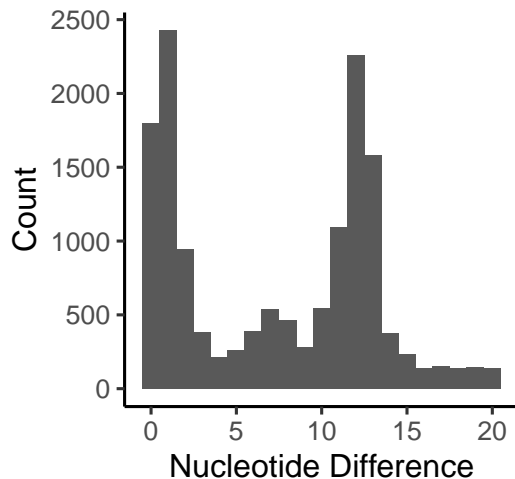


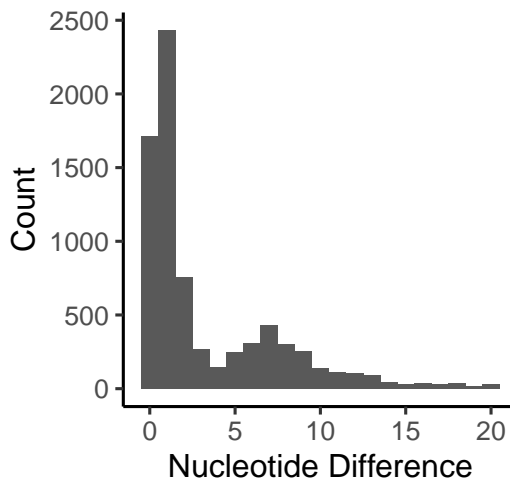
IGHV1-2*02

15966 sequences assigned
1796 (11.2%) exact matches, in which:
1392 unique CDR3
6 unique J



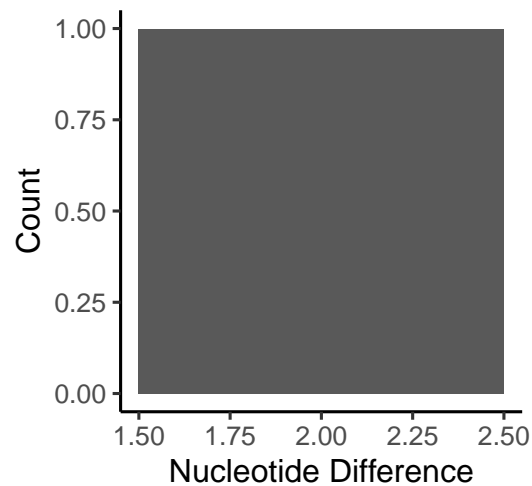
IGHV1-8*01

8618 sequences assigned
1715 (19.9%) exact matches, in which:
1351 unique CDR3
6 unique J



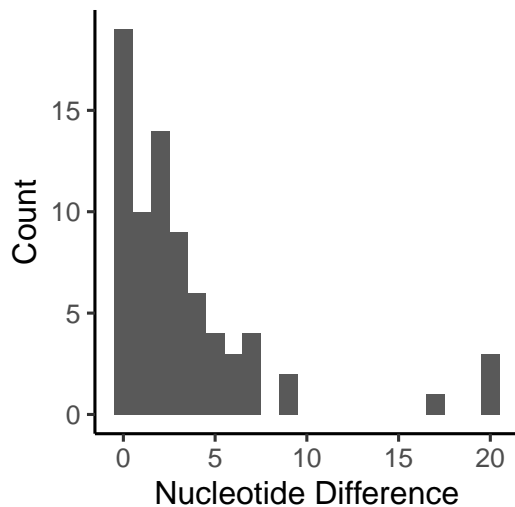
IGHV1-38-4*01

1 sequences assigned
No exact matches.



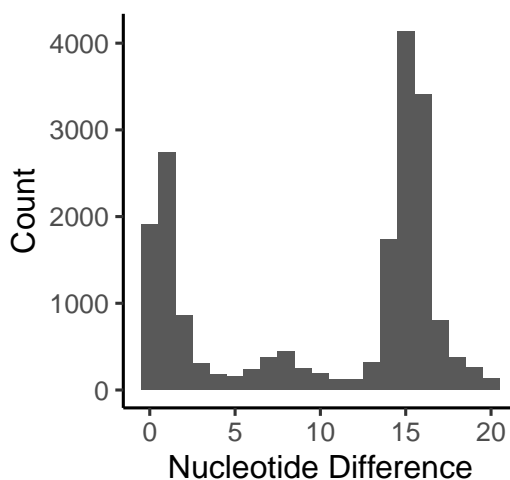
IGHV1-3*02

77 sequences assigned
19 (24.7%) exact matches, in which:
19 unique CDR3
4 unique J



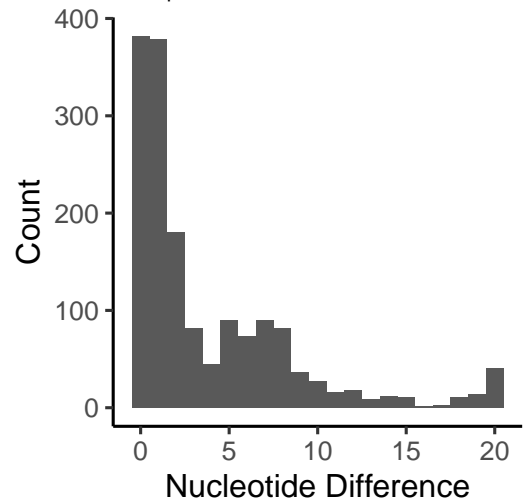
IGHV1-18*04

20079 sequences assigned
1906 (9.5%) exact matches, in which:
1485 unique CDR3
6 unique J



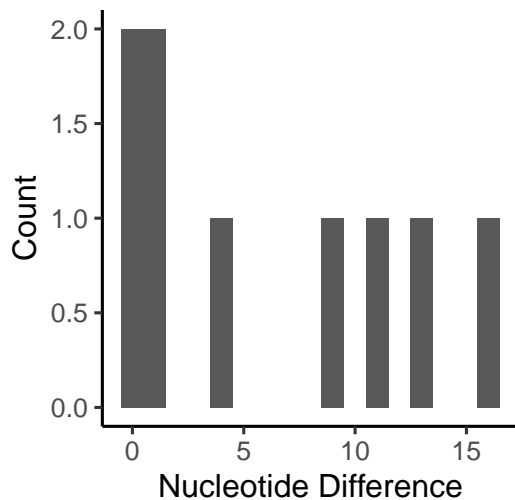
IGHV1-46*01

1745 sequences assigned
382 (21.9%) exact matches, in which:
327 unique CDR3
6 unique J



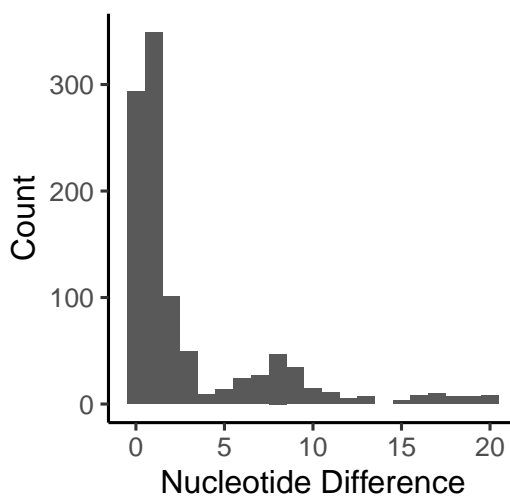
IGHV1-3*01_05

11 sequences assigned
2 (18.2%) exact matches, in which:
2 unique CDR3
2 unique J



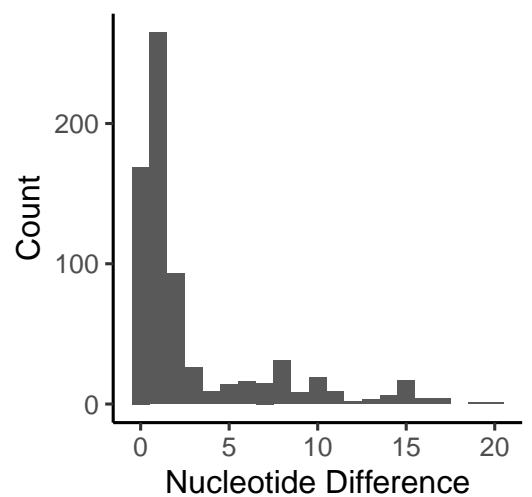
IGHV1-24*01

1039 sequences assigned
293 (28.2%) exact matches, in which:
226 unique CDR3
6 unique J



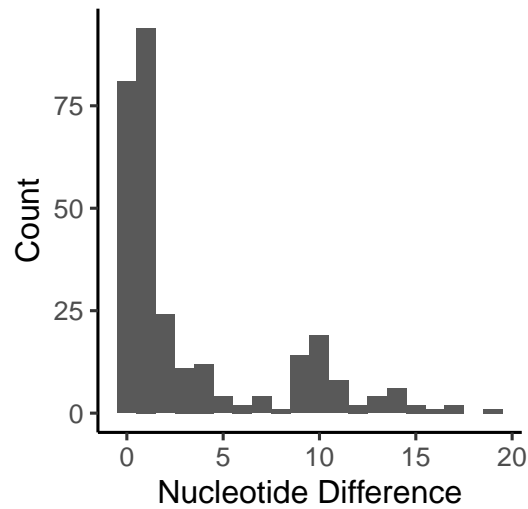
IGHV1-46*03

833 sequences assigned
169 (20.3%) exact matches, in which:
106 unique CDR3
5 unique J



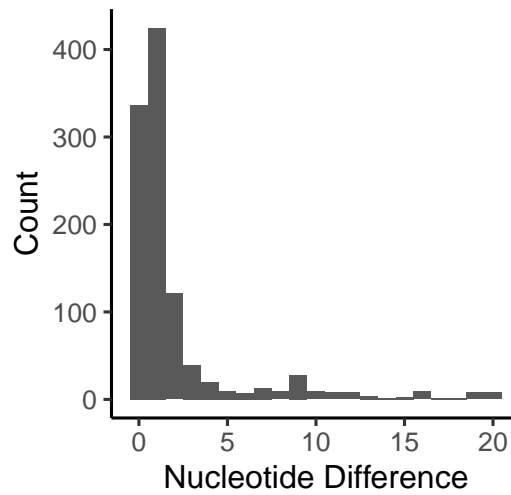
IGHV1-58*02

544 sequences assigned
81 (14.9%) exact matches, in which:
67 unique CDR3
6 unique J



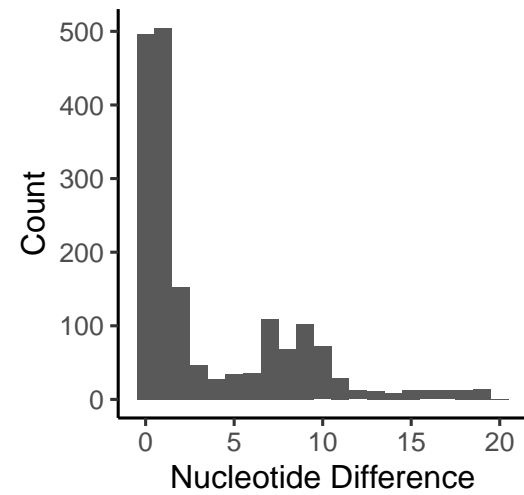
IGHV1-69*02

1124 sequences assigned
337 (30%) exact matches, in which:
279 unique CDR3
6 unique J



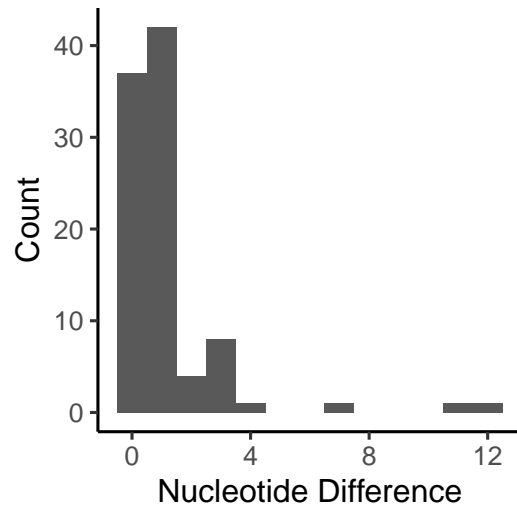
IGHV1-69*06_14

1893 sequences assigned
496 (26.2%) exact matches, in which:
436 unique CDR3
6 unique J



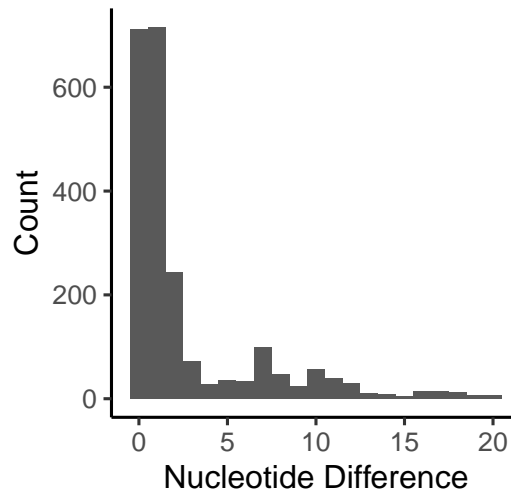
IGHV1-58*01_03

96 sequences assigned
37 (38.5%) exact matches, in which:
31 unique CDR3
4 unique J



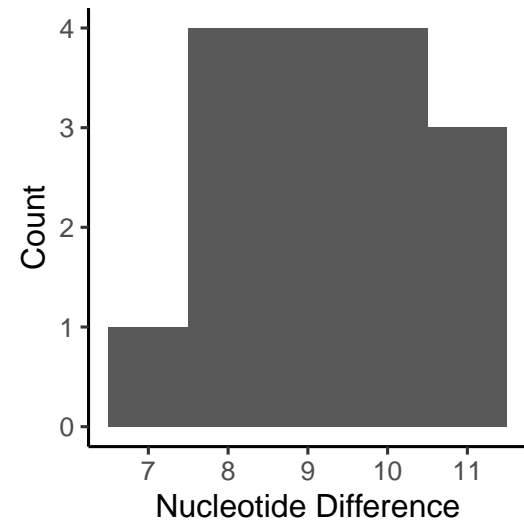
IGHV1-69*01_12_13

2284 sequences assigned
712 (31.2%) exact matches, in which:
601 unique CDR3
6 unique J



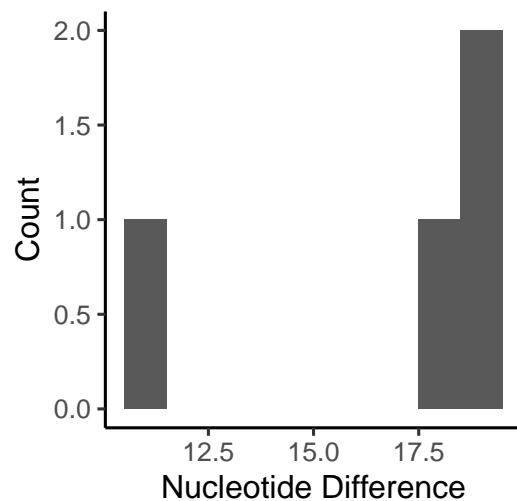
IGHV1-NL1*01

16 sequences assigned
No exact matches.



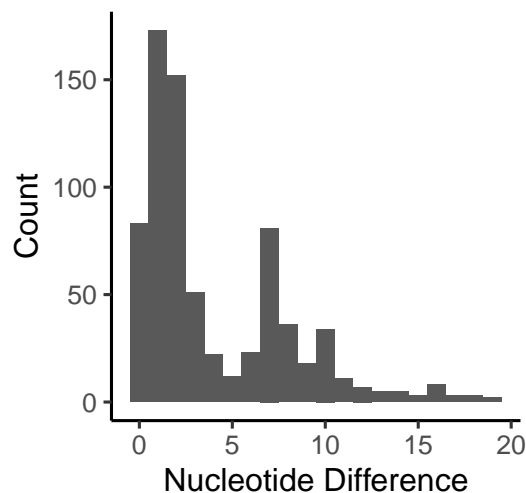
IGHV1-69-2*01

5 sequences assigned
No exact matches.



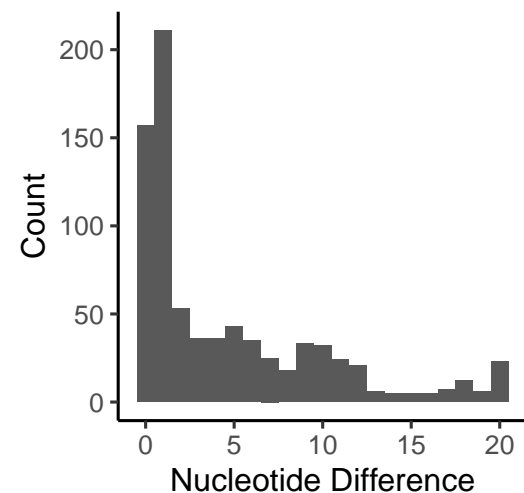
IGHV1-69*04_09

748 sequences assigned
83 (11.1%) exact matches, in which:
80 unique CDR3
5 unique J



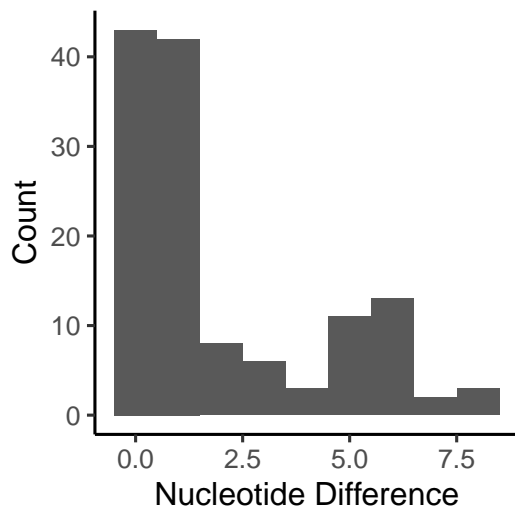
IGHV2-5*02

1080 sequences assigned
157 (14.5%) exact matches, in which:
121 unique CDR3
5 unique J



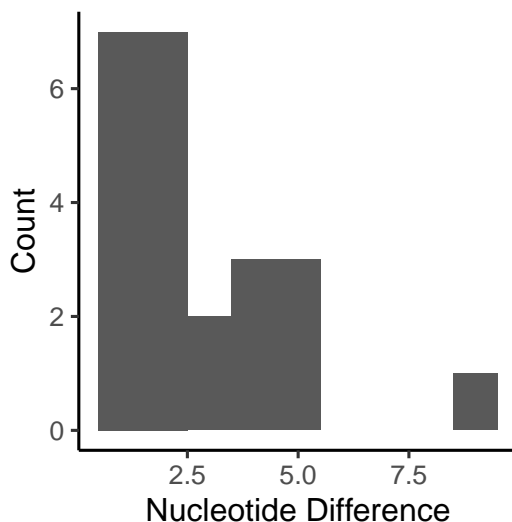
IGHV2-26*01

140 sequences assigned
43 (30.7%) exact matches, in which:
31 unique CDR3
4 unique J



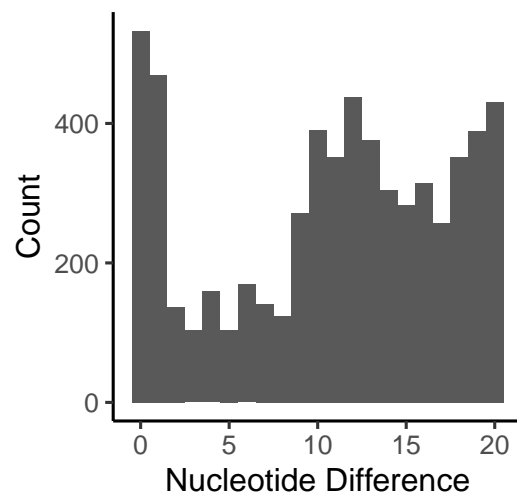
IGHV2-70*12

23 sequences assigned
No exact matches.



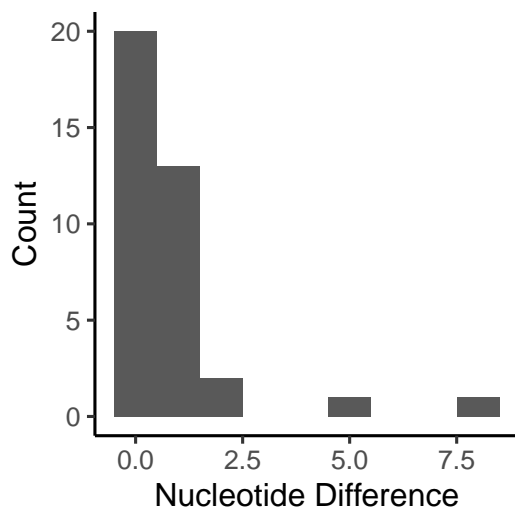
IGHV3-7*03

8010 sequences assigned
533 (6.7%) exact matches, in which:
342 unique CDR3
5 unique J



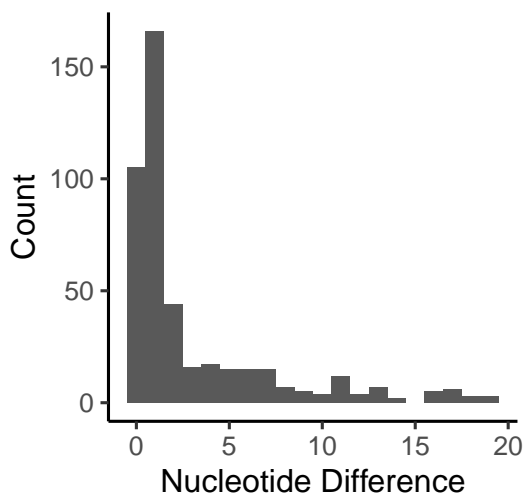
IGHV2-26*02

37 sequences assigned
20 (54.1%) exact matches, in which:
18 unique CDR3
4 unique J



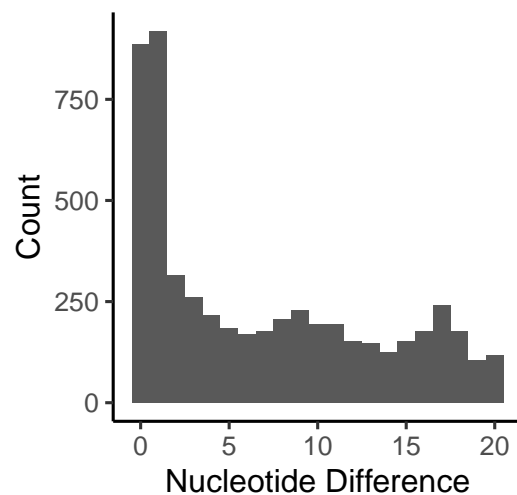
IGHV2-70*11_15

463 sequences assigned
105 (22.7%) exact matches, in which:
76 unique CDR3
4 unique J



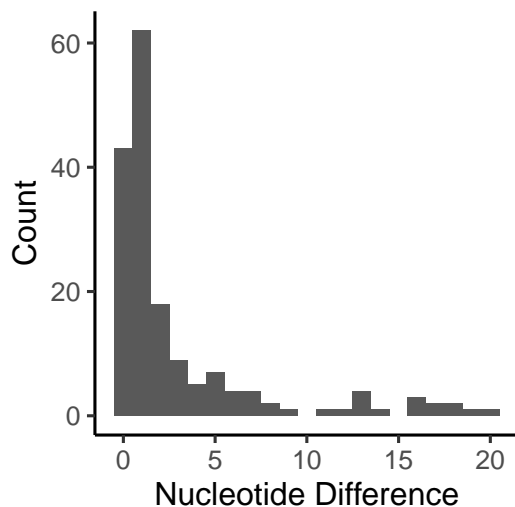
IGHV3-9*01

6380 sequences assigned
887 (13.9%) exact matches, in which:
485 unique CDR3
6 unique J



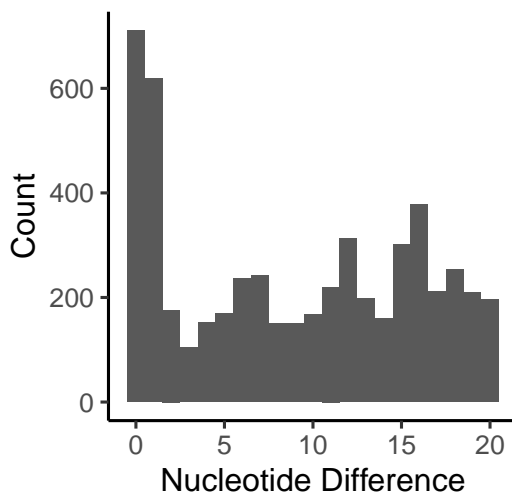
IGHV2-70*01

196 sequences assigned
43 (21.9%) exact matches, in which:
32 unique CDR3
4 unique J



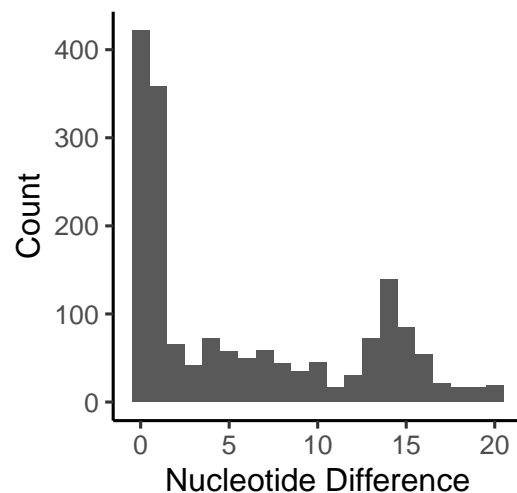
IGHV3-7*01

6460 sequences assigned
711 (11%) exact matches, in which:
499 unique CDR3
6 unique J



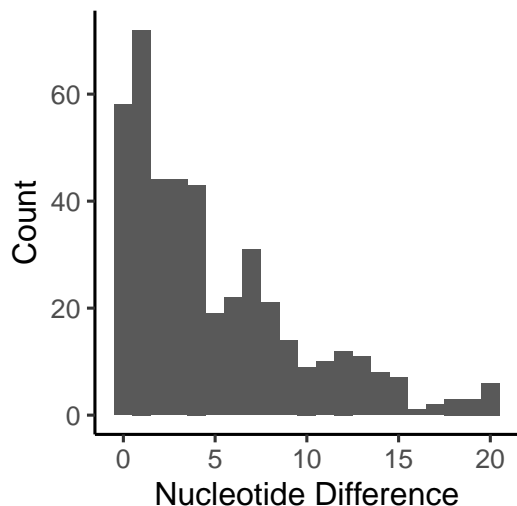
IGHV3-11*01

1889 sequences assigned
422 (22.3%) exact matches, in which:
269 unique CDR3
6 unique J



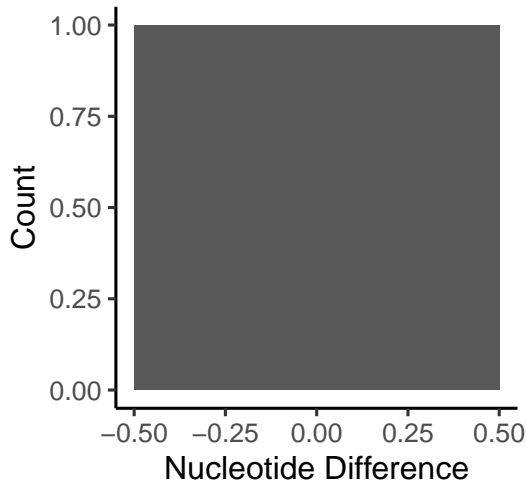
IGHV3-11*04

459 sequences assigned
58 (12.6%) exact matches, in which:
54 unique CDR3
4 unique J



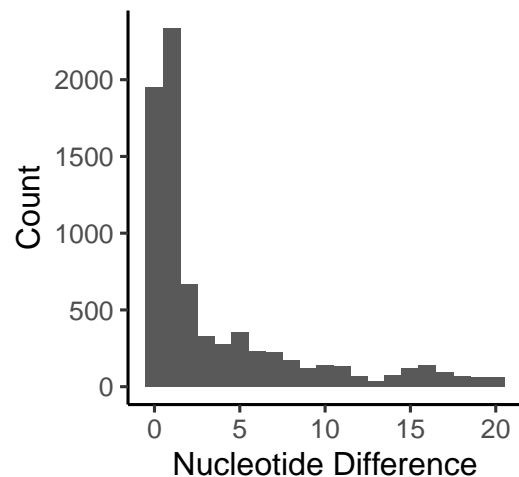
IGHV3-20*01_02

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



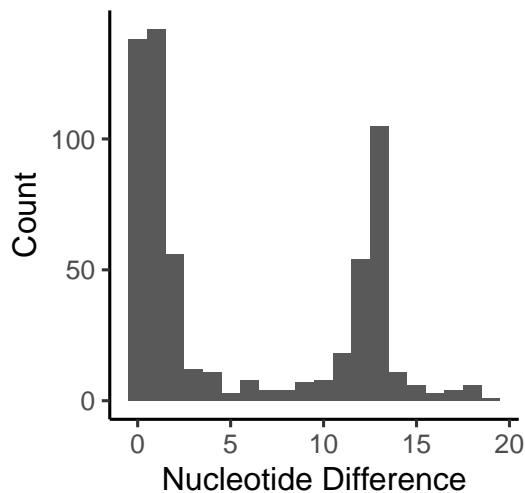
IGHV3-21*01_02

9078 sequences assigned
1950 (21.5%) exact matches, in which:
1184 unique CDR3
6 unique J



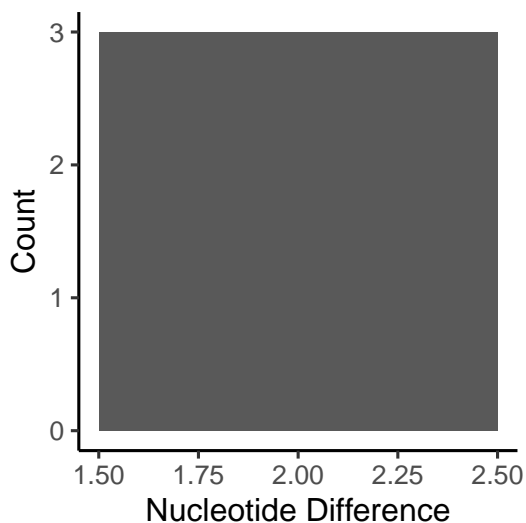
IGHV3-13*01

808 sequences assigned
138 (17.1%) exact matches, in which:
91 unique CDR3
5 unique J



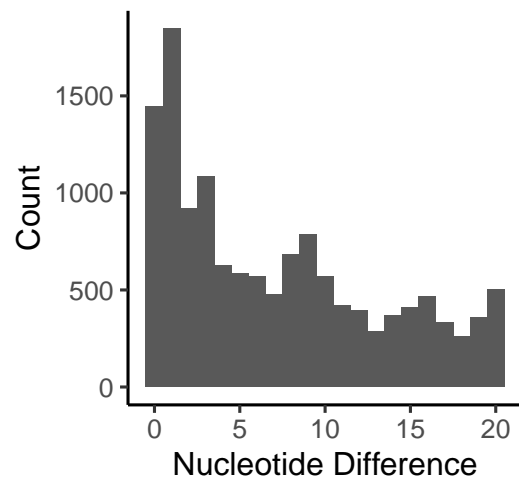
IGHV3-20*03_04

7 sequences assigned
No exact matches.



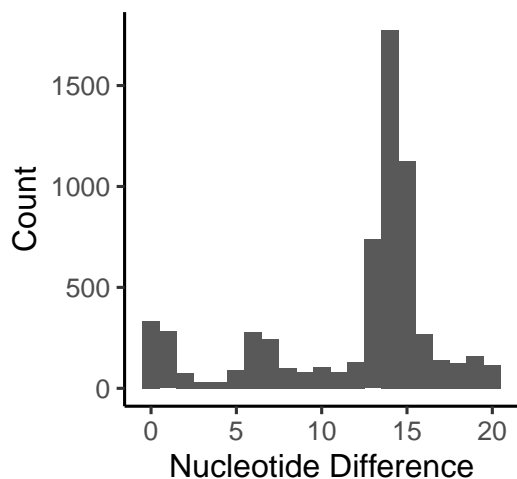
IGHV3-23*01_04

18079 sequences assigned
1445 (8%) exact matches, in which:
834 unique CDR3
6 unique J



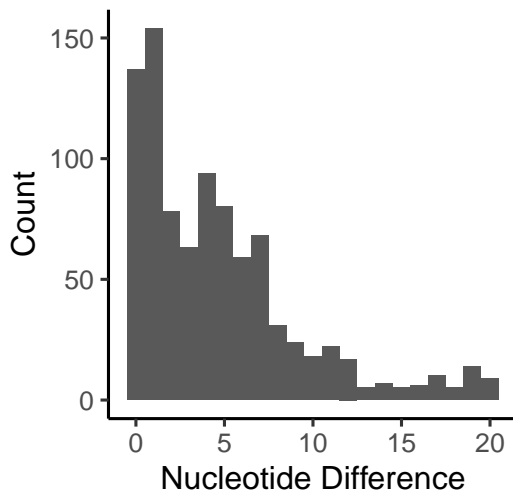
IGHV3-15*01_02

6849 sequences assigned
335 (4.9%) exact matches, in which:
190 unique CDR3
6 unique J



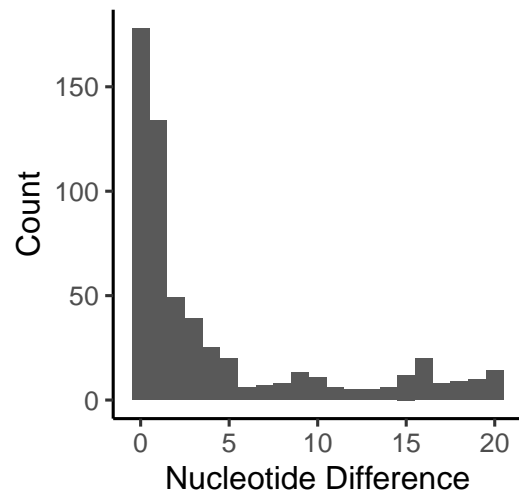
IGHV3-21*04

1261 sequences assigned
137 (10.9%) exact matches, in which:
120 unique CDR3
5 unique J



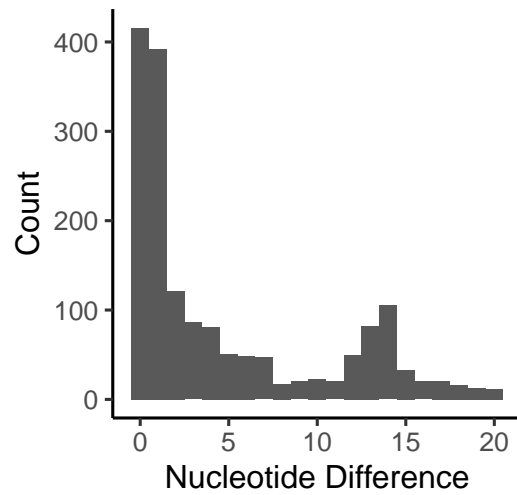
IGHV3-30*03

802 sequences assigned
178 (22.2%) exact matches, in which:
161 unique CDR3
6 unique J



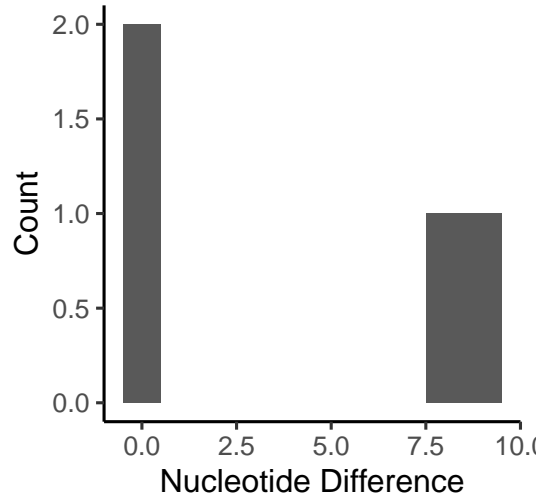
IGHV3-33*01

2362 sequences assigned
416 (17.6%) exact matches, in which:
269 unique CDR3
5 unique J



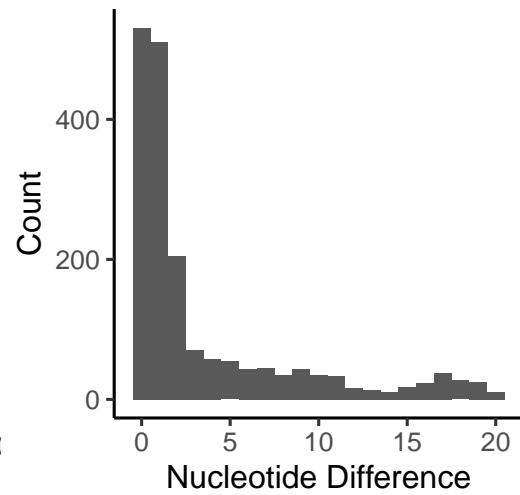
IGHV3-35*01

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



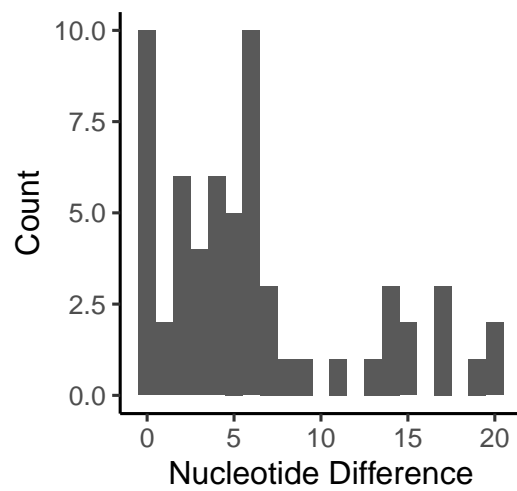
IGHV3-48*02

2300 sequences assigned
531 (23.1%) exact matches, in which:
322 unique CDR3
6 unique J



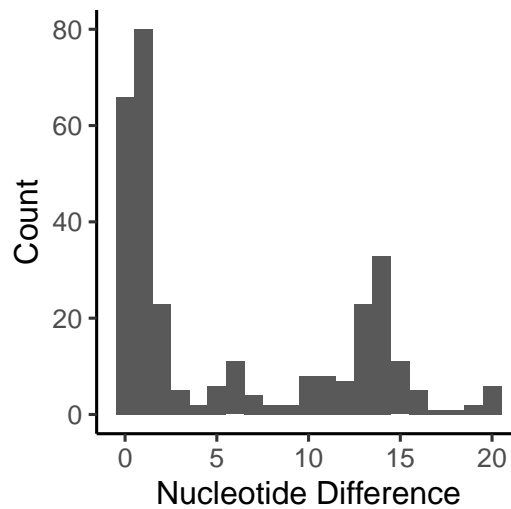
IGHV3-33*05

84 sequences assigned
10 (11.9%) exact matches, in which:
10 unique CDR3
4 unique J



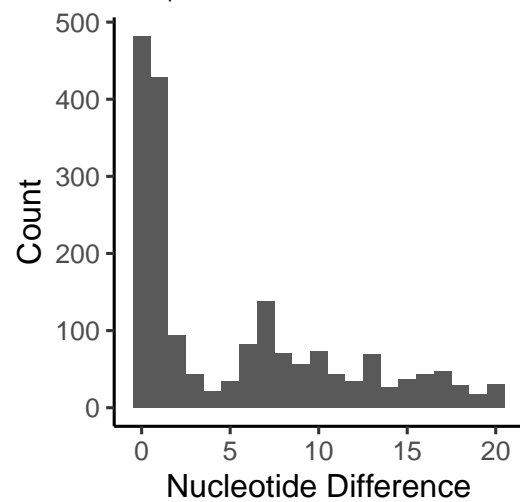
IGHV3-43*01

425 sequences assigned
66 (15.5%) exact matches, in which:
38 unique CDR3
4 unique J



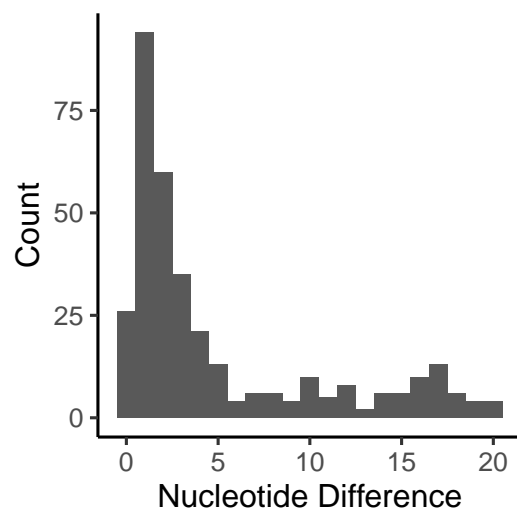
IGHV3-48*03

2607 sequences assigned
482 (18.5%) exact matches, in which:
287 unique CDR3
6 unique J



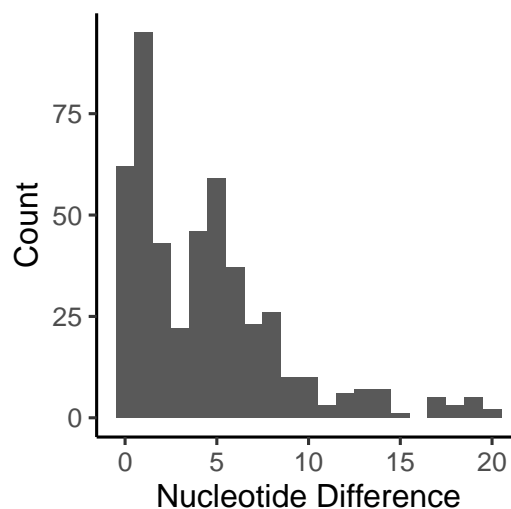
IGHV3-33*06

405 sequences assigned
26 (6.4%) exact matches, in which:
25 unique CDR3
5 unique J



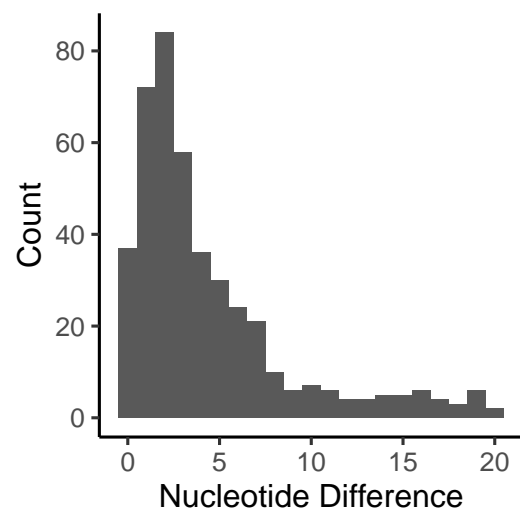
IGHV3-48*01

519 sequences assigned
62 (11.9%) exact matches, in which:
59 unique CDR3
5 unique J



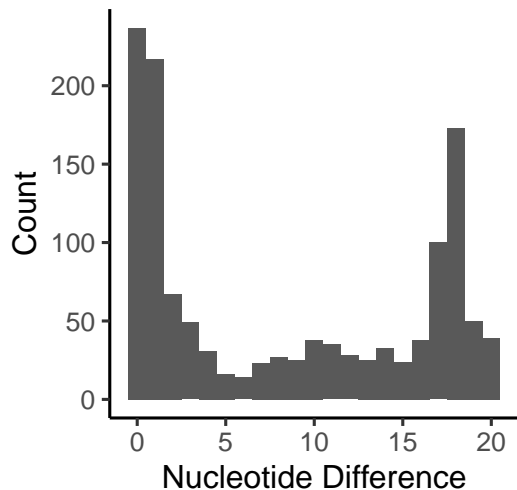
IGHV3-48*04

479 sequences assigned
37 (7.7%) exact matches, in which:
35 unique CDR3
4 unique J



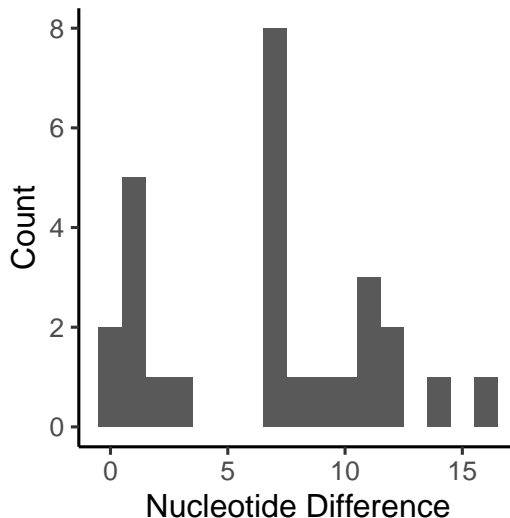
IGHV3-49*04

1898 sequences assigned
237 (12.5%) exact matches, in which:
133 unique CDR3
6 unique J



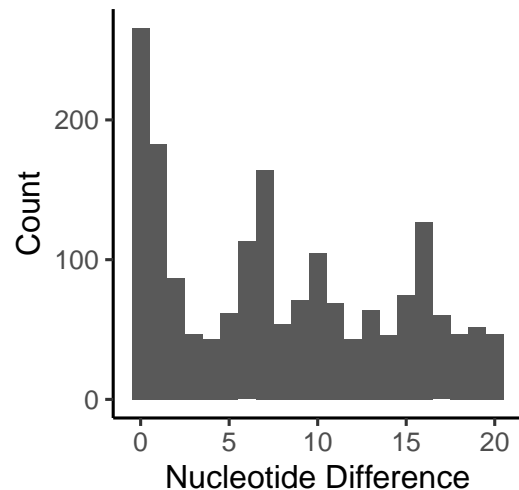
IGHV3-53*05

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



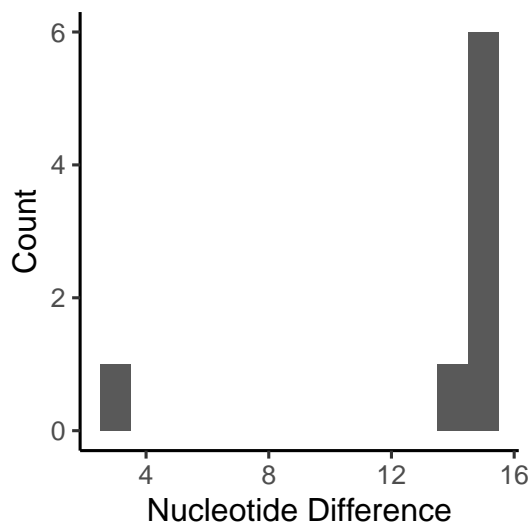
IGHV3-66*01

2505 sequences assigned
266 (10.6%) exact matches, in which:
184 unique CDR3
5 unique J



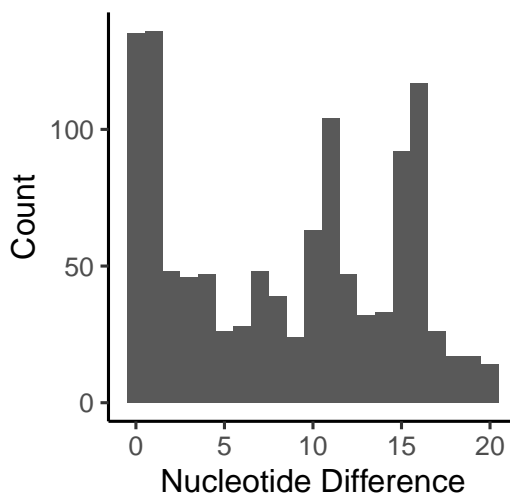
IGHV3-52*01_03

8 sequences assigned
No exact matches.



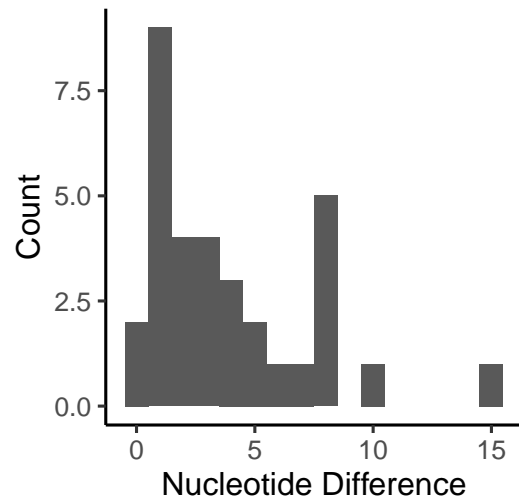
IGHV3-53*01_02

1404 sequences assigned
135 (9.6%) exact matches, in which:
91 unique CDR3
5 unique J



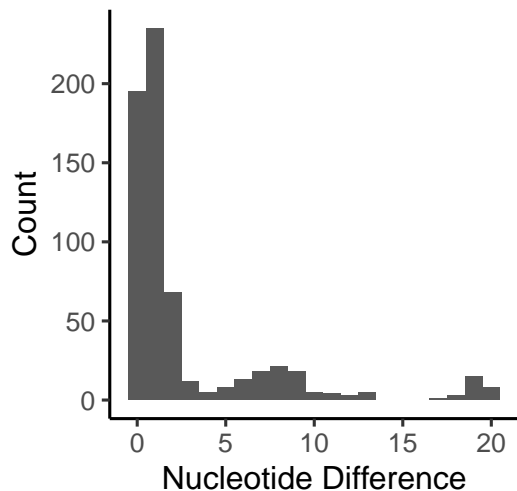
IGHV3-66*03

33 sequences assigned
2 (6.1%) exact matches, in which:
2 unique CDR3
1 unique J



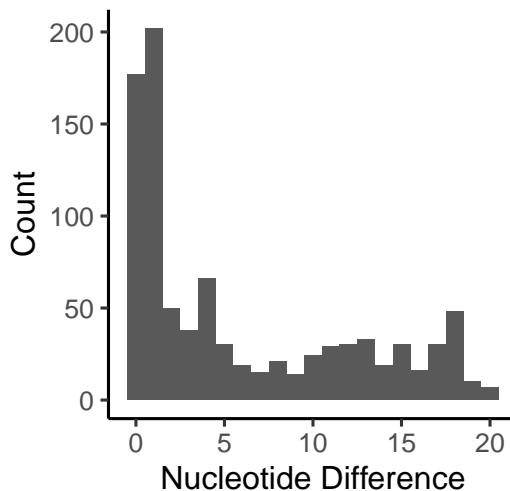
IGHV3-53*04

666 sequences assigned
195 (29.3%) exact matches, in which:
132 unique CDR3
5 unique J



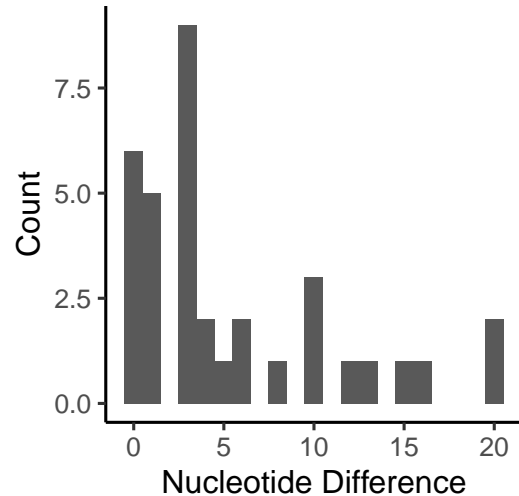
IGHV3-64*01

1010 sequences assigned
177 (17.5%) exact matches, in which:
112 unique CDR3
5 unique J



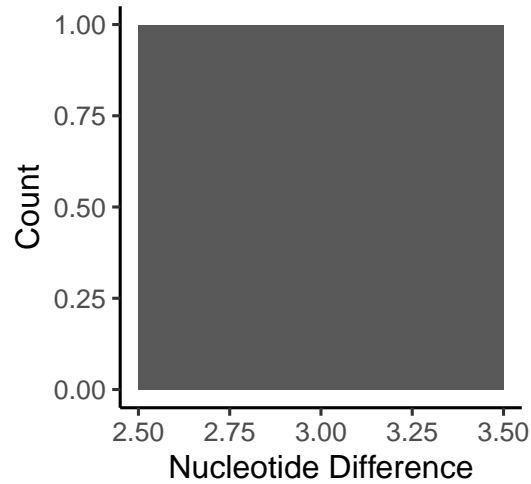
IGHV3-69-1*01

313 sequences assigned
6 (1.9%) exact matches, in which:
3 unique CDR3
2 unique J



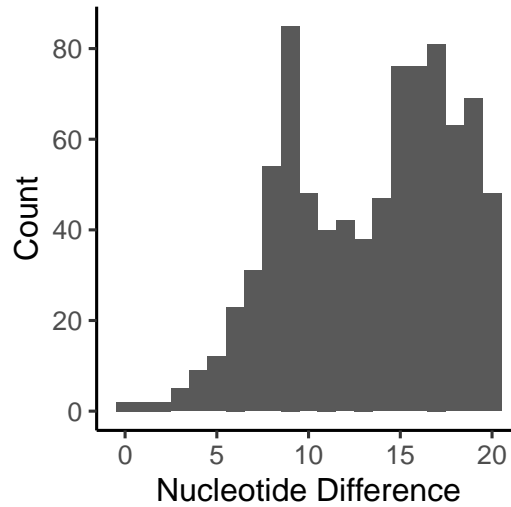
IGHV3-71*03

1 sequences assigned
No exact matches.



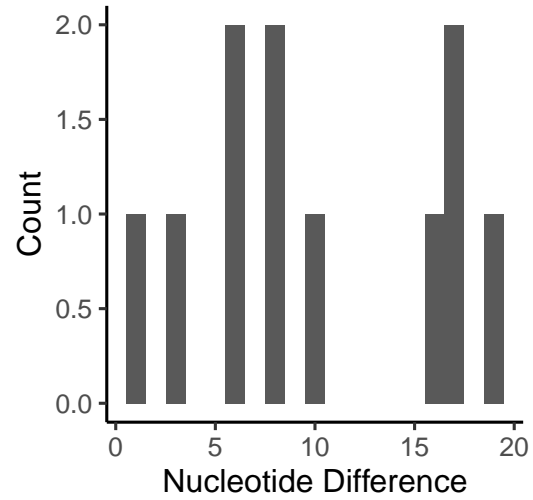
IGHV3-74*03

2029 sequences assigned
2 (0.1%) exact matches, in which:
2 unique CDR3
2 unique J



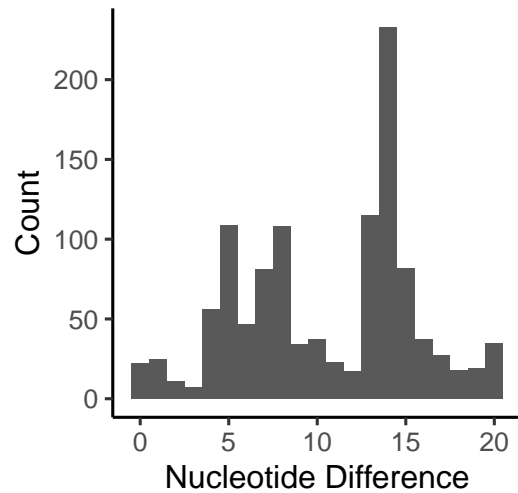
IGHV3-64D*06

15 sequences assigned
No exact matches.



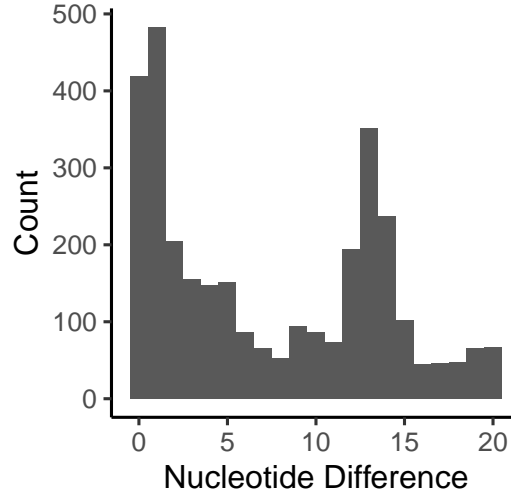
IGHV3-72*01

1295 sequences assigned
22 (1.7%) exact matches, in which:
17 unique CDR3
4 unique J



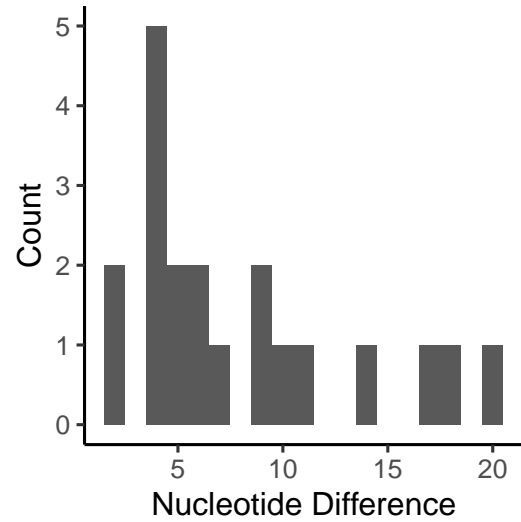
IGHV3-74*01_02

3696 sequences assigned
419 (11.3%) exact matches, in which:
276 unique CDR3
6 unique J



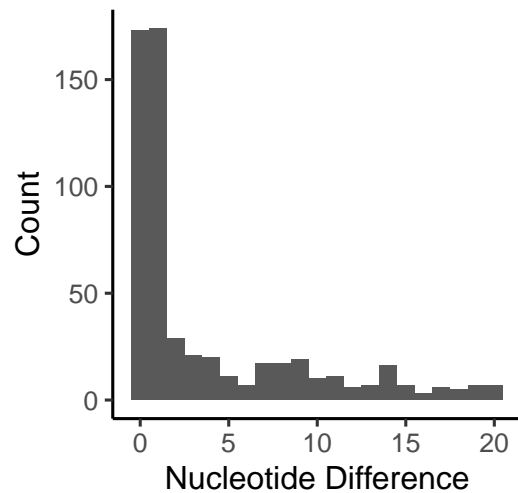
IGHV3-NL1*01

32 sequences assigned
No exact matches.



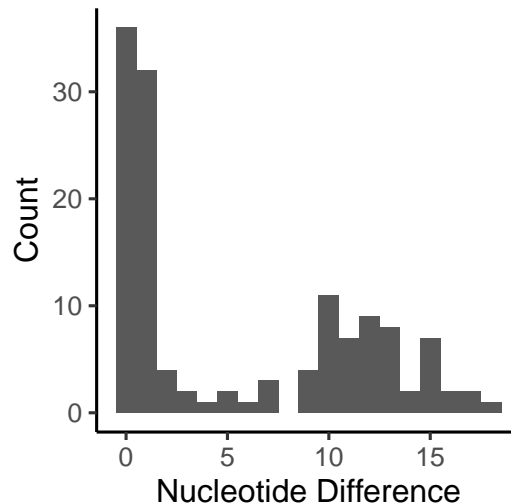
IGHV3-73*01_02

734 sequences assigned
173 (23.6%) exact matches, in which:
96 unique CDR3
5 unique J



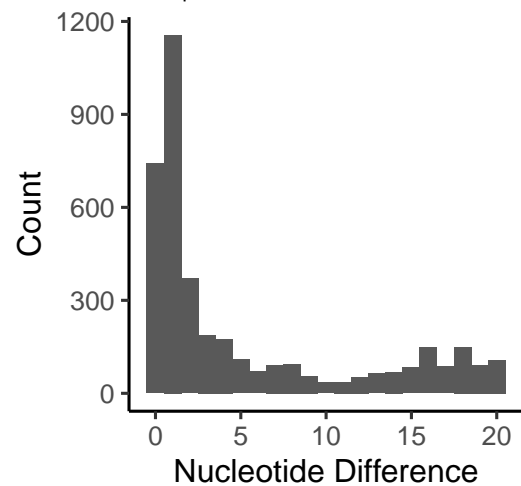
IGHV3-43D*04

141 sequences assigned
36 (25.5%) exact matches, in which:
21 unique CDR3
2 unique J



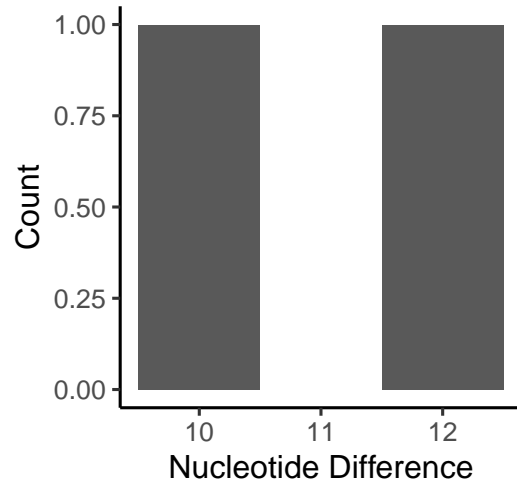
IGHV4-4*07

4704 sequences assigned
741 (15.8%) exact matches, in which:
592 unique CDR3
6 unique J



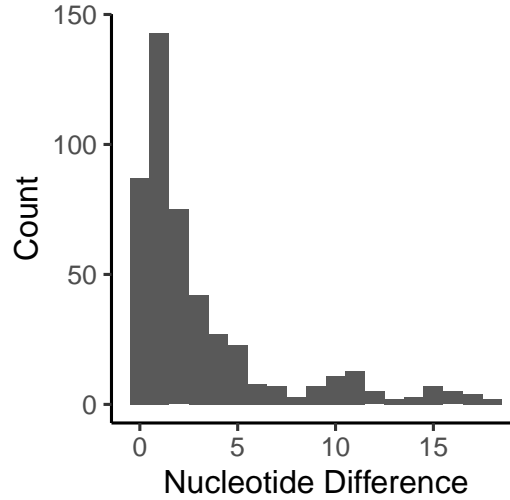
IGHV4-28*03

12 sequences assigned
No exact matches.



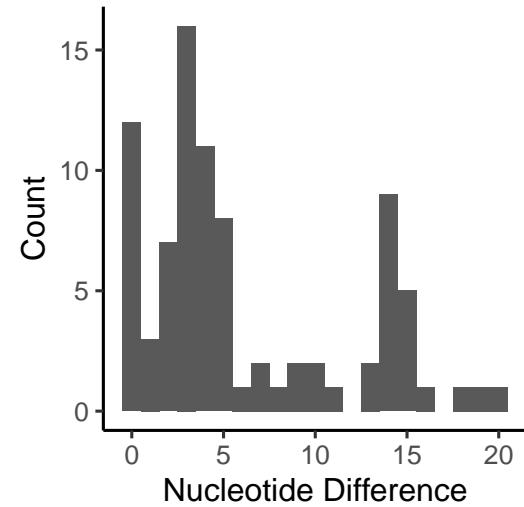
IGHV4-30-2*01

492 sequences assigned
87 (17.7%) exact matches, in which:
64 unique CDR3
5 unique J



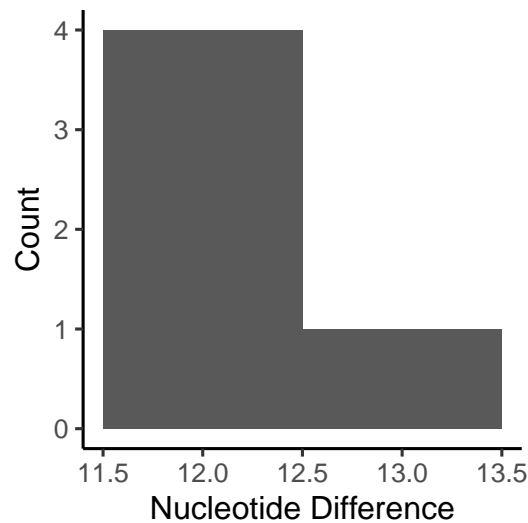
IGHV4-38-2*02

91 sequences assigned
12 (13.2%) exact matches, in which:
12 unique CDR3
5 unique J



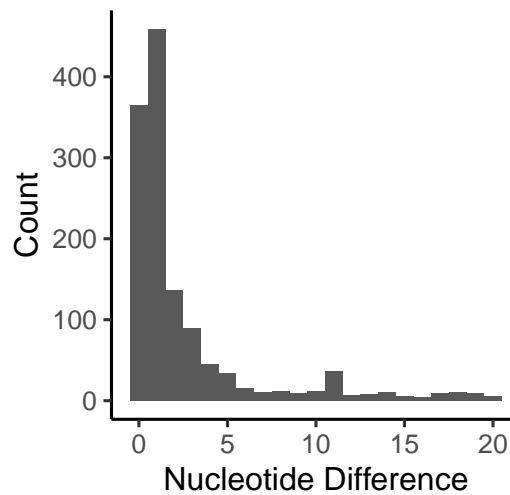
IGHV4-28*01_07

5 sequences assigned
No exact matches.



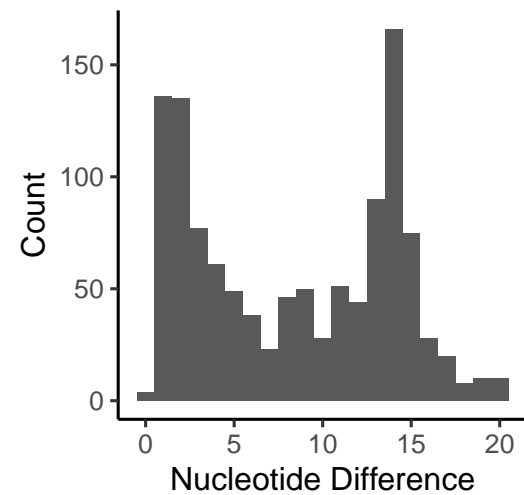
IGHV4-31*02

1365 sequences assigned
365 (26.7%) exact matches, in which:
289 unique CDR3
6 unique J



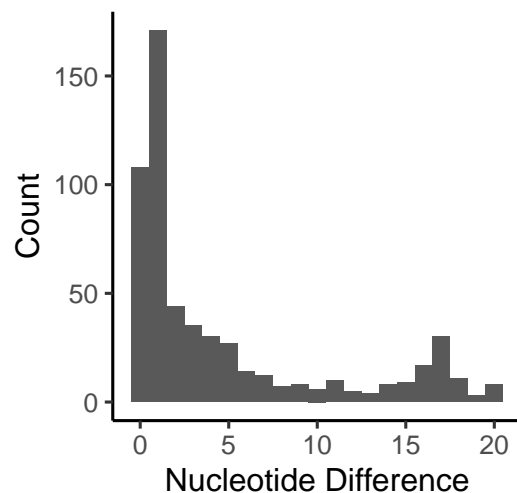
IGHV4-39*07

1268 sequences assigned
4 (0.3%) exact matches, in which:
4 unique CDR3
2 unique J



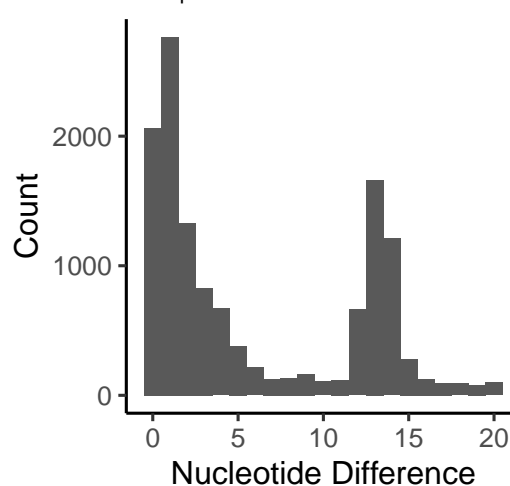
IGHV4-30-4*01

595 sequences assigned
108 (18.2%) exact matches, in which:
79 unique CDR3
5 unique J



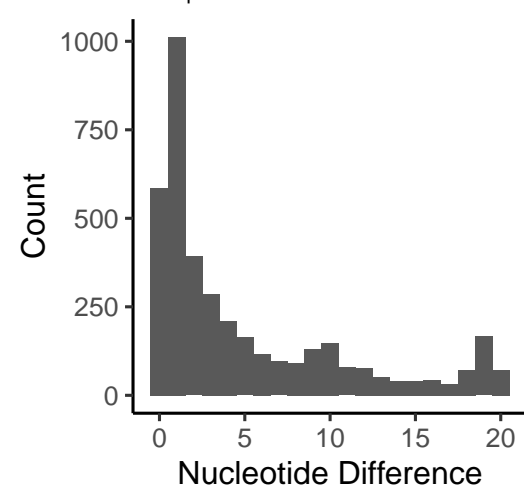
IGHV4-34*01_02

14275 sequences assigned
2061 (14.4%) exact matches, in which:
1528 unique CDR3
6 unique J



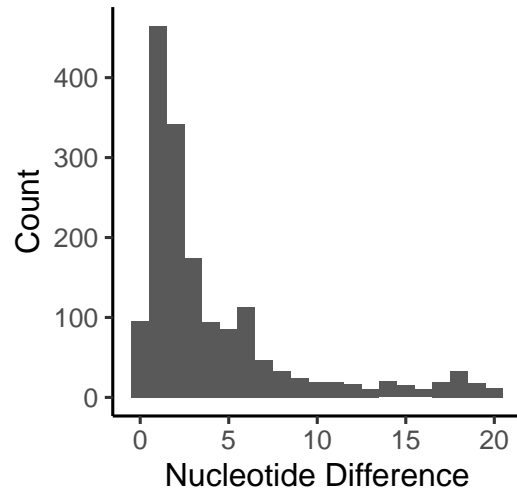
IGHV4-59*08

4452 sequences assigned
586 (13.2%) exact matches, in which:
453 unique CDR3
6 unique J



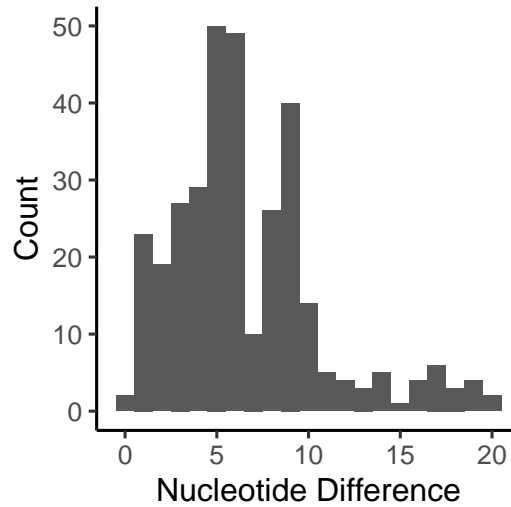
IGHV4–59*12

2391 sequences assigned
96 (4%) exact matches, in which:
93 unique CDR3
5 unique J



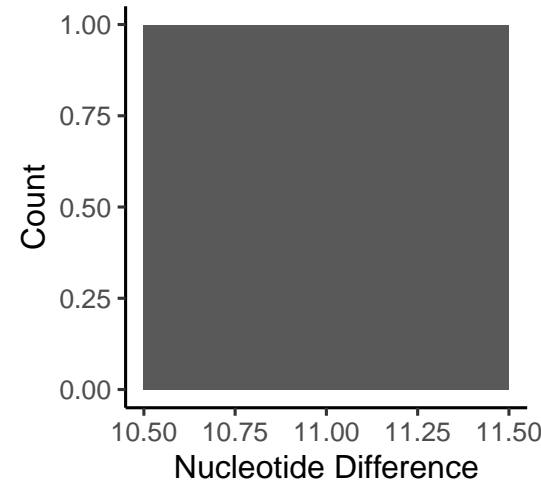
IGHV4–61*08

359 sequences assigned
2 (0.6%) exact matches, in which:
2 unique CDR3
2 unique J



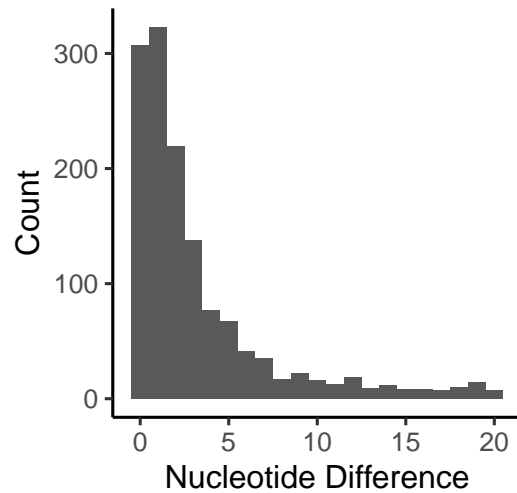
IGHV1/OR15–9*01

1 sequences assigned
No exact matches.



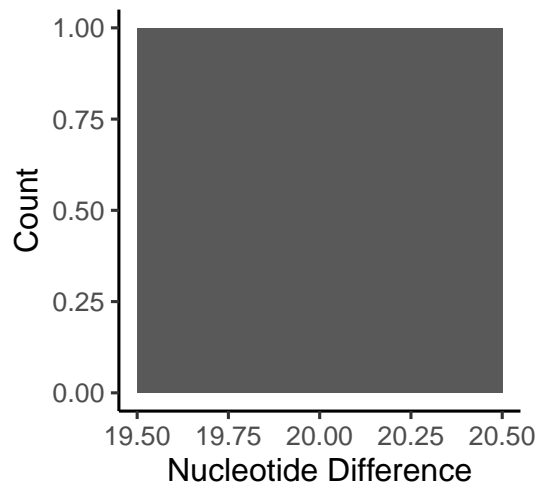
IGHV4–61*01

1401 sequences assigned
307 (21.9%) exact matches, in which:
265 unique CDR3
5 unique J



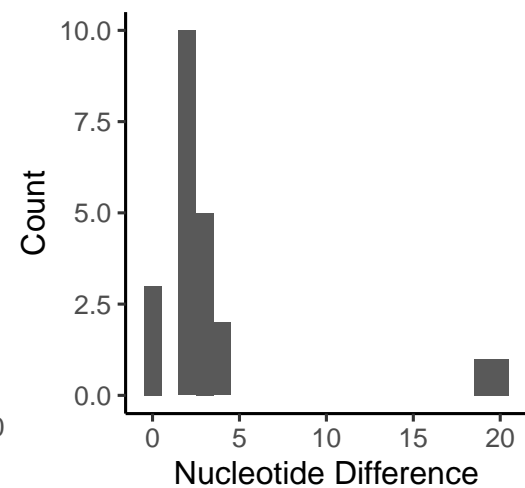
IGHV1/OR15–2*02_03

1 sequences assigned
No exact matches.



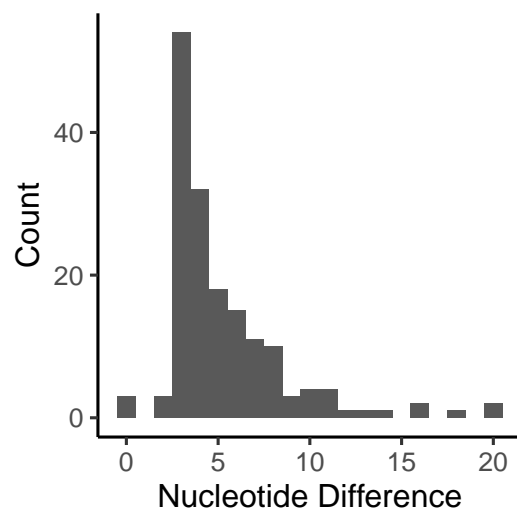
IGHV5–10–1*01_03

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



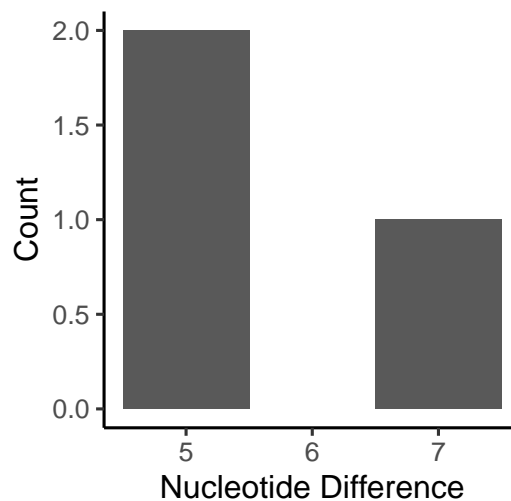
IGHV4–61*02

171 sequences assigned
3 (1.8%) exact matches, in which:
3 unique CDR3
2 unique J



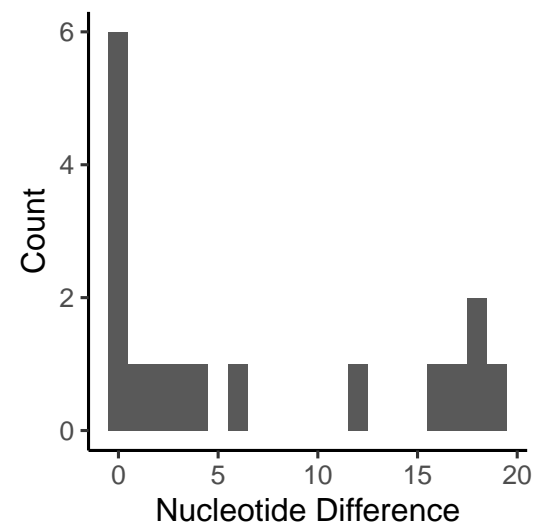
IGHV4/OR15–8*01

3 sequences assigned
No exact matches.



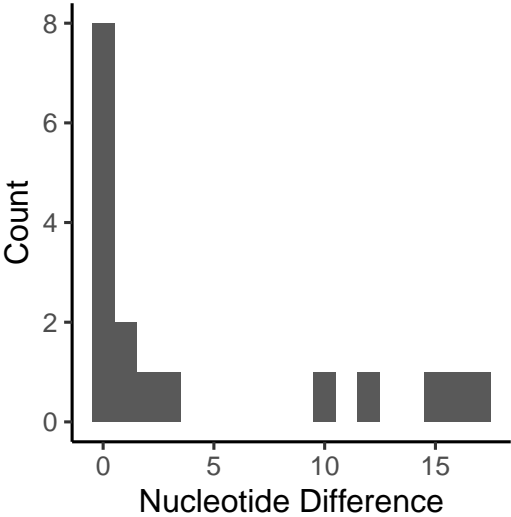
IGHV5–51*04

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



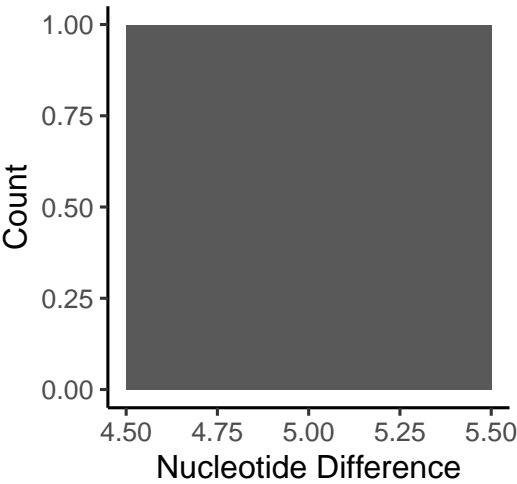
IGHV5–51*06

19 sequences assigned
8 (42.1%) exact matches, in which:
8 unique CDR3
4 unique J



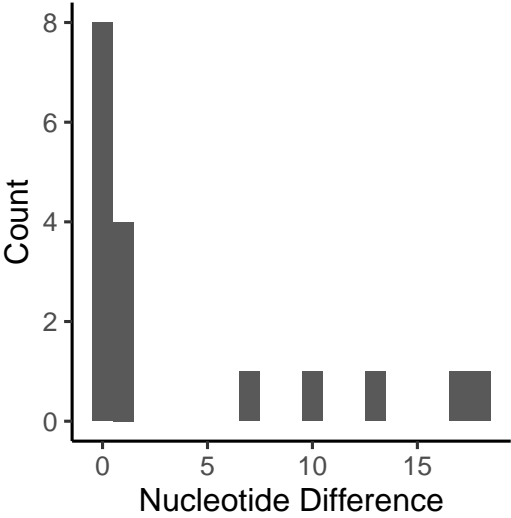
IGHV3/OR16–9*01

1 sequences assigned
No exact matches.



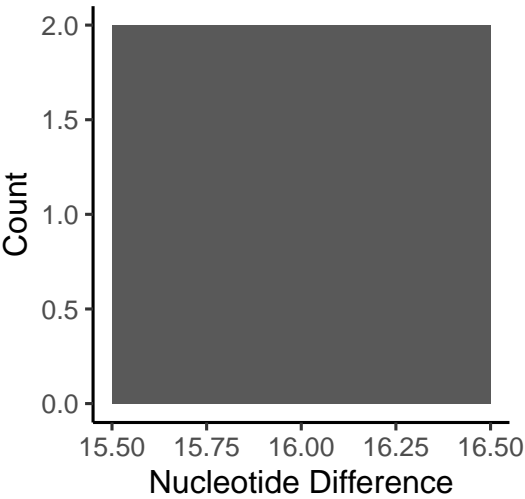
IGHV5–51*07

20 sequences assigned
8 (40%) exact matches, in which:
8 unique CDR3
3 unique J



IGHV3/OR16–10*01_03

2 sequences assigned
No exact matches.



IGHV6–1*01_02

1604 sequences assigned
136 (8.5%) exact matches, in which:
111 unique CDR3
4 unique J

