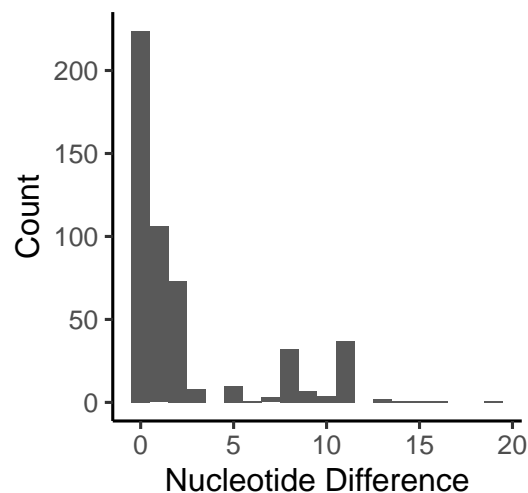


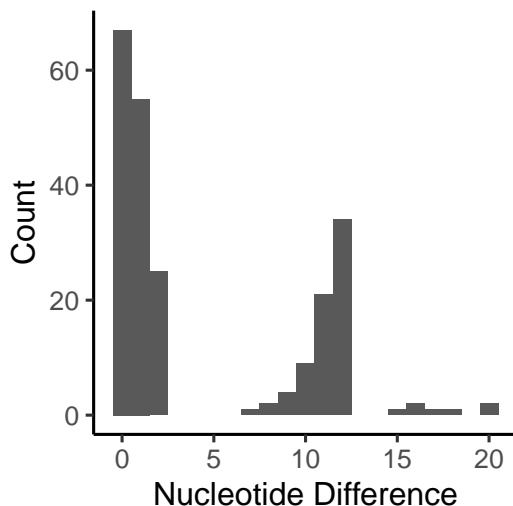
IGHV1-2*04

518 sequences assigned
224 (43.2%) exact matches, in which:
189 unique CDR3
5 unique J



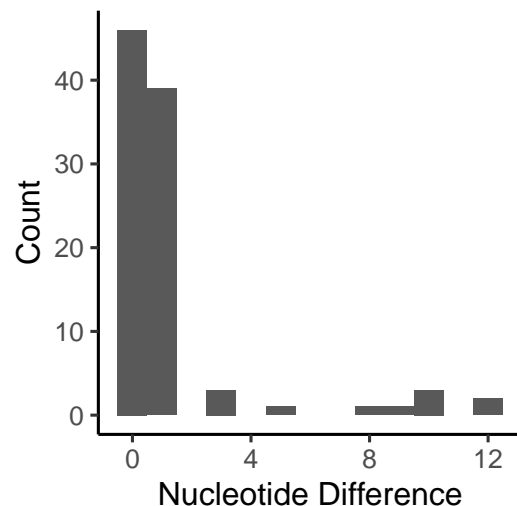
IGHV1-24*01

232 sequences assigned
67 (28.9%) exact matches, in which:
54 unique CDR3
6 unique J



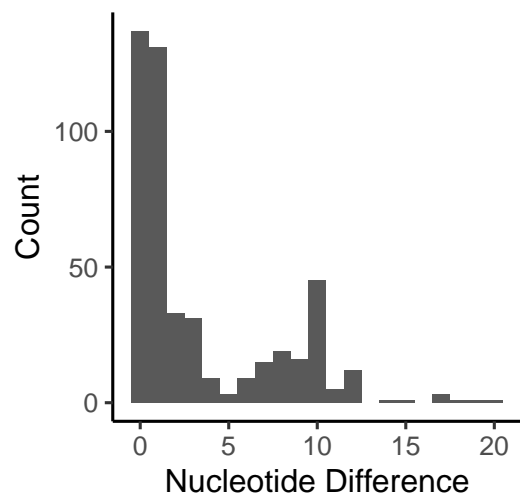
IGHV1-58*01_03

96 sequences assigned
46 (47.9%) exact matches, in which:
36 unique CDR3
6 unique J



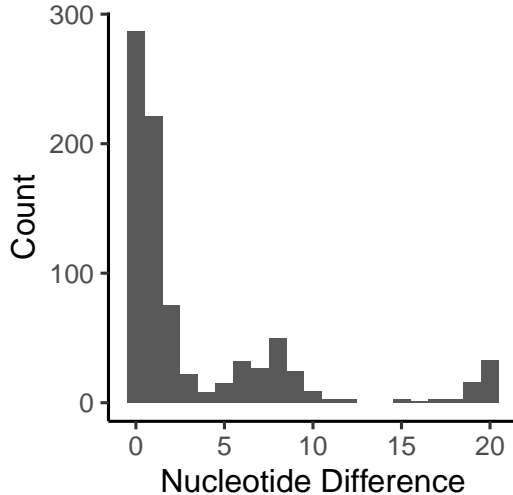
IGHV1-3*01_05

480 sequences assigned
137 (28.5%) exact matches, in which:
107 unique CDR3
6 unique J



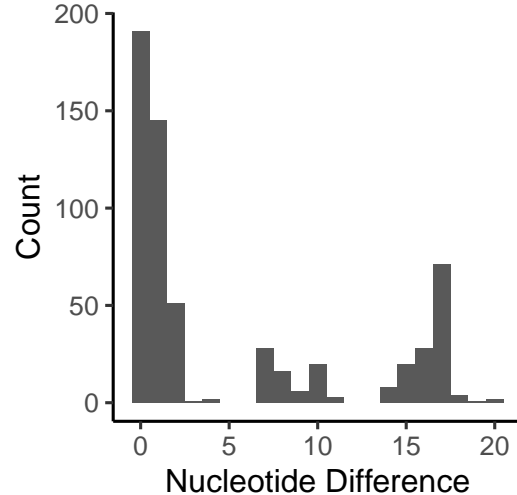
IGHV1-46*01

867 sequences assigned
287 (33.1%) exact matches, in which:
249 unique CDR3
6 unique J



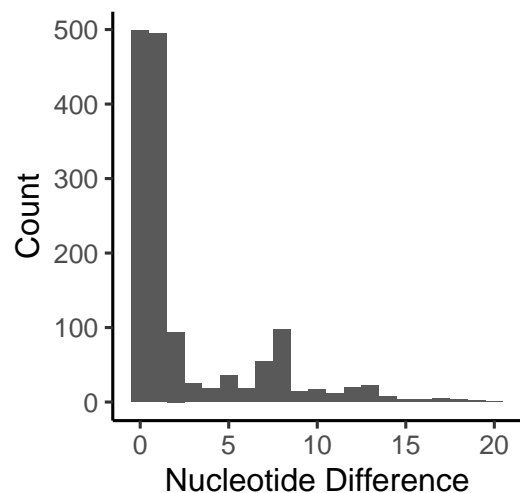
IGHV1-69*01_12_13

613 sequences assigned
191 (31.2%) exact matches, in which:
174 unique CDR3
6 unique J



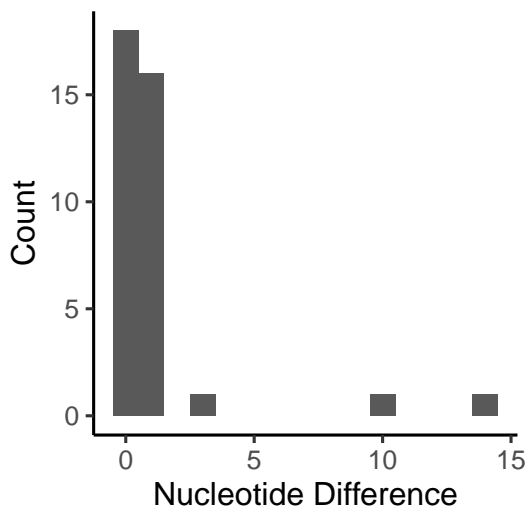
IGHV1-18*04

1501 sequences assigned
499 (33.2%) exact matches, in which:
366 unique CDR3
6 unique J



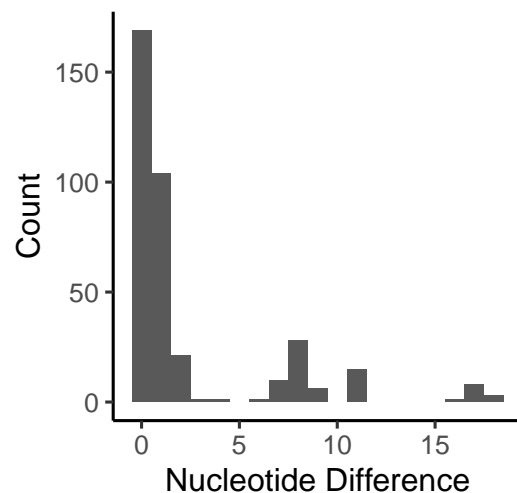
IGHV1-58*02

93 sequences assigned
18 (19.4%) exact matches, in which:
14 unique CDR3
4 unique J



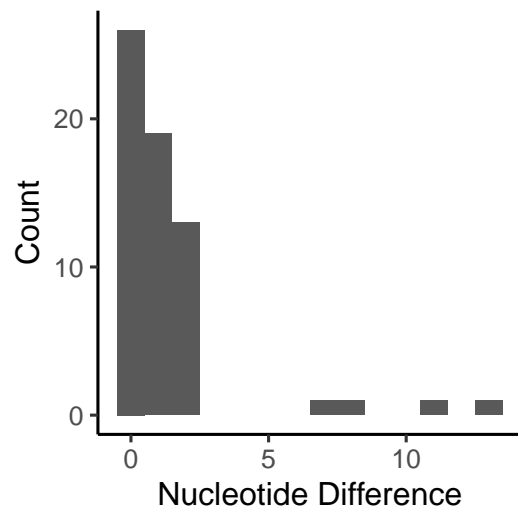
IGHV1-69*04_09_T89C

370 sequences assigned
169 (45.7%) exact matches, in which:
148 unique CDR3
6 unique J



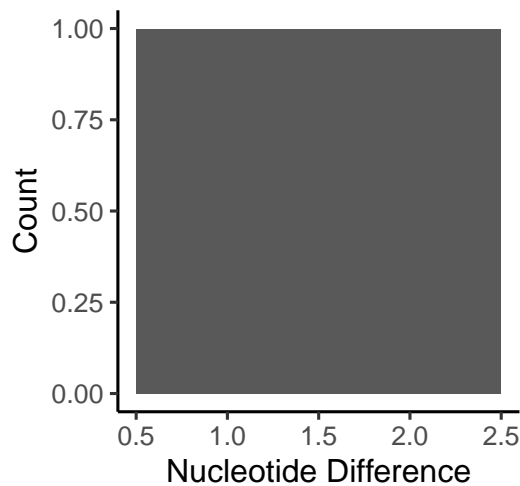
IGHV2-5*02

76 sequences assigned
26 (34.2%) exact matches, in which:
19 unique CDR3
4 unique J



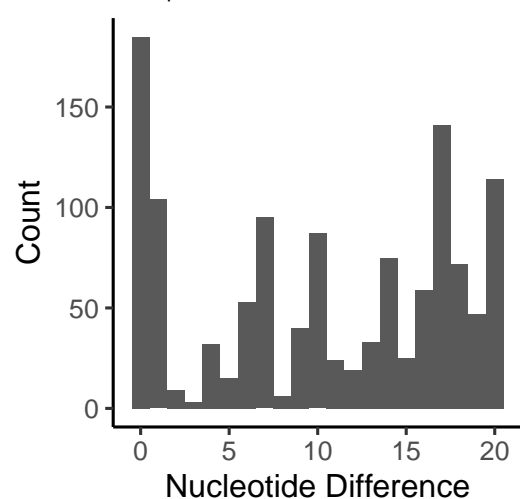
IGHV2-70*12

7 sequences assigned
No exact matches.



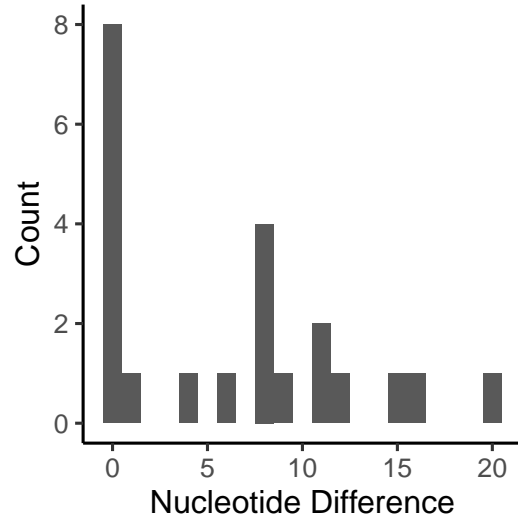
IGHV3-7*03

1411 sequences assigned
185 (13.1%) exact matches, in which:
101 unique CDR3
6 unique J



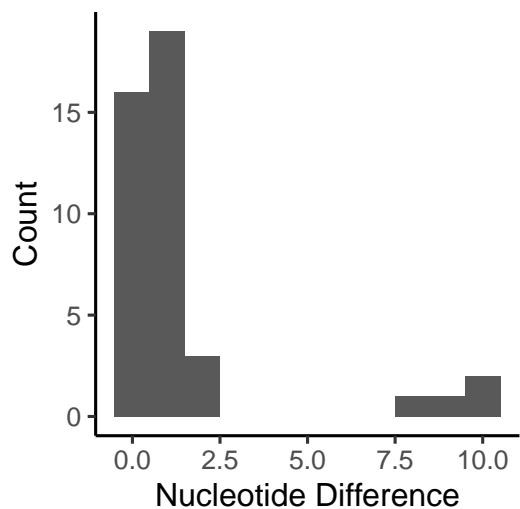
IGHV2-26*01

22 sequences assigned
8 (36.4%) exact matches, in which:
8 unique CDR3
3 unique J



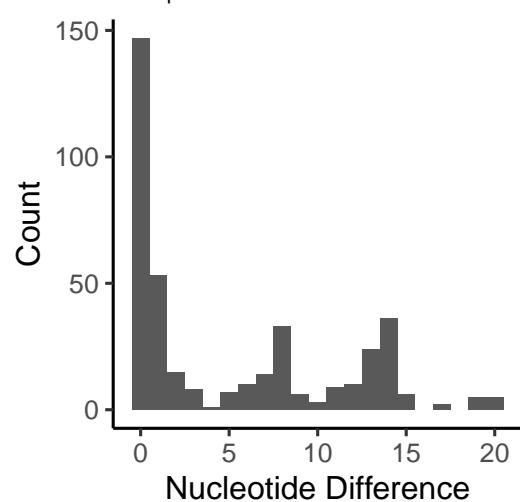
IGHV2-70*11_15

43 sequences assigned
16 (37.2%) exact matches, in which:
13 unique CDR3
6 unique J



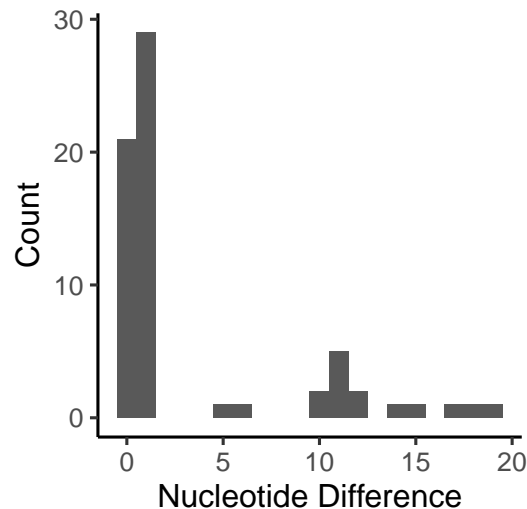
IGHV3-11*06

415 sequences assigned
147 (35.4%) exact matches, in which:
78 unique CDR3
5 unique J



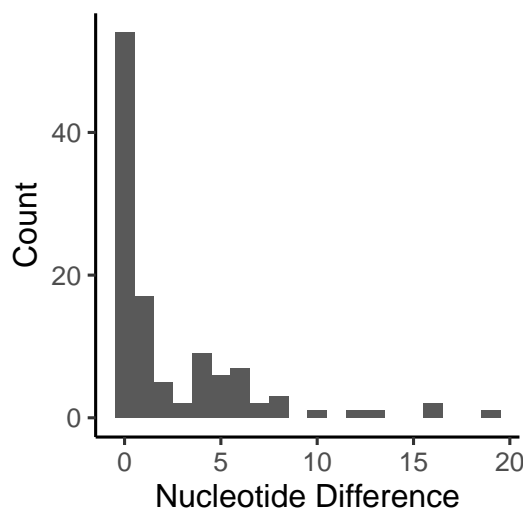
IGHV2-70*01

67 sequences assigned
21 (31.3%) exact matches, in which:
15 unique CDR3
4 unique J



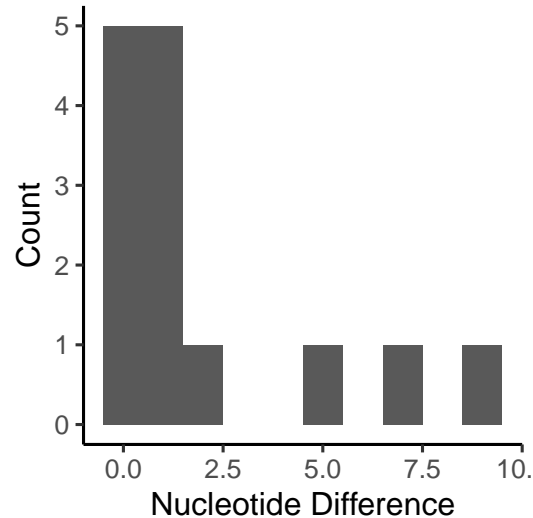
IGHV3-7*01

111 sequences assigned
54 (48.6%) exact matches, in which:
44 unique CDR3
5 unique J



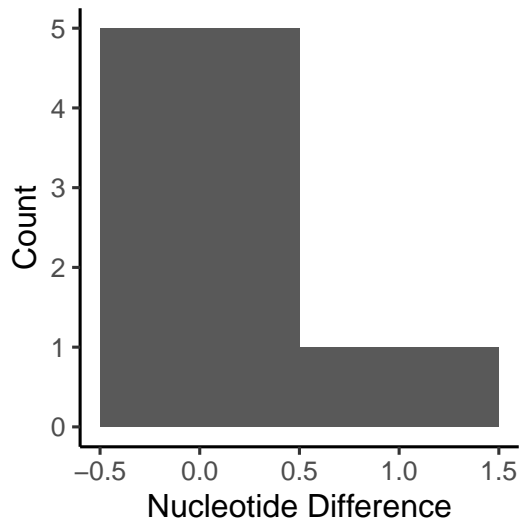
IGHV3-11*03_05

20 sequences assigned
5 (25%) exact matches, in which:
4 unique CDR3
1 unique J



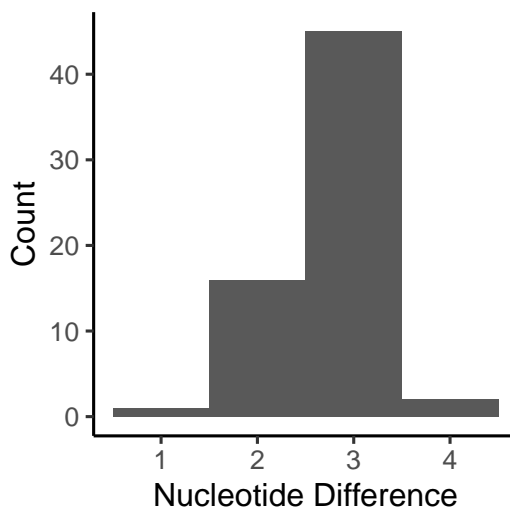
IGHV3-13*05

6 sequences assigned
5 (83.3%) exact matches, in which:
3 unique CDR3
1 unique J



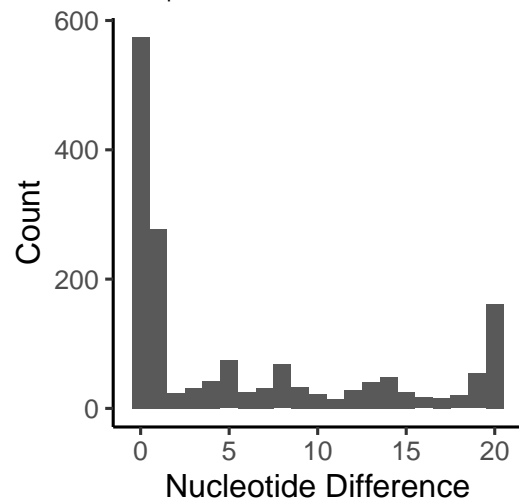
IGHV3-20*03_04

78 sequences assigned
No exact matches.



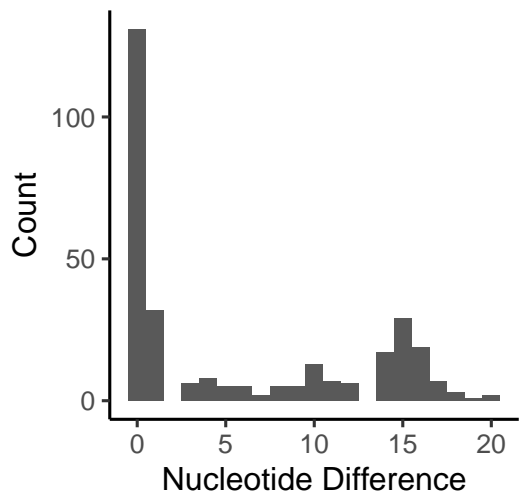
IGHV3-23*01_04

2485 sequences assigned
575 (23.1%) exact matches, in which:
286 unique CDR3
6 unique J



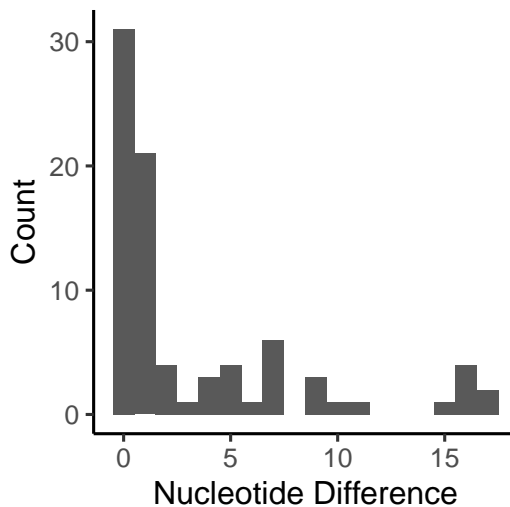
IGHV3-15*01_02

324 sequences assigned
131 (40.4%) exact matches, in which:
65 unique CDR3
6 unique J



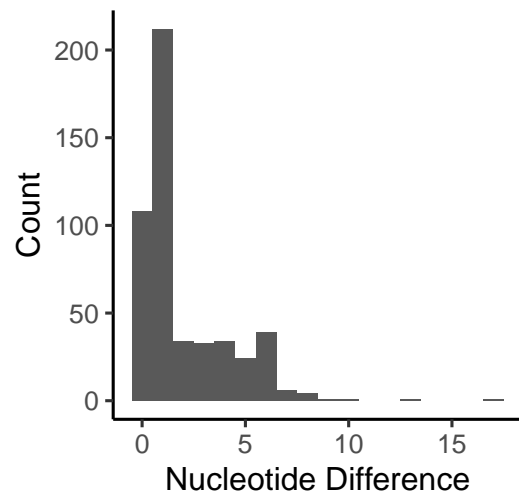
IGHV3-21*04

84 sequences assigned
31 (36.9%) exact matches, in which:
25 unique CDR3
6 unique J



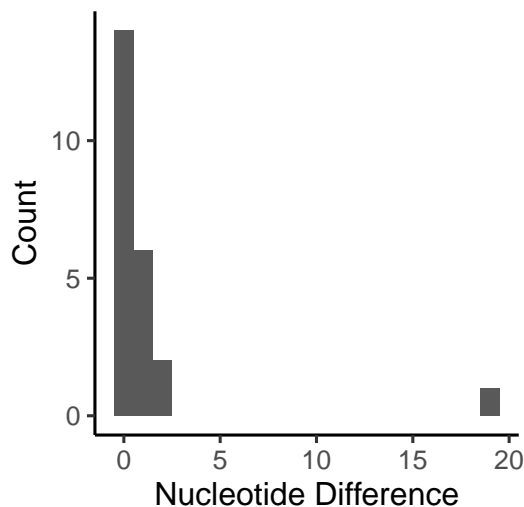
IGHV3-23*01_04_C300T

503 sequences assigned
108 (21.5%) exact matches, in which:
80 unique CDR3
5 unique J



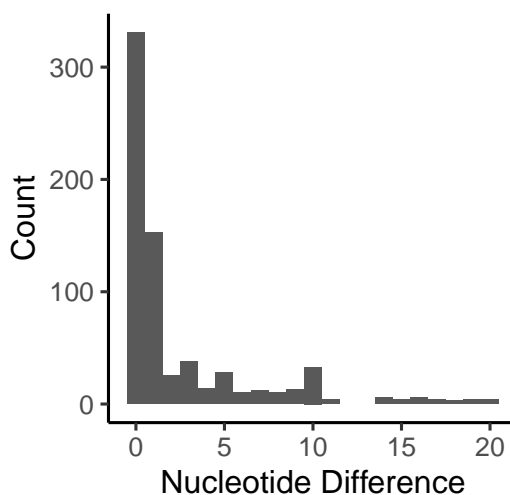
IGHV3-20*01_02

23 sequences assigned
14 (60.9%) exact matches, in which:
8 unique CDR3
4 unique J



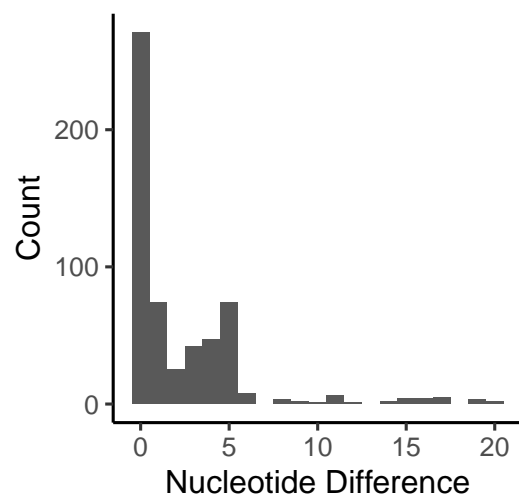
IGHV3-21*01_02

803 sequences assigned
331 (41.2%) exact matches, in which:
171 unique CDR3
6 unique J



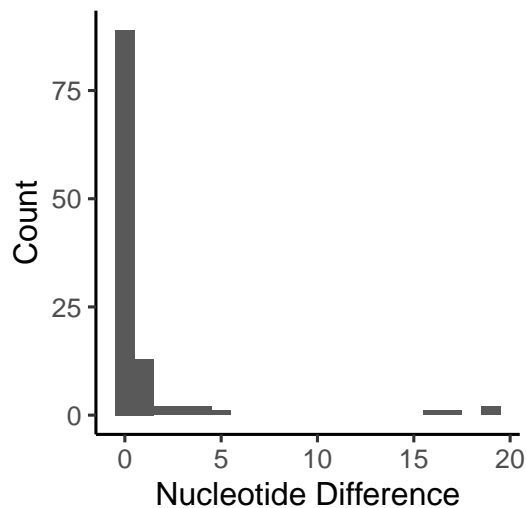
IGHV3-30-3*01

603 sequences assigned
271 (44.9%) exact matches, in which:
162 unique CDR3
6 unique J



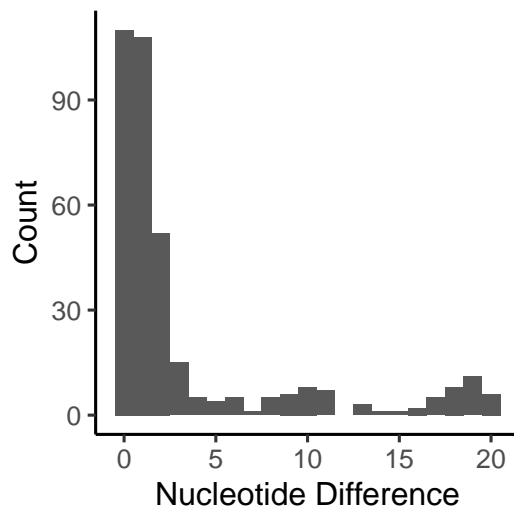
IGHV3-30*03

125 sequences assigned
89 (71.2%) exact matches, in which:
71 unique CDR3
5 unique J



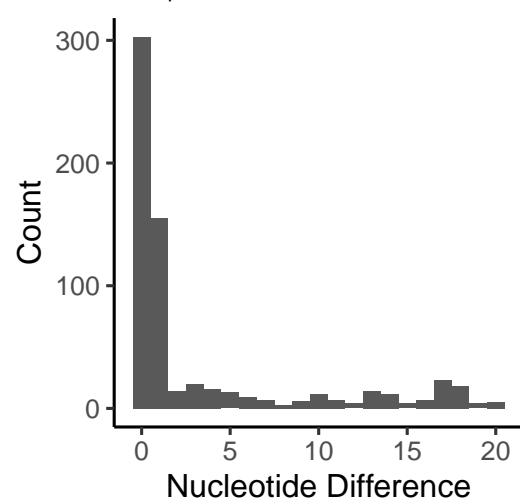
IGHV3-33*06

377 sequences assigned
110 (29.2%) exact matches, in which:
58 unique CDR3
3 unique J



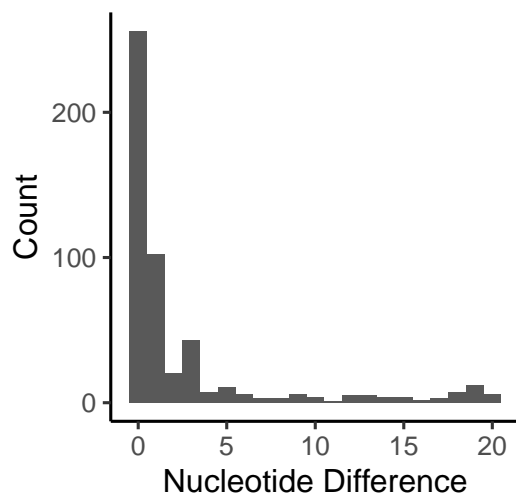
IGHV3-48*02

793 sequences assigned
303 (38.2%) exact matches, in which:
140 unique CDR3
6 unique J



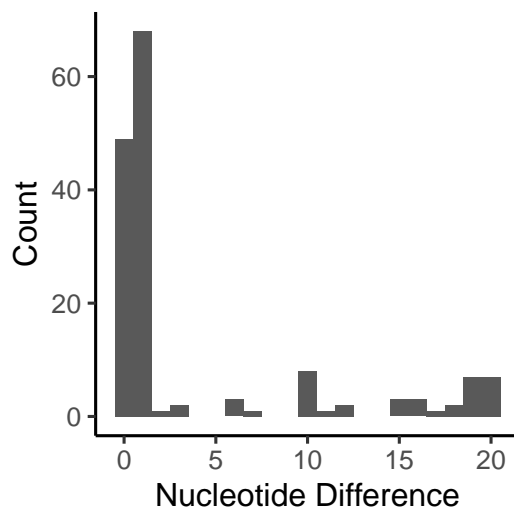
IGHV3-30*04_C203T

578 sequences assigned
256 (44.3%) exact matches, in which:
144 unique CDR3
6 unique J



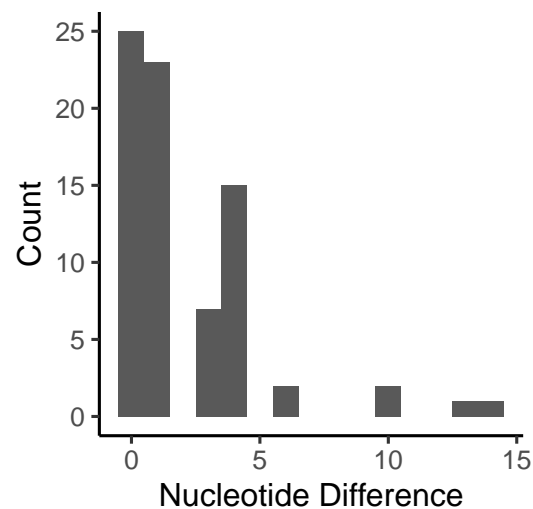
IGHV3-43*01

171 sequences assigned
49 (28.7%) exact matches, in which:
23 unique CDR3
4 unique J



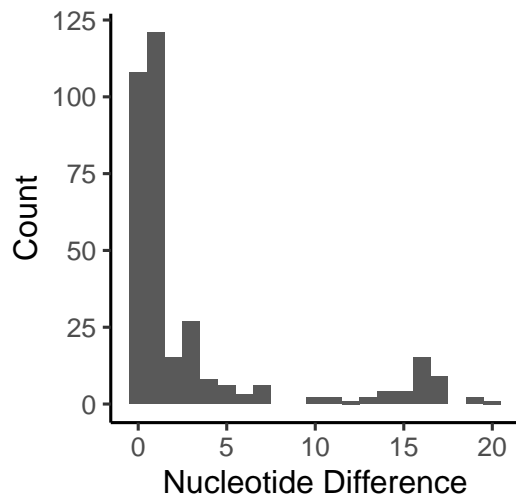
IGHV3-48*04

76 sequences assigned
25 (32.9%) exact matches, in which:
19 unique CDR3
3 unique J



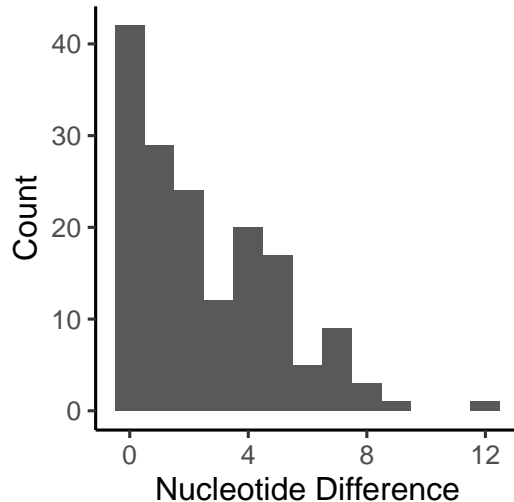
IGHV3-33*01

367 sequences assigned
108 (29.4%) exact matches, in which:
66 unique CDR3
4 unique J



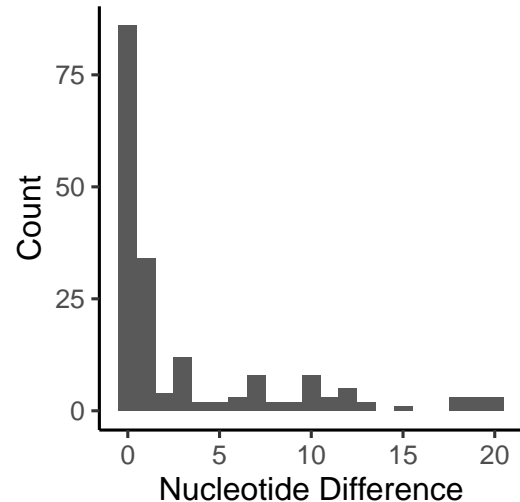
IGHV3-48*01

163 sequences assigned
42 (25.8%) exact matches, in which:
35 unique CDR3
4 unique J



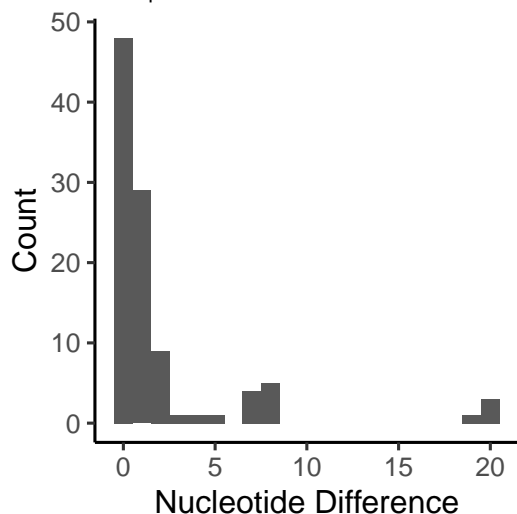
IGHV3-49*04

190 sequences assigned
86 (45.3%) exact matches, in which:
39 unique CDR3
4 unique J



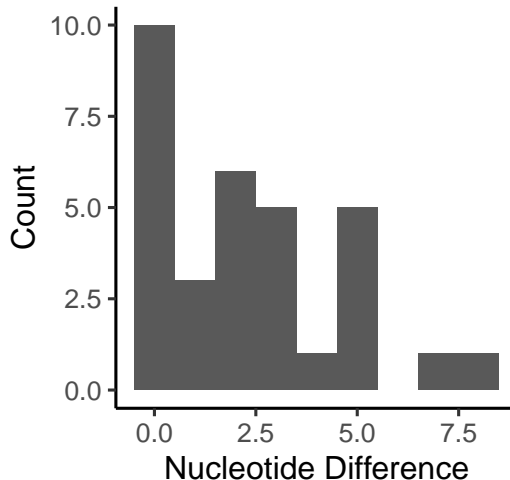
IGHV3-53*04

108 sequences assigned
48 (44.4%) exact matches, in which:
26 unique CDR3
4 unique J



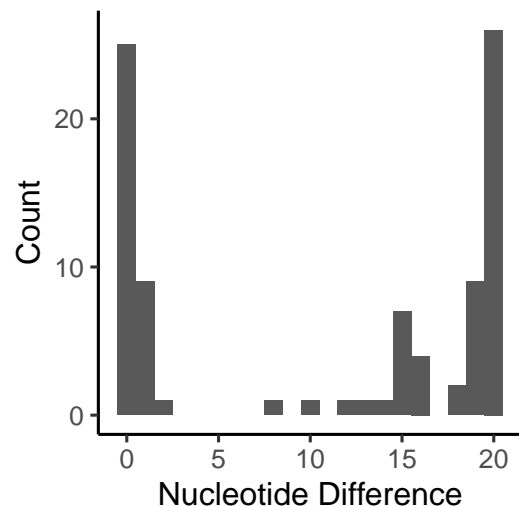
IGHV3-64*04_A210C

32 sequences assigned
10 (31.2%) exact matches, in which:
10 unique CDR3
4 unique J



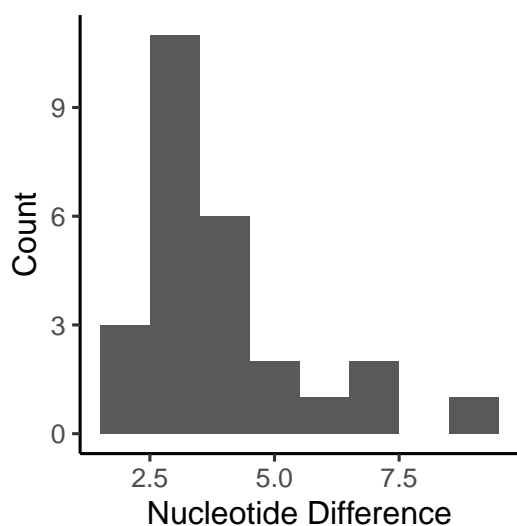
IGHV3-73*01_02

114 sequences assigned
25 (21.9%) exact matches, in which:
12 unique CDR3
4 unique J



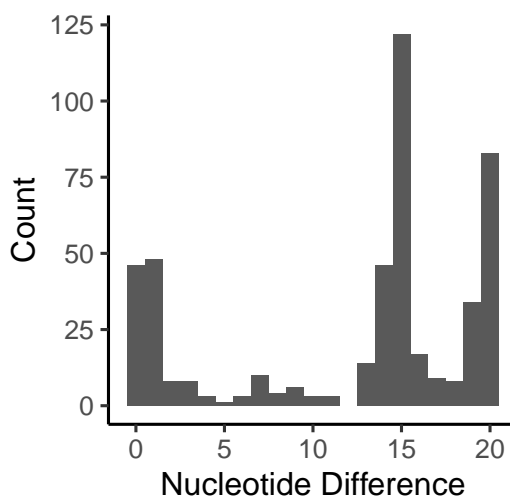
IGHV3-53*01_02

34 sequences assigned
No exact matches.



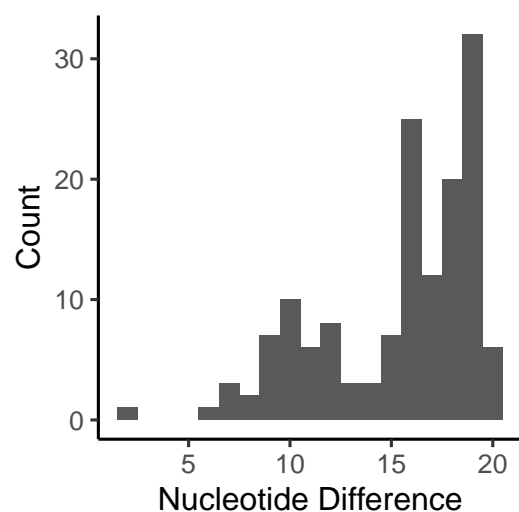
IGHV3-66*01

610 sequences assigned
46 (7.5%) exact matches, in which:
23 unique CDR3
5 unique J



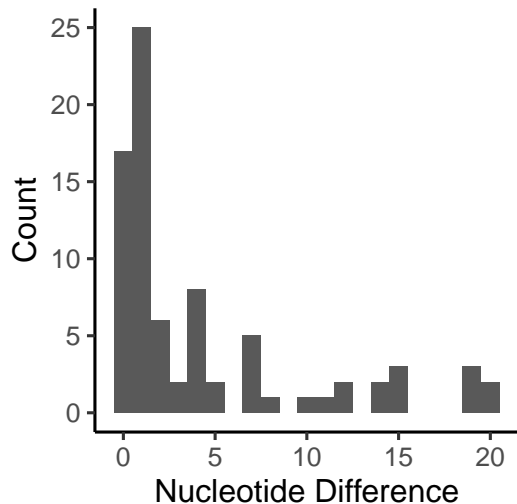
IGHV3-74*03

179 sequences assigned
No exact matches.



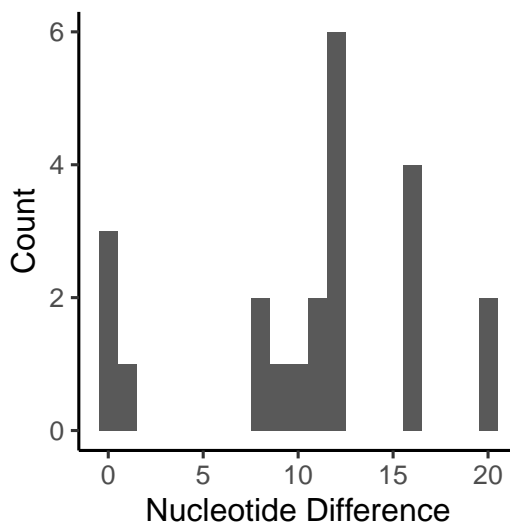
IGHV3-64*01

91 sequences assigned
17 (18.7%) exact matches, in which:
8 unique CDR3
4 unique J



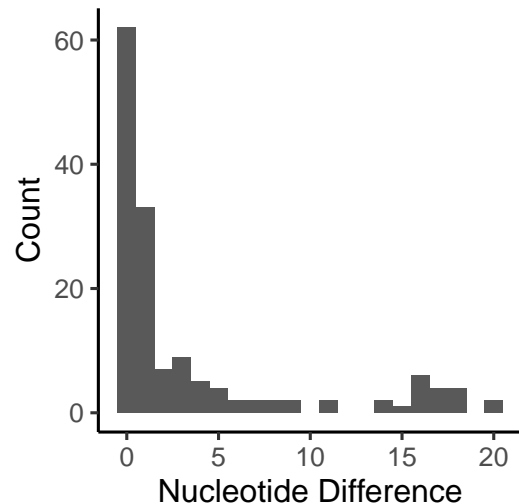
IGHV3-72*01

57 sequences assigned
3 (5.3%) exact matches, in which:
1 unique CDR3
1 unique J



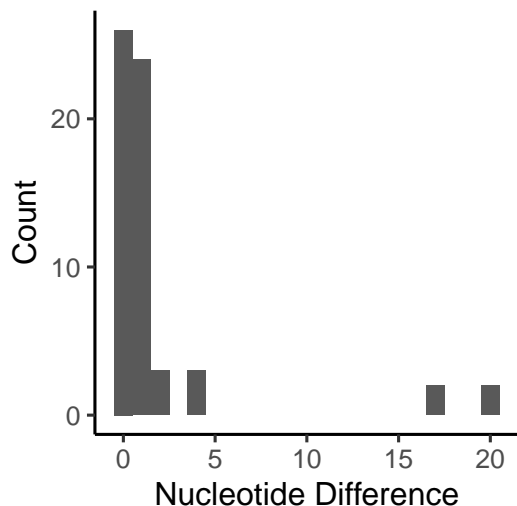
IGHV3-74*01_02

168 sequences assigned
62 (36.9%) exact matches, in which:
34 unique CDR3
4 unique J



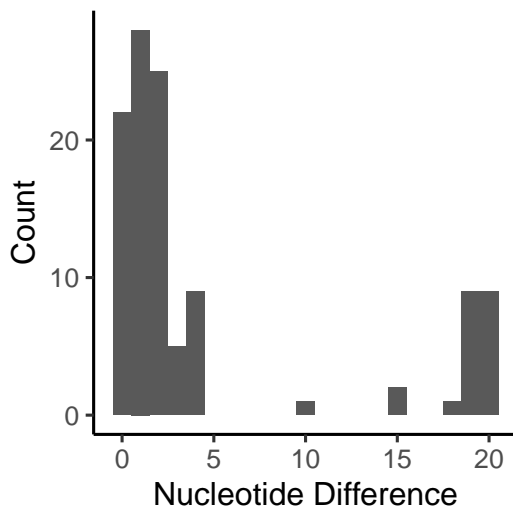
IGHV3-43D*03

71 sequences assigned
26 (36.6%) exact matches, in which:
13 unique CDR3
3 unique J



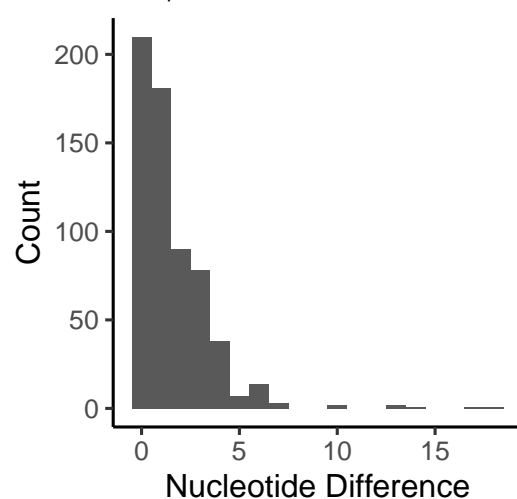
IGHV4-30-2*01

131 sequences assigned
22 (16.8%) exact matches, in which:
14 unique CDR3
5 unique J



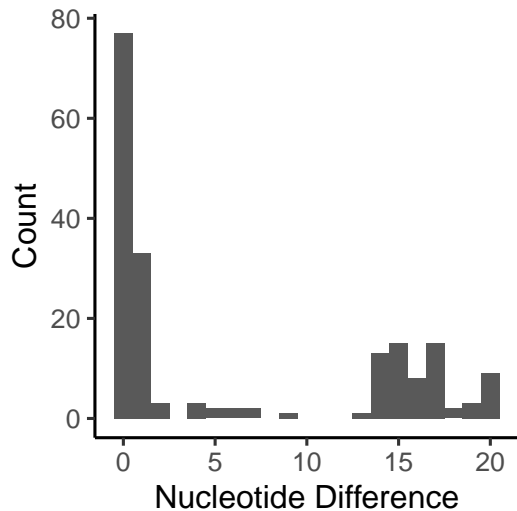
IGHV4-31*02

673 sequences assigned
210 (31.2%) exact matches, in which:
181 unique CDR3
6 unique J



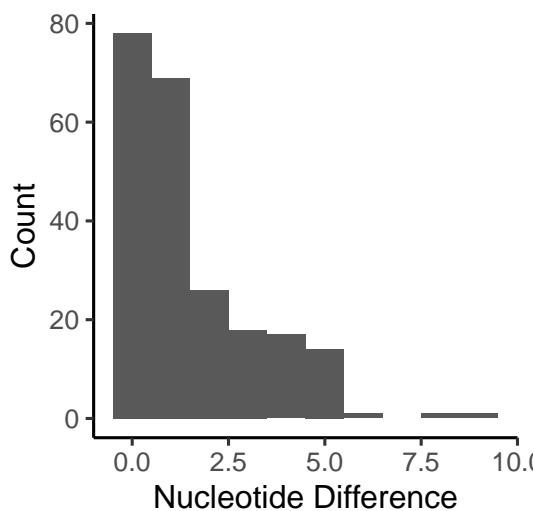
IGHV3-64D*06

200 sequences assigned
77 (38.5%) exact matches, in which:
31 unique CDR3
4 unique J



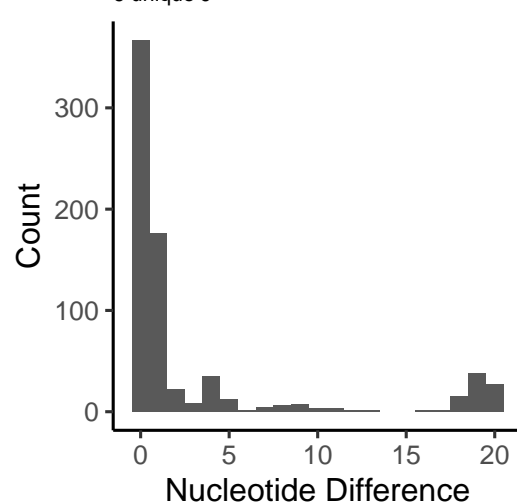
IGHV4-30-4*01

225 sequences assigned
78 (34.7%) exact matches, in which:
65 unique CDR3
6 unique J



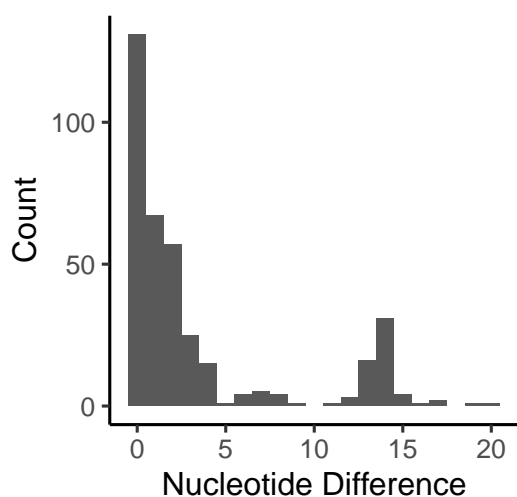
IGHV4-34*01_02

933 sequences assigned
367 (39.3%) exact matches, in which:
291 unique CDR3
6 unique J



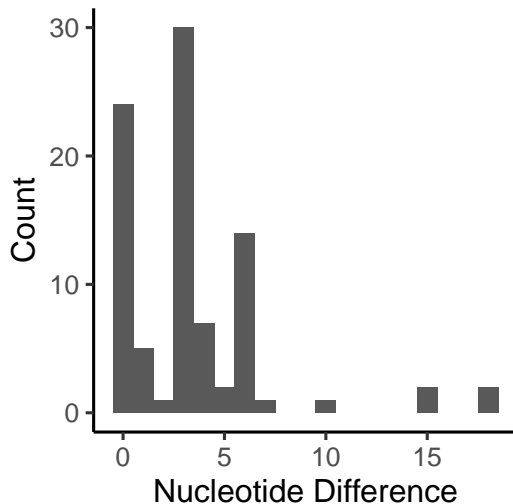
IGHV4-4*02_03

496 sequences assigned
131 (26.4%) exact matches, in which:
112 unique CDR3
6 unique J



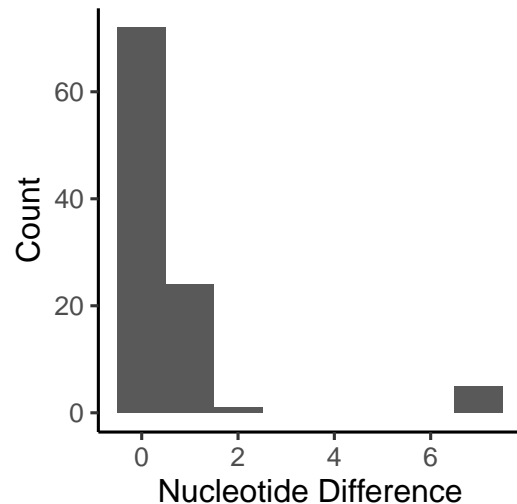
IGHV4-30-4*01_C249T_7

102 sequences assigned
24 (23.5%) exact matches, in which:
24 unique CDR3
5 unique J



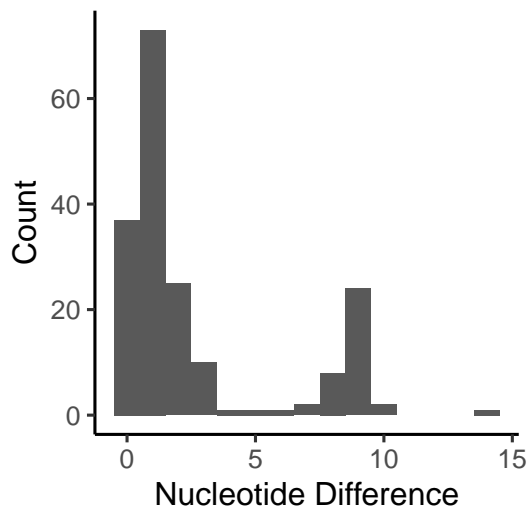
IGHV4-34*01_02_C288T_7

102 sequences assigned
72 (70.6%) exact matches, in which:
71 unique CDR3
6 unique J



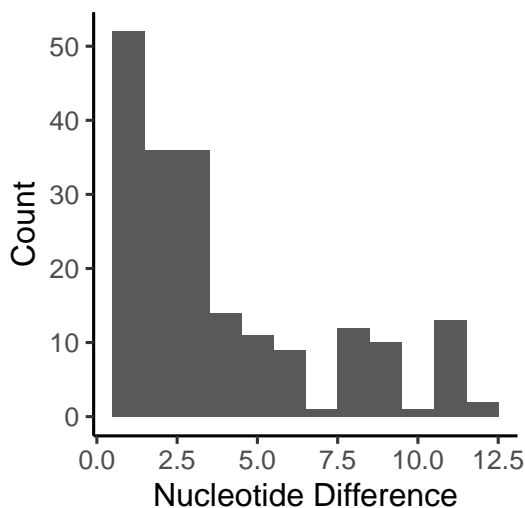
IGHV4-34*01_02_G291A

186 sequences assigned
37 (19.9%) exact matches, in which:
37 unique CDR3
5 unique J



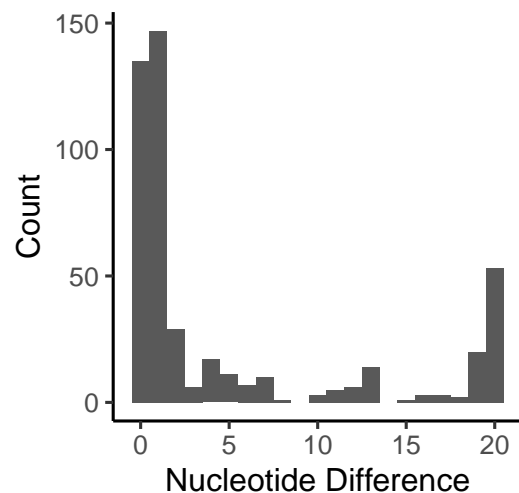
IGHV4-39*07

197 sequences assigned
No exact matches.



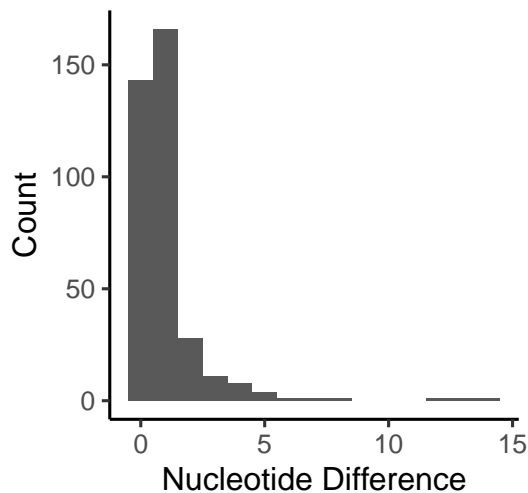
IGHV4-59*08

486 sequences assigned
135 (27.8%) exact matches, in which:
110 unique CDR3
6 unique J



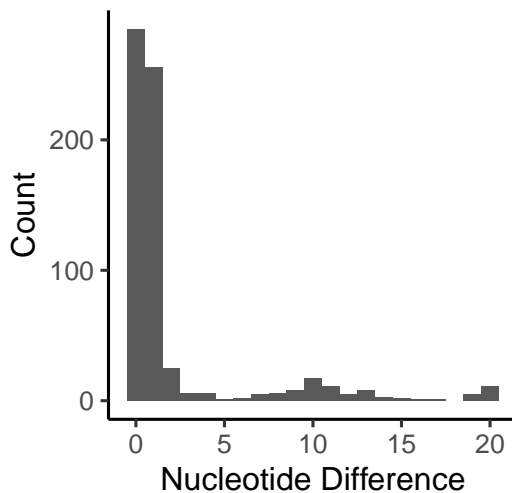
IGHV4-38-2*02

444 sequences assigned
143 (32.2%) exact matches, in which:
110 unique CDR3
6 unique J



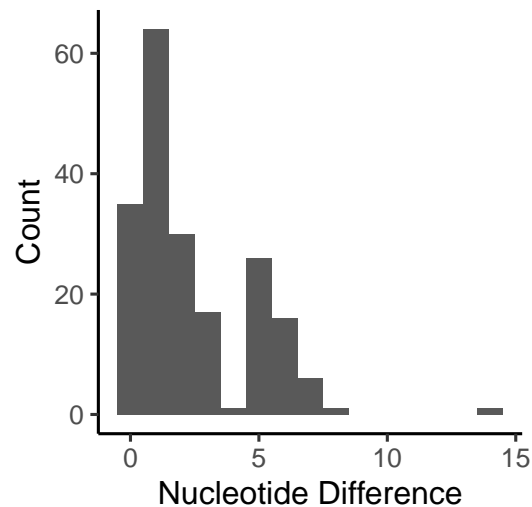
IGHV4-39*02_C258G

1053 sequences assigned
285 (27.1%) exact matches, in which:
228 unique CDR3
6 unique J



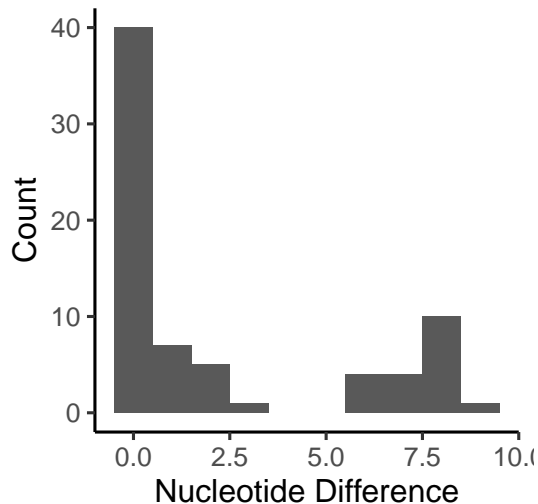
IGHV4-59*12

245 sequences assigned
35 (14.3%) exact matches, in which:
35 unique CDR3
5 unique J



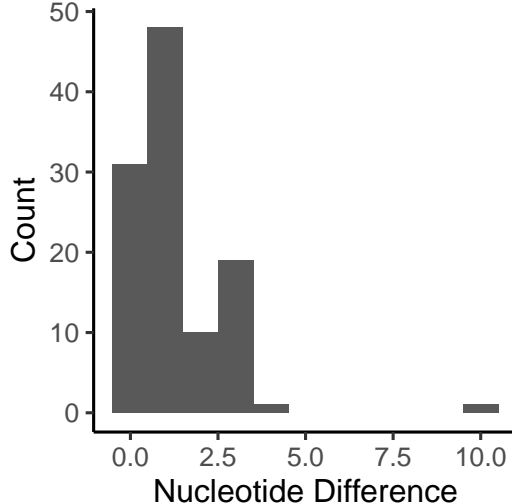
IGHV4-38-2*02_A291G_()

72 sequences assigned
40 (55.6%) exact matches, in which:
40 unique CDR3
3 unique J



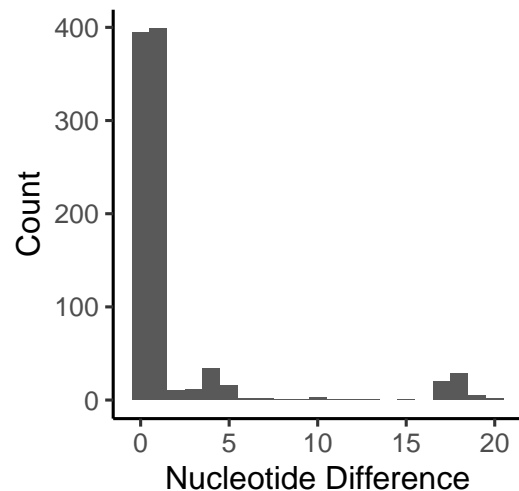
IGHV4-39*07_C288T

110 sequences assigned
31 (28.2%) exact matches, in which:
31 unique CDR3
6 unique J



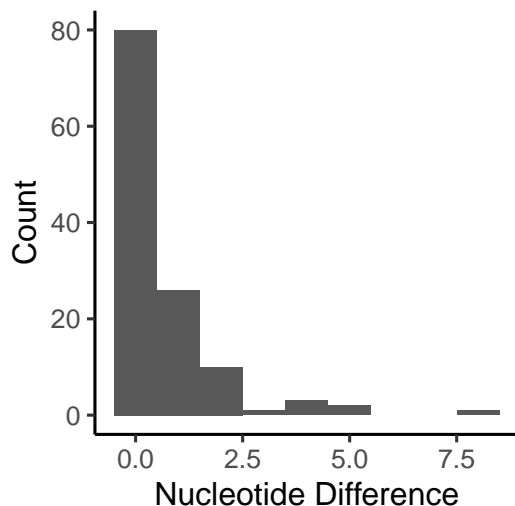
IGHV4-59*02_G88A

969 sequences assigned
395 (40.8%) exact matches, in which:
300 unique CDR3
6 unique J



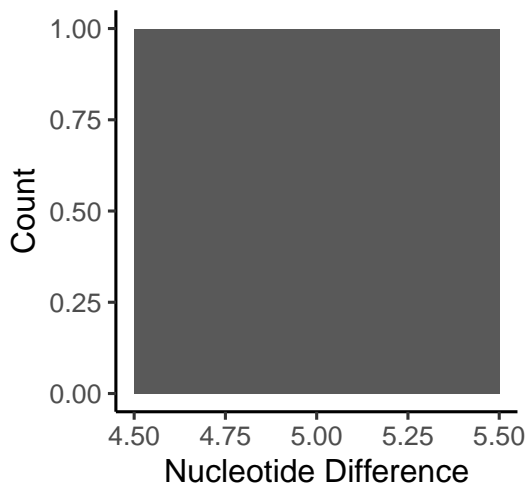
IGHV4–59*12_C300T

123 sequences assigned
80 (65%) exact matches, in which:
80 unique CDR3
5 unique J



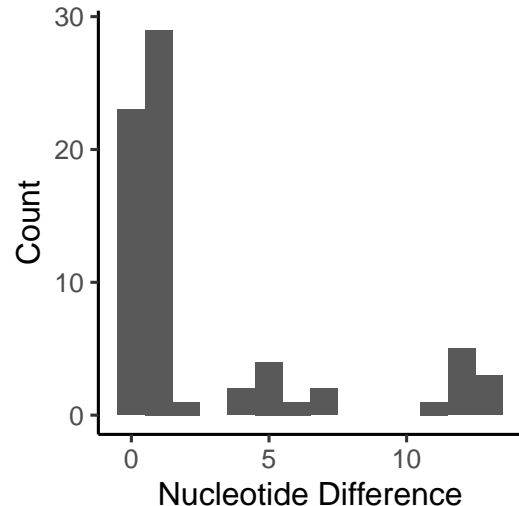
IGHV4/OR15–8*02

2 sequences assigned
No exact matches.



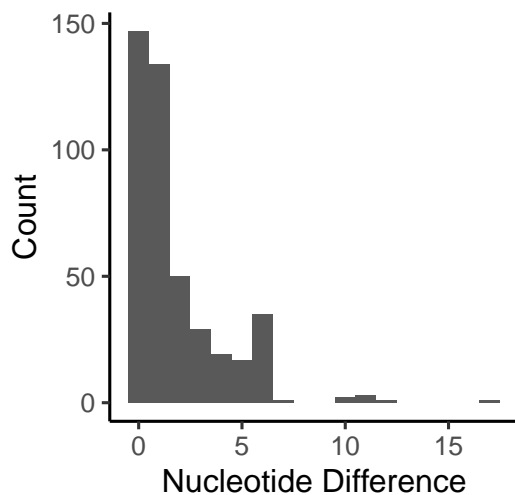
IGHV6–1*01_02

72 sequences assigned
23 (31.9%) exact matches, in which:
17 unique CDR3
4 unique J



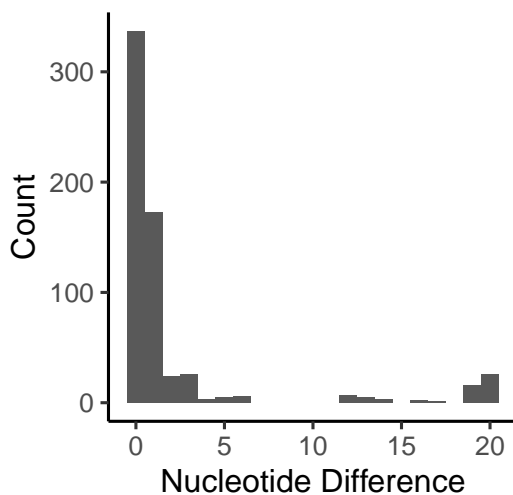
IGHV4–61*01

447 sequences assigned
147 (32.9%) exact matches, in which:
124 unique CDR3
6 unique J



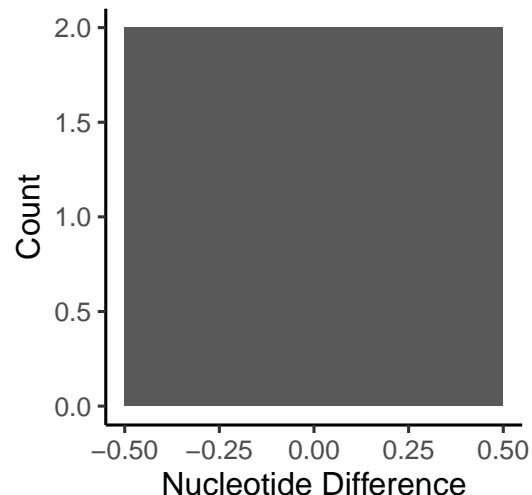
IGHV5–10–1*01_03

677 sequences assigned
337 (49.8%) exact matches, in which:
195 unique CDR3
5 unique J



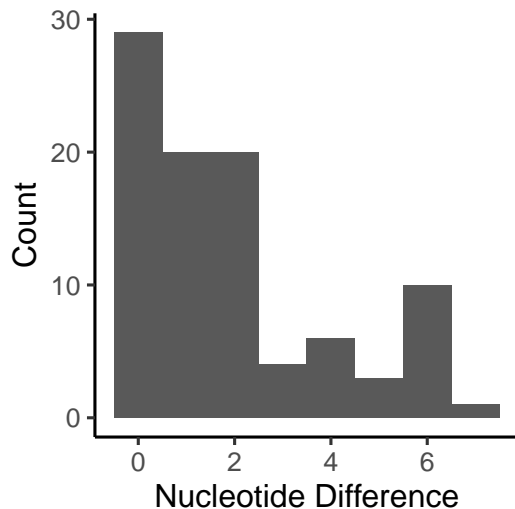
IGHV7–4–1*01

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



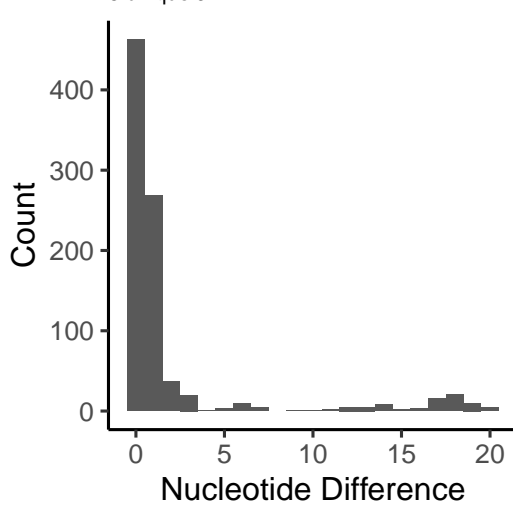
IGHV4–61*01_T288C_G2!

93 sequences assigned
29 (31.2%) exact matches, in which:
29 unique CDR3
6 unique J



IGHV5–51*07_A128G

997 sequences assigned
463 (46.4%) exact matches, in which:
220 unique CDR3
5 unique J





Warning – no inferred sequences found.