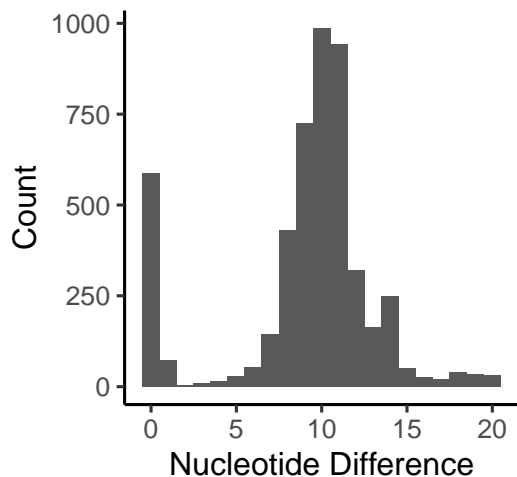


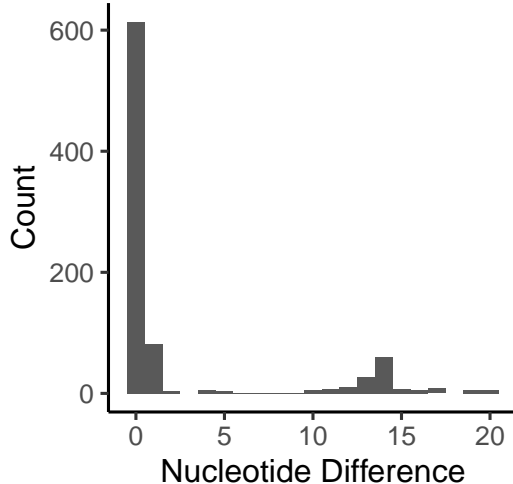
IGHV1-2*02

5249 sequences assigned
589 (11.2%) exact matches, in which:
587 unique CDR3
6 unique J



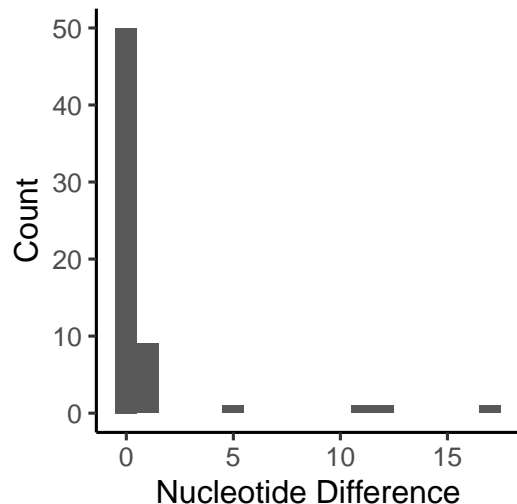
IGHV1-8*01

870 sequences assigned
614 (70.6%) exact matches, in which:
605 unique CDR3
6 unique J



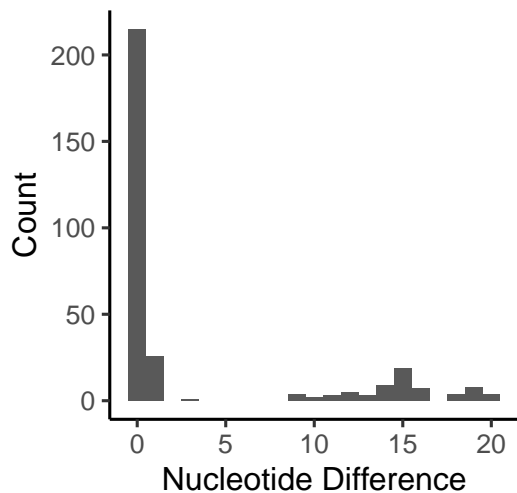
IGHV1-24*01

64 sequences assigned
50 (78.1%) exact matches, in which:
50 unique CDR3
4 unique J



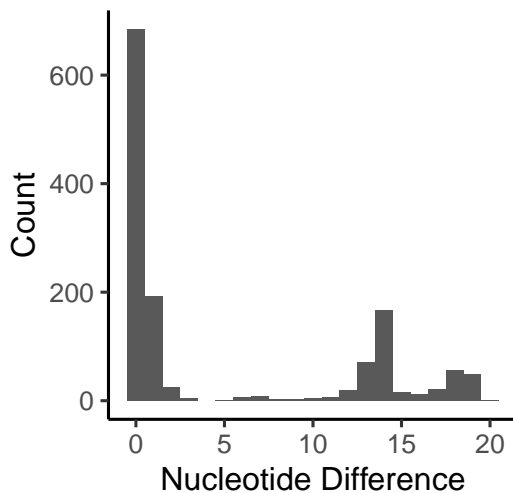
IGHV1-2*04

489 sequences assigned
215 (44%) exact matches, in which:
213 unique CDR3
6 unique J



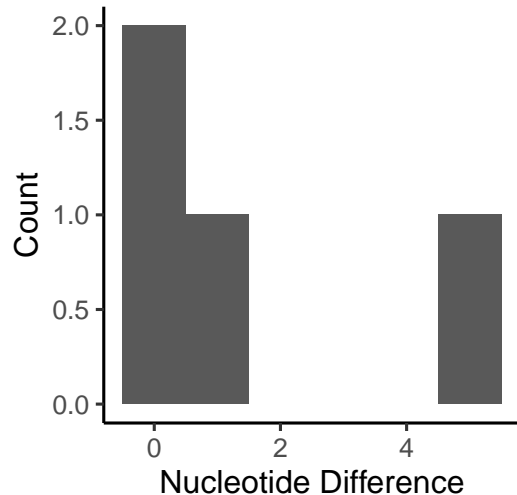
IGHV1-18*01

2784 sequences assigned
685 (24.6%) exact matches, in which:
677 unique CDR3
6 unique J



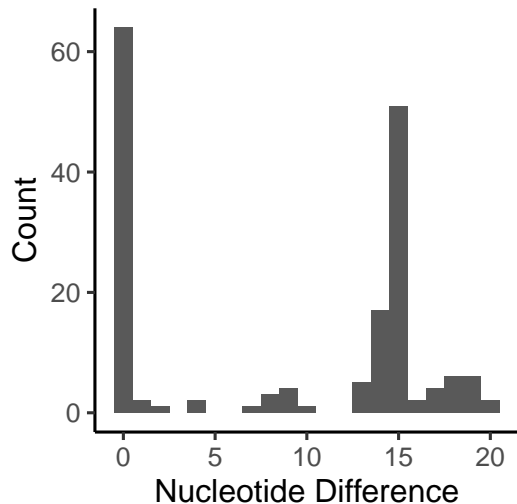
IGHV1-45*02

7 sequences assigned
2 (28.6%) exact matches, in which:
2 unique CDR3
2 unique J



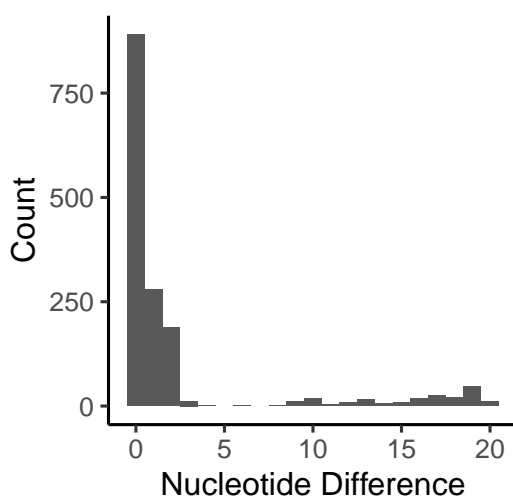
IGHV1-3*01_05

197 sequences assigned
64 (32.5%) exact matches, in which:
63 unique CDR3
5 unique J



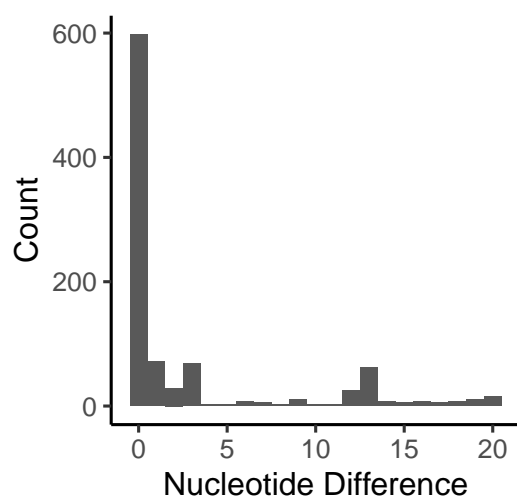
IGHV1-18*04

1630 sequences assigned
891 (54.7%) exact matches, in which:
876 unique CDR3
6 unique J



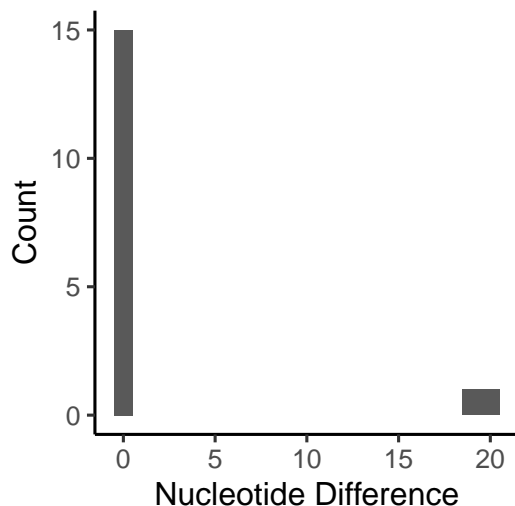
IGHV1-46*01

1274 sequences assigned
598 (46.9%) exact matches, in which:
591 unique CDR3
6 unique J



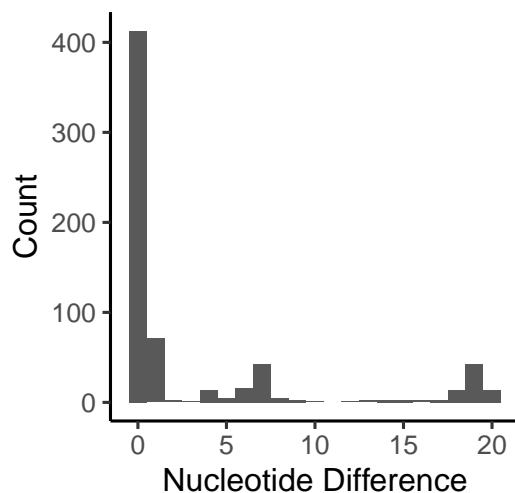
IGHV1-58*01_03

19 sequences assigned
15 (78.9%) exact matches, in which:
15 unique CDR3
3 unique J



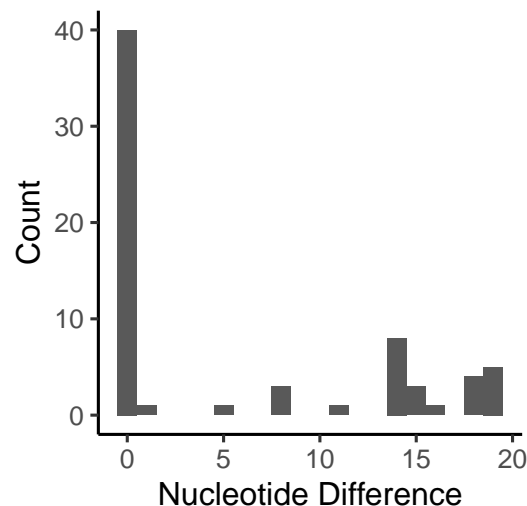
IGHV1-69*06_14

937 sequences assigned
413 (44.1%) exact matches, in which:
411 unique CDR3
6 unique J



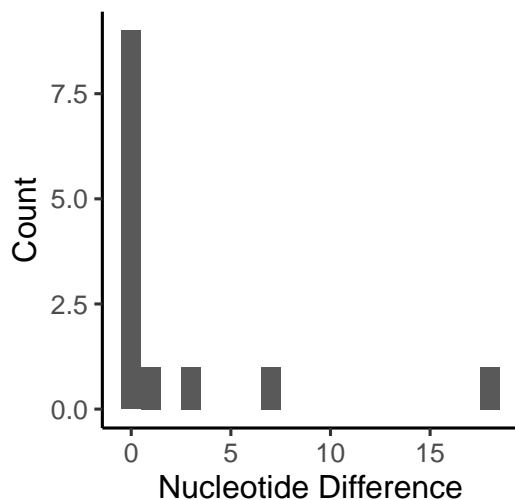
IGHV2-70*01

70 sequences assigned
40 (57.1%) exact matches, in which:
40 unique CDR3
4 unique J



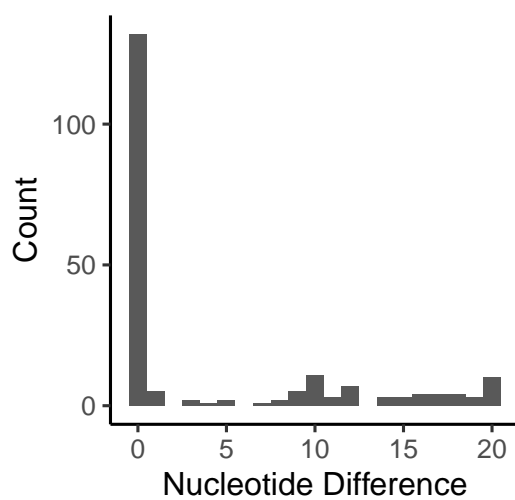
IGHV1-69-2*01

13 sequences assigned
9 (69.2%) exact matches, in which:
9 unique CDR3
3 unique J



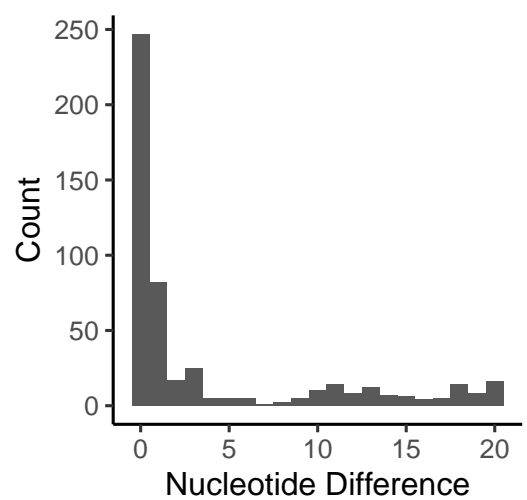
IGHV2-5*01

253 sequences assigned
132 (52.2%) exact matches, in which:
131 unique CDR3
5 unique J



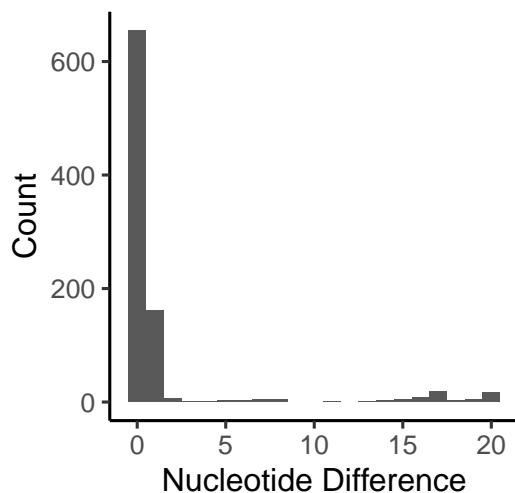
IGHV3-7*01

585 sequences assigned
247 (42.2%) exact matches, in which:
234 unique CDR3
6 unique J



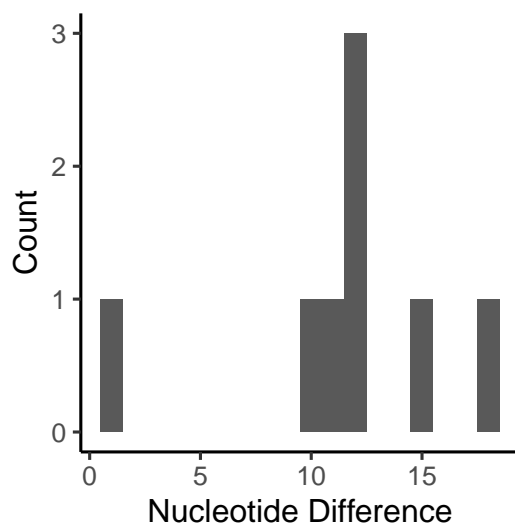
IGHV1-69*01_12_13

1047 sequences assigned
655 (62.6%) exact matches, in which:
650 unique CDR3
6 unique J



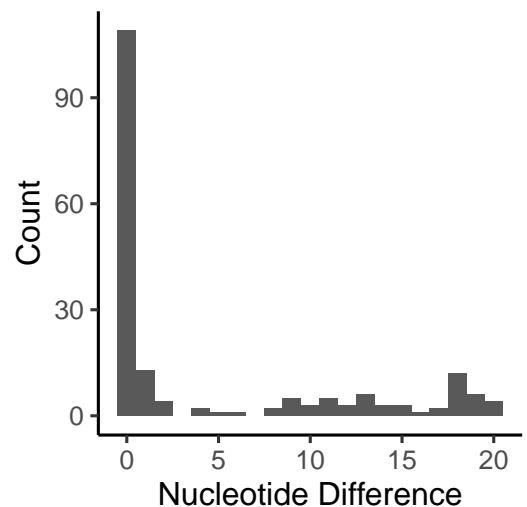
IGHV2-26*01

12 sequences assigned
No exact matches.



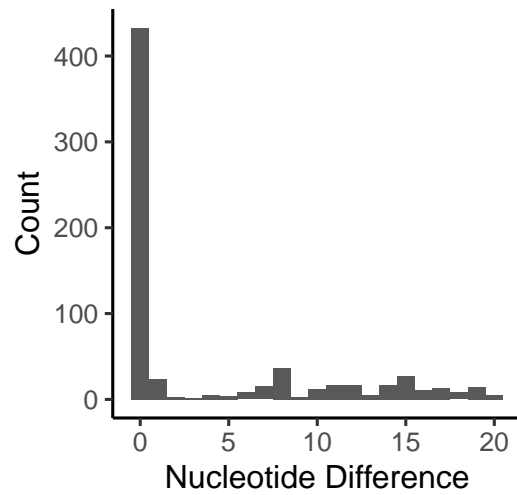
IGHV3-7*05

197 sequences assigned
109 (55.3%) exact matches, in which:
108 unique CDR3
5 unique J



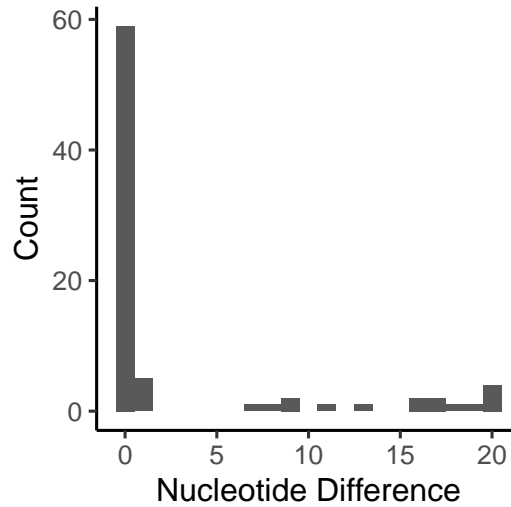
IGHV3-9*01

846 sequences assigned
433 (51.2%) exact matches, in which:
430 unique CDR3
6 unique J



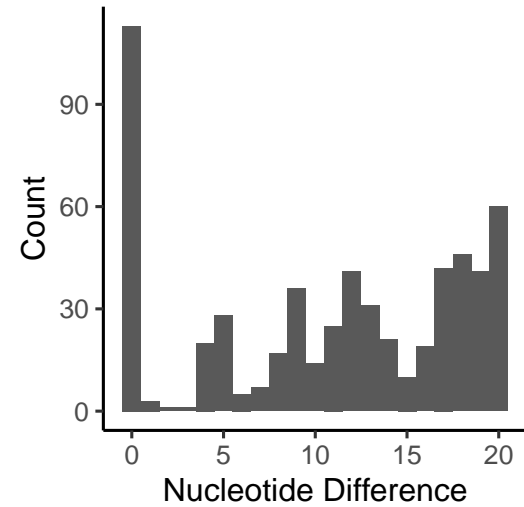
IGHV3-13*01

86 sequences assigned
59 (68.6%) exact matches, in which:
57 unique CDR3
5 unique J



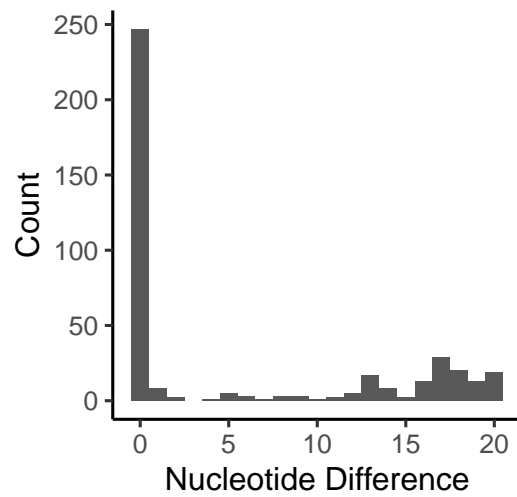
IGHV3-15*01_02

898 sequences assigned
113 (12.6%) exact matches, in which:
113 unique CDR3
6 unique J



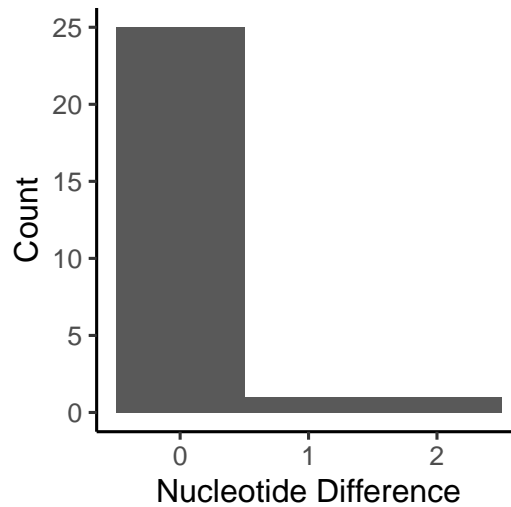
IGHV3-11*01

578 sequences assigned
247 (42.7%) exact matches, in which:
245 unique CDR3
6 unique J



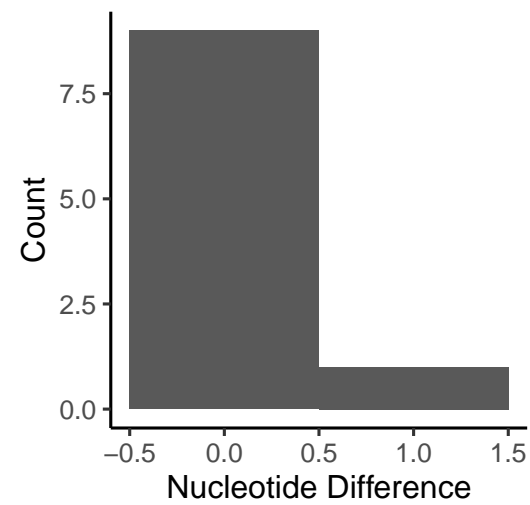
IGHV3-13*05

34 sequences assigned
25 (73.5%) exact matches, in which:
25 unique CDR3
4 unique J



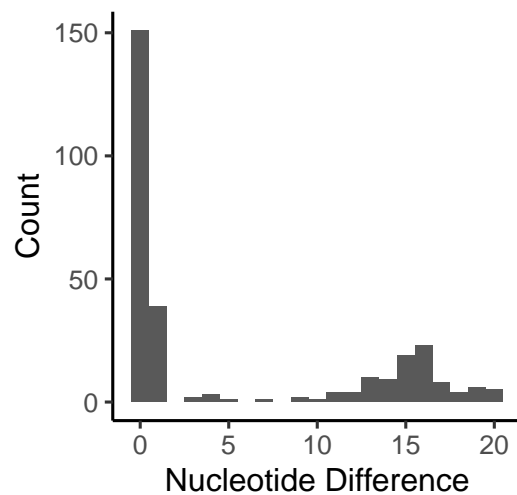
IGHV3-20*03_04

11 sequences assigned
9 (81.8%) exact matches, in which:
9 unique CDR3
5 unique J



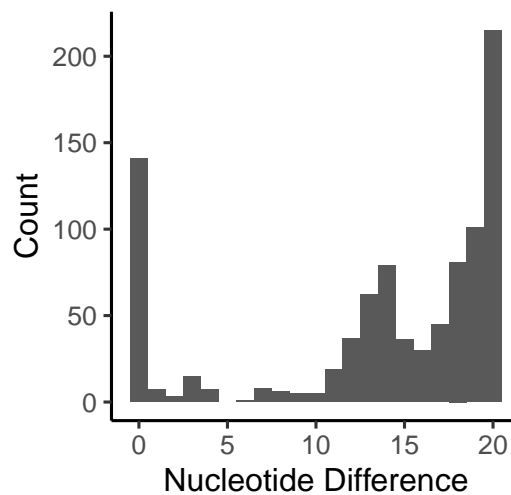
IGHV3-11*06

433 sequences assigned
151 (34.9%) exact matches, in which:
140 unique CDR3
6 unique J



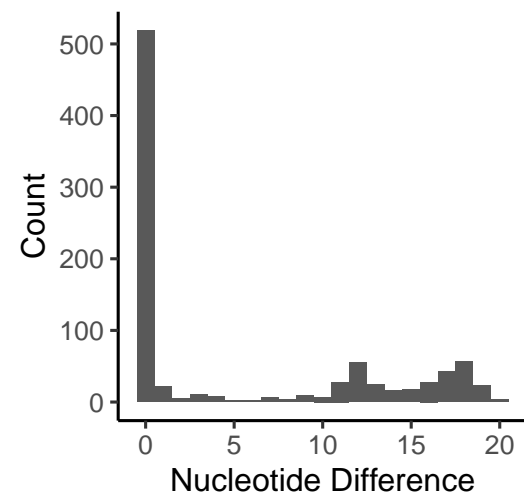
IGHV3-15*07

4832 sequences assigned
141 (2.9%) exact matches, in which:
141 unique CDR3
6 unique J



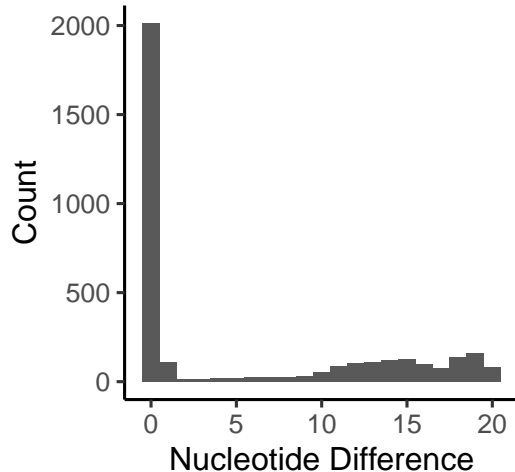
IGHV3-21*01_02

1194 sequences assigned
519 (43.5%) exact matches, in which:
511 unique CDR3
6 unique J



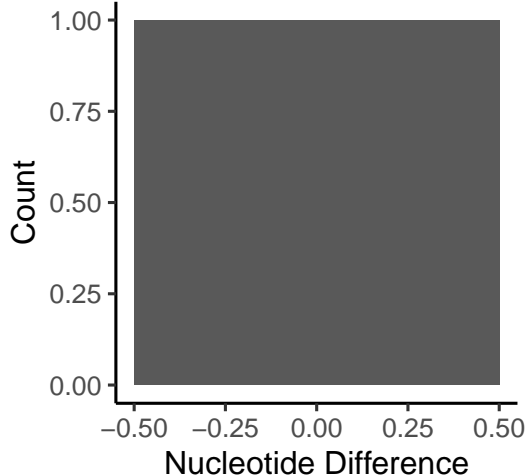
IGHV3-23*01_04

4556 sequences assigned
2012 (44.2%) exact matches, in which:
1993 unique CDR3
6 unique J



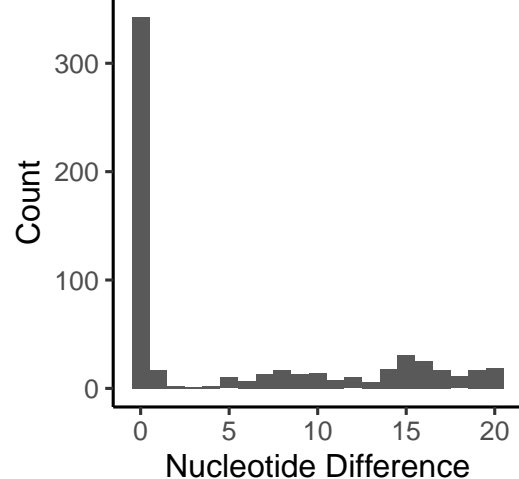
IGHV3-35*01

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



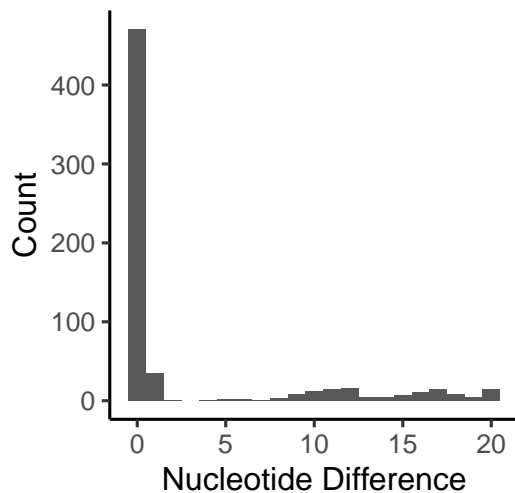
IGHV3-48*03

701 sequences assigned
343 (48.9%) exact matches, in which:
338 unique CDR3
6 unique J



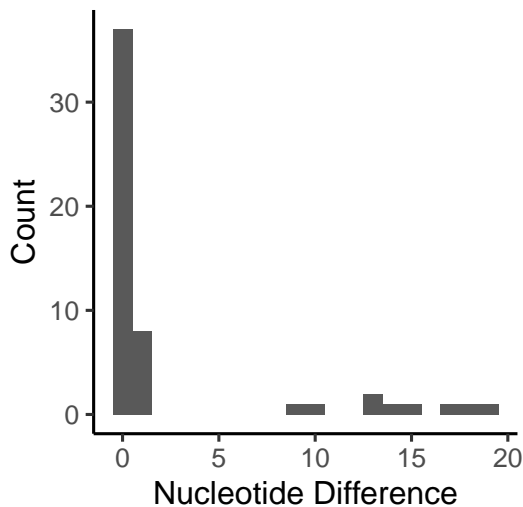
IGHV3-30-3*01

754 sequences assigned
471 (62.5%) exact matches, in which:
468 unique CDR3
6 unique J



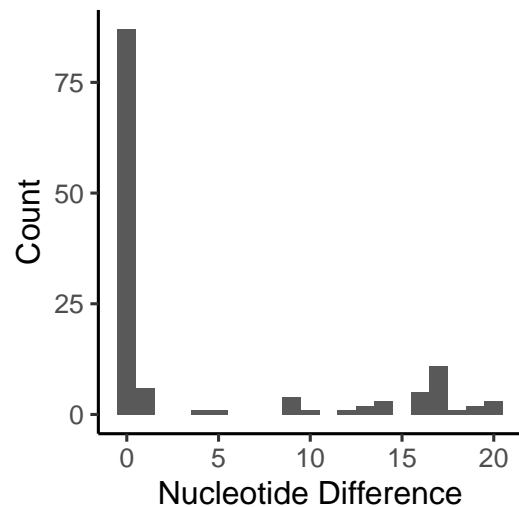
IGHV3-43*01

65 sequences assigned
37 (56.9%) exact matches, in which:
35 unique CDR3
4 unique J



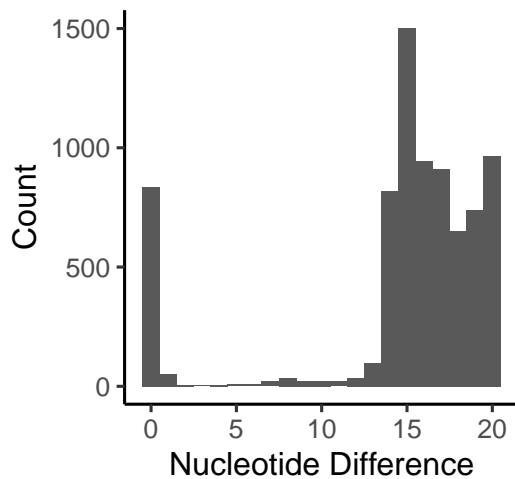
IGHV3-49*04

149 sequences assigned
87 (58.4%) exact matches, in which:
86 unique CDR3
5 unique J



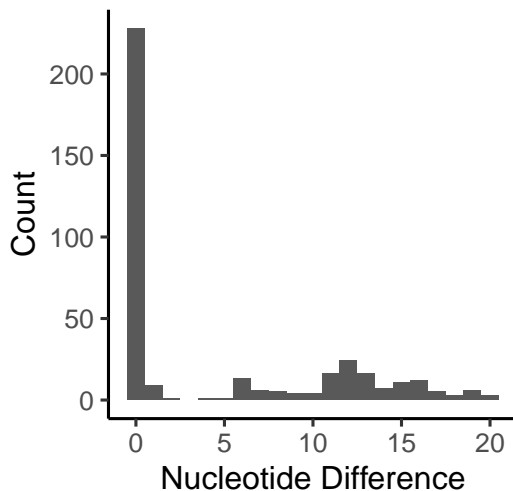
IGHV3-33*01

9219 sequences assigned
836 (9.1%) exact matches, in which:
743 unique CDR3
6 unique J



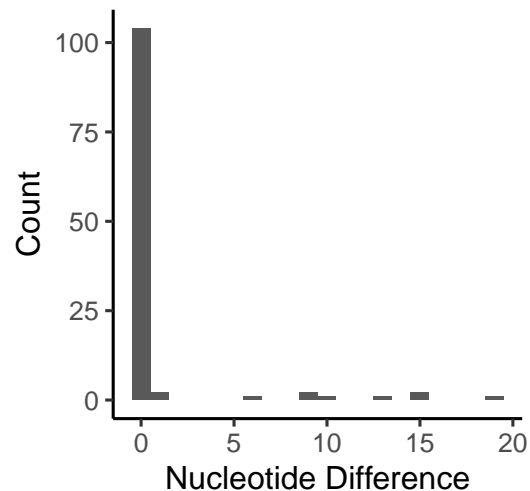
IGHV3-48*02

456 sequences assigned
228 (50%) exact matches, in which:
227 unique CDR3
6 unique J



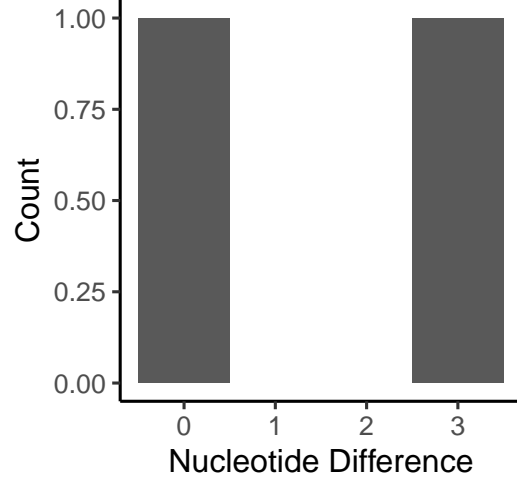
IGHV3-49*03_05

119 sequences assigned
104 (87.4%) exact matches, in which:
104 unique CDR3
5 unique J



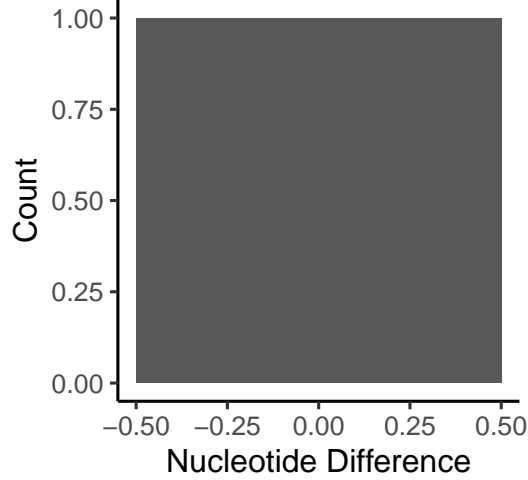
IGHV3-52*01_03

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



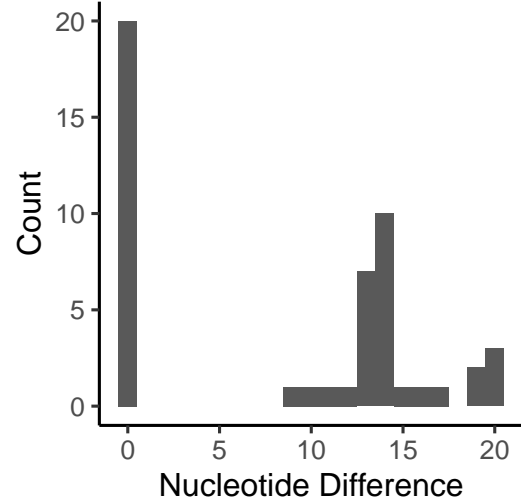
IGHV3-66*03

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



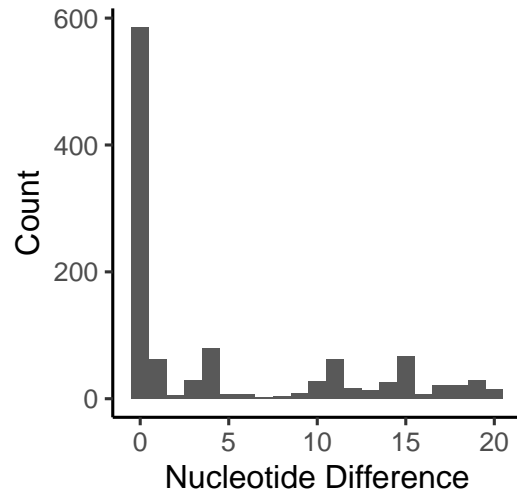
IGHV3-73*01_02

80 sequences assigned
20 (25%) exact matches, in which:
20 unique CDR3
3 unique J



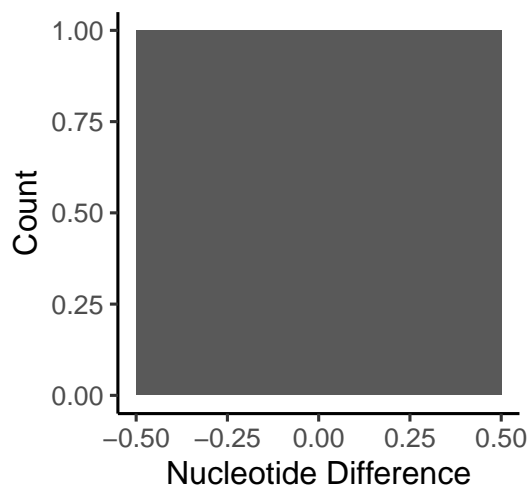
IGHV3-53*01_02

1290 sequences assigned
586 (45.4%) exact matches, in which:
582 unique CDR3
6 unique J



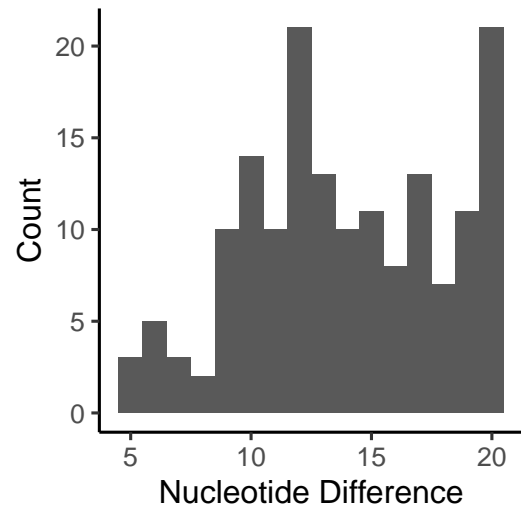
IGHV3-69-1*01

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



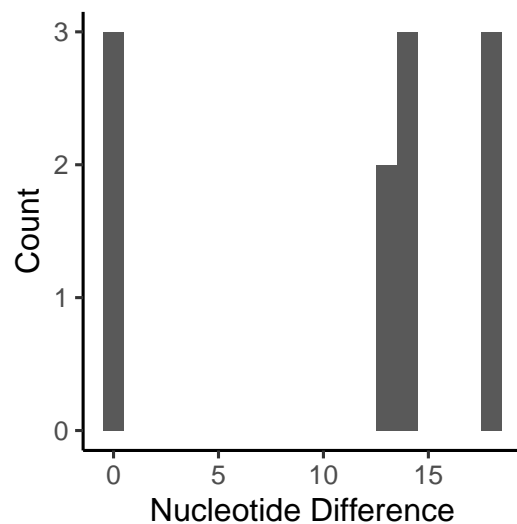
IGHV3-74*03

324 sequences assigned
No exact matches.



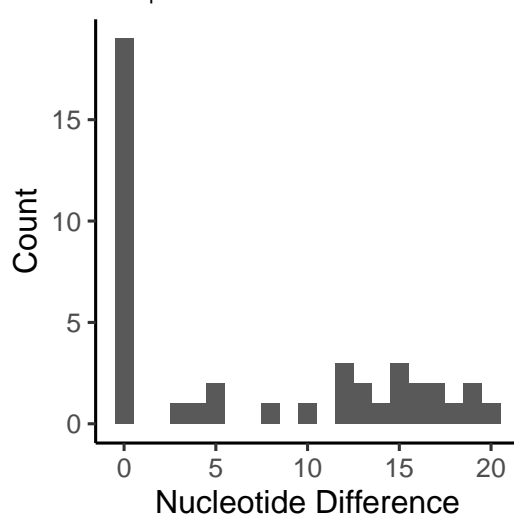
IGHV3-64*02_07

11 sequences assigned
3 (27.3%) exact matches, in which:
3 unique CDR3
3 unique J



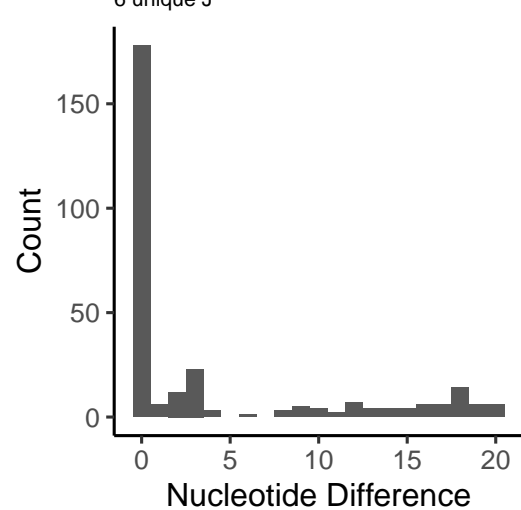
IGHV3-72*01

54 sequences assigned
19 (35.2%) exact matches, in which:
19 unique CDR3
5 unique J



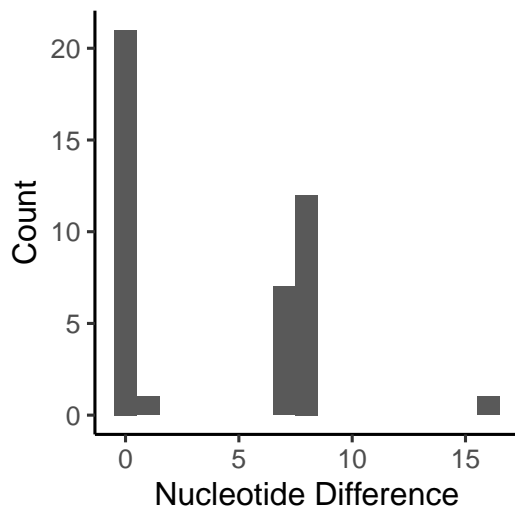
IGHV3-74*01_02

306 sequences assigned
178 (58.2%) exact matches, in which:
177 unique CDR3
6 unique J



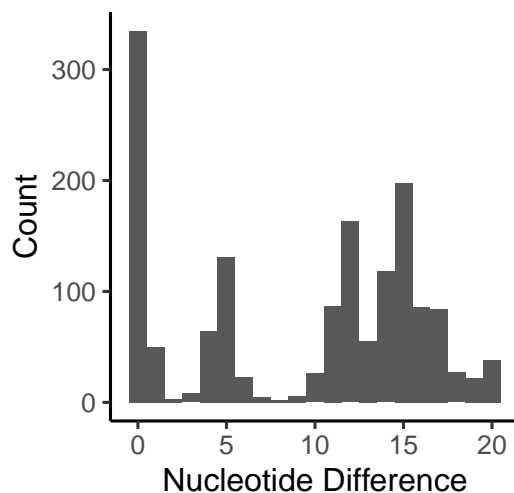
IGHV3-43D*04

43 sequences assigned
21 (48.8%) exact matches, in which:
21 unique CDR3
5 unique J



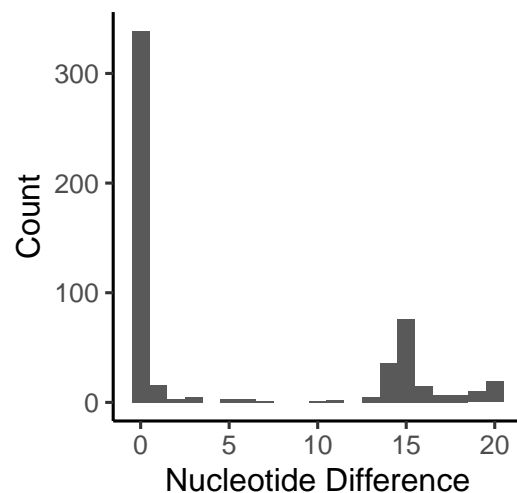
IGHV4-4*07

2044 sequences assigned
335 (16.4%) exact matches, in which:
325 unique CDR3
6 unique J



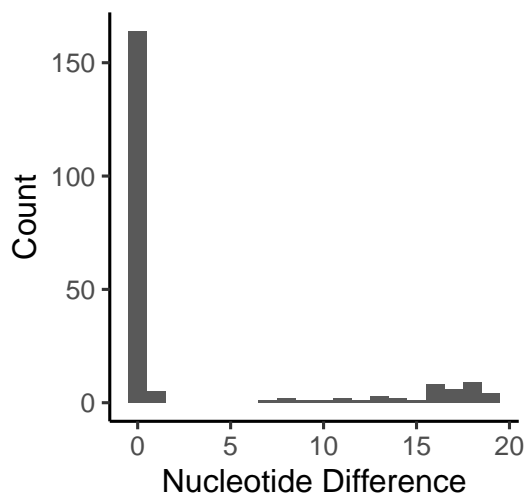
IGHV4-30-4*01

783 sequences assigned
339 (43.3%) exact matches, in which:
333 unique CDR3
6 unique J



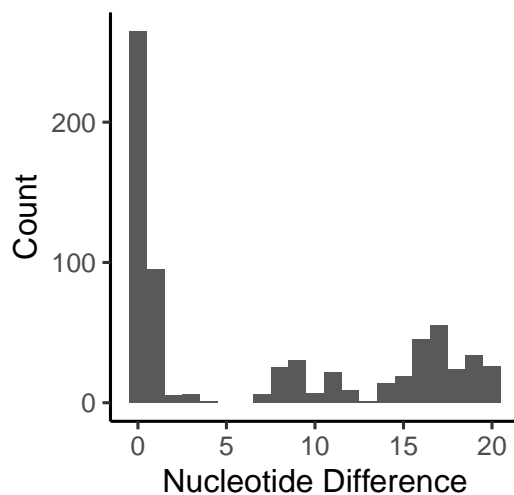
IGHV3-64D*08

215 sequences assigned
164 (76.3%) exact matches, in which:
164 unique CDR3
6 unique J



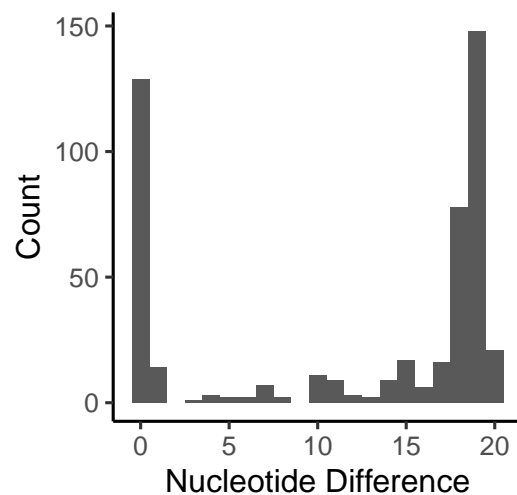
IGHV4-4*02_03

1161 sequences assigned
265 (22.8%) exact matches, in which:
247 unique CDR3
6 unique J



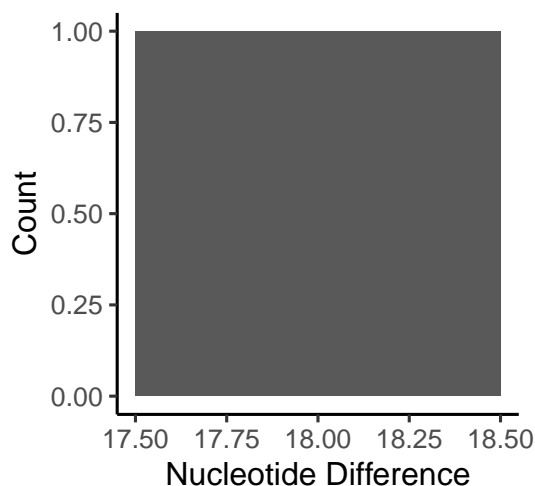
IGHV4-30-2*01

688 sequences assigned
129 (18.8%) exact matches, in which:
126 unique CDR3
6 unique J



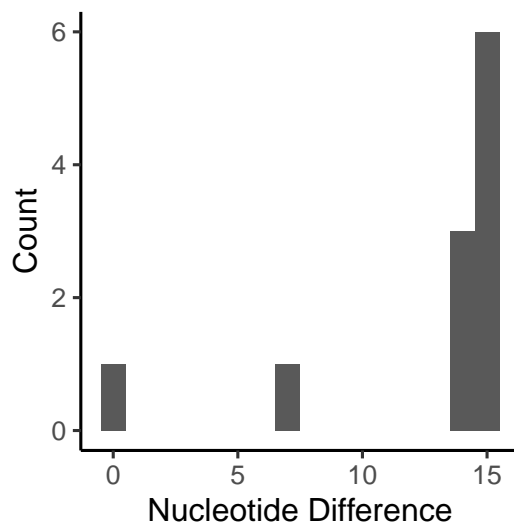
IGHV3-NL1*01

2 sequences assigned
No exact matches.



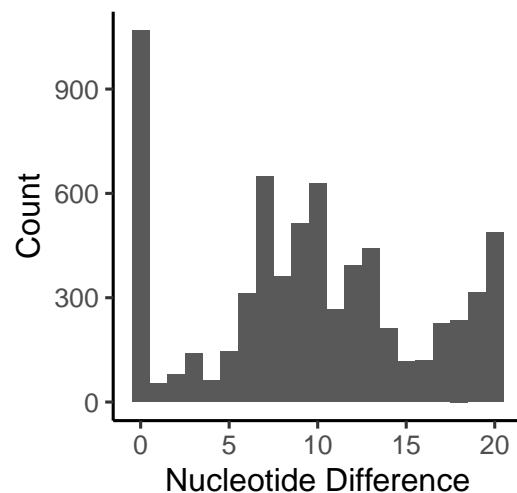
IGHV4-28*01_07

11 sequences assigned
1 (9.1%) exact matches, in which:
1 unique CDR3
1 unique J



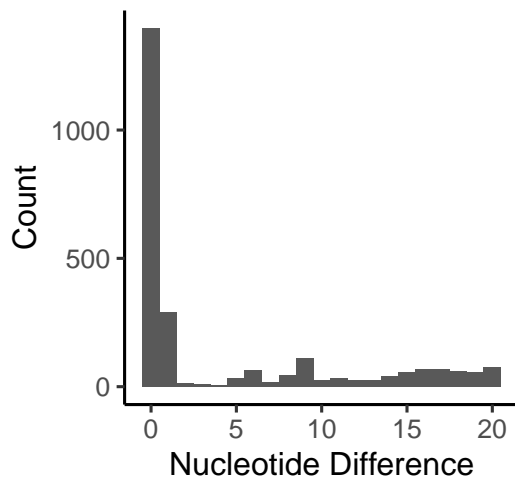
IGHV4-31*02

7722 sequences assigned
1069 (13.8%) exact matches, in which:
1035 unique CDR3
6 unique J



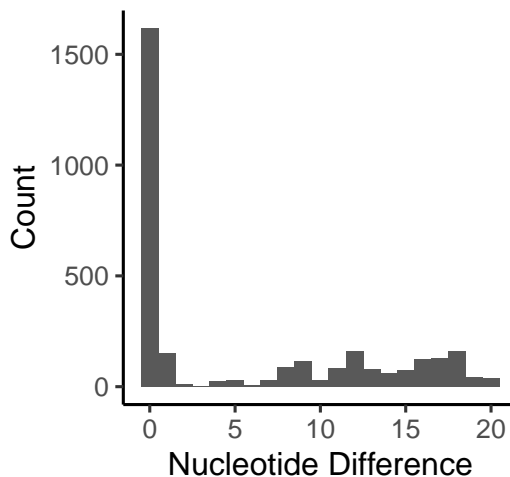
IGHV4-34*01_02

3598 sequences assigned
1396 (38.8%) exact matches, in which:
1359 unique CDR3
6 unique J



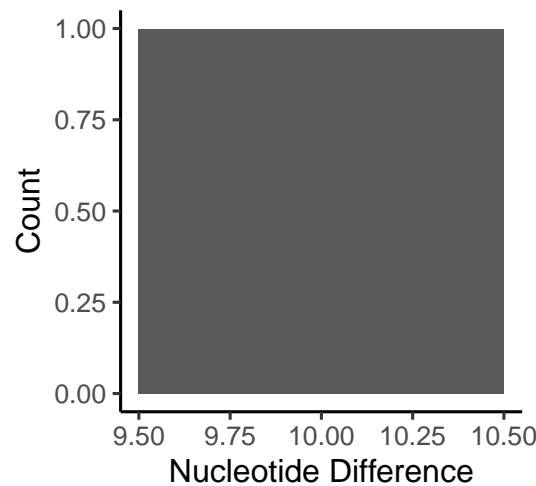
IGHV4-59*02_G88A

4087 sequences assigned
1617 (39.6%) exact matches, in which:
1502 unique CDR3
6 unique J



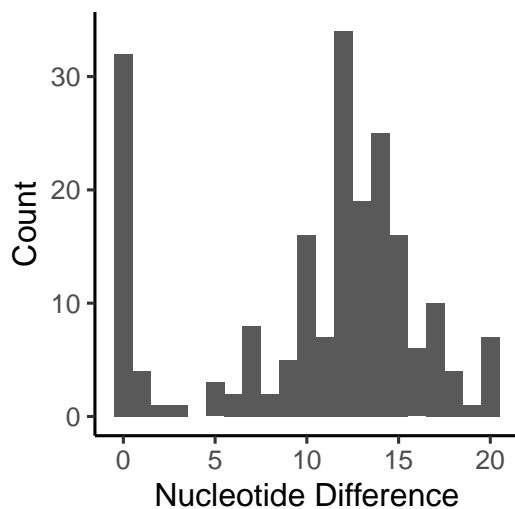
IGHV4/OR15-8*02

10 sequences assigned
No exact matches.



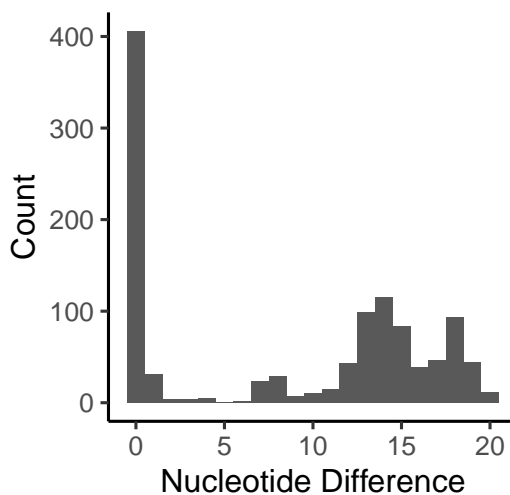
IGHV4-38-2*02_A70G

294 sequences assigned
32 (10.9%) exact matches, in which:
32 unique CDR3
5 unique J



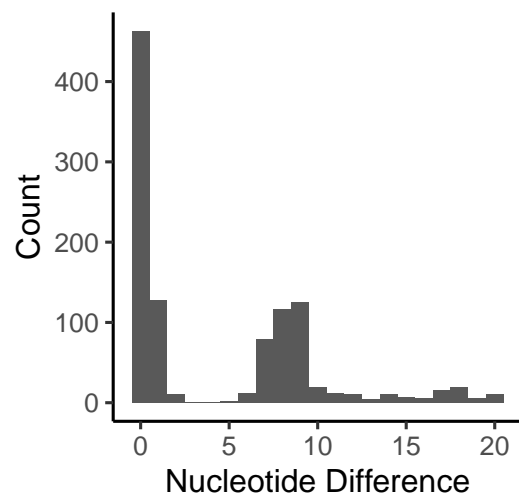
IGHV4-61*01

1647 sequences assigned
406 (24.7%) exact matches, in which:
388 unique CDR3
6 unique J



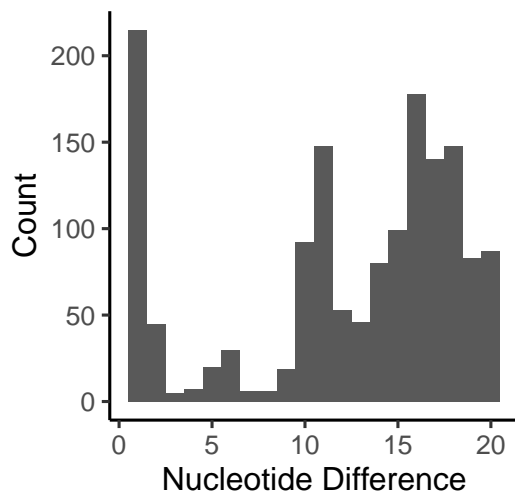
IGHV5-10-1*01_03

1142 sequences assigned
463 (40.5%) exact matches, in which:
457 unique CDR3
6 unique J



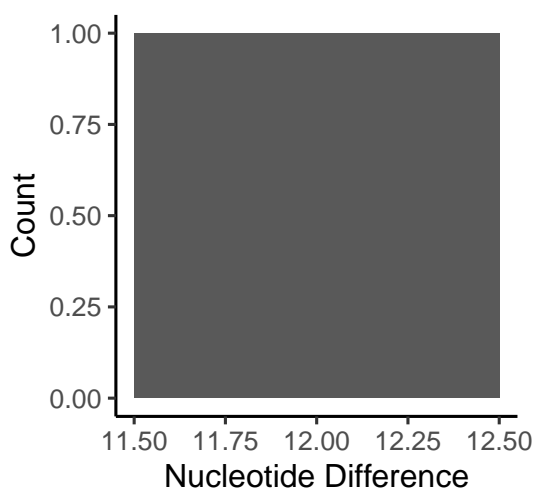
IGHV4-39*02

4502 sequences assigned
No exact matches.



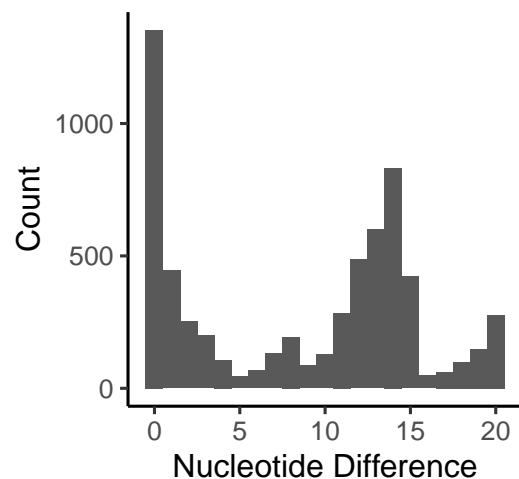
IGHV4/OR15-8*01

1 sequences assigned
No exact matches.



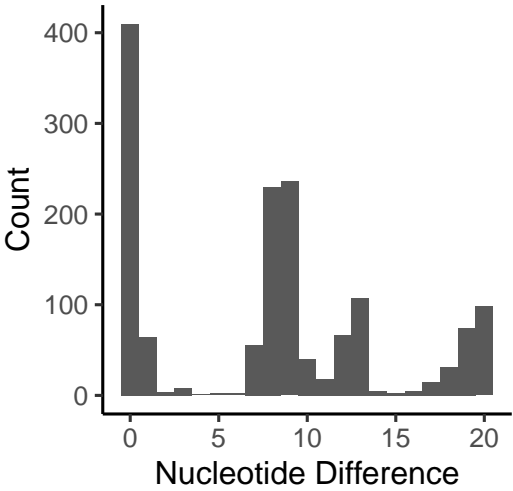
IGHV5-51*07_A128G

8228 sequences assigned
1353 (16.4%) exact matches, in which:
1349 unique CDR3
6 unique J



IGHV6-1*01_02

1674 sequences assigned
410 (24.5%) exact matches, in which:
395 unique CDR3
6 unique J





Warning – no inferred sequences found.