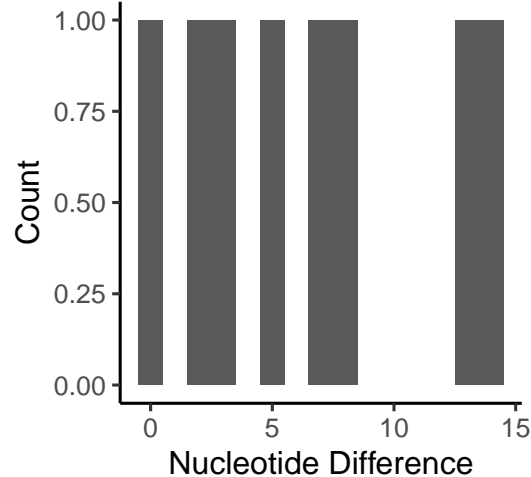


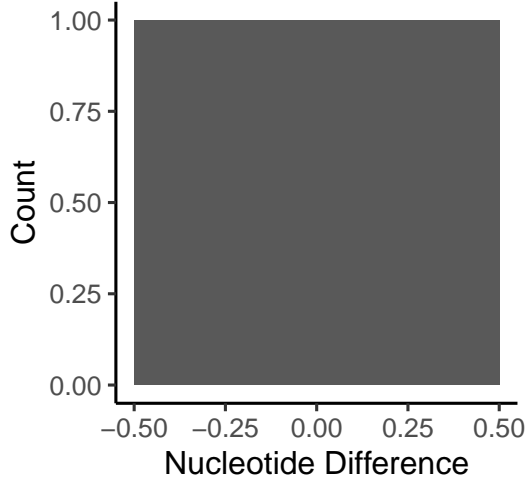
IGHV1-60*01_S7772

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



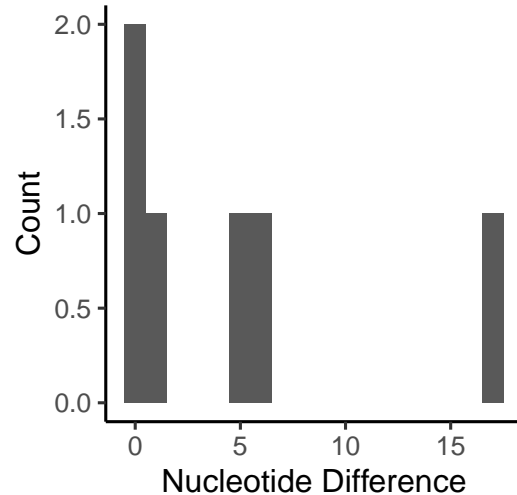
IGHV1-193*01_S6037

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



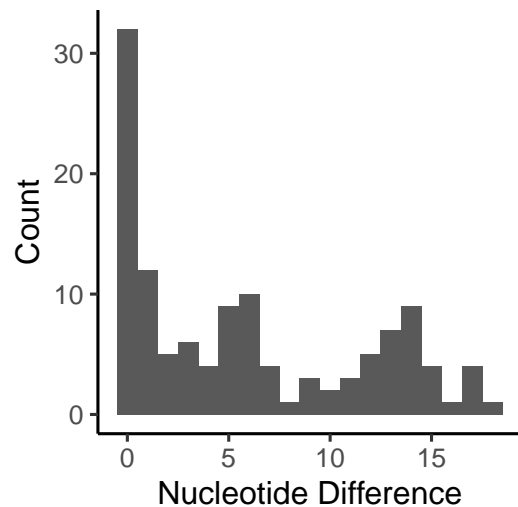
IGHV1-NL_2*01_S5959

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



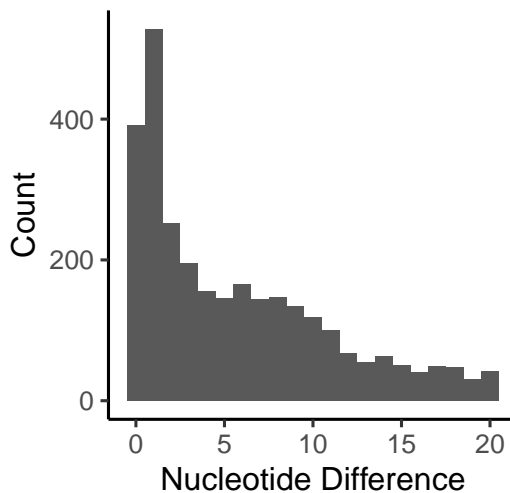
IGHV1-124*01_S6748

136 sequences assigned
32 (23.5%) exact matches, in which:
20 unique CDR3
4 unique J



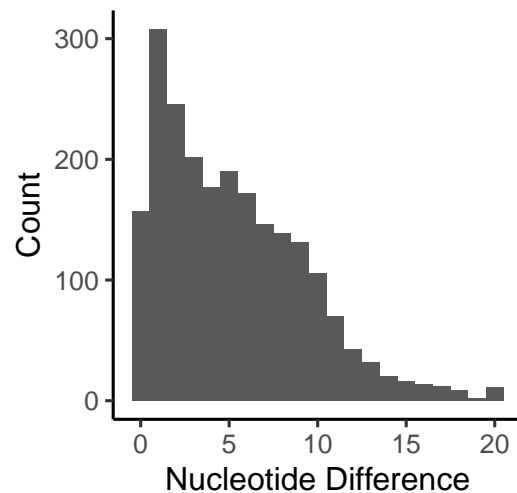
IGHV1-NL_1*01_S2052

3193 sequences assigned
392 (12.3%) exact matches, in which:
200 unique CDR3
8 unique J



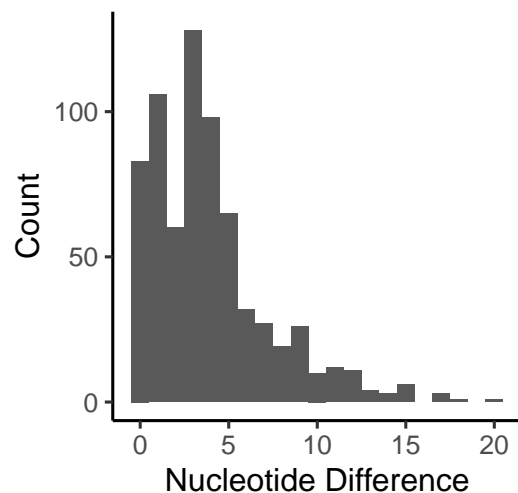
IGHV2-7*02_S1732

2239 sequences assigned
157 (7%) exact matches, in which:
102 unique CDR3
7 unique J



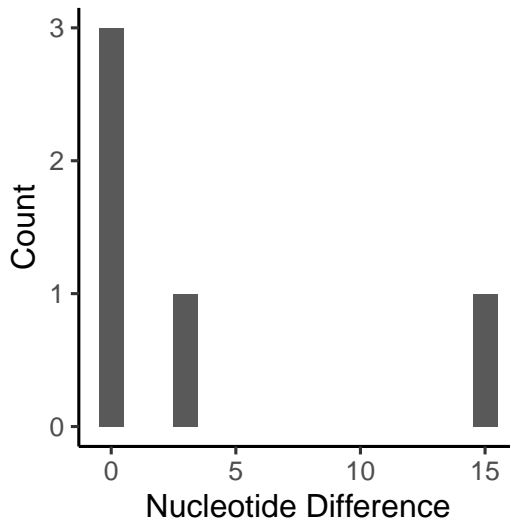
IGHV1-138*01_S2054

699 sequences assigned
83 (11.9%) exact matches, in which:
50 unique CDR3
6 unique J



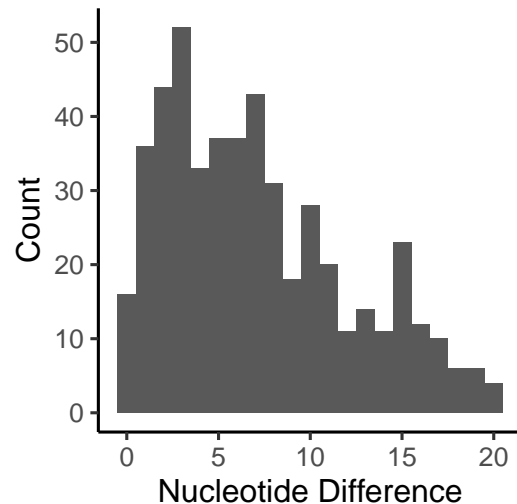
IGHV1-NL_2*01_S0023

206 sequences assigned
3 (1.5%) exact matches, in which:
2 unique CDR3
2 unique J



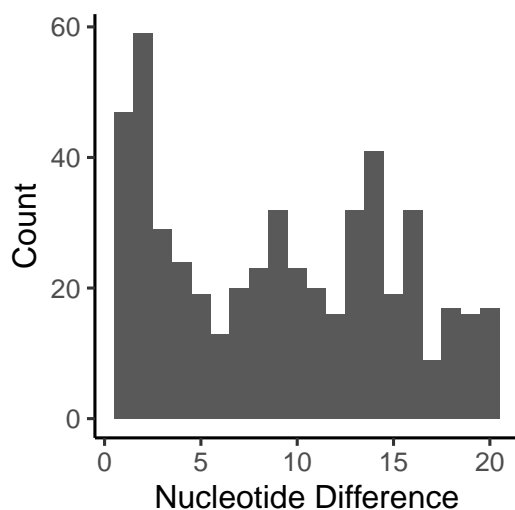
IGHV2-7*02_S4285

504 sequences assigned
16 (3.2%) exact matches, in which:
11 unique CDR3
3 unique J



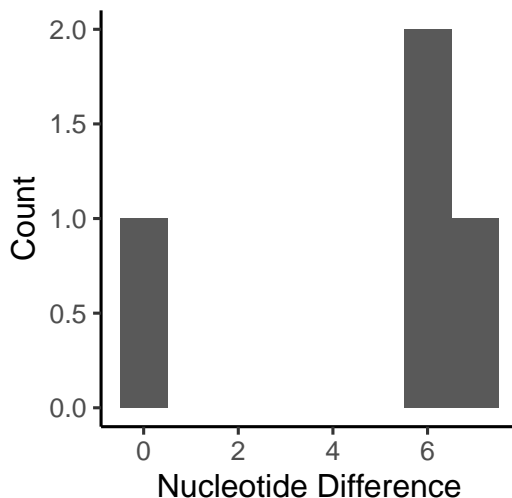
IGHV2-69*01_S8735

686 sequences assigned
No exact matches.



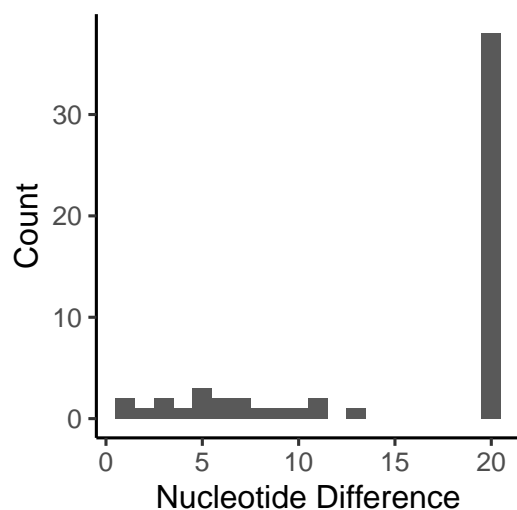
IGHV2-NL_2*01_S8873

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



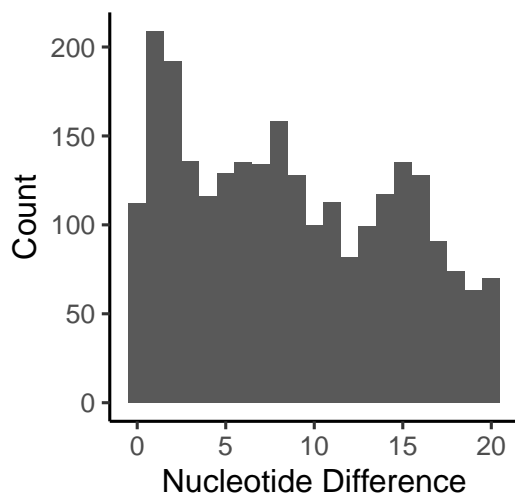
IGHV3-37*01_S9699

578 sequences assigned
No exact matches.



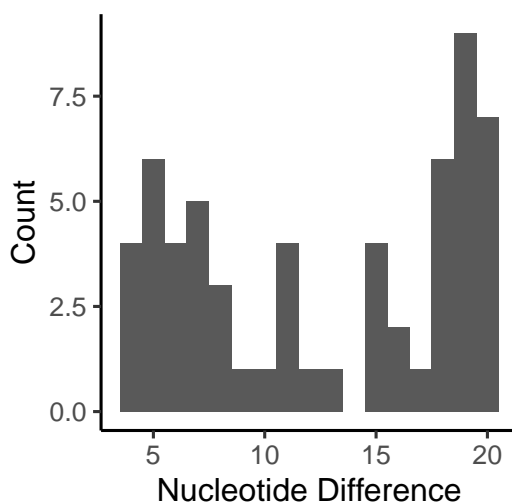
IGHV2-118*01_S3831

3109 sequences assigned
112 (3.6%) exact matches, in which:
64 unique CDR3
7 unique J



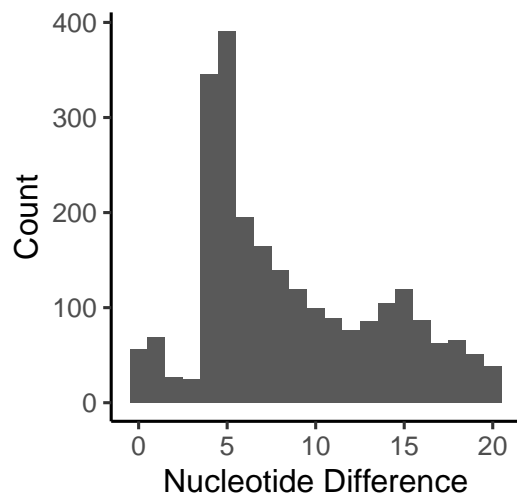
IGHV3-28*01_S3792

113 sequences assigned
No exact matches.



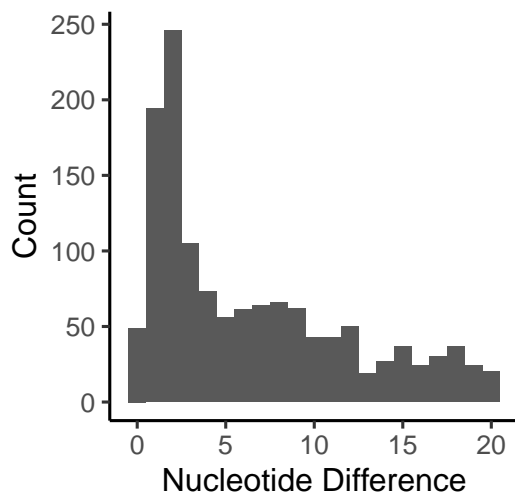
IGHV3-50*02_S9583

2903 sequences assigned
56 (1.9%) exact matches, in which:
35 unique CDR3
3 unique J



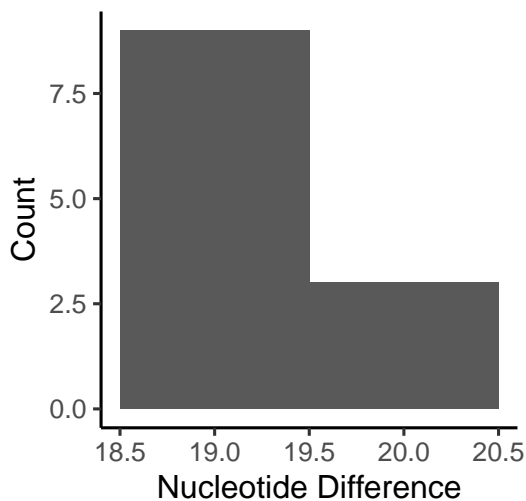
IGHV2-173*01_G289T

1460 sequences assigned
49 (3.4%) exact matches, in which:
47 unique CDR3
5 unique J



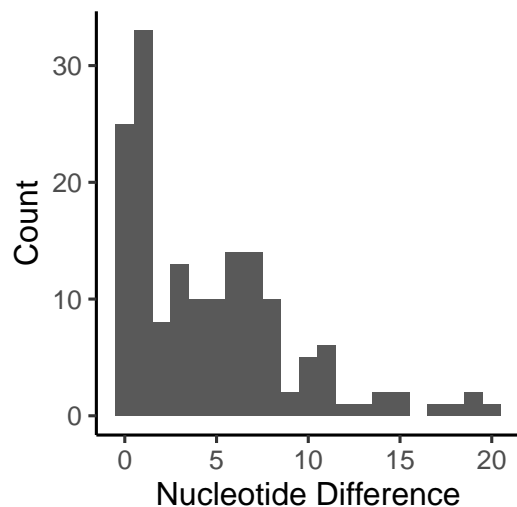
IGHV3-36*01

60 sequences assigned
No exact matches.



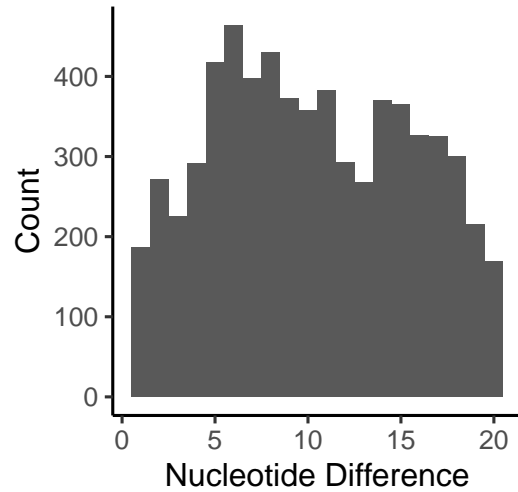
IGHV3-52*01_S8160

166 sequences assigned
25 (15.1%) exact matches, in which:
17 unique CDR3
4 unique J



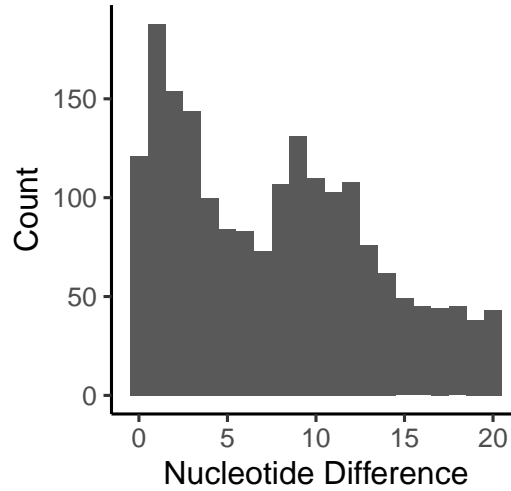
IGHV3-88*01_S4297

7552 sequences assigned
No exact matches.



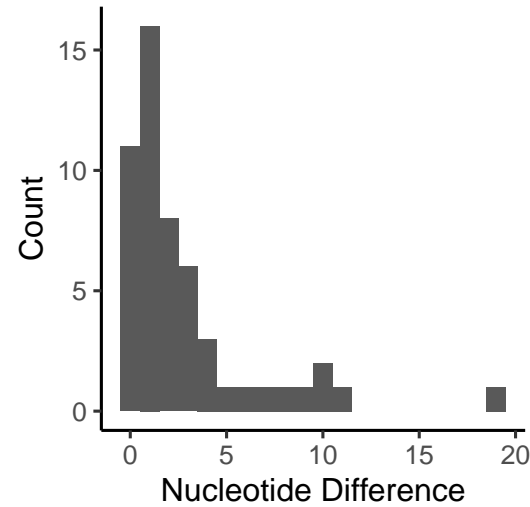
IGHV3-122*01_S6138

2301 sequences assigned
121 (5.3%) exact matches, in which:
74 unique CDR3
6 unique J



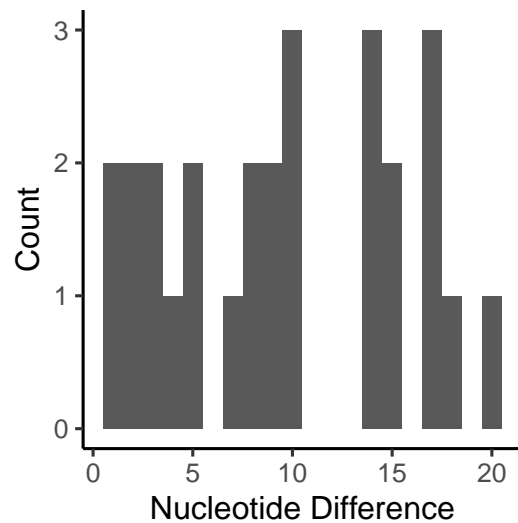
IGHV3-141*01_S8690

53 sequences assigned
11 (20.8%) exact matches, in which:
9 unique CDR3
4 unique J



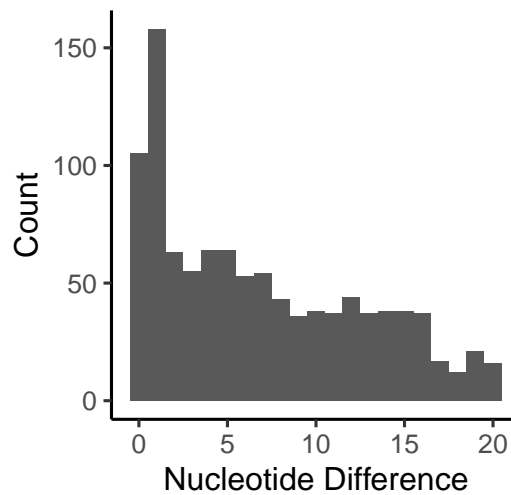
IGHV3-100*01_S4375

205 sequences assigned
No exact matches.



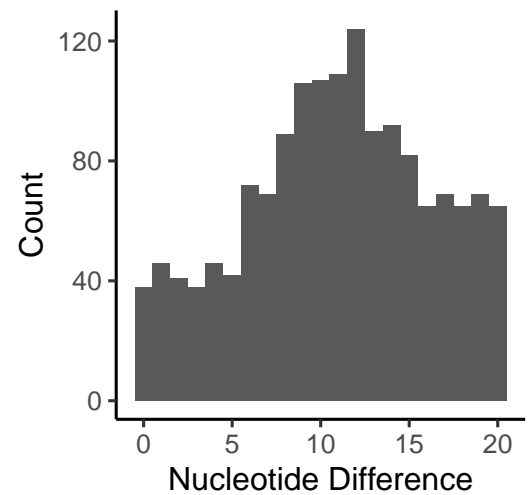
IGHV3-127*01_S1834

1180 sequences assigned
105 (8.9%) exact matches, in which:
69 unique CDR3
6 unique J



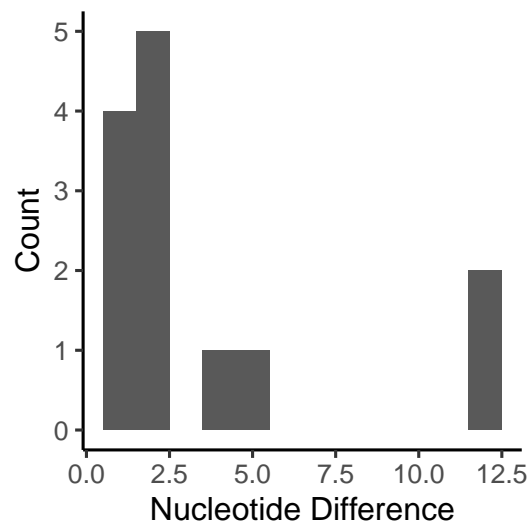
IGHV3-152*01_S5891

1944 sequences assigned
38 (2%) exact matches, in which:
24 unique CDR3
6 unique J



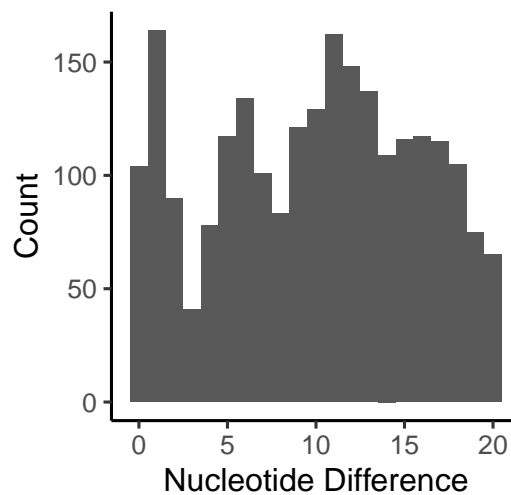
IGHV3-120*01_S4231

13 sequences assigned
No exact matches.



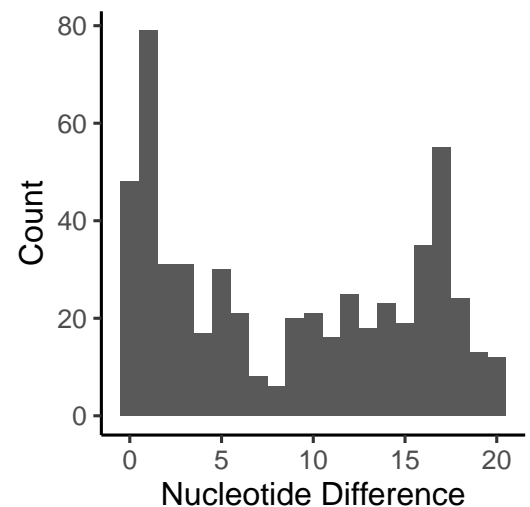
IGHV3-128*02_S2995

2763 sequences assigned
104 (3.8%) exact matches, in which:
63 unique CDR3
6 unique J



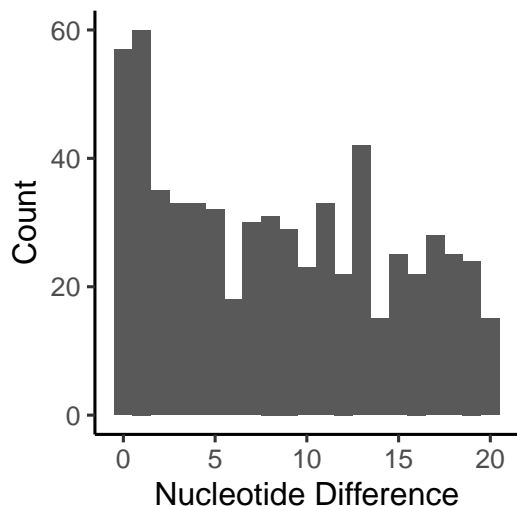
IGHV3-175*01_S1614

625 sequences assigned
48 (7.7%) exact matches, in which:
34 unique CDR3
5 unique J



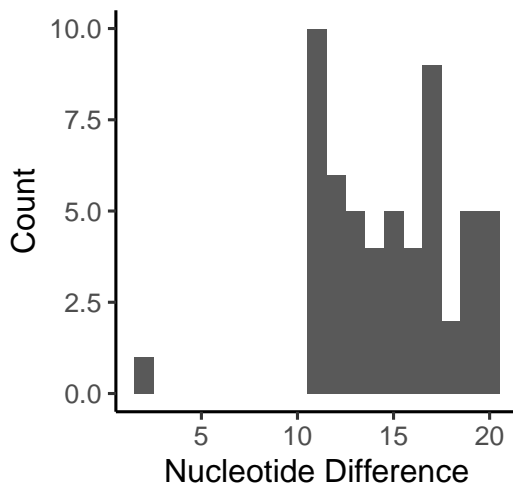
IGHV3-177*01_S5369

759 sequences assigned
57 (7.5%) exact matches, in which:
40 unique CDR3
7 unique J



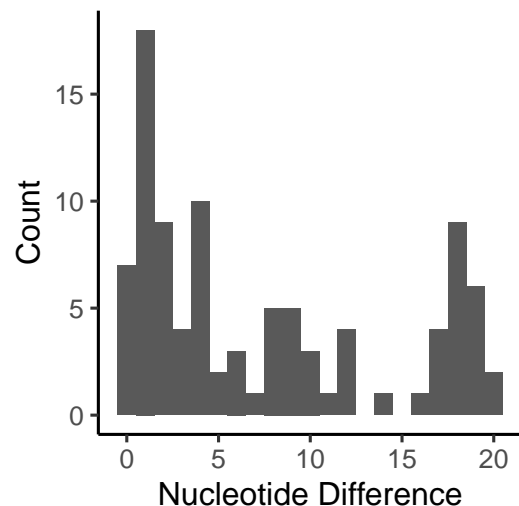
IGHV3-NL_10*02_S2211

116 sequences assigned
No exact matches.



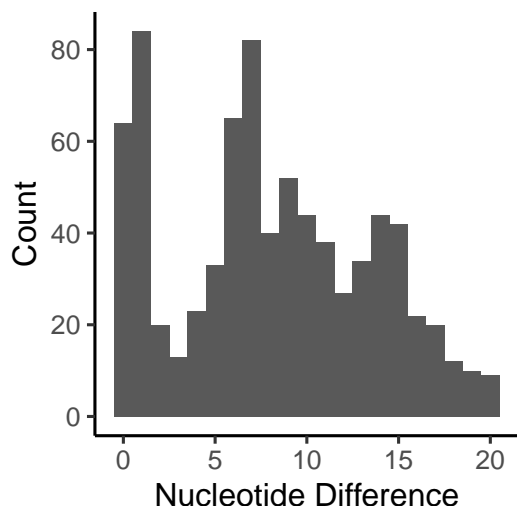
IGHV3-NL_13*01_S3277

109 sequences assigned
7 (6.4%) exact matches, in which:
4 unique CDR3
2 unique J



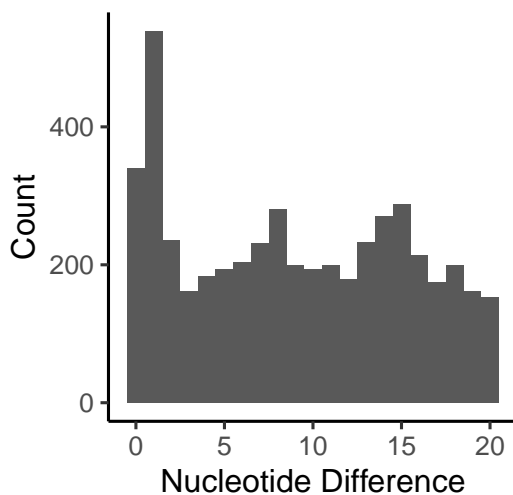
IGHV3-187*02_S6102

952 sequences assigned
64 (6.7%) exact matches, in which:
38 unique CDR3
5 unique J



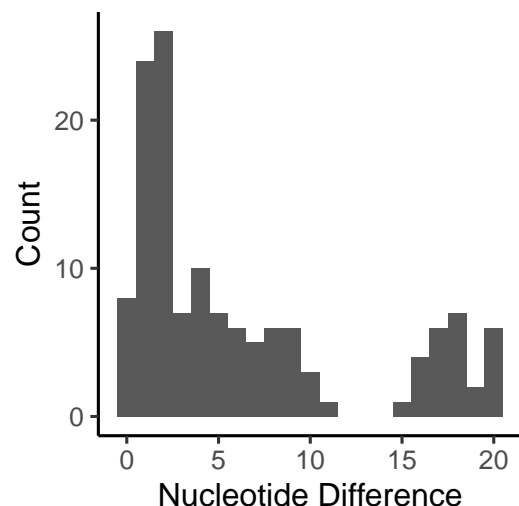
IGHV3-NL_11*01_S5714

6416 sequences assigned
340 (5.3%) exact matches, in which:
218 unique CDR3
6 unique J



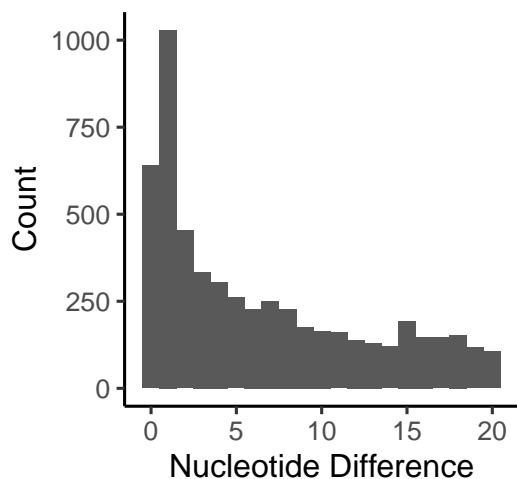
IGHV3-NL_13*01_S5549

184 sequences assigned
8 (4.3%) exact matches, in which:
6 unique CDR3
3 unique J



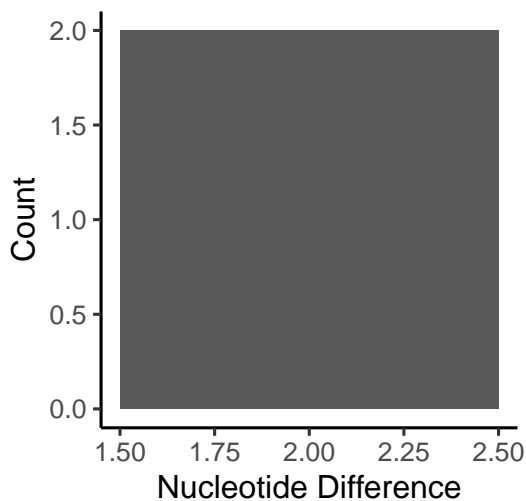
IGHV3-NL_1*01_S9854

6923 sequences assigned
640 (9.2%) exact matches, in which:
386 unique CDR3
8 unique J



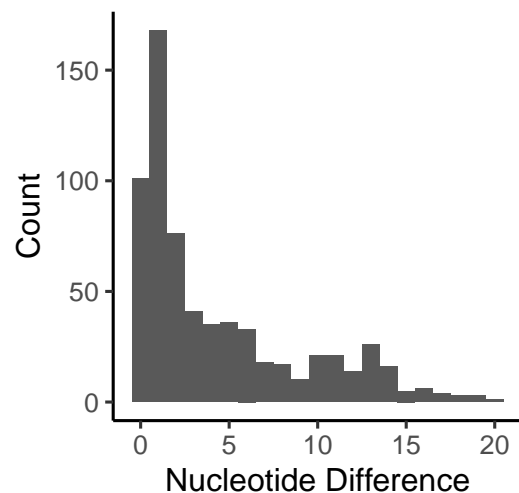
IGHV3-NL_12*02_S5864

2 sequences assigned
No exact matches.



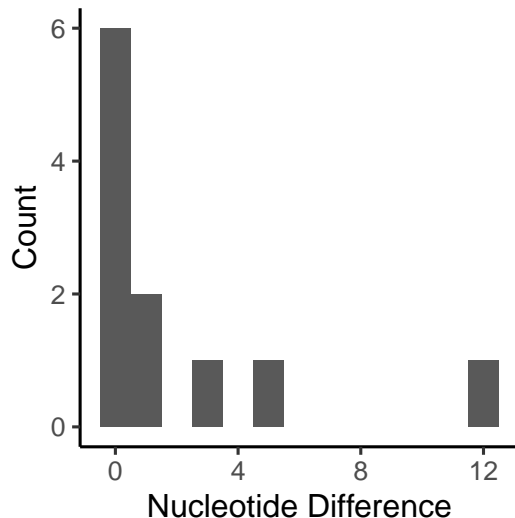
IGHV3-NL_14*01_S9303

677 sequences assigned
101 (14.9%) exact matches, in which:
76 unique CDR3
7 unique J



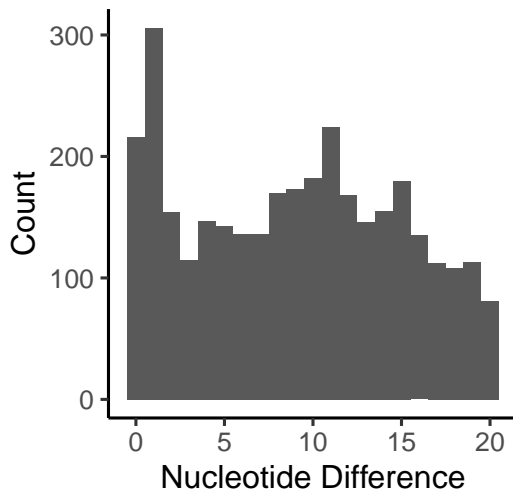
IGHV3–NL_15*01_S3018

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



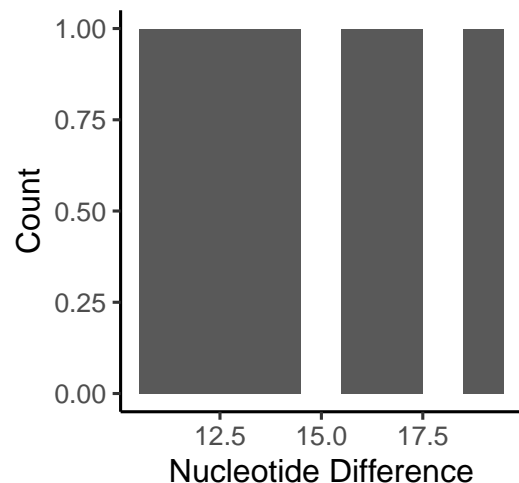
IGHV3–NL_17*01_S9589

3640 sequences assigned
216 (5.9%) exact matches, in which:
141 unique CDR3
6 unique J



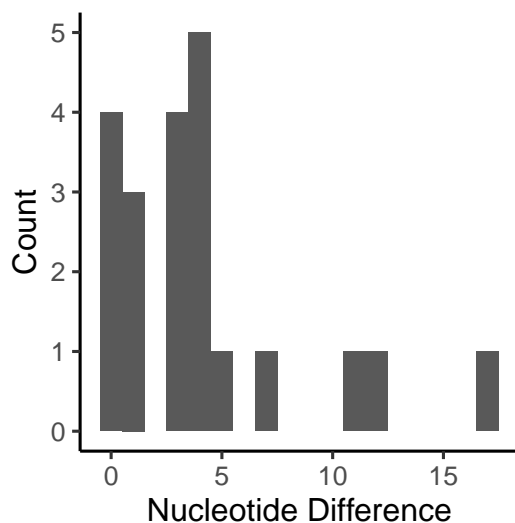
IGHV3–NL_4*01_S9067

7 sequences assigned
No exact matches.



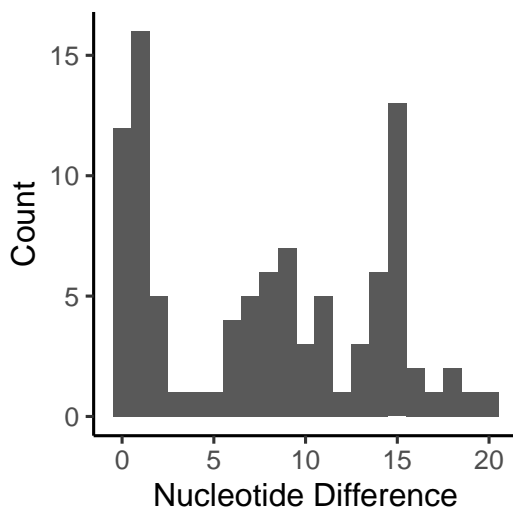
IGHV3–NL_16*01_S5133

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



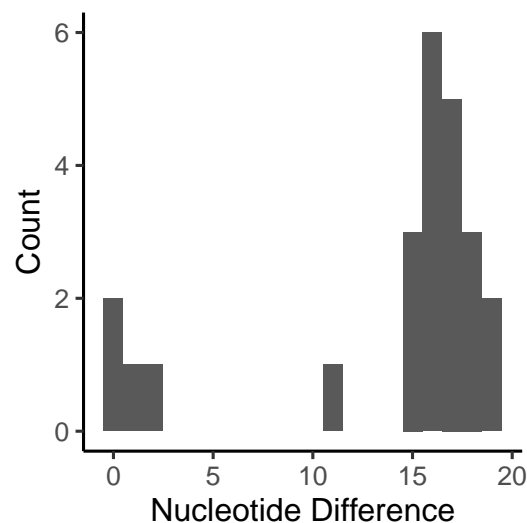
IGHV3–NL_18*01_S3867

107 sequences assigned
12 (11.2%) exact matches, in which:
10 unique CDR3
2 unique J



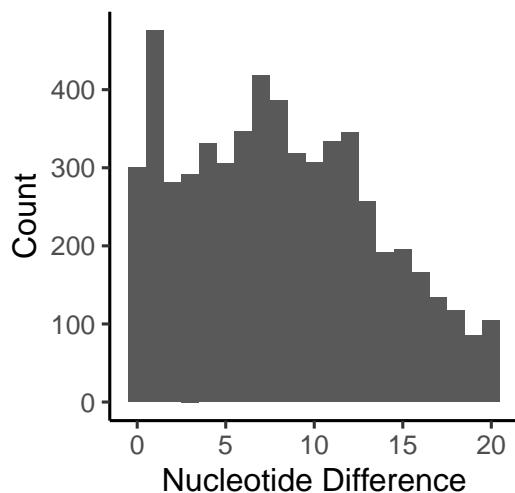
IGHV3–NL_4*01_S9635

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



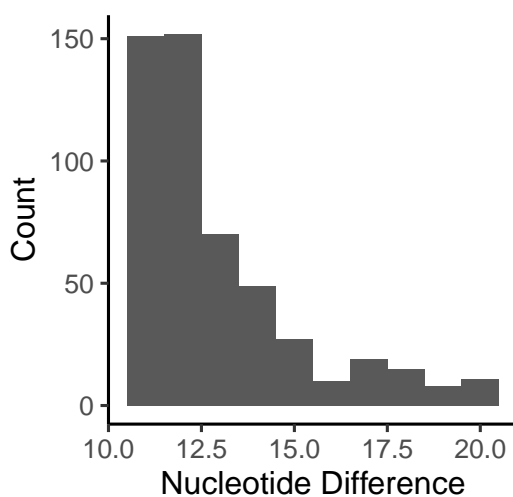
IGHV3–NL_17*01_S4250

6725 sequences assigned
300 (4.5%) exact matches, in which:
198 unique CDR3
6 unique J



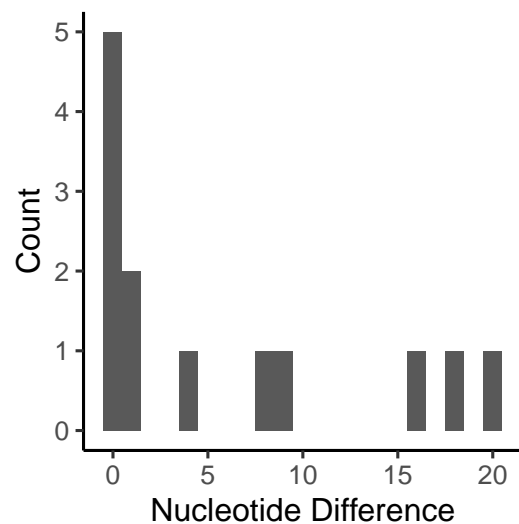
IGHV3–NL_4*01_S2727

541 sequences assigned
No exact matches.



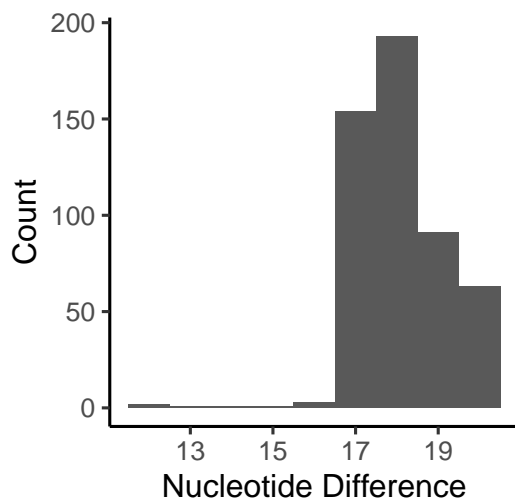
IGHV3–NL_5*01_S8361

17 sequences assigned
5 (29.4%) exact matches, in which:
5 unique CDR3
3 unique J



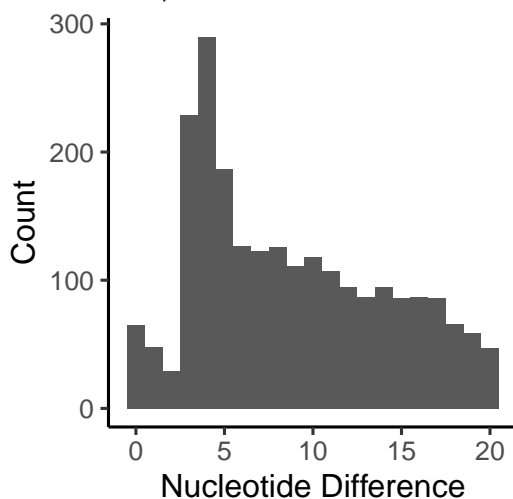
IGHV3–NL_8*01_S7474

1355 sequences assigned
No exact matches.



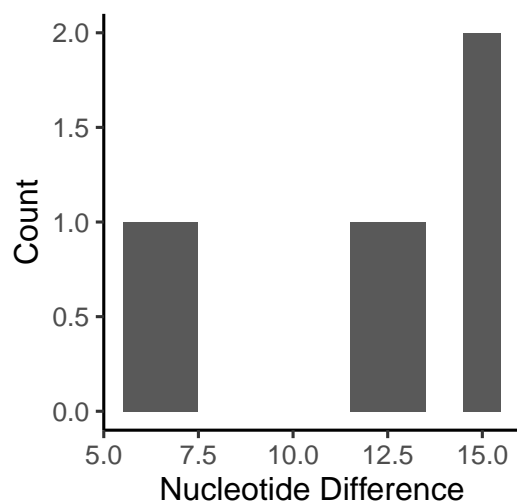
IGHV4–117*01_S4901

2630 sequences assigned
65 (2.5%) exact matches, in which:
56 unique CDR3
7 unique J



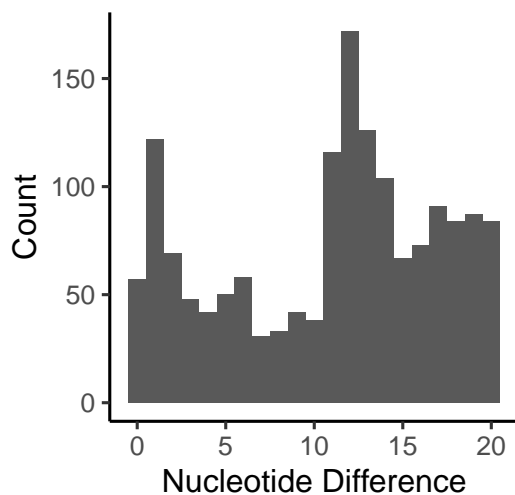
IGHV4–149*02_S8521

8 sequences assigned
No exact matches.



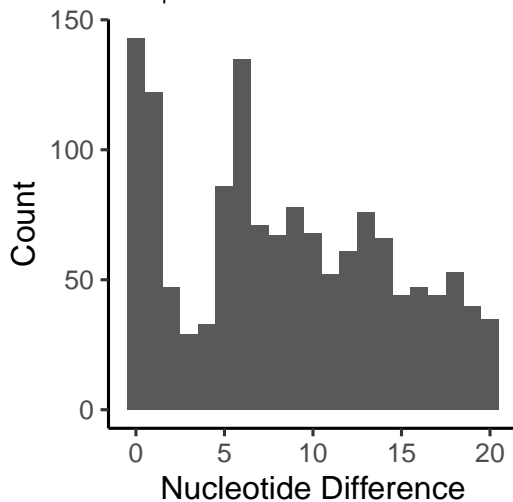
IGHV3–NL_9*01_S6098

2268 sequences assigned
57 (2.5%) exact matches, in which:
37 unique CDR3
4 unique J



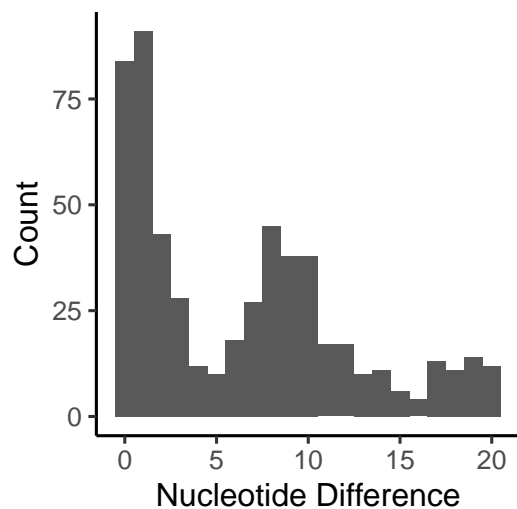
IGHV4–144*01_S3008

1654 sequences assigned
143 (8.6%) exact matches, in which:
126 unique CDR3
7 unique J



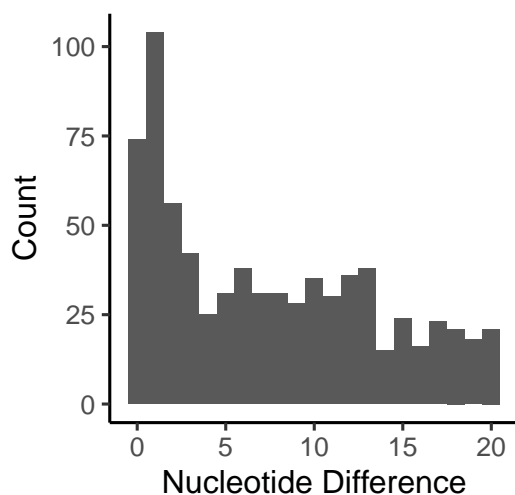
IGHV4–150*01_S0749

573 sequences assigned
84 (14.7%) exact matches, in which:
64 unique CDR3
7 unique J



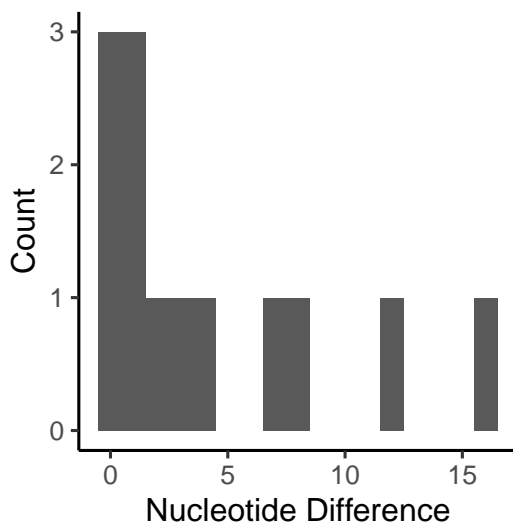
IGHV4–117*01_S0992

917 sequences assigned
74 (8.1%) exact matches, in which:
59 unique CDR3
5 unique J



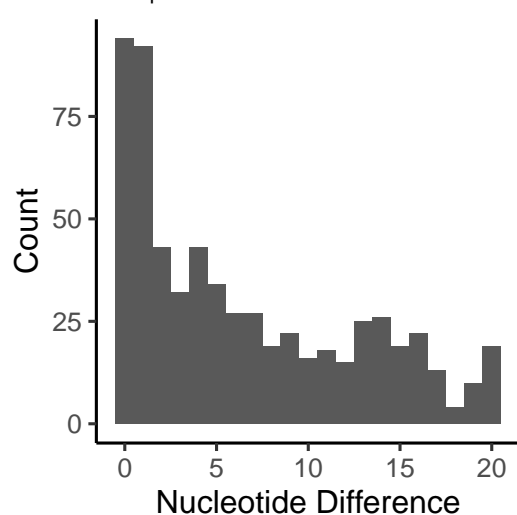
IGHV4–149*01_S0794

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



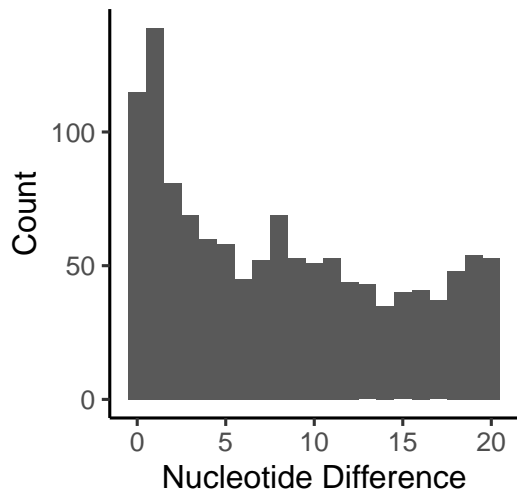
IGHV4–NL_1*01_S8720

739 sequences assigned
94 (12.7%) exact matches, in which:
67 unique CDR3
5 unique J



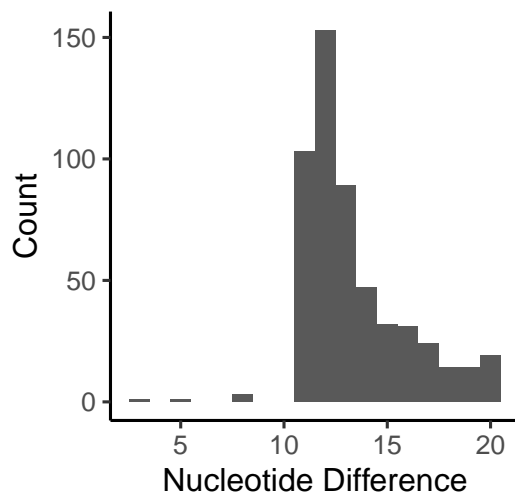
IGHV4–NL_1*02_S3654

1618 sequences assigned
115 (7.1%) exact matches, in which:
84 unique CDR3
7 unique J



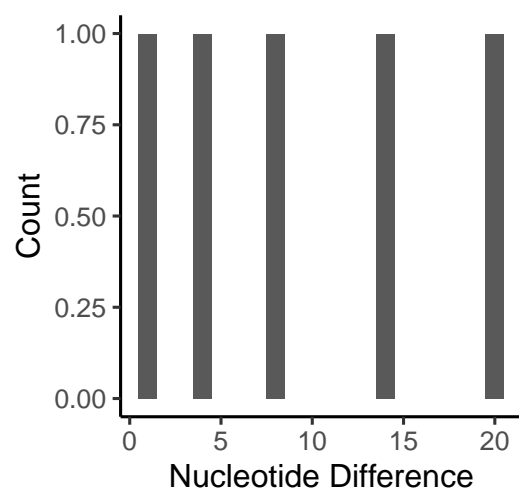
IGHV4–NL_12*01_S5174

593 sequences assigned
No exact matches.



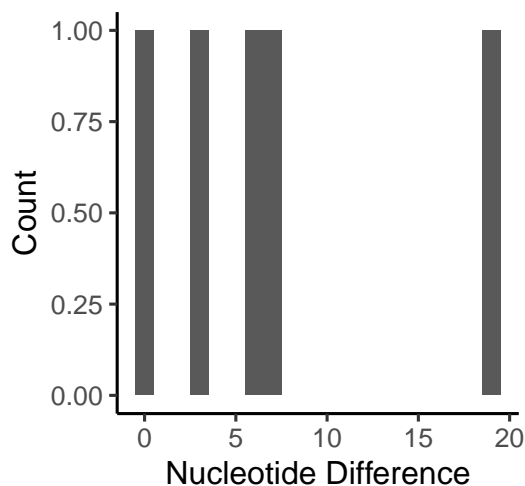
IGHV4–NL_16*01_S2138

5 sequences assigned
No exact matches.



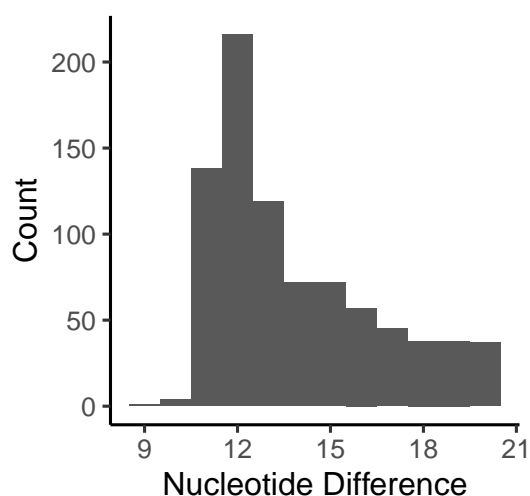
IGHV4–NL_11*01_S5570

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



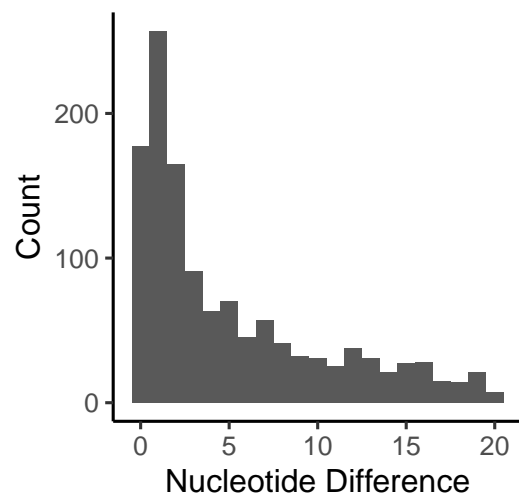
IGHV4–NL_13*01_S9624

1116 sequences assigned
No exact matches.



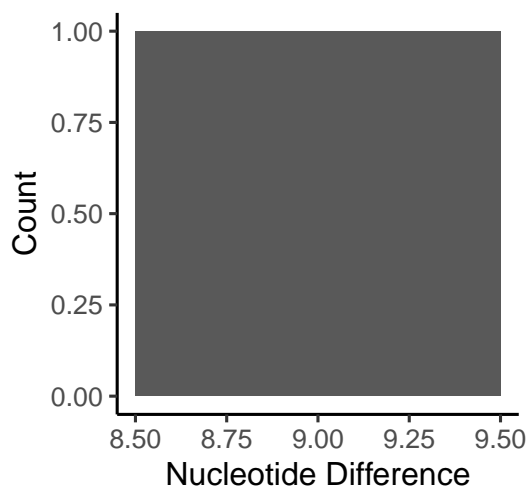
IGHV4–NL_17*01_S2469

1358 sequences assigned
177 (13%) exact matches, in which:
149 unique CDR3
7 unique J



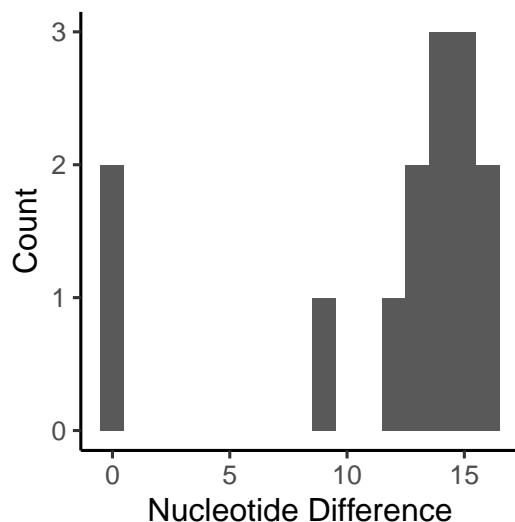
IGHV4–NL_11*01_S9942

2 sequences assigned
No exact matches.



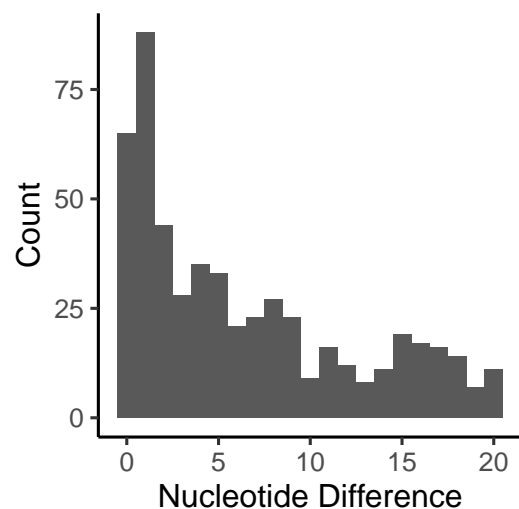
IGHV4–NL_15*01_S5717

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



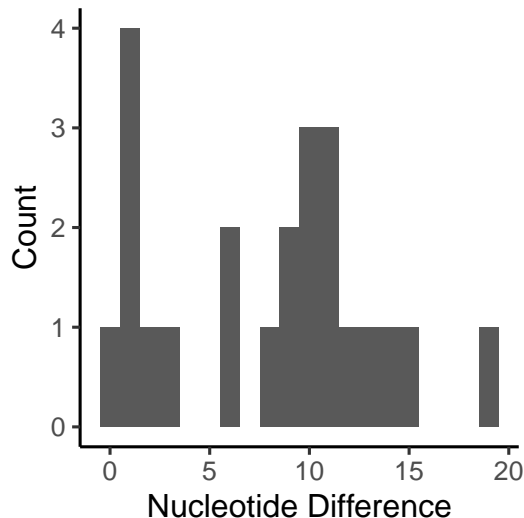
IGHV4–NL_17*01_S4839

642 sequences assigned
65 (10.1%) exact matches, in which:
53 unique CDR3
7 unique J



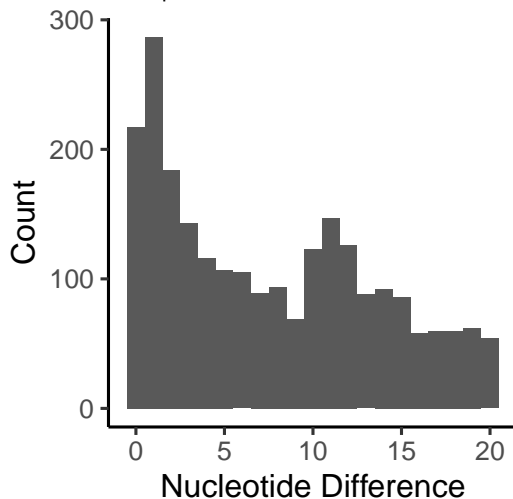
IGHV4-NL_20*01_S3868

23 sequences assigned
1 (4.3%) exact matches, in which:
1 unique CDR3
1 unique J



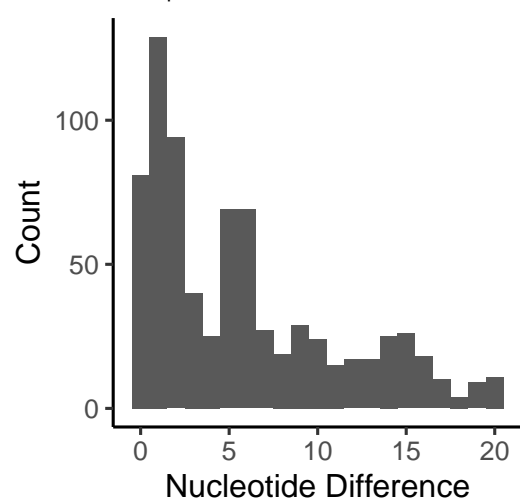
IGHV4-NL_21*01_S3257

2884 sequences assigned
217 (7.5%) exact matches, in which:
170 unique CDR3
5 unique J



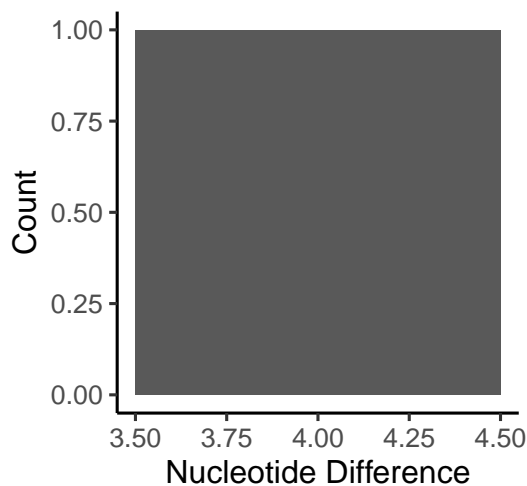
IGHV4-NL_24*01_S9400

799 sequences assigned
81 (10.1%) exact matches, in which:
67 unique CDR3
7 unique J



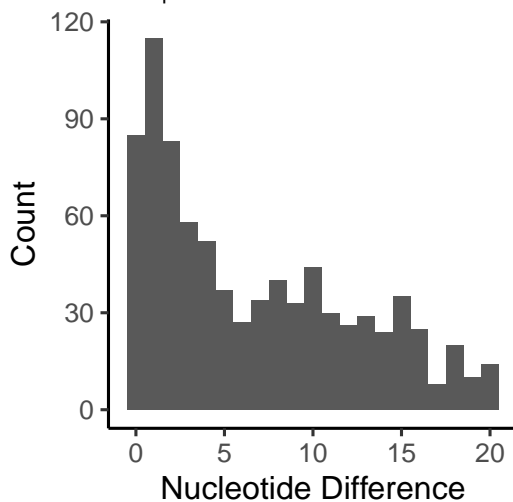
IGHV4-NL_20*01_S4754

1 sequences assigned
No exact matches.



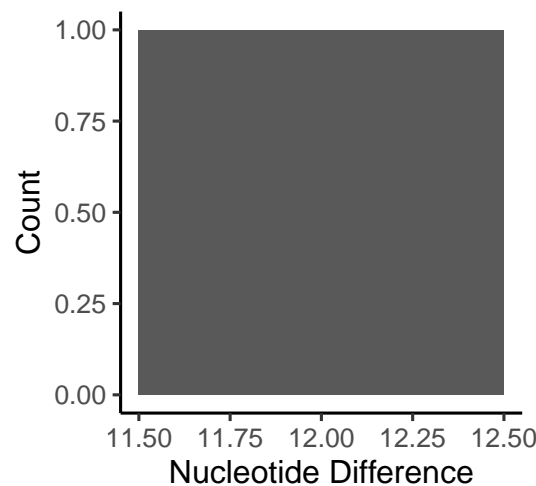
IGHV4-NL_22*01_S6977

1011 sequences assigned
85 (8.4%) exact matches, in which:
68 unique CDR3
7 unique J



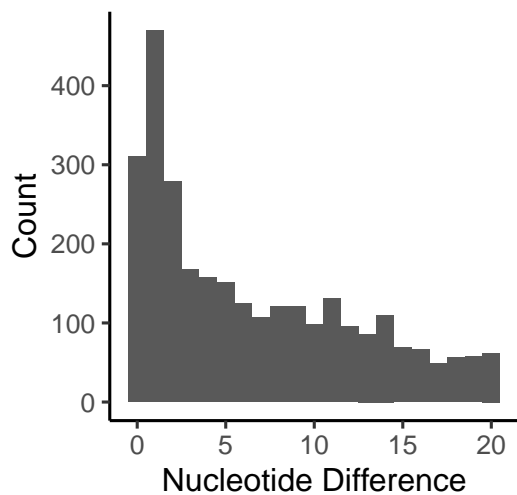
IGHV4-NL_25*01_S6200

46 sequences assigned
No exact matches.



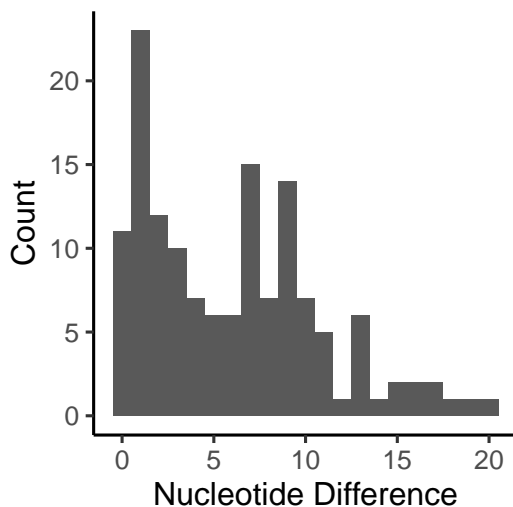
IGHV4-NL_21*01_S0138

3281 sequences assigned
310 (9.4%) exact matches, in which:
251 unique CDR3
7 unique J



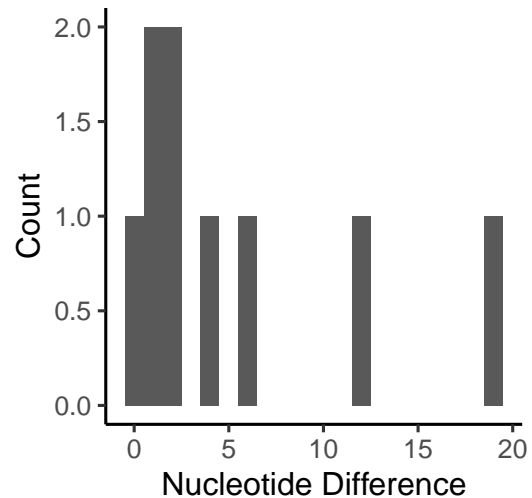
IGHV4-NL_23*01_S7678

150 sequences assigned
11 (7.3%) exact matches, in which:
11 unique CDR3
4 unique J



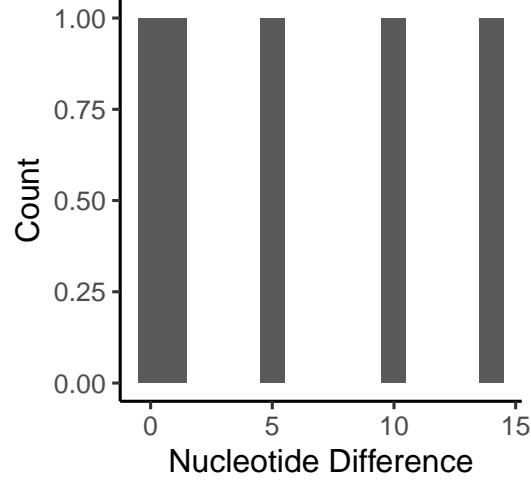
IGHV4-NL_25*01_S8389

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



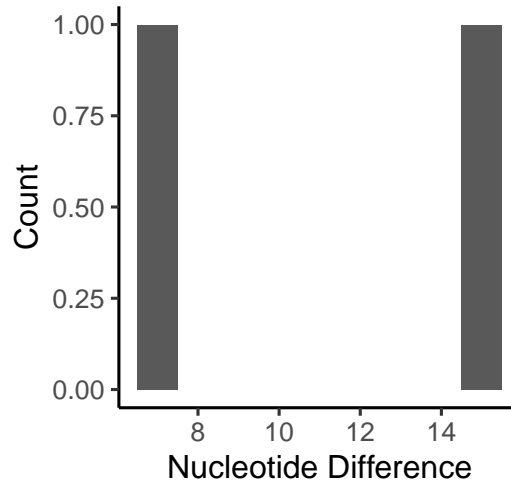
IGHV4-NL_27*01_S2822

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



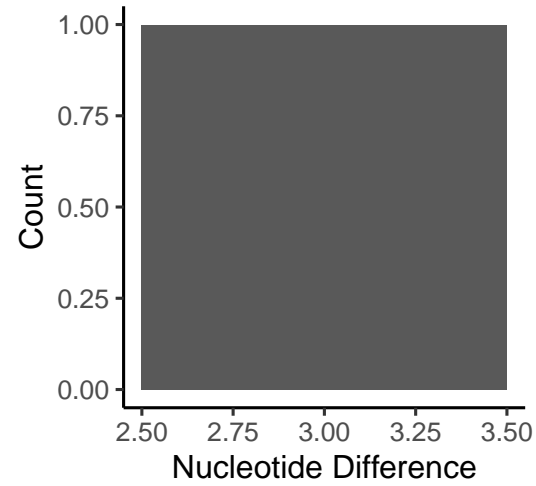
IGHV4-NL_28*01_S2610

3 sequences assigned
No exact matches.



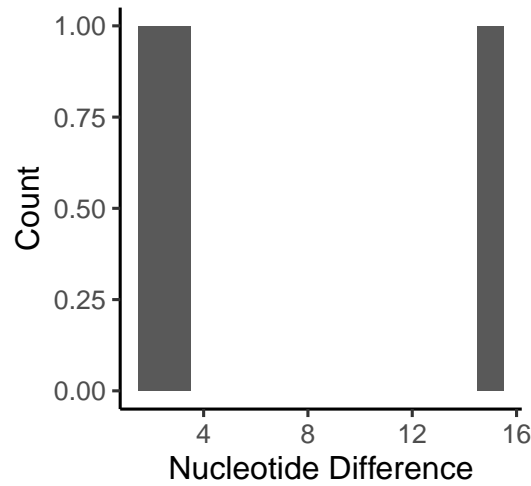
IGHV4-NL_3*01_S7864

5 sequences assigned
No exact matches.



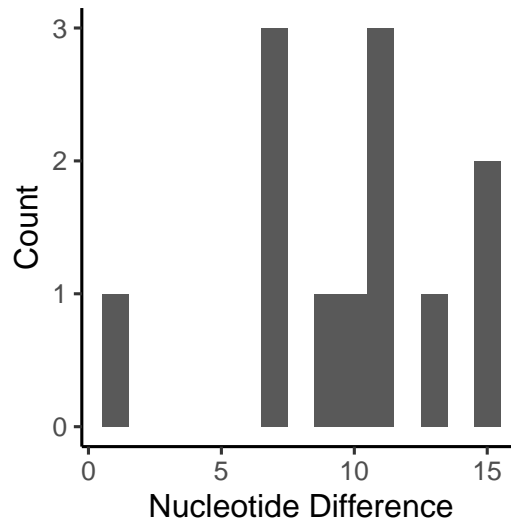
IGHV4-NL_27*01_S5157

3 sequences assigned
No exact matches.



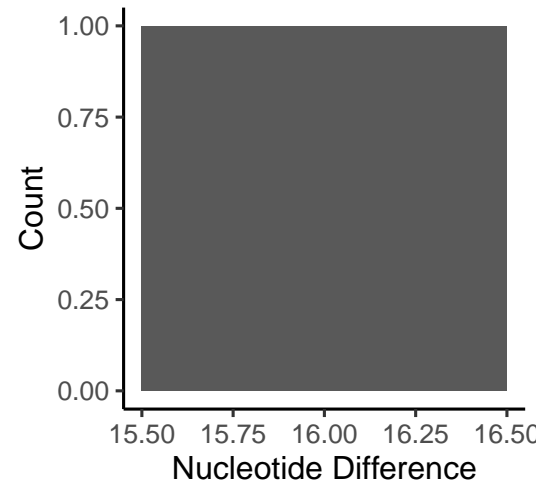
IGHV4-NL_29*01_S3761

51 sequences assigned
No exact matches.



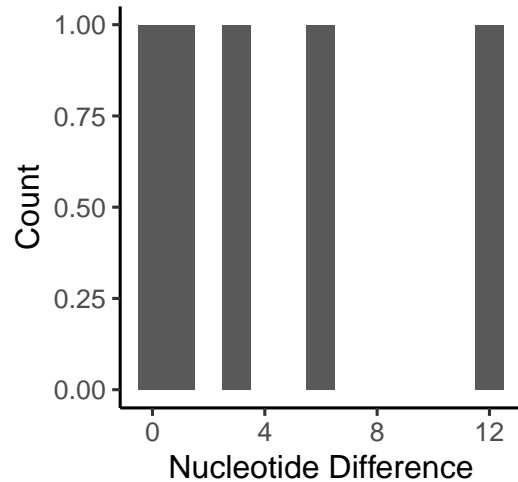
IGHV4-NL_31*01_S1675

1 sequences assigned
No exact matches.



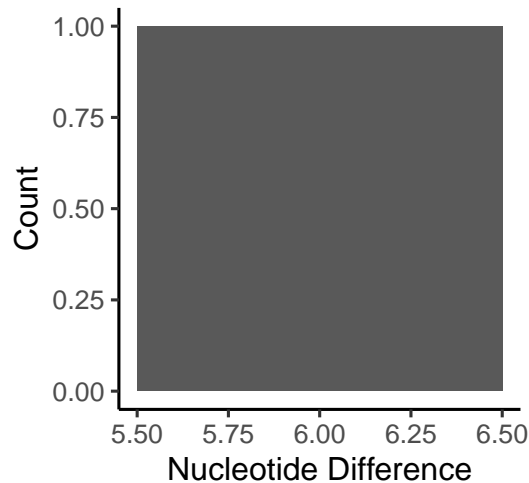
IGHV4-NL_27*01_S5720

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



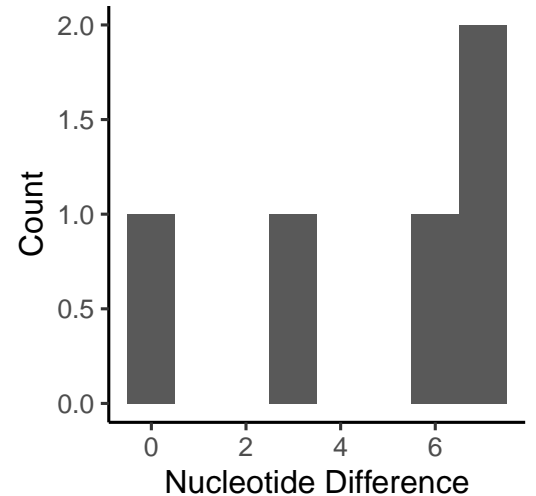
IGHV4-NL_3*01_S7576

1 sequences assigned
No exact matches.



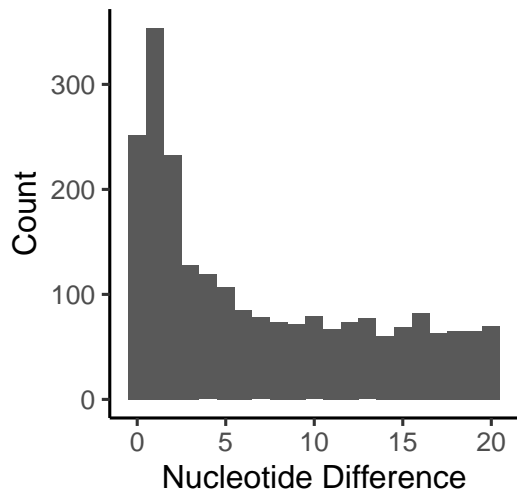
IGHV4-NL_31*01_S7693

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



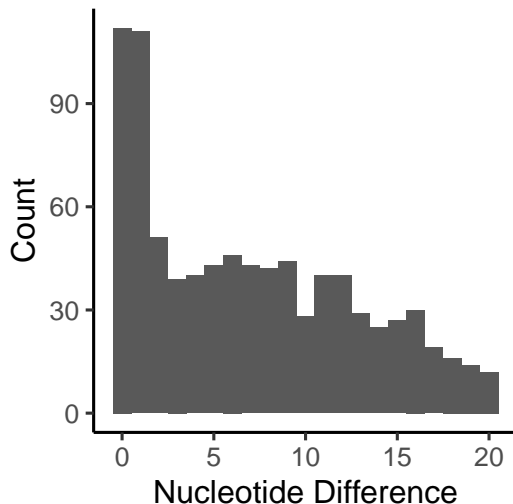
IGHV4–NL_33*01_S4467

3229 sequences assigned
252 (7.8%) exact matches, in which:
200 unique CDR3
8 unique J



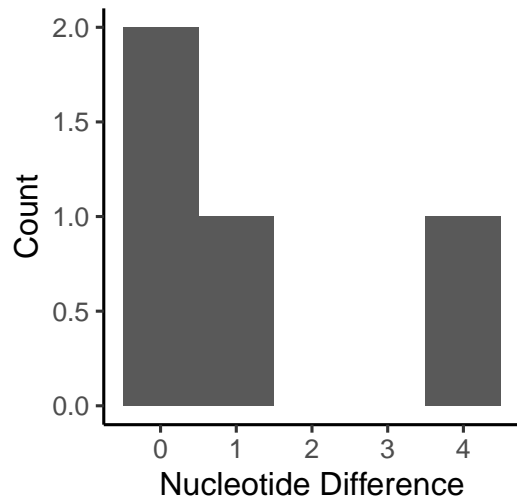
IGHV4–NL_38*01_S6954

1085 sequences assigned
112 (10.3%) exact matches, in which:
99 unique CDR3
7 unique J



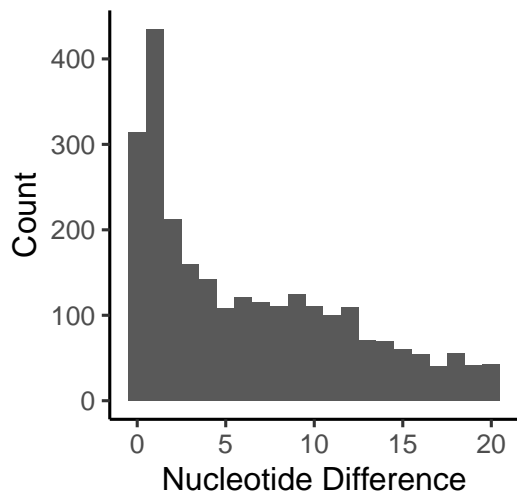
IGHV4–NL_40*01_S0696

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



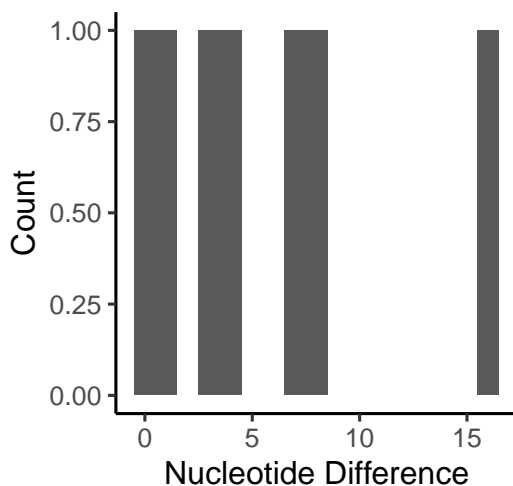
IGHV4–NL_36*01_S8200

2990 sequences assigned
314 (10.5%) exact matches, in which:
245 unique CDR3
6 unique J



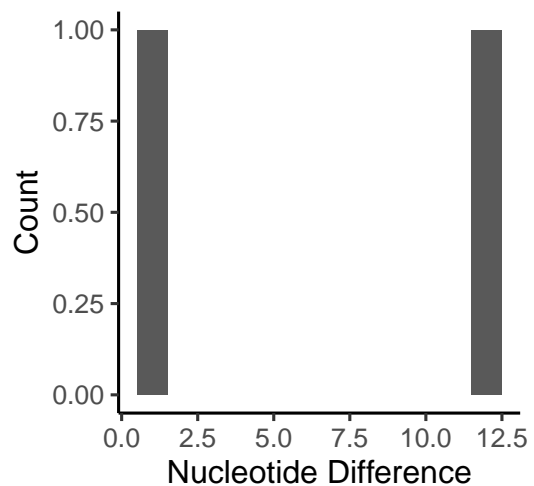
IGHV4–NL_4*01_S5211

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



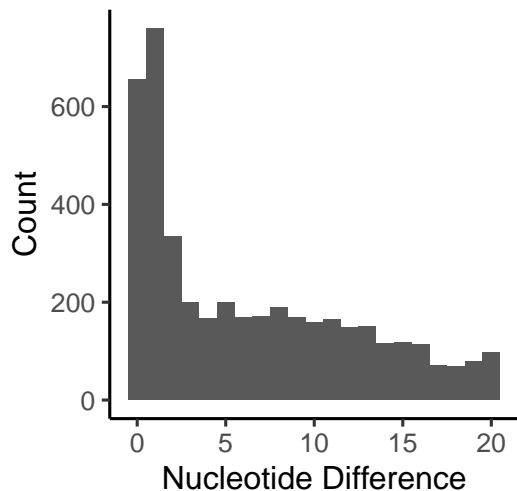
IGHV4–NL_40*01_S6921

8 sequences assigned
No exact matches.



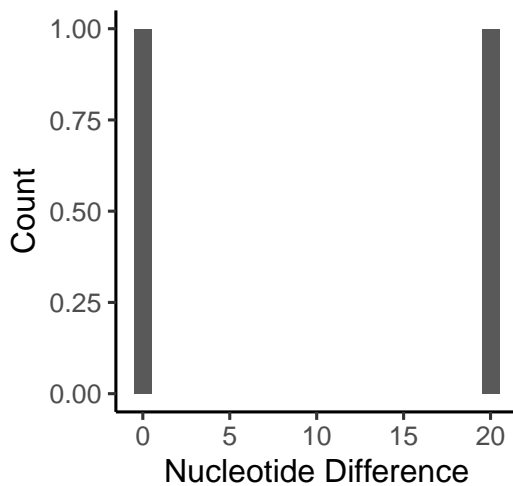
IGHV4–NL_38*01_S5467

5270 sequences assigned
656 (12.4%) exact matches, in which:
492 unique CDR3
8 unique J



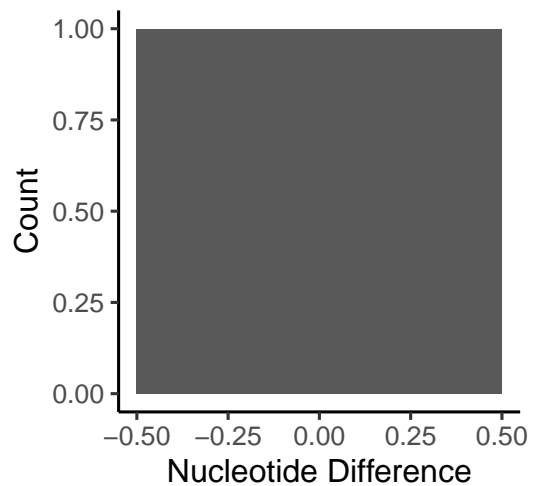
IGHV4–NL_4*01_S8866

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



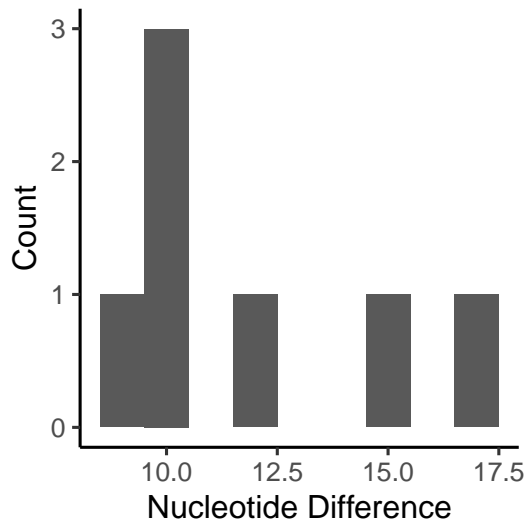
IGHV4–NL_42*01_S6064

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



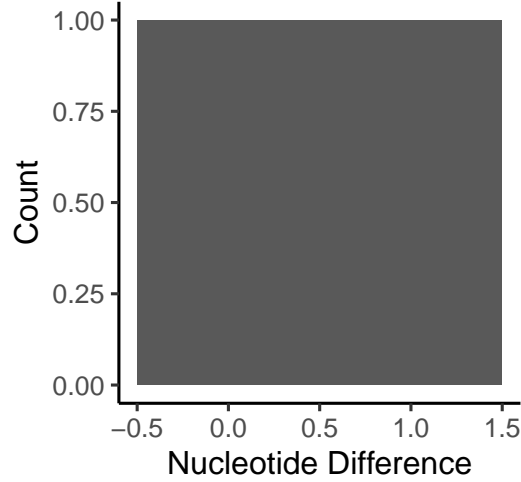
IGHV4–NL_43*01_S4510

14 sequences assigned
No exact matches.



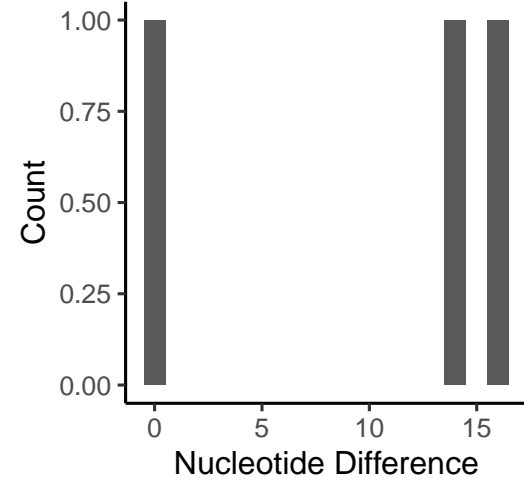
IGHV4–NL_8*02_S1304

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



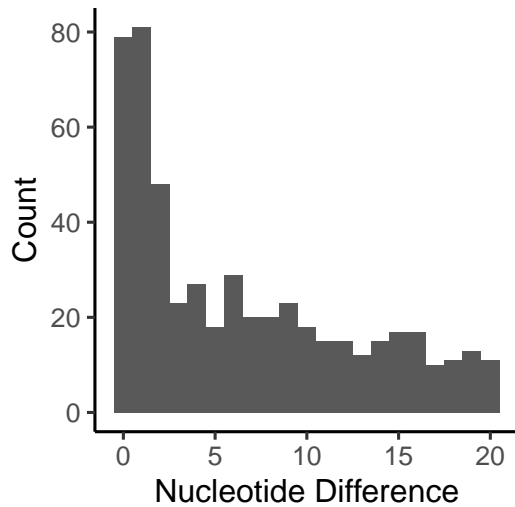
IGHV4–NL_9*01_S6142

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



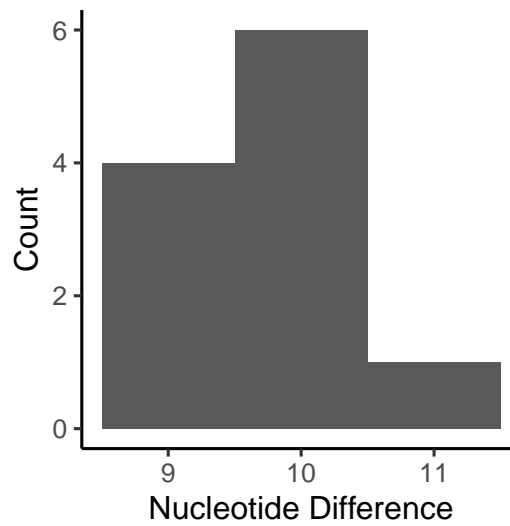
IGHV4–NL_5*01_S7147

607 sequences assigned
79 (13%) exact matches, in which:
67 unique CDR3
7 unique J



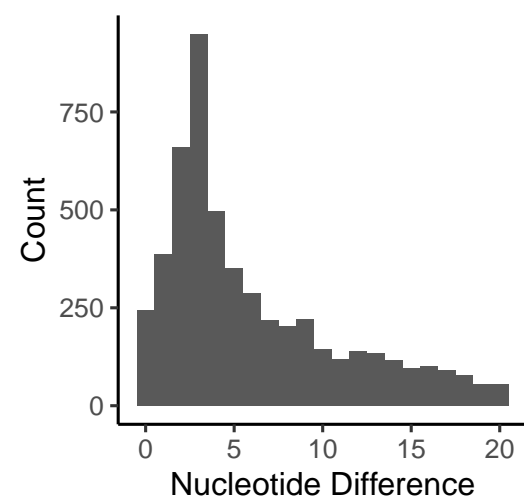
IGHV4–NL_9*01_S2406

32 sequences assigned
No exact matches.



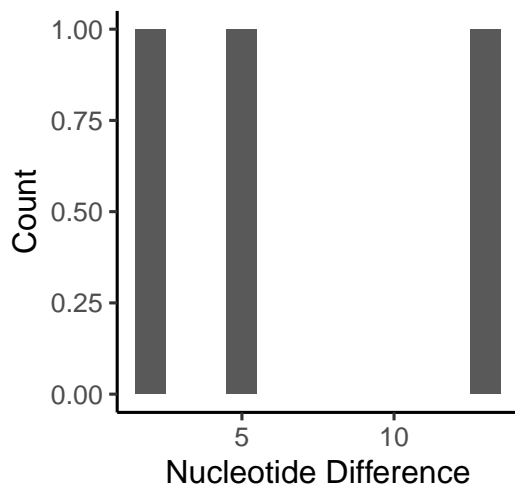
IGHV5–15*01_S9061

5712 sequences assigned
244 (4.3%) exact matches, in which:
124 unique CDR3
5 unique J



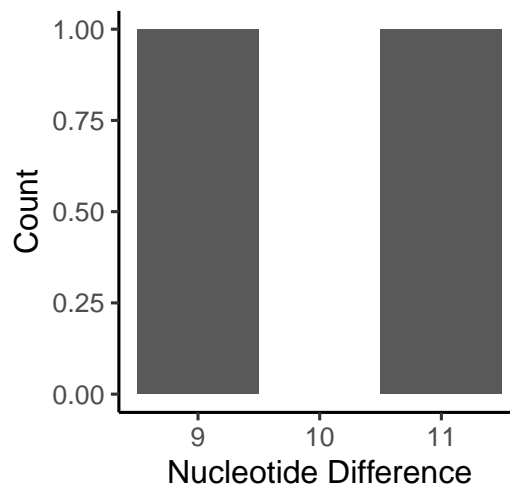
IGHV4–NL_6*01_S4760

3 sequences assigned
No exact matches.



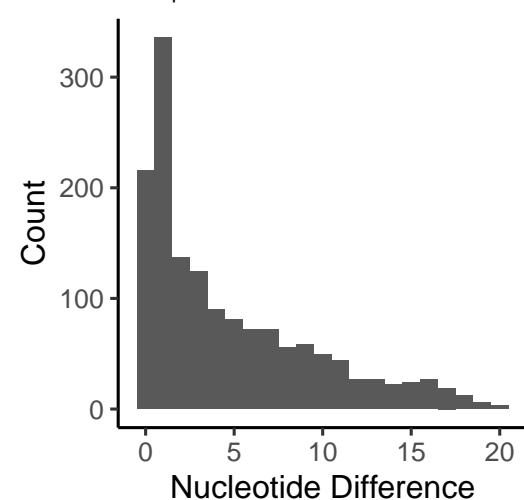
IGHV4–NL_9*01_S4567

3 sequences assigned
No exact matches.



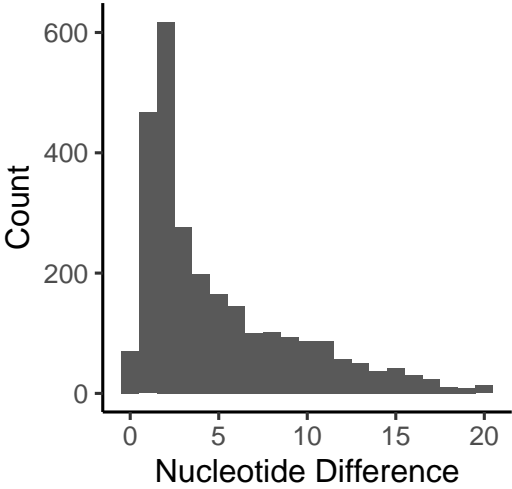
IGHV5–157*01_S6479

1579 sequences assigned
216 (13.7%) exact matches, in which:
117 unique CDR3
7 unique J



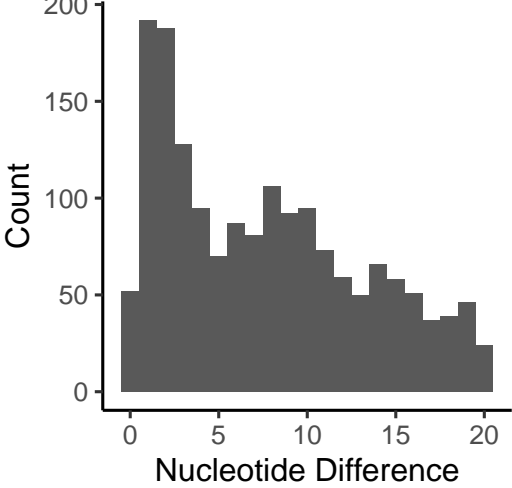
IGHV5–157*01_S8185

2939 sequences assigned
71 (2.4%) exact matches, in which:
38 unique CDR3
5 unique J



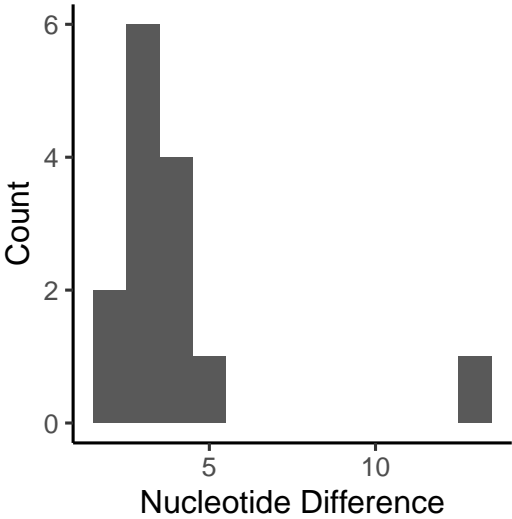
IGHV6–1*02_G280T

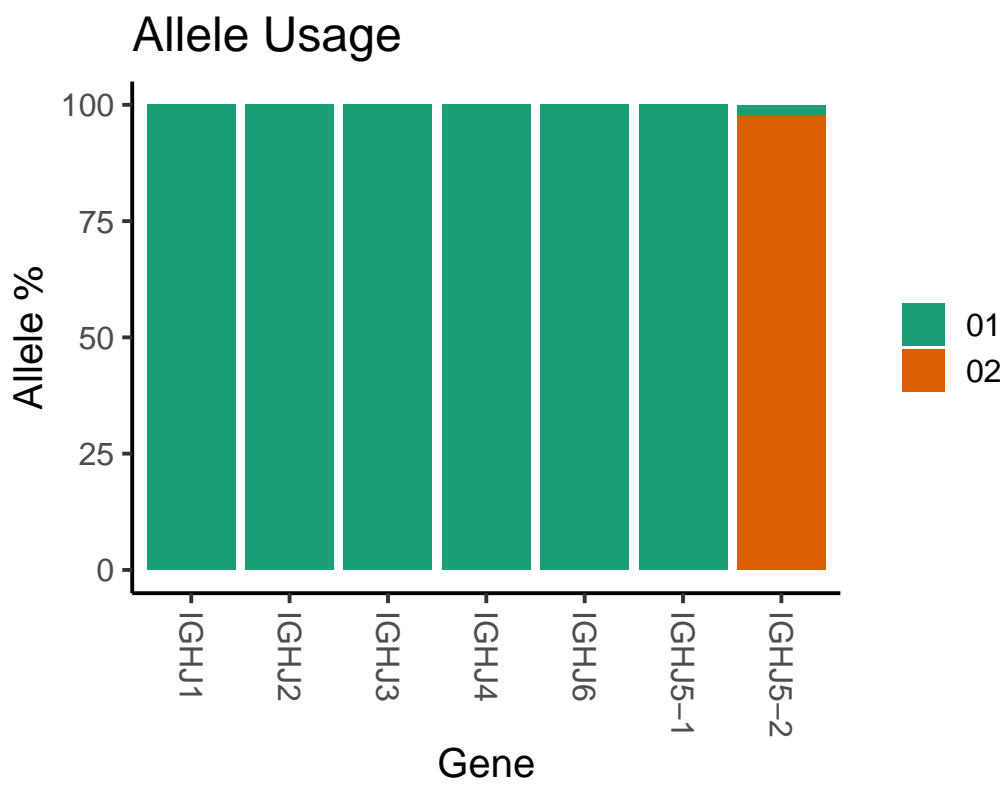
1878 sequences assigned
52 (2.8%) exact matches, in which:
40 unique CDR3
7 unique J



IGHV7–135*02_S1424

57 sequences assigned
No exact matches.





Warning – no inferred sequences found.