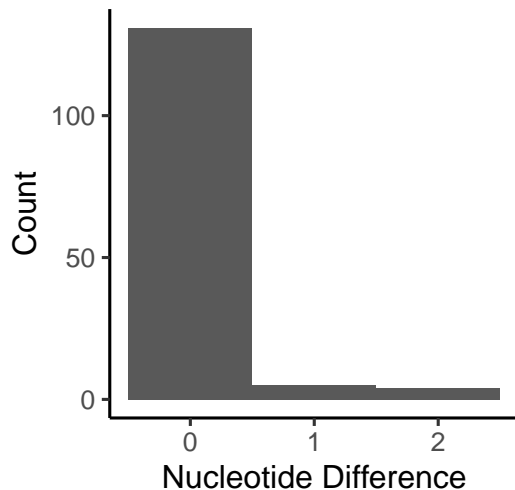


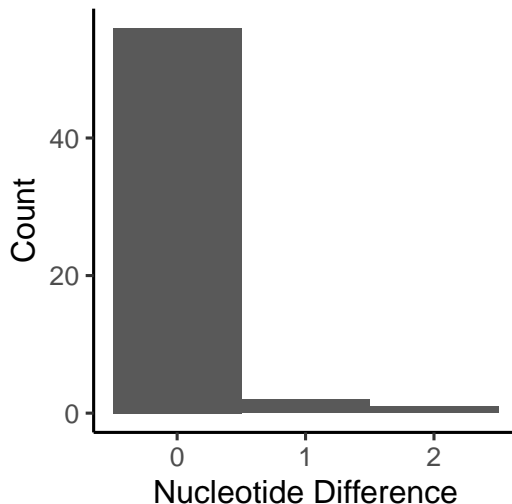
IGHV1-2*02

140 sequences assigned
131 (93.6%) exact matches, in which:
131 unique CDR3
6 unique J



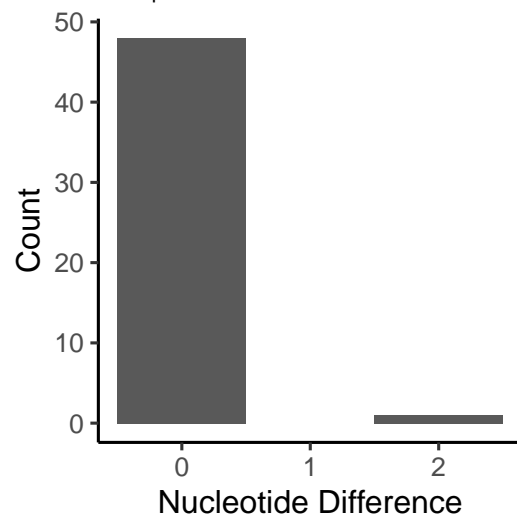
IGHV1-8*03

59 sequences assigned
56 (94.9%) exact matches, in which:
56 unique CDR3
4 unique J



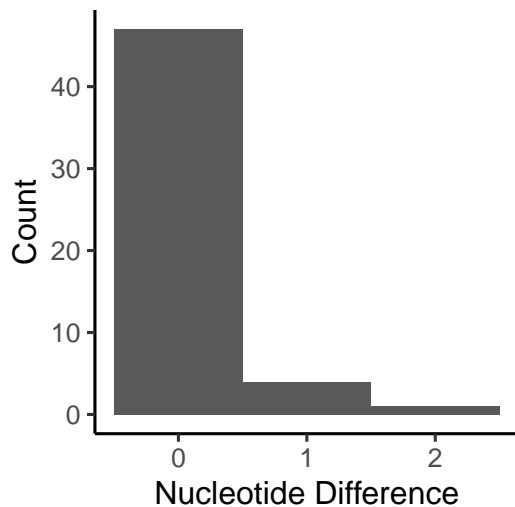
IGHV1-24*01

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



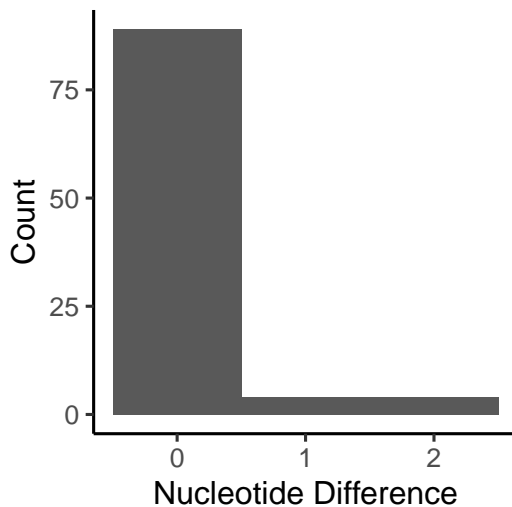
IGHV1-2*04

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



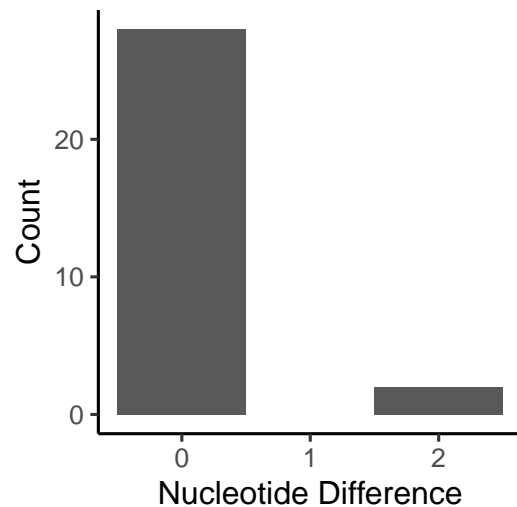
IGHV1-18*01

97 sequences assigned
89 (91.8%) exact matches, in which:
89 unique CDR3
5 unique J



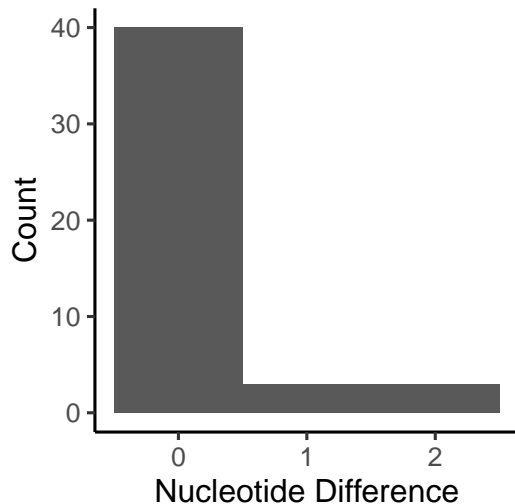
IGHV1-46*01

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



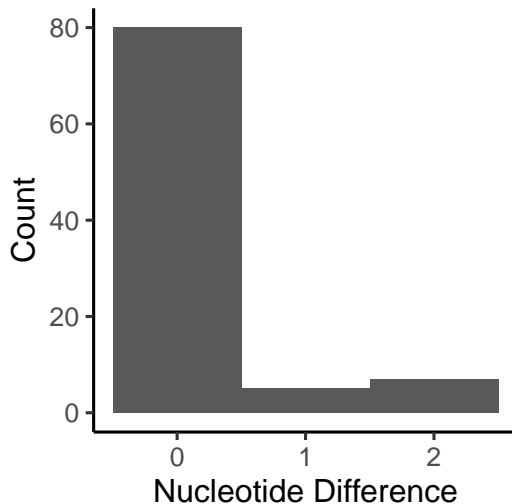
IGHV1-3*01_05

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



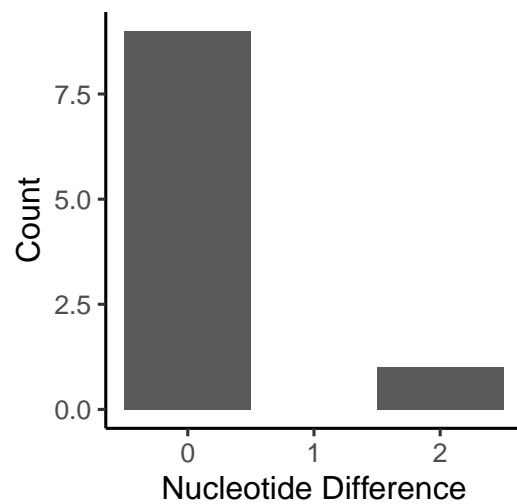
IGHV1-18*04

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



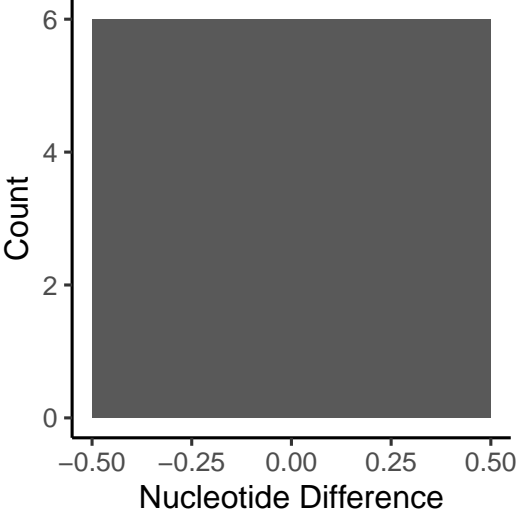
IGHV1-46*03

10 sequences assigned
9 (90%) exact matches, in which:
9 unique CDR3
5 unique J



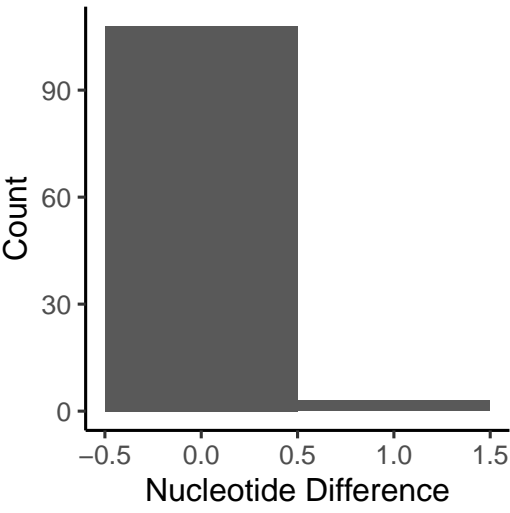
IGHV1-58*02

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



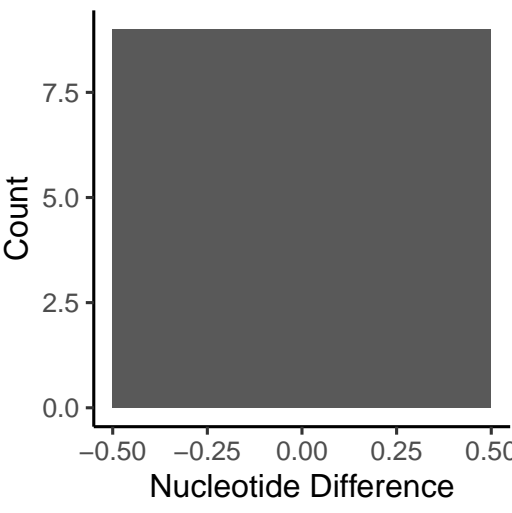
IGHV1-69*01_12_13

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



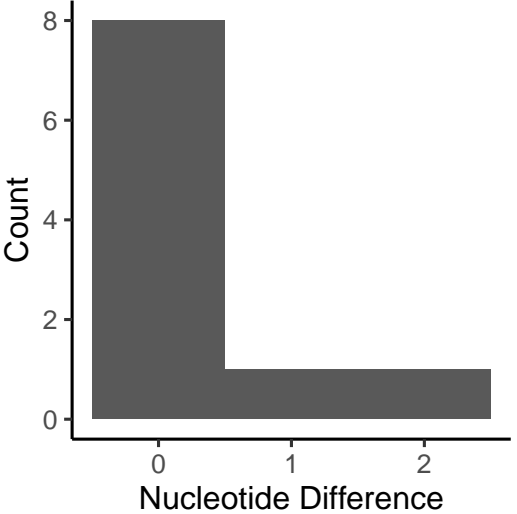
IGHV2-26*01

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



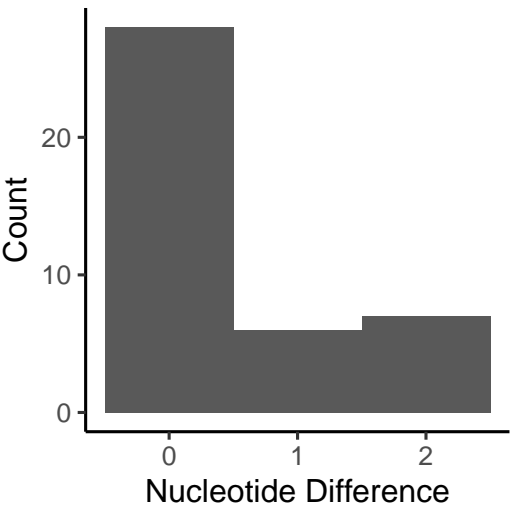
IGHV1-58*01_03

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



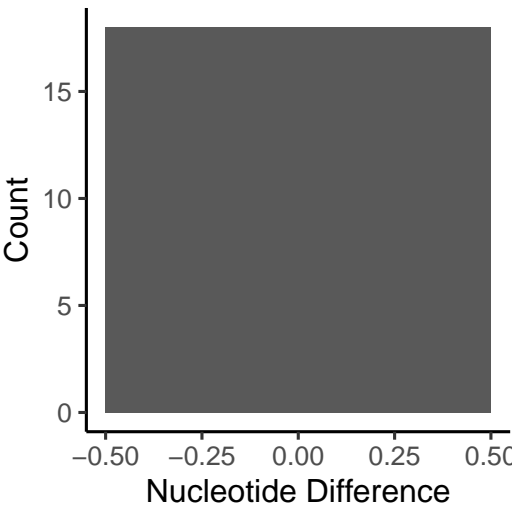
IGHV2-5*01

41 sequences assigned
28 (68.3%) exact matches, in which:
28 unique CDR3
4 unique J



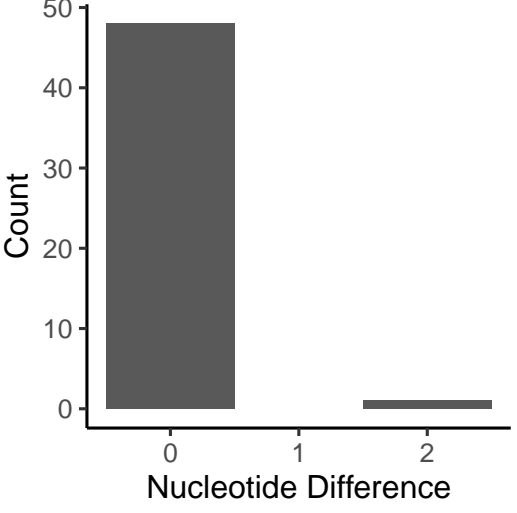
IGHV2-70*01

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



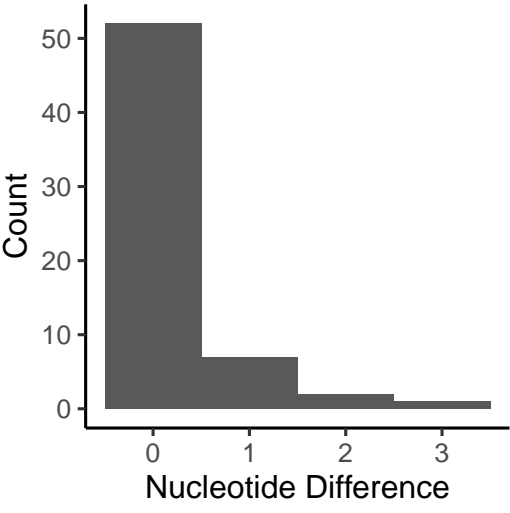
IGHV1-69*02

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



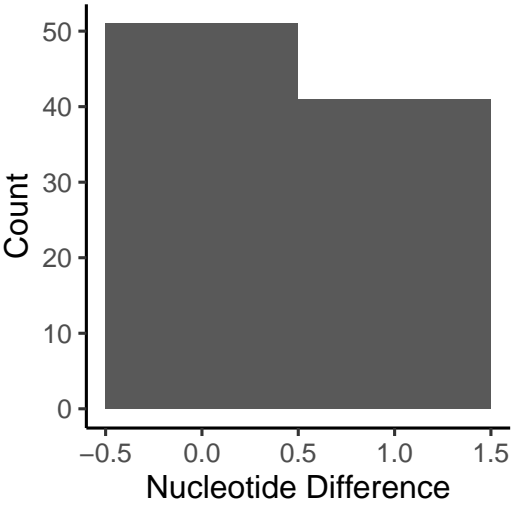
IGHV2-5*02

62 sequences assigned
52 (83.9%) exact matches, in which:
52 unique CDR3
5 unique J



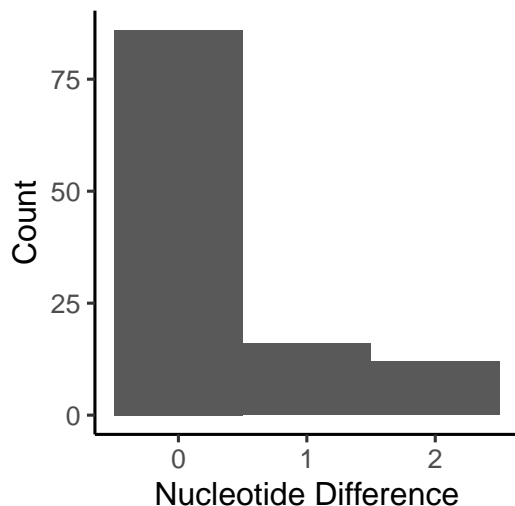
IGHV2-70*11_15

92 sequences assigned
51 (55.4%) exact matches, in which:
34 unique CDR3
3 unique J



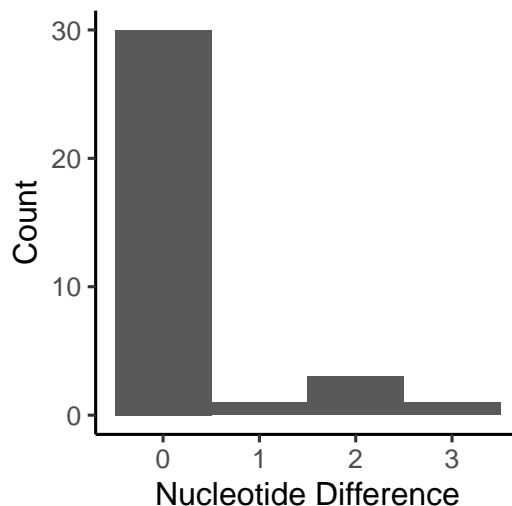
IGHV3-7*01

114 sequences assigned
86 (75.4%) exact matches, in which:
84 unique CDR3
6 unique J



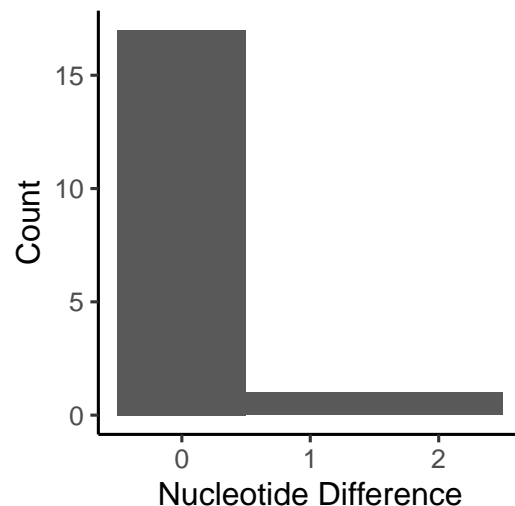
IGHV3-11*04

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



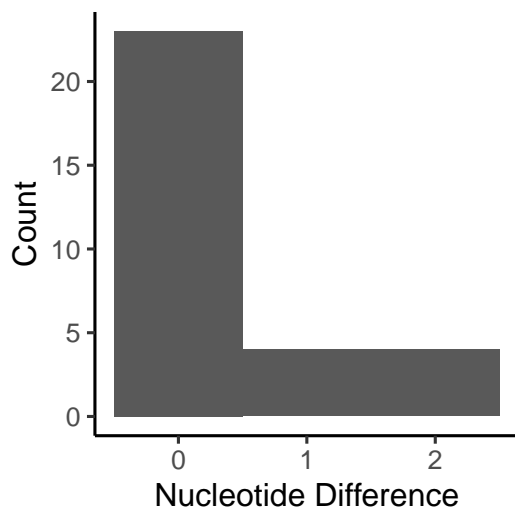
IGHV3-13*04

19 sequences assigned
17 (89.5%) exact matches, in which:
17 unique CDR3
4 unique J



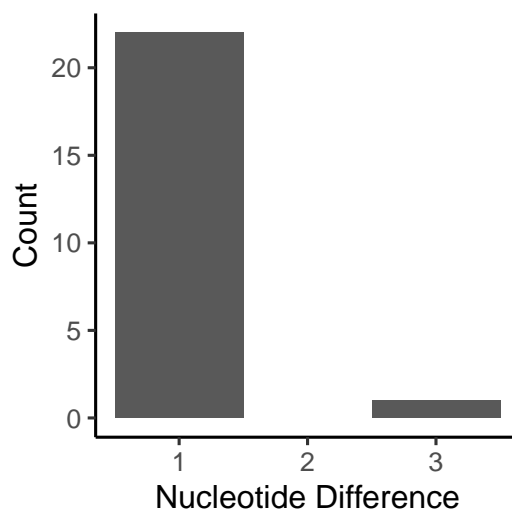
IGHV3-7*04

31 sequences assigned
23 (74.2%) exact matches, in which:
23 unique CDR3
3 unique J



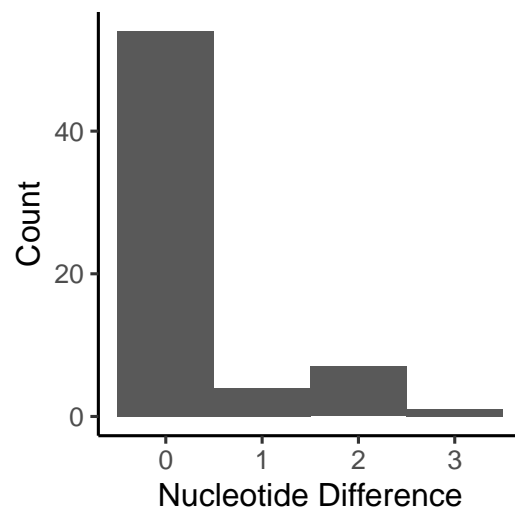
IGHV3-11*06

23 sequences assigned
No exact matches.



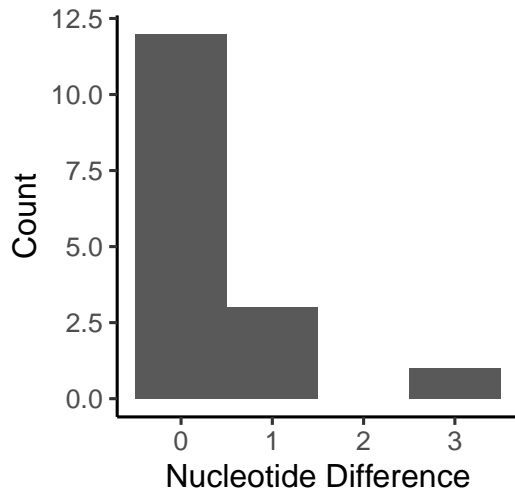
IGHV3-15*01_02

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



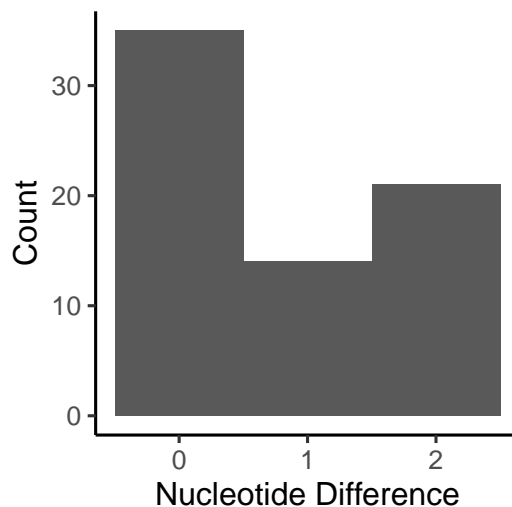
IGHV3-9*03

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



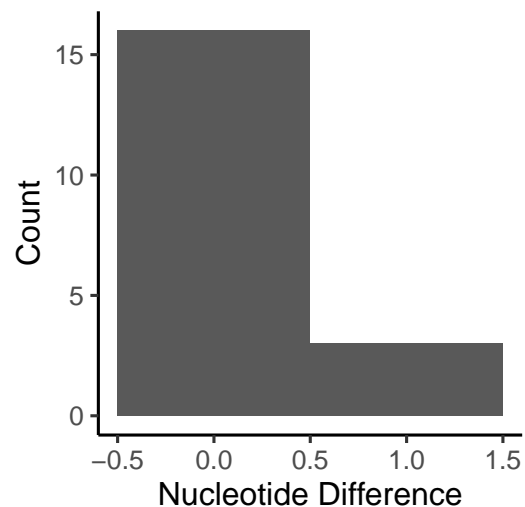
IGHV3-11*03_05

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



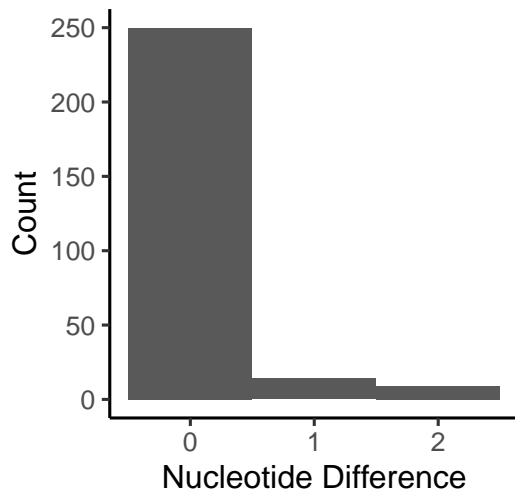
IGHV3-20*03_04

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



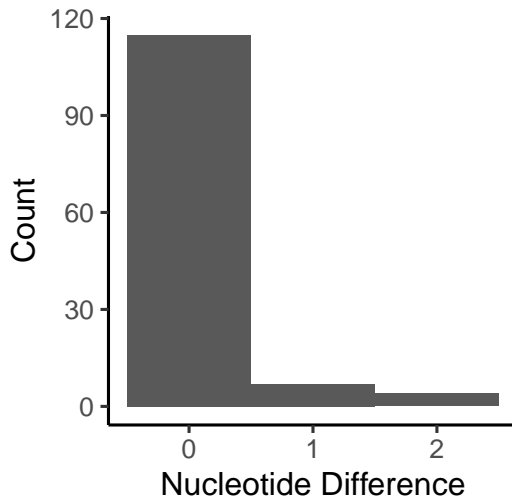
IGHV3-21*01_02

273 sequences assigned
250 (91.6%) exact matches, in which:
237 unique CDR3
6 unique J



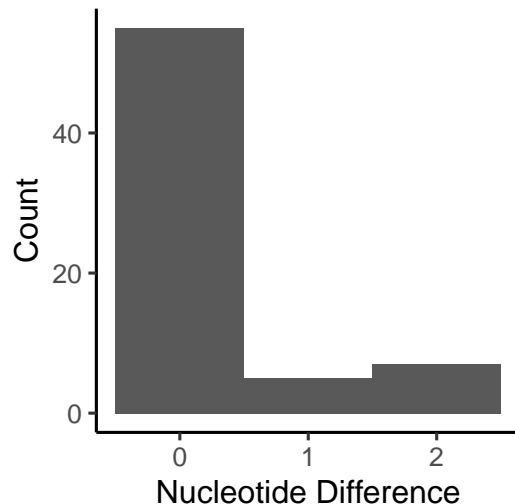
IGHV3-33*01

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



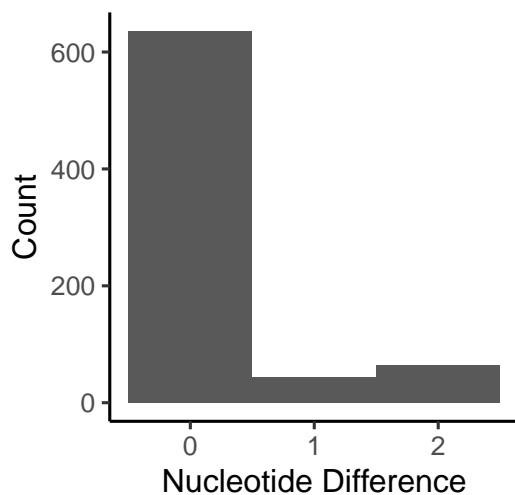
IGHV3-48*01

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



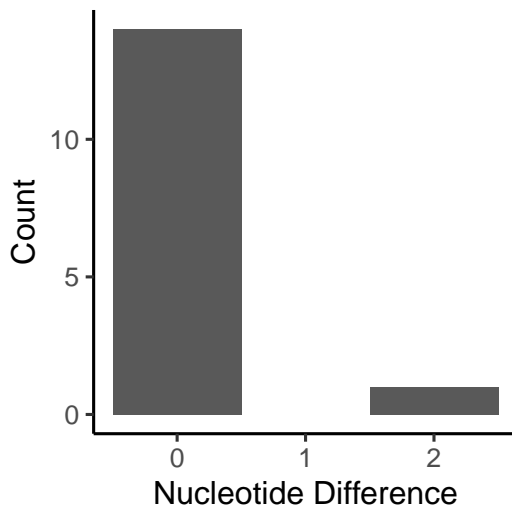
IGHV3-23*01_04

744 sequences assigned
636 (85.5%) exact matches, in which:
598 unique CDR3
6 unique J



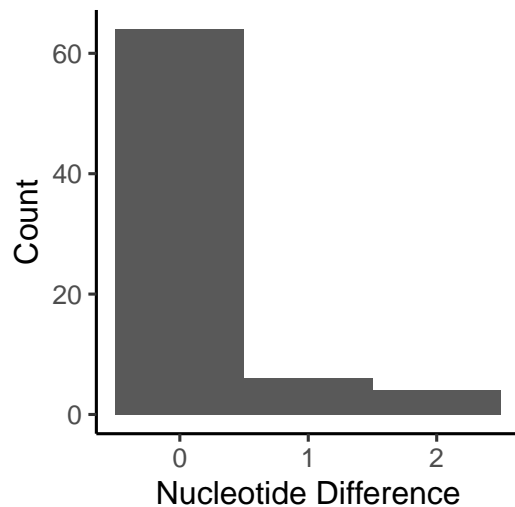
IGHV3-43*01

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



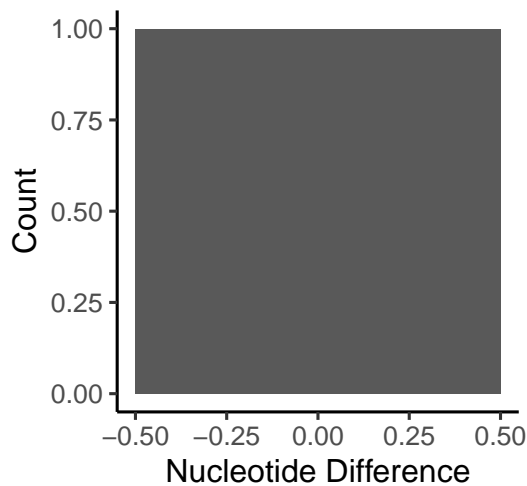
IGHV3-48*02

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



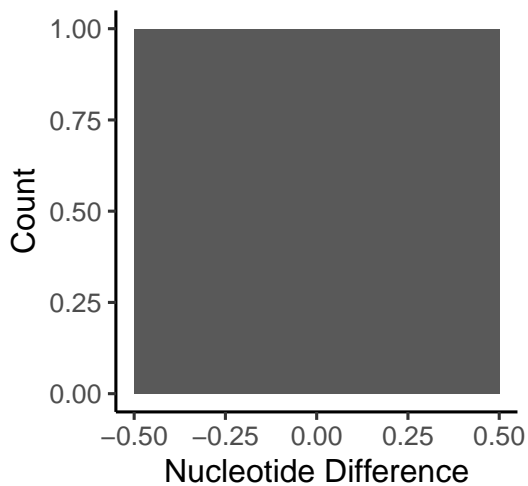
IGHV3-30-3*01

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



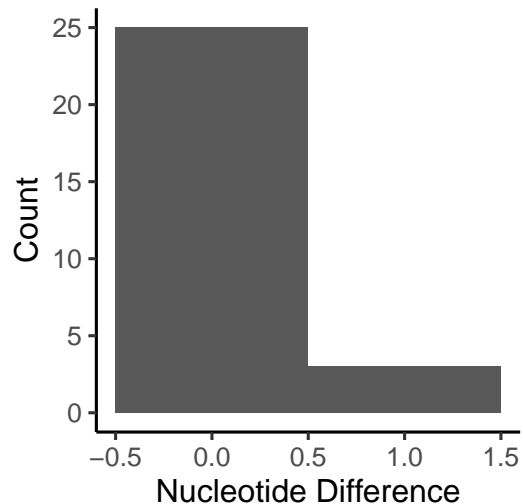
IGHV3-47*02

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



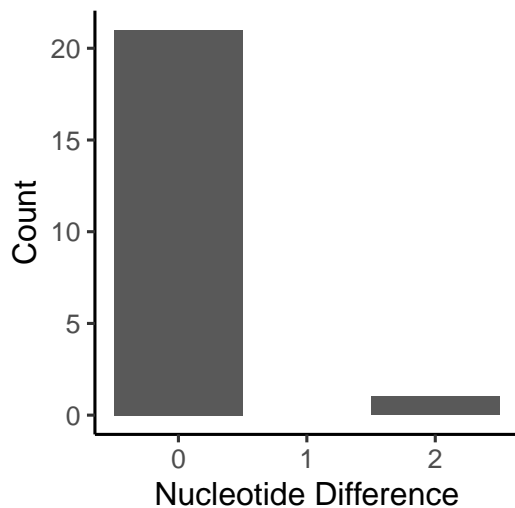
IGHV3-49*03_05

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



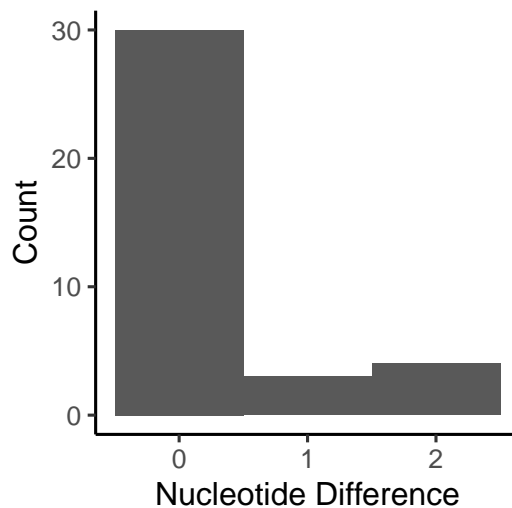
IGHV3-53*04

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



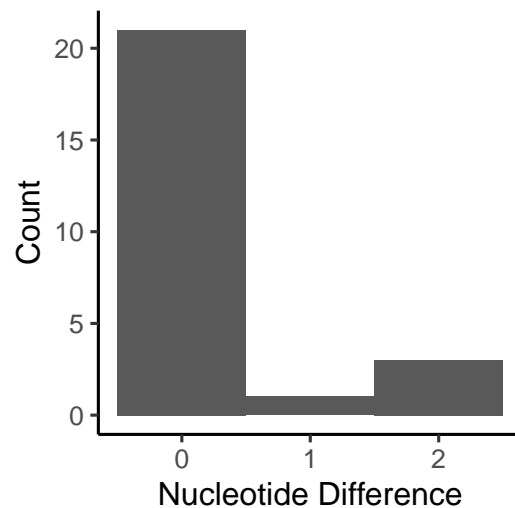
IGHV3-66*01

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



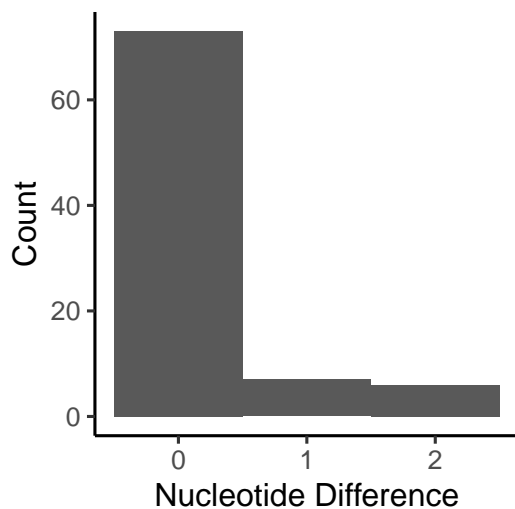
IGHV3-73*01_02

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



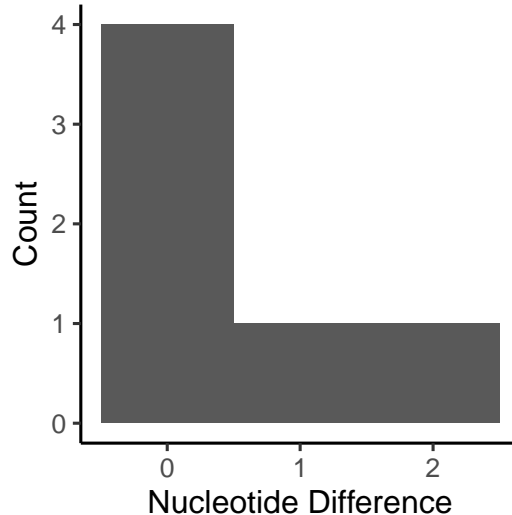
IGHV3-53*01_02

86 sequences assigned
73 (84.9%) exact matches, in which:
65 unique CDR3
5 unique J



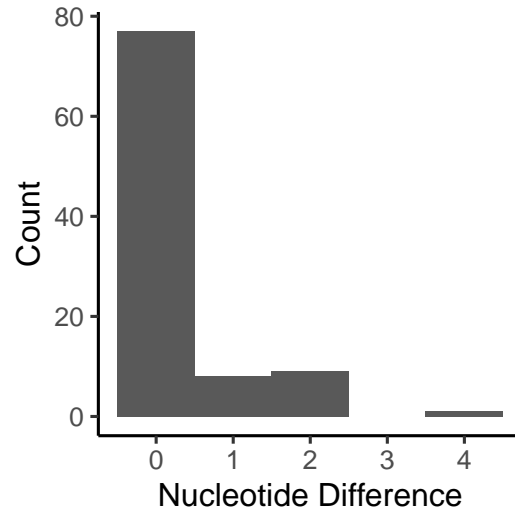
IGHV3-66*04

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



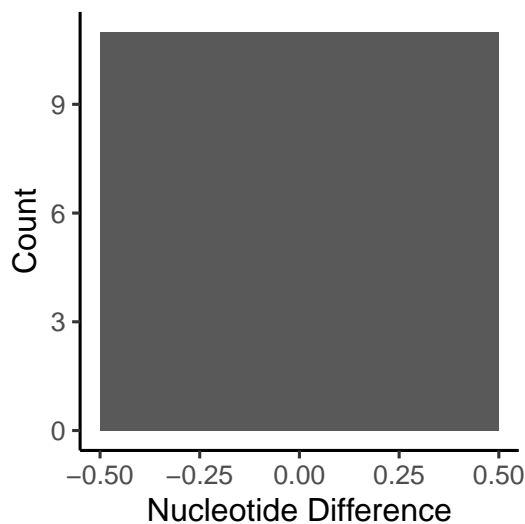
IGHV3-74*01_02

95 sequences assigned
77 (81.1%) exact matches, in which:
74 unique CDR3
5 unique J



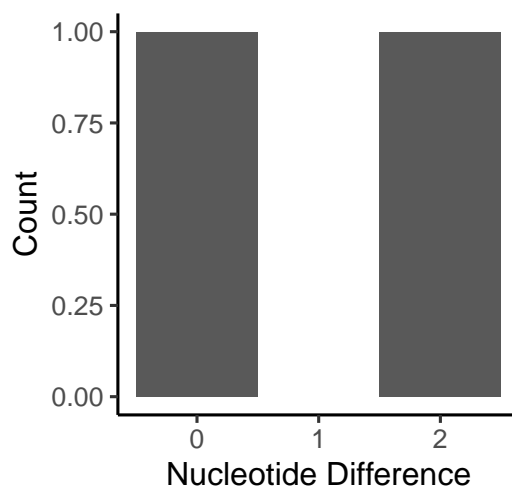
IGHV3-64*01

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



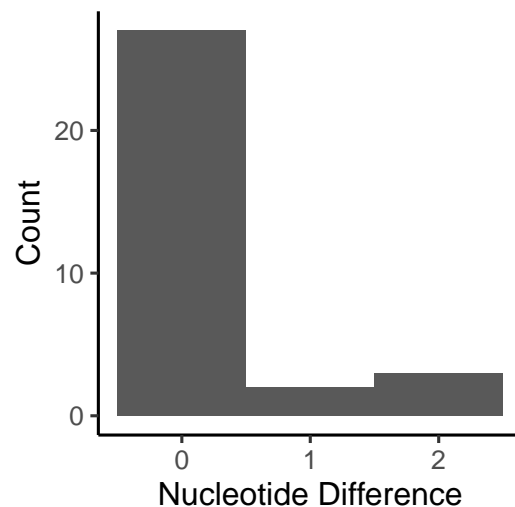
IGHV3-72*01

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



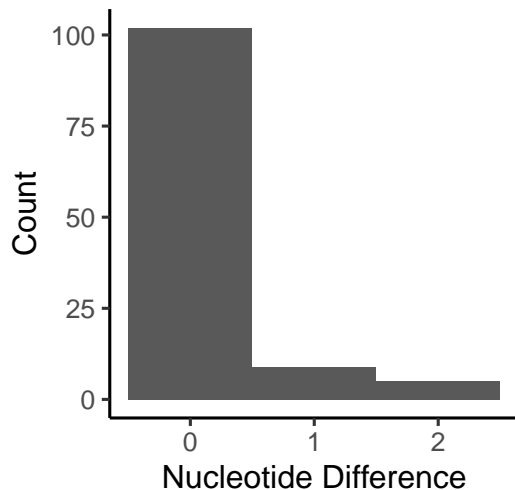
IGHV3-64D*06

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



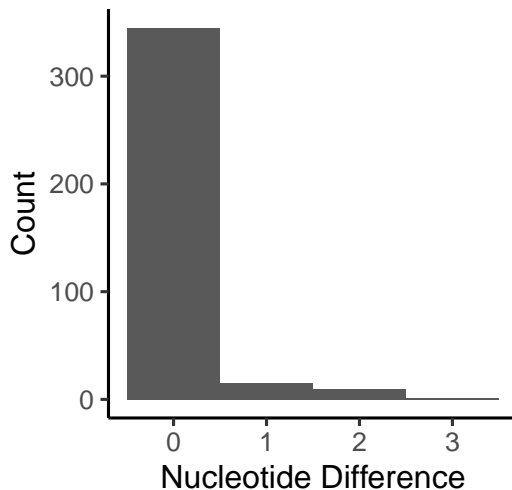
IGHV4-4*07

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



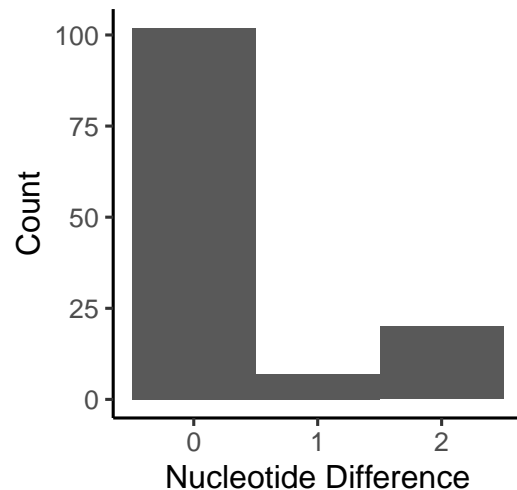
IGHV4-34*01_02

371 sequences assigned
345 (93%) exact matches, in which:
323 unique CDR3
6 unique J



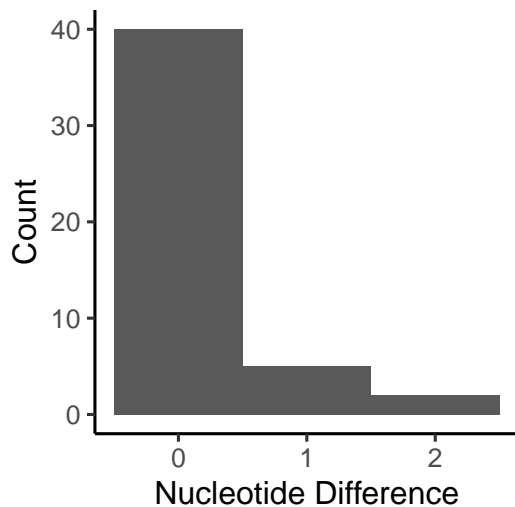
IGHV4-59*08

129 sequences assigned
102 (79.1%) exact matches, in which:
97 unique CDR3
5 unique J



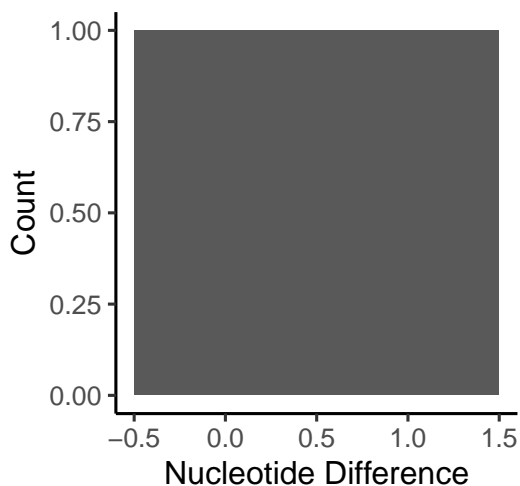
IGHV4-4*02_03

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



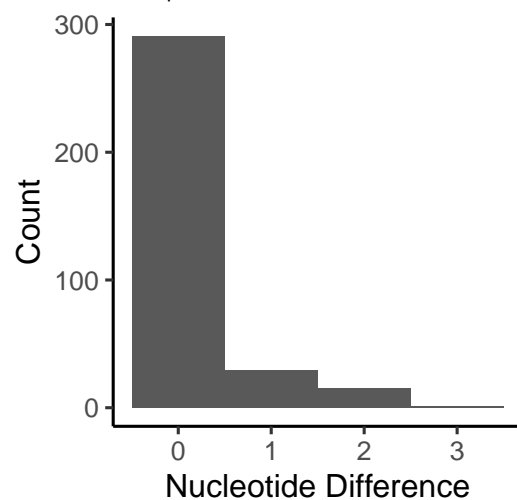
IGHV4-38-2*02

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



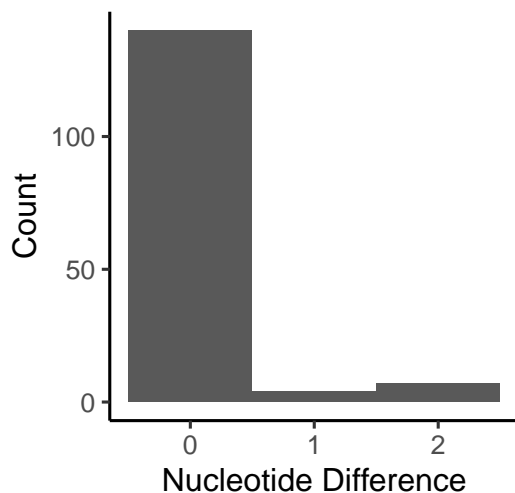
IGHV4-59*02_G88A

336 sequences assigned
291 (86.6%) exact matches, in which:
261 unique CDR3
6 unique J



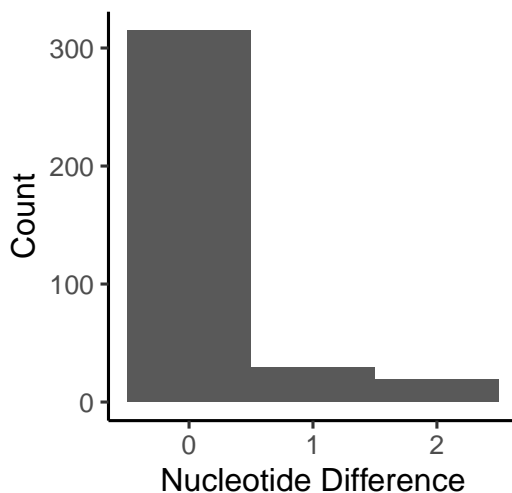
IGHV4-31*02

151 sequences assigned
140 (92.7%) exact matches, in which:
138 unique CDR3
6 unique J



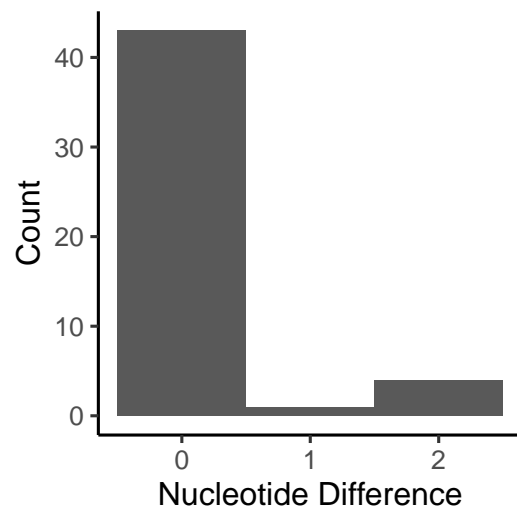
IGHV4-39*02_C258G

363 sequences assigned
315 (86.8%) exact matches, in which:
303 unique CDR3
6 unique J



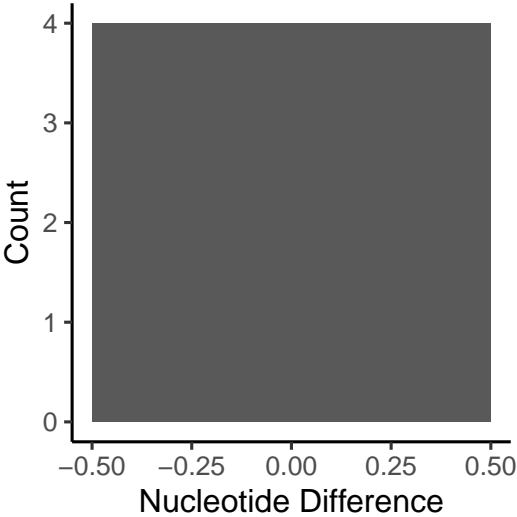
IGHV4-61*01

48 sequences assigned
43 (89.6%) exact matches, in which:
42 unique CDR3
5 unique J



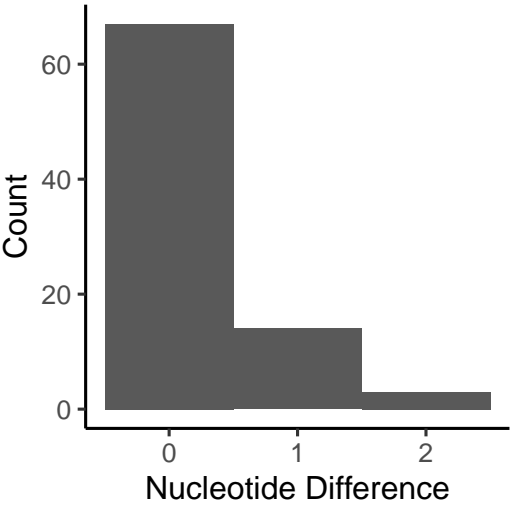
IGHV5-10-1*01_03

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



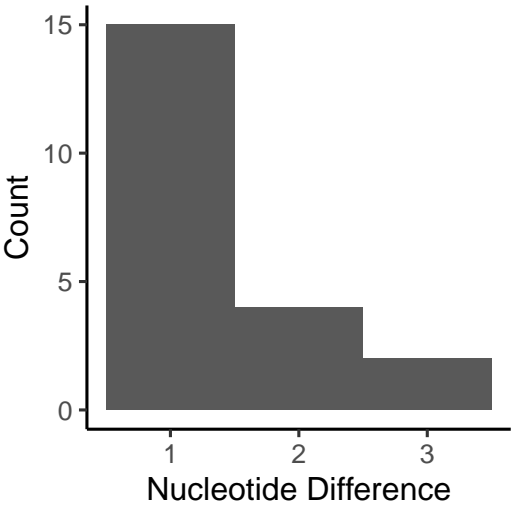
IGHV6-1*01_02

84 sequences assigned
67 (79.8%) exact matches, in which:
64 unique CDR3
5 unique J



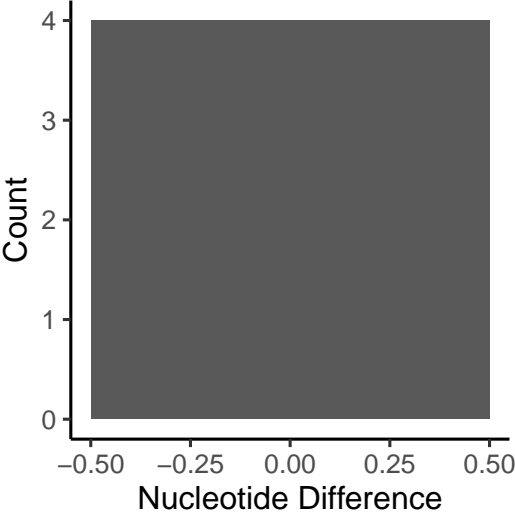
IGHV5-51*07

21 sequences assigned
No exact matches.



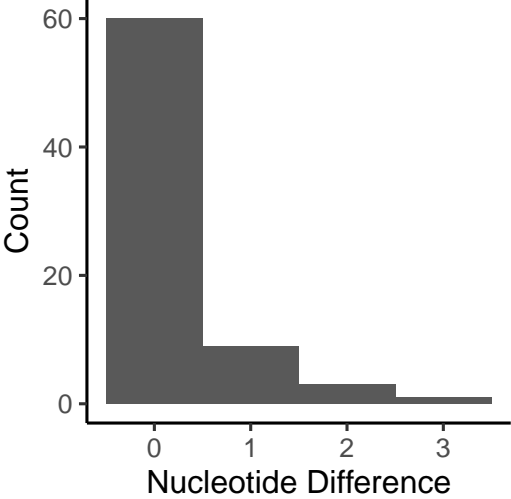
IGHV7-4-1*01

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



IGHV5-51*01_03

73 sequences assigned
60 (82.2%) exact matches, in which:
60 unique CDR3
5 unique J





Warning – no inferred sequences found.