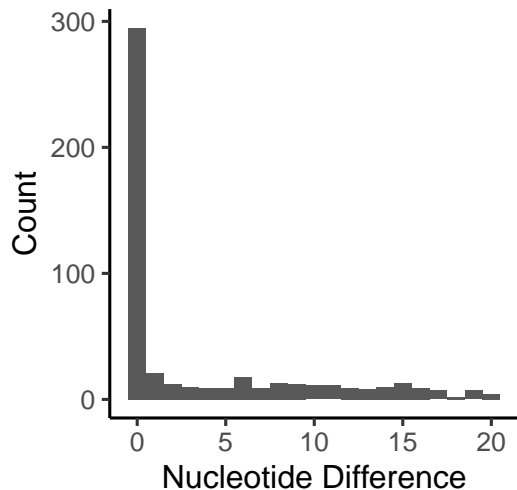


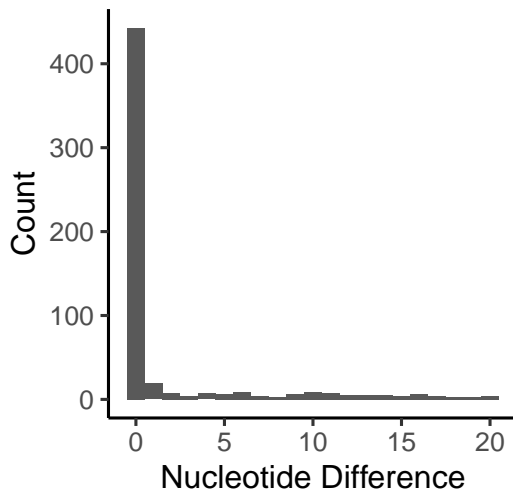
IGHV1-2*02

527 sequences assigned
295 (56%) exact matches, in which:
295 unique CDR3
6 unique J



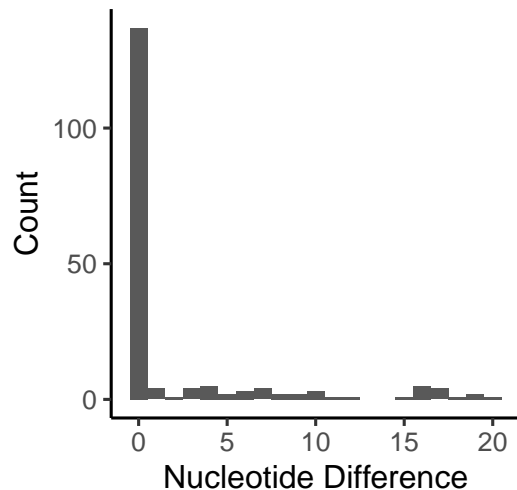
IGHV1-8*01

585 sequences assigned
443 (75.7%) exact matches, in which:
440 unique CDR3
6 unique J



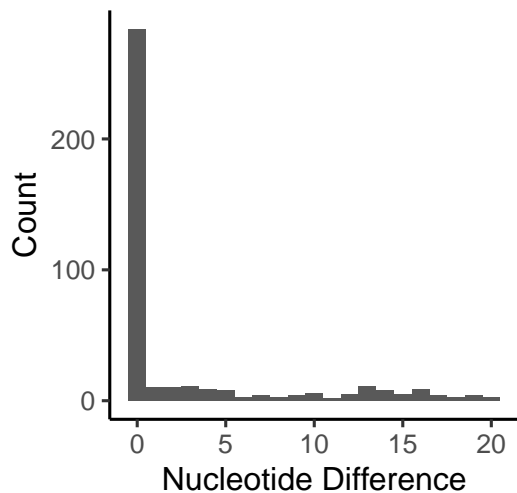
IGHV1-46*01

191 sequences assigned
137 (71.7%) exact matches, in which:
137 unique CDR3
6 unique J



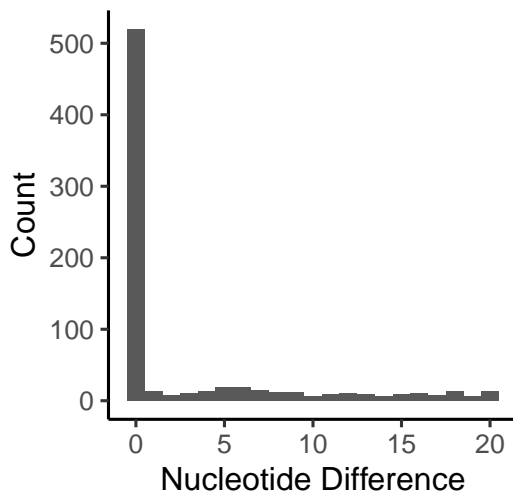
IGHV1-2*06

429 sequences assigned
284 (66.2%) exact matches, in which:
282 unique CDR3
6 unique J



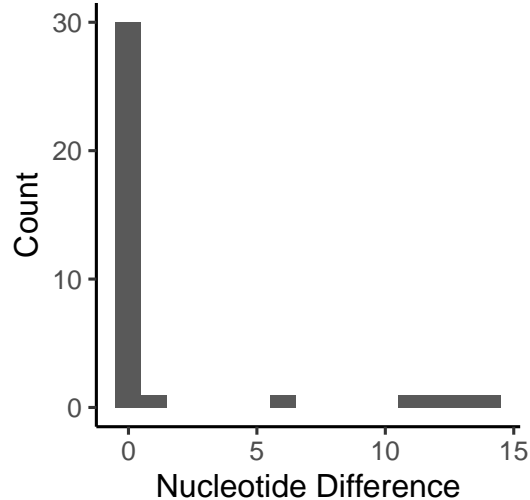
IGHV1-18*01

804 sequences assigned
520 (64.7%) exact matches, in which:
518 unique CDR3
6 unique J



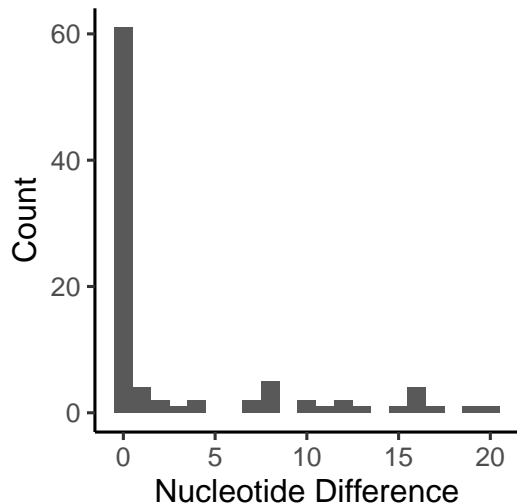
IGHV1-58*01_03

38 sequences assigned
30 (78.9%) exact matches, in which:
30 unique CDR3
5 unique J



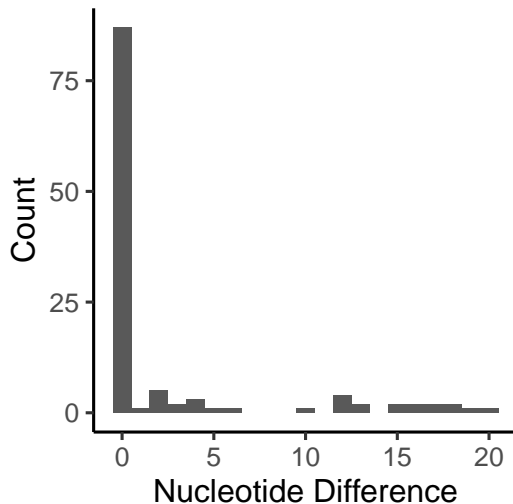
IGHV1-3*01_05

98 sequences assigned
61 (62.2%) exact matches, in which:
61 unique CDR3
6 unique J



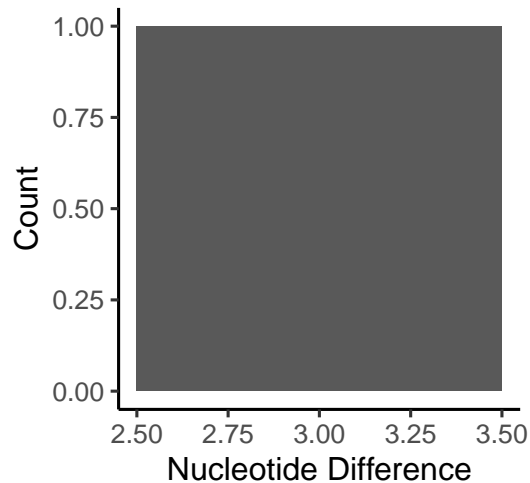
IGHV1-24*01

123 sequences assigned
87 (70.7%) exact matches, in which:
86 unique CDR3
6 unique J



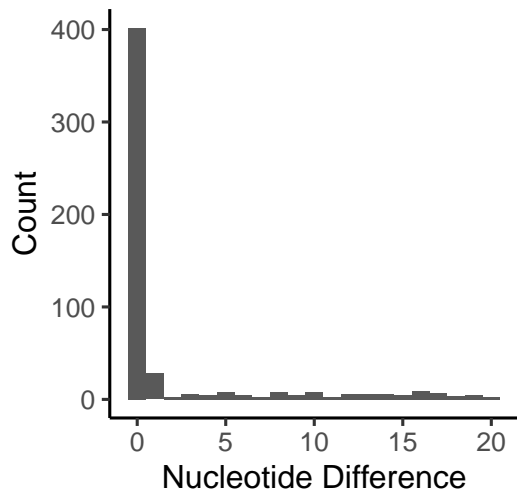
IGHV1-68*02_03

1 sequences assigned
No exact matches.



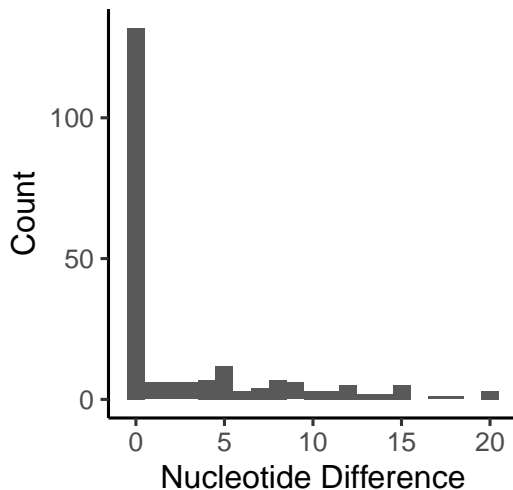
IGHV1-69*01_12_13

558 sequences assigned
402 (72%) exact matches, in which:
402 unique CDR3
6 unique J



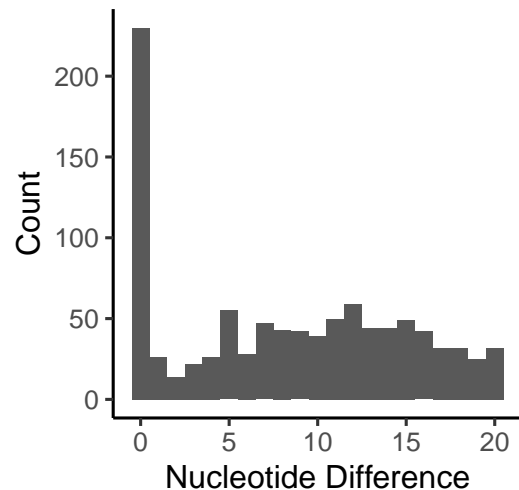
IGHV2-5*02

218 sequences assigned
132 (60.6%) exact matches, in which:
132 unique CDR3
6 unique J



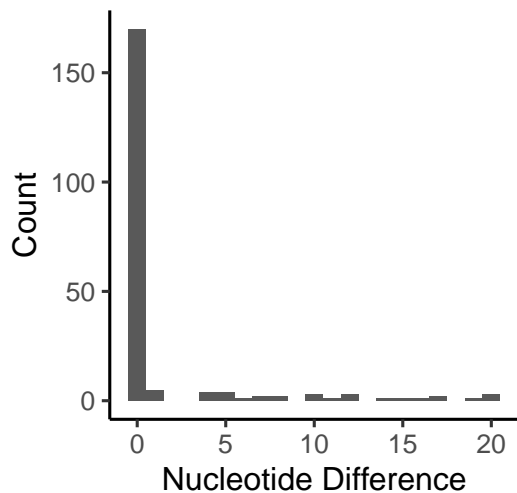
IGHV3-7*01

1070 sequences assigned
230 (21.5%) exact matches, in which:
224 unique CDR3
6 unique J



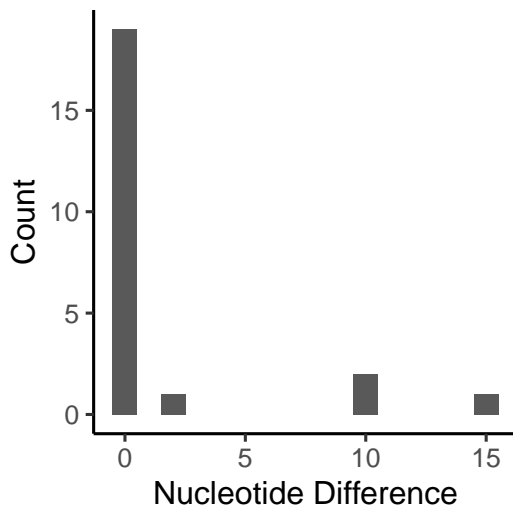
IGHV1-69*06_14

221 sequences assigned
170 (76.9%) exact matches, in which:
170 unique CDR3
6 unique J



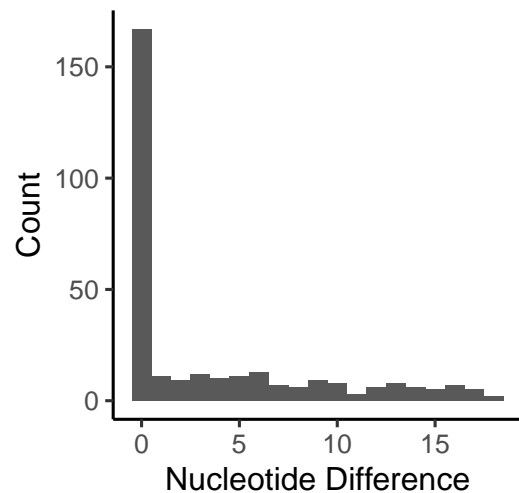
IGHV2-26*01

24 sequences assigned
19 (79.2%) exact matches, in which:
19 unique CDR3
5 unique J



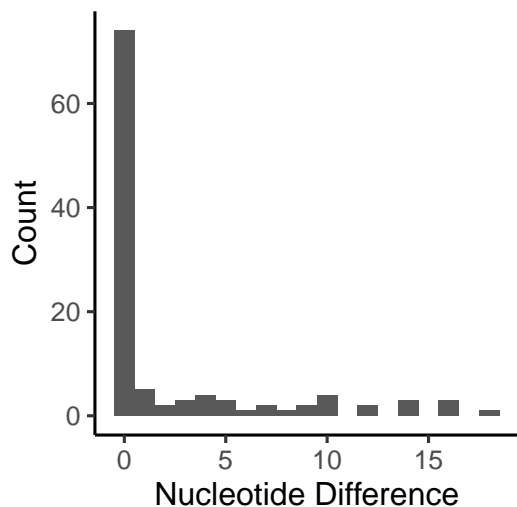
IGHV3-9*01

317 sequences assigned
167 (52.7%) exact matches, in which:
165 unique CDR3
6 unique J



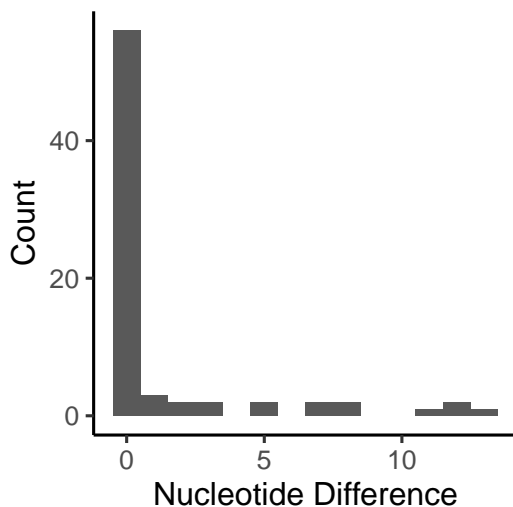
IGHV2-5*01

114 sequences assigned
74 (64.9%) exact matches, in which:
73 unique CDR3
6 unique J



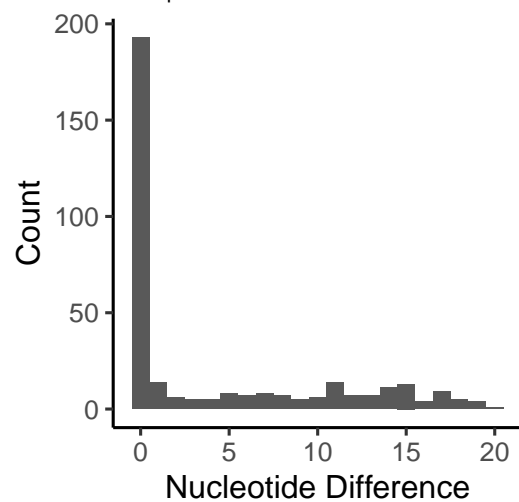
IGHV2-70*01

73 sequences assigned
56 (76.7%) exact matches, in which:
54 unique CDR3
5 unique J



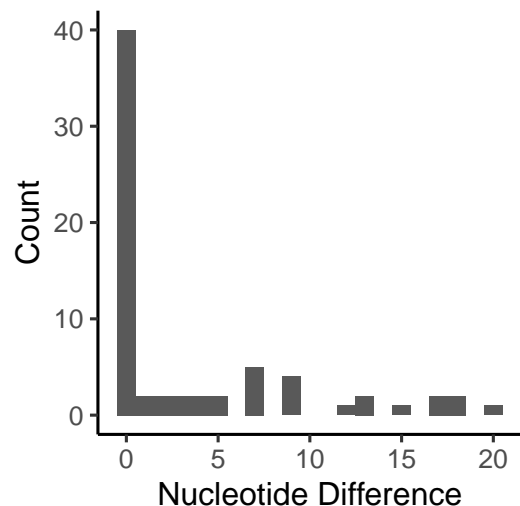
IGHV3-11*01

361 sequences assigned
193 (53.5%) exact matches, in which:
193 unique CDR3
6 unique J



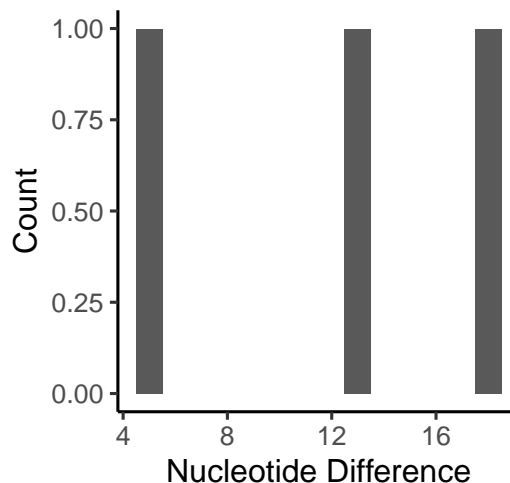
IGHV3-13*01

75 sequences assigned
40 (53.3%) exact matches, in which:
37 unique CDR3
5 unique J



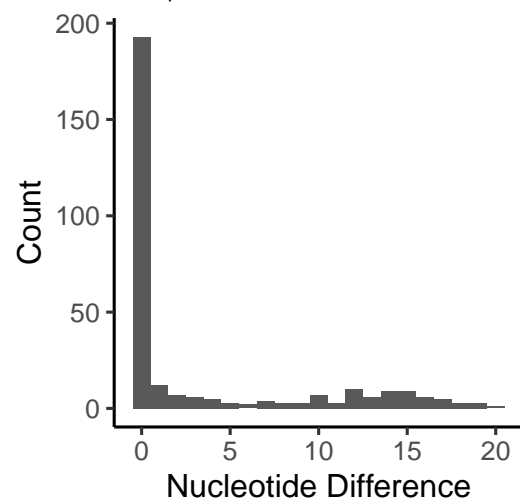
IGHV3-20*03_04

8 sequences assigned
No exact matches.



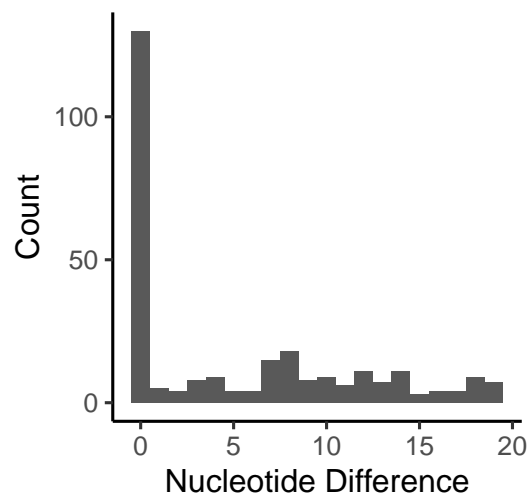
IGHV3-30-3*01

310 sequences assigned
193 (62.3%) exact matches, in which:
190 unique CDR3
6 unique J



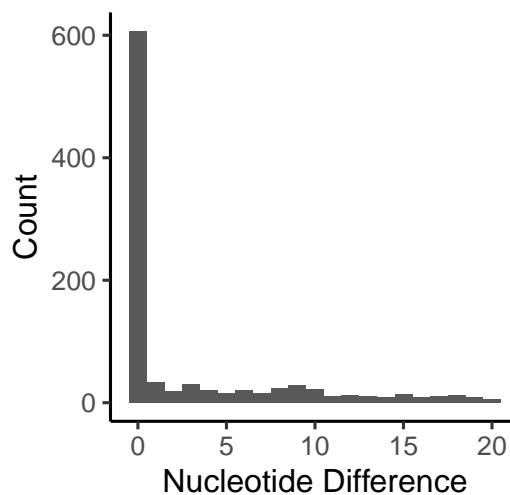
IGHV3-15*01_02

296 sequences assigned
130 (43.9%) exact matches, in which:
127 unique CDR3
6 unique J



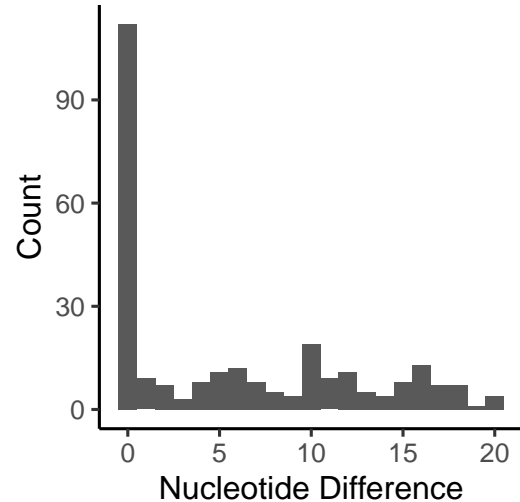
IGHV3-21*01_02

976 sequences assigned
607 (62.2%) exact matches, in which:
589 unique CDR3
6 unique J



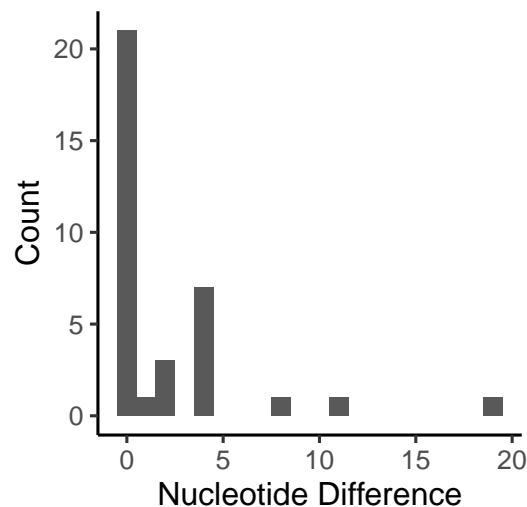
IGHV3-33*01

293 sequences assigned
112 (38.2%) exact matches, in which:
111 unique CDR3
6 unique J



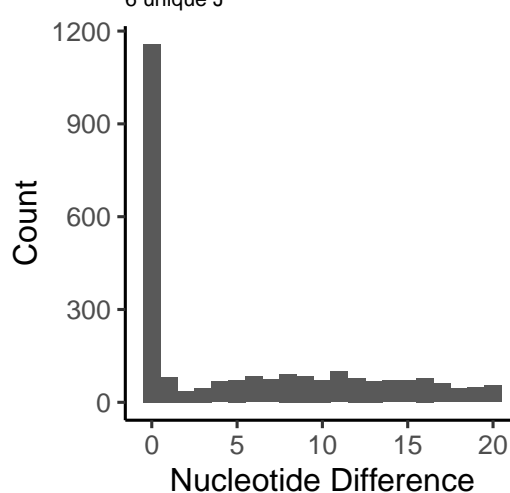
IGHV3-20*01_02

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



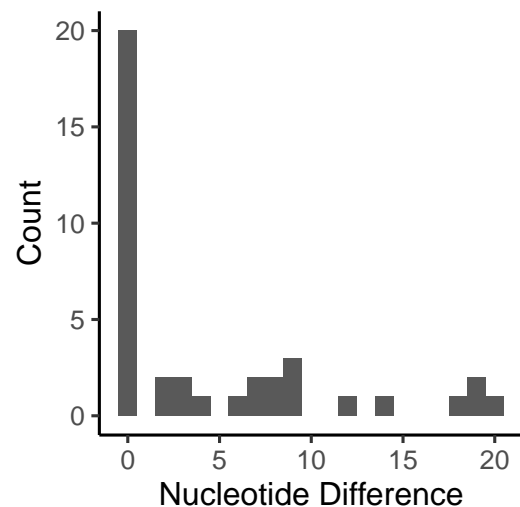
IGHV3-23*01_04

2814 sequences assigned
1158 (41.2%) exact matches, in which:
1130 unique CDR3
6 unique J



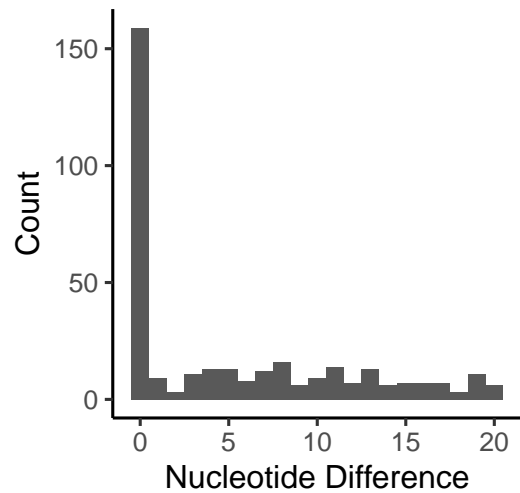
IGHV3-43*01

39 sequences assigned
20 (51.3%) exact matches, in which:
20 unique CDR3
3 unique J



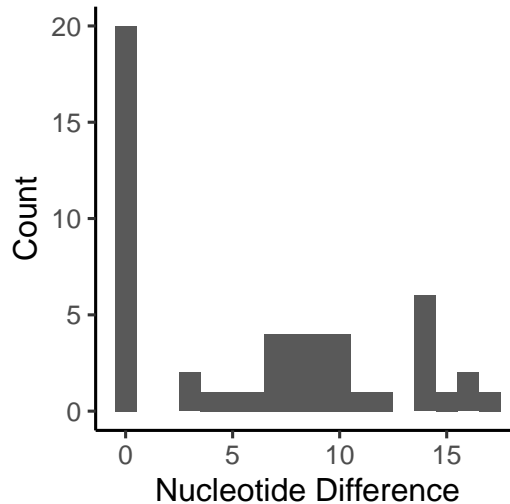
IGHV3-48*03

361 sequences assigned
159 (44%) exact matches, in which:
156 unique CDR3
5 unique J



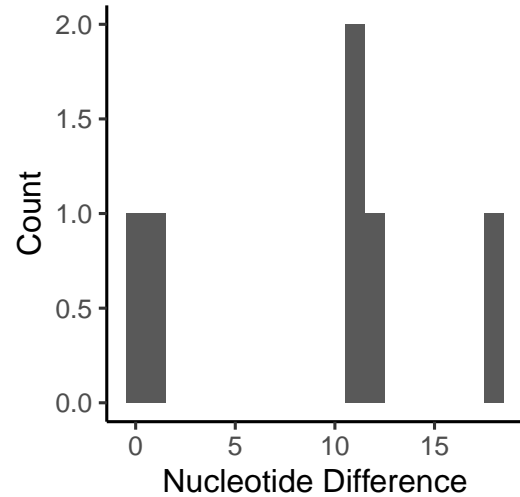
IGHV3-49*03_05

57 sequences assigned
20 (35.1%) exact matches, in which:
20 unique CDR3
5 unique J



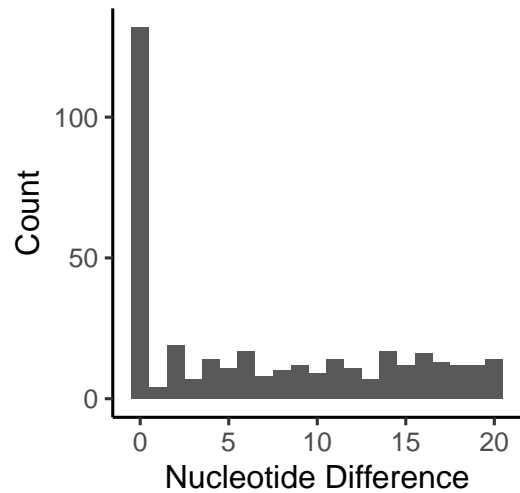
IGHV3-64*02_07

7 sequences assigned
1 (14.3%) exact matches, in which:
1 unique CDR3
1 unique J



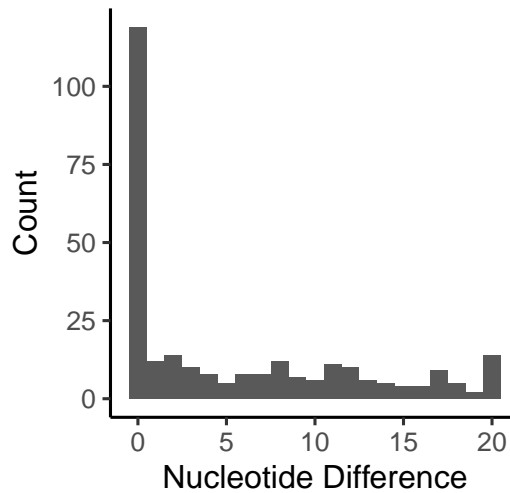
IGHV3-48*04

445 sequences assigned
132 (29.7%) exact matches, in which:
131 unique CDR3
5 unique J



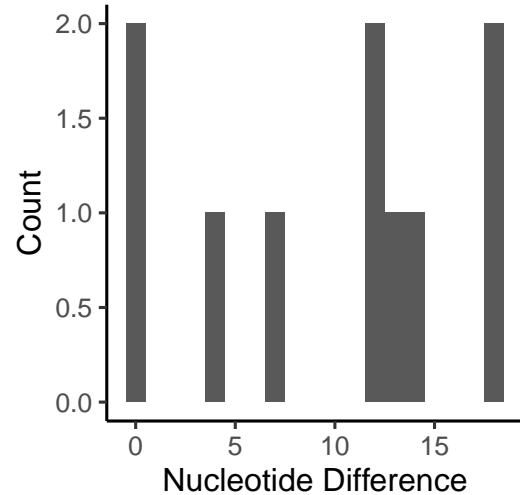
IGHV3-53*01_02

307 sequences assigned
119 (38.8%) exact matches, in which:
115 unique CDR3
6 unique J



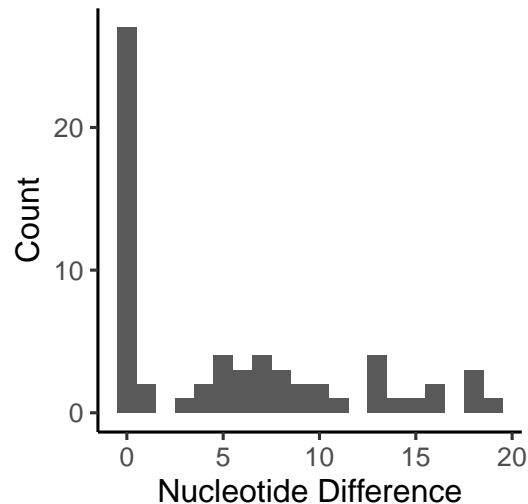
IGHV3-66*02

14 sequences assigned
2 (14.3%) exact matches, in which:
2 unique CDR3
2 unique J



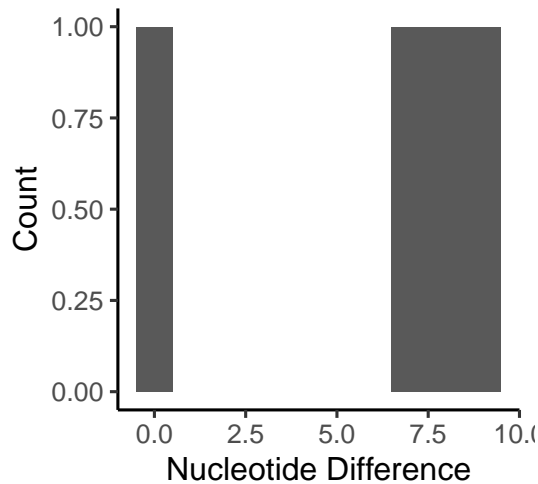
IGHV3-49*04

67 sequences assigned
27 (40.3%) exact matches, in which:
27 unique CDR3
4 unique J



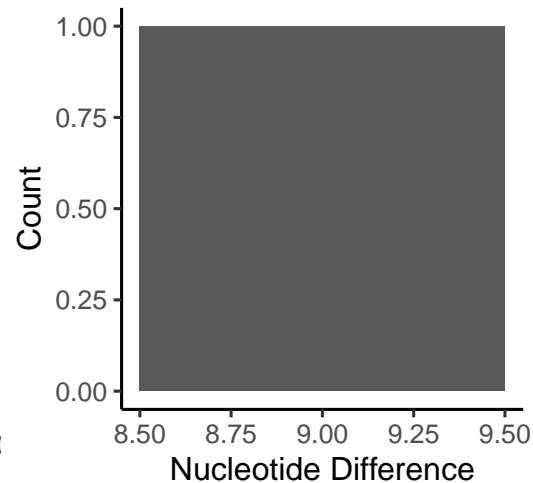
IGHV3-64*01

6 sequences assigned
1 (16.7%) exact matches, in which:
1 unique CDR3
1 unique J



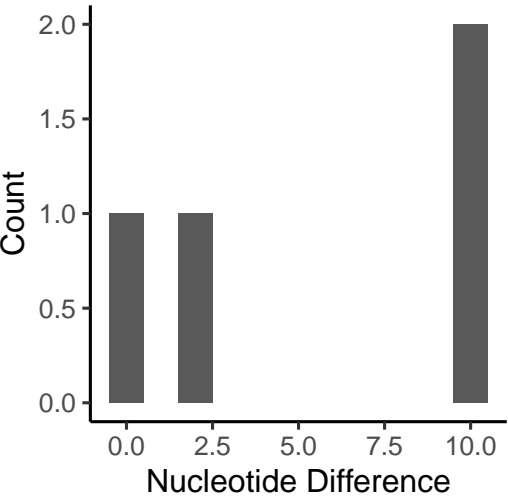
IGHV3-66*03

3 sequences assigned
No exact matches.



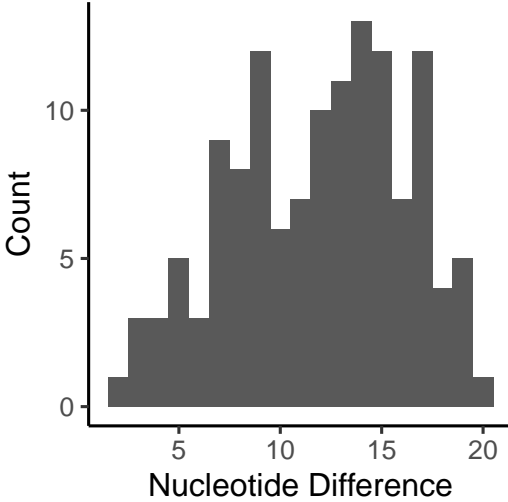
IGHV3-69-1*01

8 sequences assigned
1 (12.5%) exact matches, in which:
1 unique CDR3
1 unique J



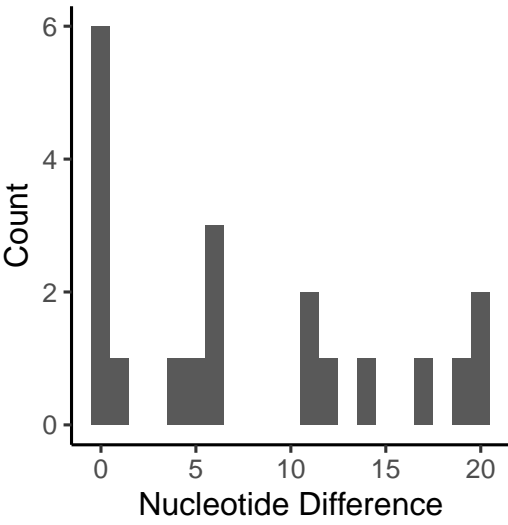
IGHV3-74*03

163 sequences assigned
No exact matches.



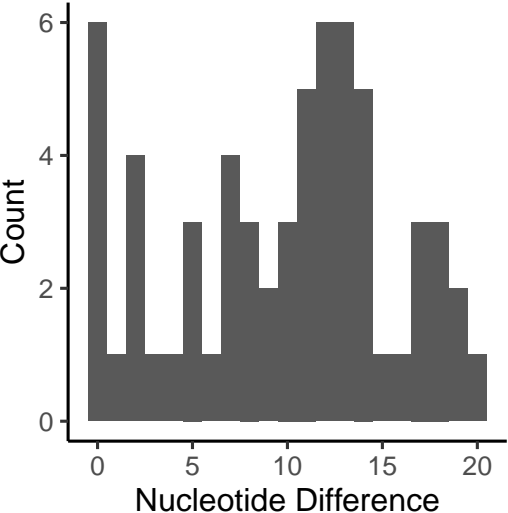
IGHV3-43D*04

22 sequences assigned
6 (27.3%) exact matches, in which:
6 unique CDR3
2 unique J



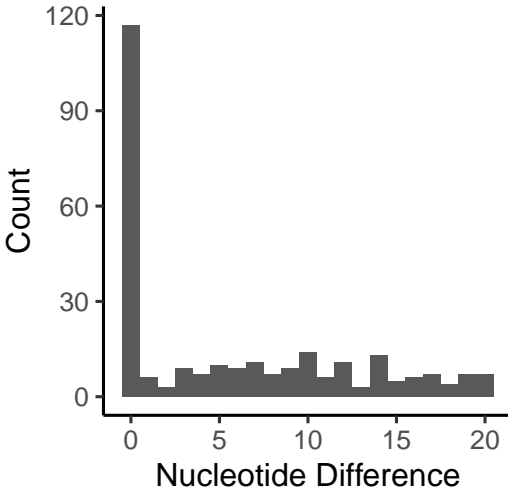
IGHV3-72*01

66 sequences assigned
6 (9.1%) exact matches, in which:
6 unique CDR3
3 unique J



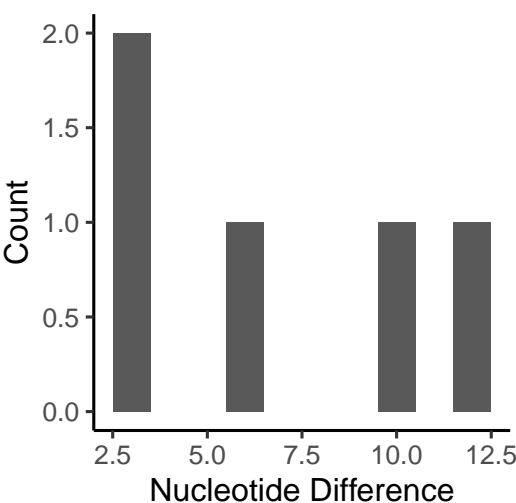
IGHV3-74*01_02

298 sequences assigned
117 (39.3%) exact matches, in which:
116 unique CDR3
6 unique J



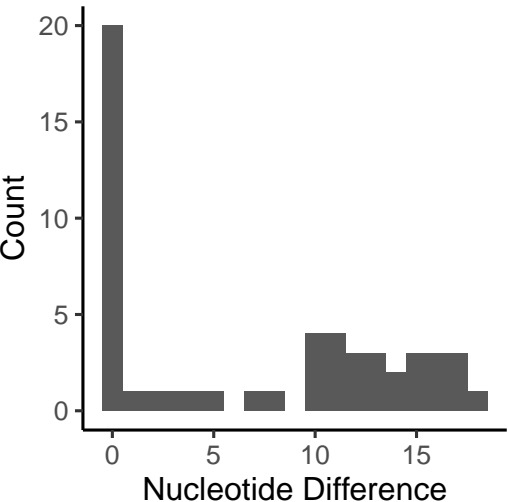
IGHV3-64D*09

8 sequences assigned
No exact matches.



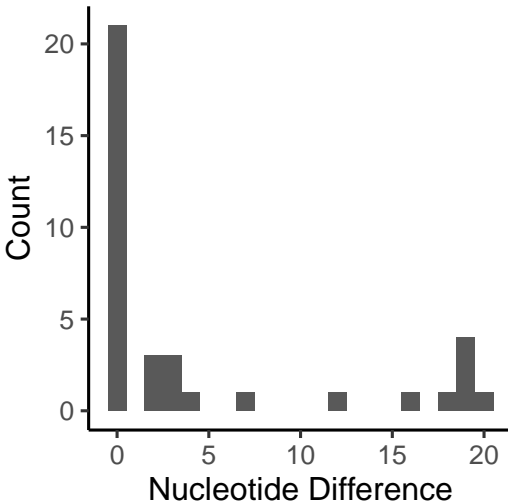
IGHV3-73*01_02

60 sequences assigned
20 (33.3%) exact matches, in which:
20 unique CDR3
4 unique J



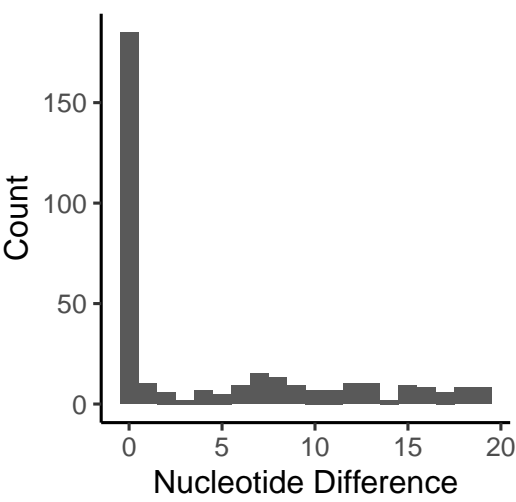
IGHV3-43D*03

39 sequences assigned
21 (53.8%) exact matches, in which:
21 unique CDR3
4 unique J



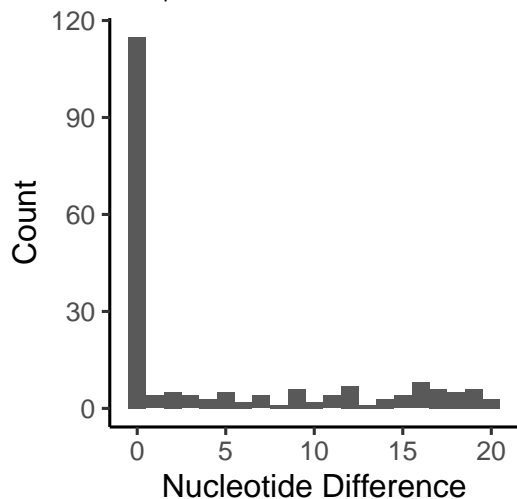
IGHV4-4*07

361 sequences assigned
185 (51.2%) exact matches, in which:
181 unique CDR3
6 unique J



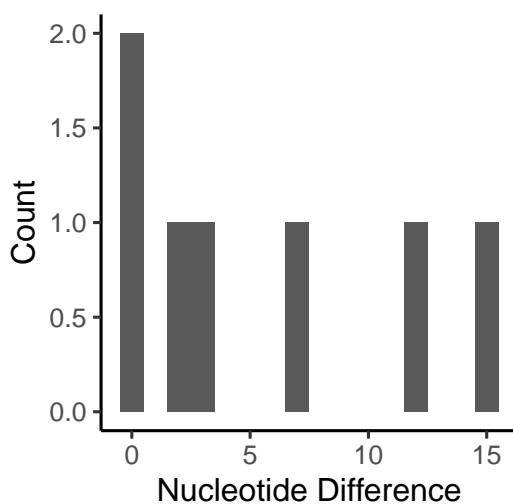
IGHV4-4*02_03

212 sequences assigned
115 (54.2%) exact matches, in which:
115 unique CDR3
5 unique J



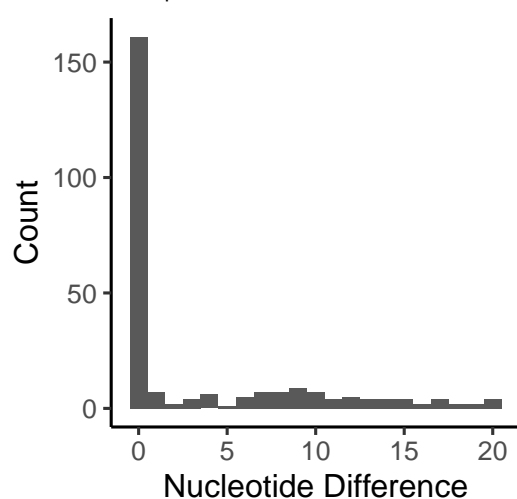
IGHV4-30-2*01

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



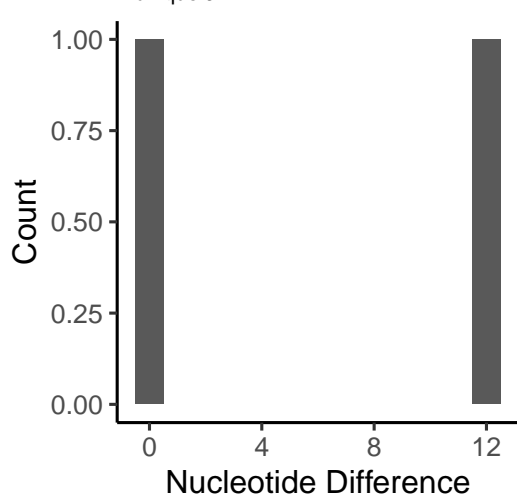
IGHV4-38-2*02

272 sequences assigned
161 (59.2%) exact matches, in which:
160 unique CDR3
5 unique J



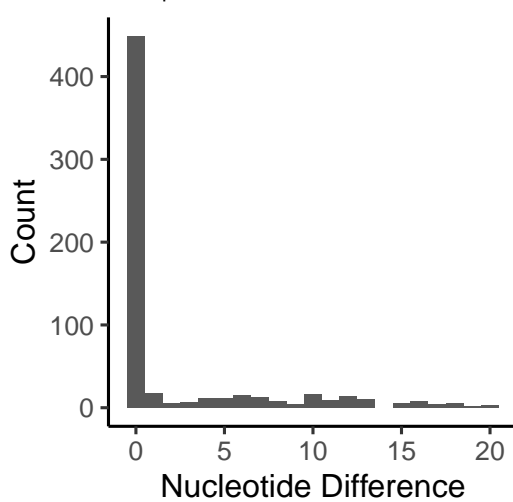
IGHV4-28*01_07

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



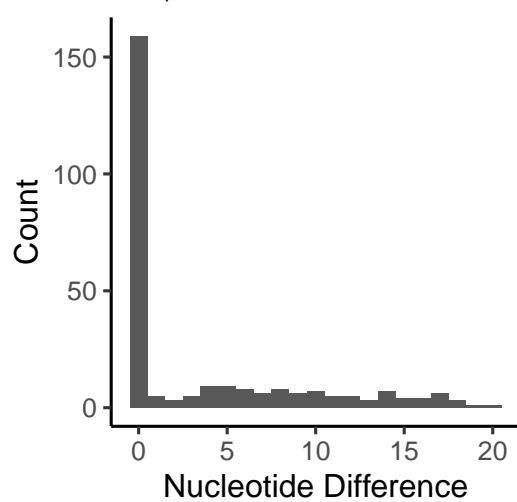
IGHV4-31*02

654 sequences assigned
449 (68.7%) exact matches, in which:
441 unique CDR3
6 unique J



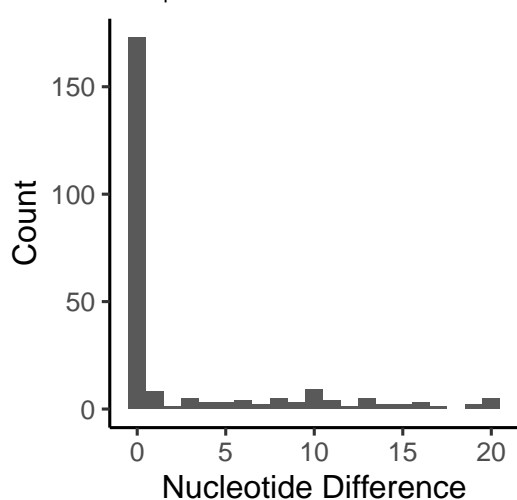
IGHV4-38-2*02_A70G

281 sequences assigned
159 (56.6%) exact matches, in which:
157 unique CDR3
6 unique J



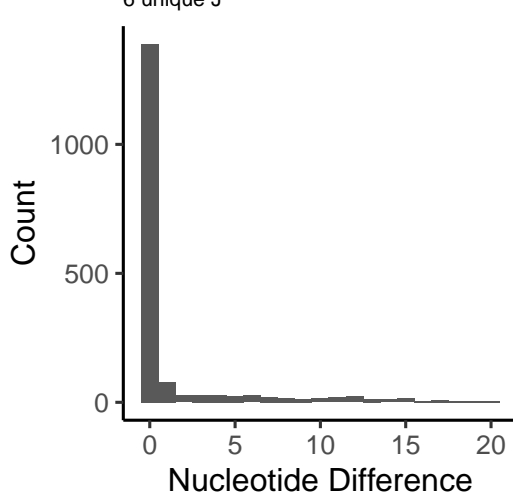
IGHV4-30-4*01

252 sequences assigned
173 (68.7%) exact matches, in which:
171 unique CDR3
6 unique J



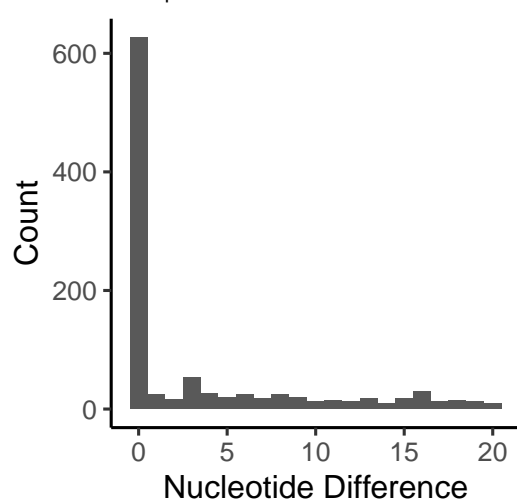
IGHV4-34*01_02

1837 sequences assigned
1389 (75.6%) exact matches, in which:
1343 unique CDR3
6 unique J



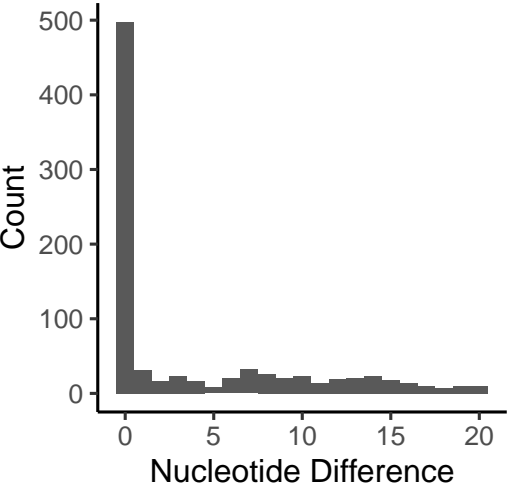
IGHV4-39*07

1144 sequences assigned
627 (54.8%) exact matches, in which:
612 unique CDR3
6 unique J



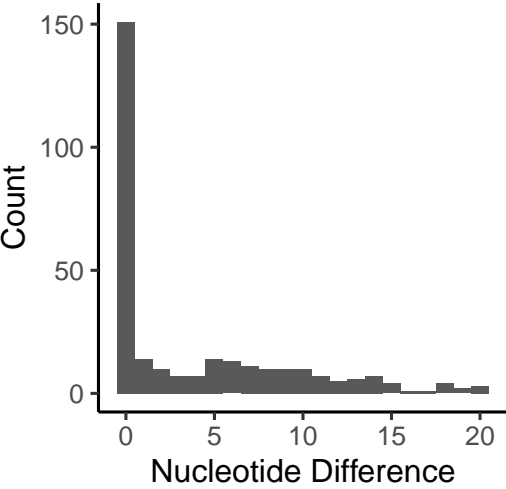
IGHV4-59*02_G88A

933 sequences assigned
498 (53.4%) exact matches, in which:
482 unique CDR3
6 unique J



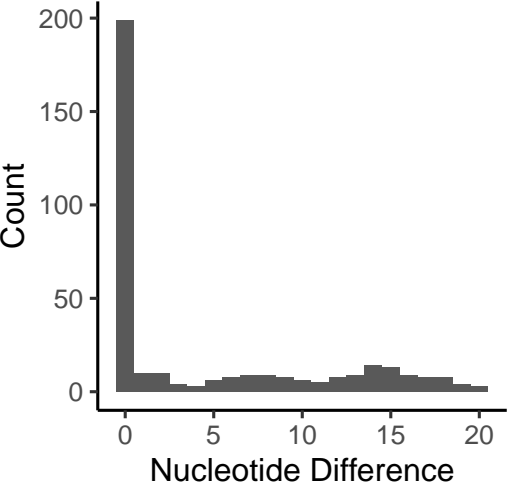
IGHV5-51*07_A128G

308 sequences assigned
151 (49%) exact matches, in which:
150 unique CDR3
5 unique J



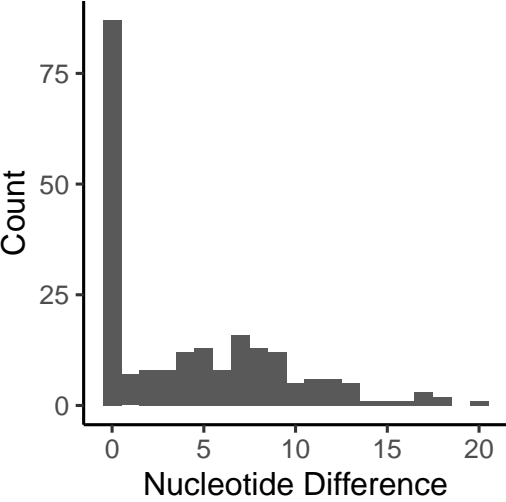
IGHV4-61*01

385 sequences assigned
199 (51.7%) exact matches, in which:
196 unique CDR3
6 unique J



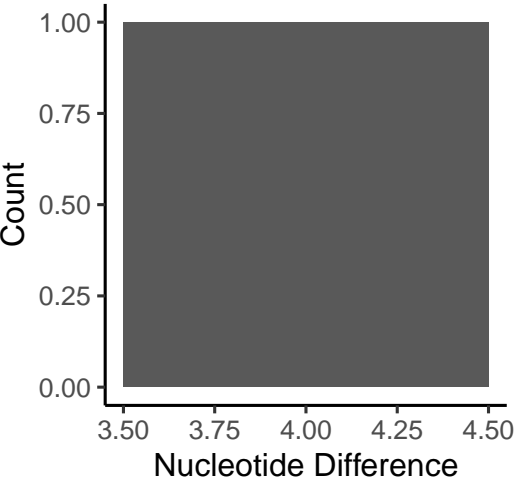
IGHV6-1*01_02

226 sequences assigned
87 (38.5%) exact matches, in which:
86 unique CDR3
6 unique J



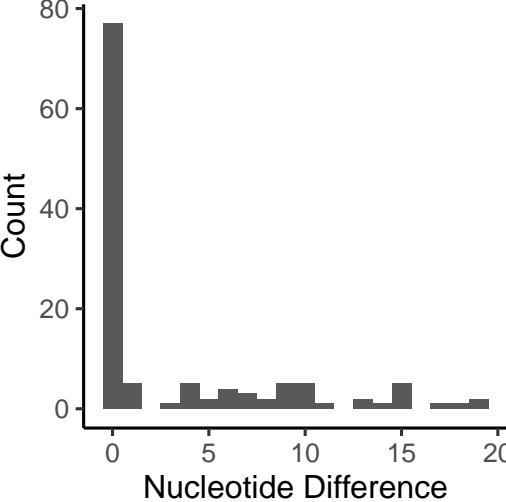
IGHV5-10-1*01_03

1 sequences assigned
No exact matches.



IGHV7-4-1*02

126 sequences assigned
77 (61.1%) exact matches, in which:
76 unique CDR3
5 unique J





Warning – no inferred sequences found.