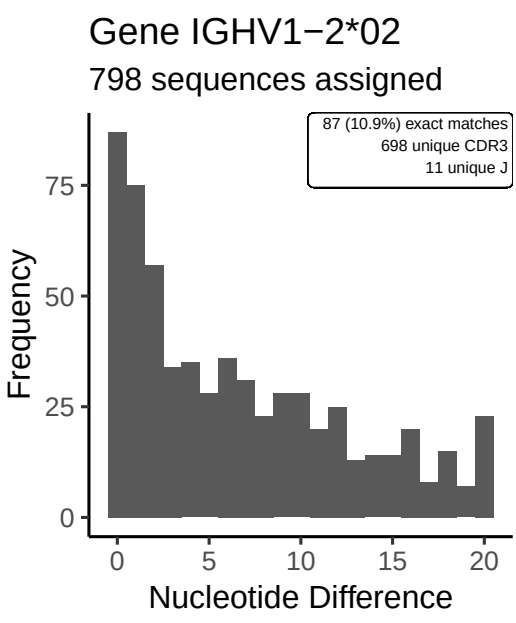
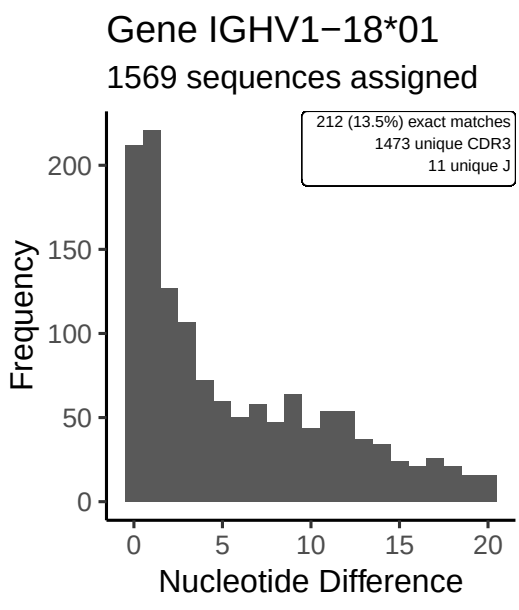
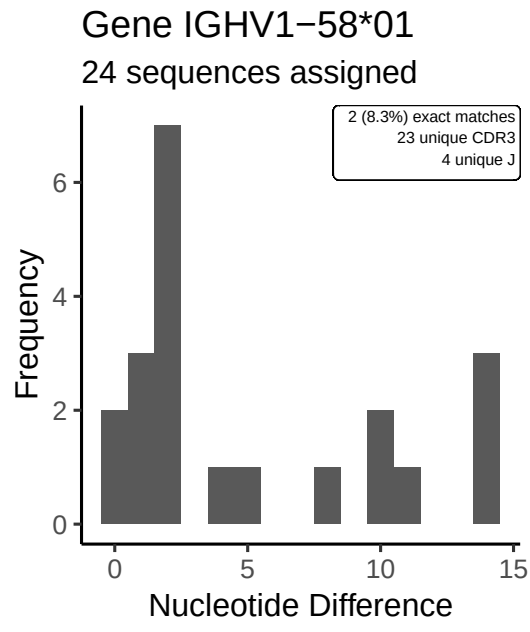
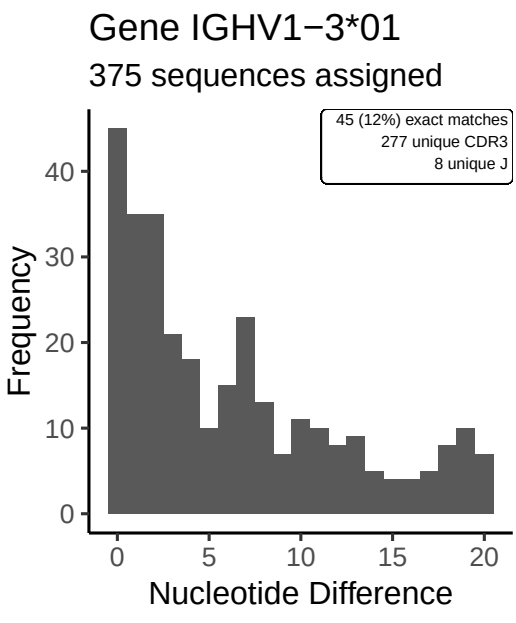
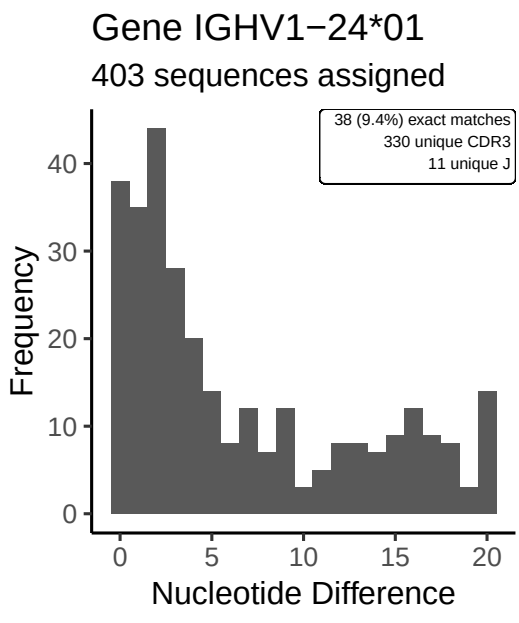
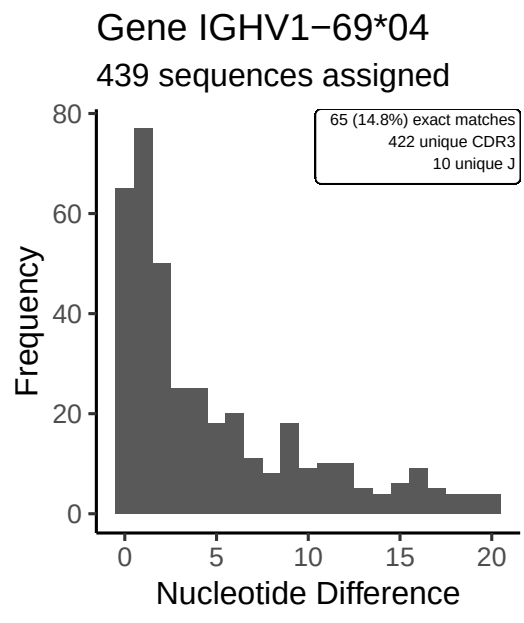

Gene IGHV1−2*02
798 sequences assigned
87 (10.9%) exact matches
698 unique CDR3
11 unique J
Frequency
Nucleotide Difference

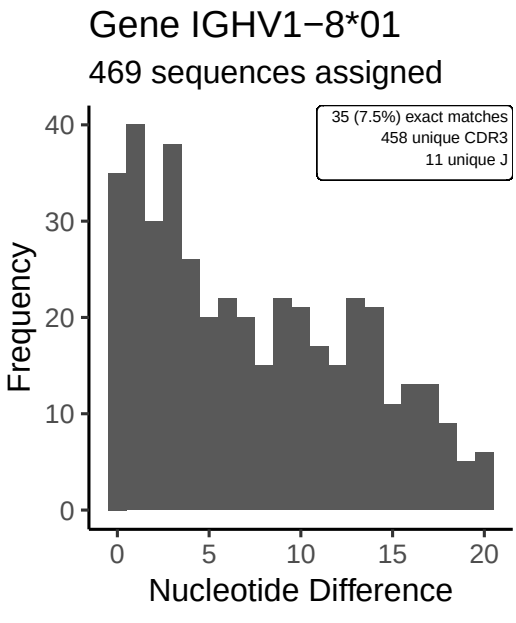

Gene IGHV1−18*01
1569 sequences assigned
212 (13.5%) exact matches
1473 unique CDR3
11 unique J
Frequency
Nucleotide Difference

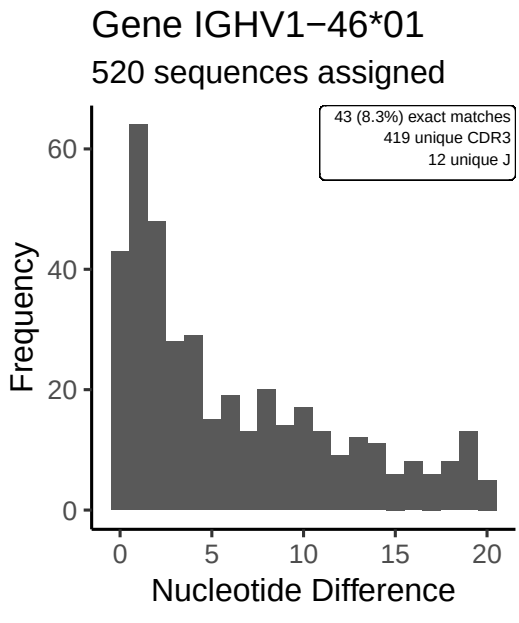

Gene IGHV1−58*01
24 sequences assigned
2 (8.3%) exact matches
23 unique CDR3
4 unique J
Frequency
Nucleotide Difference

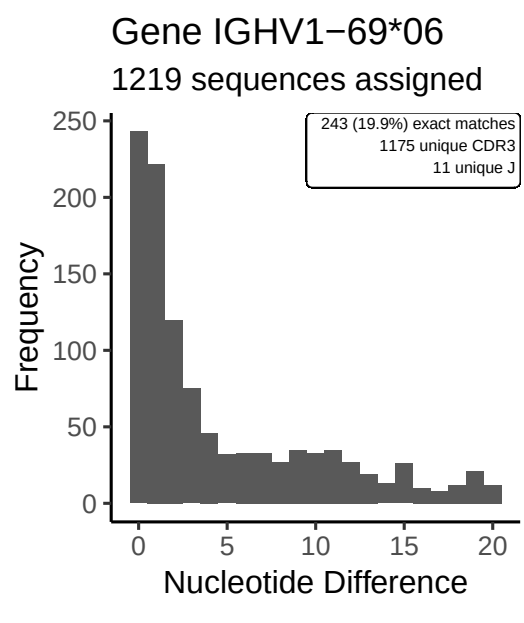

Gene IGHV1−3*01
375 sequences assigned
45 (12%) exact matches
277 unique CDR3
8 unique J
Frequency
Nucleotide Difference

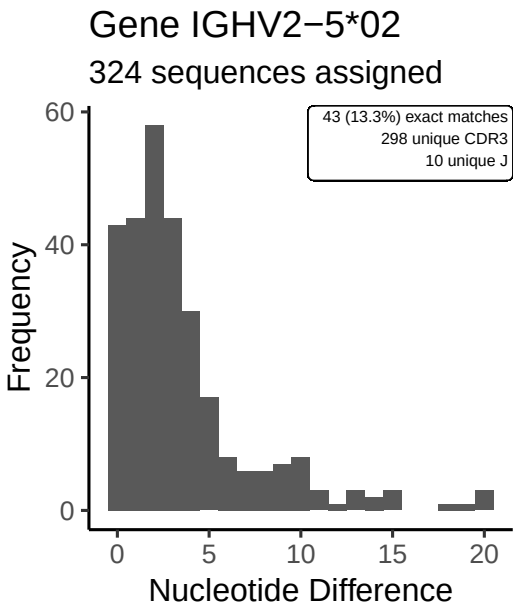

Gene IGHV1−24*01
403 sequences assigned
38 (9.4%) exact matches
330 unique CDR3
11 unique J
Frequency
Nucleotide Difference

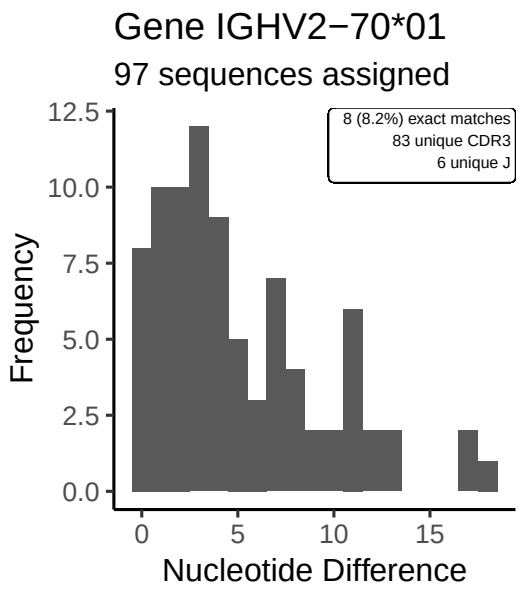

Gene IGHV1−69*04
439 sequences assigned
65 (14.8%) exact matches
422 unique CDR3
10 unique J
Frequency
Nucleotide Difference

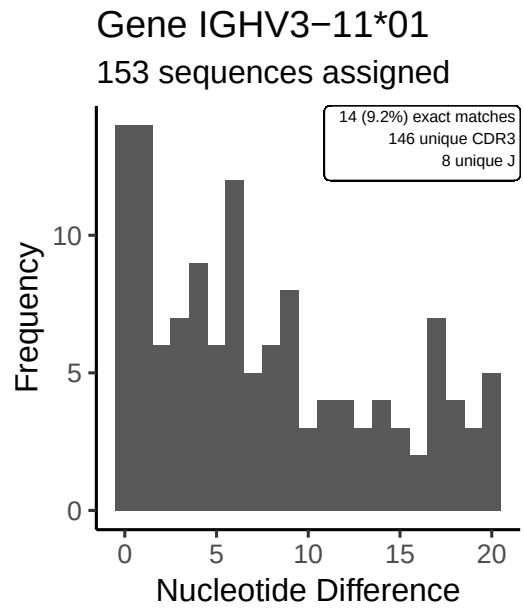

Gene IGHV1−8*01
469 sequences assigned
35 (7.5%) exact matches
458 unique CDR3
11 unique J
Frequency
Nucleotide Difference

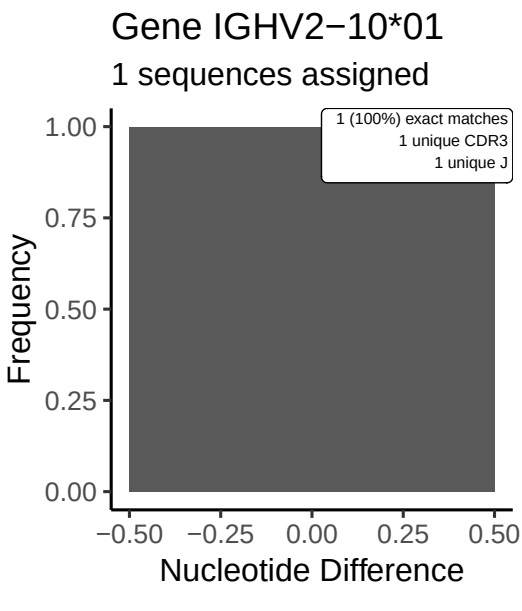

Gene IGHV1−46*01
520 sequences assigned
43 (8.3%) exact matches
419 unique CDR3
12 unique J
Frequency
Nucleotide Difference

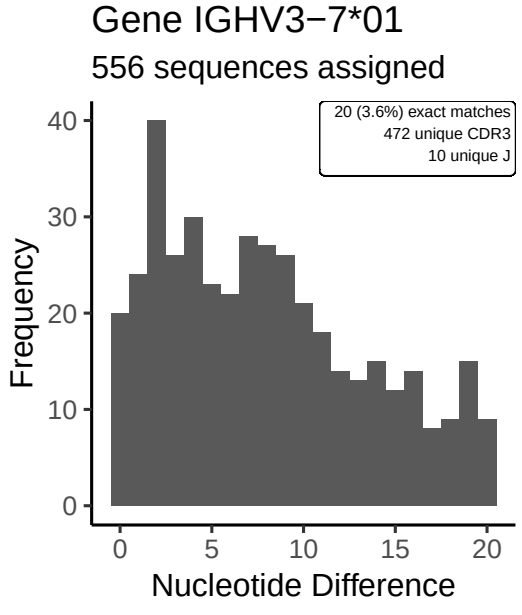

Gene IGHV1−69*06
1219 sequences assigned
243 (19.9%) exact matches
1175 unique CDR3
11 unique J
Frequency
Nucleotide Difference

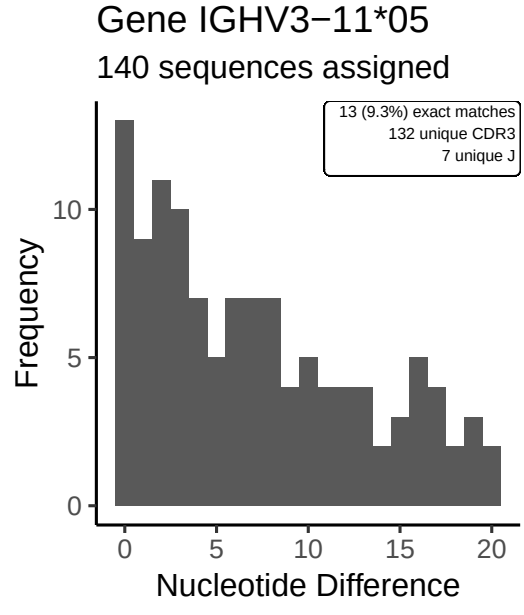

Gene IGHV2−5*02
324 sequences assigned
43 (13.3%) exact matches
298 unique CDR3
10 unique J
Frequency
Nucleotide Difference

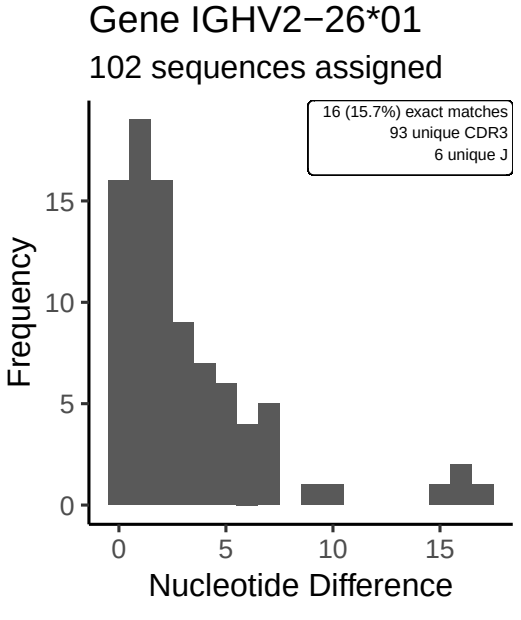

Gene IGHV2−70*01
97 sequences assigned
8 (8.2%) exact matches
83 unique CDR3
6 unique J
Frequency
Nucleotide Difference

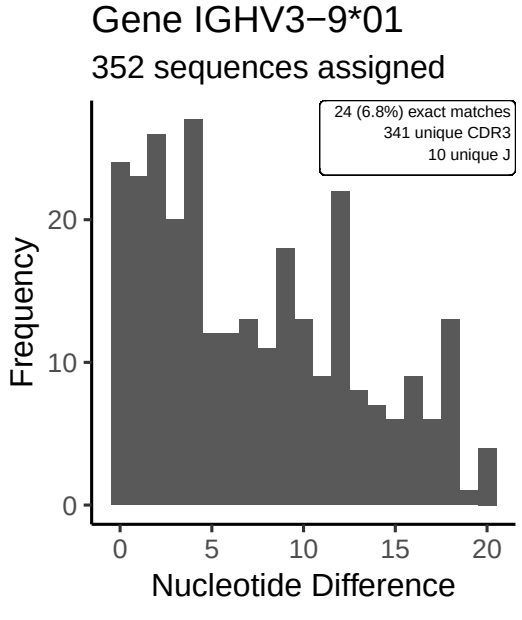

Gene IGHV3−11*01
153 sequences assigned
14 (9.2%) exact matches
146 unique CDR3
8 unique J
Frequency
Nucleotide Difference

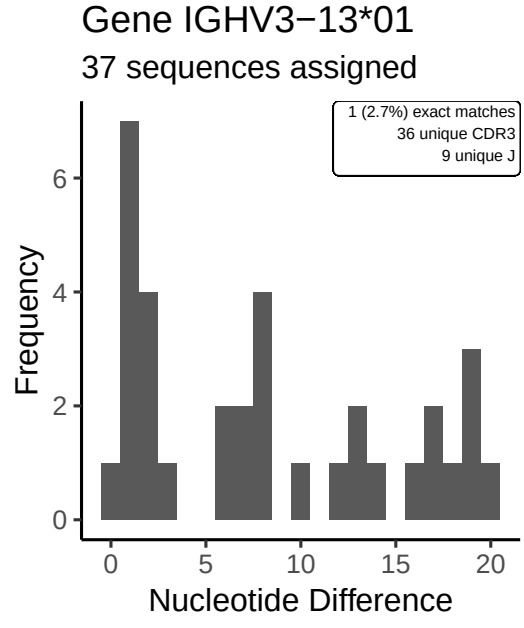

Gene IGHV2−10*01
1 sequences assigned
1 (100%) exact matches
1 unique CDR3
1 unique J
Frequency
Nucleotide Difference


Gene IGHV3−7*01
556 sequences assigned
20 (3.6%) exact matches
472 unique CDR3
10 unique J
Frequency
Nucleotide Difference


Gene IGHV3−11*05
140 sequences assigned
13 (9.3%) exact matches
132 unique CDR3
7 unique J
Frequency
Nucleotide Difference

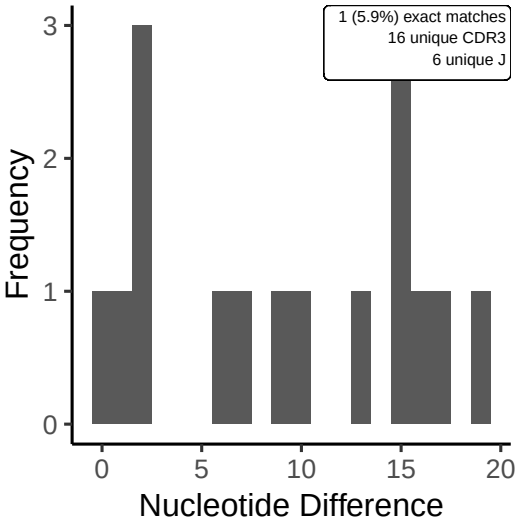

Gene IGHV2−26*01
102 sequences assigned
16 (15.7%) exact matches
93 unique CDR3
6 unique J
Frequency
Nucleotide Difference


Gene IGHV3−9*01
352 sequences assigned
24 (6.8%) exact matches
341 unique CDR3
10 unique J
Frequency
Nucleotide Difference


Gene IGHV3−13*01
37 sequences assigned
1 (2.7%) exact matches
36 unique CDR3
9 unique J
Frequency
Nucleotide Difference

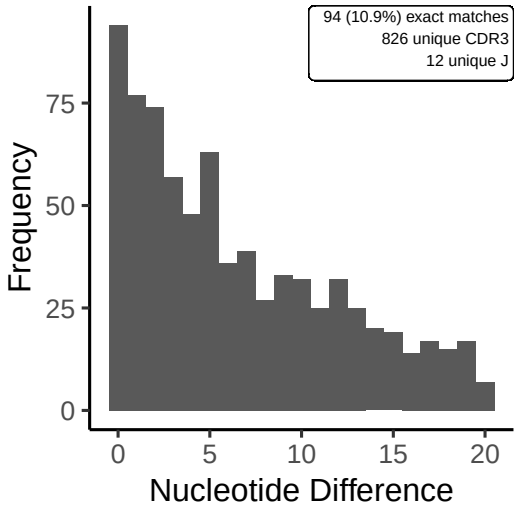
Gene IGHV3−13*04

17 sequences assigned



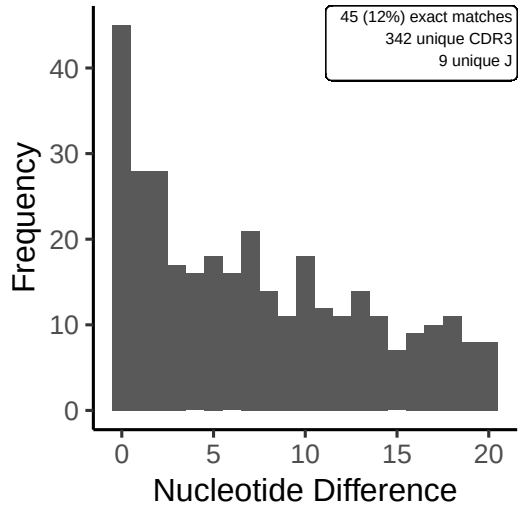
Gene IGHV3−21*01

861 sequences assigned



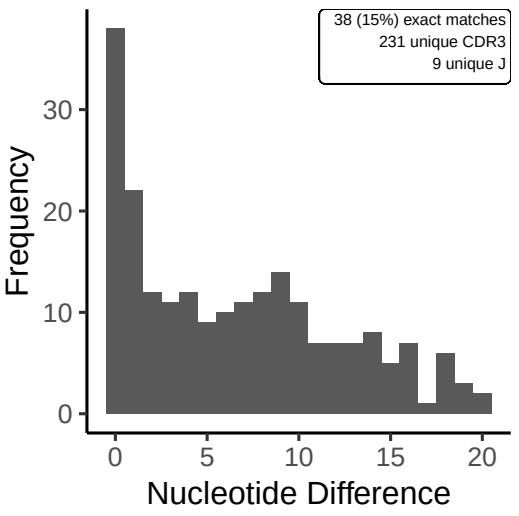
Gene IGHV3−30*04

376 sequences assigned



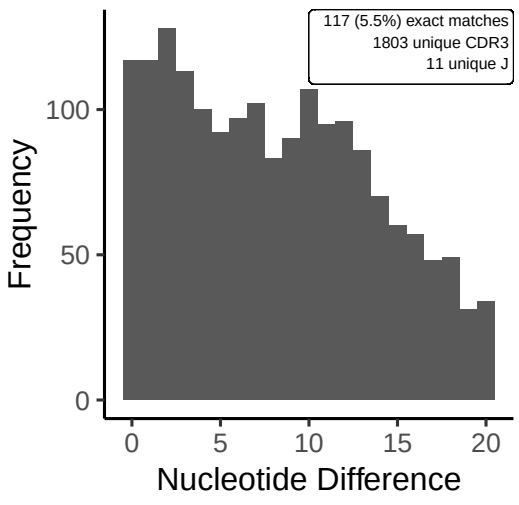
Gene IGHV3−15*01

254 sequences assigned



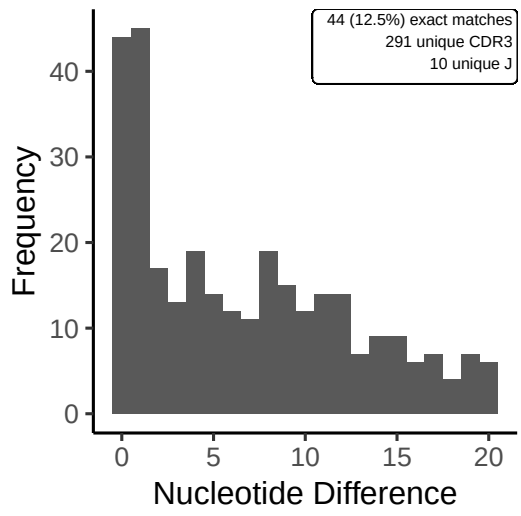
Gene IGHV3−23*01

2110 sequences assigned



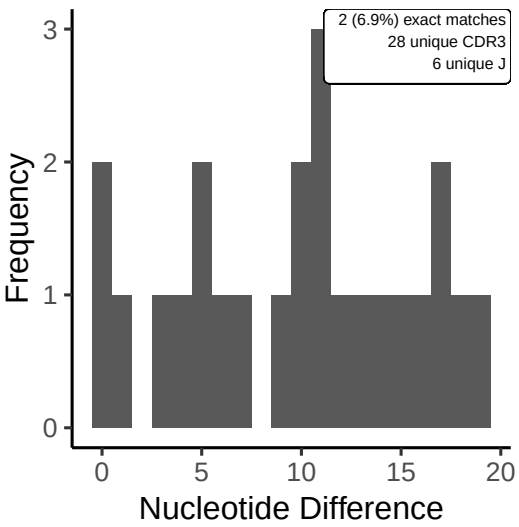
Gene IGHV3−30*18

353 sequences assigned



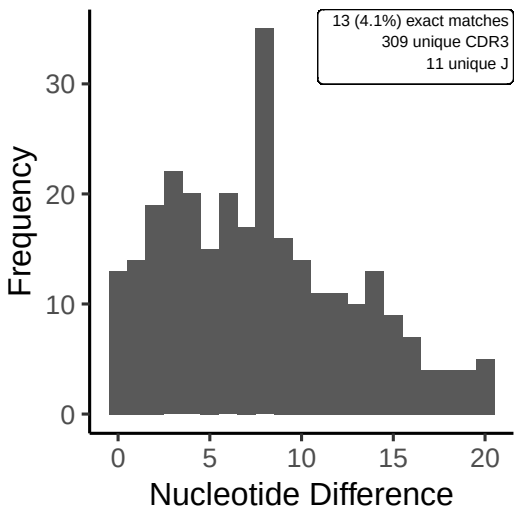
Gene IGHV3−20*01

29 sequences assigned



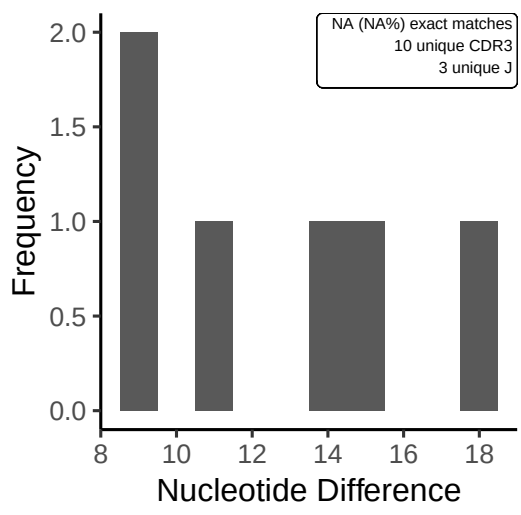
Gene IGHV3−30*03

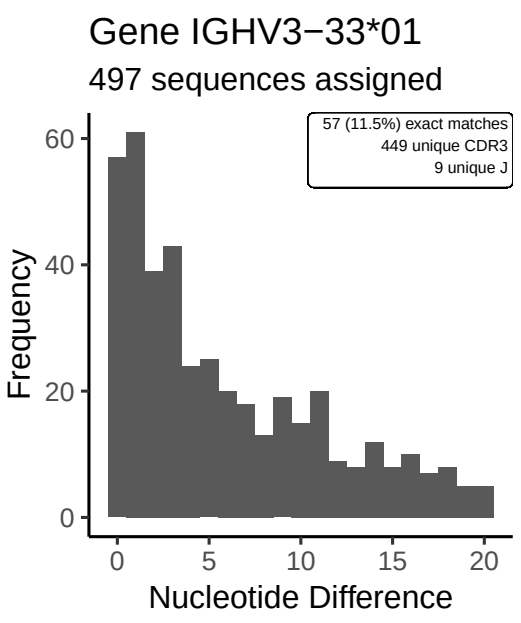
316 sequences assigned

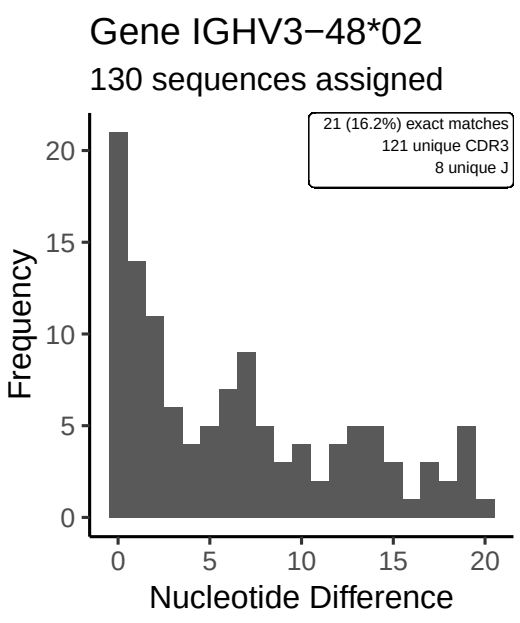


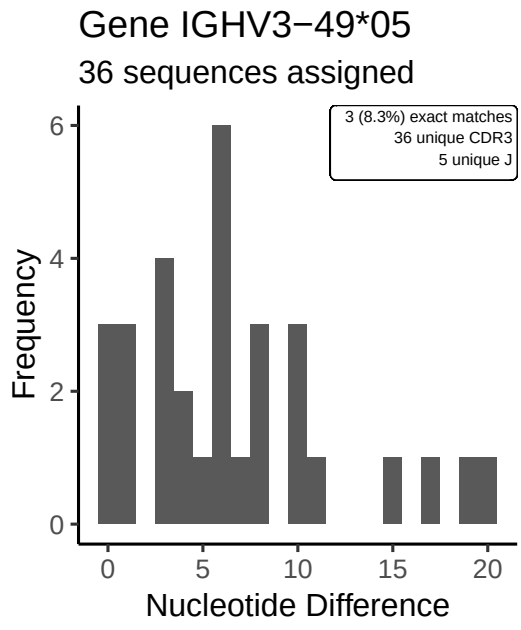
Gene IGHV3−30−3*03

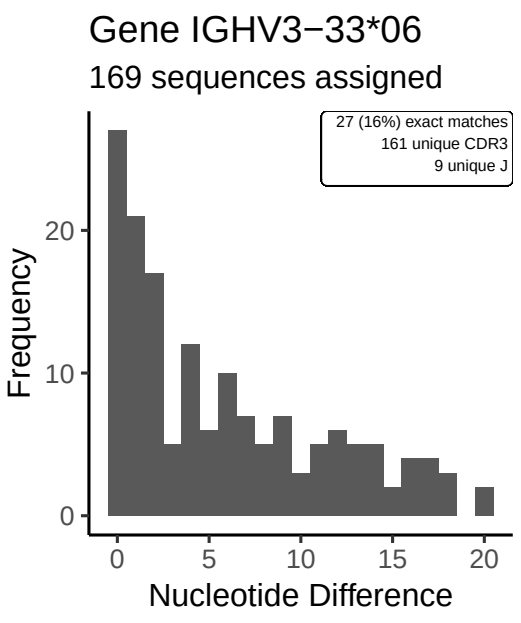
10 sequences assigned

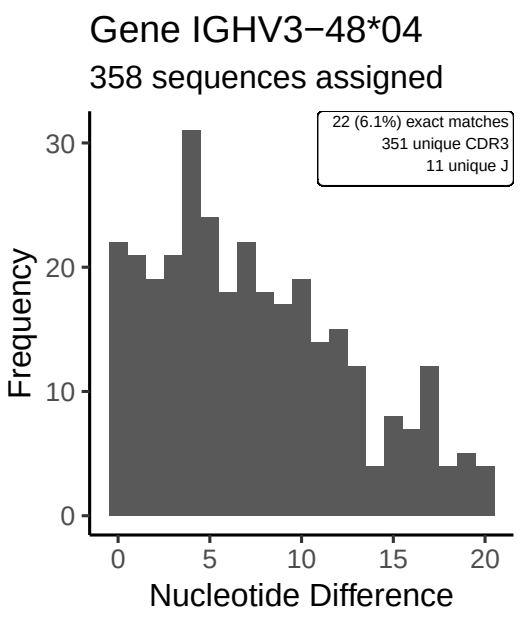


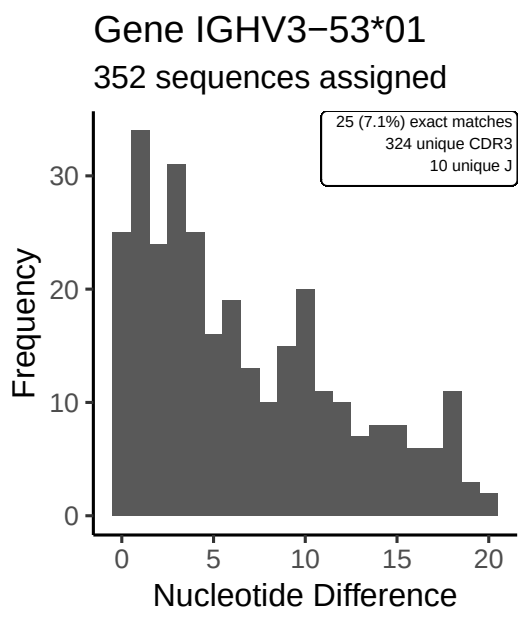

Gene IGHV3−33*01
497 sequences assigned
57 (11.5%) exact matches
449 unique CDR3
9 unique J
Frequency
Nucleotide Difference

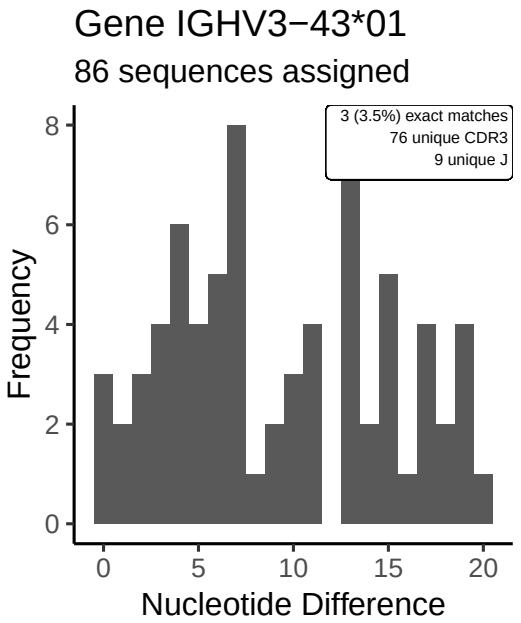

Gene IGHV3−48*02
130 sequences assigned
21 (16.2%) exact matches
121 unique CDR3
8 unique J
Frequency
Nucleotide Difference

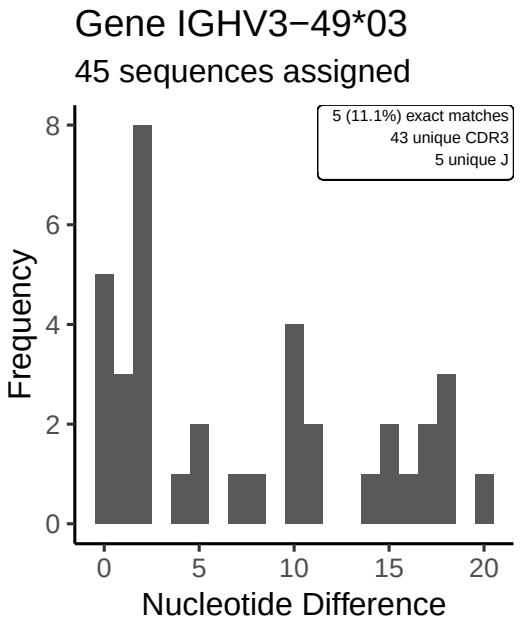

Gene IGHV3−49*05
36 sequences assigned
3 (8.3%) exact matches
36 unique CDR3
5 unique J
Frequency
Nucleotide Difference

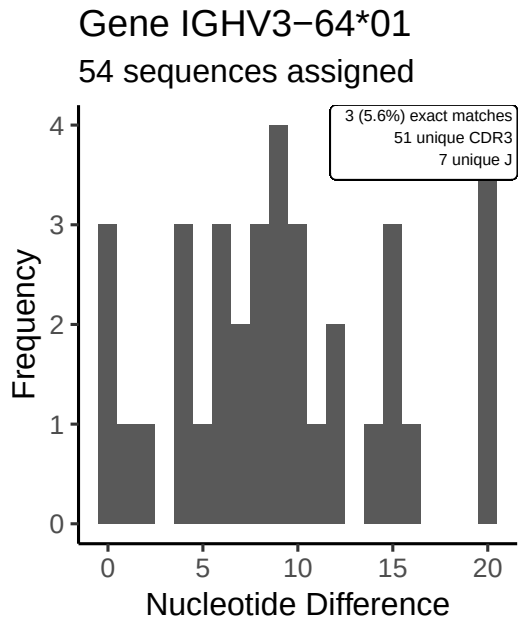

Gene IGHV3−33*06
169 sequences assigned
27 (16%) exact matches
161 unique CDR3
9 unique J
Frequency
Nucleotide Difference

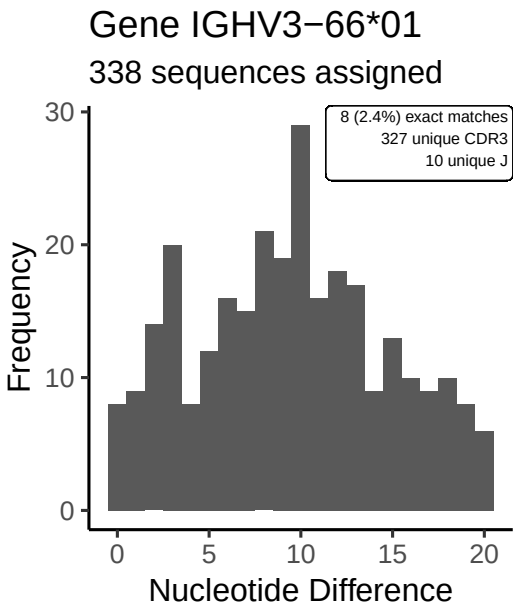

Gene IGHV3−48*04
358 sequences assigned
22 (6.1%) exact matches
351 unique CDR3
11 unique J
Frequency
Nucleotide Difference

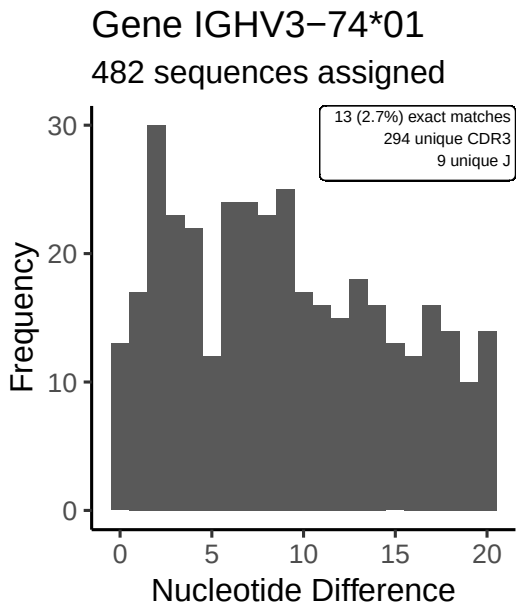

Gene IGHV3−53*01
352 sequences assigned
25 (7.1%) exact matches
324 unique CDR3
10 unique J
Frequency
Nucleotide Difference

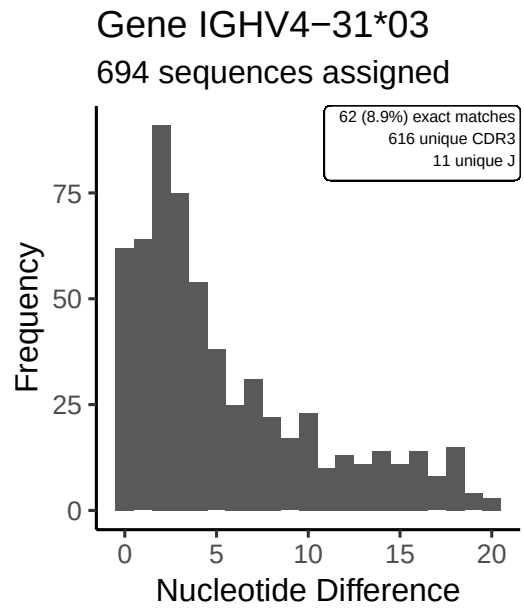

Gene IGHV3−43*01
86 sequences assigned
3 (3.5%) exact matches
76 unique CDR3
9 unique J
Frequency
Nucleotide Difference

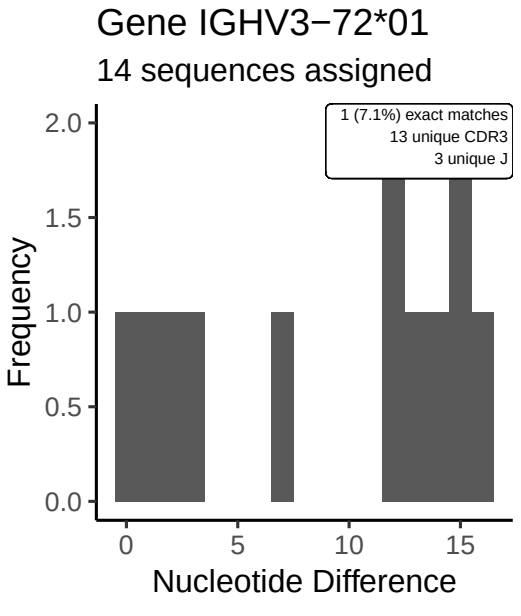

Gene IGHV3−49*03
45 sequences assigned
5 (11.1%) exact matches
43 unique CDR3
5 unique J
Frequency
Nucleotide Difference

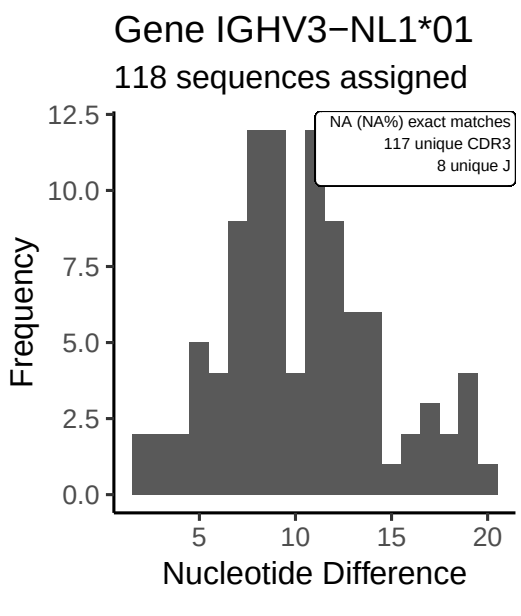

Gene IGHV3−64*01
54 sequences assigned
3 (5.6%) exact matches
51 unique CDR3
7 unique J
Frequency
Nucleotide Difference

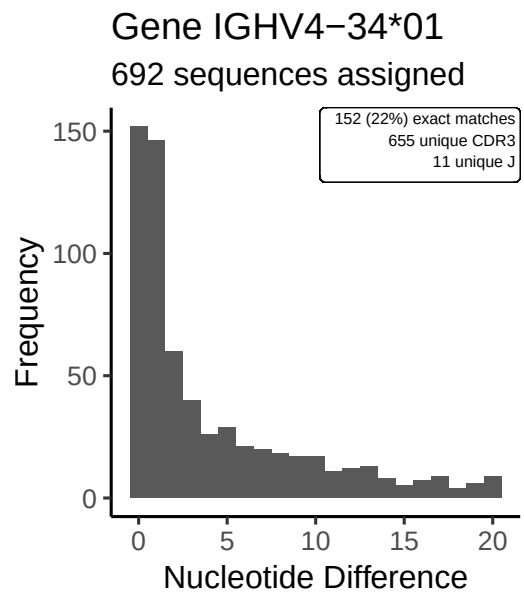

Gene IGHV3−66*01
338 sequences assigned
8 (2.4%) exact matches
327 unique CDR3
10 unique J
Frequency
Nucleotide Difference

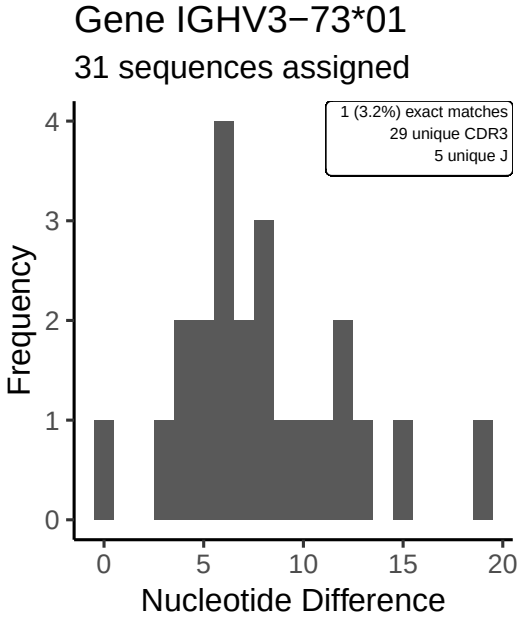

Gene IGHV3−74*01
482 sequences assigned
13 (2.7%) exact matches
294 unique CDR3
9 unique J
Frequency
Nucleotide Difference

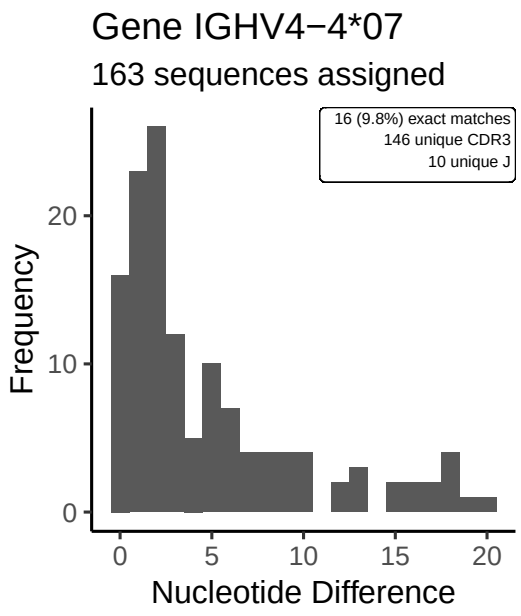

Gene IGHV4−31*03
694 sequences assigned
62 (8.9%) exact matches
616 unique CDR3
11 unique J
Frequency
Nucleotide Difference

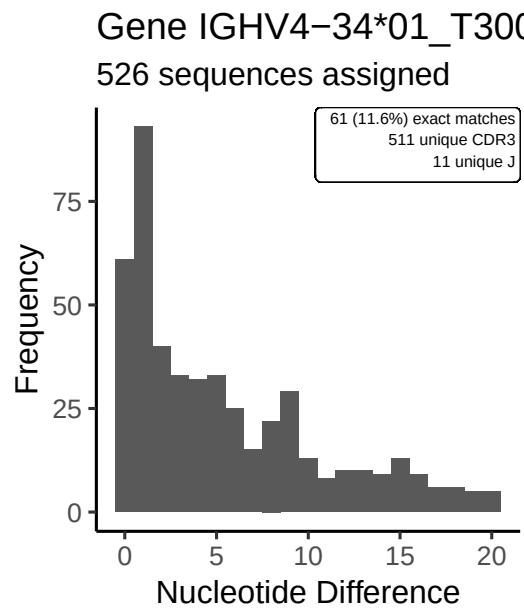

Gene IGHV3−72*01
14 sequences assigned
1 (7.1%) exact matches
13 unique CDR3
3 unique J
Frequency
Nucleotide Difference

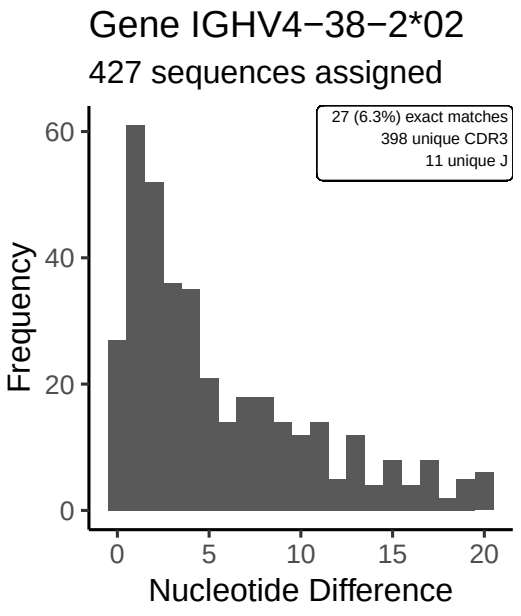

Gene IGHV3−NL1*01
118 sequences assigned
NA (NA%) exact matches
117 unique CDR3
8 unique J
Frequency
Nucleotide Difference

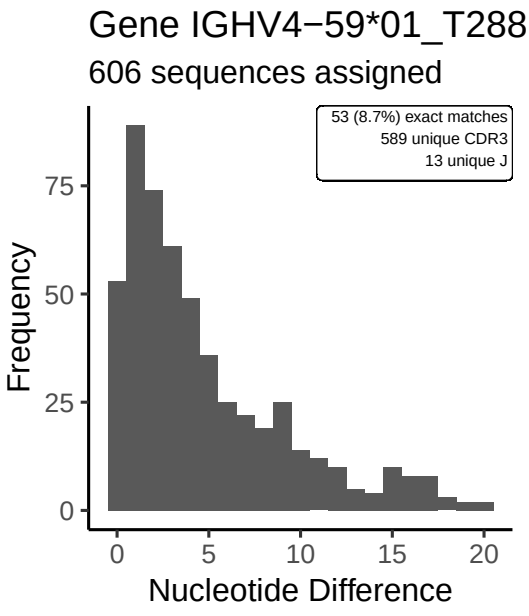

Gene IGHV4−34*01
692 sequences assigned
152 (22%) exact matches
655 unique CDR3
11 unique J
Frequency
Nucleotide Difference

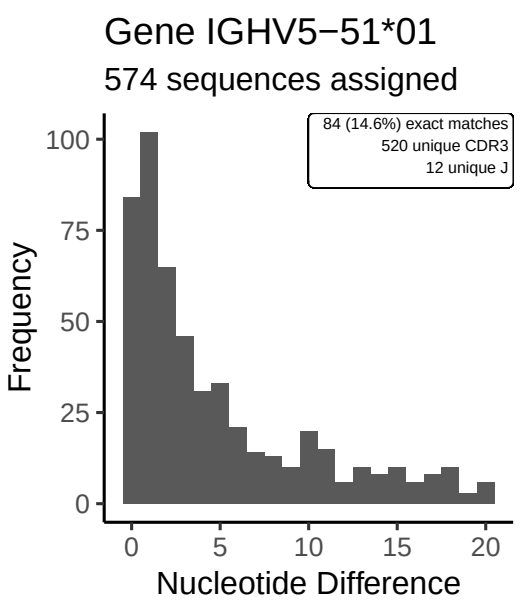

Gene IGHV3−73*01
31 sequences assigned
1 (3.2%) exact matches
29 unique CDR3
5 unique J
Frequency
Nucleotide Difference

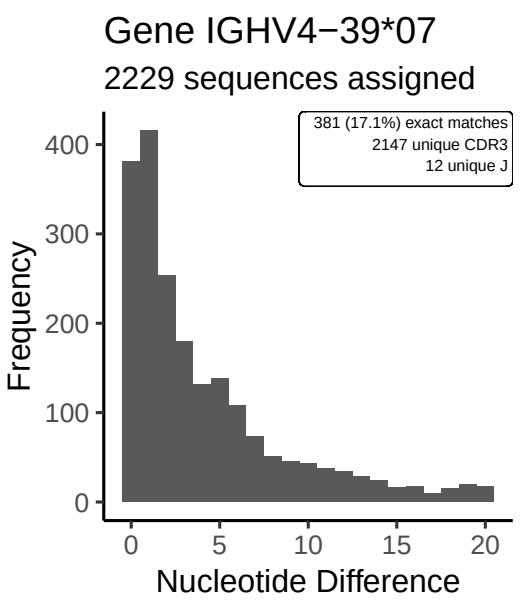

Gene IGHV4−4*07
163 sequences assigned
16 (9.8%) exact matches
146 unique CDR3
10 unique J
Frequency
Nucleotide Difference

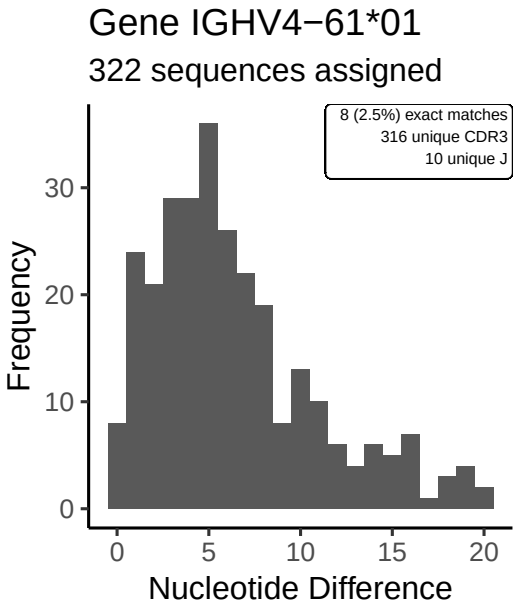

Gene IGHV4−34*01_T300
526 sequences assigned
61 (11.6%) exact matches
511 unique CDR3
11 unique J
Frequency
Nucleotide Difference

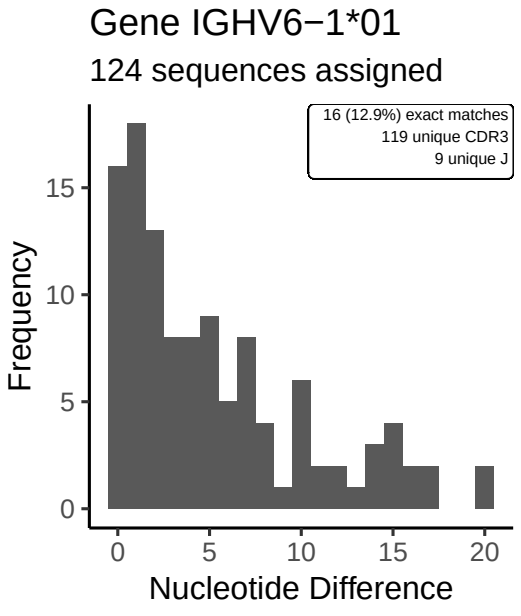

Gene IGHV4−38−2*02
427 sequences assigned
27 (6.3%) exact matches
398 unique CDR3
11 unique J
Frequency
Nucleotide Difference

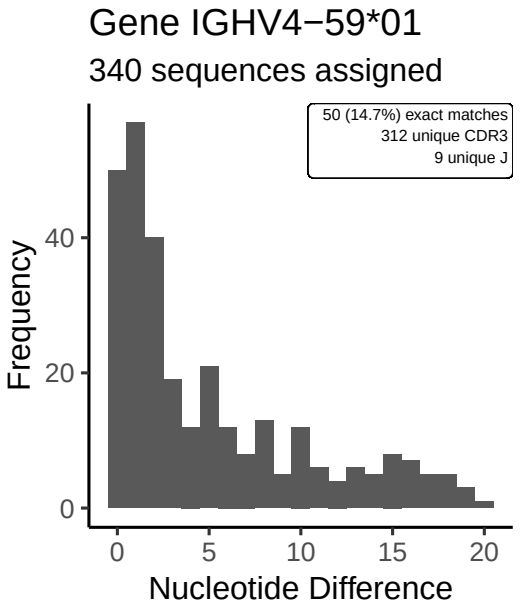

Gene IGHV4−59*01_T288
606 sequences assigned
53 (8.7%) exact matches
589 unique CDR3
13 unique J
Frequency
Nucleotide Difference

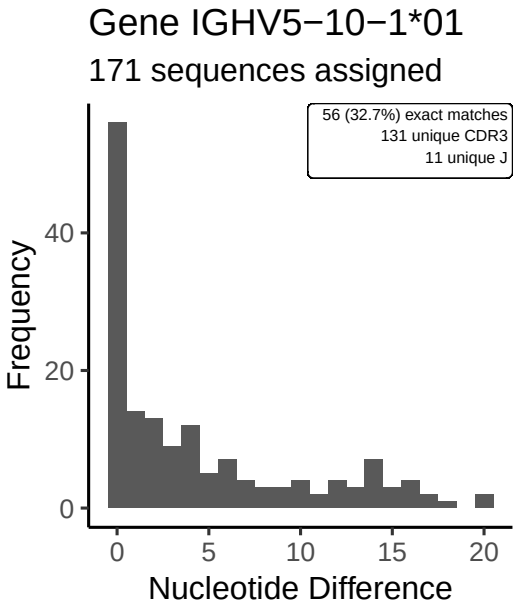

Gene IGHV5−51*01
574 sequences assigned
84 (14.6%) exact matches
520 unique CDR3
12 unique J
Frequency
Nucleotide Difference

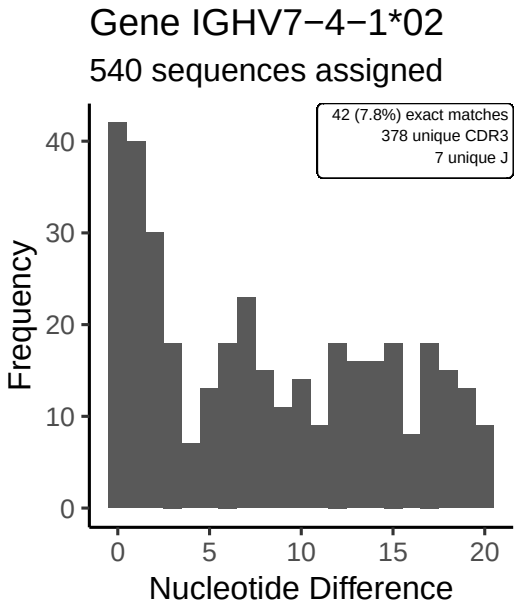

Gene IGHV4−39*07
2229 sequences assigned
381 (17.1%) exact matches
2147 unique CDR3
12 unique J
Frequency
Nucleotide Difference

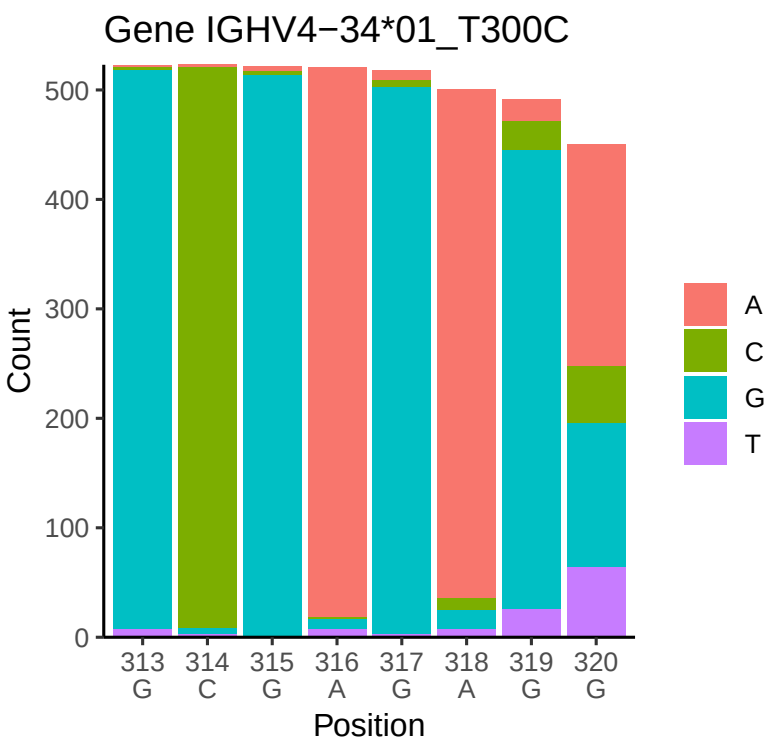

Gene IGHV4−61*01
322 sequences assigned
8 (2.5%) exact matches
316 unique CDR3
10 unique J
Frequency
Nucleotide Difference

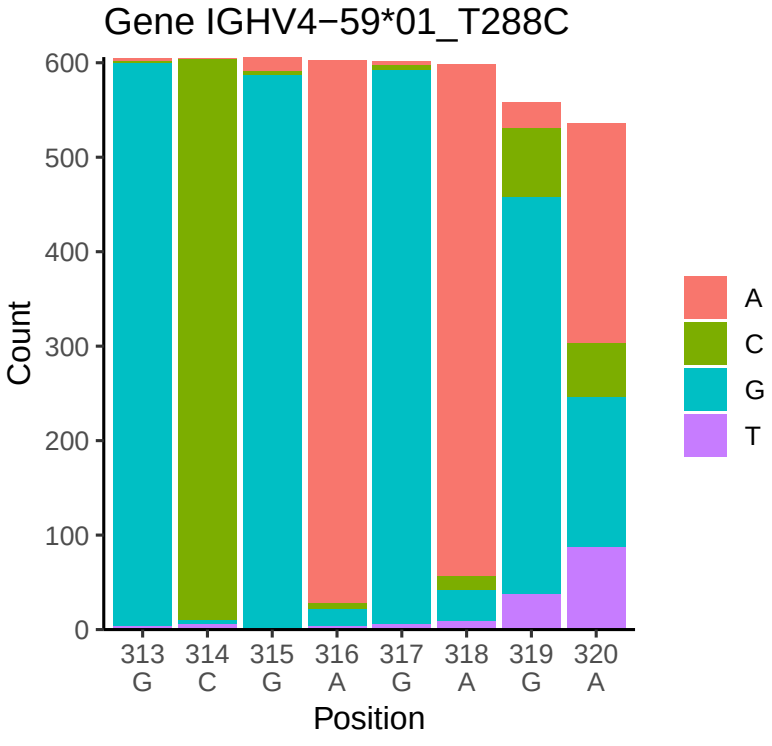

Gene IGHV6−1*01
124 sequences assigned
16 (12.9%) exact matches
119 unique CDR3
9 unique J
Frequency
Nucleotide Difference

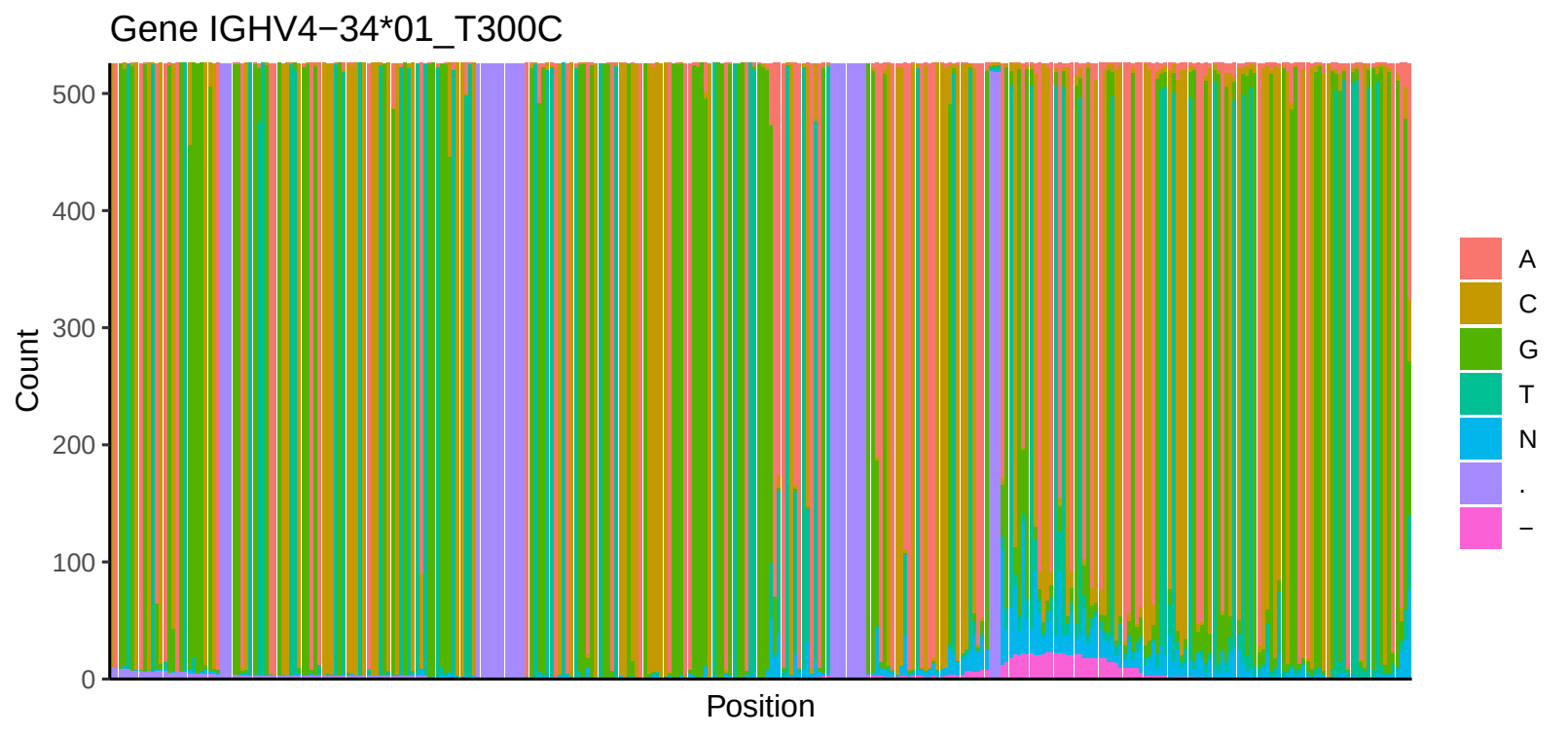

Gene IGHV4−59*01
340 sequences assigned
50 (14.7%) exact matches
312 unique CDR3
9 unique J
Frequency
Nucleotide Difference

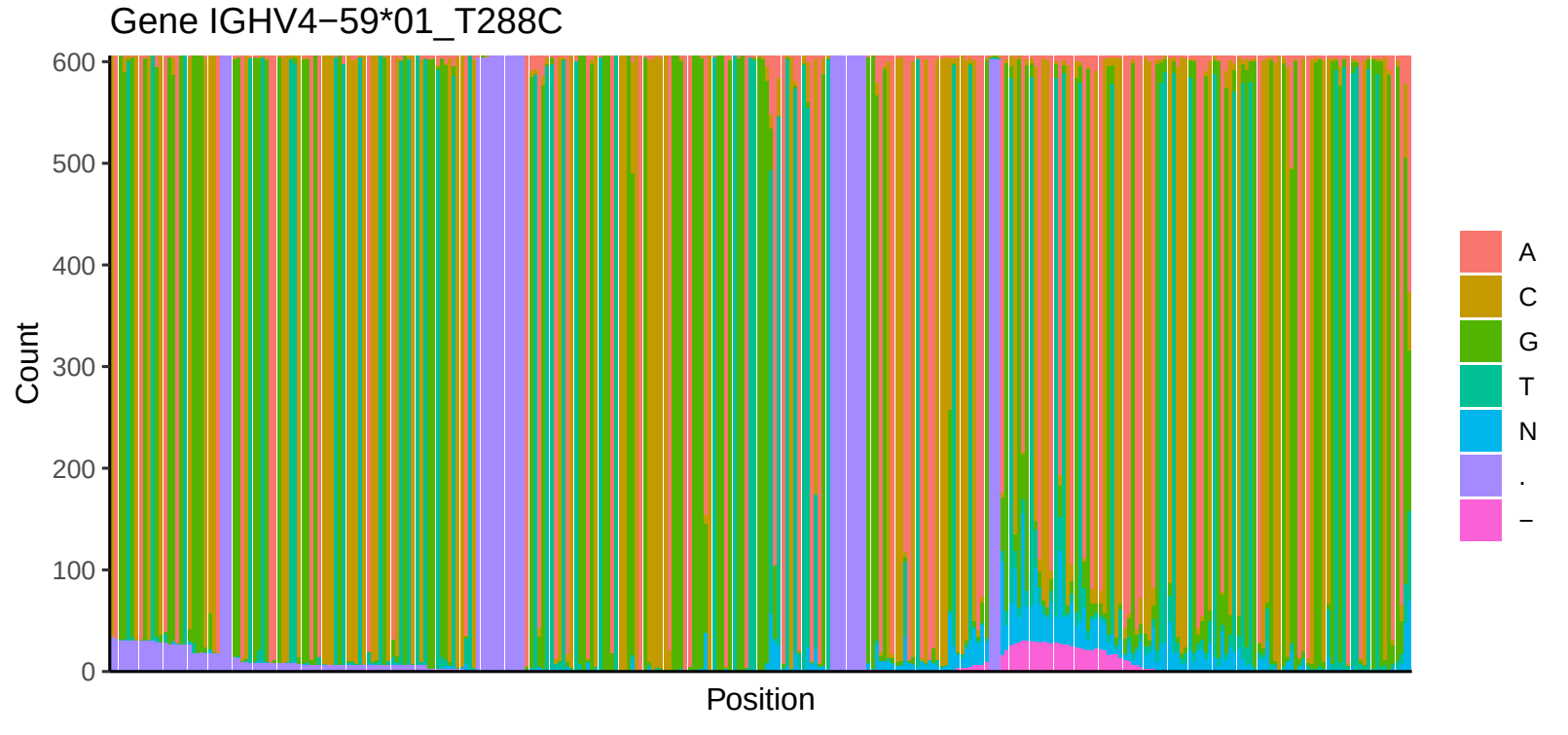

Gene IGHV5−10−1*01
171 sequences assigned
56 (32.7%) exact matches
131 unique CDR3
11 unique J
Frequency
Nucleotide Difference

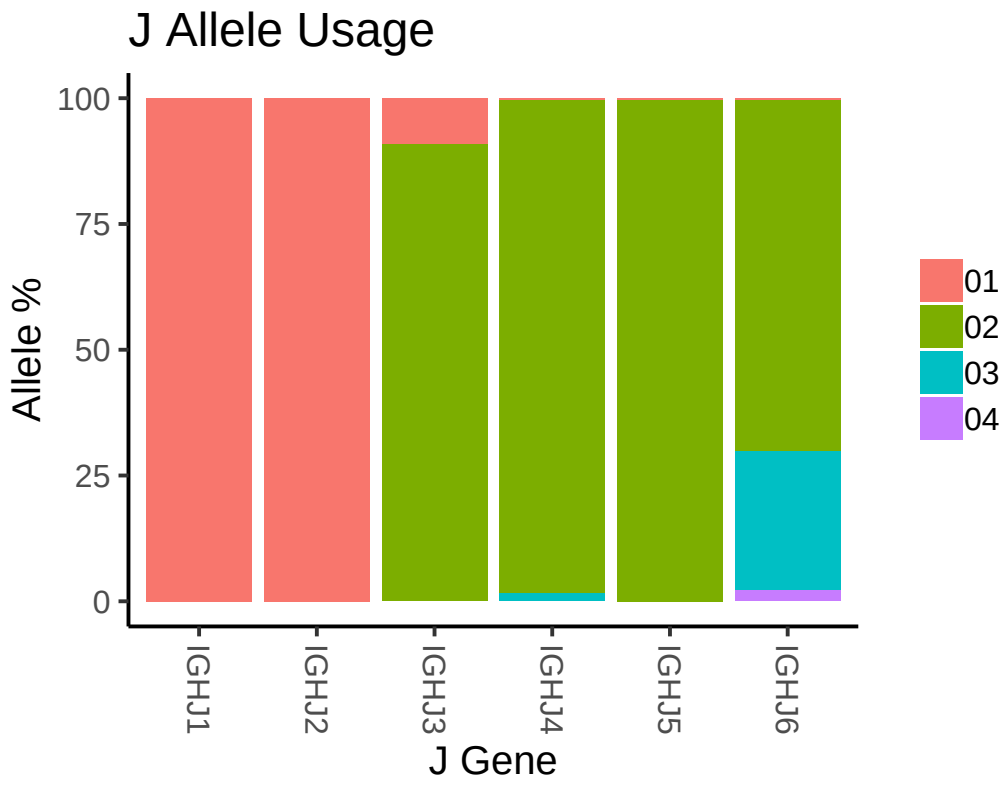

Gene IGHV7−4−1*02
540 sequences assigned
42 (7.8%) exact matches
378 unique CDR3
7 unique J
Frequency
Nucleotide Difference

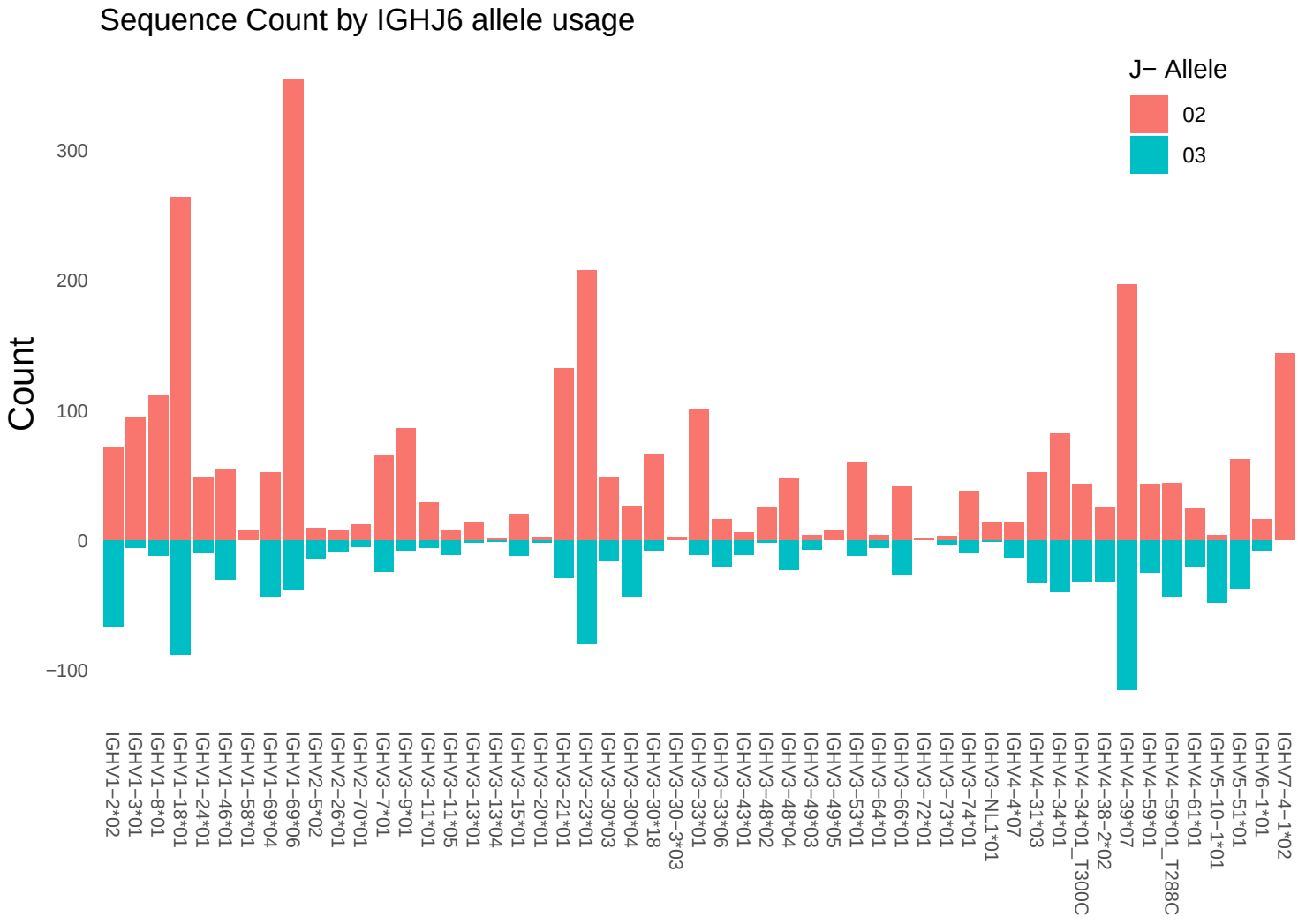

Gene IGHV4−34*01_T300C
Count
500
400
300
200
100
0
313 G
314 C
315 G
316 A
317 G
318 A
319 G
320 G
Position
A
C
G
T


Gene IGHV4−59*01_T288C
Count
600
500
400
300
200
100
0
313 G
314 C
315 G
316 A
317 G
318 A
319 G
320 A
Position
A
C
G
T


Gene IGHV4−34*01_T300C
Count
0
100
200
300
400
500
Position
A
C
G
T
N
.
–


Gene IGHV4−59*01_T288C
Count
0
100
200
300
400
500
600
Position
A
C
G
T
N
.
–


J Allele Usage
100
75
50
25
0
Allele %
IGHJ1
IGHJ2
IGHJ3
IGHJ4
IGHJ5
IGHJ6
J Gene
01
02
03
04


Sequence Count by IGHJ6 allele usage
J− Allele
02
03
Count
300
200
100
0
−100
IGHV1−2*02
IGHV1−3*01
IGHV1−8*01
IGHV1−18*01
IGHV1−24*01
IGHV1−46*01
IGHV1−58*01
IGHV1−69*04
IGHV1−69*06
IGHV2−5*02
IGHV2−26*01
IGHV2−70*01
IGHV3−7*01
IGHV3−9*01
IGHV3−11*01
IGHV3−11*05
IGHV3−13*01
IGHV3−13*04
IGHV3−15*01
IGHV3−20*01
IGHV3−21*01
IGHV3−23*01
IGHV3−30*03
IGHV3−30*04
IGHV3−30*18
IGHV3−30−3*03
IGHV3−33*01
IGHV3−33*06
IGHV3−43*01
IGHV3−48*02
IGHV3−48*04
IGHV3−49*03
IGHV3−49*05
IGHV3−53*01
IGHV3−64*01
IGHV3−66*01
IGHV3−72*01
IGHV3−73*01
IGHV3−74*01
IGHV3−NL1*01
IGHV4−4*07
IGHV4−31*03
IGHV4−34*01
IGHV4−34*01_T300C
IGHV4−38−2*02
IGHV4−39*07
IGHV4−59*01
IGHV4−59*01_T288C
IGHV4−61*01
IGHV5−10−1*01
IGHV5−51*01
IGHV6−1*01
IGHV7−4−1*02