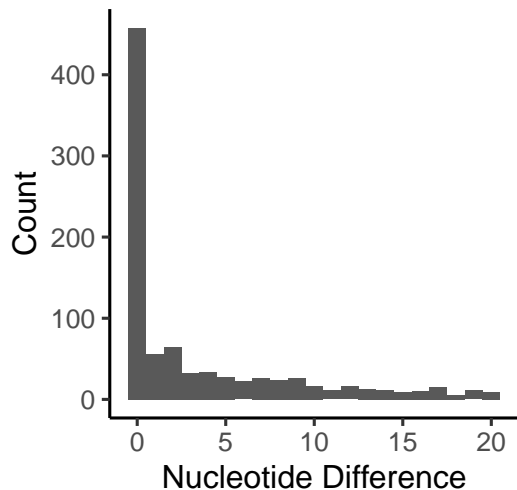


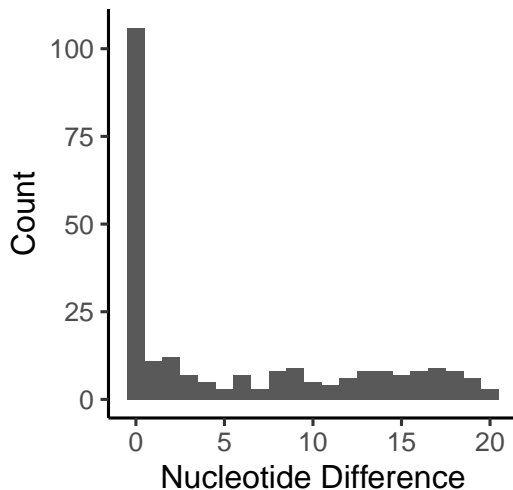
IGHV1-2*02

930 sequences assigned
458 (49.2%) exact matches, in which:
457 unique CDR3
6 unique J



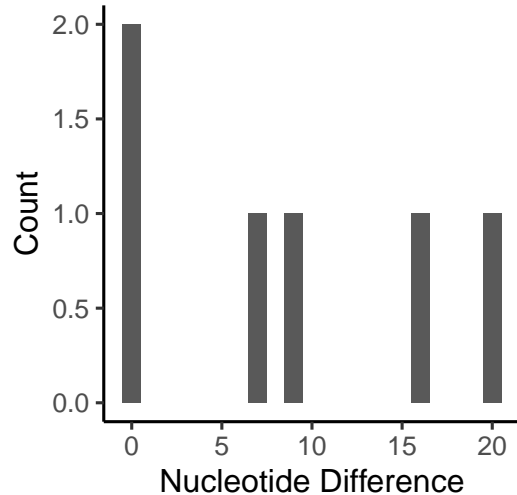
IGHV1-8*03

270 sequences assigned
106 (39.3%) exact matches, in which:
106 unique CDR3
6 unique J



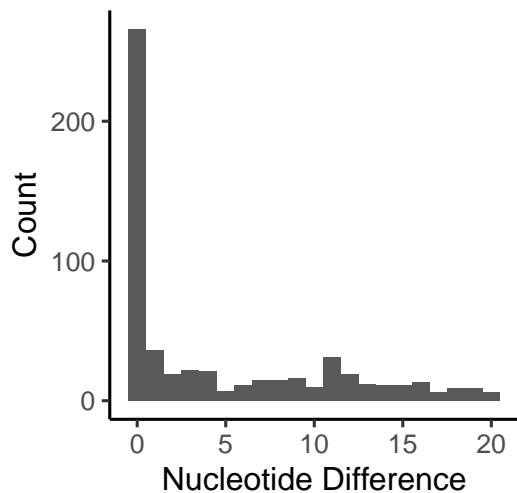
IGHV1-45*02

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
2 unique J



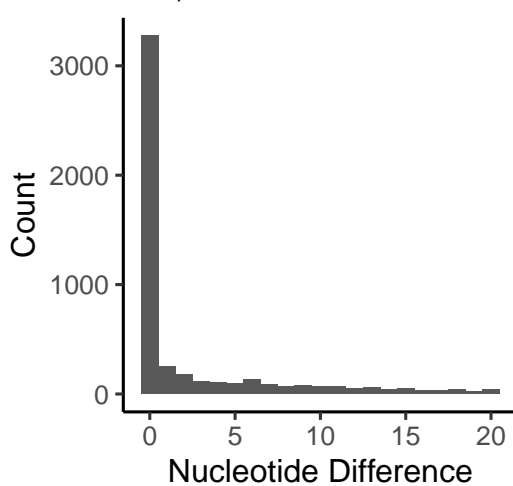
IGHV1-2*06

598 sequences assigned
266 (44.5%) exact matches, in which:
266 unique CDR3
6 unique J



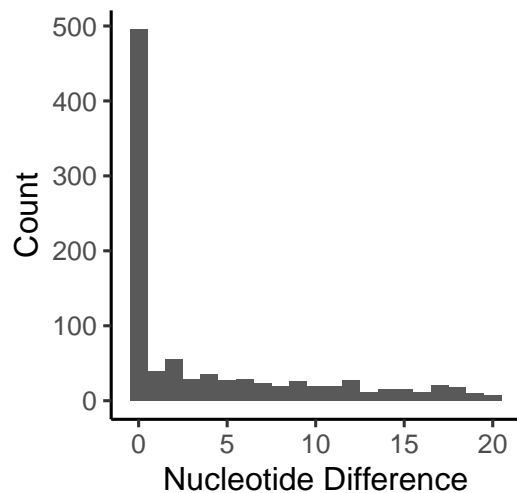
IGHV1-18*01

5125 sequences assigned
3275 (63.9%) exact matches, in which:
3247 unique CDR3
6 unique J



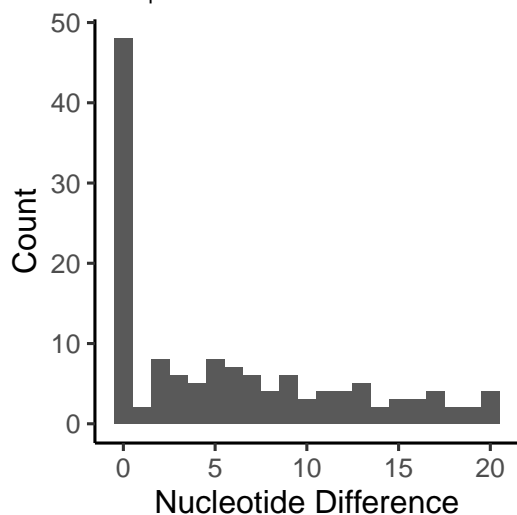
IGHV1-46*01

1018 sequences assigned
496 (48.7%) exact matches, in which:
495 unique CDR3
6 unique J



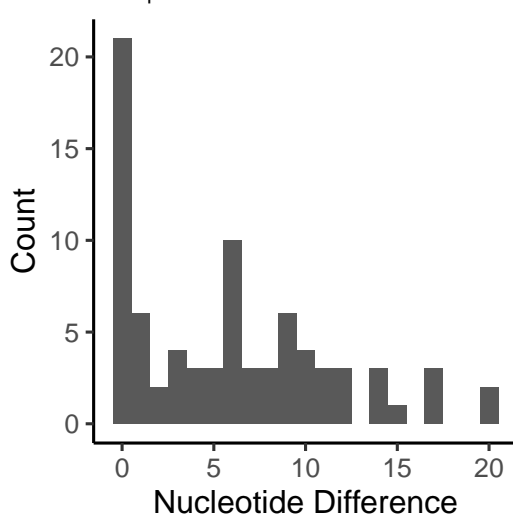
IGHV1-3*01_05

152 sequences assigned
48 (31.6%) exact matches, in which:
48 unique CDR3
5 unique J



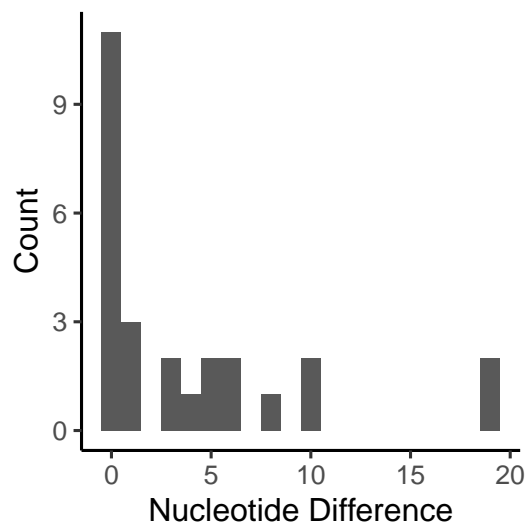
IGHV1-24*01

82 sequences assigned
21 (25.6%) exact matches, in which:
21 unique CDR3
4 unique J



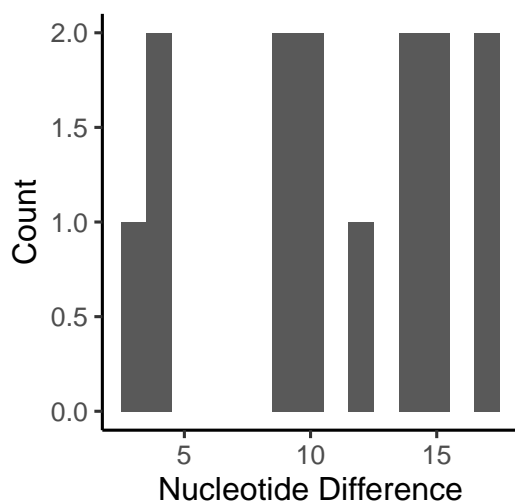
IGHV1-58*02

28 sequences assigned
11 (39.3%) exact matches, in which:
11 unique CDR3
3 unique J



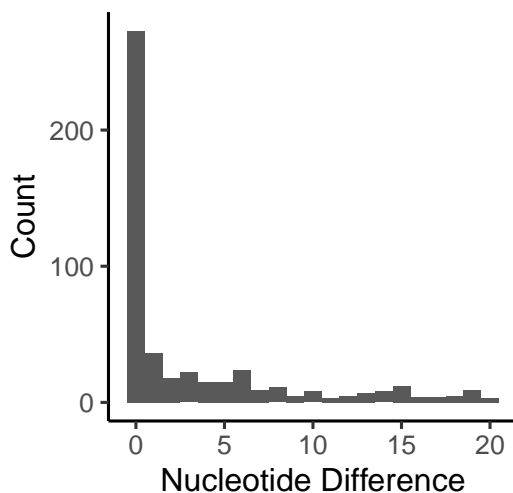
IGHV1-69-2*01

17 sequences assigned
No exact matches.



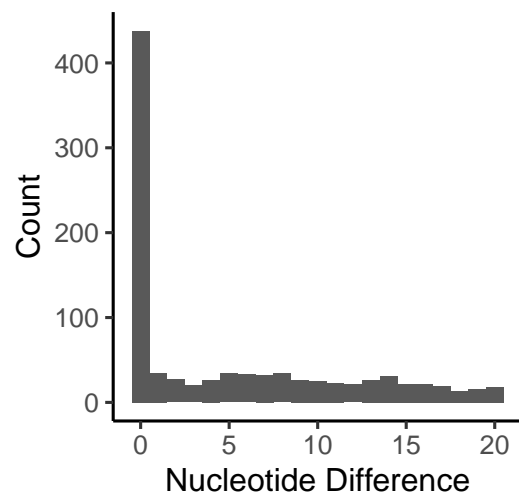
IGHV1-69*15_18

518 sequences assigned
273 (52.7%) exact matches, in which:
273 unique CDR3
6 unique J



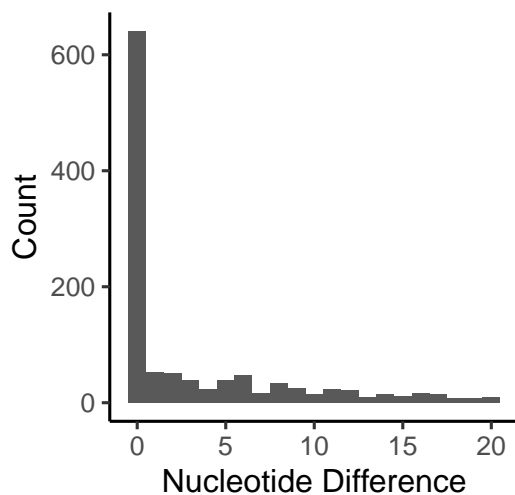
IGHV3-7*03

1006 sequences assigned
438 (43.5%) exact matches, in which:
438 unique CDR3
6 unique J



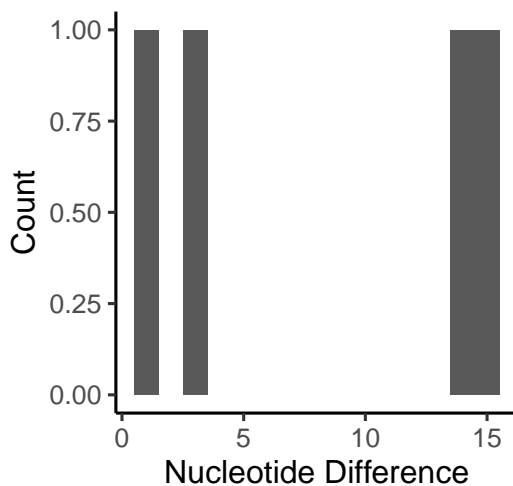
IGHV1-69*05

1157 sequences assigned
641 (55.4%) exact matches, in which:
640 unique CDR3
6 unique J



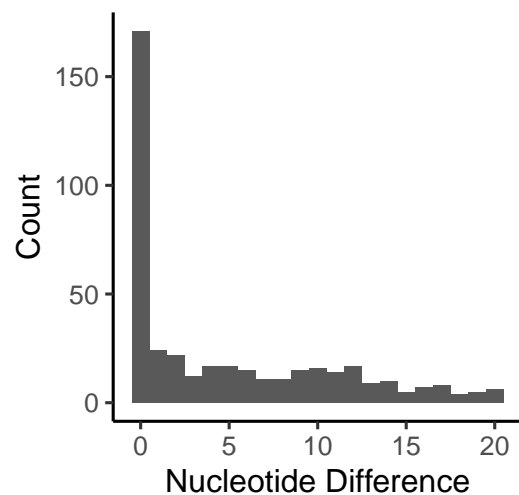
IGHV2-5*02

4 sequences assigned
No exact matches.



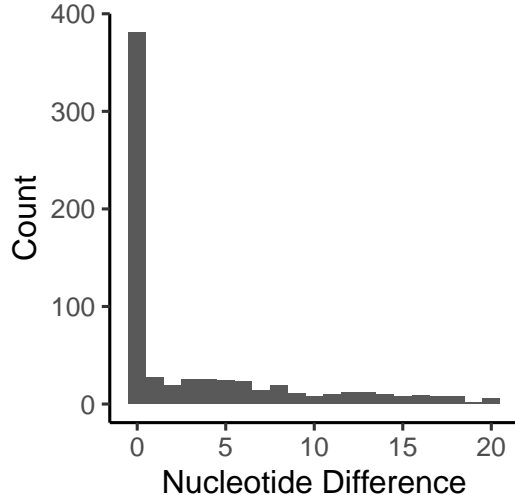
IGHV3-9*03

429 sequences assigned
171 (39.9%) exact matches, in which:
171 unique CDR3
6 unique J



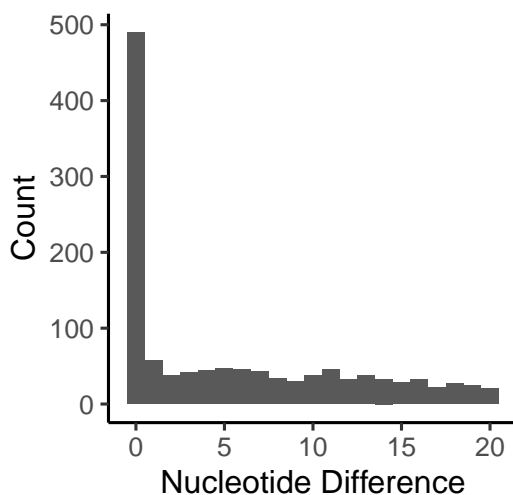
IGHV1-69*01_12_13

704 sequences assigned
381 (54.1%) exact matches, in which:
380 unique CDR3
6 unique J



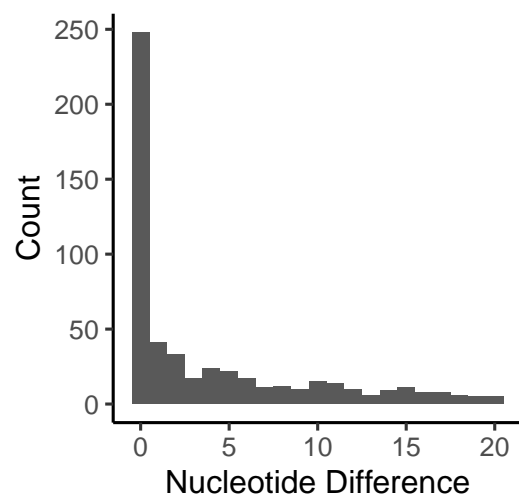
IGHV3-7*01

1280 sequences assigned
490 (38.3%) exact matches, in which:
488 unique CDR3
6 unique J



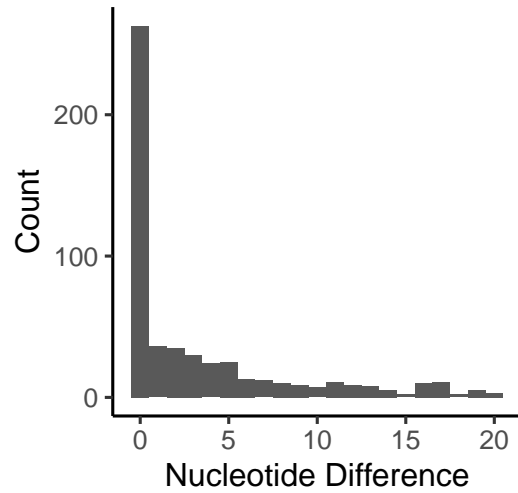
IGHV3-11*04

554 sequences assigned
248 (44.8%) exact matches, in which:
247 unique CDR3
6 unique J



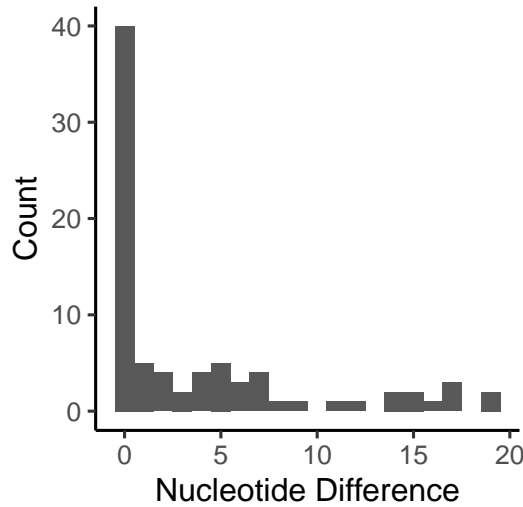
IGHV3-11*06

560 sequences assigned
263 (47%) exact matches, in which:
261 unique CDR3
6 unique J



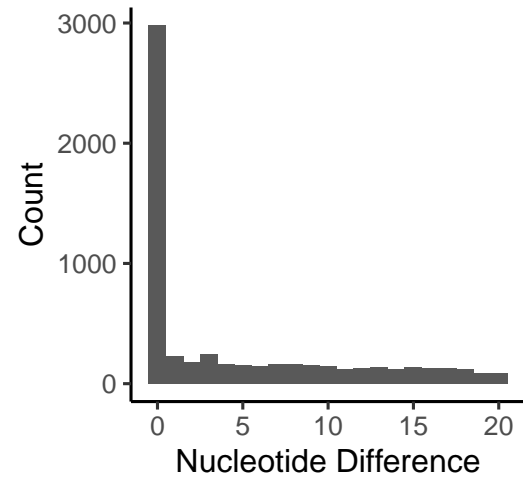
IGHV3-20*01_02

81 sequences assigned
40 (49.4%) exact matches, in which:
38 unique CDR3
6 unique J



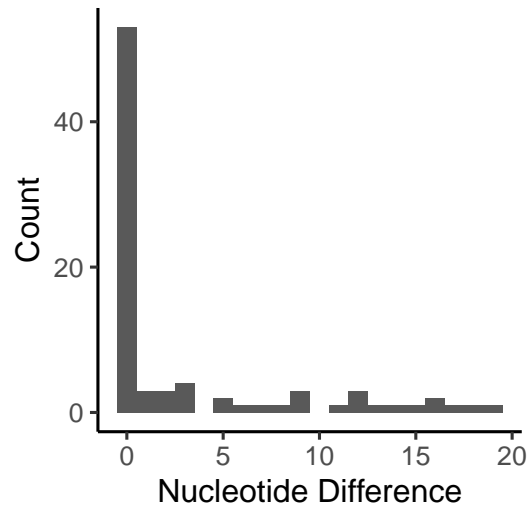
IGHV3-23*01_04

6464 sequences assigned
2980 (46.1%) exact matches, in which:
2974 unique CDR3
6 unique J



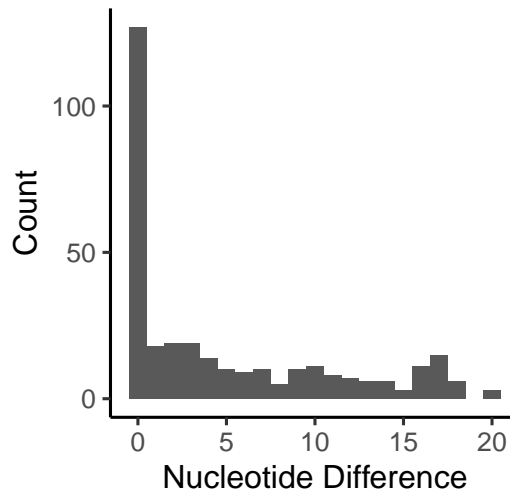
IGHV3-13*05

86 sequences assigned
53 (61.6%) exact matches, in which:
53 unique CDR3
5 unique J



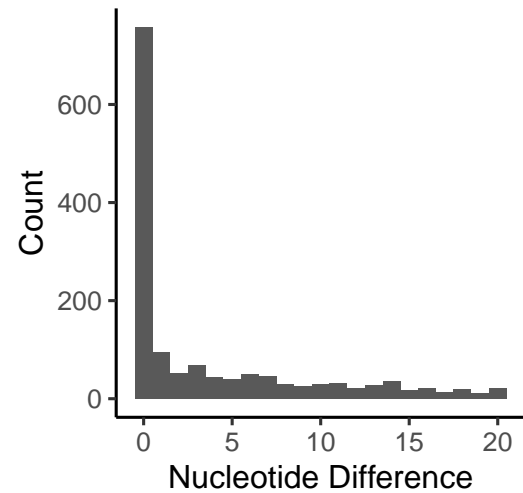
IGHV3-20*03_04

324 sequences assigned
127 (39.2%) exact matches, in which:
127 unique CDR3
5 unique J



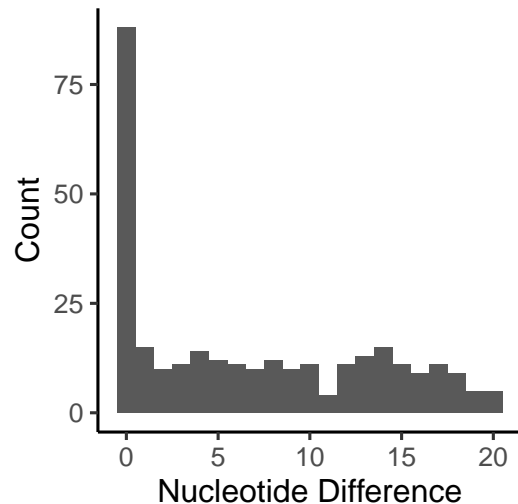
IGHV3-30-3*01

1557 sequences assigned
758 (48.7%) exact matches, in which:
757 unique CDR3
6 unique J



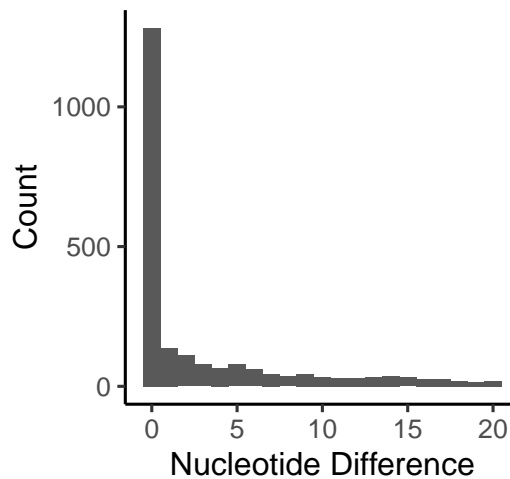
IGHV3-15*01_02

352 sequences assigned
88 (25%) exact matches, in which:
88 unique CDR3
6 unique J



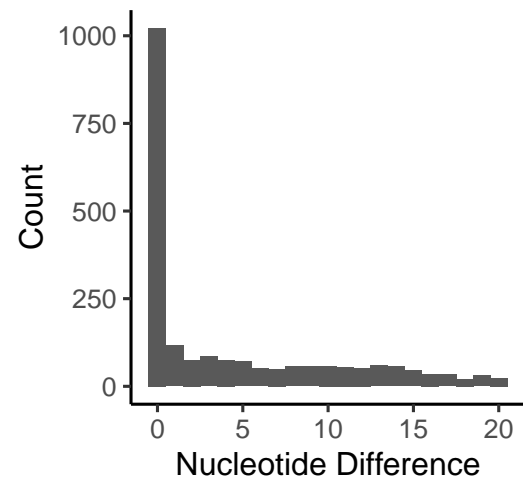
IGHV3-21*01_02

2296 sequences assigned
1282 (55.8%) exact matches, in which:
1276 unique CDR3
6 unique J



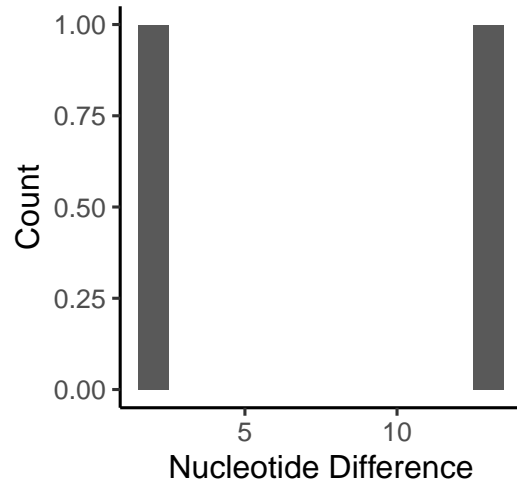
IGHV3-30*02_T201C

2272 sequences assigned
1022 (45%) exact matches, in which:
1011 unique CDR3
6 unique J



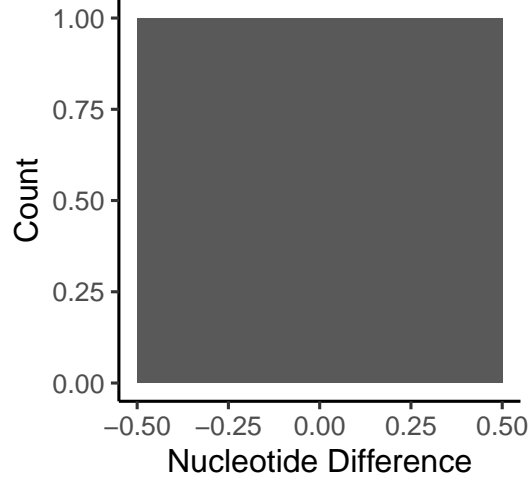
IGHV3-33*01

2 sequences assigned
No exact matches.



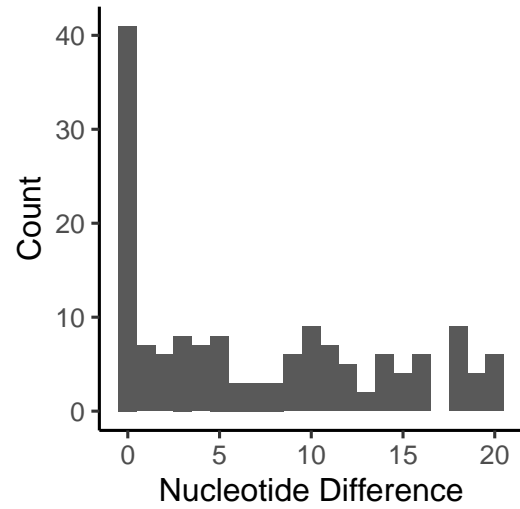
IGHV3-38-3*01

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



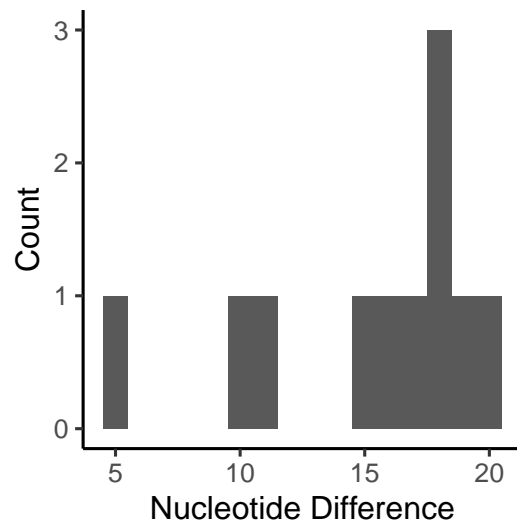
IGHV3-49*04

163 sequences assigned
41 (25.2%) exact matches, in which:
41 unique CDR3
6 unique J



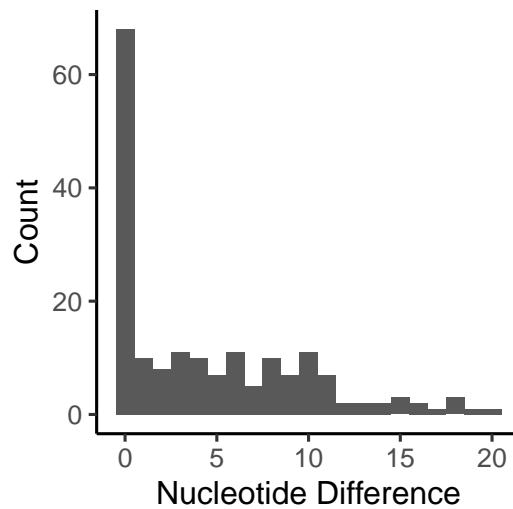
IGHV3-33*05

13 sequences assigned
No exact matches.



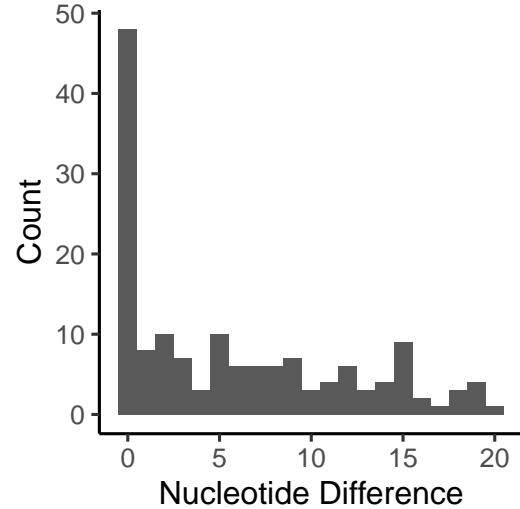
IGHV3-43*01

192 sequences assigned
68 (35.4%) exact matches, in which:
68 unique CDR3
6 unique J



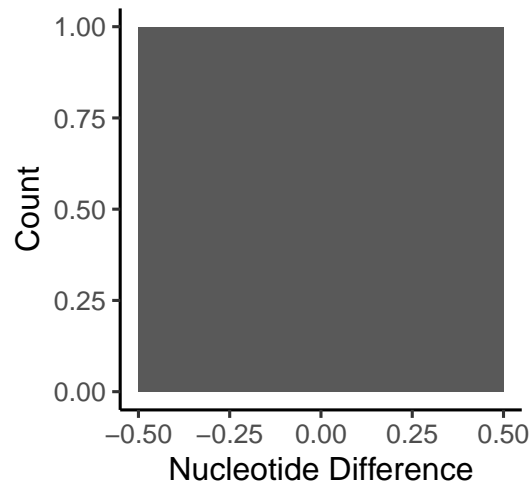
IGHV3-49*03_05

158 sequences assigned
48 (30.4%) exact matches, in which:
48 unique CDR3
5 unique J



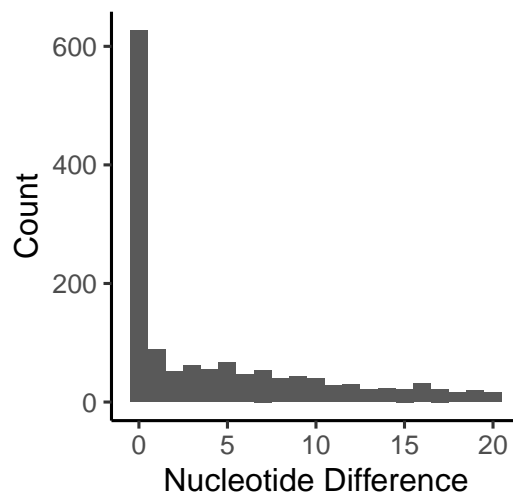
IGHV3-35*01

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



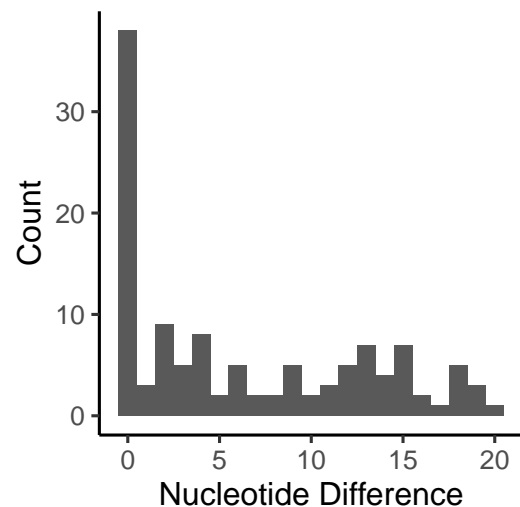
IGHV3-48*01

1489 sequences assigned
627 (42.1%) exact matches, in which:
625 unique CDR3
6 unique J



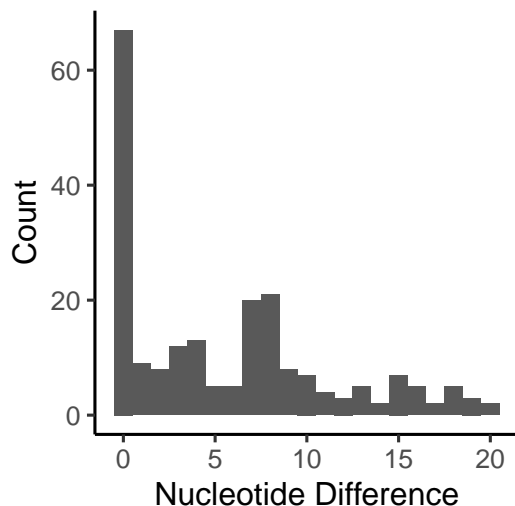
IGHV3-53*01_02

125 sequences assigned
38 (30.4%) exact matches, in which:
37 unique CDR3
3 unique J



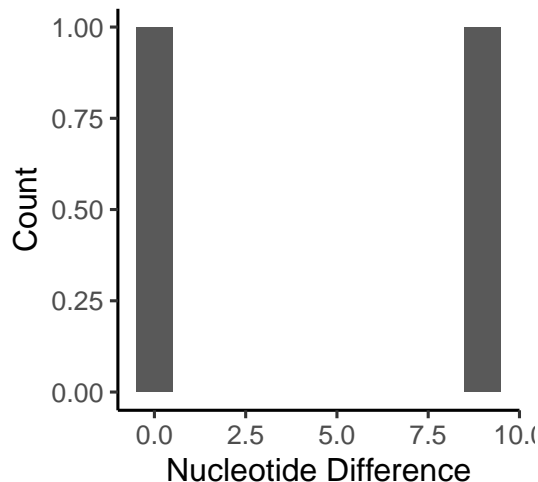
IGHV3-64*01

226 sequences assigned
67 (29.6%) exact matches, in which:
67 unique CDR3
6 unique J



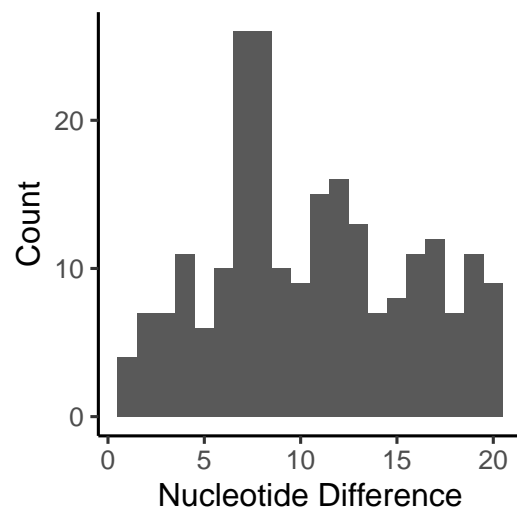
IGHV3-69-1*02

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



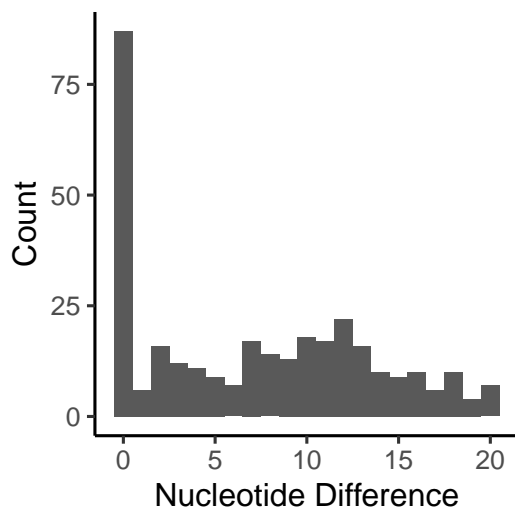
IGHV3-74*03

272 sequences assigned
No exact matches.



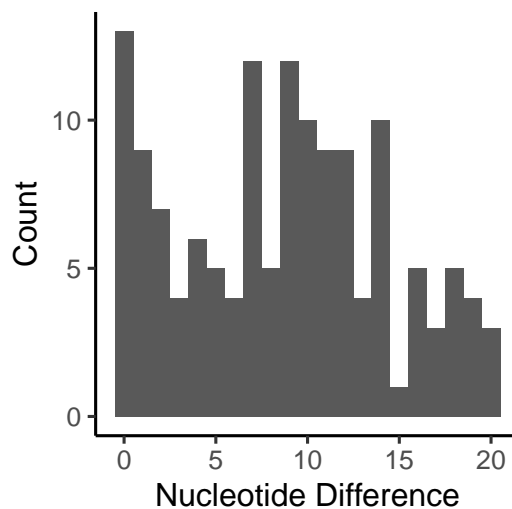
IGHV3-66*02

363 sequences assigned
87 (24%) exact matches, in which:
86 unique CDR3
5 unique J



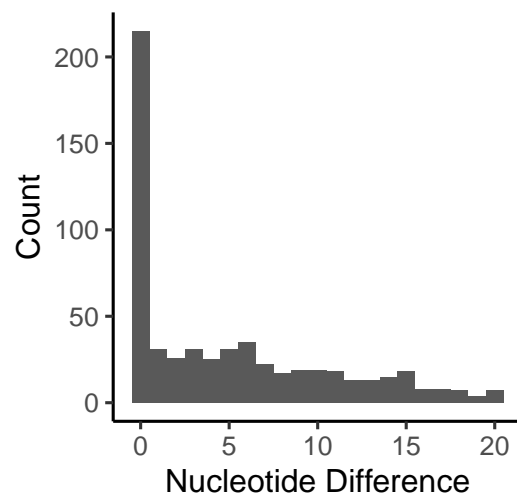
IGHV3-72*01

155 sequences assigned
13 (8.4%) exact matches, in which:
13 unique CDR3
4 unique J



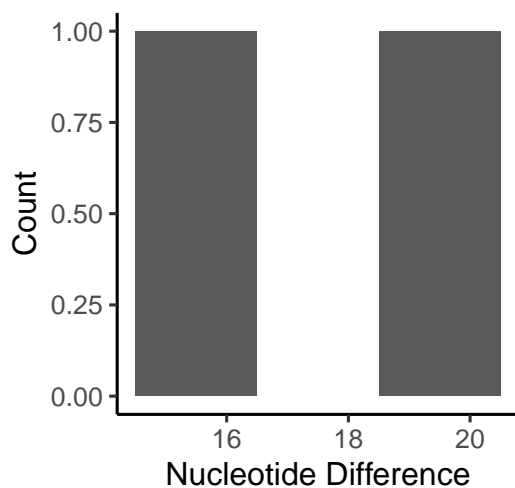
IGHV3-74*01_02

595 sequences assigned
215 (36.1%) exact matches, in which:
214 unique CDR3
6 unique J



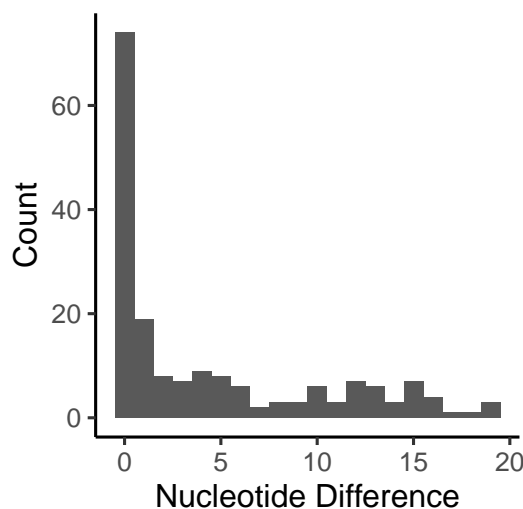
IGHV3-69-1*01

5 sequences assigned
No exact matches.



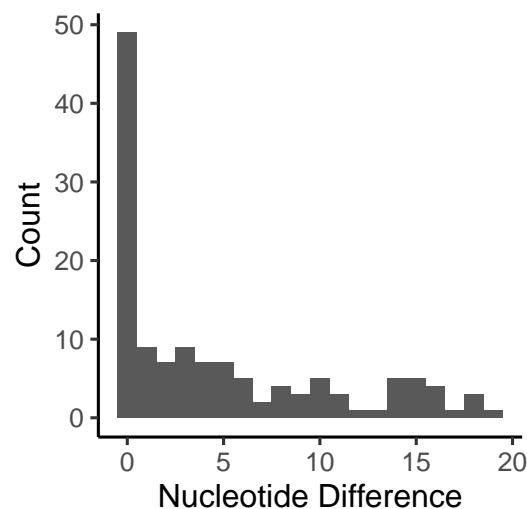
IGHV3-73*01_02

197 sequences assigned
74 (37.6%) exact matches, in which:
74 unique CDR3
5 unique J



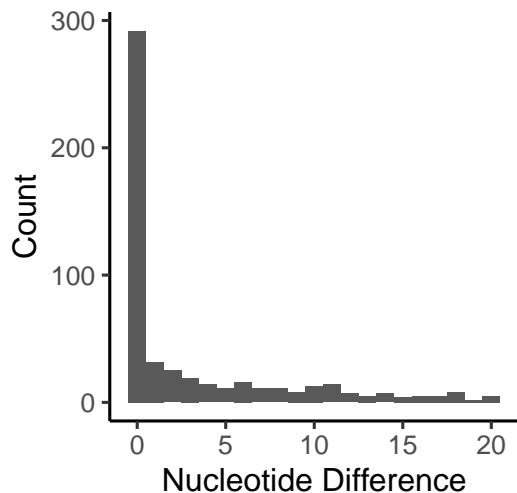
IGHV3-43D*03

138 sequences assigned
49 (35.5%) exact matches, in which:
49 unique CDR3
4 unique J



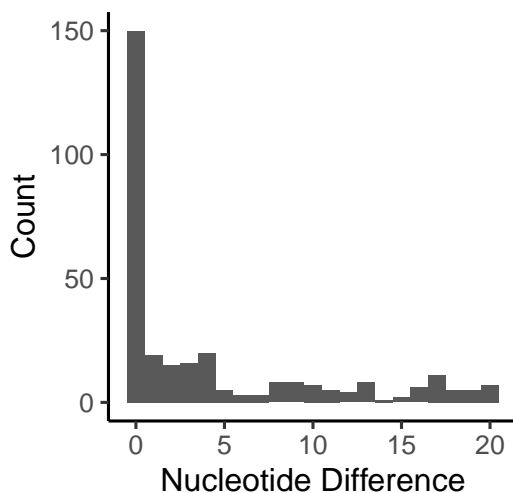
IGHV3-64D*06

558 sequences assigned
292 (52.3%) exact matches, in which:
290 unique CDR3
6 unique J



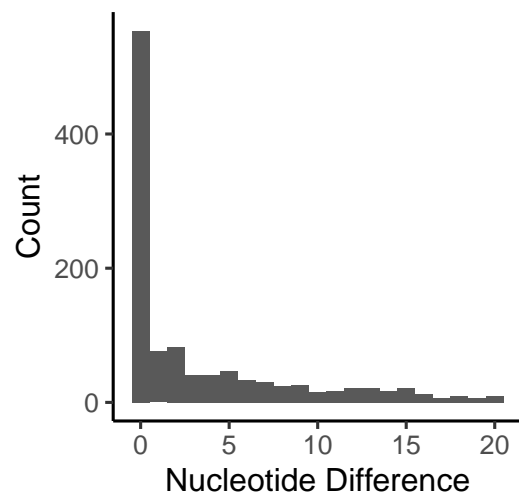
IGHV4-30-2*01

318 sequences assigned
150 (47.2%) exact matches, in which:
150 unique CDR3
6 unique J



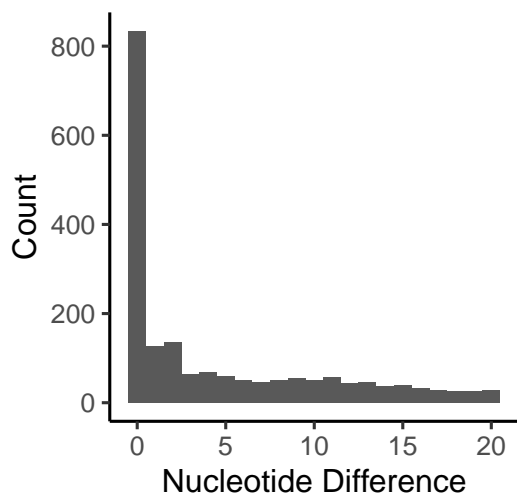
IGHV4-38-2*02

1154 sequences assigned
554 (48%) exact matches, in which:
544 unique CDR3
6 unique J



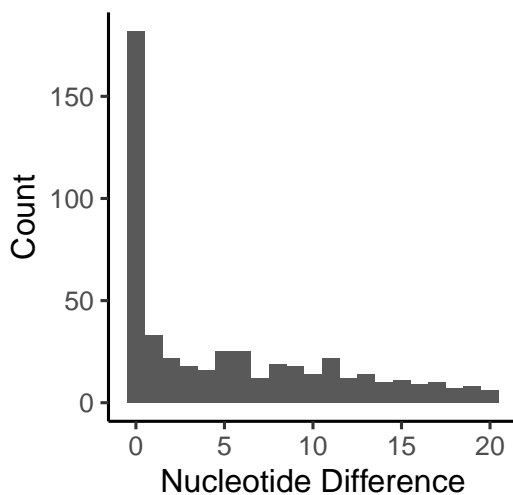
IGHV4-4*09

2033 sequences assigned
834 (41%) exact matches, in which:
819 unique CDR3
6 unique J



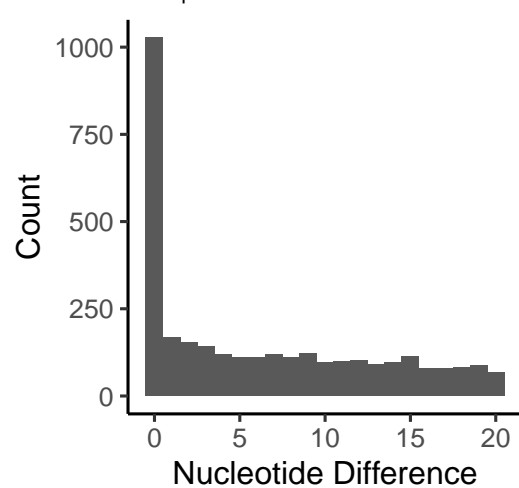
IGHV4-30-4*08

529 sequences assigned
182 (34.4%) exact matches, in which:
180 unique CDR3
6 unique J



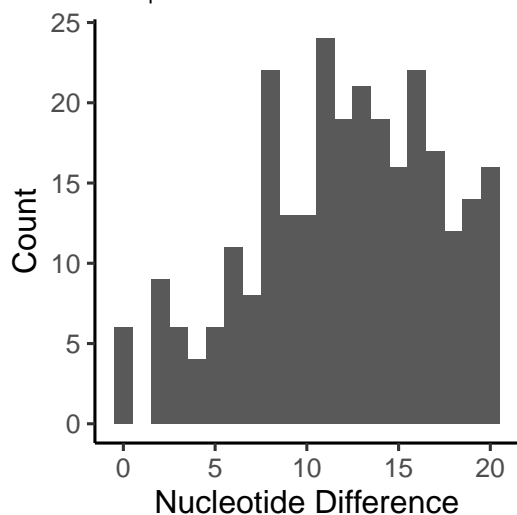
IGHV4-39*02_C258G

3580 sequences assigned
1027 (28.7%) exact matches, in which:
1013 unique CDR3
6 unique J



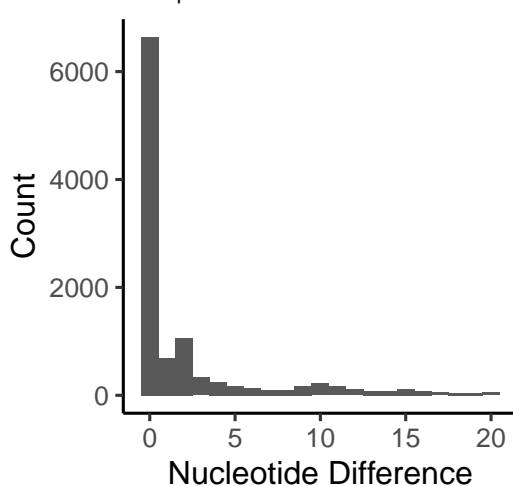
IGHV4-4*02_03

354 sequences assigned
6 (1.7%) exact matches, in which:
6 unique CDR3
3 unique J



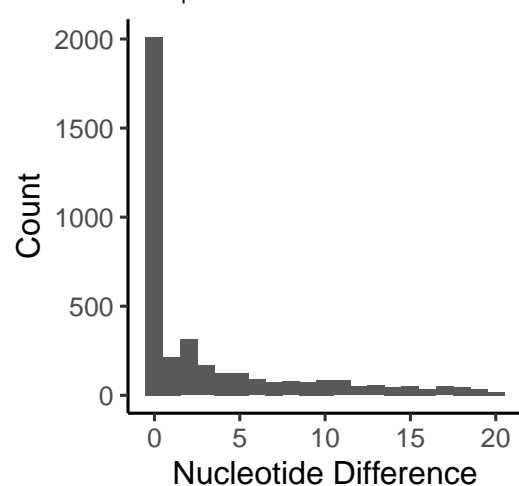
IGHV4-34*01_02

11040 sequences assigned
6640 (60.1%) exact matches, in which:
6528 unique CDR3
6 unique J



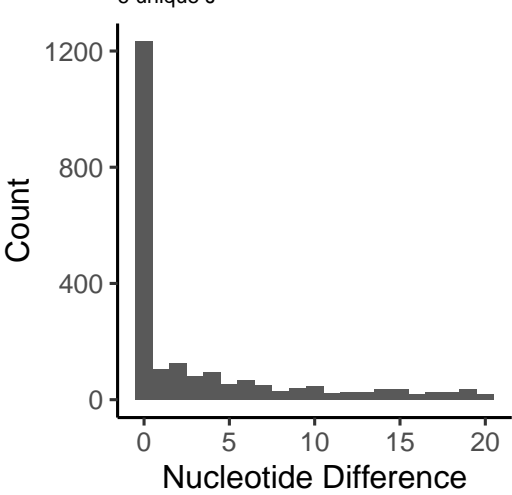
IGHV4-59*11

3955 sequences assigned
2011 (50.8%) exact matches, in which:
1973 unique CDR3
6 unique J



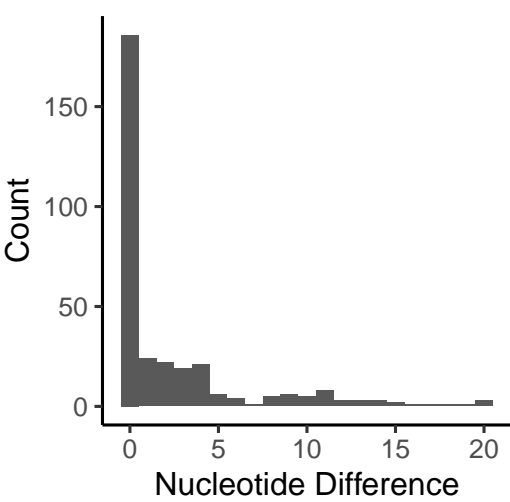
IGHV4-59*02_G88A

2272 sequences assigned
1233 (54.3%) exact matches, in which:
1192 unique CDR3
6 unique J



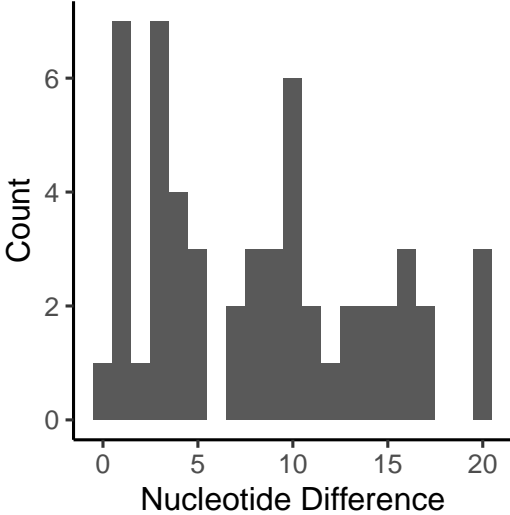
IGHV5-10-1*01_03

327 sequences assigned
186 (56.9%) exact matches, in which:
186 unique CDR3
6 unique J



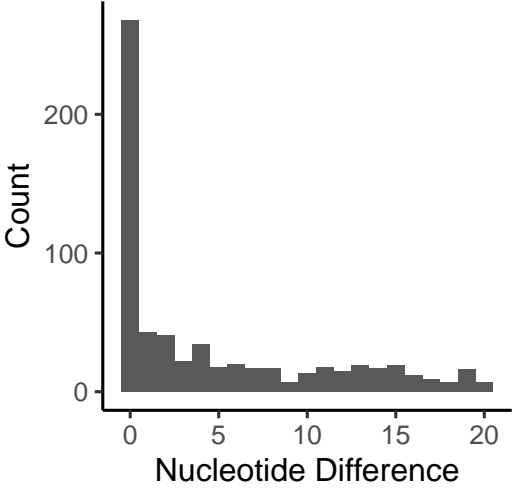
IGHV7-4-1*02

63 sequences assigned
1 (1.6%) exact matches, in which:
1 unique CDR3
1 unique J



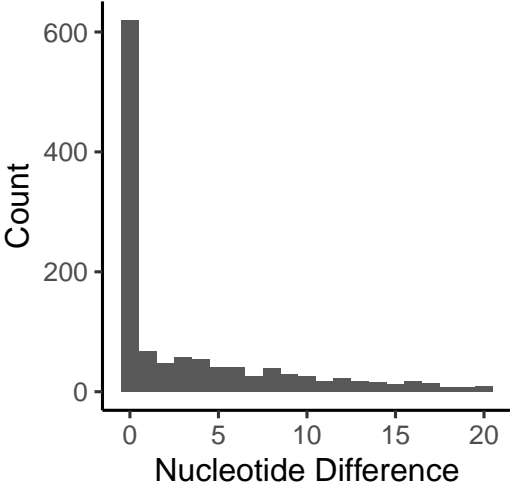
IGHV4-61*02

670 sequences assigned
268 (40%) exact matches, in which:
264 unique CDR3
6 unique J



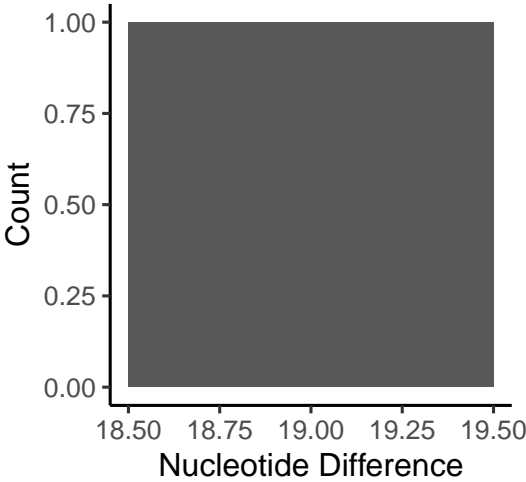
IGHV5-51*07_A128G

1213 sequences assigned
620 (51.1%) exact matches, in which:
618 unique CDR3
6 unique J



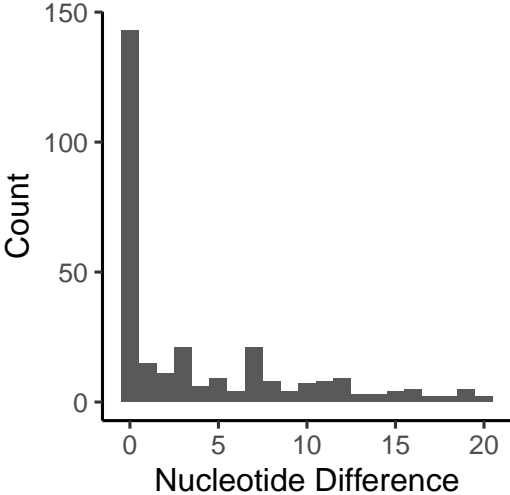
IGHV4/OR15-8*02

2 sequences assigned
No exact matches.



IGHV6-1*01_02

295 sequences assigned
143 (48.5%) exact matches, in which:
141 unique CDR3
6 unique J





Warning – no inferred sequences found.