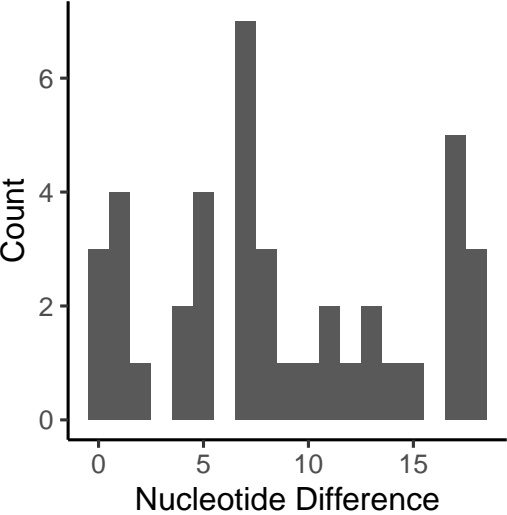


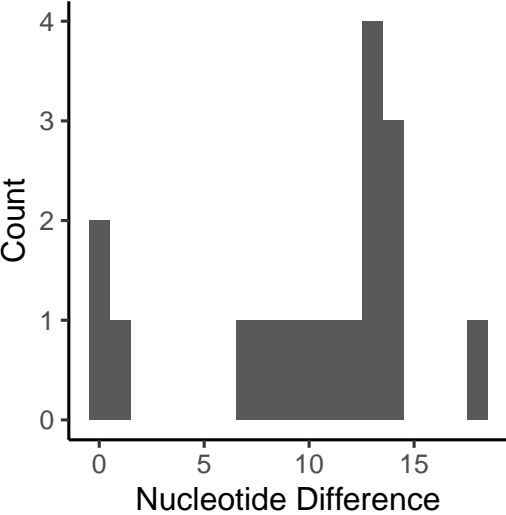
IGHV1-2*02

45 sequences assigned
3 (6.7%) exact matches, in which:
3 unique CDR3
2 unique J



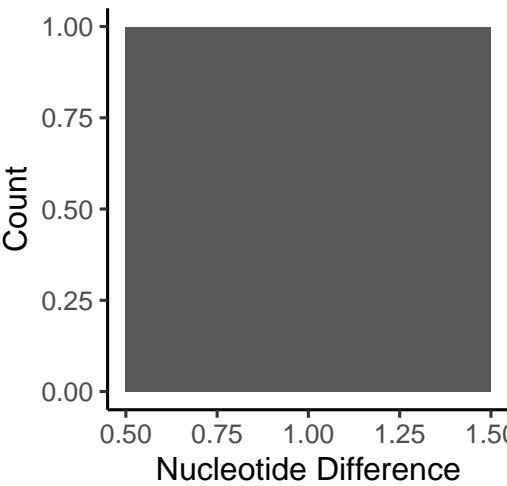
IGHV1-18*01

24 sequences assigned
2 (8.3%) exact matches, in which:
2 unique CDR3
2 unique J



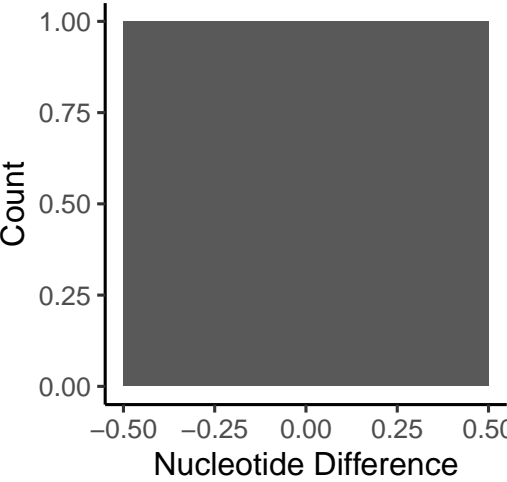
IGHV1-46*03

1 sequences assigned
No exact matches.



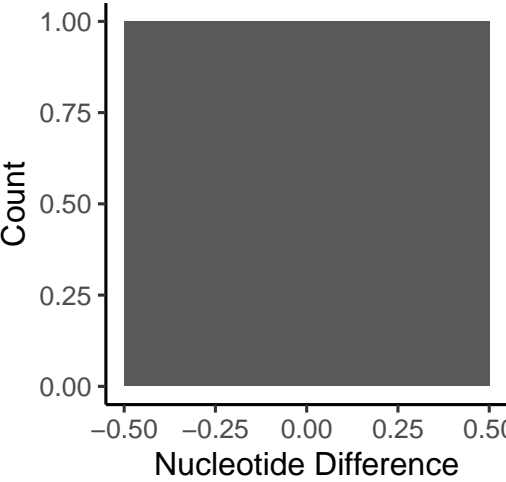
IGHV1-3*01

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



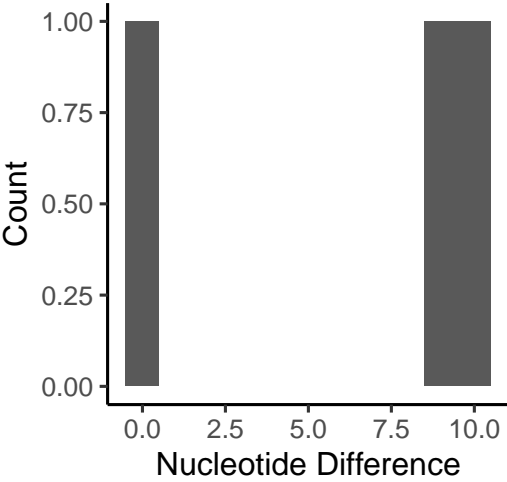
IGHV1-24*01

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



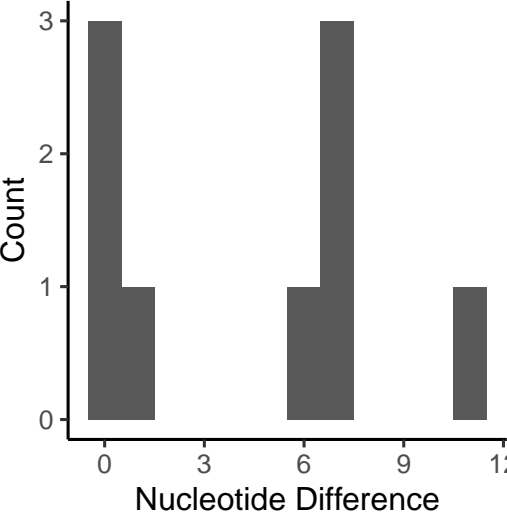
IGHV1-58*01

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



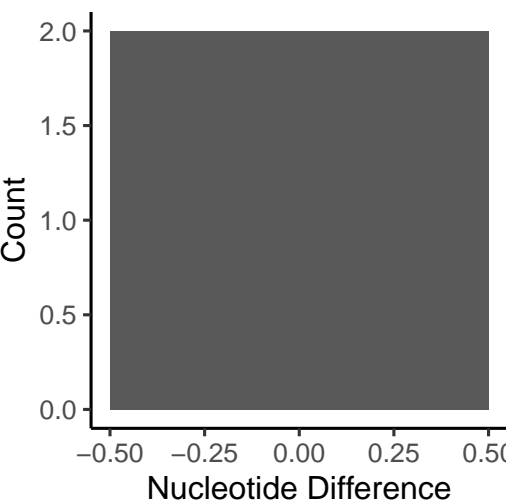
IGHV1-8*01

12 sequences assigned
3 (25%) exact matches, in which:
3 unique CDR3
2 unique J



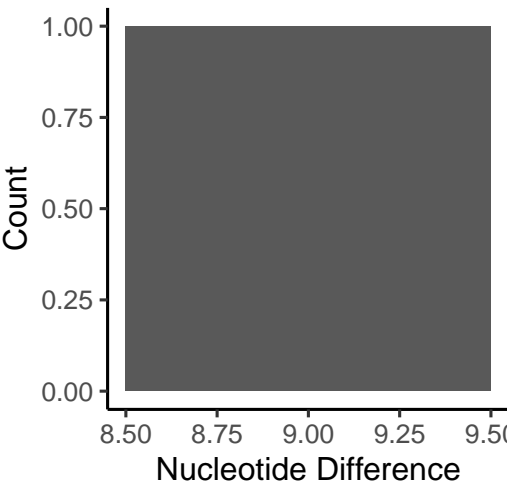
IGHV1-46*01

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



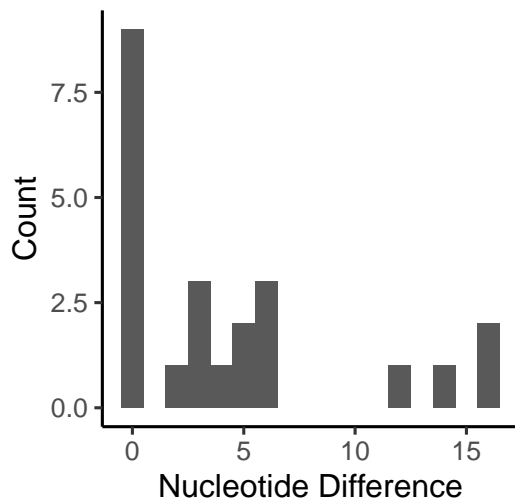
IGHV1-58*02

1 sequences assigned
No exact matches.



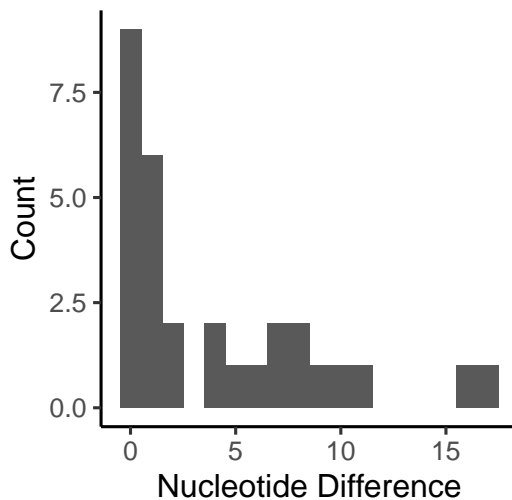
IGHV2-5*01

24 sequences assigned
9 (37.5%) exact matches, in which:
9 unique CDR3
4 unique J



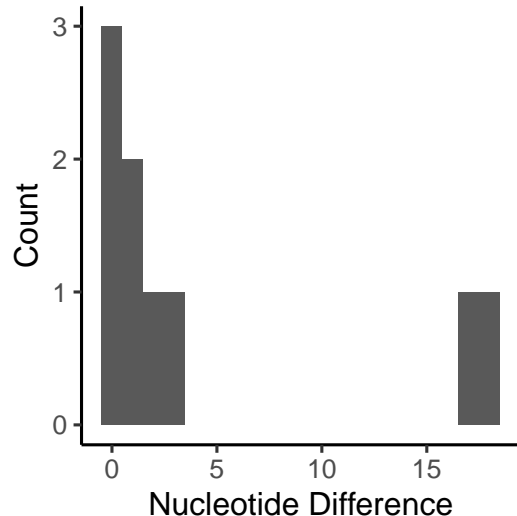
IGHV3-9*01

37 sequences assigned
9 (24.3%) exact matches, in which:
9 unique CDR3
4 unique J



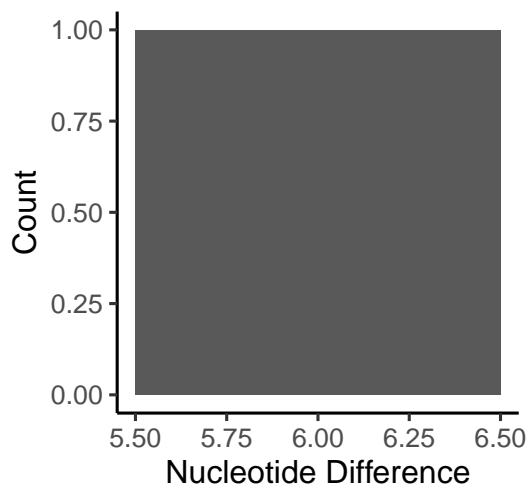
IGHV3-15*01

13 sequences assigned
3 (23.1%) exact matches, in which:
3 unique CDR3
1 unique J



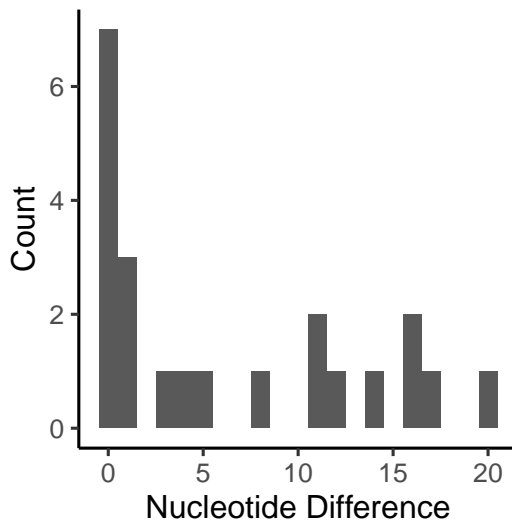
IGHV2-26*01

4 sequences assigned
No exact matches.



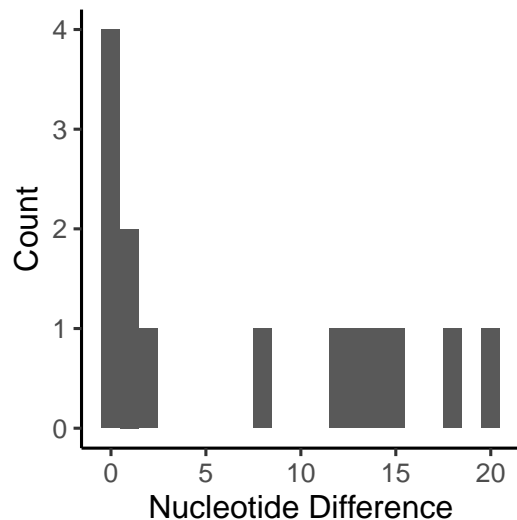
IGHV3-11*01

23 sequences assigned
7 (30.4%) exact matches, in which:
7 unique CDR3
4 unique J



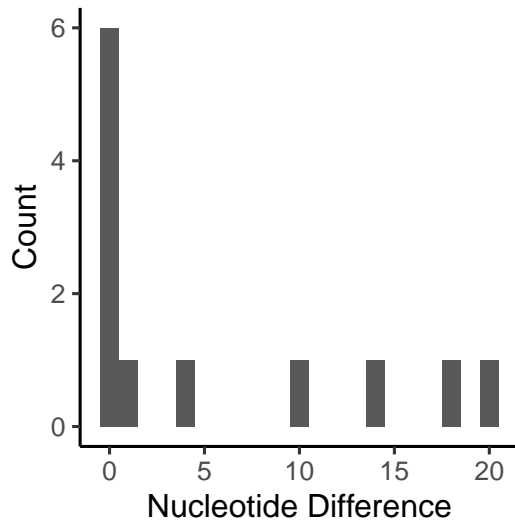
IGHV3-21*01

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



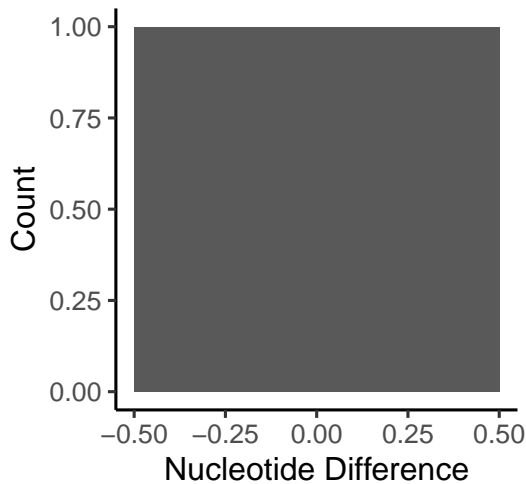
IGHV3-7*01

16 sequences assigned
6 (37.5%) exact matches, in which:
6 unique CDR3
4 unique J



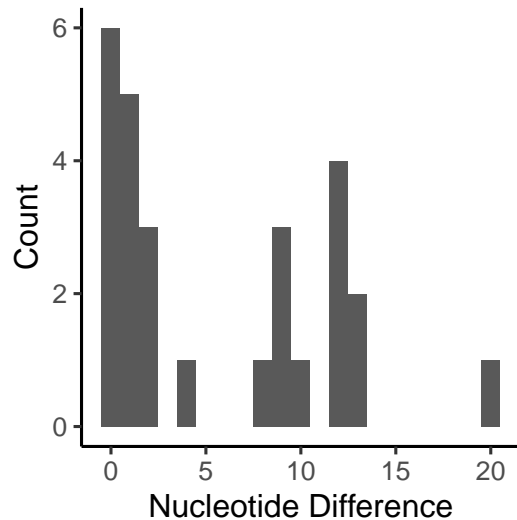
IGHV3-13*01

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



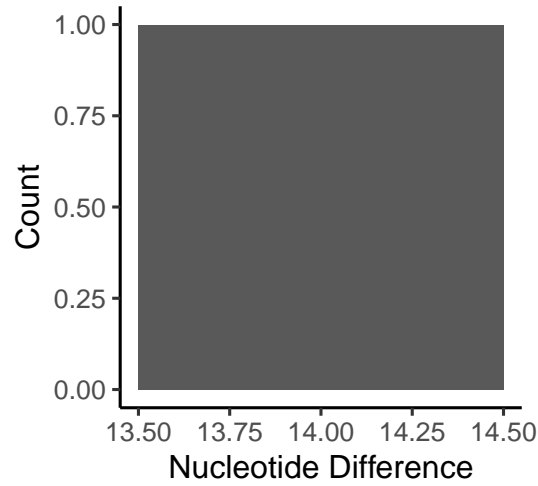
IGHV3-30-3*01

30 sequences assigned
6 (20%) exact matches, in which:
6 unique CDR3
4 unique J



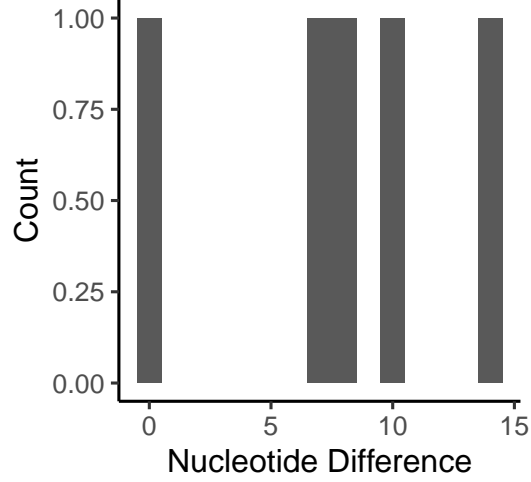
IGHV3-30*04

3 sequences assigned
No exact matches.



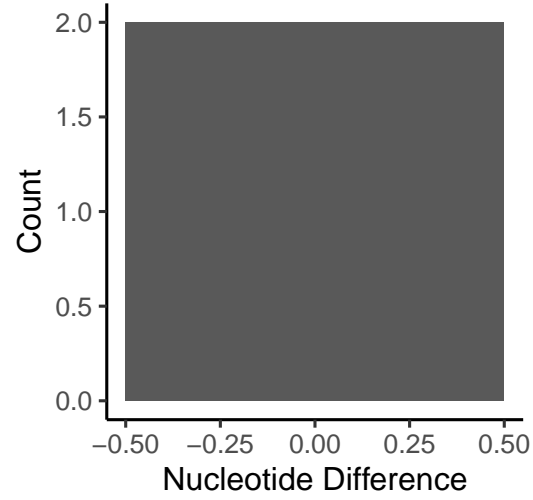
IGHV3-48*01

5 sequences assigned
1 (20%) exact matches, in which:
1 unique CDR3
1 unique J



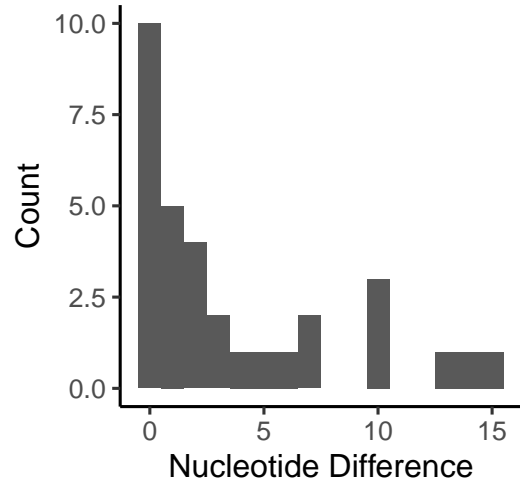
IGHV3-49*05

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



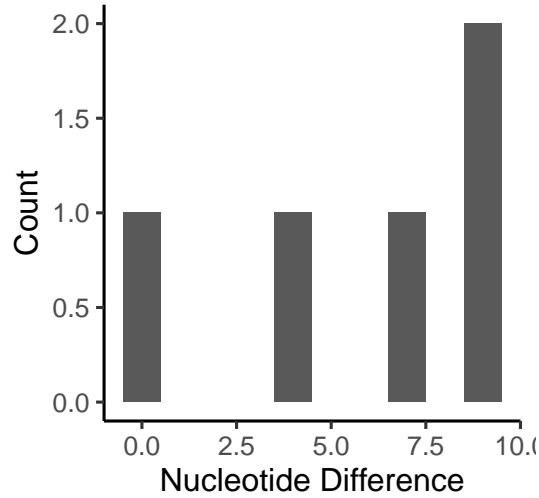
IGHV3-33*01

34 sequences assigned
10 (29.4%) exact matches, in which:
10 unique CDR3
4 unique J



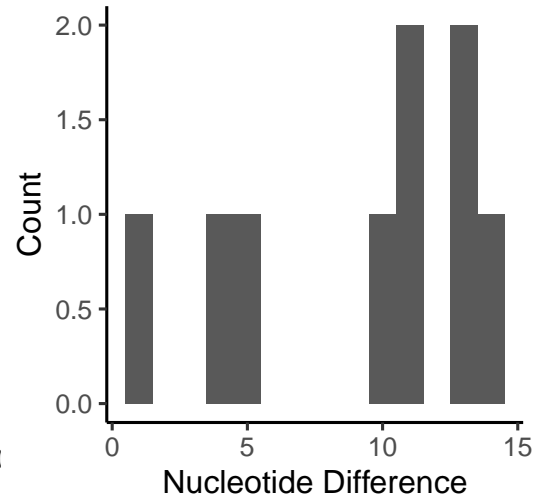
IGHV3-48*02

5 sequences assigned
1 (20%) exact matches, in which:
1 unique CDR3
1 unique J



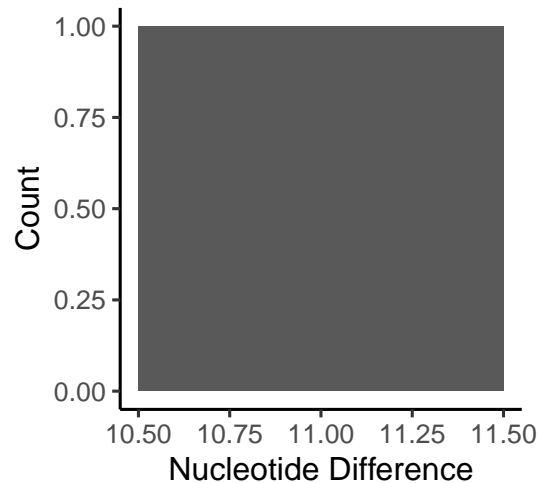
IGHV3-53*01

11 sequences assigned
No exact matches.



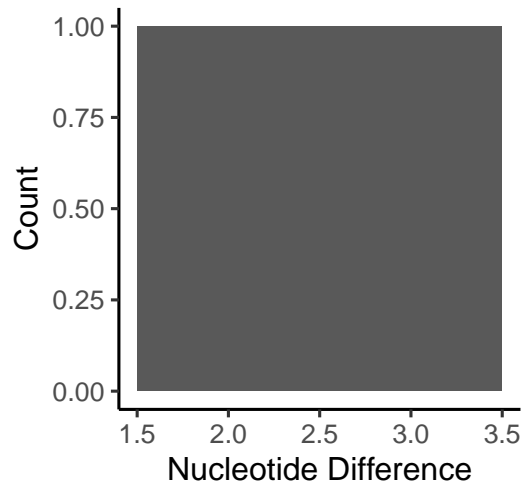
IGHV3-43*01

1 sequences assigned
No exact matches.



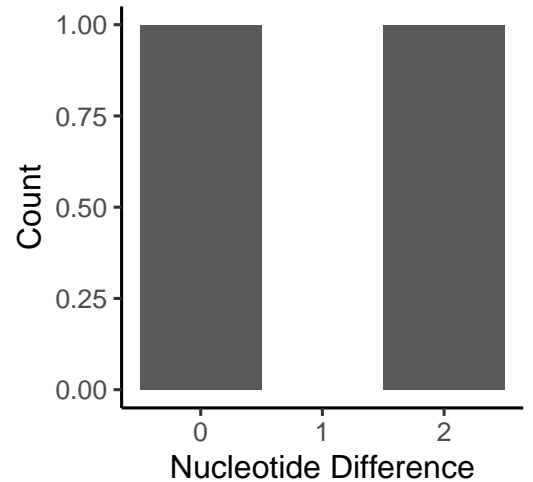
IGHV3-49*03

2 sequences assigned
No exact matches.



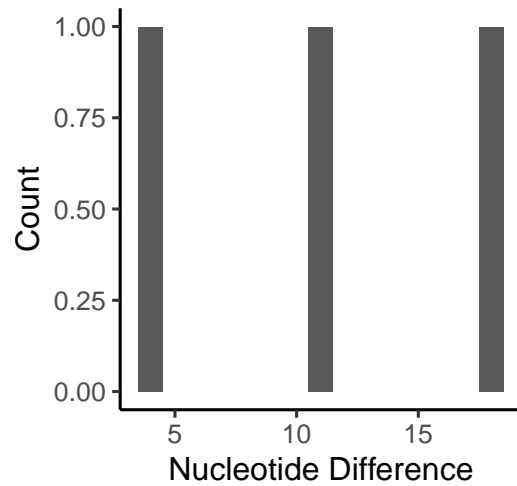
IGHV3-53*02

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



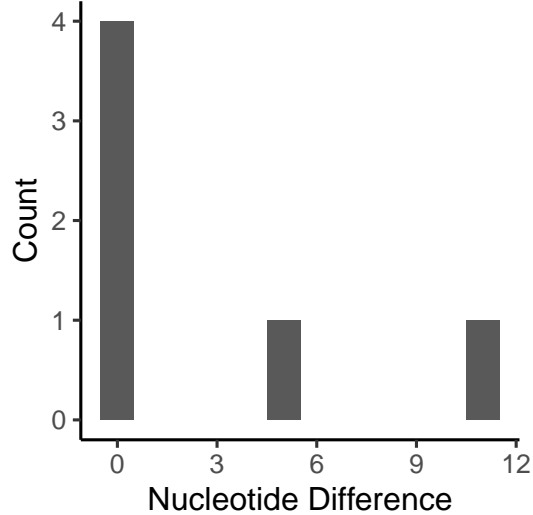
IGHV3-72*01

5 sequences assigned
No exact matches.



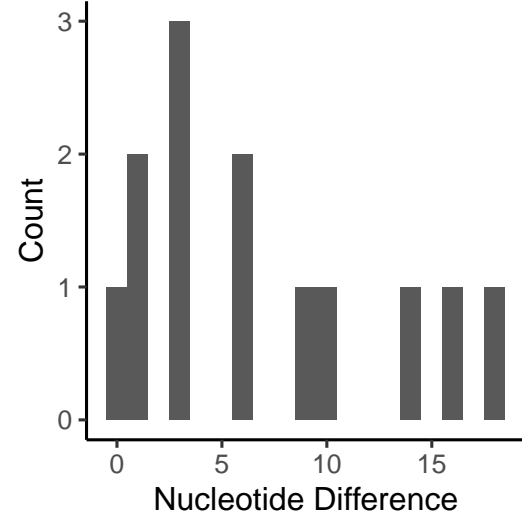
IGHV4-4*07

7 sequences assigned
4 (57.1%) exact matches, in which:
4 unique CDR3
2 unique J



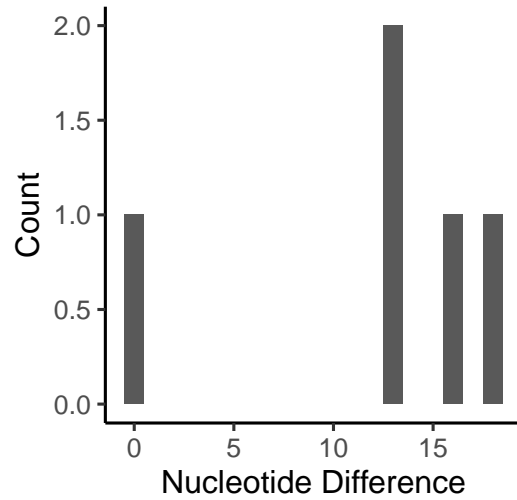
IGHV4-31*03

17 sequences assigned
1 (5.9%) exact matches, in which:
1 unique CDR3
1 unique J



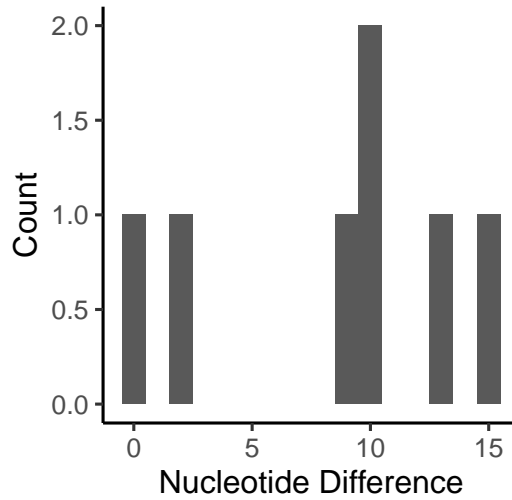
IGHV3-73*02

8 sequences assigned
1 (12.5%) exact matches, in which:
1 unique CDR3
1 unique J



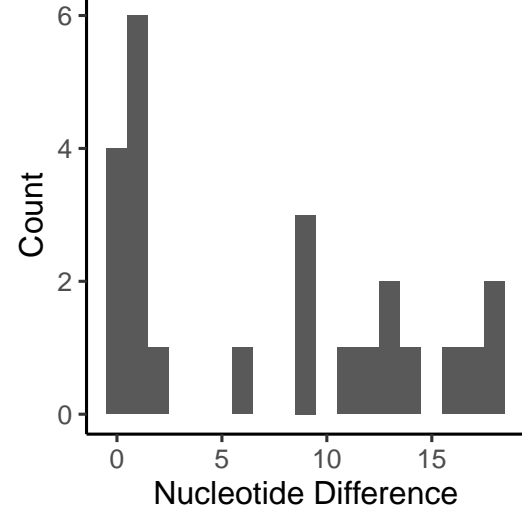
IGHV4-30-4*01

7 sequences assigned
1 (14.3%) exact matches, in which:
1 unique CDR3
1 unique J



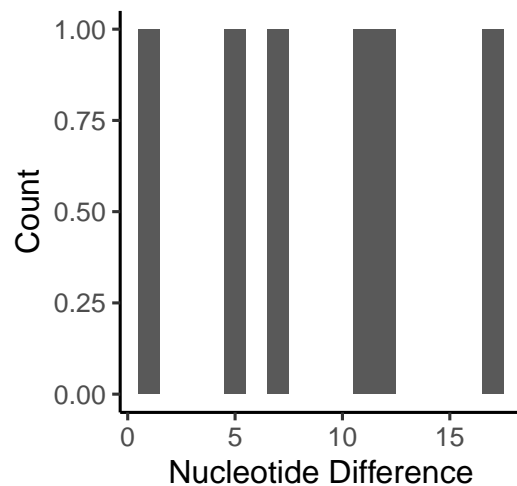
IGHV4-34*01

30 sequences assigned
4 (13.3%) exact matches, in which:
4 unique CDR3
3 unique J



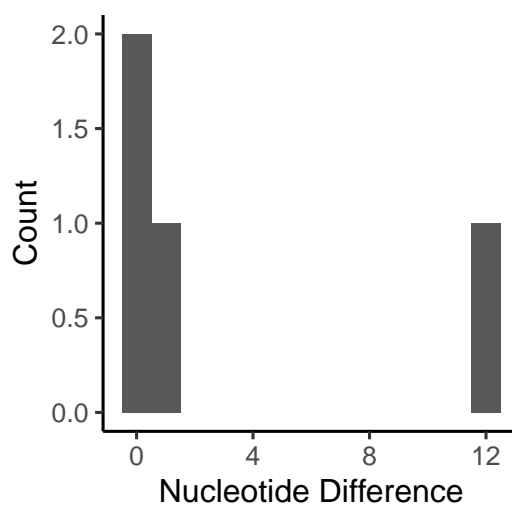
IGHV3-74*01

6 sequences assigned
No exact matches.



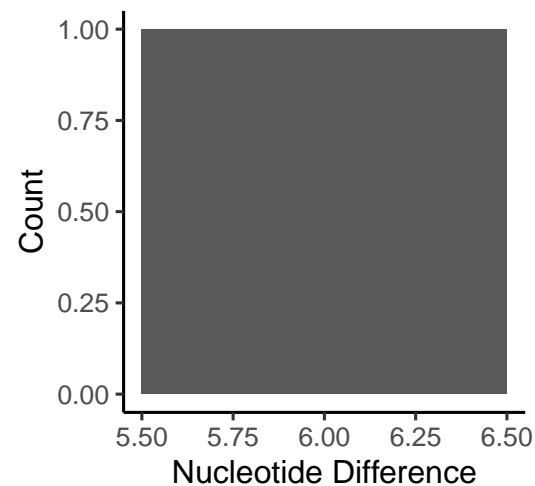
IGHV4-30-2*01

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



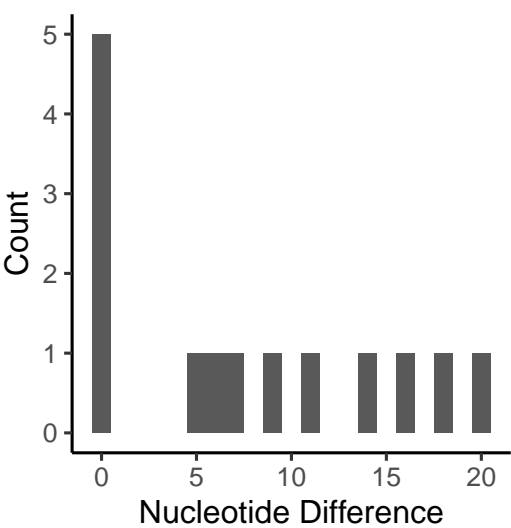
IGHV4-34*02

8 sequences assigned
No exact matches.



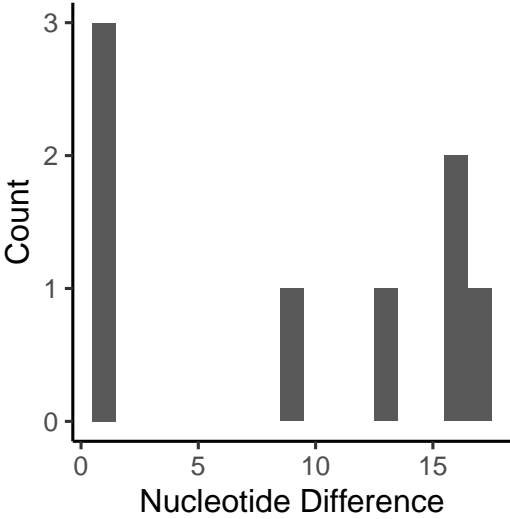
IGHV4-39*01

17 sequences assigned
5 (29.4%) exact matches, in which:
5 unique CDR3
3 unique J



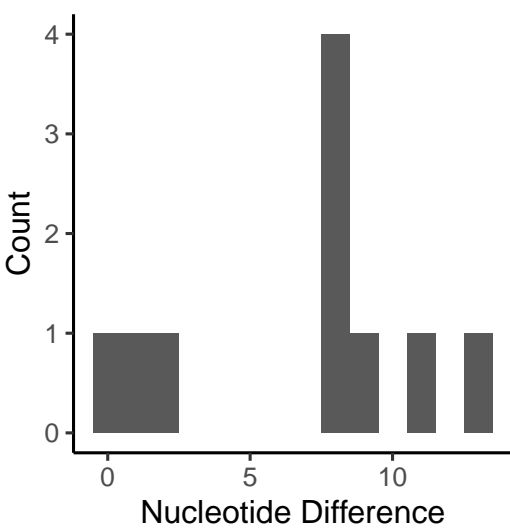
IGHV4-61*02

10 sequences assigned
No exact matches.



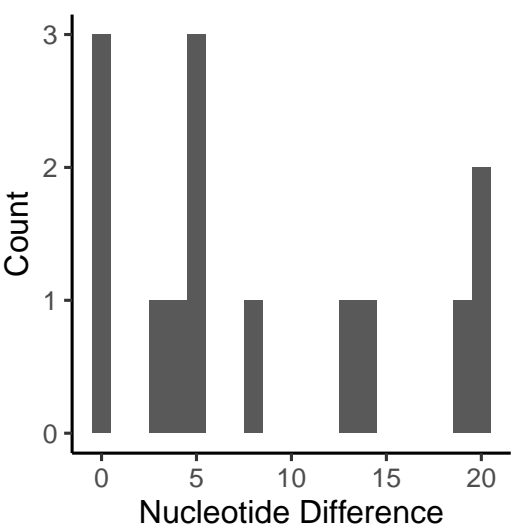
IGHV5-51*03

11 sequences assigned
1 (9.1%) exact matches, in which:
1 unique CDR3
1 unique J



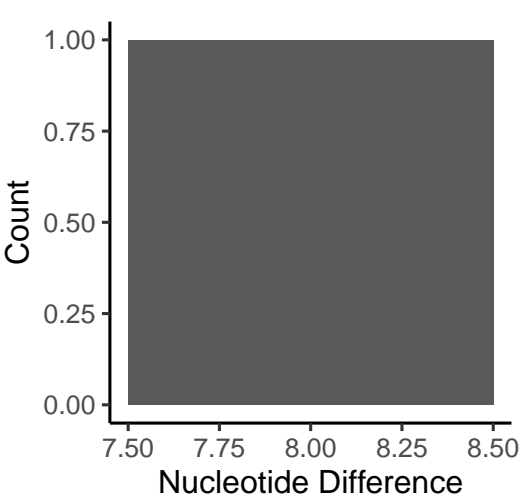
IGHV4-59*01

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



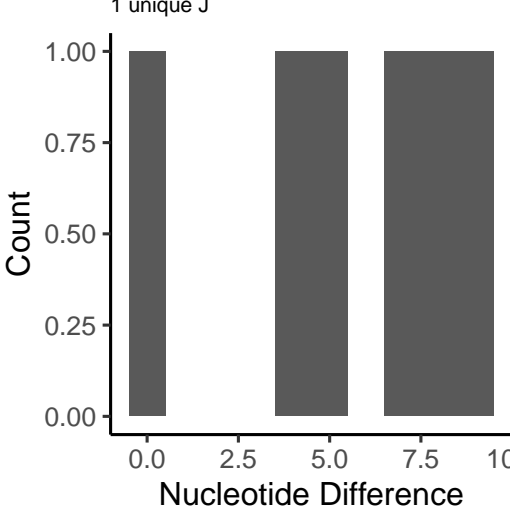
IGHV5-10-1*03

2 sequences assigned
No exact matches.



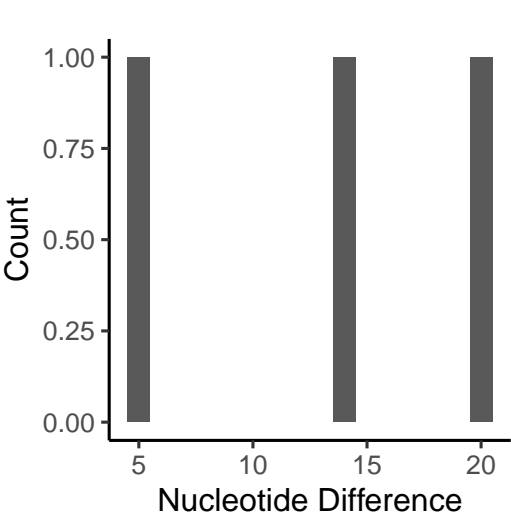
IGHV6-1*01

6 sequences assigned
1 (16.7%) exact matches, in which:
1 unique CDR3
1 unique J



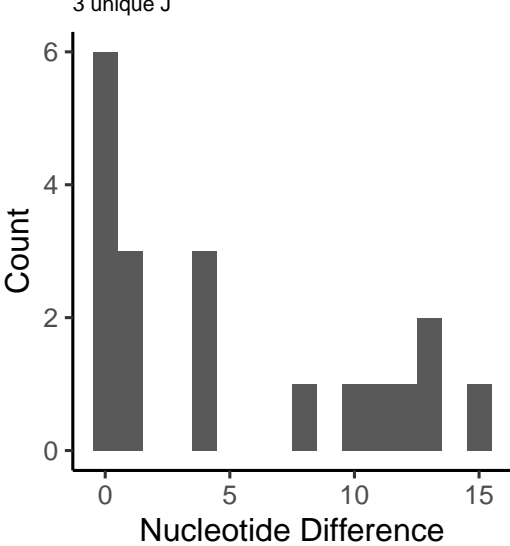
IGHV4-61*01

3 sequences assigned
No exact matches.

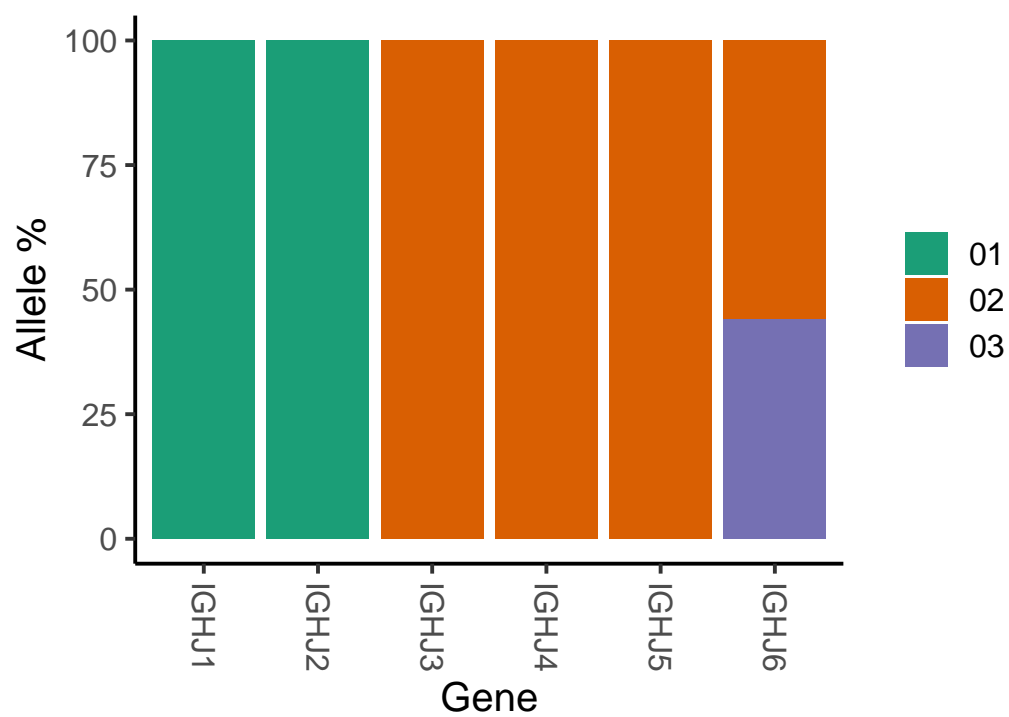


IGHV5-51*01

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



Allele Usage



Sequence Count by IGHJ6 allele usage



