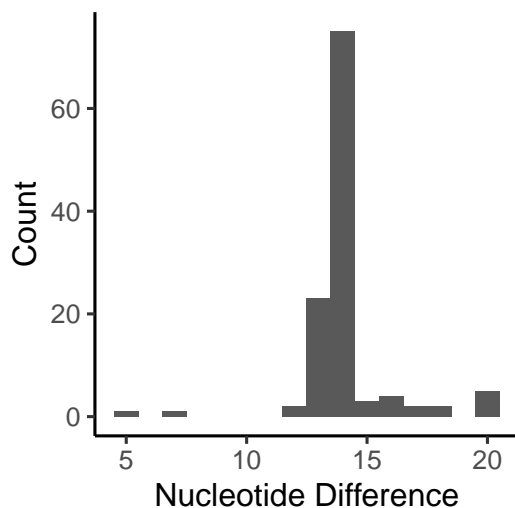


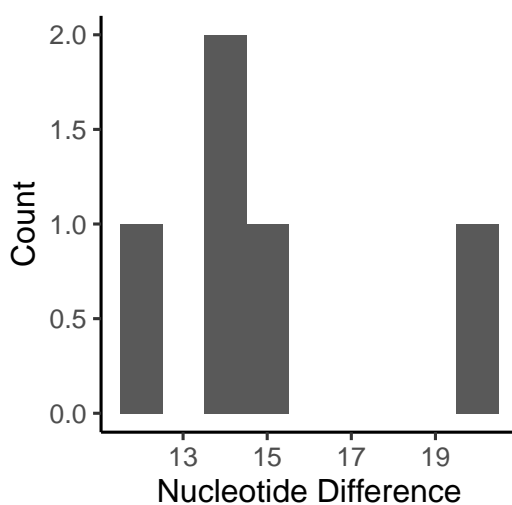
IGHV1-2*02

147 sequences assigned
No exact matches.



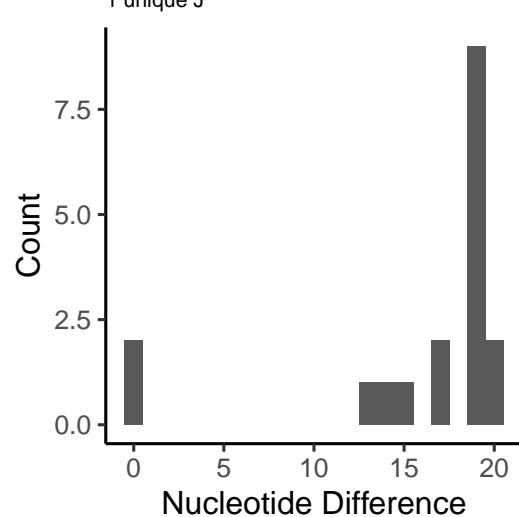
IGHV1-3*04

8 sequences assigned
No exact matches.



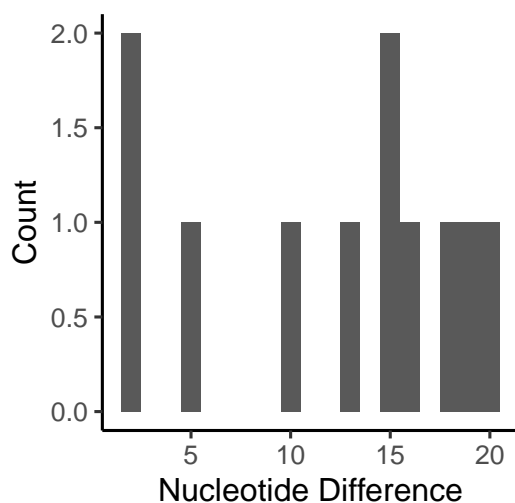
IGHV1-18*04

26 sequences assigned
2 (7.7%) exact matches, in which:
1 unique CDR3
1 unique J



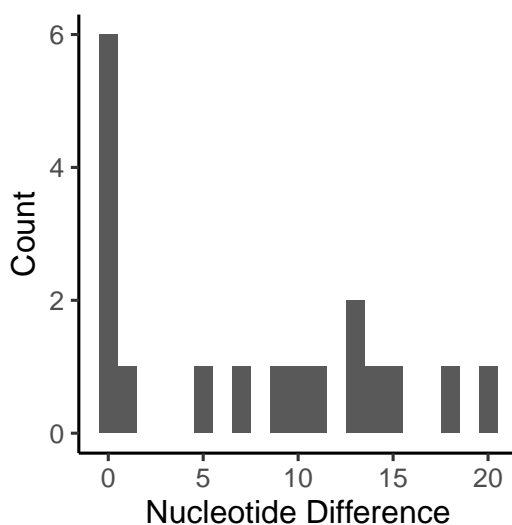
IGHV1-2*06

30 sequences assigned
No exact matches.



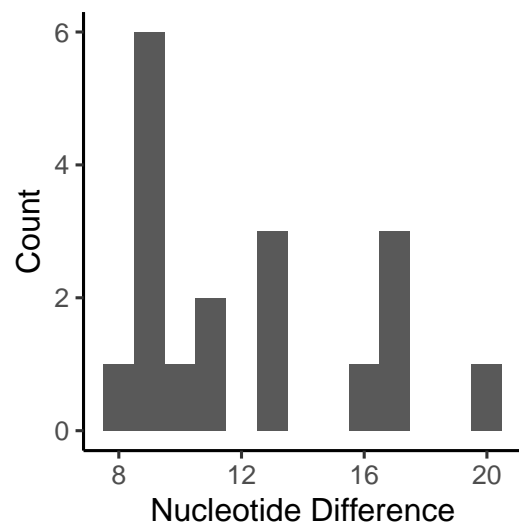
IGHV1-8*01

37 sequences assigned
6 (16.2%) exact matches, in which:
4 unique CDR3
2 unique J



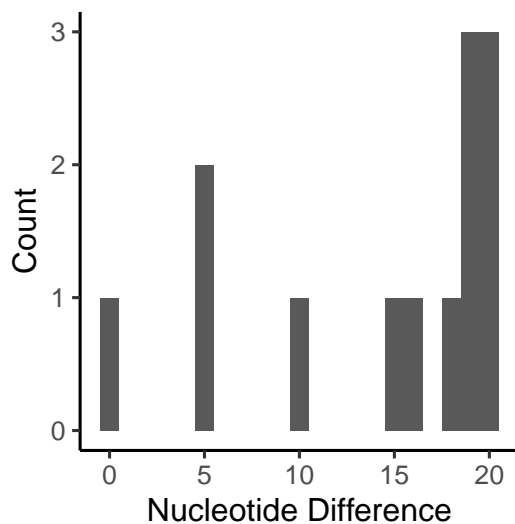
IGHV1-24*01

20 sequences assigned
No exact matches.



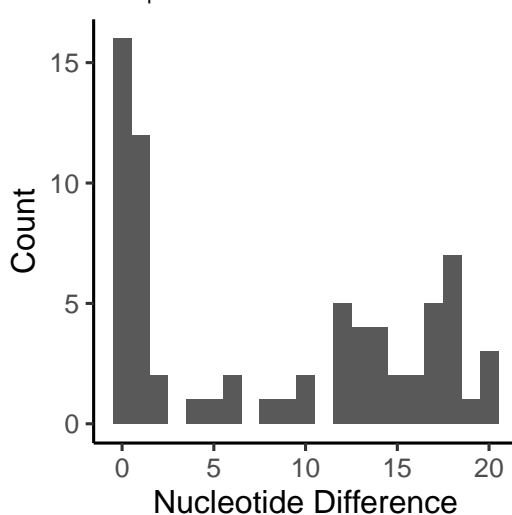
IGHV1-3*01

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



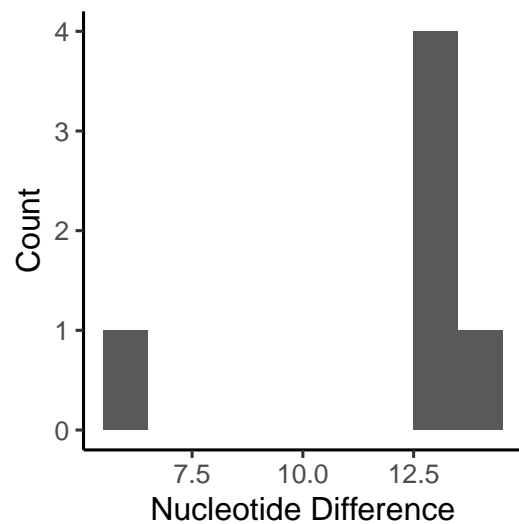
IGHV1-18*01

91 sequences assigned
16 (17.6%) exact matches, in which:
6 unique CDR3
3 unique J



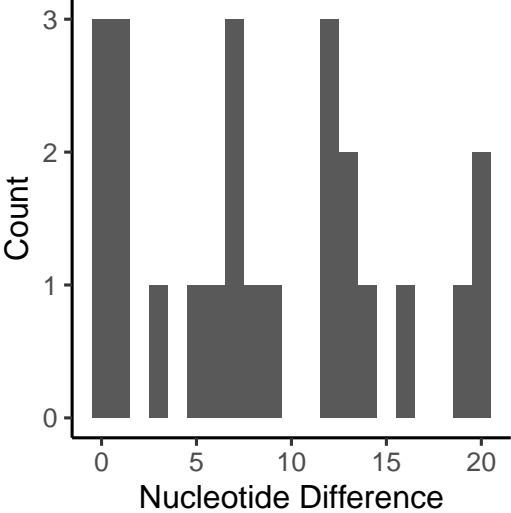
IGHV1-45*02

6 sequences assigned
No exact matches.



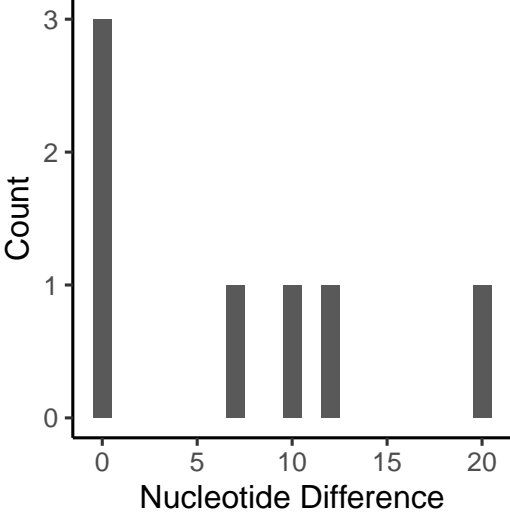
IGHV1-46*01

39 sequences assigned
3 (7.7%) exact matches, in which:
3 unique CDR3
3 unique J



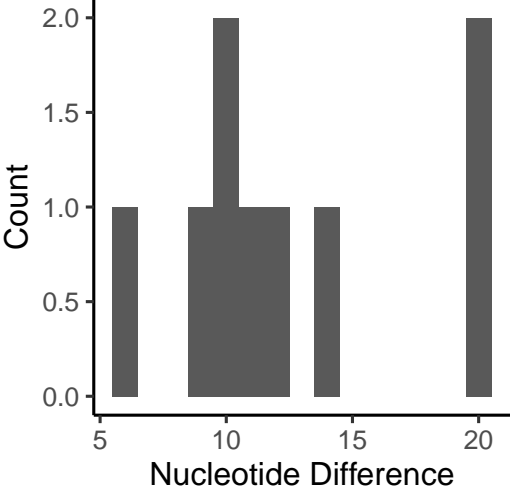
IGHV1-58*01

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



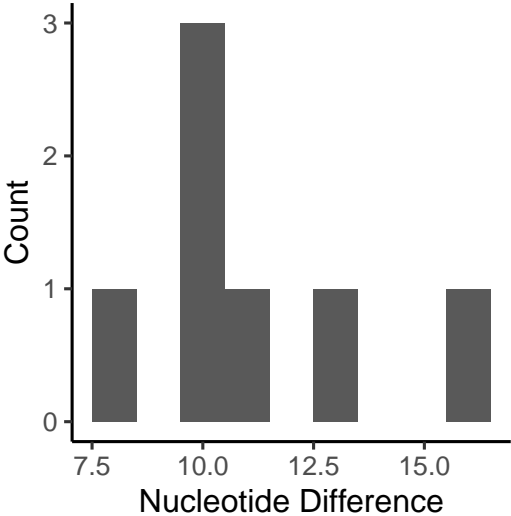
IGHV2-26*01

10 sequences assigned
No exact matches.



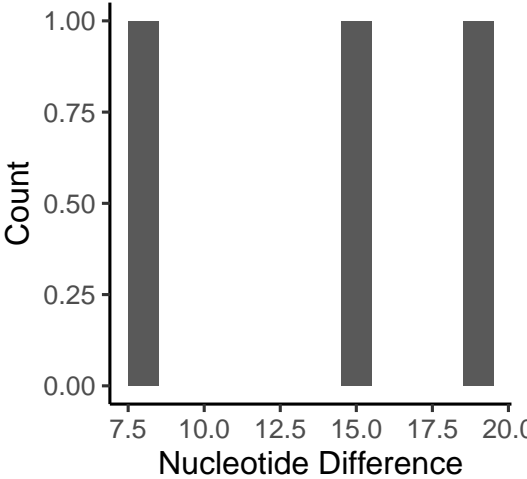
IGHV1-46*03

18 sequences assigned
No exact matches.



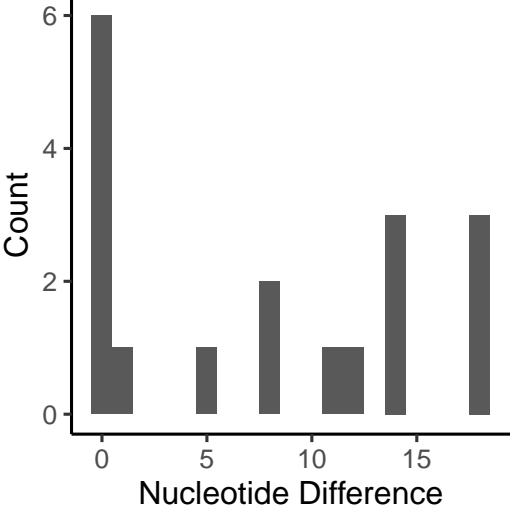
IGHV2-5*01

3 sequences assigned
No exact matches.



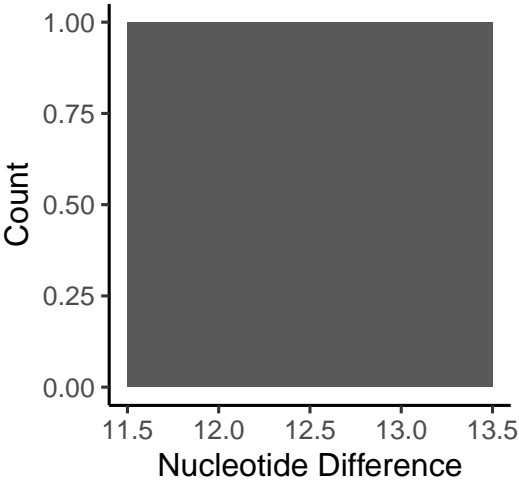
IGHV2-70*01

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



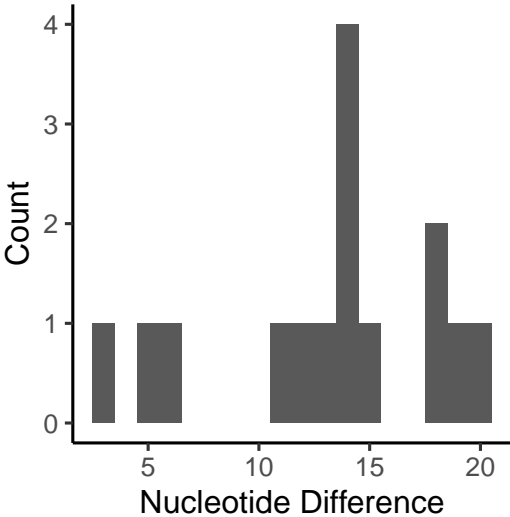
IGHV1-46*04

4 sequences assigned
No exact matches.



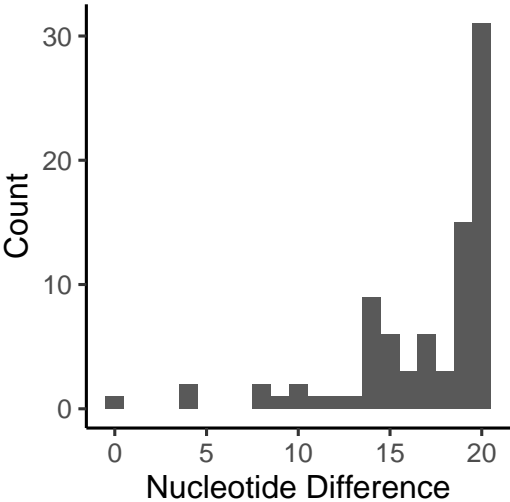
IGHV2-5*02

29 sequences assigned
No exact matches.



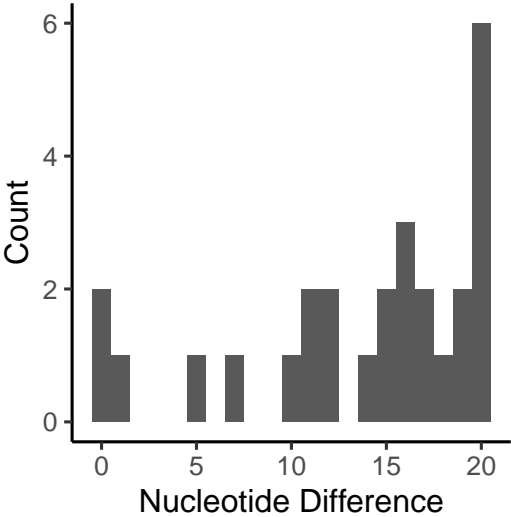
IGHV3-7*01

159 sequences assigned
1 (0.6%) exact matches, in which:
1 unique CDR3
1 unique J



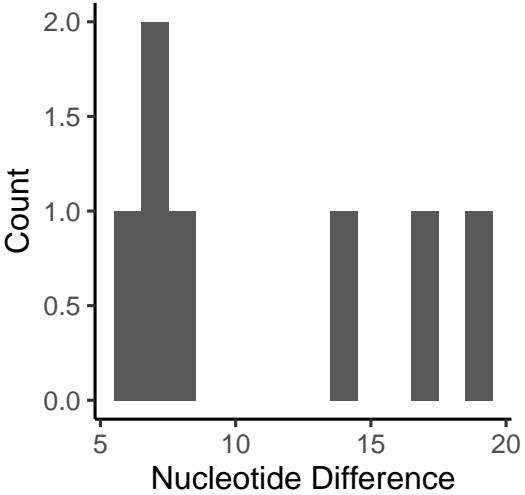
IGHV3-9*01

48 sequences assigned
2 (4.2%) exact matches, in which:
2 unique CDR3
1 unique J



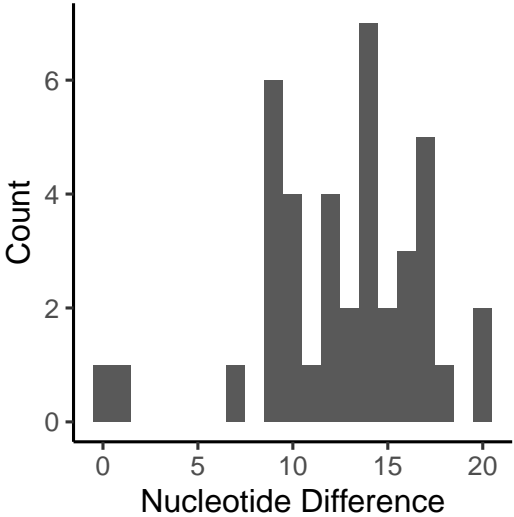
IGHV3-15*01

29 sequences assigned
No exact matches.



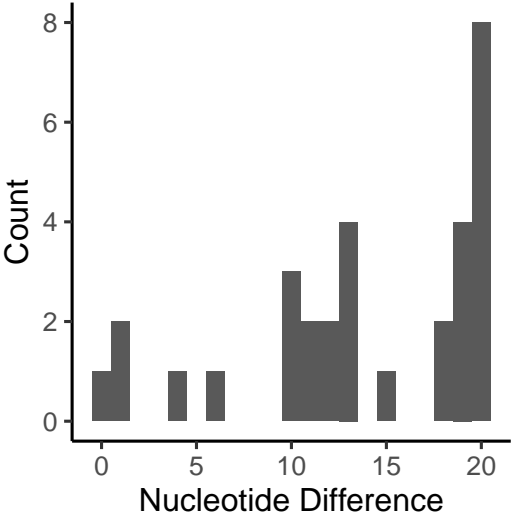
IGHV3-30-3*01

70 sequences assigned
1 (1.4%) exact matches, in which:
1 unique CDR3
1 unique J



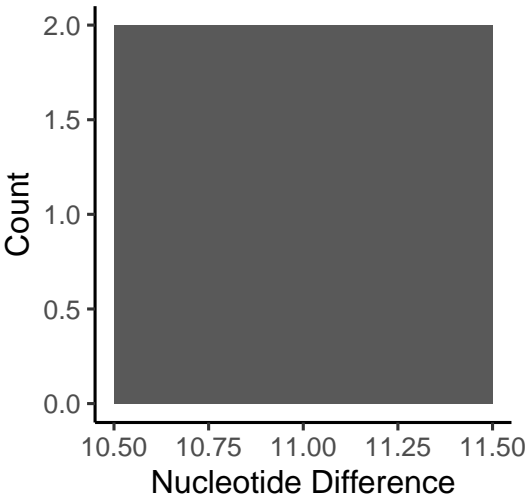
IGHV3-11*01

45 sequences assigned
1 (2.2%) exact matches, in which:
1 unique CDR3
1 unique J



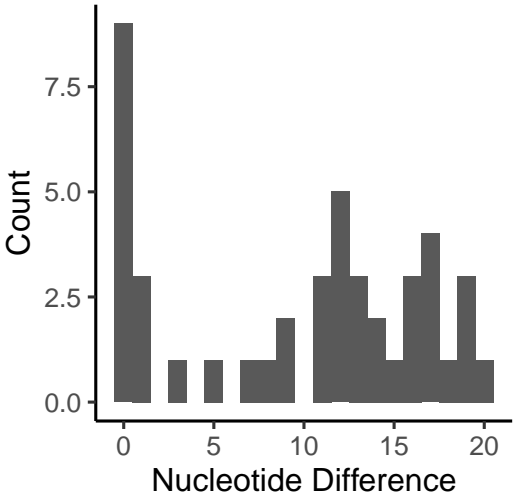
IGHV3-15*05

11 sequences assigned
No exact matches.



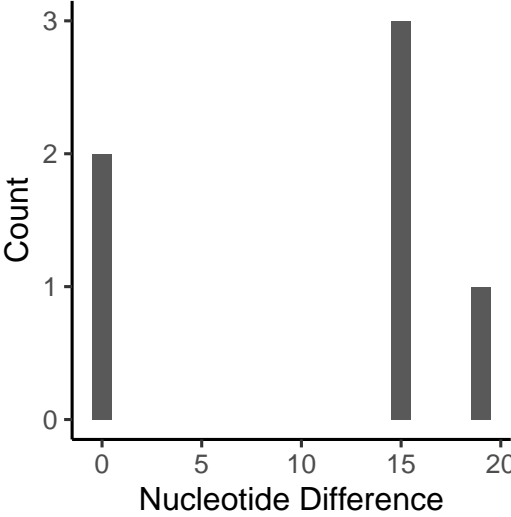
IGHV3-33*01

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



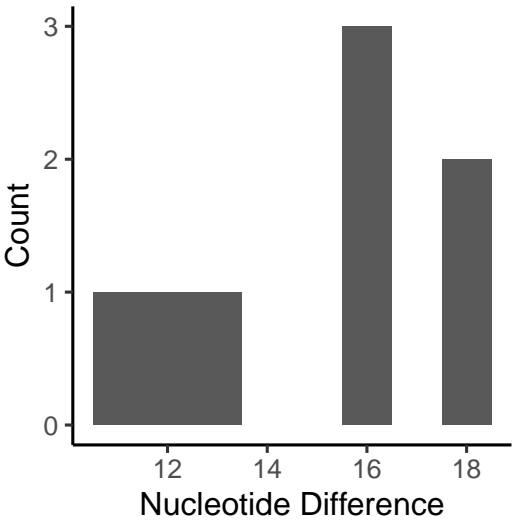
IGHV3-13*01

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



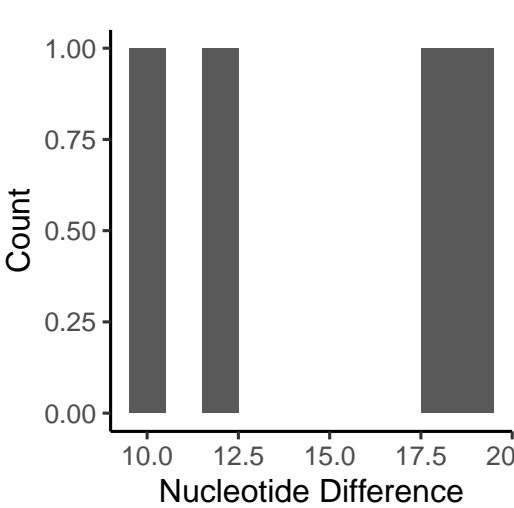
IGHV3-20*01

8 sequences assigned
No exact matches.



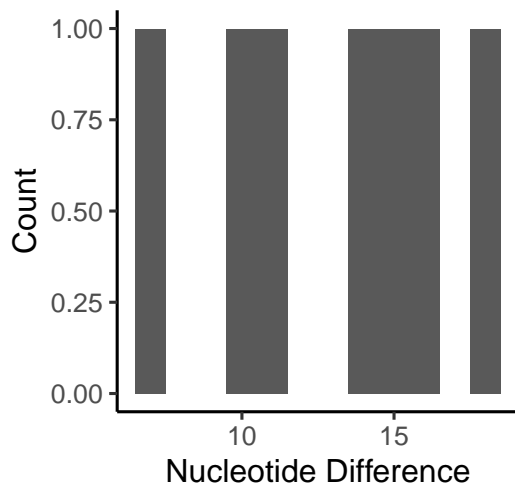
IGHV3-48*01

5 sequences assigned
No exact matches.



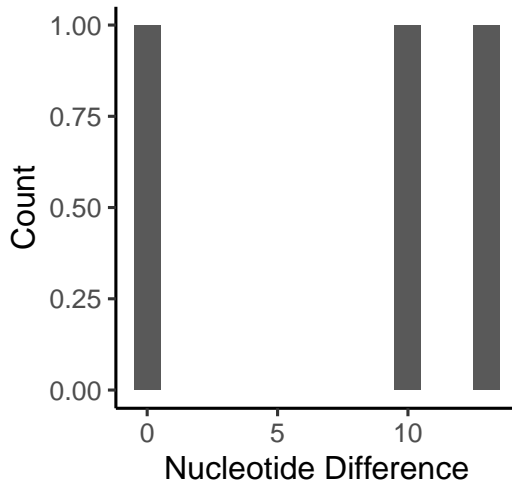
IGHV3-48*02

10 sequences assigned
No exact matches.



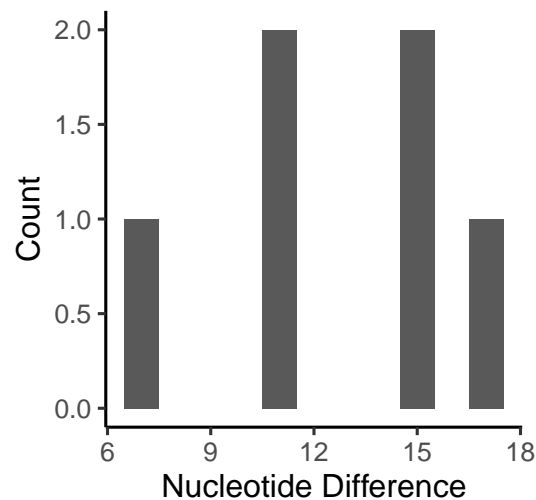
IGHV3-49*05

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



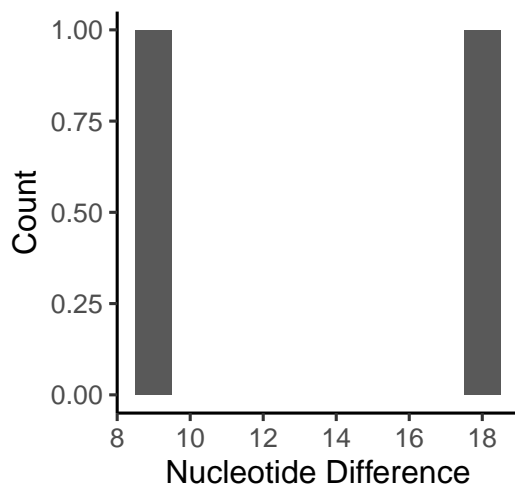
IGHV3-72*01

12 sequences assigned
No exact matches.



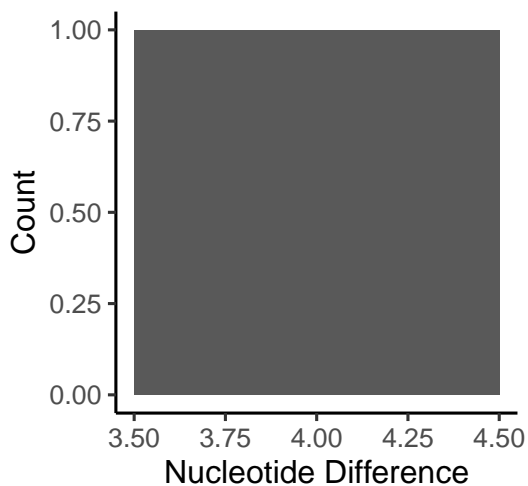
IGHV3-48*04

2 sequences assigned
No exact matches.



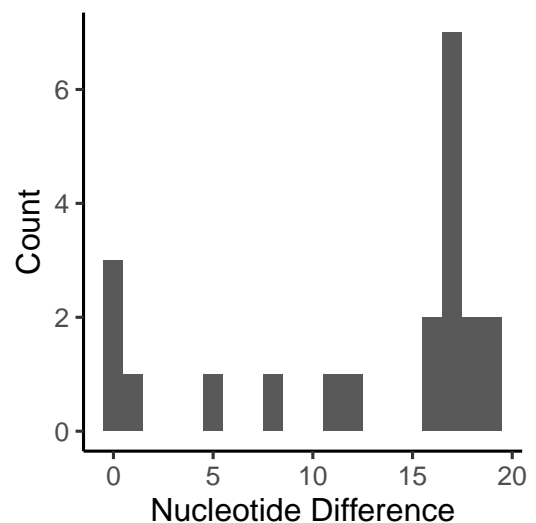
IGHV3-64*01

2 sequences assigned
No exact matches.



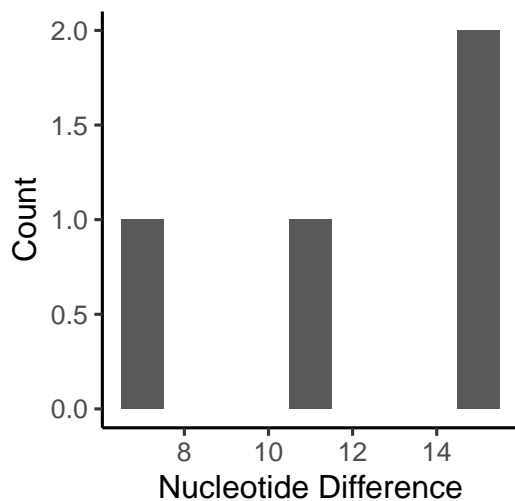
IGHV3-74*01

28 sequences assigned
3 (10.7%) exact matches, in which:
3 unique CDR3
3 unique J



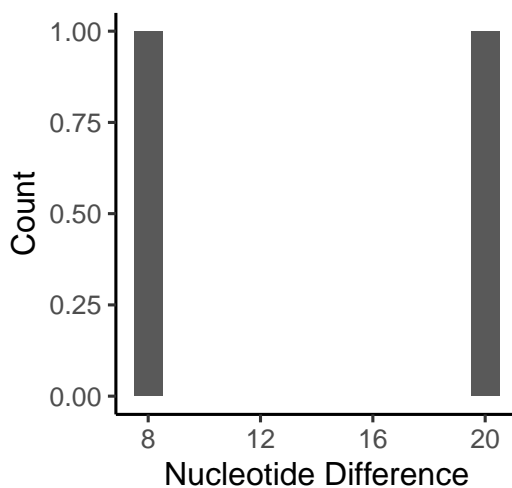
IGHV3-49*03

6 sequences assigned
No exact matches.



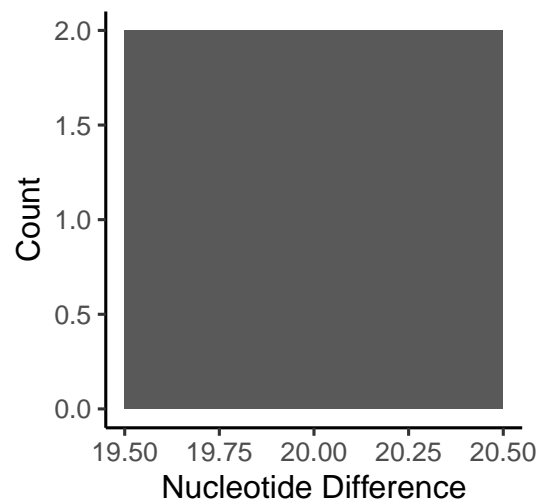
IGHV3-66*02

2 sequences assigned
No exact matches.



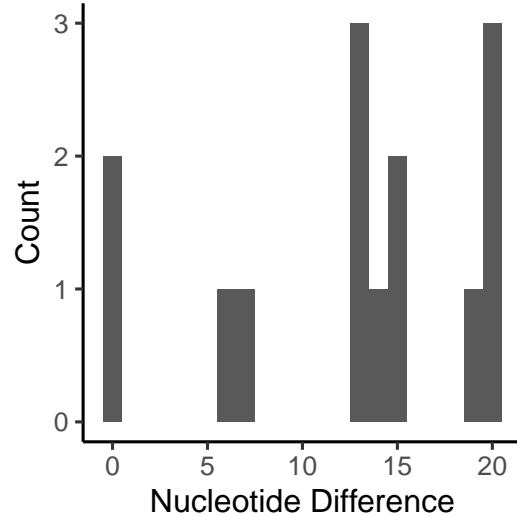
IGHV3-74*03

5 sequences assigned
No exact matches.



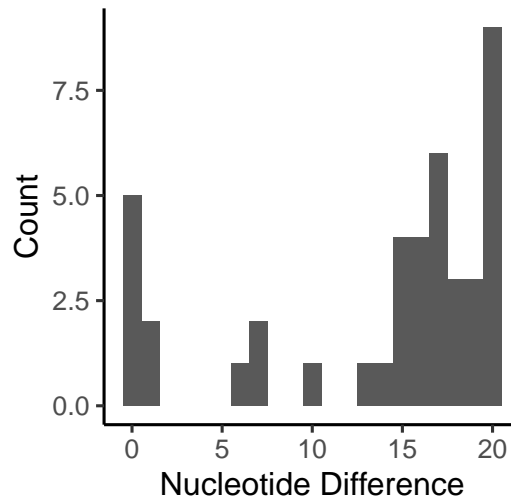
IGHV4-4*02

19 sequences assigned
2 (10.5%) exact matches, in which:
2 unique CDR3
2 unique J



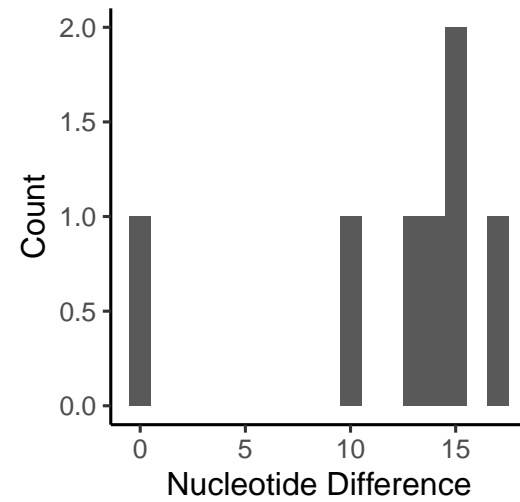
IGHV4-31*03

51 sequences assigned
5 (9.8%) exact matches, in which:
5 unique CDR3
3 unique J



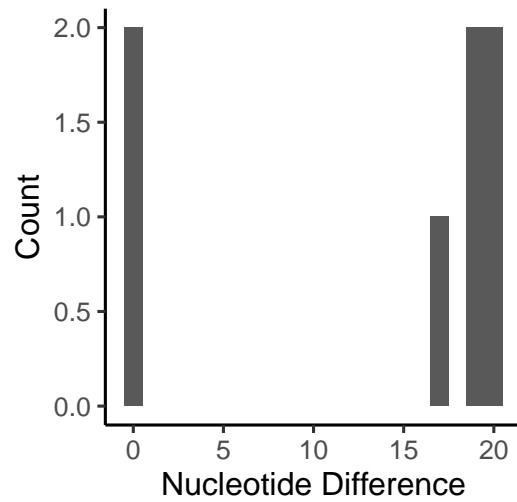
IGHV4-61*01

15 sequences assigned
1 (6.7%) exact matches, in which:
1 unique CDR3
1 unique J



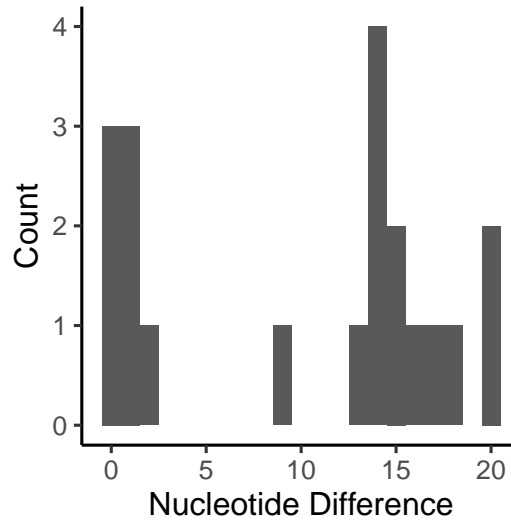
IGHV4-30-2*01

37 sequences assigned
2 (5.4%) exact matches, in which:
1 unique CDR3
1 unique J



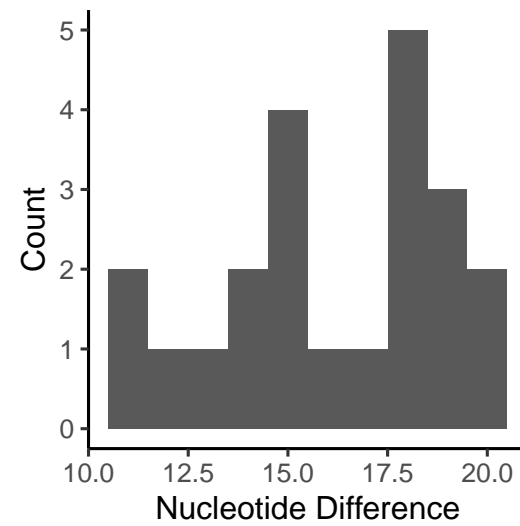
IGHV4-39*01

46 sequences assigned
3 (6.5%) exact matches, in which:
3 unique CDR3
3 unique J



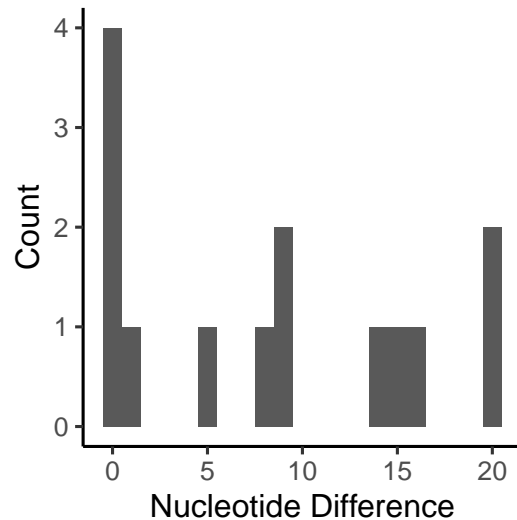
IGHV4-61*02

91 sequences assigned
No exact matches.



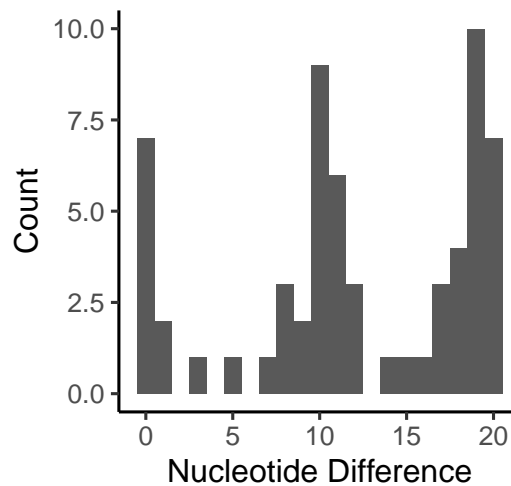
IGHV4-30-4*01

18 sequences assigned
4 (22.2%) exact matches, in which:
4 unique CDR3
2 unique J



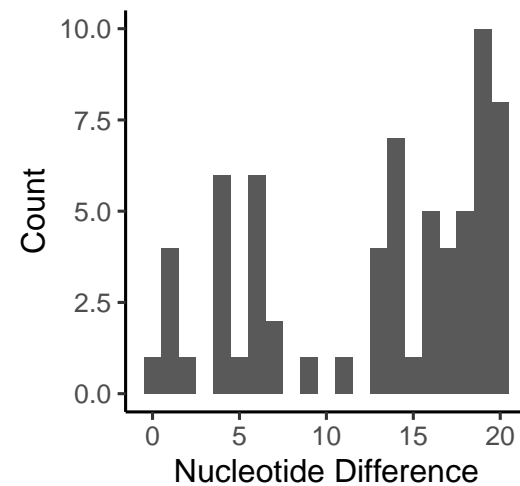
IGHV4-59*01

89 sequences assigned
7 (7.9%) exact matches, in which:
7 unique CDR3
4 unique J



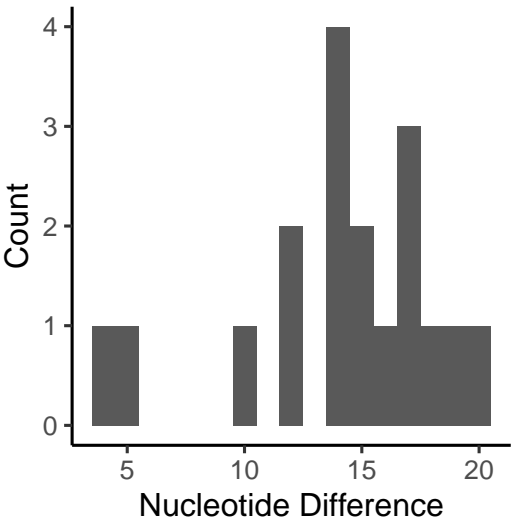
IGHV5-51*01

89 sequences assigned
1 (1.1%) exact matches, in which:
1 unique CDR3
1 unique J



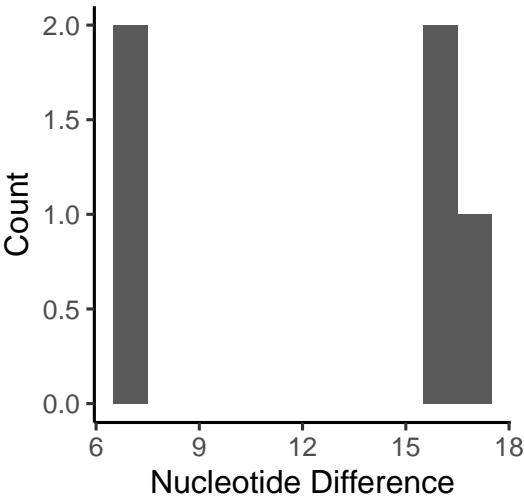
IGHV5–51*03

25 sequences assigned
No exact matches.



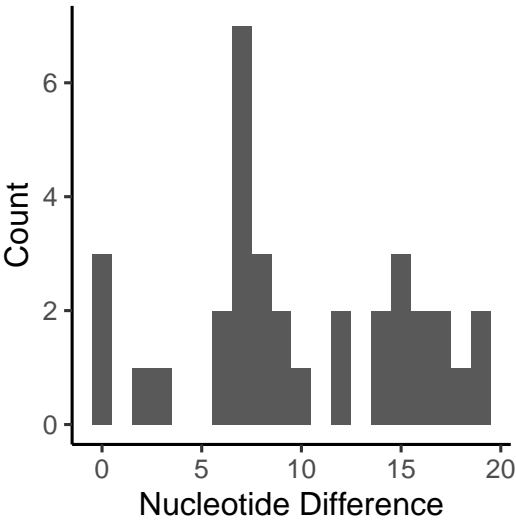
IGHV6–1*01

7 sequences assigned
No exact matches.

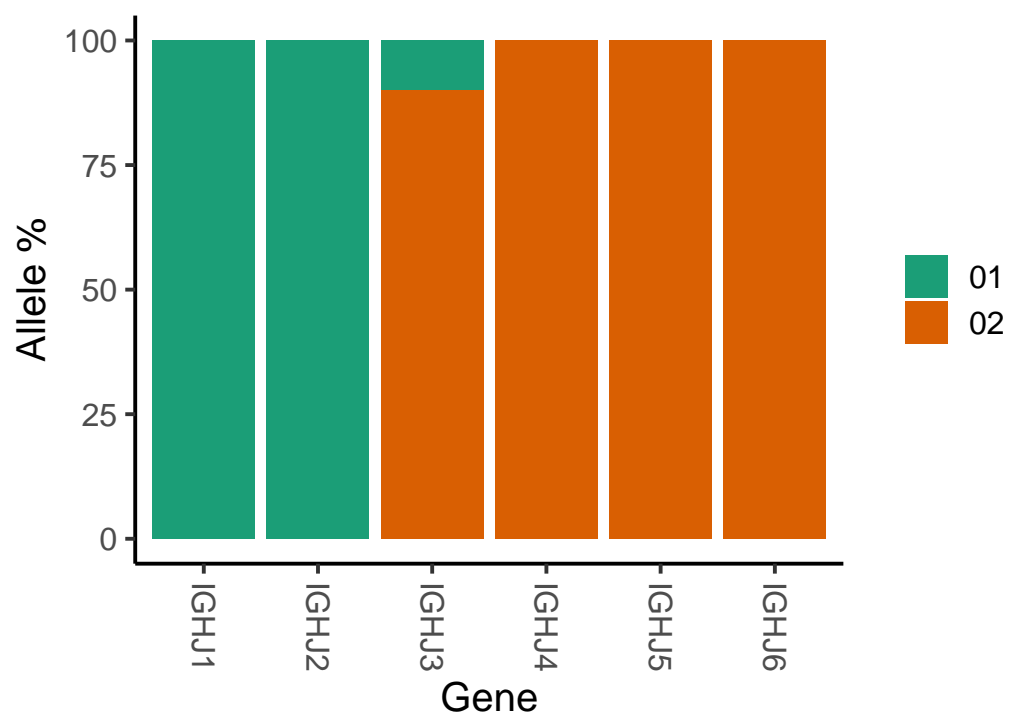


IGHV7–4–1*02

54 sequences assigned
3 (5.6%) exact matches, in which:
3 unique CDR3
2 unique J



Allele Usage



[illegible]