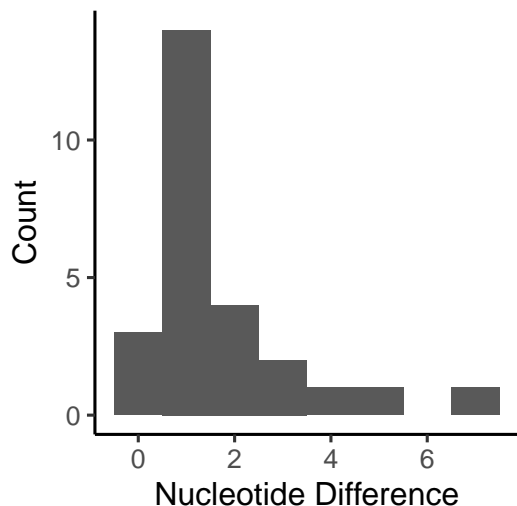


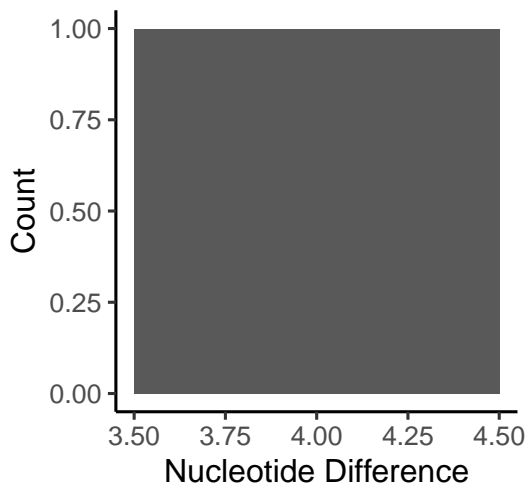
IGHV1-60*01_S7772

26 sequences assigned
3 (11.5%) exact matches, in which:
2 unique CDR3
1 unique J



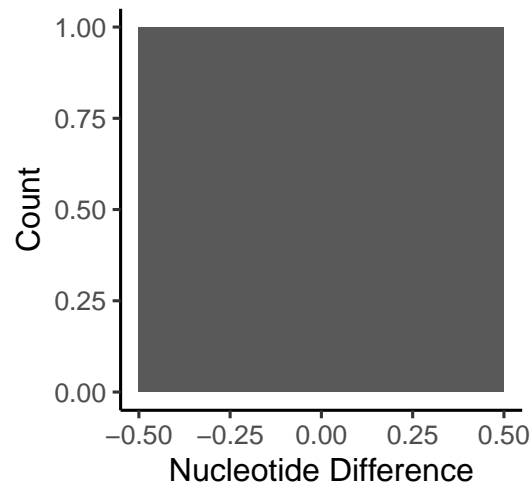
IGHV1-138*01_S2054

1 sequences assigned
No exact matches.



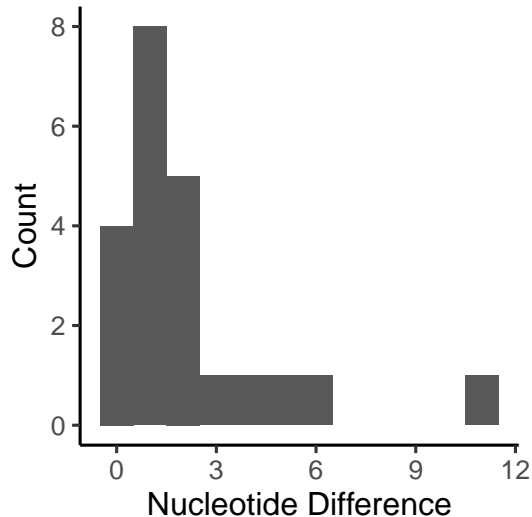
IGHV1-193*01_S6037

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



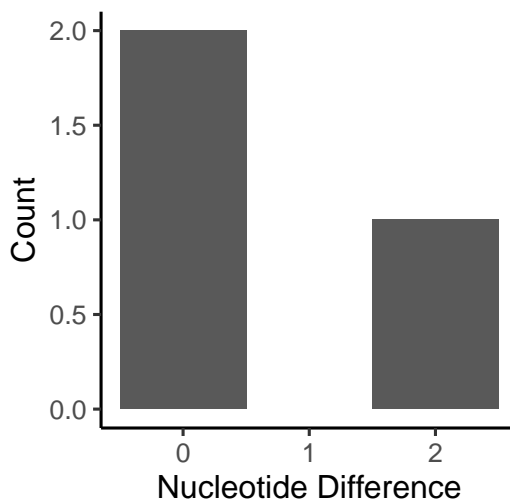
IGHV1-84*01_S4663

23 sequences assigned
4 (17.4%) exact matches, in which:
3 unique CDR3
1 unique J



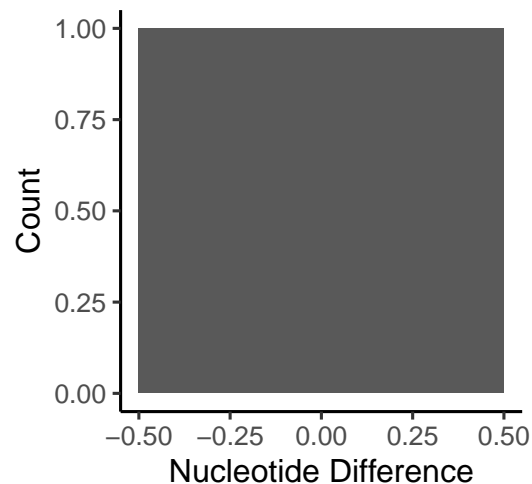
IGHV1-138*01_S2593

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



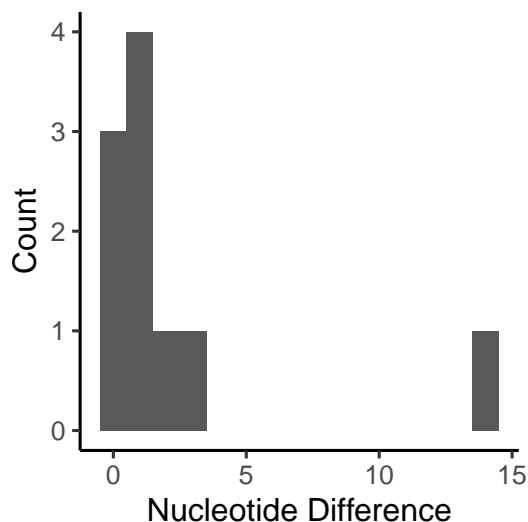
IGHV1-NL_1*01_S2052

10 sequences assigned
1 (10%) exact matches, in which:
1 unique CDR3
1 unique J



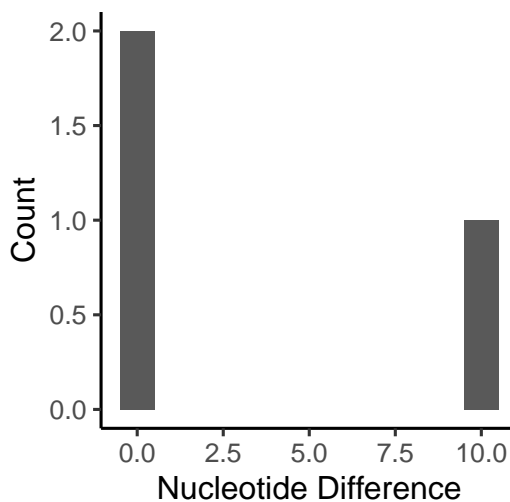
IGHV1-84*01_S9171

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



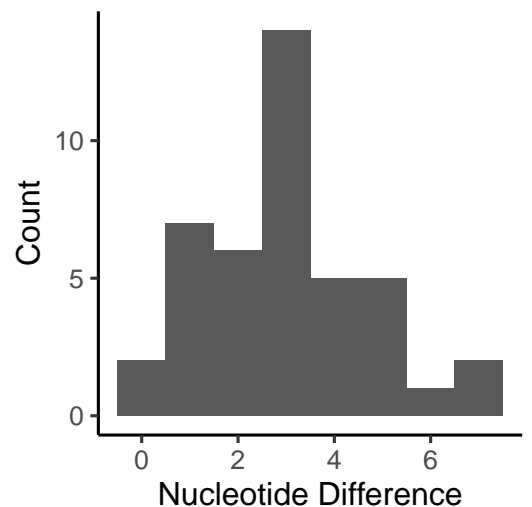
IGHV1-138*01_S8042

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



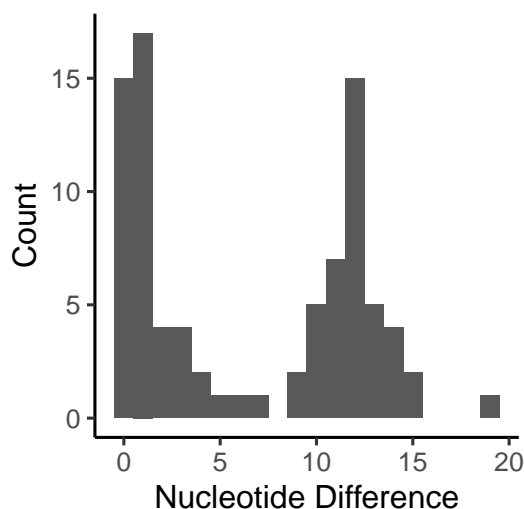
IGHV2-7*02_S1732

42 sequences assigned
2 (4.8%) exact matches, in which:
1 unique CDR3
1 unique J



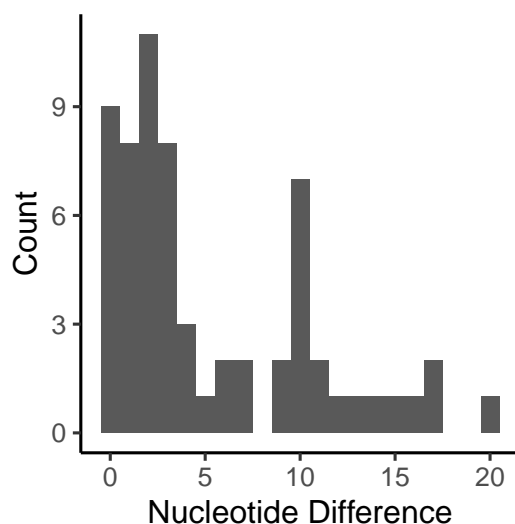
IGHV2-69*01_S2332

90 sequences assigned
15 (16.7%) exact matches, in which:
5 unique CDR3
1 unique J



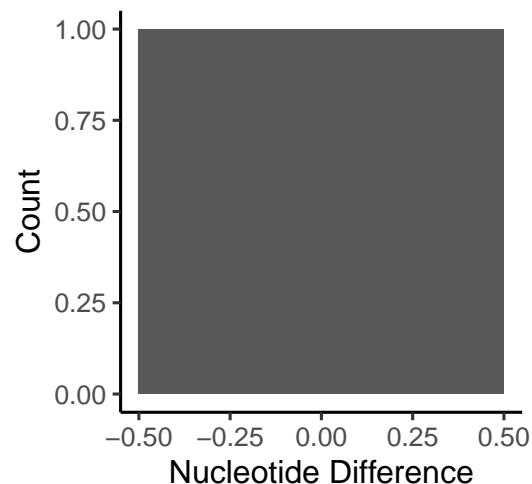
IGHV2-NL_1*01_S9725

63 sequences assigned
9 (14.3%) exact matches, in which:
4 unique CDR3
1 unique J



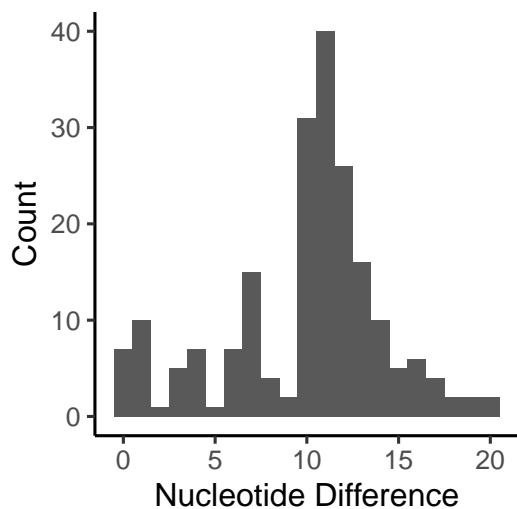
IGHV3-73*02_S7955

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



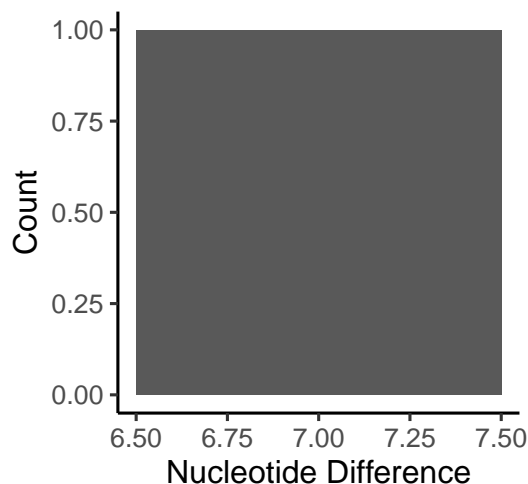
IGHV2-69*01_S6153

221 sequences assigned
7 (3.2%) exact matches, in which:
1 unique CDR3
1 unique J



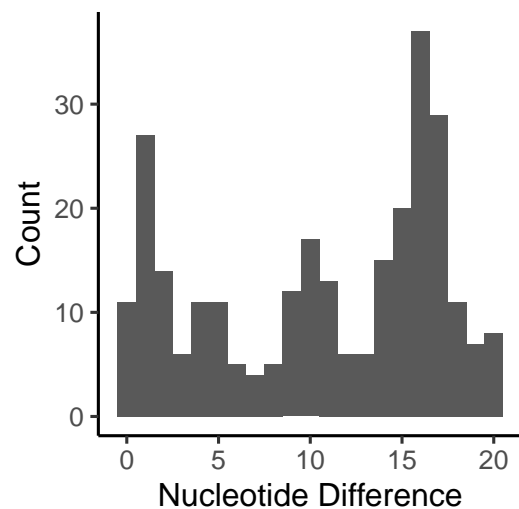
IGHV3-5*01_S2703

1 sequences assigned
No exact matches.



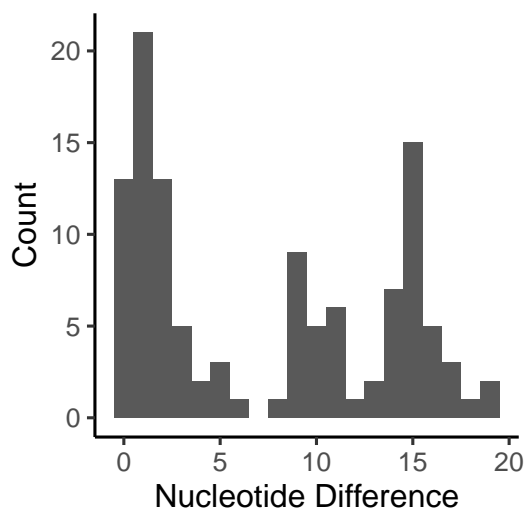
IGHV3-76*02_S4190

341 sequences assigned
11 (3.2%) exact matches, in which:
3 unique CDR3
1 unique J



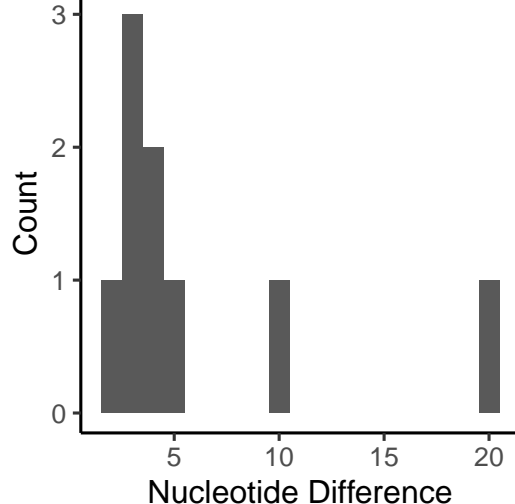
IGHV2-NL_1*01_S5779

122 sequences assigned
13 (10.7%) exact matches, in which:
5 unique CDR3
1 unique J



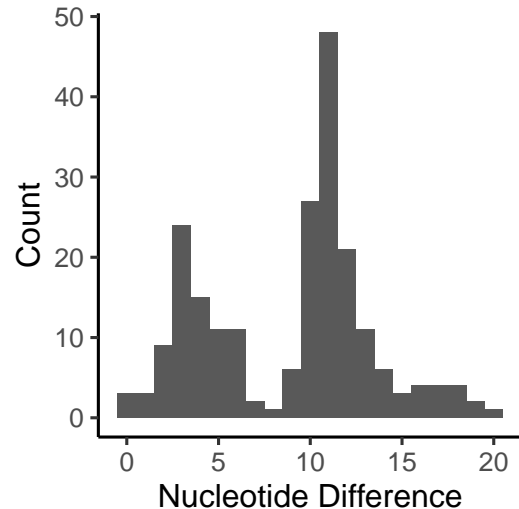
IGHV3-53*01_S5688

9 sequences assigned
No exact matches.



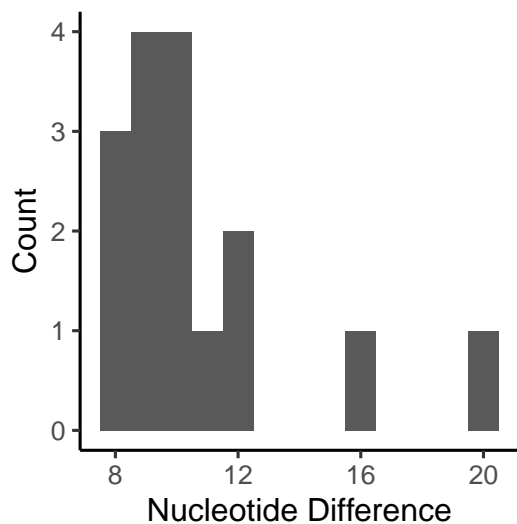
IGHV3-88*01_S9315

260 sequences assigned
3 (1.2%) exact matches, in which:
1 unique CDR3
1 unique J



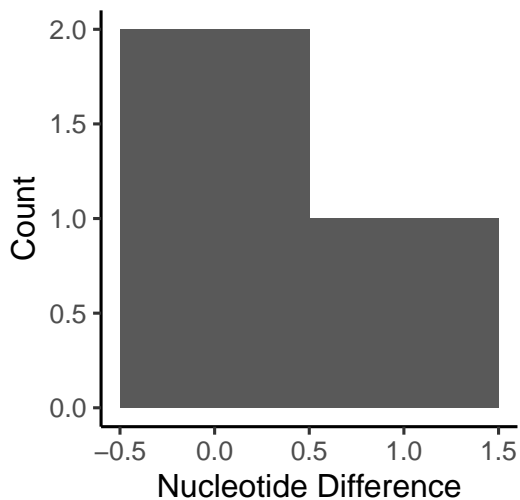
IGHV3-122*01_S2730

17 sequences assigned
No exact matches.



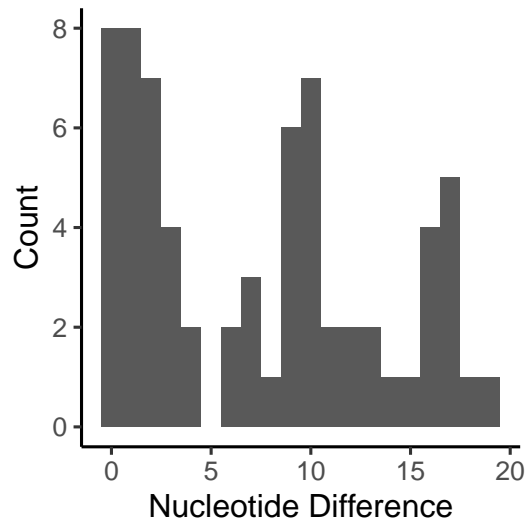
IGHV3-141*01_S6168

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



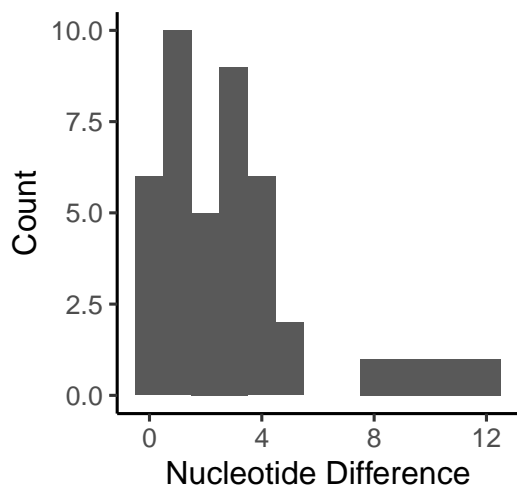
IGHV3-187*01_S1133

71 sequences assigned
8 (11.3%) exact matches, in which:
4 unique CDR3
1 unique J



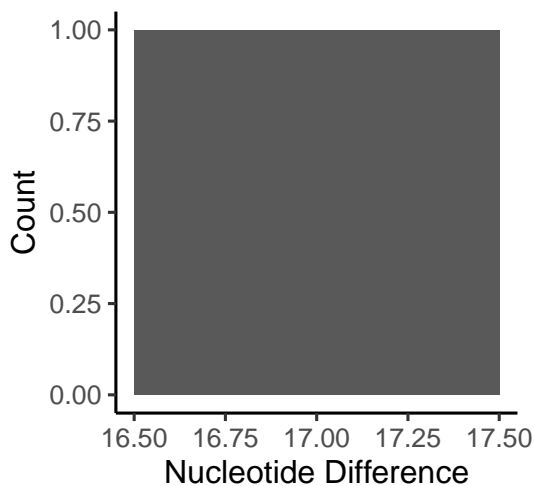
IGHV3-122*01_S8388

47 sequences assigned
6 (12.8%) exact matches, in which:
5 unique CDR3
1 unique J



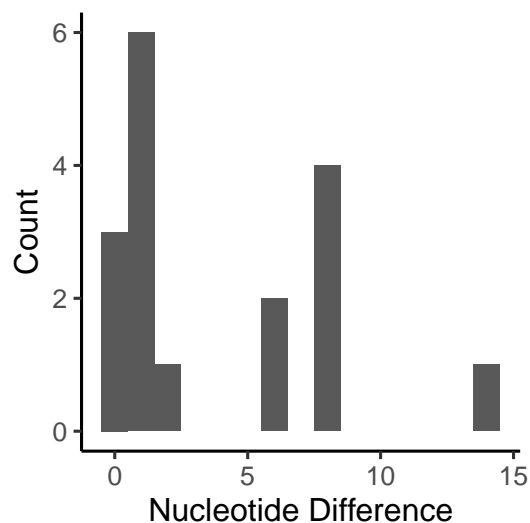
IGHV3-172*01_S1597

1 sequences assigned
No exact matches.



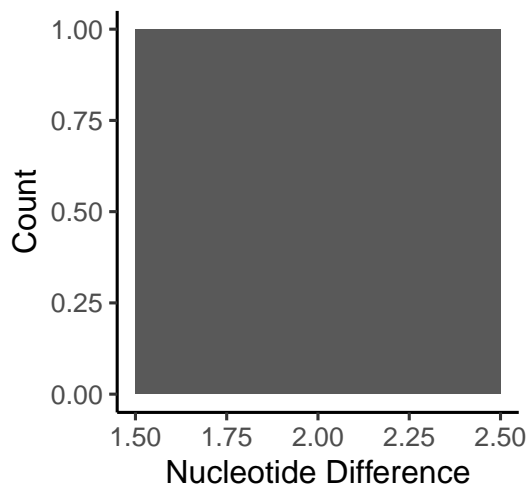
IGHV3-NL_1*01_S4331

40 sequences assigned
3 (7.5%) exact matches, in which:
1 unique CDR3
1 unique J



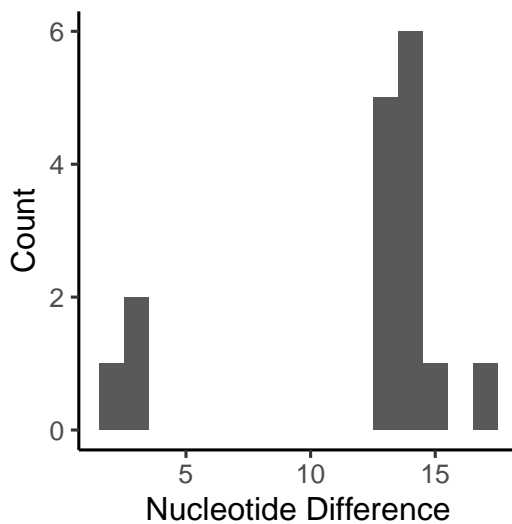
IGHV3-127*01_S5510

1 sequences assigned
No exact matches.



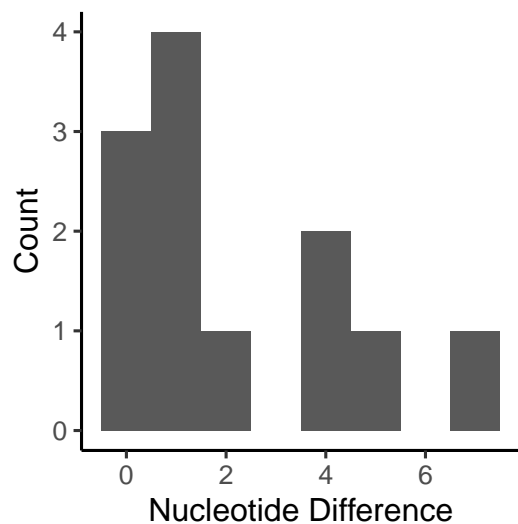
IGHV3-177*01_S5369

16 sequences assigned
No exact matches.



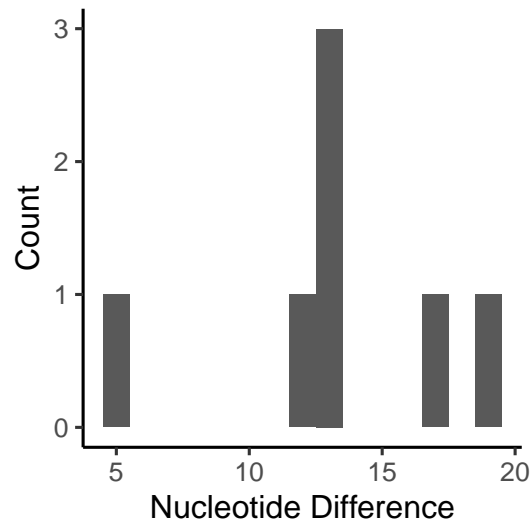
IGHV3-NL_1*01_S9422

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



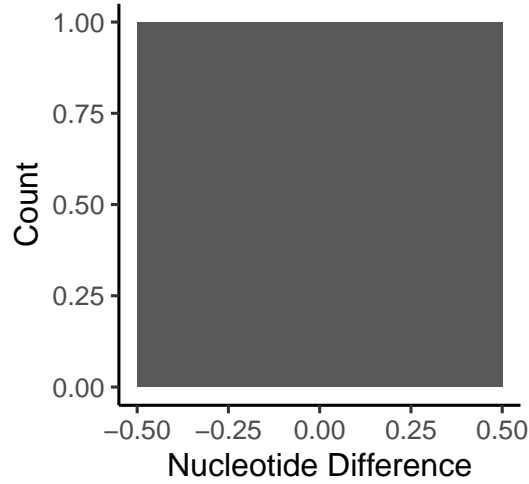
IGHV3–NL_10*02_S2212

7 sequences assigned
No exact matches.



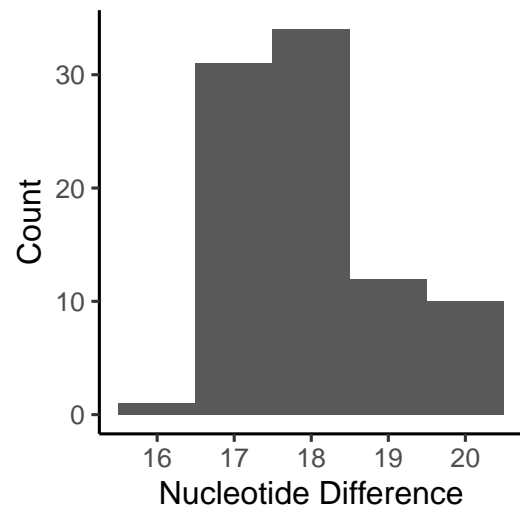
IGHV3–NL_14*01_S1113

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



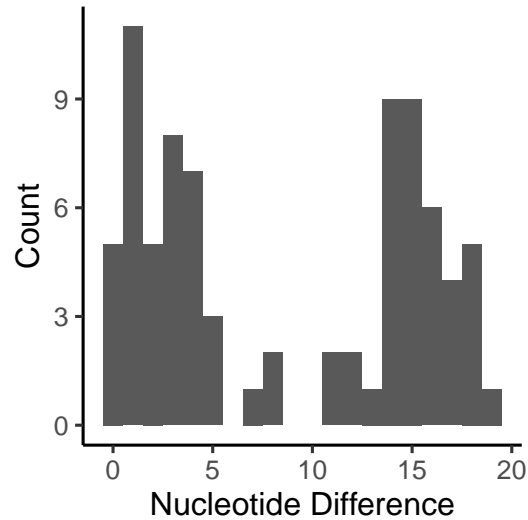
IGHV3–NL_7*01_S0199

165 sequences assigned
No exact matches.



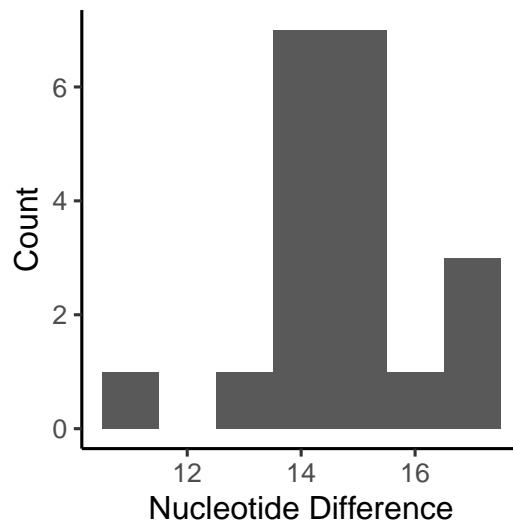
IGHV3–NL_11*01_S3736

86 sequences assigned
5 (5.8%) exact matches, in which:
3 unique CDR3
1 unique J



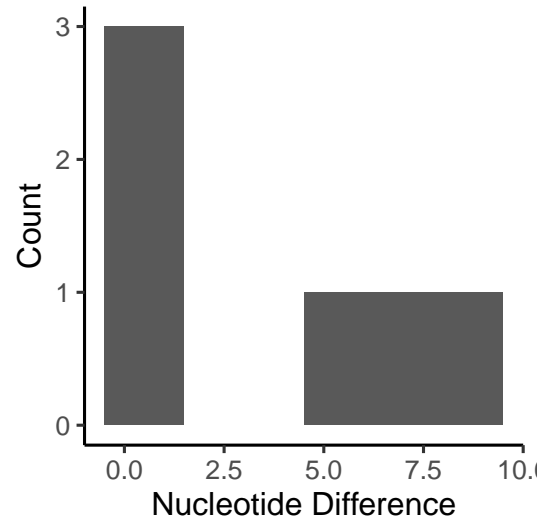
IGHV3–NL_17*01_S4250

22 sequences assigned
No exact matches.



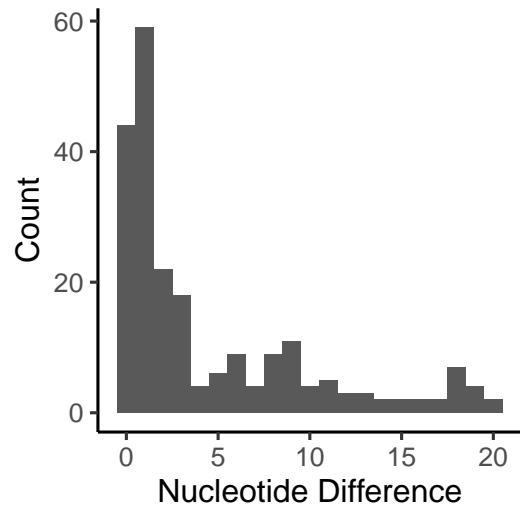
IGHV4–67*02_S8878

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



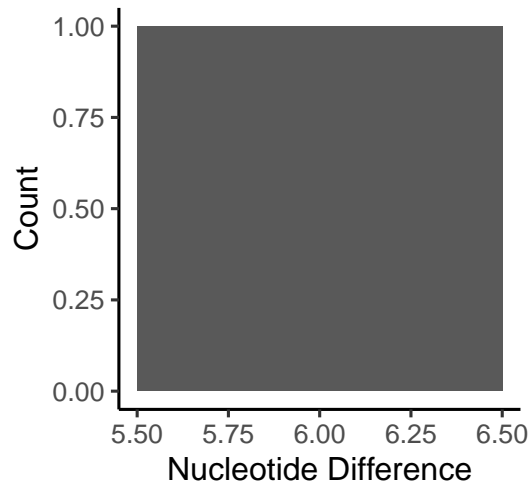
IGHV3–NL_11*01_S4619

225 sequences assigned
44 (19.6%) exact matches, in which:
23 unique CDR3
1 unique J



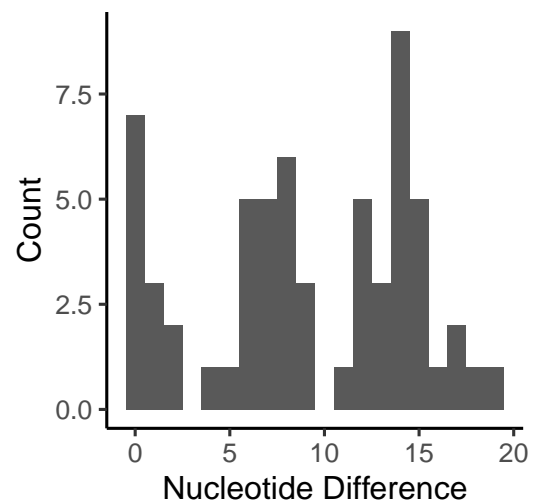
IGHV3–NL_19*01_S5460

1 sequences assigned
No exact matches.



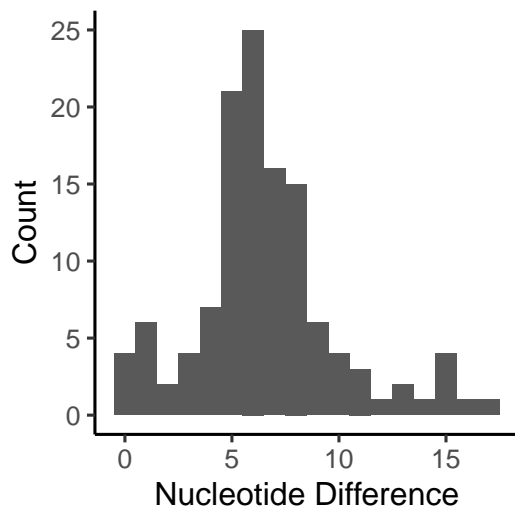
IGHV4–79*02_S9501

68 sequences assigned
7 (10.3%) exact matches, in which:
5 unique CDR3
1 unique J



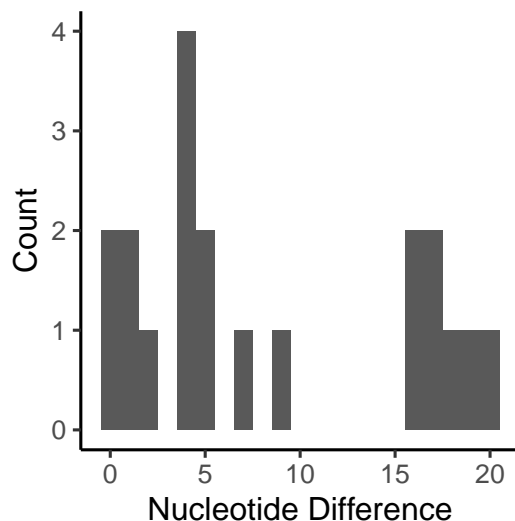
IGHV4-93*01_S6528

127 sequences assigned
4 (3.1%) exact matches, in which:
2 unique CDR3
1 unique J



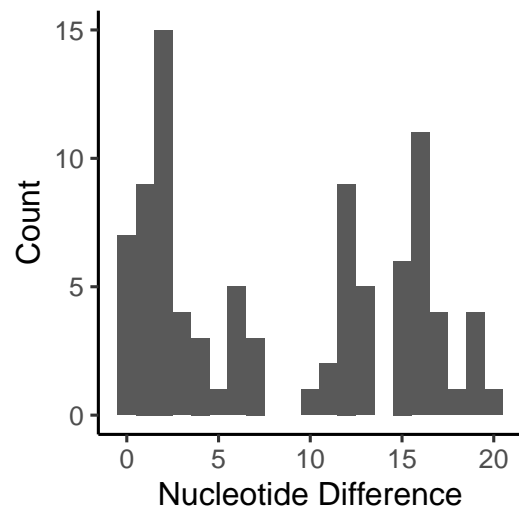
IGHV4-144*01_S5374

146 sequences assigned
2 (1.4%) exact matches, in which:
2 unique CDR3
1 unique J



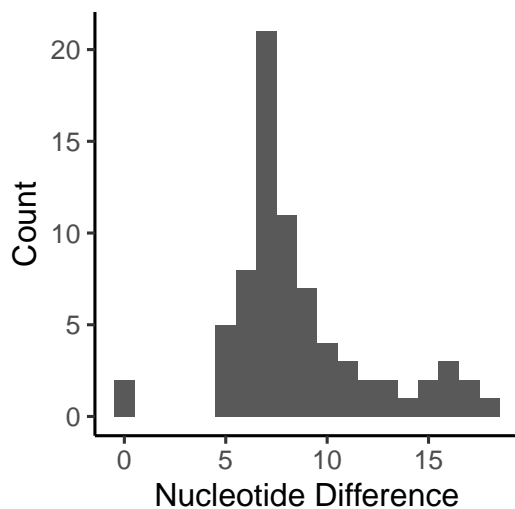
IGHV4-149*01_S3418

106 sequences assigned
7 (6.6%) exact matches, in which:
6 unique CDR3
1 unique J



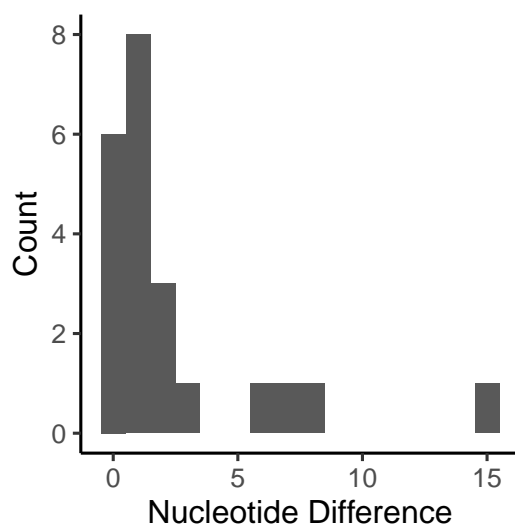
IGHV4-117*01_S5807

77 sequences assigned
2 (2.6%) exact matches, in which:
1 unique CDR3
1 unique J



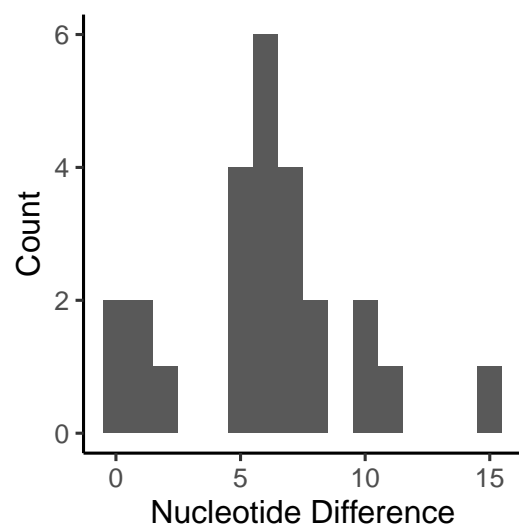
IGHV4-144*01_S8596

23 sequences assigned
6 (26.1%) exact matches, in which:
4 unique CDR3
1 unique J



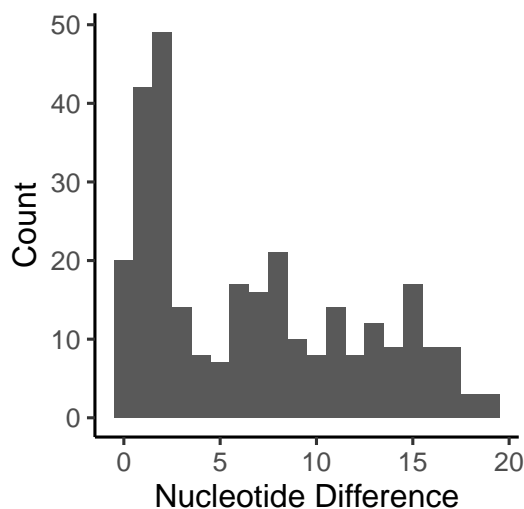
IGHV4-150*01_S6885

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



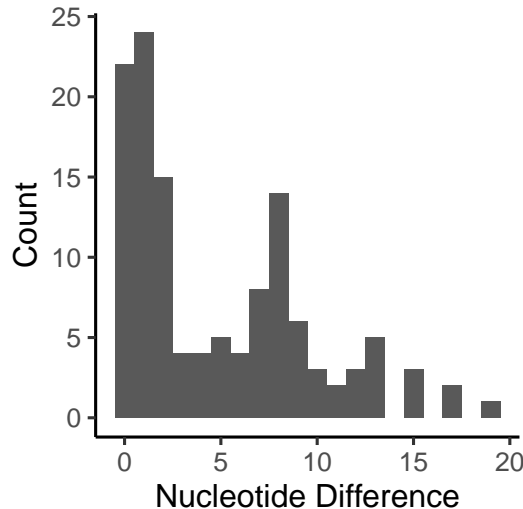
IGHV4-117*01_S8404

320 sequences assigned
20 (6.2%) exact matches, in which:
12 unique CDR3
1 unique J



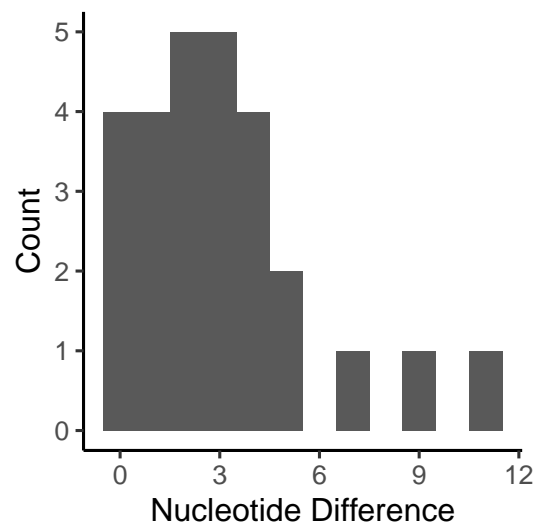
IGHV4-149*01_S1992

127 sequences assigned
22 (17.3%) exact matches, in which:
11 unique CDR3
1 unique J



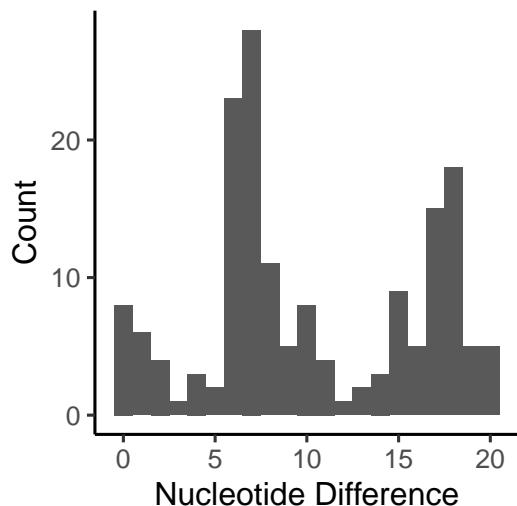
IGHV4-NL_1*01_S4750

27 sequences assigned
4 (14.8%) exact matches, in which:
2 unique CDR3
1 unique J



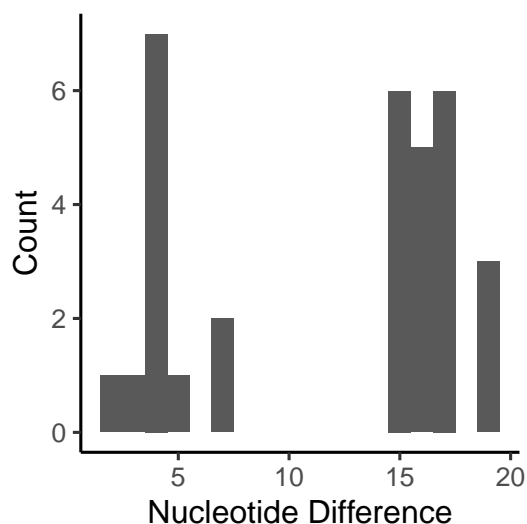
IGHV4–NL_1*01_S9508

193 sequences assigned
8 (4.1%) exact matches, in which:
4 unique CDR3
1 unique J



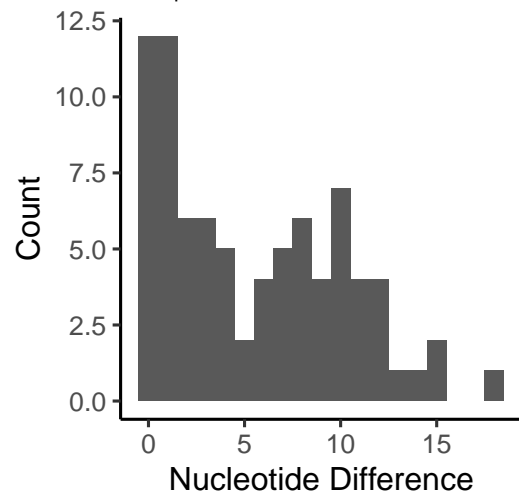
IGHV4–NL_16*01_S3062

35 sequences assigned
No exact matches.



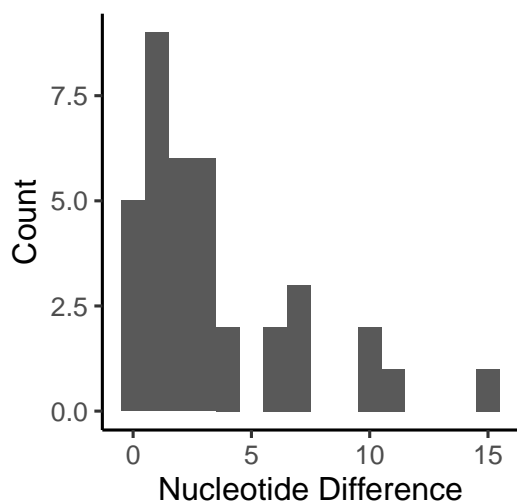
IGHV4–NL_21*01_S0138

86 sequences assigned
12 (14%) exact matches, in which:
8 unique CDR3
1 unique J



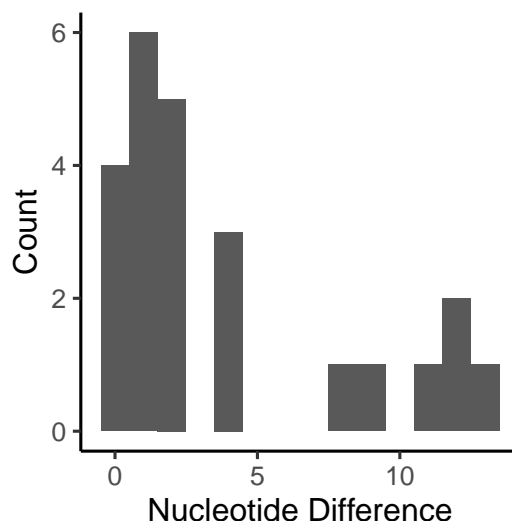
IGHV4–NL_11*01_S9942

37 sequences assigned
5 (13.5%) exact matches, in which:
3 unique CDR3
1 unique J



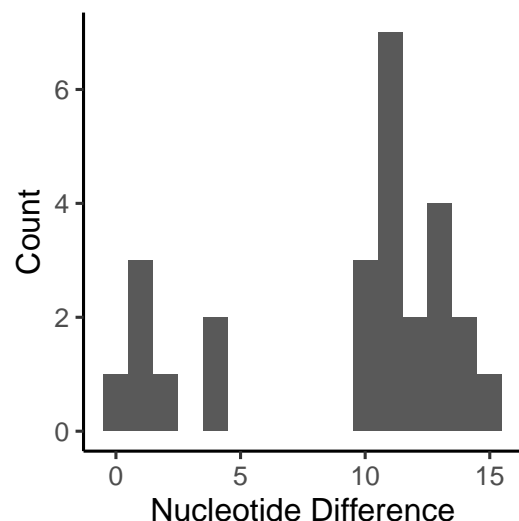
IGHV4–NL_16*01_S3640

32 sequences assigned
4 (12.5%) exact matches, in which:
3 unique CDR3
1 unique J



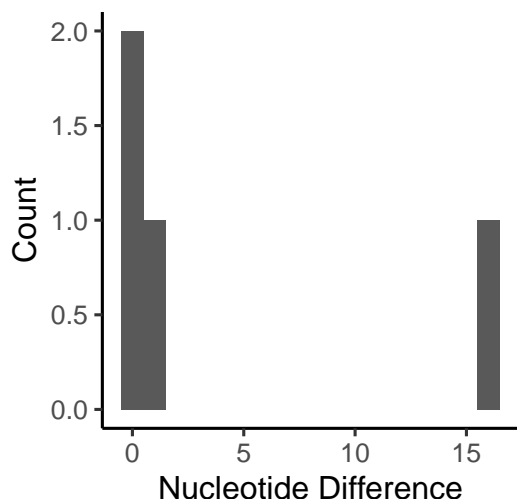
IGHV4–NL_21*01_S6468

26 sequences assigned
1 (3.8%) exact matches, in which:
1 unique CDR3
1 unique J



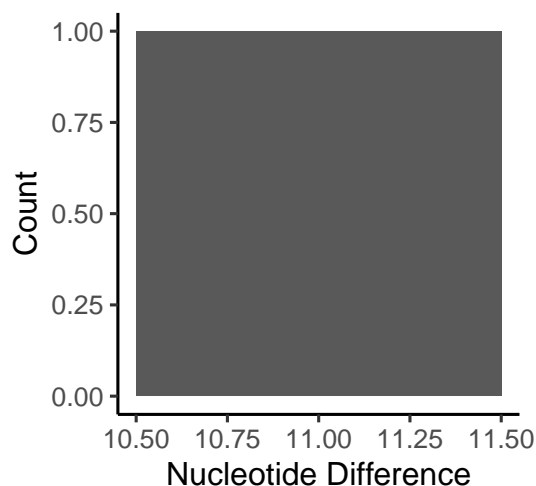
IGHV4–NL_13*01_S9744

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



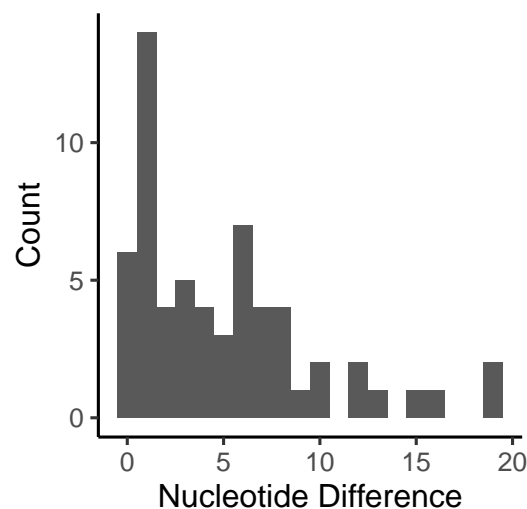
IGHV4–NL_17*01_S2142

1 sequences assigned
No exact matches.



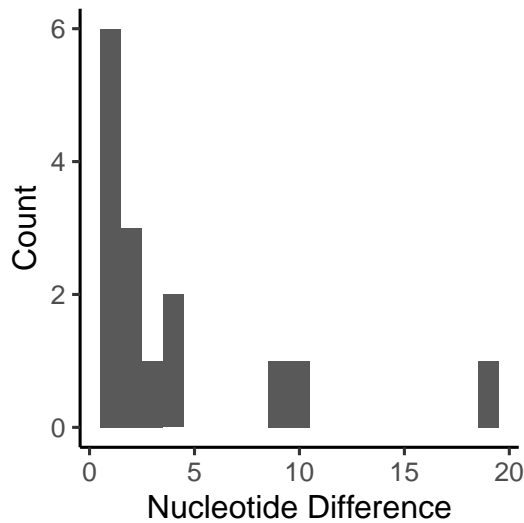
IGHV4–NL_25*01_S2780

65 sequences assigned
6 (9.2%) exact matches, in which:
3 unique CDR3
1 unique J



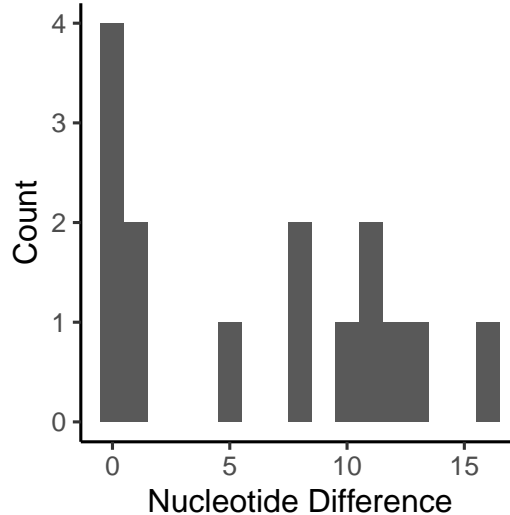
IGHV4–NL_25*01_S9478

15 sequences assigned
No exact matches.



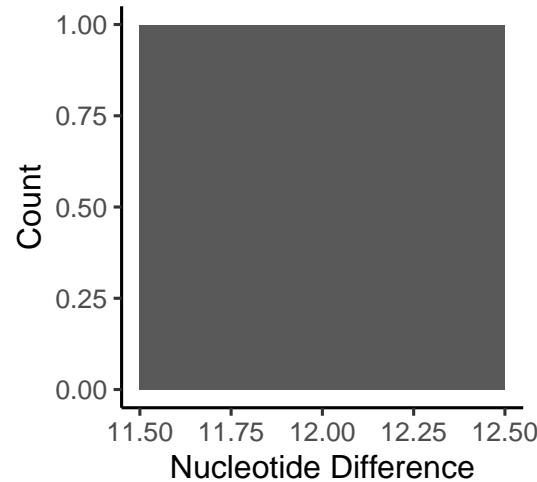
IGHV4–NL_29*01_S3761

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



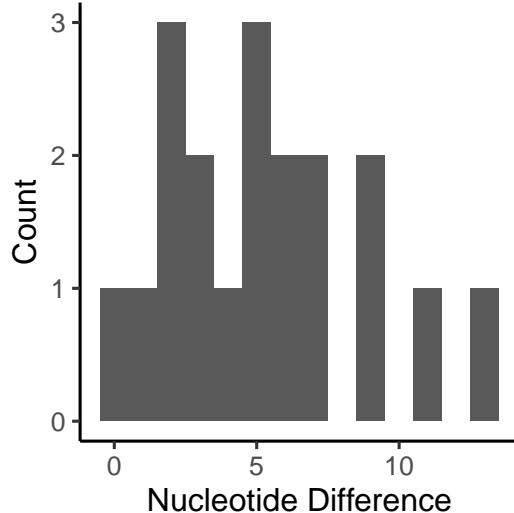
IGHV4–NL_33*01_S3086

2 sequences assigned
No exact matches.



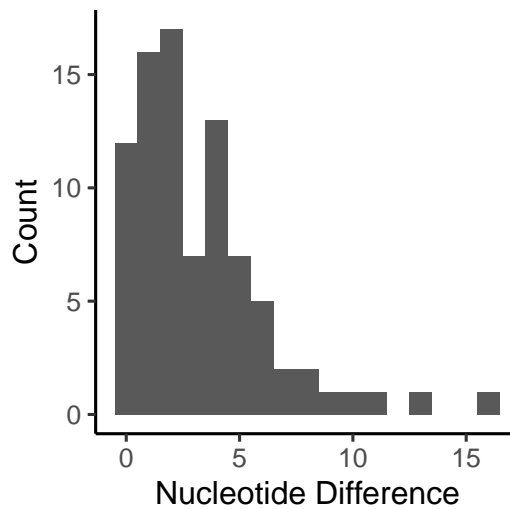
IGHV4–NL_28*01_S2610

19 sequences assigned
1 (5.3%) exact matches, in which:
1 unique CDR3
1 unique J



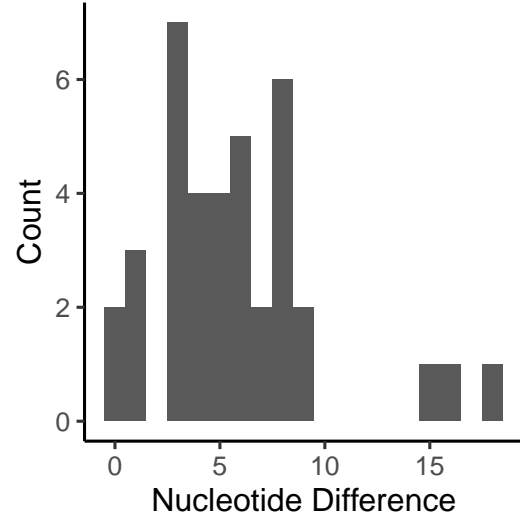
IGHV4–NL_31*01_S7693

86 sequences assigned
12 (14%) exact matches, in which:
9 unique CDR3
1 unique J



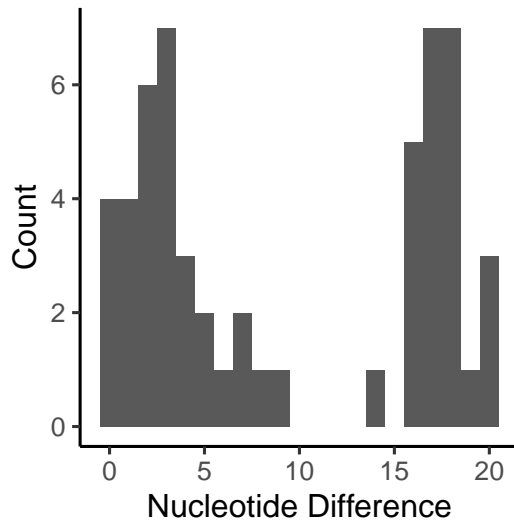
IGHV4–NL_36*01_S5847

39 sequences assigned
2 (5.1%) exact matches, in which:
1 unique CDR3
1 unique J



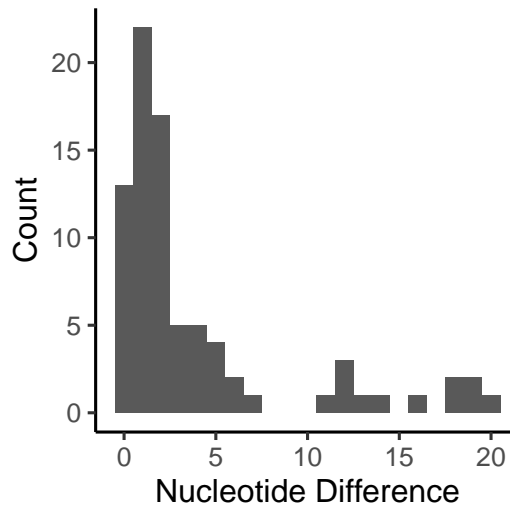
IGHV4–NL_29*01_S3018

55 sequences assigned
4 (7.3%) exact matches, in which:
4 unique CDR3
1 unique J



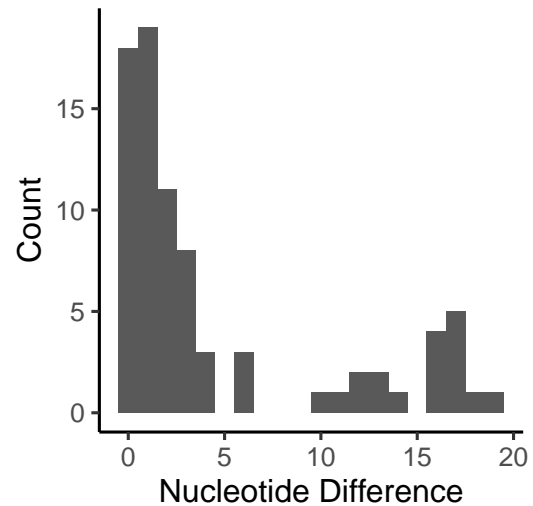
IGHV4–NL_33*01_S2532

81 sequences assigned
13 (16%) exact matches, in which:
9 unique CDR3
1 unique J



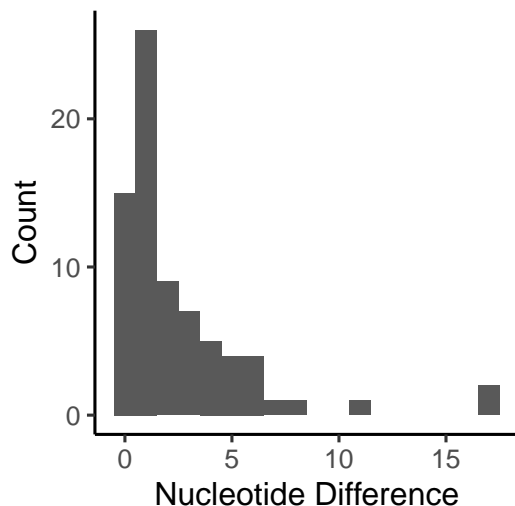
IGHV4–NL_36*01_S9644

80 sequences assigned
18 (22.5%) exact matches, in which:
12 unique CDR3
1 unique J



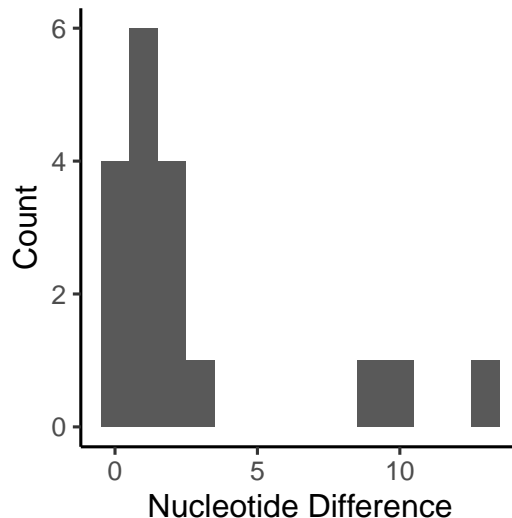
IGHV4–NL_38*01_S8437

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



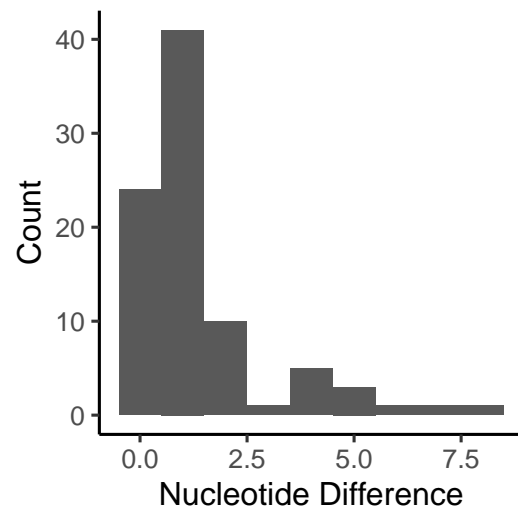
IGHV4–NL_5*01_S8781

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



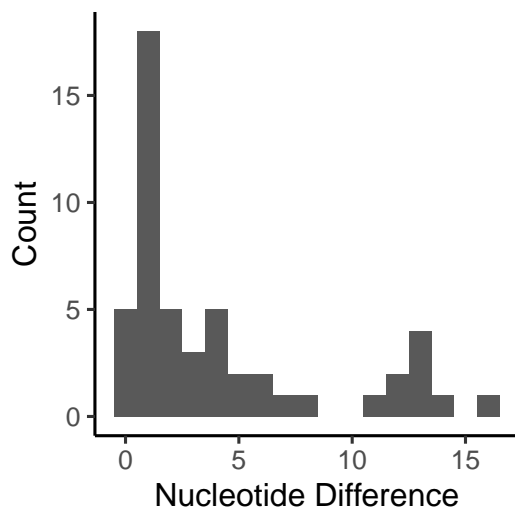
IGHV5–157*01_S8185

87 sequences assigned
24 (27.6%) exact matches, in which:
12 unique CDR3
1 unique J



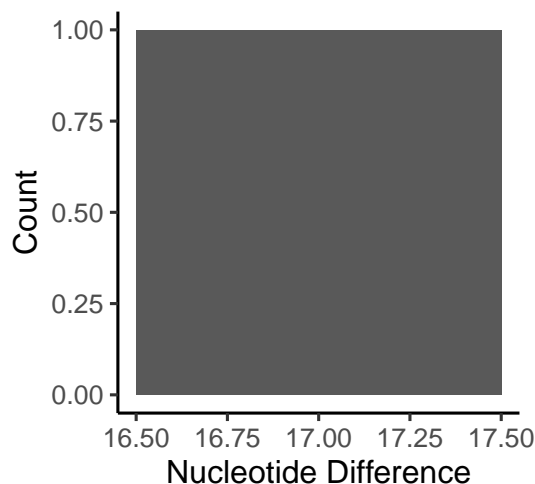
IGHV4–NL_43*01_S4510

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



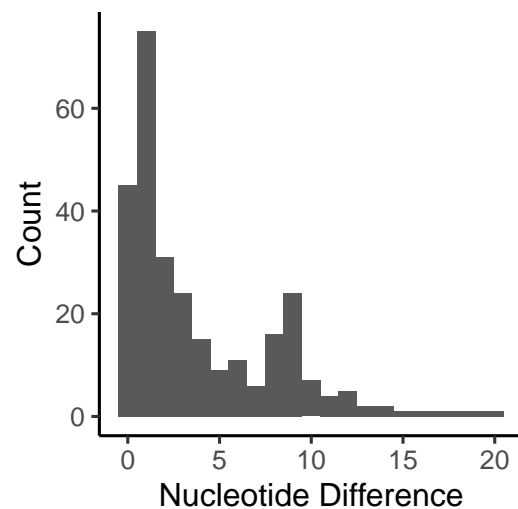
IGHV4–NL_9*01_S4990

1 sequences assigned
No exact matches.



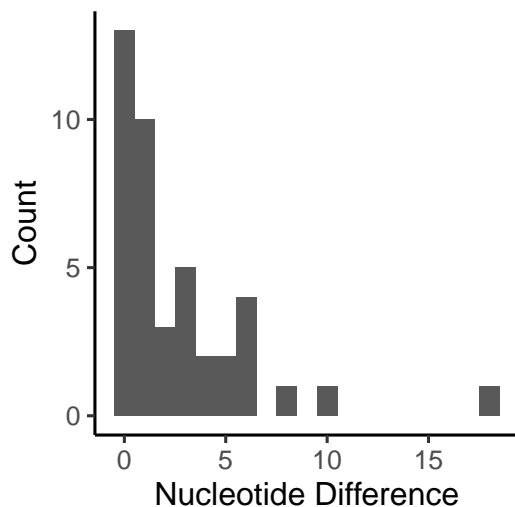
IGHV5–157*02_S3096

284 sequences assigned
45 (15.8%) exact matches, in which:
24 unique CDR3
1 unique J



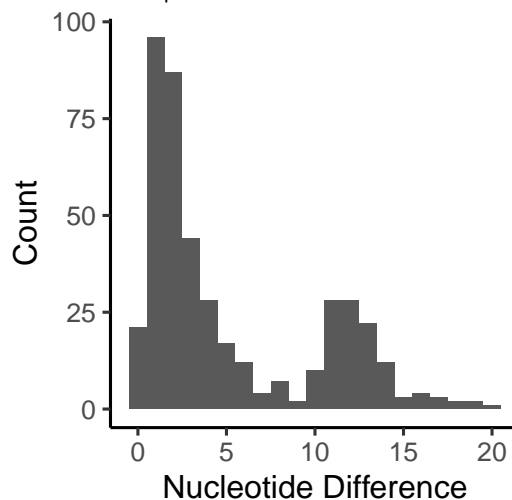
IGHV4–NL_5*01_S5158

42 sequences assigned
13 (31%) exact matches, in which:
7 unique CDR3
1 unique J



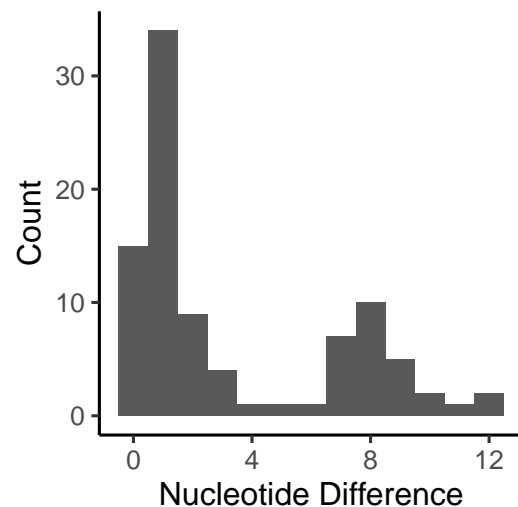
IGHV5–15*01_S0203

437 sequences assigned
21 (4.8%) exact matches, in which:
10 unique CDR3
1 unique J



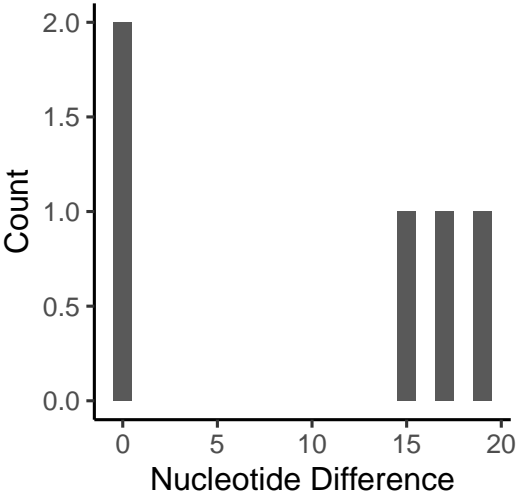
IGHV7–86*01_S9209

93 sequences assigned
15 (16.1%) exact matches, in which:
6 unique CDR3
1 unique J

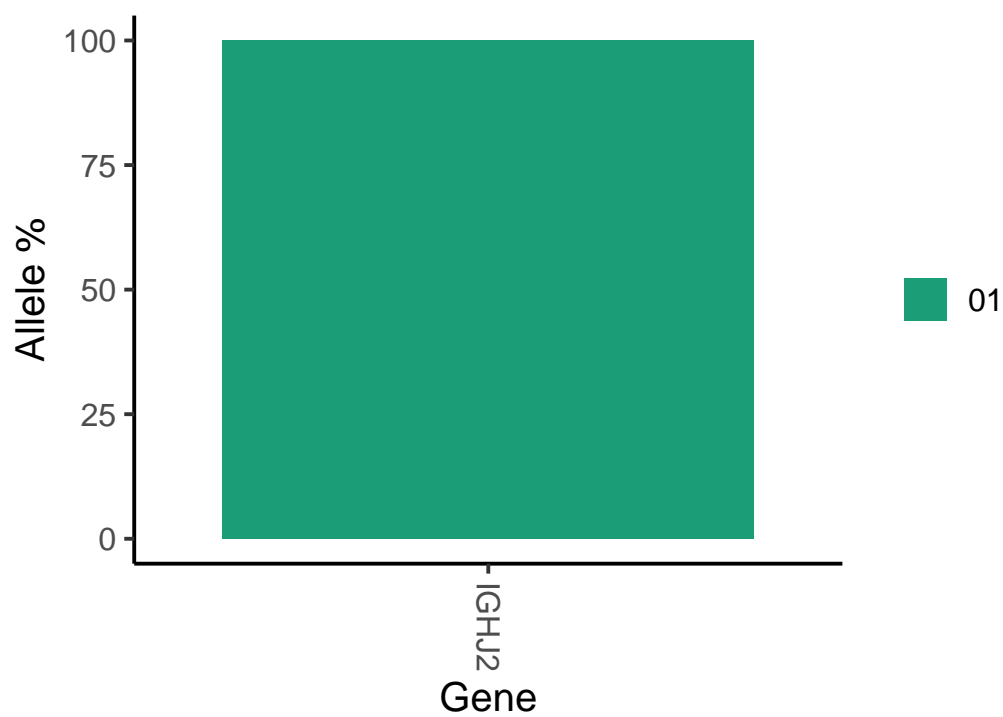


IGHV7-135*01_S4281

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



Allele Usage



Warning – no inferred sequences found.