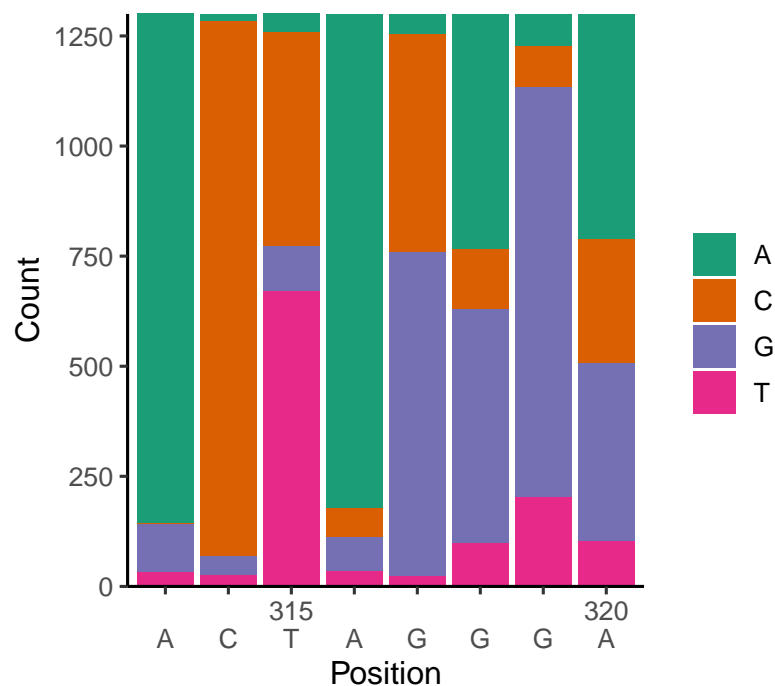
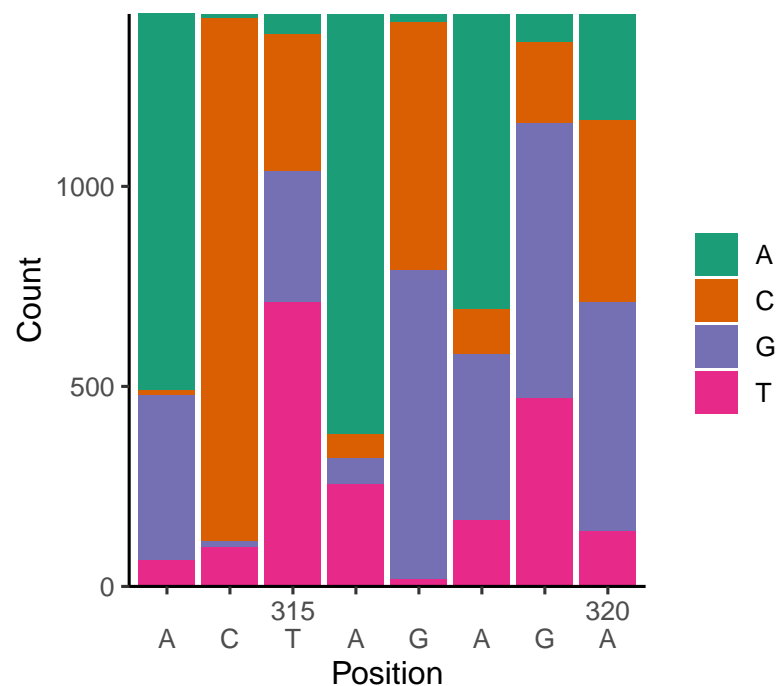


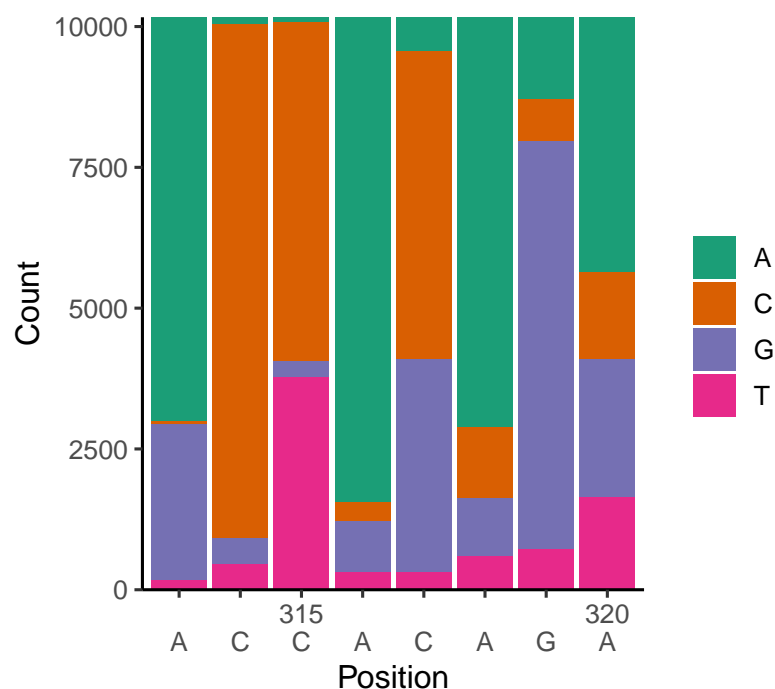
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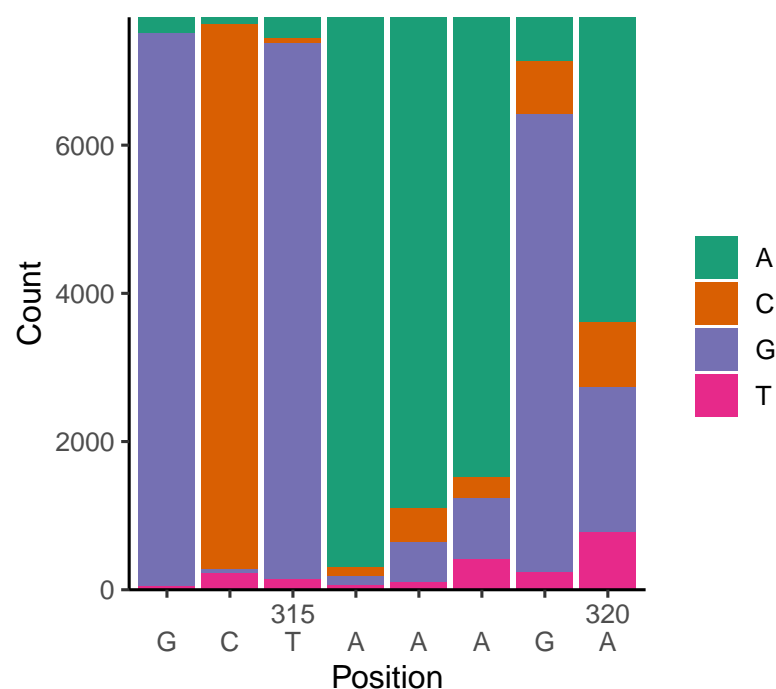
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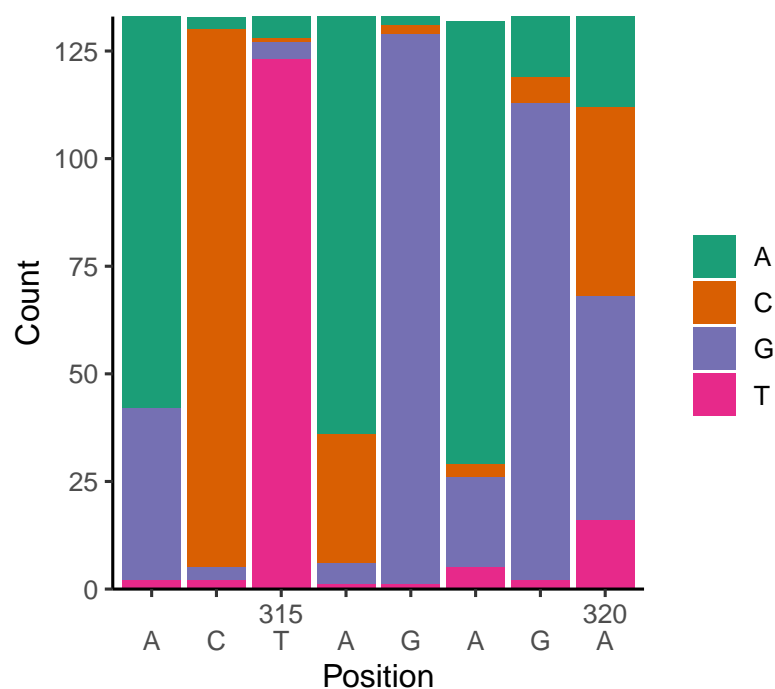
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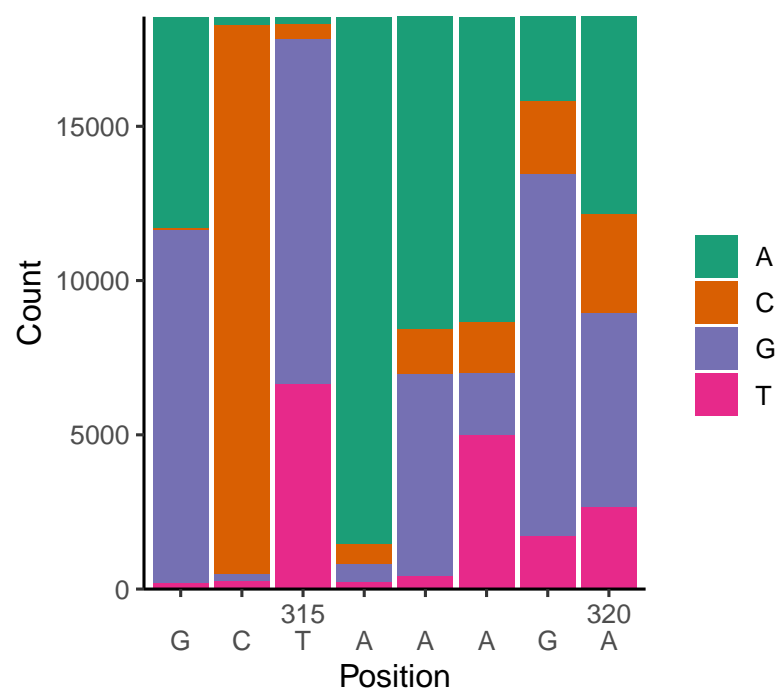
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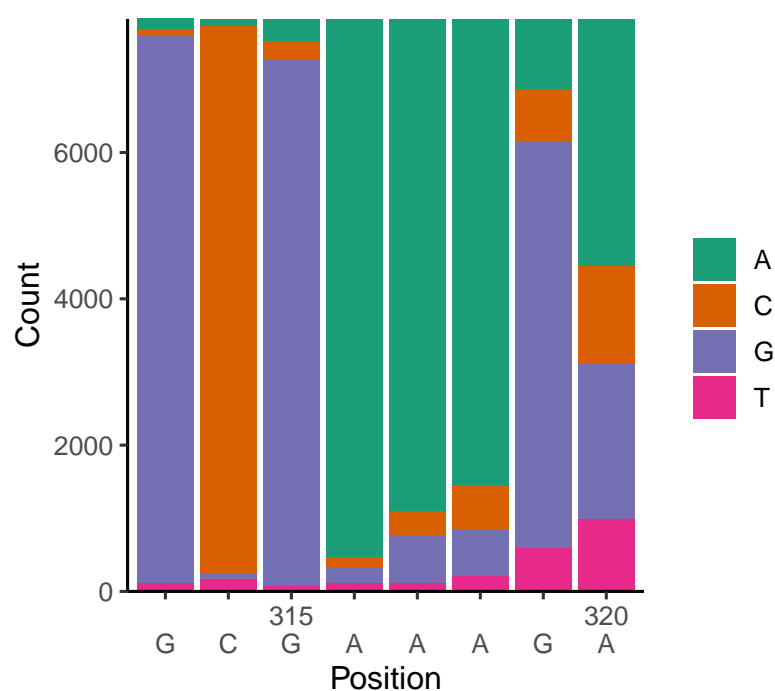
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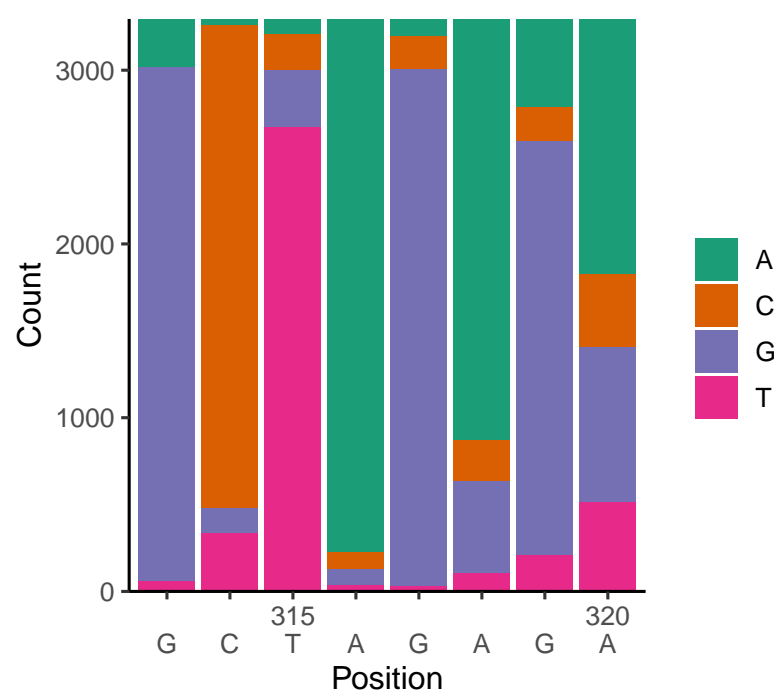
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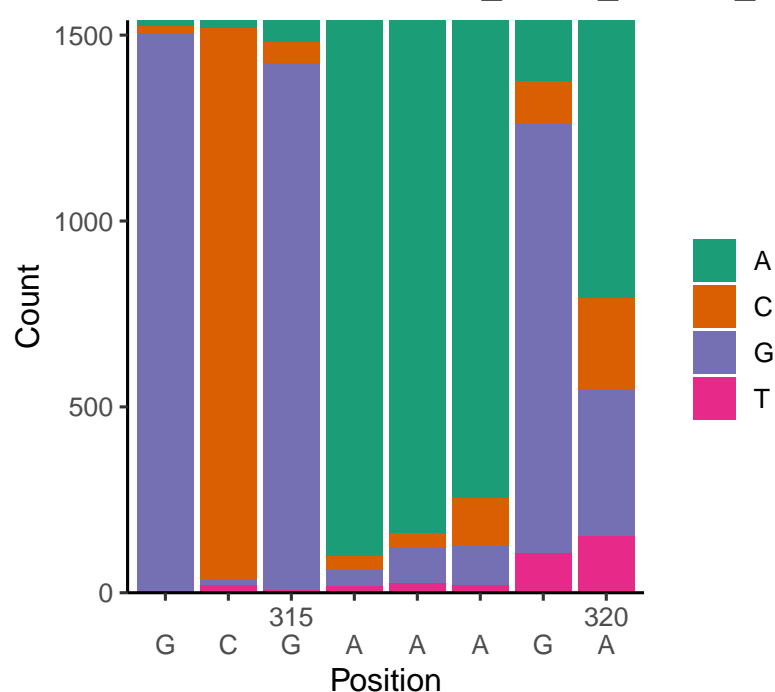
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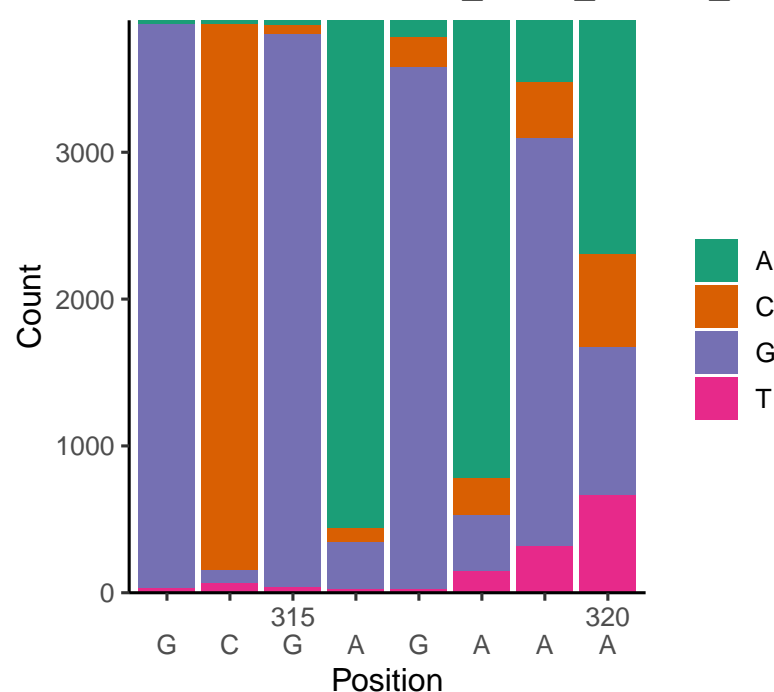
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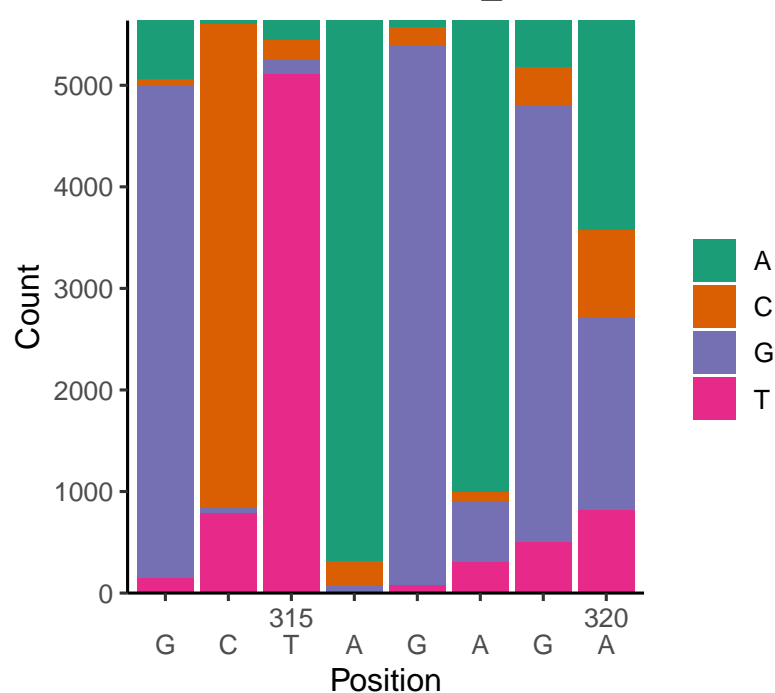
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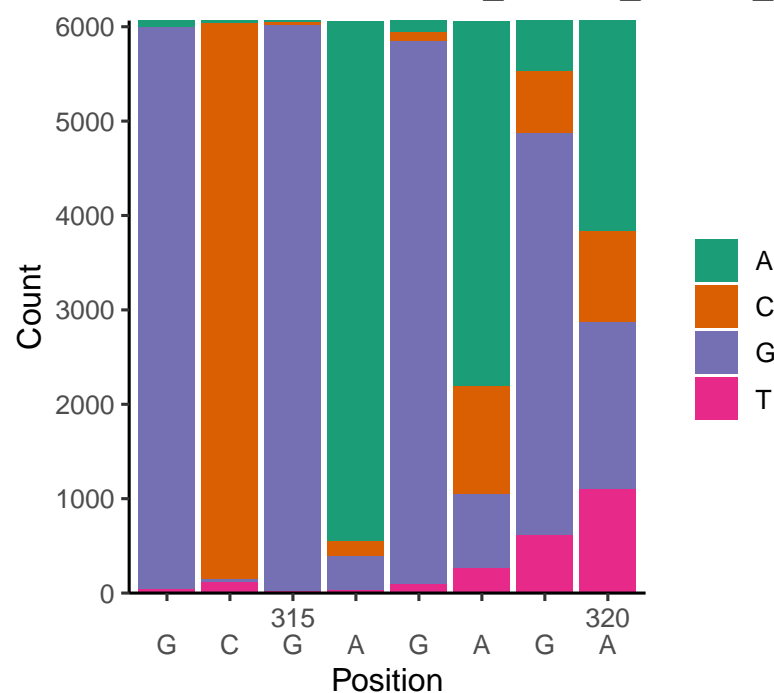
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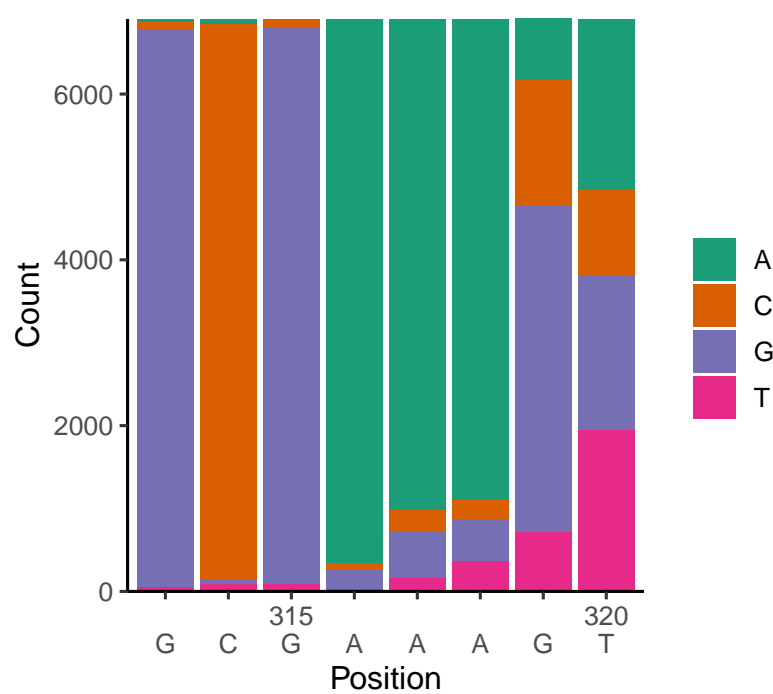
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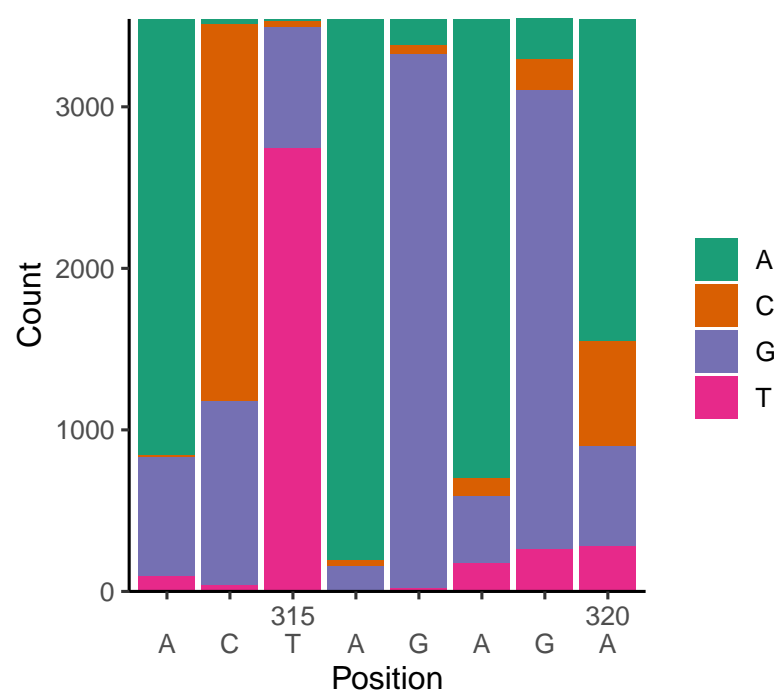
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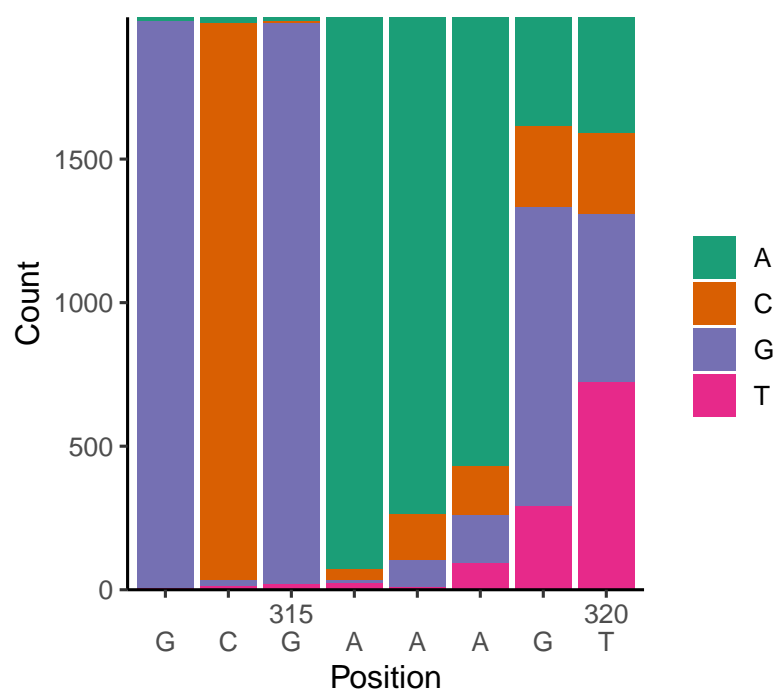
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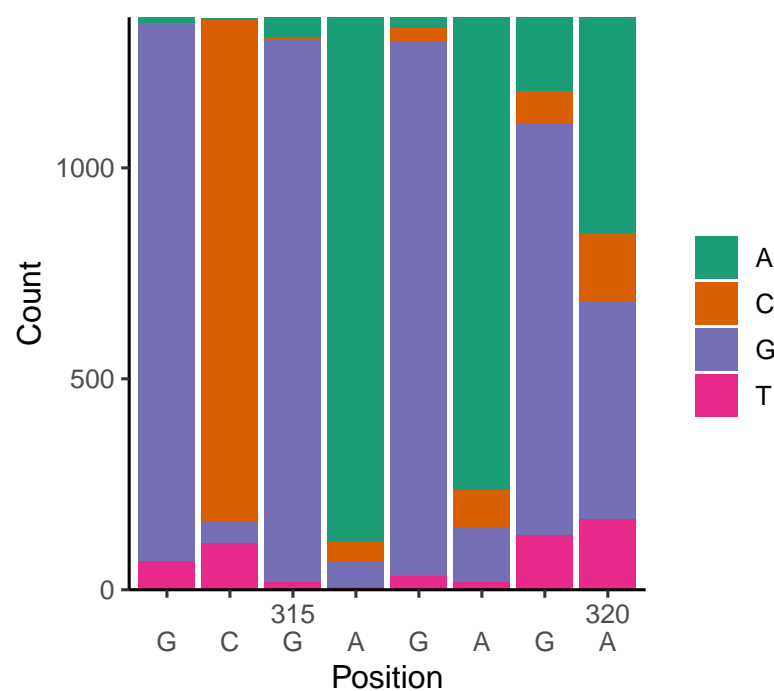
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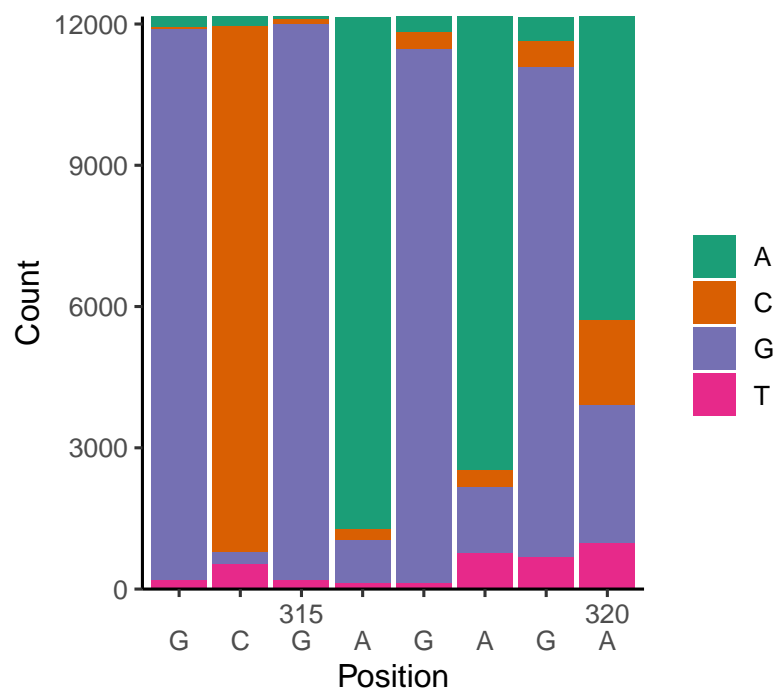
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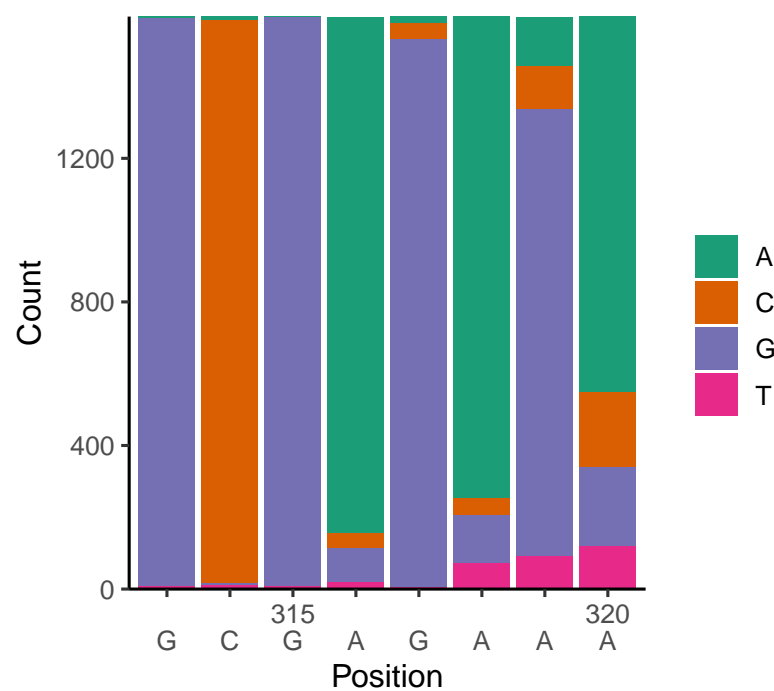
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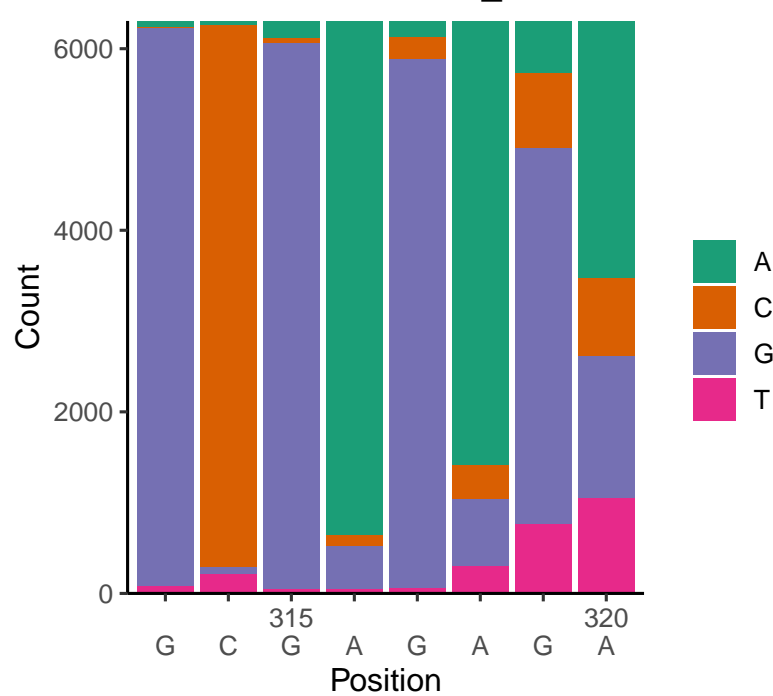
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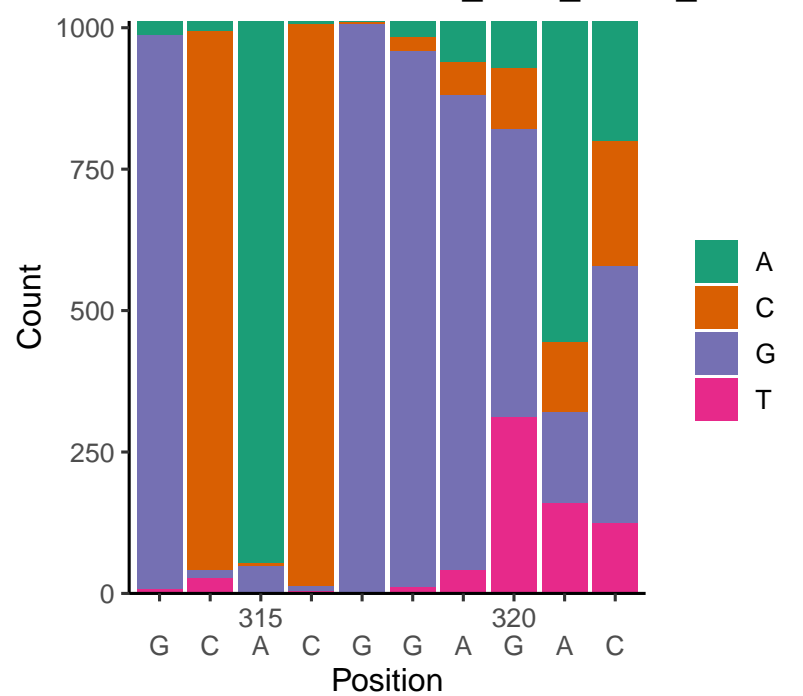
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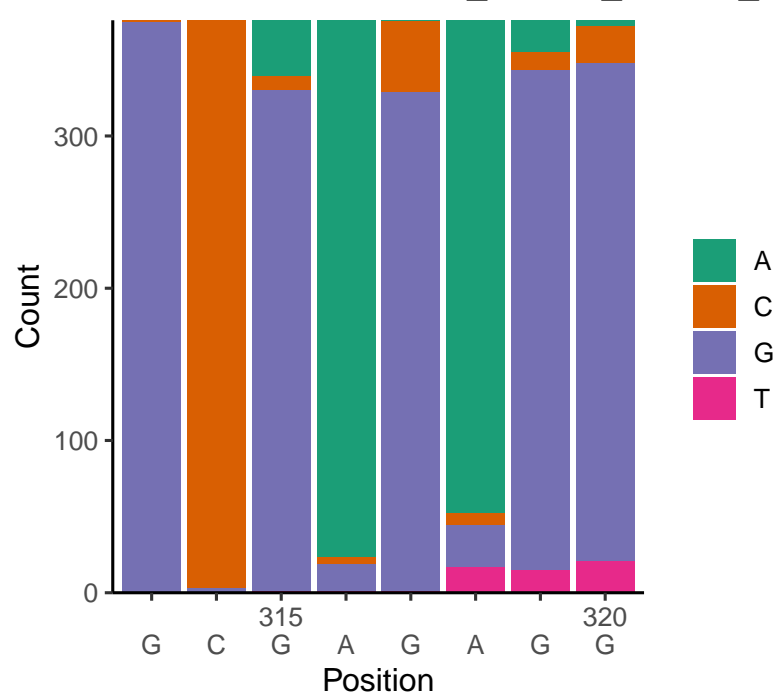
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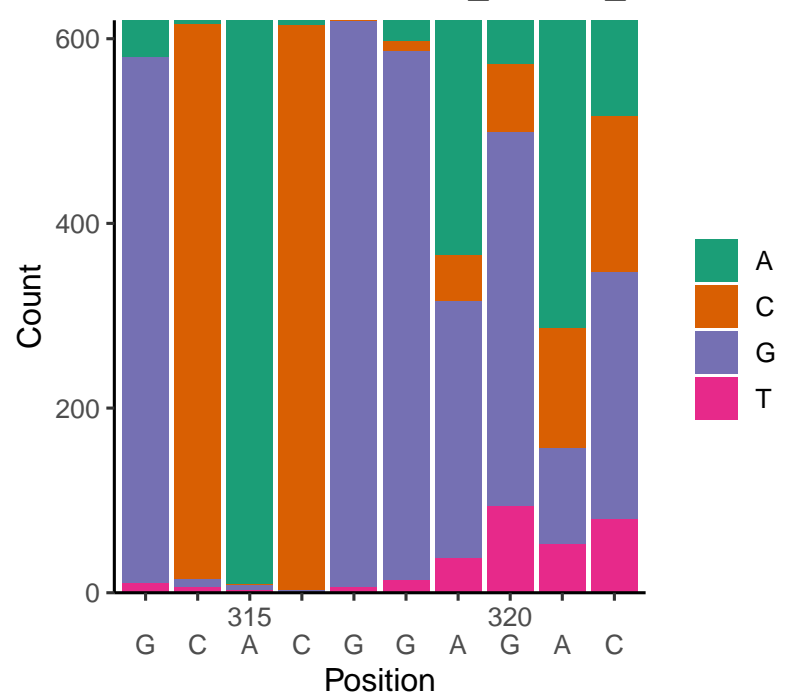
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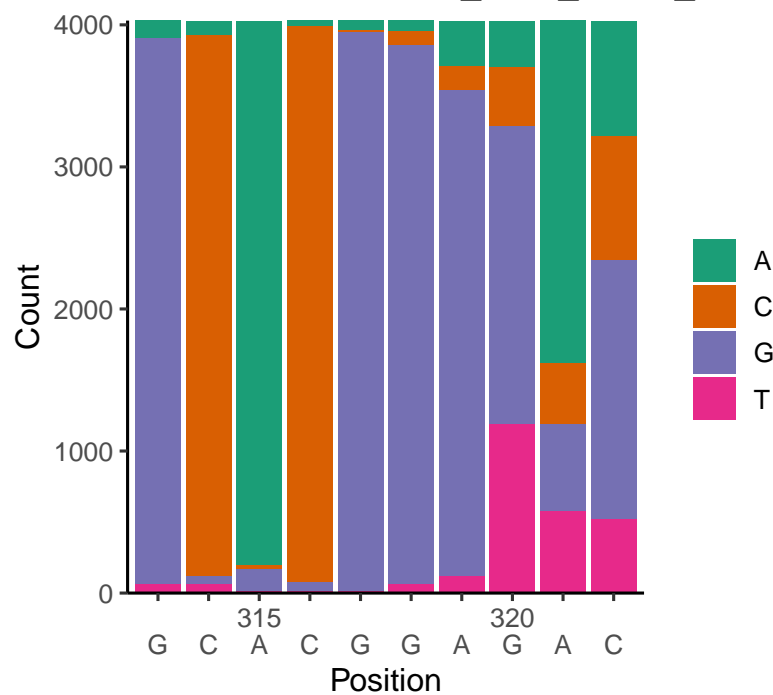
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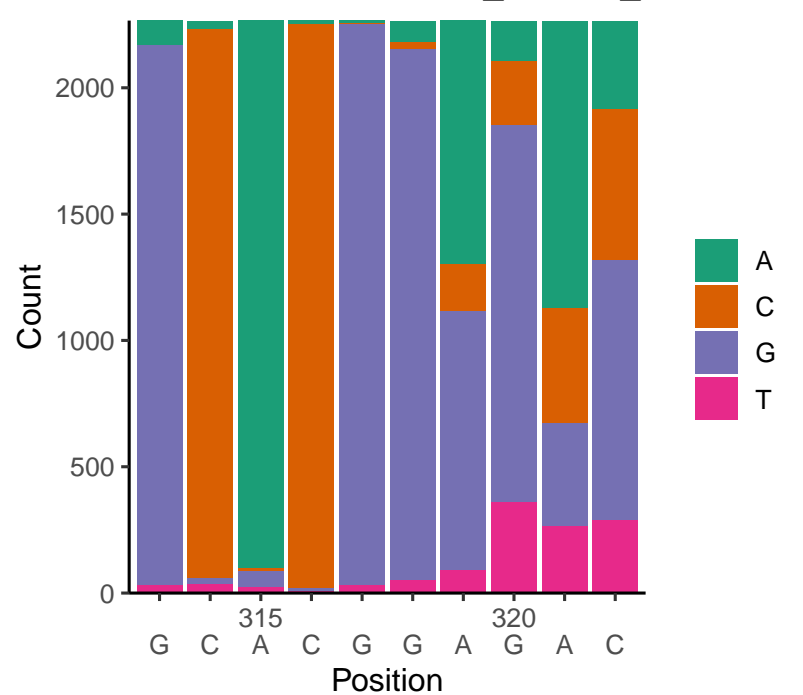
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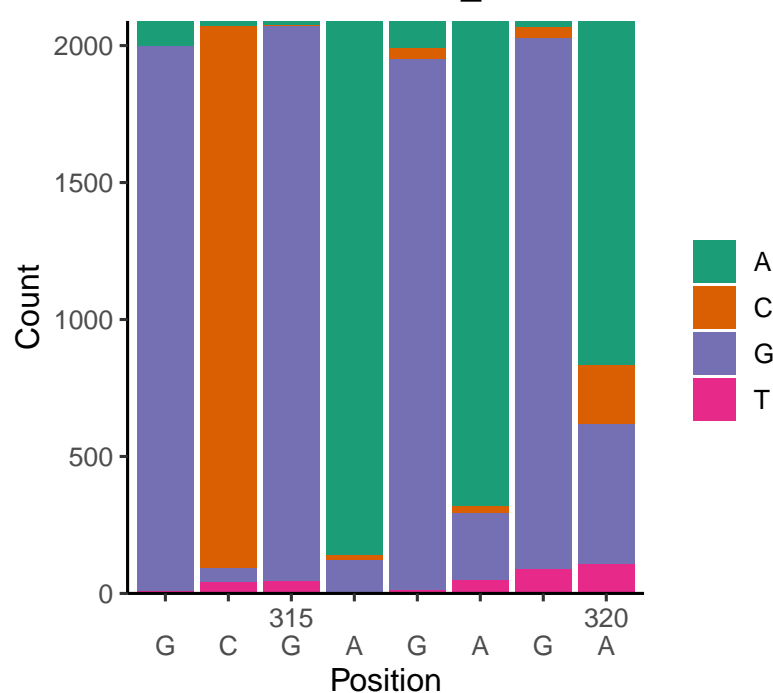
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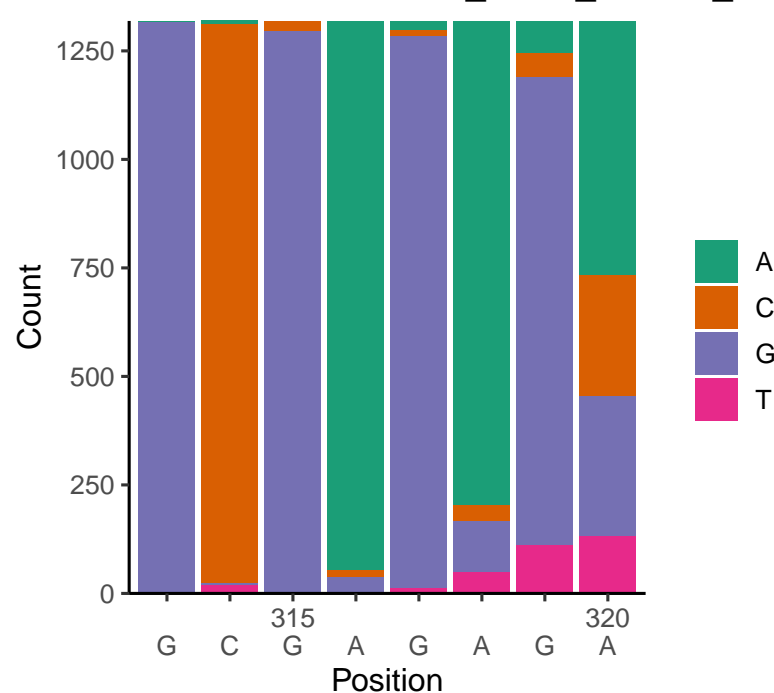
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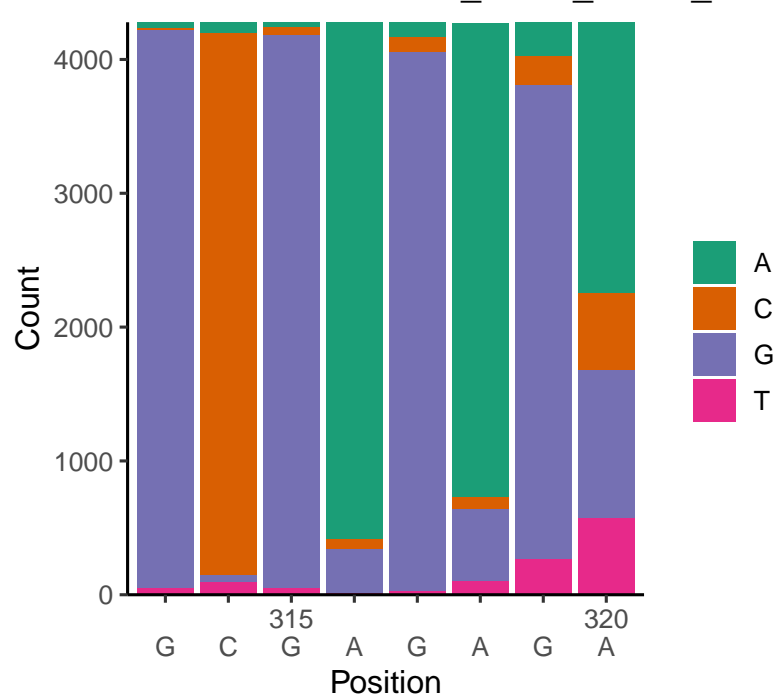
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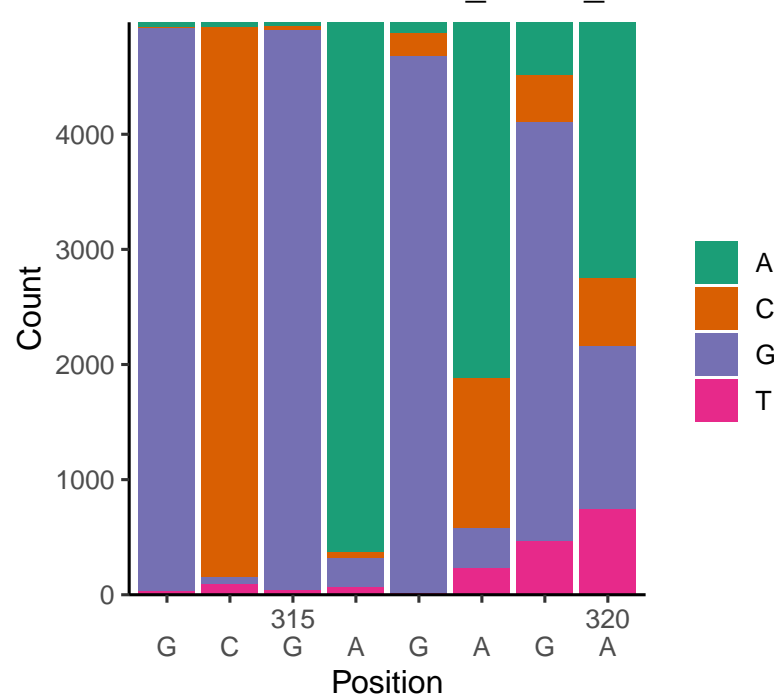
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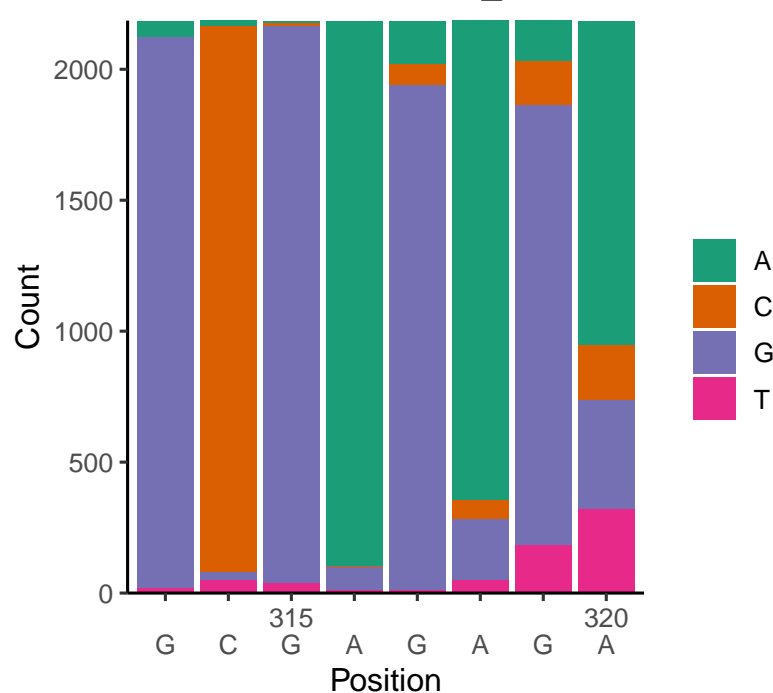
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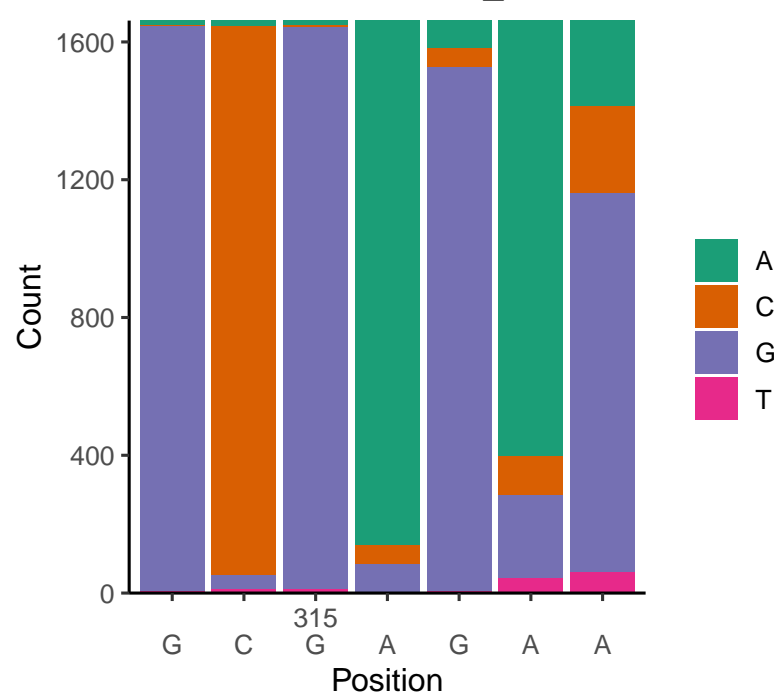
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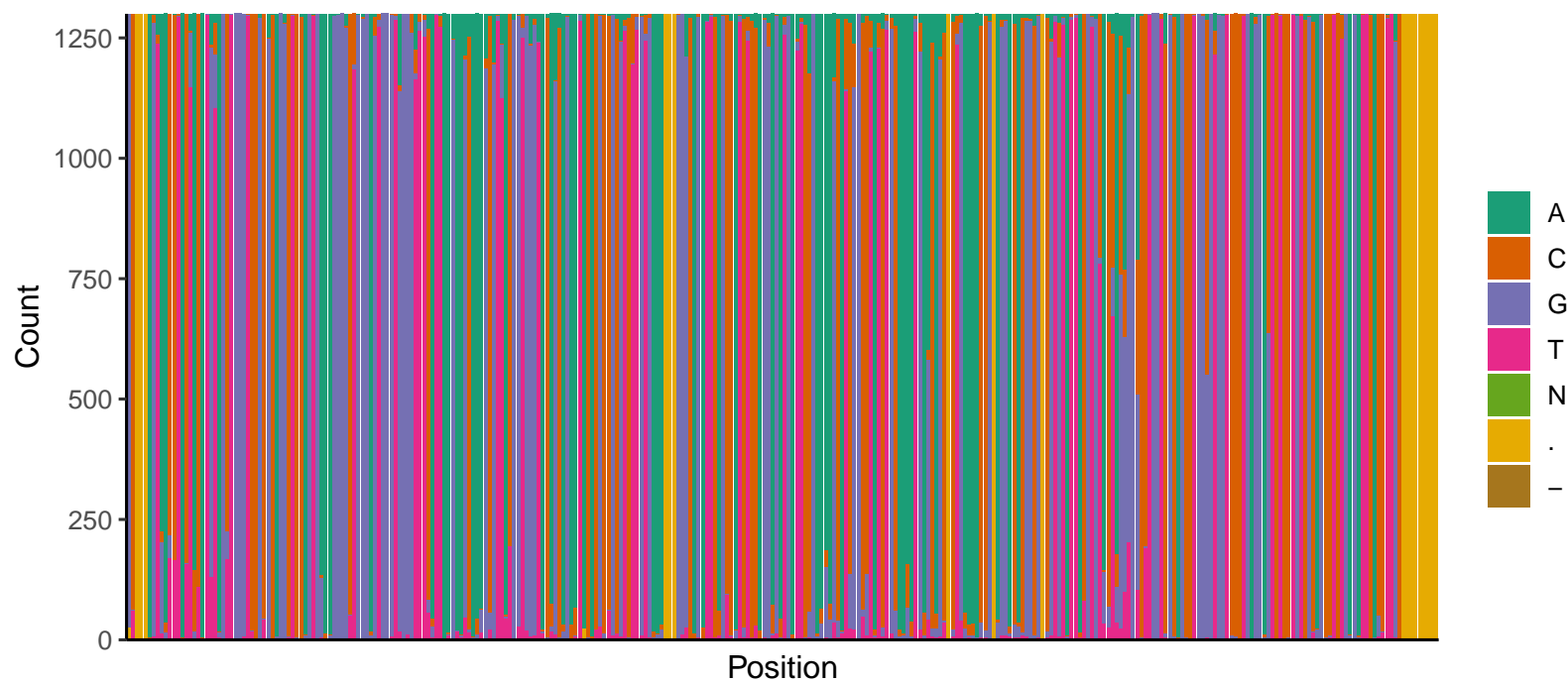
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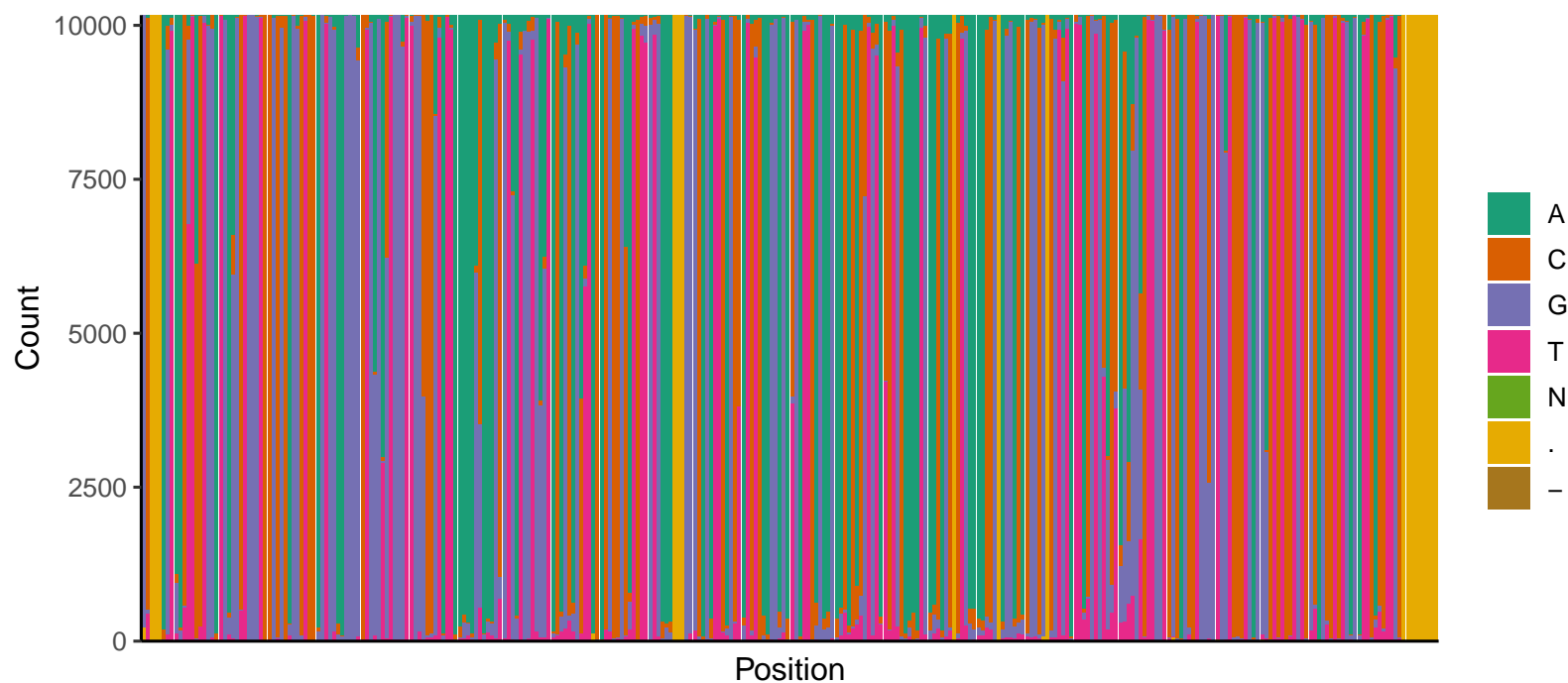
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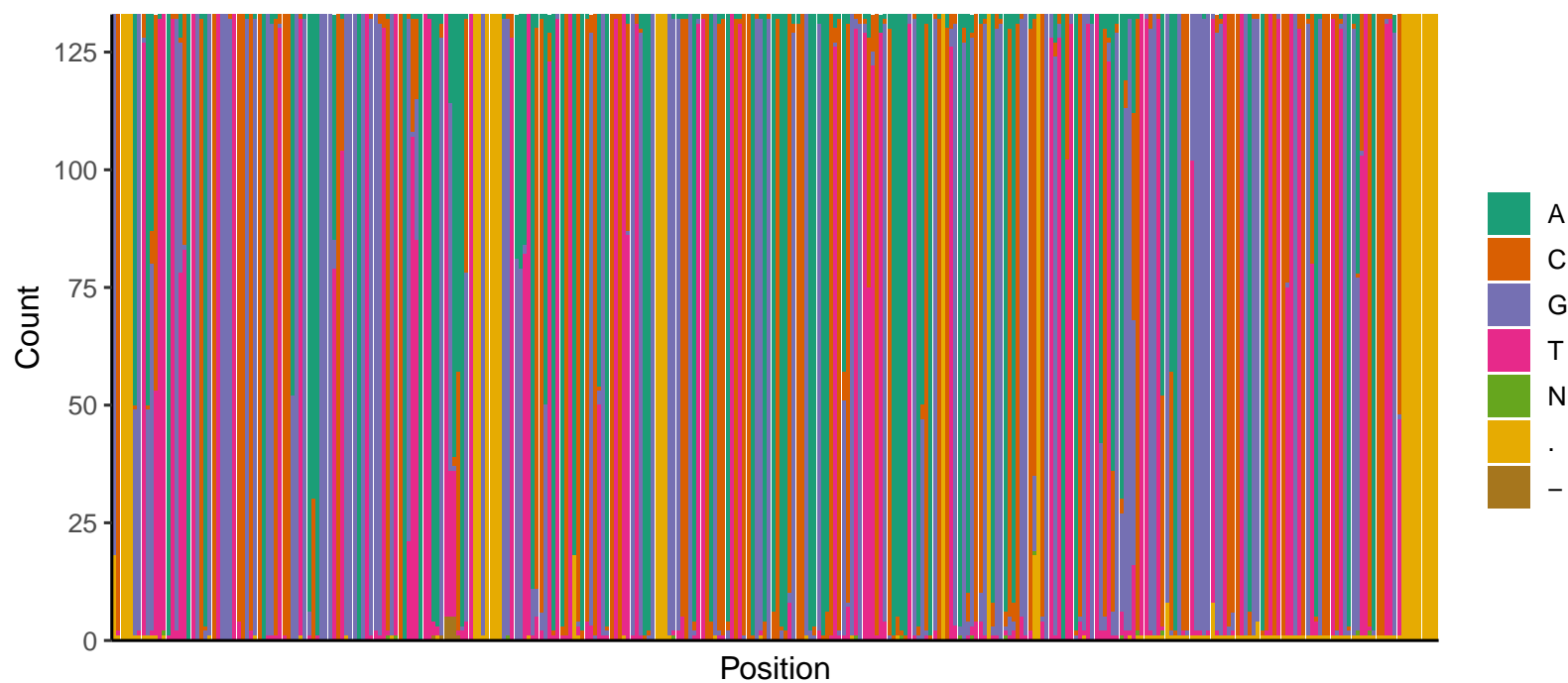
Gene IGHV3-184*01_T34C_G48C_C61G_G106A_T109C_G275A



Gene IGHV3-30*01_G48C_T110C_A152T_G174C_G181A_G207A



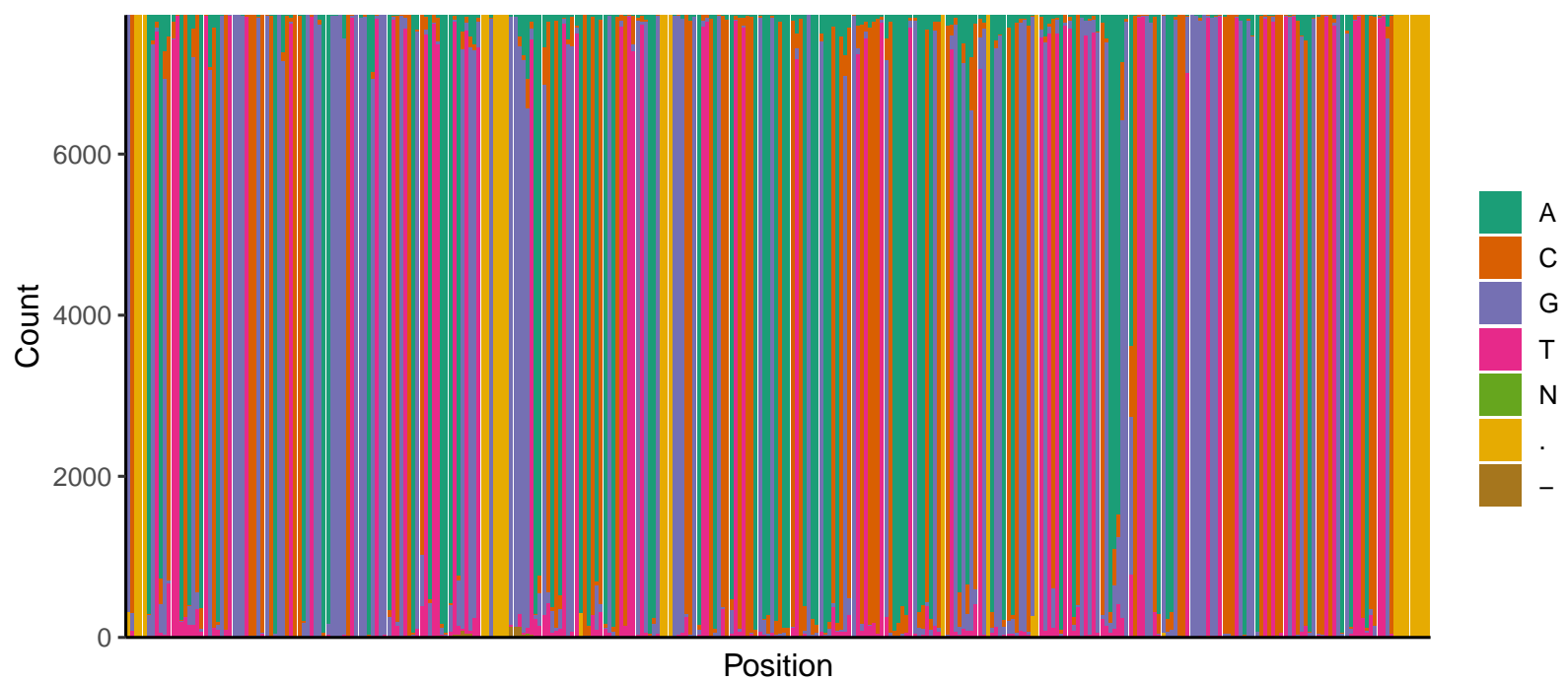
Gene IGHV3-100*01_G3C_A132G_C194T



Gene IGHV3-100*02_C3G



Gene IGHV3S42*01_T19A_G24A_C27A_T112A_G114C_A118C_T120C_A133G_A197G



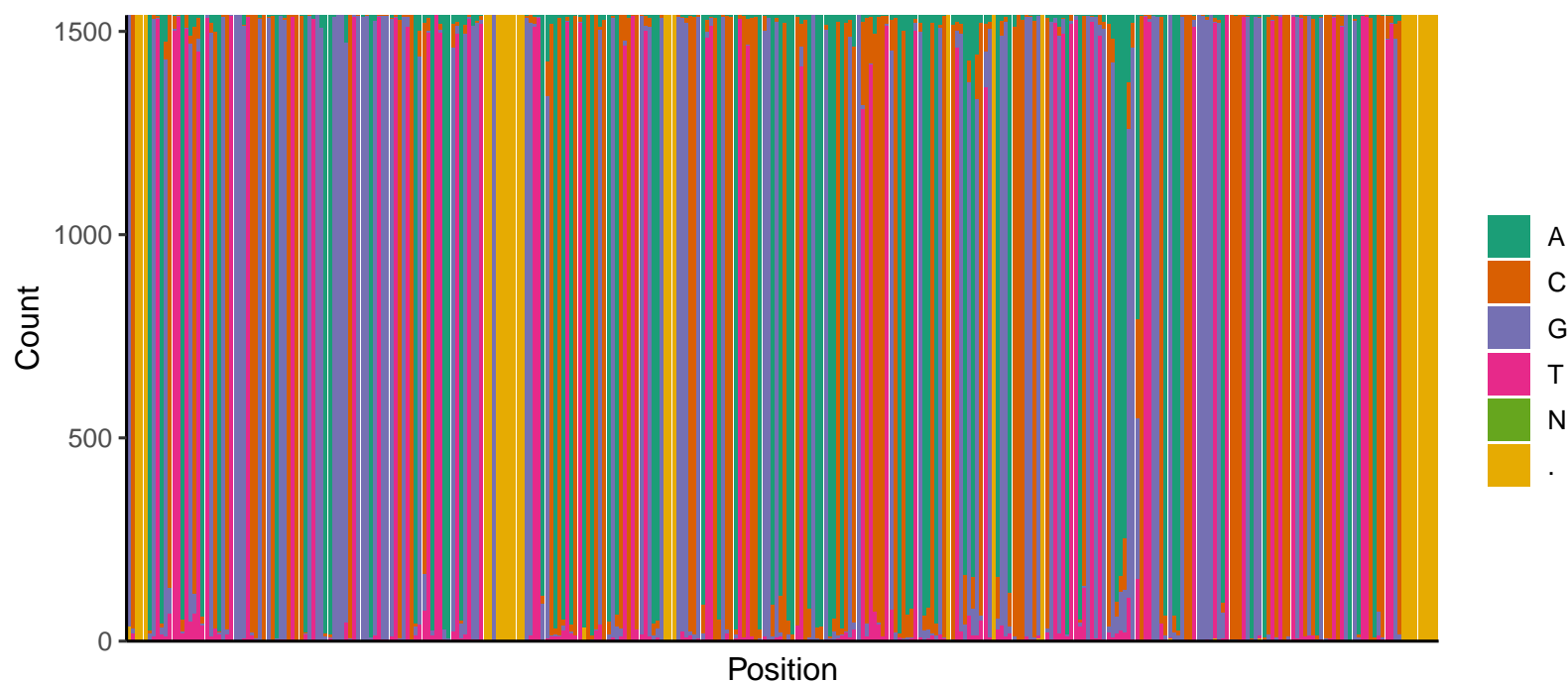
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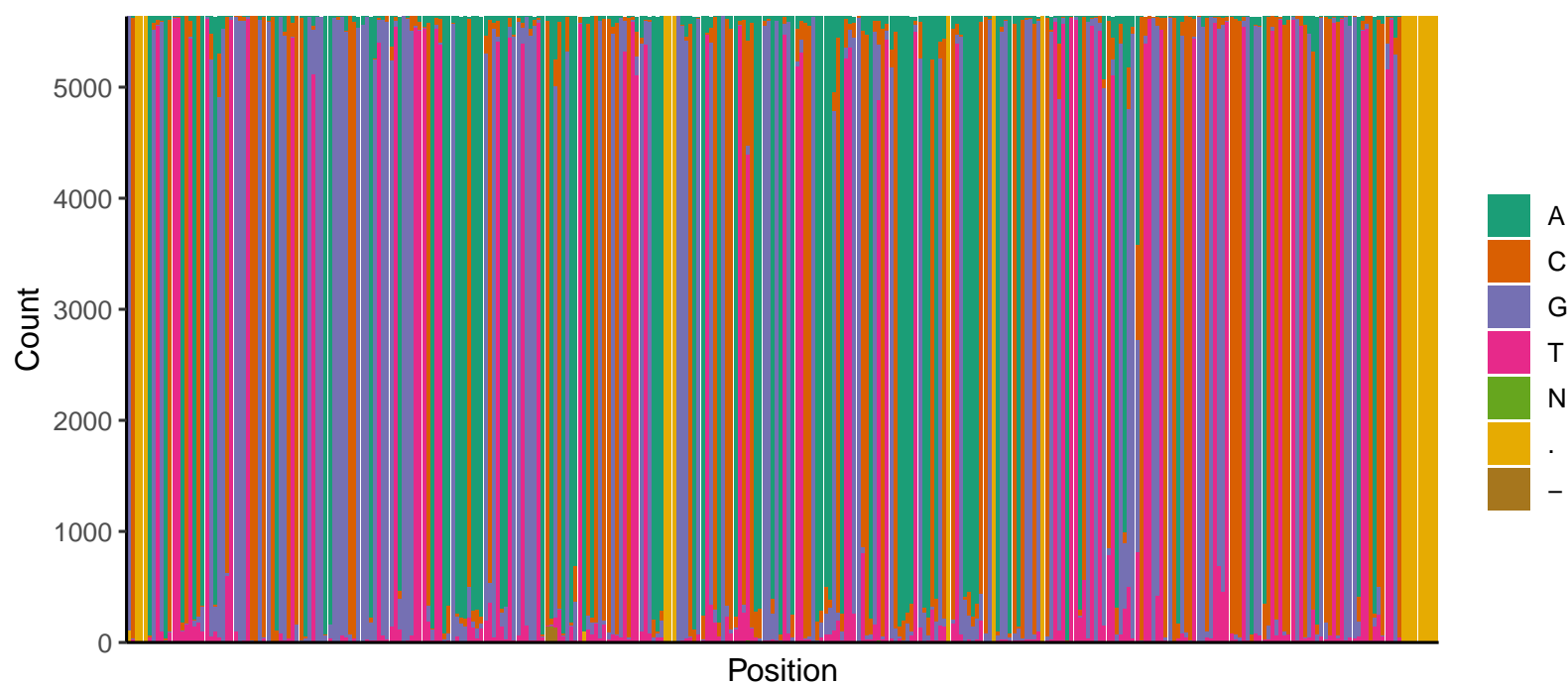
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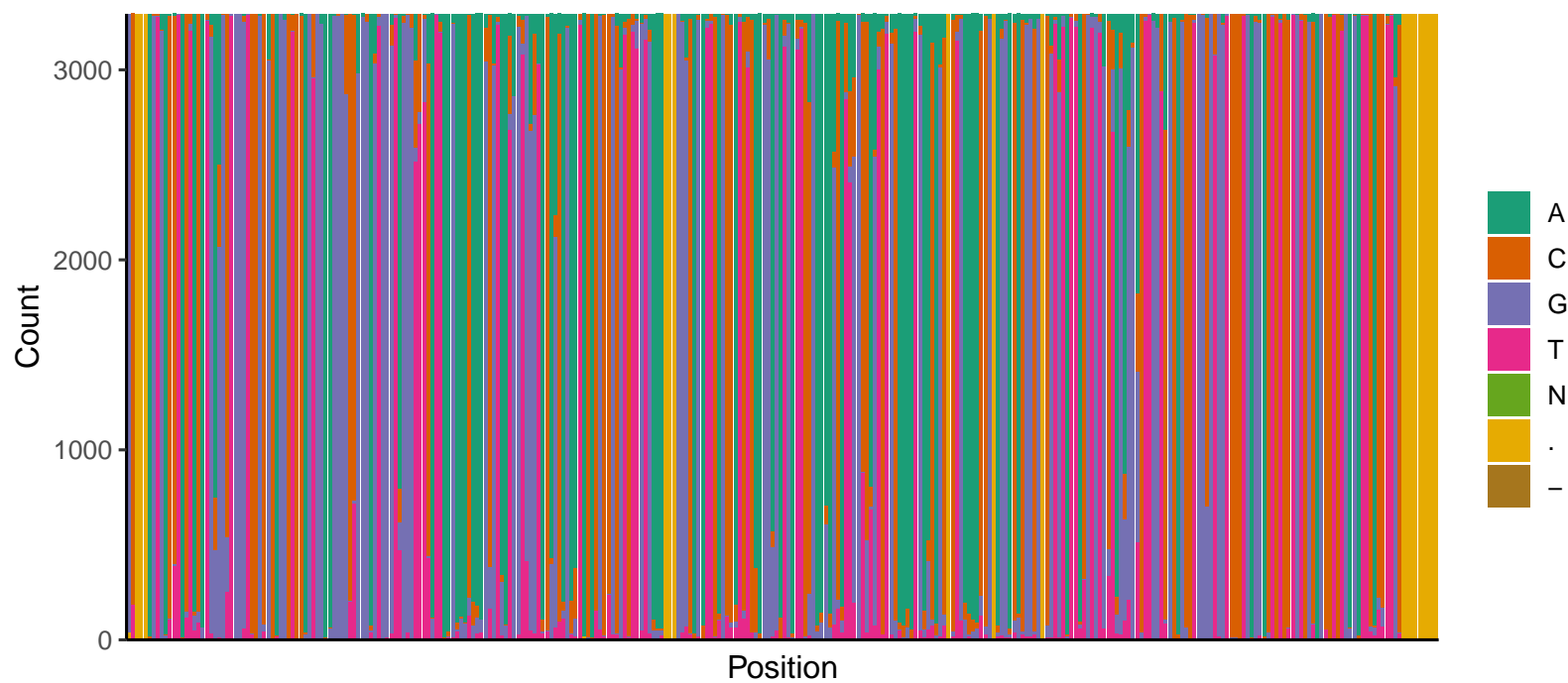
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Gene IGHV3-116*02_T227G



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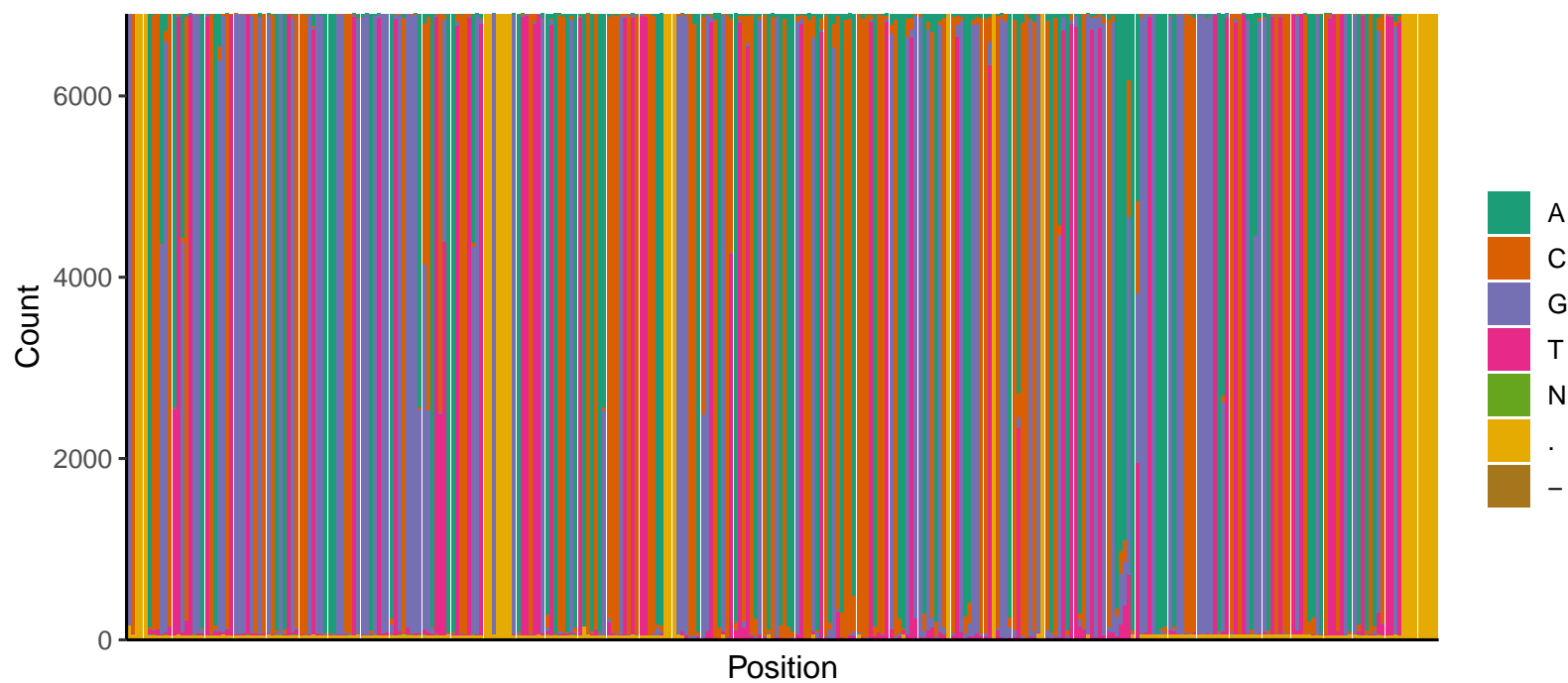
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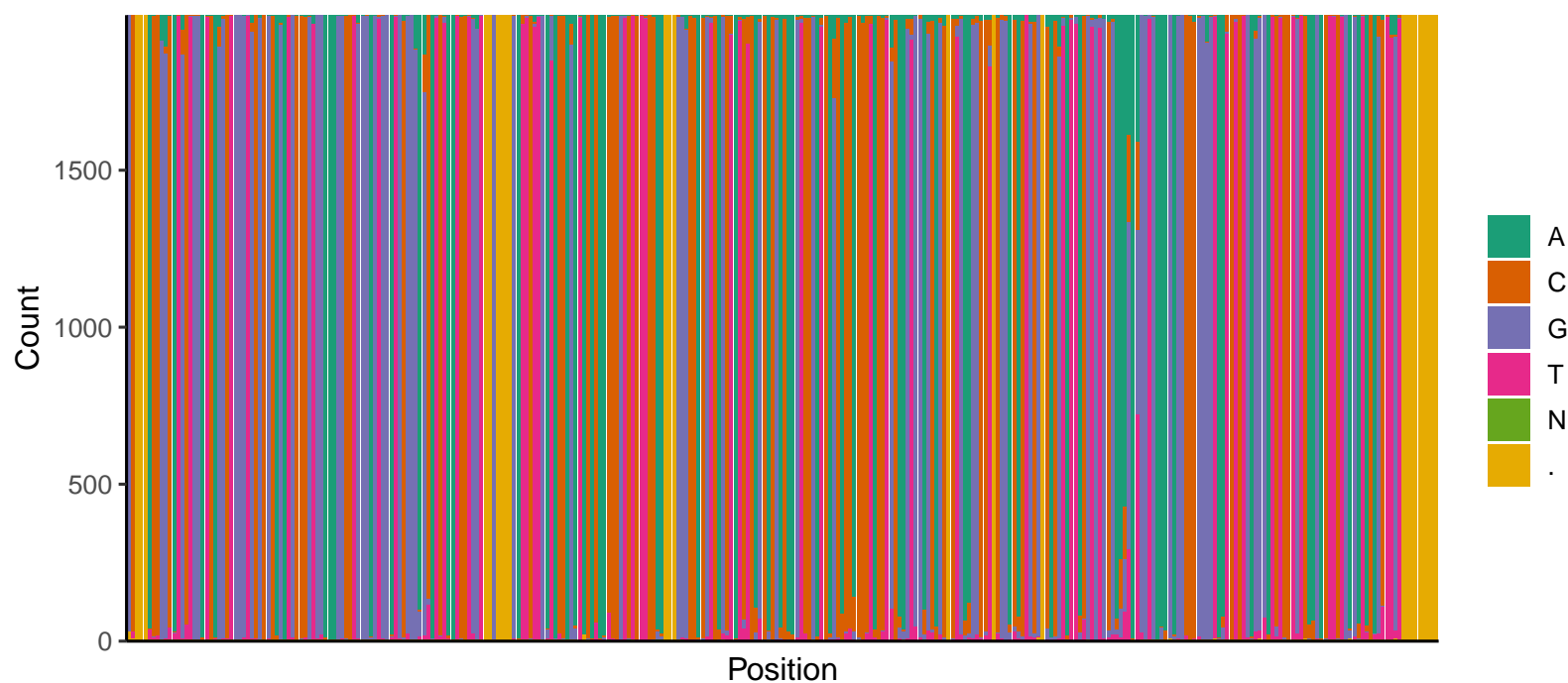
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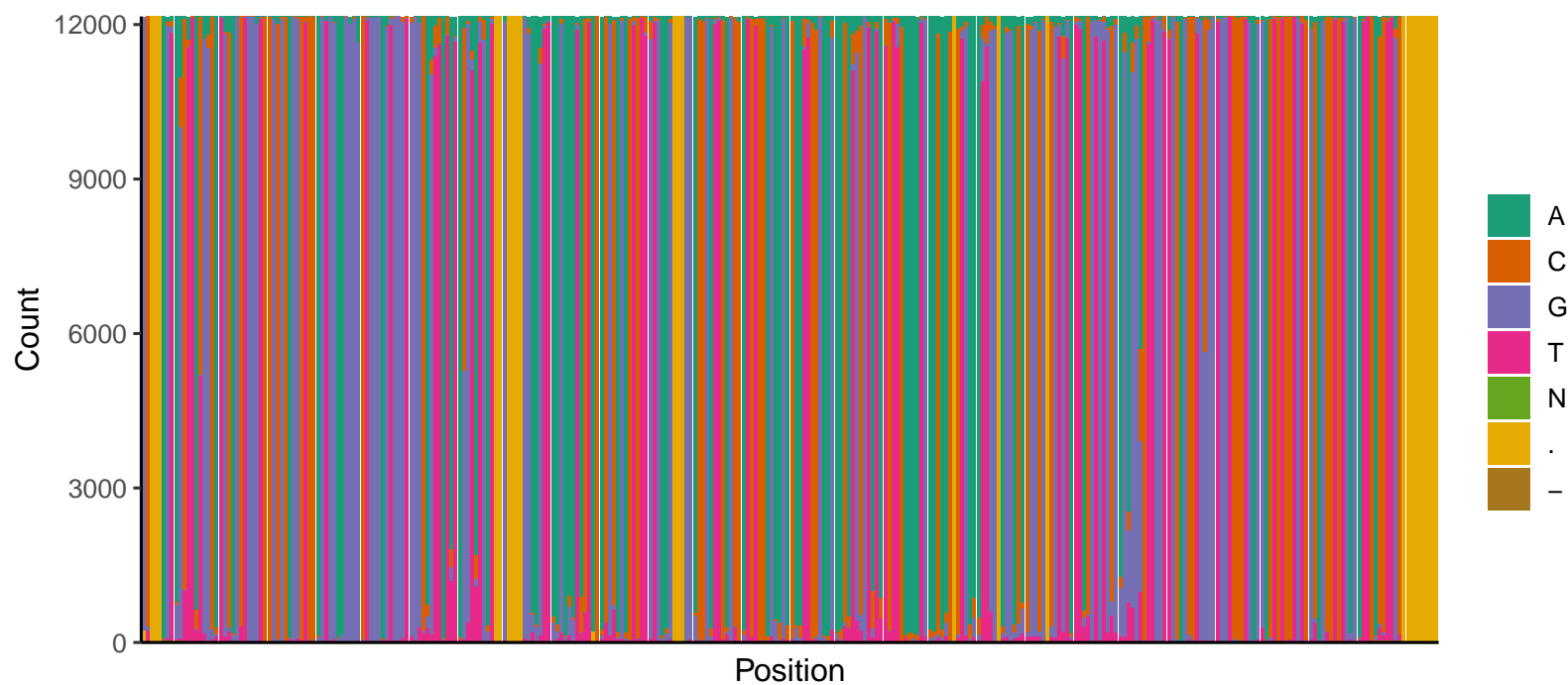
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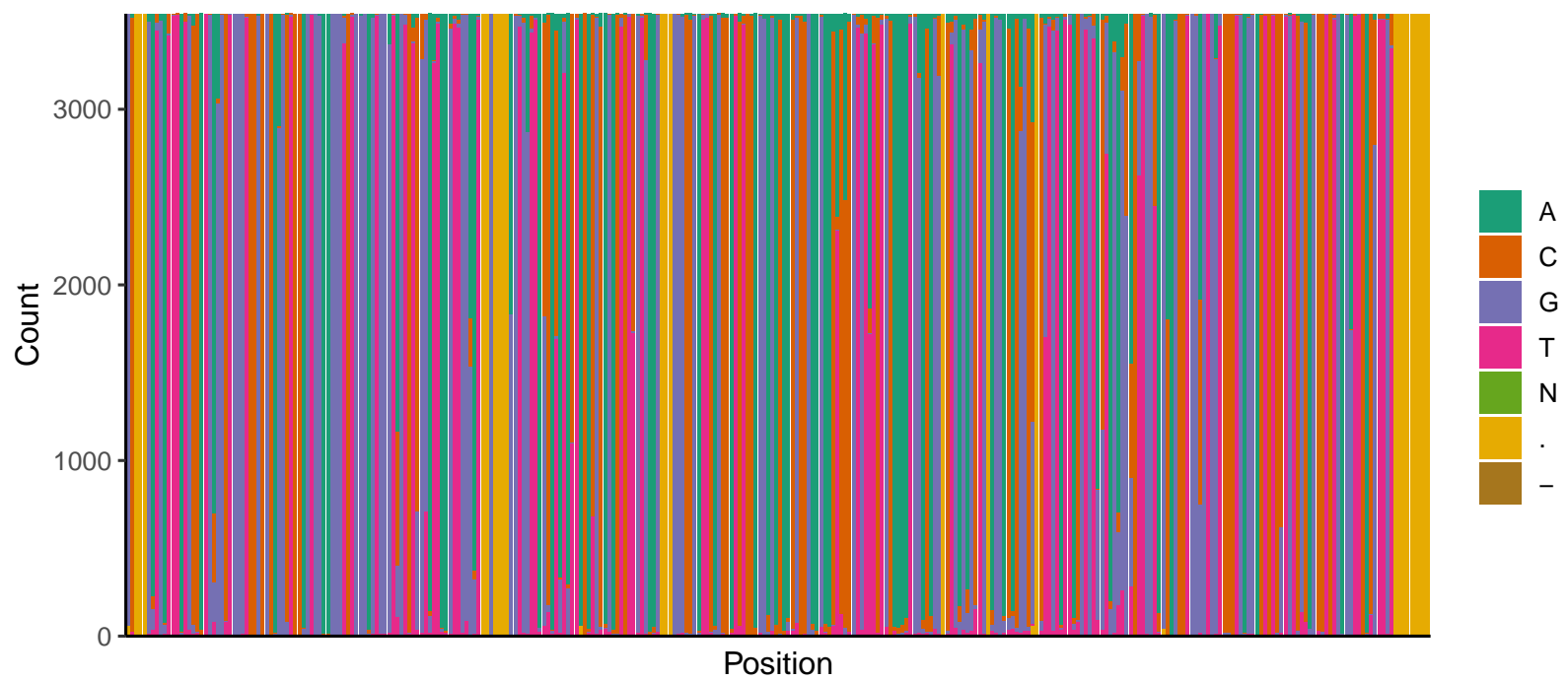
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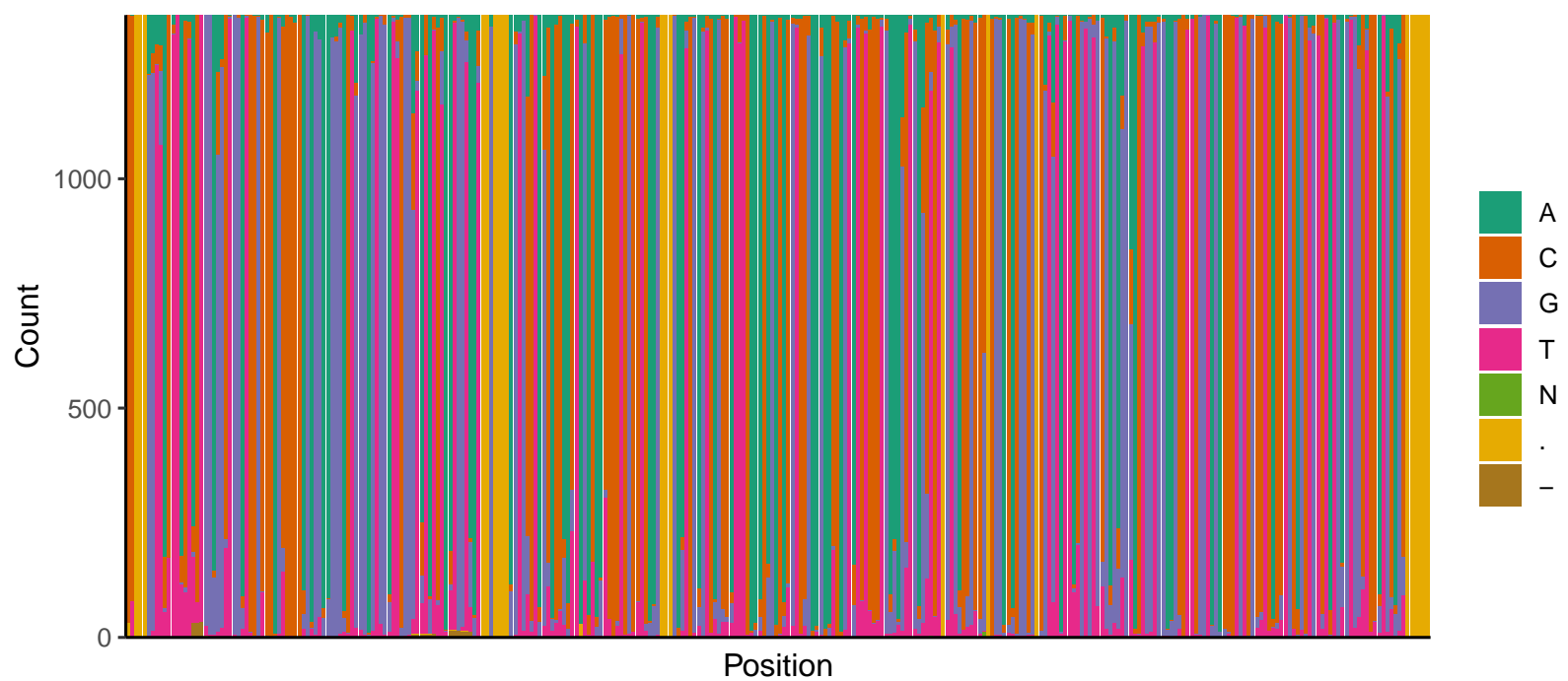
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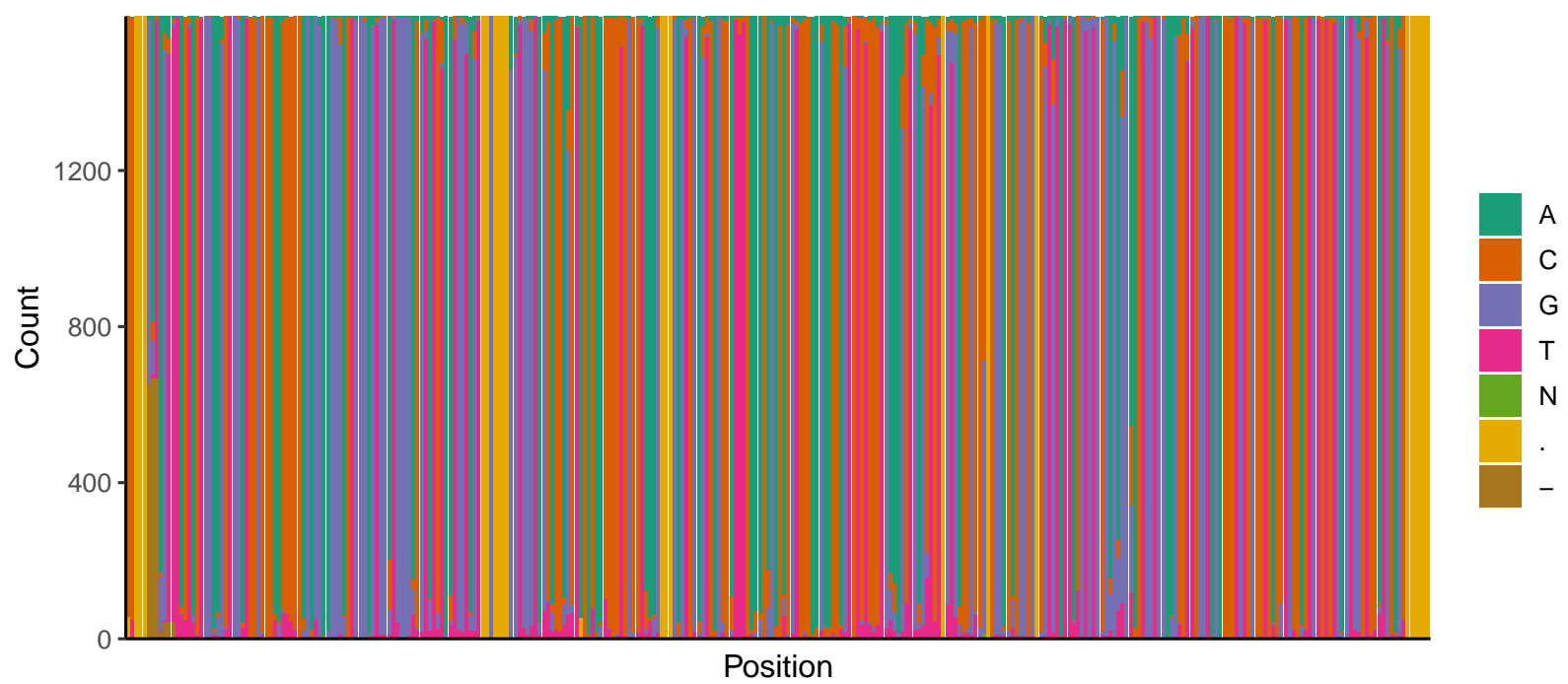
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Gene IGHV4-73*01_G147A_G189C



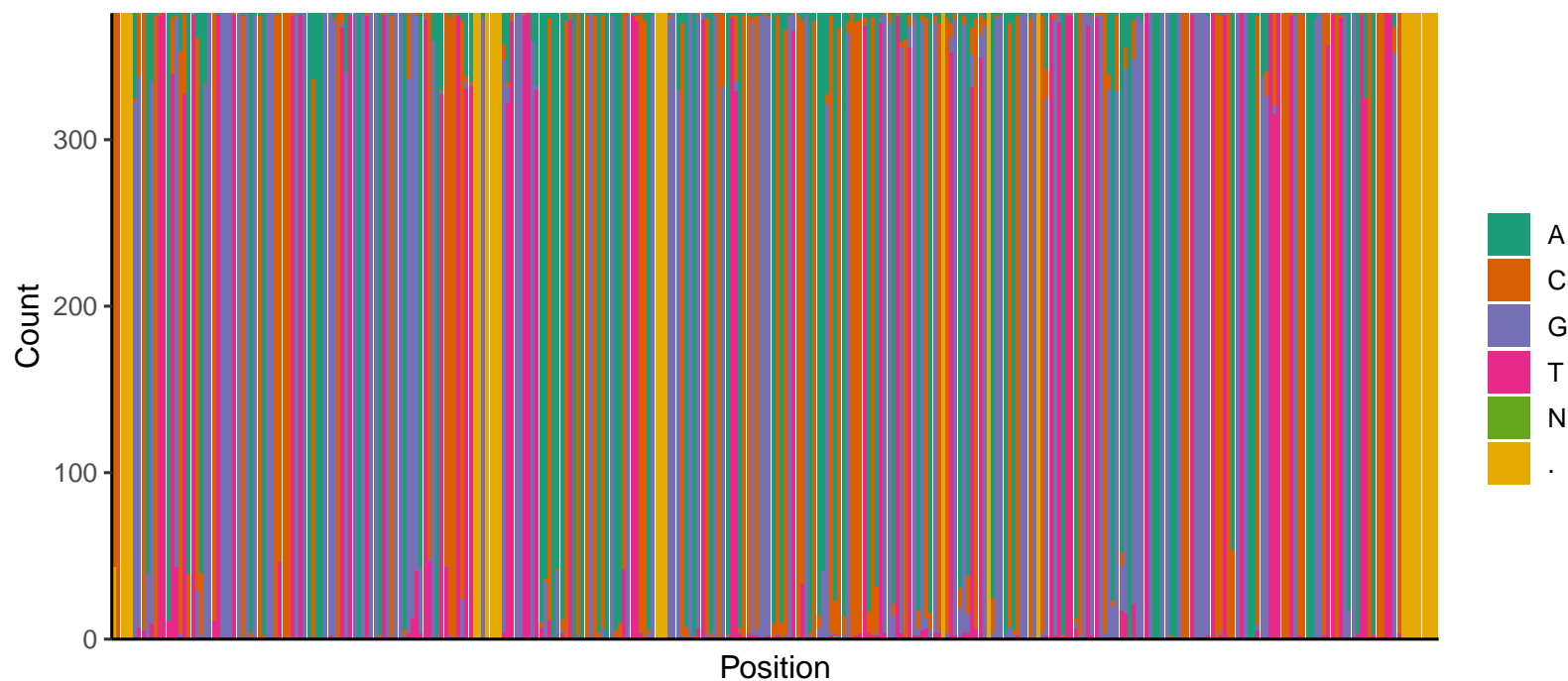
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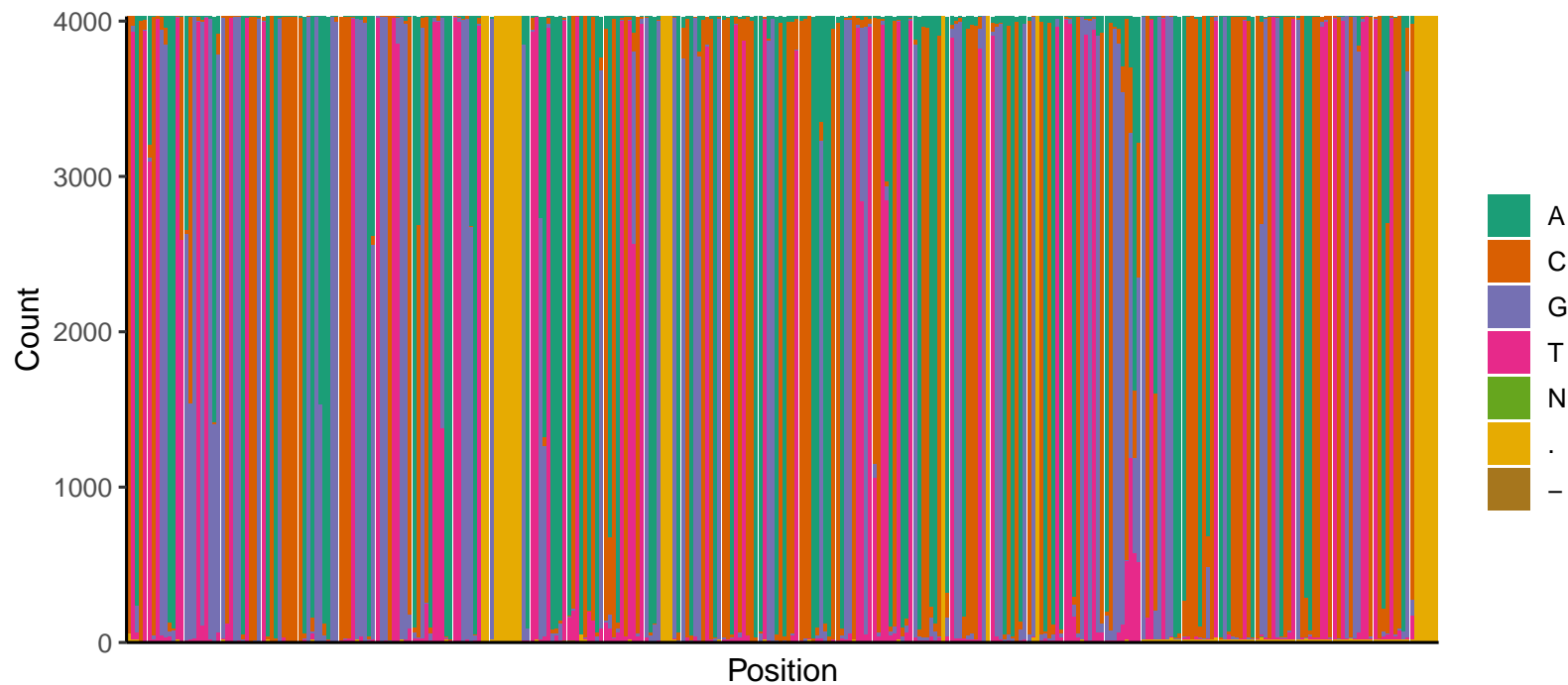
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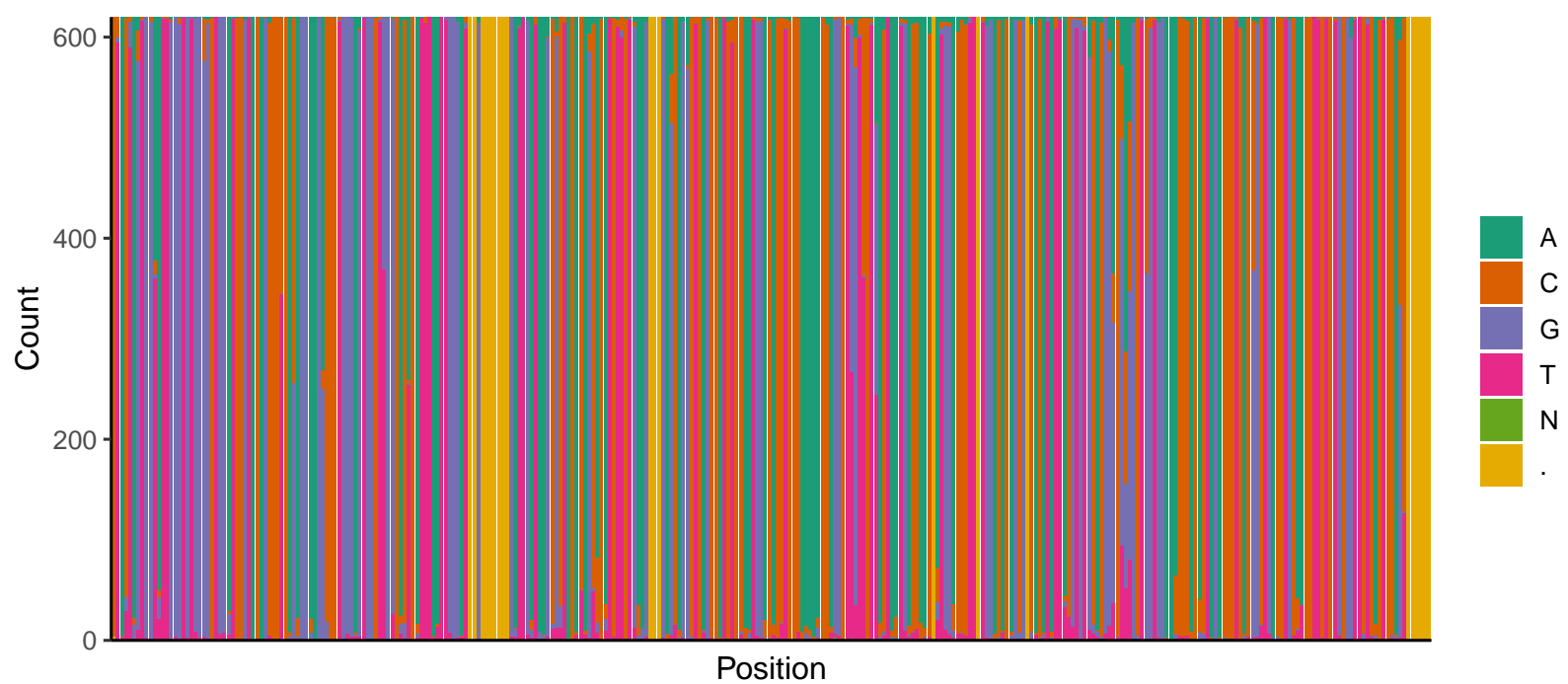
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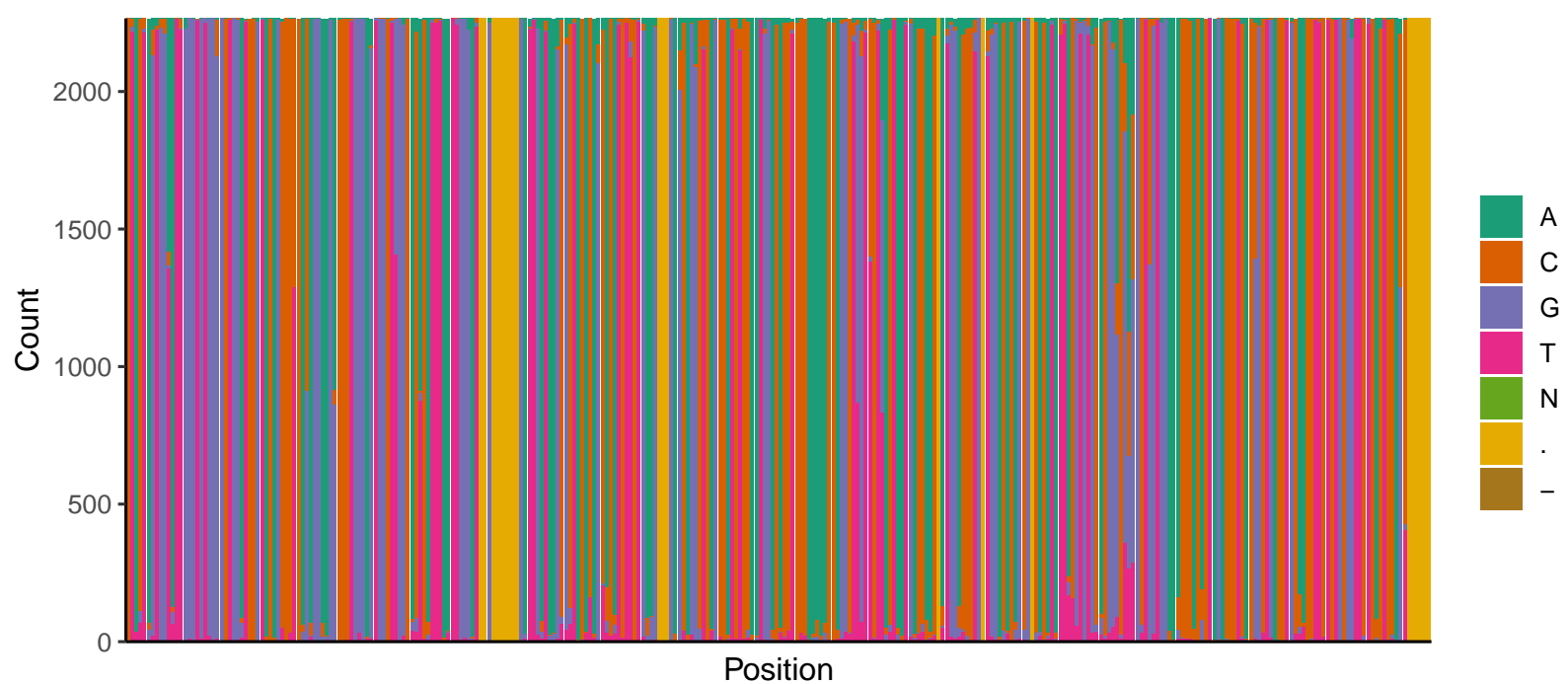
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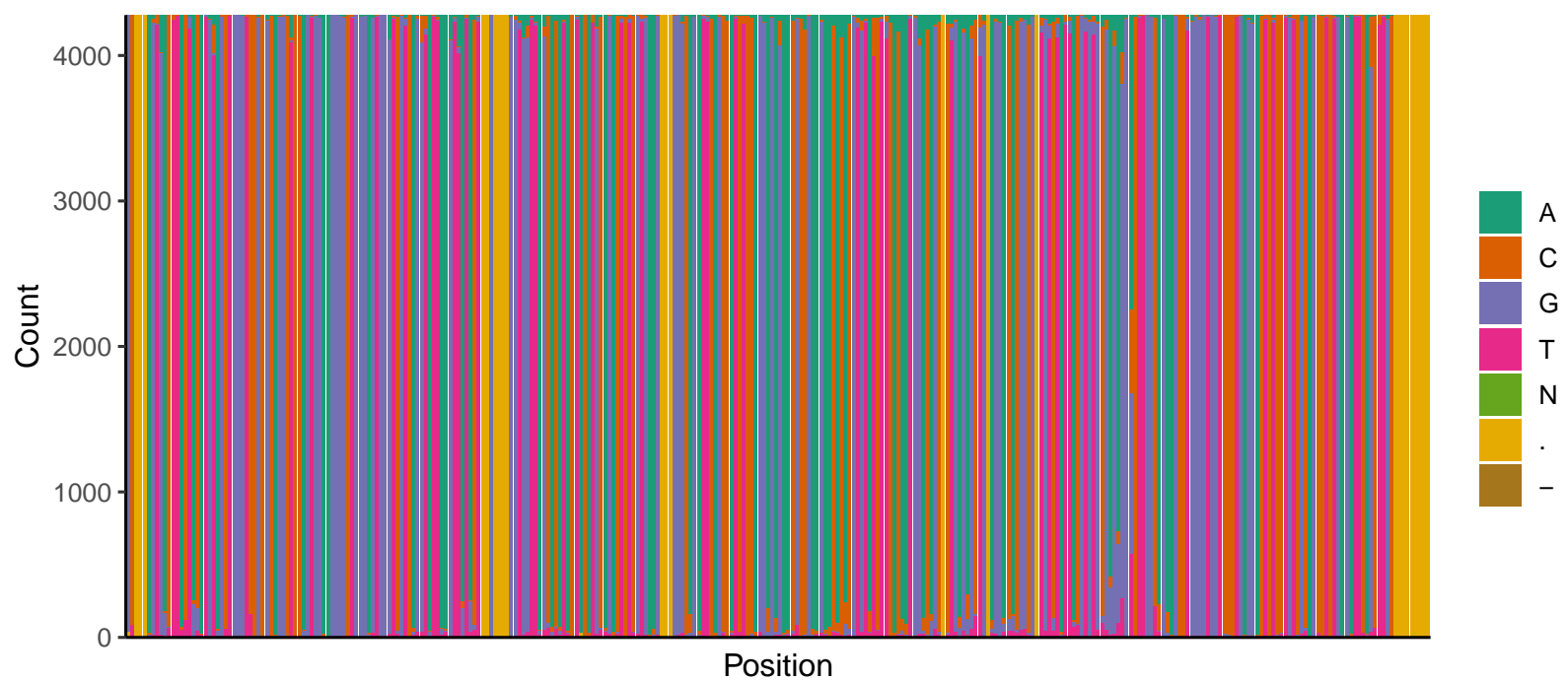
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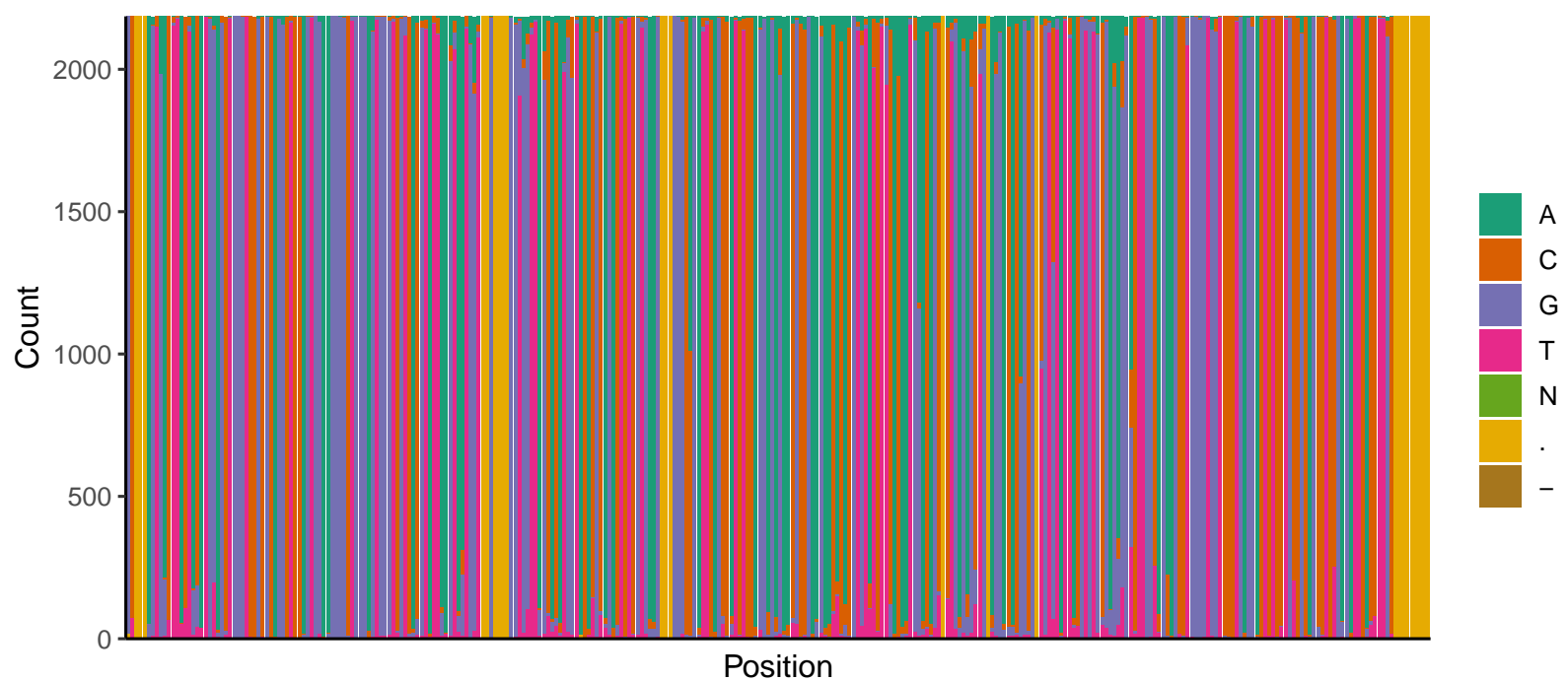
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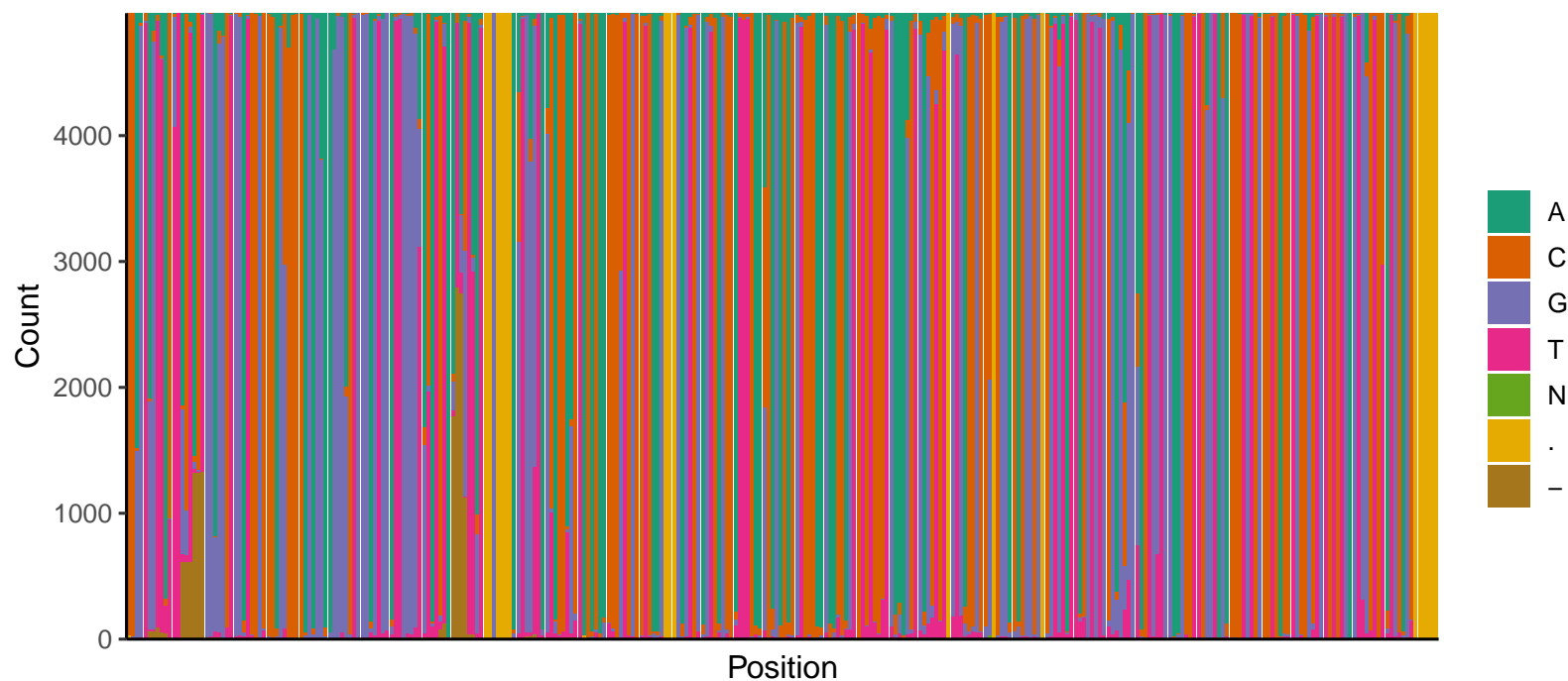
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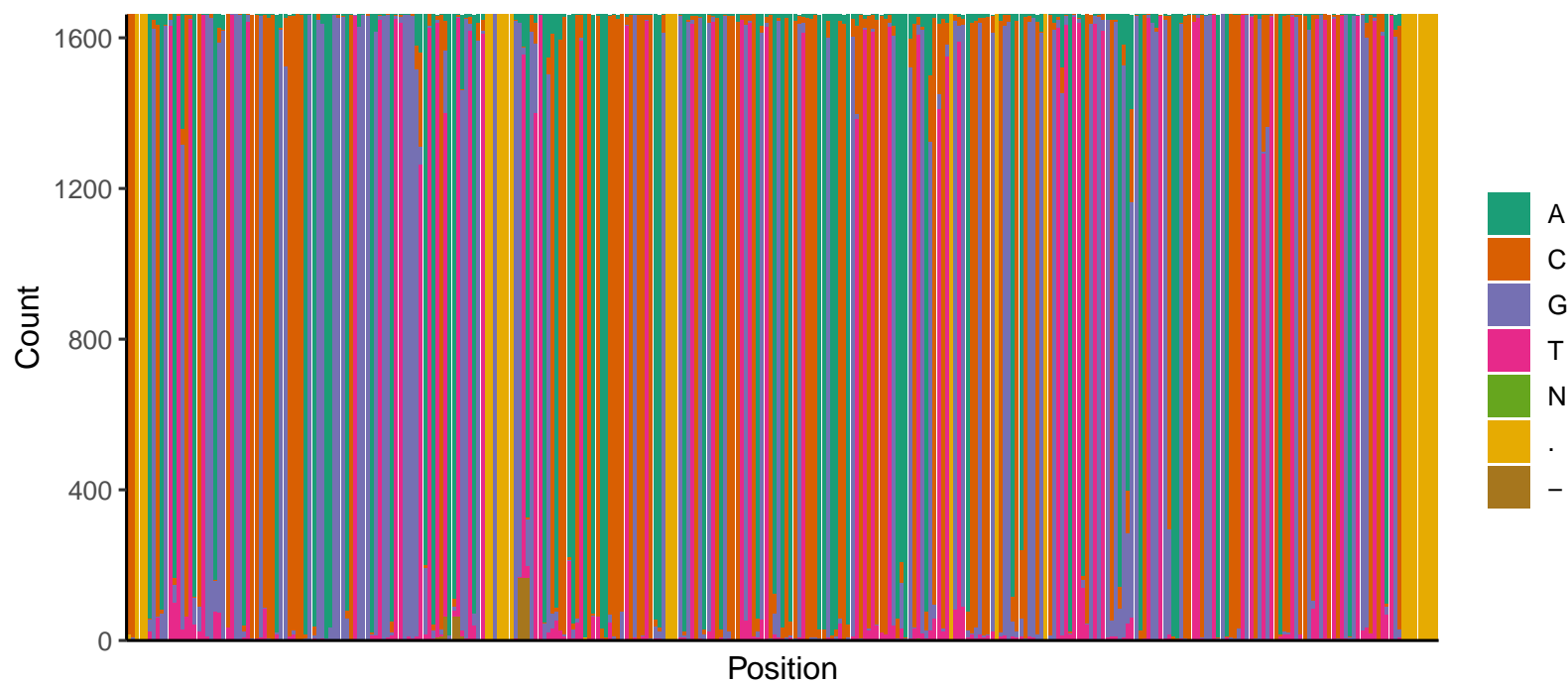
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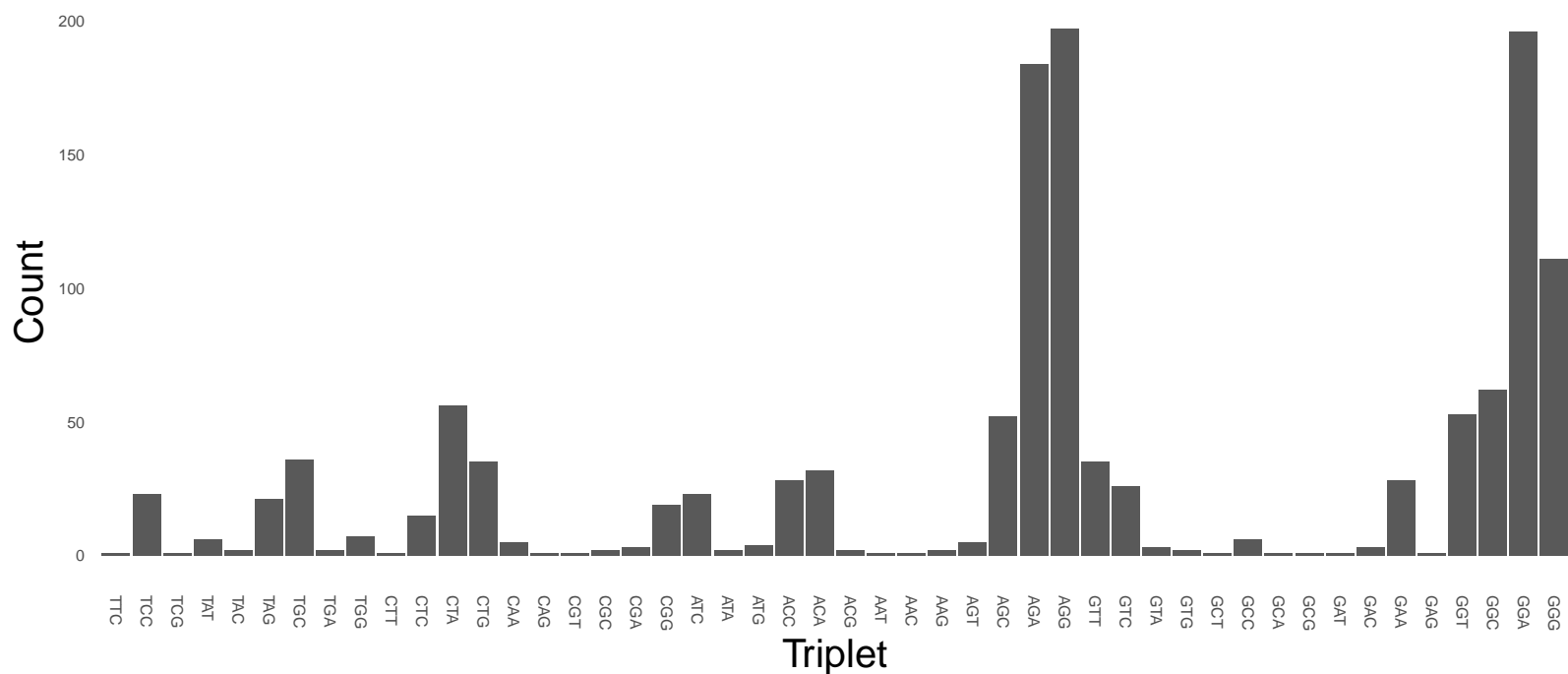
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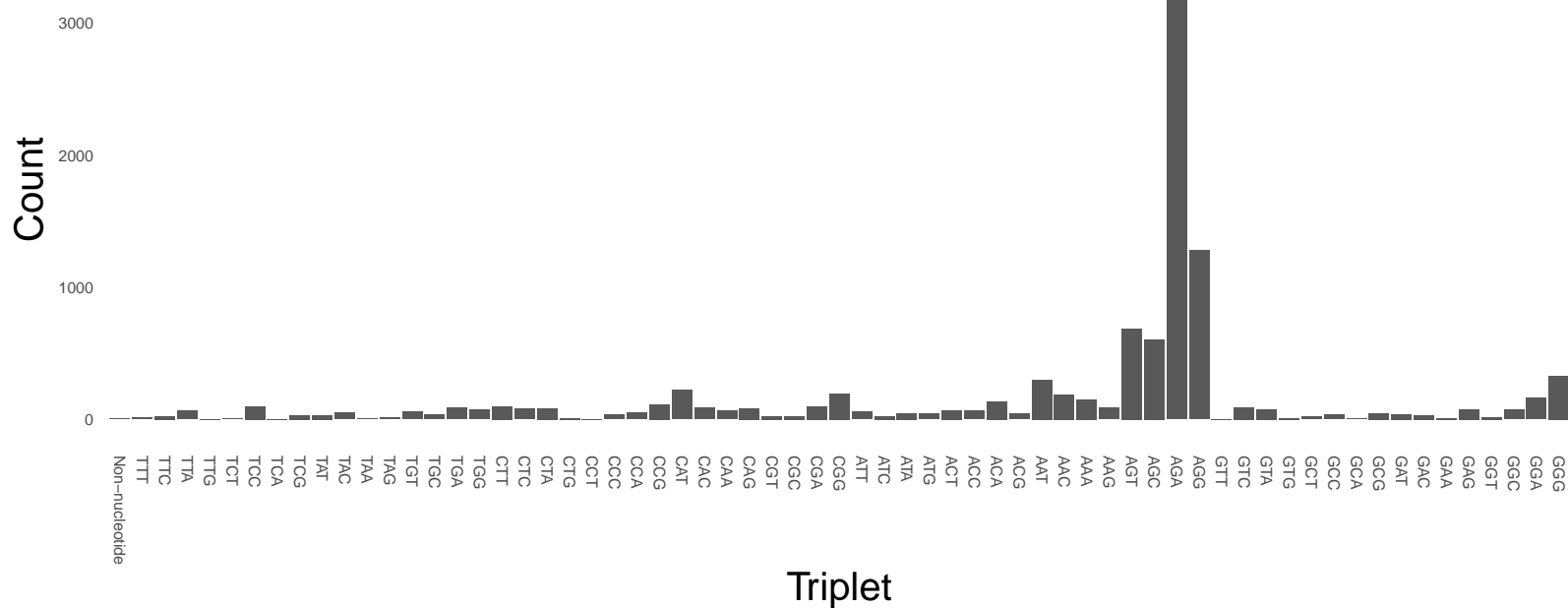
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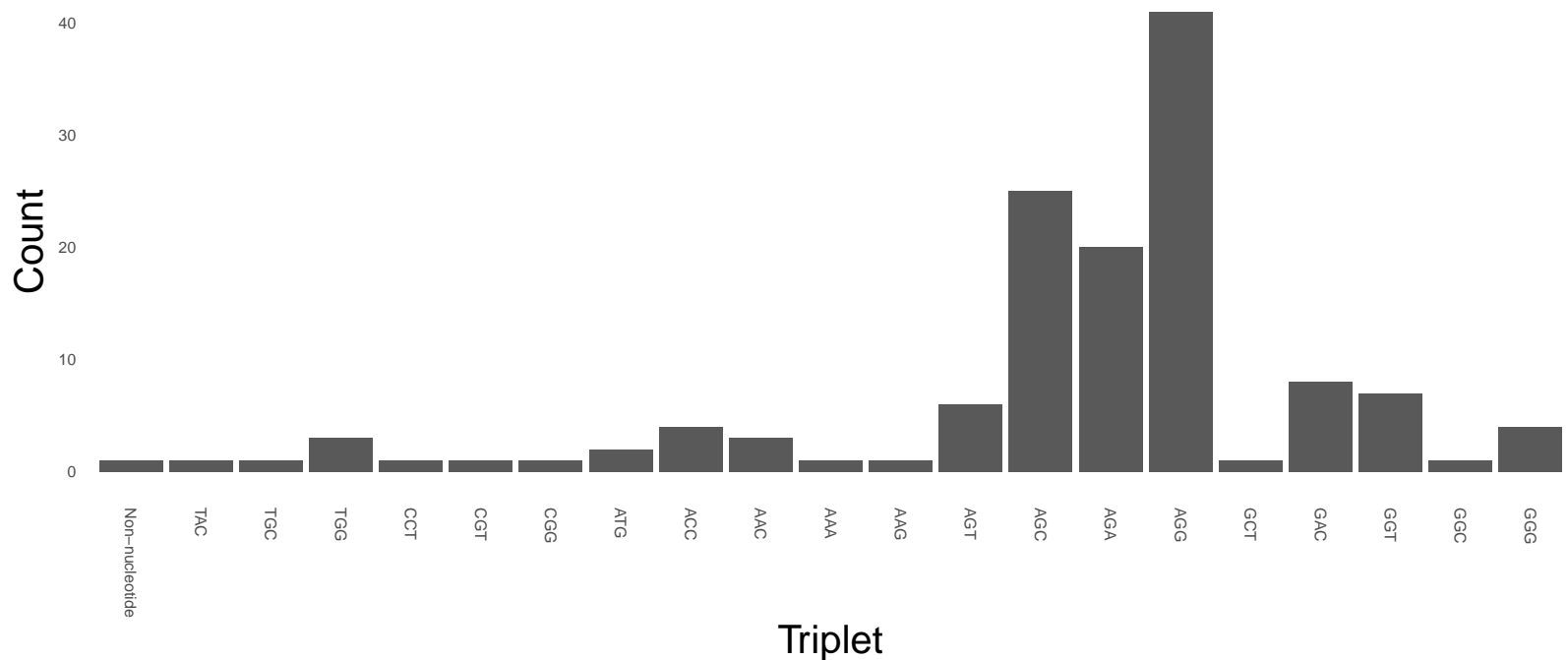
IGHV3-184*01_T34C_G48C_C61G_G106A_T109C_G275A- Final 3 nucleotides as a triplet



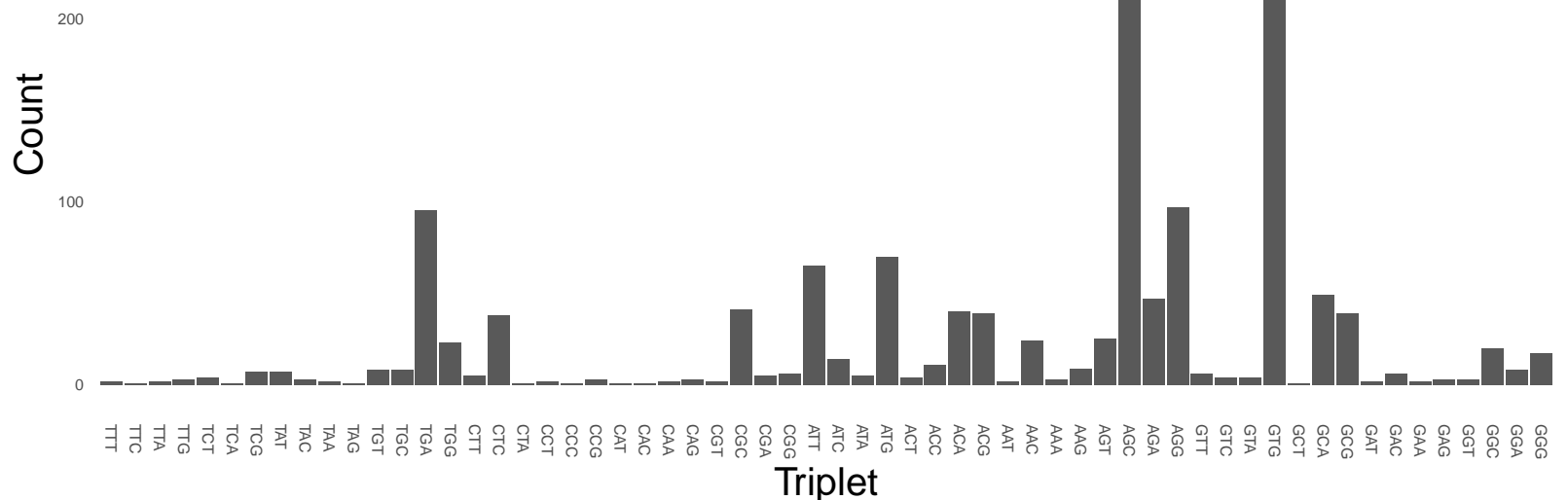
IGHV3-30*01_G48C_T110C_A152T_G174C_G181A_G207A- Final 3 nucleotides as a triplet



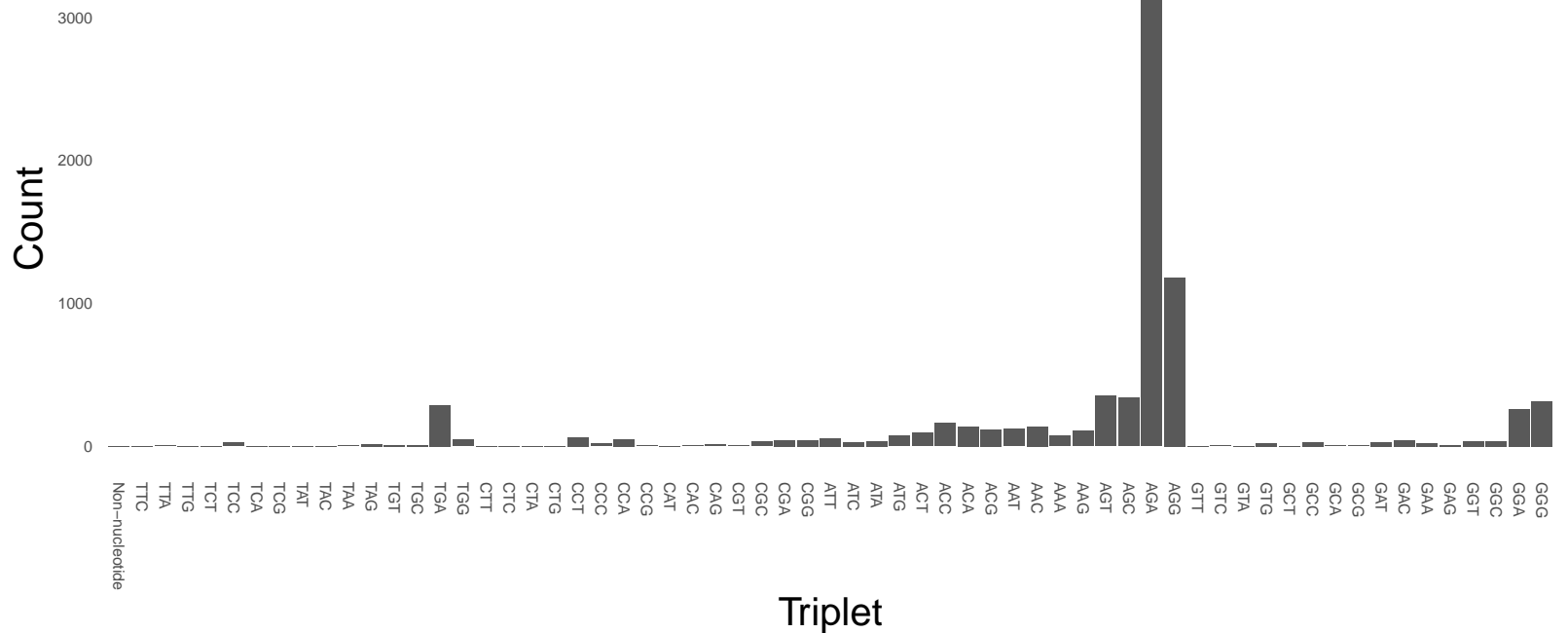
IGHV3-100*01_G3C_A132G_C194T- Final 3 nucleotides as a triplet



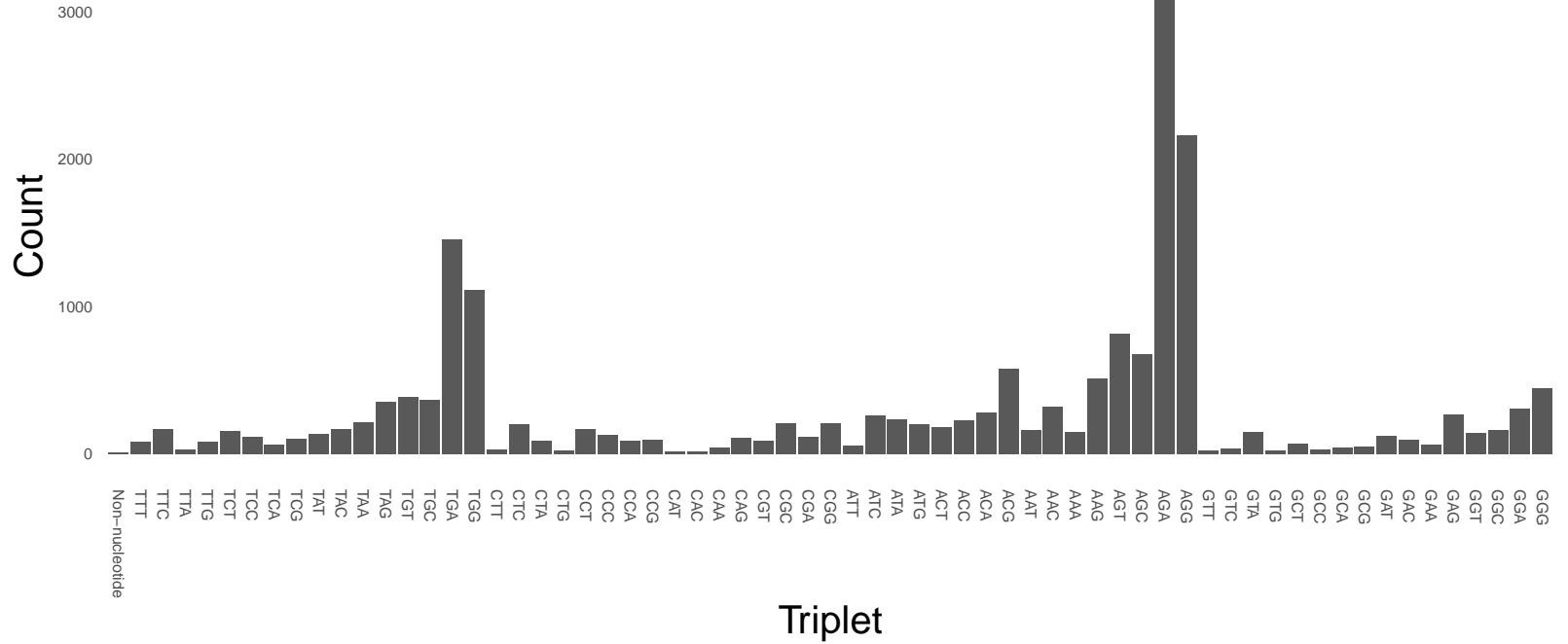
IGHV3-100*02_C3G- Final 3 nucleotides as a triplet



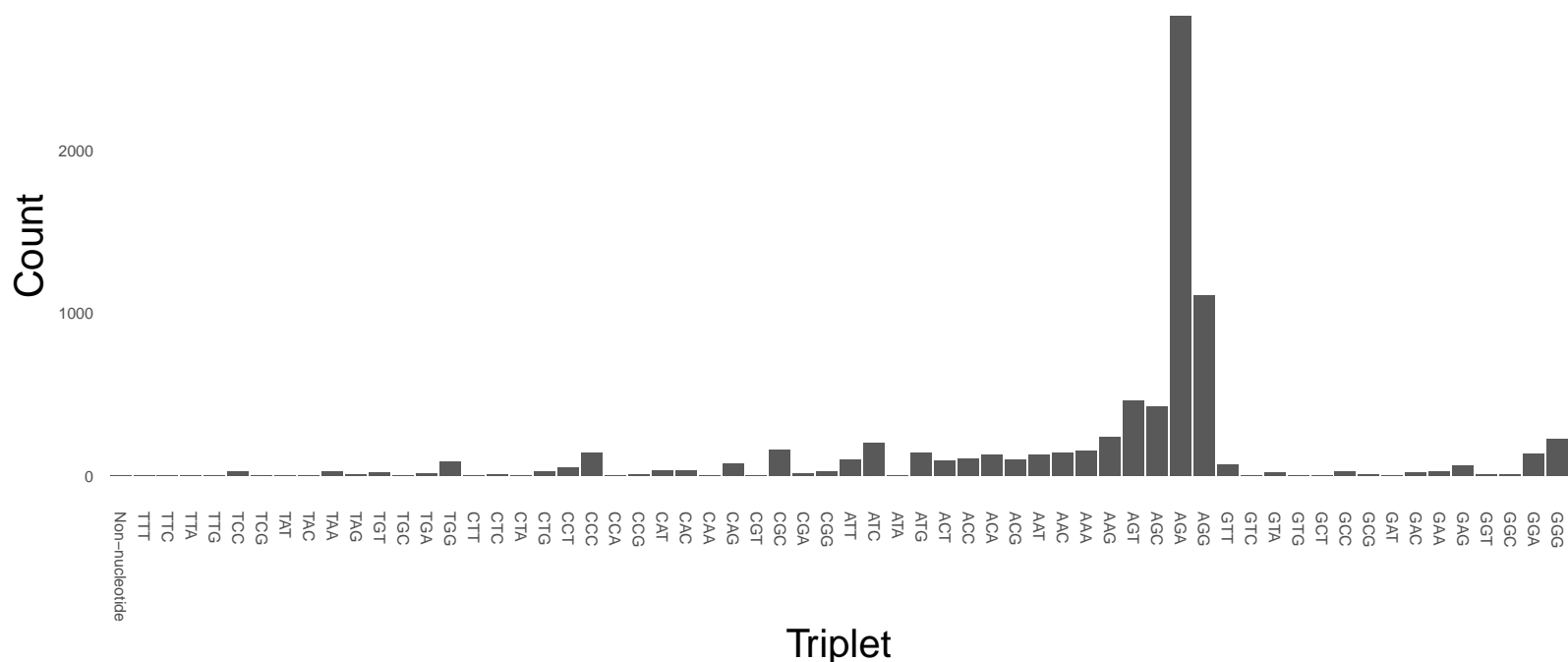
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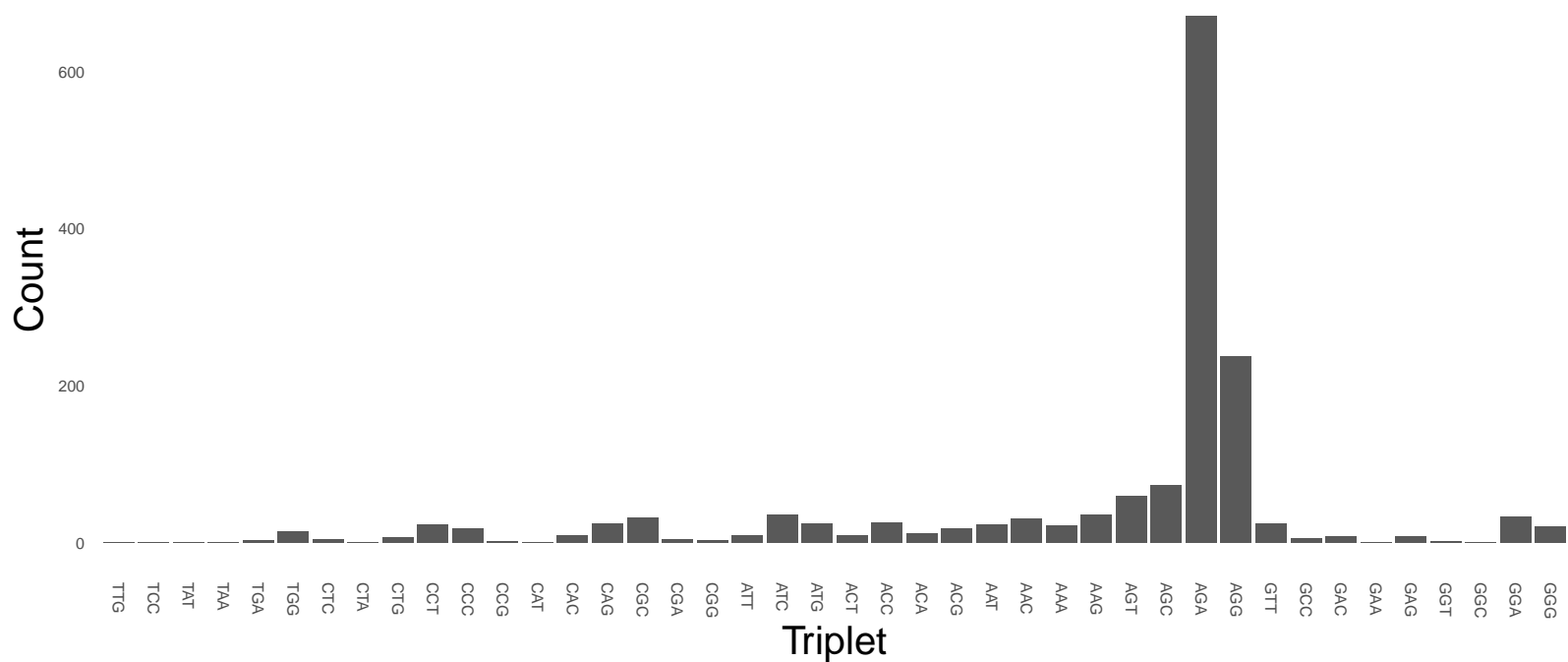
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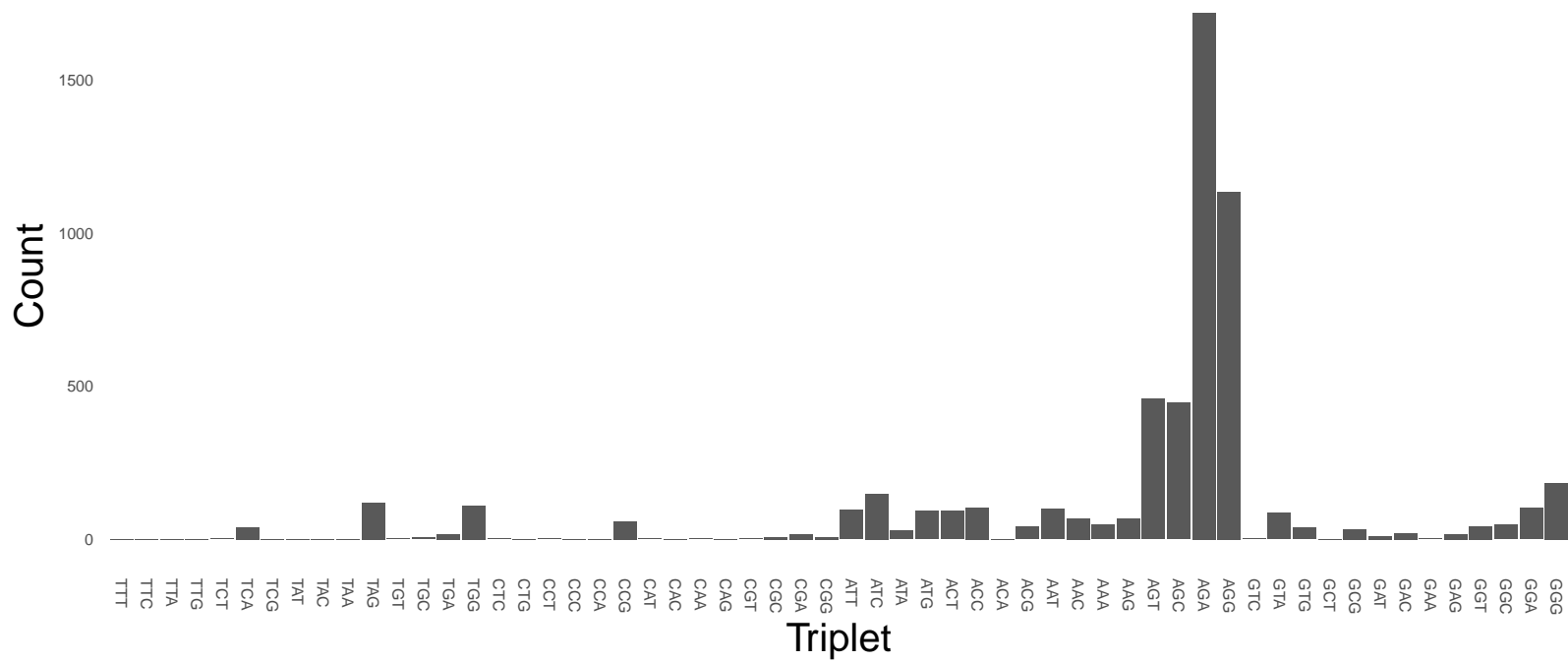
IGHV3-103*01_G51A_A170G- Final 3 nucleotides as a triplet



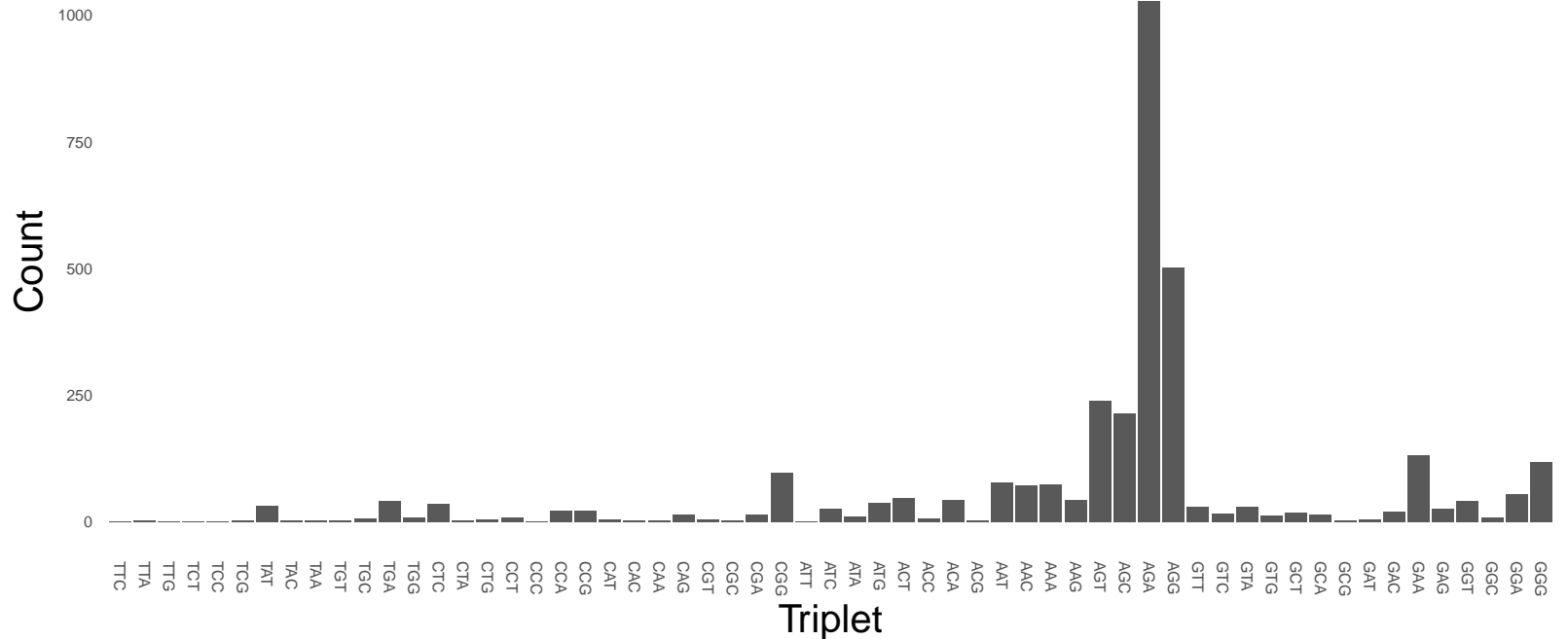
IGHV3-103*01_G51A_A170G_A295C- Final 3 nucleotides as a triplet



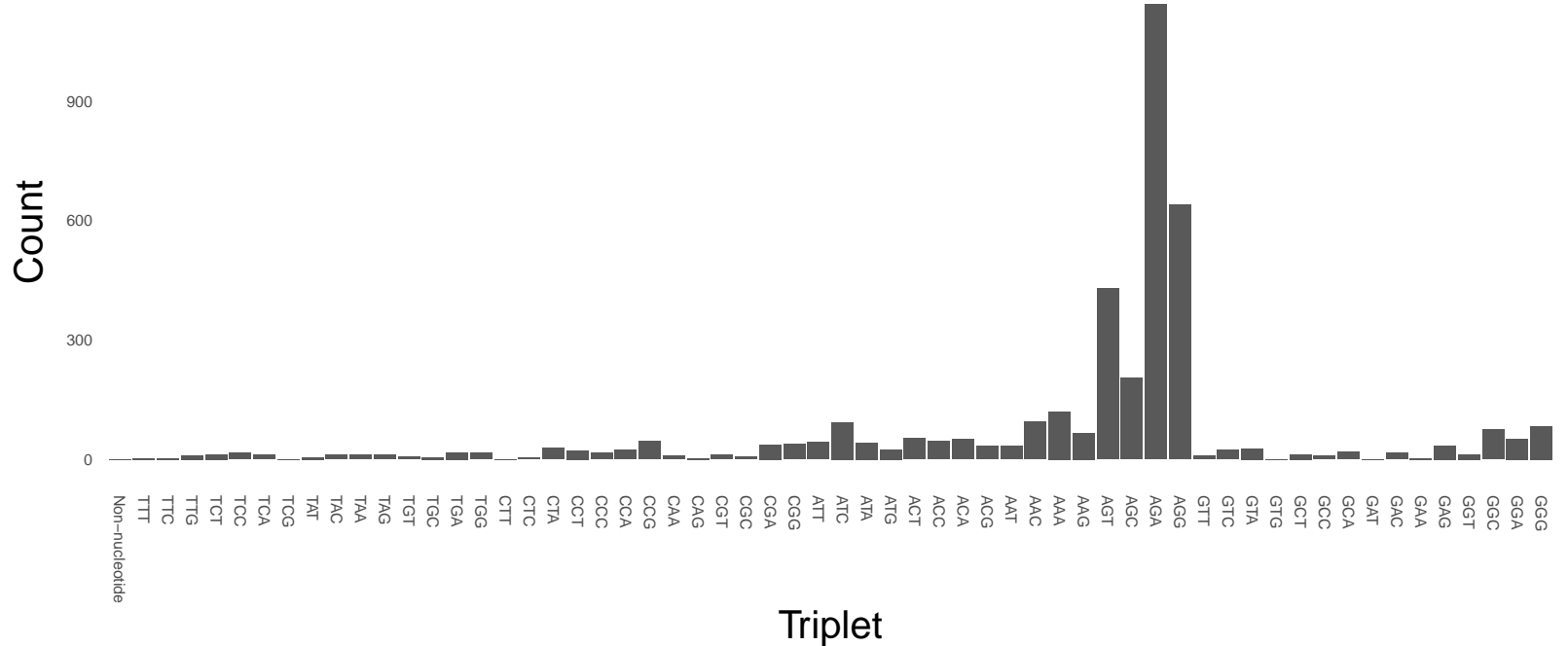
IGHV3-116*02_T227G- Final 3 nucleotides as a triplet



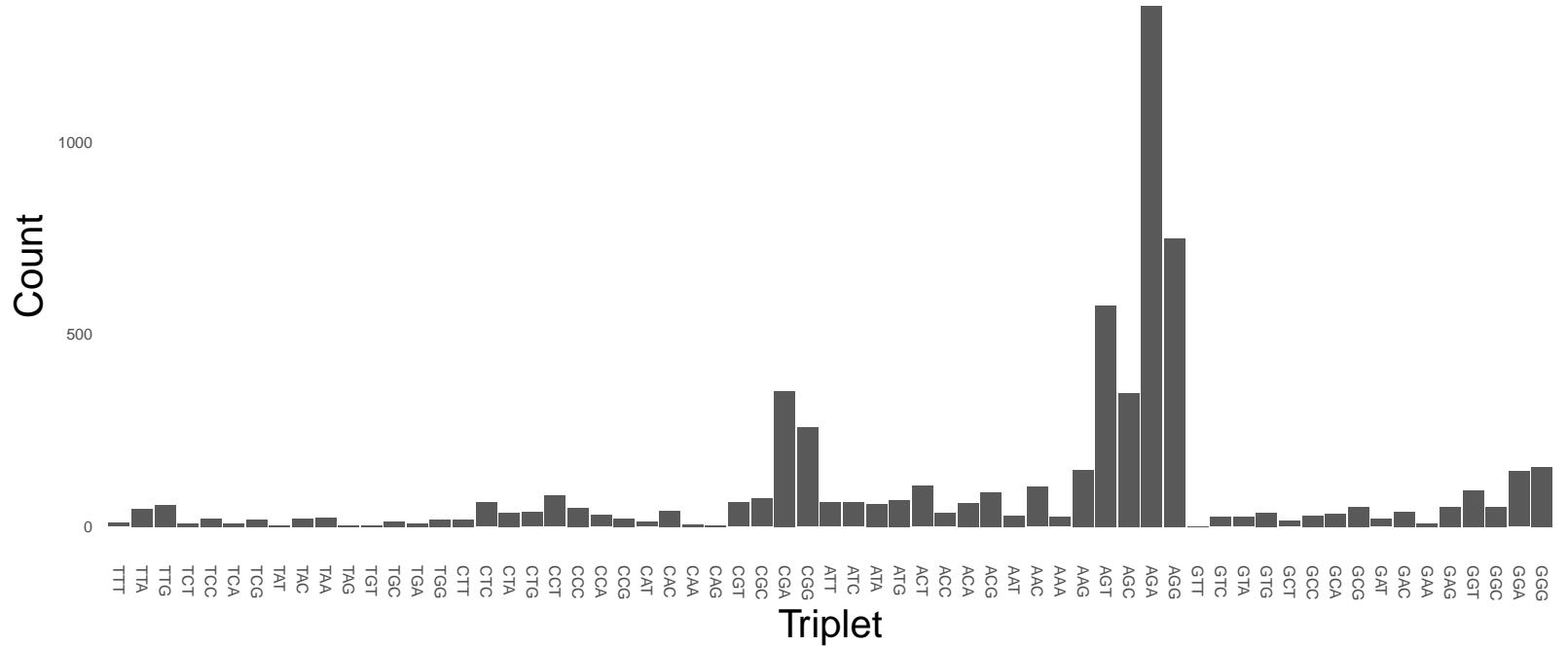
IGHV3-116*02_G8A_T109C- Final 3 nucleotides as a triplet



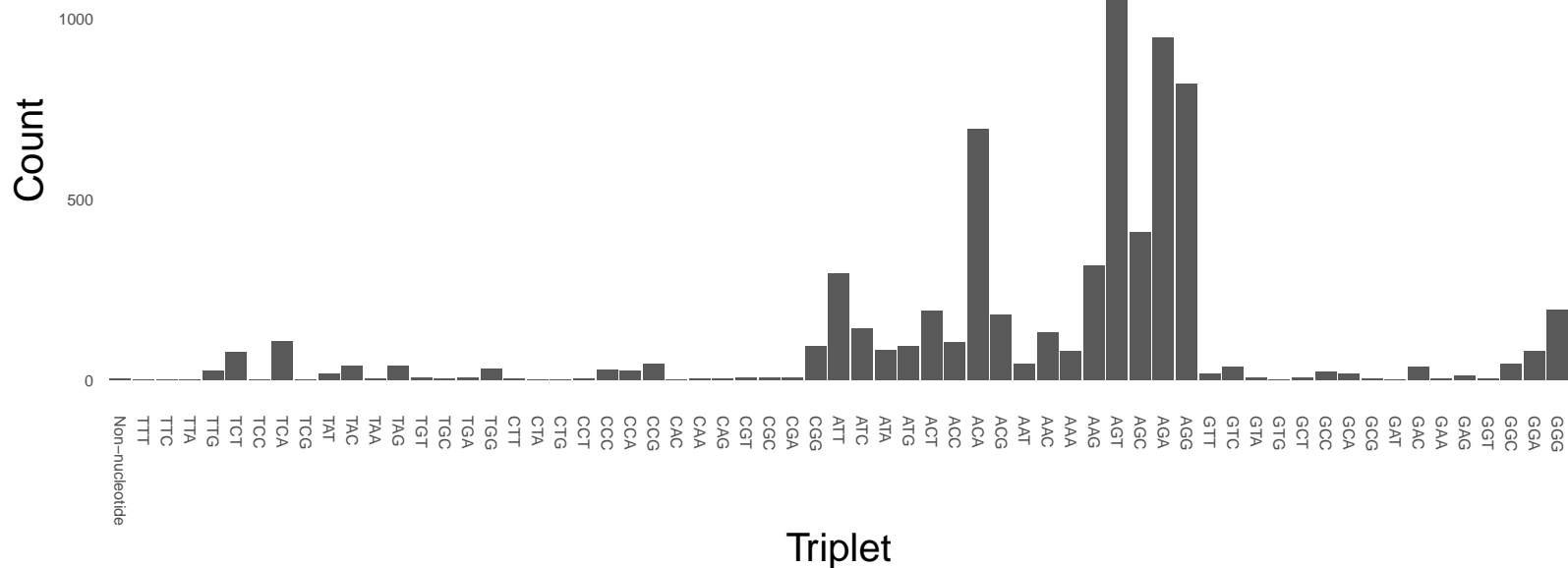
IGHV4-57*02_C87T_G199T_C207G_A239C_T255C- Final 3 nucleotides as a triplet



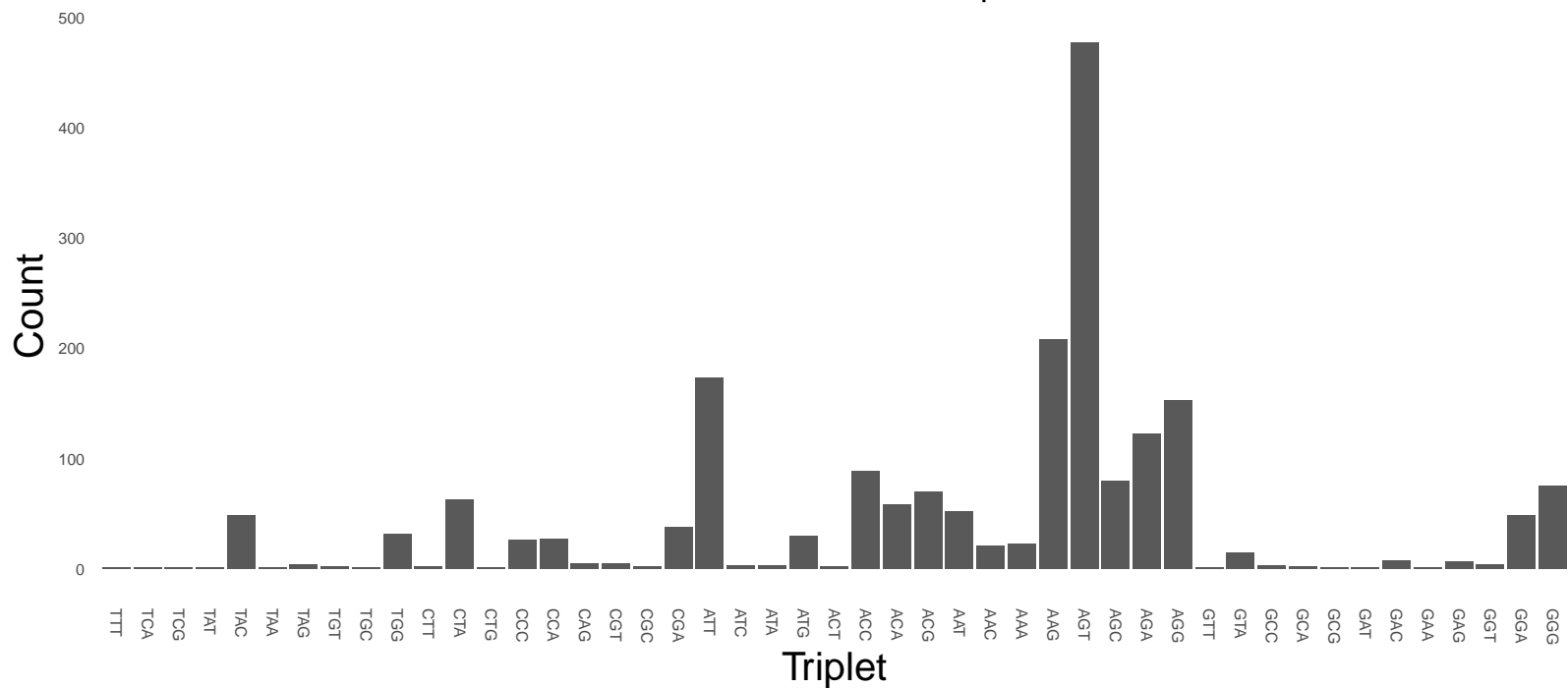
IGHV4-165*01_A132G_C168T_A175G_T196G_C198A_G216A_C239G_G258T- Final 3 nucleotides as a triplet



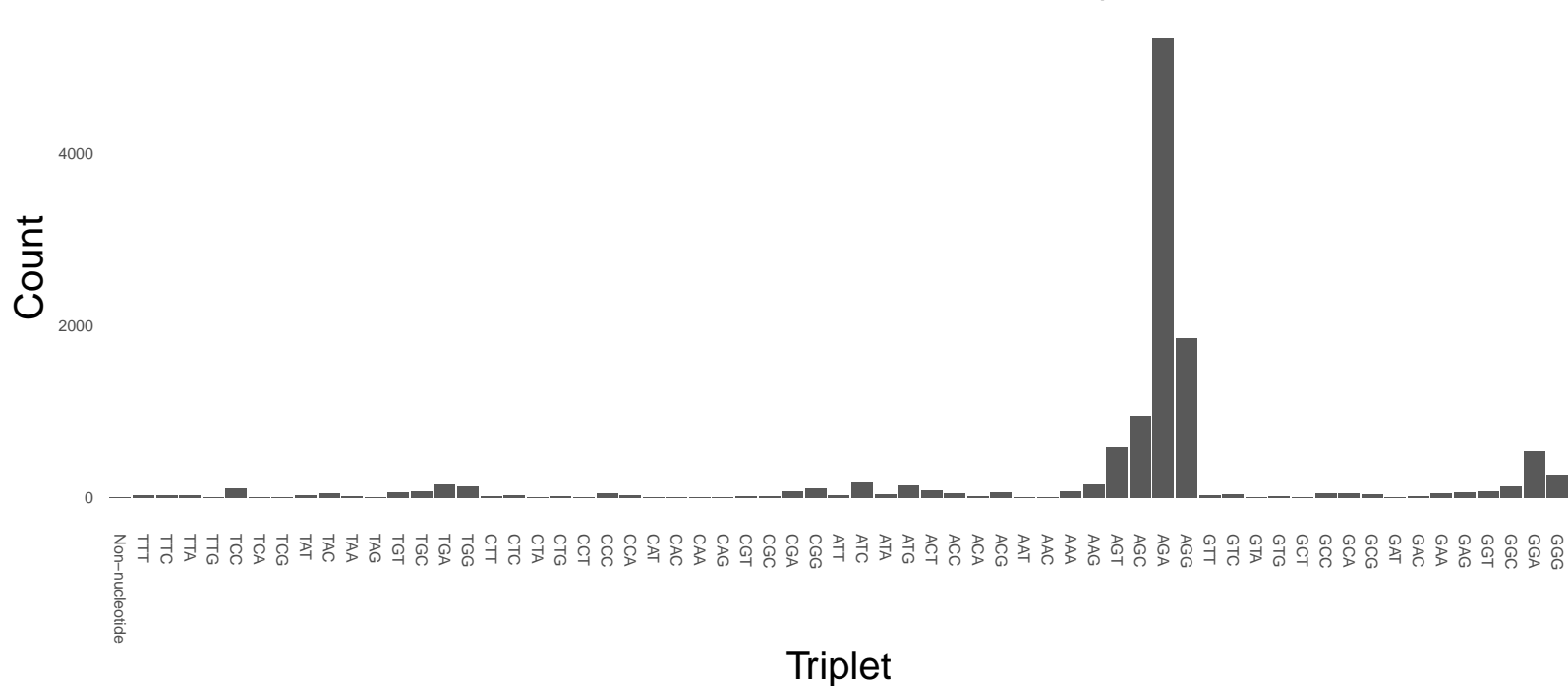
IGHV5-43*01_A106G- Final 3 nucleotides as a triplet



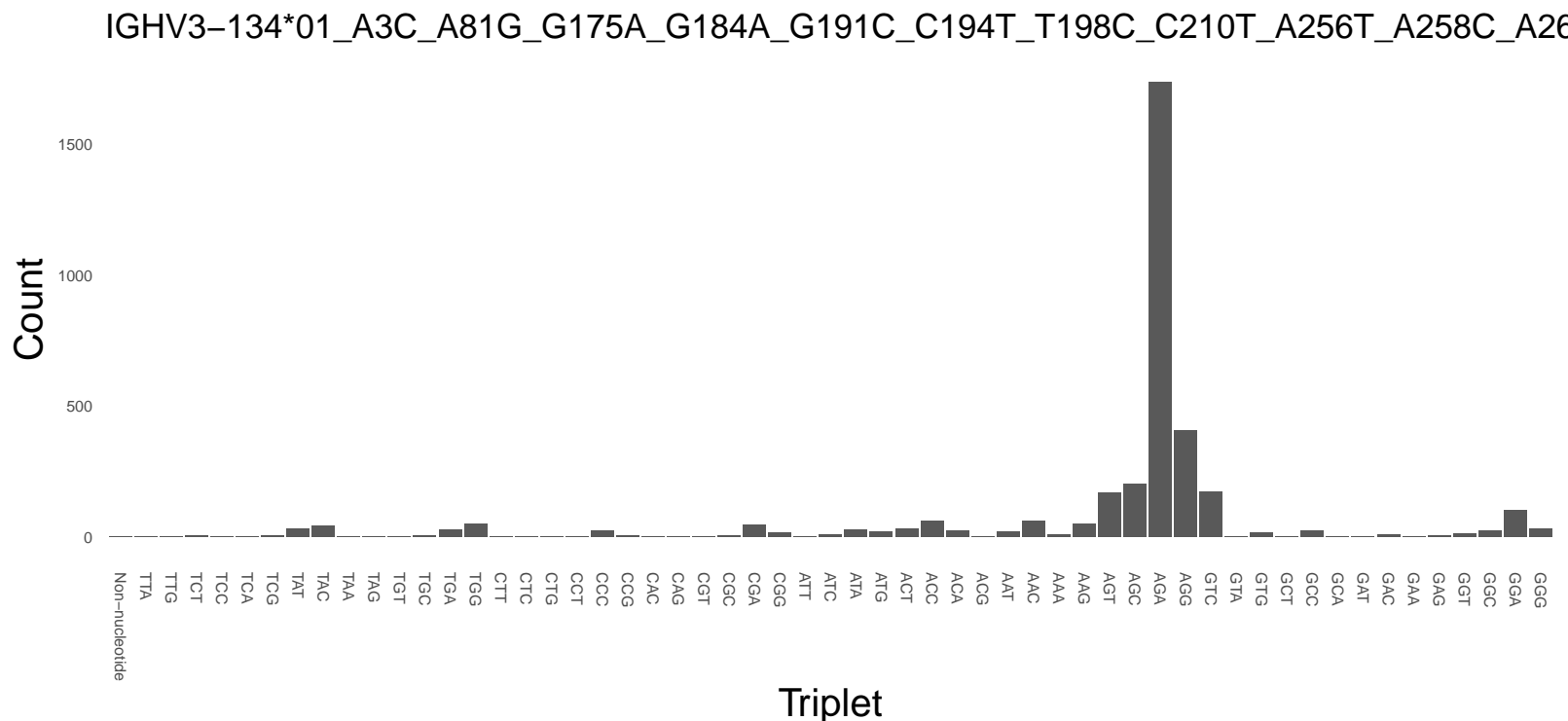
IGHV5-43*01_A106G_C297T- Final 3 nucleotides as a triplet



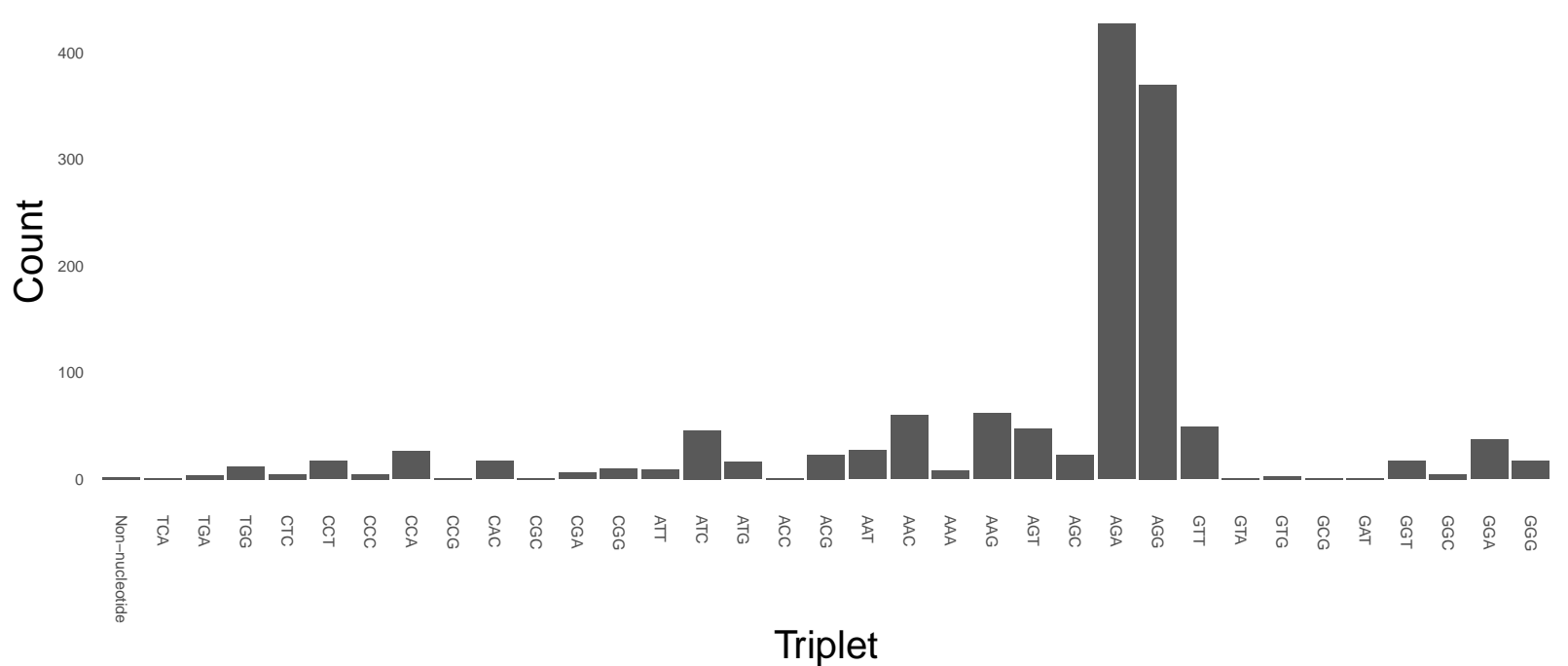
IGHV3-54*02_G47C_T111C_G170C- Final 3 nucleotides as a triplet



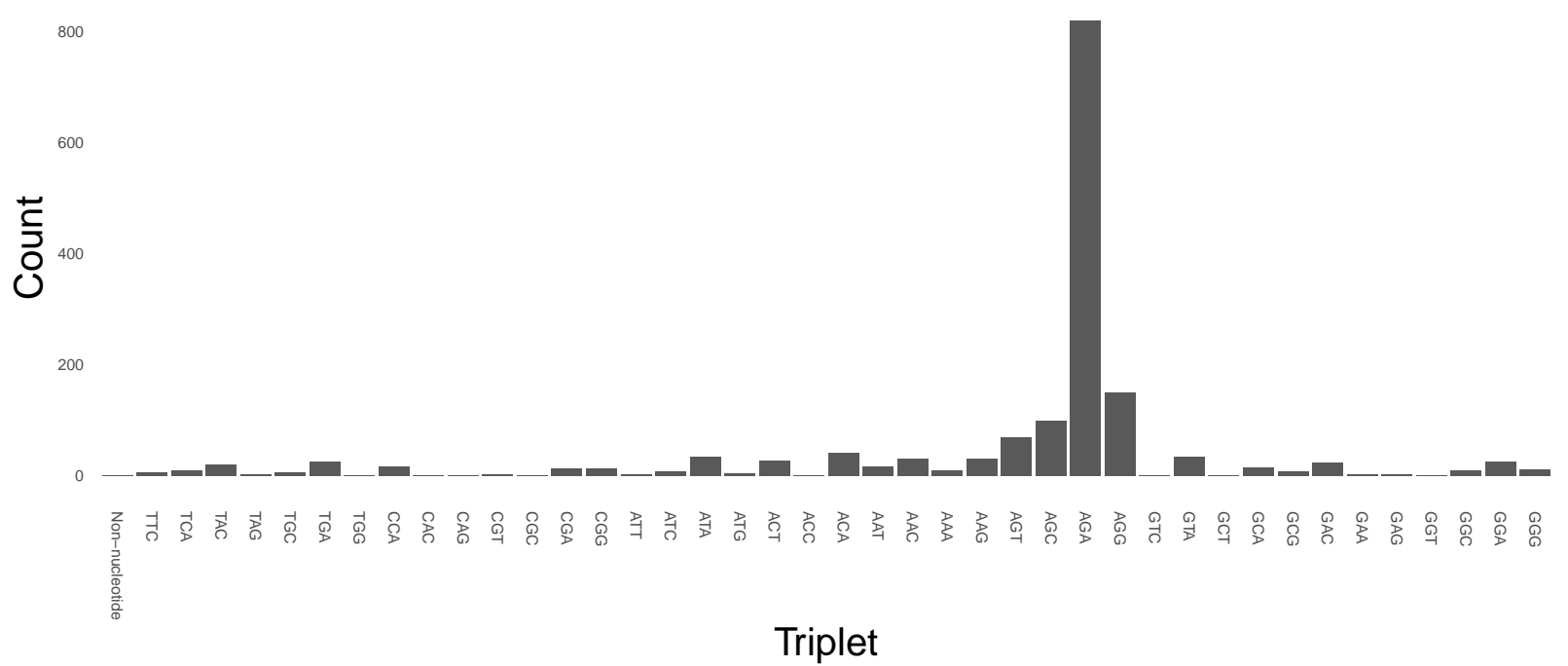
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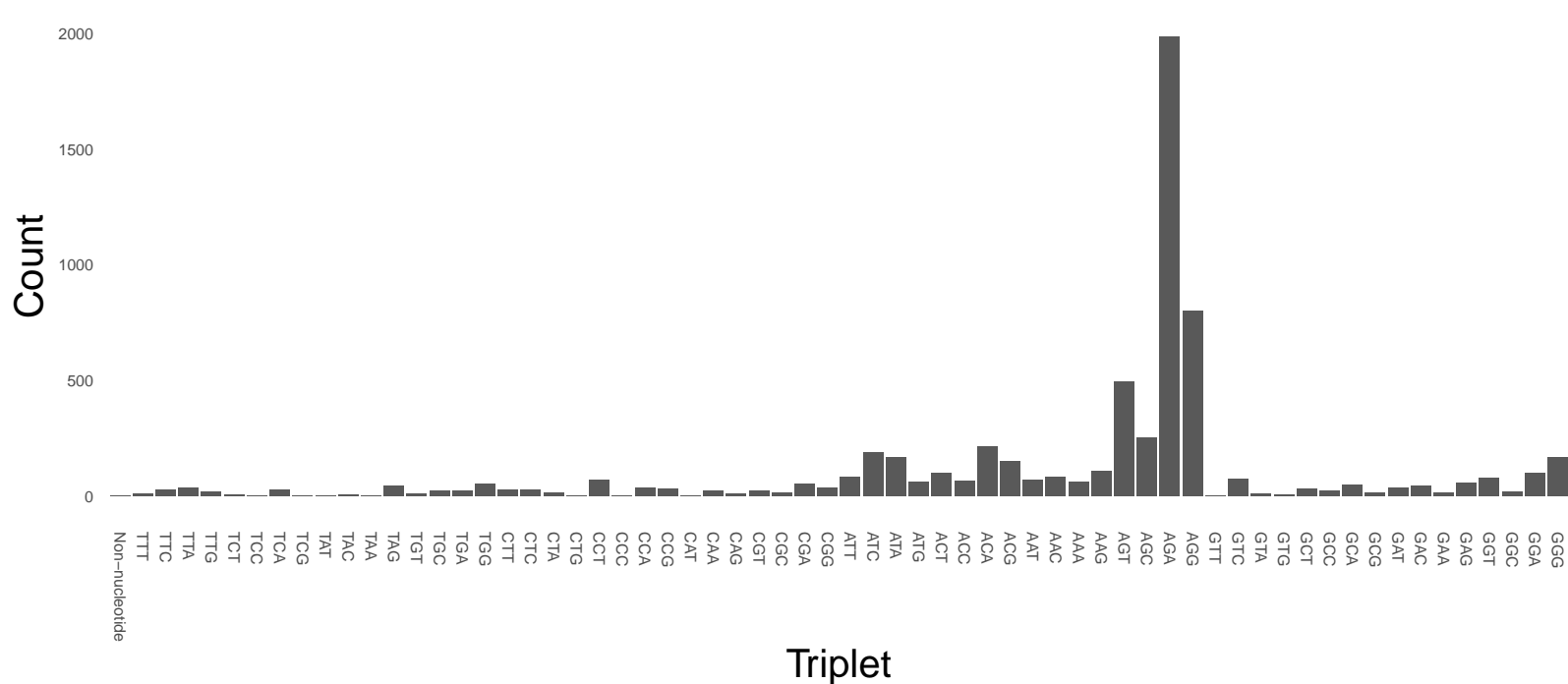
IGHV4-73*01_G147A_G189C- Final 3 nucleotides as a triplet



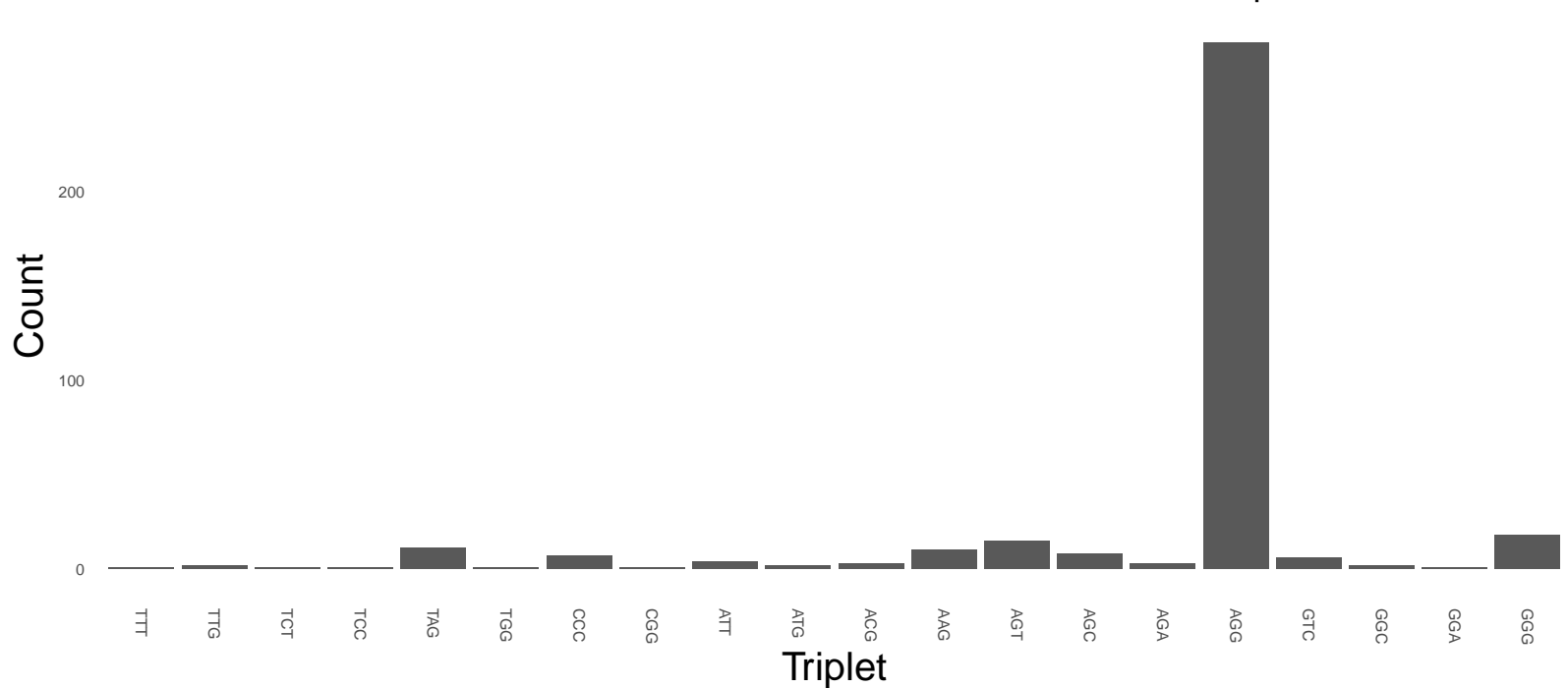
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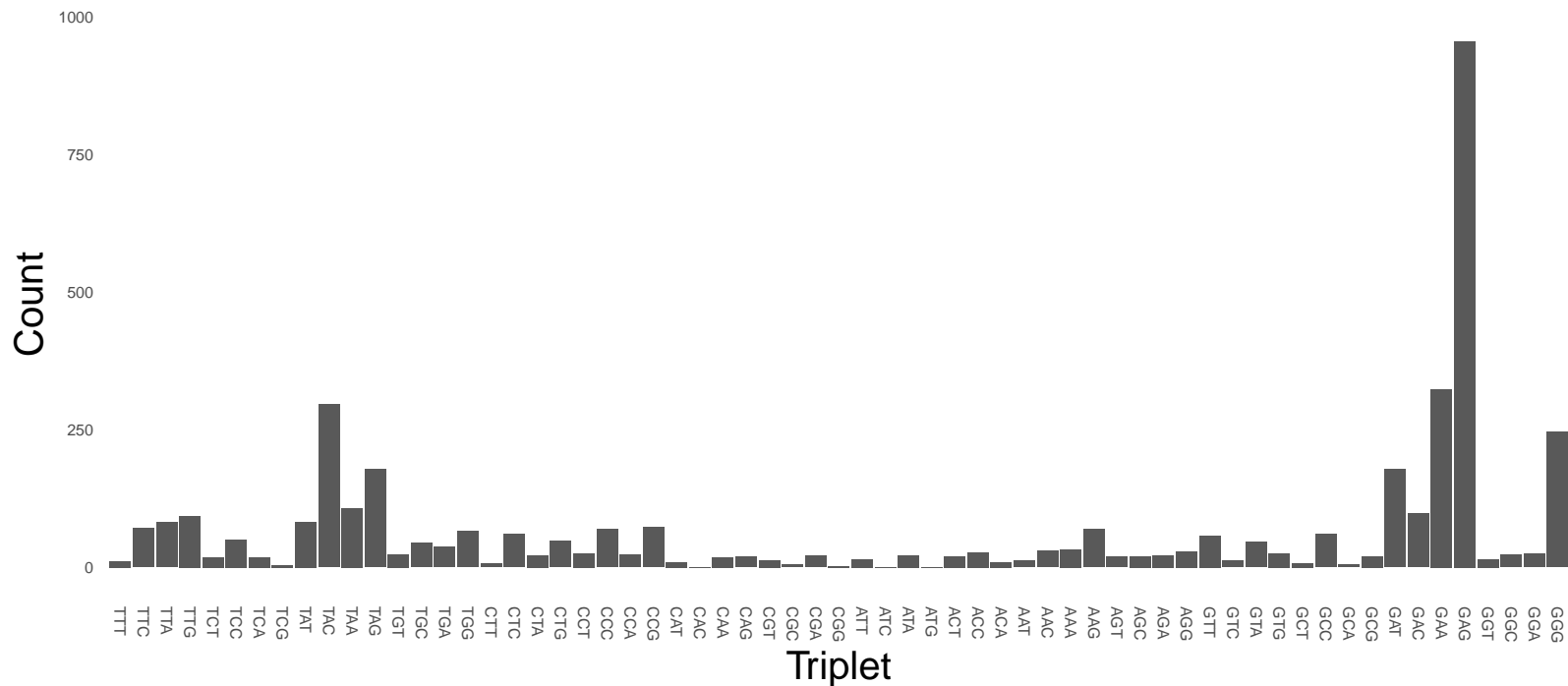
IGHV4-173*01_C4G- Final 3 nucleotides as a triplet



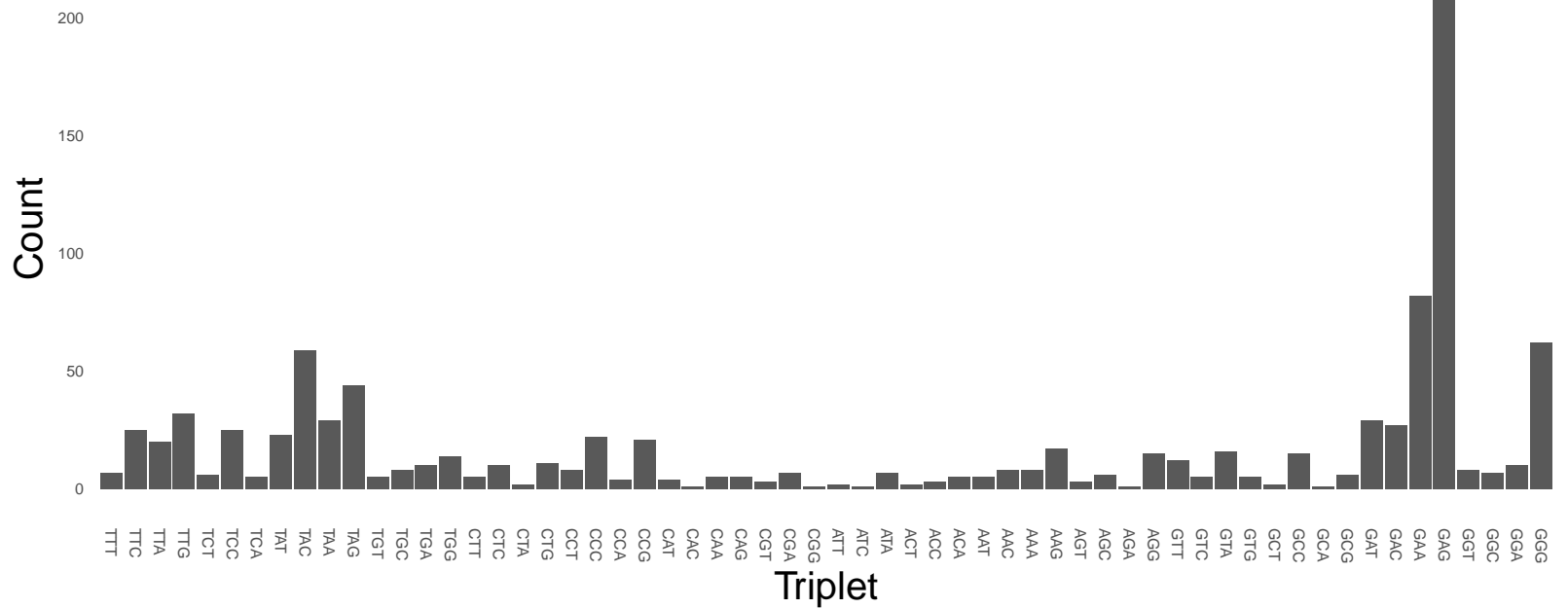
IGHV1-198*02_T164G_A169G_A190G_G205C- Final 3 nucleotides as a triplet



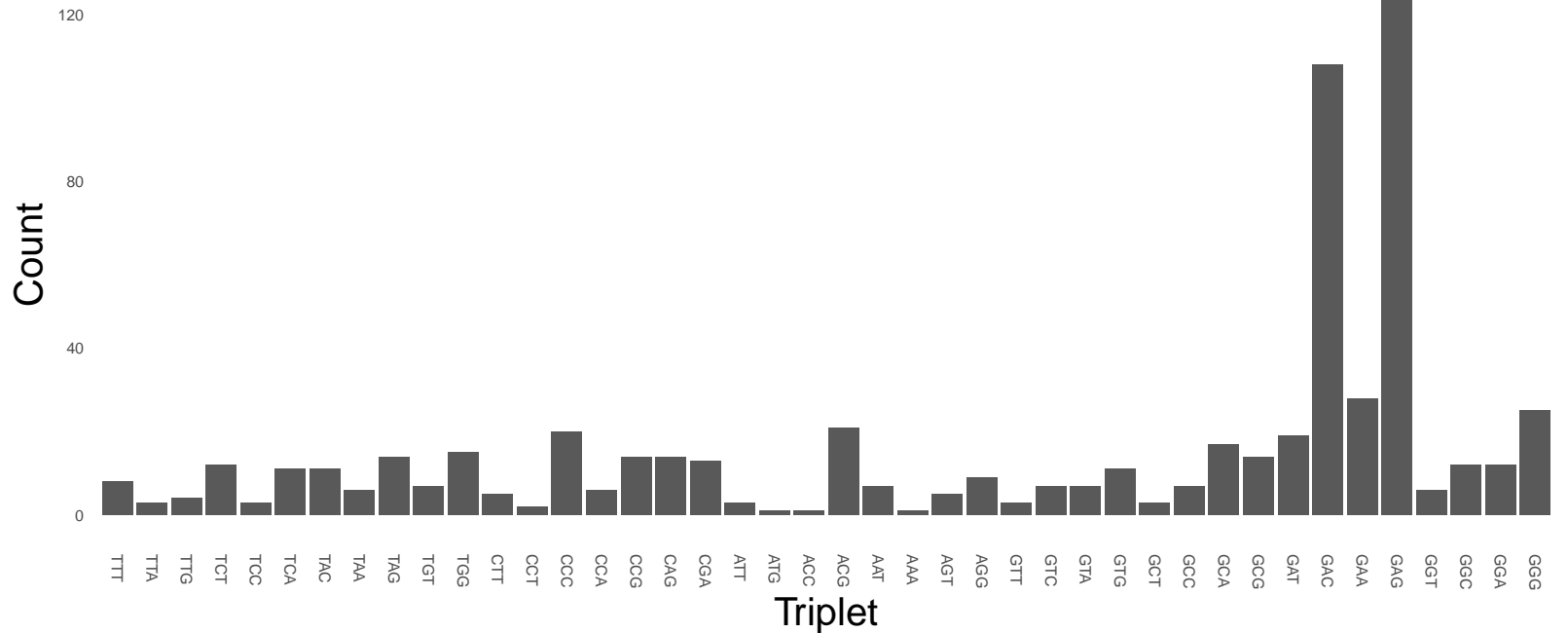
IGHV2-10*01_C6G_A23G_G112C_G118A_A119G_G121T_G141A_C205A_G210T- Final 3 nucleotides as a triplet



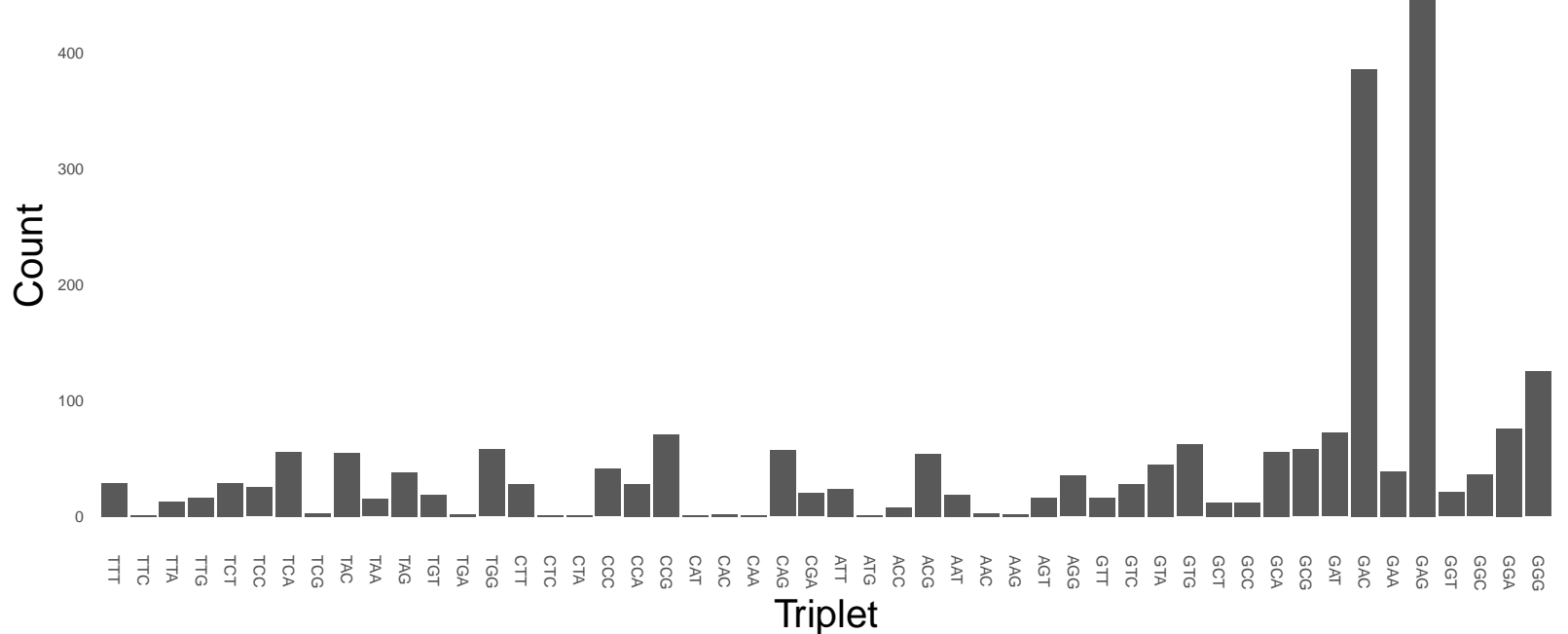
IGHV2-10*01_C6G_A23G_G112C_G118A_A119G_G121T_G141A_C205A_G210T_G289T- Final 3 nucleotides as a triplet



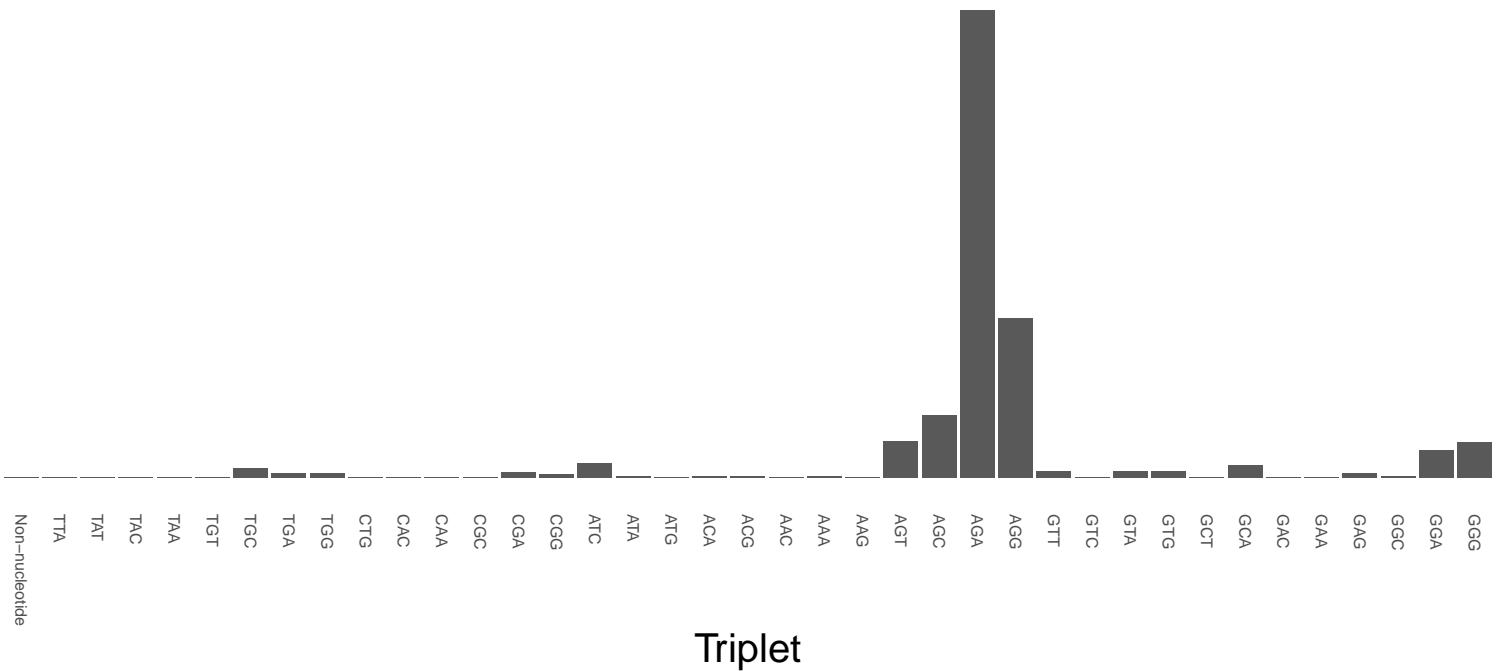
IGHV2-174*02_A267G_A289T- Final 3 nucleotides as a triplet



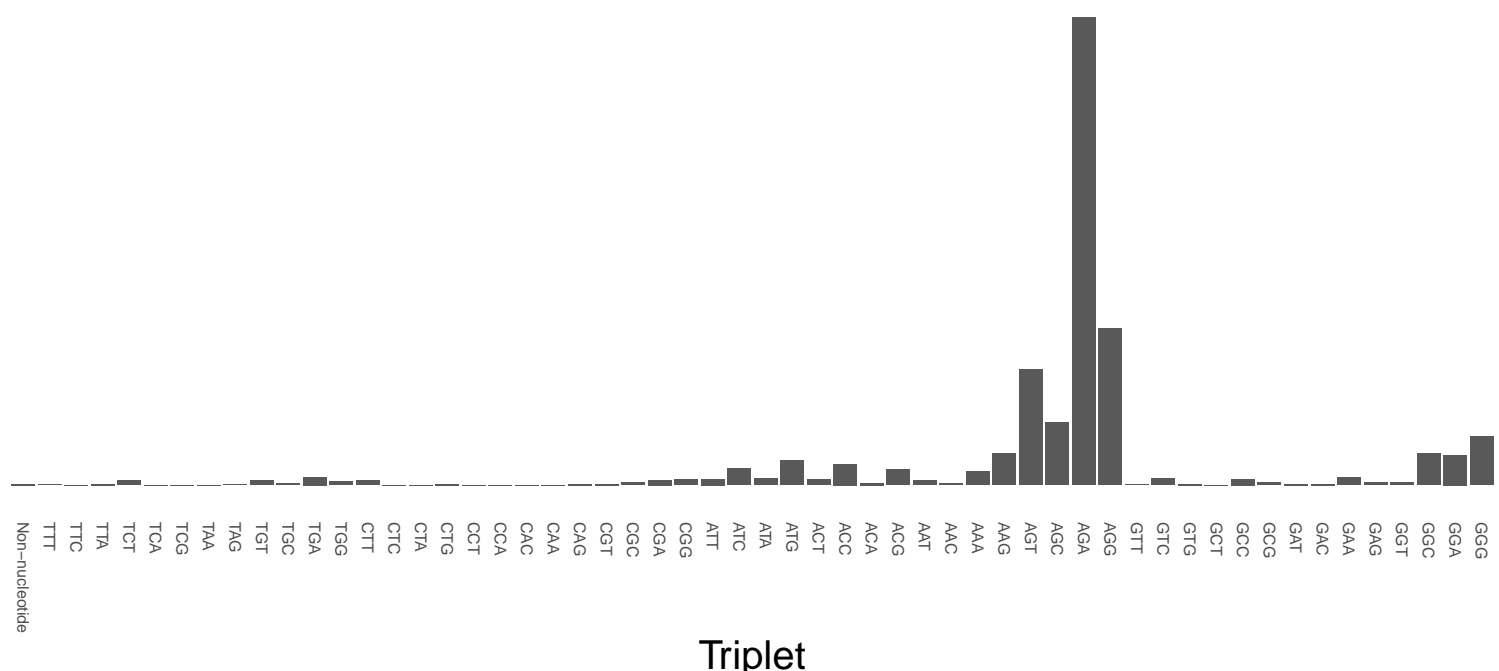
IGHV2-174*02_A267G_A289G- Final 3 nucleotides as a triplet



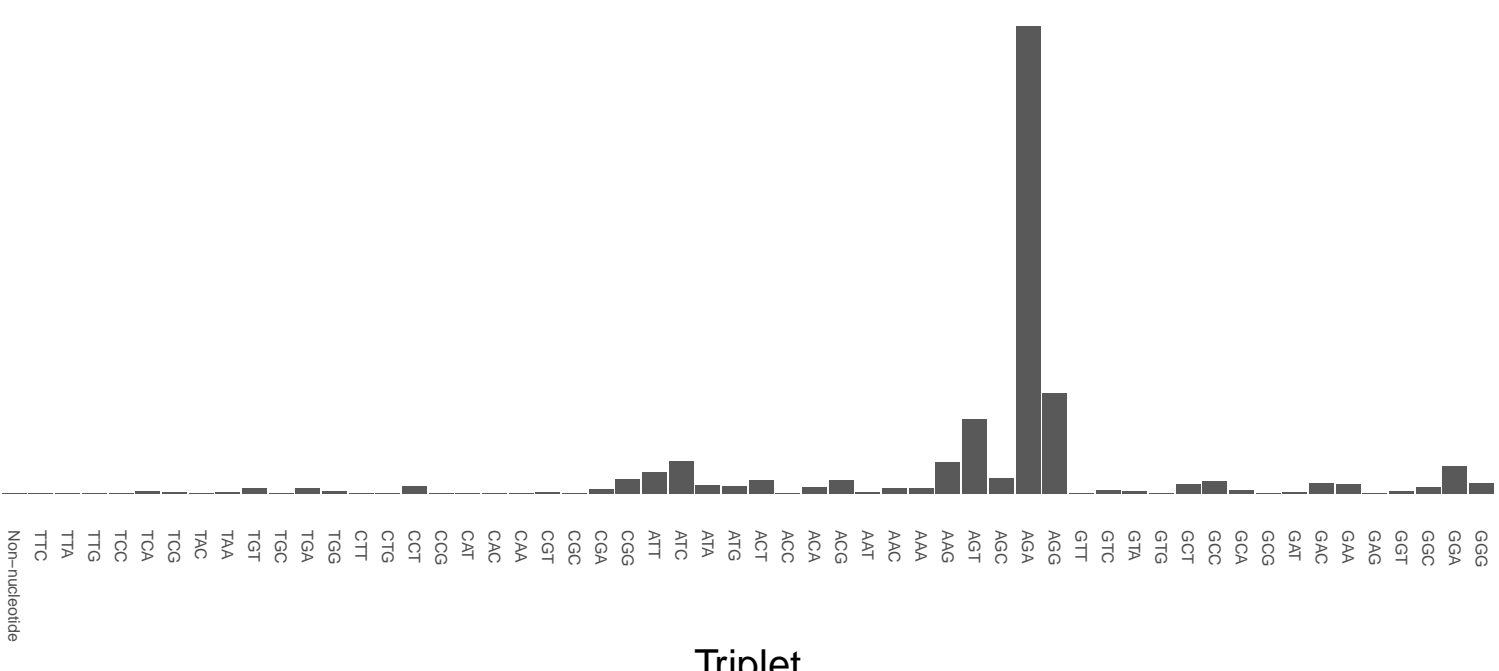
IGHV3-59*01_C69T- Final 3 nucleotides as a triplet



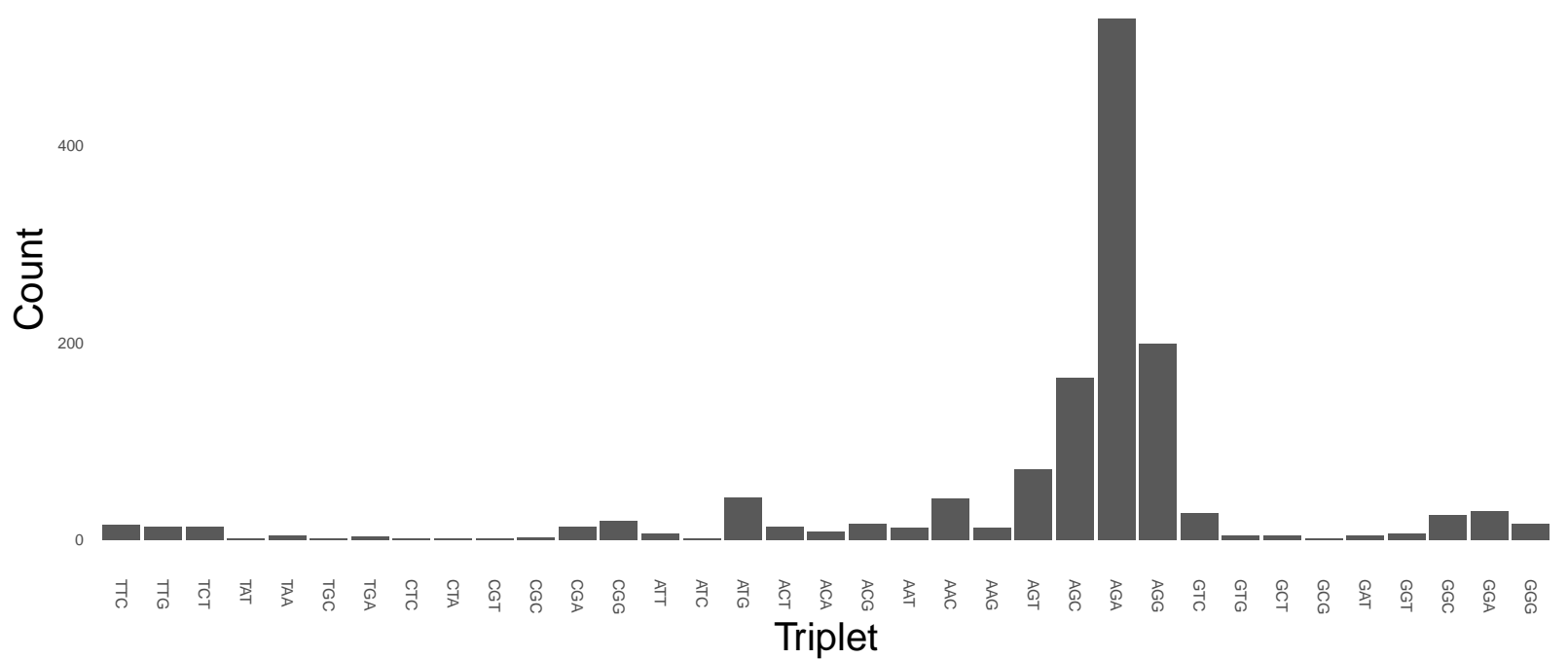
IGHV3-59*01_C69T_C86G_C118T_T136C_C163G_A172T_G175A_G176C_G197A_G198C_C2



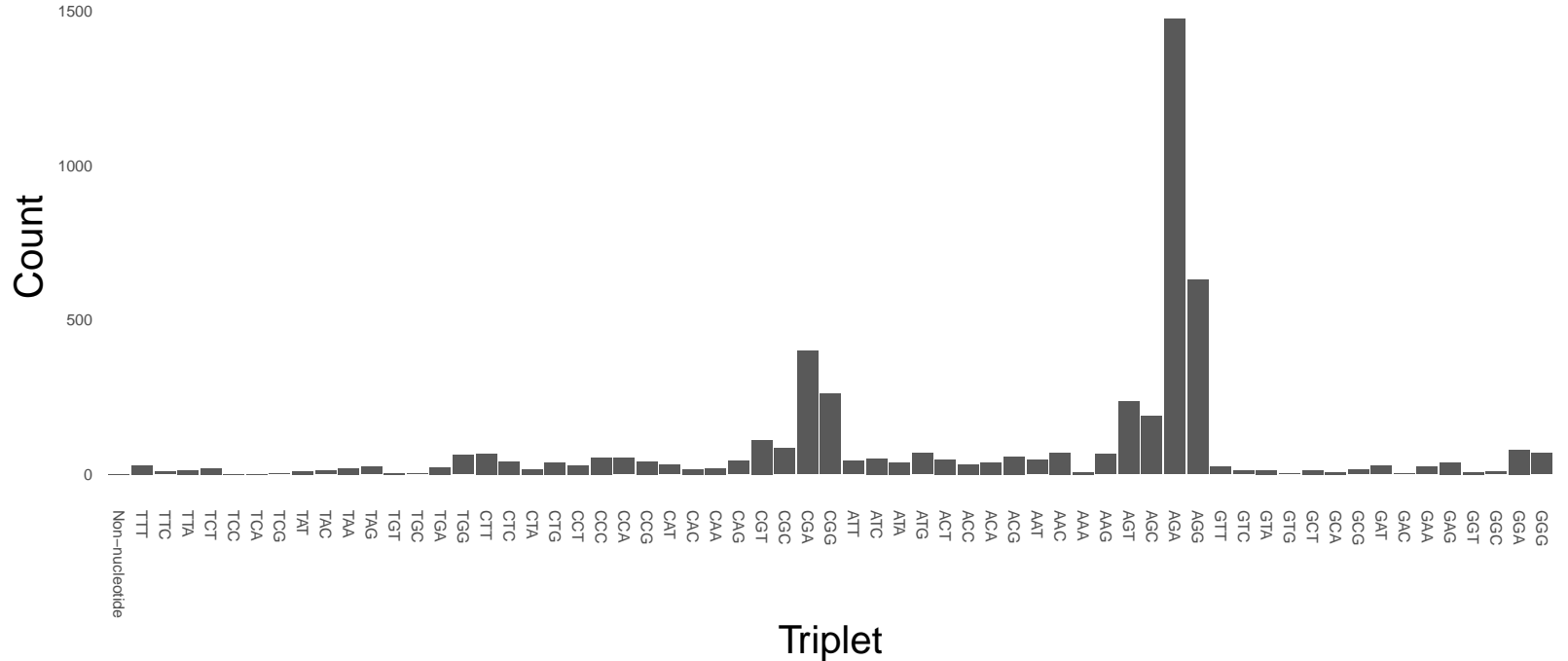
IGHV3-178*01_A223C- Final 3 nucleotides as a triplet



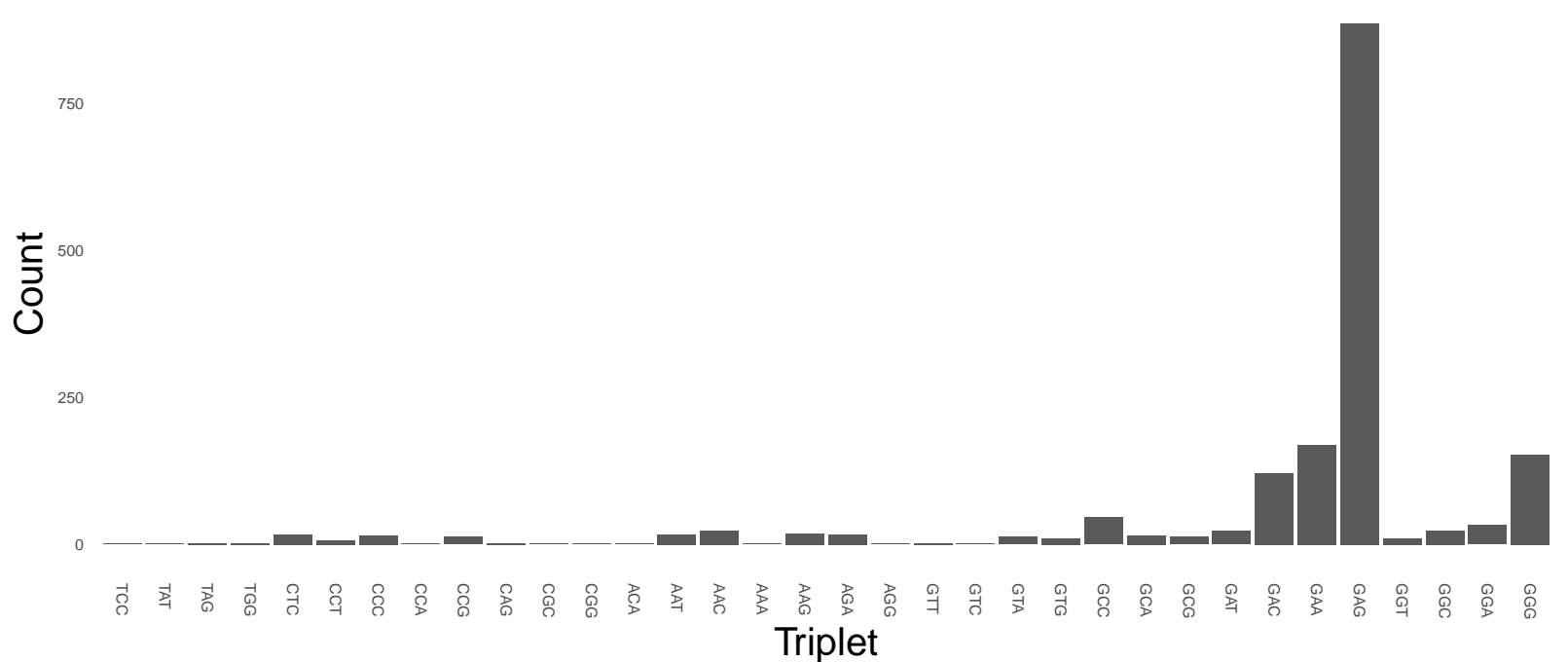
IGHV4S13*01_T85A_G267A_G289A– Final 3 nucleotides as a triplet



IGHV4S13*01_G34C_A100G– Final 3 nucleotides as a triplet

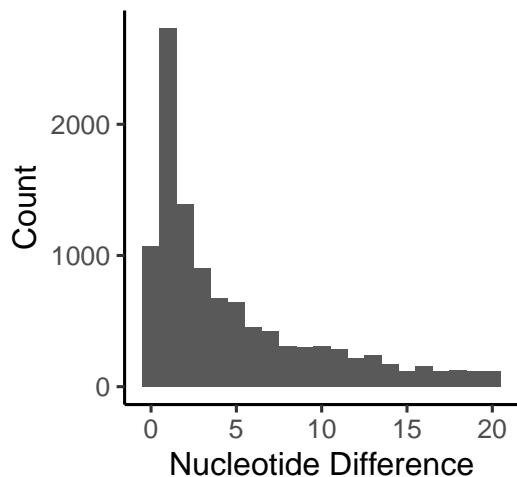


IGHV4-169*01_C259T– Final 3 nucleotides as a triplet



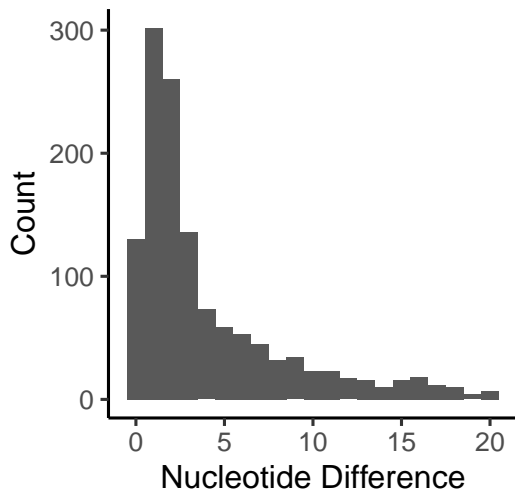
IGHV3S42*01_T19A_G2

18558 sequences assigned
1071 (5.8%) exact matches, in which:
797 unique CDR3
4 unique J



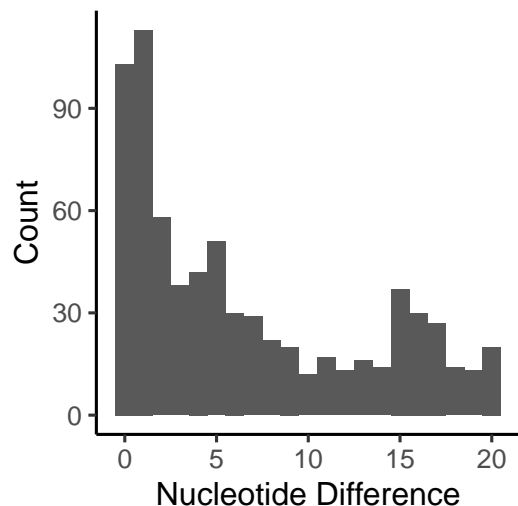
IGHV4S13*01_T85A_G2

1319 sequences assigned
130 (9.9%) exact matches, in which:
116 unique CDR3
4 unique J



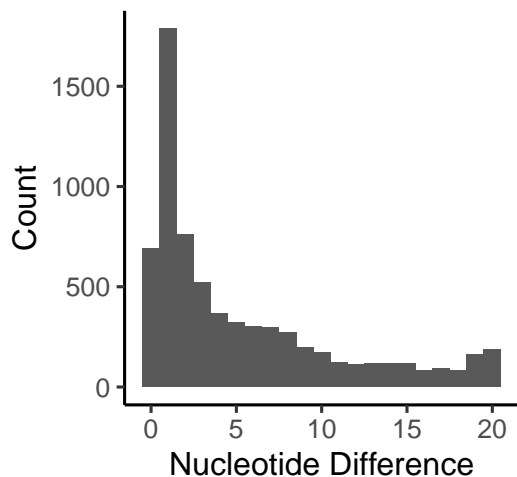
IGHV2-10*01_C6G_A23G

1012 sequences assigned
103 (10.2%) exact matches, in which:
91 unique CDR3
4 unique J



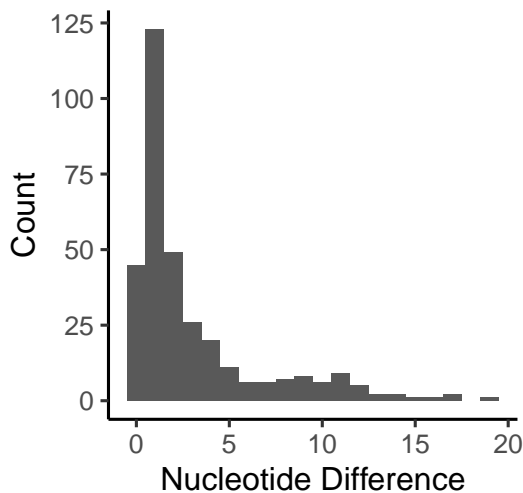
IGHV3S42*01_T19A_G2

7726 sequences assigned
691 (8.9%) exact matches, in which:
509 unique CDR3
4 unique J



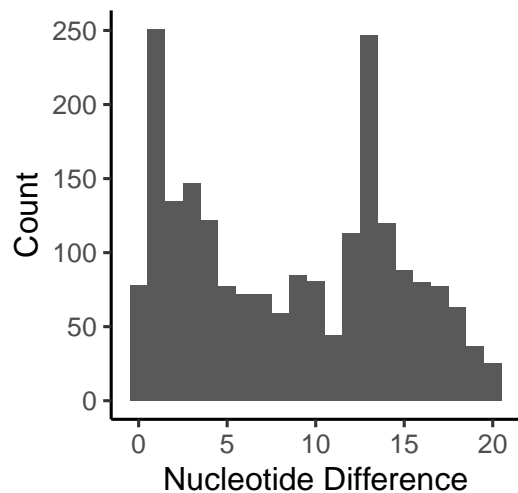
IGHV1-198*02_T164G_A

376 sequences assigned
45 (12%) exact matches, in which:
39 unique CDR3
4 unique J



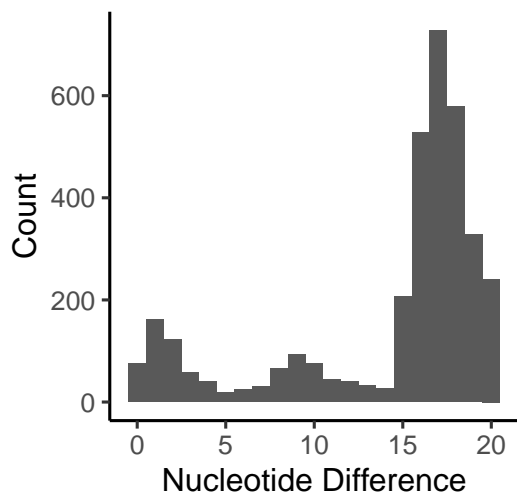
IGHV2-174*02_A267G_A

2266 sequences assigned
78 (3.4%) exact matches, in which:
57 unique CDR3
4 unique J



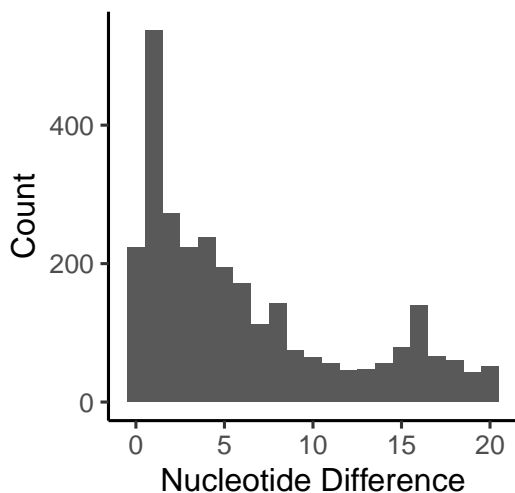
IGHV4S13*01_G34C_A10

4973 sequences assigned
75 (1.5%) exact matches, in which:
68 unique CDR3
4 unique J



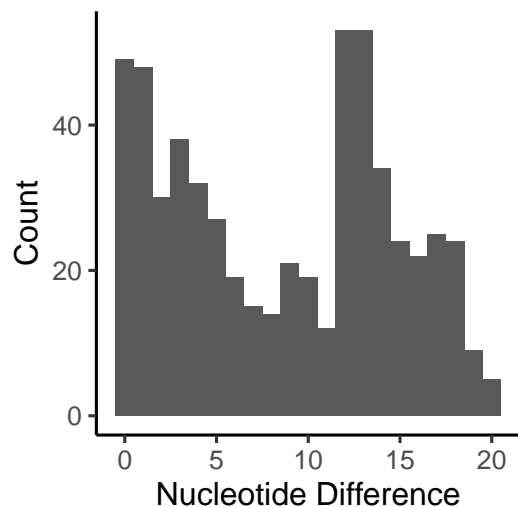
IGHV2-10*01_C6G_A23G

4030 sequences assigned
223 (5.5%) exact matches, in which:
162 unique CDR3
4 unique J



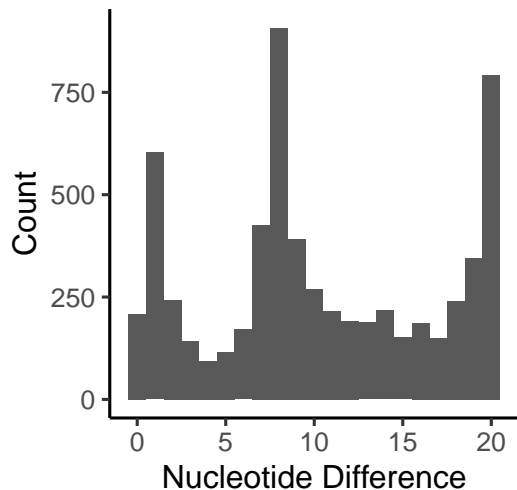
IGHV2-174*02_A267G_A

620 sequences assigned
49 (7.9%) exact matches, in which:
45 unique CDR3
4 unique J



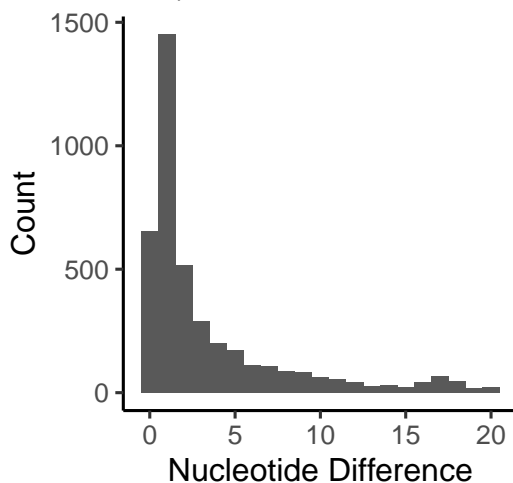
IGHV3-30*01_G48C_T11

10166 sequences assigned
208 (2%) exact matches, in which:
165 unique CDR3
3 unique J



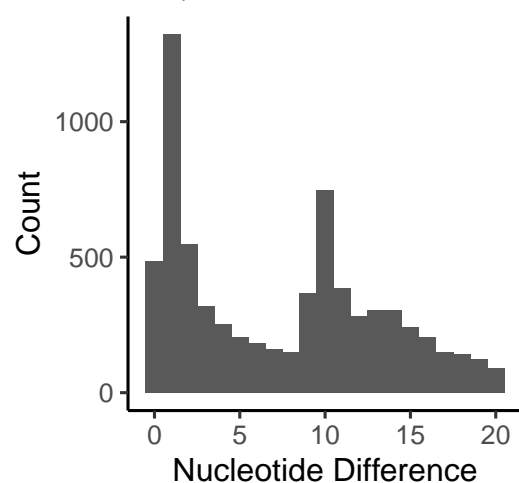
IGHV3-59*01_C69T_C8

4278 sequences assigned
655 (15.3%) exact matches, in which:
505 unique CDR3
4 unique J



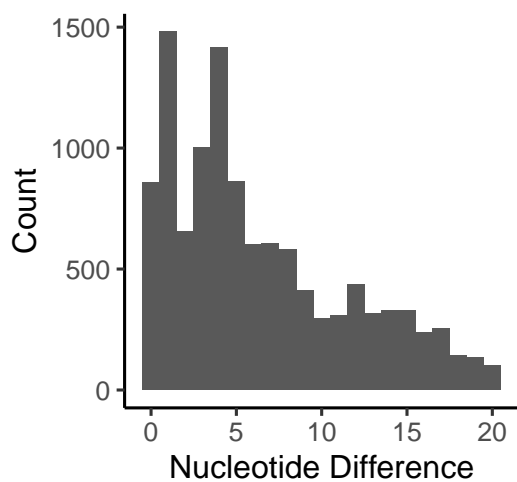
IGHV3-103*01_G51A_A

7826 sequences assigned
484 (6.2%) exact matches, in which:
340 unique CDR3
4 unique J



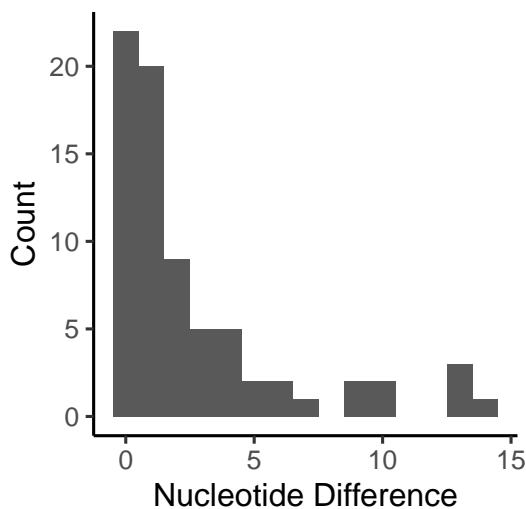
IGHV3-54*02_G47C_T1

12158 sequences assigned
856 (7%) exact matches, in which:
622 unique CDR3
4 unique J



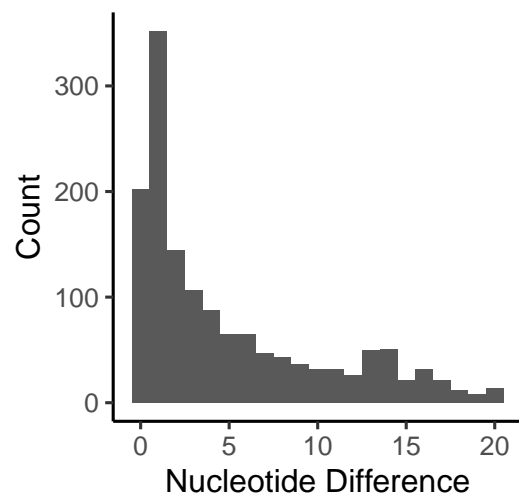
IGHV3-100*01_G3C_A13

133 sequences assigned
22 (16.5%) exact matches, in which:
22 unique CDR3
4 unique J



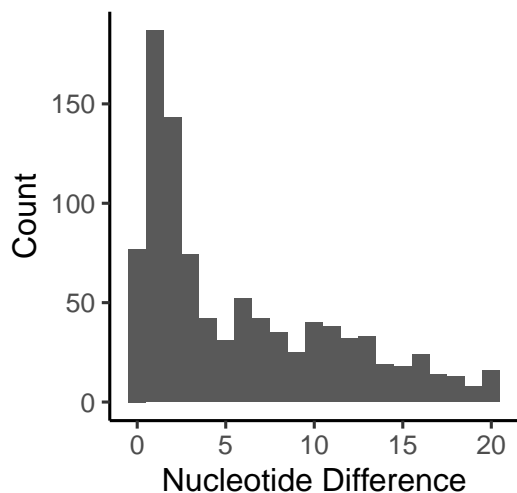
IGHV3-103*01_G51A_A1

1540 sequences assigned
202 (13.1%) exact matches, in which:
182 unique CDR3
4 unique J



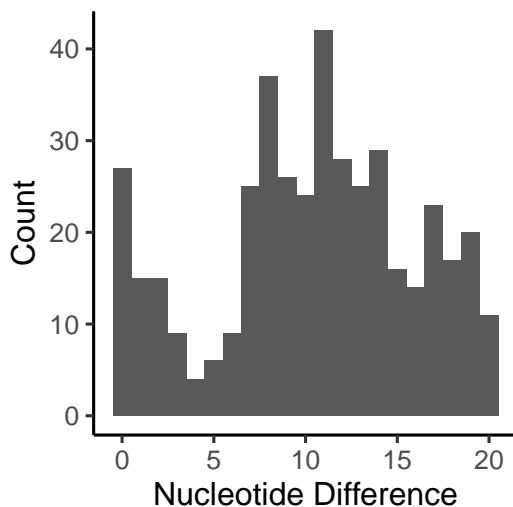
IGHV3-59*01_C69T

2090 sequences assigned
77 (3.7%) exact matches, in which:
58 unique CDR3
4 unique J



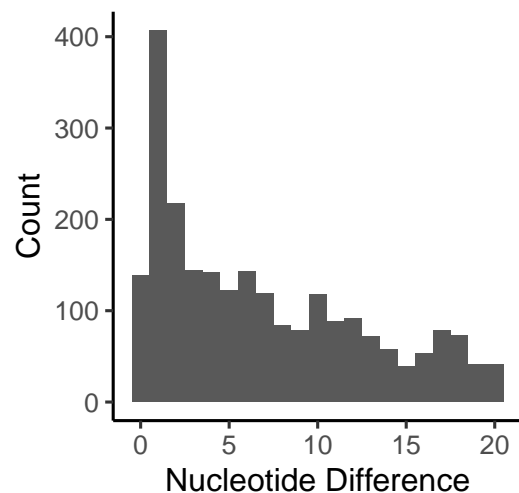
IGHV3-100*02_C3G

1431 sequences assigned
27 (1.9%) exact matches, in which:
25 unique CDR3
4 unique J



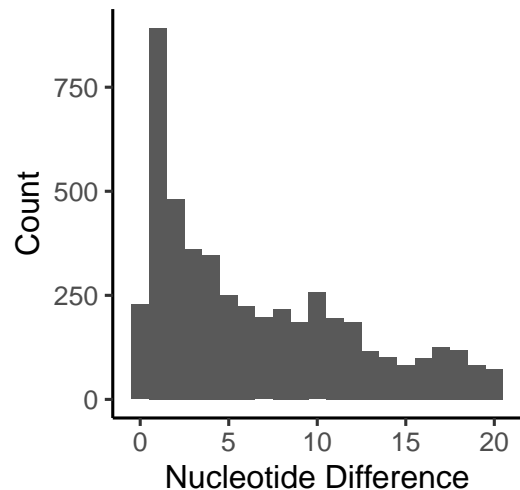
IGHV3-116*02_G8A_T10

3295 sequences assigned
139 (4.2%) exact matches, in which:
105 unique CDR3
4 unique J



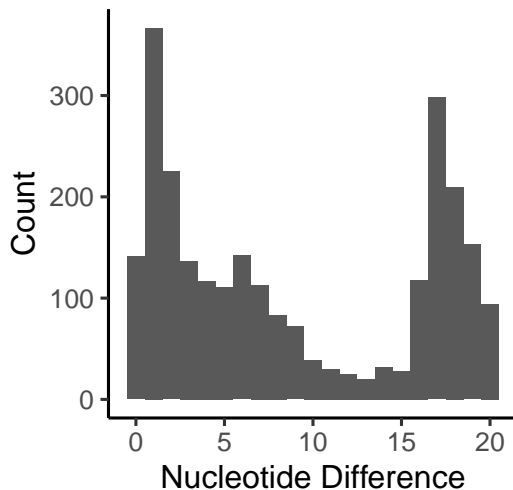
IGHV3-116*02_T227G

5637 sequences assigned
228 (4%) exact matches, in which:
160 unique CDR3
4 unique J



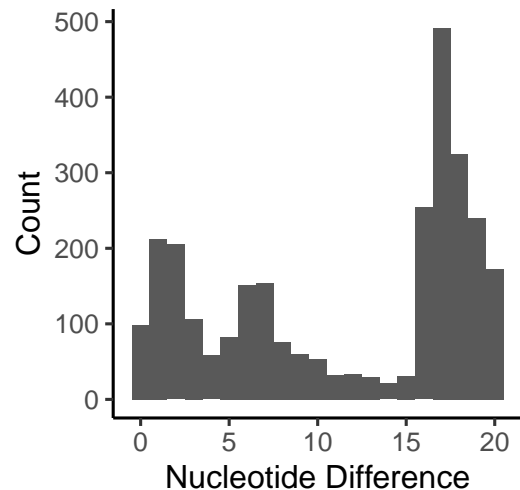
IGHV3-134*01_A3C_A81

3544 sequences assigned
141 (4%) exact matches, in which:
109 unique CDR3
4 unique J



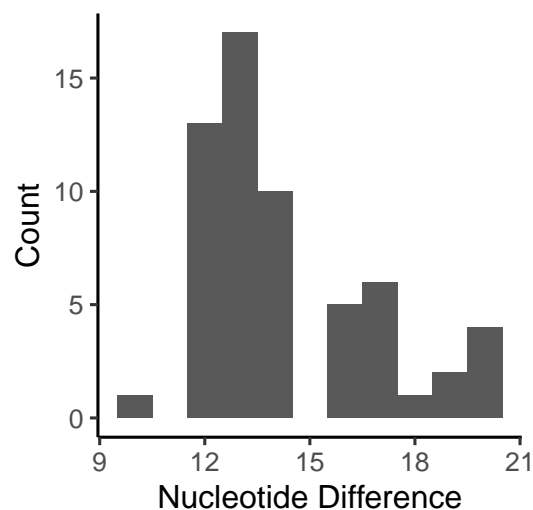
IGHV4-57*02_C87T_G19

3899 sequences assigned
99 (2.5%) exact matches, in which:
92 unique CDR3
4 unique J



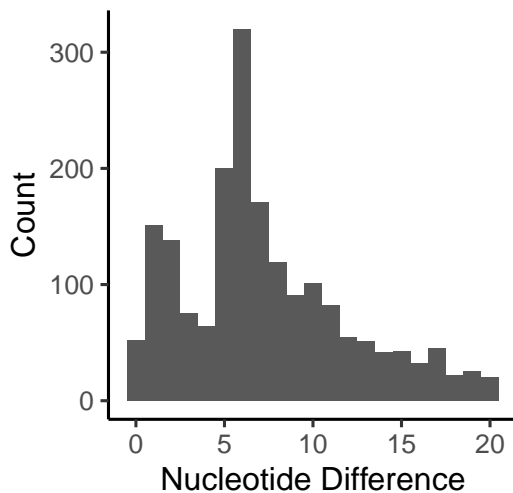
IGHV3-117*01

174 sequences assigned
No exact matches.



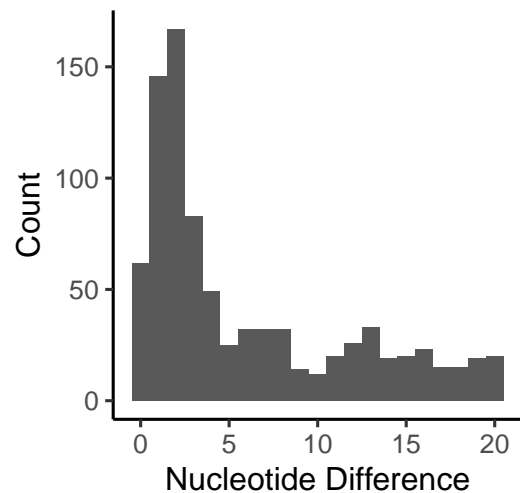
IGHV3-178*01_A223C

2186 sequences assigned
52 (2.4%) exact matches, in which:
37 unique CDR3
4 unique J



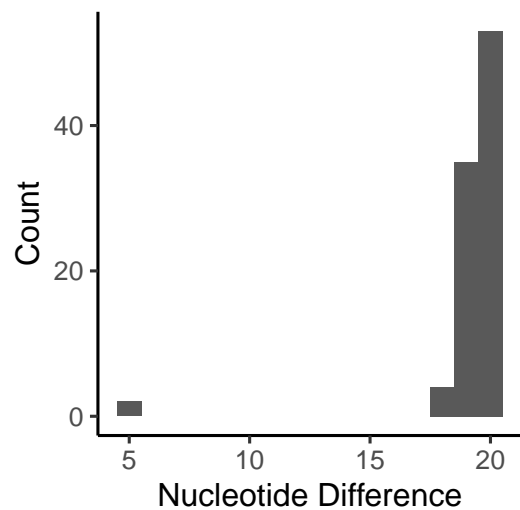
IGHV4-73*01_G147A_G

1357 sequences assigned
62 (4.6%) exact matches, in which:
54 unique CDR3
4 unique J



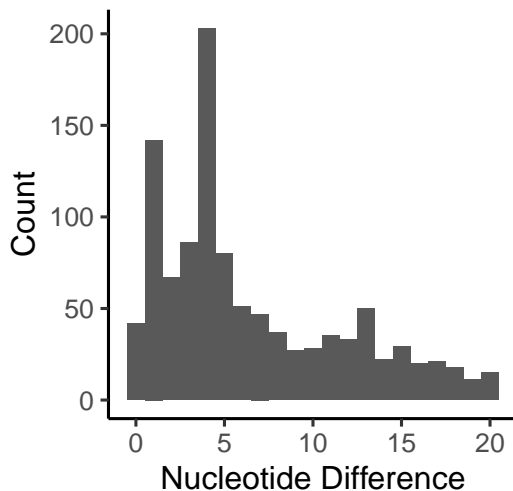
IGHV3-118*01

219 sequences assigned
No exact matches.



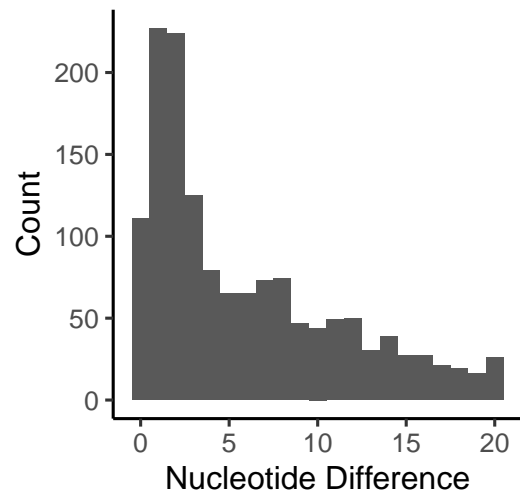
IGHV3-184*01_T34C_G4

1300 sequences assigned
42 (3.2%) exact matches, in which:
34 unique CDR3
3 unique J



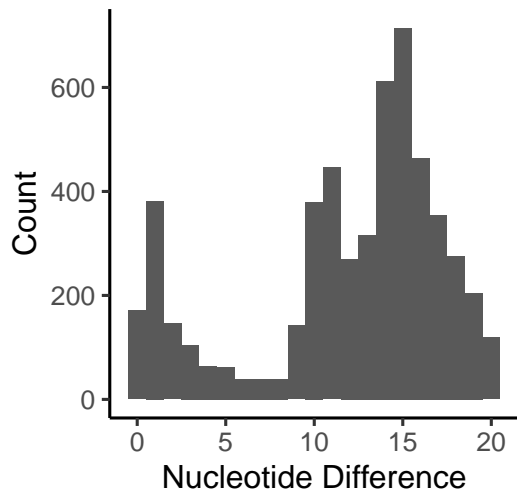
IGHV4-92*01_G70A_A10

1595 sequences assigned
111 (7%) exact matches, in which:
95 unique CDR3
4 unique J



IGHV4-165*01_A132G_C

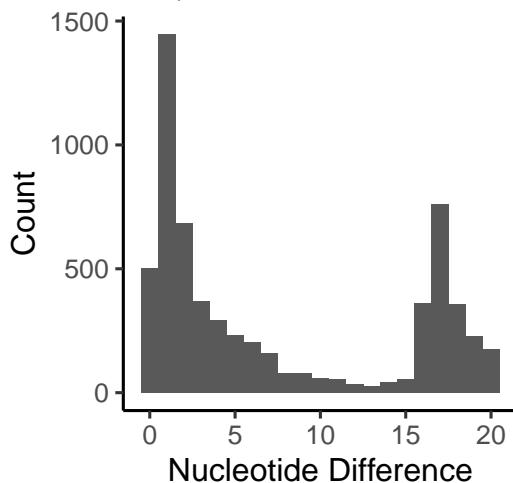
6065 sequences assigned
171 (2.8%) exact matches, in which:
139 unique CDR3
4 unique J



IGHV5-43*01_A106G

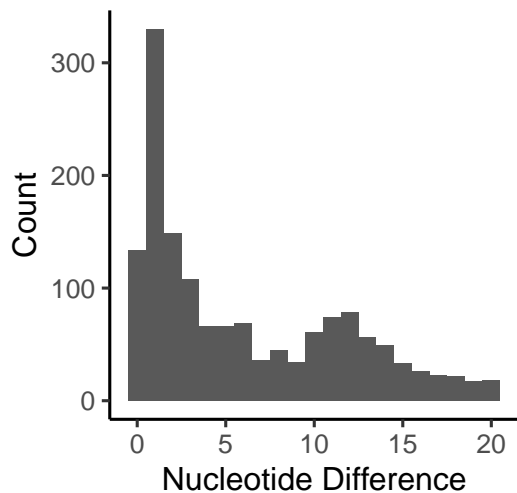
3216A_C239G_G258T

6906 sequences assigned
503 (7.3%) exact matches, in which:
358 unique CDR3
4 unique J



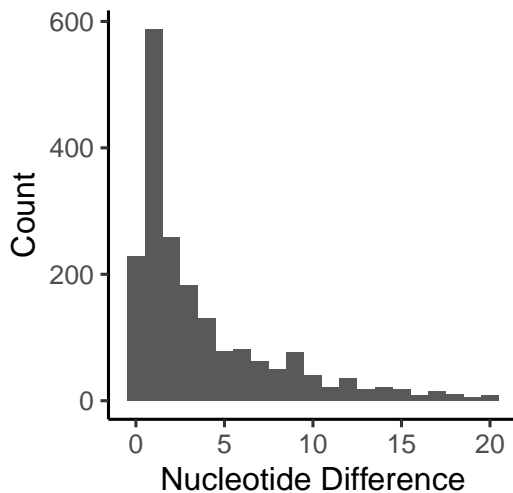
IGHV4-169*01_C259T

1662 sequences assigned
134 (8.1%) exact matches, in which:
114 unique CDR3
4 unique J



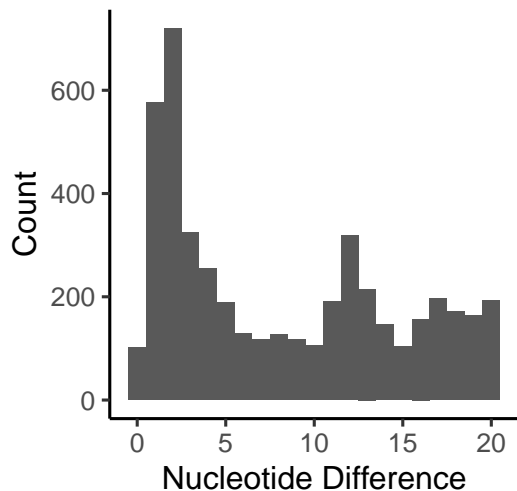
IGHV5-43*01_A106G_C297T

1994 sequences assigned
229 (11.5%) exact matches, in which:
169 unique CDR3
4 unique J



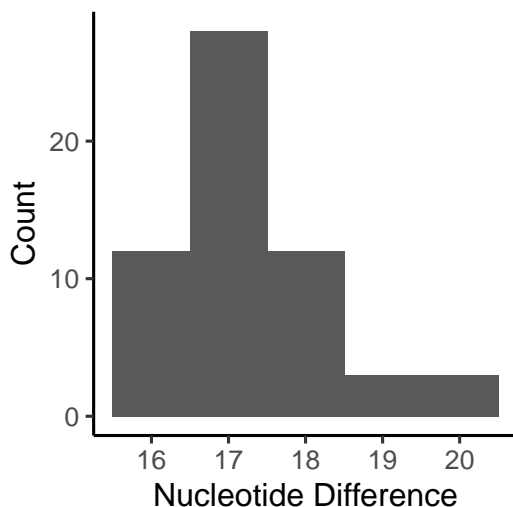
IGHV4-173*01_C4G

6306 sequences assigned
101 (1.6%) exact matches, in which:
86 unique CDR3
4 unique J

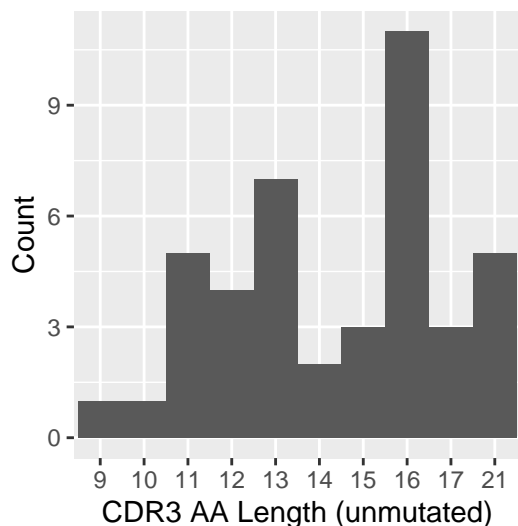


IGHV7-94*01

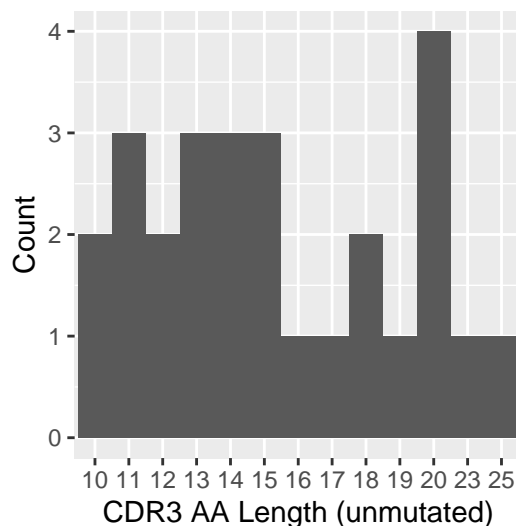
80 sequences assigned
No exact matches.



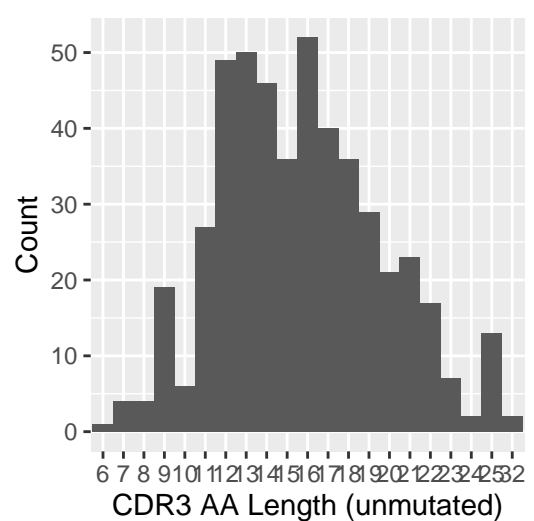
IGHV3-184*01_T34C_G48C_



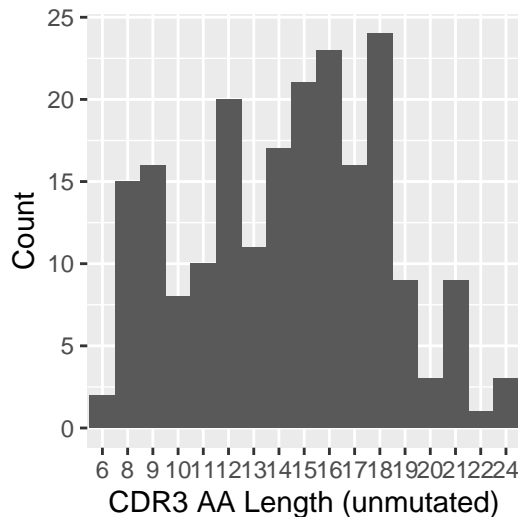
IGHV3-100*02_C3G



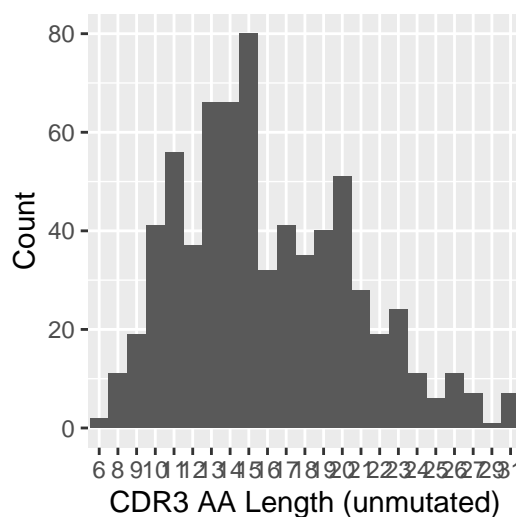
IGHV3-103*01_G51A_A1700



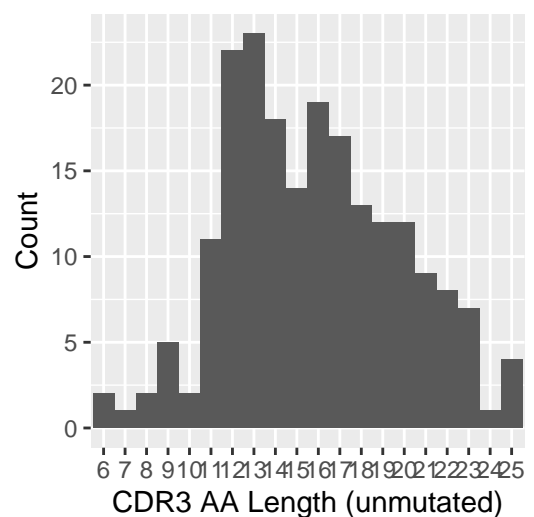
IGHV3-30*01_G48C_T110C



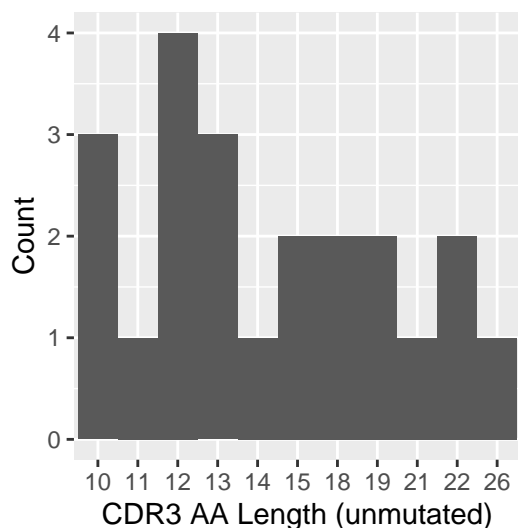
IGHV3S42*01_T19A_G24A_



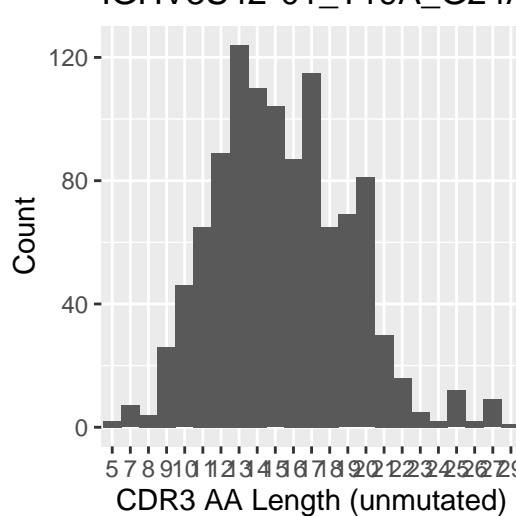
IGHV3-103*01_G51A_A1700



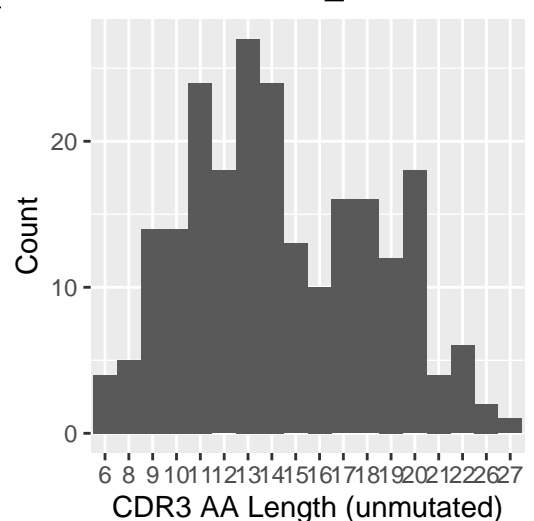
IGHV3-100*01_G3C_A132G_



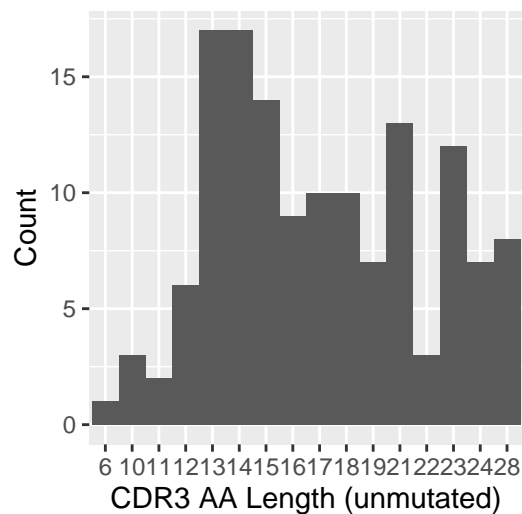
IGHV3S42*01_T19A_G24A_



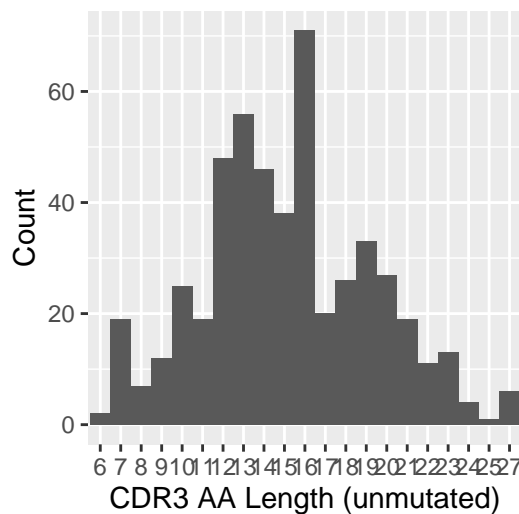
IGHV3-116*02_T227G



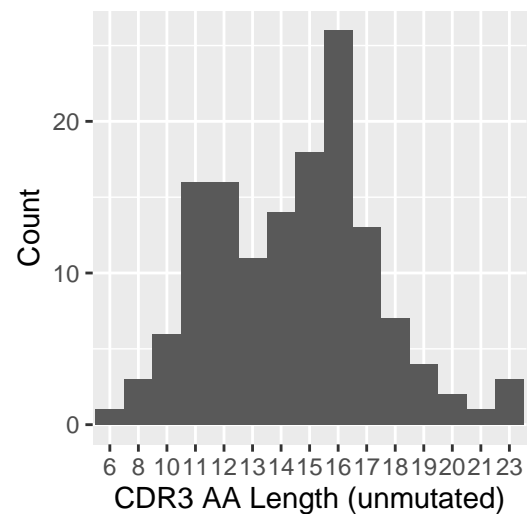
IGHV3-116*02_G8A_T109C



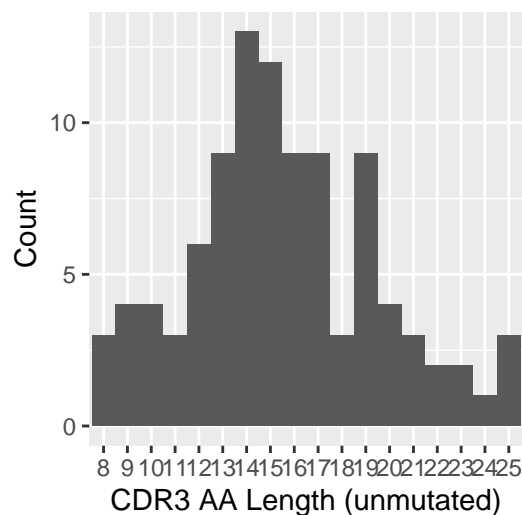
IGHV5-43*01_A106G



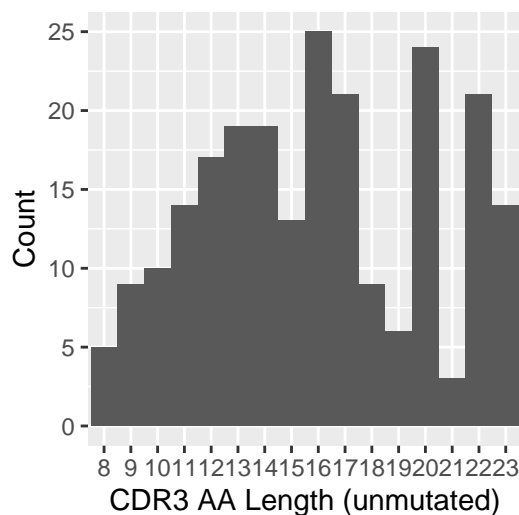
IGHV3-134*01_A3C_A81G



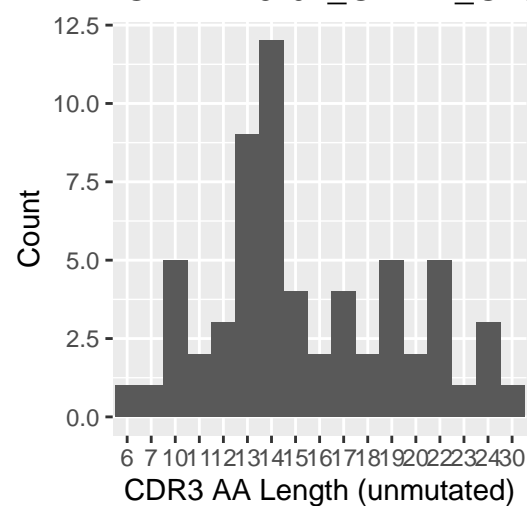
IGHV4-57*02_C87T_G199T



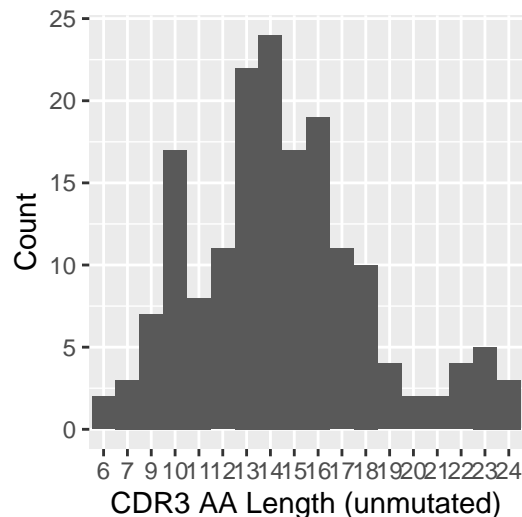
IGHV5-43*01_A106G_C297



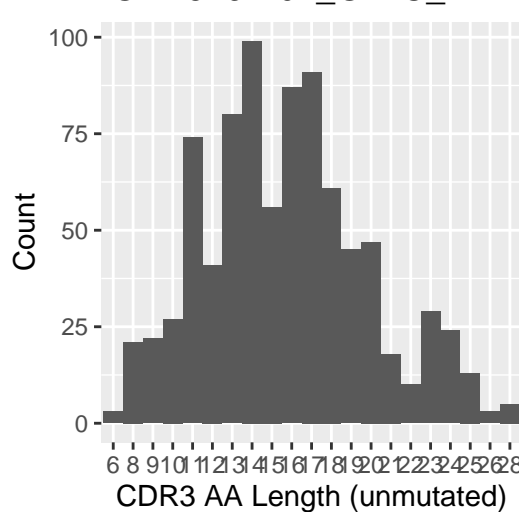
IGHV4-73*01_G147A_G18



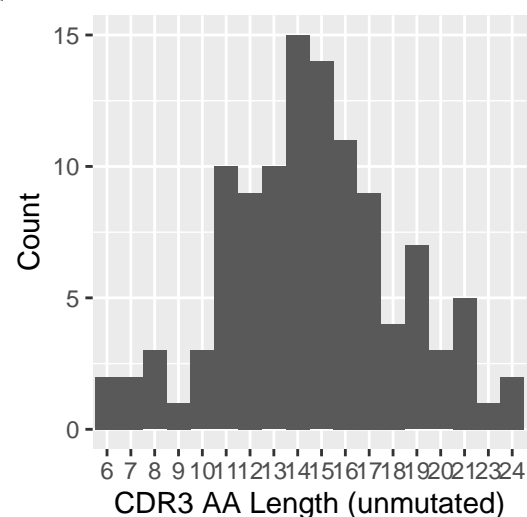
IGHV4-165*01_A132G_C161



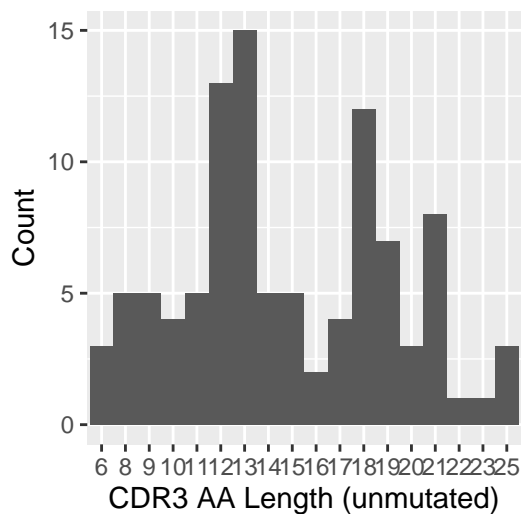
IGHV3-54*02_G47C_T111C



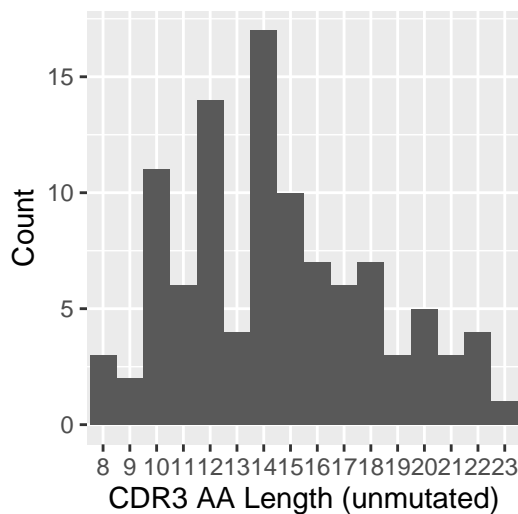
IGHV4-92*01_G70A_A103G



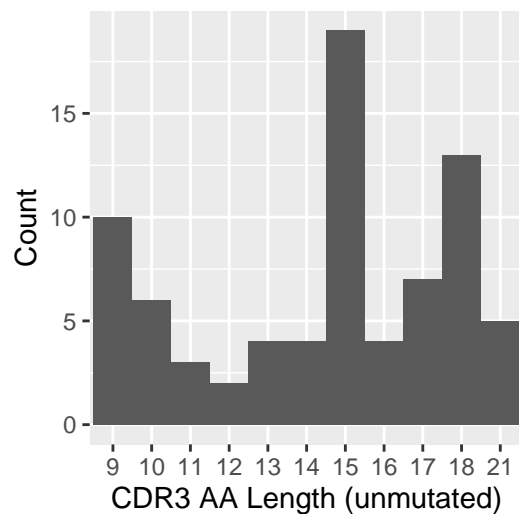
IGHV4-173*01_C4G



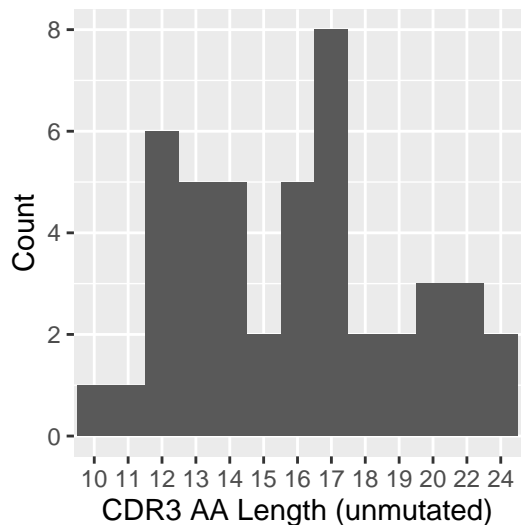
IGHV2-10*01_C6G_A23G_C



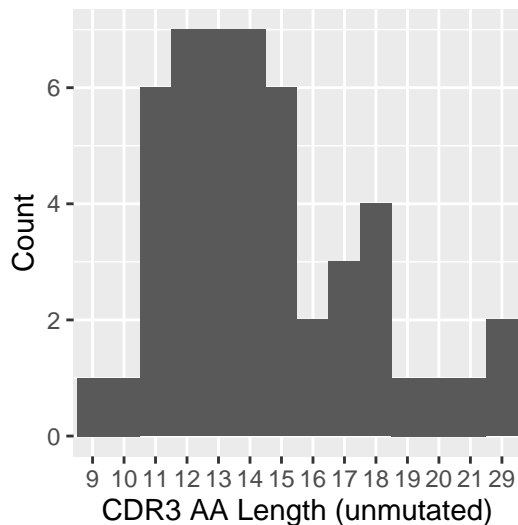
IGHV3-59*01_C69T



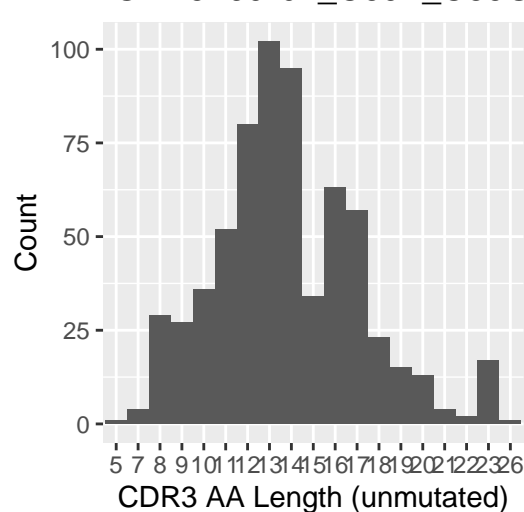
IGHV1-198*02_T164G_A169



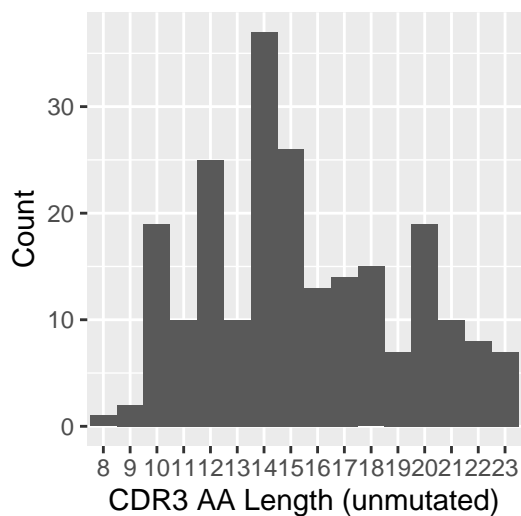
IGHV2-174*02_A267G_A289



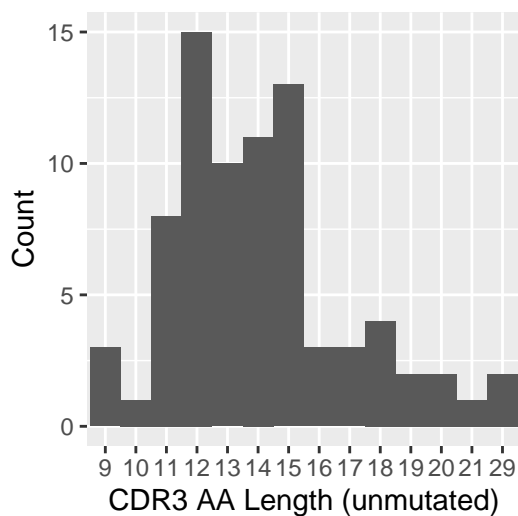
IGHV3-59*01_C69T_C86G_C



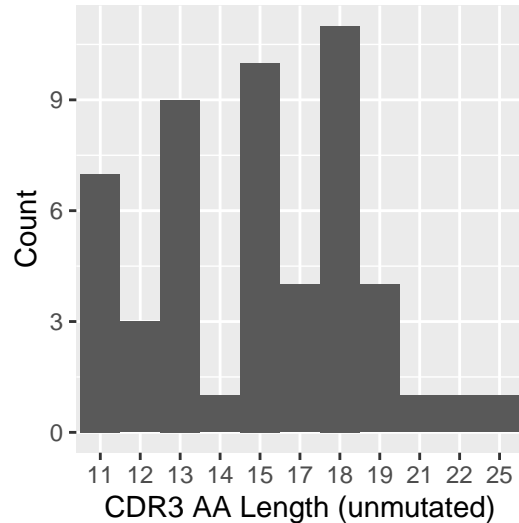
IGHV2-10*01_C6G_A23G_C



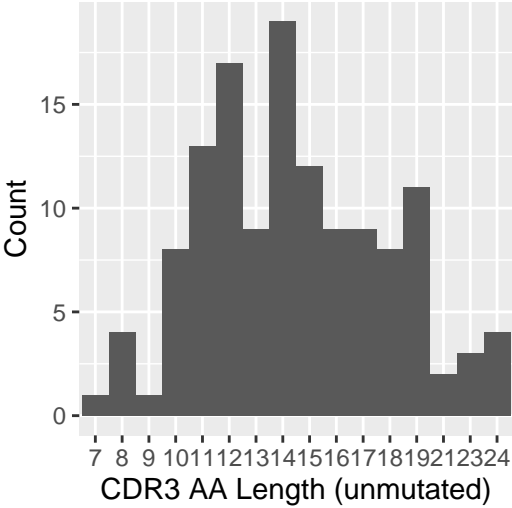
IGHV2-174*02_A267G_A289



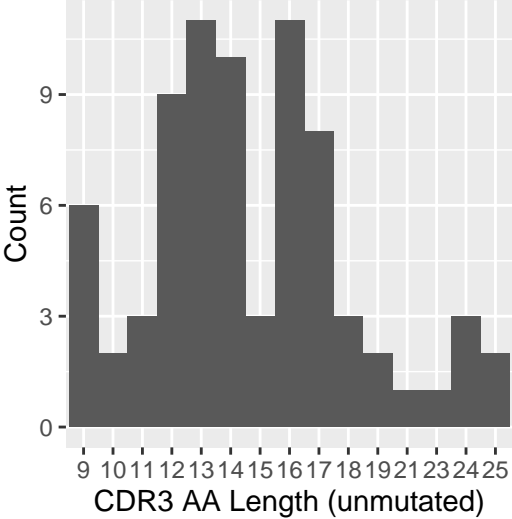
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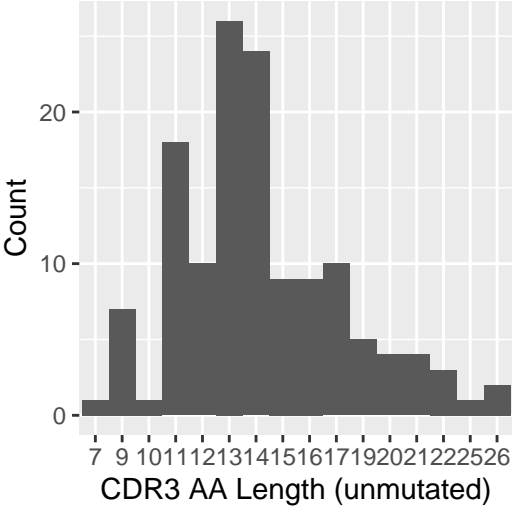
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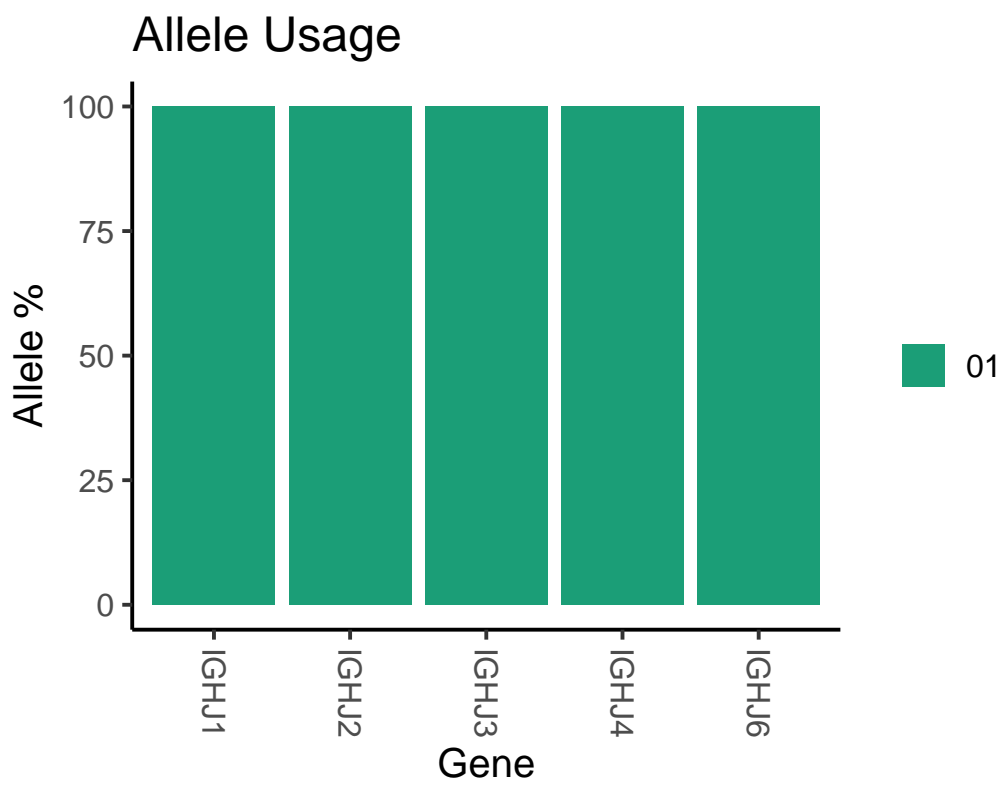


IGHV4S13*01_G34C_A100G



IGHV4-169*01_C259T





Warning – no inferred sequences found.

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