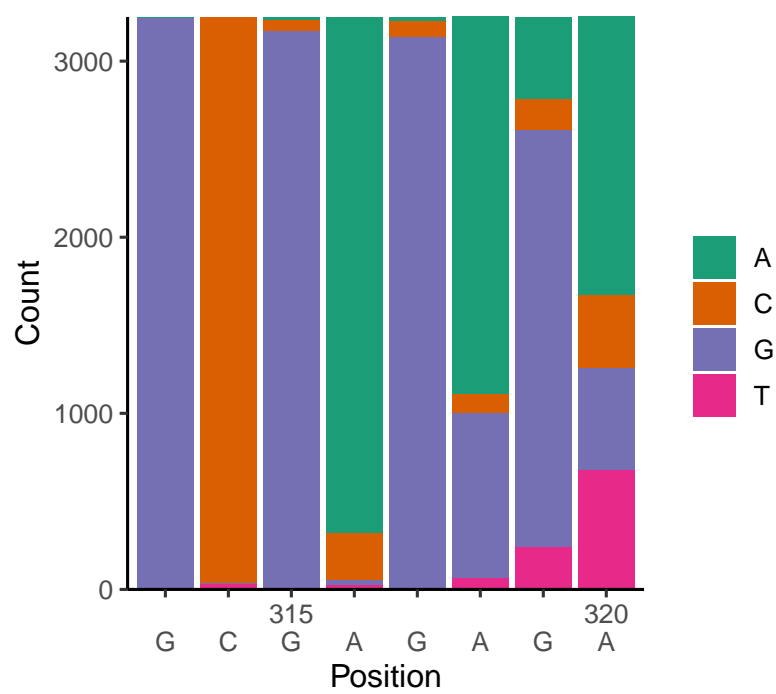


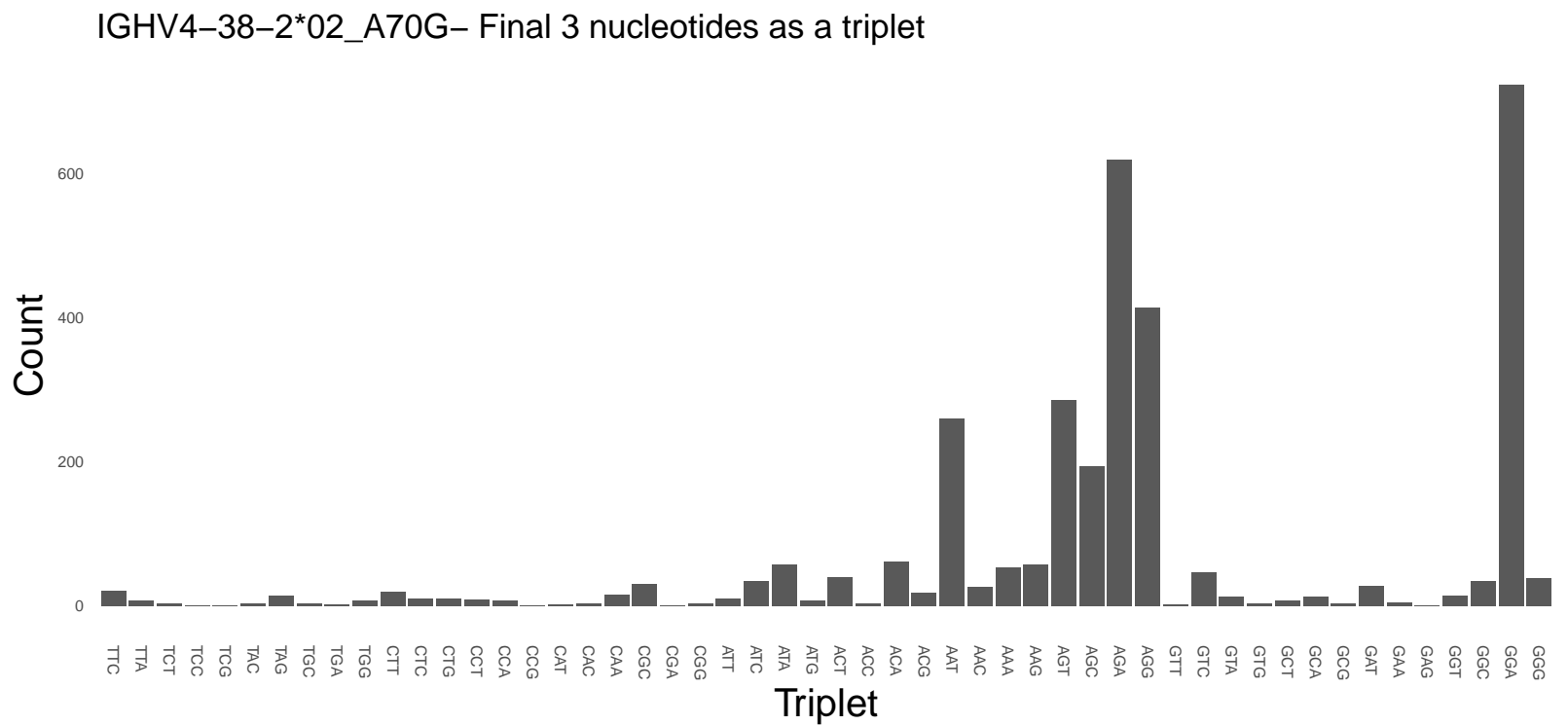
Gene IGHV4-38-2*02_A70G



Gene IGHV4-38-2*02_A70G

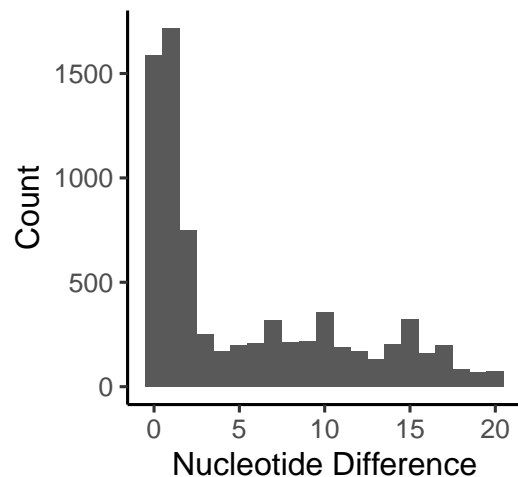


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



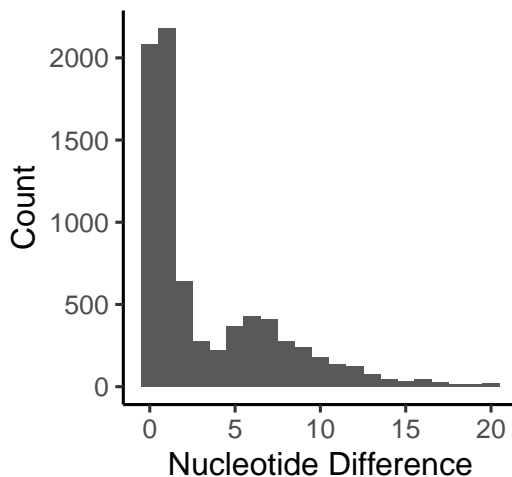
IGHV1-2*02

8538 sequences assigned
1587 (18.6%) exact matches, in which:
1306 unique CDR3
6 unique J



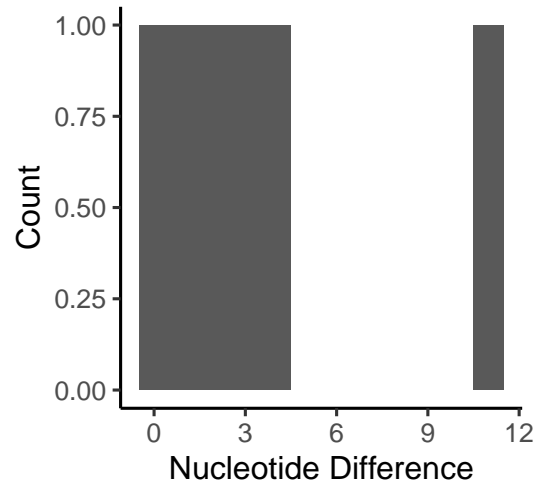
IGHV1-8*01

9033 sequences assigned
2082 (23%) exact matches, in which:
1760 unique CDR3
6 unique J



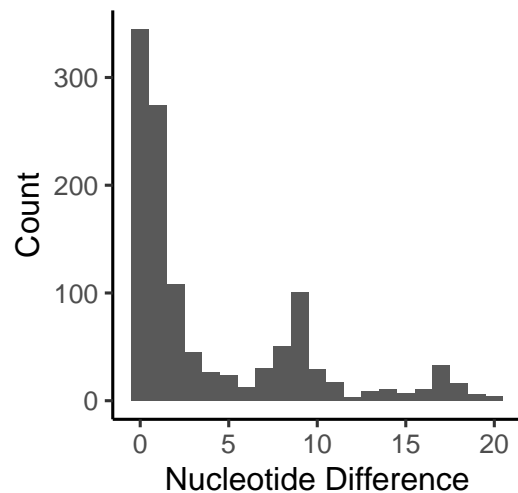
IGHV1-45*02

6 sequences assigned
1 (16.7%) exact matches, in which:
1 unique CDR3
1 unique J



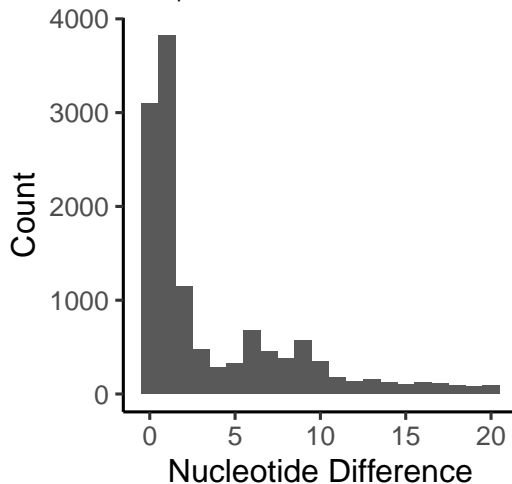
IGHV1-2*04

1168 sequences assigned
345 (29.5%) exact matches, in which:
292 unique CDR3
6 unique J



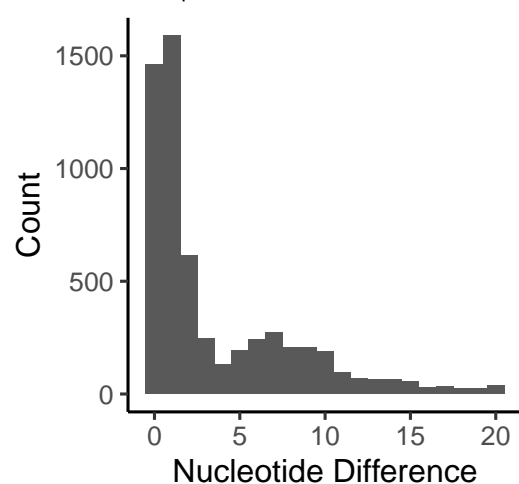
IGHV1-18*01

15556 sequences assigned
3094 (19.9%) exact matches, in which:
2530 unique CDR3
6 unique J



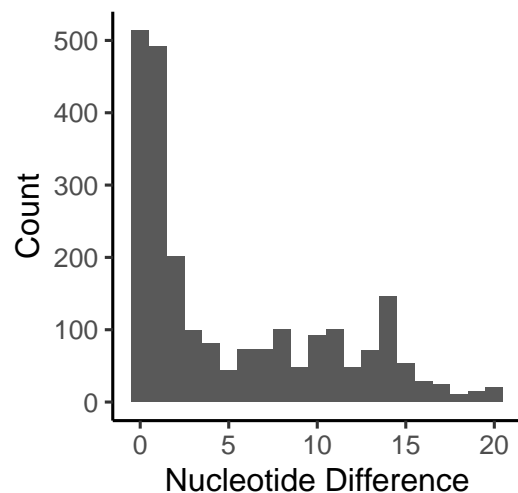
IGHV1-46*01

6406 sequences assigned
1463 (22.8%) exact matches, in which:
1260 unique CDR3
6 unique J



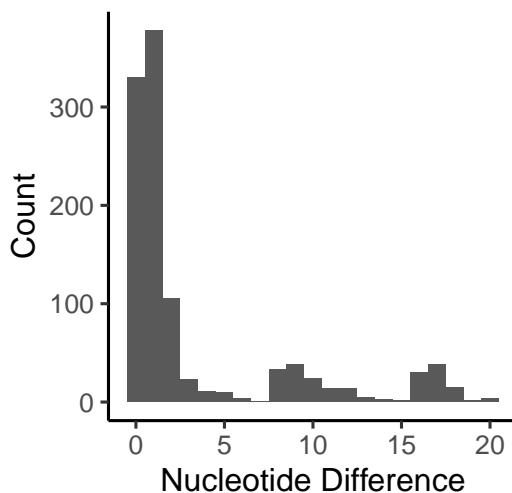
IGHV1-3*01_05

2688 sequences assigned
514 (19.1%) exact matches, in which:
422 unique CDR3
6 unique J



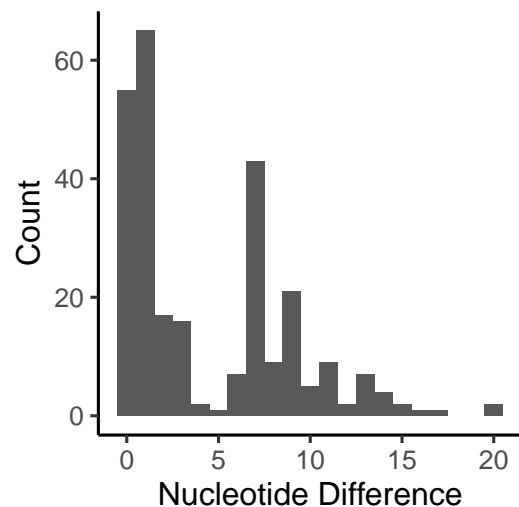
IGHV1-24*01

1129 sequences assigned
330 (29.2%) exact matches, in which:
273 unique CDR3
6 unique J



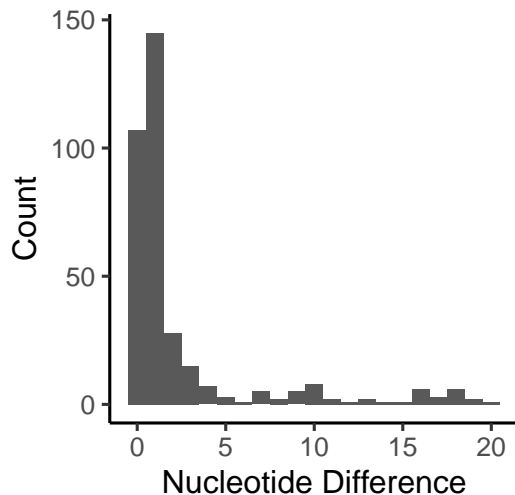
IGHV1-58*02

291 sequences assigned
55 (18.9%) exact matches, in which:
42 unique CDR3
5 unique J



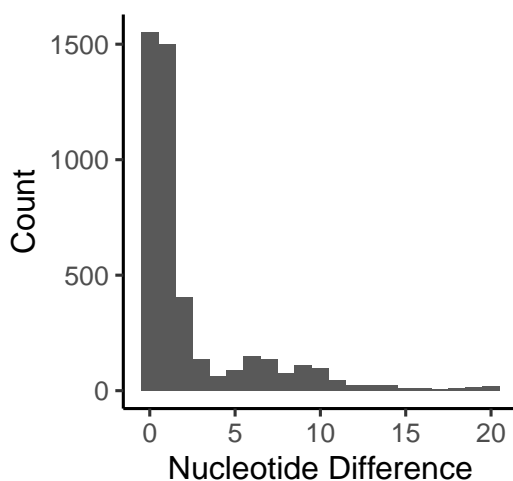
IGHV1-58*01_03

436 sequences assigned
107 (24.5%) exact matches, in which:
96 unique CDR3
5 unique J



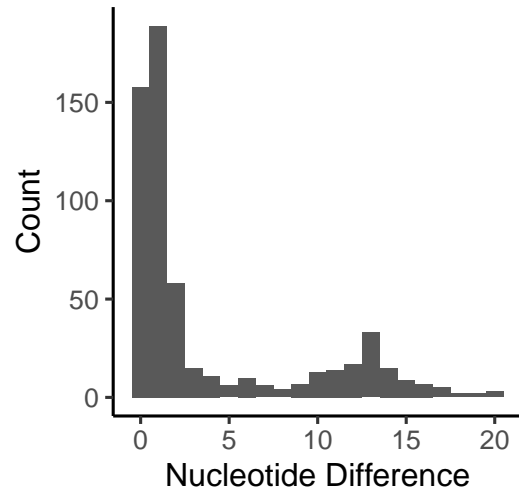
IGHV1-69*04_09

4886 sequences assigned
1551 (31.7%) exact matches, in which:
1363 unique CDR3
6 unique J



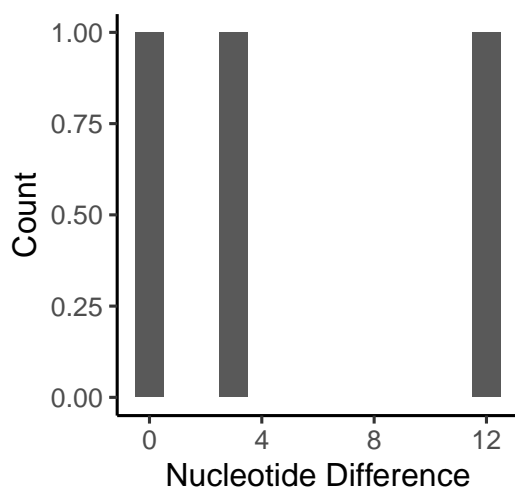
IGHV2-5*01

616 sequences assigned
158 (25.6%) exact matches, in which:
133 unique CDR3
4 unique J



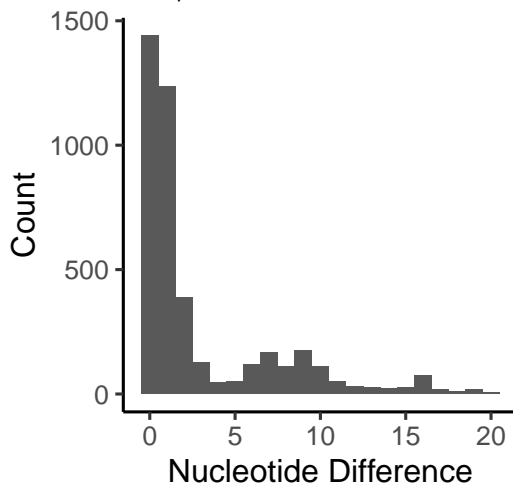
IGHV1-68*02

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



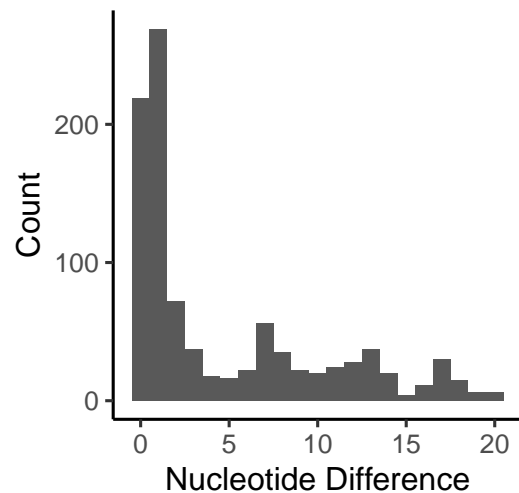
IGHV1-69*06_14

4690 sequences assigned
1440 (30.7%) exact matches, in which:
1280 unique CDR3
6 unique J



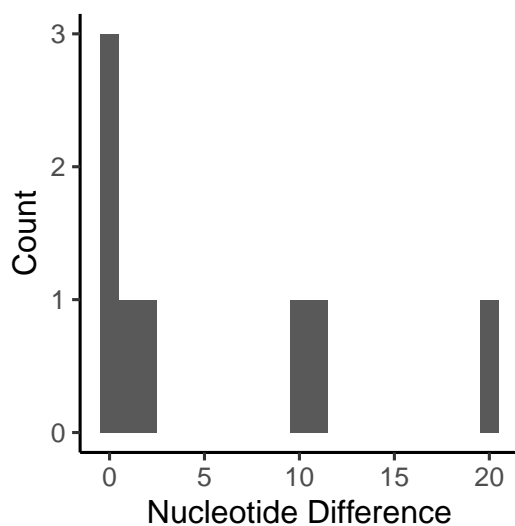
IGHV2-5*02

1031 sequences assigned
219 (21.2%) exact matches, in which:
193 unique CDR3
6 unique J



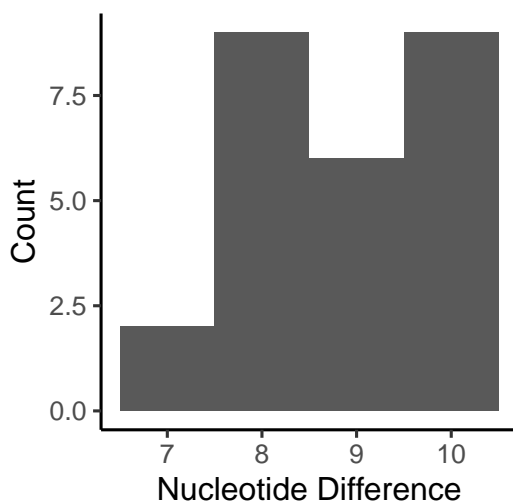
IGHV1-69-2*01

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



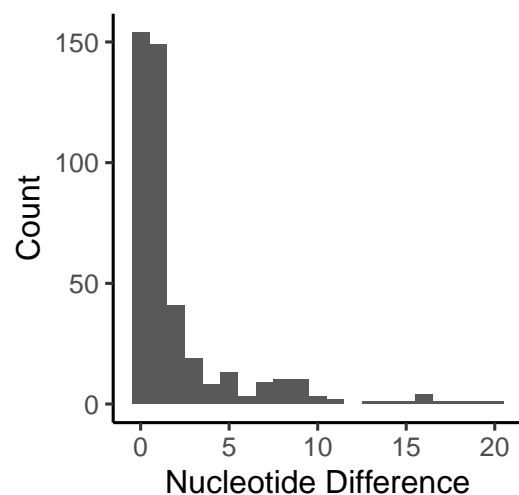
IGHV1-NL1*01

26 sequences assigned
No exact matches.



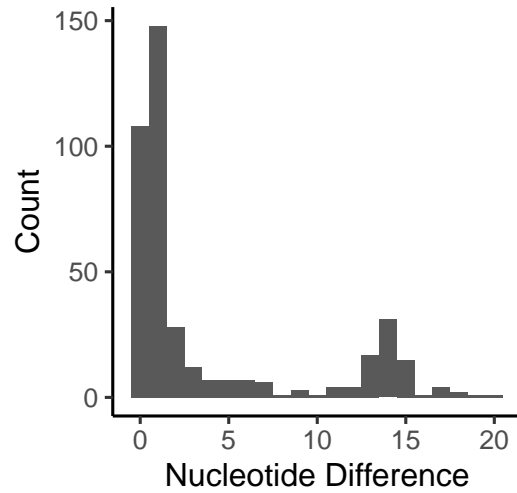
IGHV2-26*01

434 sequences assigned
154 (35.5%) exact matches, in which:
131 unique CDR3
5 unique J



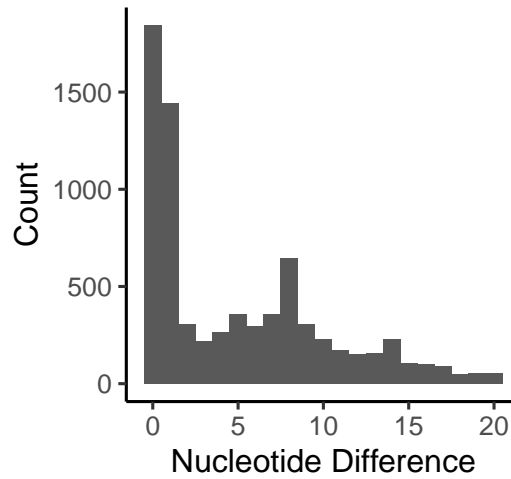
IGHV2-70*01

421 sequences assigned
108 (25.7%) exact matches, in which:
83 unique CDR3
4 unique J



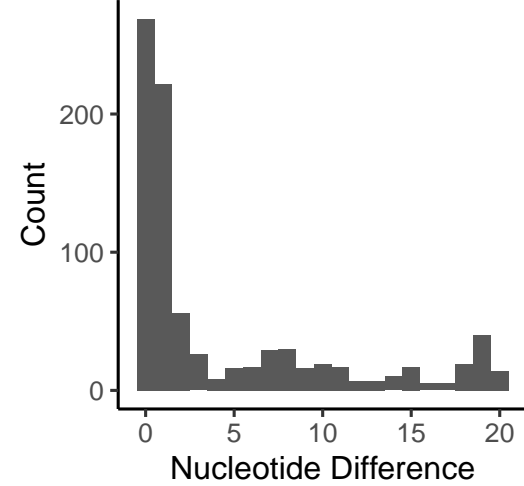
IGHV3-9*01

7606 sequences assigned
1843 (24.2%) exact matches, in which:
1071 unique CDR3
6 unique J



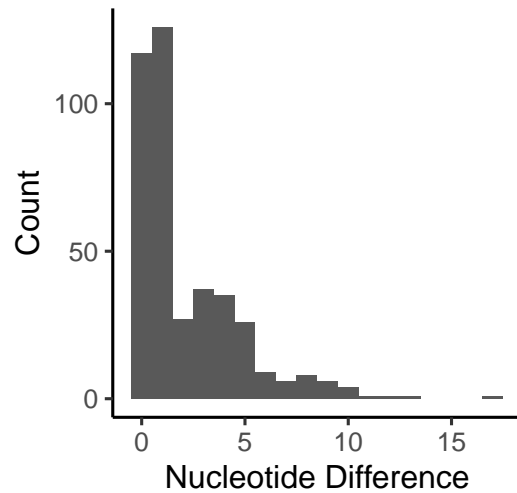
IGHV3-13*01

897 sequences assigned
269 (30%) exact matches, in which:
178 unique CDR3
5 unique J



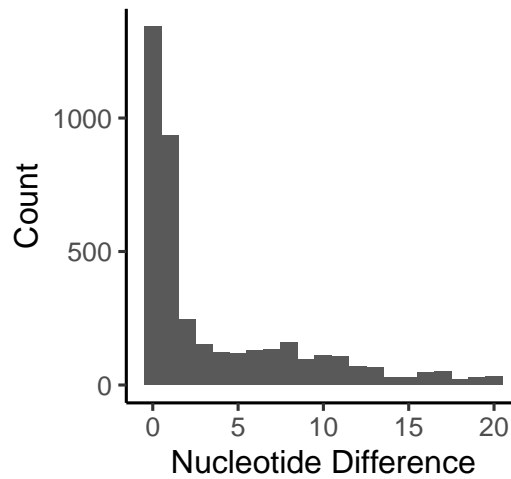
IGHV2-70*11_15

409 sequences assigned
117 (28.6%) exact matches, in which:
95 unique CDR3
4 unique J



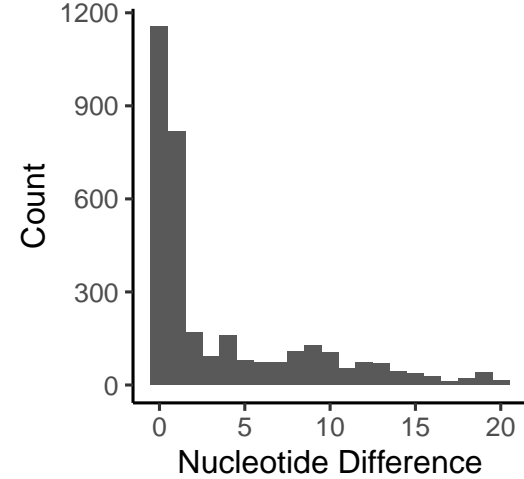
IGHV3-11*01

5188 sequences assigned
1342 (25.9%) exact matches, in which:
855 unique CDR3
6 unique J



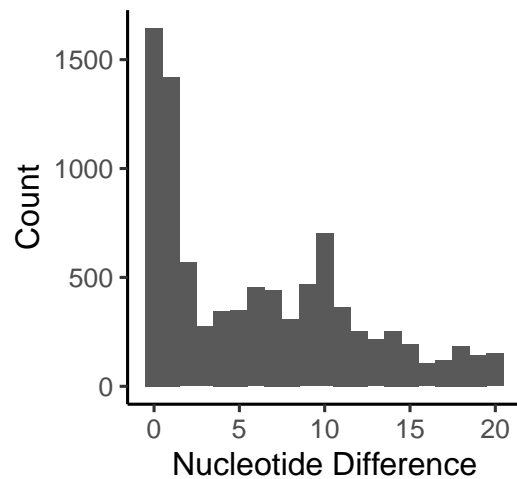
IGHV3-15*01_02

3612 sequences assigned
1155 (32%) exact matches, in which:
696 unique CDR3
6 unique J



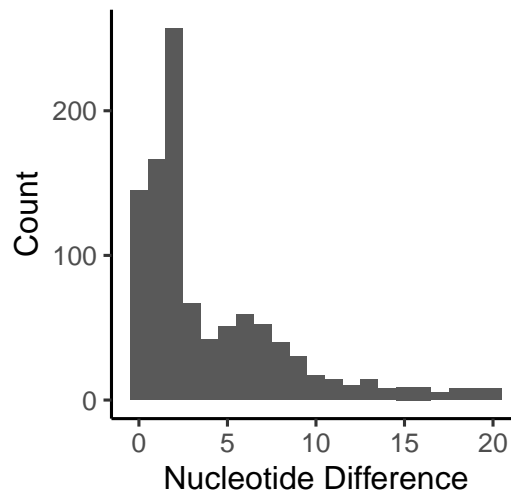
IGHV3-7*01

11095 sequences assigned
1645 (14.8%) exact matches, in which:
1089 unique CDR3
6 unique J



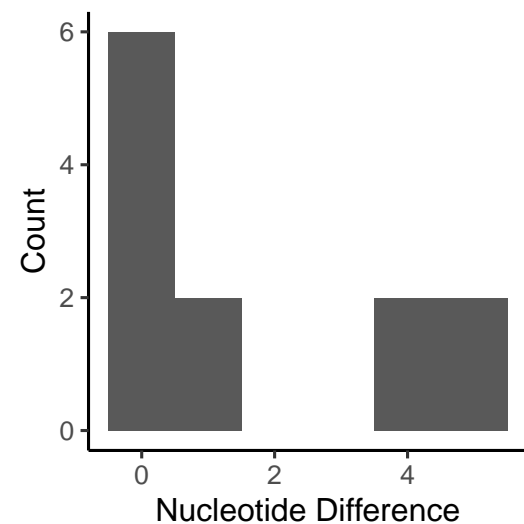
IGHV3-11*04

1060 sequences assigned
145 (13.7%) exact matches, in which:
142 unique CDR3
5 unique J



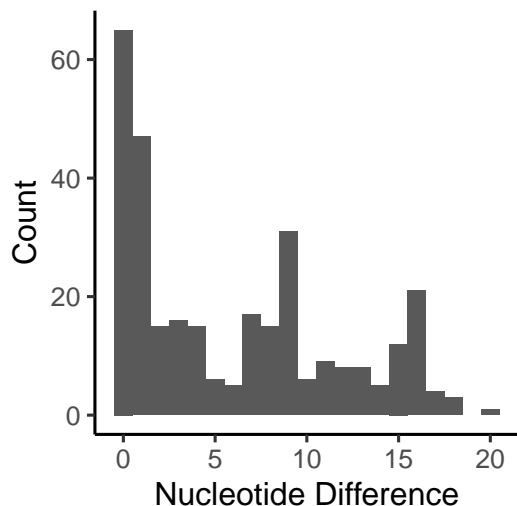
IGHV3-19*01

12 sequences assigned
6 (50%) exact matches, in which:
5 unique CDR3
2 unique J



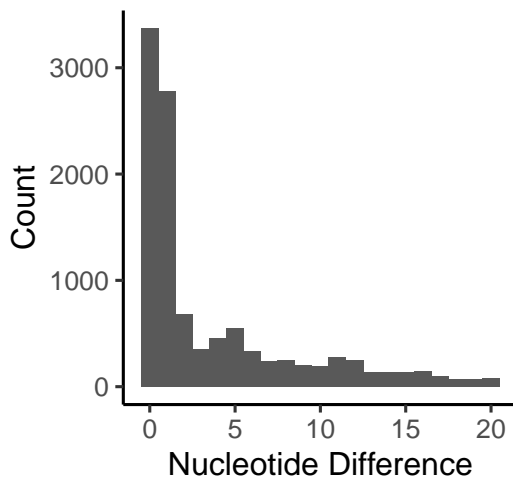
IGHV3-20*01_02

310 sequences assigned
65 (21%) exact matches, in which:
43 unique CDR3
5 unique J



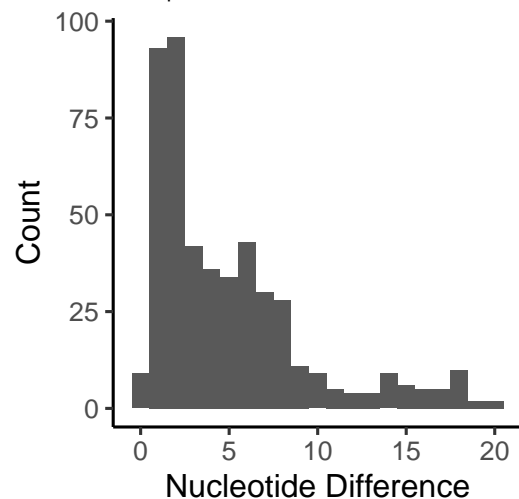
IGHV3-21*01_02

11880 sequences assigned
3370 (28.4%) exact matches, in which:
2068 unique CDR3
6 unique J



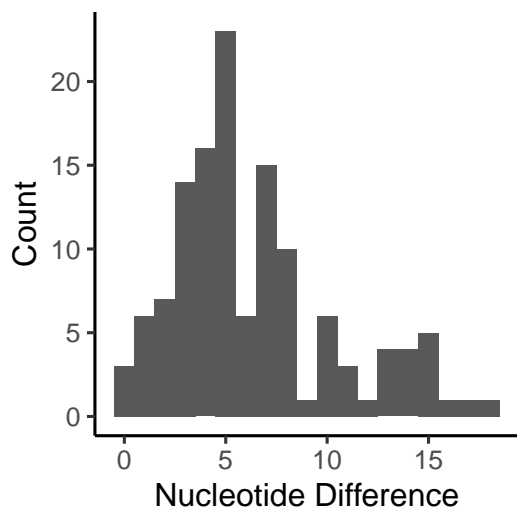
IGHV3-33*05

503 sequences assigned
9 (1.8%) exact matches, in which:
9 unique CDR3
2 unique J



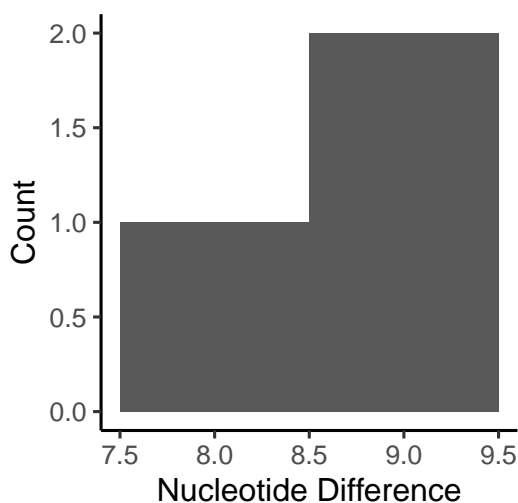
IGHV3-20*03_04

130 sequences assigned
3 (2.3%) exact matches, in which:
3 unique CDR3
2 unique J



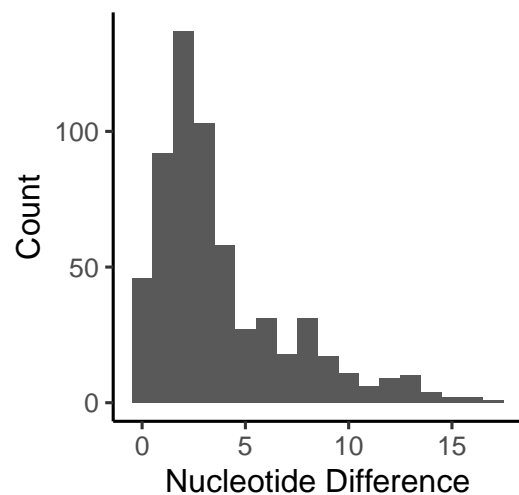
IGHV3-22*01_02

3 sequences assigned
No exact matches.



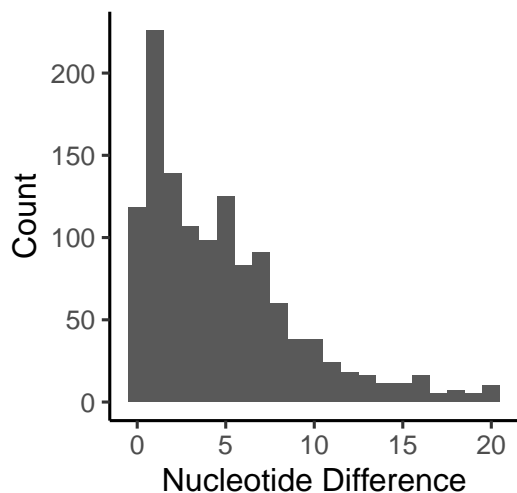
IGHV3-33*06

606 sequences assigned
46 (7.6%) exact matches, in which:
44 unique CDR3
5 unique J



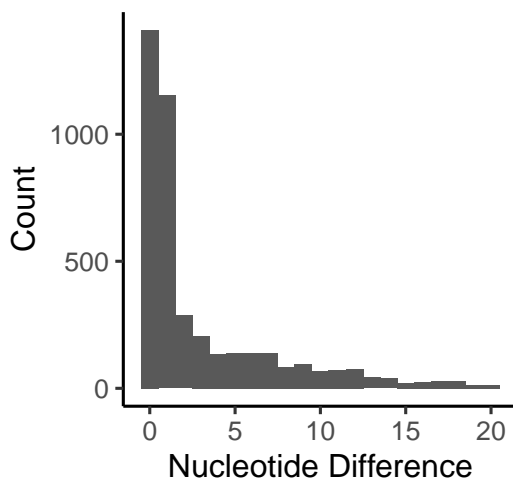
IGHV3-21*04

1335 sequences assigned
118 (8.8%) exact matches, in which:
107 unique CDR3
6 unique J



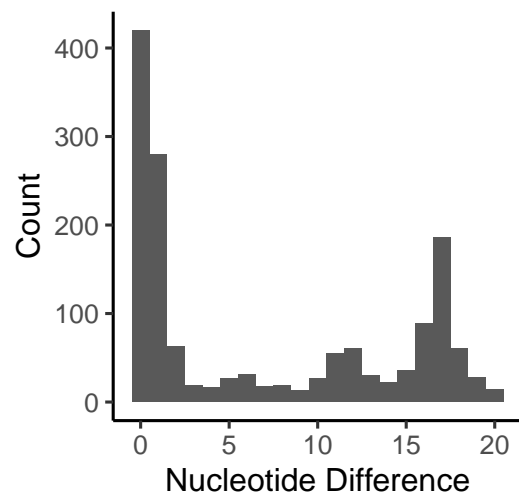
IGHV3-33*01

4323 sequences assigned
1410 (32.6%) exact matches, in which:
916 unique CDR3
6 unique J



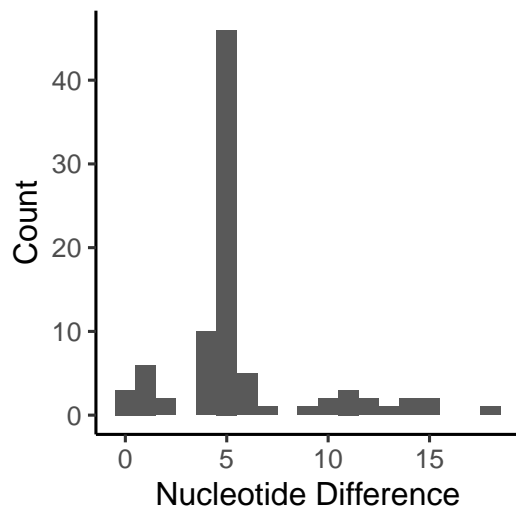
IGHV3-43*02

1591 sequences assigned
420 (26.4%) exact matches, in which:
242 unique CDR3
6 unique J



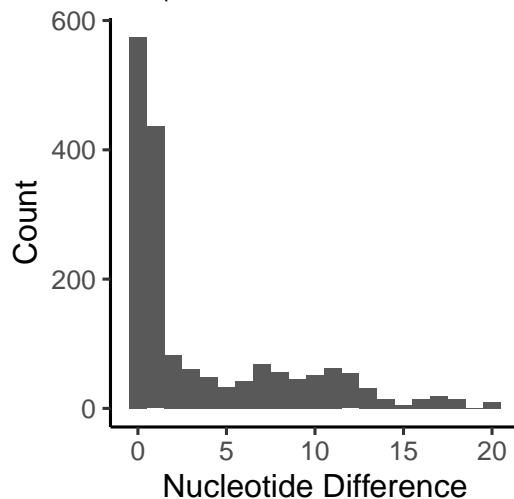
IGHV3-47*01

87 sequences assigned
3 (3.4%) exact matches, in which:
2 unique CDR3
1 unique J



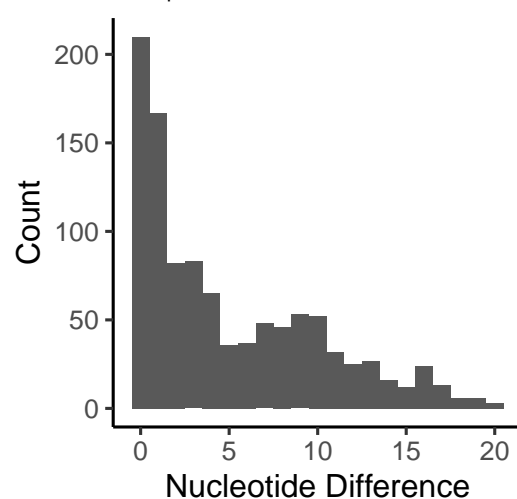
IGHV3-49*04

2108 sequences assigned
575 (27.3%) exact matches, in which:
352 unique CDR3
6 unique J



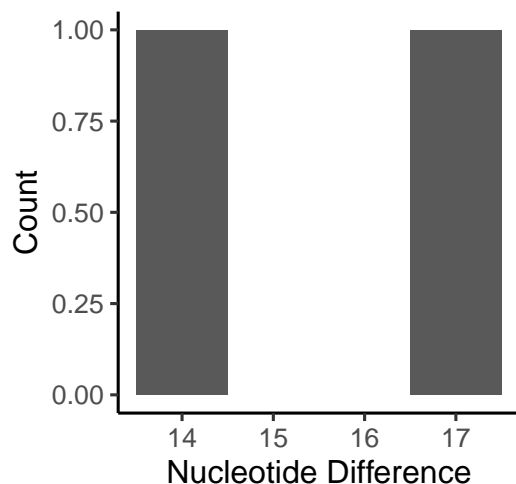
IGHV3-53*01_02

1097 sequences assigned
210 (19.1%) exact matches, in which:
127 unique CDR3
6 unique J



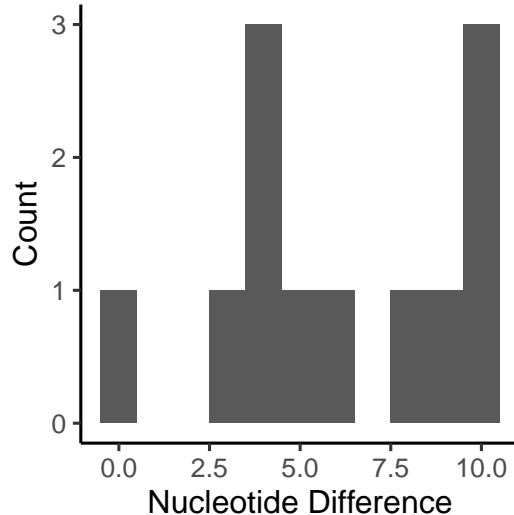
IGHV3-47*02

2 sequences assigned
No exact matches.



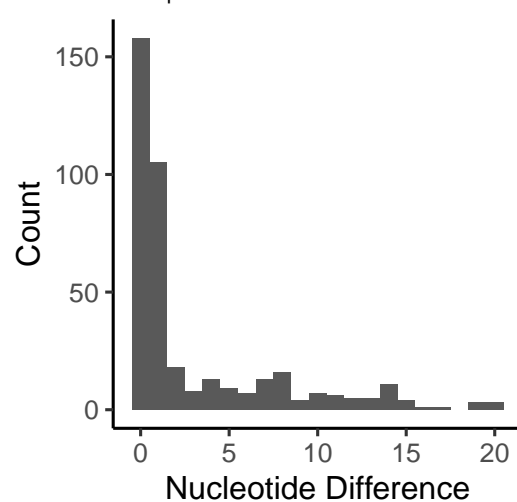
IGHV3-52*01_03

12 sequences assigned
1 (8.3%) exact matches, in which:
1 unique CDR3
1 unique J



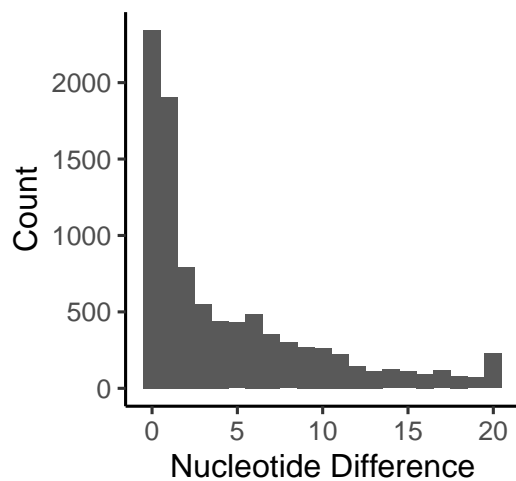
IGHV3-64*01

401 sequences assigned
158 (39.4%) exact matches, in which:
99 unique CDR3
5 unique J



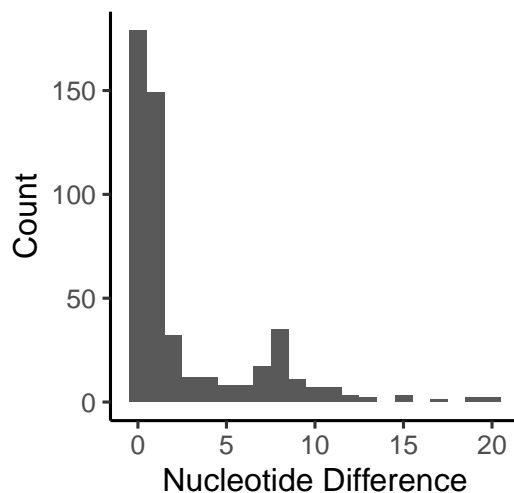
IGHV3-48*03

10905 sequences assigned
2344 (21.5%) exact matches, in which:
1412 unique CDR3
6 unique J



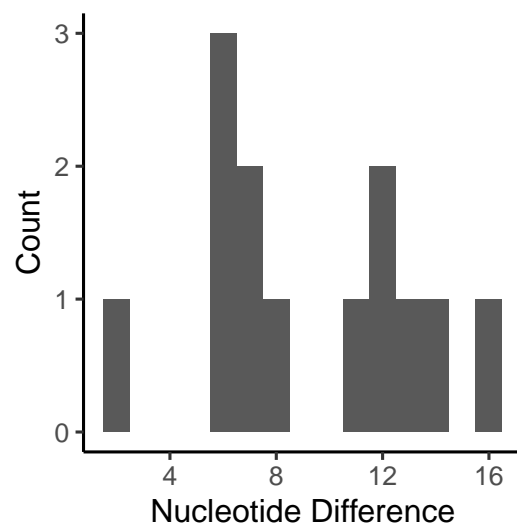
IGHV3-53*04

504 sequences assigned
179 (35.5%) exact matches, in which:
115 unique CDR3
6 unique J



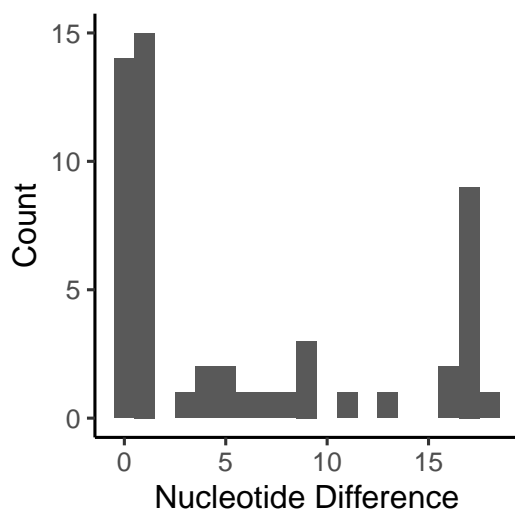
IGHV3-64*04

29 sequences assigned
No exact matches.



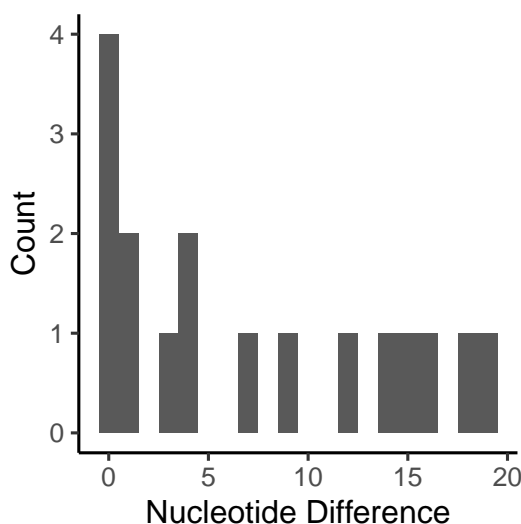
IGHV3-64*02_07

99 sequences assigned
14 (14.1%) exact matches, in which:
10 unique CDR3
2 unique J



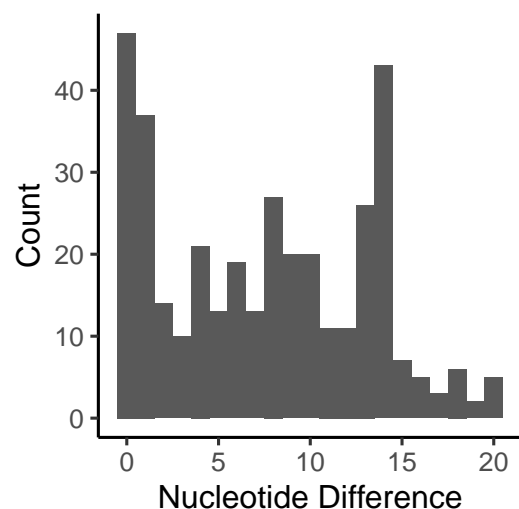
IGHV3-69-1*02

17 sequences assigned
4 (23.5%) exact matches, in which:
4 unique CDR3
2 unique J



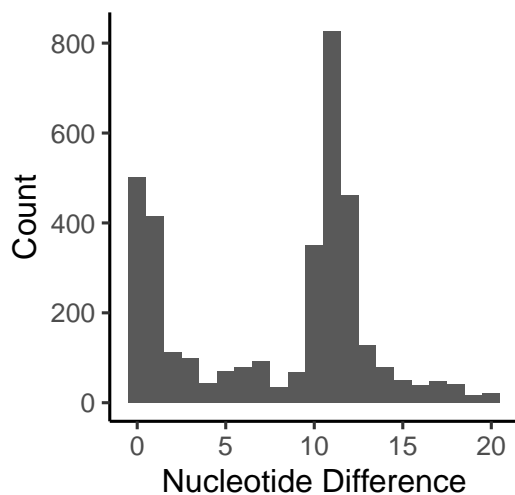
IGHV3-72*01

513 sequences assigned
47 (9.2%) exact matches, in which:
28 unique CDR3
4 unique J



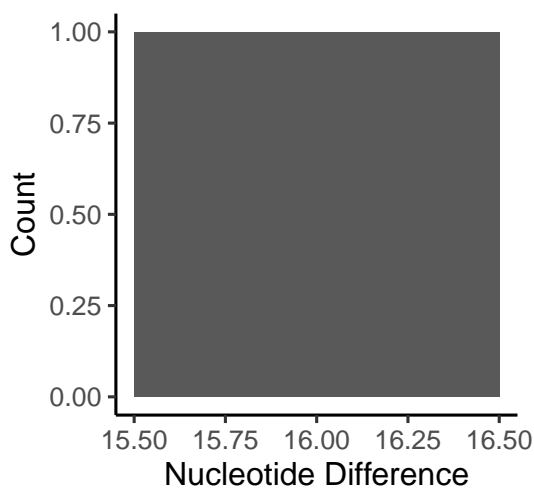
IGHV3-66*01

3722 sequences assigned
501 (13.5%) exact matches, in which:
318 unique CDR3
5 unique J



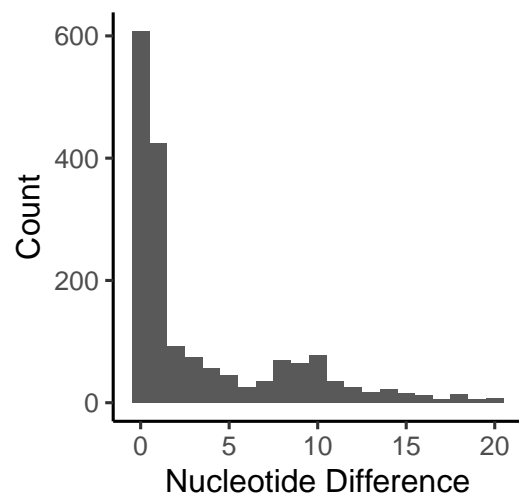
IGHV3-71*03

1 sequences assigned
No exact matches.



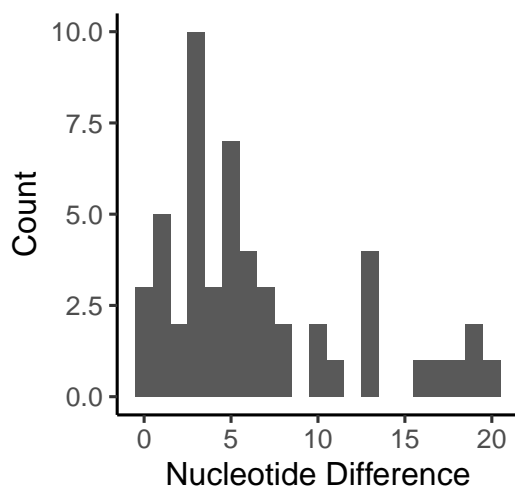
IGHV3-73*01_02

2208 sequences assigned
608 (27.5%) exact matches, in which:
364 unique CDR3
6 unique J



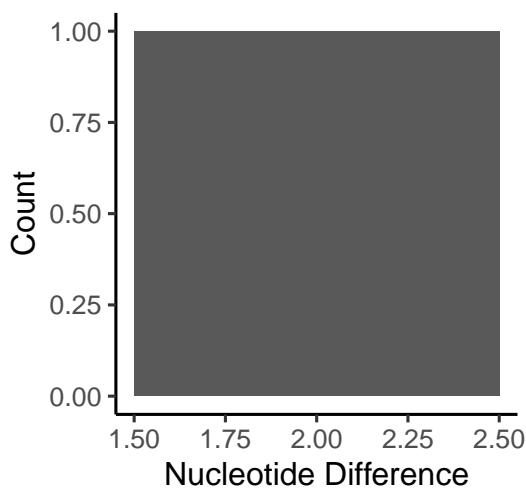
IGHV3-69-1*01

52 sequences assigned
3 (5.8%) exact matches, in which:
3 unique CDR3
1 unique J



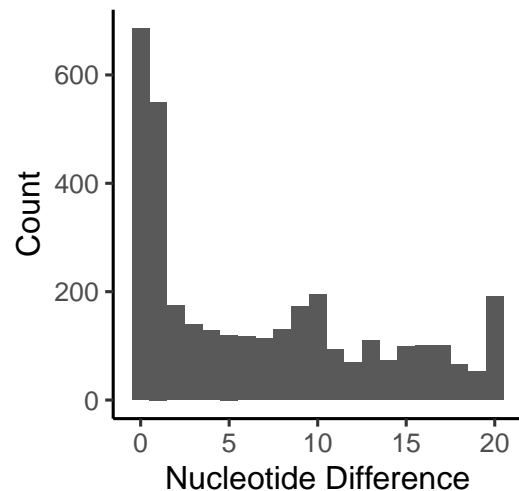
IGHV3-71*01_04

1 sequences assigned
No exact matches.



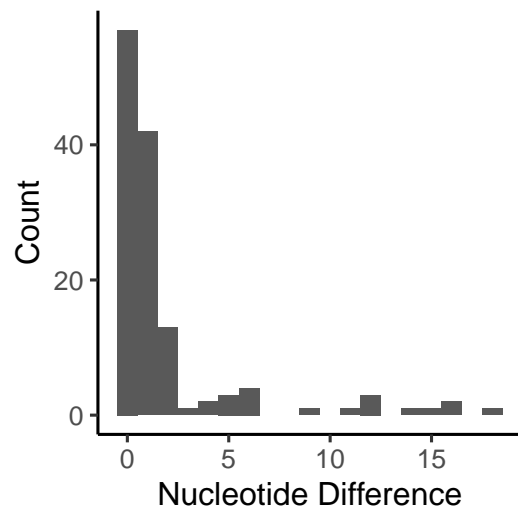
IGHV3-74*01_02

4278 sequences assigned
686 (16%) exact matches, in which:
423 unique CDR3
6 unique J



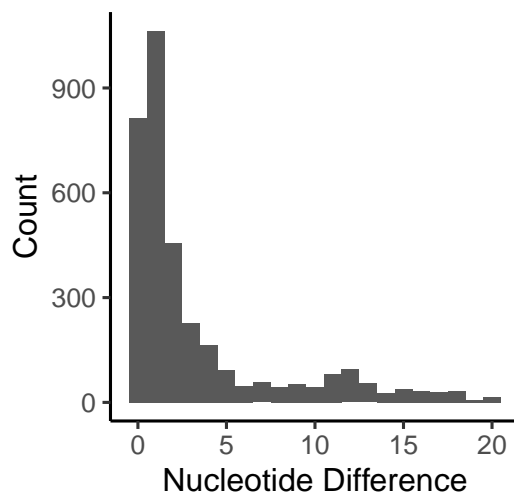
IGHV3-43D*04

135 sequences assigned
57 (42.2%) exact matches, in which:
33 unique CDR3
4 unique J



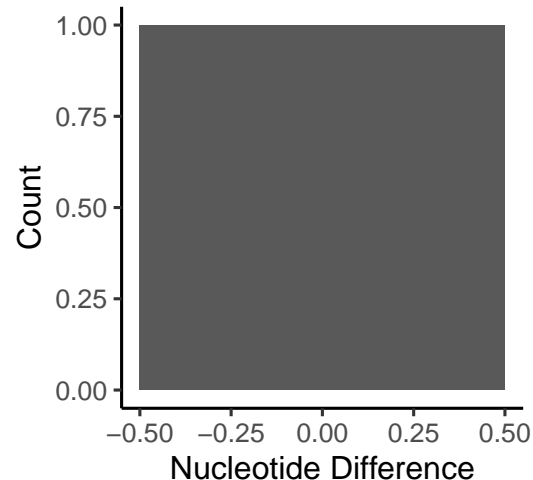
IGHV4-4*07

3632 sequences assigned
815 (22.4%) exact matches, in which:
693 unique CDR3
6 unique J



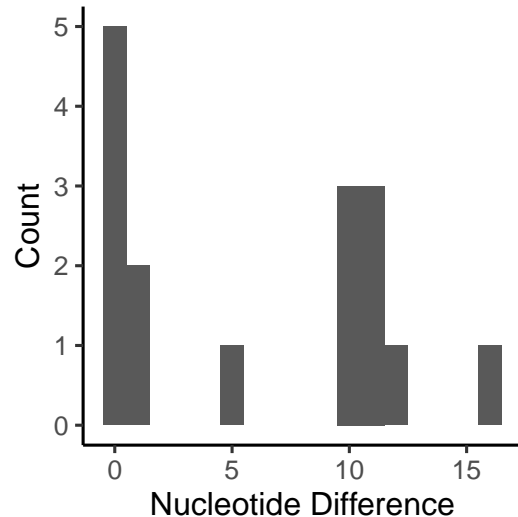
IGHV4-30-4*01

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



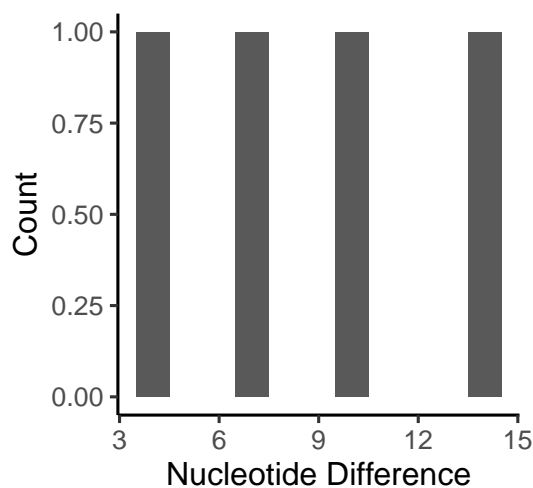
IGHV3-64D*06

16 sequences assigned
5 (31.2%) exact matches, in which:
3 unique CDR3
2 unique J



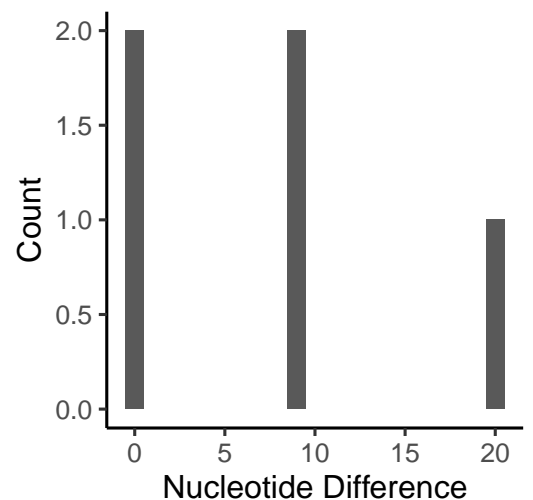
IGHV4-28*03

4 sequences assigned
No exact matches.



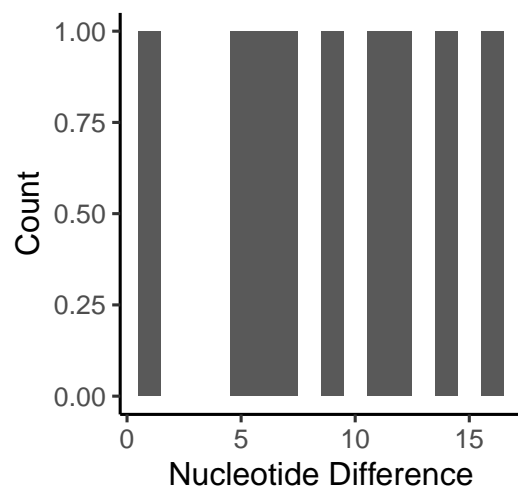
IGHV4-30-2*01

5 sequences assigned
2 (40%) exact matches, in which:
2 unique CDR3
2 unique J



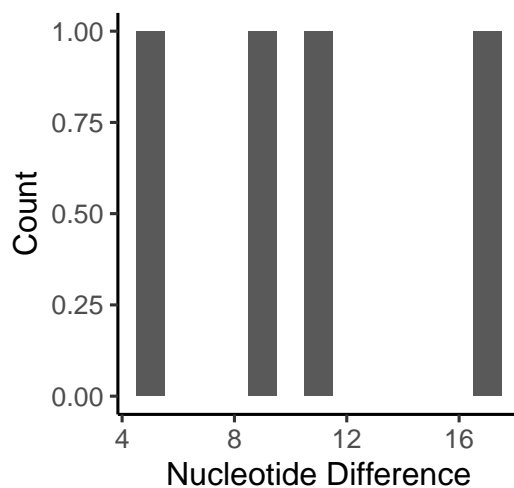
IGHV3-NL1*01

26 sequences assigned
No exact matches.



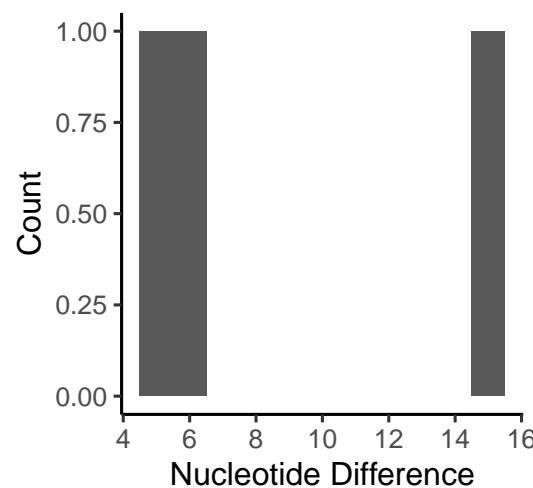
IGHV4-28*02_05

4 sequences assigned
No exact matches.



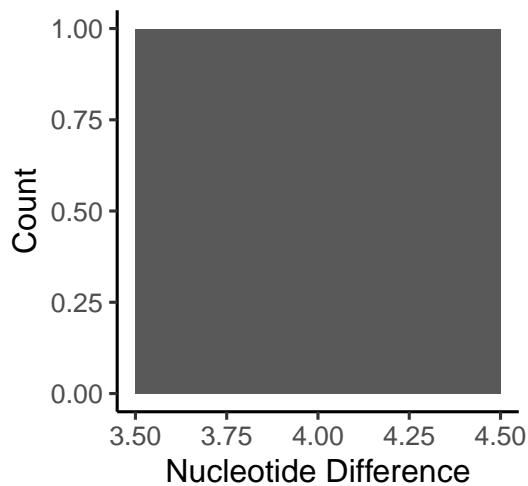
IGHV4-30-2*03

4 sequences assigned
No exact matches.



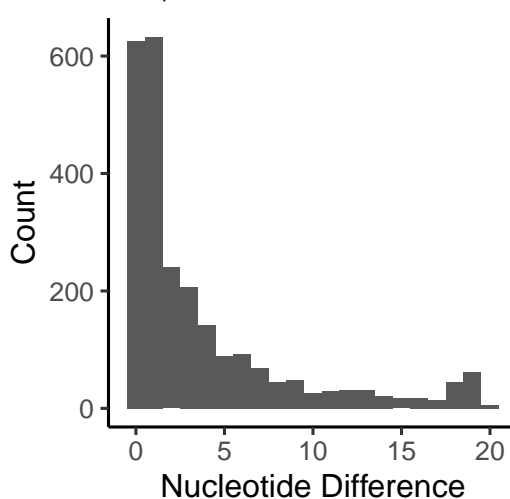
IGHV4-30-2*04

1 sequences assigned
No exact matches.



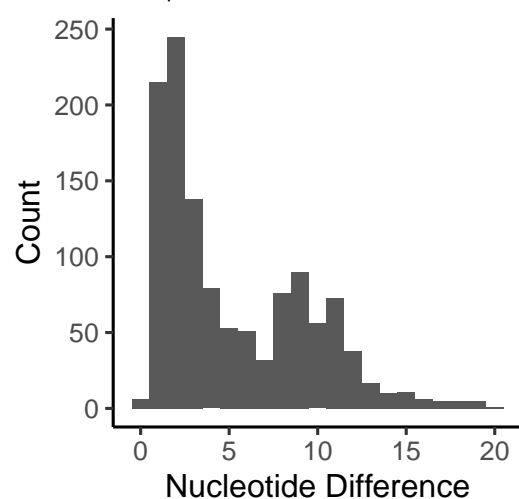
IGHV4-31*03_04

3048 sequences assigned
626 (20.5%) exact matches, in which:
537 unique CDR3
5 unique J



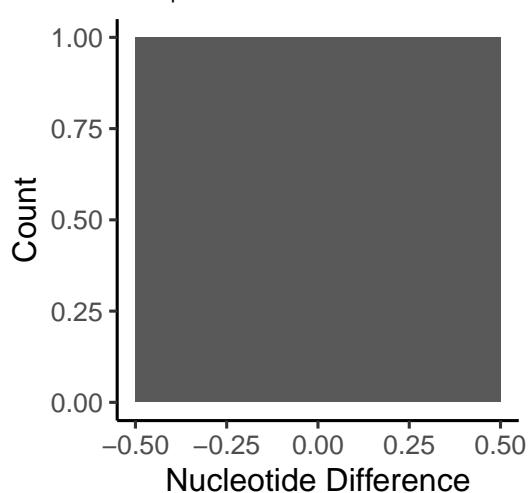
IGHV4-39*07

1230 sequences assigned
6 (0.5%) exact matches, in which:
6 unique CDR3
4 unique J



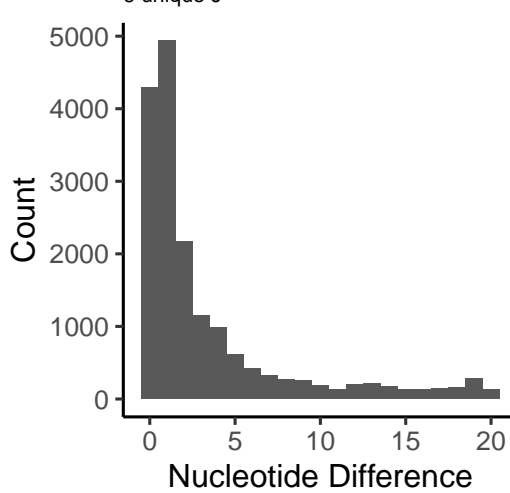
IGHV4-30-4*07

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



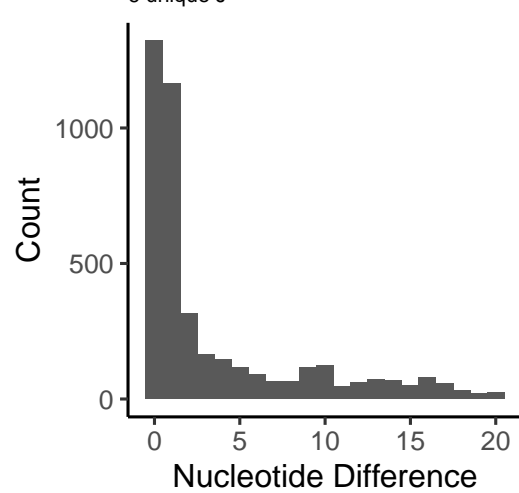
IGHV4-34*01_02

19218 sequences assigned
4297 (22.4%) exact matches, in which:
3247 unique CDR3
6 unique J



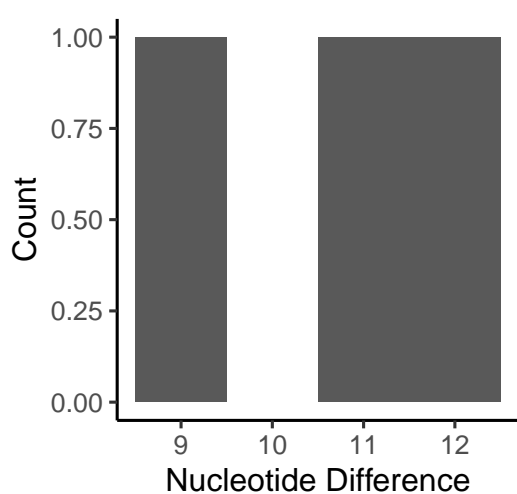
IGHV4-39*01_05

5308 sequences assigned
1322 (24.9%) exact matches, in which:
1067 unique CDR3
6 unique J



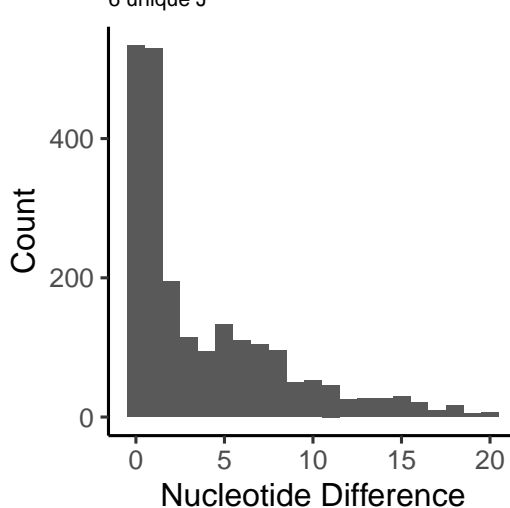
IGHV4-30-4*08

11 sequences assigned
No exact matches.



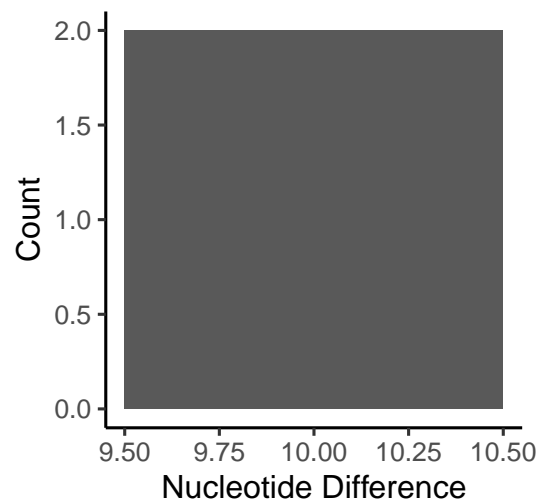
IGHV4-38-2*02_A70G

3251 sequences assigned
534 (16.4%) exact matches, in which:
412 unique CDR3
6 unique J



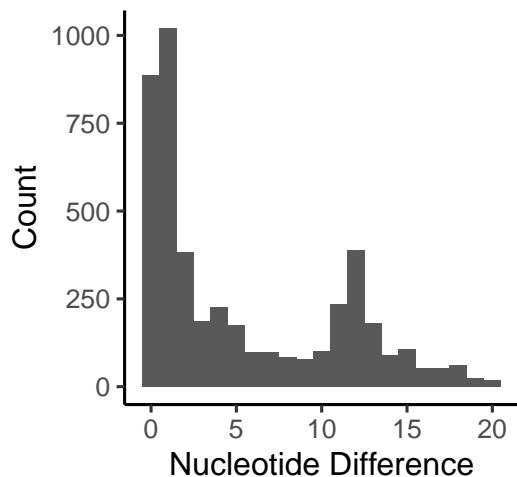
IGHV4-55*02_04_08

3 sequences assigned
No exact matches.



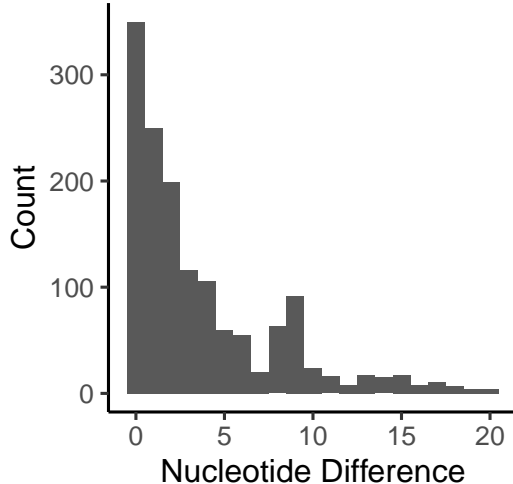
IGHV4-59*08

4719 sequences assigned
888 (18.8%) exact matches, in which:
722 unique CDR3
6 unique J



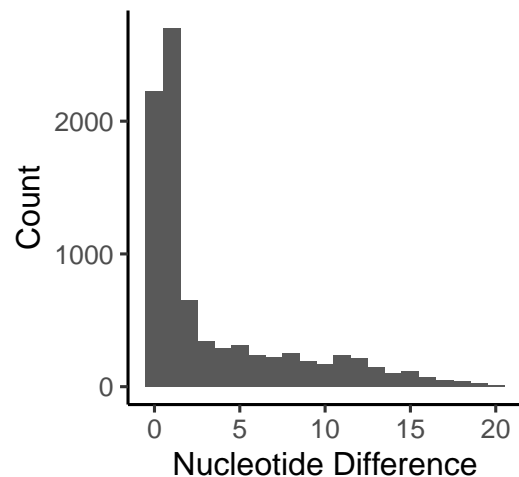
IGHV4-61*01

1577 sequences assigned
350 (22.2%) exact matches, in which:
310 unique CDR3
5 unique J



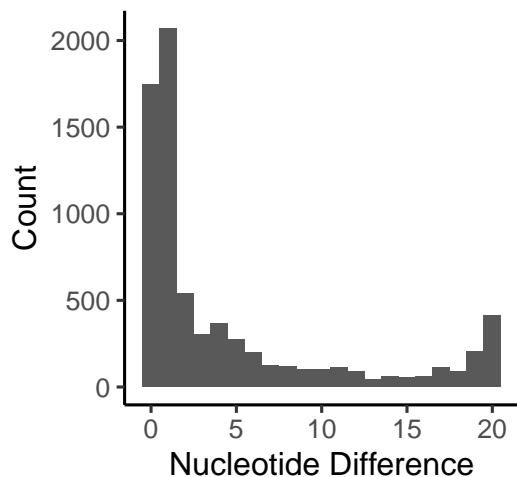
IGHV5-51*01_03

10037 sequences assigned
2229 (22.2%) exact matches, in which:
1362 unique CDR3
6 unique J



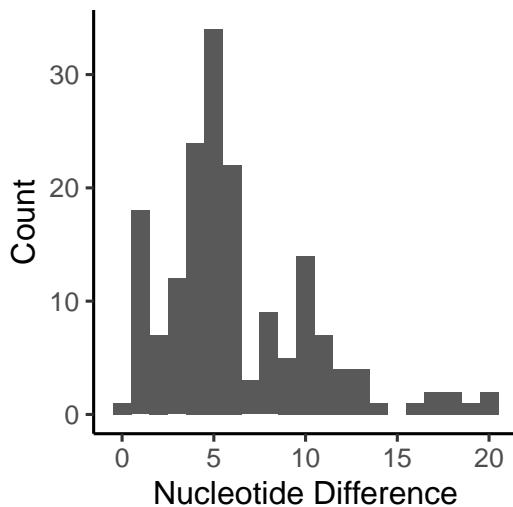
IGHV4-59*01_07

9126 sequences assigned
1746 (19.1%) exact matches, in which:
1458 unique CDR3
6 unique J



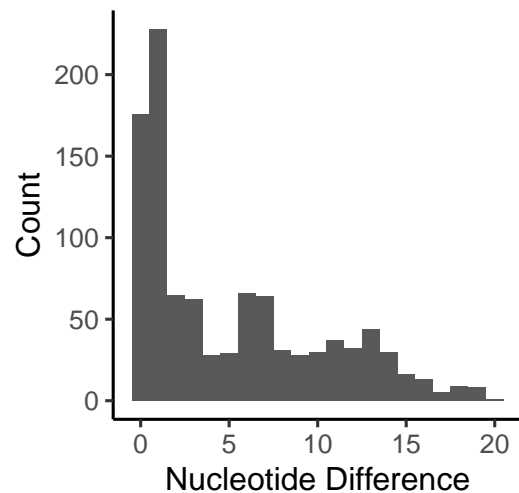
IGHV4-61*08

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



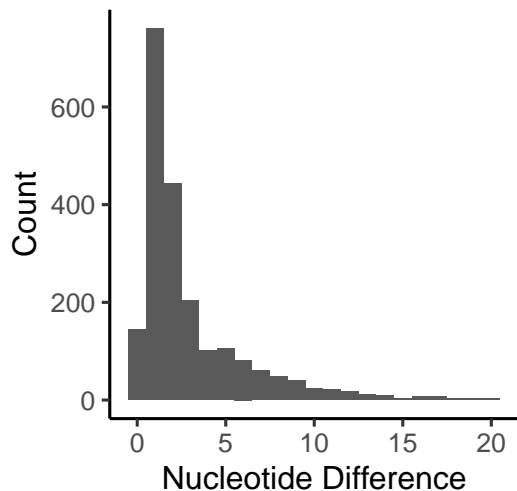
IGHV6-1*01_02

1075 sequences assigned
176 (16.4%) exact matches, in which:
143 unique CDR3
5 unique J



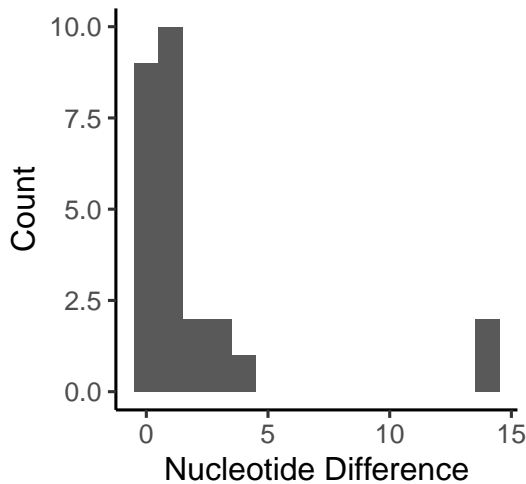
IGHV4-59*12

3626 sequences assigned
145 (4%) exact matches, in which:
142 unique CDR3
6 unique J



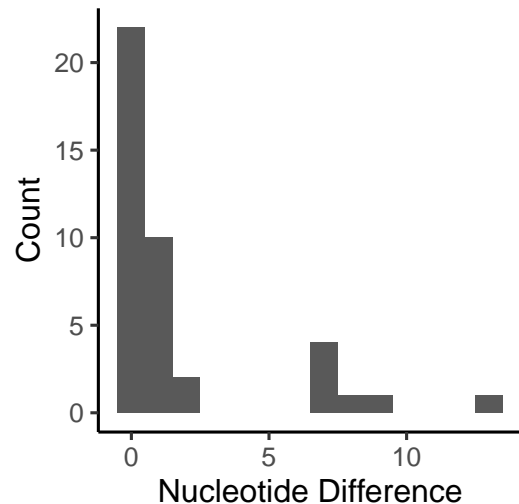
IGHV5-10-1*01_03

26 sequences assigned
9 (34.6%) exact matches, in which:
7 unique CDR3
4 unique J



IGHV7-4-1*01

41 sequences assigned
22 (53.7%) exact matches, in which:
18 unique CDR3
5 unique J





Novel sequence(s)IGHV1-69*01_12_13_G238AIGHV3-48*03_T303G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.