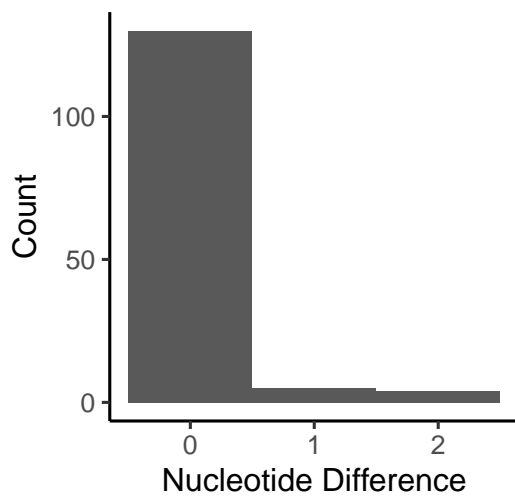


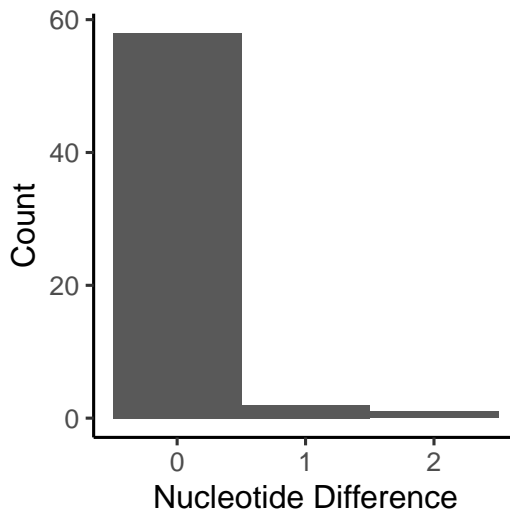
IGHV1-2*02

139 sequences assigned
130 (93.5%) exact matches, in which:
130 unique CDR3
6 unique J



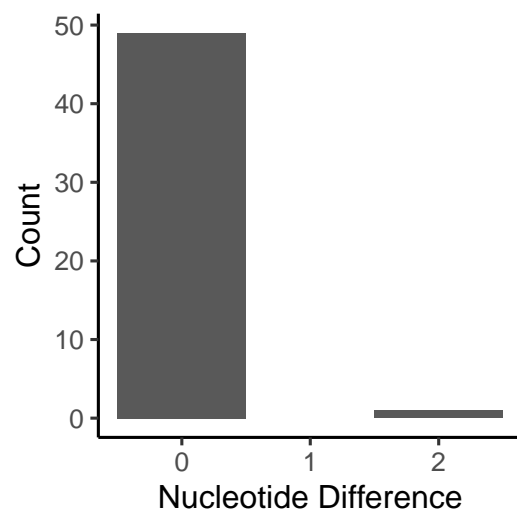
IGHV1-8*03

61 sequences assigned
58 (95.1%) exact matches, in which:
57 unique CDR3
4 unique J



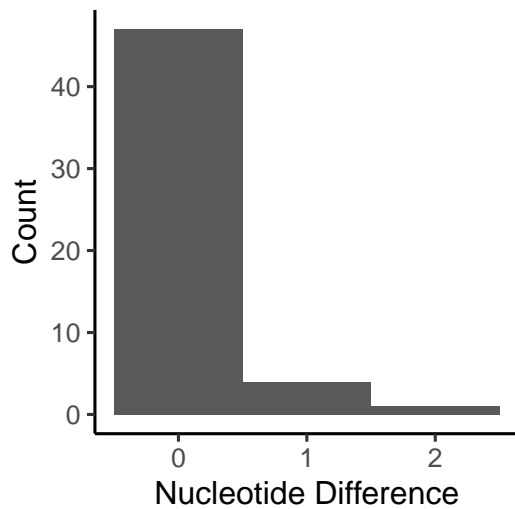
IGHV1-24*01

50 sequences assigned
49 (98%) exact matches, in which:
49 unique CDR3
5 unique J



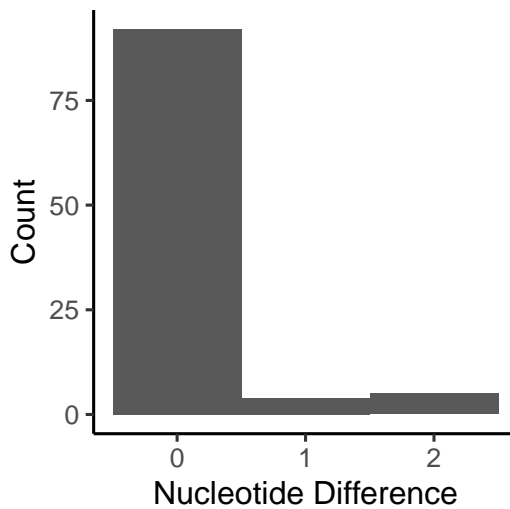
IGHV1-2*04

52 sequences assigned
47 (90.4%) exact matches, in which:
47 unique CDR3
5 unique J



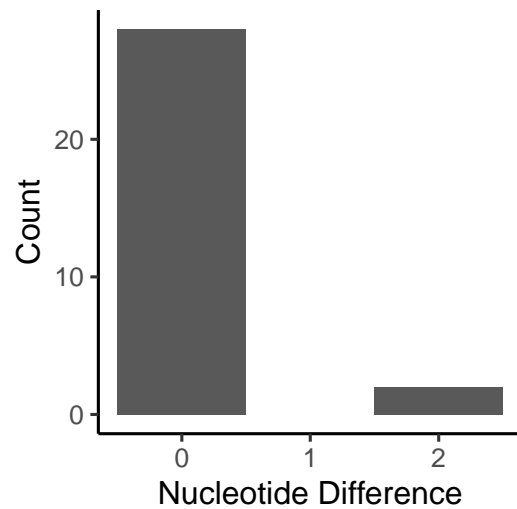
IGHV1-18*01

101 sequences assigned
92 (91.1%) exact matches, in which:
90 unique CDR3
5 unique J



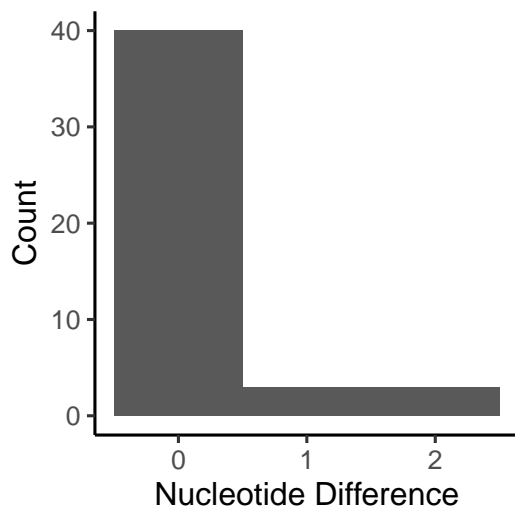
IGHV1-46*01

30 sequences assigned
28 (93.3%) exact matches, in which:
28 unique CDR3
4 unique J



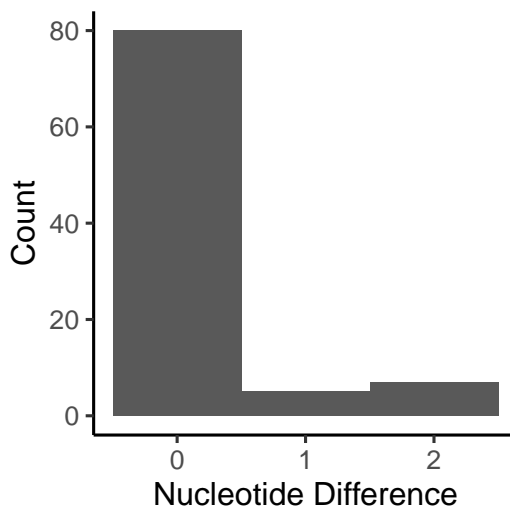
IGHV1-3*01_05

46 sequences assigned
40 (87%) exact matches, in which:
40 unique CDR3
5 unique J



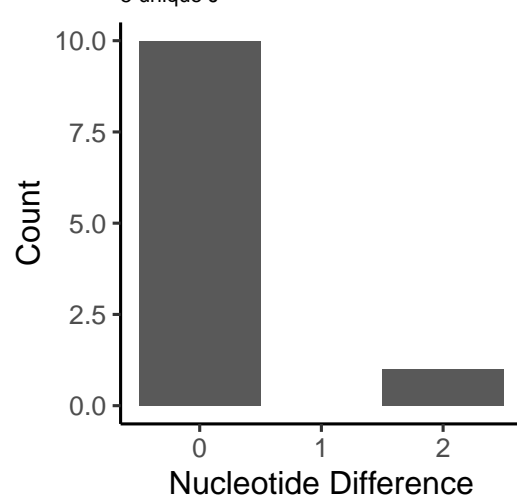
IGHV1-18*04

92 sequences assigned
80 (87%) exact matches, in which:
80 unique CDR3
4 unique J



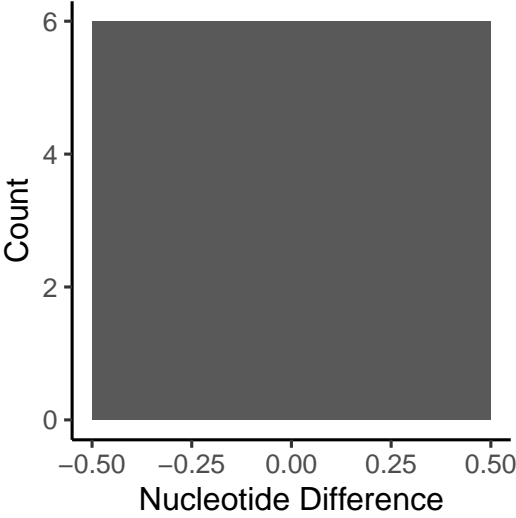
IGHV1-46*03

11 sequences assigned
10 (90.9%) exact matches, in which:
9 unique CDR3
5 unique J



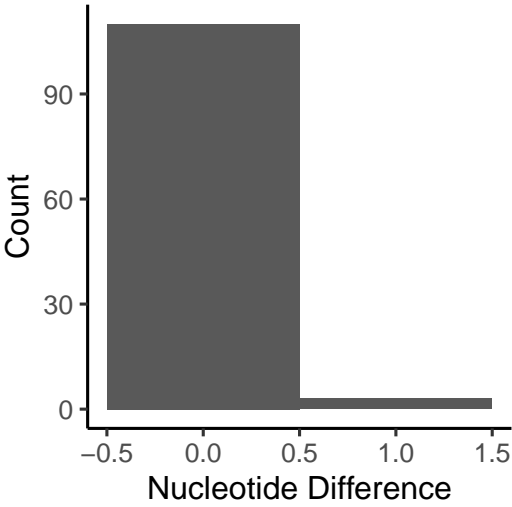
IGHV1-58*02

6 sequences assigned
6 (100%) exact matches, in which:
6 unique CDR3
3 unique J



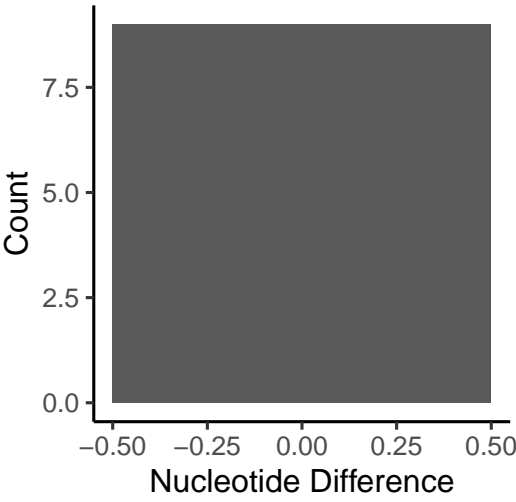
IGHV1-69*01_12_13

113 sequences assigned
110 (97.3%) exact matches, in which:
108 unique CDR3
6 unique J



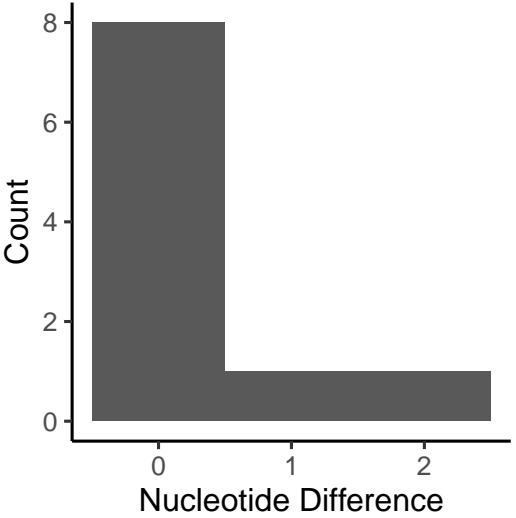
IGHV2-26*01

9 sequences assigned
9 (100%) exact matches, in which:
9 unique CDR3
3 unique J



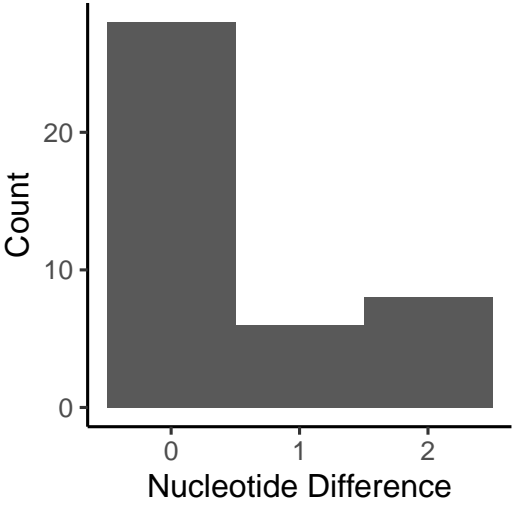
IGHV1-58*01_03

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



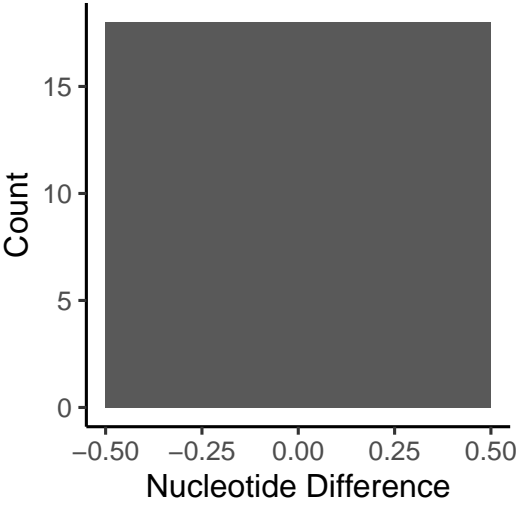
IGHV2-5*01

42 sequences assigned
28 (66.7%) exact matches, in which:
28 unique CDR3
4 unique J



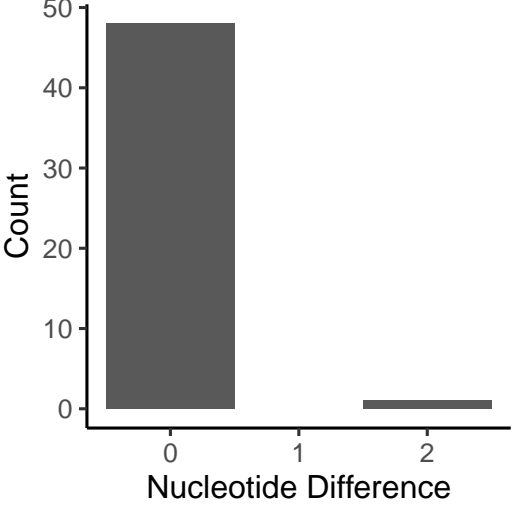
IGHV2-70*01

18 sequences assigned
18 (100%) exact matches, in which:
18 unique CDR3
4 unique J



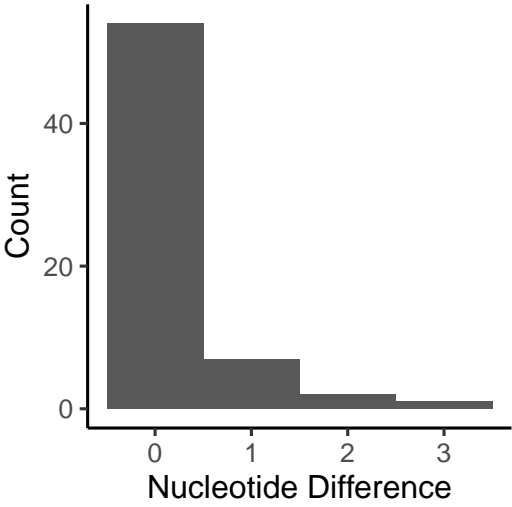
IGHV1-69*02

49 sequences assigned
48 (98%) exact matches, in which:
47 unique CDR3
5 unique J



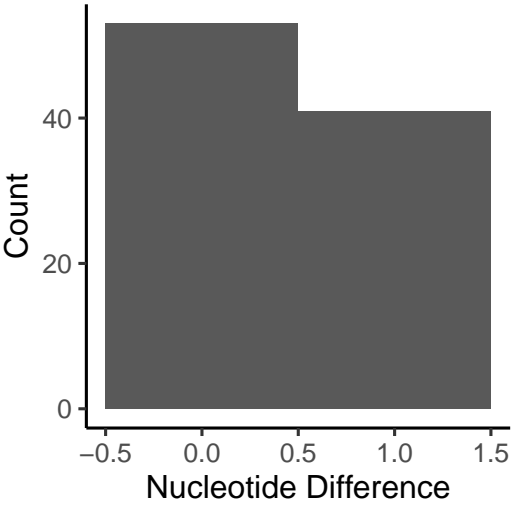
IGHV2-5*02

64 sequences assigned
54 (84.4%) exact matches, in which:
52 unique CDR3
5 unique J



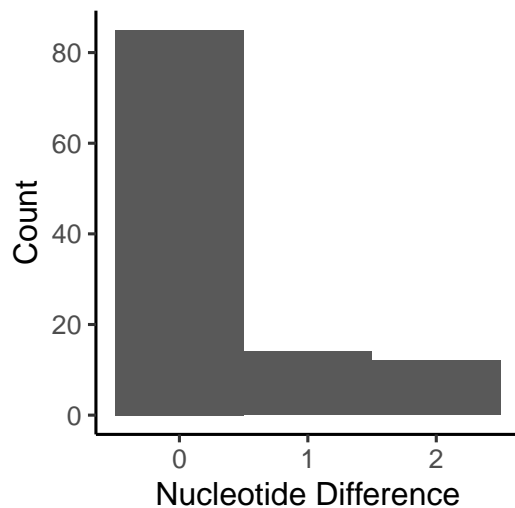
IGHV2-70*11_15

94 sequences assigned
53 (56.4%) exact matches, in which:
34 unique CDR3
3 unique J



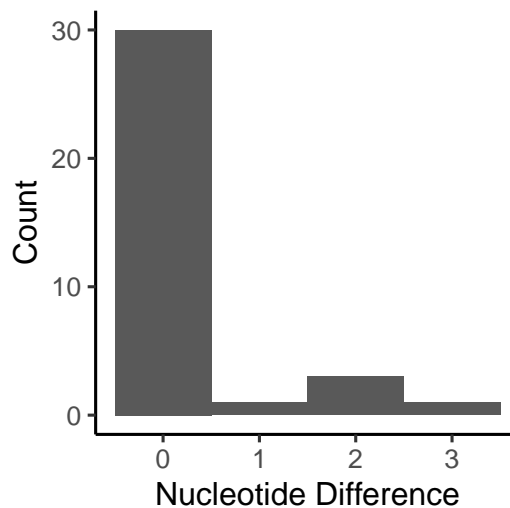
IGHV3-7*01

111 sequences assigned
85 (76.6%) exact matches, in which:
83 unique CDR3
6 unique J



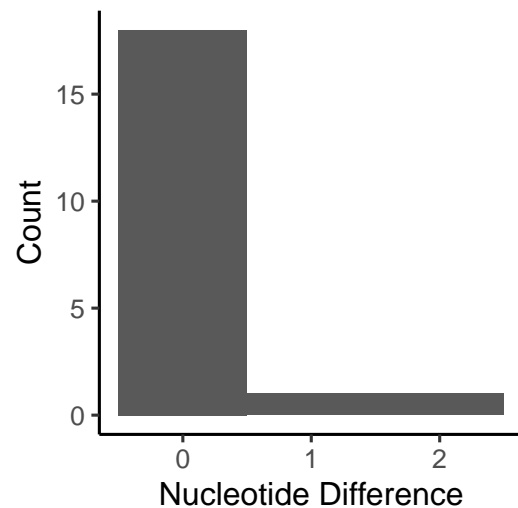
IGHV3-11*04

35 sequences assigned
30 (85.7%) exact matches, in which:
29 unique CDR3
5 unique J



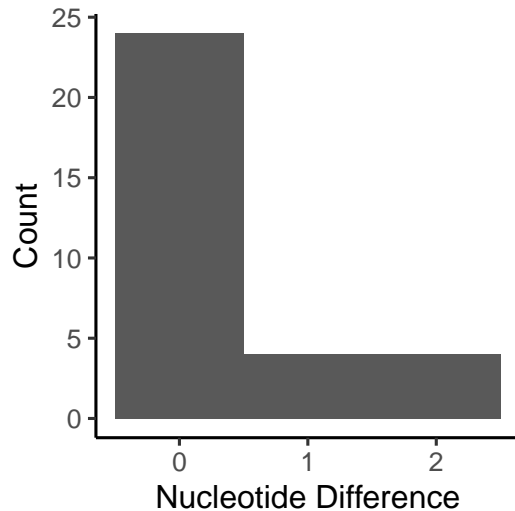
IGHV3-13*04

20 sequences assigned
18 (90%) exact matches, in which:
17 unique CDR3
4 unique J



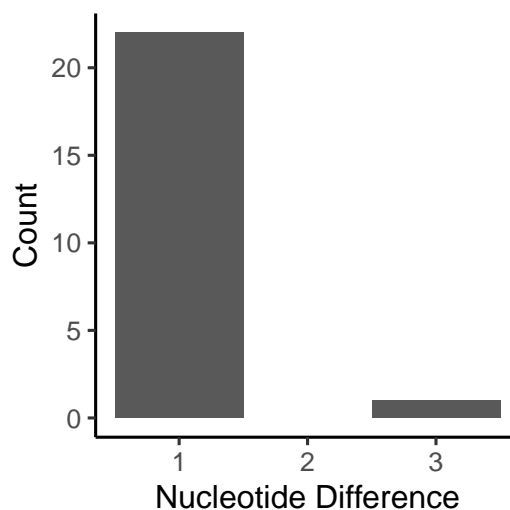
IGHV3-7*04

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



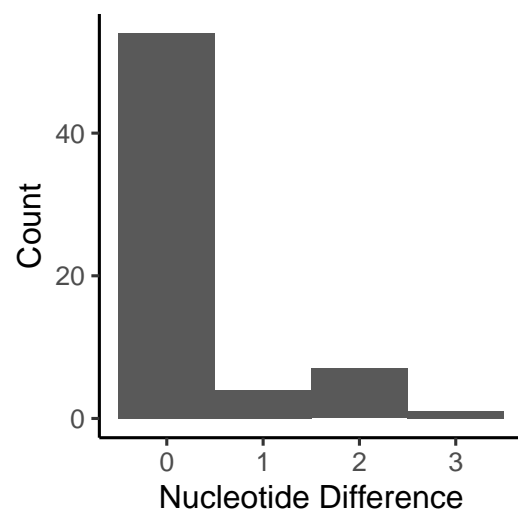
IGHV3-11*06

23 sequences assigned
No exact matches.



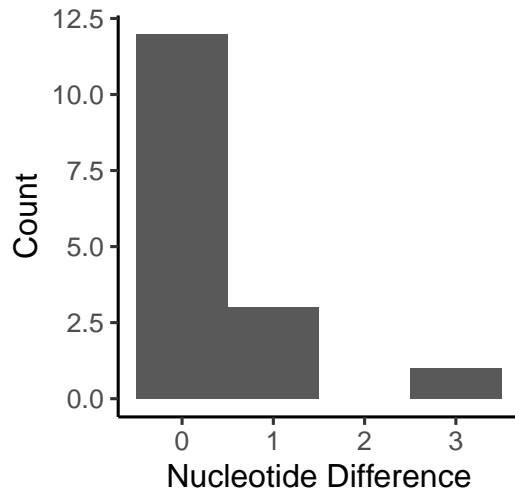
IGHV3-15*01_02

66 sequences assigned
54 (81.8%) exact matches, in which:
51 unique CDR3
6 unique J



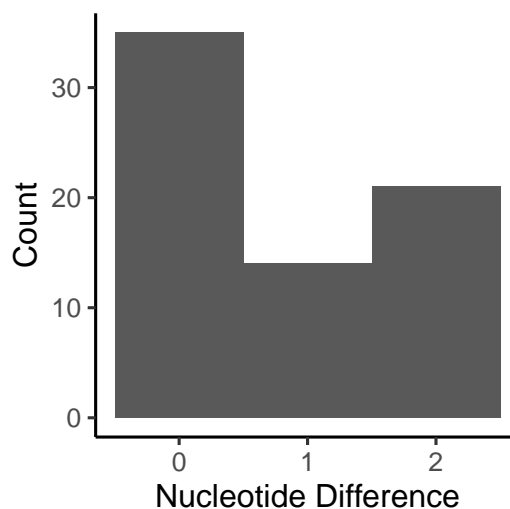
IGHV3-9*03

16 sequences assigned
12 (75%) exact matches, in which:
11 unique CDR3
4 unique J



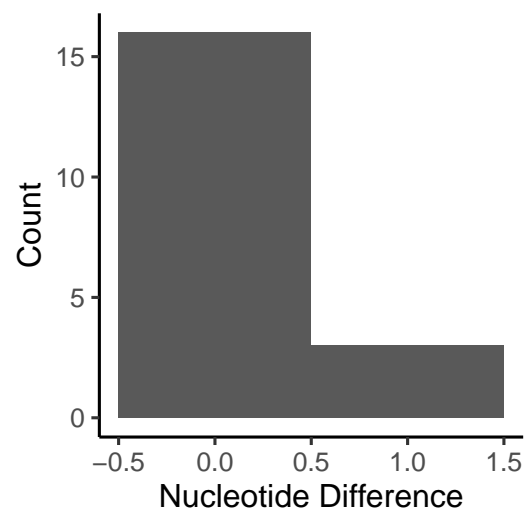
IGHV3-11*03_05

70 sequences assigned
35 (50%) exact matches, in which:
33 unique CDR3
5 unique J



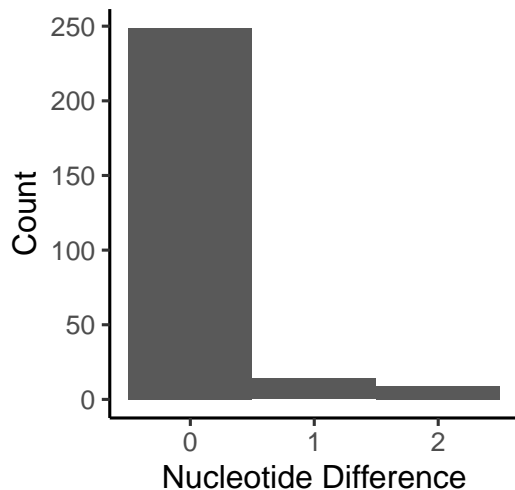
IGHV3-20*03_04

19 sequences assigned
16 (84.2%) exact matches, in which:
15 unique CDR3
4 unique J



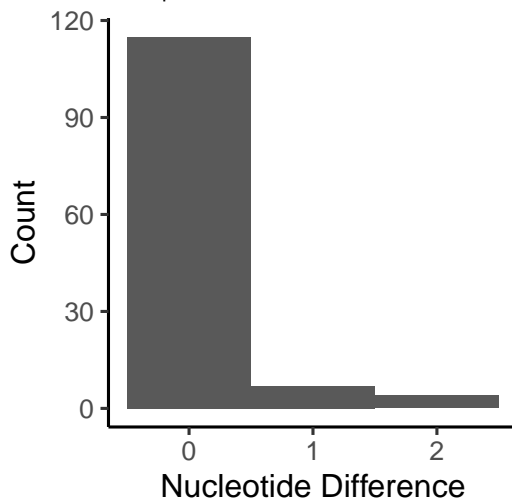
IGHV3-21*01_02

272 sequences assigned
249 (91.5%) exact matches, in which:
234 unique CDR3
6 unique J



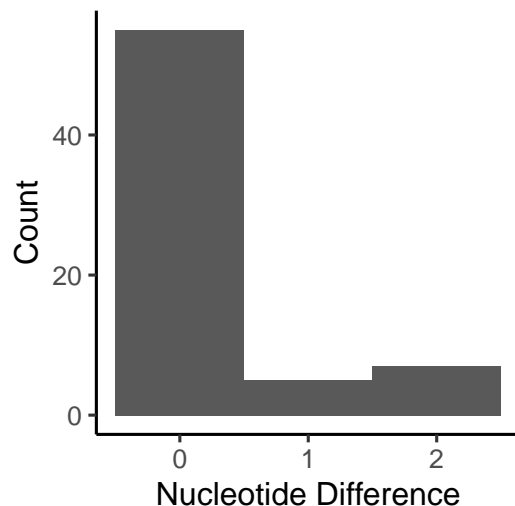
IGHV3-33*01

126 sequences assigned
115 (91.3%) exact matches, in which:
109 unique CDR3
6 unique J



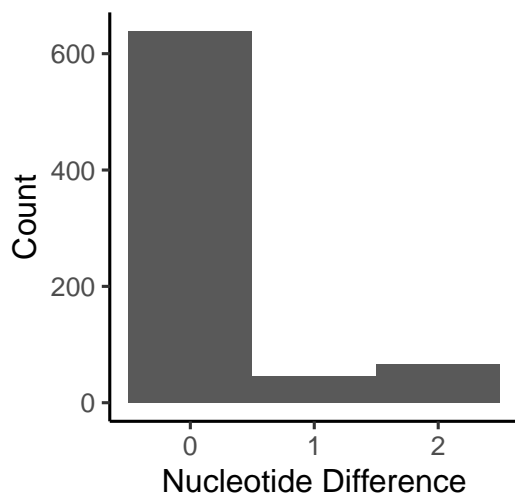
IGHV3-48*01

67 sequences assigned
55 (82.1%) exact matches, in which:
51 unique CDR3
4 unique J



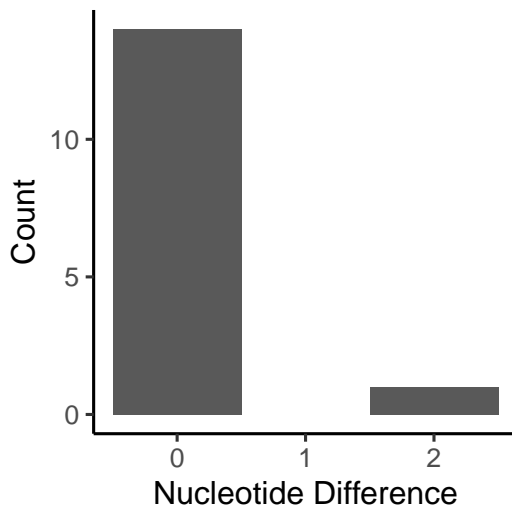
IGHV3-23*01_04

751 sequences assigned
639 (85.1%) exact matches, in which:
596 unique CDR3
6 unique J



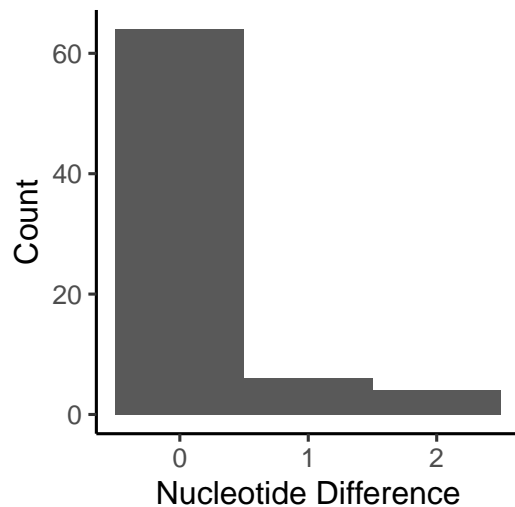
IGHV3-43*01

15 sequences assigned
14 (93.3%) exact matches, in which:
11 unique CDR3
2 unique J



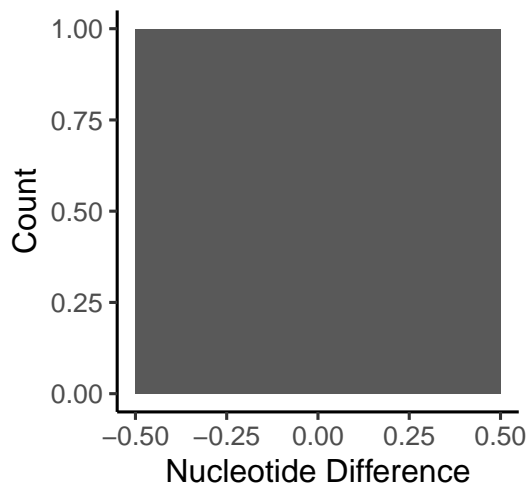
IGHV3-48*02

74 sequences assigned
64 (86.5%) exact matches, in which:
58 unique CDR3
6 unique J



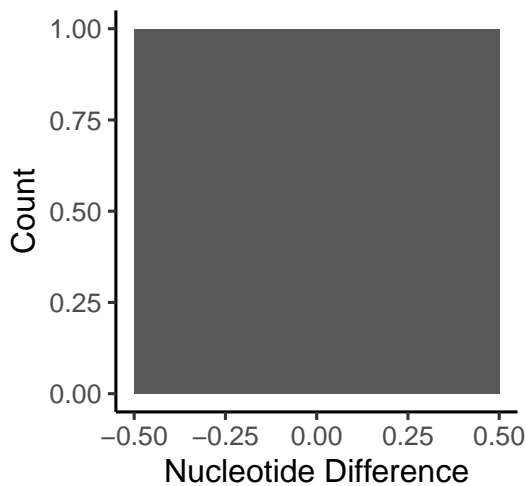
IGHV3-30-3*01

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



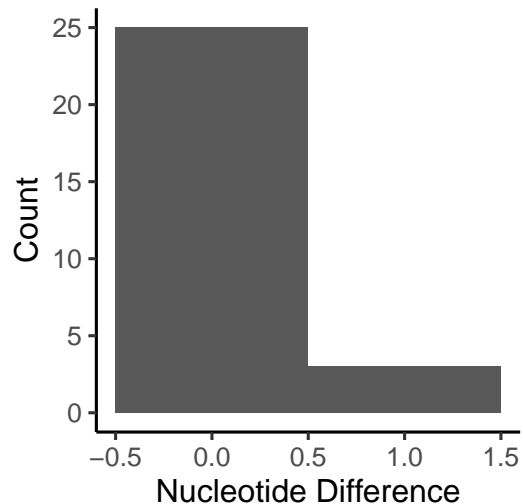
IGHV3-47*02

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



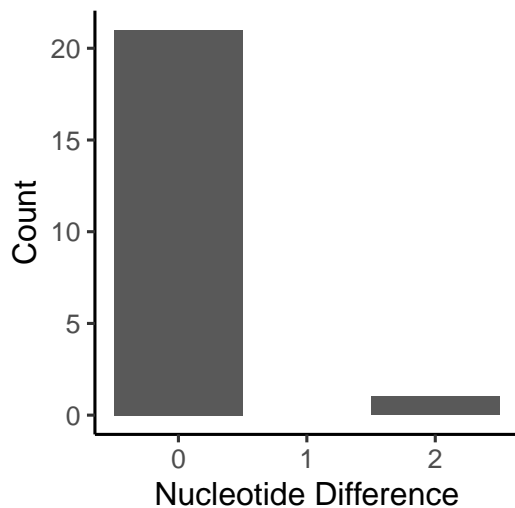
IGHV3-49*03_05

28 sequences assigned
25 (89.3%) exact matches, in which:
24 unique CDR3
4 unique J



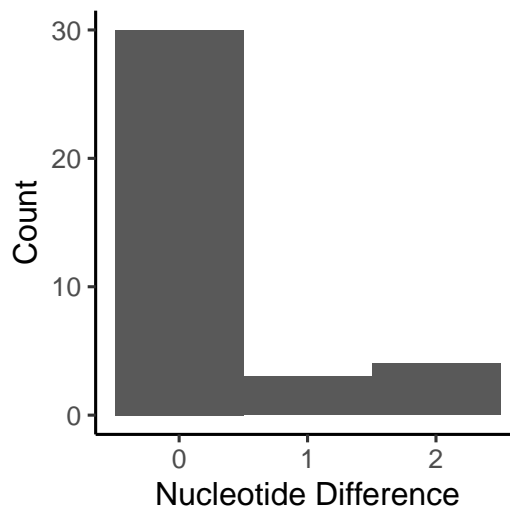
IGHV3-53*04

22 sequences assigned
21 (95.5%) exact matches, in which:
18 unique CDR3
3 unique J



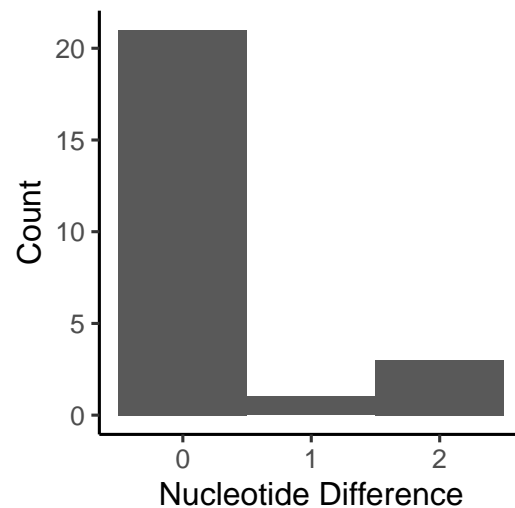
IGHV3-66*01

37 sequences assigned
30 (81.1%) exact matches, in which:
27 unique CDR3
6 unique J



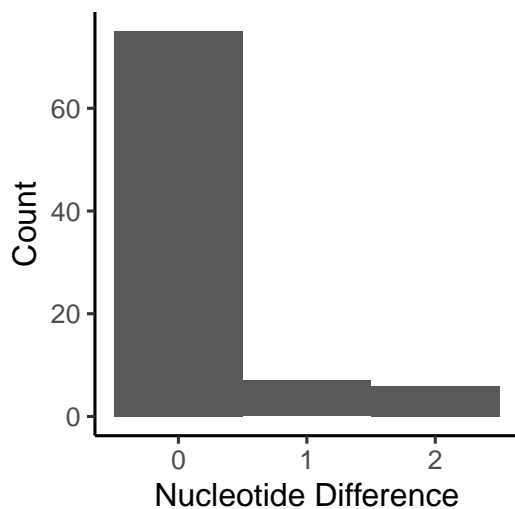
IGHV3-73*01_02

25 sequences assigned
21 (84%) exact matches, in which:
20 unique CDR3
4 unique J



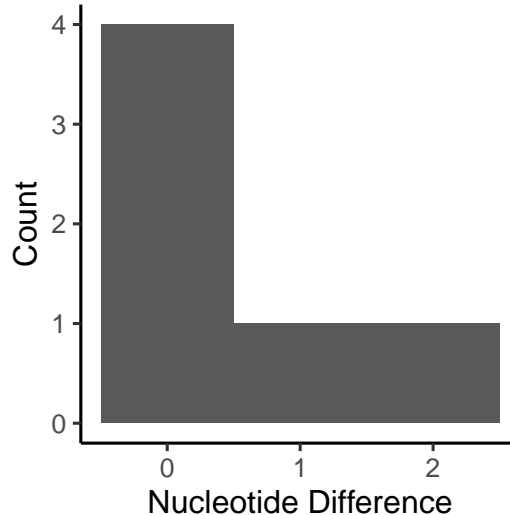
IGHV3-53*01_02

88 sequences assigned
75 (85.2%) exact matches, in which:
65 unique CDR3
5 unique J



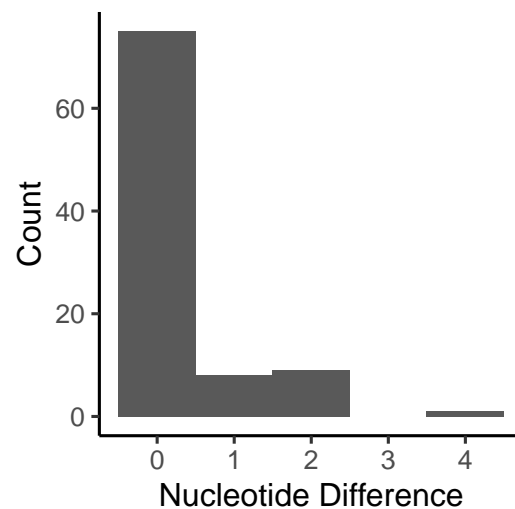
IGHV3-66*04

6 sequences assigned
4 (66.7%) exact matches, in which:
4 unique CDR3
4 unique J



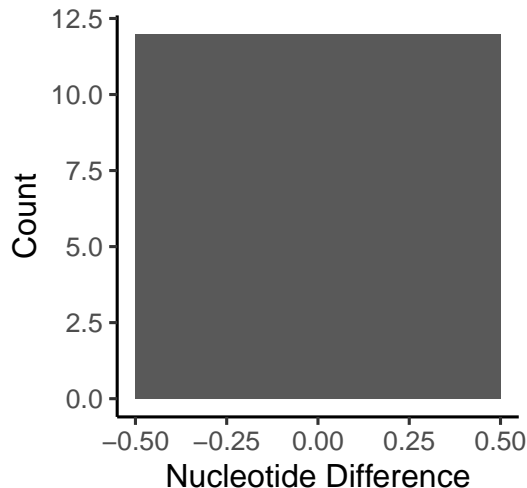
IGHV3-74*01_02

93 sequences assigned
75 (80.6%) exact matches, in which:
72 unique CDR3
5 unique J



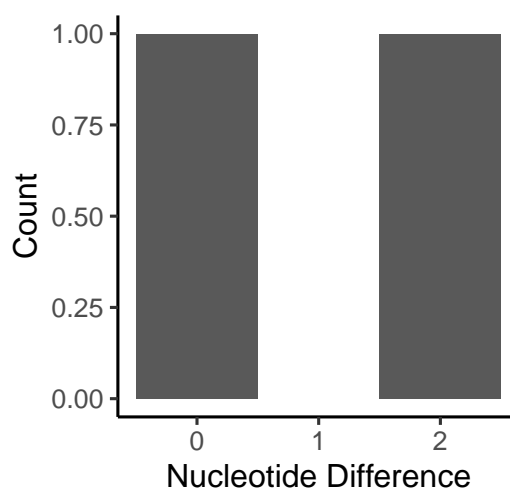
IGHV3-64*01

12 sequences assigned
12 (100%) exact matches, in which:
11 unique CDR3
3 unique J



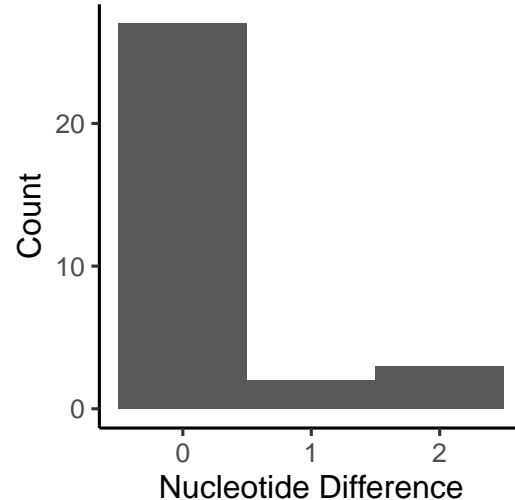
IGHV3-72*01

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



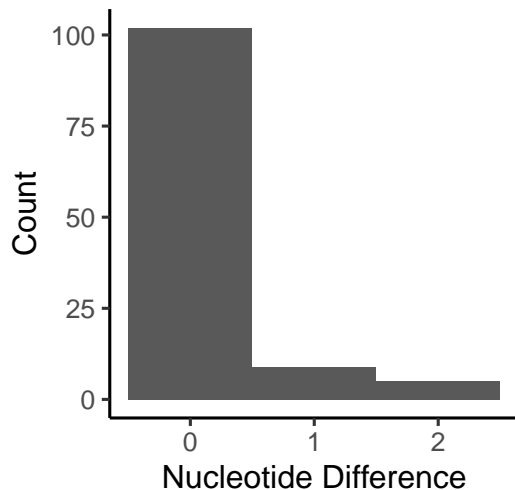
IGHV3-64D*06

32 sequences assigned
27 (84.4%) exact matches, in which:
26 unique CDR3
4 unique J



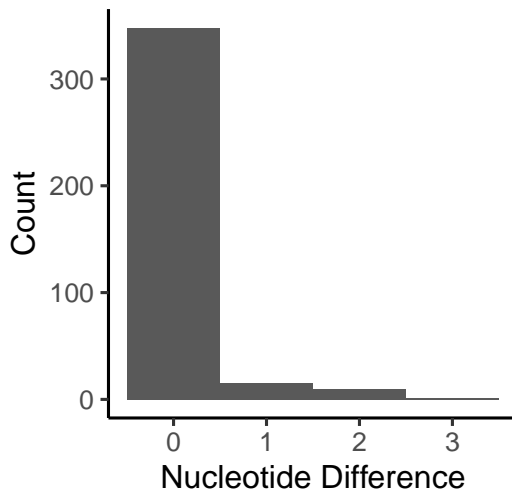
IGHV4-4*07

116 sequences assigned
102 (87.9%) exact matches, in which:
98 unique CDR3
5 unique J



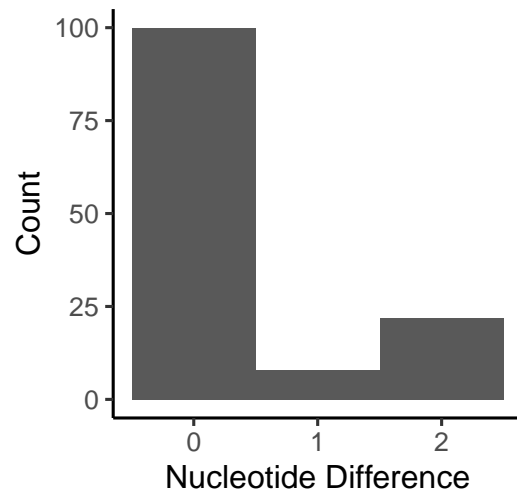
IGHV4-34*01_02

374 sequences assigned
348 (93%) exact matches, in which:
323 unique CDR3
6 unique J



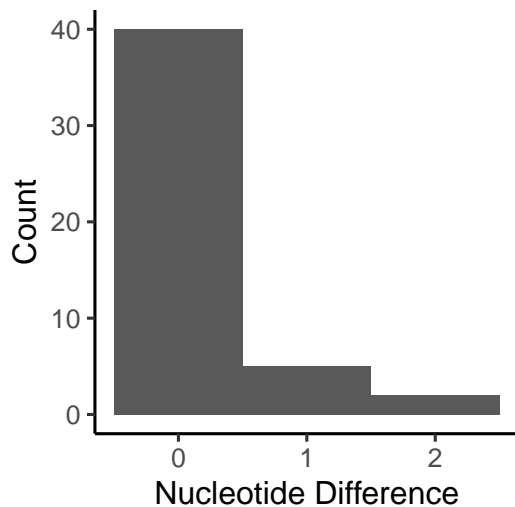
IGHV4-59*08

130 sequences assigned
100 (76.9%) exact matches, in which:
96 unique CDR3
5 unique J



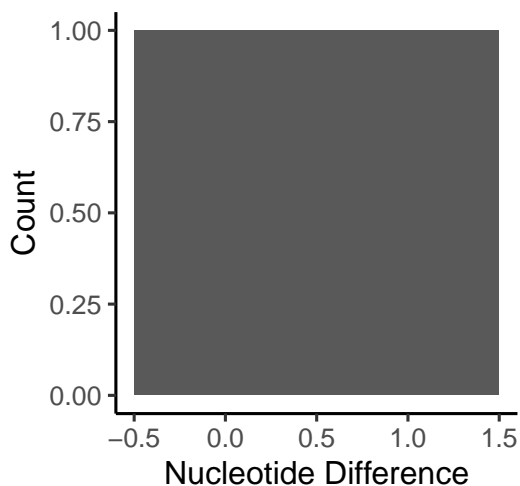
IGHV4-4*02_03

47 sequences assigned
40 (85.1%) exact matches, in which:
38 unique CDR3
6 unique J



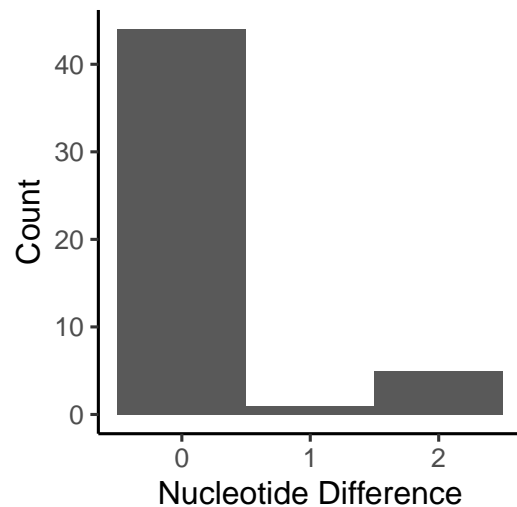
IGHV4-38-2*02

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



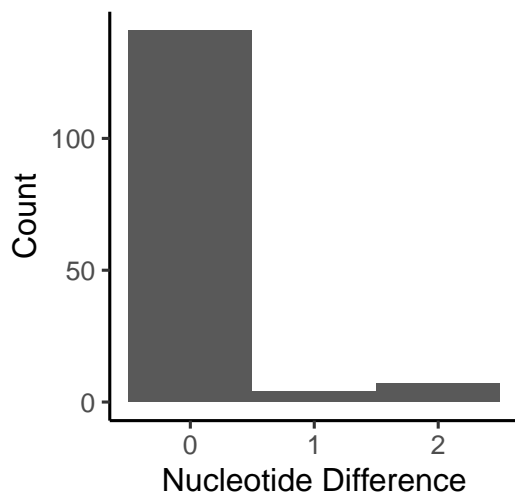
IGHV4-61*01

50 sequences assigned
44 (88%) exact matches, in which:
42 unique CDR3
5 unique J



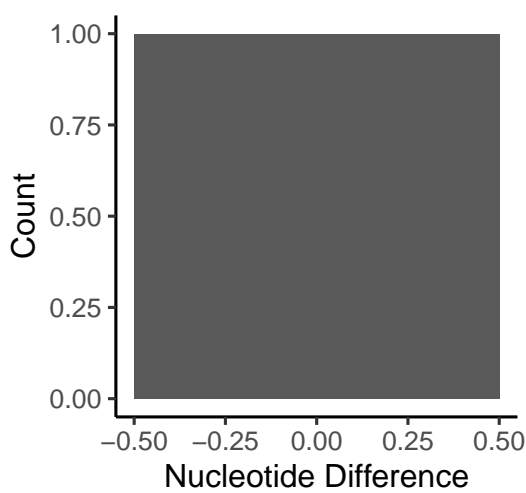
IGHV4-31*02

152 sequences assigned
141 (92.8%) exact matches, in which:
137 unique CDR3
6 unique J



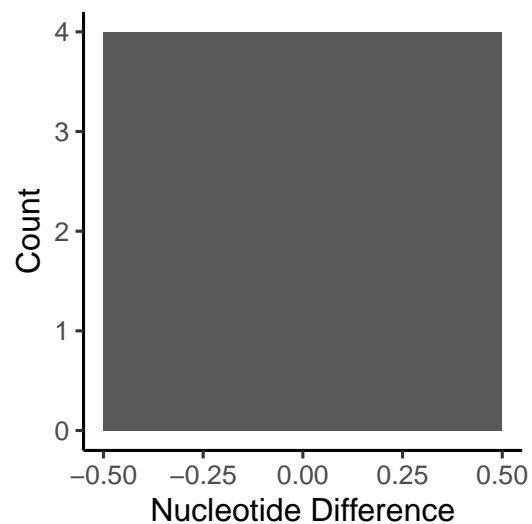
IGHV4-39*02

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



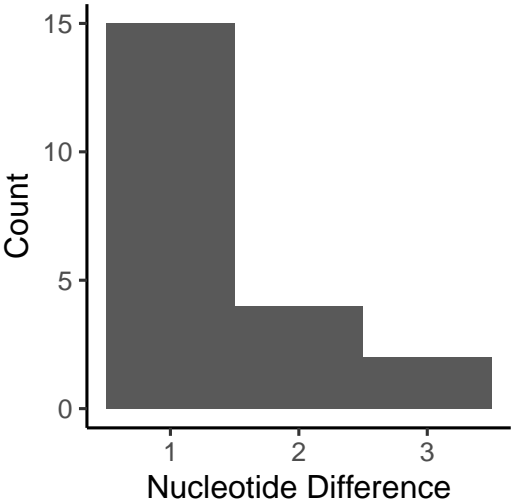
IGHV5-10-1*01_03

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



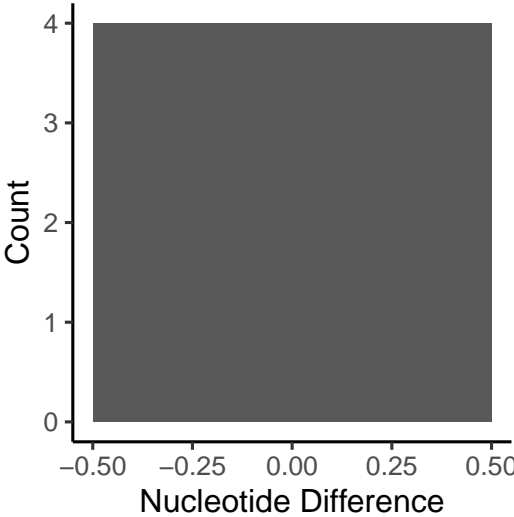
IGHV5-51*07

21 sequences assigned
No exact matches.



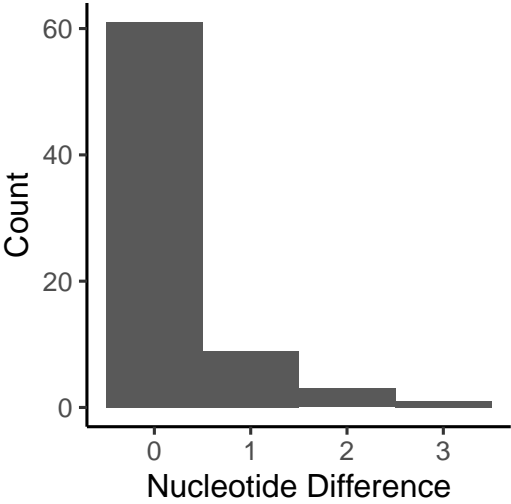
IGHV7-4-1*01

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



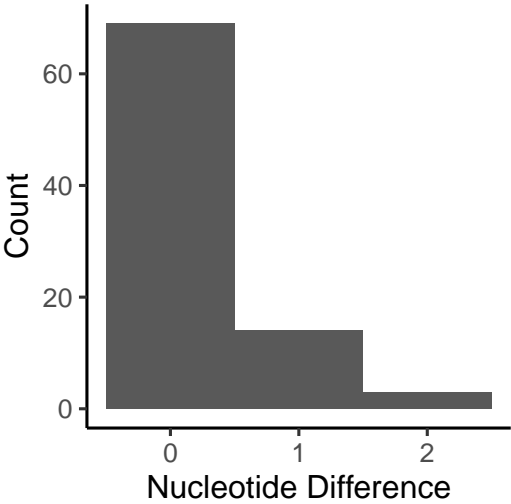
IGHV5-51*01_03

74 sequences assigned
61 (82.4%) exact matches, in which:
60 unique CDR3
5 unique J



IGHV6-1*01_02

86 sequences assigned
69 (80.2%) exact matches, in which:
64 unique CDR3
5 unique J





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