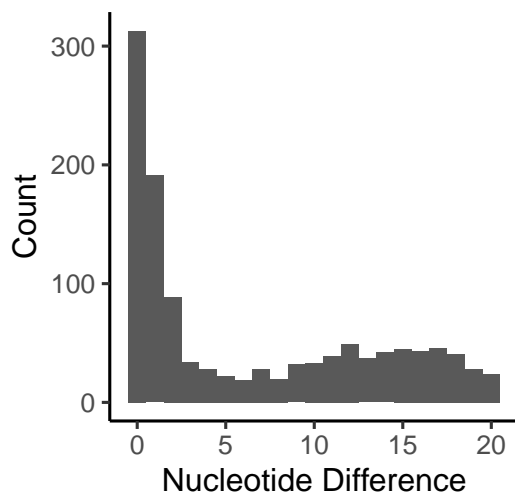


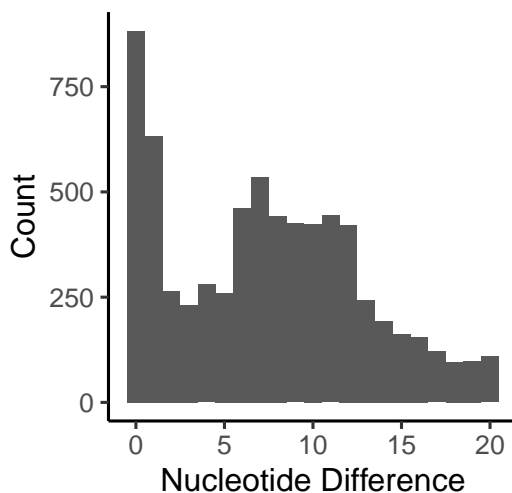
IGHV1-2*04

1450 sequences assigned
313 (21.6%) exact matches, in which:
296 unique CDR3
6 unique J



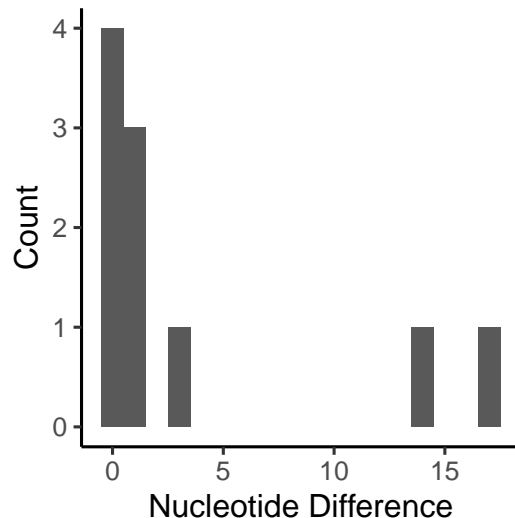
IGHV1-18*01

10133 sequences assigned
883 (8.7%) exact matches, in which:
807 unique CDR3
6 unique J



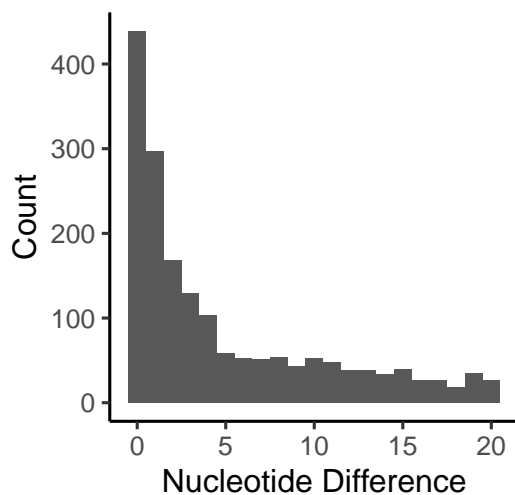
IGHV1-45*02

10 sequences assigned
4 (40%) exact matches, in which:
4 unique CDR3
2 unique J



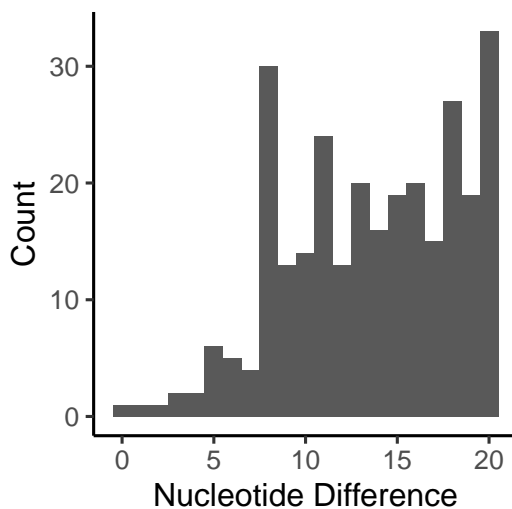
IGHV1-3*01_05

1904 sequences assigned
439 (23.1%) exact matches, in which:
408 unique CDR3
6 unique J



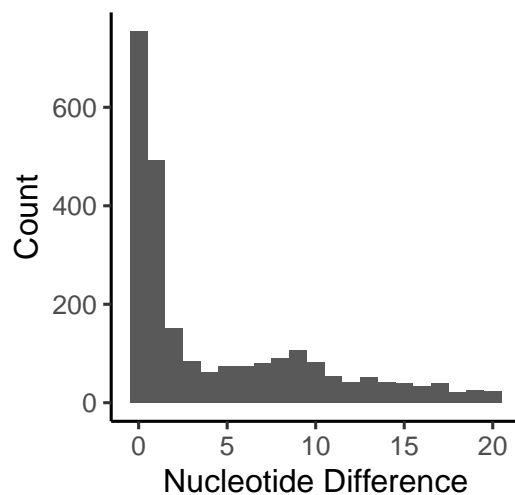
IGHV1-18*04

7029 sequences assigned
1 (0%) exact matches, in which:
1 unique CDR3
1 unique J



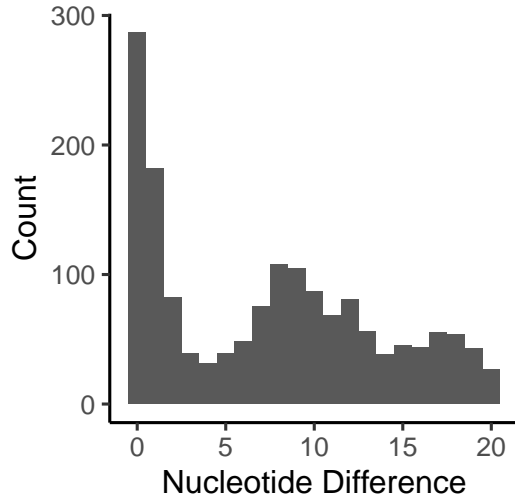
IGHV1-46*01

2761 sequences assigned
755 (27.3%) exact matches, in which:
694 unique CDR3
6 unique J



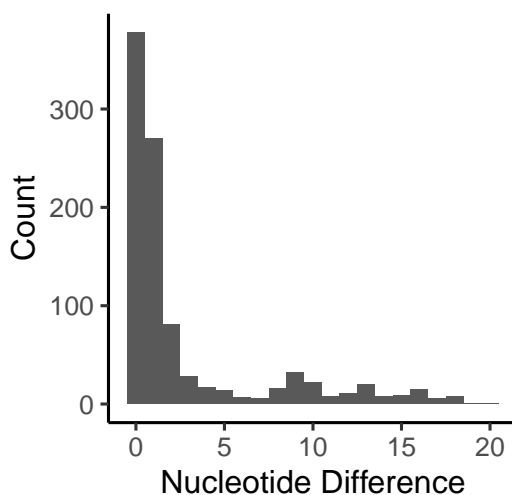
IGHV1-8*01

1688 sequences assigned
287 (17%) exact matches, in which:
266 unique CDR3
6 unique J



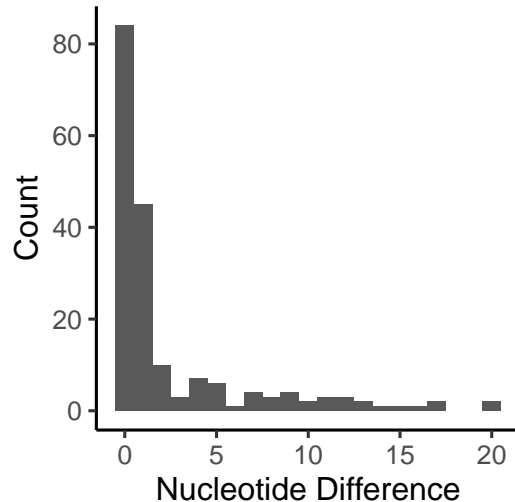
IGHV1-24*01

996 sequences assigned
378 (38%) exact matches, in which:
349 unique CDR3
6 unique J



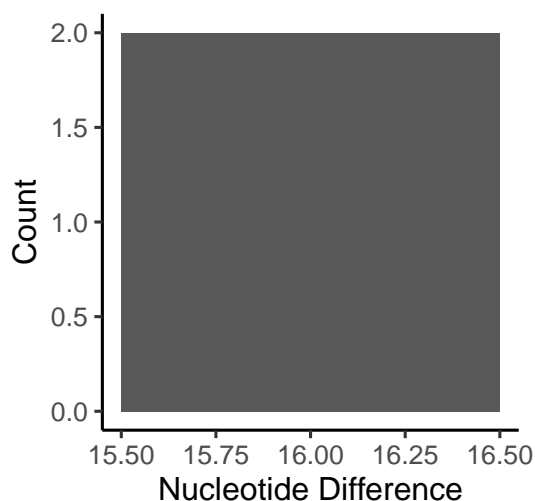
IGHV1-58*01_03

185 sequences assigned
84 (45.4%) exact matches, in which:
77 unique CDR3
5 unique J



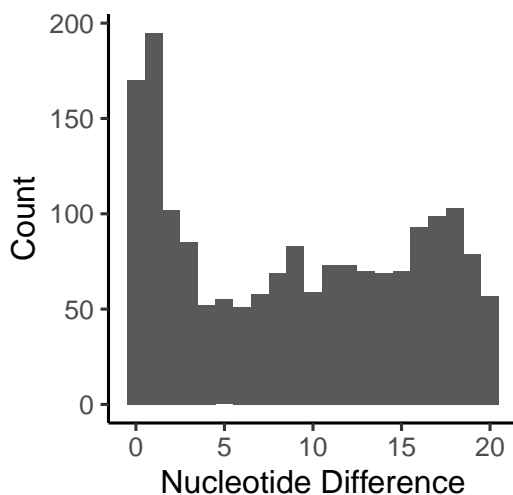
IGHV1-69-2*01

3 sequences assigned
No exact matches.



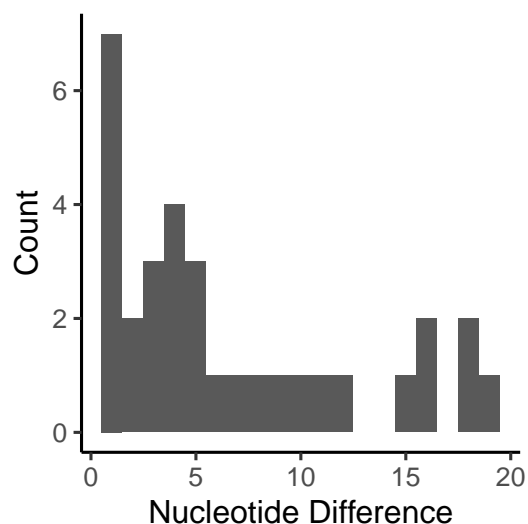
IGHV2-5*02

3699 sequences assigned
170 (4.6%) exact matches, in which:
146 unique CDR3
5 unique J



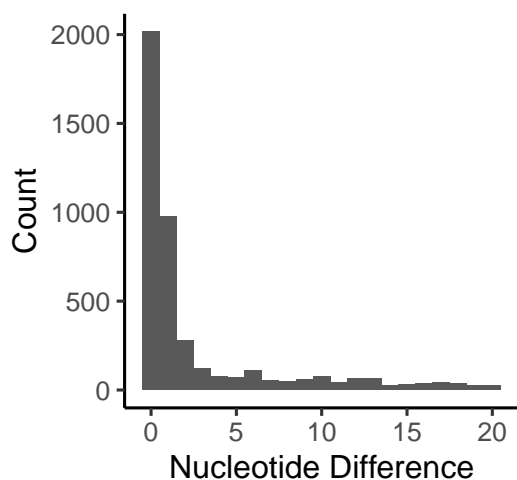
IGHV2-70*12

44 sequences assigned
No exact matches.



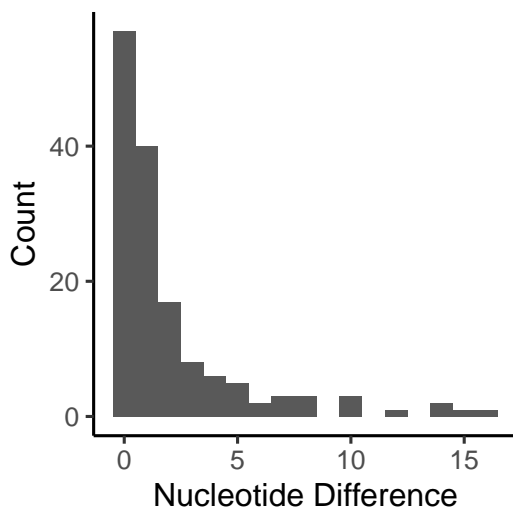
IGHV1-69*01_12_13

4438 sequences assigned
2016 (45.4%) exact matches, in which:
1894 unique CDR3
6 unique J



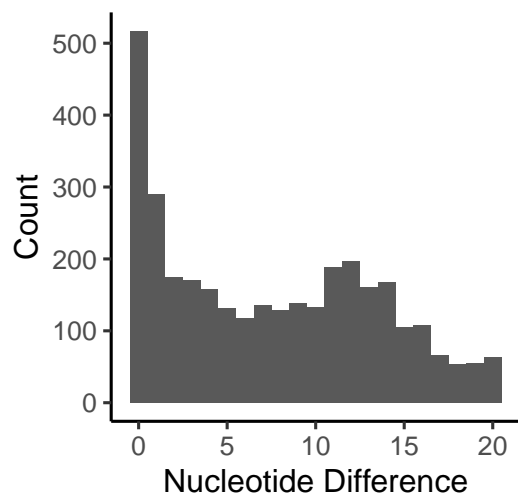
IGHV2-26*01

160 sequences assigned
57 (35.6%) exact matches, in which:
53 unique CDR3
4 unique J



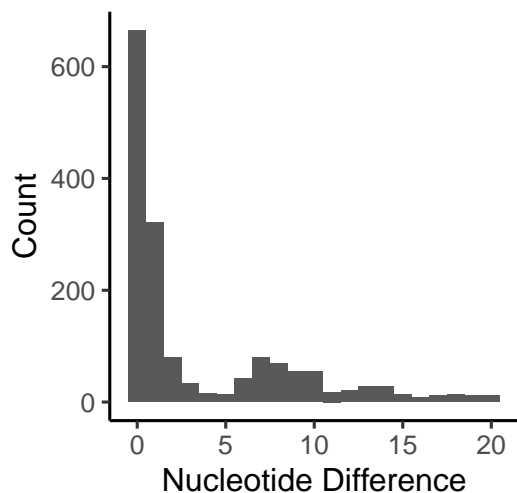
IGHV3-7*01

3500 sequences assigned
517 (14.8%) exact matches, in which:
368 unique CDR3
6 unique J



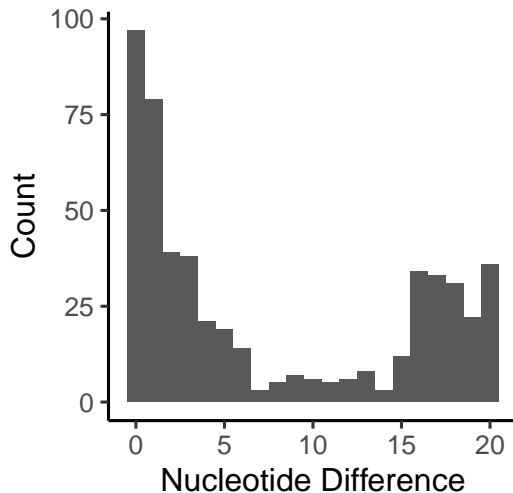
IGHV1-69*06_14

1702 sequences assigned
665 (39.1%) exact matches, in which:
628 unique CDR3
6 unique J



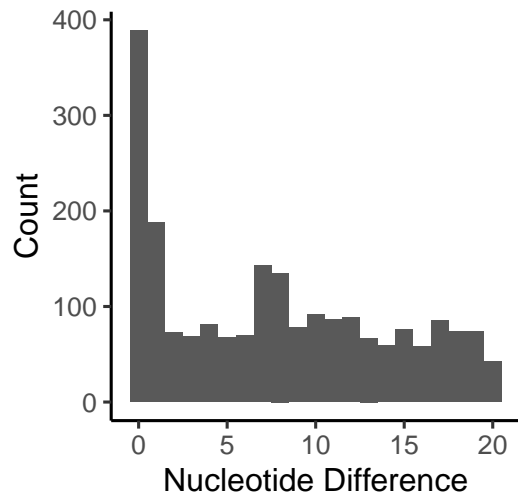
IGHV2-70*01

781 sequences assigned
97 (12.4%) exact matches, in which:
90 unique CDR3
4 unique J



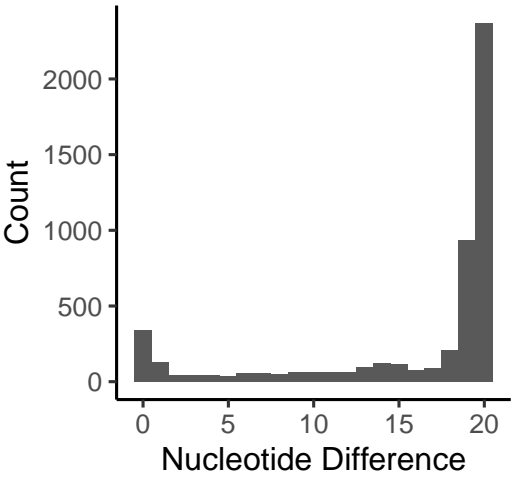
IGHV3-7*03

2375 sequences assigned
389 (16.4%) exact matches, in which:
279 unique CDR3
5 unique J



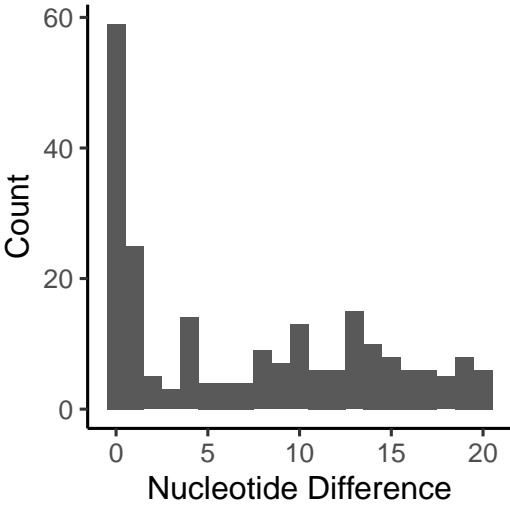
IGHV3-9*01

6745 sequences assigned
338 (5%) exact matches, in which:
256 unique CDR3
6 unique J



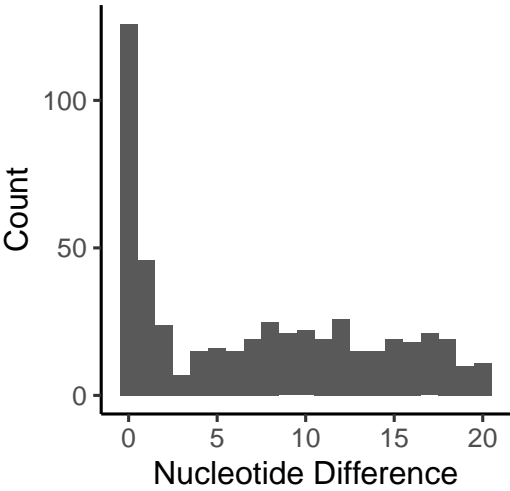
IGHV3-11*06

453 sequences assigned
59 (13%) exact matches, in which:
42 unique CDR3
4 unique J



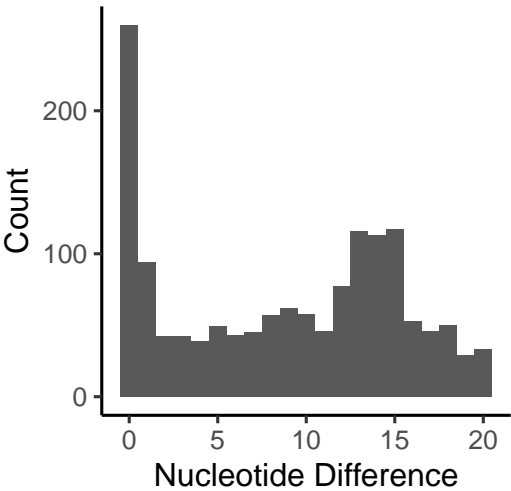
IGHV3-15*01_02

659 sequences assigned
126 (19.1%) exact matches, in which:
95 unique CDR3
5 unique J



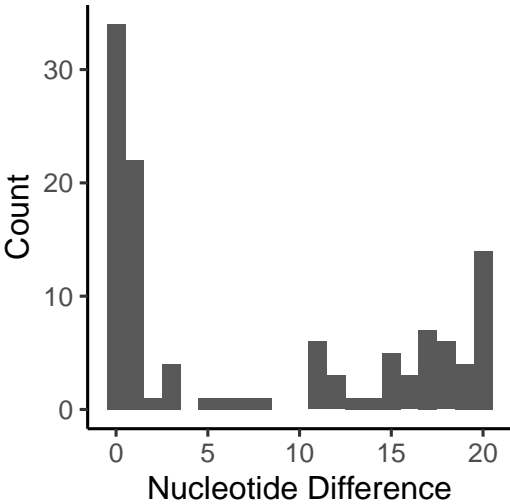
IGHV3-11*01

1780 sequences assigned
260 (14.6%) exact matches, in which:
198 unique CDR3
5 unique J



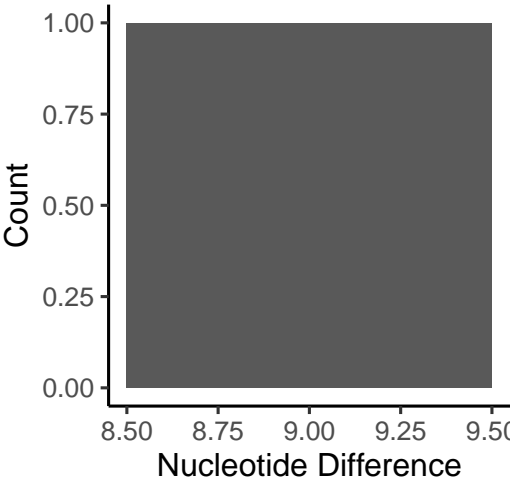
IGHV3-13*01

142 sequences assigned
34 (23.9%) exact matches, in which:
28 unique CDR3
5 unique J



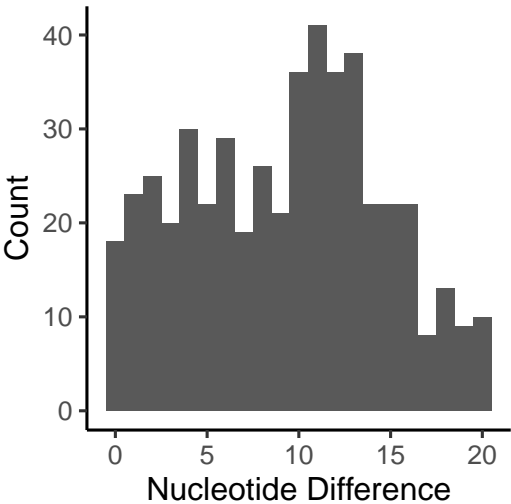
IGHV3-19*01

1 sequences assigned
No exact matches.



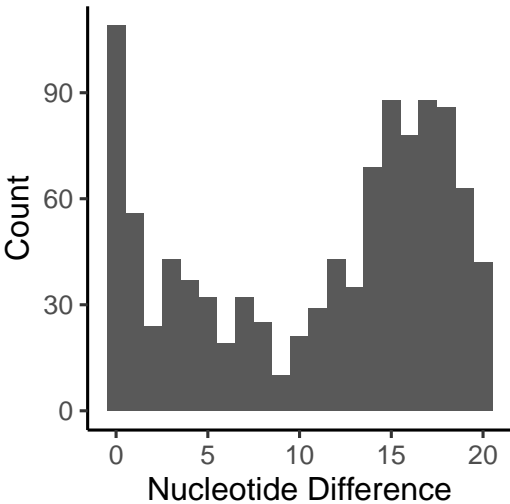
IGHV3-11*04

578 sequences assigned
18 (3.1%) exact matches, in which:
18 unique CDR3
5 unique J



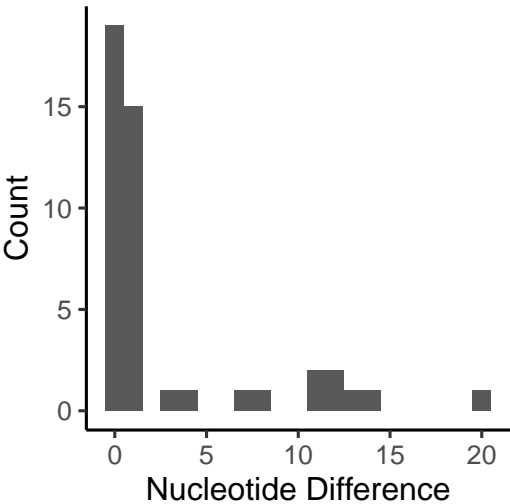
IGHV3-15*07

1431 sequences assigned
109 (7.6%) exact matches, in which:
78 unique CDR3
5 unique J



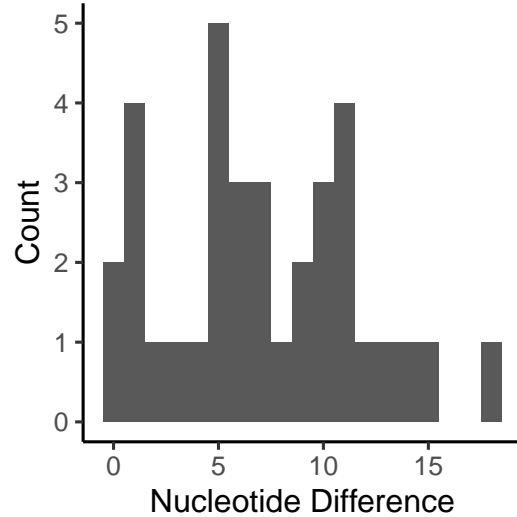
IGHV3-20*01_02

46 sequences assigned
19 (41.3%) exact matches, in which:
12 unique CDR3
3 unique J



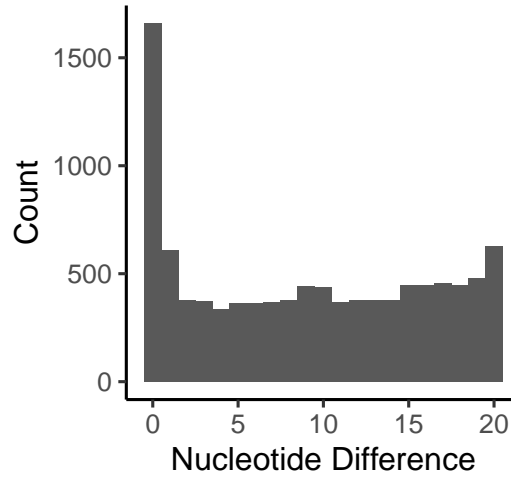
IGHV3-20*03_04

56 sequences assigned
2 (3.6%) exact matches, in which:
1 unique CDR3
1 unique J



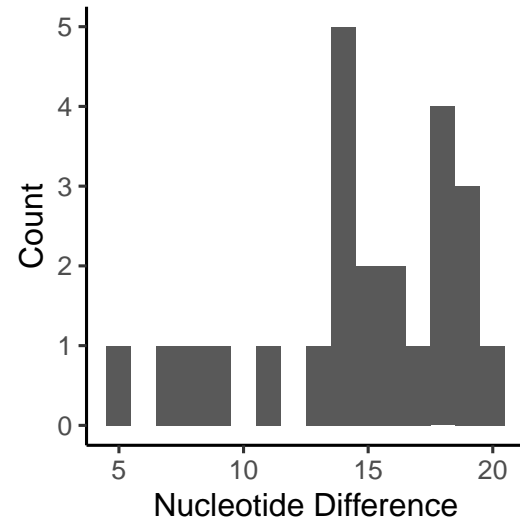
IGHV3-23*01_04

40468 sequences assigned
1659 (4.1%) exact matches, in which:
1204 unique CDR3
6 unique J



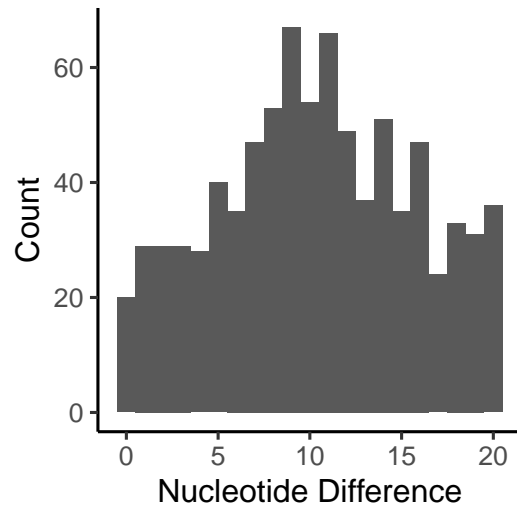
IGHV3-33*05

74 sequences assigned
No exact matches.



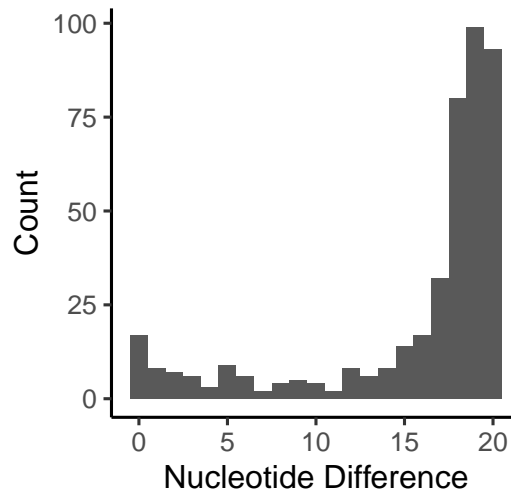
IGHV3-21*04

1434 sequences assigned
20 (1.4%) exact matches, in which:
20 unique CDR3
3 unique J



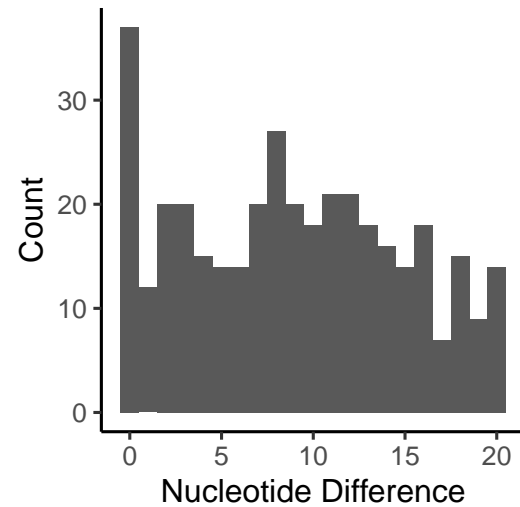
IGHV3-30*03

2731 sequences assigned
17 (0.6%) exact matches, in which:
17 unique CDR3
4 unique J



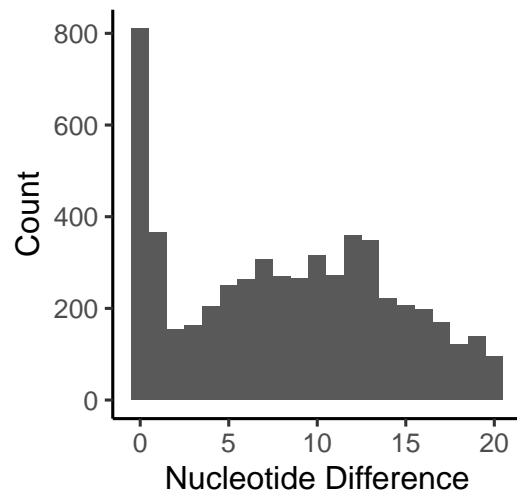
IGHV3-33*08

1033 sequences assigned
37 (3.6%) exact matches, in which:
35 unique CDR3
4 unique J



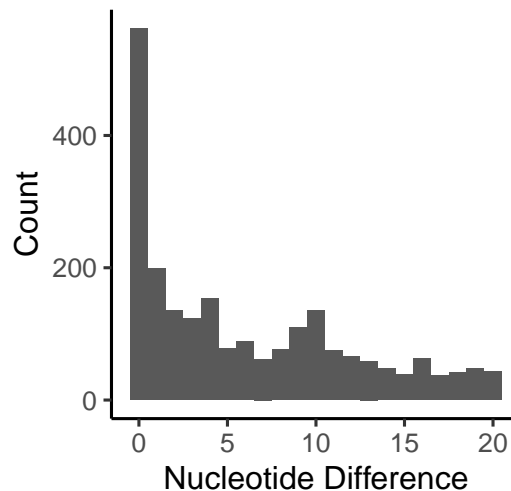
IGHV3-21*01_02

12898 sequences assigned
811 (6.3%) exact matches, in which:
580 unique CDR3
6 unique J



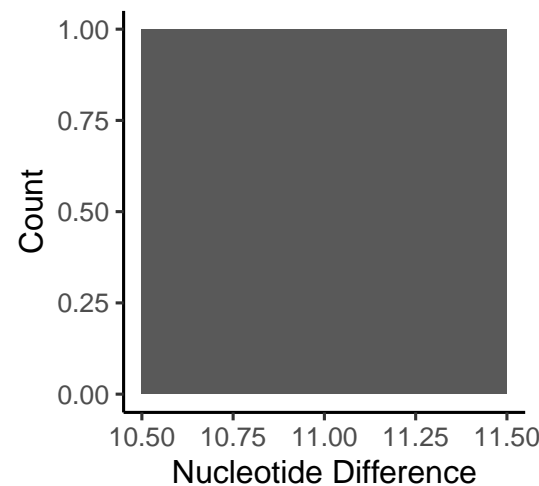
IGHV3-33*01

3140 sequences assigned
562 (17.9%) exact matches, in which:
439 unique CDR3
6 unique J



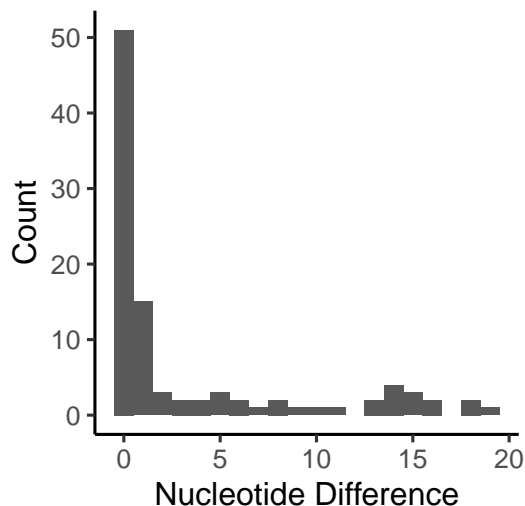
IGHV3-35*01

1 sequences assigned
No exact matches.



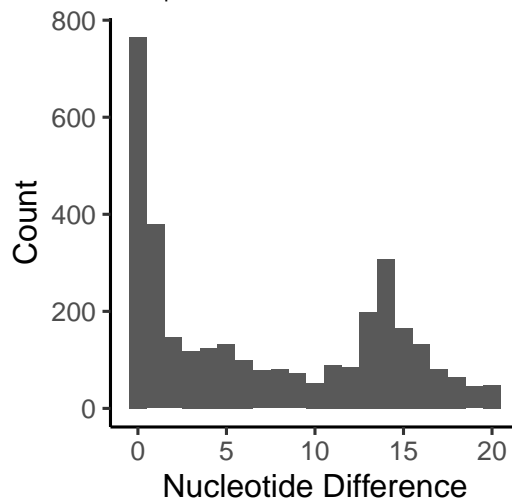
IGHV3-43*01

102 sequences assigned
51 (50%) exact matches, in which:
39 unique CDR3
6 unique J



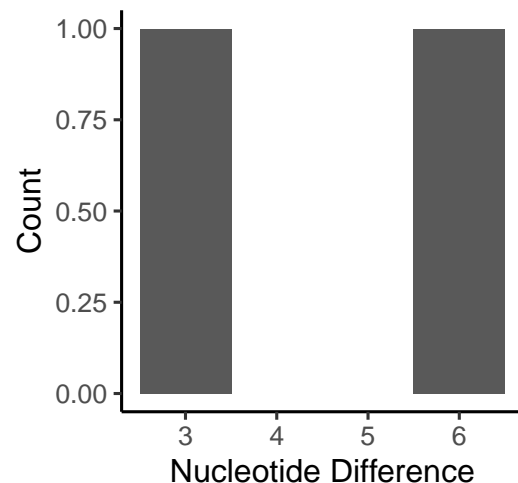
IGHV3-48*02

3642 sequences assigned
766 (21%) exact matches, in which:
531 unique CDR3
6 unique J



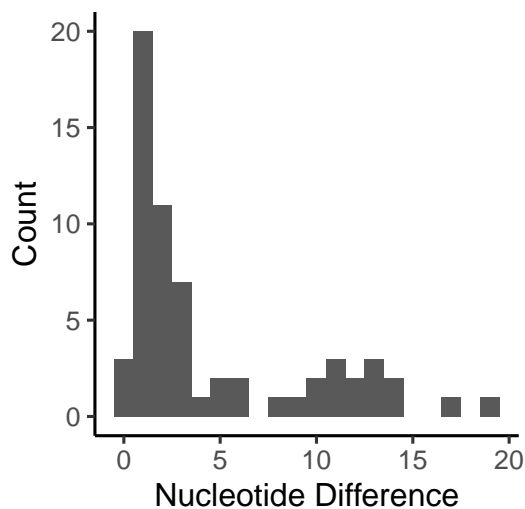
IGHV3-52*02

2 sequences assigned
No exact matches.



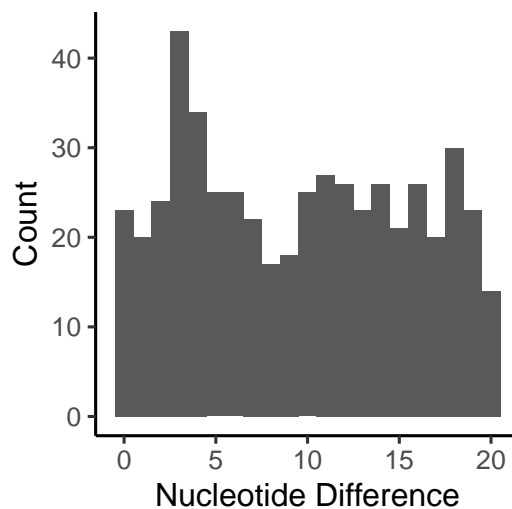
IGHV3-47*02

63 sequences assigned
3 (4.8%) exact matches, in which:
1 unique CDR3
1 unique J



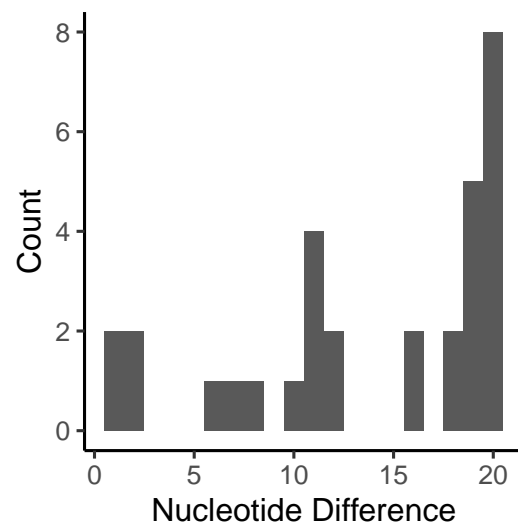
IGHV3-48*04

573 sequences assigned
23 (4%) exact matches, in which:
22 unique CDR3
3 unique J



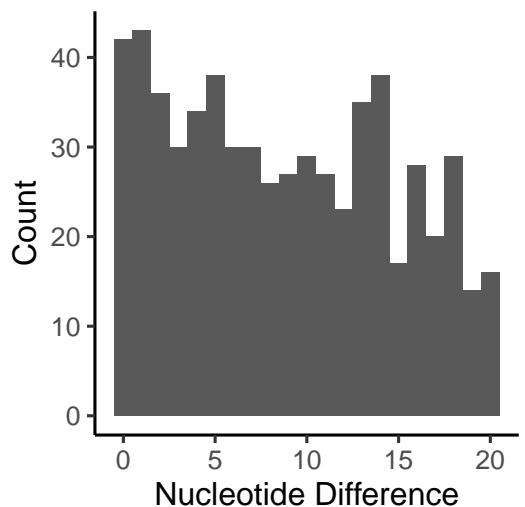
IGHV3-53*05

113 sequences assigned
No exact matches.



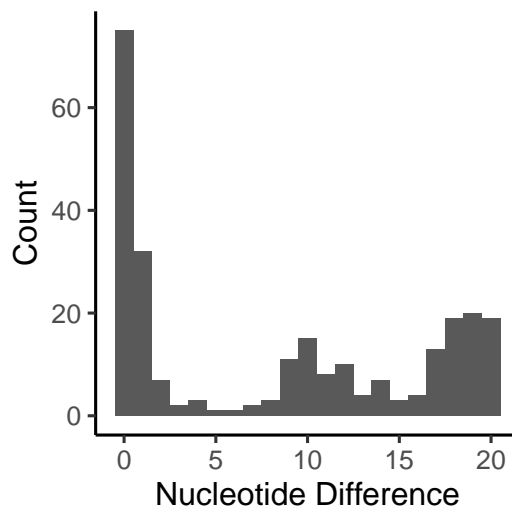
IGHV3-48*01

710 sequences assigned
42 (5.9%) exact matches, in which:
40 unique CDR3
4 unique J



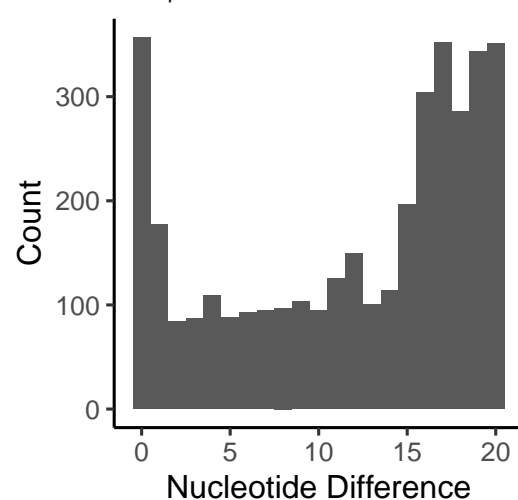
IGHV3-49*03_05

903 sequences assigned
75 (8.3%) exact matches, in which:
57 unique CDR3
5 unique J



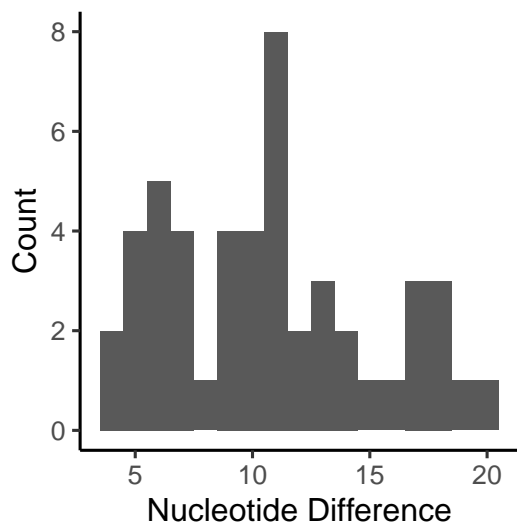
IGHV3-53*01_02

9897 sequences assigned
357 (3.6%) exact matches, in which:
259 unique CDR3
6 unique J



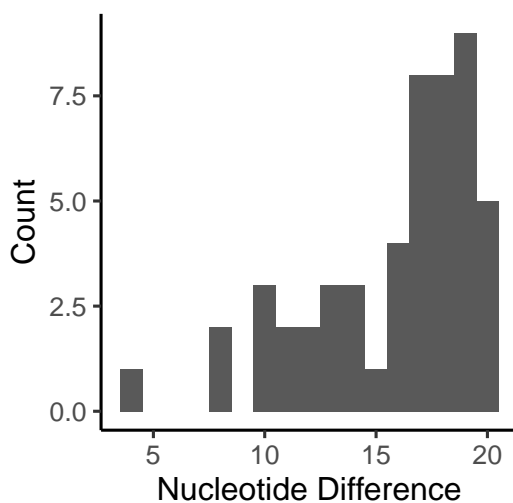
IGHV3-64*04

69 sequences assigned
No exact matches.



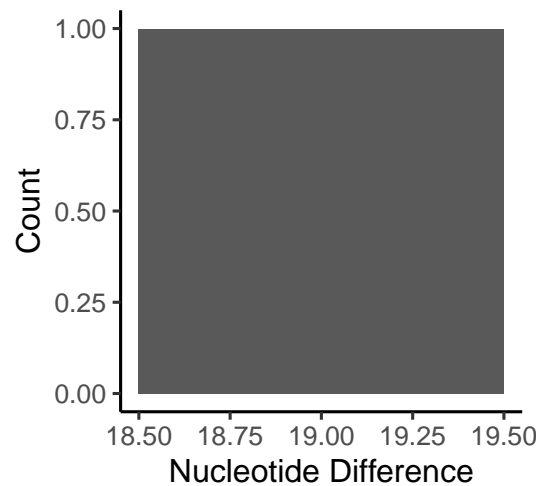
IGHV3-66*02

233 sequences assigned
No exact matches.



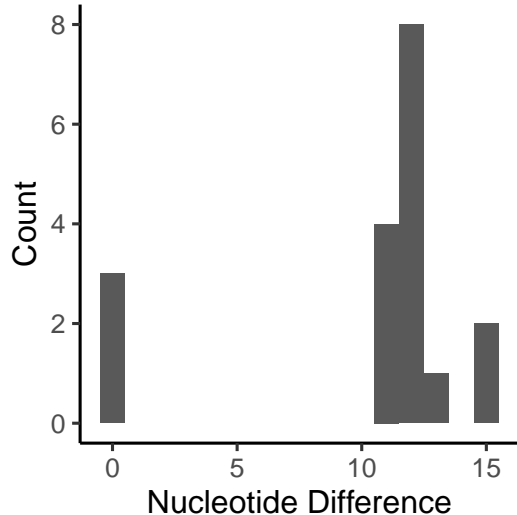
IGHV3-69-1*02

42 sequences assigned
No exact matches.



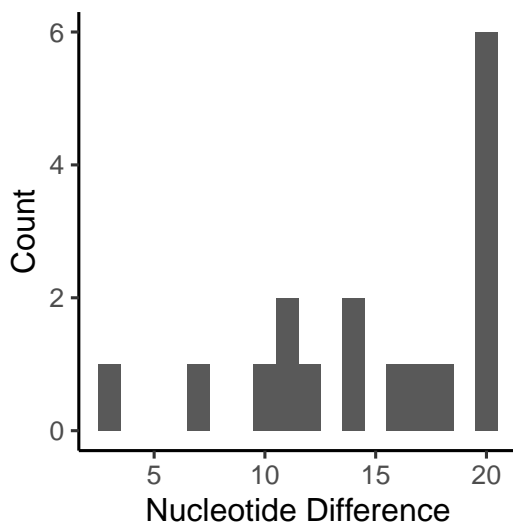
IGHV3-64*02_07

18 sequences assigned
3 (16.7%) exact matches, in which:
3 unique CDR3
3 unique J



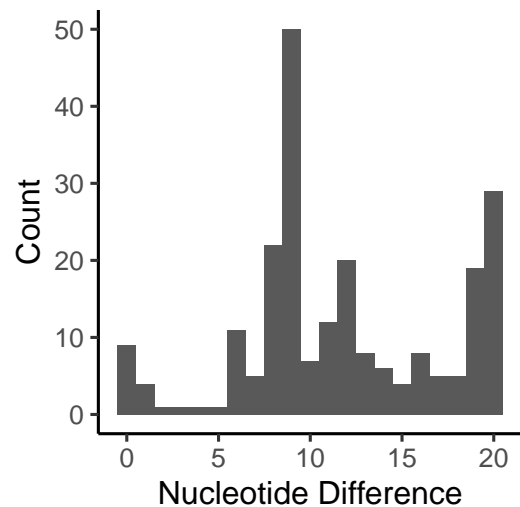
IGHV3-66*03

54 sequences assigned
No exact matches.



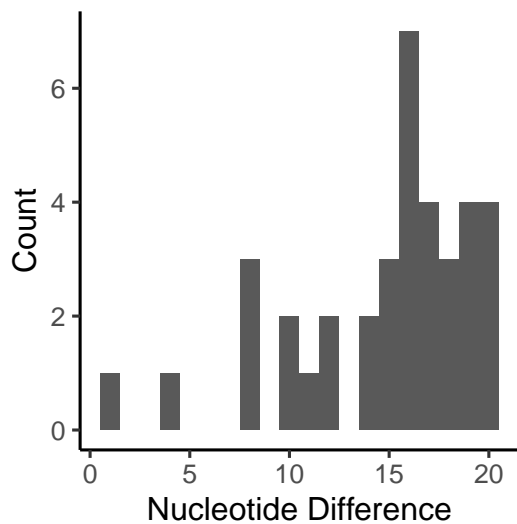
IGHV3-72*01

267 sequences assigned
9 (3.4%) exact matches, in which:
7 unique CDR3
3 unique J



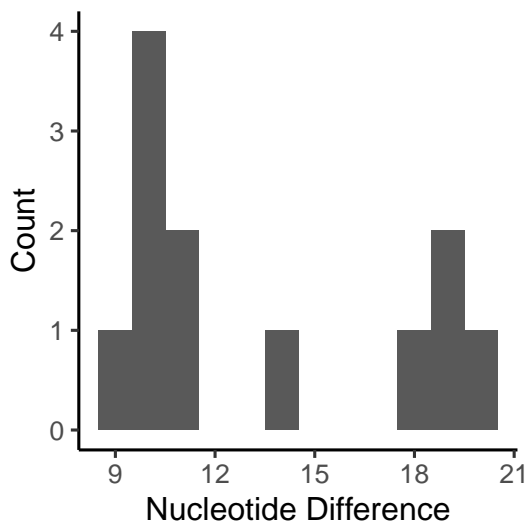
IGHV3-66*01

59 sequences assigned
No exact matches.



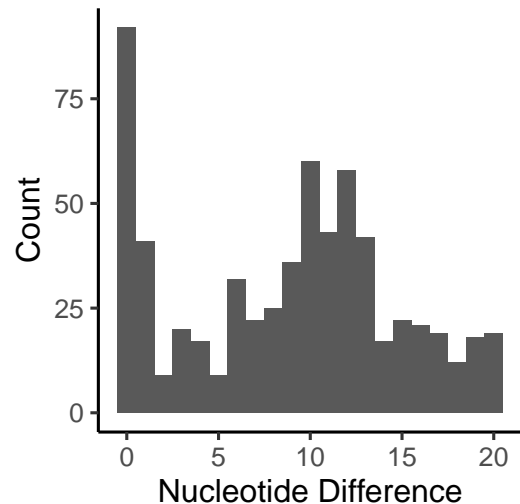
IGHV3-69-1*01

81 sequences assigned
No exact matches.



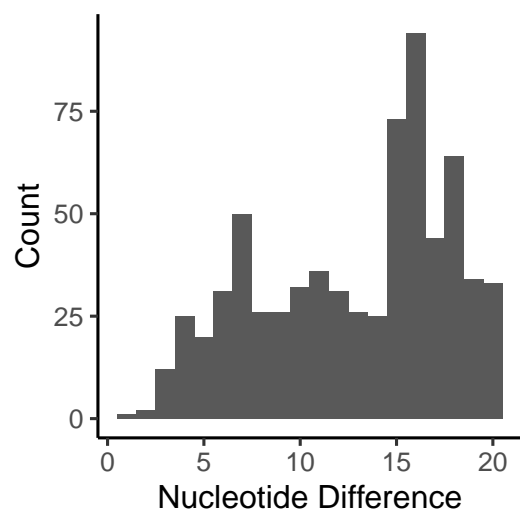
IGHV3-73*01_02

941 sequences assigned
92 (9.8%) exact matches, in which:
62 unique CDR3
4 unique J



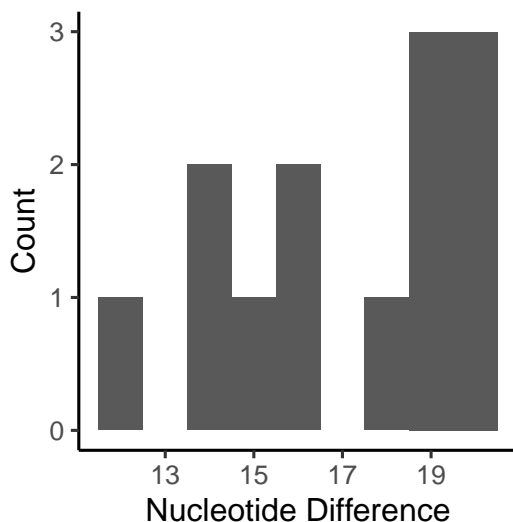
IGHV3-74*03

856 sequences assigned
No exact matches.



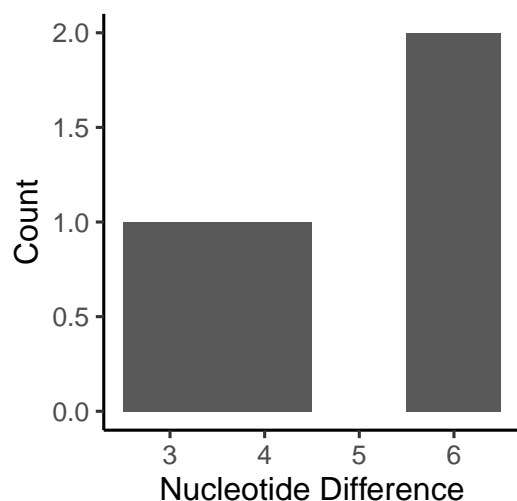
IGHV3-NL1*01

63 sequences assigned
No exact matches.



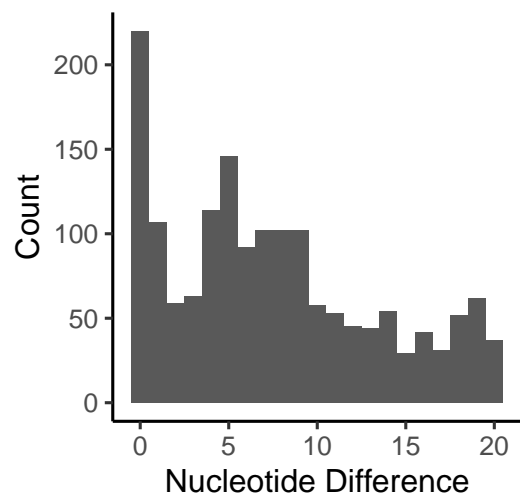
IGHV4-28*01_07

4 sequences assigned
No exact matches.



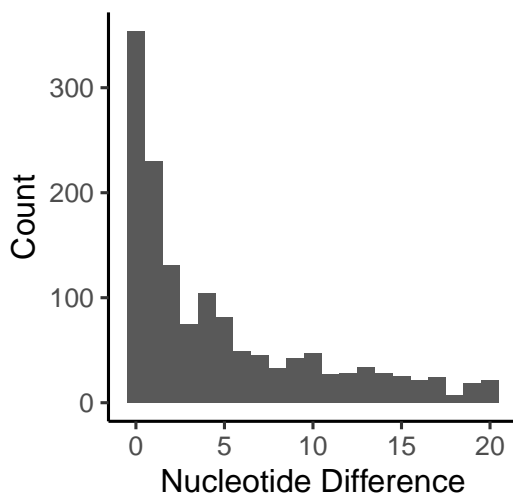
IGHV3-74*01_02

1904 sequences assigned
220 (11.6%) exact matches, in which:
163 unique CDR3
5 unique J



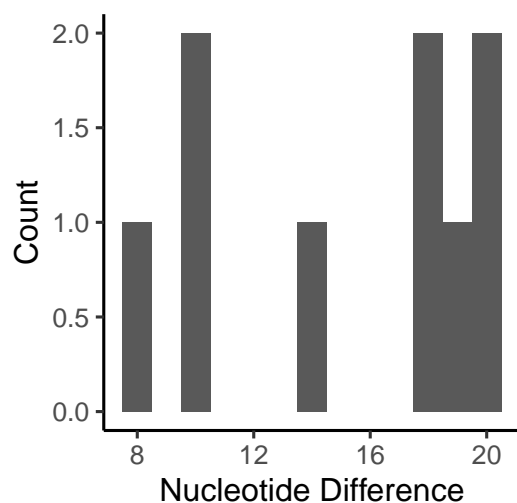
IGHV4-4*02_03

1661 sequences assigned
354 (21.3%) exact matches, in which:
318 unique CDR3
5 unique J



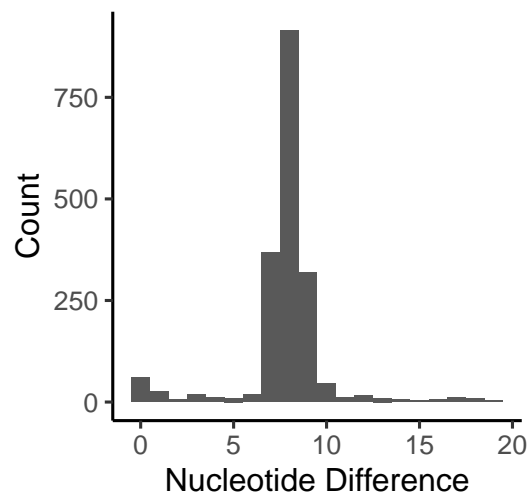
IGHV4-30-4*01

20 sequences assigned
No exact matches.



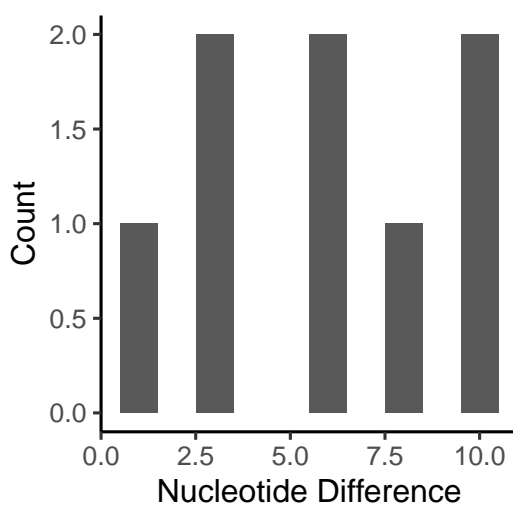
IGHV3-64D*06

1924 sequences assigned
60 (3.1%) exact matches, in which:
43 unique CDR3
5 unique J



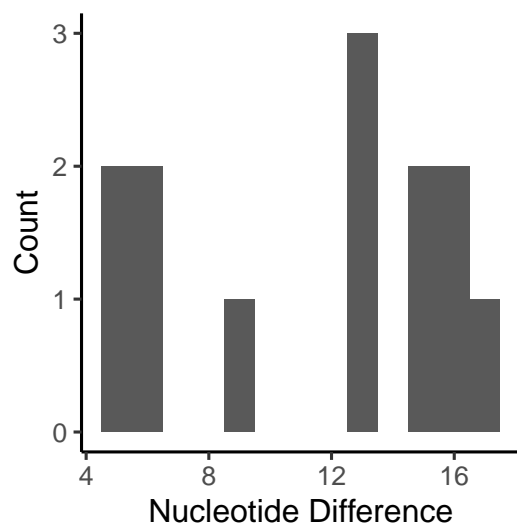
IGHV4-28*03

8 sequences assigned
No exact matches.



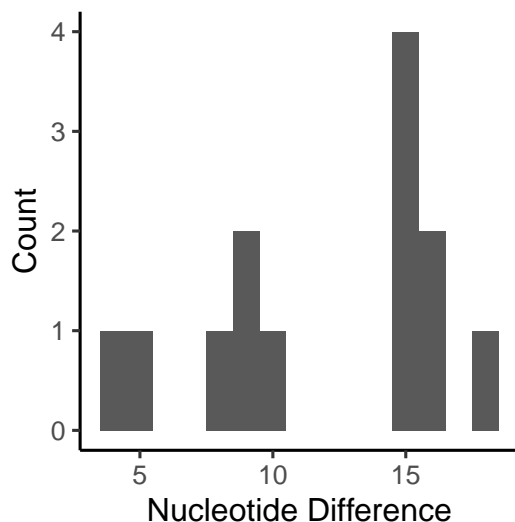
IGHV4-30-2*03

19 sequences assigned
No exact matches.



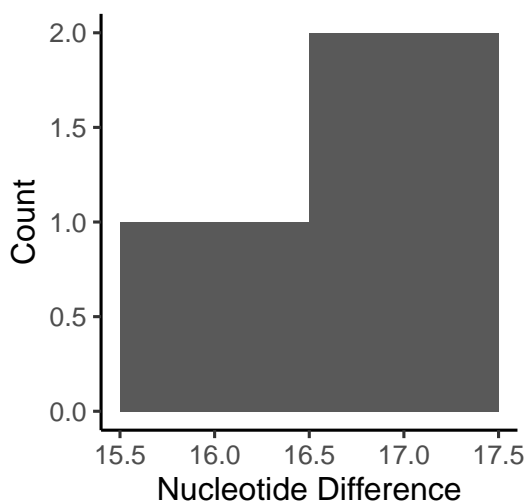
IGHV4-30-4*08

30 sequences assigned
No exact matches.



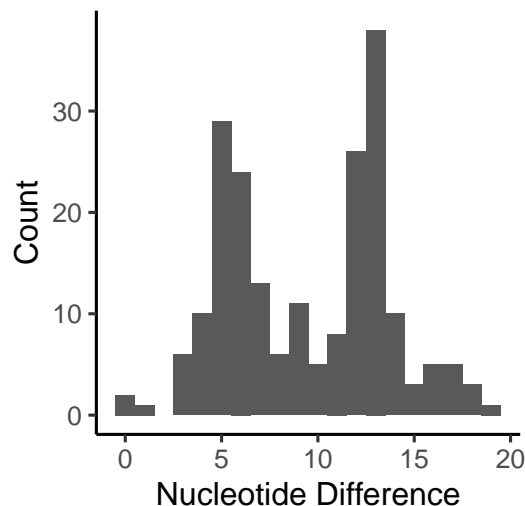
IGHV4-38-2*02

5 sequences assigned
No exact matches.



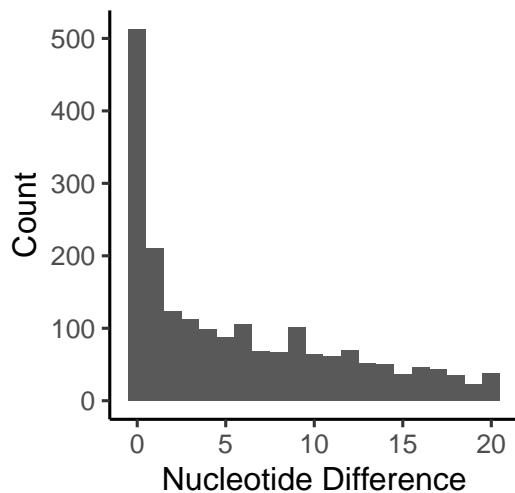
IGHV4-59*11

219 sequences assigned
2 (0.9%) exact matches, in which:
2 unique CDR3
2 unique J



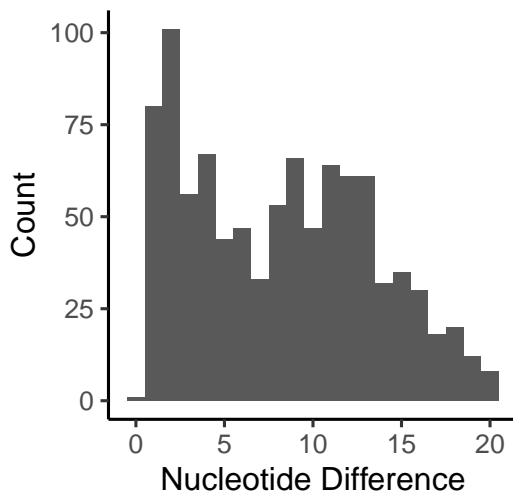
IGHV4-31*02

3068 sequences assigned
513 (16.7%) exact matches, in which:
461 unique CDR3
6 unique J



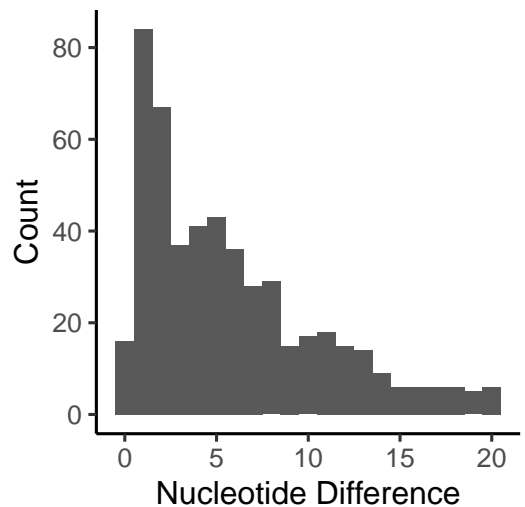
IGHV4-39*07

1016 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



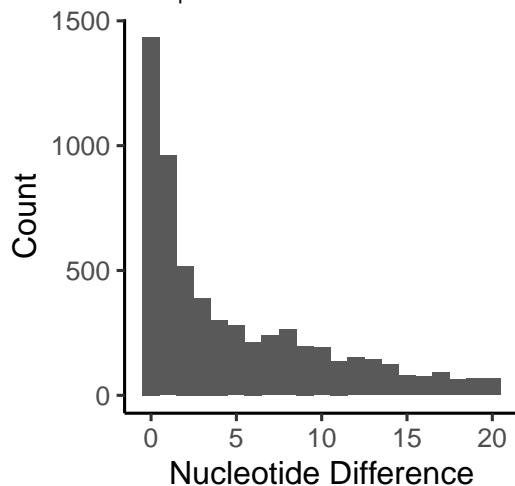
IGHV4-59*12

567 sequences assigned
16 (2.8%) exact matches, in which:
16 unique CDR3
5 unique J



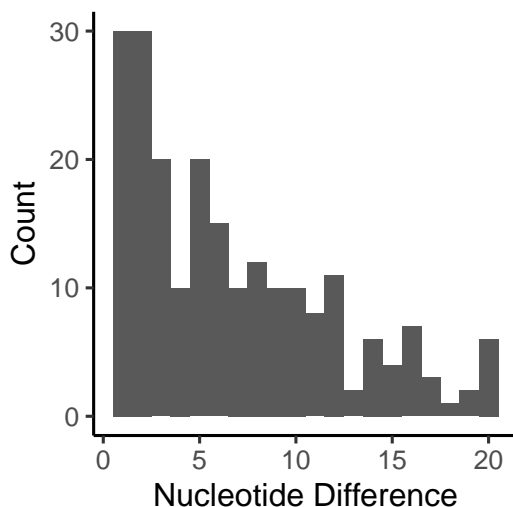
IGHV4-34*01_02

6709 sequences assigned
1435 (21.4%) exact matches, in which:
1243 unique CDR3
6 unique J



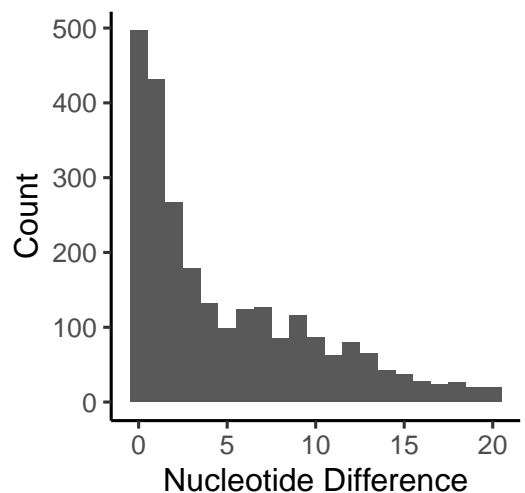
IGHV4-59*08

264 sequences assigned
No exact matches.



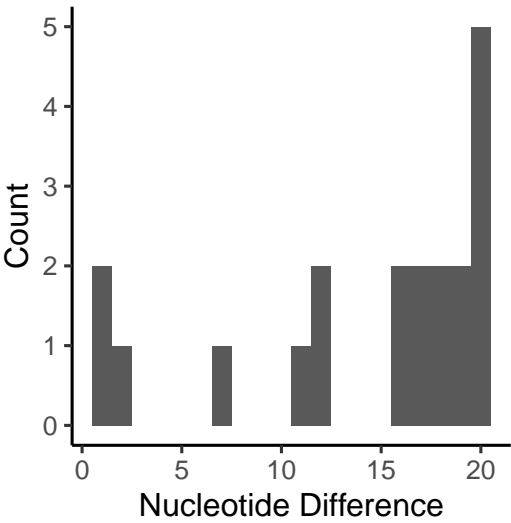
IGHV4-61*01

2766 sequences assigned
497 (18%) exact matches, in which:
451 unique CDR3
6 unique J



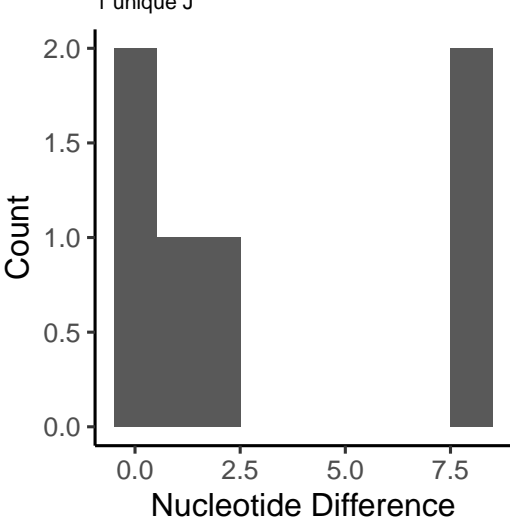
IGHV4/OR15–8*01

28 sequences assigned
No exact matches.



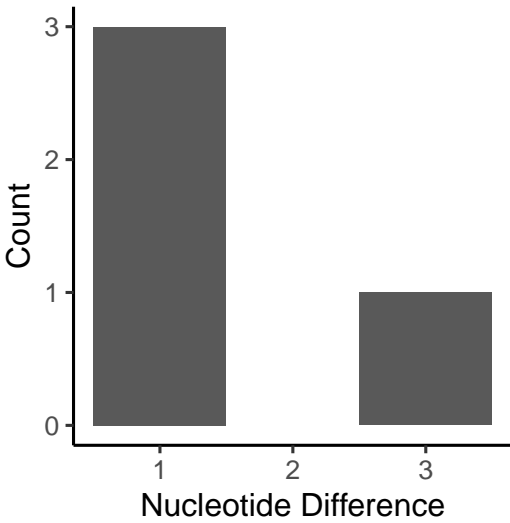
IGHV5–51*06

15 sequences assigned
2 (13.3%) exact matches, in which:
2 unique CDR3
1 unique J



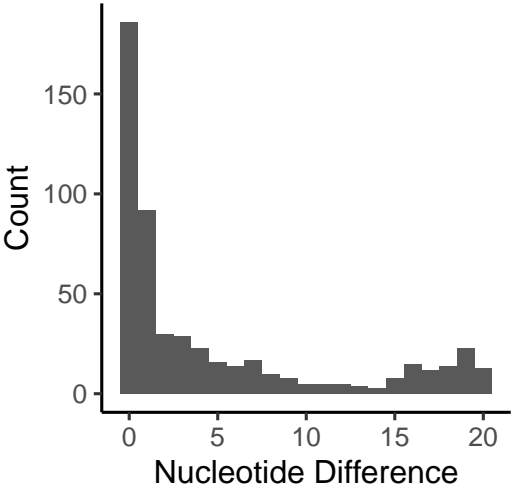
IGHV7–4–1*01

4 sequences assigned
No exact matches.



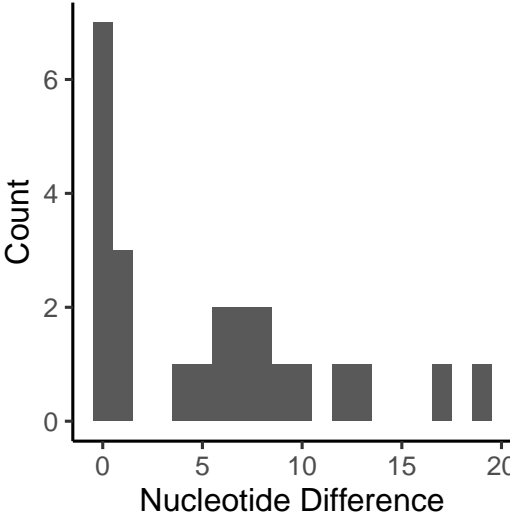
IGHV5–10–1*01_03

639 sequences assigned
186 (29.1%) exact matches, in which:
150 unique CDR3
6 unique J



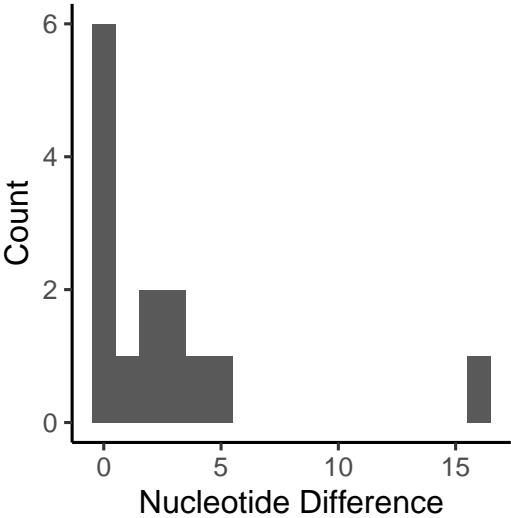
IGHV5–51*07

25 sequences assigned
7 (28%) exact matches, in which:
6 unique CDR3
4 unique J



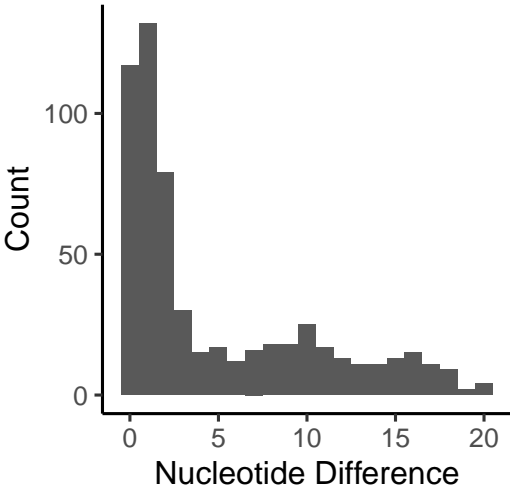
IGHV5–51*04

14 sequences assigned
6 (42.9%) exact matches, in which:
6 unique CDR3
2 unique J



IGHV6–1*01_02

702 sequences assigned
117 (16.7%) exact matches, in which:
101 unique CDR3
4 unique J





[illegible]