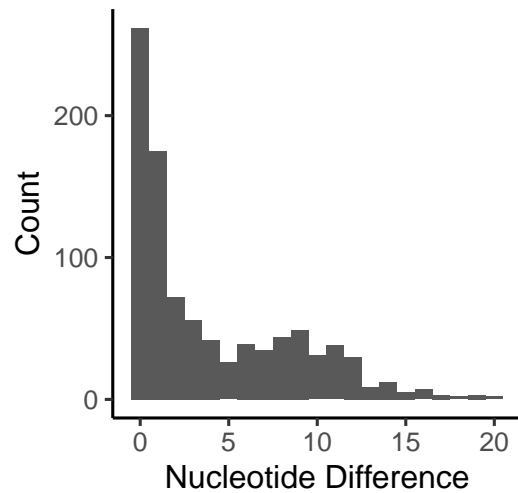


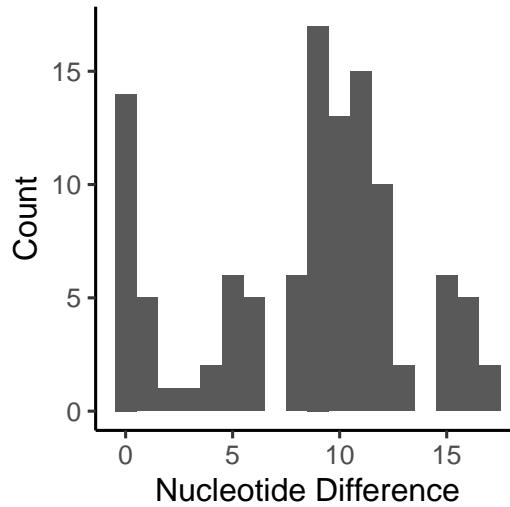
IGHV1-60*01_S7772

949 sequences assigned
262 (27.6%) exact matches, in which:
170 unique CDR3
7 unique J



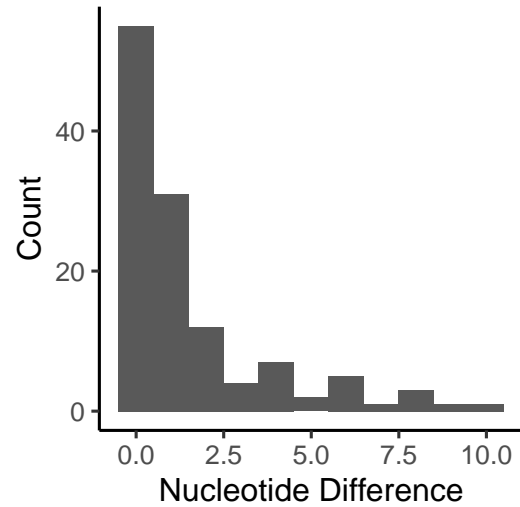
IGHV1-124*01_S6748

114 sequences assigned
14 (12.3%) exact matches, in which:
11 unique CDR3
4 unique J



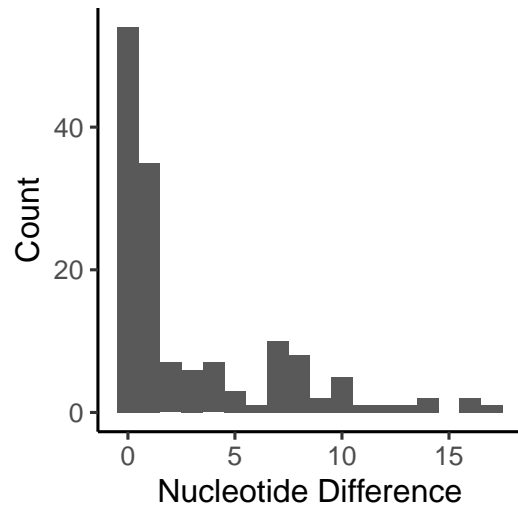
IGHV1-138*02_S9625

122 sequences assigned
55 (45.1%) exact matches, in which:
47 unique CDR3
7 unique J



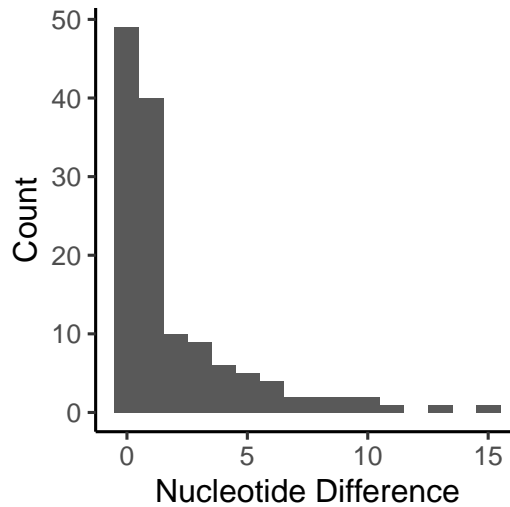
IGHV1-84*01_S2078

147 sequences assigned
54 (36.7%) exact matches, in which:
32 unique CDR3
5 unique J



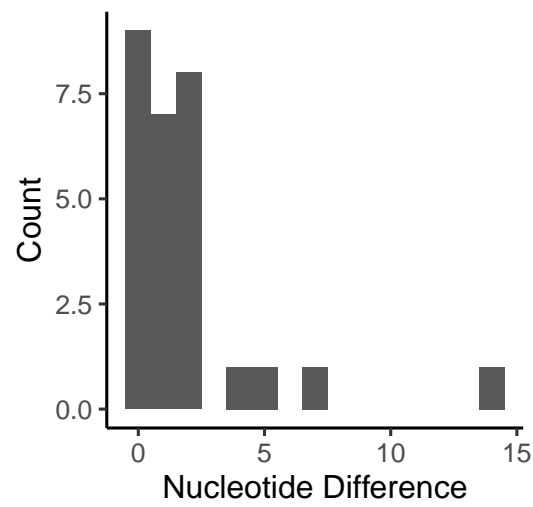
IGHV1-138*01_S2054

135 sequences assigned
49 (36.3%) exact matches, in which:
39 unique CDR3
6 unique J



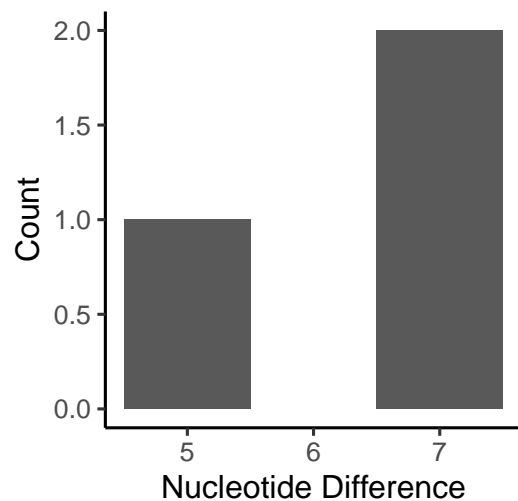
IGHV1-170*01_S3055

28 sequences assigned
9 (32.1%) exact matches, in which:
4 unique CDR3
1 unique J



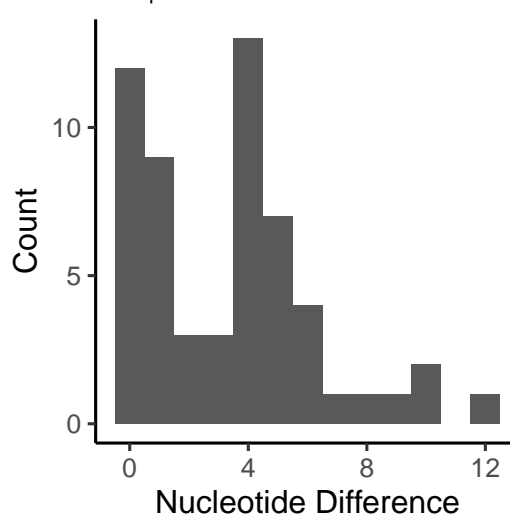
IGHV1-105*01_S9006

3 sequences assigned
No exact matches.



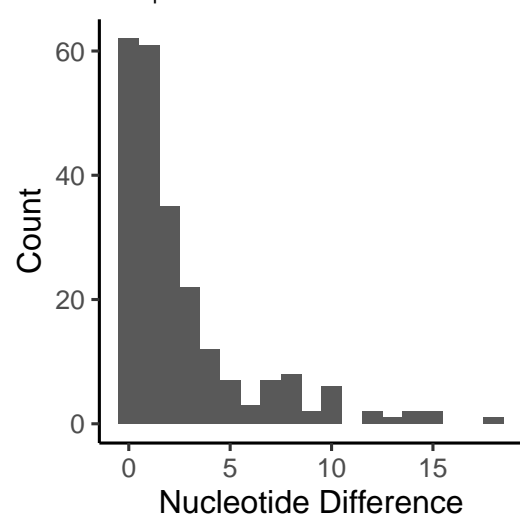
IGHV1-138*01_S6073

57 sequences assigned
12 (21.1%) exact matches, in which:
12 unique CDR3
4 unique J



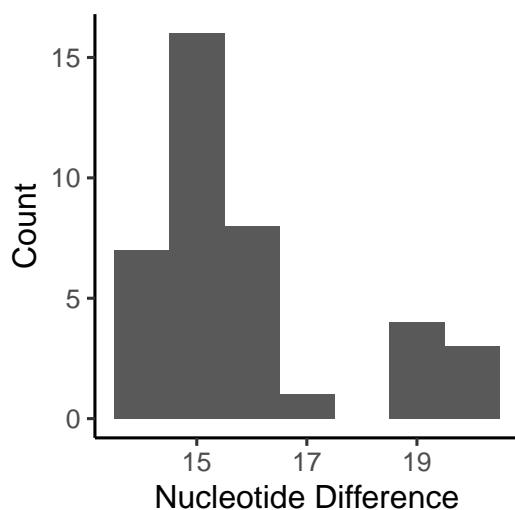
IGHV1-NL_1*01_S5433

233 sequences assigned
62 (26.6%) exact matches, in which:
33 unique CDR3
5 unique J



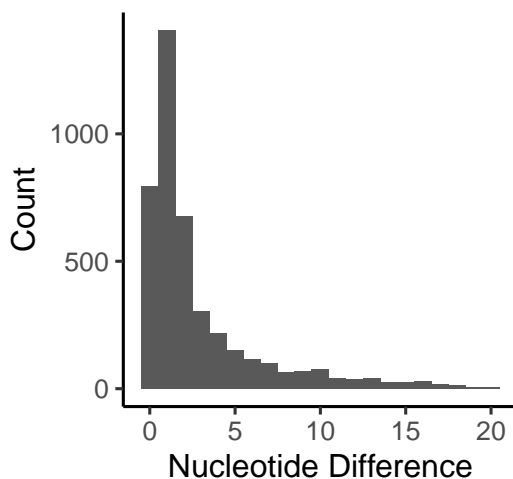
IGHV1–NL_1*01_S8523

46 sequences assigned
No exact matches.



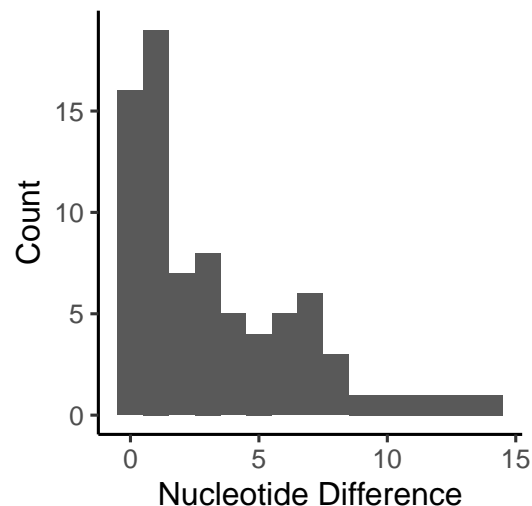
IGHV2–7*02_S3534

4257 sequences assigned
795 (18.7%) exact matches, in which:
280 unique CDR3
9 unique J



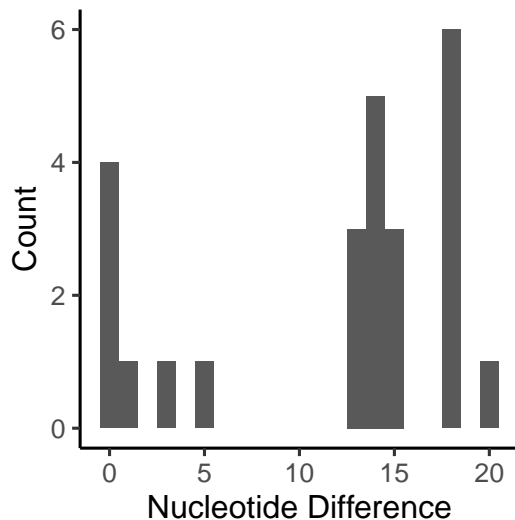
IGHV2–118*01_S1355

80 sequences assigned
16 (20%) exact matches, in which:
7 unique CDR3
2 unique J



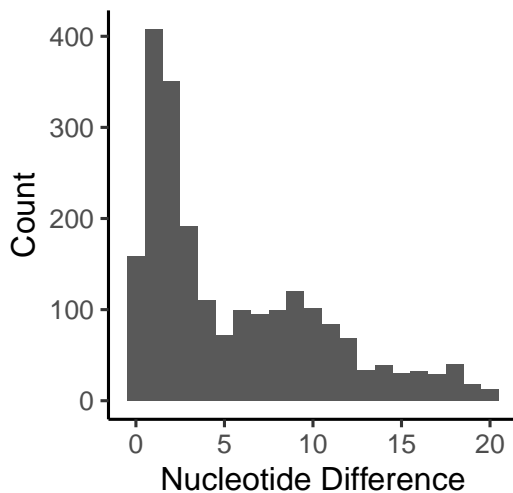
IGHV1–NL_2*01_S2245

27 sequences assigned
4 (14.8%) exact matches, in which:
2 unique CDR3
2 unique J



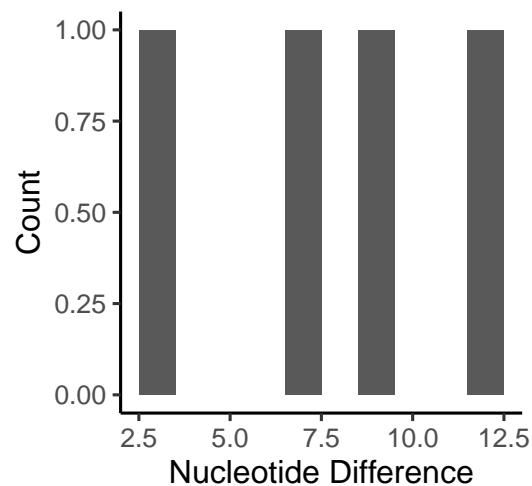
IGHV2–69*01_S0230

2243 sequences assigned
159 (7.1%) exact matches, in which:
87 unique CDR3
7 unique J



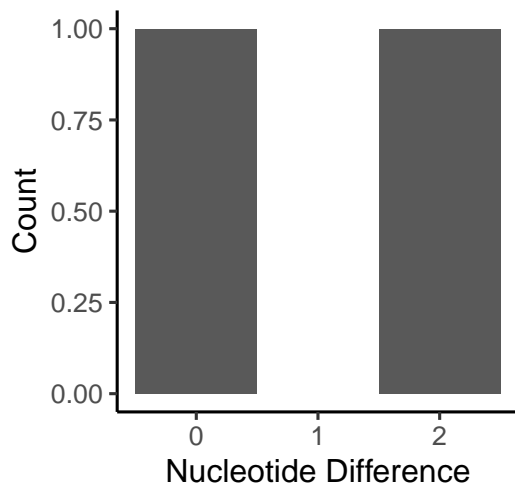
IGHV2–173*01_S2781

4 sequences assigned
No exact matches.



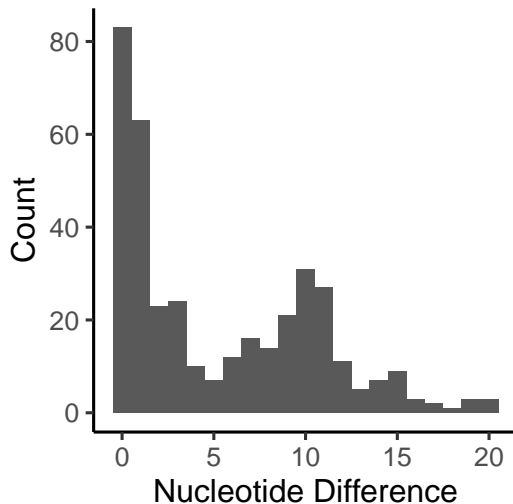
IGHV1–NL_2*01_S9602

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



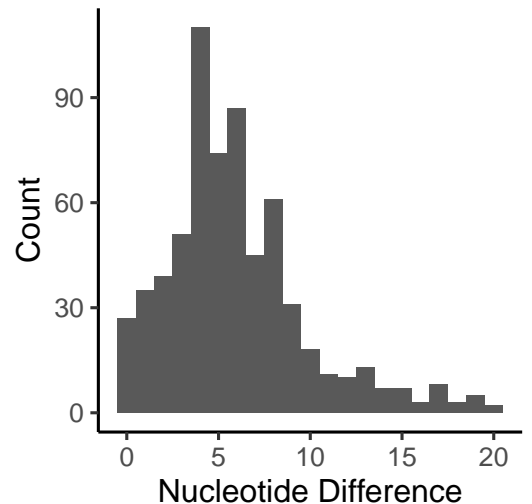
IGHV2–69*01_S2648

380 sequences assigned
83 (21.8%) exact matches, in which:
52 unique CDR3
7 unique J



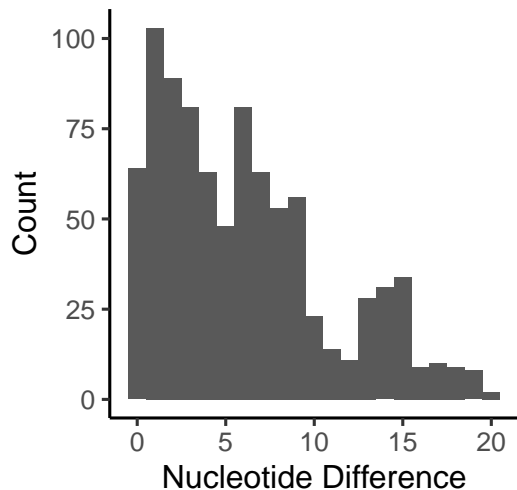
IGHV2–NL_1*01_S4605

726 sequences assigned
27 (3.7%) exact matches, in which:
19 unique CDR3
6 unique J



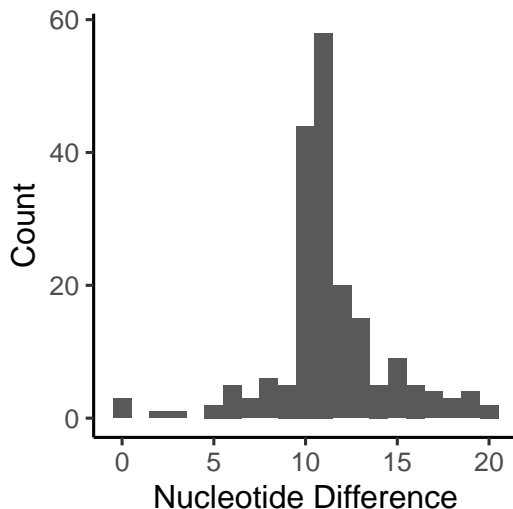
IGHV2–NL_1*01_S7937

930 sequences assigned
64 (6.9%) exact matches, in which:
36 unique CDR3
7 unique J



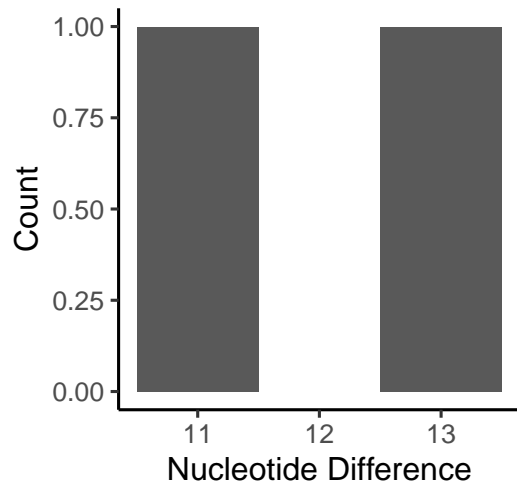
IGHV3–5*01_S1720

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



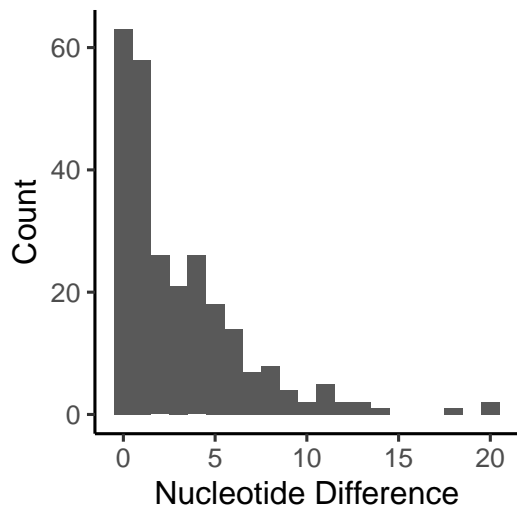
IGHV3–28*01_S3617

13 sequences assigned
No exact matches.



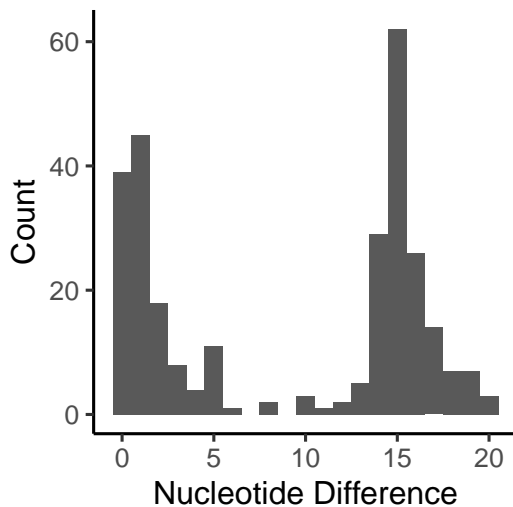
IGHV2–NL_2*01_S2193

262 sequences assigned
63 (24%) exact matches, in which:
30 unique CDR3
5 unique J



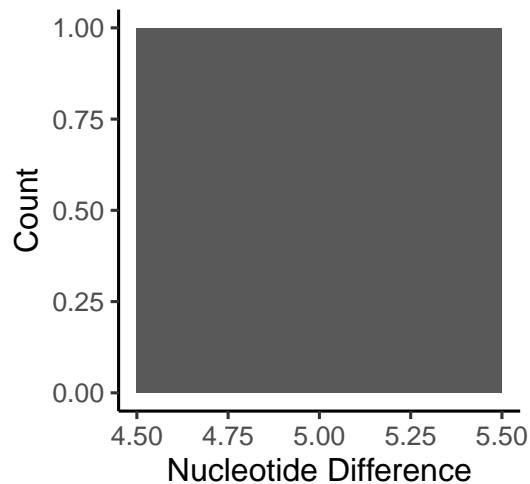
IGHV3–5*01_S7285

313 sequences assigned
39 (12.5%) exact matches, in which:
24 unique CDR3
4 unique J



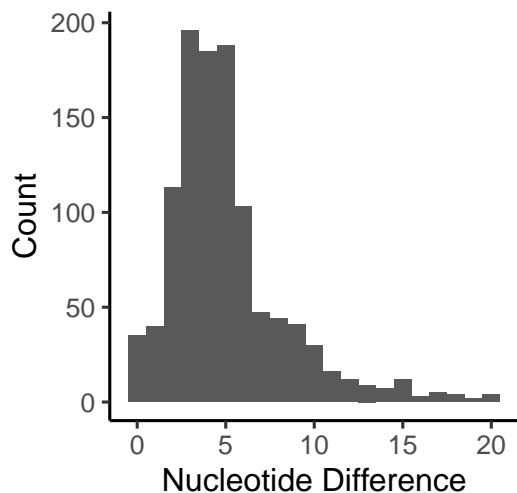
IGHV3–28*01_S4621

1 sequences assigned
No exact matches.



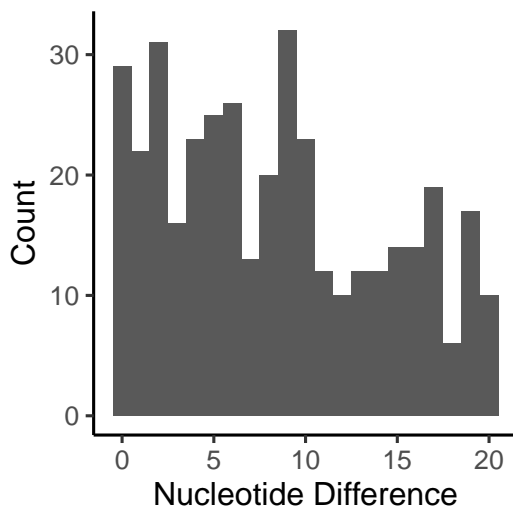
IGHV2–NL_2*01_S6246

1105 sequences assigned
35 (3.2%) exact matches, in which:
21 unique CDR3
7 unique J



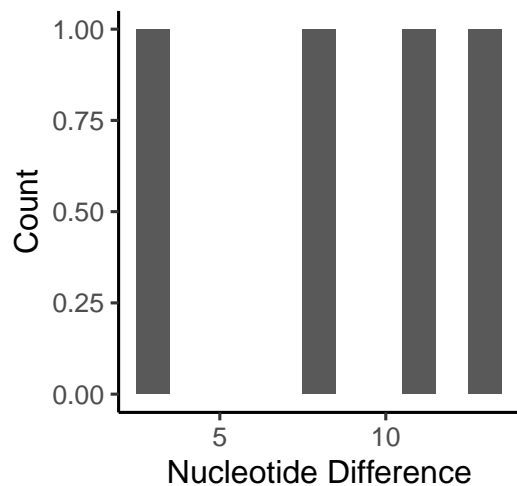
IGHV3–9*01_S0778

470 sequences assigned
29 (6.2%) exact matches, in which:
25 unique CDR3
6 unique J



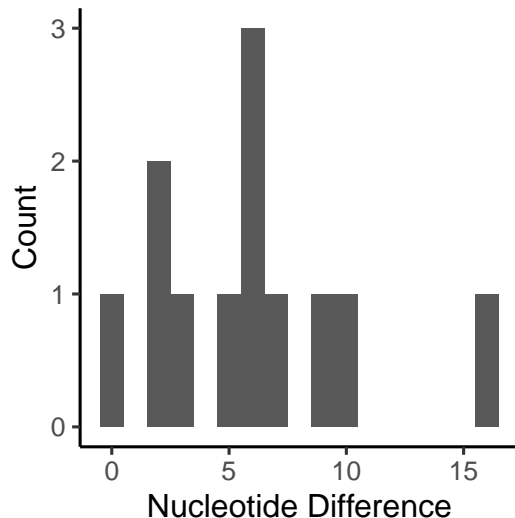
IGHV3–28*01_S7540

4 sequences assigned
No exact matches.



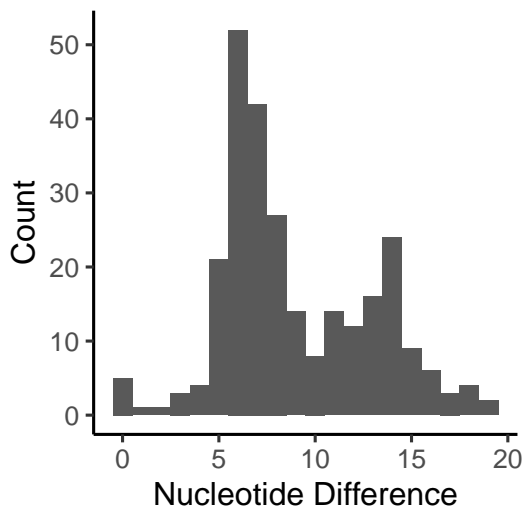
IGHV3-34*01_S1123

14 sequences assigned
1 (7.1%) exact matches, in which:
1 unique CDR3
1 unique J



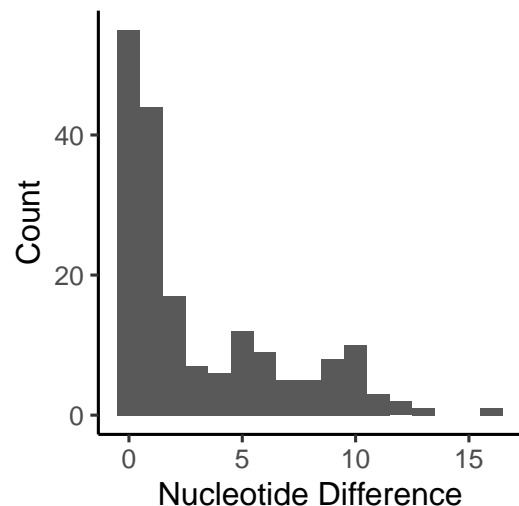
IGHV3-37*01_S0586

272 sequences assigned
5 (1.8%) exact matches, in which:
3 unique CDR3
1 unique J



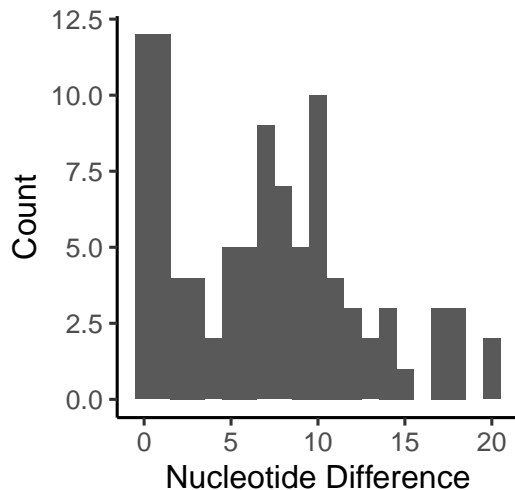
IGHV3-52*01_S8160

187 sequences assigned
55 (29.4%) exact matches, in which:
36 unique CDR3
5 unique J



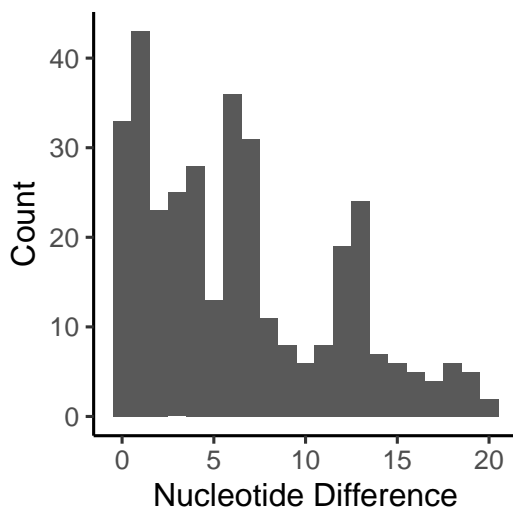
IGHV3-36*01_S6650

113 sequences assigned
12 (10.6%) exact matches, in which:
9 unique CDR3
5 unique J



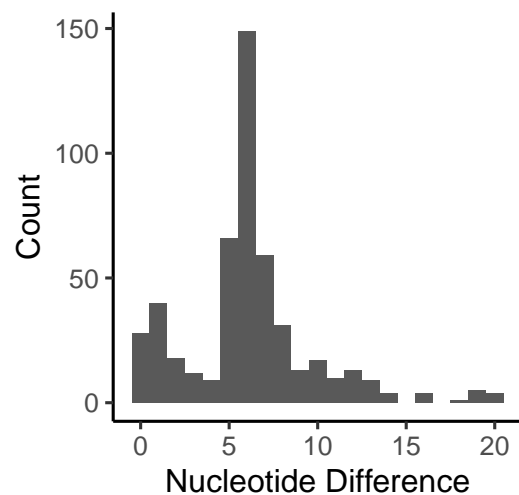
IGHV3-50*01_S8418

356 sequences assigned
33 (9.3%) exact matches, in which:
21 unique CDR3
5 unique J



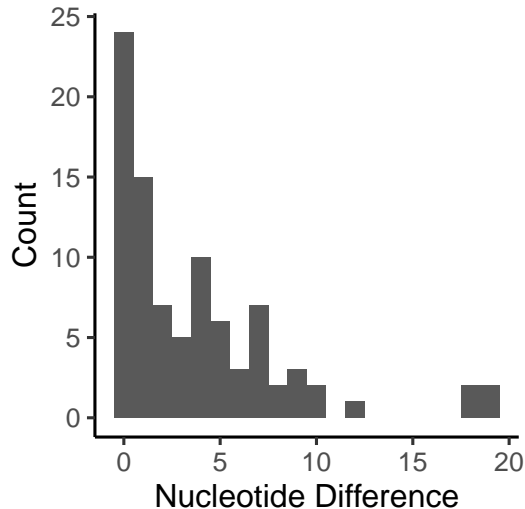
IGHV3-52*02_S4550

508 sequences assigned
28 (5.5%) exact matches, in which:
15 unique CDR3
4 unique J



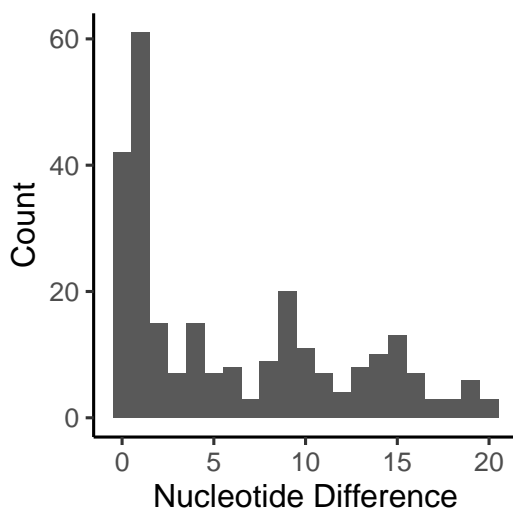
IGHV3-36*01_S6740

89 sequences assigned
24 (27%) exact matches, in which:
22 unique CDR3
5 unique J



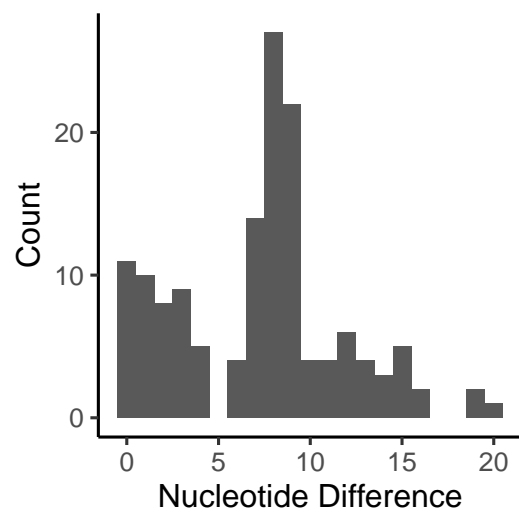
IGHV3-50*01_S9862

305 sequences assigned
42 (13.8%) exact matches, in which:
22 unique CDR3
4 unique J



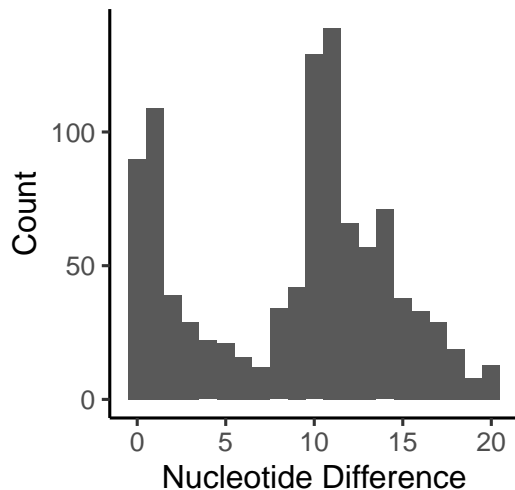
IGHV3-53*01_S2905

183 sequences assigned
11 (6%) exact matches, in which:
6 unique CDR3
3 unique J



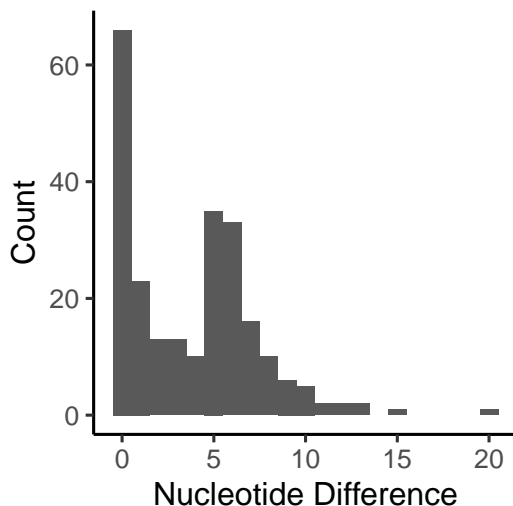
IGHV3-53*01_S8913

1100 sequences assigned
90 (8.2%) exact matches, in which:
53 unique CDR3
5 unique J



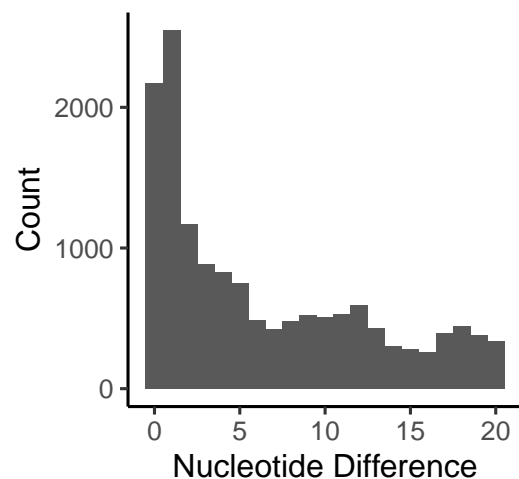
IGHV3-73*02_S4889

244 sequences assigned
66 (27%) exact matches, in which:
44 unique CDR3
4 unique J



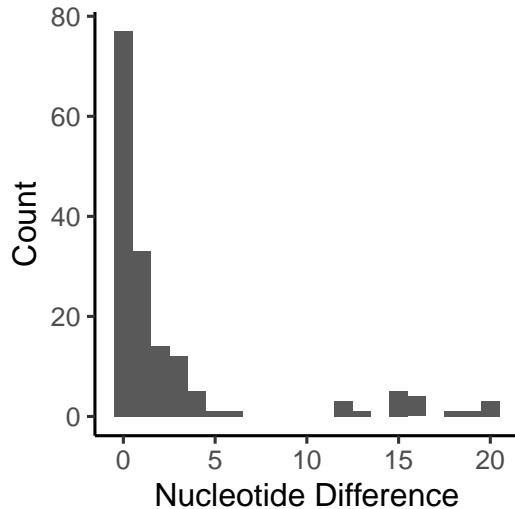
IGHV3-76*02_S4190

16408 sequences assigned
2170 (13.2%) exact matches, in which:
1502 unique CDR3
10 unique J



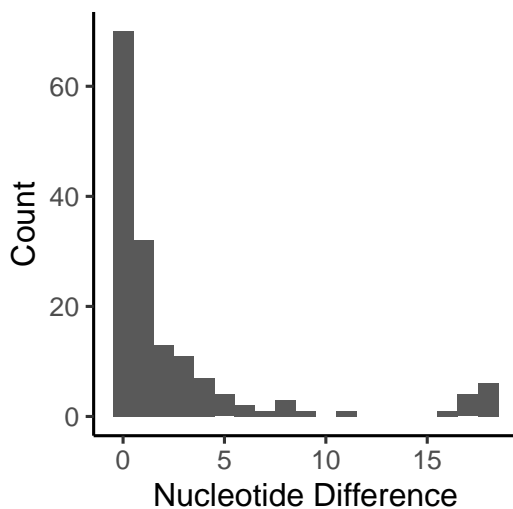
IGHV3-73*02_S0606

238 sequences assigned
77 (32.4%) exact matches, in which:
53 unique CDR3
6 unique J



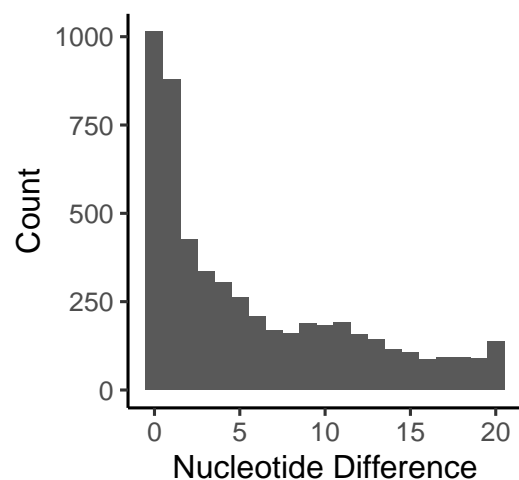
IGHV3-73*02_S7500

156 sequences assigned
70 (44.9%) exact matches, in which:
44 unique CDR3
5 unique J



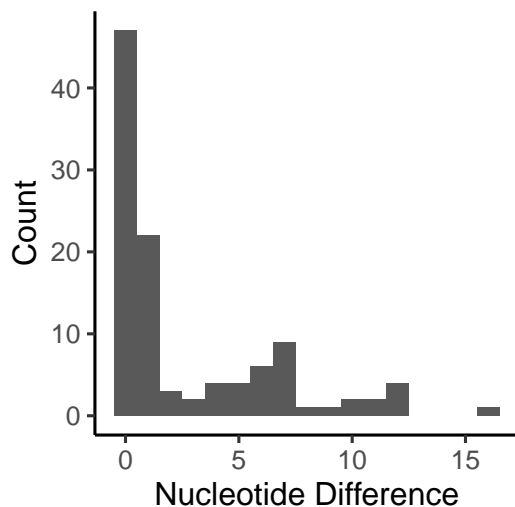
IGHV3-76*02_S4190_A

5854 sequences assigned
1014 (17.3%) exact matches, in which:
875 unique CDR3
10 unique J



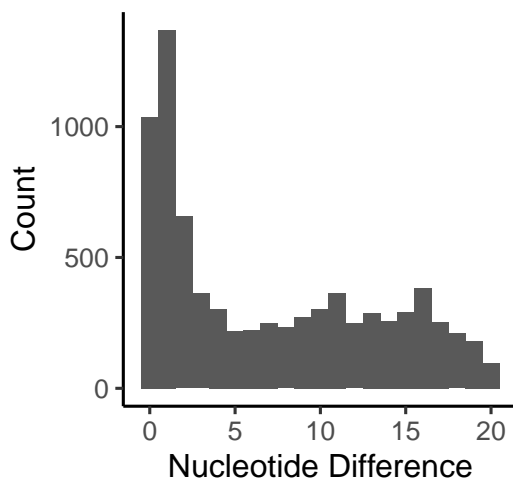
IGHV3-73*02_S2538

111 sequences assigned
47 (42.3%) exact matches, in which:
30 unique CDR3
7 unique J



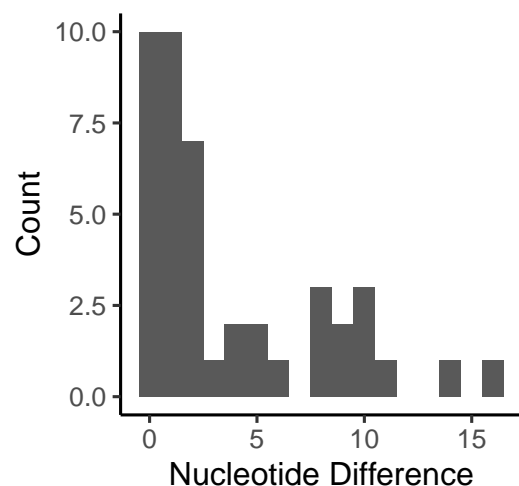
IGHV3-76*01_S9591

8140 sequences assigned
1038 (12.8%) exact matches, in which:
717 unique CDR3
9 unique J



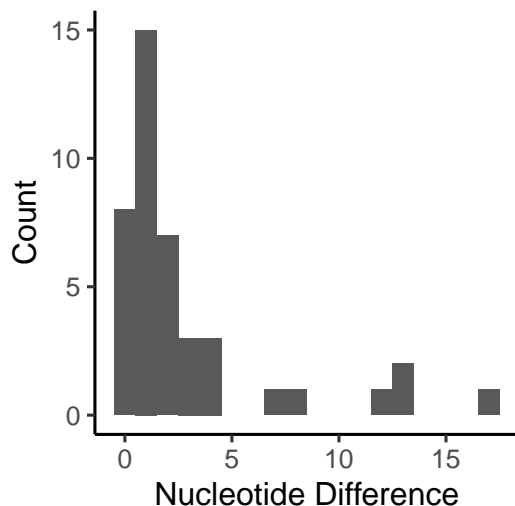
IGHV3-83*01_S5932

45 sequences assigned
10 (22.2%) exact matches, in which:
9 unique CDR3
3 unique J



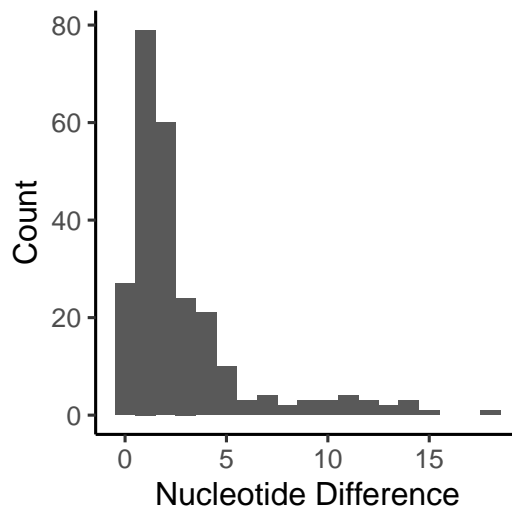
IGHV3-83*02_S1476

42 sequences assigned
8 (19%) exact matches, in which:
5 unique CDR3
3 unique J



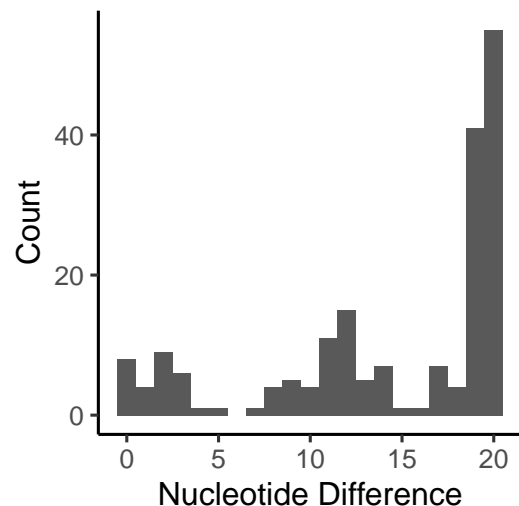
IGHV3-87*01_S2131

252 sequences assigned
27 (10.7%) exact matches, in which:
9 unique CDR3
2 unique J



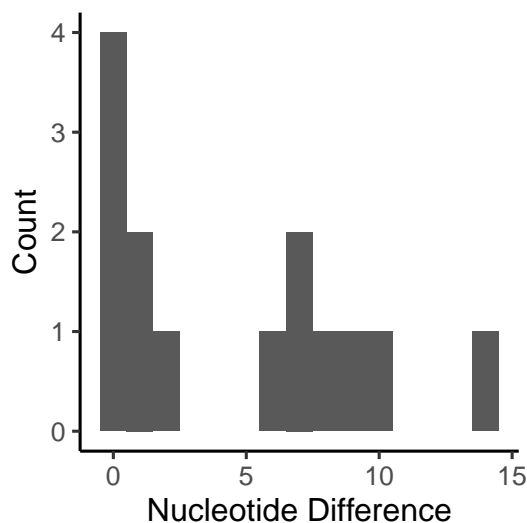
IGHV3-100*01_S4375

288 sequences assigned
8 (2.8%) exact matches, in which:
6 unique CDR3
1 unique J



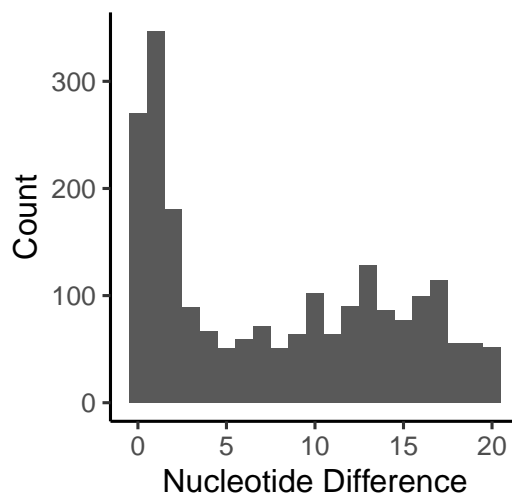
IGHV3-83*02_S3364

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



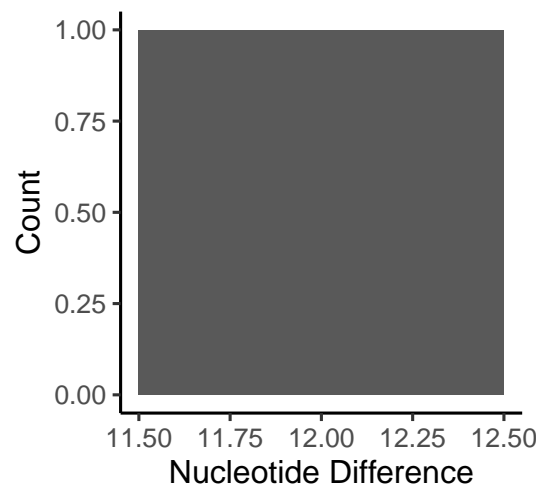
IGHV3-88*02_S1054

2352 sequences assigned
270 (11.5%) exact matches, in which:
158 unique CDR3
8 unique J



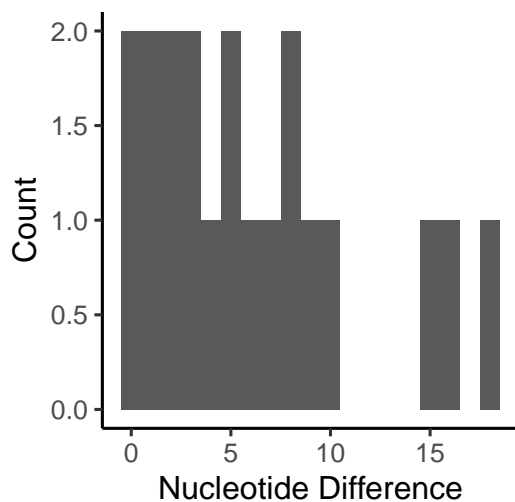
IGHV3-103*01_S0760

1 sequences assigned
No exact matches.



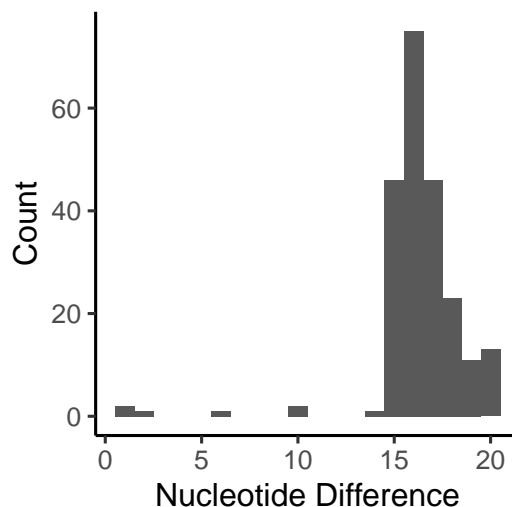
IGHV3-87*01_S1401

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



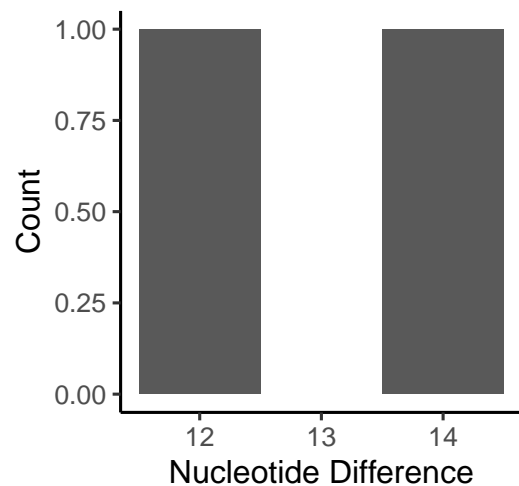
IGHV3-100*01_S2773

266 sequences assigned
No exact matches.



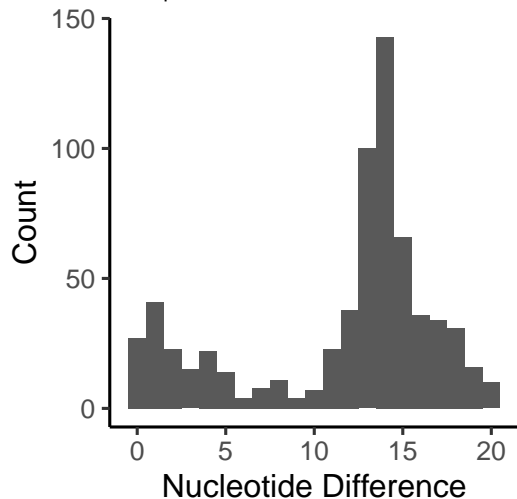
IGHV3-103*01_S1165

4 sequences assigned
No exact matches.



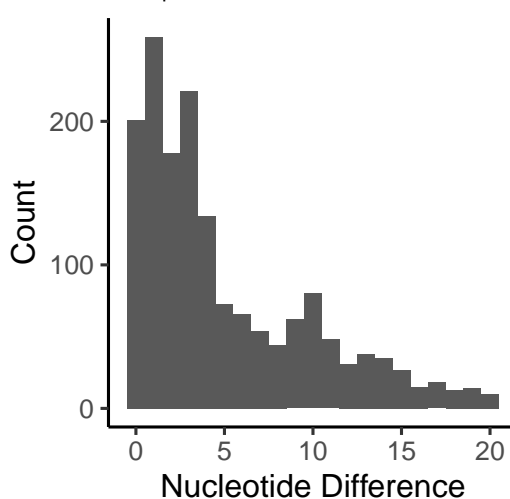
IGHV3-119*01_S5944

734 sequences assigned
27 (3.7%) exact matches, in which:
20 unique CDR3
3 unique J



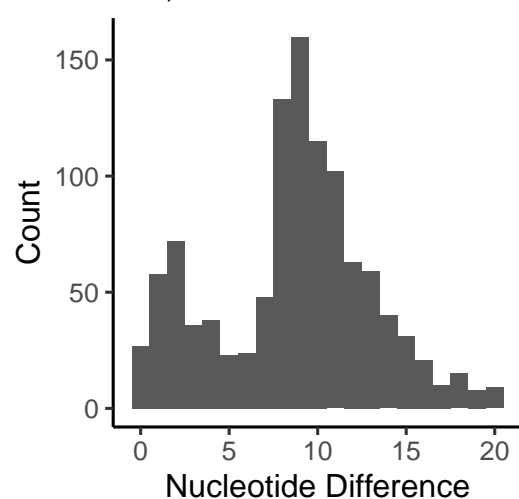
IGHV3-122*01_S8388

1703 sequences assigned
201 (11.8%) exact matches, in which:
146 unique CDR3
8 unique J



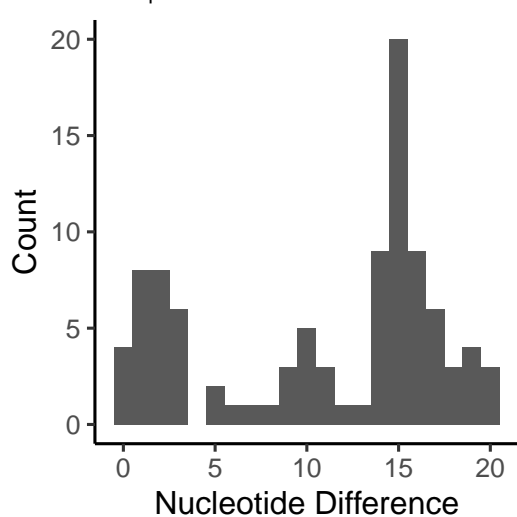
IGHV3-128*01_S6300

1139 sequences assigned
27 (2.4%) exact matches, in which:
12 unique CDR3
5 unique J



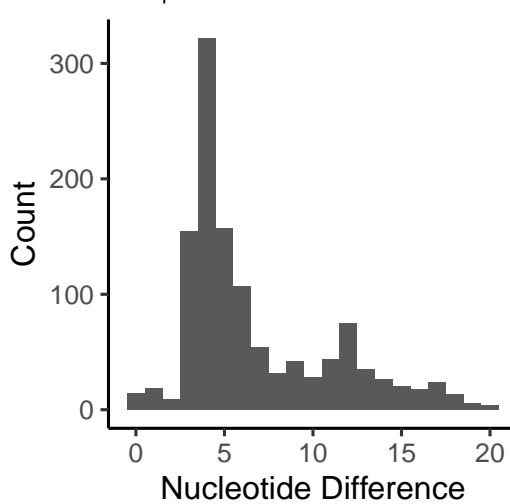
IGHV3-120*01_S7674

106 sequences assigned
4 (3.8%) exact matches, in which:
3 unique CDR3
1 unique J



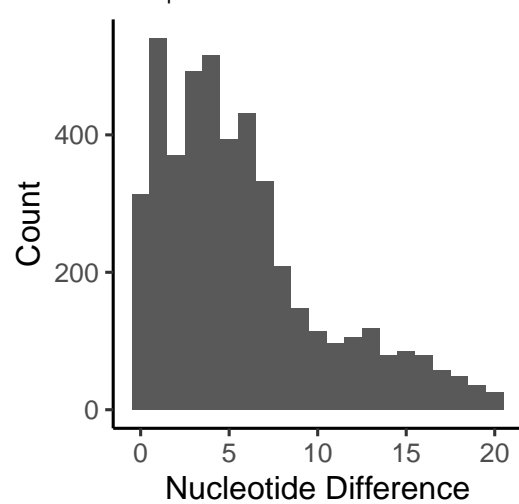
IGHV3-127*01_S6769

1238 sequences assigned
14 (1.1%) exact matches, in which:
10 unique CDR3
4 unique J



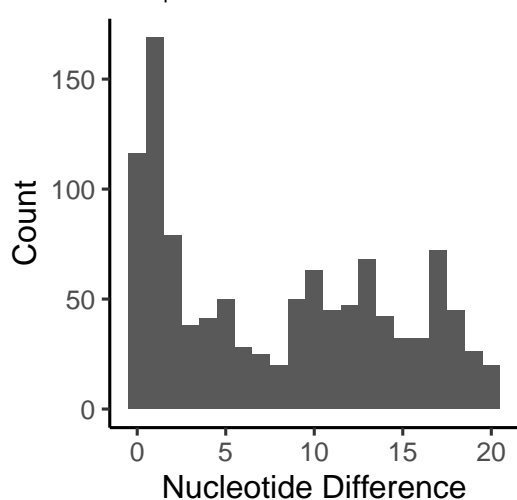
IGHV3-141*01_S8690

4750 sequences assigned
314 (6.6%) exact matches, in which:
217 unique CDR3
8 unique J



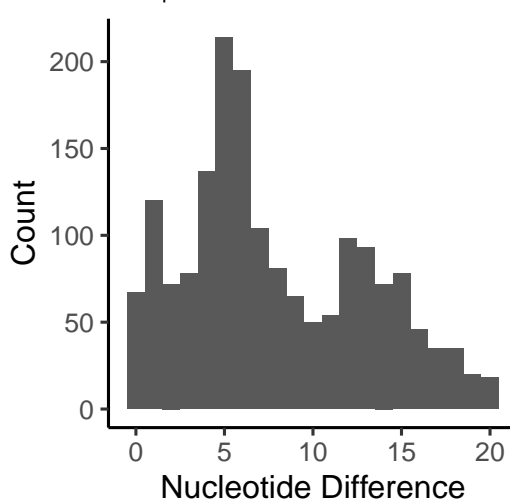
IGHV3-122*01_S0584

1181 sequences assigned
116 (9.8%) exact matches, in which:
71 unique CDR3
6 unique J



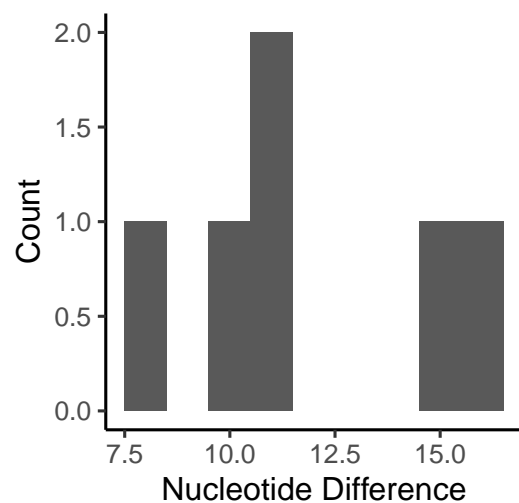
IGHV3-128*01_S3124

1830 sequences assigned
67 (3.7%) exact matches, in which:
50 unique CDR3
7 unique J



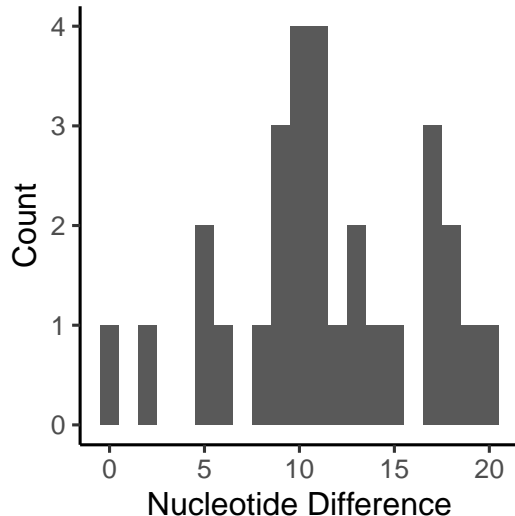
IGHV3-143*01_S1591

6 sequences assigned
No exact matches.



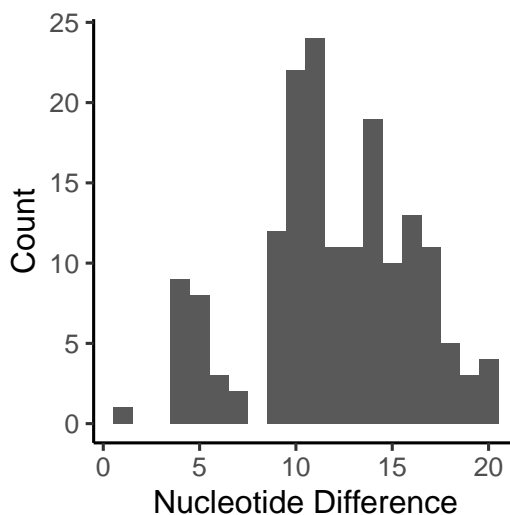
IGHV3-152*01_S7388

38 sequences assigned
1 (2.6%) exact matches, in which:
1 unique CDR3
1 unique J



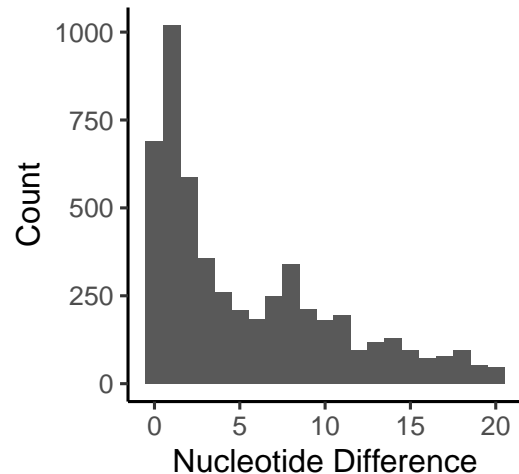
IGHV3-177*01_S2755

288 sequences assigned
No exact matches.



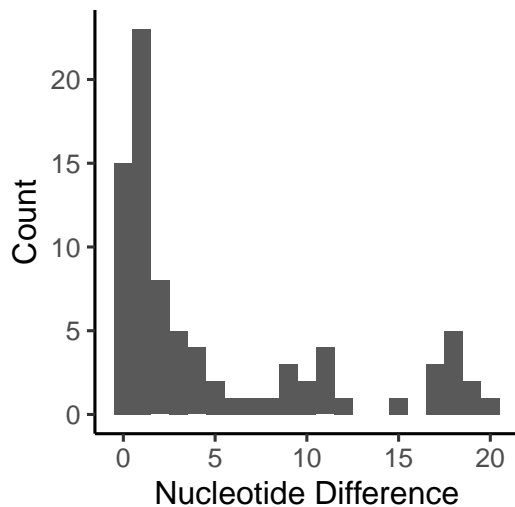
IGHV3-187*01_S6641

5520 sequences assigned
689 (12.5%) exact matches, in which:
392 unique CDR3
10 unique J



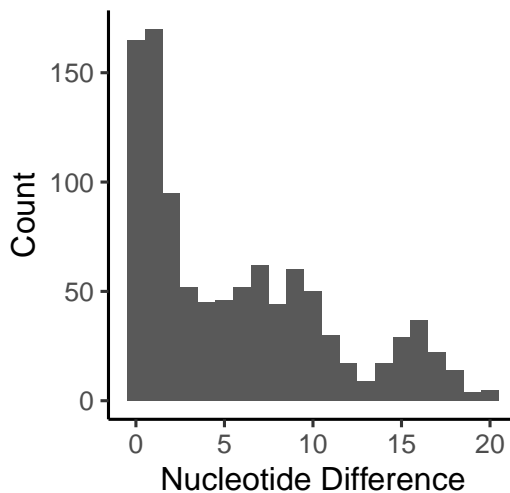
IGHV3-172*01_S1597

84 sequences assigned
15 (17.9%) exact matches, in which:
13 unique CDR3
3 unique J



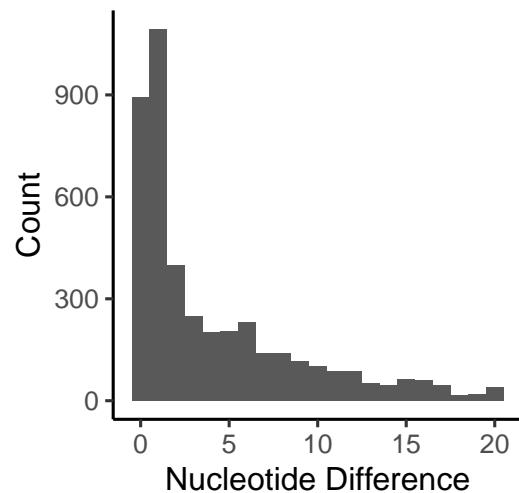
IGHV3-177*01_S8409

1053 sequences assigned
165 (15.7%) exact matches, in which:
116 unique CDR3
6 unique J



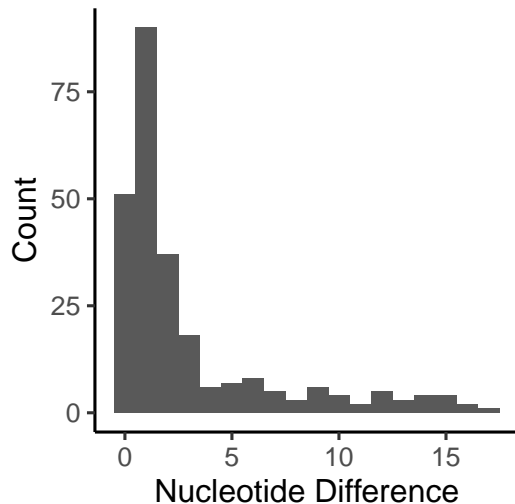
IGHV3-NL_1*01_S1988

4548 sequences assigned
892 (19.6%) exact matches, in which:
586 unique CDR3
9 unique J



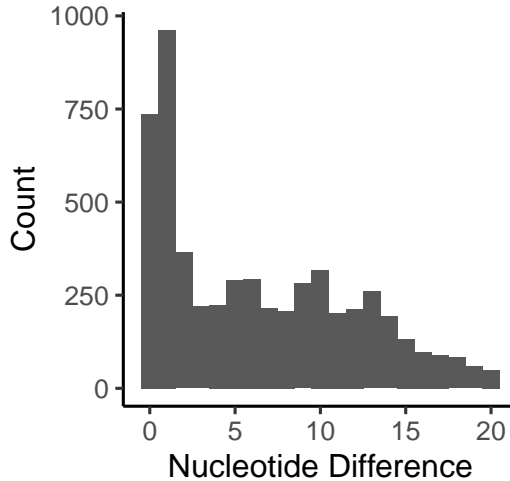
IGHV3-172*01_S8488

259 sequences assigned
51 (19.7%) exact matches, in which:
23 unique CDR3
5 unique J



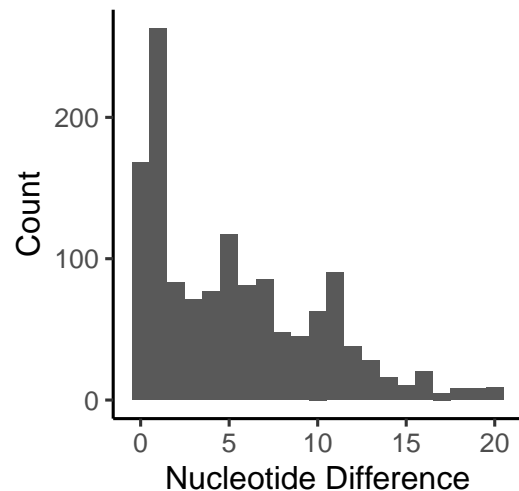
IGHV3-187*01_S1387

5855 sequences assigned
737 (12.6%) exact matches, in which:
471 unique CDR3
10 unique J



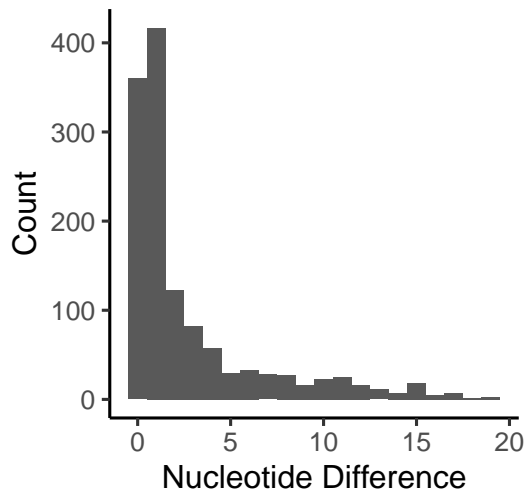
IGHV3-NL_1*01_S4906

1410 sequences assigned
168 (11.9%) exact matches, in which:
100 unique CDR3
8 unique J



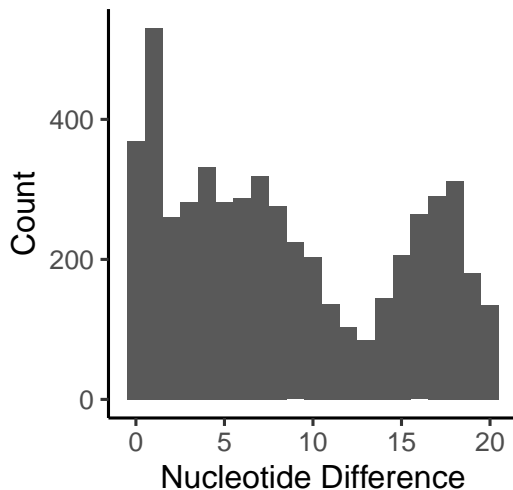
IGHV3–NL_1*01_S6560

1302 sequences assigned
360 (27.6%) exact matches, in which:
261 unique CDR3
9 unique J



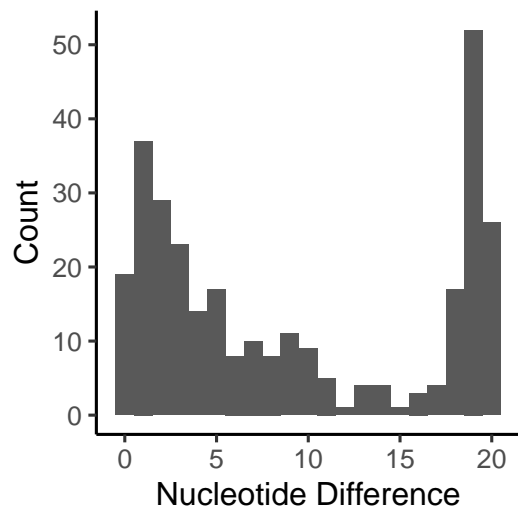
IGHV3–NL_11*01_S4380

5751 sequences assigned
369 (6.4%) exact matches, in which:
260 unique CDR3
8 unique J



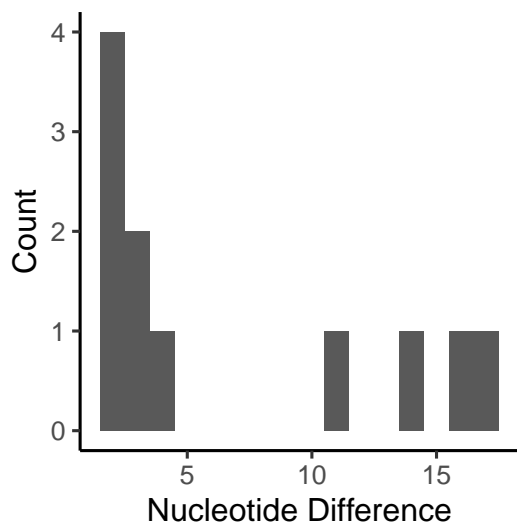
IGHV3–NL_13*01_S3277

367 sequences assigned
19 (5.2%) exact matches, in which:
16 unique CDR3
6 unique J



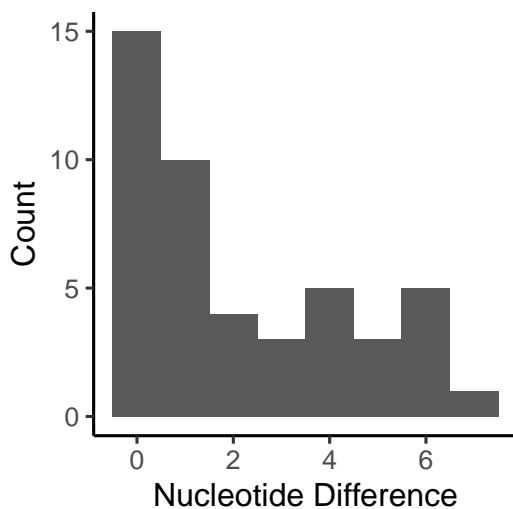
IGHV3–NL_10*02_S2212

11 sequences assigned
No exact matches.



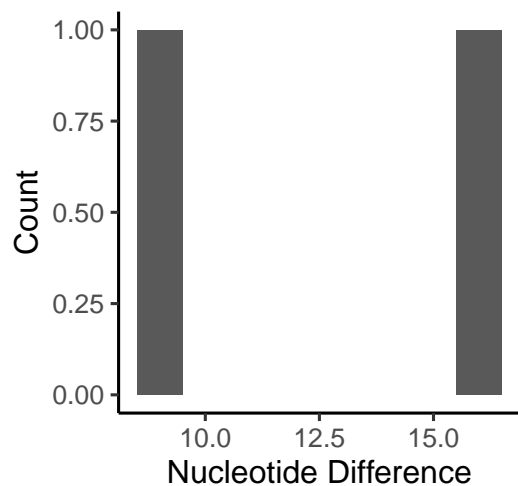
IGHV3–NL_12*02_S3129

46 sequences assigned
15 (32.6%) exact matches, in which:
11 unique CDR3
4 unique J



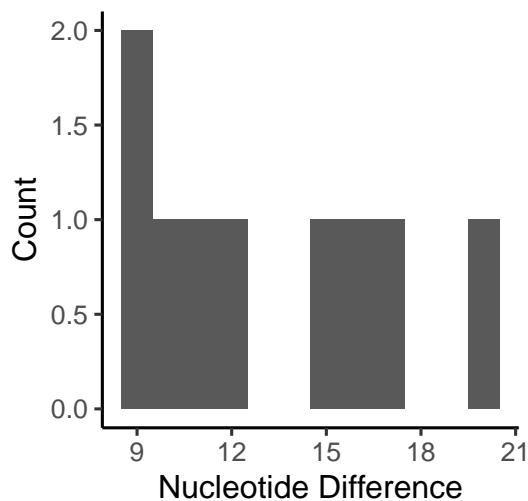
IGHV3–NL_14*01_S6089

2 sequences assigned
No exact matches.



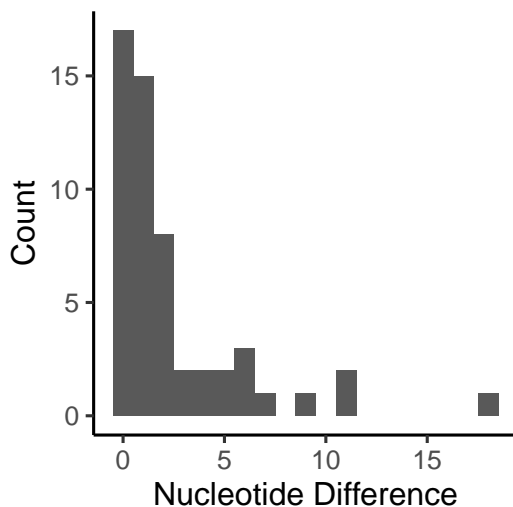
IGHV3–NL_10*02_S3155

13 sequences assigned
No exact matches.



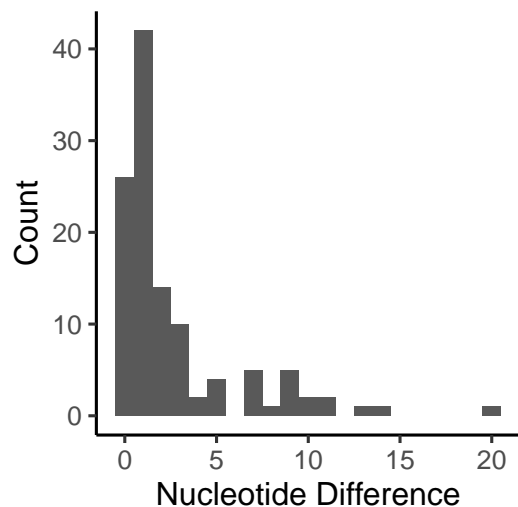
IGHV3–NL_12*02_S5246

54 sequences assigned
17 (31.5%) exact matches, in which:
14 unique CDR3
6 unique J



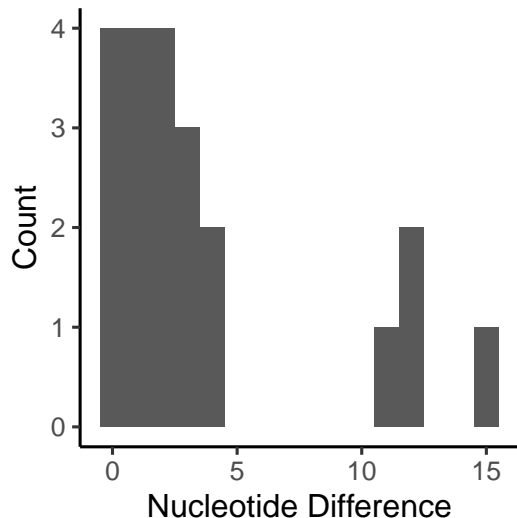
IGHV3–NL_16*01_S7722

119 sequences assigned
26 (21.8%) exact matches, in which:
17 unique CDR3
4 unique J



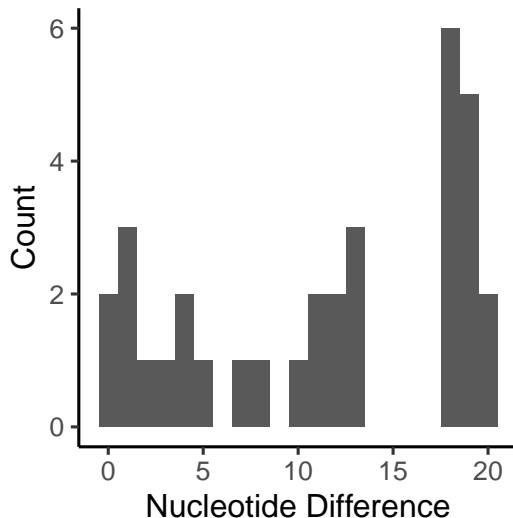
IGHV3-NL_16*01_S7825

21 sequences assigned
4 (19%) exact matches, in which:
4 unique CDR3
3 unique J



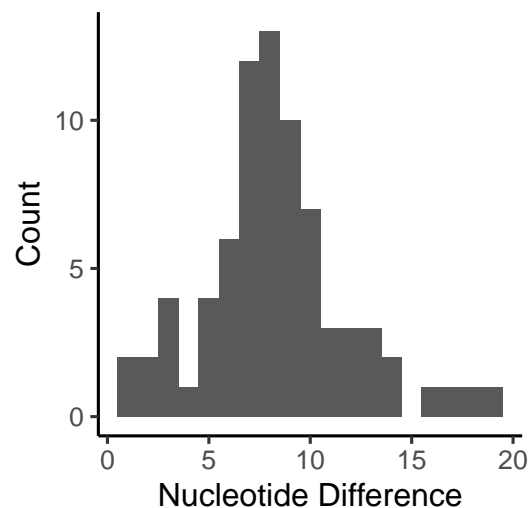
IGHV3-NL_18*01_S6396

38 sequences assigned
2 (5.3%) exact matches, in which:
2 unique CDR3
2 unique J



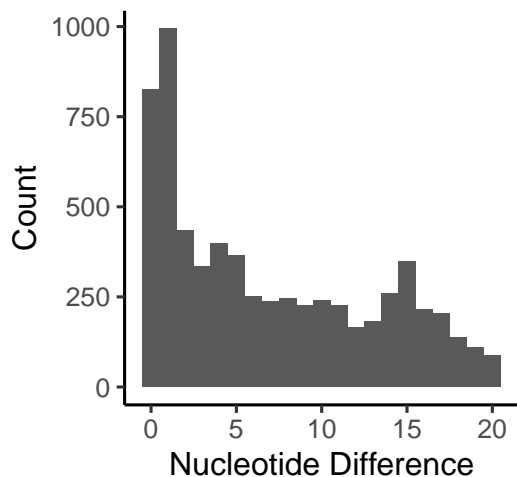
IGHV3-NL_2*01_S9710

78 sequences assigned
No exact matches.



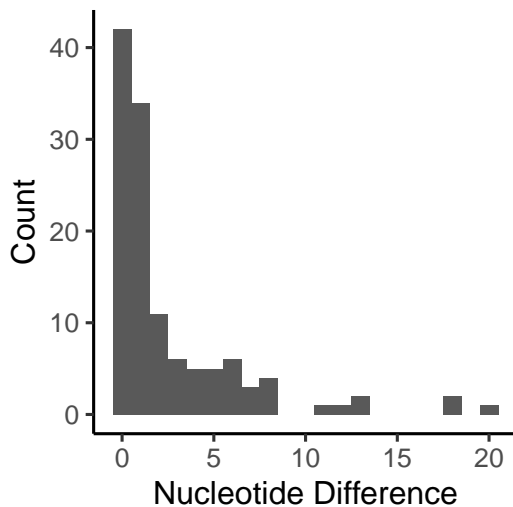
IGHV3-NL_17*01_S012

6993 sequences assigned
825 (11.8%) exact matches, in which:
535 unique CDR3
7 unique J



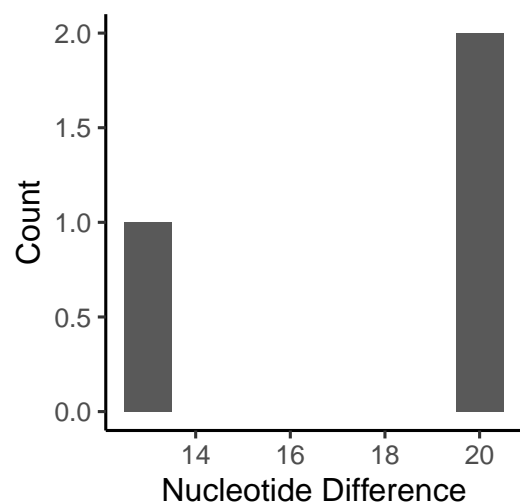
IGHV3-NL_18*01_S7220

124 sequences assigned
42 (33.9%) exact matches, in which:
30 unique CDR3
7 unique J



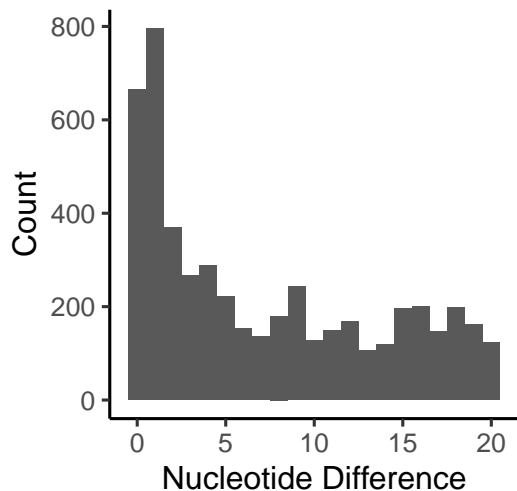
IGHV3-NL_3*02_S6269

9 sequences assigned
No exact matches.



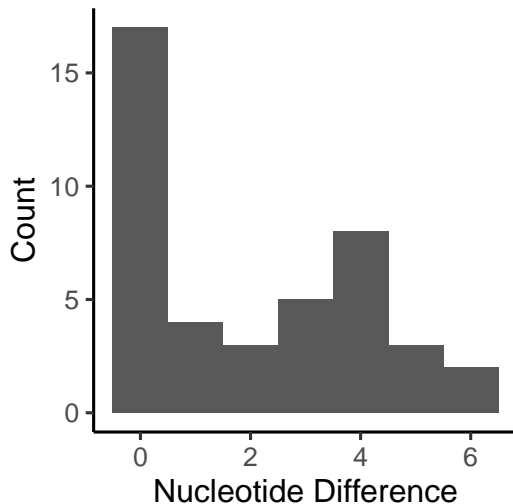
IGHV3-NL_17*01_S1342

5348 sequences assigned
665 (12.4%) exact matches, in which:
417 unique CDR3
7 unique J



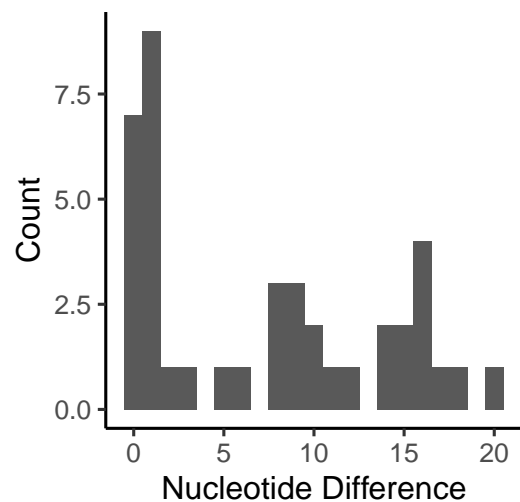
IGHV3-NL_19*01_S2166

44 sequences assigned
17 (38.6%) exact matches, in which:
16 unique CDR3
5 unique J



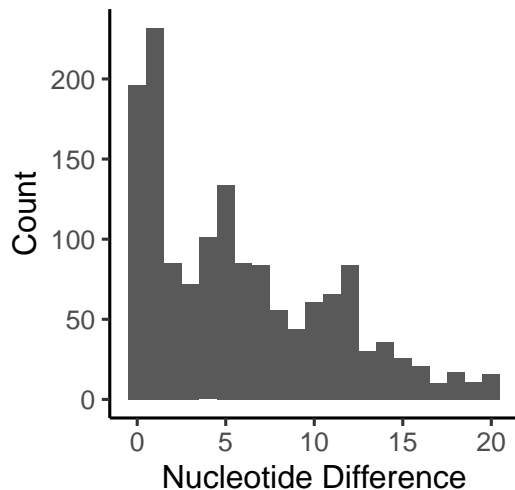
IGHV3-NL_4*01_S6875

45 sequences assigned
7 (15.6%) exact matches, in which:
6 unique CDR3
4 unique J



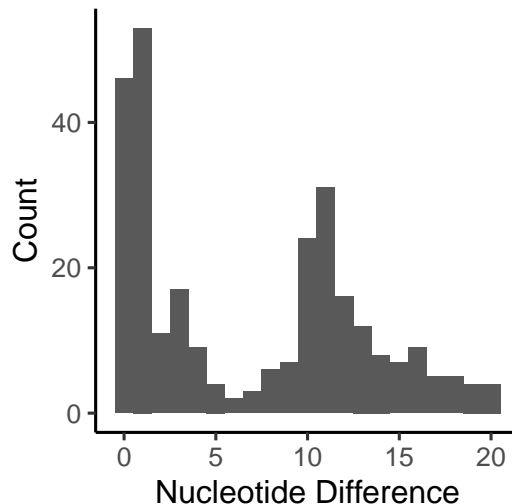
IGHV3–NL_5*01_S4429

1554 sequences assigned
196 (12.6%) exact matches, in which:
115 unique CDR3
8 unique J



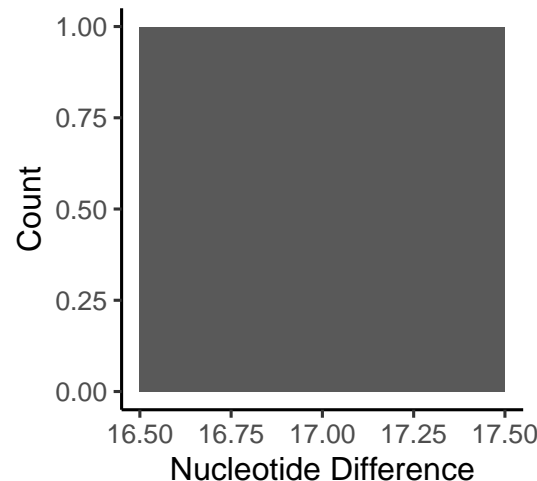
IGHV3–NL_8*01_S9584

306 sequences assigned
46 (15%) exact matches, in which:
34 unique CDR3
6 unique J



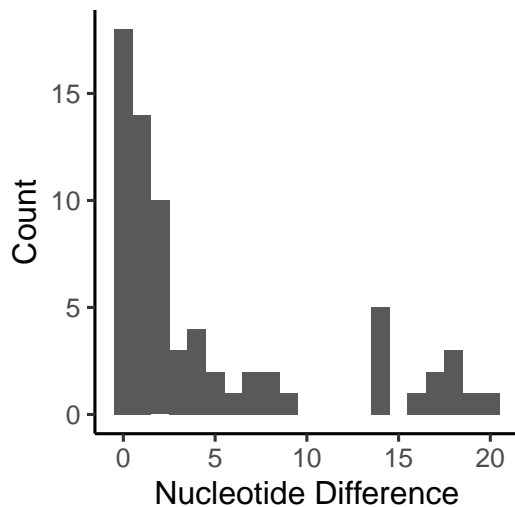
IGHV4–67*02_S6848

1 sequences assigned
No exact matches.



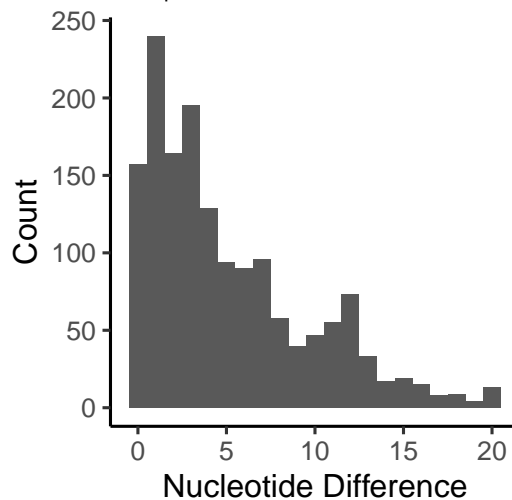
IGHV3–NL_6*02_S6474

70 sequences assigned
18 (25.7%) exact matches, in which:
11 unique CDR3
3 unique J



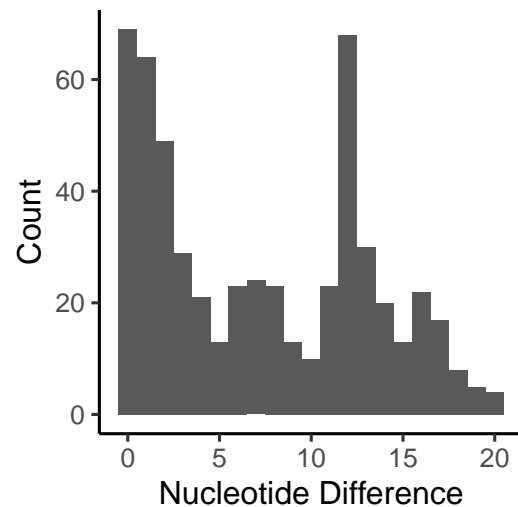
IGHV3–NL_9*01_S6098

1622 sequences assigned
157 (9.7%) exact matches, in which:
104 unique CDR3
8 unique J



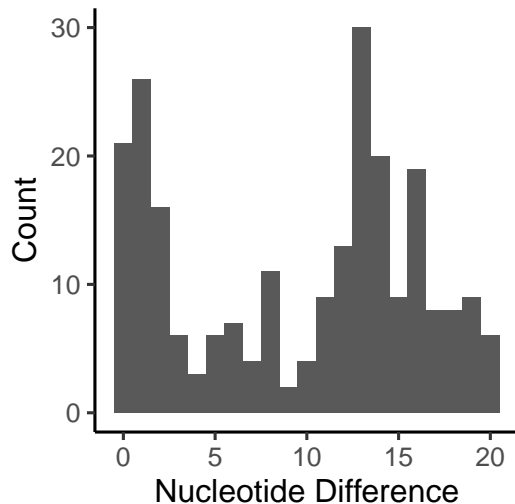
IGHV4–72*01_S8261

561 sequences assigned
69 (12.3%) exact matches, in which:
52 unique CDR3
7 unique J



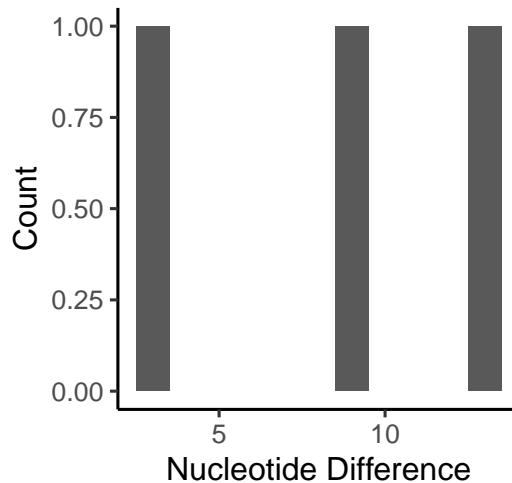
IGHV3–NL_8*01_S7474

386 sequences assigned
21 (5.4%) exact matches, in which:
15 unique CDR3
4 unique J



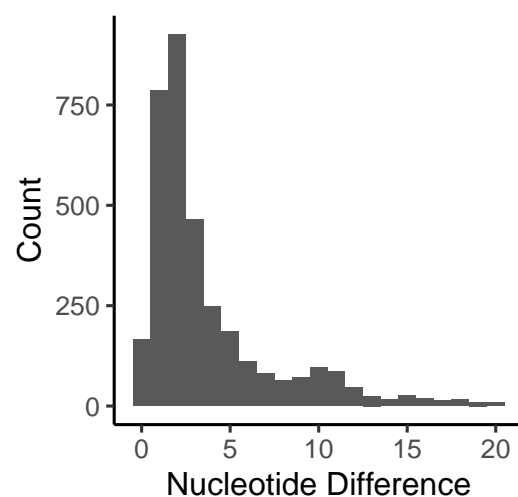
IGHV4–67*02_S1312

3 sequences assigned
No exact matches.



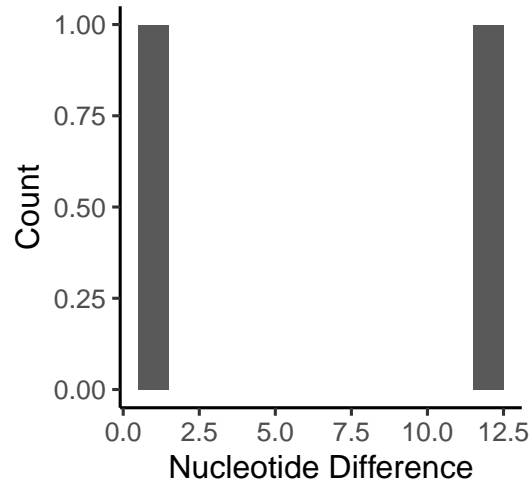
IGHV4–79*01_S6884

3532 sequences assigned
166 (4.7%) exact matches, in which:
131 unique CDR3
7 unique J



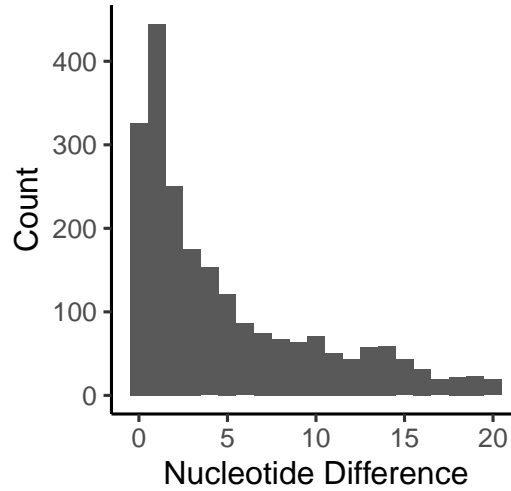
IGHV4-93*01_S1164

3 sequences assigned
No exact matches.



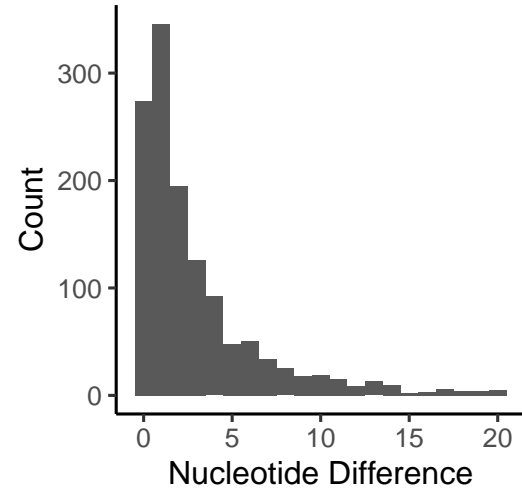
IGHV4-117*01_S2181

2391 sequences assigned
326 (13.6%) exact matches, in which:
231 unique CDR3
7 unique J



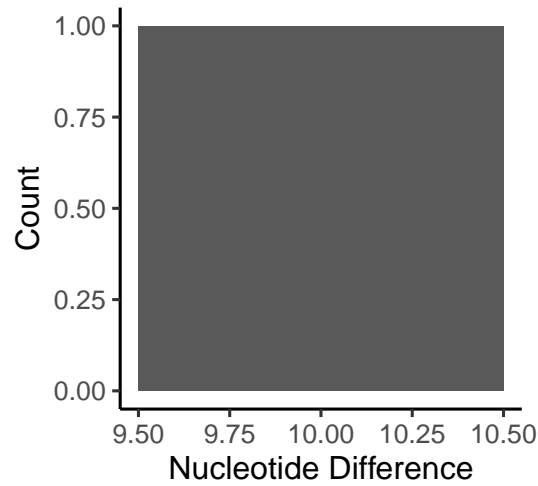
IGHV4-117*01_S7493

1343 sequences assigned
274 (20.4%) exact matches, in which:
204 unique CDR3
7 unique J



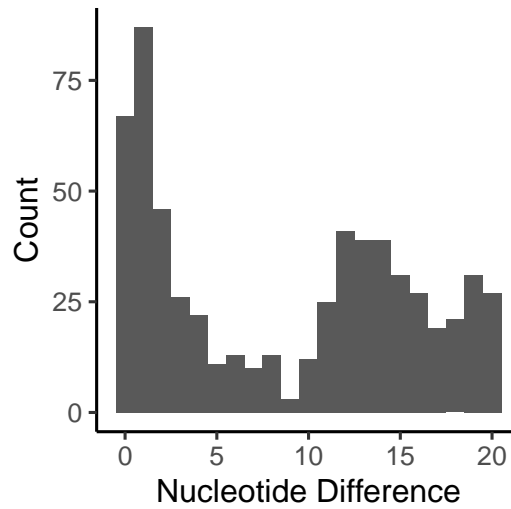
IGHV4-93*01_S5203

2 sequences assigned
No exact matches.



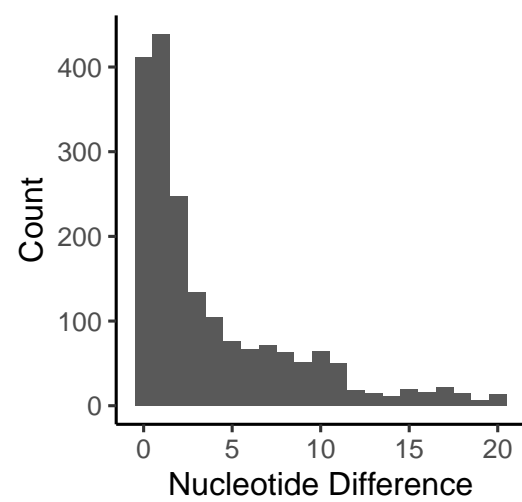
IGHV4-117*01_S3455

702 sequences assigned
67 (9.5%) exact matches, in which:
53 unique CDR3
5 unique J



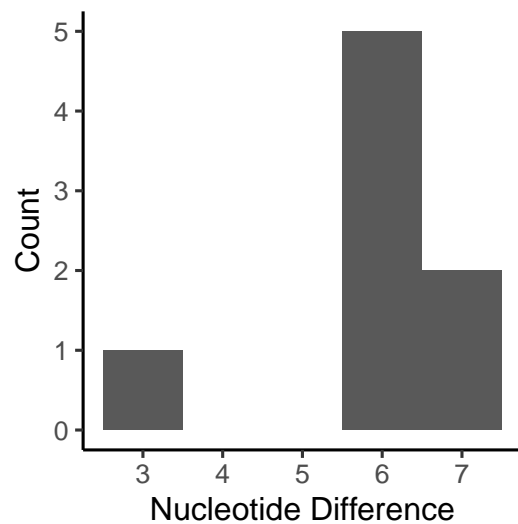
IGHV4-144*01_S0885

2130 sequences assigned
412 (19.3%) exact matches, in which:
313 unique CDR3
9 unique J



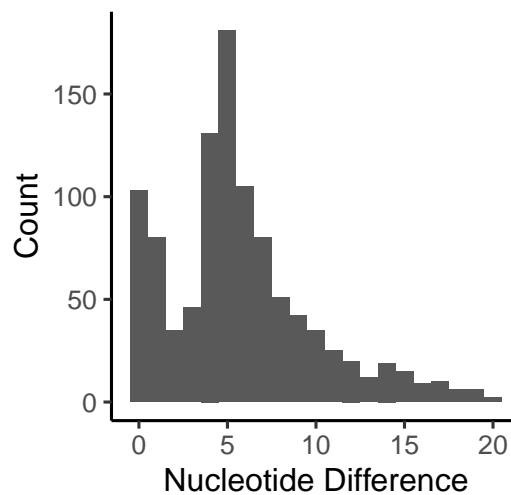
IGHV4-93*01_S6658

8 sequences assigned
No exact matches.



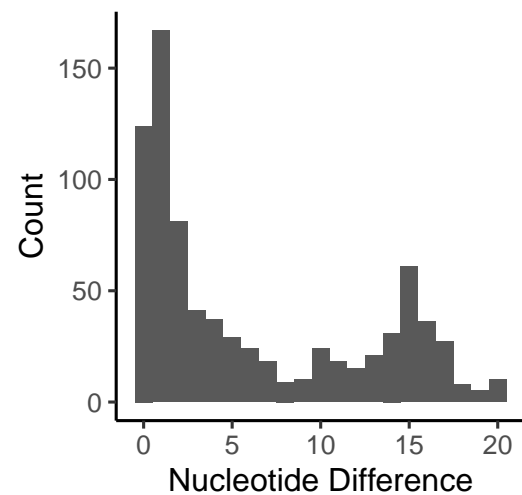
IGHV4-117*01_S6852

1040 sequences assigned
103 (9.9%) exact matches, in which:
76 unique CDR3
7 unique J



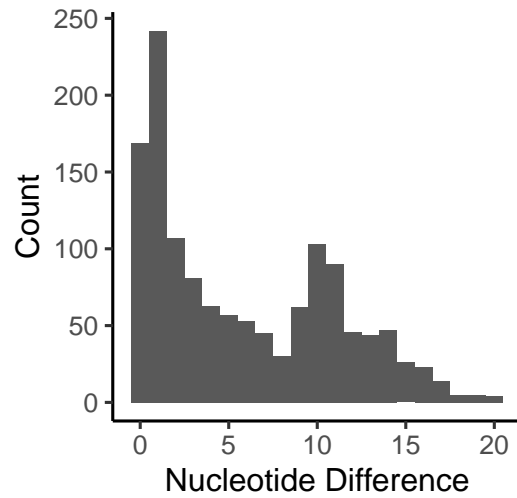
IGHV4-144*01_S1446

820 sequences assigned
124 (15.1%) exact matches, in which:
103 unique CDR3
8 unique J



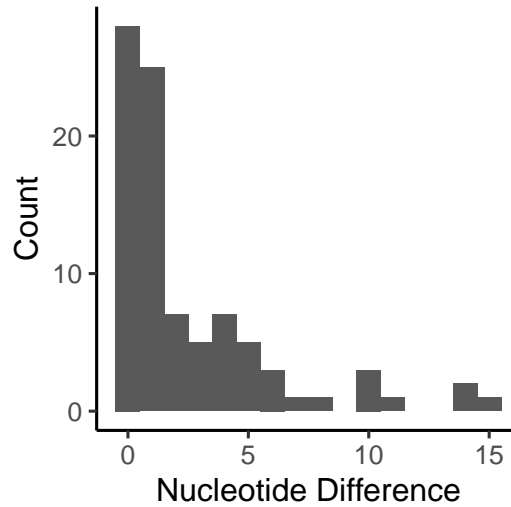
IGHV4-144*01_S6192

1353 sequences assigned
169 (12.5%) exact matches, in which:
137 unique CDR3
7 unique J



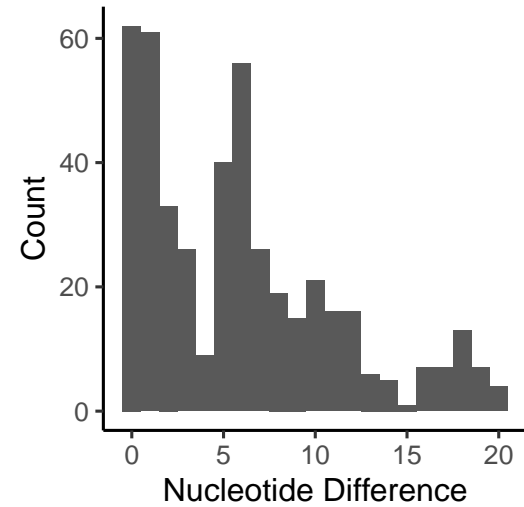
IGHV4-150*01_S4911

89 sequences assigned
28 (31.5%) exact matches, in which:
25 unique CDR3
5 unique J



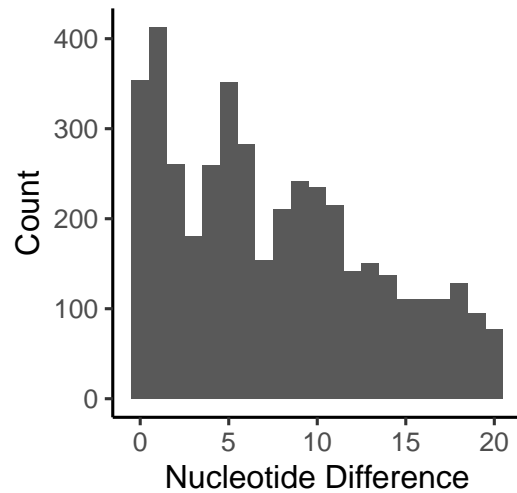
IGHV4-NL_1*01_S8621

474 sequences assigned
62 (13.1%) exact matches, in which:
50 unique CDR3
6 unique J



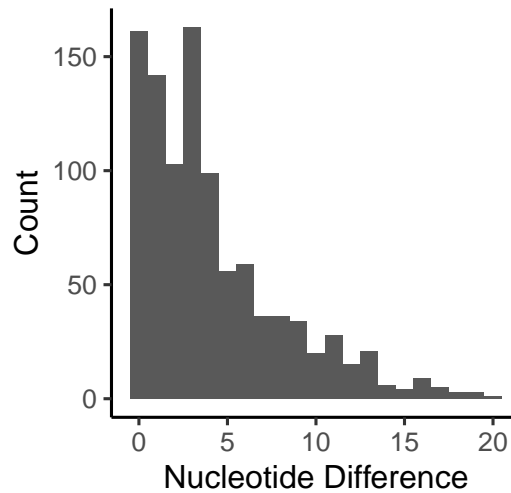
IGHV4-149*01_S2615

4602 sequences assigned
354 (7.7%) exact matches, in which:
267 unique CDR3
8 unique J



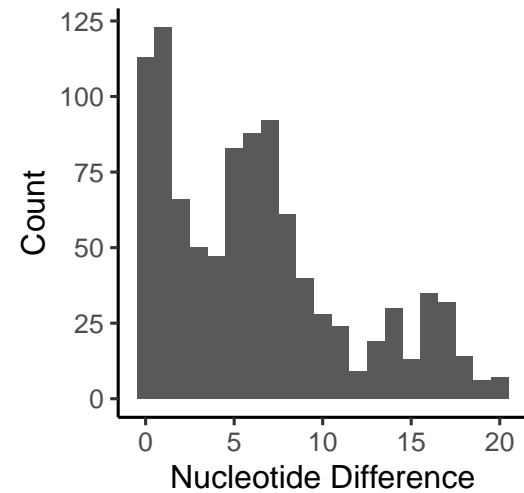
IGHV4-174*02_S7573

1025 sequences assigned
161 (15.7%) exact matches, in which:
128 unique CDR3
8 unique J



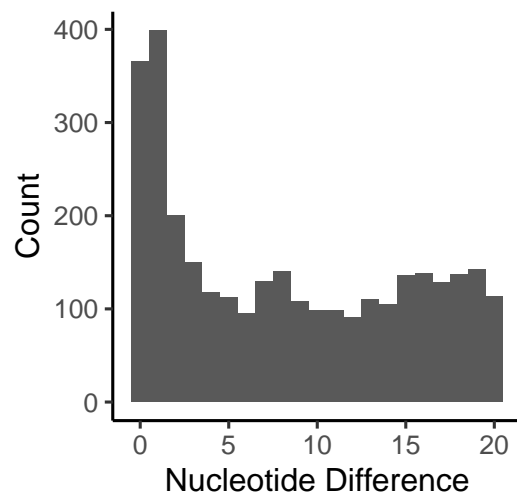
IGHV4-NL_1*01_S9616

1066 sequences assigned
113 (10.6%) exact matches, in which:
80 unique CDR3
7 unique J



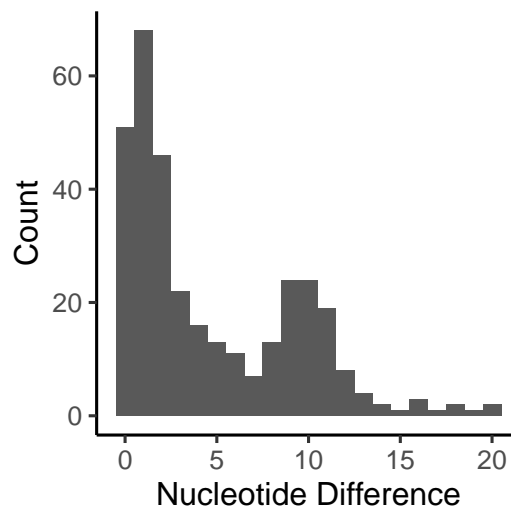
IGHV4-149*01_S4098

3723 sequences assigned
366 (9.8%) exact matches, in which:
284 unique CDR3
7 unique J



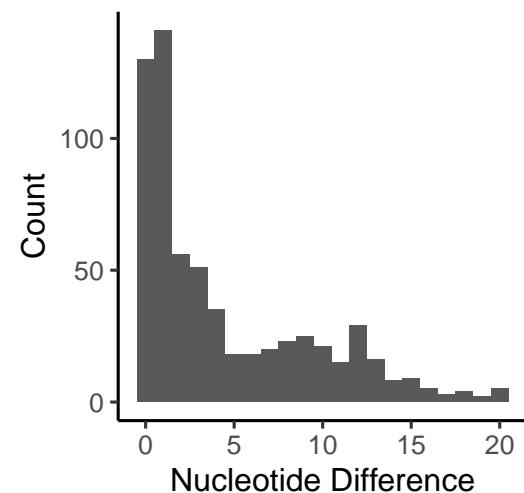
IGHV4-NL_1*01_S5641

340 sequences assigned
51 (15%) exact matches, in which:
40 unique CDR3
6 unique J



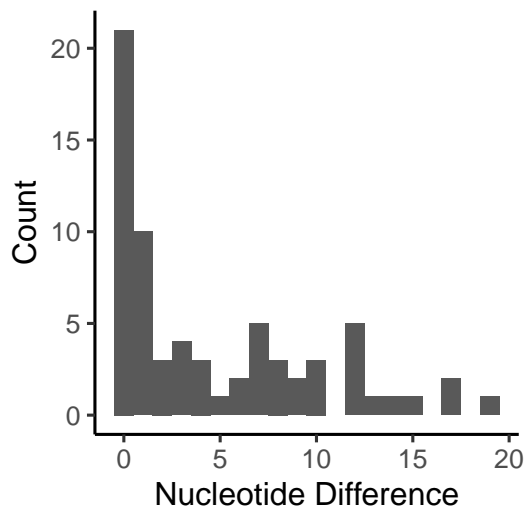
IGHV4-NL_1*02_S9550

659 sequences assigned
130 (19.7%) exact matches, in which:
100 unique CDR3
8 unique J



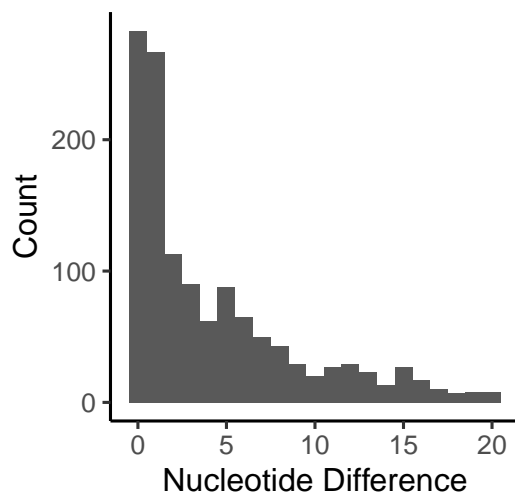
IGHV4–NL_10*01_S4826

76 sequences assigned
21 (27.6%) exact matches, in which:
18 unique CDR3
5 unique J



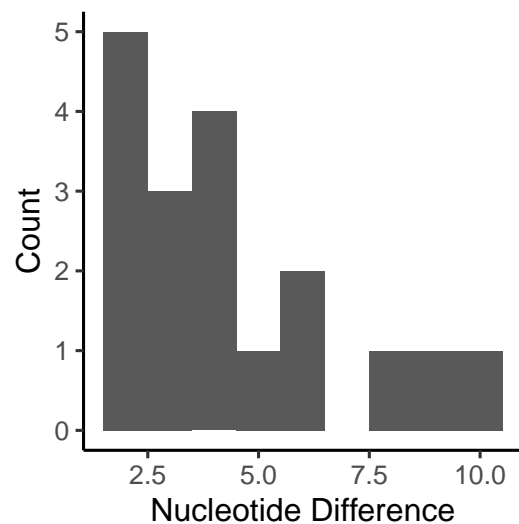
IGHV4–NL_13*01_S9273

1337 sequences assigned
283 (21.2%) exact matches, in which:
230 unique CDR3
8 unique J



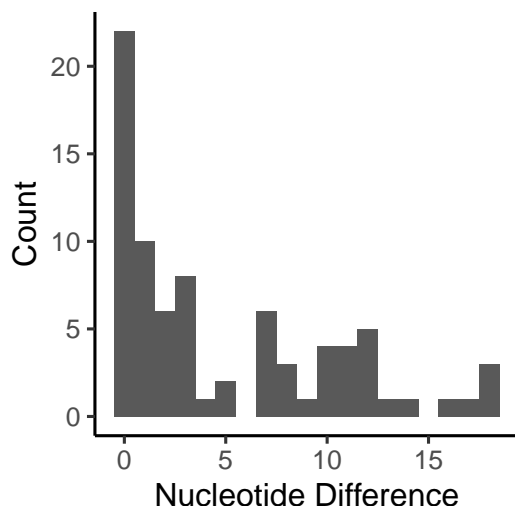
IGHV4–NL_17*01_S7793

18 sequences assigned
No exact matches.



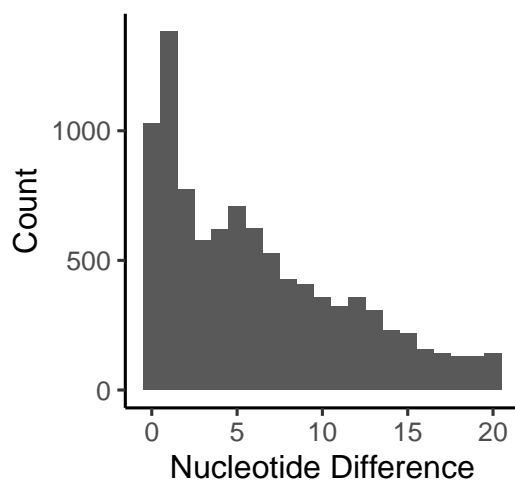
IGHV4–NL_10*01_S4826_

85 sequences assigned
22 (25.9%) exact matches, in which:
18 unique CDR3
6 unique J



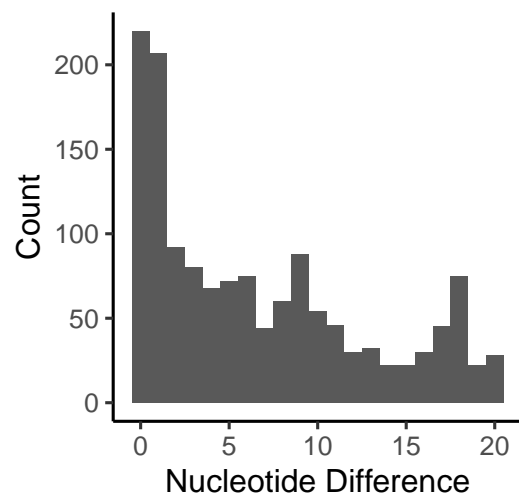
IGHV4–NL_16*01_S213

10313 sequences assigned
1027 (10%) exact matches, in which:
758 unique CDR3
10 unique J



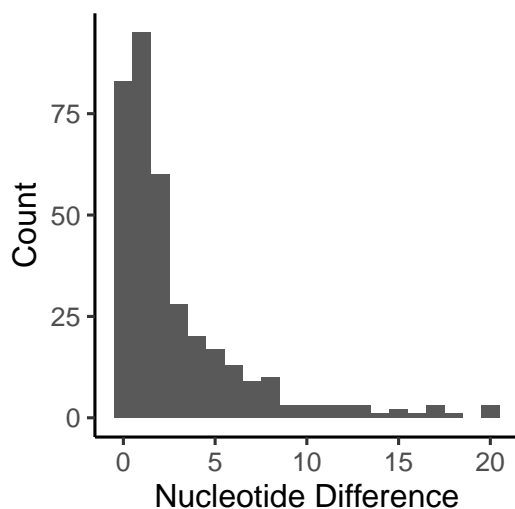
IGHV4–NL_18*01_S3907

1625 sequences assigned
220 (13.5%) exact matches, in which:
166 unique CDR3
7 unique J



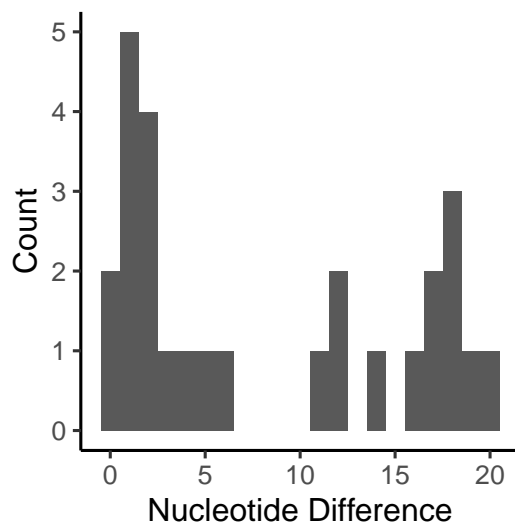
IGHV4–NL_12*01_S6471

363 sequences assigned
83 (22.9%) exact matches, in which:
69 unique CDR3
7 unique J



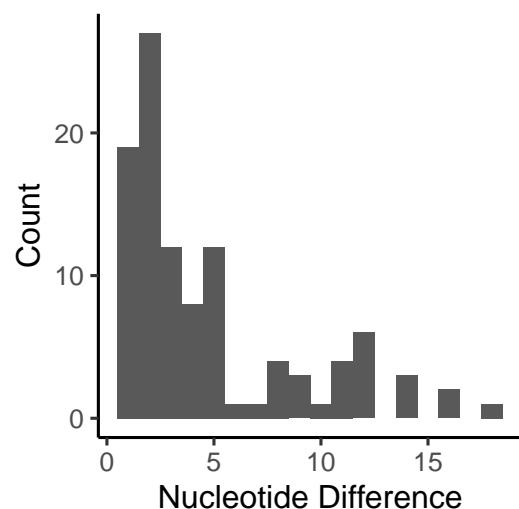
IGHV4–NL_17*01_S6249

32 sequences assigned
2 (6.2%) exact matches, in which:
1 unique CDR3
1 unique J



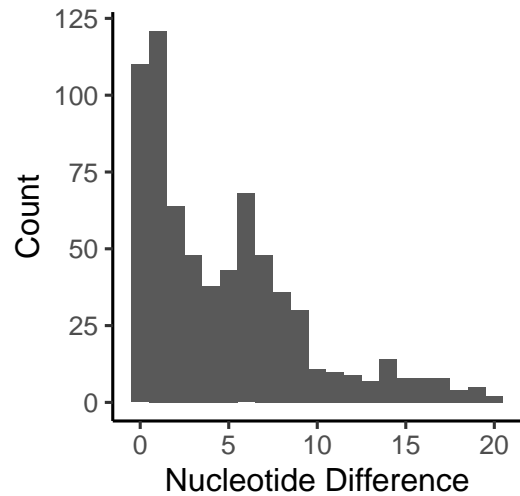
IGHV4–NL_21*01_S5257

112 sequences assigned
No exact matches.



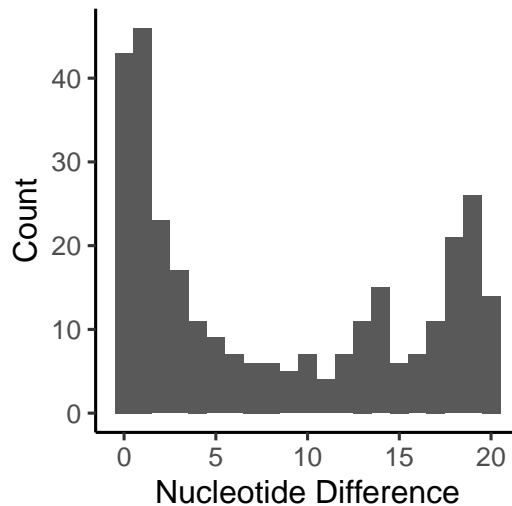
IGHV4–NL_22*01_S1072

710 sequences assigned
110 (15.5%) exact matches, in which:
93 unique CDR3
6 unique J



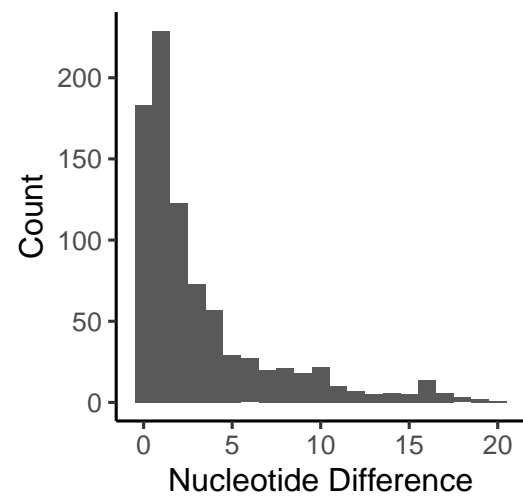
IGHV4–NL_25*01_S1514

375 sequences assigned
43 (11.5%) exact matches, in which:
36 unique CDR3
7 unique J



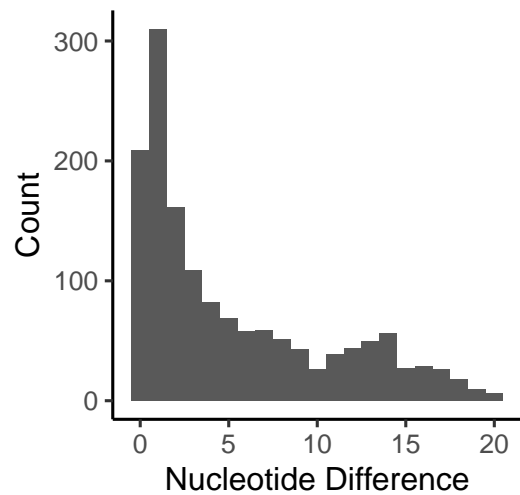
IGHV4–NL_27*01_S5720

873 sequences assigned
183 (21%) exact matches, in which:
145 unique CDR3
8 unique J



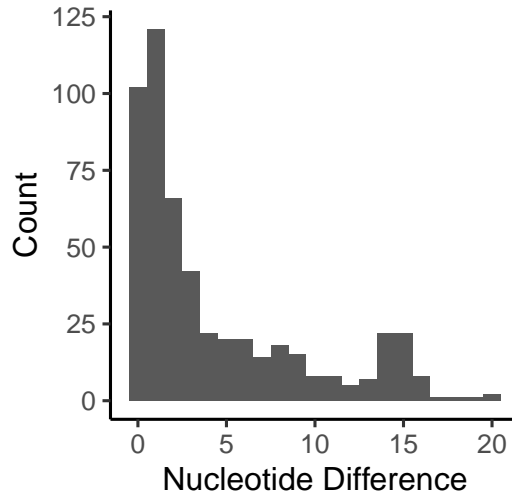
IGHV4–NL_22*01_S2393

1533 sequences assigned
209 (13.6%) exact matches, in which:
170 unique CDR3
8 unique J



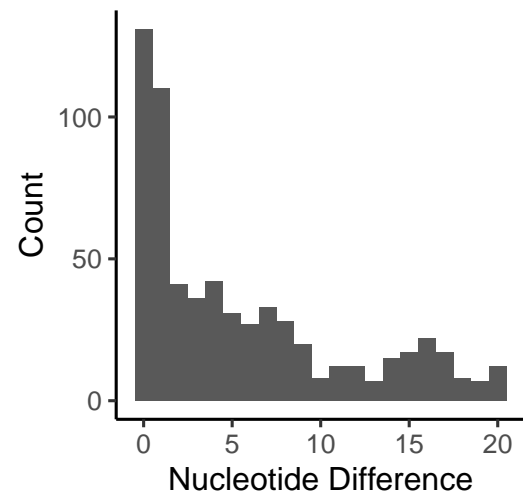
IGHV4–NL_27*01_S1515

595 sequences assigned
102 (17.1%) exact matches, in which:
81 unique CDR3
7 unique J



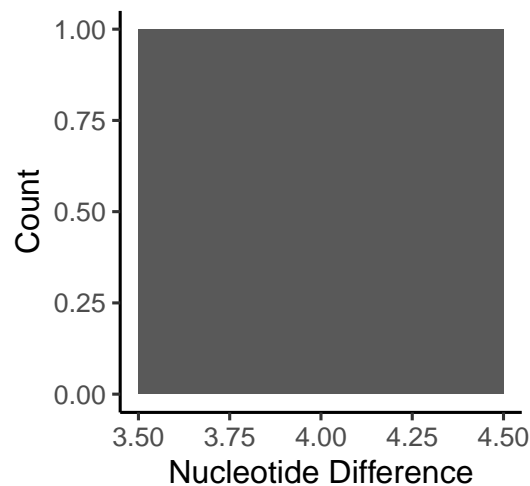
IGHV4–NL_27*01_S6960

684 sequences assigned
131 (19.2%) exact matches, in which:
106 unique CDR3
7 unique J



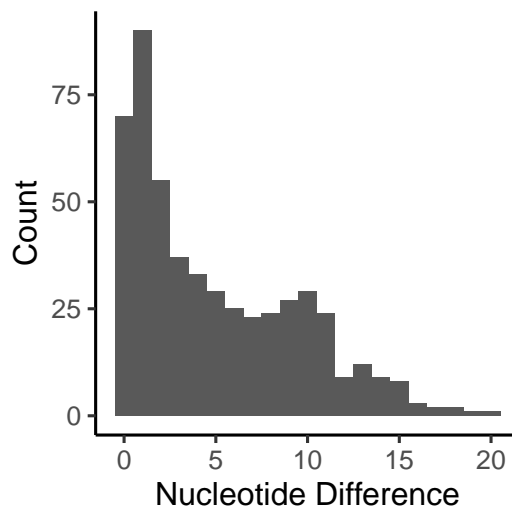
IGHV4–NL_24*01_S5697

1 sequences assigned
No exact matches.



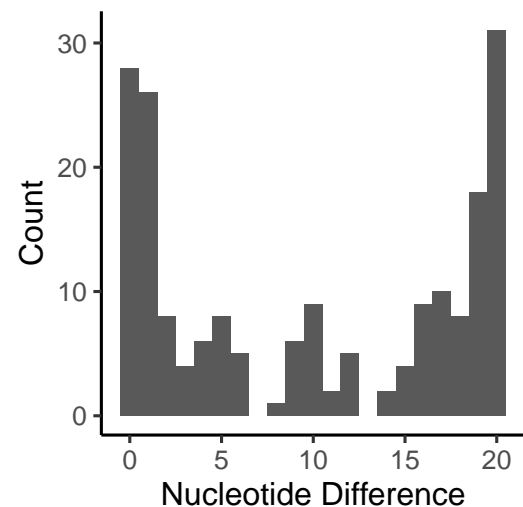
IGHV4–NL_27*01_S5217

523 sequences assigned
70 (13.4%) exact matches, in which:
48 unique CDR3
7 unique J



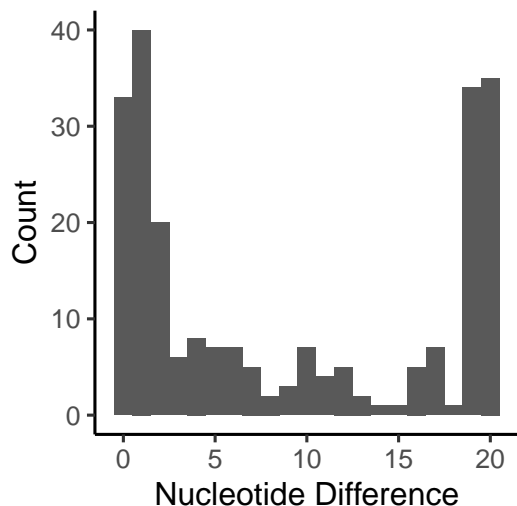
IGHV4–NL_28*01_S0629

224 sequences assigned
28 (12.5%) exact matches, in which:
24 unique CDR3
5 unique J



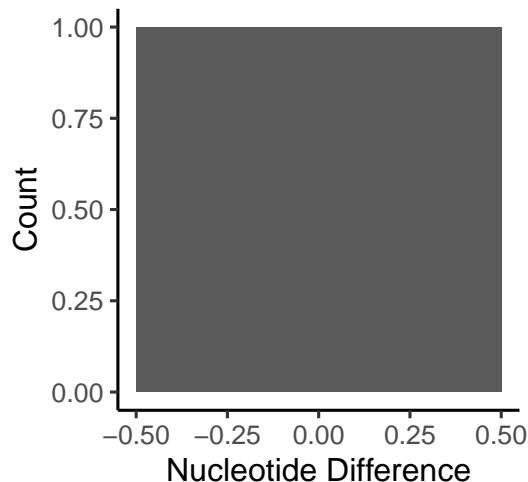
IGHV4–NL_28*01_S0629_

307 sequences assigned
33 (10.7%) exact matches, in which:
27 unique CDR3
5 unique J



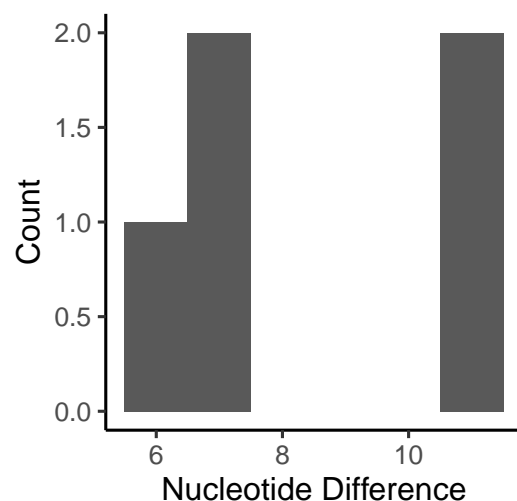
IGHV4–NL_29*01_S9610

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



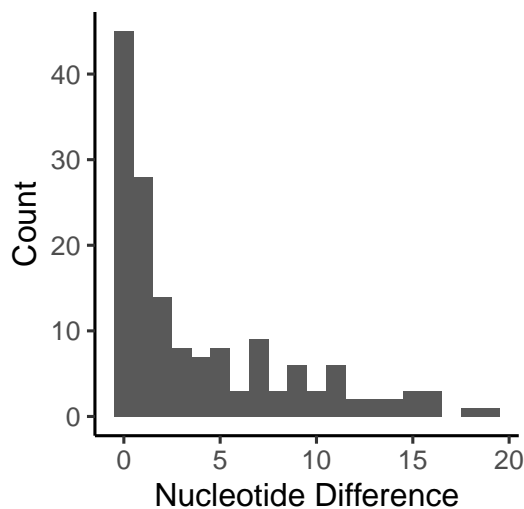
IGHV4–NL_31*01_S7693

5 sequences assigned
No exact matches.



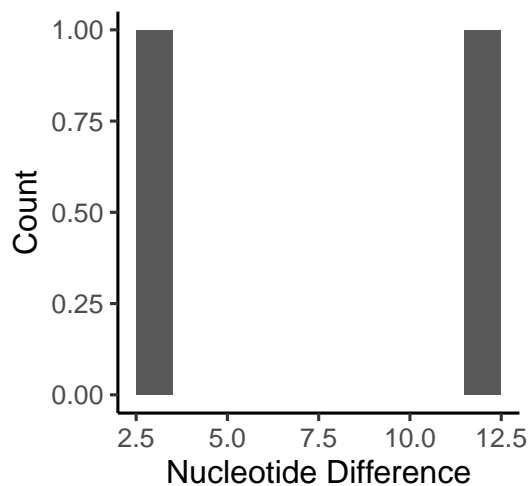
IGHV4–NL_28*01_S1005

159 sequences assigned
45 (28.3%) exact matches, in which:
40 unique CDR3
6 unique J



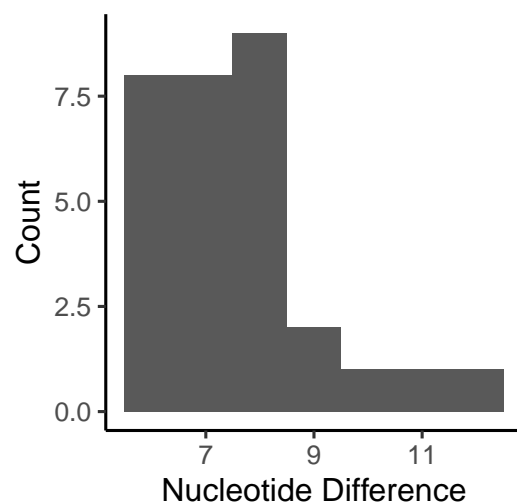
IGHV4–NL_3*01_S5200

2 sequences assigned
No exact matches.



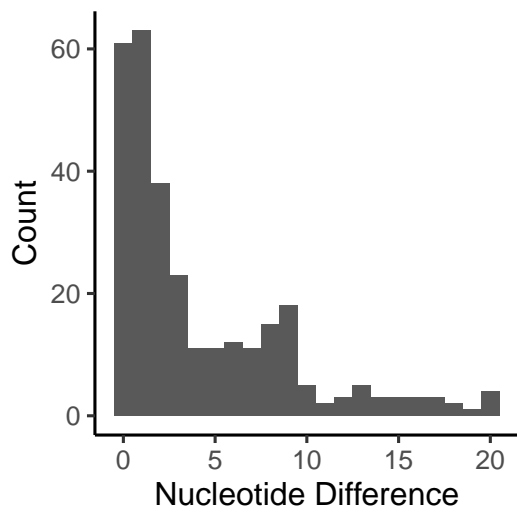
IGHV4–NL_32*01_S1450

31 sequences assigned
No exact matches.



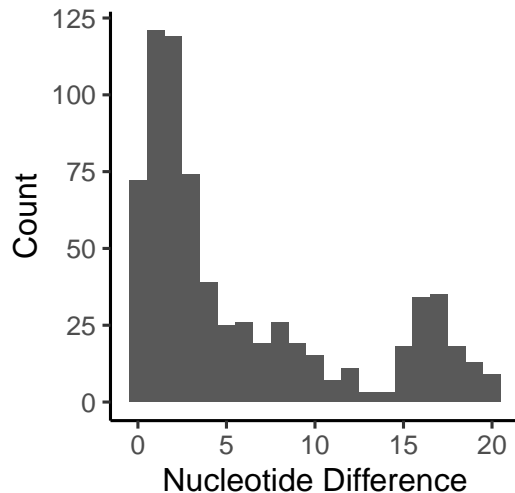
IGHV4–NL_28*01_S1005_

303 sequences assigned
61 (20.1%) exact matches, in which:
59 unique CDR3
6 unique J



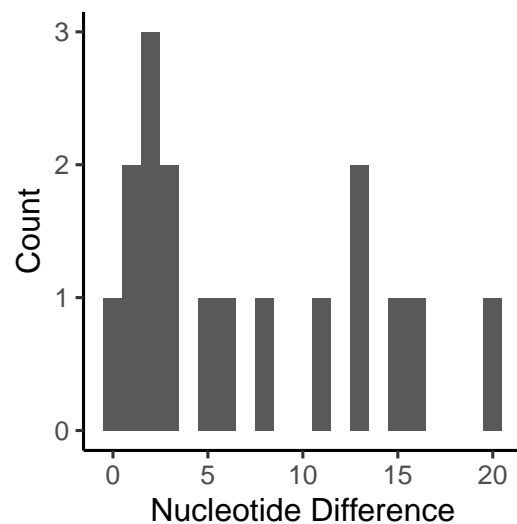
IGHV4–NL_30*01_S1240

751 sequences assigned
72 (9.6%) exact matches, in which:
50 unique CDR3
5 unique J



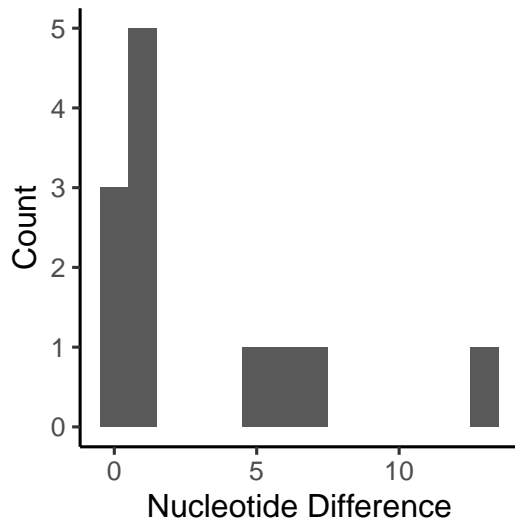
IGHV4–NL_33*01_S9199

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



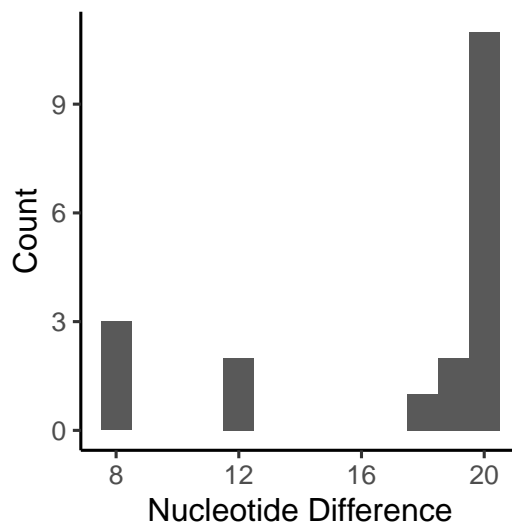
IGHV4-NL_33*01_S9333

12 sequences assigned
3 (25%) exact matches, in which:
3 unique CDR3
2 unique J



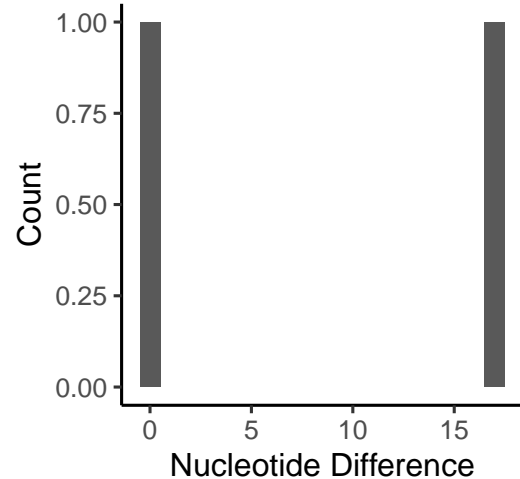
IGHV4-NL_36*01_S7581

52 sequences assigned
No exact matches.



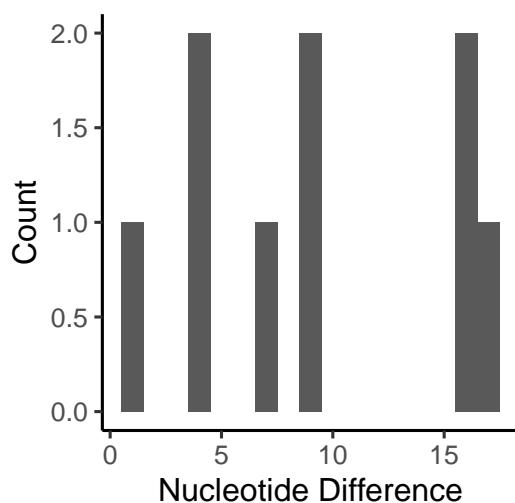
IGHV4-NL_38*01_S8437

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



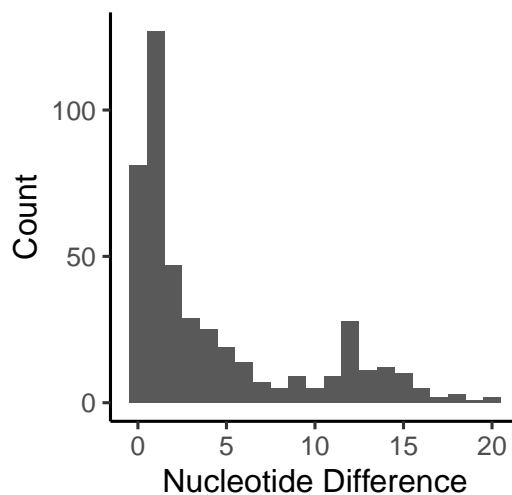
IGHV4-NL_33*01_S9588

11 sequences assigned
No exact matches.



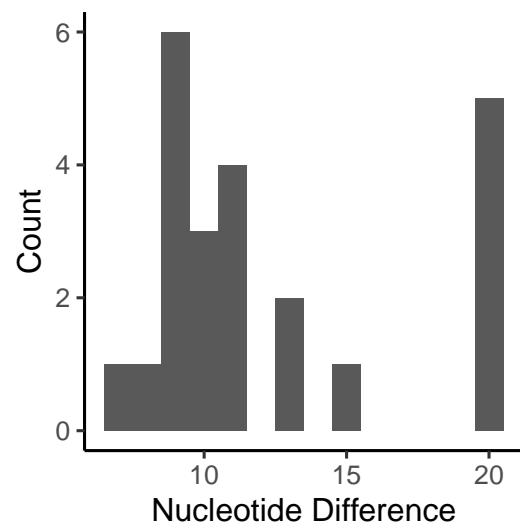
IGHV4-NL_37*01_S0071

465 sequences assigned
81 (17.4%) exact matches, in which:
61 unique CDR3
6 unique J



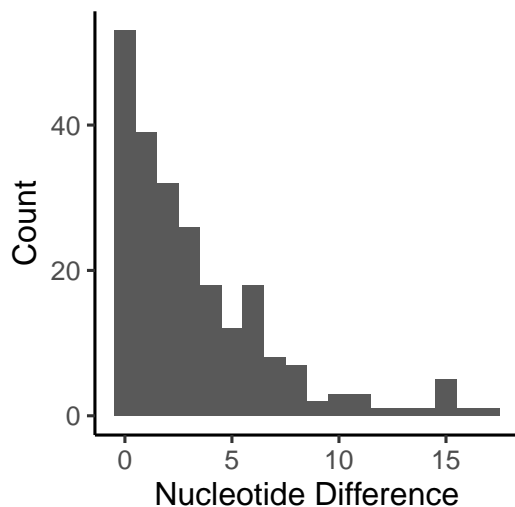
IGHV4-NL_38*01_S9225

34 sequences assigned
No exact matches.



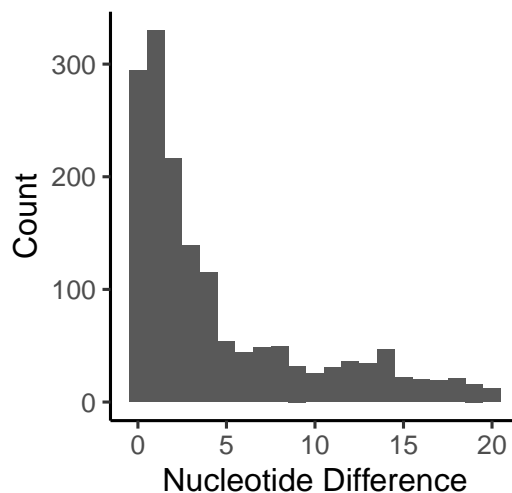
IGHV4-NL_36*01_S1694

281 sequences assigned
53 (18.9%) exact matches, in which:
35 unique CDR3
7 unique J



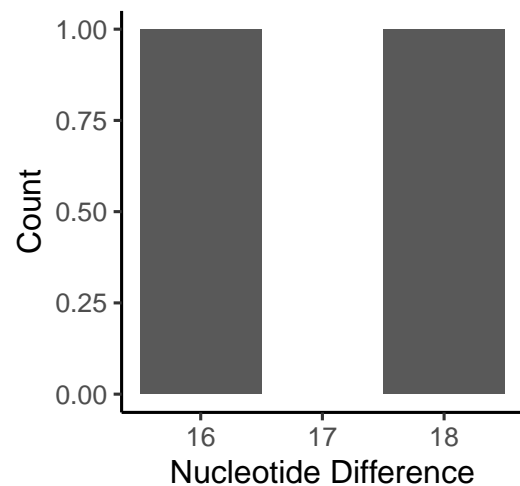
IGHV4-NL_37*01_S0997

1741 sequences assigned
294 (16.9%) exact matches, in which:
220 unique CDR3
7 unique J



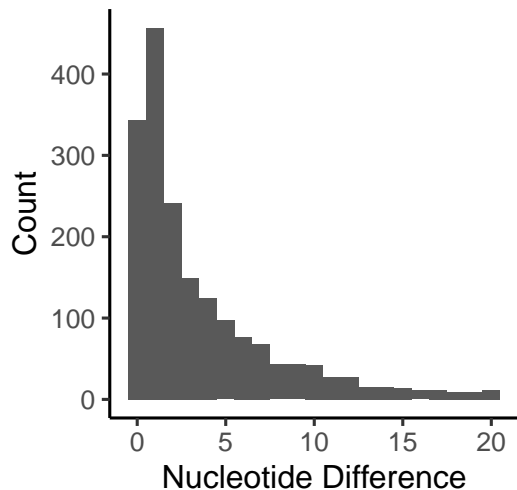
IGHV4-NL_4*01_S8866

3 sequences assigned
No exact matches.



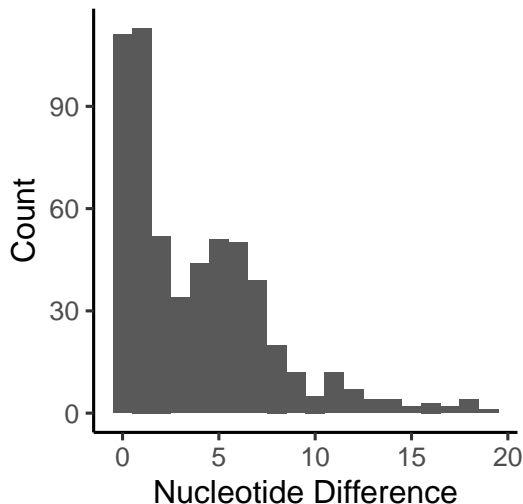
IGHV4–NL_40*01_S9020

1890 sequences assigned
343 (18.1%) exact matches, in which:
279 unique CDR3
8 unique J



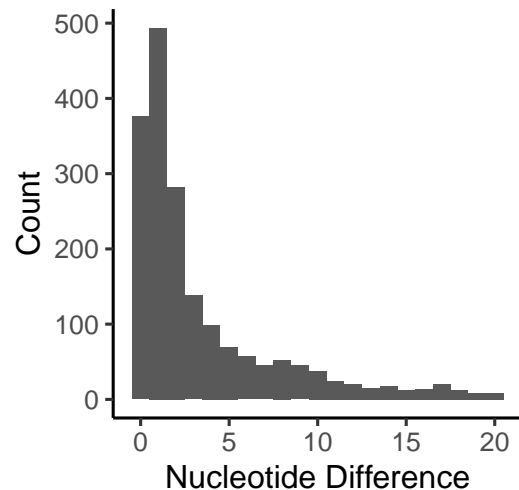
IGHV4–NL_42*01_S8550

588 sequences assigned
111 (18.9%) exact matches, in which:
85 unique CDR3
7 unique J



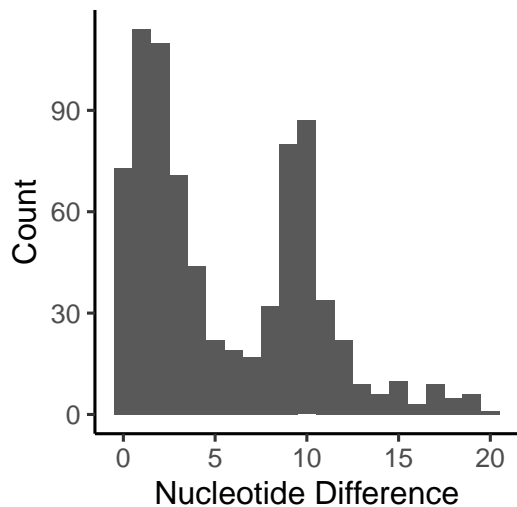
IGHV4–NL_5*01_S6960

1892 sequences assigned
376 (19.9%) exact matches, in which:
286 unique CDR3
8 unique J



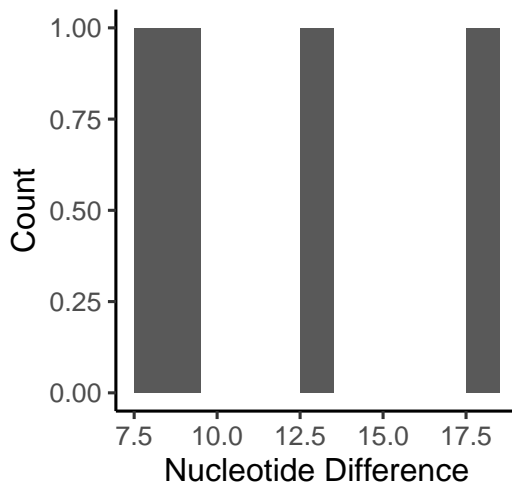
IGHV4–NL_41*01_S4457

782 sequences assigned
73 (9.3%) exact matches, in which:
52 unique CDR3
7 unique J



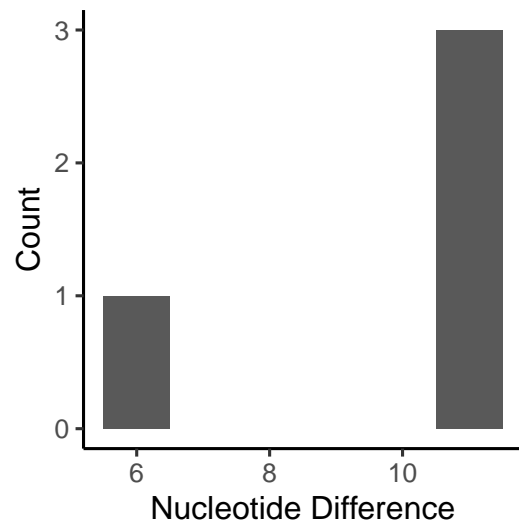
IGHV4–NL_43*01_S3820

7 sequences assigned
No exact matches.



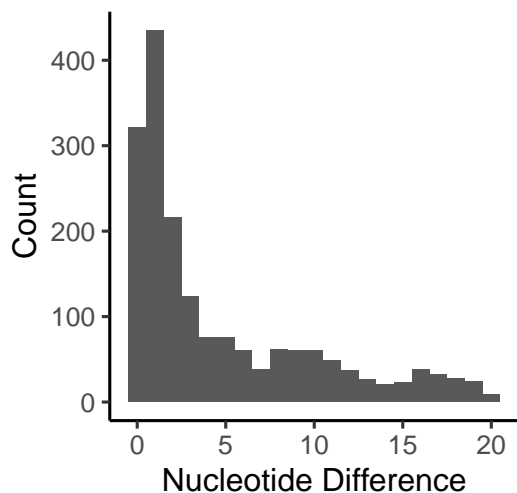
IGHV4–NL_9*01_S2406

29 sequences assigned
No exact matches.



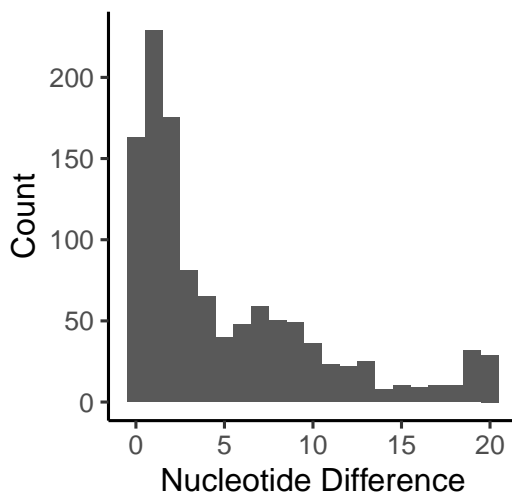
IGHV4–NL_41*01_S9253

1954 sequences assigned
321 (16.4%) exact matches, in which:
230 unique CDR3
8 unique J



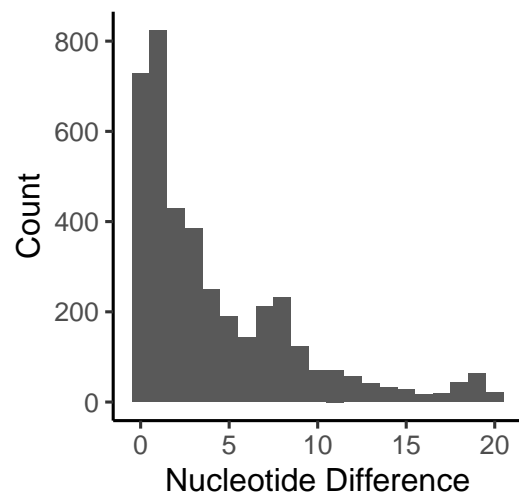
IGHV4–NL_5*01_S0908

1230 sequences assigned
163 (13.3%) exact matches, in which:
119 unique CDR3
8 unique J



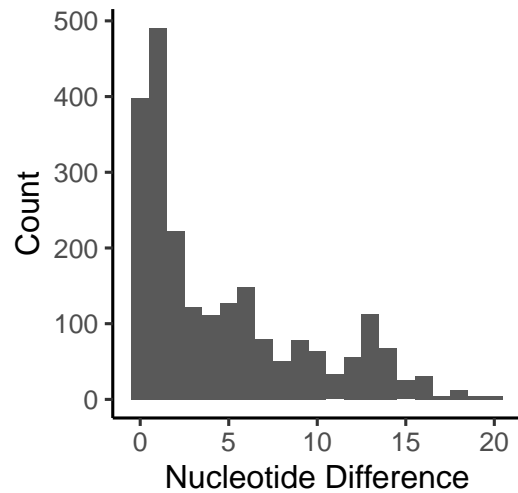
IGHV5–15*01_S8661

4252 sequences assigned
729 (17.1%) exact matches, in which:
413 unique CDR3
9 unique J



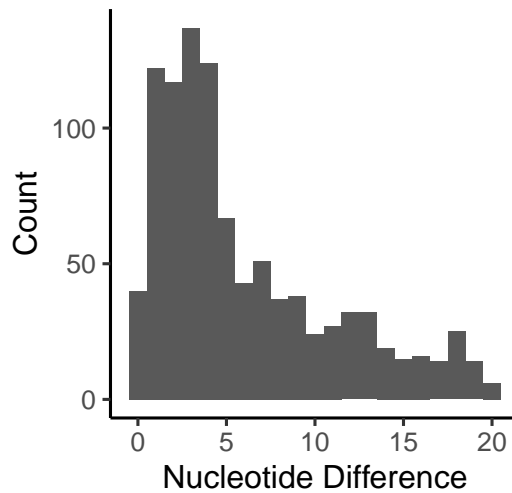
IGHV5-157*01_S5362

2270 sequences assigned
398 (17.5%) exact matches, in which:
181 unique CDR3
7 unique J



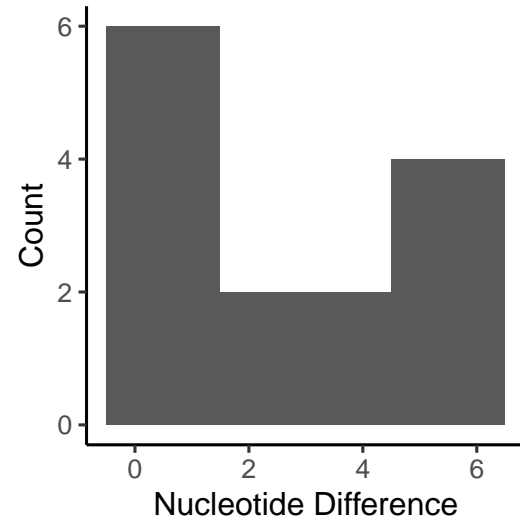
IGHV6-1*01_G283T

1024 sequences assigned
40 (3.9%) exact matches, in which:
31 unique CDR3
6 unique J



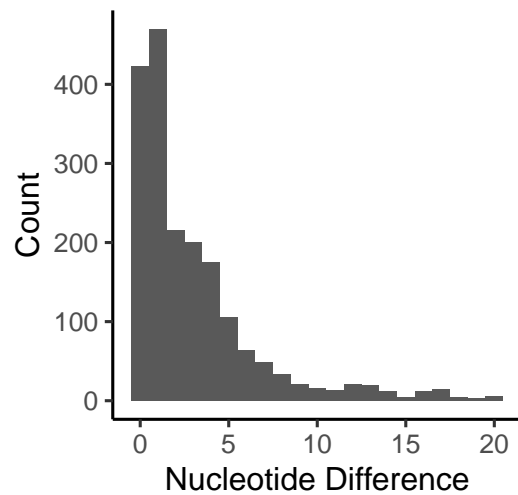
IGHV7-135*01_S9086

26 sequences assigned
6 (23.1%) exact matches, in which:
4 unique CDR3
3 unique J



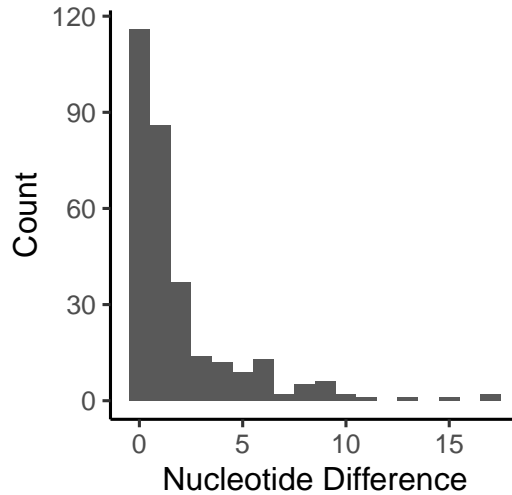
IGHV5-157*01_S8626

1899 sequences assigned
423 (22.3%) exact matches, in which:
229 unique CDR3
7 unique J



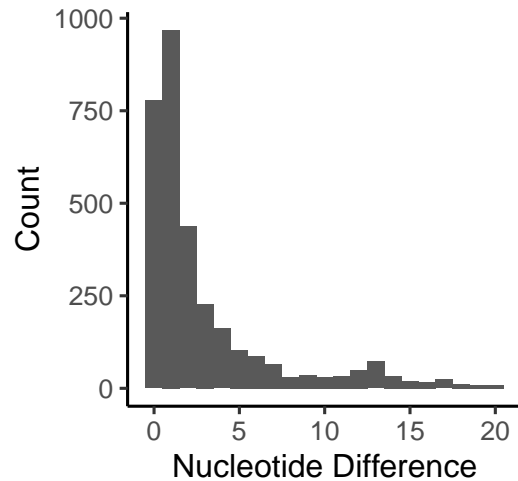
IGHV7-86*01_S5062

307 sequences assigned
116 (37.8%) exact matches, in which:
61 unique CDR3
8 unique J



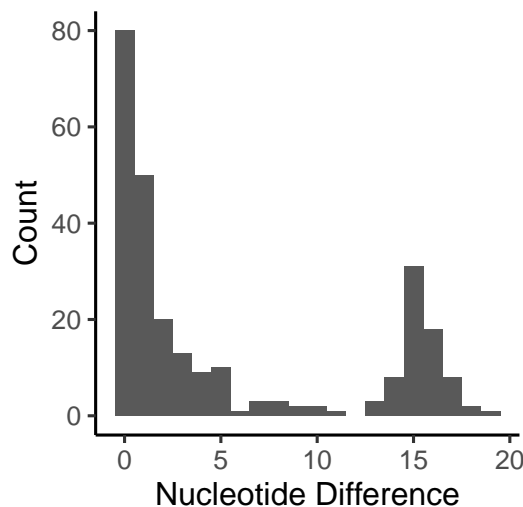
IGHV5-NL_1*02_S5699

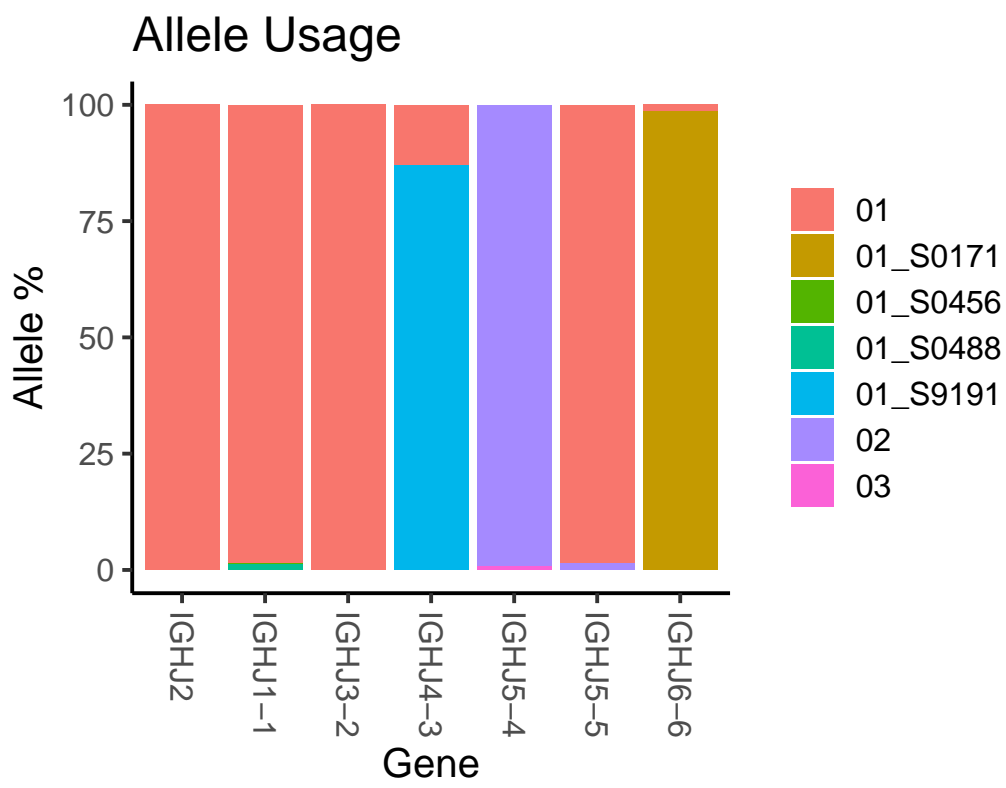
3295 sequences assigned
778 (23.6%) exact matches, in which:
421 unique CDR3
9 unique J



IGHV7-86*02_S1706

298 sequences assigned
80 (26.8%) exact matches, in which:
48 unique CDR3
7 unique J





Warning – no inferred sequences found.