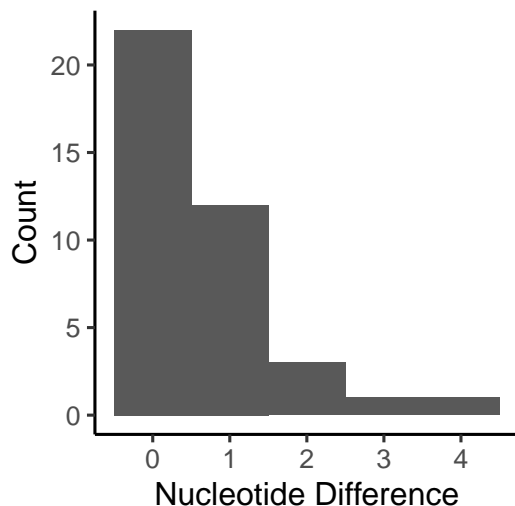


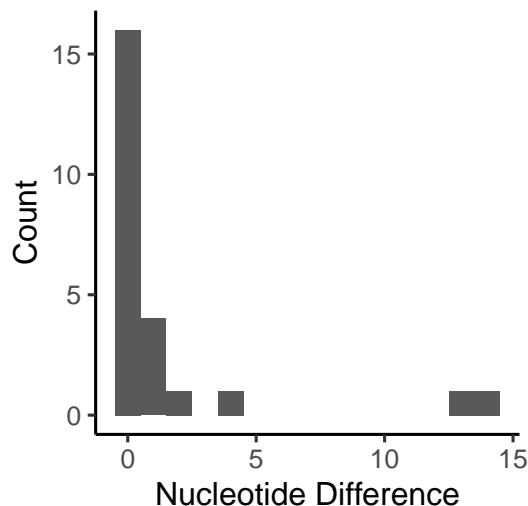
IGHV1-2*04

40 sequences assigned
22 (55%) exact matches, in which:
22 unique CDR3
4 unique J



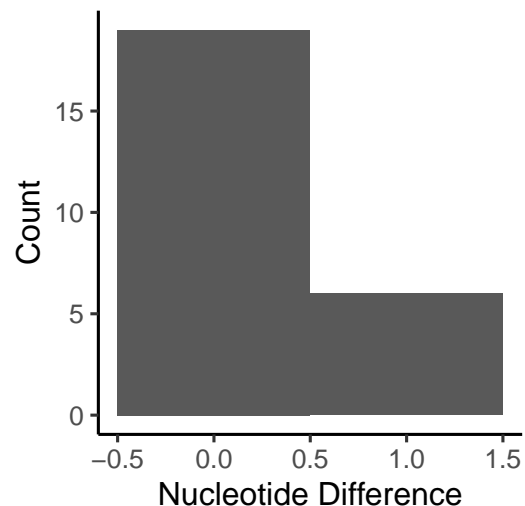
IGHV1-18*04

24 sequences assigned
16 (66.7%) exact matches, in which:
16 unique CDR3
4 unique J



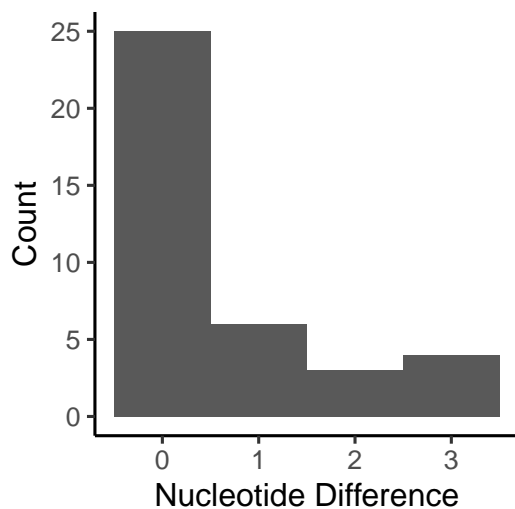
IGHV1-46*03

25 sequences assigned
19 (76%) exact matches, in which:
19 unique CDR3
6 unique J



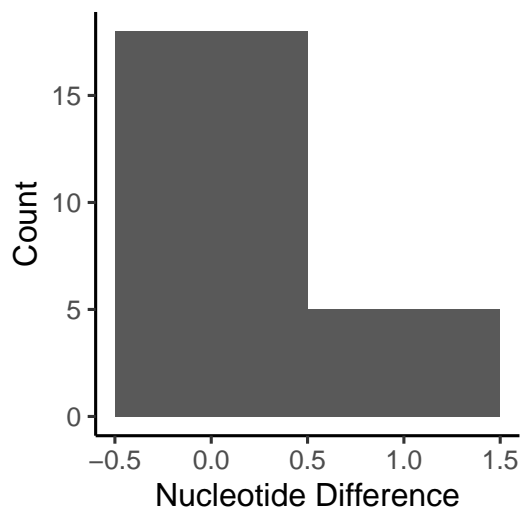
IGHV1-3*01

38 sequences assigned
25 (65.8%) exact matches, in which:
25 unique CDR3
6 unique J



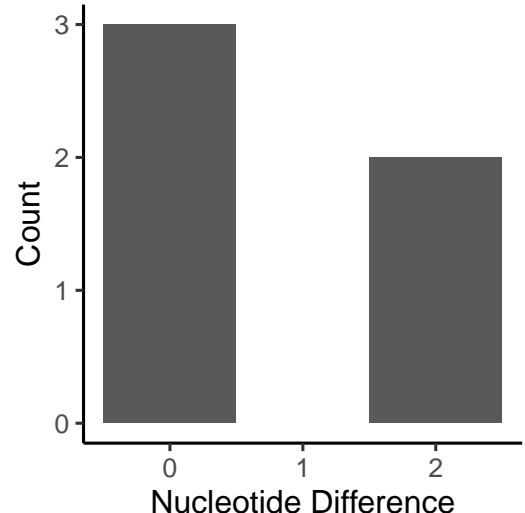
IGHV1-24*01

23 sequences assigned
18 (78.3%) exact matches, in which:
18 unique CDR3
6 unique J



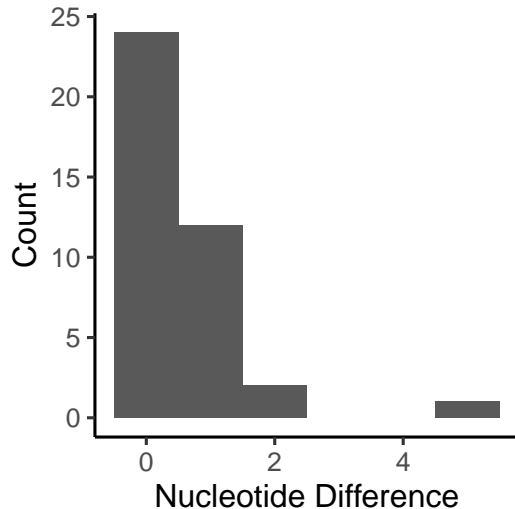
IGHV1-69-2*01

5 sequences assigned
3 (60%) exact matches, in which:
3 unique CDR3
3 unique J



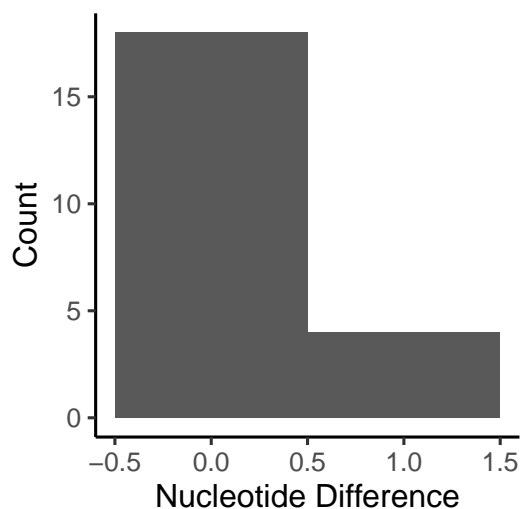
IGHV1-18*01

39 sequences assigned
24 (61.5%) exact matches, in which:
24 unique CDR3
4 unique J



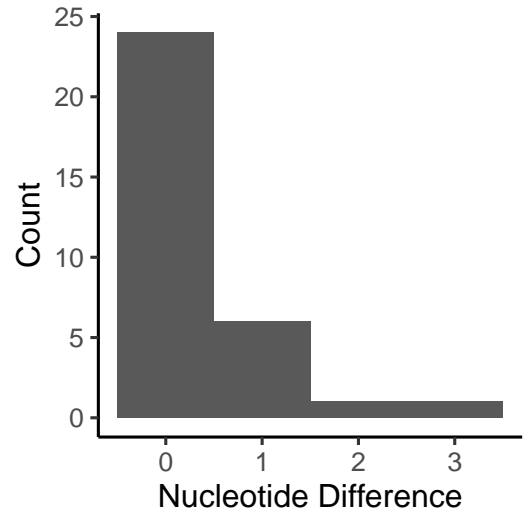
IGHV1-46*01

22 sequences assigned
18 (81.8%) exact matches, in which:
18 unique CDR3
4 unique J



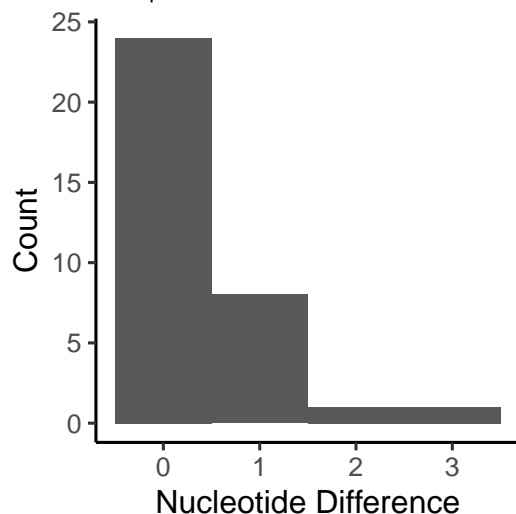
IGHV1-69*02

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



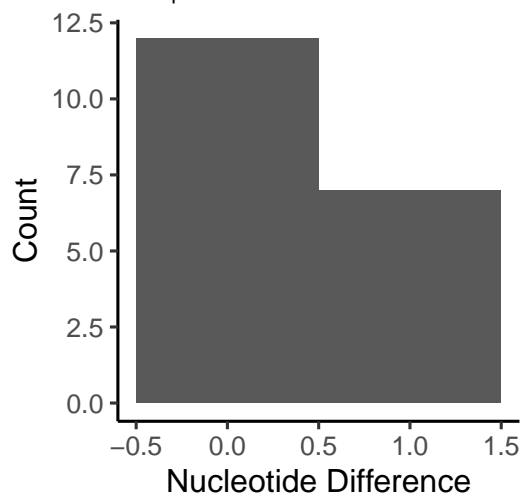
IGHV1-69*06

34 sequences assigned
24 (70.6%) exact matches, in which:
24 unique CDR3
5 unique J



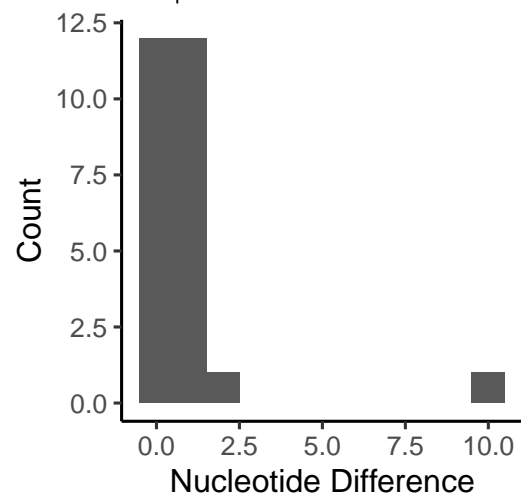
IGHV2-26*01

19 sequences assigned
12 (63.2%) exact matches, in which:
12 unique CDR3
6 unique J



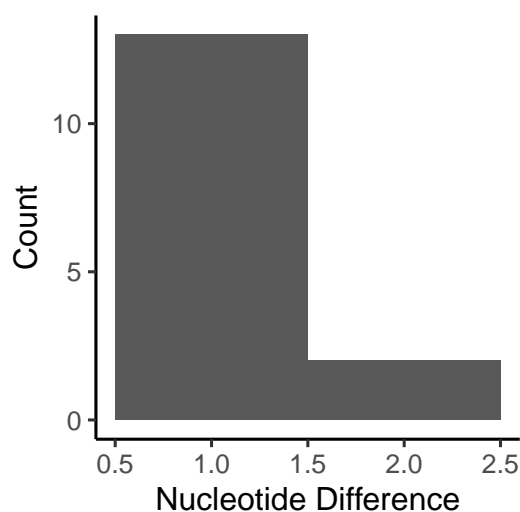
IGHV3-7*03

26 sequences assigned
12 (46.2%) exact matches, in which:
12 unique CDR3
3 unique J



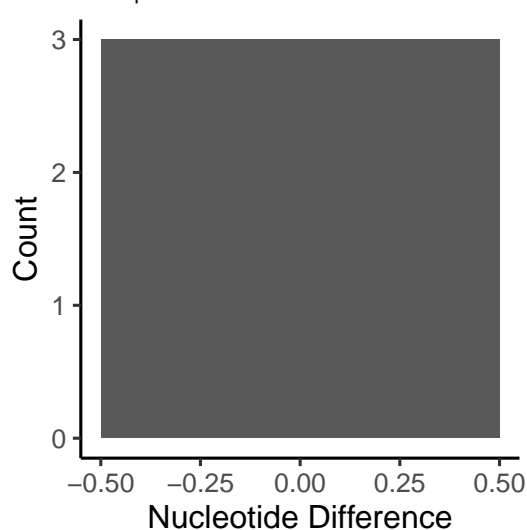
IGHV1-69*08

15 sequences assigned
No exact matches.



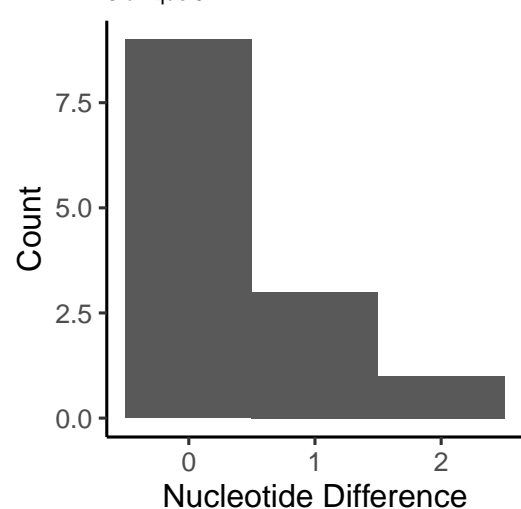
IGHV2-70*01

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



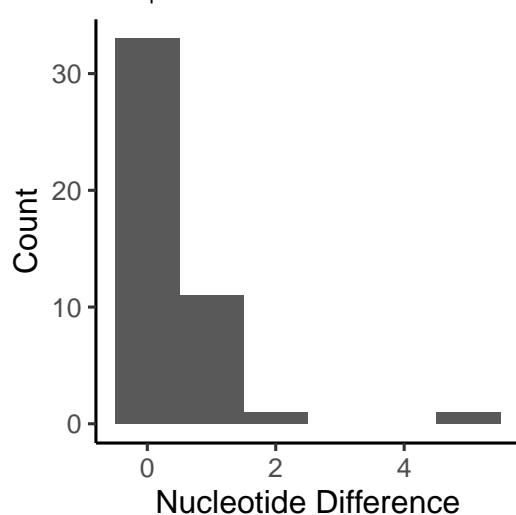
IGHV3-7*04

13 sequences assigned
9 (69.2%) exact matches, in which:
9 unique CDR3
3 unique J



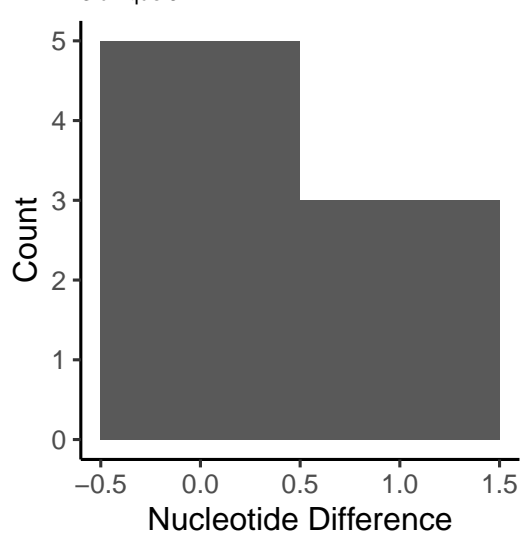
IGHV2-5*02

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



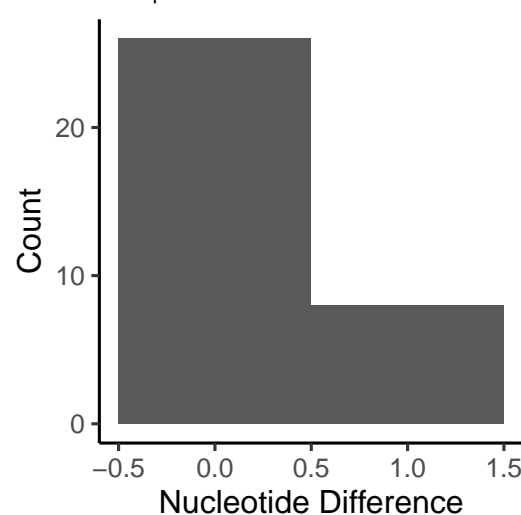
IGHV2-70*15

8 sequences assigned
5 (62.5%) exact matches, in which:
5 unique CDR3
3 unique J



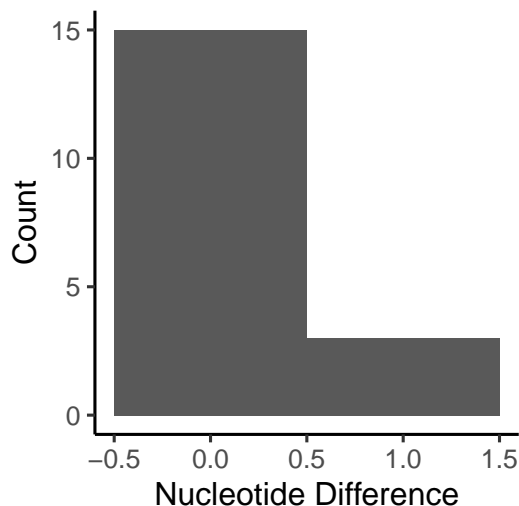
IGHV3-11*05

34 sequences assigned
26 (76.5%) exact matches, in which:
26 unique CDR3
4 unique J



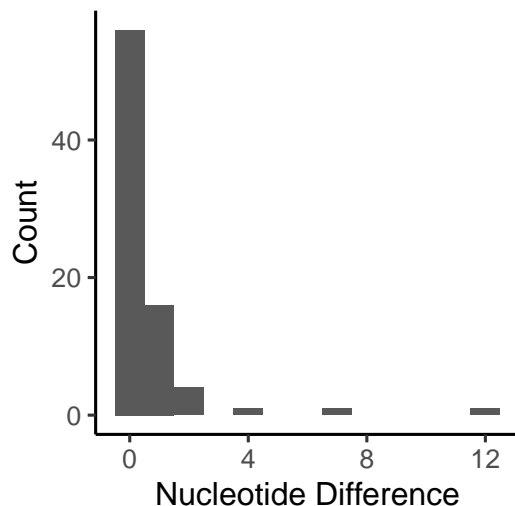
IGHV3-11*06

18 sequences assigned
15 (83.3%) exact matches, in which:
14 unique CDR3
4 unique J



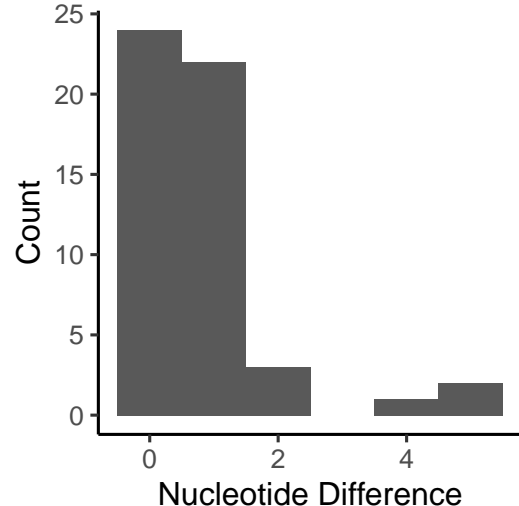
IGHV3-15*01

79 sequences assigned
56 (70.9%) exact matches, in which:
55 unique CDR3
6 unique J



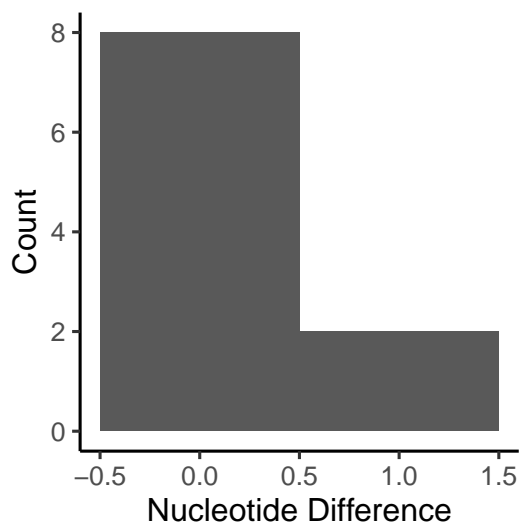
IGHV3-30-3*01

52 sequences assigned
24 (46.2%) exact matches, in which:
24 unique CDR3
4 unique J



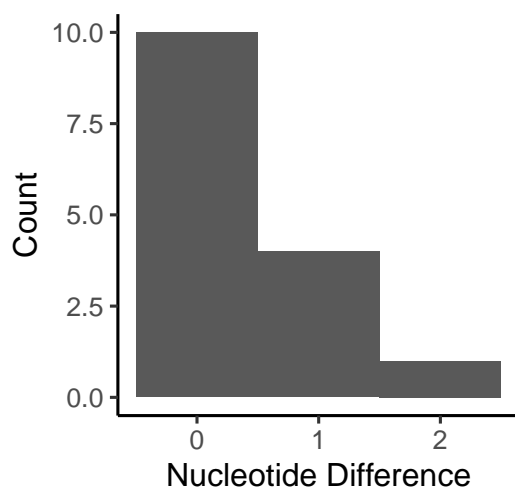
IGHV3-13*04

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



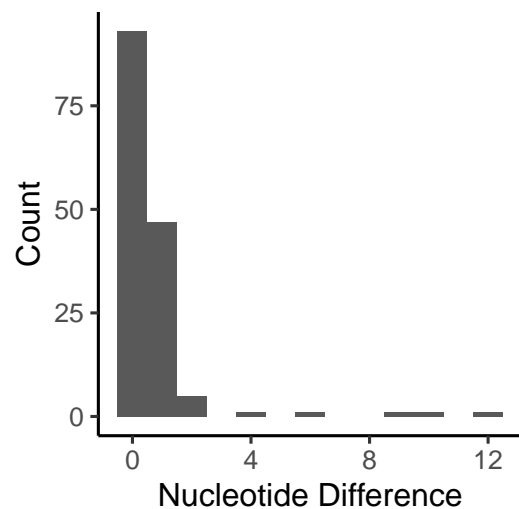
IGHV3-20*04

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



IGHV3-33*01

150 sequences assigned
93 (62%) exact matches, in which:
89 unique CDR3
6 unique J



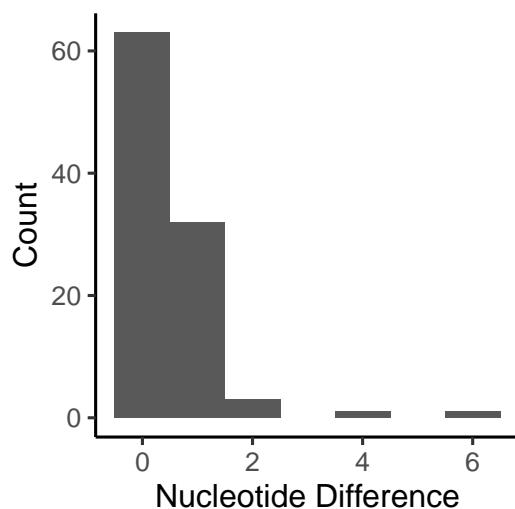
IGHV3-13*05

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



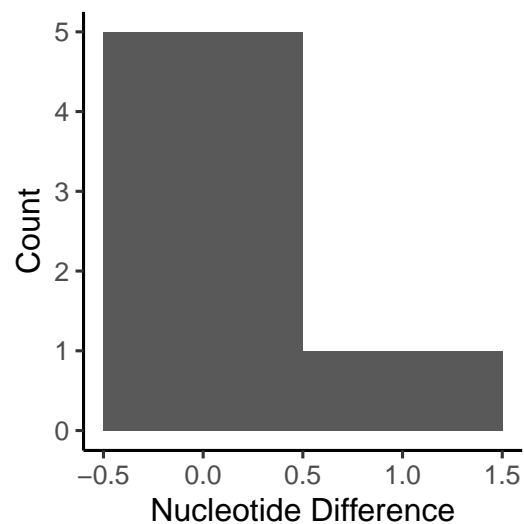
IGHV3-21*01

100 sequences assigned
63 (63%) exact matches, in which:
62 unique CDR3
7 unique J



IGHV3-43*01

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



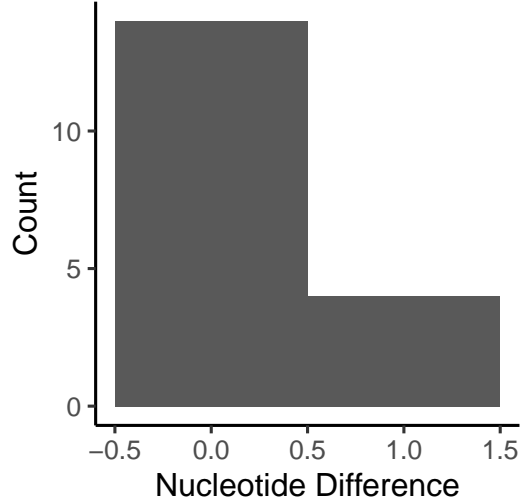
IGHV3-47*02

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



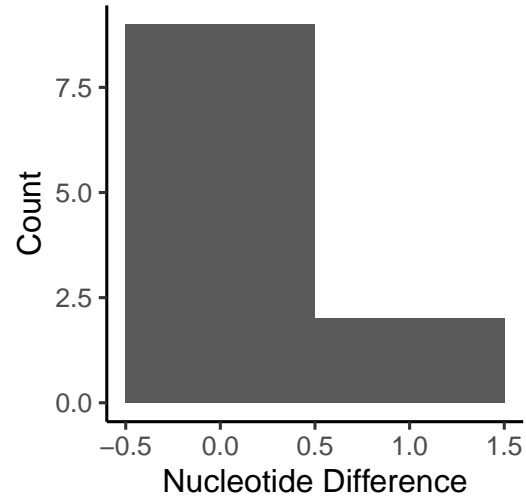
IGHV3-49*03

18 sequences assigned
14 (77.8%) exact matches, in which:
14 unique CDR3
4 unique J



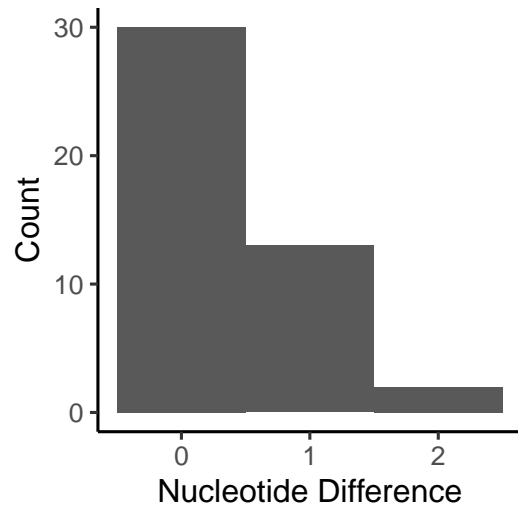
IGHV3-53*04

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



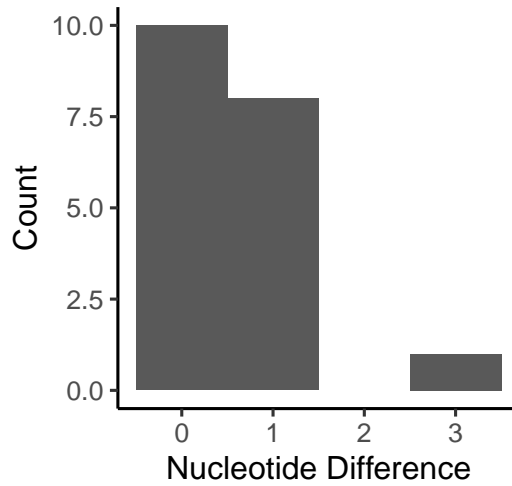
IGHV3-48*01

45 sequences assigned
30 (66.7%) exact matches, in which:
29 unique CDR3
6 unique J



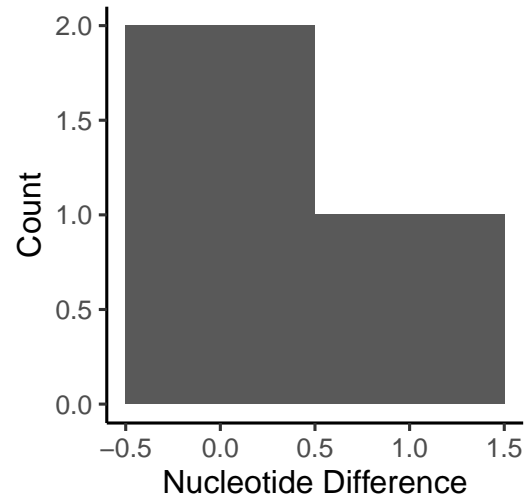
IGHV3-49*05

19 sequences assigned
10 (52.6%) exact matches, in which:
10 unique CDR3
3 unique J



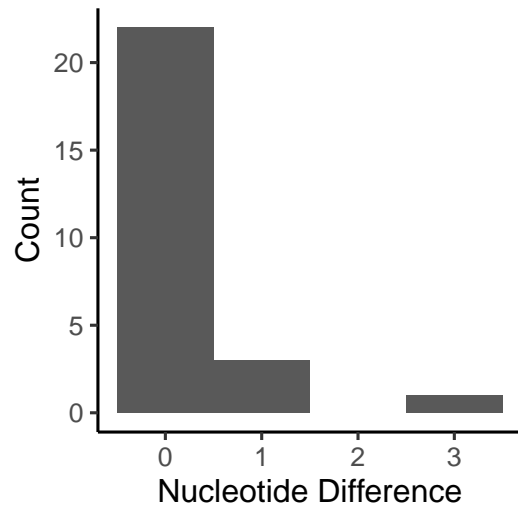
IGHV3-64*01

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



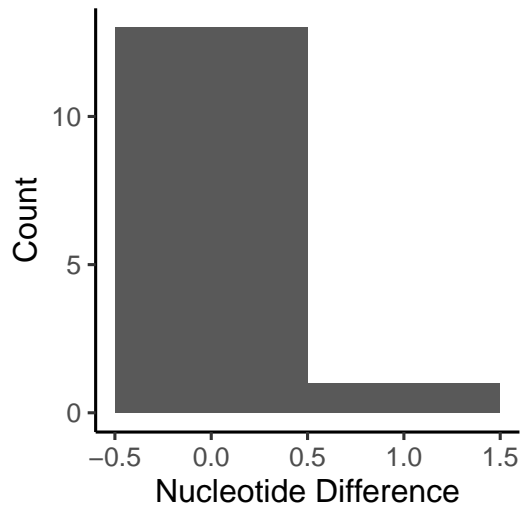
IGHV3-48*02

26 sequences assigned
22 (84.6%) exact matches, in which:
22 unique CDR3
4 unique J



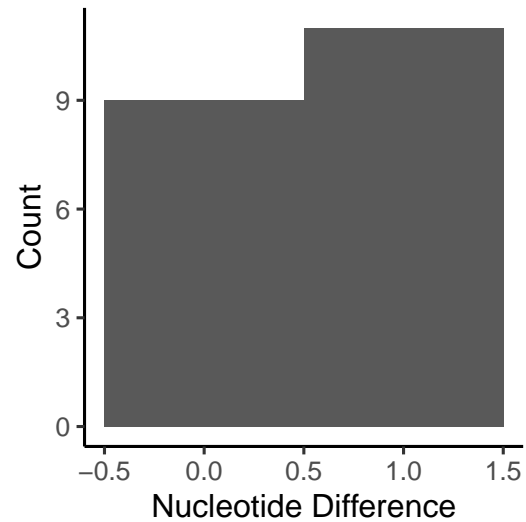
IGHV3-53*01

14 sequences assigned
13 (92.9%) exact matches, in which:
12 unique CDR3
4 unique J



IGHV3-66*01

20 sequences assigned
9 (45%) exact matches, in which:
9 unique CDR3
2 unique J



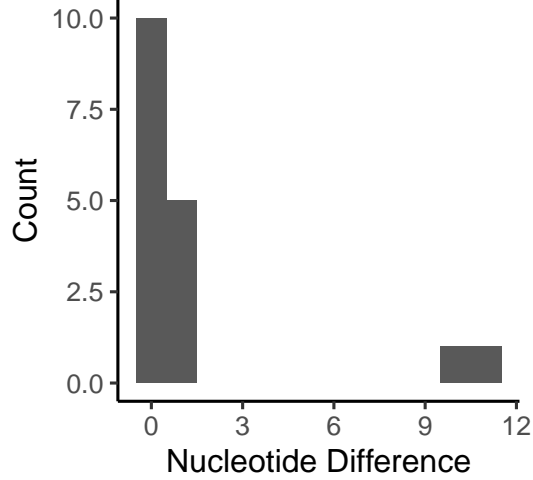
IGHV3-72*01

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



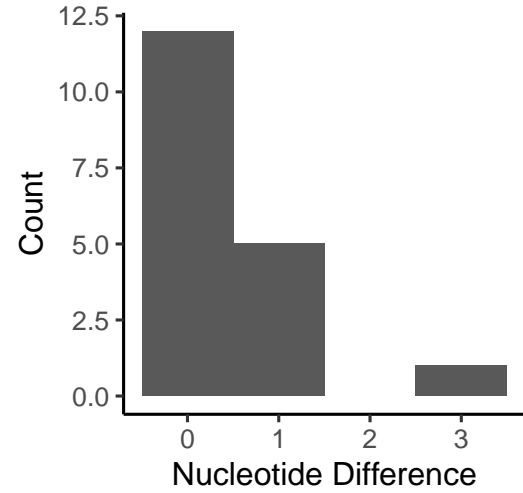
IGHV3-74*01

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



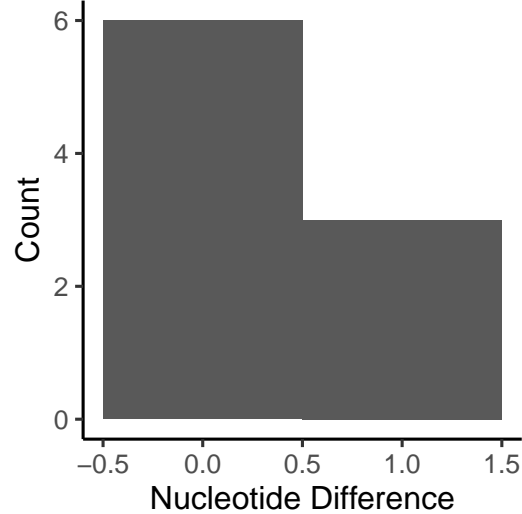
IGHV4-30-2*01

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



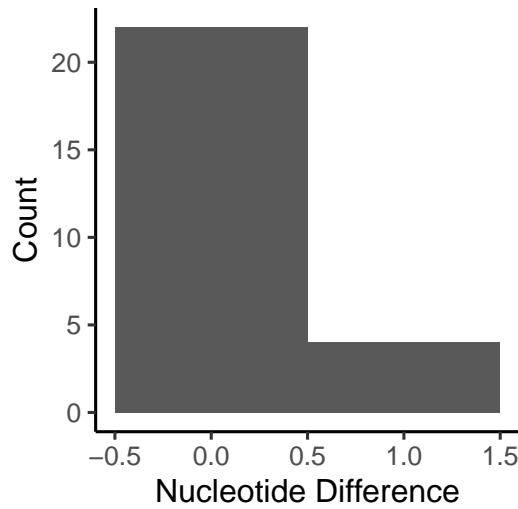
IGHV3-73*01

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



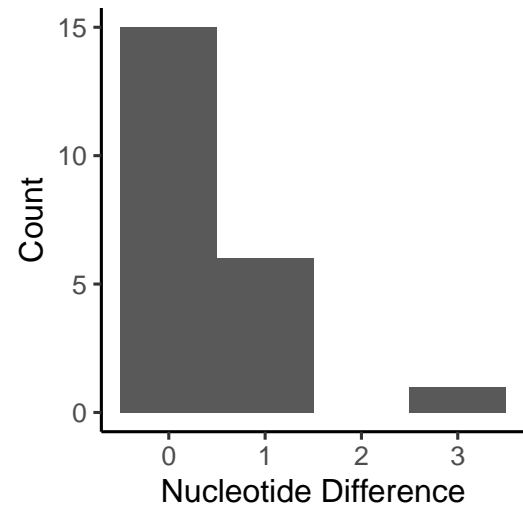
IGHV3-64D*06

26 sequences assigned
22 (84.6%) exact matches, in which:
20 unique CDR3
3 unique J



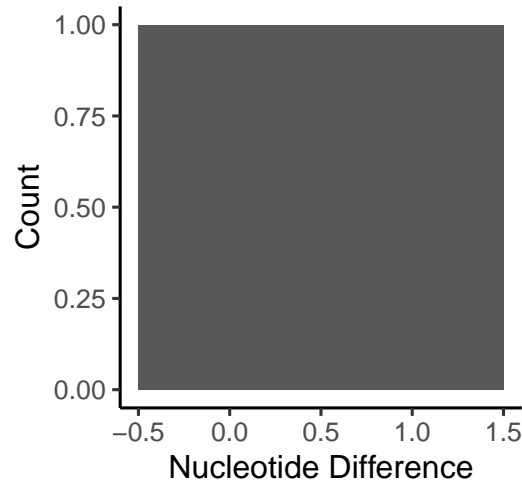
IGHV4-30-4*01

22 sequences assigned
15 (68.2%) exact matches, in which:
14 unique CDR3
5 unique J



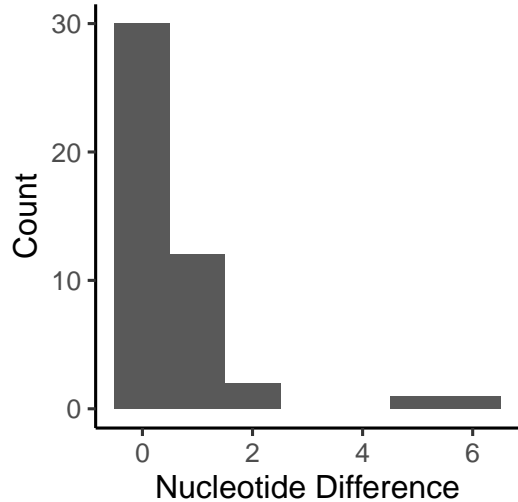
IGHV3-73*02

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



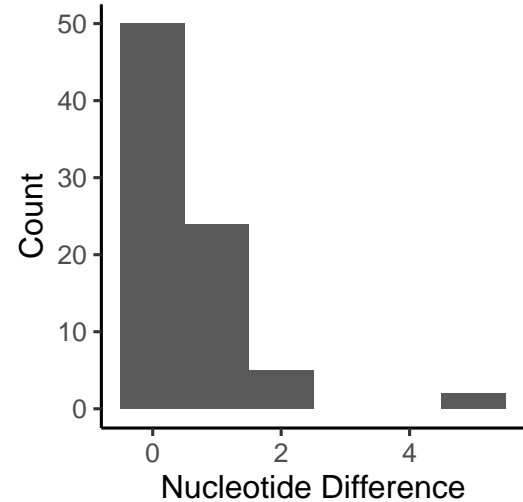
IGHV4-4*02

46 sequences assigned
30 (65.2%) exact matches, in which:
30 unique CDR3
5 unique J



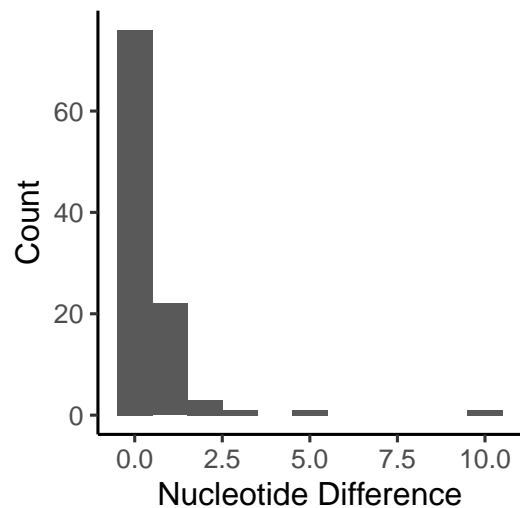
IGHV4-31*03

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



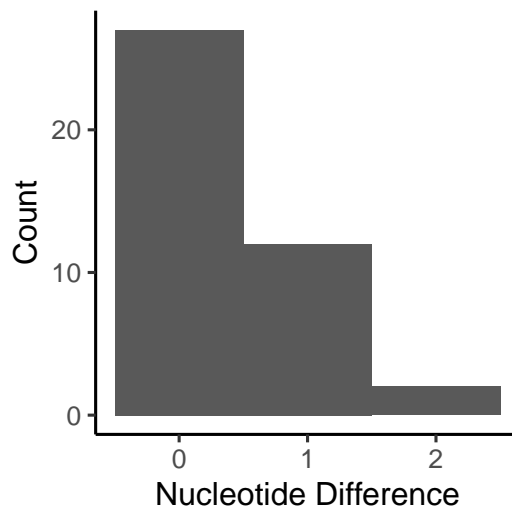
IGHV4-34*01

105 sequences assigned
76 (72.4%) exact matches, in which:
73 unique CDR3
6 unique J



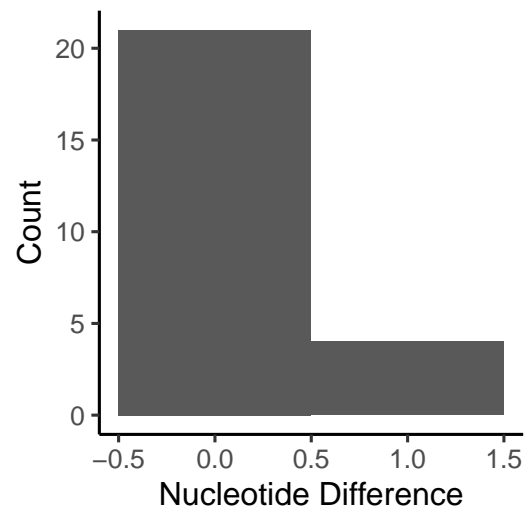
IGHV4-59*08

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



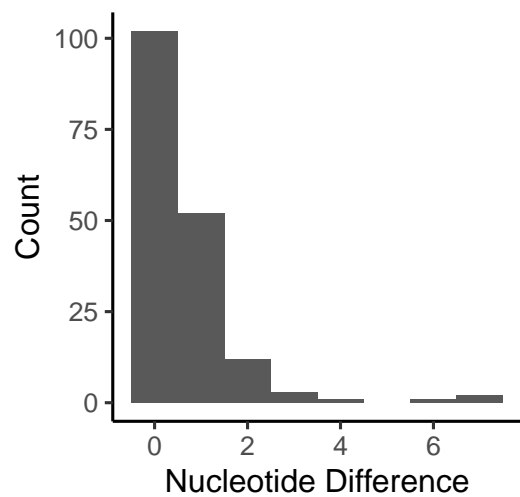
IGHV5-10-1*03

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



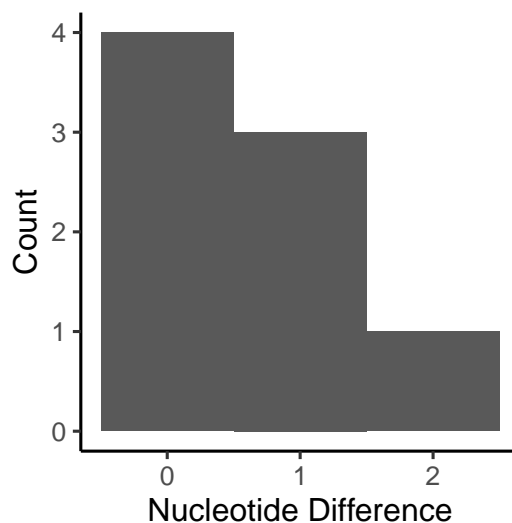
IGHV4-39*01

173 sequences assigned
102 (59%) exact matches, in which:
102 unique CDR3
7 unique J



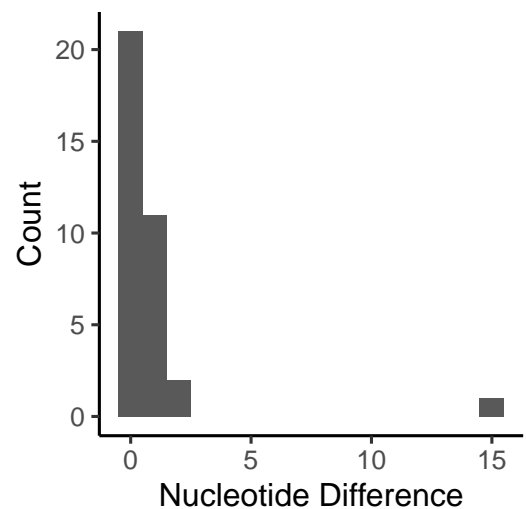
IGHV4-61*01

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



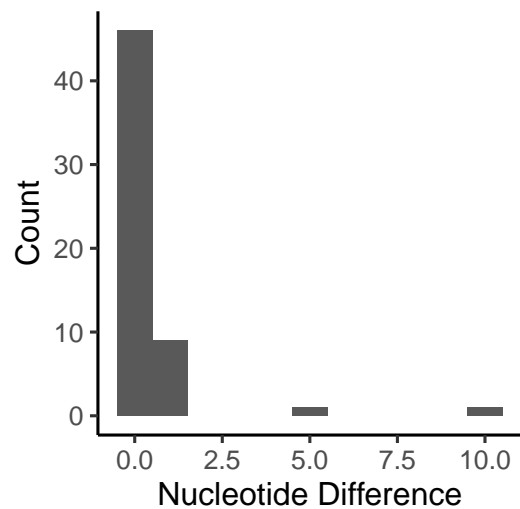
IGHV5-51*01

35 sequences assigned
21 (60%) exact matches, in which:
21 unique CDR3
6 unique J



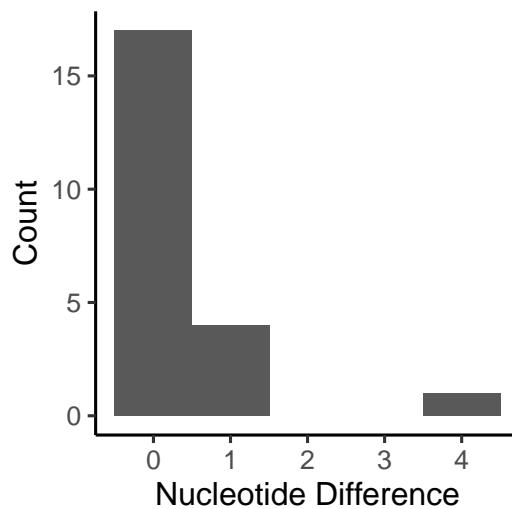
IGHV4-59*01

57 sequences assigned
46 (80.7%) exact matches, in which:
44 unique CDR3
6 unique J



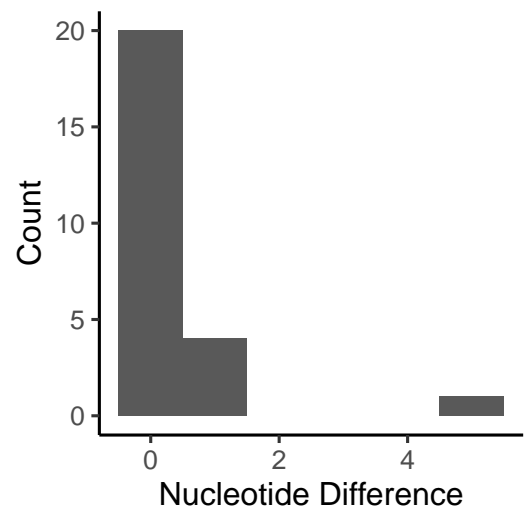
IGHV5-10-1*01

22 sequences assigned
17 (77.3%) exact matches, in which:
17 unique CDR3
4 unique J



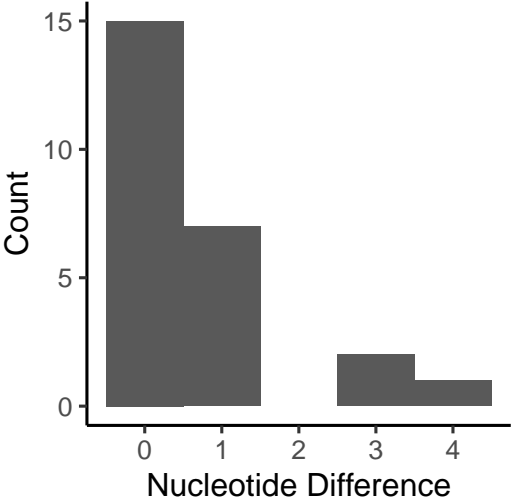
IGHV5-51*03

25 sequences assigned
20 (80%) exact matches, in which:
20 unique CDR3
4 unique J



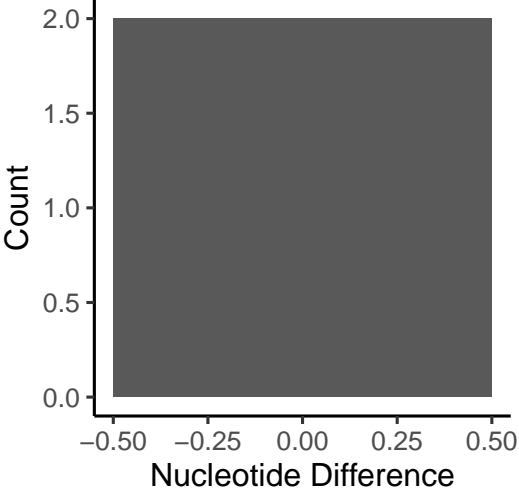
IGHV6-1*01

25 sequences assigned
15 (60%) exact matches, in which:
15 unique CDR3
6 unique J

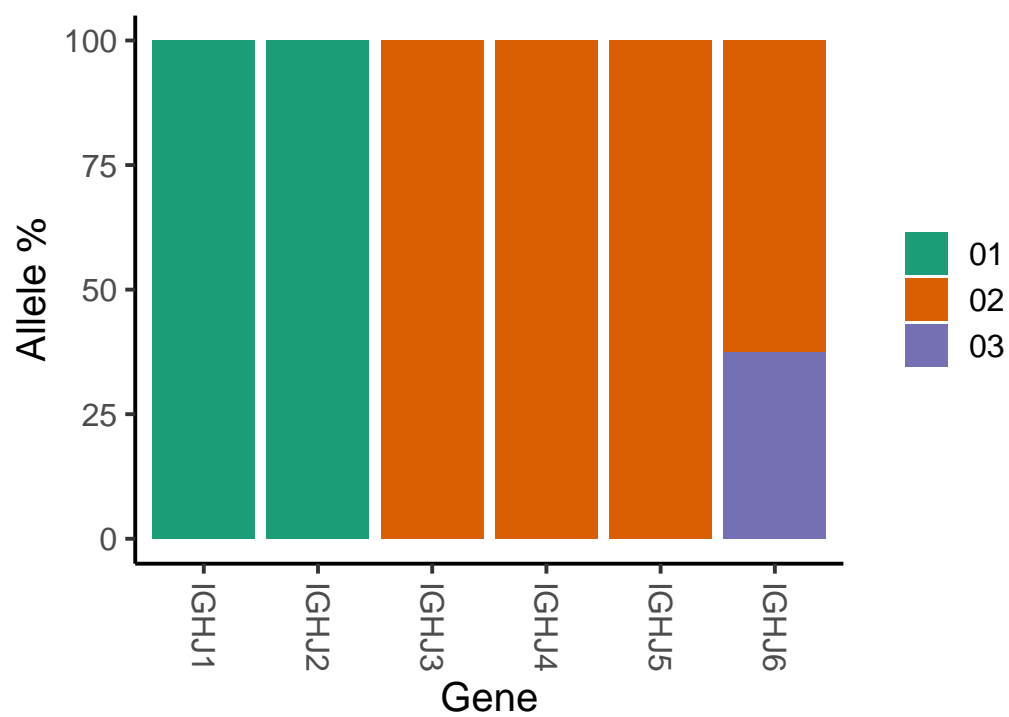


IGHV7-4-1*01

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



Allele Usage



Sequence Count by IGHJ6 allele usage

