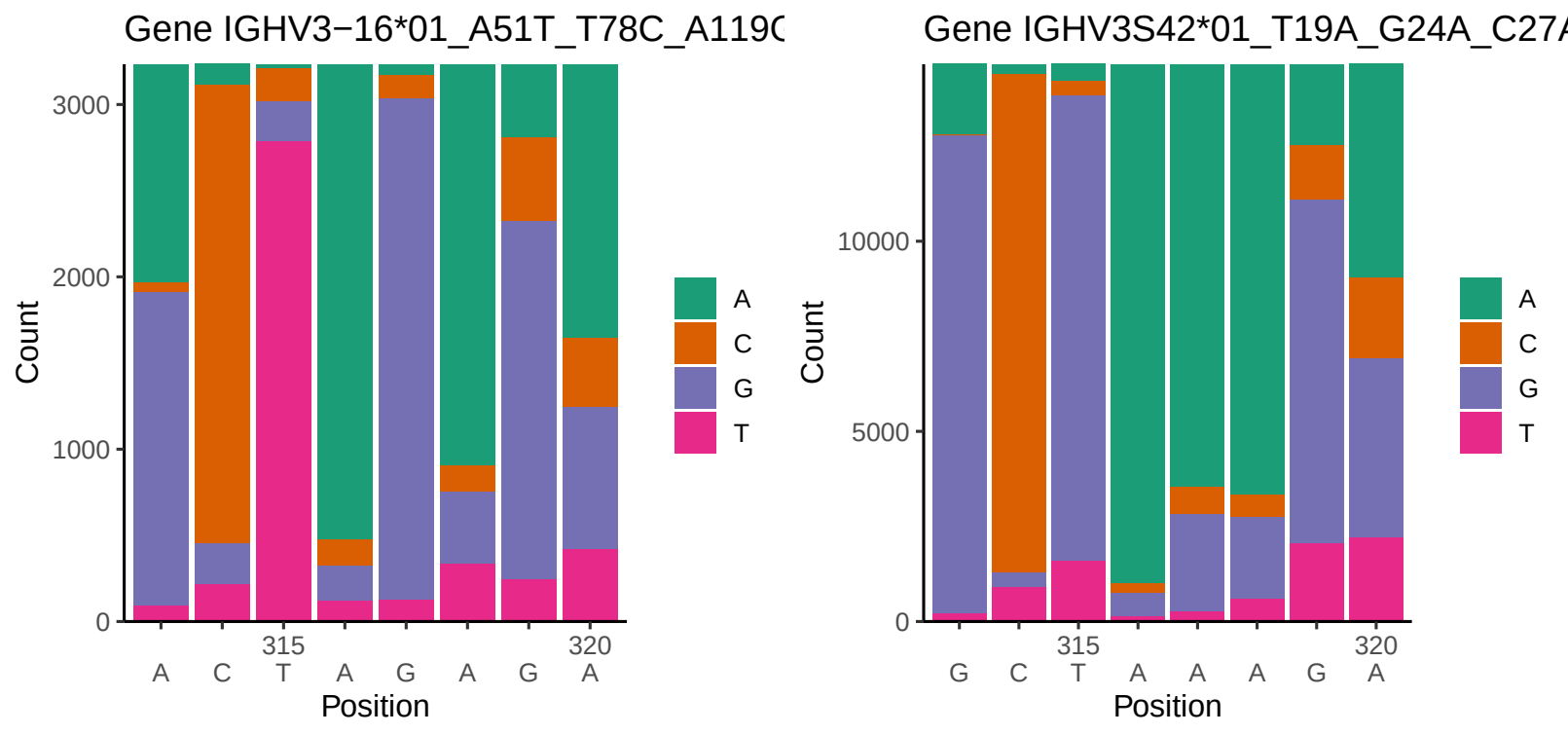
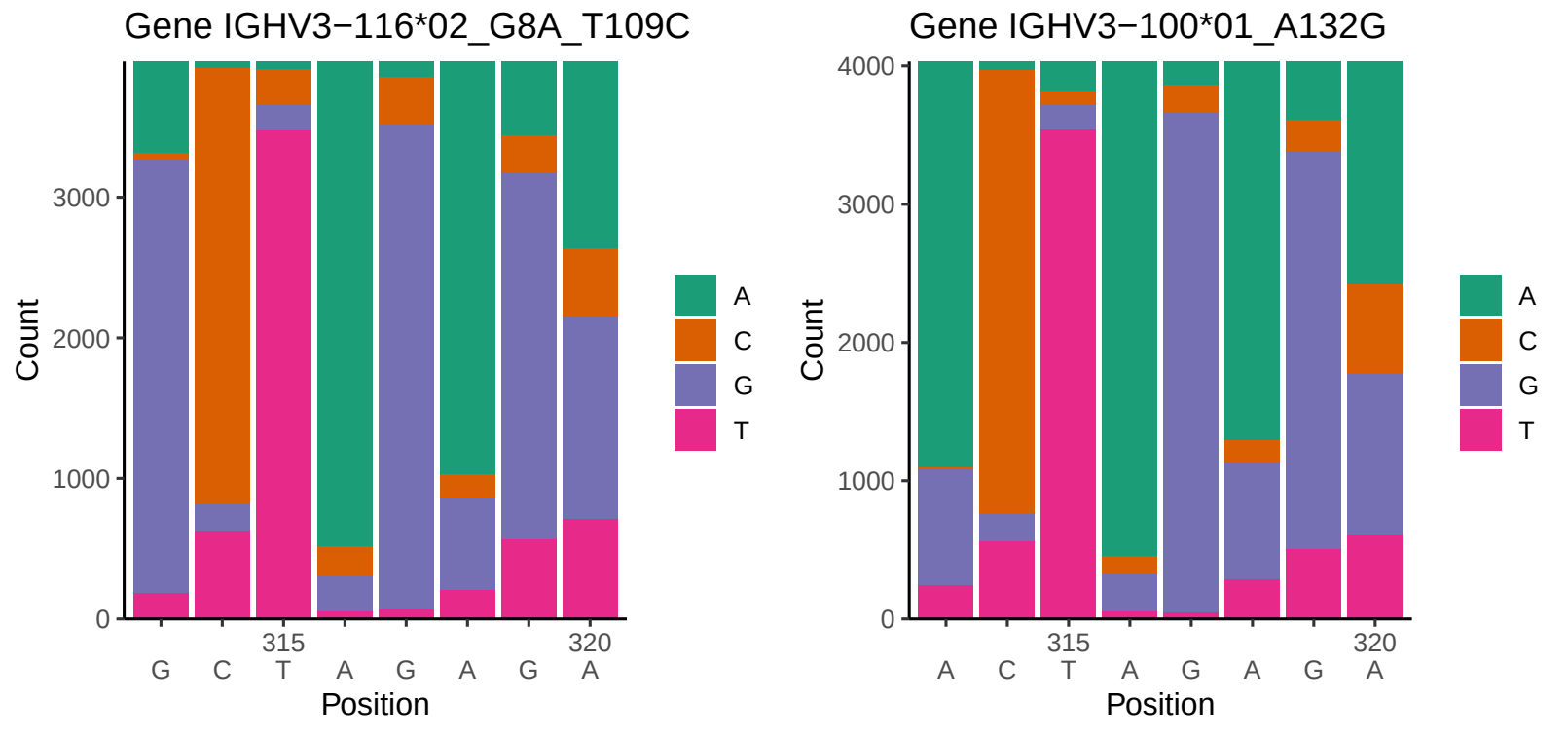
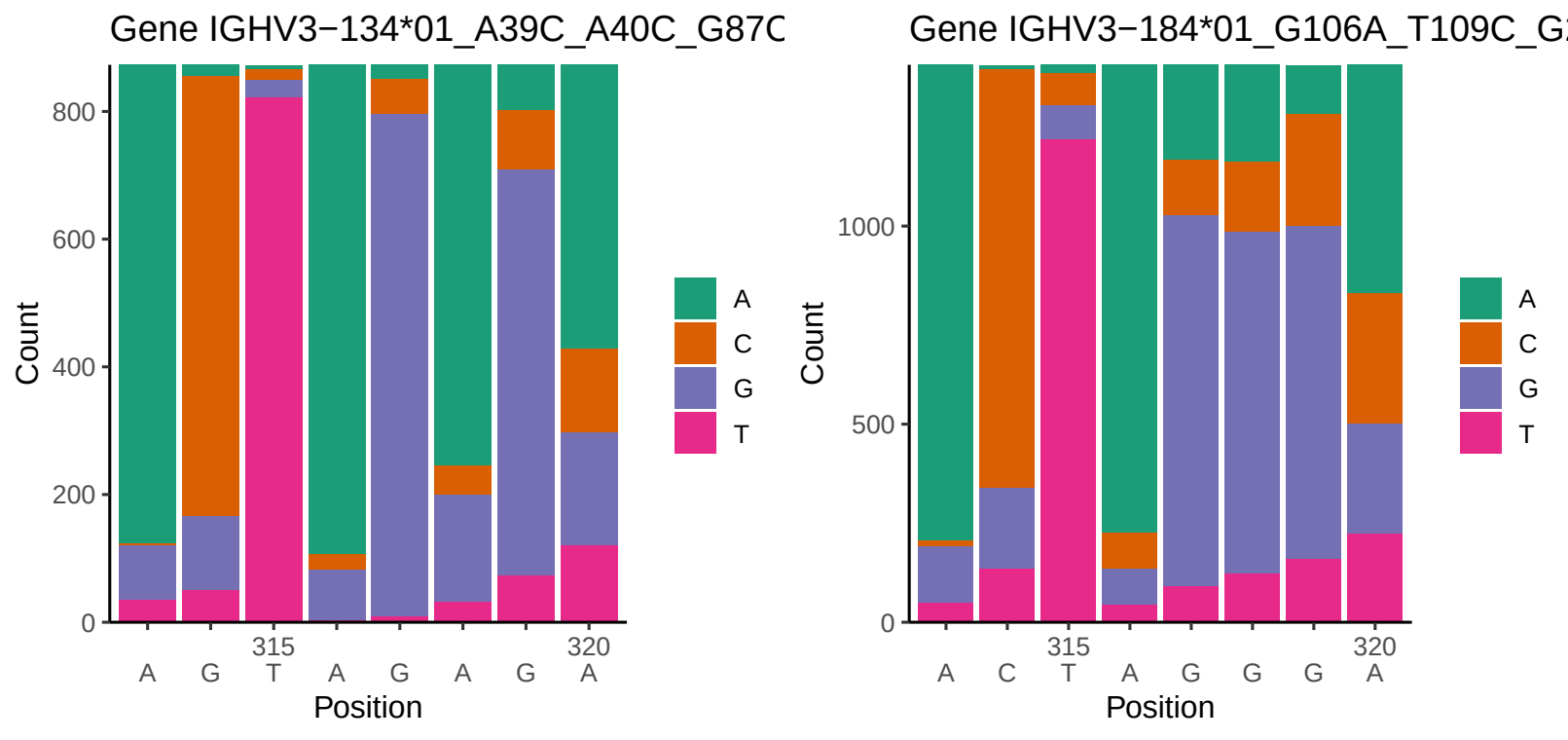

Gene IGHV3−16*01_A51T_T78C_A119C
Count
3000
2000
1000
0
315
320
A C T A G A G A
Position
A
C
G
T

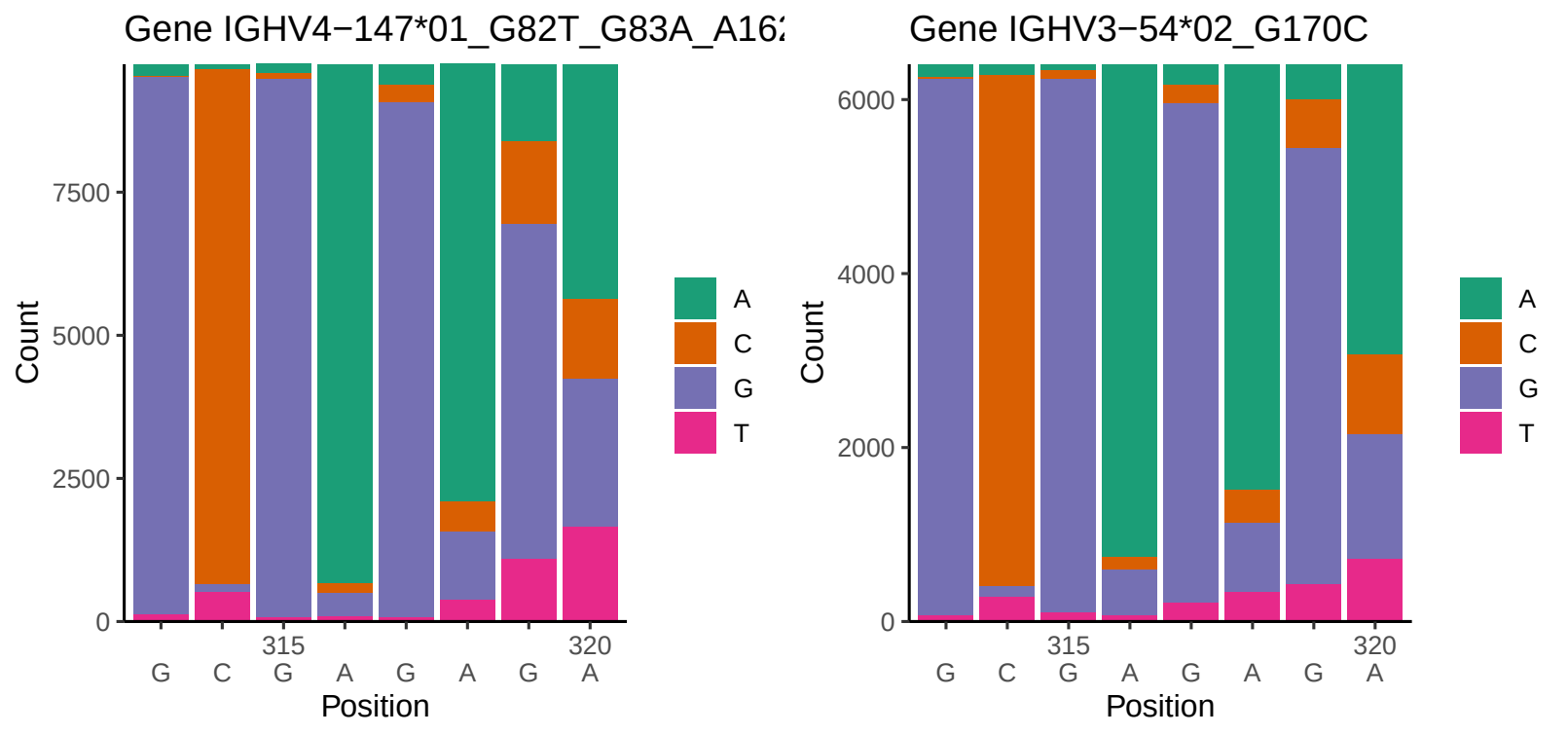
Gene IGHV3S42*01_T19A_G24A_C27A
Count
10000
5000
0
315
320
G C T A A A G A
Position
A
C
G
T


Gene IGHV3−116*02_G8A_T109C
Count
3000
2000
1000
0
315
320
G C T A G A G A
Position
A
C
G
T

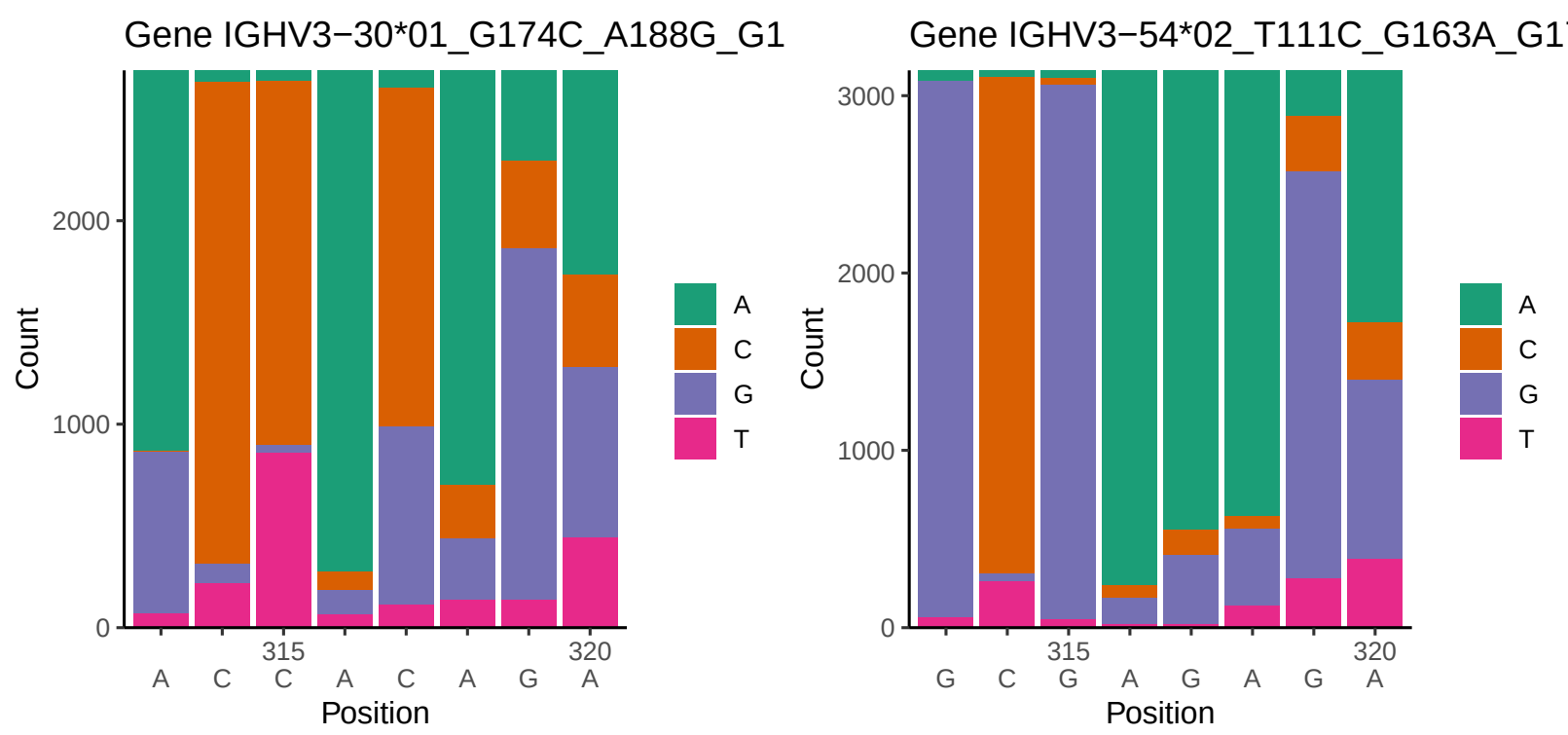
Gene IGHV3−100*01_A132G
Count
4000
3000
2000
1000
0
315
320
A C T A G A G A
Position
A
C
G
T


Gene IGHV3−134*01_A39C_A40C_G87C
Count
800
600
400
200
0
315
320
A G T A G A G A
Position
A
C
G
T

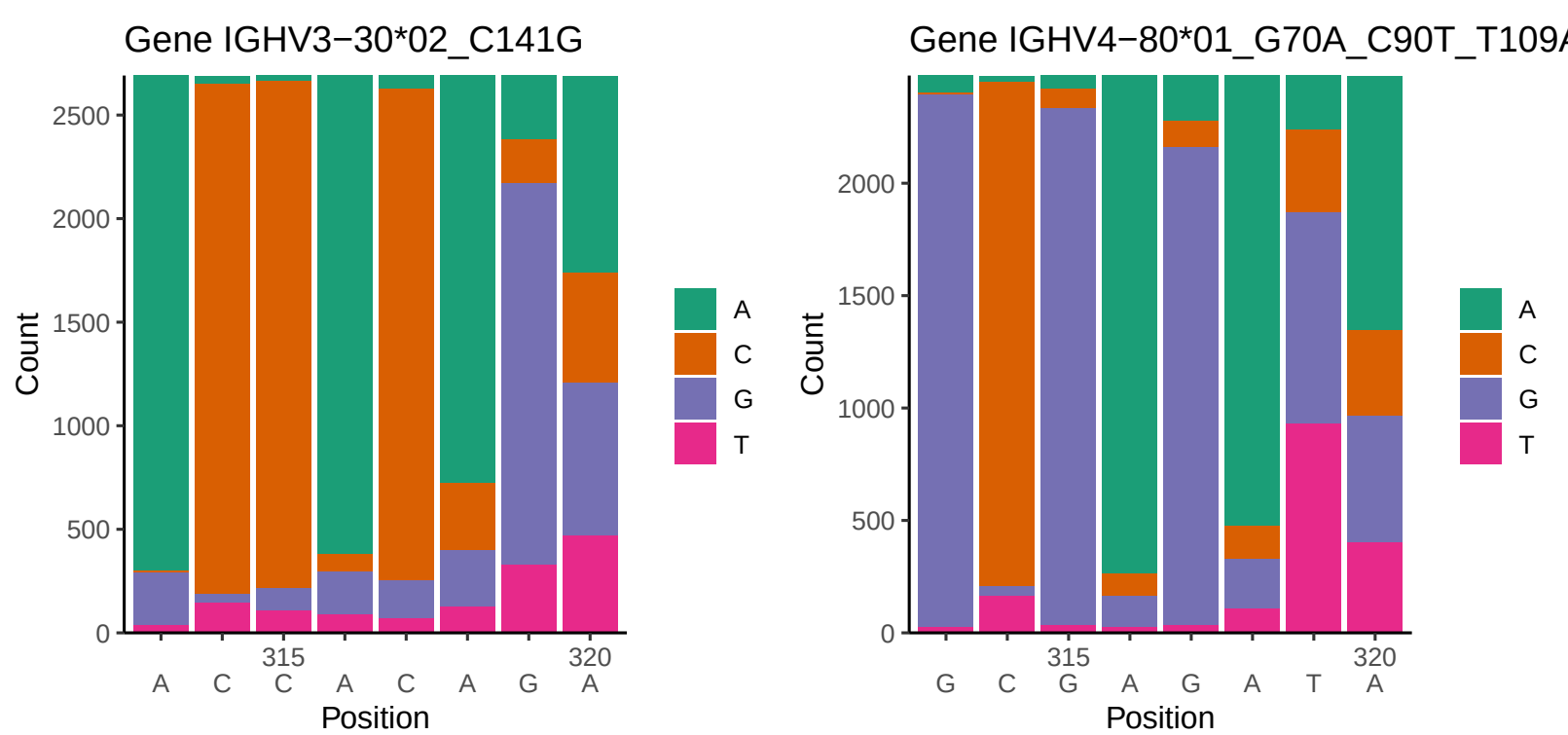
Gene IGHV3−184*01_G106A_T109C_G
Count
1000
500
0
315
320
A C T A G G G A
Position
A
C
G
T


Gene IGHV4−147*01_G82T_G83A_A16
Count
7500
5000
2500
0
315
320
G C G A G A G A
Position
A
C
G
T

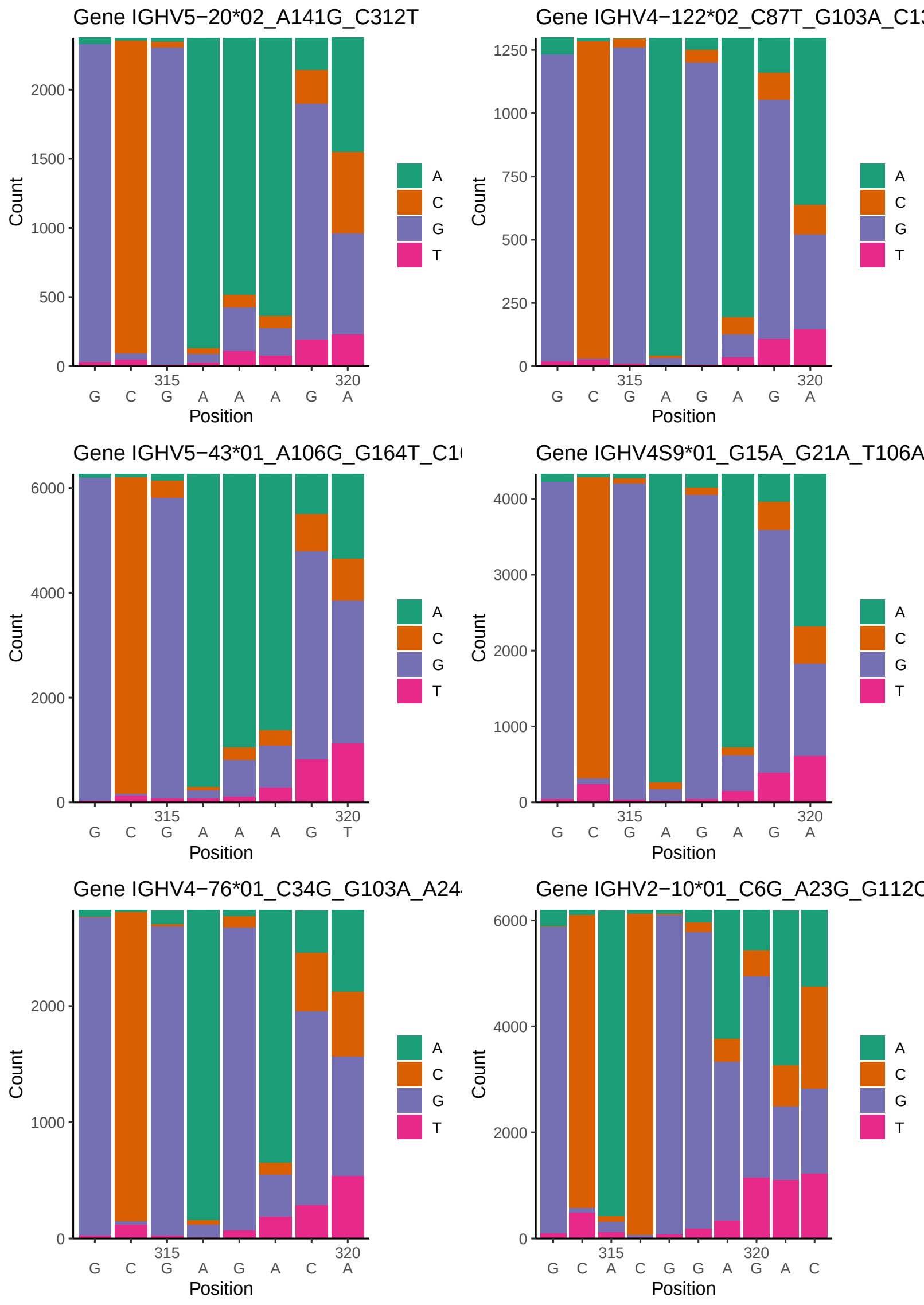
Gene IGHV3−54*02_G170C
Count
6000
4000
2000
0
315
320
G C G A G A G A
Position
A
C
G
T

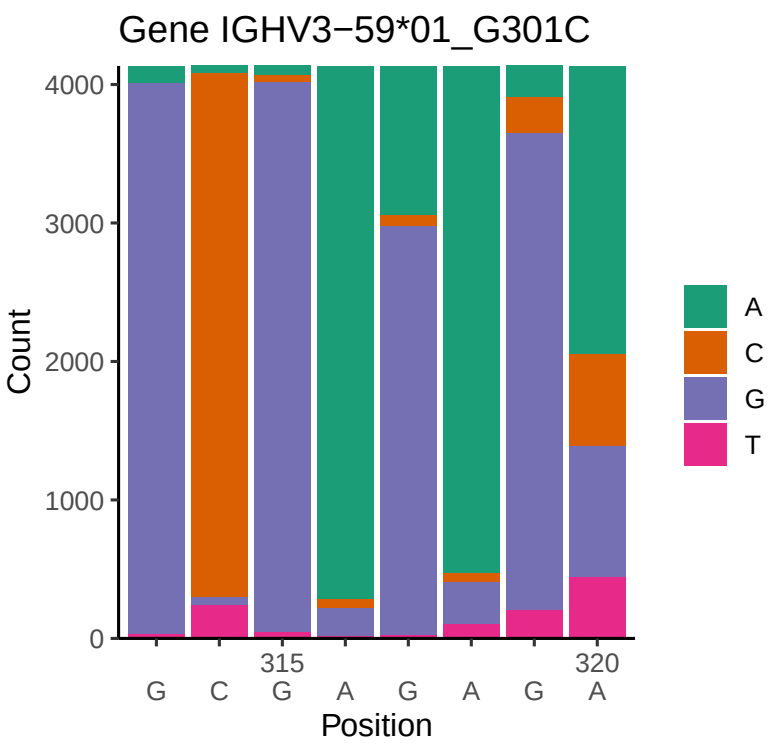

Gene IGHV3−30*01_G174C_A188G_G1
Count
2000
1000
0
315
320
A C C A C A G A
Position
A
C
G
T

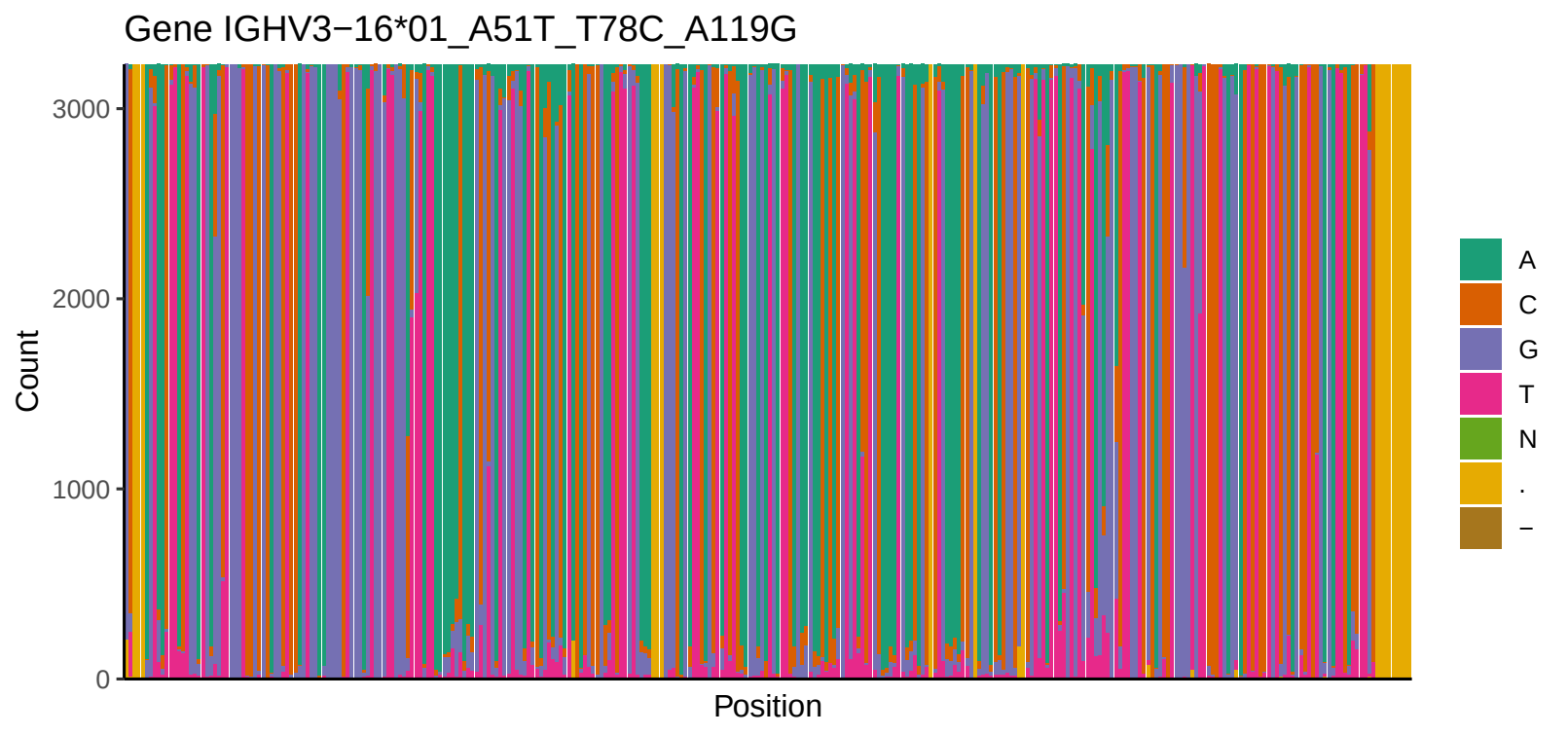
Gene IGHV3−54*02_T111C_G163A_G1
Count
3000
2000
1000
0
315
320
G C G A G A G A
Position
A
C
G
T

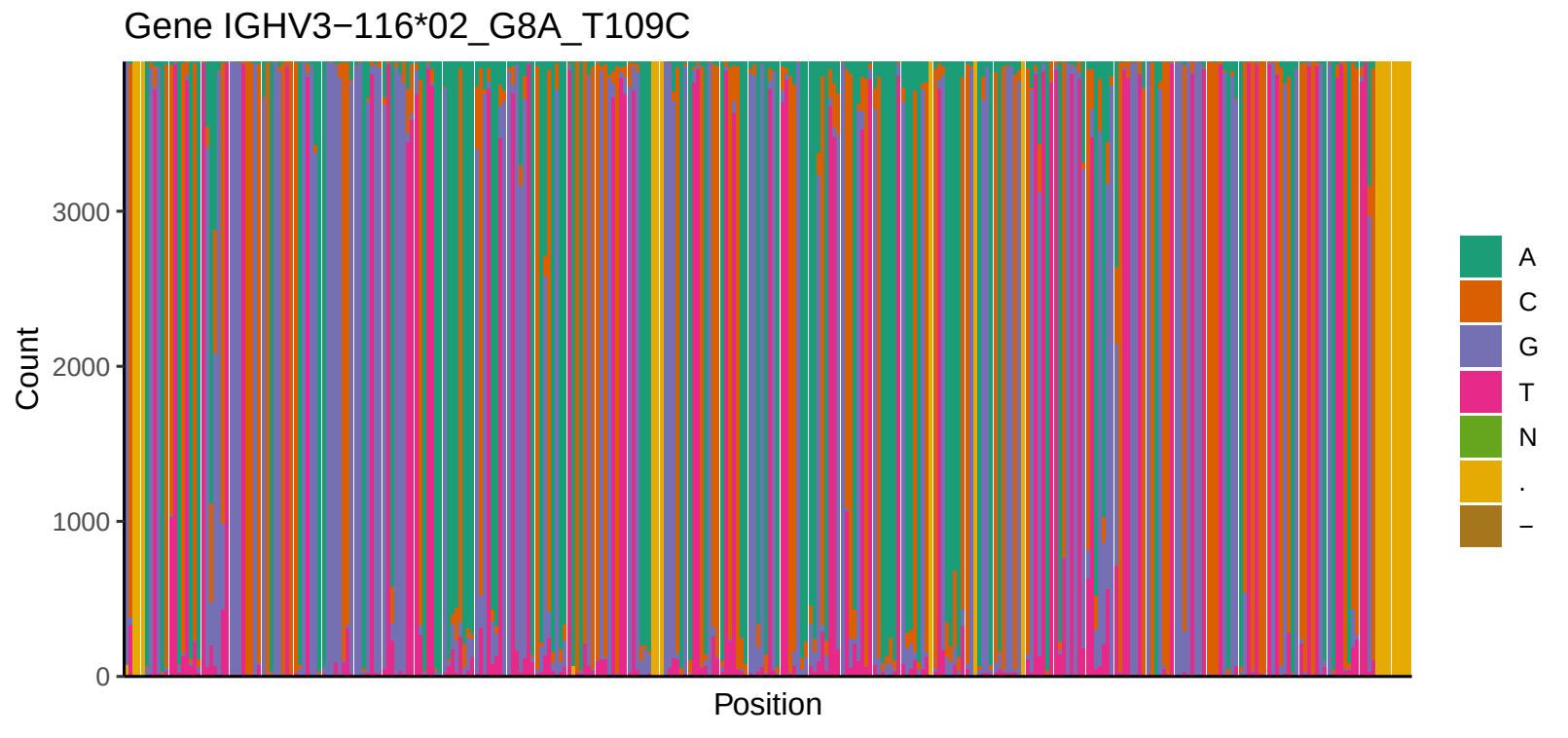

Gene IGHV3−30*02_C141G
Count
2500
2000
1500
1000
500
0
315
320
A C C A C A G A
Position
A
C
G
T

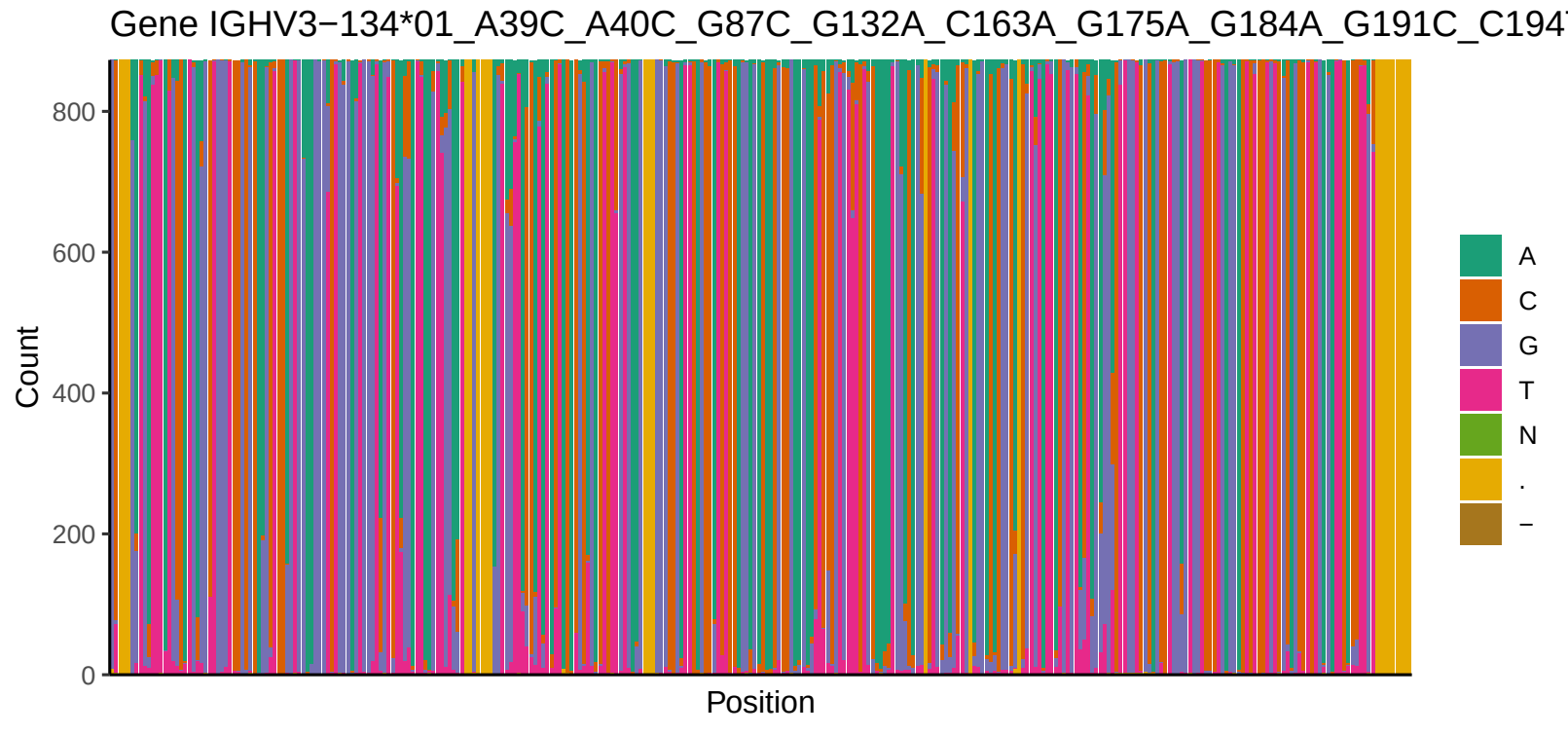
Gene IGHV4−80*01_G70A_C90T_T109
Count
2000
1500
1000
500
0
315
320
G C G A G A T A
Position
A
C
G
T

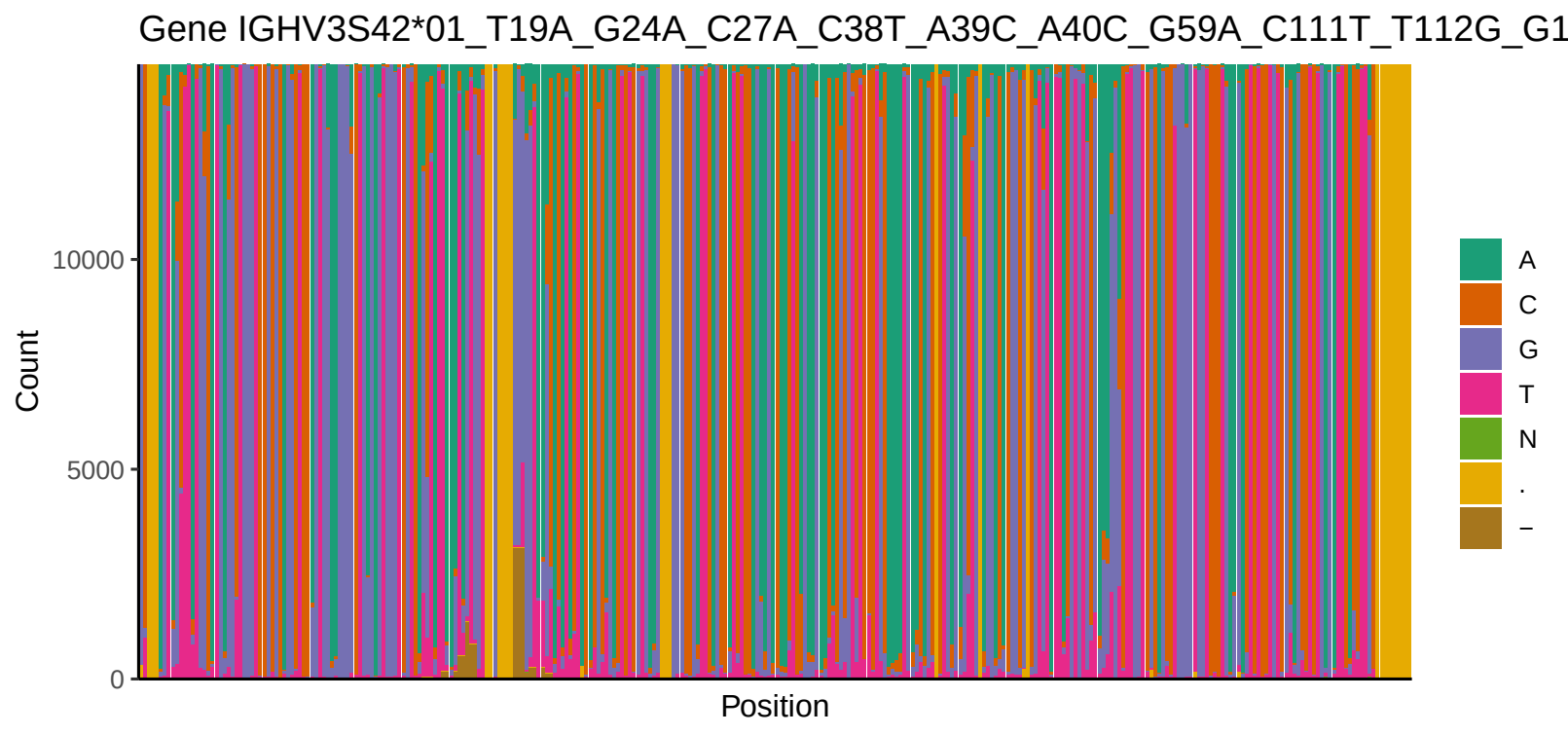

Gene IGHV5−20*02_A141G_C312T
Count
Position
315
320
G C G A A A G A
A
C
G
T
Gene IGHV4−122*02_C87T_G103A_C13
Count
Position
315
320
G C G A G A G A
A
C
G
T
Gene IGHV5−43*01_A106G_G164T_C1(
Count
Position
315
320
G C G A A A G T
A
C
G
T
Gene IGHV4S9*01_G15A_G21A_T106A
Count
Position
315
320
G C G A G A G A
A
C
G
T
Gene IGHV4−76*01_C34G_G103A_A24
Count
Position
315
320
G C G A G A C A
A
C
G
T
Gene IGHV2−10*01_C6G_A23G_G112C
Count
Position
315
320
G C A C G G A G A C
A
C
G
T

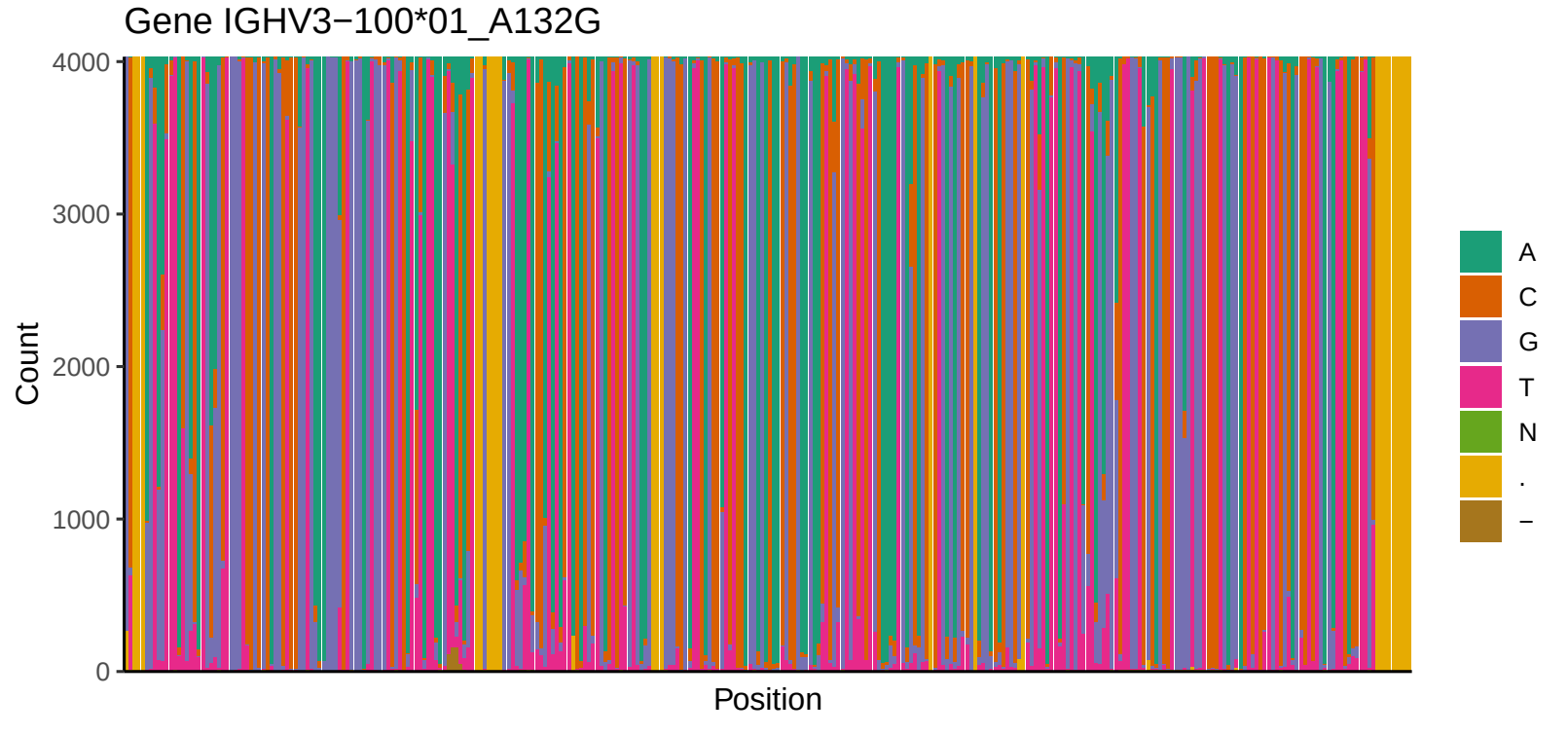

Gene IGHV3−59*01_G301C
Count
4000
3000
2000
1000
0
315
320
G C G A G A G A
Position
A
C
G
T


Gene IGHV3−16*01_A51T_T78C_A119G
Count
3000
2000
1000
0
Position
A
C
G
T
N
.
–


Gene IGHV3−116*02_G8A_T109C
Count
3000
2000
1000
0
Position
A
C
G
T
N
.
–


Gene IGHV3−134*01_A39C_A40C_G87C_G132A_C163A_G175A_G184A_G191C_C194
Count
800
600
400
200
0
Position
A
C
G
T
N
.
–


Gene IGHV3S42*01_T19A_G24A_C27A_C38T_A39C_A40C_G59A_C111T_T112G_G1
Count
10000
5000
0
Position
A
C
G
T
N
.
–


Gene IGHV3−100*01_A132G
Count
4000
3000
2000
1000
0
Position
A
C
G
T
N
.
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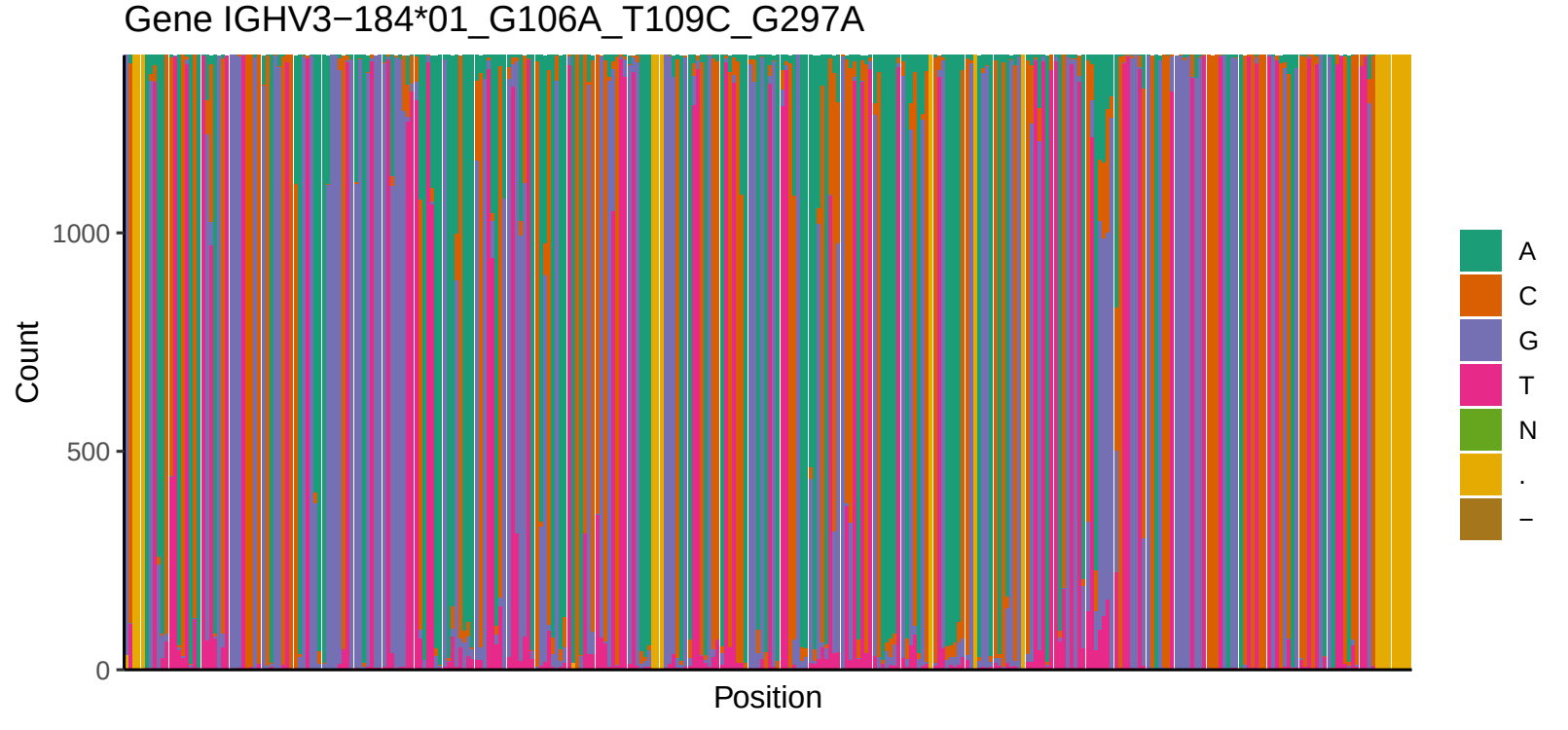
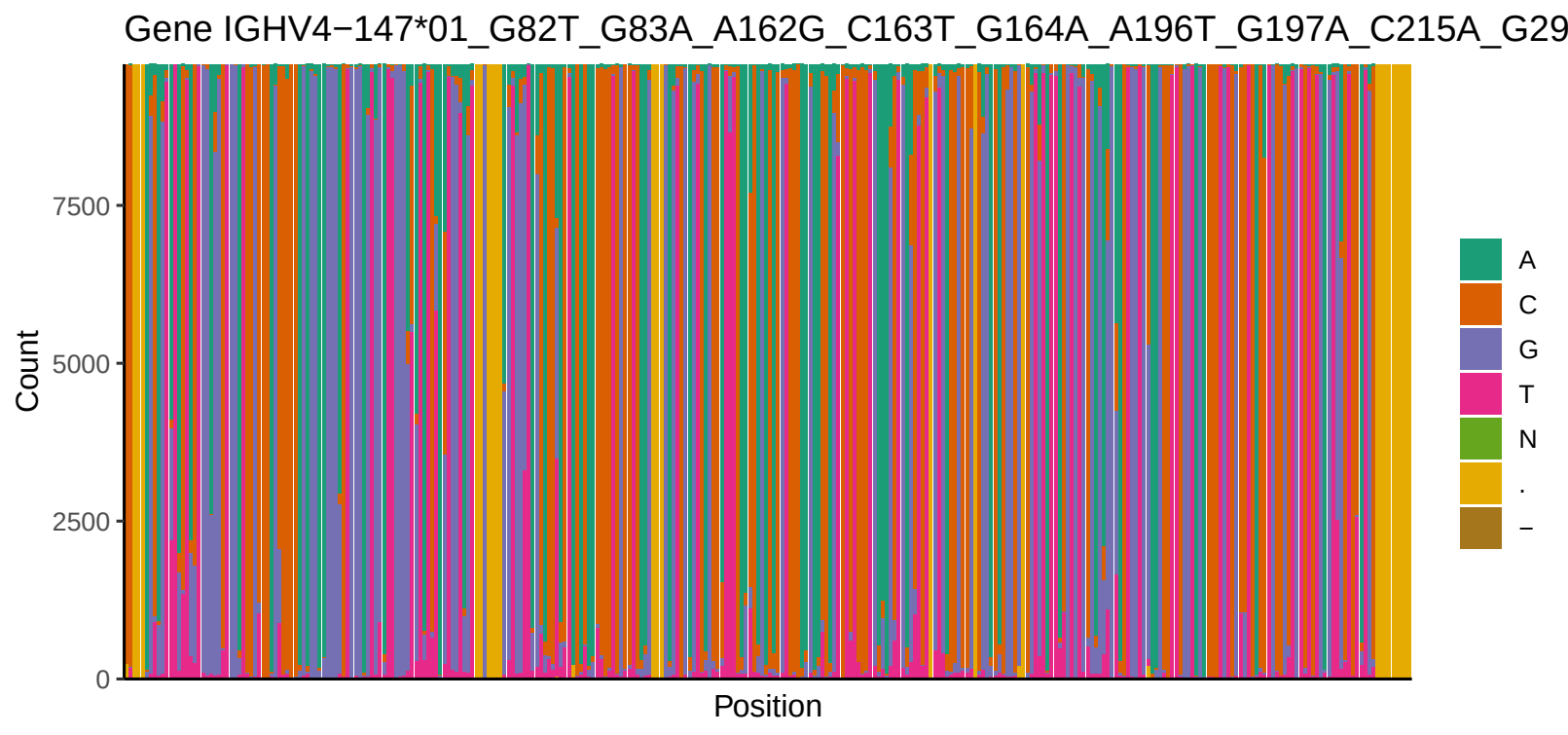
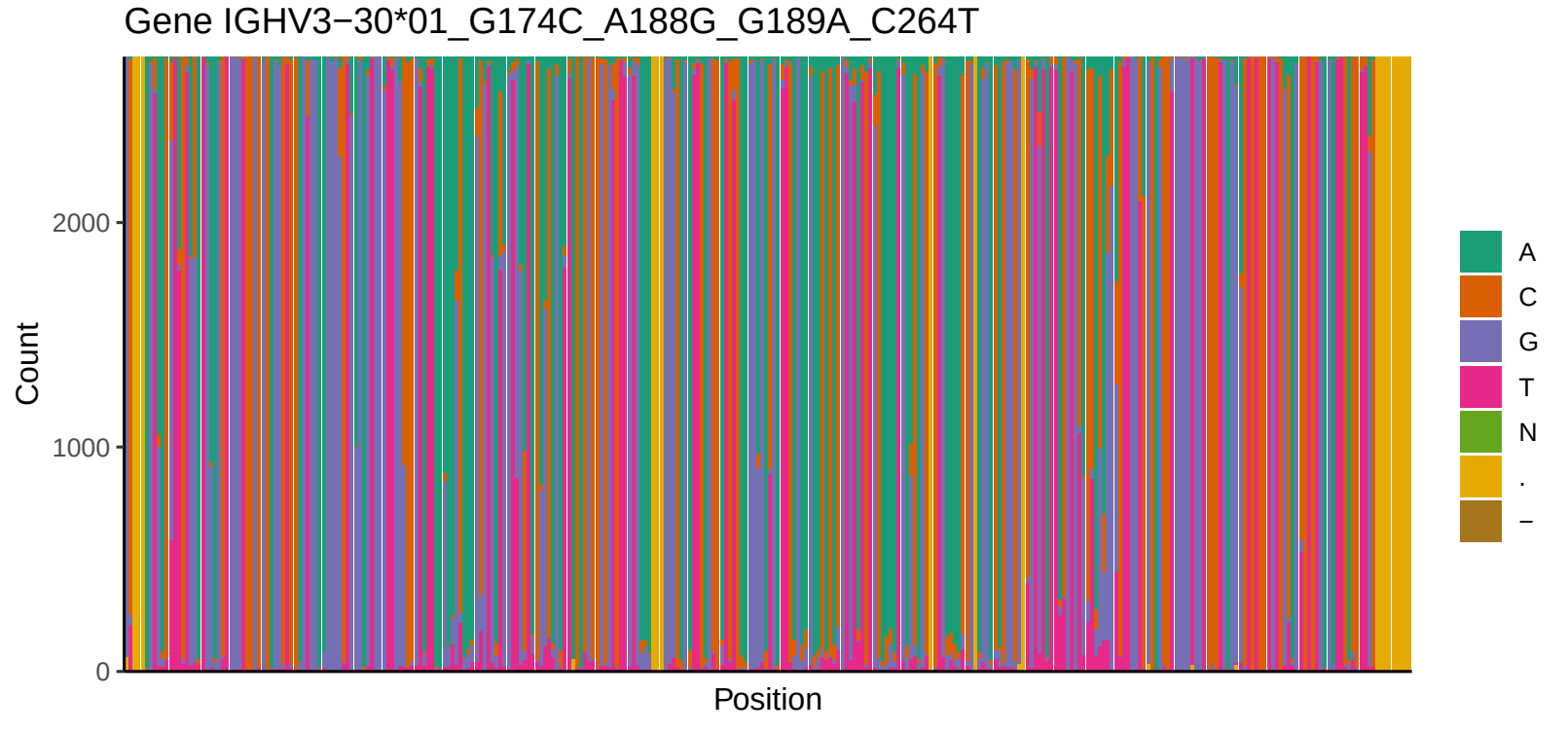
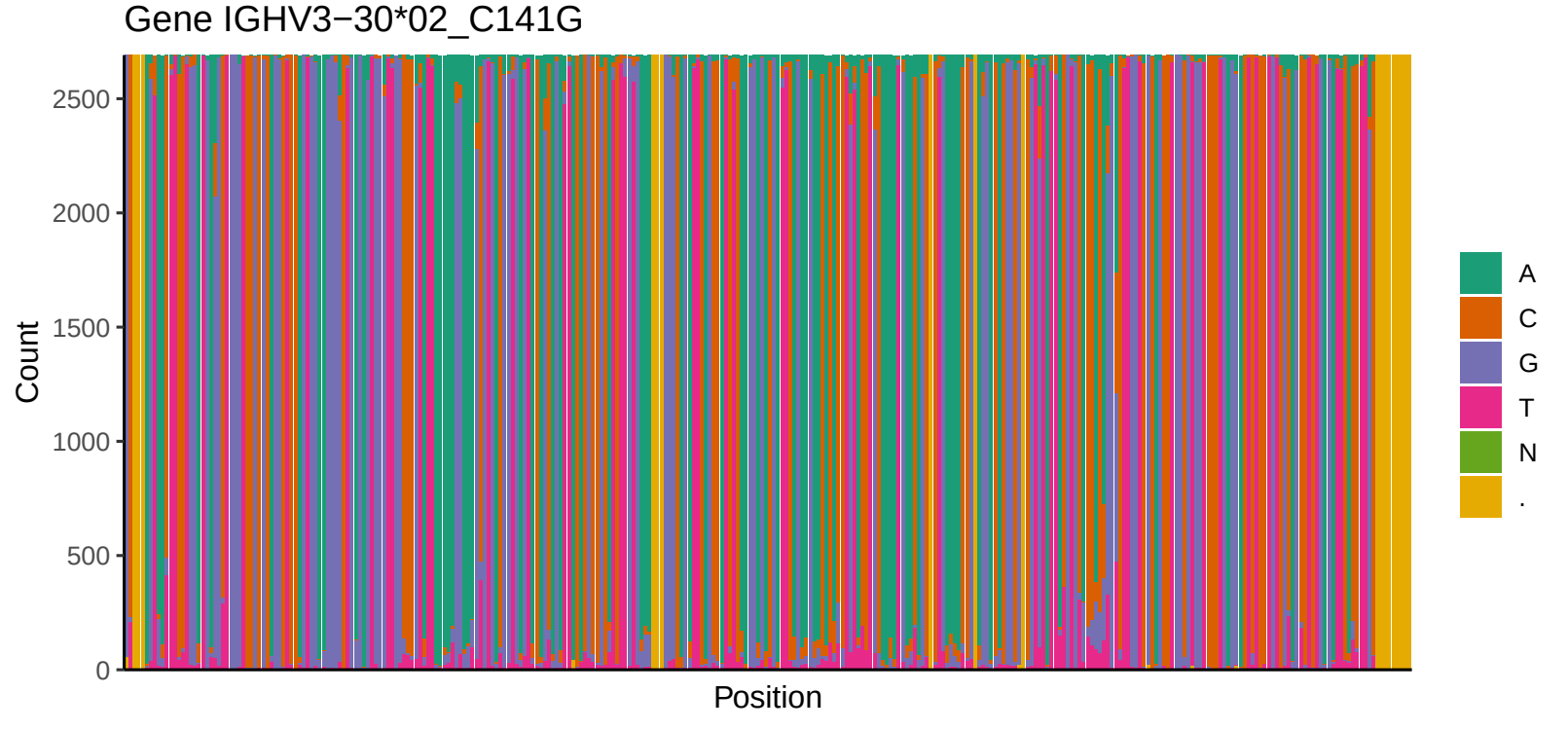
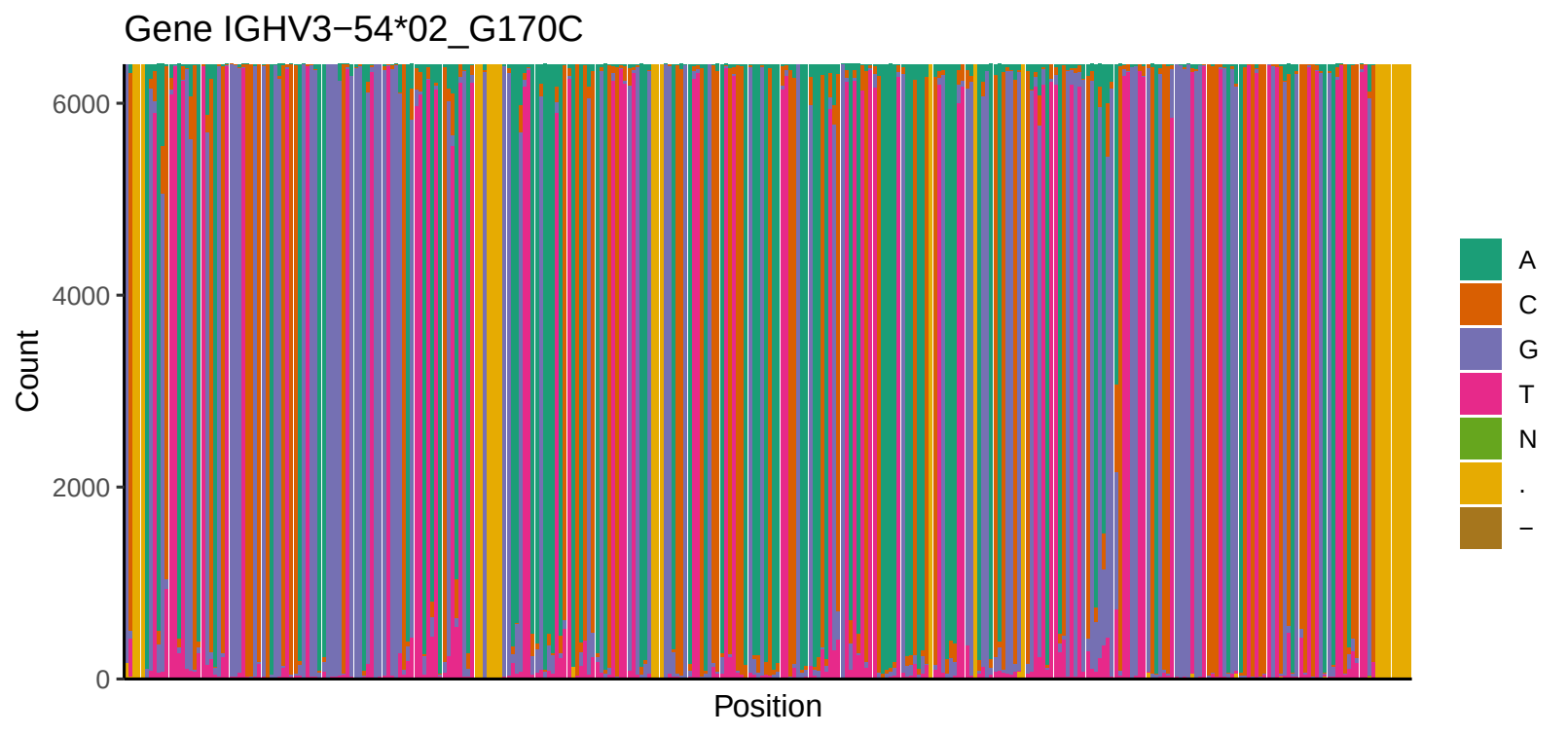

Gene IGHV3−184*01_G106A_T109C_G297A
Count
1000
500
0
Position
A
C
G
T
N
.
–


Gene IGHV4−147*01_G82T_G83A_A162G_C163T_G164A_A196T_G197A_C215A_G29
Count
7500
5000
2500
0
Position
A
C
G
T
N
.
–

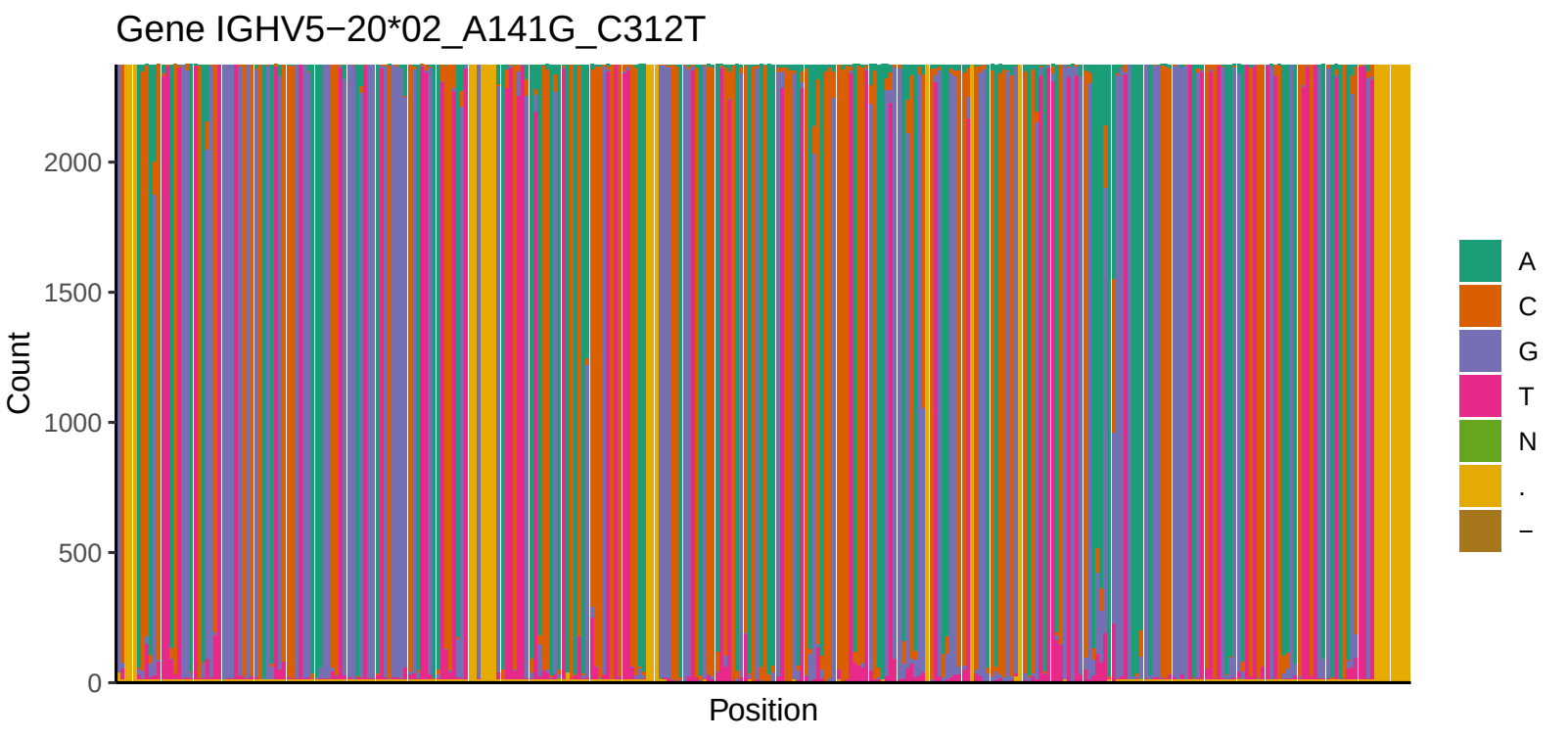

Gene IGHV3−30*01_G174C_A188G_G189A_C264T
Count
2000
1000
0
Position
A
C
G
T
N
.
–


Gene IGHV3−30*02_C141G
Count
2500
2000
1500
1000
500
0
Position
A
C
G
T
N
.

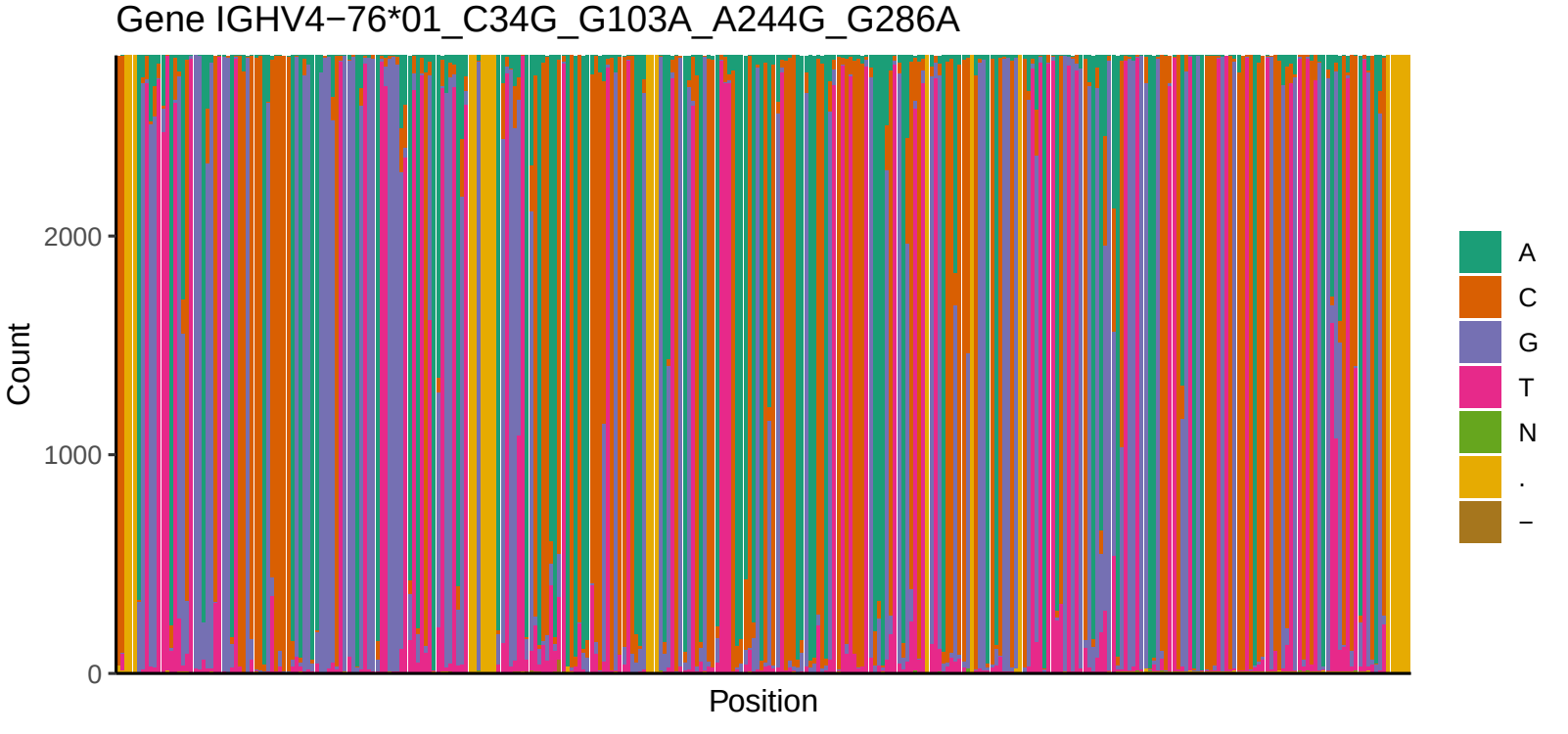

Gene IGHV3−54*02_G170C
6000
4000
2000
0
Count
Position
A
C
G
T
N
.
–


Gene IGHV3−54*02_T111C_G163A_G170A_G171T_A190C_G213C_A221G_T257C_G2
3000
2000
1000
0
Count
Position
A
C
G
T
N
.
–


Gene IGHV4−80*01_G70A_C90T_T109A_T189G_T196A_C263T
2000
1500
1000
500
0
Count
Position
A
C
G
T
N
.
–


Gene IGHV5−20*02_A141G_C312T
Count
2000
1500
1000
500
0
Position
A
C
G
T
N
.
–


Gene IGHV5−43*01_A106G_G164T_C165G_A203G_C225G_T231C_A259G
Count
6000
4000
2000
0
Position
A
C
G
T
N
.
–


Gene IGHV4−76*01_C34G_G103A_A244G_G286A
Count
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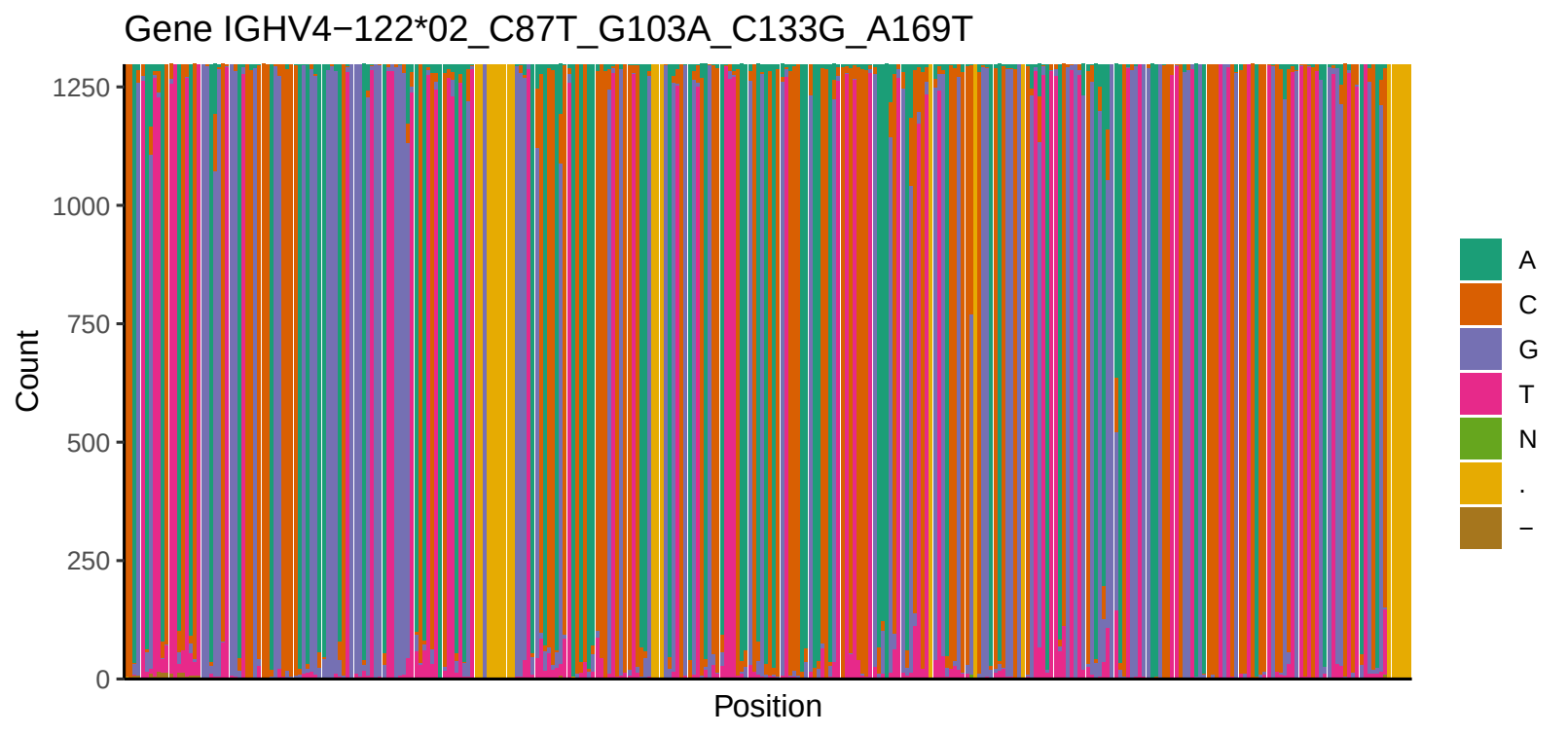
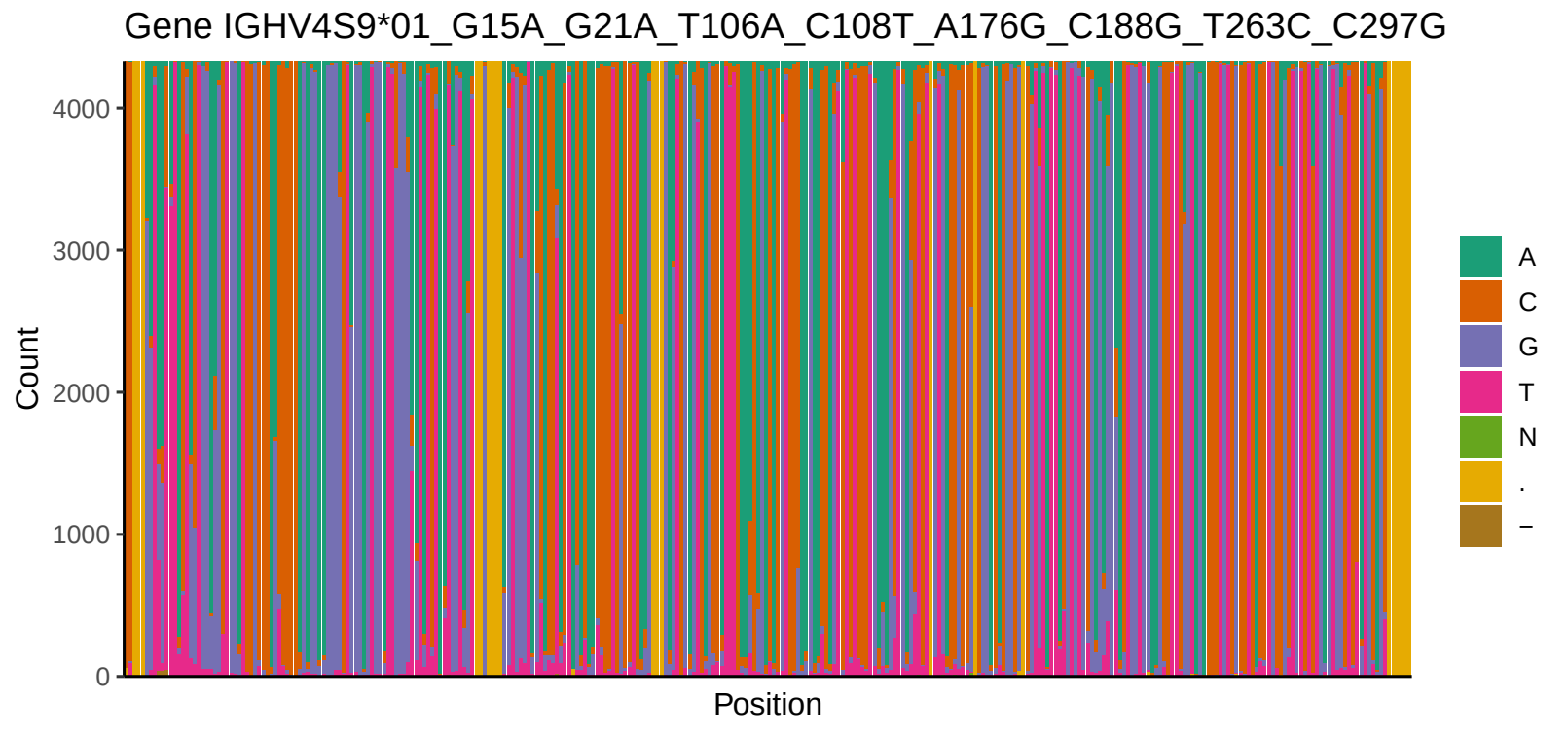
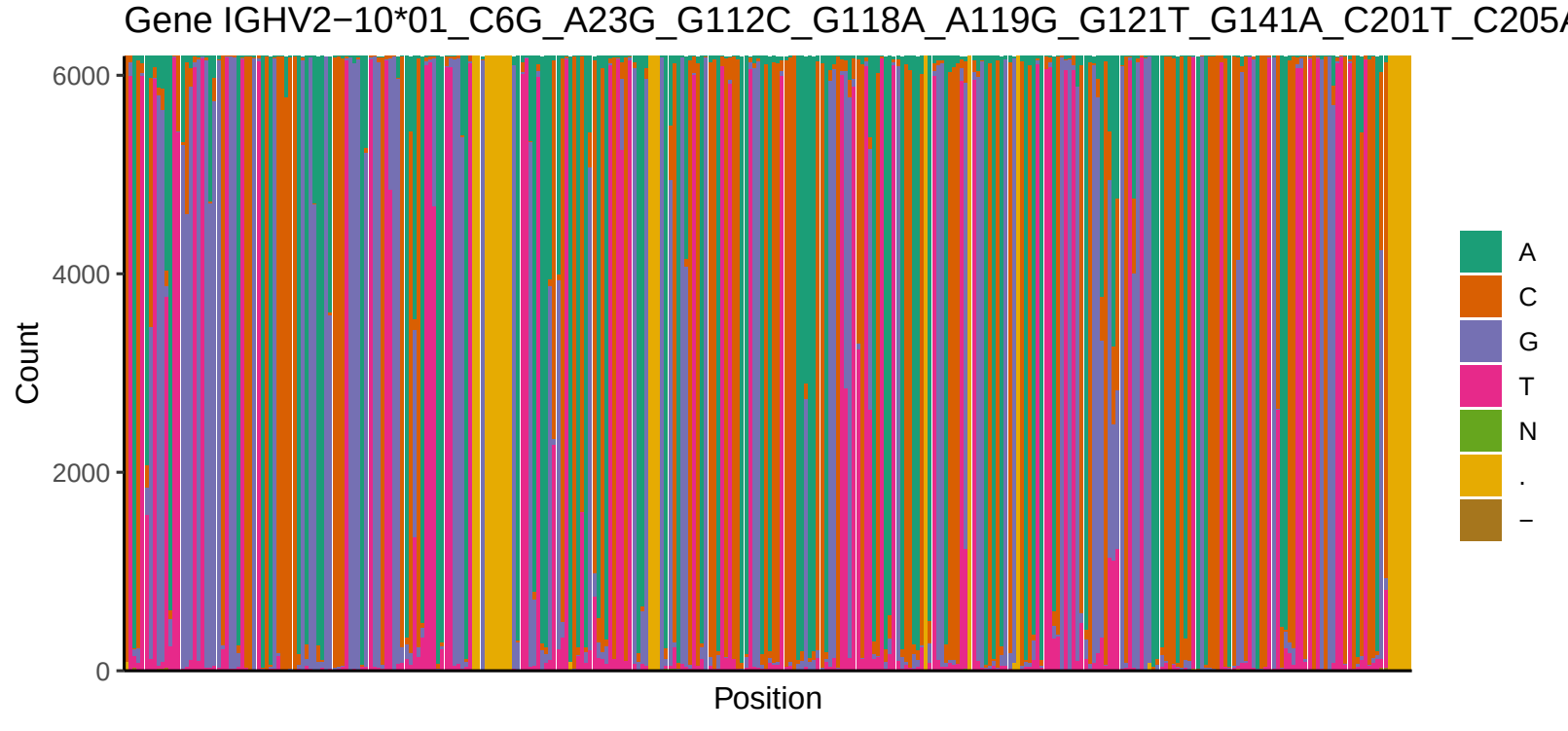
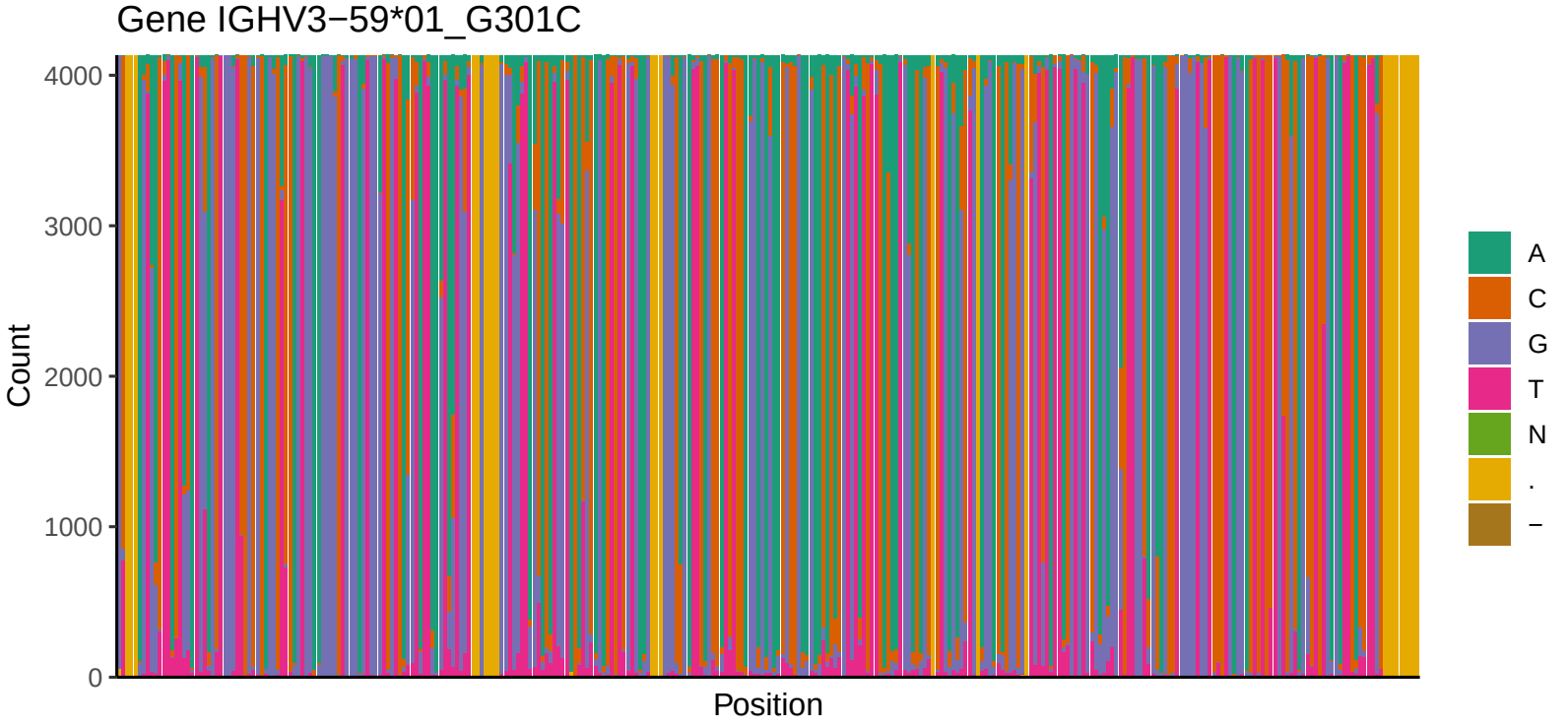
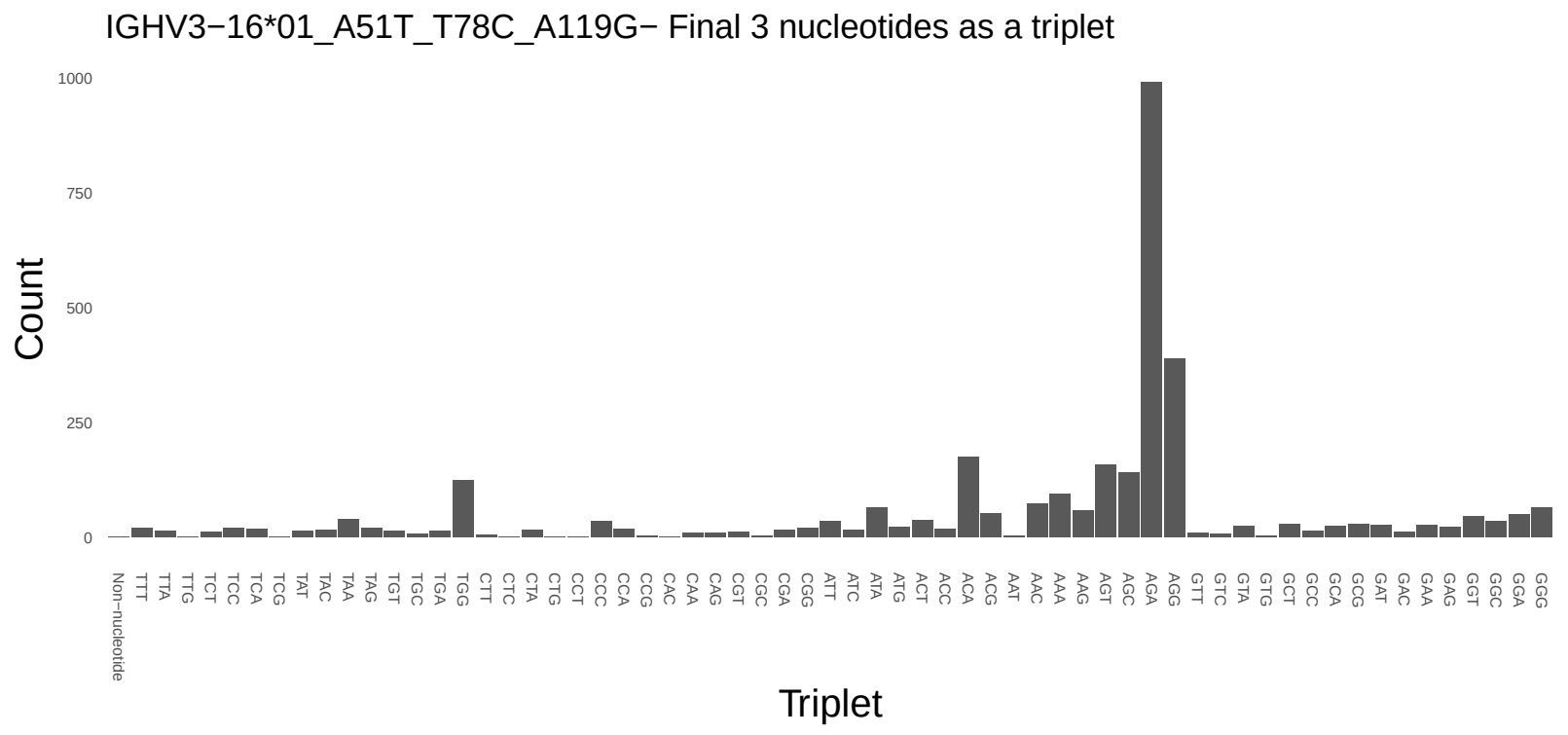
1000
0
Position
A
C
G
T
N
.
–

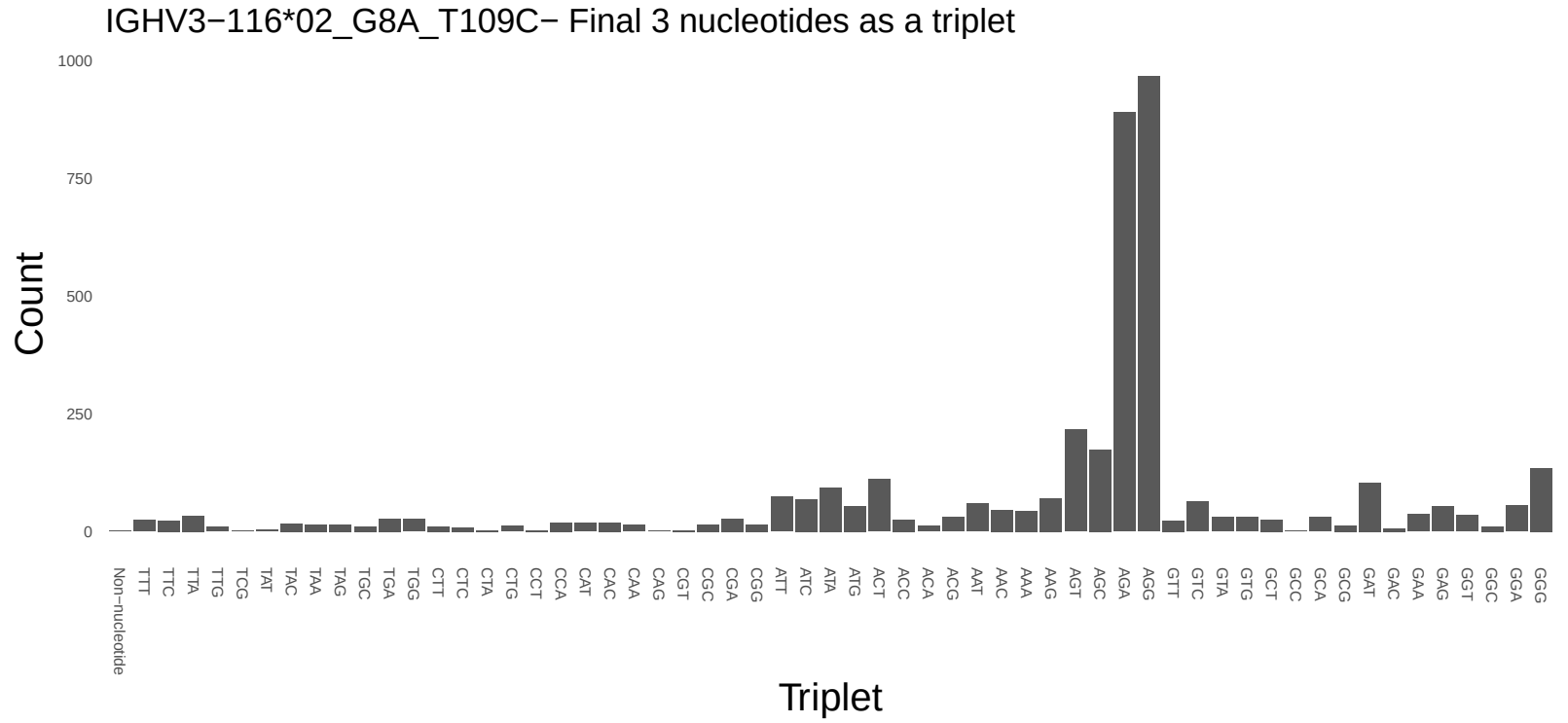

Gene IGHV4−122*02_C87T_G103A_C133G_A169T
1250
1000
750
500
250
0
Count
Position
A
C
G
T
N
.
–

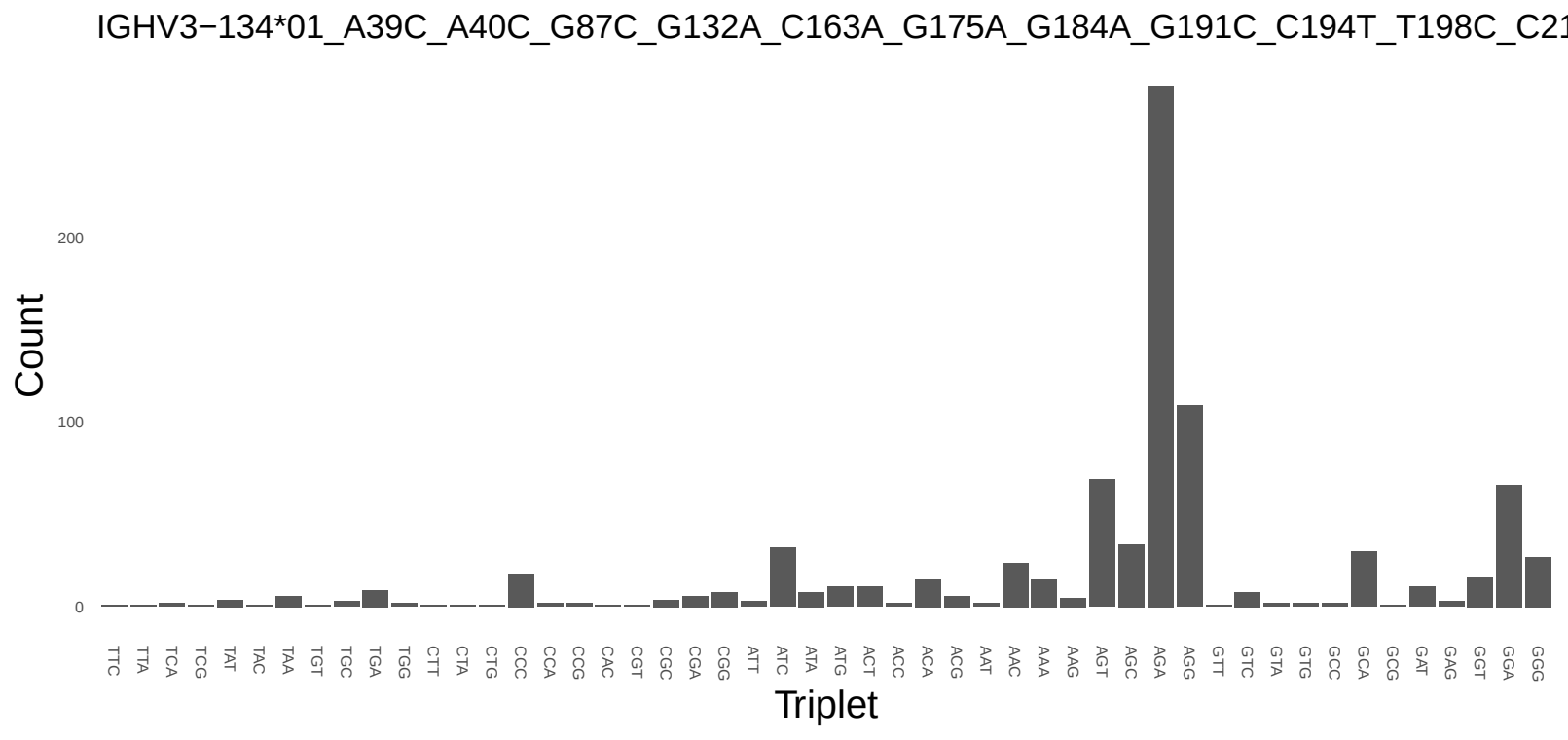

Gene IGHV4S9*01_G15A_G21A_T106A_C108T_A176G_C188G_T263C_C297G
4000
3000
2000
1000
0
Count
Position
A
C
G
T
N
.
–

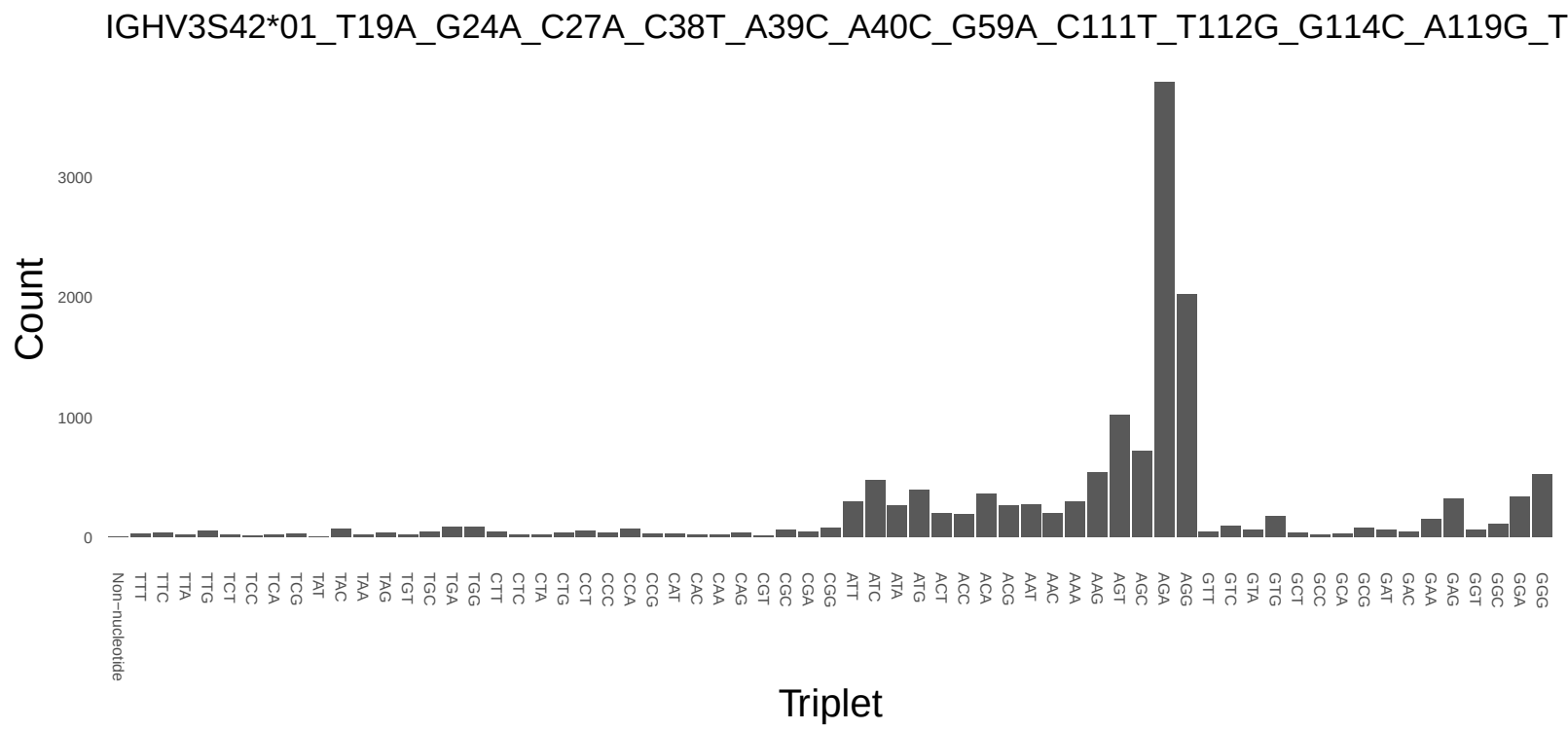

Gene IGHV2−10*01_C6G_A23G_G112C_G118A_A119G_G121T_G141A_C201T_C205
6000
4000
2000
0
Count
Position
A
C
G
T
N
.
–


Gene IGHV3−59*01_G301C
Count
4000
3000
2000
1000
0
Position
A
C
G
T
N
.
−

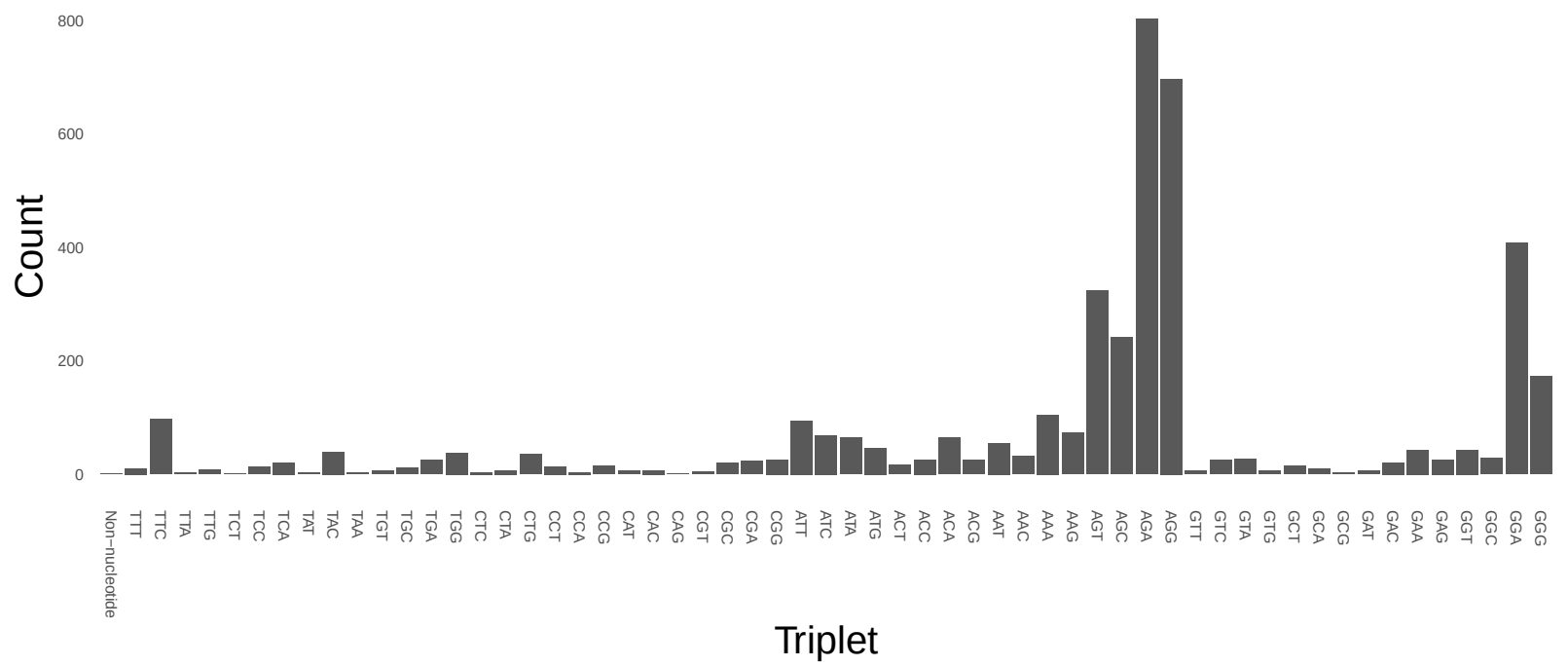

IGHV3−16*01_A51T_T78C_A119G− Final 3 nucleotides as a triplet
Count
1000
750
500
250
0
Non−nucleotide
TTT TTA TTG TCT TCC TCA TCG TAT TAC TAA TAG TGT TGC TGA TGG CTT CTC CTA CTG CCT CCC CCA CCG CAC CAA CAG CGT CGC CGA CGG ATT ATC ATA ATG ACT ACC ACA ACG AAT AAC AAA AAG AGT AGC AGA AGG GTT GTC GTA GTG GCT GCC GCA GCG GAT GAC GAA GAG GGT GGC GGA GGG
Triplet


IGHV3−116*02_G8A_T109C− Final 3 nucleotides as a triplet
Count
1000
750
500
250
0
Non−nucleotide
TTT TTC TTA TTG TCG TAT TAC TAA TAG TGC TGA TGG CTT CTC CTA CTG CCT CCA CAT CAC CAA CAG CGT CGC CGA CGG ATT ATC ATA ATG ACT ACC ACA ACG AAT AAC AAA AAG AGT AGC AGA AGG GTT GTC GTA GTG GCT GCC GCA GCG GAT GAC GAA GAG GGT GGC GGA GGG
Triplet

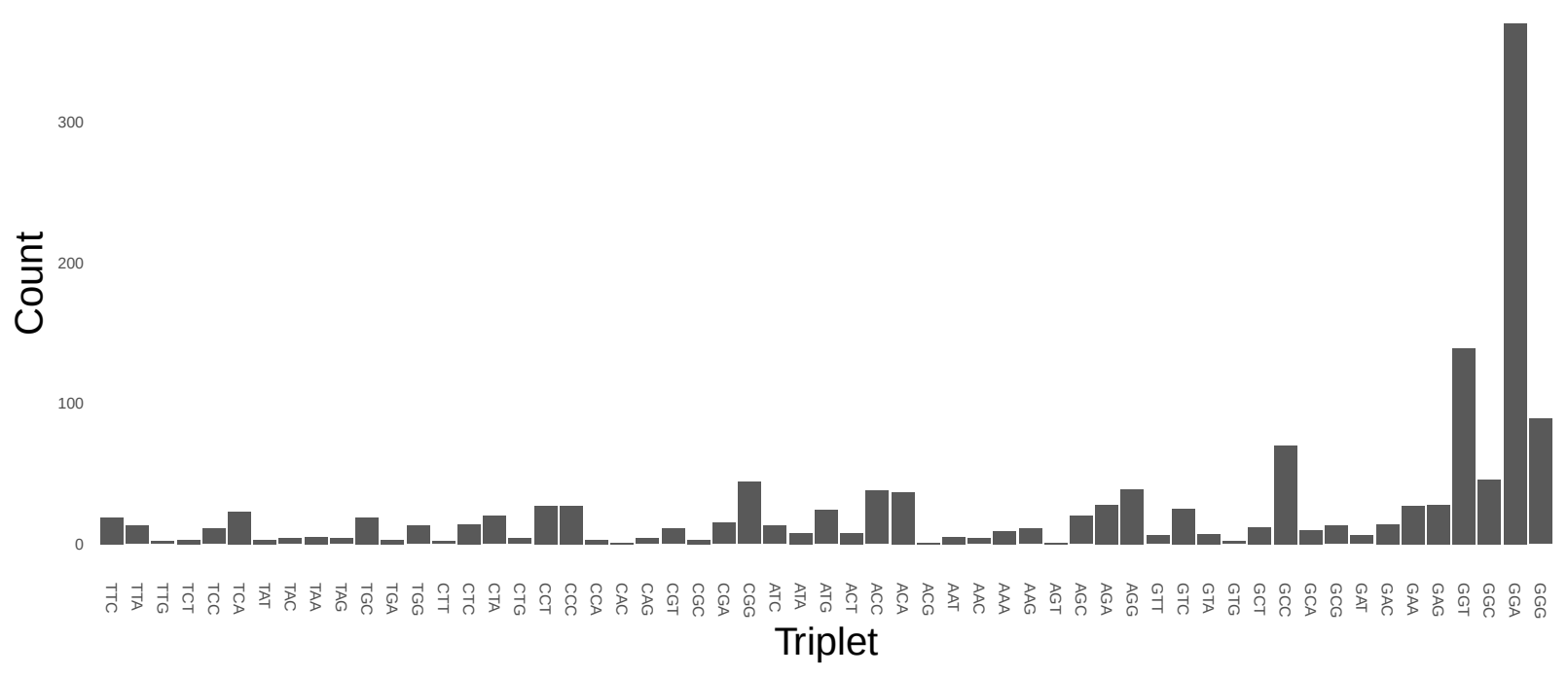

IGHV3−134*01_A39C_A40C_G87C_G132A_C163A_G175A_G184A_G191C_C194T_T198C_C21
Count
200
100
0
TTC TTA TCA TCG TAT TAC TAA TGT TGC TGA TGG CTT CTA CTG CCC CCA CCG CAC CGT CGC CGA CGG ATT ATC ATA ATG ACT ACC ACA ACG AAT AAC AAA AAG AGT AGC AGA AGG GTT GTC GTA GTG GCC GCA GCG GAT GAG GGT GGA GGG
Triplet

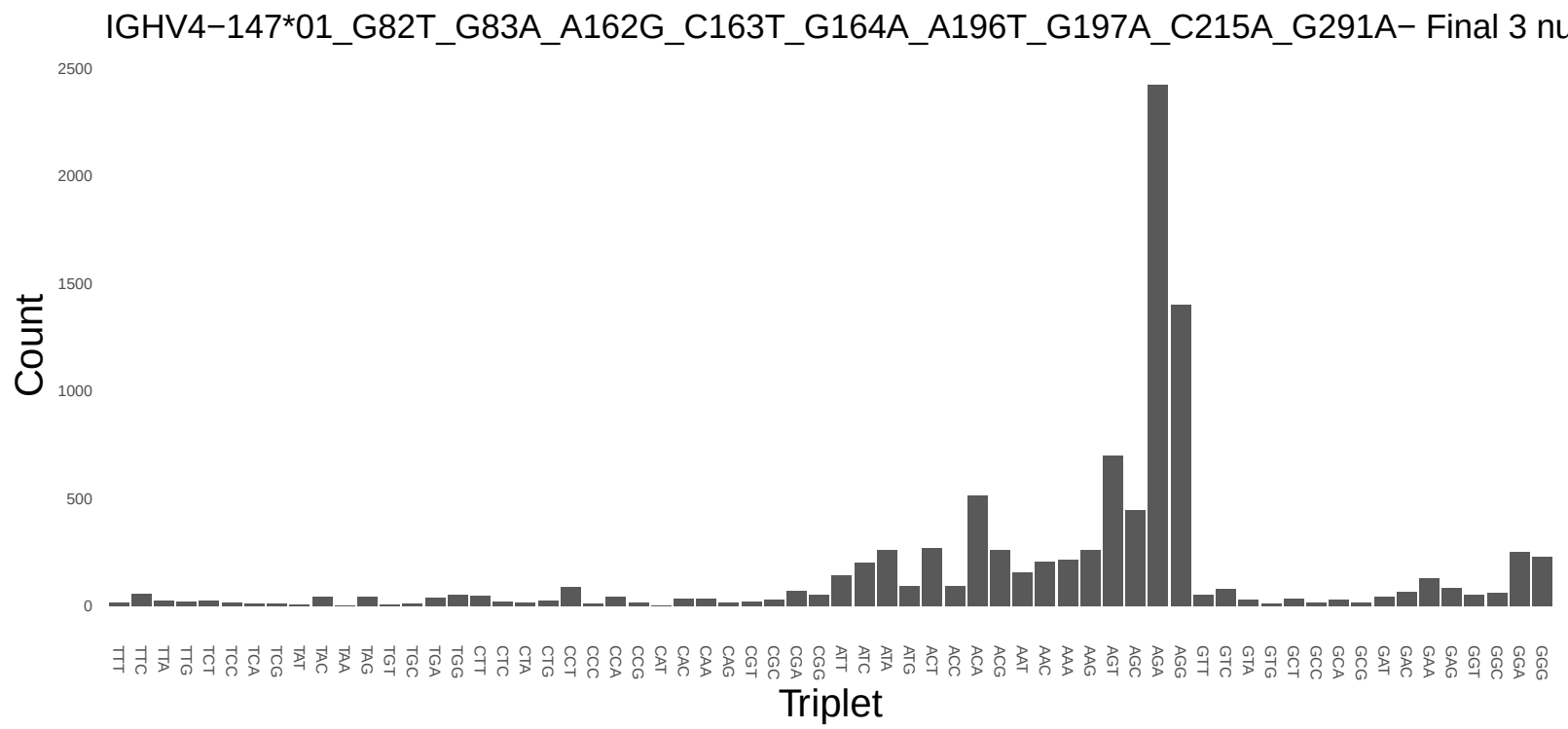


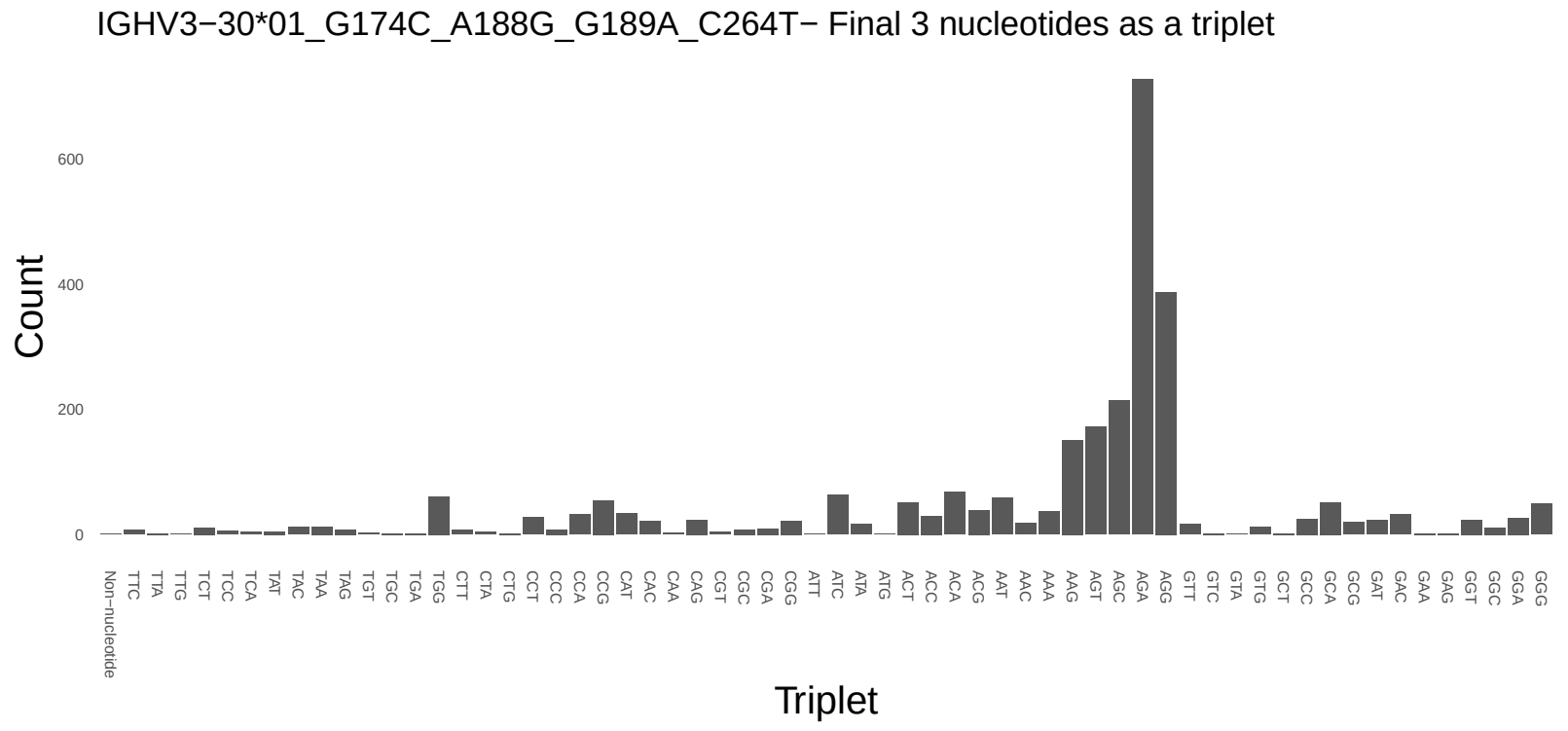
IGHV3−100*01_A132G− Final 3 nucleotides as a triplet

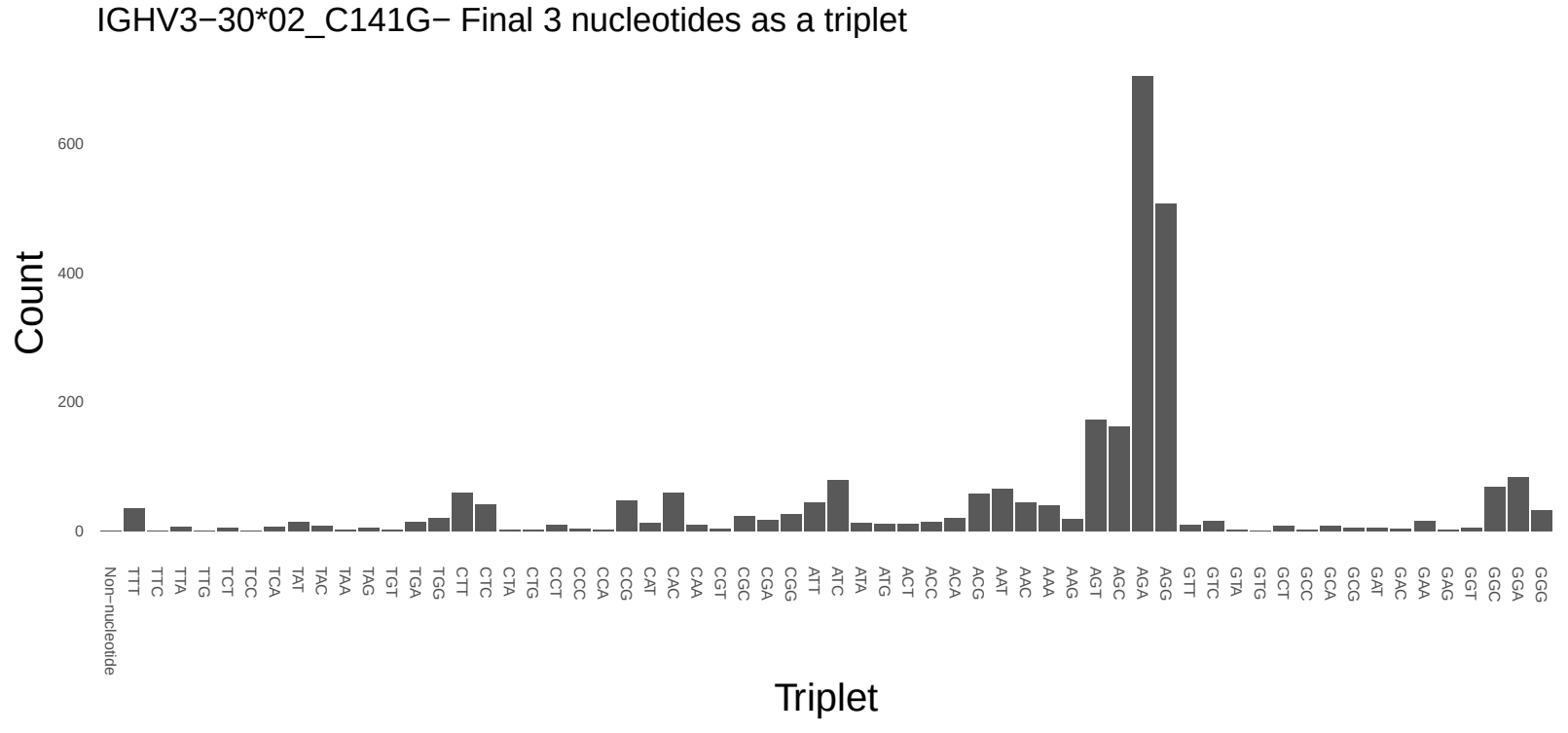


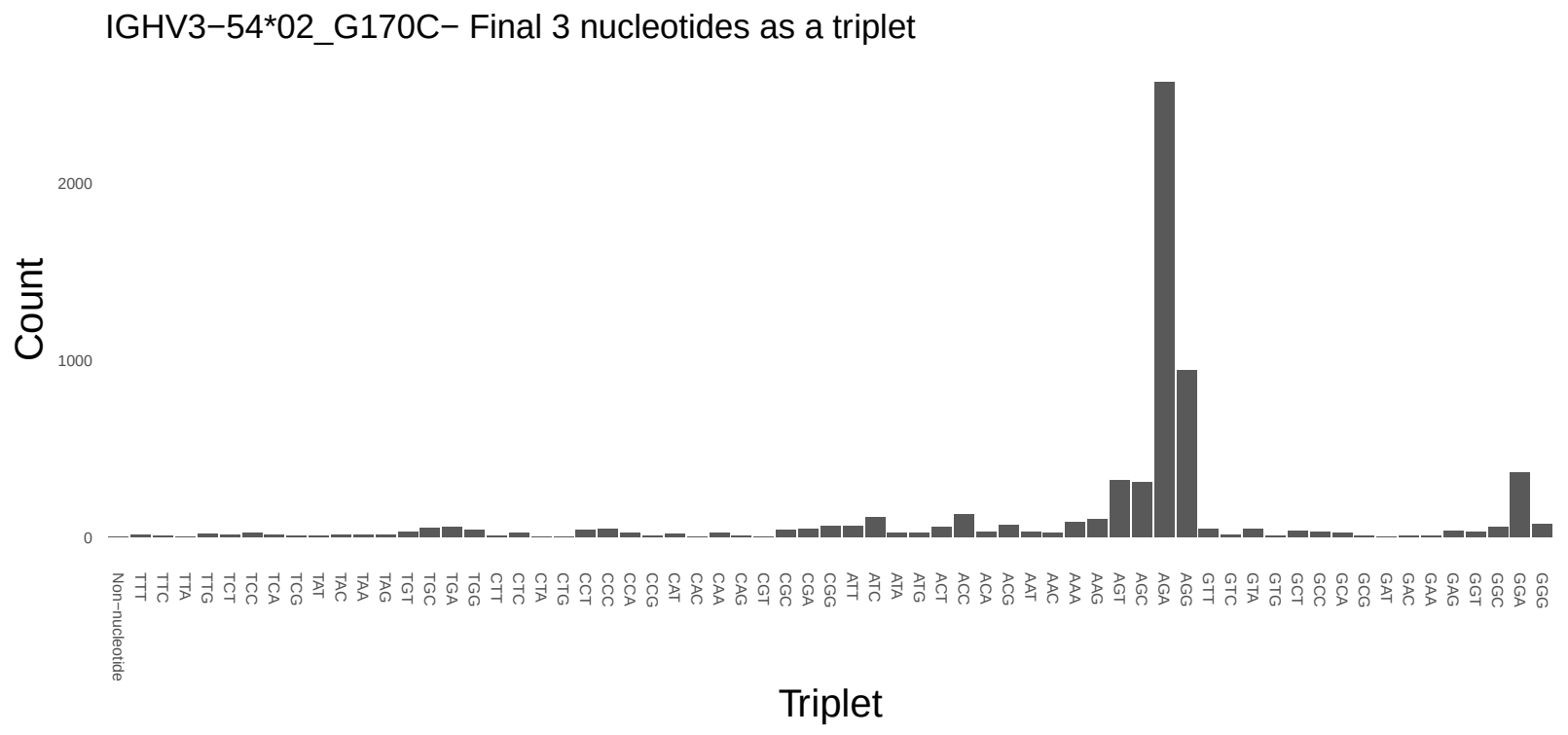
IGHV3−184*01_G106A_T109C_G297A− Final 3 nucleotides as a triplet

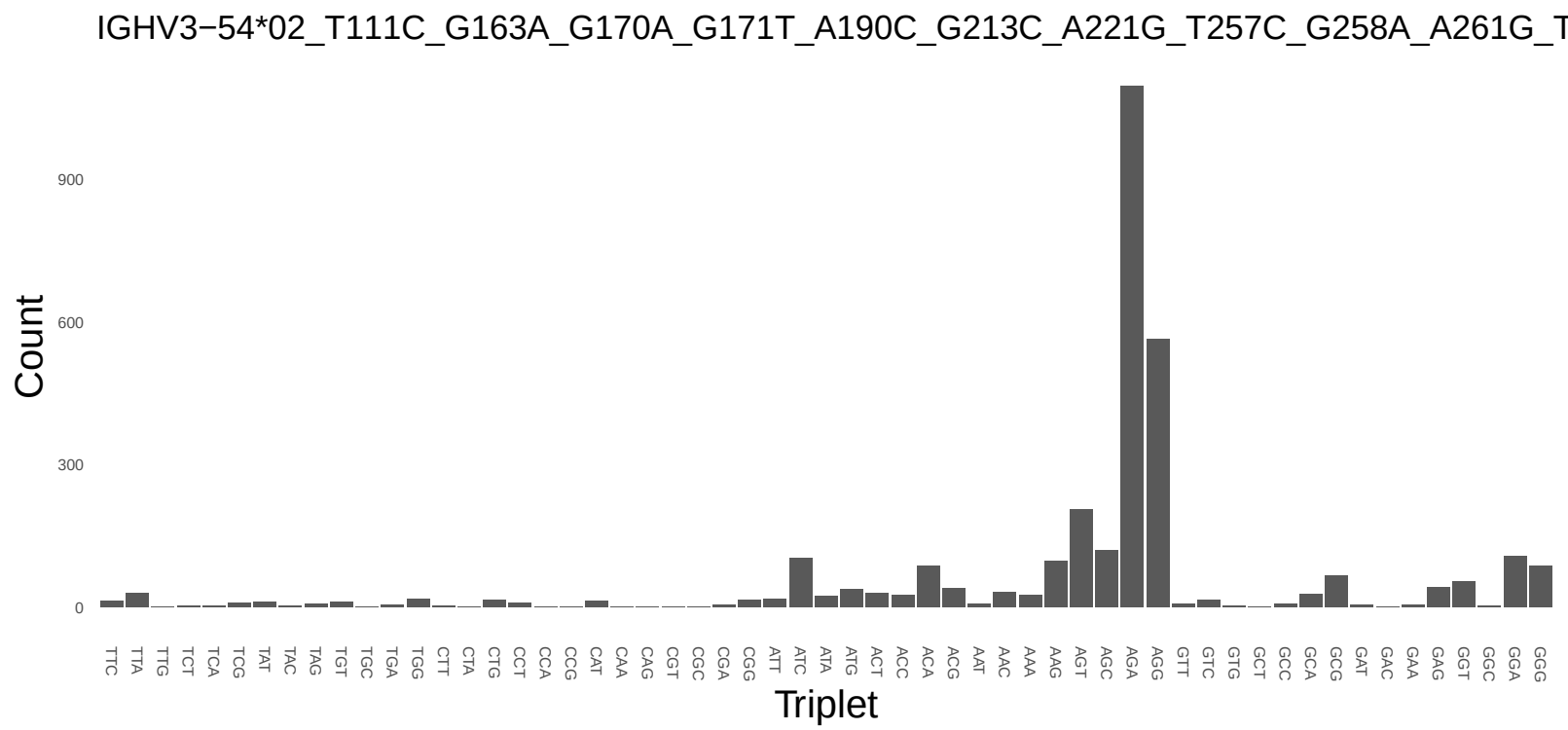


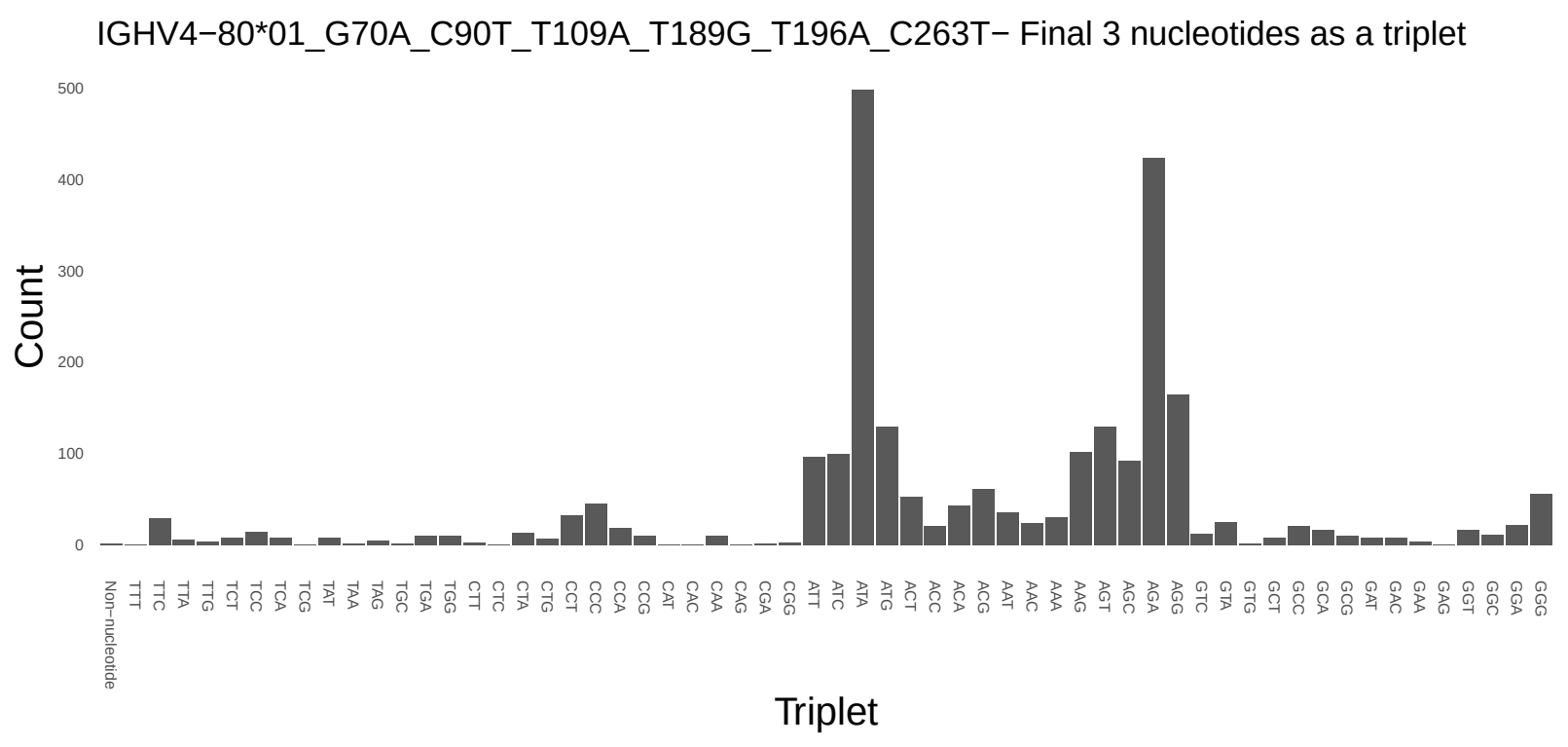

IGHV4−147*01_G82T_G83A_A162G_C163T_G164A_A196T_G197A_C215A_G291A− Final 3 nu
Count
Triplet

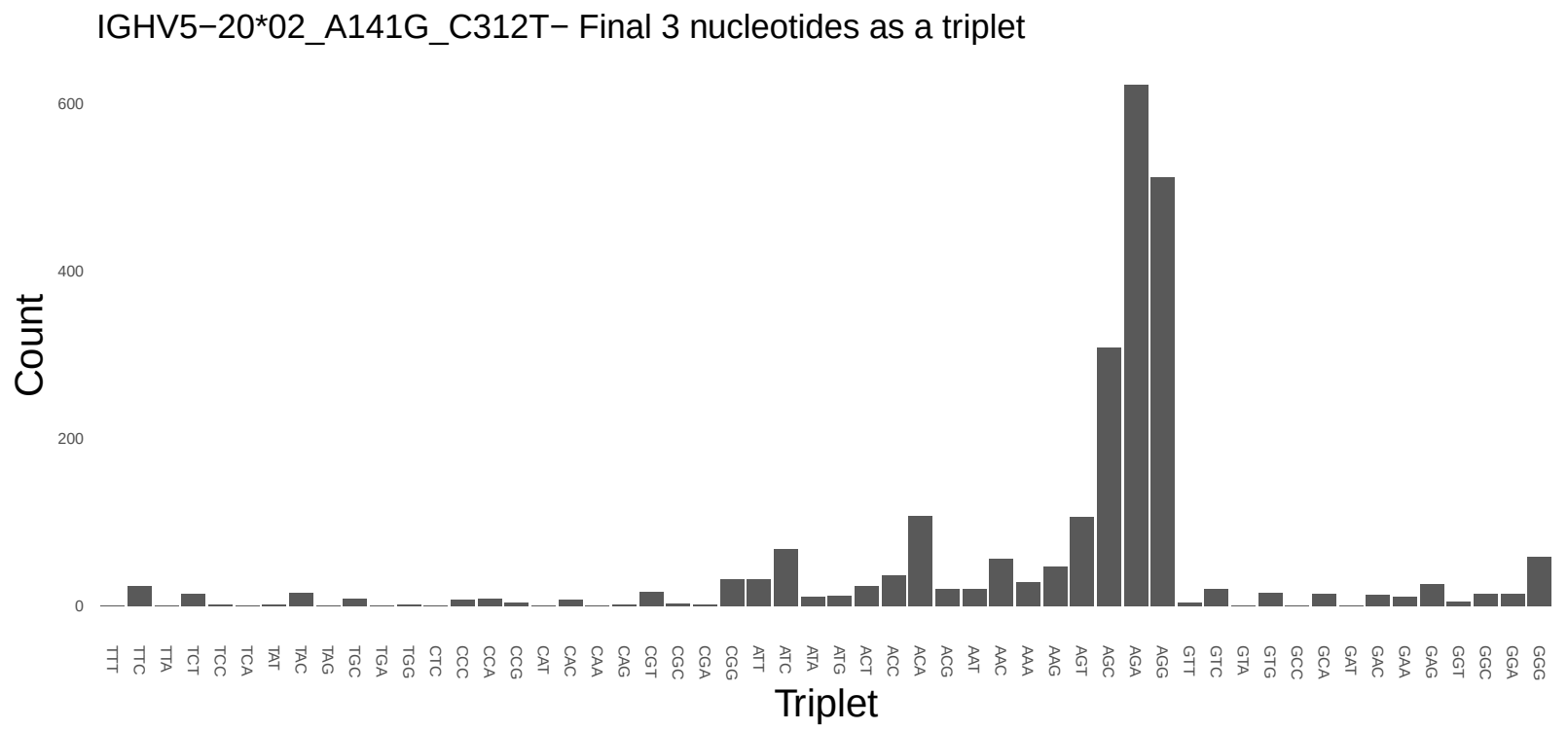

IGHV3−30*01_G174C_A188G_G189A_C264T− Final 3 nucleotides as a triplet
Count
Non−nucleotide
Triplet

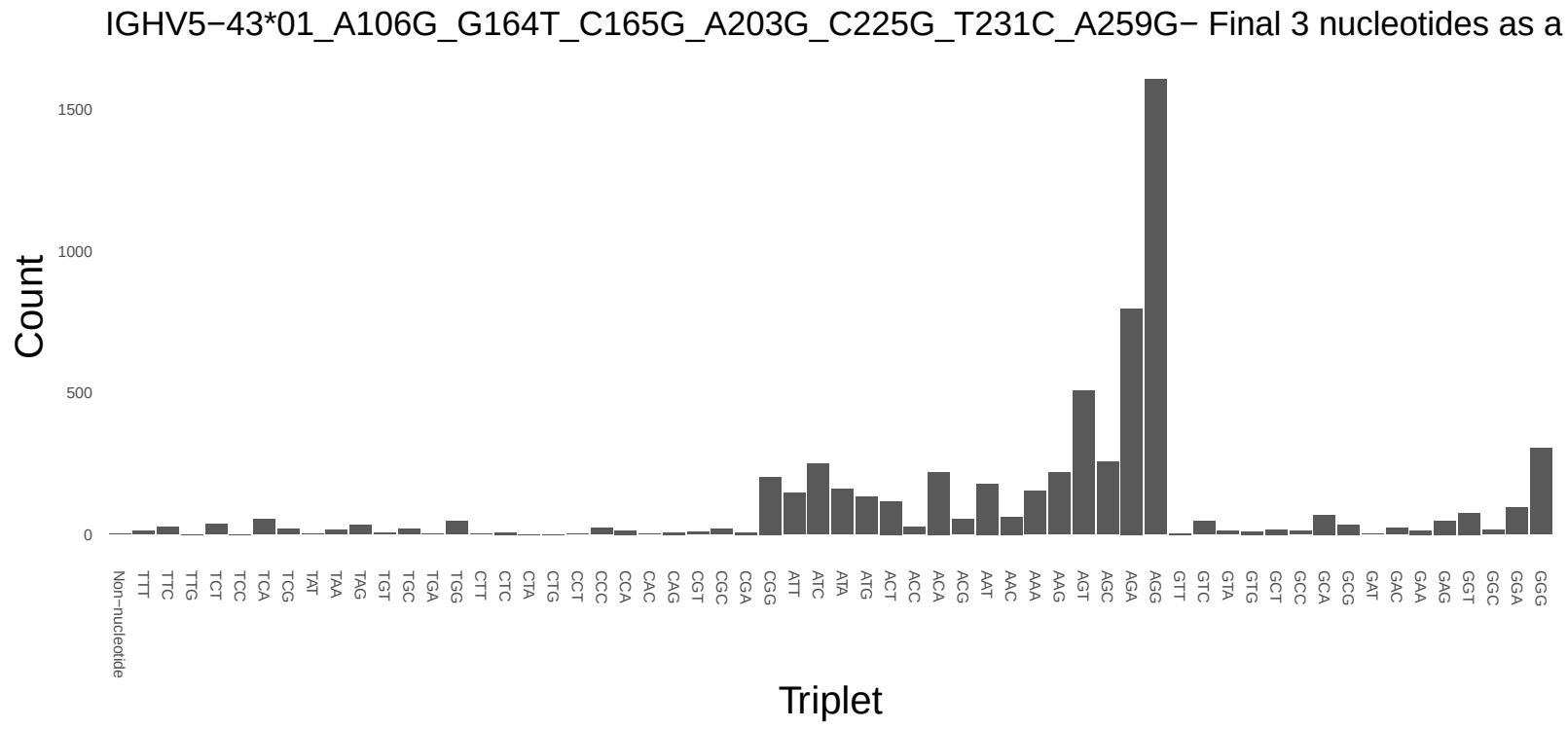

IGHV3−30*02_C141G− Final 3 nucleotides as a triplet
Count
Non−nucleotide
Triplet

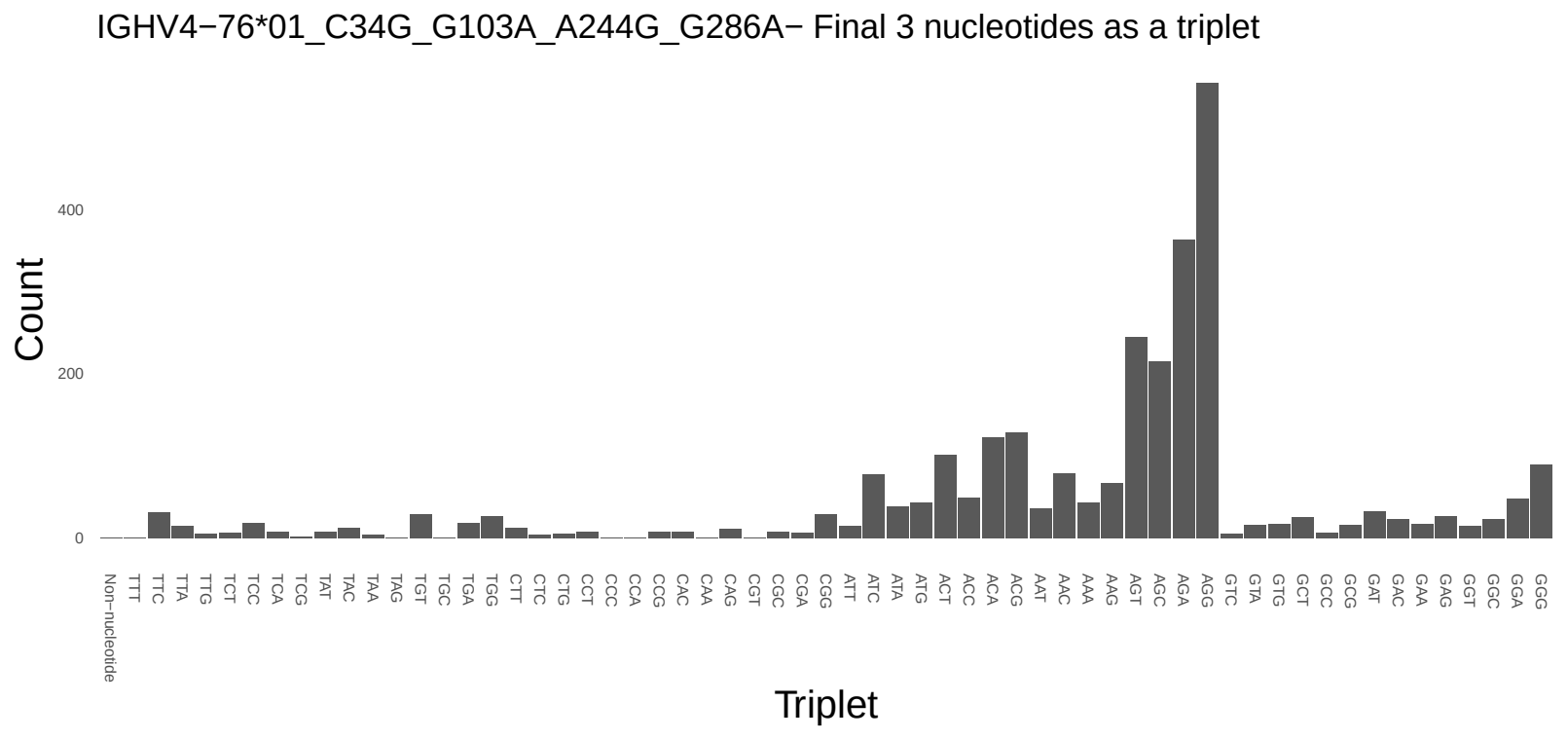

IGHV3−54*02_G170C− Final 3 nucleotides as a triplet
Count
2000
1000
0
Non−nucleotide
TTT TTC TTA TTG TCT TCC TCA TCG TAT TAC TAA TAG TGT TGC TGA TGG CTT CTC CTA CTG CCT CCC CCA CCG CAT CAC CAA CAG CGT CGC CGA CGG ATT ATC ATA ATG ACT ACC ACA ACG AAT AAC AAA AAG AGT AGC AGA AGG GTT GTC GTA GTG GCT GCC GCA GCG GAT GAC GAA GAG GGT GGC GGA GGG
Triplet

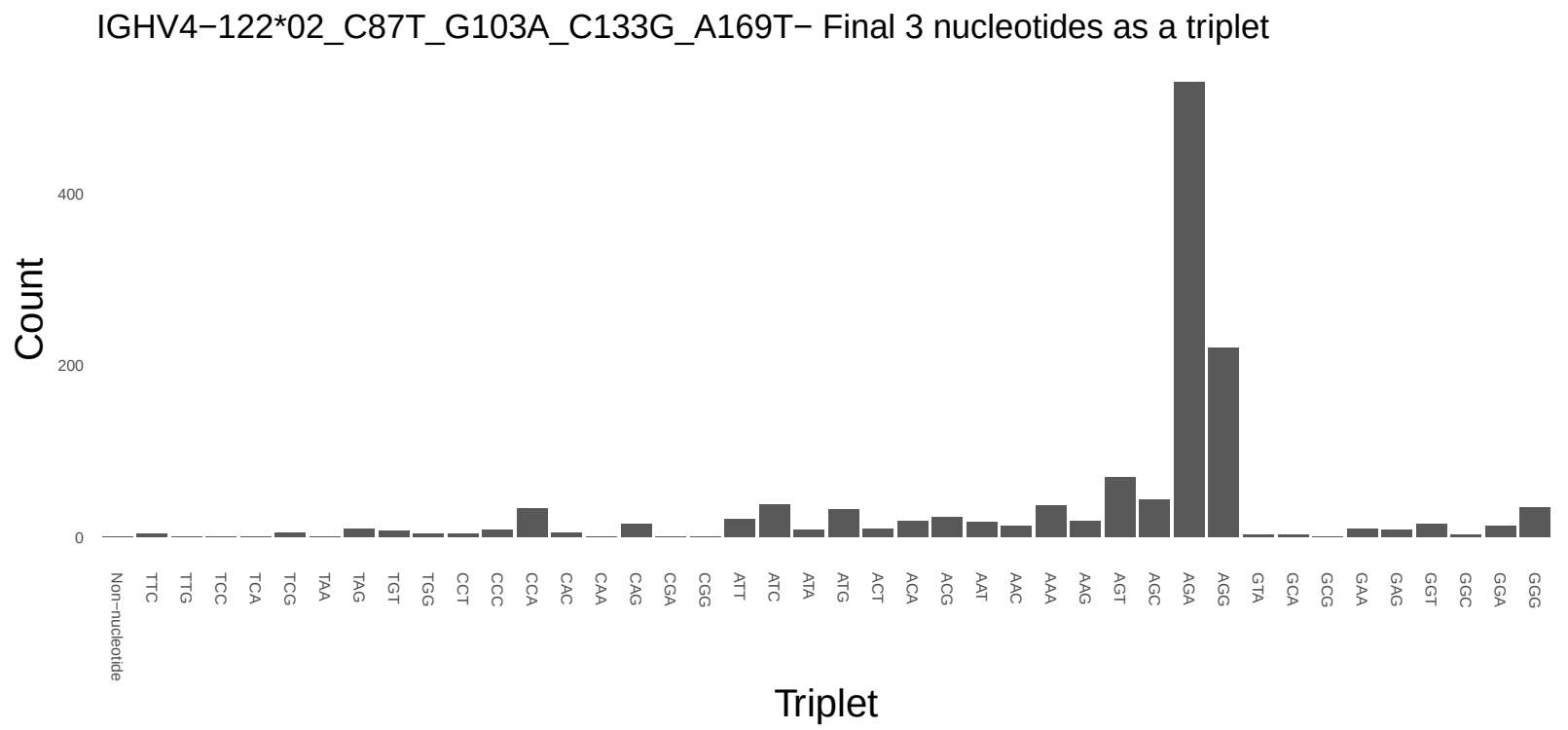

IGHV3−54*02_T111C_G163A_G170A_G171T_A190C_G213C_A221G_T257C_G258A_A261G_T
Count
900
600
300
0
TTC TTA TTG TCT TCA TCG TAT TAC TAG TGT TGC TGA TGG CTT CTA CTG CCT CCA CCG CAT CAA CAG CGT CGC CGA CGG ATT ATC ATA ATG ACT ACC ACA ACG AAT AAC AAA AAG AGT AGC AGA AGG GTT GTC GTG GCT GCC GCA GCG GAT GAC GAA GAG GGT GGC GGA GGG
Triplet

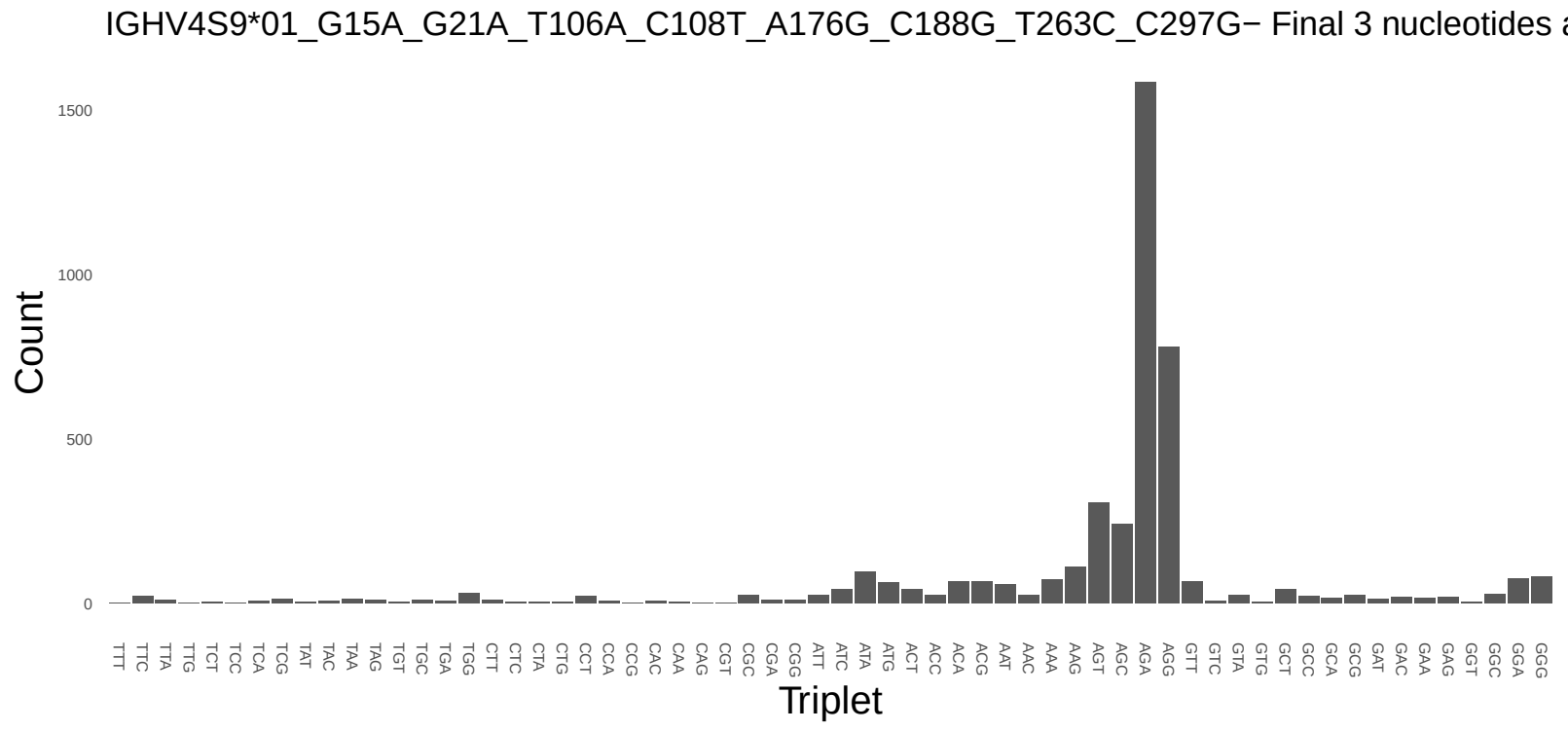

IGHV4−80*01_G70A_C90T_T109A_T189G_T196A_C263T− Final 3 nucleotides as a triplet
Count
500
400
300
200
100
0
Non−nucleotide
TTT TTC TTA TTG TCT TCC TCA TCG TAT TAA TAG TGC TGA TGG CTT CTC CTA CTG CCT CCC CCA CCG CAT CAC CAA CAG CGA CGG ATT ATC ATA ATG ACT ACC ACA ACG AAT AAC AAA AAG AGT AGC AGA AGG GTC GTA GTG GCT GCC GCA GCG GAT GAC GAA GAG GGT GGC GGA GGG
Triplet

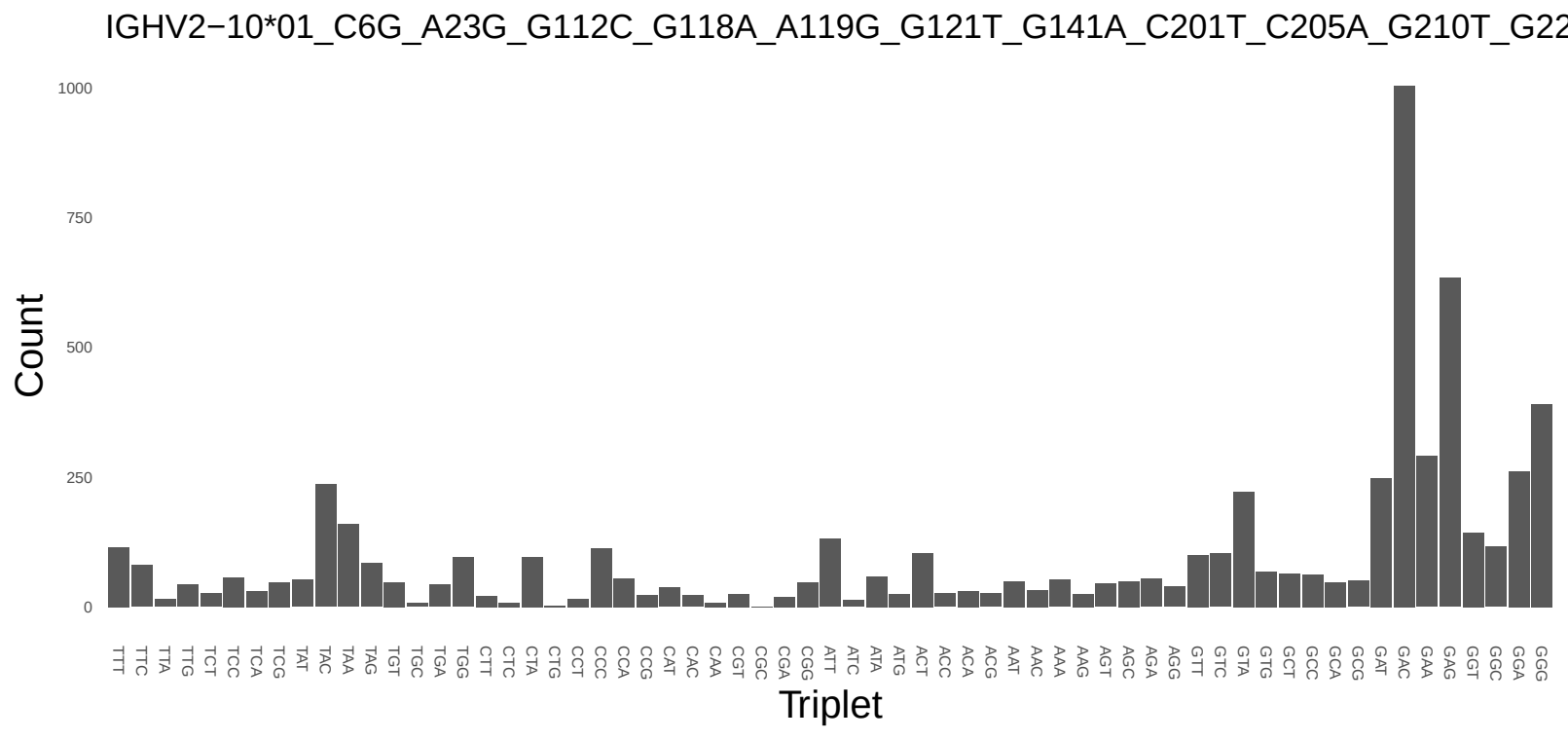

IGHV5−20*02_A141G_C312T− Final 3 nucleotides as a triplet
Count
600
400
200
0
TTT TTC TTA TCT TCC TCA TAT TAC TAG TGC TGA TGG CTC CCC CCA CCG CAT CAC CAA CAG CGT CGC CGA CGG ATT ATC ATA ATG ACT ACC ACA ACG AAT AAC AAA AAG AGT AGC AGA AGG GTT GTC GTA GTG GCC GCA GAT GAC GAA GAG GGT GGC GGA GGG
Triplet

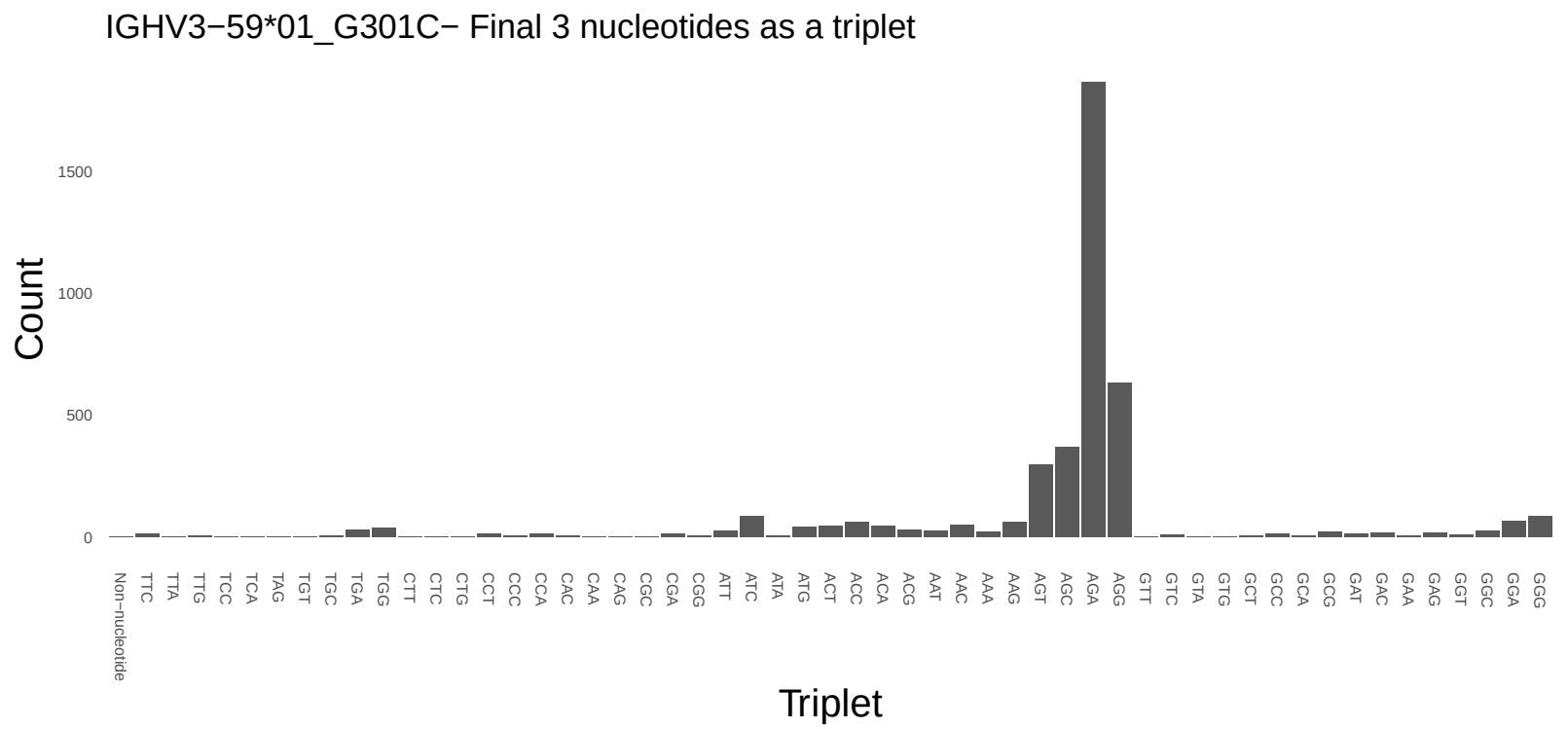

IGHV5−43*01_A106G_G164T_C165G_A203G_C225G_T231C_A259G− Final 3 nucleotides as a
Count
1500
1000
500
0
Non−nucleotide TTT TTC TTG TCT TCC TCA TCG TAT TAA TAG TGT TGC TGA TGG CTT CTC CTA CTG CCT CCC CCA CAC CAG CGT CGC CGA CGG ATT ATC ATA ATG ACT ACC ACA ACG AAT AAC AAA AAG AGT AGC AGA AGG GTT GTC GTA GTG GCT GCC GCA GCG GAT GAC GAA GAG GGT GGC GGA GGG
Triplet


IGHV4−76*01_C34G_G103A_A244G_G286A− Final 3 nucleotides as a triplet
Count
400
200
0
Non−nucleotide TTT TTC TTA TTG TCT TCC TCA TCG TAT TAC TAA TAG TGT TGC TGA TGG CTT CTC CTG CCT CCC CCA CCG CAC CAA CAG CGT CGC CGA CGG ATT ATC ATA ATG ACT ACC ACA ACG AAT AAC AAA AAG AGT AGC AGA AGG GTC GTA GTG GCT GCC GCG GAT GAC GAA GAG GGT GGC GGA GGG
Triplet


IGHV4−122*02_C87T_G103A_C133G_A169T− Final 3 nucleotides as a triplet
Count
400
200
0
Non−nucleotide
TTC
TTG
TCC
TCA
TCG
TAA
TAG
TGT
TGG
CCT
CCC
CCA
CAC
CAA
CAG
CGA
CGG
ATT
ATC
ATA
ATG
ACT
ACA
ACG
AAT
AAC
AAA
AAG
AGT
AGC
AGA
AGG
GTA
GCA
GCG
GAA
GAG
GGT
GGC
GGA
GGG
Triplet

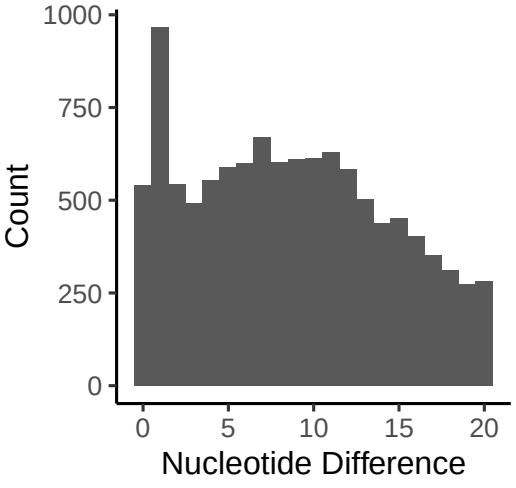

IGHV4S9*01_G15A_G21A_T106A_C108T_A176G_C188G_T263C_C297G− Final 3 nucleotides a
Count
1500
1000
500
0
TTT
TTC
TTA
TTG
TCT
TCC
TCA
TCG
TAT
TAC
TAA
TAG
TGT
TGC
TGA
TGG
CTT
CTC
CTA
CTG
CCT
CCA
CCG
CAC
CAA
CAG
CGT
CGC
CGA
CGG
ATT
ATC
ATA
ATG
ACT
ACC
ACA
ACG
AAT
AAC
AAA
AAG
AGT
AGC
AGA
AGG
GTT
GTC
GTA
GTG
GCT
GCC
GCA
GCG
GAT
GAC
GAA
GAG
GGT
GGC
GGA
GGG
Triplet


IGHV2−10*01_C6G_A23G_G112C_G118A_A119G_G121T_G141A_C201T_C205A_G210T_G22
Count
1000
750
500
250
0
TTT
TTC
TTA
TTG
TCT
TCC
TCA
TCG
TAT
TAC
TAA
TAG
TGT
TGC
TGA
TGG
CTT
CTC
CTA
CTG
CCT
CCC
CCA
CCG
CAT
CAC
CAA
CGT
CGC
CGA
CGG
ATT
ATC
ATA
ATG
ACT
ACC
ACA
ACG
AAT
AAC
AAA
AAG
AGT
AGC
AGA
AGG
GTT
GTC
GTA
GTG
GCT
GCC
GCA
GCG
GAT
GAC
GAA
GAG
GGT
GGC
GGA
GGG
Triplet


IGHV3−59*01_G301C− Final 3 nucleotides as a triplet
Count
1500
1000
500
0
Non−nucleotide
TTC
TTA
TTG
TCC
TCA
TAG
TGT
TGC
TGA
TGG
CTT
CTC
CTG
CCT
CCC
CCA
CAC
CAA
CAG
CGC
CGA
CGG
ATT
ATC
ATA
ATG
ACT
ACC
ACA
ACG
AAT
AAC
AAA
AAG
AGT
AGC
AGA
AGG
GTT
GTC
GTA
GTG
GCT
GCC
GCA
GCG
GAT
GAC
GAA
GAG
GGT
GGC
GGA
GGG
Triplet

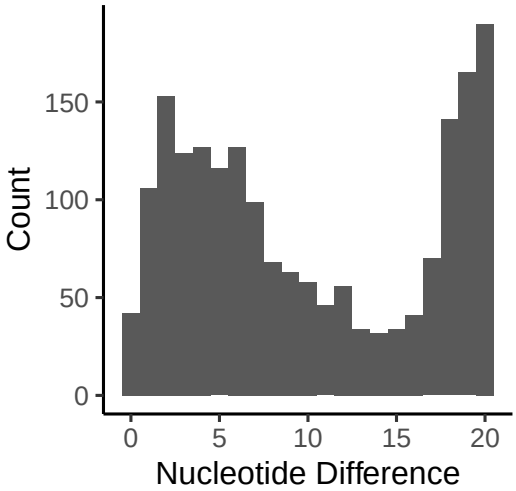
IGHV3S42*01_T19A_G2

14655 sequences assigned
540 (3.7%) exact matches, in which:
479 unique CDR3
5 unique J



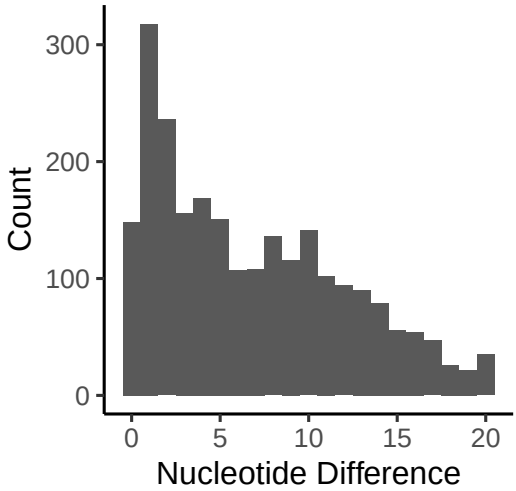
IGHV2−10*01_C6G_A23(

6194 sequences assigned
42 (0.7%) exact matches, in which:
41 unique CDR3
3 unique J



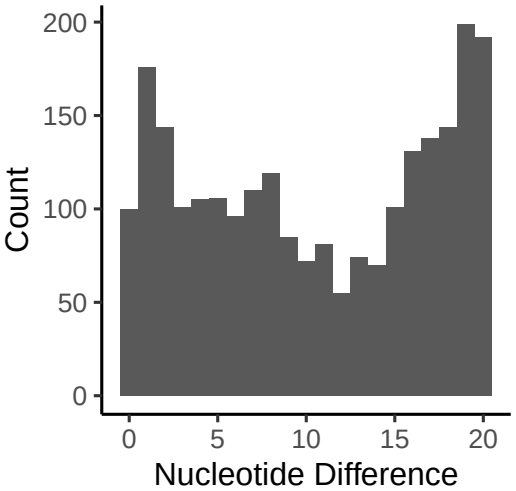
IGHV3−30*02_C141G

2691 sequences assigned
148 (5.5%) exact matches, in which:
135 unique CDR3
3 unique J



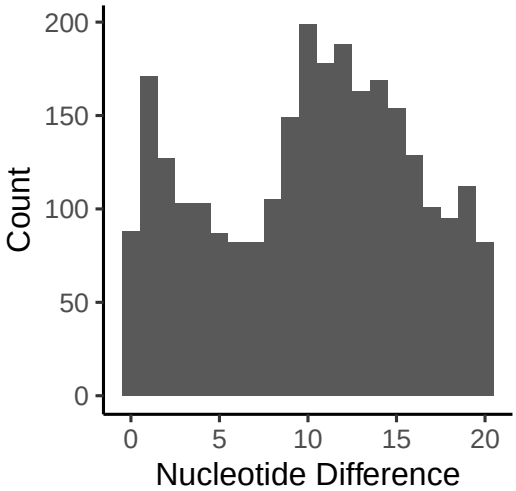
IGHV4S9*01_G15A_G21

4328 sequences assigned
100 (2.3%) exact matches, in which:
96 unique CDR3
4 unique J



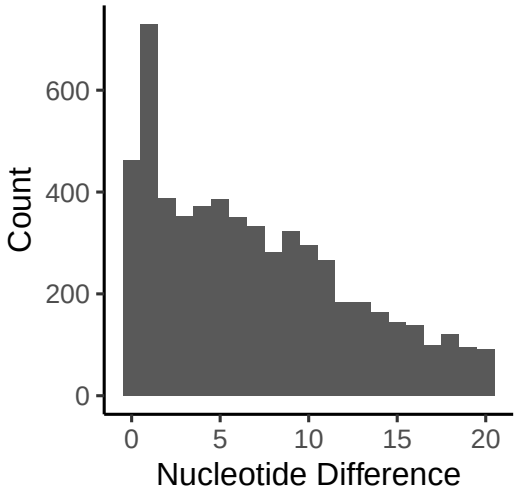
IGHV3−16*01_A51T_T78

3234 sequences assigned
88 (2.7%) exact matches, in which:
85 unique CDR3
4 unique J



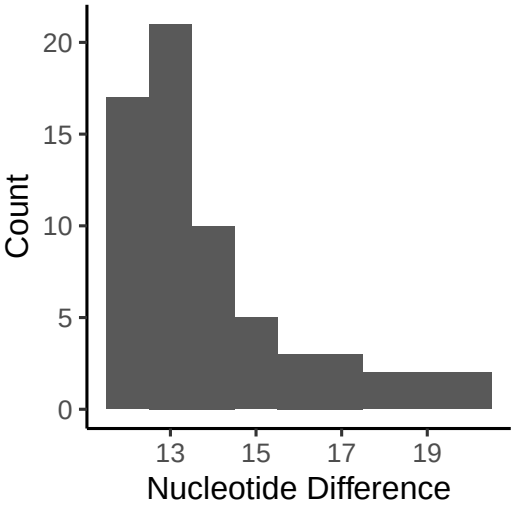
IGHV3−54*02_G170C

6407 sequences assigned
462 (7.2%) exact matches, in which:
426 unique CDR3
5 unique J



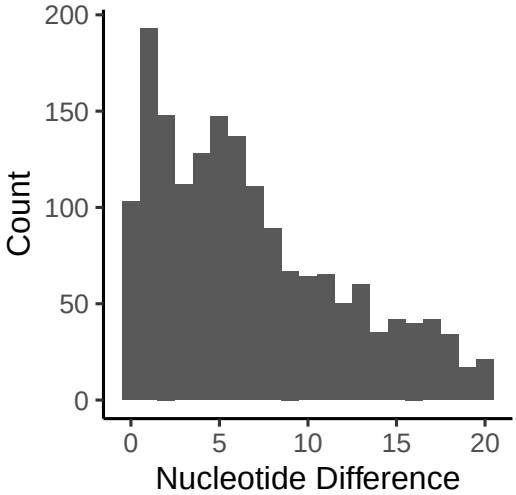
IGHV1−151*01

215 sequences assigned
No exact matches.



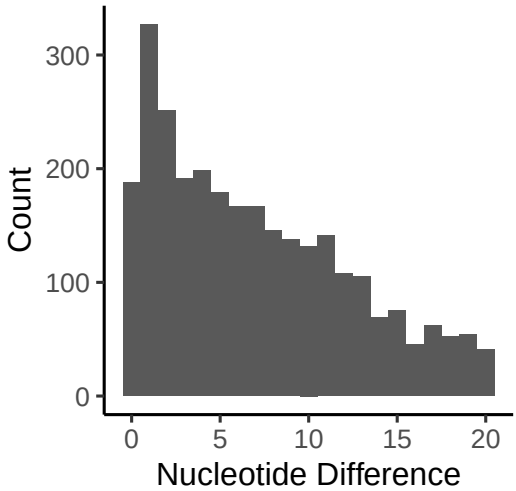
IGHV3−30*01_G174C_A:

2739 sequences assigned
103 (3.8%) exact matches, in which:
83 unique CDR3
3 unique J



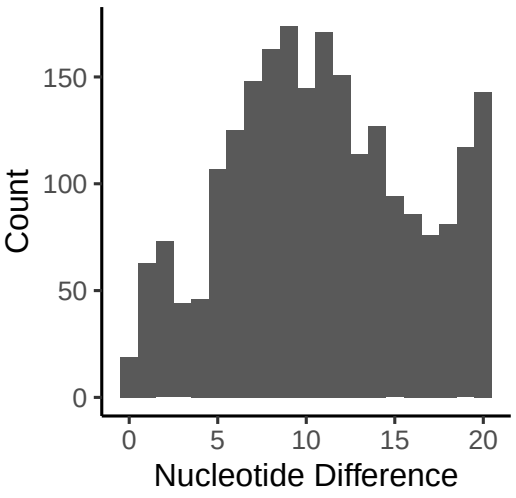
IGHV3−54*02_T111C_G1

3143 sequences assigned
188 (6%) exact matches, in which:
173 unique CDR3
5 unique J



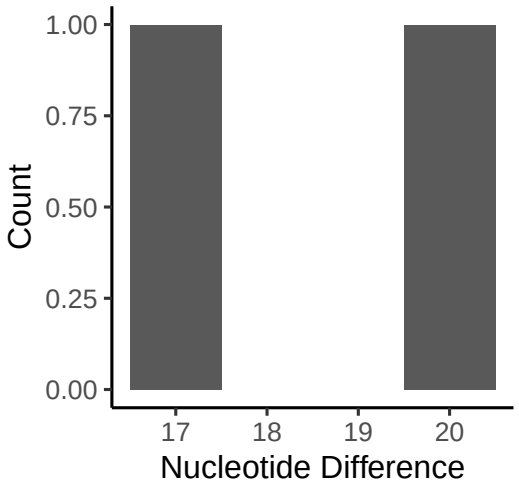
IGHV3−59*01_G301C

4134 sequences assigned
19 (0.5%) exact matches, in which:
19 unique CDR3
2 unique J



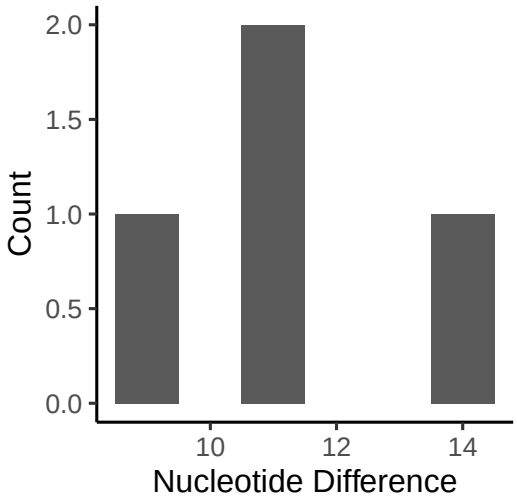
IGHV3−124*01

31 sequences assigned
No exact matches.



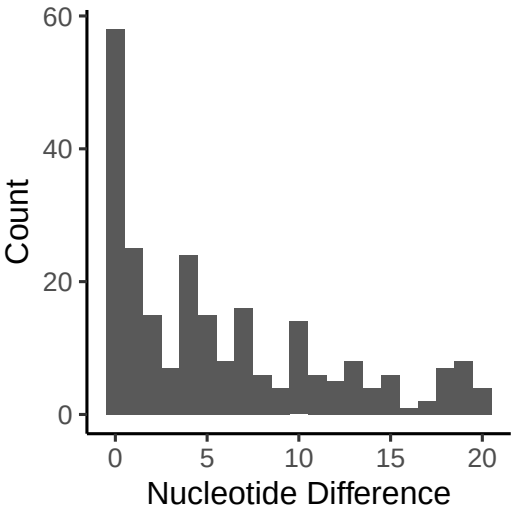
IGHV3−201*01

66 sequences assigned
No exact matches.



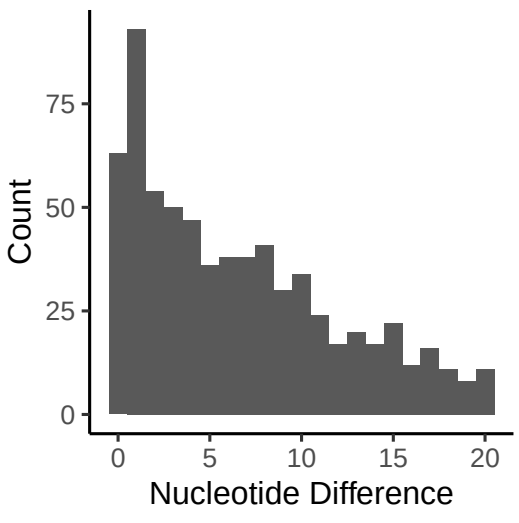
IGHV3−100*01_A132G

4032 sequences assigned
58 (1.4%) exact matches, in which:
52 unique CDR3
4 unique J



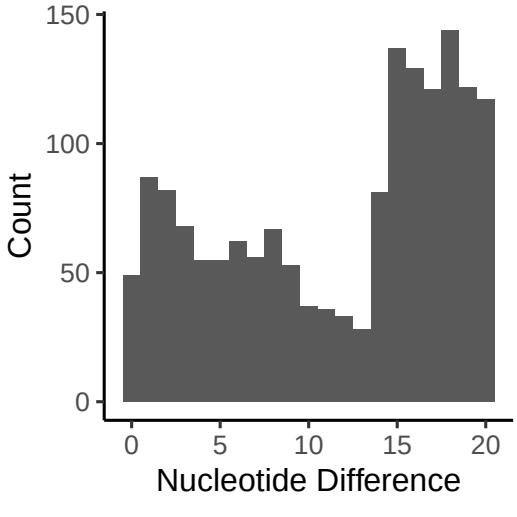
IGHV3−134*01_A39C_A4(

873 sequences assigned
63 (7.2%) exact matches, in which:
57 unique CDR3
4 unique J



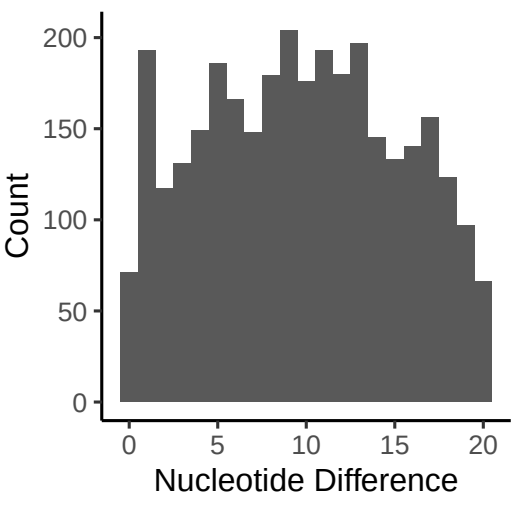
IGHV4−76*01_C34G_G1(

2826 sequences assigned
49 (1.7%) exact matches, in which:
42 unique CDR3
5 unique J



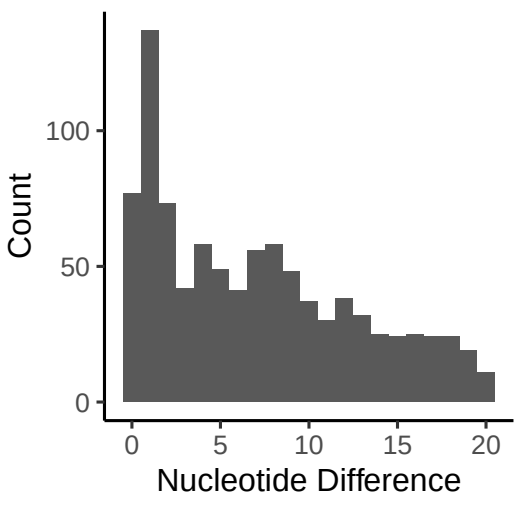
IGHV3−116*02_G8A_T1(

3965 sequences assigned
71 (1.8%) exact matches, in which:
59 unique CDR3
4 unique J



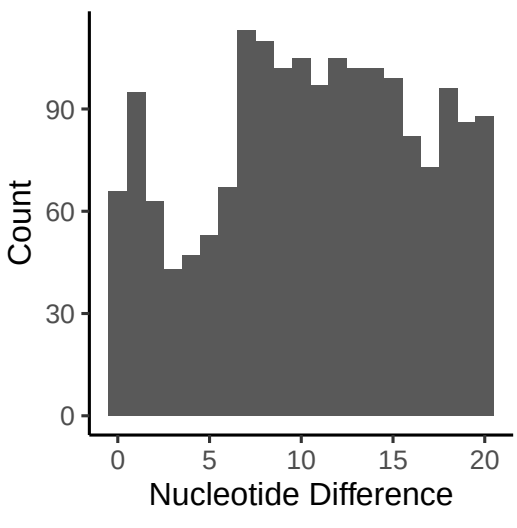
IGHV3−184*01_G106A_T

1407 sequences assigned
77 (5.5%) exact matches, in which:
65 unique CDR3
5 unique J



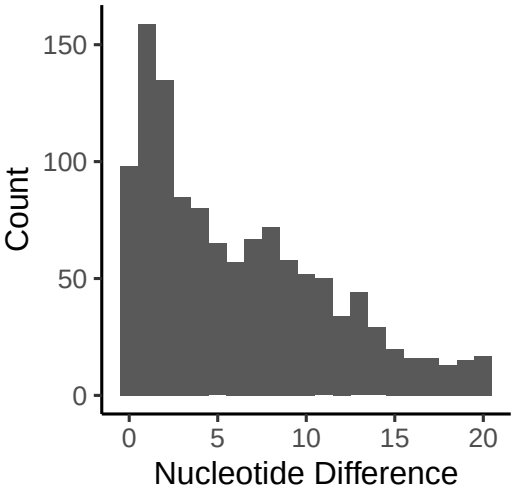
IGHV4−80*01_G70A_C90

2479 sequences assigned
66 (2.7%) exact matches, in which:
62 unique CDR3
4 unique J



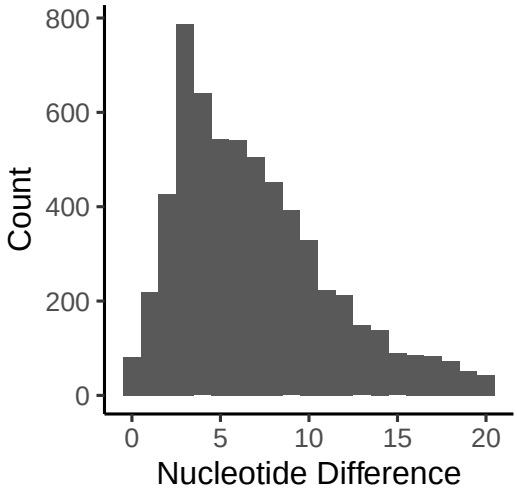
IGHV4−122*02_C87T_G1

1298 sequences assigned
98 (7.6%) exact matches, in which:
94 unique CDR3
5 unique J



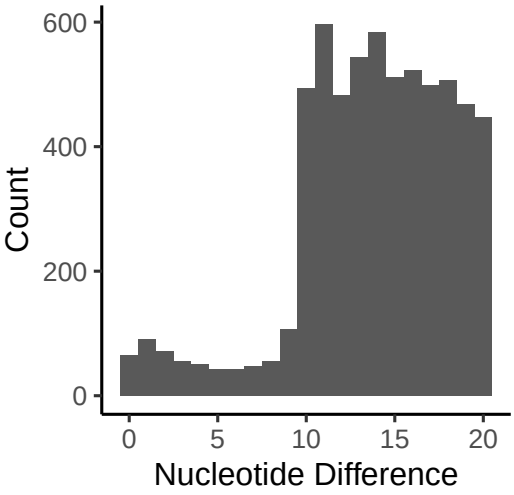
IGHV5−43*01_A106G_G164T_C165G_A203G_C225G_T

6268 sequences assigned
82 (1.3%) exact matches, in which:
70 unique CDR3
5 unique J



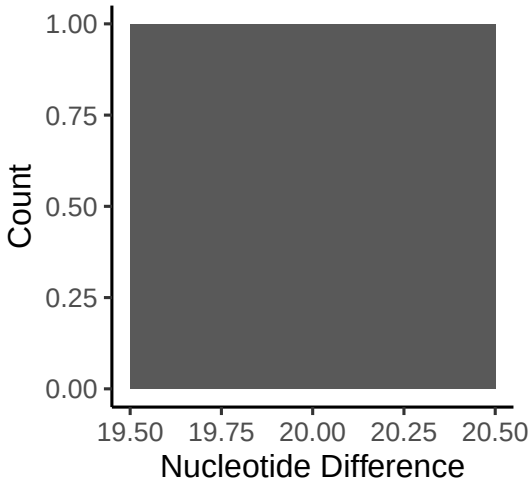
IGHV4−147*01_G82T_G8

9736 sequences assigned
65 (0.7%) exact matches, in which:
63 unique CDR3
5 unique J



IGHV7−94*01

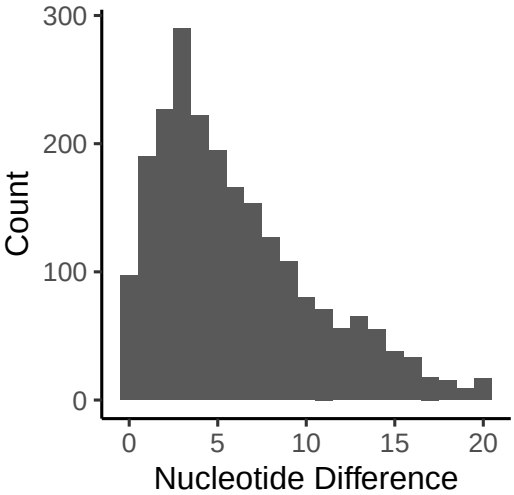
9 sequences assigned
No exact matches.

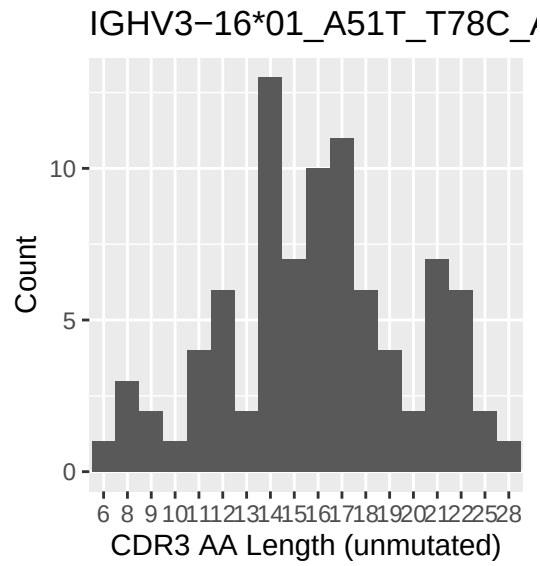


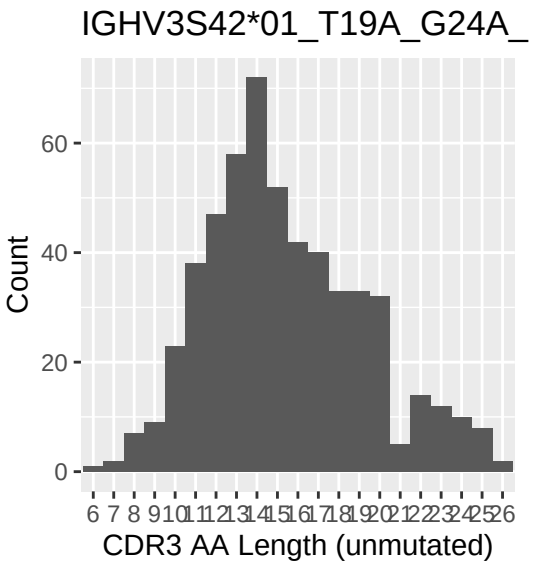
)6T_G197A_C215A_G291A

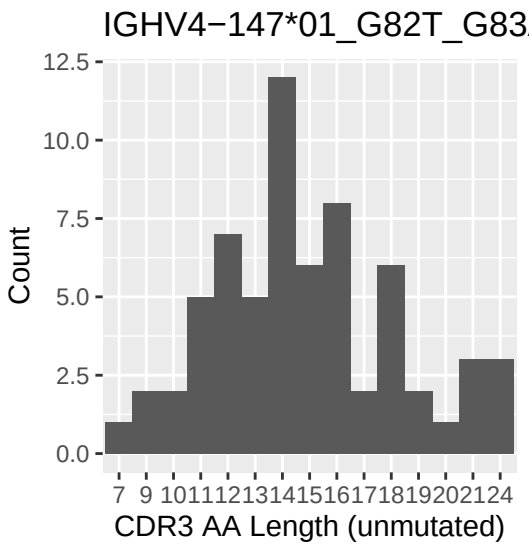
IGHV5−20*02_A141G_C312T

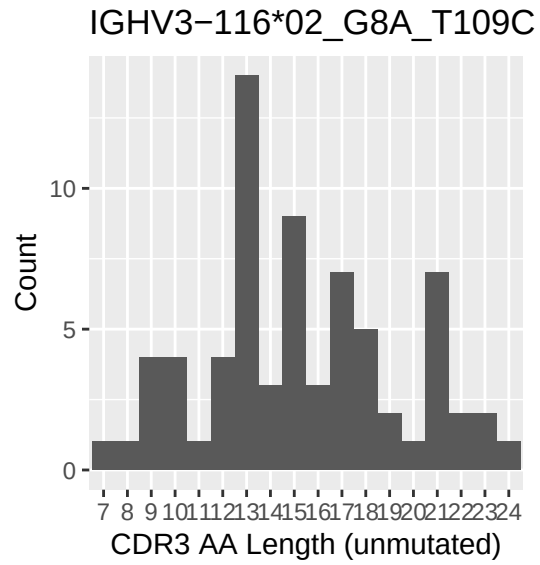
2375 sequences assigned
97 (4.1%) exact matches, in which:
91 unique CDR3
4 unique J

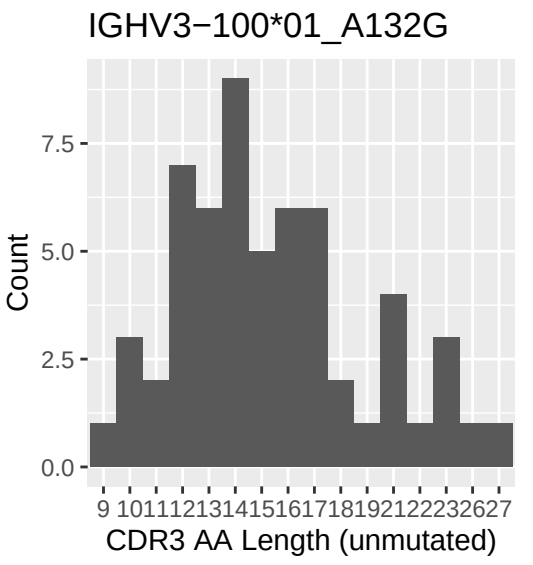


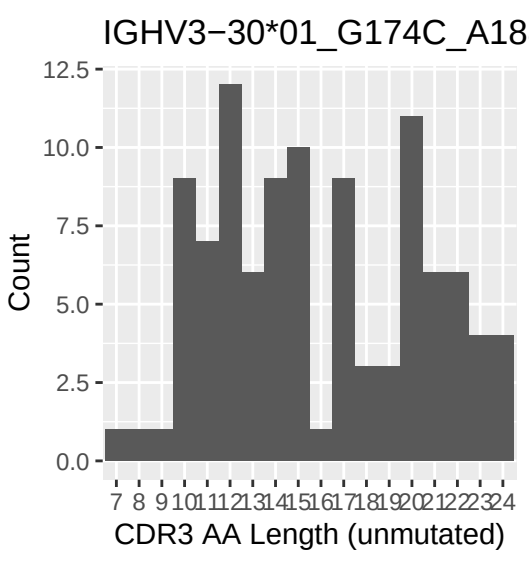

IGHV3−16*01_A51T_T78C_
Count
CDR3 AA Length (unmutated)

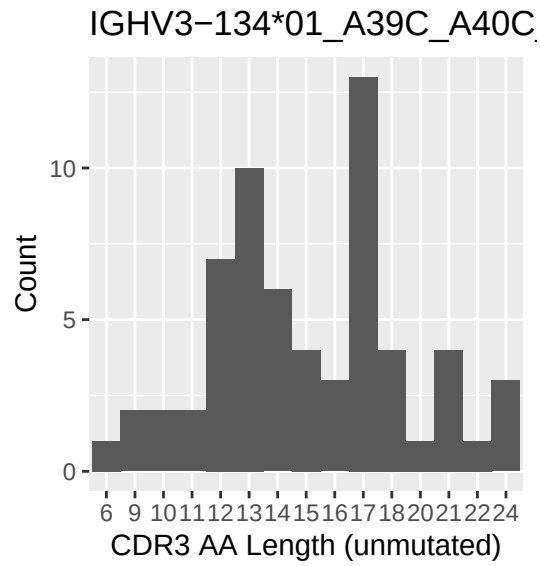

IGHV3S42*01_T19A_G24A_
Count
CDR3 AA Length (unmutated)

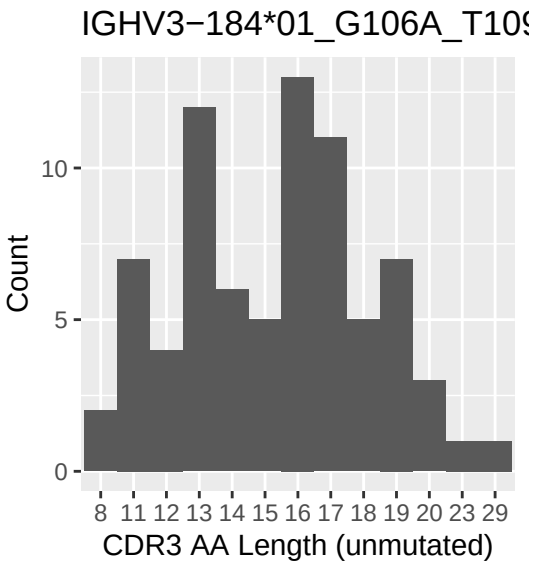

IGHV4−147*01_G82T_G83
Count
CDR3 AA Length (unmutated)

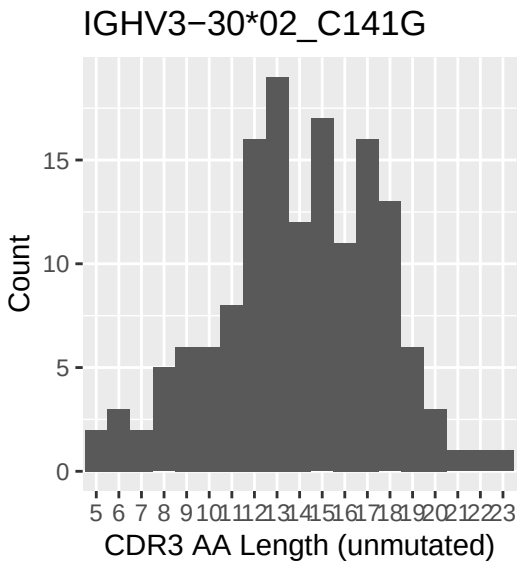

IGHV3−116*02_G8A_T109C
Count
CDR3 AA Length (unmutated)

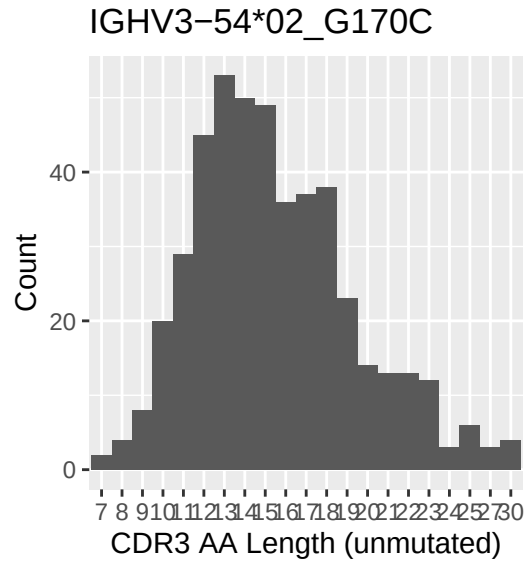

IGHV3−100*01_A132G
Count
CDR3 AA Length (unmutated)

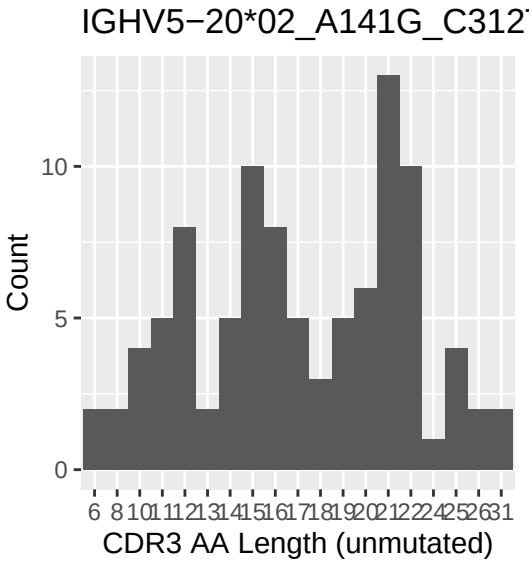

IGHV3−30*01_G174C_A18
Count
CDR3 AA Length (unmutated)

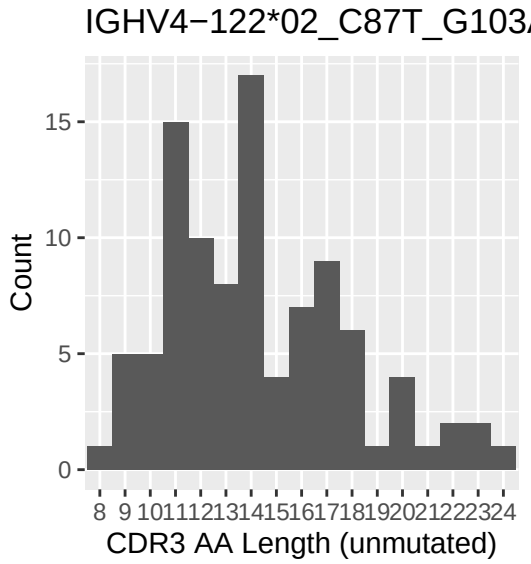

IGHV3−134*01_A39C_A40C
Count
CDR3 AA Length (unmutated)

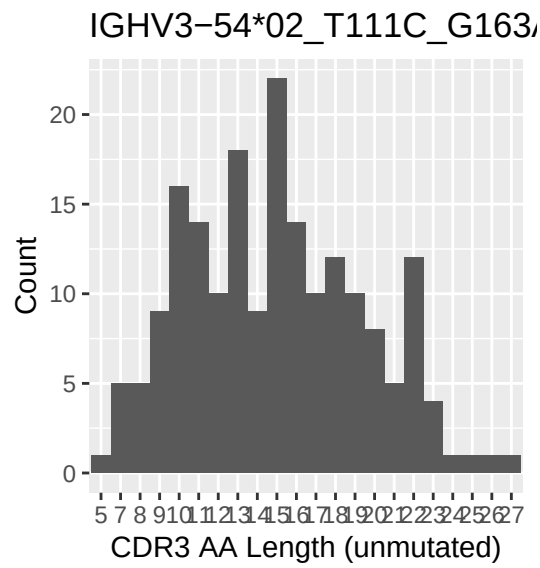

IGHV3−184*01_G106A_T10
Count
CDR3 AA Length (unmutated)

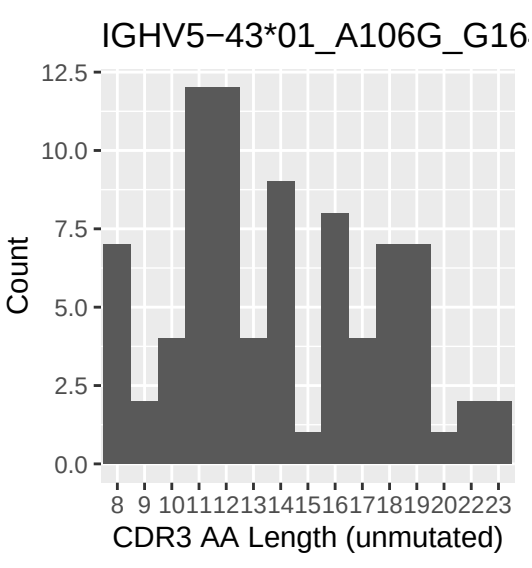

IGHV3−30*02_C141G
Count
CDR3 AA Length (unmutated)

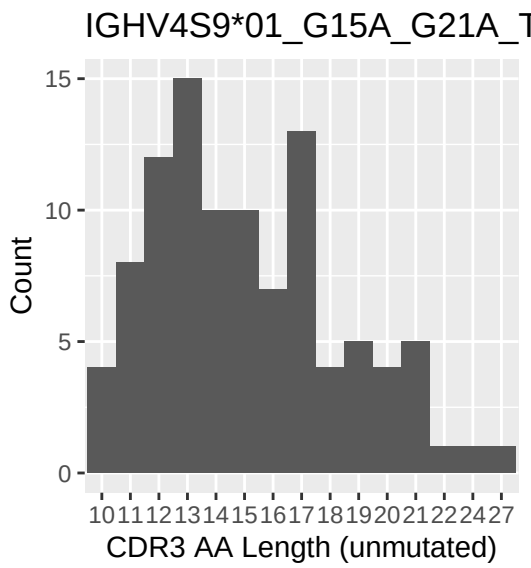

IGHV3−54*02_G170C
Count
CDR3 AA Length (unmutated)

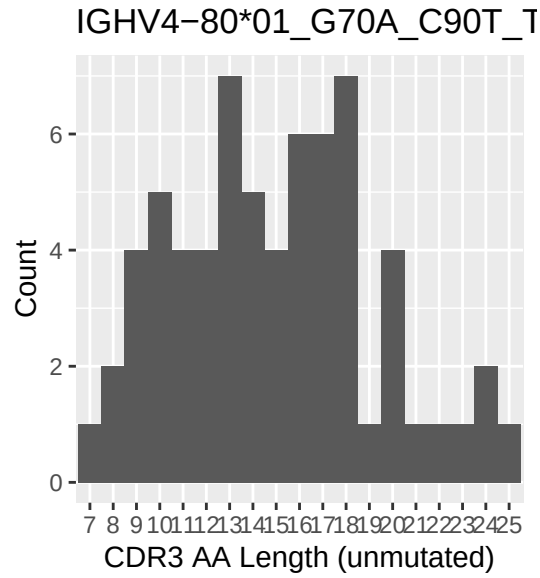

IGHV5−20*02_A141G_C312
Count
CDR3 AA Length (unmutated)

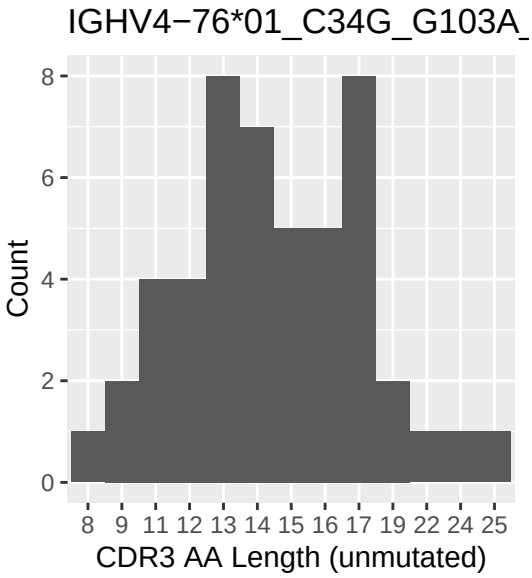

IGHV4−122*02_C87T_G103
Count
CDR3 AA Length (unmutated)

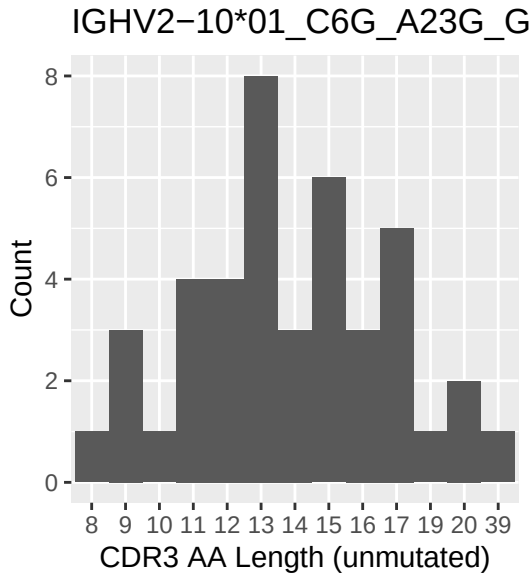

IGHV3−54*02_T111C_G163
Count
CDR3 AA Length (unmutated)

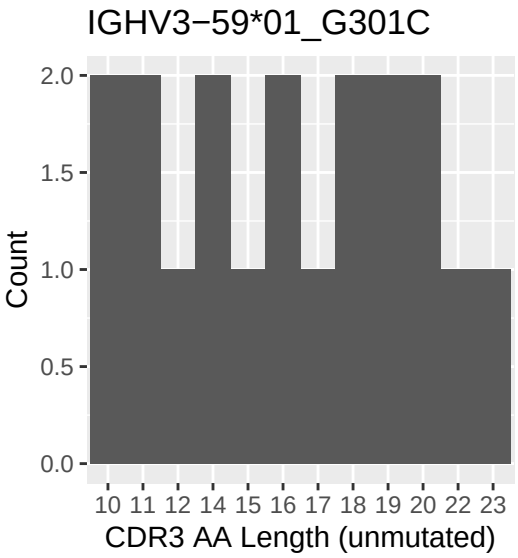

IGHV5−43*01_A106G_G16
Count
CDR3 AA Length (unmutated)


IGHV4S9*01_G15A_G21A_T
Count
CDR3 AA Length (unmutated)


IGHV4−80*01_G70A_C90T_T
Count
CDR3 AA Length (unmutated)


IGHV4−76*01_C34G_G103A_
Count
CDR3 AA Length (unmutated)


IGHV2−10*01_C6G_A23G_G
Count
CDR3 AA Length (unmutated)


IGHV3−59*01_G301C
Count
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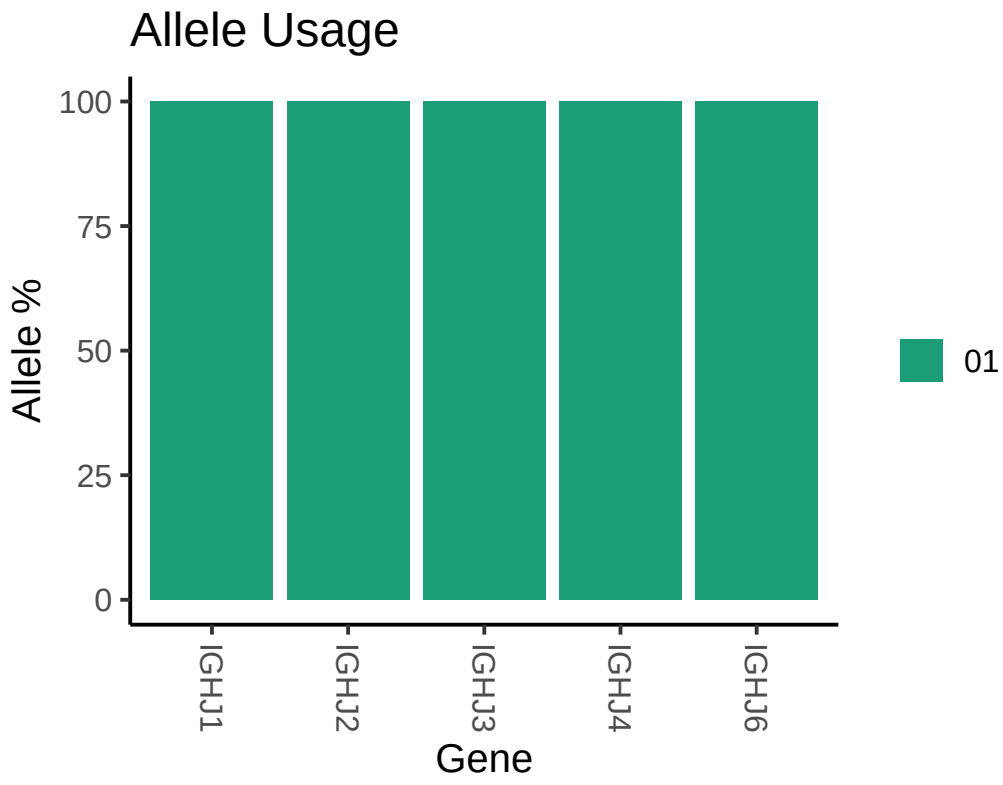
1.5
1.0
0.5
0.0
10 11 12 14 15 16 17 18 19 20 22 23
CDR3 AA Length (unmutated)


Allele Usage
100
75
50
25
0
Allele %
IGHJ1
IGHJ2
IGHJ3
IGHJ4
IGHJ6
Gene
01

Warning − no inferred sequences found.

Warning − no inferred sequences found.

Warning − no inferred sequences found.

Warning − no inferred sequences found.