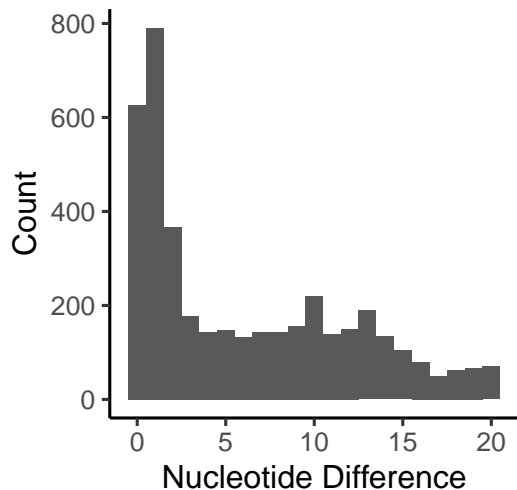


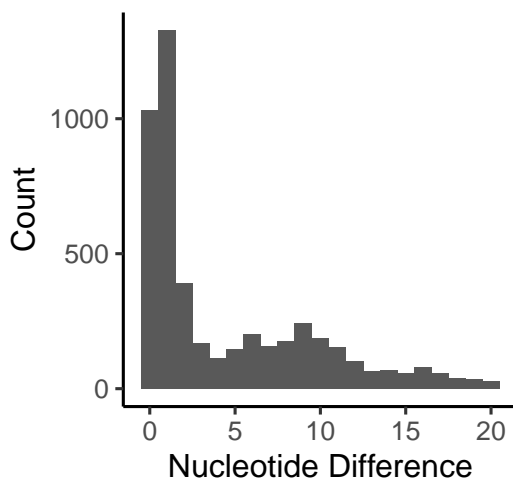
IGHV1-2*02

4578 sequences assigned
627 (13.7%) exact matches, in which:
490 unique CDR3
6 unique J



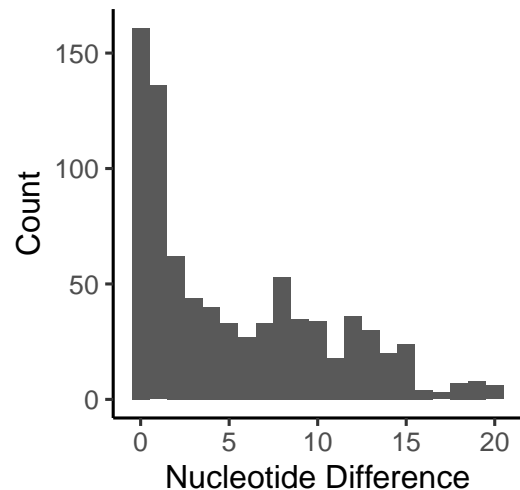
IGHV1-18*01

5138 sequences assigned
1033 (20.1%) exact matches, in which:
803 unique CDR3
6 unique J



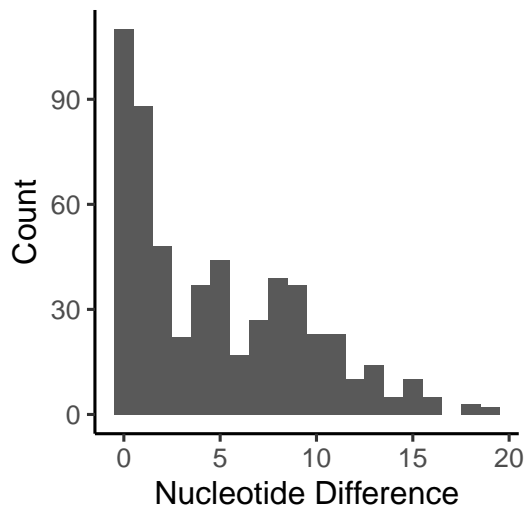
IGHV1-46*01

857 sequences assigned
161 (18.8%) exact matches, in which:
138 unique CDR3
6 unique J



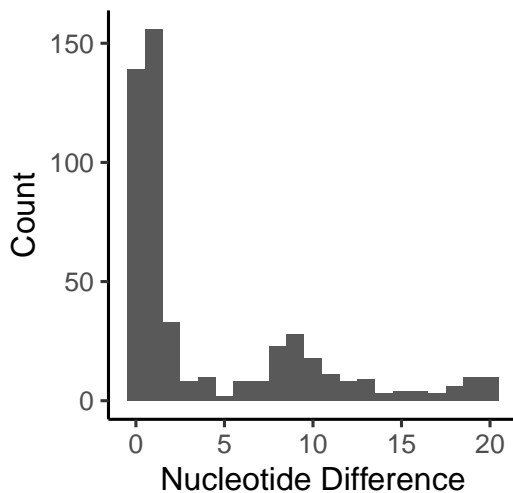
IGHV1-3*01_05

605 sequences assigned
110 (18.2%) exact matches, in which:
88 unique CDR3
5 unique J



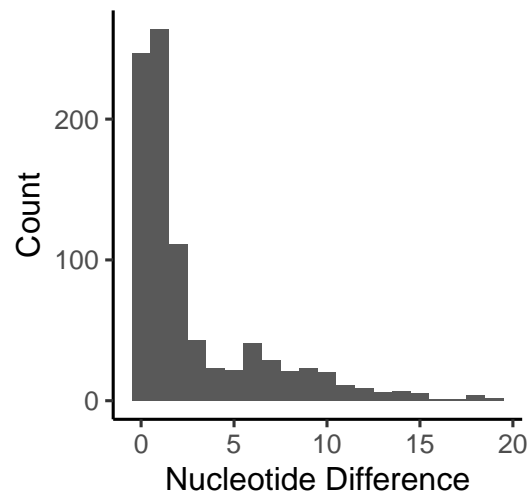
IGHV1-24*01

539 sequences assigned
139 (25.8%) exact matches, in which:
114 unique CDR3
6 unique J



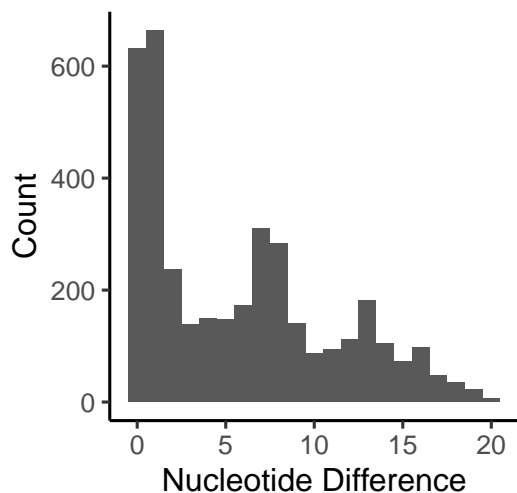
IGHV1-46*04

898 sequences assigned
247 (27.5%) exact matches, in which:
205 unique CDR3
6 unique J



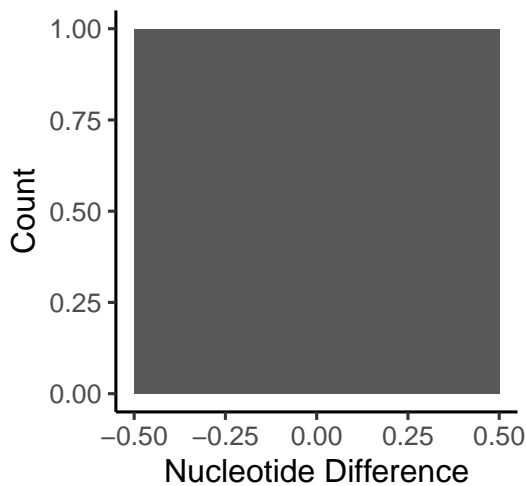
IGHV1-8*01

3771 sequences assigned
632 (16.8%) exact matches, in which:
501 unique CDR3
6 unique J



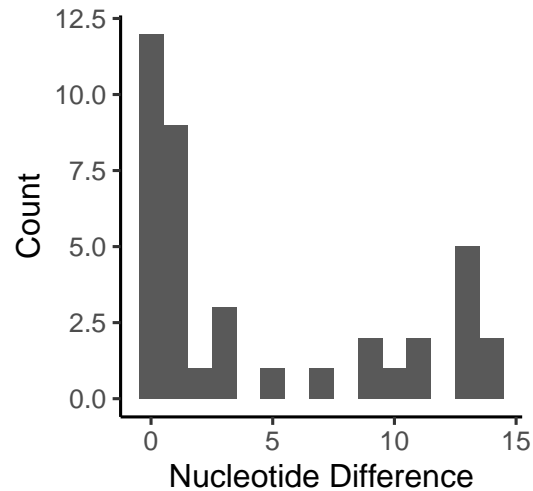
IGHV1-45*02

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



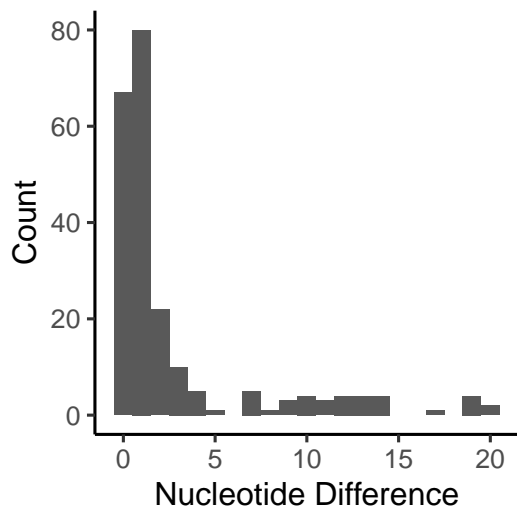
IGHV1-58*02

39 sequences assigned
12 (30.8%) exact matches, in which:
11 unique CDR3
4 unique J



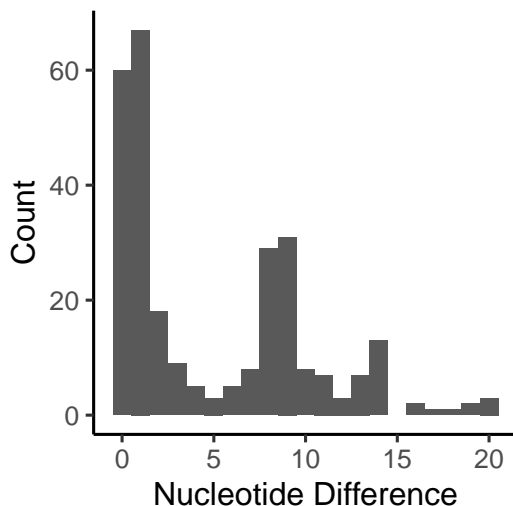
IGHV1-58*01_03

220 sequences assigned
67 (30.5%) exact matches, in which:
53 unique CDR3
4 unique J



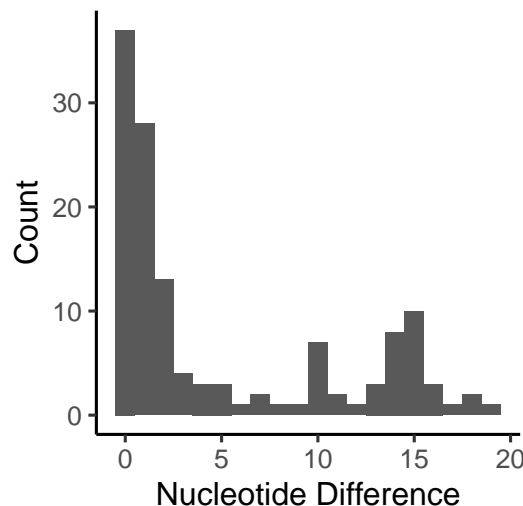
IGHV2-5*01

305 sequences assigned
60 (19.7%) exact matches, in which:
44 unique CDR3
4 unique J



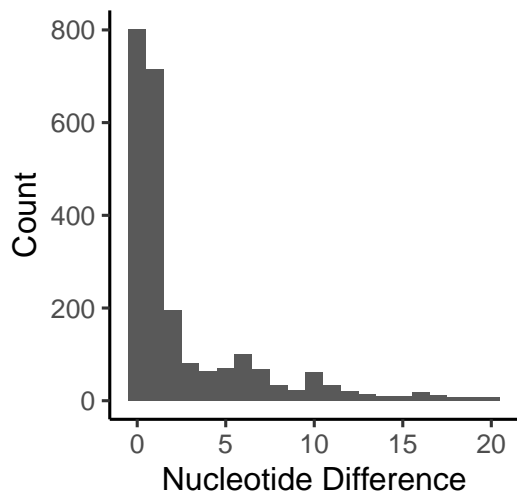
IGHV2-70*01

142 sequences assigned
37 (26.1%) exact matches, in which:
33 unique CDR3
5 unique J



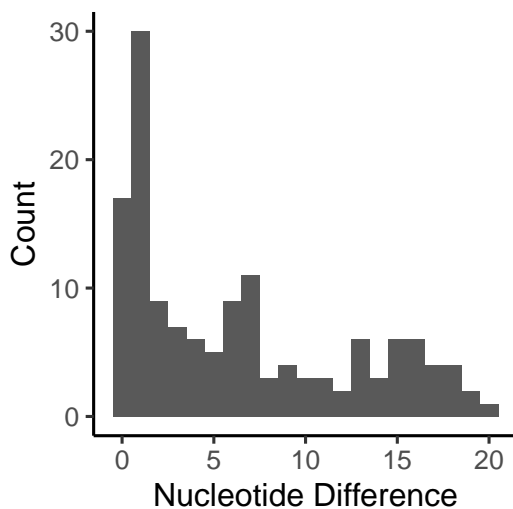
IGHV1-69*01_12_13

2433 sequences assigned
802 (33%) exact matches, in which:
693 unique CDR3
6 unique J



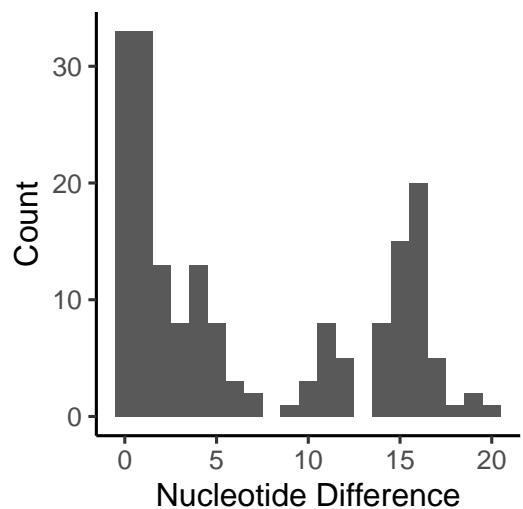
IGHV2-5*02

165 sequences assigned
17 (10.3%) exact matches, in which:
12 unique CDR3
5 unique J



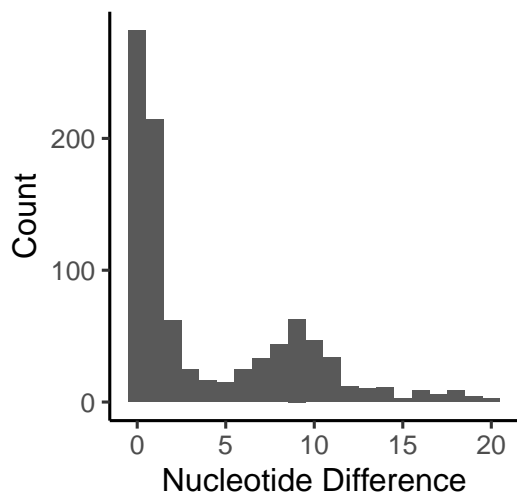
IGHV2-70*04

192 sequences assigned
33 (17.2%) exact matches, in which:
22 unique CDR3
4 unique J



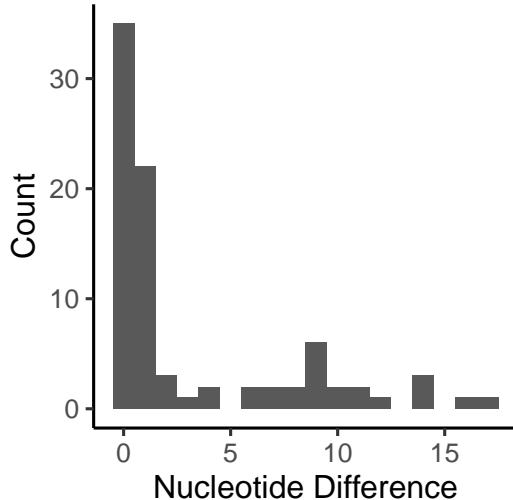
IGHV1-69*06_14

984 sequences assigned
282 (28.7%) exact matches, in which:
248 unique CDR3
6 unique J



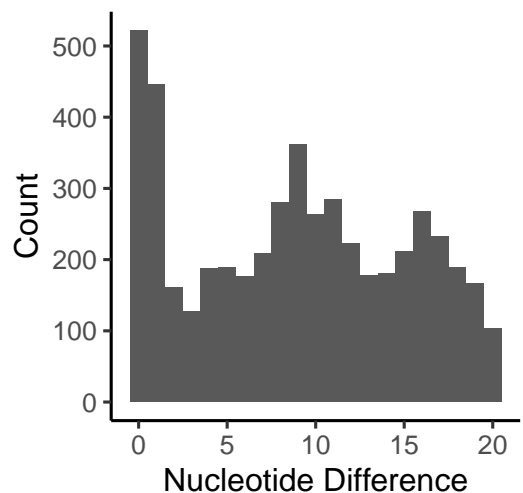
IGHV2-26*01

87 sequences assigned
35 (40.2%) exact matches, in which:
30 unique CDR3
5 unique J



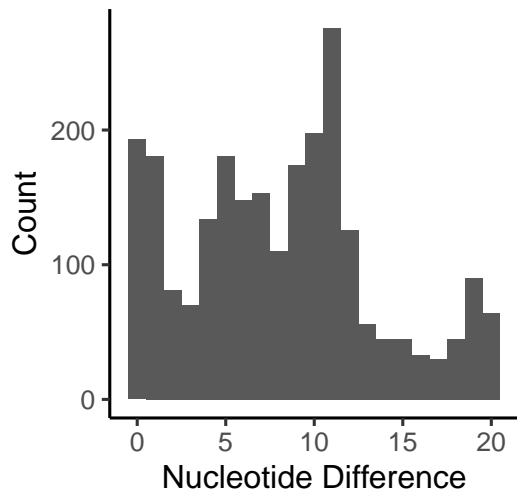
IGHV3-7*01

6101 sequences assigned
522 (8.6%) exact matches, in which:
352 unique CDR3
6 unique J



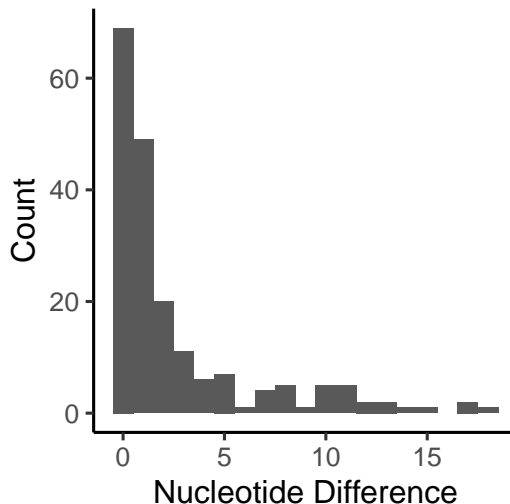
IGHV3-7*03

2575 sequences assigned
193 (7.5%) exact matches, in which:
134 unique CDR3
5 unique J



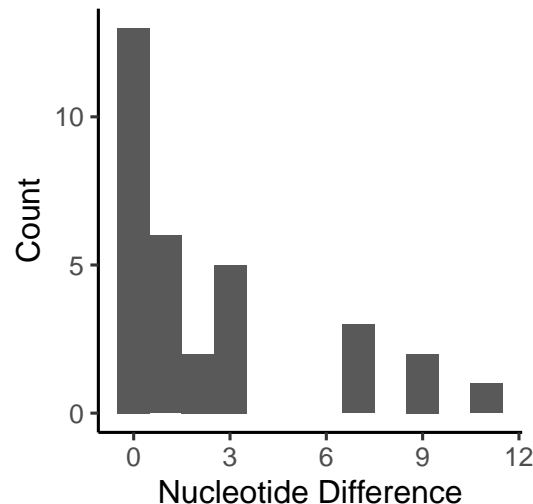
IGHV3-11*04

193 sequences assigned
69 (35.8%) exact matches, in which:
67 unique CDR3
6 unique J



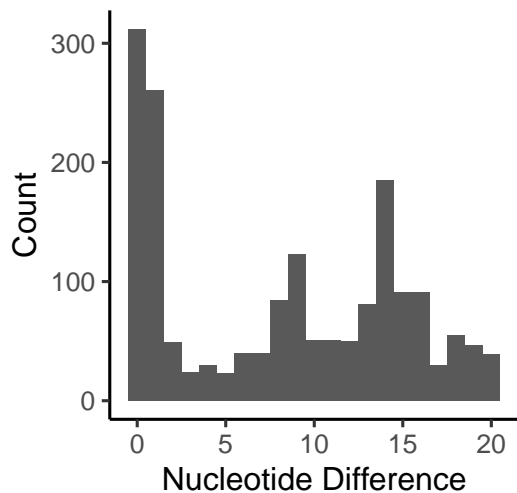
IGHV3-13*05

32 sequences assigned
13 (40.6%) exact matches, in which:
8 unique CDR3
5 unique J



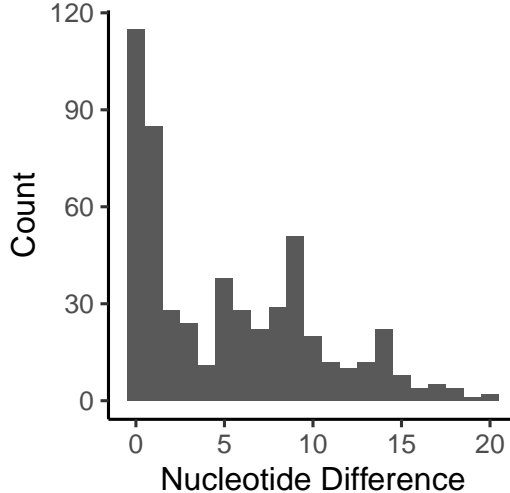
IGHV3-9*01

2053 sequences assigned
312 (15.2%) exact matches, in which:
189 unique CDR3
6 unique J



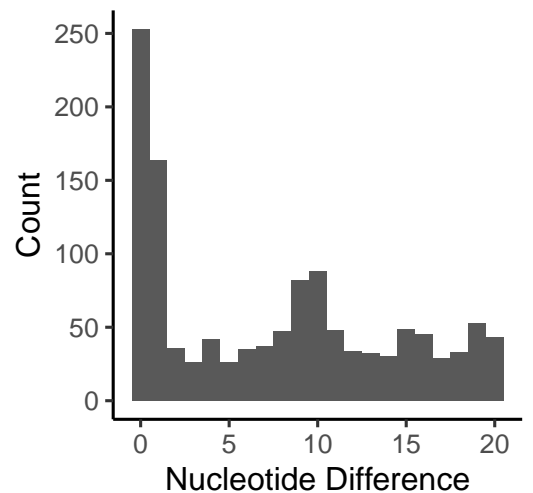
IGHV3-11*06

537 sequences assigned
115 (21.4%) exact matches, in which:
86 unique CDR3
5 unique J



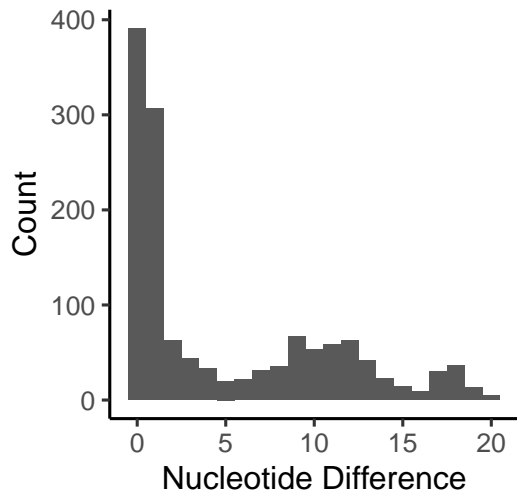
IGHV3-15*01_02

1422 sequences assigned
253 (17.8%) exact matches, in which:
153 unique CDR3
5 unique J



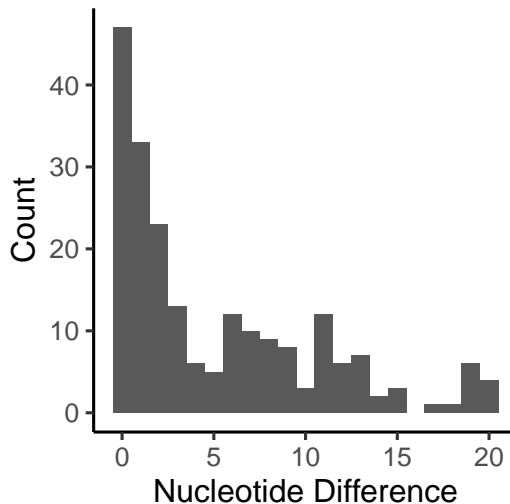
IGHV3-11*01

1395 sequences assigned
391 (28%) exact matches, in which:
237 unique CDR3
5 unique J



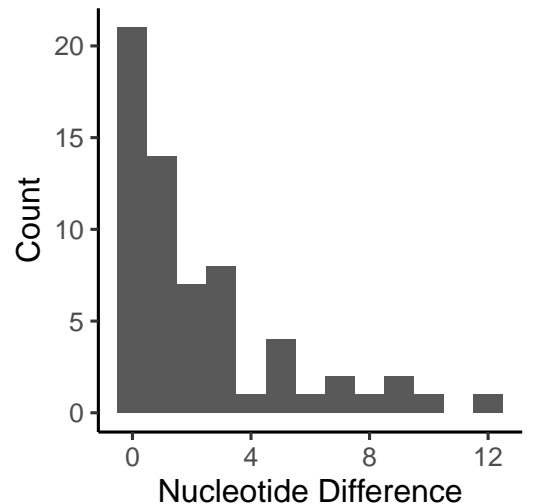
IGHV3-13*01

326 sequences assigned
47 (14.4%) exact matches, in which:
31 unique CDR3
5 unique J



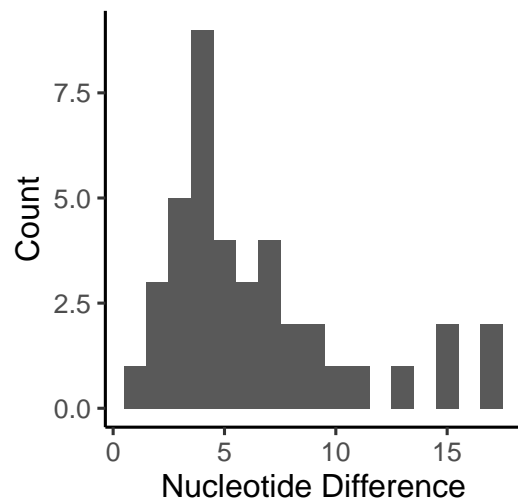
IGHV3-20*01_02

79 sequences assigned
21 (26.6%) exact matches, in which:
11 unique CDR3
4 unique J



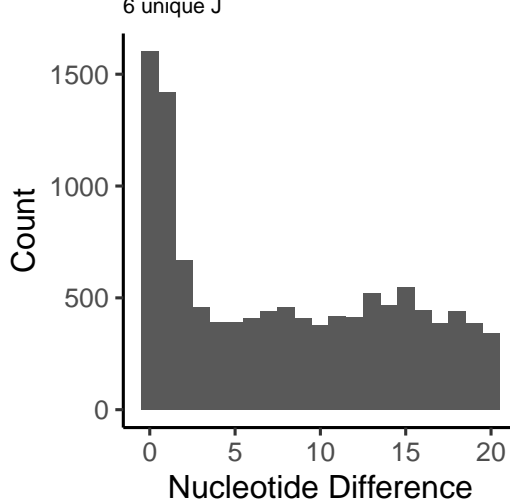
IGHV3-20*03_04

50 sequences assigned
No exact matches.



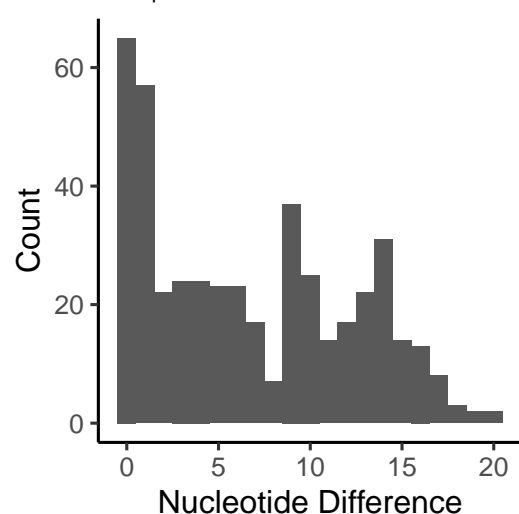
IGHV3-23*01_04

15118 sequences assigned
1602 (10.6%) exact matches, in which:
907 unique CDR3
6 unique J



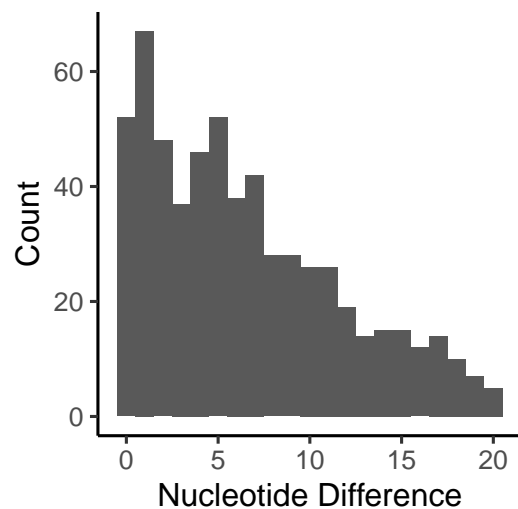
IGHV3-30*07

461 sequences assigned
65 (14.1%) exact matches, in which:
63 unique CDR3
6 unique J



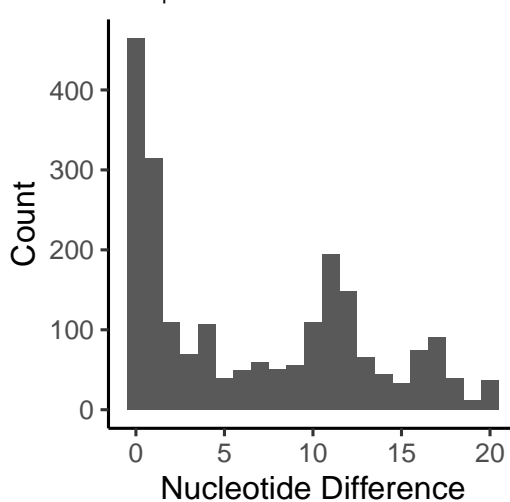
IGHV3-21*04

631 sequences assigned
52 (8.2%) exact matches, in which:
46 unique CDR3
4 unique J



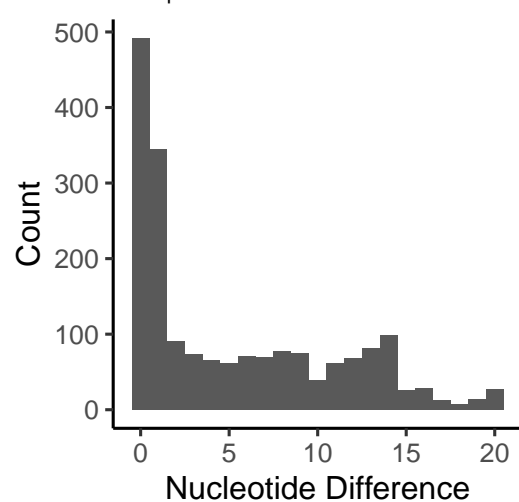
IGHV3-30*01

2310 sequences assigned
465 (20.1%) exact matches, in which:
298 unique CDR3
6 unique J



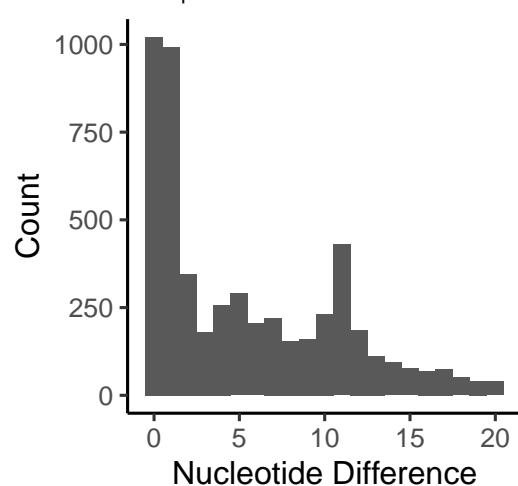
IGHV3-33*01

2023 sequences assigned
492 (24.3%) exact matches, in which:
322 unique CDR3
6 unique J



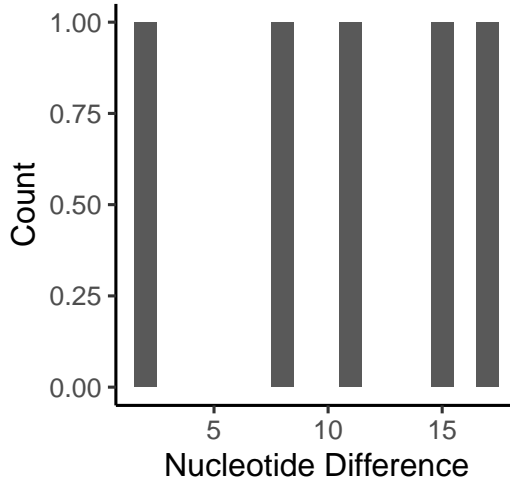
IGHV3-21*01_02

5431 sequences assigned
1021 (18.8%) exact matches, in which:
632 unique CDR3
6 unique J



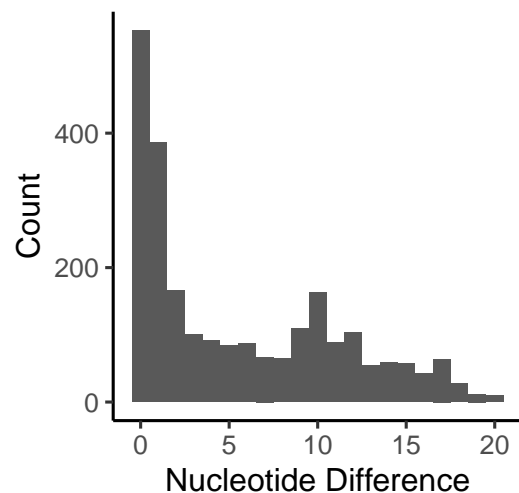
IGHV3-30-3*01

36 sequences assigned
No exact matches.



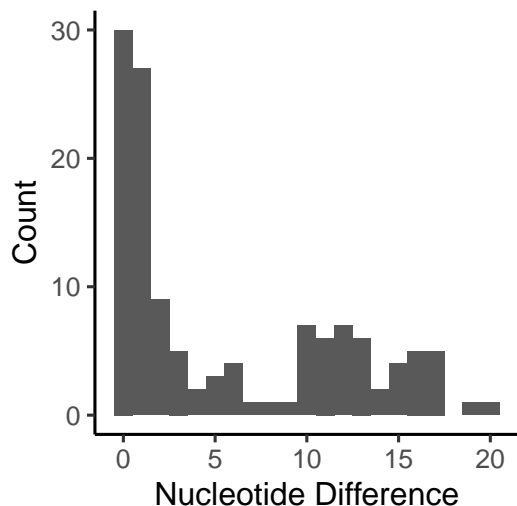
IGHV3-33*08

2455 sequences assigned
553 (22.5%) exact matches, in which:
368 unique CDR3
6 unique J



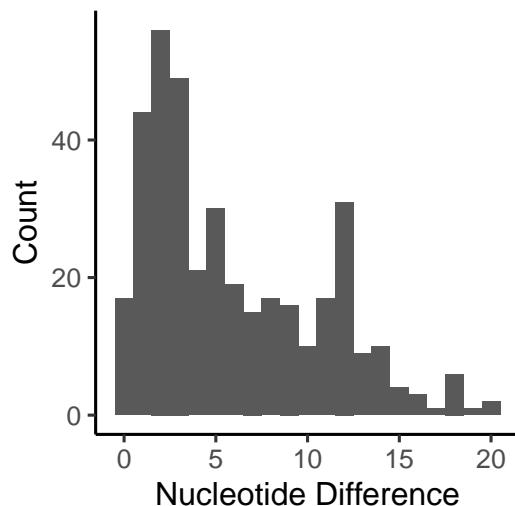
IGHV3-43*01

140 sequences assigned
30 (21.4%) exact matches, in which:
16 unique CDR3
3 unique J



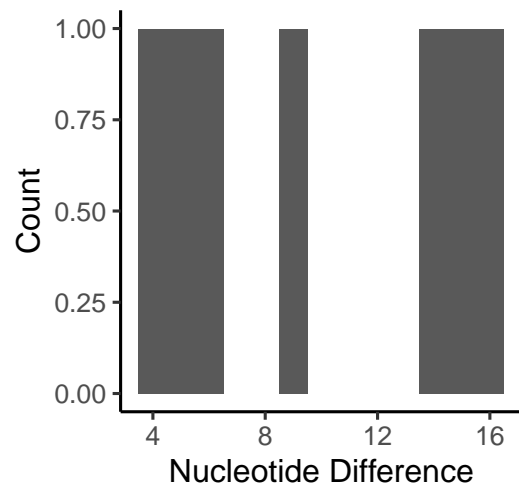
IGHV3-48*04

404 sequences assigned
17 (4.2%) exact matches, in which:
17 unique CDR3
4 unique J



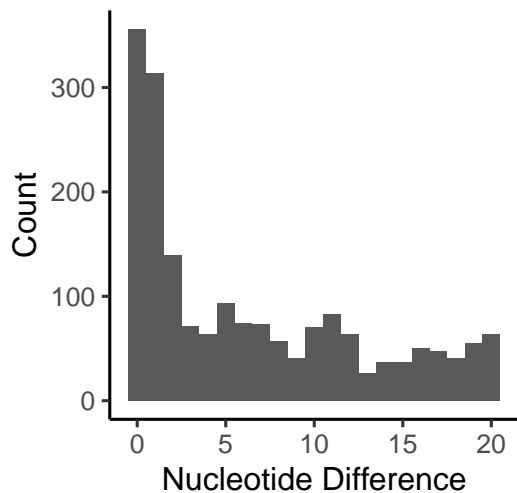
IGHV3-52*01_03

7 sequences assigned
No exact matches.



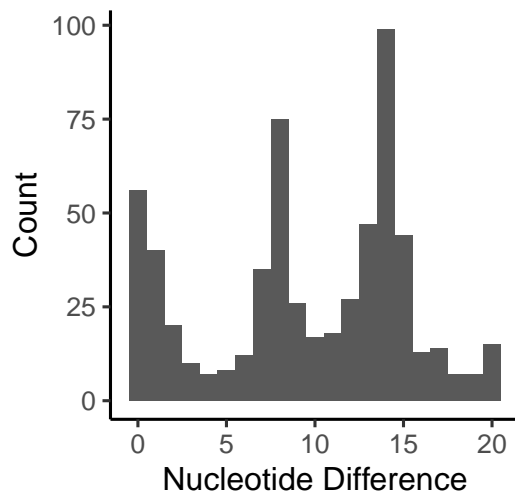
IGHV3-48*01

2020 sequences assigned
356 (17.6%) exact matches, in which:
228 unique CDR3
6 unique J



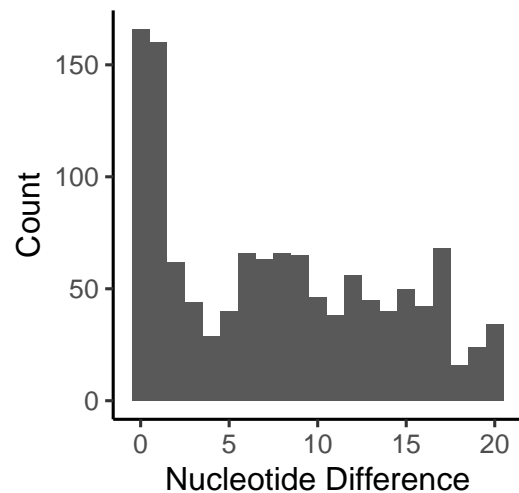
IGHV3-49*04

669 sequences assigned
56 (8.4%) exact matches, in which:
39 unique CDR3
6 unique J



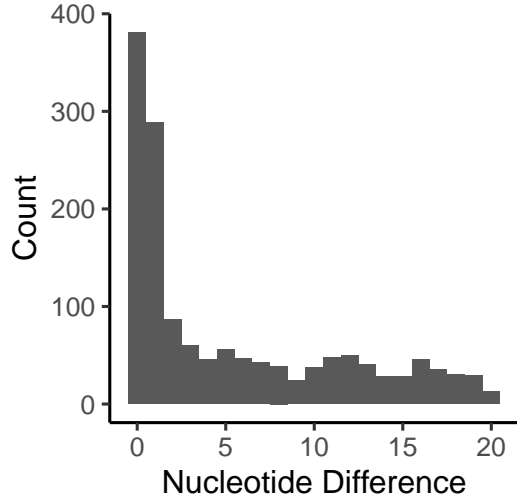
IGHV3-53*01_02

1394 sequences assigned
166 (11.9%) exact matches, in which:
107 unique CDR3
5 unique J



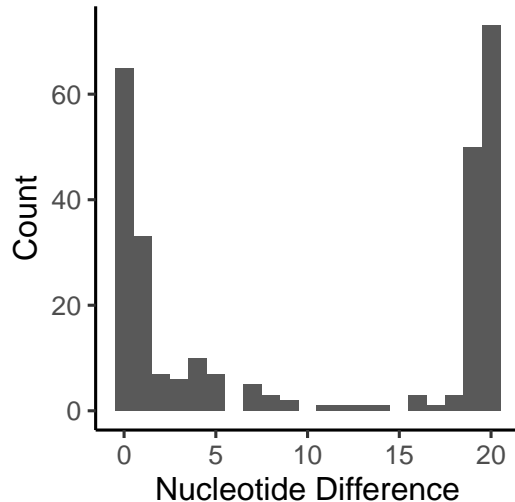
IGHV3-48*03

1545 sequences assigned
381 (24.7%) exact matches, in which:
245 unique CDR3
6 unique J



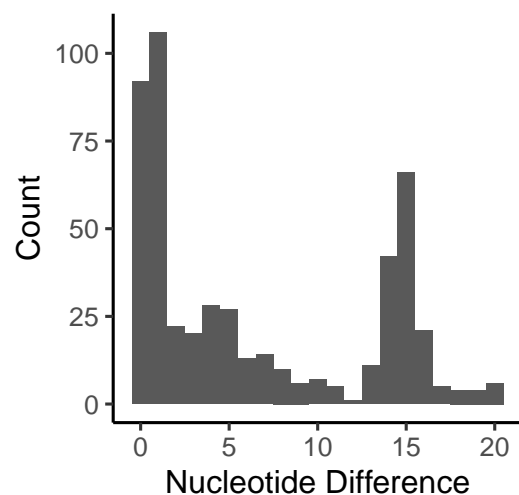
IGHV3-49*03_05

479 sequences assigned
65 (13.6%) exact matches, in which:
40 unique CDR3
4 unique J



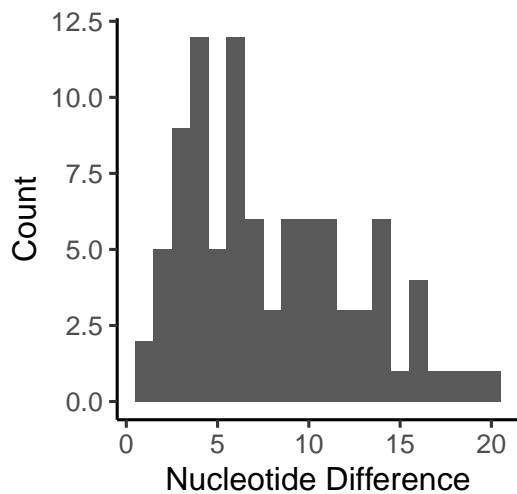
IGHV3-64*01

765 sequences assigned
92 (12%) exact matches, in which:
53 unique CDR3
5 unique J



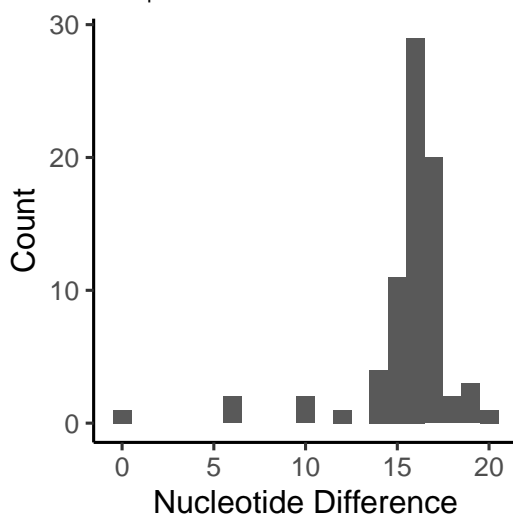
IGHV3-64*04

95 sequences assigned
No exact matches.



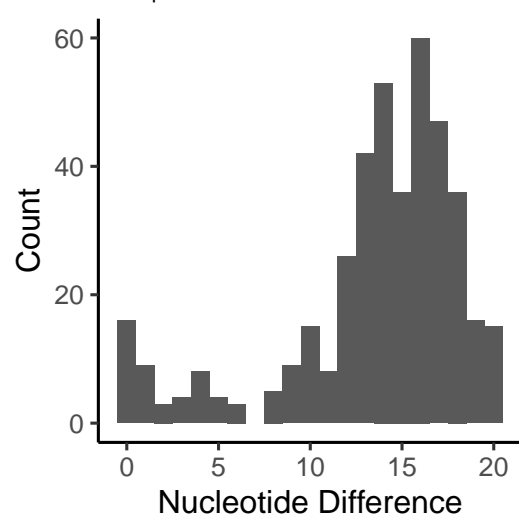
IGHV3-69-1*01

79 sequences assigned
1 (1.3%) exact matches, in which:
1 unique CDR3
1 unique J



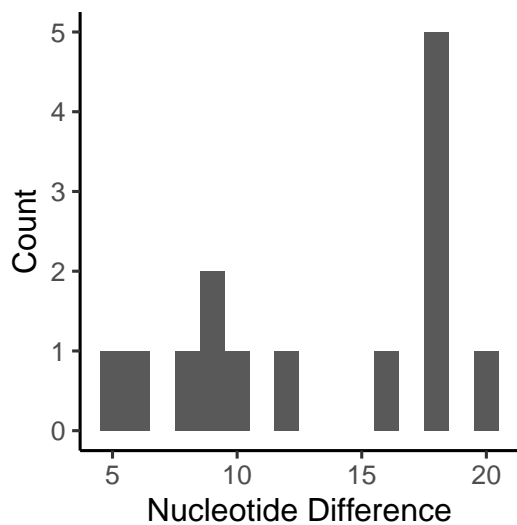
IGHV3-72*01

447 sequences assigned
16 (3.6%) exact matches, in which:
9 unique CDR3
3 unique J



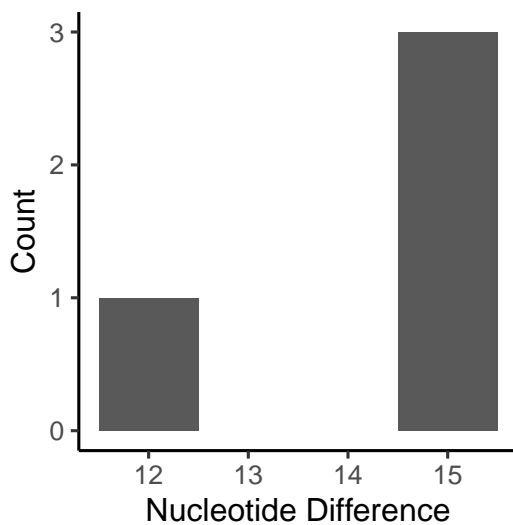
IGHV3-66*01

19 sequences assigned
No exact matches.



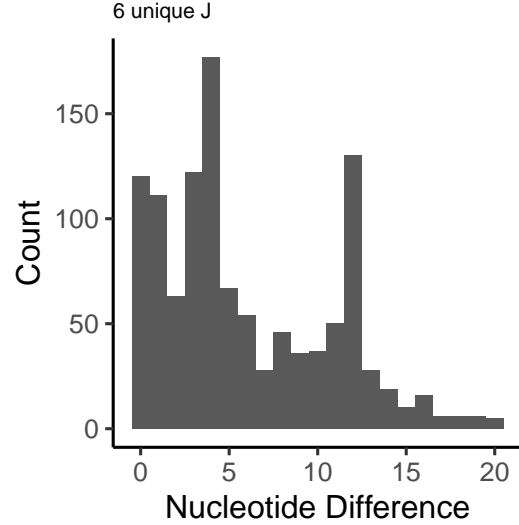
IGHV3-69-1*02

17 sequences assigned
No exact matches.



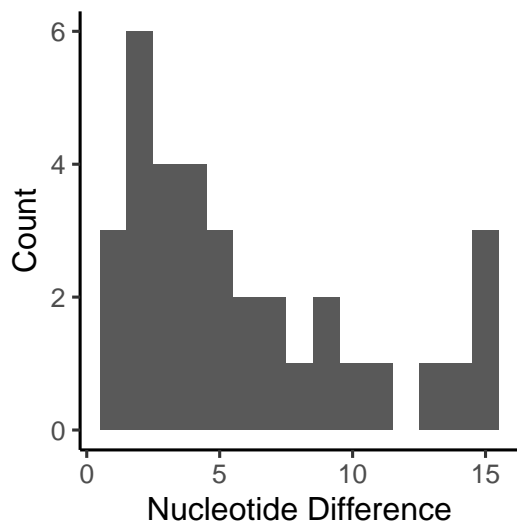
IGHV3-73*01_02

1149 sequences assigned
120 (10.4%) exact matches, in which:
75 unique CDR3
6 unique J



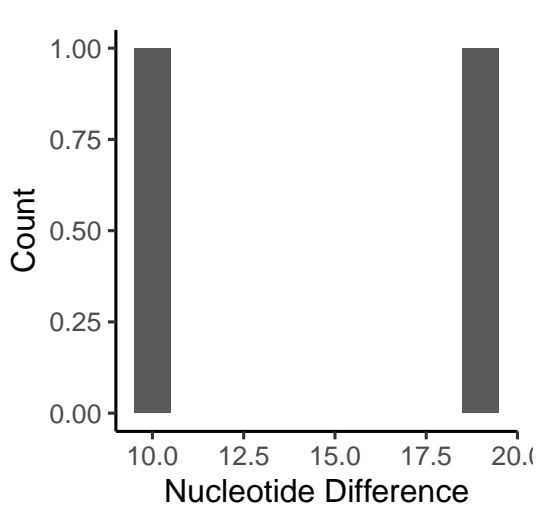
IGHV3-66*03

35 sequences assigned
No exact matches.



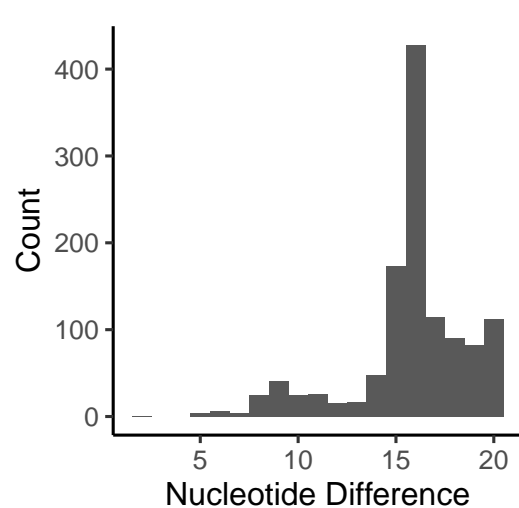
IGHV3-71*01_04

3 sequences assigned
No exact matches.



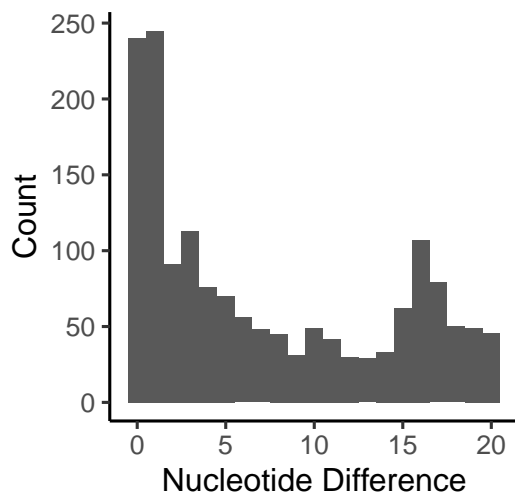
IGHV3-74*03

2824 sequences assigned
No exact matches.



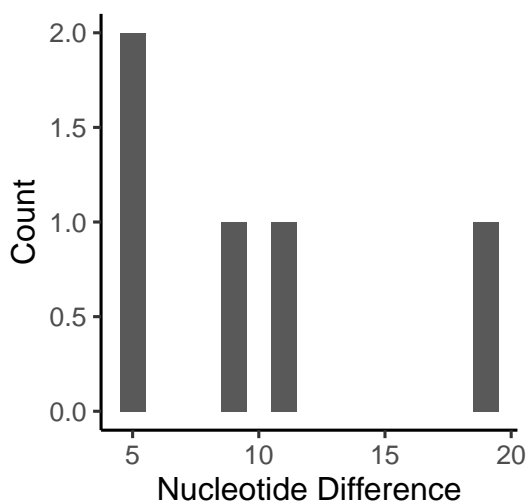
IGHV3-74*01_02

1734 sequences assigned
240 (13.8%) exact matches, in which:
158 unique CDR3
6 unique J



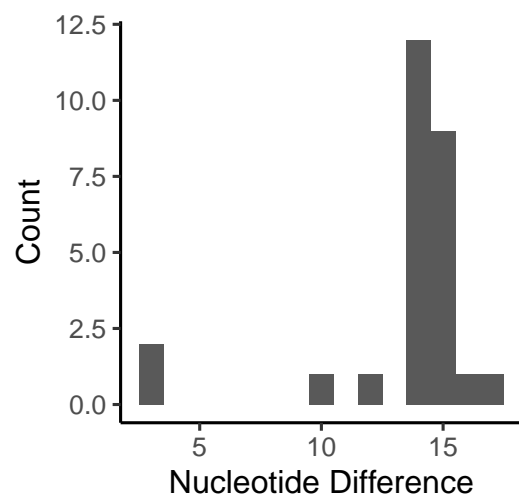
IGHV3-NL1*01

6 sequences assigned
No exact matches.



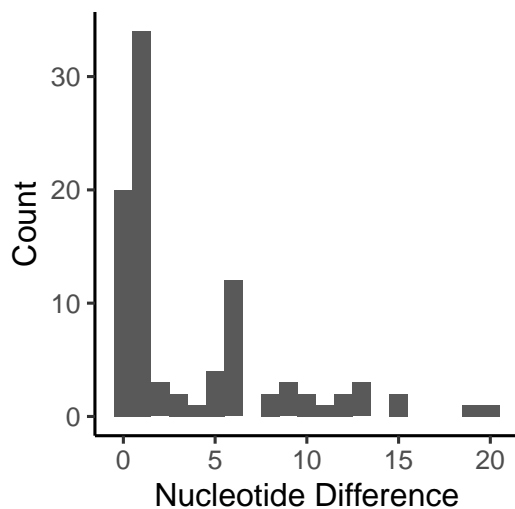
IGHV4-28*03

29 sequences assigned
No exact matches.



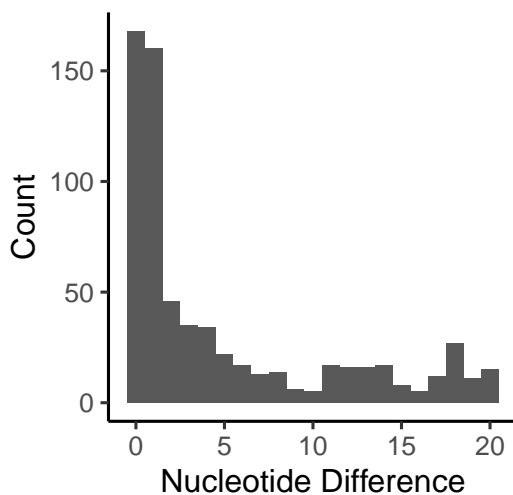
IGHV3-43D*04

93 sequences assigned
20 (21.5%) exact matches, in which:
12 unique CDR3
3 unique J



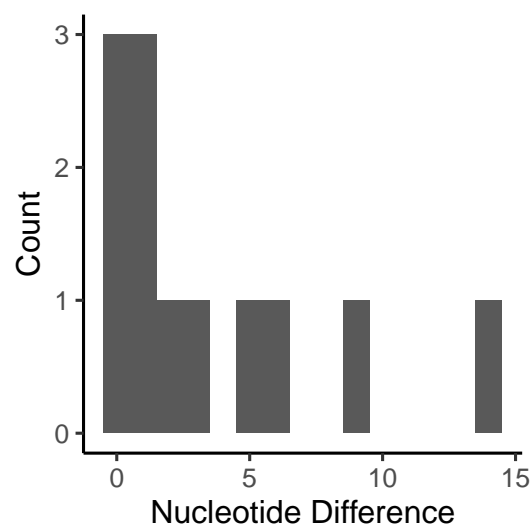
IGHV4-4*07

735 sequences assigned
168 (22.9%) exact matches, in which:
147 unique CDR3
6 unique J



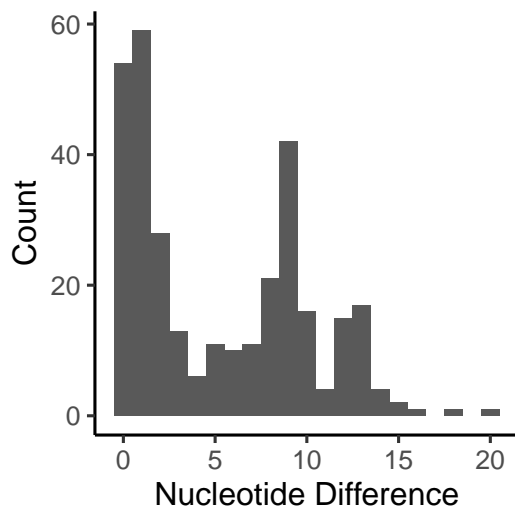
IGHV4-28*01_07

13 sequences assigned
3 (23.1%) exact matches, in which:
1 unique CDR3
1 unique J



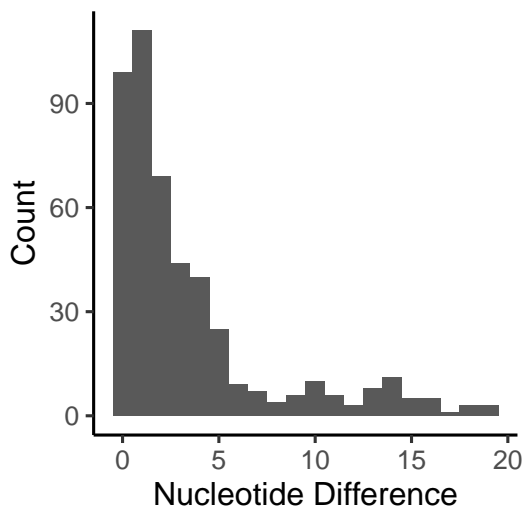
IGHV3-64D*06

322 sequences assigned
54 (16.8%) exact matches, in which:
27 unique CDR3
5 unique J



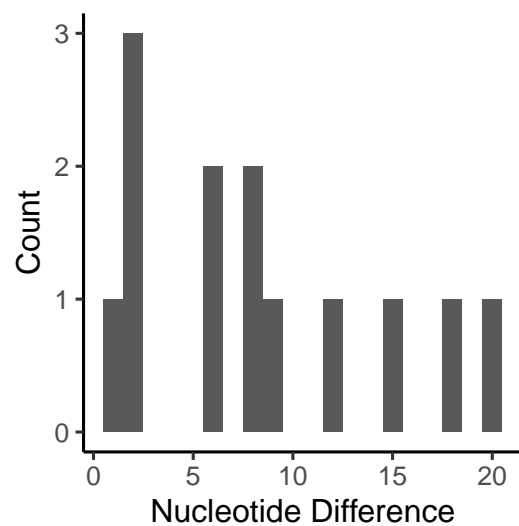
IGHV4-4*02_03

528 sequences assigned
99 (18.8%) exact matches, in which:
82 unique CDR3
6 unique J



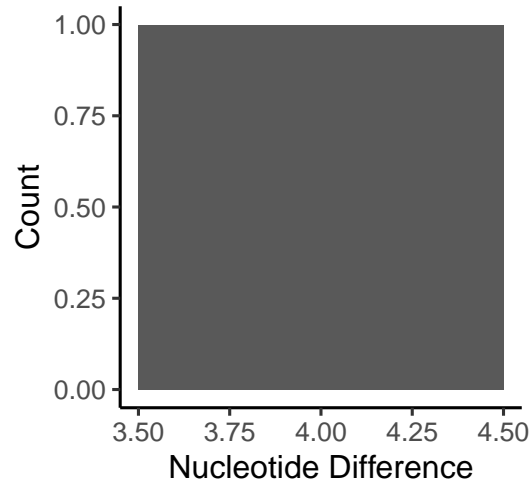
IGHV4-30-2*03

19 sequences assigned
No exact matches.



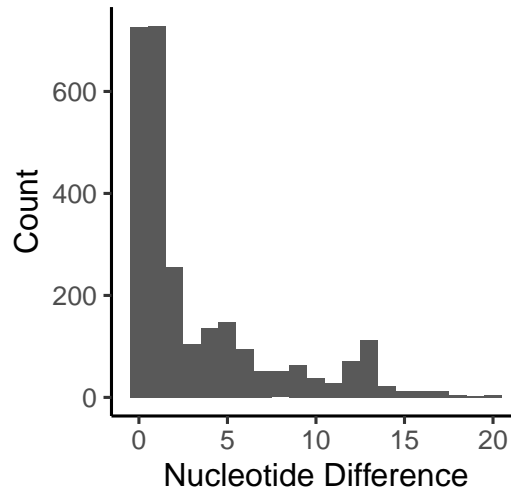
IGHV4-30-4*08

1 sequences assigned
No exact matches.



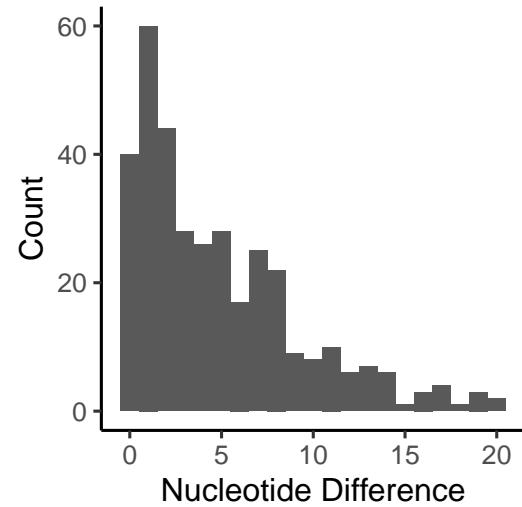
IGHV4-34*01_02

2861 sequences assigned
727 (25.4%) exact matches, in which:
594 unique CDR3
6 unique J



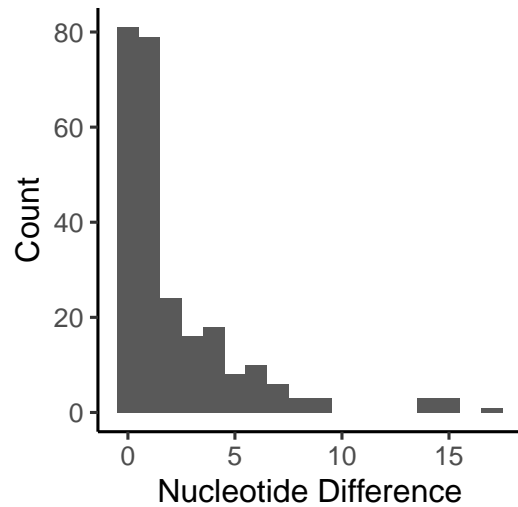
IGHV4-59*08

357 sequences assigned
40 (11.2%) exact matches, in which:
38 unique CDR3
6 unique J



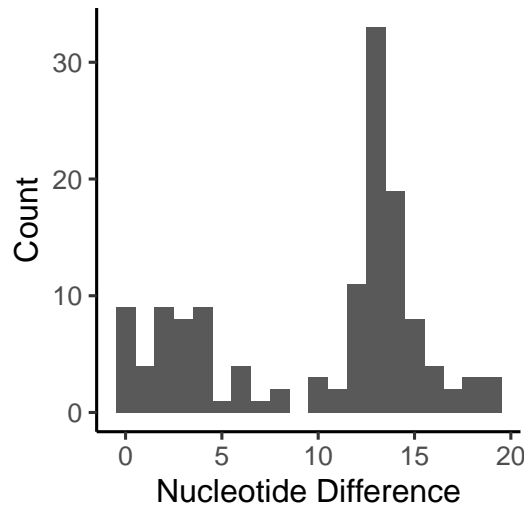
IGHV4-31*01

257 sequences assigned
81 (31.5%) exact matches, in which:
68 unique CDR3
6 unique J



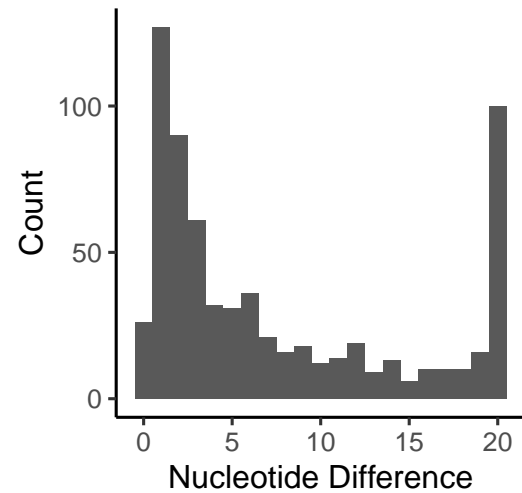
IGHV4-38-2*02

150 sequences assigned
9 (6%) exact matches, in which:
9 unique CDR3
2 unique J



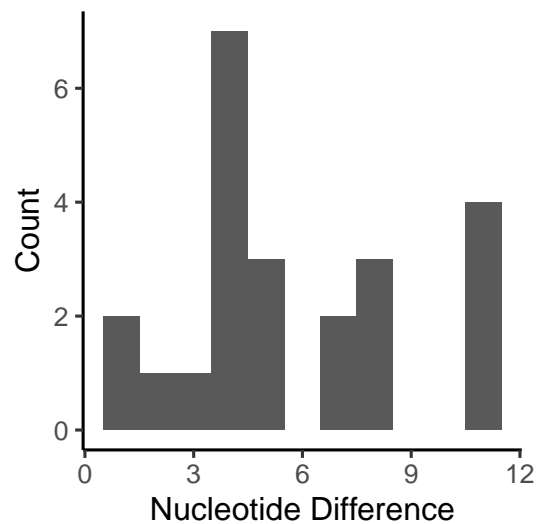
IGHV4-59*12

1891 sequences assigned
26 (1.4%) exact matches, in which:
26 unique CDR3
4 unique J



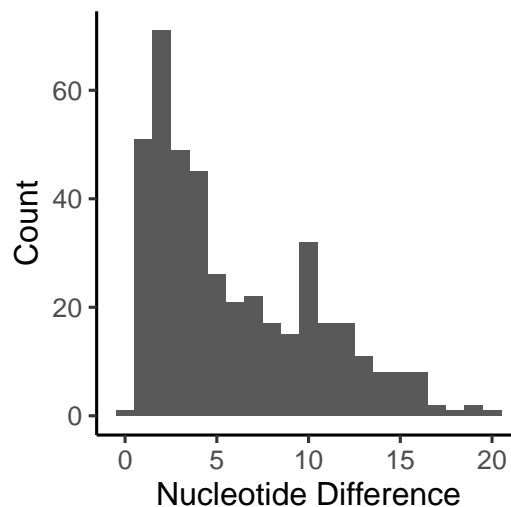
IGHV4-31*02

37 sequences assigned
No exact matches.



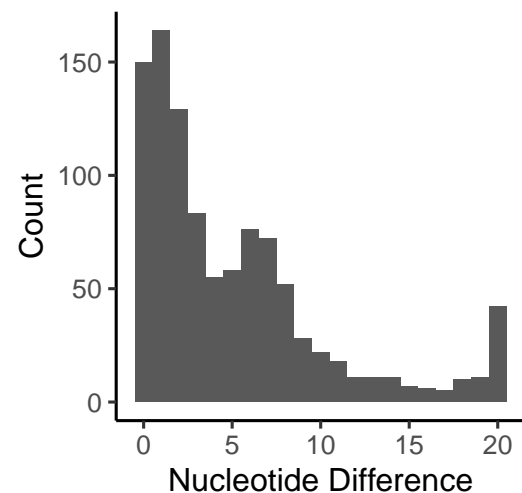
IGHV4-39*07

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



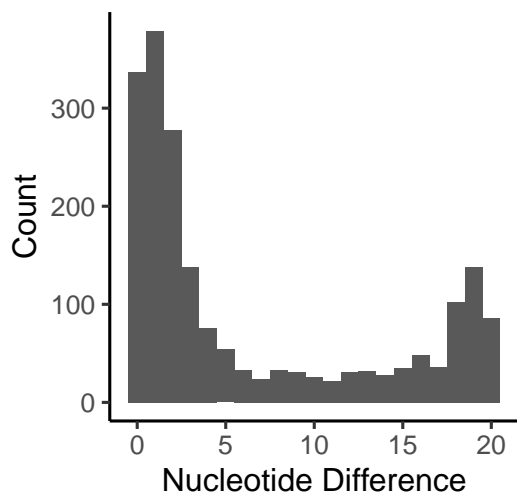
IGHV4-61*01

1550 sequences assigned
150 (9.7%) exact matches, in which:
129 unique CDR3
5 unique J



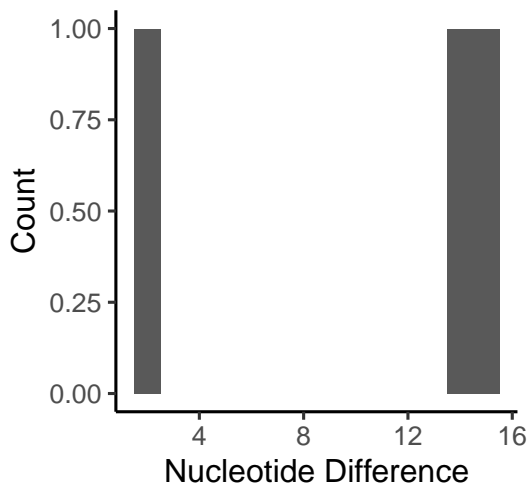
IGHV4–61*02

2443 sequences assigned
337 (13.8%) exact matches, in which:
292 unique CDR3
6 unique J



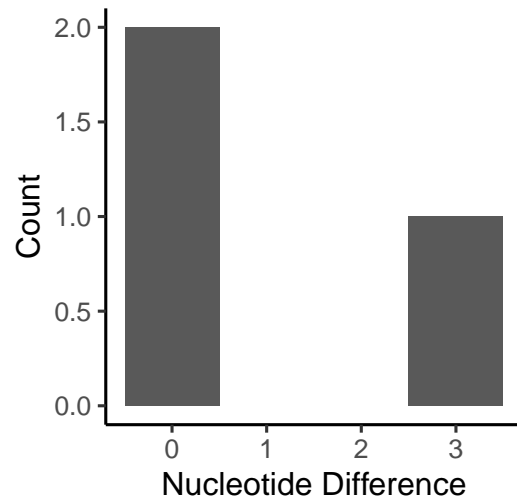
IGHV4/OR15–8*01

13 sequences assigned
No exact matches.



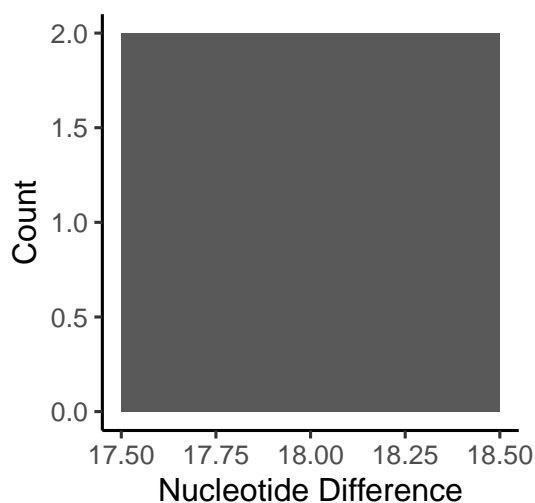
IGHV5–51*06

9 sequences assigned
2 (22.2%) exact matches, in which:
2 unique CDR3
2 unique J



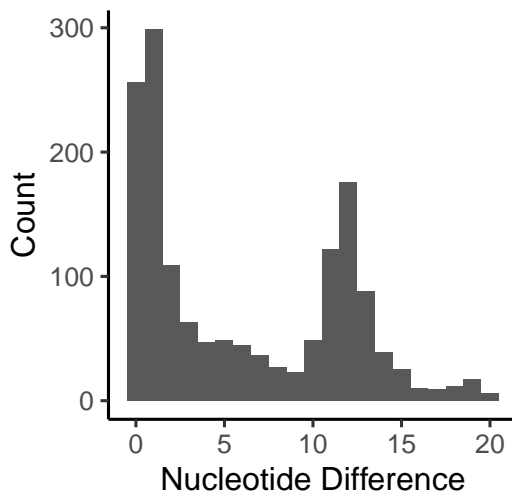
IGHV1/OR15–2*02_03

3 sequences assigned
No exact matches.



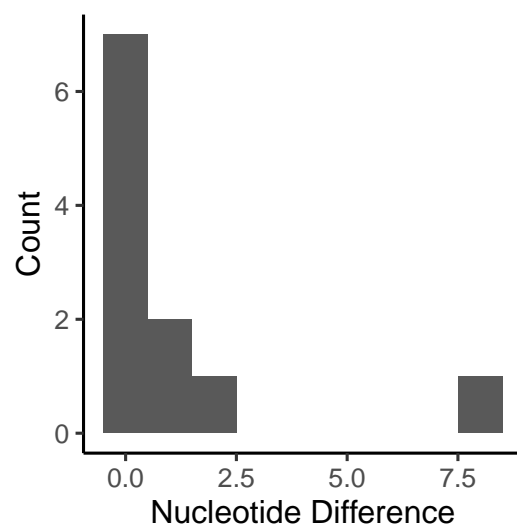
IGHV5–10–1*01_03

1528 sequences assigned
256 (16.8%) exact matches, in which:
170 unique CDR3
6 unique J



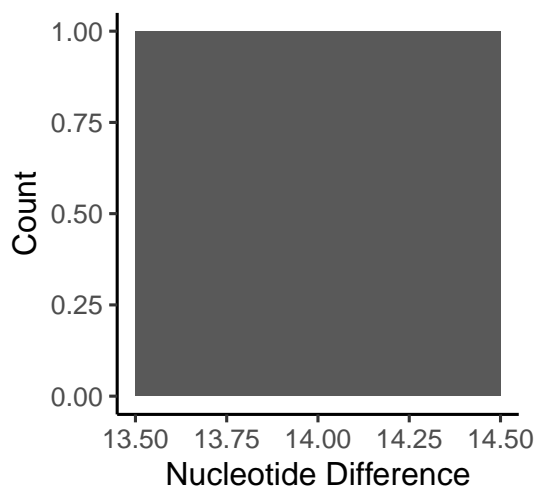
IGHV5–51*07

12 sequences assigned
7 (58.3%) exact matches, in which:
7 unique CDR3
4 unique J



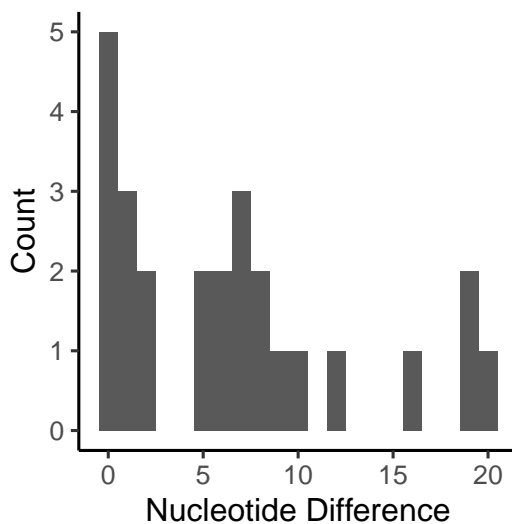
IGHV1/OR15–4*01

1 sequences assigned
No exact matches.



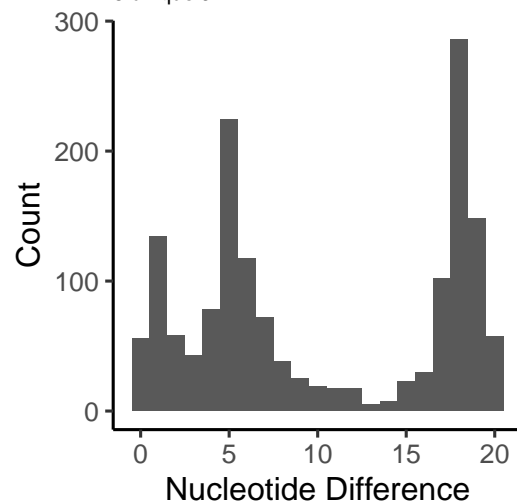
IGHV5–51*04

26 sequences assigned
5 (19.2%) exact matches, in which:
4 unique CDR3
3 unique J



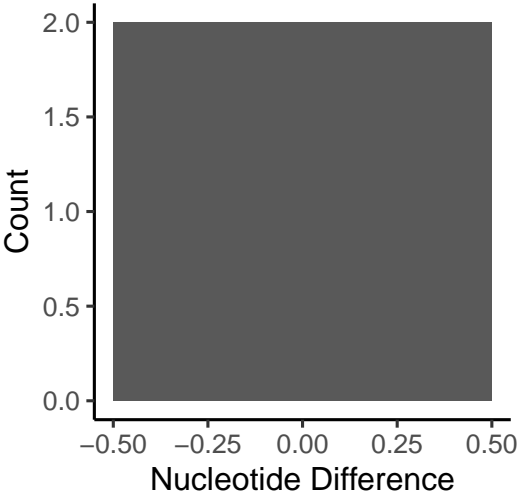
IGHV6–1*01_02

1648 sequences assigned
56 (3.4%) exact matches, in which:
45 unique CDR3
5 unique J



IGHV7-4-1*01

2 sequences assigned
2 (100%) exact matches, in which:
2 unique CDR3
1 unique J





Warning – no inferred sequences found.