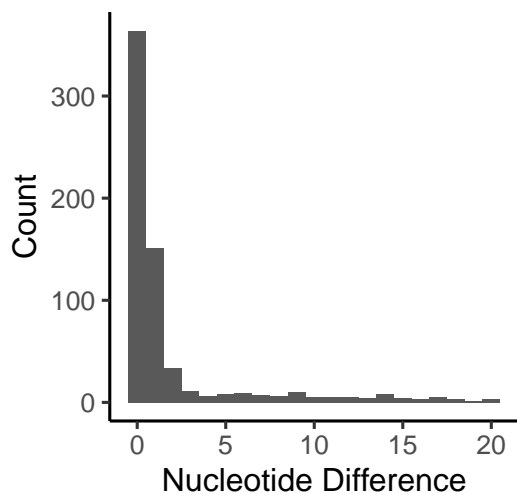


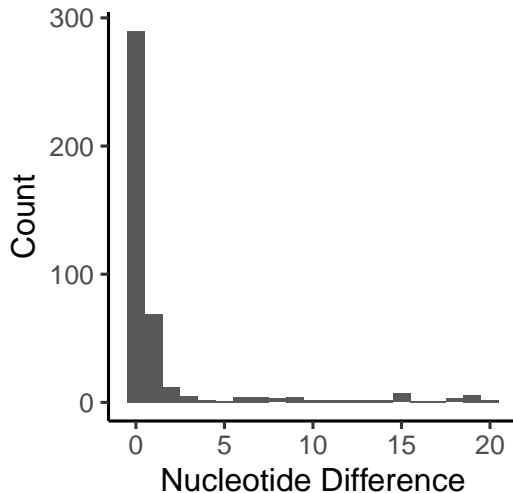
IGHV1-2*02

673 sequences assigned
364 (54.1%) exact matches, in which:
349 unique CDR3
6 unique J



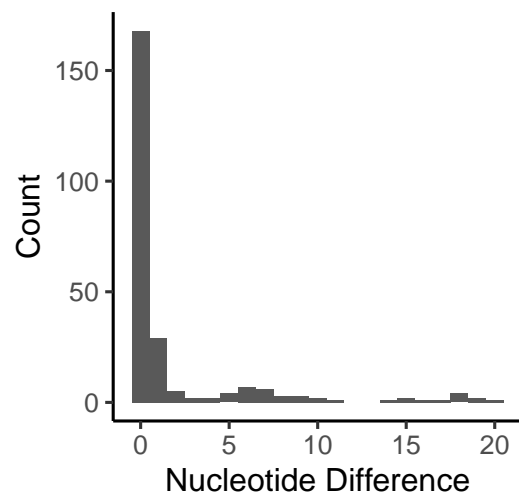
IGHV1-18*01

440 sequences assigned
290 (65.9%) exact matches, in which:
282 unique CDR3
6 unique J



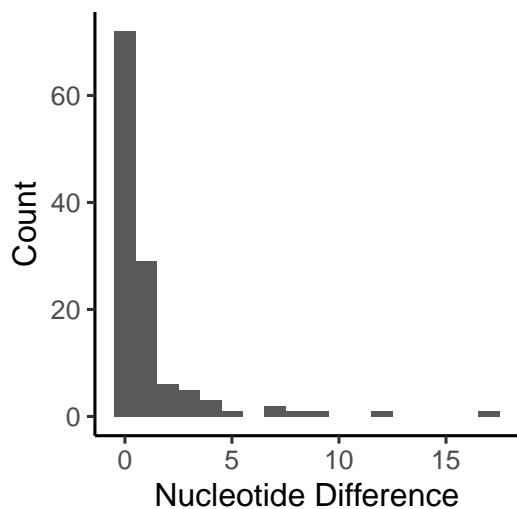
IGHV1-46*01

248 sequences assigned
168 (67.7%) exact matches, in which:
165 unique CDR3
6 unique J



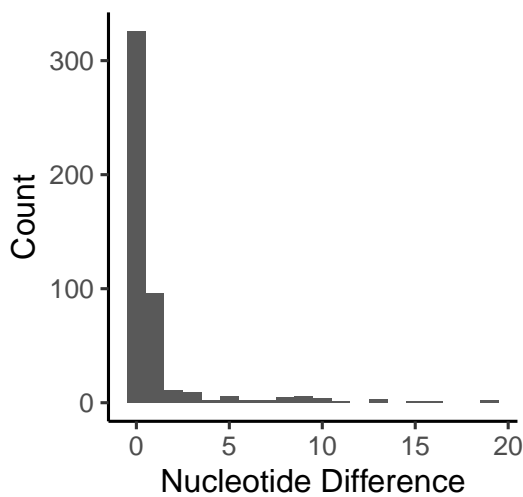
IGHV1-2*04

123 sequences assigned
72 (58.5%) exact matches, in which:
69 unique CDR3
5 unique J



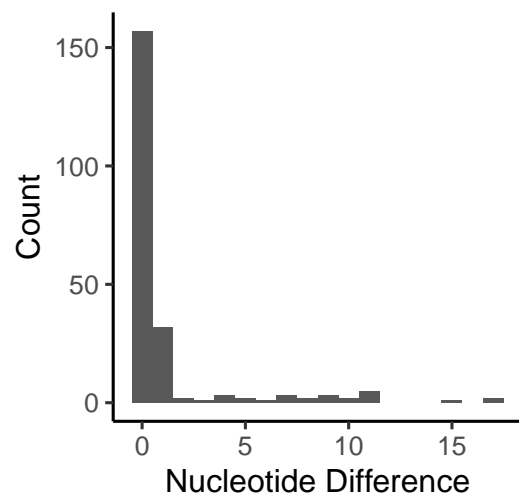
IGHV1-18*04

487 sequences assigned
326 (66.9%) exact matches, in which:
321 unique CDR3
6 unique J



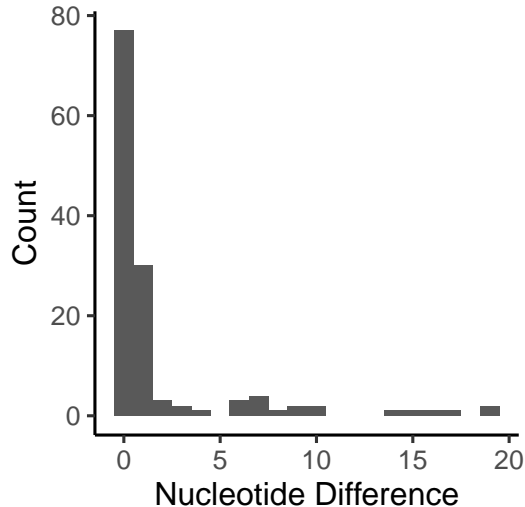
IGHV1-46*03

222 sequences assigned
157 (70.7%) exact matches, in which:
154 unique CDR3
6 unique J



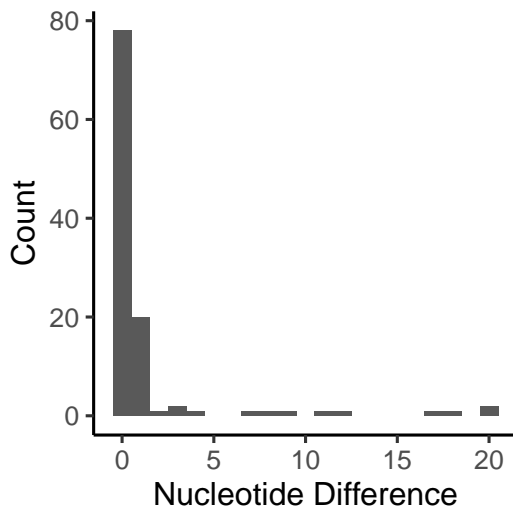
IGHV1-3*01

146 sequences assigned
77 (52.7%) exact matches, in which:
77 unique CDR3
5 unique J



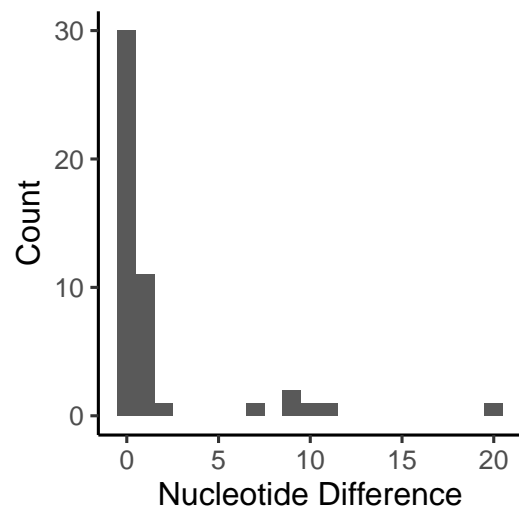
IGHV1-24*01

116 sequences assigned
78 (67.2%) exact matches, in which:
78 unique CDR3
5 unique J



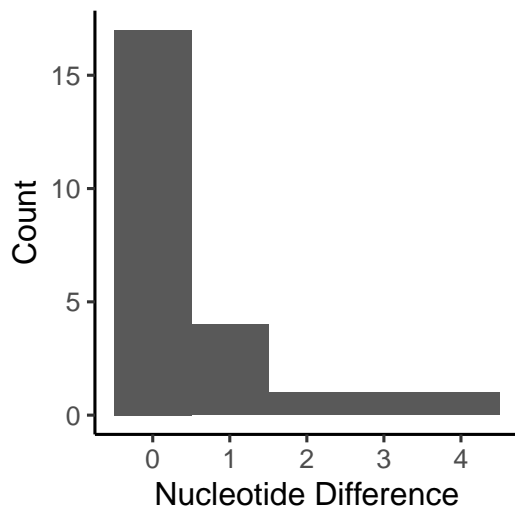
IGHV1-58*01

48 sequences assigned
30 (62.5%) exact matches, in which:
30 unique CDR3
4 unique J



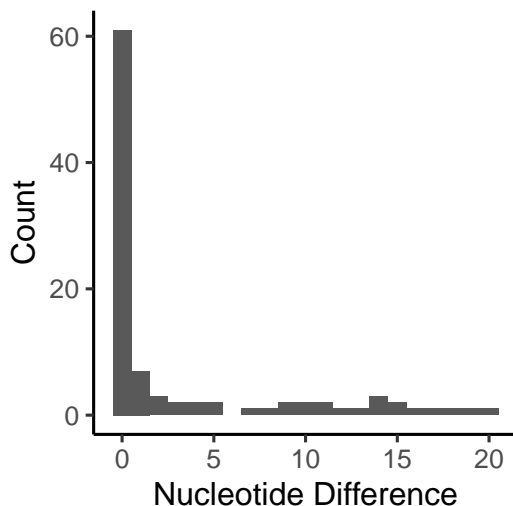
IGHV1-69-2*01

25 sequences assigned
17 (68%) exact matches, in which:
17 unique CDR3
4 unique J



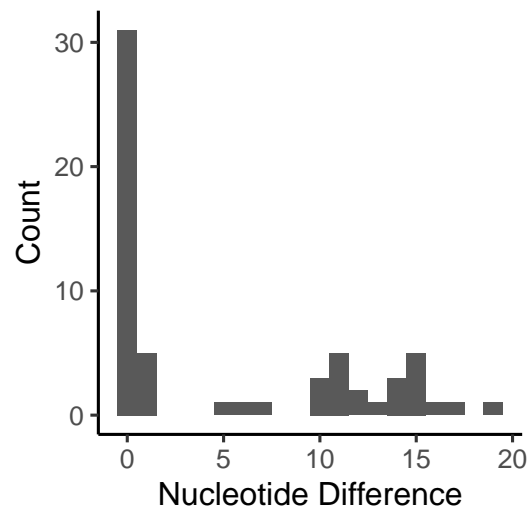
IGHV2-5*02

102 sequences assigned
61 (59.8%) exact matches, in which:
58 unique CDR3
5 unique J



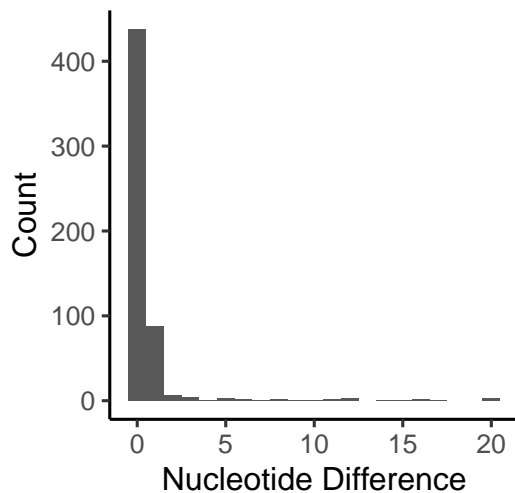
IGHV3-7*01

64 sequences assigned
31 (48.4%) exact matches, in which:
31 unique CDR3
5 unique J



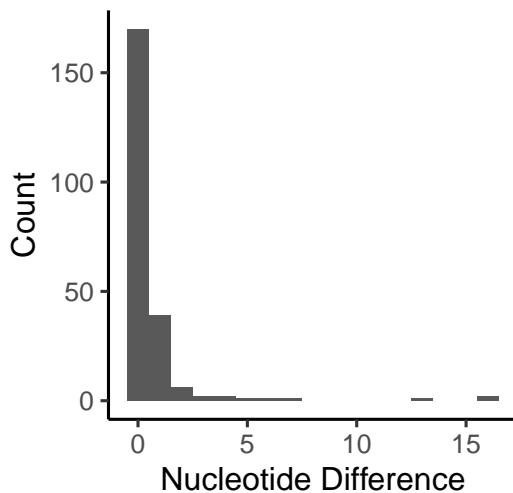
IGHV1-69*06

569 sequences assigned
438 (77%) exact matches, in which:
420 unique CDR3
6 unique J



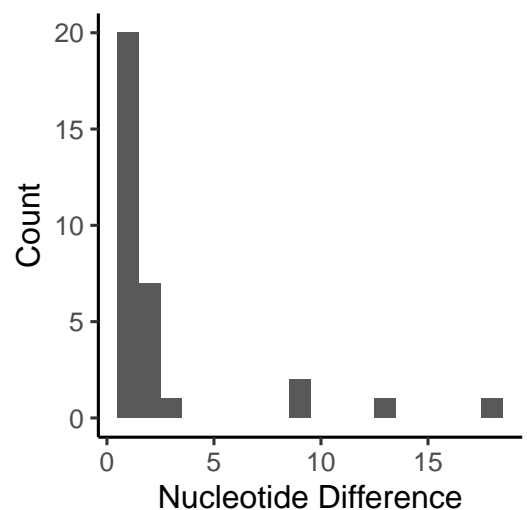
IGHV2-26*01

227 sequences assigned
170 (74.9%) exact matches, in which:
168 unique CDR3
6 unique J



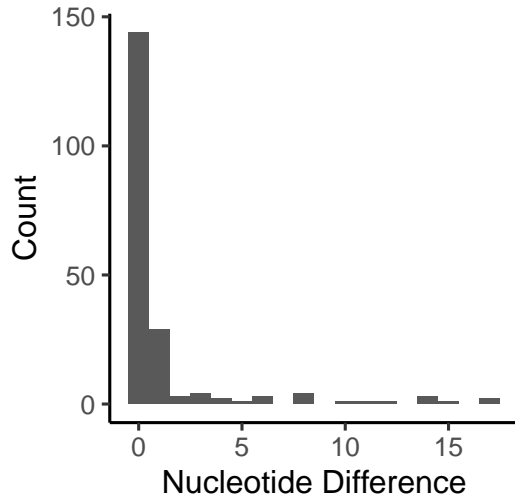
IGHV3-7*04

33 sequences assigned
No exact matches.



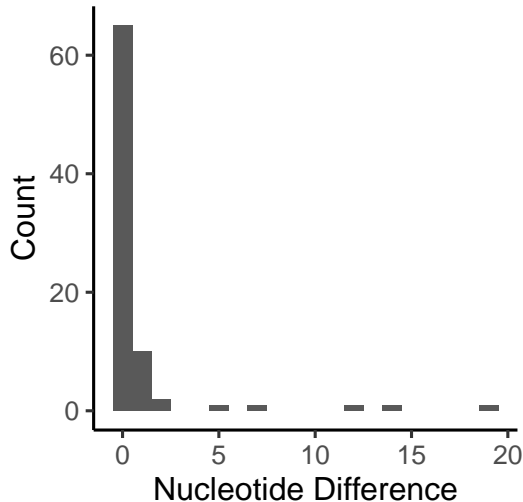
IGHV2-5*01

201 sequences assigned
144 (71.6%) exact matches, in which:
143 unique CDR3
6 unique J



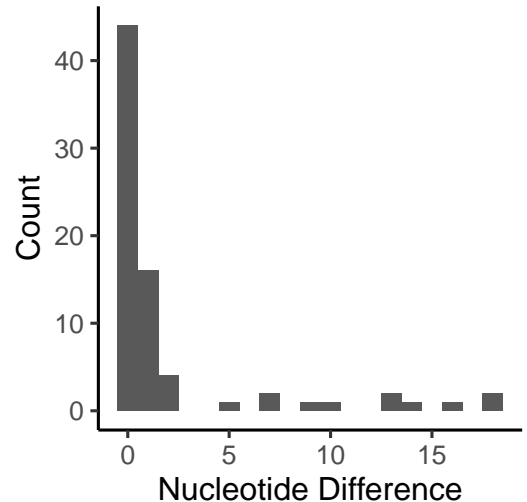
IGHV2-70*01

82 sequences assigned
65 (79.3%) exact matches, in which:
65 unique CDR3
5 unique J



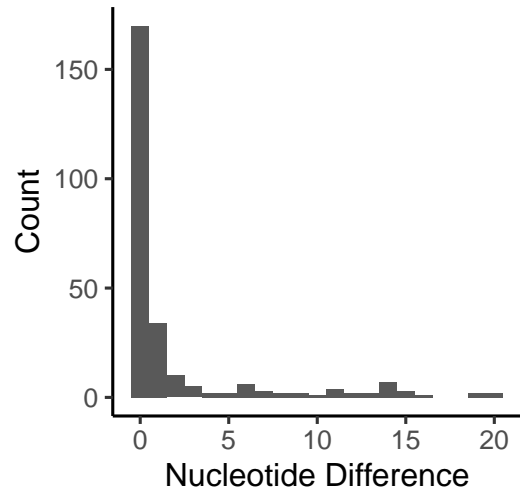
IGHV3-7*05

77 sequences assigned
44 (57.1%) exact matches, in which:
43 unique CDR3
5 unique J



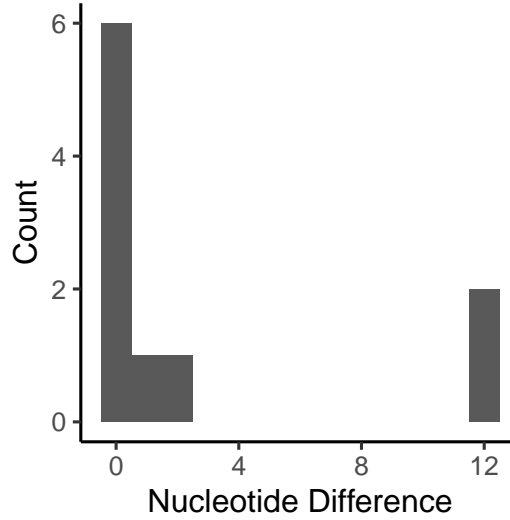
IGHV3-11*05

272 sequences assigned
170 (62.5%) exact matches, in which:
169 unique CDR3
6 unique J



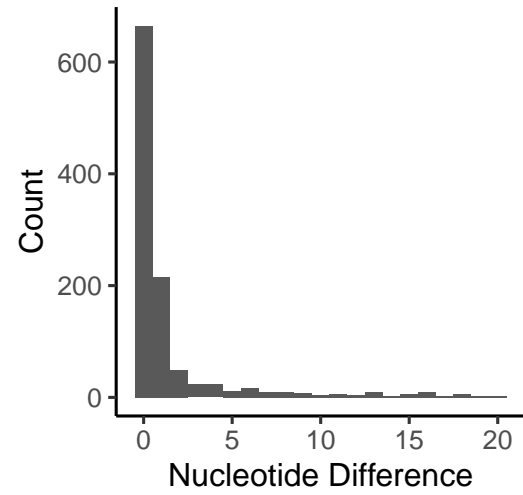
IGHV3-13*05

10 sequences assigned
6 (60%) exact matches, in which:
6 unique CDR3
3 unique J



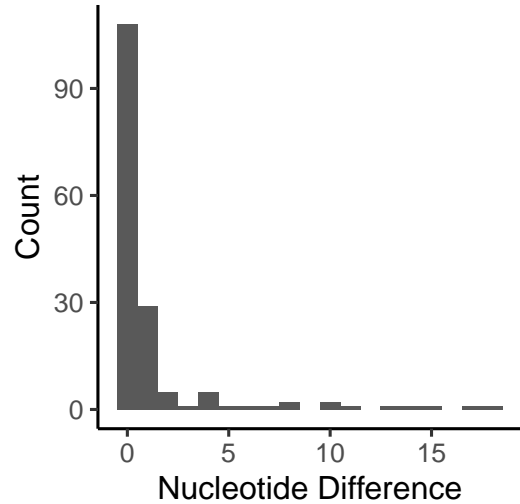
IGHV3-21*01

1113 sequences assigned
665 (59.7%) exact matches, in which:
647 unique CDR3
6 unique J



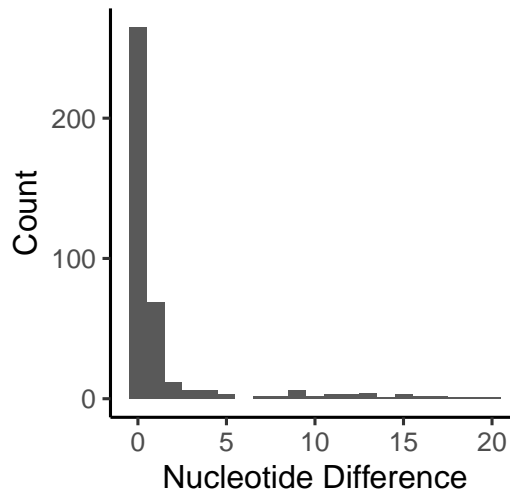
IGHV3-11*06

163 sequences assigned
108 (66.3%) exact matches, in which:
105 unique CDR3
5 unique J



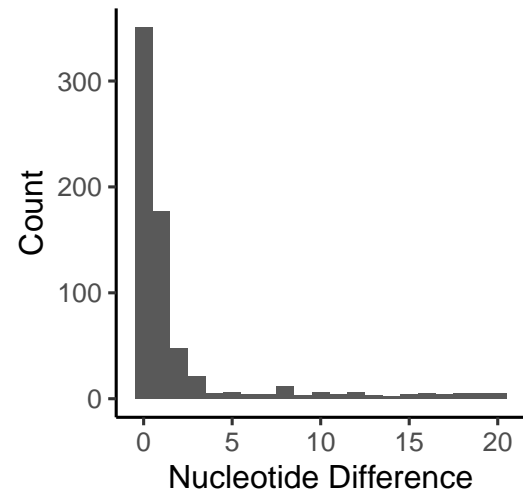
IGHV3-15*01

403 sequences assigned
265 (65.8%) exact matches, in which:
264 unique CDR3
6 unique J



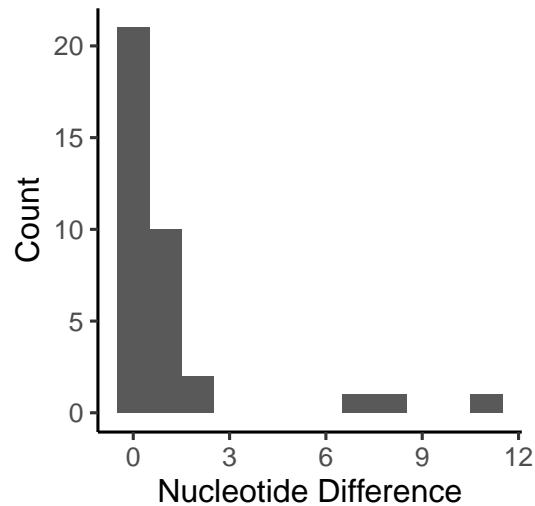
IGHV3-33*01

696 sequences assigned
351 (50.4%) exact matches, in which:
340 unique CDR3
6 unique J



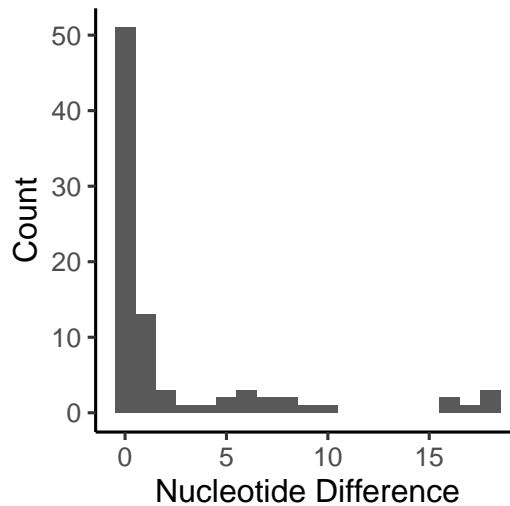
IGHV3-13*04

36 sequences assigned
21 (58.3%) exact matches, in which:
21 unique CDR3
4 unique J



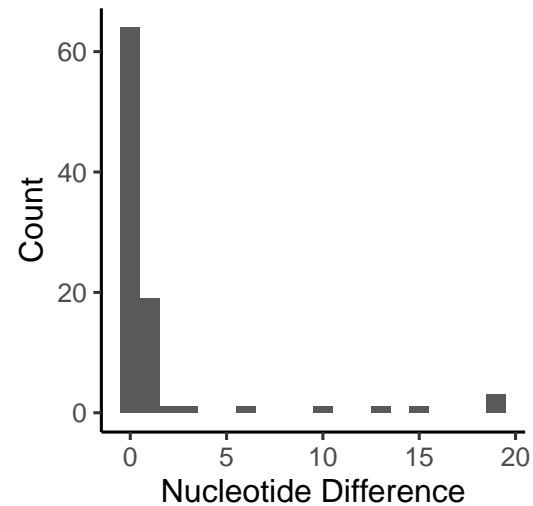
IGHV3-20*04

86 sequences assigned
51 (59.3%) exact matches, in which:
51 unique CDR3
4 unique J



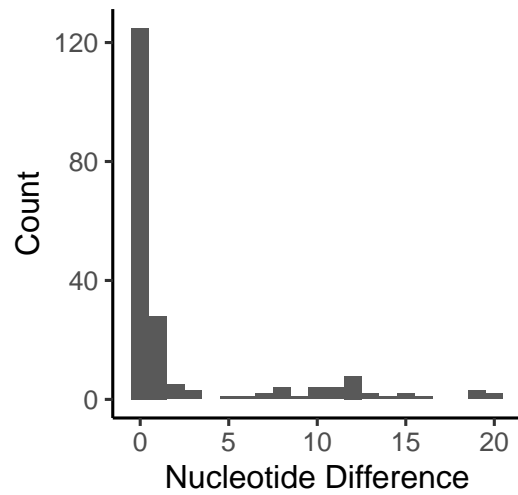
IGHV3-43*02

95 sequences assigned
64 (67.4%) exact matches, in which:
63 unique CDR3
6 unique J



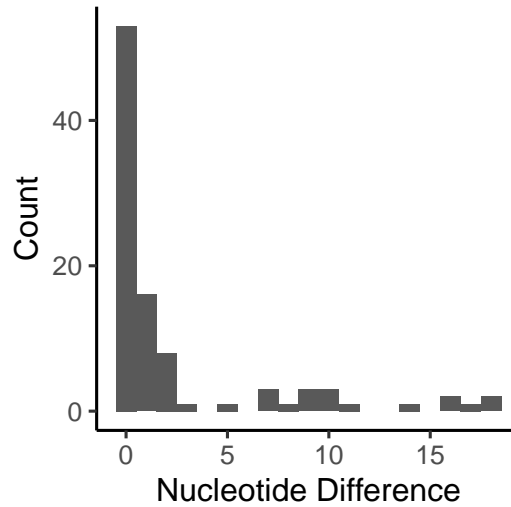
IGHV3-48*01

204 sequences assigned
125 (61.3%) exact matches, in which:
123 unique CDR3
6 unique J



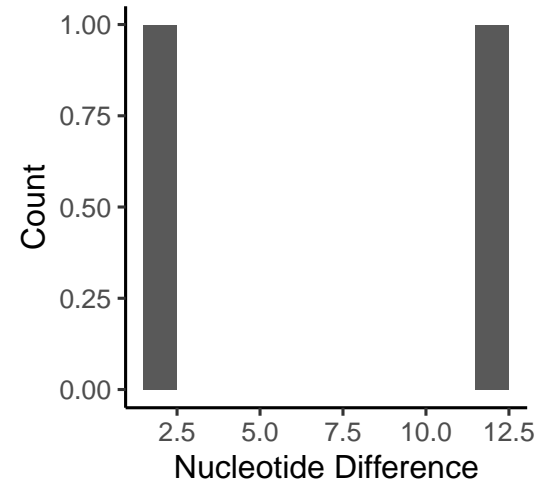
IGHV3-49*04

103 sequences assigned
53 (51.5%) exact matches, in which:
52 unique CDR3
4 unique J



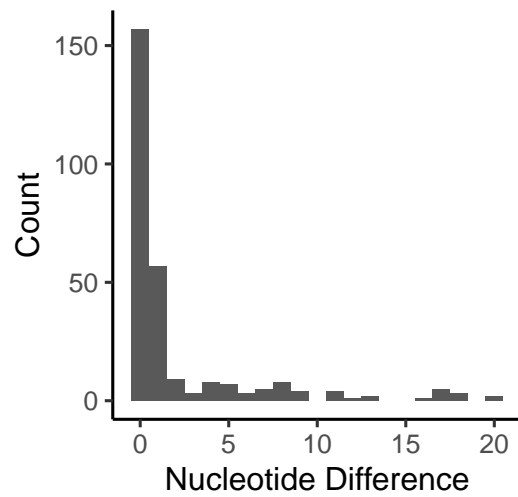
IGHV3-66*03

2 sequences assigned
No exact matches.



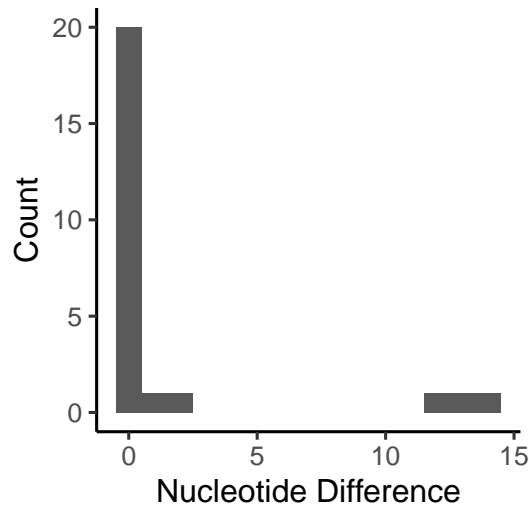
IGHV3-48*03

293 sequences assigned
157 (53.6%) exact matches, in which:
155 unique CDR3
6 unique J



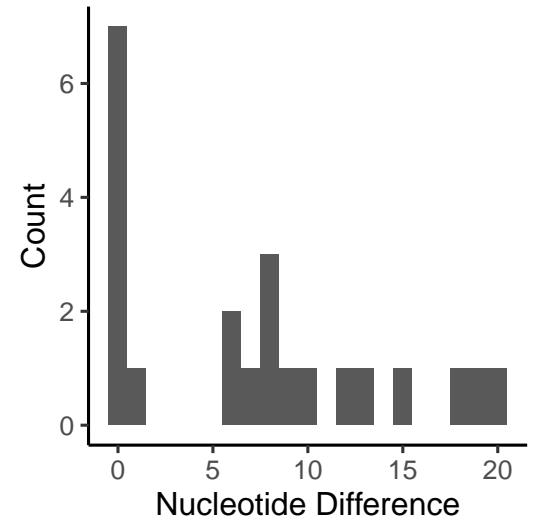
IGHV3-53*04

26 sequences assigned
20 (76.9%) exact matches, in which:
19 unique CDR3
5 unique J



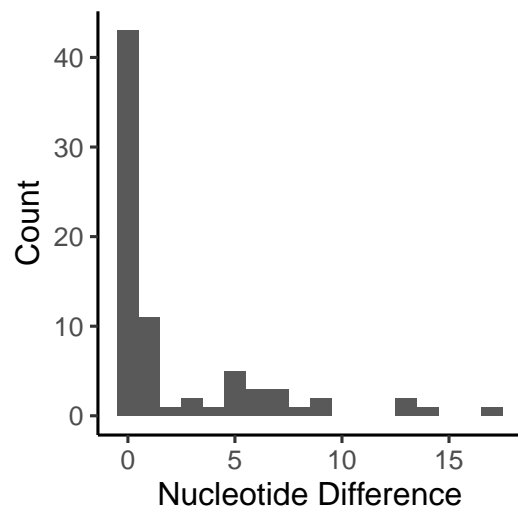
IGHV3-72*01

24 sequences assigned
7 (29.2%) exact matches, in which:
7 unique CDR3
3 unique J



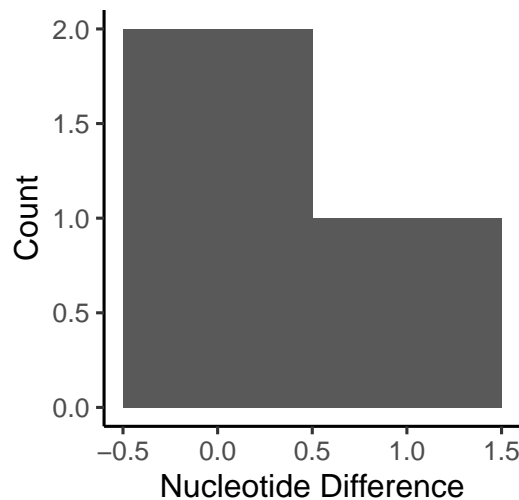
IGHV3-49*03

77 sequences assigned
43 (55.8%) exact matches, in which:
43 unique CDR3
4 unique J



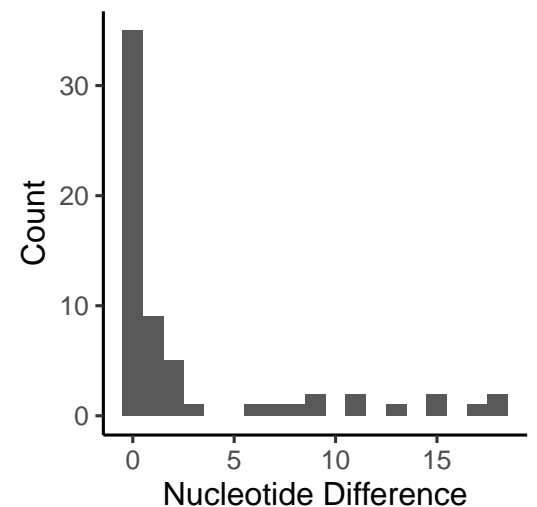
IGHV3-64*02

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



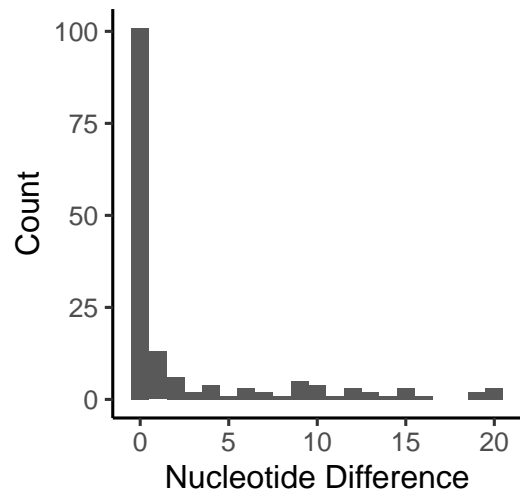
IGHV3-73*02

65 sequences assigned
35 (53.8%) exact matches, in which:
33 unique CDR3
4 unique J



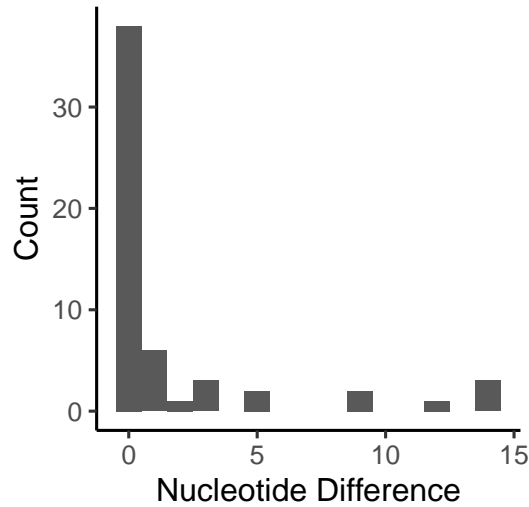
IGHV3-74*01

164 sequences assigned
101 (61.6%) exact matches, in which:
101 unique CDR3
6 unique J



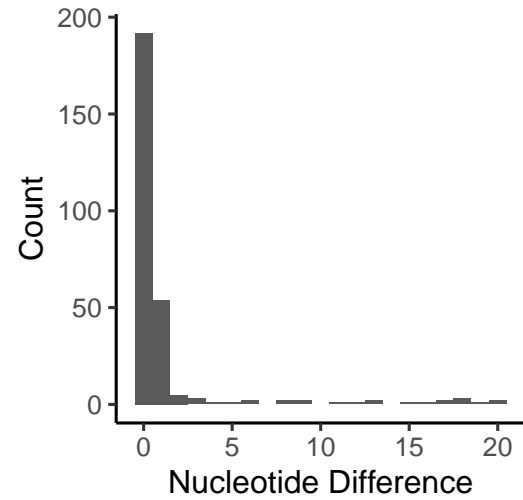
IGHV3-64D*08

58 sequences assigned
38 (65.5%) exact matches, in which:
36 unique CDR3
5 unique J



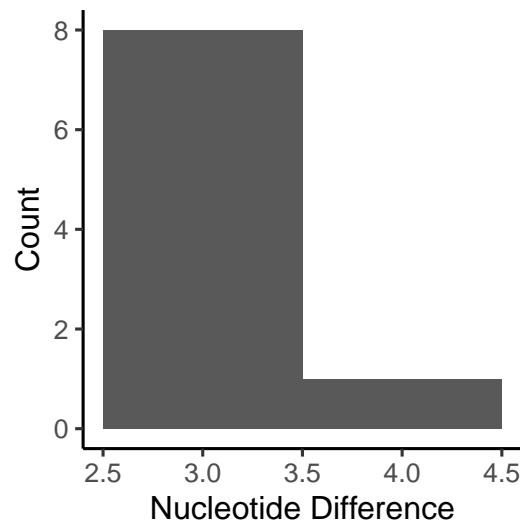
IGHV4-31*03

283 sequences assigned
192 (67.8%) exact matches, in which:
192 unique CDR3
6 unique J



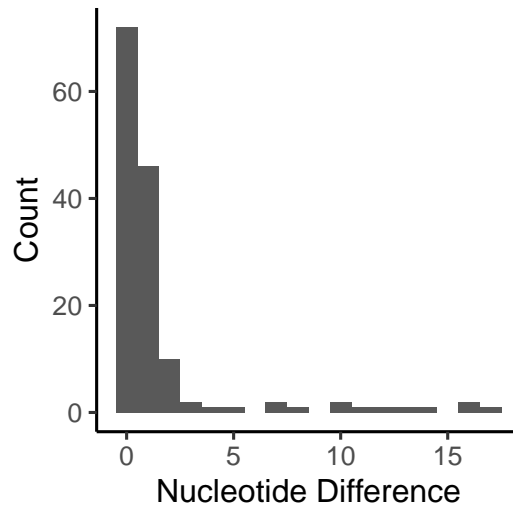
IGHV3-43D*04

9 sequences assigned
No exact matches.



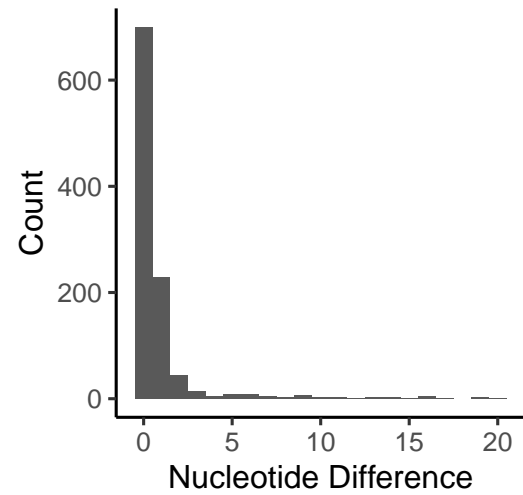
IGHV4-4*02

152 sequences assigned
72 (47.4%) exact matches, in which:
72 unique CDR3
5 unique J



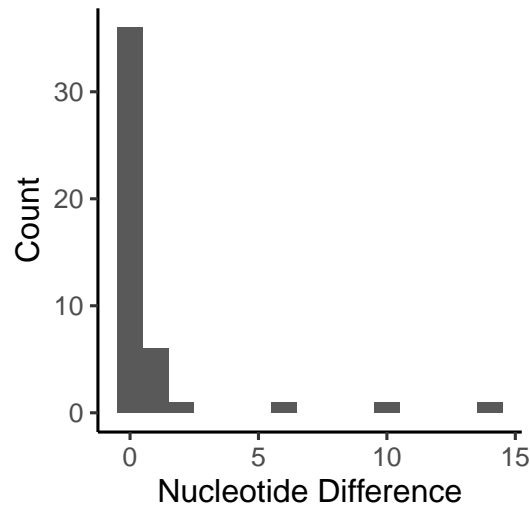
IGHV4-34*01

1068 sequences assigned
700 (65.5%) exact matches, in which:
687 unique CDR3
6 unique J



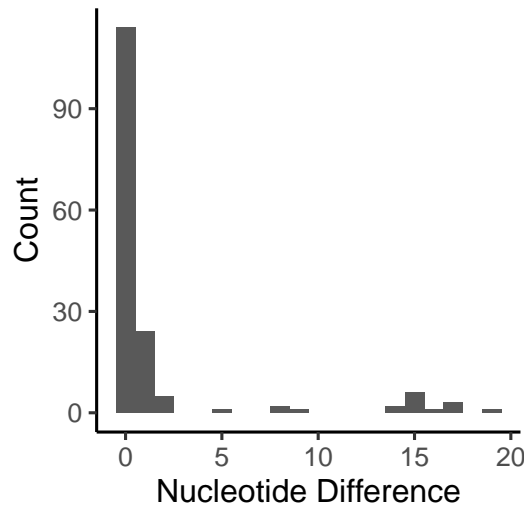
IGHV3-64D*06

49 sequences assigned
36 (73.5%) exact matches, in which:
35 unique CDR3
5 unique J



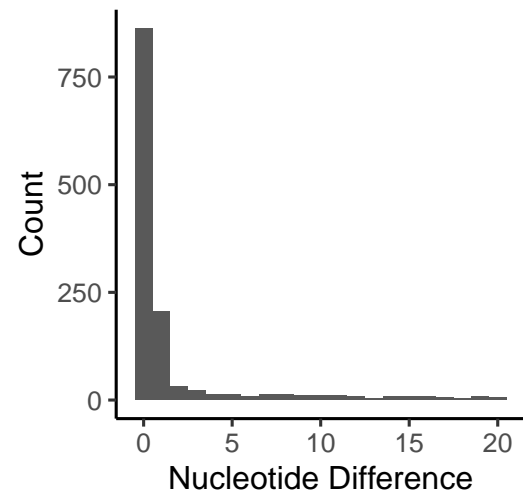
IGHV4-4*07

164 sequences assigned
114 (69.5%) exact matches, in which:
113 unique CDR3
5 unique J



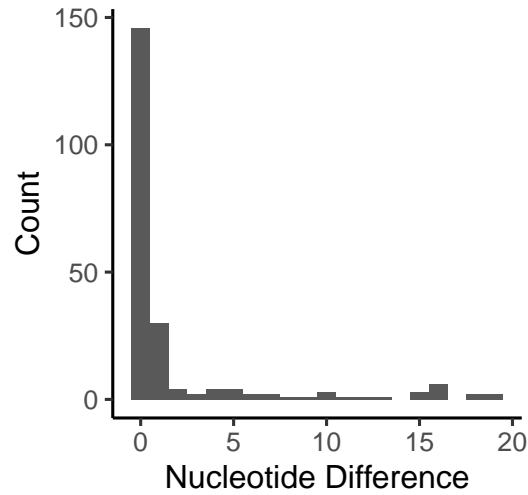
IGHV4-39*01

1307 sequences assigned
863 (66%) exact matches, in which:
845 unique CDR3
6 unique J



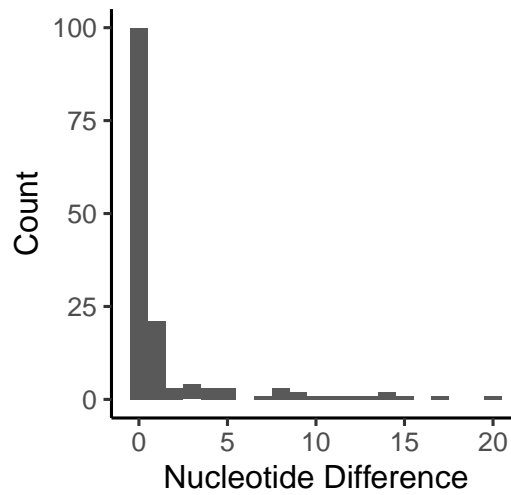
IGHV4–59*01

226 sequences assigned
146 (64.6%) exact matches, in which:
146 unique CDR3
5 unique J



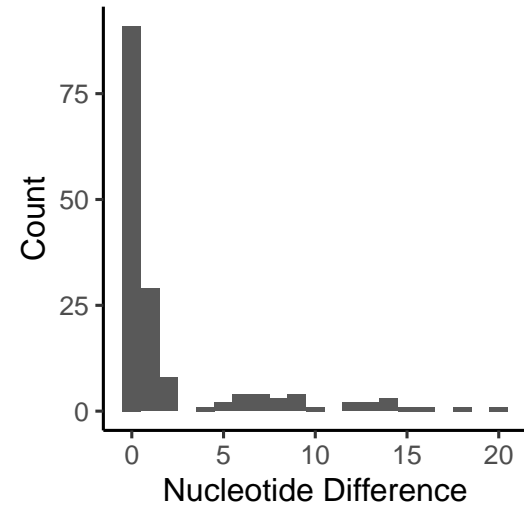
IGHV5–10–1*01

165 sequences assigned
100 (60.6%) exact matches, in which:
97 unique CDR3
6 unique J



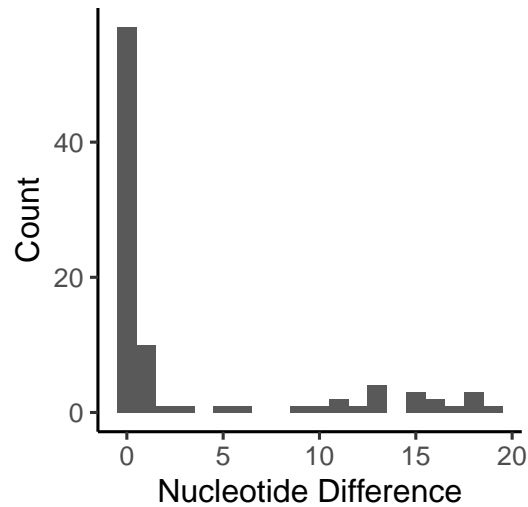
IGHV5–51*03

162 sequences assigned
91 (56.2%) exact matches, in which:
89 unique CDR3
5 unique J



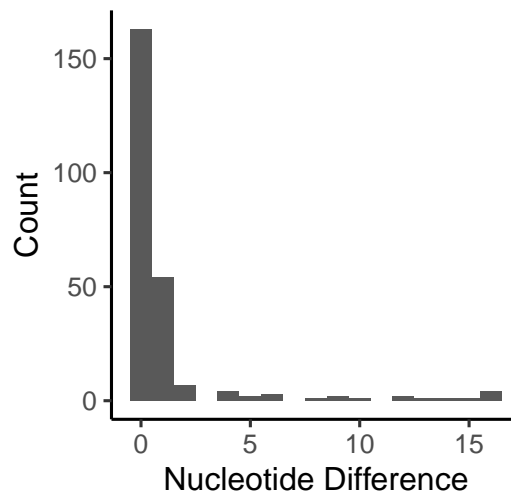
IGHV4–61*01

93 sequences assigned
57 (61.3%) exact matches, in which:
56 unique CDR3
5 unique J



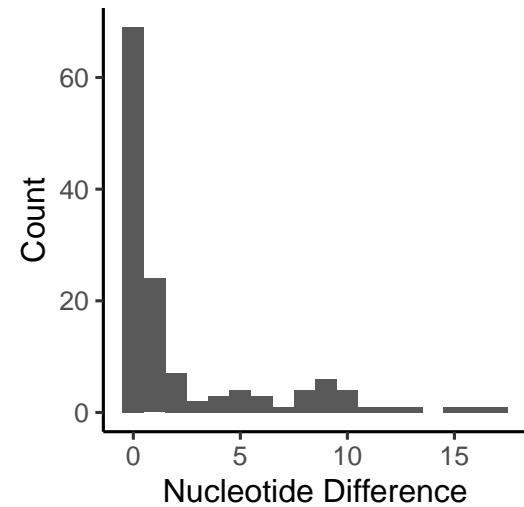
IGHV5–10–1*03

256 sequences assigned
163 (63.7%) exact matches, in which:
163 unique CDR3
6 unique J



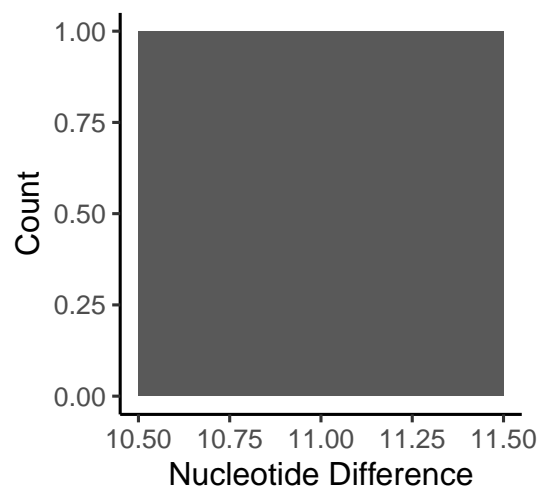
IGHV6–1*01

141 sequences assigned
69 (48.9%) exact matches, in which:
69 unique CDR3
4 unique J



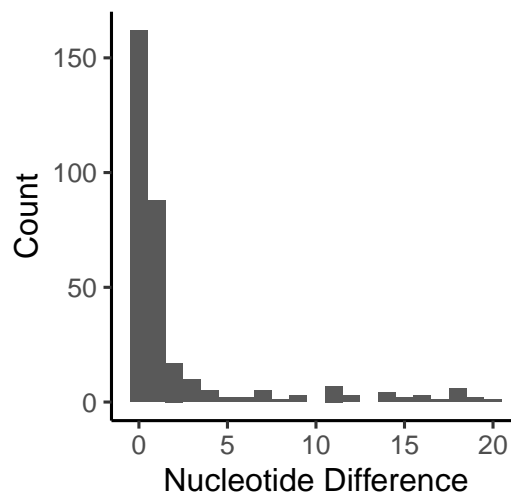
IGHV1/OR15–1*04

1 sequences assigned
No exact matches.



IGHV5–51*01

332 sequences assigned
162 (48.8%) exact matches, in which:
162 unique CDR3
6 unique J



IGHV7–4–1*01

1 sequences assigned
No exact matches.

