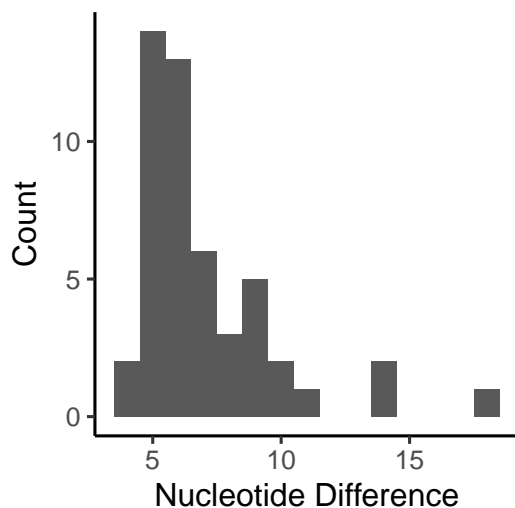


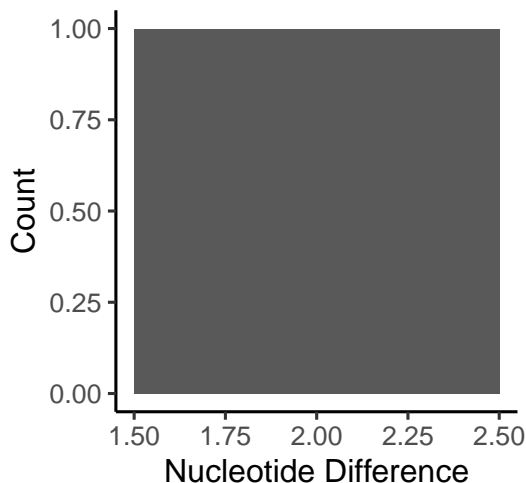
IGHV1-60*01_S7772

49 sequences assigned
No exact matches.



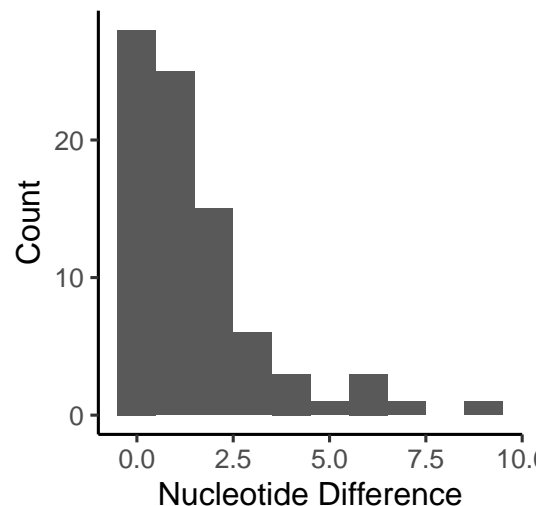
IGHV1-124*01_S1765

2 sequences assigned
No exact matches.



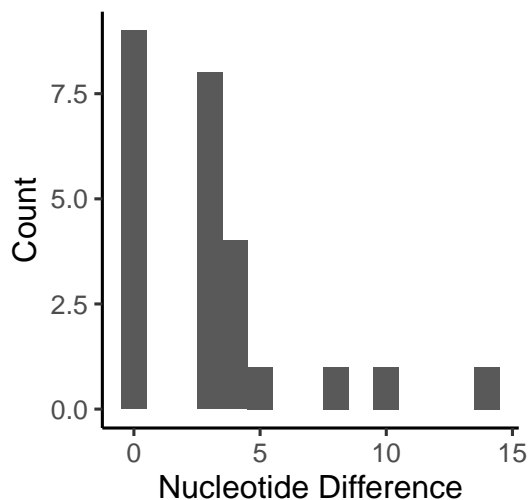
IGHV1-NL_1*01_S2052

83 sequences assigned
28 (33.7%) exact matches, in which:
13 unique CDR3
1 unique J



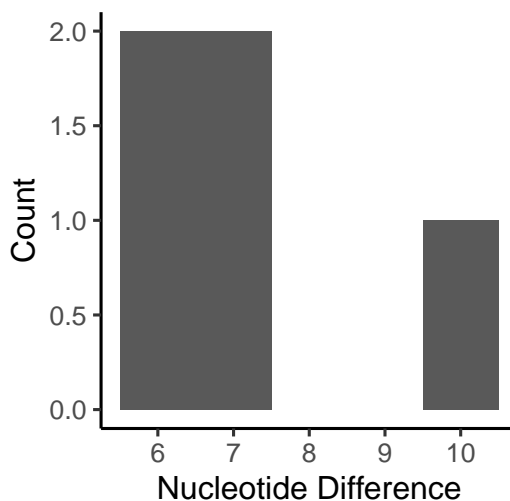
IGHV1-84*01_S0025

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



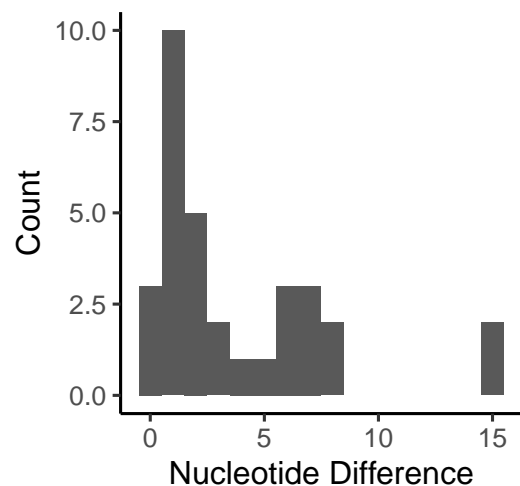
IGHV1-138*01_S2593

5 sequences assigned
No exact matches.



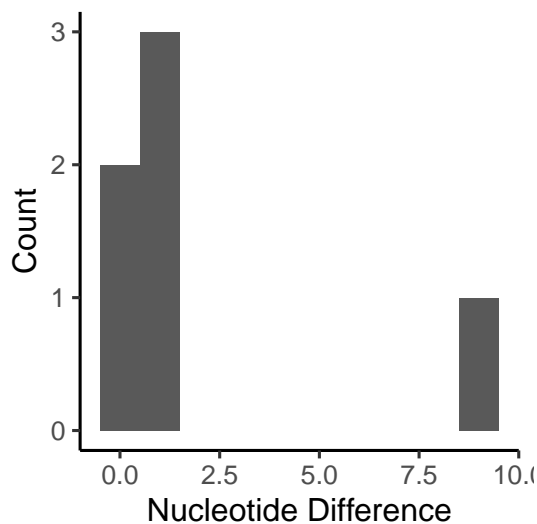
IGHV2-7*02_S4285

33 sequences assigned
3 (9.1%) exact matches, in which:
1 unique CDR3
1 unique J



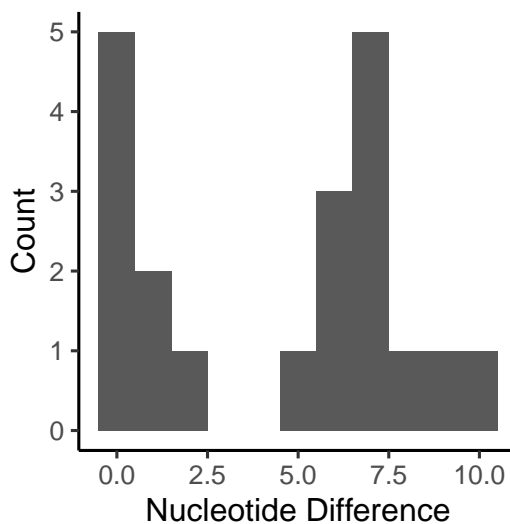
IGHV1-84*01_S4663

27 sequences assigned
2 (7.4%) exact matches, in which:
2 unique CDR3
1 unique J



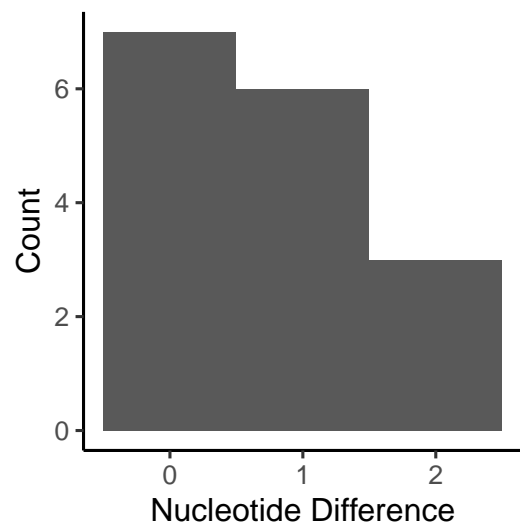
IGHV1-138*01_S8712

20 sequences assigned
5 (25%) exact matches, in which:
4 unique CDR3
1 unique J



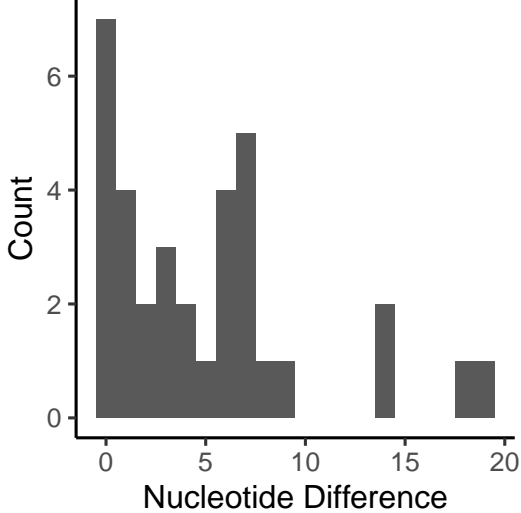
IGHV2-69*01_S2408

16 sequences assigned
7 (43.8%) exact matches, in which:
3 unique CDR3
1 unique J



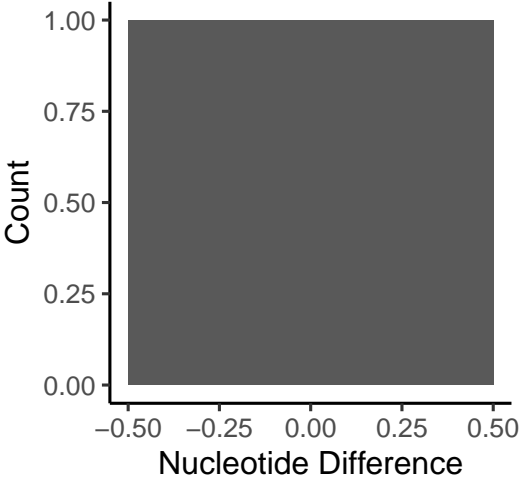
IGHV2-69*01_S8735

35 sequences assigned
7 (20%) exact matches, in which:
4 unique CDR3
1 unique J



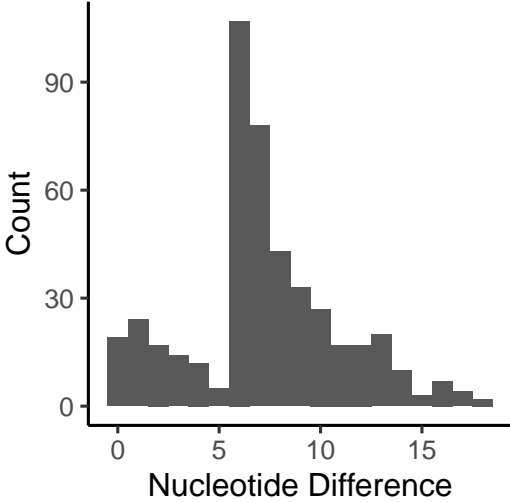
IGHV3-28*01_S7540

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



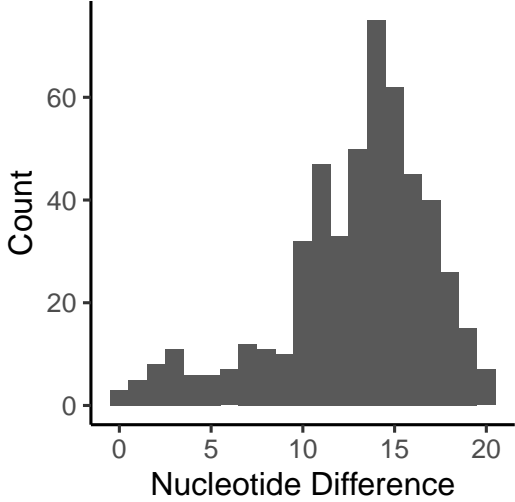
IGHV3-50*01_S9079

474 sequences assigned
19 (4%) exact matches, in which:
9 unique CDR3
1 unique J



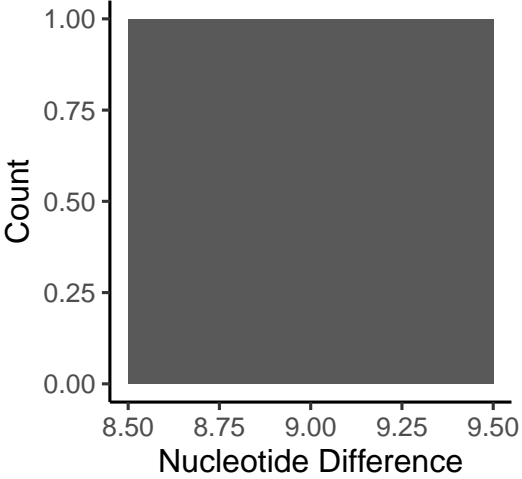
IGHV2-118*01_S6364

575 sequences assigned
3 (0.5%) exact matches, in which:
2 unique CDR3
1 unique J



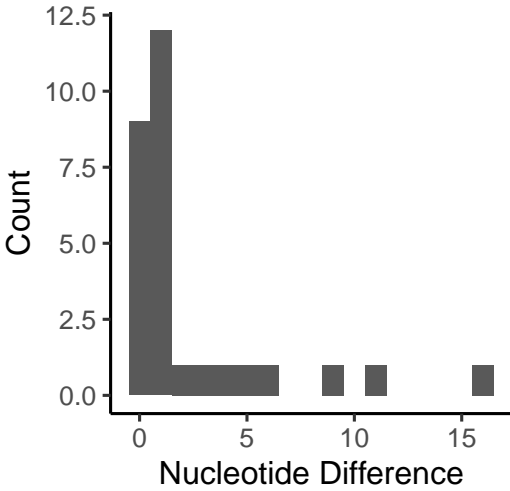
IGHV3-36*01_S9128

1 sequences assigned
No exact matches.



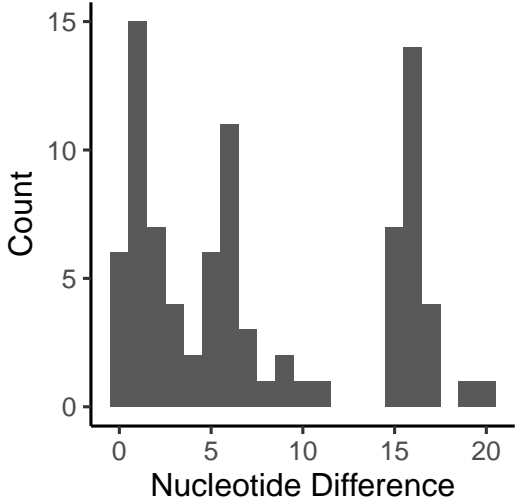
IGHV3-53*01_S2949

31 sequences assigned
9 (29%) exact matches, in which:
6 unique CDR3
1 unique J



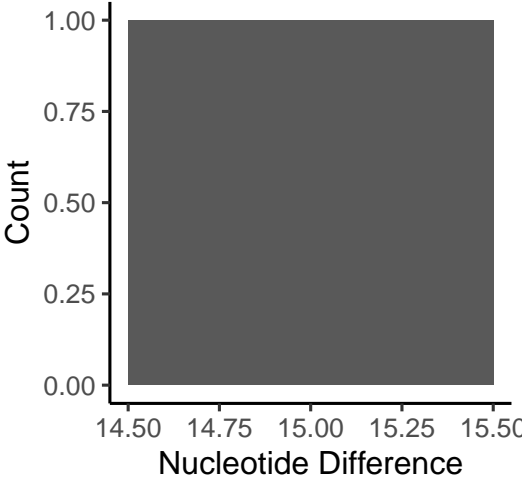
IGHV2-NL_1*01_S7874

88 sequences assigned
6 (6.8%) exact matches, in which:
4 unique CDR3
1 unique J



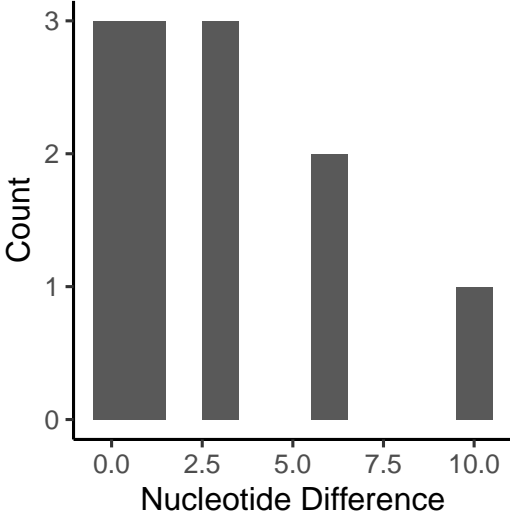
IGHV3-37*01_S6630

1 sequences assigned
No exact matches.



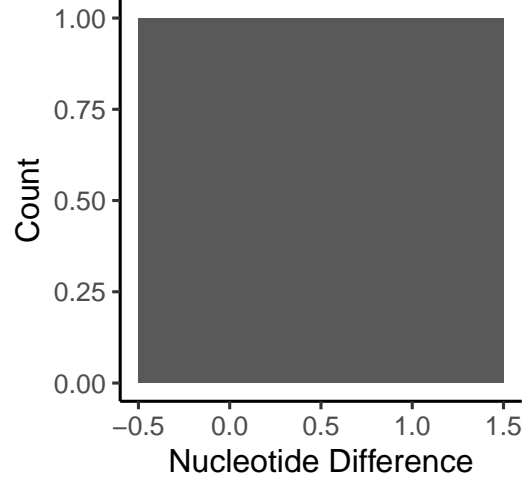
IGHV3-53*01_S3451

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



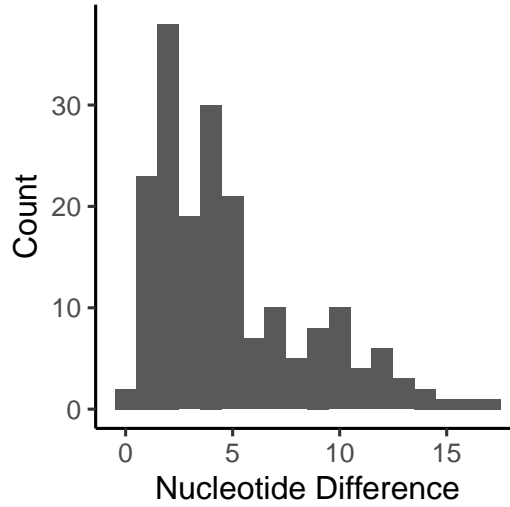
IGHV3-73*02_S3937

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



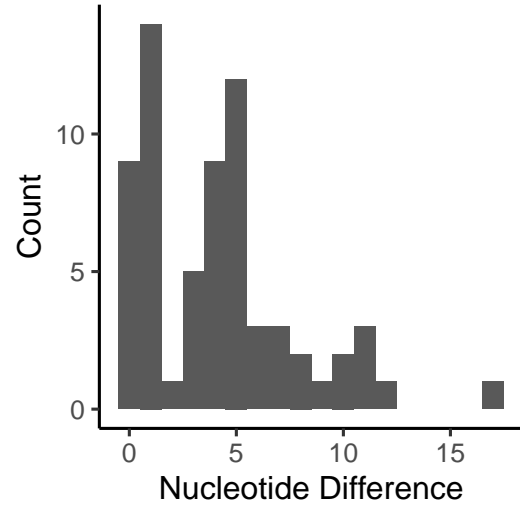
IGHV3-88*01_S4297

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



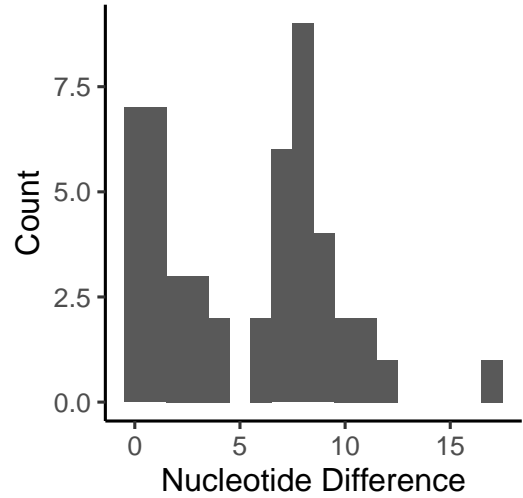
IGHV3-122*01_S5299

68 sequences assigned
9 (13.2%) exact matches, in which:
5 unique CDR3
1 unique J



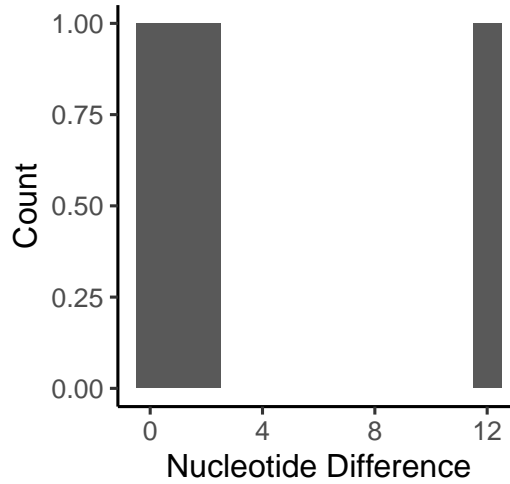
IGHV3-76*01_S0794

52 sequences assigned
7 (13.5%) exact matches, in which:
3 unique CDR3
1 unique J



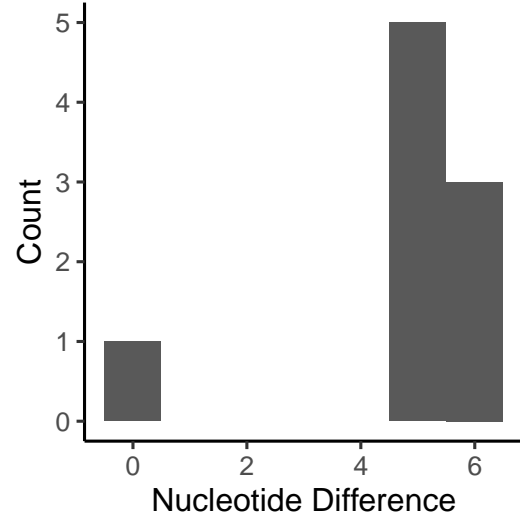
IGHV3-100*01_S4205

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



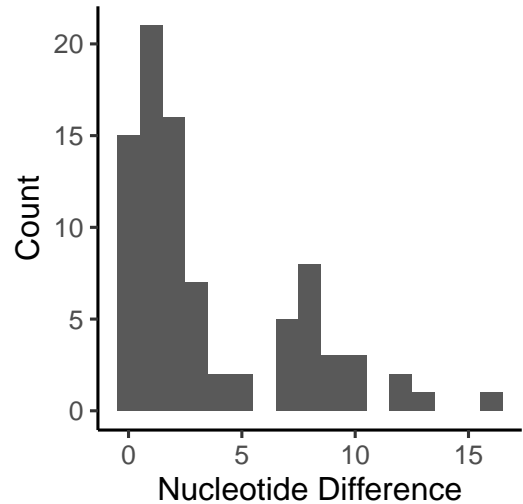
IGHV3-127*01_S5171

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



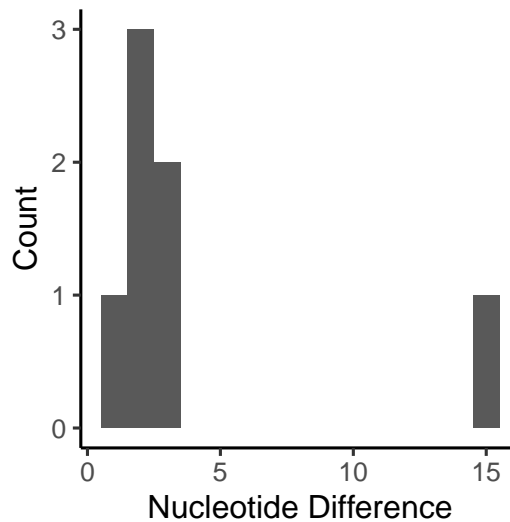
IGHV3-76*01_S5420

86 sequences assigned
15 (17.4%) exact matches, in which:
10 unique CDR3
1 unique J



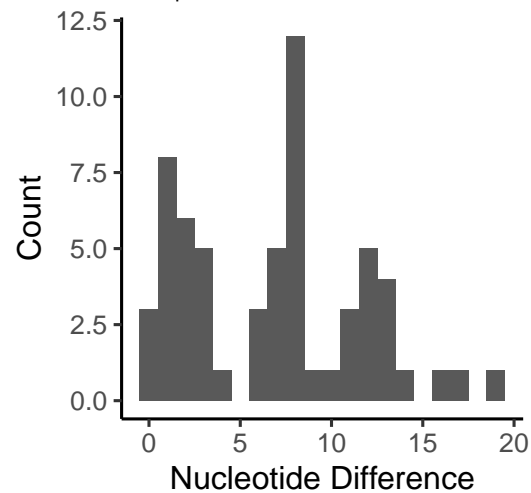
IGHV3-100*01_S4375

7 sequences assigned
No exact matches.



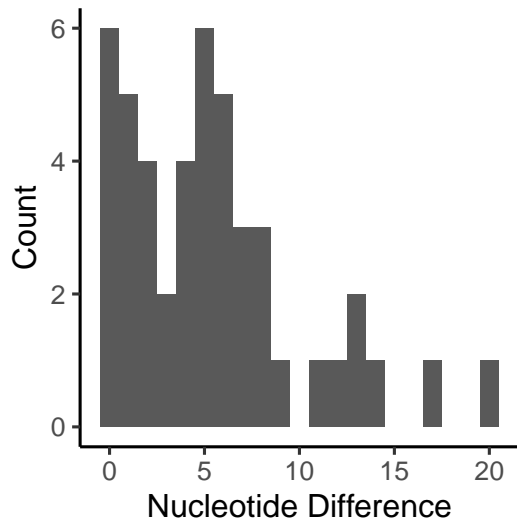
IGHV3-127*01_S9779

61 sequences assigned
3 (4.9%) exact matches, in which:
2 unique CDR3
1 unique J



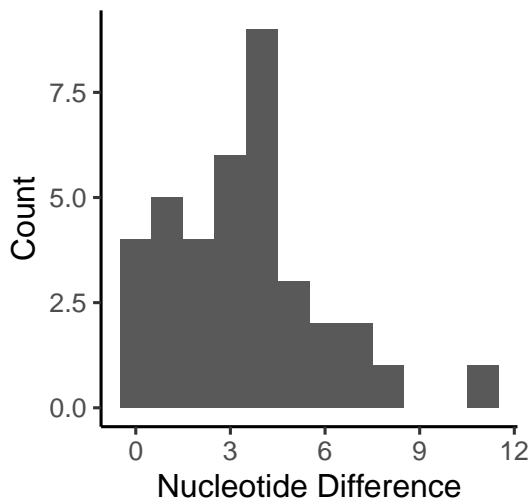
IGHV3-128*02_S5001

48 sequences assigned
6 (12.5%) exact matches, in which:
2 unique CDR3
1 unique J



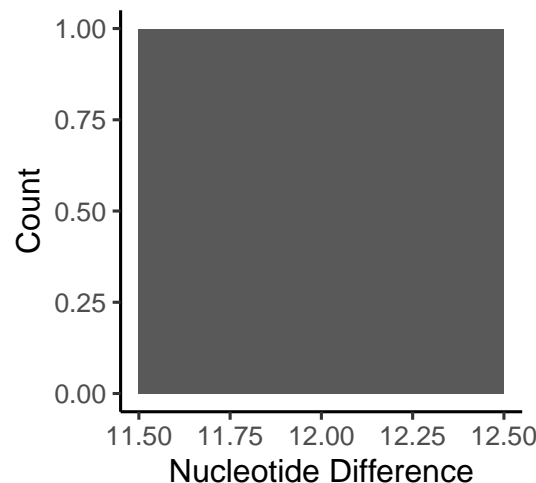
IGHV3-187*01_S6840

37 sequences assigned
4 (10.8%) exact matches, in which:
2 unique CDR3
1 unique J



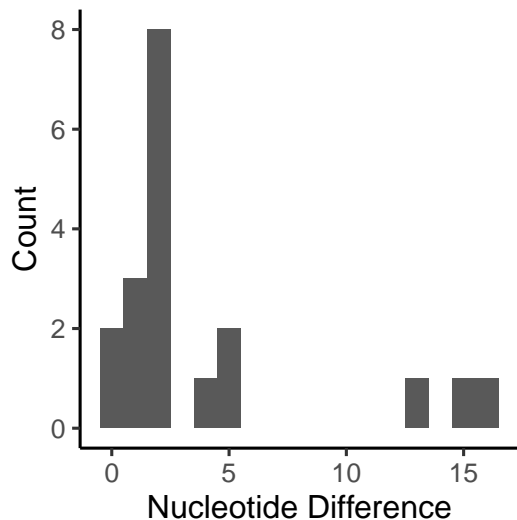
IGHV3-NL_10*02_S2212

1 sequences assigned
No exact matches.



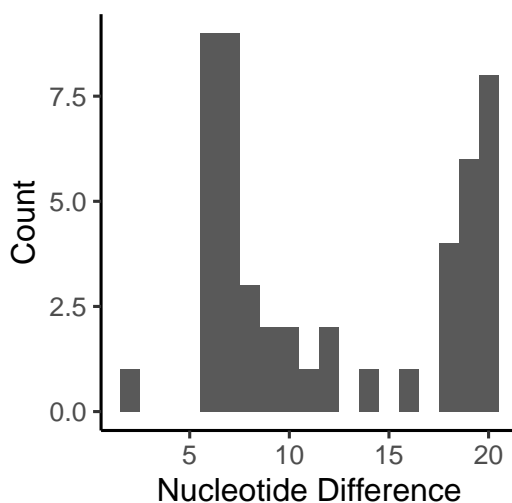
IGHV3-177*01_S5369

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



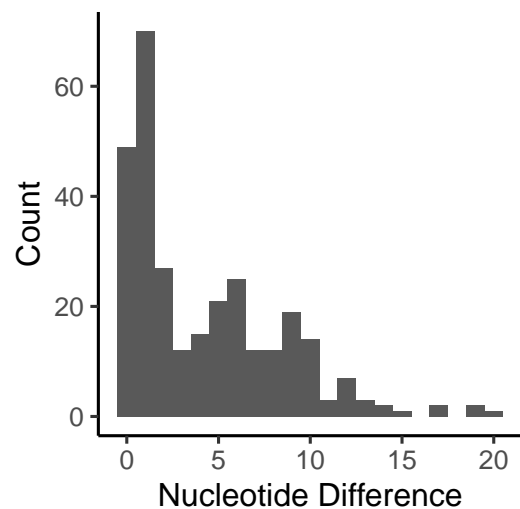
IGHV3-NL_1*01_S4549

67 sequences assigned
No exact matches.



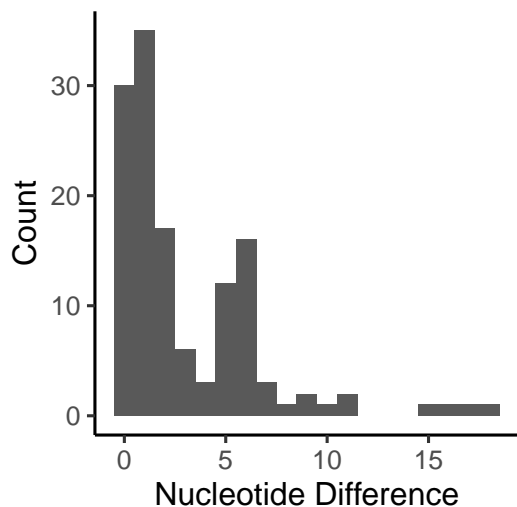
IGHV3-NL_11*01_S3736

300 sequences assigned
49 (16.3%) exact matches, in which:
24 unique CDR3
1 unique J



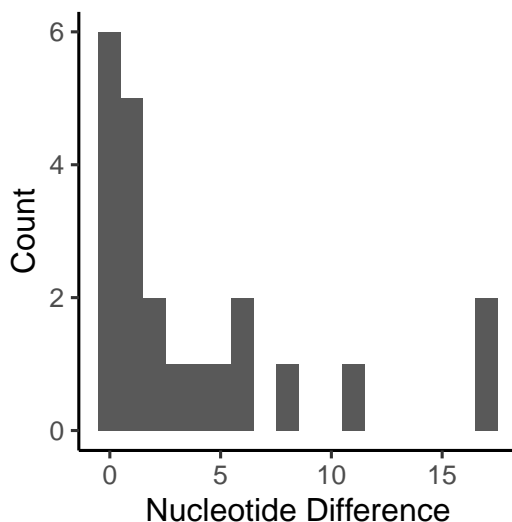
IGHV3-187*01_S1387

134 sequences assigned
30 (22.4%) exact matches, in which:
15 unique CDR3
1 unique J



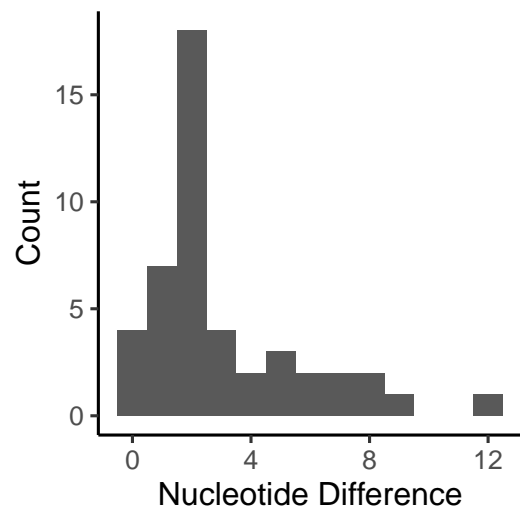
IGHV3-NL_1*01_S9854

24 sequences assigned
6 (25%) exact matches, in which:
3 unique CDR3
1 unique J



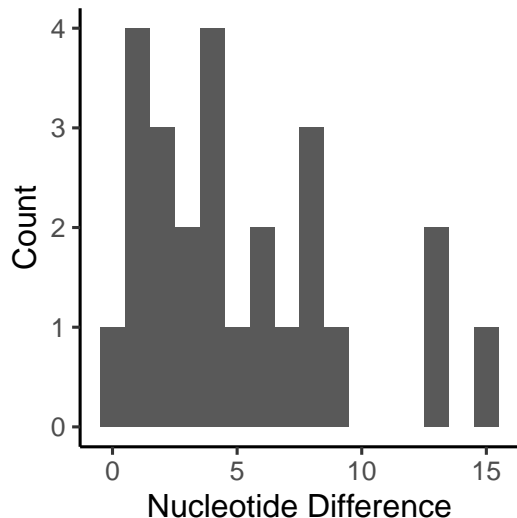
IGHV3-NL_14*01_S6089

46 sequences assigned
4 (8.7%) exact matches, in which:
2 unique CDR3
1 unique J



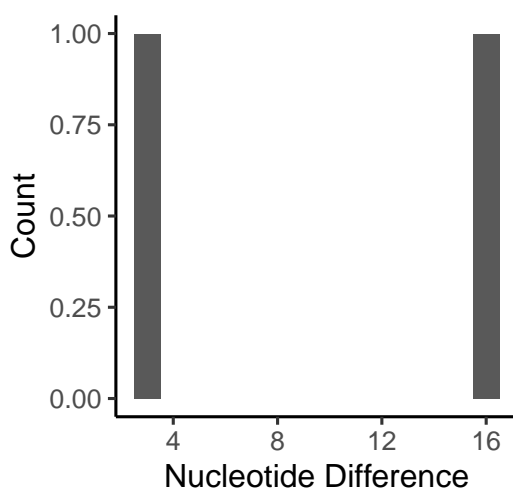
IGHV3–NL_14*01_S6338

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



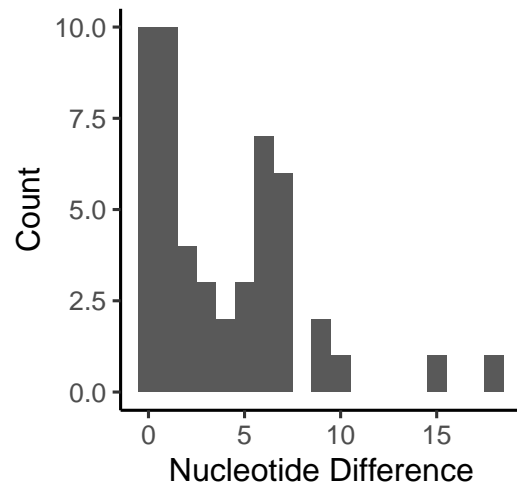
IGHV3–NL_4*01_S9067

2 sequences assigned
No exact matches.



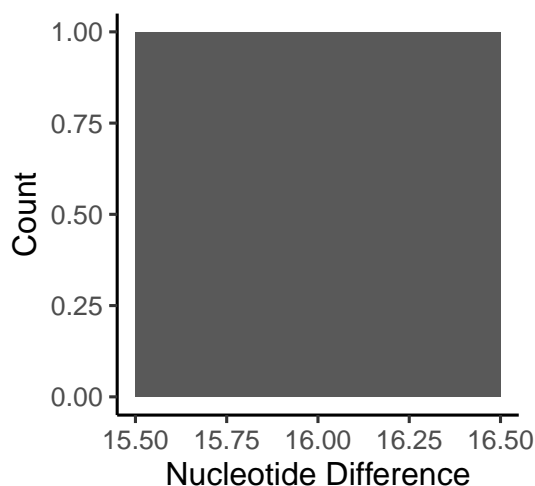
IGHV4–93*01_S1164

51 sequences assigned
10 (19.6%) exact matches, in which:
7 unique CDR3
1 unique J



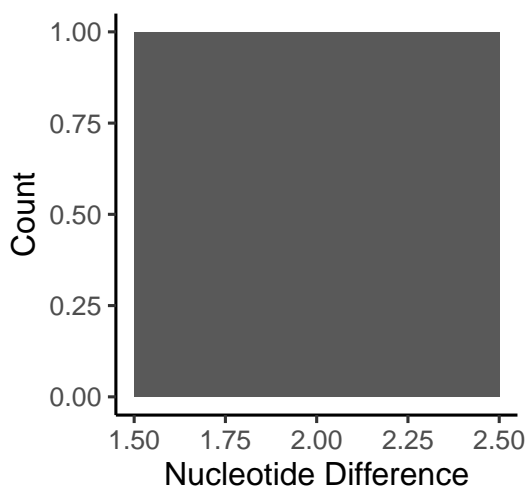
IGHV3–NL_17*01_S4250

2 sequences assigned
No exact matches.



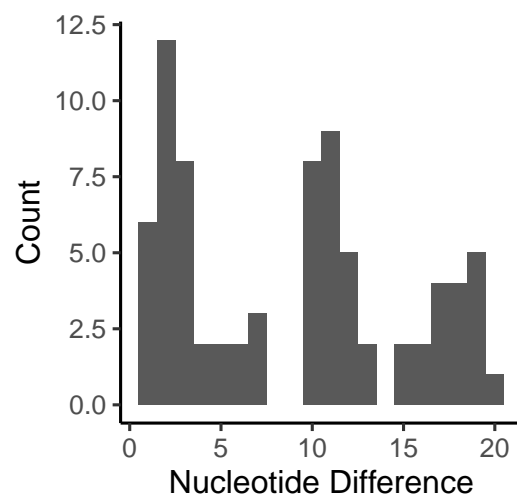
IGHV4–67*02_S6848

14 sequences assigned
No exact matches.



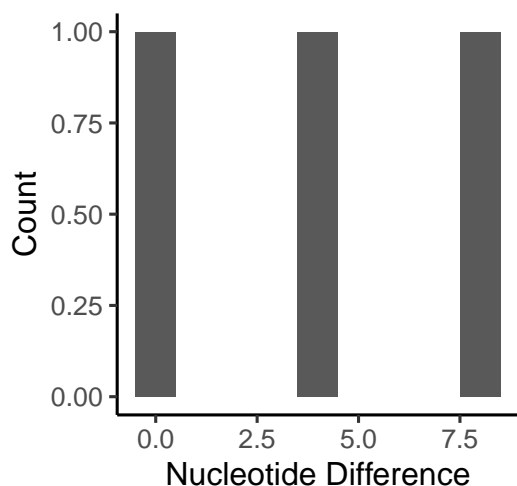
IGHV4–144*01_S2055

81 sequences assigned
No exact matches.



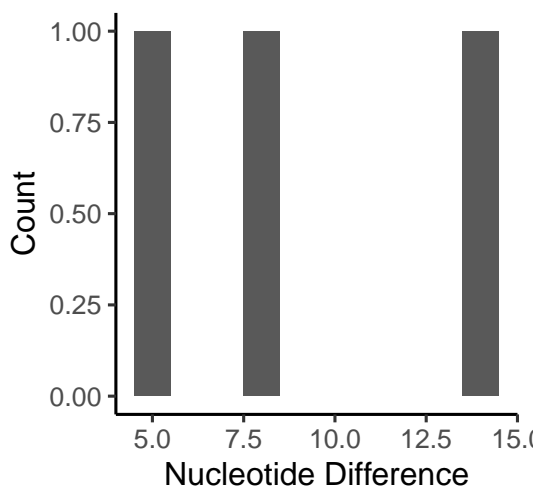
IGHV3–NL_17*01_S4736

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



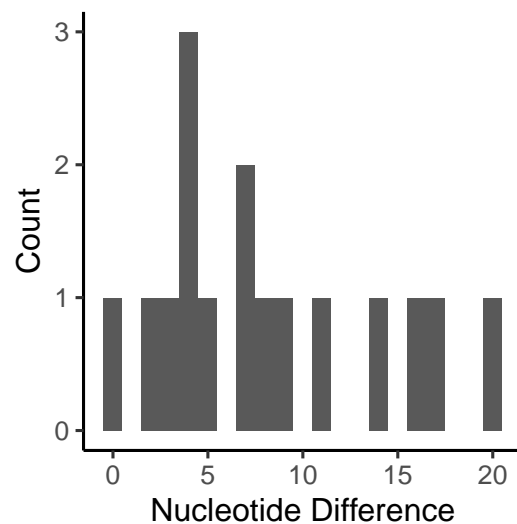
IGHV4–79*02_S9501

7 sequences assigned
No exact matches.



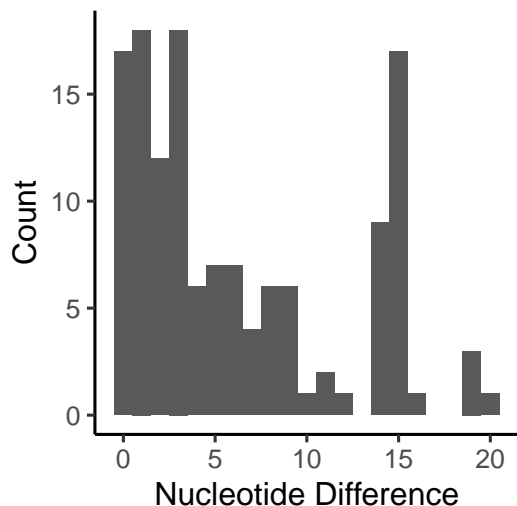
IGHV4–149*01_S3573

110 sequences assigned
1 (0.9%) exact matches, in which:
1 unique CDR3
1 unique J



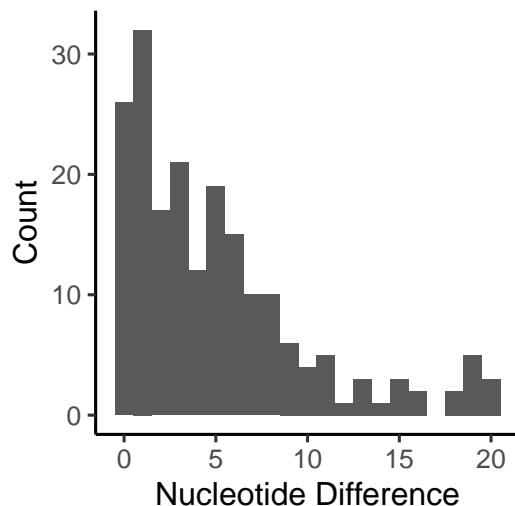
IGHV4-149*01_S6502

166 sequences assigned
17 (10.2%) exact matches, in which:
14 unique CDR3
1 unique J



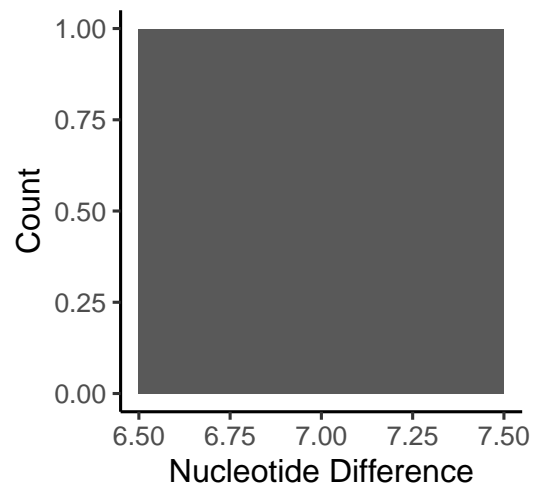
IGHV4-NL_1*01_S9508

217 sequences assigned
26 (12%) exact matches, in which:
17 unique CDR3
1 unique J



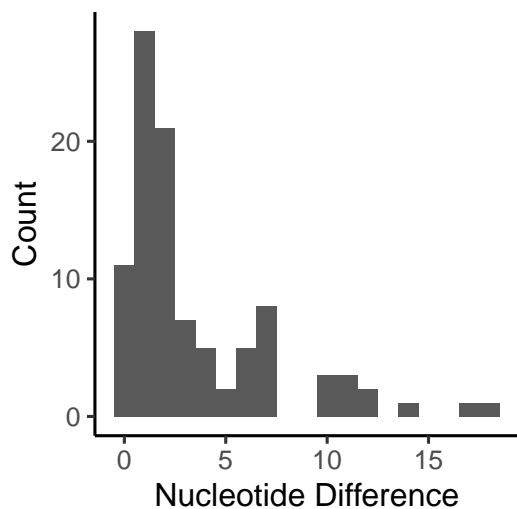
IGHV4-NL_13*01_S9744

1 sequences assigned
No exact matches.



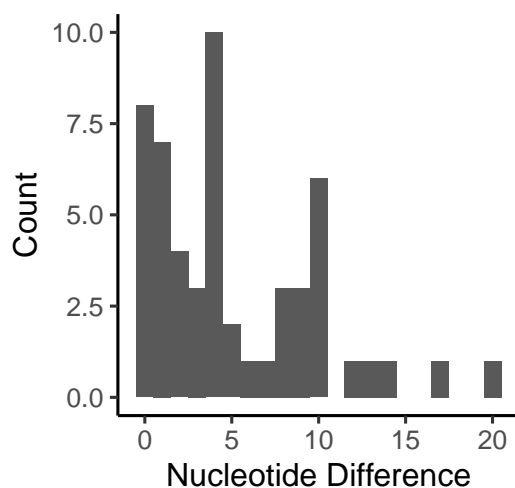
IGHV4-NL_1*01_S2370

99 sequences assigned
11 (11.1%) exact matches, in which:
7 unique CDR3
1 unique J



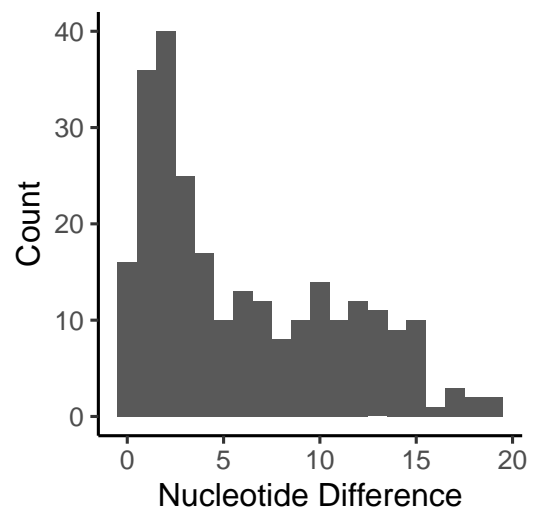
IGHV4-NL_1*02_S2524

54 sequences assigned
8 (14.8%) exact matches, in which:
8 unique CDR3
1 unique J



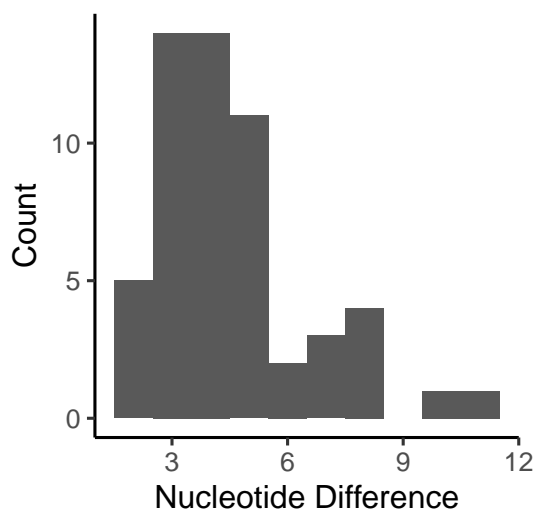
IGHV4-NL_16*01_S3062

299 sequences assigned
16 (5.4%) exact matches, in which:
13 unique CDR3
1 unique J



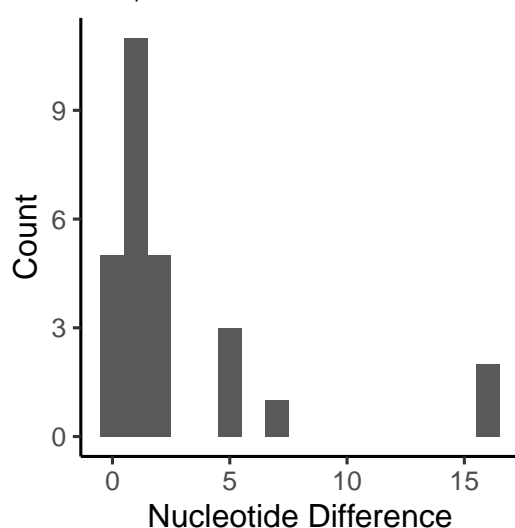
IGHV4-NL_1*01_S8621

55 sequences assigned
No exact matches.



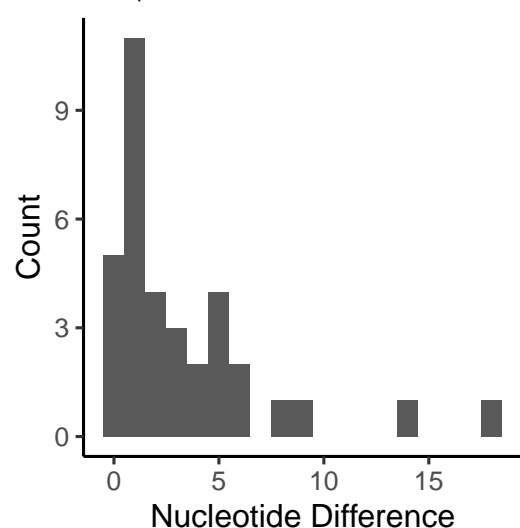
IGHV4-NL_11*01_S9942

56 sequences assigned
5 (8.9%) exact matches, in which:
4 unique CDR3
1 unique J



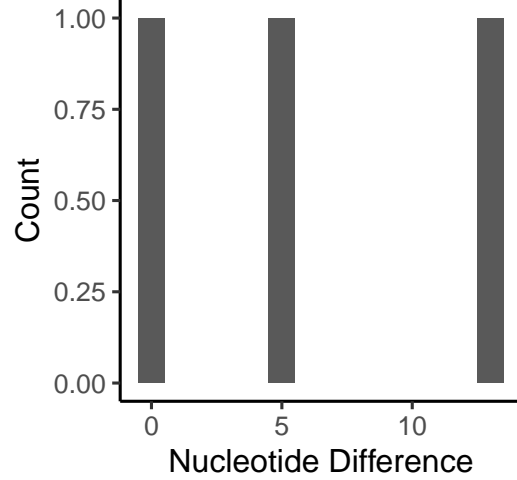
IGHV4-NL_17*01_S3082

36 sequences assigned
5 (13.9%) exact matches, in which:
4 unique CDR3
1 unique J



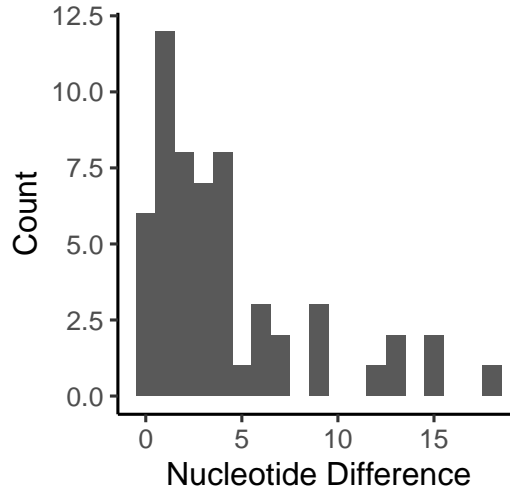
IGHV4-NL_17*01_S5437

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



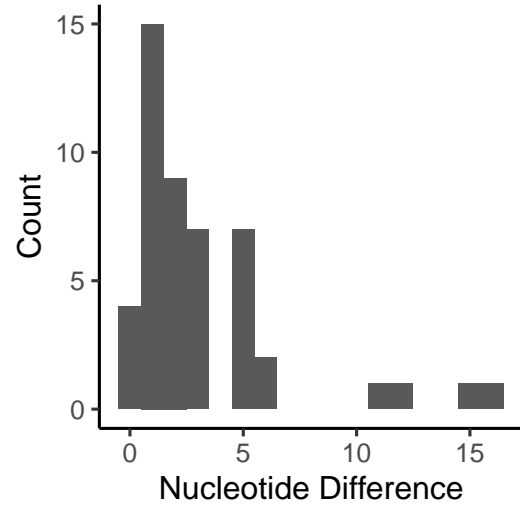
IGHV4-NL_20*01_S6186

56 sequences assigned
6 (10.7%) exact matches, in which:
6 unique CDR3
1 unique J



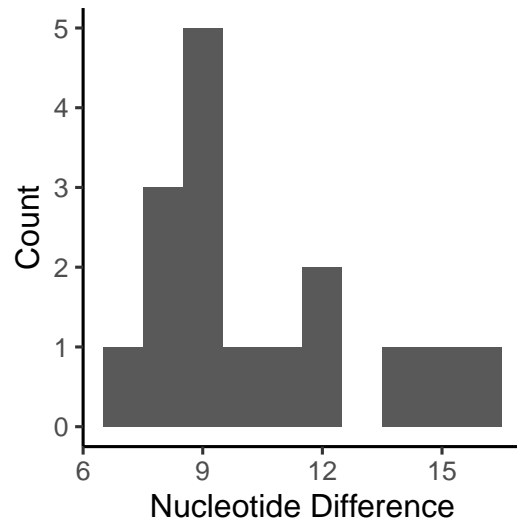
IGHV4-NL_24*01_S1628

49 sequences assigned
4 (8.2%) exact matches, in which:
4 unique CDR3
1 unique J



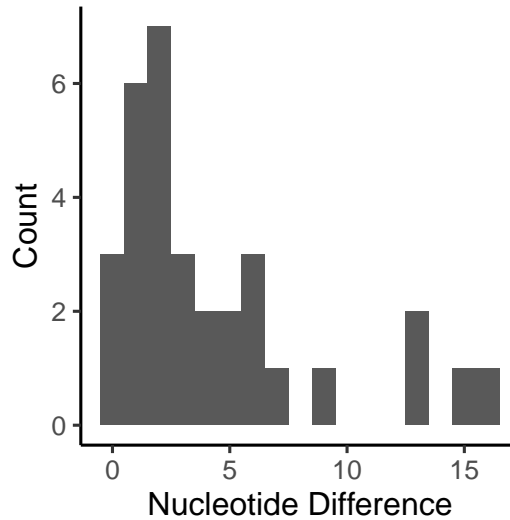
IGHV4-NL_20*01_S4754

16 sequences assigned
No exact matches.



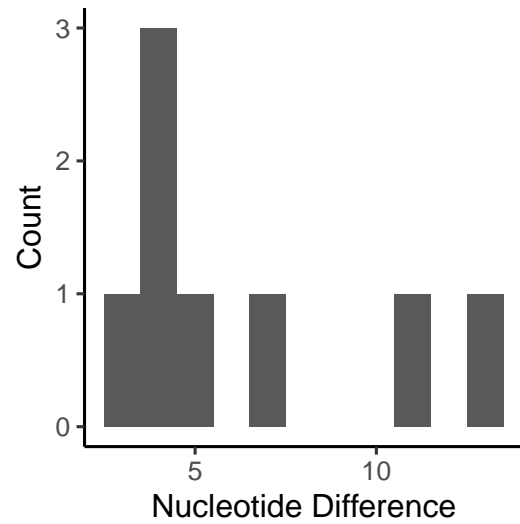
IGHV4-NL_21*01_S6468

33 sequences assigned
3 (9.1%) exact matches, in which:
3 unique CDR3
1 unique J



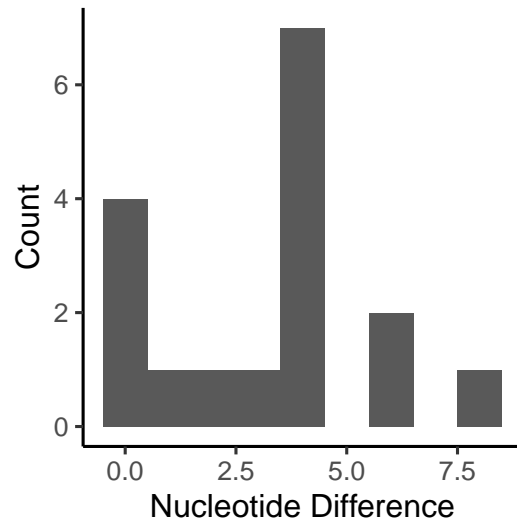
IGHV4-NL_24*01_S2784

8 sequences assigned
No exact matches.



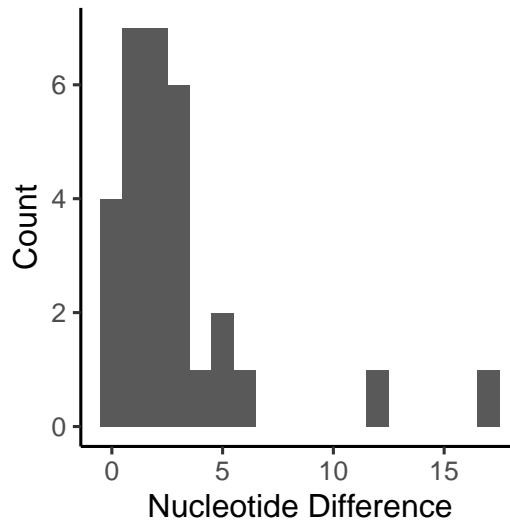
IGHV4-NL_20*01_S5229

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



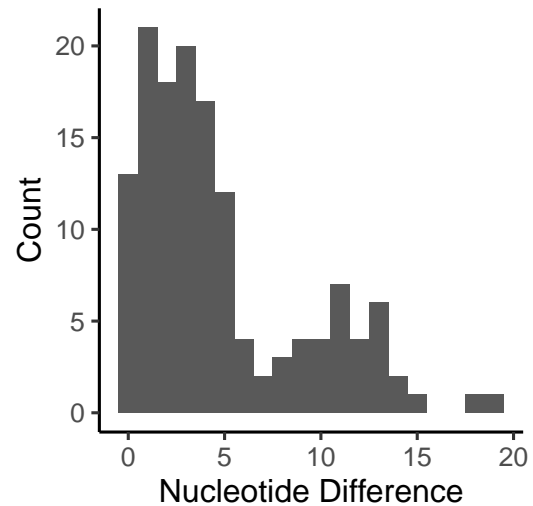
IGHV4-NL_22*01_S6977

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



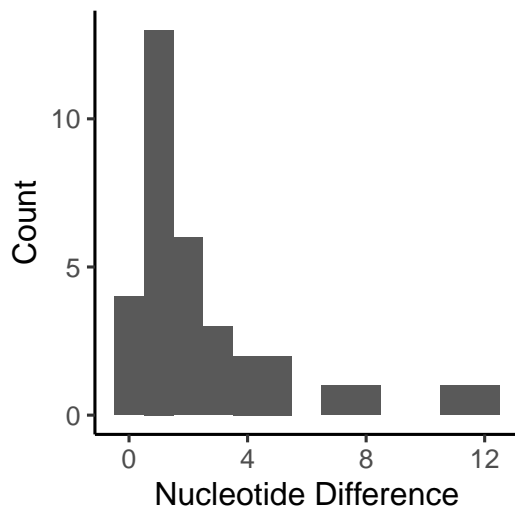
IGHV4-NL_25*01_S9955

141 sequences assigned
13 (9.2%) exact matches, in which:
7 unique CDR3
1 unique J



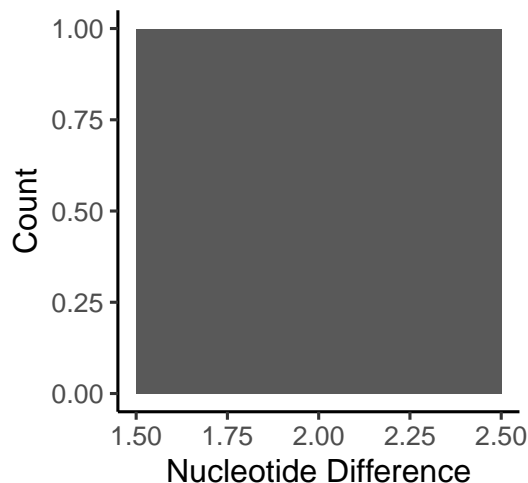
IGHV4–NL_27*01_S5720

34 sequences assigned
4 (11.8%) exact matches, in which:
4 unique CDR3
1 unique J



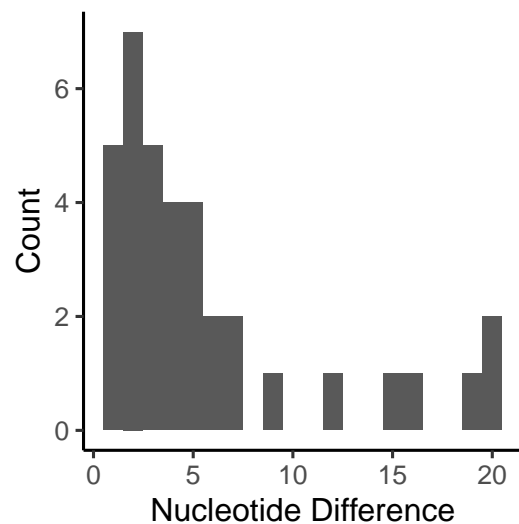
IGHV4–NL_29*01_S9610

1 sequences assigned
No exact matches.



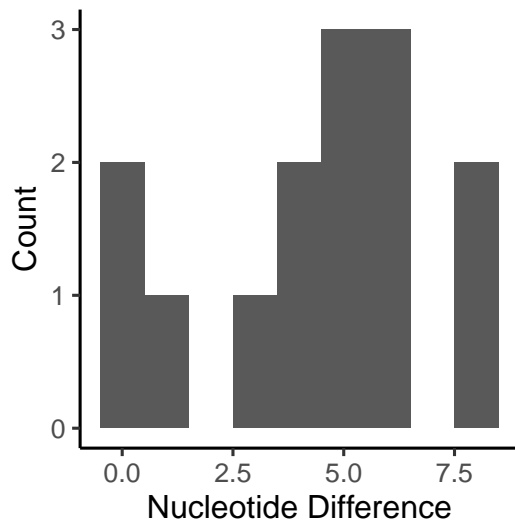
IGHV4–NL_33*01_S3086

40 sequences assigned
No exact matches.



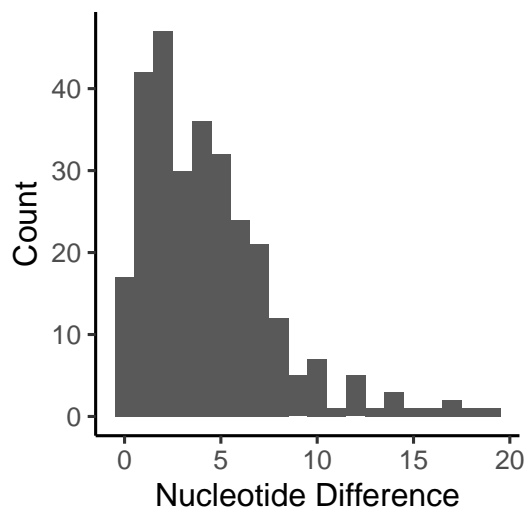
IGHV4–NL_27*01_S5829

14 sequences assigned
2 (14.3%) exact matches, in which:
1 unique CDR3
1 unique J



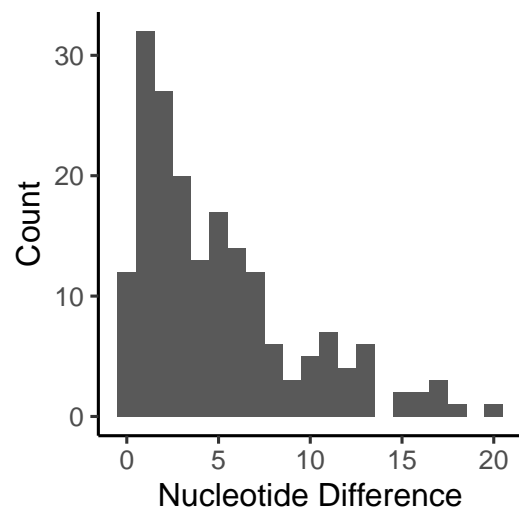
IGHV4–NL_3*01_S7576

293 sequences assigned
17 (5.8%) exact matches, in which:
15 unique CDR3
1 unique J



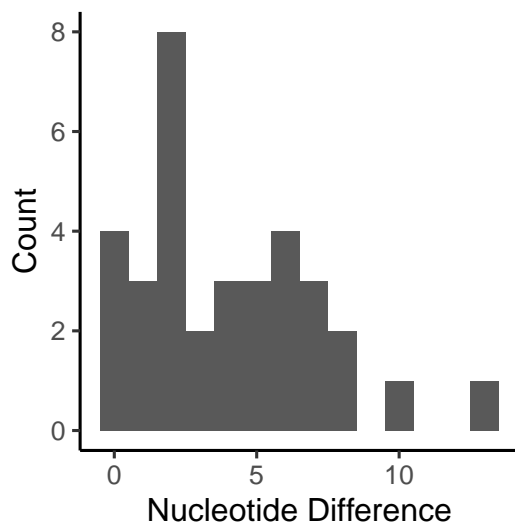
IGHV4–NL_33*01_S4467

219 sequences assigned
12 (5.5%) exact matches, in which:
10 unique CDR3
1 unique J



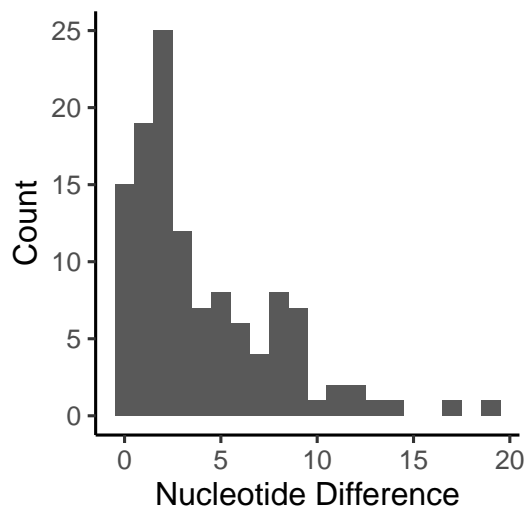
IGHV4–NL_28*01_S8057

34 sequences assigned
4 (11.8%) exact matches, in which:
3 unique CDR3
1 unique J



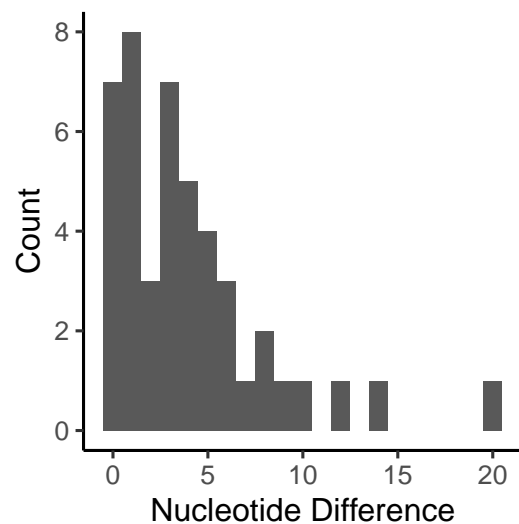
IGHV4–NL_33*01_S2532

122 sequences assigned
15 (12.3%) exact matches, in which:
8 unique CDR3
1 unique J



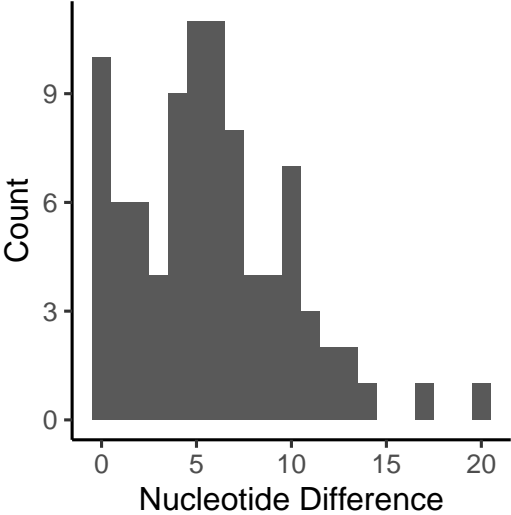
IGHV4–NL_36*01_S0211

46 sequences assigned
7 (15.2%) exact matches, in which:
4 unique CDR3
1 unique J



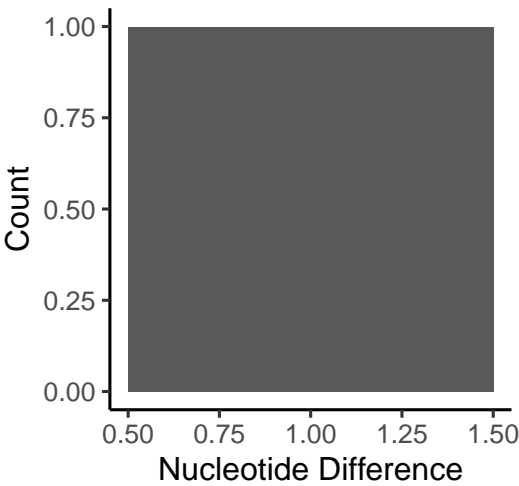
IGHV4-NL_36*01_S0538

94 sequences assigned
10 (10.6%) exact matches, in which:
6 unique CDR3
1 unique J



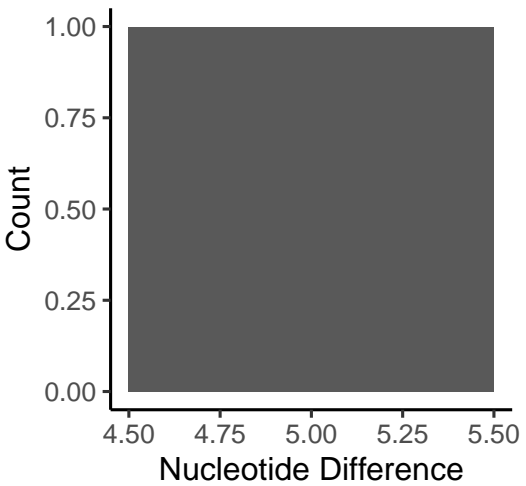
IGHV4-NL_38*01_S8437

1 sequences assigned
No exact matches.



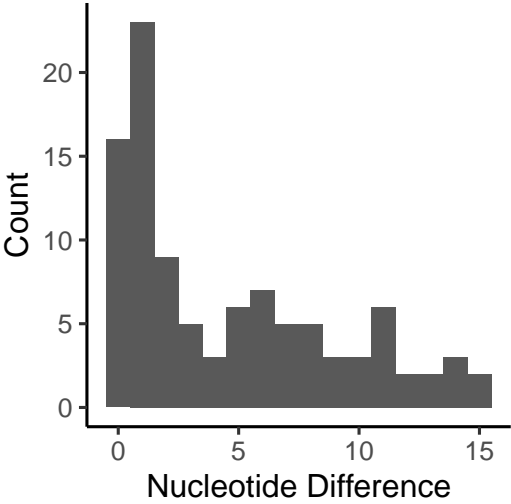
IGHV4-NL_42*01_S3076

1 sequences assigned
No exact matches.



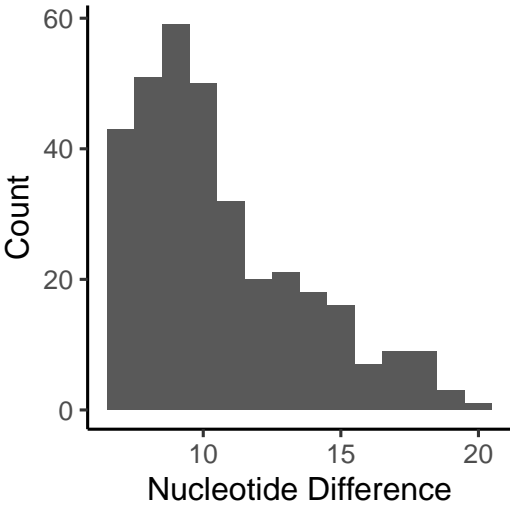
IGHV4-NL_36*01_S5847

102 sequences assigned
16 (15.7%) exact matches, in which:
10 unique CDR3
1 unique J



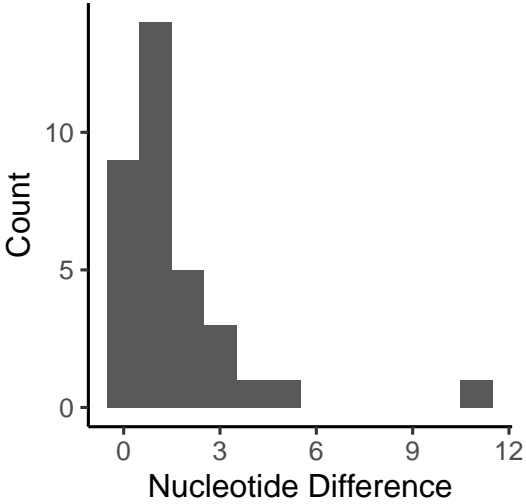
IGHV4-NL_4*01_S5211

346 sequences assigned
No exact matches.



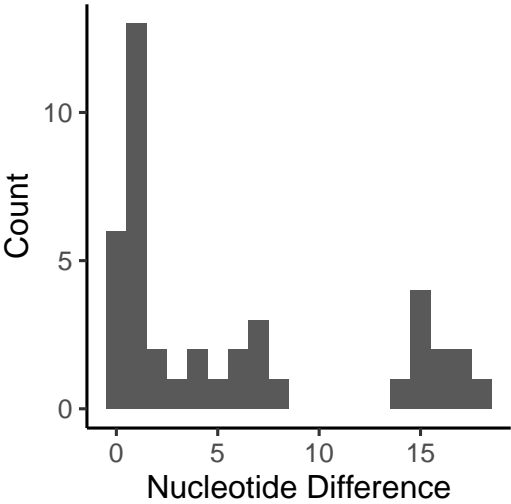
IGHV4-NL_5*01_S5158

34 sequences assigned
9 (26.5%) exact matches, in which:
6 unique CDR3
1 unique J



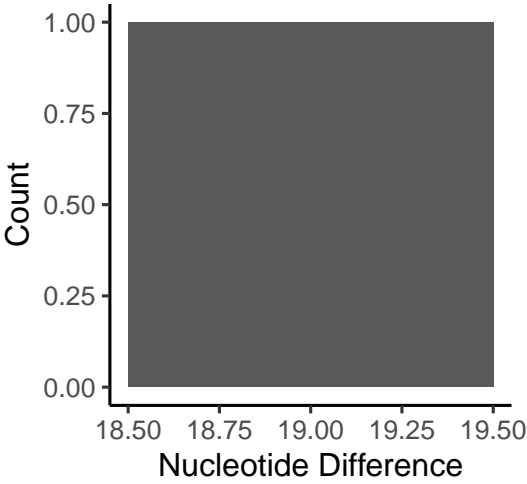
IGHV4-NL_36*01_S9644

50 sequences assigned
6 (12%) exact matches, in which:
4 unique CDR3
1 unique J



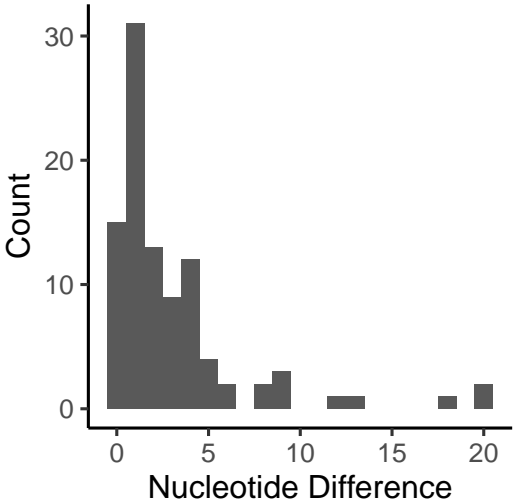
IGHV4-NL_4*01_S8866

2 sequences assigned
No exact matches.



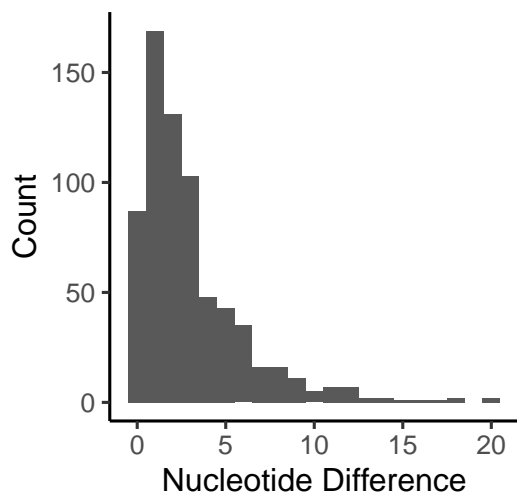
IGHV4-NL_9*01_S6766

97 sequences assigned
15 (15.5%) exact matches, in which:
12 unique CDR3
1 unique J



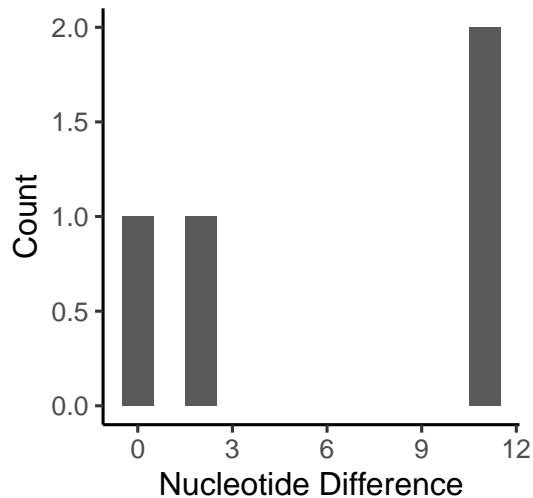
IGHV5-15*01_S8661

692 sequences assigned
87 (12.6%) exact matches, in which:
36 unique CDR3
1 unique J



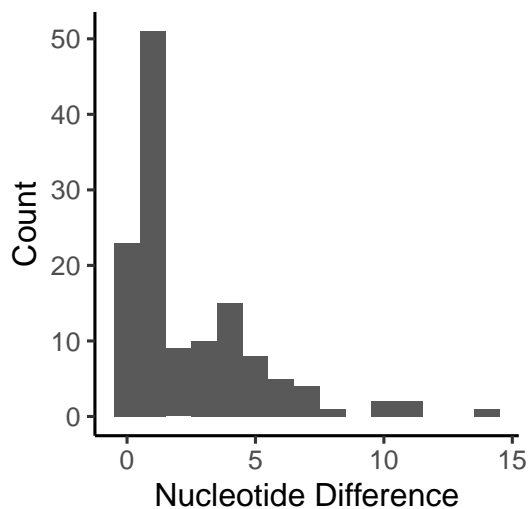
IGHV7-86*01_S3619

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



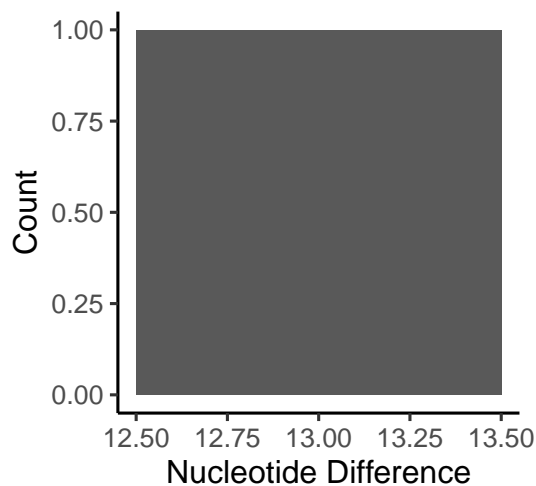
IGHV5-157*01_S6479

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



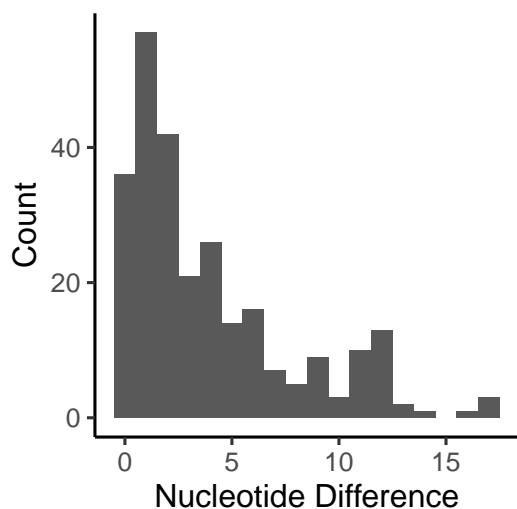
IGHV7-86*01_S9209

1 sequences assigned
No exact matches.



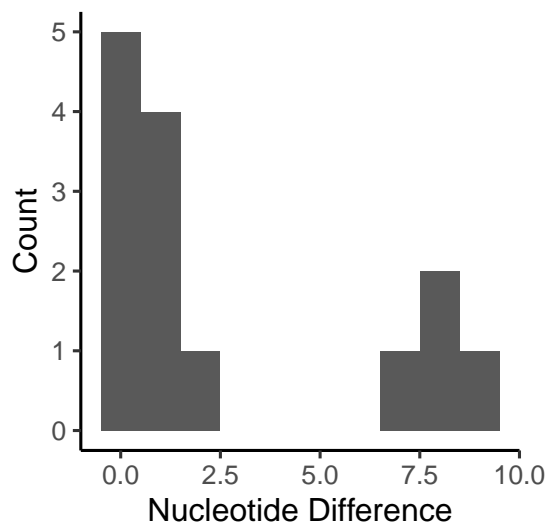
IGHV5-157*02_S3440

266 sequences assigned
36 (13.5%) exact matches, in which:
18 unique CDR3
1 unique J

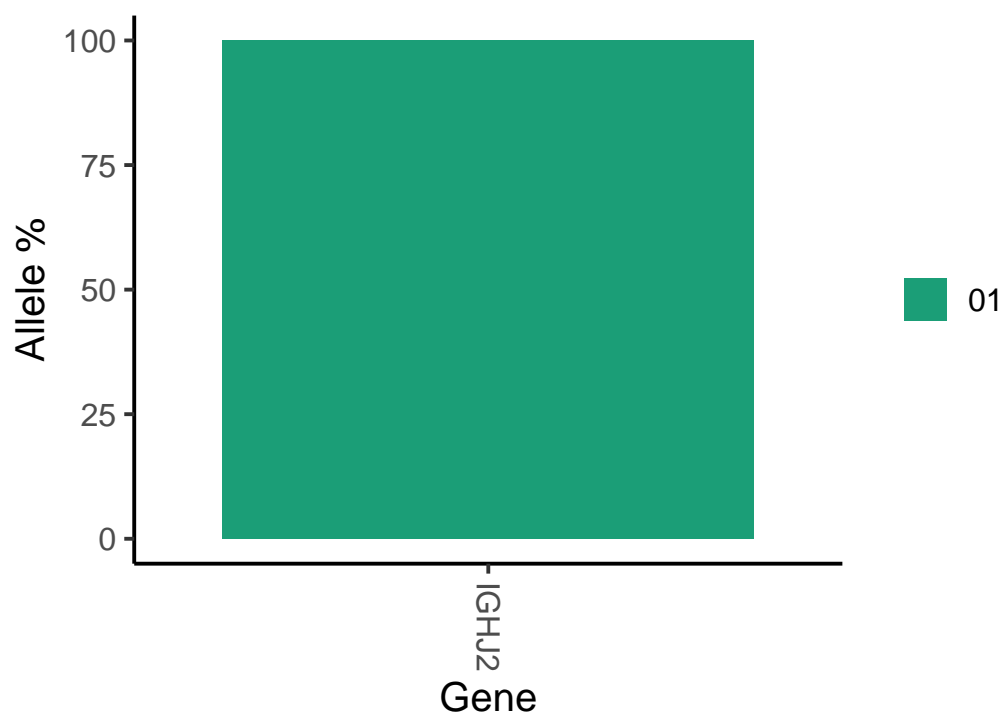


IGHV7-135*01_S9086

14 sequences assigned
5 (35.7%) exact matches, in which:
3 unique CDR3
1 unique J



Allele Usage



Warning – no inferred sequences found.