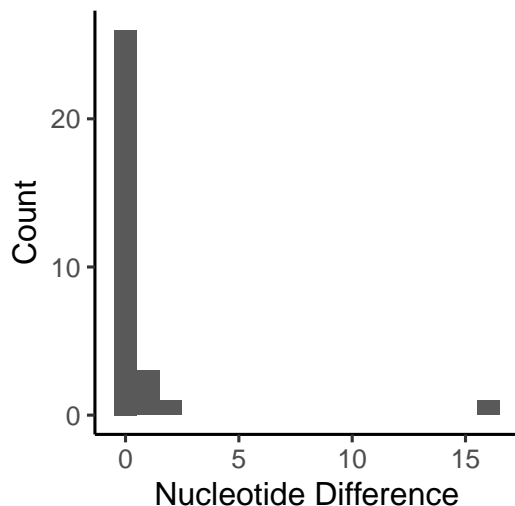


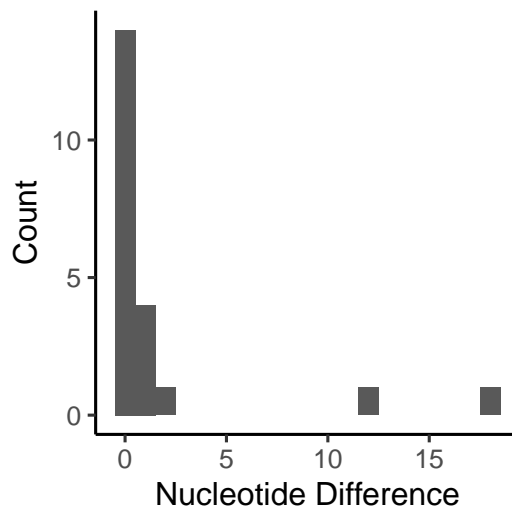
IGHV1-2*02

31 sequences assigned
26 (83.9%) exact matches, in which:
26 unique CDR3
5 unique J



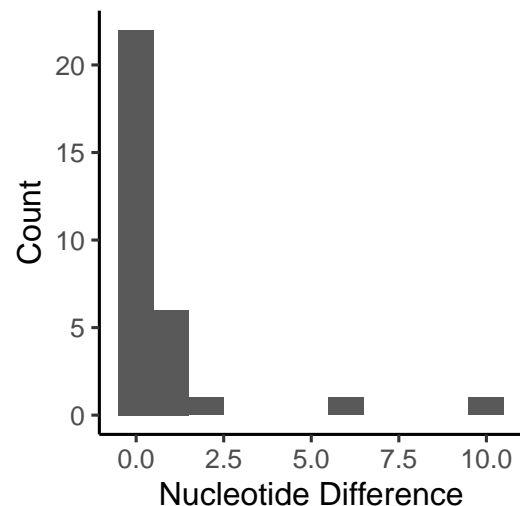
IGHV1-8*02

23 sequences assigned
14 (60.9%) exact matches, in which:
14 unique CDR3
4 unique J



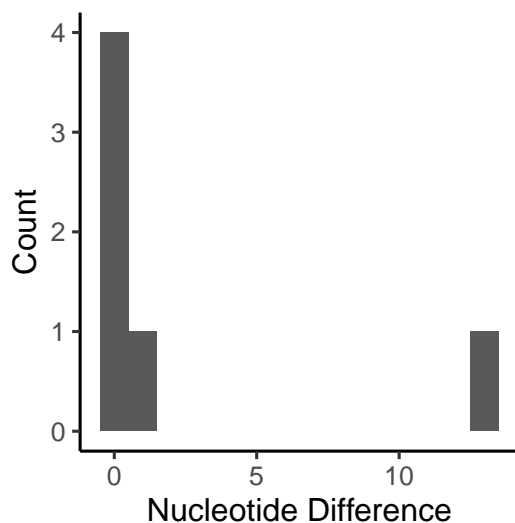
IGHV1-46*01

34 sequences assigned
22 (64.7%) exact matches, in which:
22 unique CDR3
5 unique J



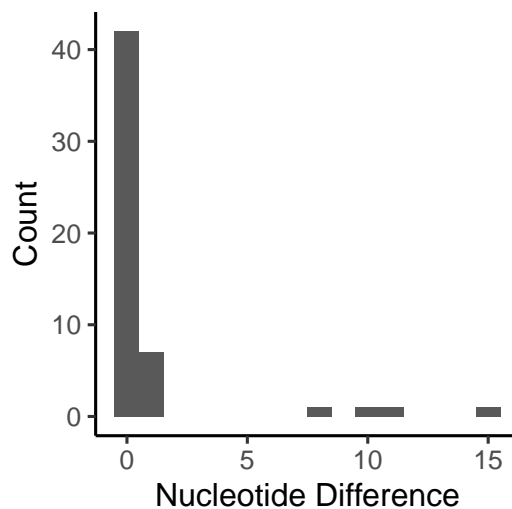
IGHV1-2*04

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



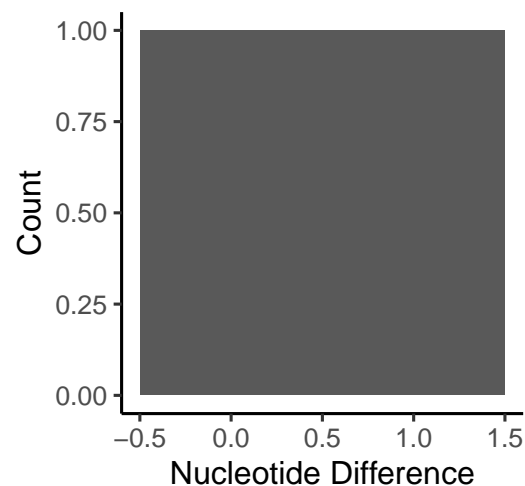
IGHV1-18*01

59 sequences assigned
42 (71.2%) exact matches, in which:
41 unique CDR3
6 unique J



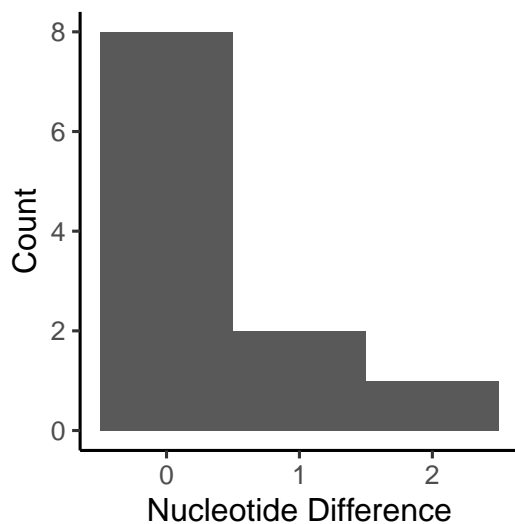
IGHV1-58*02

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



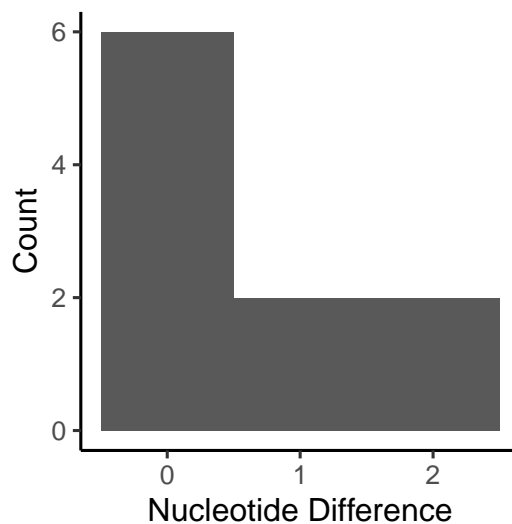
IGHV1-3*01

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



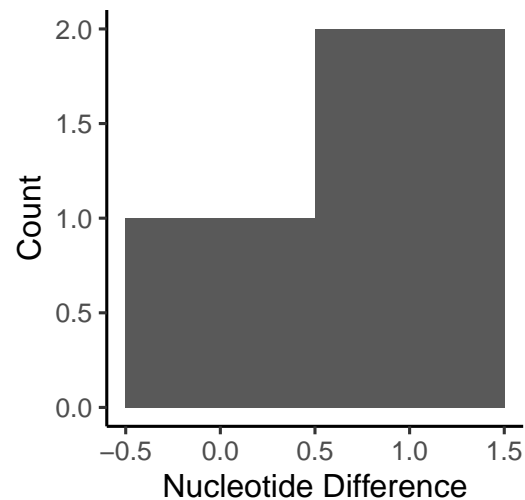
IGHV1-24*01

14 sequences assigned
6 (42.9%) exact matches, in which:
6 unique CDR3
2 unique J



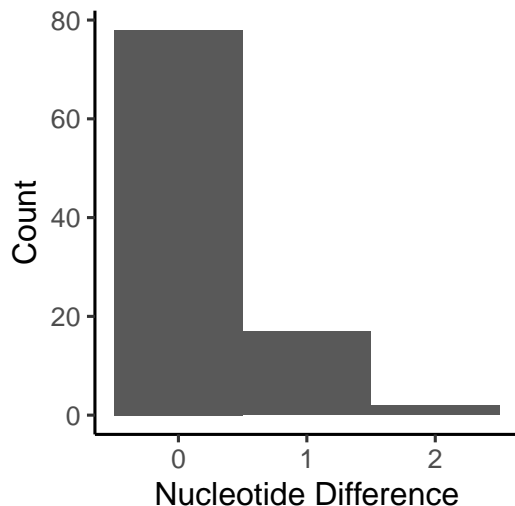
IGHV1-69-2*01

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



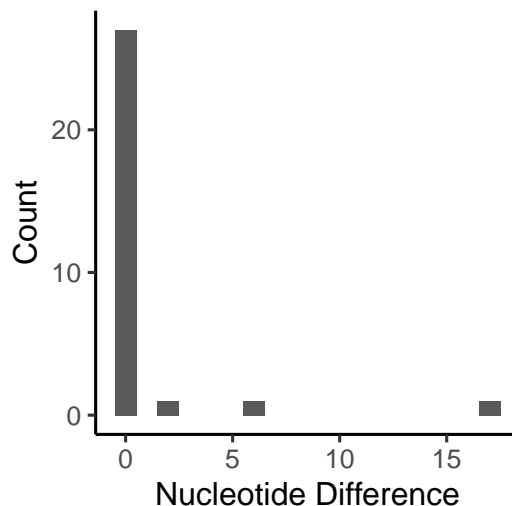
IGHV1-69*05

101 sequences assigned
78 (77.2%) exact matches, in which:
78 unique CDR3
5 unique J



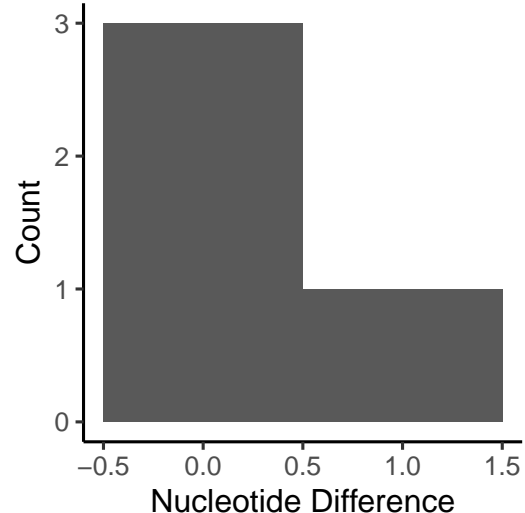
IGHV2-5*02

33 sequences assigned
27 (81.8%) exact matches, in which:
27 unique CDR3
4 unique J



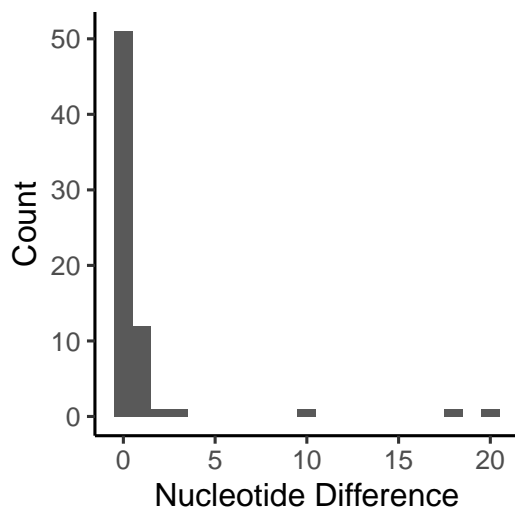
IGHV2-70*20

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



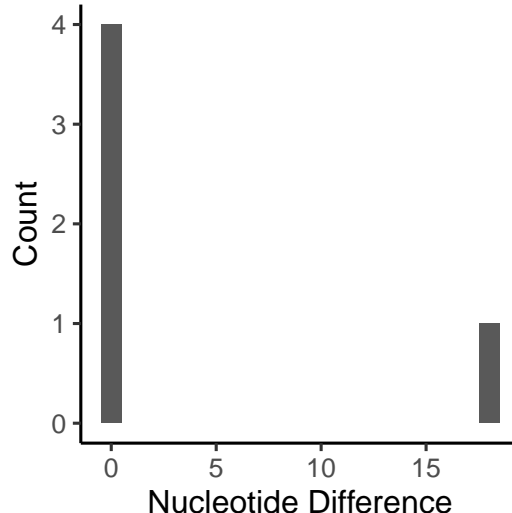
IGHV1-69*12

69 sequences assigned
51 (73.9%) exact matches, in which:
51 unique CDR3
5 unique J



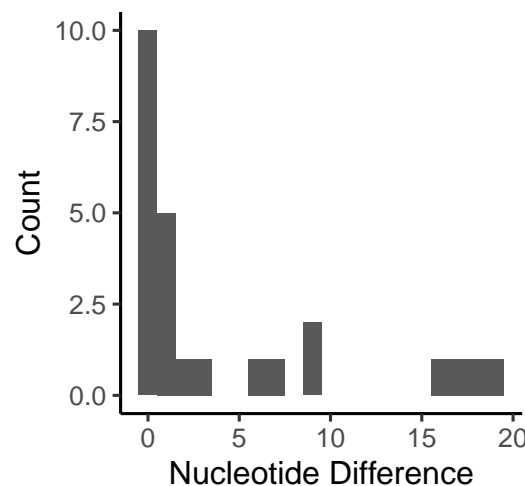
IGHV2-26*01

5 sequences assigned
4 (80%) exact matches, in which:
4 unique CDR3
2 unique J



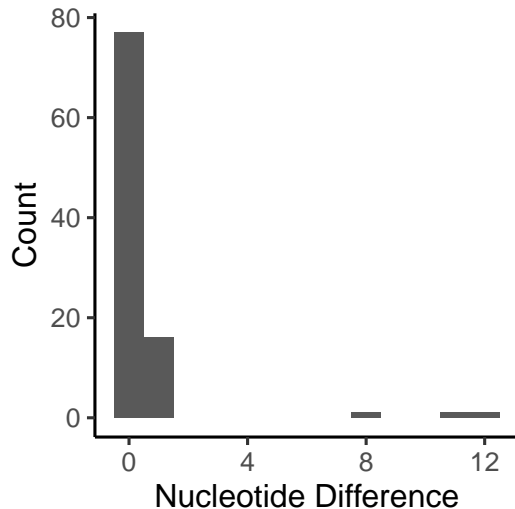
IGHV3-7*04

26 sequences assigned
10 (38.5%) exact matches, in which:
10 unique CDR3
3 unique J



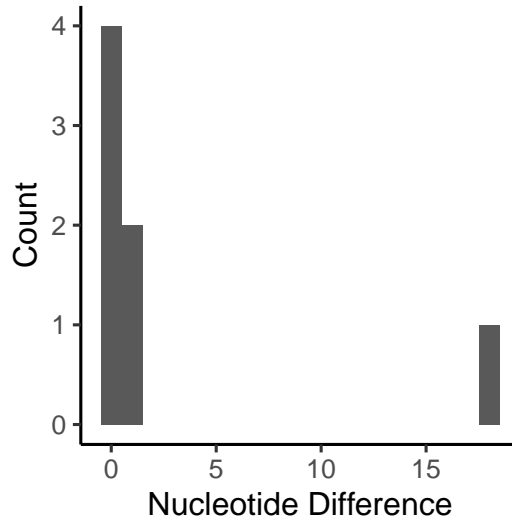
IGHV1-69*15

100 sequences assigned
77 (77%) exact matches, in which:
77 unique CDR3
5 unique J



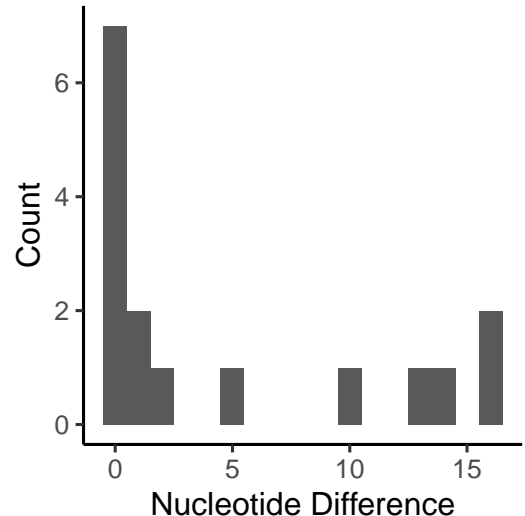
IGHV2-70*15

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



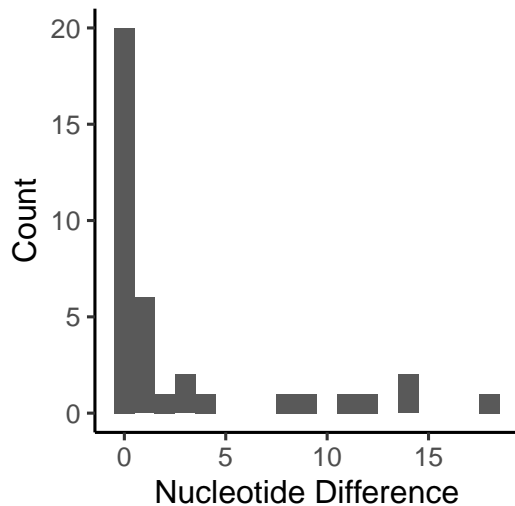
IGHV3-7*05

18 sequences assigned
7 (38.9%) exact matches, in which:
7 unique CDR3
5 unique J



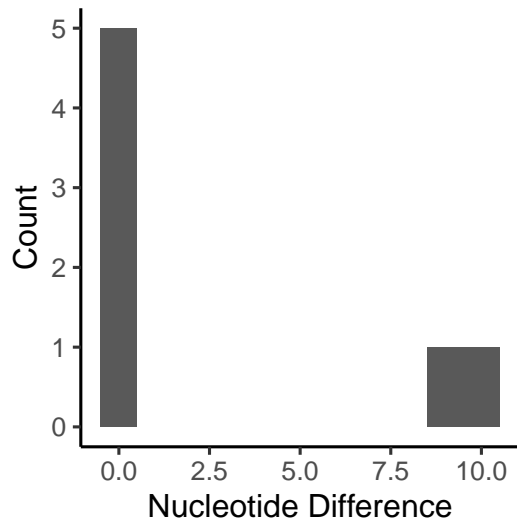
IGHV3-9*01

38 sequences assigned
20 (52.6%) exact matches, in which:
20 unique CDR3
4 unique J



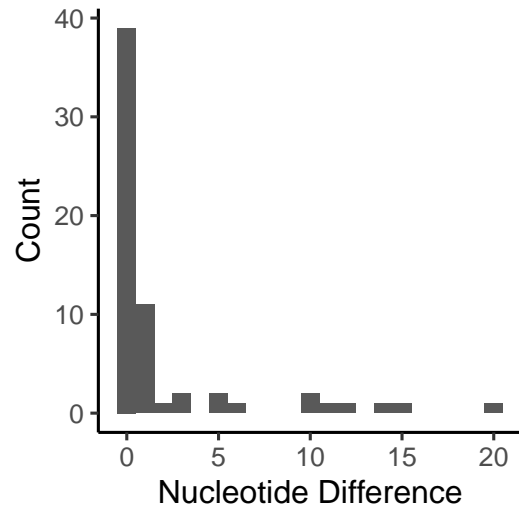
IGHV3-13*01

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



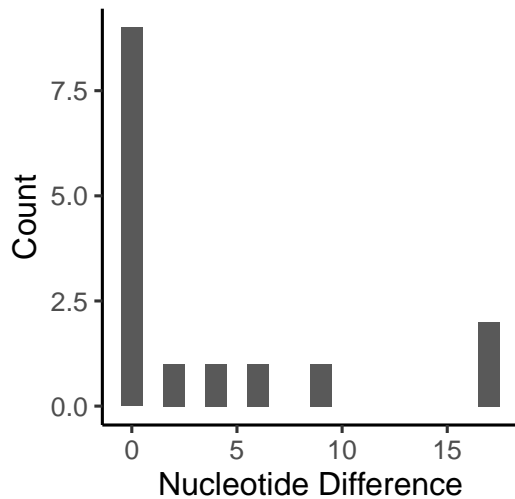
IGHV3-21*01

66 sequences assigned
39 (59.1%) exact matches, in which:
39 unique CDR3
5 unique J



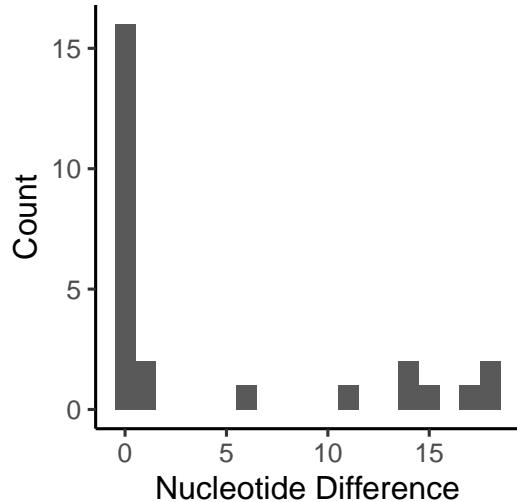
IGHV3-11*04

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



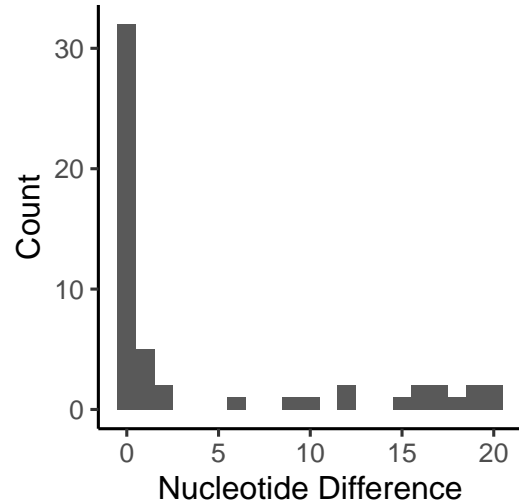
IGHV3-15*01

28 sequences assigned
16 (57.1%) exact matches, in which:
16 unique CDR3
4 unique J



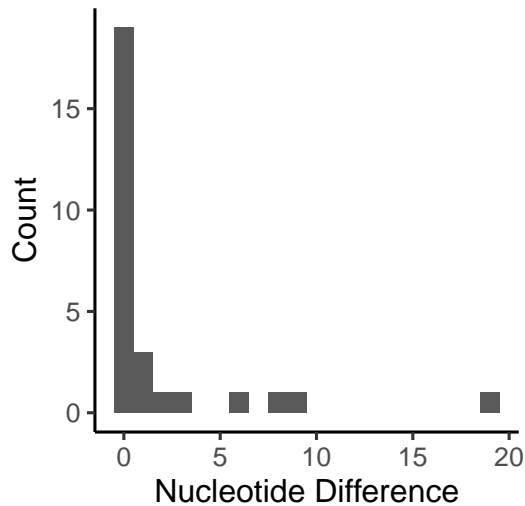
IGHV3-23*04

58 sequences assigned
32 (55.2%) exact matches, in which:
32 unique CDR3
5 unique J



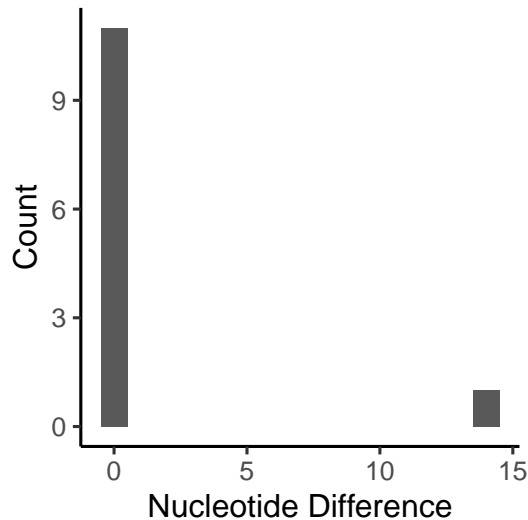
IGHV3-11*05

30 sequences assigned
19 (63.3%) exact matches, in which:
19 unique CDR3
4 unique J



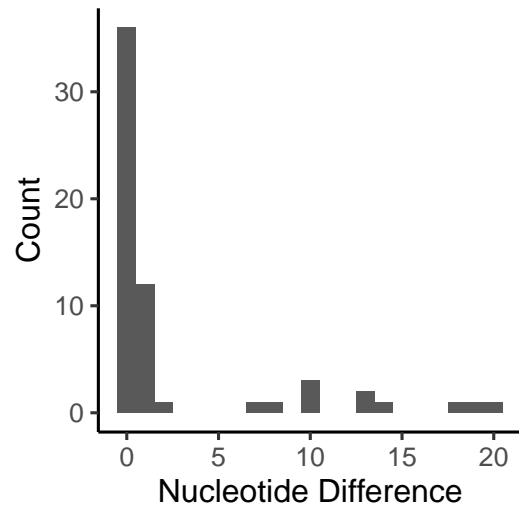
IGHV3-20*04

12 sequences assigned
11 (91.7%) exact matches, in which:
11 unique CDR3
3 unique J



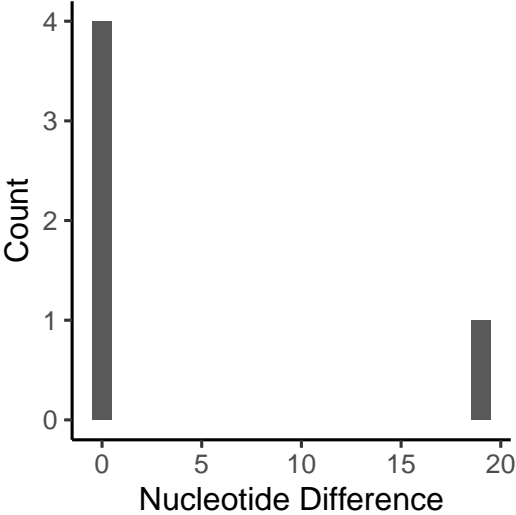
IGHV3-33*01

61 sequences assigned
36 (59%) exact matches, in which:
36 unique CDR3
5 unique J



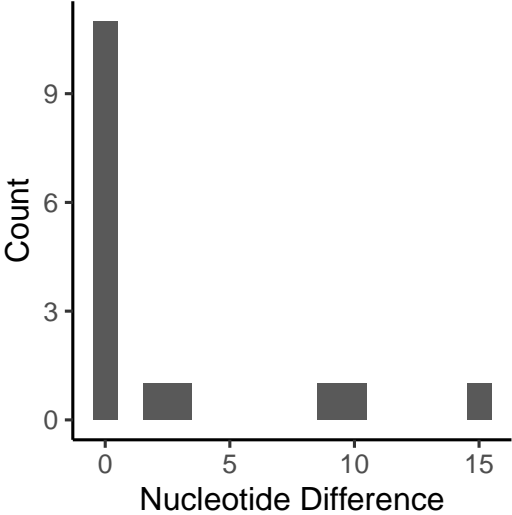
IGHV3-43*01

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



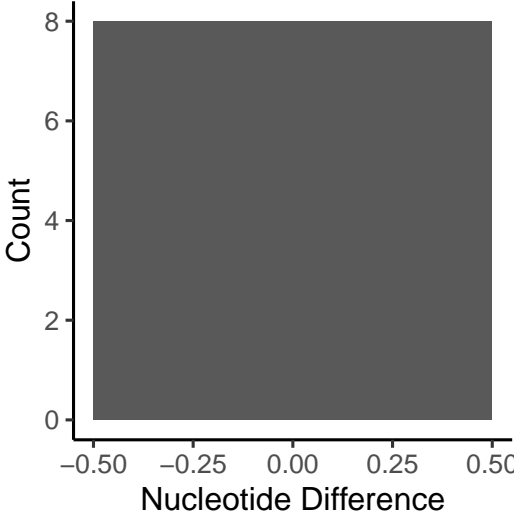
IGHV3-49*04

16 sequences assigned
11 (68.8%) exact matches, in which:
11 unique CDR3
2 unique J



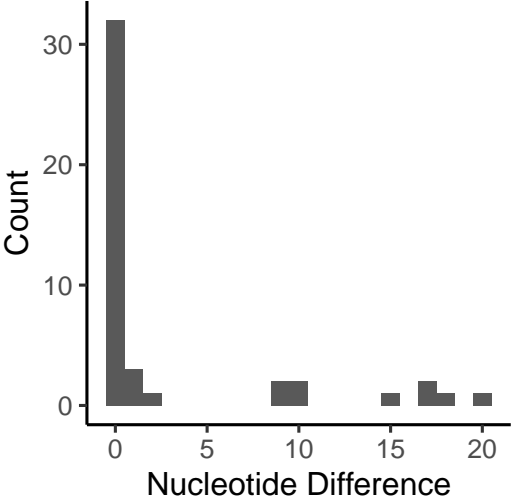
IGHV3-64*01

8 sequences assigned
8 (100%) exact matches, in which:
8 unique CDR3
3 unique J



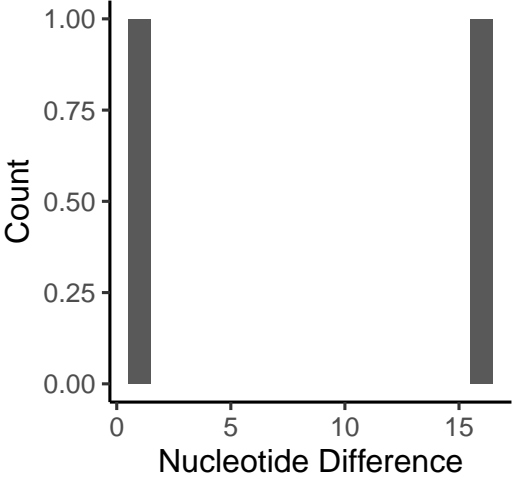
IGHV3-48*01

47 sequences assigned
32 (68.1%) exact matches, in which:
32 unique CDR3
5 unique J



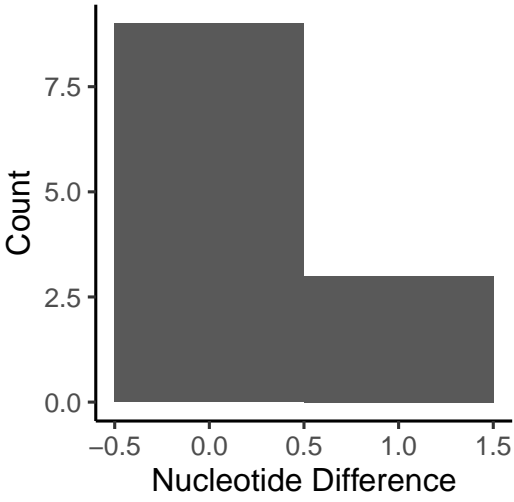
IGHV3-53*01

2 sequences assigned
No exact matches.



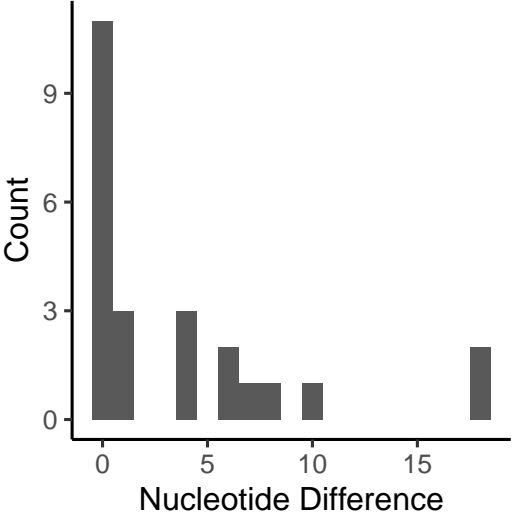
IGHV3-66*02

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



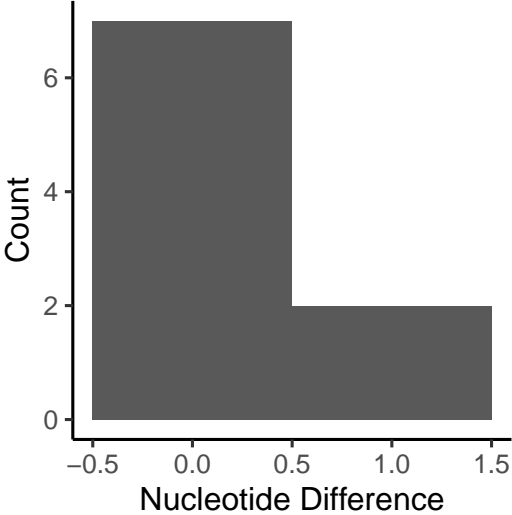
IGHV3-48*04

25 sequences assigned
11 (44%) exact matches, in which:
11 unique CDR3
4 unique J



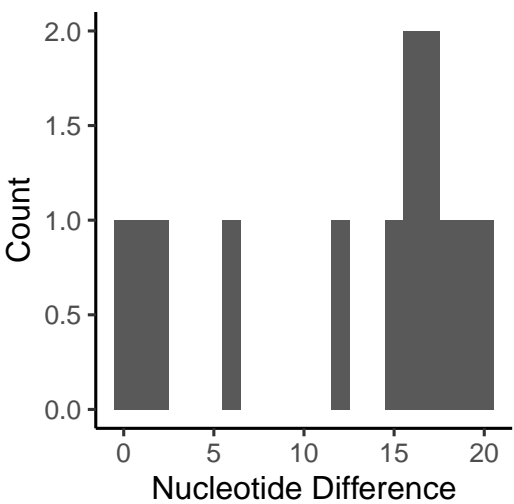
IGHV3-53*02

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



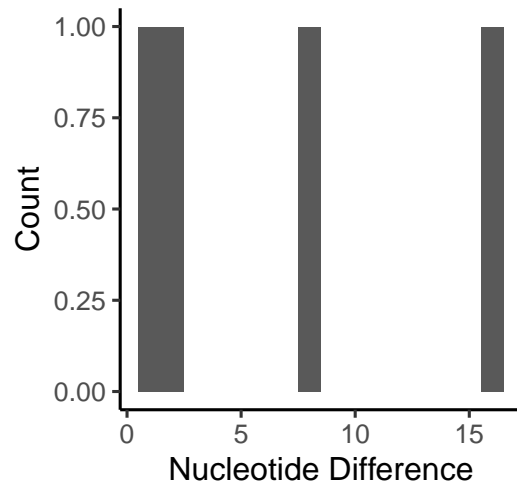
IGHV3-72*01

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



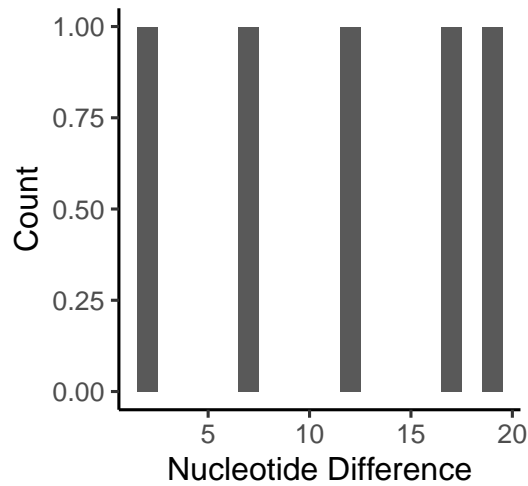
IGHV3-73*01

4 sequences assigned
No exact matches.



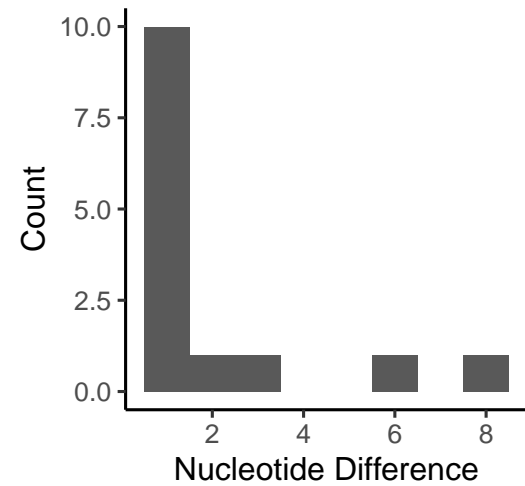
IGHV3-74*02

12 sequences assigned
No exact matches.



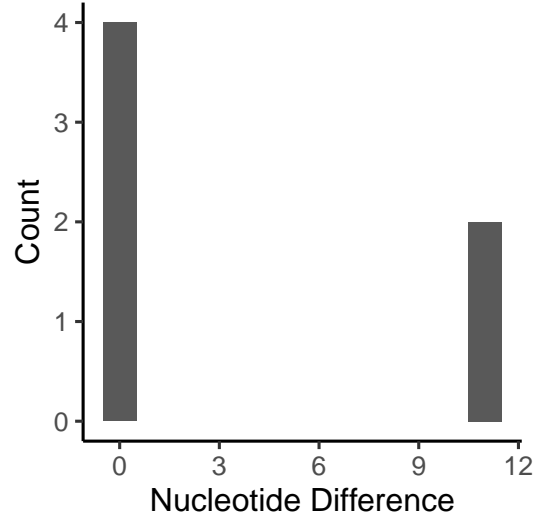
IGHV4-4*02

15 sequences assigned
No exact matches.



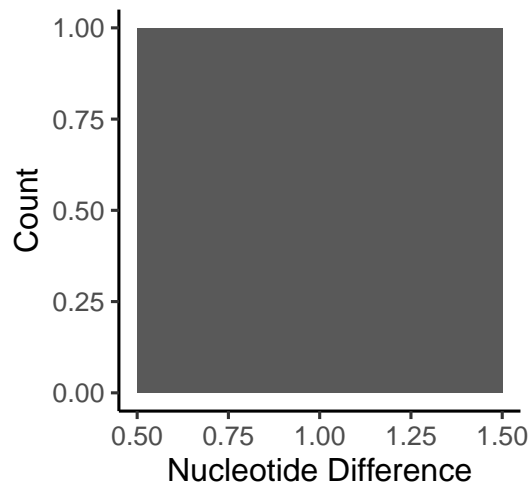
IGHV3-73*02

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



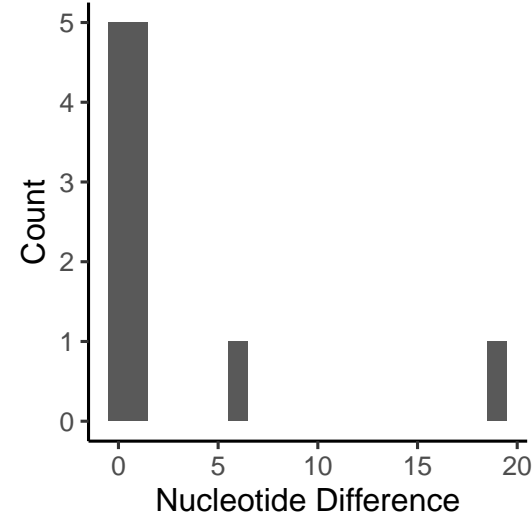
IGHV3-43D*04

1 sequences assigned
No exact matches.



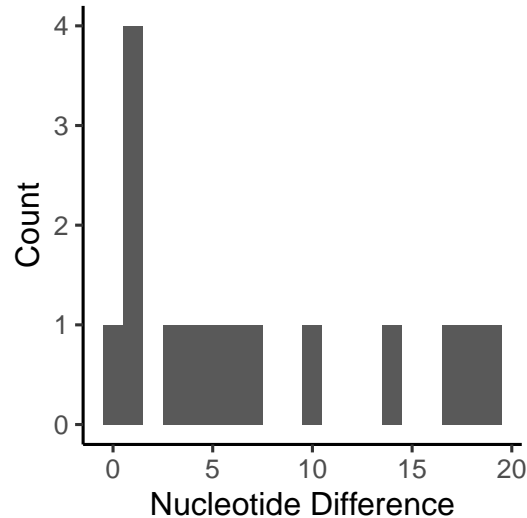
IGHV4-4*07

13 sequences assigned
5 (38.5%) exact matches, in which:
5 unique CDR3
4 unique J



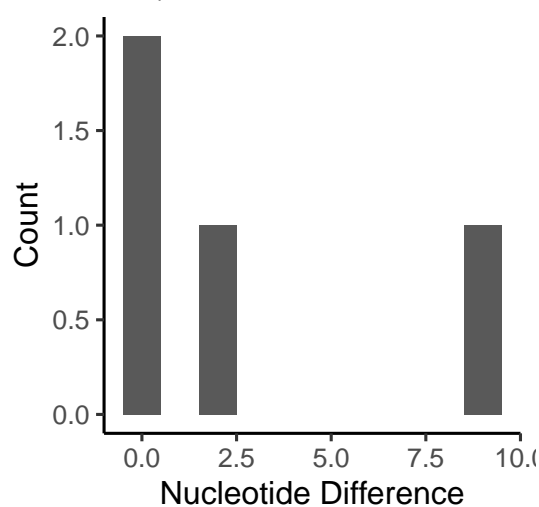
IGHV3-74*01

16 sequences assigned
1 (6.2%) exact matches, in which:
1 unique CDR3
1 unique J



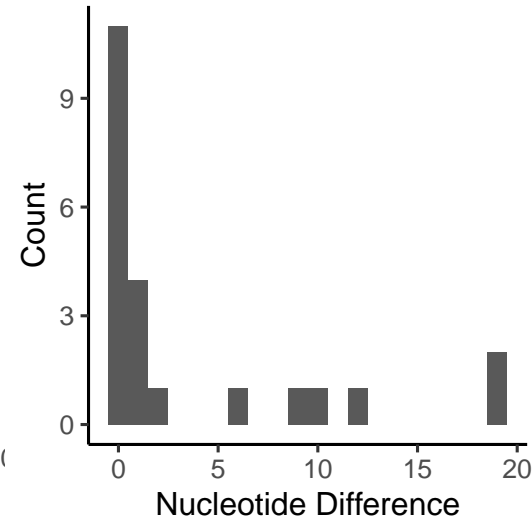
IGHV3-64D*09

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



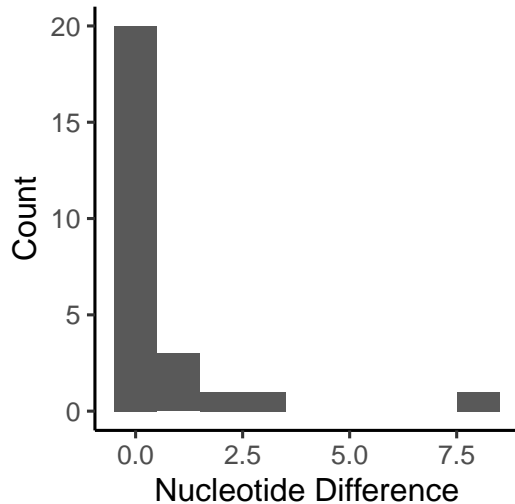
IGHV4-4*09

27 sequences assigned
11 (40.7%) exact matches, in which:
11 unique CDR3
4 unique J



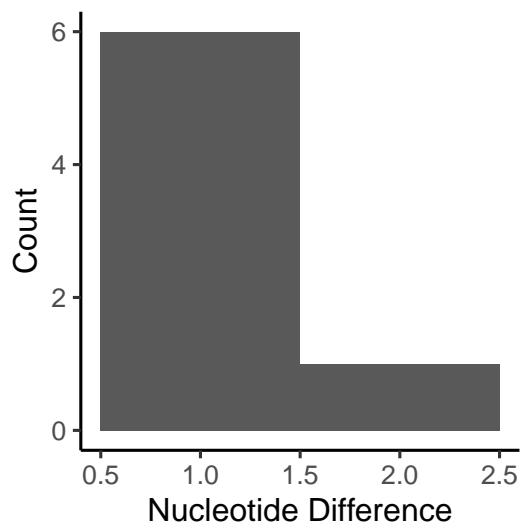
IGHV4-31*03

26 sequences assigned
20 (76.9%) exact matches, in which:
20 unique CDR3
5 unique J



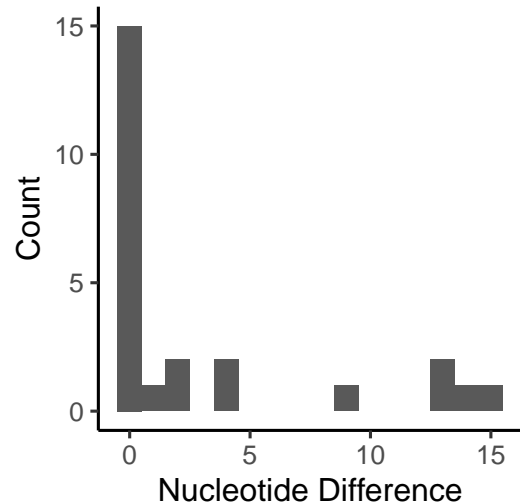
IGHV4-38-2*02

7 sequences assigned
No exact matches.



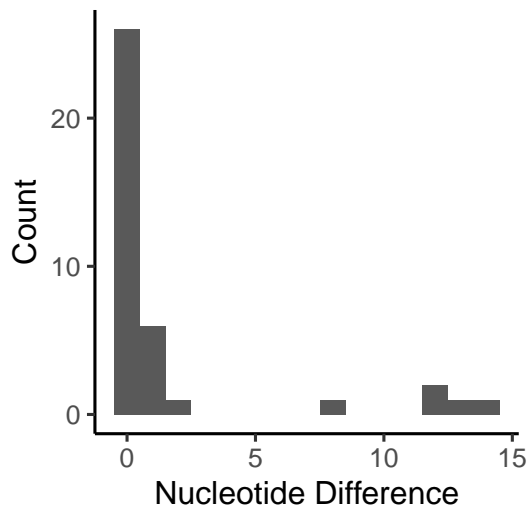
IGHV4-59*11

30 sequences assigned
15 (50%) exact matches, in which:
15 unique CDR3
5 unique J



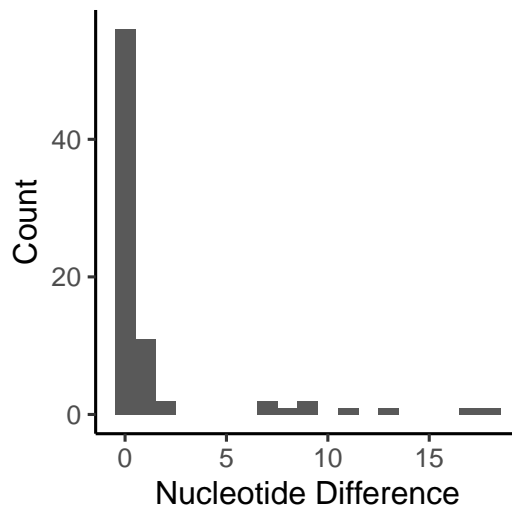
IGHV4-34*01

39 sequences assigned
26 (66.7%) exact matches, in which:
26 unique CDR3
6 unique J



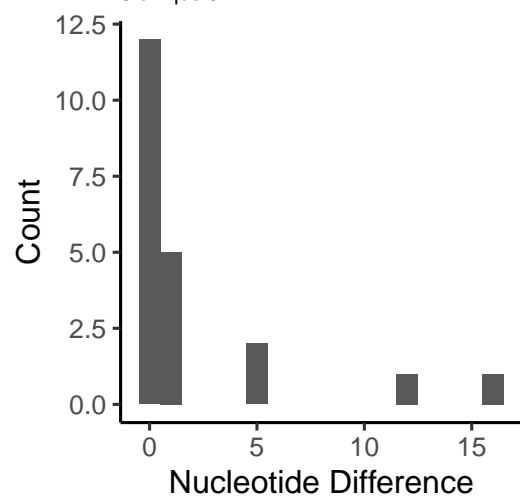
IGHV4-39*01

87 sequences assigned
56 (64.4%) exact matches, in which:
56 unique CDR3
6 unique J



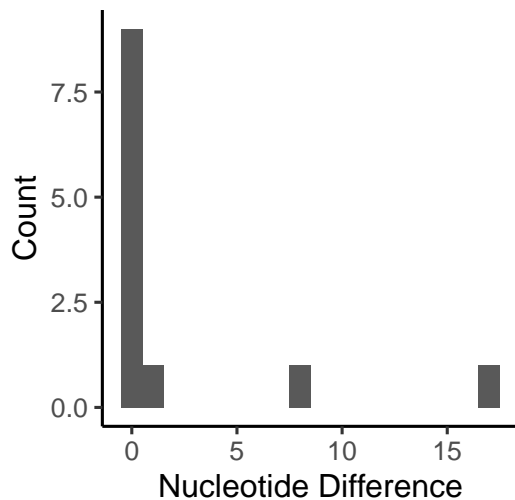
IGHV4-61*02

25 sequences assigned
12 (48%) exact matches, in which:
12 unique CDR3
5 unique J



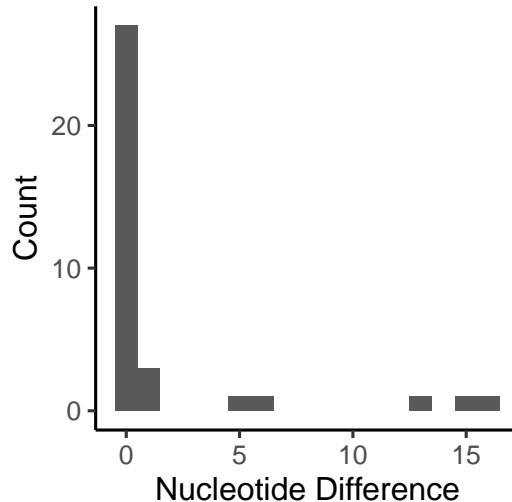
IGHV4-38-2*01

13 sequences assigned
9 (69.2%) exact matches, in which:
9 unique CDR3
4 unique J



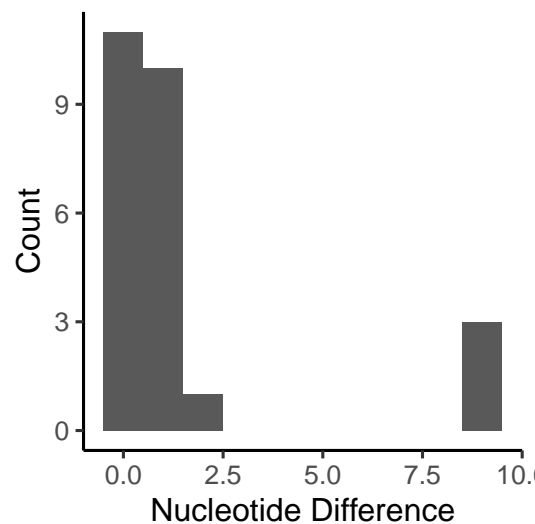
IGHV4-59*01

38 sequences assigned
27 (71.1%) exact matches, in which:
27 unique CDR3
5 unique J



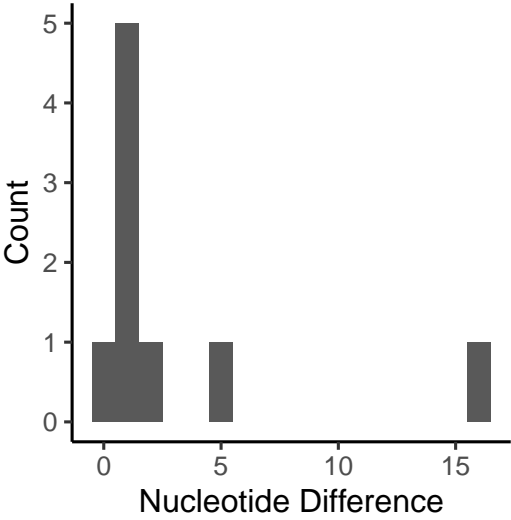
IGHV5-10-1*01

28 sequences assigned
11 (39.3%) exact matches, in which:
11 unique CDR3
4 unique J



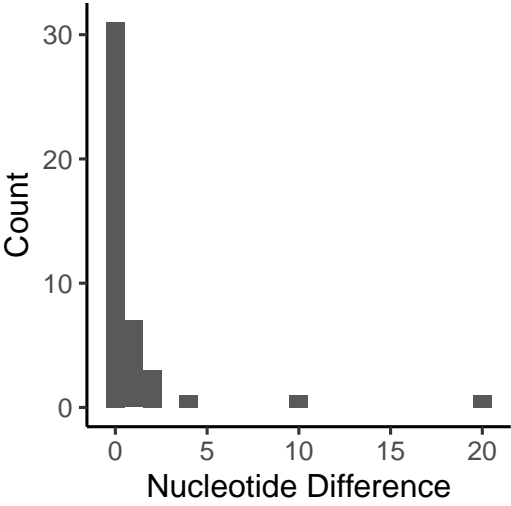
IGHV5–51*01

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



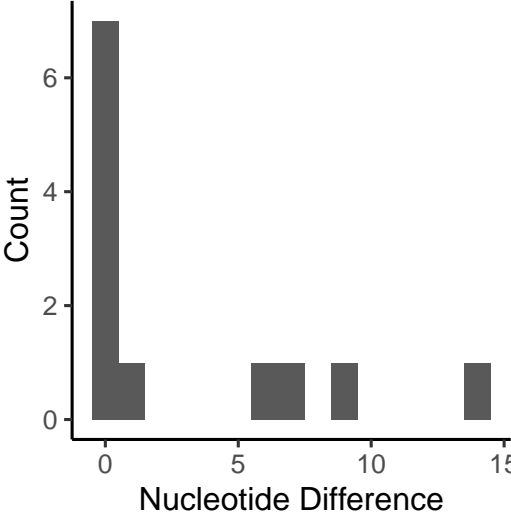
IGHV5–51*03

44 sequences assigned
31 (70.5%) exact matches, in which:
31 unique CDR3
5 unique J



IGHV6–1*01

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





Novel sequence(s)IGHV3-21*01_G315A are not listed in the genotype and will be ignored.