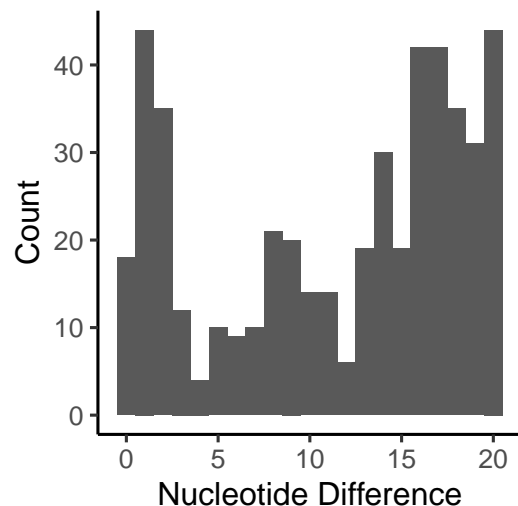


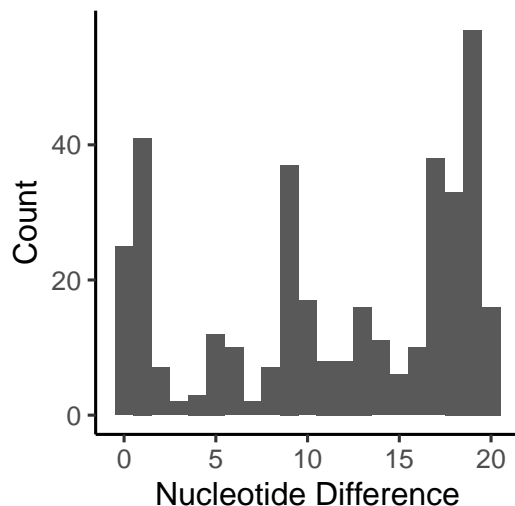
IGHV1-2*02

561 sequences assigned
18 (3.2%) exact matches, in which:
10 unique CDR3
4 unique J



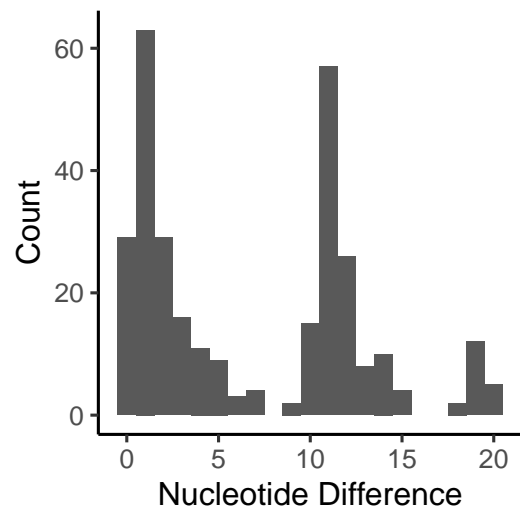
IGHV1-8*01

374 sequences assigned
25 (6.7%) exact matches, in which:
17 unique CDR3
3 unique J



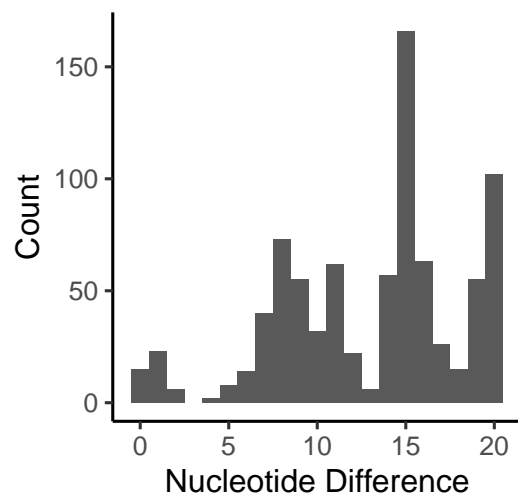
IGHV1-46*01

348 sequences assigned
29 (8.3%) exact matches, in which:
13 unique CDR3
3 unique J



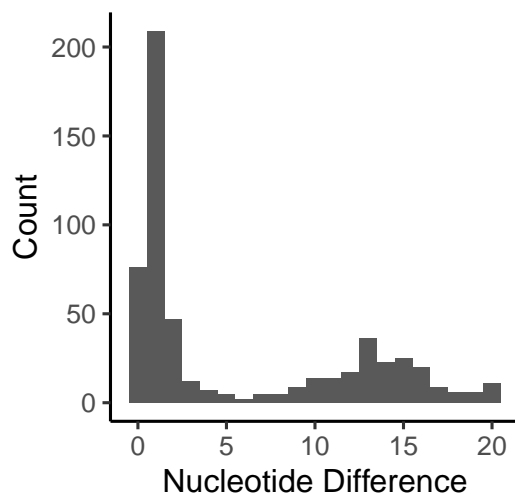
IGHV1-3*01

1018 sequences assigned
15 (1.5%) exact matches, in which:
6 unique CDR3
4 unique J



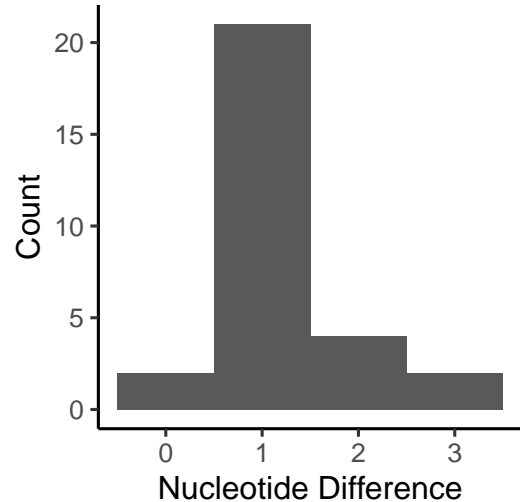
IGHV1-18*01

604 sequences assigned
76 (12.6%) exact matches, in which:
33 unique CDR3
4 unique J



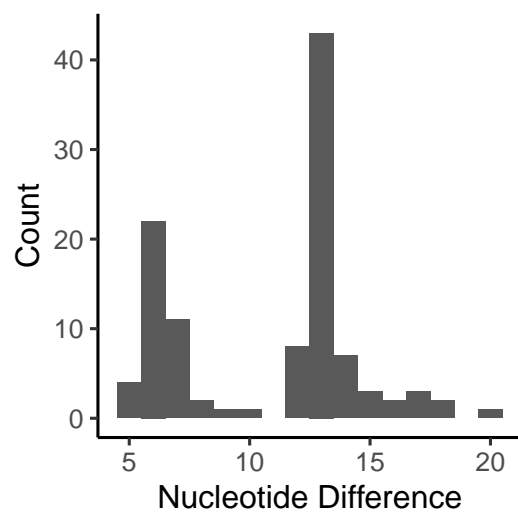
IGHV1-58*01

29 sequences assigned
2 (6.9%) exact matches, in which:
1 unique CDR3
1 unique J



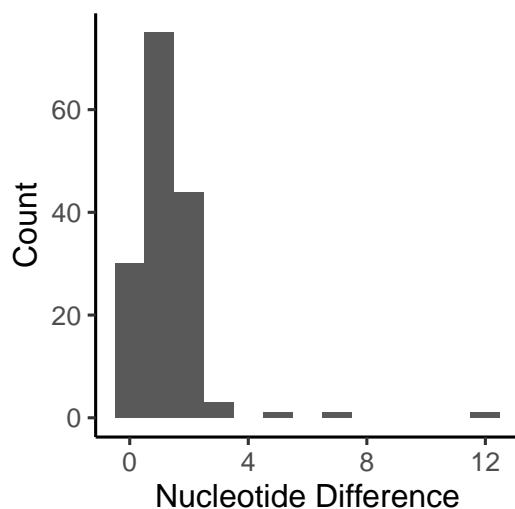
IGHV1-3*04

112 sequences assigned
No exact matches.



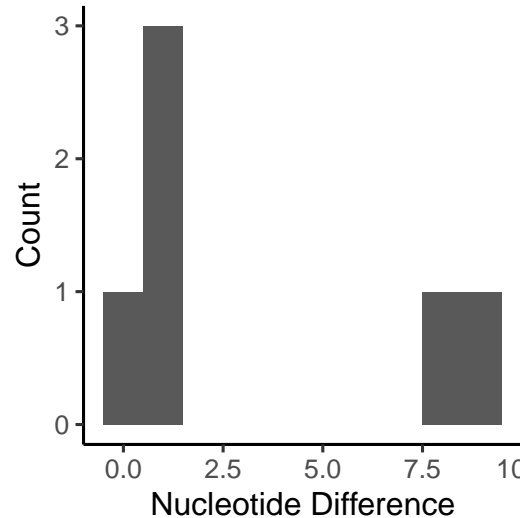
IGHV1-24*01

155 sequences assigned
30 (19.4%) exact matches, in which:
13 unique CDR3
3 unique J



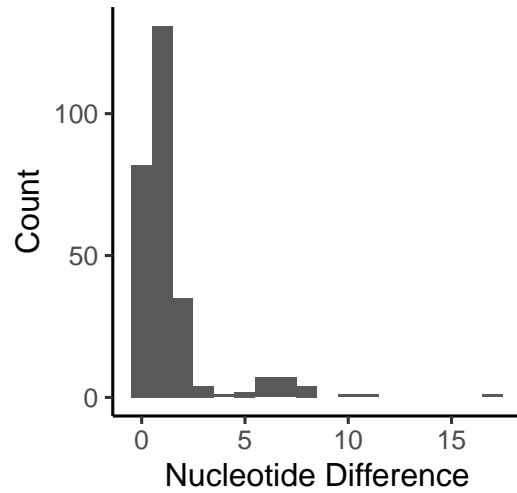
IGHV1-69-2*01

6 sequences assigned
1 (16.7%) exact matches, in which:
1 unique CDR3
1 unique J



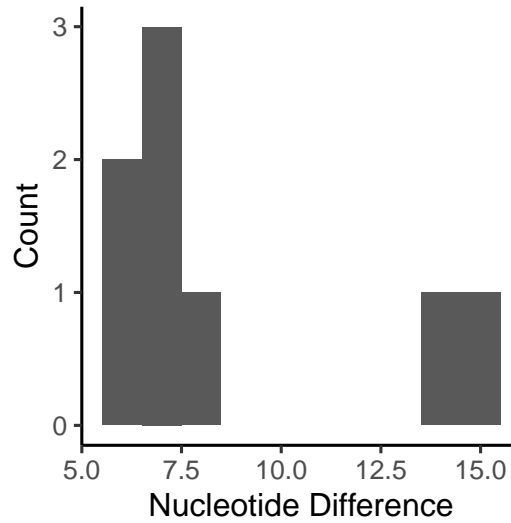
IGHV1-69*06

288 sequences assigned
82 (28.5%) exact matches, in which:
47 unique CDR3
3 unique J



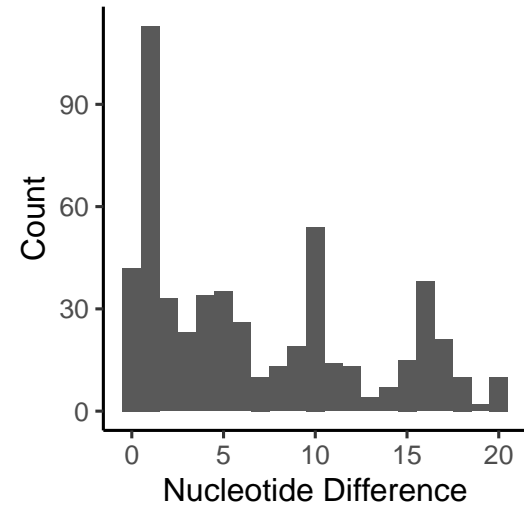
IGHV2-26*01

8 sequences assigned
No exact matches.



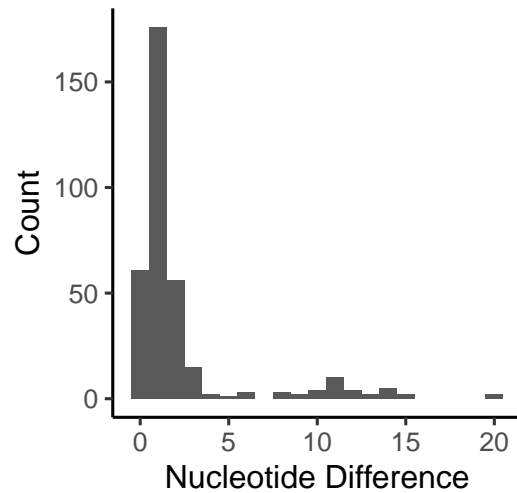
IGHV3-9*01

558 sequences assigned
42 (7.5%) exact matches, in which:
27 unique CDR3
3 unique J



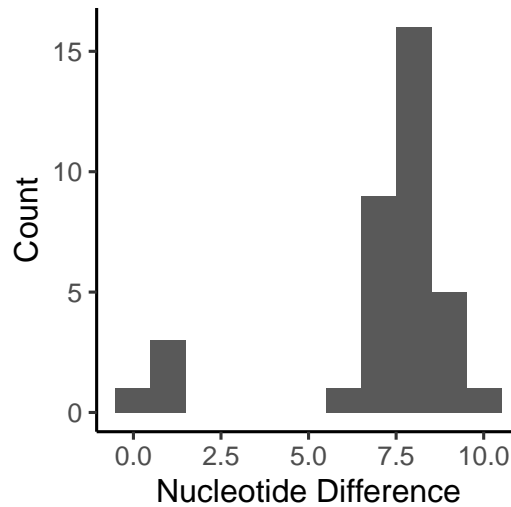
IGHV2-5*01

388 sequences assigned
61 (15.7%) exact matches, in which:
37 unique CDR3
3 unique J



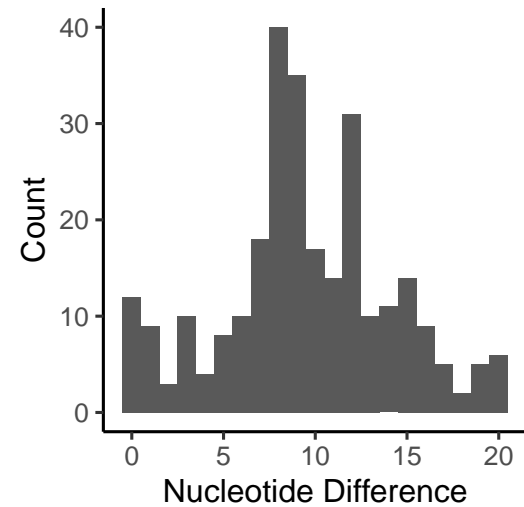
IGHV2-70*01

36 sequences assigned
1 (2.8%) exact matches, in which:
1 unique CDR3
1 unique J



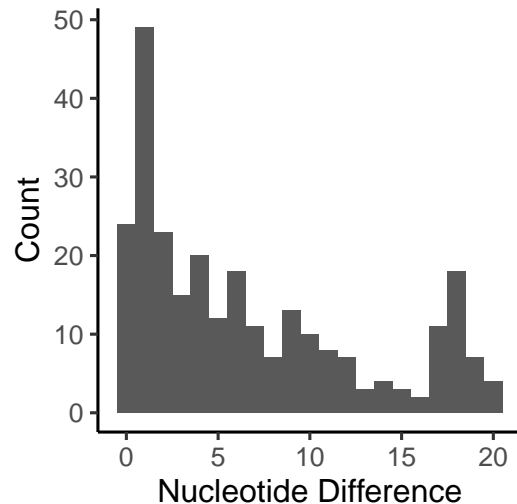
IGHV3-11*01

364 sequences assigned
12 (3.3%) exact matches, in which:
10 unique CDR3
2 unique J



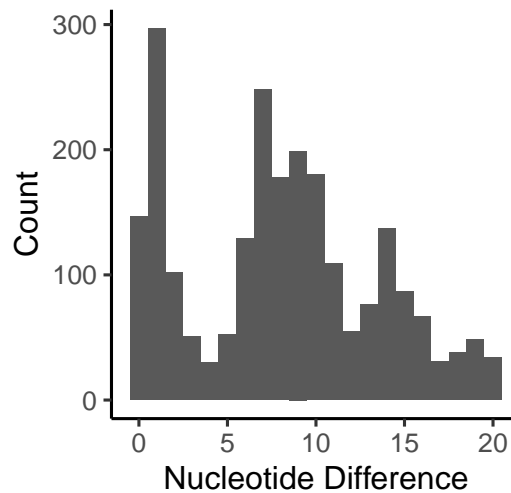
IGHV2-5*02

322 sequences assigned
24 (7.5%) exact matches, in which:
17 unique CDR3
4 unique J



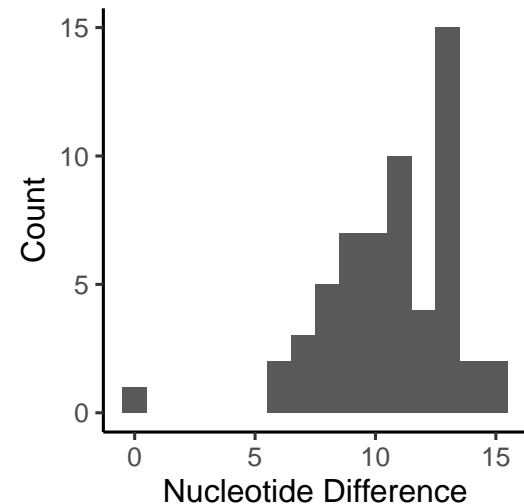
IGHV3-7*01

2485 sequences assigned
147 (5.9%) exact matches, in which:
82 unique CDR3
5 unique J



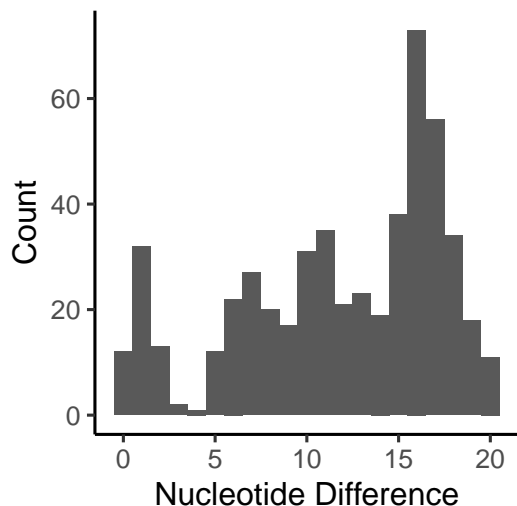
IGHV3-13*01

58 sequences assigned
1 (1.7%) exact matches, in which:
1 unique CDR3
1 unique J



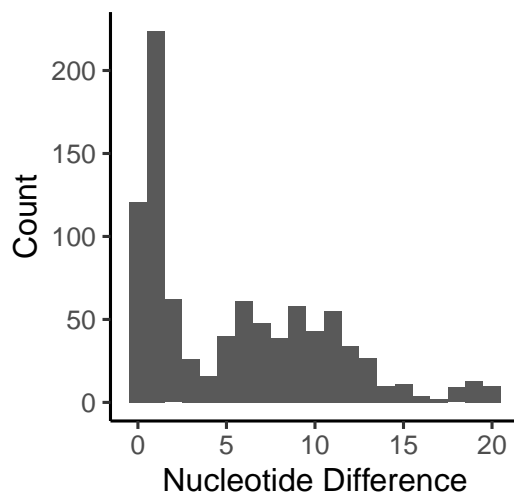
IGHV3-15*01

575 sequences assigned
12 (2.1%) exact matches, in which:
12 unique CDR3
2 unique J



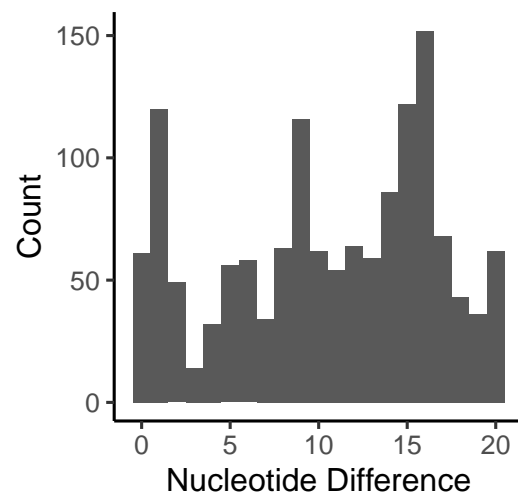
IGHV3-21*01

1130 sequences assigned
121 (10.7%) exact matches, in which:
68 unique CDR3
4 unique J



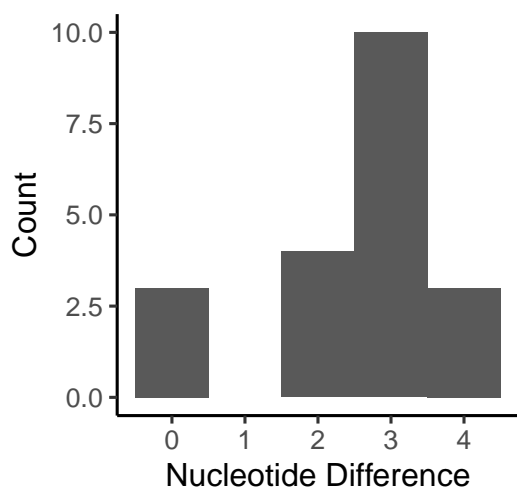
IGHV3-33*01

1663 sequences assigned
61 (3.7%) exact matches, in which:
29 unique CDR3
3 unique J



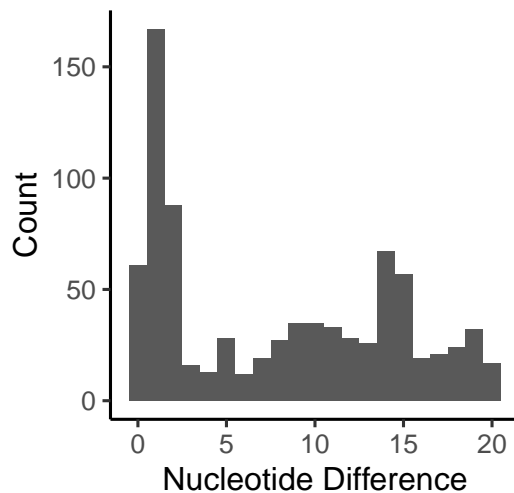
IGHV3-20*01

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



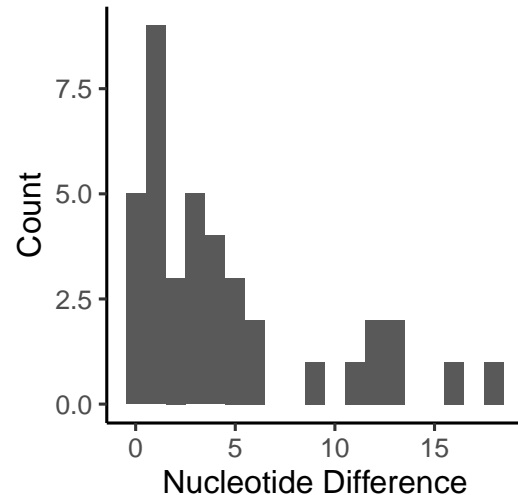
IGHV3-23*04

1003 sequences assigned
61 (6.1%) exact matches, in which:
27 unique CDR3
4 unique J



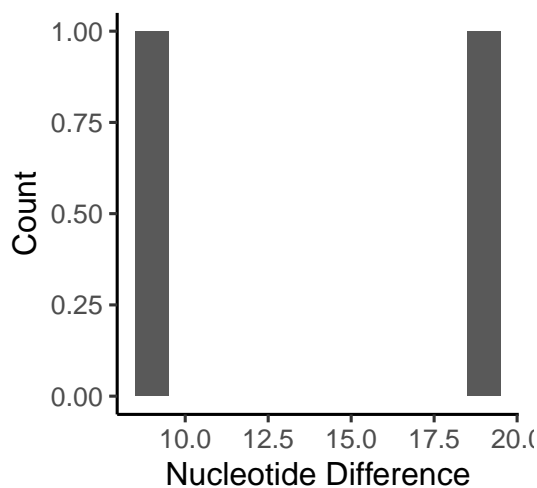
IGHV3-43*01

39 sequences assigned
5 (12.8%) exact matches, in which:
5 unique CDR3
1 unique J



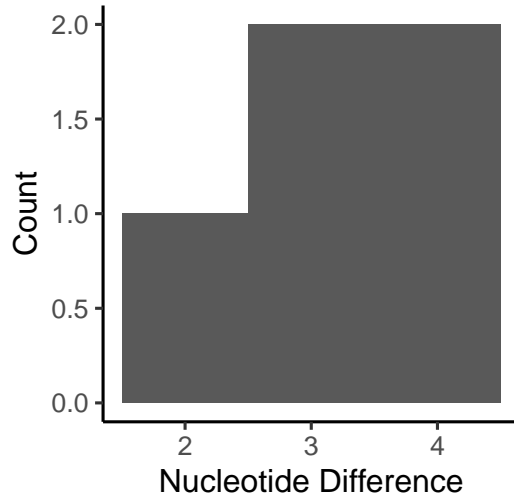
IGHV3-20*04

2 sequences assigned
No exact matches.



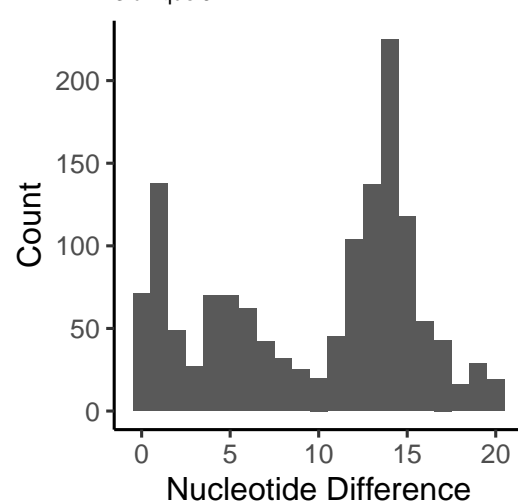
IGHV3-30-3*03

5 sequences assigned
No exact matches.



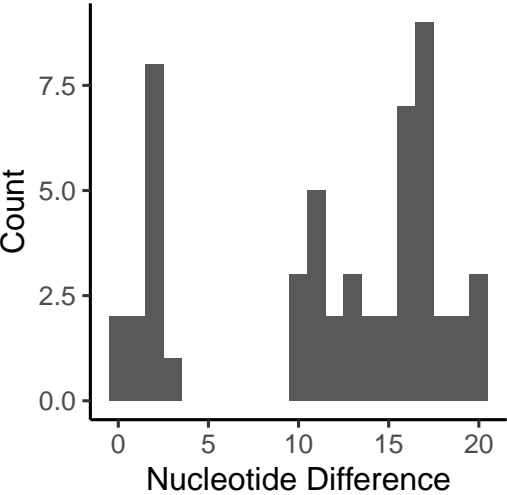
IGHV3-48*02

1528 sequences assigned
71 (4.6%) exact matches, in which:
28 unique CDR3
3 unique J



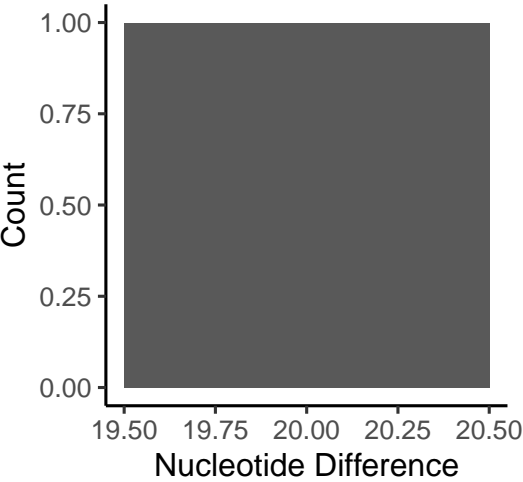
IGHV3-49*05

65 sequences assigned
2 (3.1%) exact matches, in which:
1 unique CDR3
1 unique J



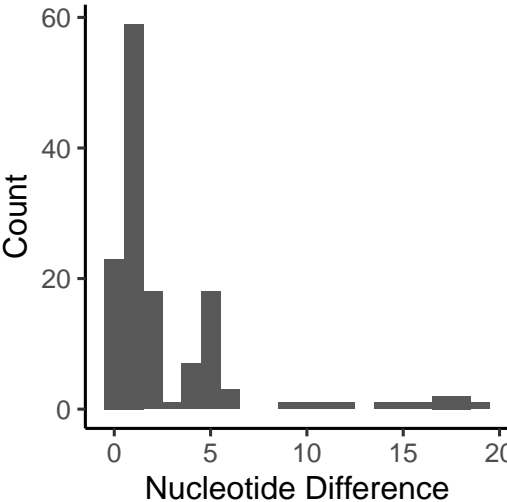
IGHV3-66*04

1 sequences assigned
No exact matches.



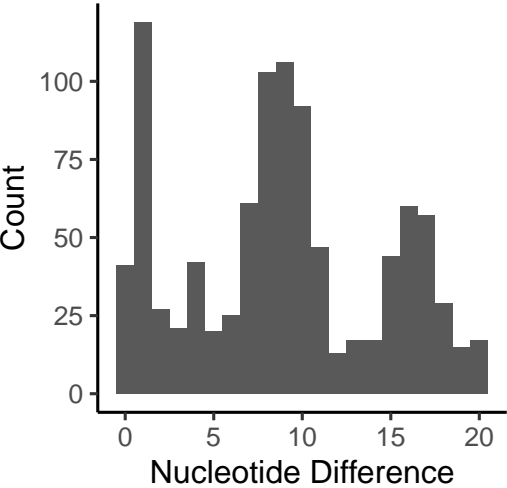
IGHV3-73*02

141 sequences assigned
23 (16.3%) exact matches, in which:
14 unique CDR3
2 unique J



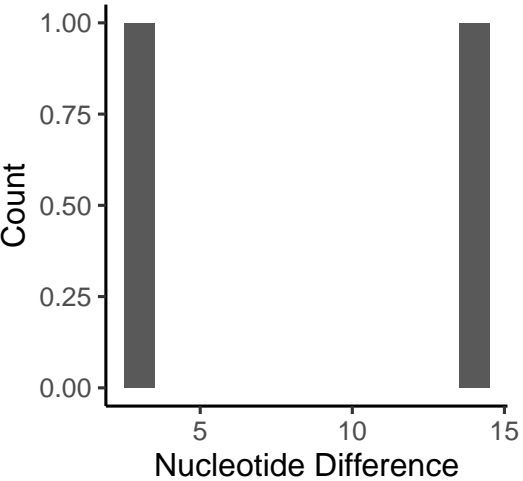
IGHV3-53*01

1040 sequences assigned
41 (3.9%) exact matches, in which:
24 unique CDR3
5 unique J



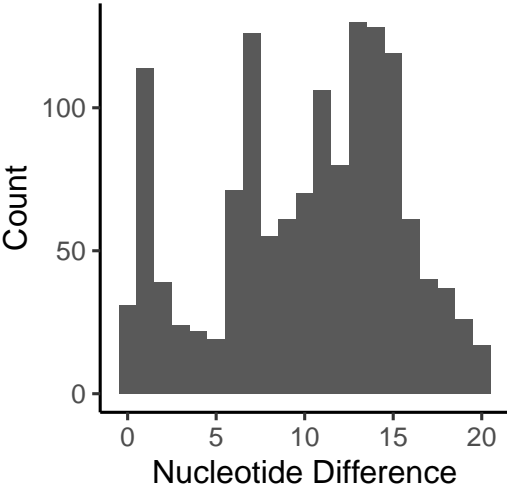
IGHV3-69-1*01

2 sequences assigned
No exact matches.



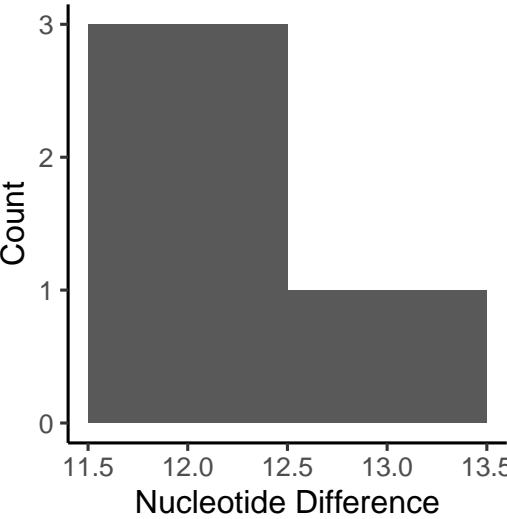
IGHV3-74*01

1484 sequences assigned
31 (2.1%) exact matches, in which:
17 unique CDR3
3 unique J



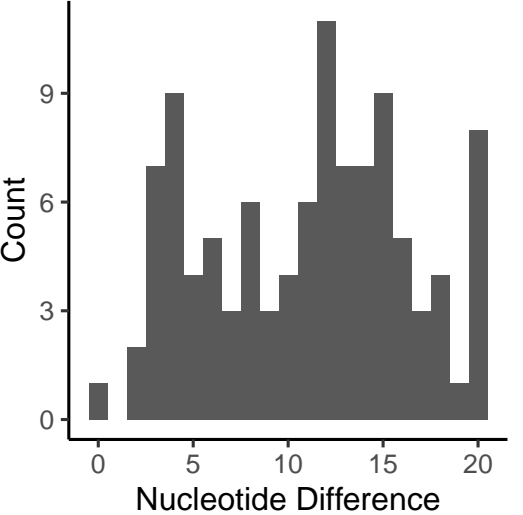
IGHV3-64*02

4 sequences assigned
No exact matches.



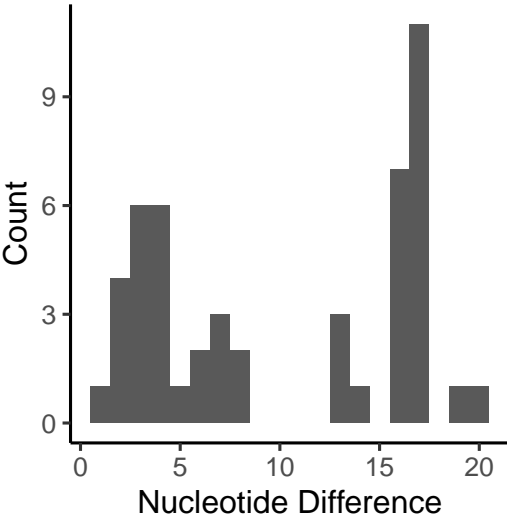
IGHV3-72*01

118 sequences assigned
1 (0.8%) exact matches, in which:
1 unique CDR3
1 unique J



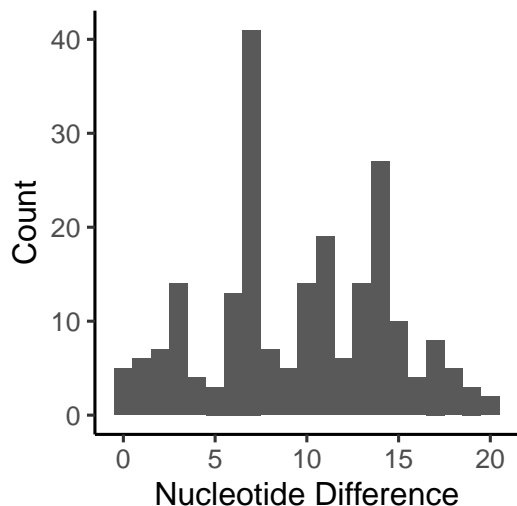
IGHV4-4*02

54 sequences assigned
No exact matches.



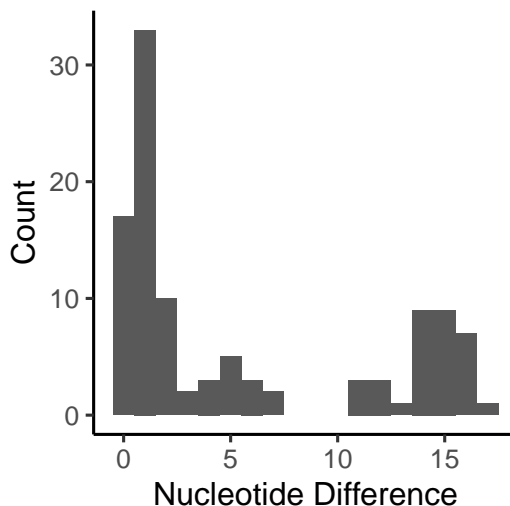
IGHV4-4*07

230 sequences assigned
5 (2.2%) exact matches, in which:
4 unique CDR3
1 unique J



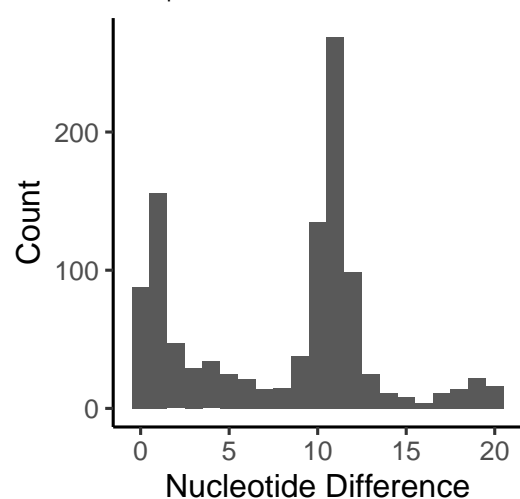
IGHV4-31*03

108 sequences assigned
17 (15.7%) exact matches, in which:
6 unique CDR3
2 unique J



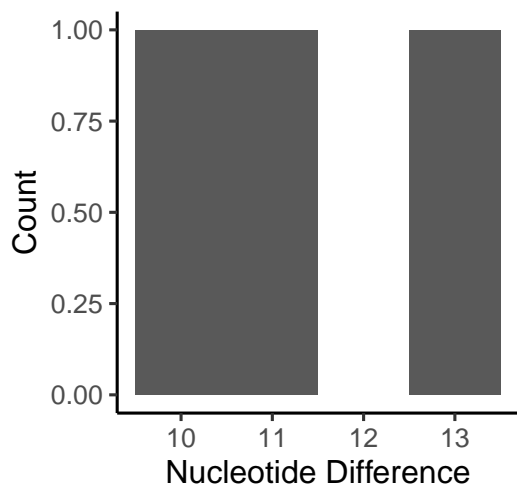
IGHV4-59*01

1137 sequences assigned
88 (7.7%) exact matches, in which:
37 unique CDR3
4 unique J



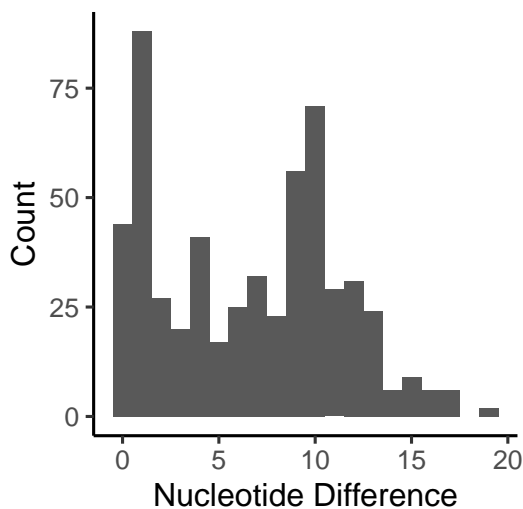
IGHV4-28*01

3 sequences assigned
No exact matches.



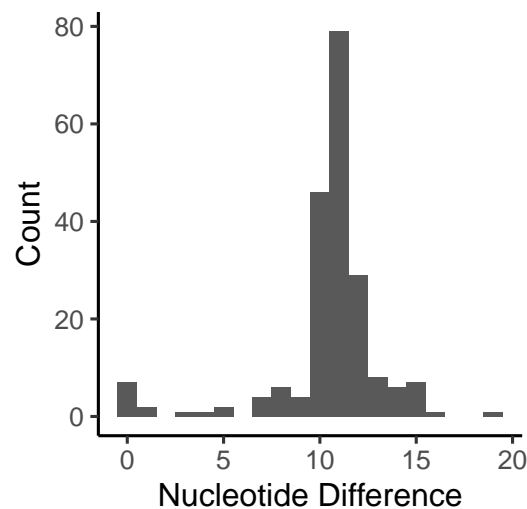
IGHV4-34*01

565 sequences assigned
44 (7.8%) exact matches, in which:
23 unique CDR3
3 unique J



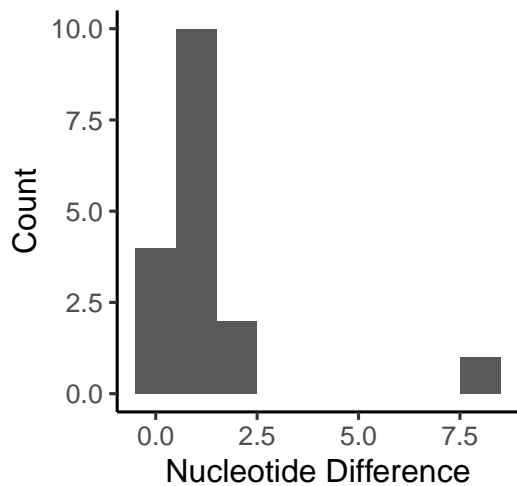
IGHV4-61*01

215 sequences assigned
7 (3.3%) exact matches, in which:
3 unique CDR3
2 unique J



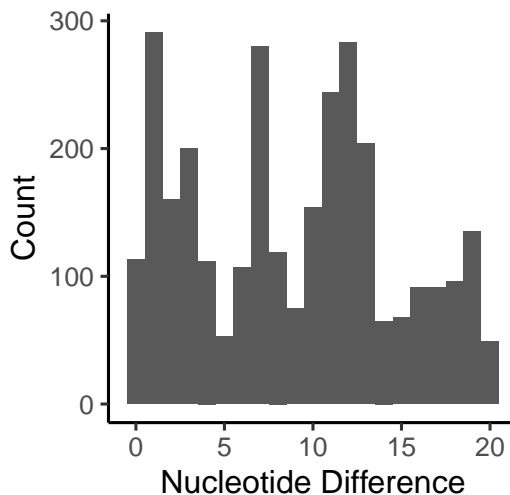
IGHV4-30-2*01

17 sequences assigned
4 (23.5%) exact matches, in which:
1 unique CDR3
1 unique J



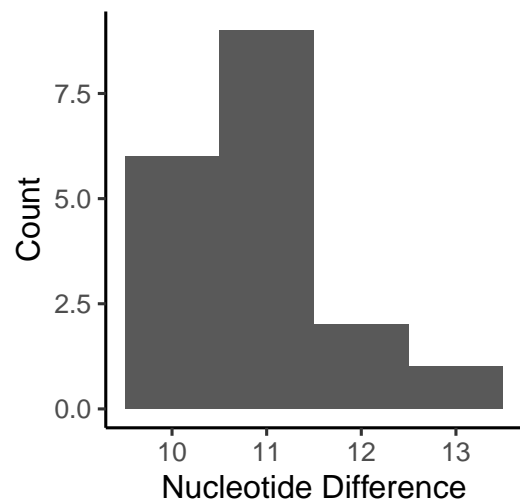
IGHV4-39*01

3079 sequences assigned
113 (3.7%) exact matches, in which:
59 unique CDR3
5 unique J



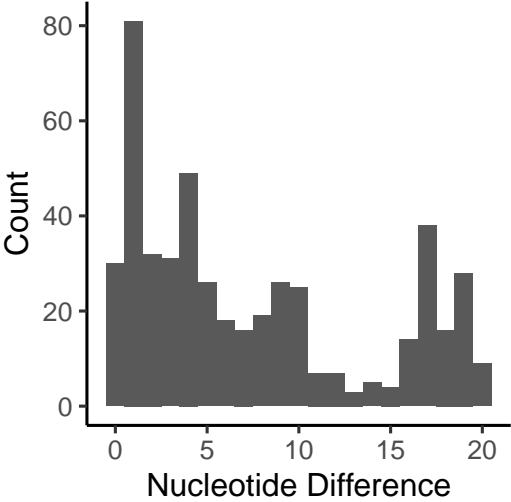
IGHV4-61*08

20 sequences assigned
No exact matches.



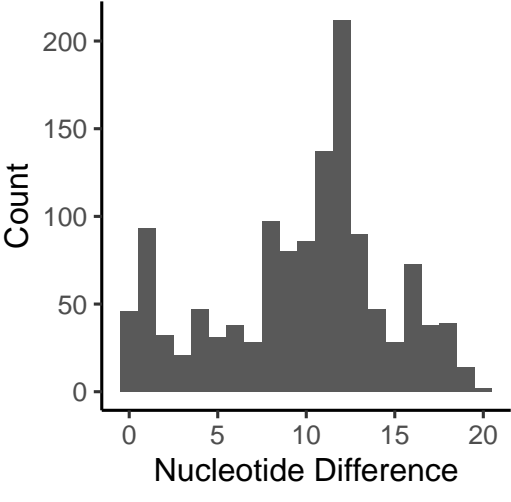
IGHV5-51*01

542 sequences assigned
30 (5.5%) exact matches, in which:
16 unique CDR3
5 unique J



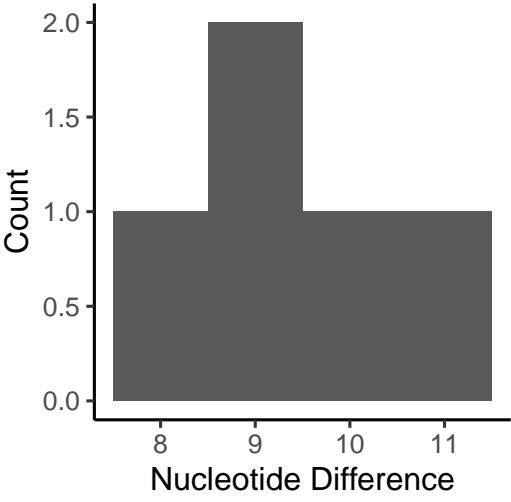
IGHV6-1*01

1279 sequences assigned
46 (3.6%) exact matches, in which:
20 unique CDR3
3 unique J



IGHV7-4-1*01

5 sequences assigned
No exact matches.





[illegible]