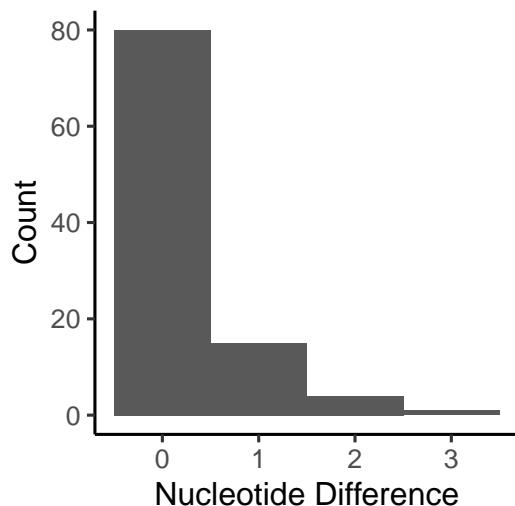


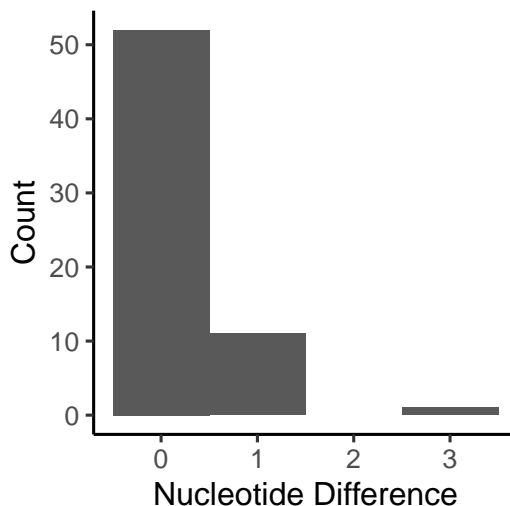
IGHV1-2*02

103 sequences assigned
80 (77.7%) exact matches, in which:
78 unique CDR3
5 unique J



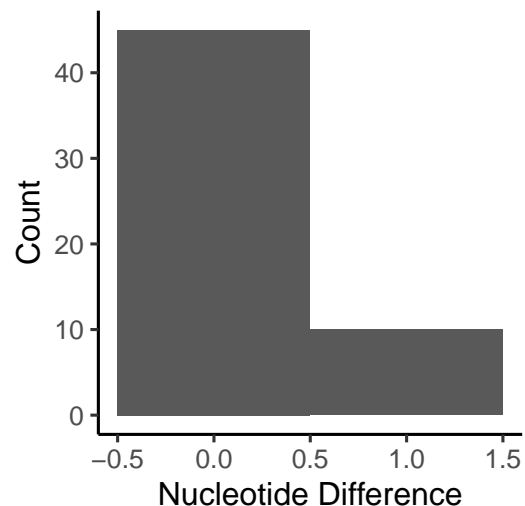
IGHV1-8*01

64 sequences assigned
52 (81.2%) exact matches, in which:
52 unique CDR3
6 unique J



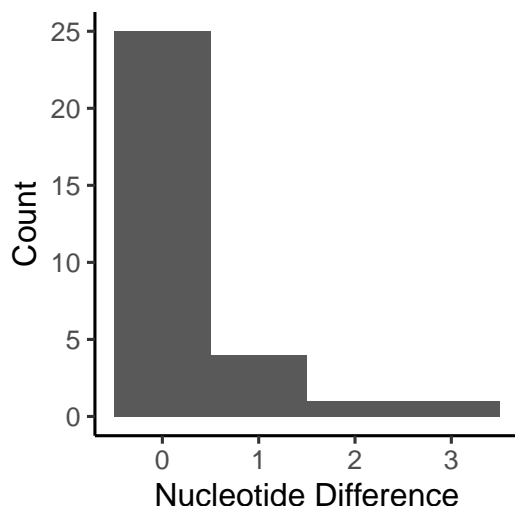
IGHV1-46*01

55 sequences assigned
45 (81.8%) exact matches, in which:
44 unique CDR3
5 unique J



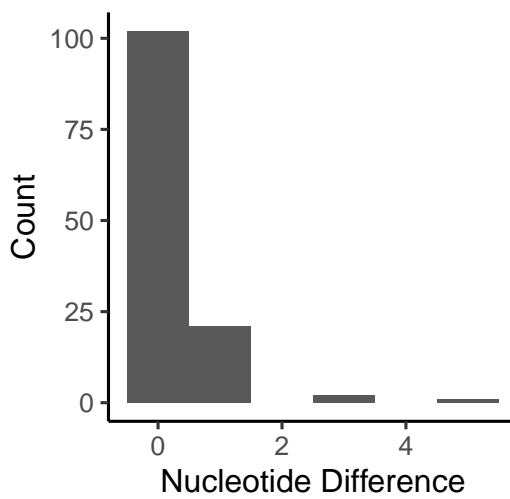
IGHV1-2*04

31 sequences assigned
25 (80.6%) exact matches, in which:
24 unique CDR3
4 unique J



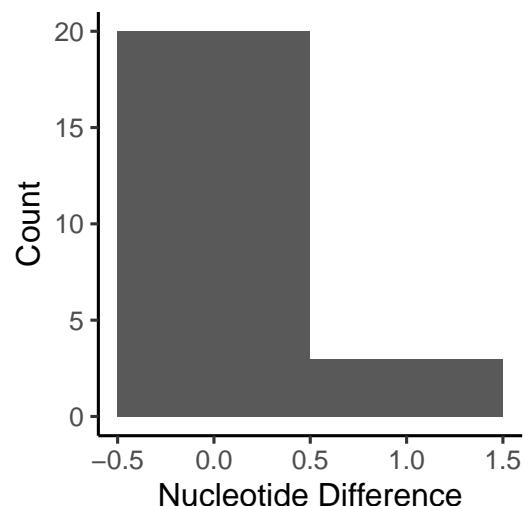
IGHV1-18*01

127 sequences assigned
102 (80.3%) exact matches, in which:
102 unique CDR3
4 unique J



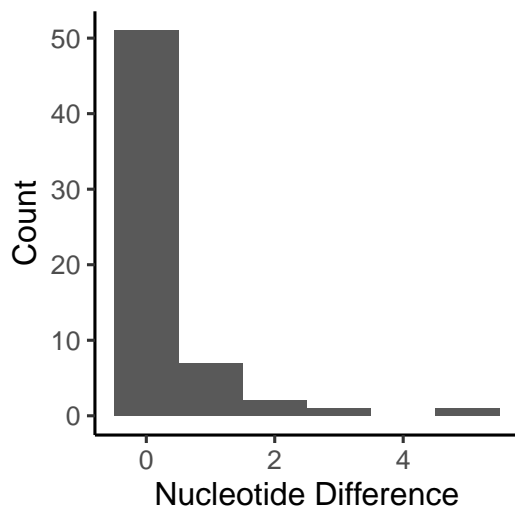
IGHV1-46*03

23 sequences assigned
20 (87%) exact matches, in which:
19 unique CDR3
5 unique J



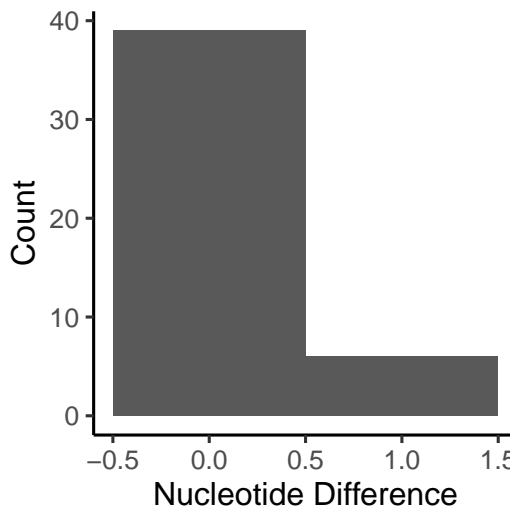
IGHV1-3*01

62 sequences assigned
51 (82.3%) exact matches, in which:
51 unique CDR3
6 unique J



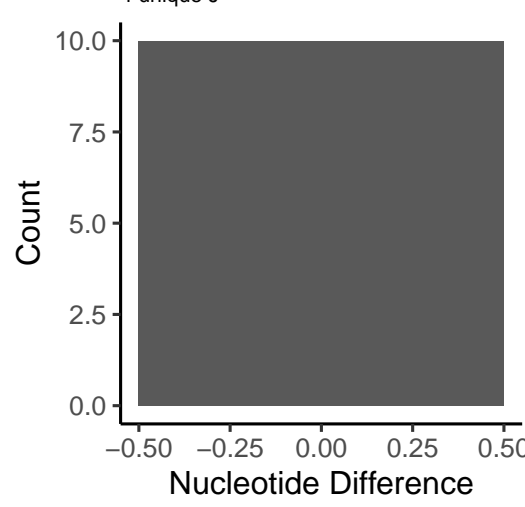
IGHV1-24*01

45 sequences assigned
39 (86.7%) exact matches, in which:
39 unique CDR3
5 unique J



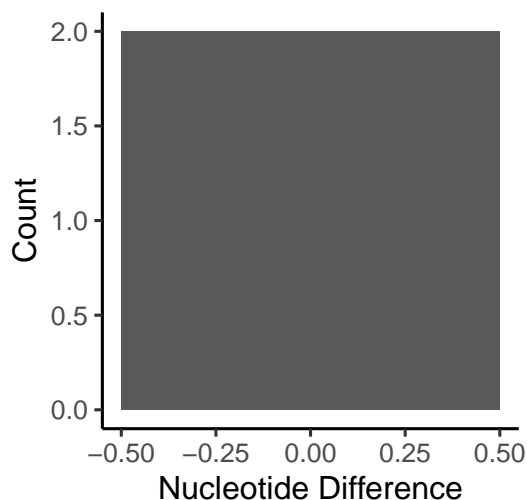
IGHV1-58*01

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



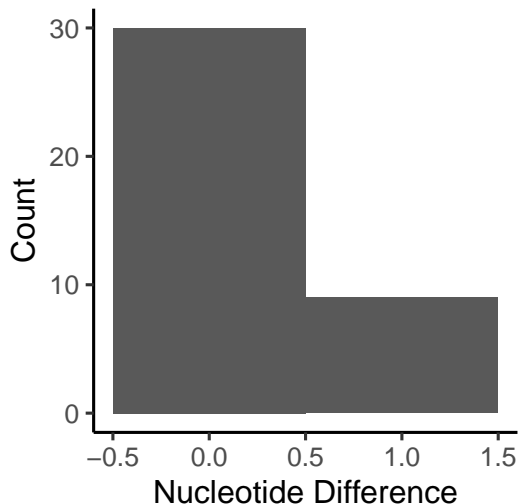
IGHV1-58*02

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



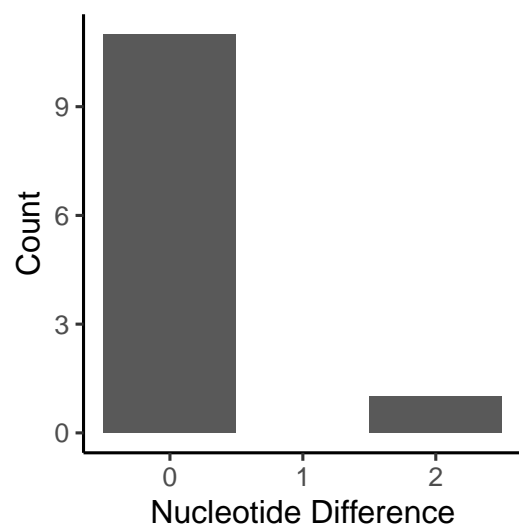
IGHV2-5*01

39 sequences assigned
30 (76.9%) exact matches, in which:
29 unique CDR3
4 unique J



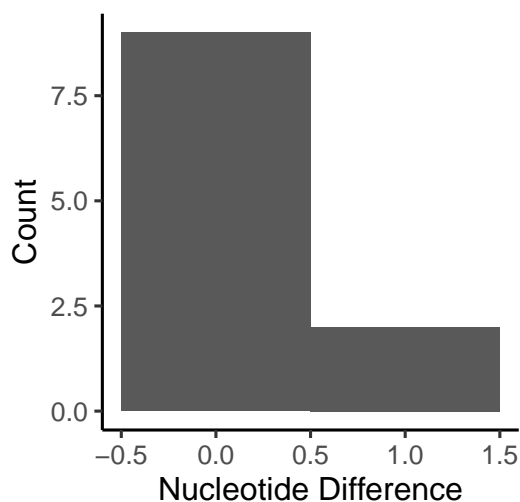
IGHV2-70*01

12 sequences assigned
11 (91.7%) exact matches, in which:
11 unique CDR3
5 unique J



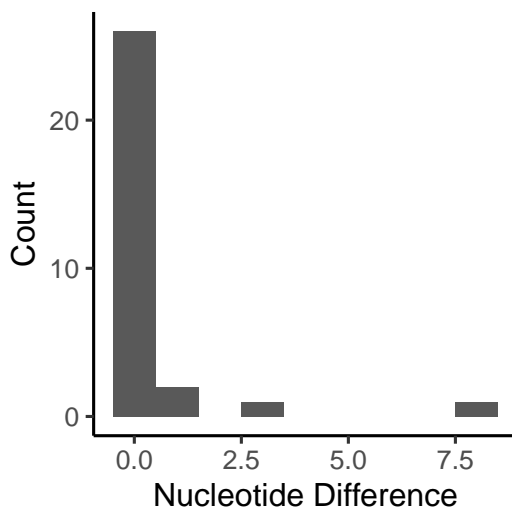
IGHV1-69-2*01

11 sequences assigned
9 (81.8%) exact matches, in which:
9 unique CDR3
4 unique J



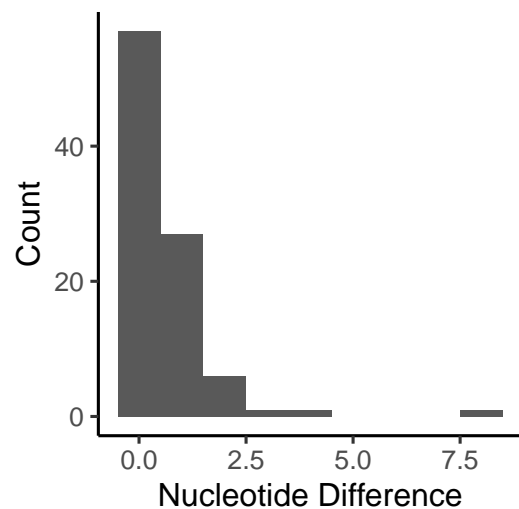
IGHV2-5*02

30 sequences assigned
26 (86.7%) exact matches, in which:
25 unique CDR3
4 unique J



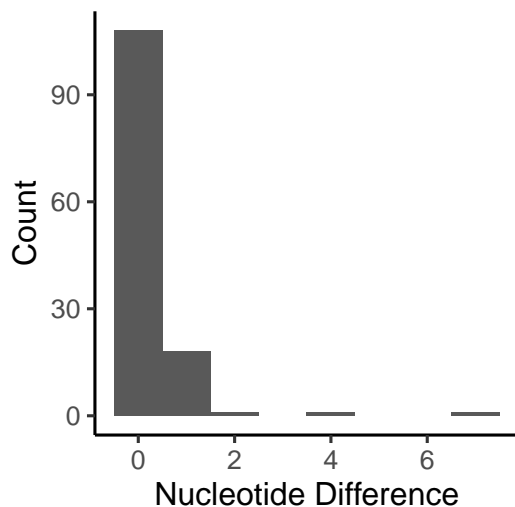
IGHV3-7*01

93 sequences assigned
57 (61.3%) exact matches, in which:
55 unique CDR3
6 unique J



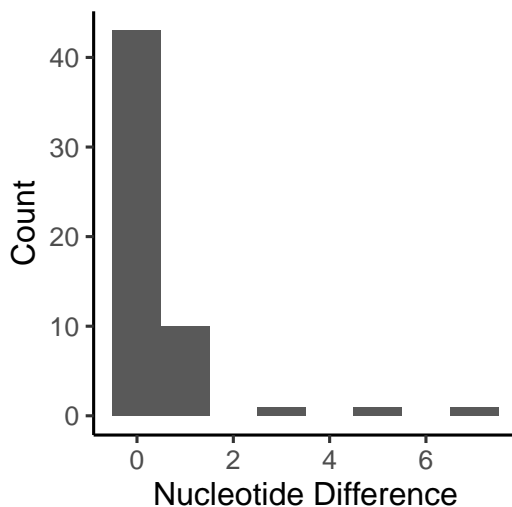
IGHV1-69*06

130 sequences assigned
108 (83.1%) exact matches, in which:
106 unique CDR3
6 unique J



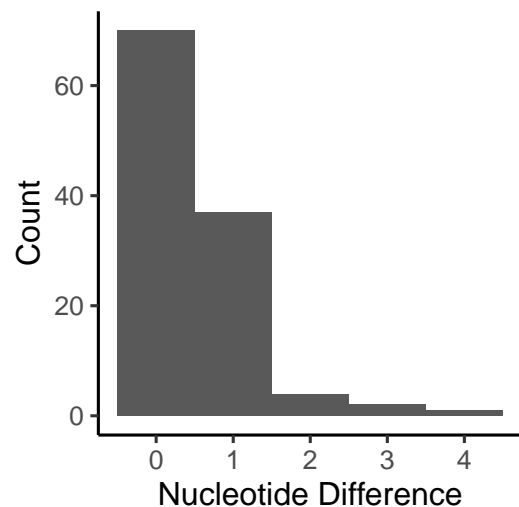
IGHV2-26*01

56 sequences assigned
43 (76.8%) exact matches, in which:
43 unique CDR3
5 unique J



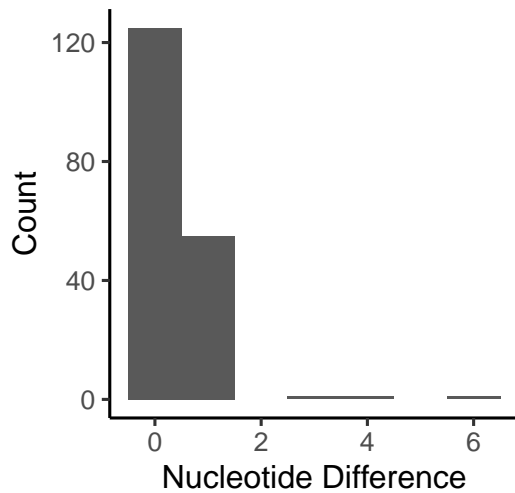
IGHV3-7*03

114 sequences assigned
70 (61.4%) exact matches, in which:
69 unique CDR3
6 unique J



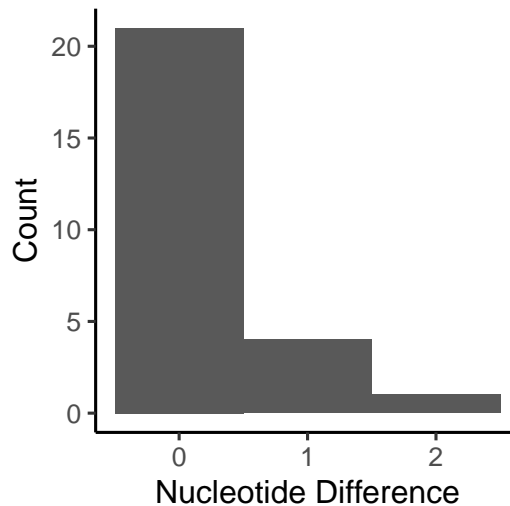
IGHV3-9*01

183 sequences assigned
125 (68.3%) exact matches, in which:
125 unique CDR3
6 unique J



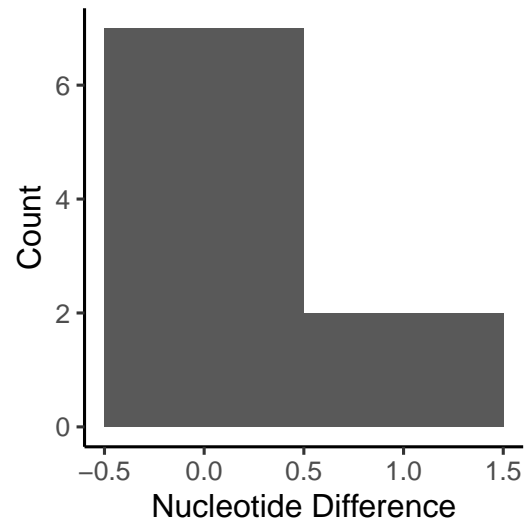
IGHV3-13*01

26 sequences assigned
21 (80.8%) exact matches, in which:
20 unique CDR3
5 unique J



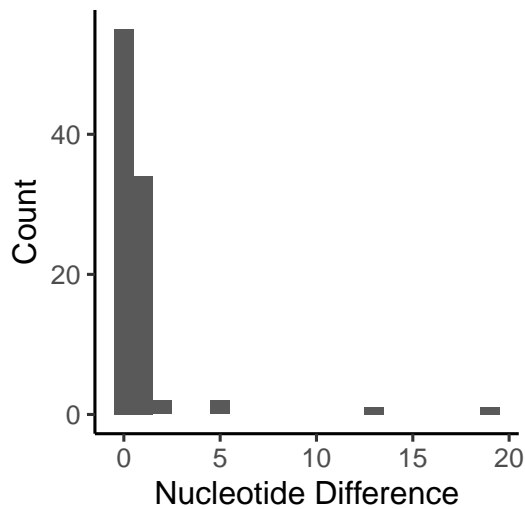
IGHV3-20*01

9 sequences assigned
7 (77.8%) exact matches, in which:
7 unique CDR3
3 unique J



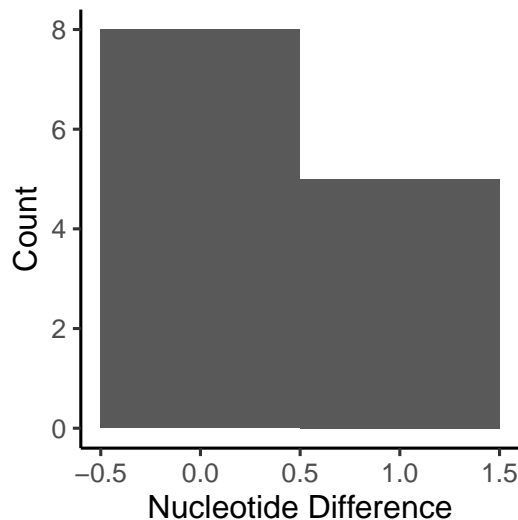
IGHV3-11*01

95 sequences assigned
55 (57.9%) exact matches, in which:
54 unique CDR3
6 unique J



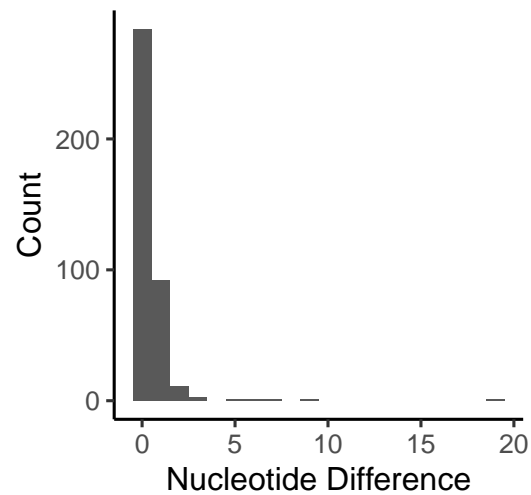
IGHV3-13*05

13 sequences assigned
8 (61.5%) exact matches, in which:
8 unique CDR3
4 unique J



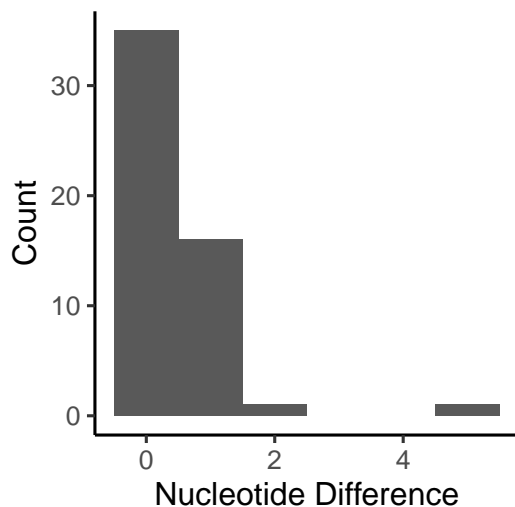
IGHV3-21*01

397 sequences assigned
284 (71.5%) exact matches, in which:
280 unique CDR3
6 unique J



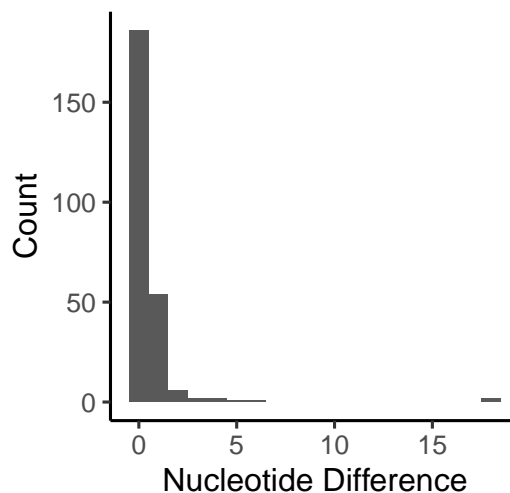
IGHV3-11*06

53 sequences assigned
35 (66%) exact matches, in which:
35 unique CDR3
5 unique J



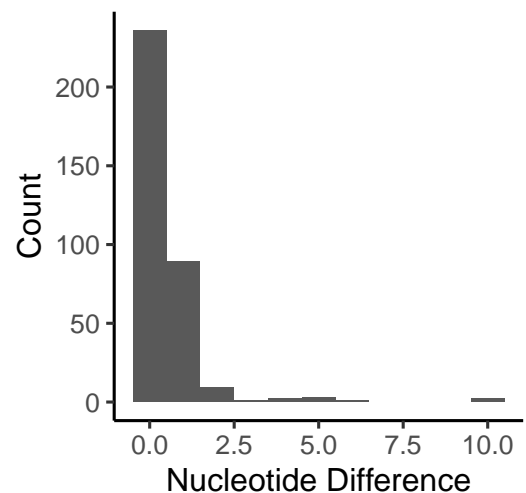
IGHV3-15*01

254 sequences assigned
186 (73.2%) exact matches, in which:
181 unique CDR3
5 unique J



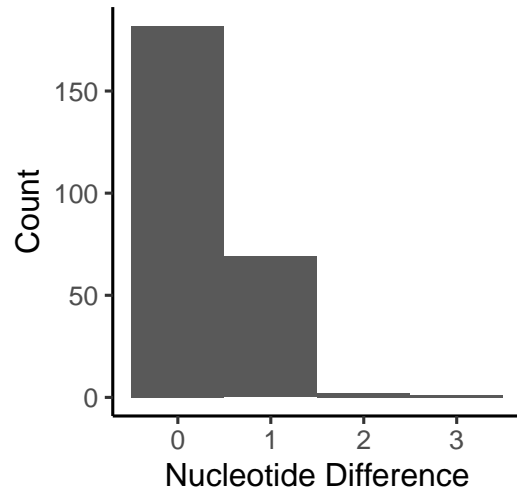
IGHV3-23*04

351 sequences assigned
236 (67.2%) exact matches, in which:
235 unique CDR3
6 unique J



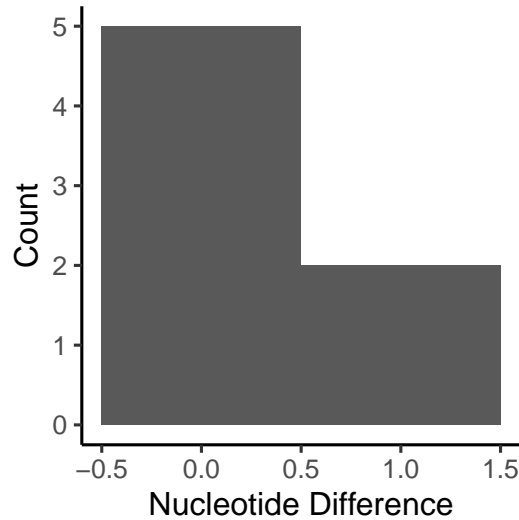
IGHV3-30*01

254 sequences assigned
182 (71.7%) exact matches, in which:
177 unique CDR3
6 unique J



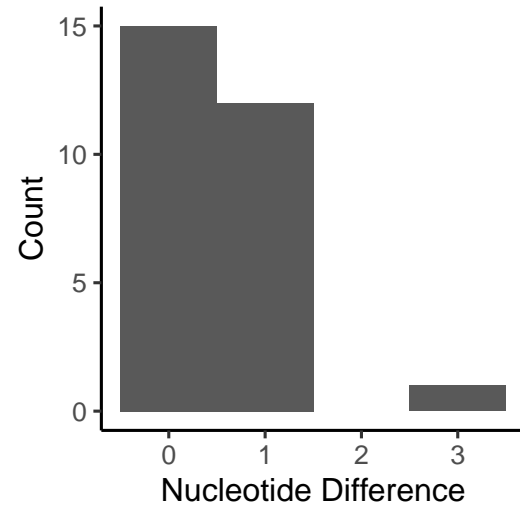
IGHV3-43*01

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



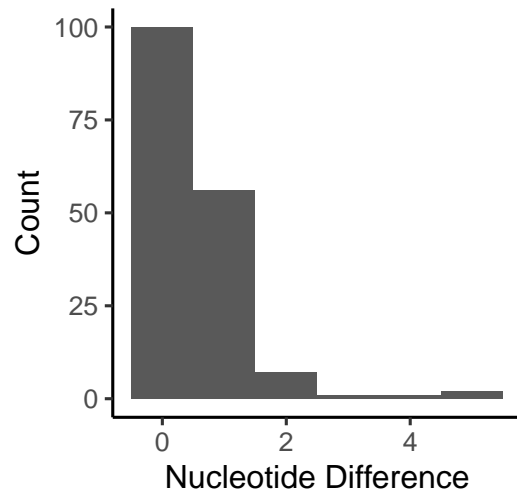
IGHV3-49*03

28 sequences assigned
15 (53.6%) exact matches, in which:
15 unique CDR3
5 unique J



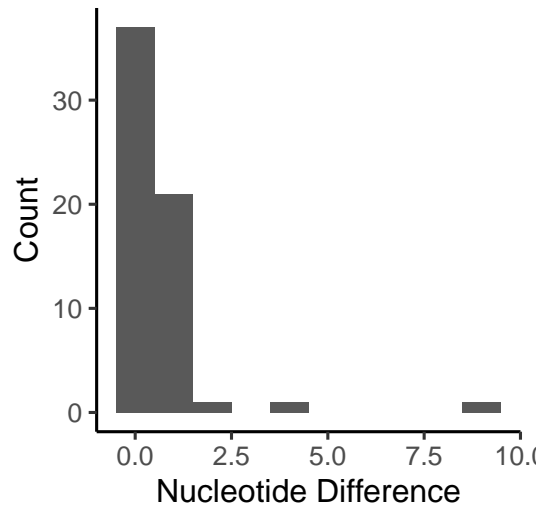
IGHV3-30-3*01

167 sequences assigned
100 (59.9%) exact matches, in which:
100 unique CDR3
6 unique J



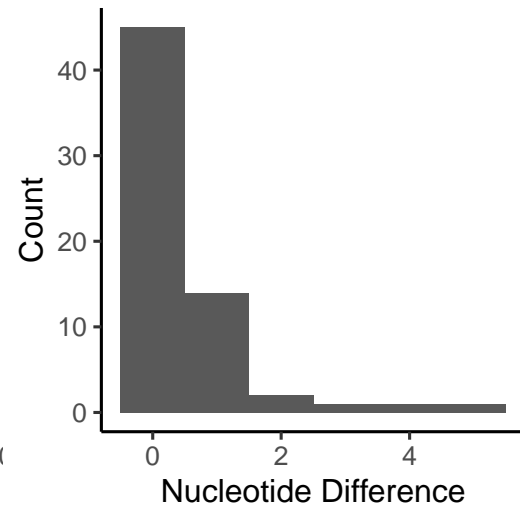
IGHV3-48*01

61 sequences assigned
37 (60.7%) exact matches, in which:
37 unique CDR3
5 unique J



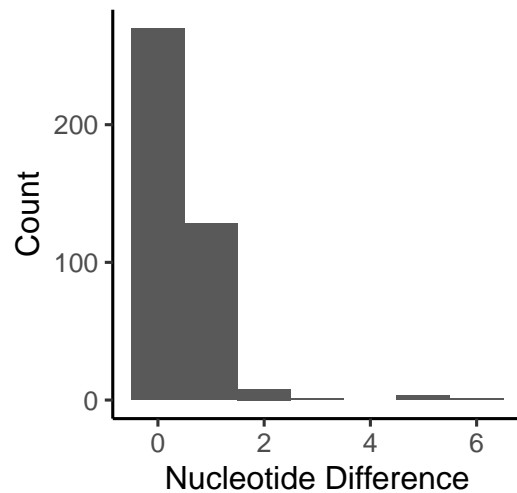
IGHV3-49*04

64 sequences assigned
45 (70.3%) exact matches, in which:
44 unique CDR3
5 unique J



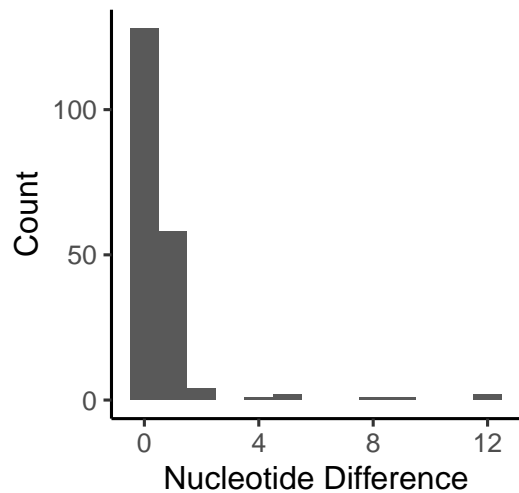
IGHV3-33*01

413 sequences assigned
270 (65.4%) exact matches, in which:
266 unique CDR3
6 unique J



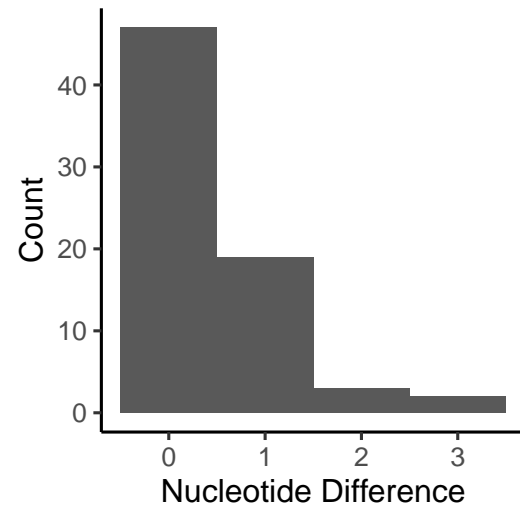
IGHV3-48*03

197 sequences assigned
128 (65%) exact matches, in which:
125 unique CDR3
6 unique J



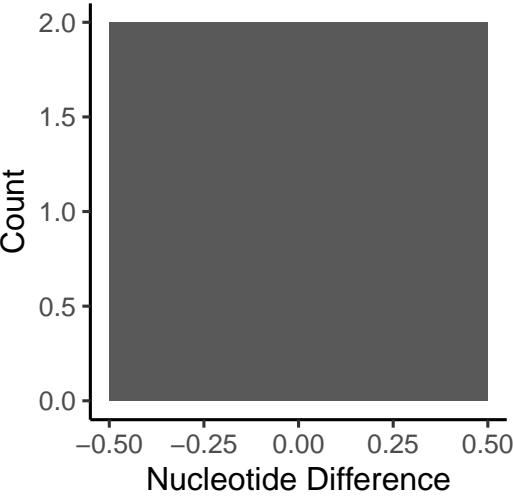
IGHV3-53*02

71 sequences assigned
47 (66.2%) exact matches, in which:
47 unique CDR3
5 unique J



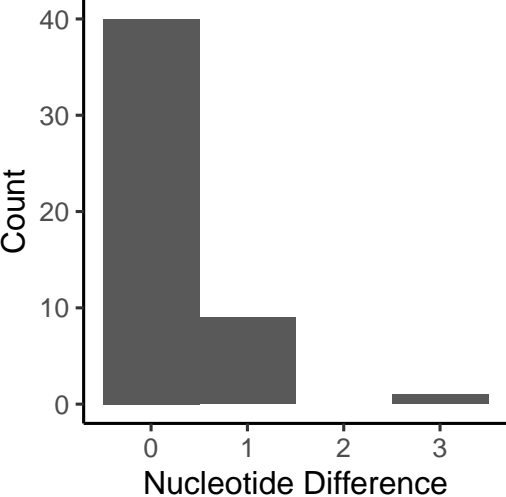
IGHV3-64*02

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



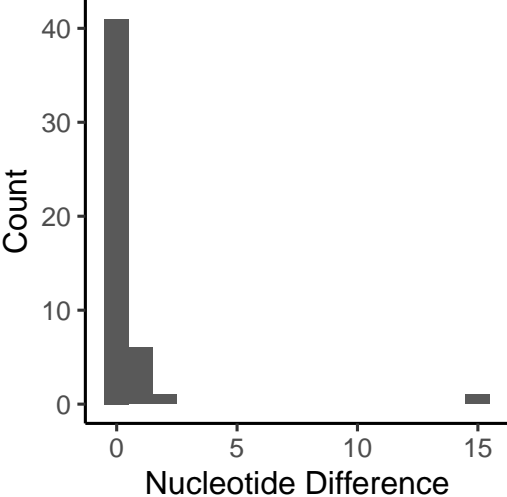
IGHV3-73*02

50 sequences assigned
40 (80%) exact matches, in which:
38 unique CDR3
4 unique J



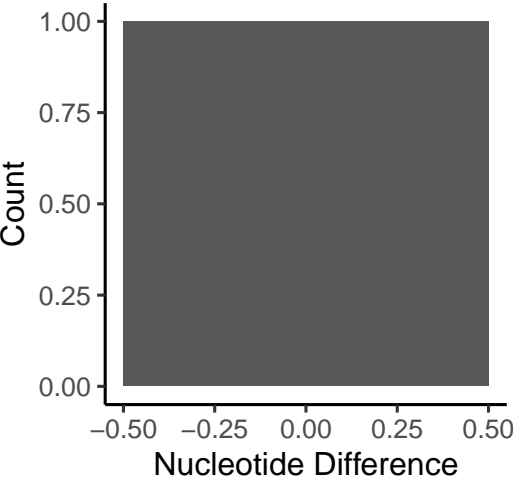
IGHV3-64D*06

49 sequences assigned
41 (83.7%) exact matches, in which:
40 unique CDR3
5 unique J



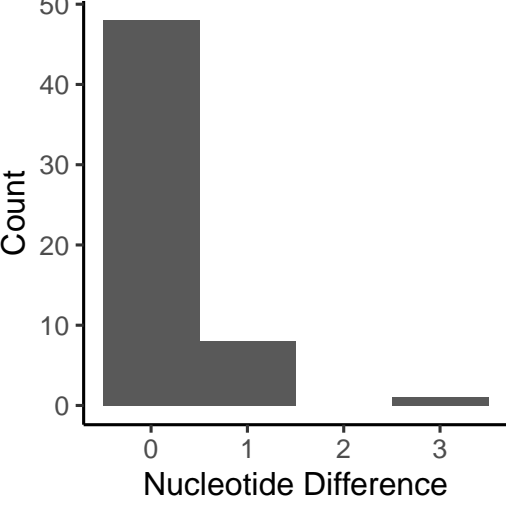
IGHV3-66*03

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



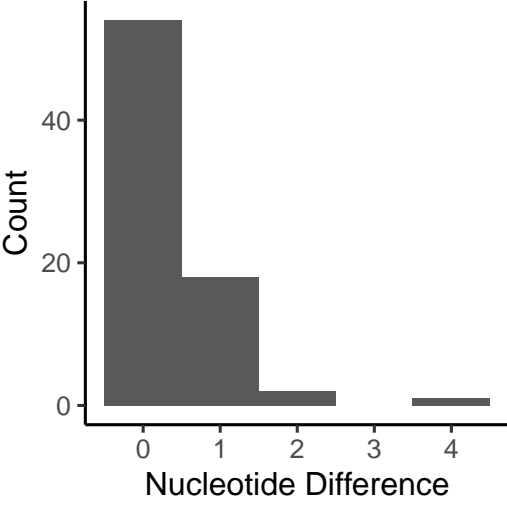
IGHV3-74*01

57 sequences assigned
48 (84.2%) exact matches, in which:
48 unique CDR3
5 unique J



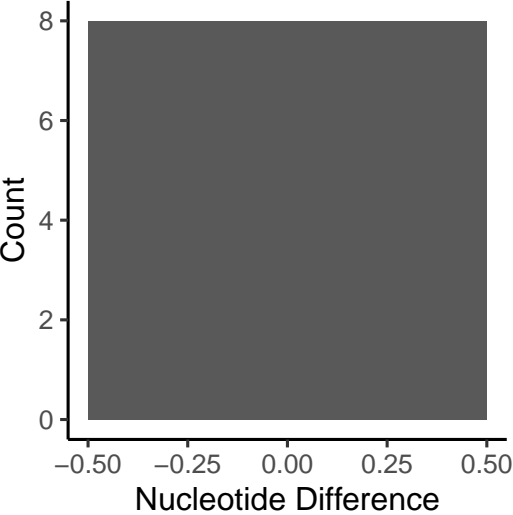
IGHV4-4*02

75 sequences assigned
54 (72%) exact matches, in which:
53 unique CDR3
6 unique J



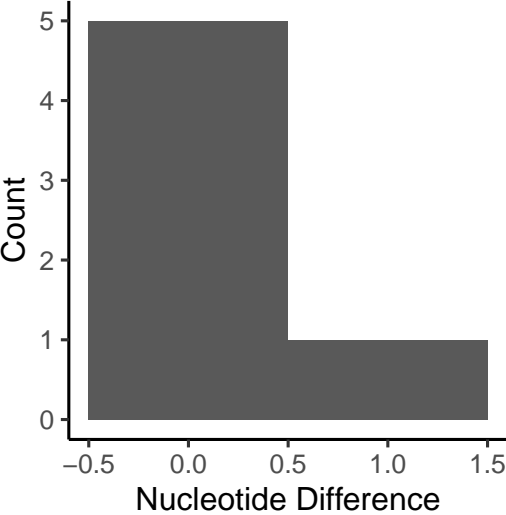
IGHV3-72*01

8 sequences assigned
8 (100%) exact matches, in which:
8 unique CDR3
4 unique J



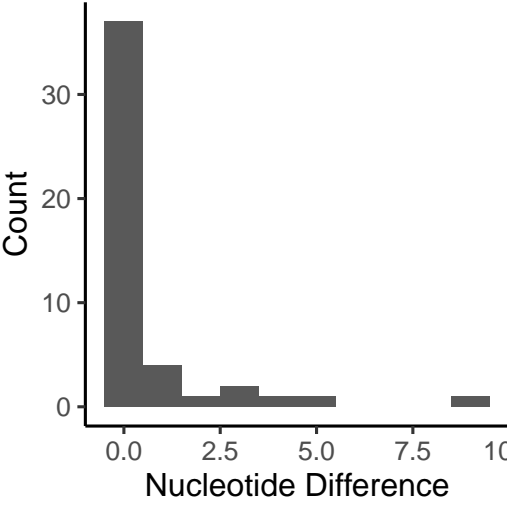
IGHV3-43D*04

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



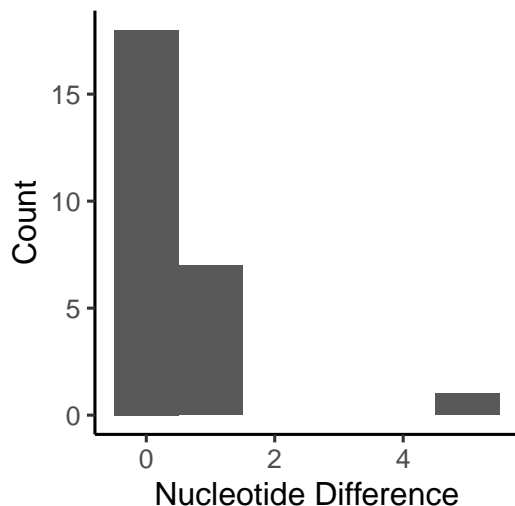
IGHV4-4*07

47 sequences assigned
37 (78.7%) exact matches, in which:
33 unique CDR3
5 unique J



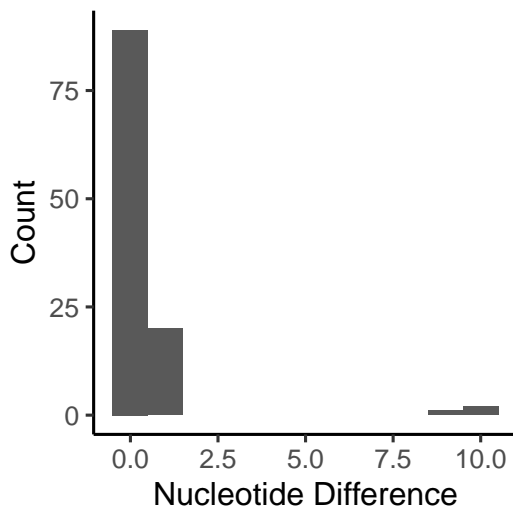
IGHV4-30-2*01

26 sequences assigned
18 (69.2%) exact matches, in which:
18 unique CDR3
4 unique J



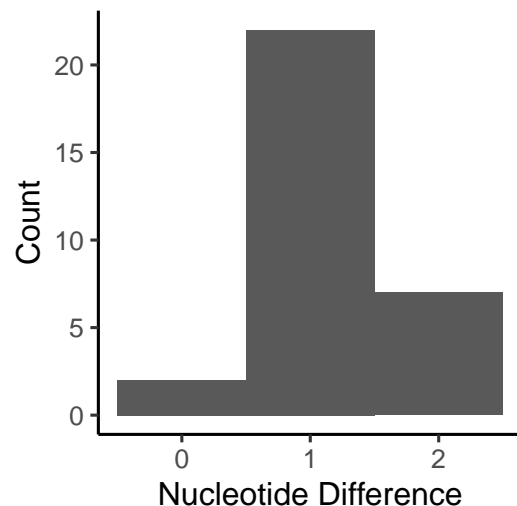
IGHV4-31*03

112 sequences assigned
89 (79.5%) exact matches, in which:
89 unique CDR3
5 unique J



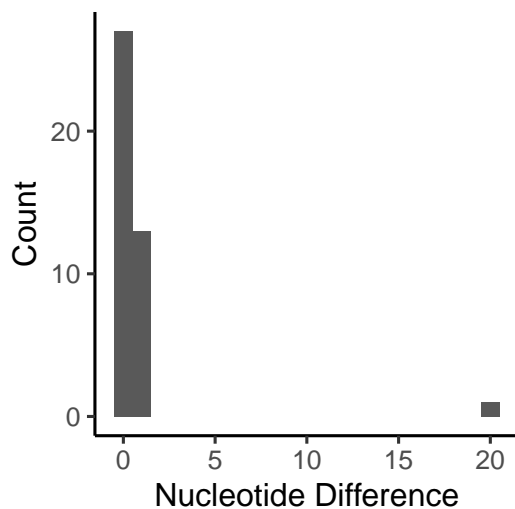
IGHV4-38-2*02

31 sequences assigned
2 (6.5%) exact matches, in which:
2 unique CDR3
2 unique J



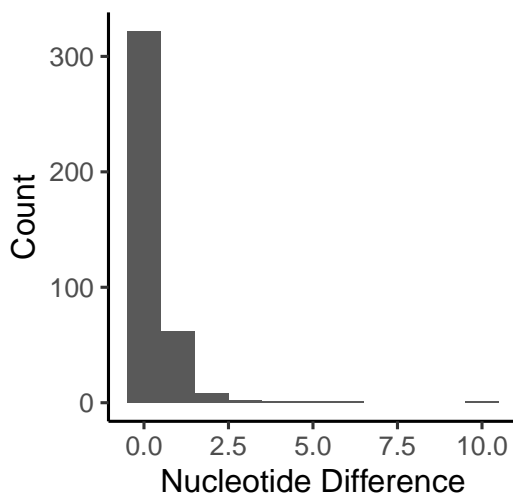
IGHV4-30-4*01

41 sequences assigned
27 (65.9%) exact matches, in which:
25 unique CDR3
4 unique J



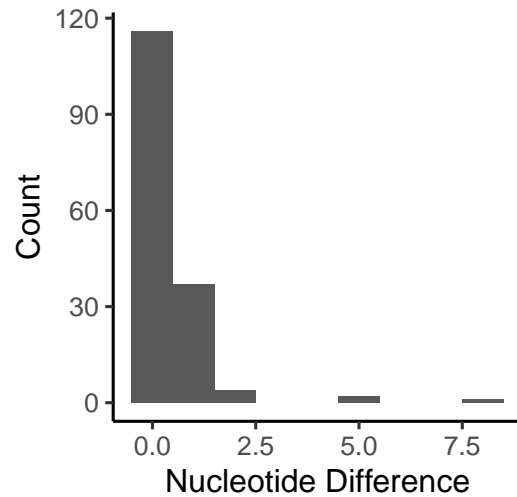
IGHV4-34*01

399 sequences assigned
322 (80.7%) exact matches, in which:
318 unique CDR3
6 unique J



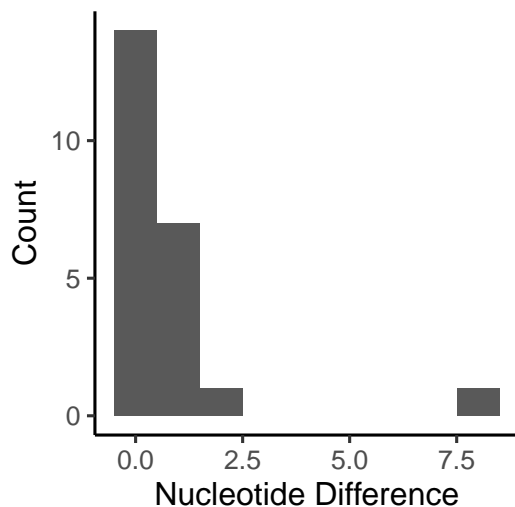
IGHV4-39*01

160 sequences assigned
116 (72.5%) exact matches, in which:
111 unique CDR3
6 unique J



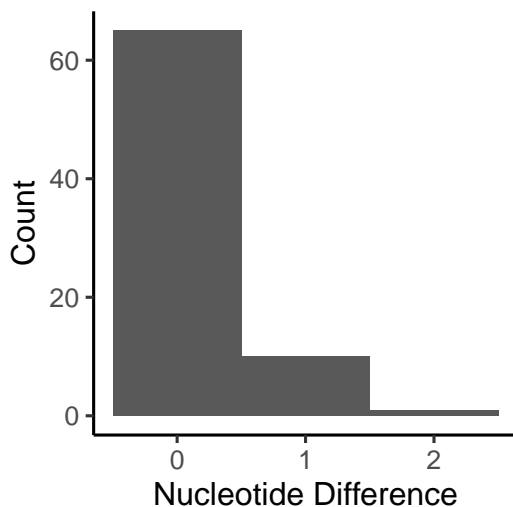
IGHV4-31*01

23 sequences assigned
14 (60.9%) exact matches, in which:
14 unique CDR3
3 unique J



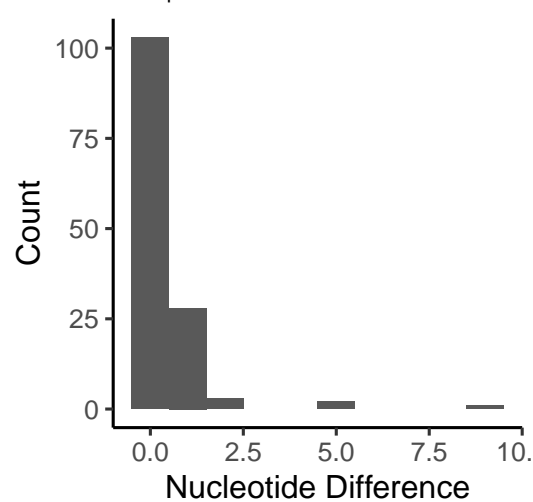
IGHV4-38-2*01

76 sequences assigned
65 (85.5%) exact matches, in which:
65 unique CDR3
6 unique J



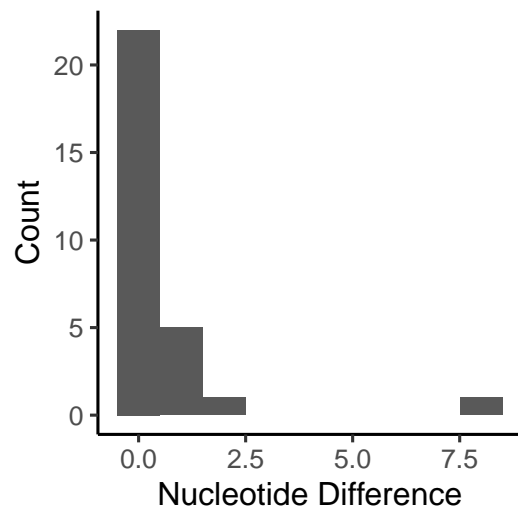
IGHV4-59*01

138 sequences assigned
103 (74.6%) exact matches, in which:
102 unique CDR3
5 unique J



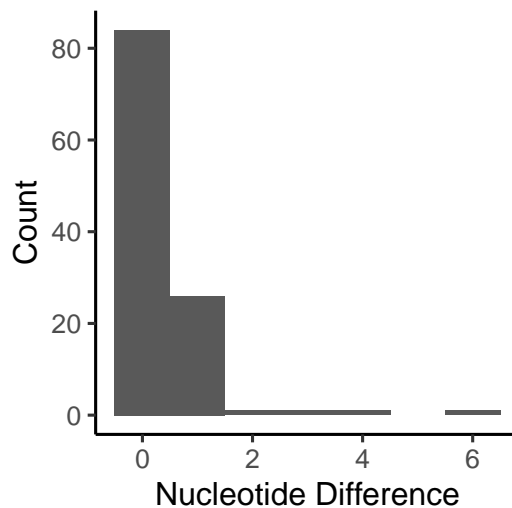
IGHV4-61*01

29 sequences assigned
22 (75.9%) exact matches, in which:
22 unique CDR3
5 unique J



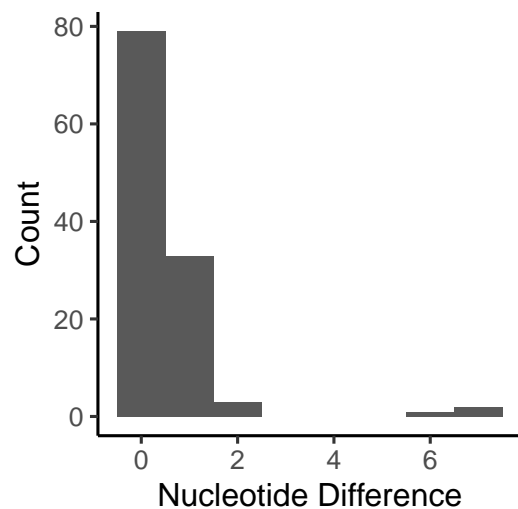
IGHV5-51*01

114 sequences assigned
84 (73.7%) exact matches, in which:
83 unique CDR3
5 unique J



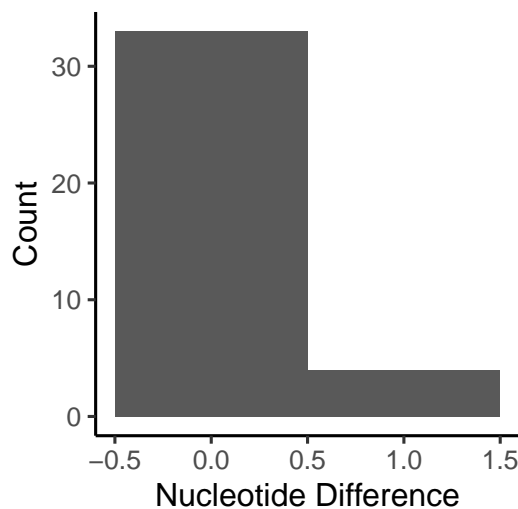
IGHV4-61*02_A234G

118 sequences assigned
79 (66.9%) exact matches, in which:
79 unique CDR3
5 unique J



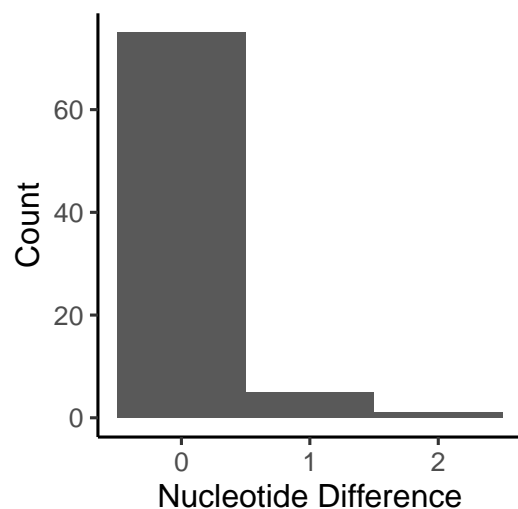
IGHV5-51*03

37 sequences assigned
33 (89.2%) exact matches, in which:
33 unique CDR3
5 unique J



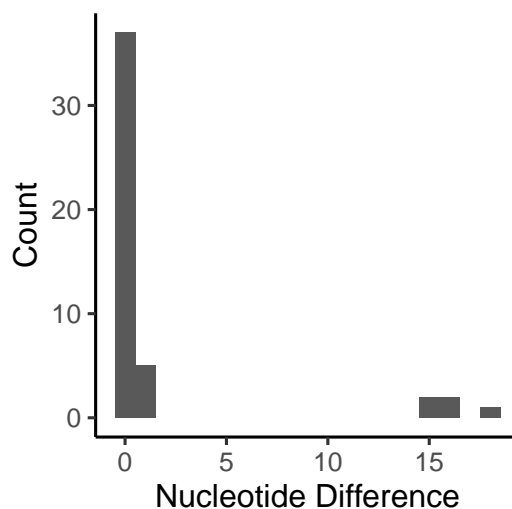
IGHV5-10-1*03

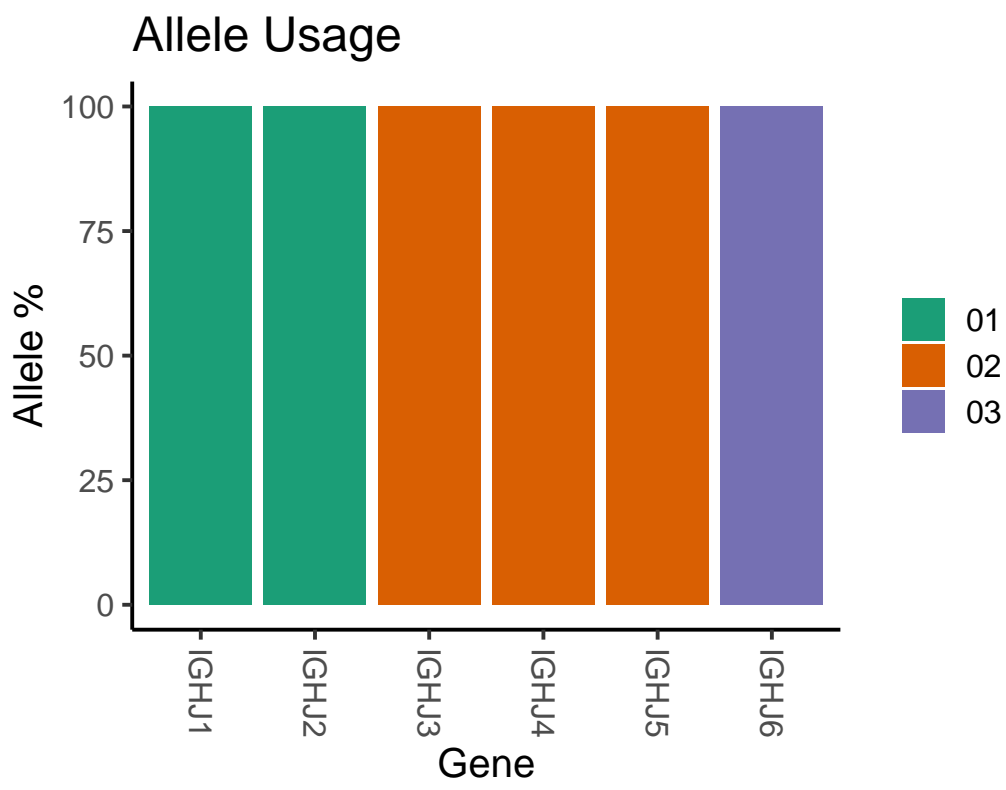
81 sequences assigned
75 (92.6%) exact matches, in which:
75 unique CDR3
6 unique J



IGHV6-1*01

47 sequences assigned
37 (78.7%) exact matches, in which:
35 unique CDR3
5 unique J





Warning – no inferred sequences found.