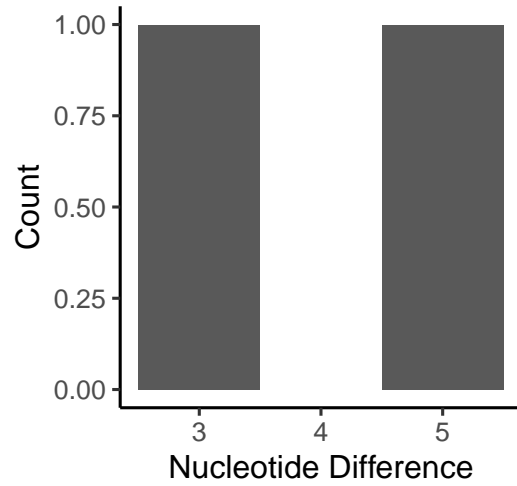


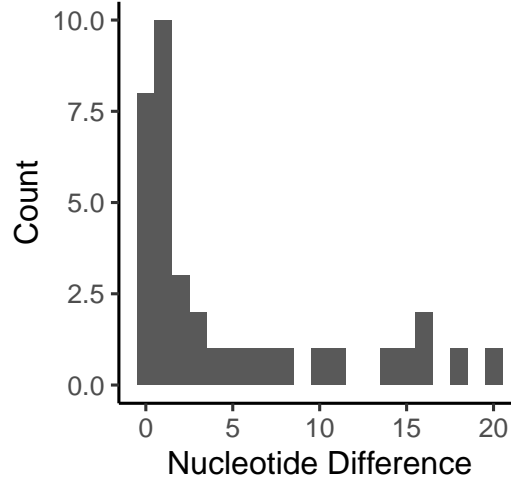
IGHV1-58*02

2 sequences assigned
No exact matches.



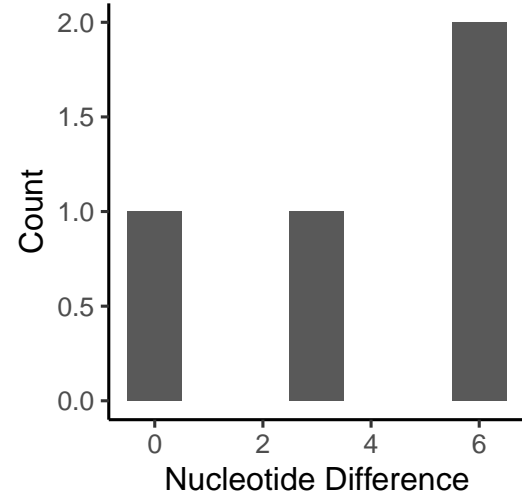
IGHV1-124*01_S1765

52 sequences assigned
8 (15.4%) exact matches, in which:
6 unique CDR3
4 unique J



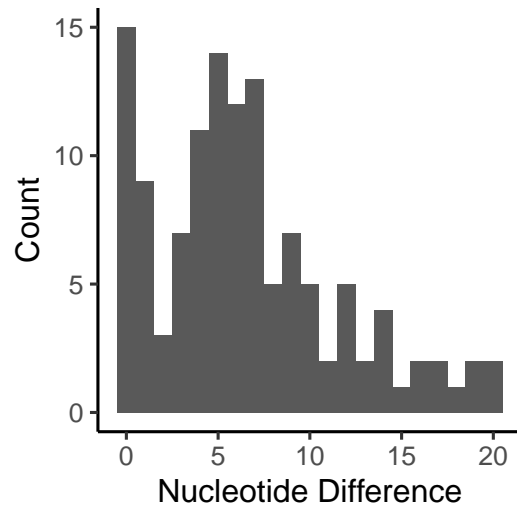
IGHV1-NL_1*01_S2052

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



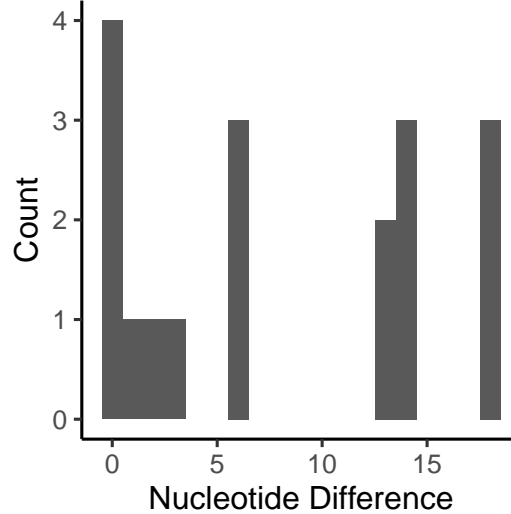
IGHV1-60*01_S7602

141 sequences assigned
15 (10.6%) exact matches, in which:
14 unique CDR3
5 unique J



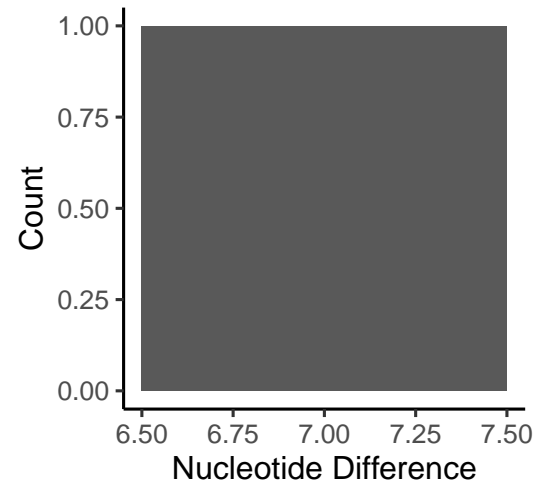
IGHV1-138*01_S2593

26 sequences assigned
4 (15.4%) exact matches, in which:
4 unique CDR3
2 unique J



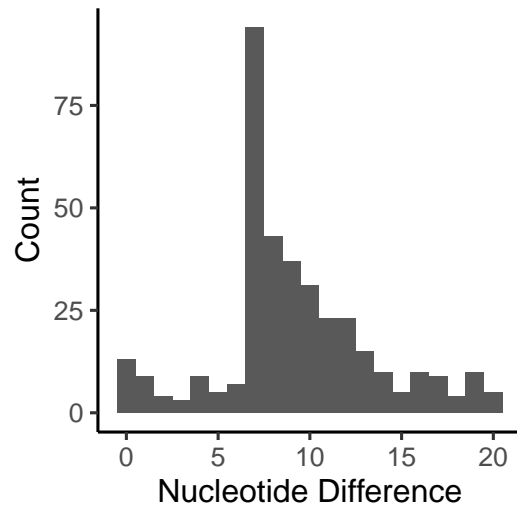
IGHV1-NL_2*01_S3568

1 sequences assigned
No exact matches.



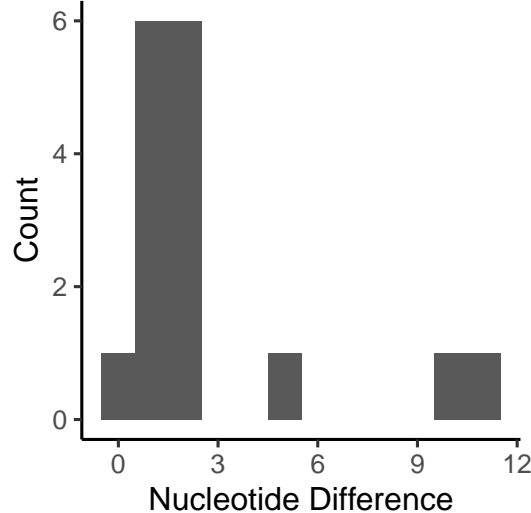
IGHV1-84*01_S9171

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



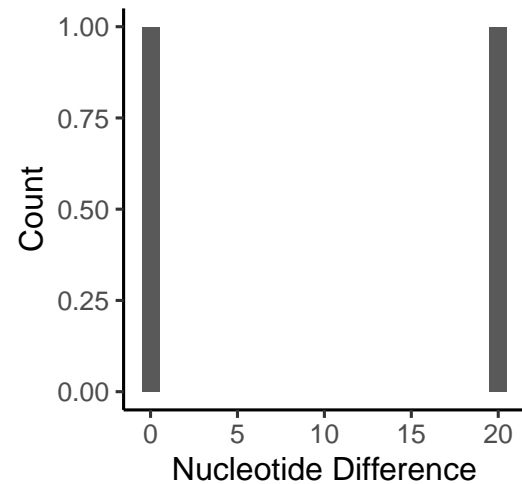
IGHV1-170*01_S3055

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



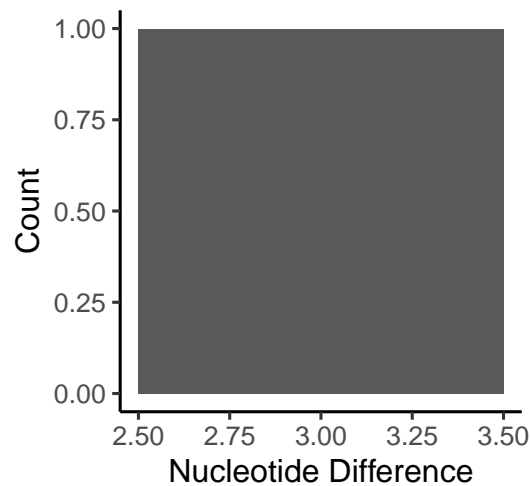
IGHV2-7*02_S1732

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



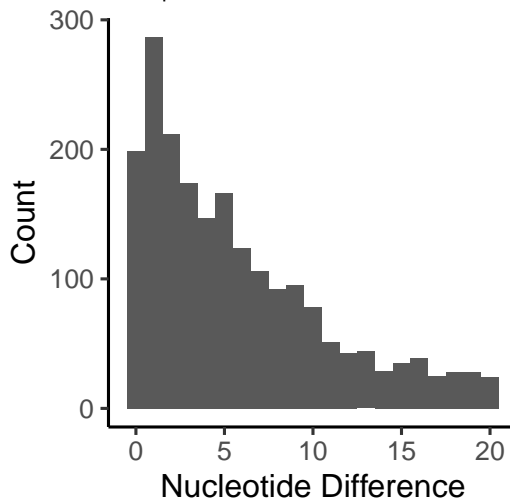
IGHV2-7*02_S3534

2 sequences assigned
No exact matches.



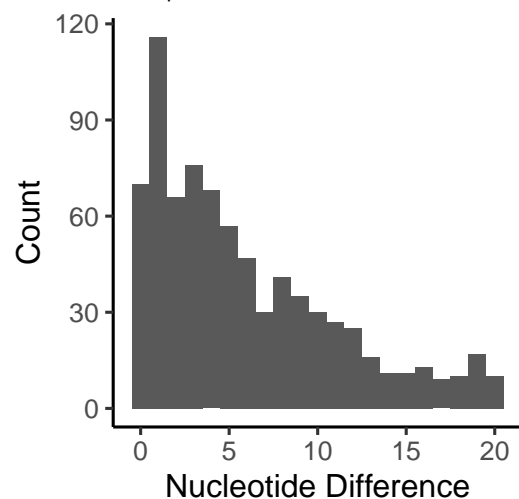
IGHV2-118*01_S6364

2215 sequences assigned
199 (9%) exact matches, in which:
156 unique CDR3
7 unique J



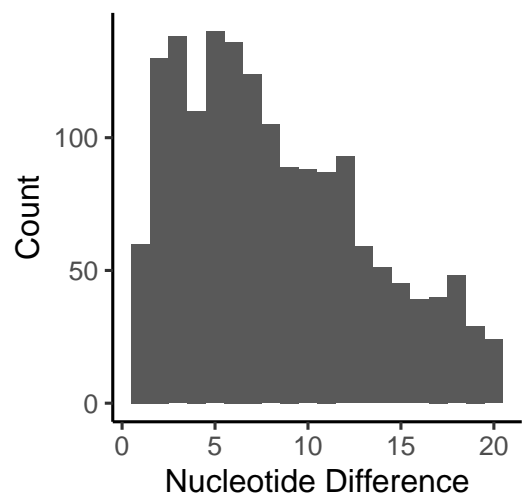
IGHV2-NL_2*01_S8873

1081 sequences assigned
70 (6.5%) exact matches, in which:
42 unique CDR3
7 unique J



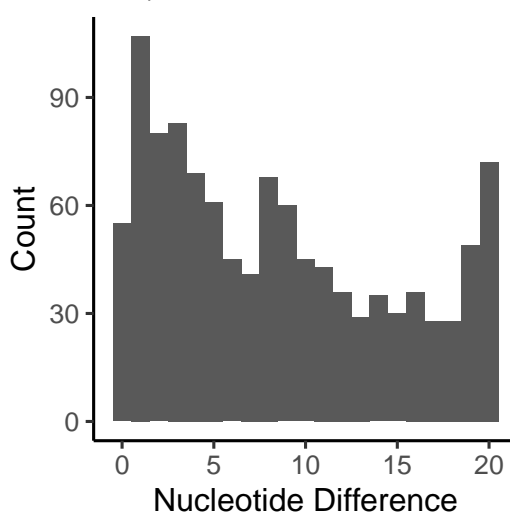
IGHV2-69*01_S8735

1875 sequences assigned
No exact matches.



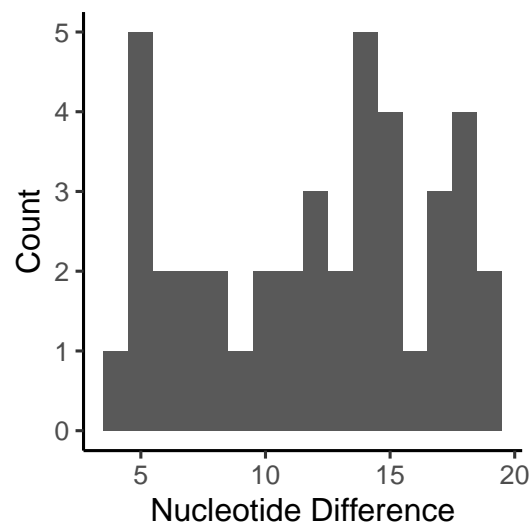
IGHV2-NL_1*01_S5779

1672 sequences assigned
55 (3.3%) exact matches, in which:
45 unique CDR3
6 unique J



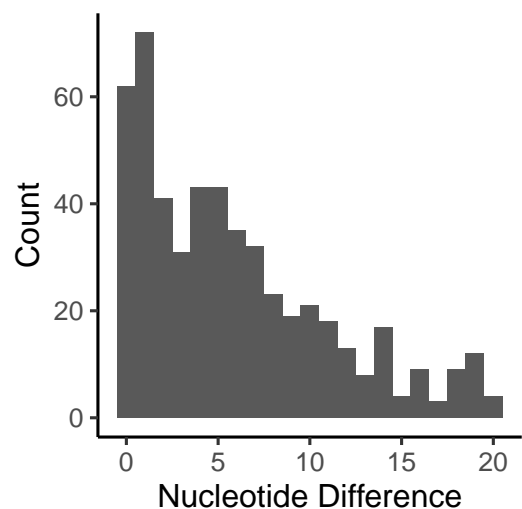
IGHV3-5*01_S0969

43 sequences assigned
No exact matches.



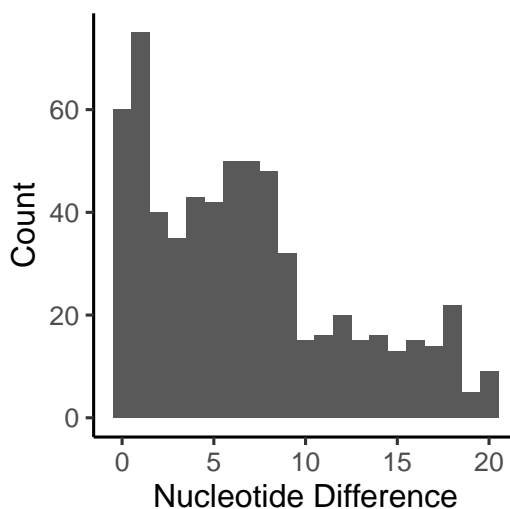
IGHV2-118*01_A267G_A:

575 sequences assigned
62 (10.8%) exact matches, in which:
60 unique CDR3
7 unique J



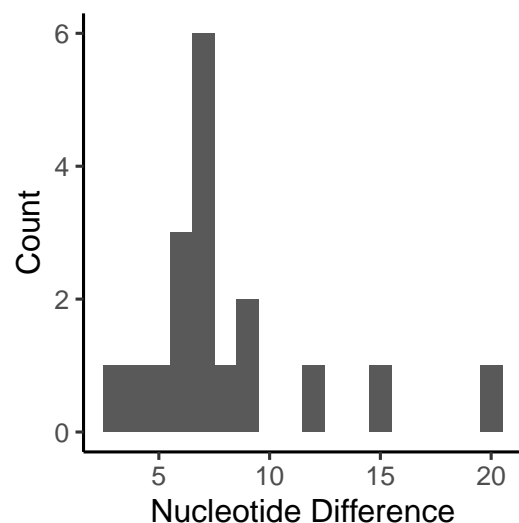
IGHV2-NL_1*01_S9725

687 sequences assigned
60 (8.7%) exact matches, in which:
49 unique CDR3
6 unique J



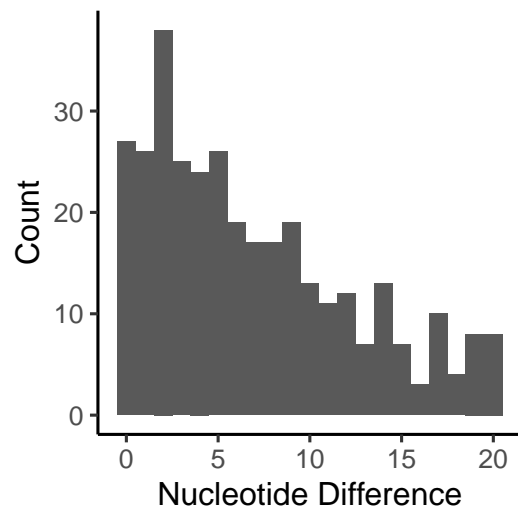
IGHV3-5*01_S4091

18 sequences assigned
No exact matches.



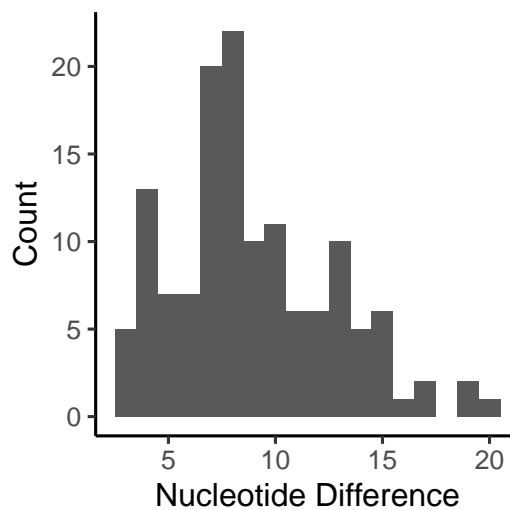
IGHV3-9*01_S0778

360 sequences assigned
27 (7.5%) exact matches, in which:
22 unique CDR3
7 unique J



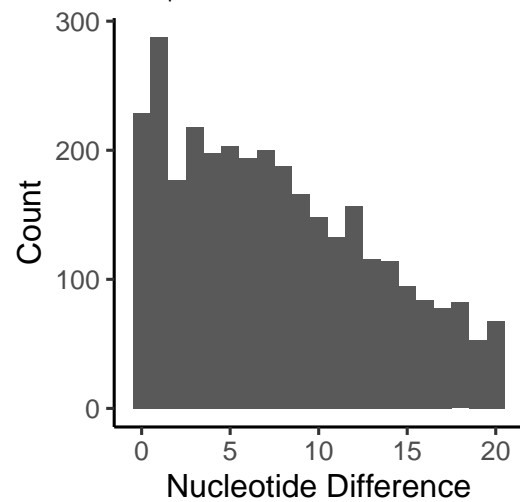
IGHV3-37*01_S6630

140 sequences assigned
No exact matches.



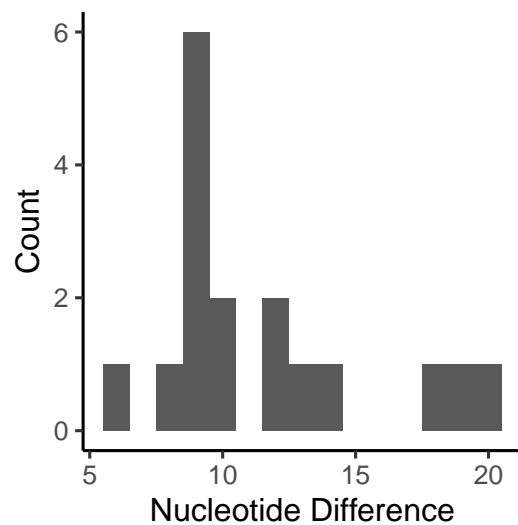
IGHV3-76*02_S4190

3604 sequences assigned
229 (6.4%) exact matches, in which:
177 unique CDR3
6 unique J



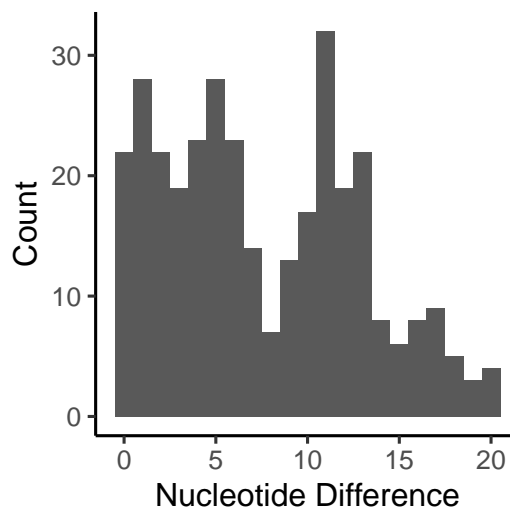
IGHV3-28*01_S3792

22 sequences assigned
No exact matches.



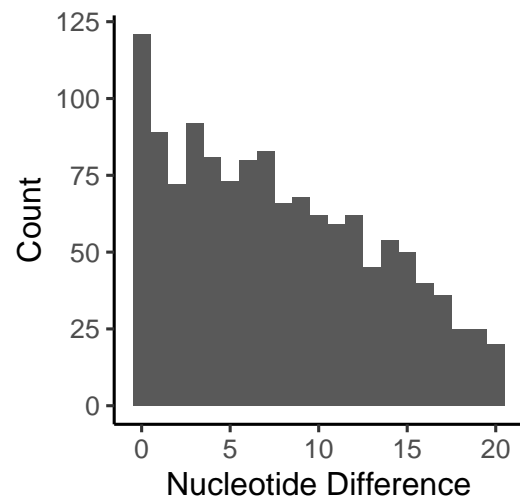
IGHV3-53*01_S5688

375 sequences assigned
22 (5.9%) exact matches, in which:
16 unique CDR3
5 unique J



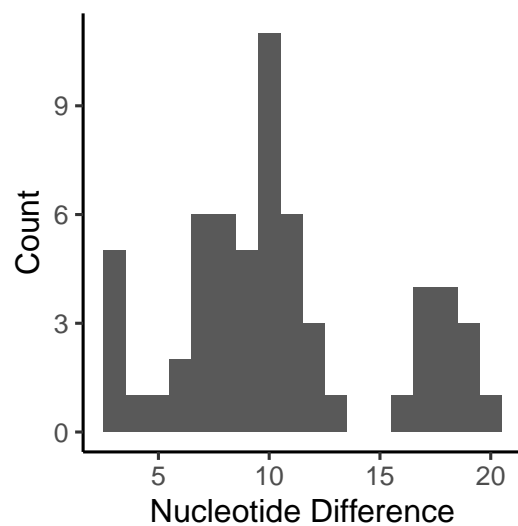
IGHV3-76*02_S4190_A2

1419 sequences assigned
121 (8.5%) exact matches, in which:
107 unique CDR3
6 unique J



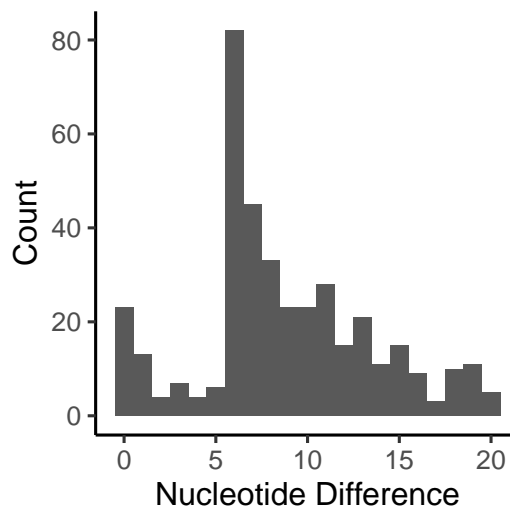
IGHV3-28*01_S5703

86 sequences assigned
No exact matches.



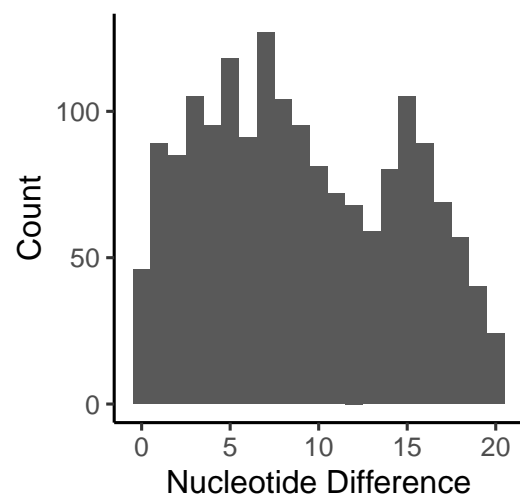
IGHV3-73*02_S7955

427 sequences assigned
23 (5.4%) exact matches, in which:
17 unique CDR3
5 unique J



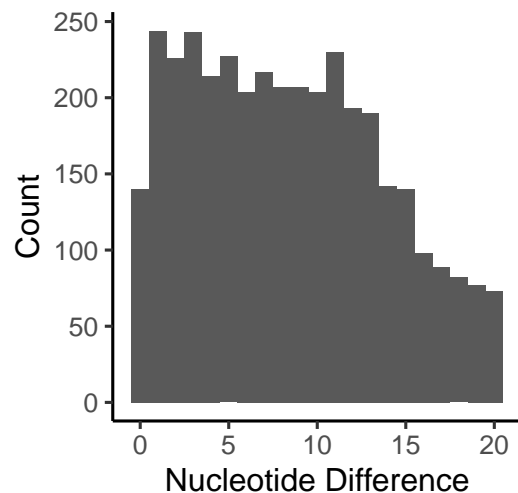
IGHV3-88*02_S7485

2017 sequences assigned
46 (2.3%) exact matches, in which:
33 unique CDR3
4 unique J



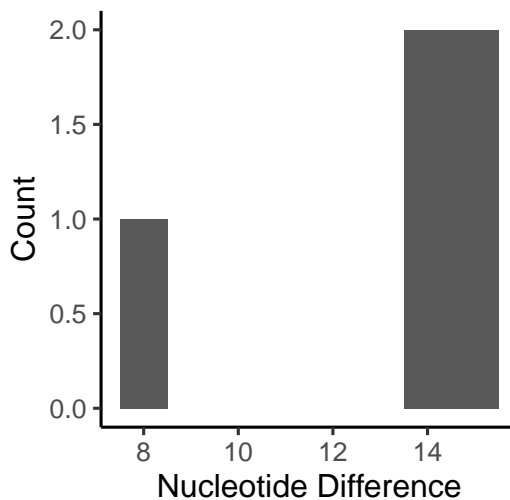
IGHV3-88*02_S9033

4447 sequences assigned
140 (3.1%) exact matches, in which:
95 unique CDR3
5 unique J



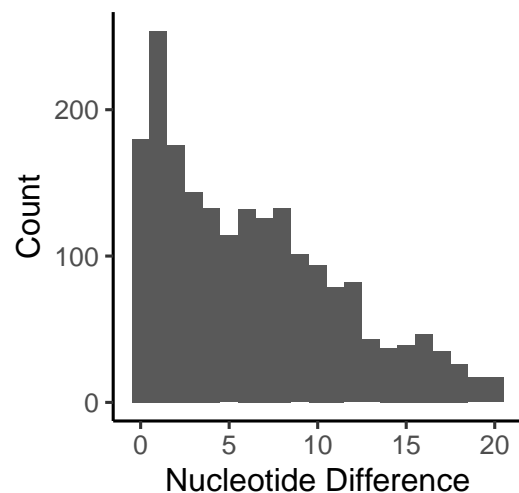
IGHV3-100*01_S4205

24 sequences assigned
No exact matches.



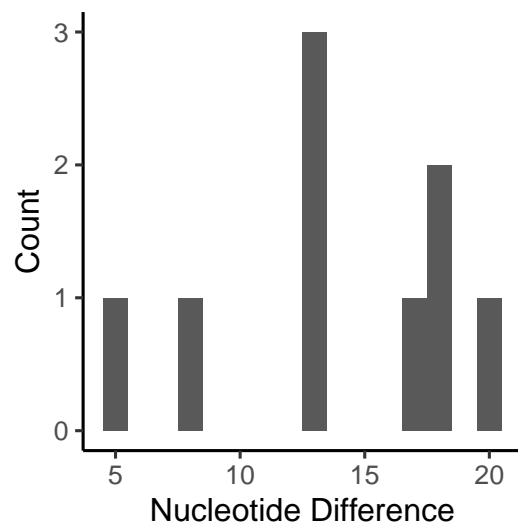
IGHV3-122*01_S5299

2128 sequences assigned
180 (8.5%) exact matches, in which:
137 unique CDR3
8 unique J



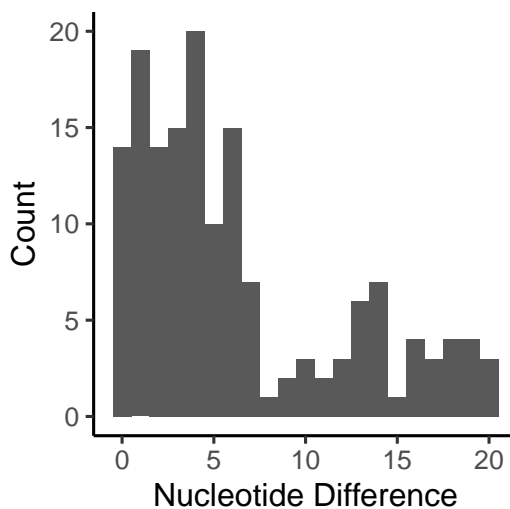
IGHV3-94*01_S4458

15 sequences assigned
No exact matches.



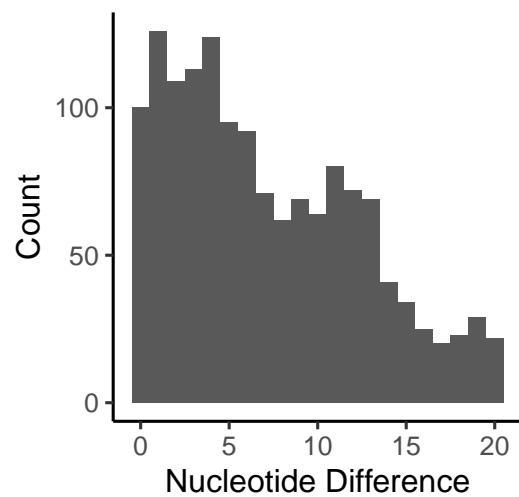
IGHV3-100*01_S4375

185 sequences assigned
14 (7.6%) exact matches, in which:
12 unique CDR3
3 unique J



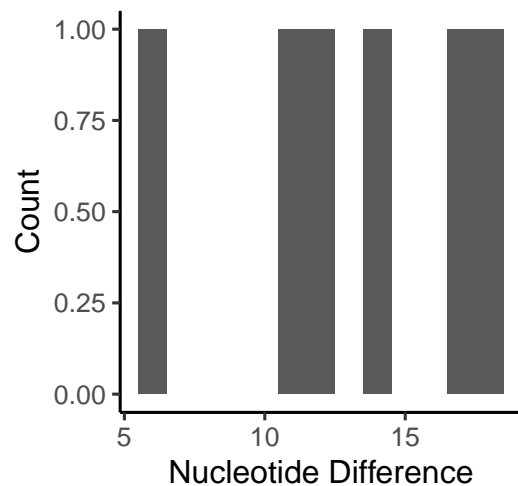
IGHV3-122*01_S8388

1610 sequences assigned
100 (6.2%) exact matches, in which:
74 unique CDR3
4 unique J



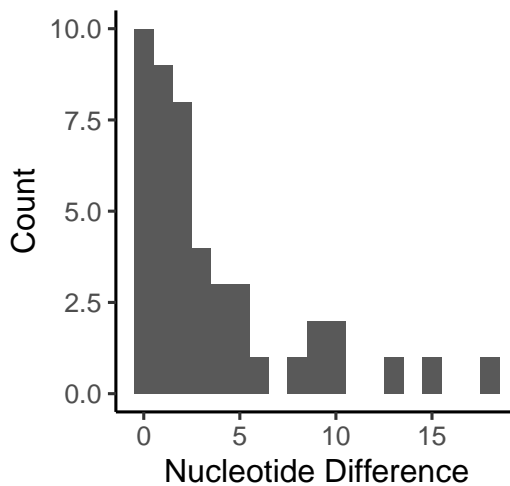
IGHV3-94*01_S7982

48 sequences assigned
No exact matches.



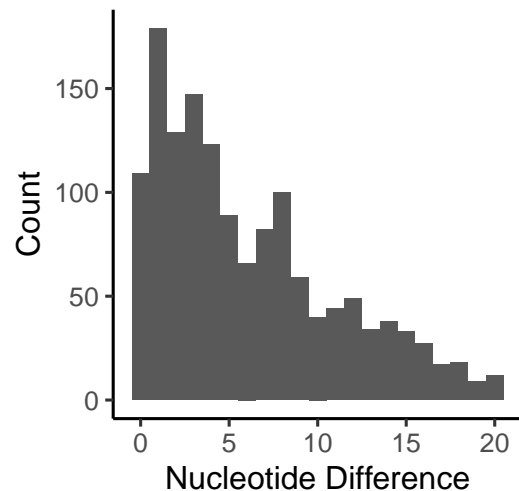
IGHV3-120*01_S4231

48 sequences assigned
10 (20.8%) exact matches, in which:
7 unique CDR3
2 unique J



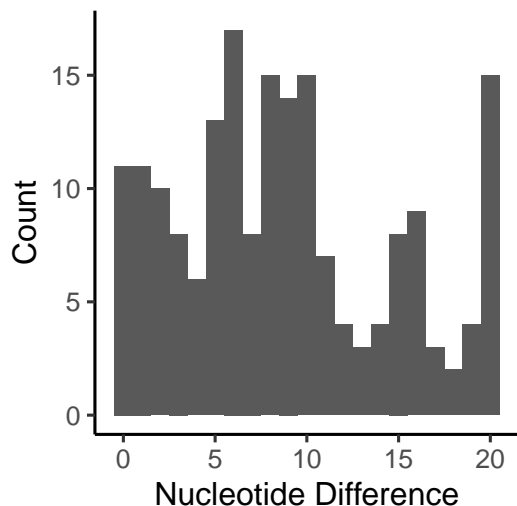
IGHV3-127*01_S5510

1448 sequences assigned
109 (7.5%) exact matches, in which:
78 unique CDR3
7 unique J



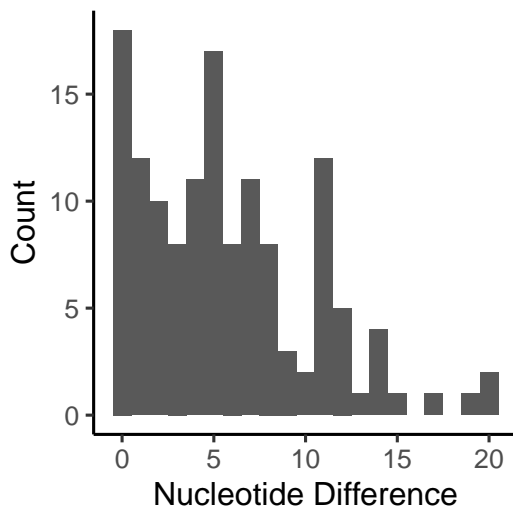
IGHV3-127*01_S6769

268 sequences assigned
11 (4.1%) exact matches, in which:
10 unique CDR3
3 unique J



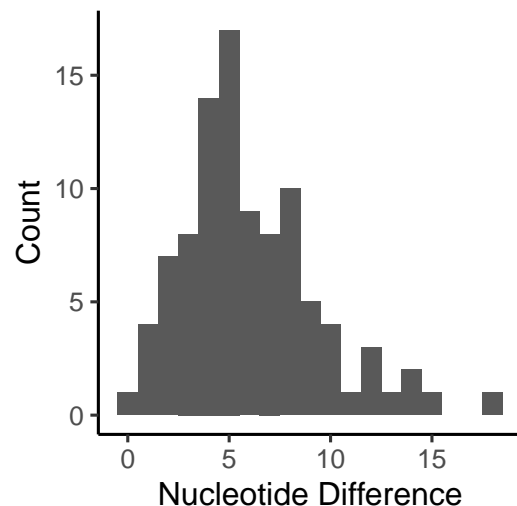
IGHV3-141*02_S6589

143 sequences assigned
18 (12.6%) exact matches, in which:
15 unique CDR3
3 unique J



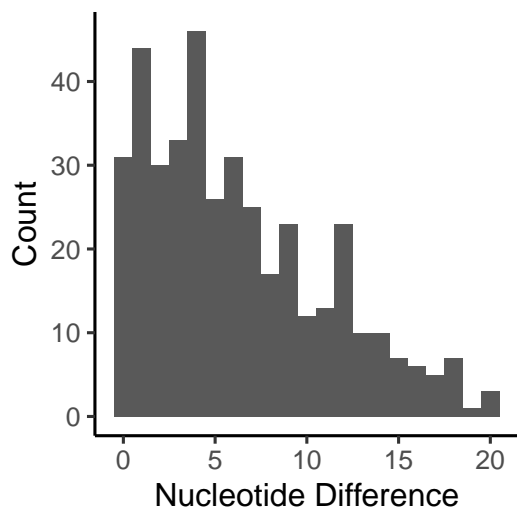
IGHV3-172*01_S1597

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



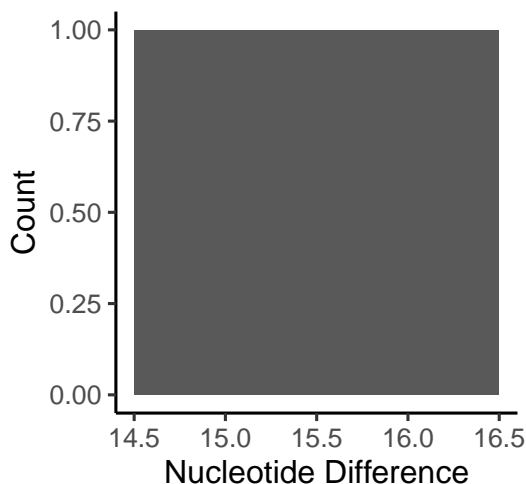
IGHV3-128*01_S1128

535 sequences assigned
31 (5.8%) exact matches, in which:
25 unique CDR3
4 unique J



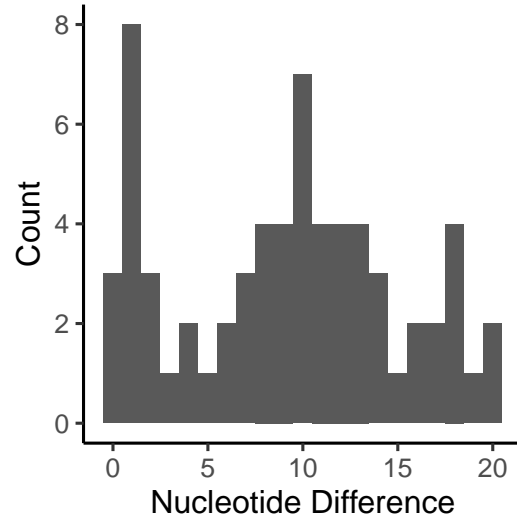
IGHV3-152*01_S1340

3 sequences assigned
No exact matches.



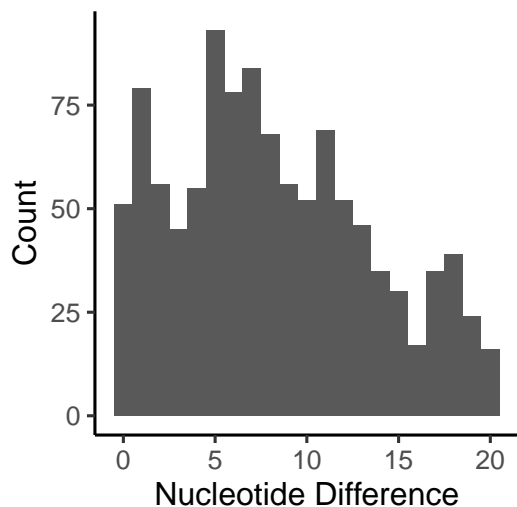
IGHV3-172*01_S8488

70 sequences assigned
3 (4.3%) exact matches, in which:
3 unique CDR3
2 unique J



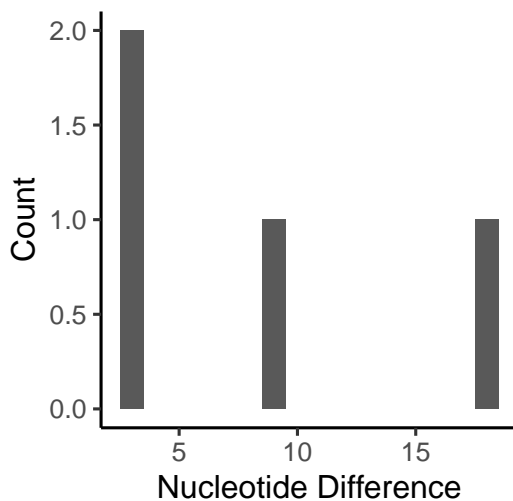
IGHV3-128*02_S1375

1267 sequences assigned
51 (4%) exact matches, in which:
42 unique CDR3
6 unique J



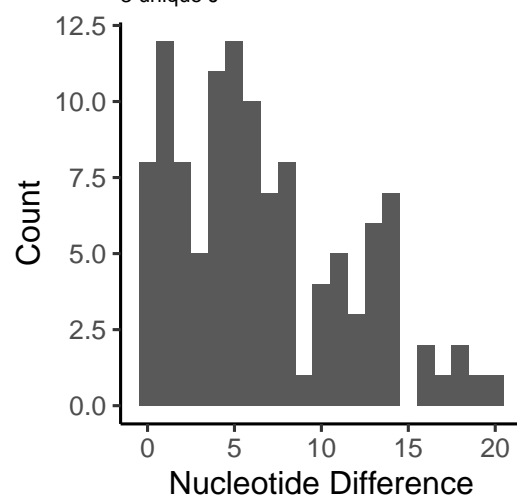
IGHV3-152*01_S5891

5 sequences assigned
No exact matches.



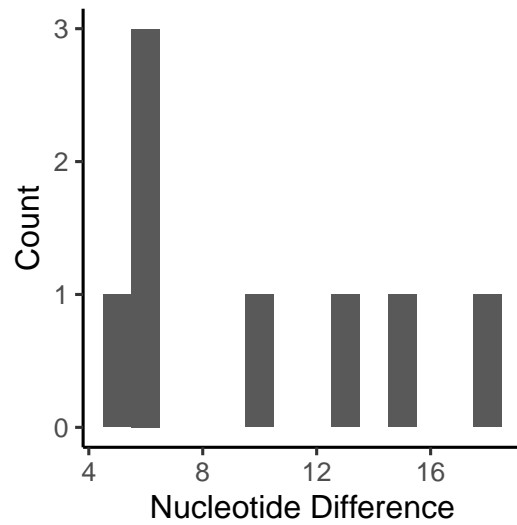
IGHV3-172*01_S8824

120 sequences assigned
8 (6.7%) exact matches, in which:
5 unique CDR3
3 unique J



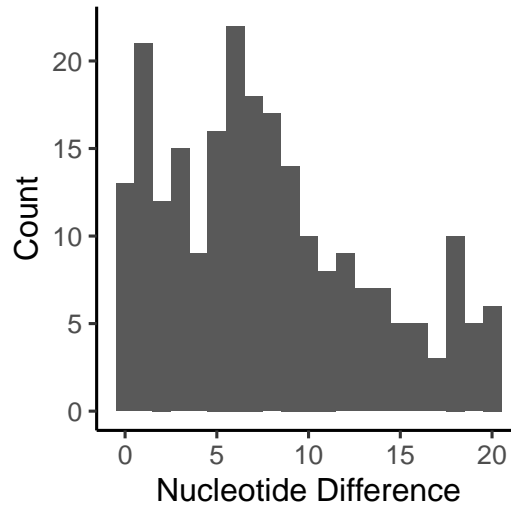
IGHV3-175*01_S1248

9 sequences assigned
No exact matches.



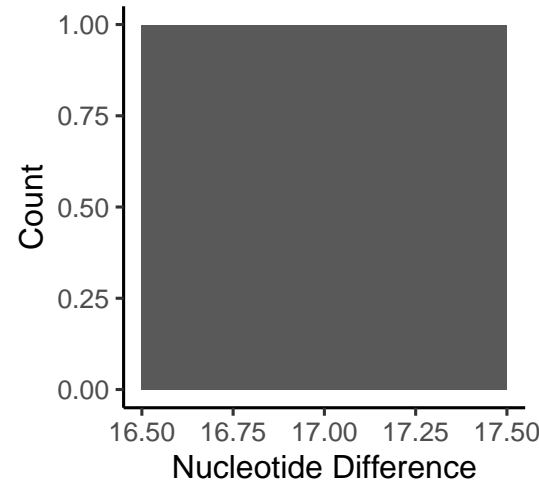
IGHV3-187*01_S4220

478 sequences assigned
13 (2.7%) exact matches, in which:
10 unique CDR3
5 unique J



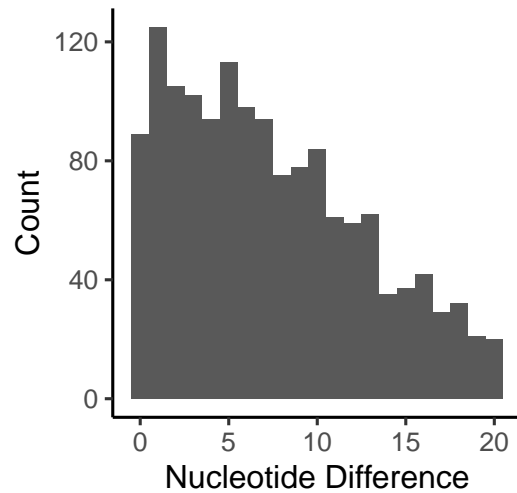
IGHV3-NL_10*02_S1970

6 sequences assigned
No exact matches.



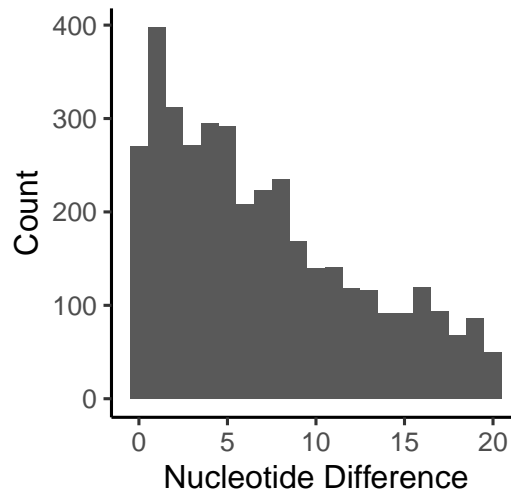
IGHV3-177*01_S5369

1623 sequences assigned
89 (5.5%) exact matches, in which:
74 unique CDR3
7 unique J



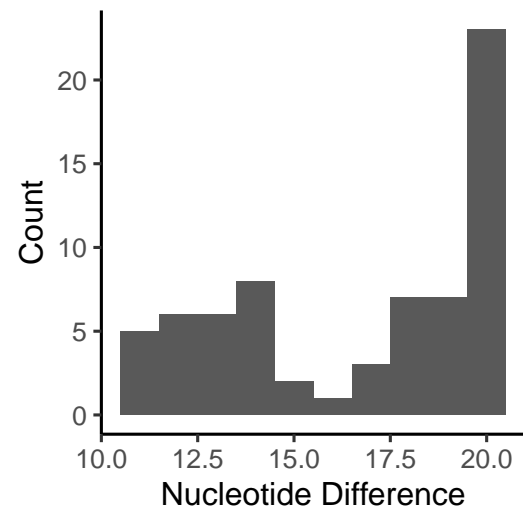
IGHV3-NL_1*01_S4331

4534 sequences assigned
270 (6%) exact matches, in which:
213 unique CDR3
7 unique J



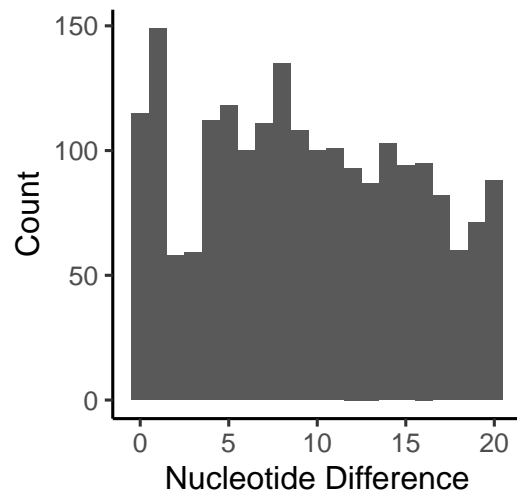
IGHV3-NL_10*02_S2212

288 sequences assigned
No exact matches.



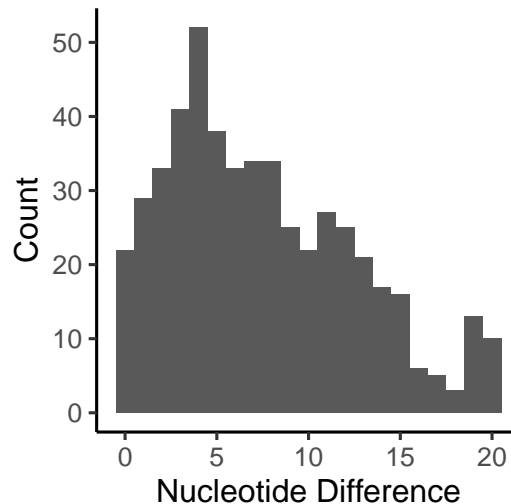
IGHV3-187*01_S1387

3405 sequences assigned
115 (3.4%) exact matches, in which:
88 unique CDR3
6 unique J



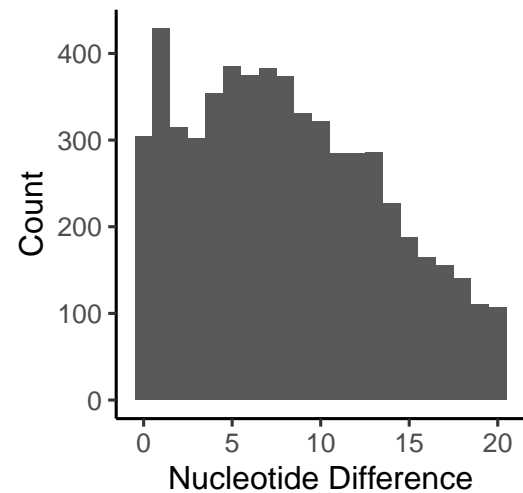
IGHV3-NL_1*01_S9422

634 sequences assigned
22 (3.5%) exact matches, in which:
17 unique CDR3
6 unique J



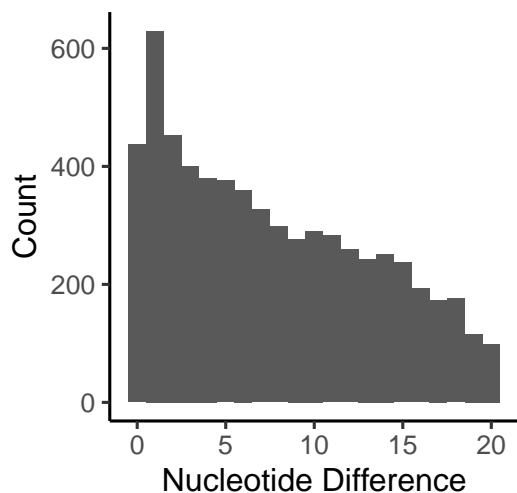
IGHV3-NL_11*01_S4619

6601 sequences assigned
304 (4.6%) exact matches, in which:
235 unique CDR3
7 unique J



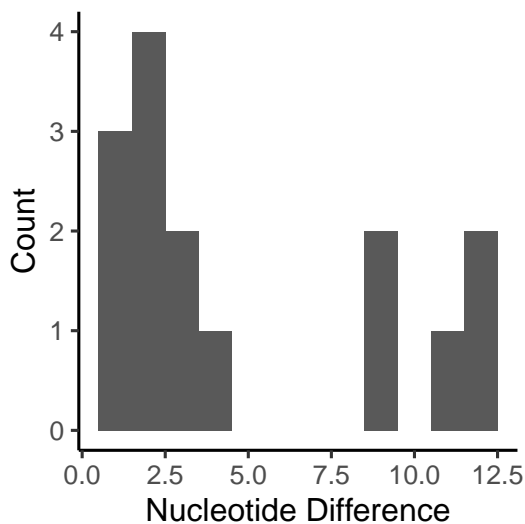
IGHV3–NL_11*01_S5714

7102 sequences assigned
437 (6.2%) exact matches, in which:
341 unique CDR3
8 unique J



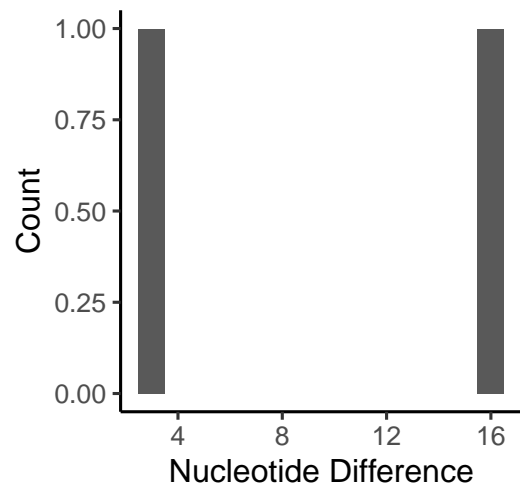
IGHV3–NL_15*01_S0604

15 sequences assigned
No exact matches.



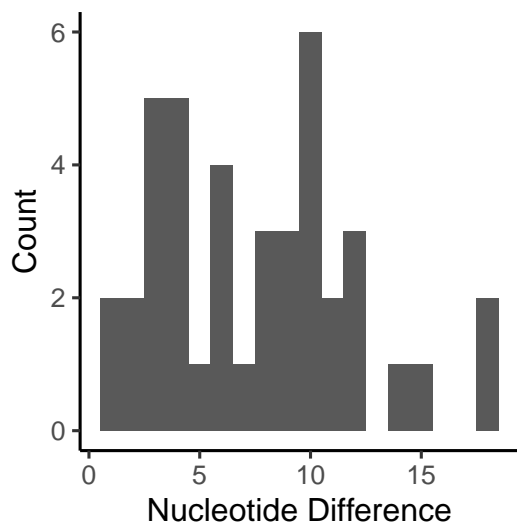
IGHV3–NL_18*01_S0984

2 sequences assigned
No exact matches.



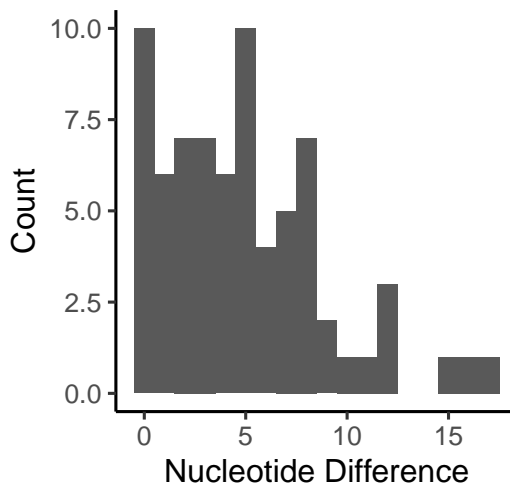
IGHV3–NL_12*02_S5864

42 sequences assigned
No exact matches.



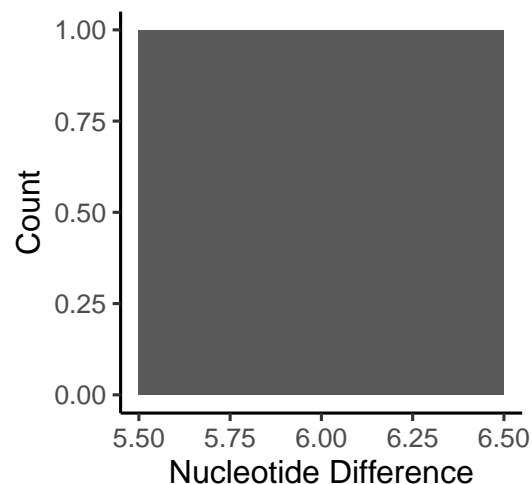
IGHV3–NL_16*01_S8234

75 sequences assigned
10 (13.3%) exact matches, in which:
7 unique CDR3
1 unique J



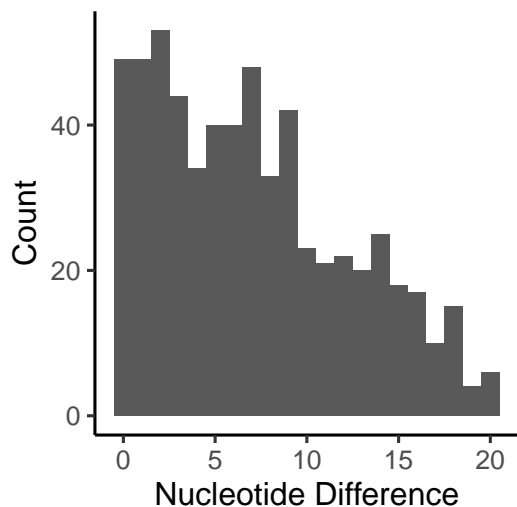
IGHV3–NL_18*01_S3867

1 sequences assigned
No exact matches.



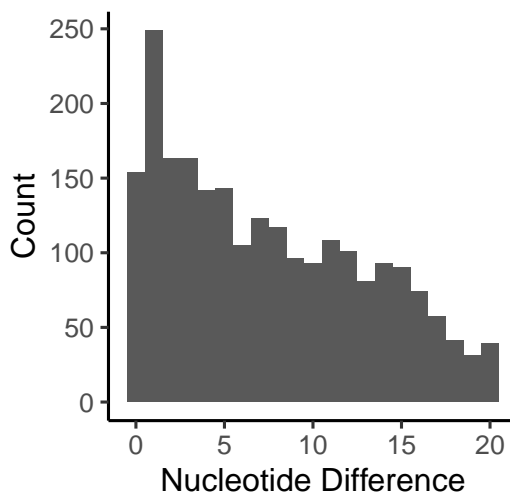
IGHV3–NL_14*01_S1995

664 sequences assigned
49 (7.4%) exact matches, in which:
40 unique CDR3
6 unique J



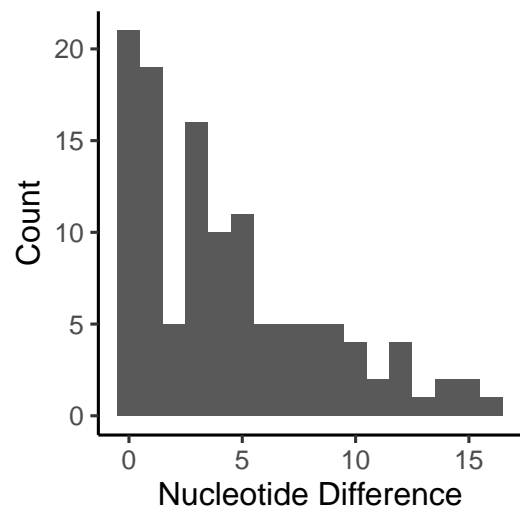
IGHV3–NL_17*01_S4250

2467 sequences assigned
154 (6.2%) exact matches, in which:
122 unique CDR3
7 unique J



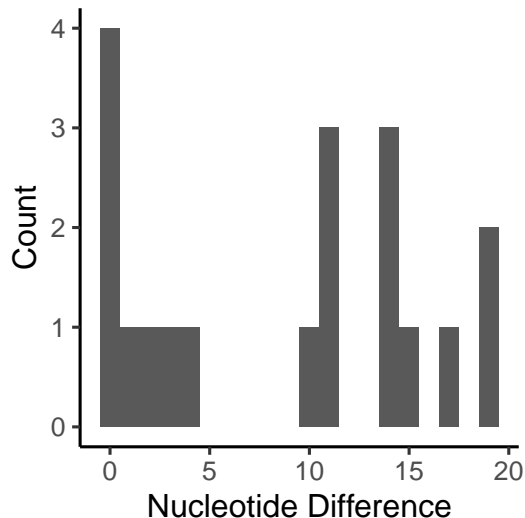
IGHV3–NL_19*01_S5460

130 sequences assigned
21 (16.2%) exact matches, in which:
20 unique CDR3
4 unique J



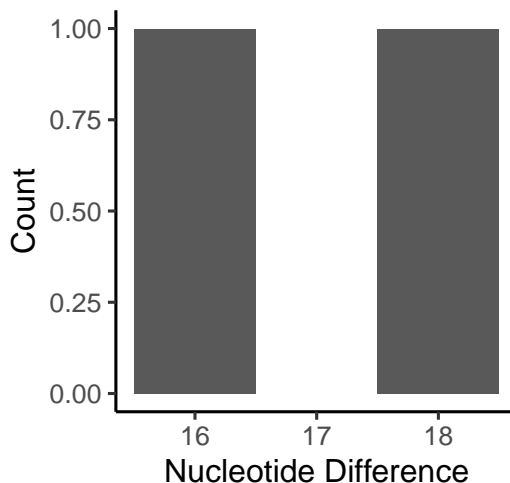
IGHV3-NL_2*01_S1693

22 sequences assigned
4 (18.2%) exact matches, in which:
4 unique CDR3
2 unique J



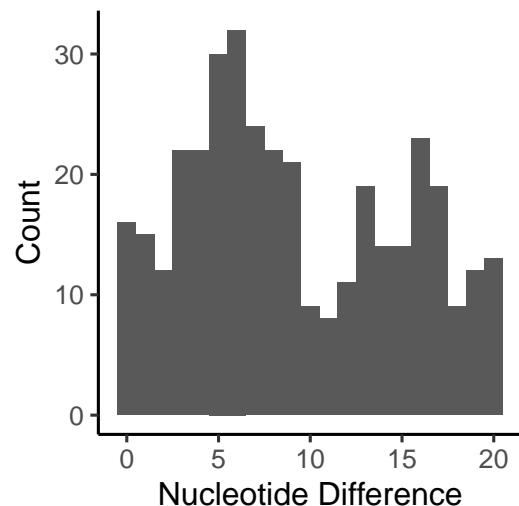
IGHV3-NL_5*01_S8361

5 sequences assigned
No exact matches.



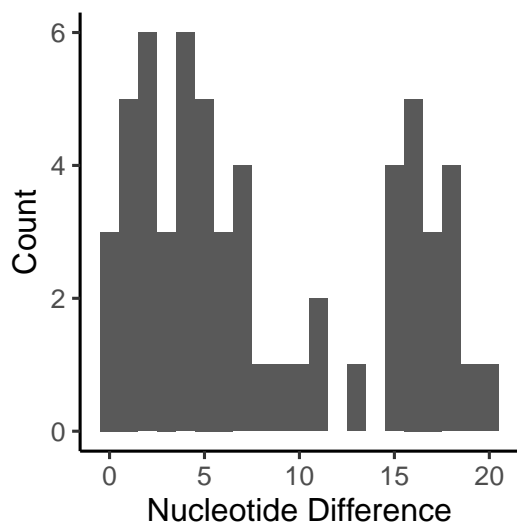
IGHV3-NL_8*01_S7474

396 sequences assigned
16 (4%) exact matches, in which:
9 unique CDR3
2 unique J



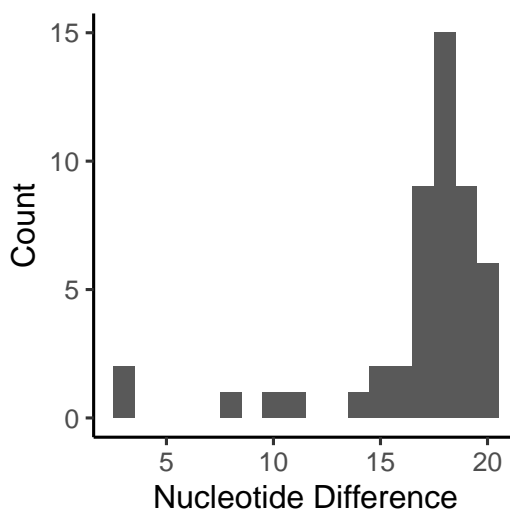
IGHV3-NL_2*01_S3900

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



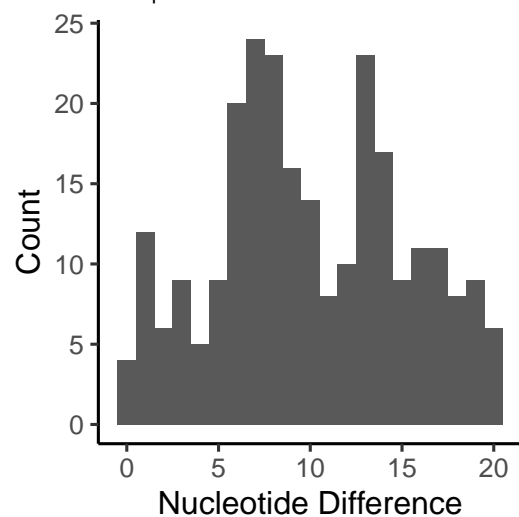
IGHV3-NL_6*02_S7808

134 sequences assigned
No exact matches.



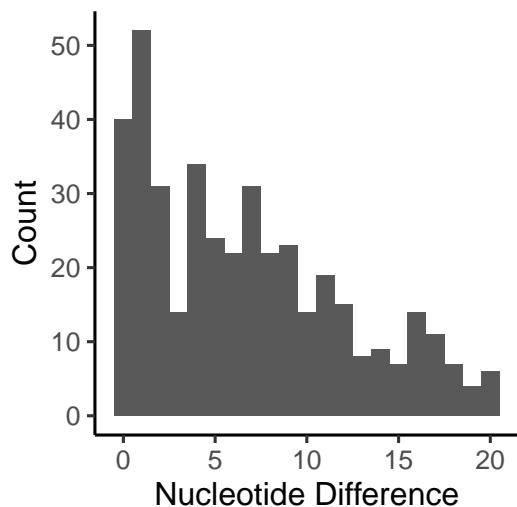
IGHV3-NL_8*01_S7860

275 sequences assigned
4 (1.5%) exact matches, in which:
3 unique CDR3
2 unique J



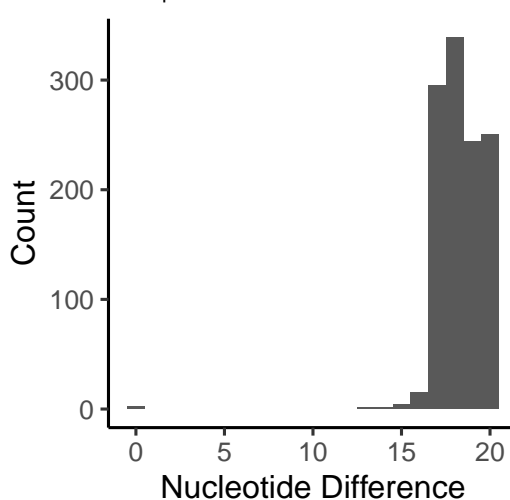
IGHV3-NL_4*01_S6405

430 sequences assigned
40 (9.3%) exact matches, in which:
28 unique CDR3
6 unique J



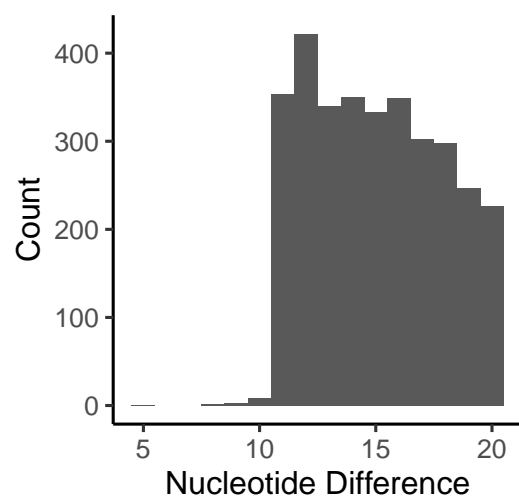
IGHV3-NL_7*01_S0199

3878 sequences assigned
2 (0.1%) exact matches, in which:
2 unique CDR3
2 unique J



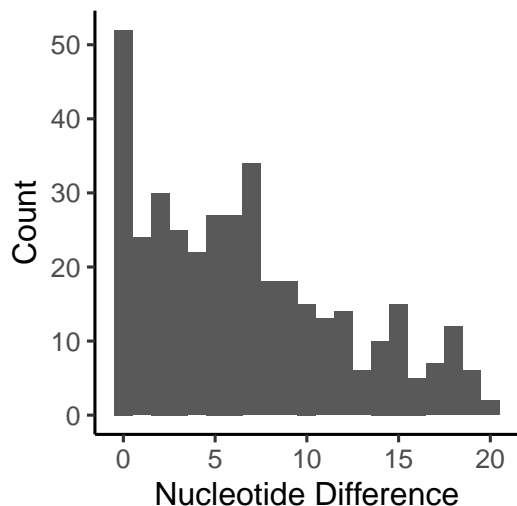
IGHV3-NL_9*01_S6098

5013 sequences assigned
No exact matches.



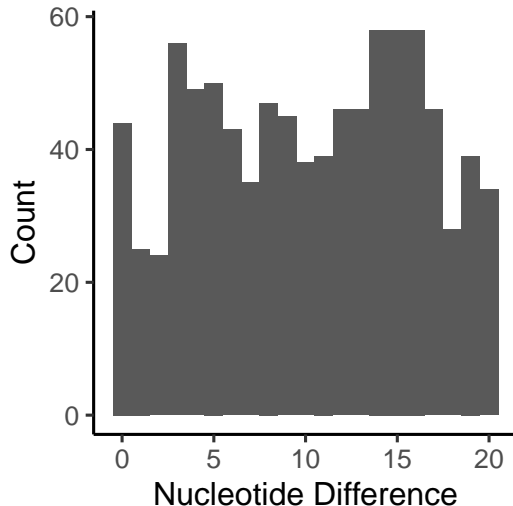
IGHV4-79*02_S9501

428 sequences assigned
52 (12.1%) exact matches, in which:
46 unique CDR3
5 unique J



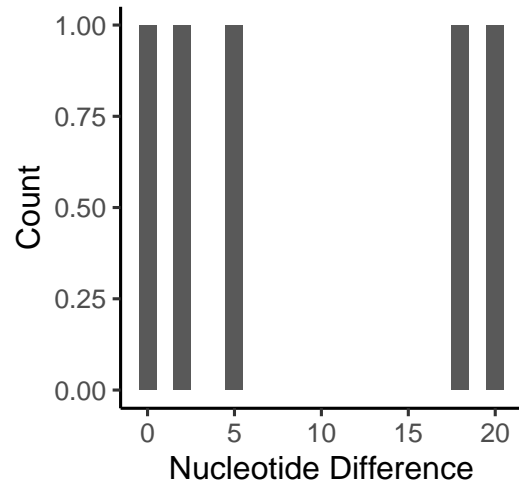
IGHV4-144*01_S3008

1264 sequences assigned
44 (3.5%) exact matches, in which:
36 unique CDR3
7 unique J



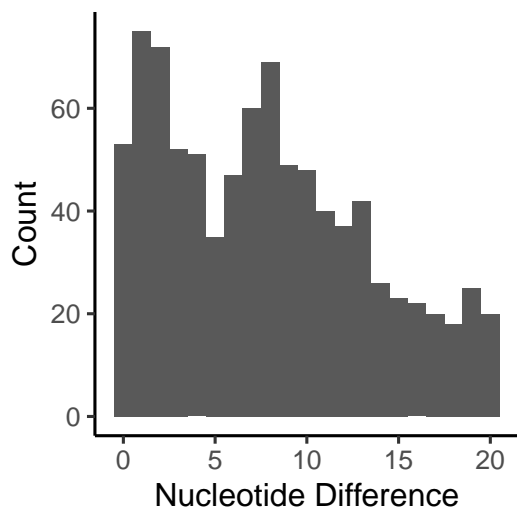
IGHV4-174*02_S3984

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



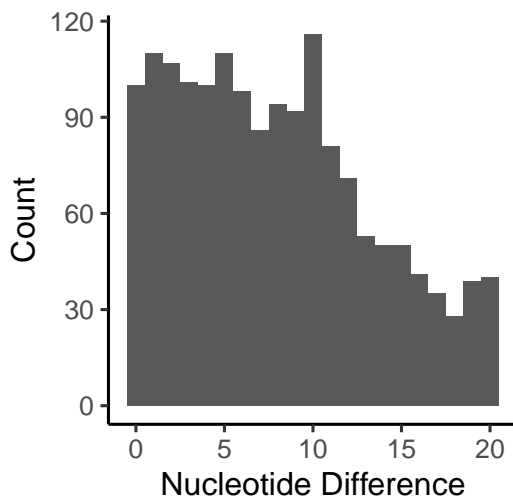
IGHV4-93*01_S5203

1006 sequences assigned
53 (5.3%) exact matches, in which:
50 unique CDR3
6 unique J



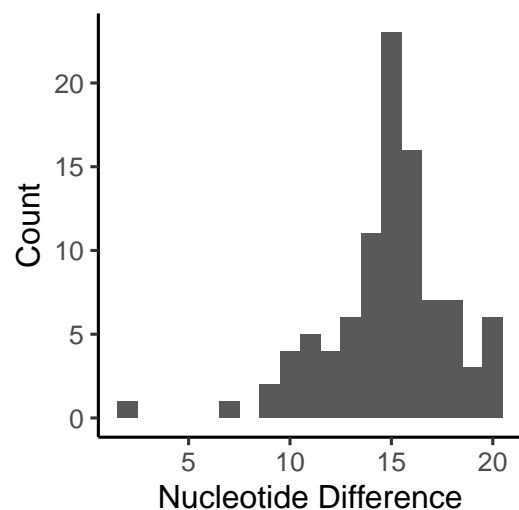
IGHV4-149*01_S1992

1891 sequences assigned
100 (5.3%) exact matches, in which:
84 unique CDR3
6 unique J



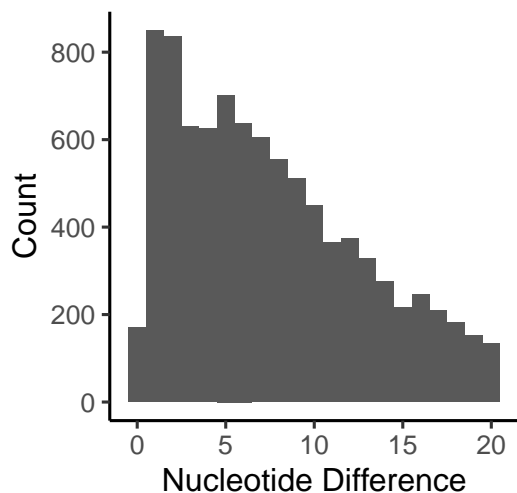
IGHV4-174*02_S5400

193 sequences assigned
No exact matches.



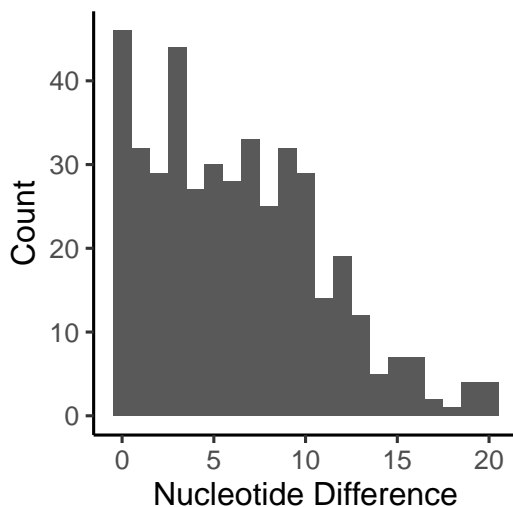
IGHV4-117*01_S8404

9860 sequences assigned
171 (1.7%) exact matches, in which:
153 unique CDR3
6 unique J



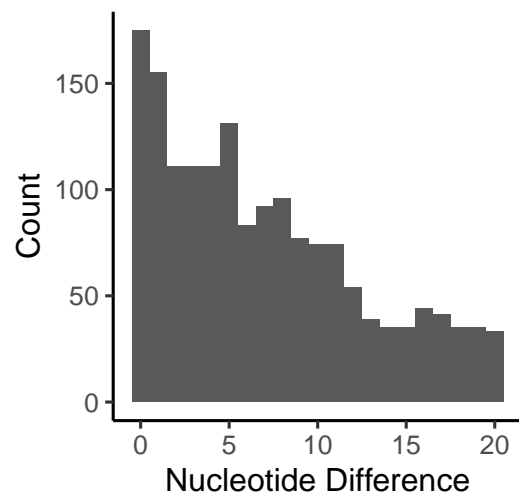
IGHV4-150*01_S0749

487 sequences assigned
46 (9.4%) exact matches, in which:
42 unique CDR3
6 unique J



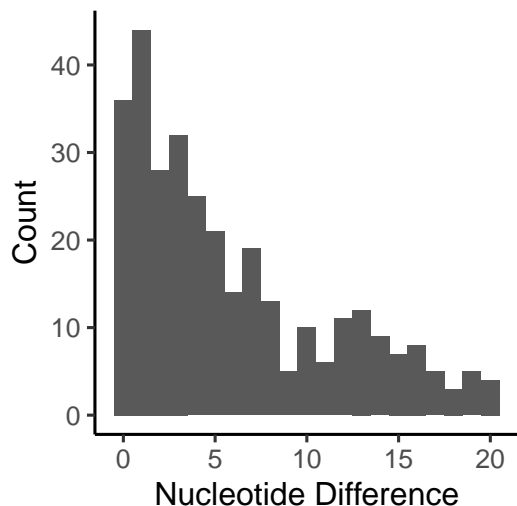
IGHV4-NL_1*01_S1593

1809 sequences assigned
175 (9.7%) exact matches, in which:
151 unique CDR3
7 unique J



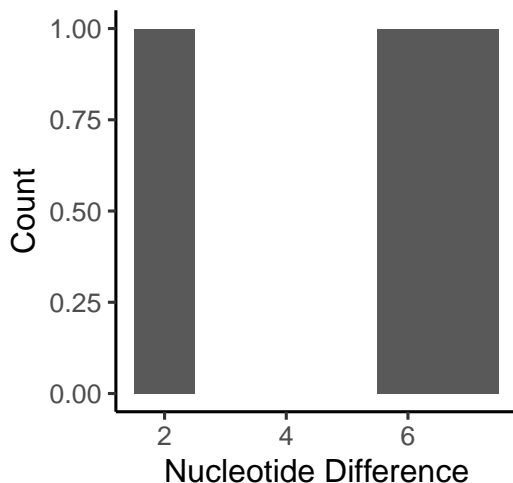
IGHV4–NL_1*01_S8621

349 sequences assigned
36 (10.3%) exact matches, in which:
33 unique CDR3
5 unique J



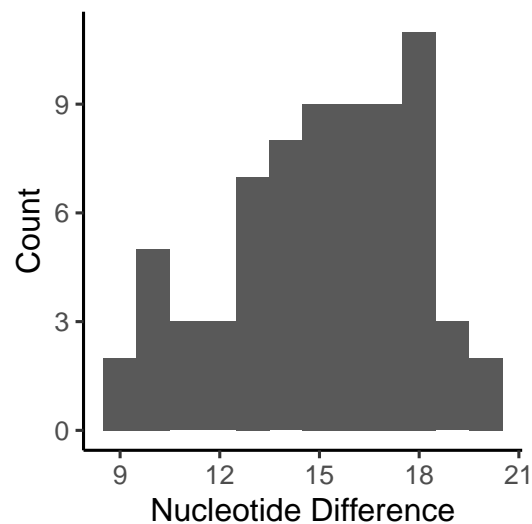
IGHV4–NL_10*01_S6744

3 sequences assigned
No exact matches.



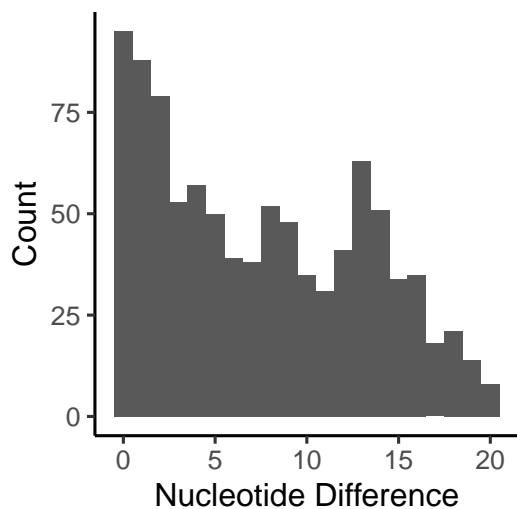
IGHV4–NL_12*01_S5174

167 sequences assigned
No exact matches.



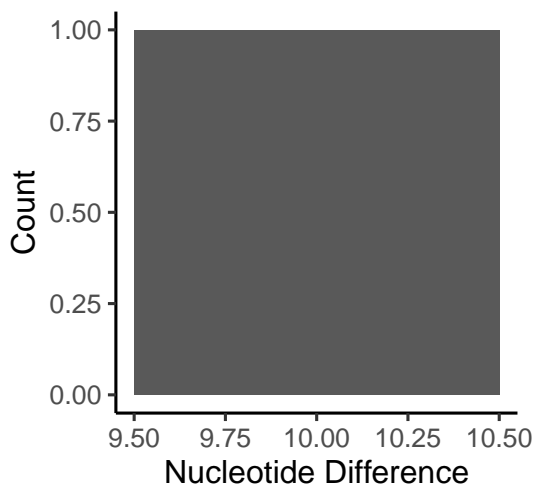
IGHV4–NL_1*01_S9508

1026 sequences assigned
95 (9.3%) exact matches, in which:
87 unique CDR3
6 unique J



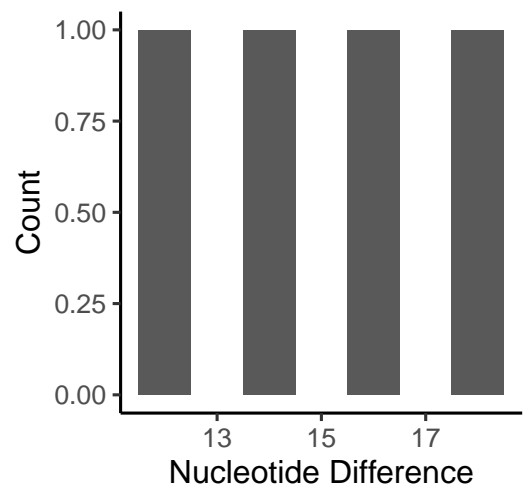
IGHV4–NL_10*01_S7684

1 sequences assigned
No exact matches.



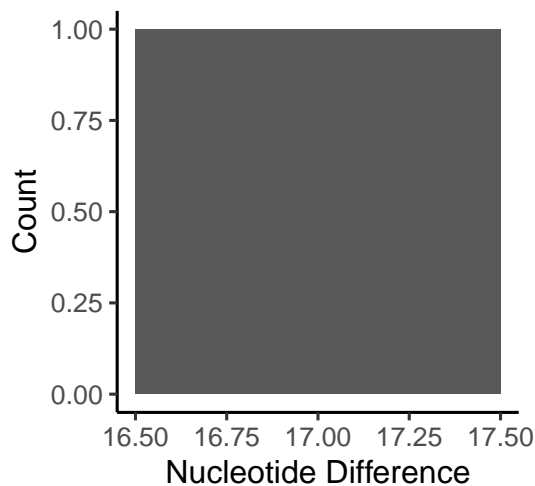
IGHV4–NL_12*01_S8068

9 sequences assigned
No exact matches.



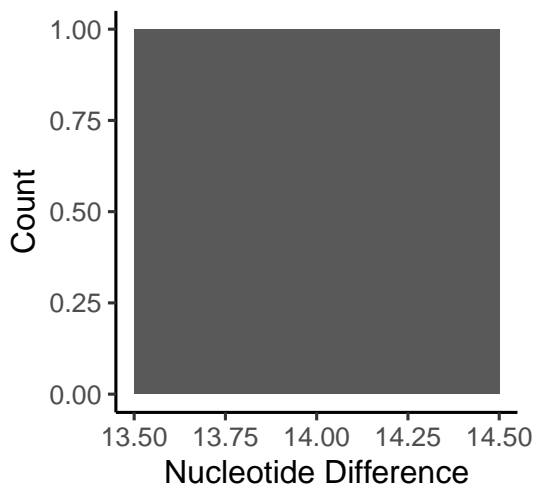
IGHV4–NL_10*01_S0458

1 sequences assigned
No exact matches.



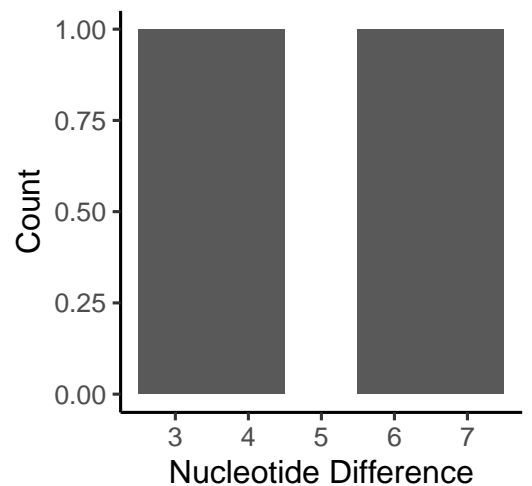
IGHV4–NL_11*01_S5570

2 sequences assigned
No exact matches.



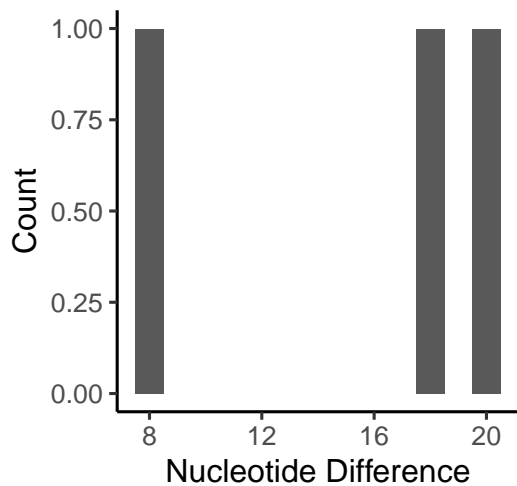
IGHV4–NL_13*01_S9624

5 sequences assigned
No exact matches.



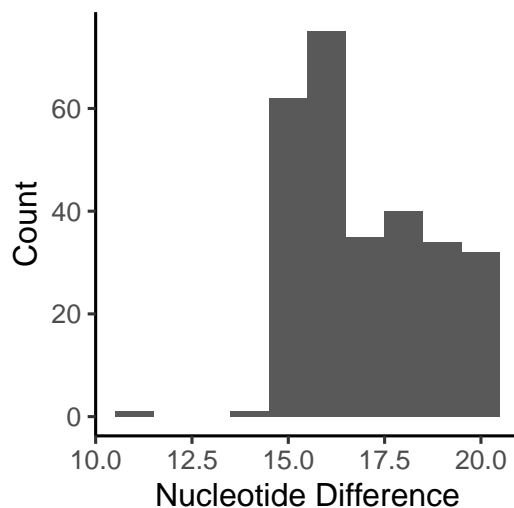
IGHV4-NL_15*01_S7687

3 sequences assigned
No exact matches.



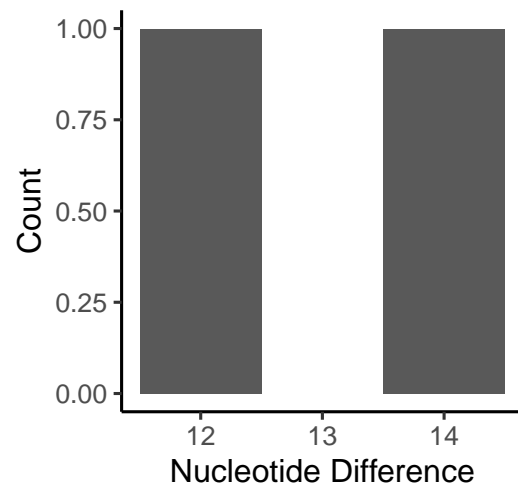
IGHV4-NL_17*01_S0904

466 sequences assigned
No exact matches.



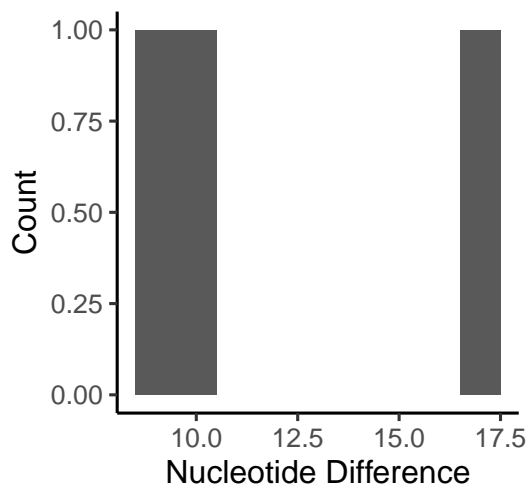
IGHV4-NL_19*01_S1944

2 sequences assigned
No exact matches.



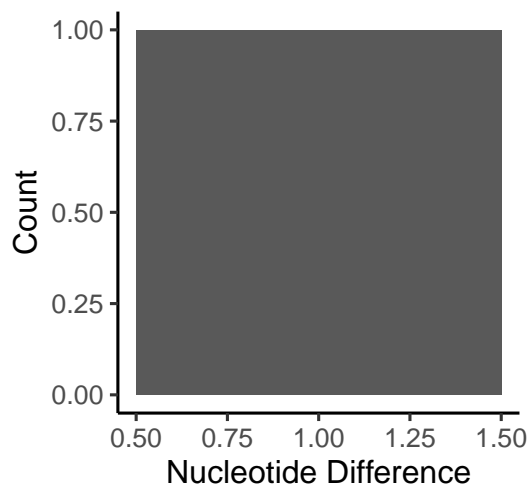
IGHV4-NL_16*01_S2138

3 sequences assigned
No exact matches.



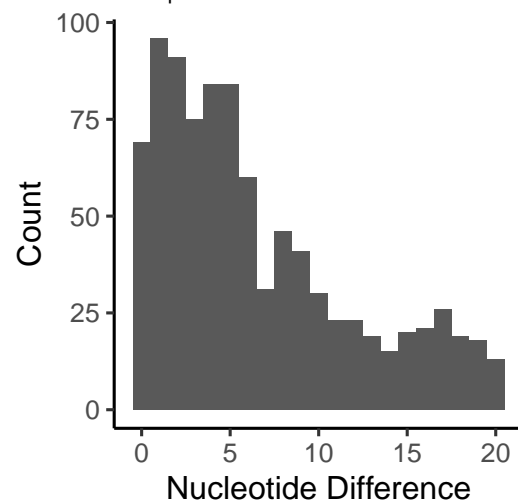
IGHV4-NL_17*01_S0936

1 sequences assigned
No exact matches.



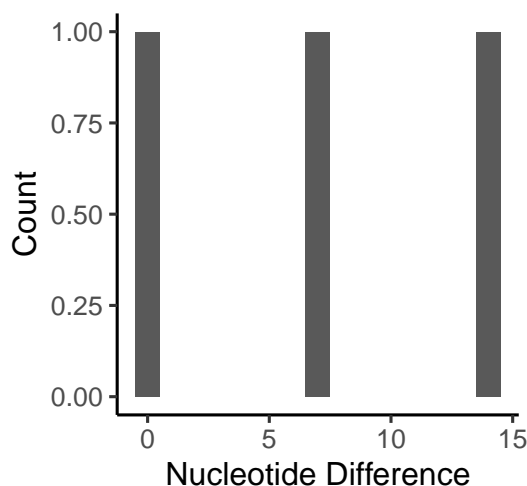
IGHV4-NL_20*01_S2908

1026 sequences assigned
69 (6.7%) exact matches, in which:
62 unique CDR3
6 unique J



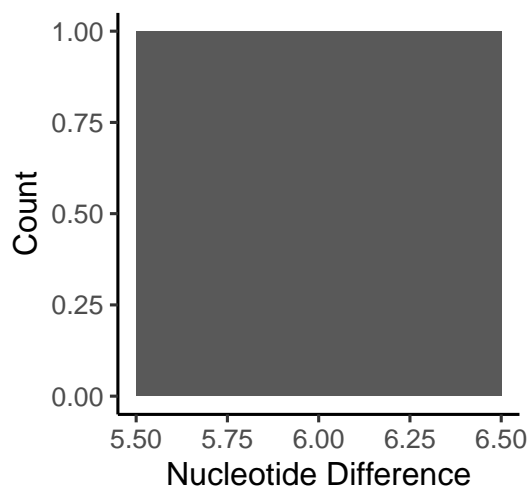
IGHV4-NL_16*01_S2324

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



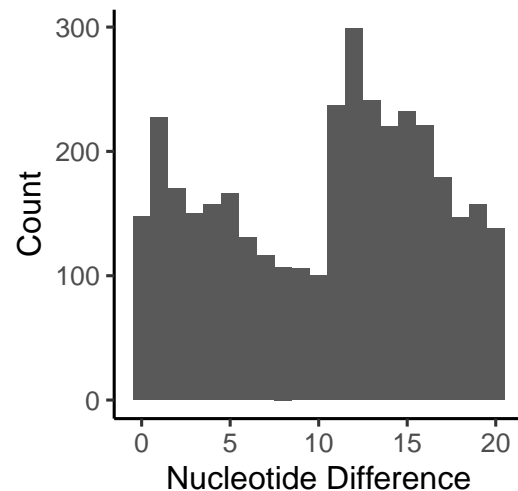
IGHV4-NL_17*01_S2336

1 sequences assigned
No exact matches.



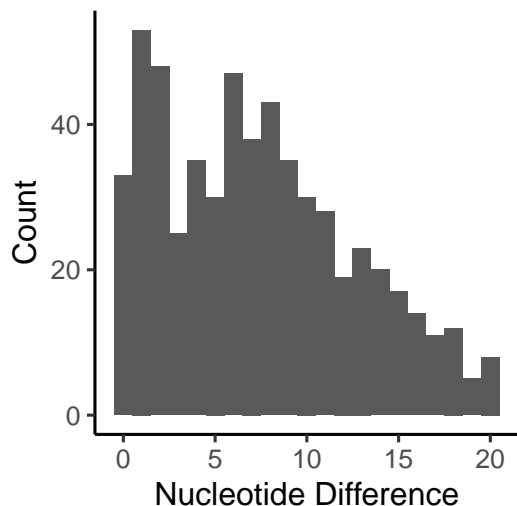
IGHV4-NL_21*01_S0138

4561 sequences assigned
148 (3.2%) exact matches, in which:
129 unique CDR3
6 unique J



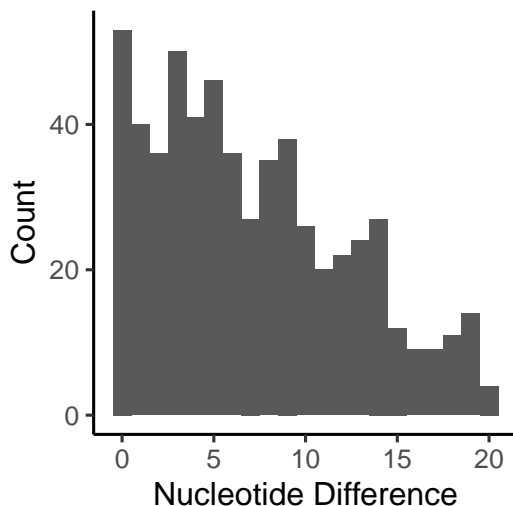
IGHV4–NL_24*01_S7595

637 sequences assigned
33 (5.2%) exact matches, in which:
30 unique CDR3
7 unique J



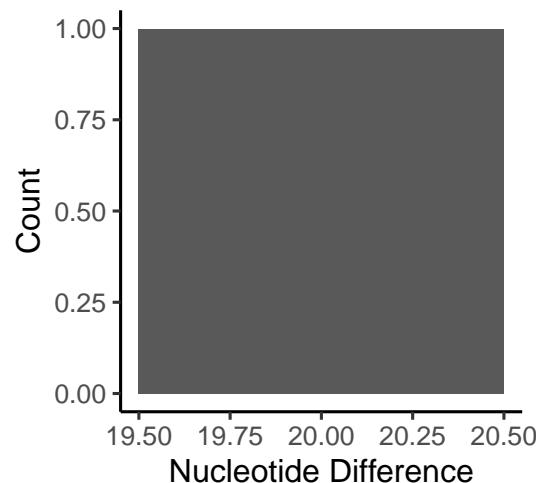
IGHV4–NL_27*01_S7431

637 sequences assigned
53 (8.3%) exact matches, in which:
46 unique CDR3
4 unique J



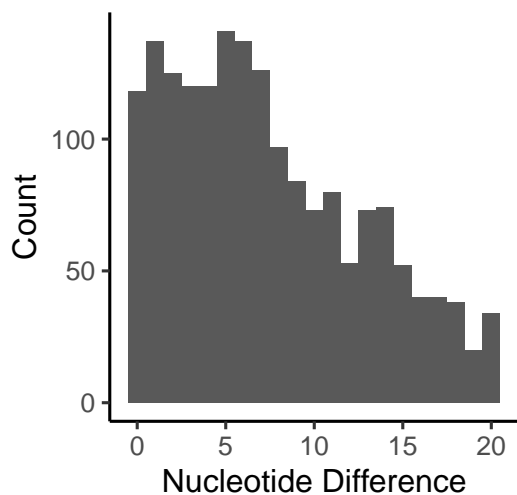
IGHV4–NL_28*01_S8057

1 sequences assigned
No exact matches.



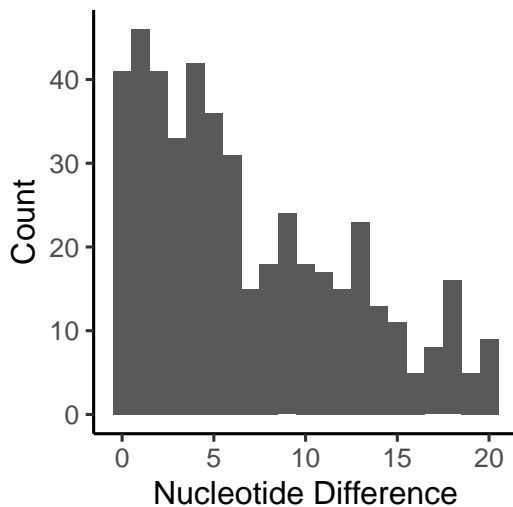
IGHV4–NL_25*01_S2780

1994 sequences assigned
118 (5.9%) exact matches, in which:
100 unique CDR3
6 unique J



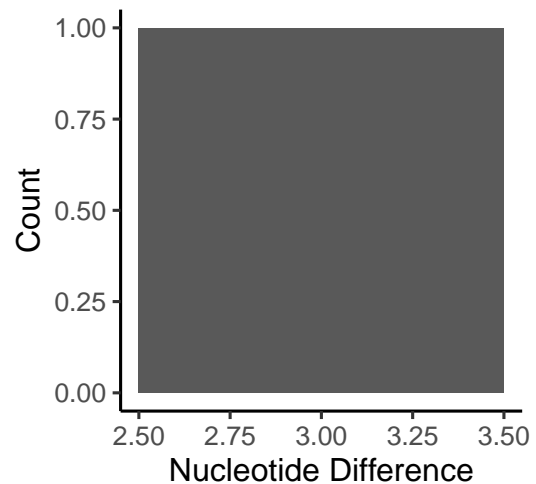
IGHV4–NL_27*01_S7871

514 sequences assigned
41 (8%) exact matches, in which:
37 unique CDR3
7 unique J



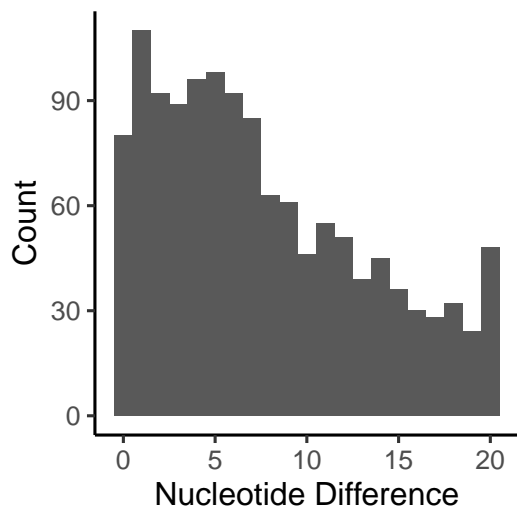
IGHV4–NL_29*01_S1425

2 sequences assigned
No exact matches.



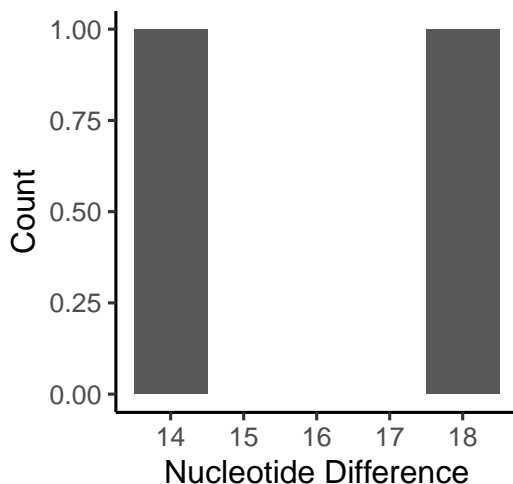
IGHV4–NL_27*01_S2979

1711 sequences assigned
80 (4.7%) exact matches, in which:
69 unique CDR3
6 unique J



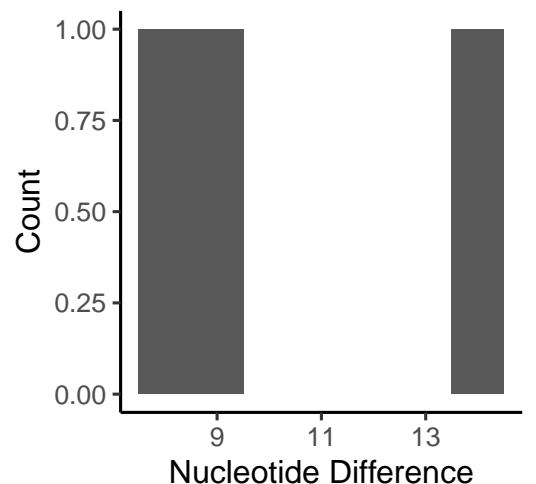
IGHV4–NL_28*01_S2610

3 sequences assigned
No exact matches.



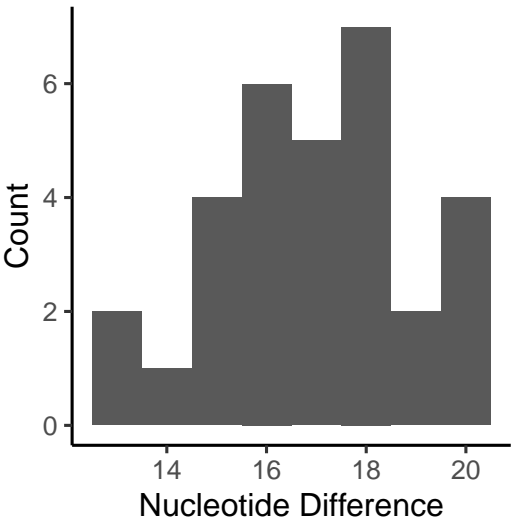
IGHV4–NL_29*01_S3761

9 sequences assigned
No exact matches.



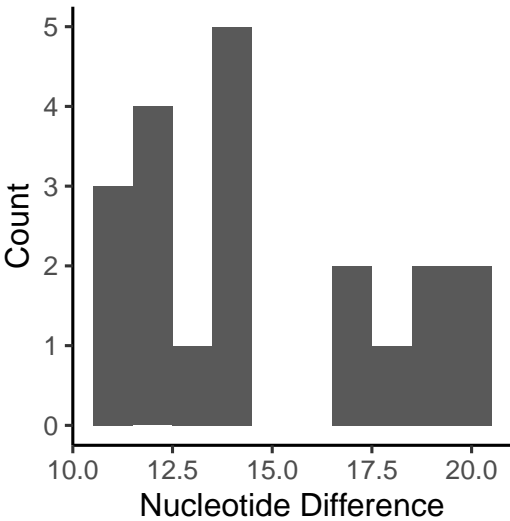
IGHV4–NL_3*01_S7576

64 sequences assigned
No exact matches.



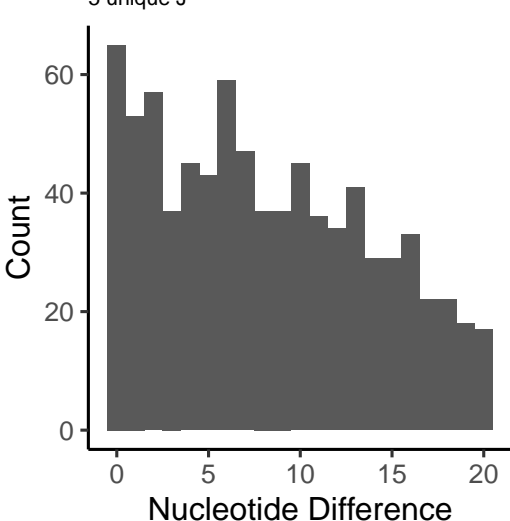
IGHV4–NL_32*01_S3033

27 sequences assigned
No exact matches.



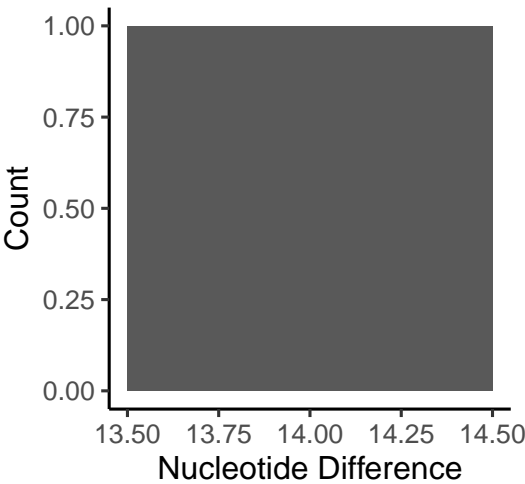
IGHV4–NL_36*01_S6474

954 sequences assigned
65 (6.8%) exact matches, in which:
57 unique CDR3
5 unique J



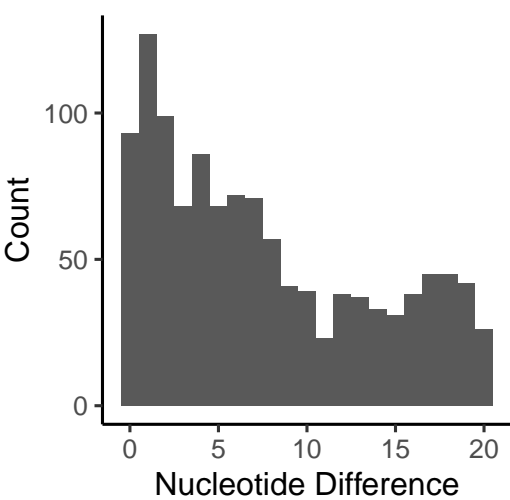
IGHV4–NL_31*01_S1675

1 sequences assigned
No exact matches.



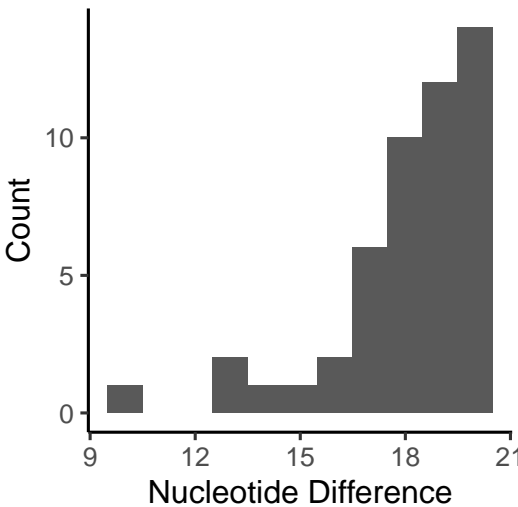
IGHV4–NL_33*01_S3086

1493 sequences assigned
93 (6.2%) exact matches, in which:
83 unique CDR3
6 unique J



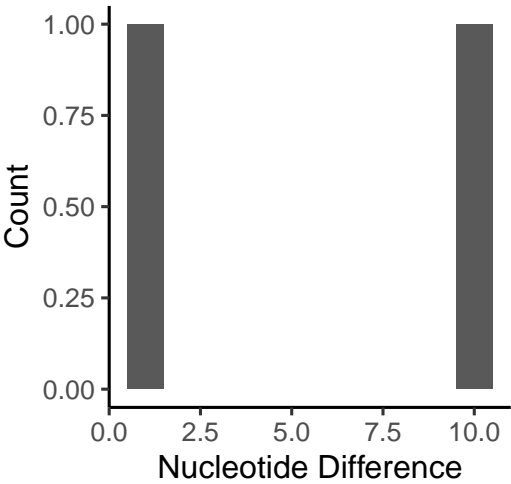
IGHV4–NL_38*01_S2187

91 sequences assigned
No exact matches.



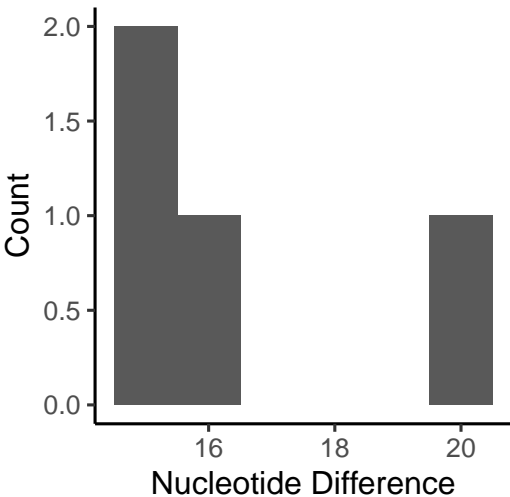
IGHV4–NL_31*01_S7693

5 sequences assigned
No exact matches.



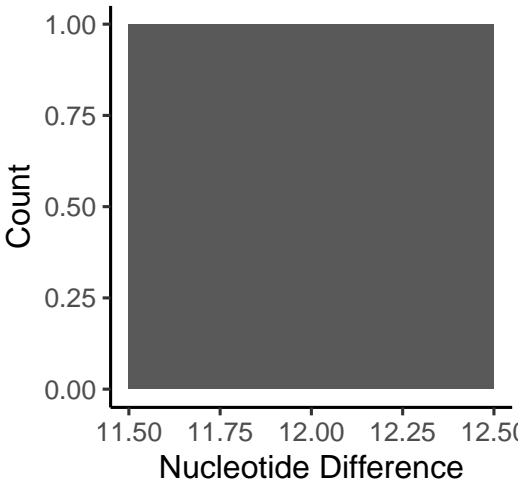
IGHV4–NL_34*01_S4637

9 sequences assigned
No exact matches.



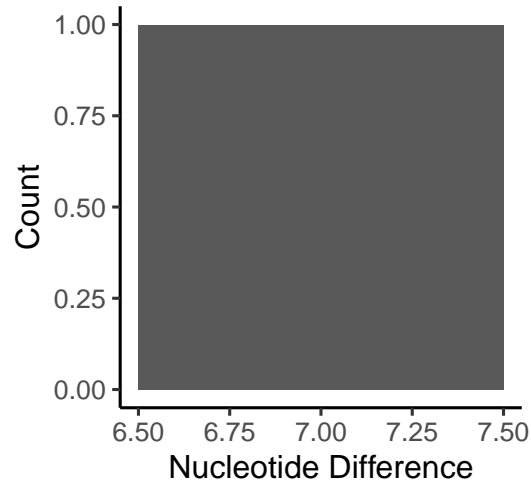
IGHV4–NL_38*01_S6935

1 sequences assigned
No exact matches.



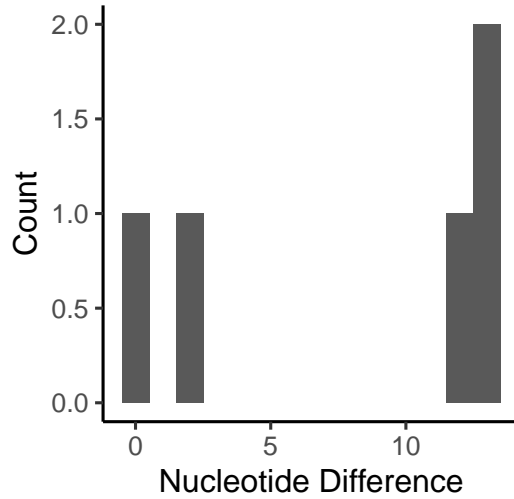
IGHV4-NL_38*01_S8437

1 sequences assigned
No exact matches.



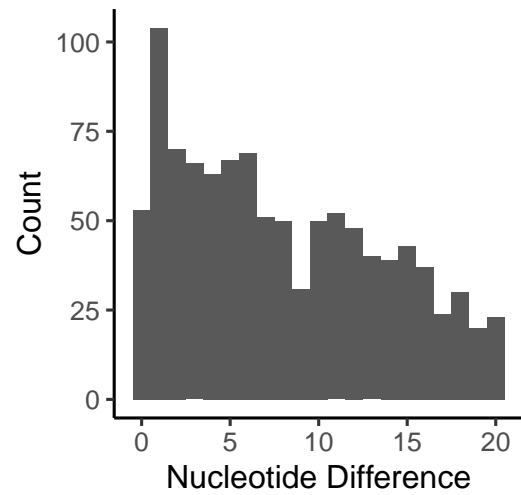
IGHV4-NL_40*01_S0696

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



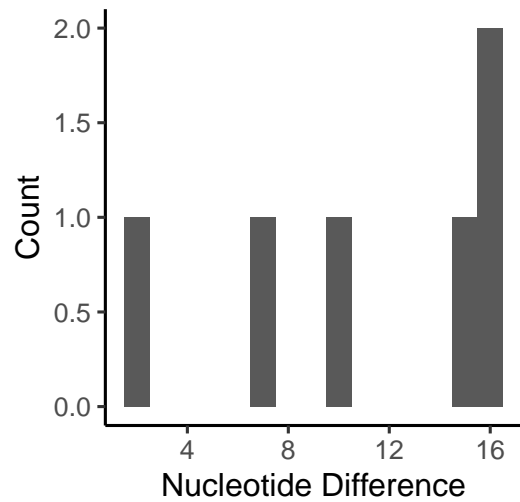
IGHV4-NL_43*01_S4510

1165 sequences assigned
53 (4.5%) exact matches, in which:
47 unique CDR3
6 unique J



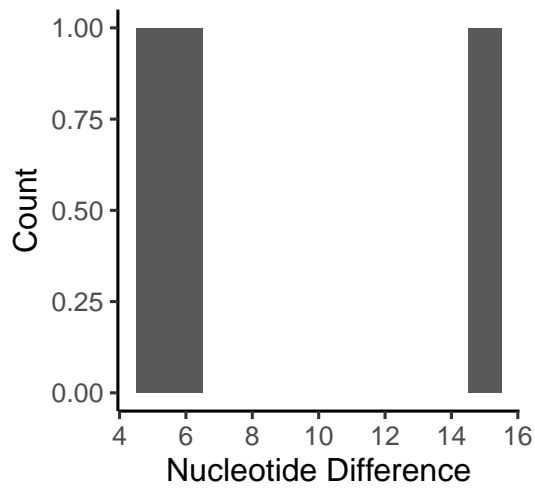
IGHV4-NL_38*01_S9472

8 sequences assigned
No exact matches.



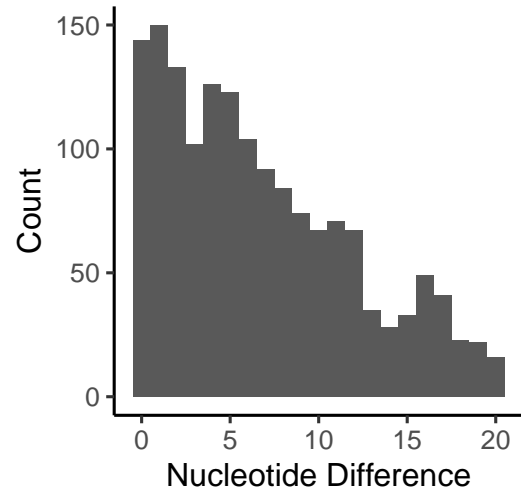
IGHV4-NL_40*01_S5093

5 sequences assigned
No exact matches.



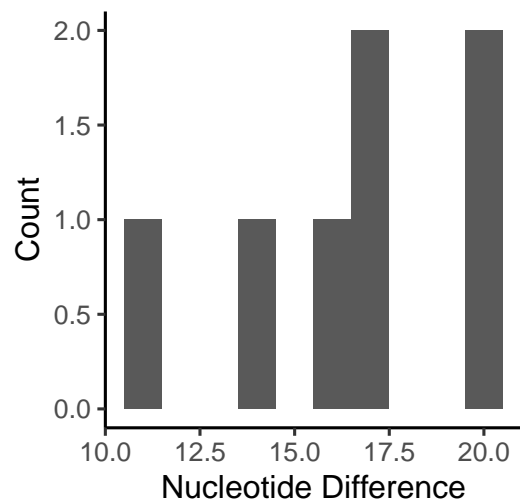
IGHV4-NL_5*01_S1492

1806 sequences assigned
144 (8%) exact matches, in which:
121 unique CDR3
7 unique J



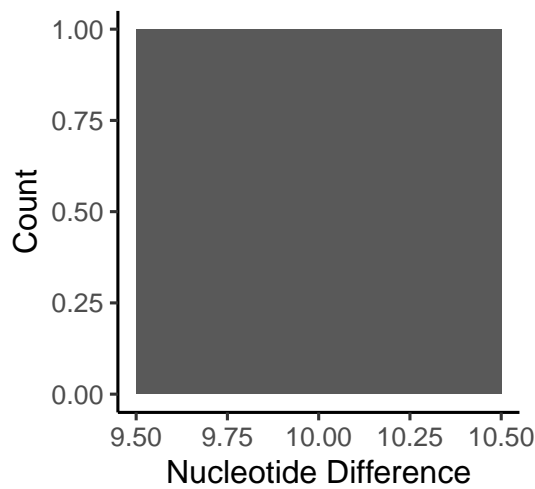
IGHV4-NL_4*01_S8866

19 sequences assigned
No exact matches.



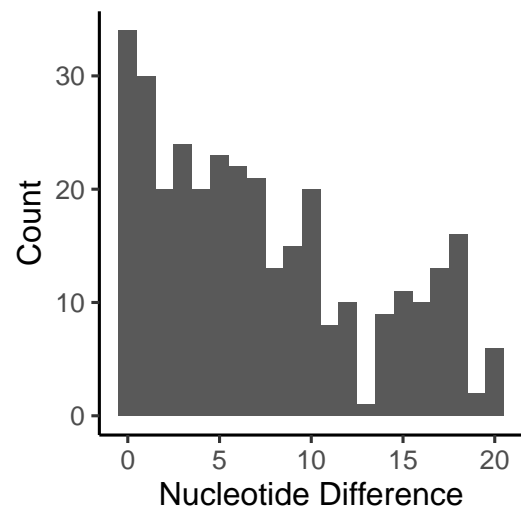
IGHV4-NL_42*01_S3666

2 sequences assigned
No exact matches.



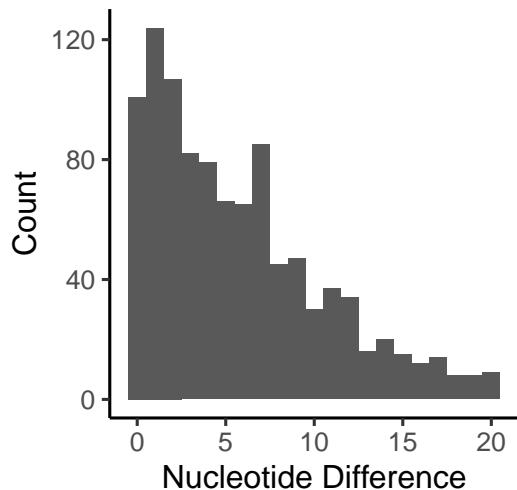
IGHV4-NL_5*01_S5158

367 sequences assigned
34 (9.3%) exact matches, in which:
27 unique CDR3
5 unique J



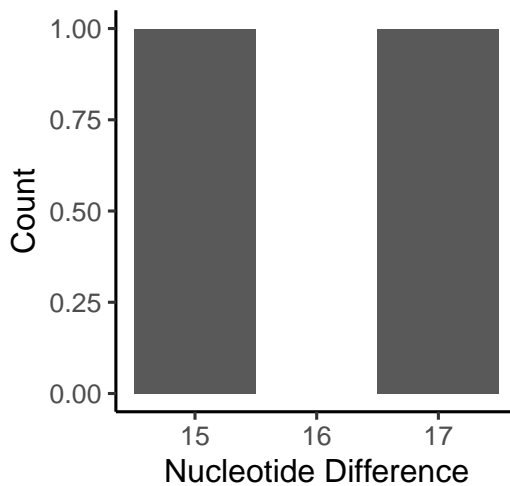
IGHV4–NL_5*01_S8645

1098 sequences assigned
101 (9.2%) exact matches, in which:
89 unique CDR3
5 unique J



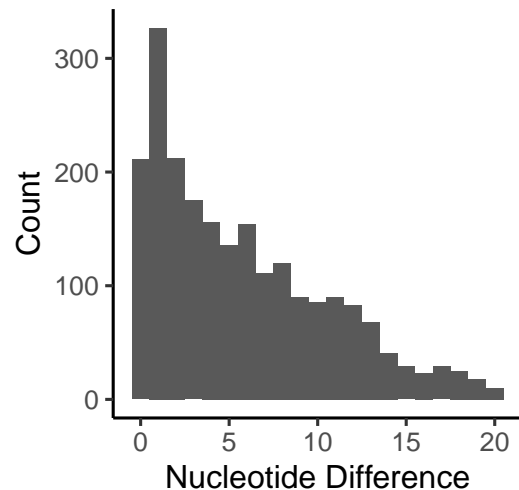
IGHV4–NL_9*01_S4567

67 sequences assigned
No exact matches.



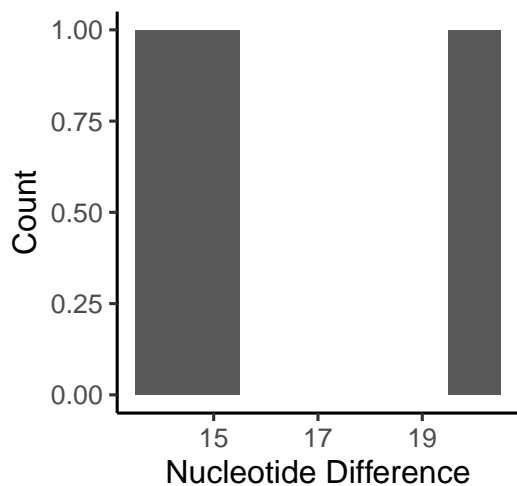
IGHV5–15*01_S5299

2340 sequences assigned
211 (9%) exact matches, in which:
166 unique CDR3
7 unique J



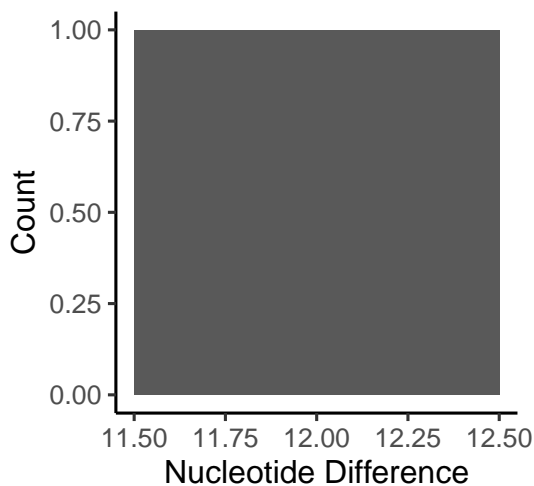
IGHV4–NL_9*01_S2406

16 sequences assigned
No exact matches.



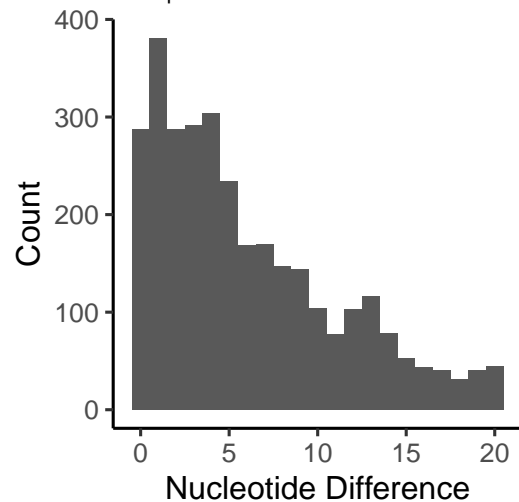
IGHV4–NL_9*01_S9889

2 sequences assigned
No exact matches.



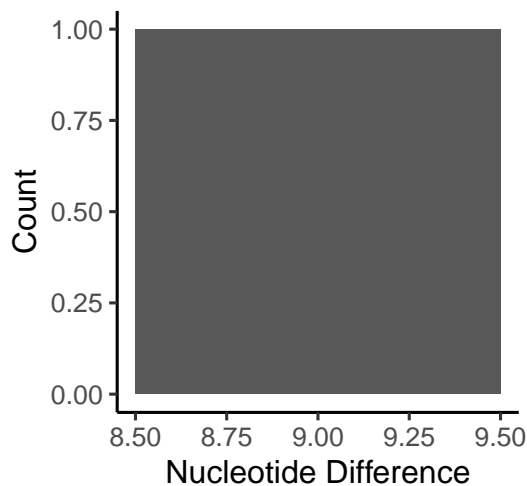
IGHV5–157*02_S3096

3333 sequences assigned
288 (8.6%) exact matches, in which:
170 unique CDR3
6 unique J



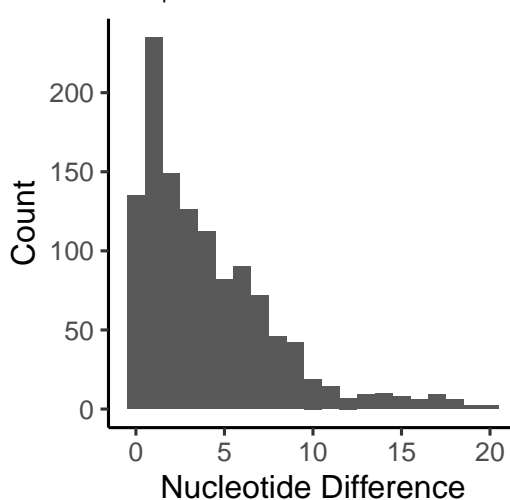
IGHV4–NL_9*01_S3502

3 sequences assigned
No exact matches.



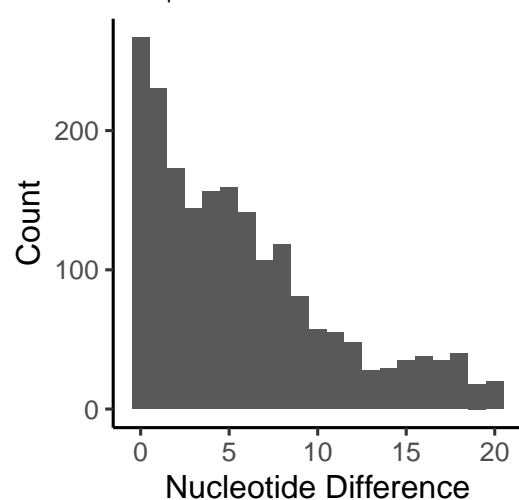
IGHV5–15*01_S2502

1210 sequences assigned
135 (11.2%) exact matches, in which:
107 unique CDR3
6 unique J



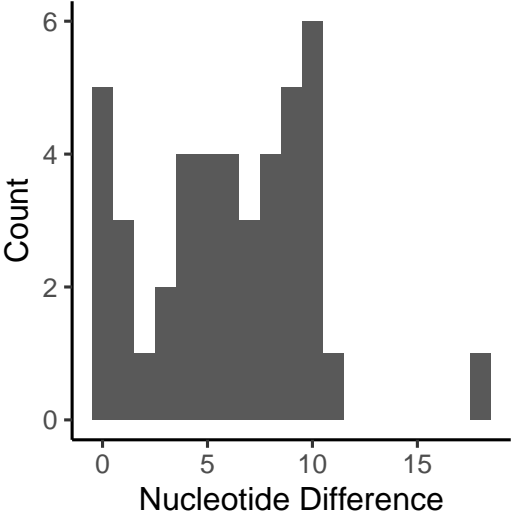
IGHV7–86*01_S0772

2097 sequences assigned
267 (12.7%) exact matches, in which:
210 unique CDR3
7 unique J



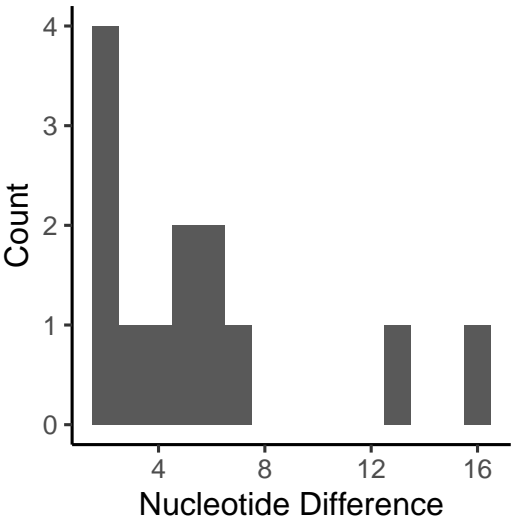
IGHV7-135*01_S4281

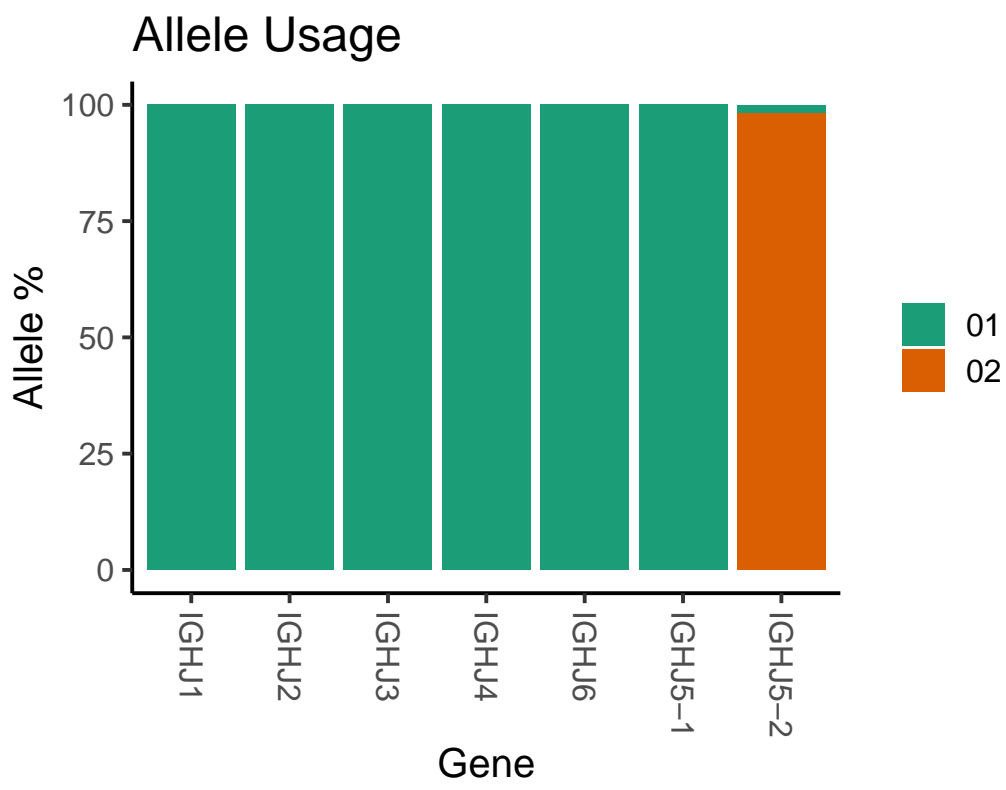
43 sequences assigned
5 (11.6%) exact matches, in which:
4 unique CDR3
3 unique J



IGHV7-135*02_S1424

13 sequences assigned
No exact matches.





Warning – no inferred sequences found.