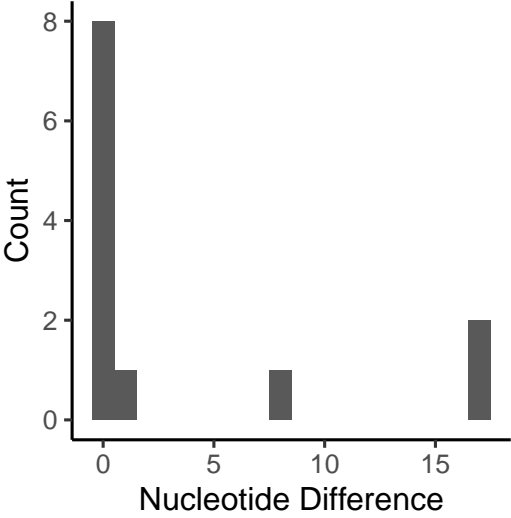


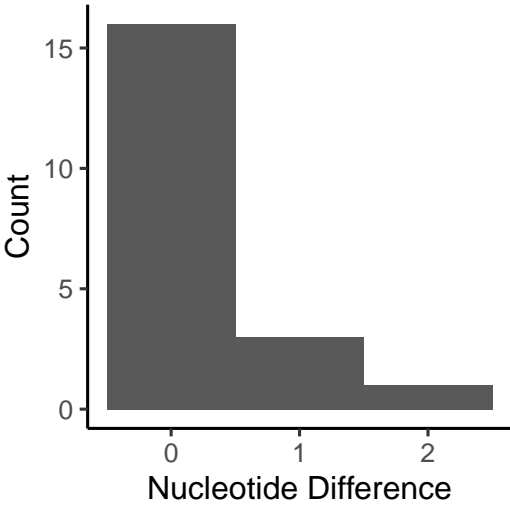
IGHV1-2*02

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



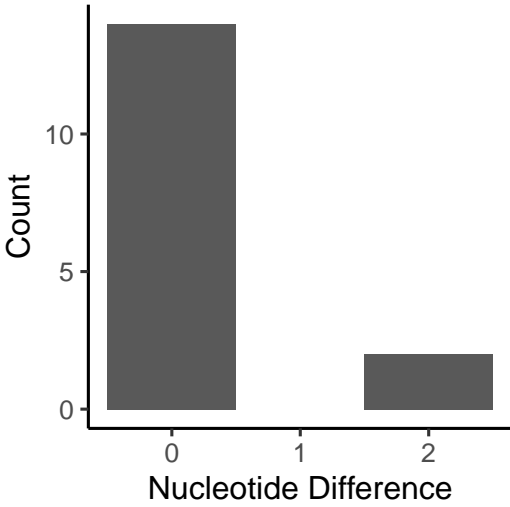
IGHV1-8*03

20 sequences assigned
16 (80%) exact matches, in which:
16 unique CDR3
5 unique J



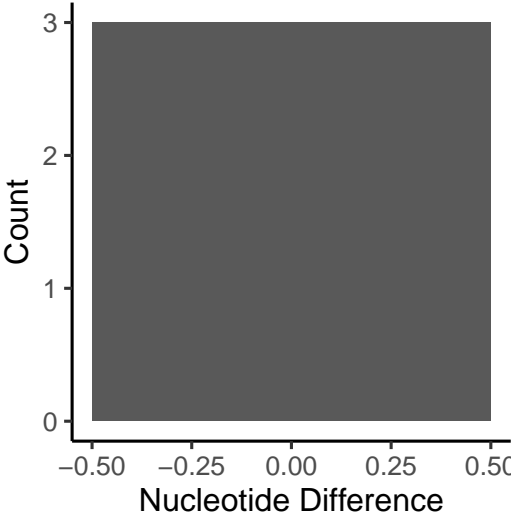
IGHV1-46*01

16 sequences assigned
14 (87.5%) exact matches, in which:
14 unique CDR3
5 unique J



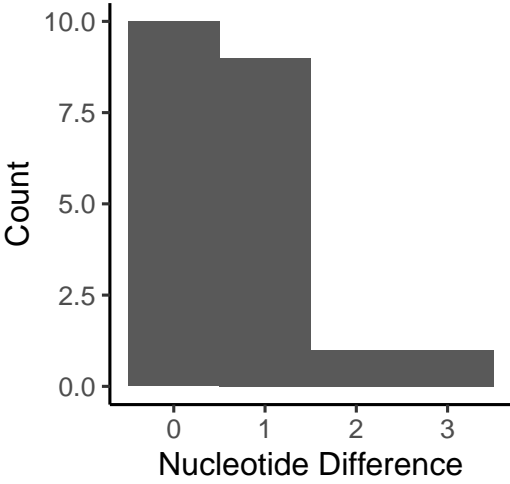
IGHV1-2*04

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



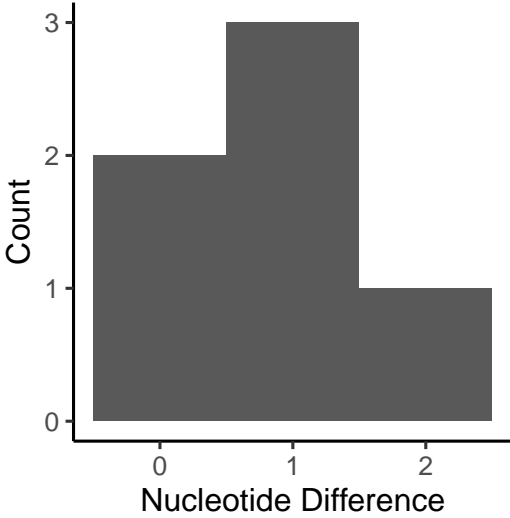
IGHV1-18*01

21 sequences assigned
10 (47.6%) exact matches, in which:
10 unique CDR3
4 unique J



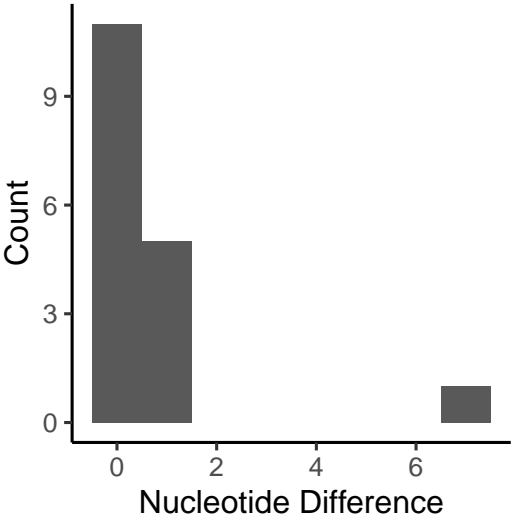
IGHV1-69-2*01

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



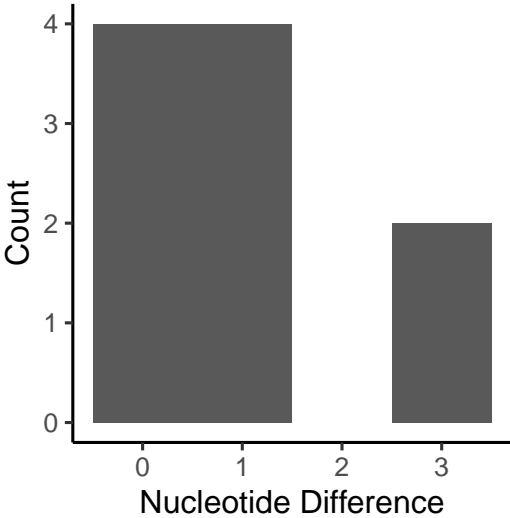
IGHV1-3*01

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



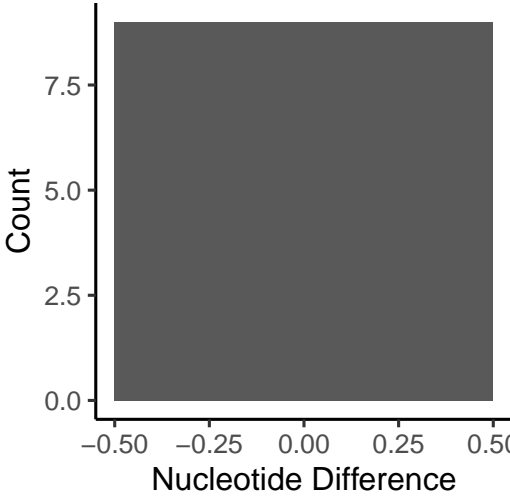
IGHV1-24*01

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



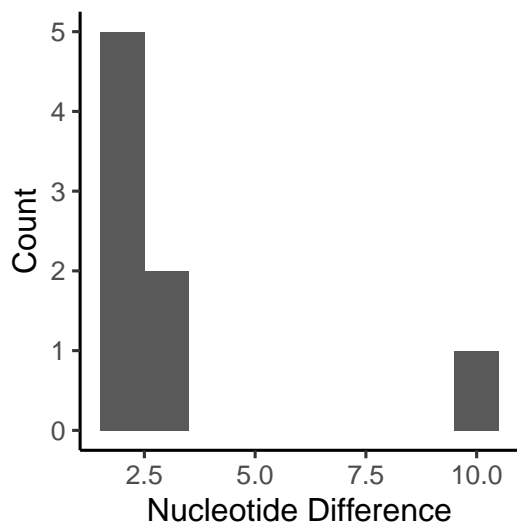
IGHV1-69*02

9 sequences assigned
9 (100%) exact matches, in which:
9 unique CDR3
4 unique J



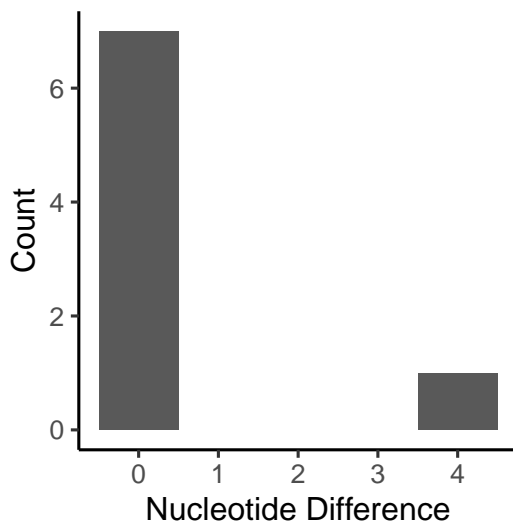
IGHV1–69*04

8 sequences assigned
No exact matches.



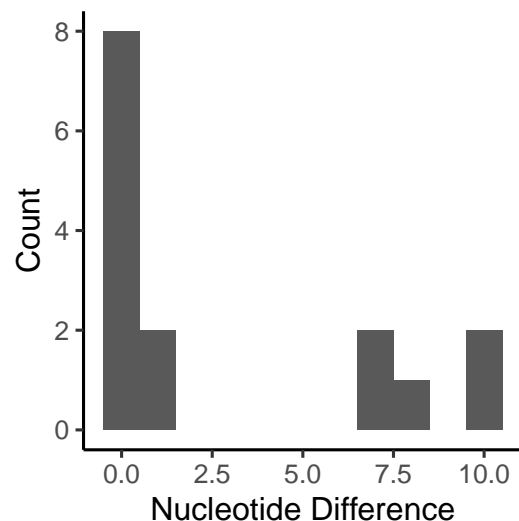
IGHV2–26*01

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



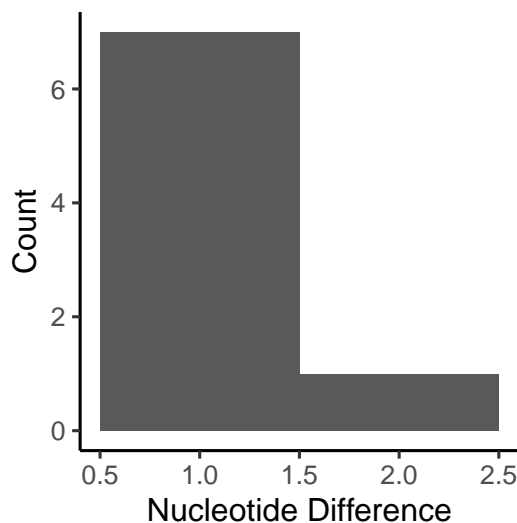
IGHV3–9*03

15 sequences assigned
8 (53.3%) exact matches, in which:
8 unique CDR3
2 unique J



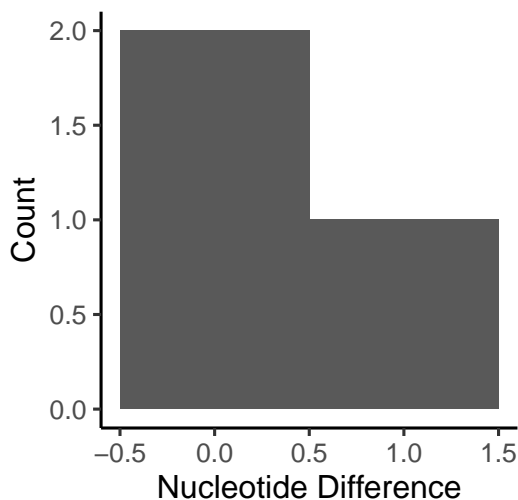
IGHV1–69*08

8 sequences assigned
No exact matches.



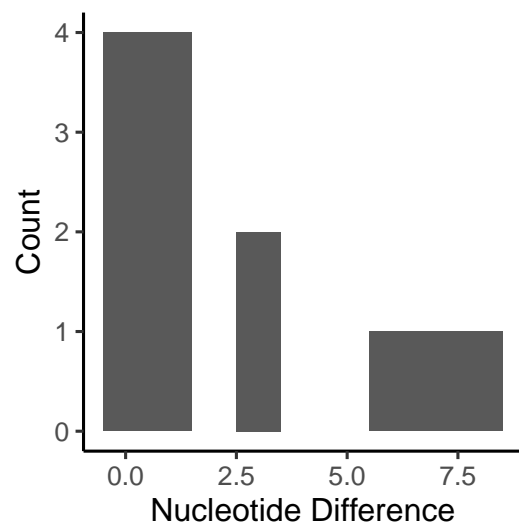
IGHV2–70*15

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



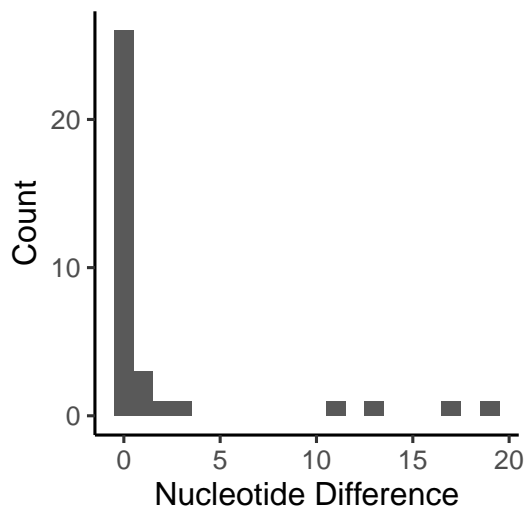
IGHV3–11*04

15 sequences assigned
4 (26.7%) exact matches, in which:
4 unique CDR3
2 unique J



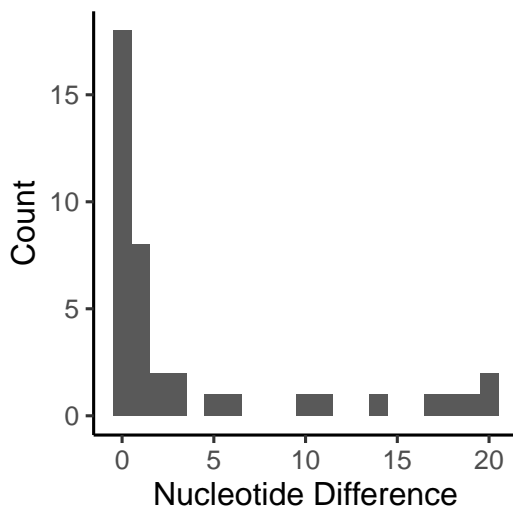
IGHV2–5*01

35 sequences assigned
26 (74.3%) exact matches, in which:
26 unique CDR3
4 unique J



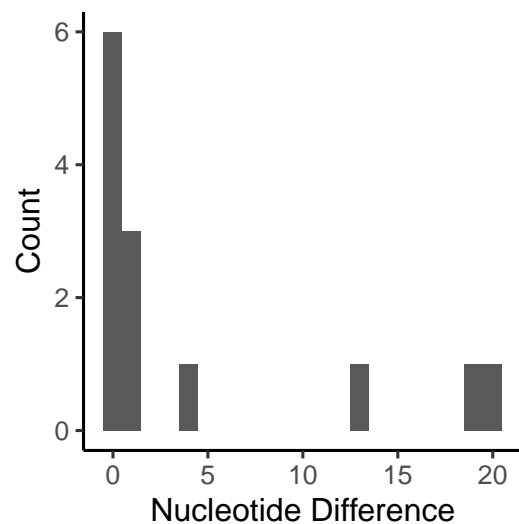
IGHV3–7*01

46 sequences assigned
18 (39.1%) exact matches, in which:
18 unique CDR3
5 unique J



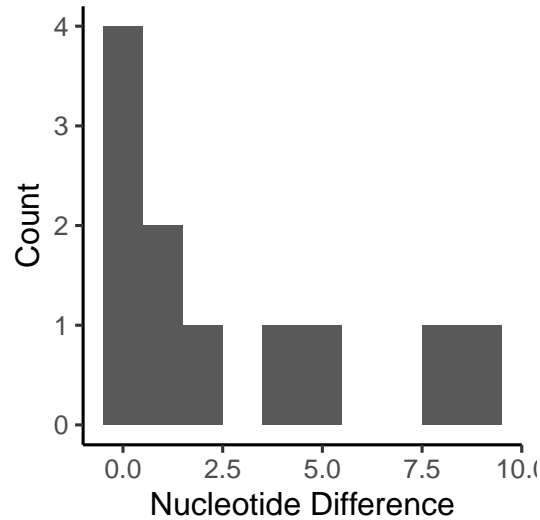
IGHV3–15*01

13 sequences assigned
6 (46.2%) exact matches, in which:
6 unique CDR3
3 unique J



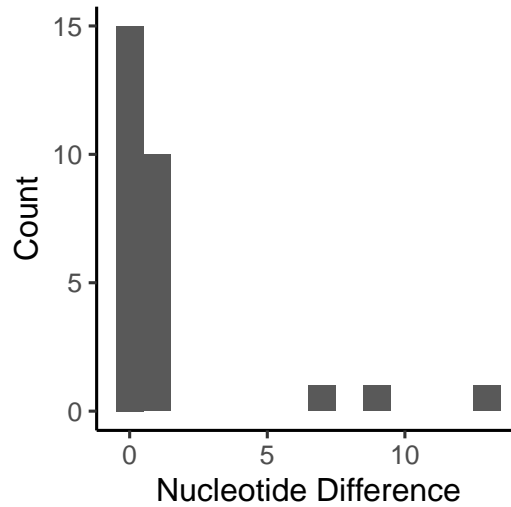
IGHV3-20*04

11 sequences assigned
4 (36.4%) exact matches, in which:
4 unique CDR3
3 unique J



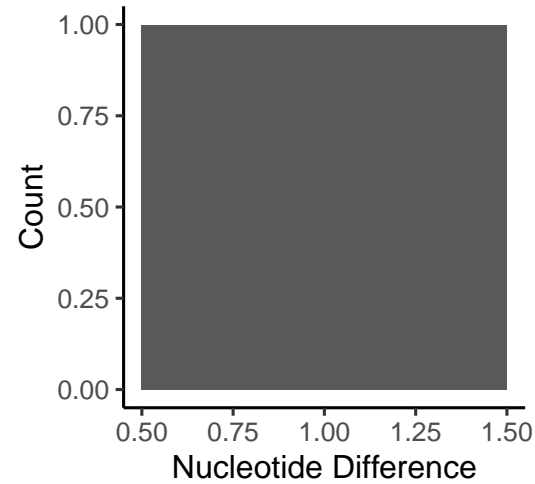
IGHV3-30-3*01

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



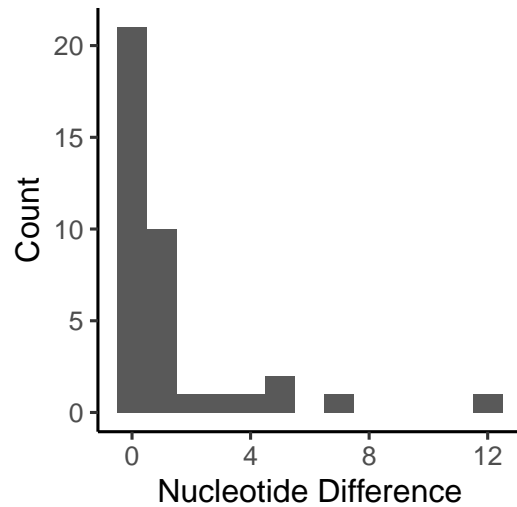
IGHV3-43*01

2 sequences assigned
No exact matches.



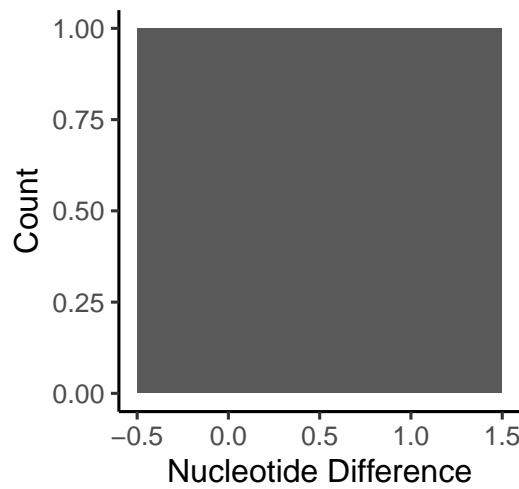
IGHV3-21*01

38 sequences assigned
21 (55.3%) exact matches, in which:
21 unique CDR3
4 unique J



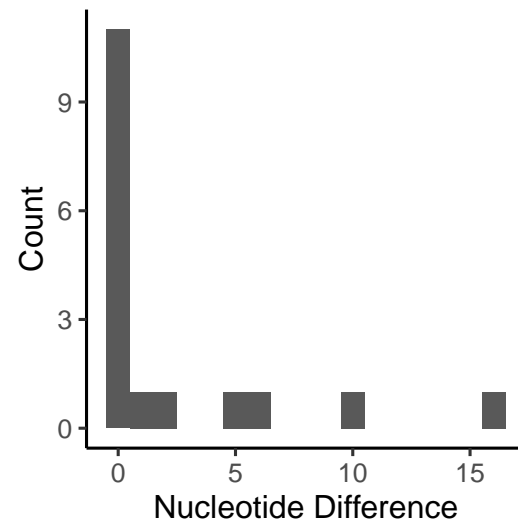
IGHV3-33*01

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



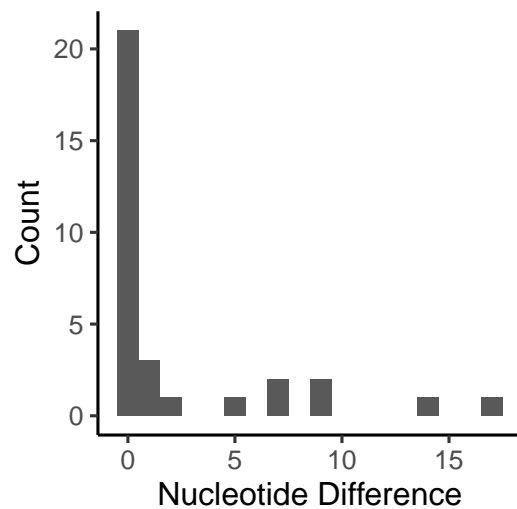
IGHV3-48*03

18 sequences assigned
11 (61.1%) exact matches, in which:
11 unique CDR3
3 unique J



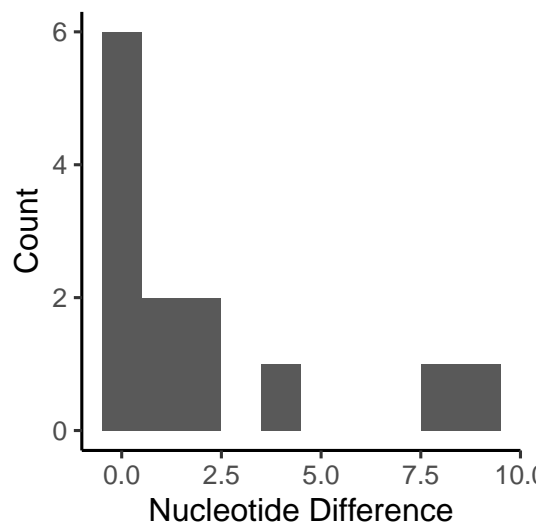
IGHV3-30*01

32 sequences assigned
21 (65.6%) exact matches, in which:
21 unique CDR3
4 unique J



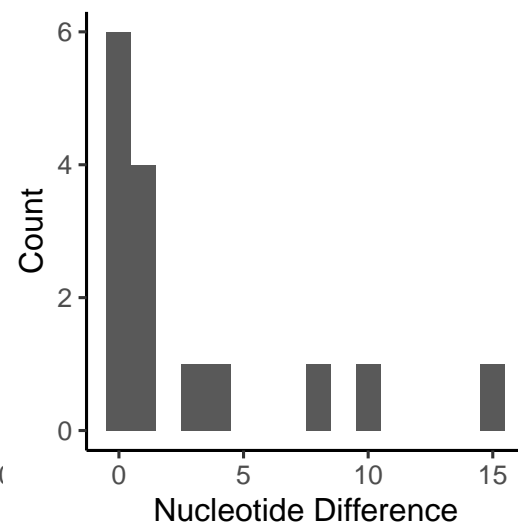
IGHV3-33*06

13 sequences assigned
6 (46.2%) exact matches, in which:
6 unique CDR3
3 unique J



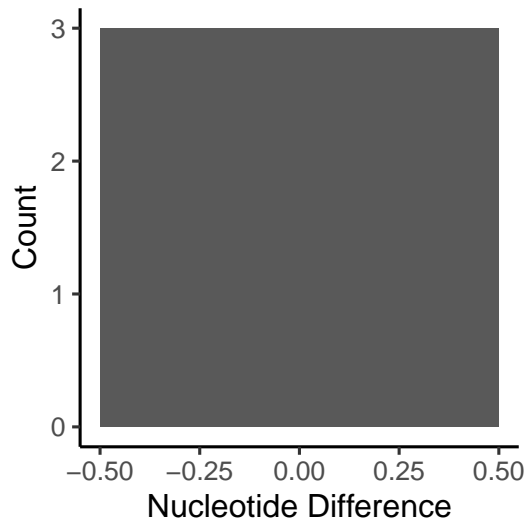
IGHV3-48*04

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



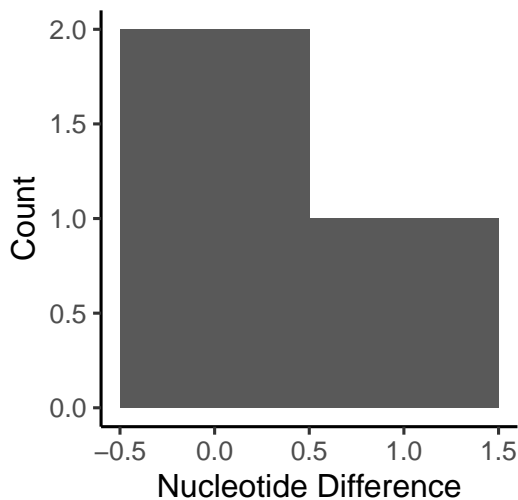
IGHV3-49*03

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



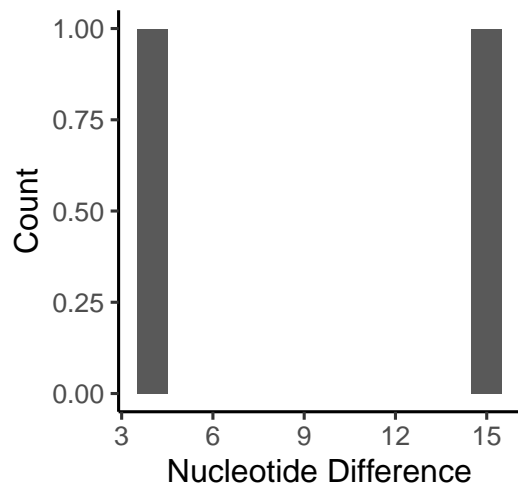
IGHV3-53*04

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



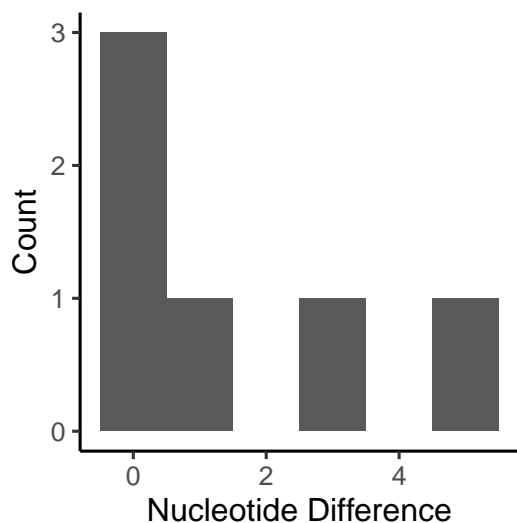
IGHV3-72*01

2 sequences assigned
No exact matches.



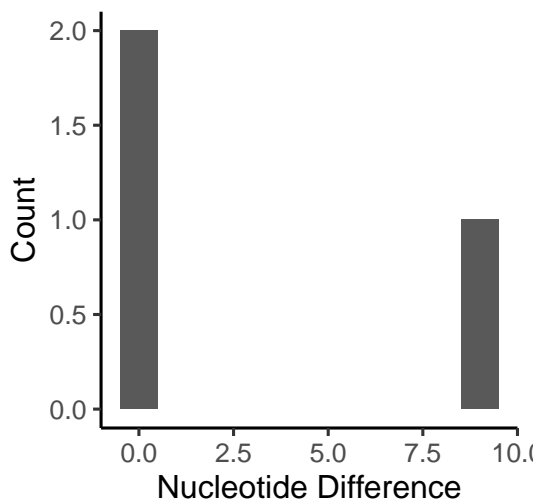
IGHV3-49*04

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



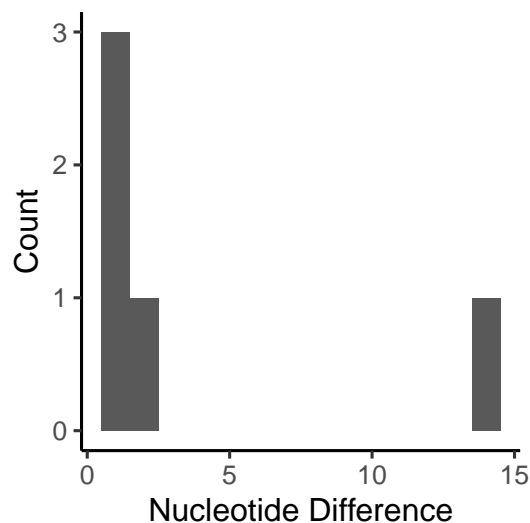
IGHV3-64*01

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



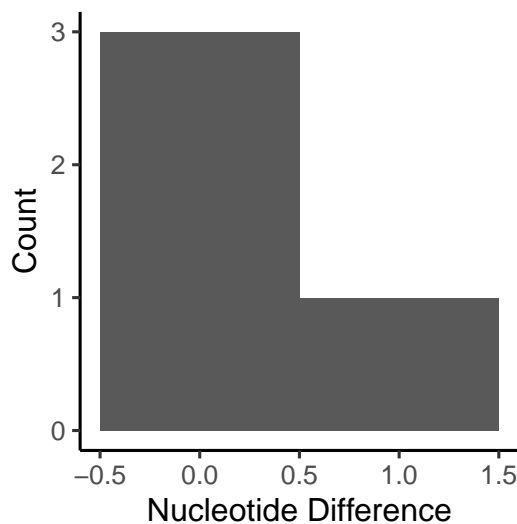
IGHV3-73*01

5 sequences assigned
No exact matches.



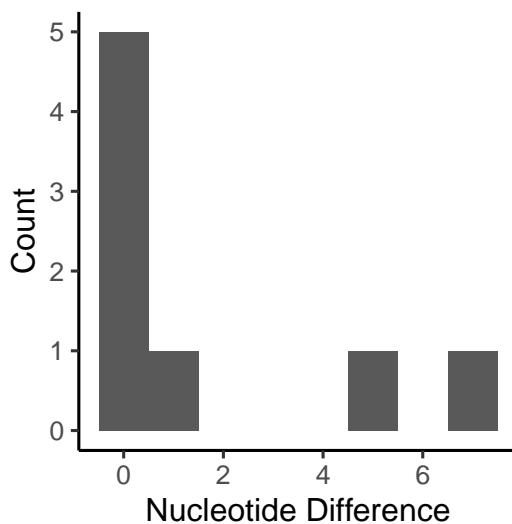
IGHV3-53*01

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



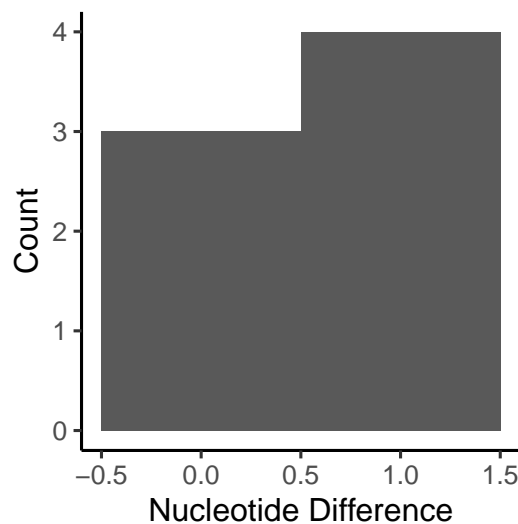
IGHV3-66*02

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



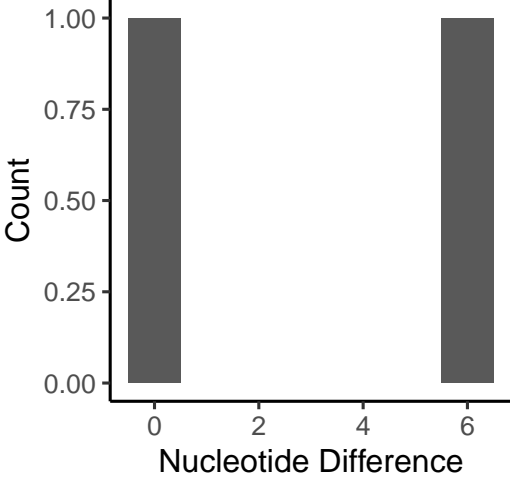
IGHV3-74*01

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



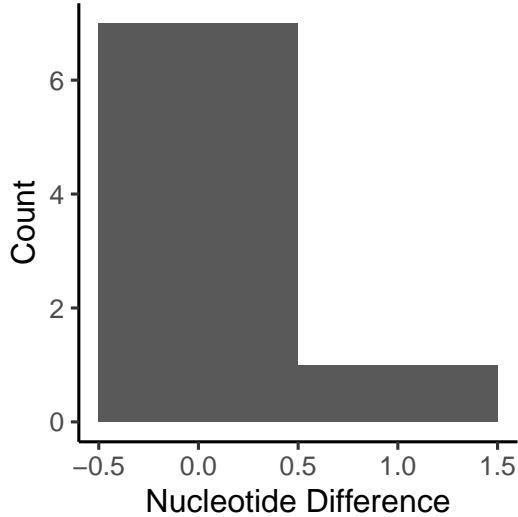
IGHV3-74*02

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



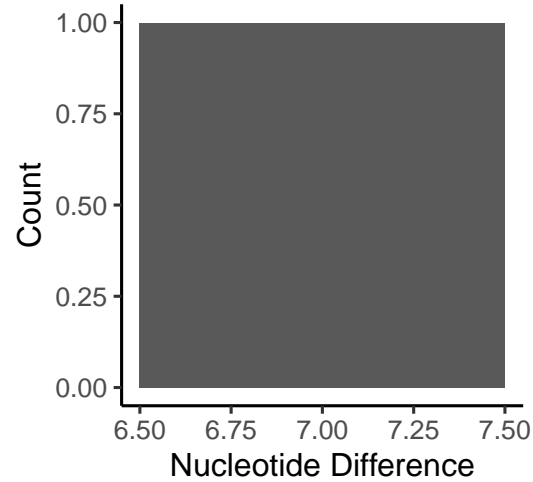
IGHV4-4*07

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



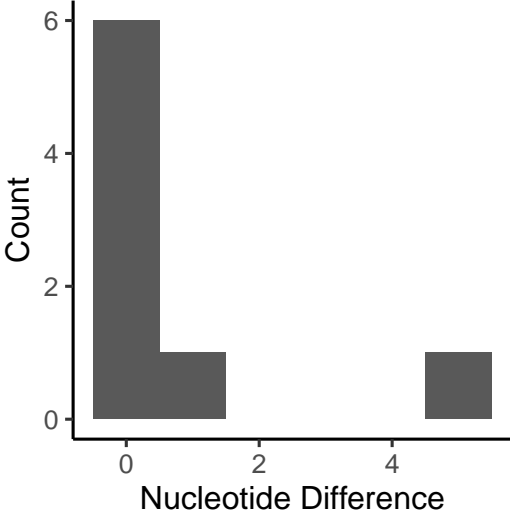
IGHV4-31*01

1 sequences assigned
No exact matches.



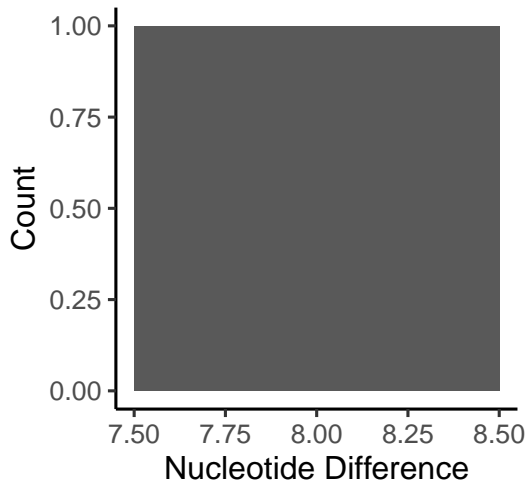
IGHV3-43D*04

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



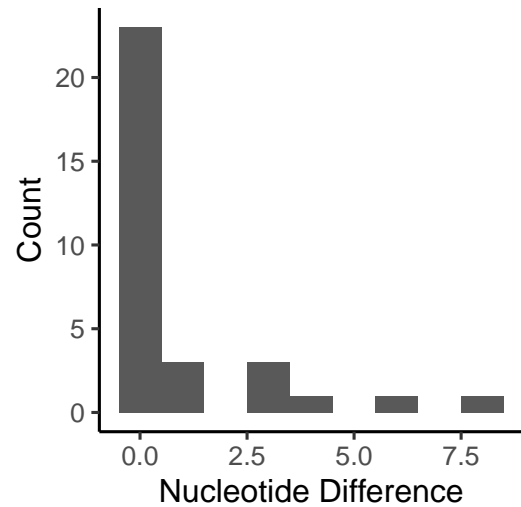
IGHV4-30-4*01

1 sequences assigned
No exact matches.



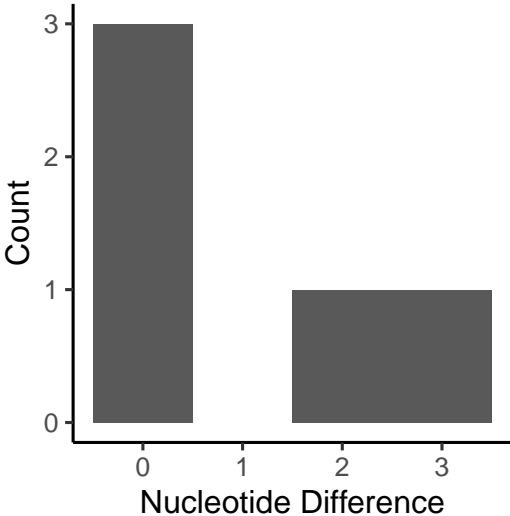
IGHV4-34*01

33 sequences assigned
23 (69.7%) exact matches, in which:
23 unique CDR3
5 unique J



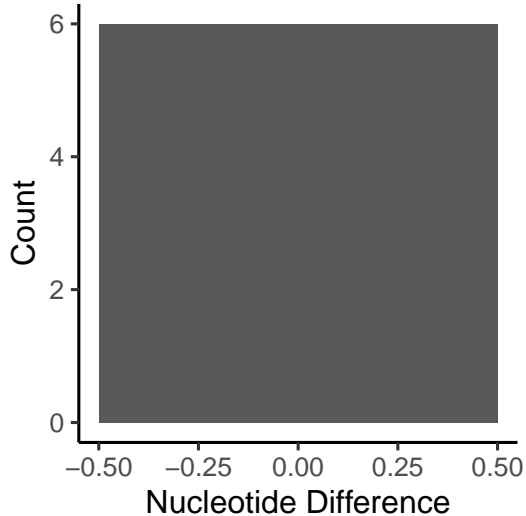
IGHV4-4*02

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



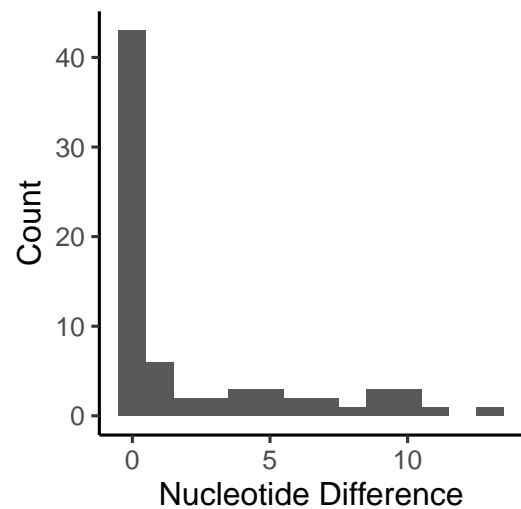
IGHV4-30-4*08

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



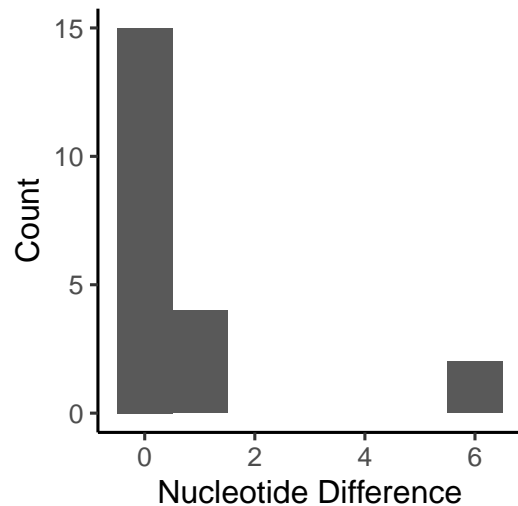
IGHV4-38-2*01

72 sequences assigned
43 (59.7%) exact matches, in which:
43 unique CDR3
6 unique J



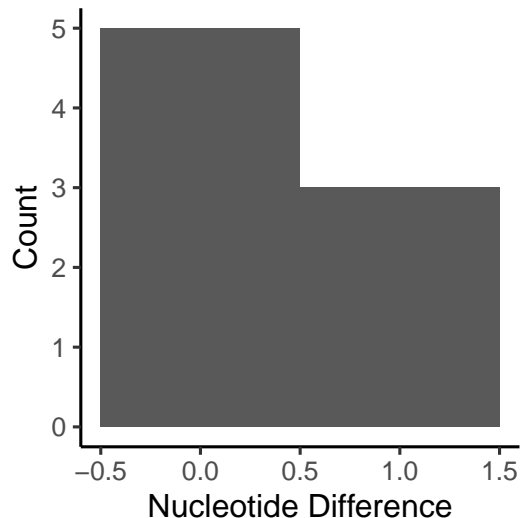
IGHV4-39*01

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



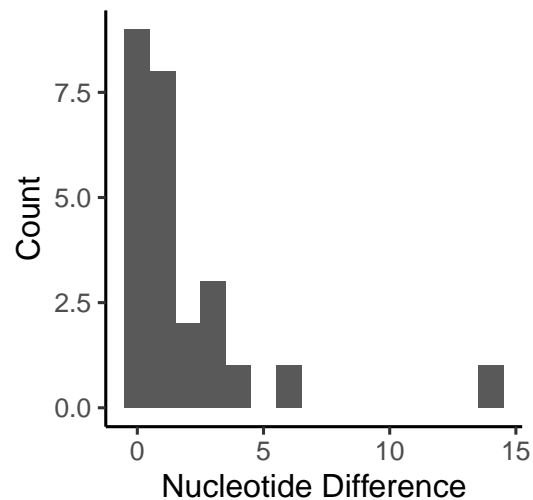
IGHV4-59*08

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



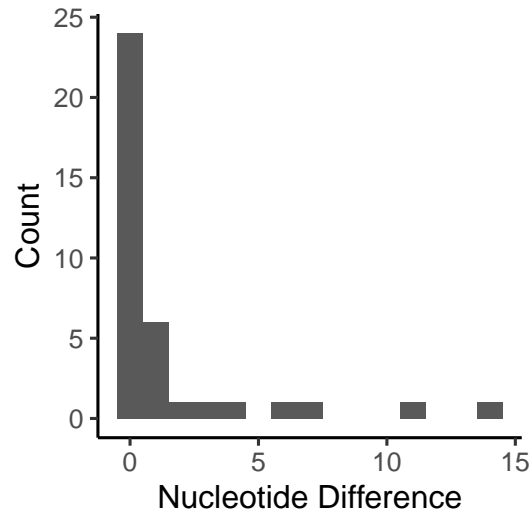
IGHV5-51*01

28 sequences assigned
9 (32.1%) exact matches, in which:
9 unique CDR3
3 unique J



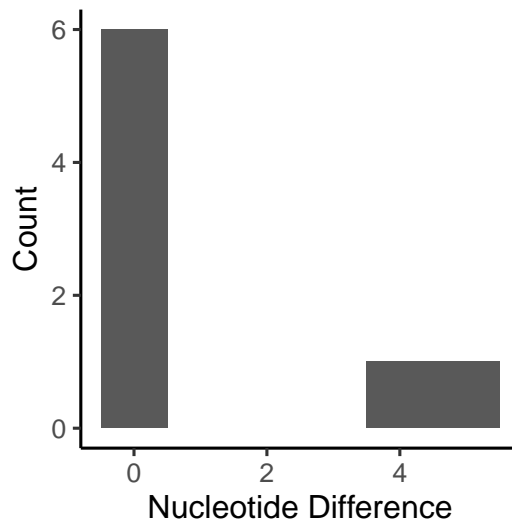
IGHV4-39*07

40 sequences assigned
24 (60%) exact matches, in which:
24 unique CDR3
5 unique J



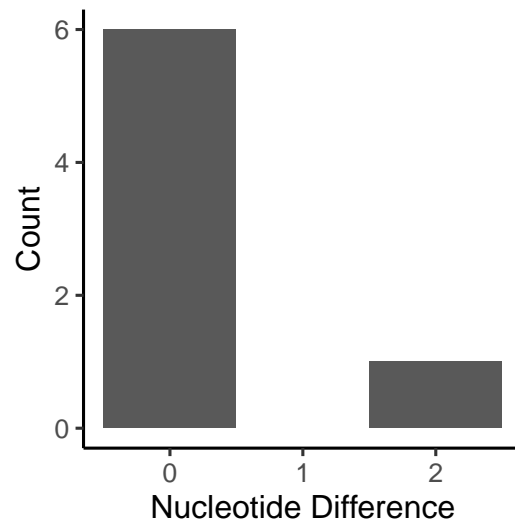
IGHV4-59*11

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



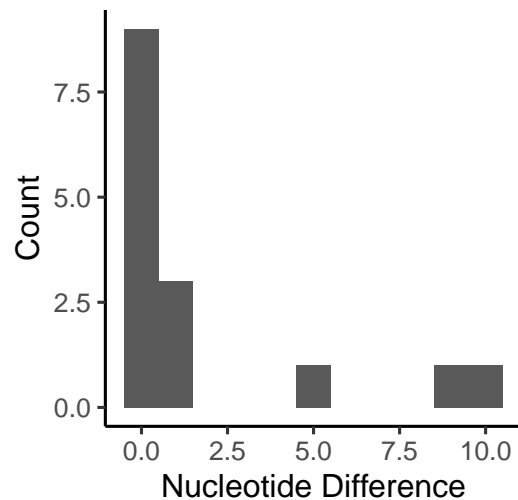
IGHV6-1*01

7 sequences assigned
6 (85.7%) exact matches, in which:
6 unique CDR3
3 unique J



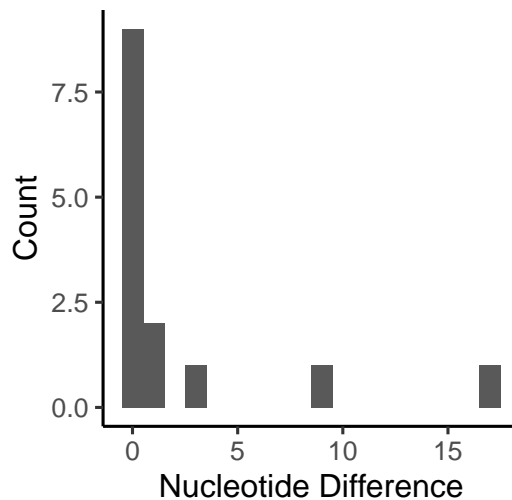
IGHV4-59*01

15 sequences assigned
9 (60%) exact matches, in which:
9 unique CDR3
4 unique J

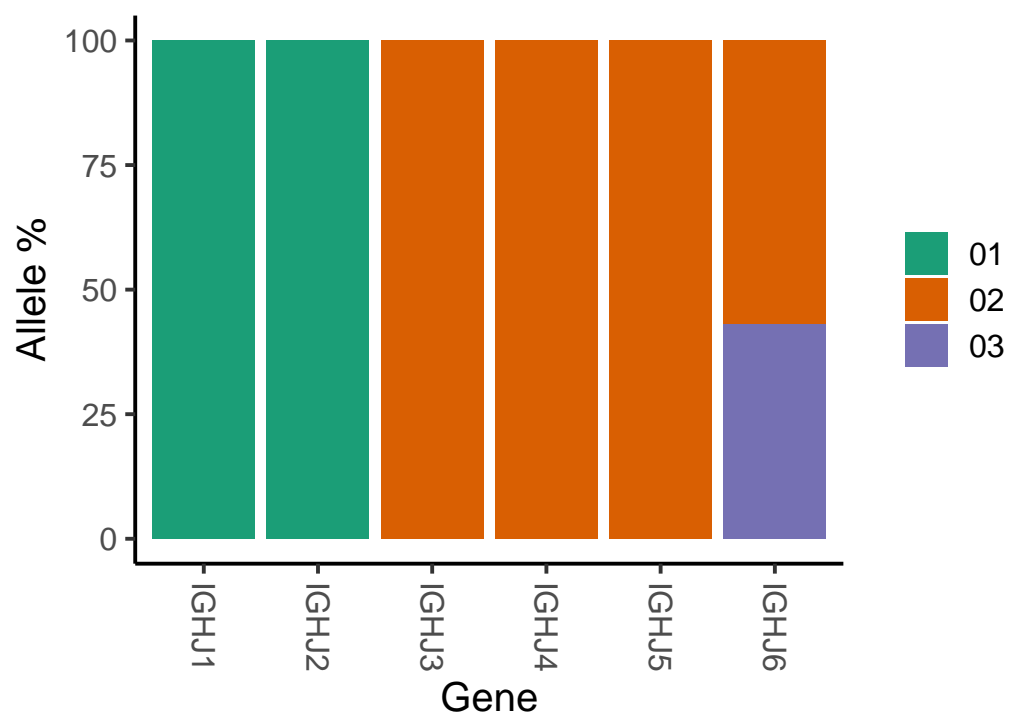


IGHV4-61*02

14 sequences assigned
9 (64.3%) exact matches, in which:
9 unique CDR3
3 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]