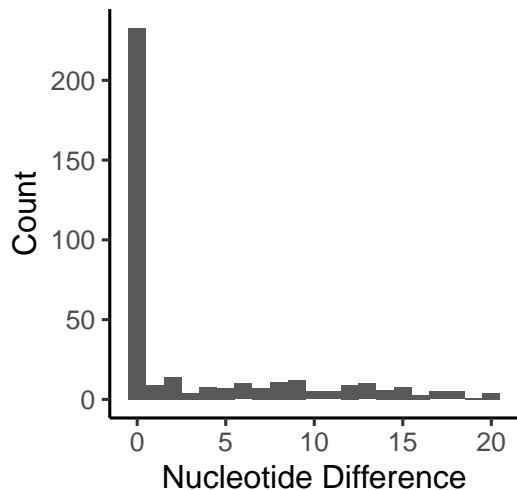


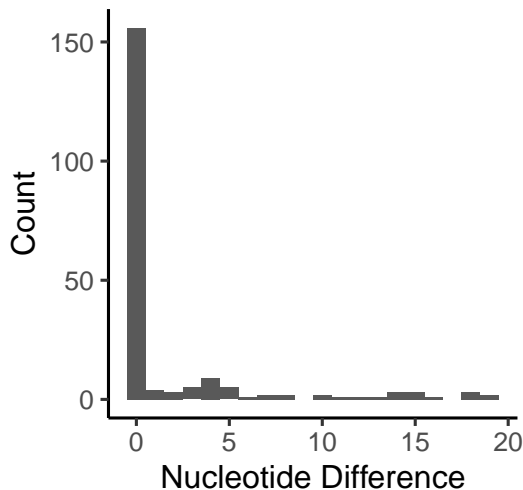
IGHV1-2*02

392 sequences assigned
233 (59.4%) exact matches, in which:
233 unique CDR3
6 unique J



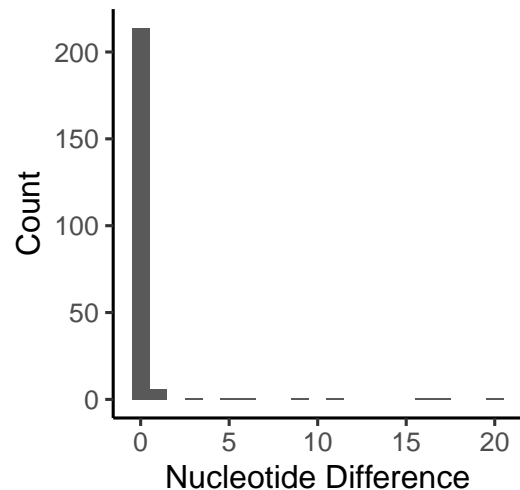
IGHV1-8*01

207 sequences assigned
156 (75.4%) exact matches, in which:
154 unique CDR3
5 unique J



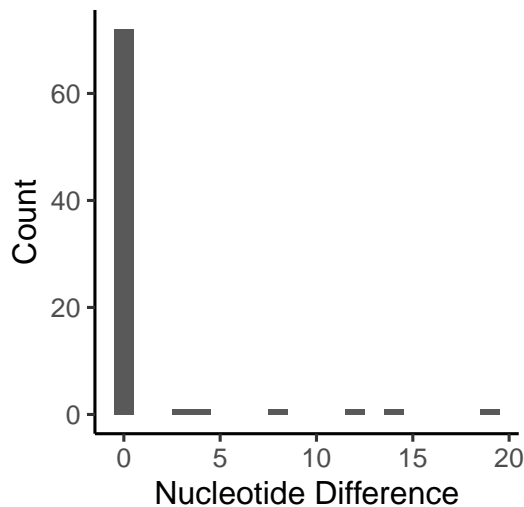
IGHV1-24*01

231 sequences assigned
214 (92.6%) exact matches, in which:
213 unique CDR3
6 unique J



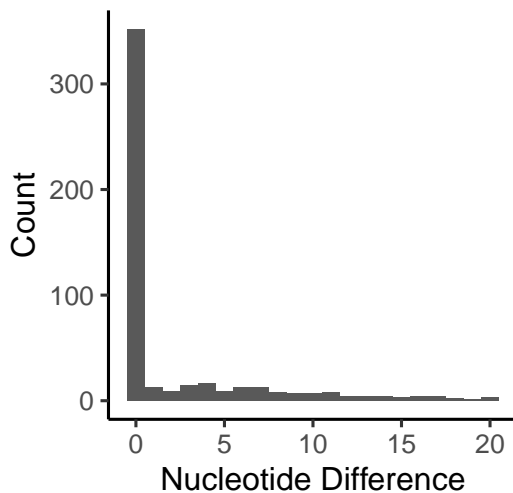
IGHV1-2*04

80 sequences assigned
72 (90%) exact matches, in which:
72 unique CDR3
5 unique J



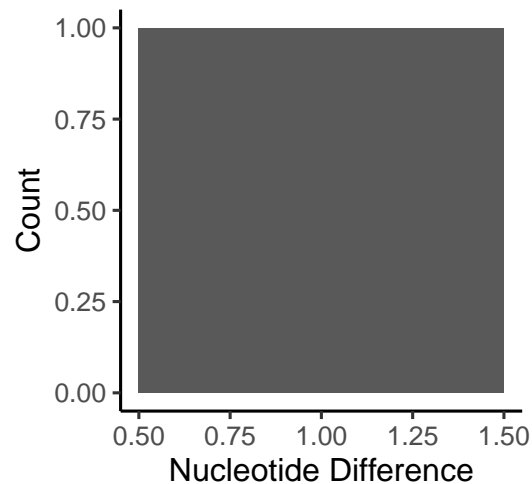
IGHV1-18*01

514 sequences assigned
352 (68.5%) exact matches, in which:
352 unique CDR3
6 unique J



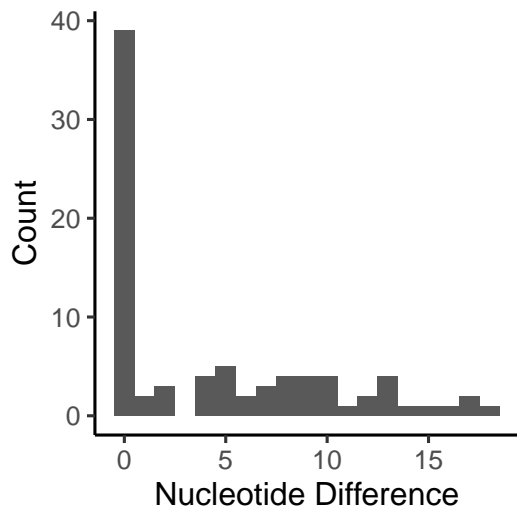
IGHV1-45*02

1 sequences assigned
No exact matches.



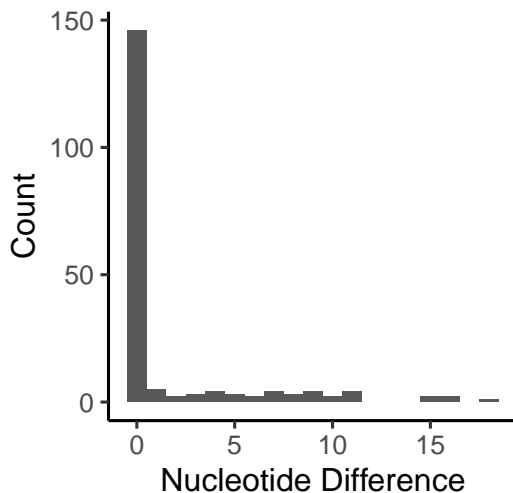
IGHV1-3*01_05

90 sequences assigned
39 (43.3%) exact matches, in which:
39 unique CDR3
6 unique J



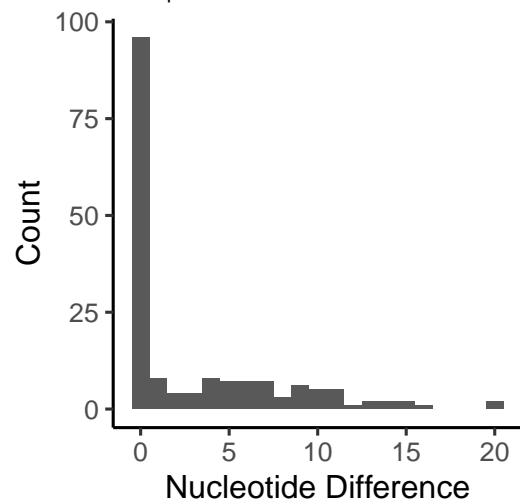
IGHV1-18*04

191 sequences assigned
146 (76.4%) exact matches, in which:
146 unique CDR3
6 unique J



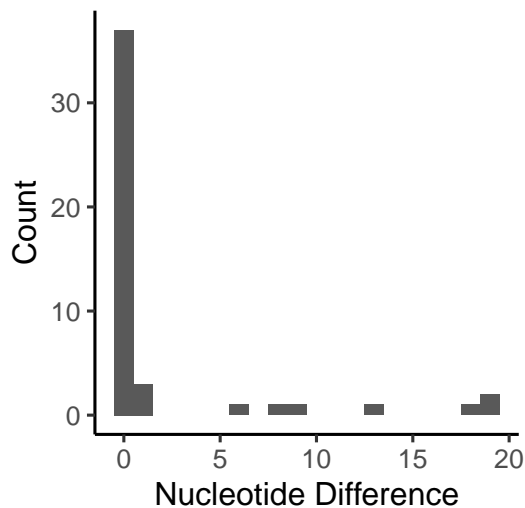
IGHV1-46*01

180 sequences assigned
96 (53.3%) exact matches, in which:
96 unique CDR3
6 unique J



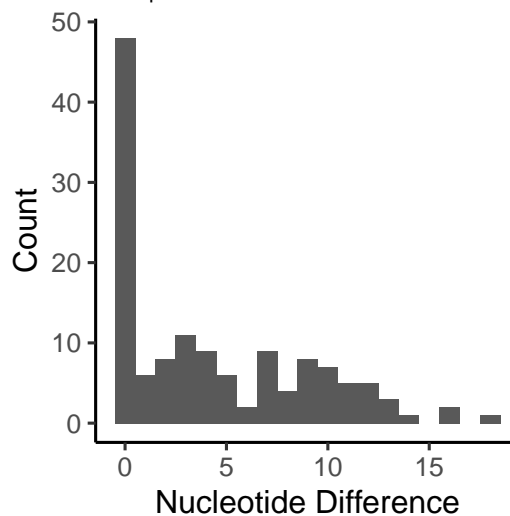
IGHV1-58*01_03

48 sequences assigned
37 (77.1%) exact matches, in which:
37 unique CDR3
6 unique J



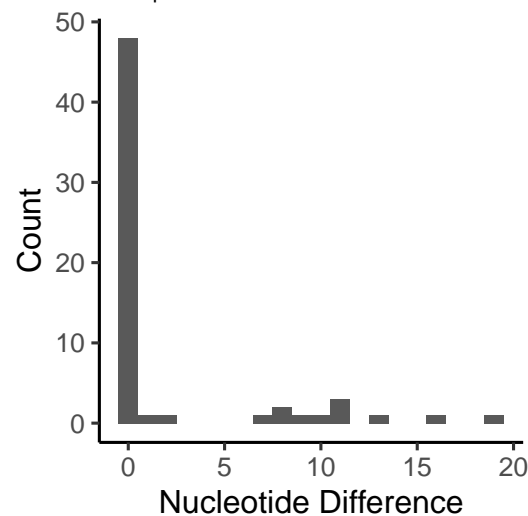
IGHV2-5*01

140 sequences assigned
48 (34.3%) exact matches, in which:
48 unique CDR3
5 unique J



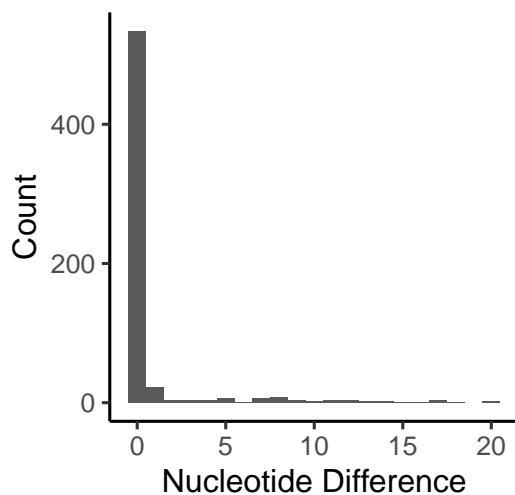
IGHV2-70*01

61 sequences assigned
48 (78.7%) exact matches, in which:
47 unique CDR3
4 unique J



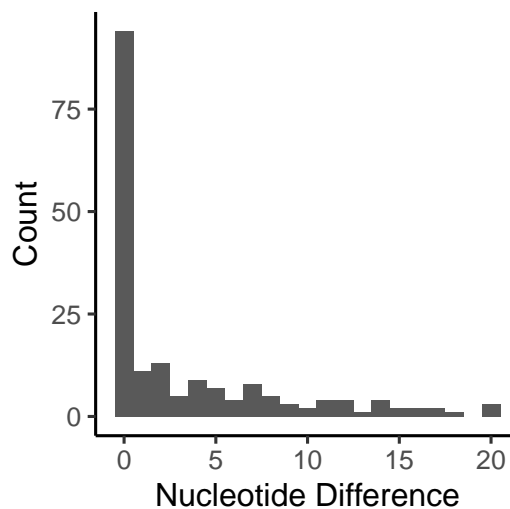
IGHV1-69*01_12_13

619 sequences assigned
534 (86.3%) exact matches, in which:
530 unique CDR3
6 unique J



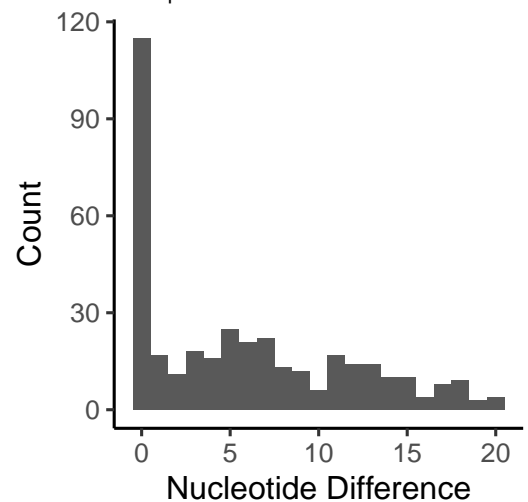
IGHV2-5*02

191 sequences assigned
94 (49.2%) exact matches, in which:
93 unique CDR3
6 unique J



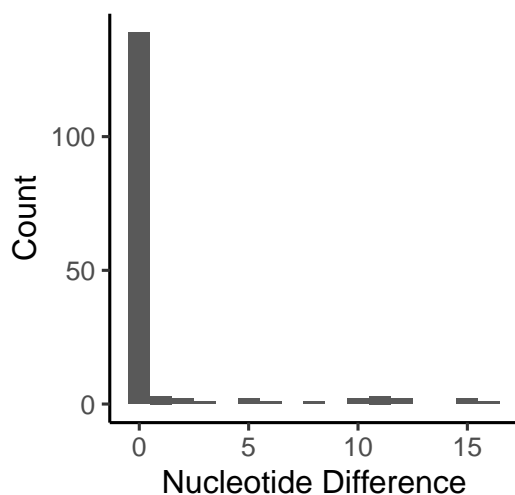
IGHV3-7*01

382 sequences assigned
115 (30.1%) exact matches, in which:
113 unique CDR3
6 unique J



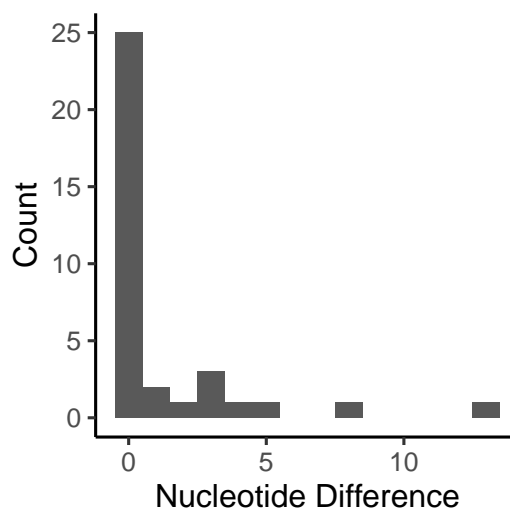
IGHV1-69*06_14

160 sequences assigned
139 (86.9%) exact matches, in which:
139 unique CDR3
6 unique J



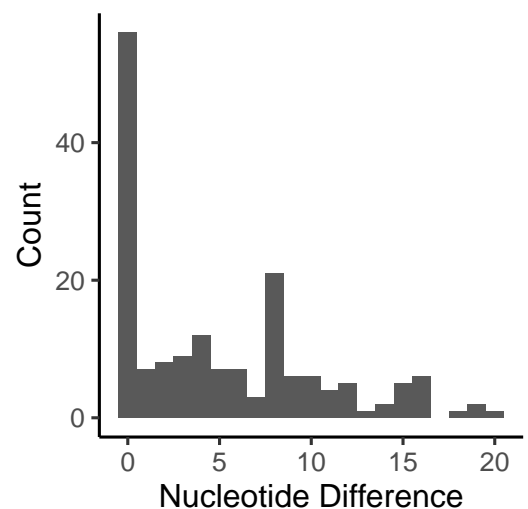
IGHV2-26*01

35 sequences assigned
25 (71.4%) exact matches, in which:
25 unique CDR3
4 unique J



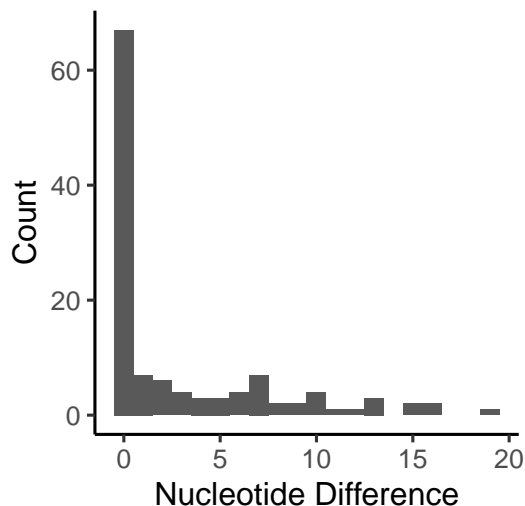
IGHV3-7*04

178 sequences assigned
56 (31.5%) exact matches, in which:
56 unique CDR3
6 unique J



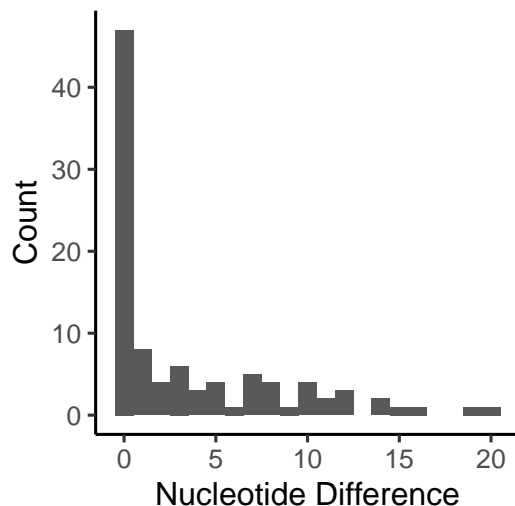
IGHV3-9*01

122 sequences assigned
67 (54.9%) exact matches, in which:
67 unique CDR3
5 unique J



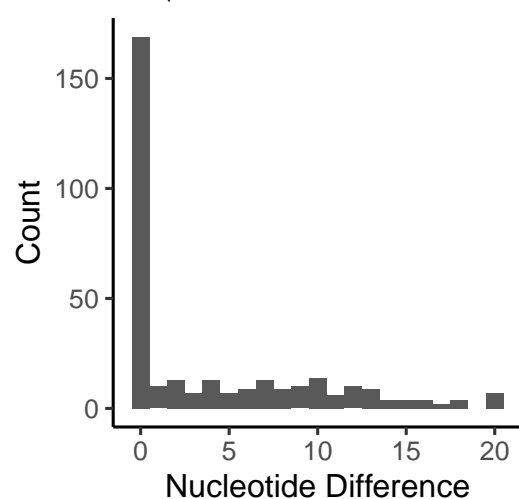
IGHV3-11*03_05

101 sequences assigned
47 (46.5%) exact matches, in which:
46 unique CDR3
5 unique J



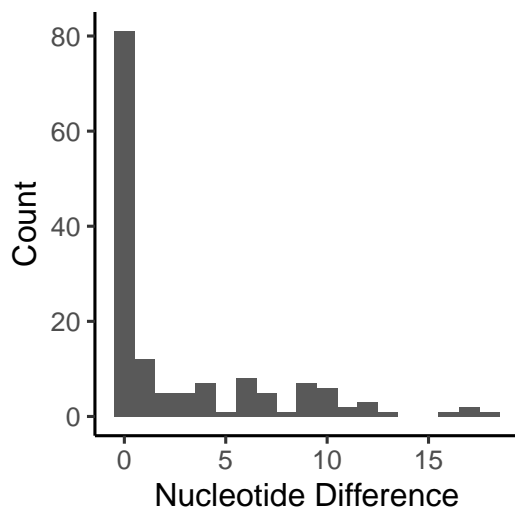
IGHV3-15*01_02

350 sequences assigned
169 (48.3%) exact matches, in which:
166 unique CDR3
6 unique J



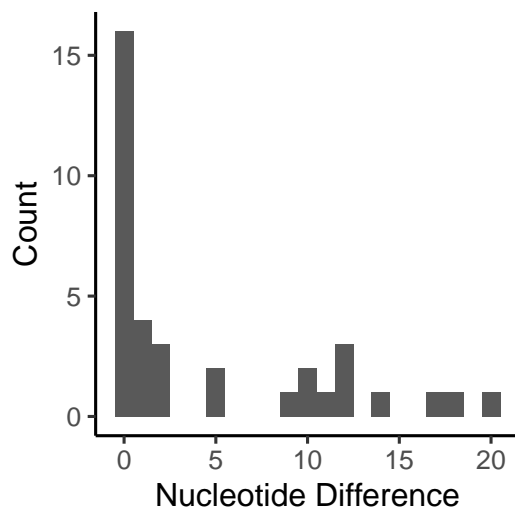
IGHV3-11*01

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



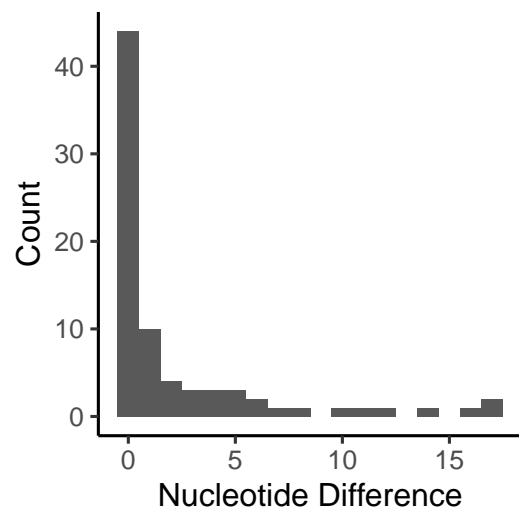
IGHV3-13*01

40 sequences assigned
16 (40%) exact matches, in which:
15 unique CDR3
3 unique J



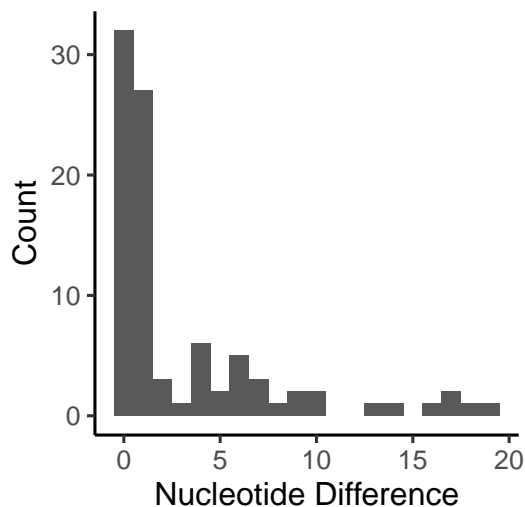
IGHV3-20*03_04

82 sequences assigned
44 (53.7%) exact matches, in which:
44 unique CDR3
5 unique J



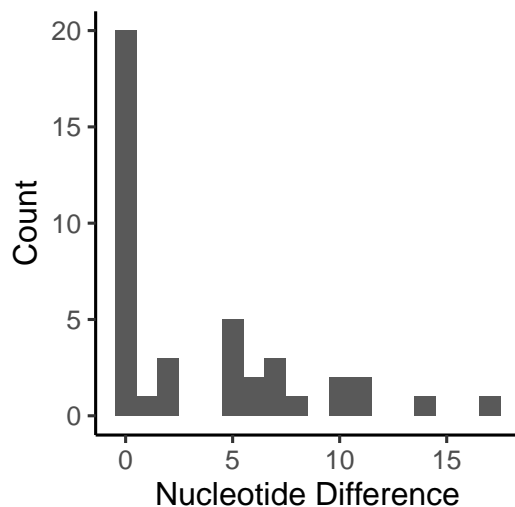
IGHV3-11*06

93 sequences assigned
32 (34.4%) exact matches, in which:
30 unique CDR3
5 unique J



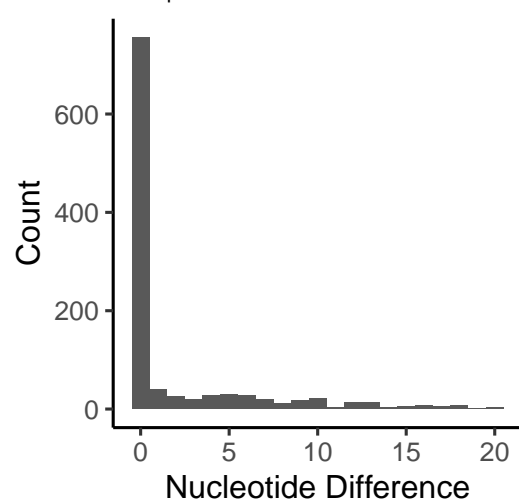
IGHV3-13*04

42 sequences assigned
20 (47.6%) exact matches, in which:
20 unique CDR3
5 unique J



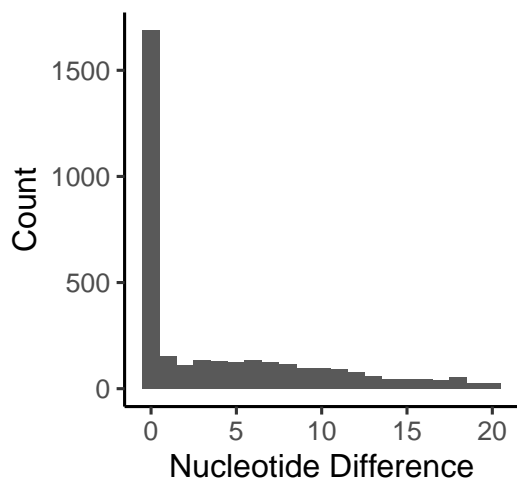
IGHV3-21*01_02

1092 sequences assigned
756 (69.2%) exact matches, in which:
738 unique CDR3
6 unique J



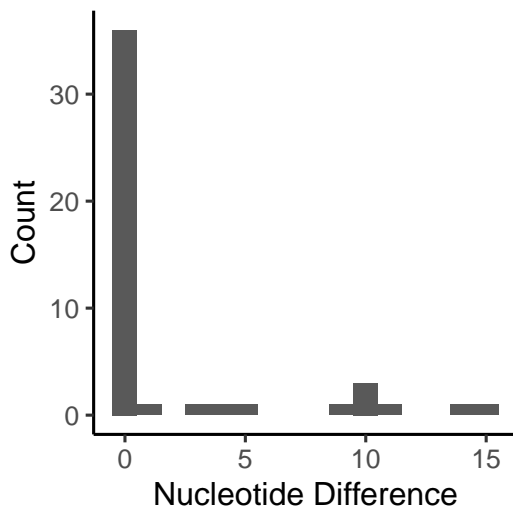
IGHV3-23*01_04

3496 sequences assigned
1688 (48.3%) exact matches, in which:
1622 unique CDR3
6 unique J



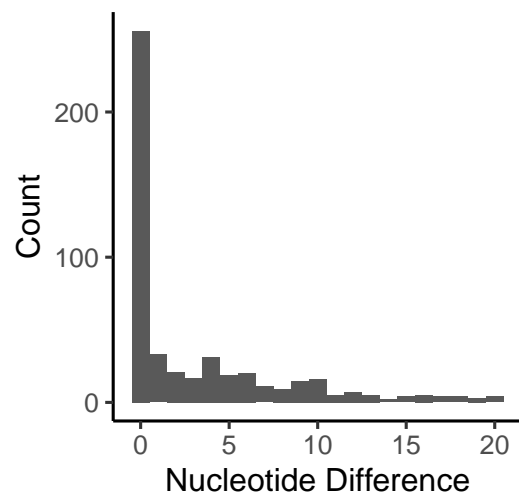
IGHV3-43*01

48 sequences assigned
36 (75%) exact matches, in which:
35 unique CDR3
4 unique J



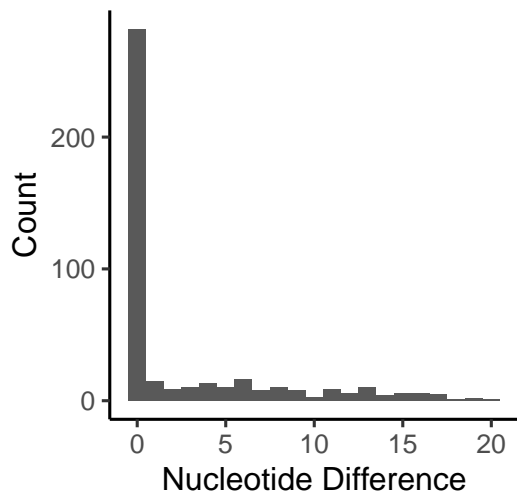
IGHV3-53*01_02

498 sequences assigned
256 (51.4%) exact matches, in which:
247 unique CDR3
6 unique J



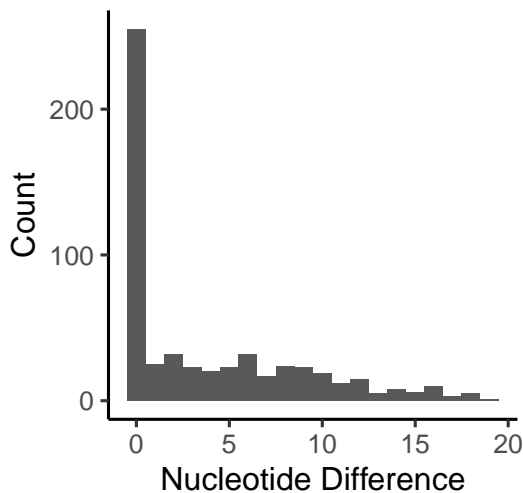
IGHV3-30-3*01

463 sequences assigned
282 (60.9%) exact matches, in which:
277 unique CDR3
6 unique J



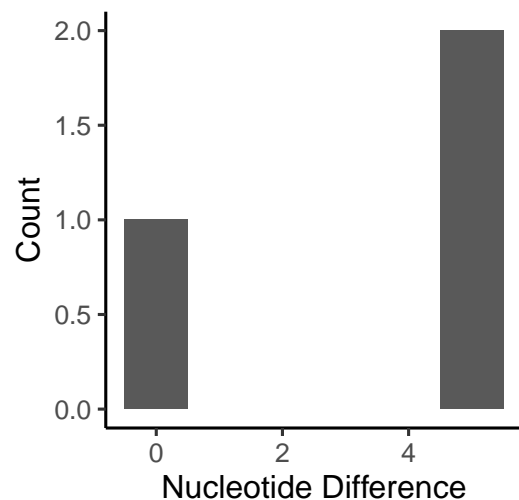
IGHV3-48*02

574 sequences assigned
255 (44.4%) exact matches, in which:
250 unique CDR3
6 unique J



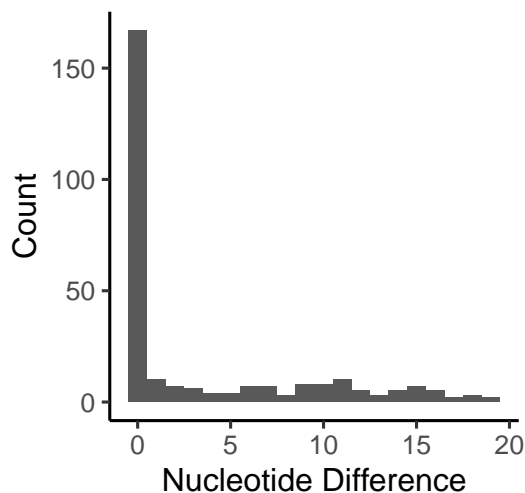
IGHV3-64*02_07

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



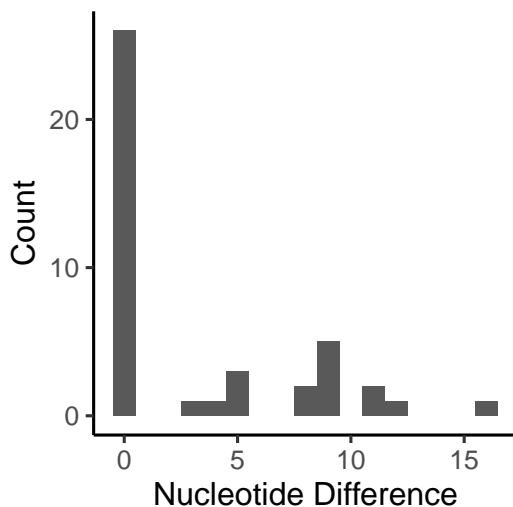
IGHV3-33*01

281 sequences assigned
167 (59.4%) exact matches, in which:
165 unique CDR3
6 unique J



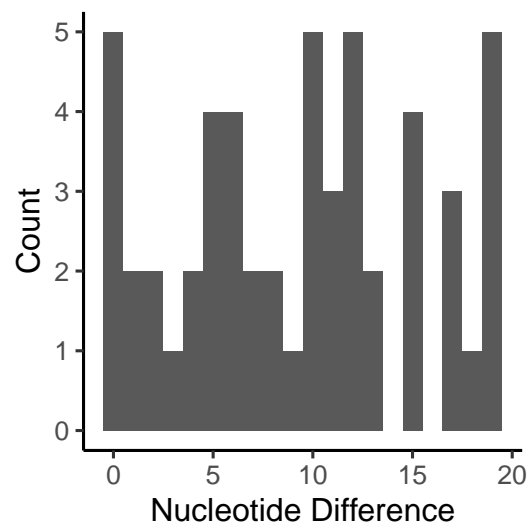
IGHV3-49*03_05

46 sequences assigned
26 (56.5%) exact matches, in which:
26 unique CDR3
5 unique J



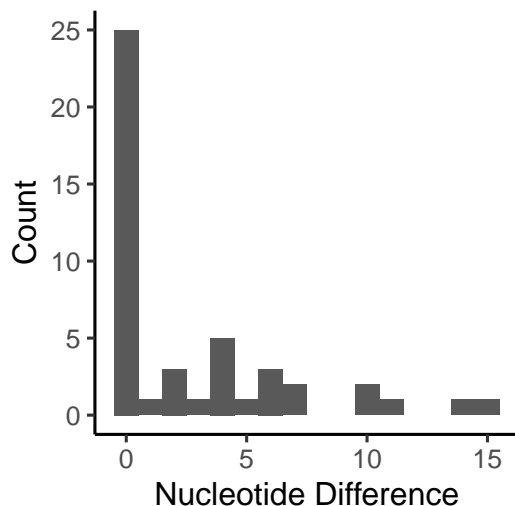
IGHV3-72*01

67 sequences assigned
5 (7.5%) exact matches, in which:
5 unique CDR3
2 unique J



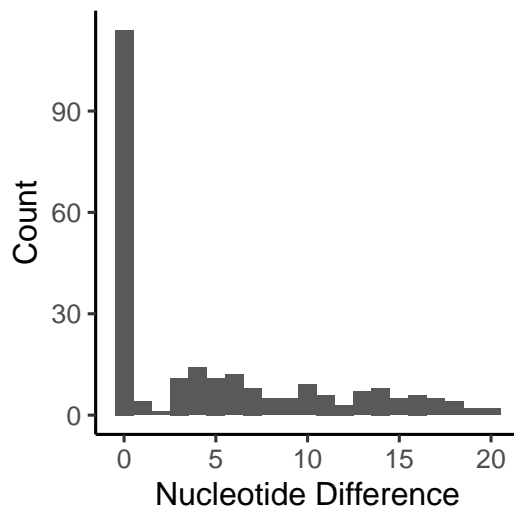
IGHV3-73*01_02

46 sequences assigned
25 (54.3%) exact matches, in which:
25 unique CDR3
4 unique J



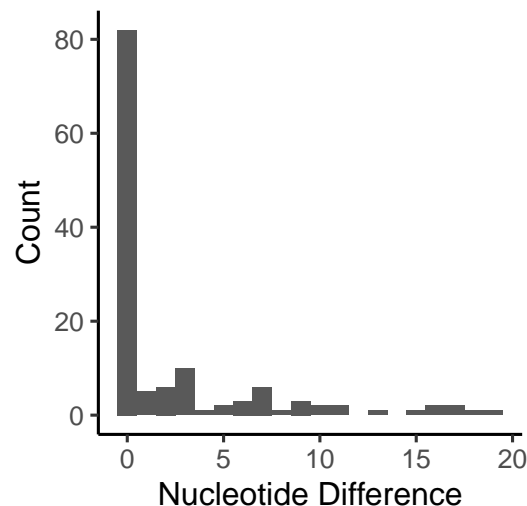
IGHV3-64D*06

253 sequences assigned
114 (45.1%) exact matches, in which:
113 unique CDR3
6 unique J



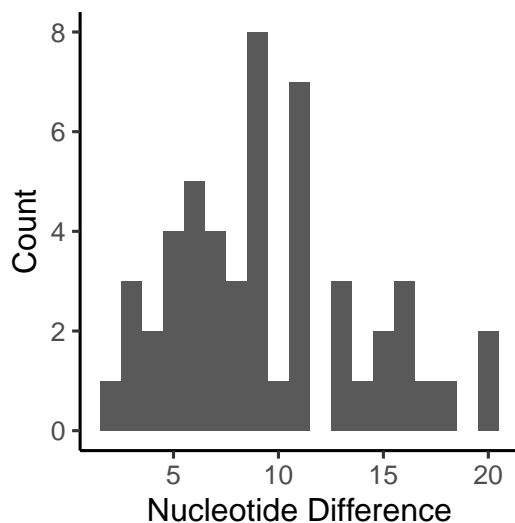
IGHV4-30-4*01

140 sequences assigned
82 (58.6%) exact matches, in which:
81 unique CDR3
6 unique J



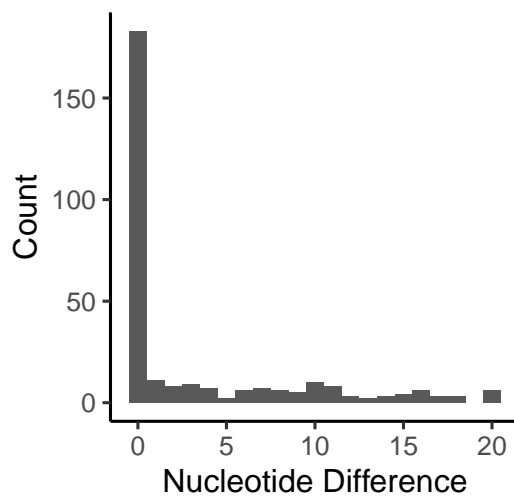
IGHV3-74*03

54 sequences assigned
No exact matches.



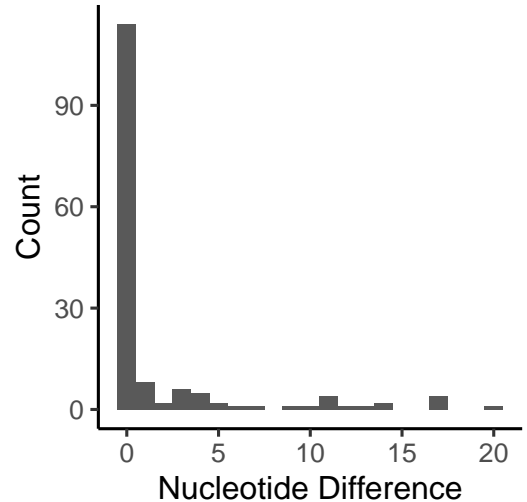
IGHV4-4*02_03

308 sequences assigned
183 (59.4%) exact matches, in which:
181 unique CDR3
6 unique J



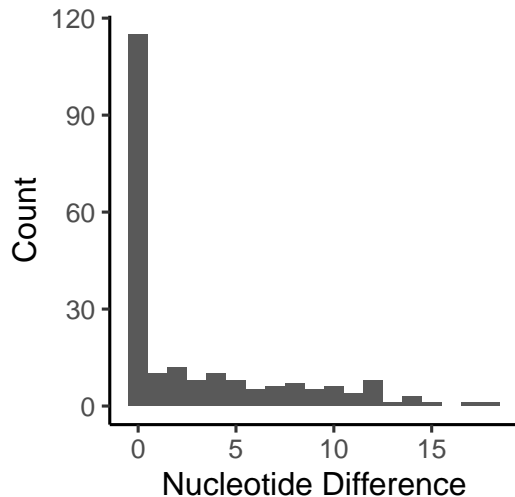
IGHV4-30-2*01

171 sequences assigned
114 (66.7%) exact matches, in which:
109 unique CDR3
6 unique J



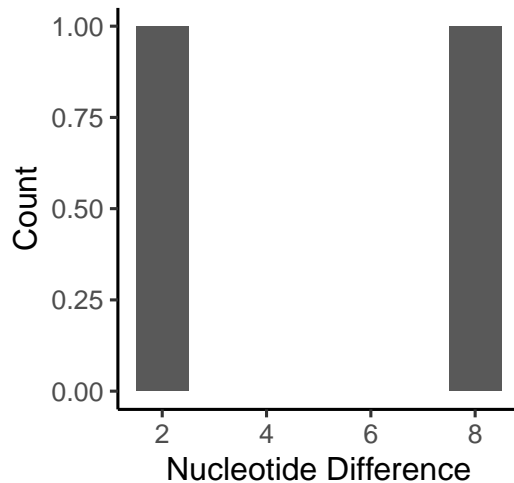
IGHV3-74*01_02

216 sequences assigned
115 (53.2%) exact matches, in which:
110 unique CDR3
6 unique J



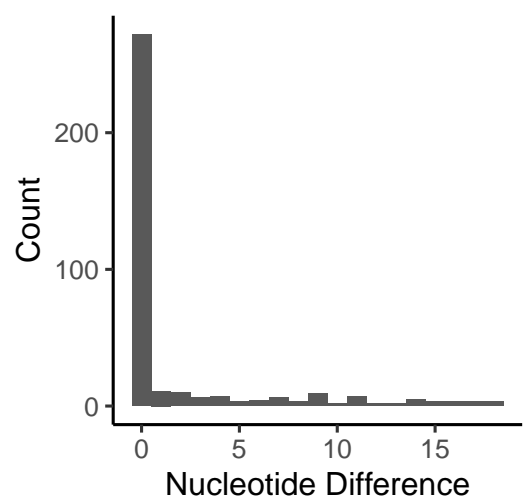
IGHV4-28*01_07

2 sequences assigned
No exact matches.



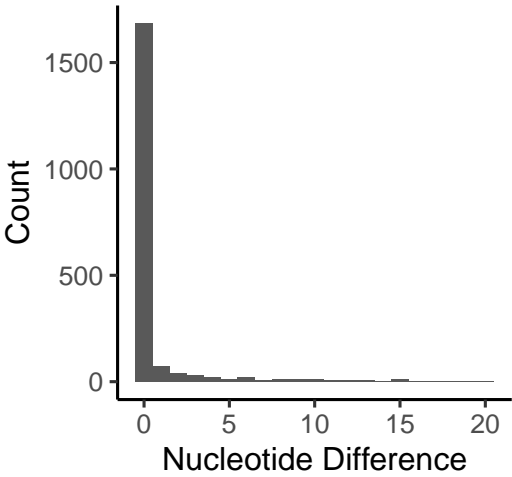
IGHV4-31*02

384 sequences assigned
272 (70.8%) exact matches, in which:
269 unique CDR3
6 unique J



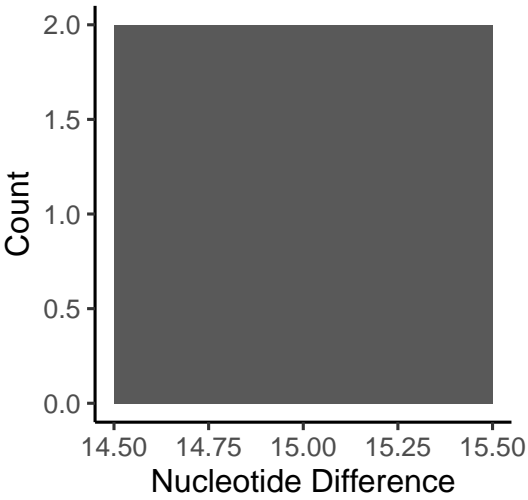
IGHV4-34*01_02

1994 sequences assigned
1684 (84.5%) exact matches, in which:
1630 unique CDR3
6 unique J



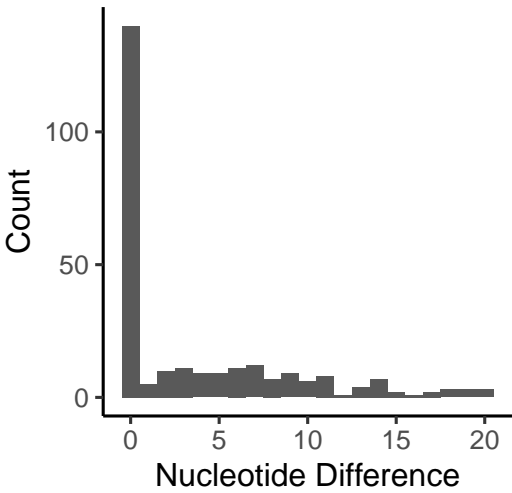
IGHV4-59*03

3 sequences assigned
No exact matches.



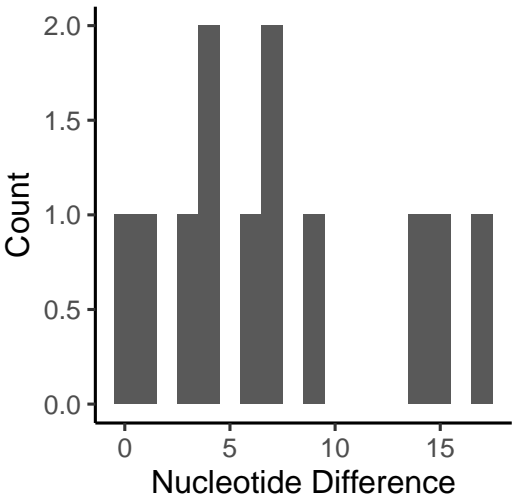
IGHV4-61*01

272 sequences assigned
140 (51.5%) exact matches, in which:
137 unique CDR3
6 unique J



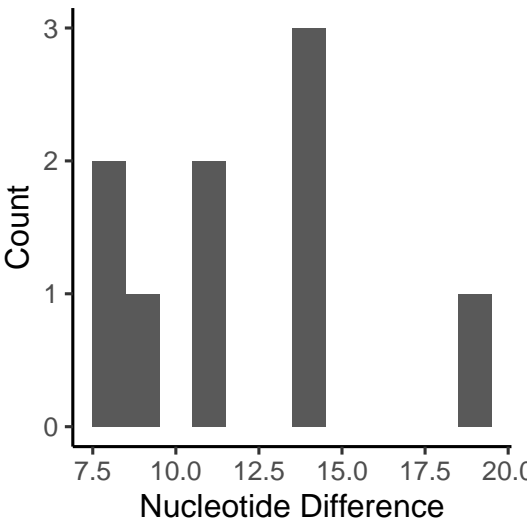
IGHV4-39*02

14 sequences assigned
1 (7.1%) exact matches, in which:
1 unique CDR3
1 unique J



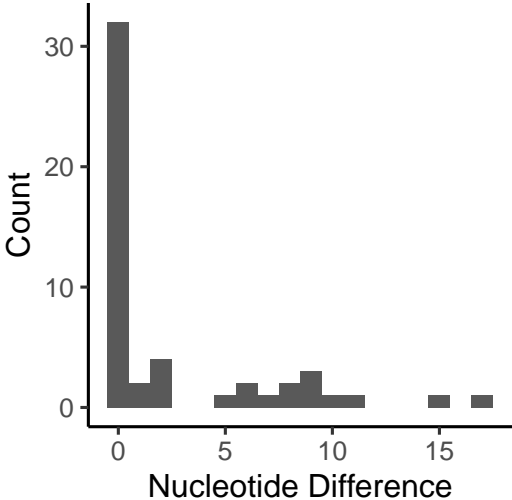
IGHV4-59*11

17 sequences assigned
No exact matches.



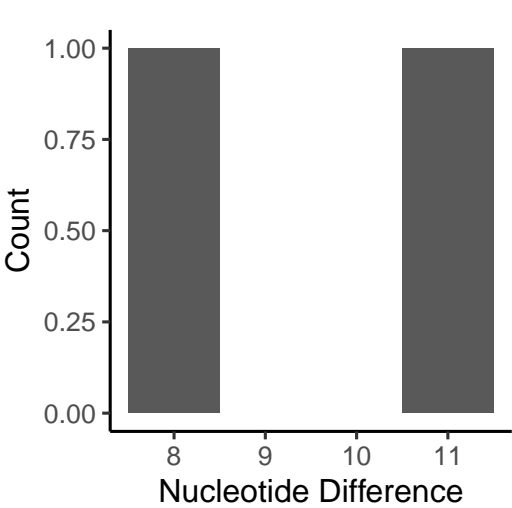
IGHV5-10-1*01_03

53 sequences assigned
32 (60.4%) exact matches, in which:
32 unique CDR3
5 unique J



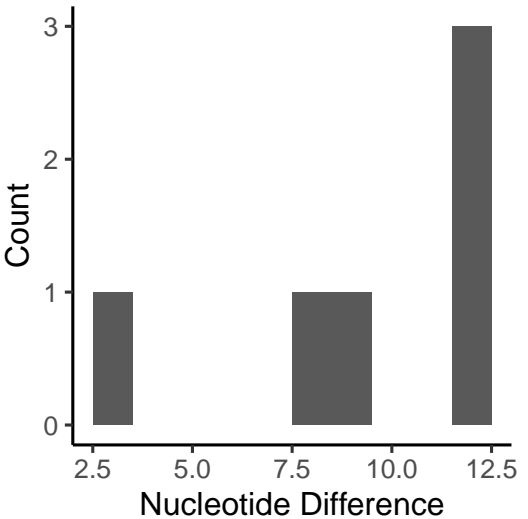
IGHV4-59*02

6 sequences assigned
No exact matches.



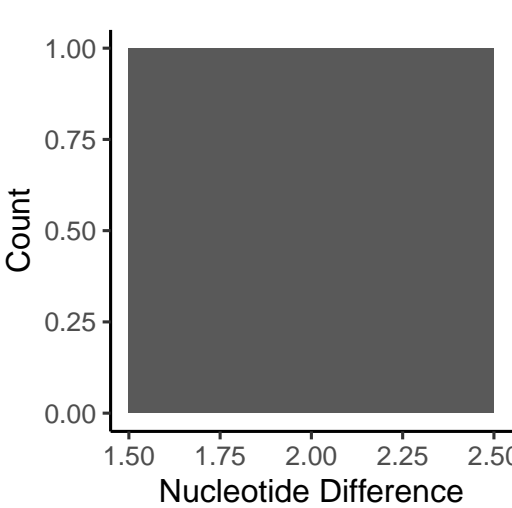
IGHV4-59*12

8 sequences assigned
No exact matches.



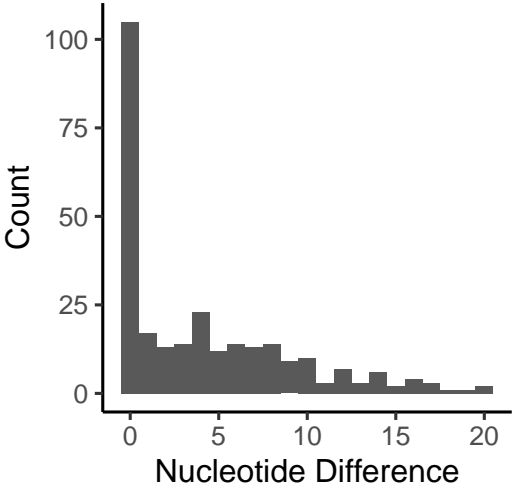
IGHV5-51*04

1 sequences assigned
No exact matches.



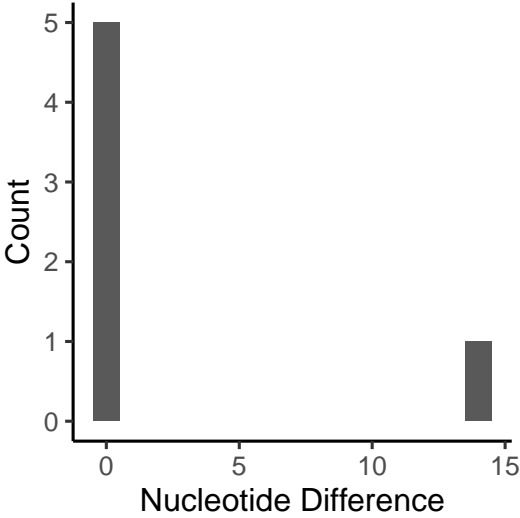
IGHV6-1*01_02

284 sequences assigned
105 (37%) exact matches, in which:
104 unique CDR3
5 unique J



IGHV7-4-1*01

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





[illegible]