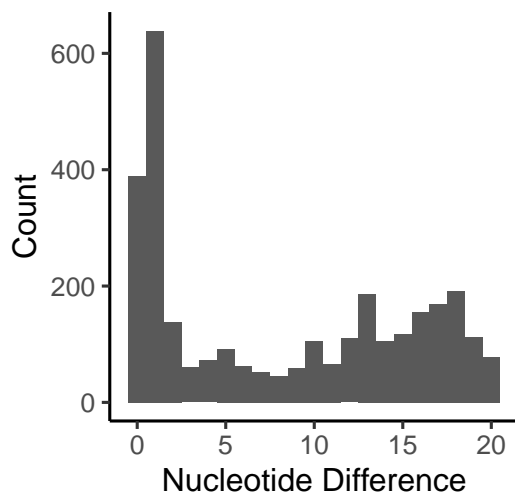


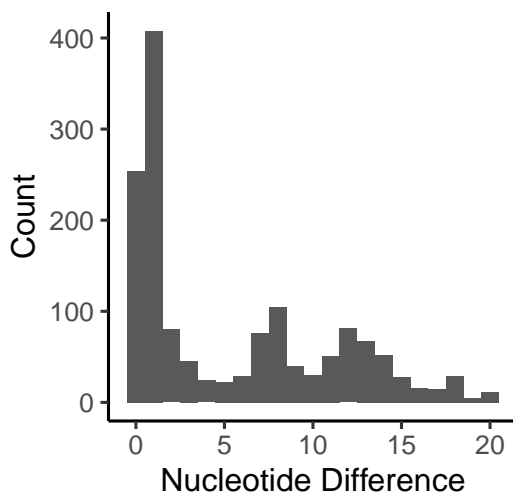
IGHV1-2*02

4264 sequences assigned
389 (9.1%) exact matches, in which:
307 unique CDR3
6 unique J



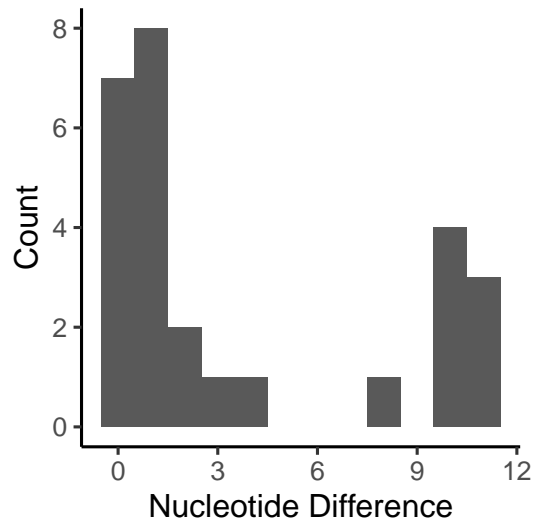
IGHV1-8*01

1528 sequences assigned
254 (16.6%) exact matches, in which:
207 unique CDR3
6 unique J



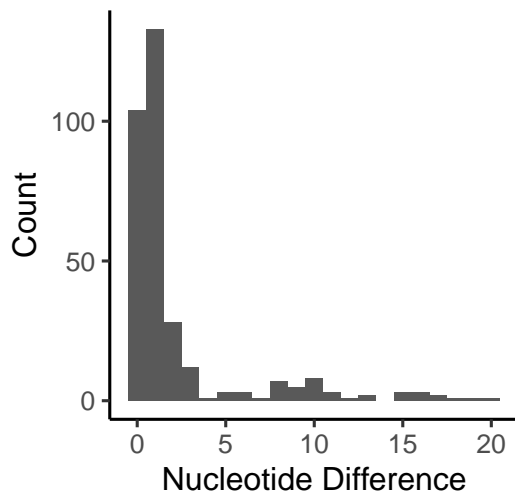
IGHV1-45*02

103 sequences assigned
7 (6.8%) exact matches, in which:
6 unique CDR3
3 unique J



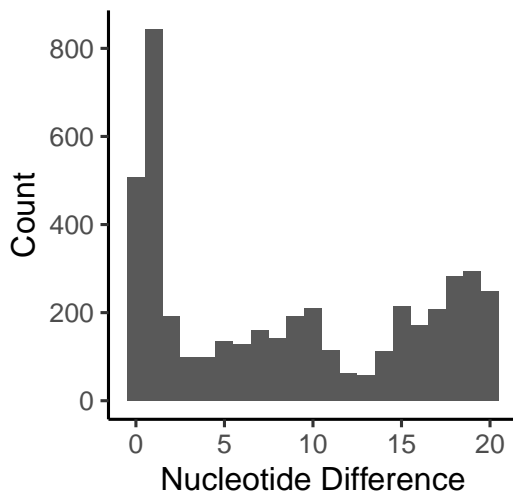
IGHV1-2*04

362 sequences assigned
104 (28.7%) exact matches, in which:
87 unique CDR3
4 unique J



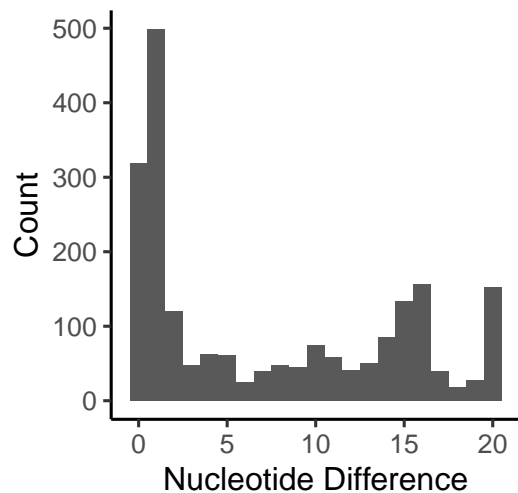
IGHV1-18*04

5670 sequences assigned
508 (9%) exact matches, in which:
379 unique CDR3
5 unique J



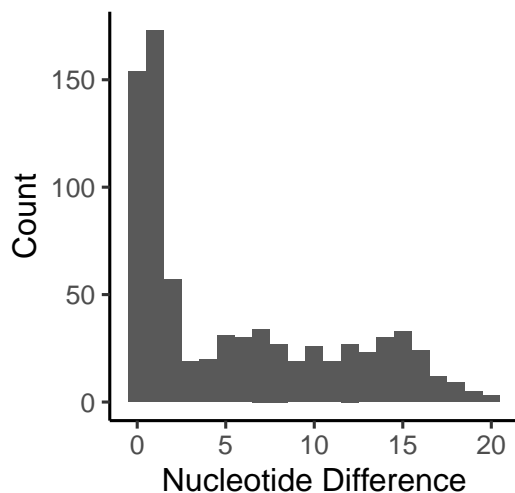
IGHV1-46*01

2833 sequences assigned
319 (11.3%) exact matches, in which:
239 unique CDR3
6 unique J



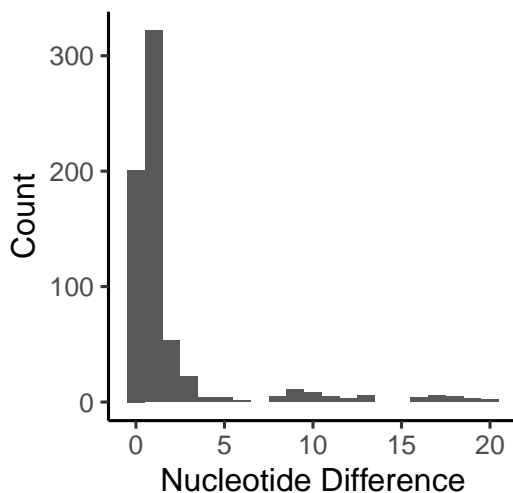
IGHV1-3*01_05

825 sequences assigned
154 (18.7%) exact matches, in which:
123 unique CDR3
6 unique J



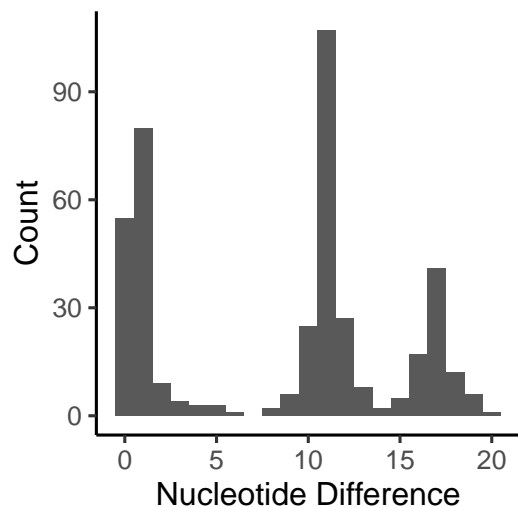
IGHV1-24*01

696 sequences assigned
201 (28.9%) exact matches, in which:
161 unique CDR3
6 unique J



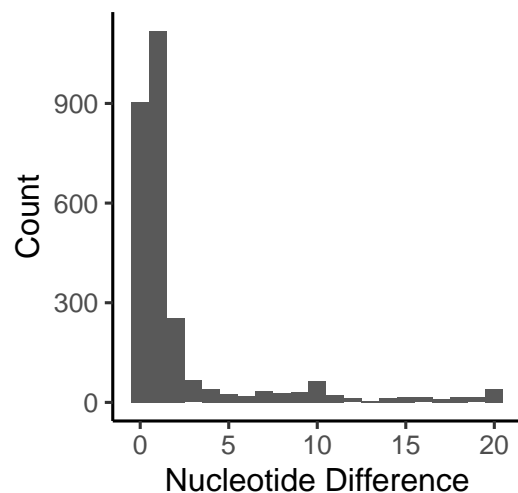
IGHV1-58*01_03

501 sequences assigned
55 (11%) exact matches, in which:
39 unique CDR3
4 unique J



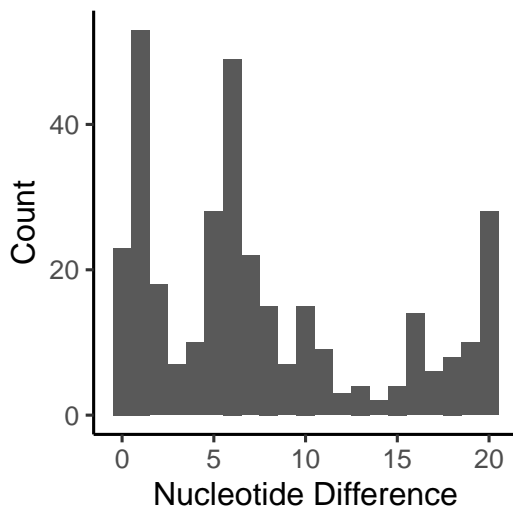
IGHV1-69*01_12_13

2941 sequences assigned
904 (30.7%) exact matches, in which:
781 unique CDR3
6 unique J



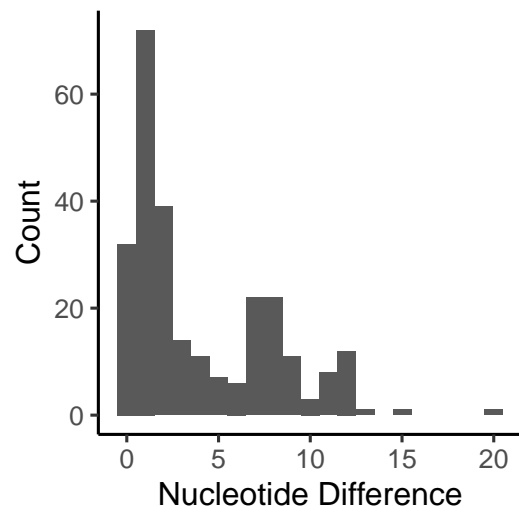
IGHV2-5*02

514 sequences assigned
23 (4.5%) exact matches, in which:
17 unique CDR3
4 unique J



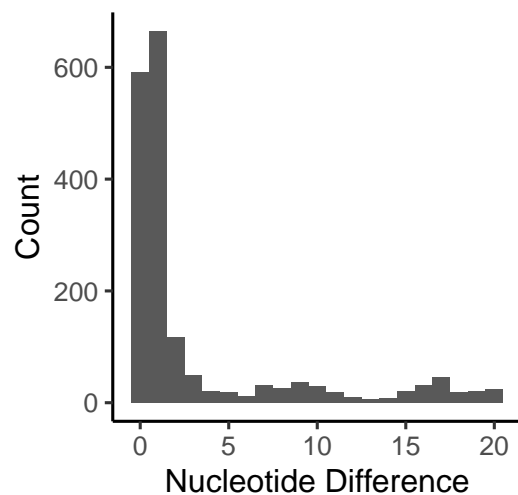
IGHV2-70*11_15

265 sequences assigned
32 (12.1%) exact matches, in which:
27 unique CDR3
5 unique J



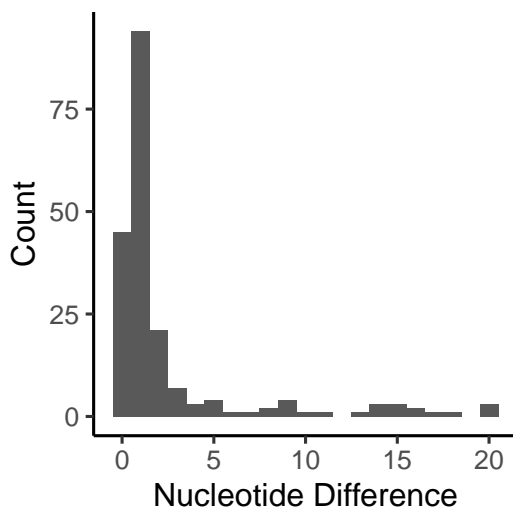
IGHV1-69*06_14

2944 sequences assigned
591 (20.1%) exact matches, in which:
517 unique CDR3
6 unique J



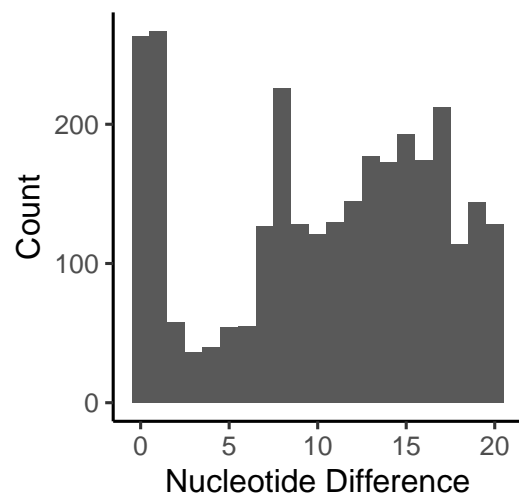
IGHV2-26*01

276 sequences assigned
45 (16.3%) exact matches, in which:
35 unique CDR3
5 unique J



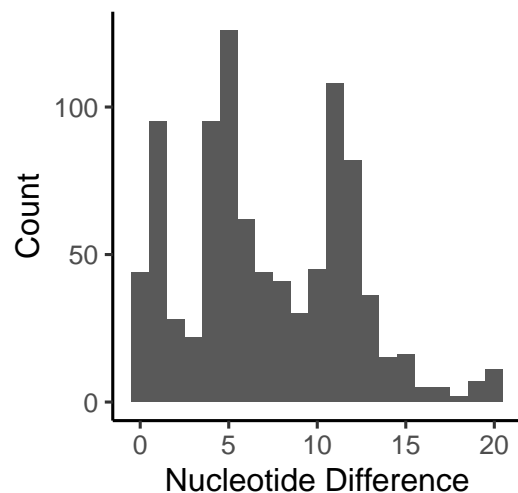
IGHV3-7*01

3674 sequences assigned
263 (7.2%) exact matches, in which:
160 unique CDR3
5 unique J



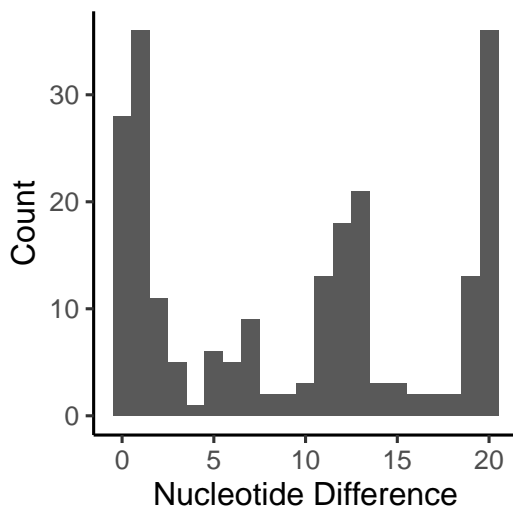
IGHV2-5*01

953 sequences assigned
44 (4.6%) exact matches, in which:
34 unique CDR3
4 unique J



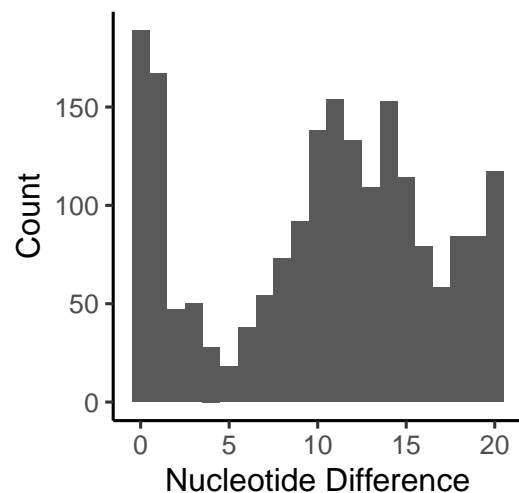
IGHV2-70*01

286 sequences assigned
28 (9.8%) exact matches, in which:
21 unique CDR3
4 unique J



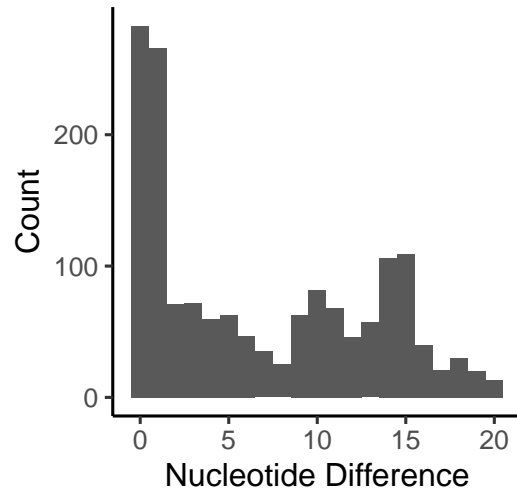
IGHV3-7*03

2533 sequences assigned
189 (7.5%) exact matches, in which:
114 unique CDR3
6 unique J



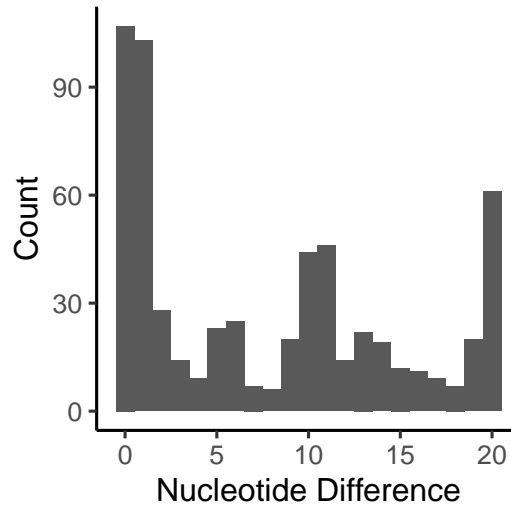
IGHV3-9*01

1826 sequences assigned
283 (15.5%) exact matches, in which:
161 unique CDR3
6 unique J



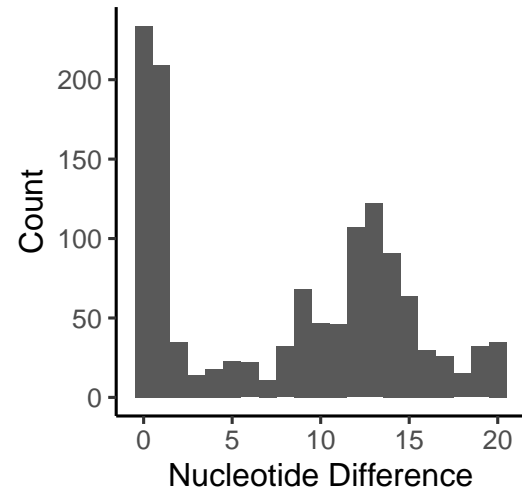
IGHV3-11*06

741 sequences assigned
107 (14.4%) exact matches, in which:
63 unique CDR3
5 unique J



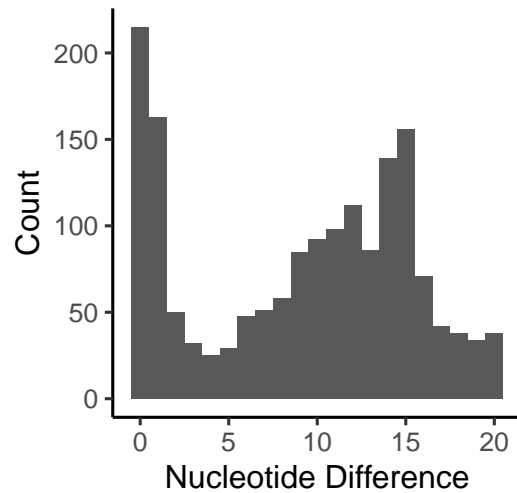
IGHV3-15*01_02

1766 sequences assigned
234 (13.3%) exact matches, in which:
129 unique CDR3
6 unique J



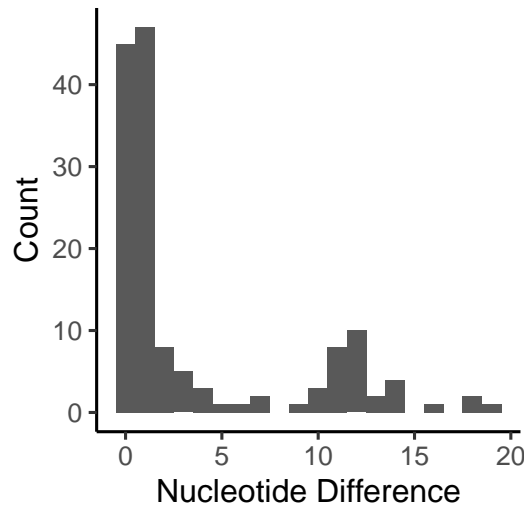
IGHV3-11*01

2571 sequences assigned
215 (8.4%) exact matches, in which:
126 unique CDR3
6 unique J



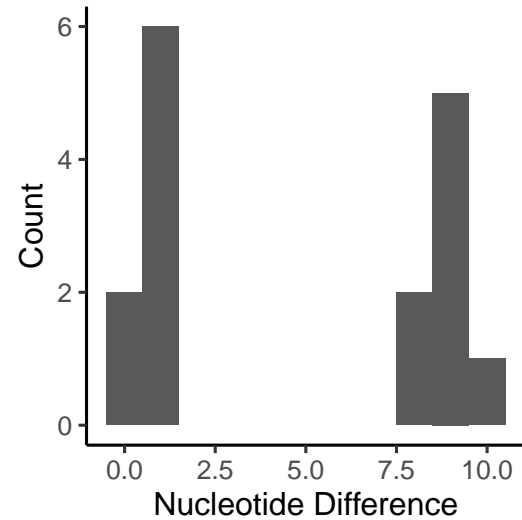
IGHV3-13*01

148 sequences assigned
45 (30.4%) exact matches, in which:
26 unique CDR3
5 unique J



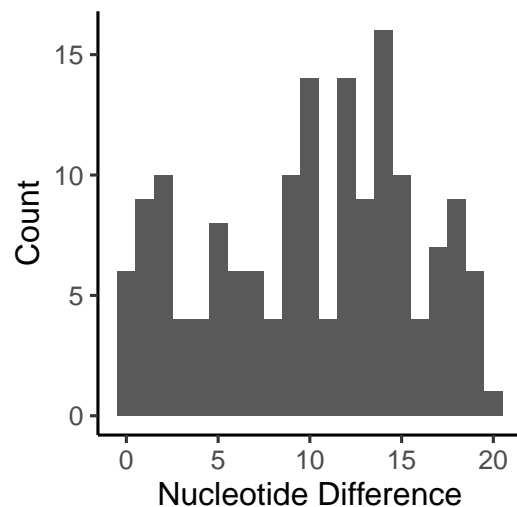
IGHV3-20*01_02

16 sequences assigned
2 (12.5%) exact matches, in which:
1 unique CDR3
1 unique J



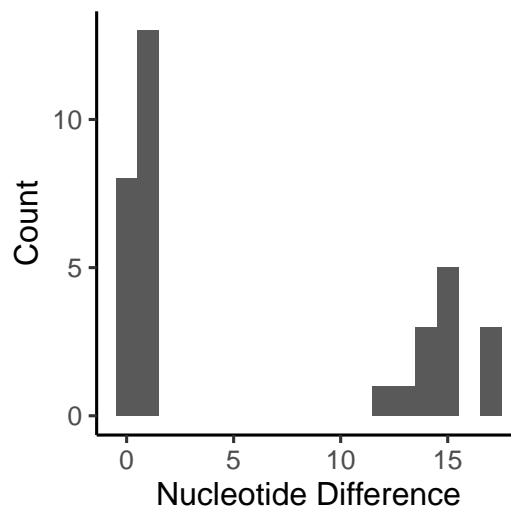
IGHV3-11*04

186 sequences assigned
6 (3.2%) exact matches, in which:
6 unique CDR3
4 unique J



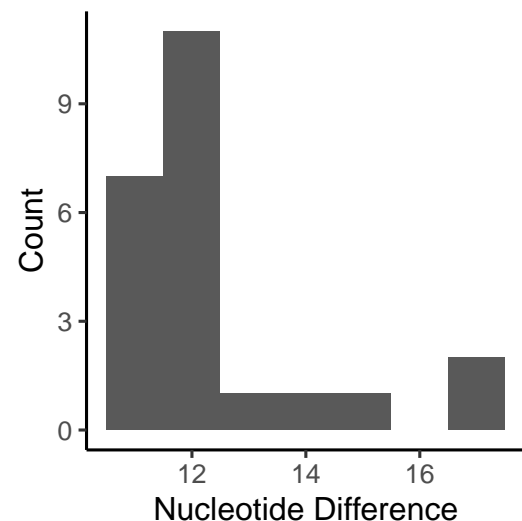
IGHV3-13*05

37 sequences assigned
8 (21.6%) exact matches, in which:
5 unique CDR3
3 unique J



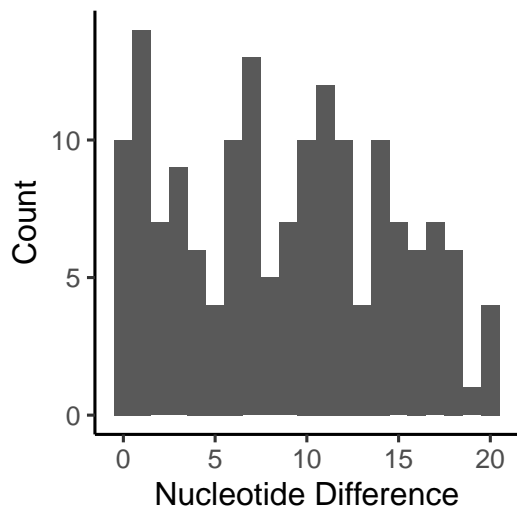
IGHV3-20*03_04

26 sequences assigned
No exact matches.



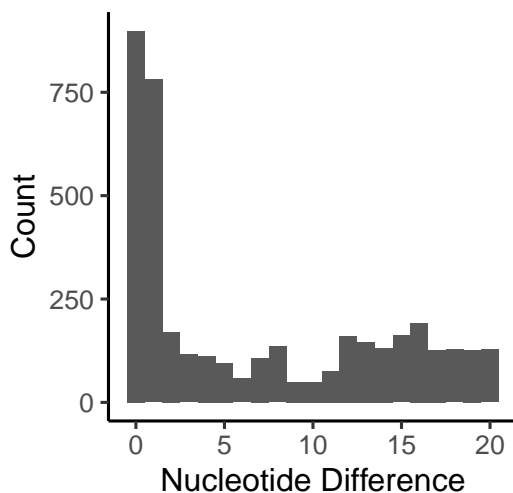
IGHV3-21*04

225 sequences assigned
10 (4.4%) exact matches, in which:
10 unique CDR3
5 unique J



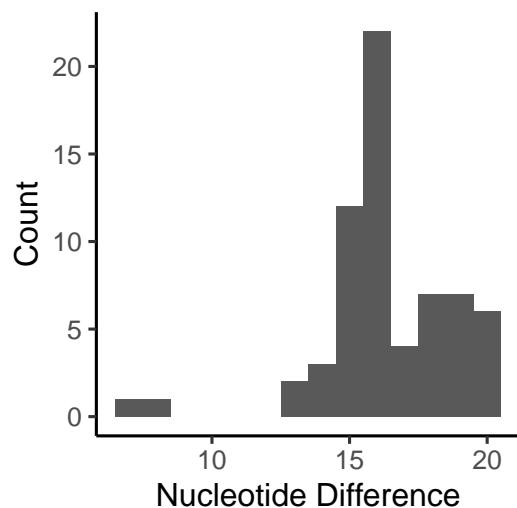
IGHV3-30-3*01

5069 sequences assigned
899 (17.7%) exact matches, in which:
526 unique CDR3
6 unique J



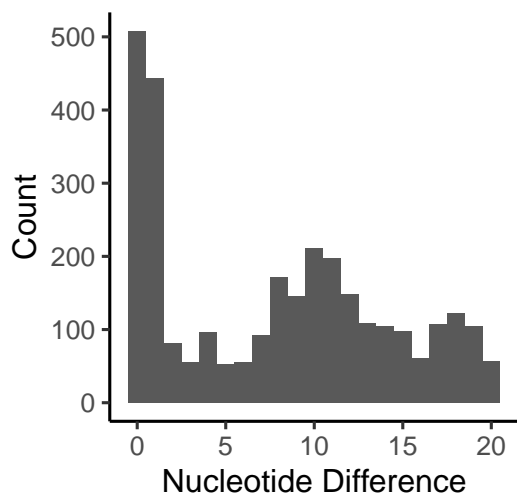
IGHV3-33*05

82 sequences assigned
No exact matches.



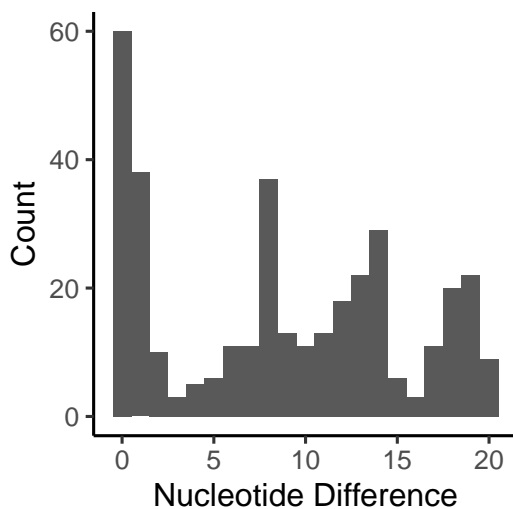
IGHV3-21*01_02

3563 sequences assigned
508 (14.3%) exact matches, in which:
297 unique CDR3
6 unique J



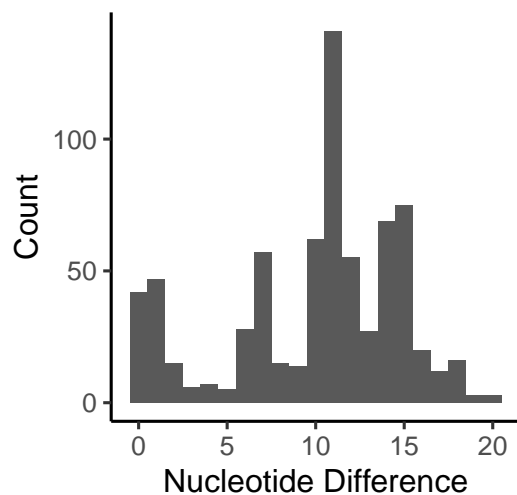
IGHV3-30*03

485 sequences assigned
60 (12.4%) exact matches, in which:
54 unique CDR3
4 unique J



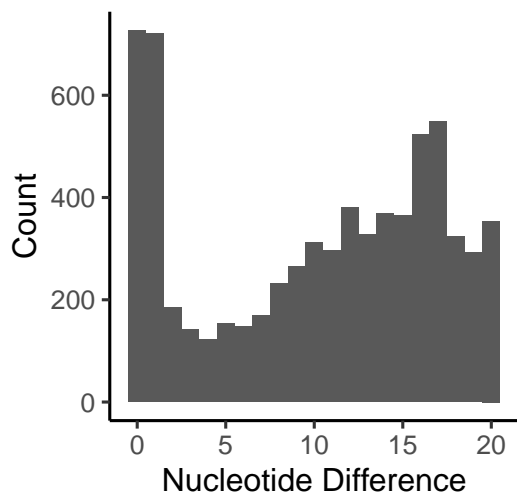
IGHV3-43*01

866 sequences assigned
42 (4.8%) exact matches, in which:
24 unique CDR3
4 unique J



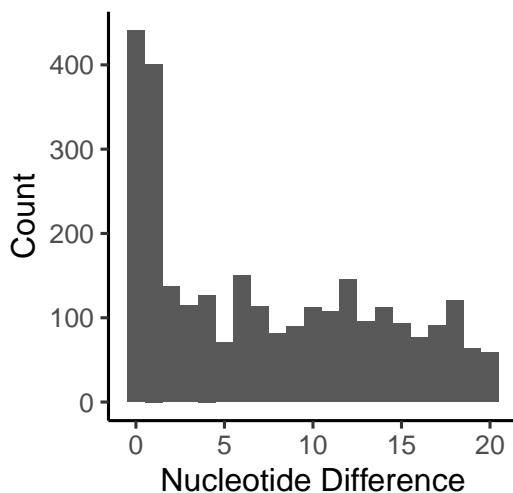
IGHV3-23*01_04

11908 sequences assigned
727 (6.1%) exact matches, in which:
405 unique CDR3
6 unique J



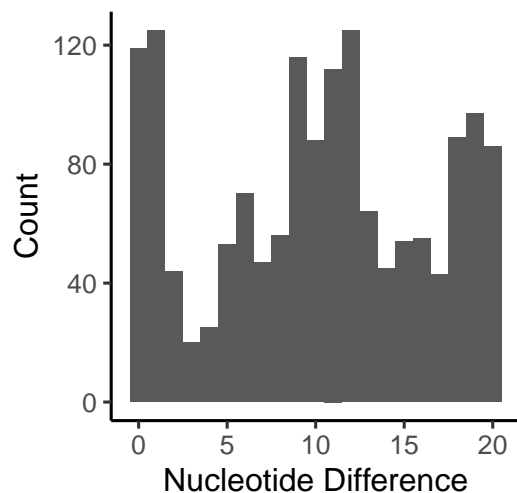
IGHV3-33*01

3608 sequences assigned
441 (12.2%) exact matches, in which:
257 unique CDR3
6 unique J



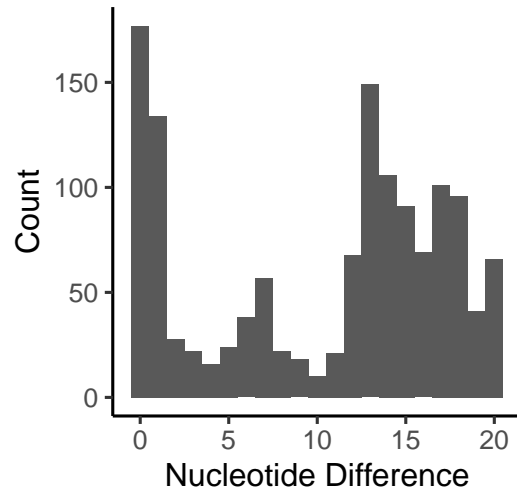
IGHV3-48*01

1808 sequences assigned
119 (6.6%) exact matches, in which:
66 unique CDR3
6 unique J



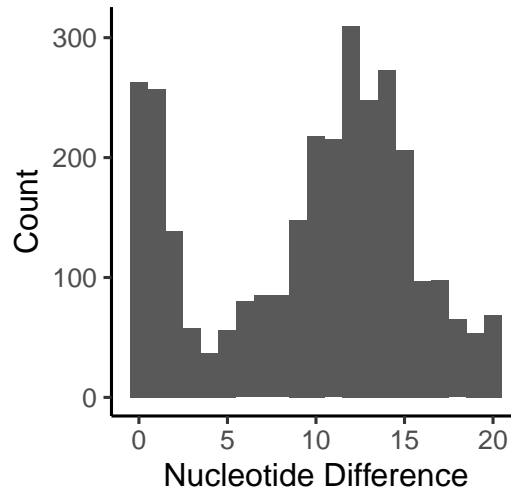
IGHV3-48*02

1866 sequences assigned
177 (9.5%) exact matches, in which:
98 unique CDR3
4 unique J



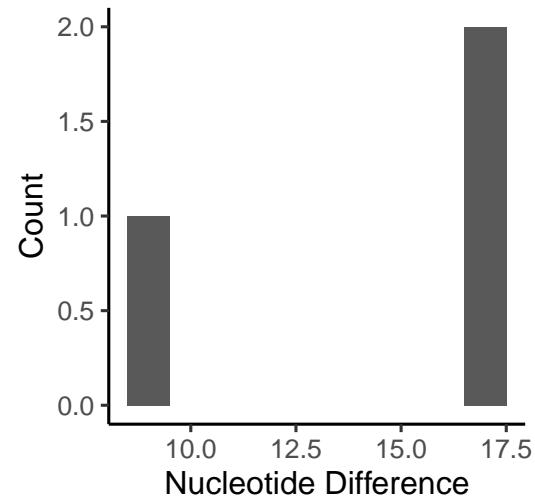
IGHV3-53*01_02

3708 sequences assigned
263 (7.1%) exact matches, in which:
161 unique CDR3
6 unique J



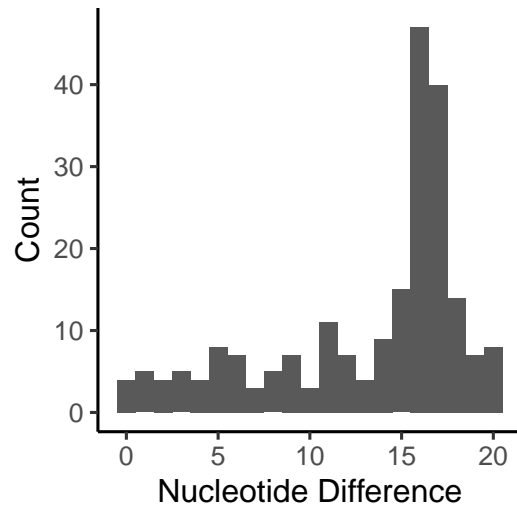
IGHV3-66*01

3 sequences assigned
No exact matches.



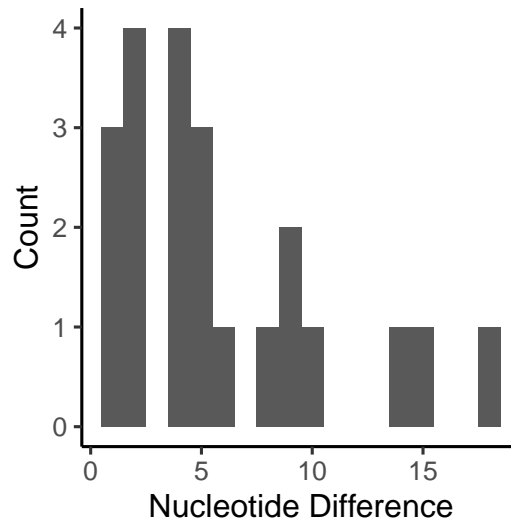
IGHV3-48*04

263 sequences assigned
4 (1.5%) exact matches, in which:
3 unique CDR3
2 unique J



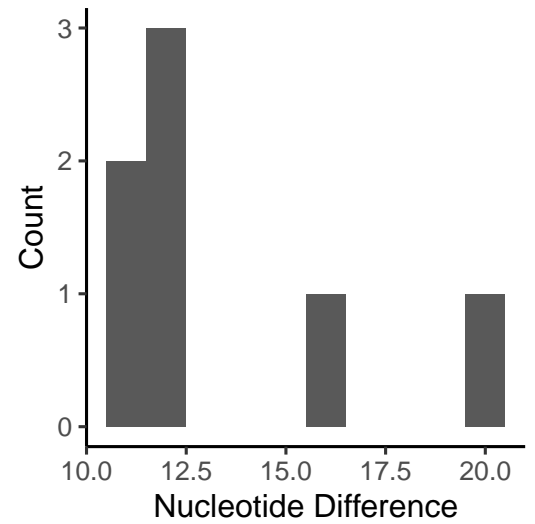
IGHV3-64*04

27 sequences assigned
No exact matches.



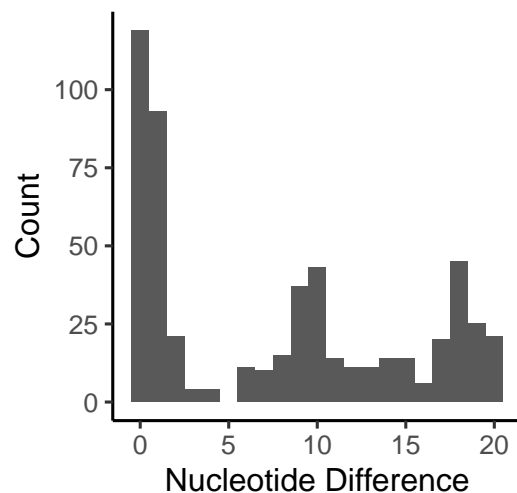
IGHV3-66*02

10 sequences assigned
No exact matches.



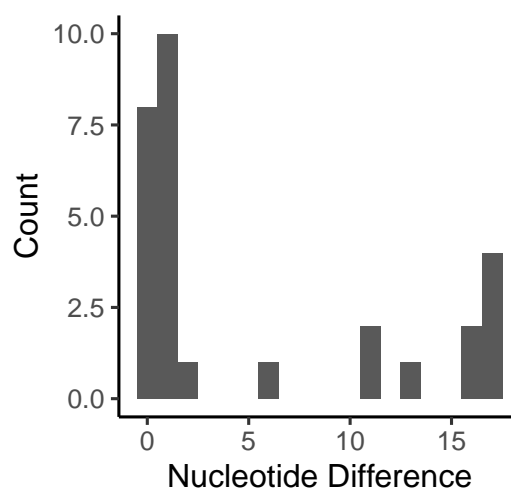
IGHV3-49*03_05

640 sequences assigned
119 (18.6%) exact matches, in which:
63 unique CDR3
5 unique J



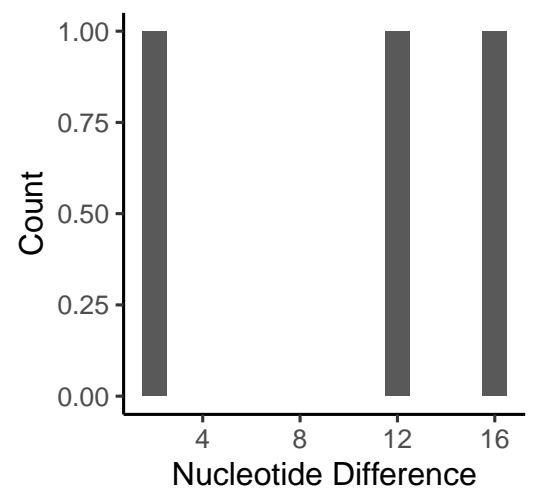
IGHV3-64*02_07

29 sequences assigned
8 (27.6%) exact matches, in which:
6 unique CDR3
2 unique J



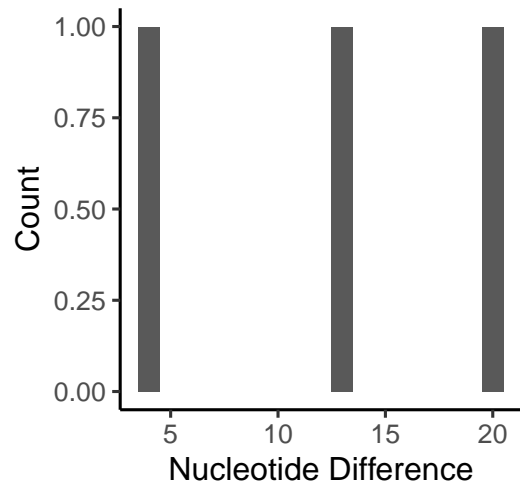
IGHV3-66*03

6 sequences assigned
No exact matches.



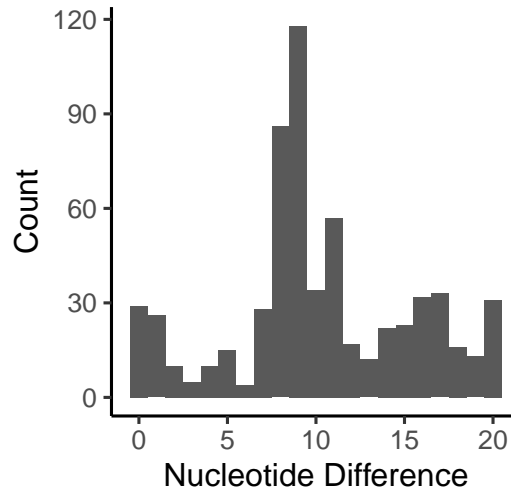
IGHV3-66*04

5 sequences assigned
No exact matches.



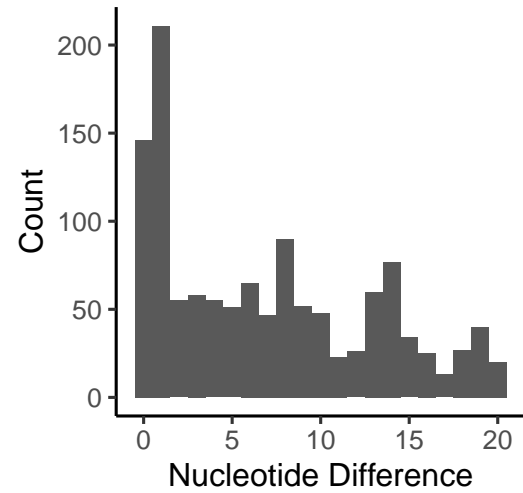
IGHV3-72*01

690 sequences assigned
29 (4.2%) exact matches, in which:
19 unique CDR3
3 unique J



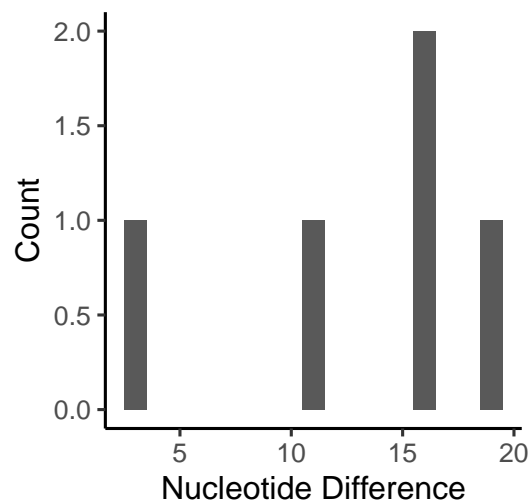
IGHV3-74*01_02

1584 sequences assigned
146 (9.2%) exact matches, in which:
83 unique CDR3
5 unique J



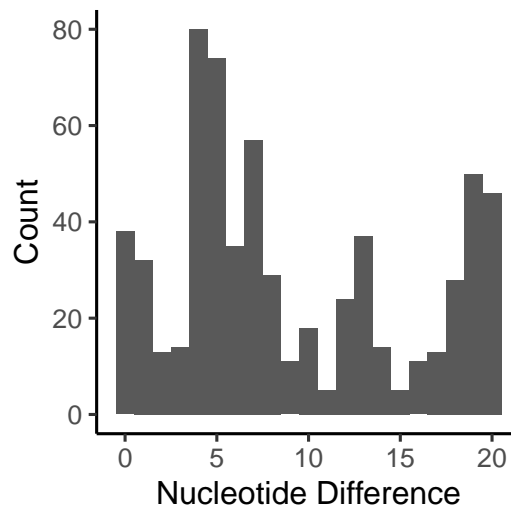
IGHV3-69-1*01

9 sequences assigned
No exact matches.



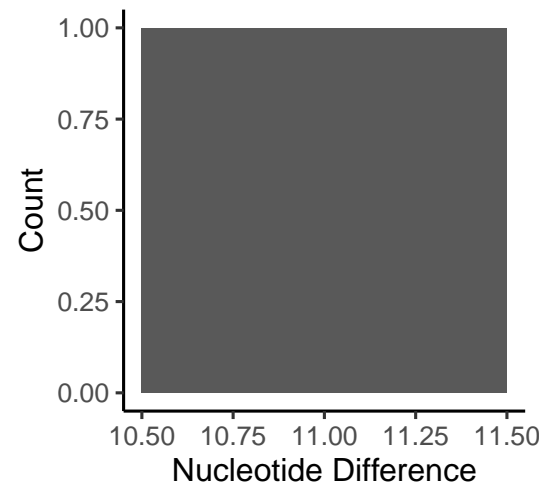
IGHV3-73*01_02

756 sequences assigned
38 (5%) exact matches, in which:
19 unique CDR3
3 unique J



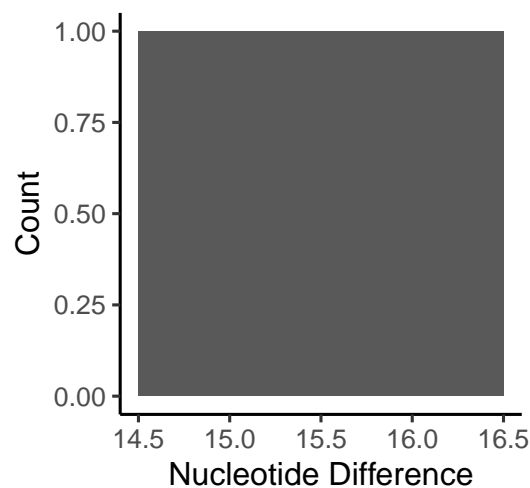
IGHV3-43D*04

5 sequences assigned
No exact matches.



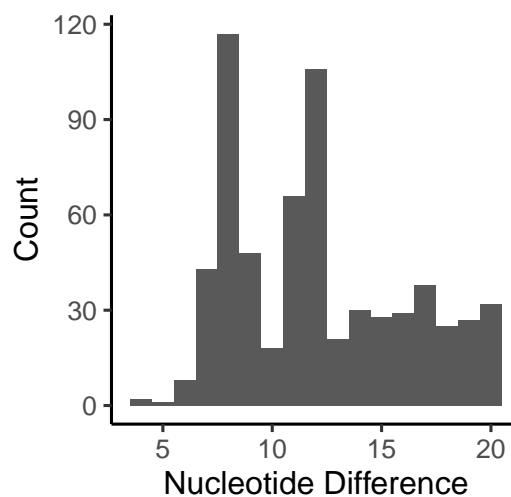
IGHV3-69-1*02

3 sequences assigned
No exact matches.



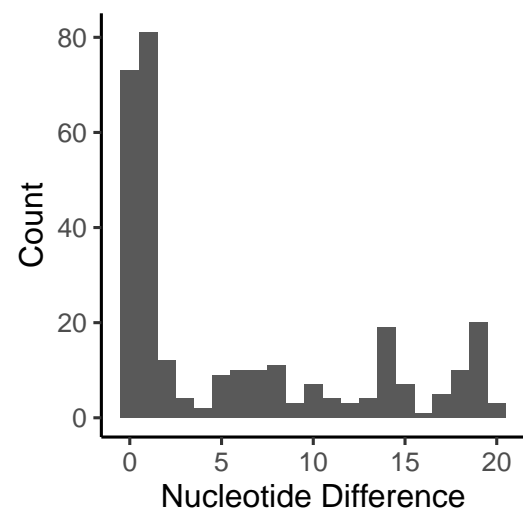
IGHV3-74*03

828 sequences assigned
No exact matches.



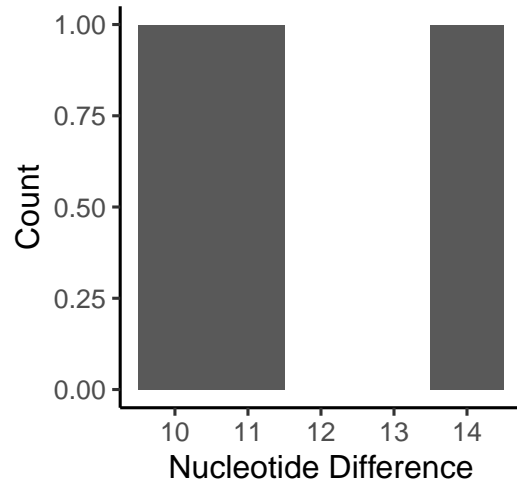
IGHV3-64D*06

488 sequences assigned
73 (15%) exact matches, in which:
36 unique CDR3
4 unique J



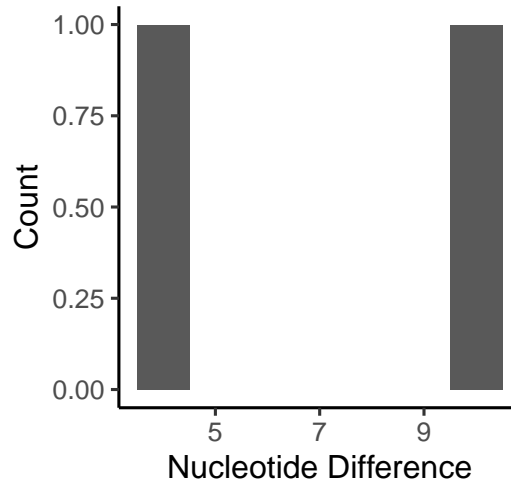
IGHV3–NL1*01

8 sequences assigned
No exact matches.



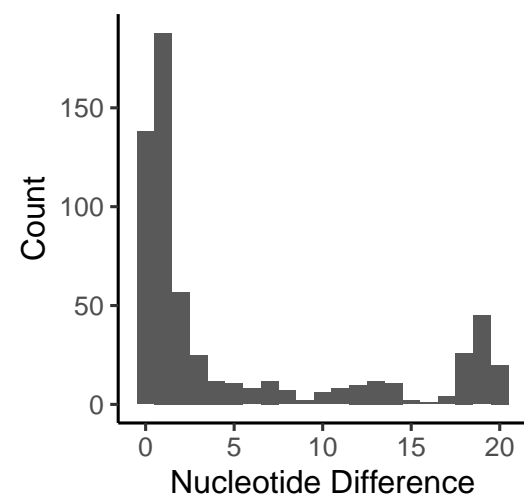
IGHV4–28*03

15 sequences assigned
No exact matches.



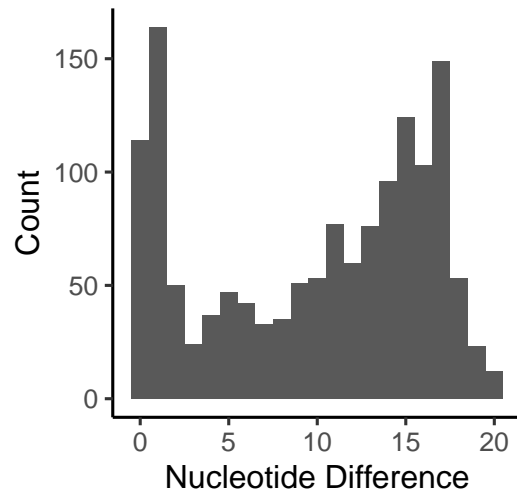
IGHV4–30–2*01

742 sequences assigned
138 (18.6%) exact matches, in which:
91 unique CDR3
5 unique J



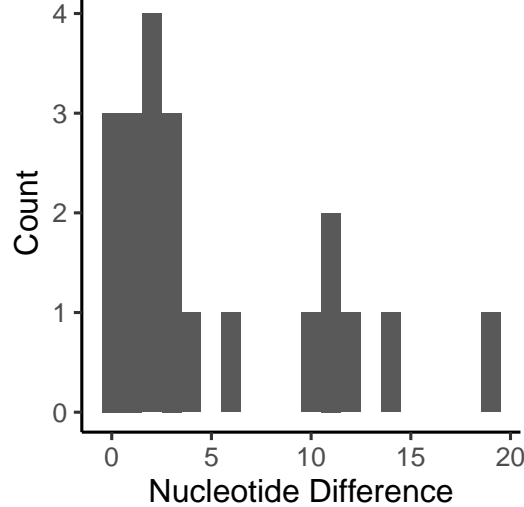
IGHV4–4*07

1651 sequences assigned
114 (6.9%) exact matches, in which:
79 unique CDR3
6 unique J



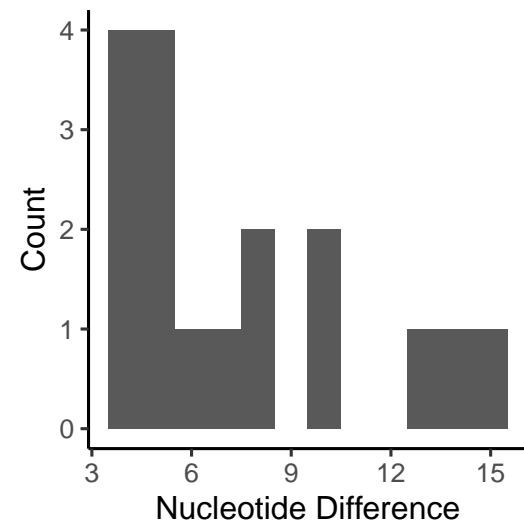
IGHV4–28*01_07

21 sequences assigned
3 (14.3%) exact matches, in which:
2 unique CDR3
1 unique J



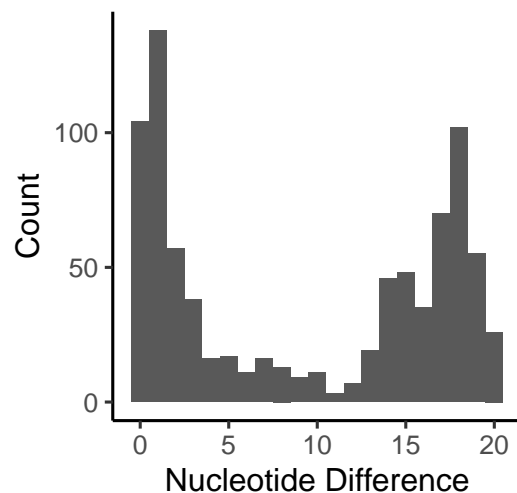
IGHV4–30–2*03

23 sequences assigned
No exact matches.



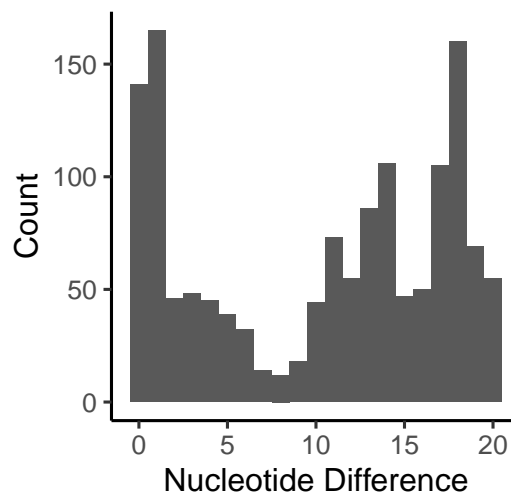
IGHV4–4*02_03

1459 sequences assigned
104 (7.1%) exact matches, in which:
79 unique CDR3
6 unique J



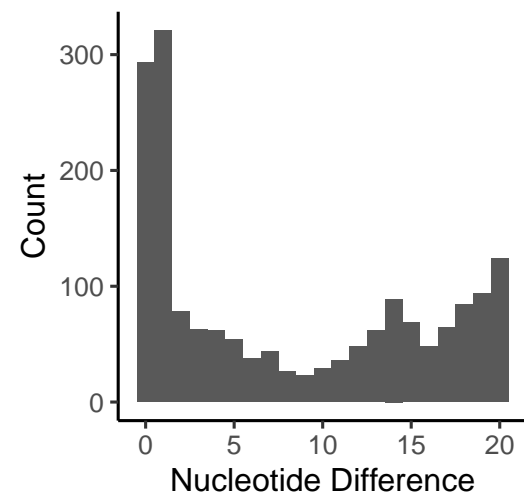
IGHV4–30–4*01

2488 sequences assigned
141 (5.7%) exact matches, in which:
112 unique CDR3
5 unique J



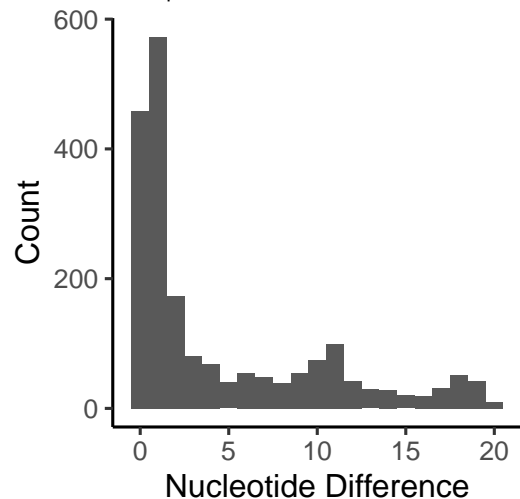
IGHV4–31*02

2366 sequences assigned
293 (12.4%) exact matches, in which:
246 unique CDR3
6 unique J



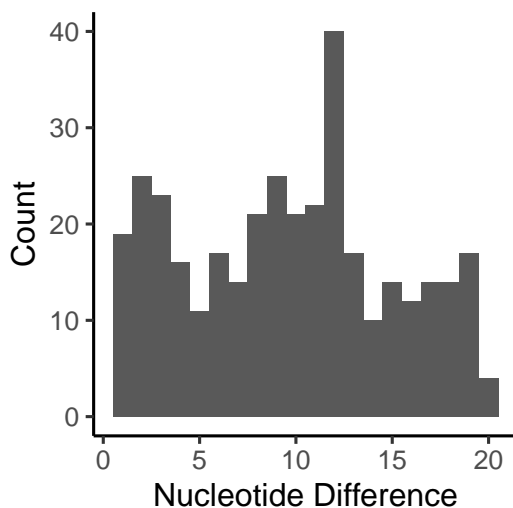
IGHV4-34*01_02

2439 sequences assigned
458 (18.8%) exact matches, in which:
323 unique CDR3
5 unique J



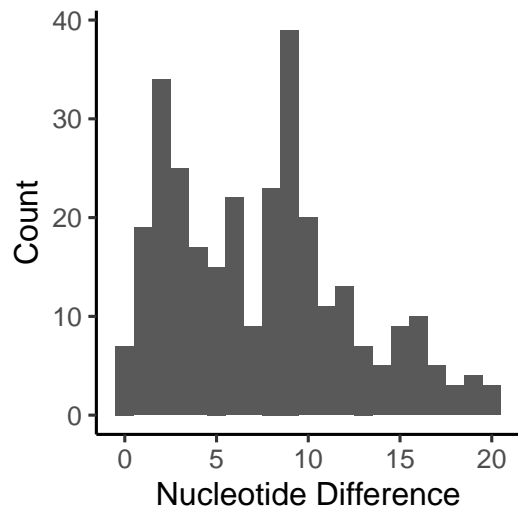
IGHV4-39*07

477 sequences assigned
No exact matches.



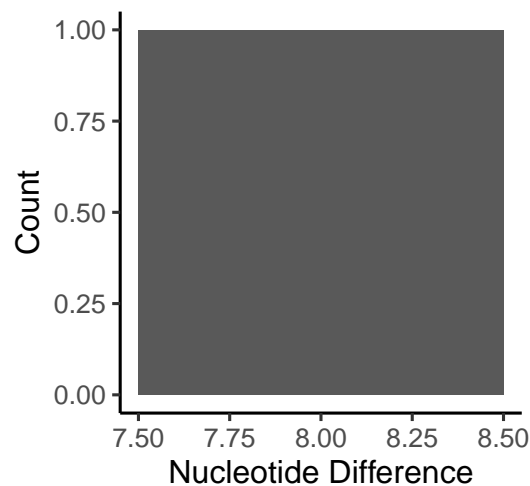
IGHV4-59*12

406 sequences assigned
7 (1.7%) exact matches, in which:
7 unique CDR3
3 unique J



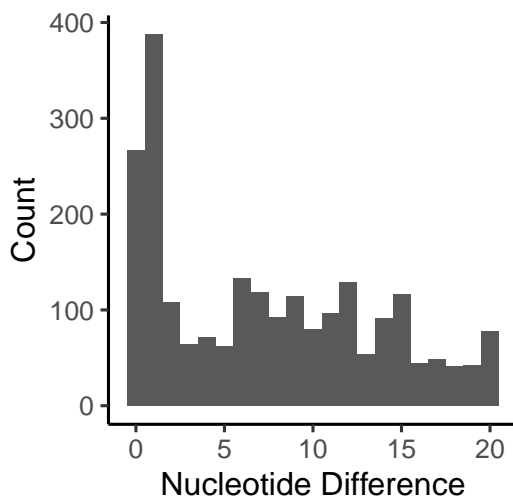
IGHV4-38-2*01

1 sequences assigned
No exact matches.



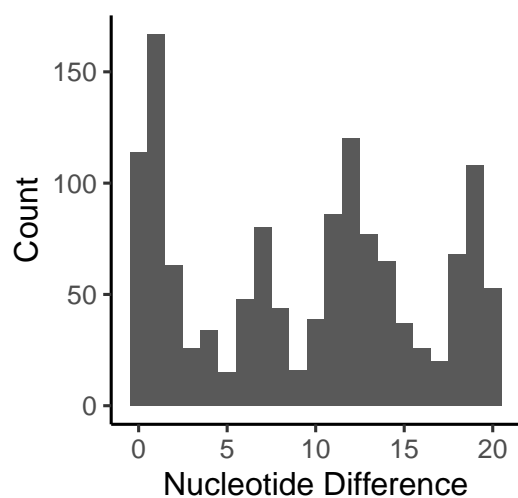
IGHV4-59*01_07

3880 sequences assigned
267 (6.9%) exact matches, in which:
200 unique CDR3
5 unique J



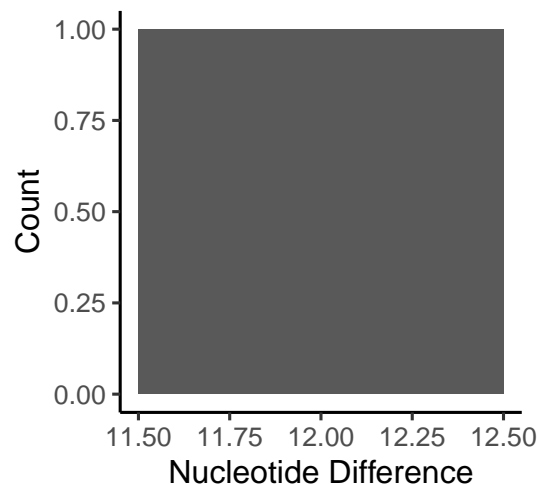
IGHV4-61*01

1771 sequences assigned
114 (6.4%) exact matches, in which:
96 unique CDR3
6 unique J



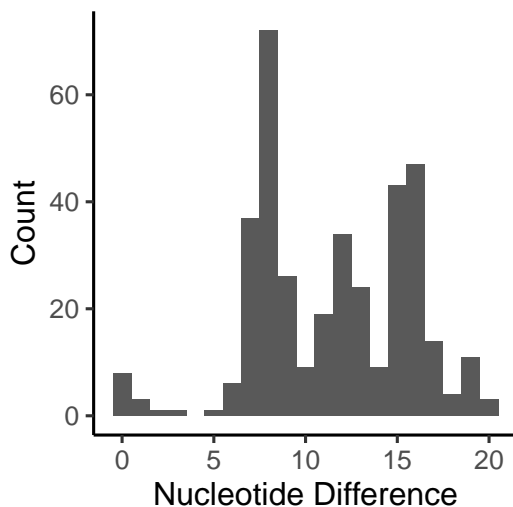
IGHV4-38-2*02

48 sequences assigned
No exact matches.



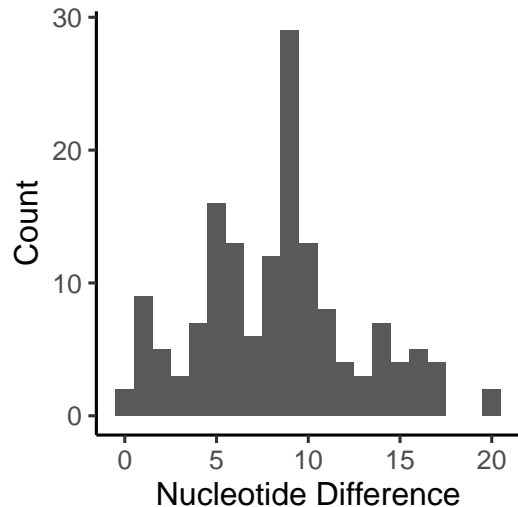
IGHV4-59*11

550 sequences assigned
8 (1.5%) exact matches, in which:
8 unique CDR3
3 unique J



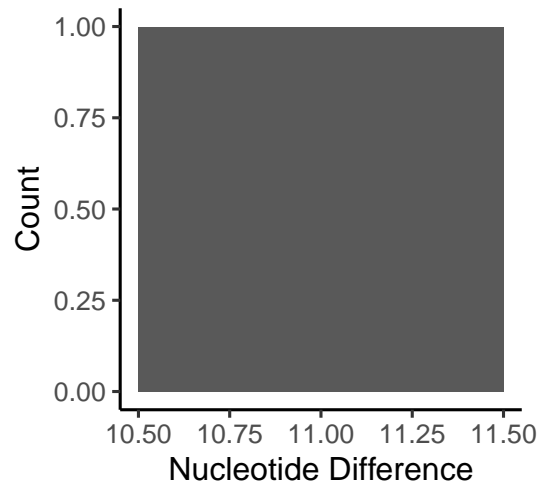
IGHV4-61*08

497 sequences assigned
2 (0.4%) exact matches, in which:
2 unique CDR3
2 unique J



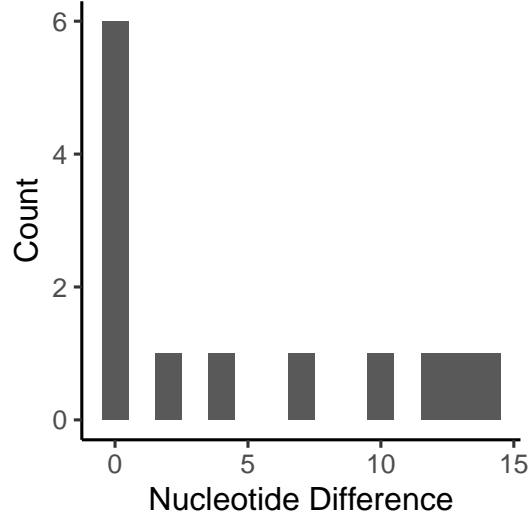
IGHV4/OR15-8*01

1 sequences assigned
No exact matches.



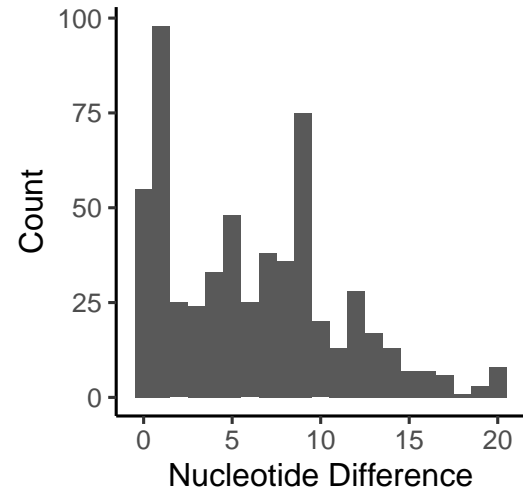
IGHV5-51*04

19 sequences assigned
6 (31.6%) exact matches, in which:
6 unique CDR3
3 unique J



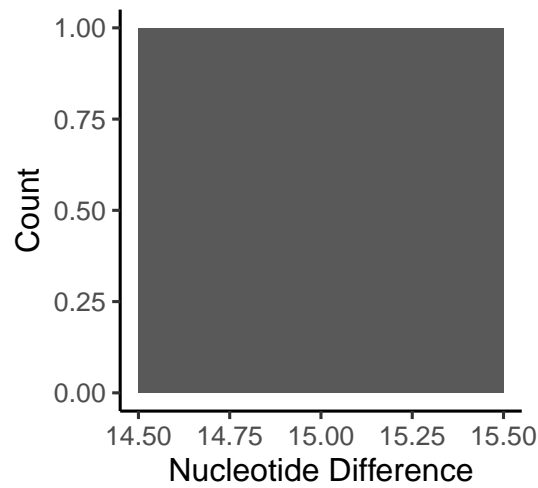
IGHV6-1*01_02

758 sequences assigned
55 (7.3%) exact matches, in which:
40 unique CDR3
5 unique J



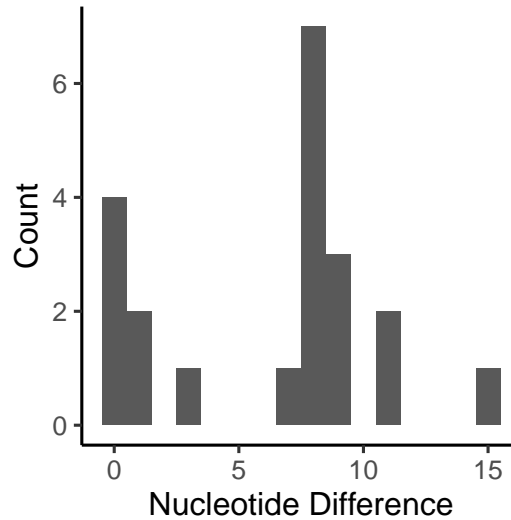
IGHV4/OR15-8*02

3 sequences assigned
No exact matches.



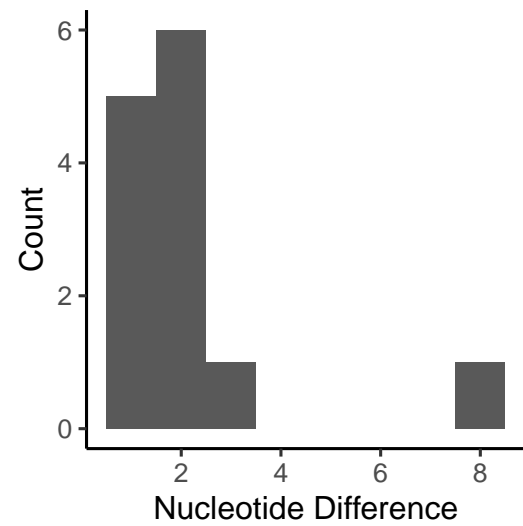
IGHV5-51*06

22 sequences assigned
4 (18.2%) exact matches, in which:
4 unique CDR3
3 unique J



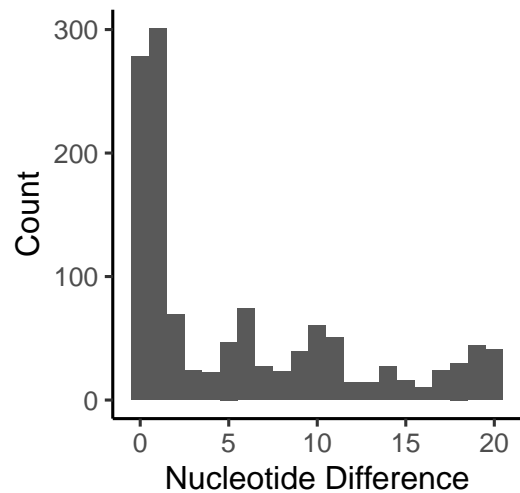
IGHV7-4-1*01

13 sequences assigned
No exact matches.



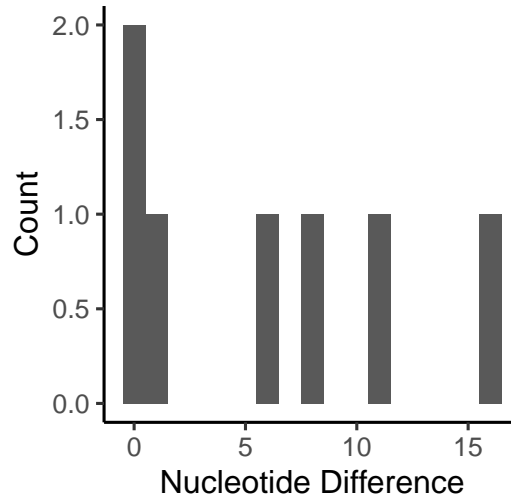
IGHV5-10-1*01_03

1412 sequences assigned
278 (19.7%) exact matches, in which:
150 unique CDR3
5 unique J



IGHV5-51*07

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





Warning – no inferred sequences found.