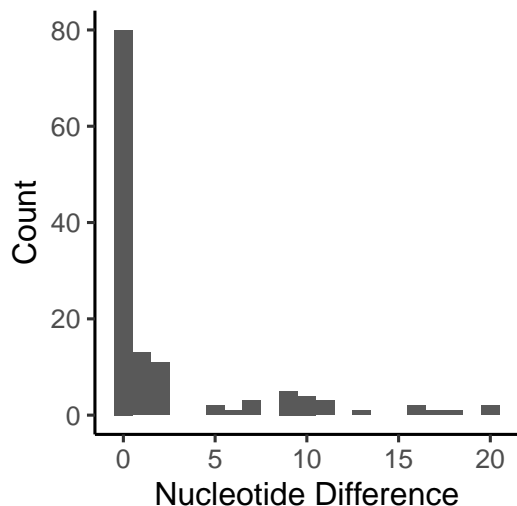


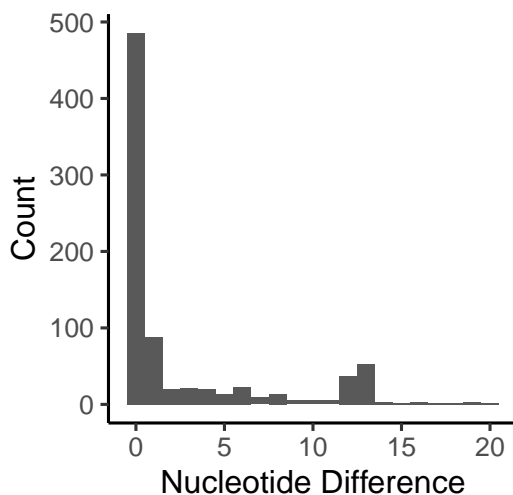
IGHV1-2*04

141 sequences assigned
80 (56.7%) exact matches, in which:
76 unique CDR3
5 unique J



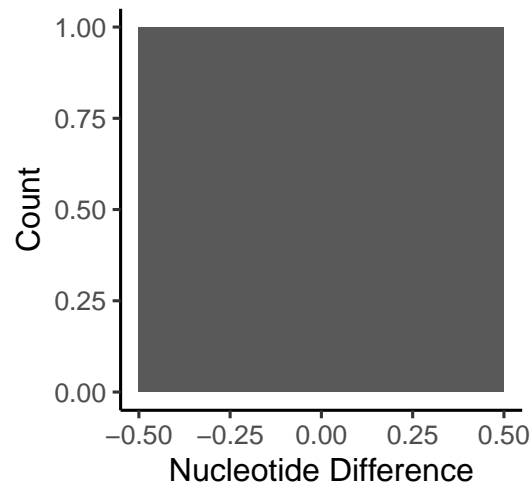
IGHV1-8*01

1044 sequences assigned
486 (46.6%) exact matches, in which:
473 unique CDR3
6 unique J



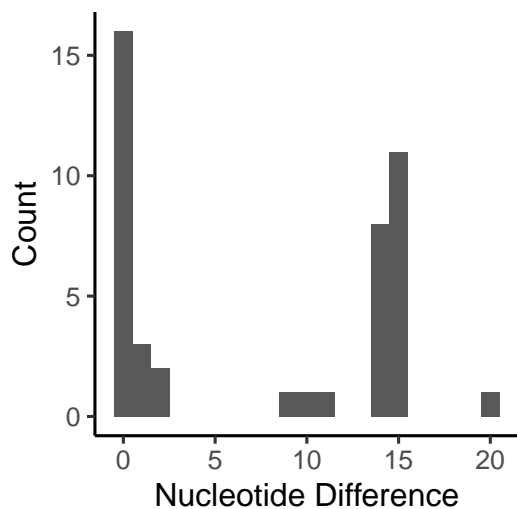
IGHV1-45*02

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



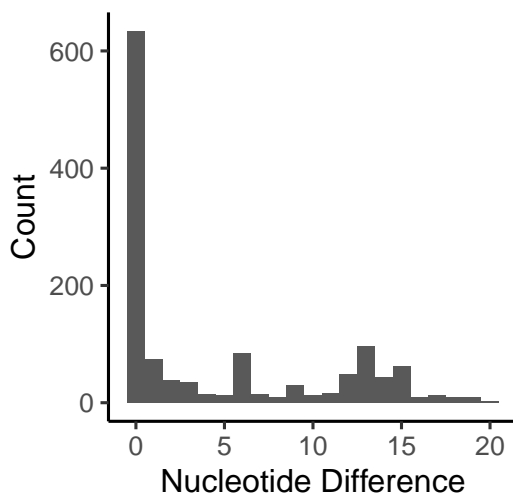
IGHV1-2*05

45 sequences assigned
16 (35.6%) exact matches, in which:
16 unique CDR3
3 unique J



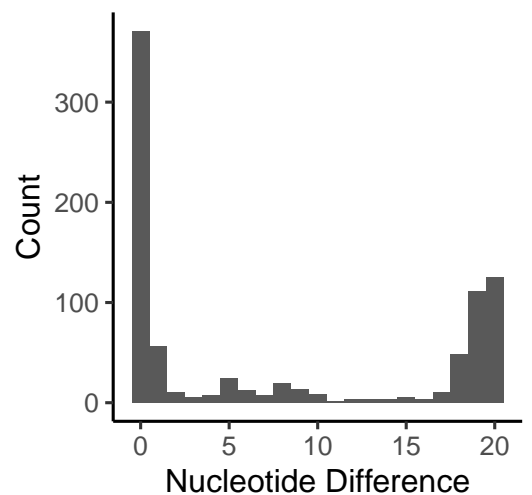
IGHV1-18*01

1444 sequences assigned
634 (43.9%) exact matches, in which:
612 unique CDR3
6 unique J



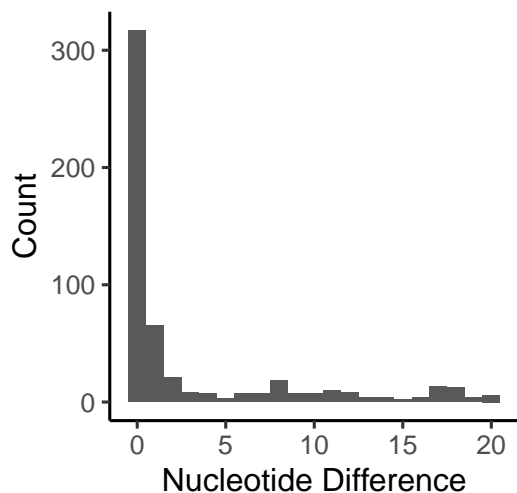
IGHV1-46*01

918 sequences assigned
371 (40.4%) exact matches, in which:
358 unique CDR3
6 unique J



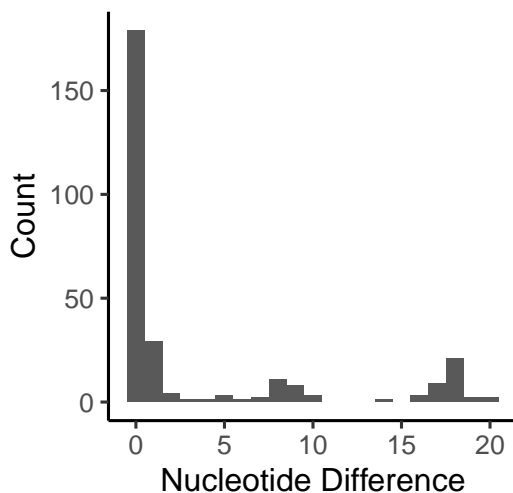
IGHV1-3*01_05

669 sequences assigned
317 (47.4%) exact matches, in which:
303 unique CDR3
6 unique J



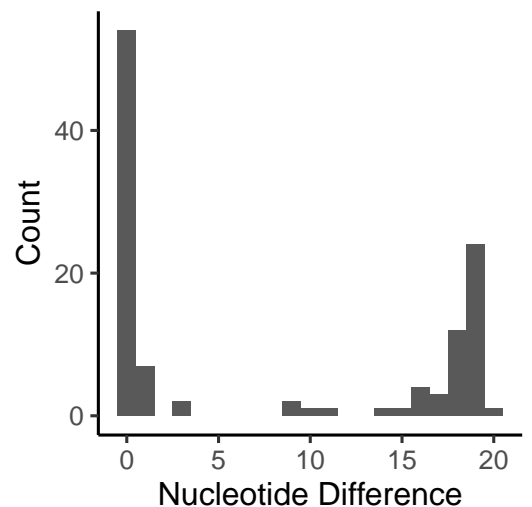
IGHV1-24*01

305 sequences assigned
179 (58.7%) exact matches, in which:
173 unique CDR3
6 unique J



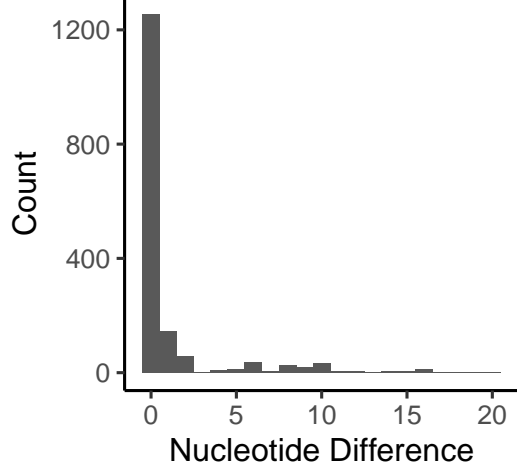
IGHV1-58*01_03

145 sequences assigned
54 (37.2%) exact matches, in which:
54 unique CDR3
5 unique J



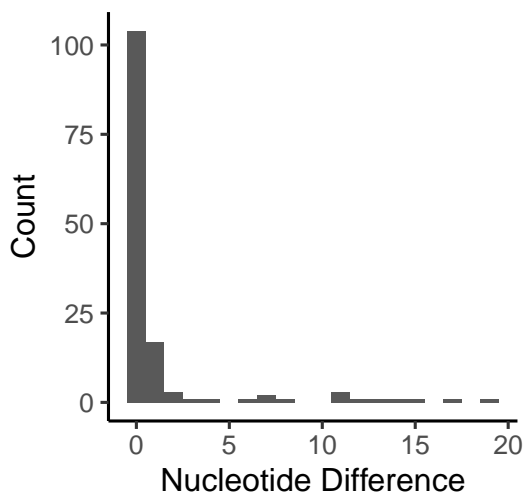
IGHV1-69*01_12_13

1688 sequences assigned
1254 (74.3%) exact matches, in which:
1227 unique CDR3
6 unique J



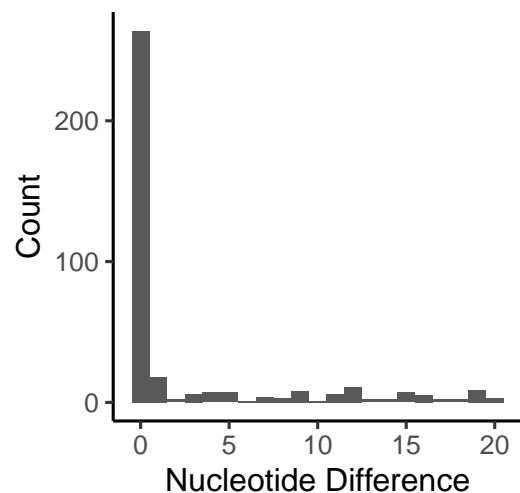
IGHV2-70*01

140 sequences assigned
104 (74.3%) exact matches, in which:
101 unique CDR3
4 unique J



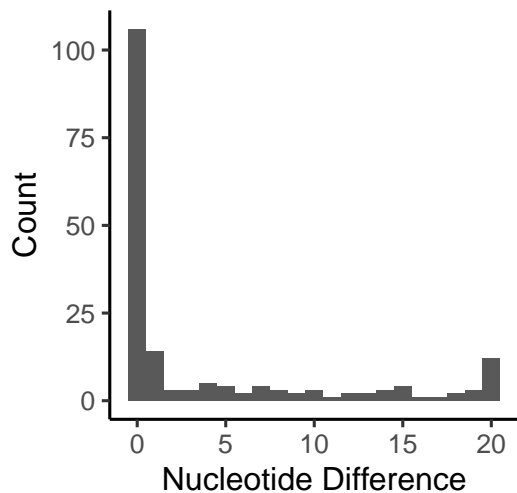
IGHV3-11*01

426 sequences assigned
264 (62%) exact matches, in which:
154 unique CDR3
6 unique J



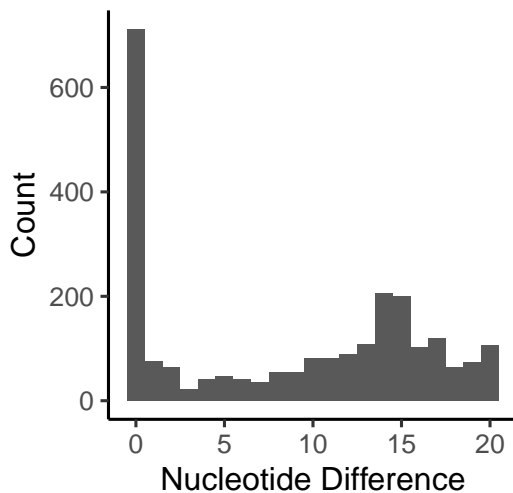
IGHV2-5*02

193 sequences assigned
106 (54.9%) exact matches, in which:
102 unique CDR3
6 unique J



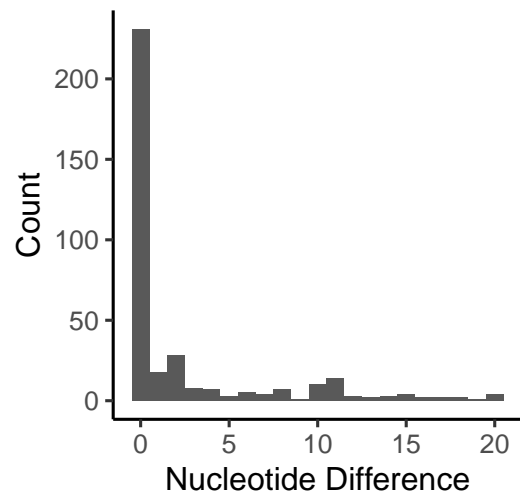
IGHV3-7*01

2844 sequences assigned
712 (25%) exact matches, in which:
406 unique CDR3
6 unique J



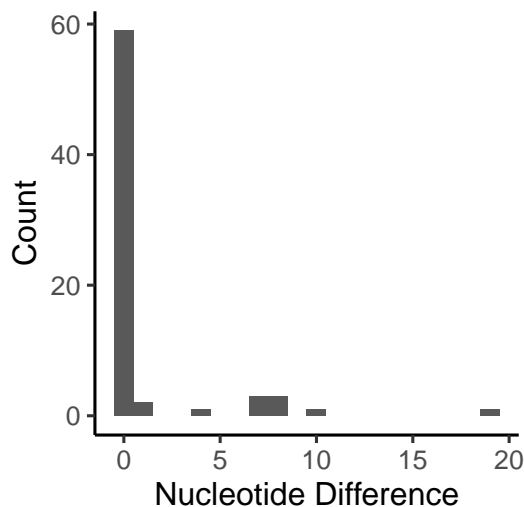
IGHV3-11*04

401 sequences assigned
231 (57.6%) exact matches, in which:
136 unique CDR3
6 unique J



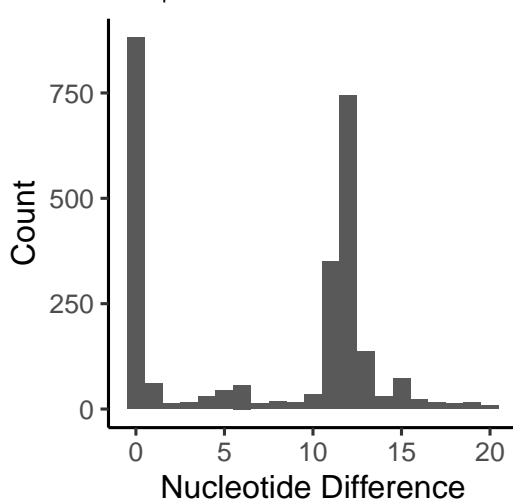
IGHV2-26*01

71 sequences assigned
59 (83.1%) exact matches, in which:
55 unique CDR3
5 unique J



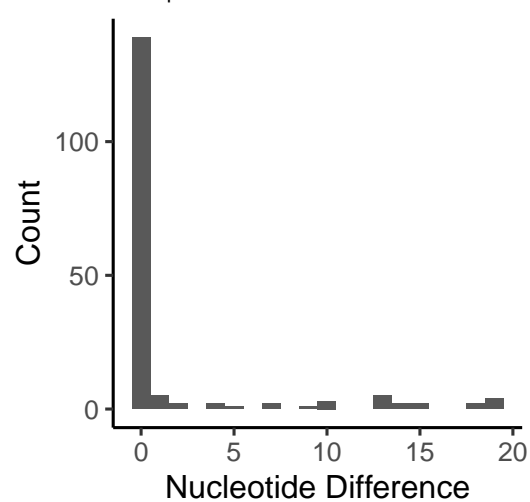
IGHV3-9*01

2650 sequences assigned
882 (33.3%) exact matches, in which:
498 unique CDR3
6 unique J



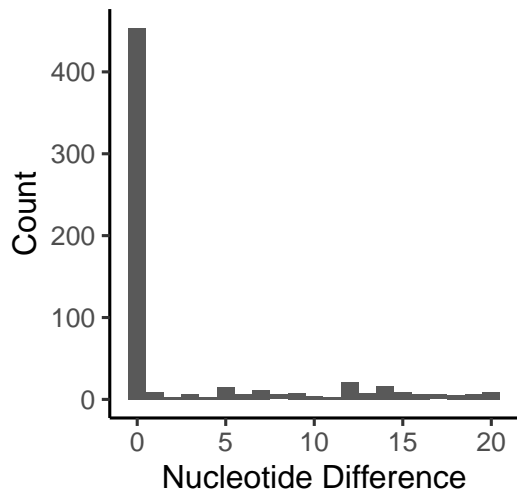
IGHV3-13*01

182 sequences assigned
139 (76.4%) exact matches, in which:
74 unique CDR3
5 unique J



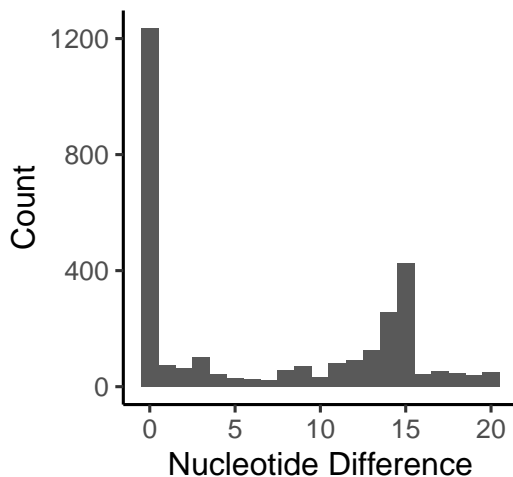
IGHV3–15*01_02

817 sequences assigned
454 (55.6%) exact matches, in which:
270 unique CDR3
5 unique J



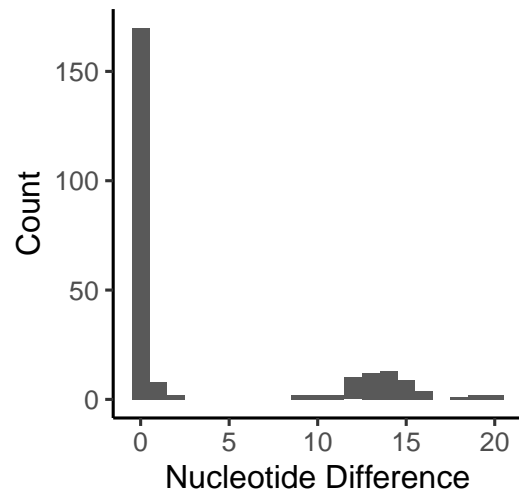
IGHV3–23*01_04

3573 sequences assigned
1235 (34.6%) exact matches, in which:
695 unique CDR3
6 unique J



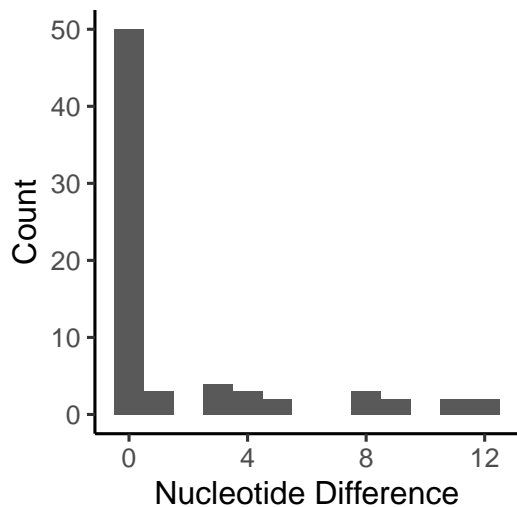
IGHV3–43*02

269 sequences assigned
170 (63.2%) exact matches, in which:
99 unique CDR3
6 unique J



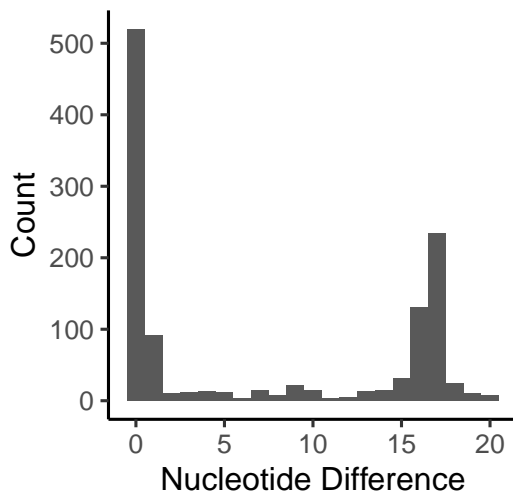
IGHV3–20*01_02

85 sequences assigned
50 (58.8%) exact matches, in which:
31 unique CDR3
5 unique J



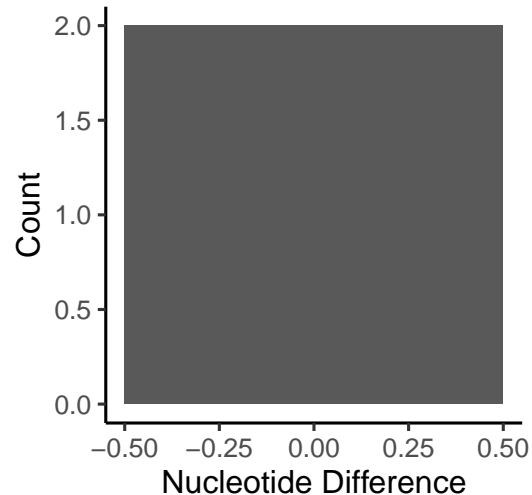
IGHV3–33*01

1430 sequences assigned
520 (36.4%) exact matches, in which:
303 unique CDR3
6 unique J



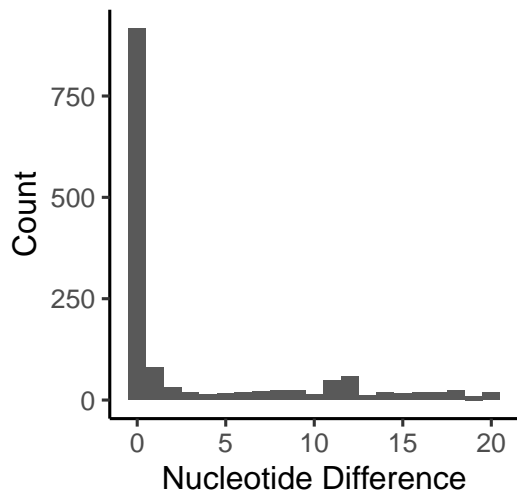
IGHV3–47*01

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



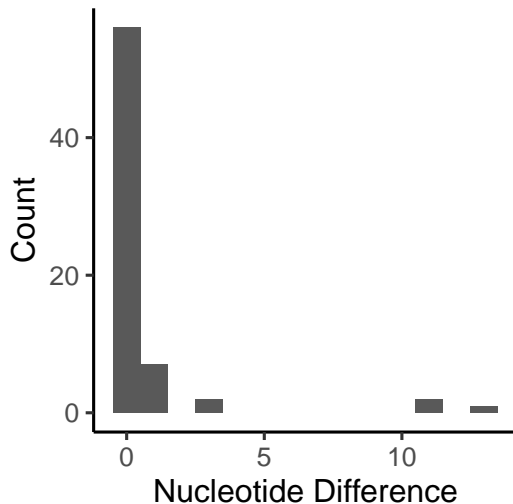
IGHV3–21*01_02

2090 sequences assigned
917 (43.9%) exact matches, in which:
511 unique CDR3
6 unique J



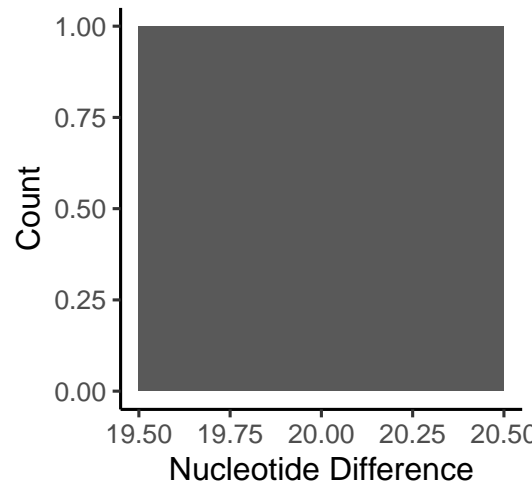
IGHV3–43*01

78 sequences assigned
56 (71.8%) exact matches, in which:
33 unique CDR3
5 unique J



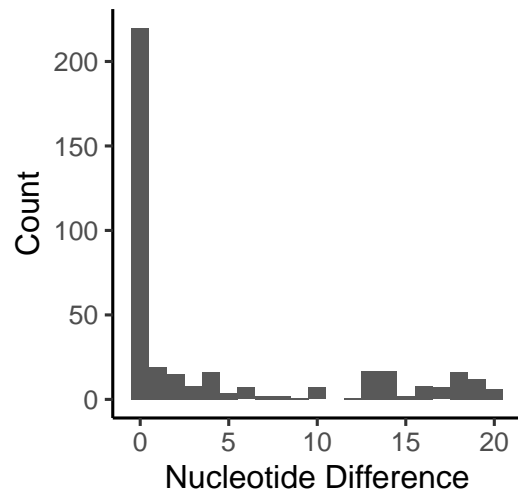
IGHV3–47*02

1 sequences assigned
No exact matches.



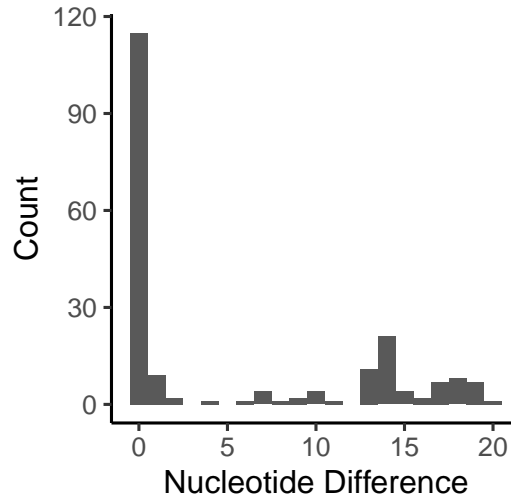
IGHV3-48*02

427 sequences assigned
220 (51.5%) exact matches, in which:
120 unique CDR3
6 unique J



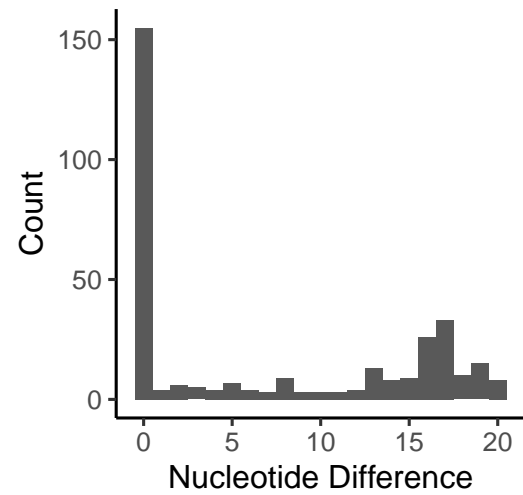
IGHV3-49*04

217 sequences assigned
115 (53%) exact matches, in which:
74 unique CDR3
6 unique J



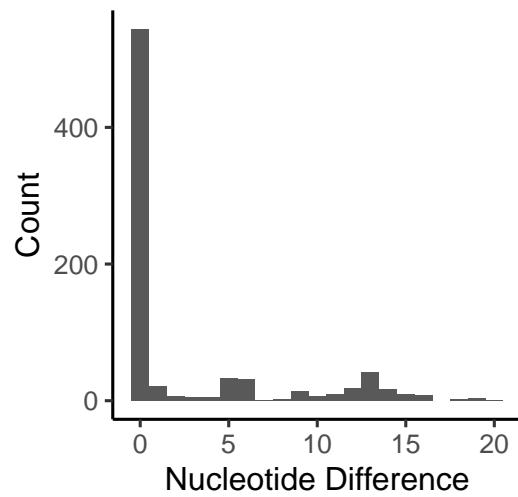
IGHV3-53*01_02

534 sequences assigned
155 (29%) exact matches, in which:
86 unique CDR3
5 unique J



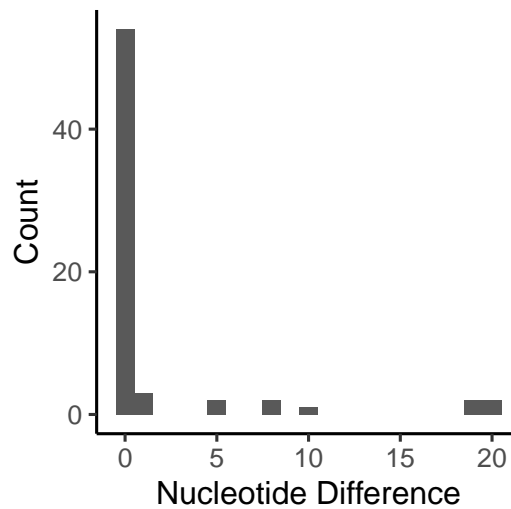
IGHV3-48*03

833 sequences assigned
544 (65.3%) exact matches, in which:
309 unique CDR3
6 unique J



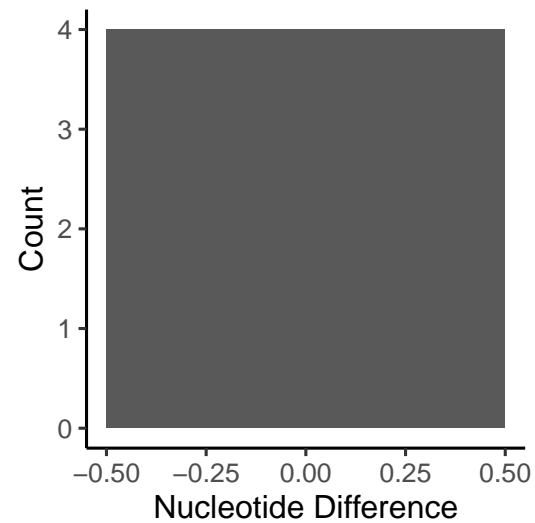
IGHV3-49*03_05

67 sequences assigned
54 (80.6%) exact matches, in which:
32 unique CDR3
5 unique J



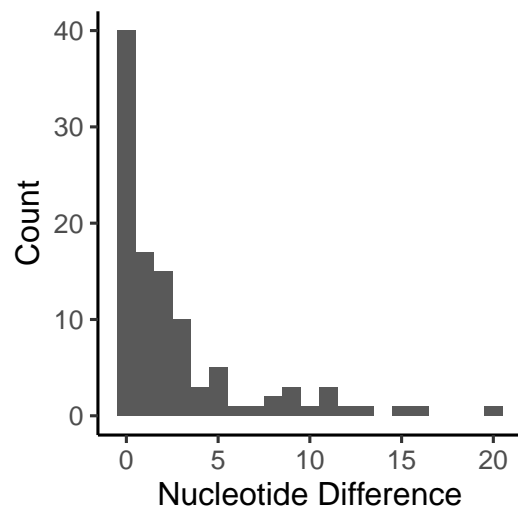
IGHV3-64*02_07

4 sequences assigned
4 (100%) exact matches, in which:
2 unique CDR3
2 unique J



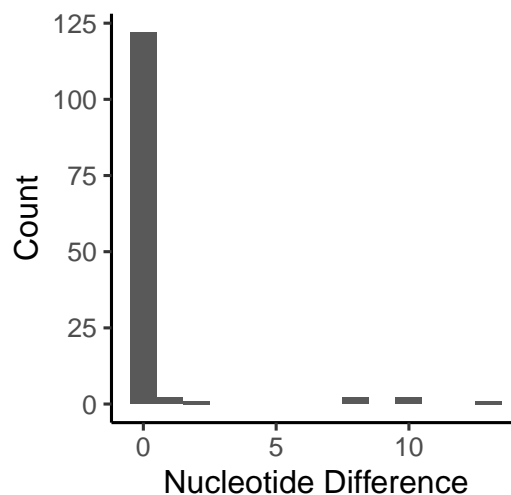
IGHV3-48*03_T303G

128 sequences assigned
40 (31.2%) exact matches, in which:
40 unique CDR3
5 unique J



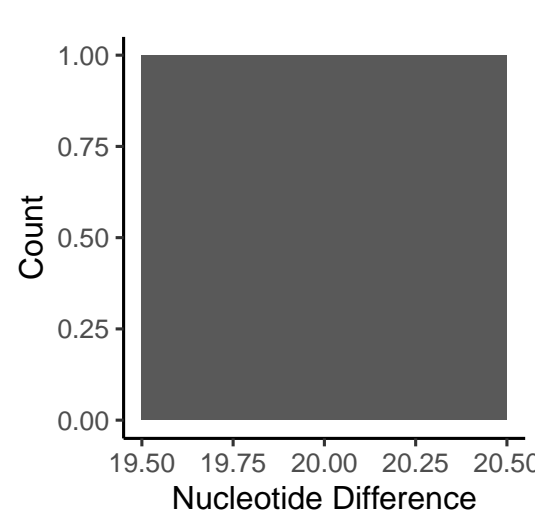
IGHV3-53*04

144 sequences assigned
122 (84.7%) exact matches, in which:
66 unique CDR3
5 unique J



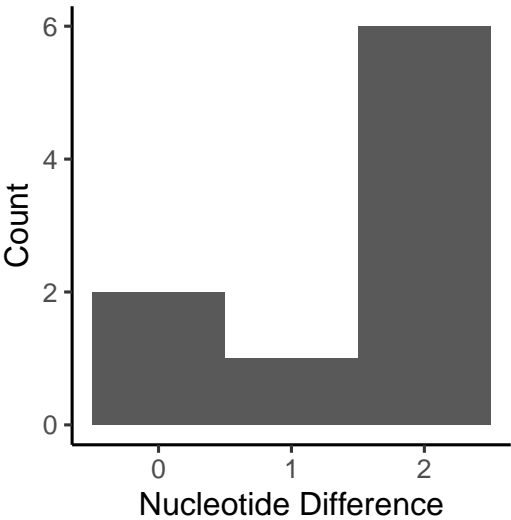
IGHV3-66*02

4 sequences assigned
No exact matches.



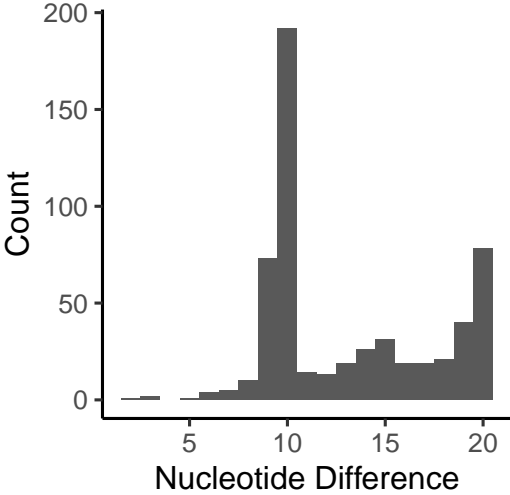
IGHV3-66*03

9 sequences assigned
2 (22.2%) exact matches, in which:
1 unique CDR3
1 unique J



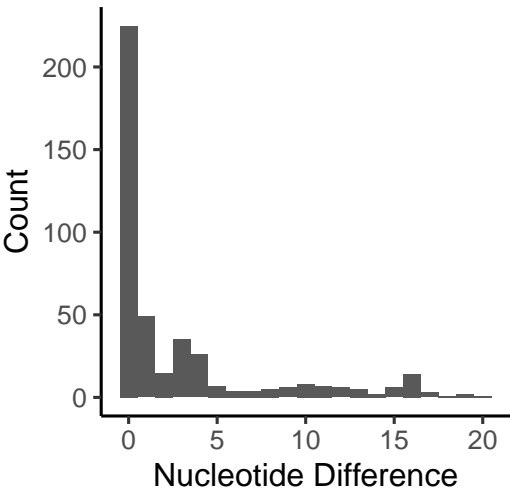
IGHV3-74*03

840 sequences assigned
No exact matches.



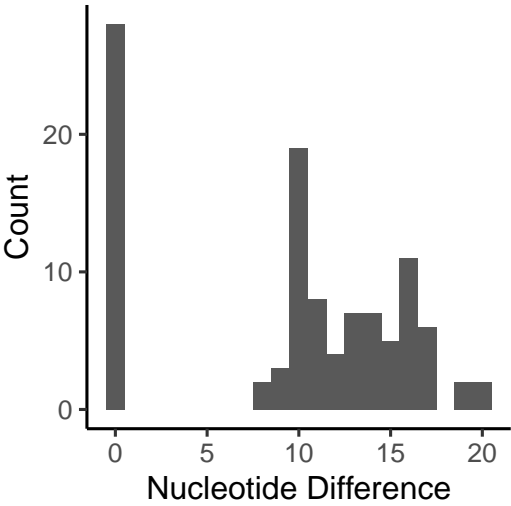
IGHV4-4*07

509 sequences assigned
225 (44.2%) exact matches, in which:
204 unique CDR3
6 unique J



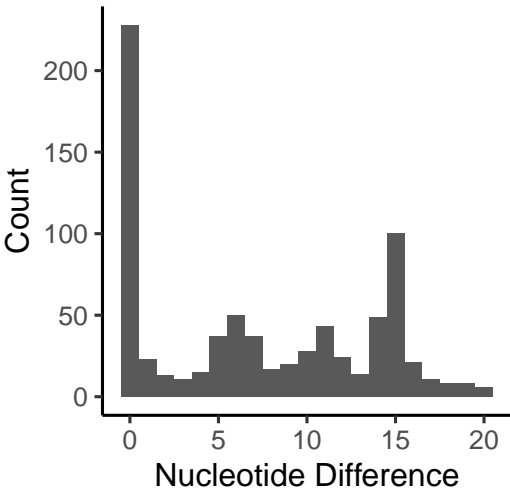
IGHV3-72*01

155 sequences assigned
28 (18.1%) exact matches, in which:
16 unique CDR3
5 unique J



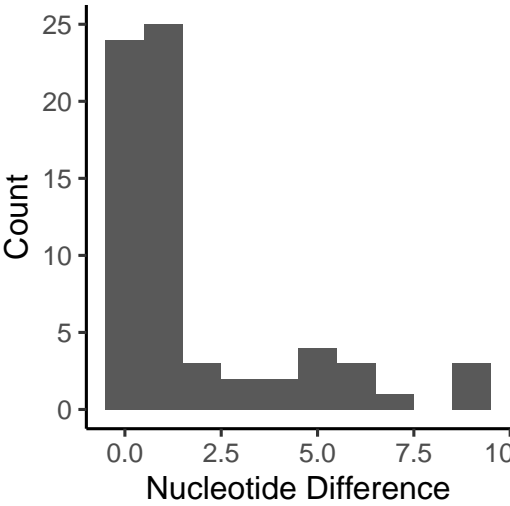
IGHV3-74*01_02

826 sequences assigned
228 (27.6%) exact matches, in which:
121 unique CDR3
5 unique J



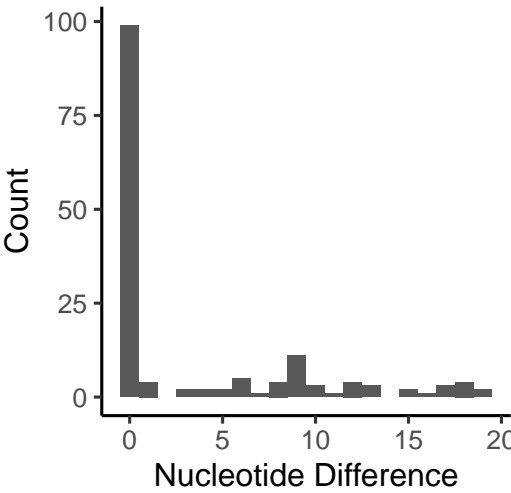
IGHV4-4*07_C288T

67 sequences assigned
24 (35.8%) exact matches, in which:
24 unique CDR3
5 unique J



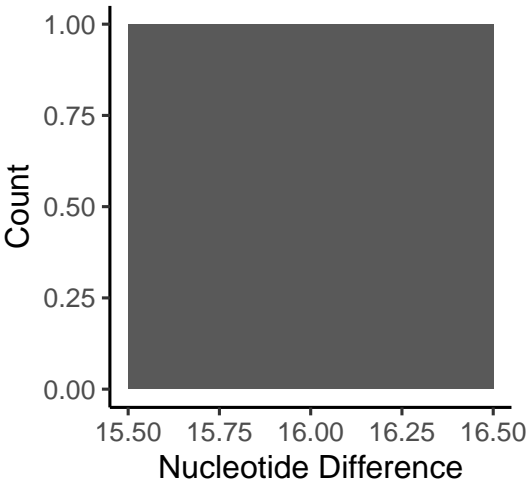
IGHV3-73*01_02

198 sequences assigned
99 (50%) exact matches, in which:
56 unique CDR3
5 unique J



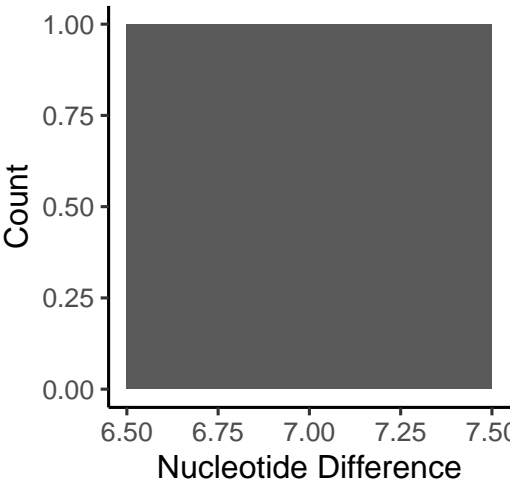
IGHV3-43D*04

1 sequences assigned
No exact matches.



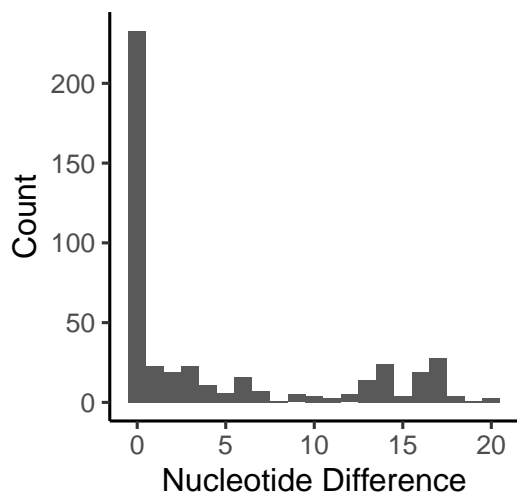
IGHV4-28*02_05

1 sequences assigned
No exact matches.



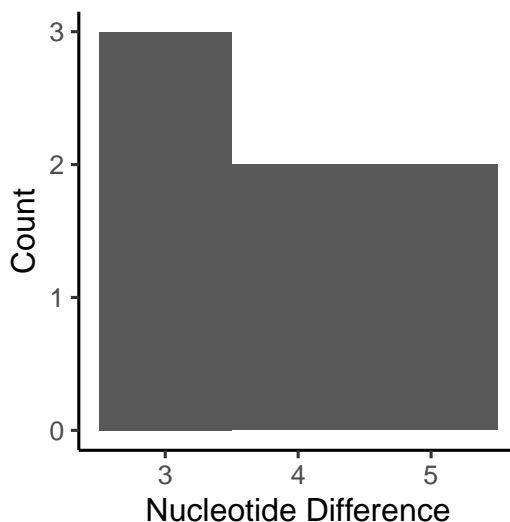
IGHV4-31*02

552 sequences assigned
233 (42.2%) exact matches, in which:
222 unique CDR3
6 unique J



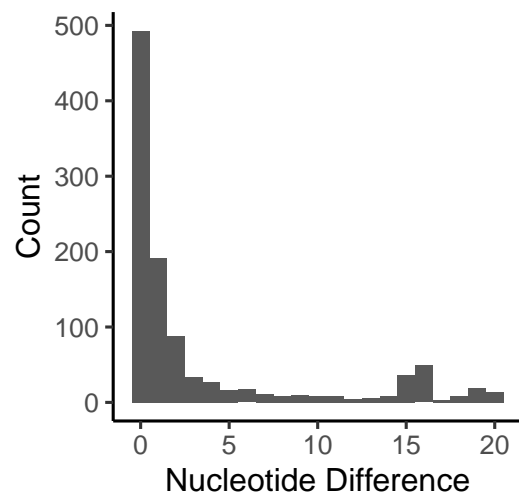
IGHV4-38-2*02

7 sequences assigned
No exact matches.



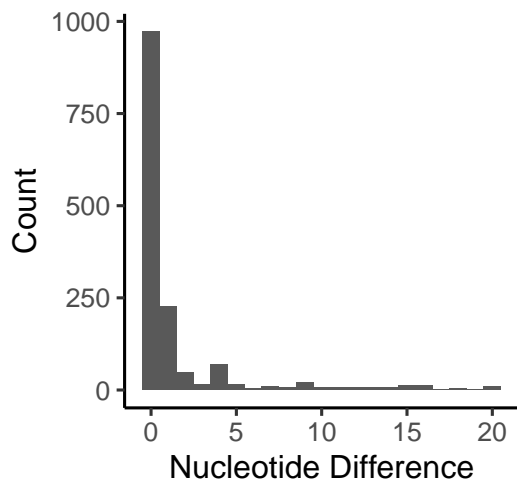
IGHV4-59*13

1276 sequences assigned
493 (38.6%) exact matches, in which:
485 unique CDR3
6 unique J



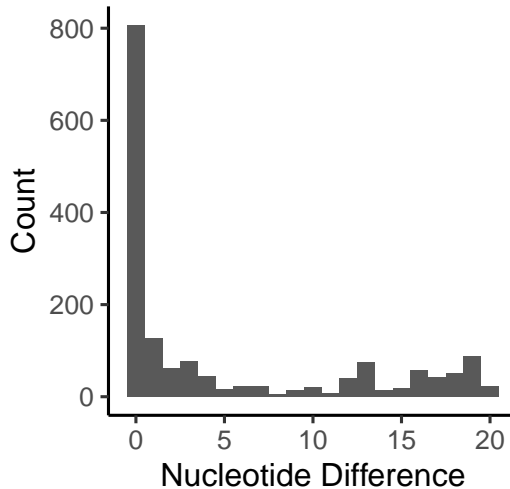
IGHV4-34*01_02

1573 sequences assigned
972 (61.8%) exact matches, in which:
854 unique CDR3
6 unique J



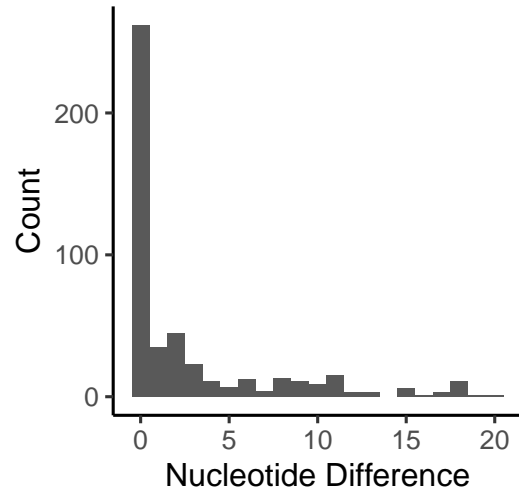
IGHV4-39*02_C258G

1943 sequences assigned
807 (41.5%) exact matches, in which:
743 unique CDR3
6 unique J



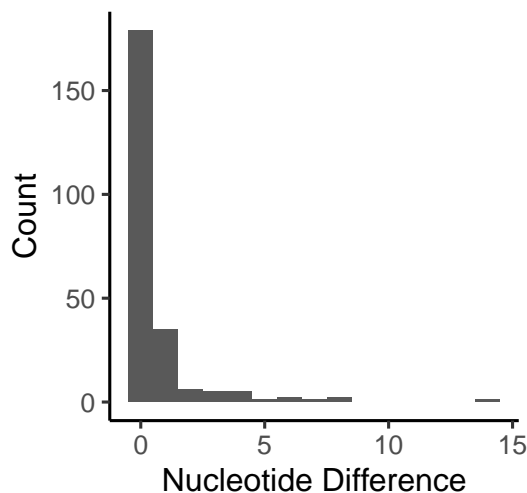
IGHV4-61*01

600 sequences assigned
262 (43.7%) exact matches, in which:
260 unique CDR3
6 unique J



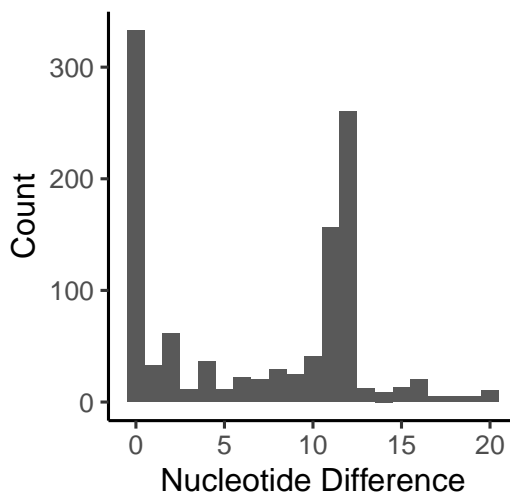
IGHV4-34*01_02_C288T

237 sequences assigned
179 (75.5%) exact matches, in which:
177 unique CDR3
6 unique J



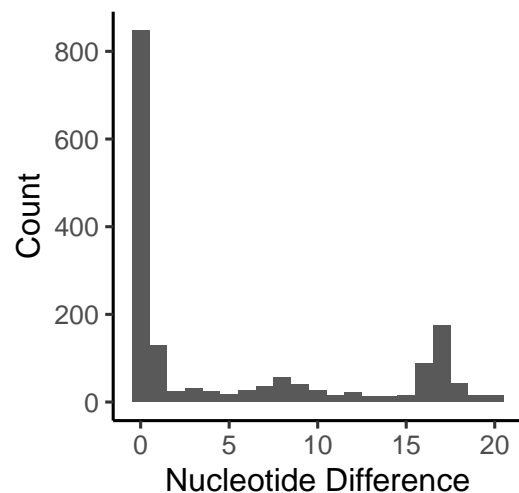
IGHV4-59*01_07

1172 sequences assigned
333 (28.4%) exact matches, in which:
325 unique CDR3
6 unique J



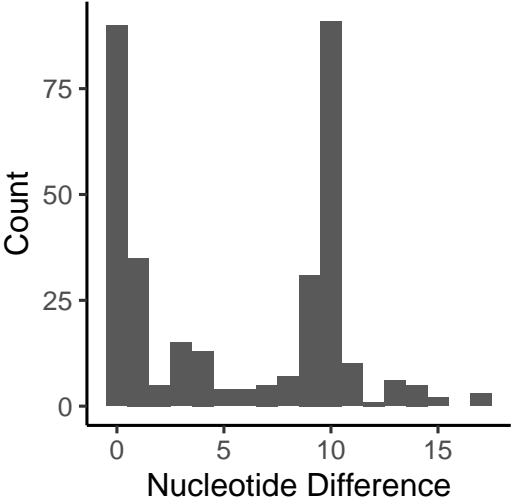
IGHV5-51*07_A128G

1777 sequences assigned
848 (47.7%) exact matches, in which:
509 unique CDR3
6 unique J



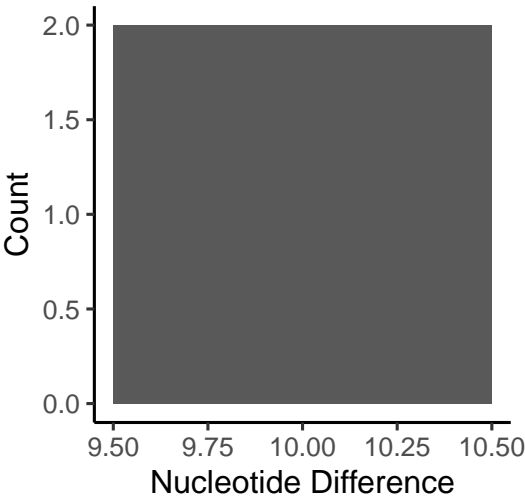
IGHV6-1*01_02

341 sequences assigned
90 (26.4%) exact matches, in which:
90 unique CDR3
5 unique J



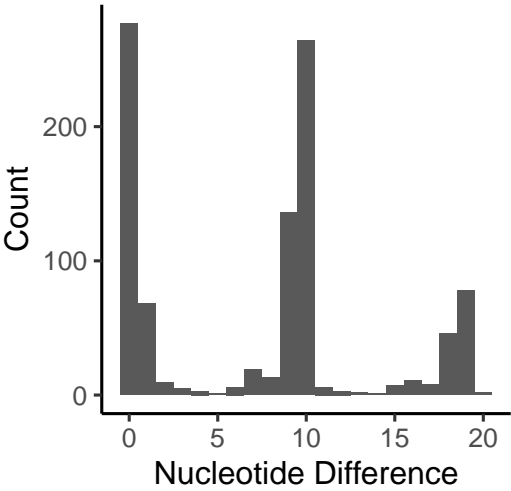
IGHV3/OR16-9*01

2 sequences assigned
No exact matches.



IGHV7-4-1*02

1016 sequences assigned
277 (27.3%) exact matches, in which:
269 unique CDR3
6 unique J





Warning – no inferred sequences found.