

SBS1

$C > A$

C > G

$C > T$

T>A

$T > C$

T > G

Mutation probability

0.00 0.05 0.10 0.15

0.00

[illegible]

SBS3

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.05

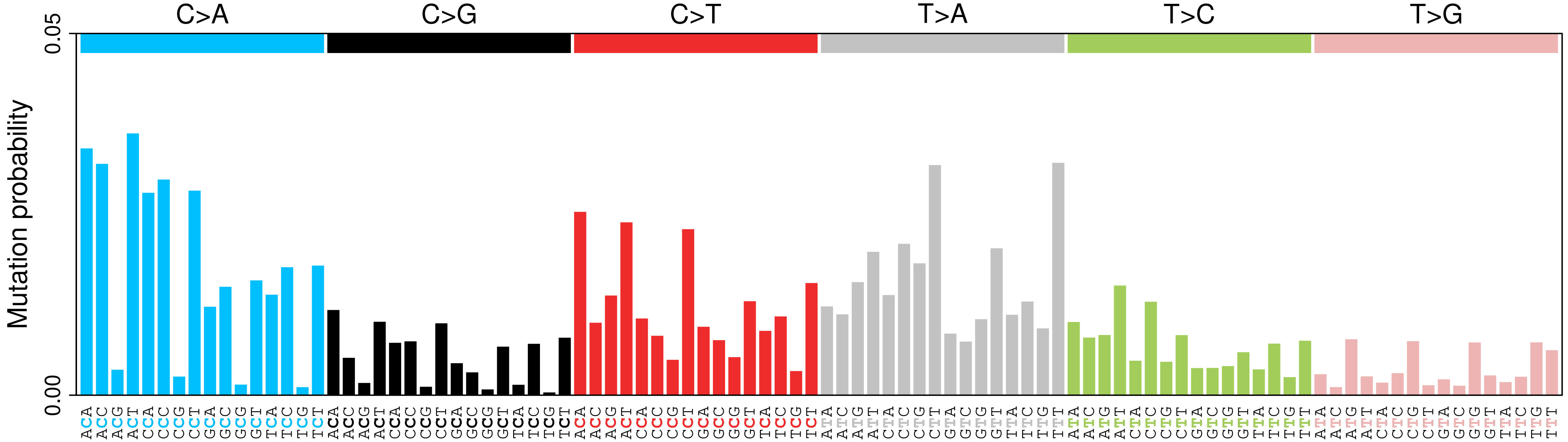
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SBS5



SBS8



SBS9

$C > A$

C > G

$C > T$

T > A

$T > C$

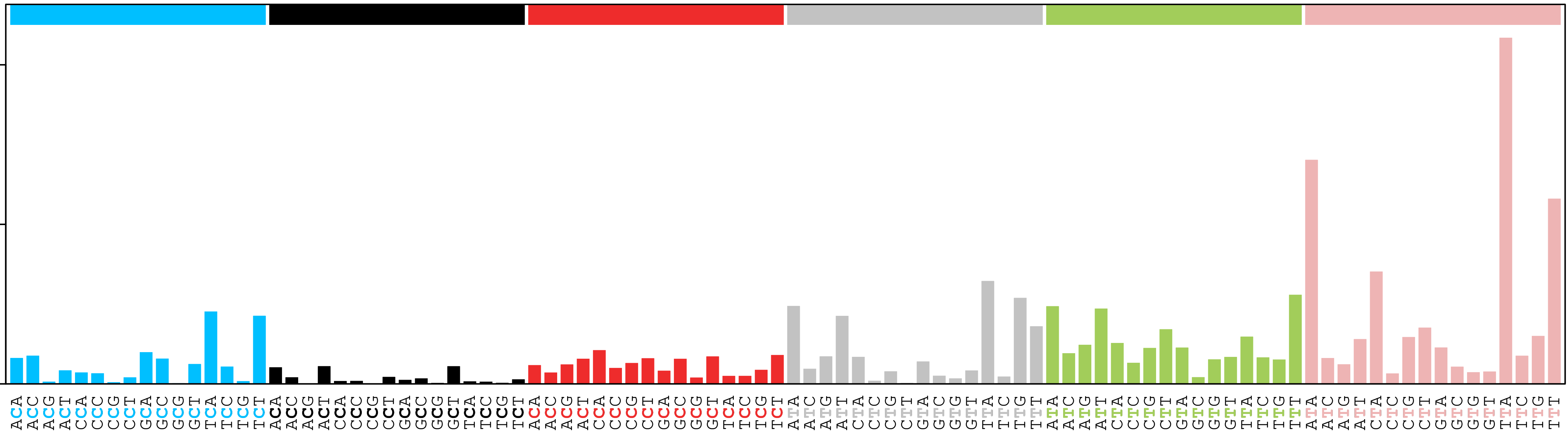
T>G

Mutation probability

0.10.

50.

0.00.



SBS10d

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.20
0.15
0.10
0.05
0.00

ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GCT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GCT TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GCA GCC GGT TTA TCC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT

SBS12

C>A

C>G

C>T

T>A

T>C

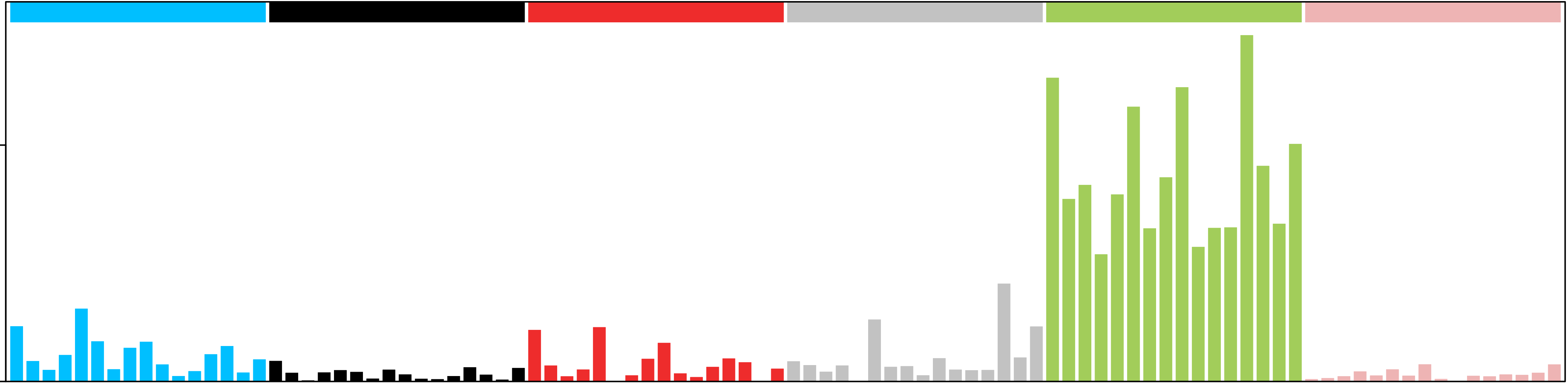
T>G

Mutation probability

0.05

0.00

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SBS13

C>A

C>G

C>T

T>A

T>C

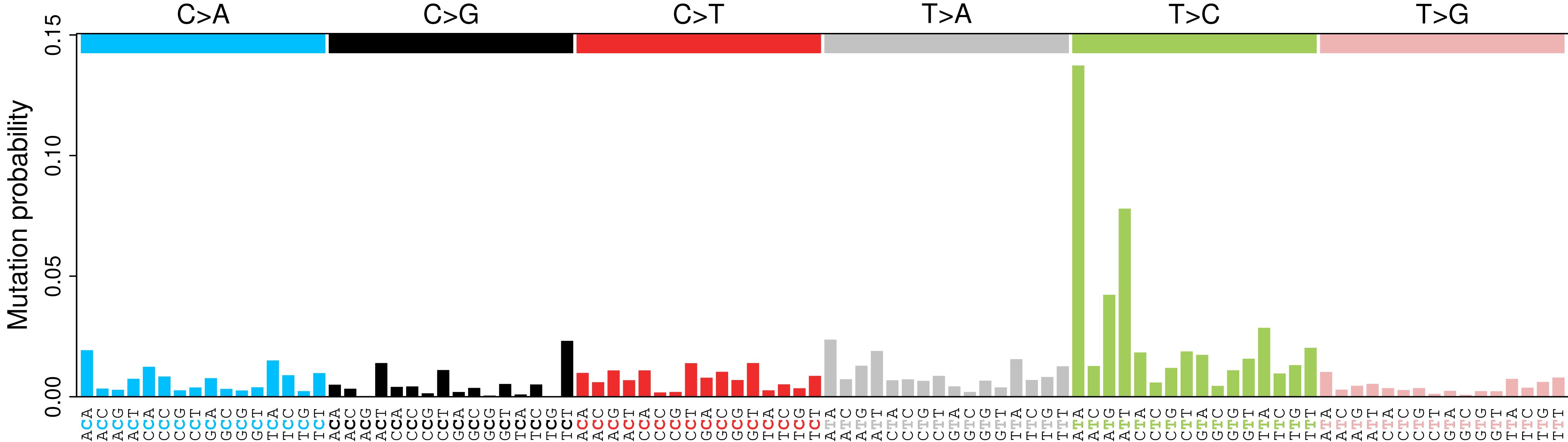
T>G

Mutation probability

0.20
0.15
0.10
0.05
0.00

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SBS16



SBS17

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.20
0.15
0.10
0.05
0.00



SBS18

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

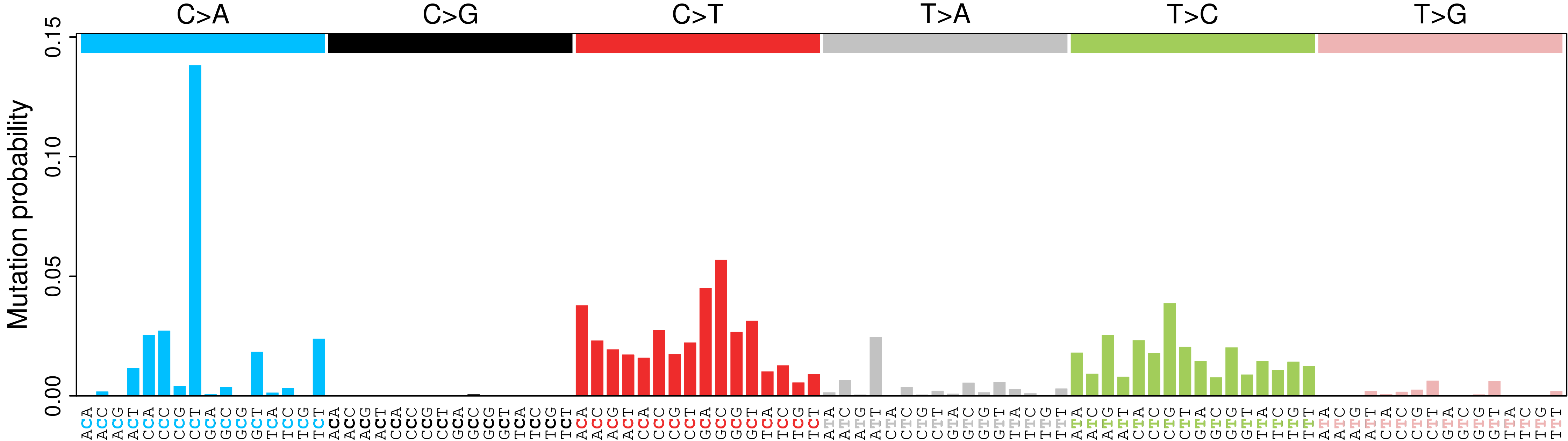
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0.05

0.00

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SBS20



SBS22

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.10

0.05

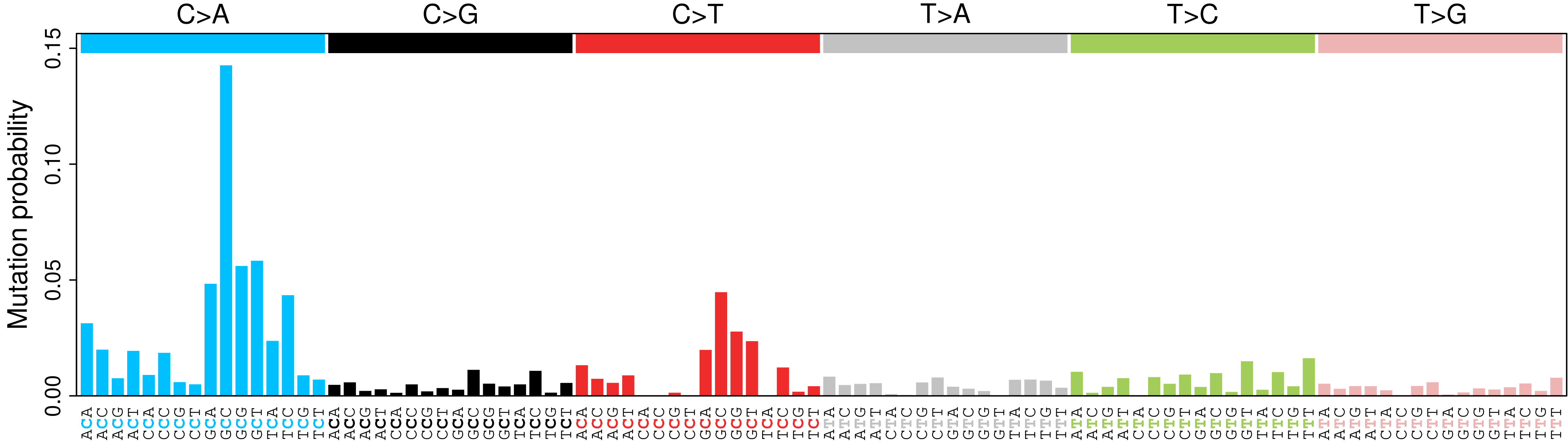
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SBS23



SBS24



SBS26

$C > A$

C > G

$$C > T$$

T > A

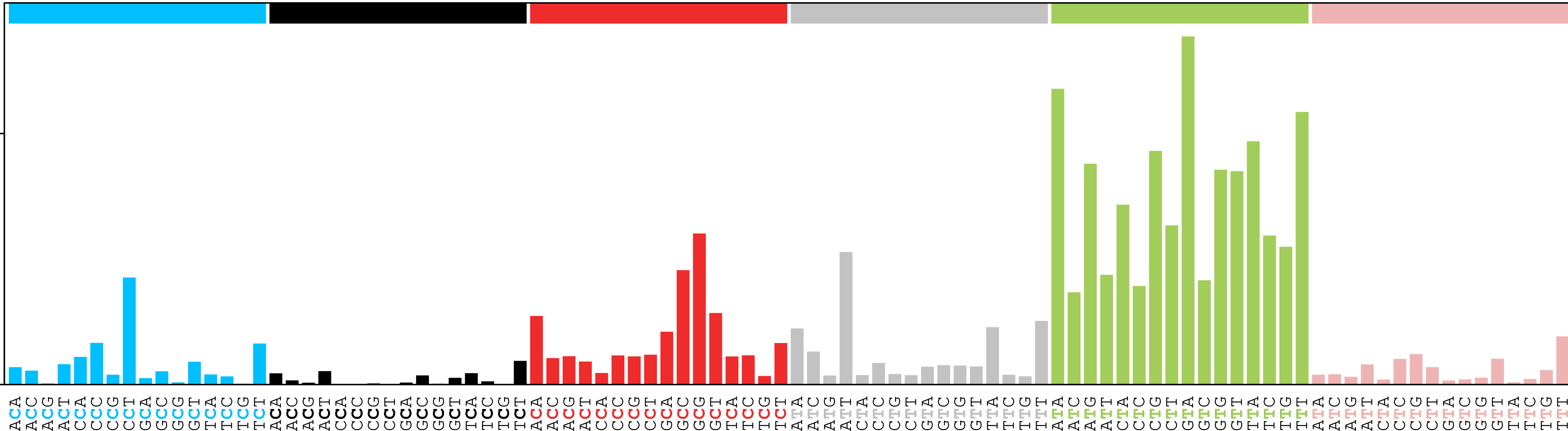
$T > C$

T>G

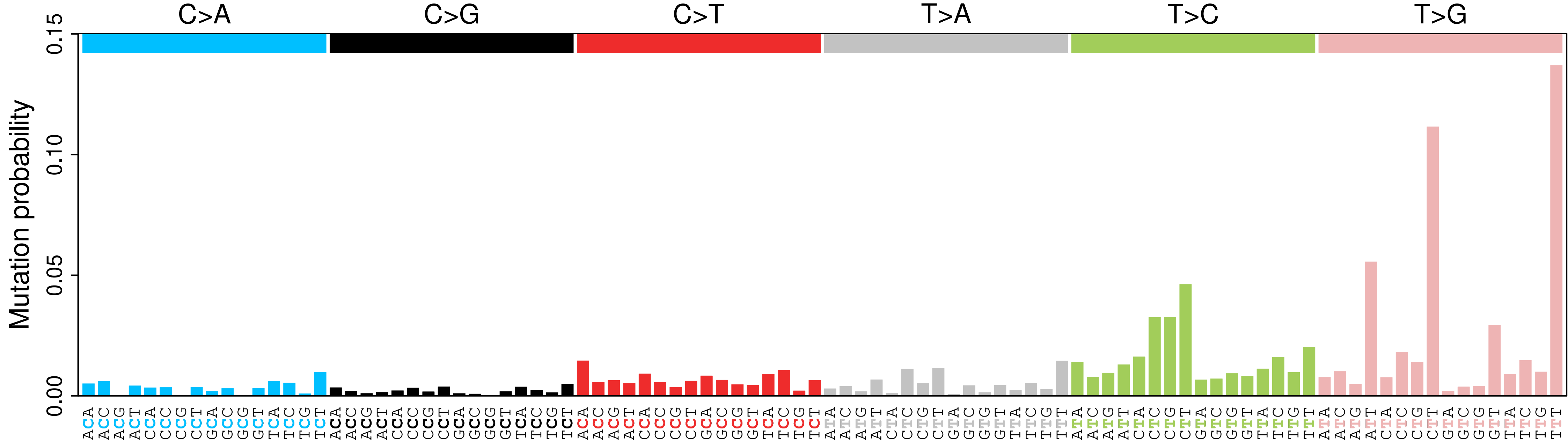
Mutation probability

0.05

0.00



SBS28



SBS32

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.10

0.05

0.00

ACA ACC ACG ACT CCA CCC CCG CCA GCA GCC GCG GGT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GCG GGT TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT

SBS33

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.2
0.1
0.0



SBS35



SBS38

C > A

C > G

$$C > T$$

T > A

$$T > C$$

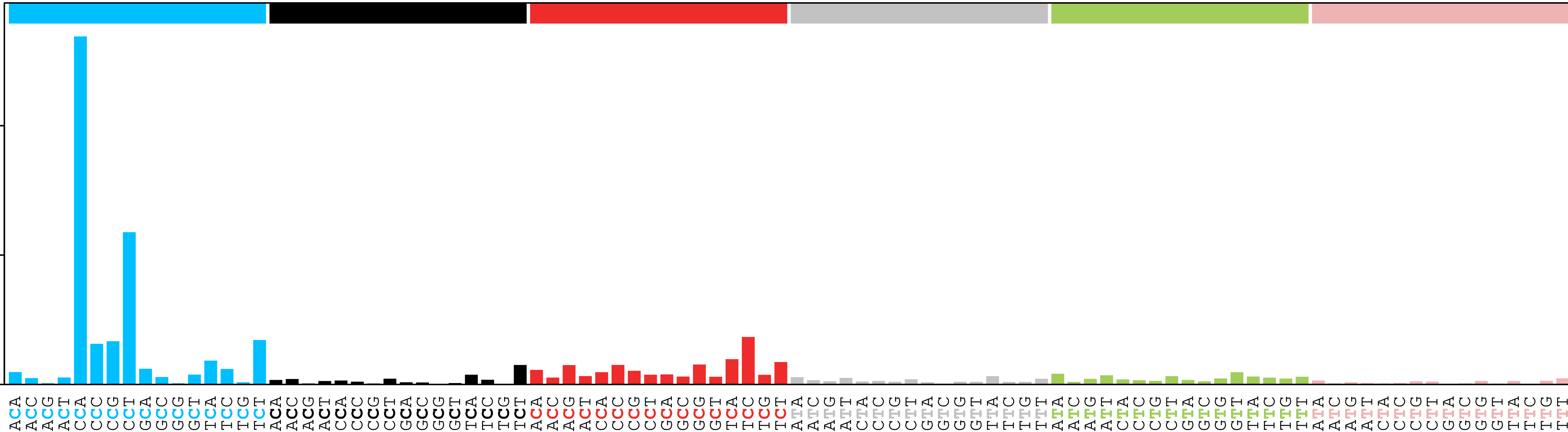
$T > G$

Mutation probability

0.2

0.1

0.0



SBS44

$C > A$

C > G

$$C > T$$

T > A

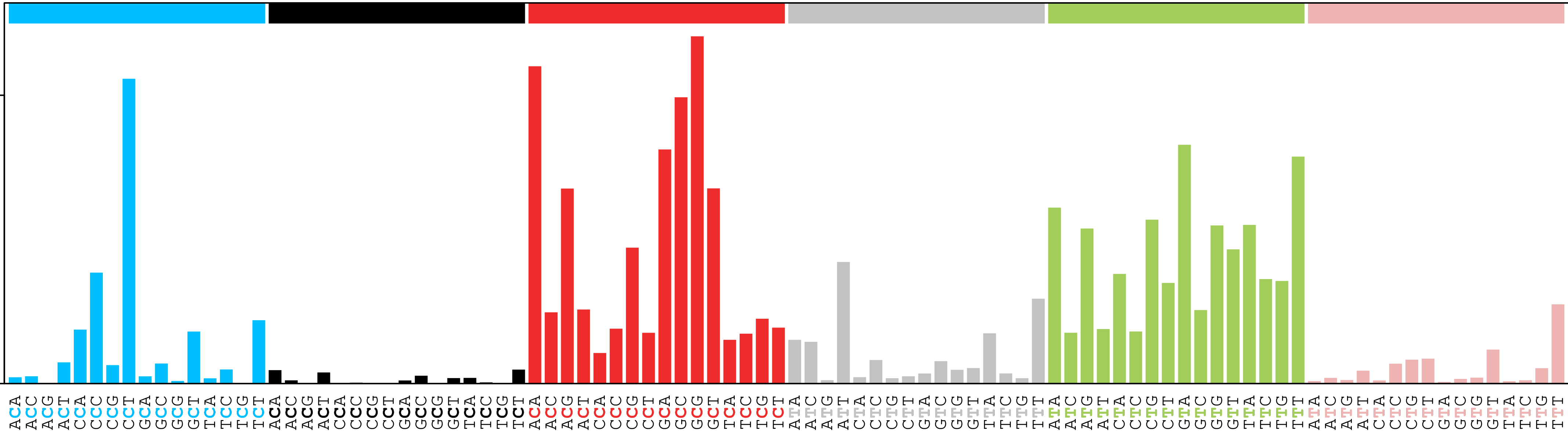
$T > C$

T>G

Mutation probability

0.05

0.00



SBS53

C > A

C > G

$$C > T$$

T > A

$T > C$

T>G

Mutation probability

0.10

50

0

[illegible]

SBS88

C>A

C>G

C>T

T>A

T>C

T>G

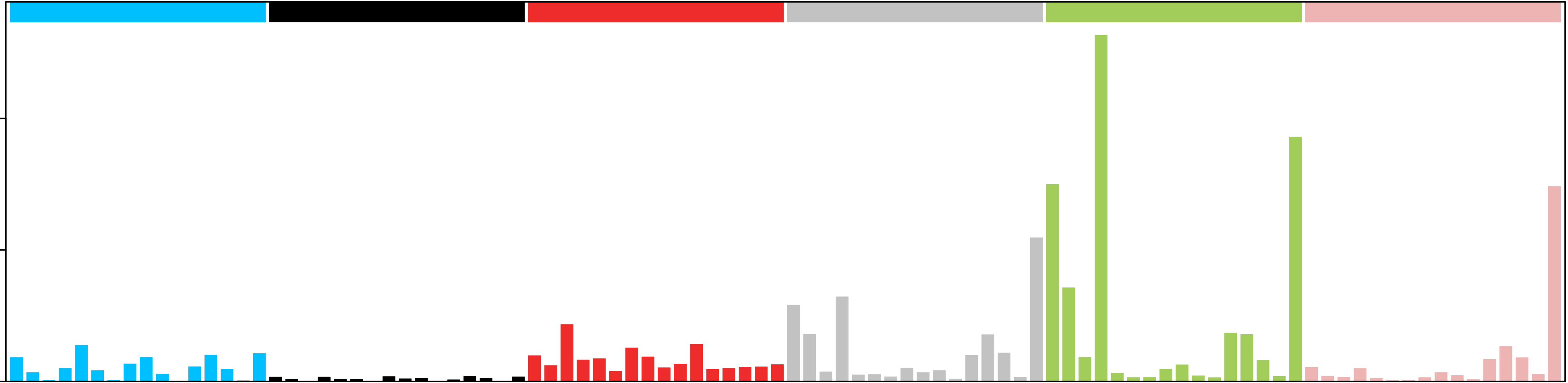
Mutation probability

0.10

0.05

0.00

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SBS92

$C > A$

C > G

$$C > T$$

T > A

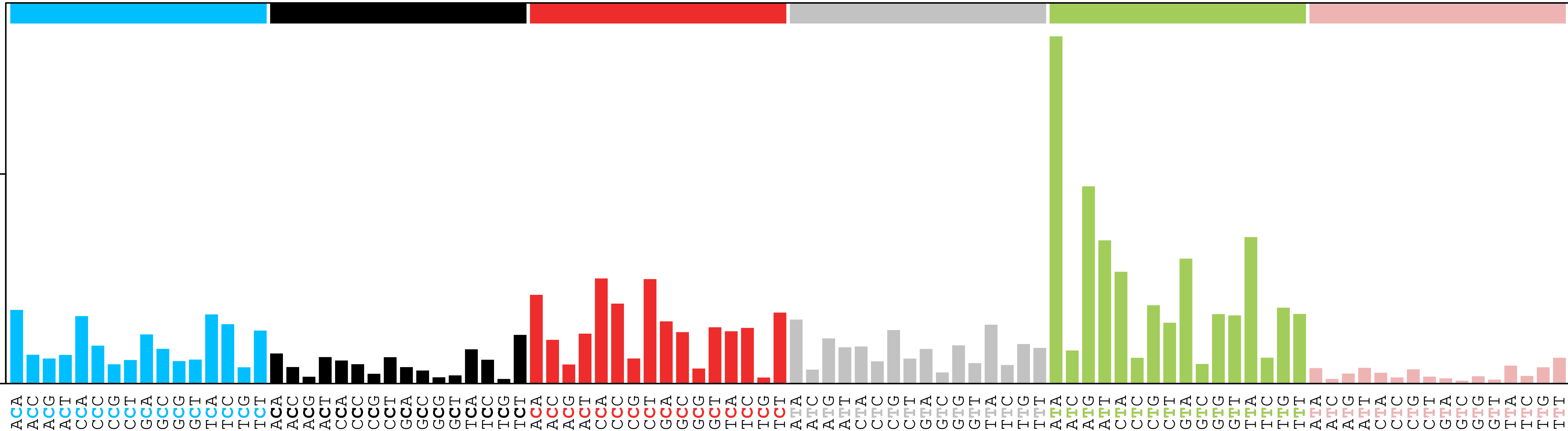
$T > C$

T>G

Mutation probability

0.05

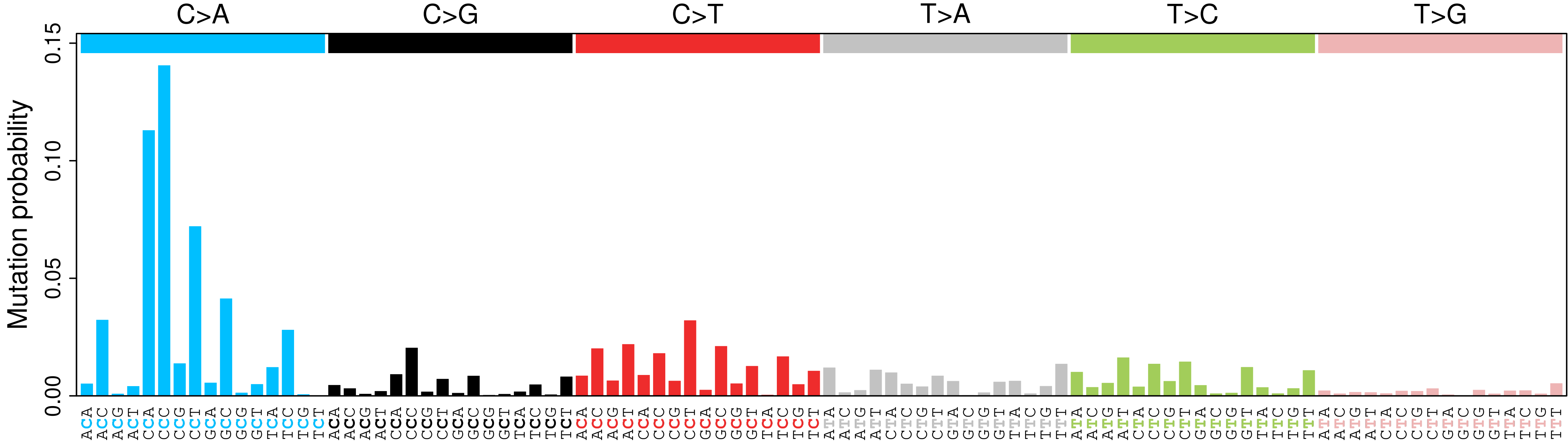
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SBS93



SBS94



SBS98



SBS99

$C > A$

C > G

$$C > T$$

T > A

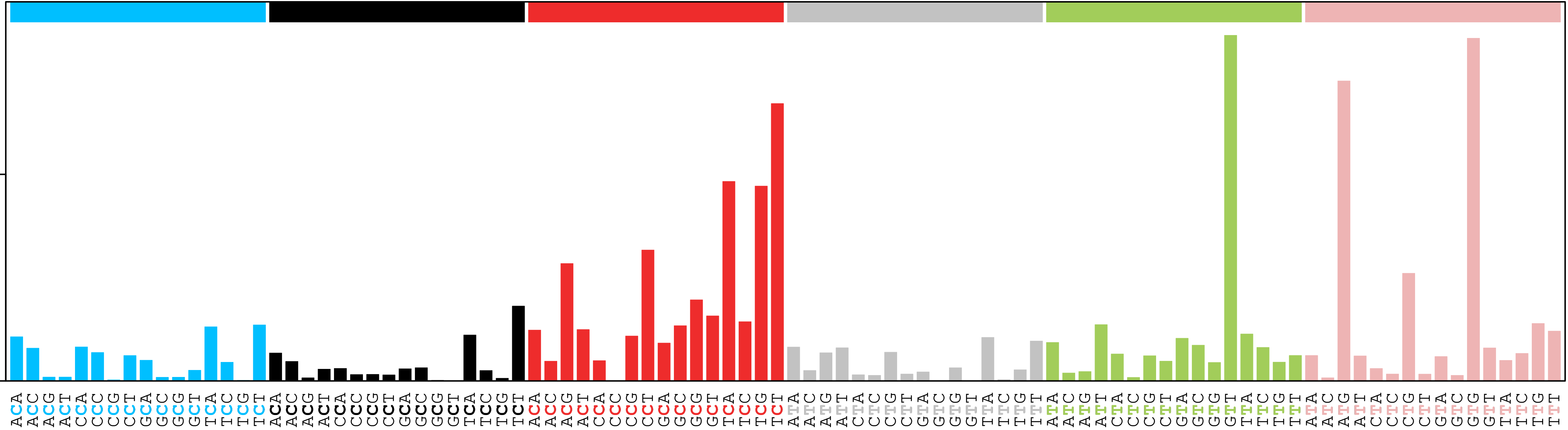
$T > C$

T>G

Mutation probability

0.05

0.00



SBS101

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.05

0.00

ACA ACC ACG ACT CCA CCC CGC CTC TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CGC CTC GCA GCC GCG GGT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CGC CTC GCA GCC GCG GGT TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT

SBS102

C>A

C>G

C>T

T>A

T>C

T>G

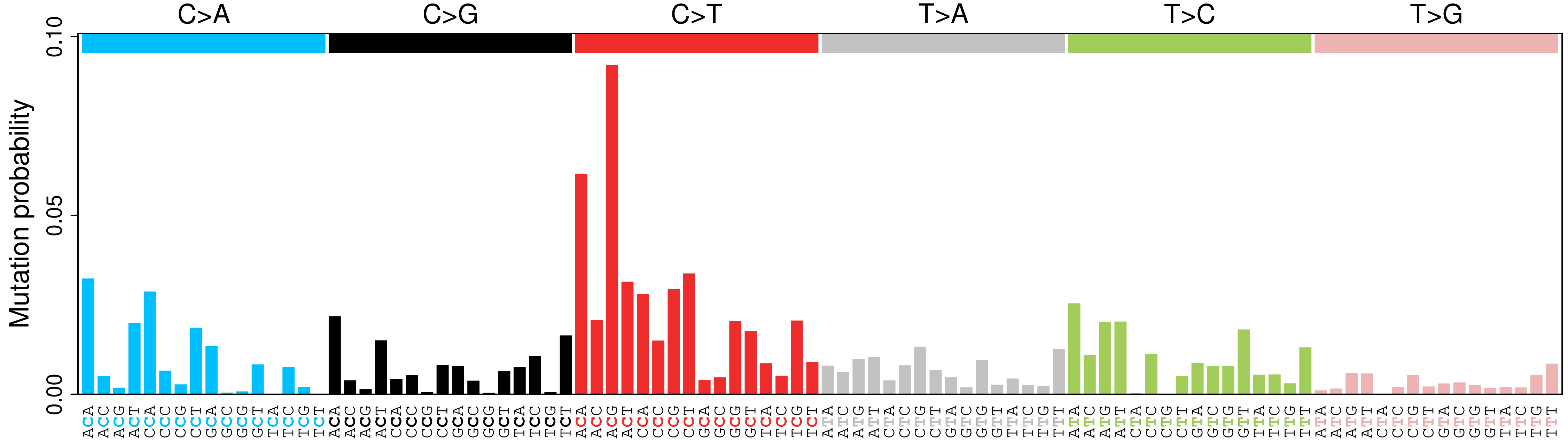
Mutation probability

0.05

0.00

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SBS103



SBS104

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.2

0.1

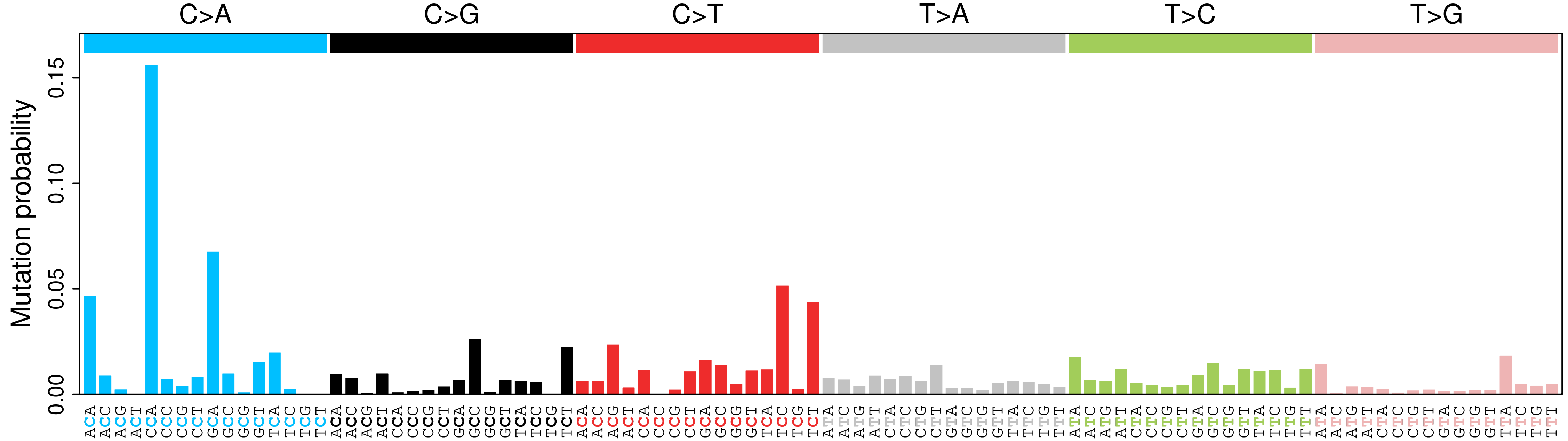
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SBS105



SBS106



SBS108

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.15

0.10

0.05

0.00

ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGG GGT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGG GGT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGG GGT TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT

SBS111

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.05

0.00

ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GCG GGT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GCG GGT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GCG GGT TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT

SBS112

C > A

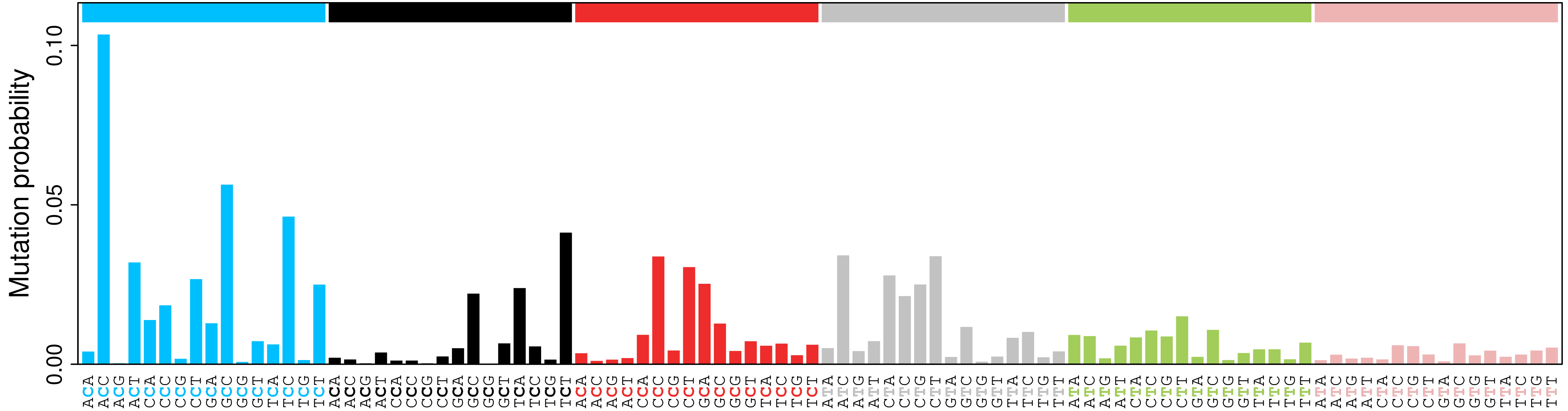
C > G

$$C > T$$

T > A

$$T > C$$

$T > G$



SBS113

$C > A$

C > G

$$C > T$$

T > A

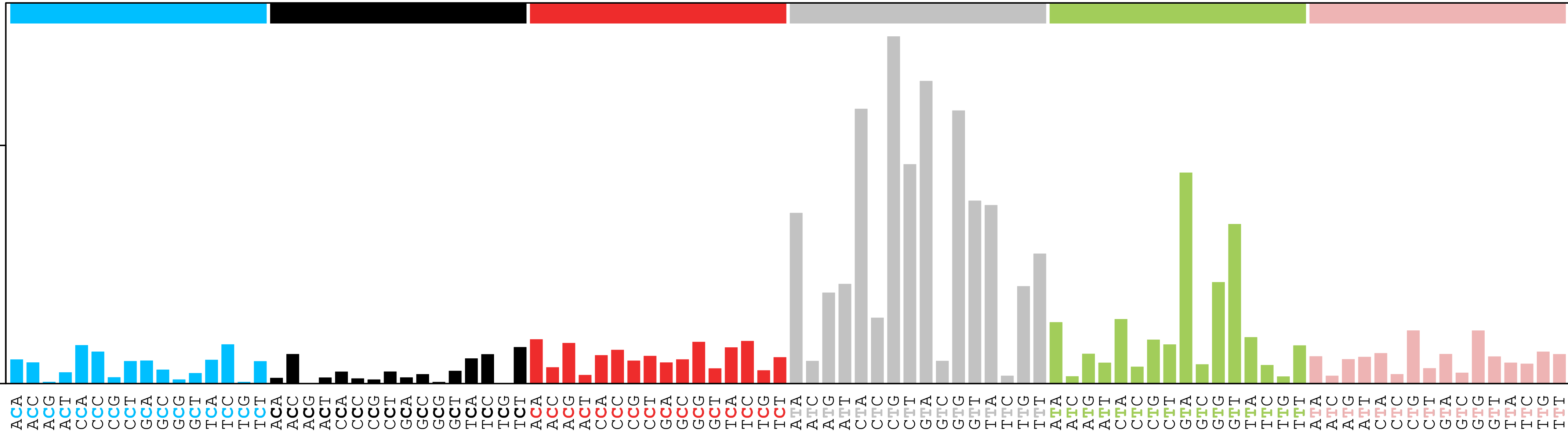
$T > C$

T>G

Mutation probability

0.05

0.00



SBS114

C > A

C > G

$$C > T$$

T > A

$T > C$

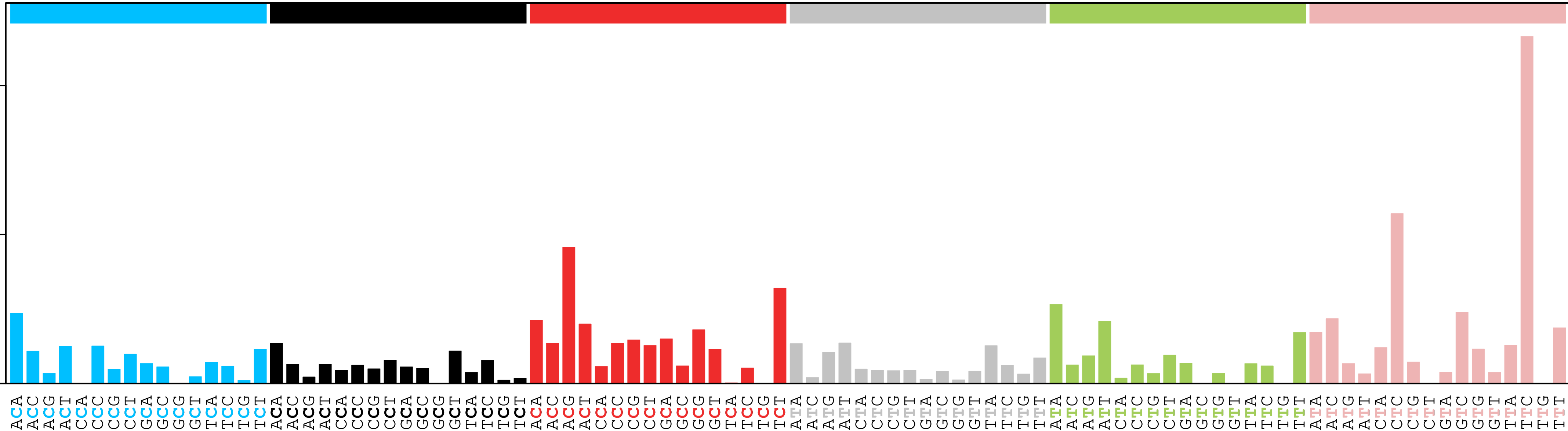
T>G

Mutation probability

0.10

0.05

0.00



SBS116



SBS117

C > A

C > G

$C > T$

T > A

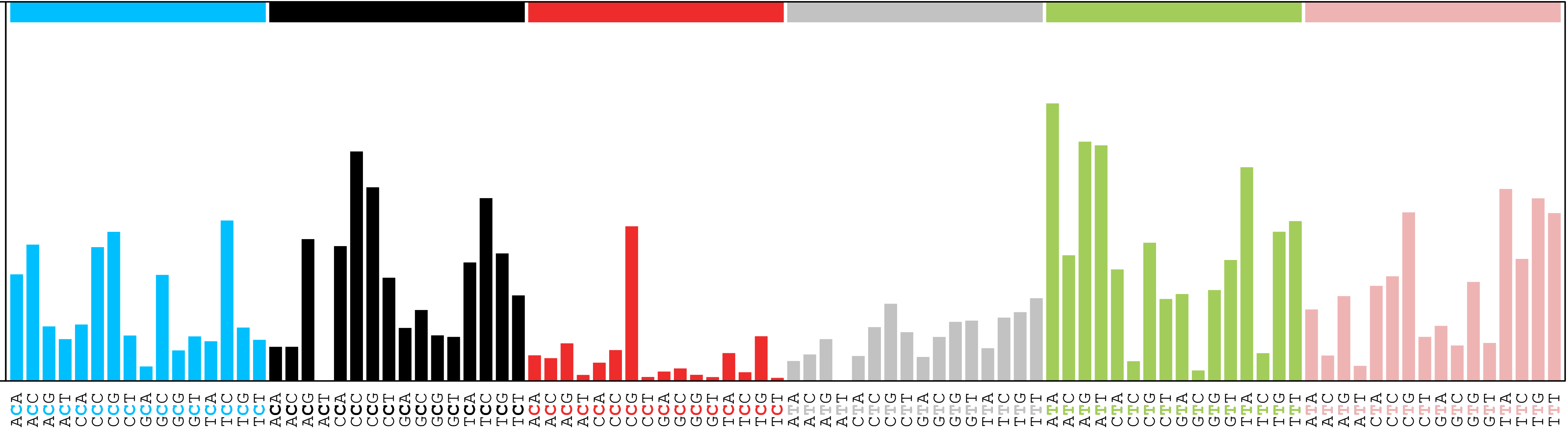
$T > C$

T>G

0.05.

Mutation probability

0.00.



SBS118

C>A

C>G

C>T

T>A

T>C

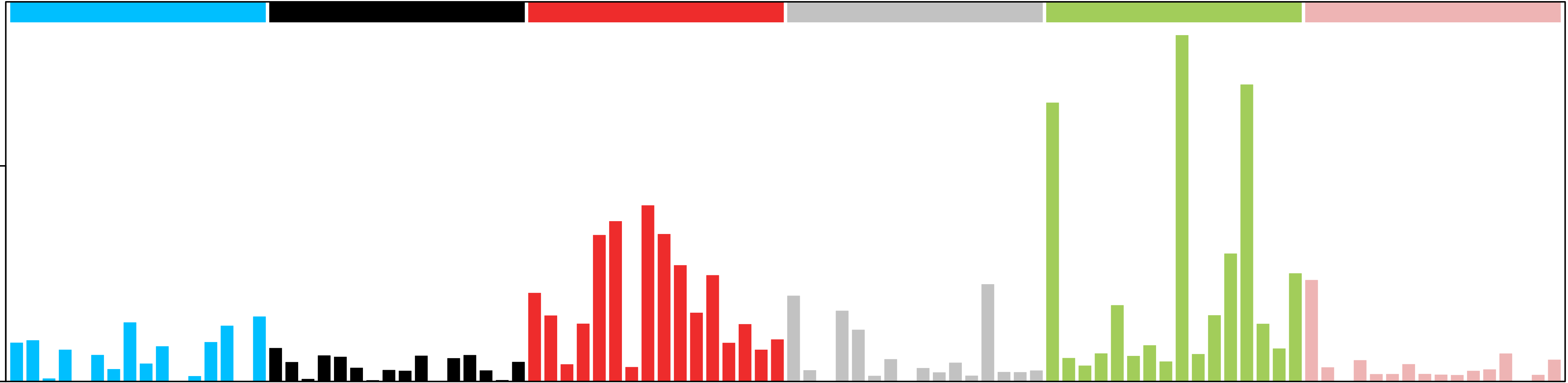
T>G

Mutation probability

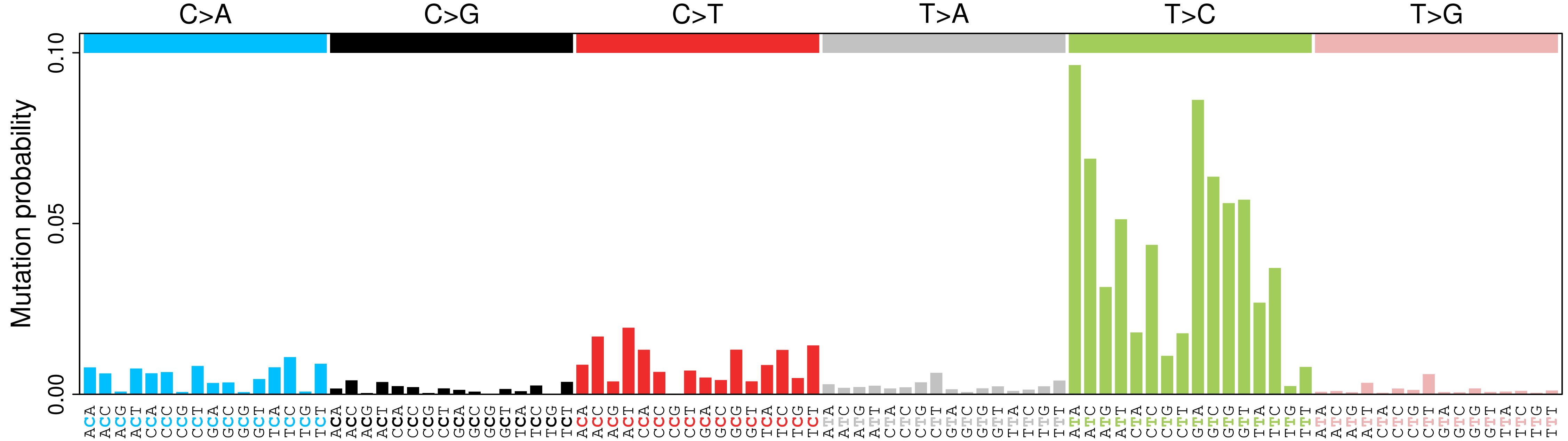
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0.00

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SBS119



SBS121

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.15
0.10
0.05
0.00

ACA ACC AGC ACT CCA CCC CCG CCT GCA GCC GGT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT TCA TCC TCG TCT ACA ACC AGC ACT CCA CCC CCG CCT CCA GCC GGT TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT

SBS123

C>A

C>G

C>T

T>A

T>C

T>G

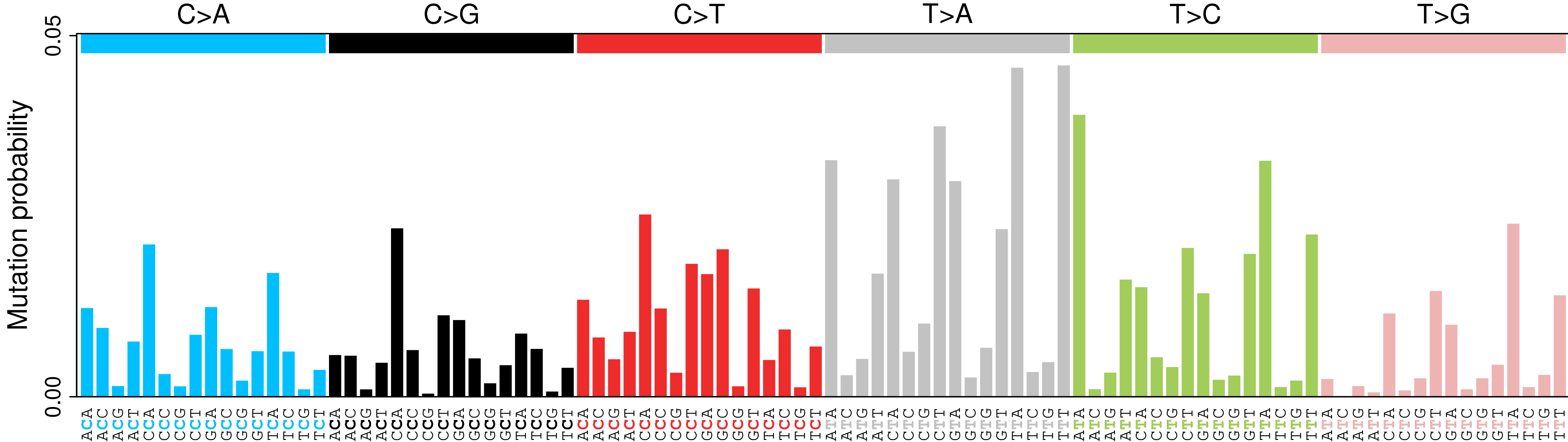
Mutation probability

0.05

0.00

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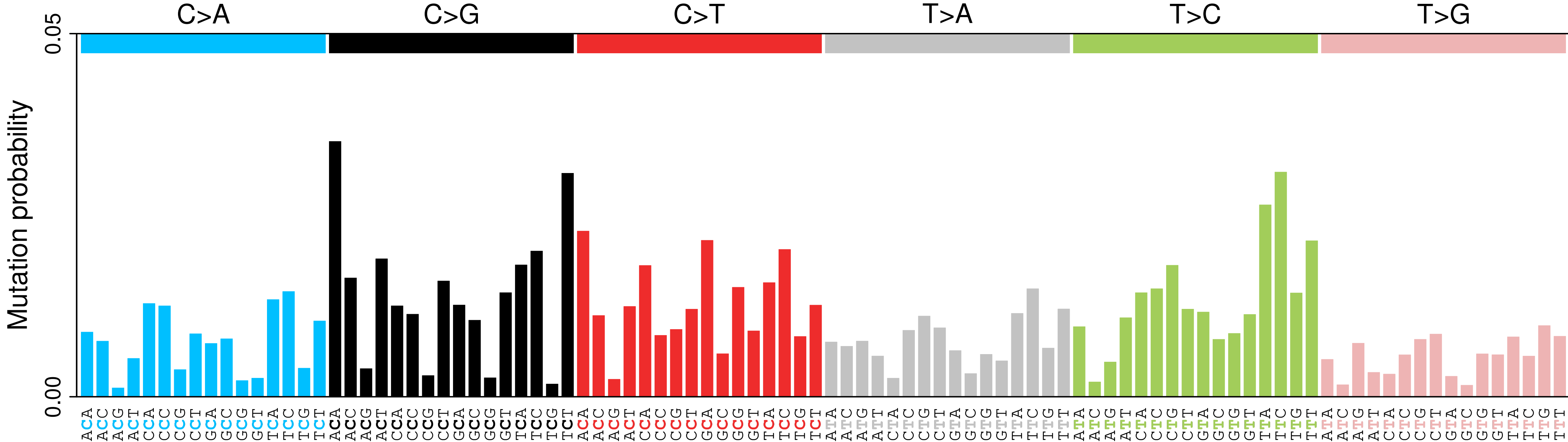
SBS124



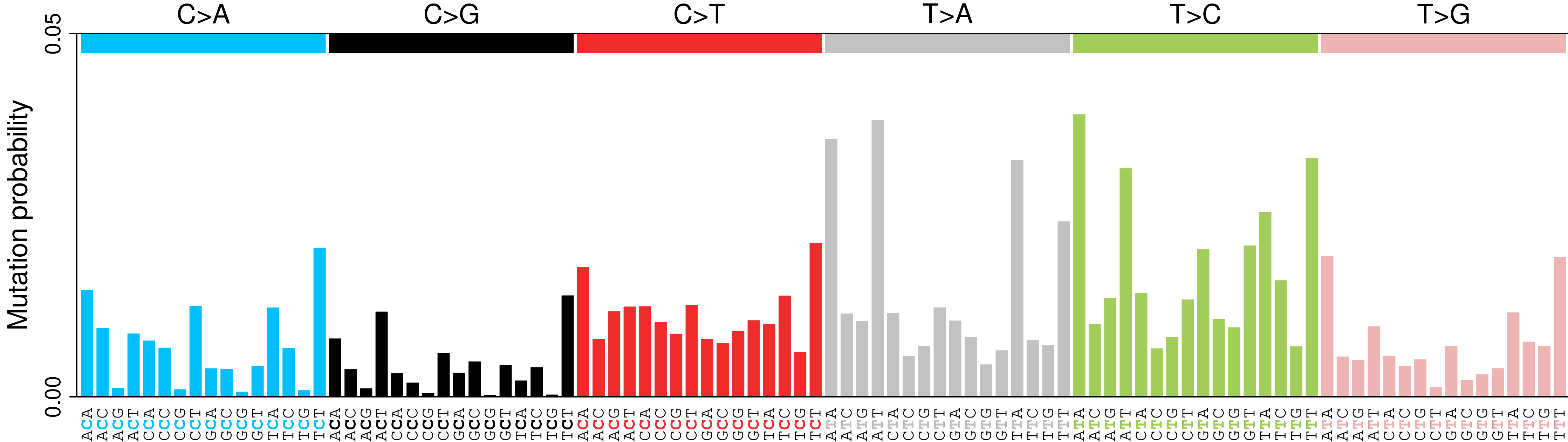
SBS125



SBS126



SBS127



SBS131

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.05

0.00

ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GTC TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GTC TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GTC TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT

SBS132

$$C > A$$

C > G

$$C > T$$

T > A

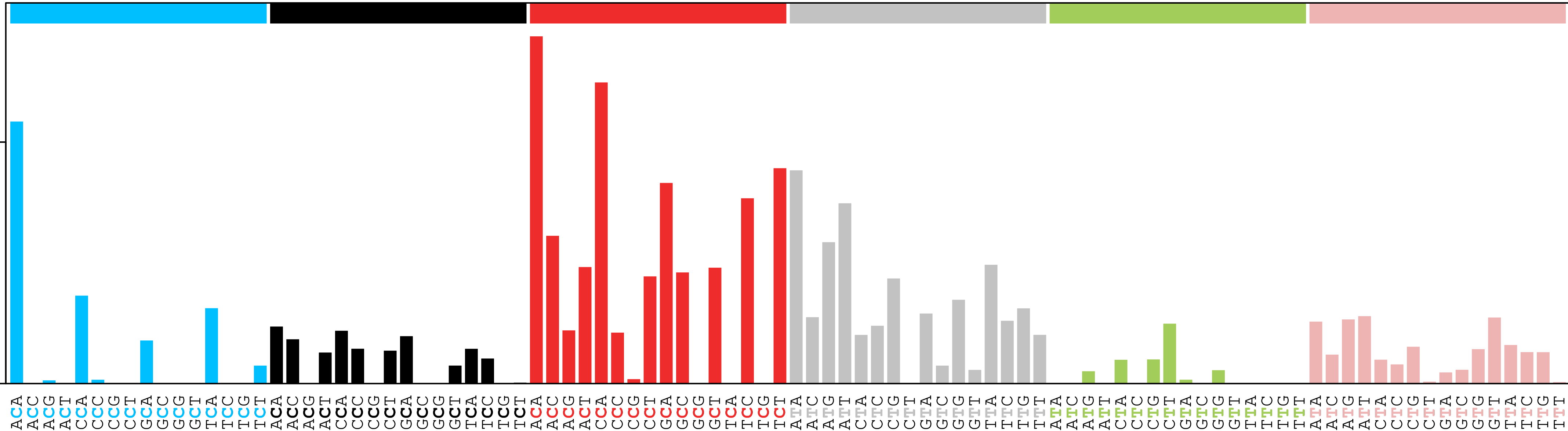
$T > C$

T > G

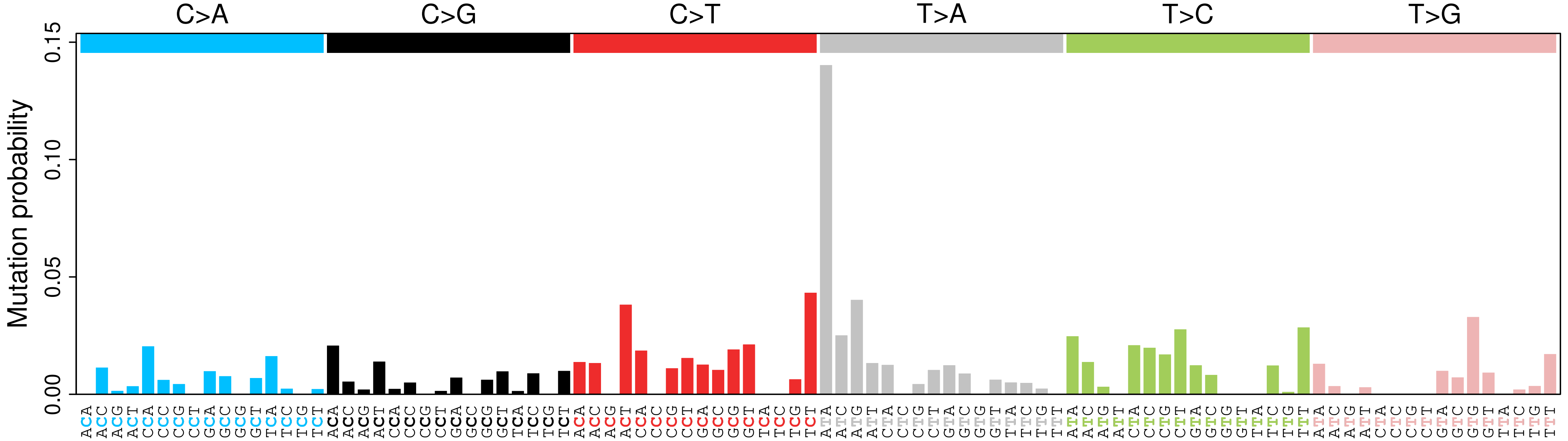
Mutation probability

0.05

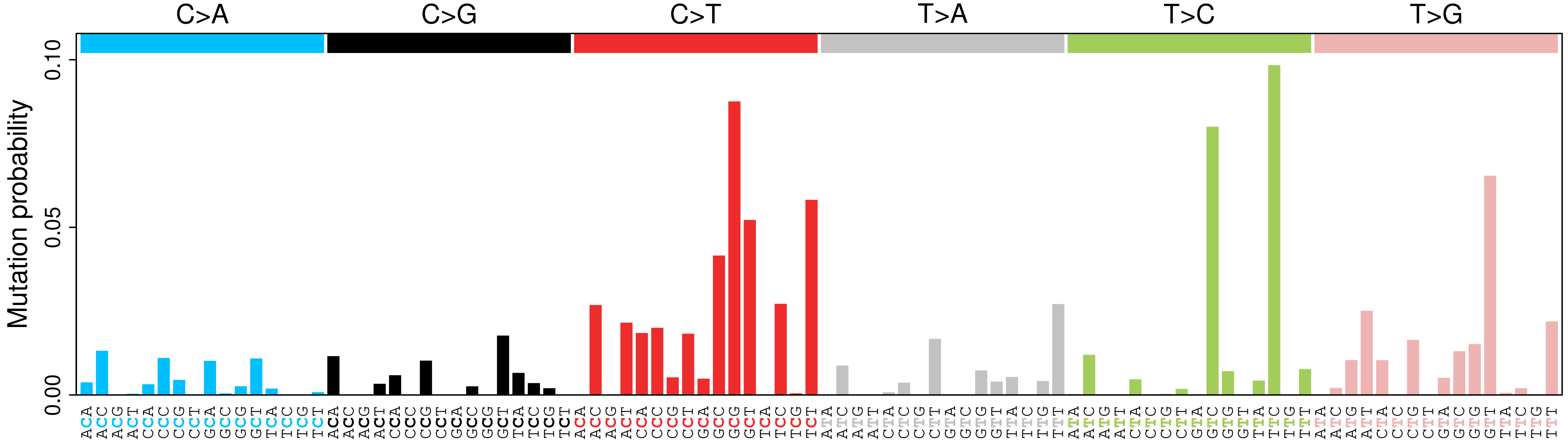
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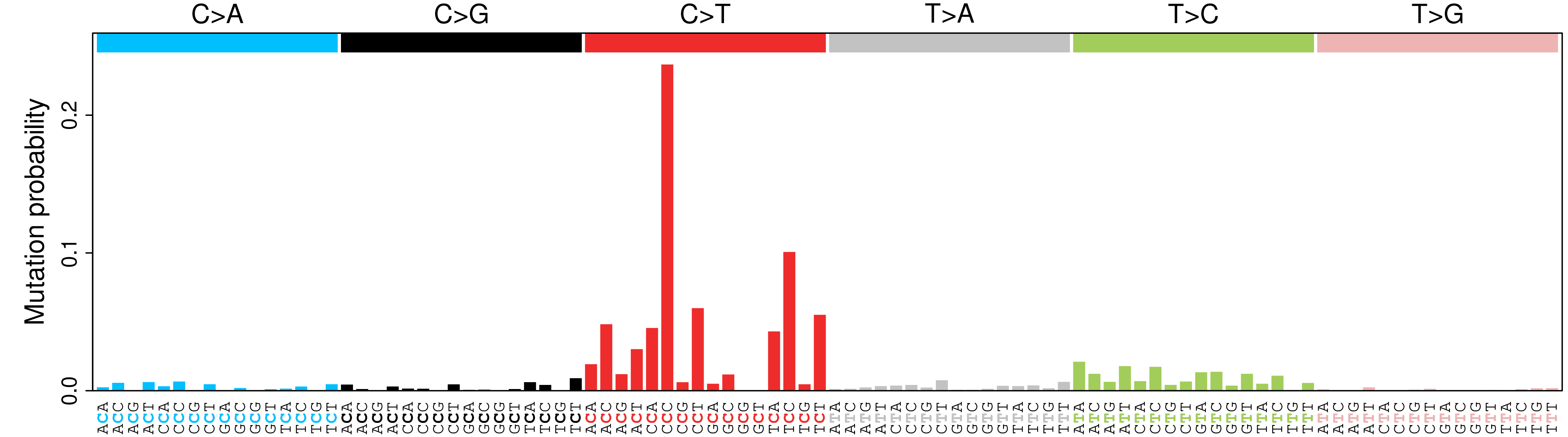
SBS135



SBS136



SBS137



SBS139

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.05

0.00

ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGG GGT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGG GGT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGG GGT TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT

SBS140

C > A

C > G

$$C > T$$

T > A

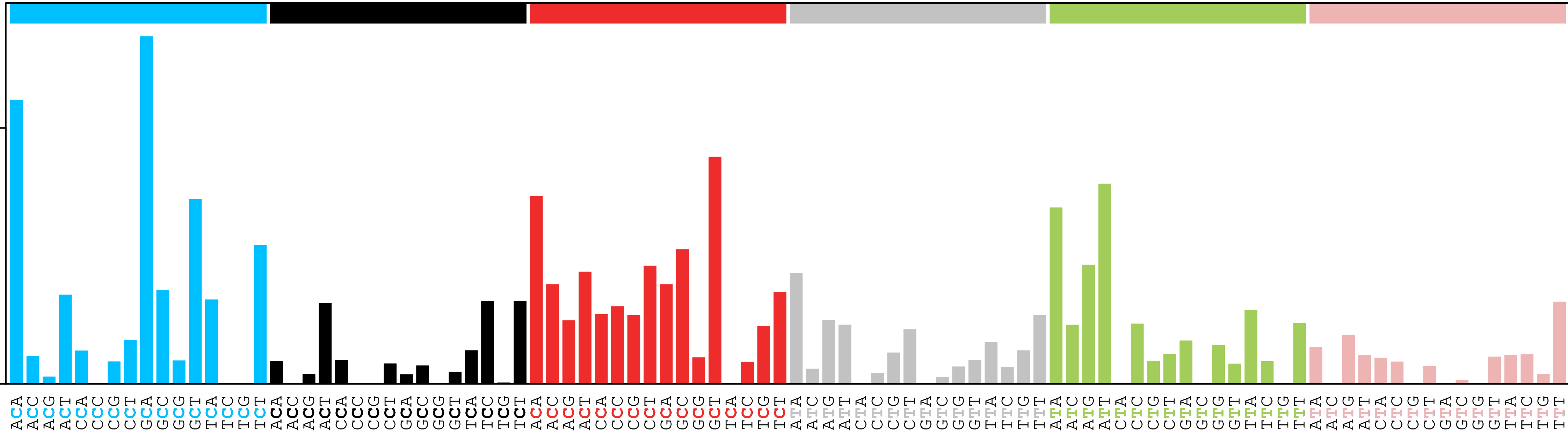
$T > C$

T>G

Mutation probability

0.05

0.00



SBS141

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.05

0.00

ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GCT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GCT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GCT TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT

SBS142

C > A

C > G

$$C > T$$

T > A

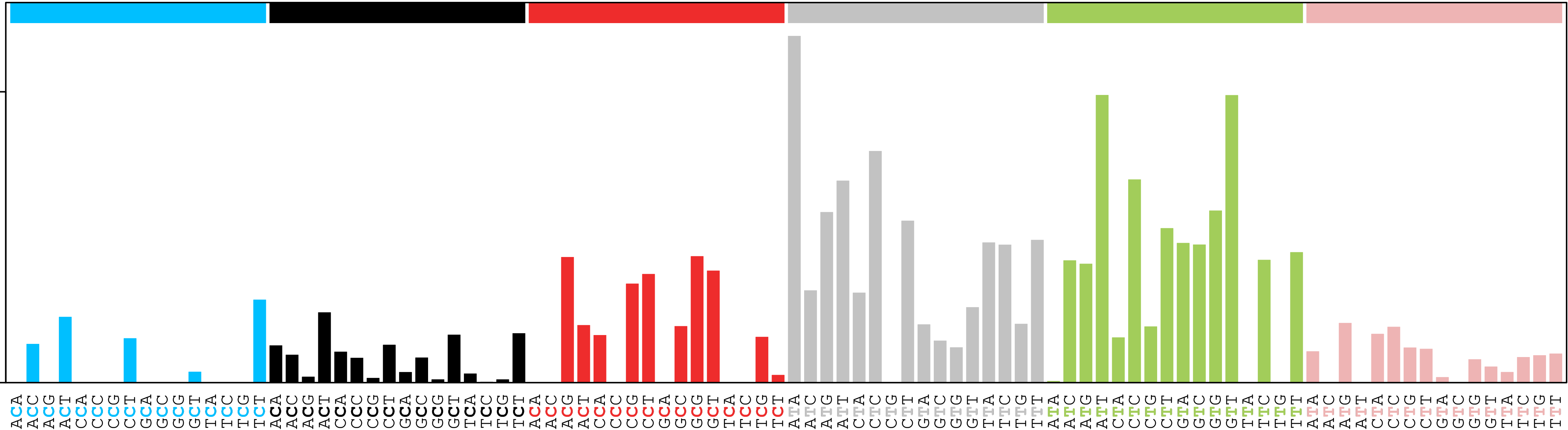
$$T > C$$

T>G

Mutation probability

0.05

0.00



SBS143



SBS144

C > A

C > G

$$C > T$$

T > A

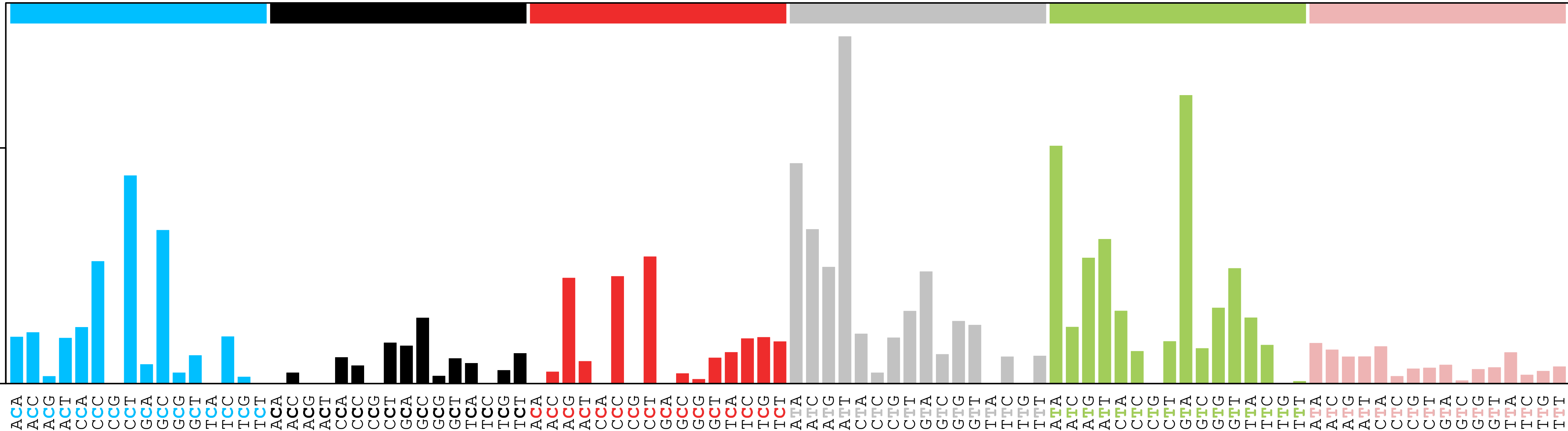
$T > C$

T>G

Mutation probability

0.05

0.00



SBS145

$C > A$

C > G

$C > T$

T > A

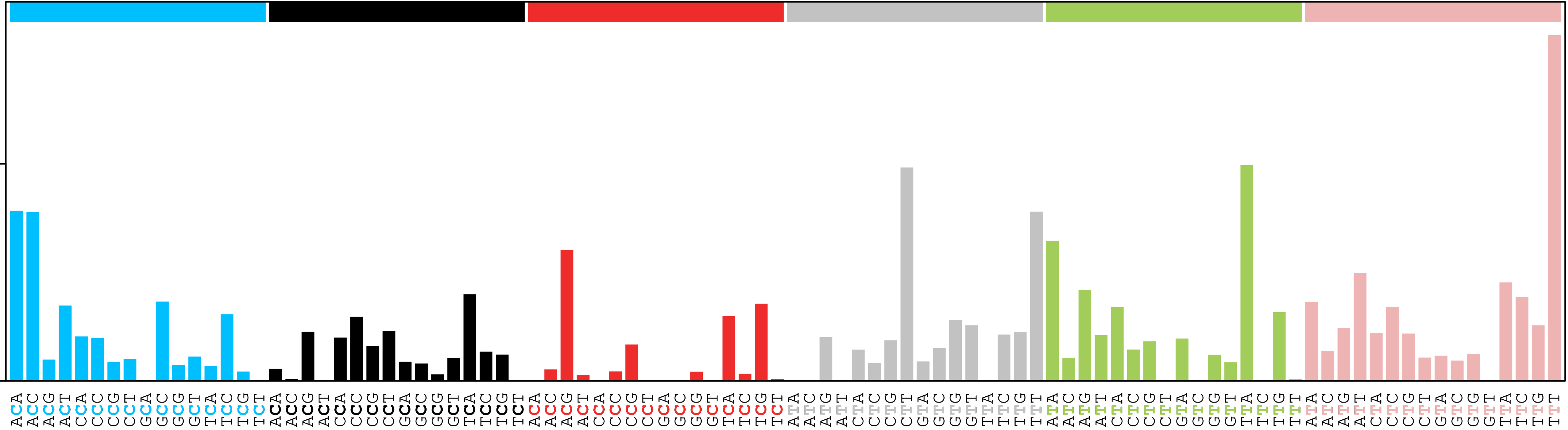
$$T > C$$

$T > G$

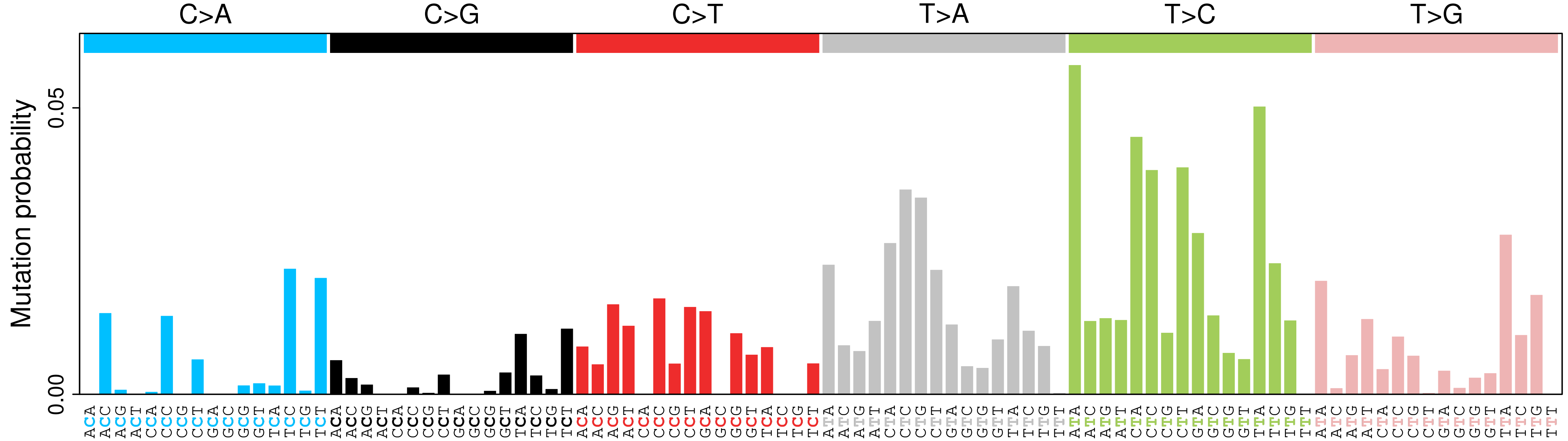
Mutation probability

0.05

0.00



SBS146



SBS148

C>A

C>G

C>T

T>A

T>C

T>G

Mutation probability

0.10
0.05
0.00



SBS149

$C > A$

C > G

$$C > T$$

T > A

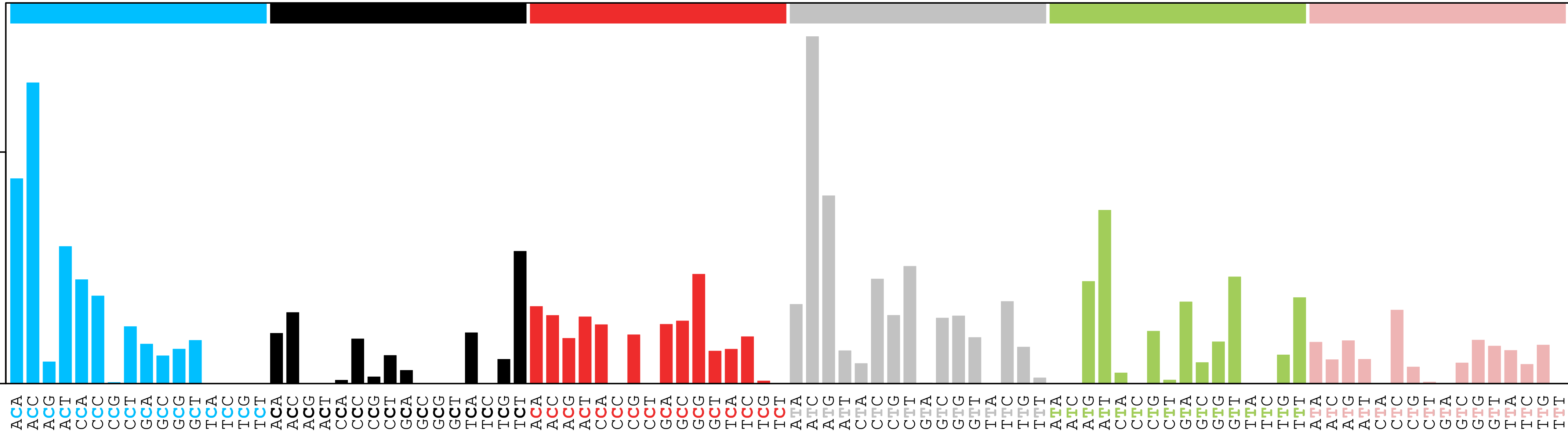
$T > C$

T>G

Mutation probability

0.05

0.00



SBS151

$$C > A$$

C > G

$$C > T$$

T > A

$T > C$

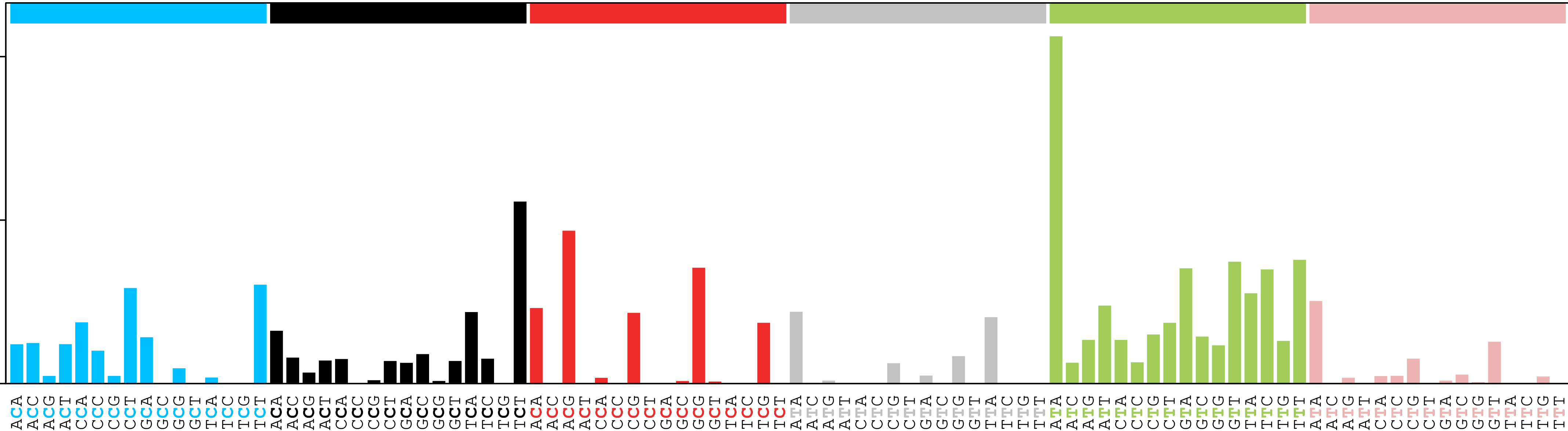
$T > G$

Mutation probability

0.10

0.05

0.0.



SBS153

C>A

C>G

C>T

T>A

T>C

T>G

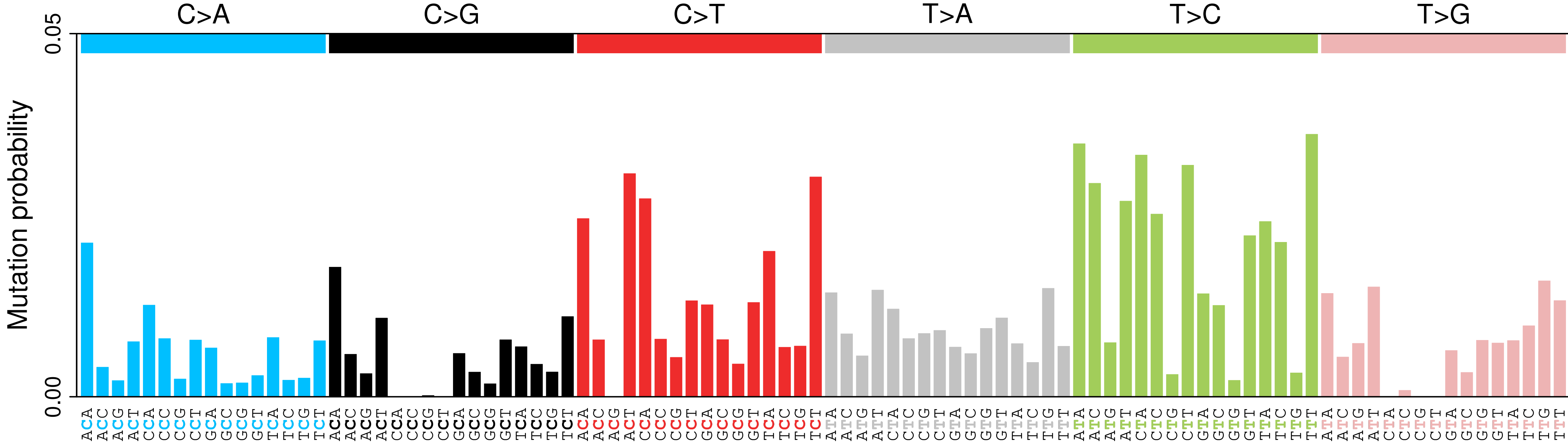
Mutation probability

0.05

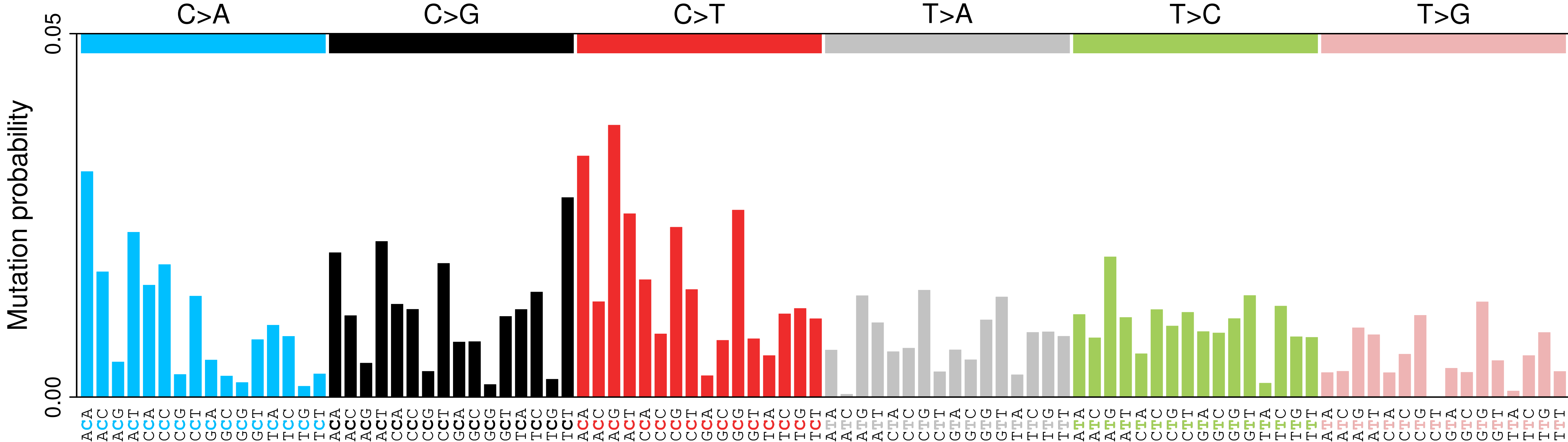
0.00

ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GCT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GCT TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT

SBS154



SBS157



SBS158

$C > A$

C > G

$$C > T$$

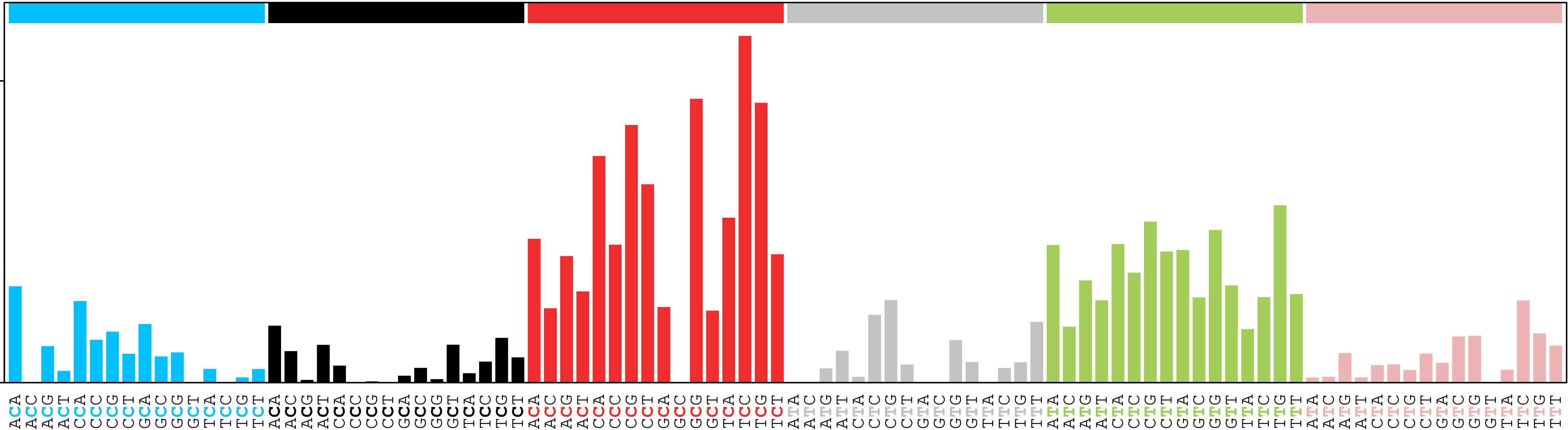
T > A

$T > C$

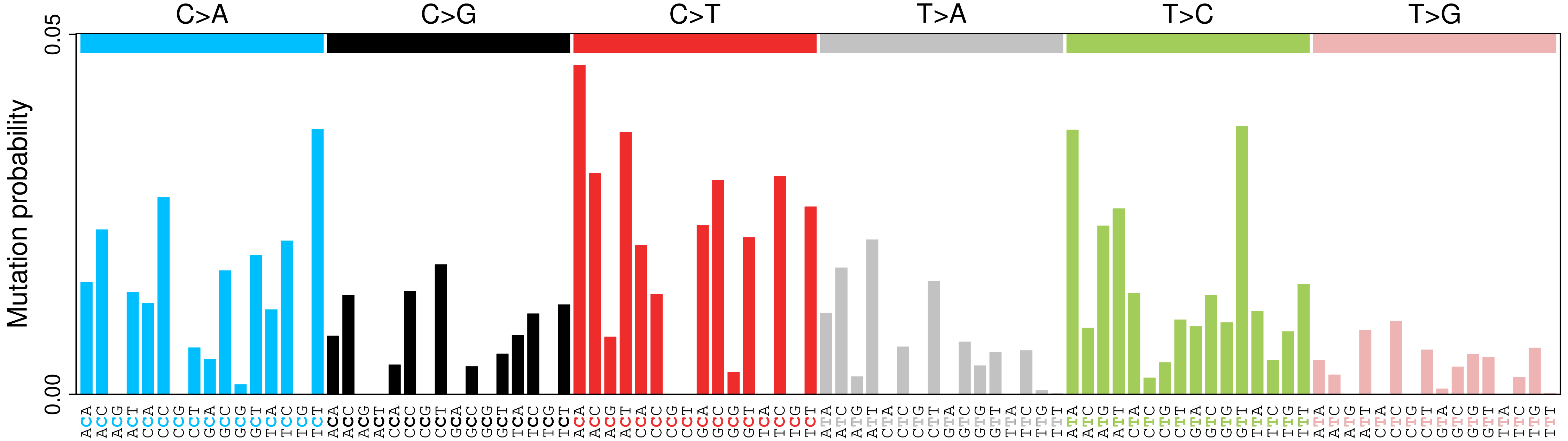
T>G

0.05

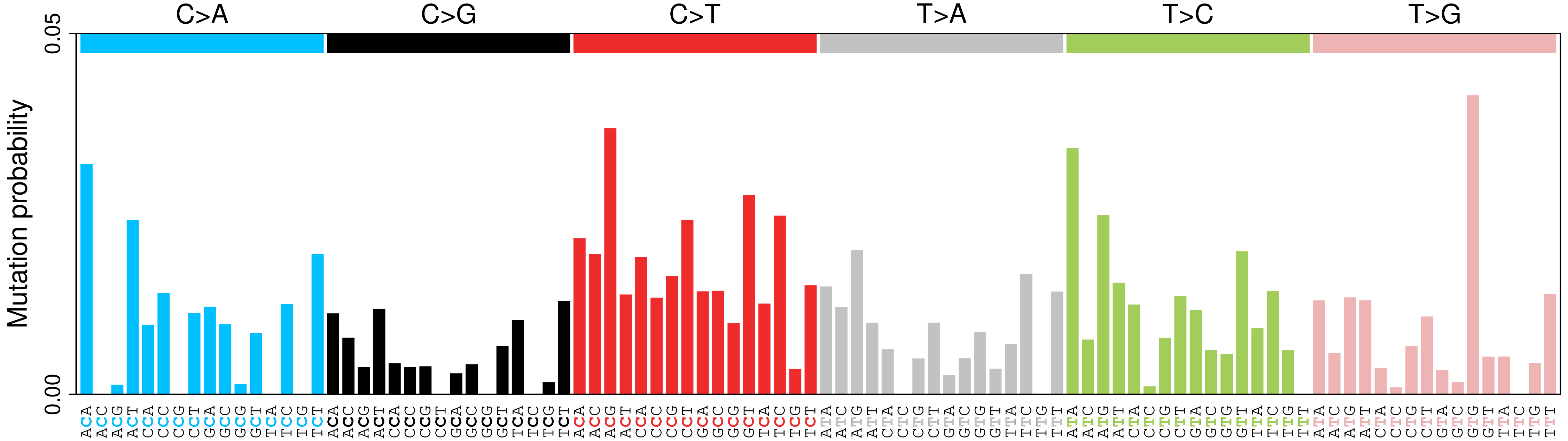
0.00



SBS159



SBS160



SBS161

C>A

C>G

C>T

T>A

T>C

T>G

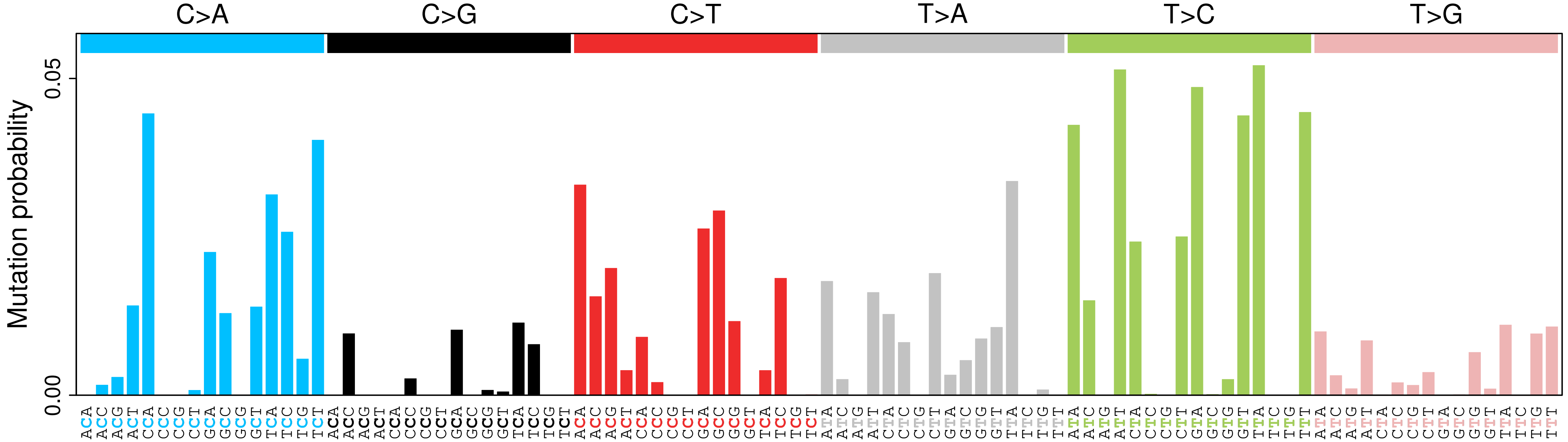
Mutation probability

0.05

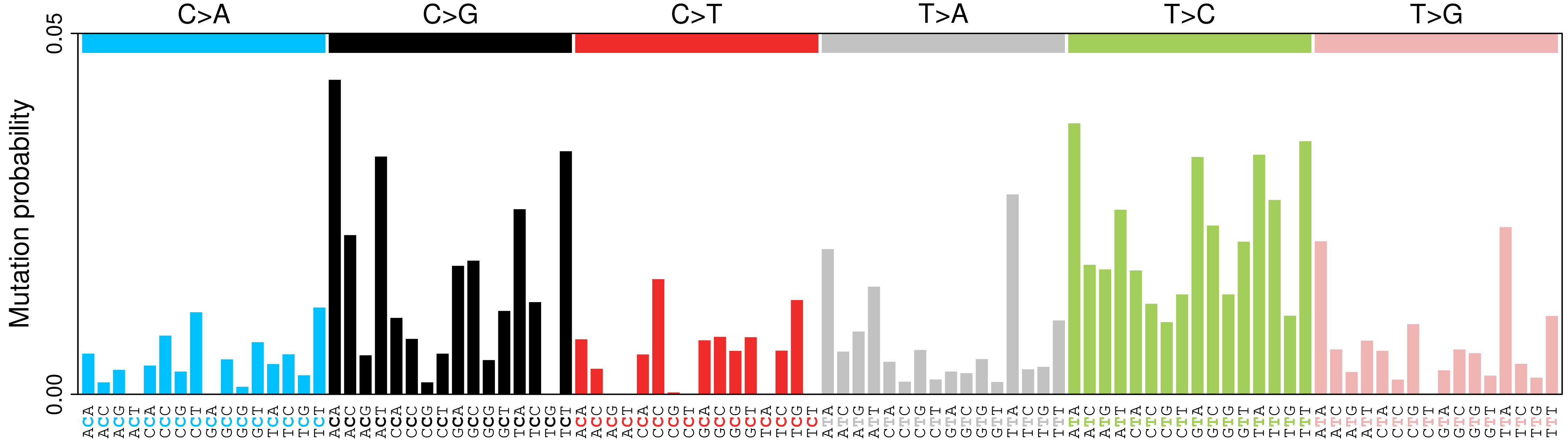
0.00

ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GCT TCA TCC TCG TCT TCA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GCT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GCT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT GCT TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT

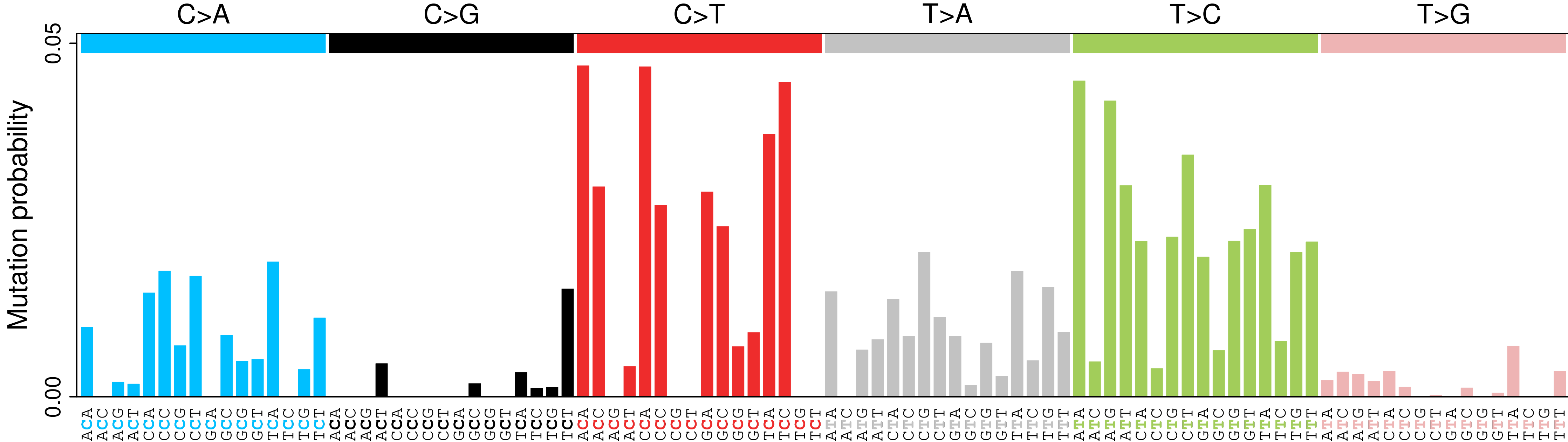
SBS162



SBS163



SBS164



SBS166

$C > A$

C > G

$$C > T$$

T > A

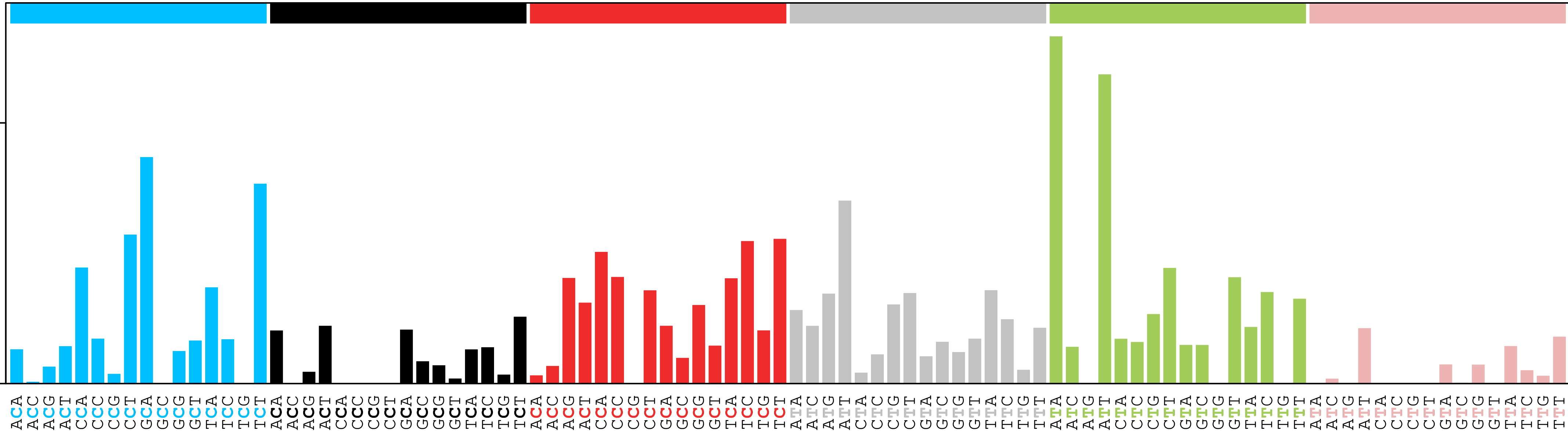
$T > C$

T>G

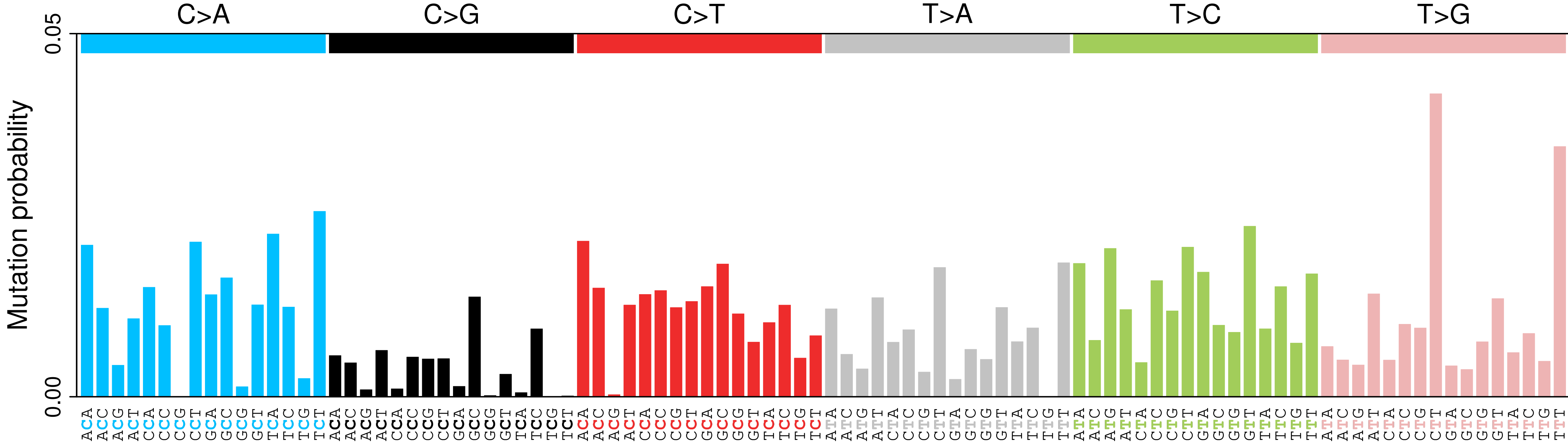
Mutation probability

0.05

0.00



SBS167



SBS168

$C > A$

C > G

$$C > T$$

T > A

$T > C$

T>G

Mutation probability

0.05

0.00



SBS169

