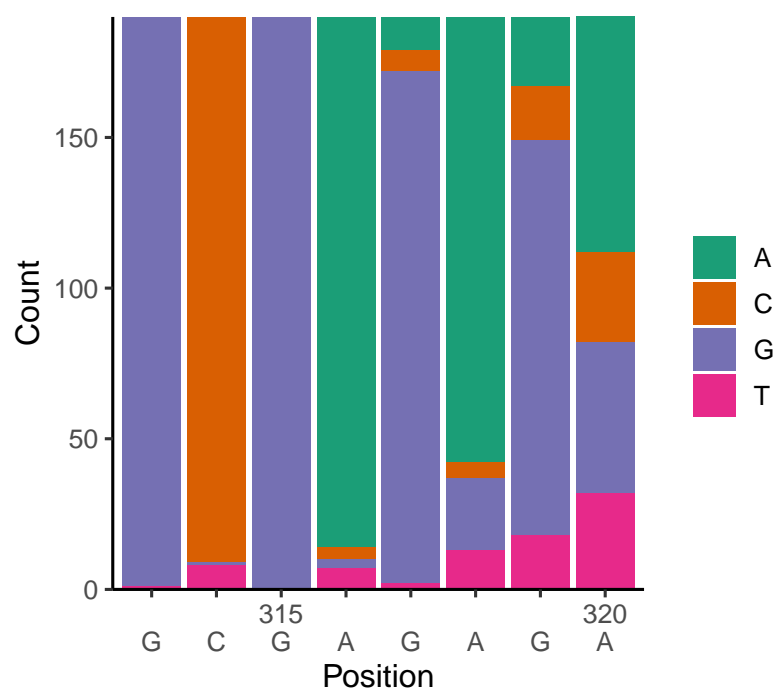


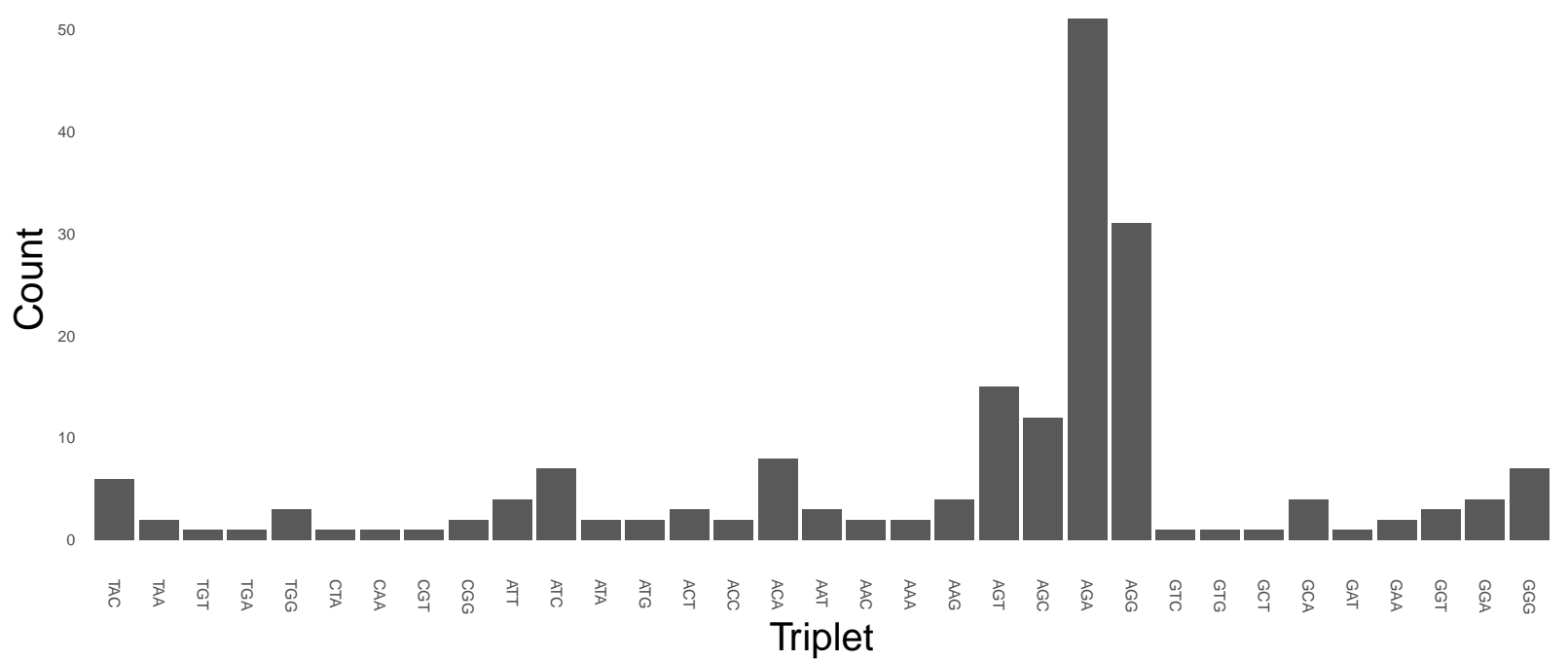
Gene IGHV6-1*01_02_A315G



Gene IGHV6-1*01_02_A315G

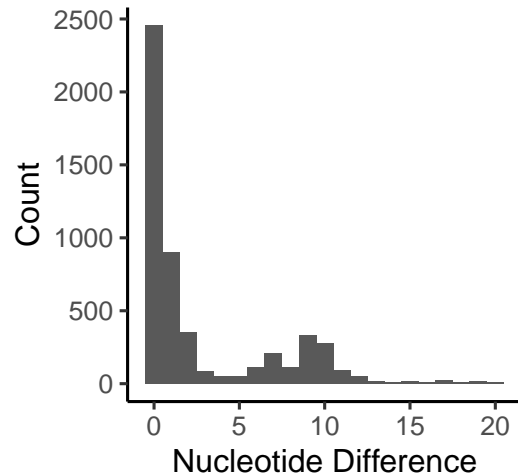


IGHV6-1*01_02_A315G- Final 3 nucleotides as a triplet



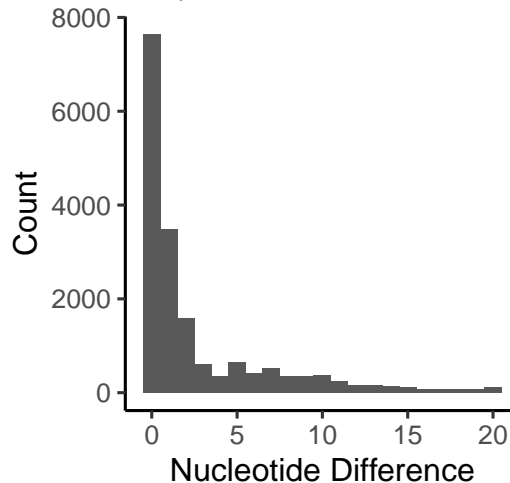
IGHV1-2*04

5257 sequences assigned
2456 (46.7%) exact matches, in which:
2341 unique CDR3
6 unique J



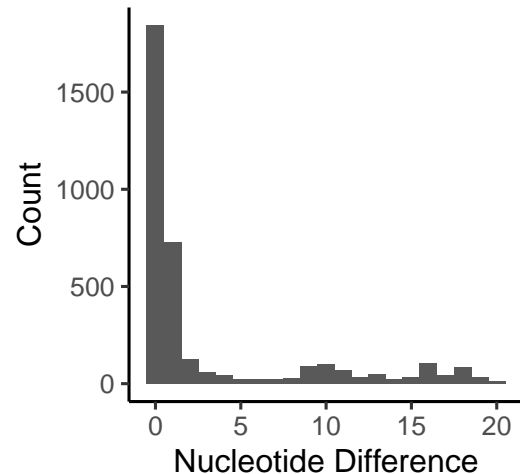
IGHV1-8*01

19355 sequences assigned
7638 (39.5%) exact matches, in which:
7232 unique CDR3
6 unique J



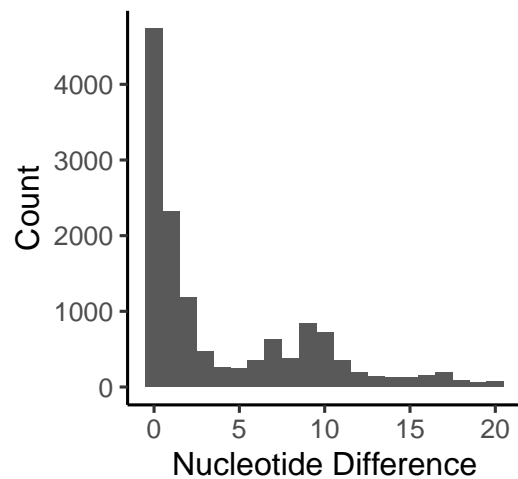
IGHV1-24*01

3608 sequences assigned
1843 (51.1%) exact matches, in which:
1711 unique CDR3
6 unique J



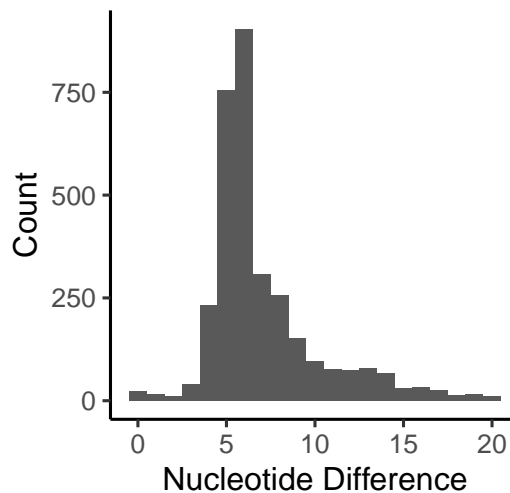
IGHV1-2*06

14429 sequences assigned
4735 (32.8%) exact matches, in which:
4472 unique CDR3
6 unique J



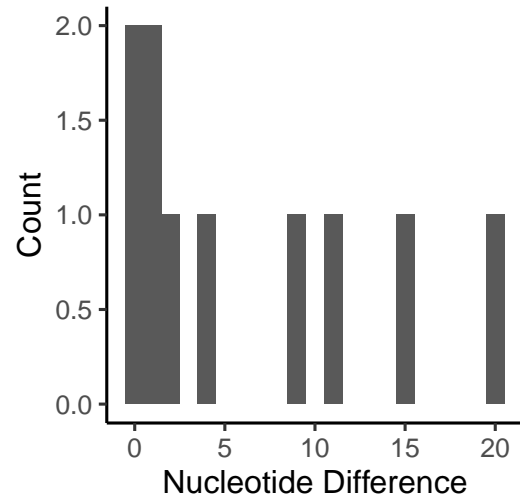
IGHV1-8*02

3426 sequences assigned
24 (0.7%) exact matches, in which:
24 unique CDR3
4 unique J



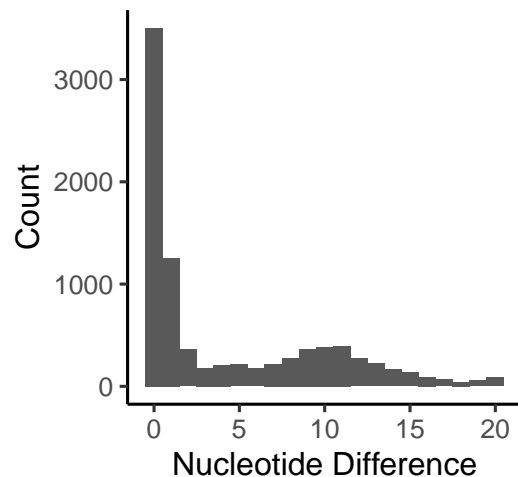
IGHV1-45*02

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



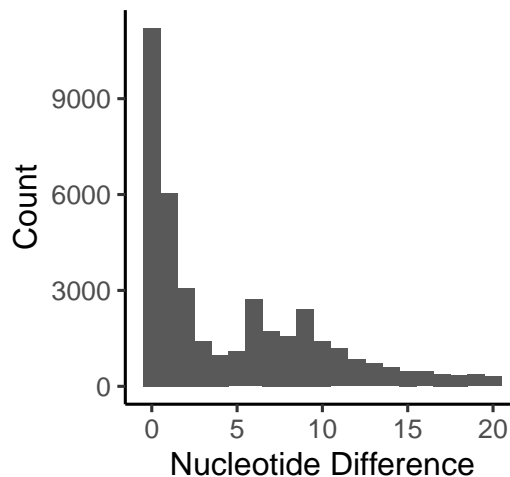
IGHV1-3*01_05

9239 sequences assigned
3504 (37.9%) exact matches, in which:
3269 unique CDR3
6 unique J



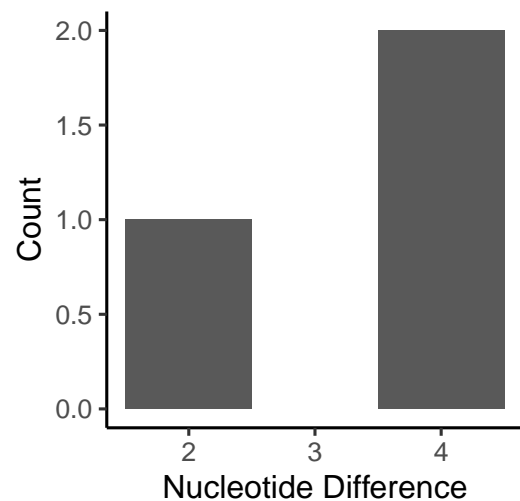
IGHV1-18*01

41796 sequences assigned
11209 (26.8%) exact matches, in which:
10378 unique CDR3
6 unique J



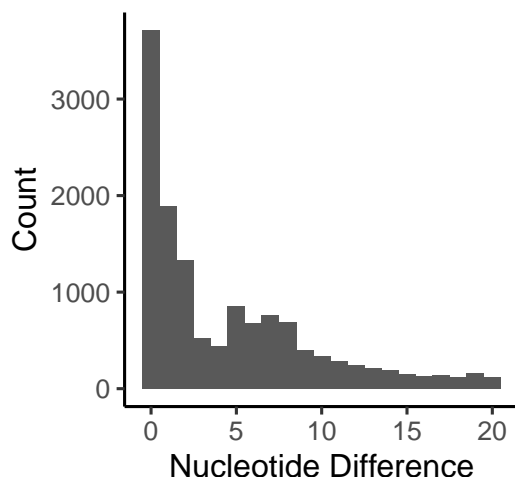
IGHV1-45*03

3 sequences assigned
No exact matches.



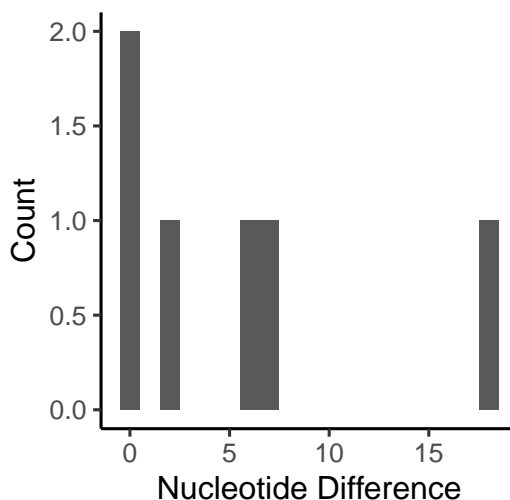
IGHV1-46*01

14194 sequences assigned
3711 (26.1%) exact matches, in which:
3544 unique CDR3
6 unique J



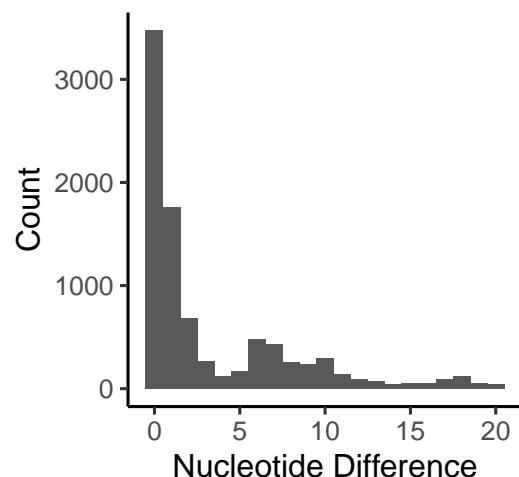
IGHV1-68*01

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



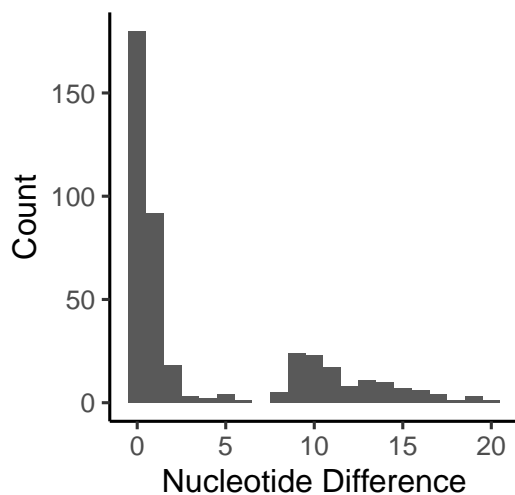
IGHV1-69*04_09

9747 sequences assigned
3475 (35.7%) exact matches, in which:
3355 unique CDR3
6 unique J



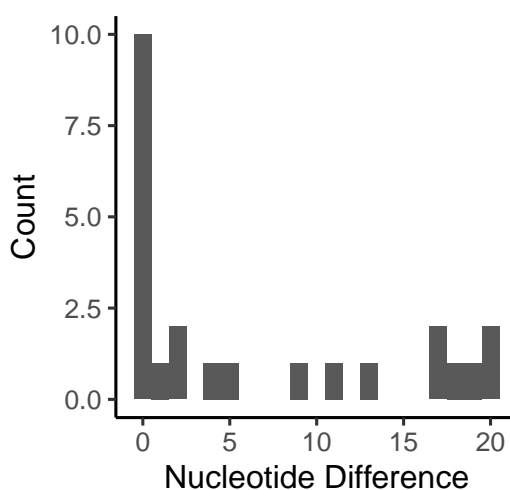
IGHV1-58*02

420 sequences assigned
180 (42.9%) exact matches, in which:
166 unique CDR3
5 unique J



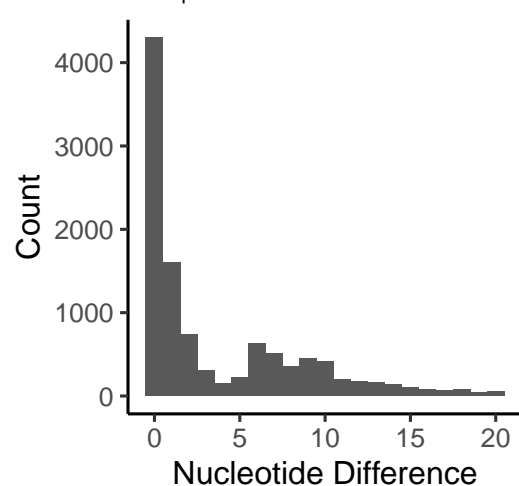
IGHV1-69-2*01

26 sequences assigned
10 (38.5%) exact matches, in which:
10 unique CDR3
4 unique J



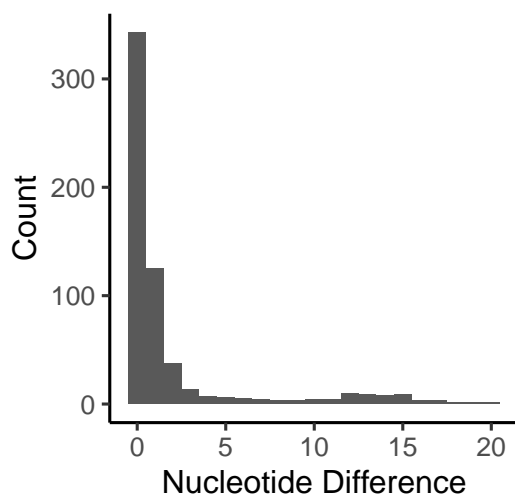
IGHV1-69*06_14

11155 sequences assigned
4299 (38.5%) exact matches, in which:
4169 unique CDR3
6 unique J



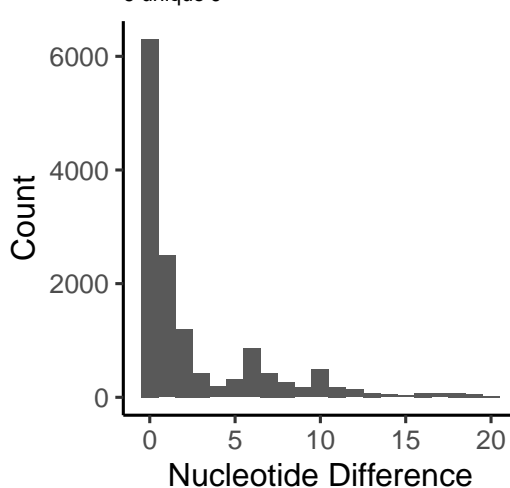
IGHV1-58*01_03

624 sequences assigned
343 (55%) exact matches, in which:
321 unique CDR3
6 unique J



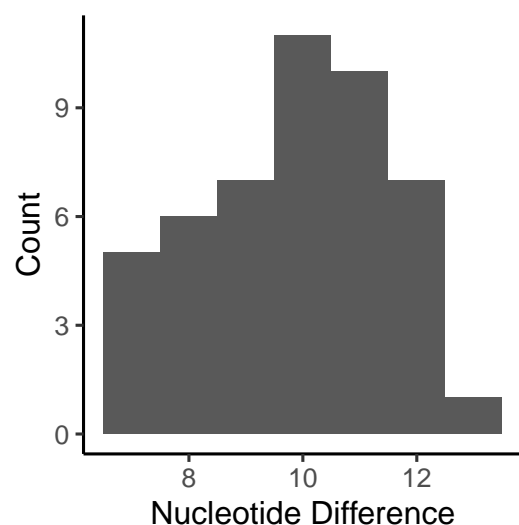
IGHV1-69*01_12_13

14321 sequences assigned
6304 (44%) exact matches, in which:
6082 unique CDR3
6 unique J



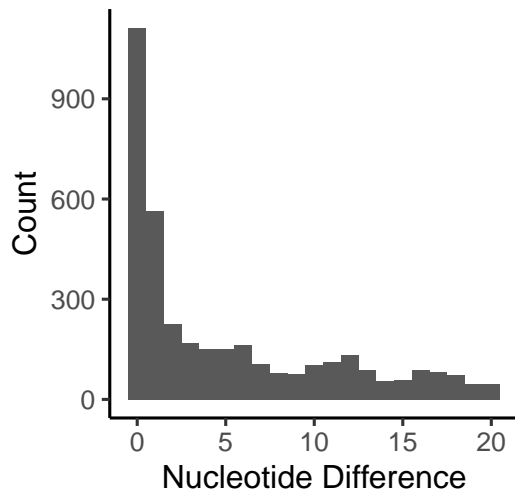
IGHV1-NL1*01

47 sequences assigned
No exact matches.



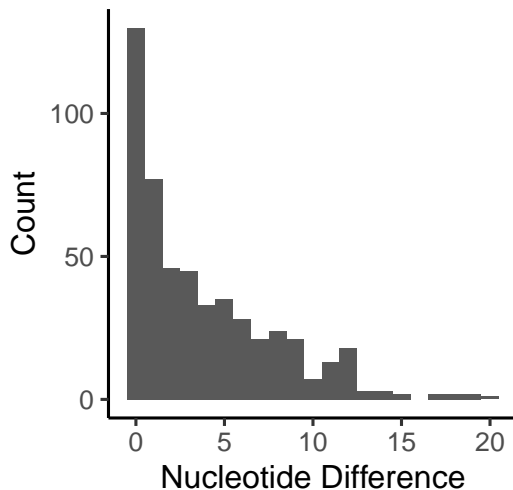
IGHV2-5*02

4010 sequences assigned
1113 (27.8%) exact matches, in which:
1049 unique CDR3
6 unique J



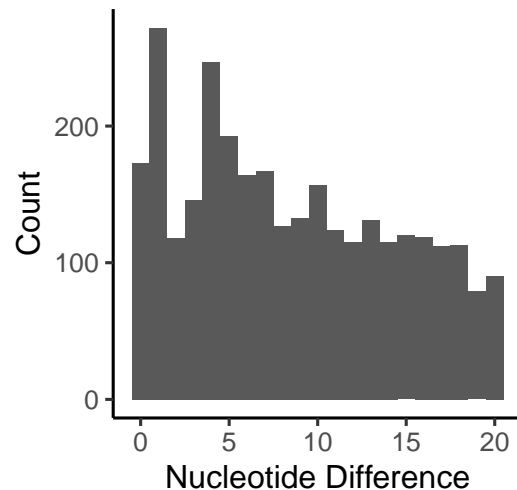
IGHV2-70*04

518 sequences assigned
130 (25.1%) exact matches, in which:
124 unique CDR3
5 unique J



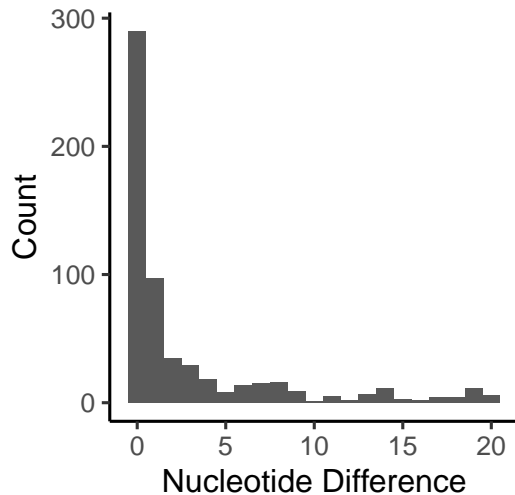
IGHV3-7*03

3425 sequences assigned
173 (5.1%) exact matches, in which:
170 unique CDR3
6 unique J



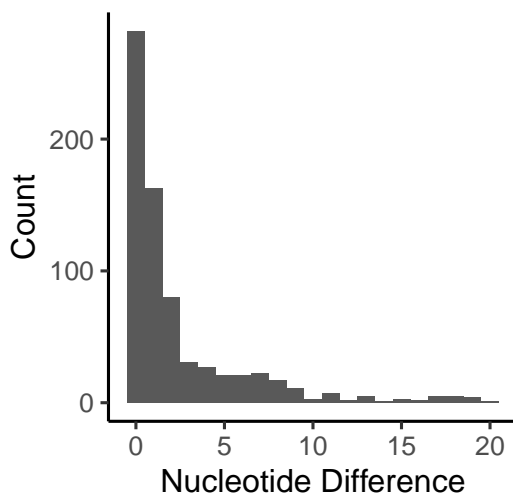
IGHV2-26*01

592 sequences assigned
290 (49%) exact matches, in which:
264 unique CDR3
5 unique J



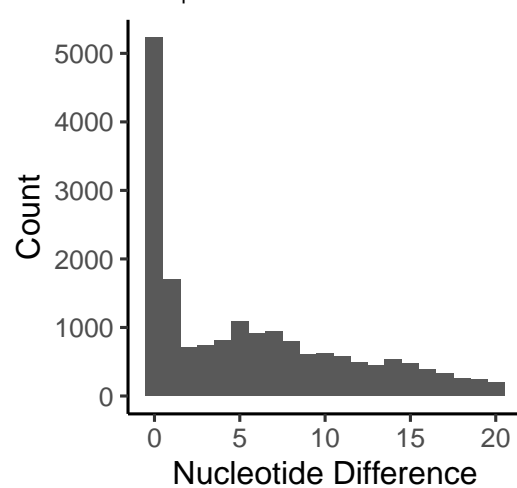
IGHV2-70*11_15

725 sequences assigned
282 (38.9%) exact matches, in which:
263 unique CDR3
6 unique J



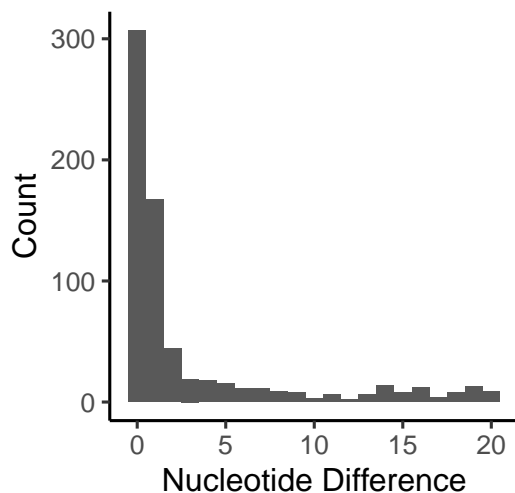
IGHV3-9*01

19578 sequences assigned
5228 (26.7%) exact matches, in which:
3983 unique CDR3
6 unique J



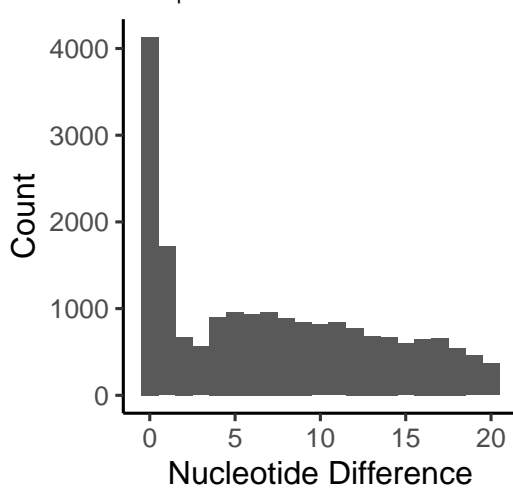
IGHV2-70*01

763 sequences assigned
307 (40.2%) exact matches, in which:
292 unique CDR3
5 unique J



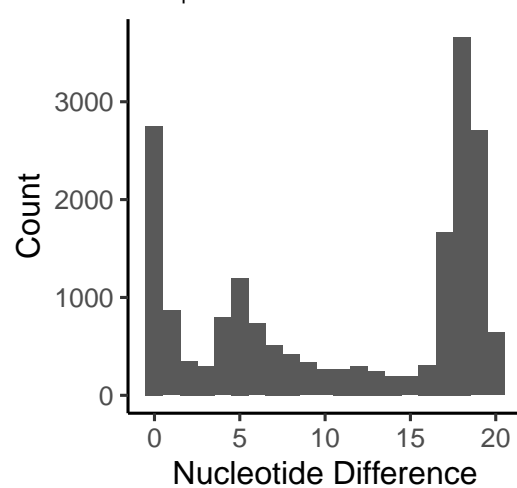
IGHV3-7*01

21910 sequences assigned
4132 (18.9%) exact matches, in which:
3363 unique CDR3
6 unique J



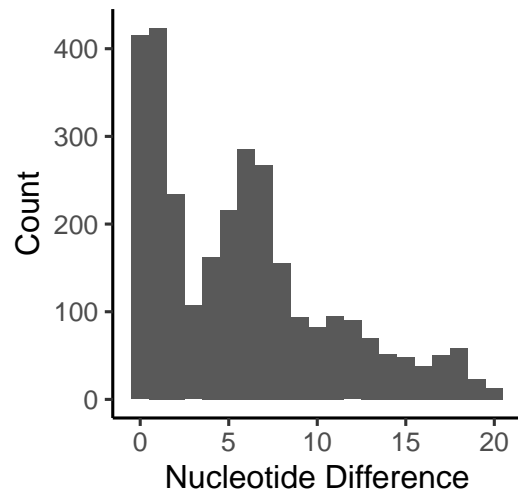
IGHV3-11*01

19644 sequences assigned
2754 (14%) exact matches, in which:
2237 unique CDR3
6 unique J



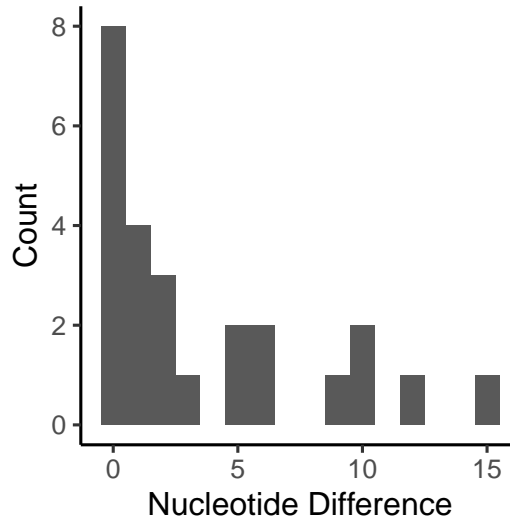
IGHV3-11*04

3083 sequences assigned
415 (13.5%) exact matches, in which:
408 unique CDR3
6 unique J



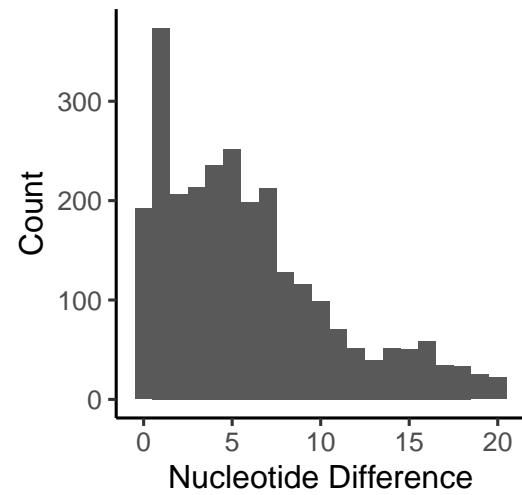
IGHV3-19*01

25 sequences assigned
8 (32%) exact matches, in which:
8 unique CDR3
3 unique J



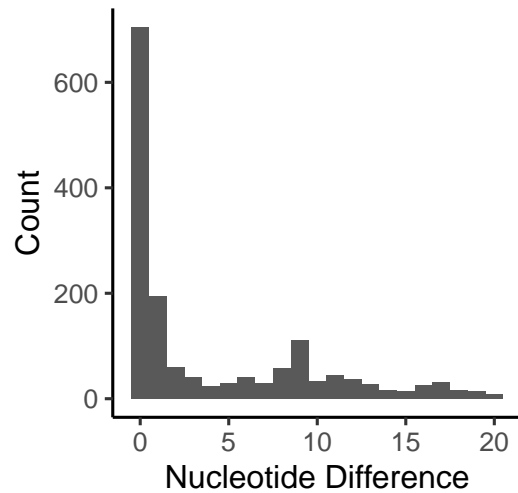
IGHV3-21*04

2792 sequences assigned
192 (6.9%) exact matches, in which:
189 unique CDR3
6 unique J



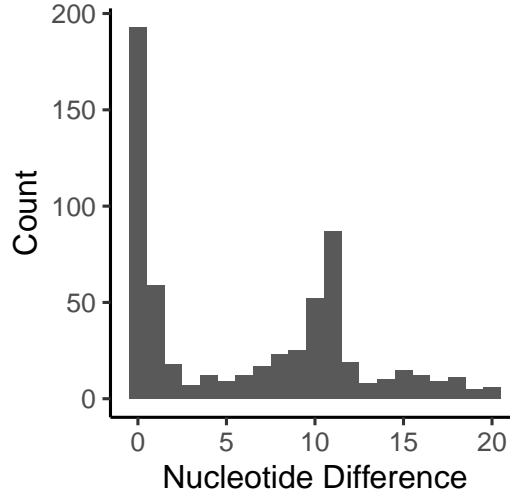
IGHV3-13*01

1630 sequences assigned
705 (43.3%) exact matches, in which:
526 unique CDR3
6 unique J



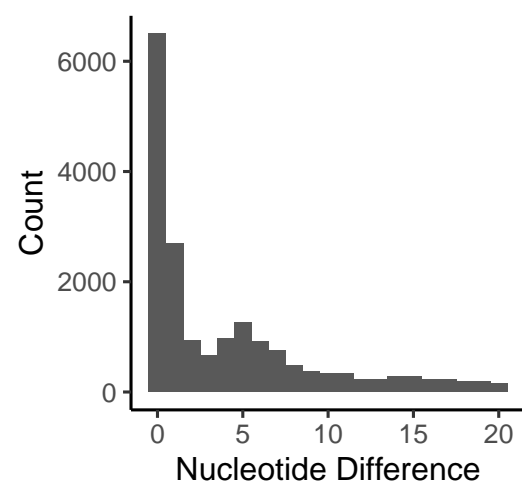
IGHV3-20*01_02

622 sequences assigned
193 (31%) exact matches, in which:
151 unique CDR3
5 unique J



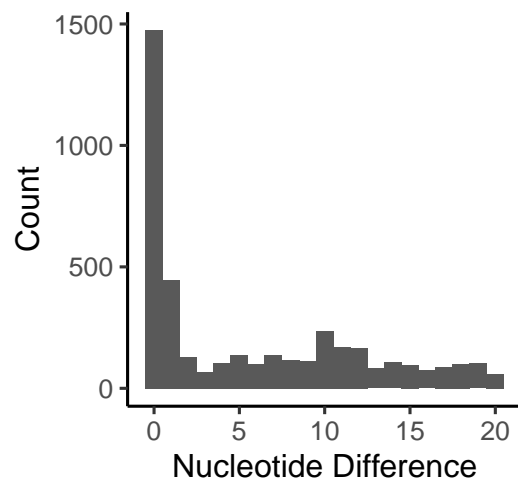
IGHV3-21*01_02

19248 sequences assigned
6500 (33.8%) exact matches, in which:
5155 unique CDR3
6 unique J



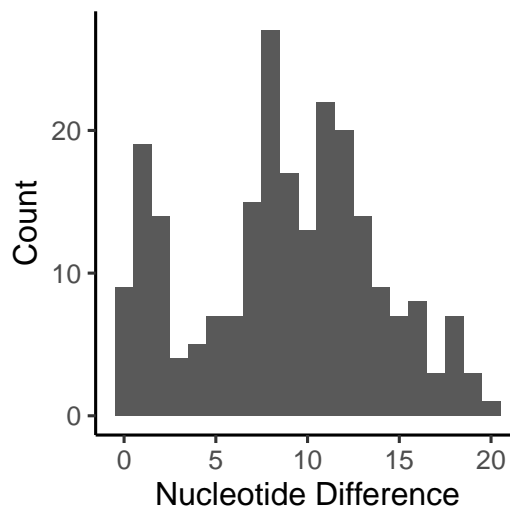
IGHV3-15*01_02

4663 sequences assigned
1475 (31.6%) exact matches, in which:
1208 unique CDR3
6 unique J



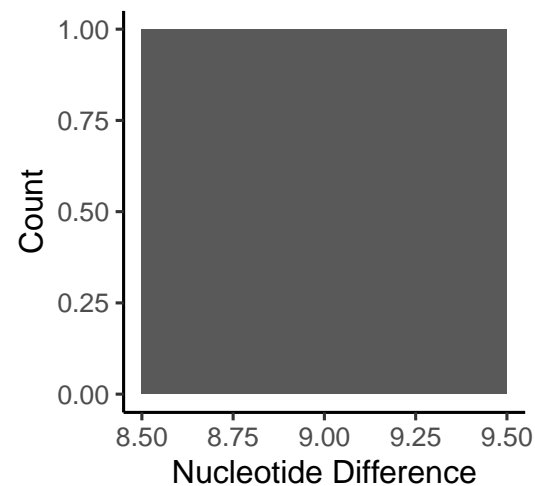
IGHV3-20*03_04

245 sequences assigned
9 (3.7%) exact matches, in which:
8 unique CDR3
5 unique J



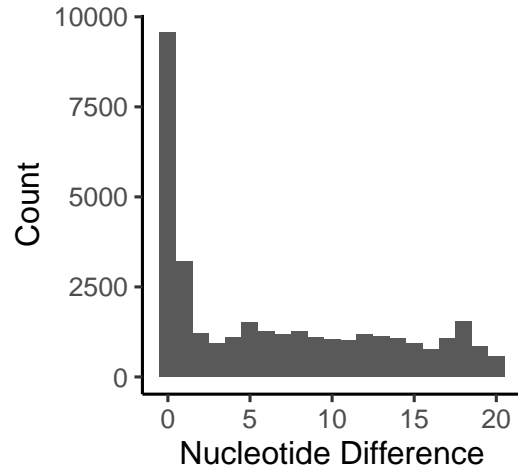
IGHV3-22*01_02

1 sequences assigned
No exact matches.



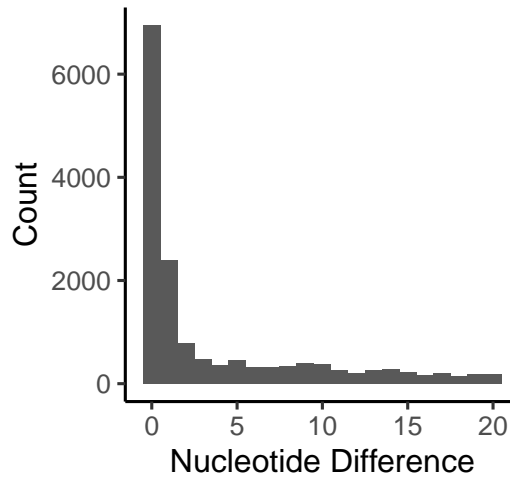
IGHV3-23*01_04

37082 sequences assigned
9574 (25.8%) exact matches, in which:
7232 unique CDR3
6 unique J



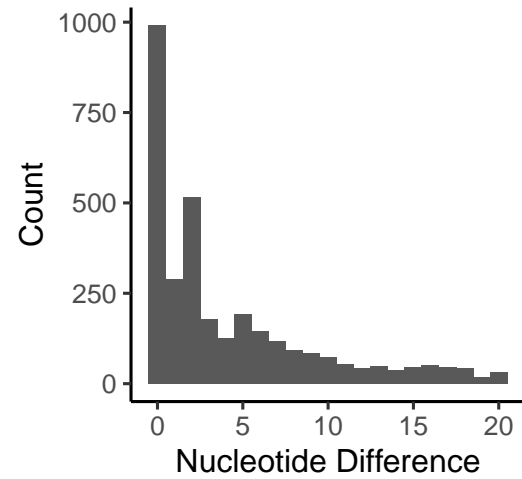
IGHV3-30*18

16067 sequences assigned
6945 (43.2%) exact matches, in which:
5463 unique CDR3
6 unique J



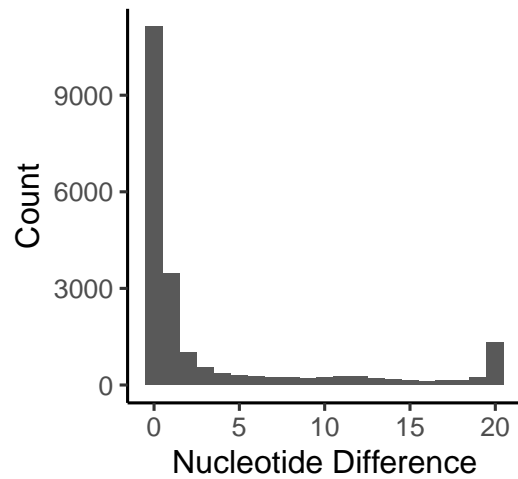
IGHV3-33*08

3533 sequences assigned
991 (28%) exact matches, in which:
925 unique CDR3
6 unique J



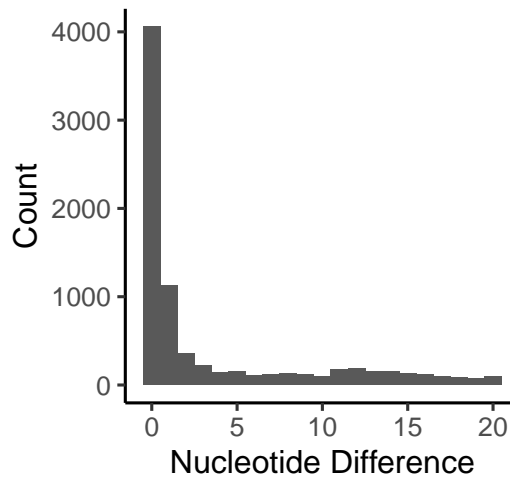
IGHV3-30-3*01

26108 sequences assigned
11127 (42.6%) exact matches, in which:
8779 unique CDR3
6 unique J



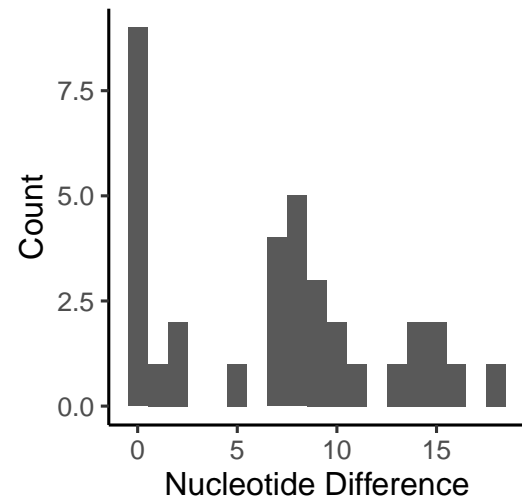
IGHV3-33*01

8838 sequences assigned
4058 (45.9%) exact matches, in which:
3396 unique CDR3
6 unique J



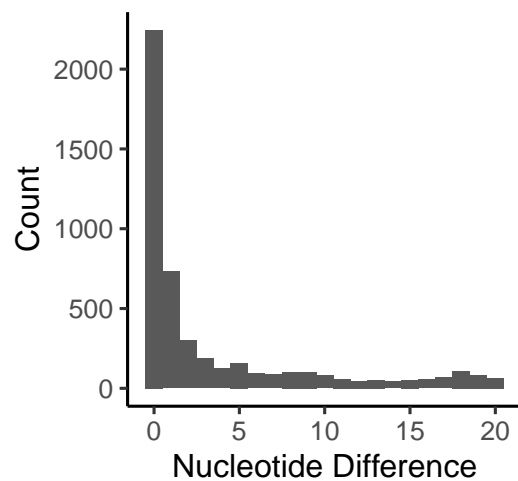
IGHV3-35*01

35 sequences assigned
9 (25.7%) exact matches, in which:
8 unique CDR3
4 unique J



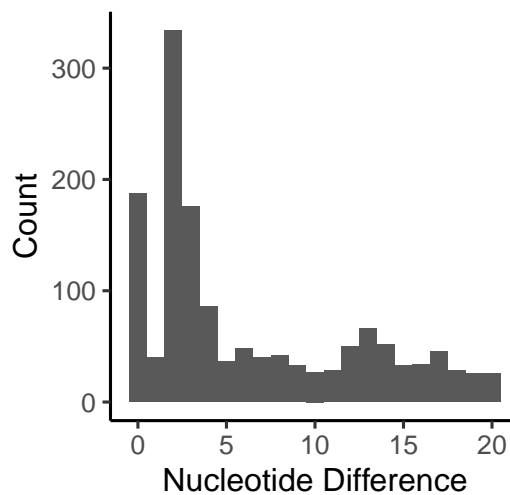
IGHV3-30*03

5122 sequences assigned
2245 (43.8%) exact matches, in which:
2123 unique CDR3
6 unique J



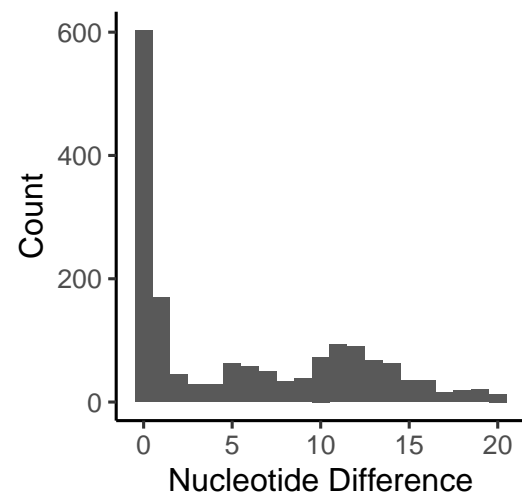
IGHV3-33*06

1695 sequences assigned
187 (11%) exact matches, in which:
186 unique CDR3
6 unique J



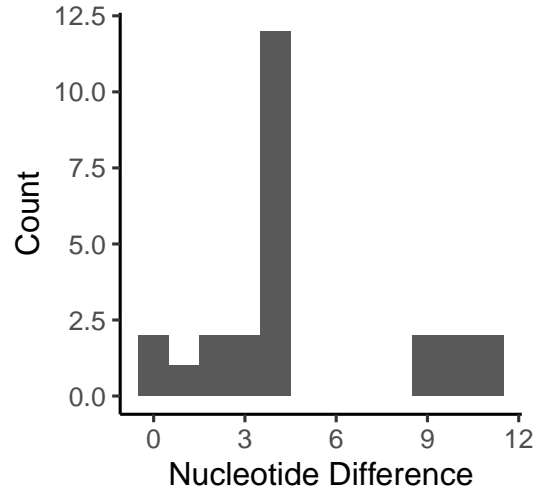
IGHV3-43*02

1945 sequences assigned
603 (31%) exact matches, in which:
491 unique CDR3
6 unique J



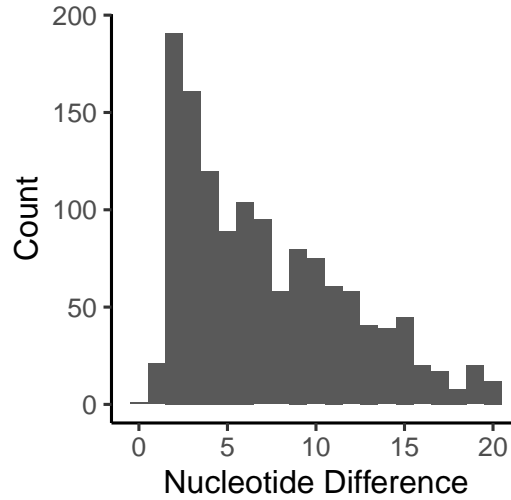
IGHV3-47*01

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



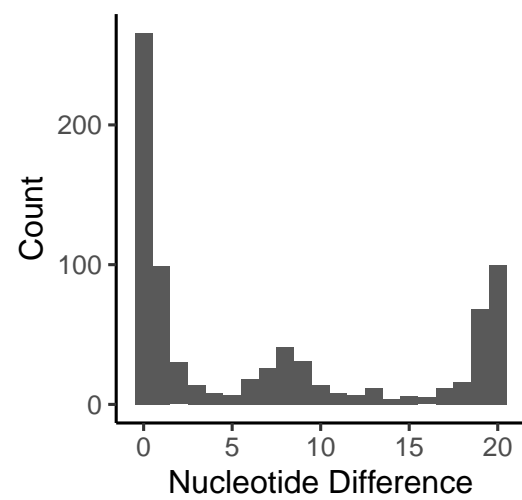
IGHV3-48*04

1404 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



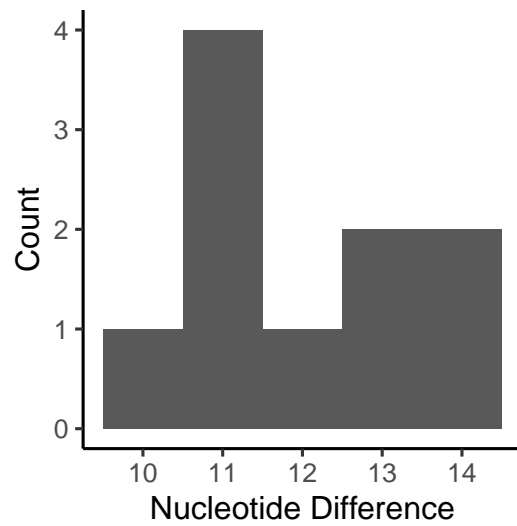
IGHV3-53*04

938 sequences assigned
266 (28.4%) exact matches, in which:
227 unique CDR3
6 unique J



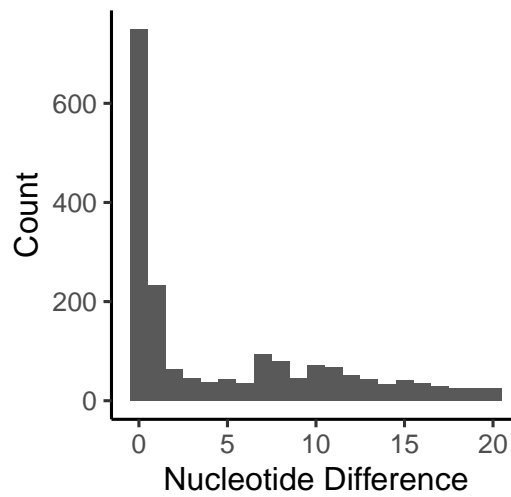
IGHV3-47*02

10 sequences assigned
No exact matches.



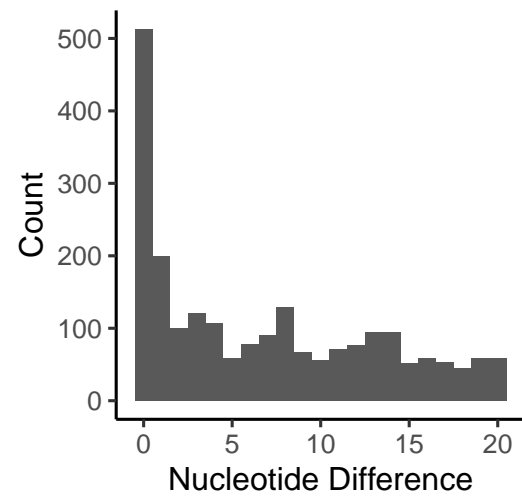
IGHV3-49*04

2045 sequences assigned
750 (36.7%) exact matches, in which:
634 unique CDR3
6 unique J



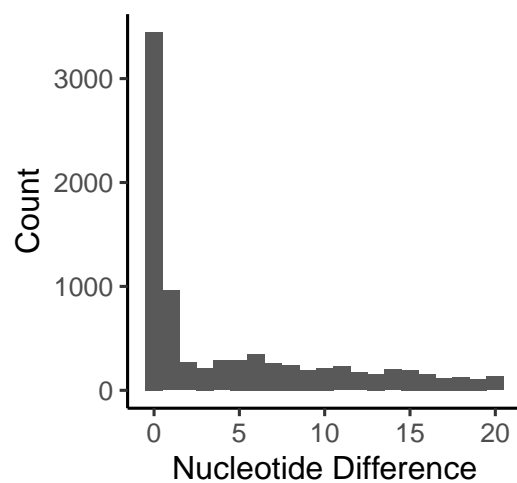
IGHV3-53*01_02

2902 sequences assigned
513 (17.7%) exact matches, in which:
426 unique CDR3
6 unique J



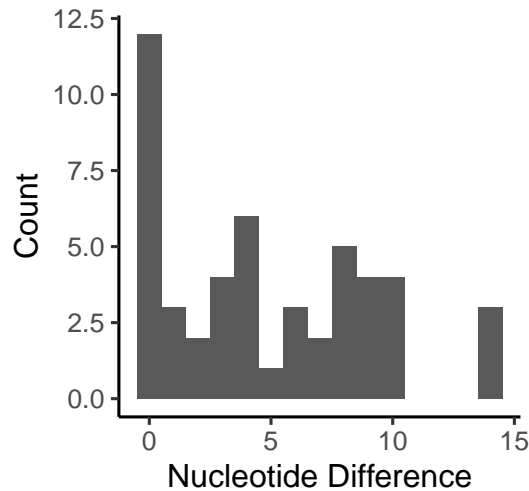
IGHV3-48*03

9075 sequences assigned
3448 (38%) exact matches, in which:
2804 unique CDR3
6 unique J



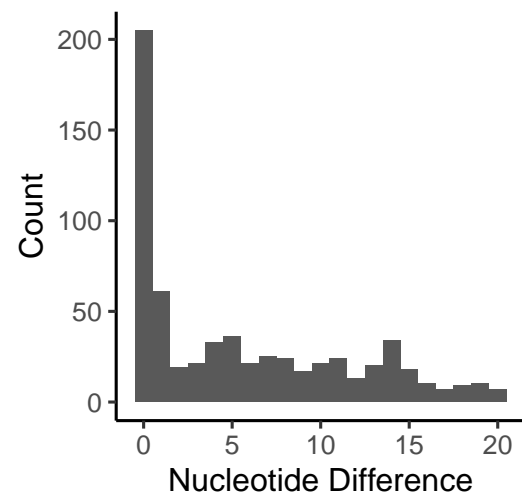
IGHV3-52*01_03

50 sequences assigned
12 (24%) exact matches, in which:
8 unique CDR3
4 unique J



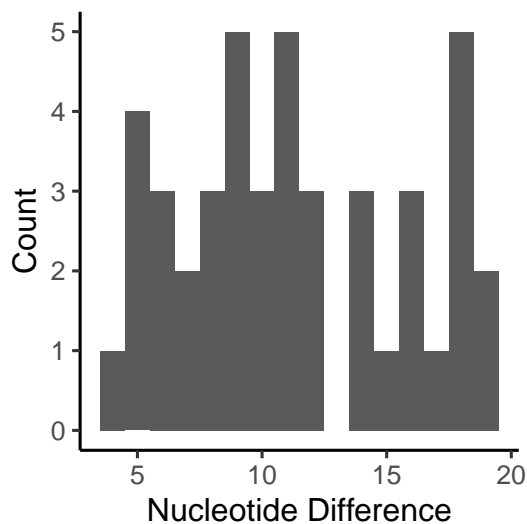
IGHV3-64*01

890 sequences assigned
205 (23%) exact matches, in which:
170 unique CDR3
6 unique J



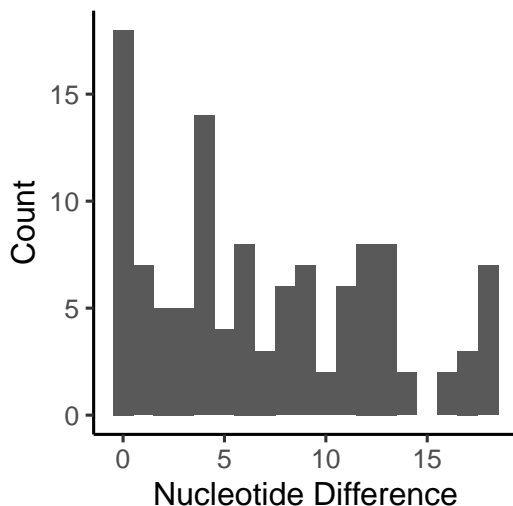
IGHV3-64*04

66 sequences assigned
No exact matches.



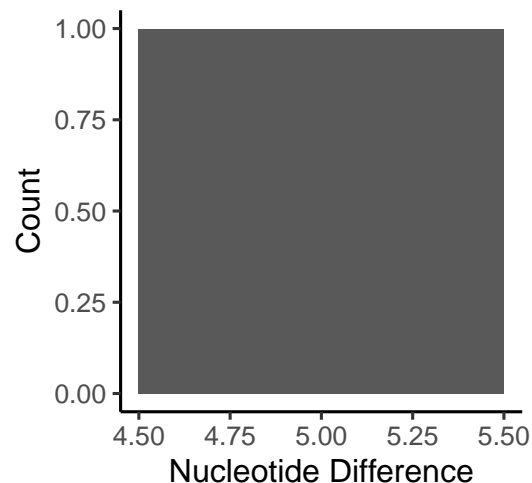
IGHV3-69-1*01

128 sequences assigned
18 (14.1%) exact matches, in which:
17 unique CDR3
4 unique J



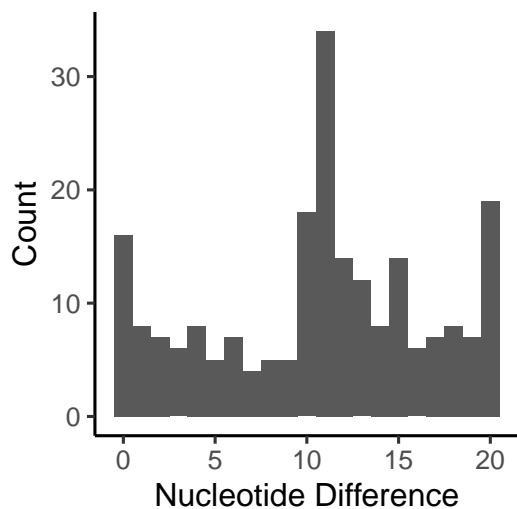
IGHV3-71*03

1 sequences assigned
No exact matches.



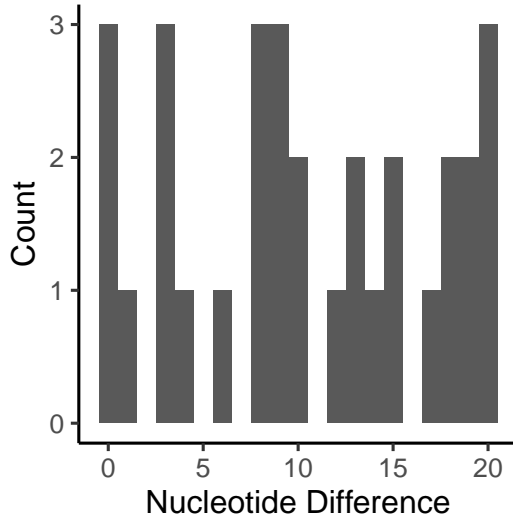
IGHV3-64*02_07

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



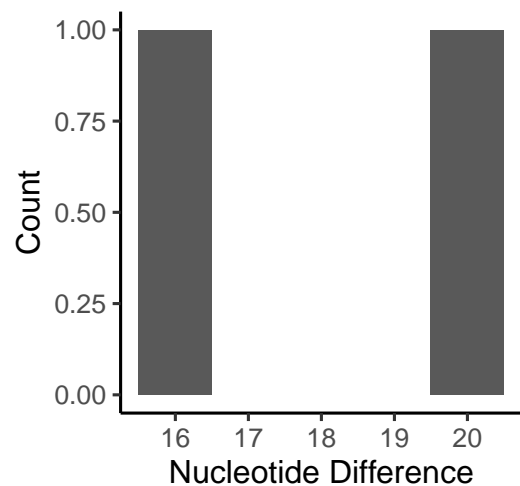
IGHV3-69-1*02

72 sequences assigned
3 (4.2%) exact matches, in which:
3 unique CDR3
2 unique J



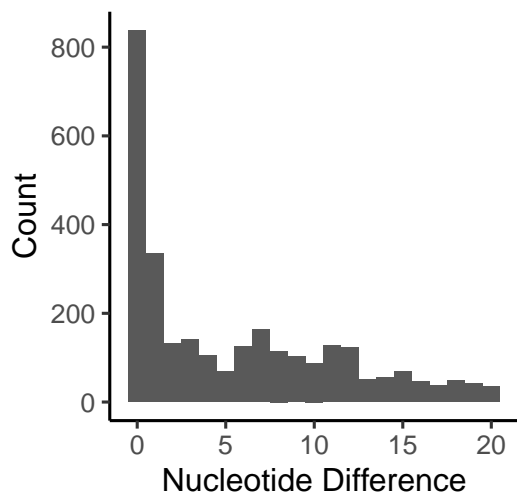
IGHV3-71*01_04

4 sequences assigned
No exact matches.



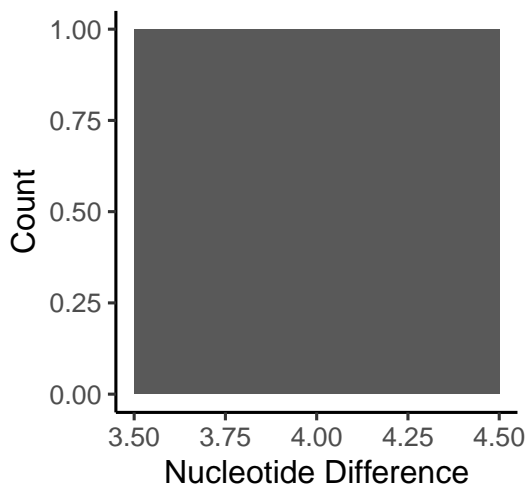
IGHV3-66*01

3541 sequences assigned
838 (23.7%) exact matches, in which:
693 unique CDR3
6 unique J



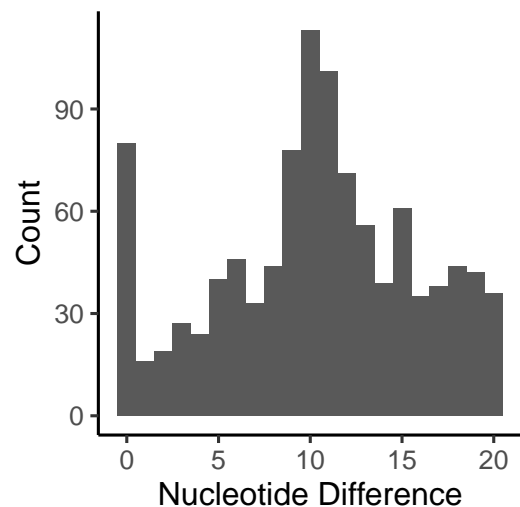
IGHV3-71*02

1 sequences assigned
No exact matches.



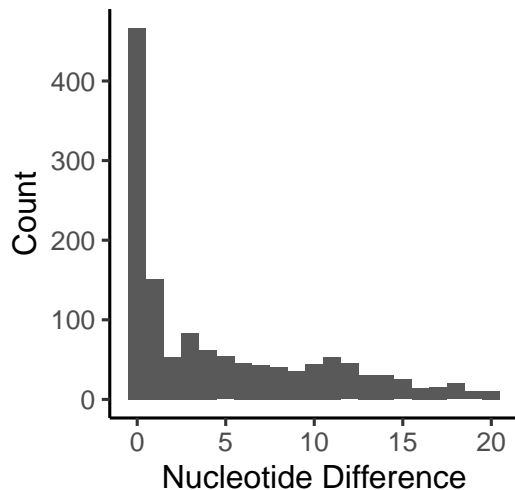
IGHV3-72*01

1394 sequences assigned
80 (5.7%) exact matches, in which:
64 unique CDR3
4 unique J



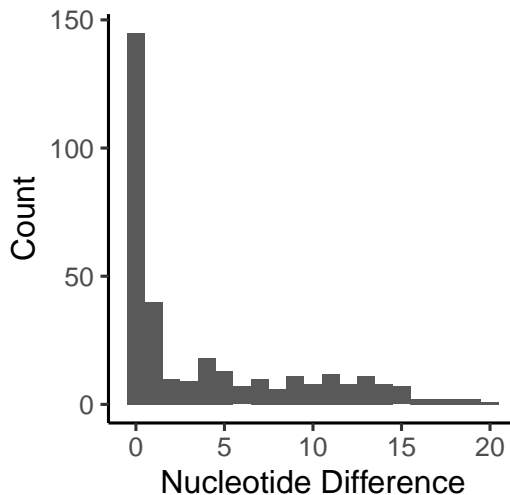
IGHV3-73*01_02

1371 sequences assigned
467 (34.1%) exact matches, in which:
372 unique CDR3
6 unique J



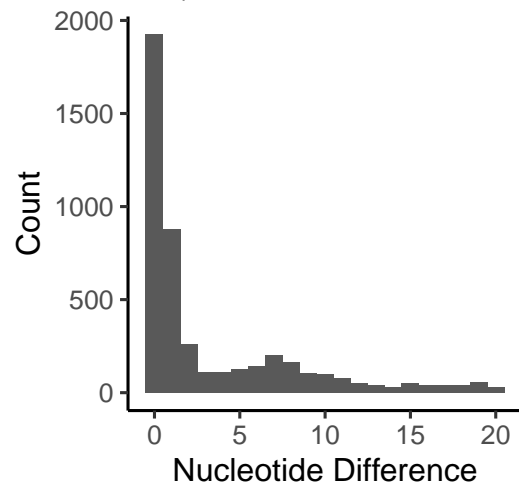
IGHV3-43D*04

334 sequences assigned
145 (43.4%) exact matches, in which:
118 unique CDR3
5 unique J



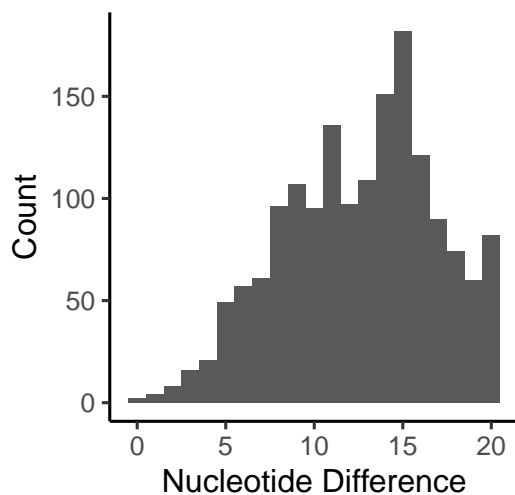
IGHV4-4*02_03

4859 sequences assigned
1925 (39.6%) exact matches, in which:
1790 unique CDR3
6 unique J



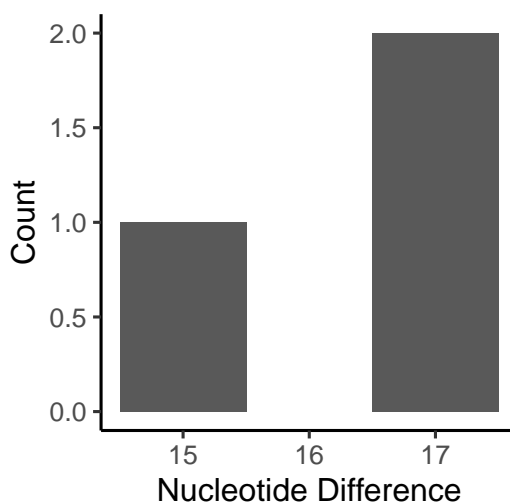
IGHV3-74*03

2251 sequences assigned
2 (0.1%) exact matches, in which:
2 unique CDR3
1 unique J



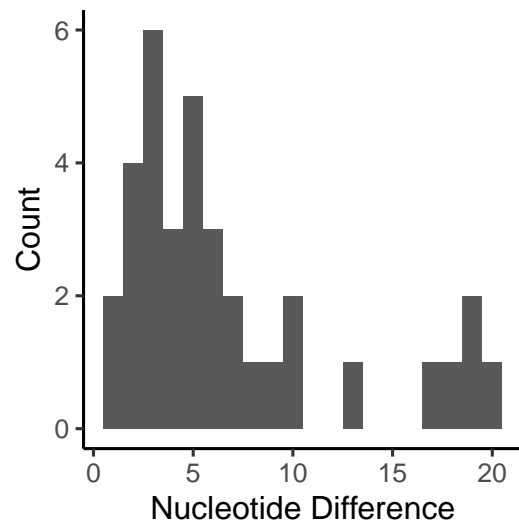
IGHV3-64D*08

9 sequences assigned
No exact matches.



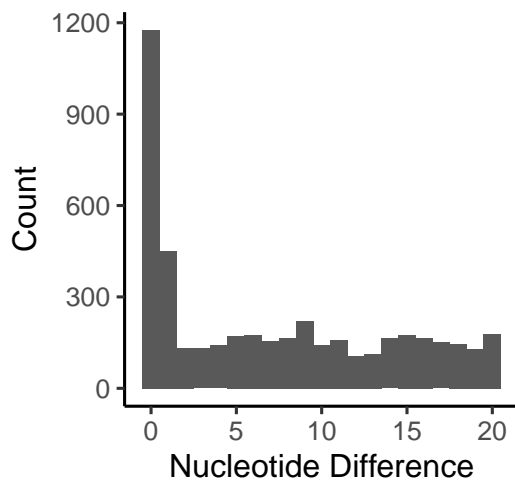
IGHV4-28*03

41 sequences assigned
No exact matches.



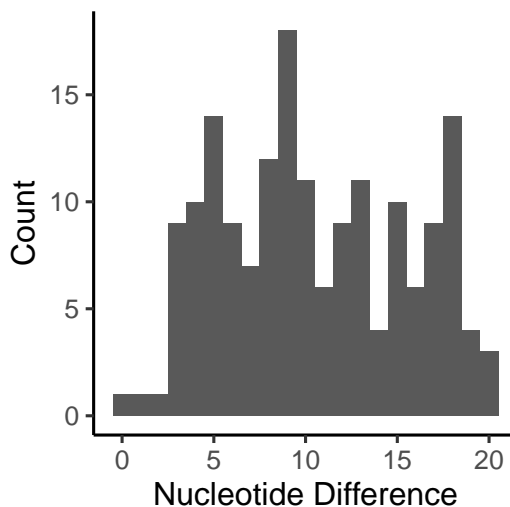
IGHV3-74*01_02

4952 sequences assigned
1176 (23.7%) exact matches, in which:
887 unique CDR3
6 unique J



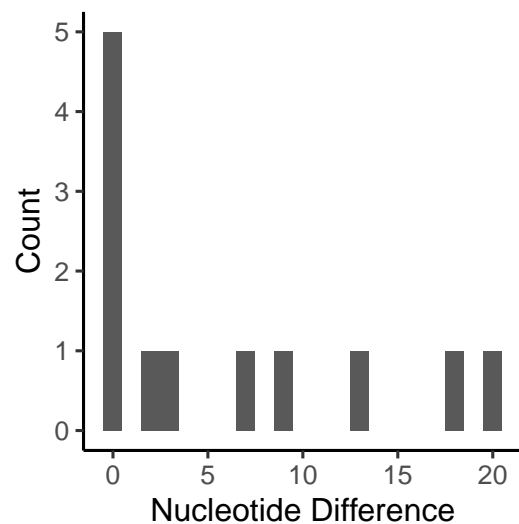
IGHV3-NL1*01

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



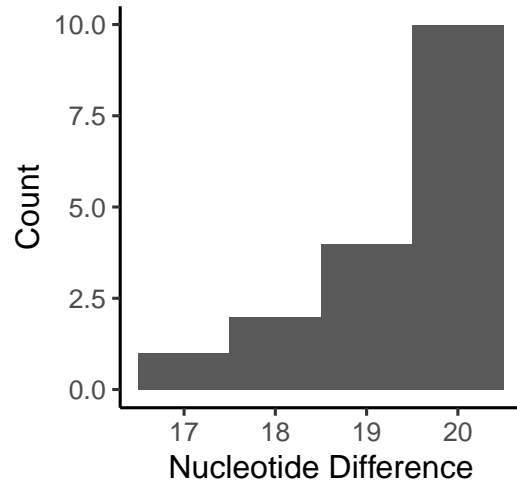
IGHV4-28*01_07

15 sequences assigned
5 (33.3%) exact matches, in which:
5 unique CDR3
3 unique J



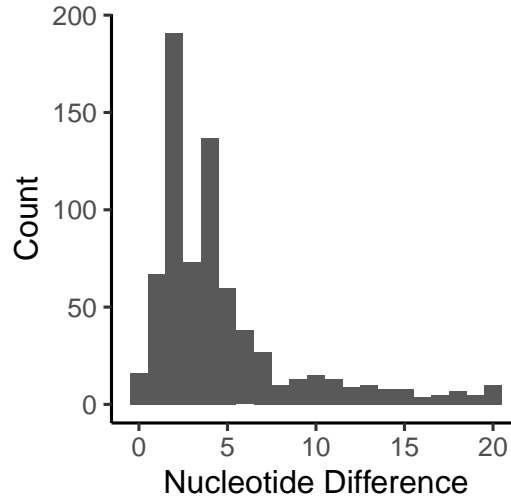
IGHV4-28*02_05

45 sequences assigned
No exact matches.



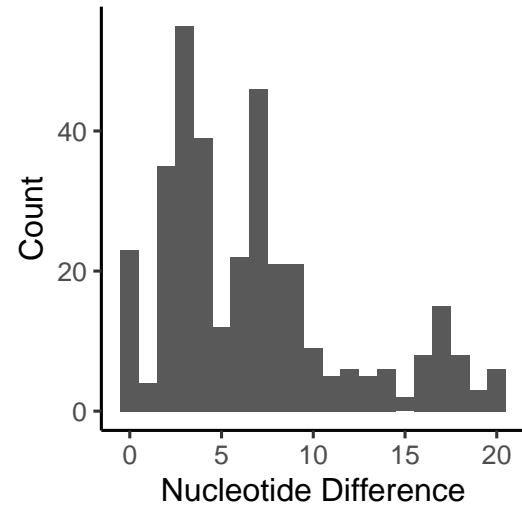
IGHV4-30-4*08

769 sequences assigned
16 (2.1%) exact matches, in which:
16 unique CDR3
4 unique J



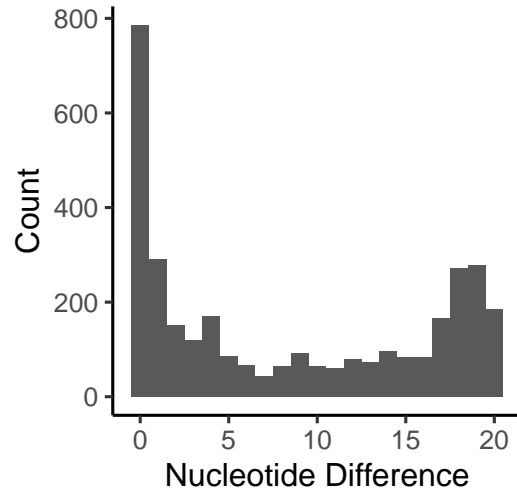
IGHV4-38-2*02

446 sequences assigned
23 (5.2%) exact matches, in which:
23 unique CDR3
5 unique J



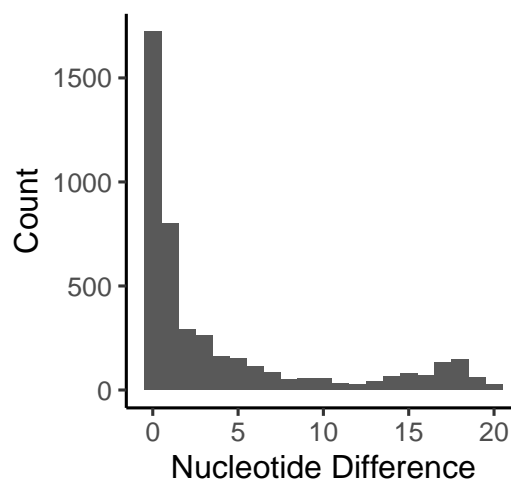
IGHV4-30-2*01

4263 sequences assigned
786 (18.4%) exact matches, in which:
696 unique CDR3
6 unique J



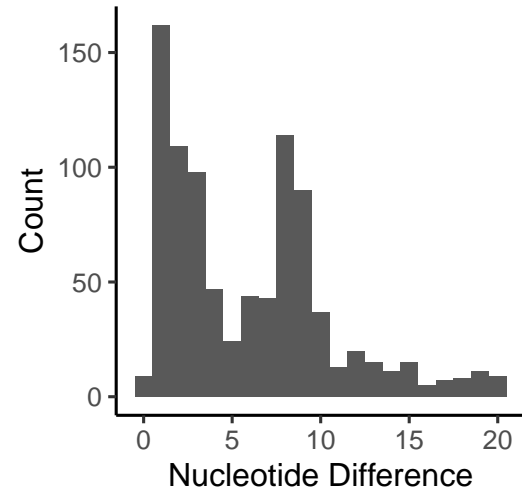
IGHV4-31*02

4924 sequences assigned
1722 (35%) exact matches, in which:
1618 unique CDR3
6 unique J



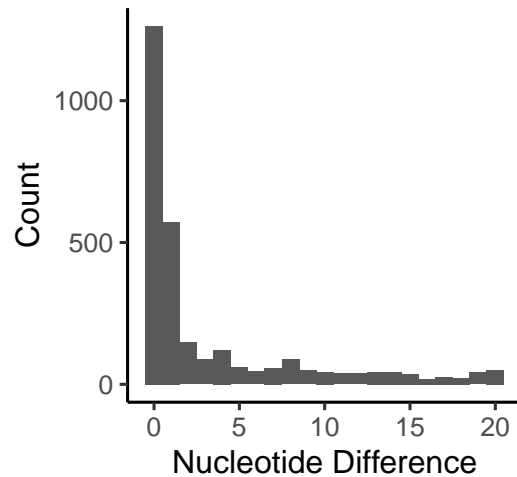
IGHV4-39*07

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



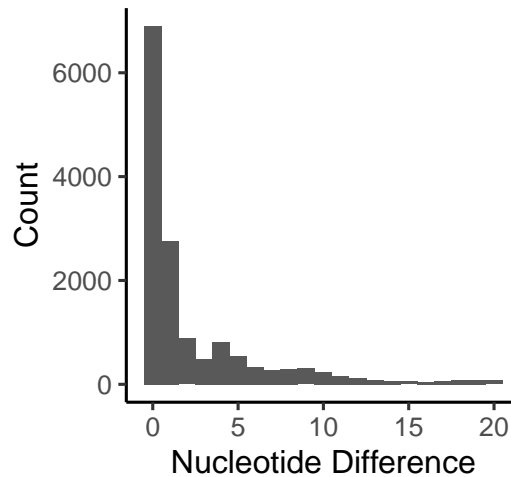
IGHV4-30-4*01

4401 sequences assigned
1263 (28.7%) exact matches, in which:
1193 unique CDR3
6 unique J



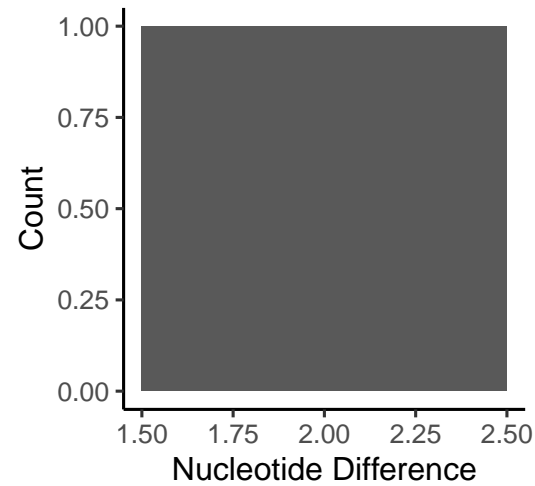
IGHV4-34*01_02

15204 sequences assigned
6900 (45.4%) exact matches, in which:
6405 unique CDR3
6 unique J



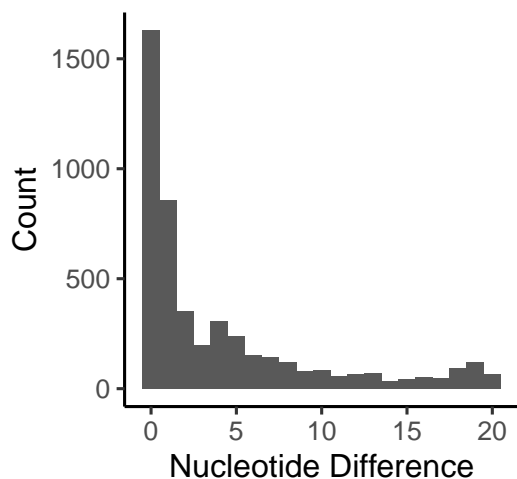
IGHV4-55*09

1 sequences assigned
No exact matches.



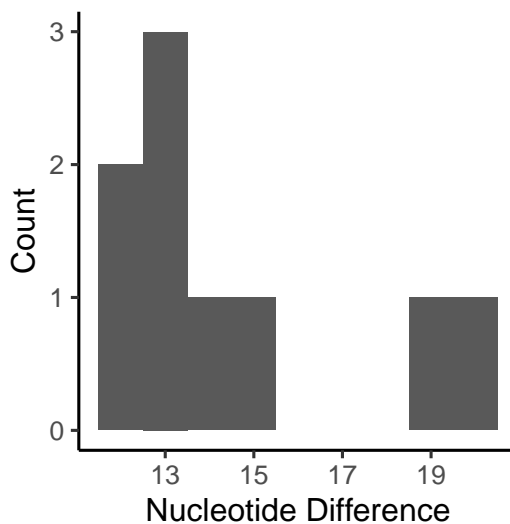
IGHV4–59*08

5217 sequences assigned
1629 (31.2%) exact matches, in which:
1540 unique CDR3
6 unique J



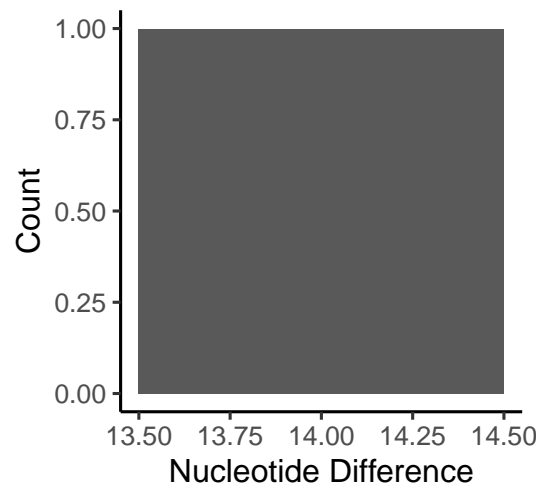
IGHV1/OR15–1*04

9 sequences assigned
No exact matches.



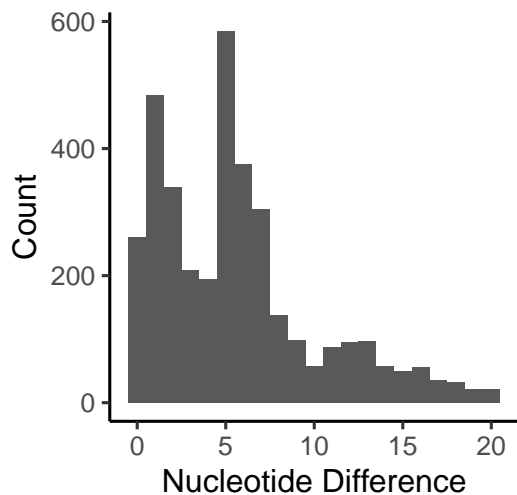
IGHV1/OR15–4*01

2 sequences assigned
No exact matches.



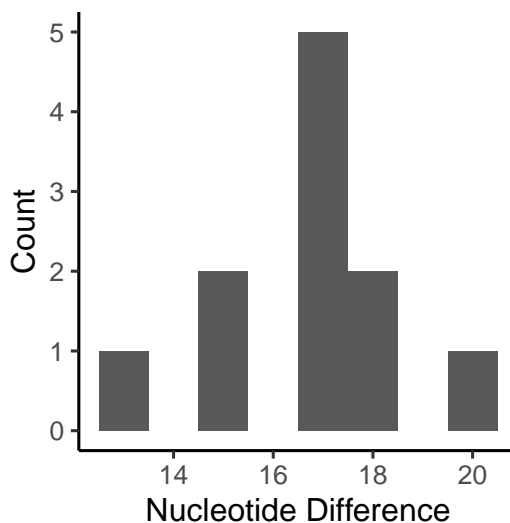
IGHV4–59*12

3918 sequences assigned
261 (6.7%) exact matches, in which:
261 unique CDR3
6 unique J



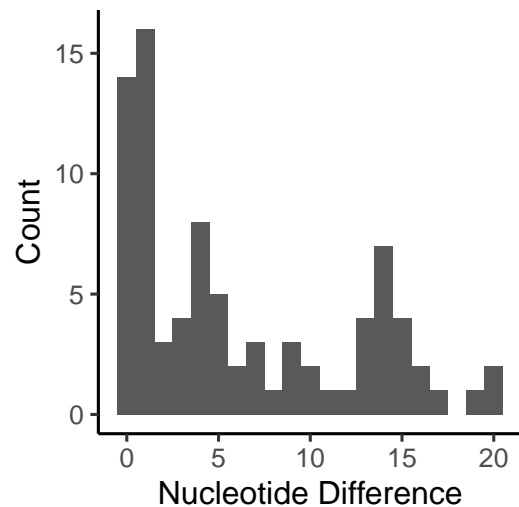
IGHV1/OR15–2*02_03

31 sequences assigned
No exact matches.



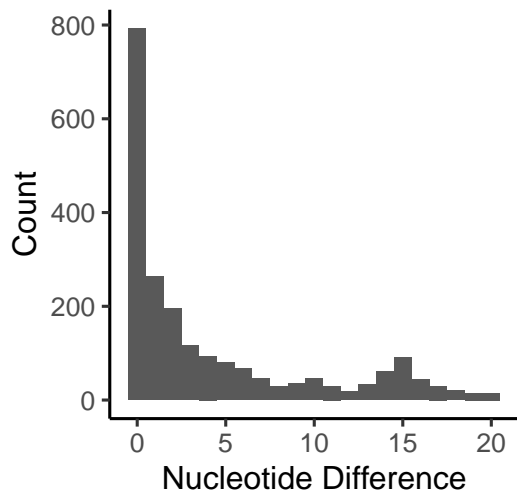
IGHV4/OR15–8*01

98 sequences assigned
14 (14.3%) exact matches, in which:
8 unique CDR3
1 unique J



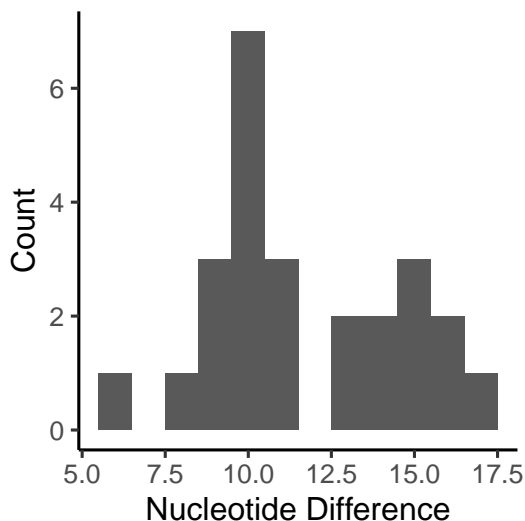
IGHV4–61*01

2342 sequences assigned
793 (33.9%) exact matches, in which:
775 unique CDR3
6 unique J



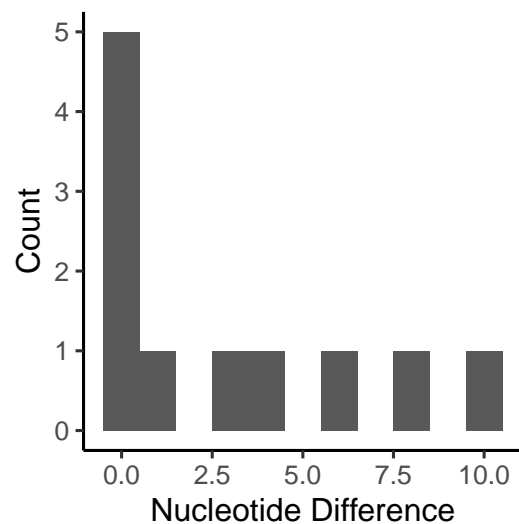
IGHV1/OR15–3*02

26 sequences assigned
No exact matches.



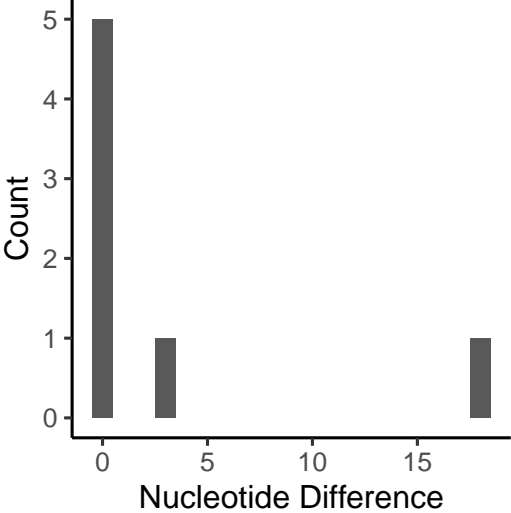
IGHV5–10–1*01_03

12 sequences assigned
5 (41.7%) exact matches, in which:
5 unique CDR3
3 unique J



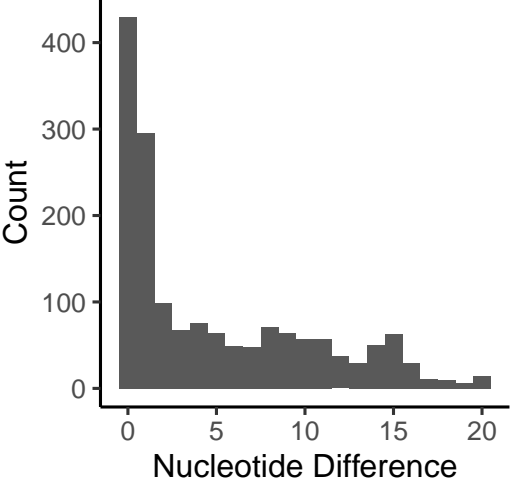
IGHV5-51*04

8 sequences assigned
5 (62.5%) exact matches, in which:
5 unique CDR3
3 unique J



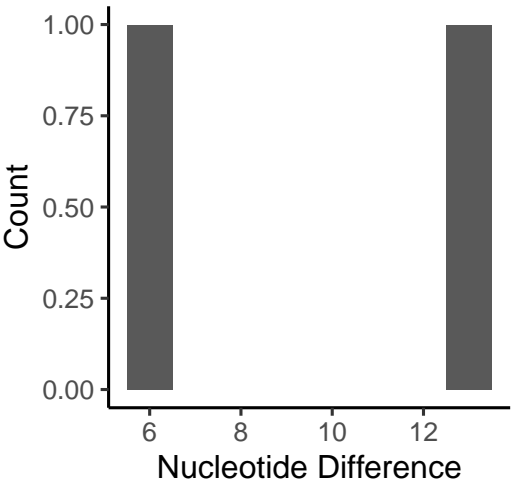
IGHV6-1*01_02

1685 sequences assigned
430 (25.5%) exact matches, in which:
406 unique CDR3
5 unique J



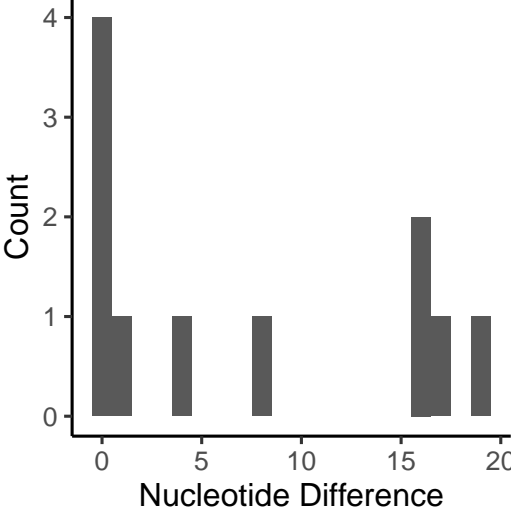
IGHV3/OR16-13*01

2 sequences assigned
No exact matches.



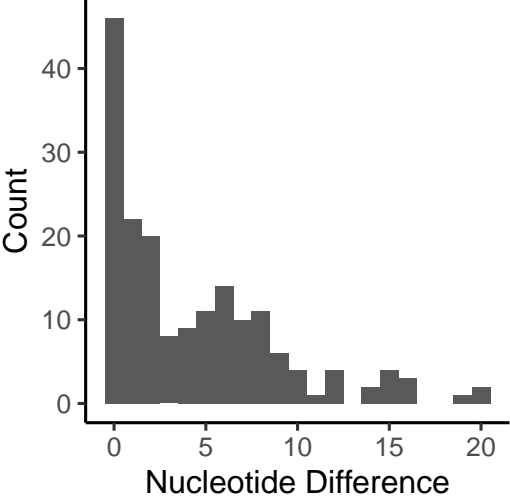
IGHV5-51*06

15 sequences assigned
4 (26.7%) exact matches, in which:
4 unique CDR3
3 unique J



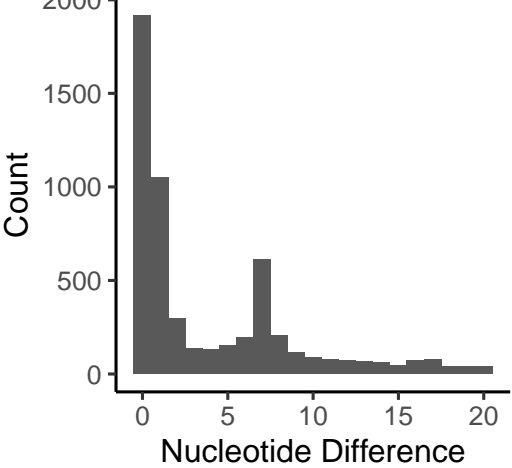
IGHV6-1*01_02_A315G

190 sequences assigned
46 (24.2%) exact matches, in which:
46 unique CDR3
5 unique J



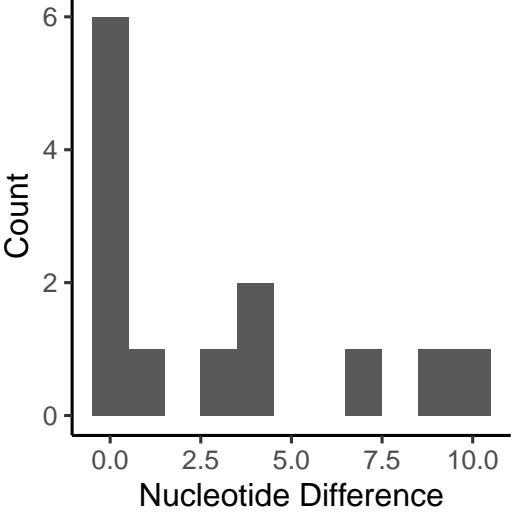
IGHV7-4-1*02

5835 sequences assigned
1915 (32.8%) exact matches, in which:
1797 unique CDR3
6 unique J



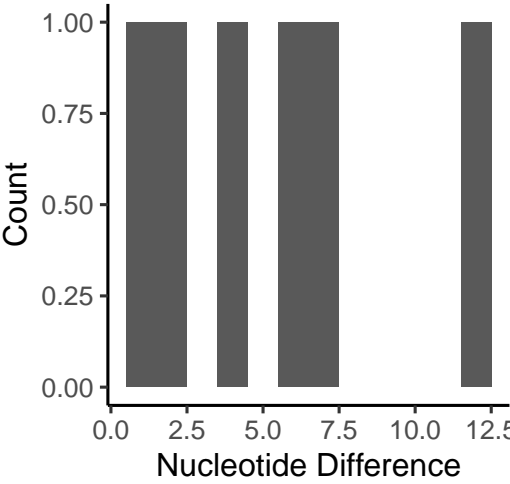
IGHV5-51*07

13 sequences assigned
6 (46.2%) exact matches, in which:
6 unique CDR3
3 unique J



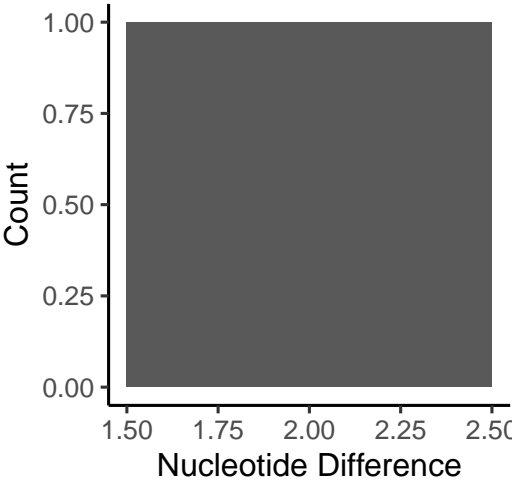
IGHV3/OR16-9*01

6 sequences assigned
No exact matches.



IGHV7-81*01

1 sequences assigned
No exact matches.



IGHV6-1*01_02_A315G

