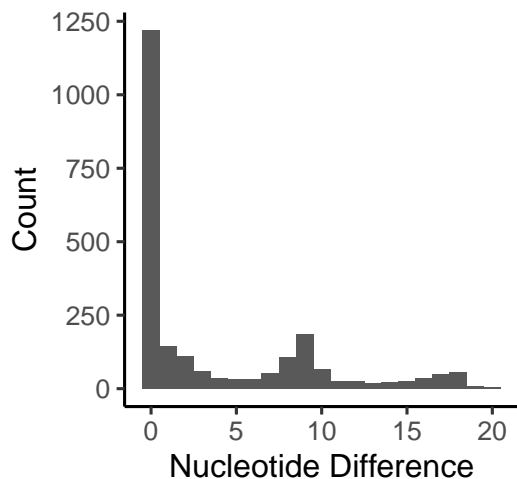


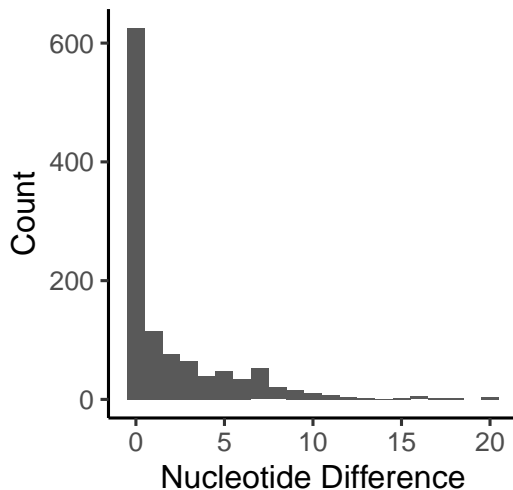
IGHV1-2*02

2370 sequences assigned
1219 (51.4%) exact matches, in which:
1203 unique CDR3
6 unique J



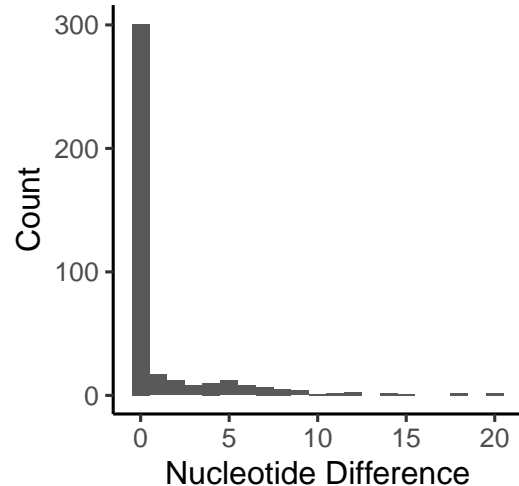
IGHV1-8*01

1152 sequences assigned
626 (54.3%) exact matches, in which:
618 unique CDR3
6 unique J



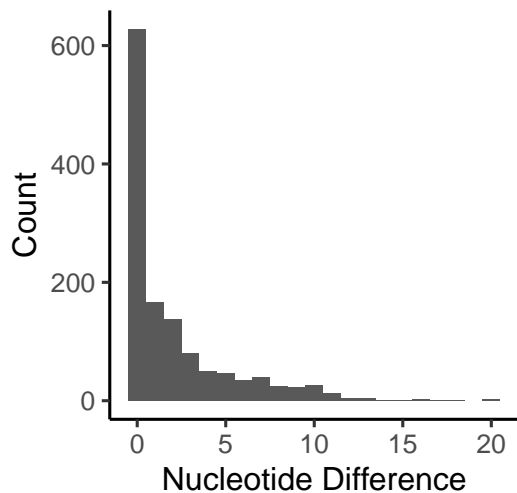
IGHV1-24*01

406 sequences assigned
301 (74.1%) exact matches, in which:
300 unique CDR3
6 unique J



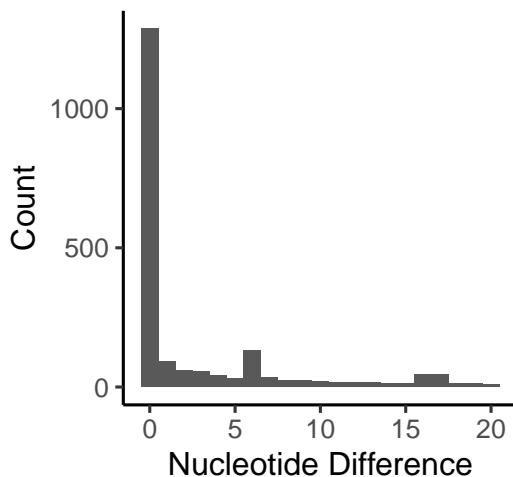
IGHV1-2*04

1289 sequences assigned
628 (48.7%) exact matches, in which:
603 unique CDR3
6 unique J



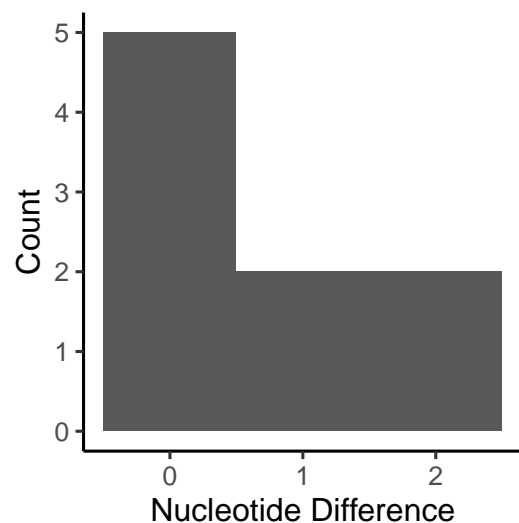
IGHV1-18*01

2129 sequences assigned
1287 (60.5%) exact matches, in which:
1273 unique CDR3
6 unique J



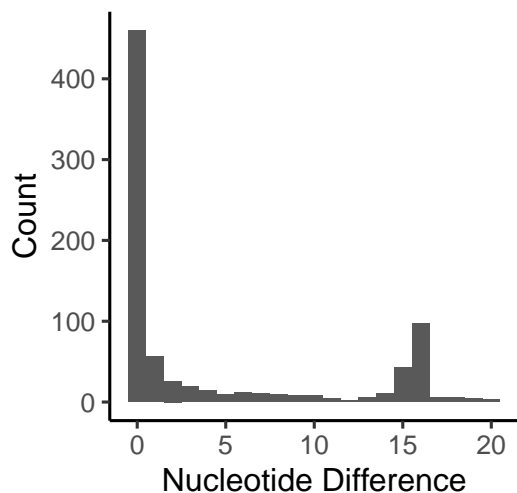
IGHV1-45*02

9 sequences assigned
5 (55.6%) exact matches, in which:
5 unique CDR3
2 unique J



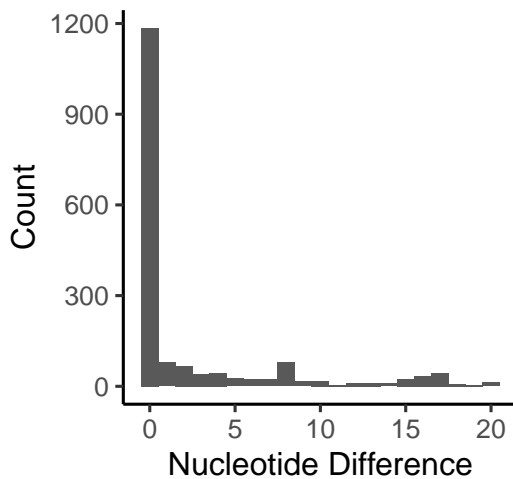
IGHV1-3*01_05

836 sequences assigned
460 (55%) exact matches, in which:
453 unique CDR3
6 unique J



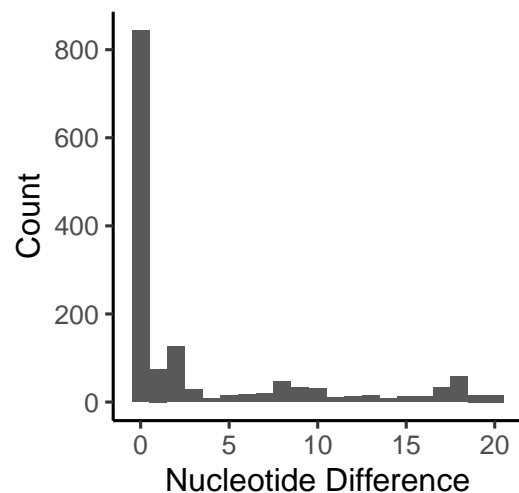
IGHV1-18*04

1842 sequences assigned
1185 (64.3%) exact matches, in which:
1176 unique CDR3
6 unique J



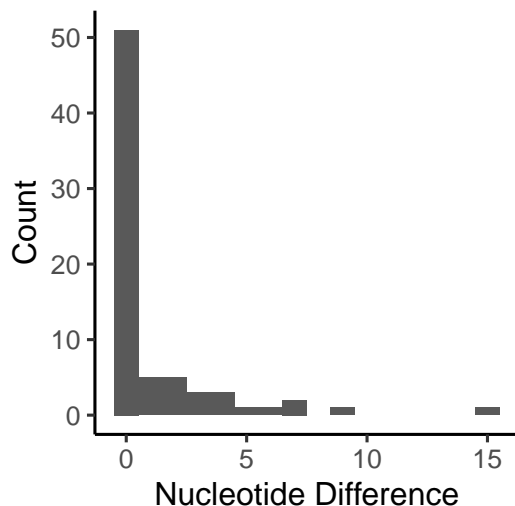
IGHV1-46*01

1739 sequences assigned
844 (48.5%) exact matches, in which:
834 unique CDR3
6 unique J



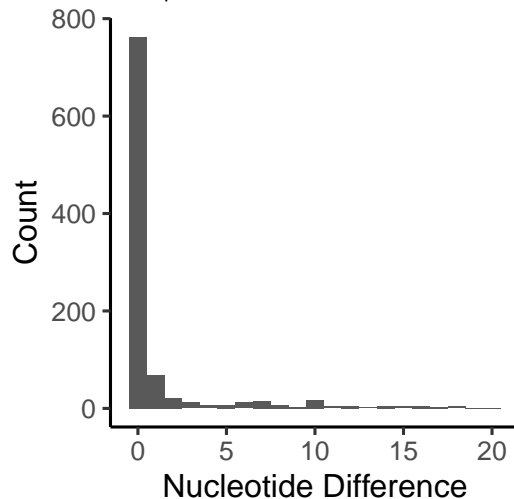
IGHV1-58*02

73 sequences assigned
51 (69.9%) exact matches, in which:
51 unique CDR3
5 unique J



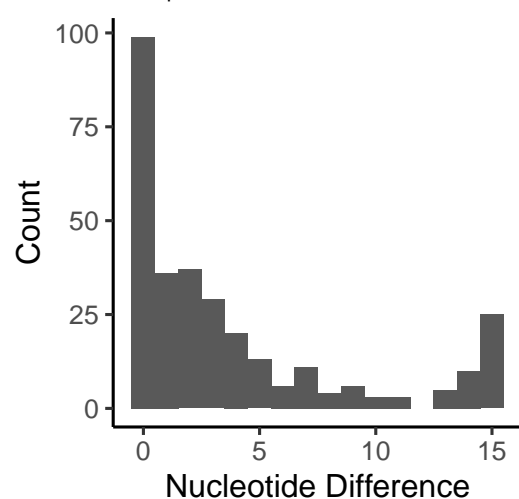
IGHV1-69*04_09

1112 sequences assigned
763 (68.6%) exact matches, in which:
761 unique CDR3
6 unique J



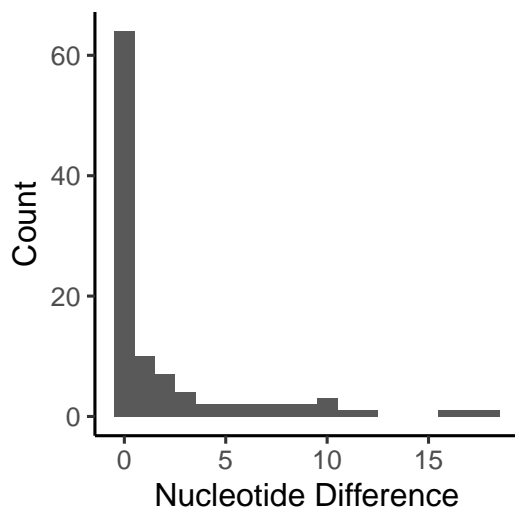
IGHV2-70*01

309 sequences assigned
99 (32%) exact matches, in which:
95 unique CDR3
5 unique J



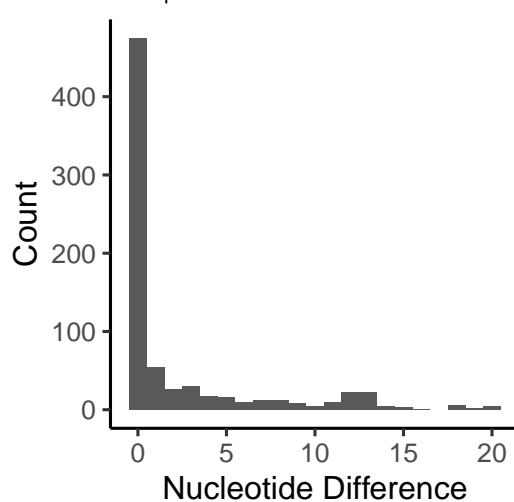
IGHV1-58*01_03

105 sequences assigned
64 (61%) exact matches, in which:
63 unique CDR3
5 unique J



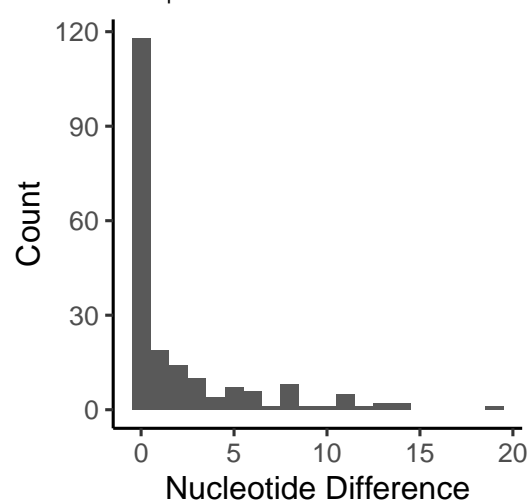
IGHV2-5*02

765 sequences assigned
475 (62.1%) exact matches, in which:
463 unique CDR3
6 unique J



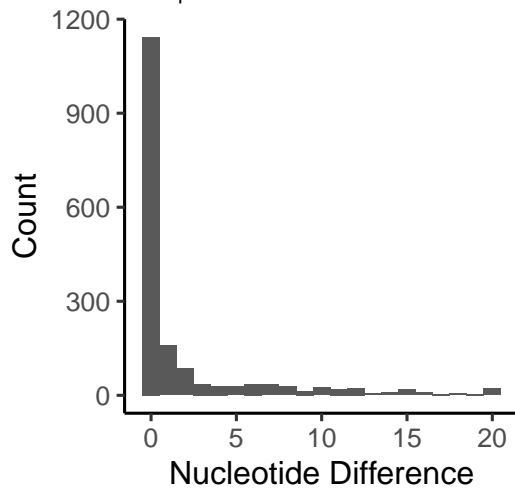
IGHV2-70*11_15

203 sequences assigned
118 (58.1%) exact matches, in which:
114 unique CDR3
5 unique J



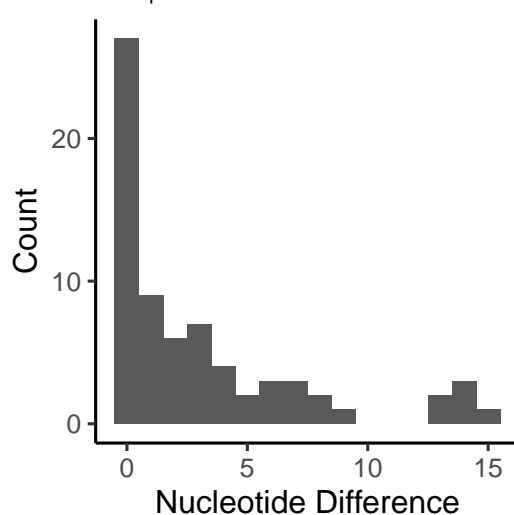
IGHV1-69*01_12_13

2043 sequences assigned
1143 (55.9%) exact matches, in which:
1134 unique CDR3
6 unique J



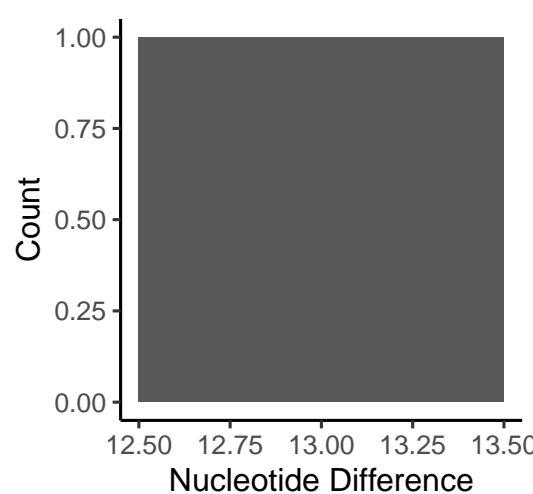
IGHV2-26*01

180 sequences assigned
27 (15%) exact matches, in which:
25 unique CDR3
4 unique J



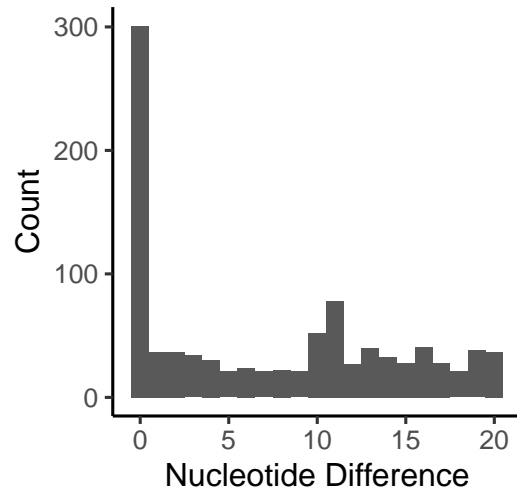
IGHV2-70D*04

1 sequences assigned
No exact matches.



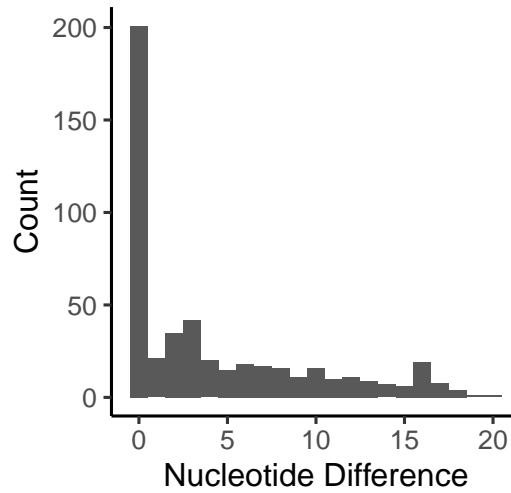
IGHV3-7*01

1084 sequences assigned
301 (27.8%) exact matches, in which:
237 unique CDR3
6 unique J



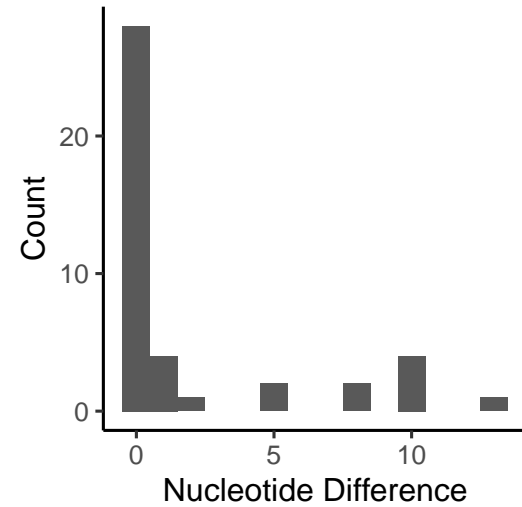
IGHV3-11*01

520 sequences assigned
201 (38.7%) exact matches, in which:
156 unique CDR3
6 unique J



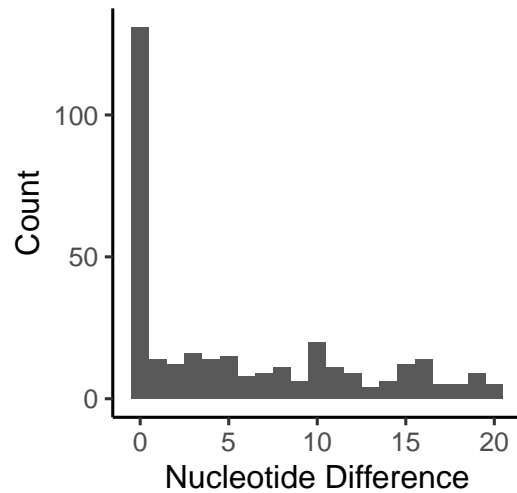
IGHV3-13*05

42 sequences assigned
28 (66.7%) exact matches, in which:
21 unique CDR3
4 unique J



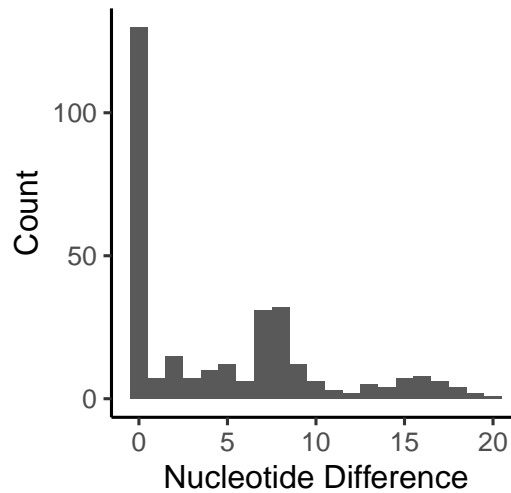
IGHV3-7*04

573 sequences assigned
131 (22.9%) exact matches, in which:
98 unique CDR3
6 unique J



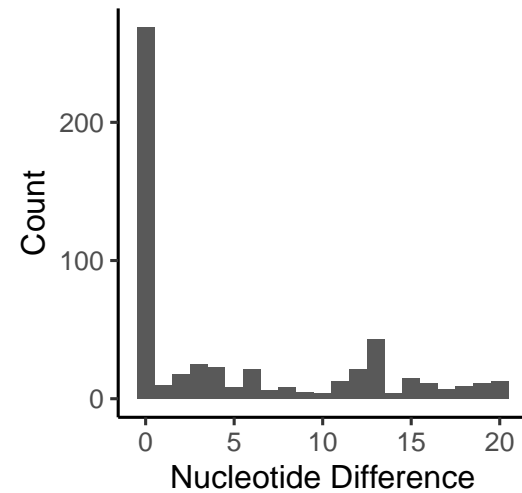
IGHV3-11*06

334 sequences assigned
130 (38.9%) exact matches, in which:
97 unique CDR3
6 unique J



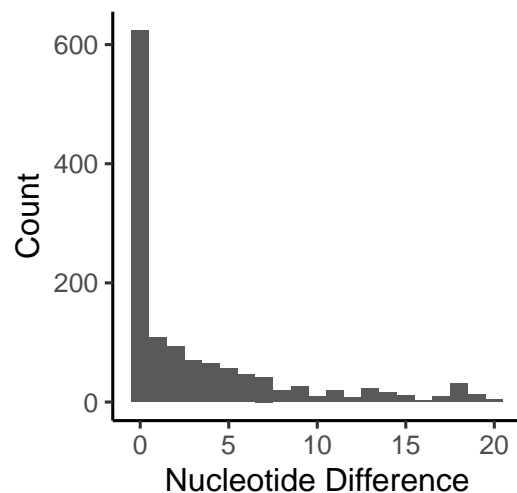
IGHV3-15*01_02

753 sequences assigned
269 (35.7%) exact matches, in which:
226 unique CDR3
6 unique J



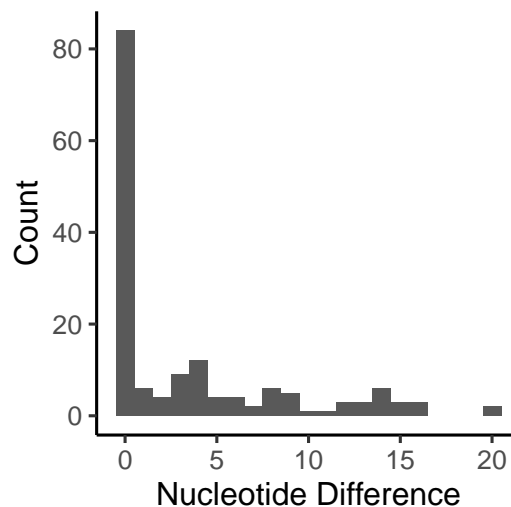
IGHV3-9*01

1327 sequences assigned
624 (47%) exact matches, in which:
474 unique CDR3
6 unique J



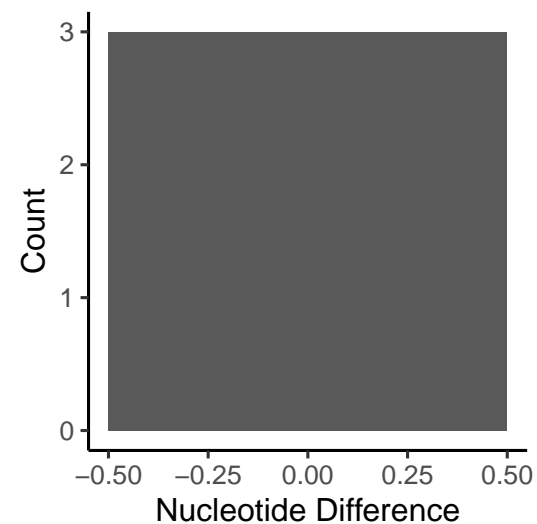
IGHV3-13*01

162 sequences assigned
84 (51.9%) exact matches, in which:
66 unique CDR3
5 unique J



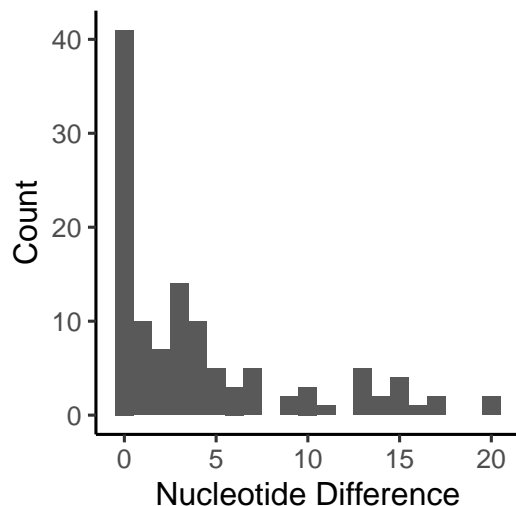
IGHV3-19*01

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



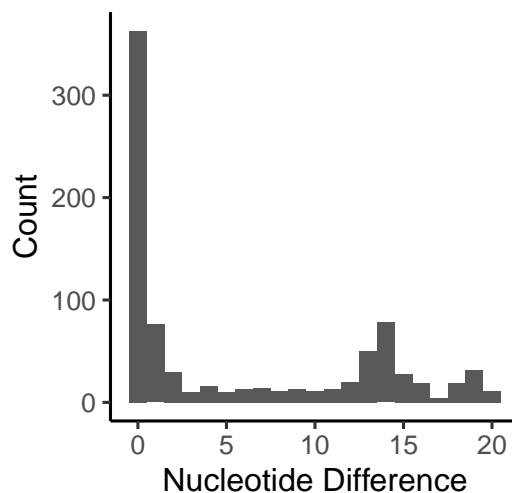
IGHV3-20*01_02

119 sequences assigned
41 (34.5%) exact matches, in which:
34 unique CDR3
5 unique J



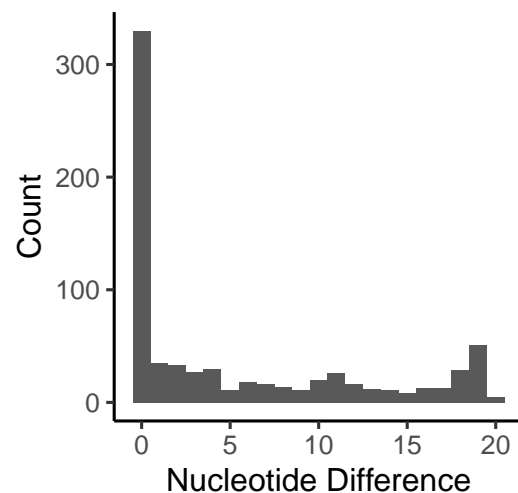
IGHV3-33*01

901 sequences assigned
363 (40.3%) exact matches, in which:
302 unique CDR3
6 unique J



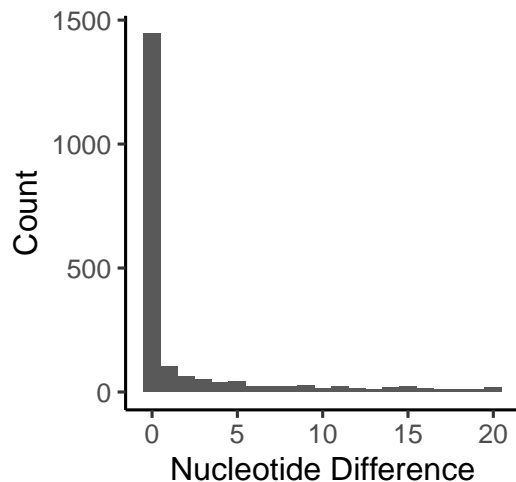
IGHV3-48*03

819 sequences assigned
330 (40.3%) exact matches, in which:
263 unique CDR3
5 unique J



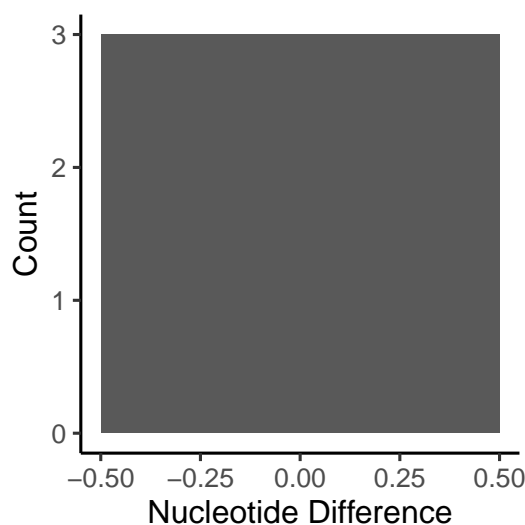
IGHV3-21*01_02

2287 sequences assigned
1445 (63.2%) exact matches, in which:
1108 unique CDR3
6 unique J



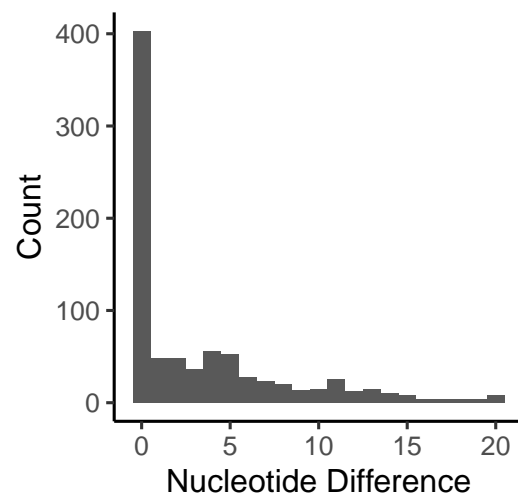
IGHV3-35*01

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



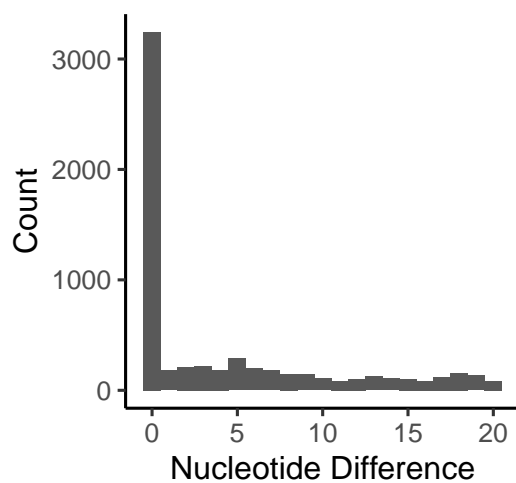
IGHV3-48*04

875 sequences assigned
403 (46.1%) exact matches, in which:
310 unique CDR3
6 unique J



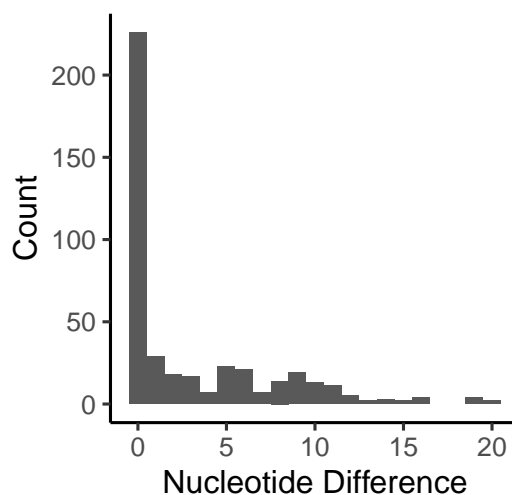
IGHV3-23*01_04

7153 sequences assigned
3244 (45.4%) exact matches, in which:
2412 unique CDR3
6 unique J



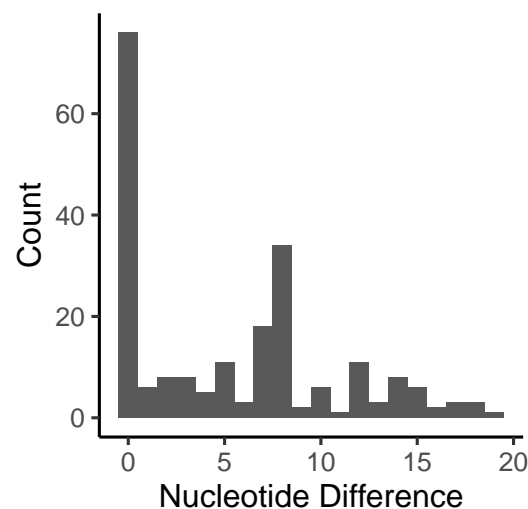
IGHV3-43*02

506 sequences assigned
226 (44.7%) exact matches, in which:
177 unique CDR3
6 unique J



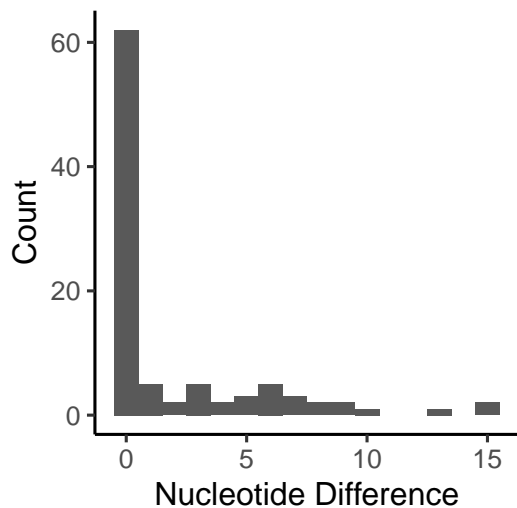
IGHV3-49*04

228 sequences assigned
76 (33.3%) exact matches, in which:
62 unique CDR3
6 unique J



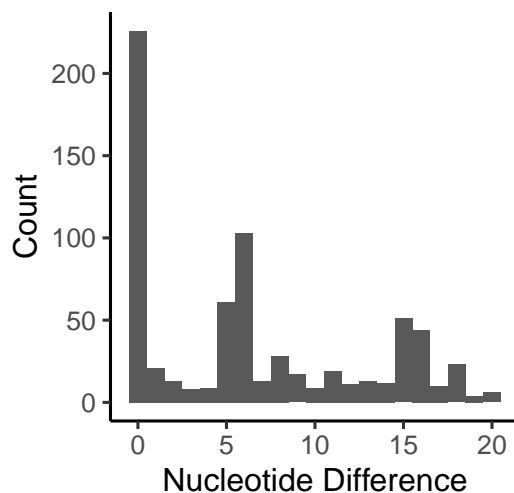
IGHV3-49*03_05

99 sequences assigned
62 (62.6%) exact matches, in which:
49 unique CDR3
5 unique J



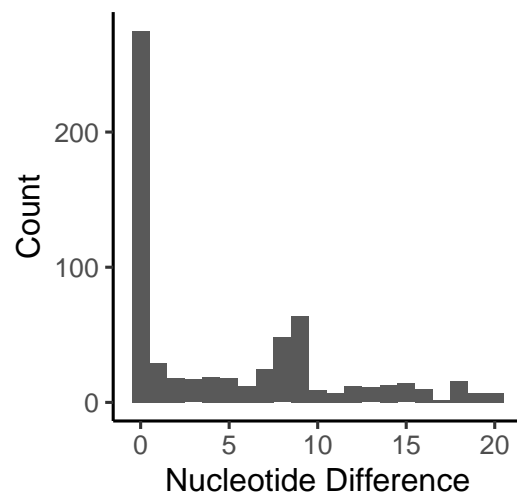
IGHV3-53*01_02

1009 sequences assigned
226 (22.4%) exact matches, in which:
171 unique CDR3
6 unique J



IGHV3-66*01

761 sequences assigned
275 (36.1%) exact matches, in which:
216 unique CDR3
6 unique J



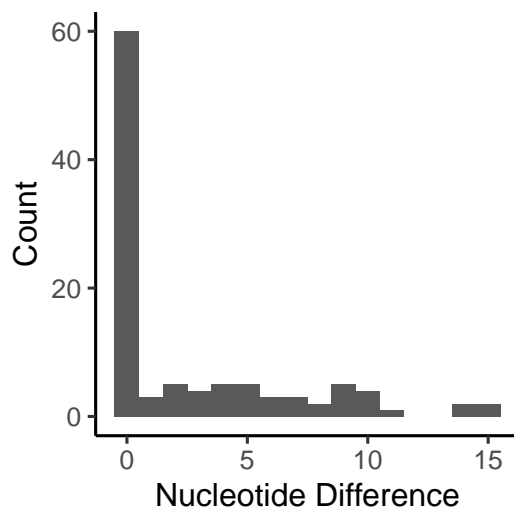
IGHV3-52*01_03

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



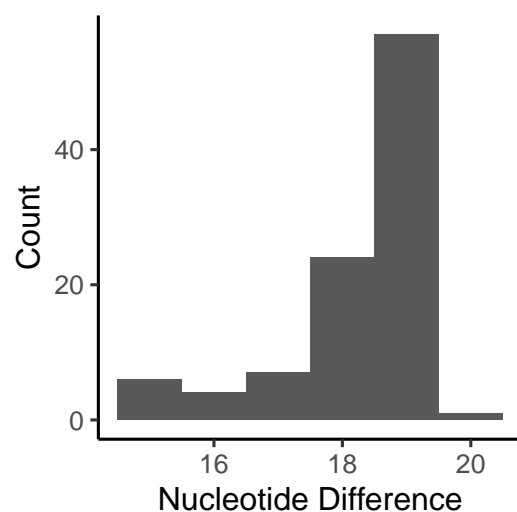
IGHV3-64*01

123 sequences assigned
60 (48.8%) exact matches, in which:
45 unique CDR3
6 unique J



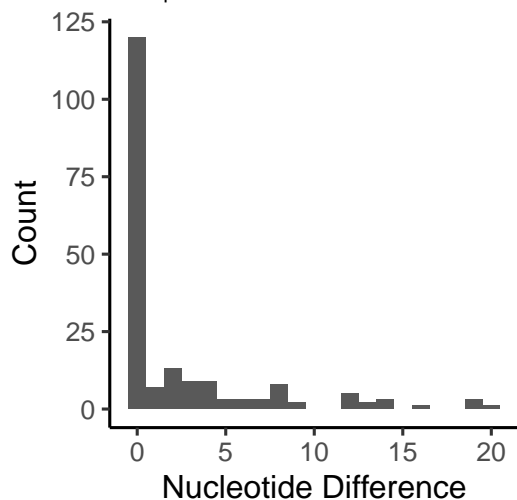
IGHV3-69-1*01

104 sequences assigned
No exact matches.



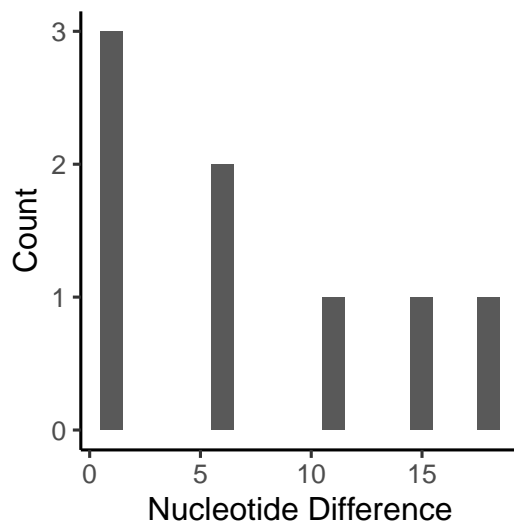
IGHV3-53*04

200 sequences assigned
120 (60%) exact matches, in which:
88 unique CDR3
6 unique J



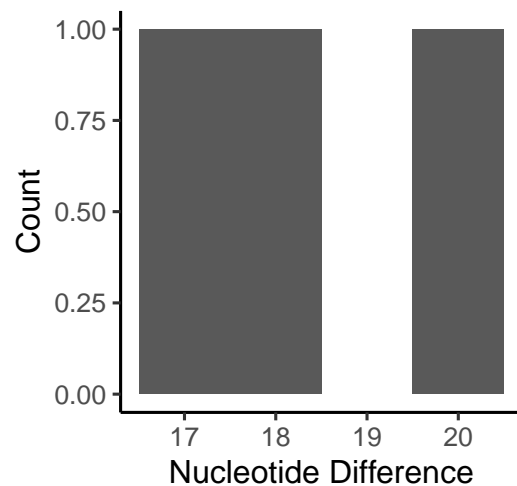
IGHV3-64*02_07

82 sequences assigned
No exact matches.



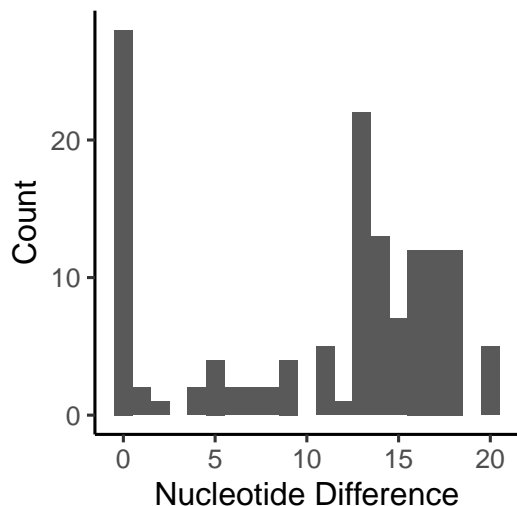
IGHV3-69-1*02

5 sequences assigned
No exact matches.



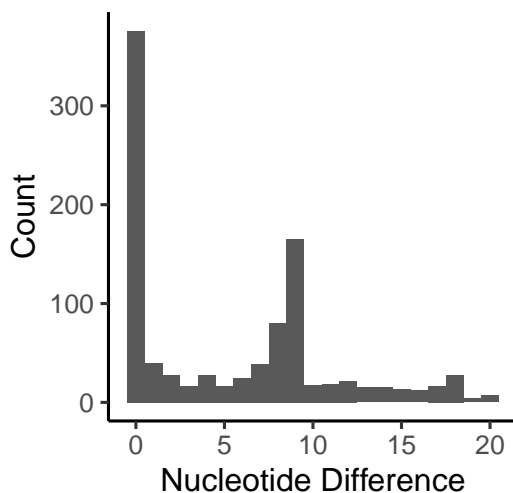
IGHV3-72*01

193 sequences assigned
28 (14.5%) exact matches, in which:
22 unique CDR3
5 unique J



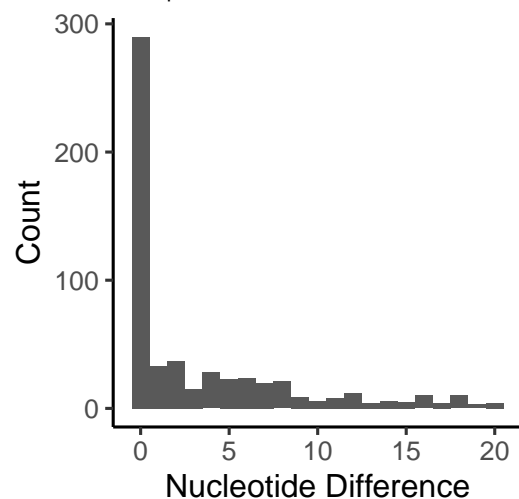
IGHV3-74*01_02

1055 sequences assigned
376 (35.6%) exact matches, in which:
285 unique CDR3
6 unique J



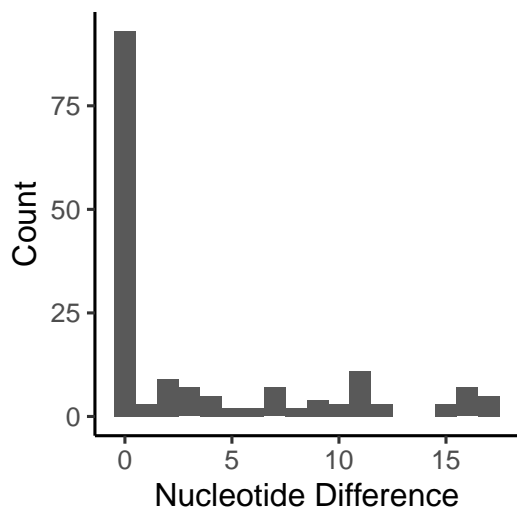
IGHV4-4*02_03

811 sequences assigned
290 (35.8%) exact matches, in which:
280 unique CDR3
6 unique J



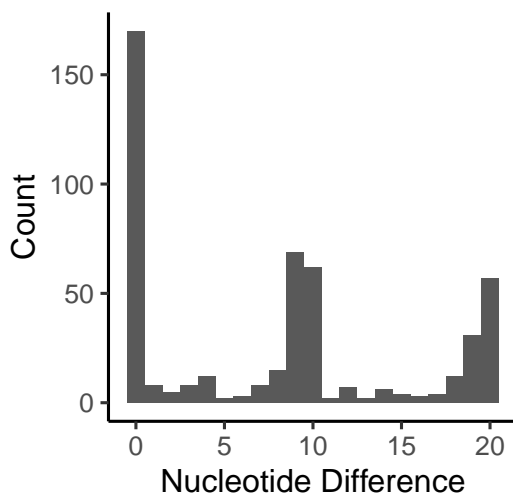
IGHV3-73*01_02

177 sequences assigned
93 (52.5%) exact matches, in which:
73 unique CDR3
5 unique J



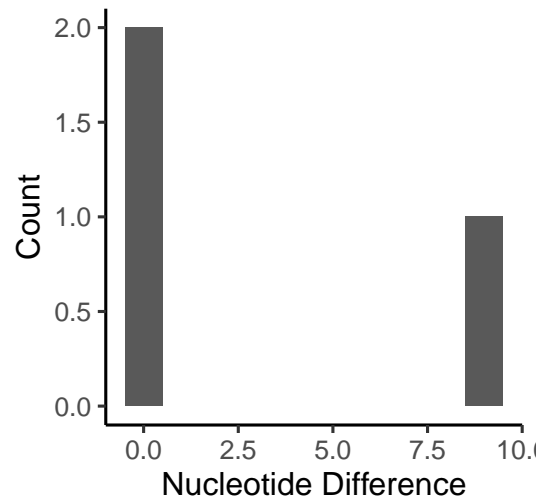
IGHV3-64D*09

539 sequences assigned
170 (31.5%) exact matches, in which:
119 unique CDR3
6 unique J



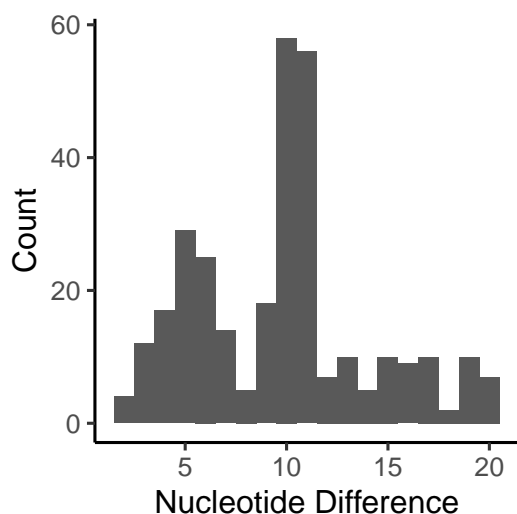
IGHV4-28*01_07

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



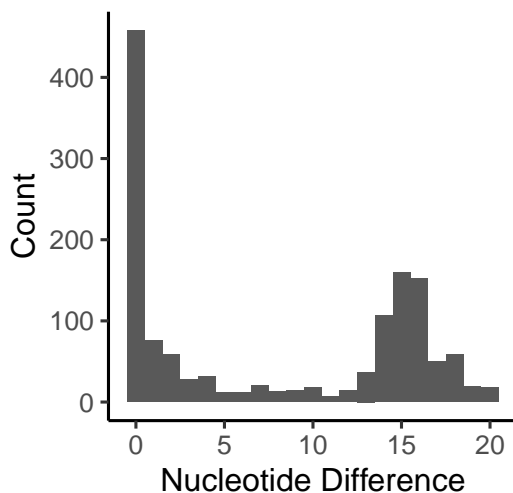
IGHV3-74*03

352 sequences assigned
No exact matches.



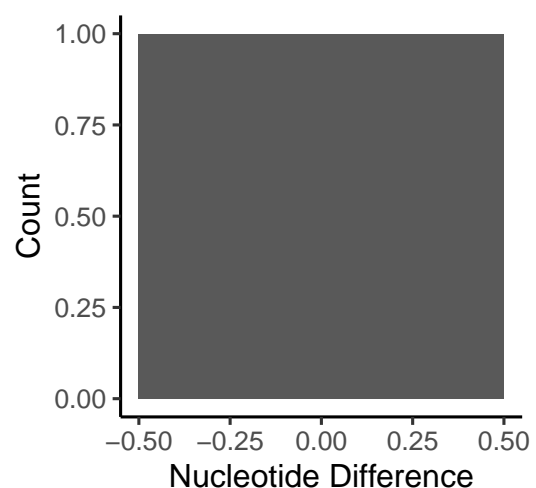
IGHV4-4*07

2163 sequences assigned
458 (21.2%) exact matches, in which:
452 unique CDR3
6 unique J



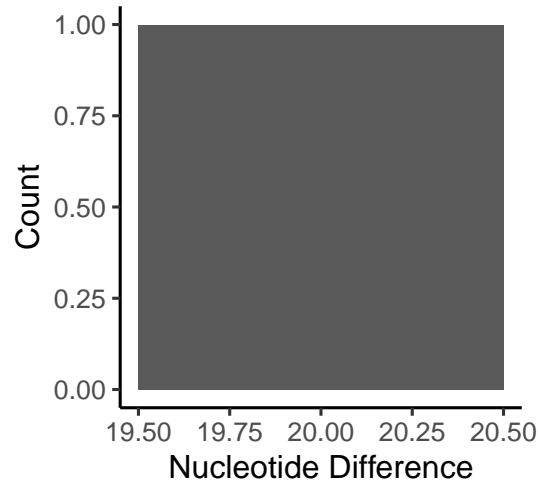
IGHV4-28*02_05

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



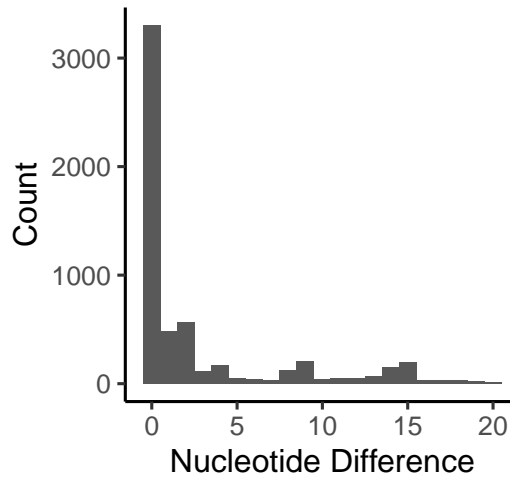
IGHV4-30-2*01

1 sequences assigned
No exact matches.



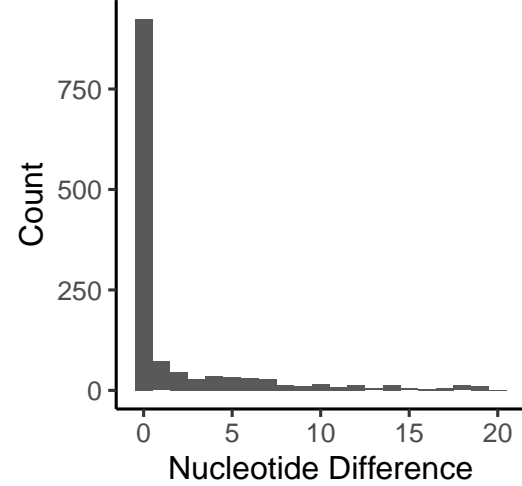
IGHV4-34*01_02

6036 sequences assigned
3301 (54.7%) exact matches, in which:
3200 unique CDR3
6 unique J



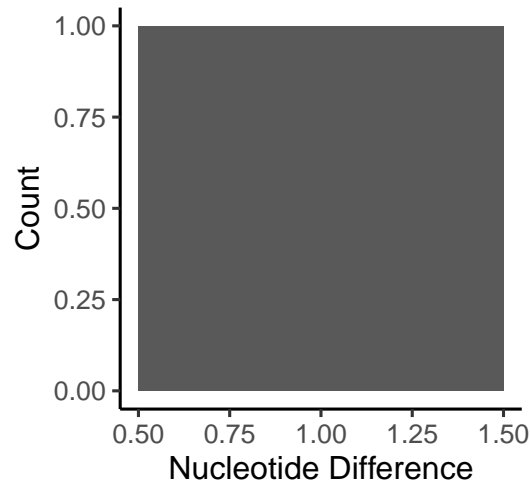
IGHV4-59*01_07

1440 sequences assigned
925 (64.2%) exact matches, in which:
915 unique CDR3
6 unique J



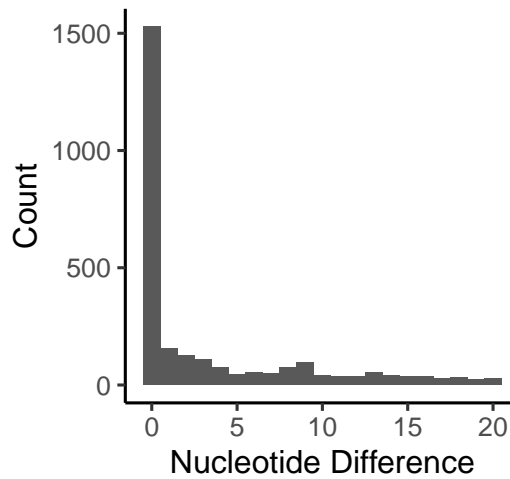
IGHV4-30-4*08

1 sequences assigned
No exact matches.



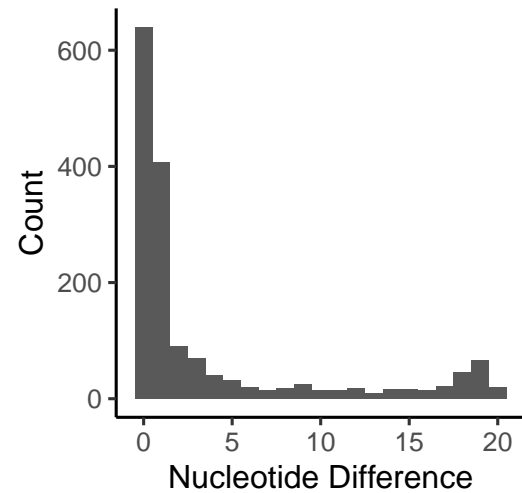
IGHV4-39*02_C258G

3231 sequences assigned
1528 (47.3%) exact matches, in which:
1490 unique CDR3
6 unique J



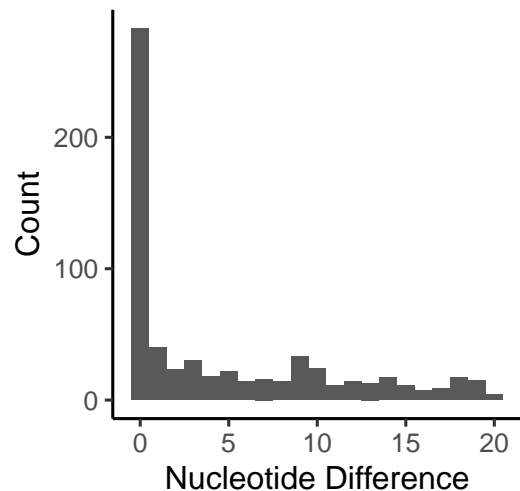
IGHV4-59*13

1770 sequences assigned
640 (36.2%) exact matches, in which:
635 unique CDR3
6 unique J



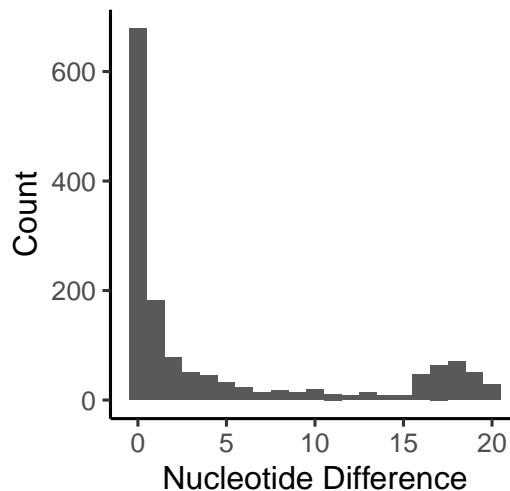
IGHV4-31*02

741 sequences assigned
283 (38.2%) exact matches, in which:
281 unique CDR3
6 unique J



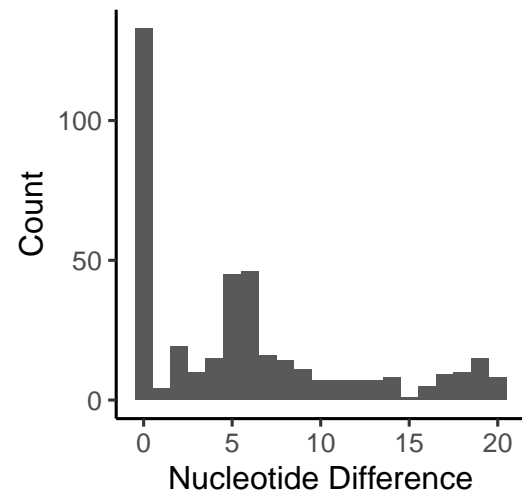
IGHV4-59*08

1928 sequences assigned
679 (35.2%) exact matches, in which:
671 unique CDR3
6 unique J



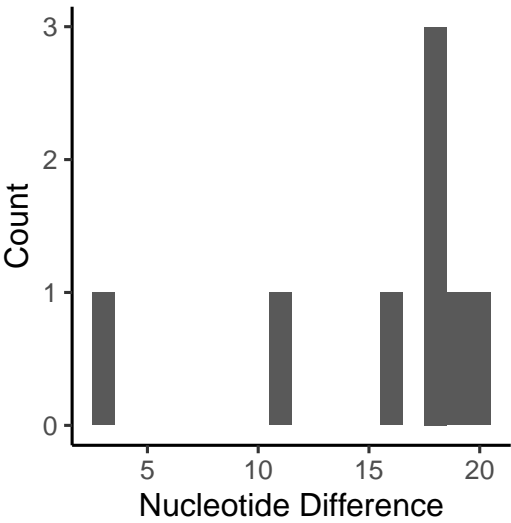
IGHV4-61*01

427 sequences assigned
133 (31.1%) exact matches, in which:
133 unique CDR3
6 unique J



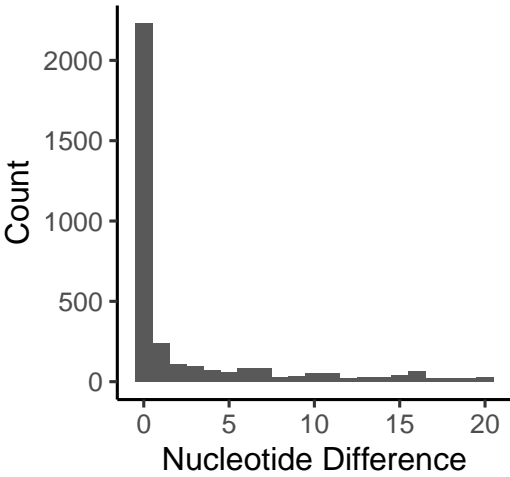
IGHV4/OR15-8*01

11 sequences assigned
No exact matches.



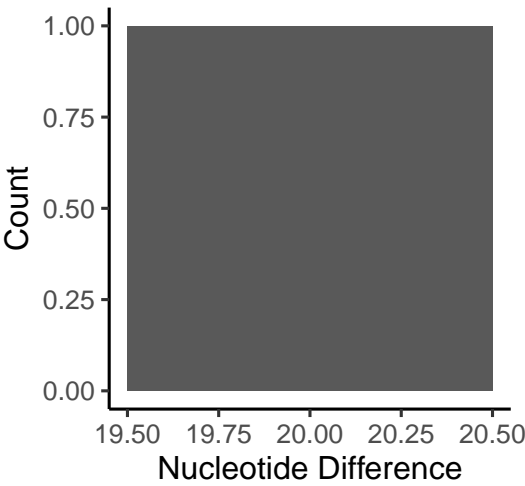
IGHV5-51*07_A128G

3562 sequences assigned
2230 (62.6%) exact matches, in which:
1879 unique CDR3
6 unique J



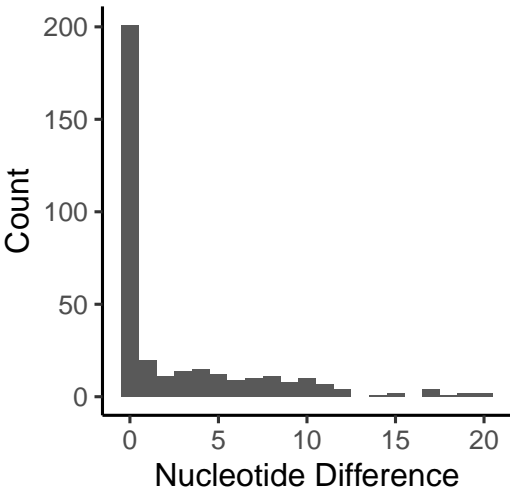
IGHV4/OR15-8*02

4 sequences assigned
No exact matches.



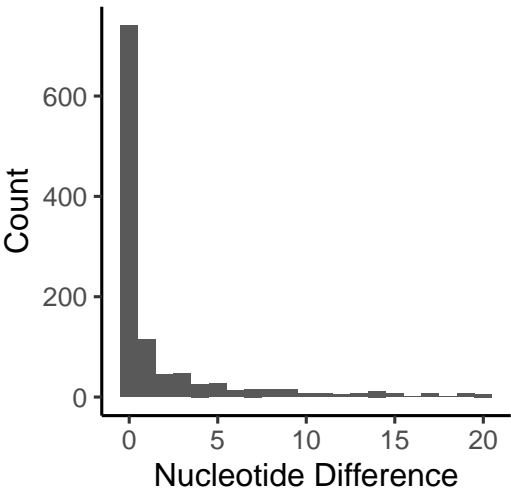
IGHV6-1*01_02

348 sequences assigned
201 (57.8%) exact matches, in which:
198 unique CDR3
6 unique J



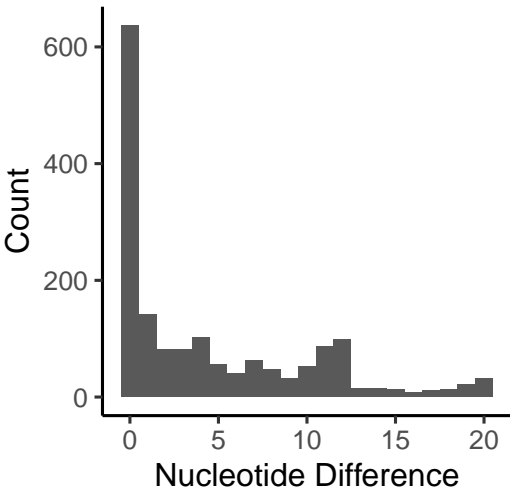
IGHV5-10-1*01_03

1205 sequences assigned
741 (61.5%) exact matches, in which:
647 unique CDR3
6 unique J



IGHV7-4-1*02

2077 sequences assigned
637 (30.7%) exact matches, in which:
628 unique CDR3
6 unique J





Warning – no inferred sequences found.