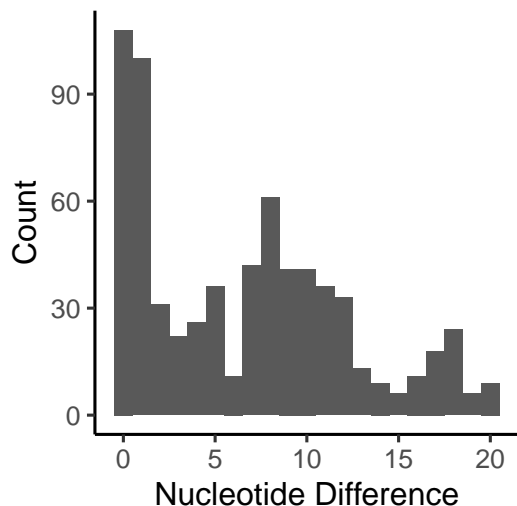


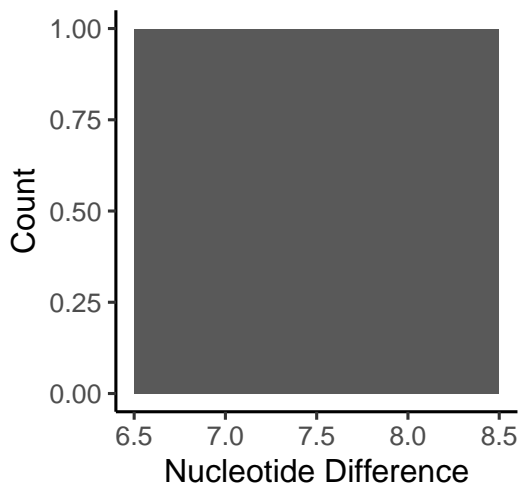
IGHV1-60*01_S7772

714 sequences assigned
108 (15.1%) exact matches, in which:
65 unique CDR3
6 unique J



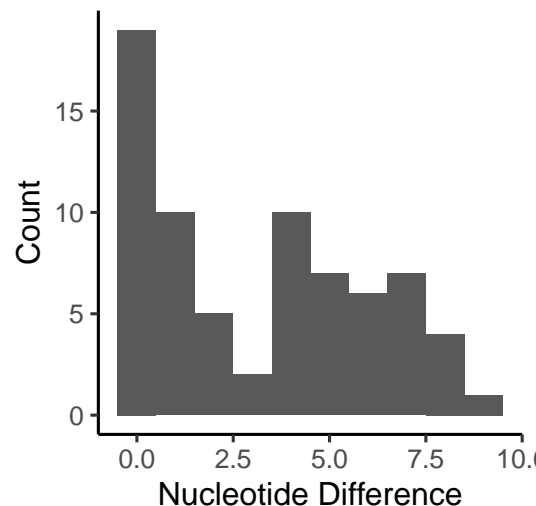
IGHV1-105*01_S8693

3 sequences assigned
No exact matches.



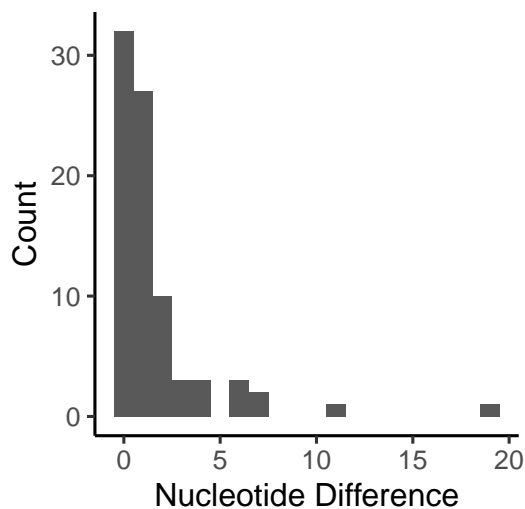
IGHV1-138*01_S6073

71 sequences assigned
19 (26.8%) exact matches, in which:
15 unique CDR3
5 unique J



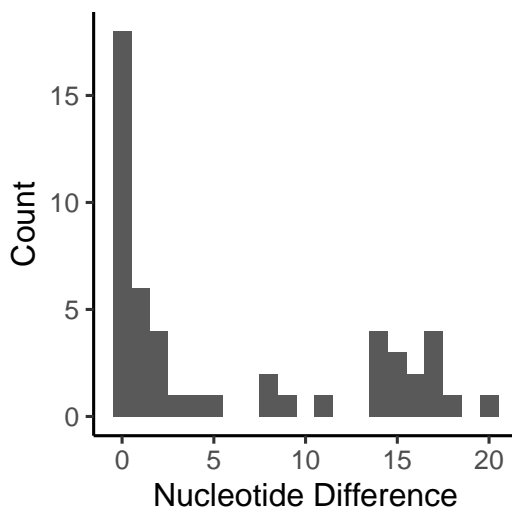
IGHV1-84*01_S2078

82 sequences assigned
32 (39%) exact matches, in which:
20 unique CDR3
5 unique J



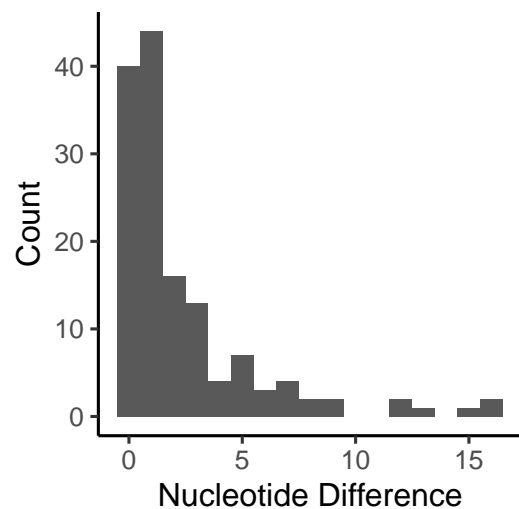
IGHV1-124*01_S6748

83 sequences assigned
18 (21.7%) exact matches, in which:
13 unique CDR3
4 unique J



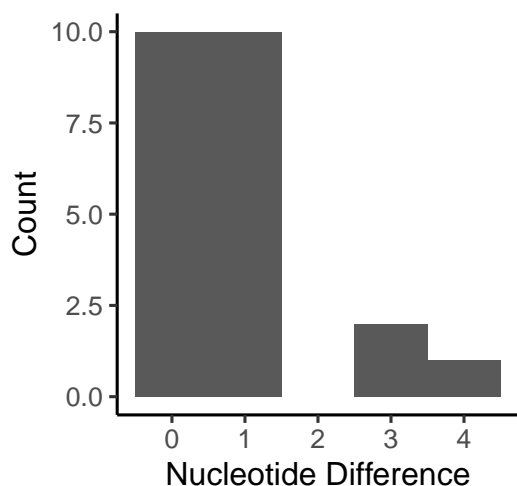
IGHV1-138*02_S9625

141 sequences assigned
40 (28.4%) exact matches, in which:
33 unique CDR3
6 unique J



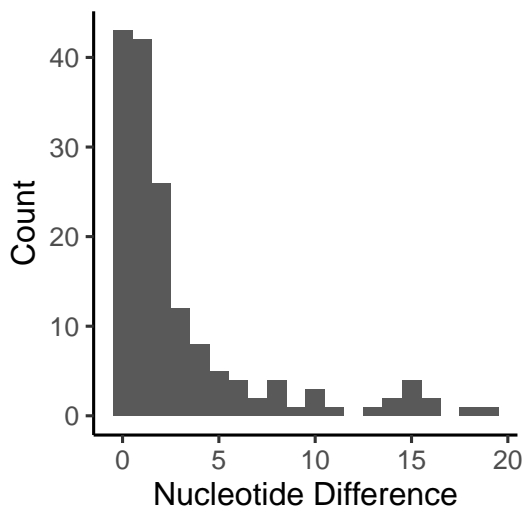
IGHV1-84*01_S4048

23 sequences assigned
10 (43.5%) exact matches, in which:
5 unique CDR3
2 unique J



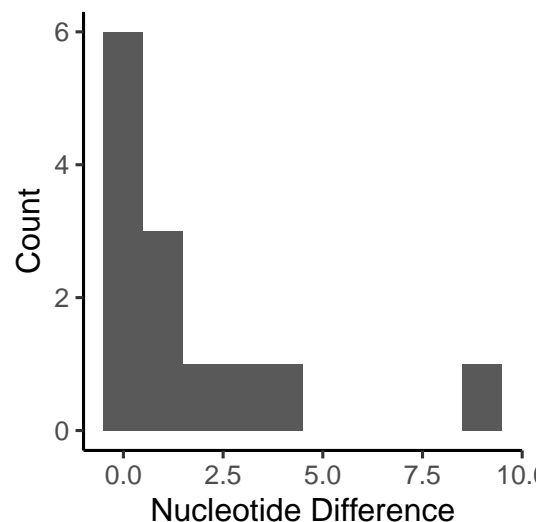
IGHV1-138*01_S2054

162 sequences assigned
43 (26.5%) exact matches, in which:
34 unique CDR3
6 unique J



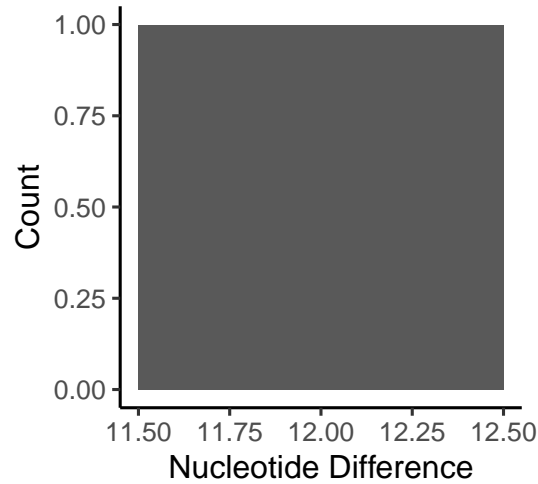
IGHV1-170*01_S3055

13 sequences assigned
6 (46.2%) exact matches, in which:
2 unique CDR3
2 unique J



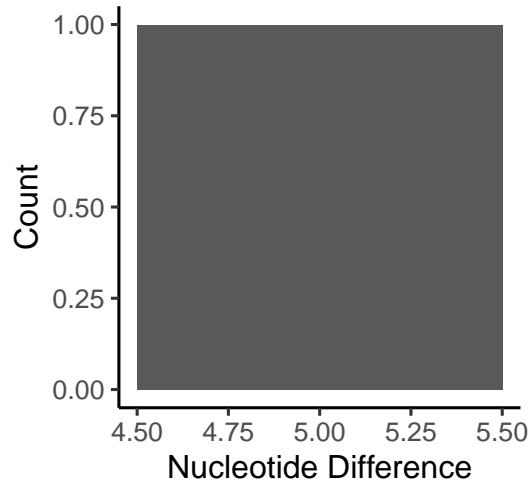
IGHV1-193*01_S6037

1 sequences assigned
No exact matches.



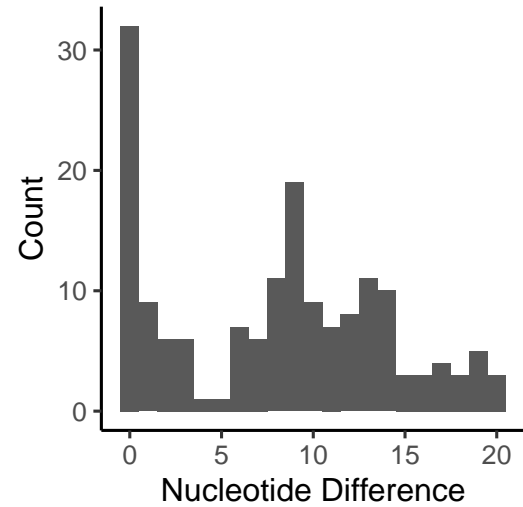
IGHV1-NL_2*01_S6034

1 sequences assigned
No exact matches.



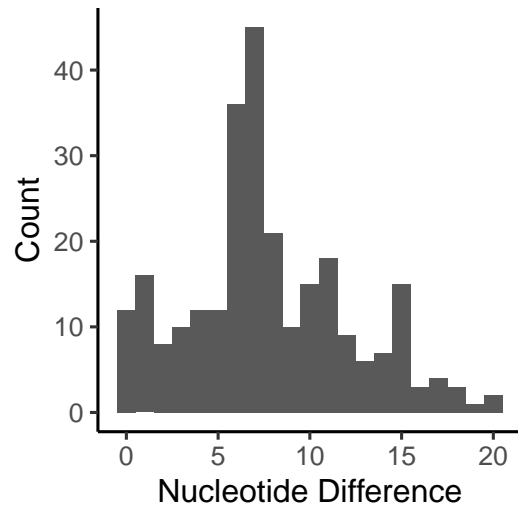
IGHV2-7*02_S3534_G292

167 sequences assigned
32 (19.2%) exact matches, in which:
30 unique CDR3
7 unique J



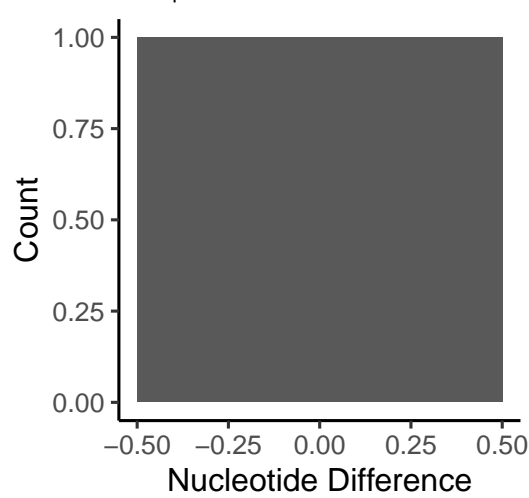
IGHV1-NL_1*01_S5433

268 sequences assigned
12 (4.5%) exact matches, in which:
11 unique CDR3
6 unique J



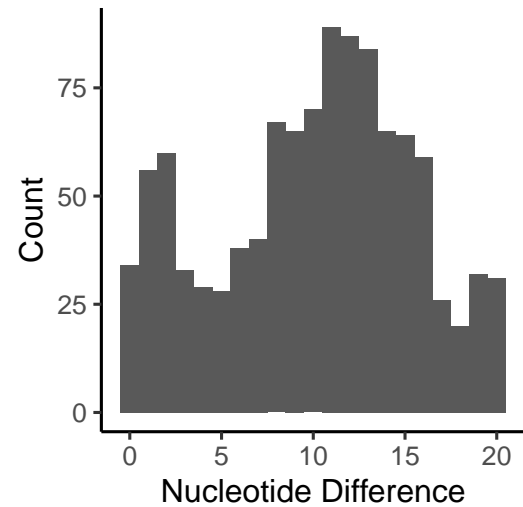
IGHV1-NL_2*01_S9602

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



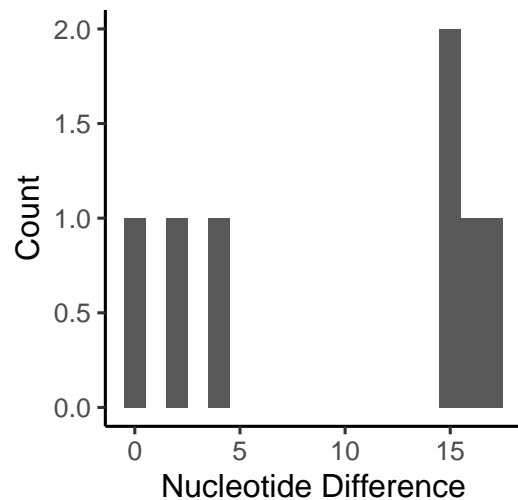
IGHV2-69*01_S0230

1230 sequences assigned
34 (2.8%) exact matches, in which:
22 unique CDR3
3 unique J



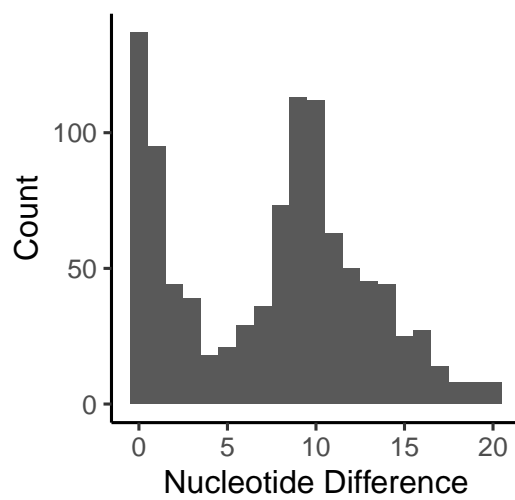
IGHV1-NL_2*01_S2245

7 sequences assigned
1 (14.3%) exact matches, in which:
1 unique CDR3
1 unique J



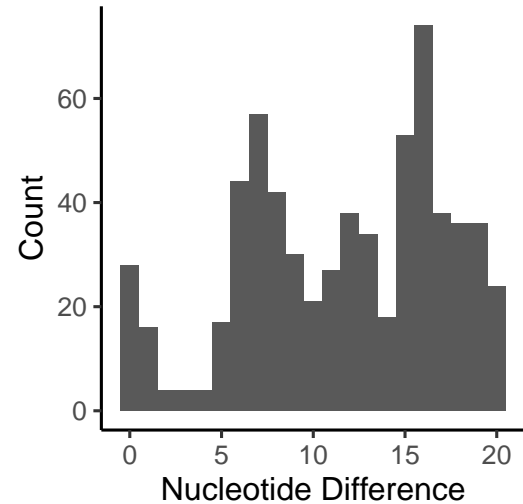
IGHV2-7*02_S3534

1030 sequences assigned
137 (13.3%) exact matches, in which:
79 unique CDR3
7 unique J



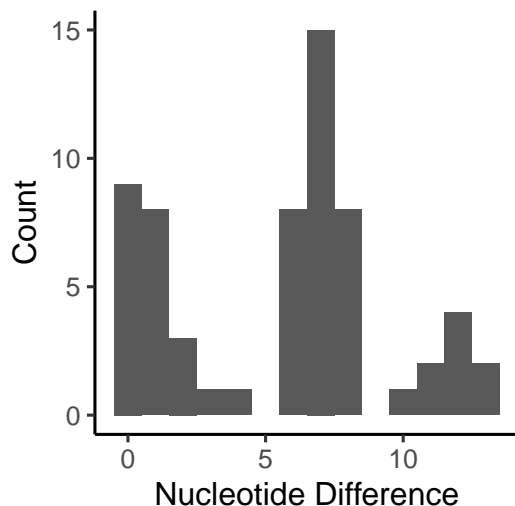
IGHV2-69*01_S2648

711 sequences assigned
28 (3.9%) exact matches, in which:
20 unique CDR3
7 unique J



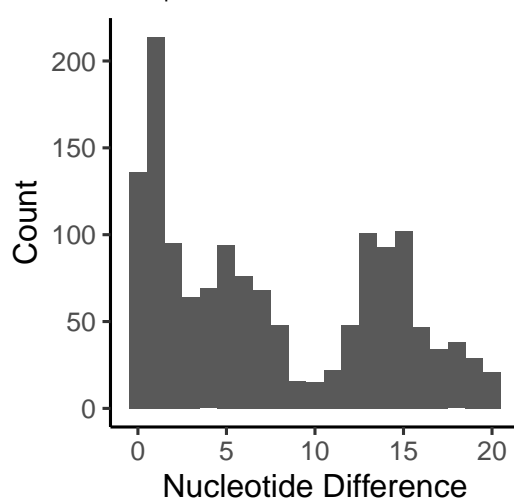
IGHV2-118*01_S1355

62 sequences assigned
9 (14.5%) exact matches, in which:
4 unique CDR3
2 unique J



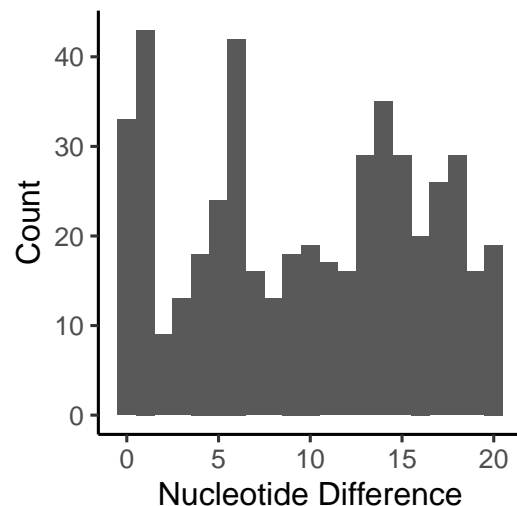
IGHV2-NL_1*01_S7937

1580 sequences assigned
136 (8.6%) exact matches, in which:
58 unique CDR3
7 unique J



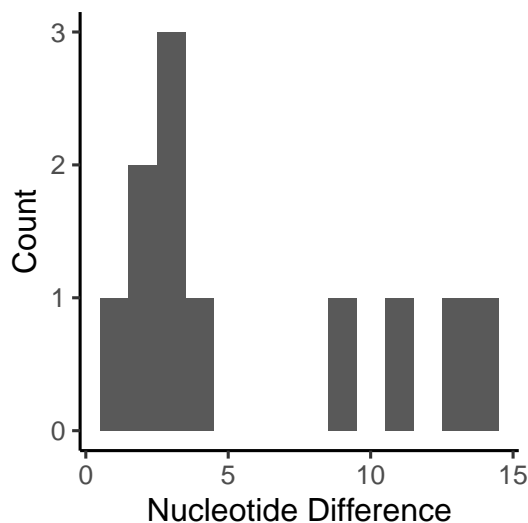
IGHV3-9*01_S0778

648 sequences assigned
33 (5.1%) exact matches, in which:
24 unique CDR3
7 unique J



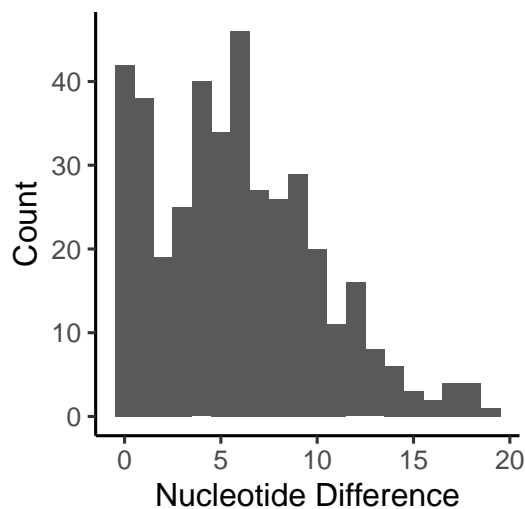
IGHV2-118*01_S2278

13 sequences assigned
No exact matches.



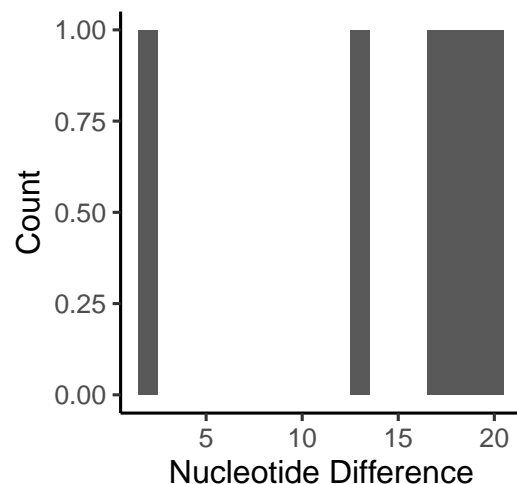
IGHV2-NL_2*01_S2193

405 sequences assigned
42 (10.4%) exact matches, in which:
23 unique CDR3
7 unique J



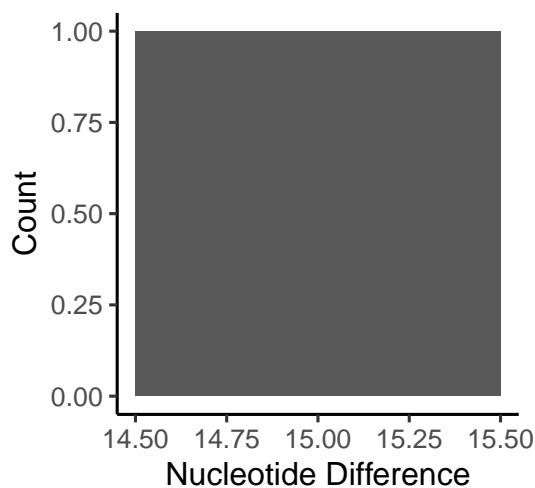
IGHV3-28*01_S3617

8 sequences assigned
No exact matches.



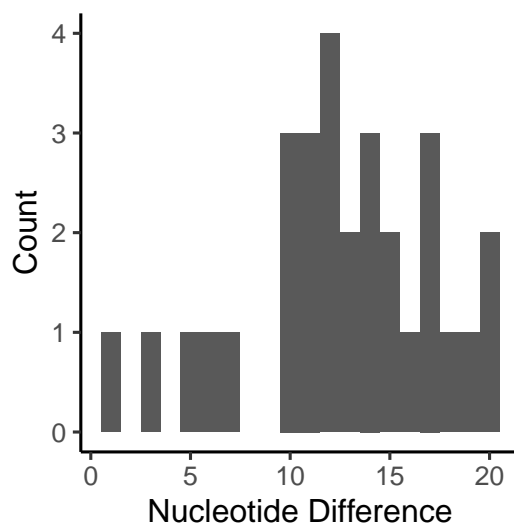
IGHV2-173*01_S2781

2 sequences assigned
No exact matches.



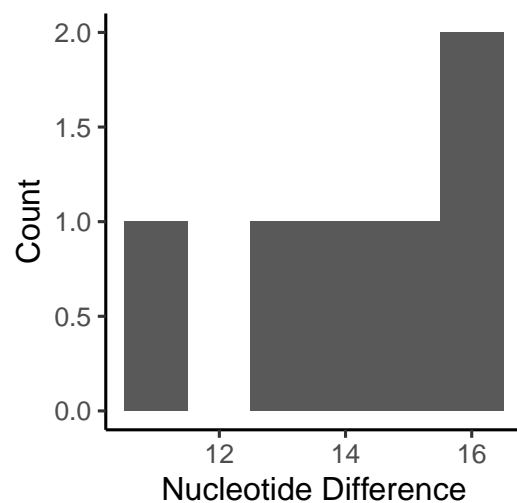
IGHV3-5*01_S1720

43 sequences assigned
No exact matches.



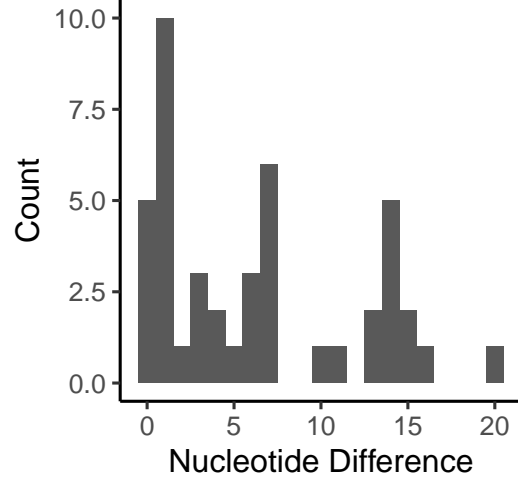
IGHV3-28*01_S7540

7 sequences assigned
No exact matches.



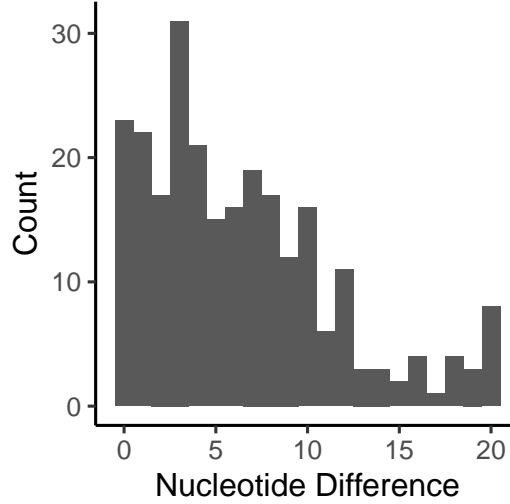
IGHV3-36*01_S1803

47 sequences assigned
5 (10.6%) exact matches, in which:
4 unique CDR3
2 unique J



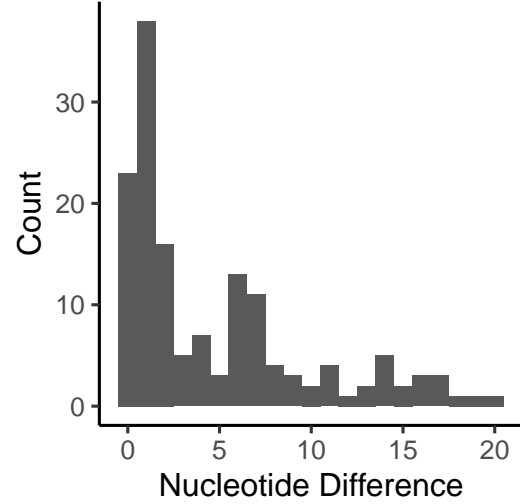
IGHV3-50*01_S8418

262 sequences assigned
23 (8.8%) exact matches, in which:
16 unique CDR3
6 unique J



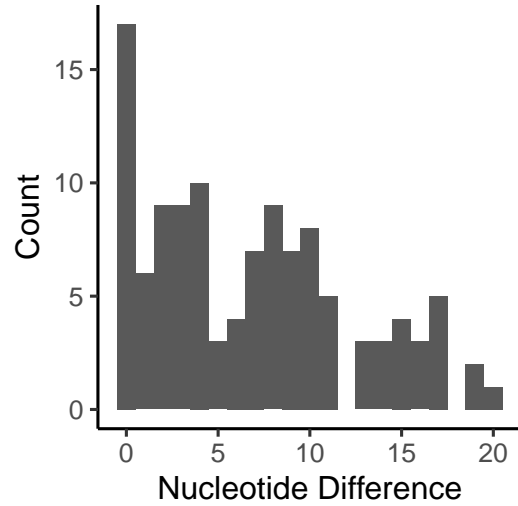
IGHV3-53*01_S2905

153 sequences assigned
23 (15%) exact matches, in which:
11 unique CDR3
3 unique J



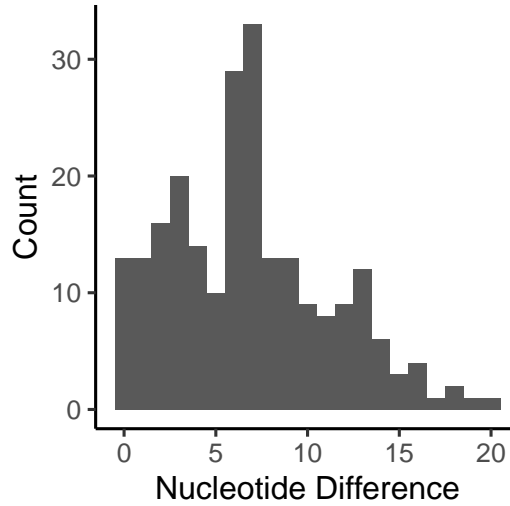
IGHV3-36*01_S6740

121 sequences assigned
17 (14%) exact matches, in which:
15 unique CDR3
6 unique J



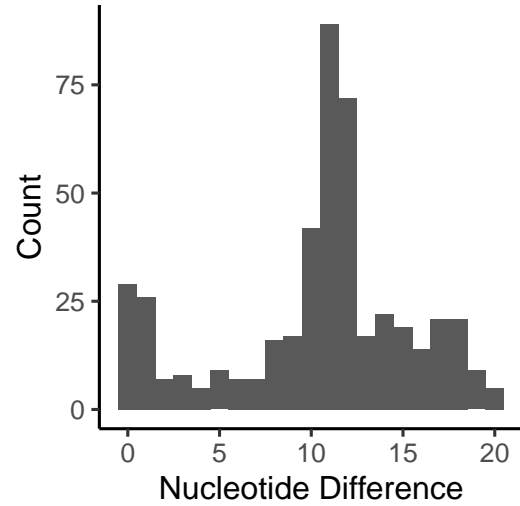
IGHV3-52*02_S4550

245 sequences assigned
13 (5.3%) exact matches, in which:
8 unique CDR3
4 unique J



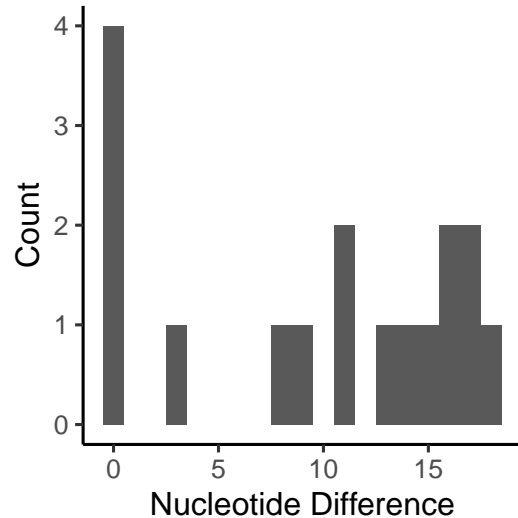
IGHV3-53*01_S3647

484 sequences assigned
29 (6%) exact matches, in which:
25 unique CDR3
5 unique J



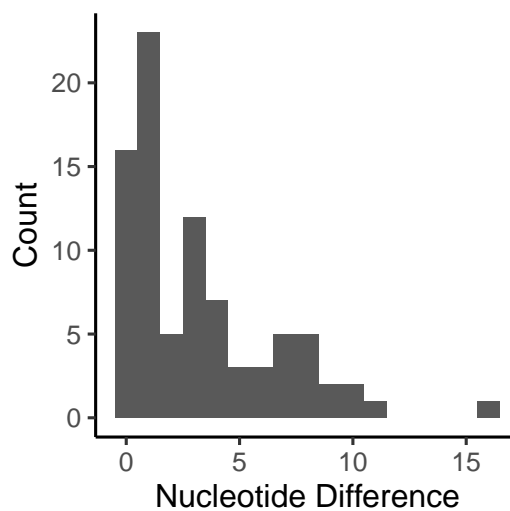
IGHV3-37*01_S0586

23 sequences assigned
4 (17.4%) exact matches, in which:
4 unique CDR3
2 unique J



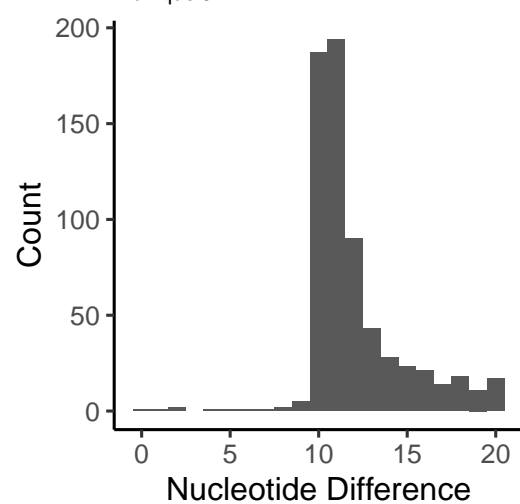
IGHV3-52*02_S6213

85 sequences assigned
16 (18.8%) exact matches, in which:
14 unique CDR3
4 unique J



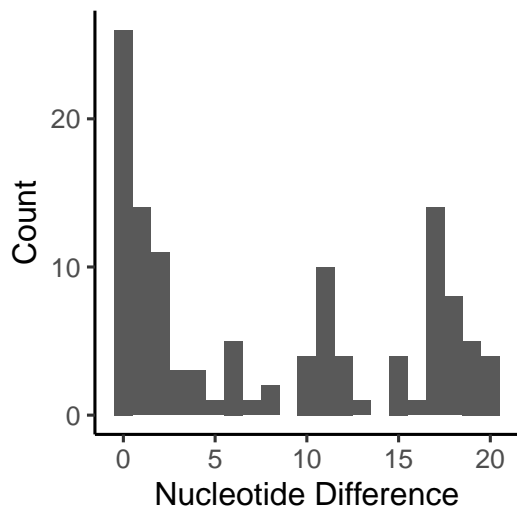
IGHV3-53*01_S8913

710 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



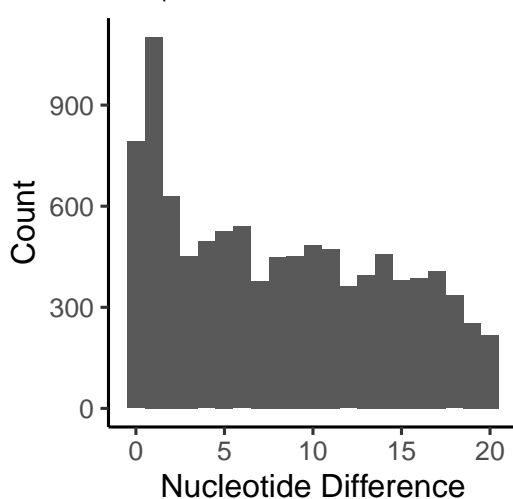
IGHV3-73*02_S2538

128 sequences assigned
26 (20.3%) exact matches, in which:
19 unique CDR3
5 unique J



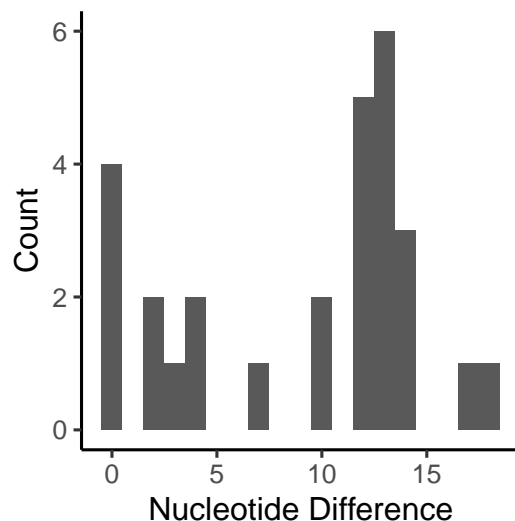
IGHV3-76*01_S9591

11831 sequences assigned
792 (6.7%) exact matches, in which:
514 unique CDR3
8 unique J



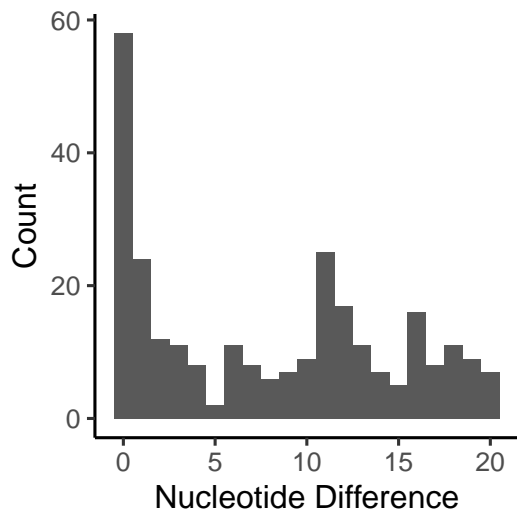
IGHV3-83*01_S5932

42 sequences assigned
4 (9.5%) exact matches, in which:
4 unique CDR3
2 unique J



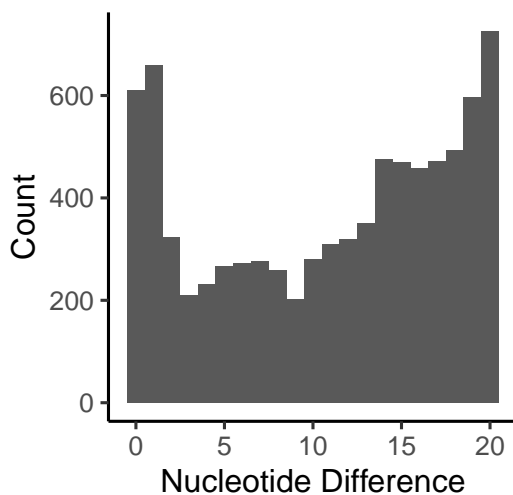
IGHV3-73*02_S4889

333 sequences assigned
58 (17.4%) exact matches, in which:
42 unique CDR3
5 unique J



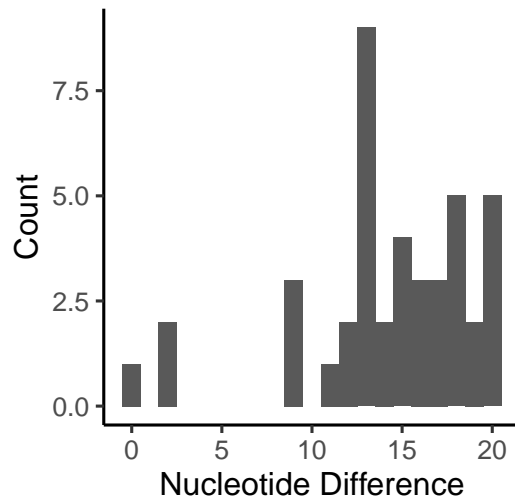
IGHV3-76*02_S4190

11628 sequences assigned
611 (5.3%) exact matches, in which:
445 unique CDR3
9 unique J



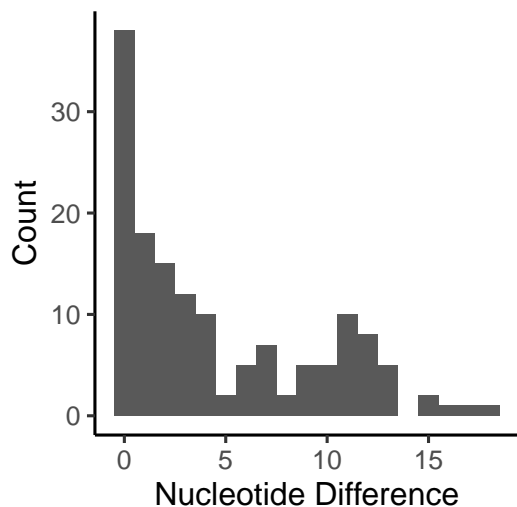
IGHV3-83*02_S1476

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



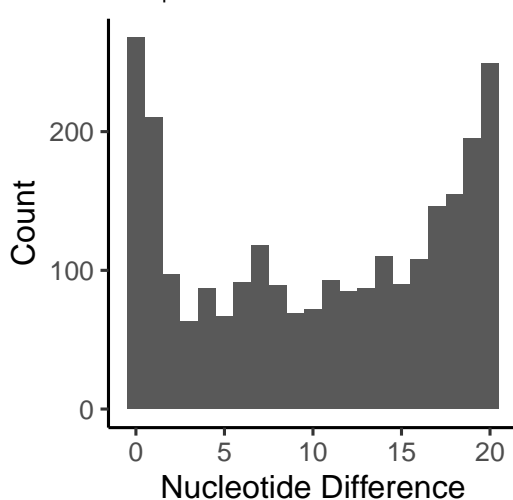
IGHV3-73*02_S7500

151 sequences assigned
38 (25.2%) exact matches, in which:
29 unique CDR3
5 unique J



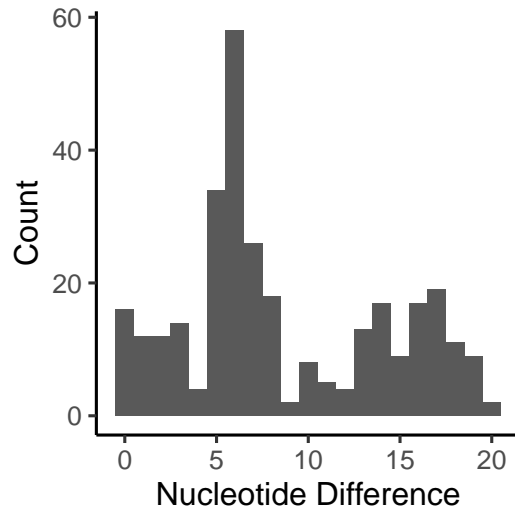
IGHV3-76*02_S4190_A2

3677 sequences assigned
268 (7.3%) exact matches, in which:
231 unique CDR3
8 unique J



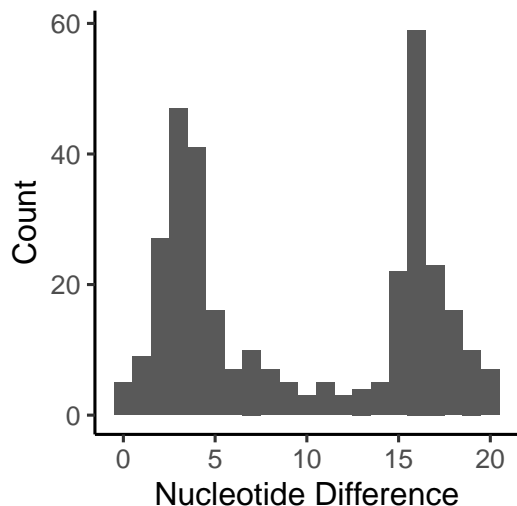
IGHV3-87*01_S1401

323 sequences assigned
16 (5%) exact matches, in which:
9 unique CDR3
4 unique J



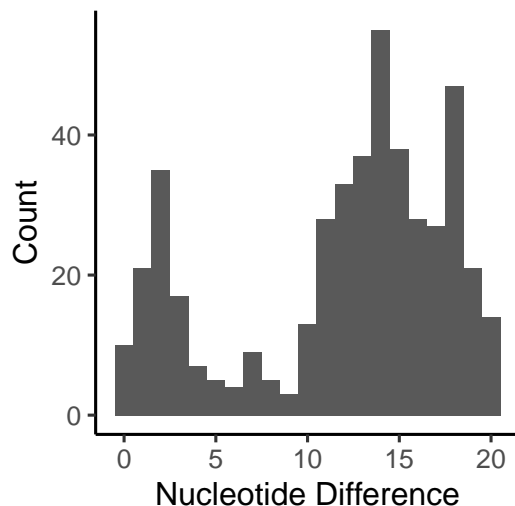
IGHV3-87*01_S2131

356 sequences assigned
5 (1.4%) exact matches, in which:
4 unique CDR3
2 unique J



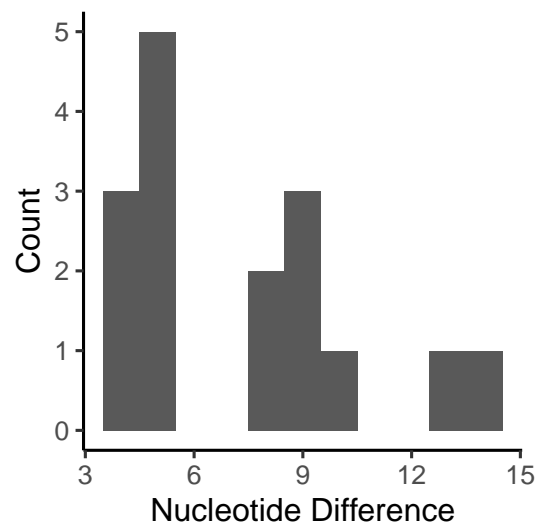
IGHV3-100*01_S4375

572 sequences assigned
10 (1.7%) exact matches, in which:
6 unique CDR3
4 unique J



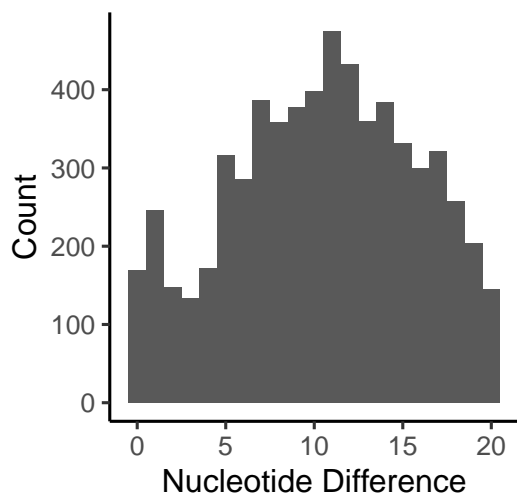
IGHV3-103*01_S6076

21 sequences assigned
No exact matches.



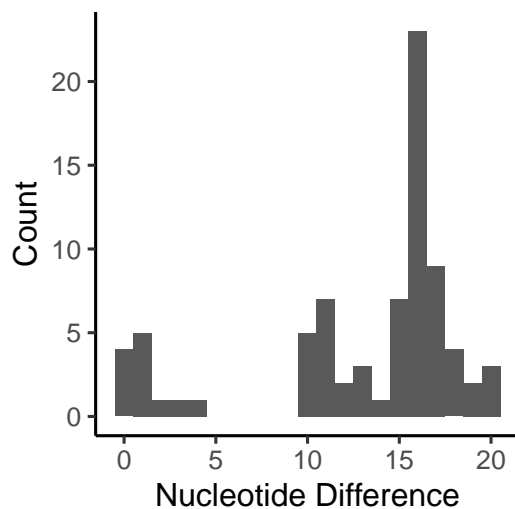
IGHV3-88*02_S1054

7272 sequences assigned
169 (2.3%) exact matches, in which:
116 unique CDR3
6 unique J



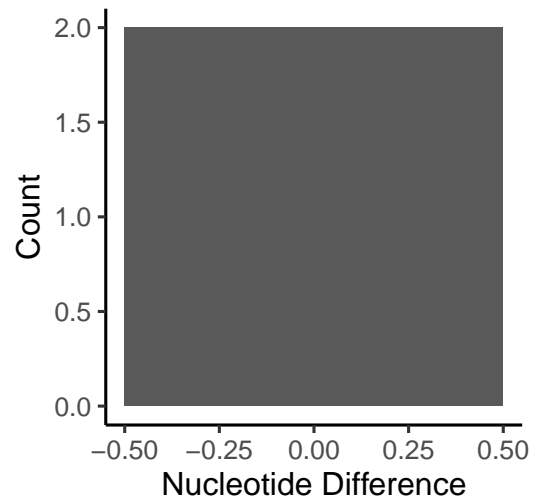
IGHV3-100*01_S5468

86 sequences assigned
4 (4.7%) exact matches, in which:
3 unique CDR3
2 unique J



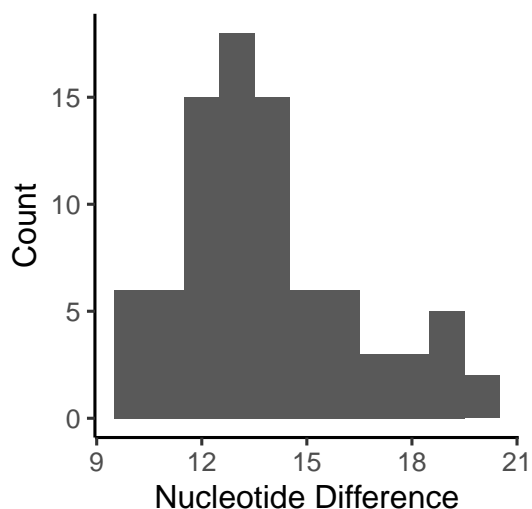
IGHV3-119*01_S5944

2 sequences assigned
2 (100%) exact matches, in which:
2 unique CDR3
1 unique J



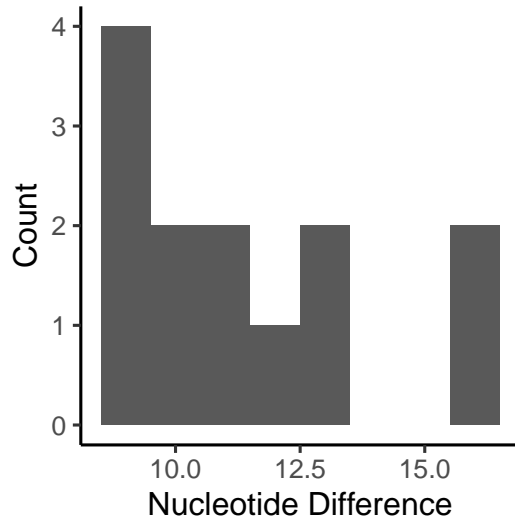
IGHV3-100*01_S2773

93 sequences assigned
No exact matches.



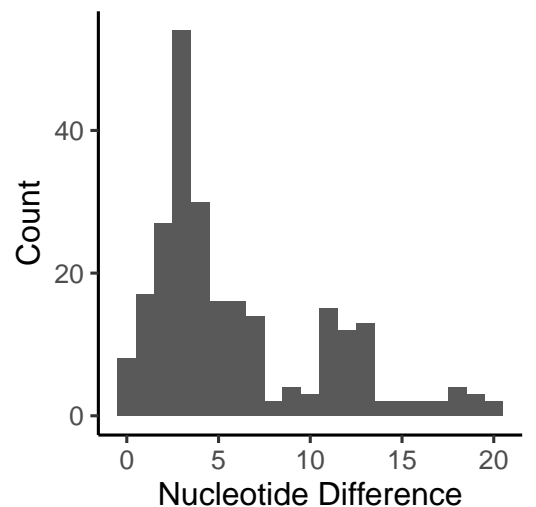
IGHV3-103*01_S1165

20 sequences assigned
No exact matches.



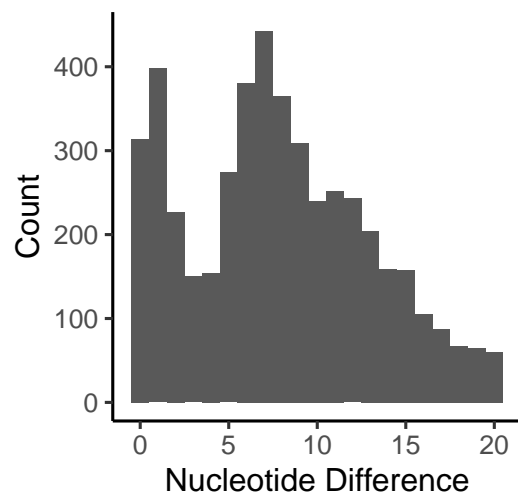
IGHV3-120*01_S7674

260 sequences assigned
8 (3.1%) exact matches, in which:
5 unique CDR3
1 unique J



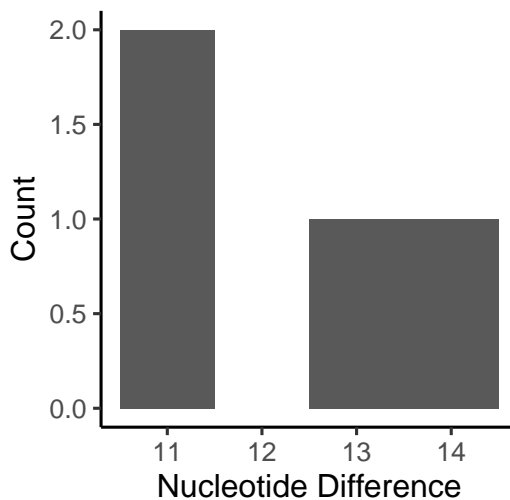
IGHV3-122*01_S8388

4958 sequences assigned
314 (6.3%) exact matches, in which:
214 unique CDR3
7 unique J



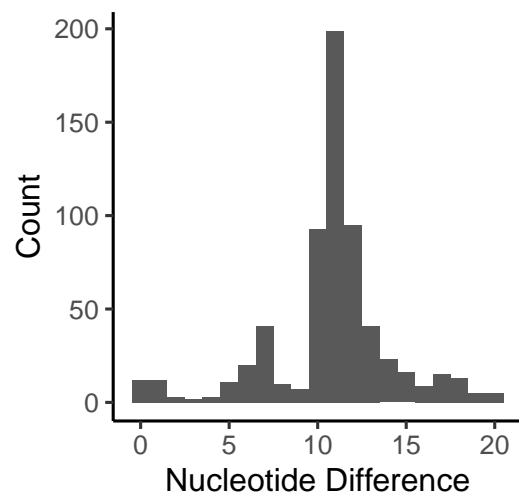
IGHV3-143*01_S1591

4 sequences assigned
No exact matches.



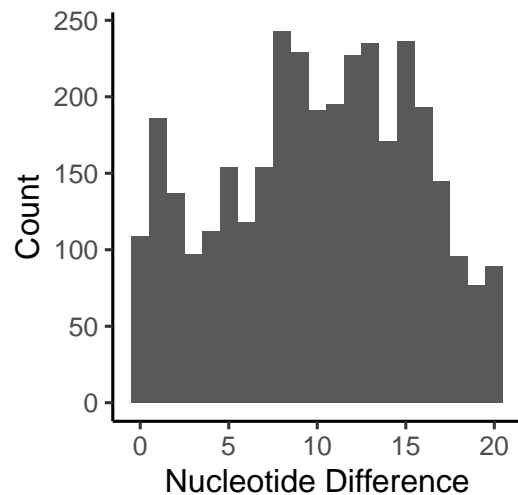
IGHV3-172*01_S8488

653 sequences assigned
12 (1.8%) exact matches, in which:
9 unique CDR3
3 unique J



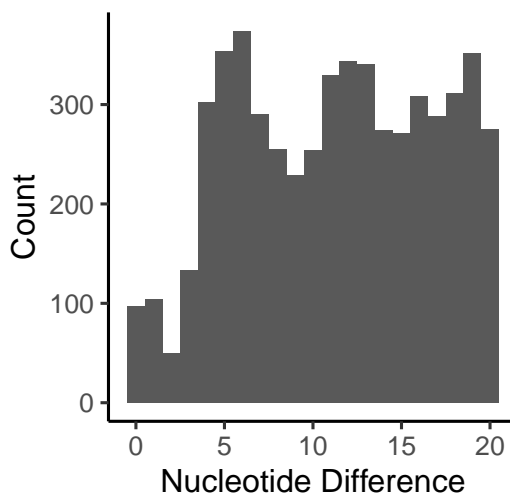
IGHV3-128*01_S3124

3722 sequences assigned
109 (2.9%) exact matches, in which:
76 unique CDR3
8 unique J



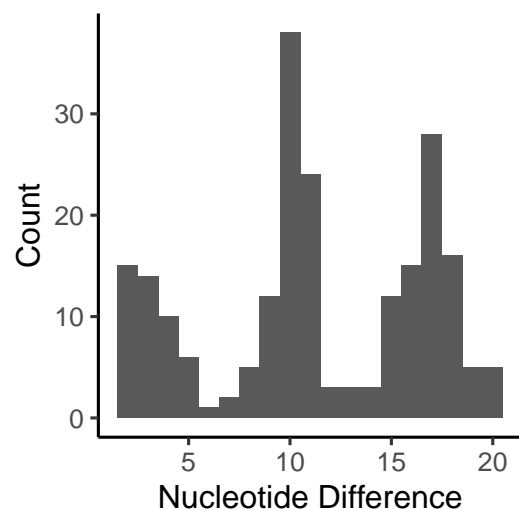
IGHV3-152*01_S7388

6730 sequences assigned
97 (1.4%) exact matches, in which:
68 unique CDR3
8 unique J



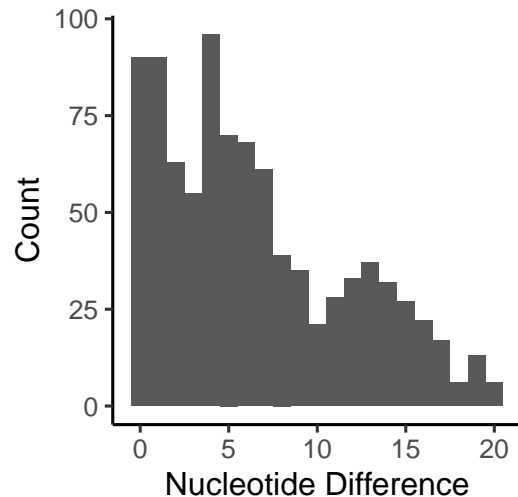
IGHV3-177*01_S2755

249 sequences assigned
No exact matches.



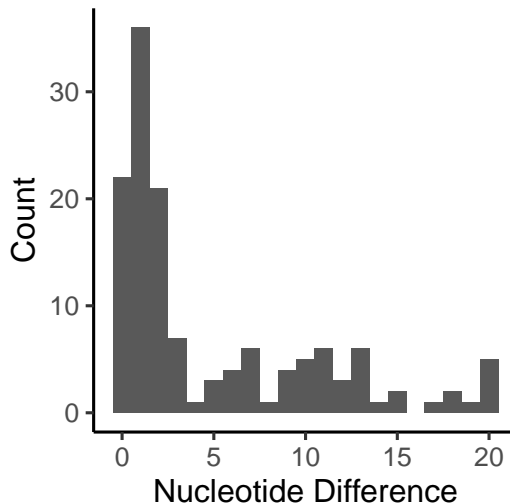
IGHV3-141*01_S8690

1036 sequences assigned
90 (8.7%) exact matches, in which:
68 unique CDR3
7 unique J



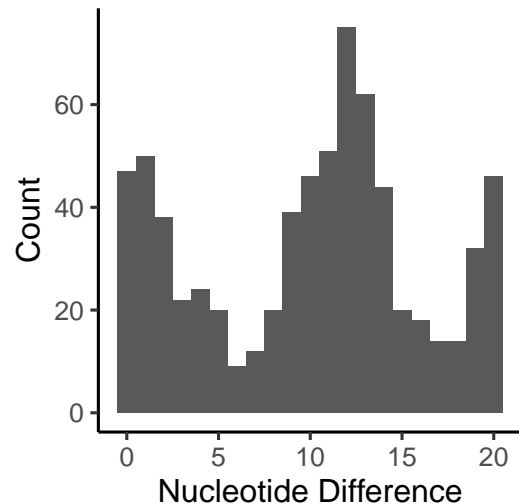
IGHV3-172*01_S1597

141 sequences assigned
22 (15.6%) exact matches, in which:
18 unique CDR3
5 unique J



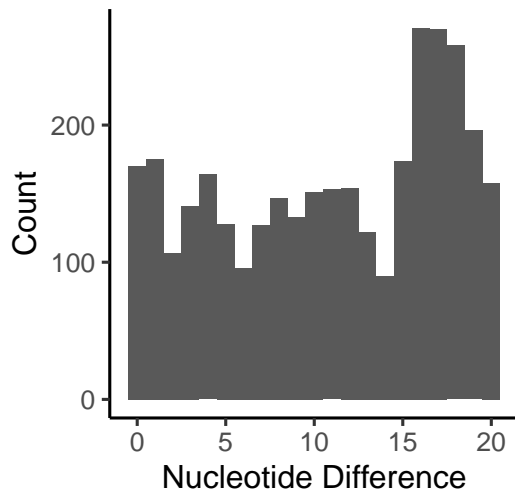
IGHV3-177*01_S8409

791 sequences assigned
47 (5.9%) exact matches, in which:
32 unique CDR3
7 unique J



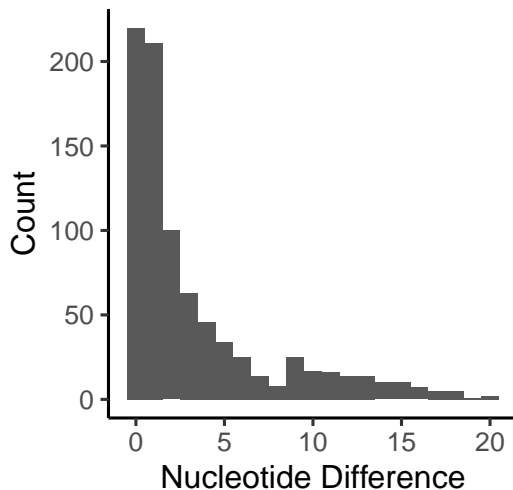
IGHV3-187*01_S6641

4486 sequences assigned
170 (3.8%) exact matches, in which:
123 unique CDR3
7 unique J



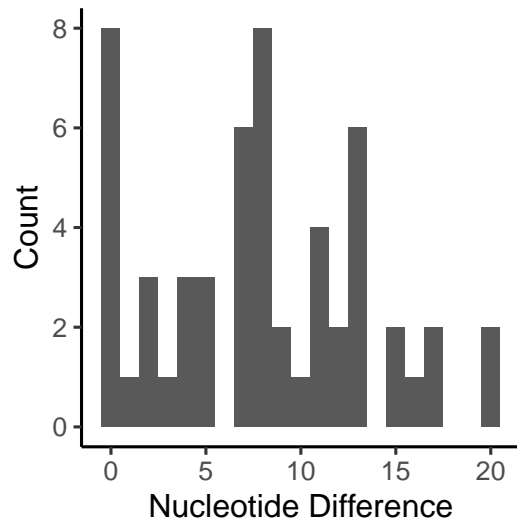
IGHV3-NL_1*01_S6560

881 sequences assigned
220 (25%) exact matches, in which:
150 unique CDR3
7 unique J



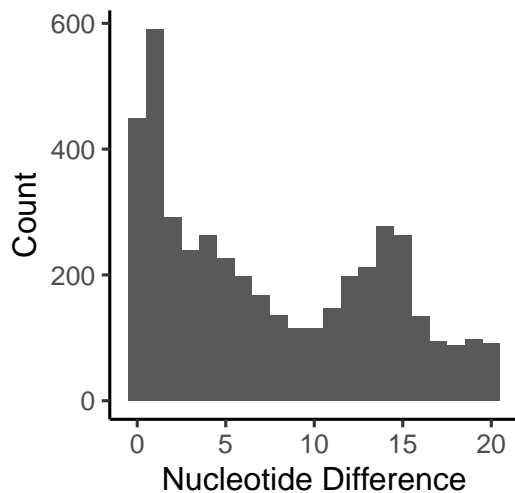
IGHV3-NL_11*01_S4102_1

67 sequences assigned
8 (11.9%) exact matches, in which:
8 unique CDR3
2 unique J



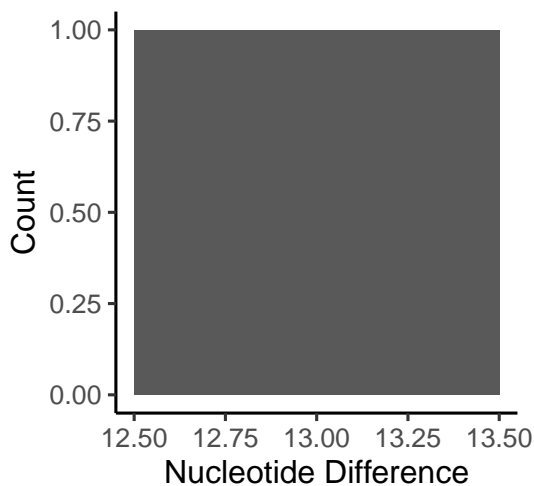
IGHV3-NL_1*01_S1988

5303 sequences assigned
449 (8.5%) exact matches, in which:
303 unique CDR3
7 unique J



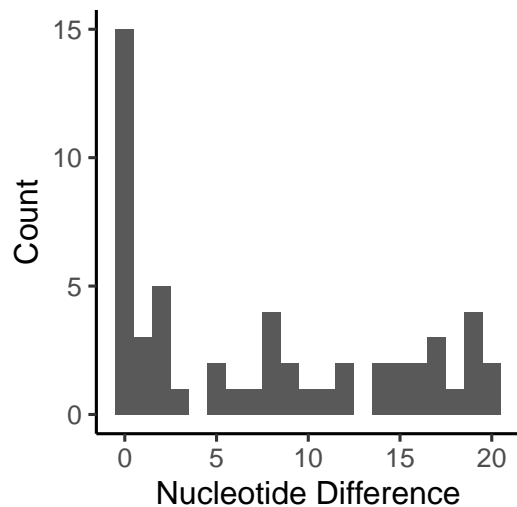
IGHV3-NL_10*02_S3155

1 sequences assigned
No exact matches.



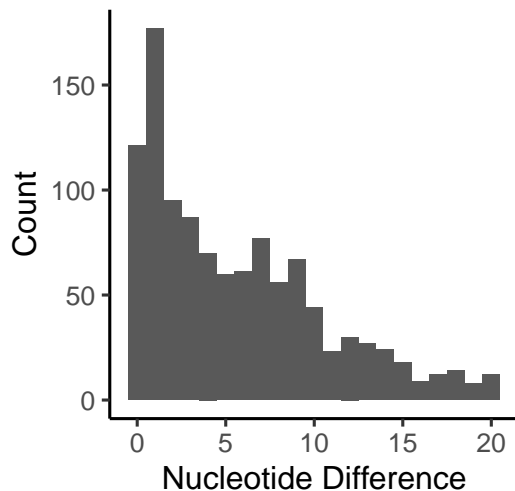
IGHV3-NL_11*01_S4380

60 sequences assigned
15 (25%) exact matches, in which:
15 unique CDR3
6 unique J



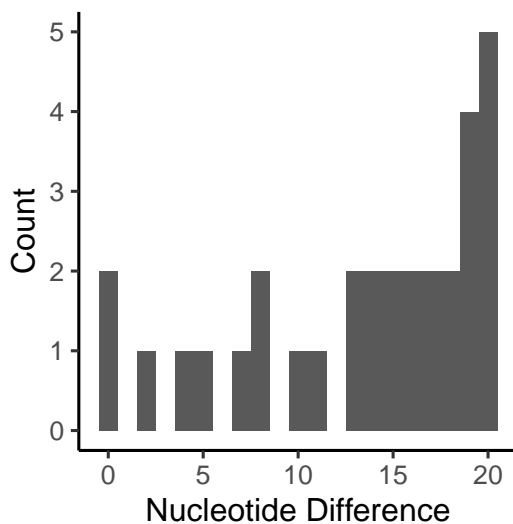
IGHV3-NL_1*01_S4906

1143 sequences assigned
121 (10.6%) exact matches, in which:
84 unique CDR3
7 unique J



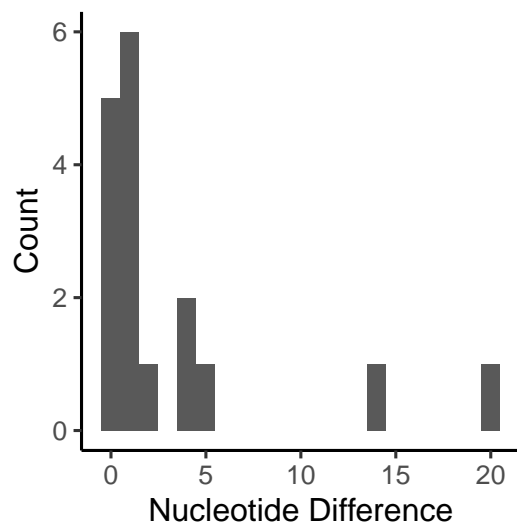
IGHV3-NL_11*01_S4102

59 sequences assigned
2 (3.4%) exact matches, in which:
2 unique CDR3
2 unique J



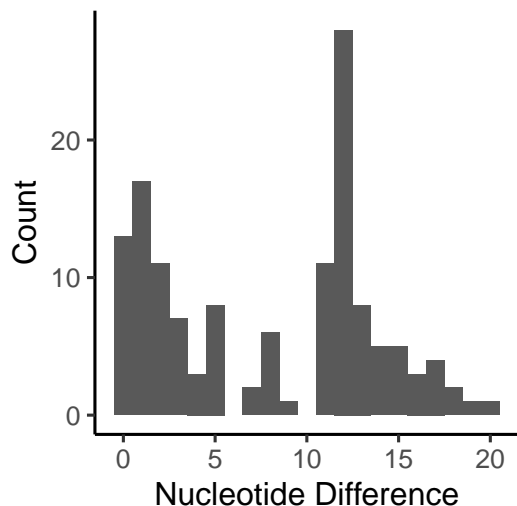
IGHV3-NL_12*02_S5246

19 sequences assigned
5 (26.3%) exact matches, in which:
3 unique CDR3
2 unique J



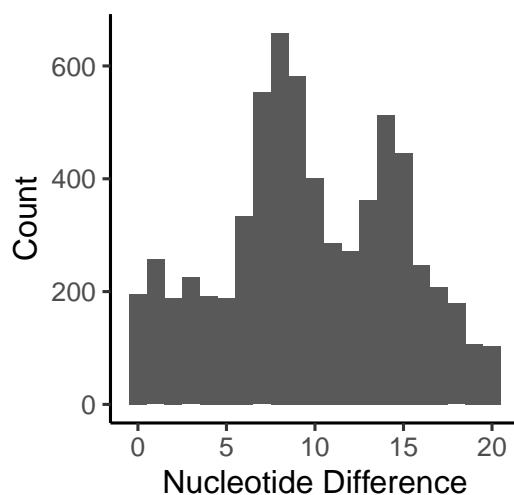
IGHV3–NL_13*01_S3277

140 sequences assigned
13 (9.3%) exact matches, in which:
8 unique CDR3
4 unique J



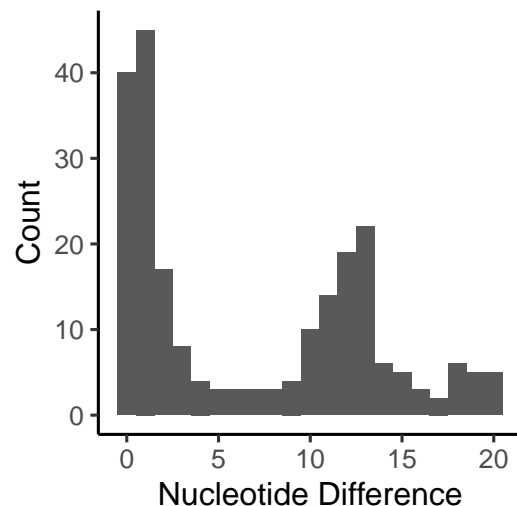
IGHV3–NL_17*01_S1342

7056 sequences assigned
196 (2.8%) exact matches, in which:
133 unique CDR3
7 unique J



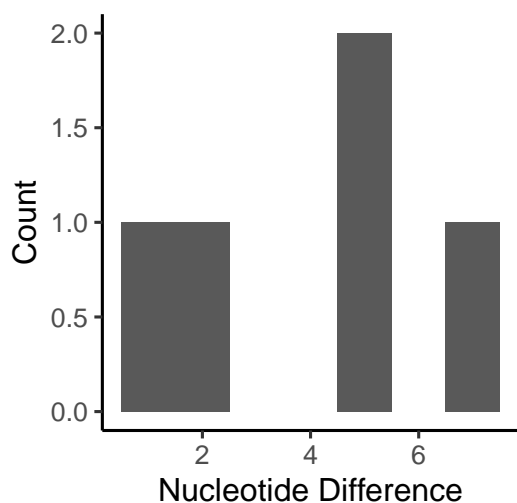
IGHV3–NL_18*01_S7220

237 sequences assigned
40 (16.9%) exact matches, in which:
23 unique CDR3
6 unique J



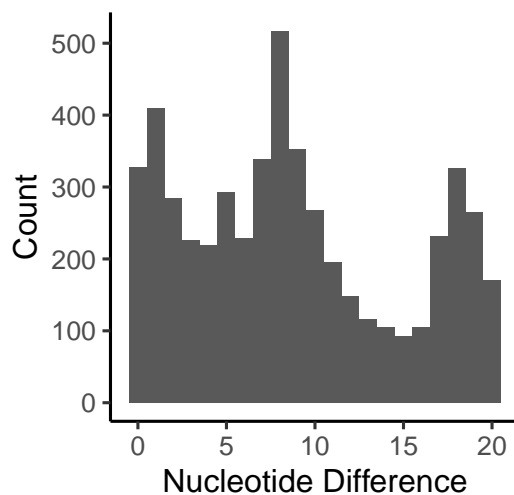
IGHV3–NL_14*01_S0414

5 sequences assigned
No exact matches.



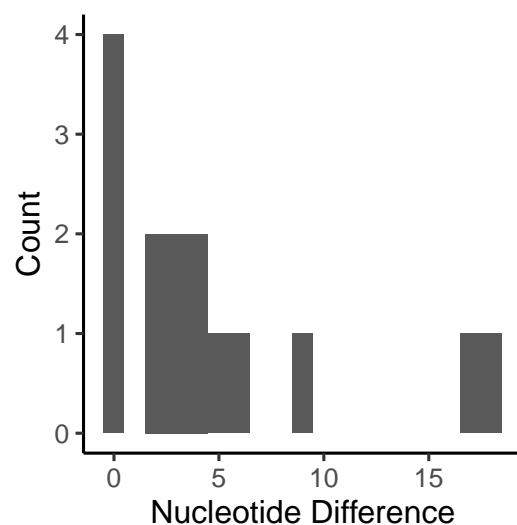
IGHV3–NL_17*01_S4250

5691 sequences assigned
327 (5.7%) exact matches, in which:
208 unique CDR3
7 unique J



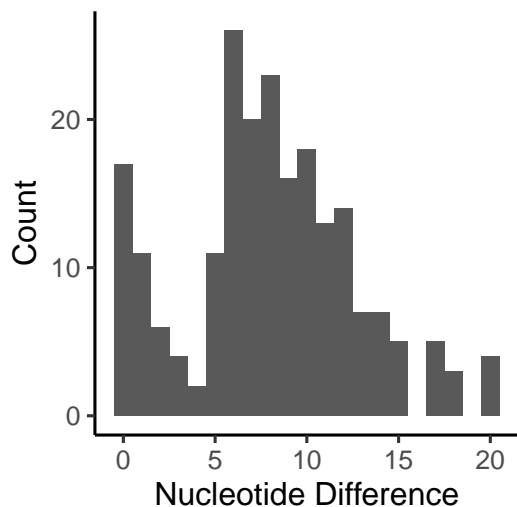
IGHV3–NL_19*01_S2166

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



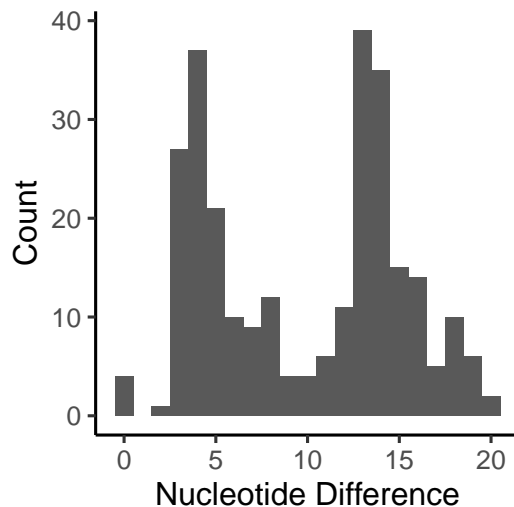
IGHV3–NL_16*01_S7825

224 sequences assigned
17 (7.6%) exact matches, in which:
13 unique CDR3
5 unique J



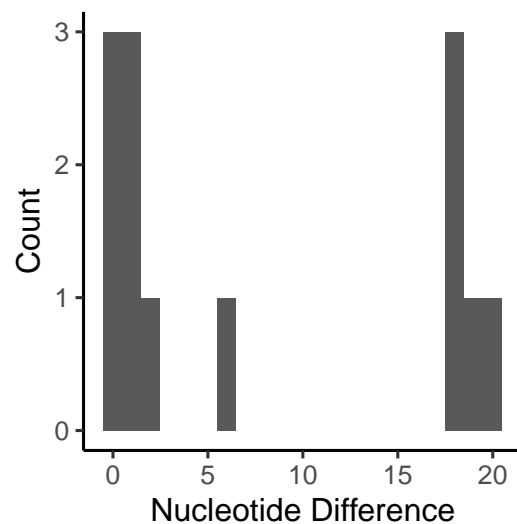
IGHV3–NL_18*01_S6396

288 sequences assigned
4 (1.4%) exact matches, in which:
3 unique CDR3
3 unique J



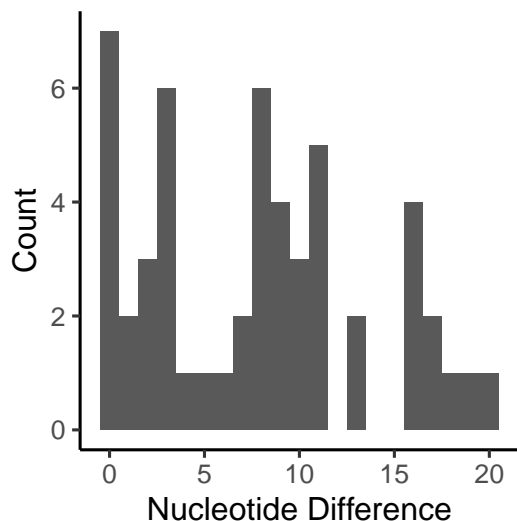
IGHV3–NL_2*01_S9710

21 sequences assigned
3 (14.3%) exact matches, in which:
2 unique CDR3
2 unique J



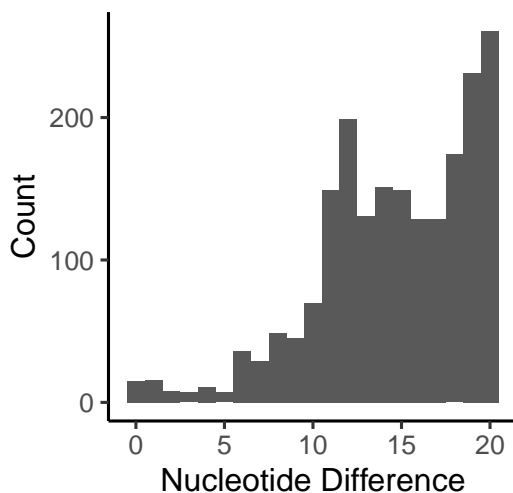
IGHV3–NL_4*01_S6875

54 sequences assigned
7 (13%) exact matches, in which:
5 unique CDR3
2 unique J



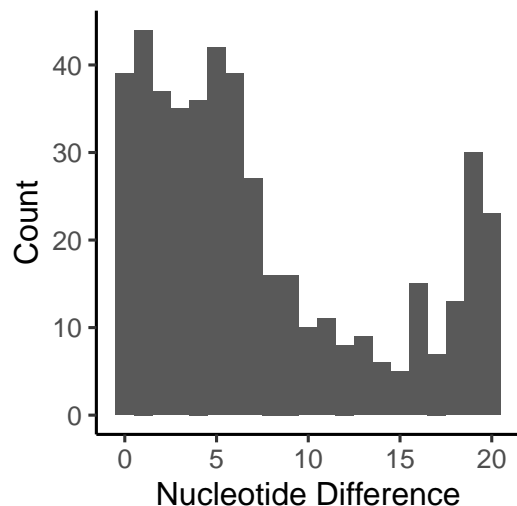
IGHV3–NL_8*01_S7415

3494 sequences assigned
15 (0.4%) exact matches, in which:
11 unique CDR3
4 unique J



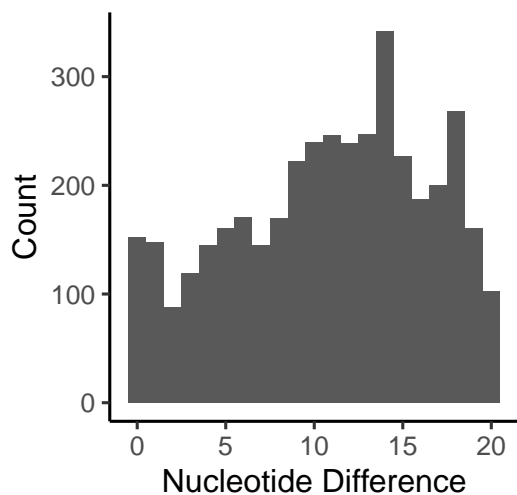
IGHV4–72*01_S8261

589 sequences assigned
39 (6.6%) exact matches, in which:
23 unique CDR3
6 unique J



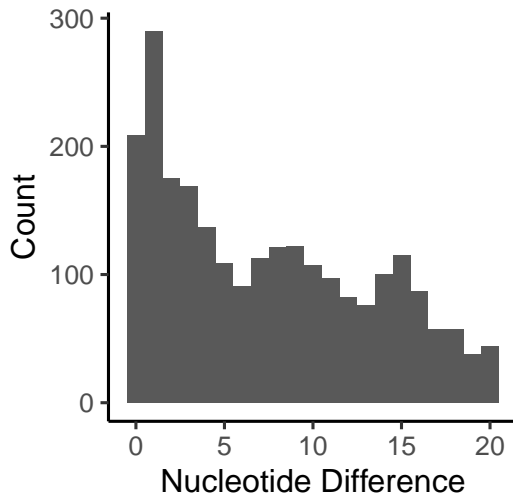
IGHV3–NL_5*01_S4429

4486 sequences assigned
152 (3.4%) exact matches, in which:
86 unique CDR3
7 unique J



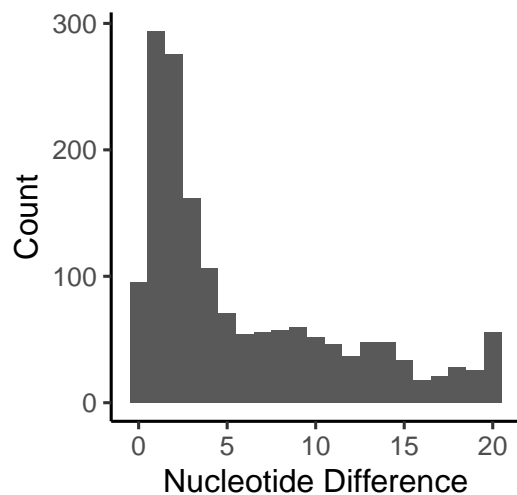
IGHV3–NL_9*01_S6098

3326 sequences assigned
209 (6.3%) exact matches, in which:
142 unique CDR3
6 unique J



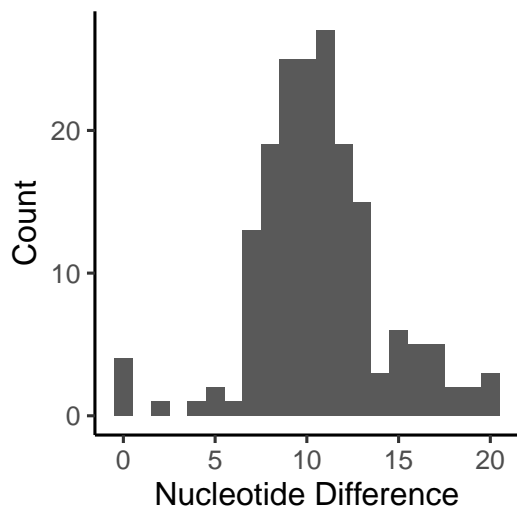
IGHV4–79*01_S6884

1962 sequences assigned
95 (4.8%) exact matches, in which:
79 unique CDR3
7 unique J



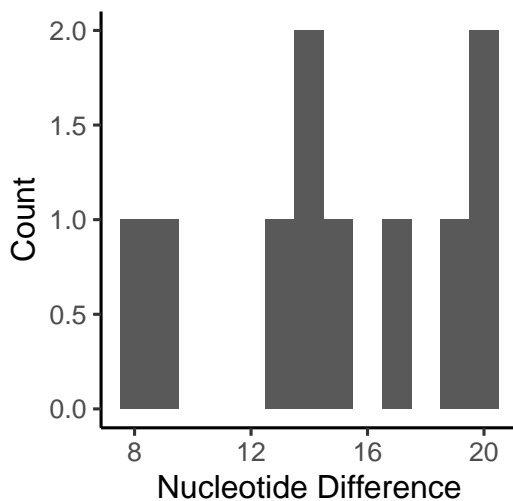
IGHV3–NL_6*02_S6474

187 sequences assigned
4 (2.1%) exact matches, in which:
4 unique CDR3
3 unique J



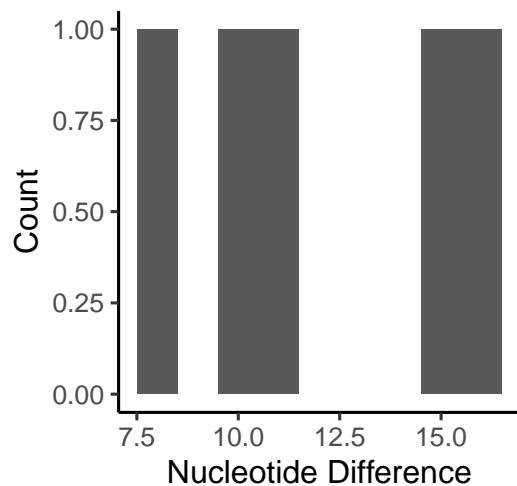
IGHV4–67*02_S1312

21 sequences assigned
No exact matches.



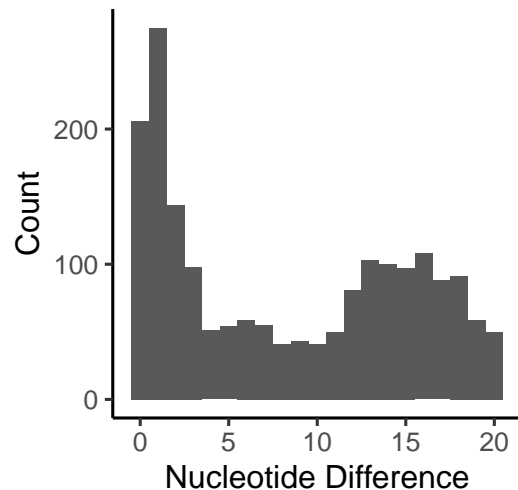
IGHV4–93*01_S5203

6 sequences assigned
No exact matches.



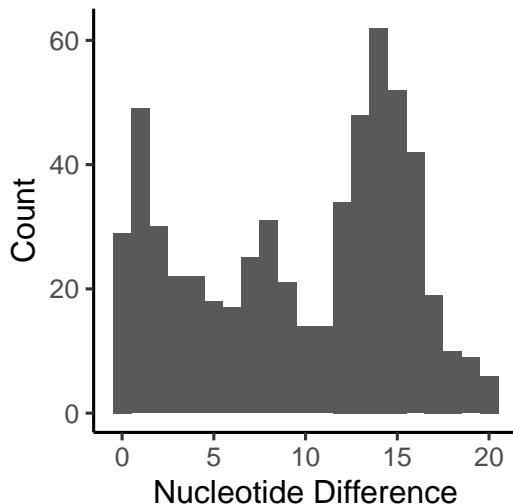
IGHV4-117*01_S2181

2047 sequences assigned
206 (10.1%) exact matches, in which:
166 unique CDR3
7 unique J



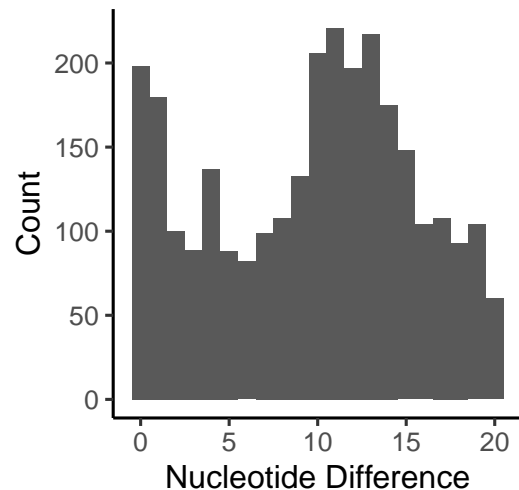
IGHV4-144*01_S1446

777 sequences assigned
29 (3.7%) exact matches, in which:
26 unique CDR3
6 unique J



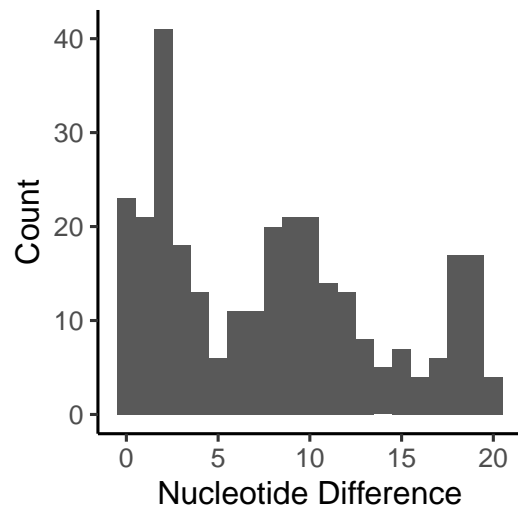
IGHV4-149*01_S2615

3309 sequences assigned
198 (6%) exact matches, in which:
156 unique CDR3
8 unique J



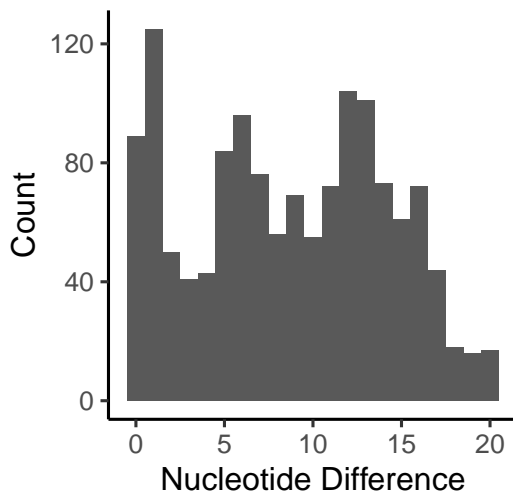
IGHV4-117*01_S3455

351 sequences assigned
23 (6.6%) exact matches, in which:
19 unique CDR3
3 unique J



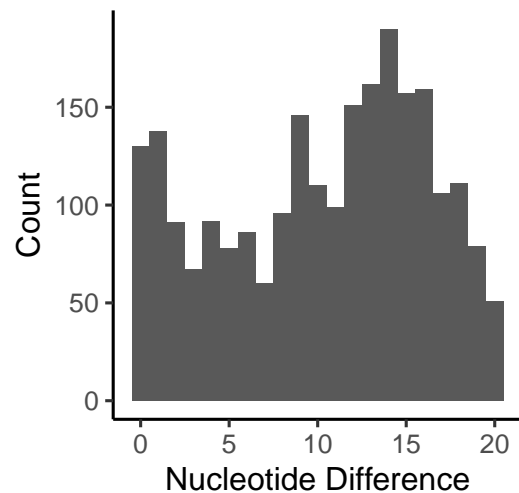
IGHV4-144*01_S6192

1408 sequences assigned
89 (6.3%) exact matches, in which:
70 unique CDR3
8 unique J



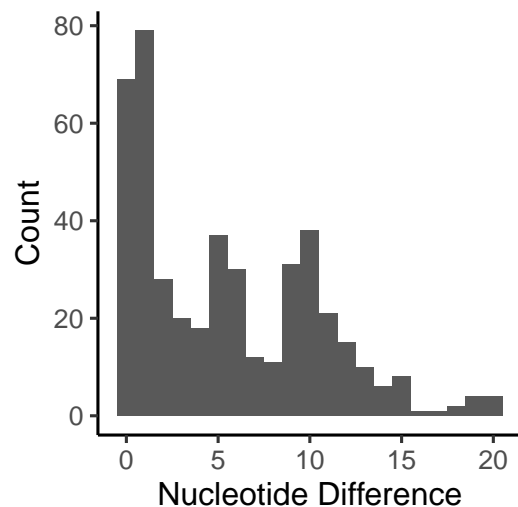
IGHV4-149*01_S4098

2897 sequences assigned
130 (4.5%) exact matches, in which:
99 unique CDR3
8 unique J



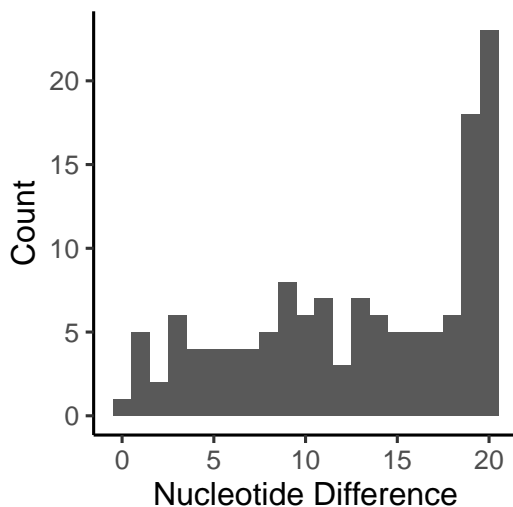
IGHV4-144*01_S0885

454 sequences assigned
69 (15.2%) exact matches, in which:
54 unique CDR3
6 unique J



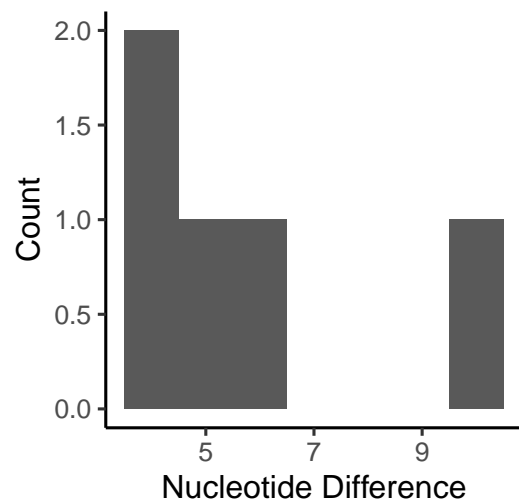
IGHV4-149*01_S0794

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



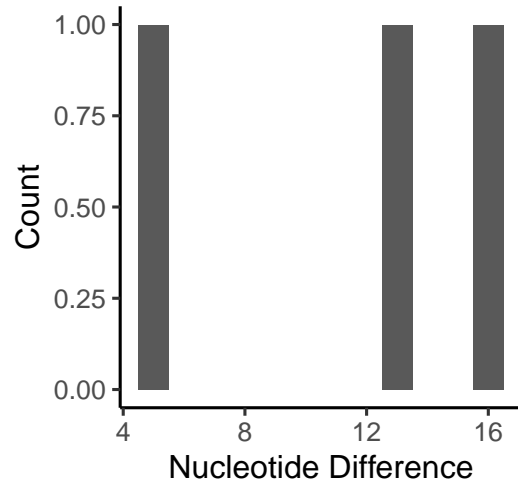
IGHV4-150*01_S0749

5 sequences assigned
No exact matches.



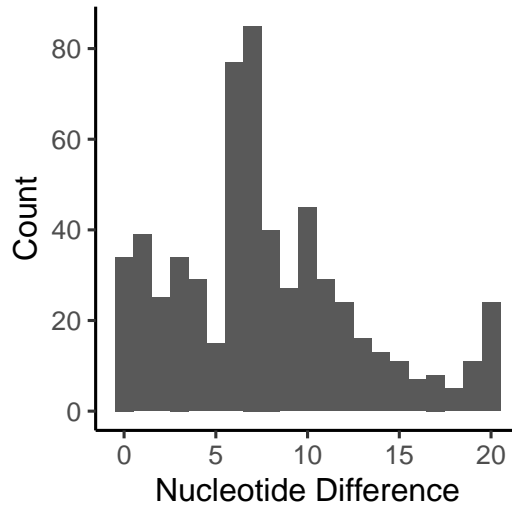
IGHV4-150*01_S1575

6 sequences assigned
No exact matches.



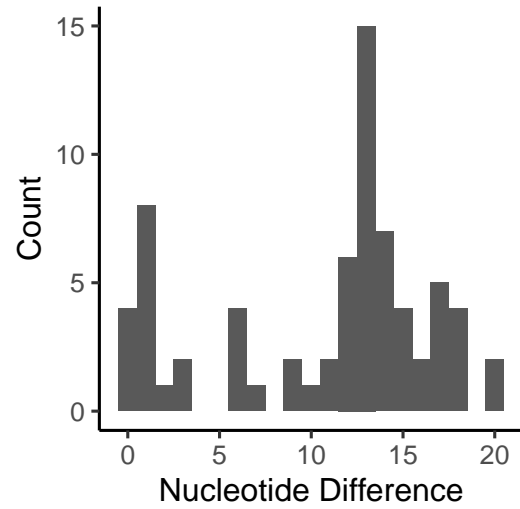
IGHV4-NL_1*01_S8520

703 sequences assigned
34 (4.8%) exact matches, in which:
25 unique CDR3
6 unique J



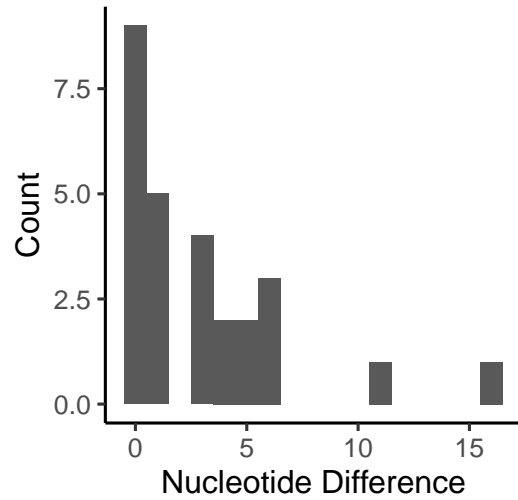
IGHV4-NL_1*02_S9550

74 sequences assigned
4 (5.4%) exact matches, in which:
4 unique CDR3
2 unique J



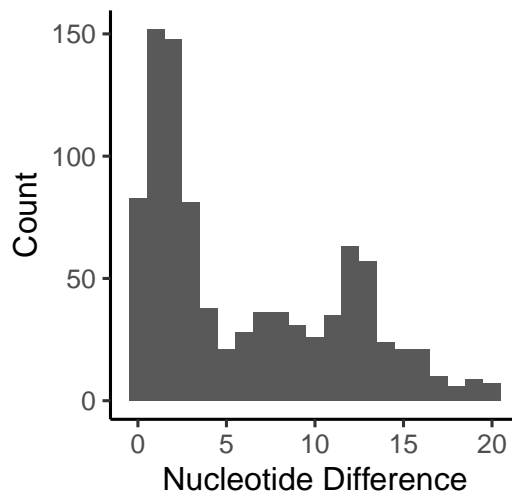
IGHV4-150*01_S4911

27 sequences assigned
9 (33.3%) exact matches, in which:
7 unique CDR3
3 unique J



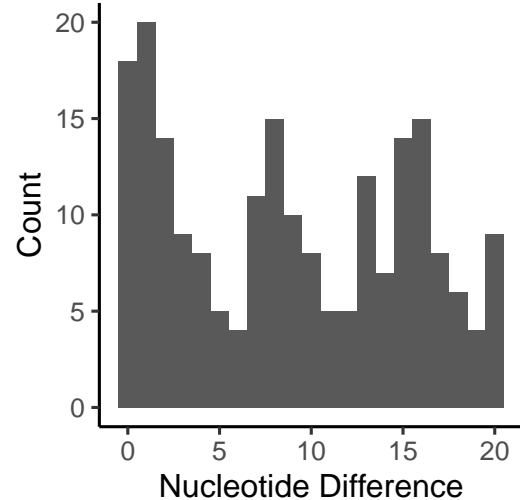
IGHV4-NL_1*01_S9616

1149 sequences assigned
83 (7.2%) exact matches, in which:
59 unique CDR3
7 unique J



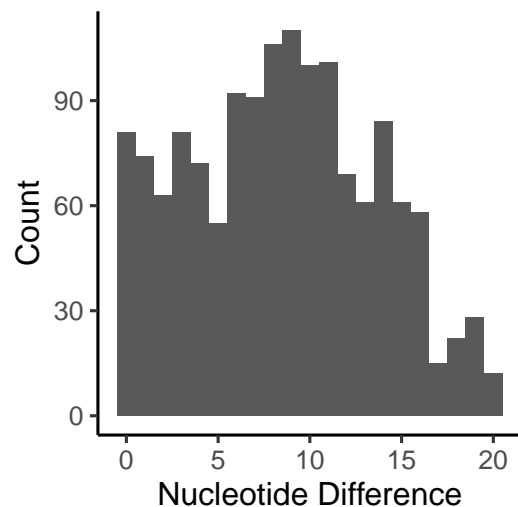
IGHV4-NL_10*01_S4826

231 sequences assigned
18 (7.8%) exact matches, in which:
10 unique CDR3
3 unique J



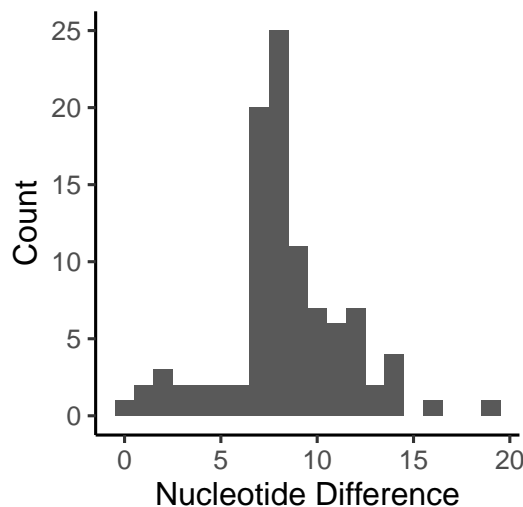
IGHV4-174*02_S7573

1541 sequences assigned
81 (5.3%) exact matches, in which:
68 unique CDR3
6 unique J



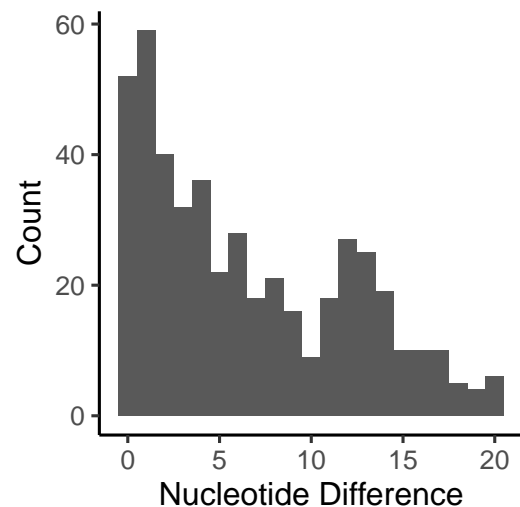
IGHV4-NL_1*02_S2201

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



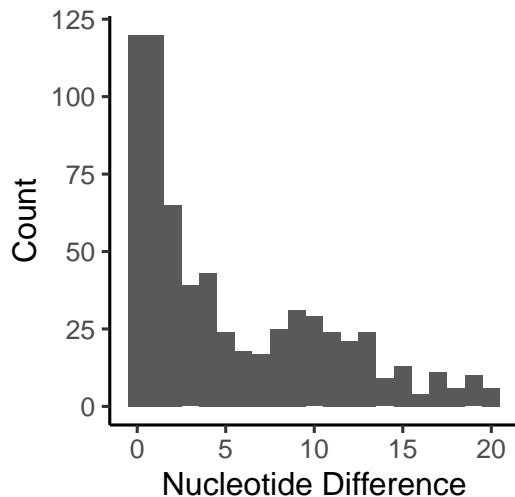
IGHV4-NL_12*01_S6471

548 sequences assigned
52 (9.5%) exact matches, in which:
44 unique CDR3
5 unique J



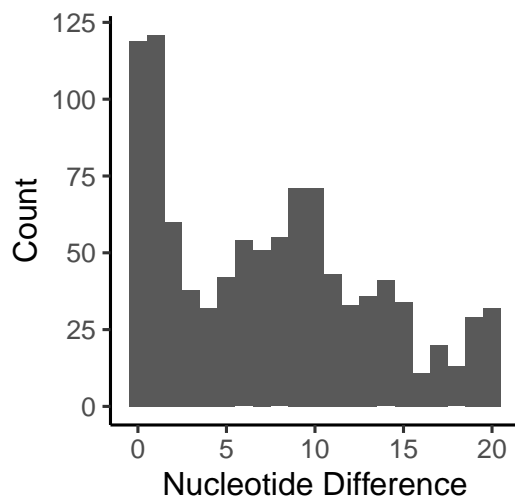
IGHV4-NL_13*01_S9273

694 sequences assigned
120 (17.3%) exact matches, in which:
101 unique CDR3
8 unique J



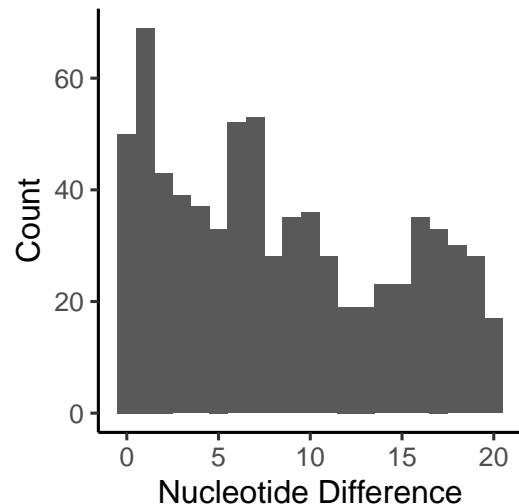
IGHV4-NL_18*01_S3907

1427 sequences assigned
119 (8.3%) exact matches, in which:
93 unique CDR3
8 unique J



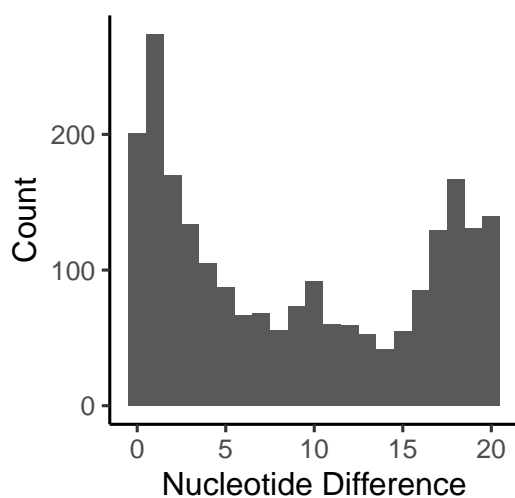
IGHV4-NL_22*01_S1072

841 sequences assigned
50 (5.9%) exact matches, in which:
44 unique CDR3
6 unique J



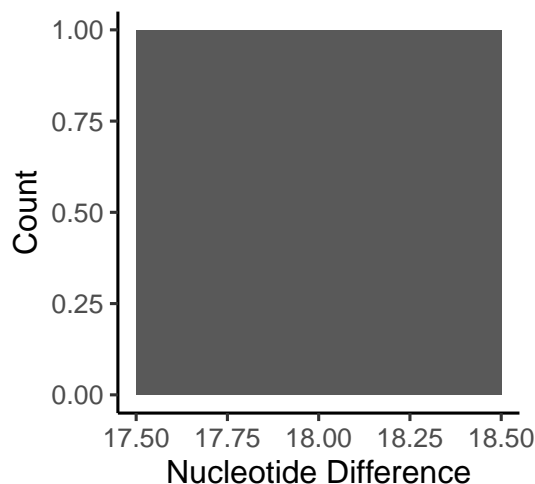
IGHV4-NL_16*01_S2138

3125 sequences assigned
201 (6.4%) exact matches, in which:
149 unique CDR3
7 unique J



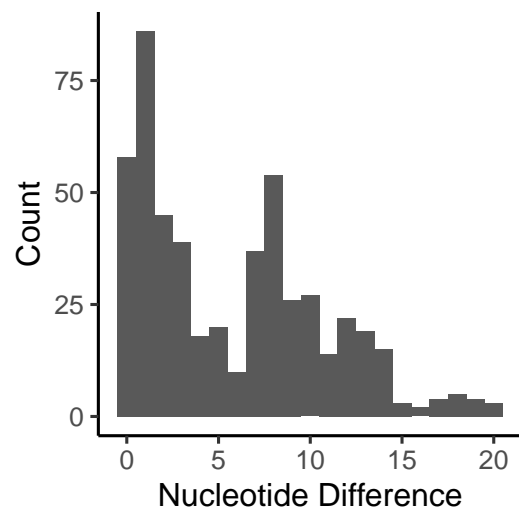
IGHV4-NL_21*01_S3442

18 sequences assigned
No exact matches.



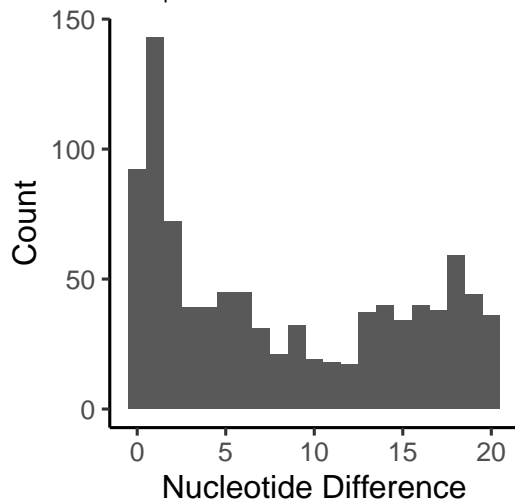
IGHV4-NL_22*01_S2393

538 sequences assigned
58 (10.8%) exact matches, in which:
54 unique CDR3
7 unique J



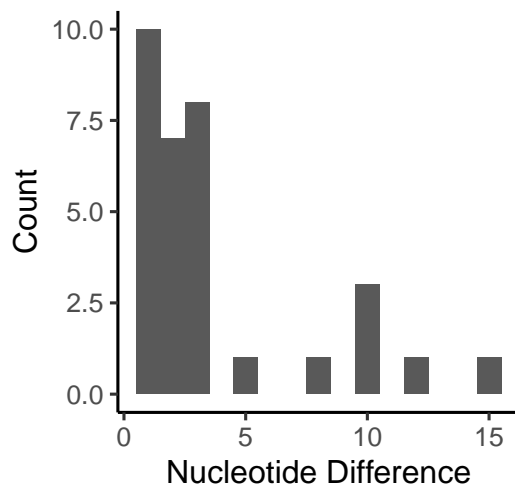
IGHV4-NL_17*01_S6249

1546 sequences assigned
92 (6%) exact matches, in which:
76 unique CDR3
7 unique J



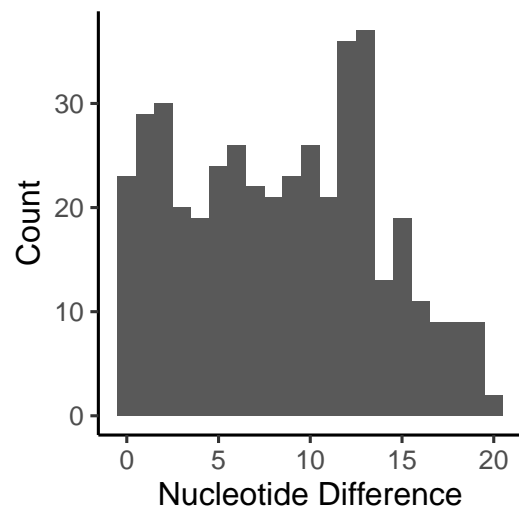
IGHV4-NL_21*01_S5257

33 sequences assigned
No exact matches.



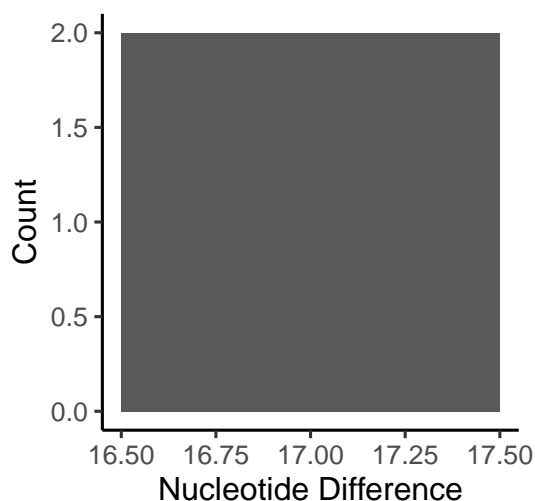
IGHV4-NL_22*01_S4706

453 sequences assigned
23 (5.1%) exact matches, in which:
18 unique CDR3
3 unique J



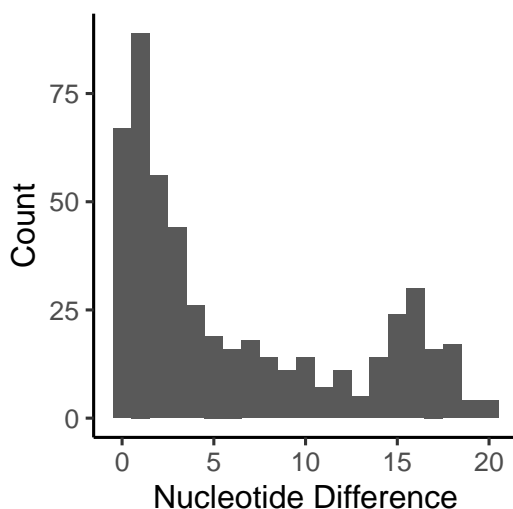
IGHV4–NL_24*01_S5697

2 sequences assigned
No exact matches.



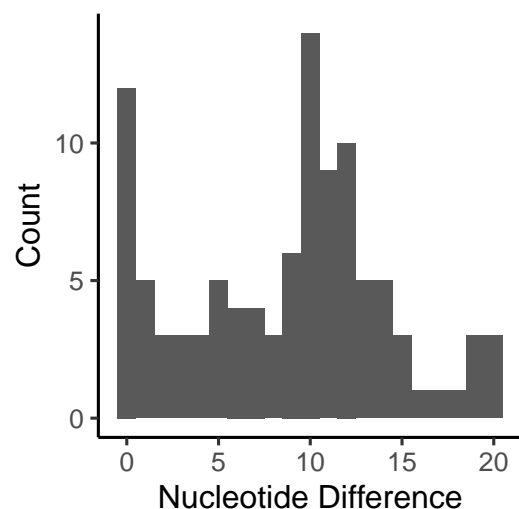
IGHV4–NL_27*01_S1515

740 sequences assigned
67 (9.1%) exact matches, in which:
52 unique CDR3
6 unique J



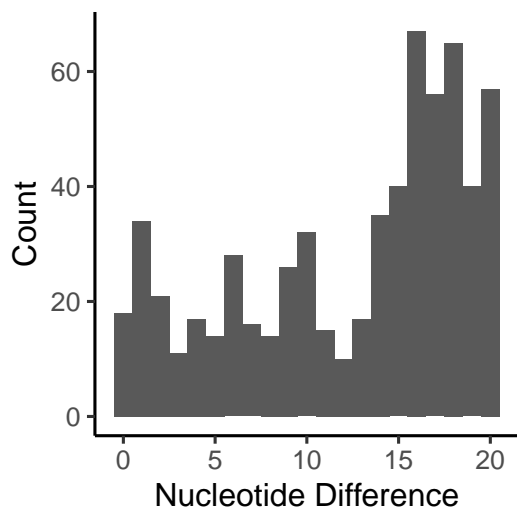
IGHV4–NL_28*01_S0629

115 sequences assigned
12 (10.4%) exact matches, in which:
11 unique CDR3
5 unique J



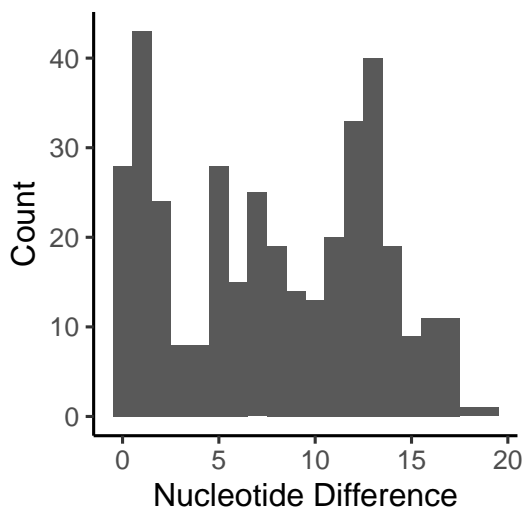
IGHV4–NL_25*01_S1514

786 sequences assigned
18 (2.3%) exact matches, in which:
15 unique CDR3
4 unique J



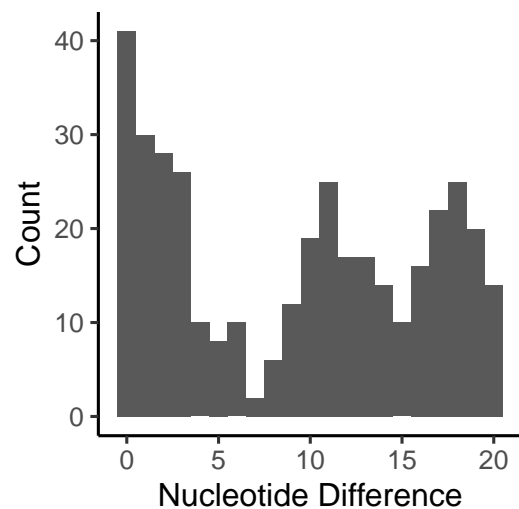
IGHV4–NL_27*01_S5217

467 sequences assigned
28 (6%) exact matches, in which:
24 unique CDR3
6 unique J



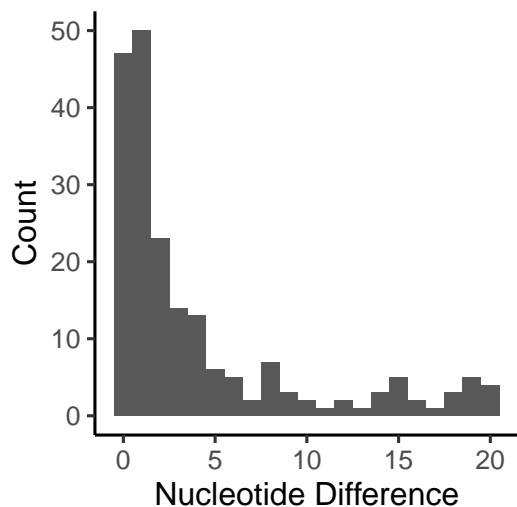
IGHV4–NL_28*01_S1005

501 sequences assigned
41 (8.2%) exact matches, in which:
32 unique CDR3
6 unique J



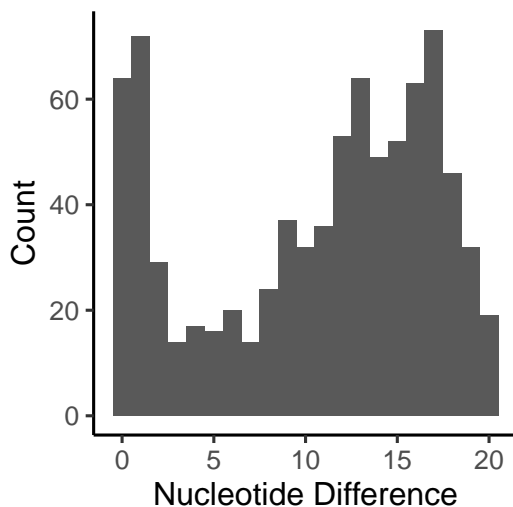
IGHV4–NL_27*01_S0482

267 sequences assigned
47 (17.6%) exact matches, in which:
38 unique CDR3
6 unique J



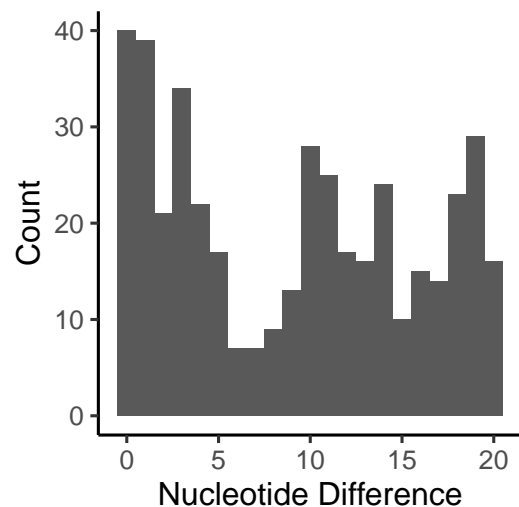
IGHV4–NL_27*01_S6960

932 sequences assigned
64 (6.9%) exact matches, in which:
54 unique CDR3
6 unique J



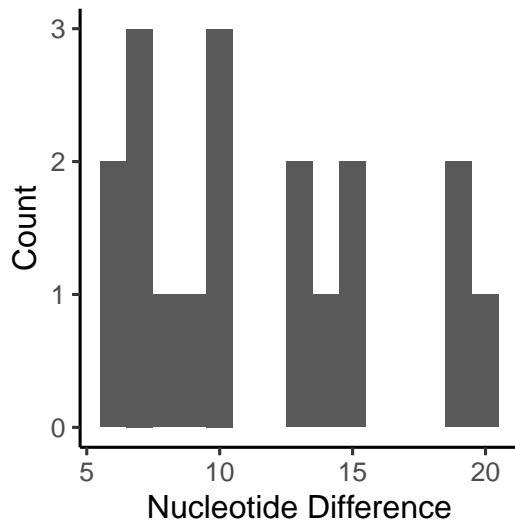
IGHV4–NL_28*01_S1005_

595 sequences assigned
40 (6.7%) exact matches, in which:
36 unique CDR3
7 unique J



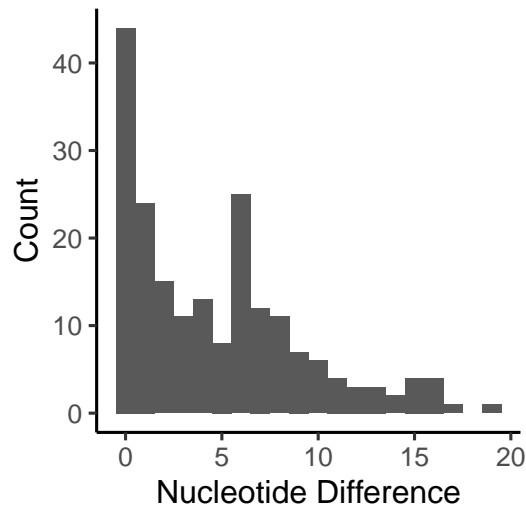
IGHV4–NL_29*01_S3761

18 sequences assigned
No exact matches.



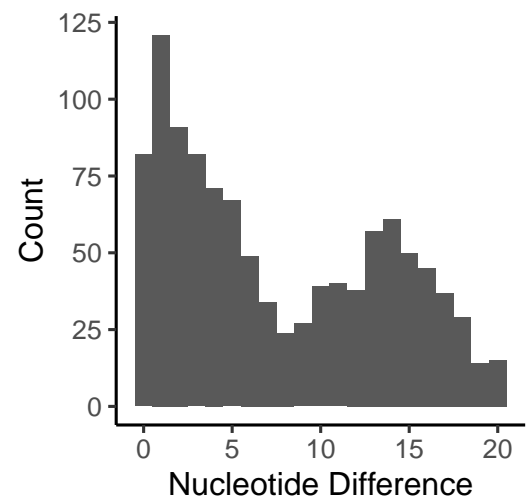
IGHV4–NL_30*01_S1240

202 sequences assigned
44 (21.8%) exact matches, in which:
37 unique CDR3
6 unique J



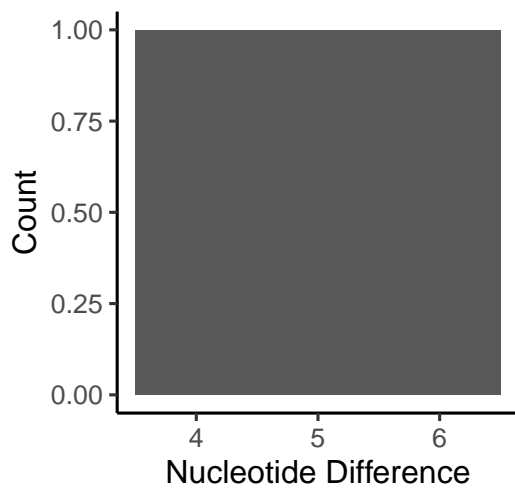
IGHV4–NL_33*01_S9333

1265 sequences assigned
82 (6.5%) exact matches, in which:
72 unique CDR3
7 unique J



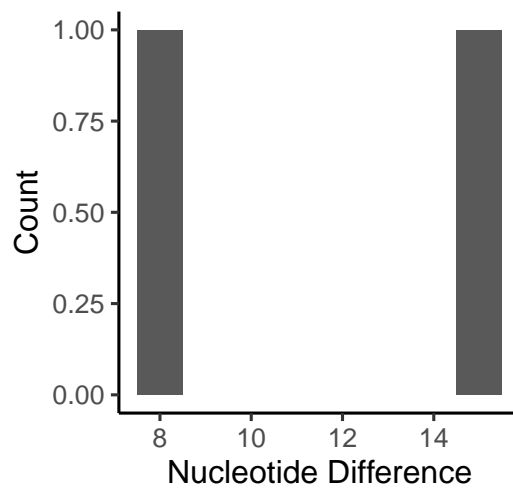
IGHV4–NL_3*01_S5200

3 sequences assigned
No exact matches.



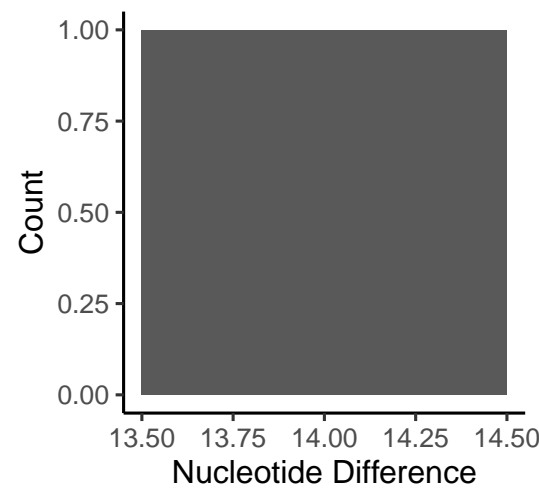
IGHV4–NL_31*01_S7693

2 sequences assigned
No exact matches.



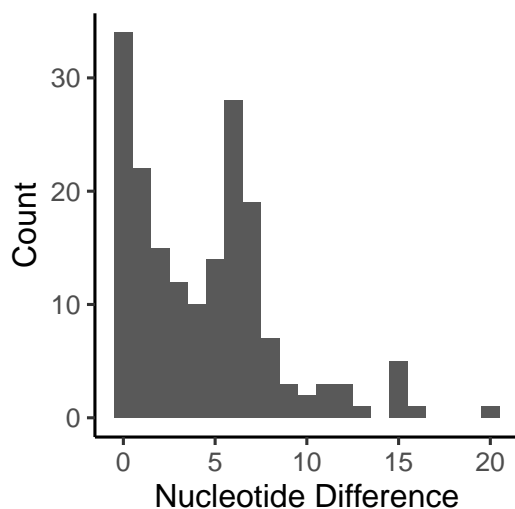
IGHV4–NL_35*01_S9510

1 sequences assigned
No exact matches.



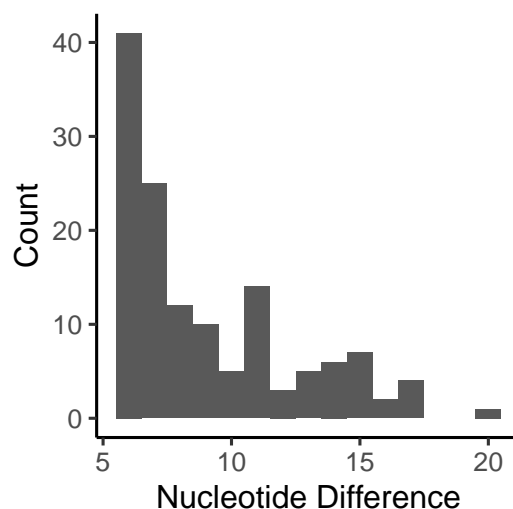
IGHV4–NL_30*01_S1240

185 sequences assigned
34 (18.4%) exact matches, in which:
32 unique CDR3
5 unique J



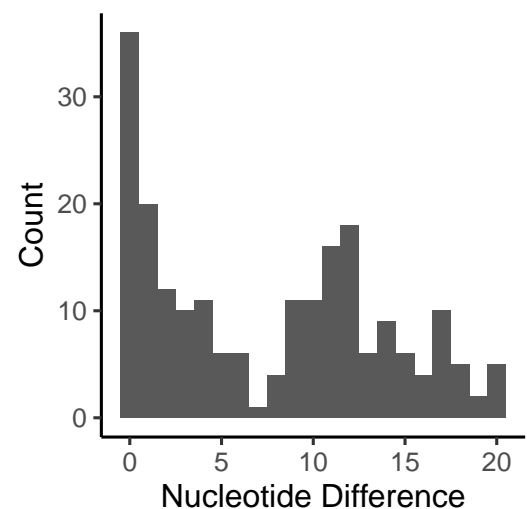
IGHV4–NL_32*01_S1450

136 sequences assigned
No exact matches.



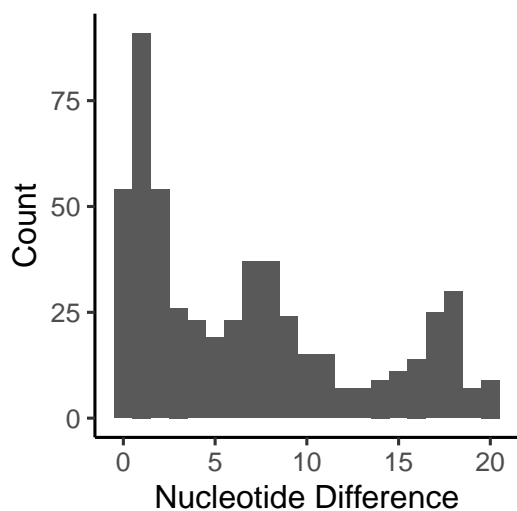
IGHV4–NL_36*01_S1694

260 sequences assigned
36 (13.8%) exact matches, in which:
28 unique CDR3
7 unique J



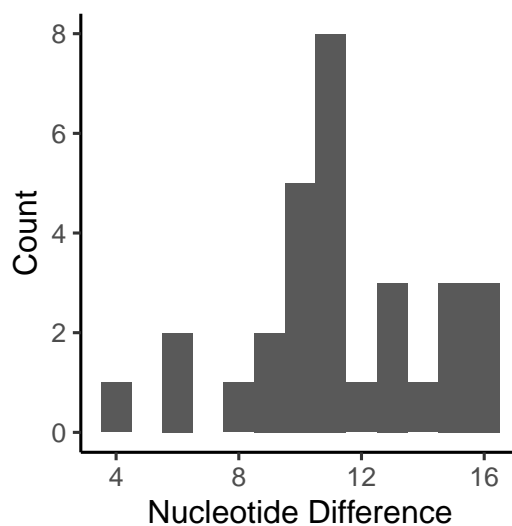
IGHV4–NL_37*01_S0071

564 sequences assigned
54 (9.6%) exact matches, in which:
39 unique CDR3
7 unique J



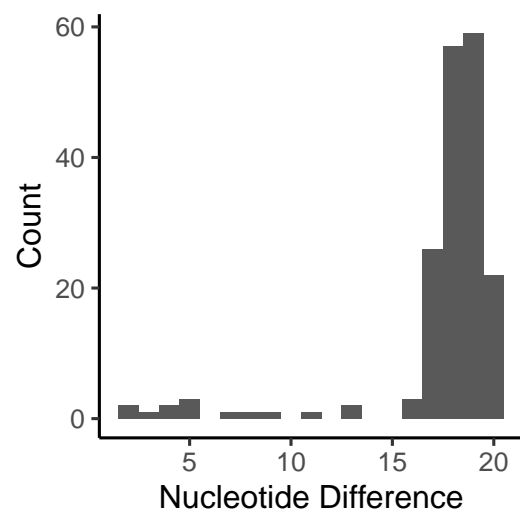
IGHV4–NL_38*01_S9225

37 sequences assigned
No exact matches.



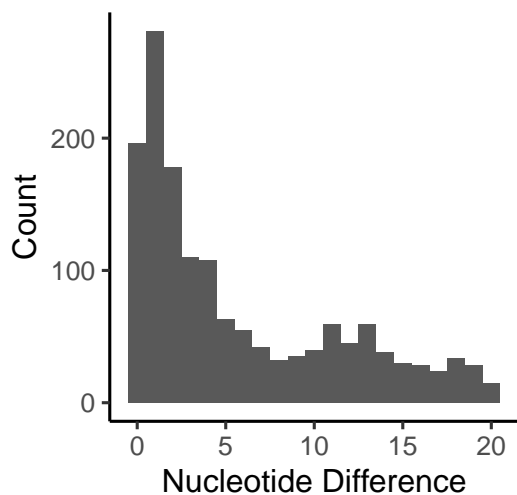
IGHV4–NL_41*01_S9253

238 sequences assigned
No exact matches.



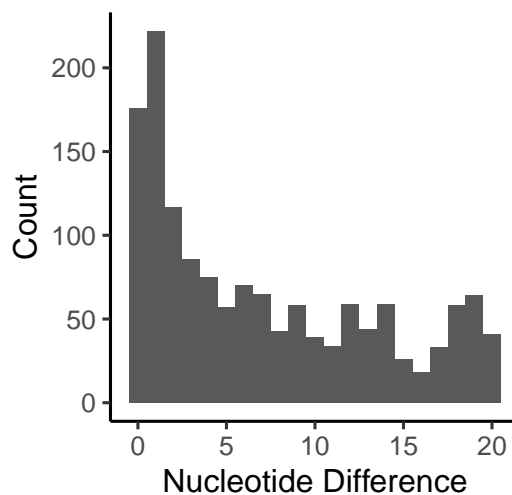
IGHV4–NL_37*01_S0997

1843 sequences assigned
196 (10.6%) exact matches, in which:
132 unique CDR3
9 unique J



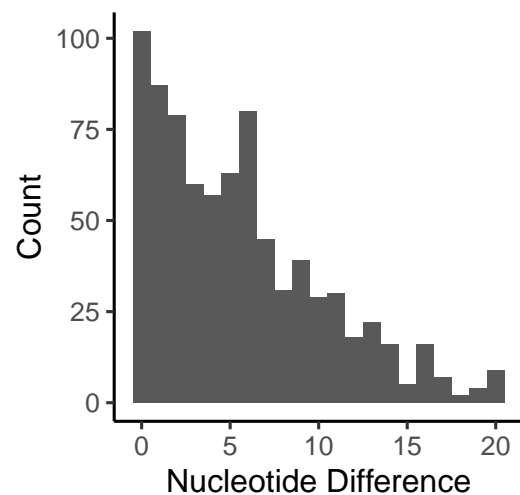
IGHV4–NL_40*01_S9020

1824 sequences assigned
176 (9.6%) exact matches, in which:
144 unique CDR3
7 unique J



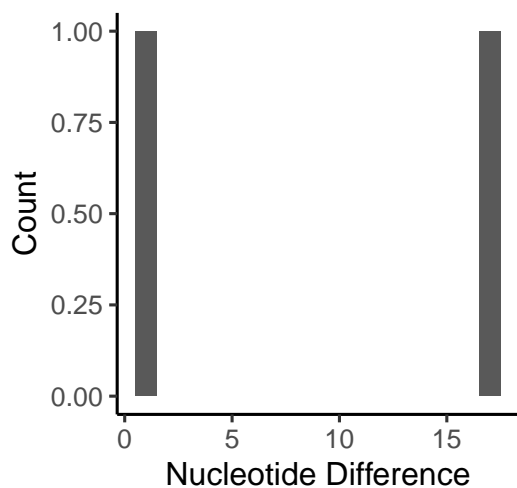
IGHV4–NL_42*01_S8550

828 sequences assigned
102 (12.3%) exact matches, in which:
81 unique CDR3
7 unique J



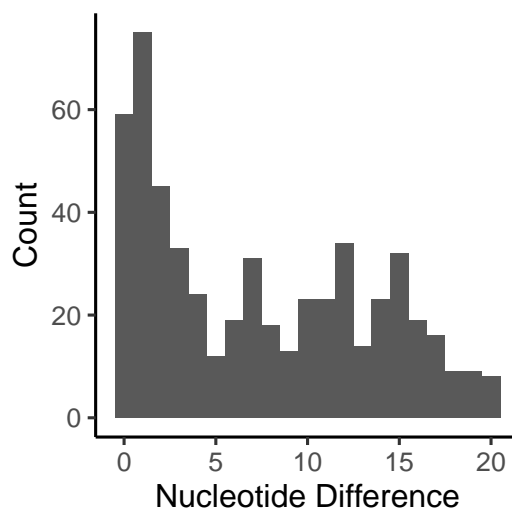
IGHV4–NL_38*01_S8437

2 sequences assigned
No exact matches.



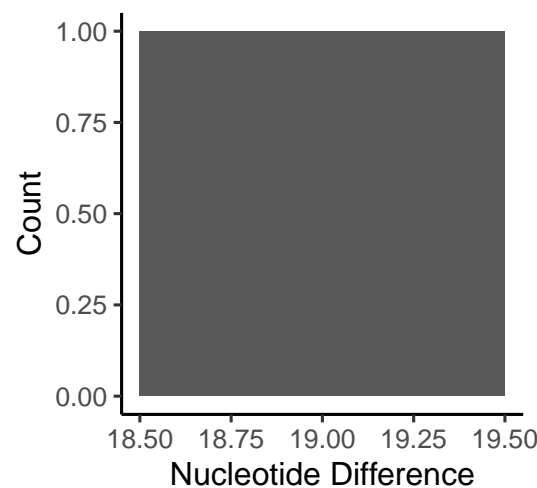
IGHV4–NL_41*01_S4457

634 sequences assigned
59 (9.3%) exact matches, in which:
40 unique CDR3
6 unique J



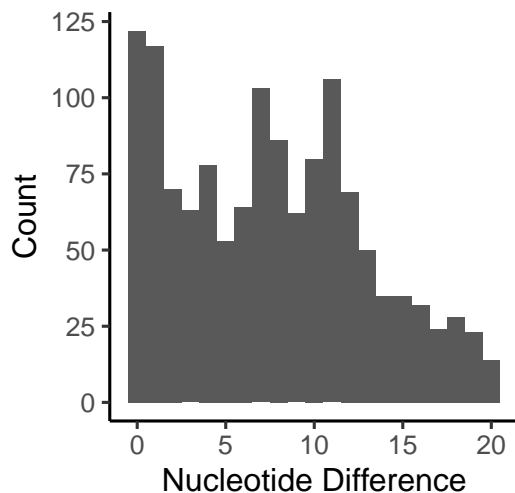
IGHV4–NL_43*01_S3820

13 sequences assigned
No exact matches.



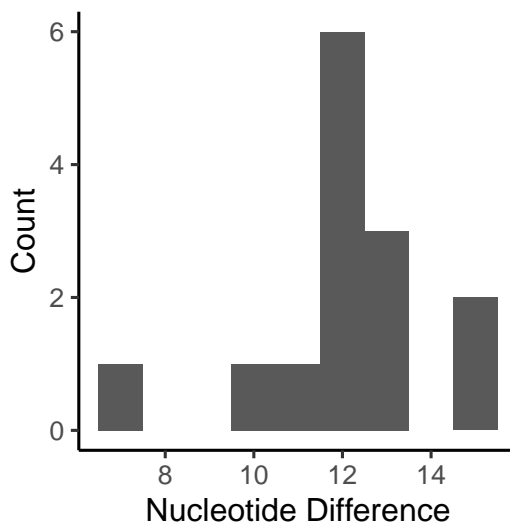
IGHV4–NL_5*01_S0908

1388 sequences assigned
122 (8.8%) exact matches, in which:
103 unique CDR3
8 unique J



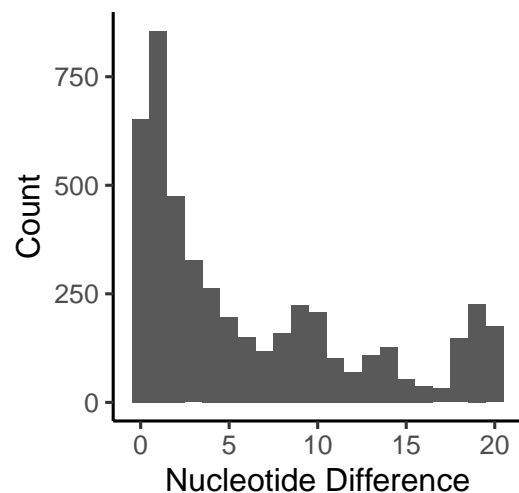
IGHV4–NL_9*02_S2874

16 sequences assigned
No exact matches.



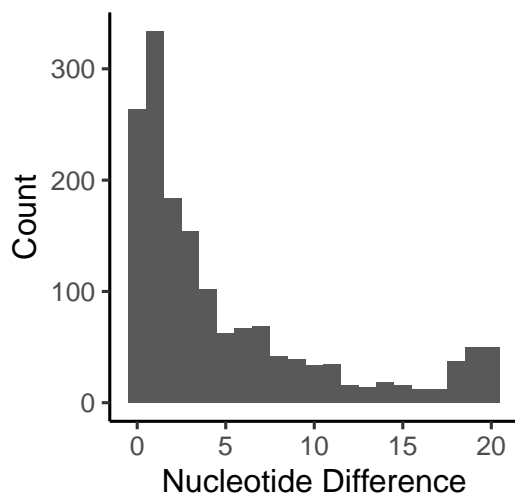
IGHV5–157*02_S3096

5091 sequences assigned
652 (12.8%) exact matches, in which:
316 unique CDR3
9 unique J



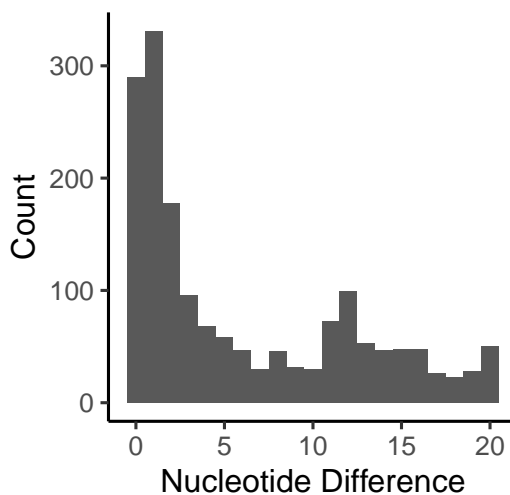
IGHV4–NL_5*01_S6960

1826 sequences assigned
264 (14.5%) exact matches, in which:
213 unique CDR3
7 unique J



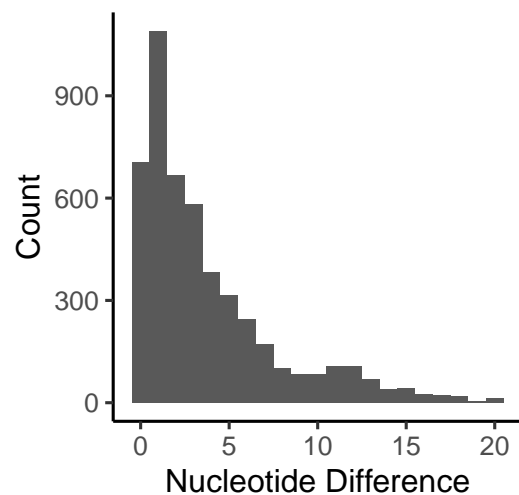
IGHV5–15*01_S8661

1842 sequences assigned
290 (15.7%) exact matches, in which:
159 unique CDR3
8 unique J



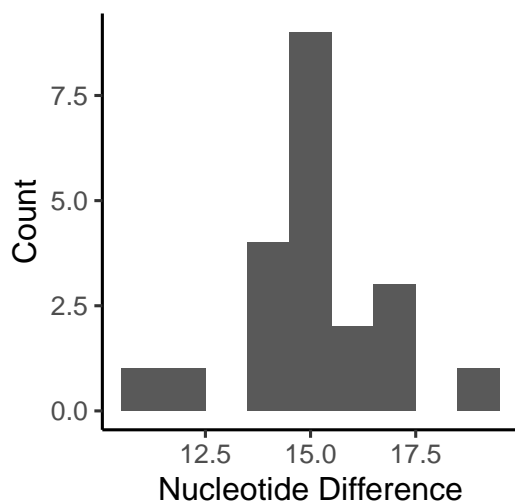
IGHV5–NL_1*02_S5699

5129 sequences assigned
705 (13.7%) exact matches, in which:
337 unique CDR3
9 unique J



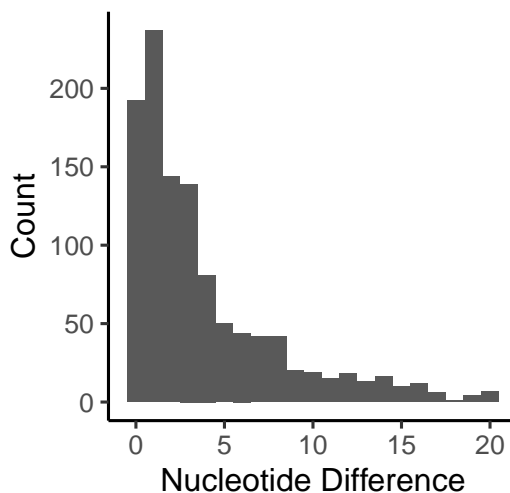
IGHV4–NL_9*01_S6608

21 sequences assigned
No exact matches.



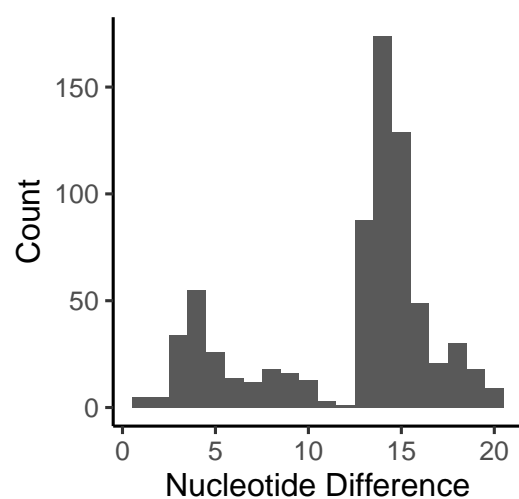
IGHV5–157*01_S5362

1217 sequences assigned
192 (15.8%) exact matches, in which:
82 unique CDR3
6 unique J



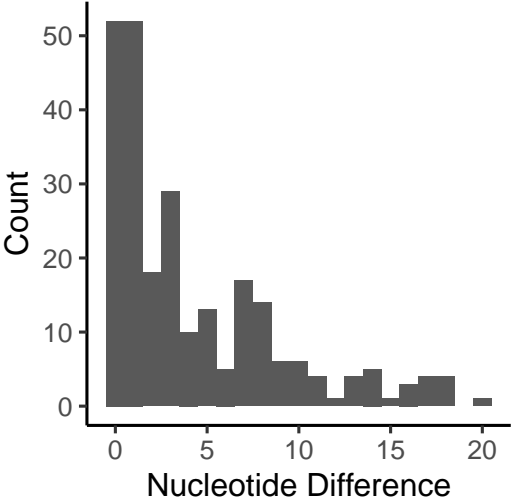
IGHV6–1*01_S5053

800 sequences assigned
No exact matches.



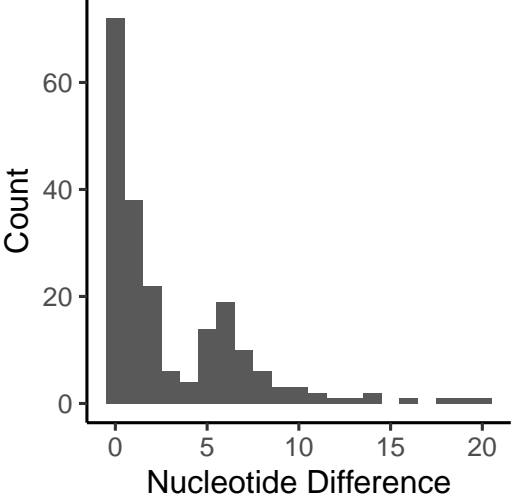
IGHV7-86*01_S5062

250 sequences assigned
52 (20.8%) exact matches, in which:
35 unique CDR3
6 unique J

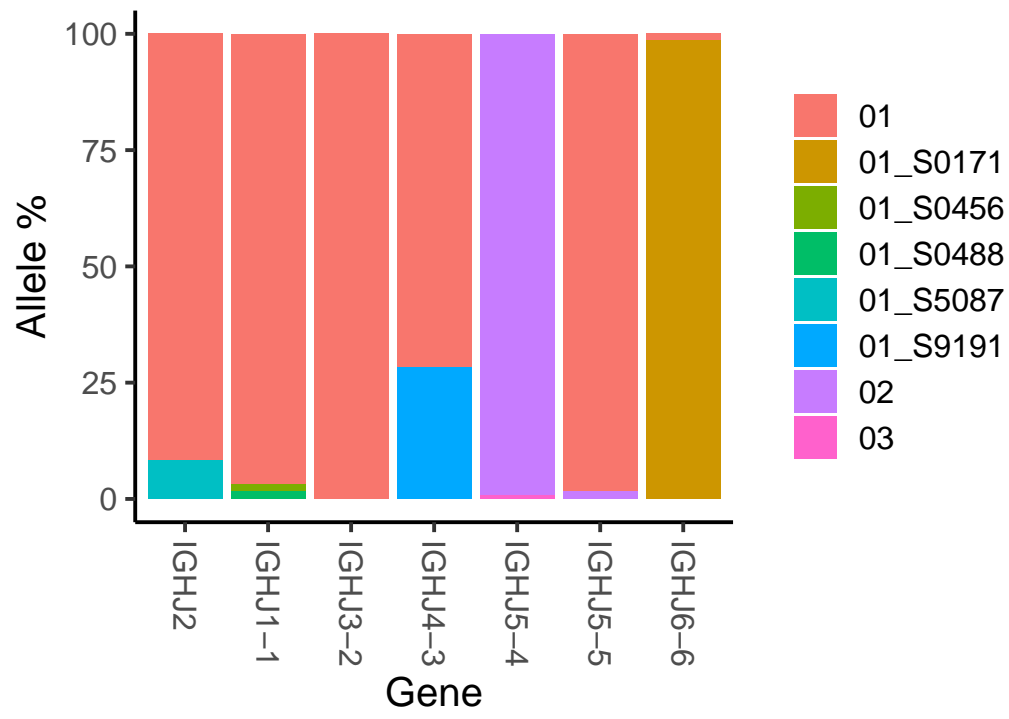


IGHV7-86*02_S1706

266 sequences assigned
72 (27.1%) exact matches, in which:
43 unique CDR3
5 unique J



Allele Usage



Sequence Count by IGHJ4-3 allele usage



01

01_S9191

4000

2000

-2000

[illegible]

Warning – no inferred sequences found.