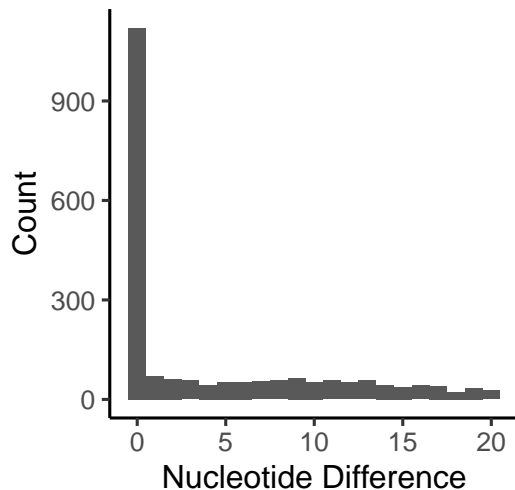


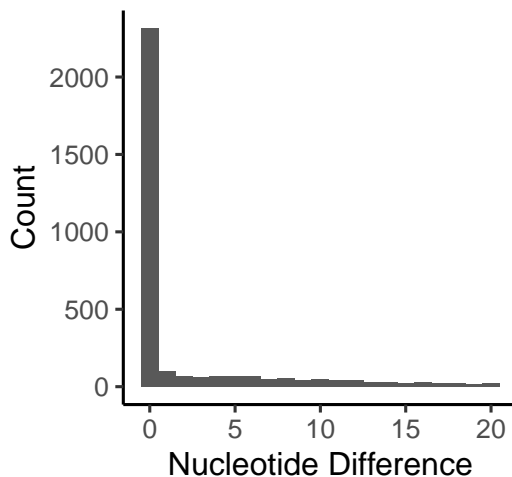
IGHV1-2*02

2261 sequences assigned
1121 (49.6%) exact matches, in which:
1114 unique CDR3
6 unique J



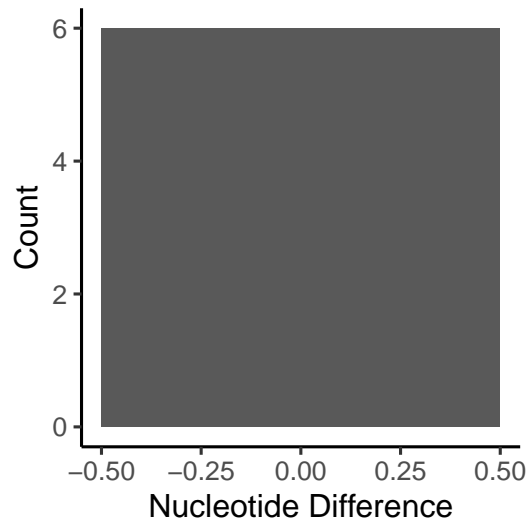
IGHV1-8*01

3328 sequences assigned
2314 (69.5%) exact matches, in which:
2294 unique CDR3
6 unique J



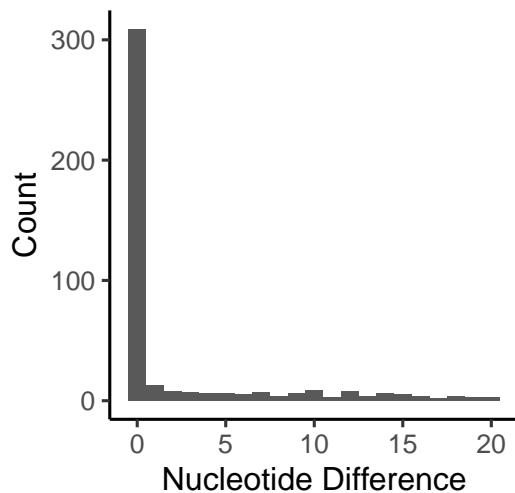
IGHV1-45*02

6 sequences assigned
6 (100%) exact matches, in which:
6 unique CDR3
3 unique J



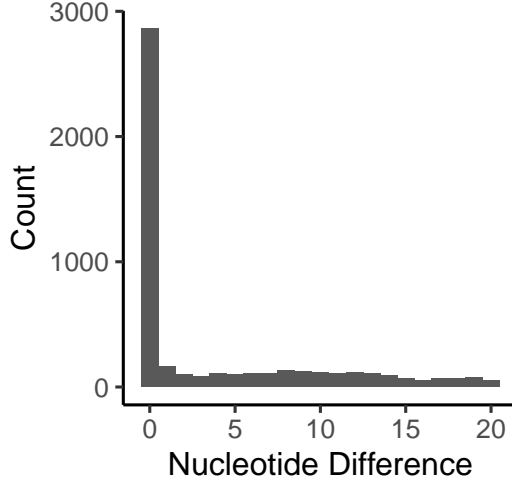
IGHV1-2*04

445 sequences assigned
309 (69.4%) exact matches, in which:
309 unique CDR3
6 unique J



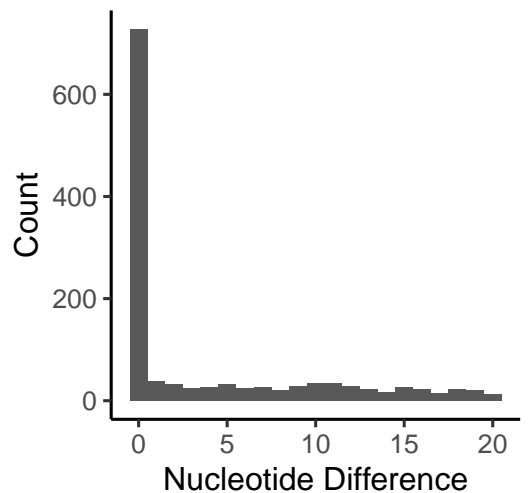
IGHV1-18*01

5233 sequences assigned
2861 (54.7%) exact matches, in which:
2826 unique CDR3
6 unique J



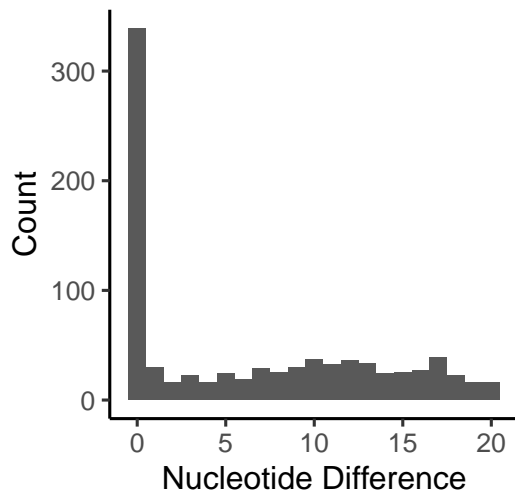
IGHV1-46*01

1345 sequences assigned
728 (54.1%) exact matches, in which:
724 unique CDR3
6 unique J



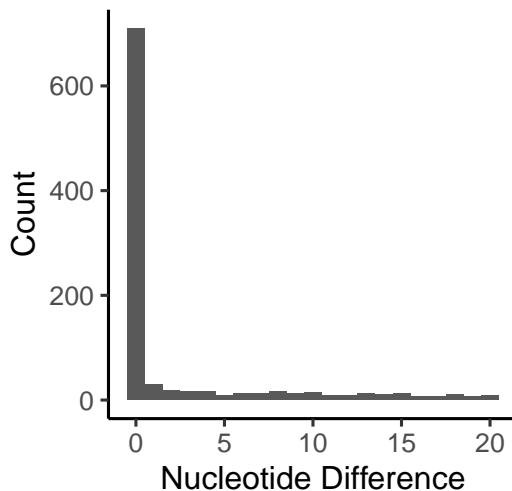
IGHV1-3*01_05

943 sequences assigned
339 (35.9%) exact matches, in which:
338 unique CDR3
6 unique J



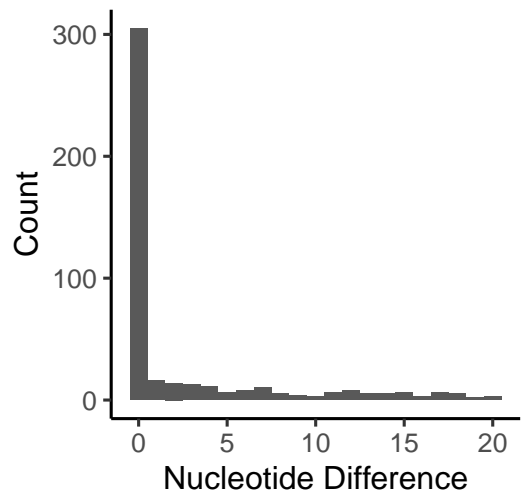
IGHV1-24*01

991 sequences assigned
710 (71.6%) exact matches, in which:
705 unique CDR3
6 unique J



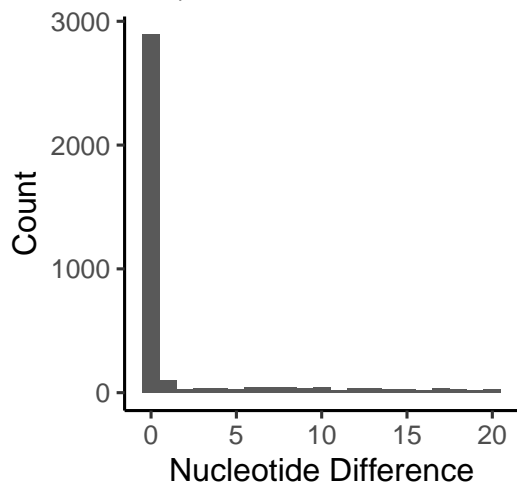
IGHV1-58*01_03

469 sequences assigned
305 (65%) exact matches, in which:
305 unique CDR3
6 unique J



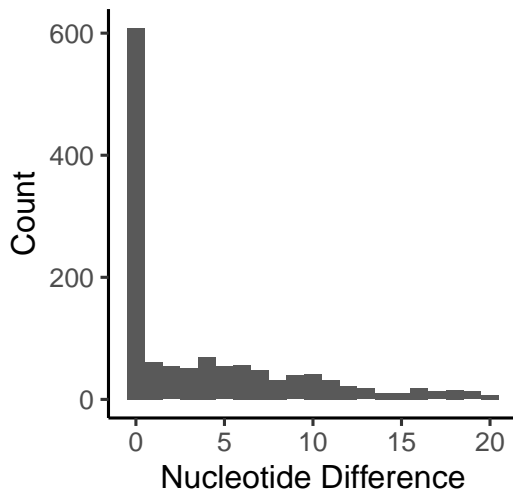
IGHV1-69*01_12_13

3837 sequences assigned
2894 (75.4%) exact matches, in which:
2881 unique CDR3
6 unique J



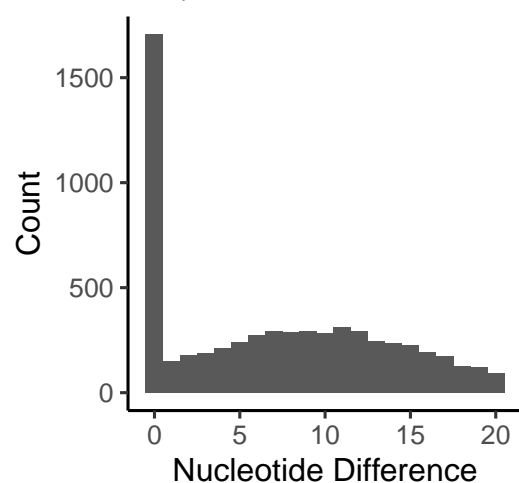
IGHV2-5*02

1323 sequences assigned
609 (46%) exact matches, in which:
606 unique CDR3
6 unique J



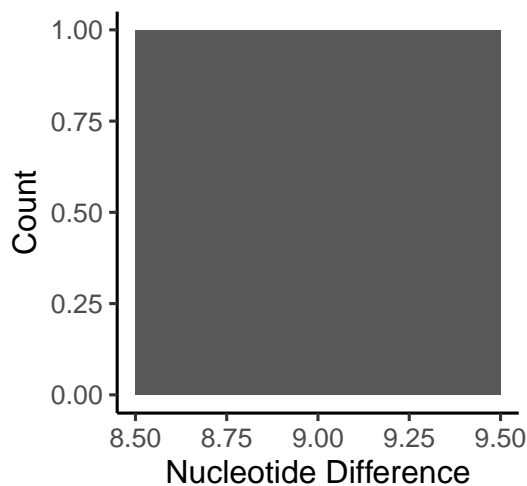
IGHV3-7*01

6584 sequences assigned
1706 (25.9%) exact matches, in which:
1619 unique CDR3
6 unique J



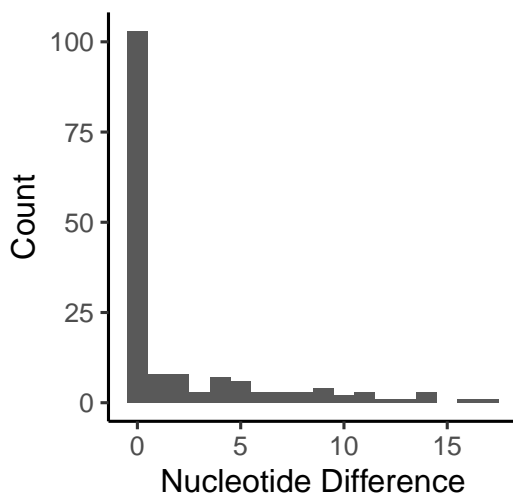
IGHV1-NL1*01

1 sequences assigned
No exact matches.



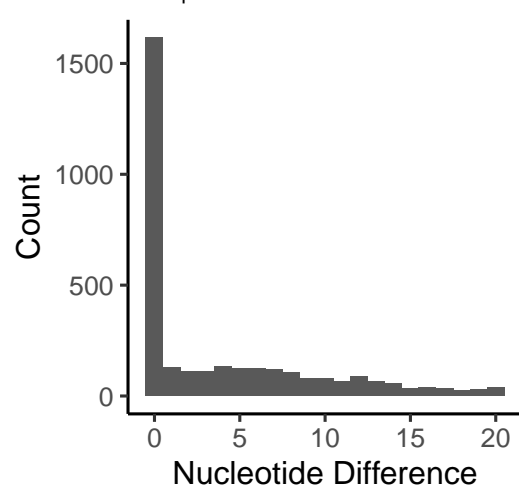
IGHV2-26*01

162 sequences assigned
103 (63.6%) exact matches, in which:
103 unique CDR3
5 unique J



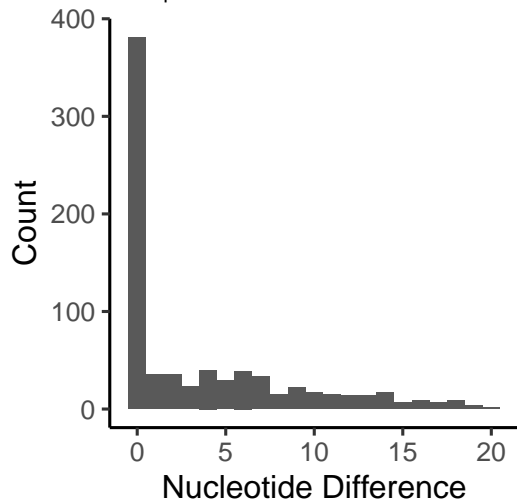
IGHV3-9*01

3399 sequences assigned
1616 (47.5%) exact matches, in which:
1565 unique CDR3
6 unique J



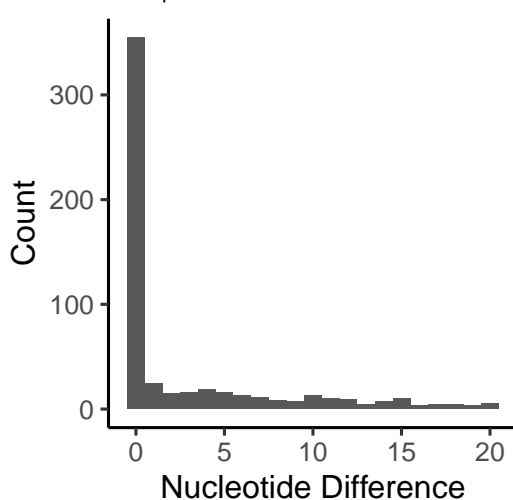
IGHV2-5*01

787 sequences assigned
381 (48.4%) exact matches, in which:
379 unique CDR3
6 unique J



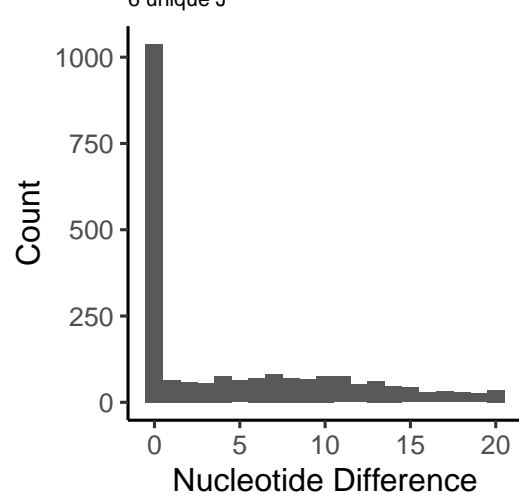
IGHV2-70*01

569 sequences assigned
355 (62.4%) exact matches, in which:
350 unique CDR3
6 unique J



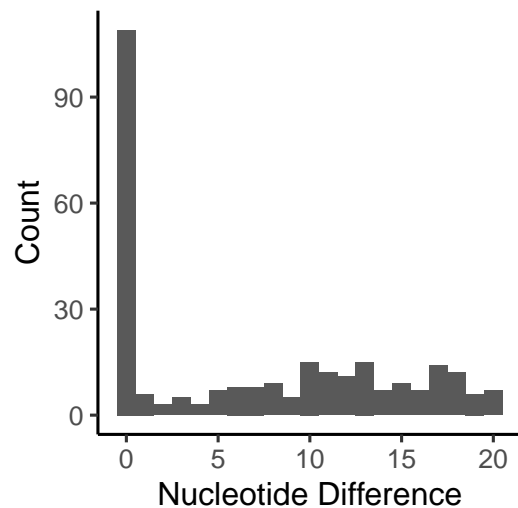
IGHV3-11*01

2349 sequences assigned
1038 (44.2%) exact matches, in which:
1008 unique CDR3
6 unique J



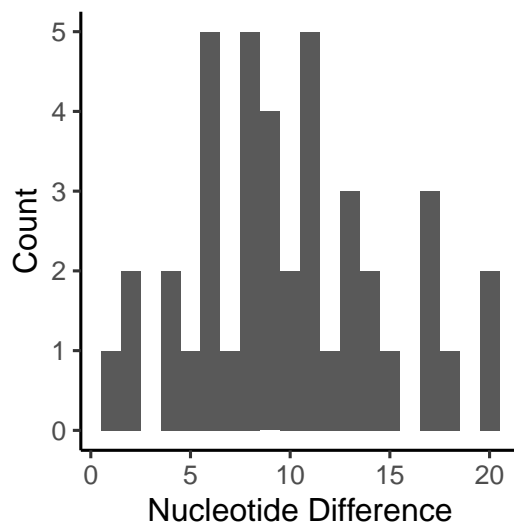
IGHV3-13*01

314 sequences assigned
109 (34.7%) exact matches, in which:
105 unique CDR3
5 unique J



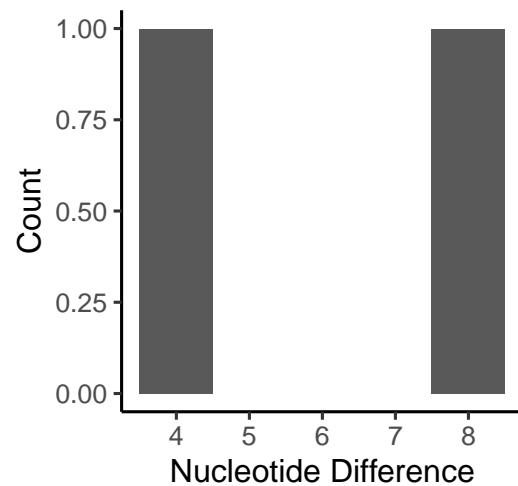
IGHV3-20*03_04

49 sequences assigned
No exact matches.



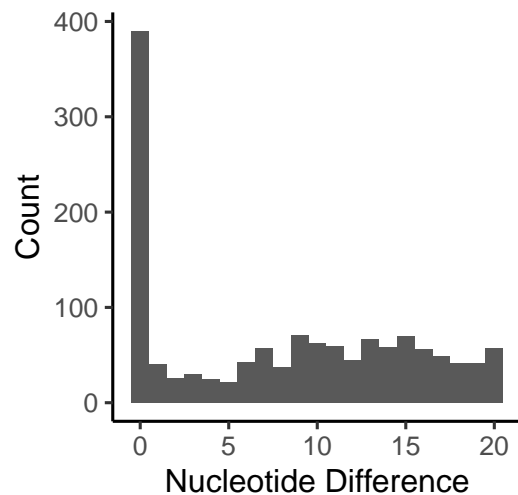
IGHV3-30-3*01

2 sequences assigned
No exact matches.



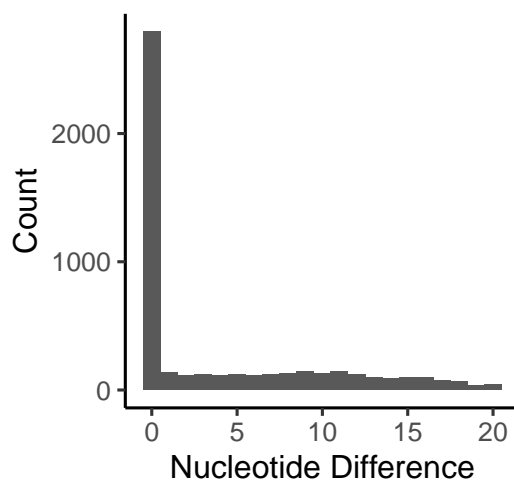
IGHV3-15*01_02

1629 sequences assigned
390 (23.9%) exact matches, in which:
384 unique CDR3
6 unique J



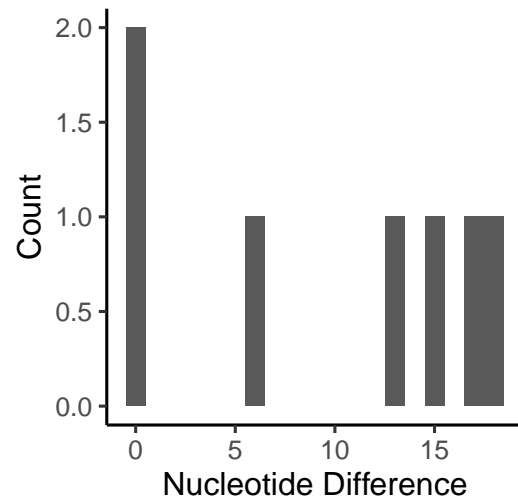
IGHV3-21*01_02

5156 sequences assigned
2794 (54.2%) exact matches, in which:
2667 unique CDR3
6 unique J



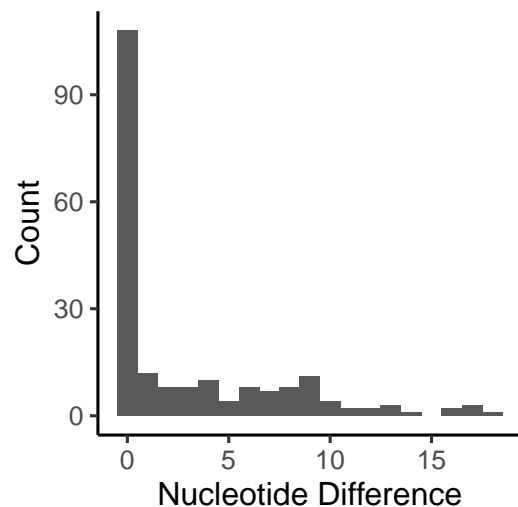
IGHV3-30-3*03

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



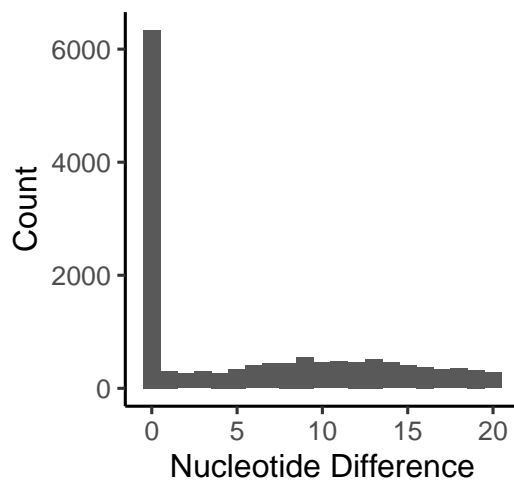
IGHV3-20*01_02

213 sequences assigned
108 (50.7%) exact matches, in which:
102 unique CDR3
5 unique J



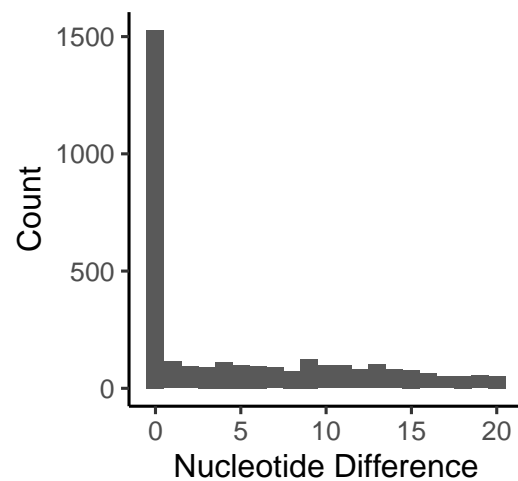
IGHV3-23*01_04

15829 sequences assigned
6338 (40%) exact matches, in which:
6097 unique CDR3
6 unique J



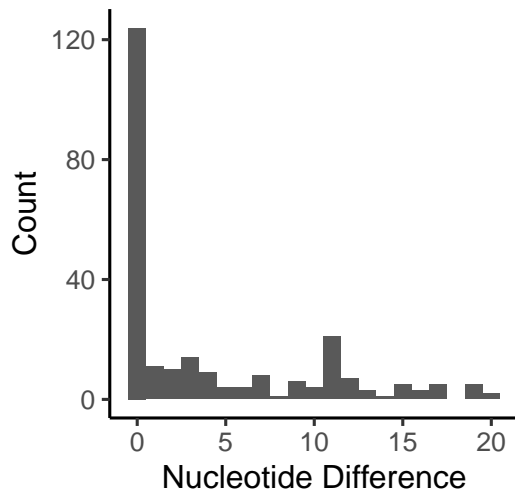
IGHV3-33*01

3526 sequences assigned
1528 (43.3%) exact matches, in which:
1488 unique CDR3
6 unique J



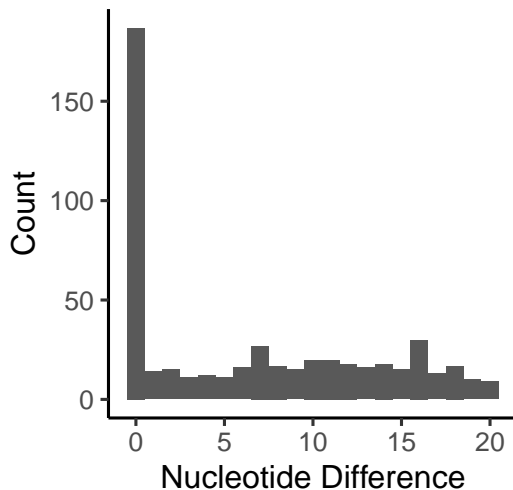
IGHV3-43*01

277 sequences assigned
124 (44.8%) exact matches, in which:
118 unique CDR3
6 unique J



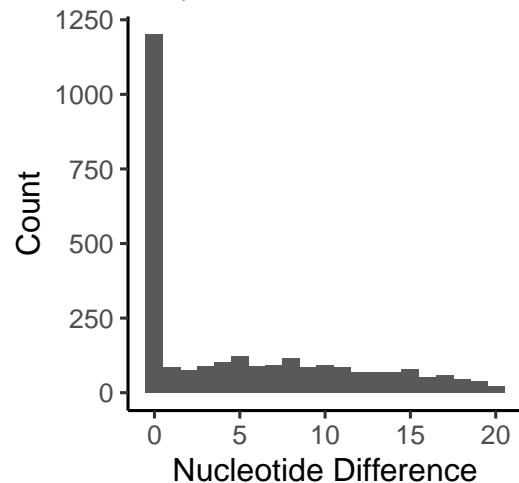
IGHV3-49*04

592 sequences assigned
187 (31.6%) exact matches, in which:
185 unique CDR3
5 unique J



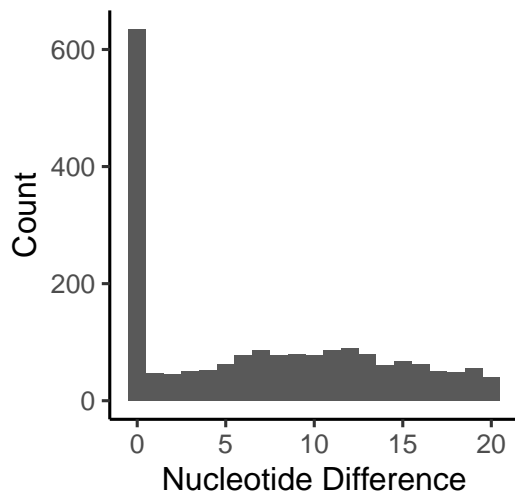
IGHV3-53*01_02

2980 sequences assigned
1201 (40.3%) exact matches, in which:
1149 unique CDR3
6 unique J



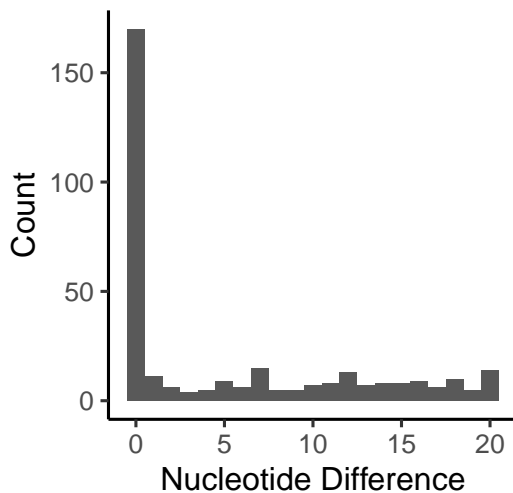
IGHV3-48*02

2218 sequences assigned
635 (28.6%) exact matches, in which:
611 unique CDR3
6 unique J



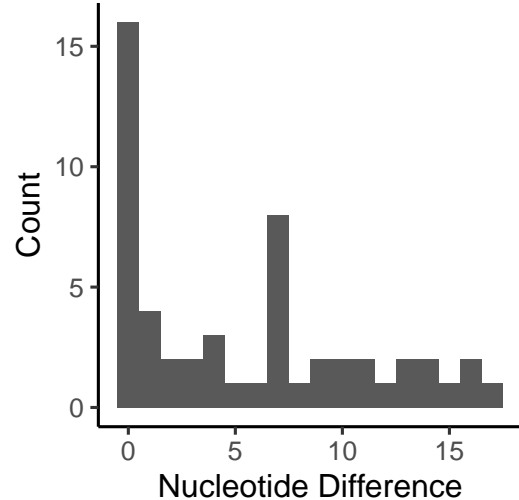
IGHV3-49*03_05

366 sequences assigned
170 (46.4%) exact matches, in which:
166 unique CDR3
6 unique J



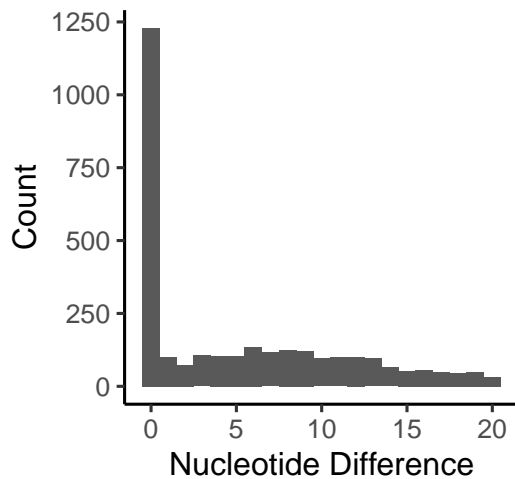
IGHV3-64*02_07

58 sequences assigned
16 (27.6%) exact matches, in which:
16 unique CDR3
4 unique J



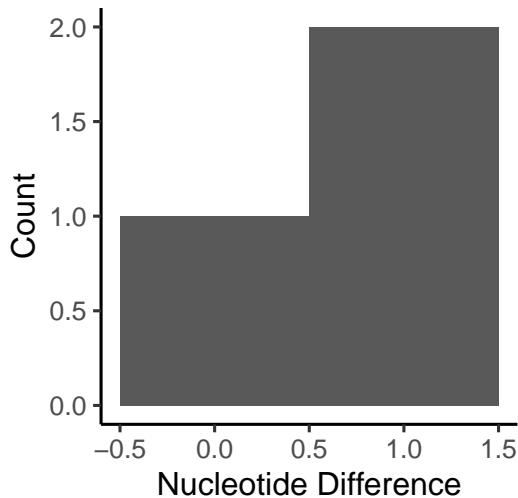
IGHV3-48*03

3202 sequences assigned
1229 (38.4%) exact matches, in which:
1179 unique CDR3
6 unique J



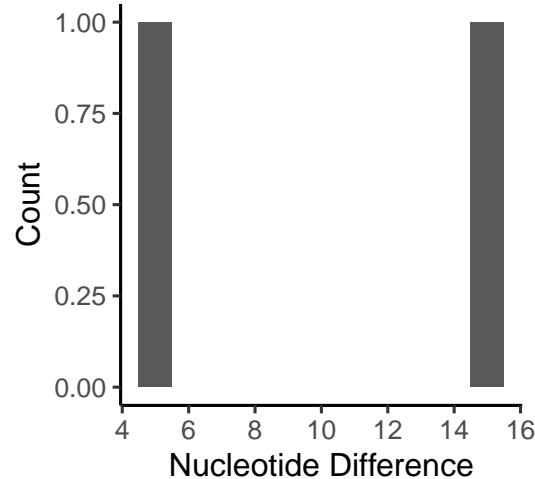
IGHV3-52*01_03

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



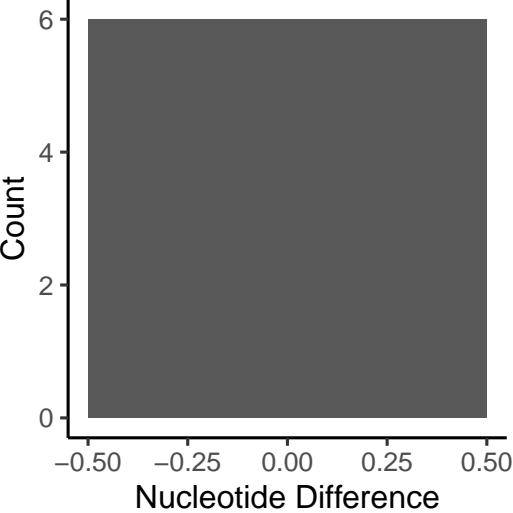
IGHV3-66*02

2 sequences assigned
No exact matches.



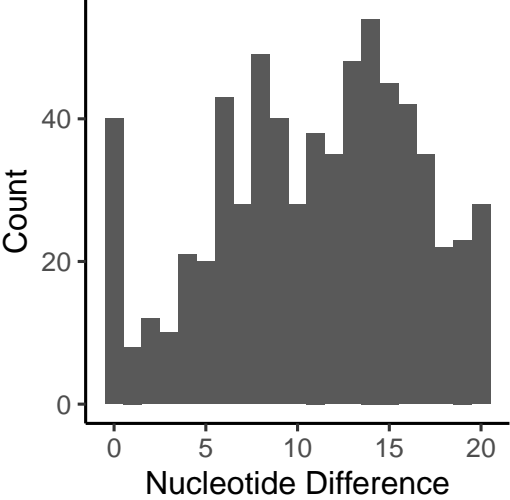
IGHV3-66*03

6 sequences assigned
6 (100%) exact matches, in which:
5 unique CDR3
2 unique J



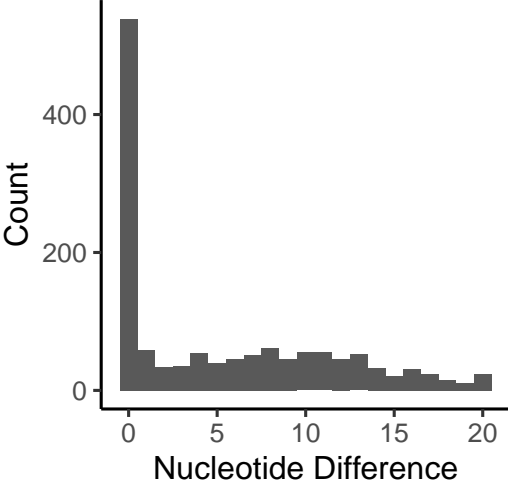
IGHV3-72*01

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



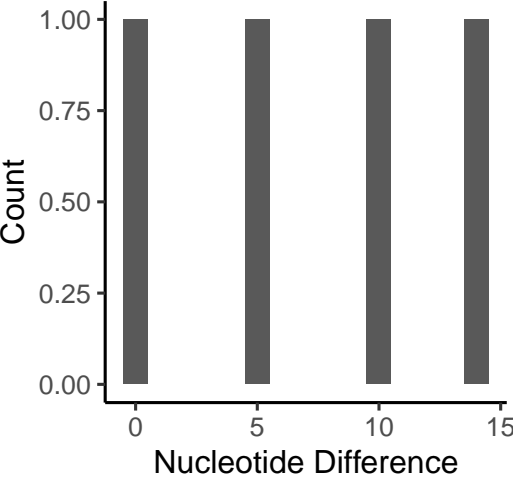
IGHV3-74*01_02

1439 sequences assigned
539 (37.5%) exact matches, in which:
522 unique CDR3
6 unique J



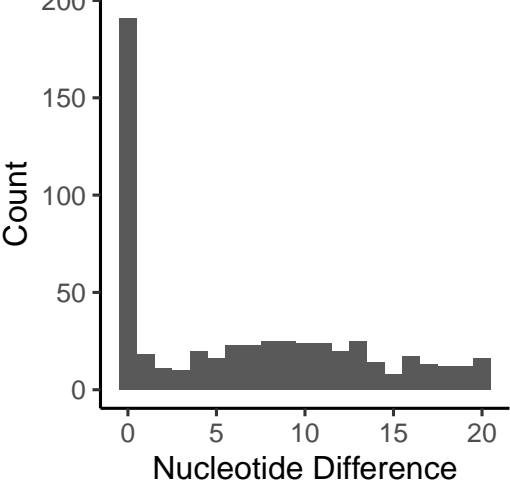
IGHV3-66*04

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



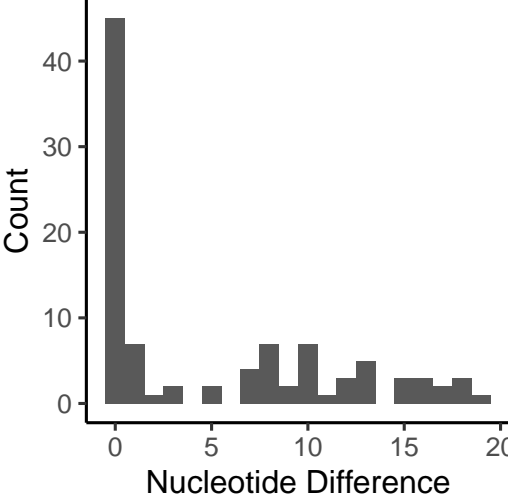
IGHV3-73*01_02

615 sequences assigned
191 (31.1%) exact matches, in which:
183 unique CDR3
6 unique J



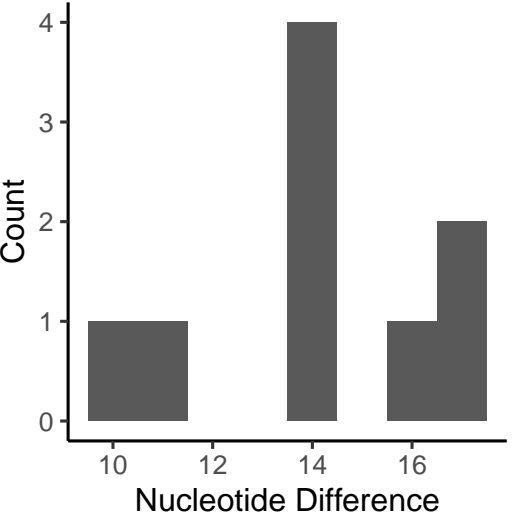
IGHV3-43D*04

105 sequences assigned
45 (42.9%) exact matches, in which:
43 unique CDR3
4 unique J



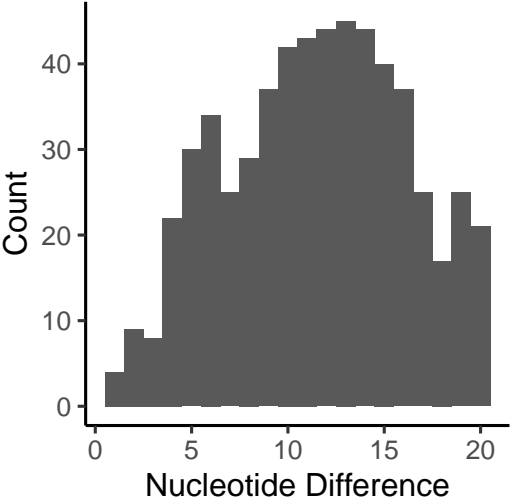
IGHV3-69-1*01

15 sequences assigned
No exact matches.



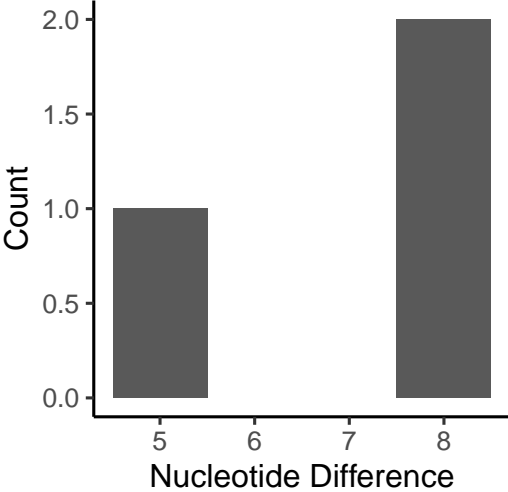
IGHV3-74*03

712 sequences assigned
No exact matches.



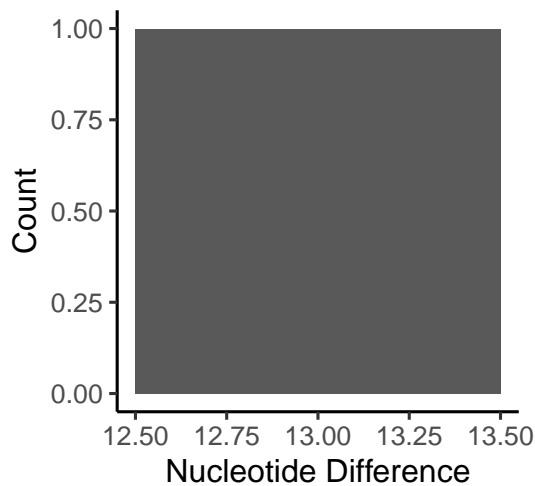
IGHV3-64D*06

3 sequences assigned
No exact matches.



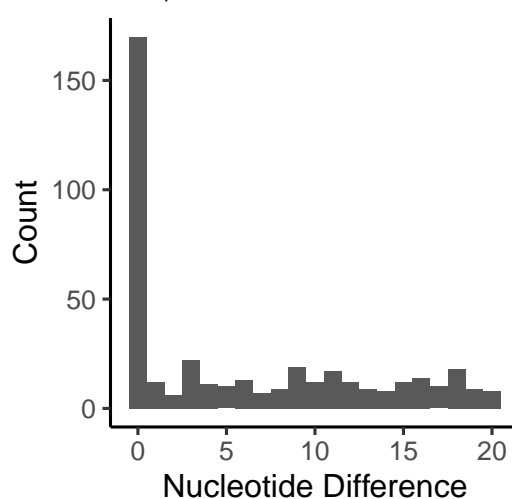
IGHV3-64D*08

1 sequences assigned
No exact matches.



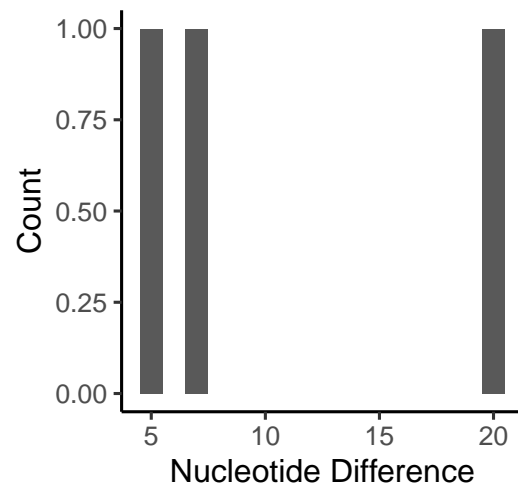
IGHV4-4*02_03

491 sequences assigned
170 (34.6%) exact matches, in which:
164 unique CDR3
6 unique J



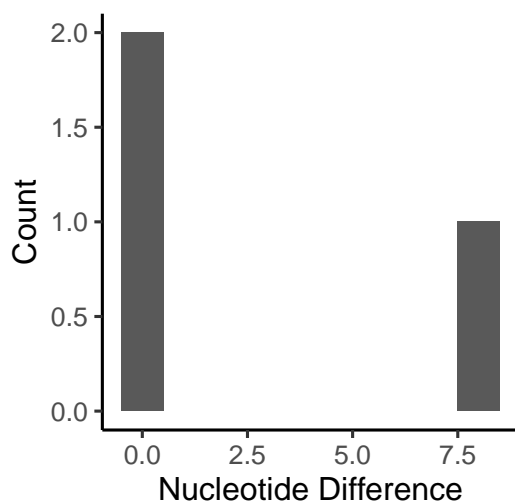
IGHV4-28*02_05

3 sequences assigned
No exact matches.



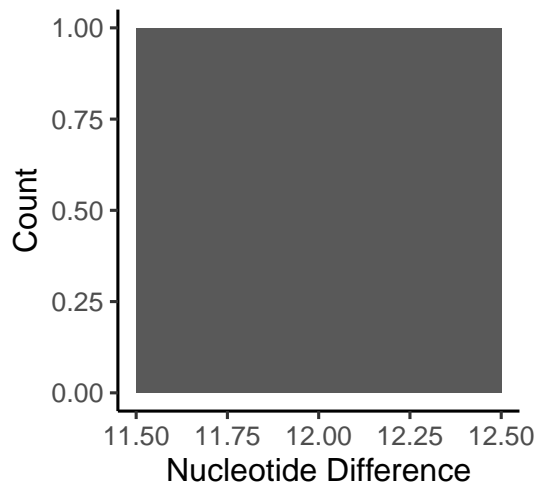
IGHV3-64D*09

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
2 unique J



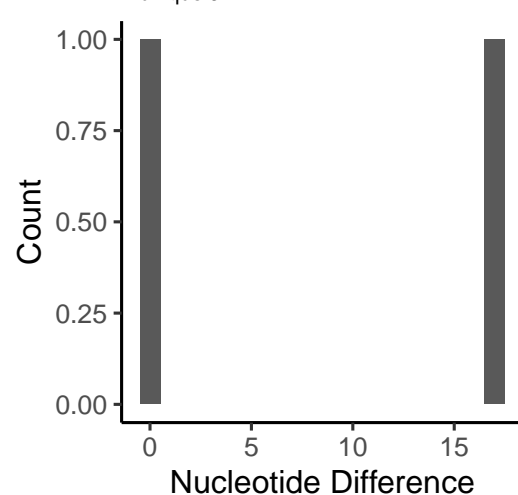
IGHV4-28*03

1 sequences assigned
No exact matches.



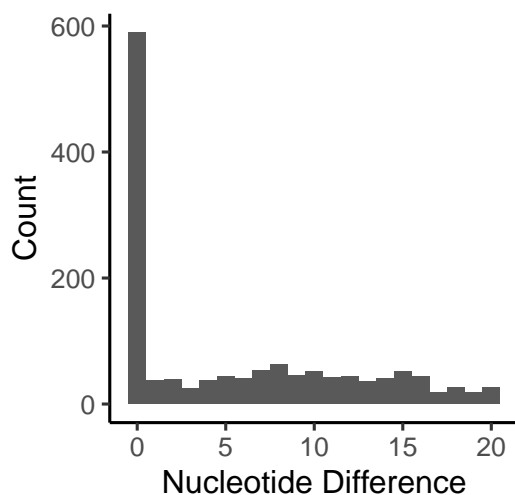
IGHV4-30-2*01

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



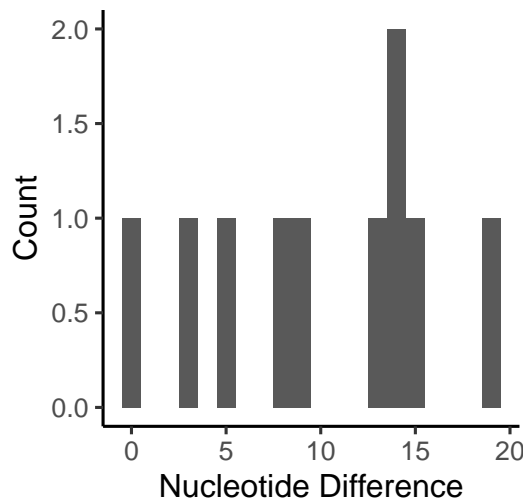
IGHV4-4*07

1523 sequences assigned
590 (38.7%) exact matches, in which:
581 unique CDR3
6 unique J



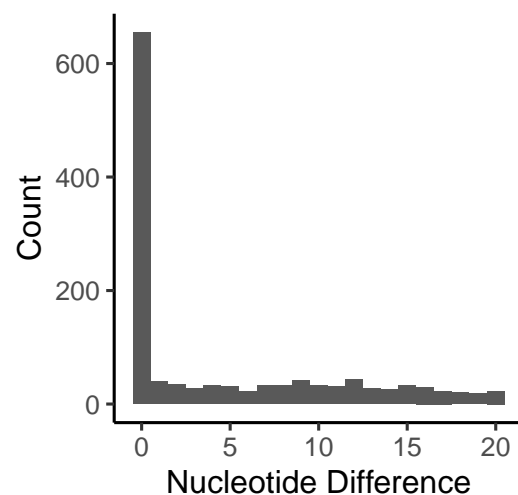
IGHV4-28*01_07

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



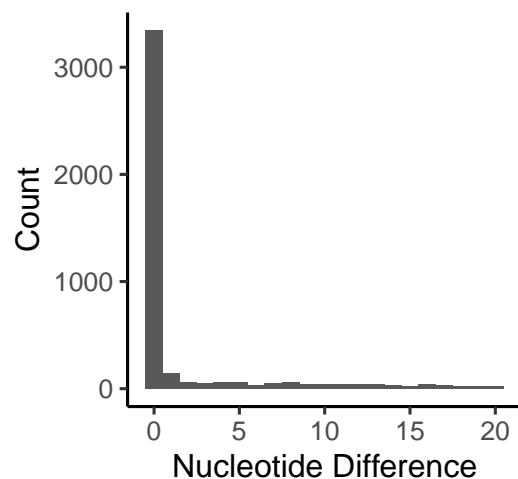
IGHV4-31*02

1386 sequences assigned
655 (47.3%) exact matches, in which:
644 unique CDR3
6 unique J



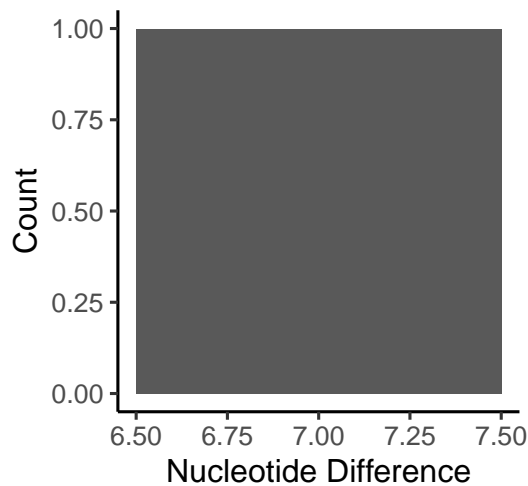
IGHV4-34*01_02

4512 sequences assigned
3344 (74.1%) exact matches, in which:
3242 unique CDR3
6 unique J



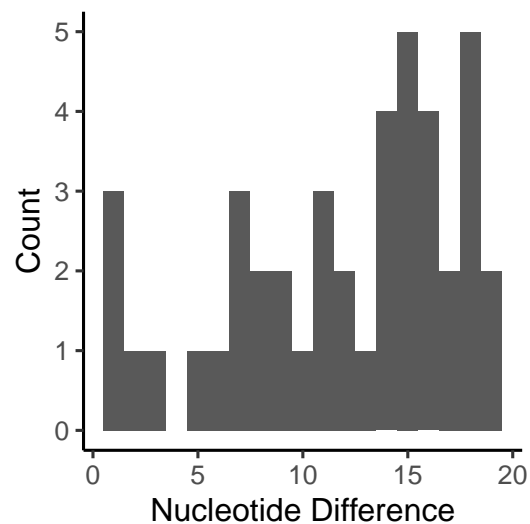
IGHV4-55*09

1 sequences assigned
No exact matches.



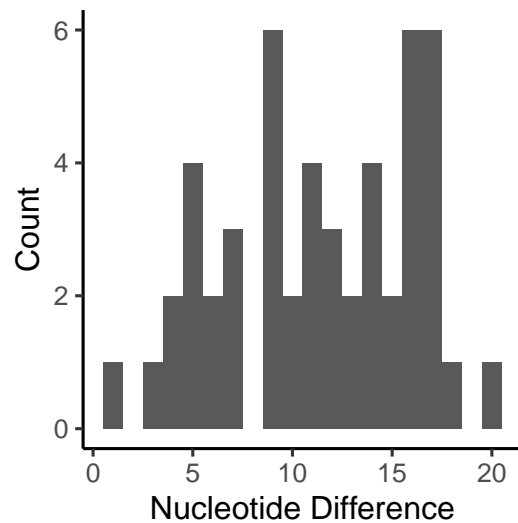
IGHV4-59*12

67 sequences assigned
No exact matches.



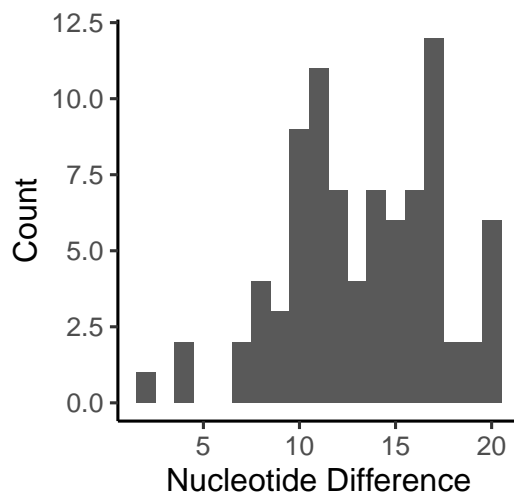
IGHV4-38-2*02

71 sequences assigned
No exact matches.



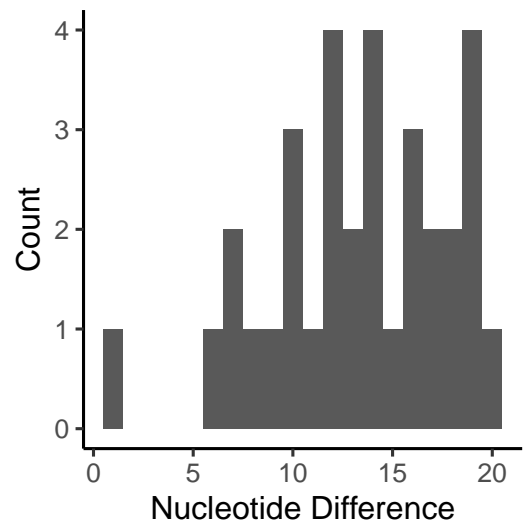
IGHV4-59*02

123 sequences assigned
No exact matches.



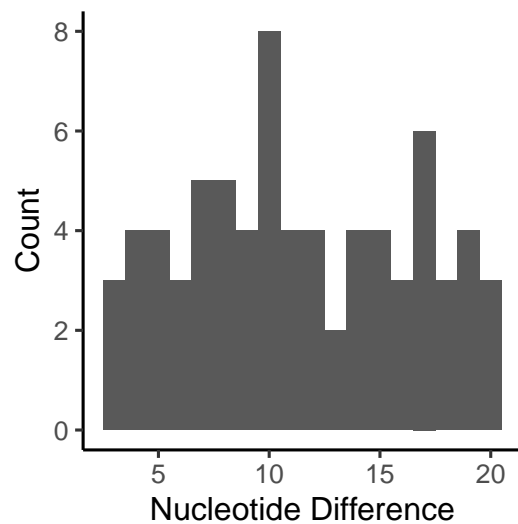
IGHV4-59*13

52 sequences assigned
No exact matches.



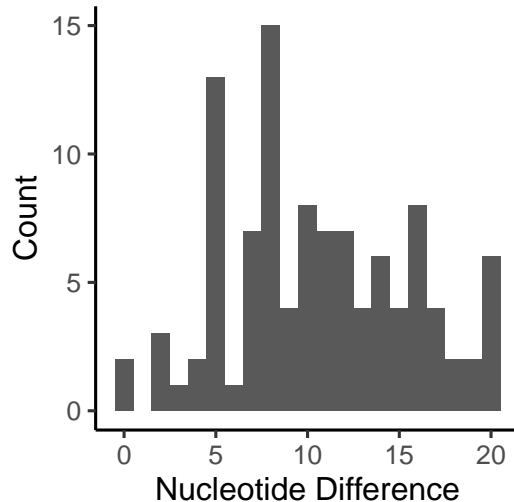
IGHV4-39*02

110 sequences assigned
No exact matches.



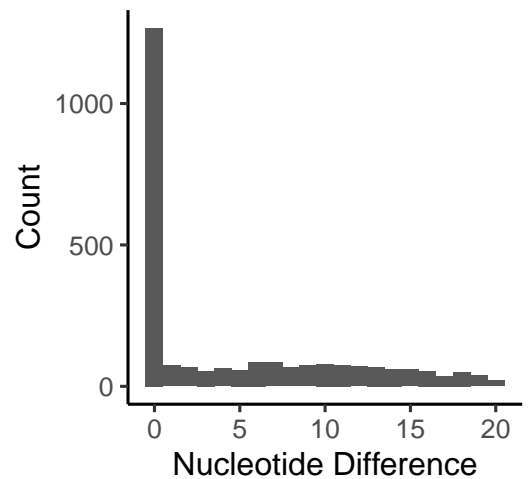
IGHV4-59*11

131 sequences assigned
2 (1.5%) exact matches, in which:
2 unique CDR3
1 unique J



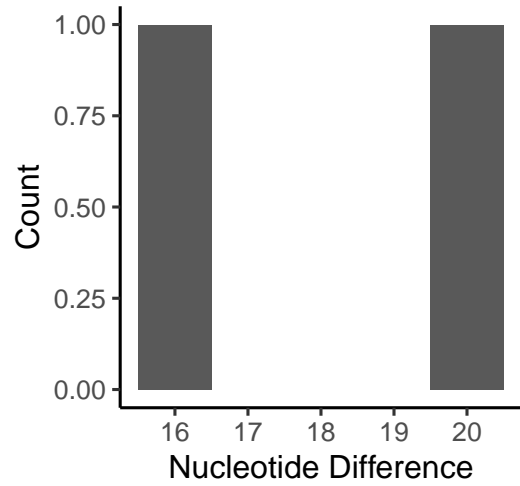
IGHV4-61*01

2663 sequences assigned
1267 (47.6%) exact matches, in which:
1217 unique CDR3
6 unique J



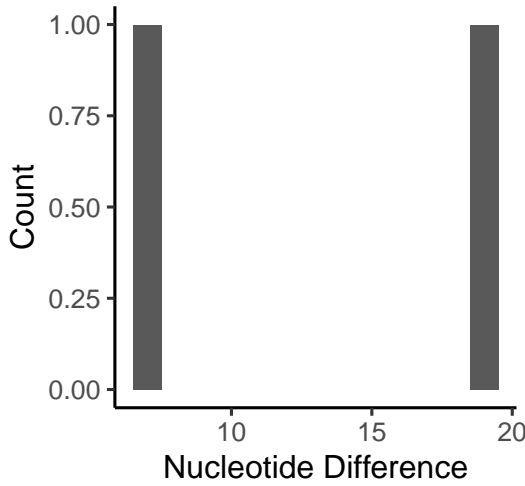
IGHV4/OR15-8*01

3 sequences assigned
No exact matches.



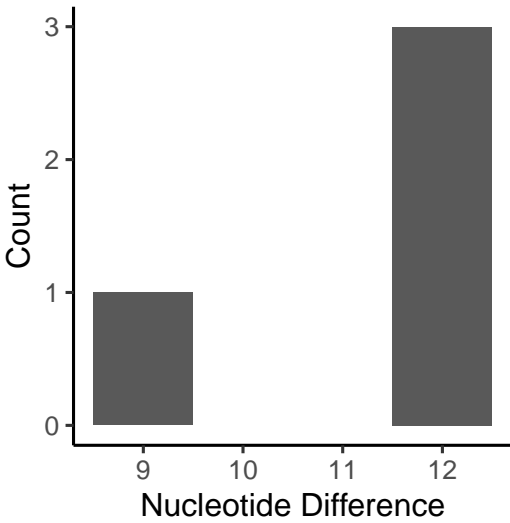
IGHV5-51*06

3 sequences assigned
No exact matches.



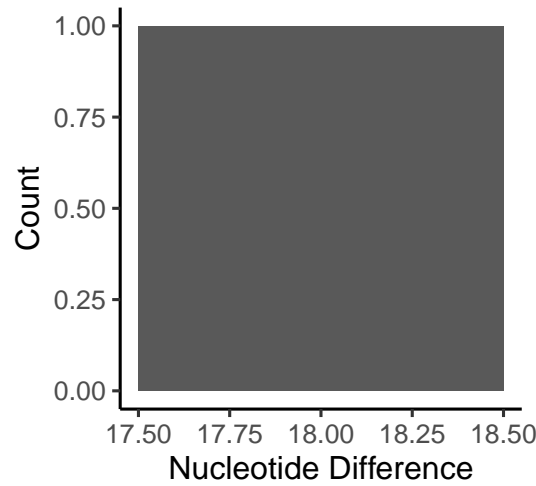
IGHV7-4-1*02

4 sequences assigned
No exact matches.



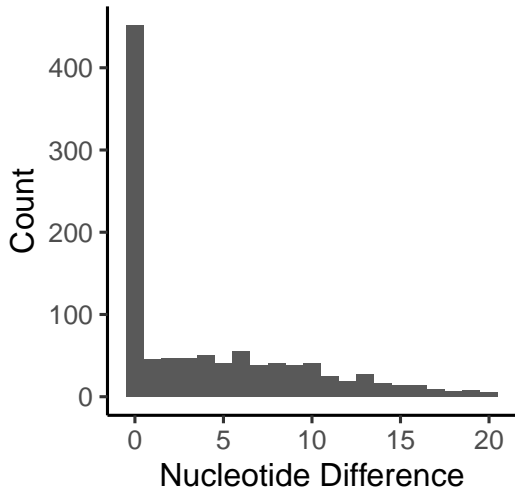
IGHV4/OR15-8*02

2 sequences assigned
No exact matches.



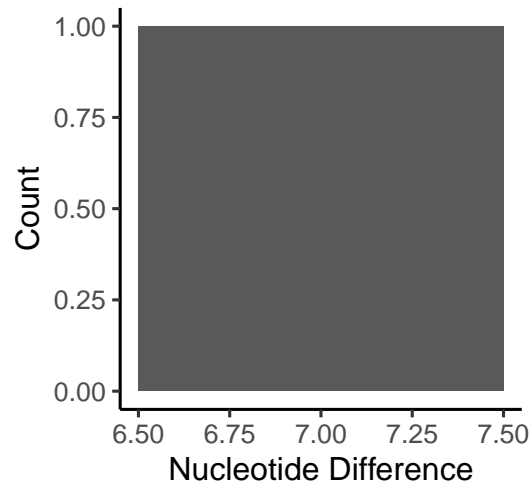
IGHV6-1*01_02

1070 sequences assigned
452 (42.2%) exact matches, in which:
446 unique CDR3
6 unique J



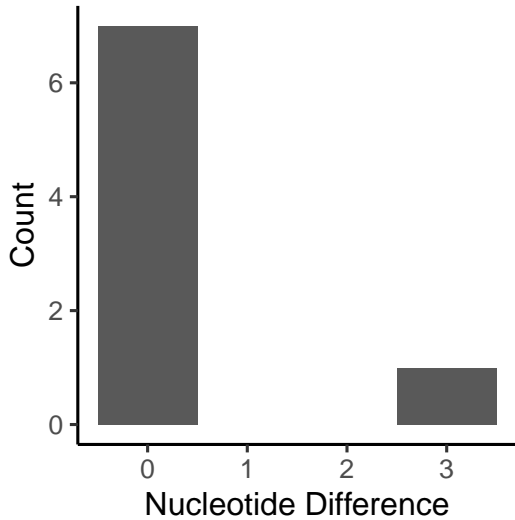
IGHV5-51*04

1 sequences assigned
No exact matches.



IGHV7-4-1*01

8 sequences assigned
7 (87.5%) exact matches, in which:
7 unique CDR3
3 unique J





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