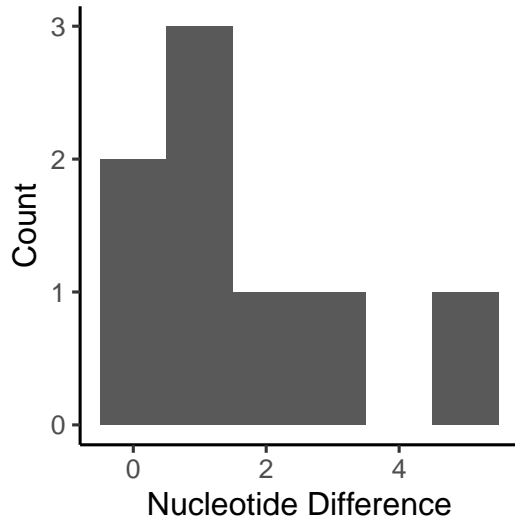


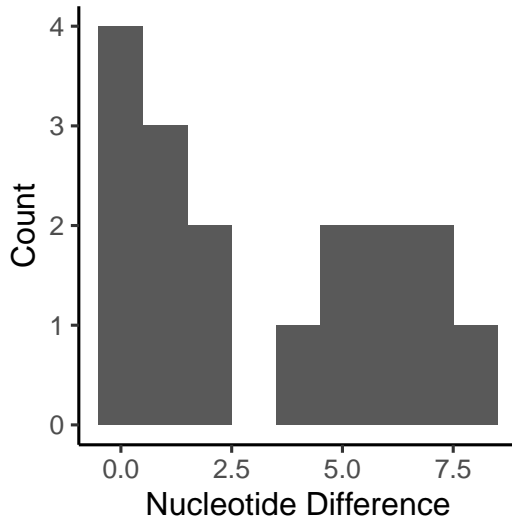
IGHV1-60*01_S7772

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



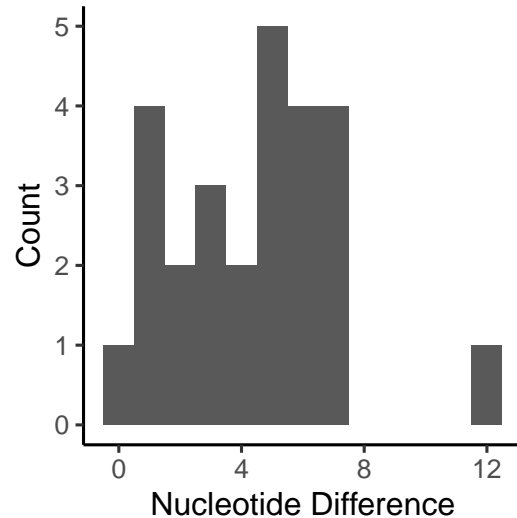
IGHV1-138*01_S8841

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



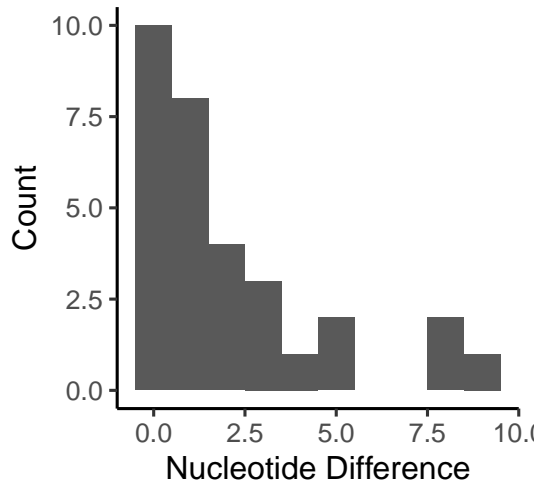
IGHV2-118*01_S8953

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



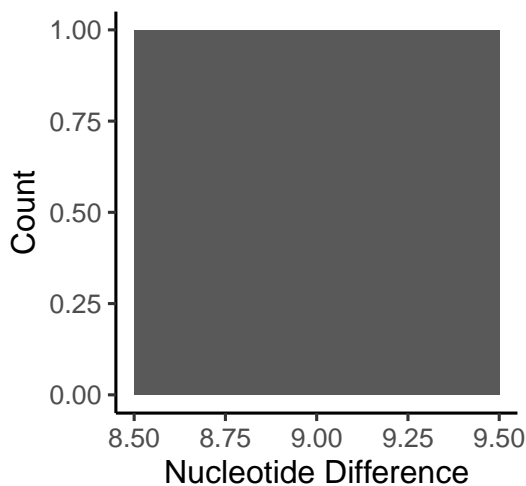
IGHV1-84*01_S5228

32 sequences assigned
10 (31.2%) exact matches, in which:
6 unique CDR3
1 unique J



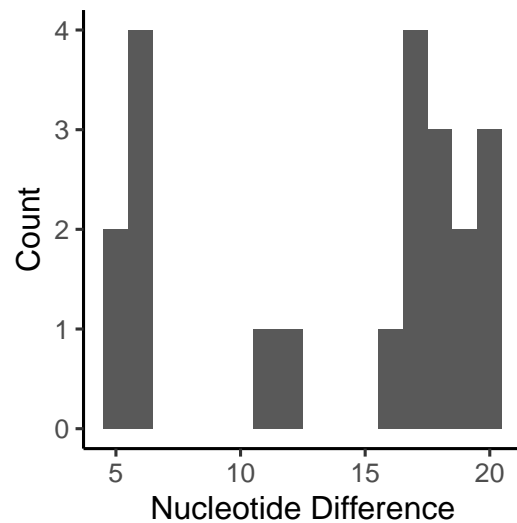
IGHV1-NL_2*01_S5797

1 sequences assigned
No exact matches.



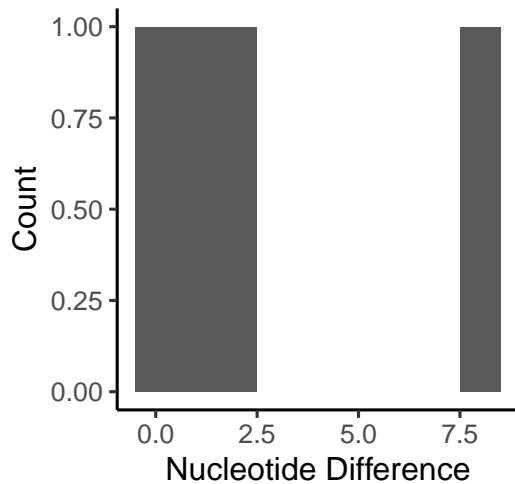
IGHV2-NL_1*01_S9725

38 sequences assigned
No exact matches.



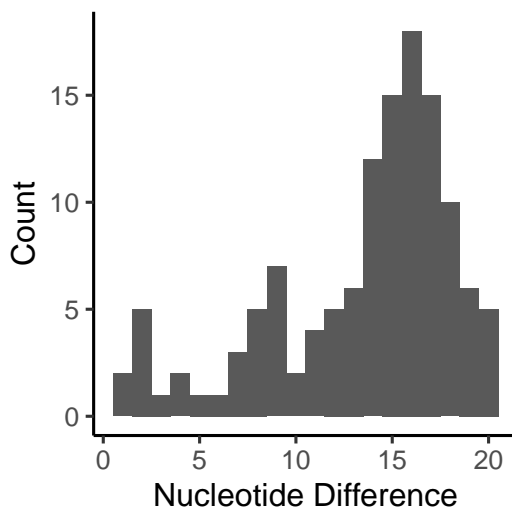
IGHV1-138*01_S2593

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



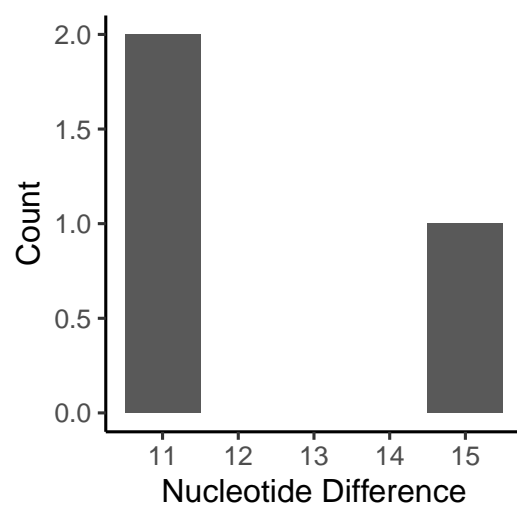
IGHV2-69*01_S2408

240 sequences assigned
No exact matches.



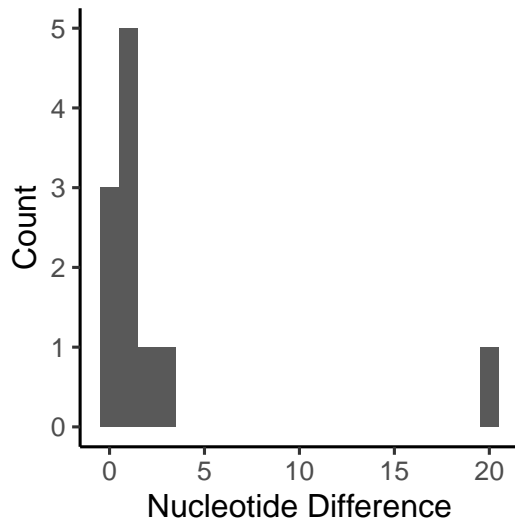
IGHV3-52*01_S8160

3 sequences assigned
No exact matches.



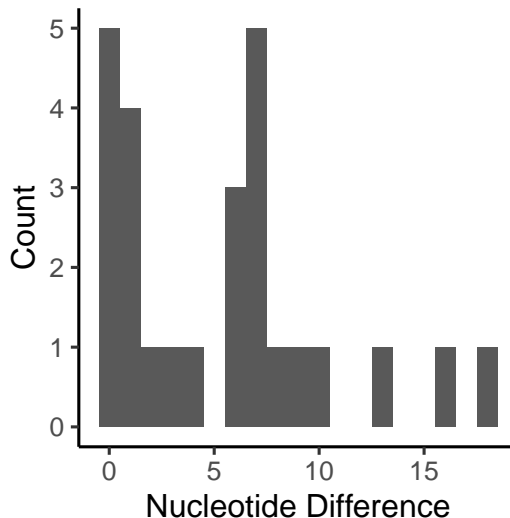
IGHV3-53*01_S2949

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



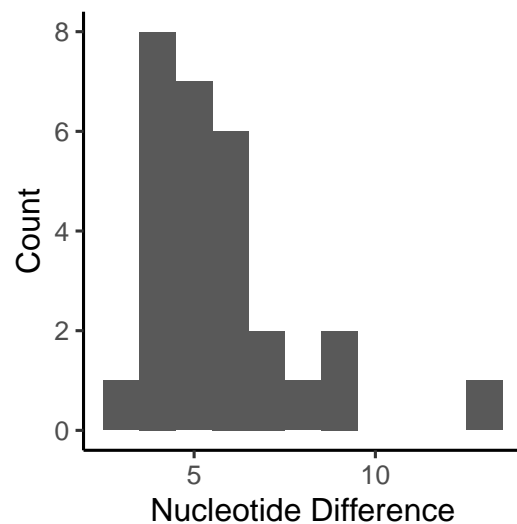
IGHV3-76*01_S5420

28 sequences assigned
5 (17.9%) exact matches, in which:
2 unique CDR3
1 unique J



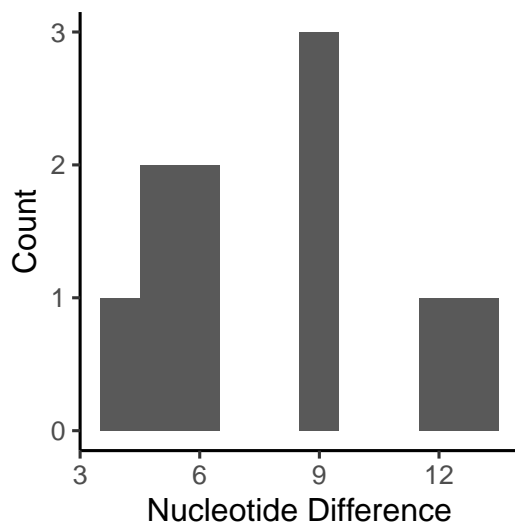
IGHV3-122*01_S8388

29 sequences assigned
No exact matches.



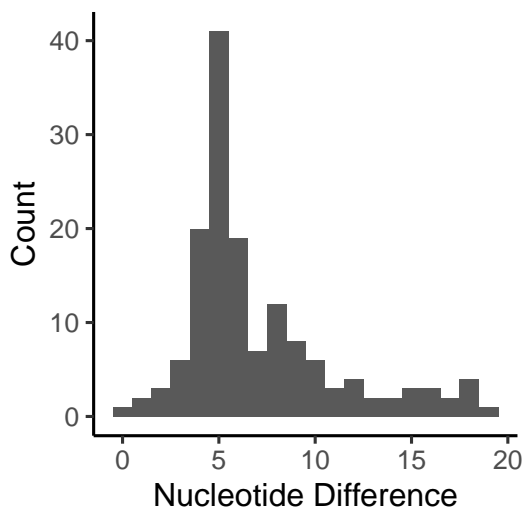
IGHV3-73*01_S6942

10 sequences assigned
No exact matches.



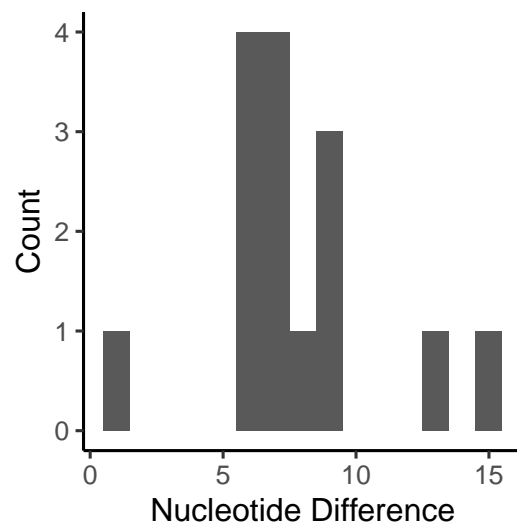
IGHV3-88*01_S4297

153 sequences assigned
1 (0.7%) exact matches, in which:
1 unique CDR3
1 unique J



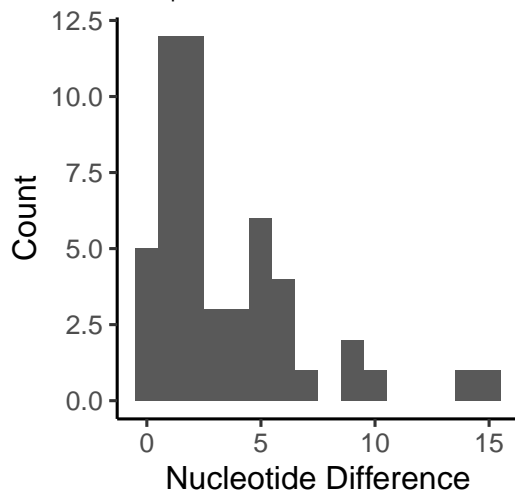
IGHV3-127*01_S8923

15 sequences assigned
No exact matches.



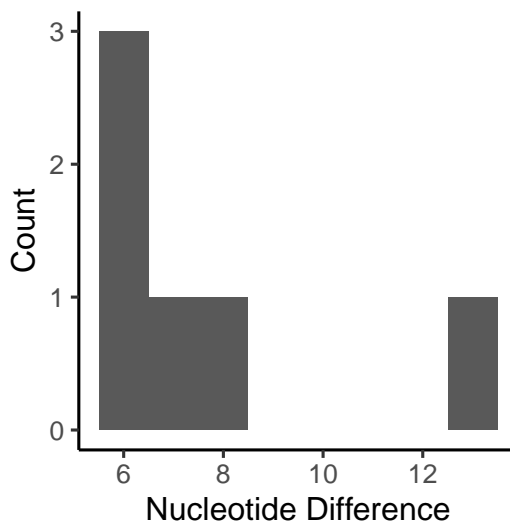
IGHV3-76*01_S4285

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



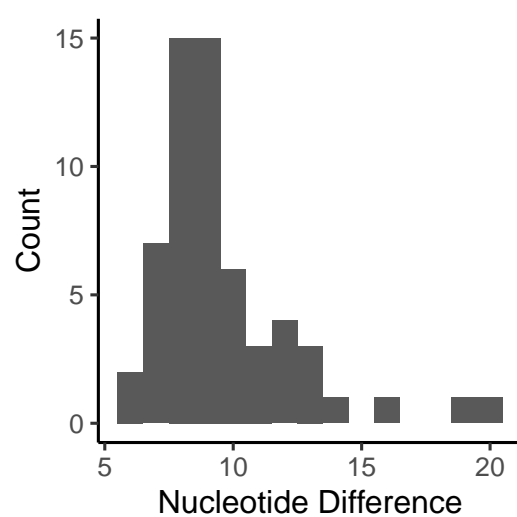
IGHV3-100*01_S4205

6 sequences assigned
No exact matches.



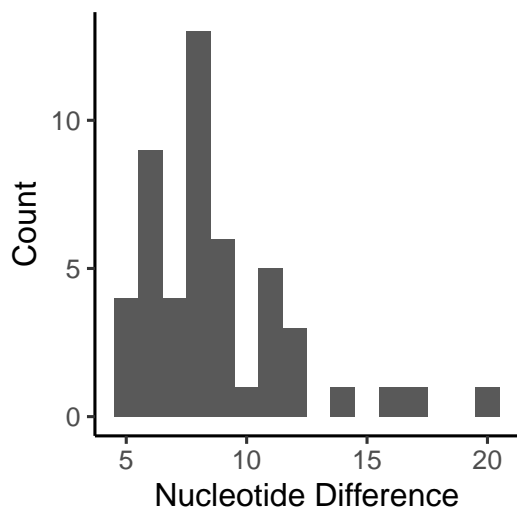
IGHV3-128*02_S0204

59 sequences assigned
No exact matches.



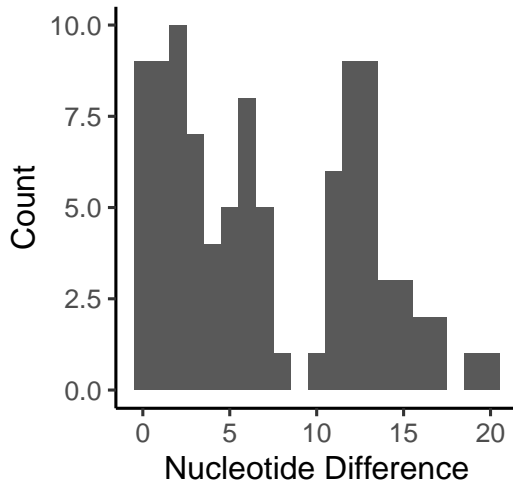
IGHV3-177*01_S8409

50 sequences assigned
No exact matches.



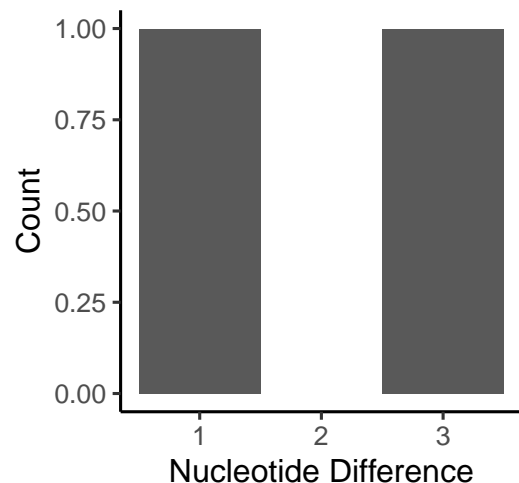
IGHV3-NL_11*01_S8670

113 sequences assigned
9 (8%) exact matches, in which:
4 unique CDR3
1 unique J



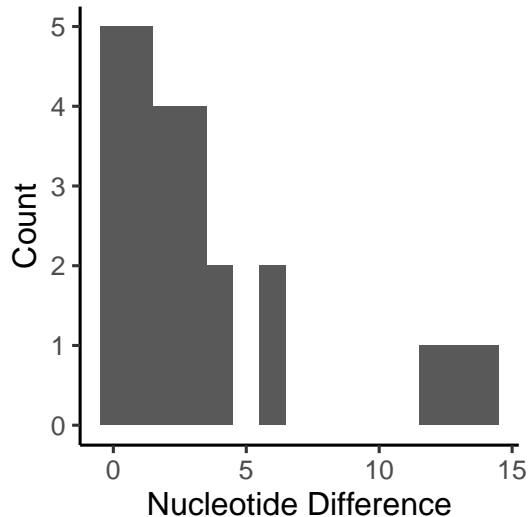
IGHV3-NL_18*01_S6383

2 sequences assigned
No exact matches.



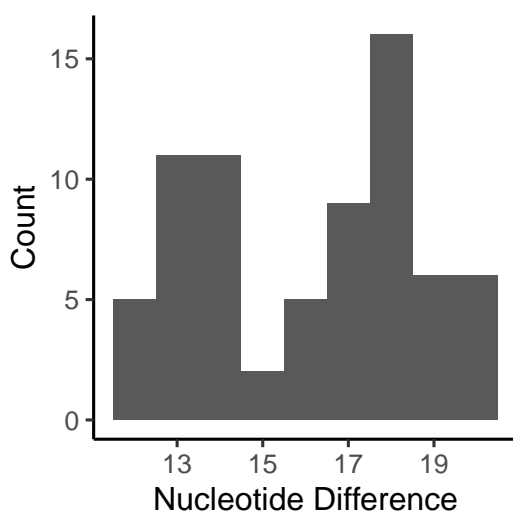
IGHV3-187*01_S4259

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



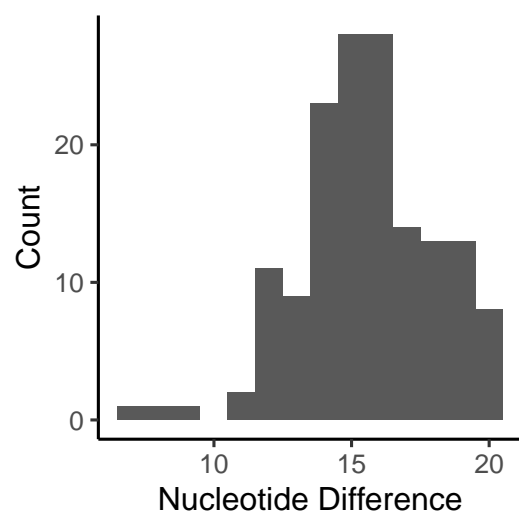
IGHV3-NL_14*01_S7988

90 sequences assigned
No exact matches.



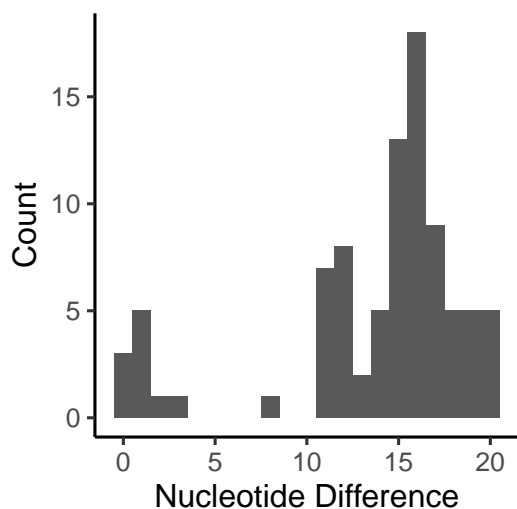
IGHV3-NL_4*01_S9392

343 sequences assigned
No exact matches.



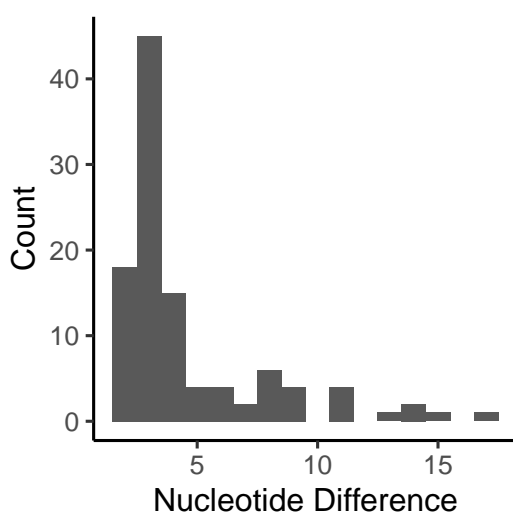
IGHV3-NL_1*01_S9854

120 sequences assigned
3 (2.5%) exact matches, in which:
2 unique CDR3
1 unique J



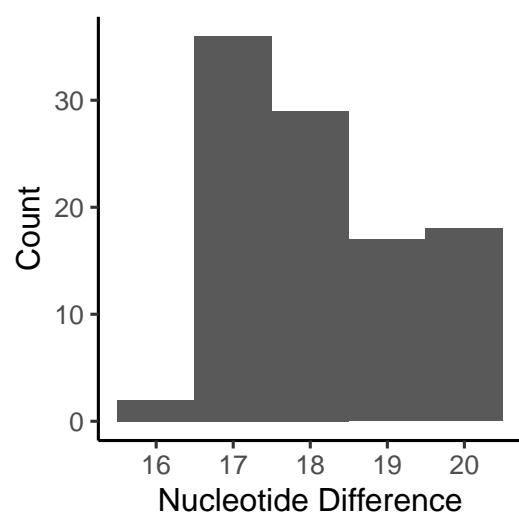
IGHV3-NL_17*01_S1160

107 sequences assigned
No exact matches.



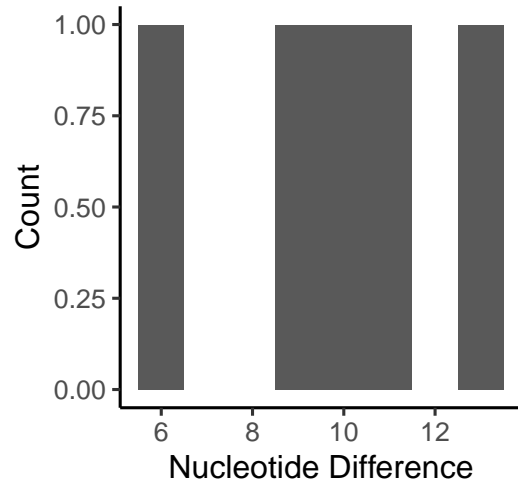
IGHV3-NL_7*01_S0199

319 sequences assigned
No exact matches.



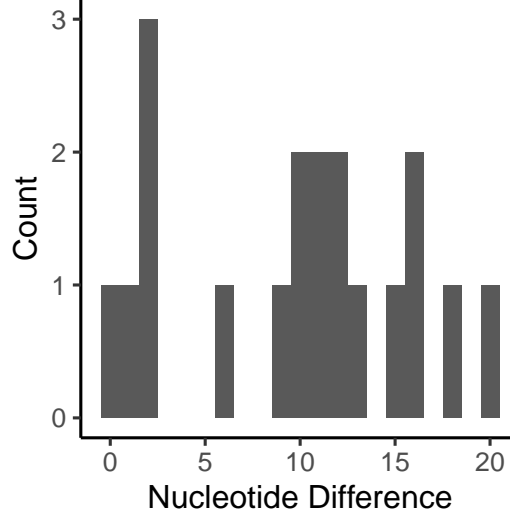
IGHV3–NL_8*01_S7474

5 sequences assigned
No exact matches.



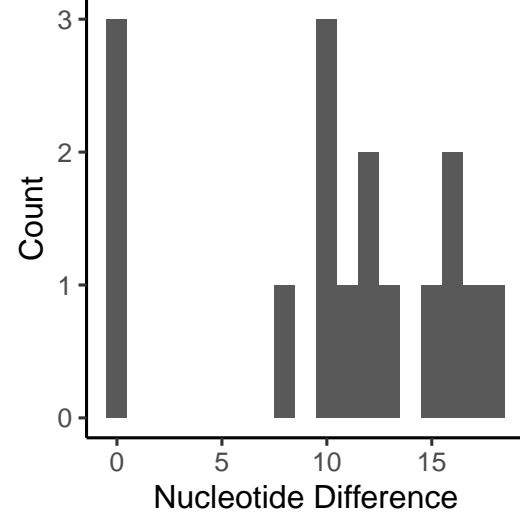
IGHV4–117*01_S1924

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



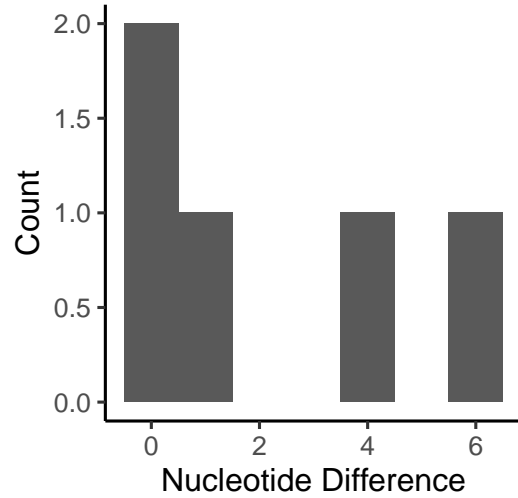
IGHV4–149*01_S1430

17 sequences assigned
3 (17.6%) exact matches, in which:
3 unique CDR3
1 unique J



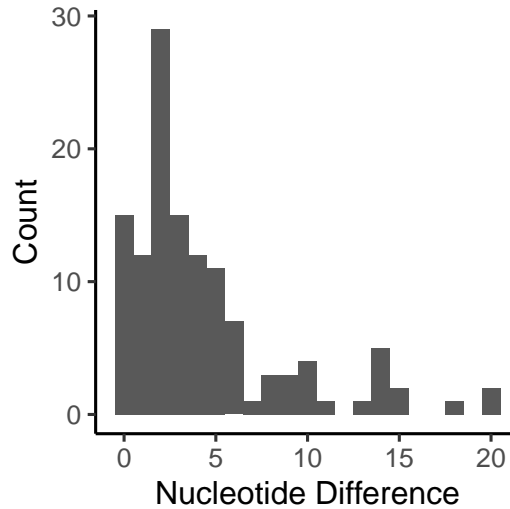
IGHV4–67*01_S8827

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



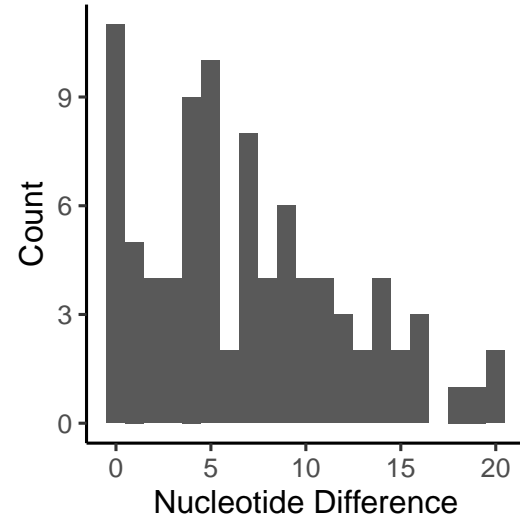
IGHV4–117*01_S2932

126 sequences assigned
15 (11.9%) exact matches, in which:
12 unique CDR3
1 unique J



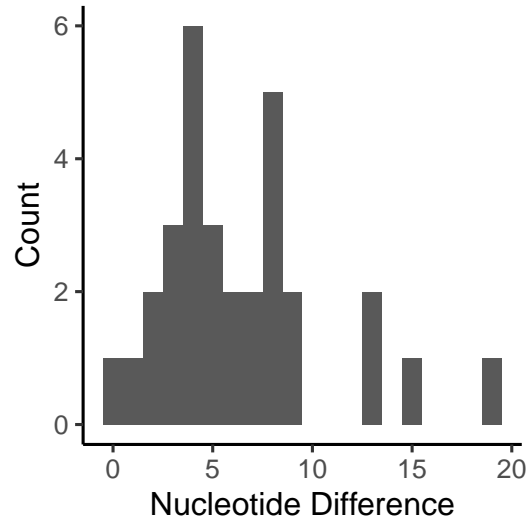
IGHV4–149*01_S6502

93 sequences assigned
11 (11.8%) exact matches, in which:
9 unique CDR3
1 unique J



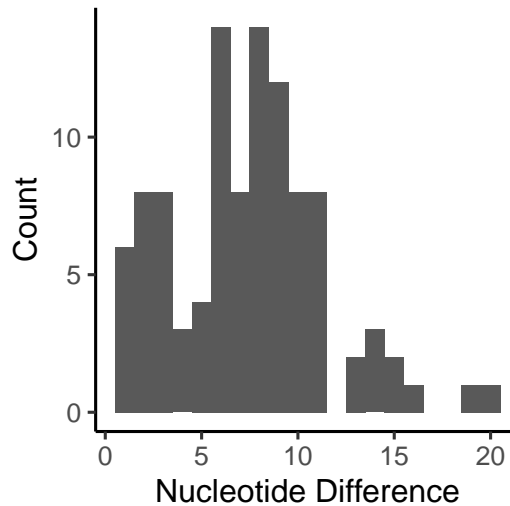
IGHV4–93*01_S1164

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



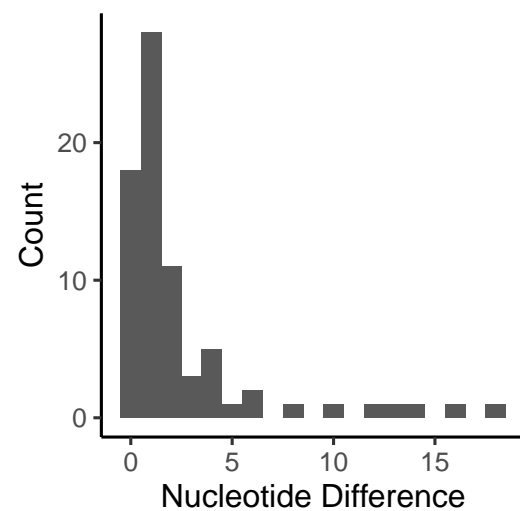
IGHV4–144*01_S9923

104 sequences assigned
No exact matches.



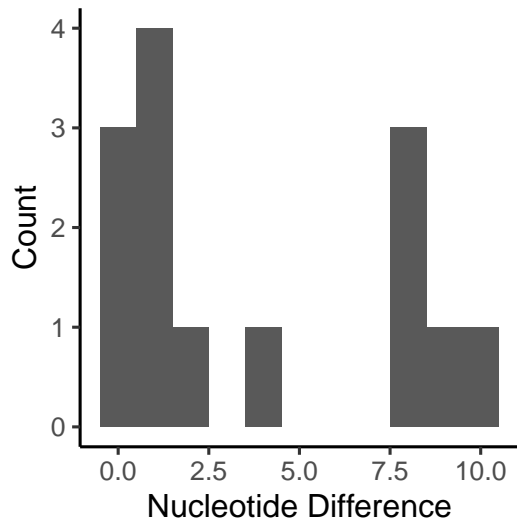
IGHV4–149*01_S8526

75 sequences assigned
18 (24%) exact matches, in which:
15 unique CDR3
1 unique J



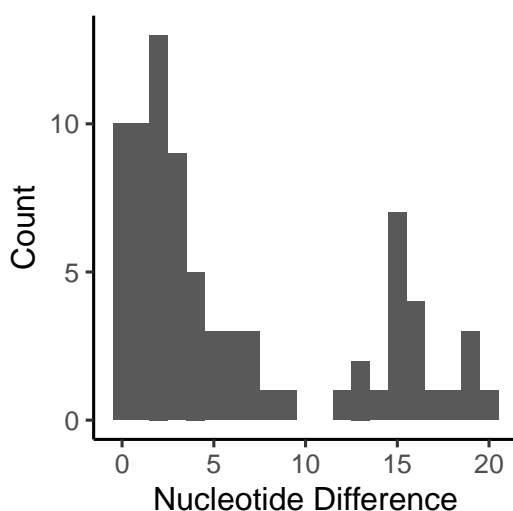
IGHV4-150*01_S2344

14 sequences assigned
3 (21.4%) exact matches, in which:
3 unique CDR3
1 unique J



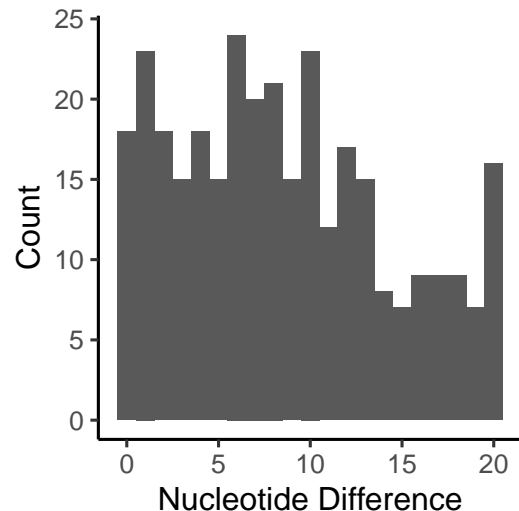
IGHV4-NL_10*01_S7684

84 sequences assigned
10 (11.9%) exact matches, in which:
7 unique CDR3
1 unique J



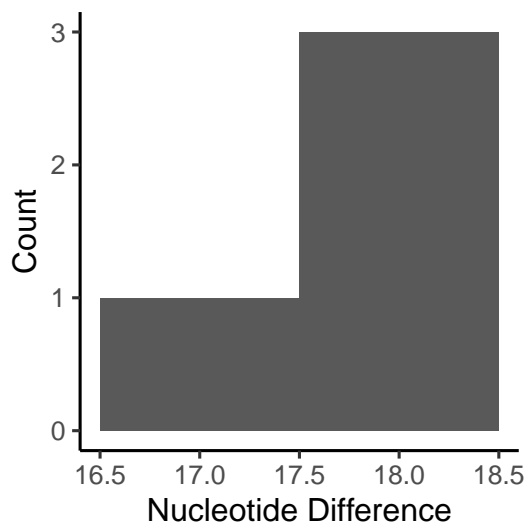
IGHV4-NL_16*01_S2138

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



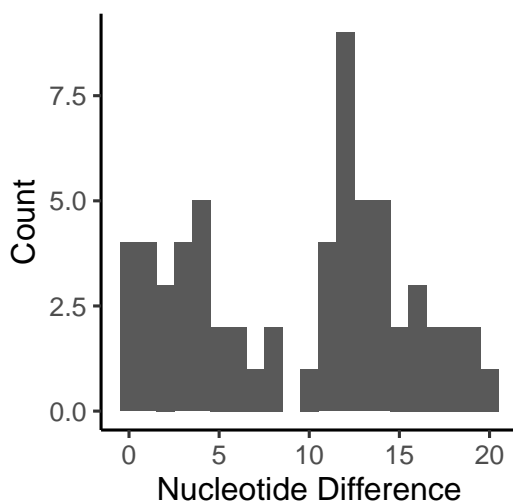
IGHV4-NL_1*01_S1593

4 sequences assigned
No exact matches.



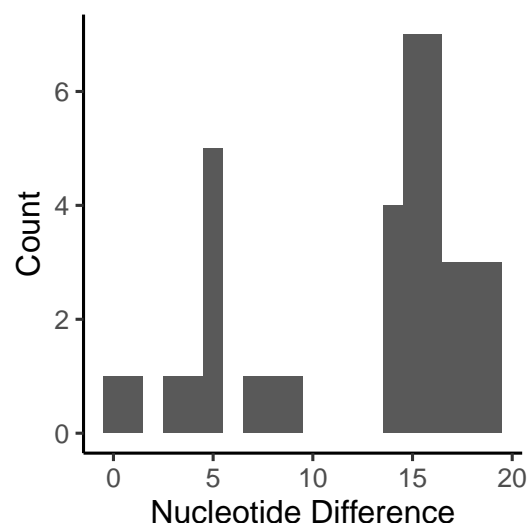
IGHV4-NL_10*02_S9348

64 sequences assigned
4 (6.2%) exact matches, in which:
3 unique CDR3
1 unique J



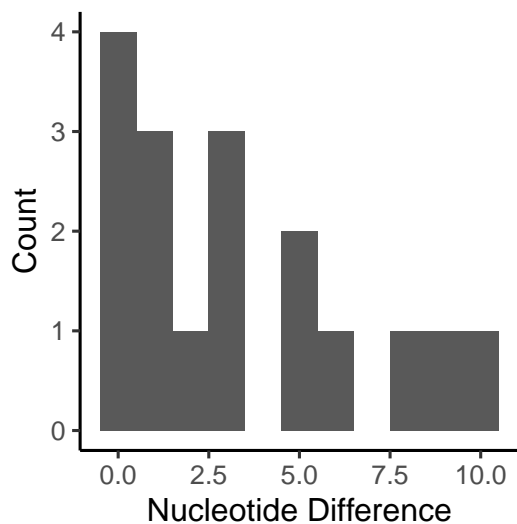
IGHV4-NL_21*01_S0138

44 sequences assigned
1 (2.3%) exact matches, in which:
1 unique CDR3
1 unique J



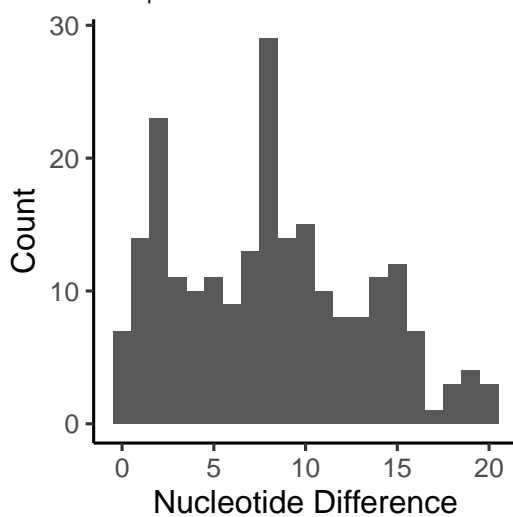
IGHV4-NL_1*01_S9508

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



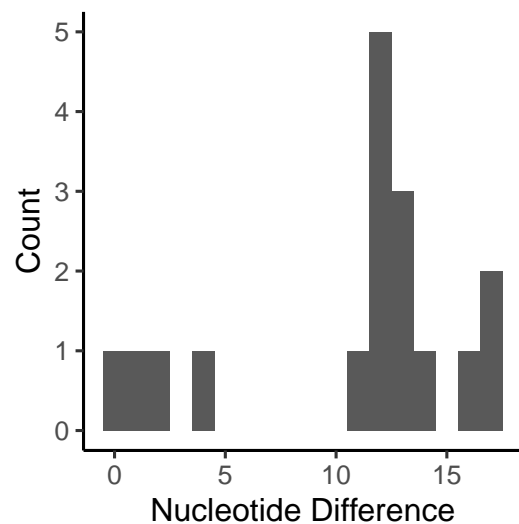
IGHV4-NL_12*01_S5174

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



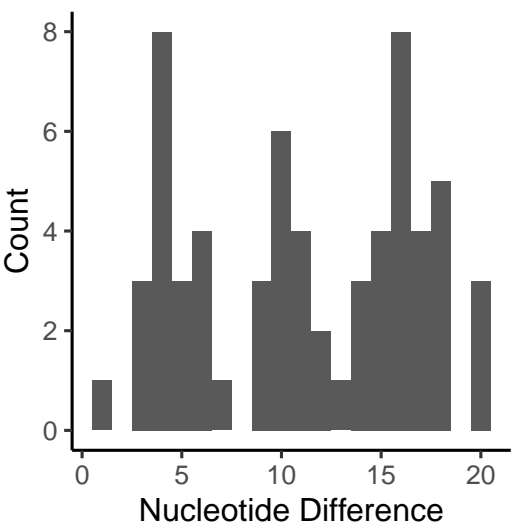
IGHV4-NL_22*01_S9255

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



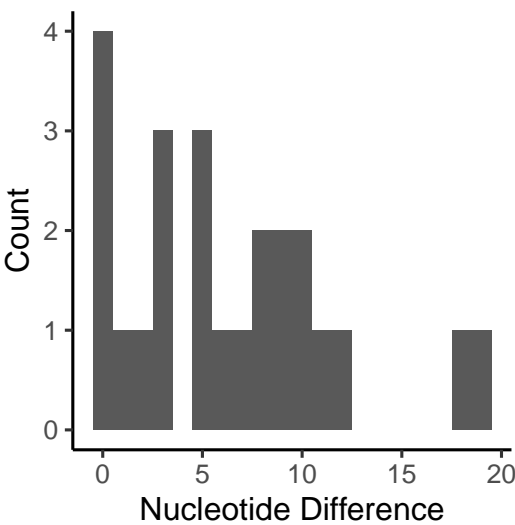
IGHV4–NL_25*01_S9955

66 sequences assigned
No exact matches.



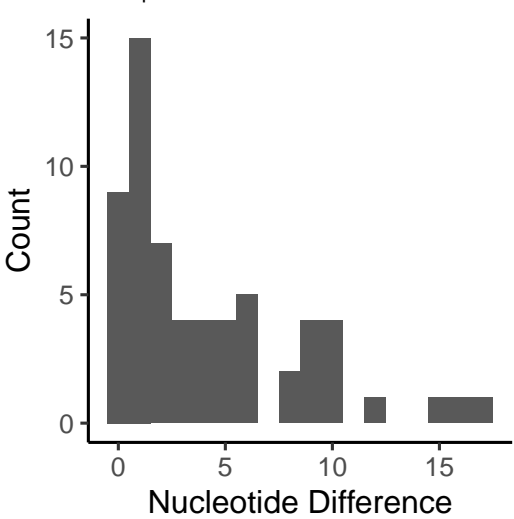
IGHV4–NL_31*01_S7693

24 sequences assigned
4 (16.7%) exact matches, in which:
2 unique CDR3
1 unique J



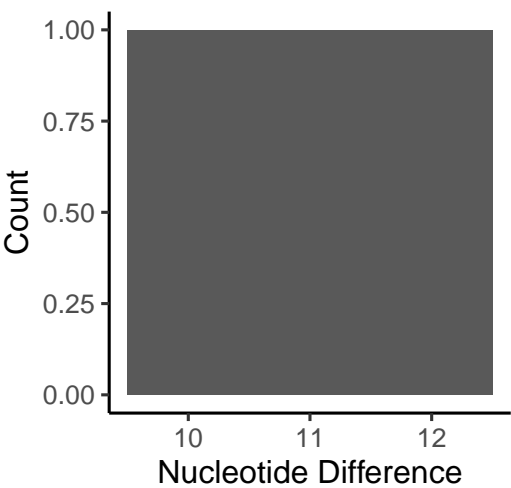
IGHV4–NL_36*01_S5847

64 sequences assigned
9 (14.1%) exact matches, in which:
7 unique CDR3
1 unique J



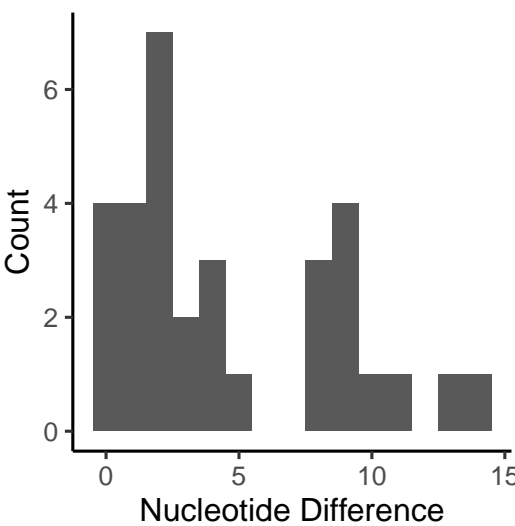
IGHV4–NL_27*01_S7150

4 sequences assigned
No exact matches.



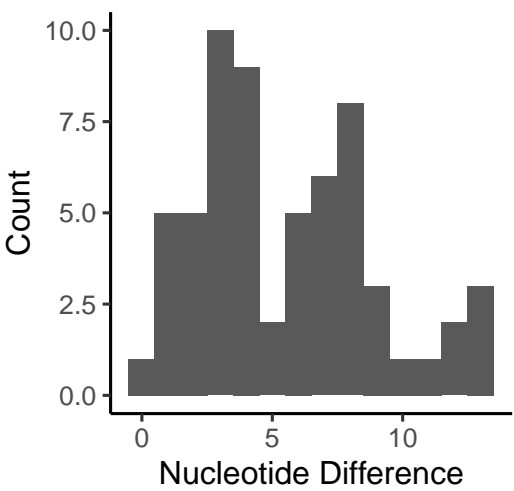
IGHV4–NL_33*01_S1148

33 sequences assigned
4 (12.1%) exact matches, in which:
4 unique CDR3
1 unique J



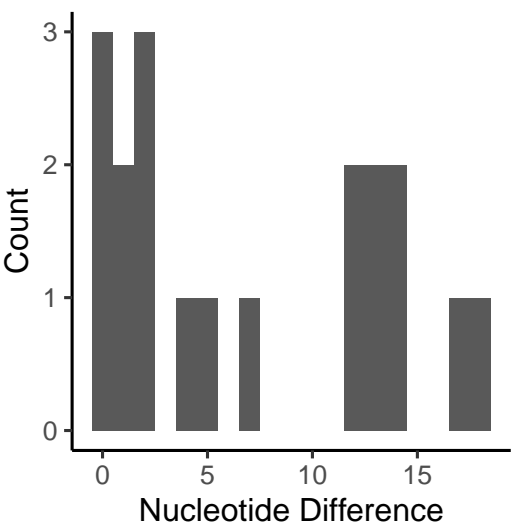
IGHV4–NL_36*01_S9644

61 sequences assigned
1 (1.6%) exact matches, in which:
1 unique CDR3
1 unique J



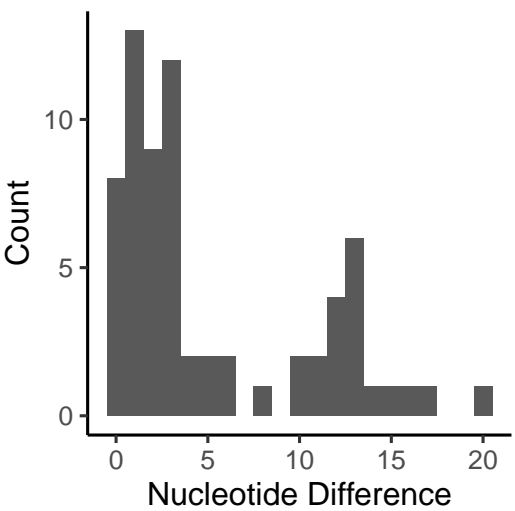
IGHV4–NL_27*01_S9596

19 sequences assigned
3 (15.8%) exact matches, in which:
3 unique CDR3
1 unique J



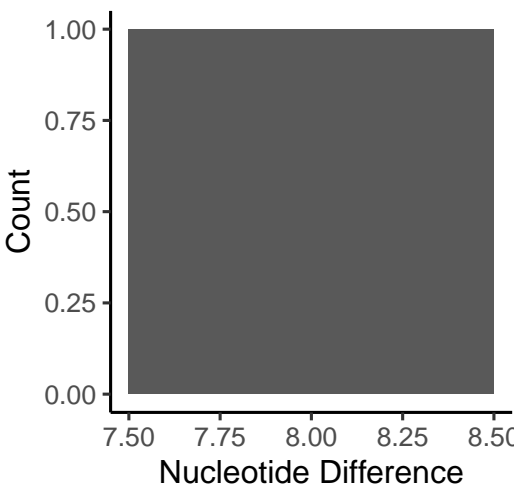
IGHV4–NL_33*01_S8127

95 sequences assigned
8 (8.4%) exact matches, in which:
6 unique CDR3
1 unique J



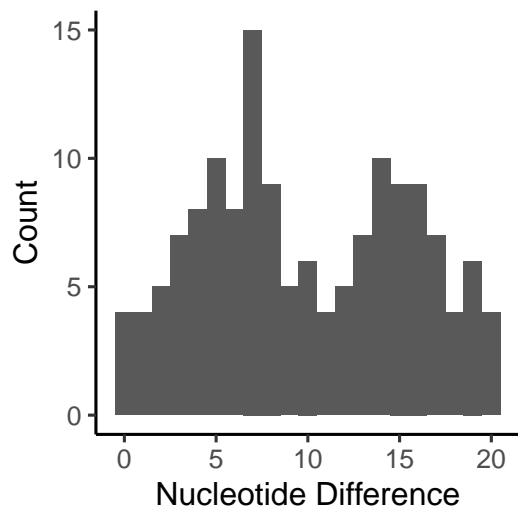
IGHV4–NL_38*01_S5467

1 sequences assigned
No exact matches.



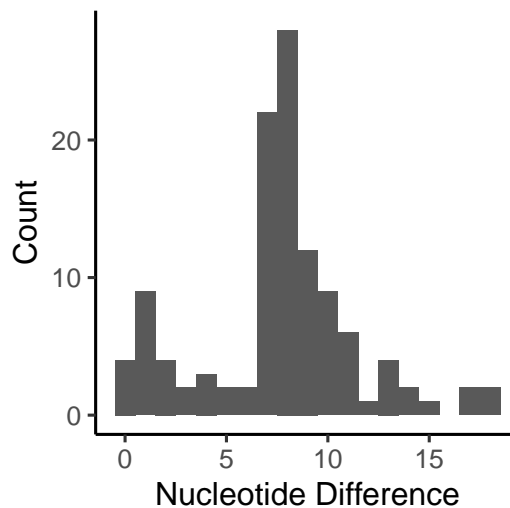
IGHV4–NL_43*01_S4510

164 sequences assigned
4 (2.4%) exact matches, in which:
2 unique CDR3
1 unique J



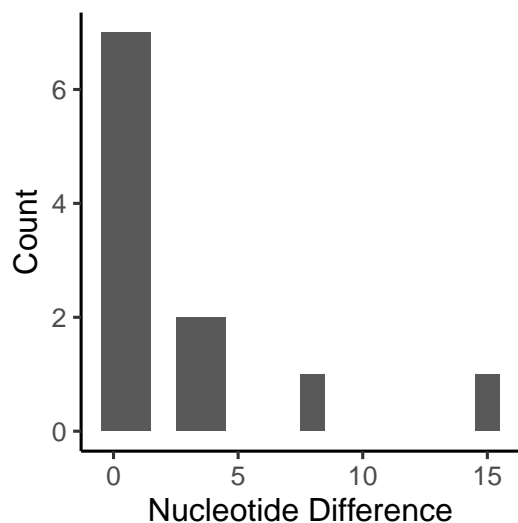
IGHV5–157*02_S5108

165 sequences assigned
4 (2.4%) exact matches, in which:
3 unique CDR3
1 unique J



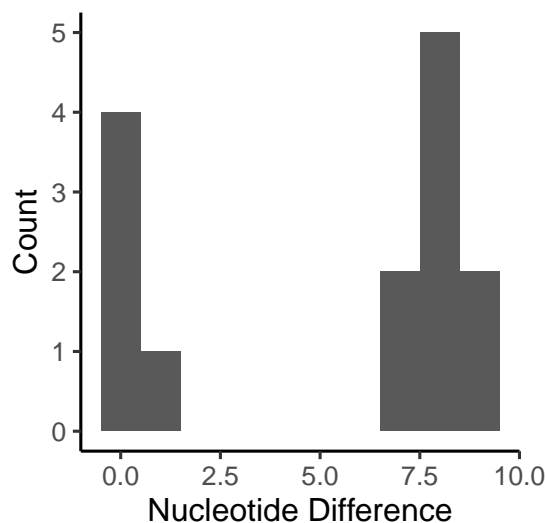
IGHV4–NL_5*01_S5158

27 sequences assigned
7 (25.9%) exact matches, in which:
6 unique CDR3
1 unique J



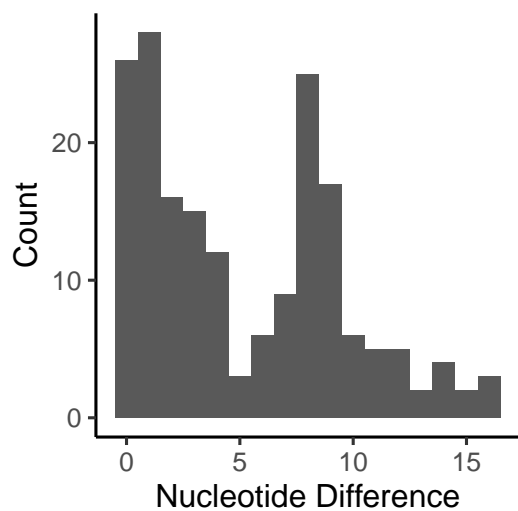
IGHV7–86*01_S6208

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



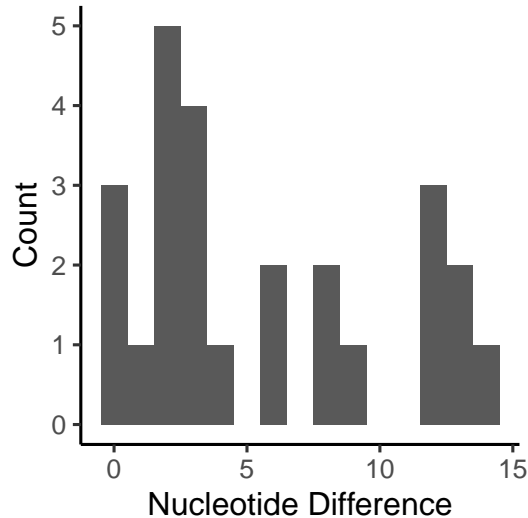
IGHV5–15*01_S8661

184 sequences assigned
26 (14.1%) exact matches, in which:
20 unique CDR3
1 unique J

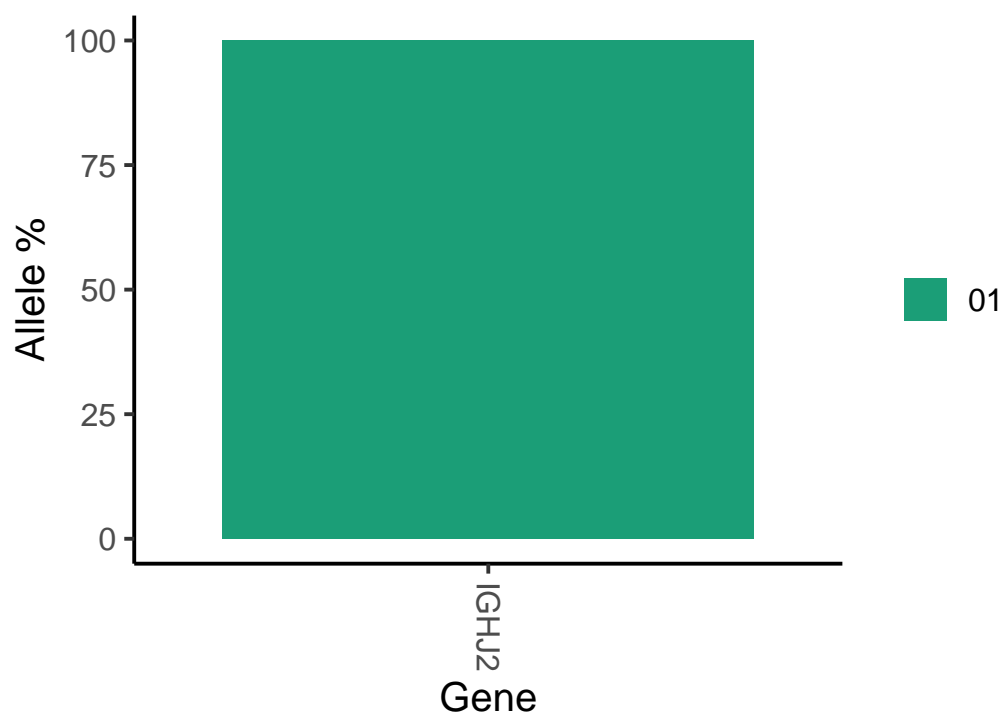


IGHV7–86*01_S8420

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



Allele Usage



Warning – no inferred sequences found.