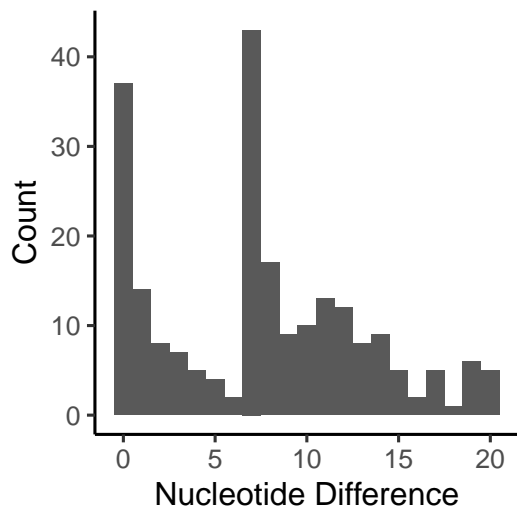


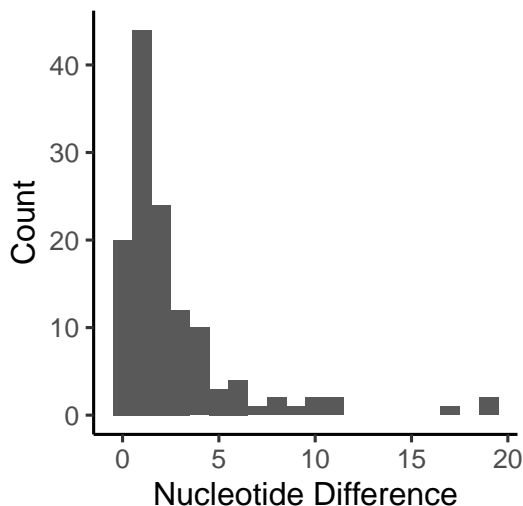
IGHV1-84*01_S9171

282 sequences assigned
37 (13.1%) exact matches, in which:
23 unique CDR3
5 unique J



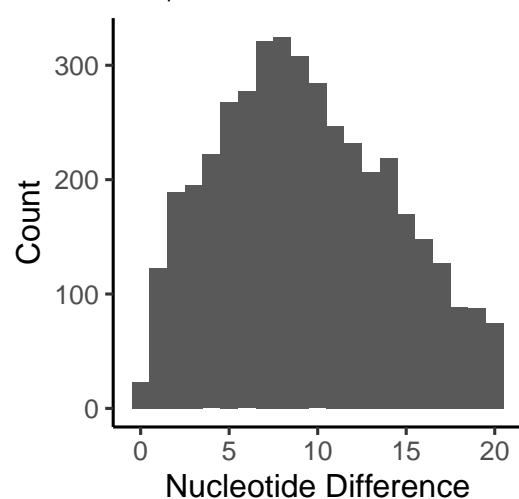
IGHV1-170*01_S3055

132 sequences assigned
20 (15.2%) exact matches, in which:
10 unique CDR3
4 unique J



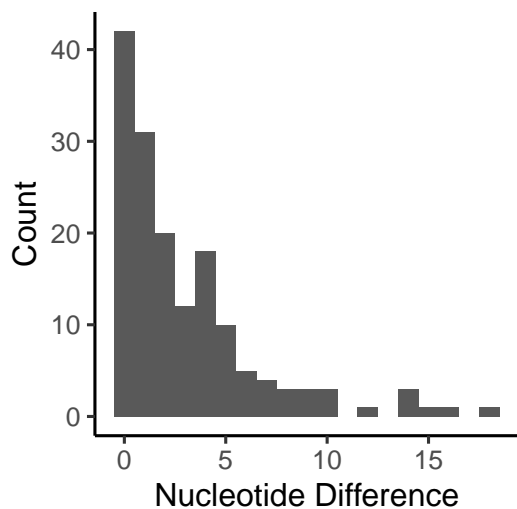
IGHV2-69*01_G289T

4607 sequences assigned
23 (0.5%) exact matches, in which:
23 unique CDR3
6 unique J



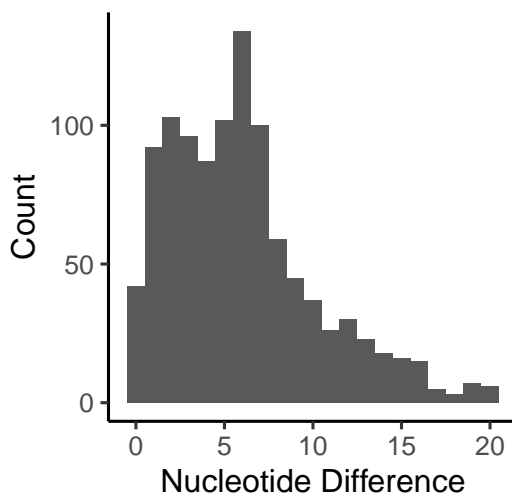
IGHV1-138*01_S2054

158 sequences assigned
42 (26.6%) exact matches, in which:
34 unique CDR3
5 unique J



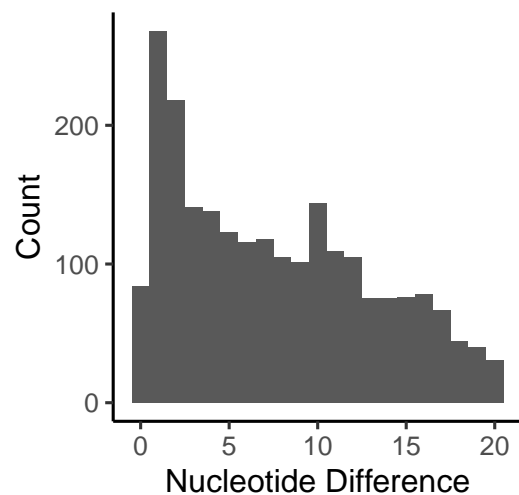
IGHV2-7*02_S1732

1059 sequences assigned
42 (4%) exact matches, in which:
35 unique CDR3
7 unique J



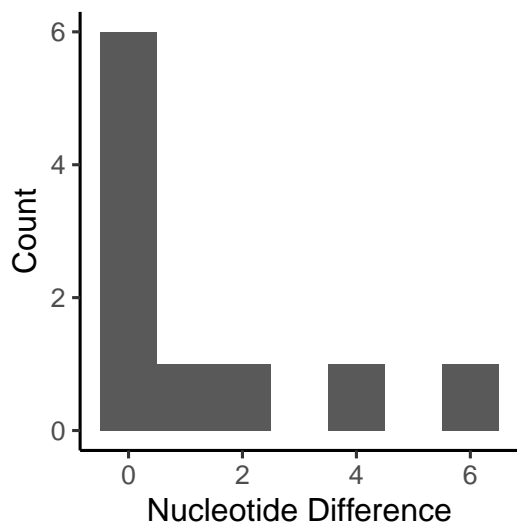
IGHV2-173*01_G289T

2504 sequences assigned
84 (3.4%) exact matches, in which:
81 unique CDR3
7 unique J



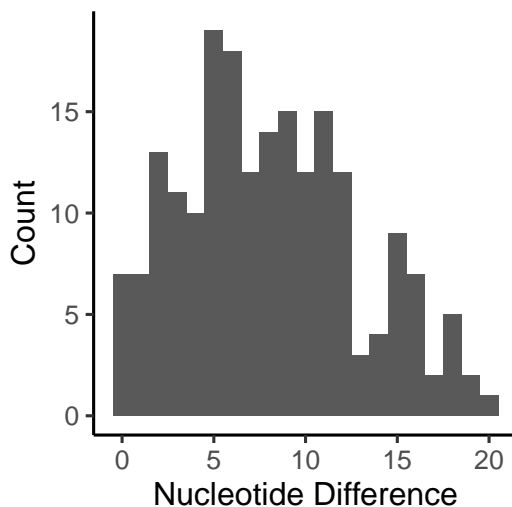
IGHV1-138*01_S2593

10 sequences assigned
6 (60%) exact matches, in which:
6 unique CDR3
4 unique J



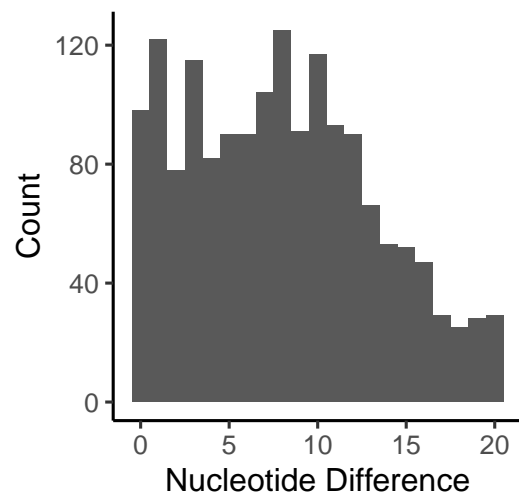
IGHV2-7*02_S4285

208 sequences assigned
7 (3.4%) exact matches, in which:
5 unique CDR3
4 unique J



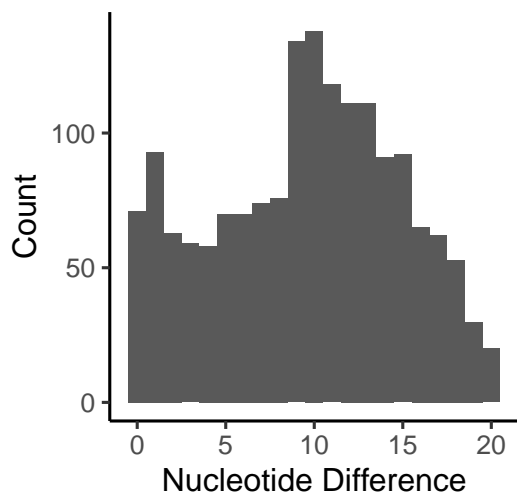
IGHV2-NL_1*01_S5779

1836 sequences assigned
98 (5.3%) exact matches, in which:
68 unique CDR3
5 unique J



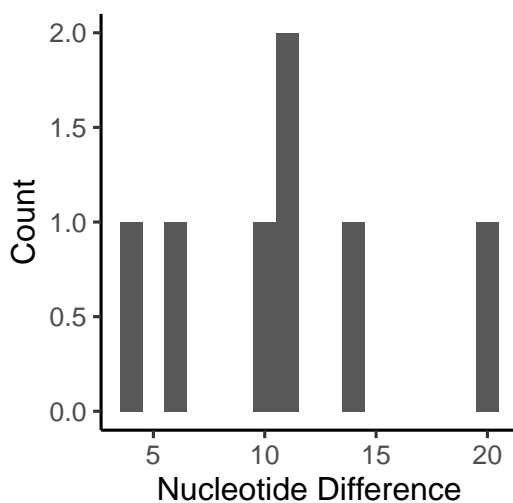
IGHV2–NL_1*01_S9725

1801 sequences assigned
71 (3.9%) exact matches, in which:
53 unique CDR3
6 unique J



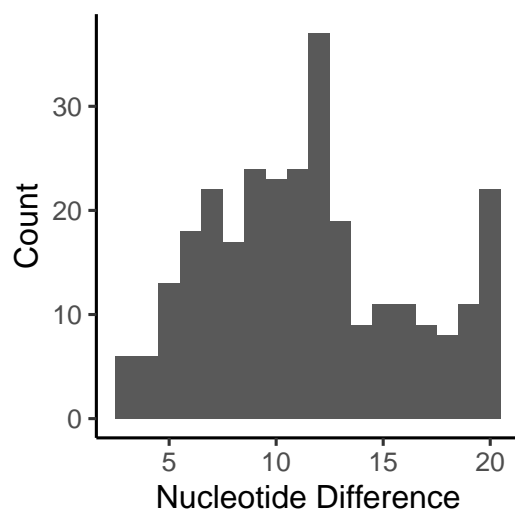
IGHV3–28*01_S5703

12 sequences assigned
No exact matches.



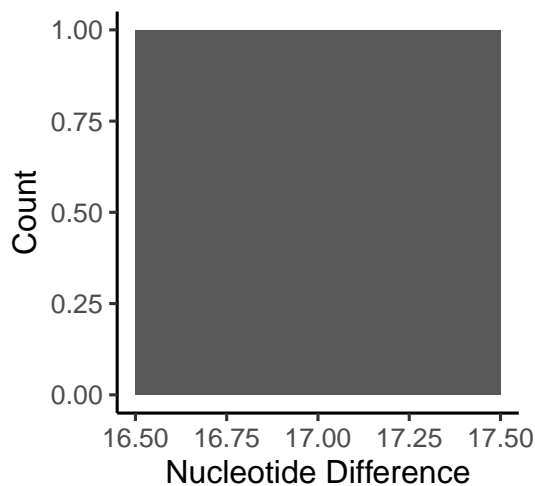
IGHV3–37*01_S6630

543 sequences assigned
No exact matches.



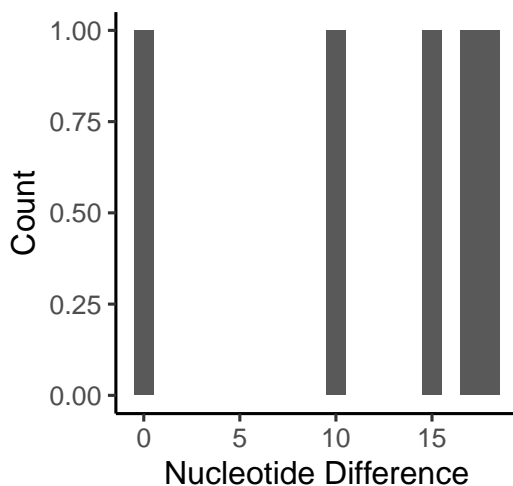
IGHV3–28*01_S0096

1 sequences assigned
No exact matches.



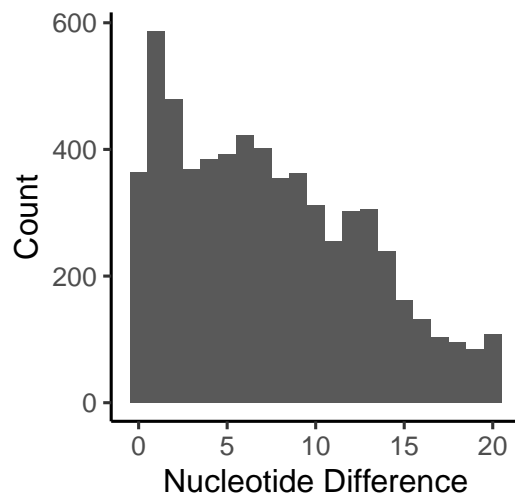
IGHV3–34*01_S1309

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



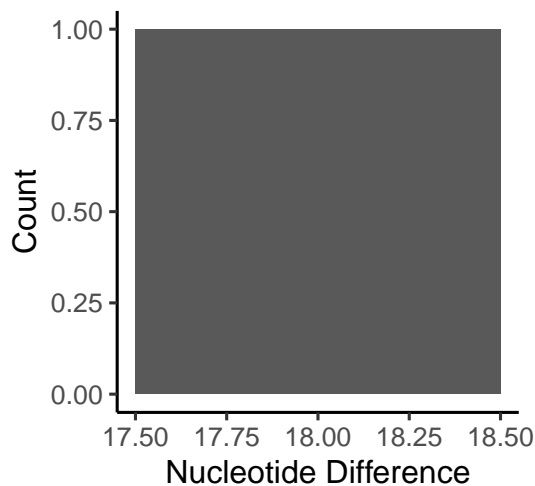
IGHV3–50*01_S1879

6891 sequences assigned
364 (5.3%) exact matches, in which:
289 unique CDR3
7 unique J



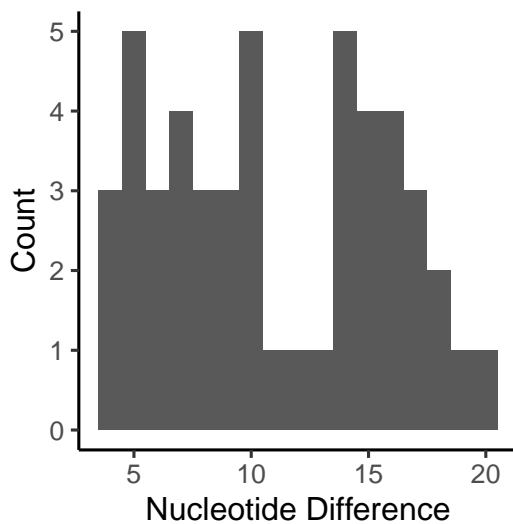
IGHV3–28*01_S3792

8 sequences assigned
No exact matches.



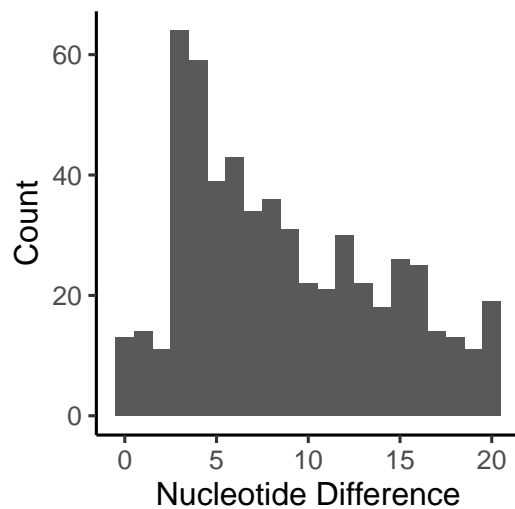
IGHV3–37*01_S4420

114 sequences assigned
No exact matches.



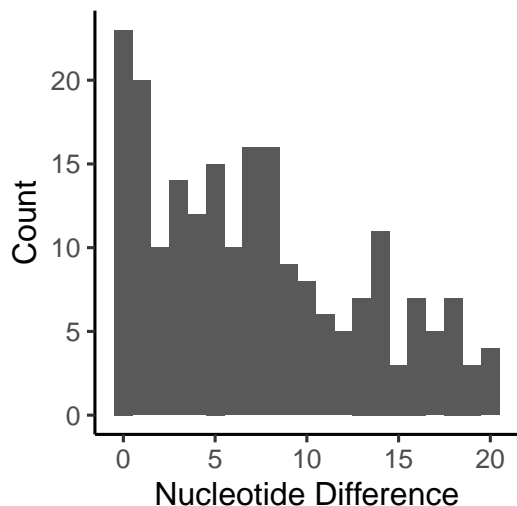
IGHV3–53*01_S3647

628 sequences assigned
13 (2.1%) exact matches, in which:
11 unique CDR3
4 unique J



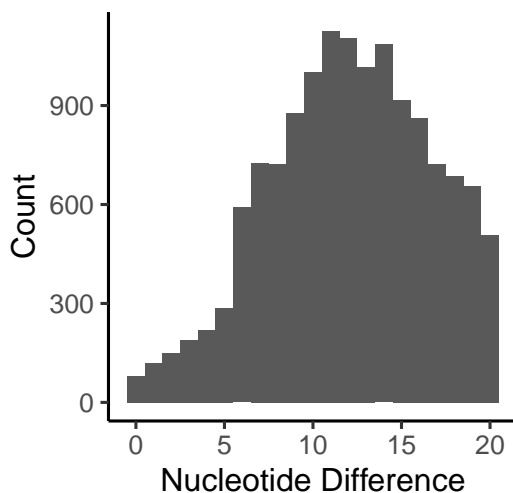
IGHV3-53*01_S5688

252 sequences assigned
23 (9.1%) exact matches, in which:
19 unique CDR3
5 unique J



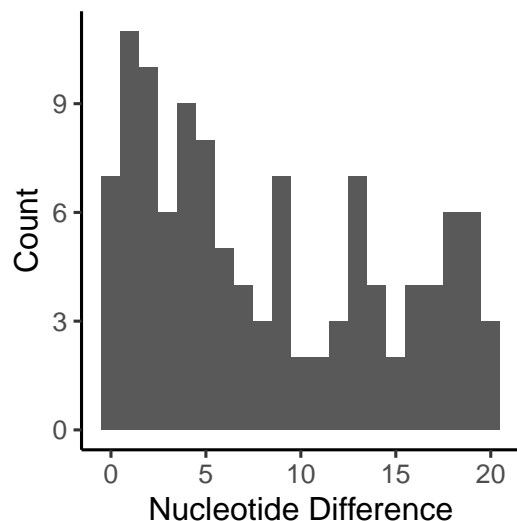
IGHV3-88*02_S7485

16971 sequences assigned
81 (0.5%) exact matches, in which:
62 unique CDR3
4 unique J



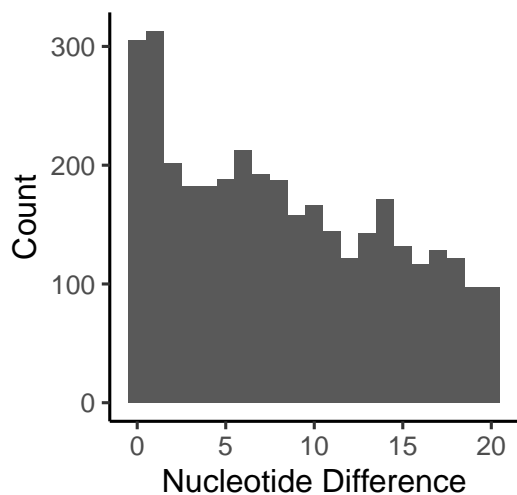
IGHV3-100*01_S4375

159 sequences assigned
7 (4.4%) exact matches, in which:
6 unique CDR3
4 unique J



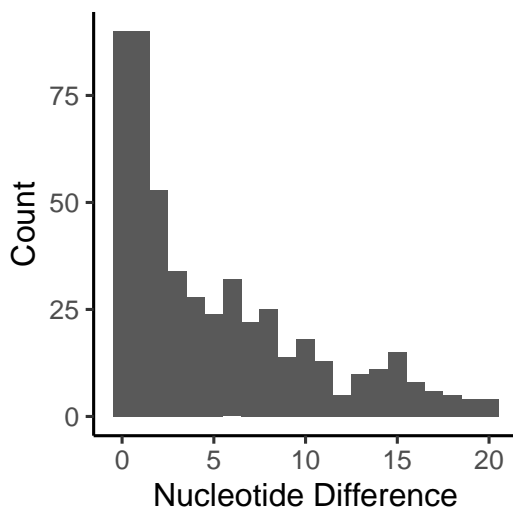
IGHV3-76*02_S4190

4024 sequences assigned
305 (7.6%) exact matches, in which:
251 unique CDR3
6 unique J



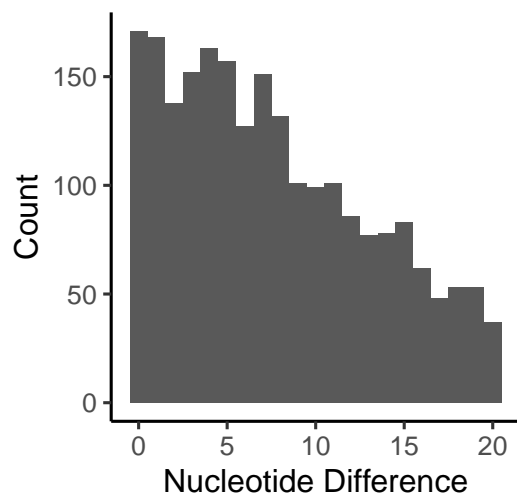
IGHV3-94*01_S4458

555 sequences assigned
90 (16.2%) exact matches, in which:
74 unique CDR3
7 unique J



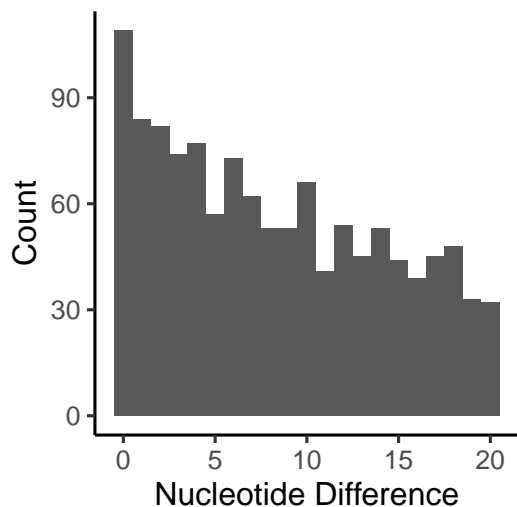
IGHV3-122*01_S8388

2510 sequences assigned
171 (6.8%) exact matches, in which:
138 unique CDR3
7 unique J



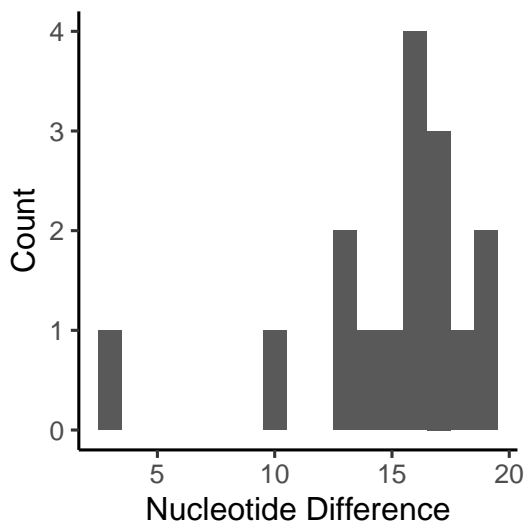
IGHV3-76*02_S4190_A29

1370 sequences assigned
109 (8%) exact matches, in which:
98 unique CDR3
5 unique J



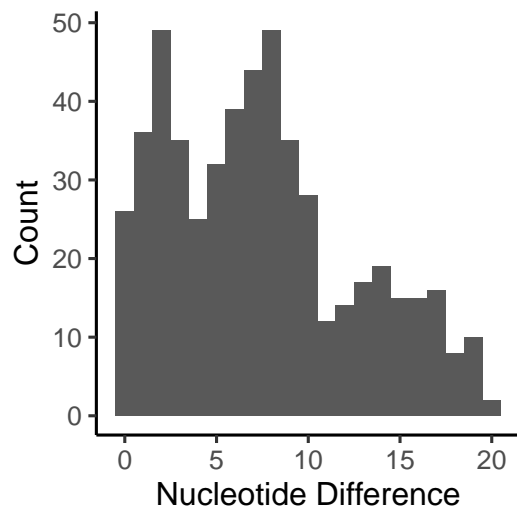
IGHV3-100*01_S4205

30 sequences assigned
No exact matches.



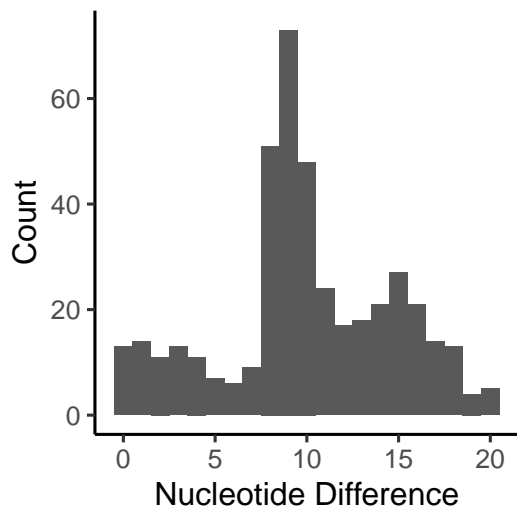
IGHV3-127*01_S3553

591 sequences assigned
26 (4.4%) exact matches, in which:
21 unique CDR3
4 unique J



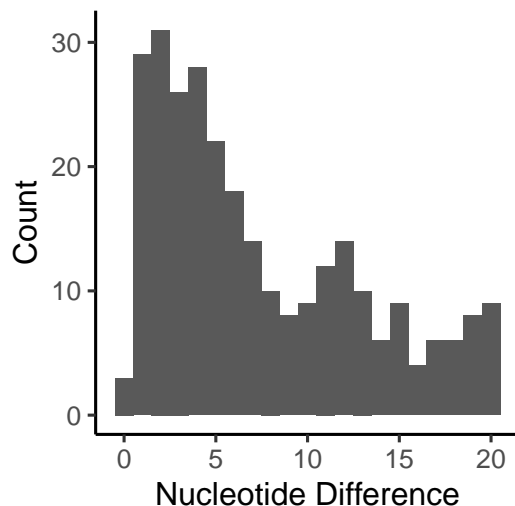
IGHV3-127*01_S6769

468 sequences assigned
13 (2.8%) exact matches, in which:
9 unique CDR3
3 unique J



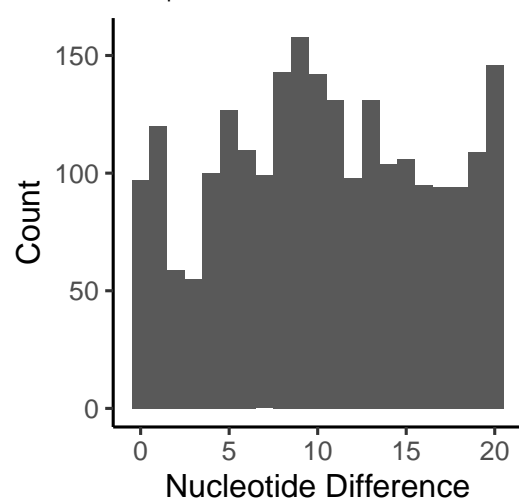
IGHV3-172*01_S8488

380 sequences assigned
3 (0.8%) exact matches, in which:
1 unique CDR3
1 unique J



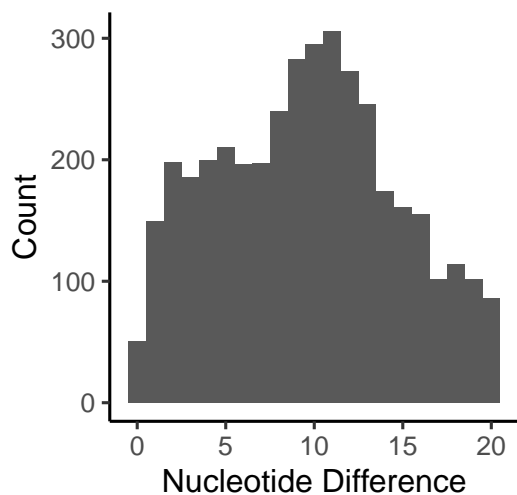
IGHV3-187*01_S1133

3050 sequences assigned
97 (3.2%) exact matches, in which:
74 unique CDR3
7 unique J



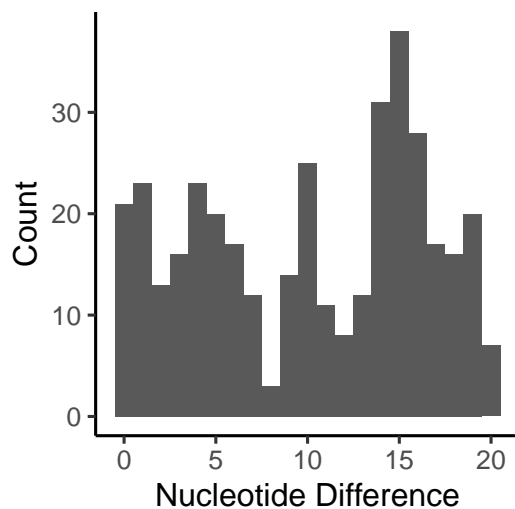
IGHV3-128*01_S1128

4614 sequences assigned
51 (1.1%) exact matches, in which:
42 unique CDR3
6 unique J



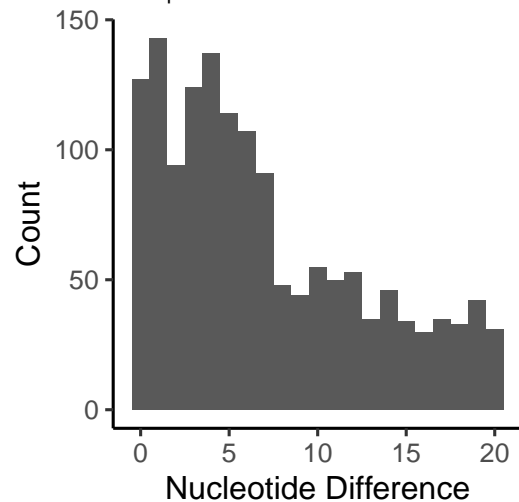
IGHV3-172*01_S8824

501 sequences assigned
21 (4.2%) exact matches, in which:
14 unique CDR3
3 unique J



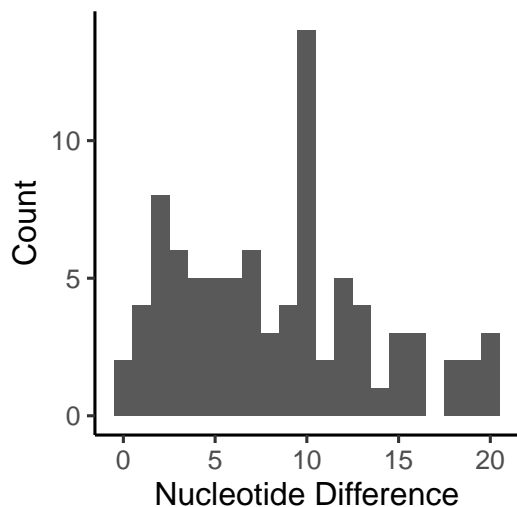
IGHV3-NL_1*01_S4331

1848 sequences assigned
127 (6.9%) exact matches, in which:
97 unique CDR3
6 unique J



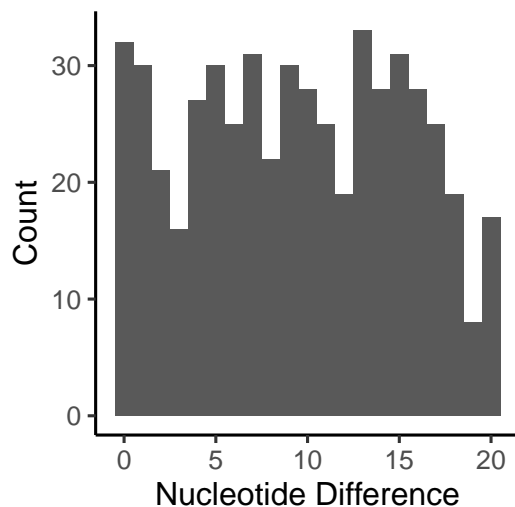
IGHV3-172*01_S1597

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



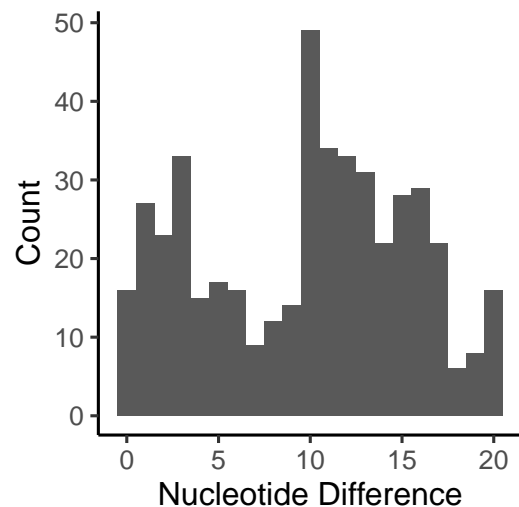
IGHV3-177*01_S1591

608 sequences assigned
32 (5.3%) exact matches, in which:
26 unique CDR3
6 unique J



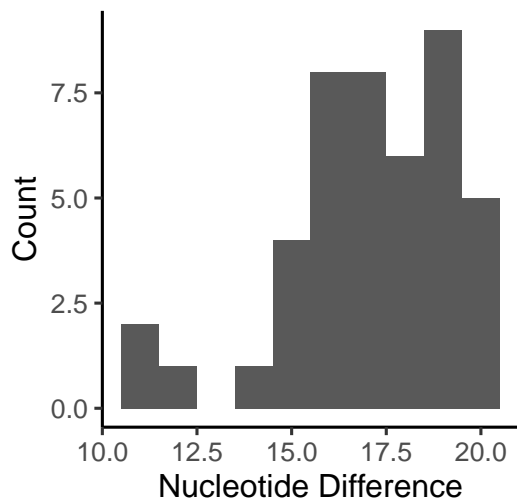
IGHV3-NL_1*01_S9422

584 sequences assigned
16 (2.7%) exact matches, in which:
10 unique CDR3
3 unique J



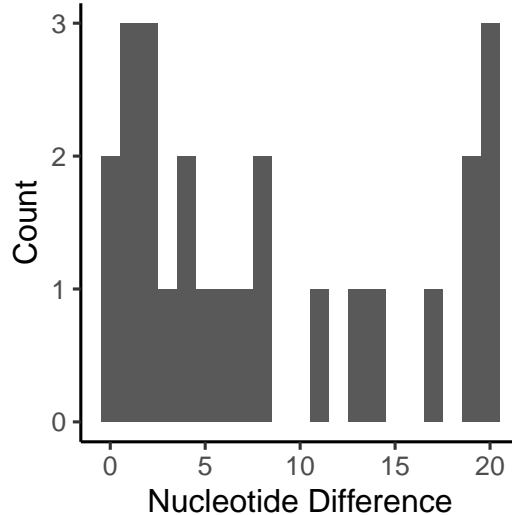
IGHV3-NL_10*02_S2212

110 sequences assigned
No exact matches.



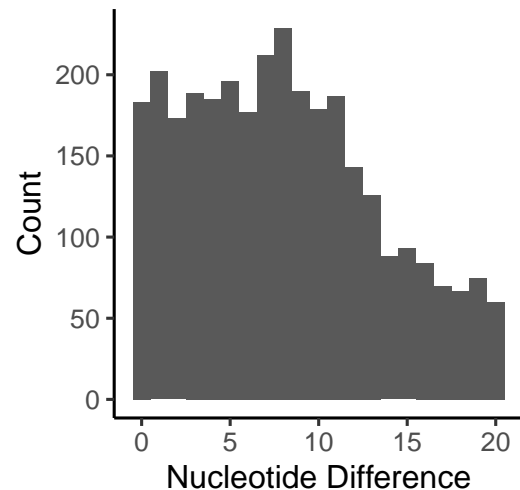
IGHV3-NL_13*01_S3940

31 sequences assigned
2 (6.5%) exact matches, in which:
2 unique CDR3
1 unique J



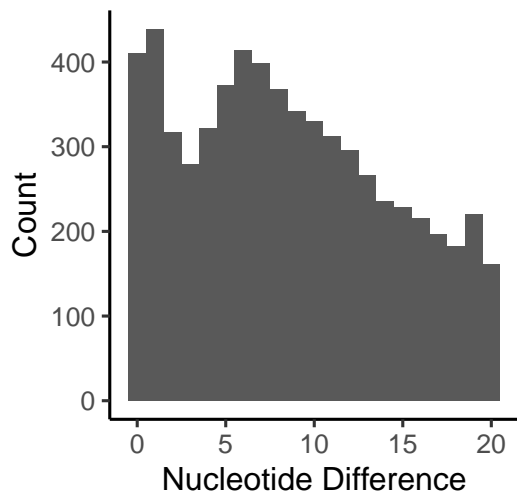
IGHV3-NL_17*01_S0507

3593 sequences assigned
183 (5.1%) exact matches, in which:
131 unique CDR3
7 unique J



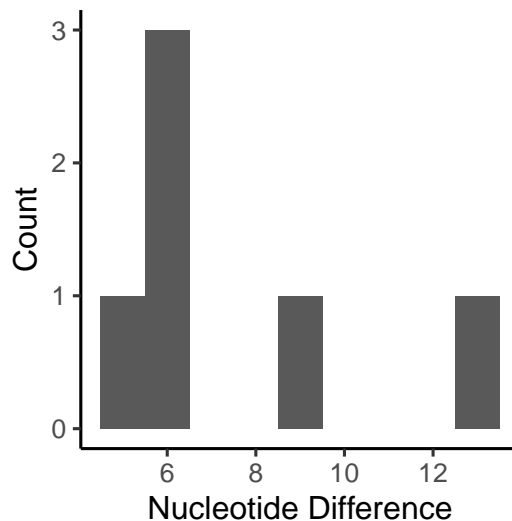
IGHV3-NL_11*01_S4619

7519 sequences assigned
410 (5.5%) exact matches, in which:
317 unique CDR3
7 unique J



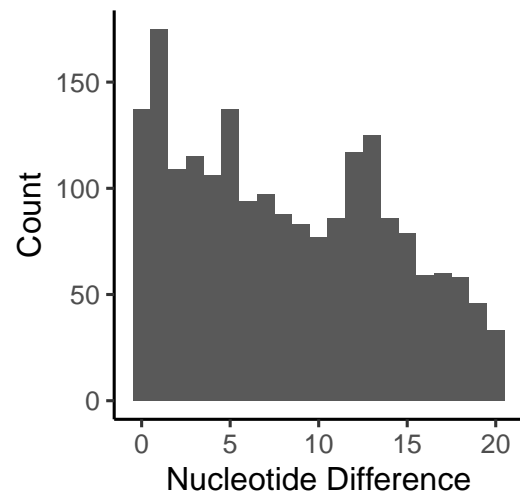
IGHV3-NL_15*01_S0604

6 sequences assigned
No exact matches.



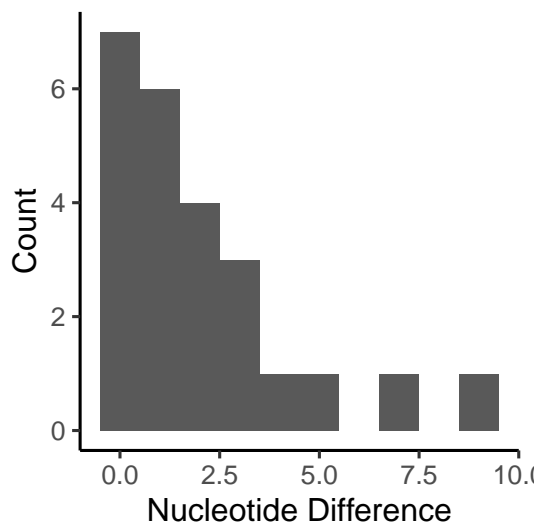
IGHV3-NL_17*01_S4250

2268 sequences assigned
137 (6%) exact matches, in which:
98 unique CDR3
4 unique J



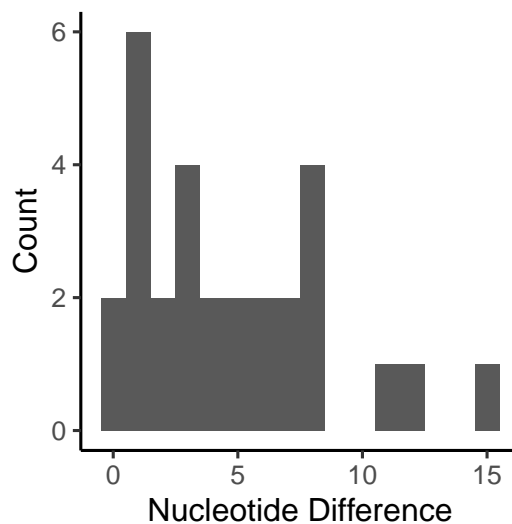
IGHV3-NL_12*02_S6994

33 sequences assigned
7 (21.2%) exact matches, in which:
6 unique CDR3
3 unique J



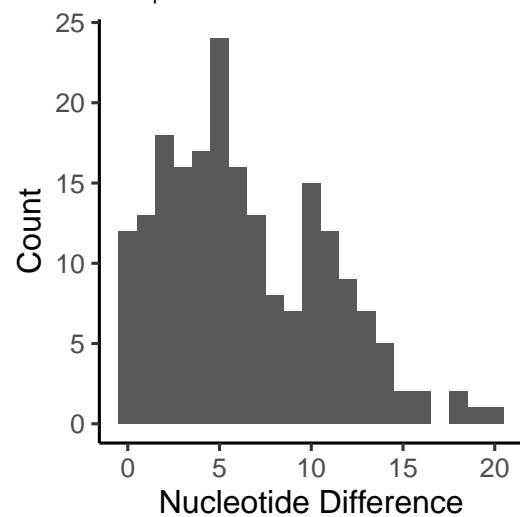
IGHV3-NL_16*01_S8234

31 sequences assigned
2 (6.5%) exact matches, in which:
2 unique CDR3
1 unique J



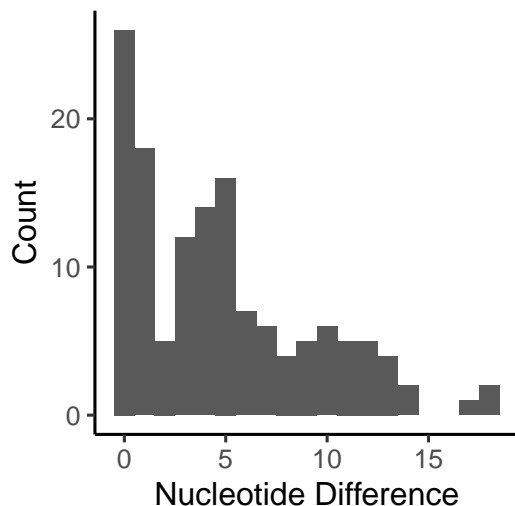
IGHV3-NL_18*01_S3867

217 sequences assigned
12 (5.5%) exact matches, in which:
11 unique CDR3
4 unique J



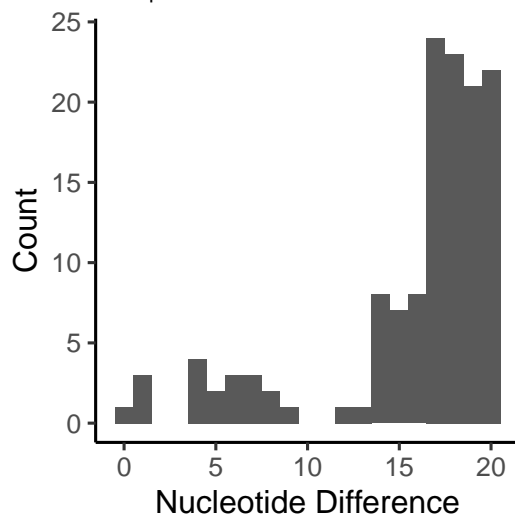
IGHV3–NL_19*01_S5460

141 sequences assigned
26 (18.4%) exact matches, in which:
21 unique CDR3
5 unique J



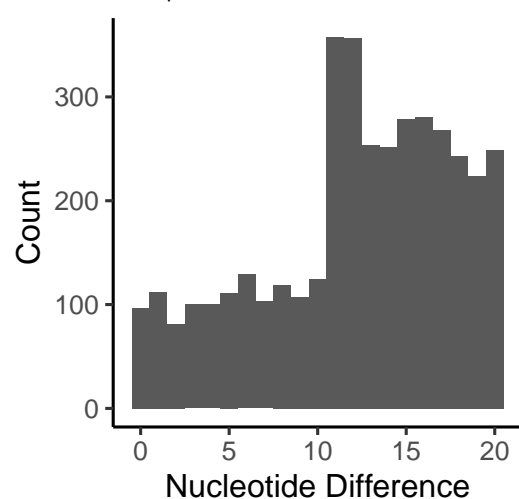
IGHV3–NL_6*02_S7808

443 sequences assigned
1 (0.2%) exact matches, in which:
1 unique CDR3
1 unique J



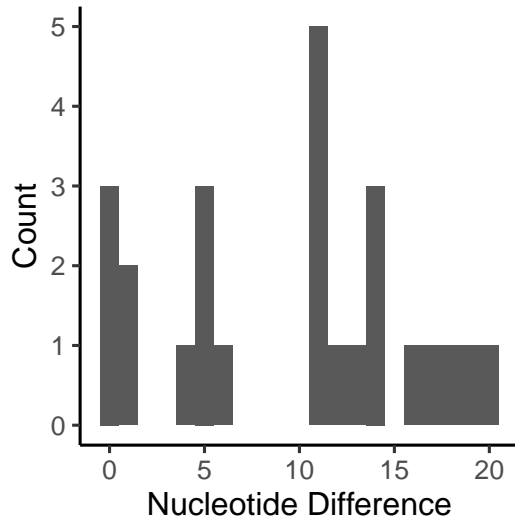
IGHV3–NL_9*01_S6098

5544 sequences assigned
97 (1.7%) exact matches, in which:
65 unique CDR3
7 unique J



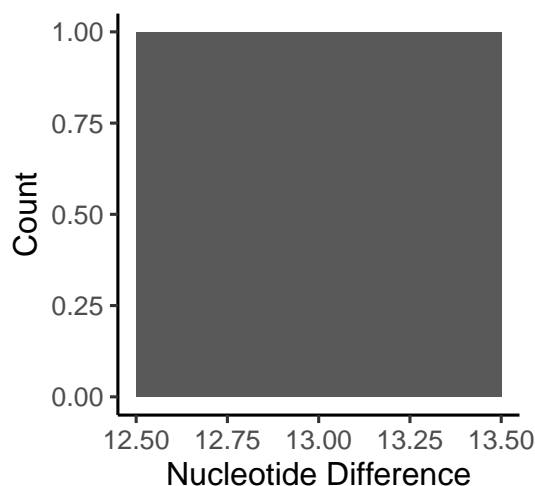
IGHV3–NL_2*01_S1693

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



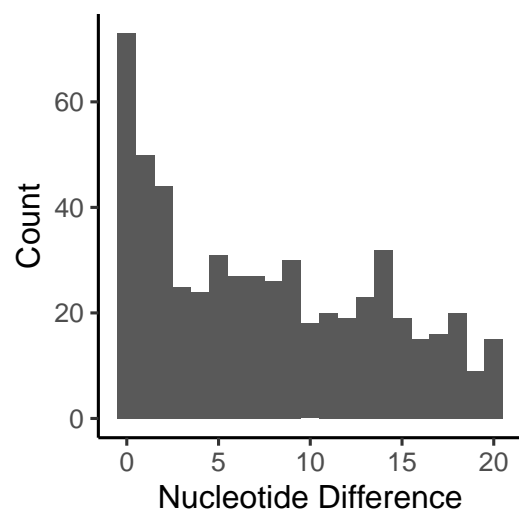
IGHV3–NL_7*01_S0199

18 sequences assigned
No exact matches.



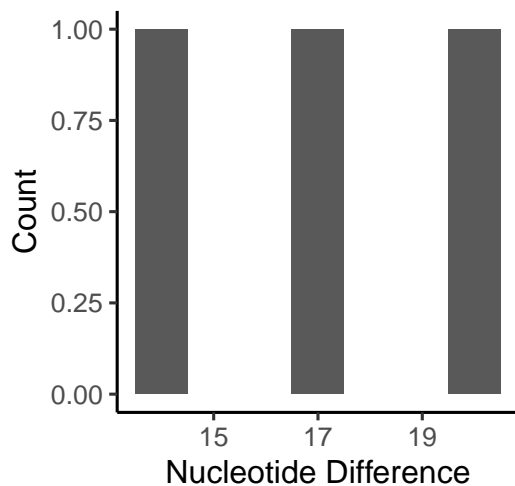
IGHV4–79*02_S9501

712 sequences assigned
73 (10.3%) exact matches, in which:
69 unique CDR3
5 unique J



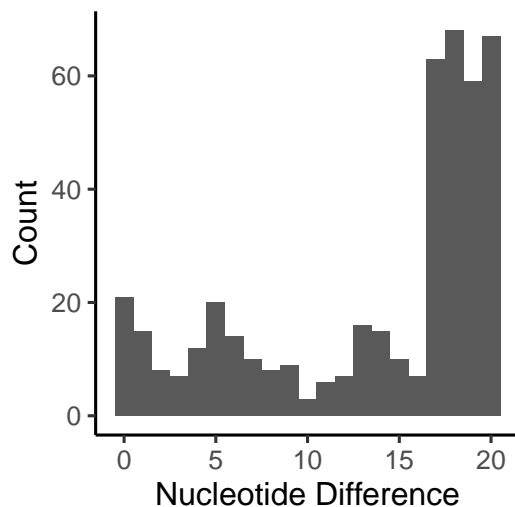
IGHV3–NL_5*01_S8361

10 sequences assigned
No exact matches.



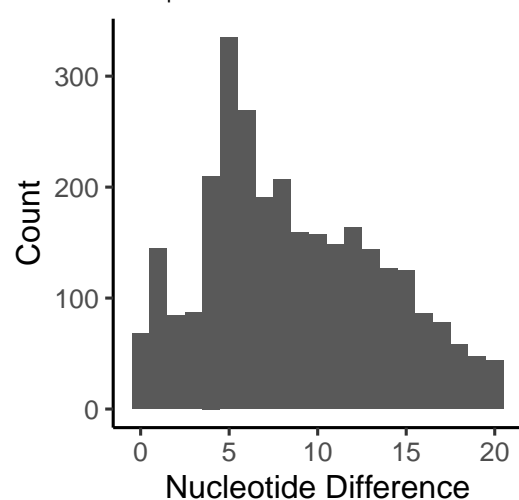
IGHV3–NL_8*01_S7474

736 sequences assigned
21 (2.9%) exact matches, in which:
16 unique CDR3
5 unique J



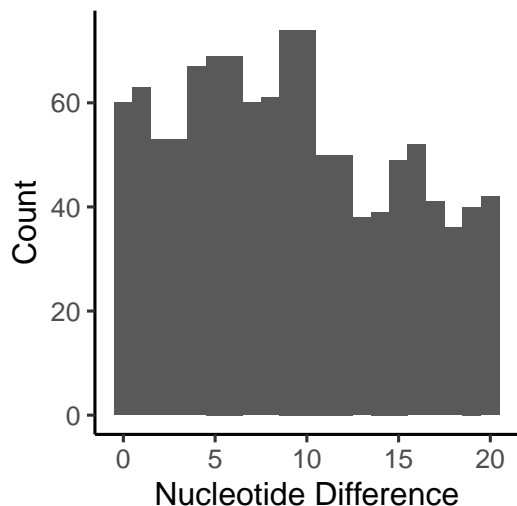
IGHV4–93*01_S5203

3293 sequences assigned
68 (2.1%) exact matches, in which:
64 unique CDR3
6 unique J



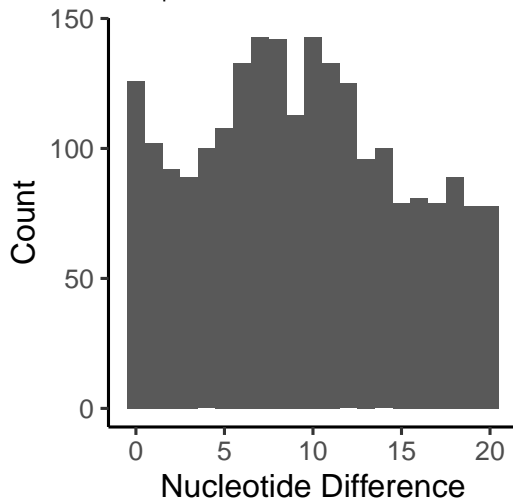
IGHV4-117*01_S5807

1465 sequences assigned
60 (4.1%) exact matches, in which:
56 unique CDR3
6 unique J



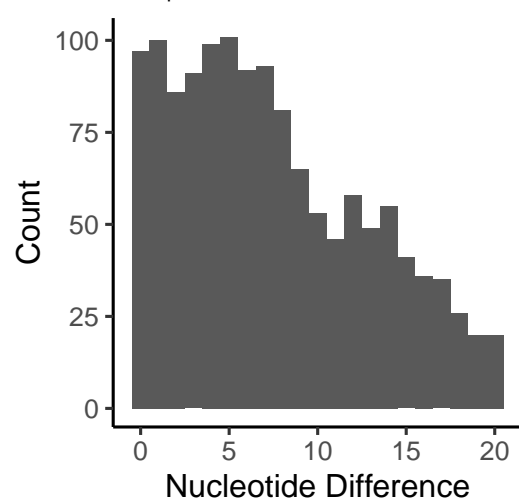
IGHV4-149*01_S1992

2944 sequences assigned
126 (4.3%) exact matches, in which:
110 unique CDR3
8 unique J



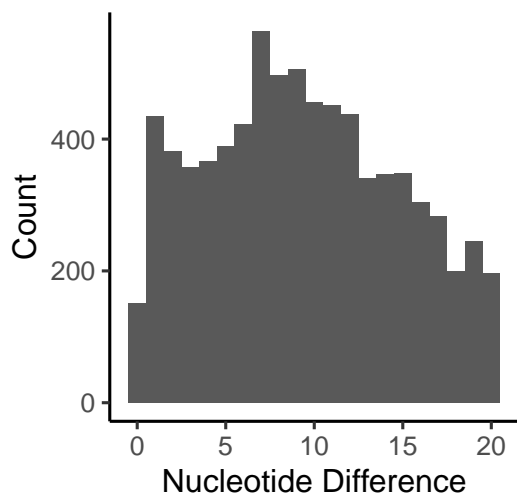
IGHV4-NL_1*01_S8720

1539 sequences assigned
97 (6.3%) exact matches, in which:
84 unique CDR3
7 unique J



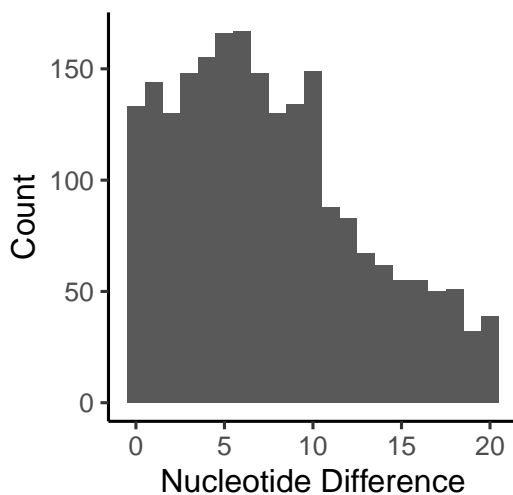
IGHV4-117*01_S8404

8694 sequences assigned
151 (1.7%) exact matches, in which:
137 unique CDR3
6 unique J



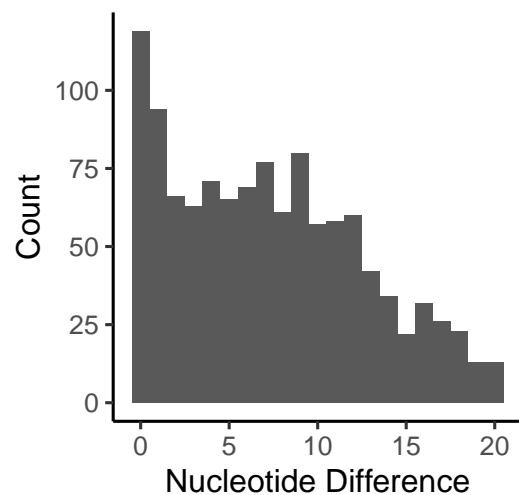
IGHV4-NL_1*01_S7297

2373 sequences assigned
133 (5.6%) exact matches, in which:
115 unique CDR3
7 unique J



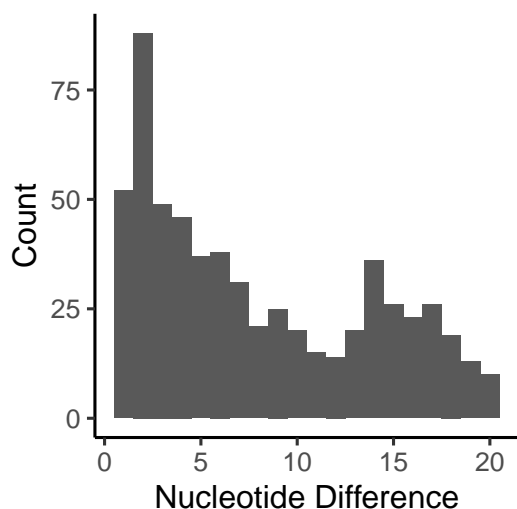
IGHV4-NL_1*01_S9508

1208 sequences assigned
119 (9.9%) exact matches, in which:
106 unique CDR3
6 unique J



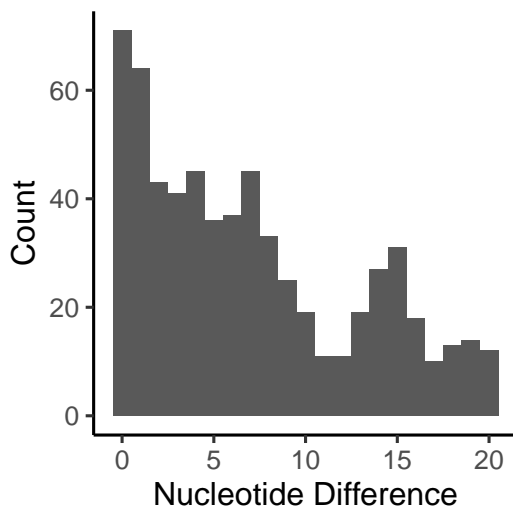
IGHV4-144*01_S5374

768 sequences assigned
No exact matches.



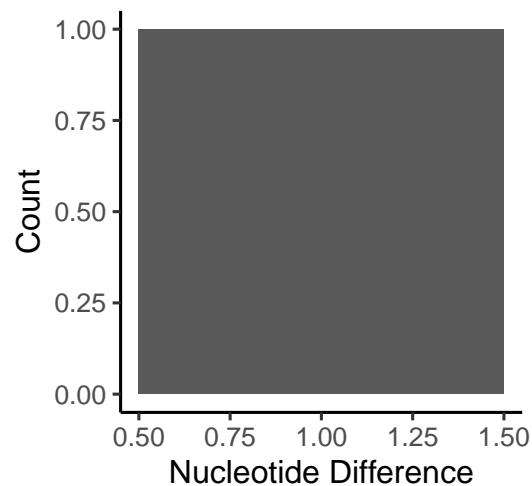
IGHV4-NL_1*01_S8621

683 sequences assigned
71 (10.4%) exact matches, in which:
63 unique CDR3
6 unique J



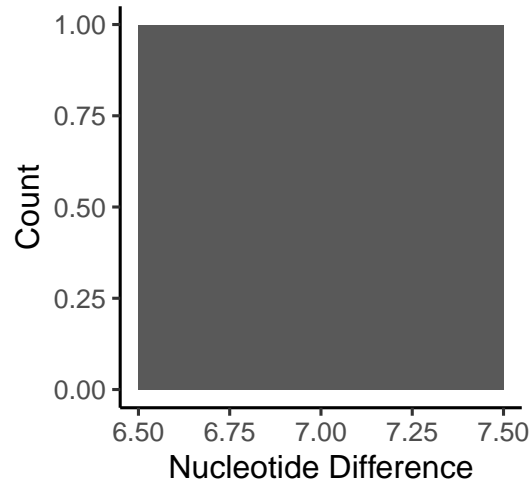
IGHV4-NL_10*01_S7684

1 sequences assigned
No exact matches.



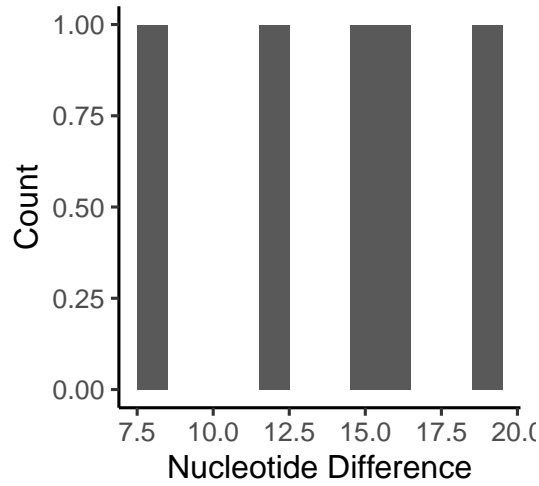
IGHV4-NL_10*02_S934

3 sequences assigned
No exact matches.



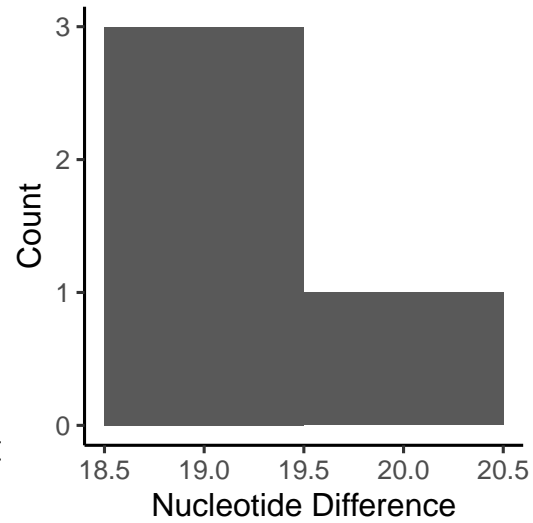
IGHV4-NL_12*01_S806

15 sequences assigned
No exact matches.



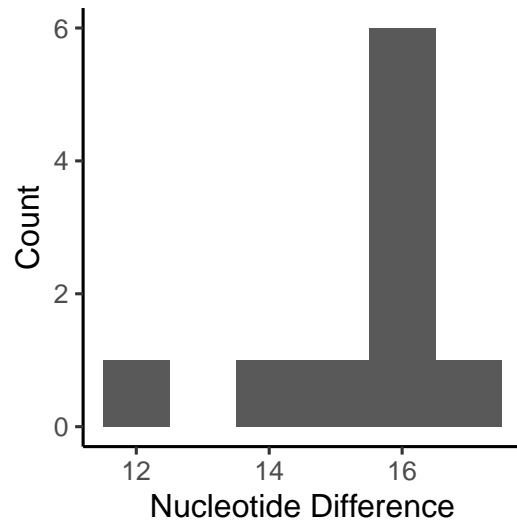
IGHV4-NL_20*01_S4754

26 sequences assigned
No exact matches.



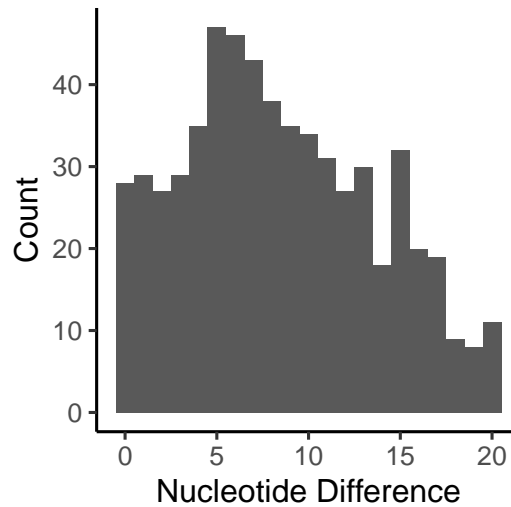
IGHV4-NL_11*01_S5570

24 sequences assigned
No exact matches.



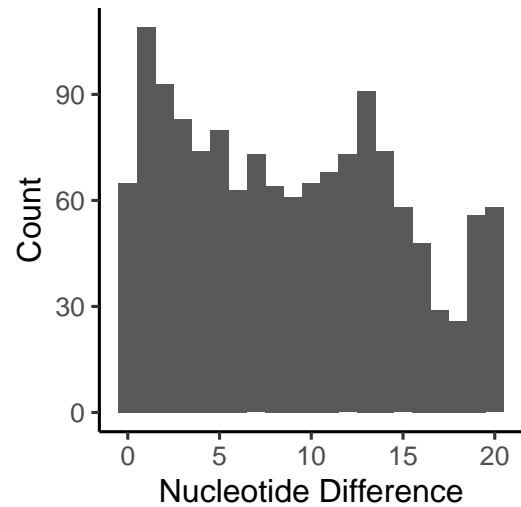
IGHV4-NL_16*01_S2324

664 sequences assigned
28 (4.2%) exact matches, in which:
26 unique CDR3
4 unique J



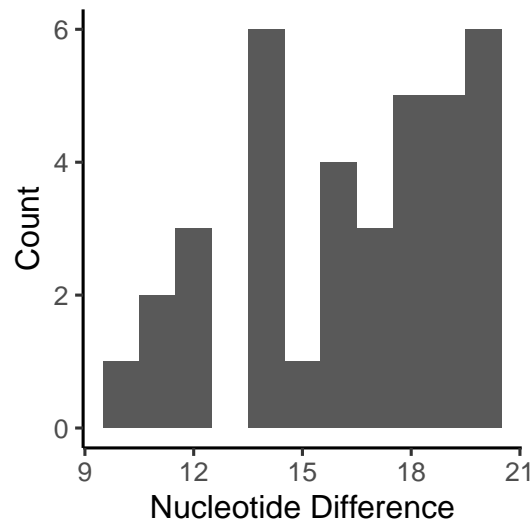
IGHV4-NL_21*01_S0138

2086 sequences assigned
65 (3.1%) exact matches, in which:
62 unique CDR3
7 unique J



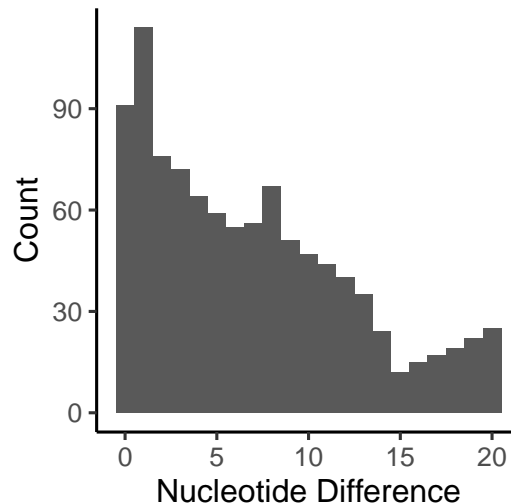
IGHV4-NL_12*01_S5174

113 sequences assigned
No exact matches.



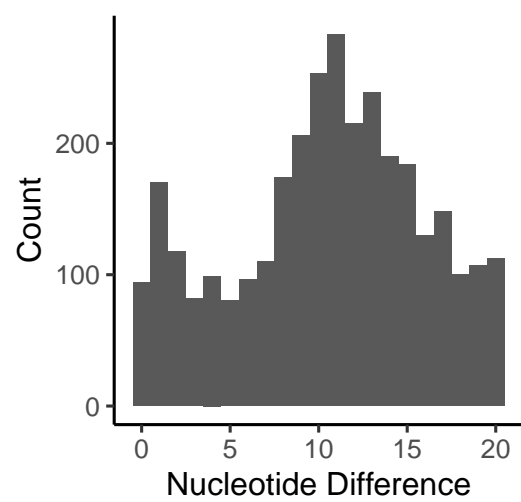
IGHV4-NL_17*01_S4099

1124 sequences assigned
91 (8.1%) exact matches, in which:
81 unique CDR3
7 unique J



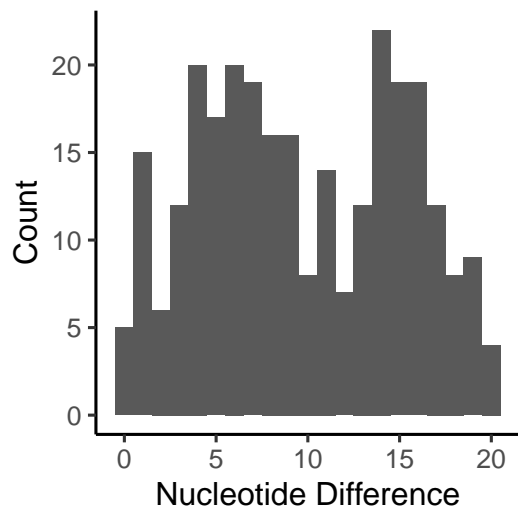
IGHV4-NL_21*01_S1118

3810 sequences assigned
94 (2.5%) exact matches, in which:
88 unique CDR3
6 unique J



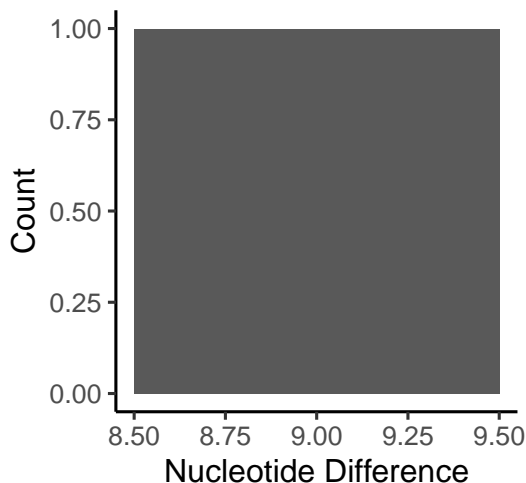
IGHV4–NL_21*01_S6308

415 sequences assigned
5 (1.2%) exact matches, in which:
4 unique CDR3
1 unique J



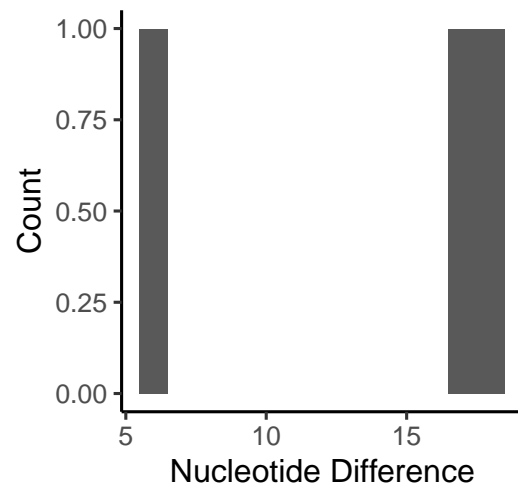
IGHV4–NL_27*01_S6960

1 sequences assigned
No exact matches.



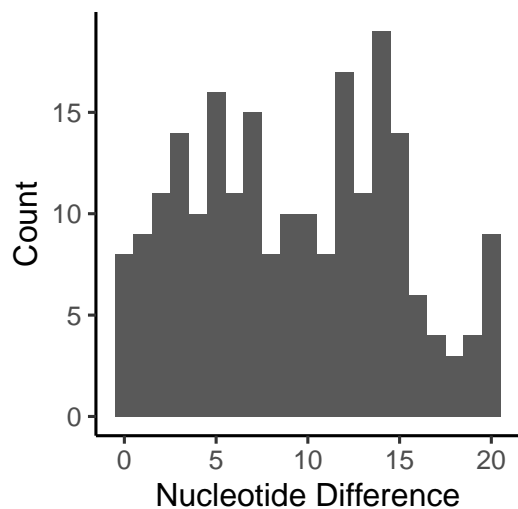
IGHV4–NL_3*01_S1577

14 sequences assigned
No exact matches.



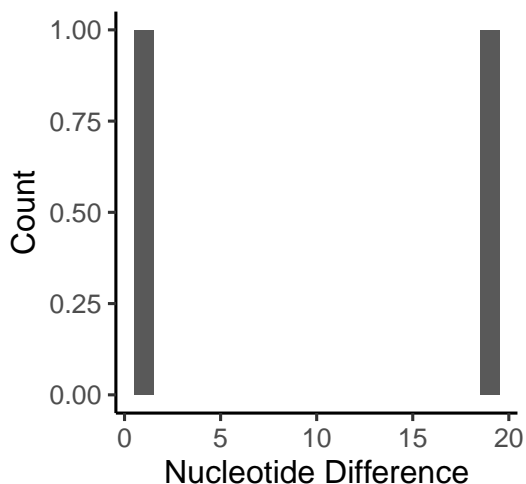
IGHV4–NL_23*01_S1296

238 sequences assigned
8 (3.4%) exact matches, in which:
8 unique CDR3
3 unique J



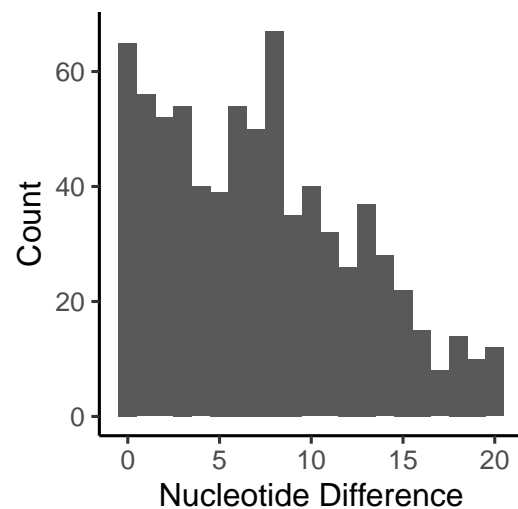
IGHV4–NL_27*01_S7150

2 sequences assigned
No exact matches.



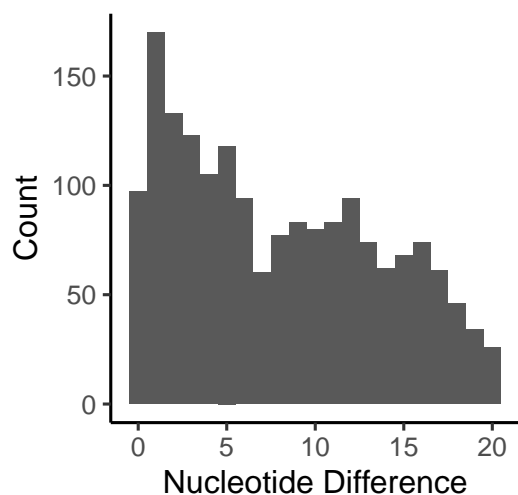
IGHV4–NL_31*01_S7693

939 sequences assigned
65 (6.9%) exact matches, in which:
56 unique CDR3
7 unique J



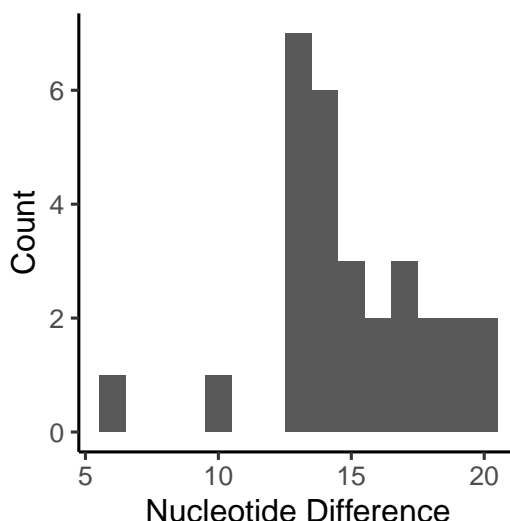
IGHV4–NL_25*01_S2780

2237 sequences assigned
97 (4.3%) exact matches, in which:
90 unique CDR3
6 unique J



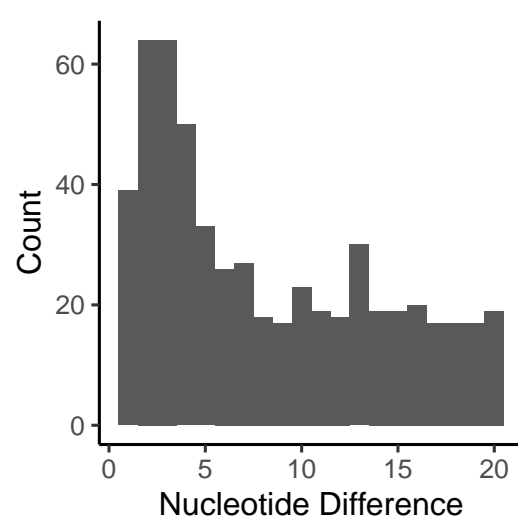
IGHV4–NL_29*01_S3761

43 sequences assigned
No exact matches.



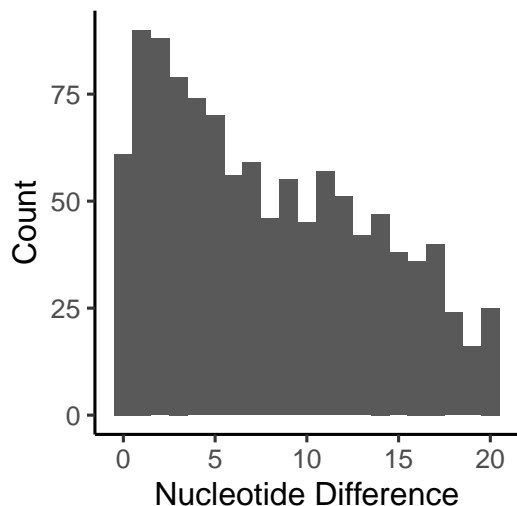
IGHV4–NL_33*01_S1148

940 sequences assigned
No exact matches.



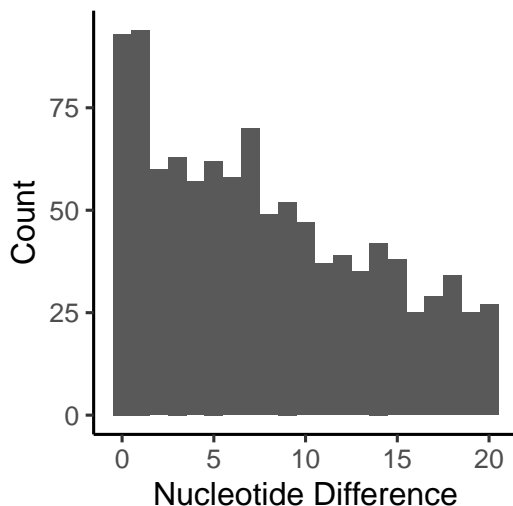
IGHV4–NL_33*01_S2532

1333 sequences assigned
61 (4.6%) exact matches, in which:
58 unique CDR3
6 unique J



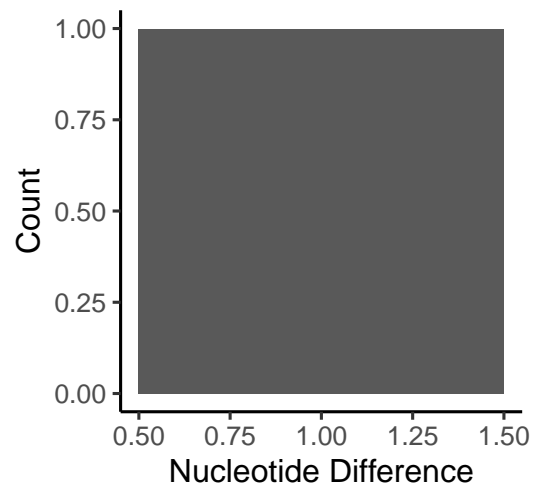
IGHV4–NL_36*01_S6474

1202 sequences assigned
93 (7.7%) exact matches, in which:
84 unique CDR3
6 unique J



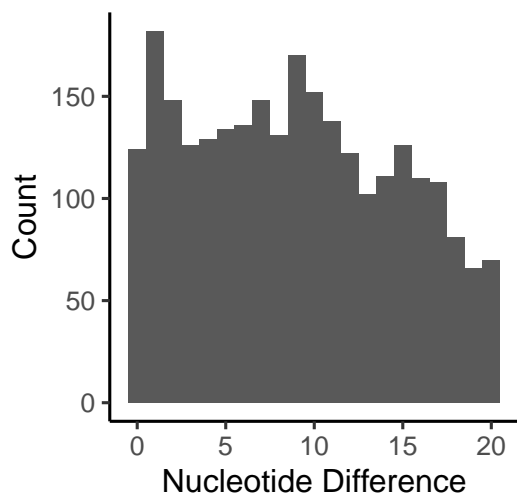
IGHV4–NL_38*01_S8437

3 sequences assigned
No exact matches.



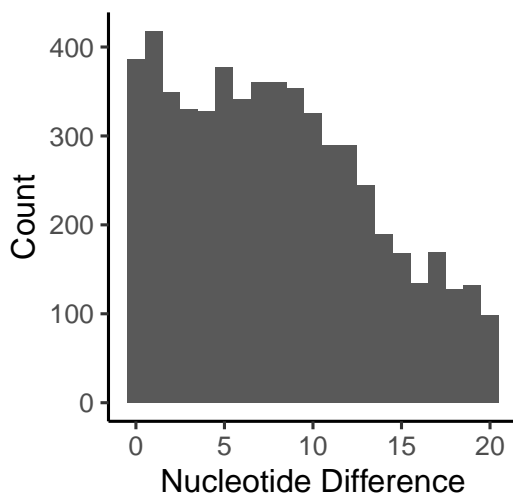
IGHV4–NL_33*01_S4377

3233 sequences assigned
124 (3.8%) exact matches, in which:
113 unique CDR3
7 unique J



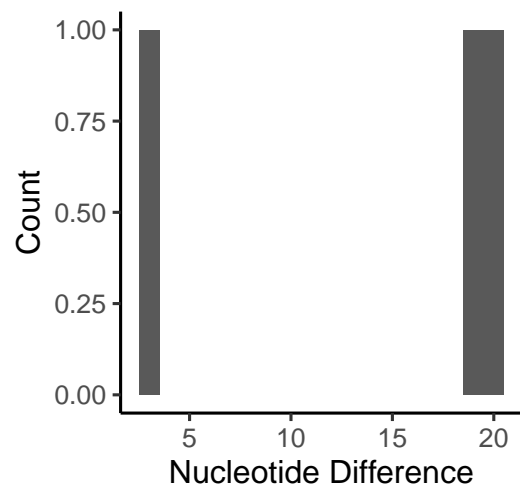
IGHV4–NL_36*01_S8200

6443 sequences assigned
386 (6%) exact matches, in which:
330 unique CDR3
7 unique J



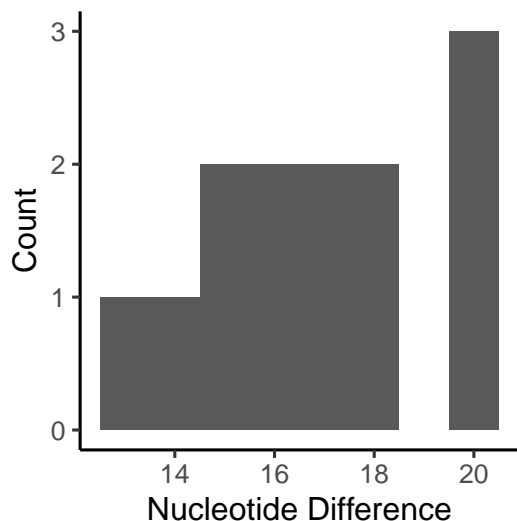
IGHV4–NL_38*01_S9244

7 sequences assigned
No exact matches.



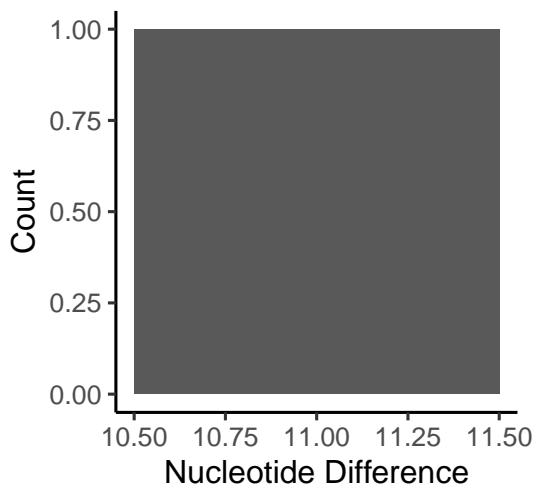
IGHV4–NL_34*01_S4637

37 sequences assigned
No exact matches.



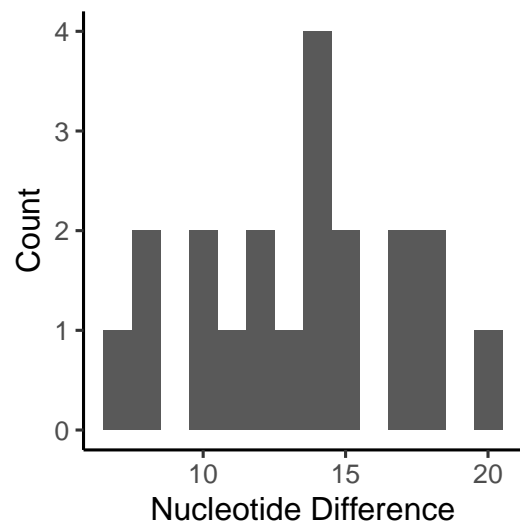
IGHV4–NL_38*01_S5467

2 sequences assigned
No exact matches.



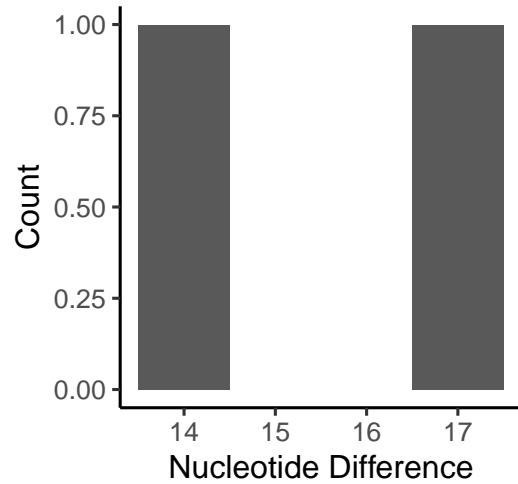
IGHV4–NL_4*01_S5211

54 sequences assigned
No exact matches.



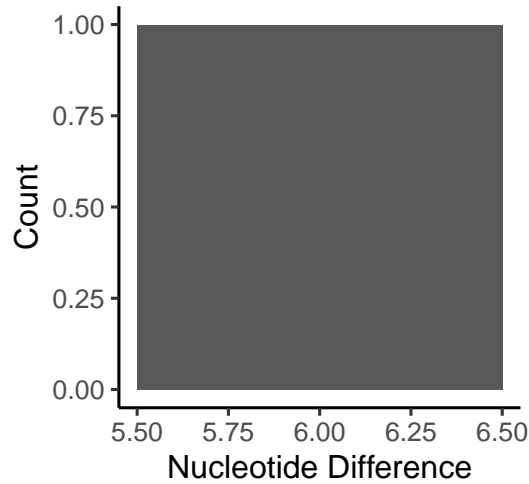
IGHV4-NL_4*01_S8866

18 sequences assigned
No exact matches.



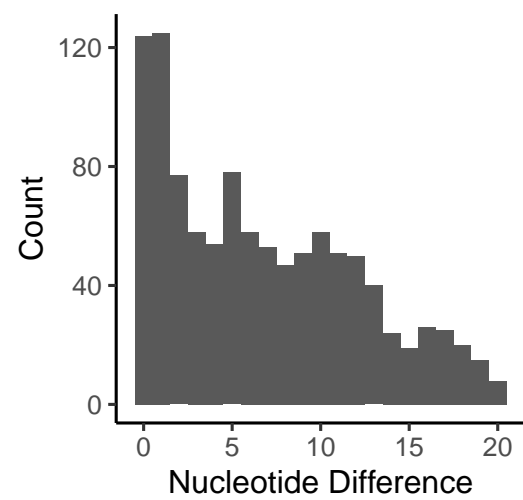
IGHV4-NL_42*01_S3666

1 sequences assigned
No exact matches.



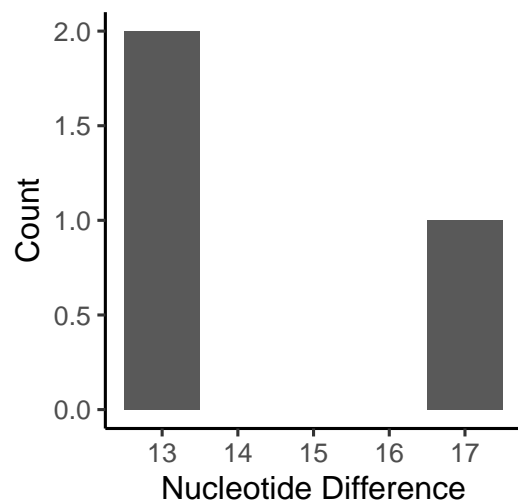
IGHV4-NL_5*01_S8078

1141 sequences assigned
124 (10.9%) exact matches, in which:
103 unique CDR3
6 unique J



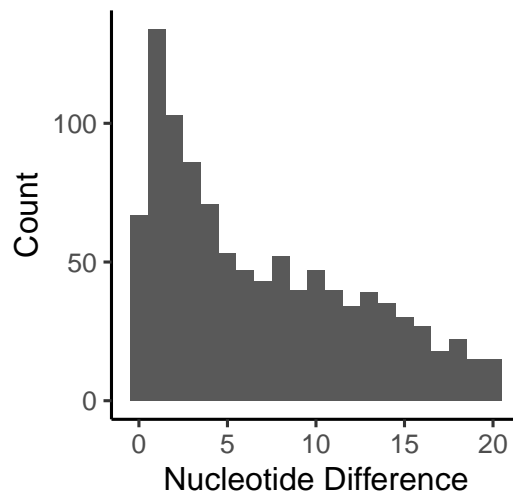
IGHV4-NL_40*01_S0696

3 sequences assigned
No exact matches.



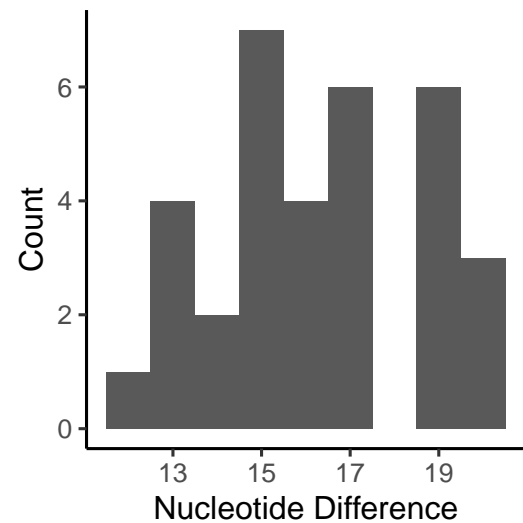
IGHV4-NL_43*01_S4510

1212 sequences assigned
67 (5.5%) exact matches, in which:
62 unique CDR3
6 unique J



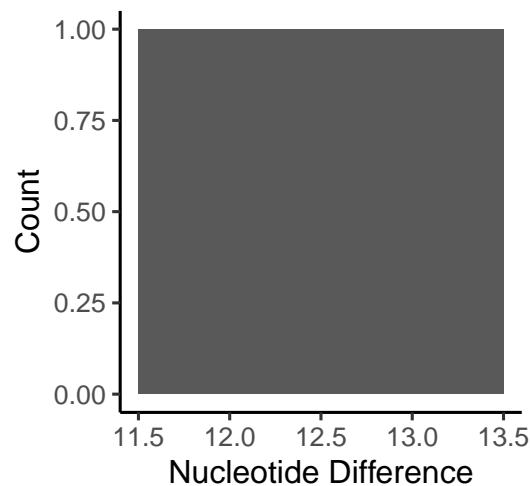
IGHV4-NL_9*01_S4990

94 sequences assigned
No exact matches.



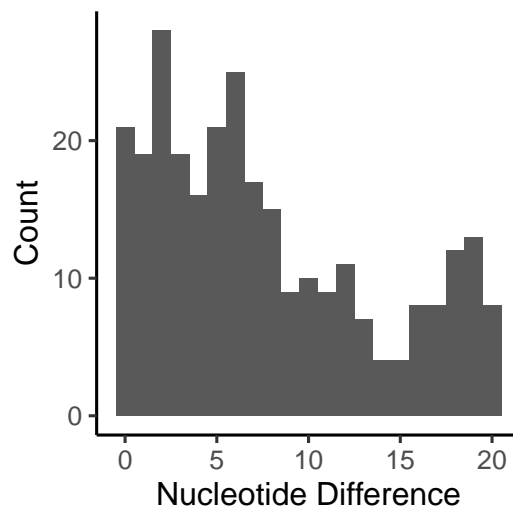
IGHV4-NL_42*01_S3076

6 sequences assigned
No exact matches.



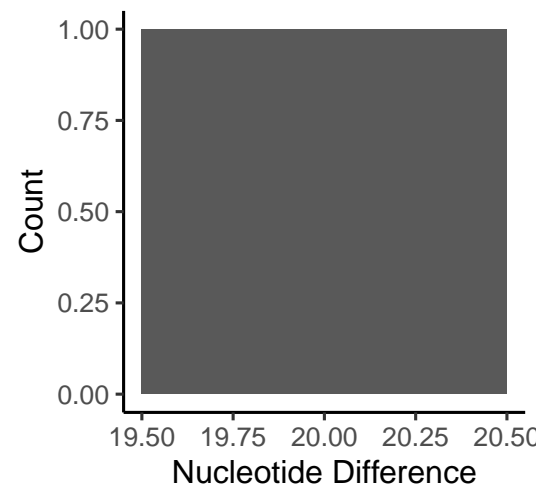
IGHV4-NL_5*01_S5158

344 sequences assigned
21 (6.1%) exact matches, in which:
20 unique CDR3
3 unique J



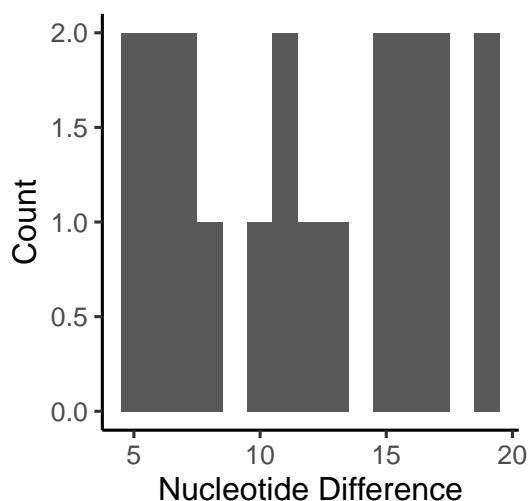
IGHV4-NL_9*01_S6142

11 sequences assigned
No exact matches.



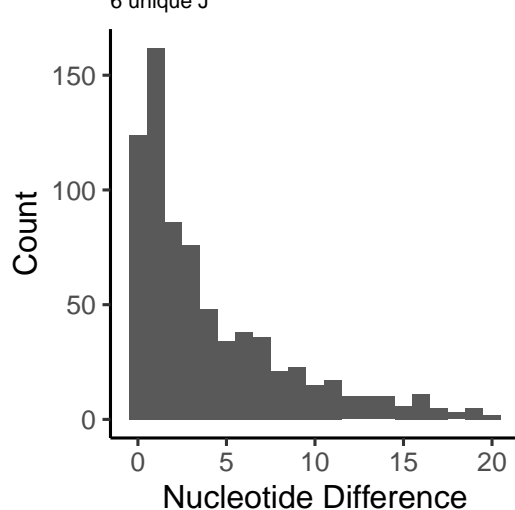
IGHV4–NL_9*01_S9889

25 sequences assigned
No exact matches.



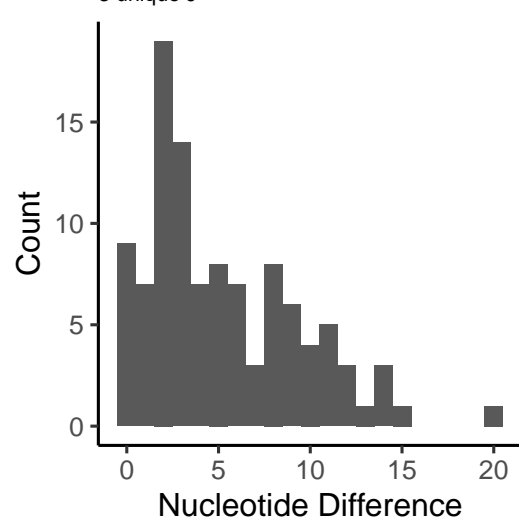
IGHV5–157*01_S3631

767 sequences assigned
124 (16.2%) exact matches, in which:
68 unique CDR3
6 unique J



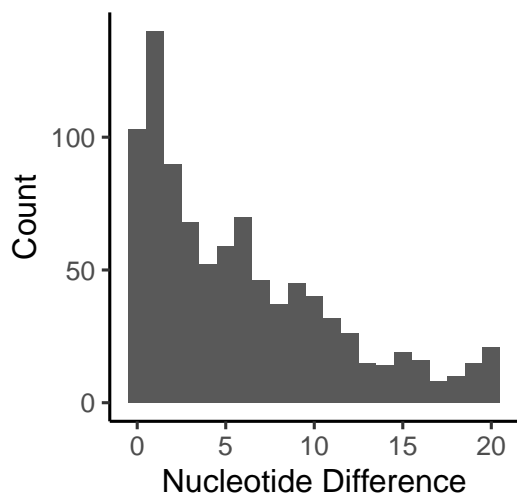
IGHV7–135*01_S4281

316 sequences assigned
9 (2.8%) exact matches, in which:
6 unique CDR3
3 unique J



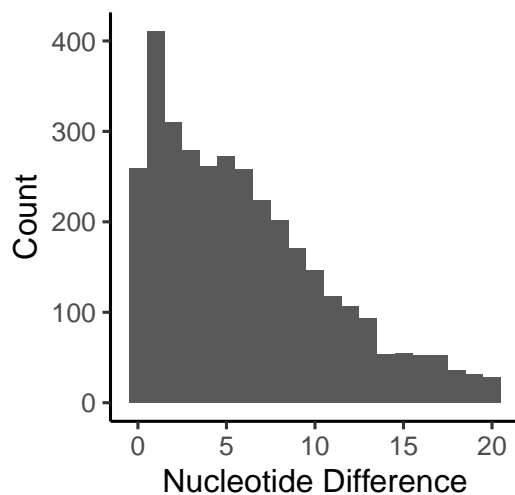
IGHV5–15*01_S0203

966 sequences assigned
103 (10.7%) exact matches, in which:
76 unique CDR3
7 unique J



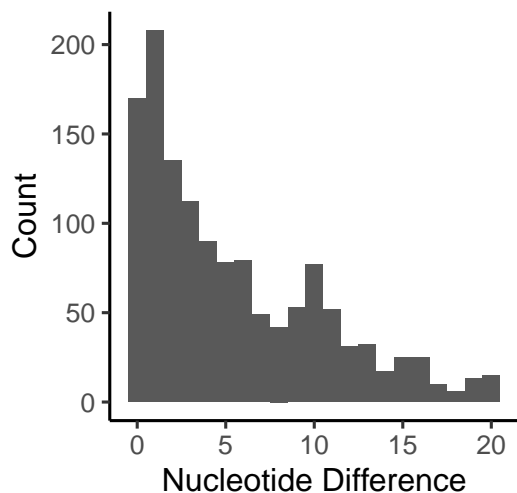
IGHV5–157*02_S3096

3593 sequences assigned
259 (7.2%) exact matches, in which:
172 unique CDR3
7 unique J



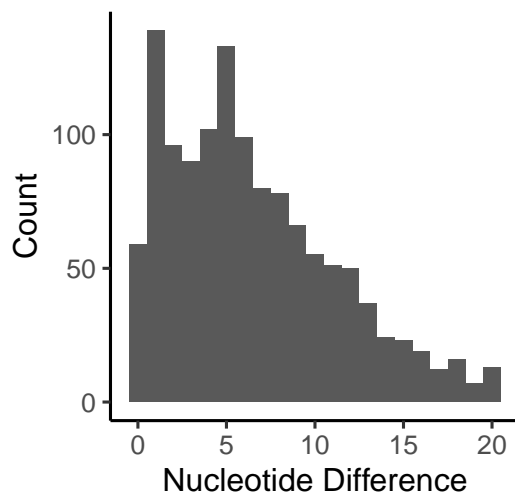
IGHV5–15*01_S2502

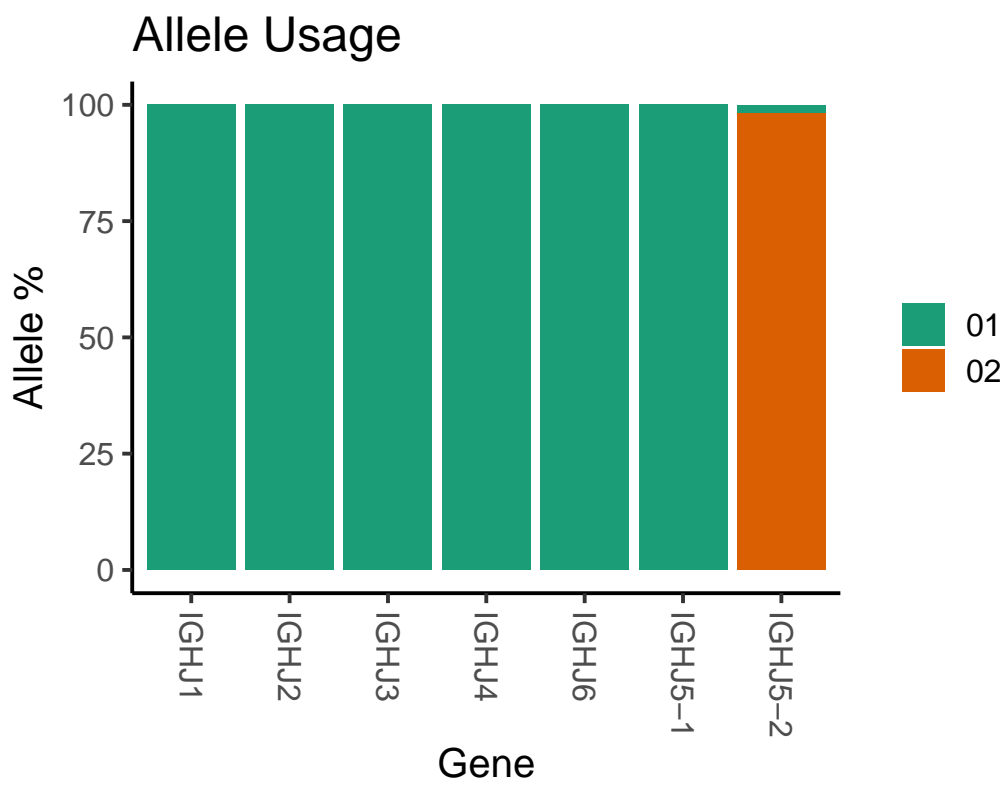
1349 sequences assigned
170 (12.6%) exact matches, in which:
123 unique CDR3
6 unique J



IGHV6–1*02_G280T

1326 sequences assigned
59 (4.4%) exact matches, in which:
53 unique CDR3
8 unique J





Warning – no inferred sequences found.