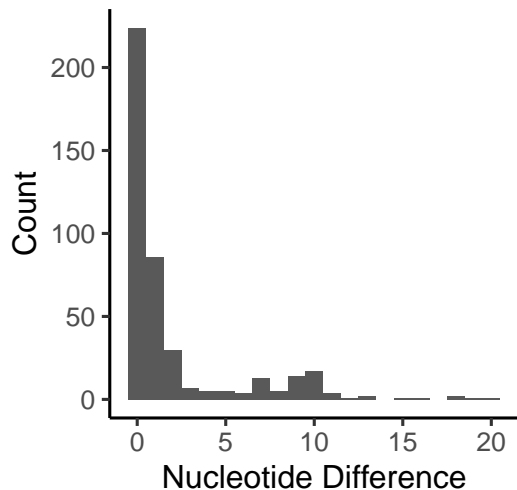


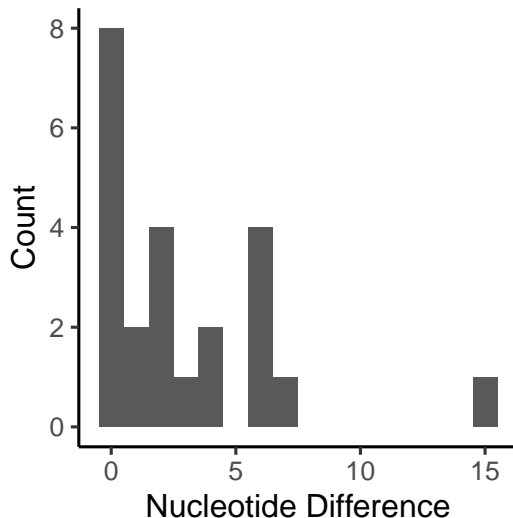
IGHV1-2*02

454 sequences assigned
224 (49.3%) exact matches, in which:
222 unique CDR3
6 unique J



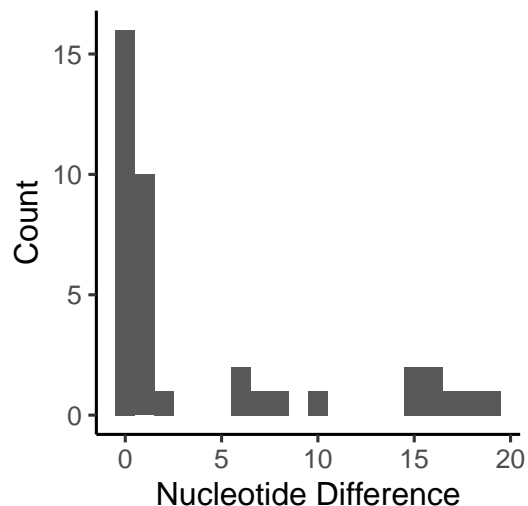
IGHV1-3*01_05_A291G_T

24 sequences assigned
8 (33.3%) exact matches, in which:
8 unique CDR3
4 unique J



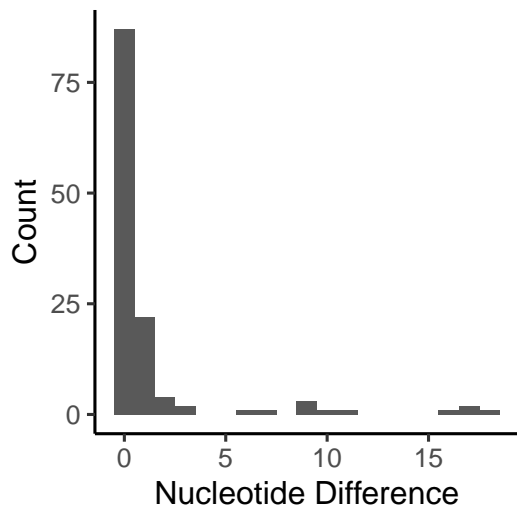
IGHV1-24*01

39 sequences assigned
16 (41%) exact matches, in which:
16 unique CDR3
4 unique J



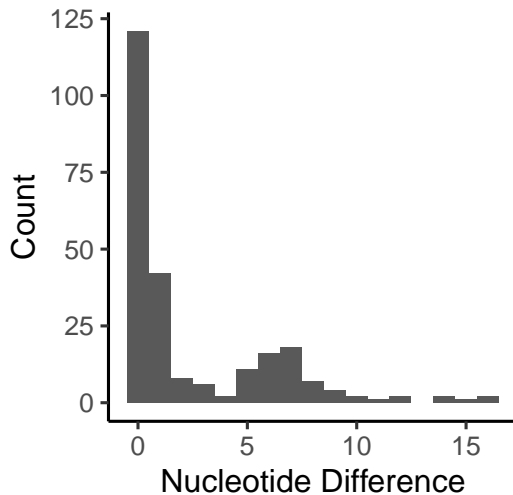
IGHV1-2*04

126 sequences assigned
87 (69%) exact matches, in which:
85 unique CDR3
5 unique J



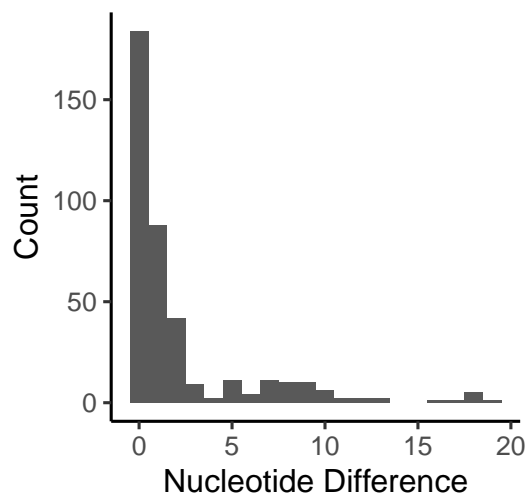
IGHV1-8*01

249 sequences assigned
121 (48.6%) exact matches, in which:
120 unique CDR3
4 unique J



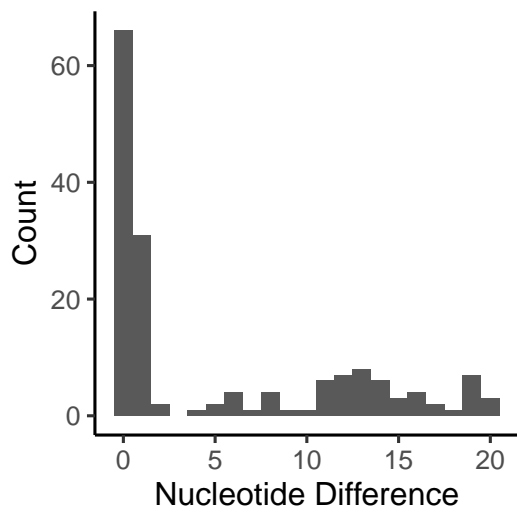
IGHV1-46*01

393 sequences assigned
184 (46.8%) exact matches, in which:
183 unique CDR3
5 unique J



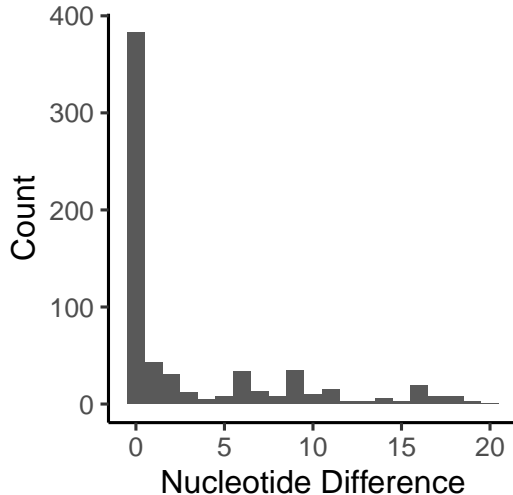
IGHV1-3*01_05

166 sequences assigned
66 (39.8%) exact matches, in which:
62 unique CDR3
4 unique J



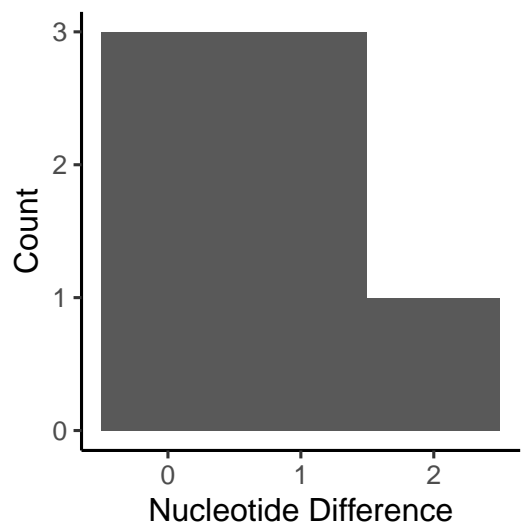
IGHV1-18*01

674 sequences assigned
383 (56.8%) exact matches, in which:
369 unique CDR3
6 unique J



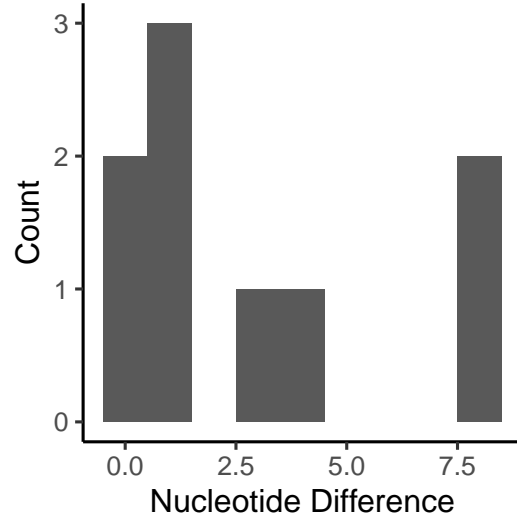
IGHV1-58*02

7 sequences assigned
3 (42.9%) exact matches, in which:
3 unique CDR3
3 unique J



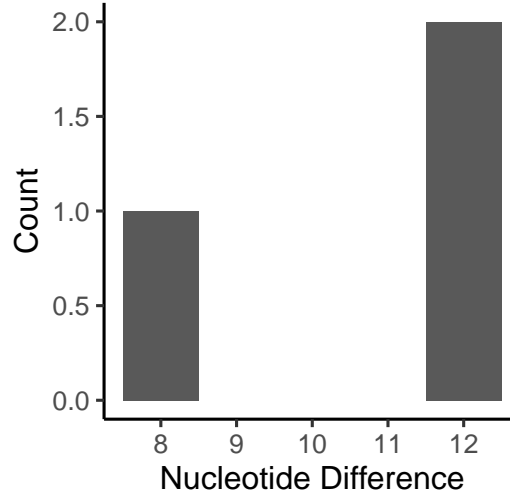
IGHV1-58*01_03

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



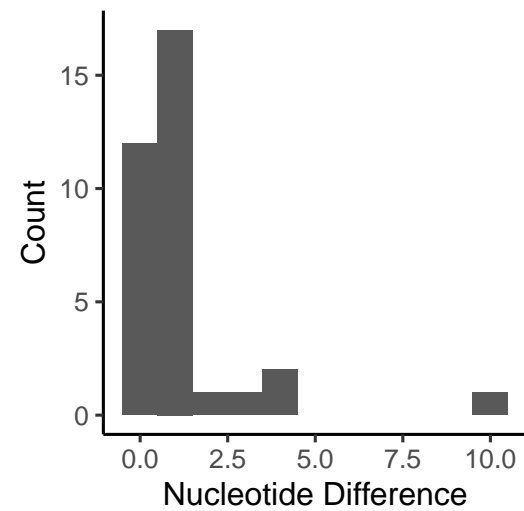
IGHV1-NL1*01

3 sequences assigned
No exact matches.



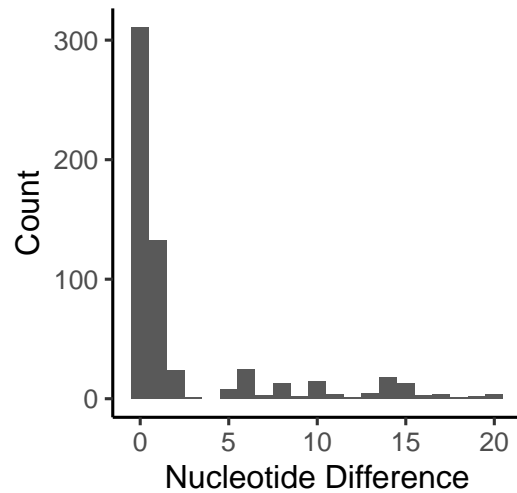
IGHV2-70*01

34 sequences assigned
12 (35.3%) exact matches, in which:
11 unique CDR3
4 unique J



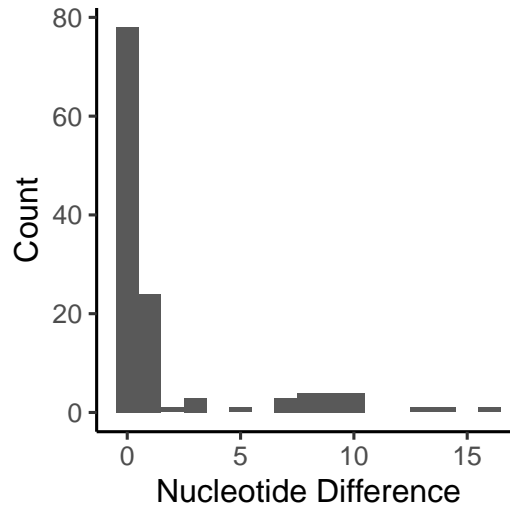
IGHV1-69*01_12_13

617 sequences assigned
311 (50.4%) exact matches, in which:
303 unique CDR3
6 unique J



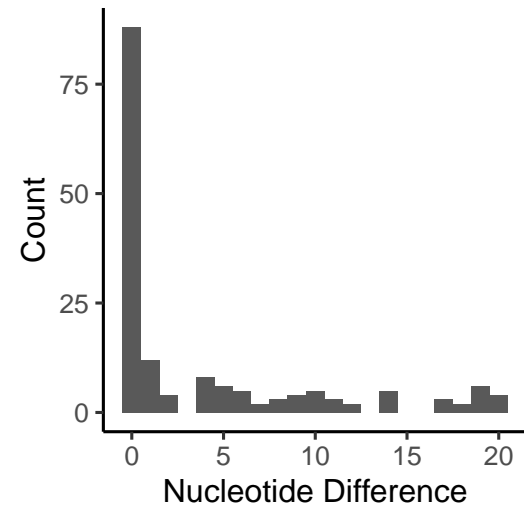
IGHV2-5*02

129 sequences assigned
78 (60.5%) exact matches, in which:
75 unique CDR3
5 unique J



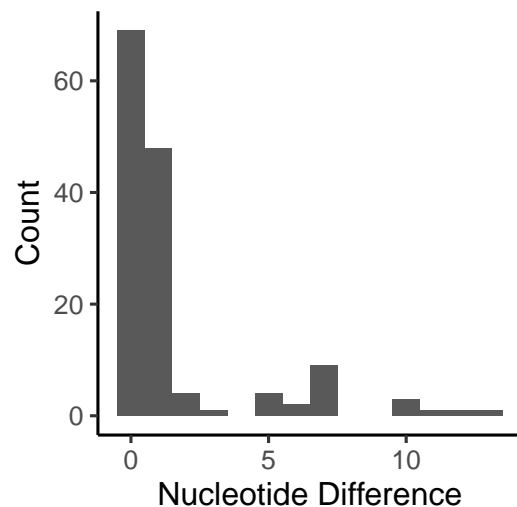
IGHV3-7*01

171 sequences assigned
88 (51.5%) exact matches, in which:
53 unique CDR3
5 unique J



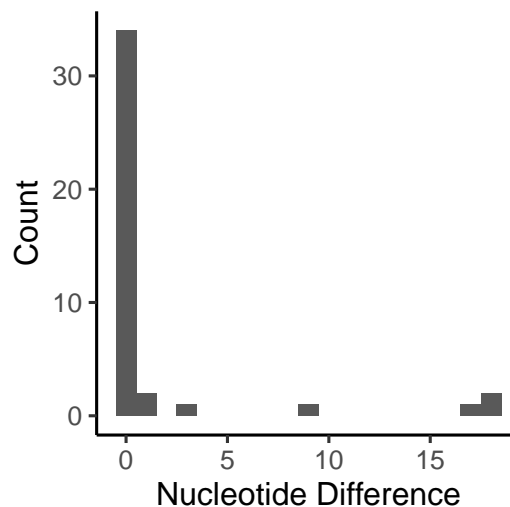
IGHV1-69*04_09_G112A

144 sequences assigned
69 (47.9%) exact matches, in which:
69 unique CDR3
5 unique J



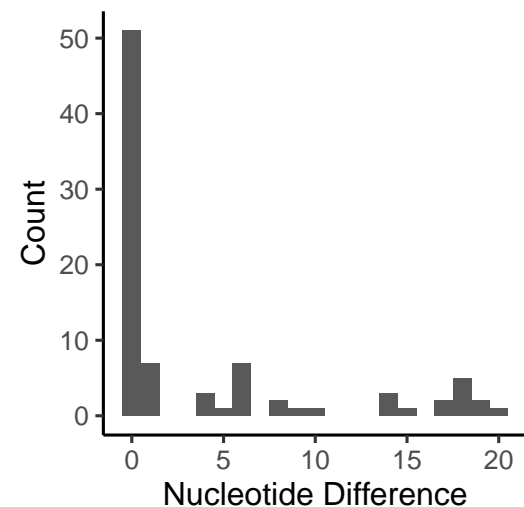
IGHV2-26*01

41 sequences assigned
34 (82.9%) exact matches, in which:
30 unique CDR3
5 unique J



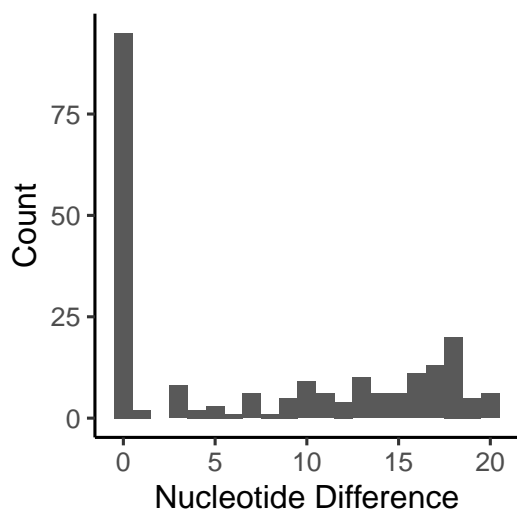
IGHV3-7*04

117 sequences assigned
51 (43.6%) exact matches, in which:
28 unique CDR3
5 unique J



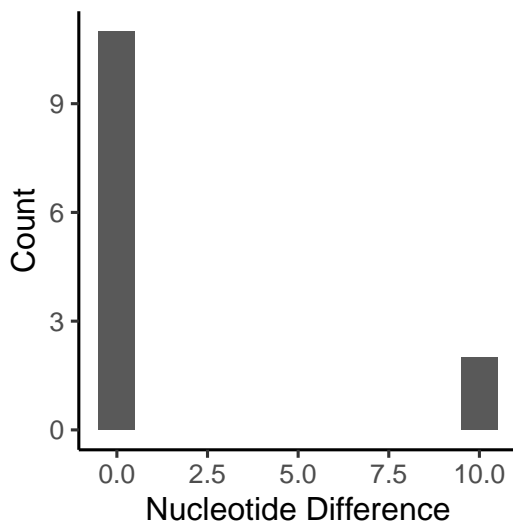
IGHV3-9*01

261 sequences assigned
95 (36.4%) exact matches, in which:
51 unique CDR3
6 unique J



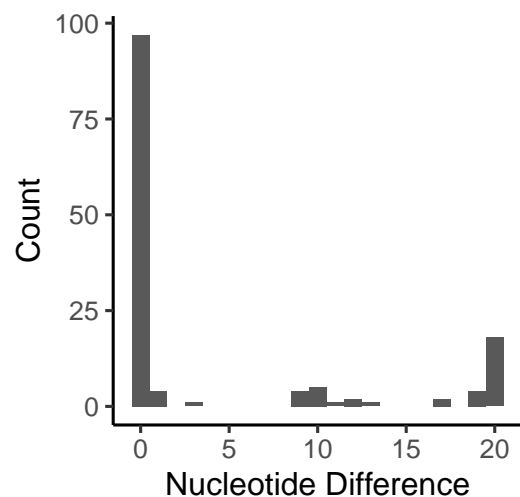
IGHV3-13*01

13 sequences assigned
11 (84.6%) exact matches, in which:
6 unique CDR3
4 unique J



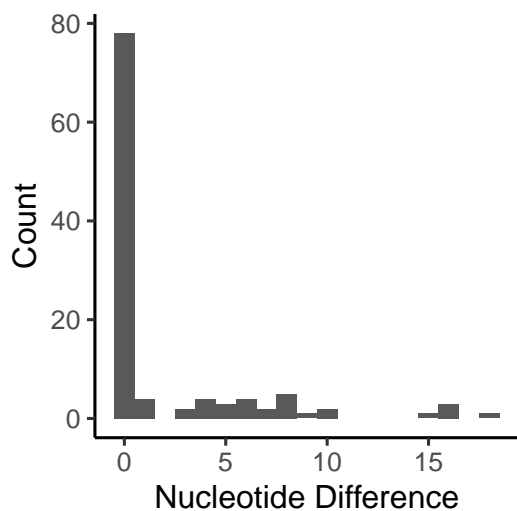
IGHV3-15*01_02

219 sequences assigned
97 (44.3%) exact matches, in which:
70 unique CDR3
4 unique J



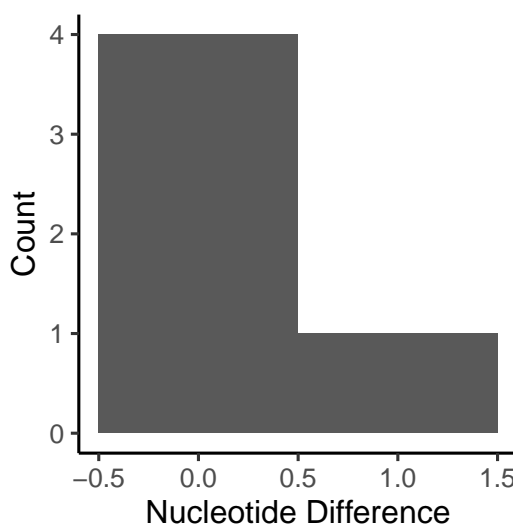
IGHV3-11*01

112 sequences assigned
78 (69.6%) exact matches, in which:
43 unique CDR3
6 unique J



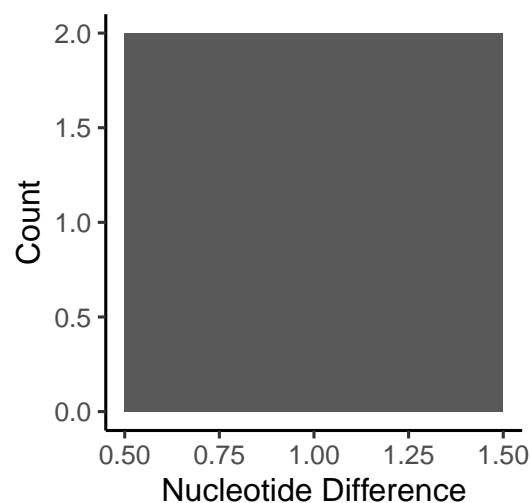
IGHV3-13*05

5 sequences assigned
4 (80%) exact matches, in which:
3 unique CDR3
2 unique J



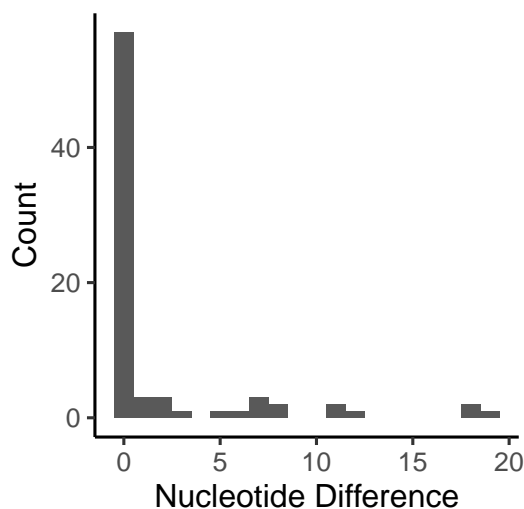
IGHV3-19*01

2 sequences assigned
No exact matches.



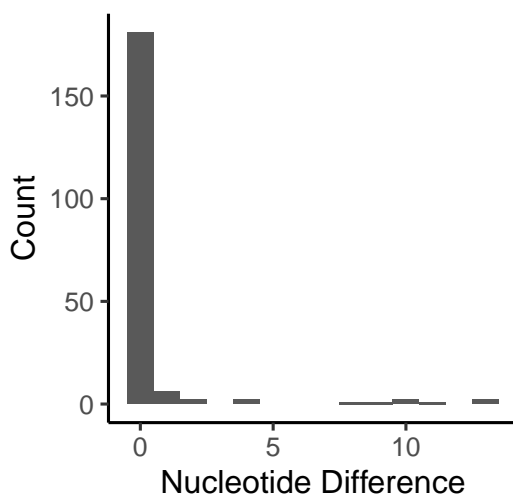
IGHV3-11*06

91 sequences assigned
57 (62.6%) exact matches, in which:
36 unique CDR3
6 unique J



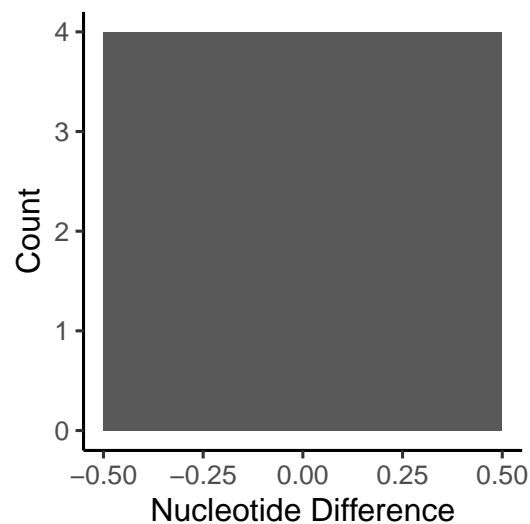
IGHV3-15*07

201 sequences assigned
181 (90%) exact matches, in which:
113 unique CDR3
4 unique J



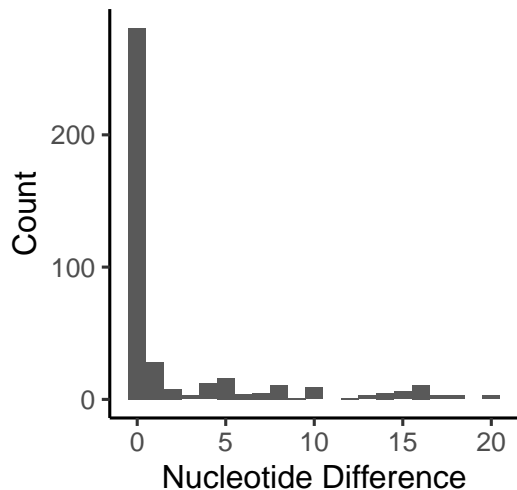
IGHV3-20*03_04

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



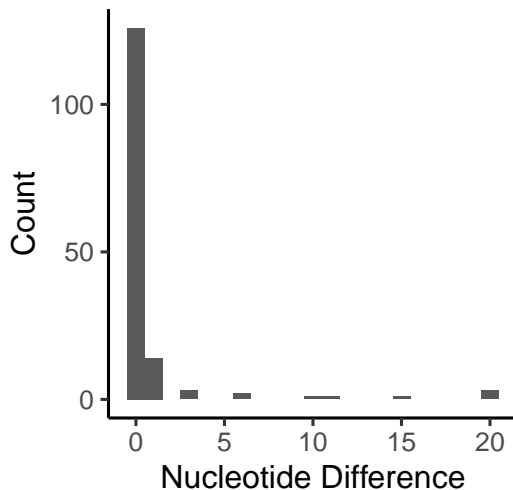
IGHV3–21*01_02

429 sequences assigned
281 (65.5%) exact matches, in which:
174 unique CDR3
6 unique J



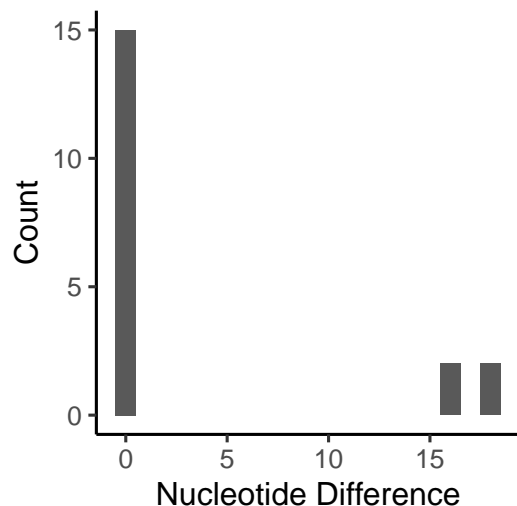
IGHV3–30*03

163 sequences assigned
126 (77.3%) exact matches, in which:
107 unique CDR3
4 unique J



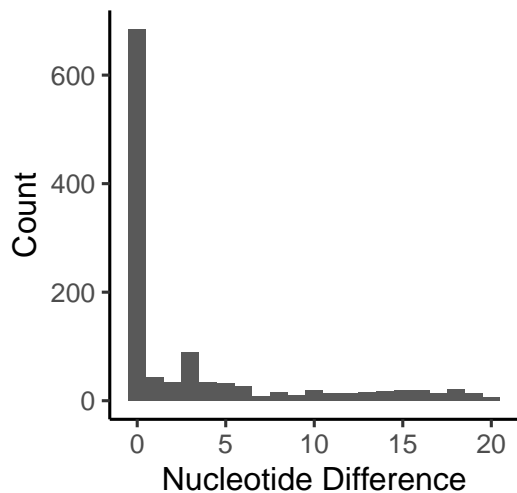
IGHV3–43*01

22 sequences assigned
15 (68.2%) exact matches, in which:
9 unique CDR3
3 unique J



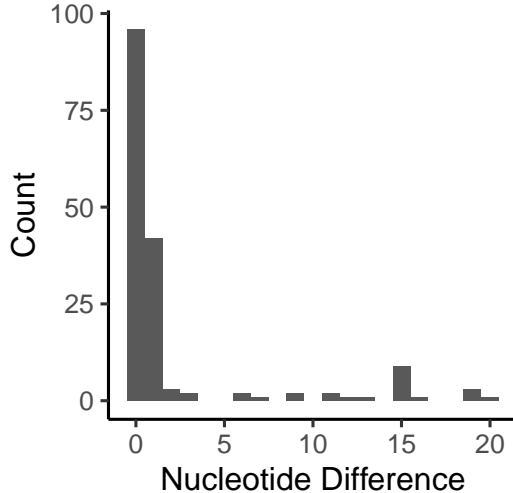
IGHV3–23*01_04

1272 sequences assigned
685 (53.9%) exact matches, in which:
411 unique CDR3
6 unique J



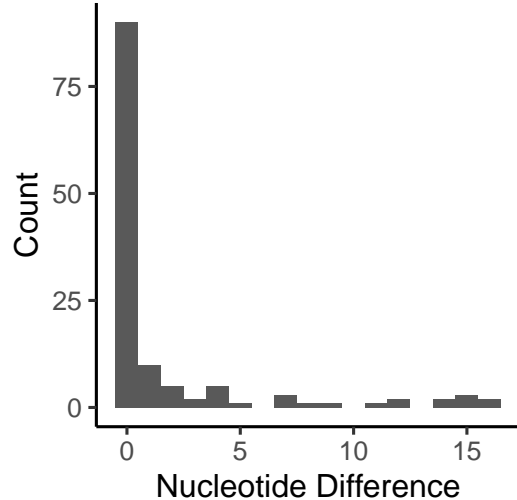
IGHV3–33*01

168 sequences assigned
96 (57.1%) exact matches, in which:
55 unique CDR3
5 unique J



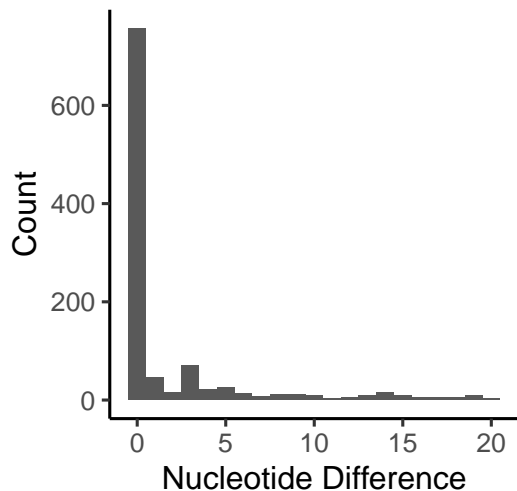
IGHV3–48*01

133 sequences assigned
90 (67.7%) exact matches, in which:
55 unique CDR3
5 unique J



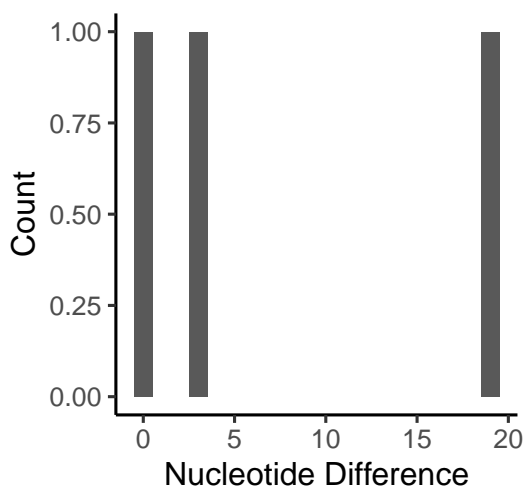
IGHV3–30–3*01

1105 sequences assigned
757 (68.5%) exact matches, in which:
494 unique CDR3
6 unique J



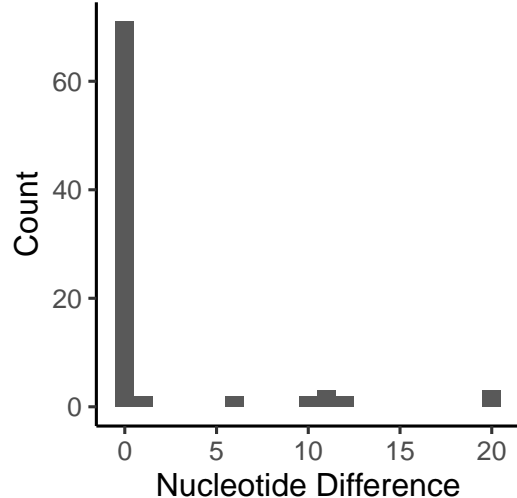
IGHV3–33*05

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



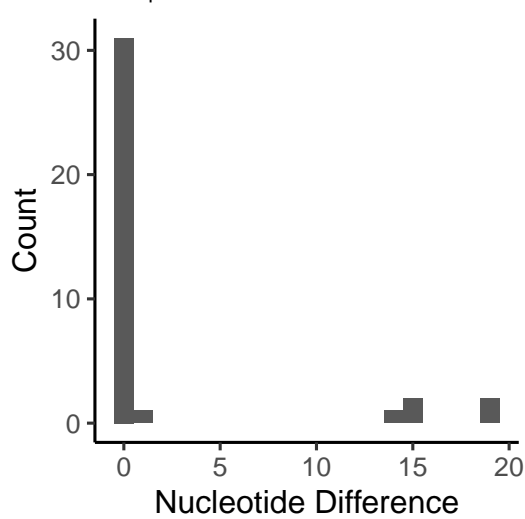
IGHV3–48*02

97 sequences assigned
71 (73.2%) exact matches, in which:
40 unique CDR3
5 unique J



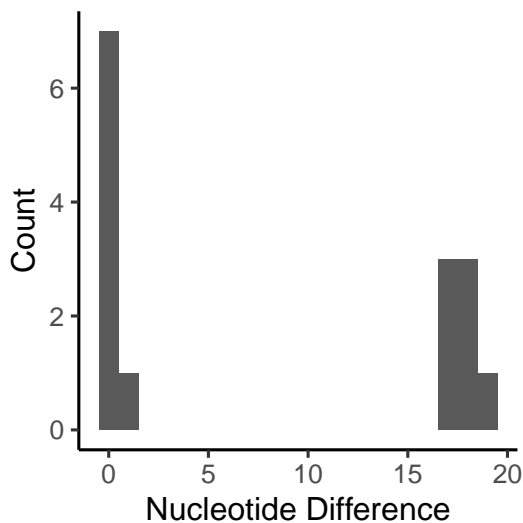
IGHV3-49*03_05

37 sequences assigned
31 (83.8%) exact matches, in which:
22 unique CDR3
5 unique J



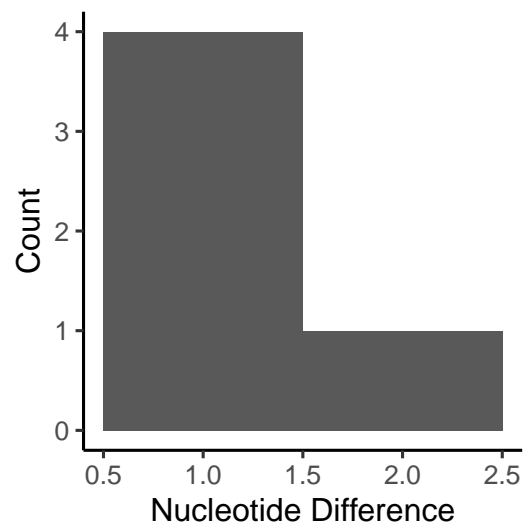
IGHV3-64*01

19 sequences assigned
7 (36.8%) exact matches, in which:
4 unique CDR3
3 unique J



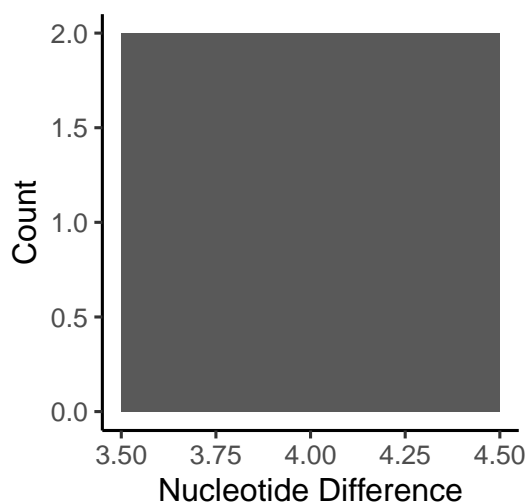
IGHV3-66*03

5 sequences assigned
No exact matches.



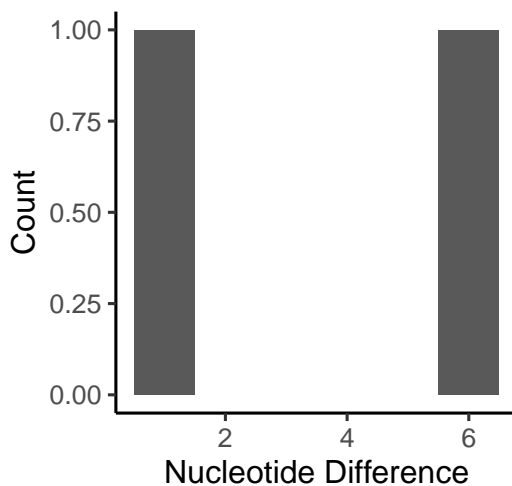
IGHV3-52*01_03

2 sequences assigned
No exact matches.



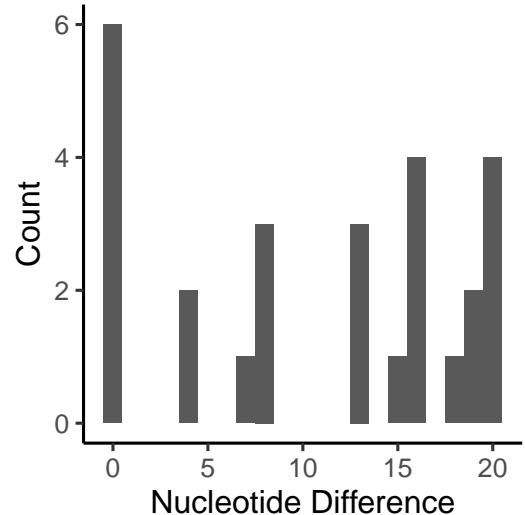
IGHV3-64*04

2 sequences assigned
No exact matches.



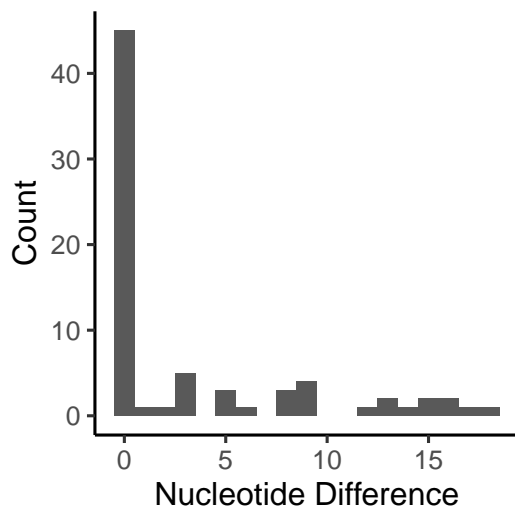
IGHV3-72*01

27 sequences assigned
6 (22.2%) exact matches, in which:
3 unique CDR3
3 unique J



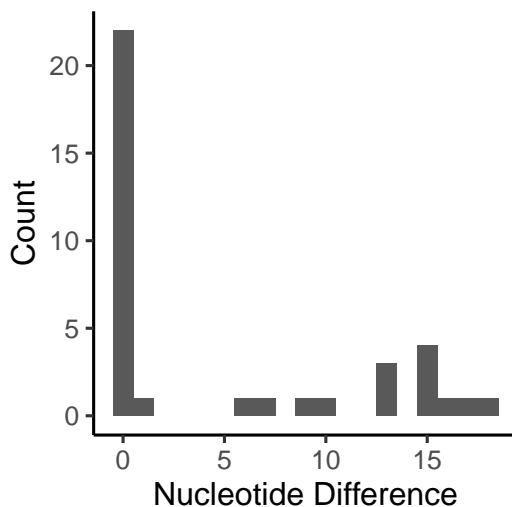
IGHV3-53*01_02

77 sequences assigned
45 (58.4%) exact matches, in which:
27 unique CDR3
4 unique J



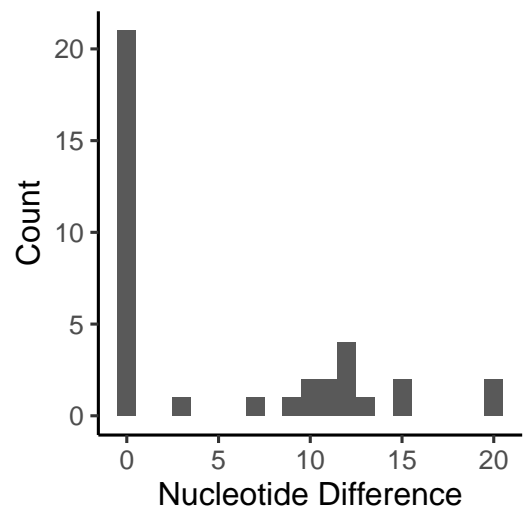
IGHV3-66*02

42 sequences assigned
22 (52.4%) exact matches, in which:
12 unique CDR3
3 unique J



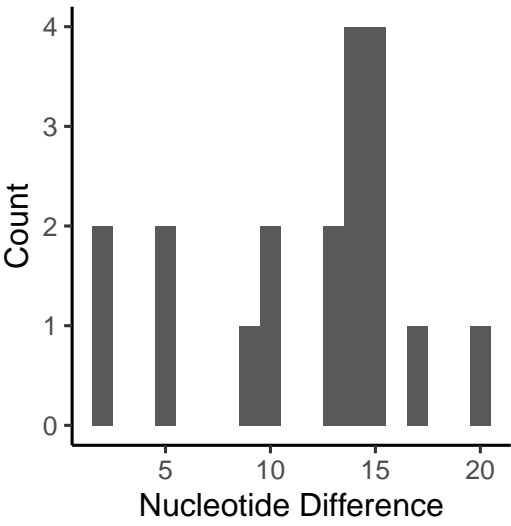
IGHV3-73*01_02

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



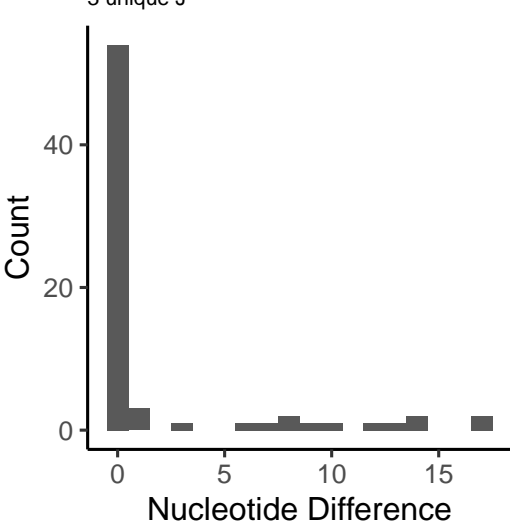
IGHV3-74*03

26 sequences assigned
No exact matches.



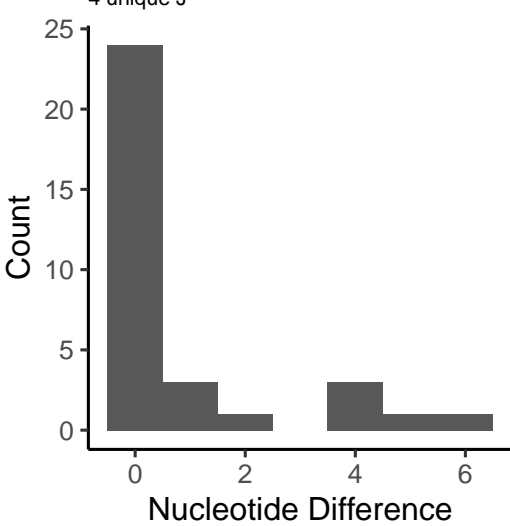
IGHV3-64D*06

83 sequences assigned
54 (65.1%) exact matches, in which:
23 unique CDR3
3 unique J



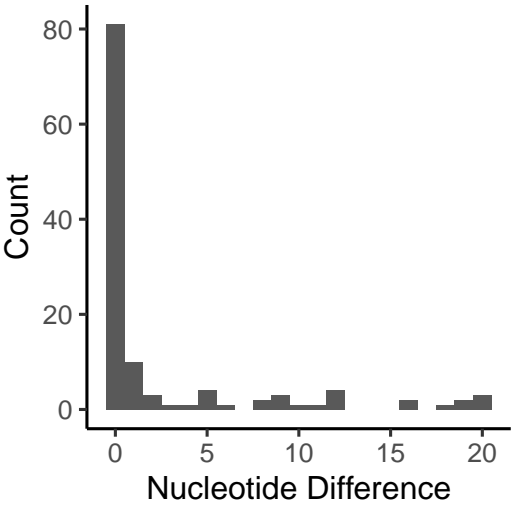
IGHV4-4*07_G234A_G29

33 sequences assigned
24 (72.7%) exact matches, in which:
24 unique CDR3
4 unique J



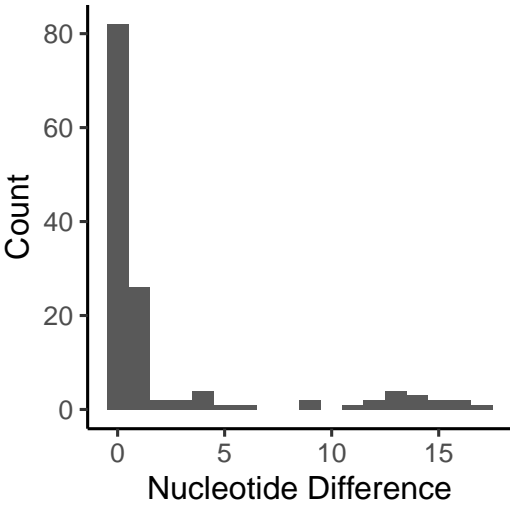
IGHV3-74*01_02

130 sequences assigned
81 (62.3%) exact matches, in which:
48 unique CDR3
4 unique J



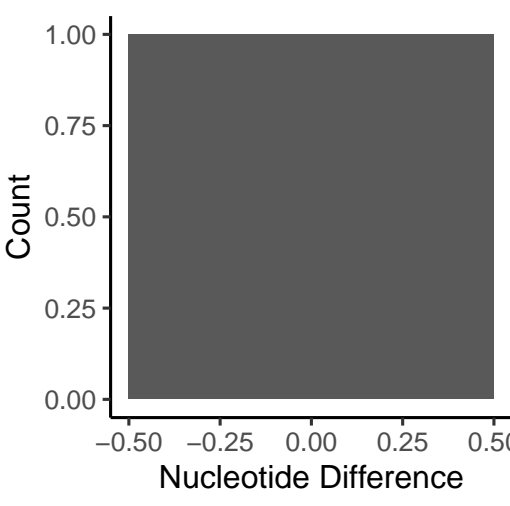
IGHV4-4*07

162 sequences assigned
82 (50.6%) exact matches, in which:
74 unique CDR3
6 unique J



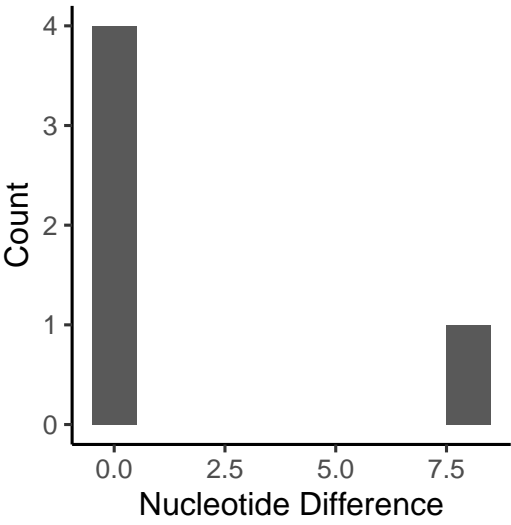
IGHV4-28*01_07

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



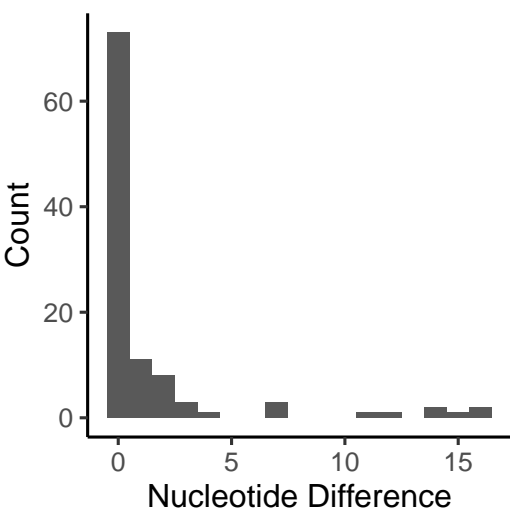
IGHV3-43D*03

5 sequences assigned
4 (80%) exact matches, in which:
2 unique CDR3
1 unique J



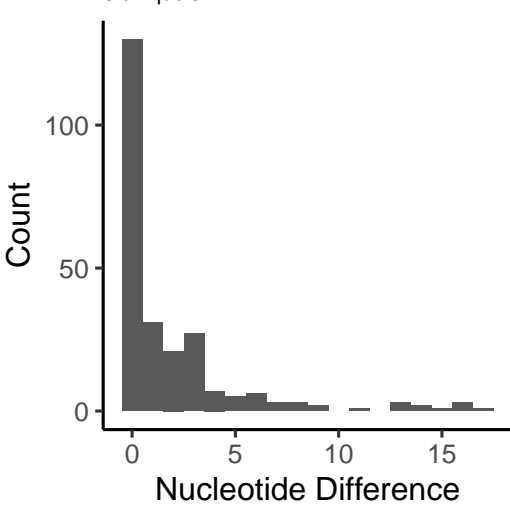
IGHV4-4*02_03

112 sequences assigned
73 (65.2%) exact matches, in which:
59 unique CDR3
5 unique J



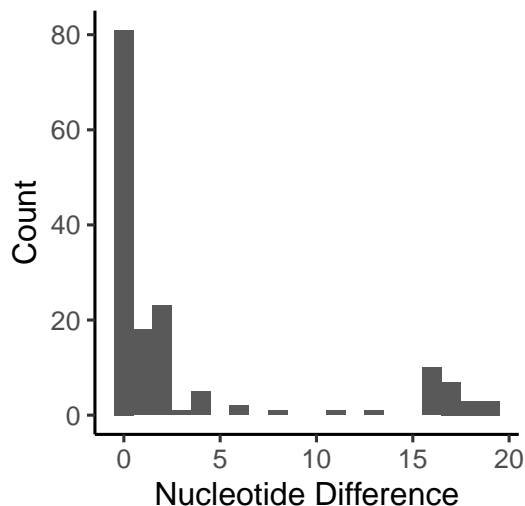
IGHV4-30-4*01

260 sequences assigned
130 (50%) exact matches, in which:
118 unique CDR3
6 unique J



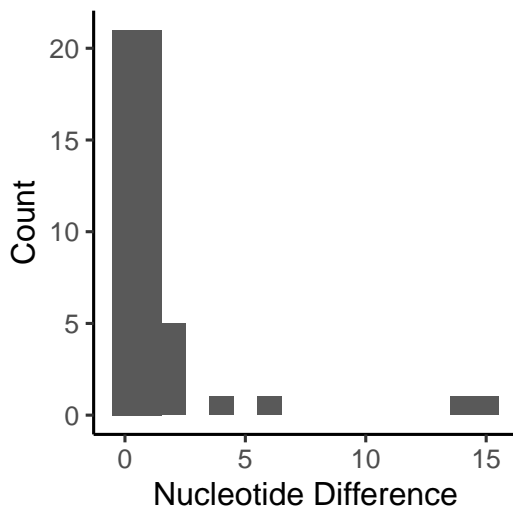
IGHV4-30-2*01

157 sequences assigned
81 (51.6%) exact matches, in which:
53 unique CDR3
5 unique J



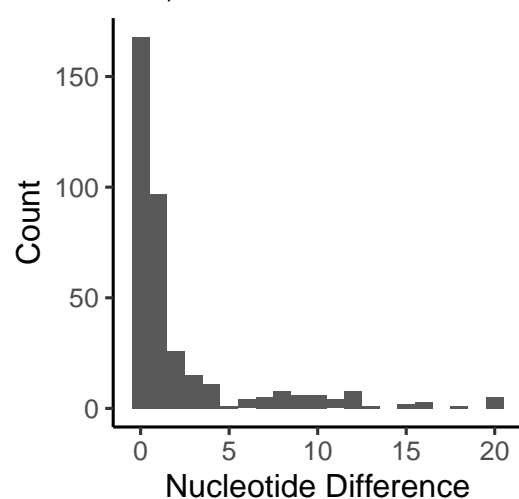
IGHV4-34*01_02_G291A_

51 sequences assigned
21 (41.2%) exact matches, in which:
21 unique CDR3
4 unique J



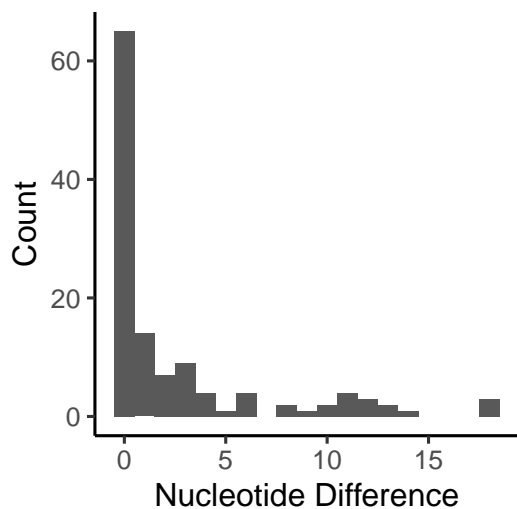
IGHV4-39*07

402 sequences assigned
168 (41.8%) exact matches, in which:
155 unique CDR3
6 unique J



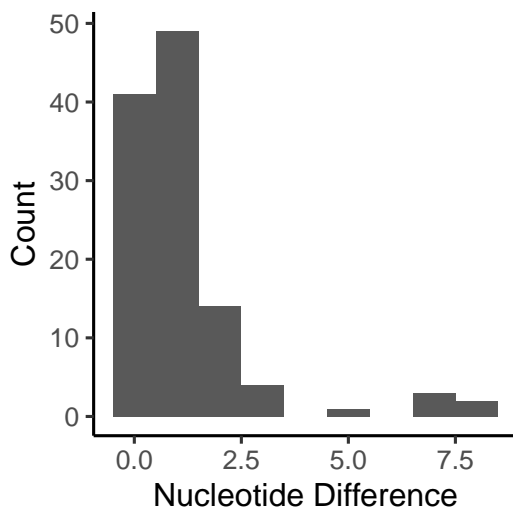
IGHV4-31*02

130 sequences assigned
65 (50%) exact matches, in which:
63 unique CDR3
5 unique J



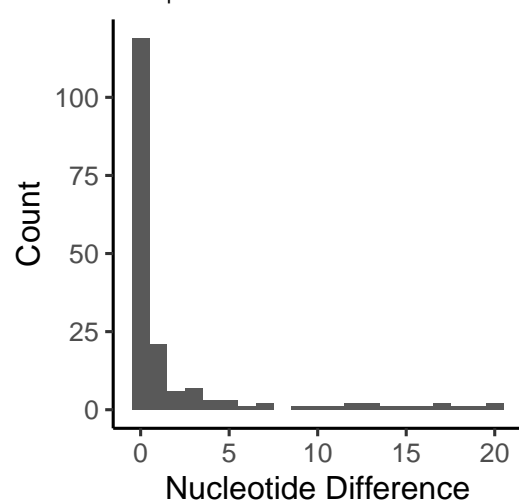
IGHV4-34*01_02_T300C

114 sequences assigned
41 (36%) exact matches, in which:
41 unique CDR3
5 unique J



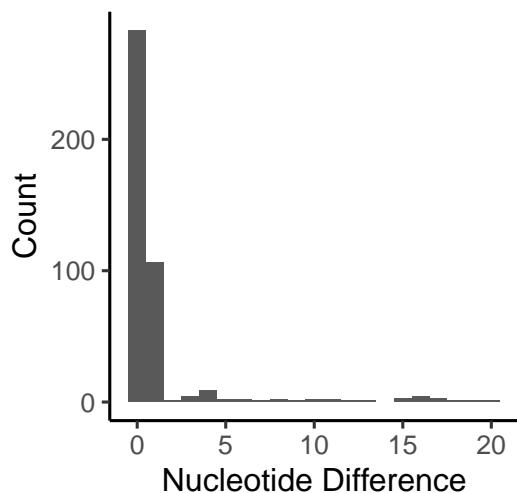
IGHV4-39*02_C258G

189 sequences assigned
119 (63%) exact matches, in which:
106 unique CDR3
6 unique J



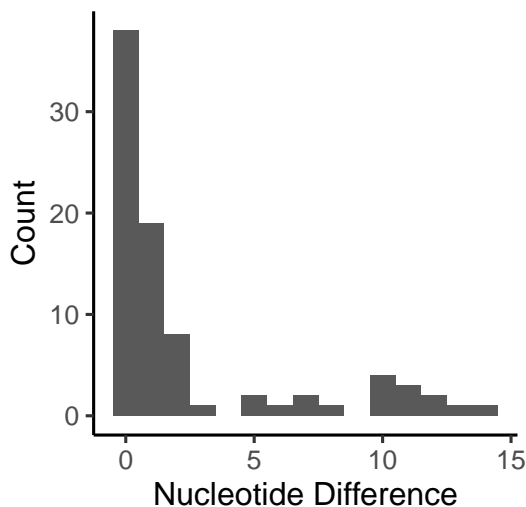
IGHV4-34*01_02

439 sequences assigned
283 (64.5%) exact matches, in which:
219 unique CDR3
6 unique J



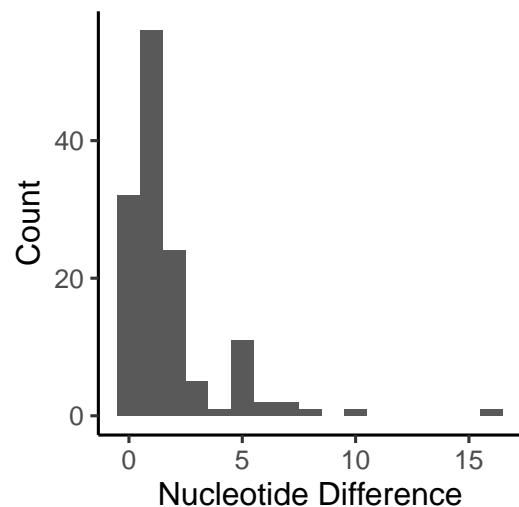
IGHV4-38-2*02

87 sequences assigned
38 (43.7%) exact matches, in which:
38 unique CDR3
5 unique J



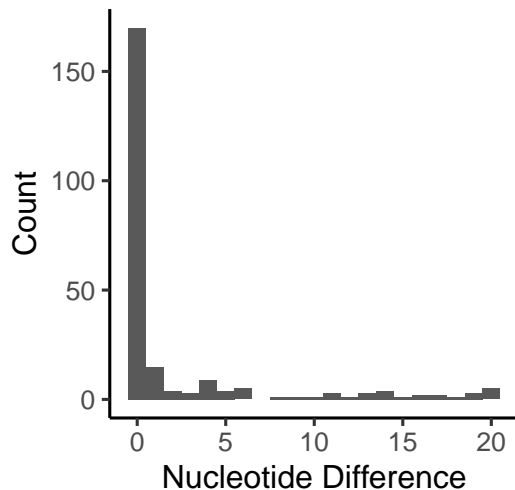
IGHV4-59*12

150 sequences assigned
32 (21.3%) exact matches, in which:
32 unique CDR3
6 unique J



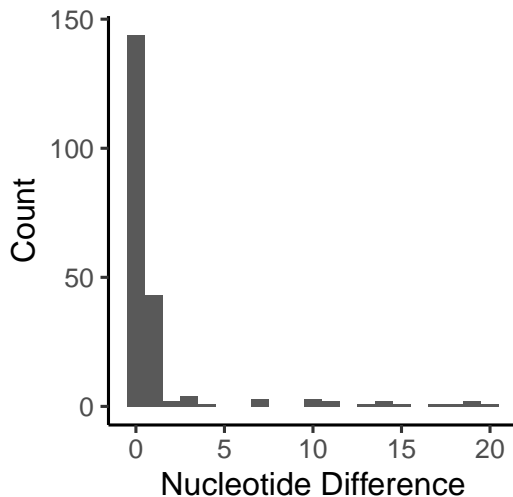
IGHV4–59*02_G88A

273 sequences assigned
170 (62.3%) exact matches, in which:
163 unique CDR3
6 unique J



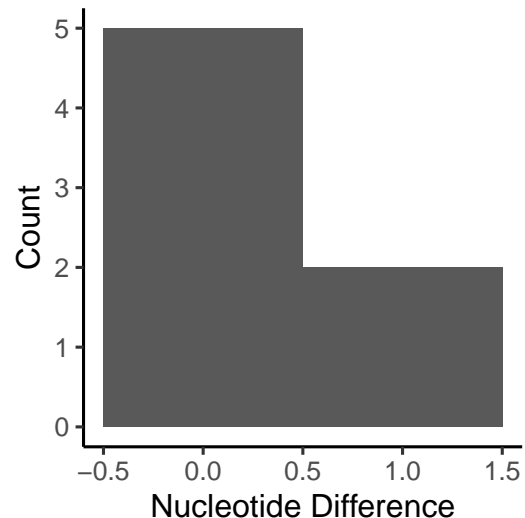
IGHV5–10–1*01_03

216 sequences assigned
144 (66.7%) exact matches, in which:
104 unique CDR3
5 unique J



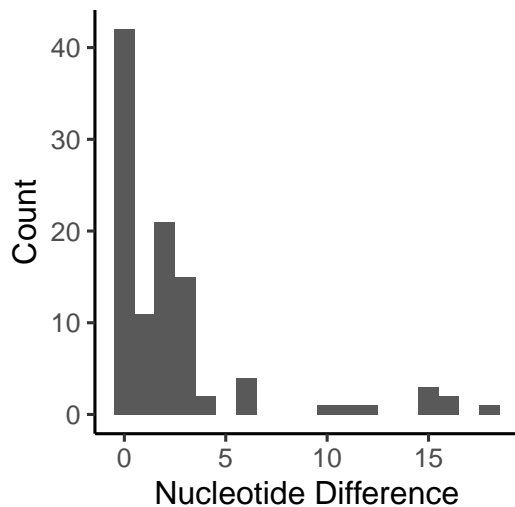
IGHV7–4–1*01

7 sequences assigned
5 (71.4%) exact matches, in which:
5 unique CDR3
1 unique J



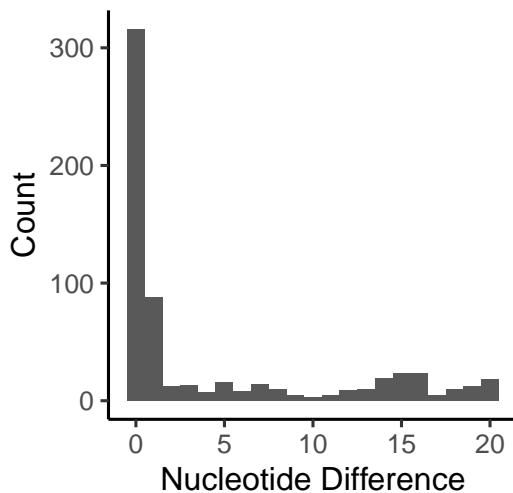
IGHV4–61*01

106 sequences assigned
42 (39.6%) exact matches, in which:
42 unique CDR3
5 unique J



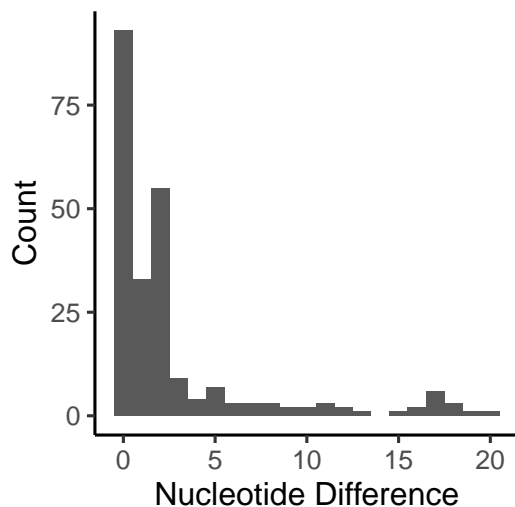
IGHV5–51*07_A128G

649 sequences assigned
316 (48.7%) exact matches, in which:
249 unique CDR3
6 unique J



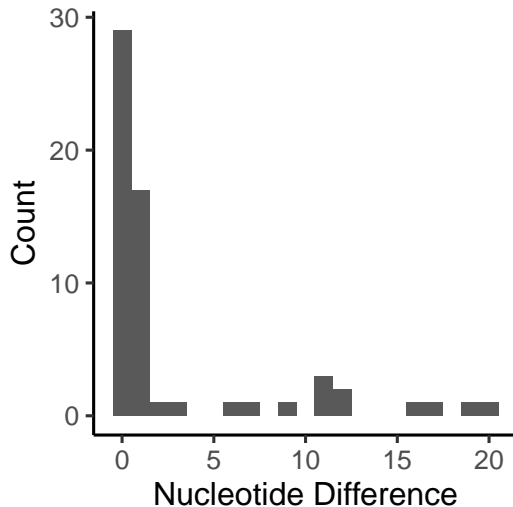
IGHV4–61*02

248 sequences assigned
93 (37.5%) exact matches, in which:
91 unique CDR3
5 unique J



IGHV6–1*01_02

61 sequences assigned
29 (47.5%) exact matches, in which:
27 unique CDR3
5 unique J





Warning – no inferred sequences found.