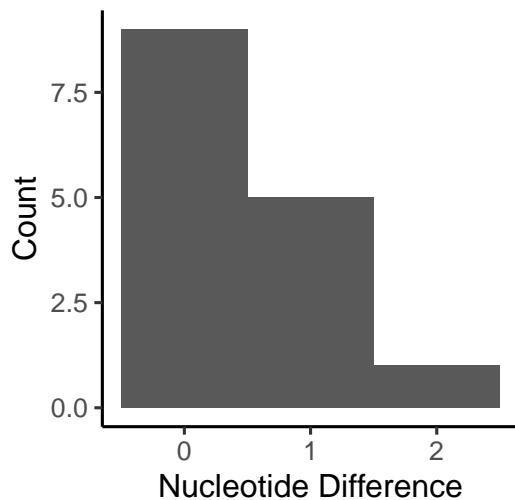


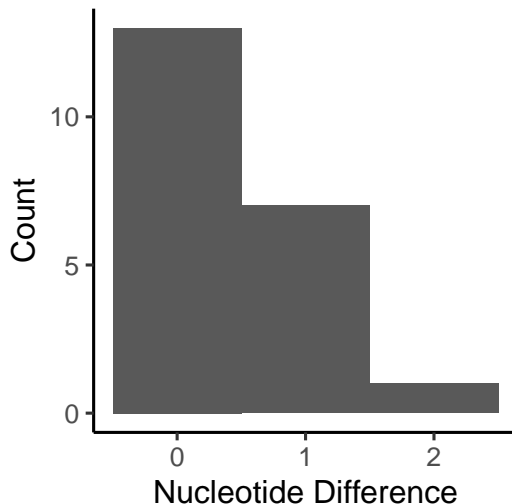
IGHV1-2*06

17 sequences assigned
9 (52.9%) exact matches, in which:
9 unique CDR3
3 unique J



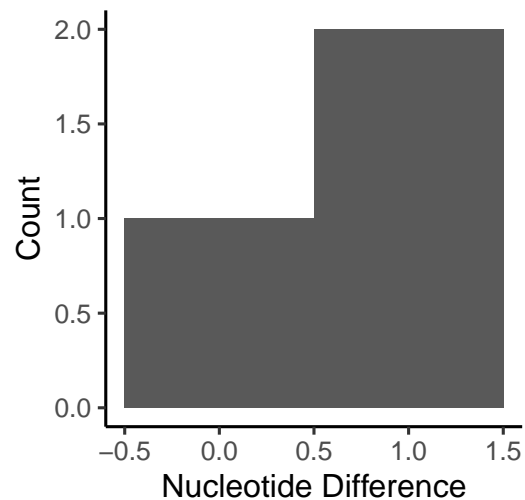
IGHV1-18*01

21 sequences assigned
13 (61.9%) exact matches, in which:
13 unique CDR3
2 unique J



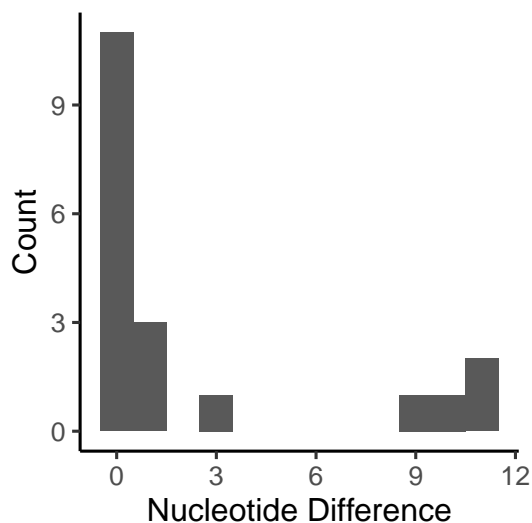
IGHV1-46*03

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



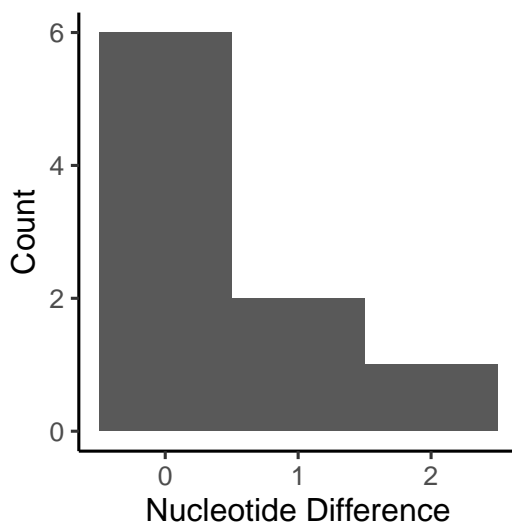
IGHV1-3*01

19 sequences assigned
11 (57.9%) exact matches, in which:
7 unique CDR3
4 unique J



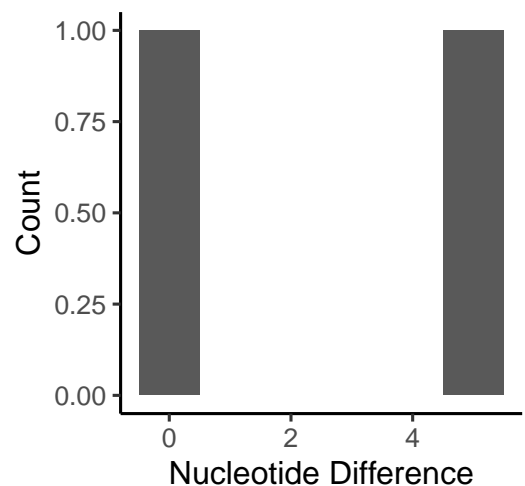
IGHV1-24*01

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



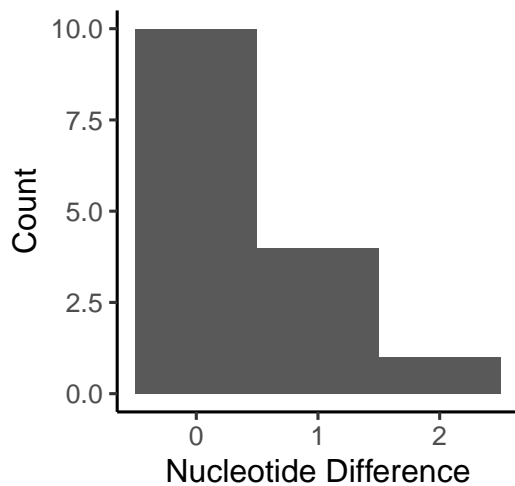
IGHV1-58*01

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



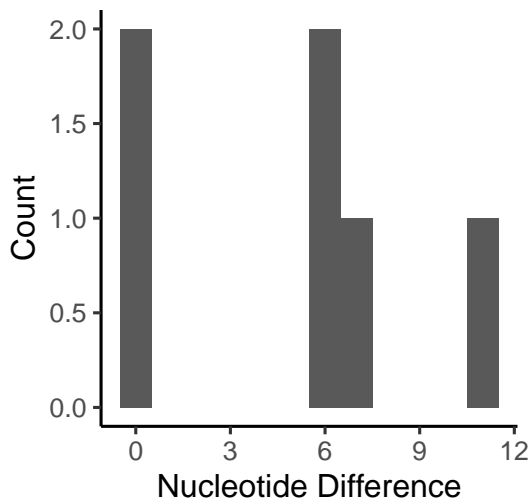
IGHV1-8*01

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



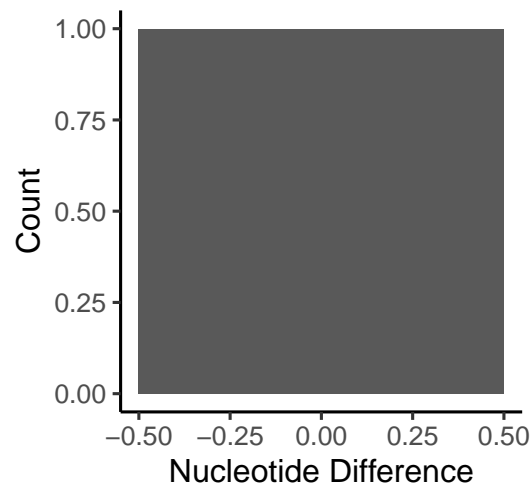
IGHV1-46*01

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
2 unique J



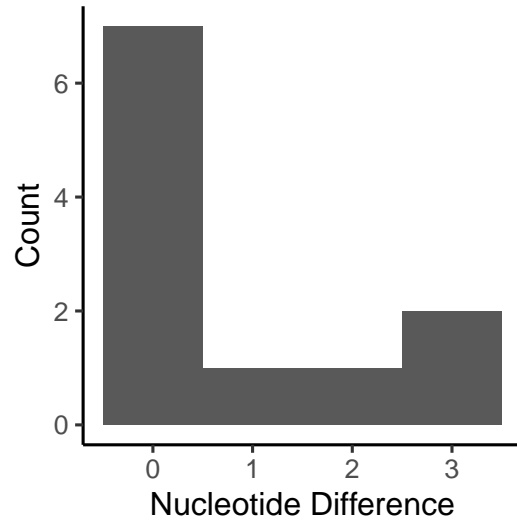
IGHV1-58*02

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



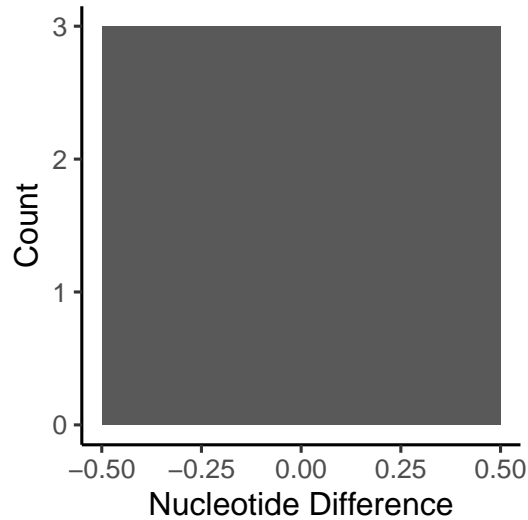
IGHV1-69*02

11 sequences assigned
7 (63.6%) exact matches, in which:
7 unique CDR3
4 unique J



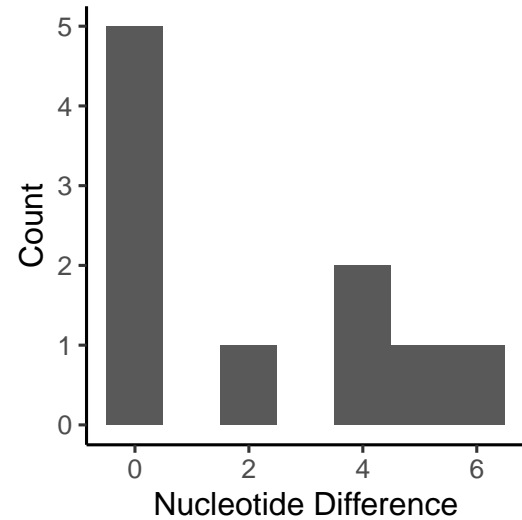
IGHV2-26*01

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



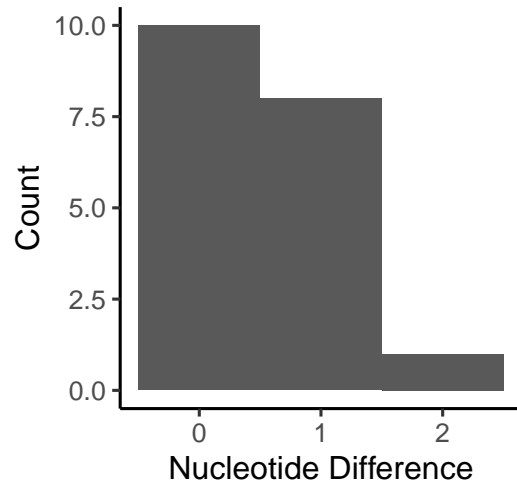
IGHV3-7*01

10 sequences assigned
5 (50%) exact matches, in which:
4 unique CDR3
3 unique J



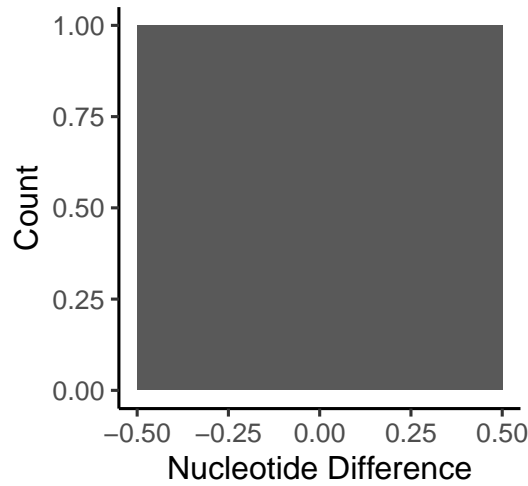
IGHV1-69*06

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



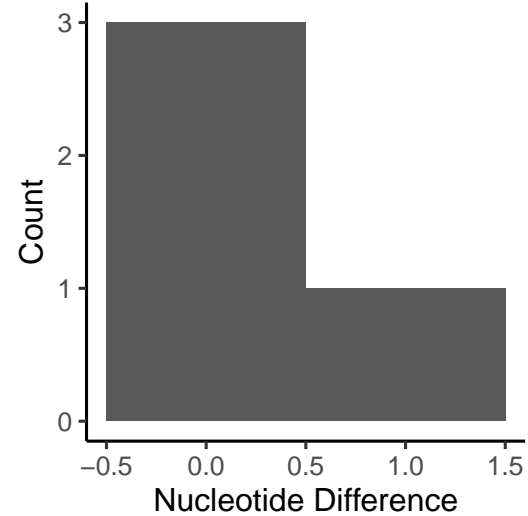
IGHV2-70*01

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



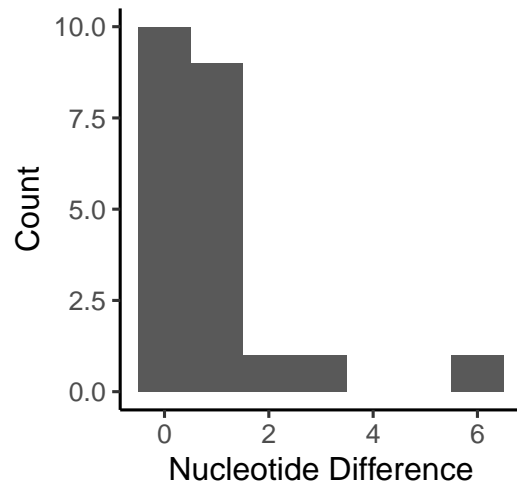
IGHV3-7*03

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



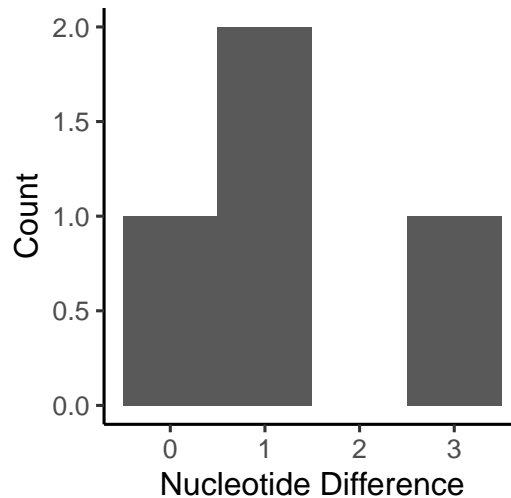
IGHV2-5*02

22 sequences assigned
10 (45.5%) exact matches, in which:
6 unique CDR3
4 unique J



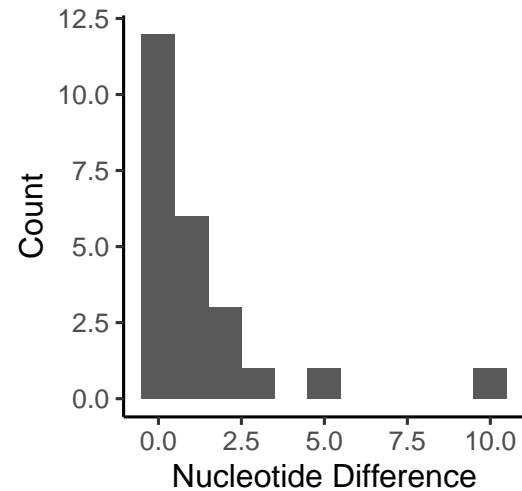
IGHV2-70*15

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



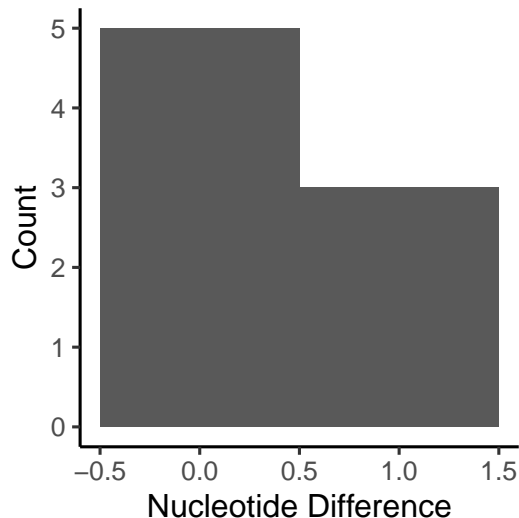
IGHV3-9*01

24 sequences assigned
12 (50%) exact matches, in which:
9 unique CDR3
3 unique J



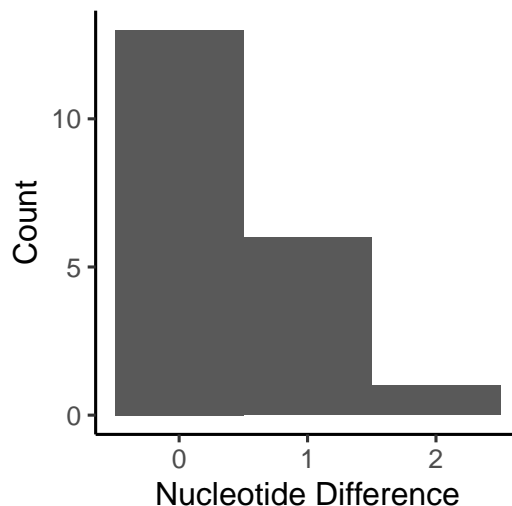
IGHV3-11*01

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



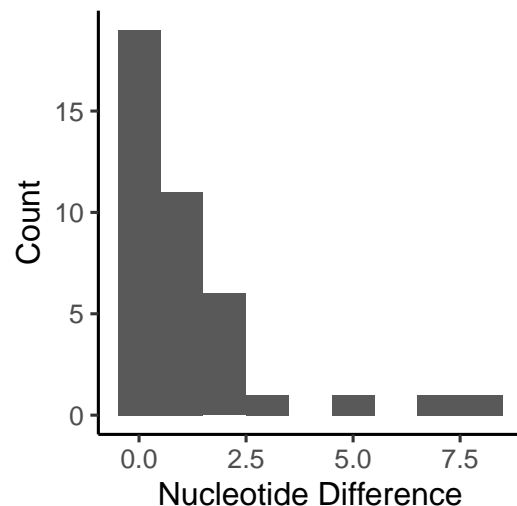
IGHV3-15*01

20 sequences assigned
13 (65%) exact matches, in which:
10 unique CDR3
3 unique J



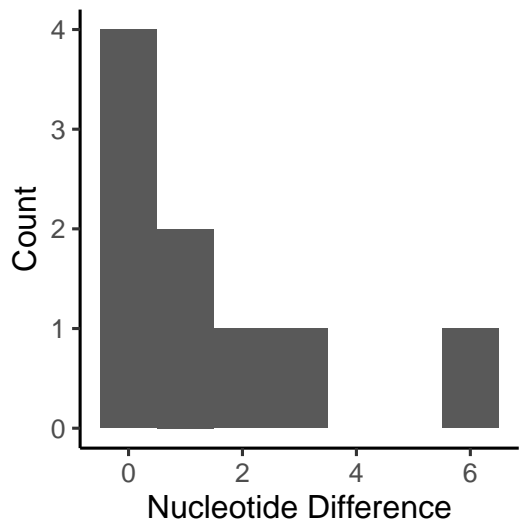
IGHV3-30-3*01

40 sequences assigned
19 (47.5%) exact matches, in which:
18 unique CDR3
6 unique J



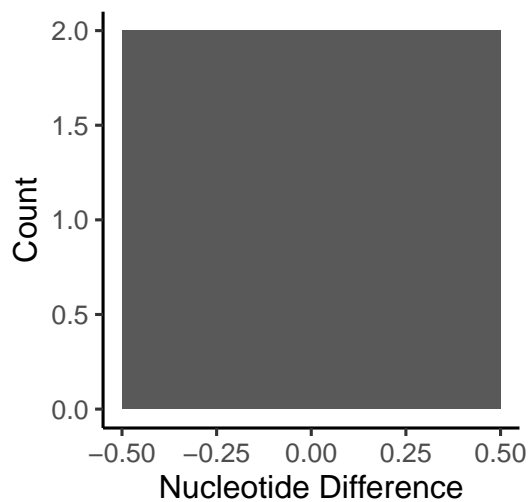
IGHV3-11*06

9 sequences assigned
4 (44.4%) exact matches, in which:
4 unique CDR3
2 unique J



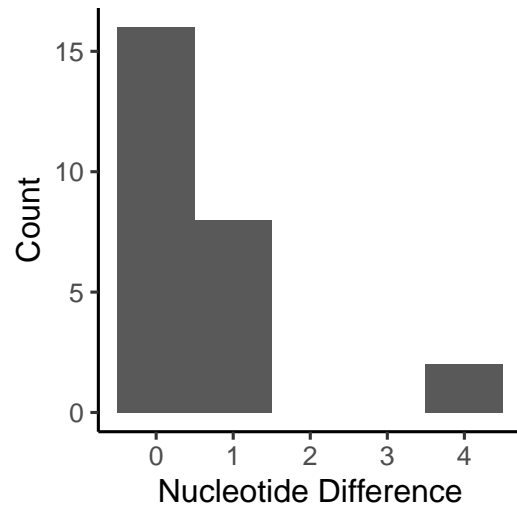
IGHV3-20*01

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



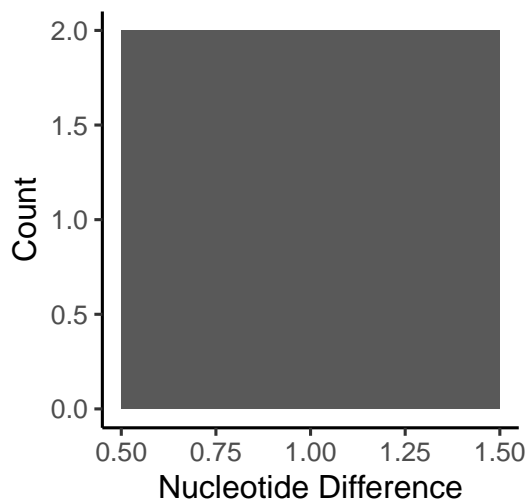
IGHV3-33*01

26 sequences assigned
16 (61.5%) exact matches, in which:
15 unique CDR3
4 unique J



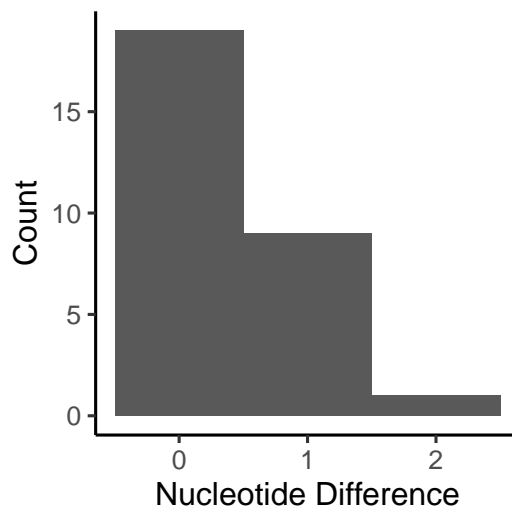
IGHV3-13*01

2 sequences assigned
No exact matches.



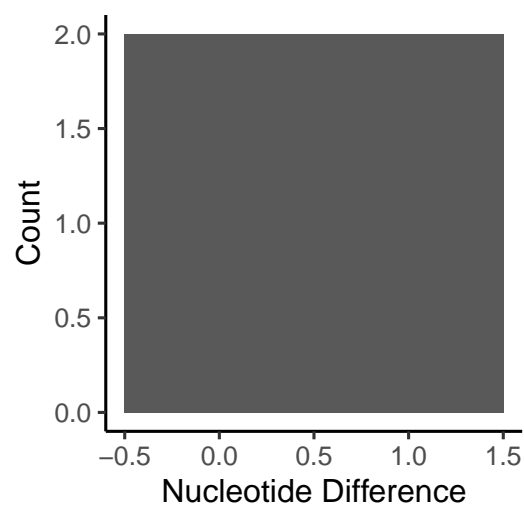
IGHV3-21*01

29 sequences assigned
19 (65.5%) exact matches, in which:
16 unique CDR3
5 unique J



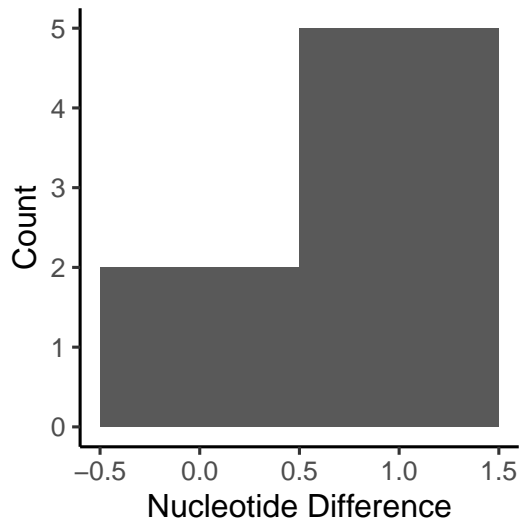
IGHV3-43*01

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



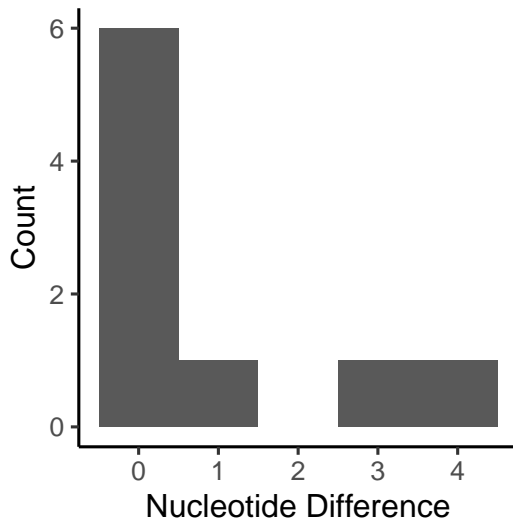
IGHV3-48*01

7 sequences assigned
2 (28.6%) exact matches, in which:
2 unique CDR3
2 unique J



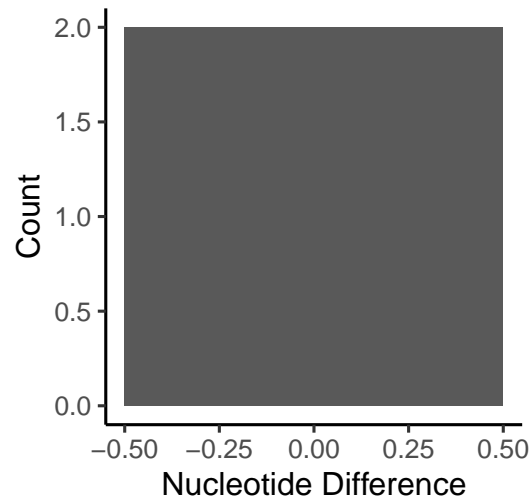
IGHV3-53*01

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



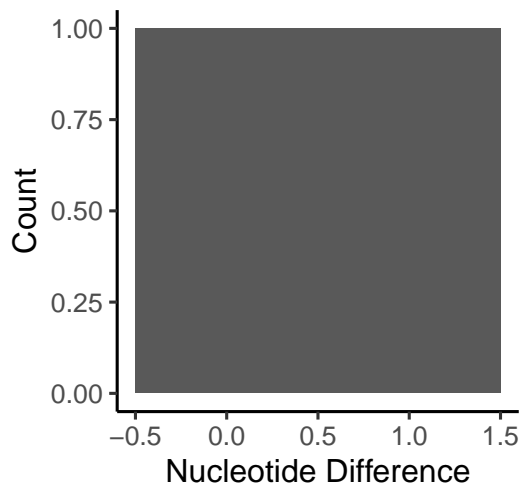
IGHV3-66*01

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



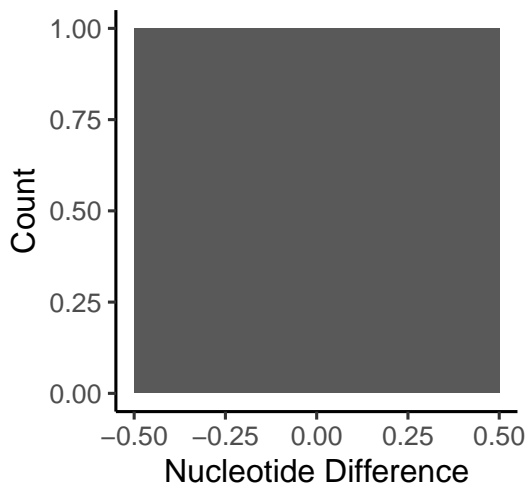
IGHV3-48*02

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



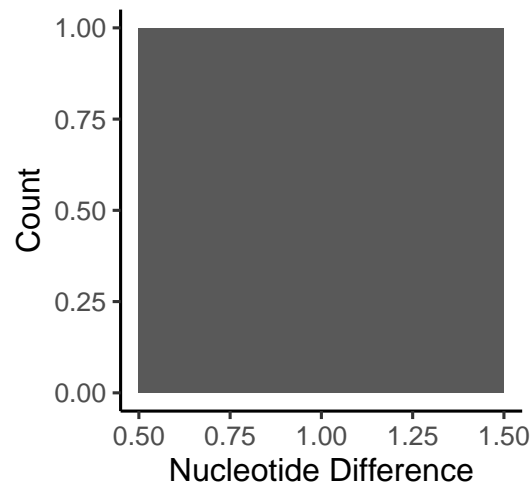
IGHV3-53*04

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



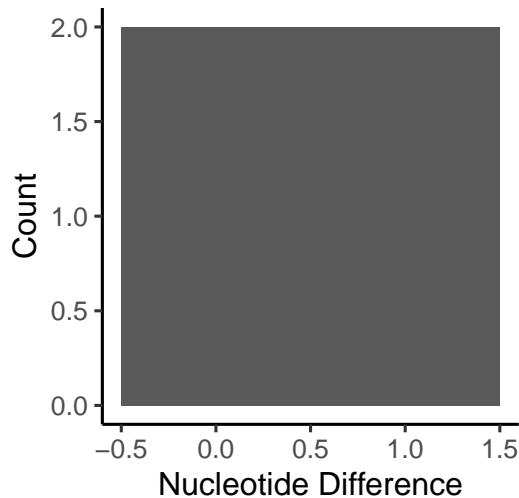
IGHV3-72*01

1 sequences assigned
No exact matches.



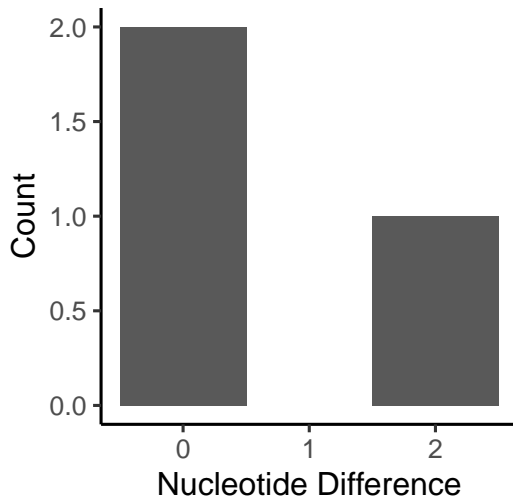
IGHV3-49*05

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



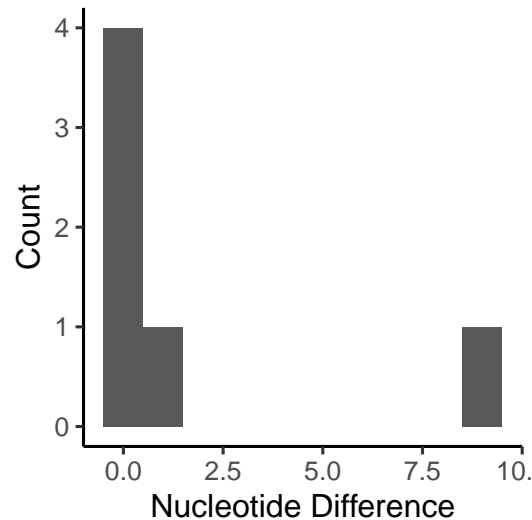
IGHV3-64*01

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



IGHV3-74*01

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



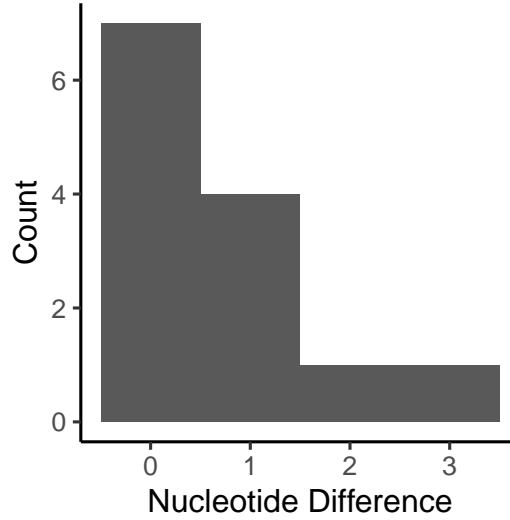
IGHV3-64D*06

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



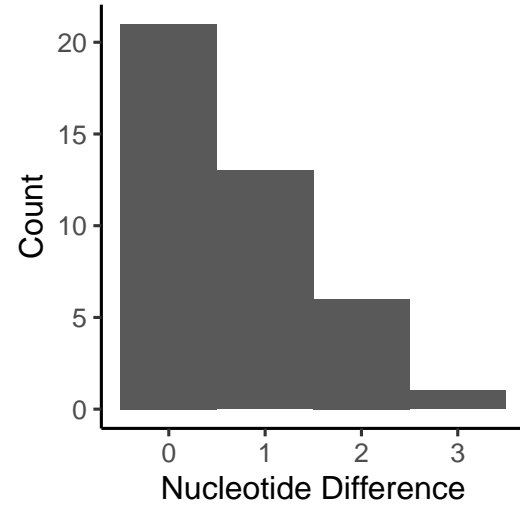
IGHV4-30-4*01

13 sequences assigned
7 (53.8%) exact matches, in which:
5 unique CDR3
2 unique J



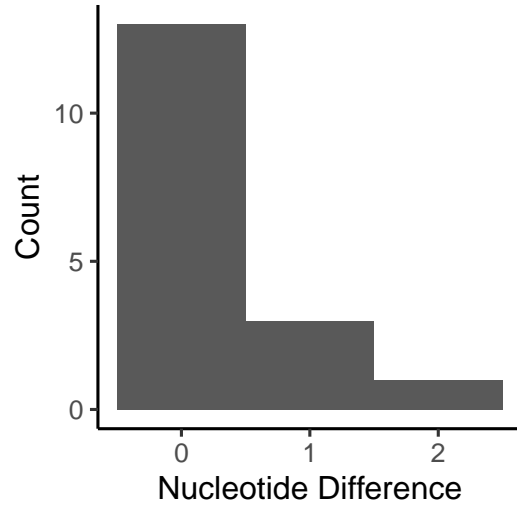
IGHV4-39*01

41 sequences assigned
21 (51.2%) exact matches, in which:
19 unique CDR3
7 unique J



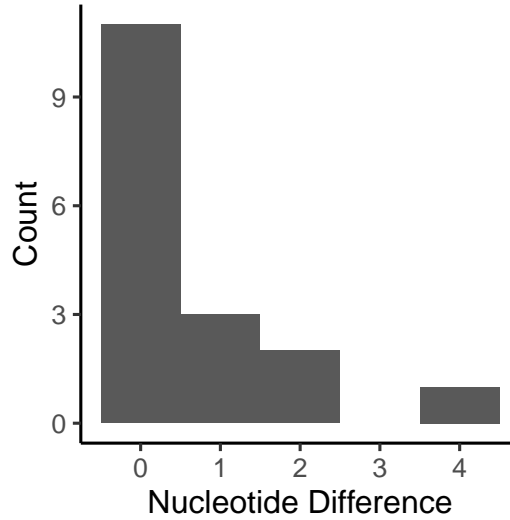
IGHV4-4*02

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



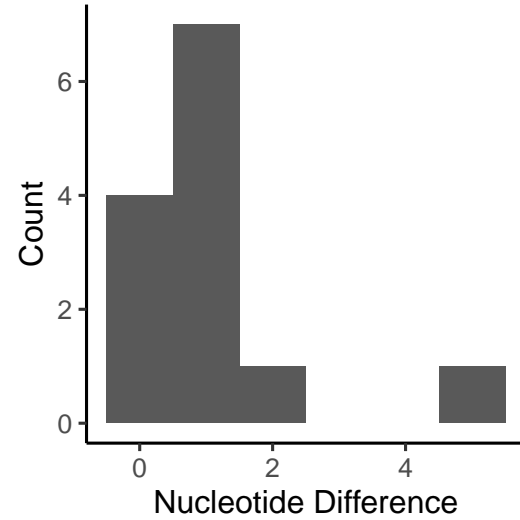
IGHV4-31*03

17 sequences assigned
11 (64.7%) exact matches, in which:
8 unique CDR3
4 unique J



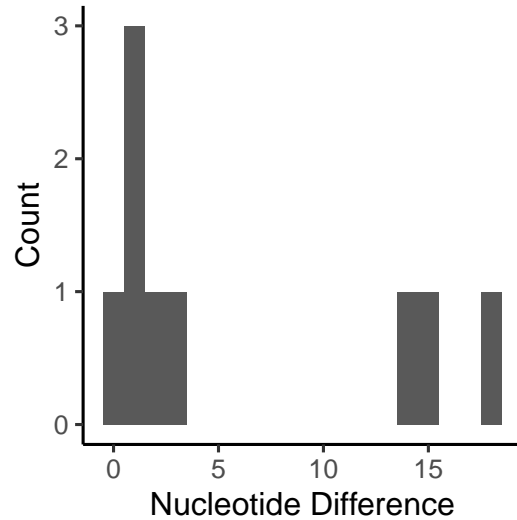
IGHV4-59*01

13 sequences assigned
4 (30.8%) exact matches, in which:
4 unique CDR3
4 unique J



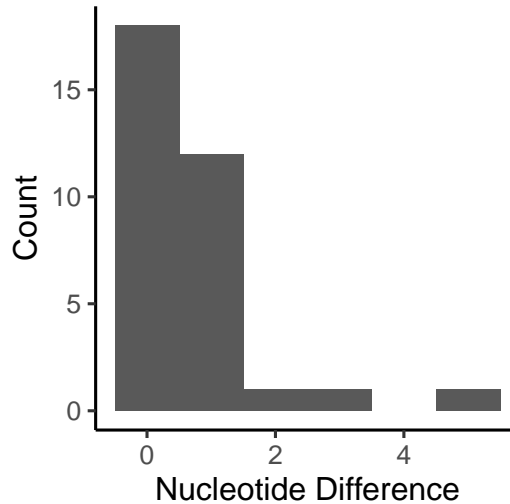
IGHV4-30-2*01

9 sequences assigned
1 (11.1%) exact matches, in which:
1 unique CDR3
1 unique J



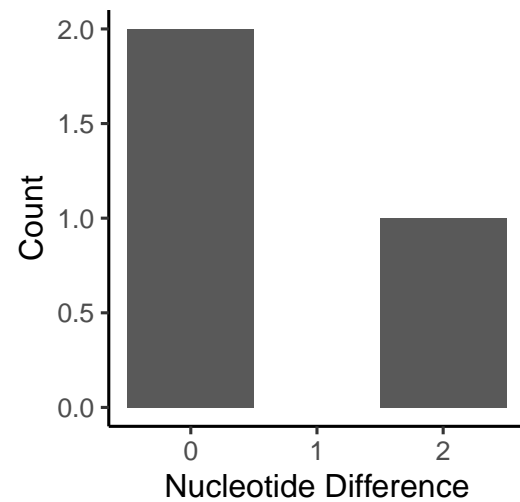
IGHV4-34*01

33 sequences assigned
18 (54.5%) exact matches, in which:
18 unique CDR3
6 unique J



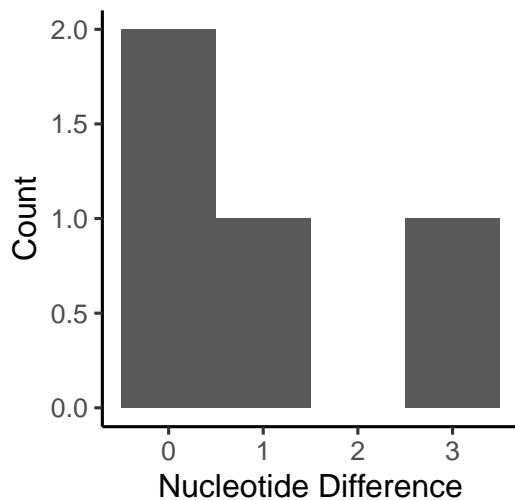
IGHV4-59*08

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



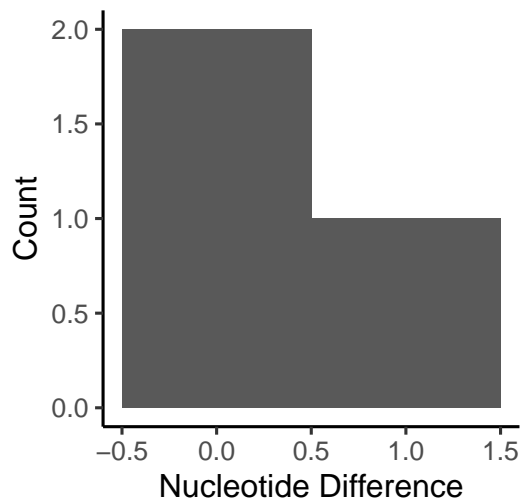
IGHV4-61*01

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



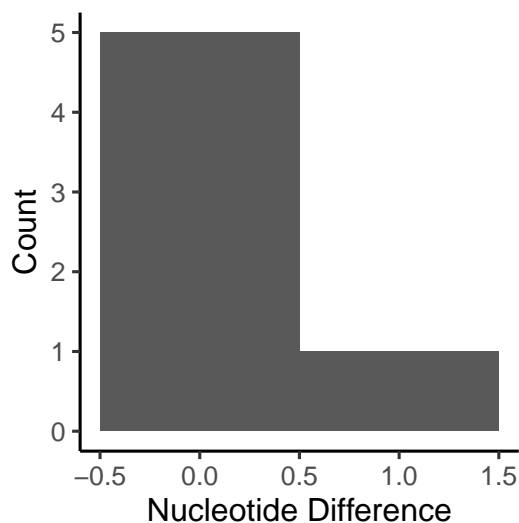
IGHV5-51*03

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



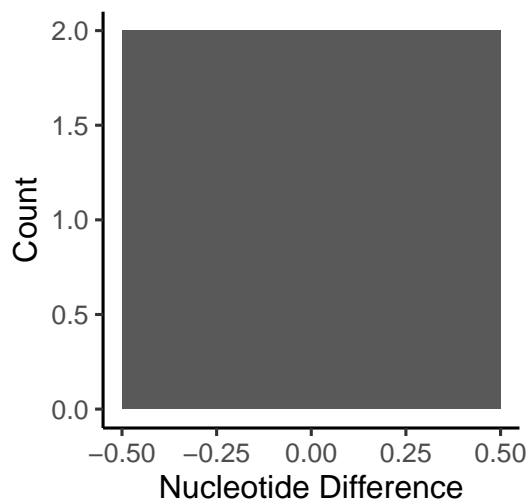
IGHV5-10-1*03

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



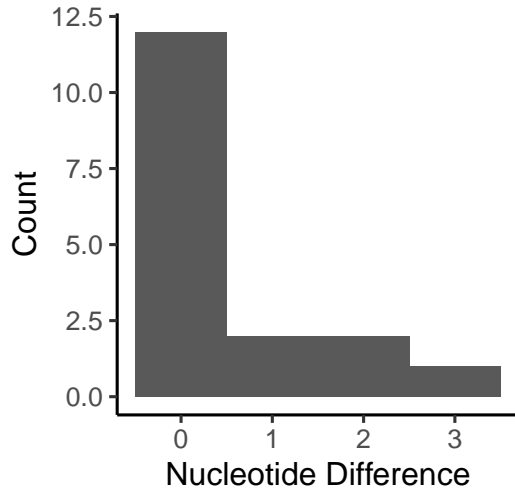
IGHV6-1*01

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



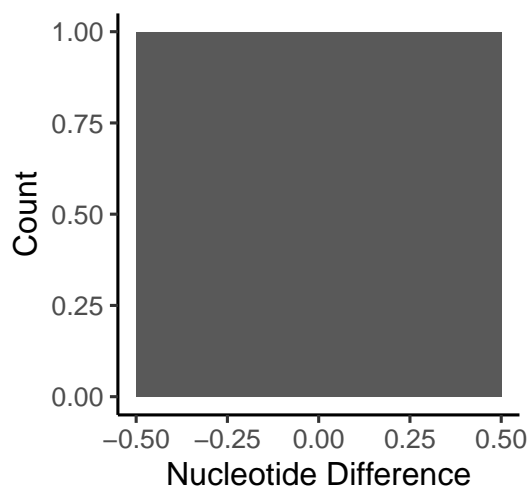
IGHV5-51*01

17 sequences assigned
12 (70.6%) exact matches, in which:
7 unique CDR3
2 unique J

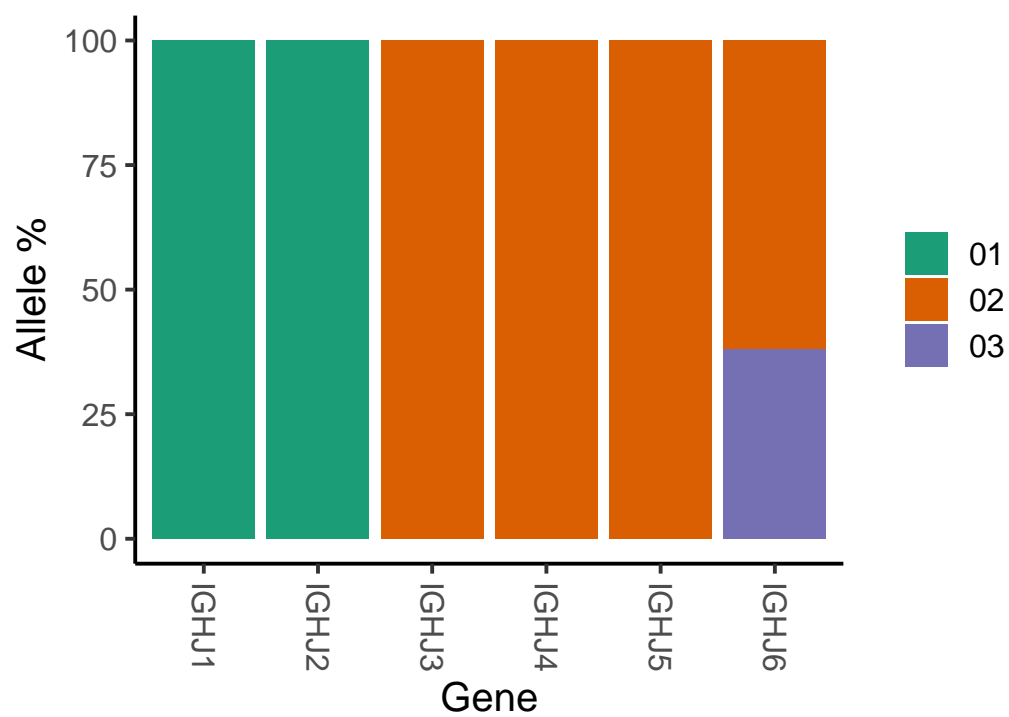


IGHV7-4-1*02

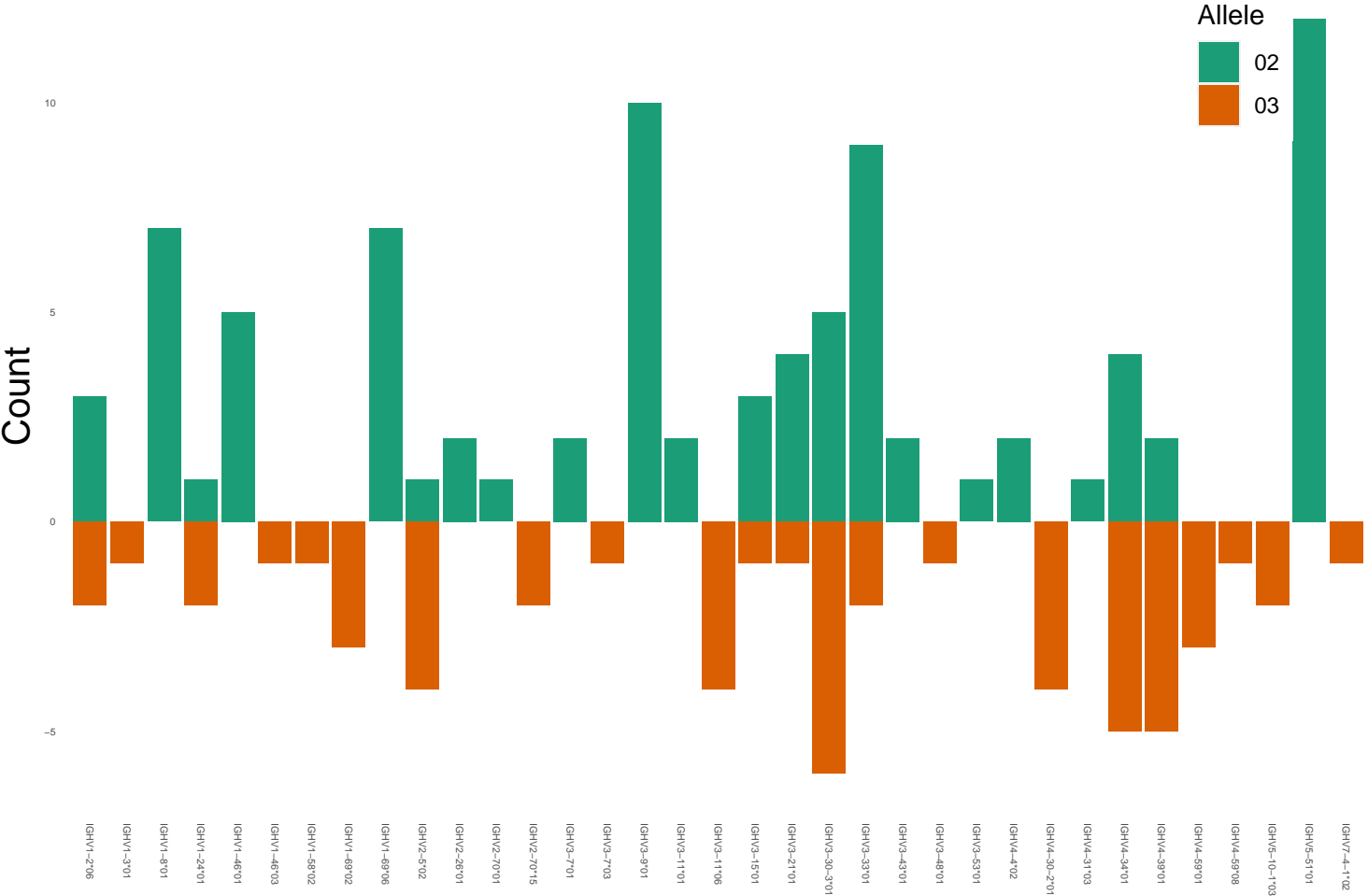
1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]