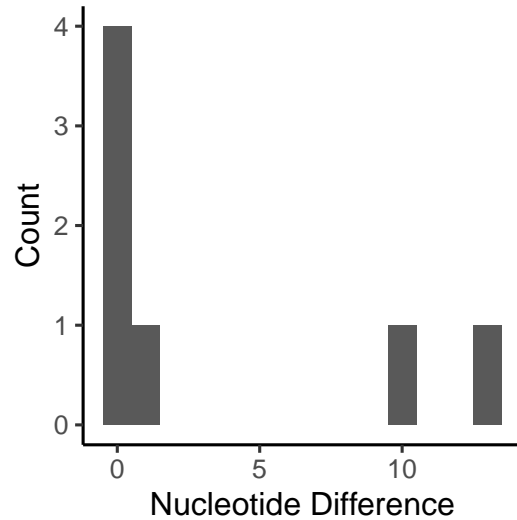


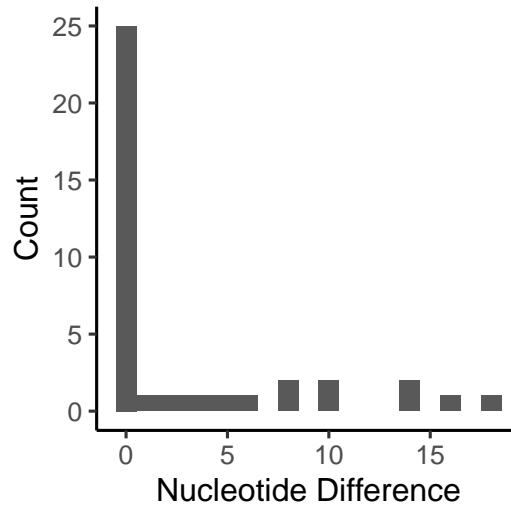
IGHV1-2*04

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



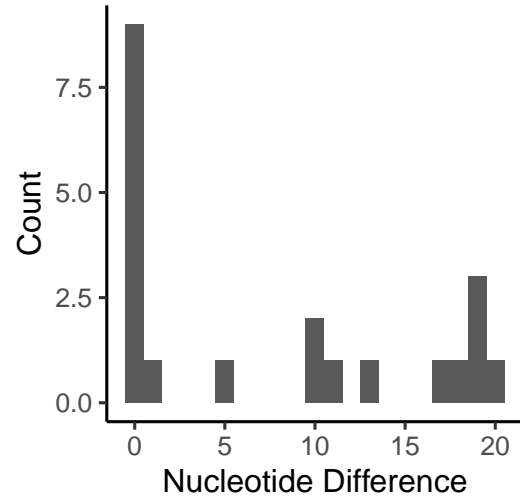
IGHV1-8*01

40 sequences assigned
25 (62.5%) exact matches, in which:
25 unique CDR3
6 unique J



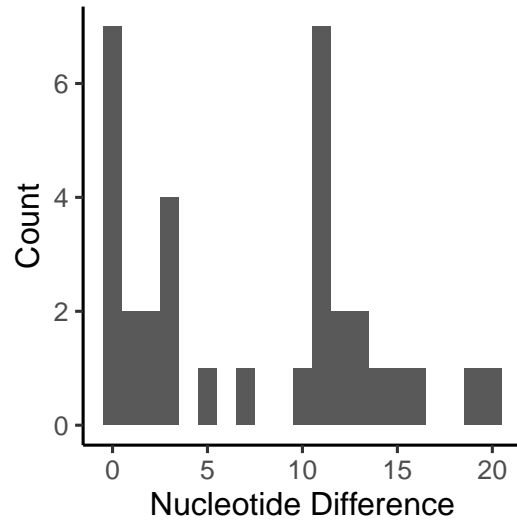
IGHV1-46*01

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



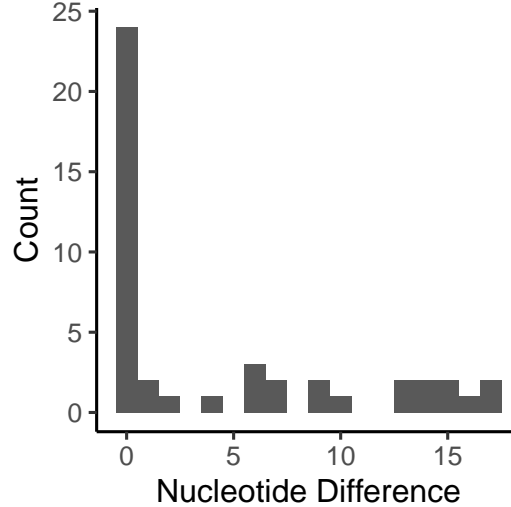
IGHV1-2*06

40 sequences assigned
7 (17.5%) exact matches, in which:
7 unique CDR3
4 unique J



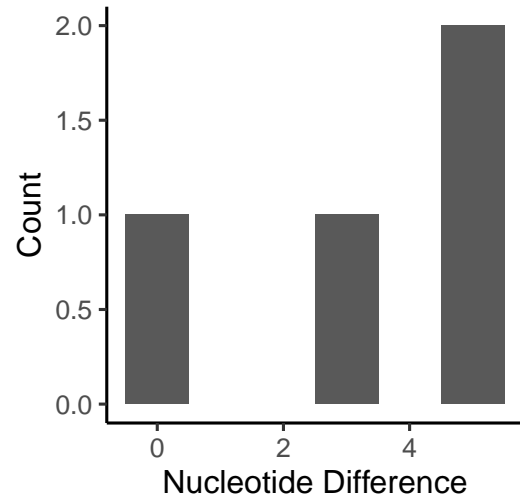
IGHV1-18*01

55 sequences assigned
24 (43.6%) exact matches, in which:
23 unique CDR3
6 unique J



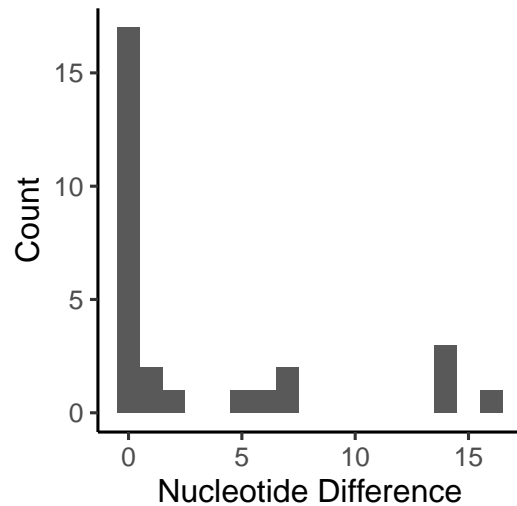
IGHV1-58*01

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



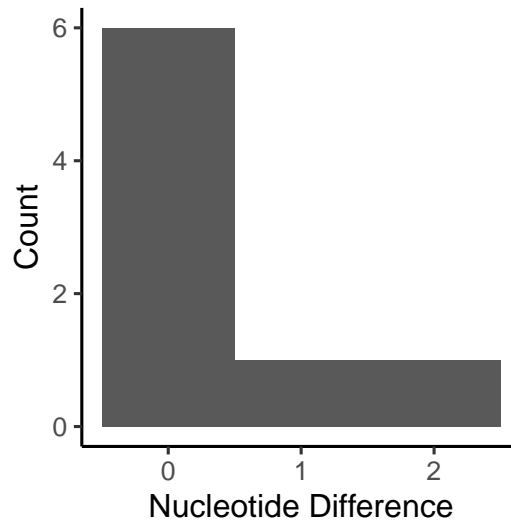
IGHV1-3*01

33 sequences assigned
17 (51.5%) exact matches, in which:
17 unique CDR3
6 unique J



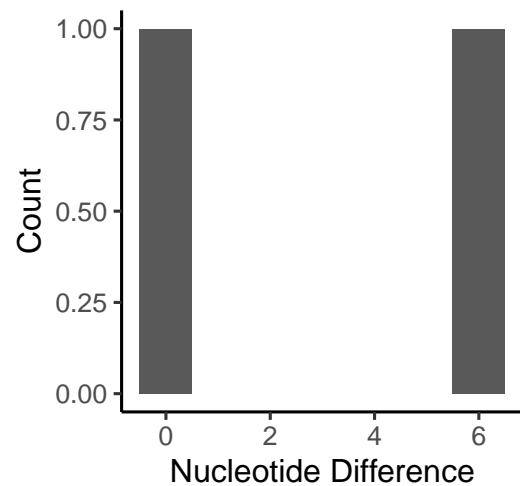
IGHV1-24*01

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



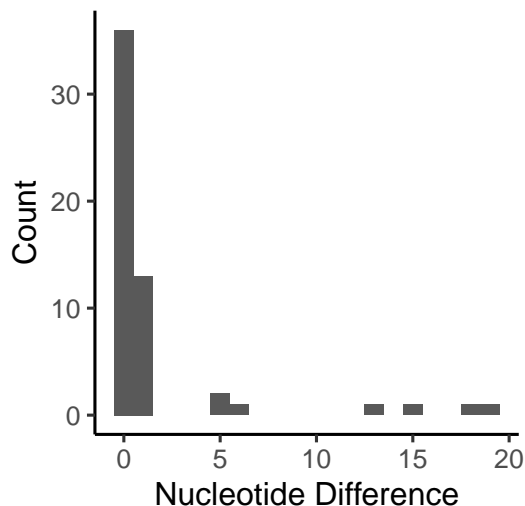
IGHV1-69-2*01

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



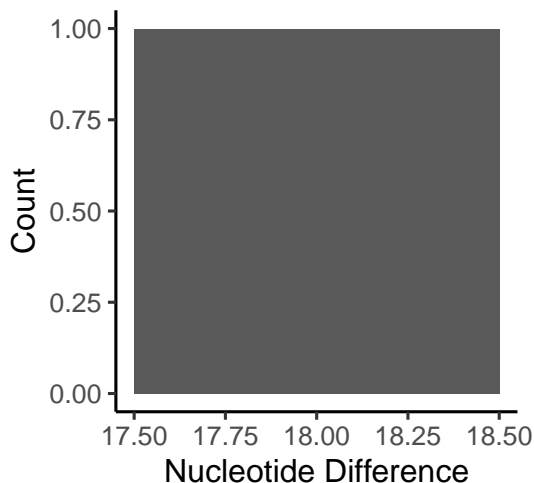
IGHV1–69*06

64 sequences assigned
36 (56.2%) exact matches, in which:
36 unique CDR3
7 unique J



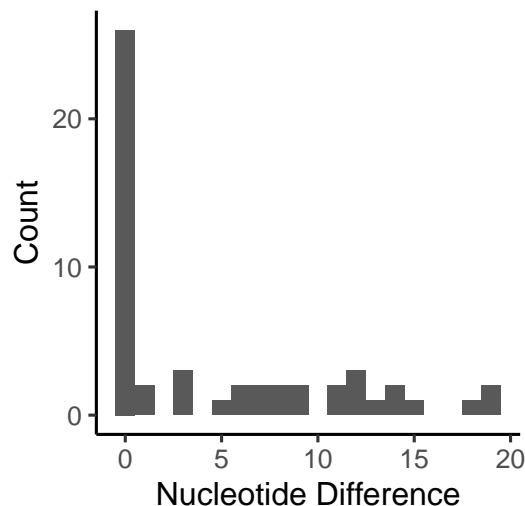
IGHV2–26*03

1 sequences assigned
No exact matches.



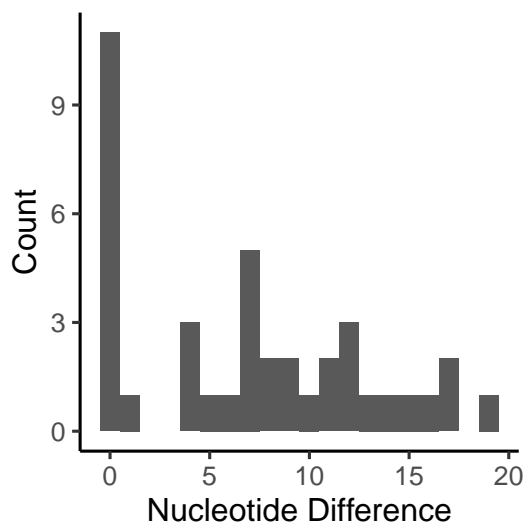
IGHV3–9*01

61 sequences assigned
26 (42.6%) exact matches, in which:
26 unique CDR3
5 unique J



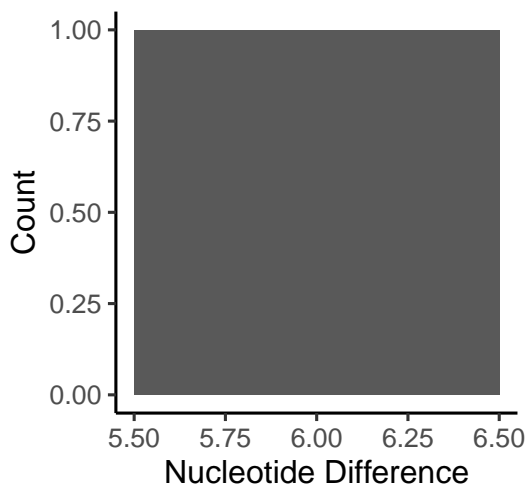
IGHV2–5*02

48 sequences assigned
11 (22.9%) exact matches, in which:
11 unique CDR3
3 unique J



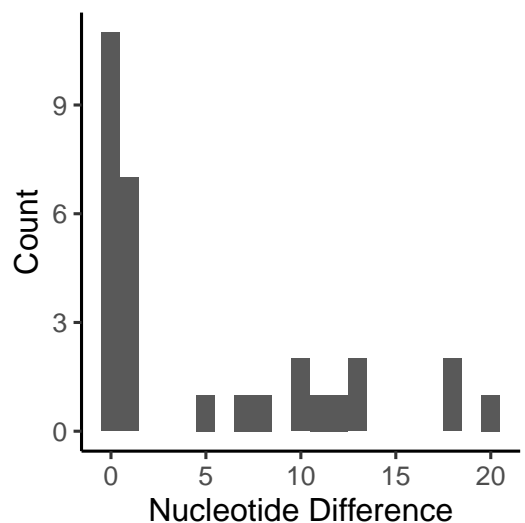
IGHV2–70*13

1 sequences assigned
No exact matches.



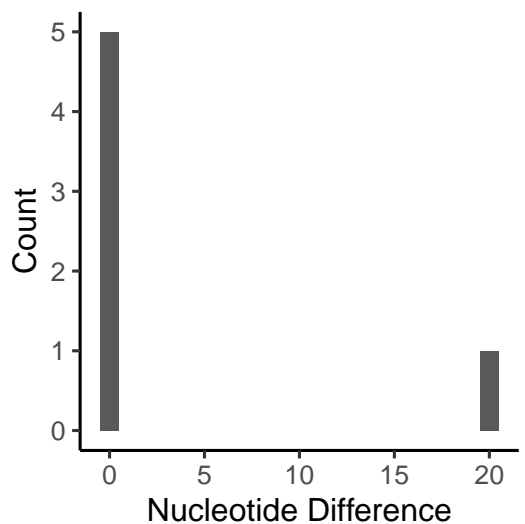
IGHV3–11*01

39 sequences assigned
11 (28.2%) exact matches, in which:
11 unique CDR3
5 unique J



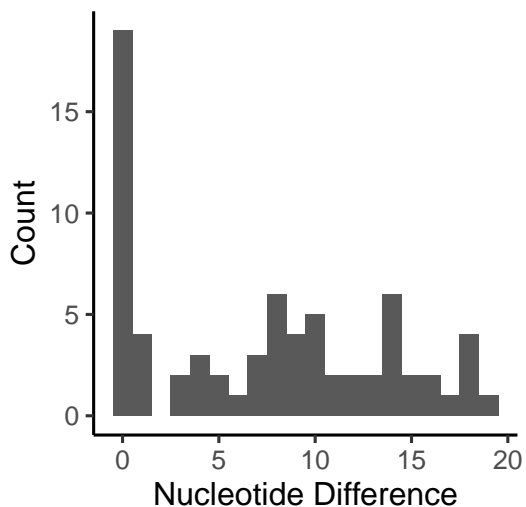
IGHV2–26*01

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



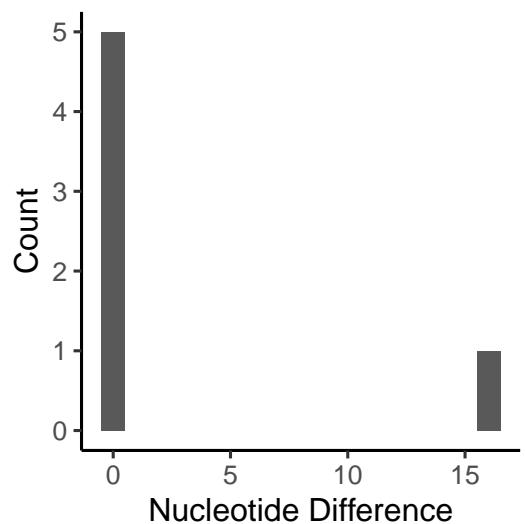
IGHV3–7*01

85 sequences assigned
19 (22.4%) exact matches, in which:
19 unique CDR3
5 unique J



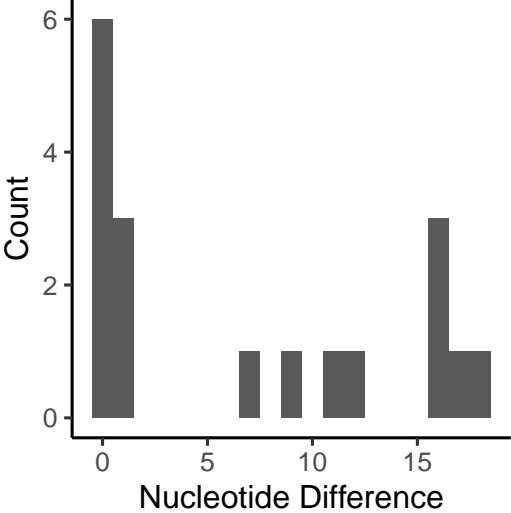
IGHV3–13*01

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



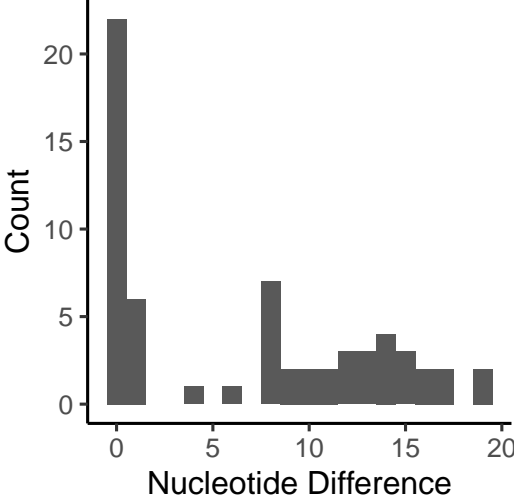
IGHV3-15*01

22 sequences assigned
6 (27.3%) exact matches, in which:
6 unique CDR3
3 unique J



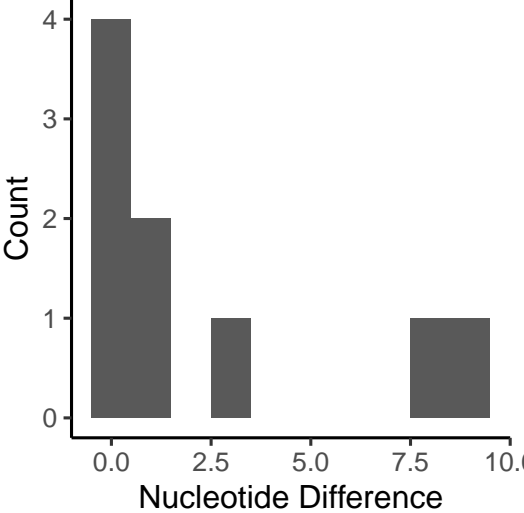
IGHV3-23*04

84 sequences assigned
22 (26.2%) exact matches, in which:
22 unique CDR3
3 unique J



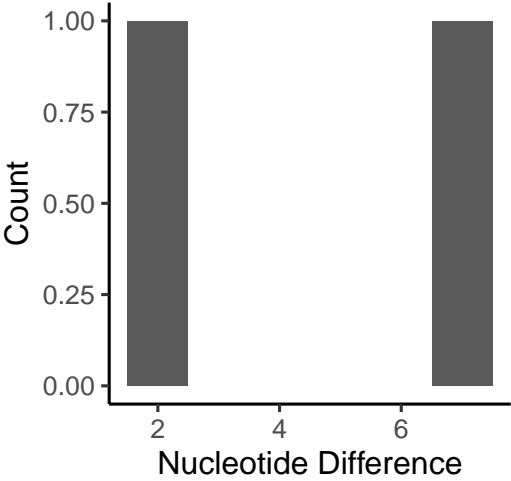
IGHV3-43*02

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



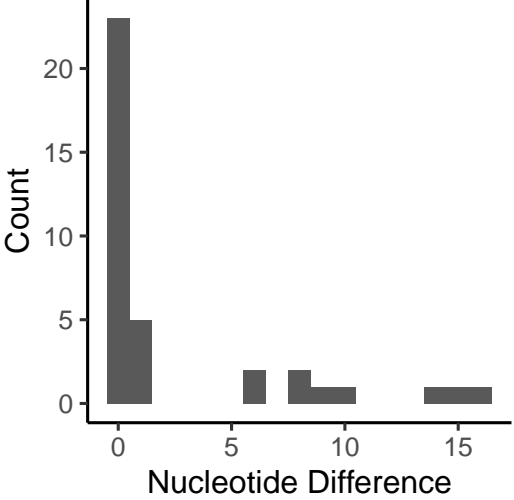
IGHV3-20*01

2 sequences assigned
No exact matches.



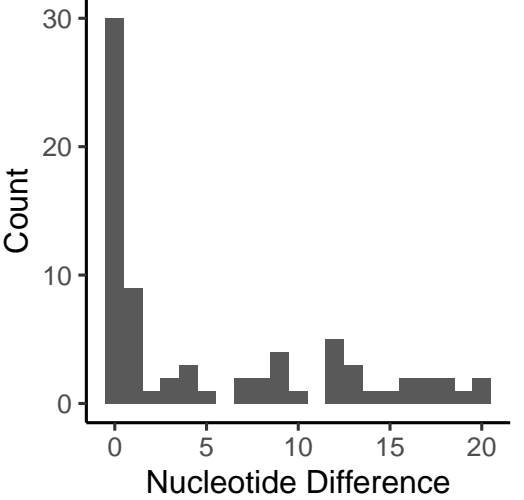
IGHV3-30-3*01

41 sequences assigned
23 (56.1%) exact matches, in which:
23 unique CDR3
5 unique J



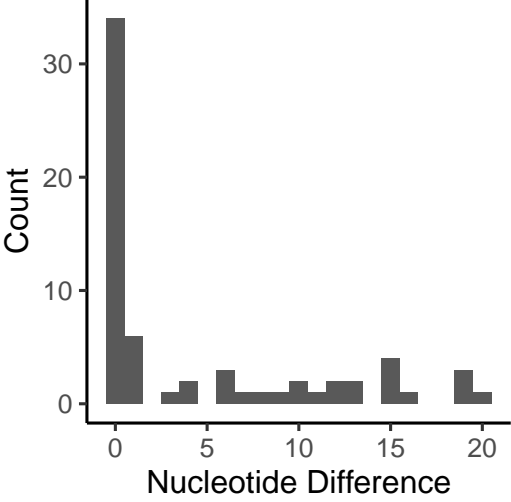
IGHV3-48*03

86 sequences assigned
30 (34.9%) exact matches, in which:
30 unique CDR3
5 unique J



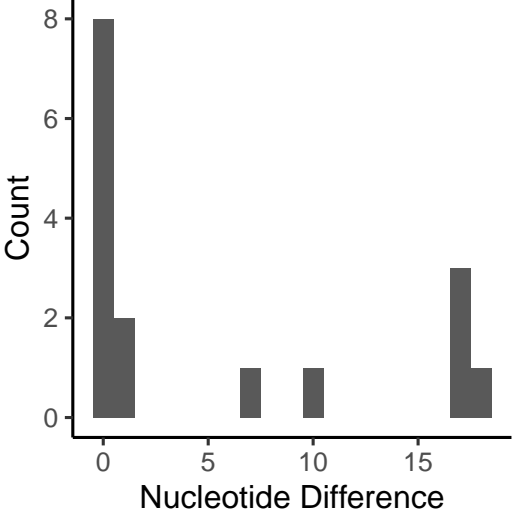
IGHV3-21*01

78 sequences assigned
34 (43.6%) exact matches, in which:
34 unique CDR3
5 unique J



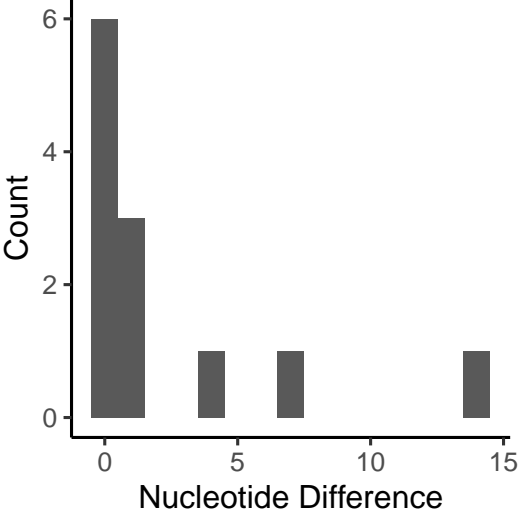
IGHV3-33*01

25 sequences assigned
8 (32%) exact matches, in which:
8 unique CDR3
4 unique J



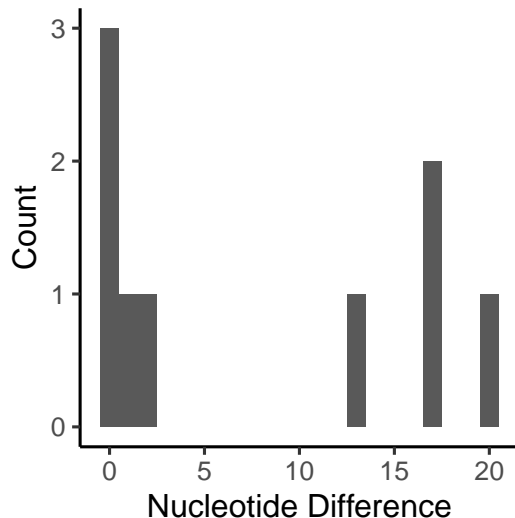
IGHV3-49*04

21 sequences assigned
6 (28.6%) exact matches, in which:
6 unique CDR3
2 unique J



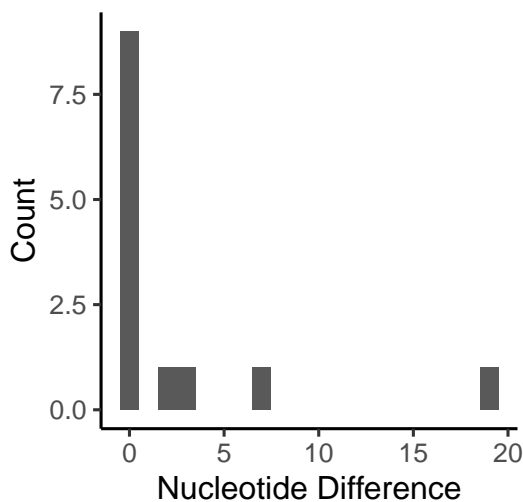
IGHV3-53*02

11 sequences assigned
3 (27.3%) exact matches, in which:
3 unique CDR3
3 unique J



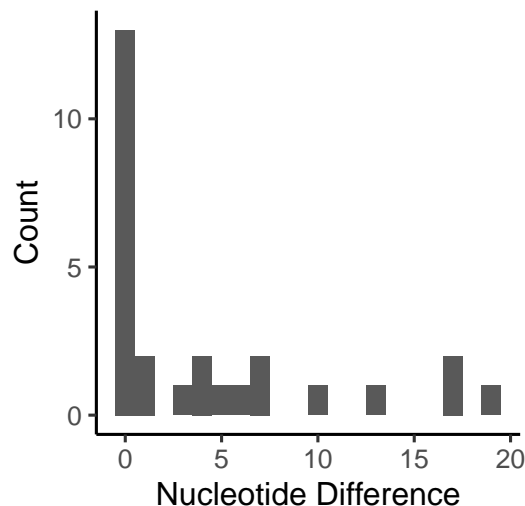
IGHV3-73*02

18 sequences assigned
9 (50%) exact matches, in which:
9 unique CDR3
4 unique J



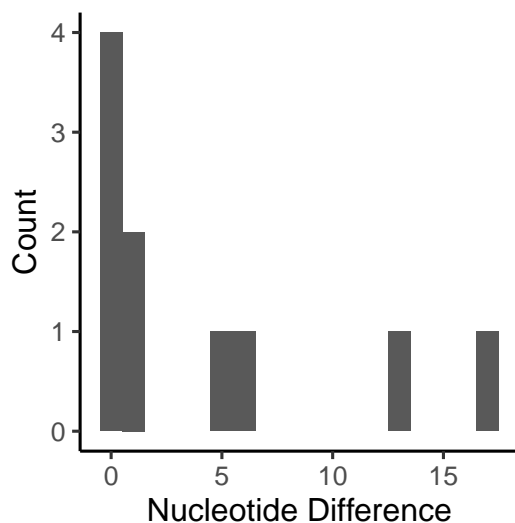
IGHV4-4*02

33 sequences assigned
13 (39.4%) exact matches, in which:
13 unique CDR3
3 unique J



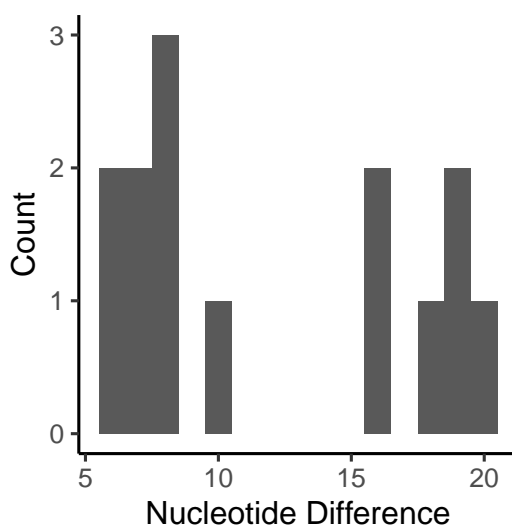
IGHV3-53*04

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



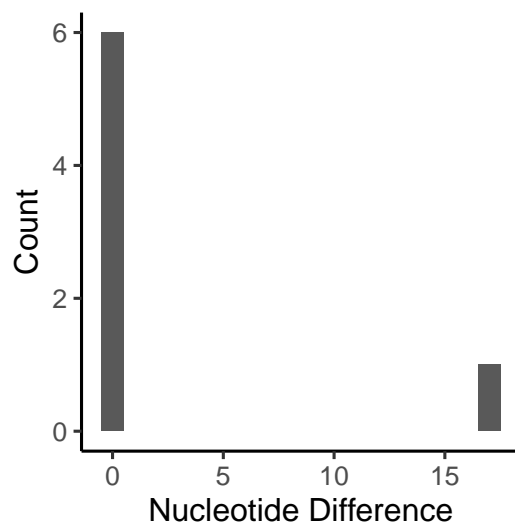
IGHV3-74*01

18 sequences assigned
No exact matches.



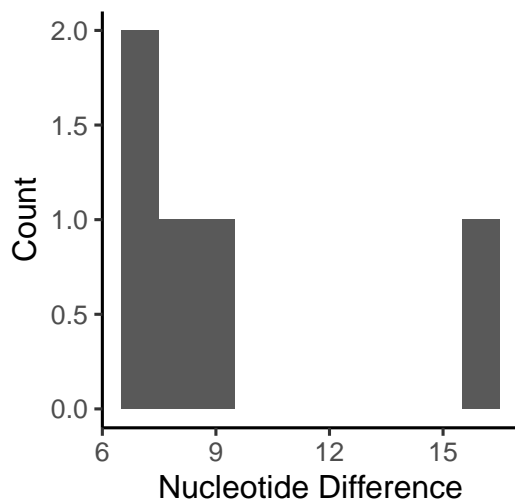
IGHV4-30-2*01

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



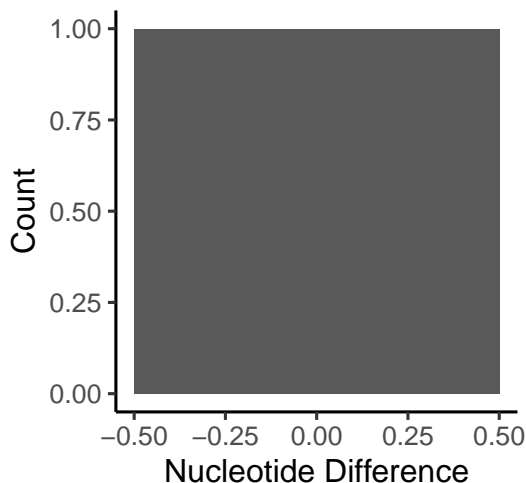
IGHV3-72*01

8 sequences assigned
No exact matches.



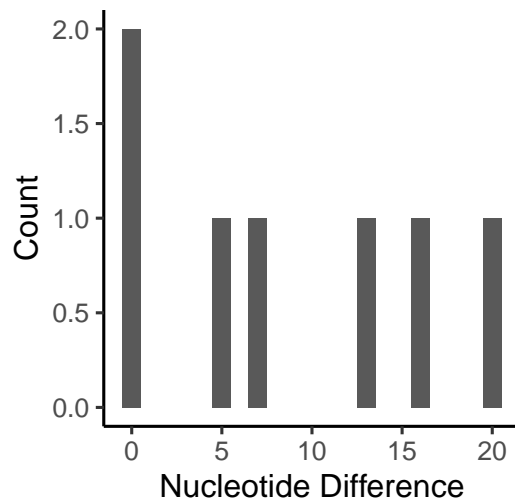
IGHV3-43D*04

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



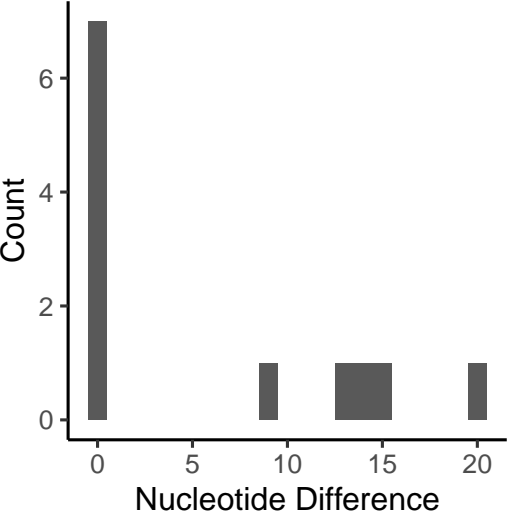
IGHV4-30-4*01

12 sequences assigned
2 (16.7%) exact matches, in which:
2 unique CDR3
1 unique J



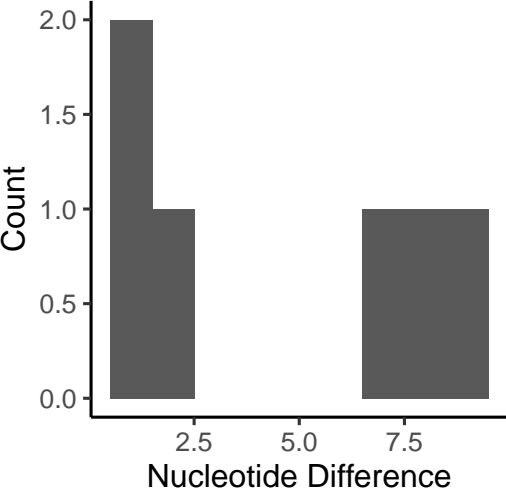
IGHV4-31*03

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



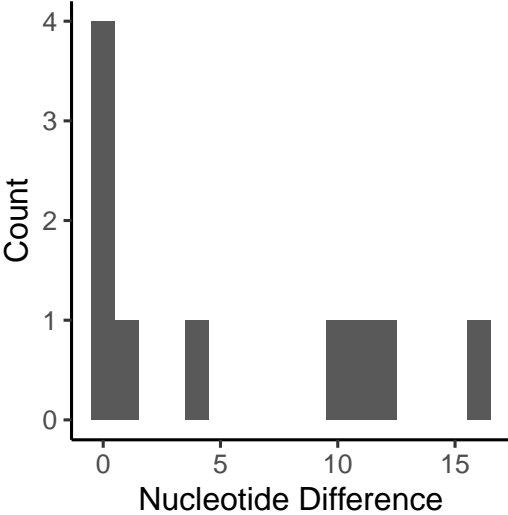
IGHV4-38-2*02

8 sequences assigned
No exact matches.



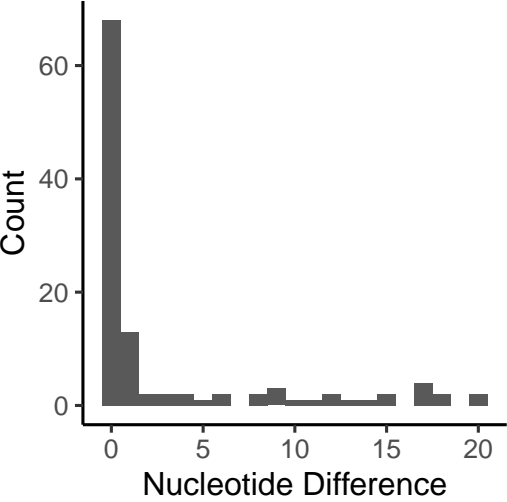
IGHV4-61*01

17 sequences assigned
4 (23.5%) exact matches, in which:
4 unique CDR3
3 unique J



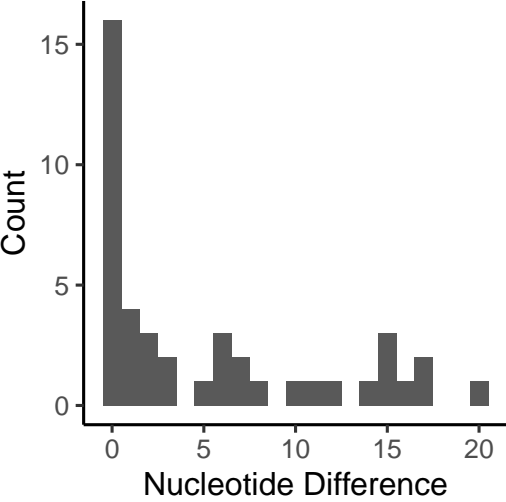
IGHV4-34*01

128 sequences assigned
68 (53.1%) exact matches, in which:
68 unique CDR3
7 unique J



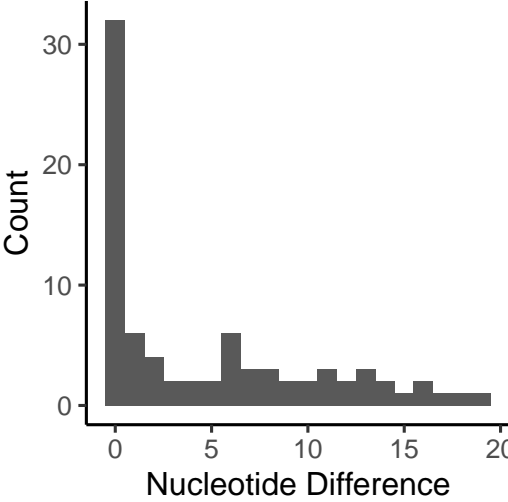
IGHV4-39*01

53 sequences assigned
16 (30.2%) exact matches, in which:
16 unique CDR3
4 unique J



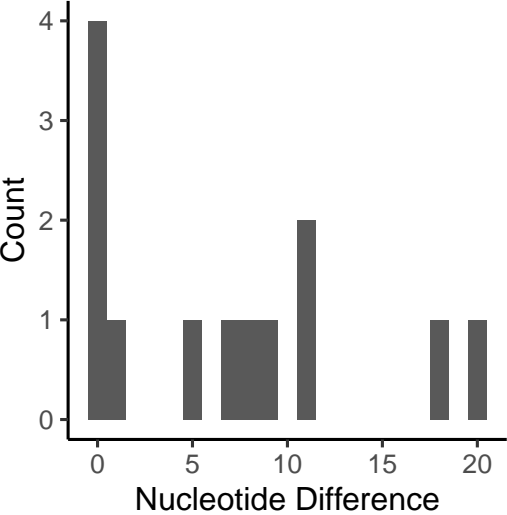
IGHV5-51*01

92 sequences assigned
32 (34.8%) exact matches, in which:
32 unique CDR3
6 unique J



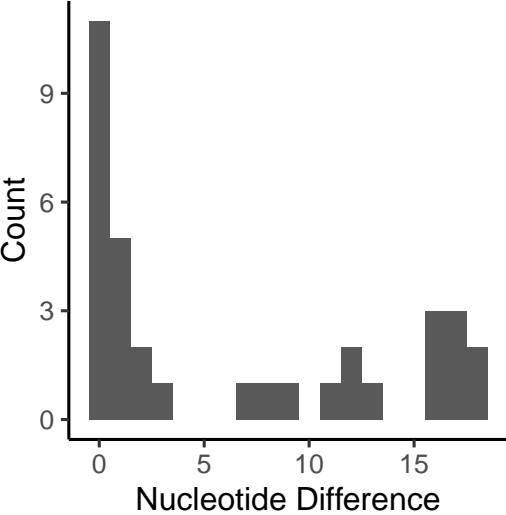
IGHV4-38-2*01

14 sequences assigned
4 (28.6%) exact matches, in which:
4 unique CDR3
2 unique J



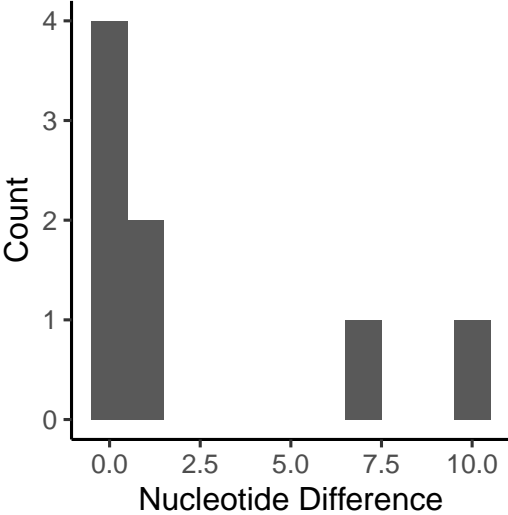
IGHV4-59*01

40 sequences assigned
11 (27.5%) exact matches, in which:
11 unique CDR3
4 unique J



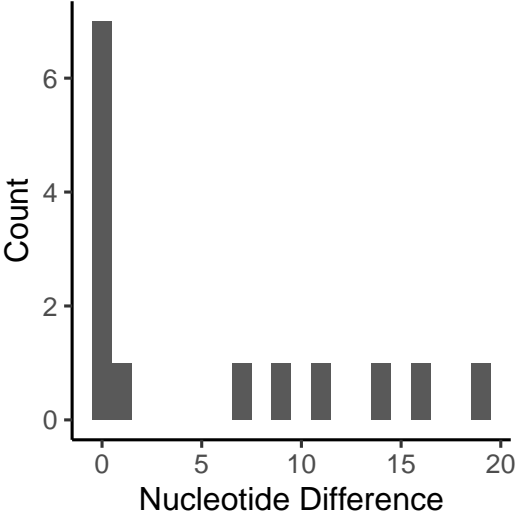
IGHV6-1*01

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

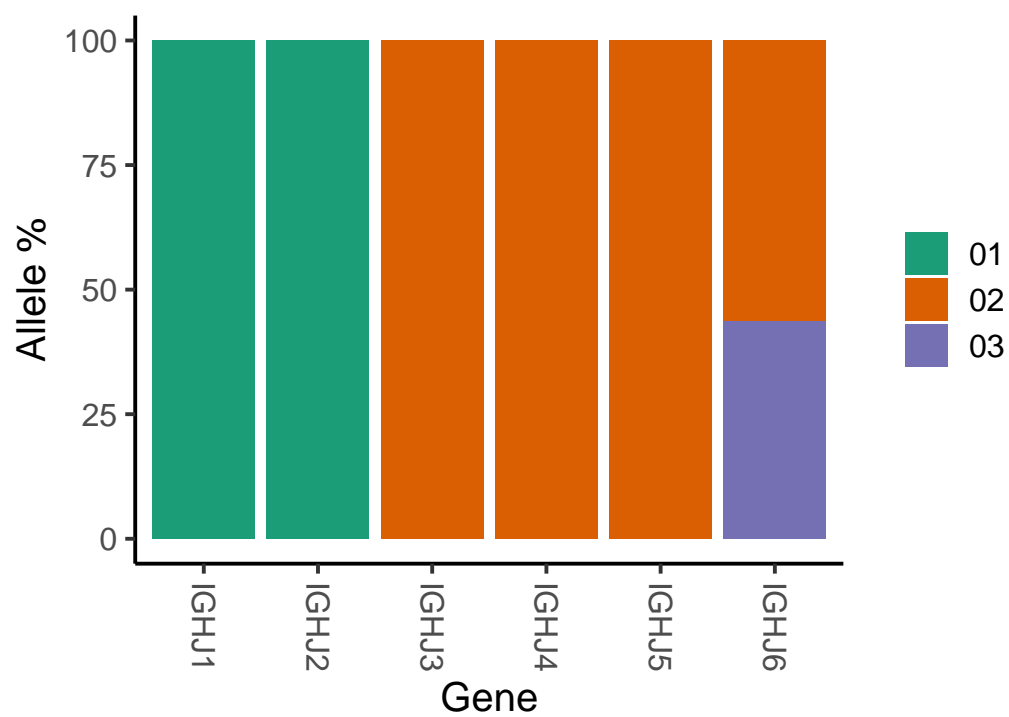


IGHV7-4-1*02

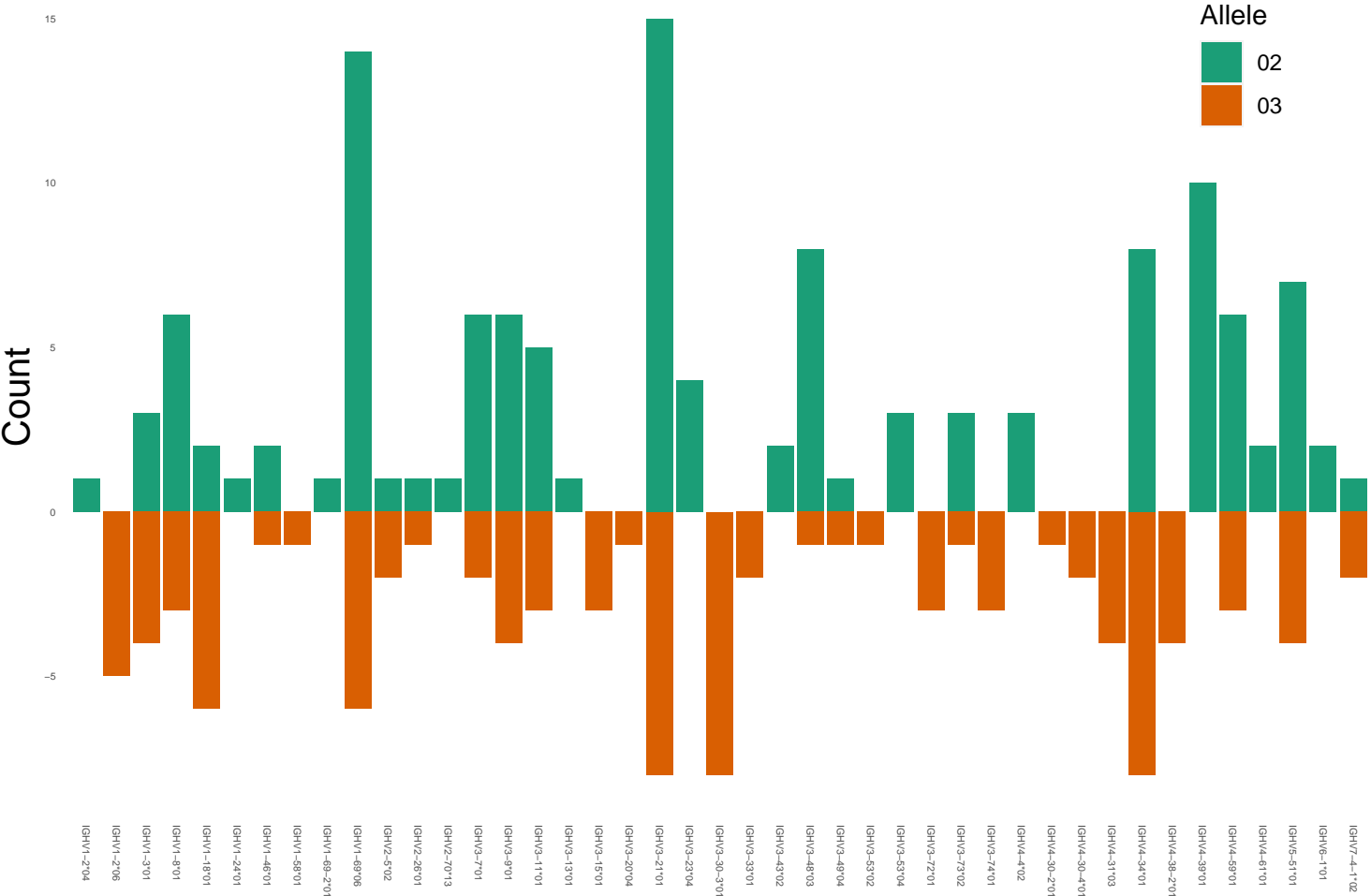
22 sequences assigned
7 (31.8%) exact matches, in which:
7 unique CDR3
4 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]