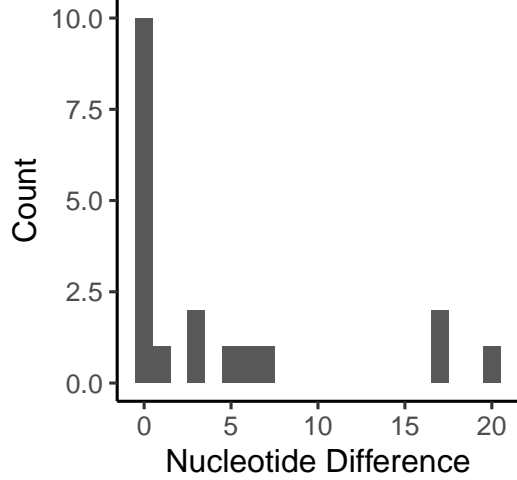


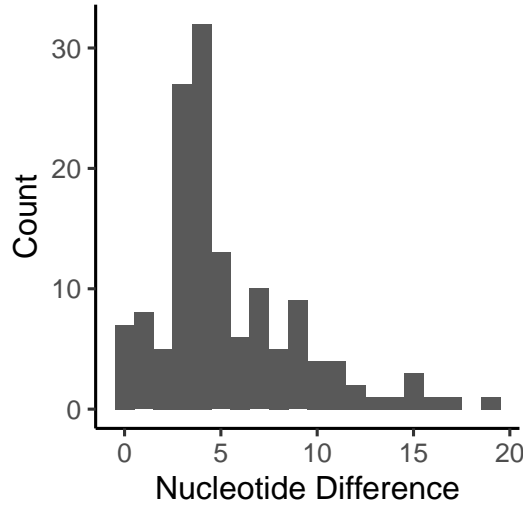
IGHV1-60*01_S7772

20 sequences assigned
10 (50%) exact matches, in which:
10 unique CDR3
4 unique J



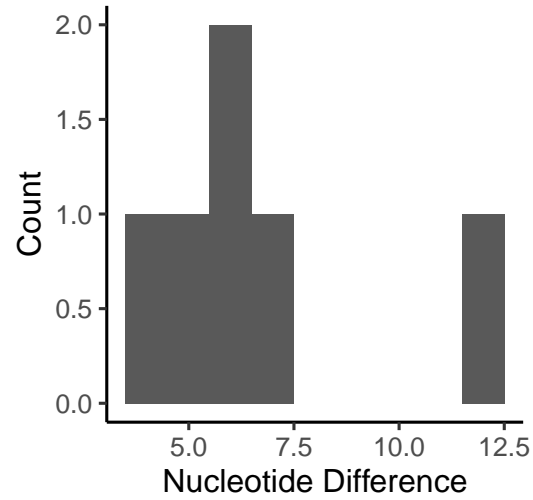
IGHV1-138*01_S2054

144 sequences assigned
7 (4.9%) exact matches, in which:
6 unique CDR3
2 unique J



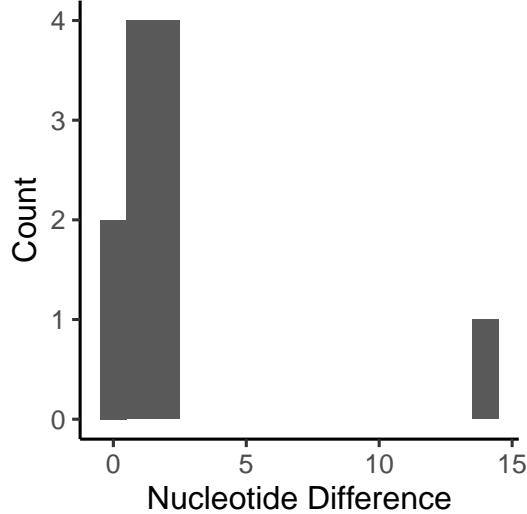
IGHV1-NL_2*01_S3568

300 sequences assigned
No exact matches.



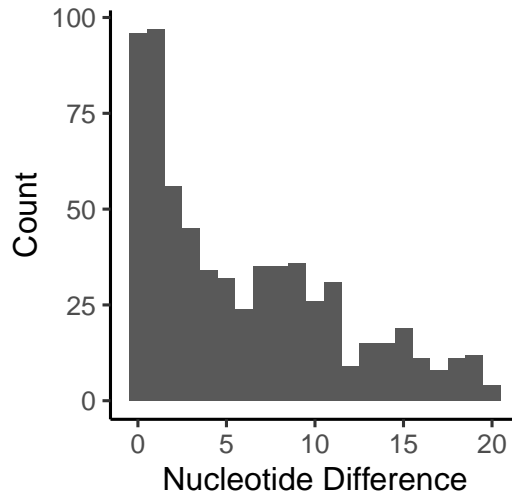
IGHV1-124*01_S1765

11 sequences assigned
2 (18.2%) exact matches, in which:
1 unique CDR3
1 unique J



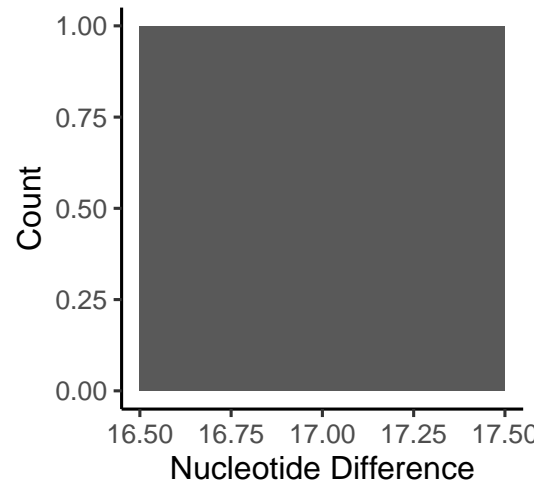
IGHV1-NL_1*01_S2052

719 sequences assigned
96 (13.4%) exact matches, in which:
67 unique CDR3
6 unique J



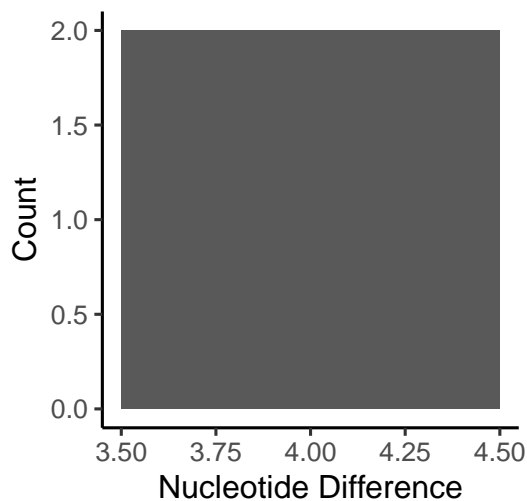
IGHV2-7*02_S1732

1 sequences assigned
No exact matches.



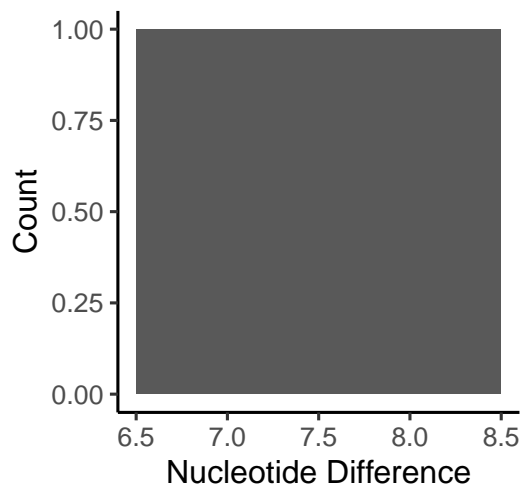
IGHV1-124*01_S6748

2 sequences assigned
No exact matches.



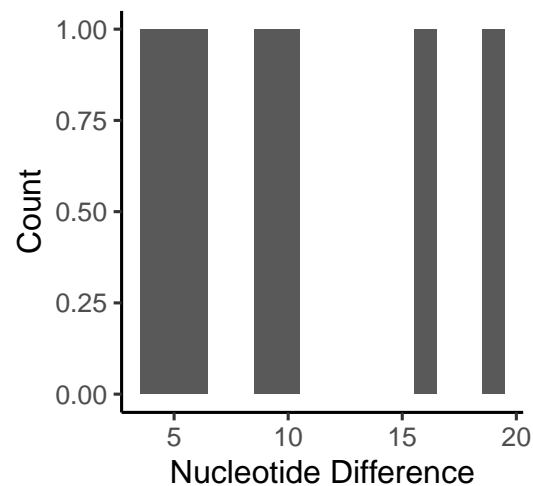
IGHV1-NL_2*01_S3477

2 sequences assigned
No exact matches.



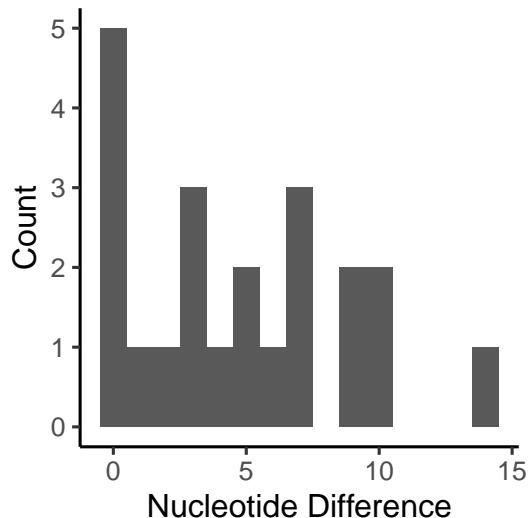
IGHV2-7*02_S3534

8 sequences assigned
No exact matches.



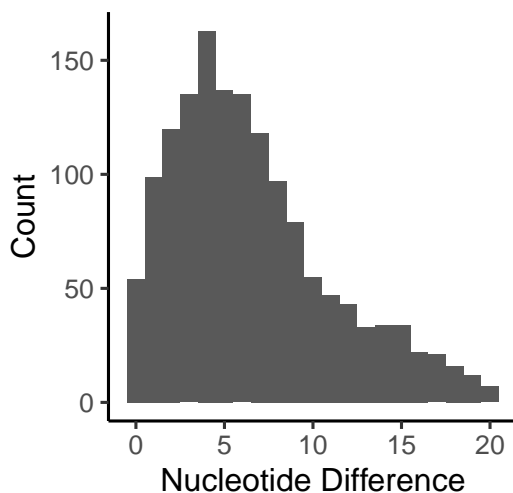
IGHV2-7*02_S4078

22 sequences assigned
5 (22.7%) exact matches, in which:
5 unique CDR3
1 unique J



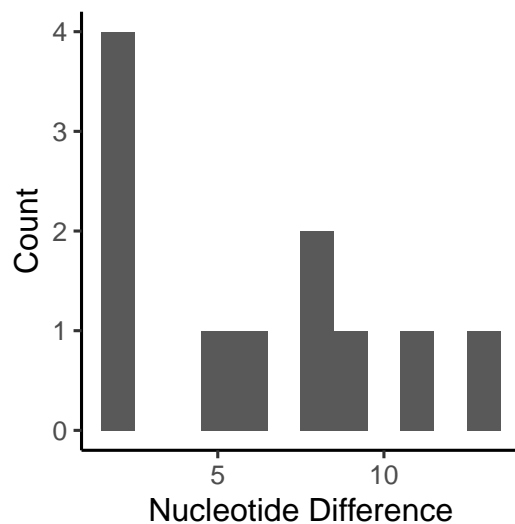
IGHV2-118*01_S6364

1591 sequences assigned
54 (3.4%) exact matches, in which:
40 unique CDR3
5 unique J



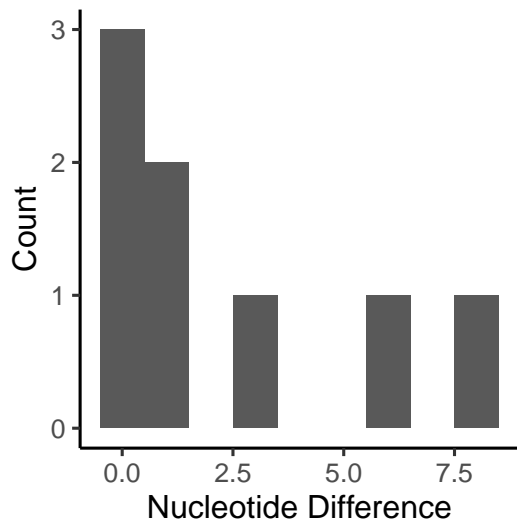
IGHV2-NL_1*01_S5211

15 sequences assigned
No exact matches.



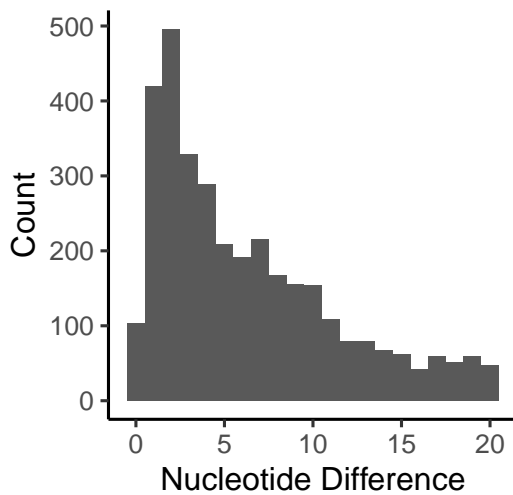
IGHV2-7*02_S4285

8 sequences assigned
3 (37.5%) exact matches, in which:
3 unique CDR3
3 unique J



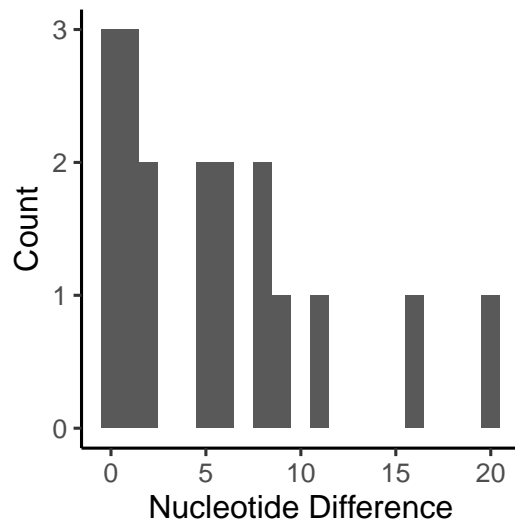
IGHV2-173*01_G289T

3904 sequences assigned
103 (2.6%) exact matches, in which:
96 unique CDR3
7 unique J



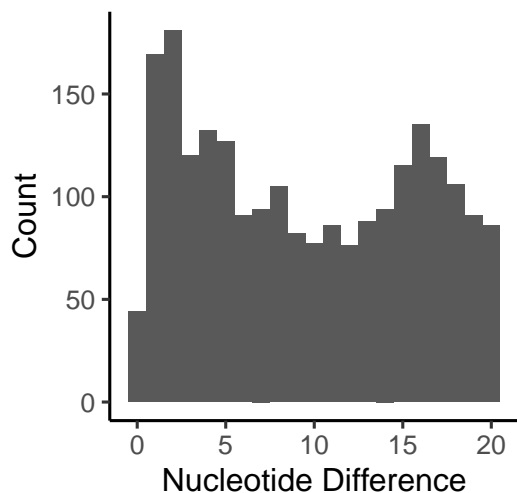
IGHV2-NL_1*01_S5779

18 sequences assigned
3 (16.7%) exact matches, in which:
3 unique CDR3
3 unique J



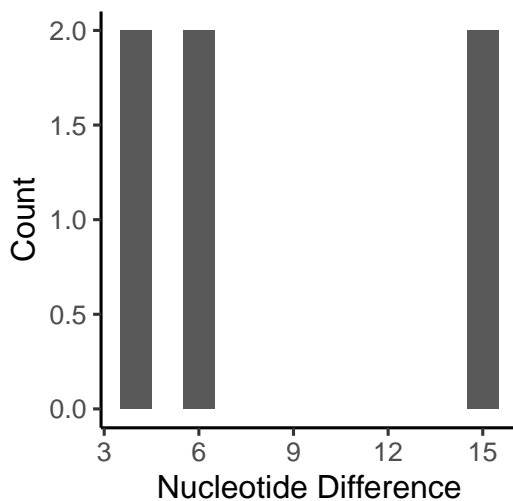
IGHV2-69*01_G289T

2934 sequences assigned
44 (1.5%) exact matches, in which:
39 unique CDR3
6 unique J



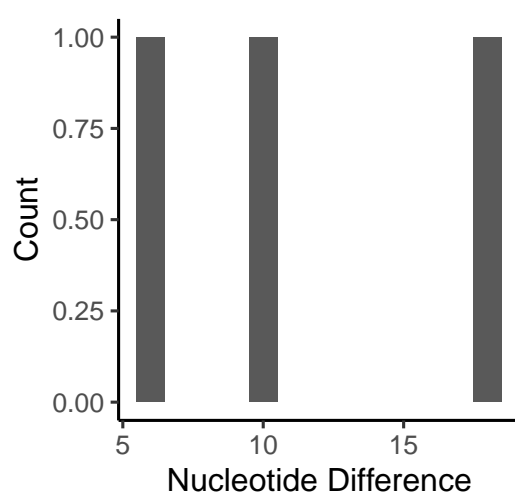
IGHV2-NL_1*01_S2133

11 sequences assigned
No exact matches.



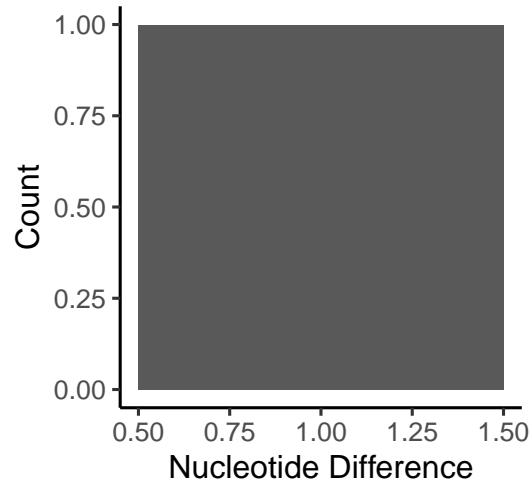
IGHV2-NL_2*01_S2193

3 sequences assigned
No exact matches.



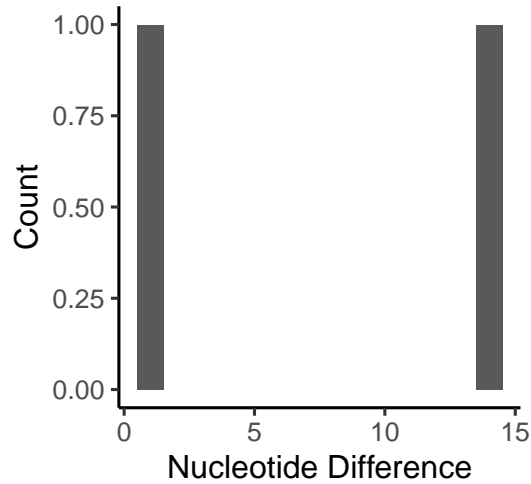
IGHV2-NL_2*01_S8873

1 sequences assigned
No exact matches.



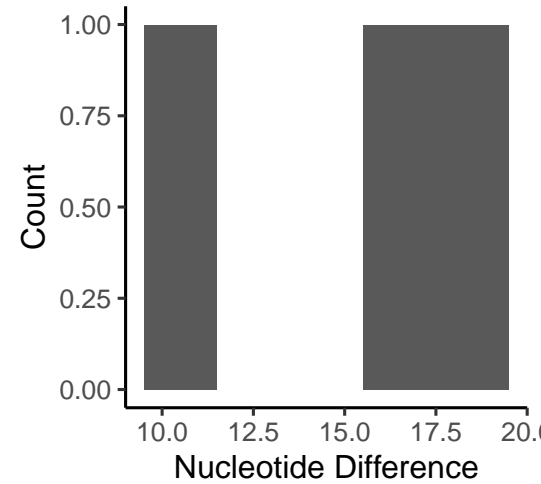
IGHV3-34*01_S2915

15 sequences assigned
No exact matches.



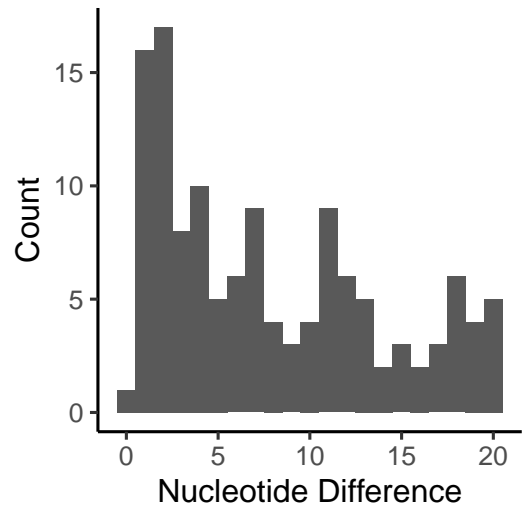
IGHV3-37*01_S9699

9 sequences assigned
No exact matches.



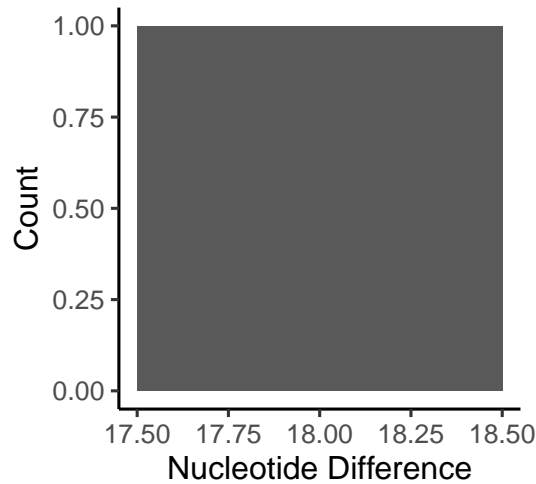
IGHV3-9*01_S4754

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



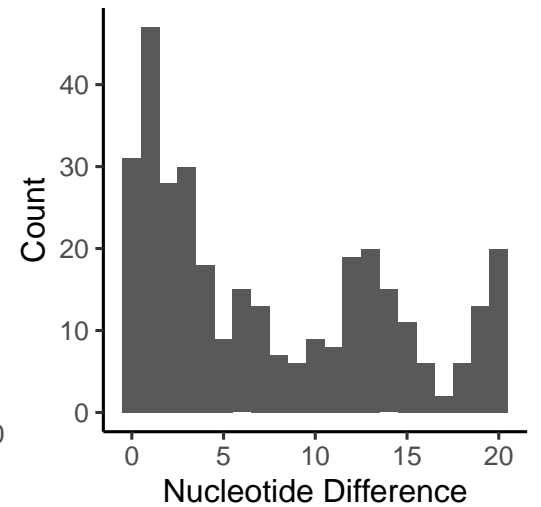
IGHV3-37*01_S4420

2 sequences assigned
No exact matches.



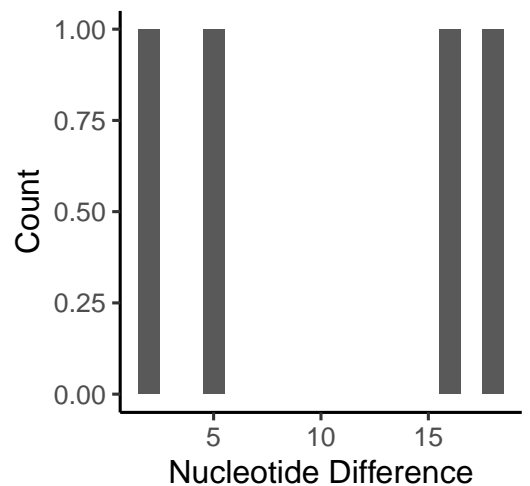
IGHV3-50*02_S9583

393 sequences assigned
31 (7.9%) exact matches, in which:
18 unique CDR3
3 unique J



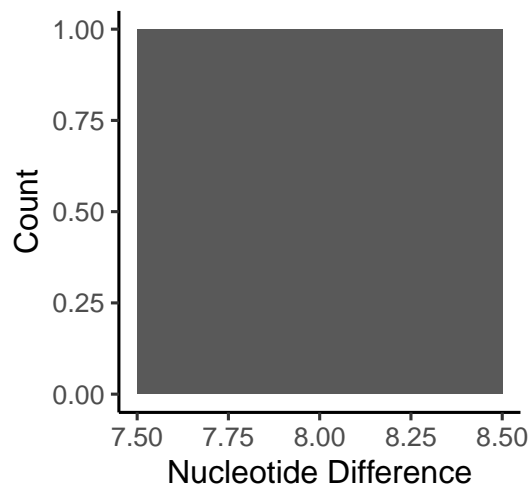
IGHV3-34*01_S1309

6 sequences assigned
No exact matches.



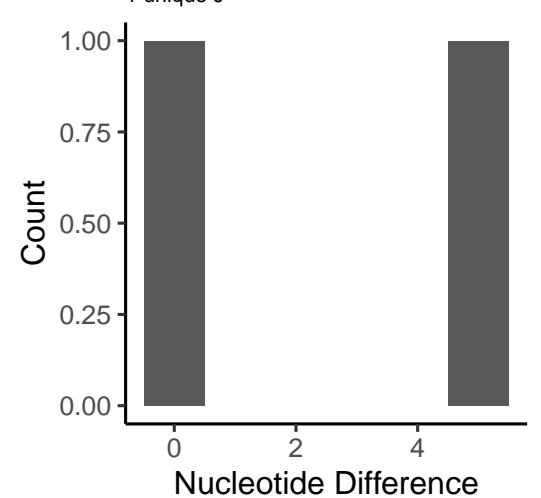
IGHV3-37*01_S6630

2 sequences assigned
No exact matches.



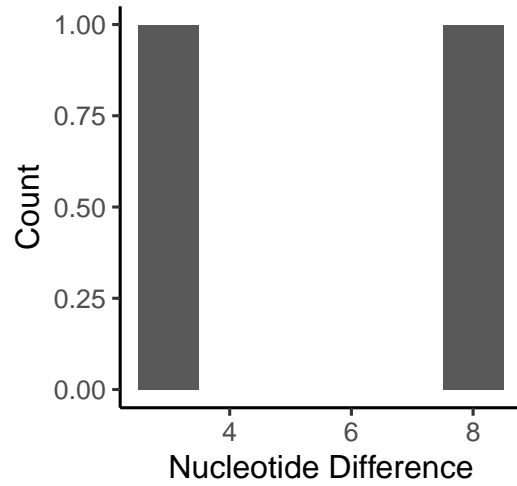
IGHV3-52*01_S3960

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



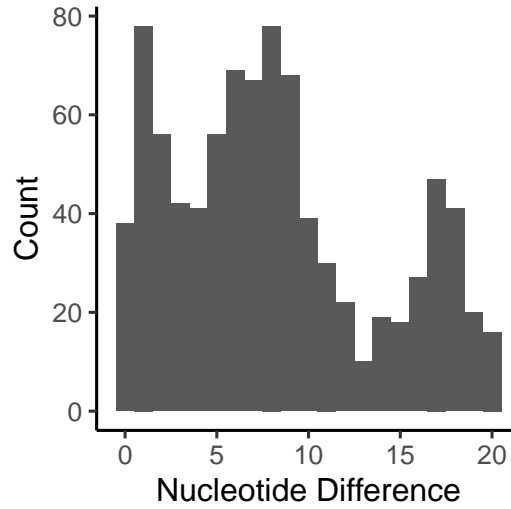
IGHV3-52*02_S4550

2 sequences assigned
No exact matches.



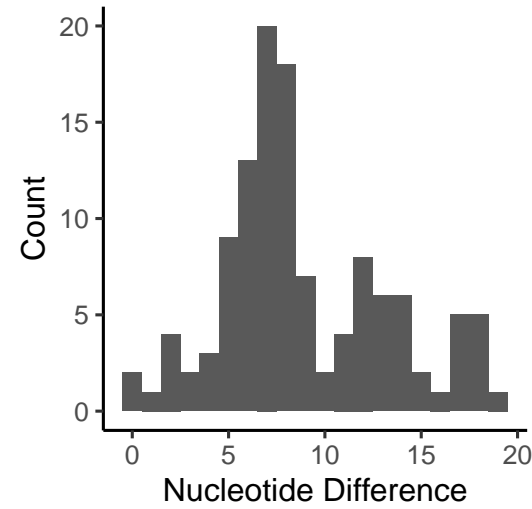
IGHV3-127*01_S2849

1159 sequences assigned
38 (3.3%) exact matches, in which:
28 unique CDR3
5 unique J



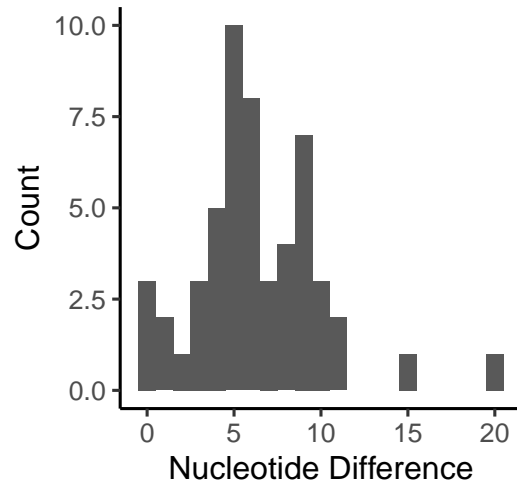
IGHV3-152*01_S7388

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



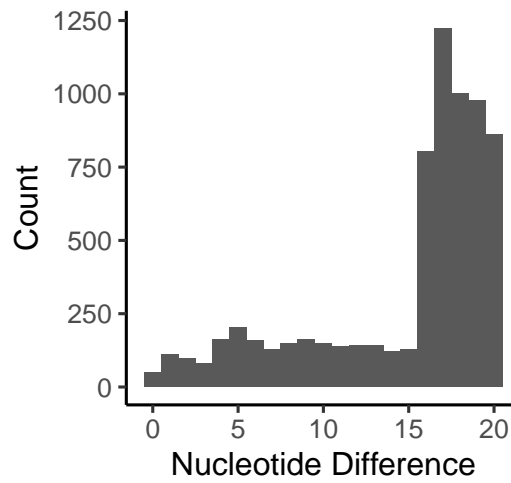
IGHV3-120*01_S4231

66 sequences assigned
3 (4.5%) exact matches, in which:
2 unique CDR3
2 unique J



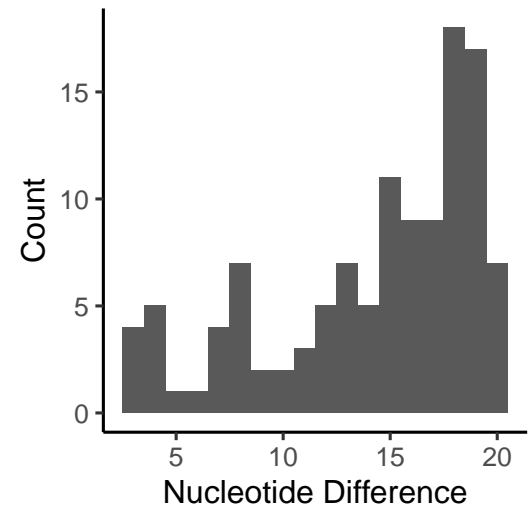
IGHV3-128*02_S0204

16529 sequences assigned
51 (0.3%) exact matches, in which:
36 unique CDR3
4 unique J



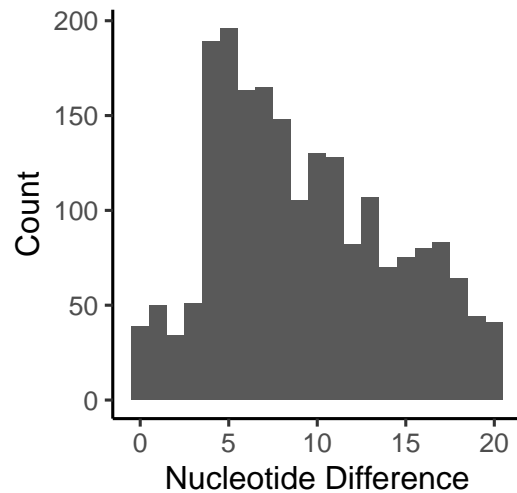
IGHV3-177*01_S1591

171 sequences assigned
No exact matches.



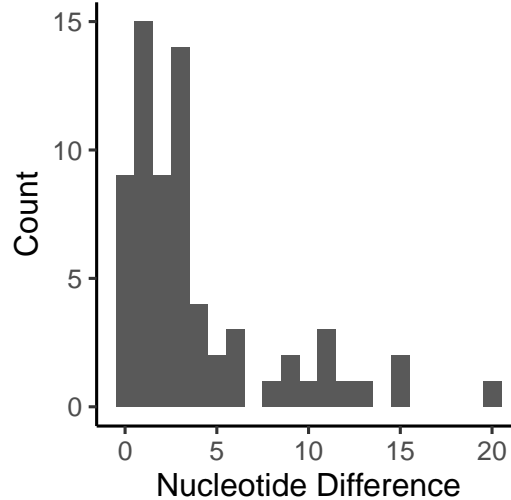
IGHV3-122*01_S5299

2476 sequences assigned
39 (1.6%) exact matches, in which:
30 unique CDR3
5 unique J



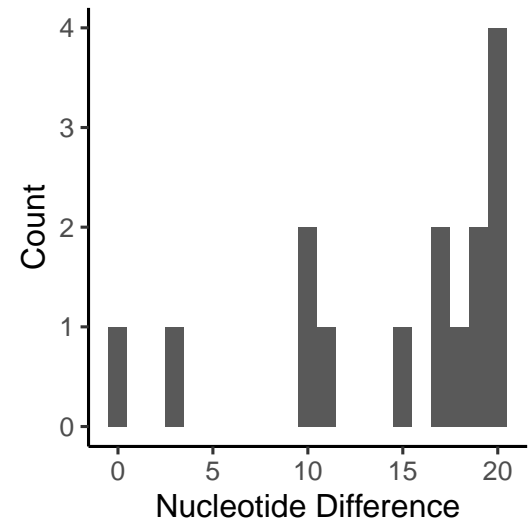
IGHV3-141*01_S8690

107 sequences assigned
9 (8.4%) exact matches, in which:
5 unique CDR3
2 unique J



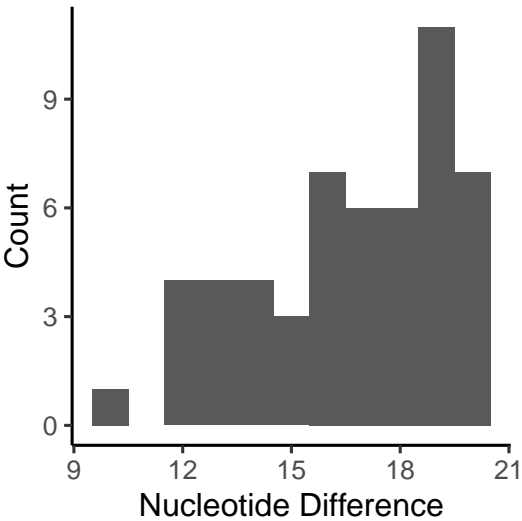
IGHV3-177*01_S5369

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



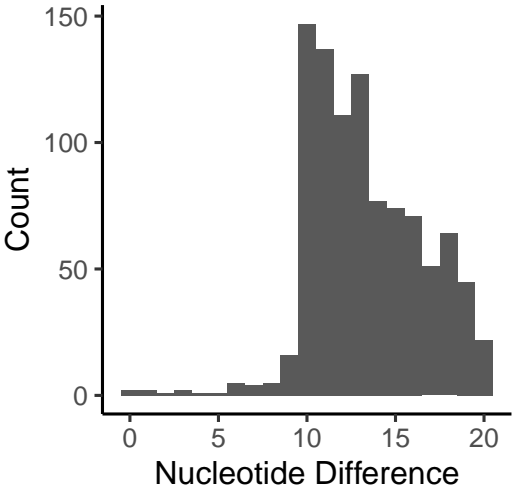
IGHV3-177*01_S6408

103 sequences assigned
No exact matches.



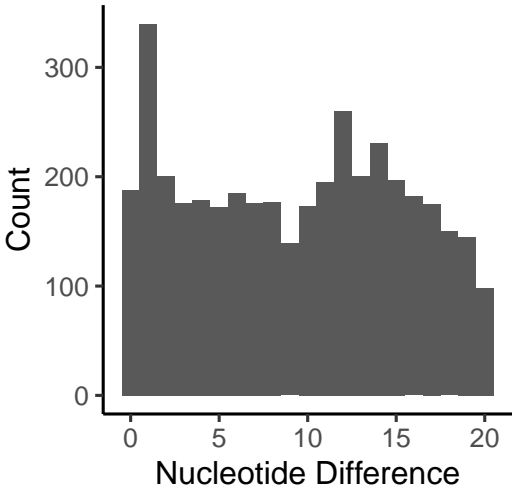
IGHV3-NL_1*01_S4331

1673 sequences assigned
2 (0.1%) exact matches, in which:
2 unique CDR3
2 unique J



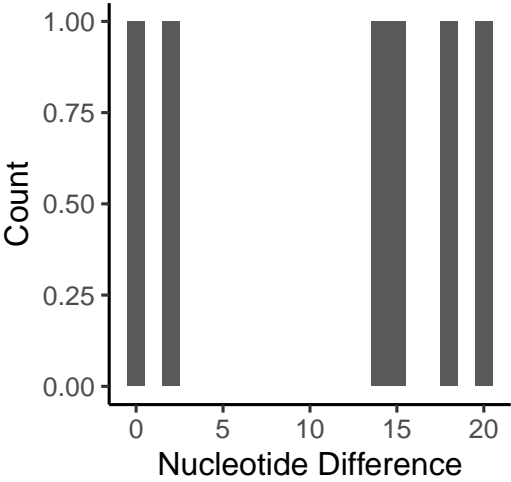
IGHV3-NL_11*01_S5714

5088 sequences assigned
188 (3.7%) exact matches, in which:
131 unique CDR3
6 unique J



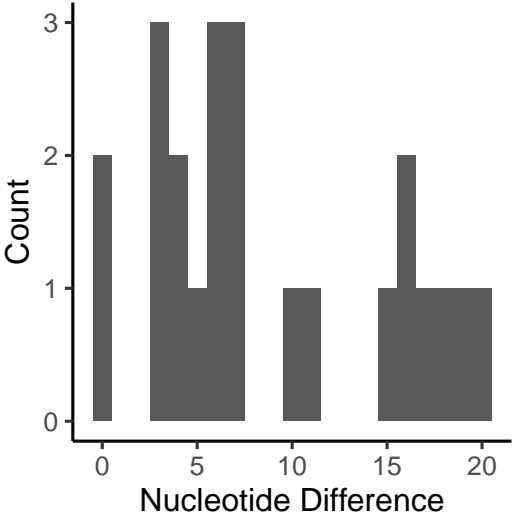
IGHV3-177*01_S8409

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



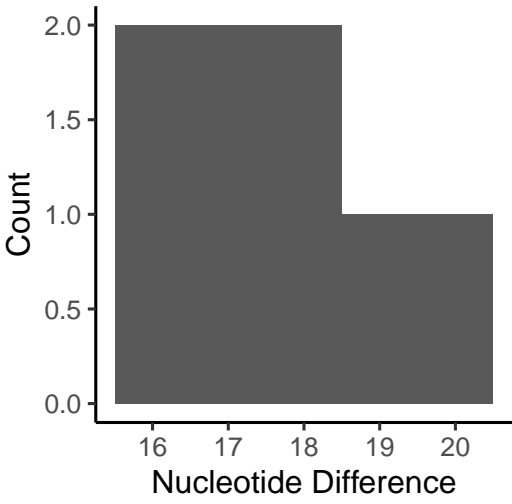
IGHV3-NL_1*01_S9854

578 sequences assigned
2 (0.3%) exact matches, in which:
2 unique CDR3
2 unique J



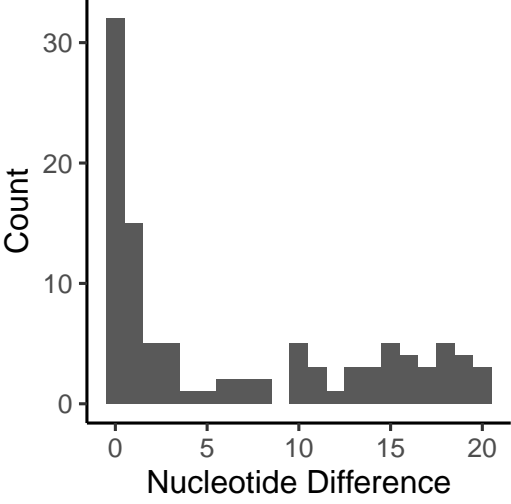
IGHV3-NL_12*02_S5864

51 sequences assigned
No exact matches.



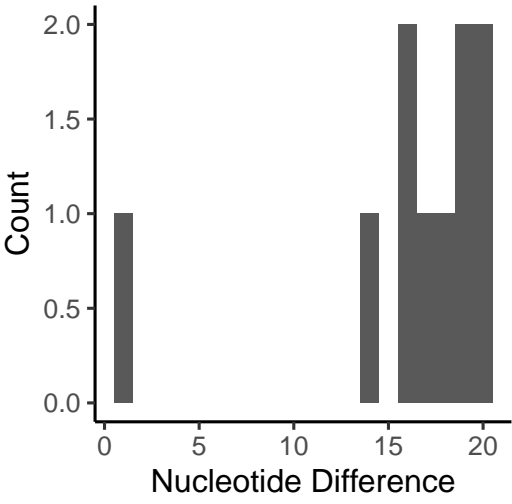
IGHV3-NL_1*01_S2788_C

126 sequences assigned
32 (25.4%) exact matches, in which:
32 unique CDR3
5 unique J



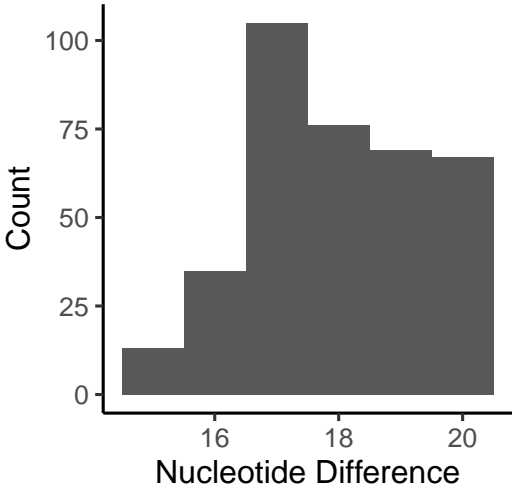
IGHV3-NL_10*02_S1970

828 sequences assigned
No exact matches.



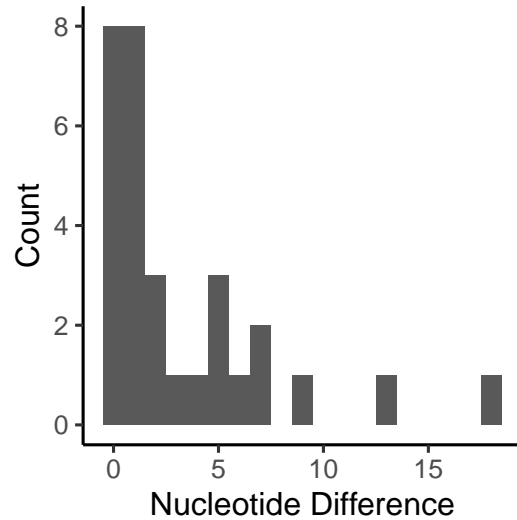
IGHV3-NL_12*02_S6994

2129 sequences assigned
No exact matches.



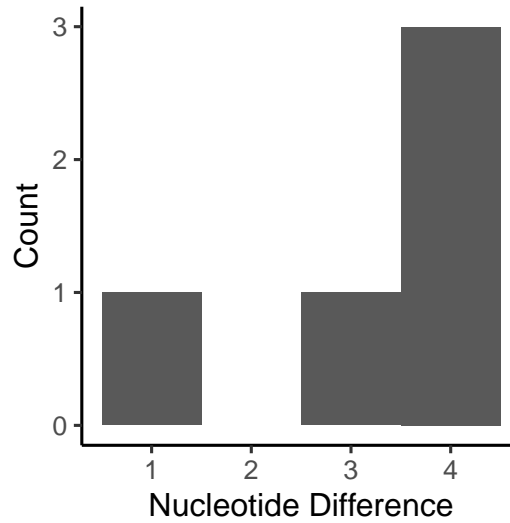
IGHV3-NL_13*01_S3277

50 sequences assigned
8 (16%) exact matches, in which:
6 unique CDR3
2 unique J



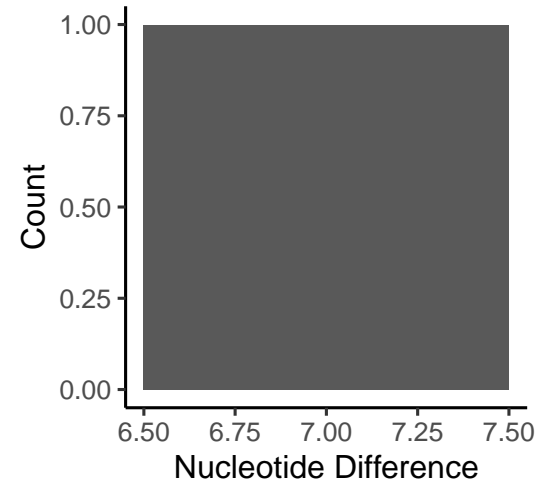
IGHV3-NL_14*01_S9823

7 sequences assigned
No exact matches.



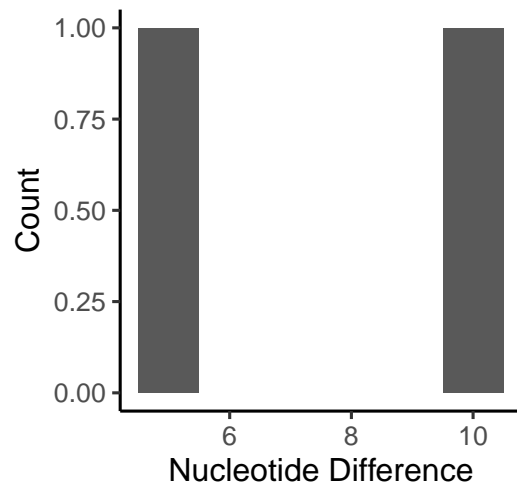
IGHV3-NL_19*01_S2472

1 sequences assigned
No exact matches.



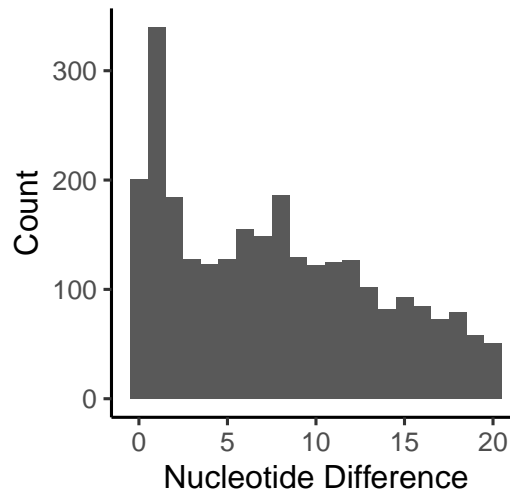
IGHV3-NL_14*01_S0723

4 sequences assigned
No exact matches.



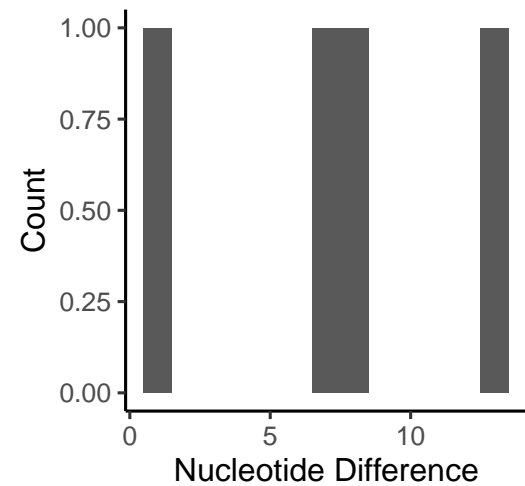
IGHV3-NL_17*01_S9589

3366 sequences assigned
201 (6%) exact matches, in which:
139 unique CDR3
7 unique J



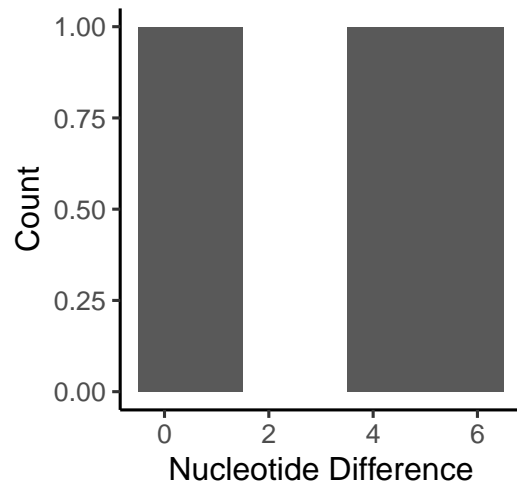
IGHV3-NL_19*01_S4000

4 sequences assigned
No exact matches.



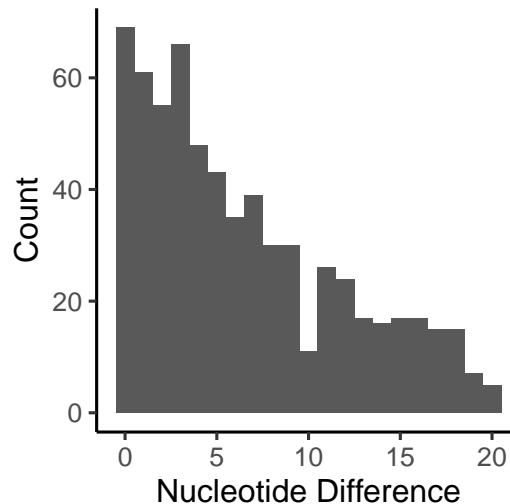
IGHV3-NL_14*01_S1113

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



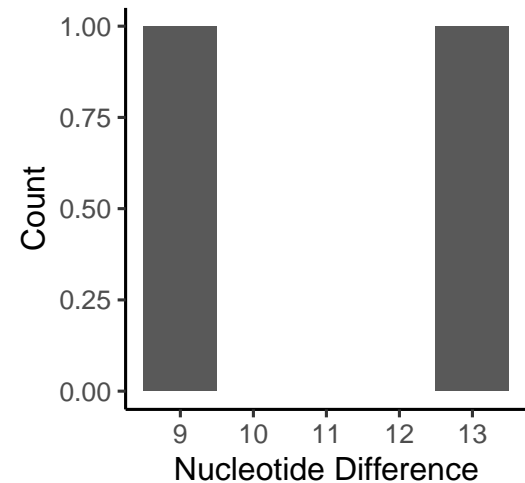
IGHV3-NL_18*01_S3867

686 sequences assigned
69 (10.1%) exact matches, in which:
54 unique CDR3
6 unique J



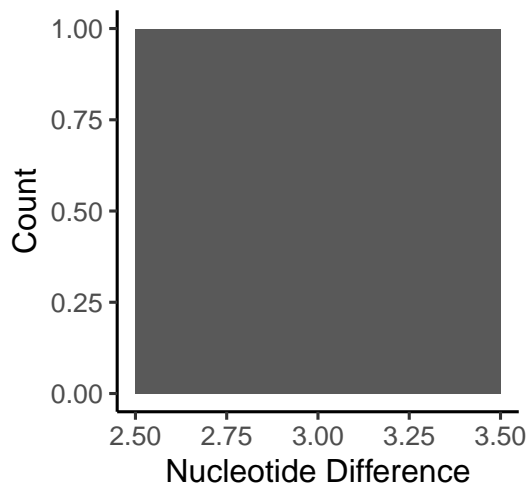
IGHV3-NL_19*01_S6894

2 sequences assigned
No exact matches.



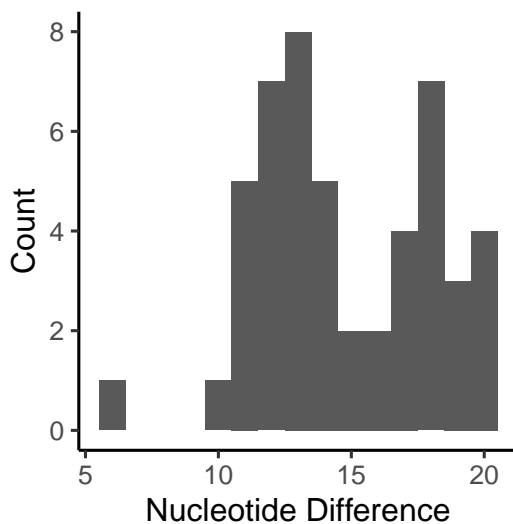
IGHV3-NL_2*01_S3900

195 sequences assigned
No exact matches.



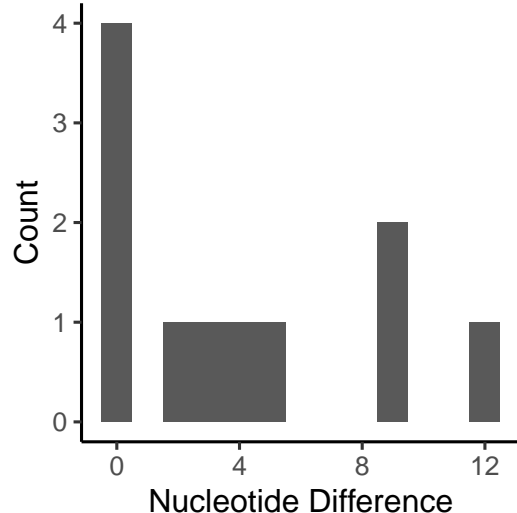
IGHV3-NL_4*01_S9067

57 sequences assigned
No exact matches.



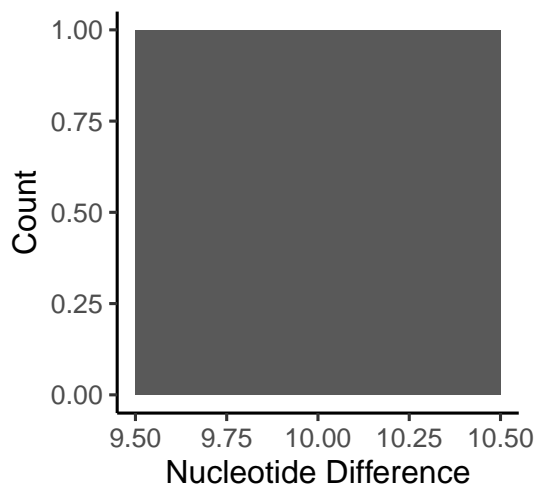
IGHV3-NL_7*01_S0199

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



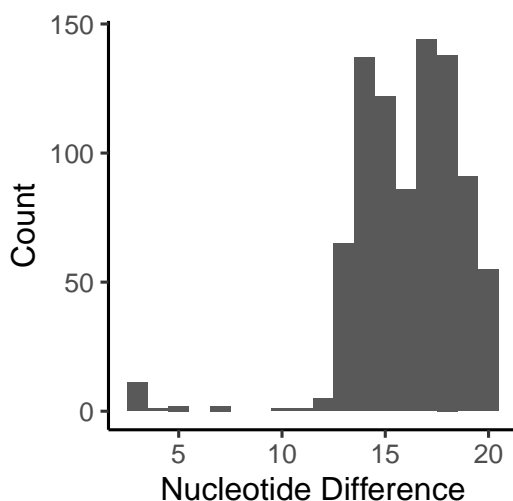
IGHV3-NL_2*01_S5884

2 sequences assigned
No exact matches.



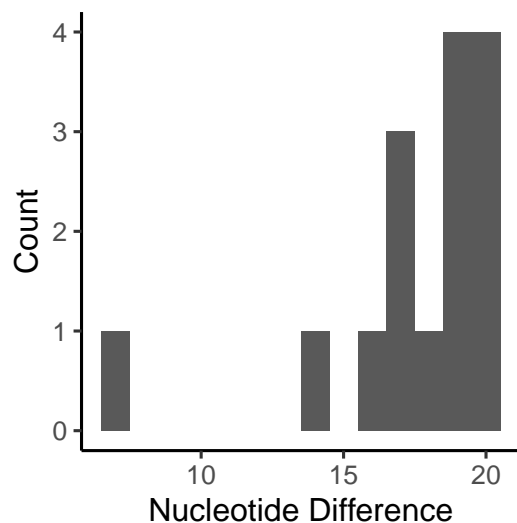
IGHV3-NL_5*01_S8361

1650 sequences assigned
No exact matches.



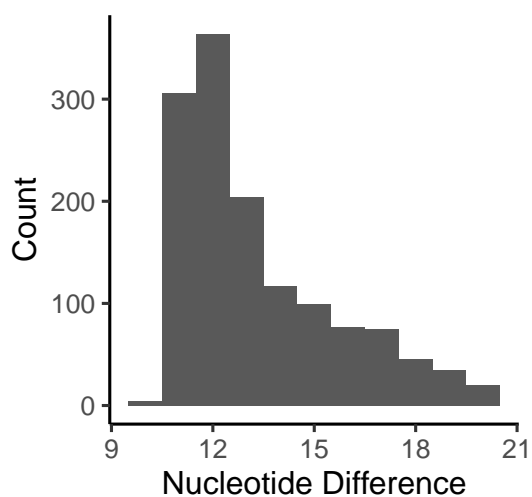
IGHV3-NL_8*01_S7474

373 sequences assigned
No exact matches.



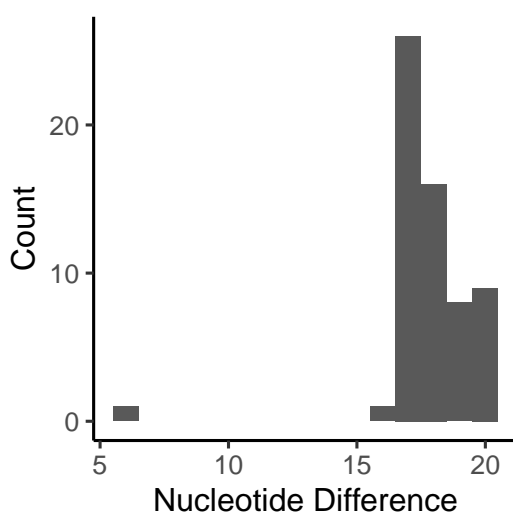
IGHV3-NL_4*01_S6405

1445 sequences assigned
No exact matches.



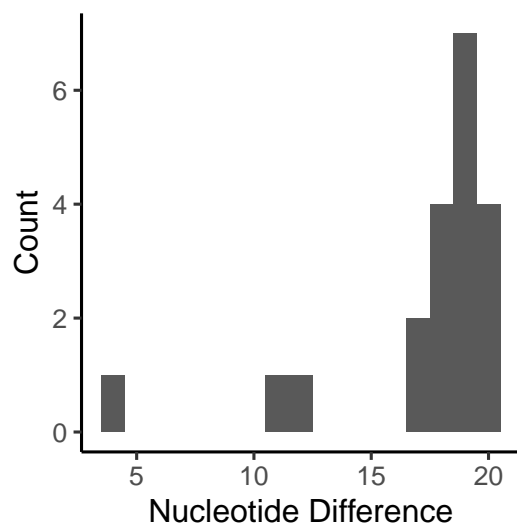
IGHV3-NL_6*02_S7808

328 sequences assigned
No exact matches.



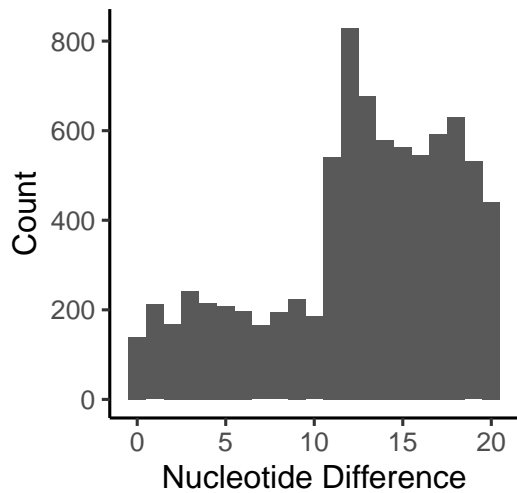
IGHV3-NL_8*01_S7860

32 sequences assigned
No exact matches.



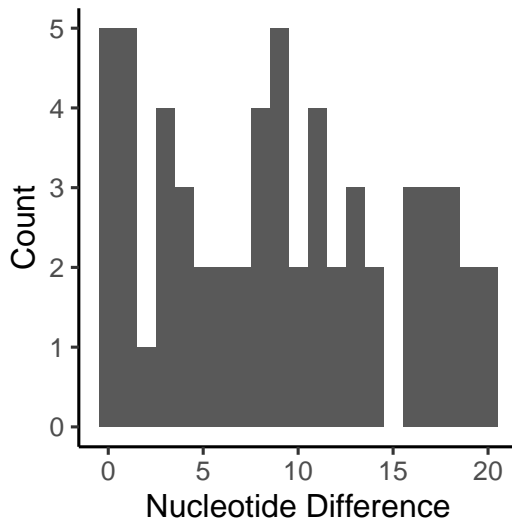
IGHV3–NL_9*01_S6098

12777 sequences assigned
139 (1.1%) exact matches, in which:
95 unique CDR3
5 unique J



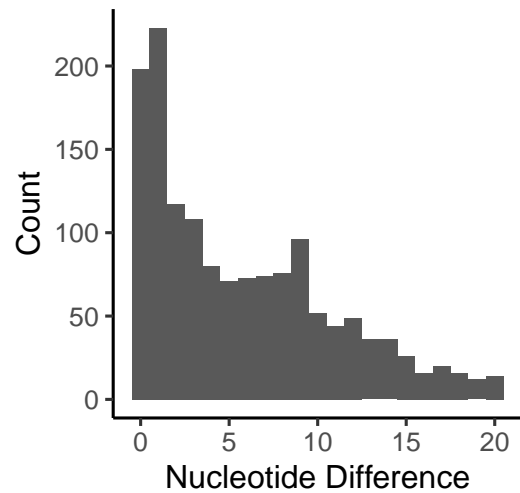
IGHV4–149*01_S9613

82 sequences assigned
5 (6.1%) exact matches, in which:
5 unique CDR3
3 unique J



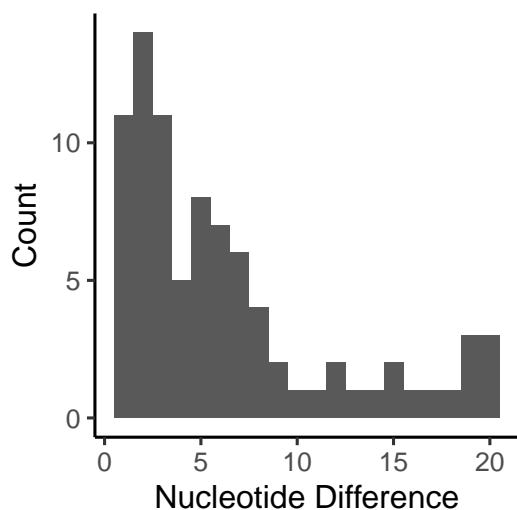
IGHV4–NL_1*01_S8720

1635 sequences assigned
198 (12.1%) exact matches, in which:
153 unique CDR3
7 unique J



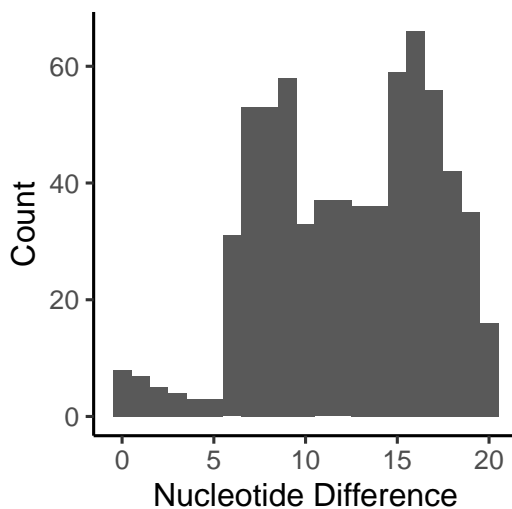
IGHV4–144*01_S3676

197 sequences assigned
No exact matches.



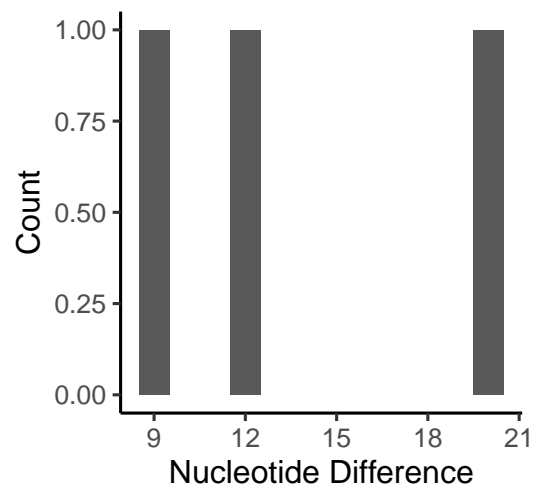
IGHV4–149*02_S8521

908 sequences assigned
8 (0.9%) exact matches, in which:
5 unique CDR3
3 unique J



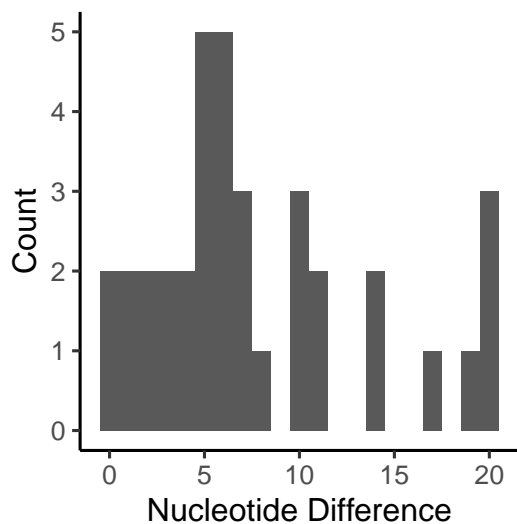
IGHV4–NL_10*01_S6744

6 sequences assigned
No exact matches.



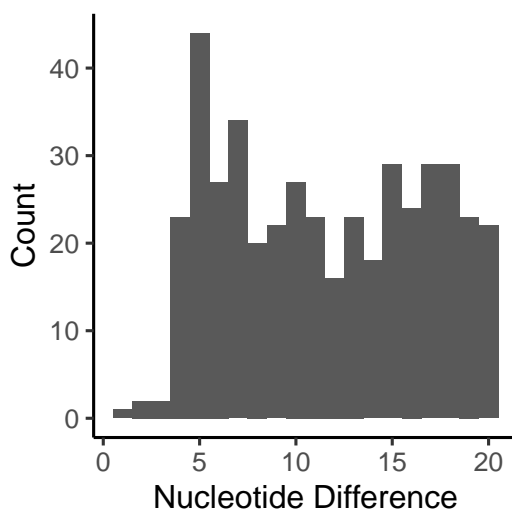
IGHV4–149*01_S1992

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



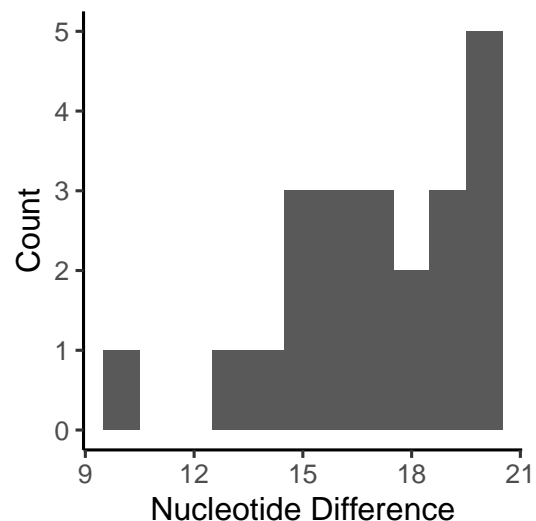
IGHV4–NL_1*01_S0860

677 sequences assigned
No exact matches.



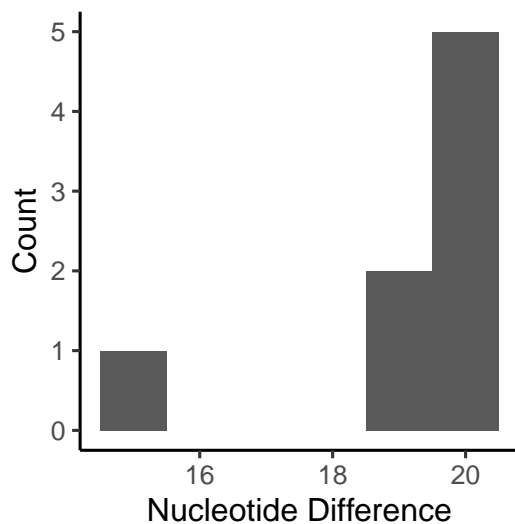
IGHV4–NL_11*01_S5570

80 sequences assigned
No exact matches.



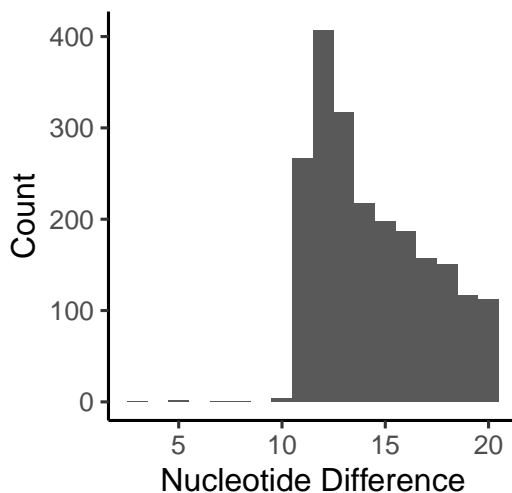
IGHV4–NL_11*01_S9942

48 sequences assigned
No exact matches.



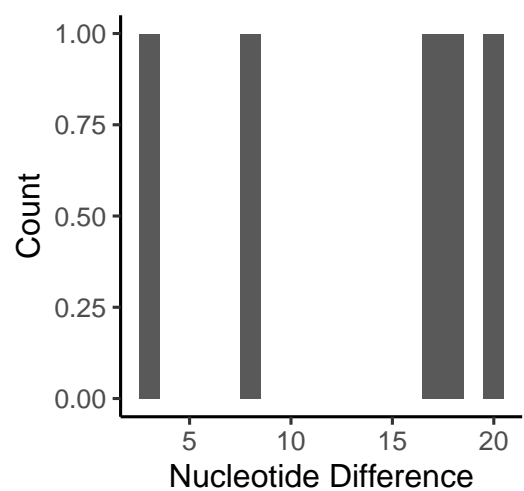
IGHV4–NL_13*01_S9624

2849 sequences assigned
No exact matches.



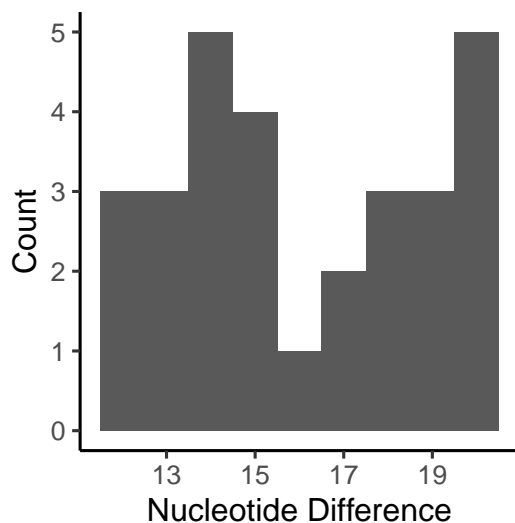
IGHV4–NL_19*01_S3005

6 sequences assigned
No exact matches.



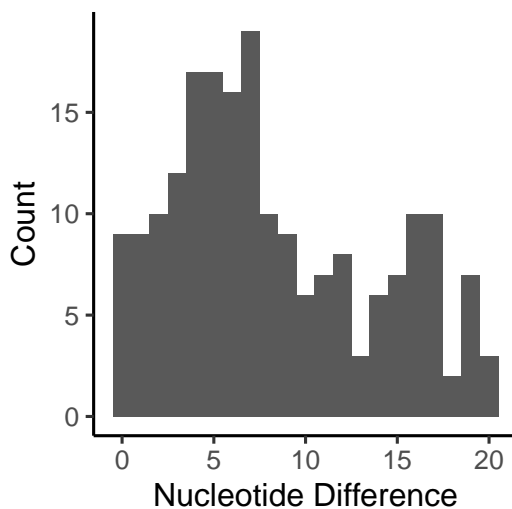
IGHV4–NL_12*01_S5174

119 sequences assigned
No exact matches.



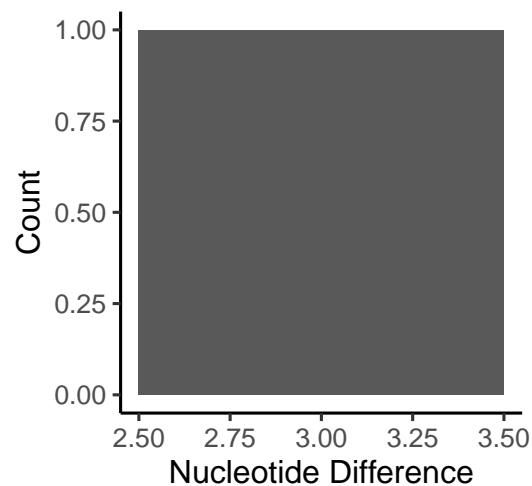
IGHV4–NL_16*01_S2324

239 sequences assigned
9 (3.8%) exact matches, in which:
8 unique CDR3
1 unique J



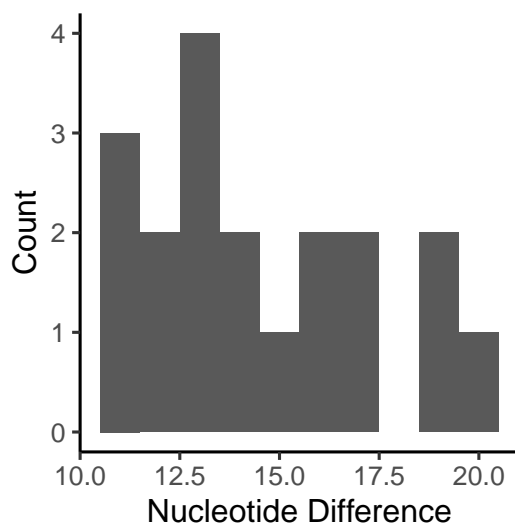
IGHV4–NL_20*01_S2908

3 sequences assigned
No exact matches.



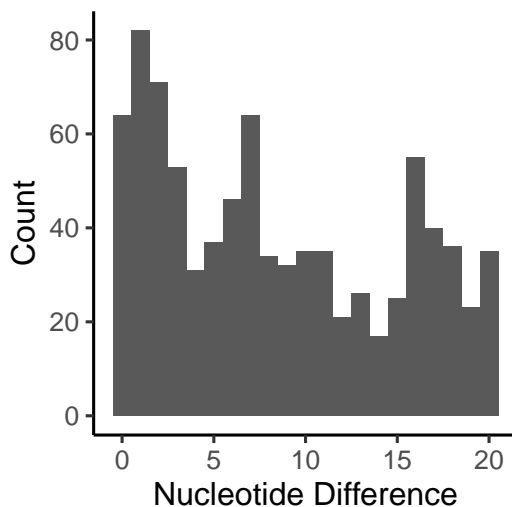
IGHV4–NL_12*01_S8068

25 sequences assigned
No exact matches.



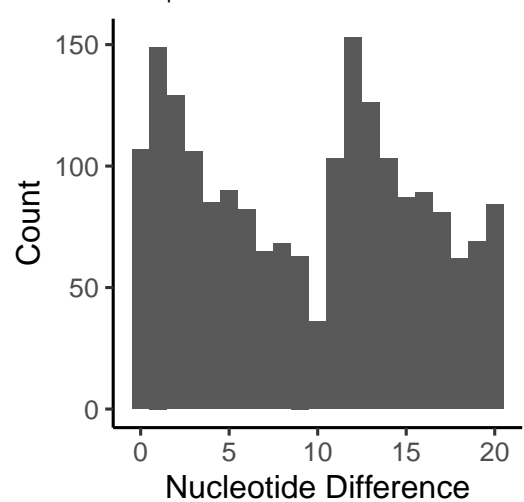
IGHV4–NL_17*01_S7355

1071 sequences assigned
64 (6%) exact matches, in which:
55 unique CDR3
5 unique J



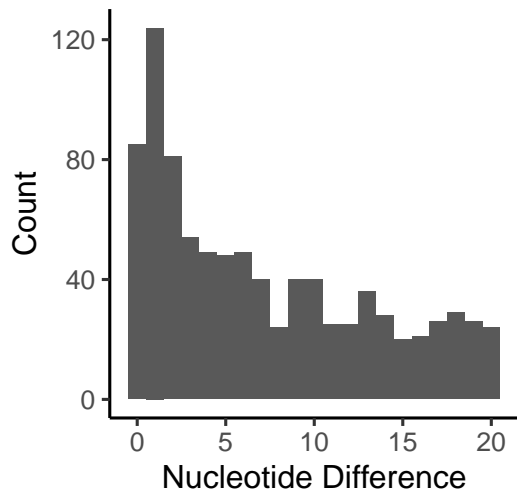
IGHV4–NL_21*01_S0138

2700 sequences assigned
107 (4%) exact matches, in which:
88 unique CDR3
5 unique J



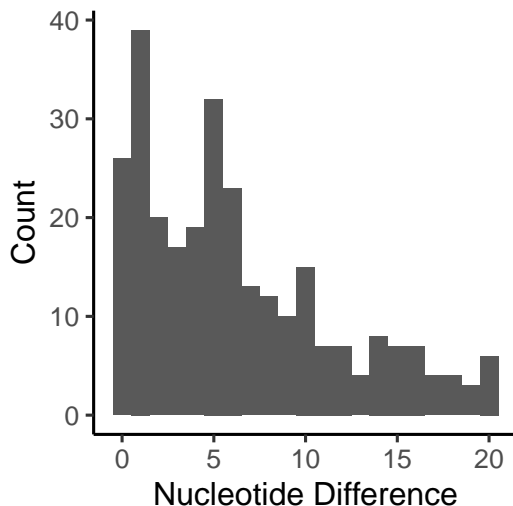
IGHV4–NL_21*01_S0142

1070 sequences assigned
85 (7.9%) exact matches, in which:
73 unique CDR3
6 unique J



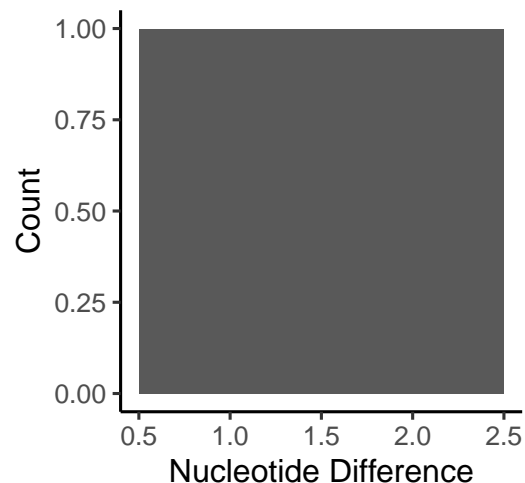
IGHV4–NL_23*01_S1296

297 sequences assigned
26 (8.8%) exact matches, in which:
19 unique CDR3
5 unique J



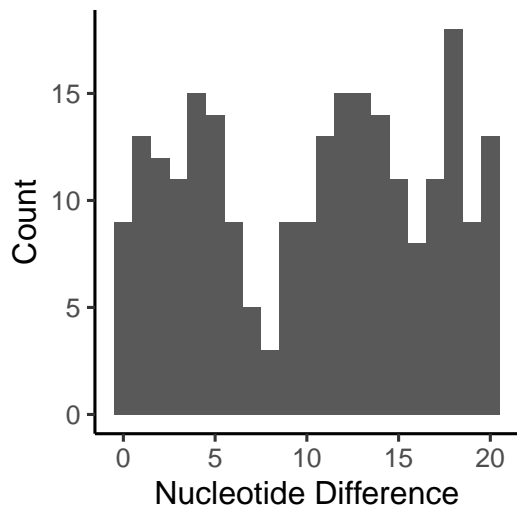
IGHV4–NL_24*01_S5697

2 sequences assigned
No exact matches.



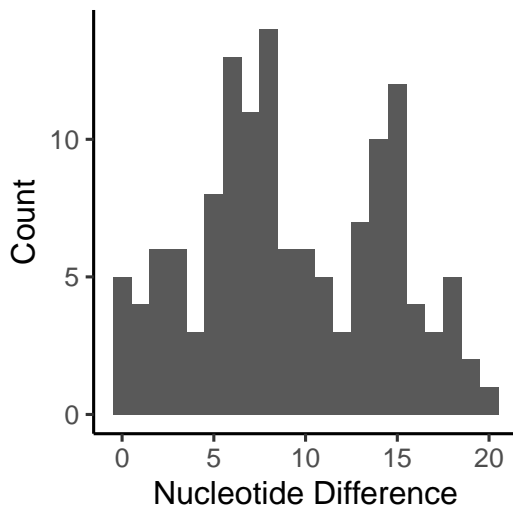
IGHV4–NL_21*01_S6308

394 sequences assigned
9 (2.3%) exact matches, in which:
9 unique CDR3
3 unique J



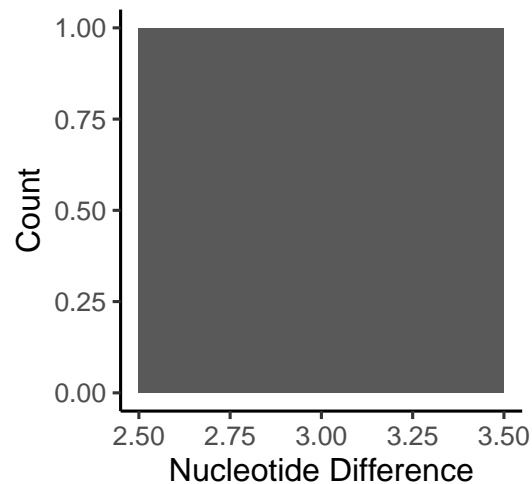
IGHV4–NL_23*01_S4212

139 sequences assigned
5 (3.6%) exact matches, in which:
5 unique CDR3
1 unique J



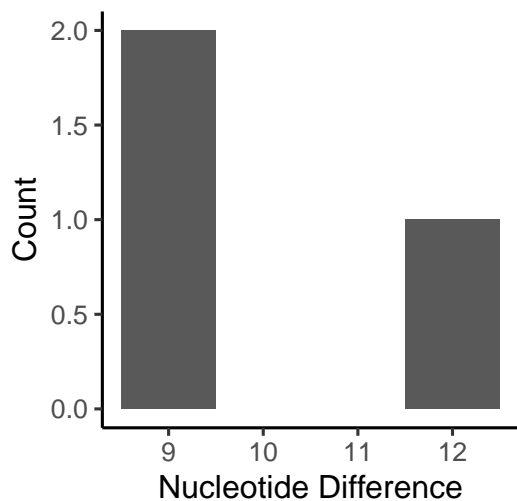
IGHV4–NL_24*01_S7595

1 sequences assigned
No exact matches.



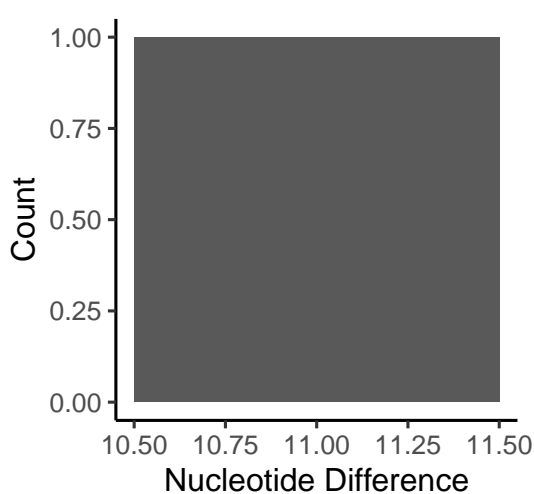
IGHV4–NL_22*01_S9255

3 sequences assigned
No exact matches.



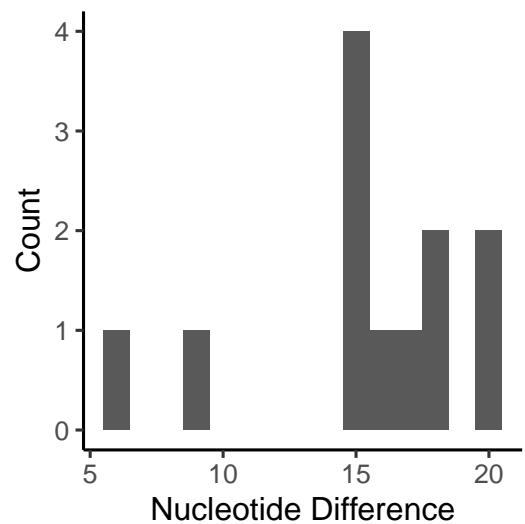
IGHV4–NL_24*01_S1628

1 sequences assigned
No exact matches.



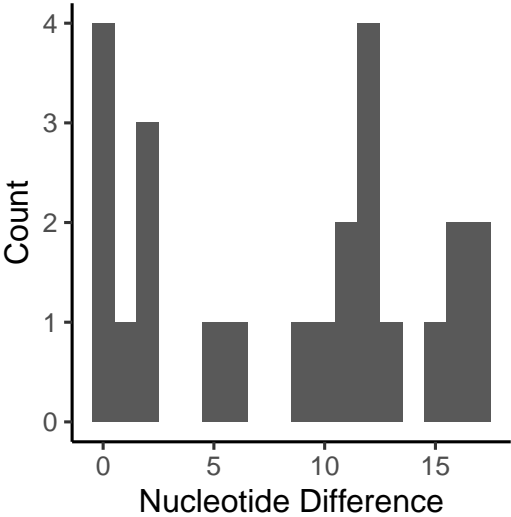
IGHV4–NL_25*01_S6200

19 sequences assigned
No exact matches.



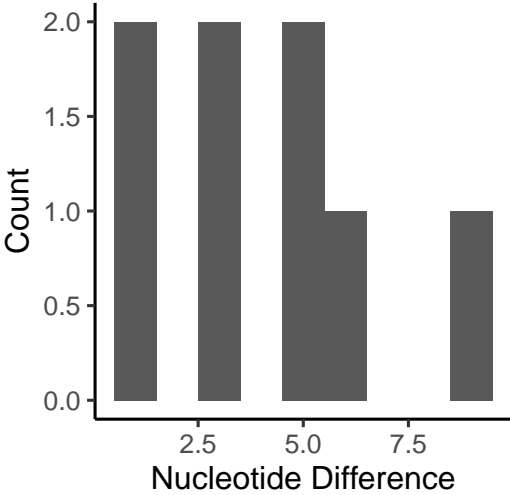
IGHV4-NL_25*01_S6960

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



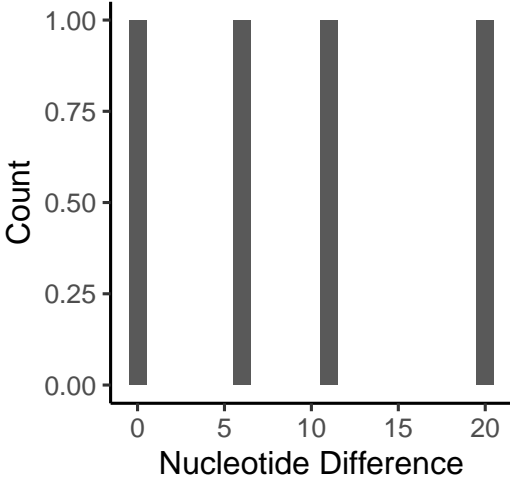
IGHV4-NL_27*01_S5720

9 sequences assigned
No exact matches.



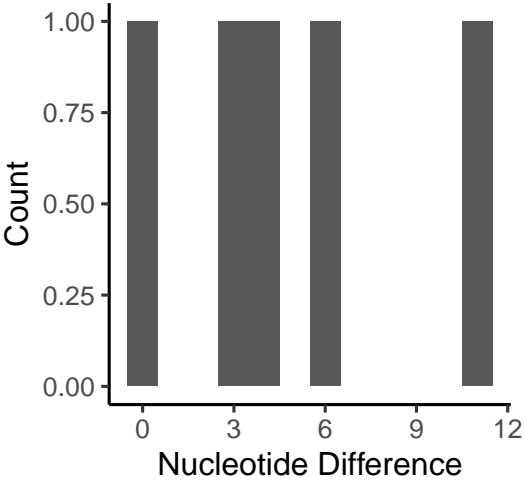
IGHV4-NL_29*01_S3760

60 sequences assigned
1 (1.7%) exact matches, in which:
1 unique CDR3
1 unique J



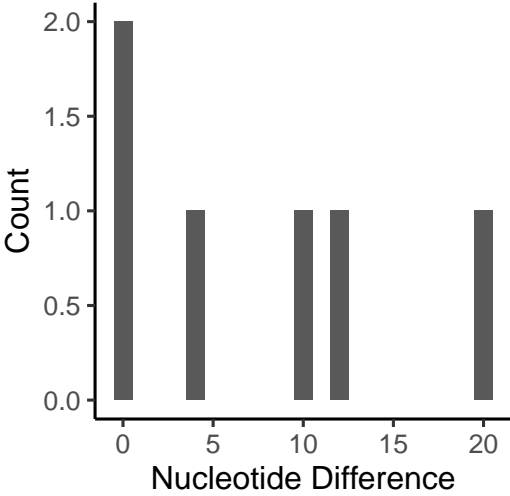
IGHV4-NL_27*01_S1458

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



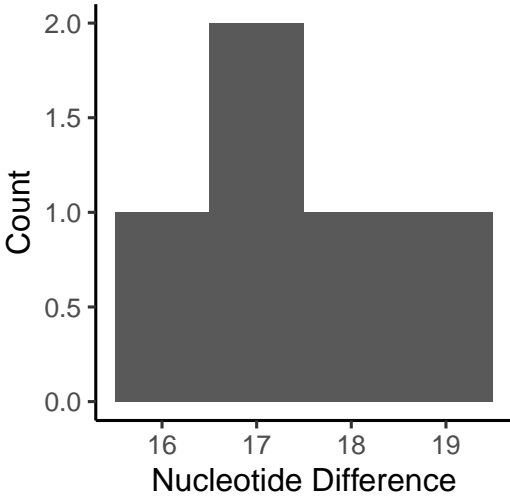
IGHV4-NL_27*01_S9001

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



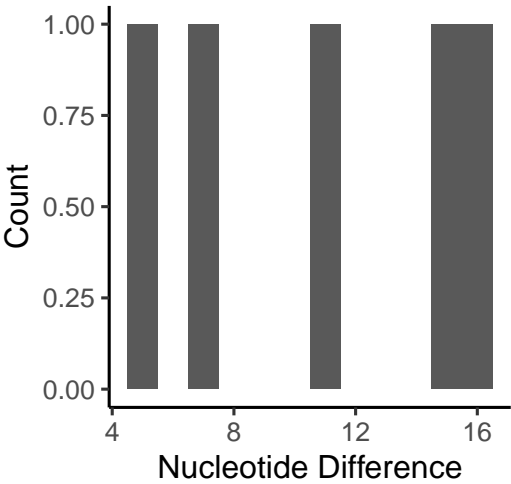
IGHV4-NL_29*01_S5315

56 sequences assigned
No exact matches.



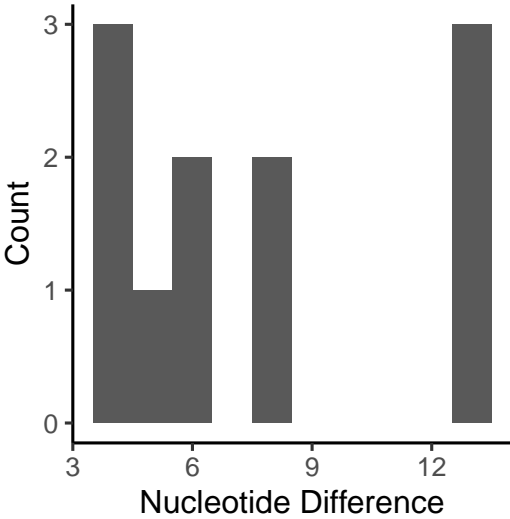
IGHV4-NL_27*01_S2822

5 sequences assigned
No exact matches.



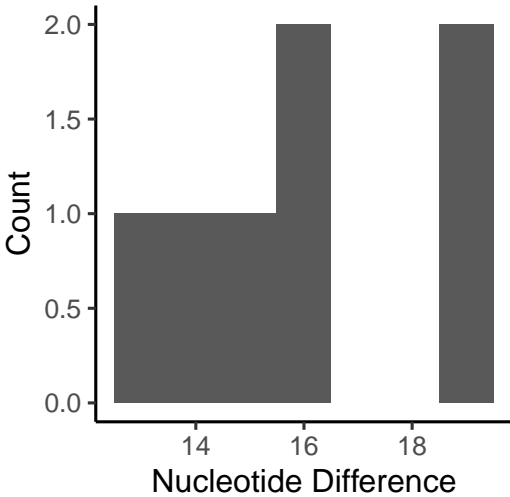
IGHV4-NL_28*01_S2610

12 sequences assigned
No exact matches.



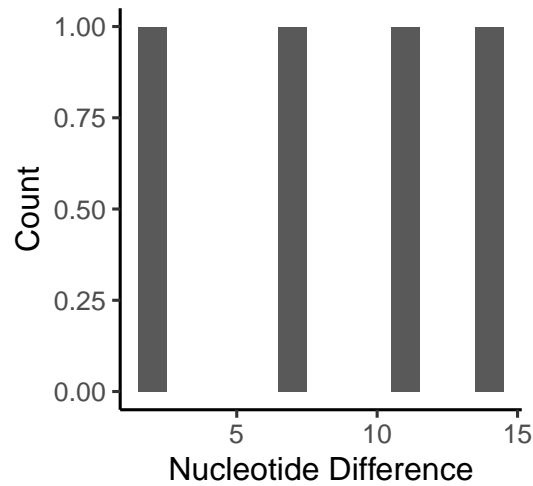
IGHV4-NL_3*01_S7864

110 sequences assigned
No exact matches.



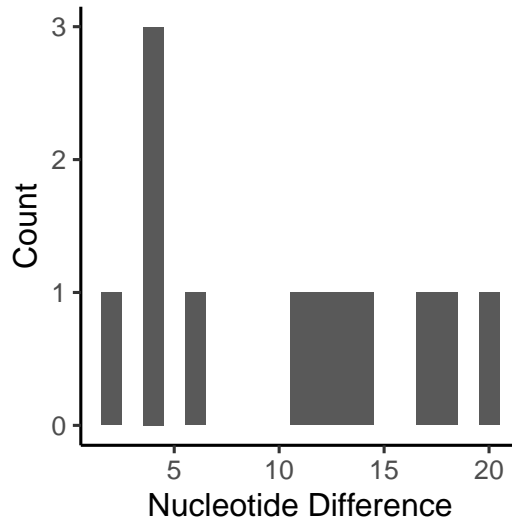
IGHV4–NL_30*01_S4257

25 sequences assigned
No exact matches.



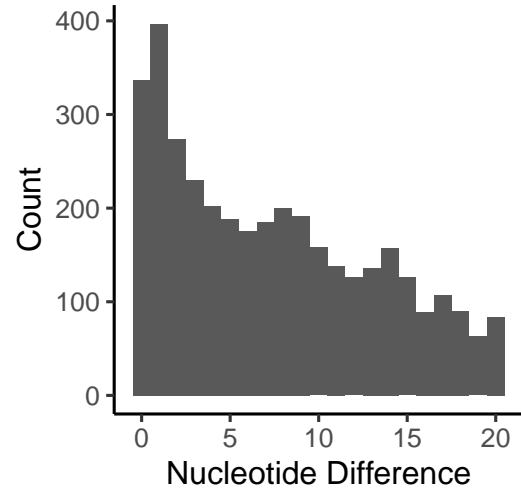
IGHV4–NL_33*01_S4467

37 sequences assigned
No exact matches.



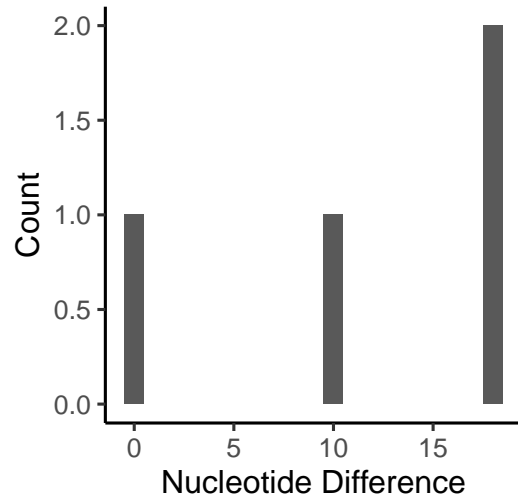
IGHV4–NL_36*01_S8200

4215 sequences assigned
337 (8%) exact matches, in which:
270 unique CDR3
7 unique J



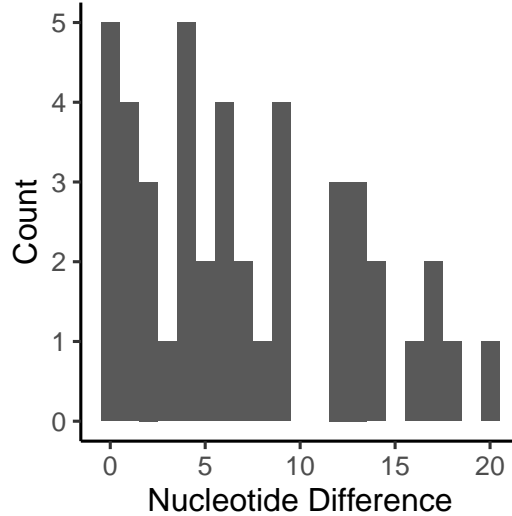
IGHV4–NL_32*01_S3033

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



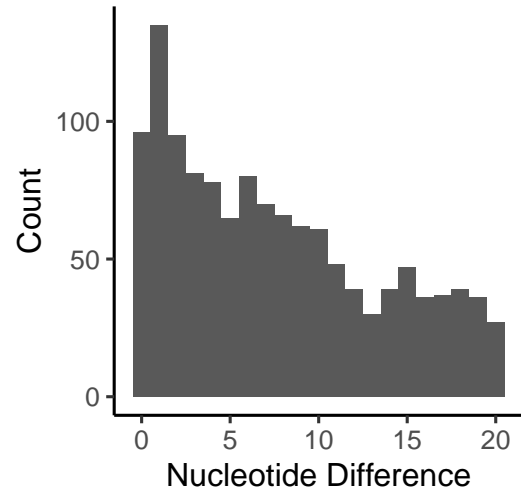
IGHV4–NL_33*01_S9428

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



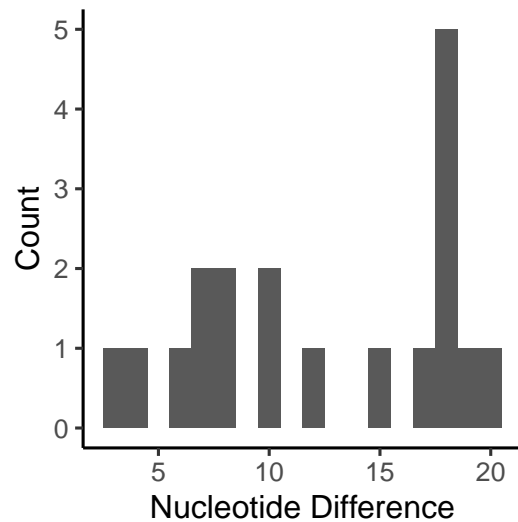
IGHV4–NL_38*01_S8437

1438 sequences assigned
96 (6.7%) exact matches, in which:
76 unique CDR3
6 unique J



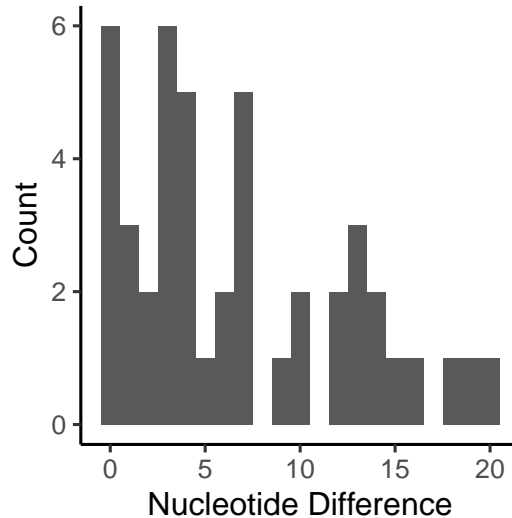
IGHV4–NL_33*01_S4377

61 sequences assigned
No exact matches.



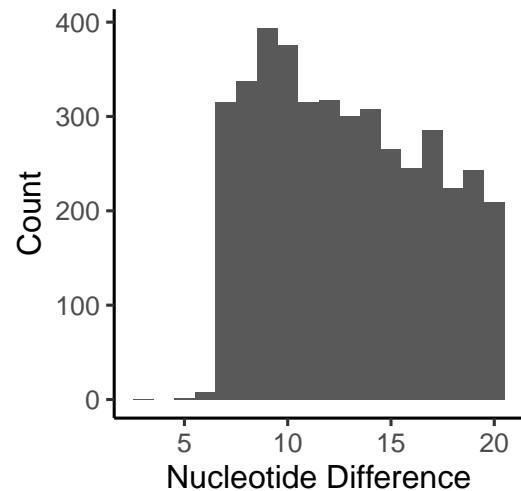
IGHV4–NL_34*01_S4637

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



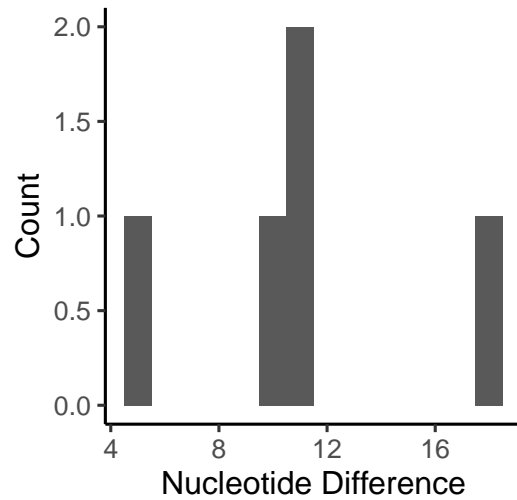
IGHV4–NL_4*01_S5211

5872 sequences assigned
No exact matches.



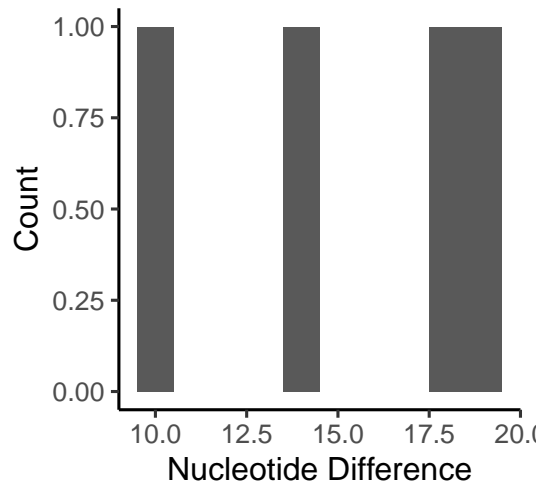
IGHV4-NL_4*01_S8866

27 sequences assigned
No exact matches.



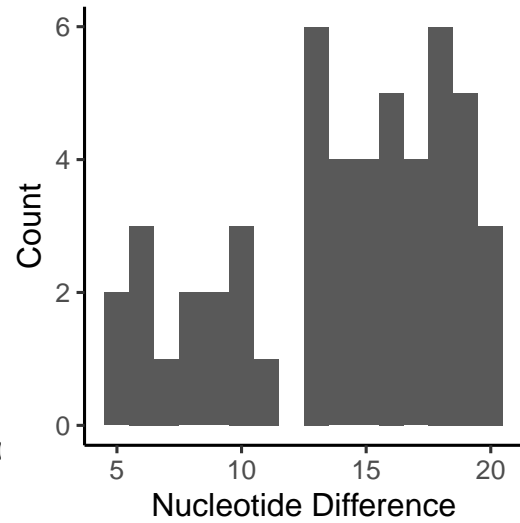
IGHV4-NL_43*01_S4510

21 sequences assigned
No exact matches.



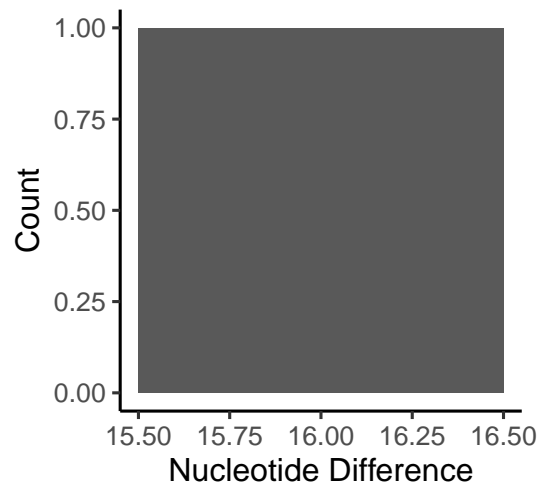
IGHV4-NL_5*01_S5308

182 sequences assigned
No exact matches.



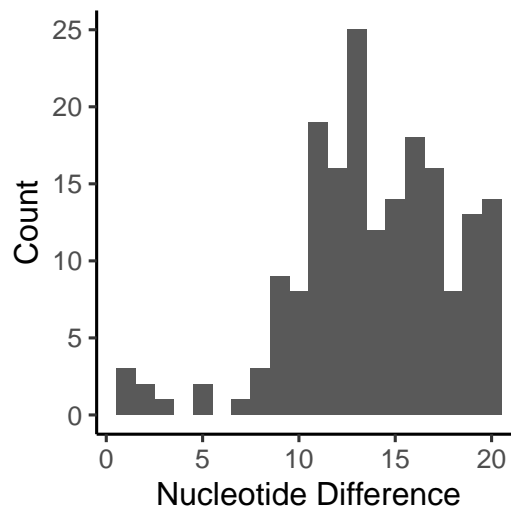
IGHV4-NL_40*01_S0690

3 sequences assigned
No exact matches.



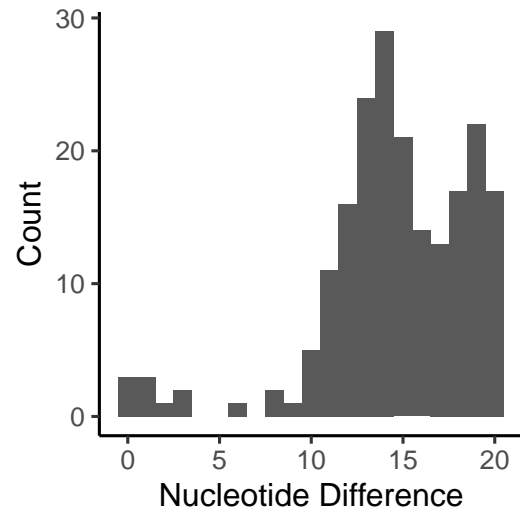
IGHV4-NL_5*01_S0876

270 sequences assigned
No exact matches.



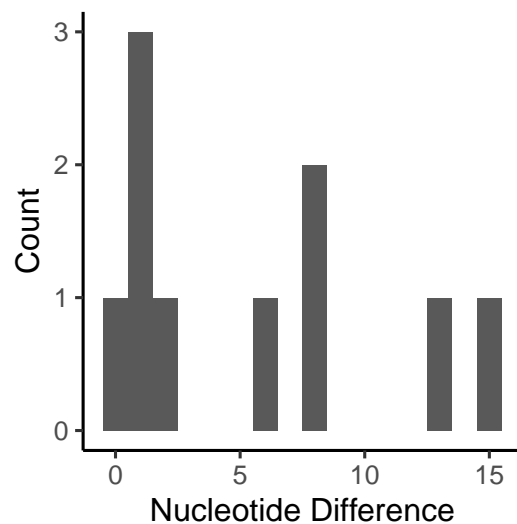
IGHV4-NL_5*01_S8645

460 sequences assigned
3 (0.7%) exact matches, in which:
3 unique CDR3
2 unique J



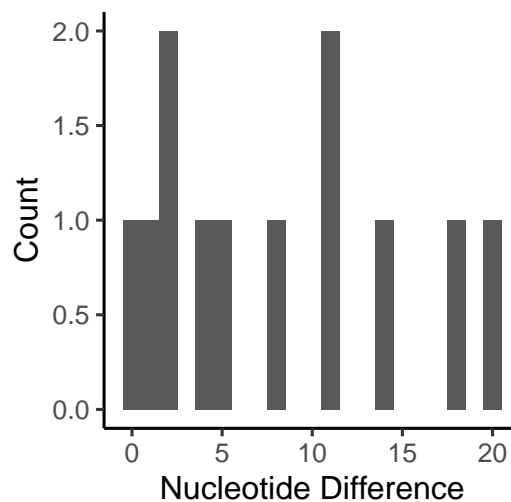
IGHV4-NL_42*01_S3666

12 sequences assigned
1 (8.3%) exact matches, in which:
1 unique CDR3
1 unique J



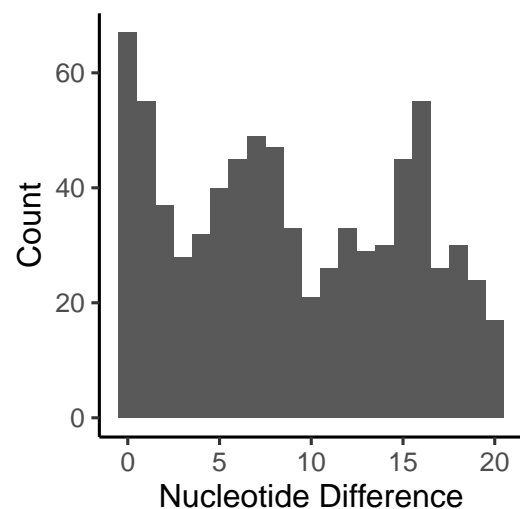
IGHV4-NL_5*01_S5158

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



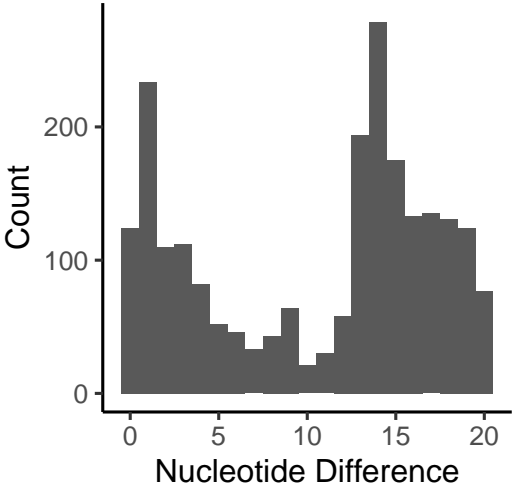
IGHV4-NL_9*01_S4567

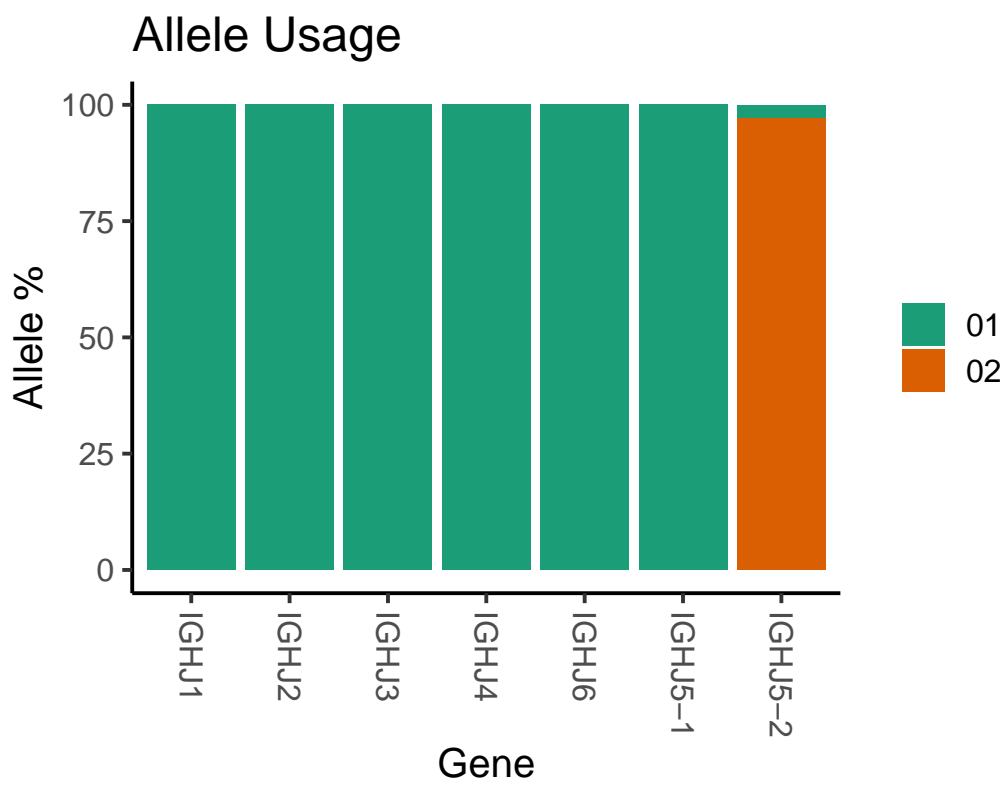
932 sequences assigned
67 (7.2%) exact matches, in which:
59 unique CDR3
5 unique J



IGHV5-15*01_S9061

2696 sequences assigned
124 (4.6%) exact matches, in which:
98 unique CDR3
6 unique J





Warning – no inferred sequences found.