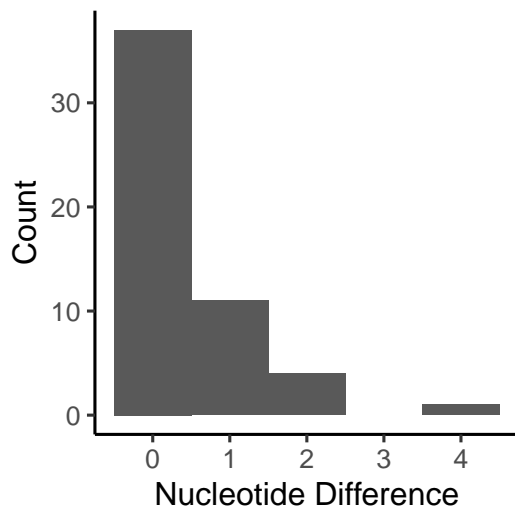


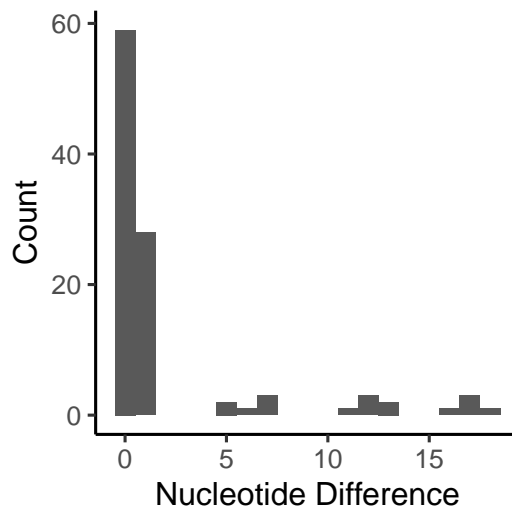
IGHV1-2*04

53 sequences assigned
37 (69.8%) exact matches, in which:
35 unique CDR3
5 unique J



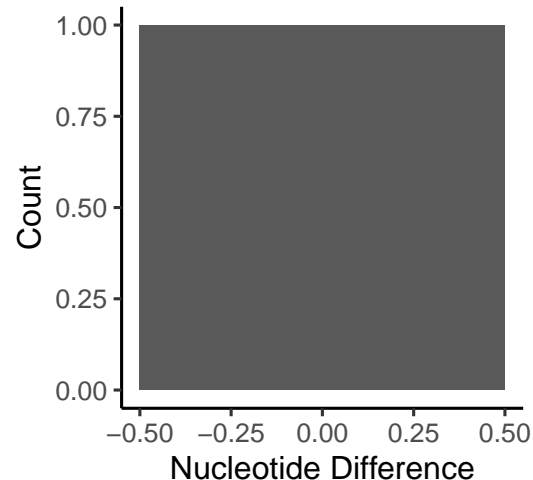
IGHV1-8*01

104 sequences assigned
59 (56.7%) exact matches, in which:
59 unique CDR3
5 unique J



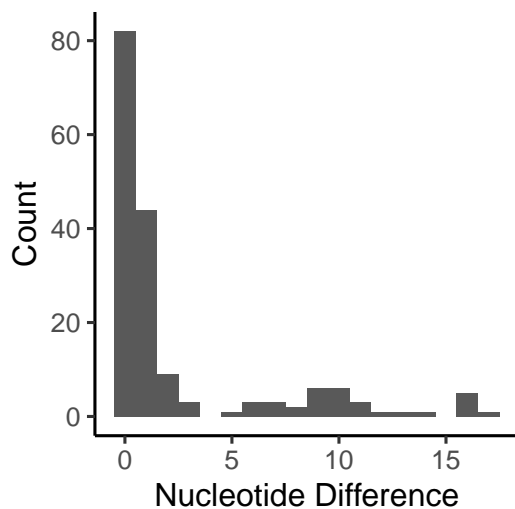
IGHV1-38-4*01

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



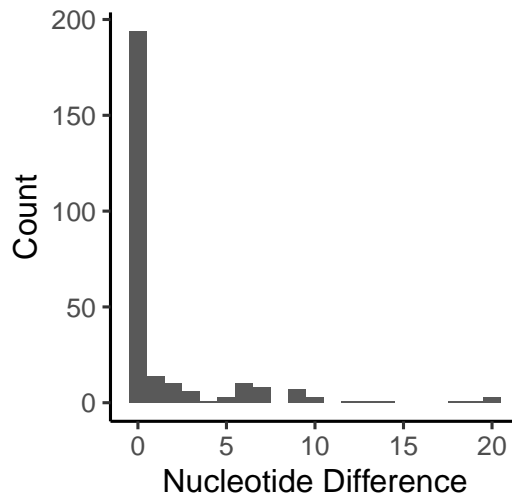
IGHV1-2*06

175 sequences assigned
82 (46.9%) exact matches, in which:
82 unique CDR3
5 unique J



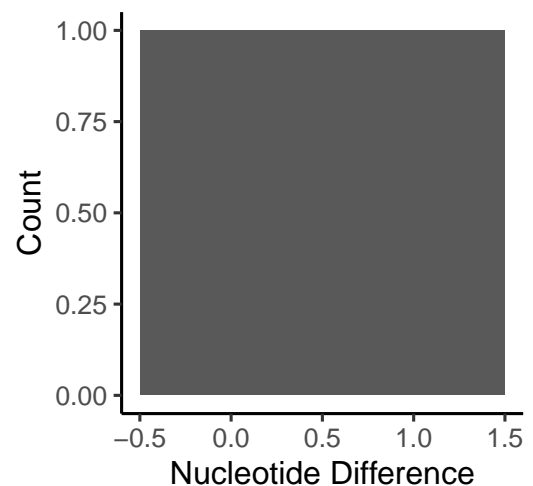
IGHV1-18*01

271 sequences assigned
194 (71.6%) exact matches, in which:
191 unique CDR3
6 unique J



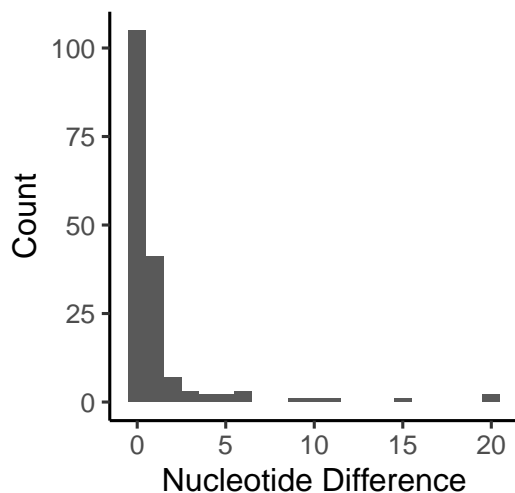
IGHV1-45*02

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



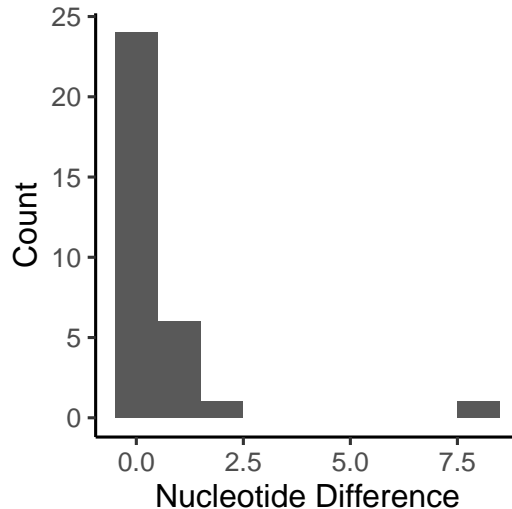
IGHV1-3*01_05

170 sequences assigned
105 (61.8%) exact matches, in which:
100 unique CDR3
5 unique J



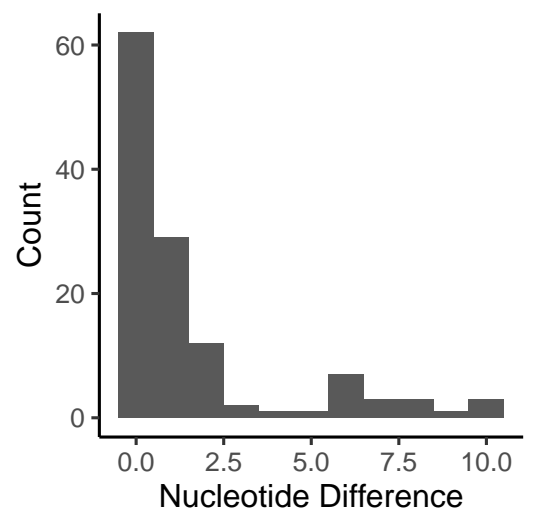
IGHV1-24*01

32 sequences assigned
24 (75%) exact matches, in which:
24 unique CDR3
4 unique J



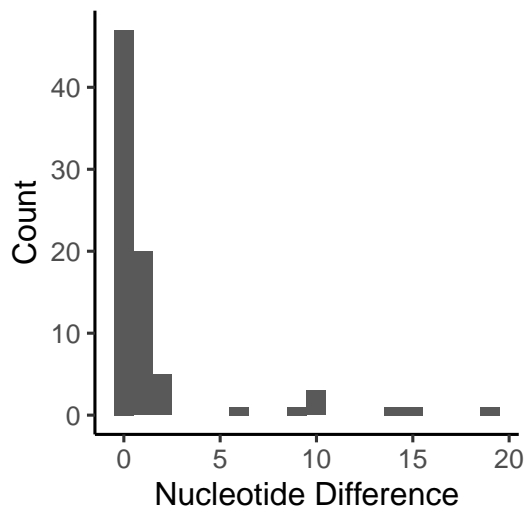
IGHV1-46*01

125 sequences assigned
62 (49.6%) exact matches, in which:
62 unique CDR3
5 unique J



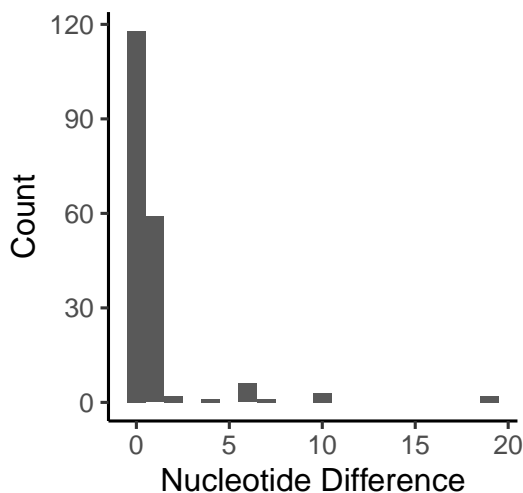
IGHV1-46*03

80 sequences assigned
47 (58.8%) exact matches, in which:
45 unique CDR3
4 unique J



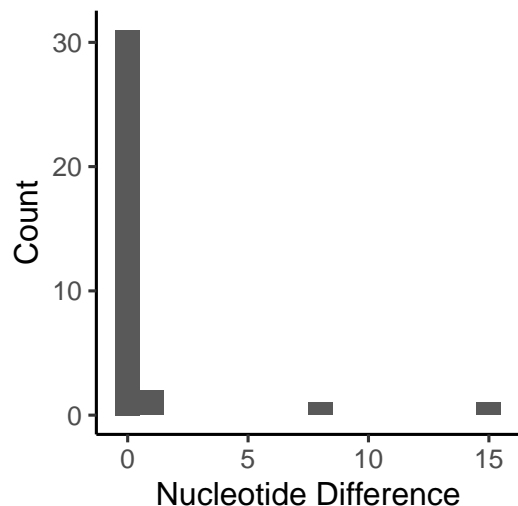
IGHV1-69*10

193 sequences assigned
118 (61.1%) exact matches, in which:
117 unique CDR3
6 unique J



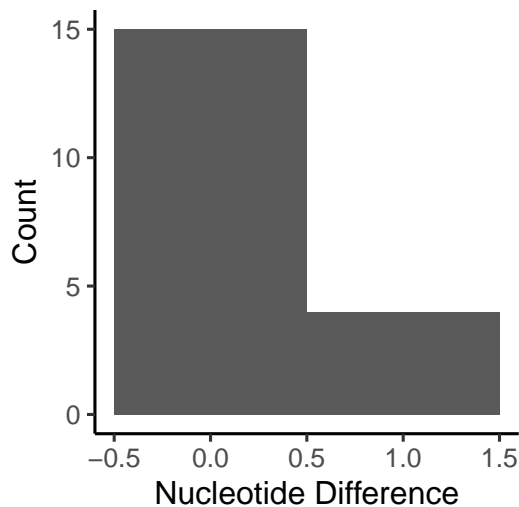
IGHV2-26*01

35 sequences assigned
31 (88.6%) exact matches, in which:
28 unique CDR3
3 unique J



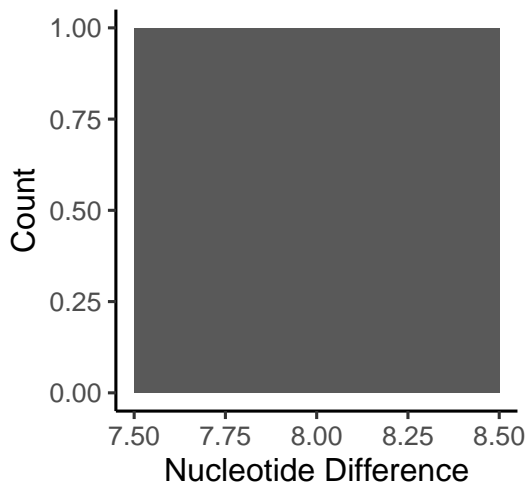
IGHV1-58*02

19 sequences assigned
15 (78.9%) exact matches, in which:
15 unique CDR3
3 unique J



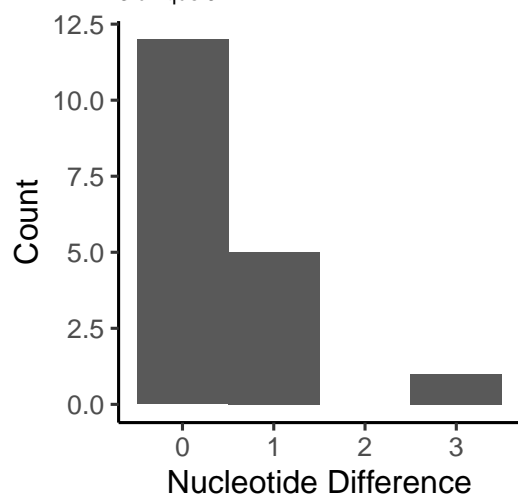
IGHV1-NL1*01

1 sequences assigned
No exact matches.



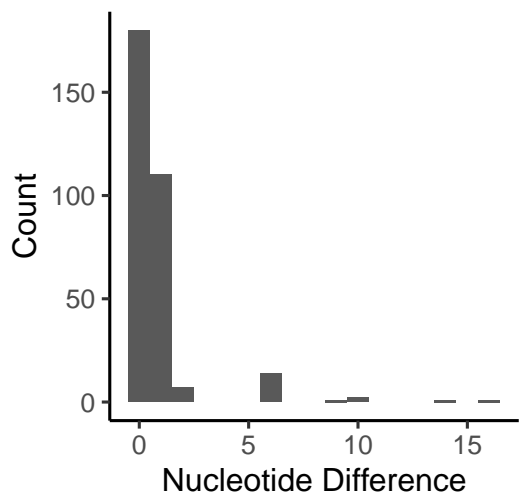
IGHV2-70*01

18 sequences assigned
12 (66.7%) exact matches, in which:
11 unique CDR3
3 unique J



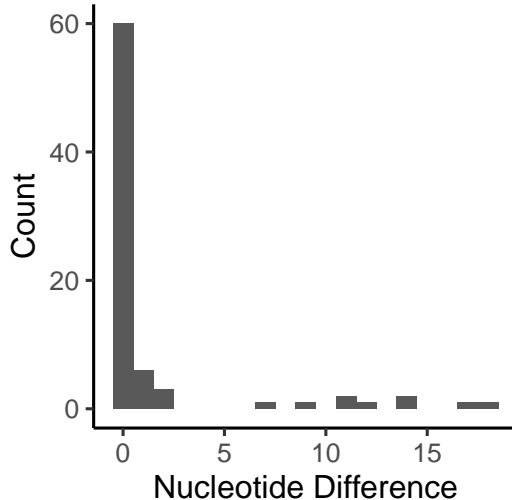
IGHV1-69*01_12_13

322 sequences assigned
180 (55.9%) exact matches, in which:
180 unique CDR3
6 unique J



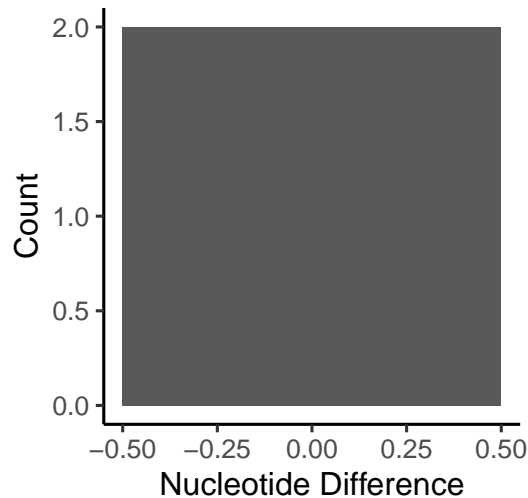
IGHV2-5*02

79 sequences assigned
60 (75.9%) exact matches, in which:
56 unique CDR3
6 unique J



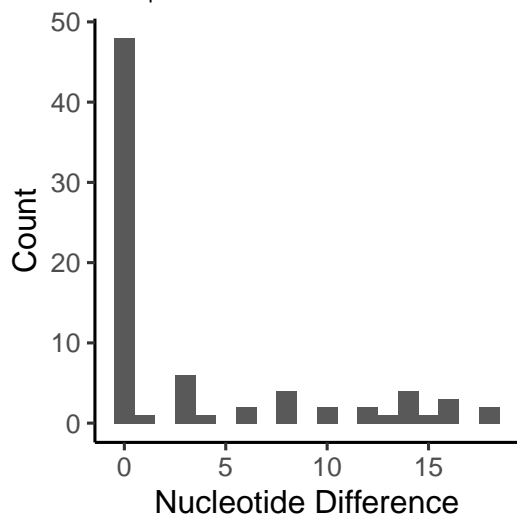
IGHV2-70*12

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



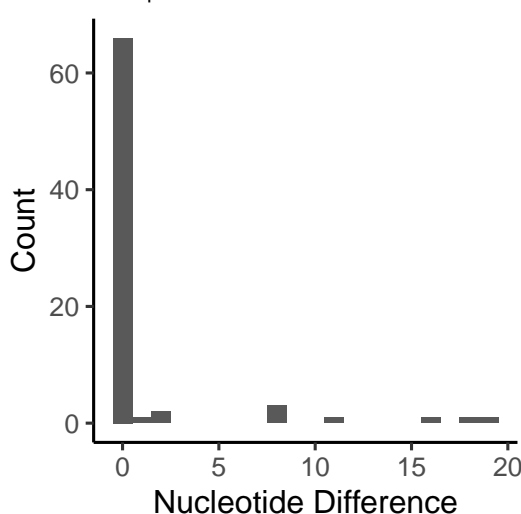
IGHV3-7*01

83 sequences assigned
48 (57.8%) exact matches, in which:
34 unique CDR3
4 unique J



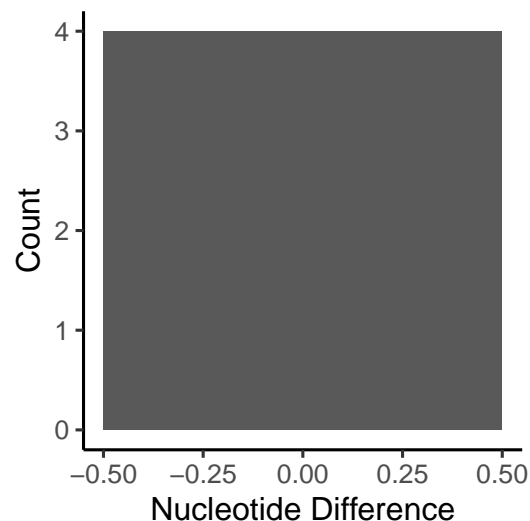
IGHV3-11*01

77 sequences assigned
66 (85.7%) exact matches, in which:
42 unique CDR3
5 unique J



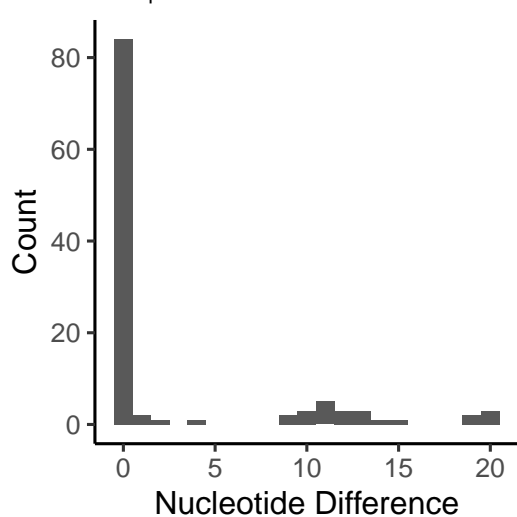
IGHV3-13*05

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



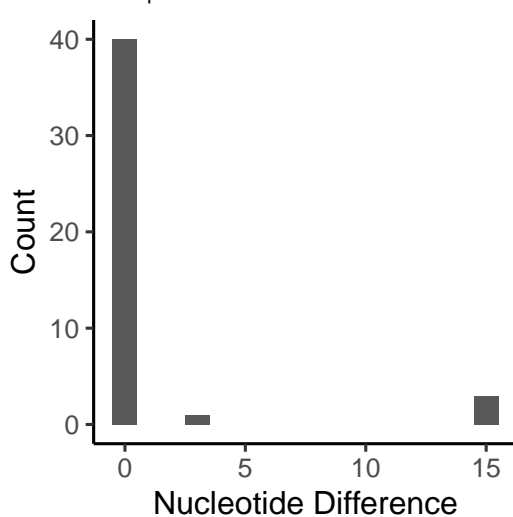
IGHV3-7*03

124 sequences assigned
84 (67.7%) exact matches, in which:
53 unique CDR3
5 unique J



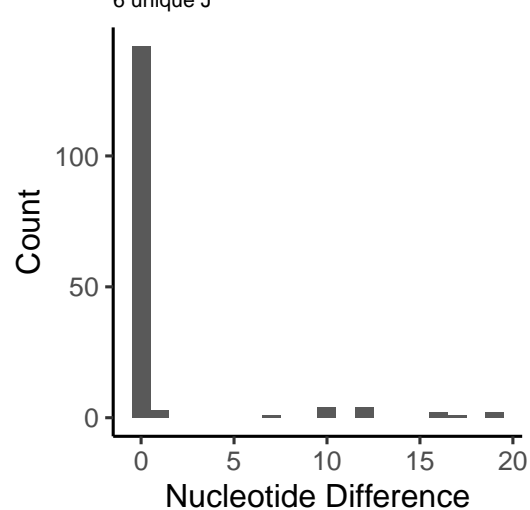
IGHV3-11*06

45 sequences assigned
40 (88.9%) exact matches, in which:
26 unique CDR3
4 unique J



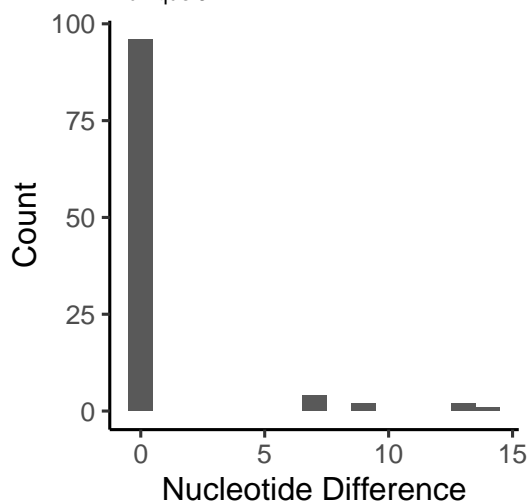
IGHV3-15*01_02

167 sequences assigned
142 (85%) exact matches, in which:
93 unique CDR3
6 unique J



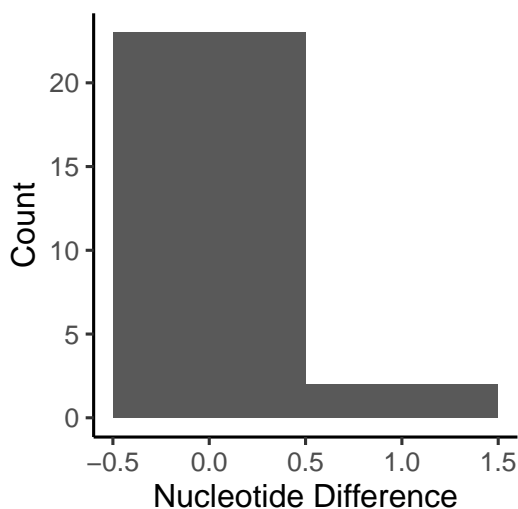
IGHV3-9*01

106 sequences assigned
96 (90.6%) exact matches, in which:
61 unique CDR3
4 unique J



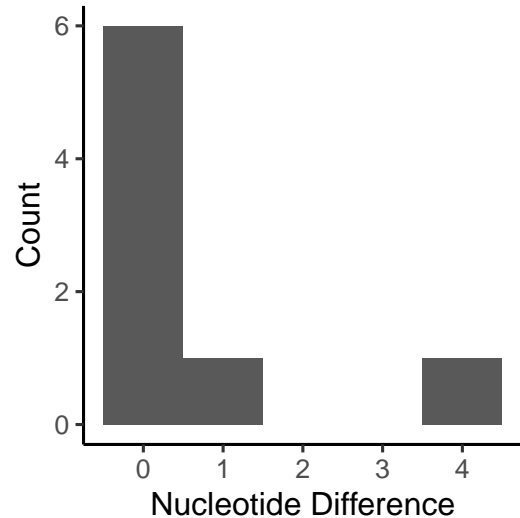
IGHV3-13*01

25 sequences assigned
23 (92%) exact matches, in which:
14 unique CDR3
4 unique J



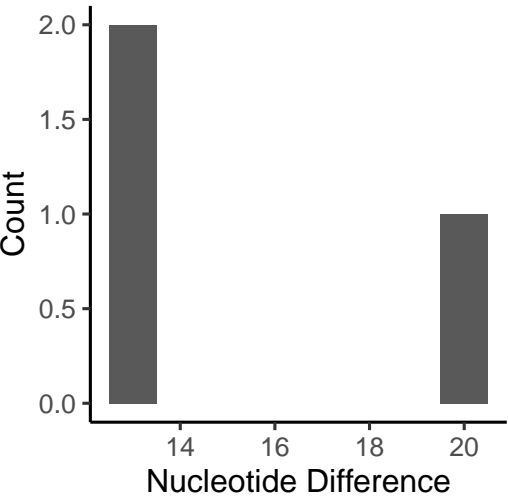
IGHV3-20*01_02

8 sequences assigned
6 (75%) exact matches, in which:
4 unique CDR3
3 unique J



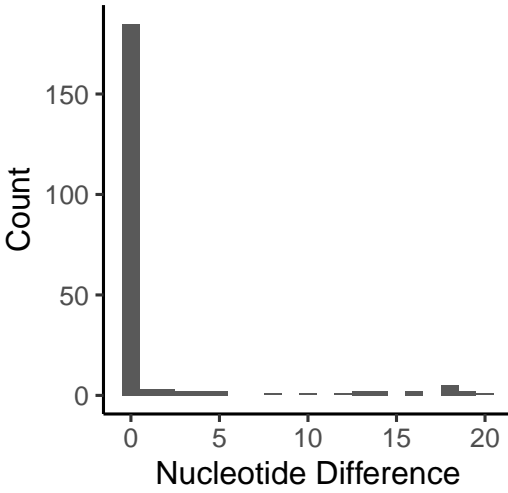
IGHV3-20*03_04

3 sequences assigned
No exact matches.



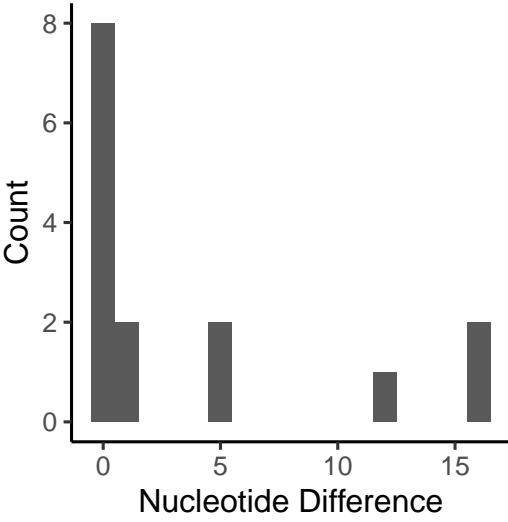
IGHV3-30-3*01

220 sequences assigned
185 (84.1%) exact matches, in which:
120 unique CDR3
4 unique J



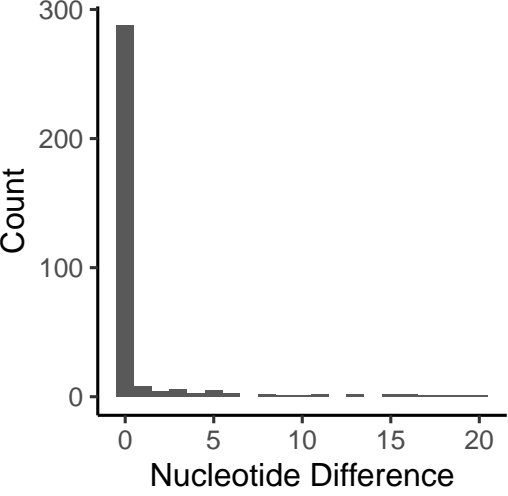
IGHV3-43*01

17 sequences assigned
8 (47.1%) exact matches, in which:
4 unique CDR3
1 unique J



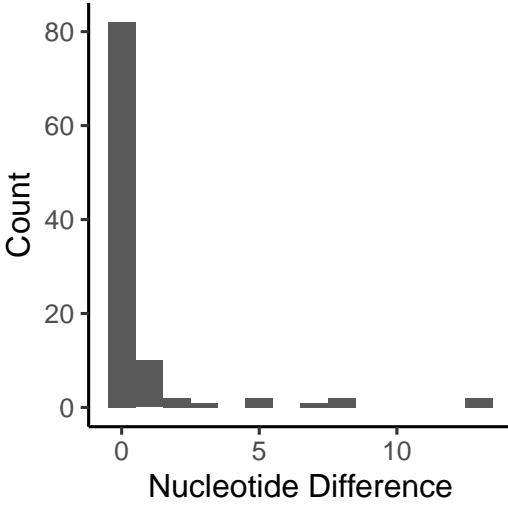
IGHV3-21*01_02

336 sequences assigned
288 (85.7%) exact matches, in which:
177 unique CDR3
5 unique J



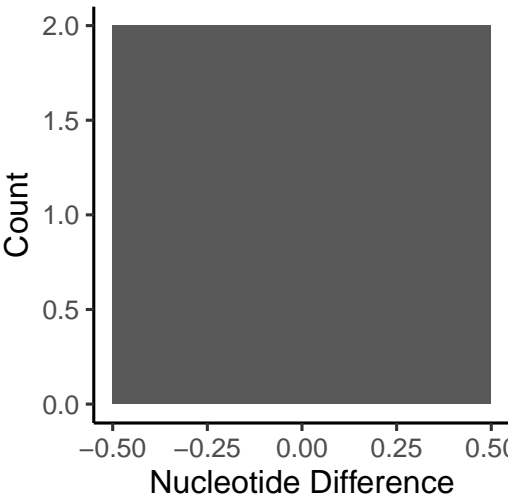
IGHV3-33*01

102 sequences assigned
82 (80.4%) exact matches, in which:
59 unique CDR3
5 unique J



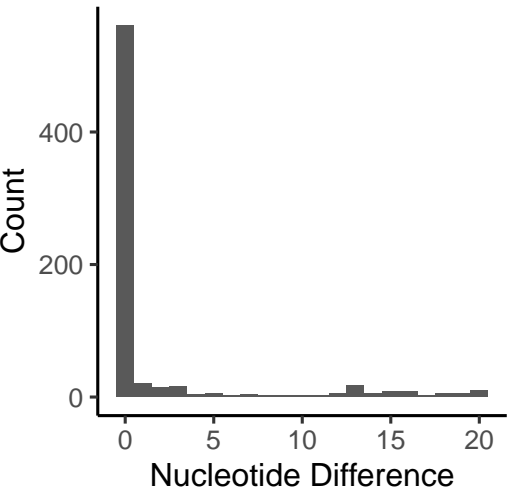
IGHV3-47*02

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



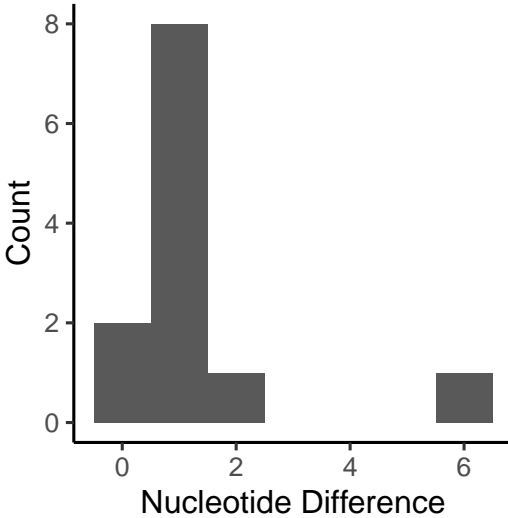
IGHV3-23*01_04

729 sequences assigned
561 (77%) exact matches, in which:
328 unique CDR3
6 unique J



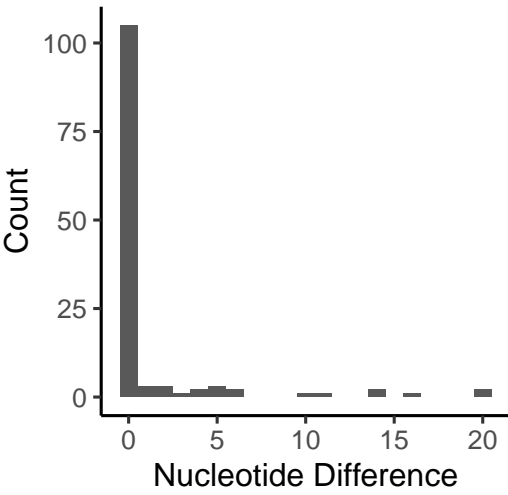
IGHV3-33*05

13 sequences assigned
2 (15.4%) exact matches, in which:
2 unique CDR3
1 unique J



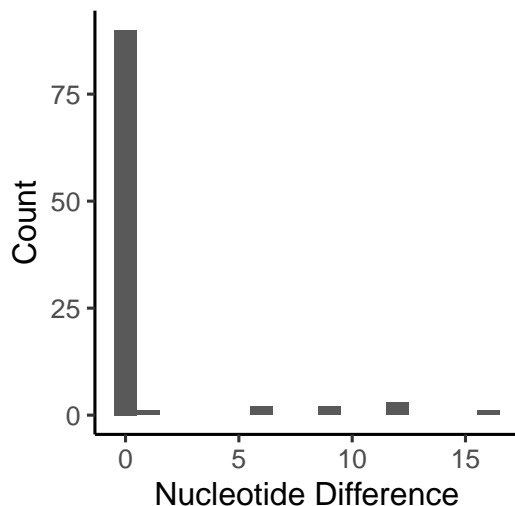
IGHV3-48*01

127 sequences assigned
105 (82.7%) exact matches, in which:
65 unique CDR3
4 unique J



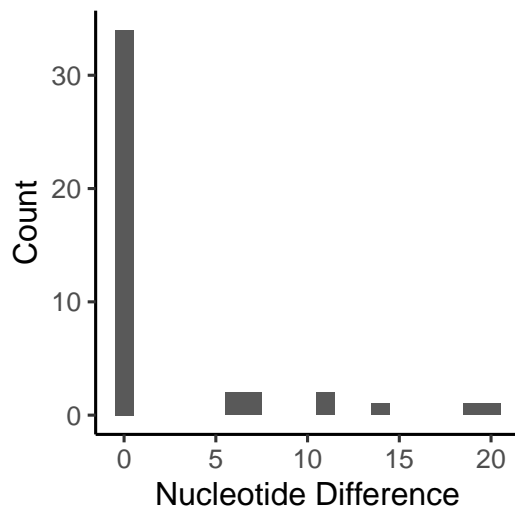
IGHV3-48*02

99 sequences assigned
90 (90.9%) exact matches, in which:
55 unique CDR3
5 unique J



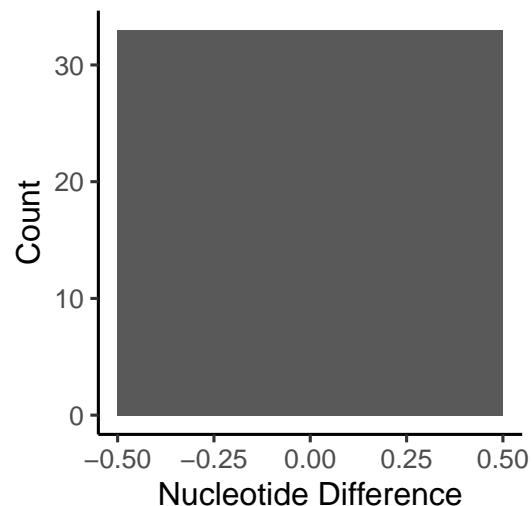
IGHV3-64*01

44 sequences assigned
34 (77.3%) exact matches, in which:
22 unique CDR3
3 unique J



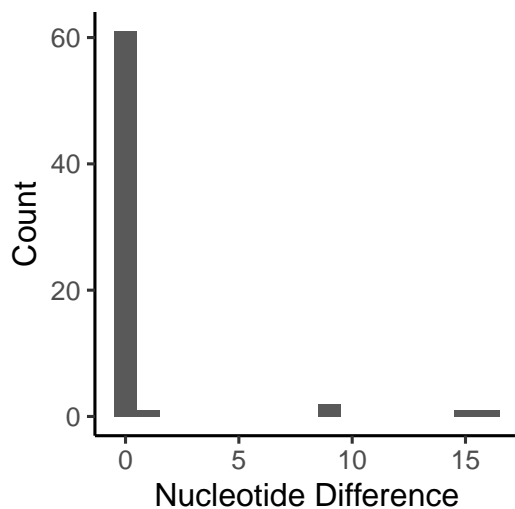
IGHV3-73*01_02

33 sequences assigned
33 (100%) exact matches, in which:
22 unique CDR3
5 unique J



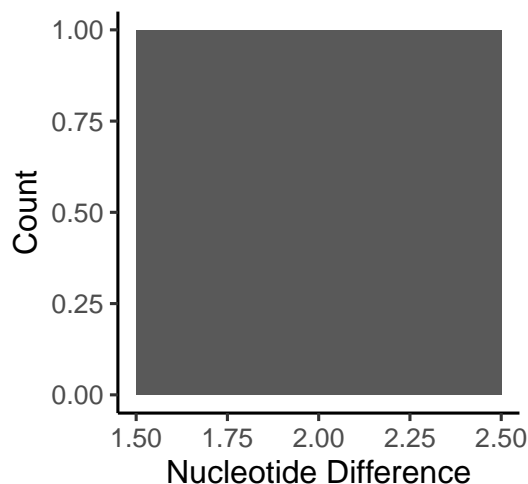
IGHV3-49*03_05

68 sequences assigned
61 (89.7%) exact matches, in which:
43 unique CDR3
6 unique J



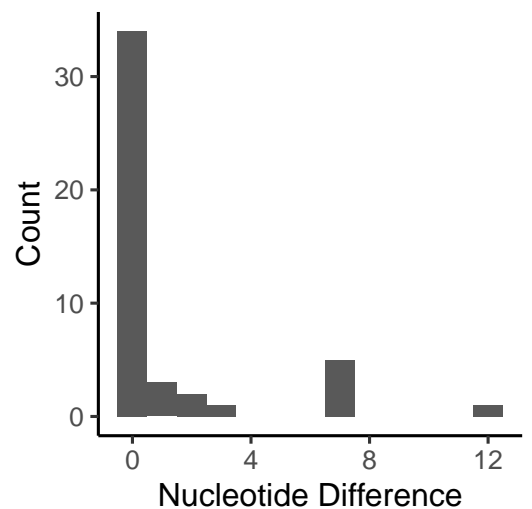
IGHV3-66*03

1 sequences assigned
No exact matches.



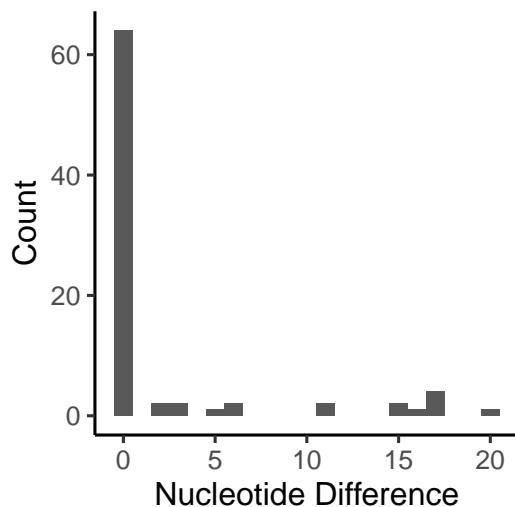
IGHV3-74*01_02

54 sequences assigned
34 (63%) exact matches, in which:
24 unique CDR3
4 unique J



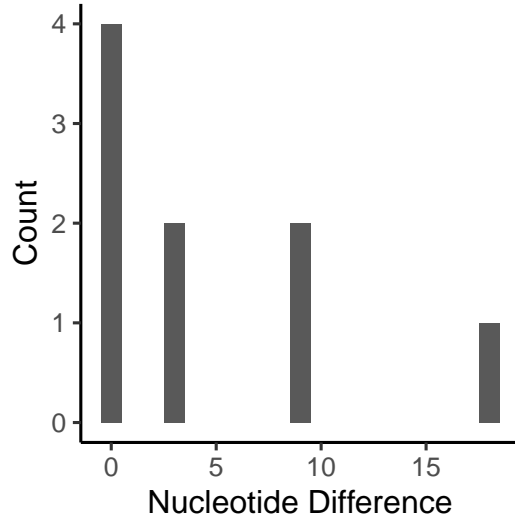
IGHV3-53*01_02

87 sequences assigned
64 (73.6%) exact matches, in which:
38 unique CDR3
6 unique J



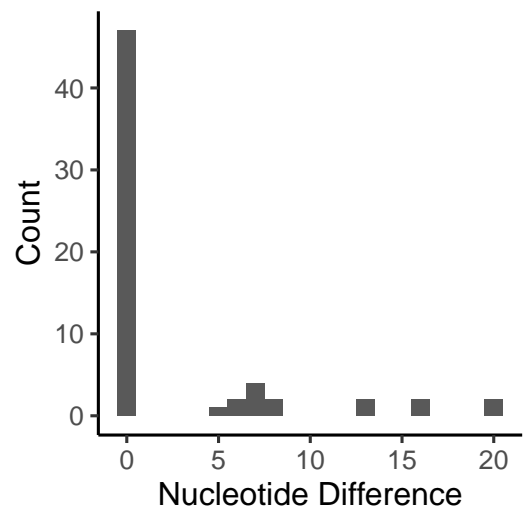
IGHV3-72*01

13 sequences assigned
4 (30.8%) exact matches, in which:
2 unique CDR3
1 unique J



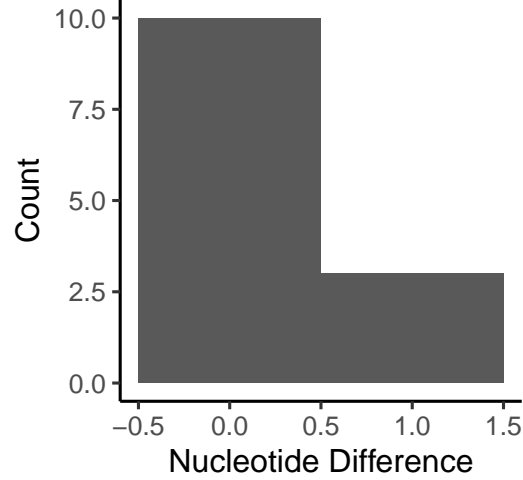
IGHV3-74*01_02_A81G

70 sequences assigned
47 (67.1%) exact matches, in which:
27 unique CDR3
4 unique J



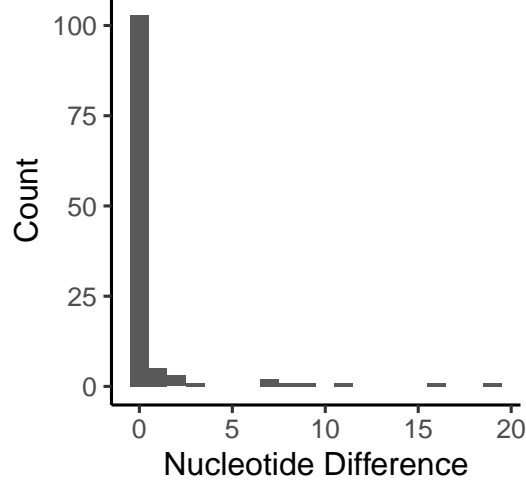
IGHV3-43D*03

15 sequences assigned
10 (66.7%) exact matches, in which:
6 unique CDR3
3 unique J



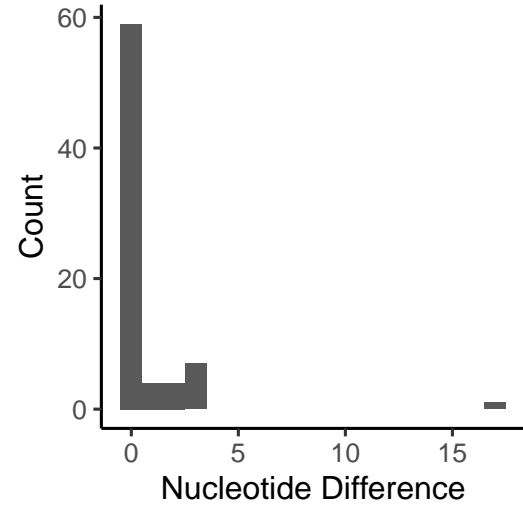
IGHV4-4*02_03

123 sequences assigned
103 (83.7%) exact matches, in which:
90 unique CDR3
6 unique J



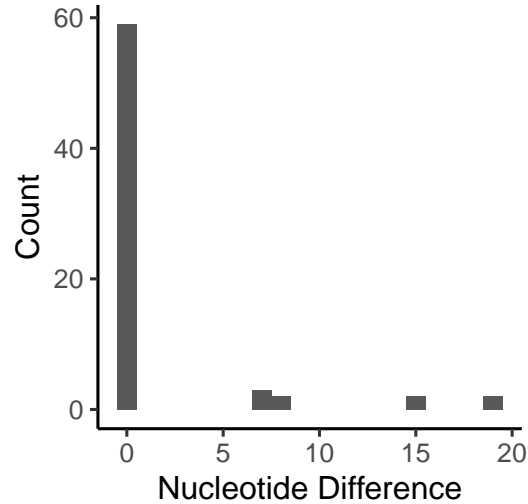
IGHV4-31*02

75 sequences assigned
59 (78.7%) exact matches, in which:
50 unique CDR3
5 unique J



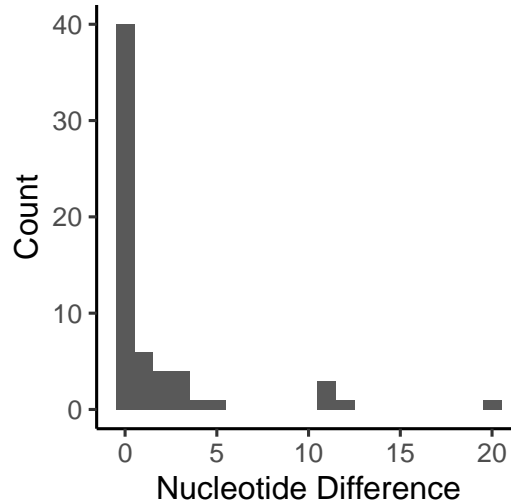
IGHV3-64D*06

76 sequences assigned
59 (77.6%) exact matches, in which:
30 unique CDR3
5 unique J



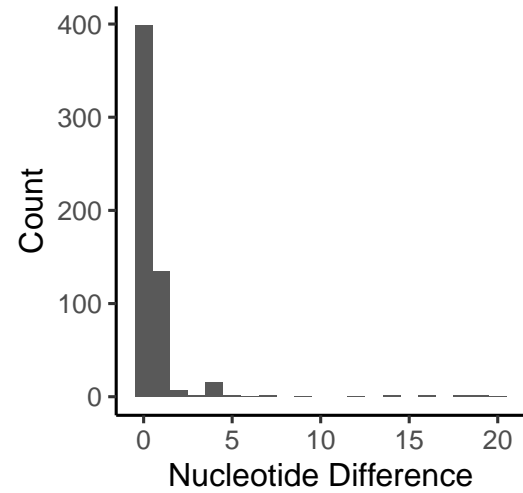
IGHV4-30-4*01

62 sequences assigned
40 (64.5%) exact matches, in which:
35 unique CDR3
4 unique J



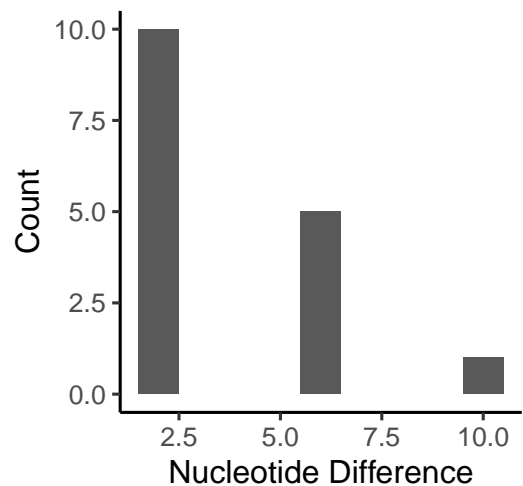
IGHV4-34*01_02

577 sequences assigned
399 (69.2%) exact matches, in which:
325 unique CDR3
6 unique J



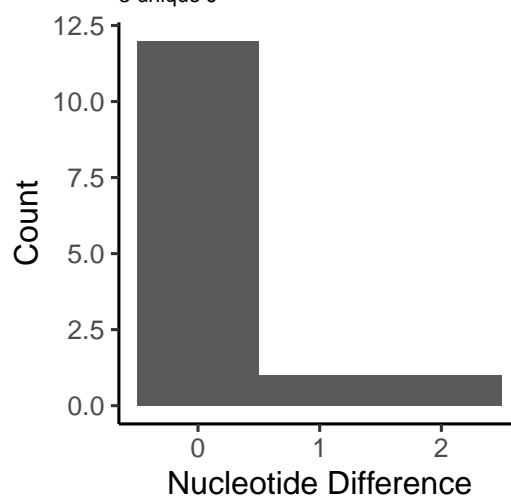
IGHV4-4*07

18 sequences assigned
No exact matches.



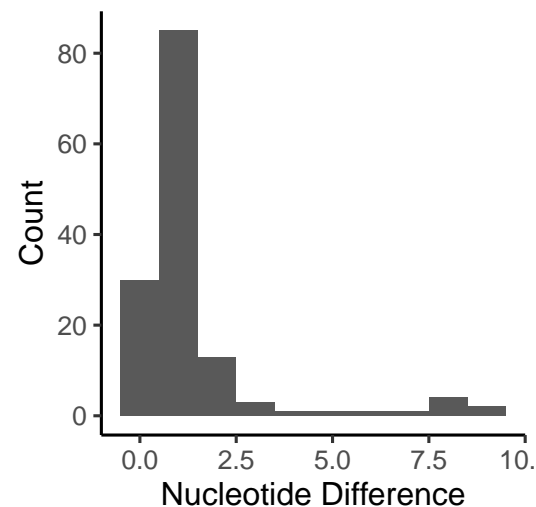
IGHV4-30-2*01

15 sequences assigned
12 (80%) exact matches, in which:
8 unique CDR3
3 unique J



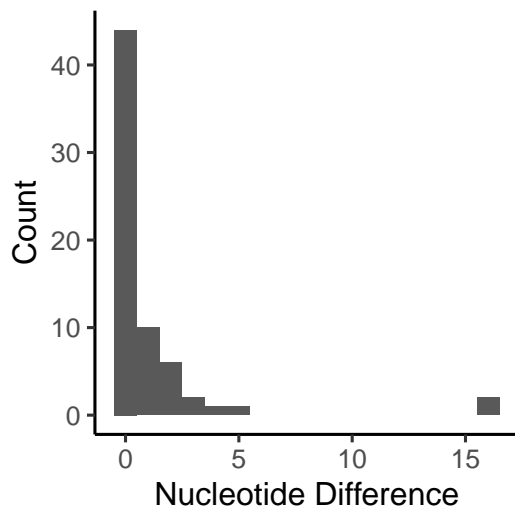
IGHV4-34*01_02_T300C

141 sequences assigned
30 (21.3%) exact matches, in which:
30 unique CDR3
4 unique J



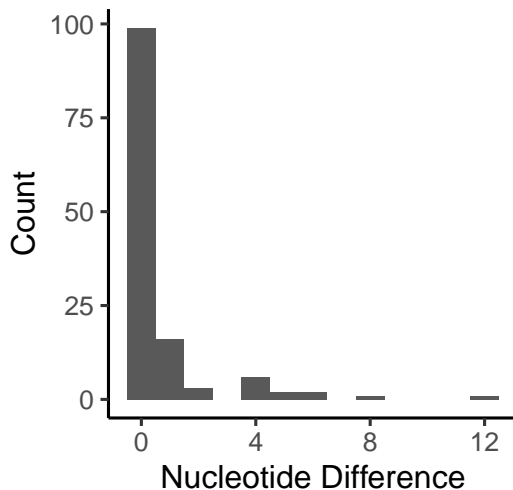
IGHV4-38-2*02

71 sequences assigned
44 (62%) exact matches, in which:
42 unique CDR3
5 unique J



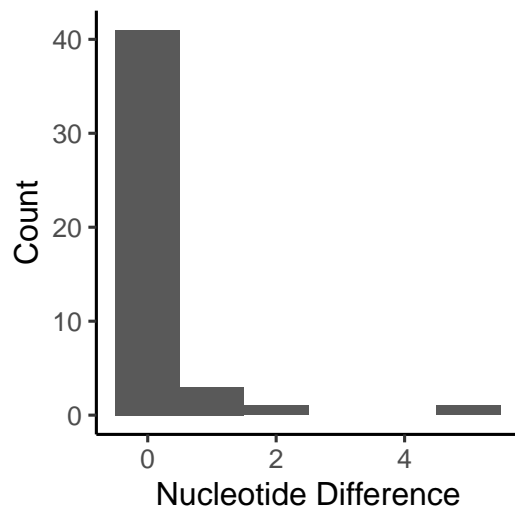
IGHV4-59*08

133 sequences assigned
99 (74.4%) exact matches, in which:
94 unique CDR3
6 unique J



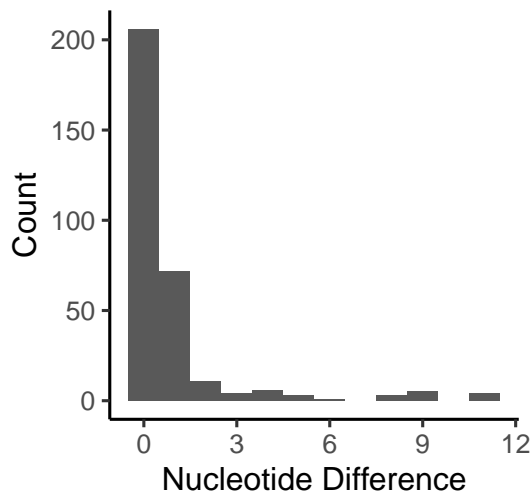
IGHV4-59*12_C300T

46 sequences assigned
41 (89.1%) exact matches, in which:
41 unique CDR3
5 unique J



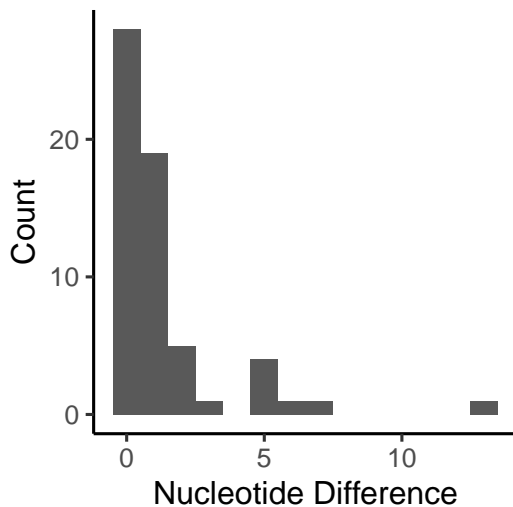
IGHV4-39*07

318 sequences assigned
206 (64.8%) exact matches, in which:
186 unique CDR3
4 unique J



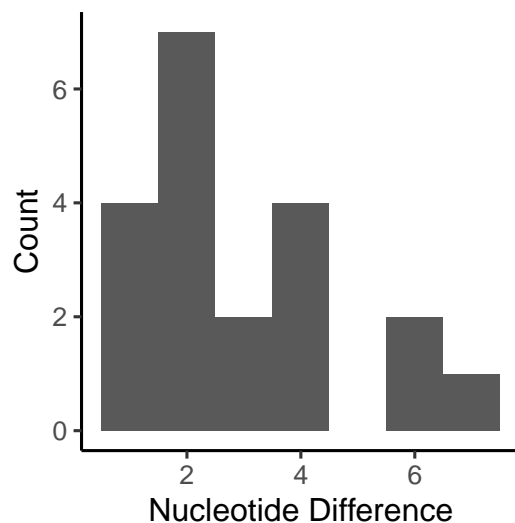
IGHV4-59*12

61 sequences assigned
28 (45.9%) exact matches, in which:
28 unique CDR3
3 unique J



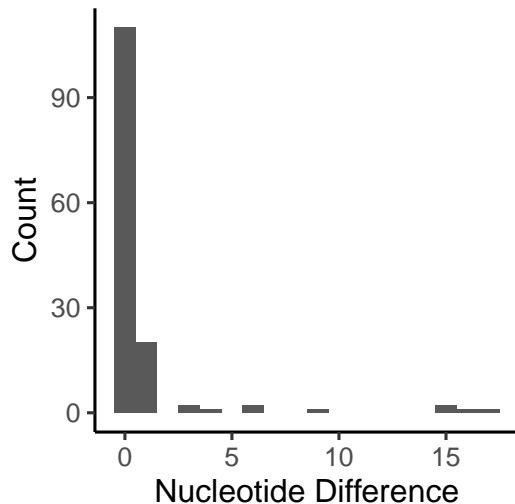
IGHV4-61*01

20 sequences assigned
No exact matches.



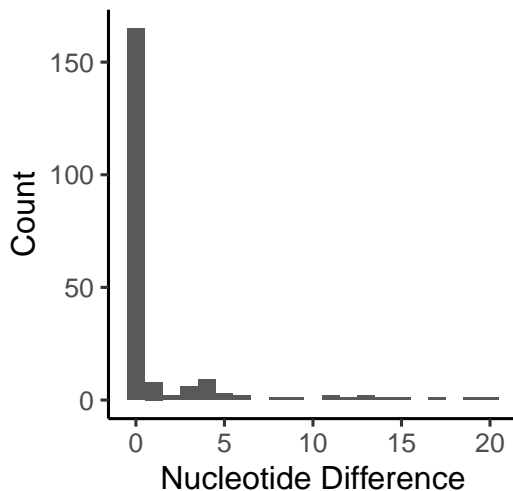
IGHV4-39*02_C258G

140 sequences assigned
110 (78.6%) exact matches, in which:
99 unique CDR3
6 unique J



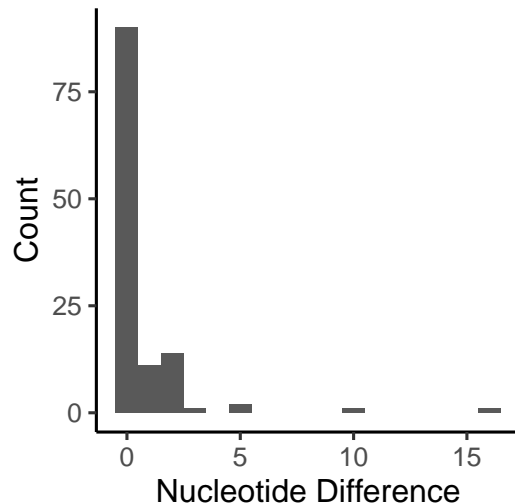
IGHV4-59*02_G88A

219 sequences assigned
165 (75.3%) exact matches, in which:
163 unique CDR3
6 unique J



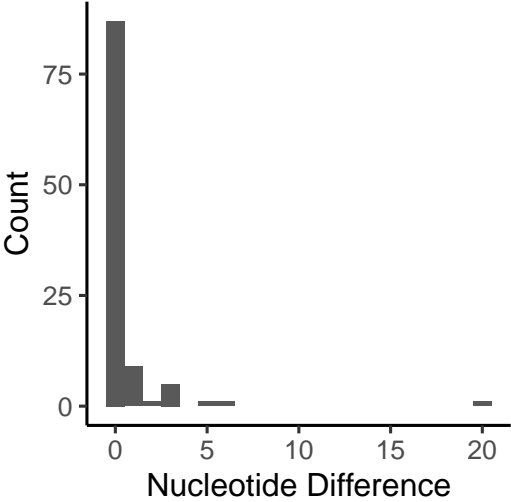
IGHV4-61*02

123 sequences assigned
90 (73.2%) exact matches, in which:
89 unique CDR3
5 unique J



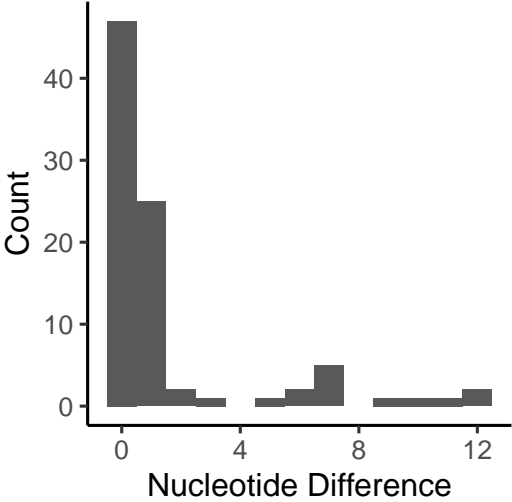
IGHV5-10-1*01_03

105 sequences assigned
87 (82.9%) exact matches, in which:
62 unique CDR3
5 unique J



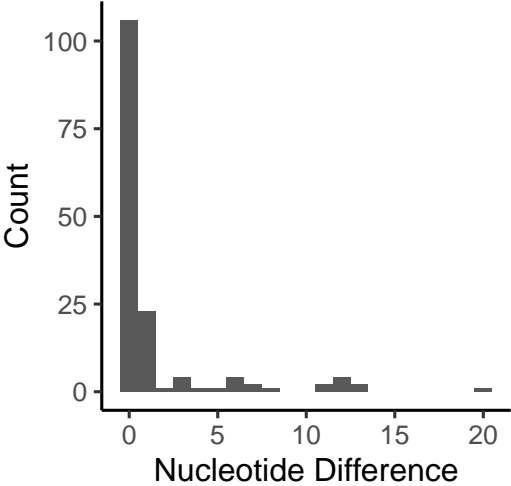
IGHV7-4-1*02

90 sequences assigned
47 (52.2%) exact matches, in which:
46 unique CDR3
6 unique J



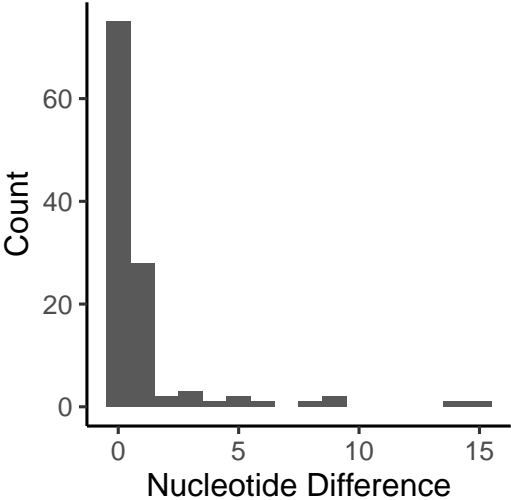
IGHV5-51*07_A128G

152 sequences assigned
106 (69.7%) exact matches, in which:
79 unique CDR3
5 unique J



IGHV6-1*01_02

117 sequences assigned
75 (64.1%) exact matches, in which:
74 unique CDR3
5 unique J





Warning – no inferred sequences found.