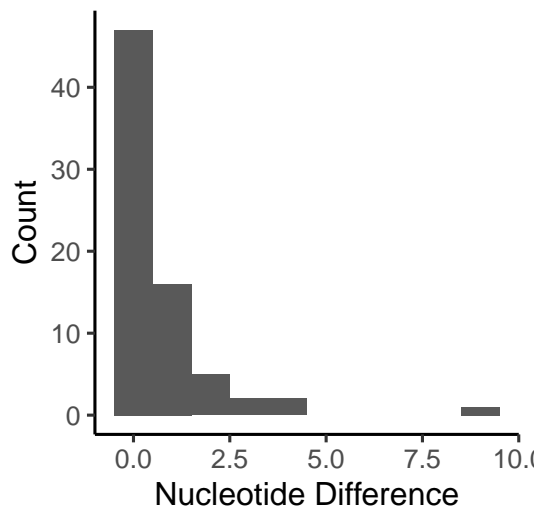


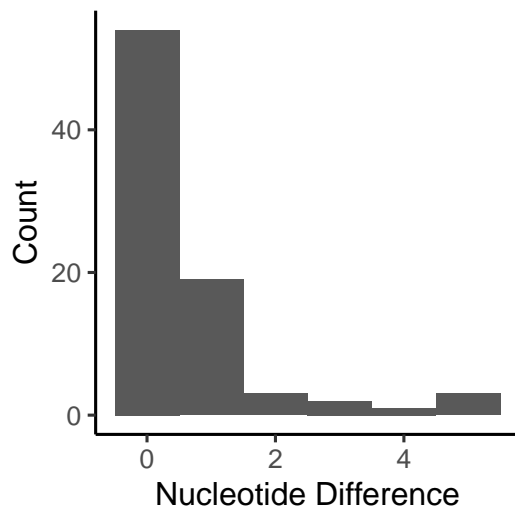
IGHV1-2*02

73 sequences assigned
47 (64.4%) exact matches, in which:
45 unique CDR3
4 unique J



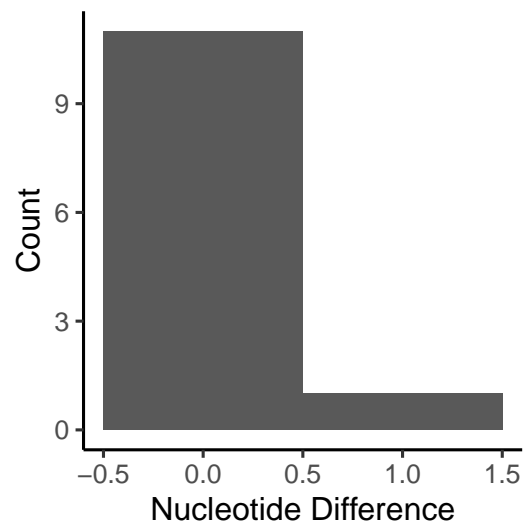
IGHV1-8*01

82 sequences assigned
54 (65.9%) exact matches, in which:
50 unique CDR3
4 unique J



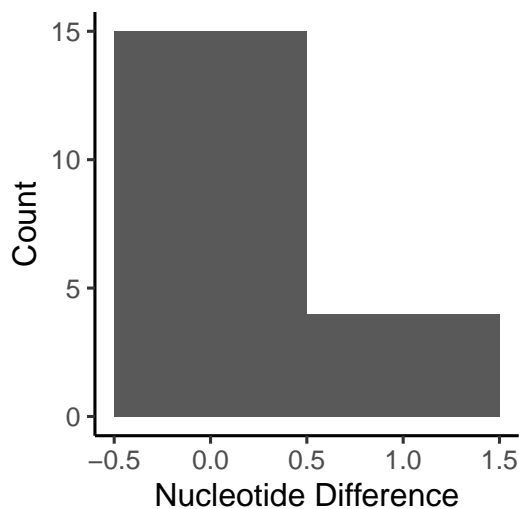
IGHV1-24*01

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



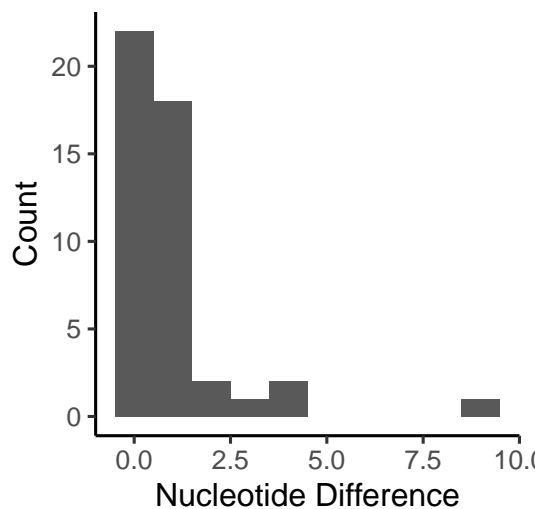
IGHV1-2*04

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



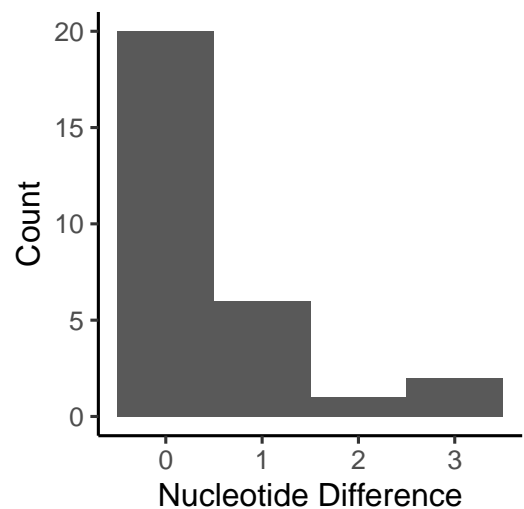
IGHV1-18*01

46 sequences assigned
22 (47.8%) exact matches, in which:
22 unique CDR3
4 unique J



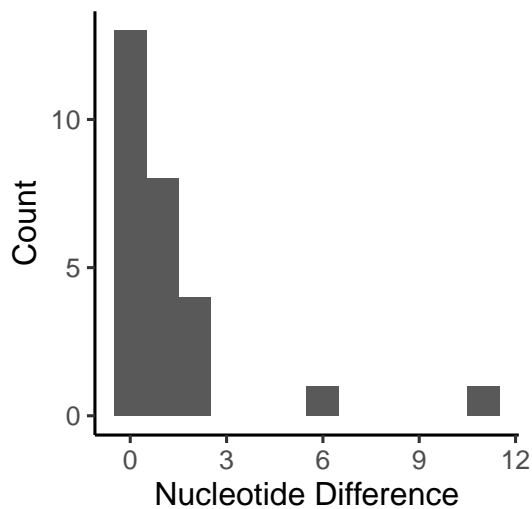
IGHV1-46*03

29 sequences assigned
20 (69%) exact matches, in which:
20 unique CDR3
4 unique J



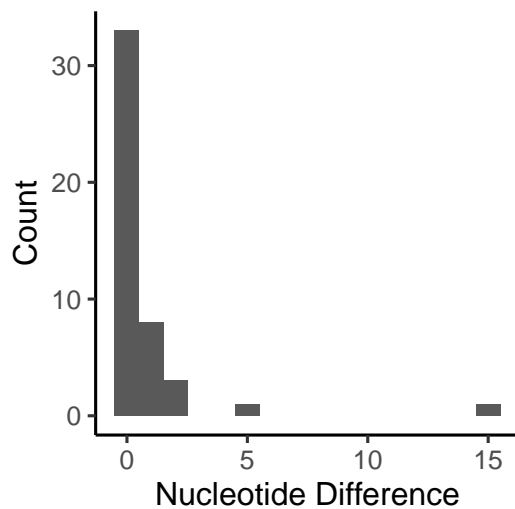
IGHV1-3*01

27 sequences assigned
13 (48.1%) exact matches, in which:
13 unique CDR3
4 unique J



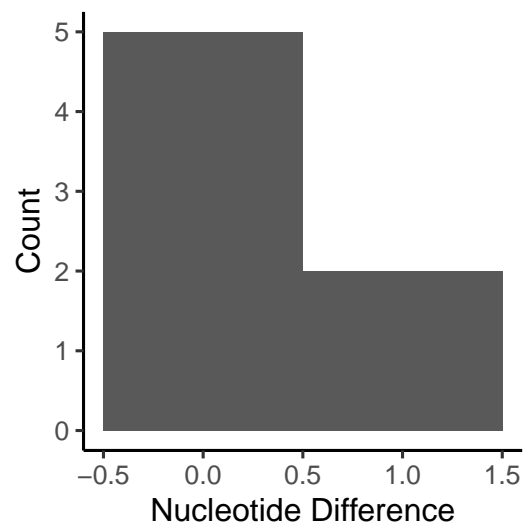
IGHV1-18*04

46 sequences assigned
33 (71.7%) exact matches, in which:
33 unique CDR3
4 unique J



IGHV1-58*01

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



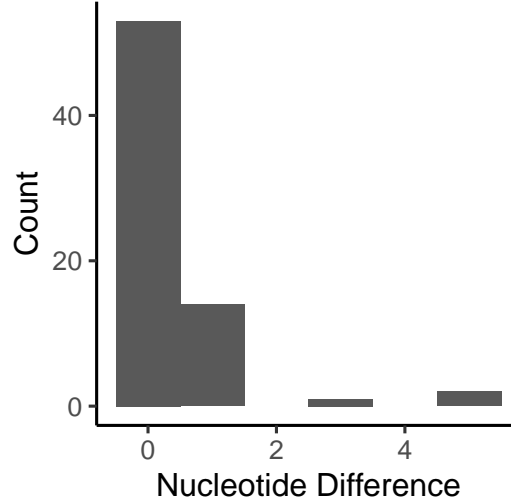
IGHV1-58*02

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



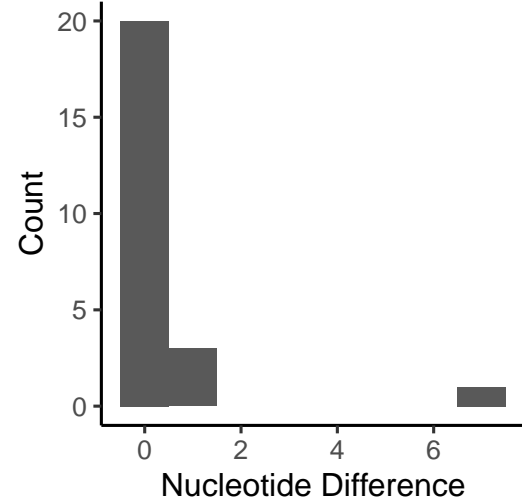
IGHV1-69*06

70 sequences assigned
53 (75.7%) exact matches, in which:
53 unique CDR3
5 unique J



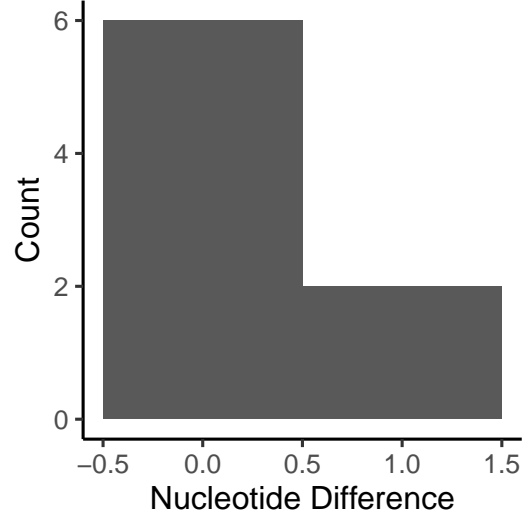
IGHV2-5*02

24 sequences assigned
20 (83.3%) exact matches, in which:
20 unique CDR3
4 unique J



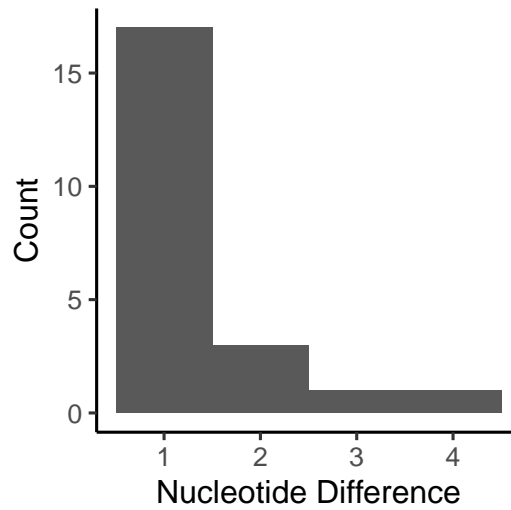
IGHV1-69-2*01

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



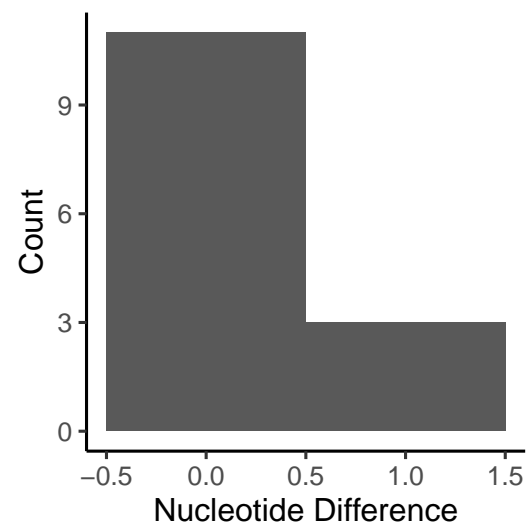
IGHV1-69*08

22 sequences assigned
No exact matches.



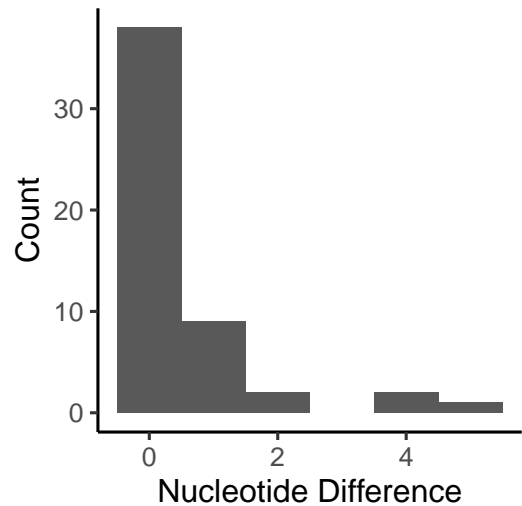
IGHV2-26*01

14 sequences assigned
11 (78.6%) exact matches, in which:
11 unique CDR3
5 unique J



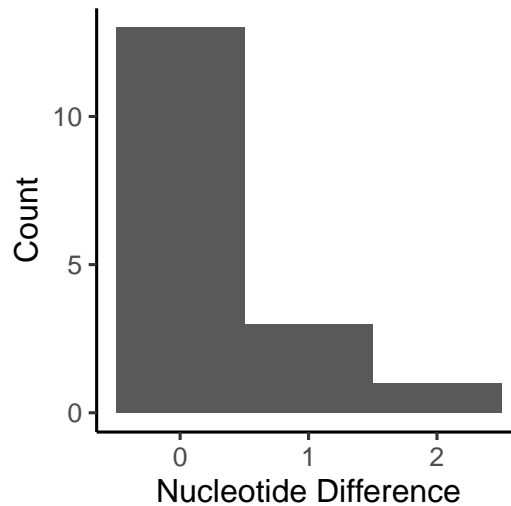
IGHV1-69*02

52 sequences assigned
38 (73.1%) exact matches, in which:
38 unique CDR3
5 unique J



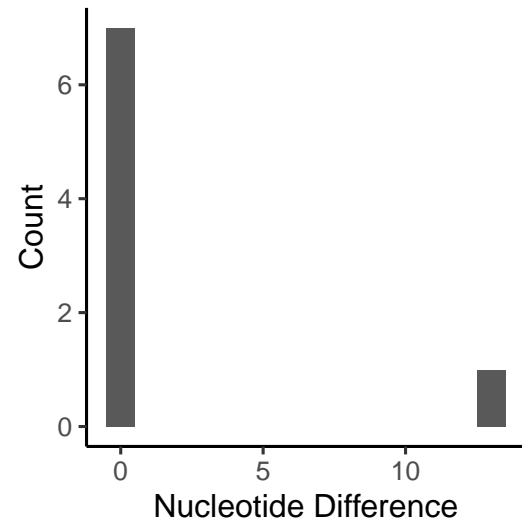
IGHV2-5*01

17 sequences assigned
13 (76.5%) exact matches, in which:
13 unique CDR3
3 unique J



IGHV2-70*15

8 sequences assigned
7 (87.5%) exact matches, in which:
7 unique CDR3
3 unique J



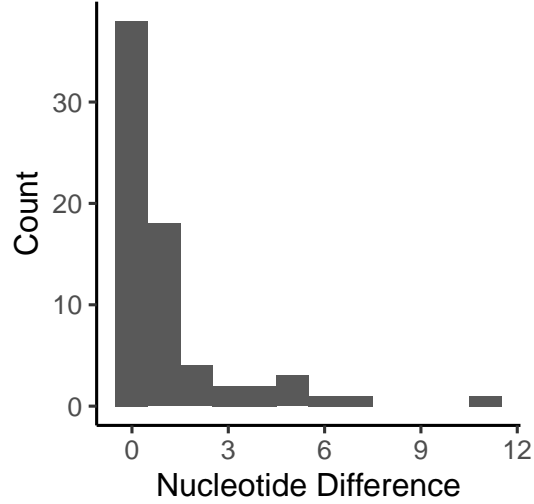
IGHV2-70D*04

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



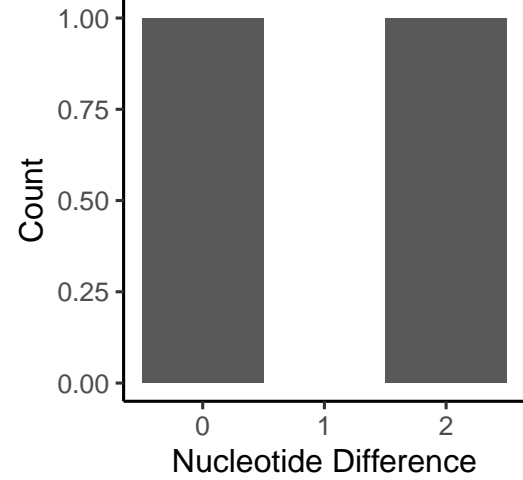
IGHV3-11*01

70 sequences assigned
38 (54.3%) exact matches, in which:
37 unique CDR3
4 unique J



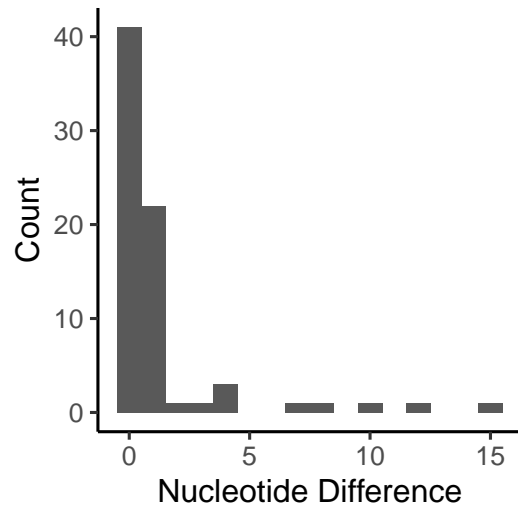
IGHV3-20*01

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



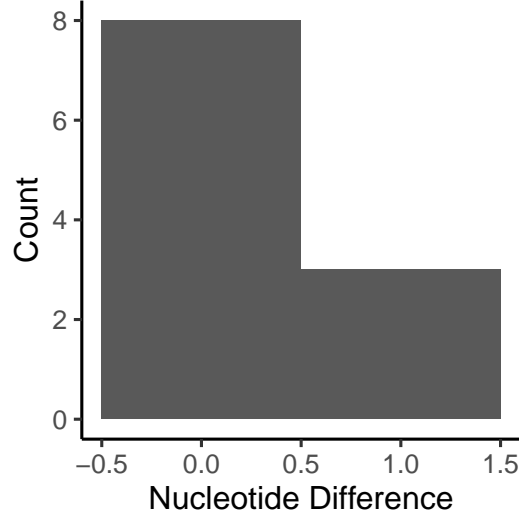
IGHV3-7*01

73 sequences assigned
41 (56.2%) exact matches, in which:
40 unique CDR3
4 unique J



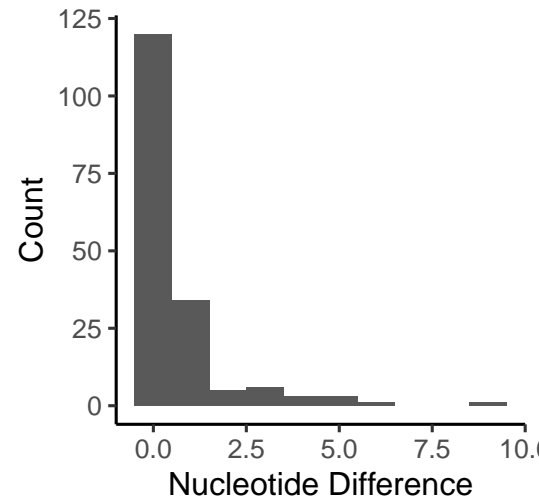
IGHV3-13*01

11 sequences assigned
8 (72.7%) exact matches, in which:
8 unique CDR3
2 unique J



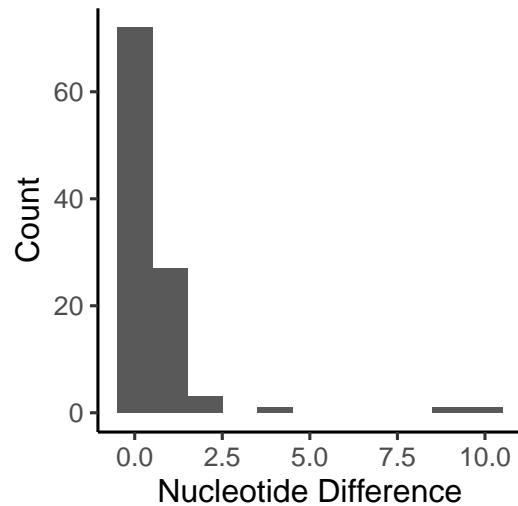
IGHV3-21*01

173 sequences assigned
120 (69.4%) exact matches, in which:
120 unique CDR3
5 unique J



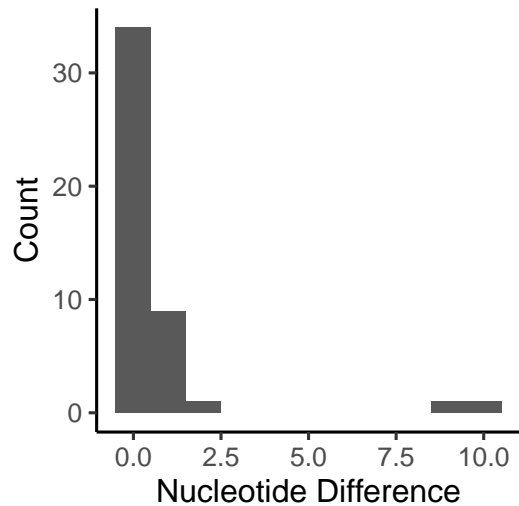
IGHV3-9*01

105 sequences assigned
72 (68.6%) exact matches, in which:
72 unique CDR3
6 unique J



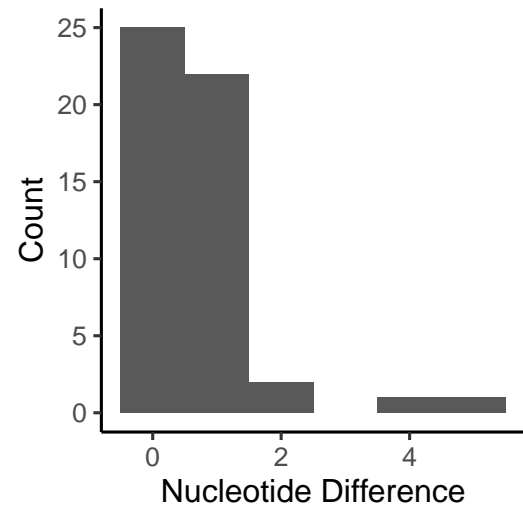
IGHV3-15*01

46 sequences assigned
34 (73.9%) exact matches, in which:
34 unique CDR3
4 unique J



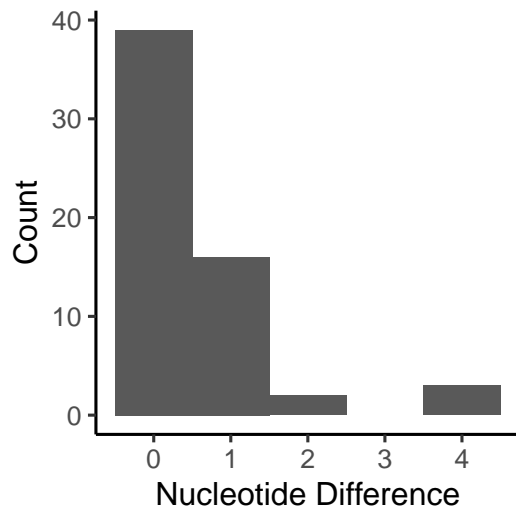
IGHV3-30*01

51 sequences assigned
25 (49%) exact matches, in which:
24 unique CDR3
3 unique J



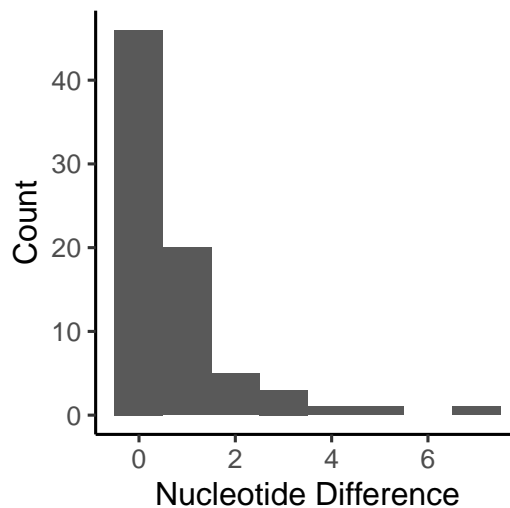
IGHV3-33*01

60 sequences assigned
39 (65%) exact matches, in which:
38 unique CDR3
5 unique J



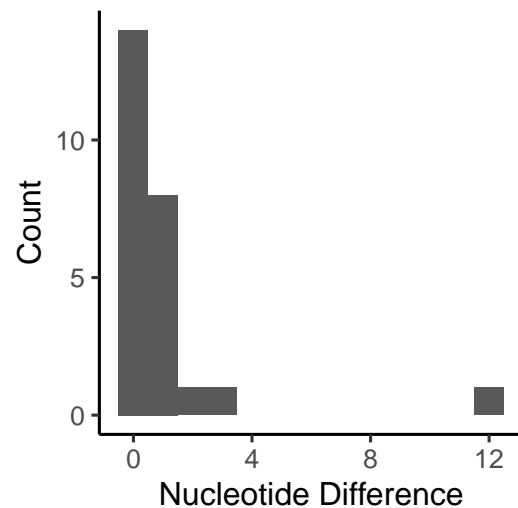
IGHV3-48*02

77 sequences assigned
46 (59.7%) exact matches, in which:
46 unique CDR3
5 unique J



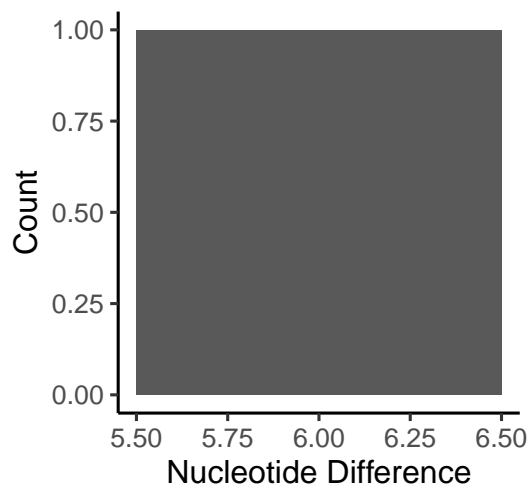
IGHV3-53*01

25 sequences assigned
14 (56%) exact matches, in which:
14 unique CDR3
5 unique J



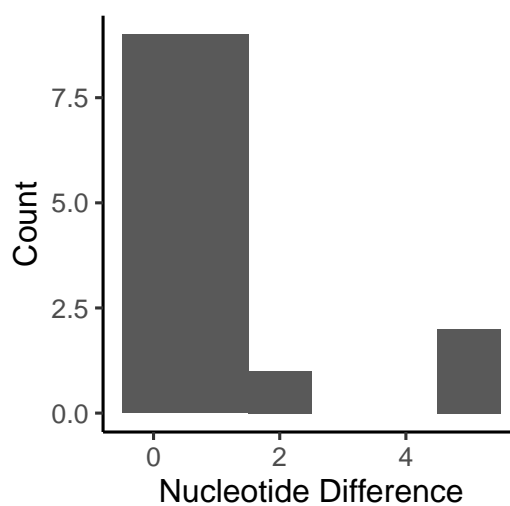
IGHV3-41*02

1 sequences assigned
No exact matches.



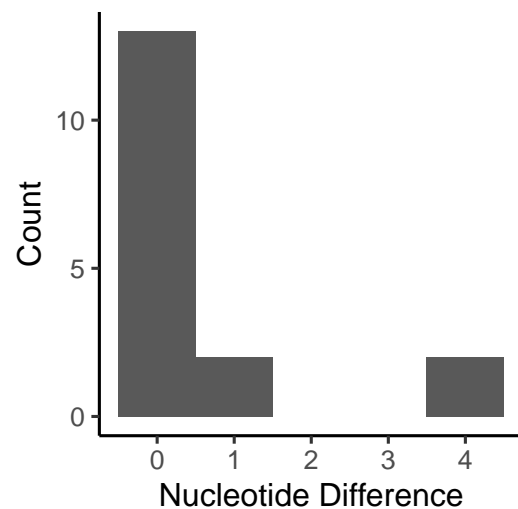
IGHV3-49*04

21 sequences assigned
9 (42.9%) exact matches, in which:
9 unique CDR3
3 unique J



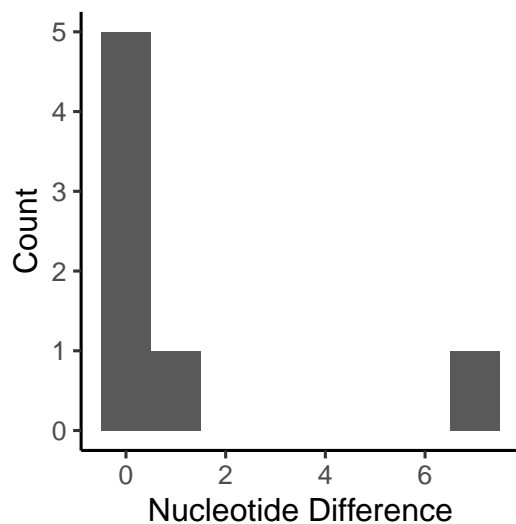
IGHV3-53*04

17 sequences assigned
13 (76.5%) exact matches, in which:
12 unique CDR3
4 unique J



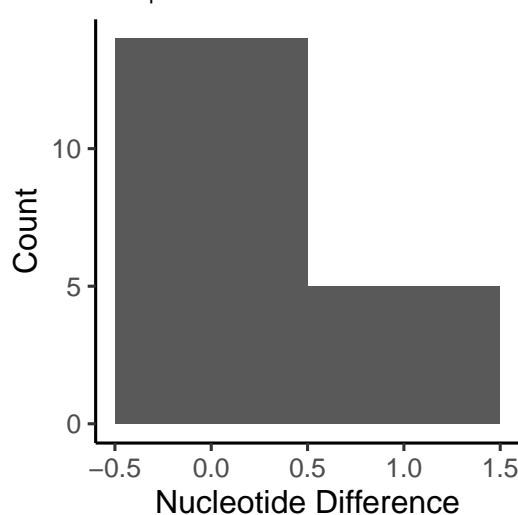
IGHV3-43*01

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



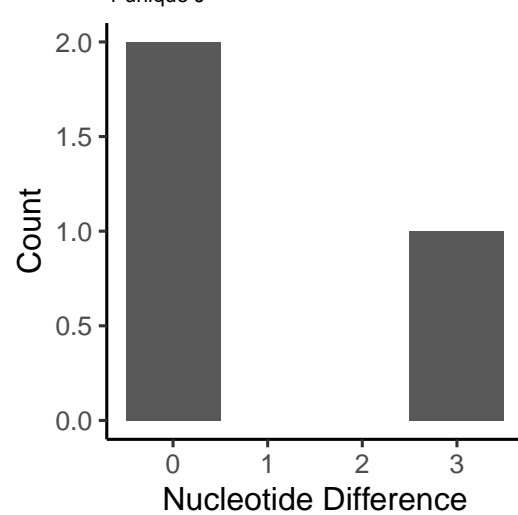
IGHV3-49*05

19 sequences assigned
14 (73.7%) exact matches, in which:
14 unique CDR3
4 unique J



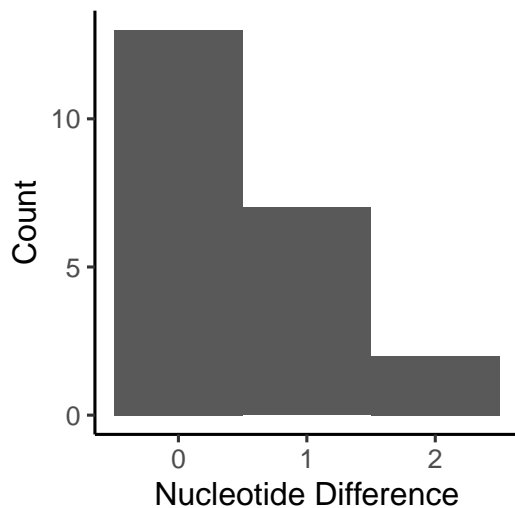
IGHV3-64*01

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
1 unique J



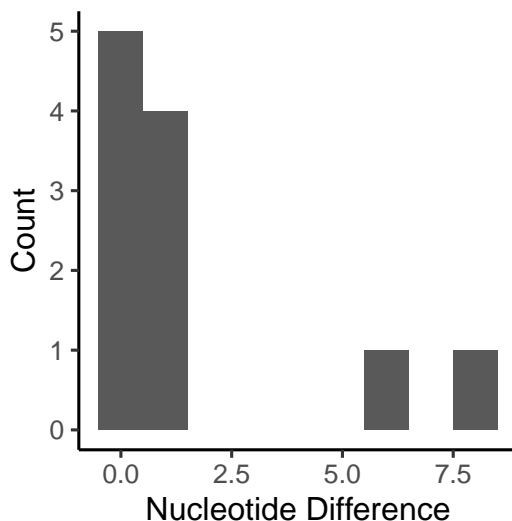
IGHV3-66*01

22 sequences assigned
13 (59.1%) exact matches, in which:
13 unique CDR3
5 unique J



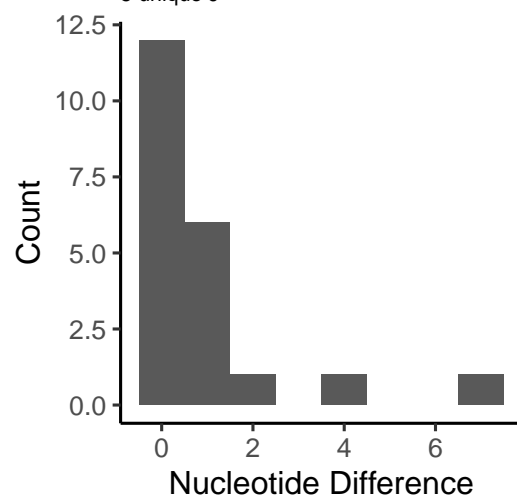
IGHV3-73*02

11 sequences assigned
5 (45.5%) exact matches, in which:
5 unique CDR3
2 unique J



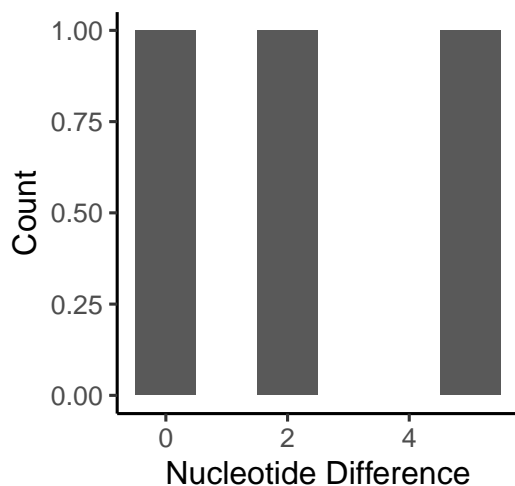
IGHV4-4*02

21 sequences assigned
12 (57.1%) exact matches, in which:
12 unique CDR3
5 unique J



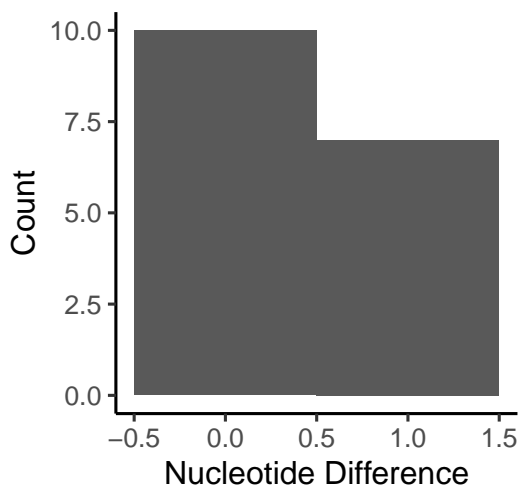
IGHV3-72*01

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



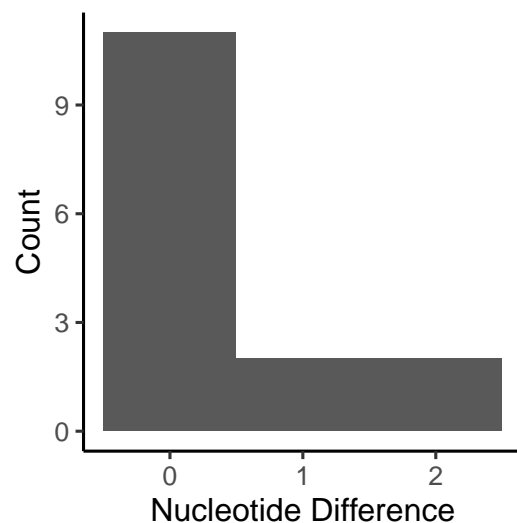
IGHV3-74*01

17 sequences assigned
10 (58.8%) exact matches, in which:
10 unique CDR3
3 unique J



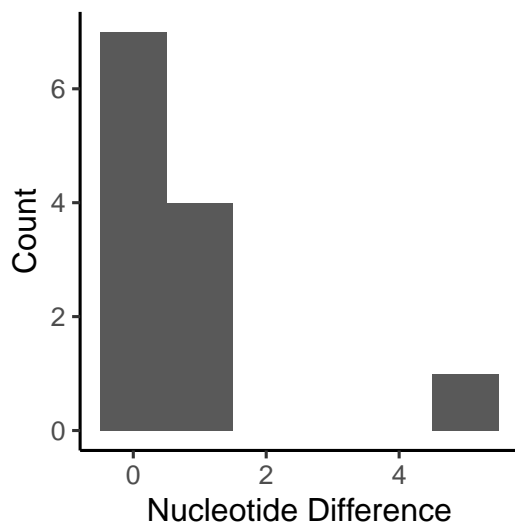
IGHV4-4*07

15 sequences assigned
11 (73.3%) exact matches, in which:
10 unique CDR3
4 unique J



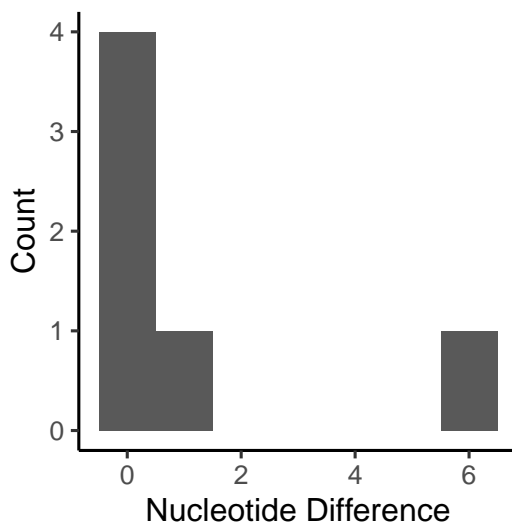
IGHV3-73*01

12 sequences assigned
7 (58.3%) exact matches, in which:
7 unique CDR3
3 unique J



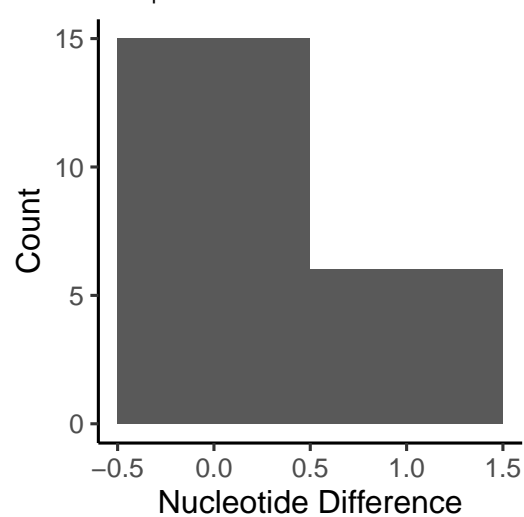
IGHV3-43D*03

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



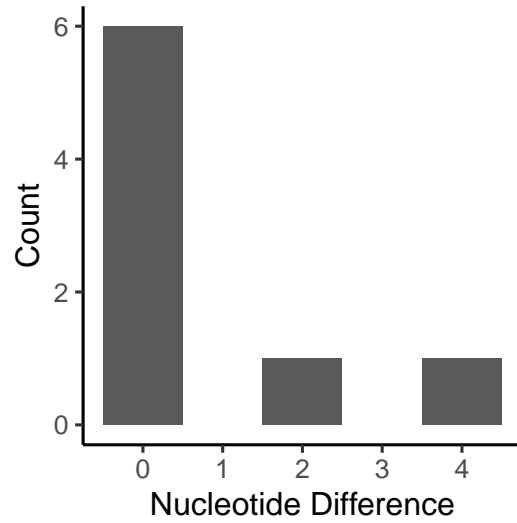
IGHV4-30-2*01

21 sequences assigned
15 (71.4%) exact matches, in which:
15 unique CDR3
4 unique J



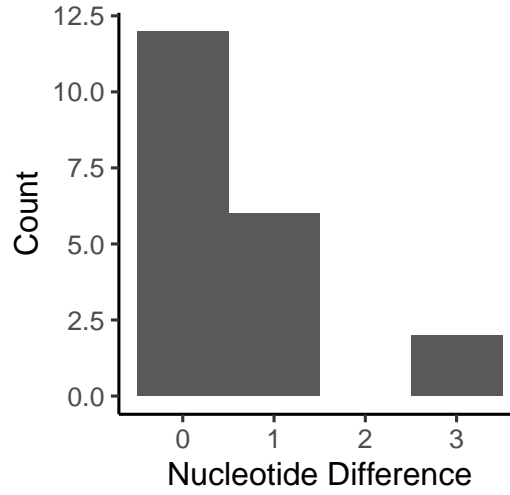
IGHV4-30-4*07

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



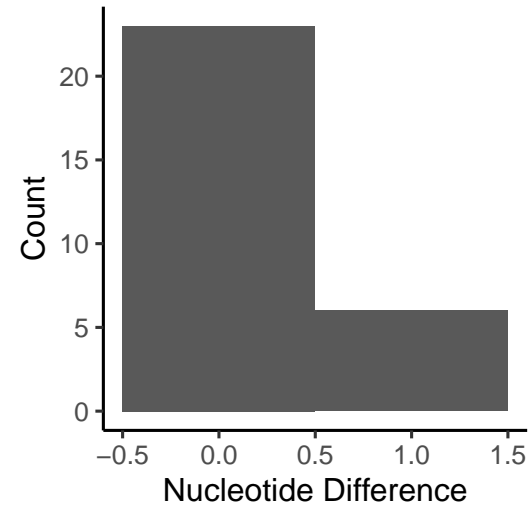
IGHV4-38-2*02

20 sequences assigned
12 (60%) exact matches, in which:
10 unique CDR3
4 unique J



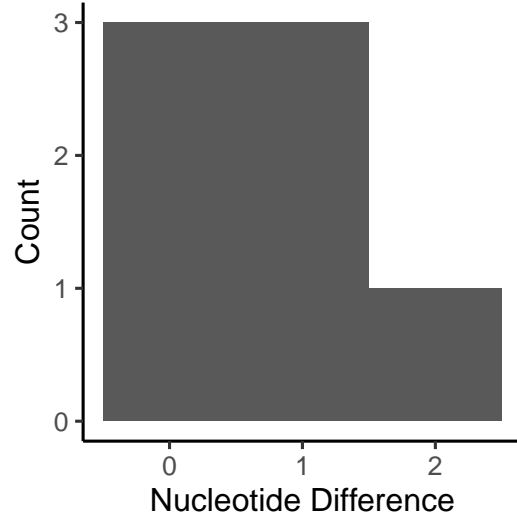
IGHV4-59*08

29 sequences assigned
23 (79.3%) exact matches, in which:
22 unique CDR3
4 unique J



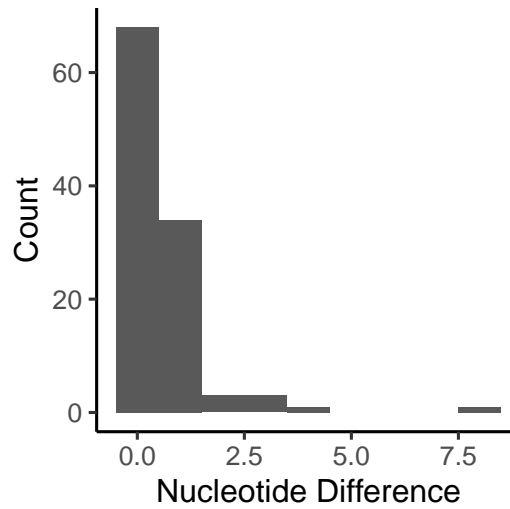
IGHV4-31*01

7 sequences assigned
3 (42.9%) exact matches, in which:
3 unique CDR3
3 unique J



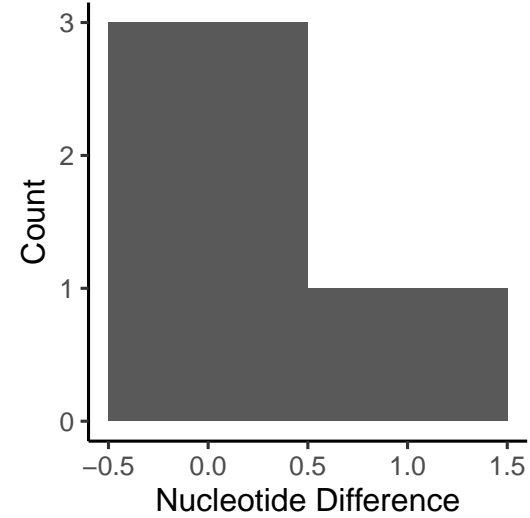
IGHV4-39*01

111 sequences assigned
68 (61.3%) exact matches, in which:
68 unique CDR3
5 unique J



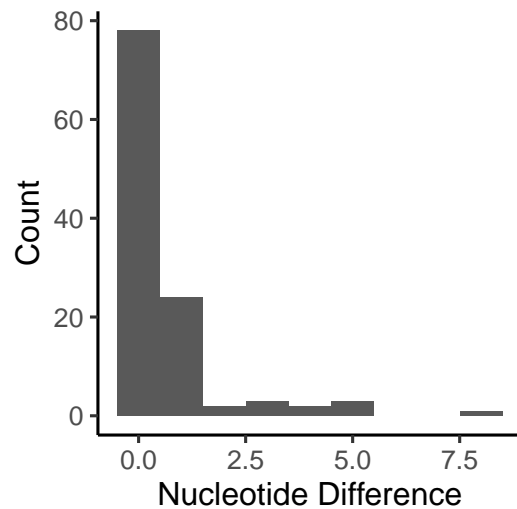
IGHV4-61*01

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



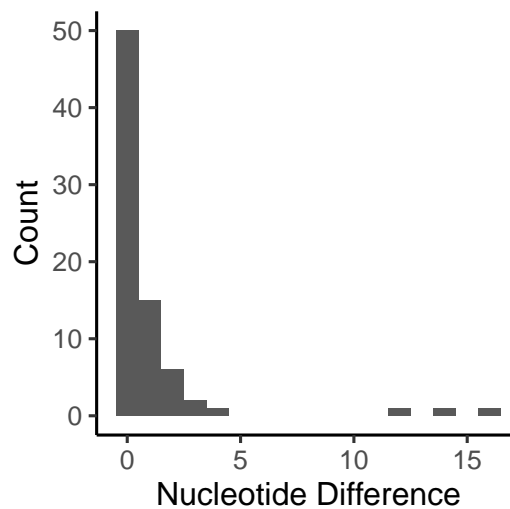
IGHV4-34*01

113 sequences assigned
78 (69%) exact matches, in which:
72 unique CDR3
4 unique J



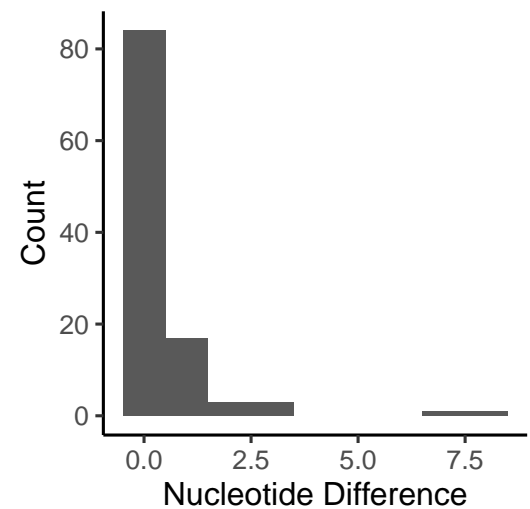
IGHV4-59*01

81 sequences assigned
50 (61.7%) exact matches, in which:
50 unique CDR3
4 unique J



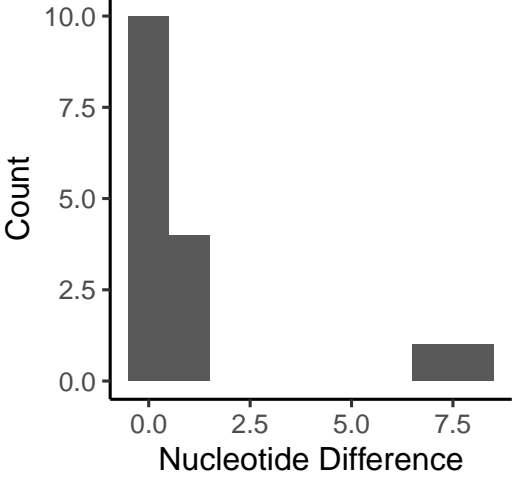
IGHV5-51*01

109 sequences assigned
84 (77.1%) exact matches, in which:
83 unique CDR3
5 unique J



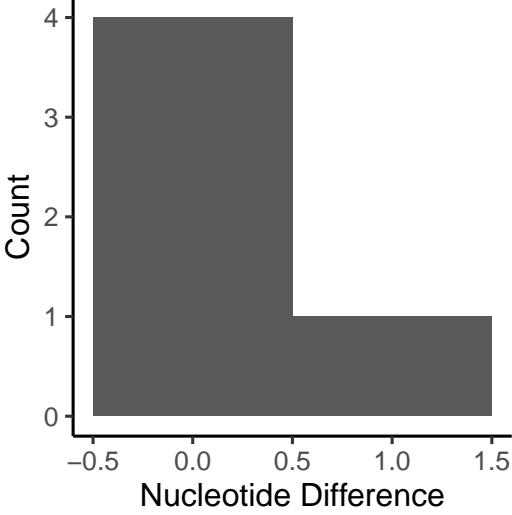
IGHV6-1*01

16 sequences assigned
10 (62.5%) exact matches, in which:
10 unique CDR3
4 unique J



IGHV7-4-1*01

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





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