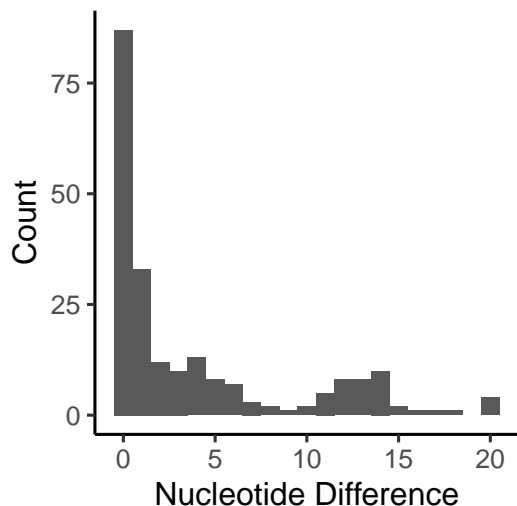


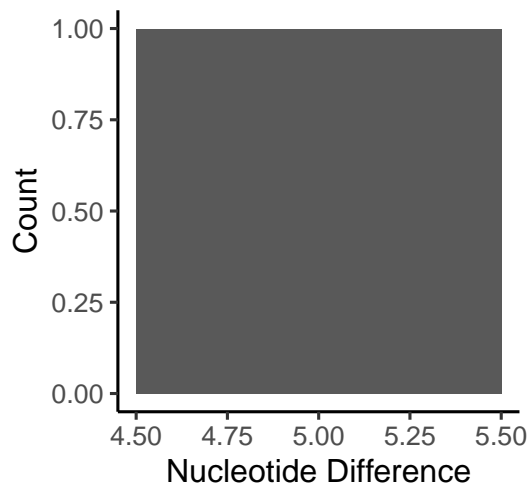
IGHV1-84*01_S5842

227 sequences assigned
87 (38.3%) exact matches, in which:
41 unique CDR3
6 unique J



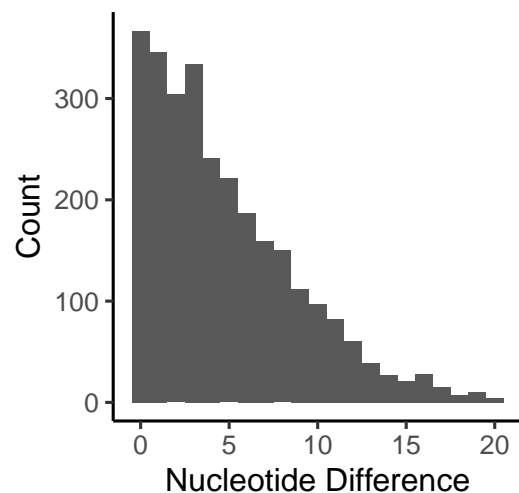
IGHV1-NL_1*01_S2052

20 sequences assigned
No exact matches.



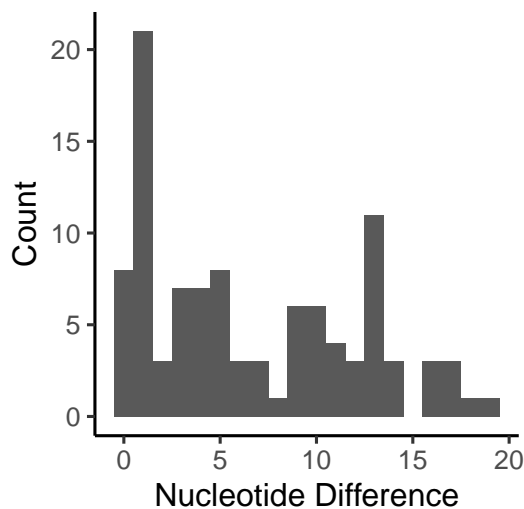
IGHV2-7*02_S1732

2832 sequences assigned
367 (13%) exact matches, in which:
222 unique CDR3
8 unique J



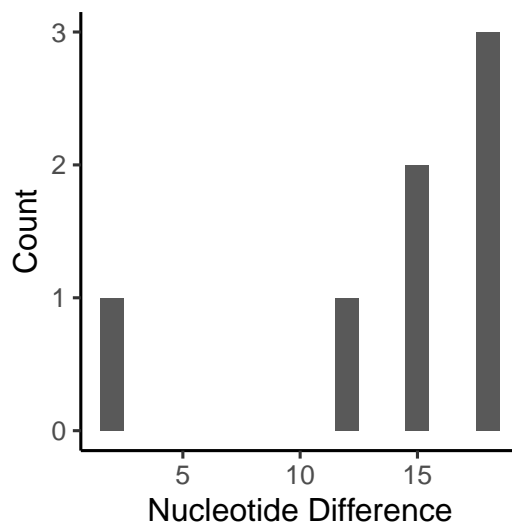
IGHV1-124*01_S7834

110 sequences assigned
8 (7.3%) exact matches, in which:
6 unique CDR3
1 unique J



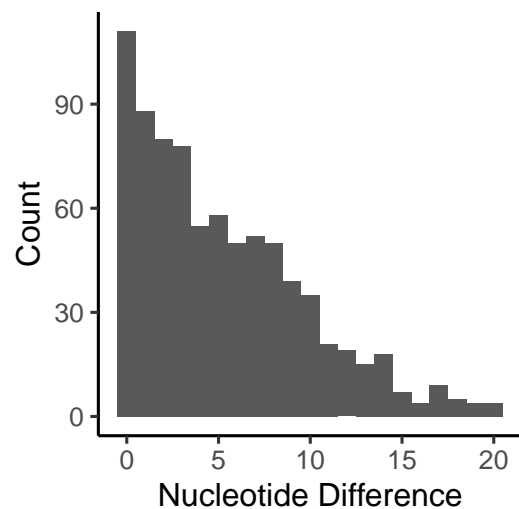
IGHV1-NL_2*01_S5797

10 sequences assigned
No exact matches.



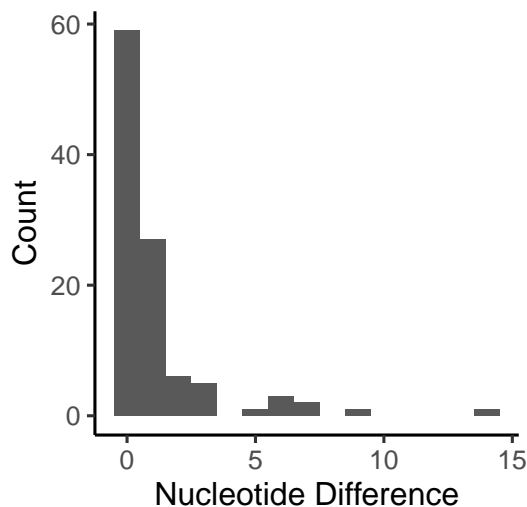
IGHV2-7*02_S1732_G289

811 sequences assigned
111 (13.7%) exact matches, in which:
108 unique CDR3
7 unique J



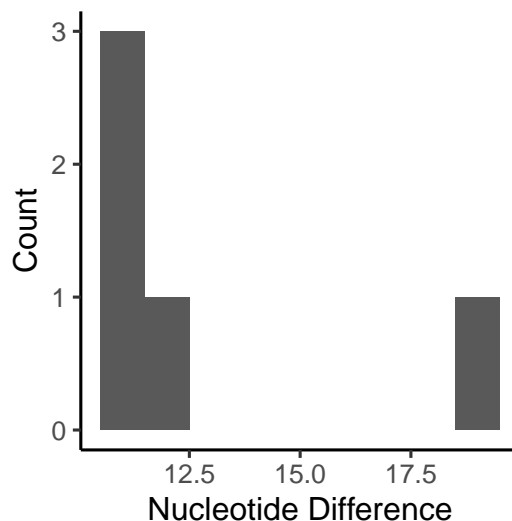
IGHV1-138*01_S6073

108 sequences assigned
59 (54.6%) exact matches, in which:
52 unique CDR3
5 unique J



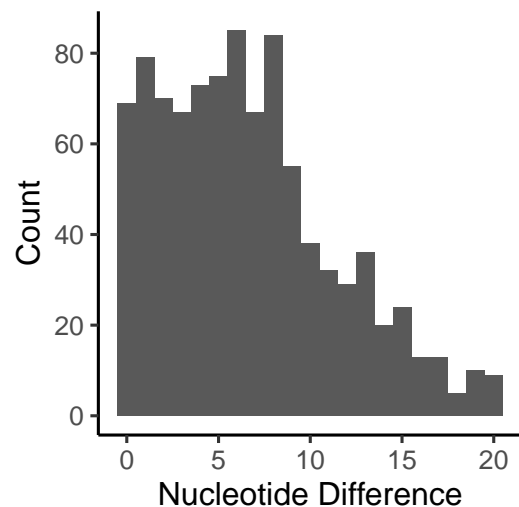
IGHV1-NL_2*01_S9896

2006 sequences assigned
No exact matches.



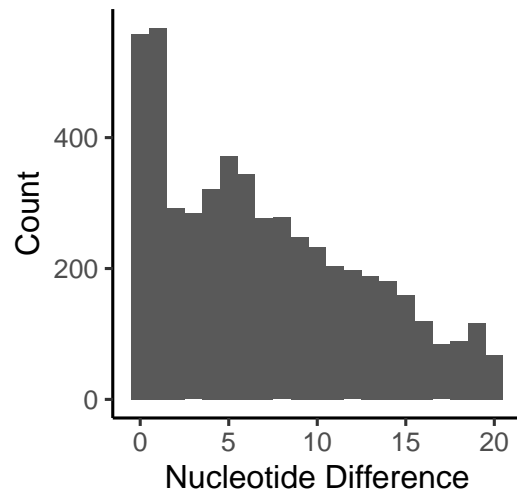
IGHV2-7*02_S4285

985 sequences assigned
69 (7%) exact matches, in which:
44 unique CDR3
6 unique J



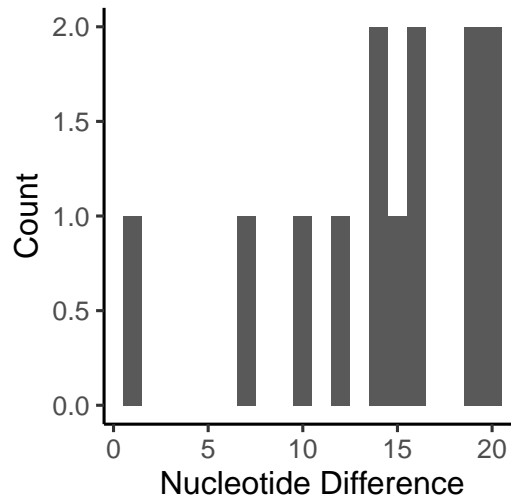
IGHV2-69*02_S0779

5632 sequences assigned
558 (9.9%) exact matches, in which:
343 unique CDR3
7 unique J



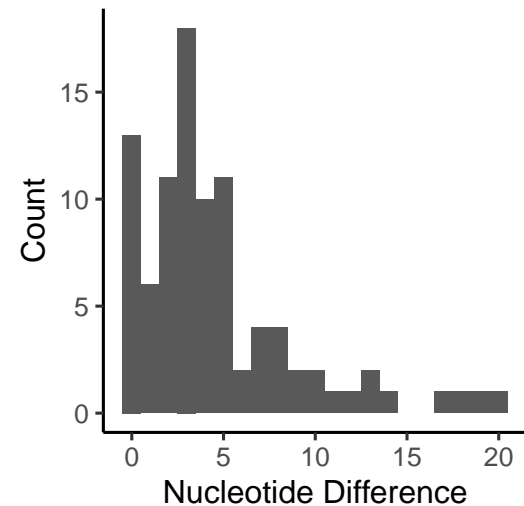
IGHV3-28*01_S3792

15 sequences assigned
No exact matches.



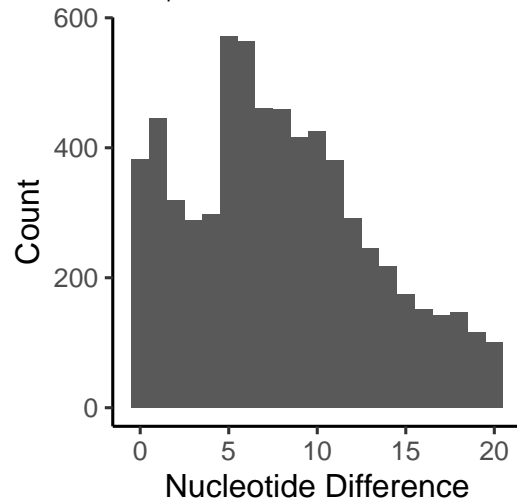
IGHV3-36*01_S7141

94 sequences assigned
13 (13.8%) exact matches, in which:
10 unique CDR3
3 unique J



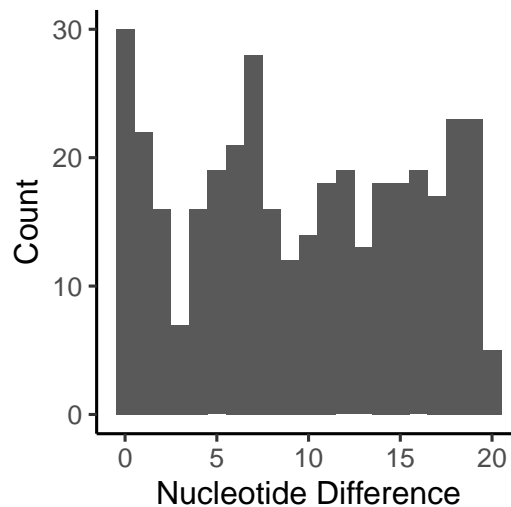
IGHV2-118*01_S4632

7446 sequences assigned
383 (5.1%) exact matches, in which:
249 unique CDR3
6 unique J



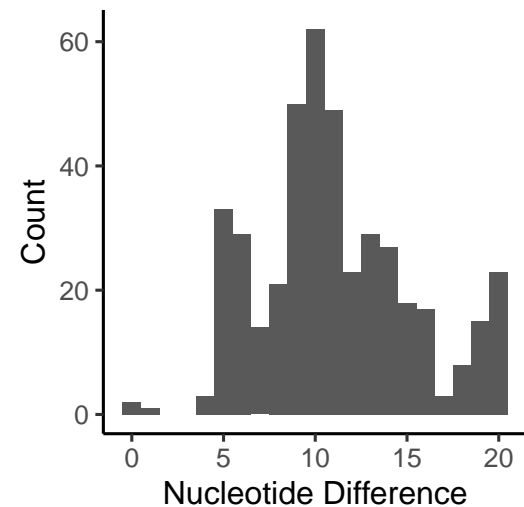
IGHV3-28*01_S7540

441 sequences assigned
30 (6.8%) exact matches, in which:
22 unique CDR3
5 unique J



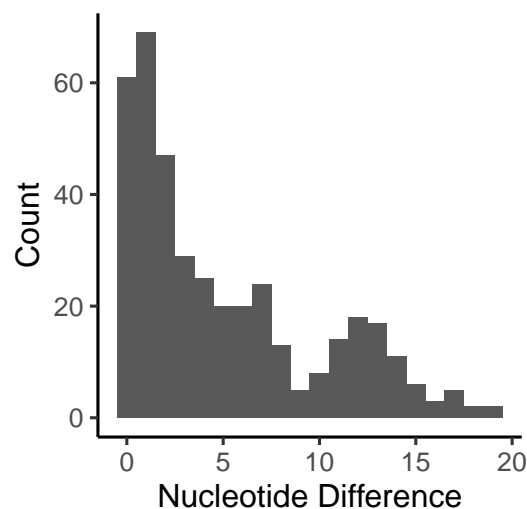
IGHV3-37*01_S6630

563 sequences assigned
2 (0.4%) exact matches, in which:
2 unique CDR3
2 unique J



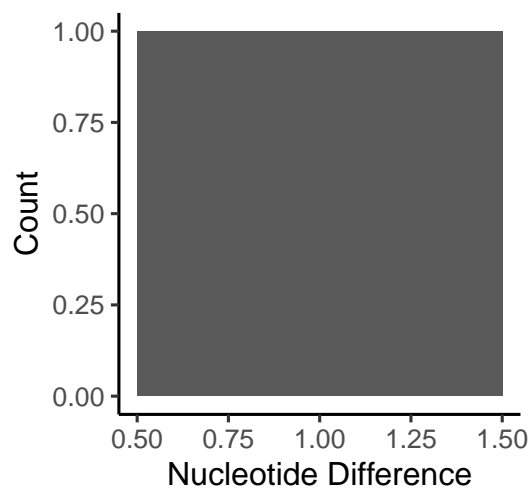
IGHV2-NL_1*01_S4514

407 sequences assigned
61 (15%) exact matches, in which:
40 unique CDR3
5 unique J



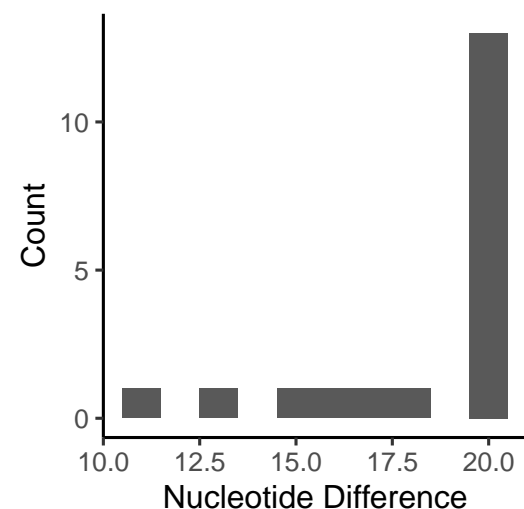
IGHV3-34*01_S2915

2 sequences assigned
No exact matches.



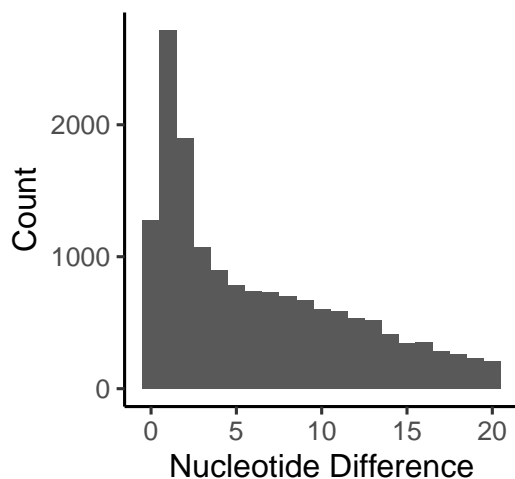
IGHV3-37*01_S9699

401 sequences assigned
No exact matches.



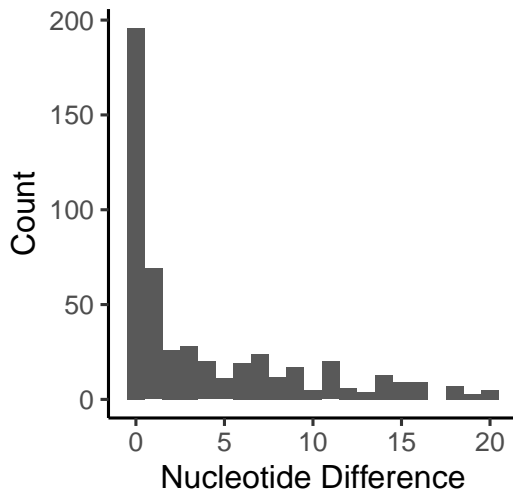
IGHV3-50*01_S1879

17299 sequences assigned
1274 (7.4%) exact matches, in which:
883 unique CDR3
8 unique J



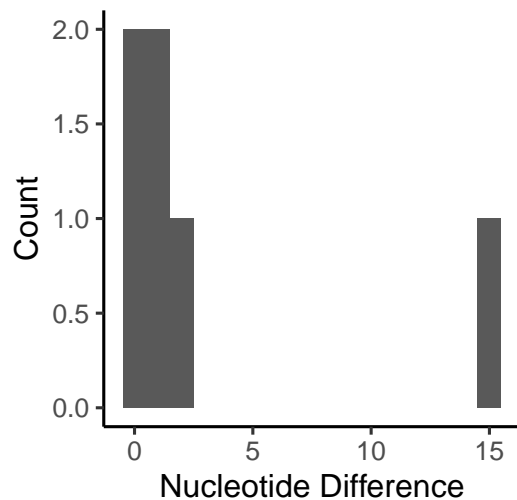
IGHV3-73*01_S3636

553 sequences assigned
196 (35.4%) exact matches, in which:
136 unique CDR3
7 unique J



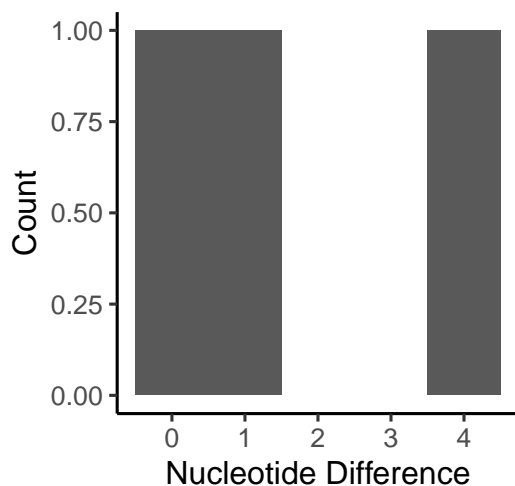
IGHV3-83*02_S9518

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
2 unique J



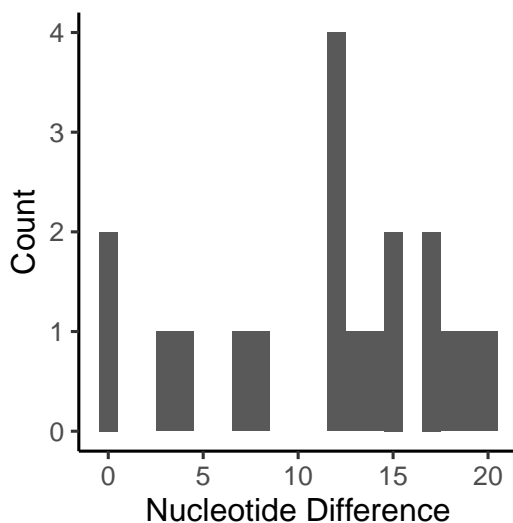
IGHV3-52*02_S2646

46 sequences assigned
1 (2.2%) exact matches, in which:
1 unique CDR3
1 unique J



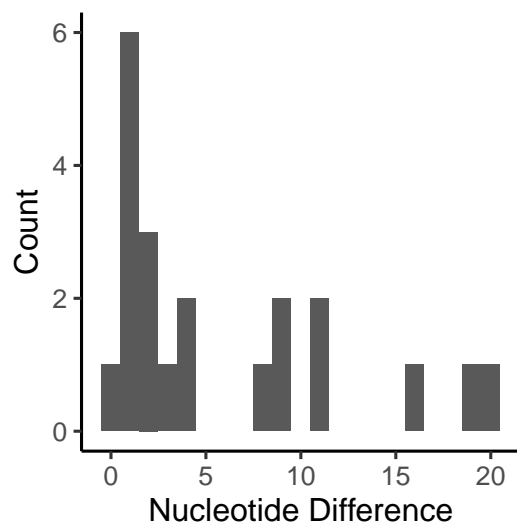
IGHV3-76*01_S4285

22 sequences assigned
2 (9.1%) exact matches, in which:
2 unique CDR3
2 unique J



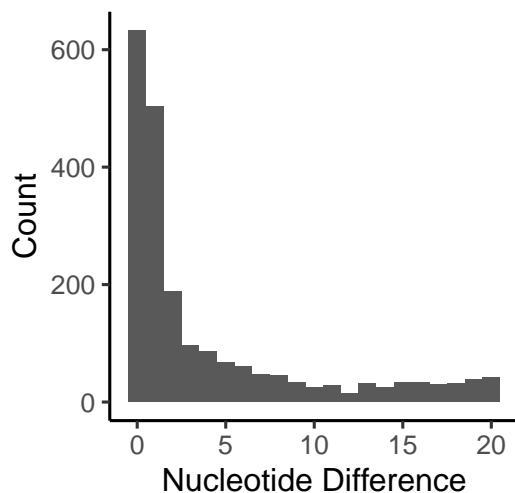
IGHV3-94*01_S4458

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



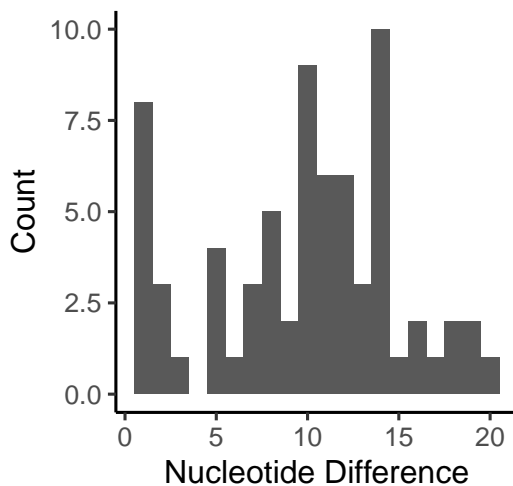
IGHV3-53*01_S4423

2676 sequences assigned
633 (23.7%) exact matches, in which:
433 unique CDR3
7 unique J



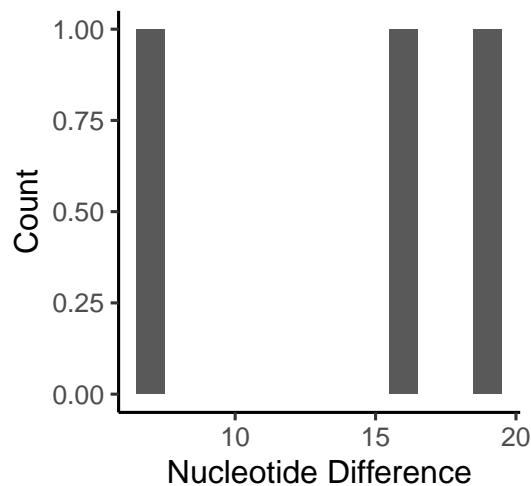
IGHV3-76*01_S5420

82 sequences assigned
No exact matches.



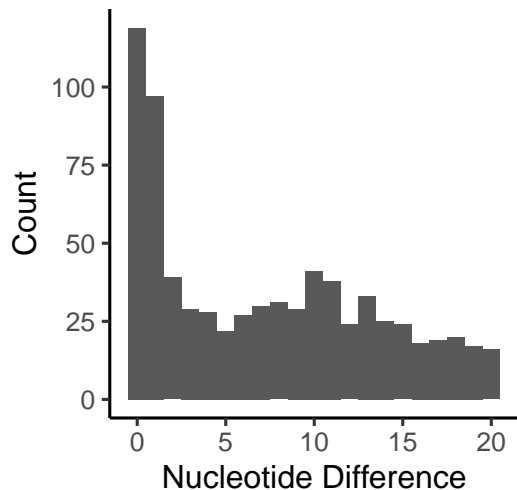
IGHV3-94*01_S7982

23 sequences assigned
No exact matches.



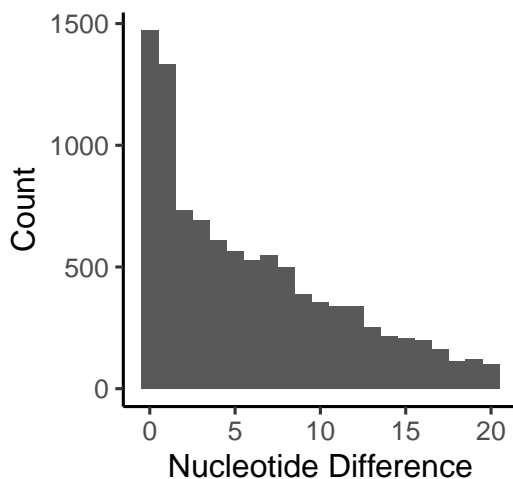
IGHV3-100*01_S4375

904 sequences assigned
119 (13.2%) exact matches, in which:
85 unique CDR3
5 unique J



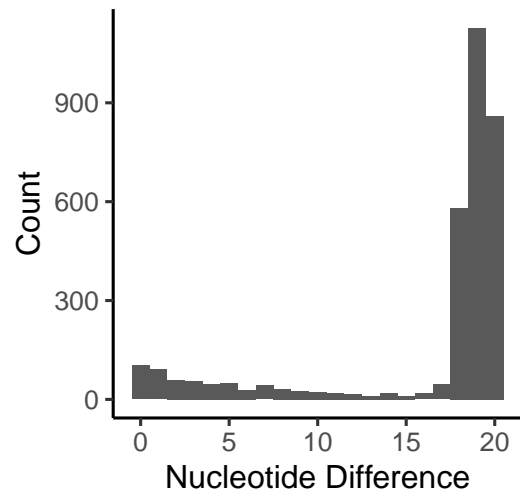
IGHV3-122*01_S8388

10514 sequences assigned
1472 (14%) exact matches, in which:
1037 unique CDR3
8 unique J



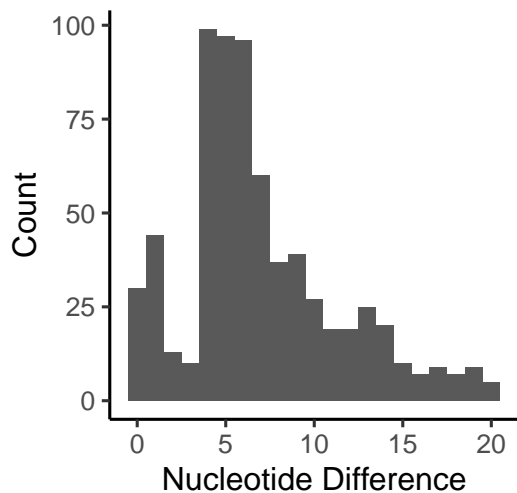
IGHV3-172*01_S1597_A

10162 sequences assigned
103 (1%) exact matches, in which:
78 unique CDR3
5 unique J



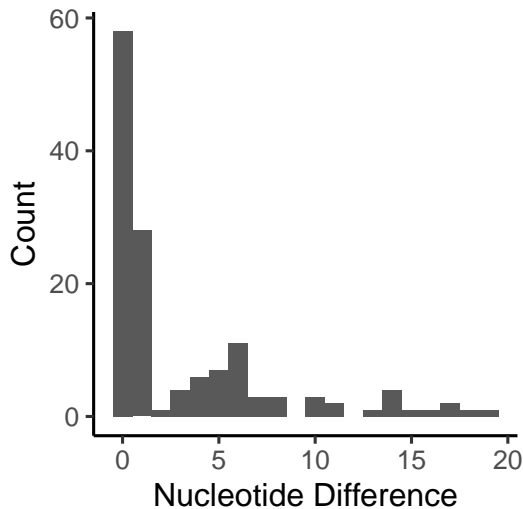
IGHV3-119*01_S9769

724 sequences assigned
30 (4.1%) exact matches, in which:
22 unique CDR3
4 unique J



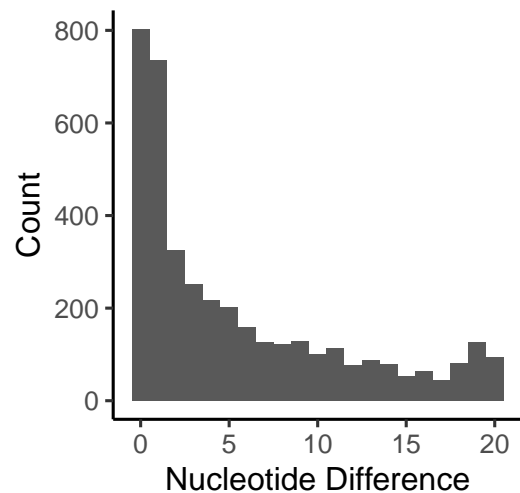
IGHV3-141*01_S4264

140 sequences assigned
58 (41.4%) exact matches, in which:
46 unique CDR3
5 unique J



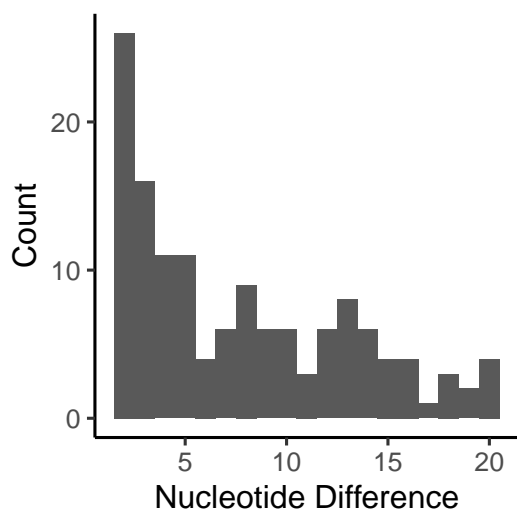
IGHV3-172*01_S2175

5463 sequences assigned
803 (14.7%) exact matches, in which:
531 unique CDR3
7 unique J



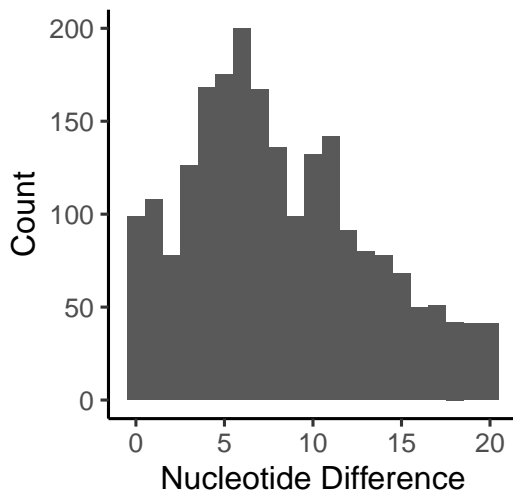
IGHV3-120*01_S4231

149 sequences assigned
No exact matches.



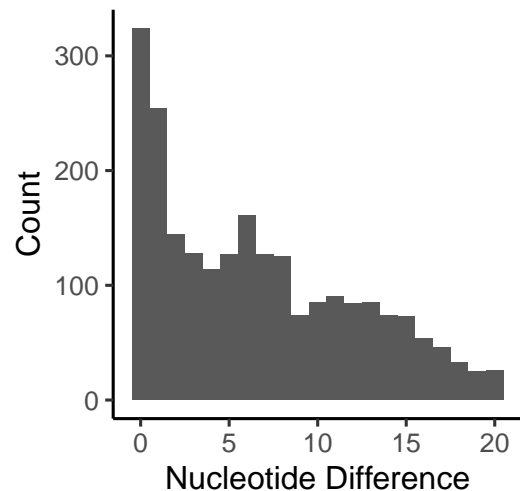
IGHV3-152*01_S1340

2345 sequences assigned
99 (4.2%) exact matches, in which:
71 unique CDR3
5 unique J



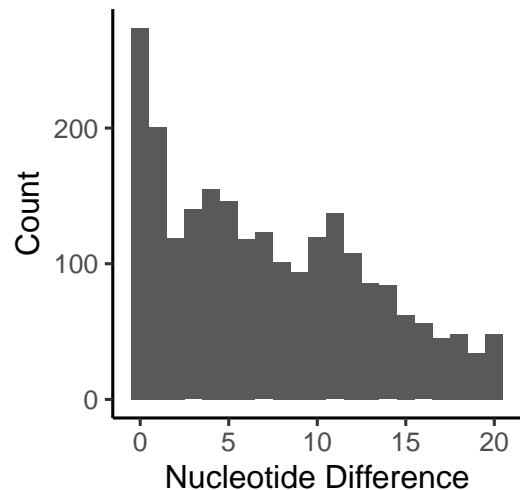
IGHV3-177*01_S5369

2436 sequences assigned
324 (13.3%) exact matches, in which:
230 unique CDR3
6 unique J



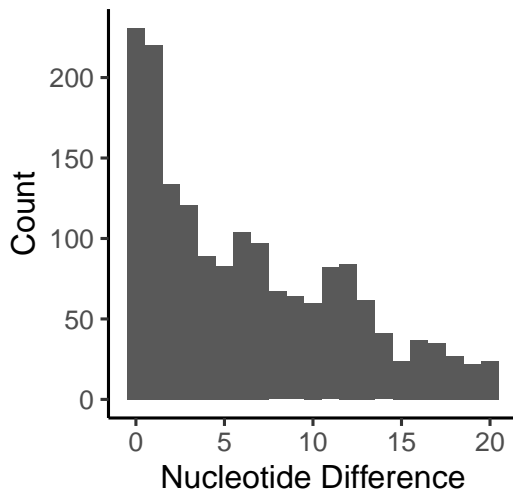
IGHV3-177*01_S6408

2605 sequences assigned
274 (10.5%) exact matches, in which:
181 unique CDR3
7 unique J



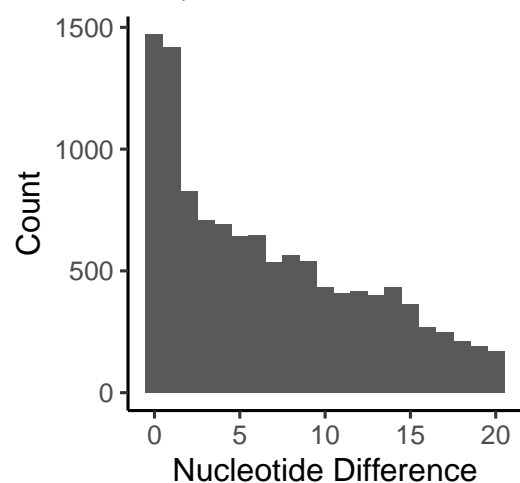
IGHV3-NL_1*01_S4549_

2554 sequences assigned
231 (9%) exact matches, in which:
165 unique CDR3
7 unique J



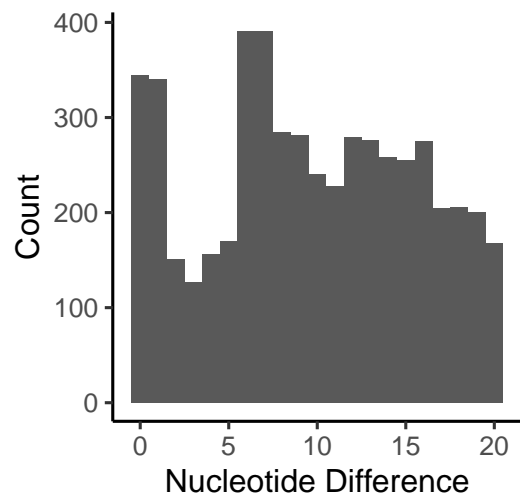
IGHV3-NL_11*01_S962

12451 sequences assigned
1471 (11.8%) exact matches, in which:
1000 unique CDR3
8 unique J



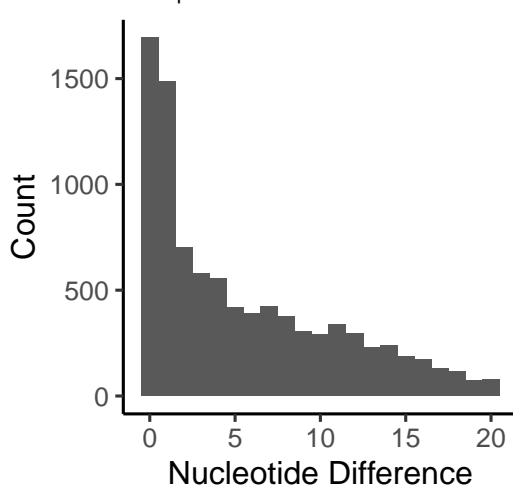
IGHV3-187*02_S8458

6683 sequences assigned
345 (5.2%) exact matches, in which:
226 unique CDR3
6 unique J



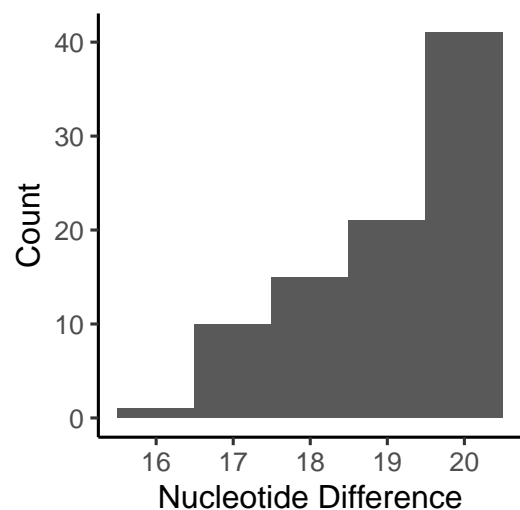
IGHV3-NL_1*01_S9854

9493 sequences assigned
1693 (17.8%) exact matches, in which:
1169 unique CDR3
8 unique J



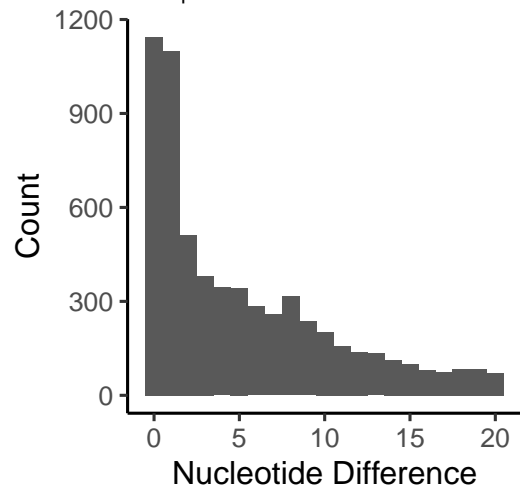
IGHV3-NL_12*02_S5864

799 sequences assigned
No exact matches.



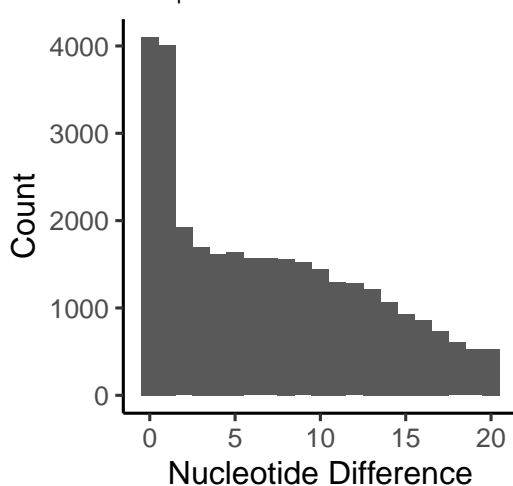
IGHV3-NL_1*01_S1080

6525 sequences assigned
1144 (17.5%) exact matches, in which:
788 unique CDR3
8 unique J



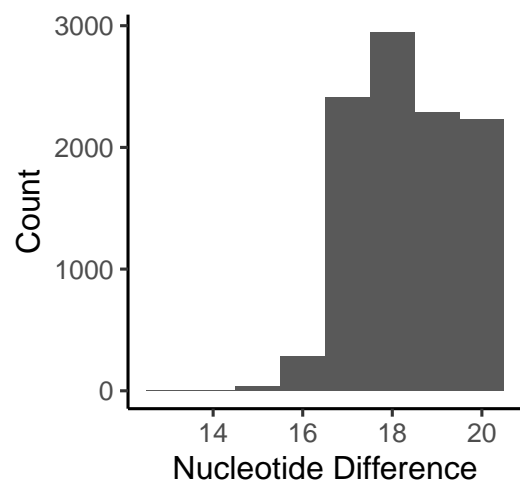
IGHV3-NL_11*01_S373

35228 sequences assigned
4102 (11.6%) exact matches, in which:
2824 unique CDR3
8 unique J



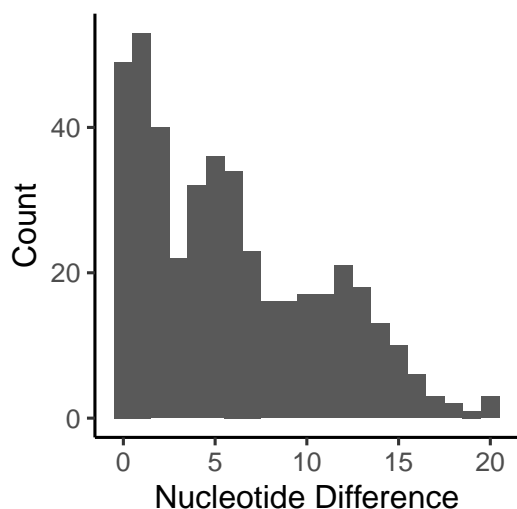
IGHV3-NL_12*02_S699

28168 sequences assigned
No exact matches.



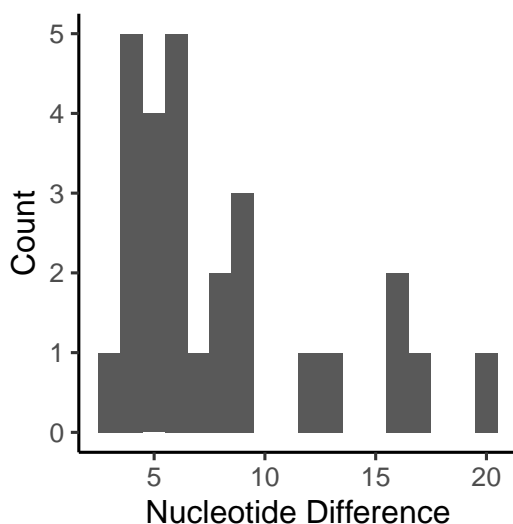
IGHV3–NL_13*01_S3277

460 sequences assigned
49 (10.7%) exact matches, in which:
30 unique CDR3
5 unique J



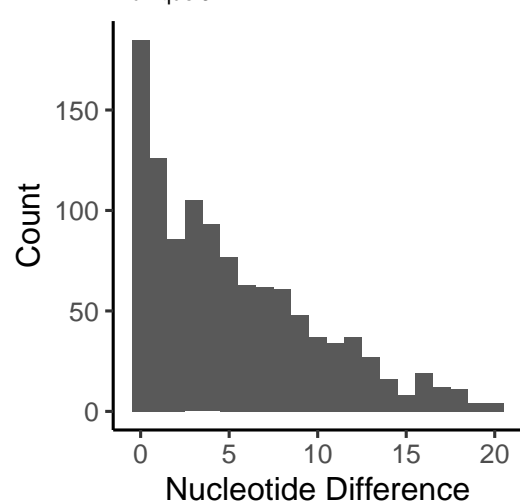
IGHV3–NL_16*01_S5133

29 sequences assigned
No exact matches.



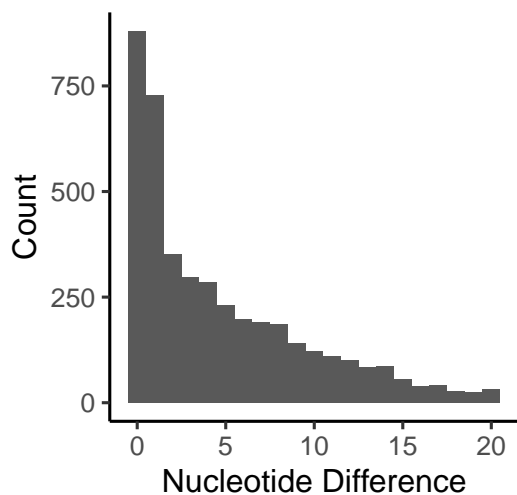
IGHV3–NL_18*01_S3867

1163 sequences assigned
185 (15.9%) exact matches, in which:
146 unique CDR3
7 unique J



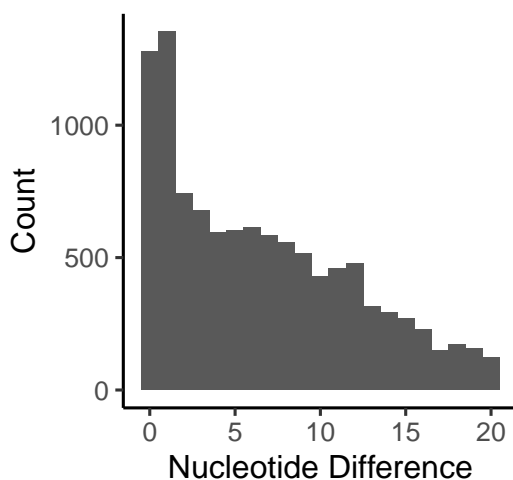
IGHV3–NL_14*01_S1113

4293 sequences assigned
880 (20.5%) exact matches, in which:
669 unique CDR3
7 unique J



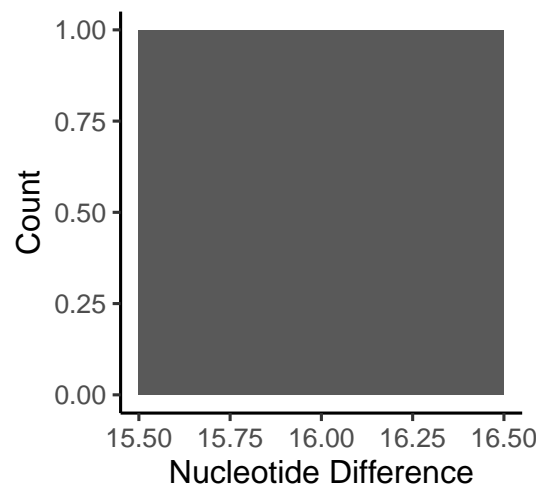
IGHV3–NL_17*01_S425

11310 sequences assigned
1279 (11.3%) exact matches, in which:
806 unique CDR3
8 unique J



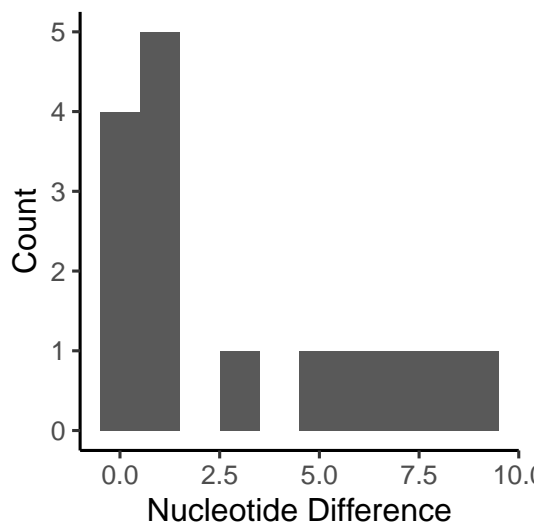
IGHV3–NL_19*01_S7515

3 sequences assigned
No exact matches.



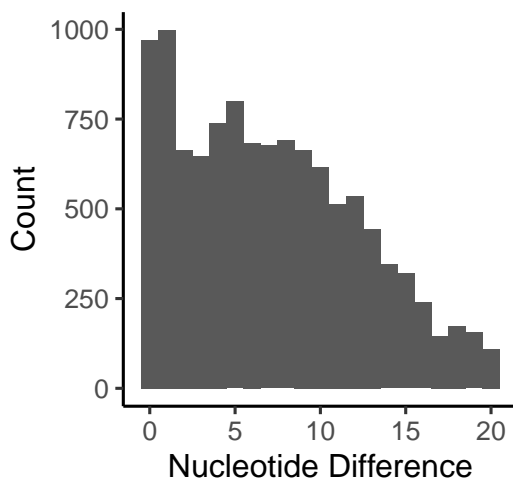
IGHV3–NL_15*01_S0604

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



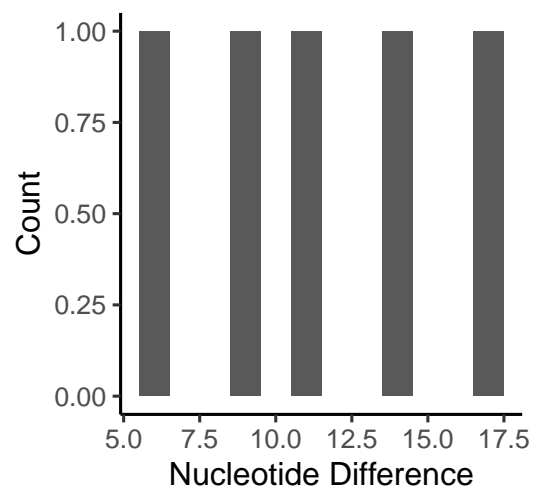
IGHV3–NL_17*01_S425

11924 sequences assigned
970 (8.1%) exact matches, in which:
617 unique CDR3
7 unique J



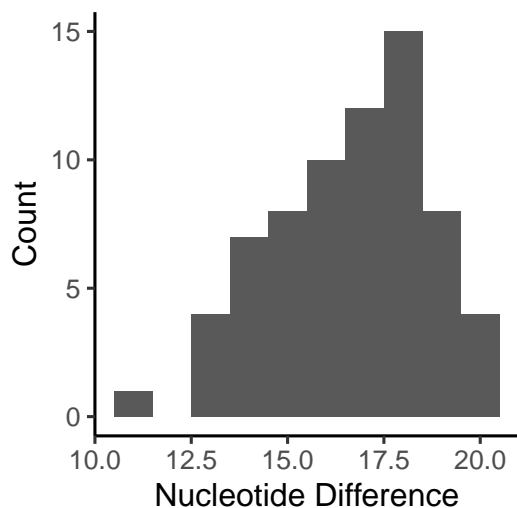
IGHV3–NL_4*01_S2727

7 sequences assigned
No exact matches.



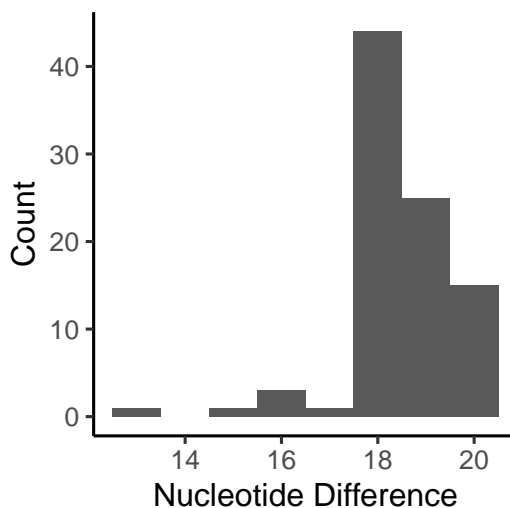
IGHV3–NL_5*01_S8361

280 sequences assigned
No exact matches.



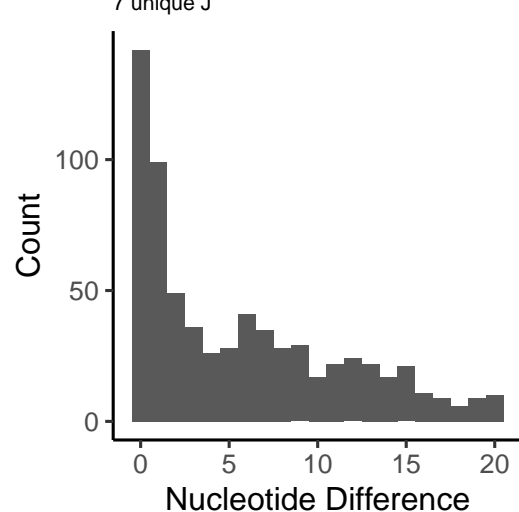
IGHV3–NL_8*01_S7860

286 sequences assigned
No exact matches.



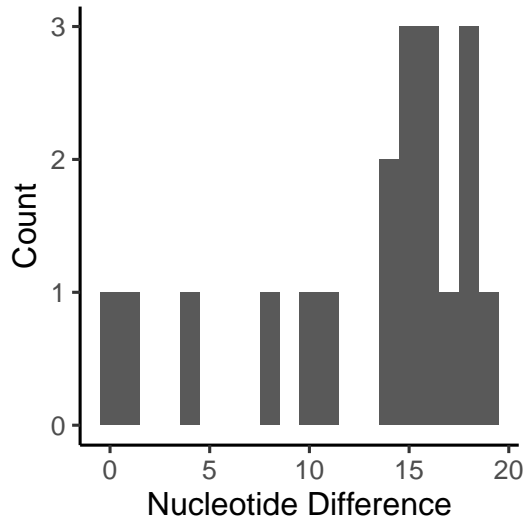
IGHV4–67*01_S8901

754 sequences assigned
142 (18.8%) exact matches, in which:
119 unique CDR3
7 unique J



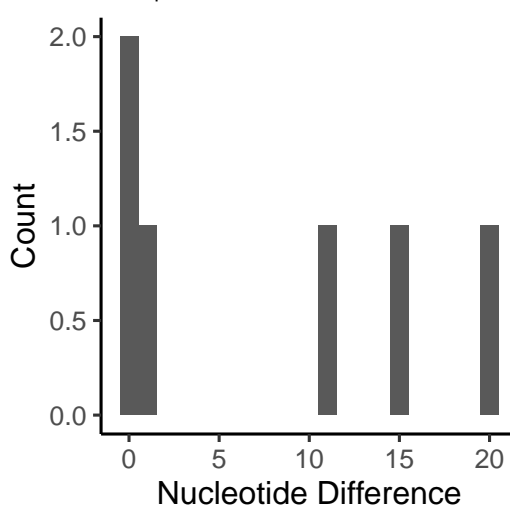
IGHV3–NL_7*01_S0199

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



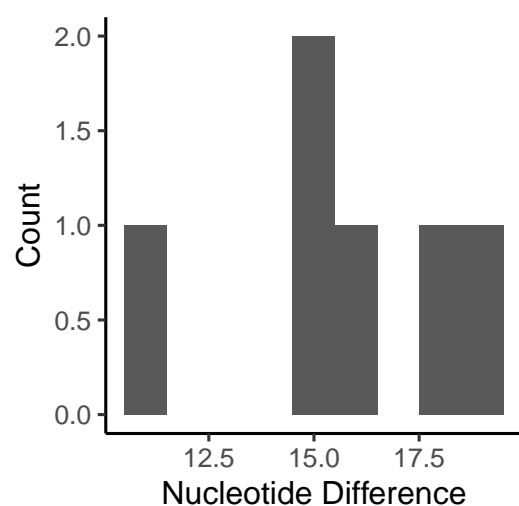
IGHV3–NL_8*01_S9578

22 sequences assigned
2 (9.1%) exact matches, in which:
2 unique CDR3
2 unique J



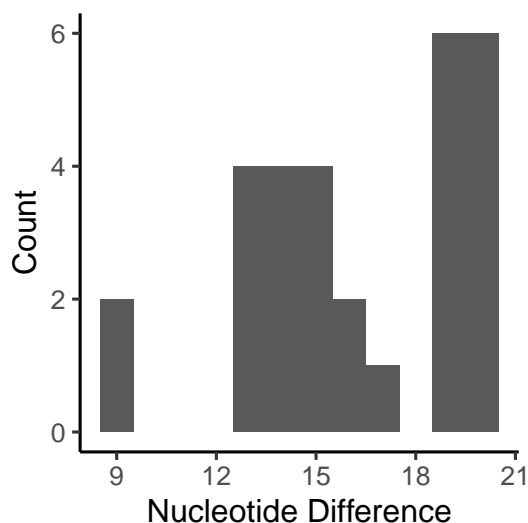
IGHV4–79*02_S9501

7 sequences assigned
No exact matches.



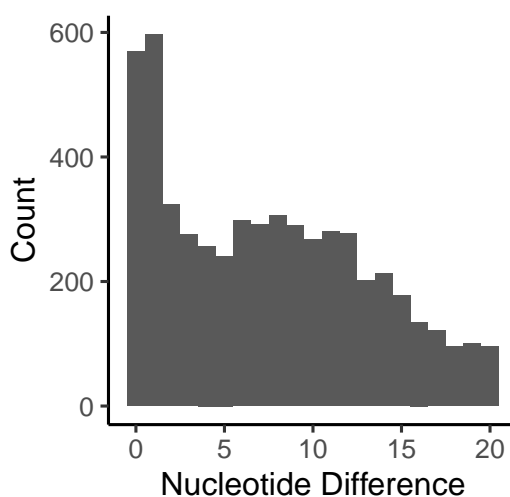
IGHV3–NL_8*01_S7474

133 sequences assigned
No exact matches.



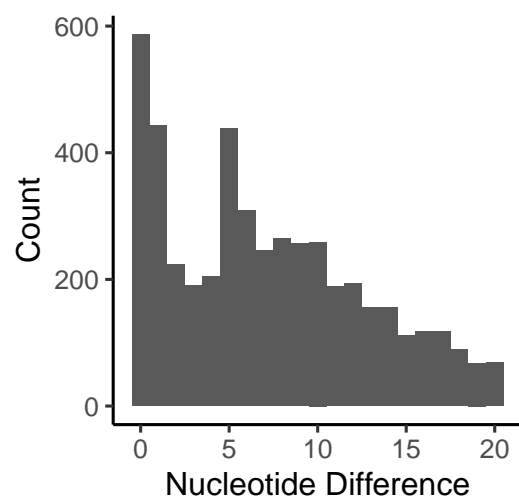
IGHV3–NL_9*01_S6098

5960 sequences assigned
570 (9.6%) exact matches, in which:
389 unique CDR3
7 unique J



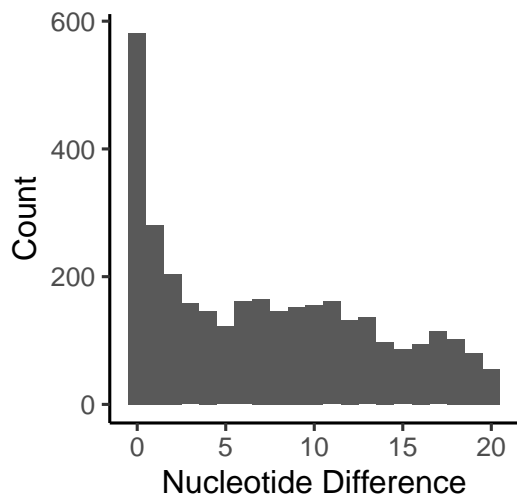
IGHV4–117*01_S3417

5169 sequences assigned
587 (11.4%) exact matches, in which:
483 unique CDR3
8 unique J



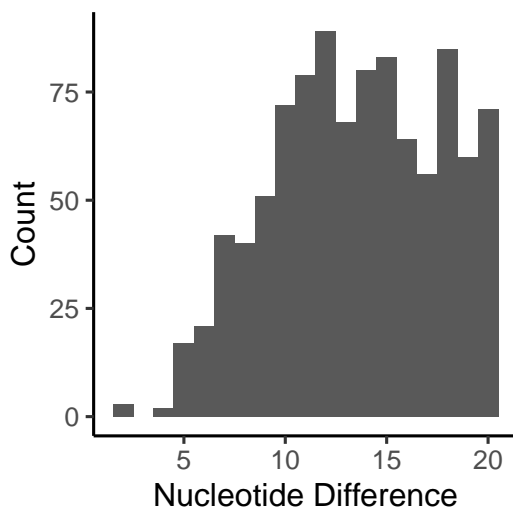
IGHV4-117*01_S6342

3749 sequences assigned
582 (15.5%) exact matches, in which:
513 unique CDR3
7 unique J



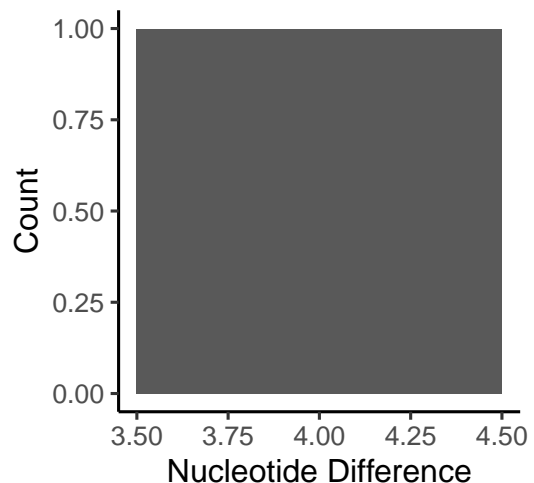
IGHV4-174*02_S5400

1404 sequences assigned
No exact matches.



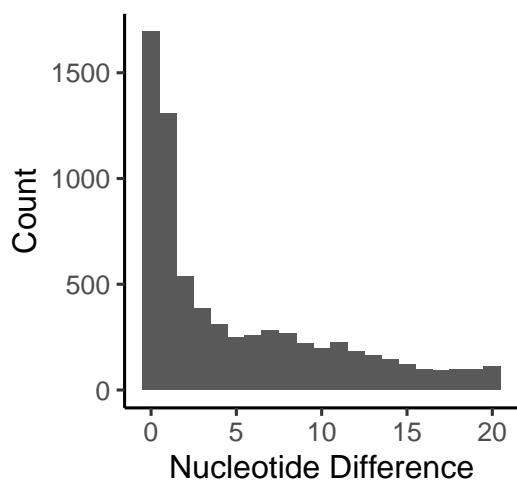
IGHV4-NL_10*01_S6744

2 sequences assigned
No exact matches.



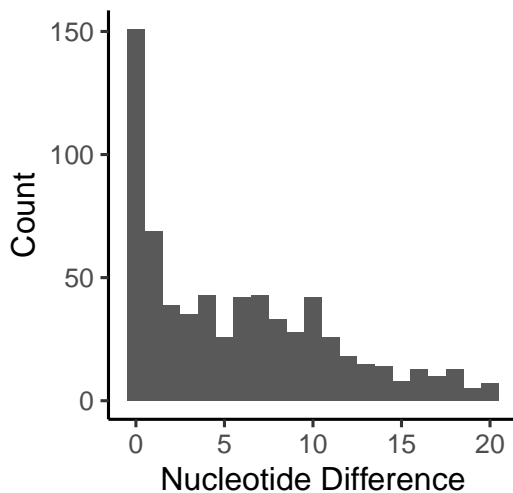
IGHV4-144*01_S3113

7706 sequences assigned
1694 (22%) exact matches, in which:
1275 unique CDR3
8 unique J



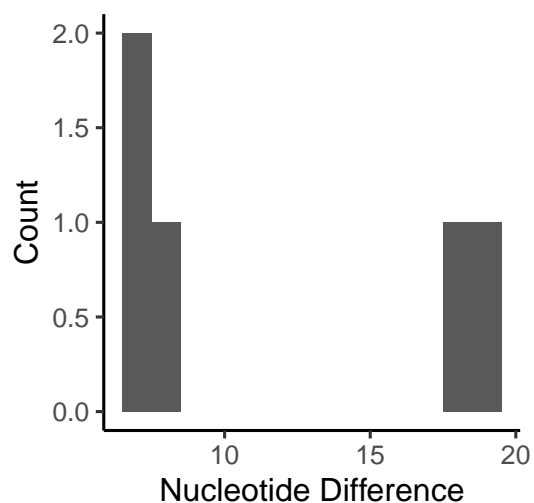
IGHV4-NL_1*02_S2070

717 sequences assigned
151 (21.1%) exact matches, in which:
132 unique CDR3
6 unique J



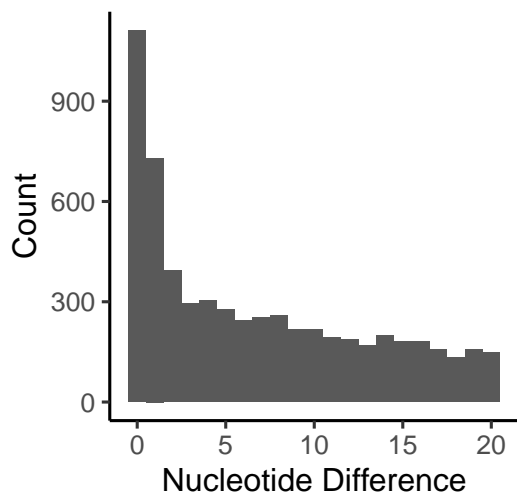
IGHV4-NL_11*01_S9942

5 sequences assigned
No exact matches.



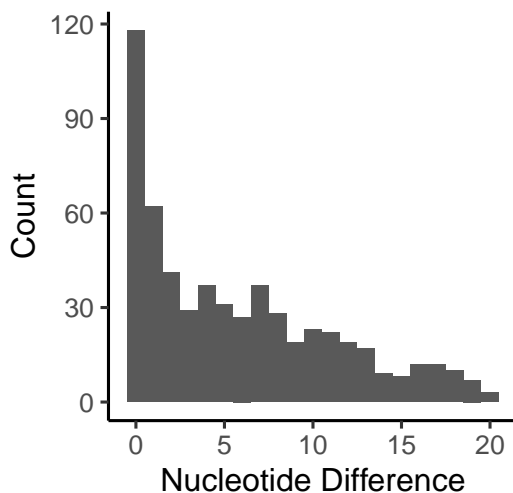
IGHV4-149*01_S4098

6917 sequences assigned
1112 (16.1%) exact matches, in which:
919 unique CDR3
7 unique J



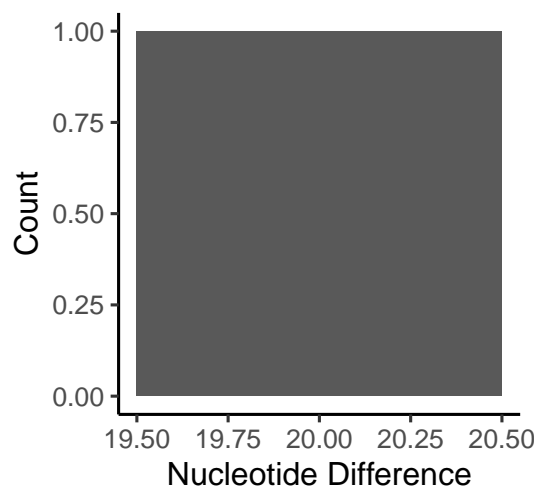
IGHV4-NL_1*02_S2070_

614 sequences assigned
118 (19.2%) exact matches, in which:
111 unique CDR3
6 unique J



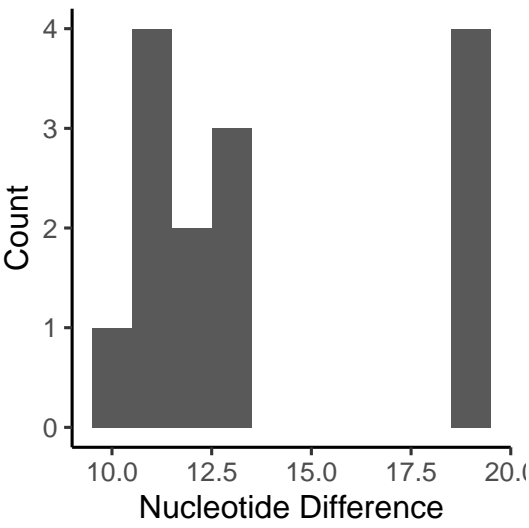
IGHV4-NL_12*01_S8068

1 sequences assigned
No exact matches.



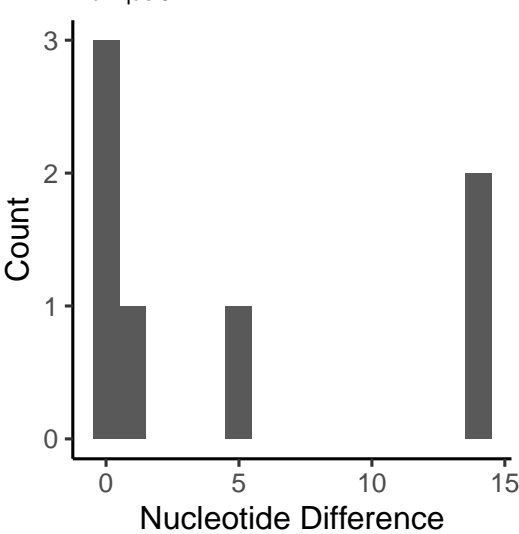
IGHV4–NL_13*01_S9744

18 sequences assigned
No exact matches.



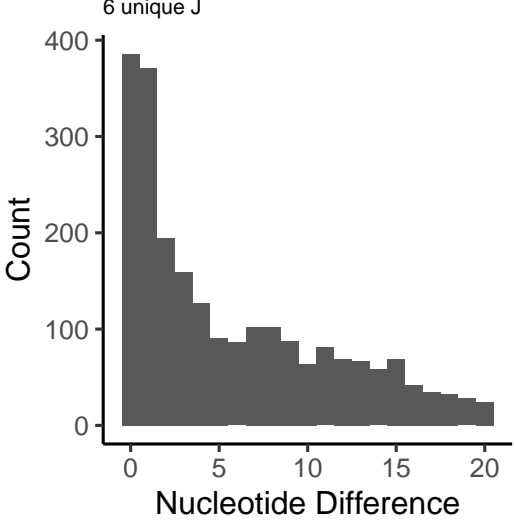
IGHV4–NL_17*01_S4099

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



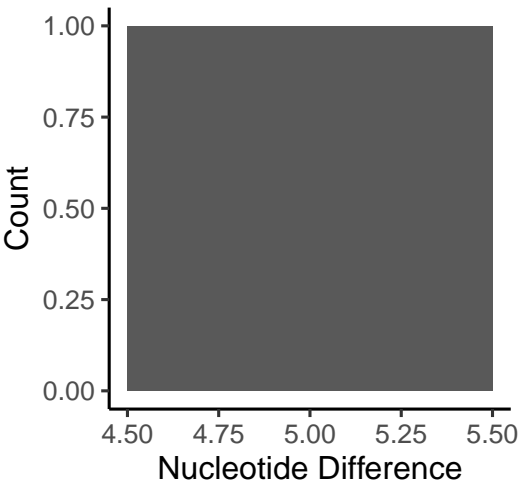
IGHV4–NL_22*01_S2393

2418 sequences assigned
386 (16%) exact matches, in which:
335 unique CDR3
6 unique J



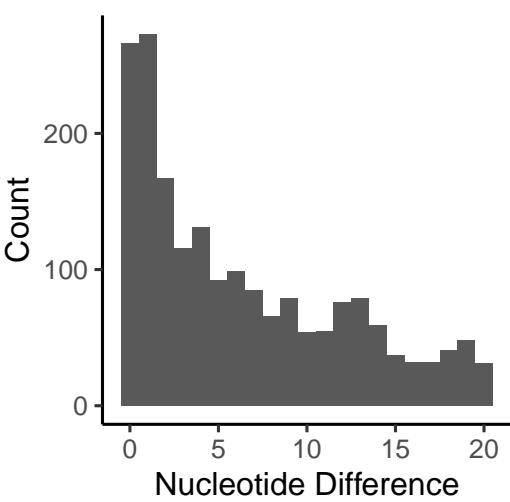
IGHV4–NL_16*01_S2324

2 sequences assigned
No exact matches.



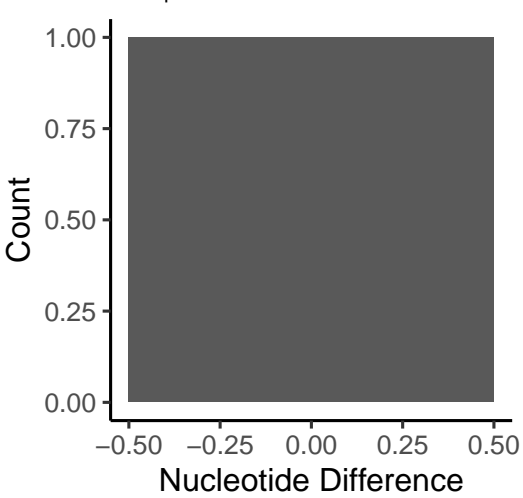
IGHV4–NL_20*01_S4754

2153 sequences assigned
266 (12.4%) exact matches, in which:
212 unique CDR3
6 unique J



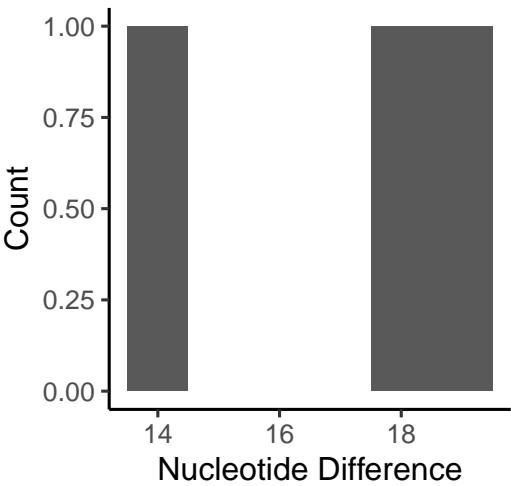
IGHV4–NL_23*01_S7000

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



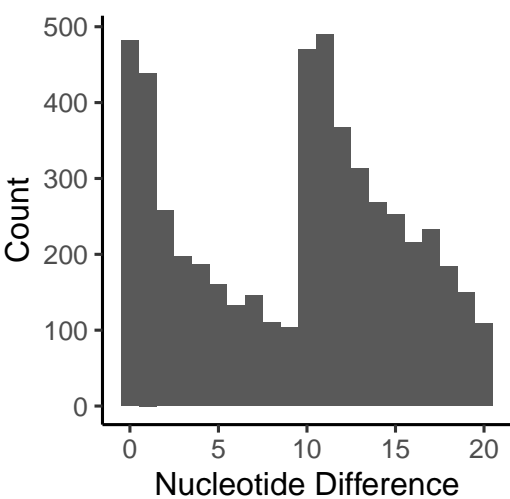
IGHV4–NL_17*01_S4004

4 sequences assigned
No exact matches.



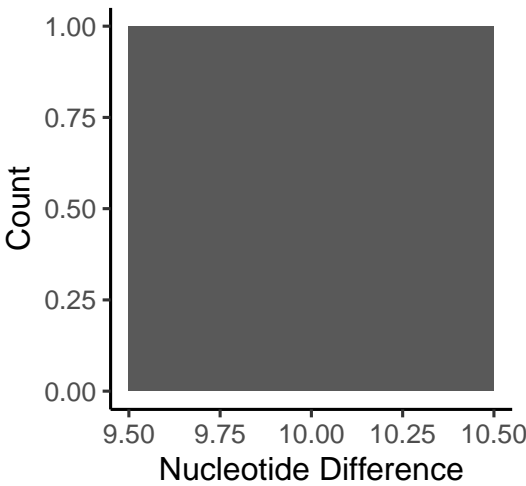
IGHV4–NL_21*01_S9849

6194 sequences assigned
482 (7.8%) exact matches, in which:
380 unique CDR3
8 unique J



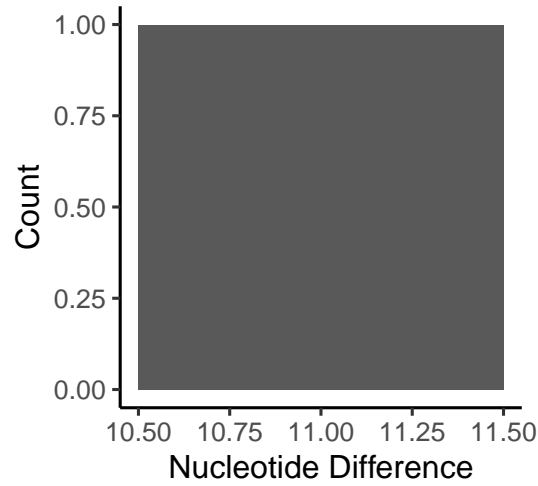
IGHV4–NL_25*01_S6200

2 sequences assigned
No exact matches.



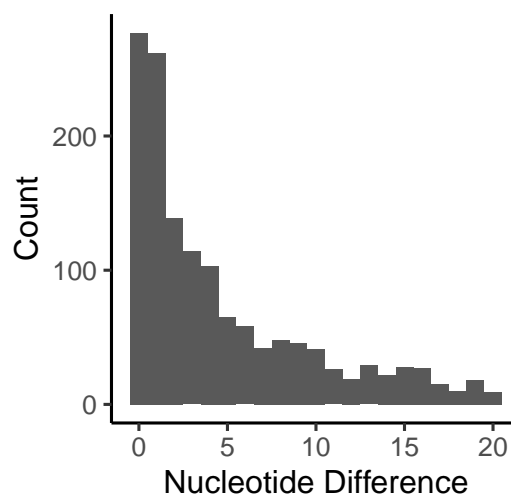
IGHV4-NL_25*01_S6383

1 sequences assigned
No exact matches.



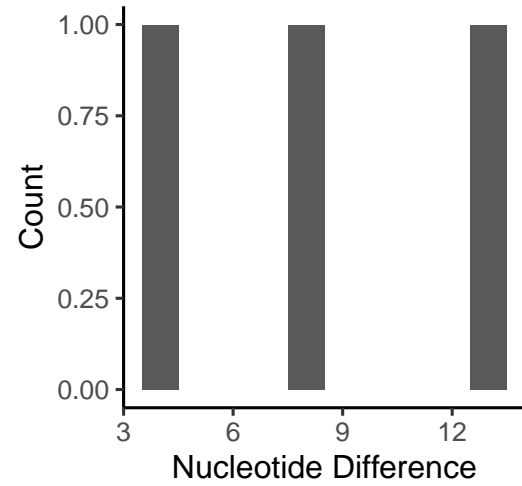
IGHV4-NL_27*01_S7643

1472 sequences assigned
277 (18.8%) exact matches, in which:
220 unique CDR3
7 unique J



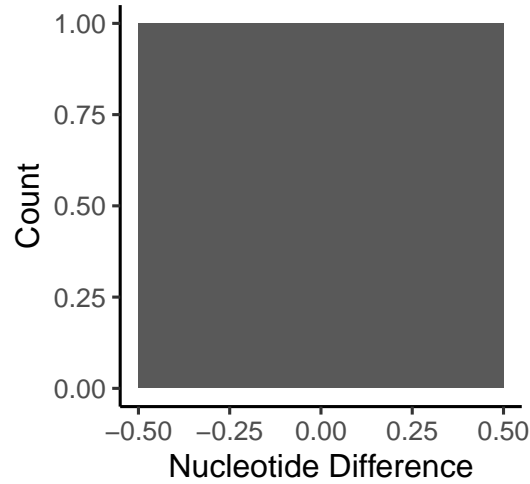
IGHV4-NL_31*01_S1675

3 sequences assigned
No exact matches.



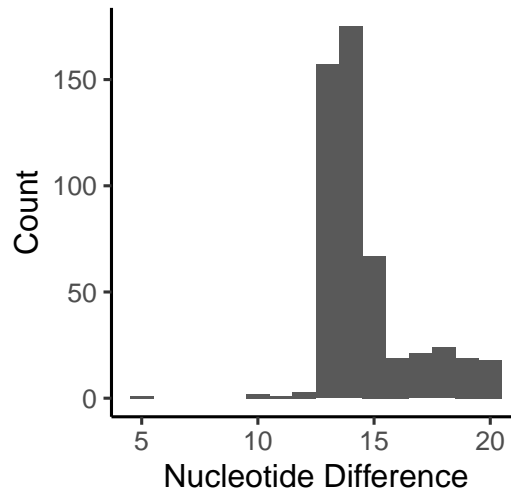
IGHV4-NL_25*01_S9955

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



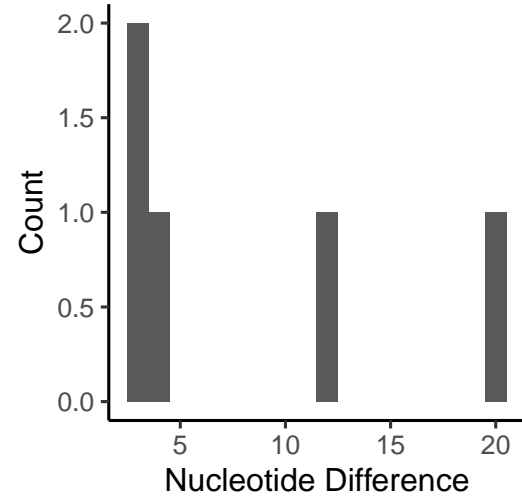
IGHV4-NL_29*01_S3761

606 sequences assigned
No exact matches.



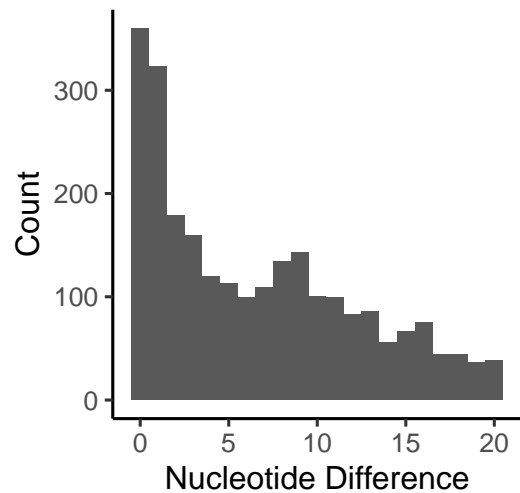
IGHV4-NL_31*01_S7693

5 sequences assigned
No exact matches.



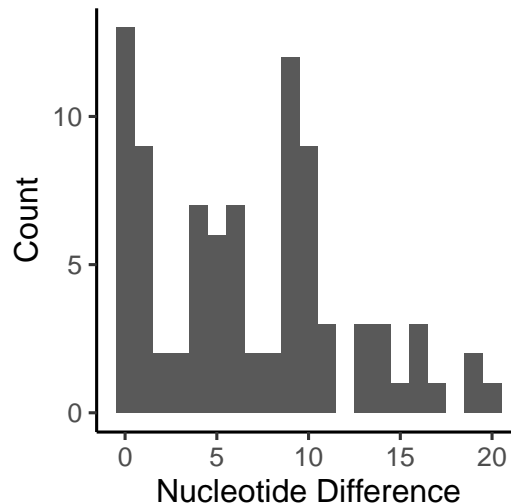
IGHV4-NL_27*01_S5151

2707 sequences assigned
360 (13.3%) exact matches, in which:
283 unique CDR3
6 unique J



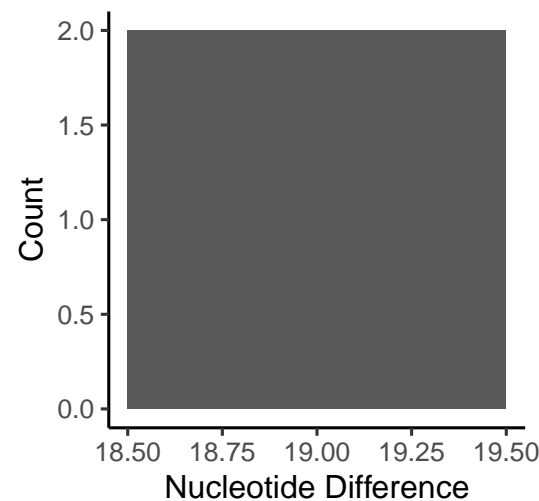
IGHV4-NL_3*01_S1577

96 sequences assigned
13 (13.5%) exact matches, in which:
10 unique CDR3
4 unique J



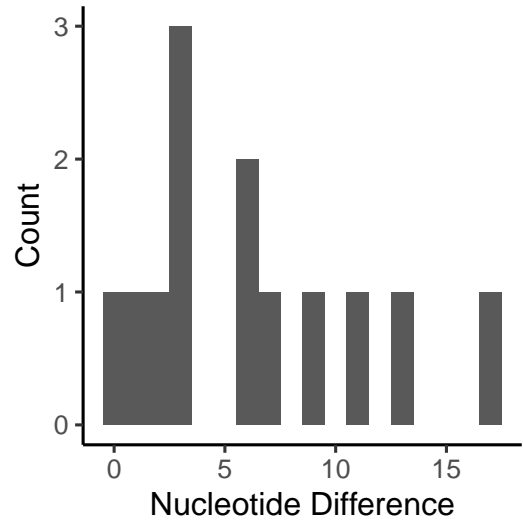
IGHV4-NL_32*01_S3033

7 sequences assigned
No exact matches.



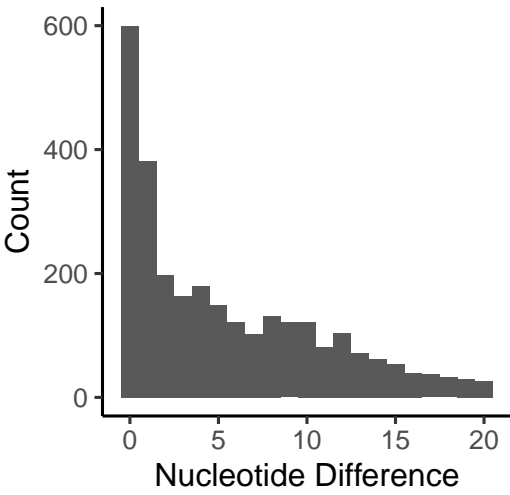
IGHV4-NL_33*01_S4377

17 sequences assigned
1 (5.9%) exact matches, in which:
1 unique CDR3
1 unique J



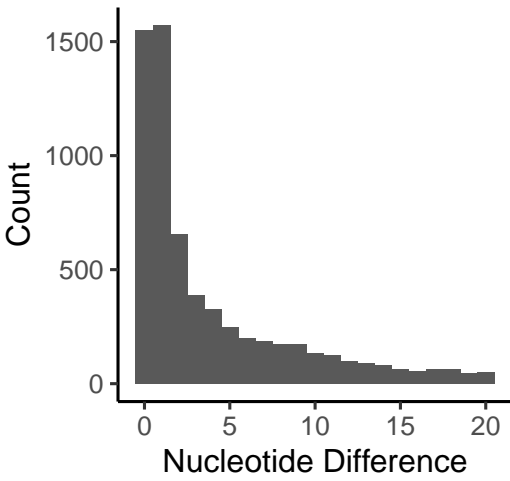
IGHV4-NL_36*01_S5847

3064 sequences assigned
600 (19.6%) exact matches, in which:
490 unique CDR3
7 unique J



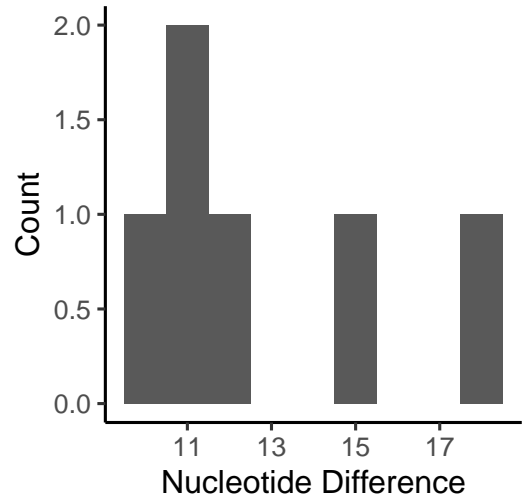
IGHV4-NL_40*01_S069

6618 sequences assigned
1551 (23.4%) exact matches, in which:
1289 unique CDR3
8 unique J



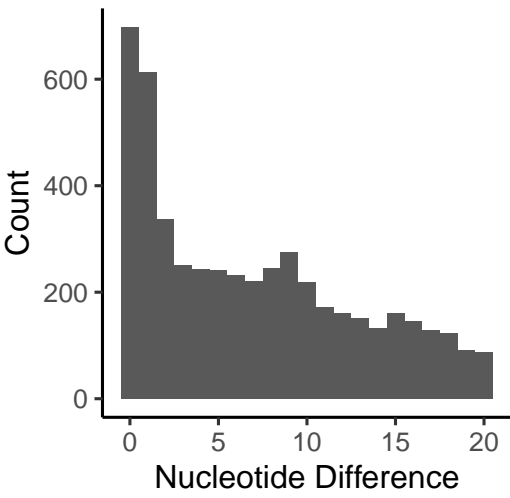
IGHV4-NL_33*01_S5330

11 sequences assigned
No exact matches.



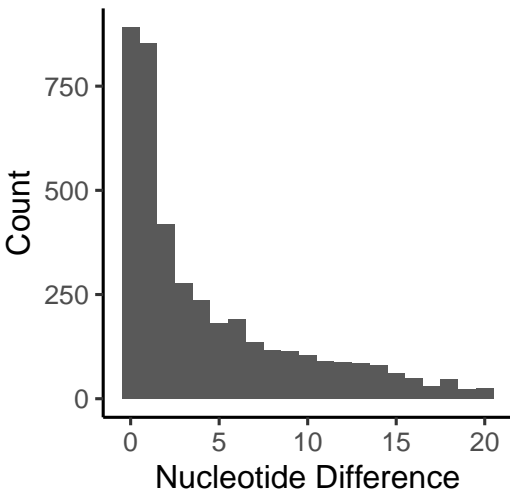
IGHV4-NL_38*01_S9244

5558 sequences assigned
698 (12.6%) exact matches, in which:
555 unique CDR3
7 unique J



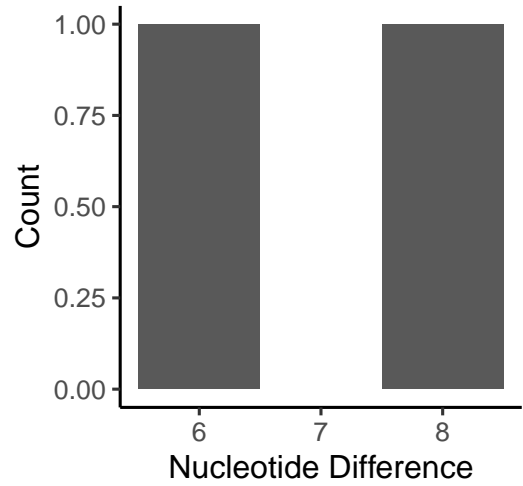
IGHV4-NL_40*01_S6921

4263 sequences assigned
892 (20.9%) exact matches, in which:
748 unique CDR3
7 unique J



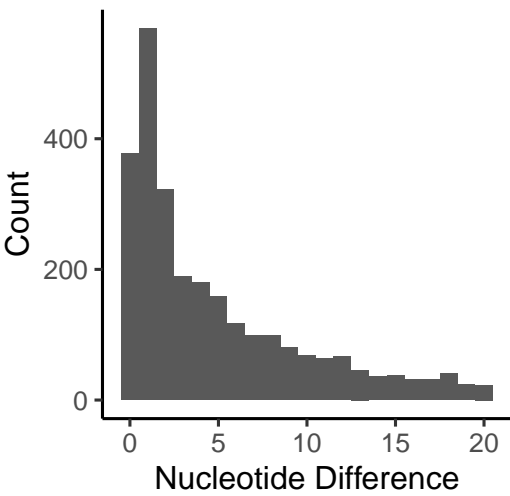
IGHV4-NL_34*01_S4637

2 sequences assigned
No exact matches.



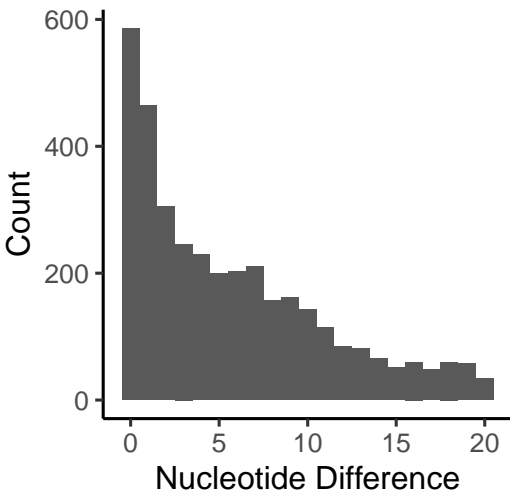
IGHV4-NL_4*01_S8866

2778 sequences assigned
377 (13.6%) exact matches, in which:
326 unique CDR3
6 unique J



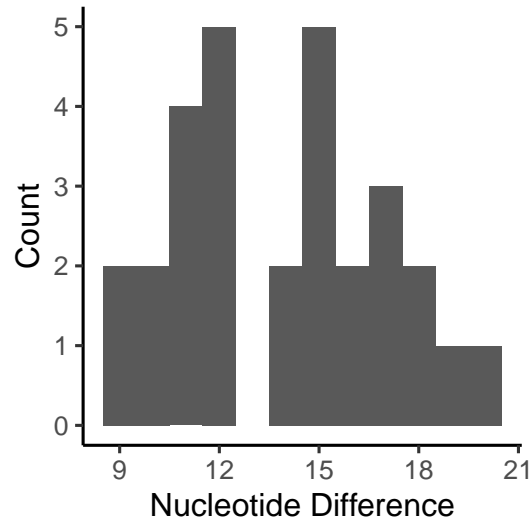
IGHV4-NL_42*01_S6064

3816 sequences assigned
586 (15.4%) exact matches, in which:
487 unique CDR3
7 unique J



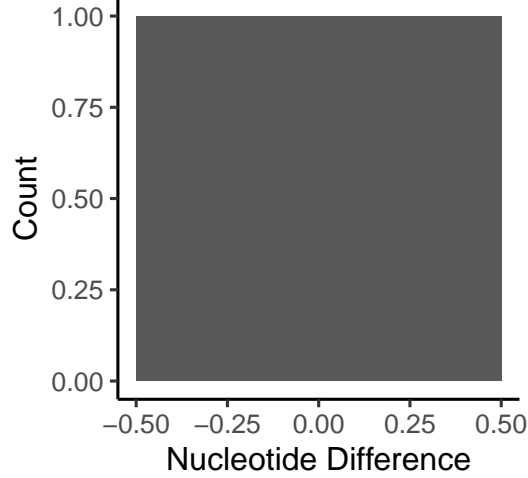
IGHV4–NL_43*01_S4510

39 sequences assigned
No exact matches.



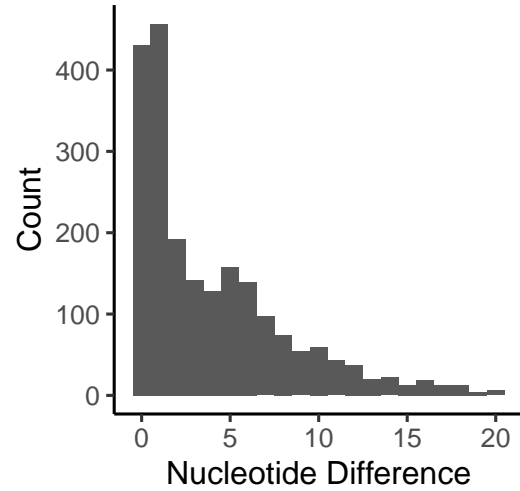
IGHV4–NL_7*02_S0143

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



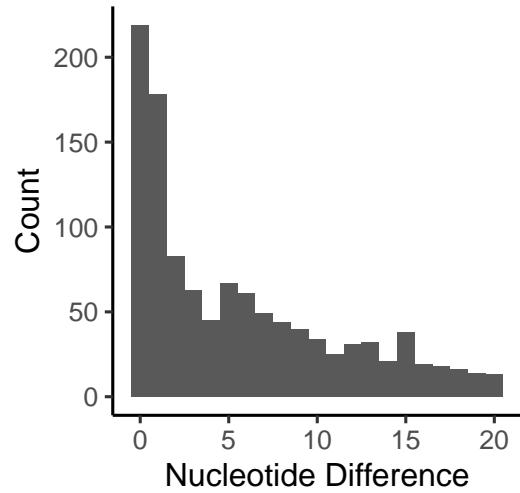
IGHV5–157*01_S5960

2148 sequences assigned
431 (20.1%) exact matches, in which:
216 unique CDR3
6 unique J



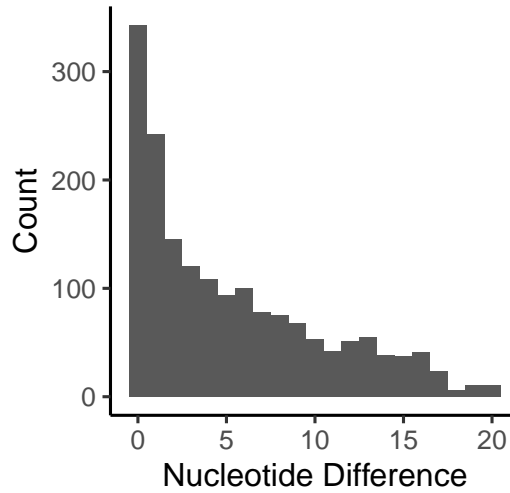
IGHV4–NL_5*01_S5442

1178 sequences assigned
219 (18.6%) exact matches, in which:
184 unique CDR3
7 unique J



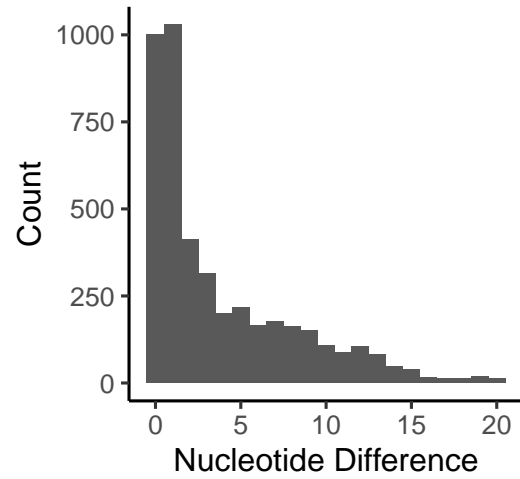
IGHV4–NL_9*01_S6142

1998 sequences assigned
343 (17.2%) exact matches, in which:
277 unique CDR3
6 unique J



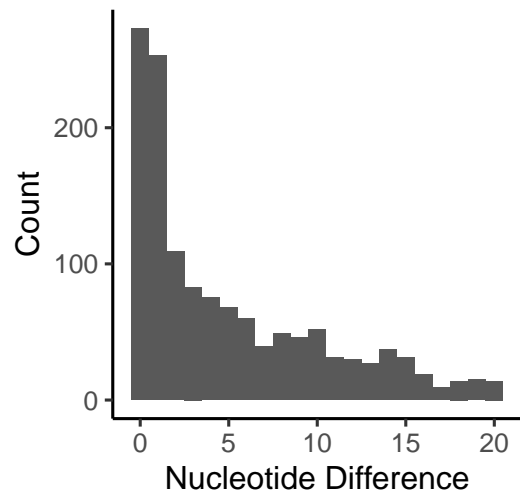
IGHV5–157*01_S8185

4443 sequences assigned
1002 (22.6%) exact matches, in which:
514 unique CDR3
8 unique J



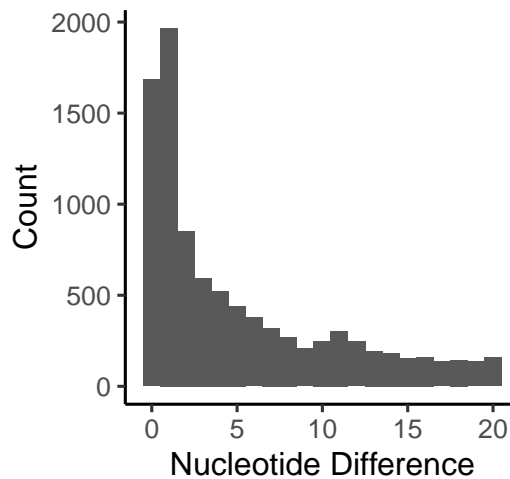
IGHV4–NL_5*01_S5442_

1394 sequences assigned
273 (19.6%) exact matches, in which:
233 unique CDR3
6 unique J



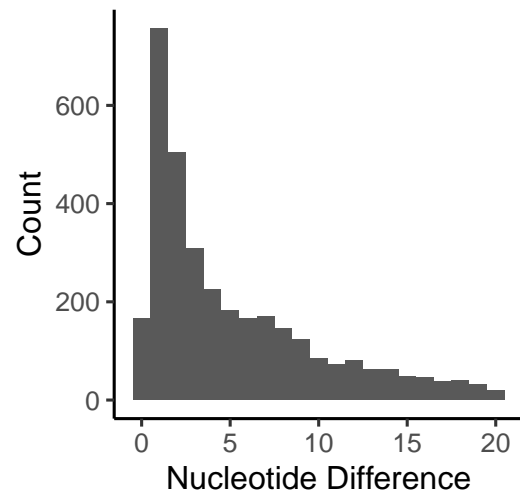
IGHV5–15*01_S4790

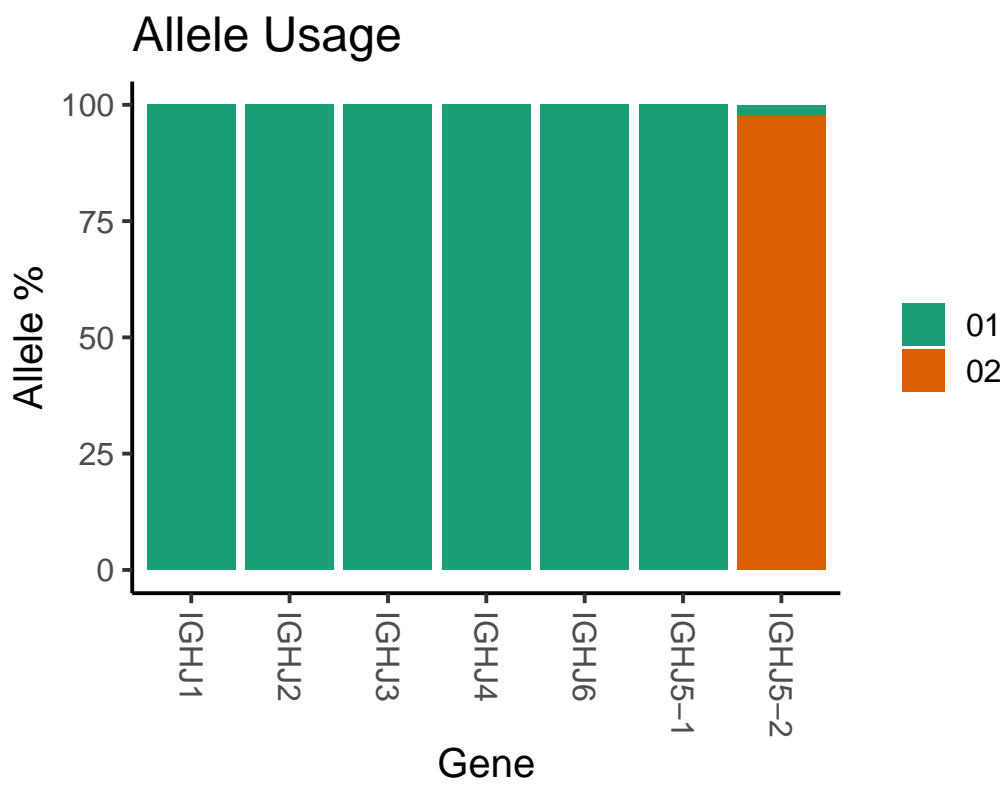
9735 sequences assigned
1685 (17.3%) exact matches, in which:
1084 unique CDR3
8 unique J



IGHV6–1*02_G280T

3416 sequences assigned
166 (4.9%) exact matches, in which:
154 unique CDR3
7 unique J





Warning – no inferred sequences found.