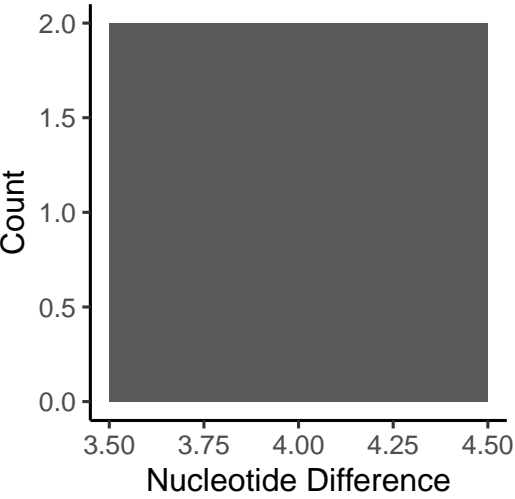
IGHV7-4-1*01

148 sequences assigned
27 (18.2%) exact matches, in which:
23 unique CDR3
3 unique J



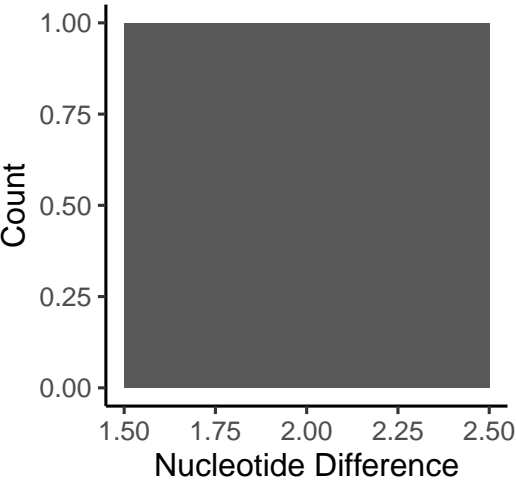
IGHV3/OR16-9*01

2 sequences assigned
No exact matches.



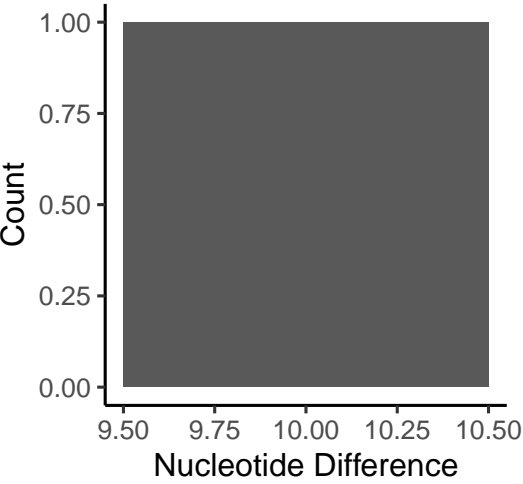
IGHV7-81*01

1 sequences assigned
No exact matches.

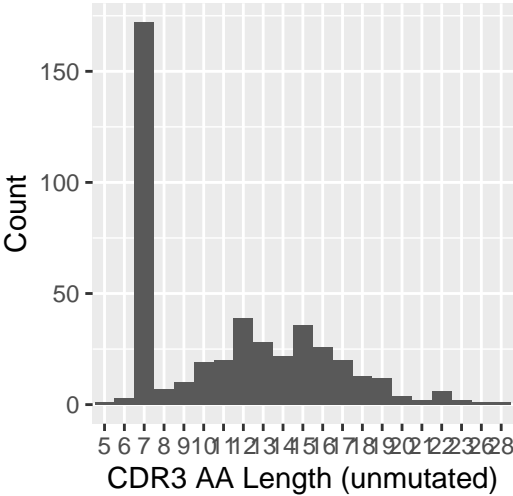


IGHV3/OR16-13*01

1 sequences assigned
No exact matches.



IGHV3-74*03_T105G_G156C_T171G_G191T_C197G_G198T_G258T





[illegible]