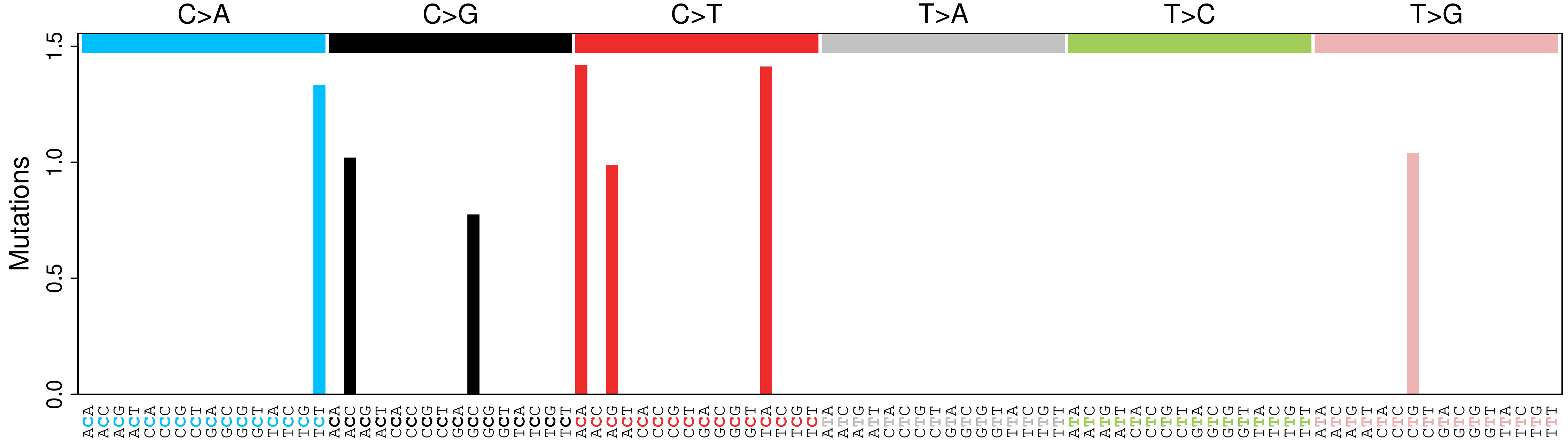


## CATD0414a (8 mutations)



# CATD0105a (6 mutations)

C>A

C>G

C>T

T>A

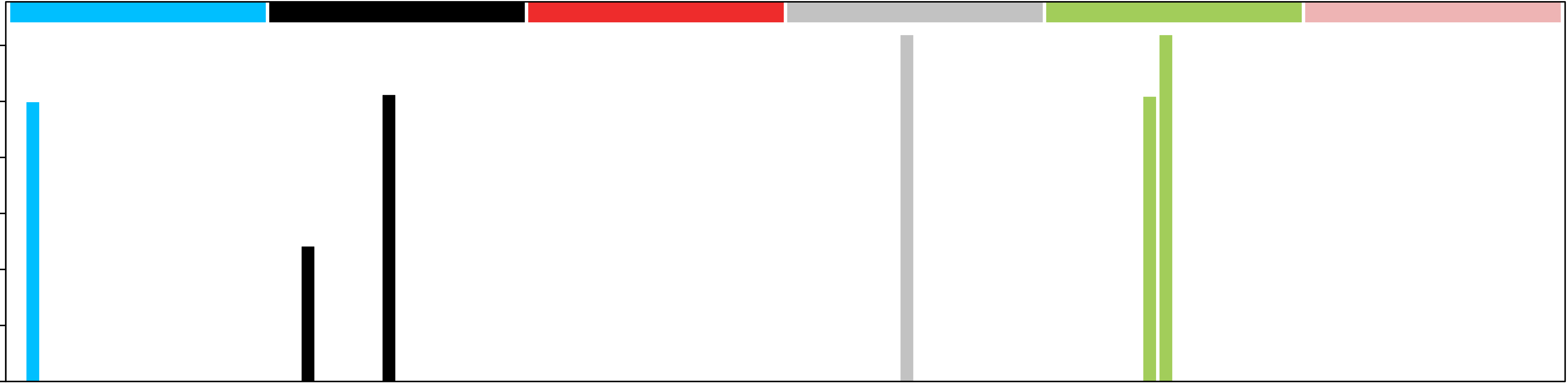
T>C

T>G

Mutations

0.0  
0.2  
0.4  
0.6  
0.8  
1.0  
1.2

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



# CATD189a (3 mutations)

C>A

C>G

C>T

T>A

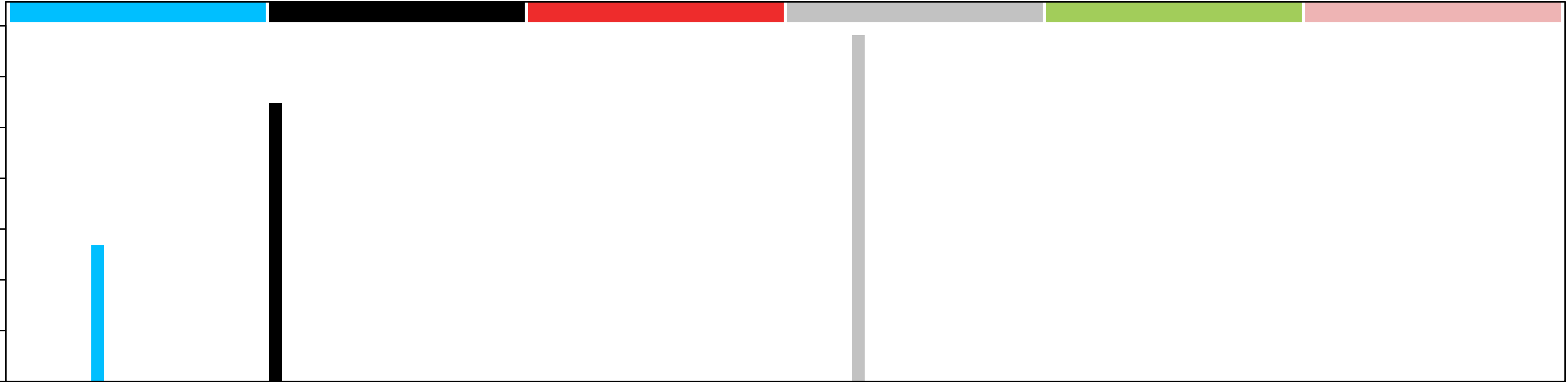
T>C

T>G

Mutations

0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4

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



## CATD0090a (7 mutations)

**C > A**

C > G

$C > T$

**T > A**

$$T > C$$

T>G

# Mutations

1.5

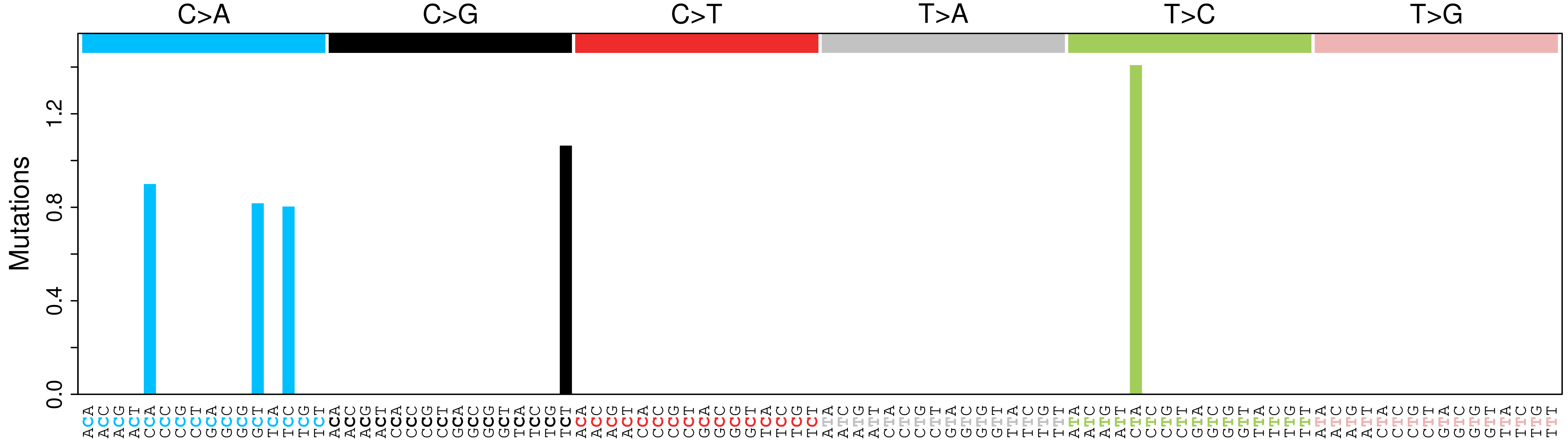
# 1.0

5.0

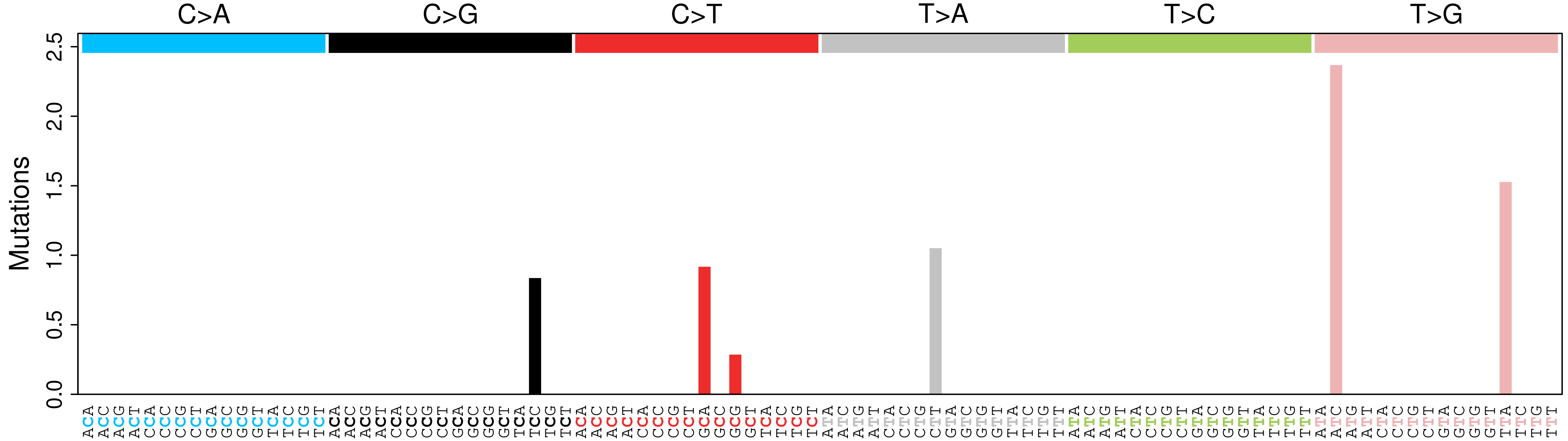
0.0

[illegible]

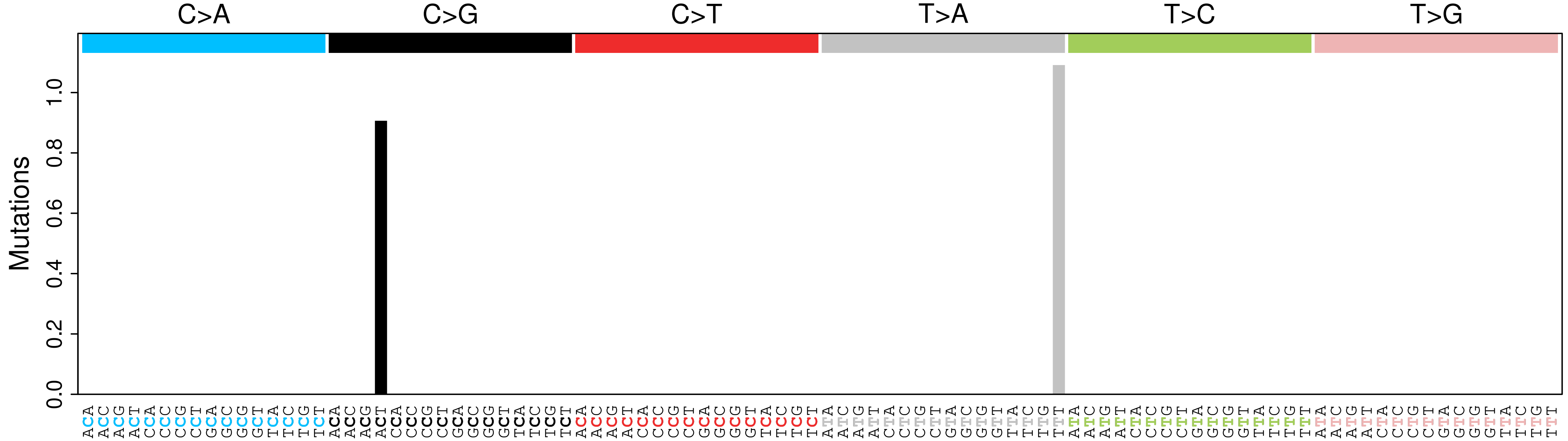
## CATD0088a (5 mutations)



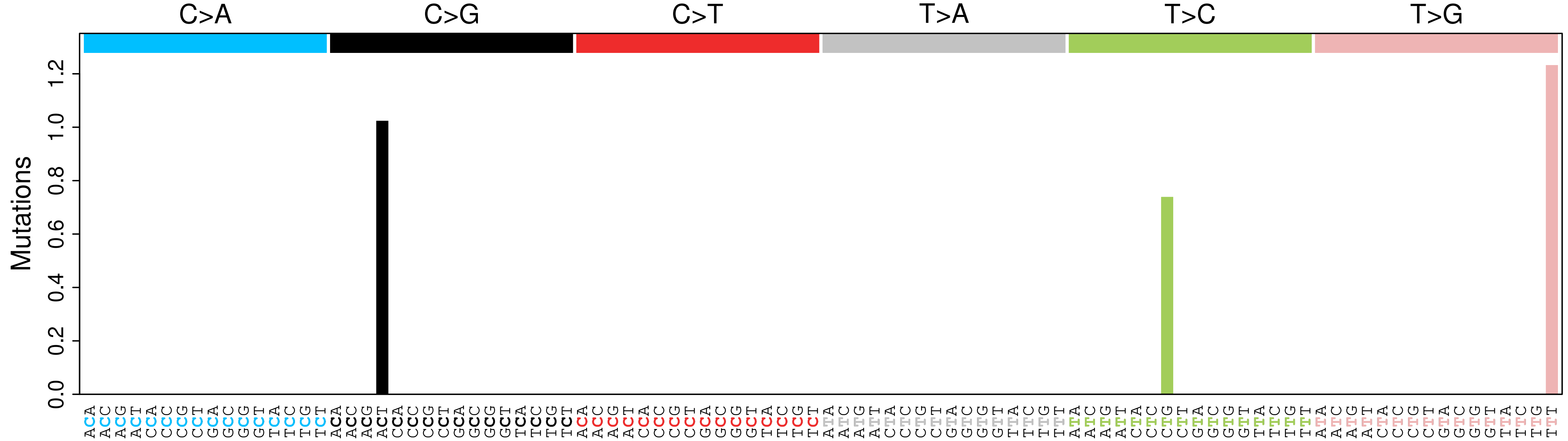
## CATD0102a (7 mutations)



## CATD0400a (2 mutations)



## CATD0095a (3 mutations)





# CATD0087a (8 mutations)

C>A

C>G

C>T

T>A

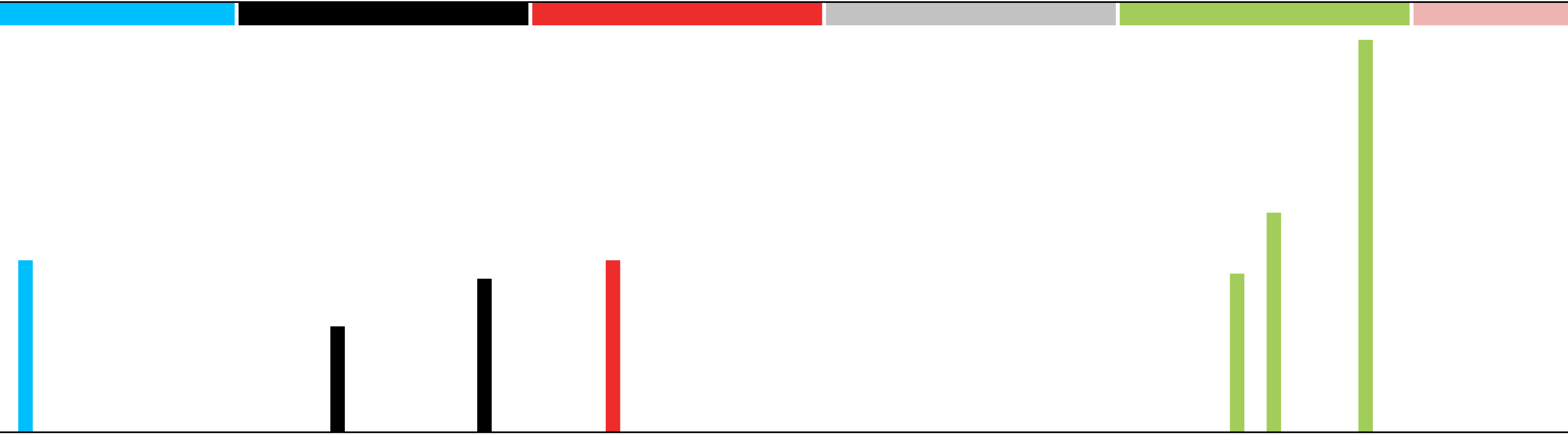
T>C

T>G

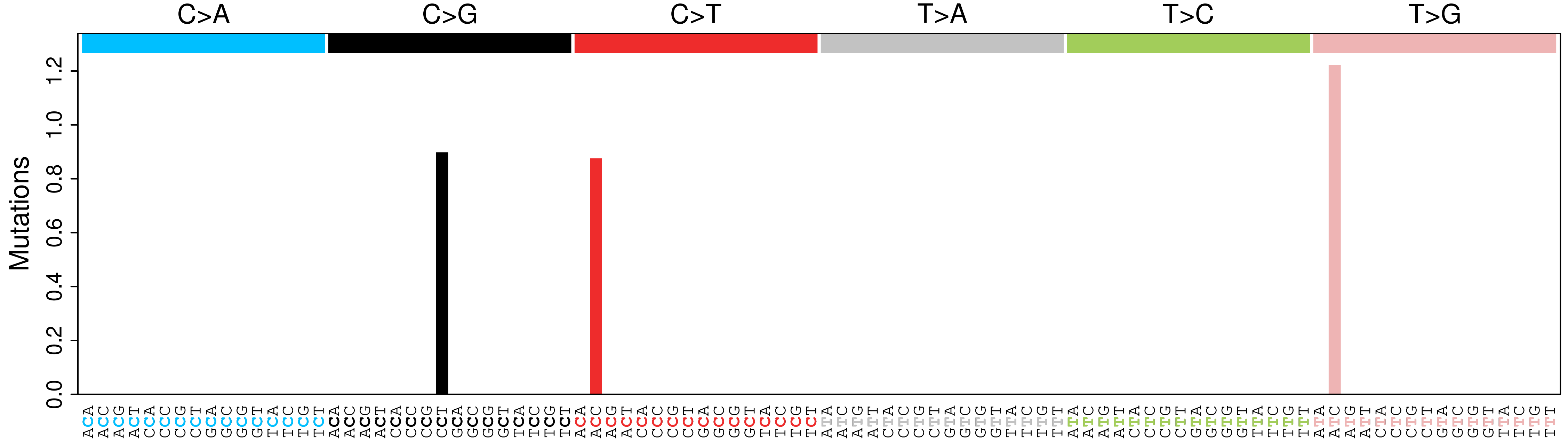
Mutations

2.0  
1.5  
1.0  
0.5  
0.0

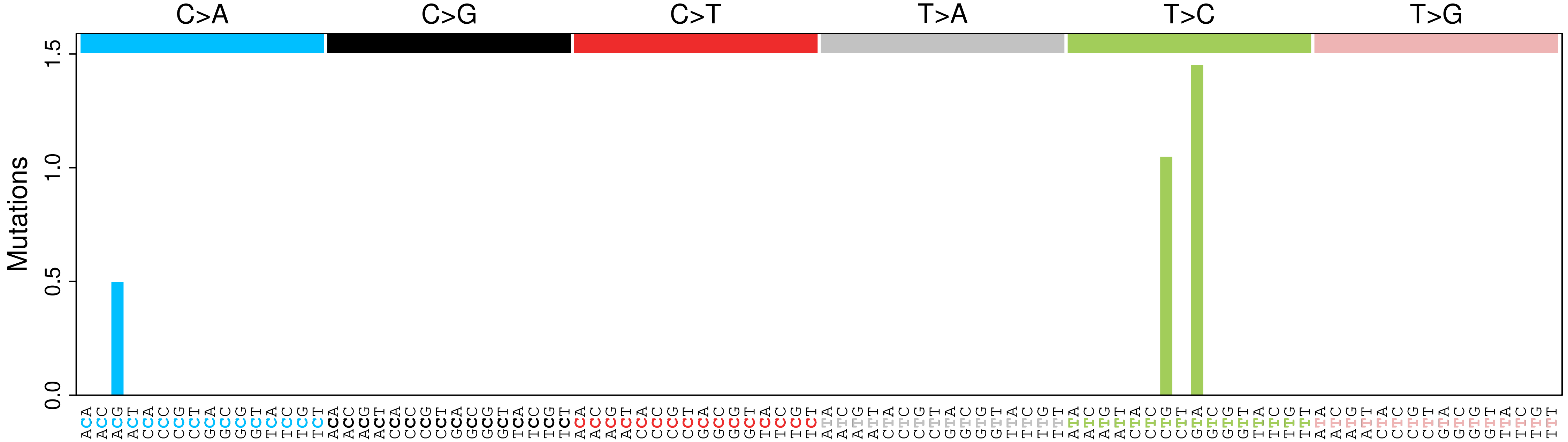
ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GGT TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC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



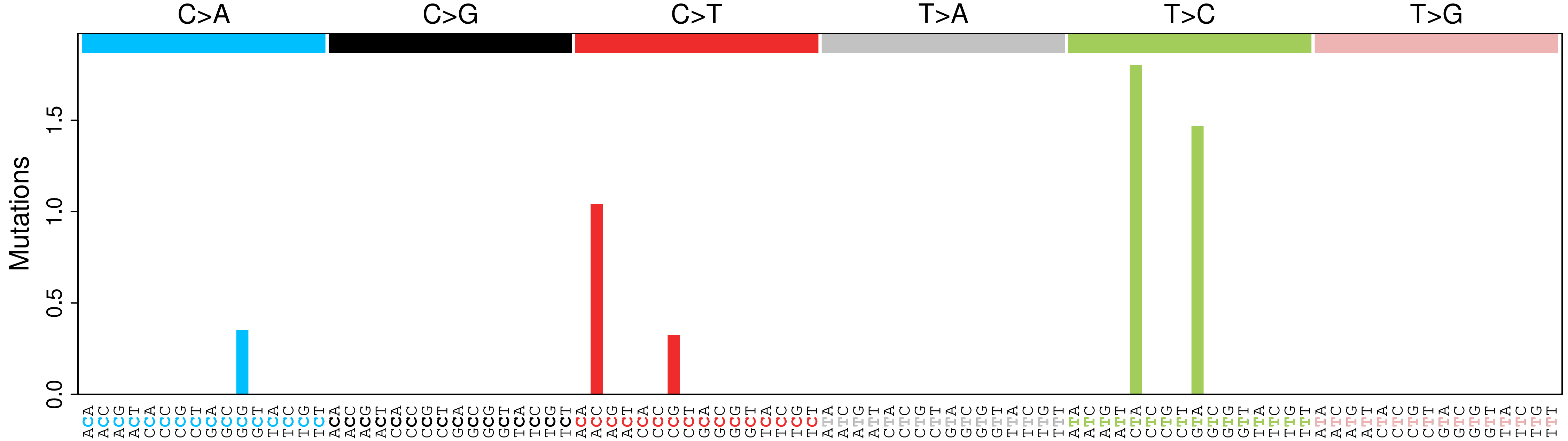
## CATD0410a (3 mutations)



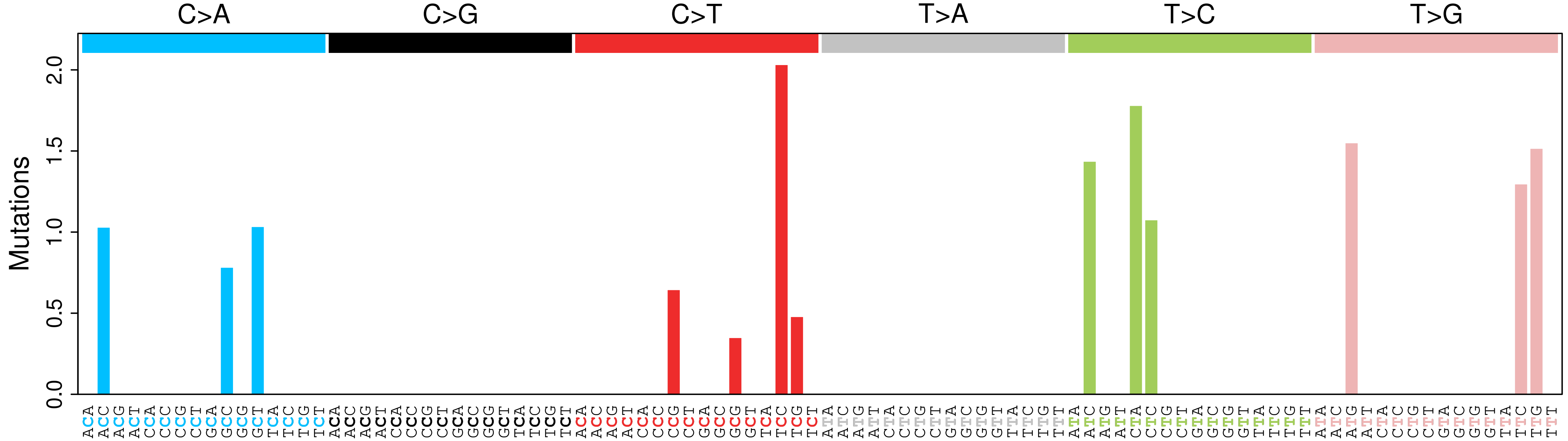
# CATD0101a (3 mutations)



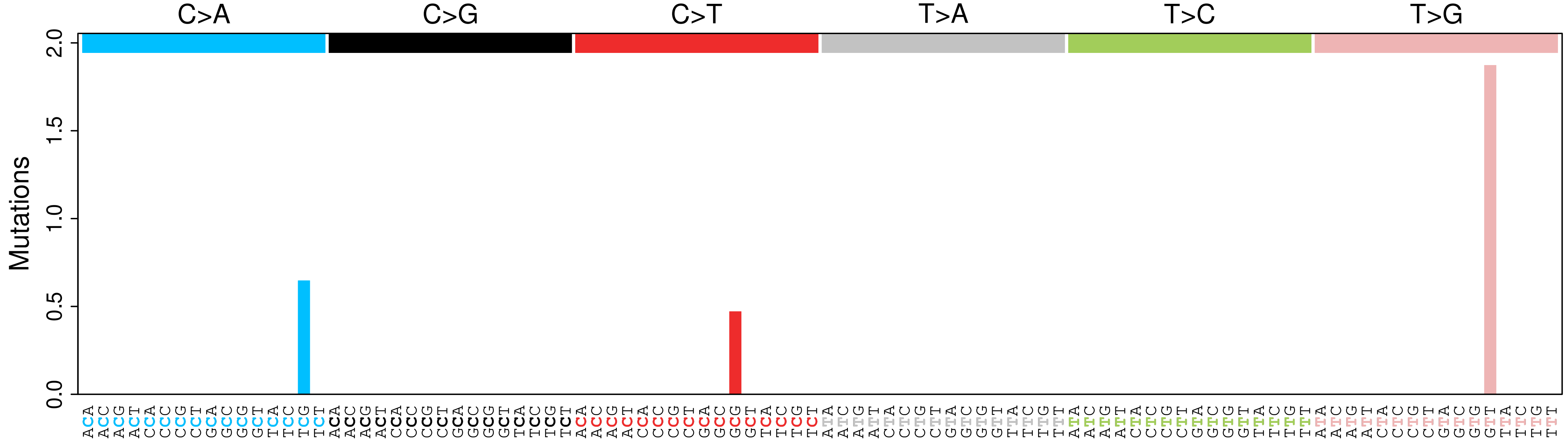
## CATD0100a (5 mutations)



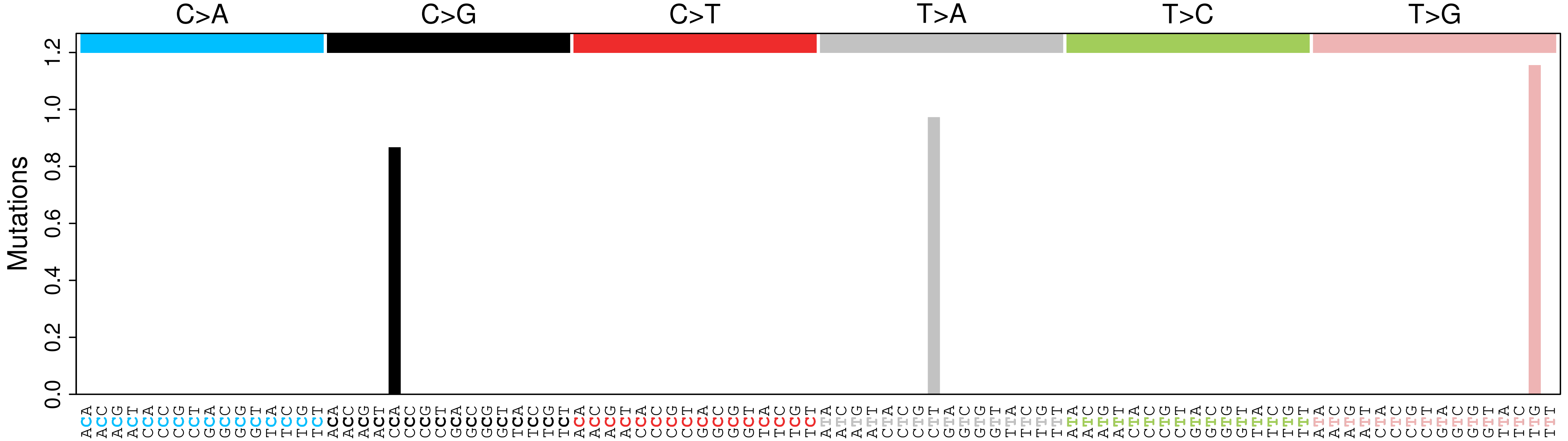
## CATD0118a (15 mutations)



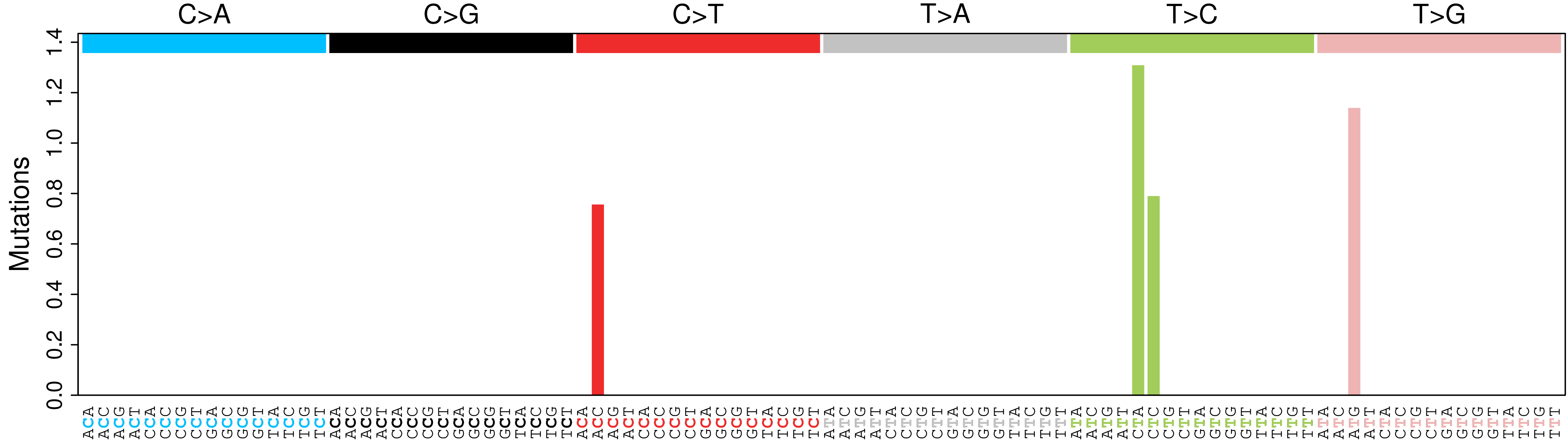
## CATD0108a (3 mutations)



# CATD0082a (3 mutations)

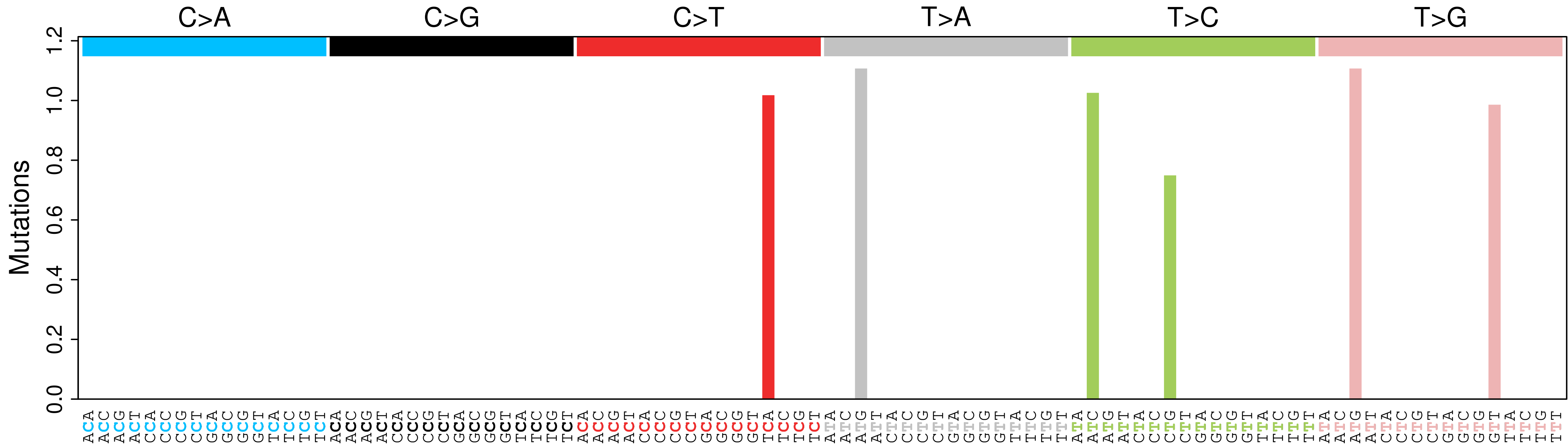


CATD0106a (4 mutations)

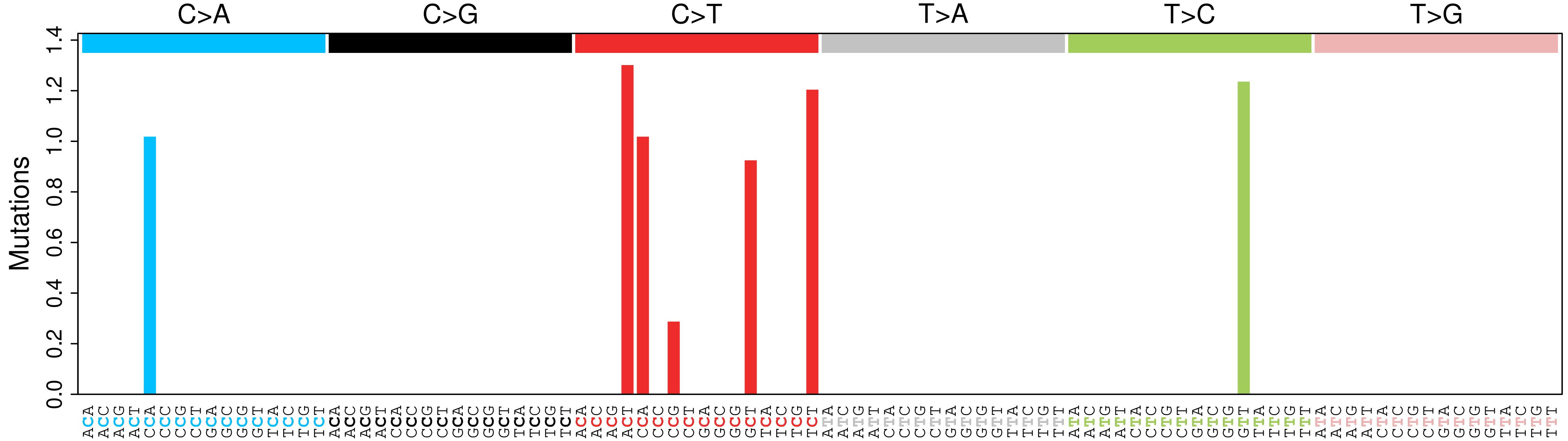




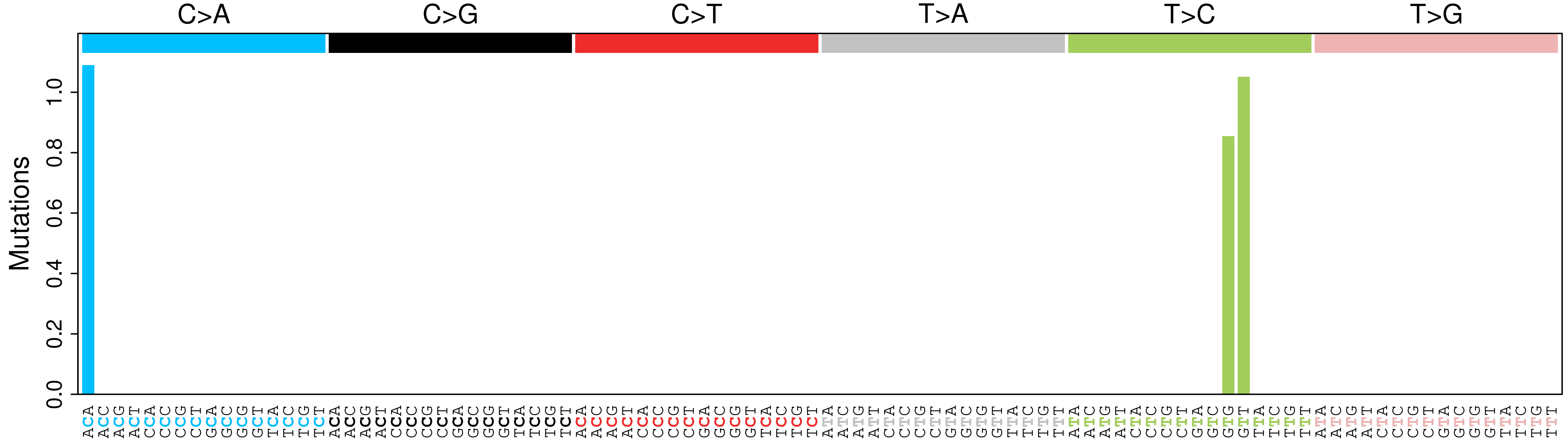
# CATD0107a (6 mutations)



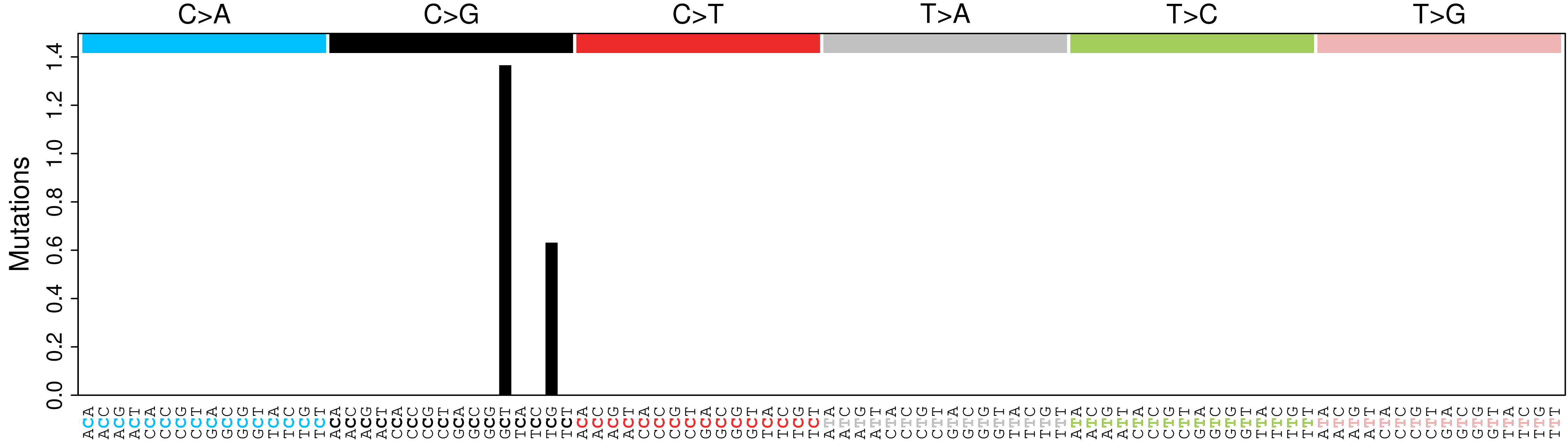
## CATD0097a (7 mutations)



## CATD0112a (3 mutations)



CATD0412a (2 mutations)



# CATD0110a (5 mutations)

C>A

C>G

C>T

T>A

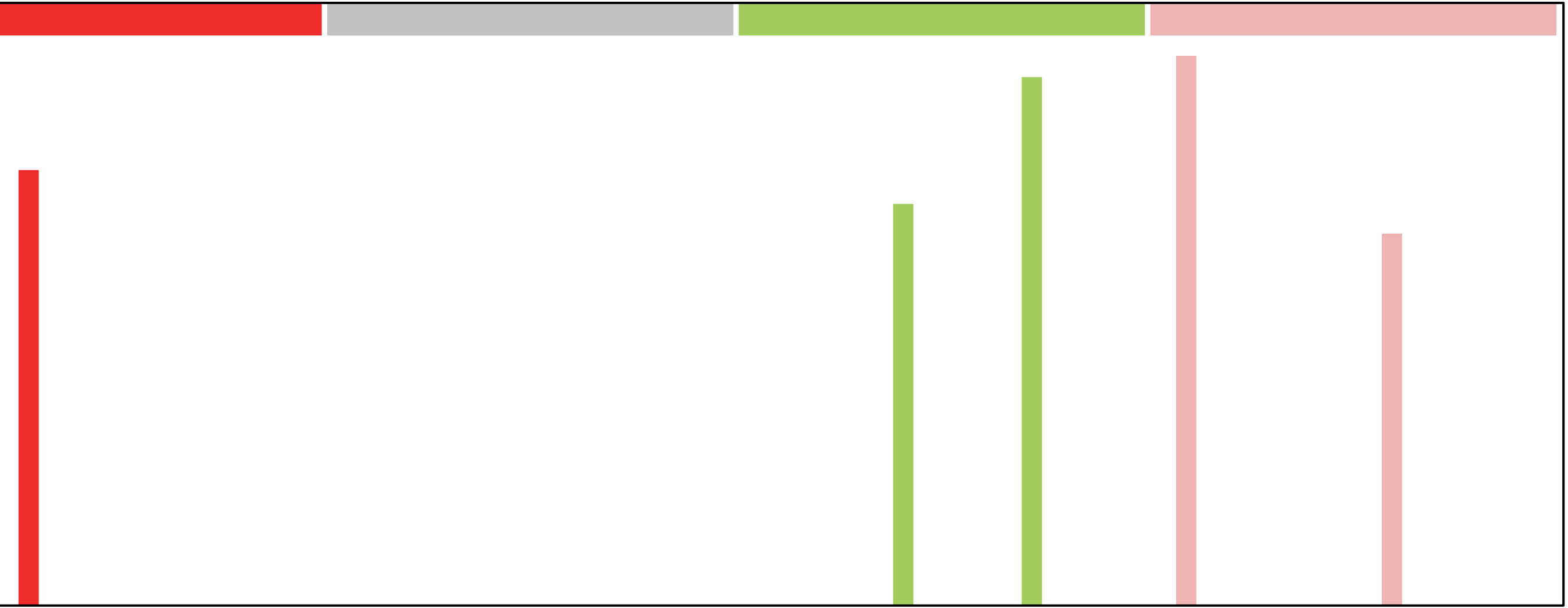
T>C

T>G

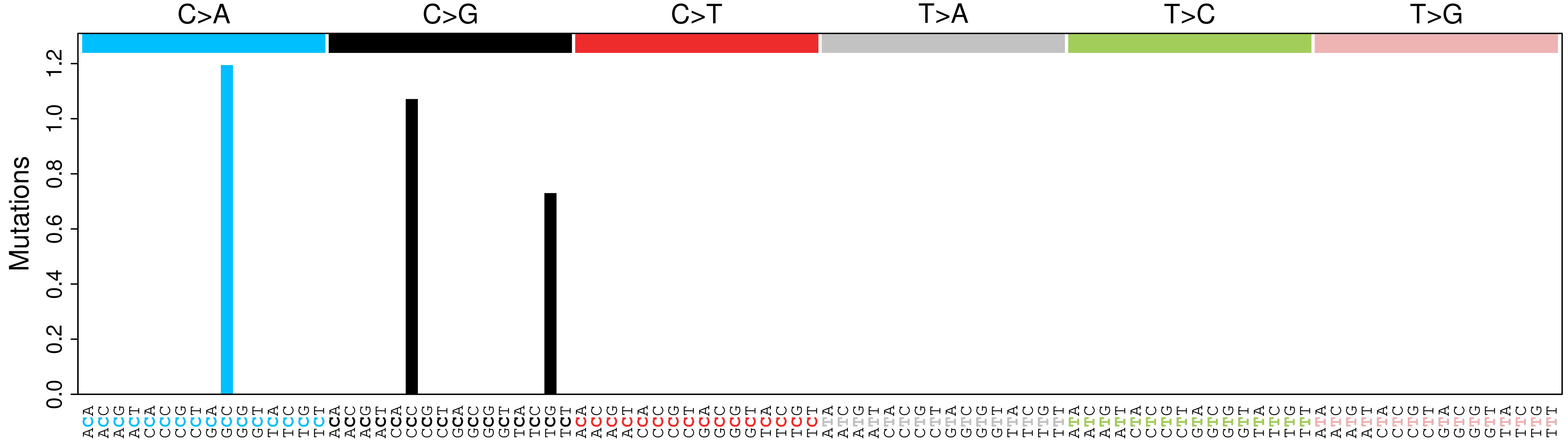
Mutations

1.2  
1.0  
0.8  
0.6  
0.4  
0.2  
0.0

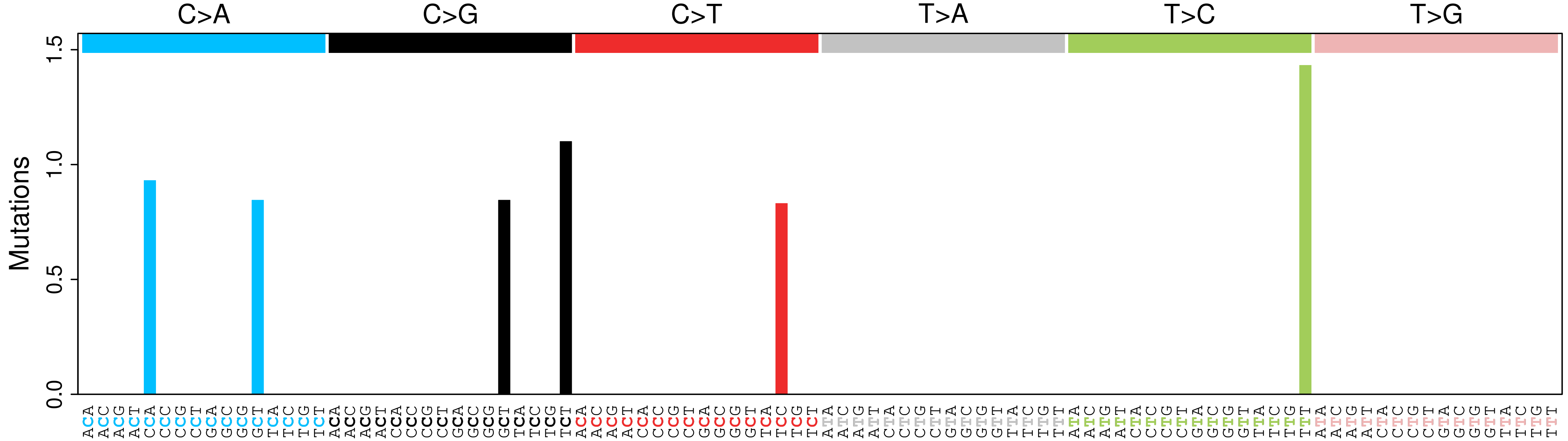
ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GCG GGT TCA TCC TCG TCT ACA ACC ACG ACT CCA CCC CCG CCT GCA GCC GCG GGT TCA TCC TCG TCT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GTA GTC GTG GTT TTA TTC TTG TTT



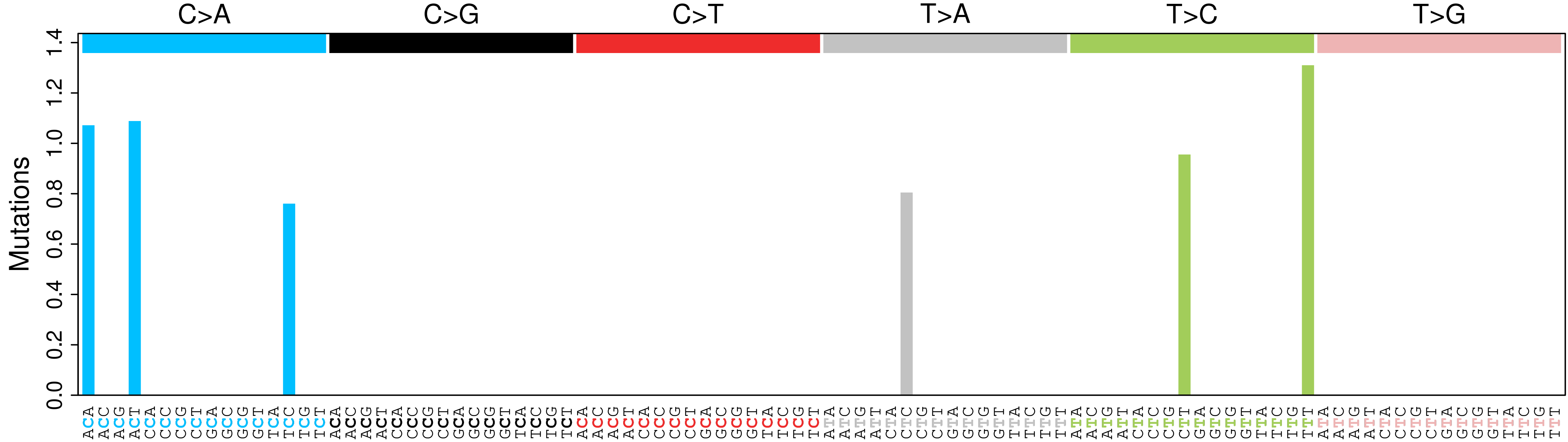
## CATD0117a (3 mutations)



## CATD0084a (6 mutations)



CATD0081a (6 mutations)





## CATD0092a (3 mutations)

$C > A$

$C > G$

$C > T$

**T > A**

$T > C$

T > G

# Mutations

## 1.2

$$\frac{8}{0}.$$

## 0.4

0.0

[illegible]

# CATD0111a (5 mutations)

C>A

C>G

C>T

T>A

T>C

T>G

Mutations

1.5

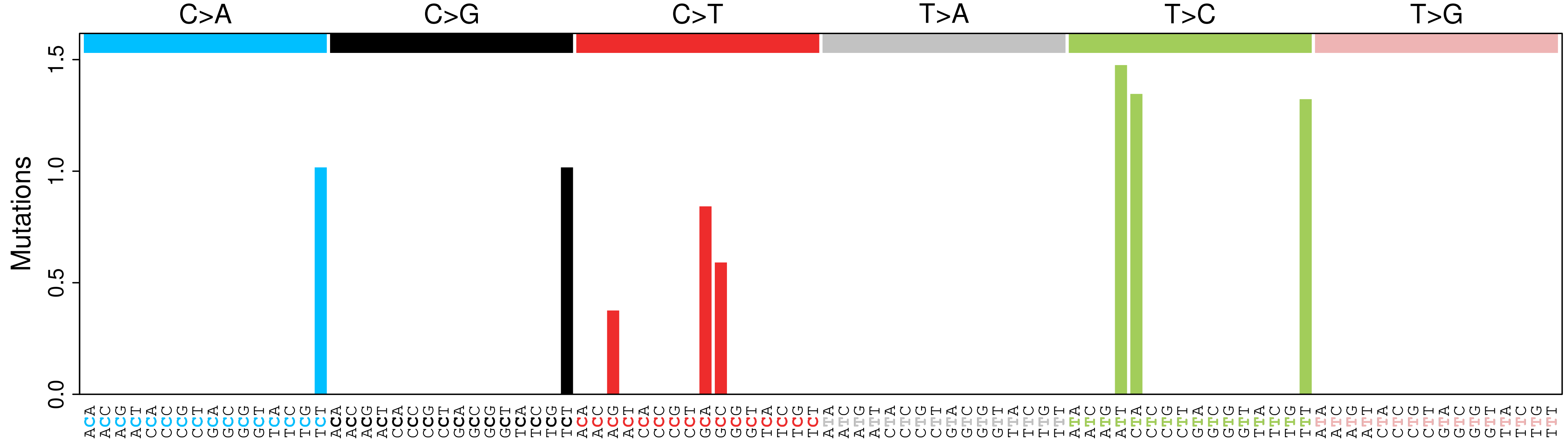
1.0

0.5

0.0

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  
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TTA  
TTC  
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GTC  
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TTC  
TTG  
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ATA  
ATC  
ATG  
ATT  
CTA  
CTC  
CTG  
CTT  
GTA  
GTC  
GTG  
GTT  
TTA  
TTC  
TTG  
TTT

## CATD0114a (8 mutations)



## CATD0103a (13 mutations)

$C > A$

C > G

$C > T$

$T > A$

$T > C$

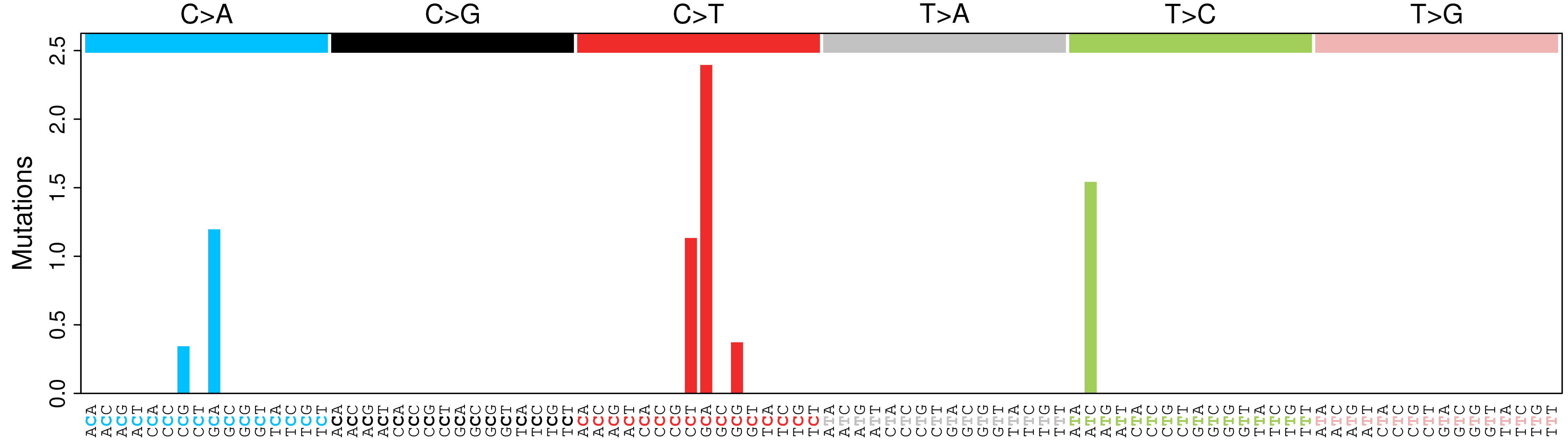
**T > G**

# Mutations

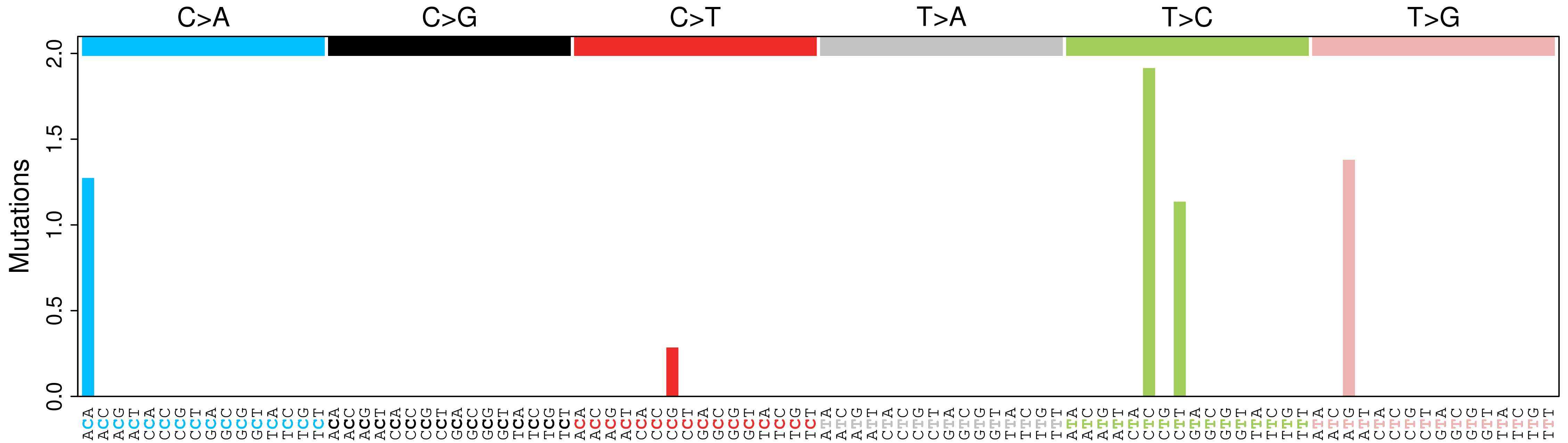
$\alpha$	$N_s$
0.0	0.00
0.1	0.45
0.2	0.75
0.3	0.82
0.4	0.85
0.5	0.82
0.6	0.78
0.8	0.70
1.0	0.65
1.5	0.62
2.0	0.60

[illegible]

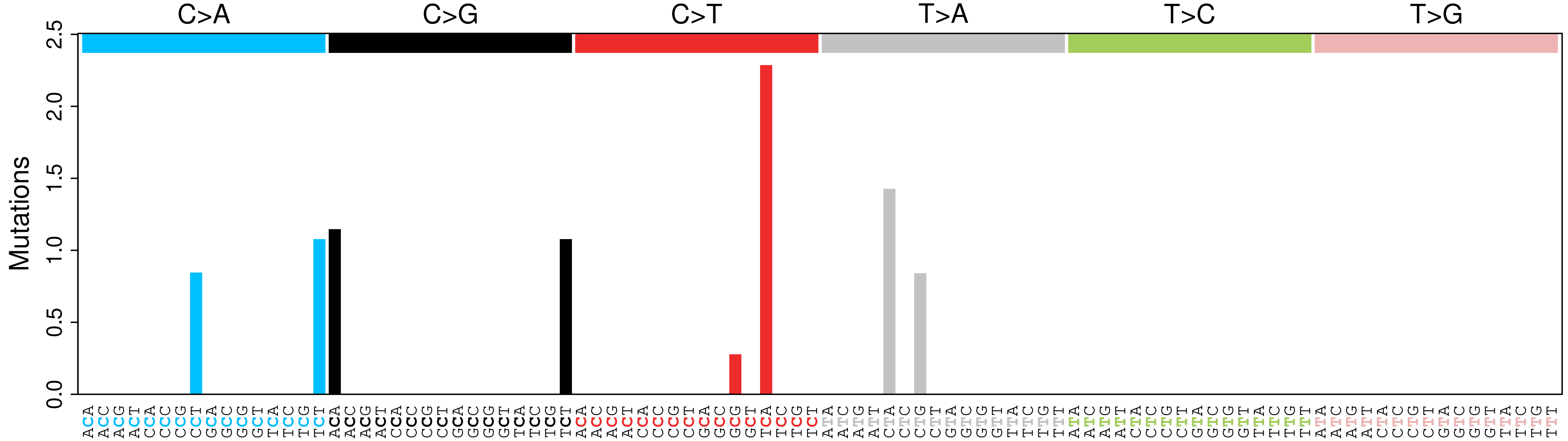
## CATD0099a (7 mutations)



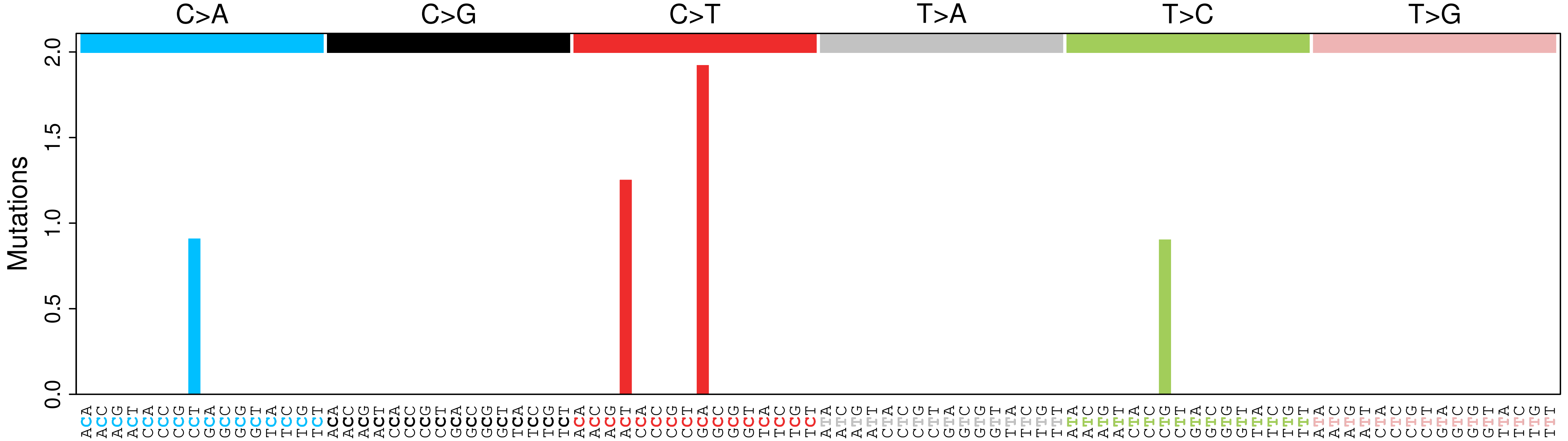
# CATD0091a (6 mutations)



## CATD0086a (9 mutations)



# CATD0405a (5 mutations)





# CATD188a (7 mutations)

C>A

C>G

C>T

T>A

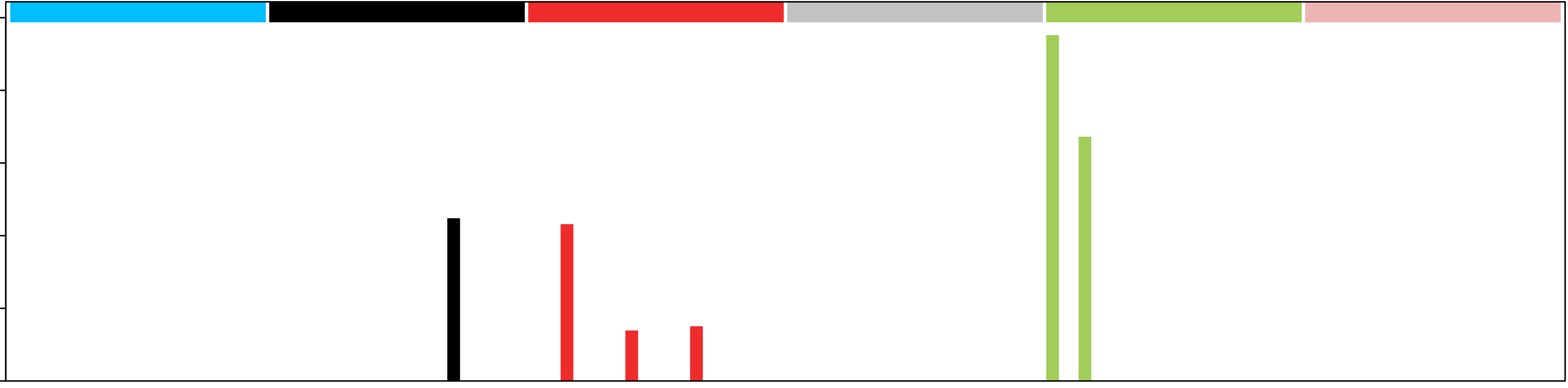
T>C

T>G

Mutations

2.5  
2.0  
1.5  
1.0  
0.5  
0.0

ACA ACC AGT ACT CCA CCC CCT CCA 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 GCA GGC GTT TTA TTC TTG TTT ATA ATC ATG ATT CTA CTC CTG CTT GCA GGC GTT TTA TTC TTG TTT



# CATD0401a (6 mutations)

C>A

C>G

C>T

T>A

T>C

T>G

Mutations

2.5  
2.0  
1.5  
1.0  
0.5  
0.0

A C A C A C C C C G C A G C G G T T C A T C C T A C C A C G A C T C C C C G C C T G C A G C C G G T T C A T C C T C T A A T C A T G A T T A C T C C T G T A G T C G T T A T T C T T G T T A A T C A T G A T T A C C T C T G T A G T G T T A T T C T T G T T T A T A T C A T G A T T A C C T C T G T A G T G T T A T T C T T G T T T A T T C T T G T T T



# CATD0096a (2 mutations)

C>A

C>G

C>T

T>A

T>C

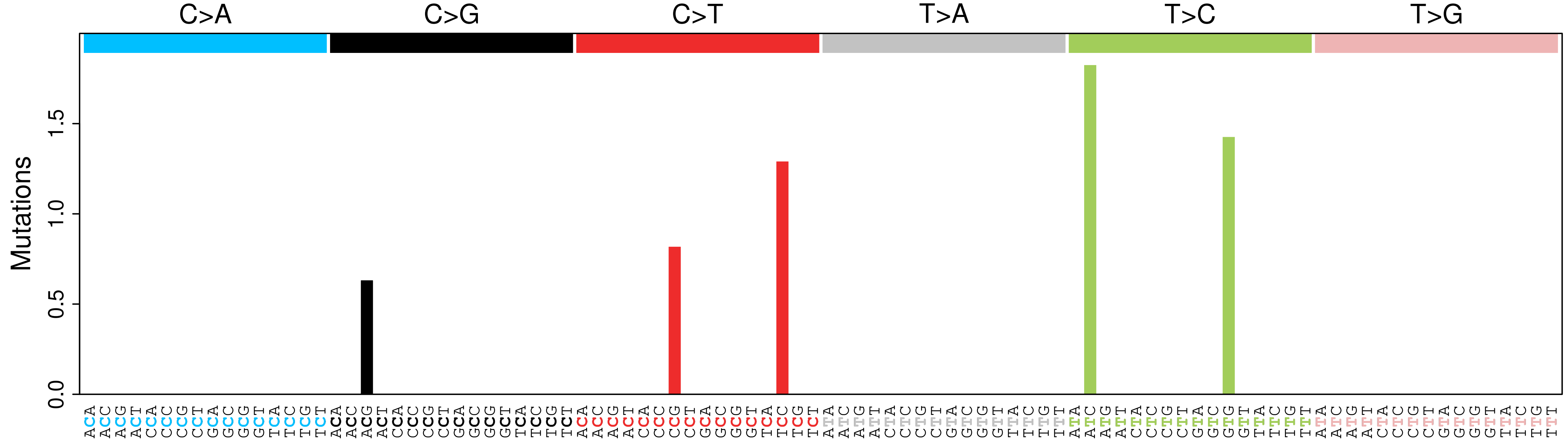
T>G

Mutations

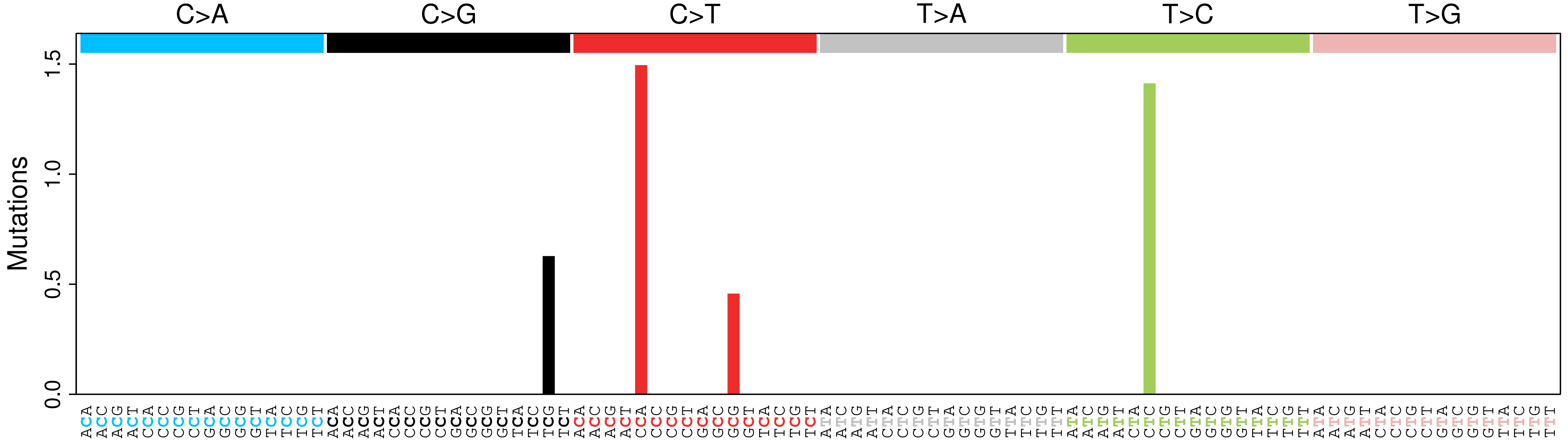
1.0  
0.8  
0.6  
0.4  
0.2  
0.0

ACA  
ACC  
ACG  
ACT  
CCA  
CCC  
CCG  
CCT  
GCA  
GCC  
GGG  
GCT  
TCA  
TCC  
TCG  
TCT  
ACA  
ACC  
ACG  
ACT  
CCA  
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CCG  
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GCA  
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GGG  
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TTC  
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TTC  
TTG  
TTT

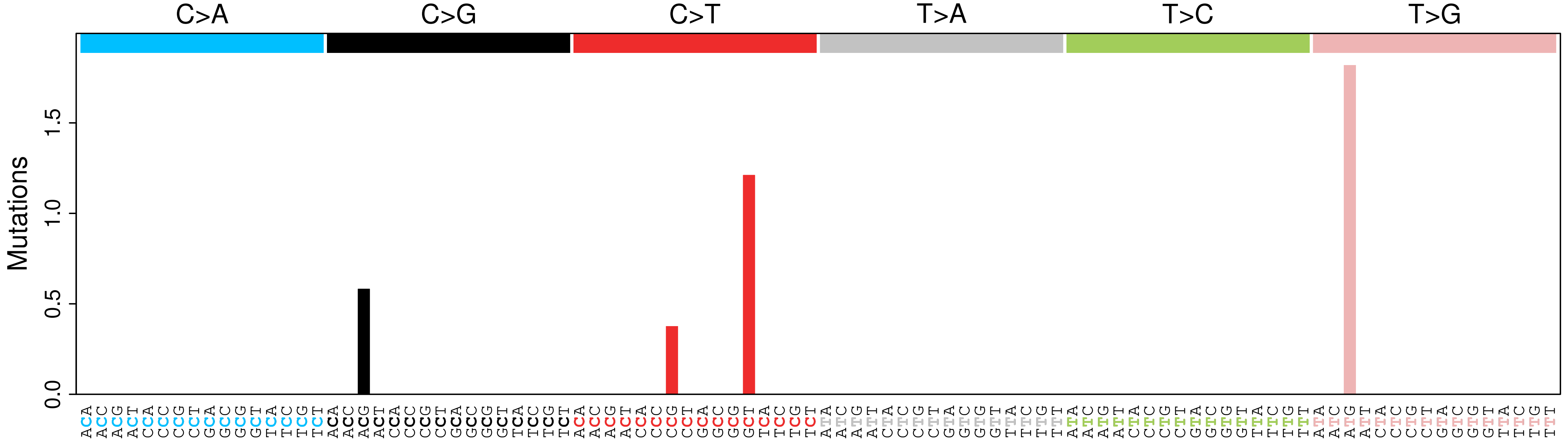
## CATD0411a (6 mutations)



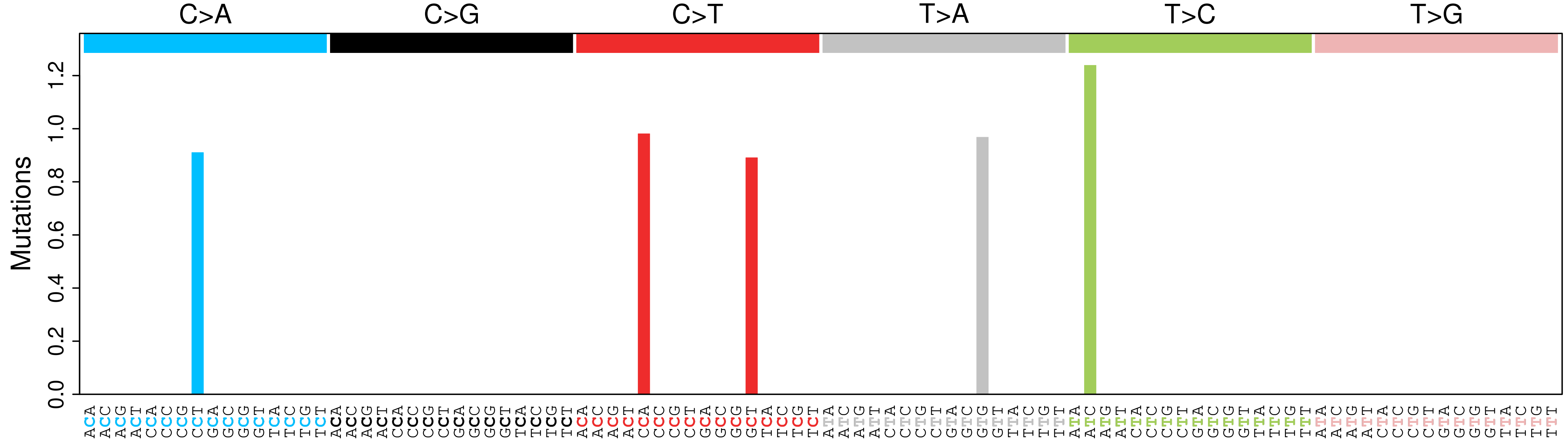
# CATD0113a (4 mutations)



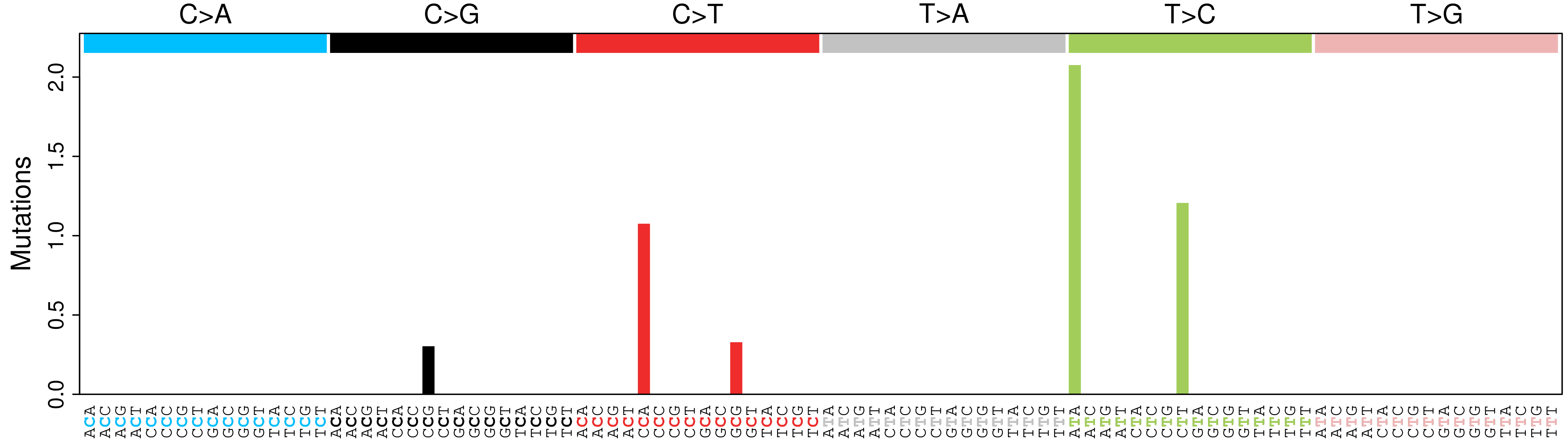
# CATD0403a (4 mutations)



## CATD0085a (5 mutations)

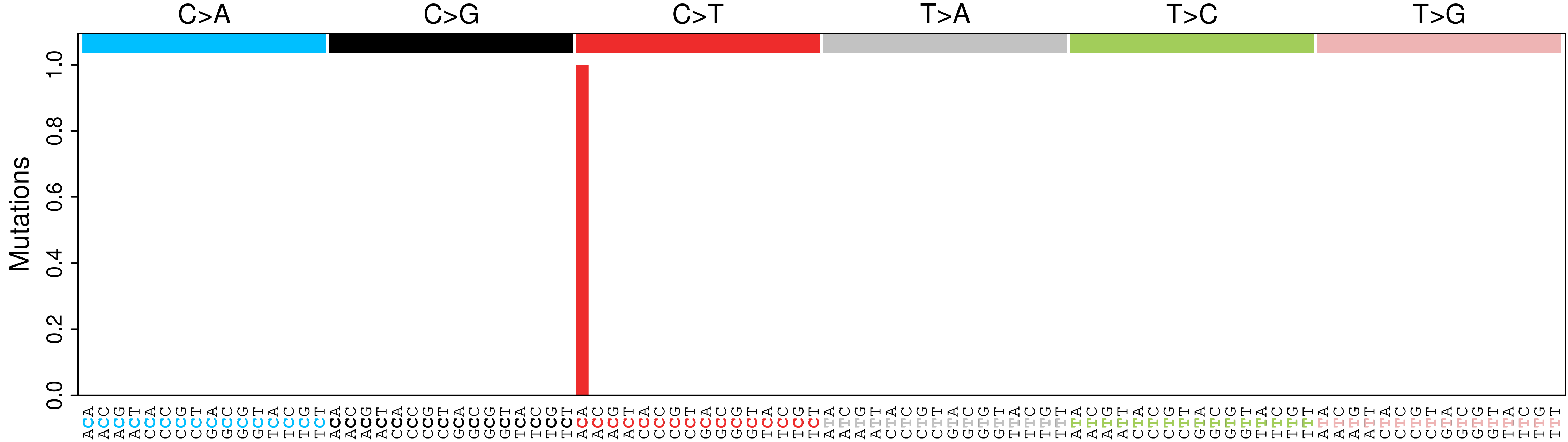


## CATD190a (5 mutations)





CATD0109a (1 mutations)



## CATD0415a (5 mutations)



## CATD191a (2 mutations)

$C > A$

$C > G$

$C > T$

$T > A$

$T > C$

T>G

# Mutations

1.0

0.

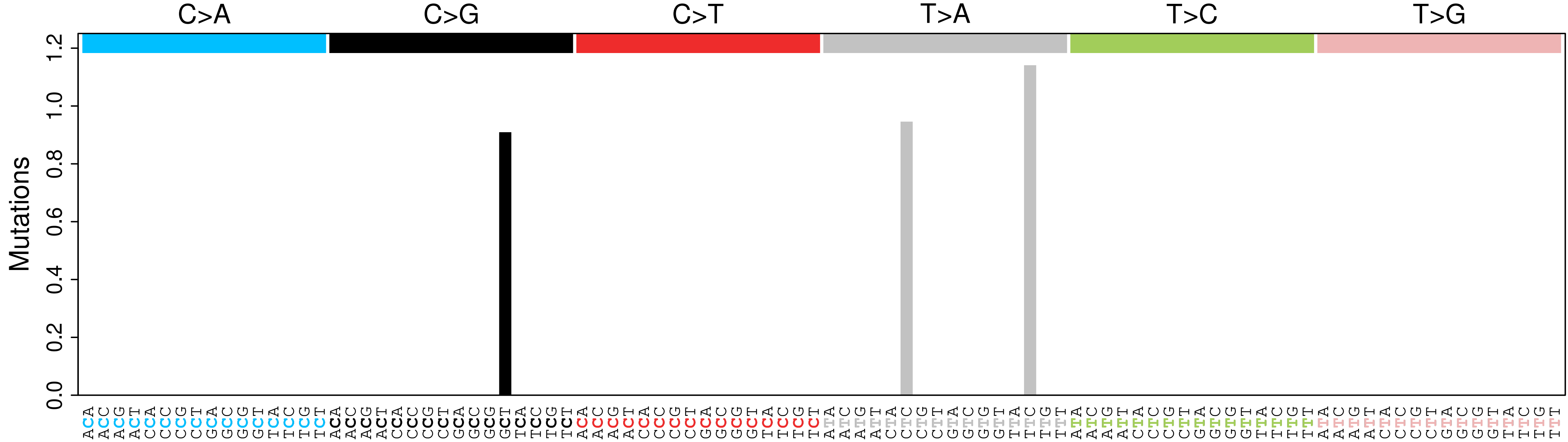
0

Q

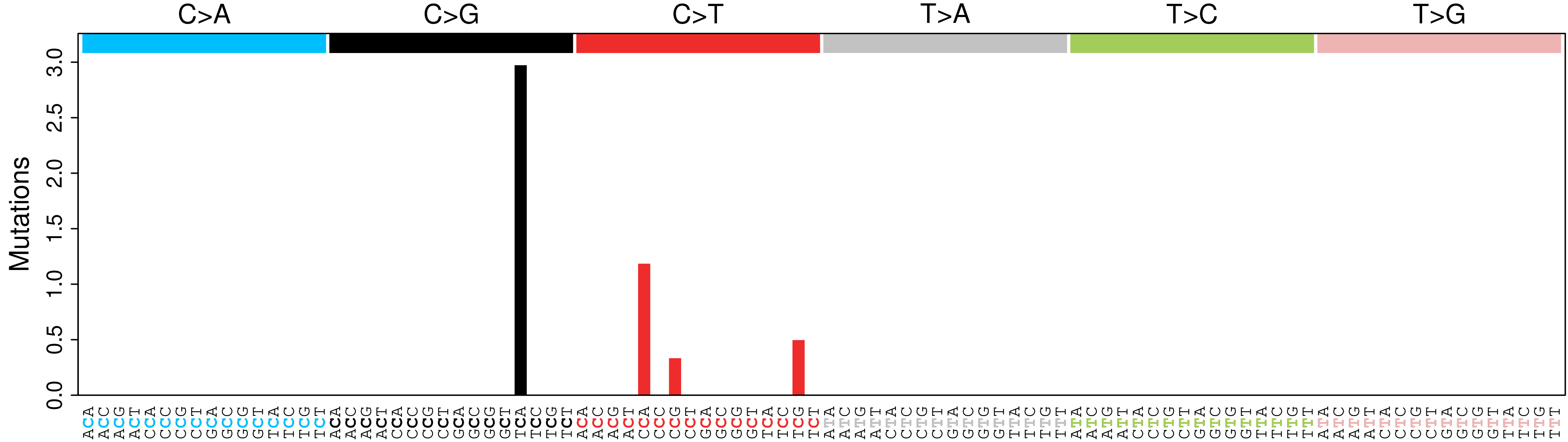
0

[illegible]

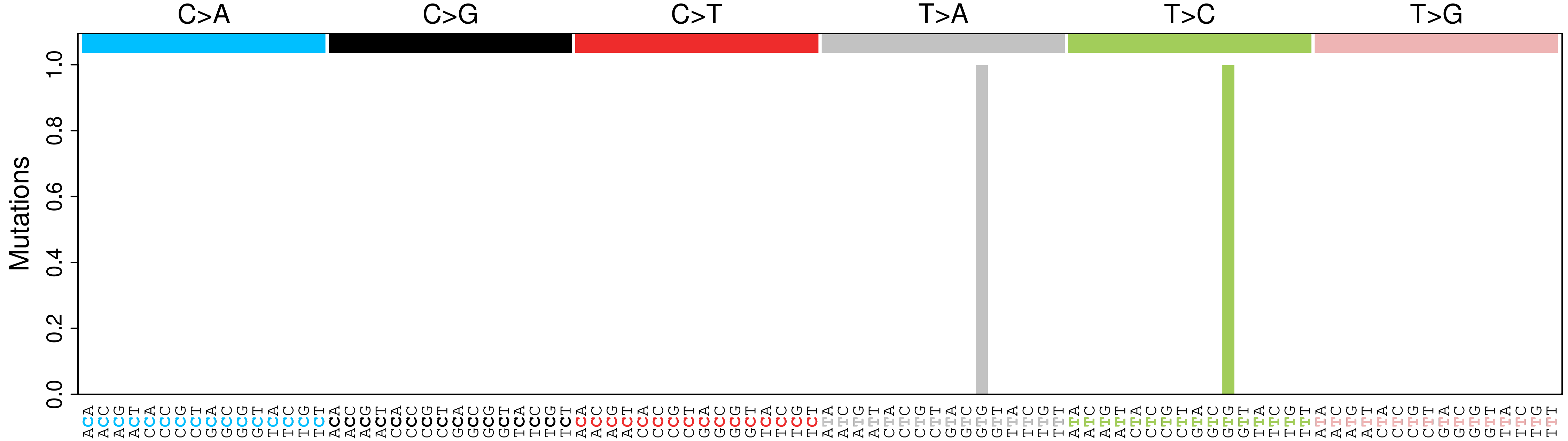
CATD0093a (3 mutations)



CATD0407a (5 mutations)



## CATD0413a (2 mutations)



# CATD0104a (2 mutations)

C>A

C>G

C>T

T>A

T>C

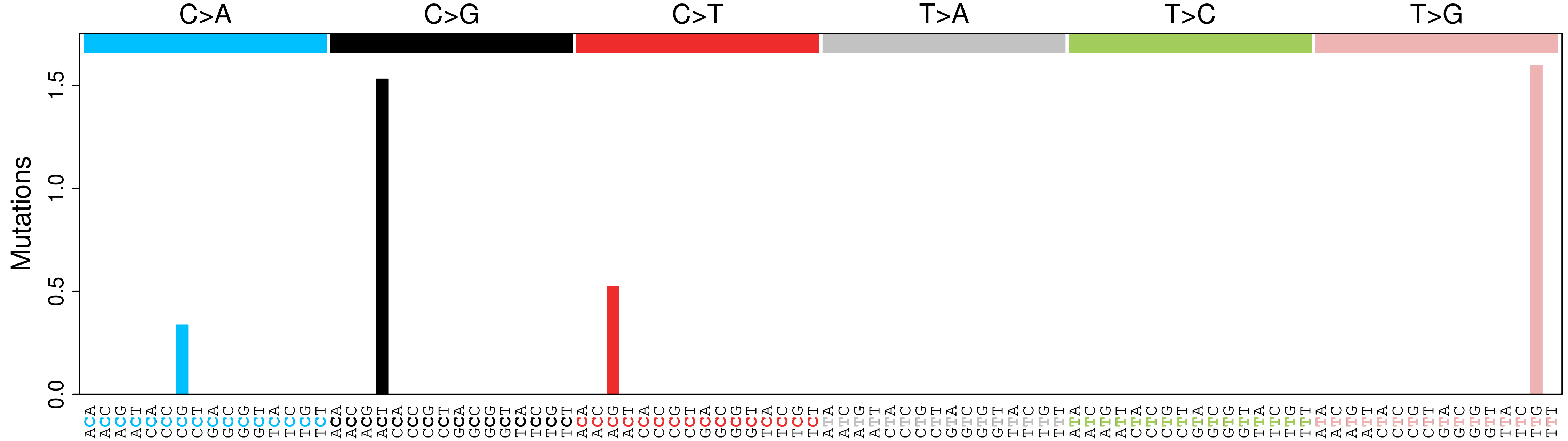
T>G

Mutations

1.0  
0.8  
0.6  
0.4  
0.2  
0.0

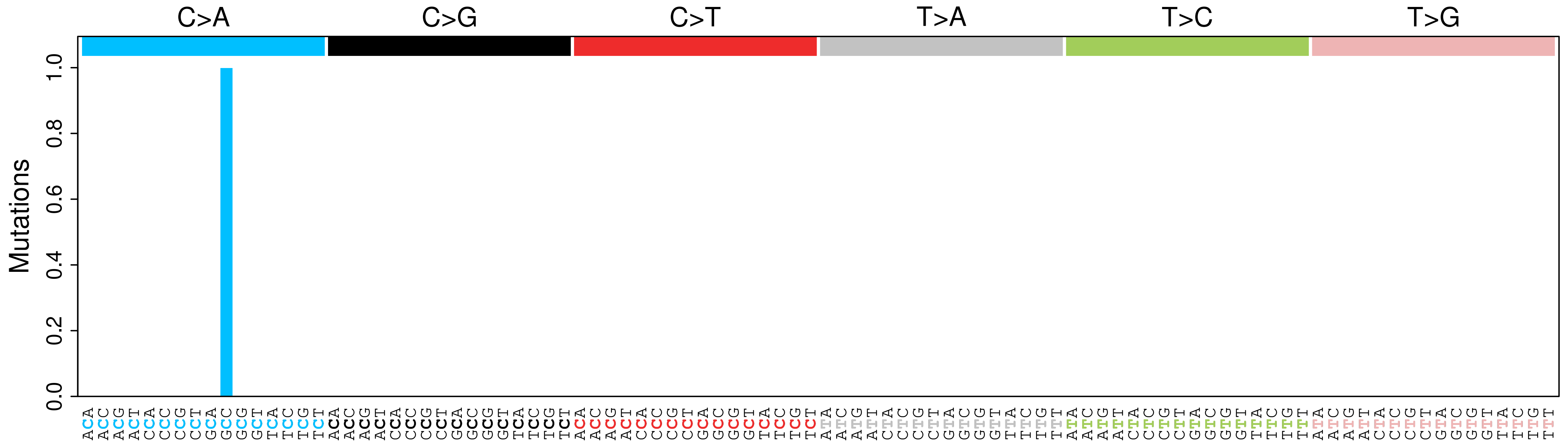
A C A C A C C C C G C A G C G G T T C A T C C T A C C A C G A C T C C C C G C A G C G G T T C A T C C T C T A C A C A C G A C T C C C C G C A G C G G T T C A T C C T C T A T C A T G A T T A C T C C T G T A G T C G T T A T C A T C A T G A T C C T G T T A T C A T C A T C C T G T A C G T T A T C G T T T T T T A T C A T G A T C C T G T A C G T T A T C G T T T T T T

## CATD0409a (4 mutations)





# CATD0116a (1 mutations)



## CATD0406a (1 mutations)

**C > A**

C > G

$C > T$

**T > A**

$$T > C$$

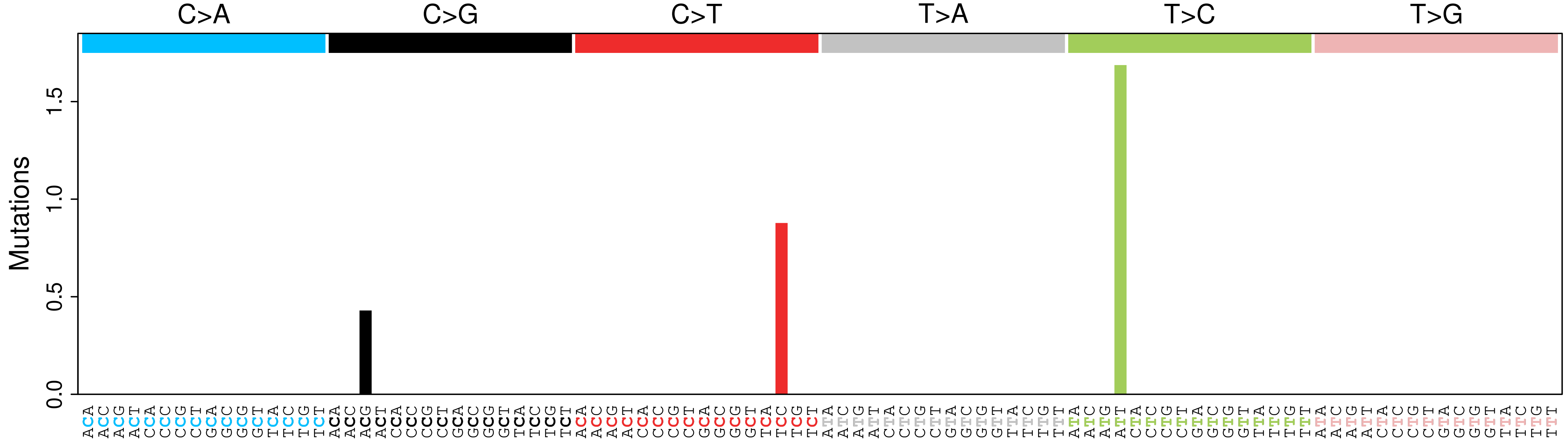
T > G

# Mutations

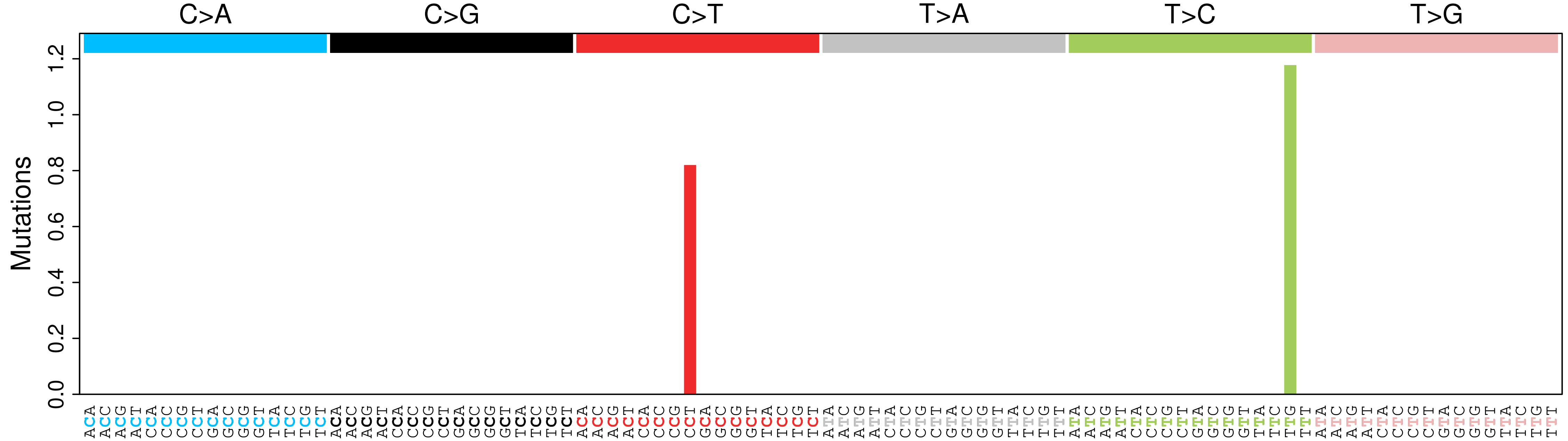
0.0 0.2 0.4 0.6 0.8 1.0

AACGTCAGCGGTATCTGTTACAACGAATACCCGTCA GCGGTTCCTCTTAACAGTACCGTGCGGTATCCTCTTAATCATAGTACTCTCTGTGGTGTATTCTTTTAAATATACTCTCTGTGTGTATTCTTTAATAATACTCTCTGTGTGTATTCTTT

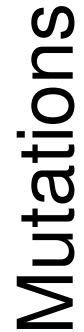
## CATD0089a (3 mutations)



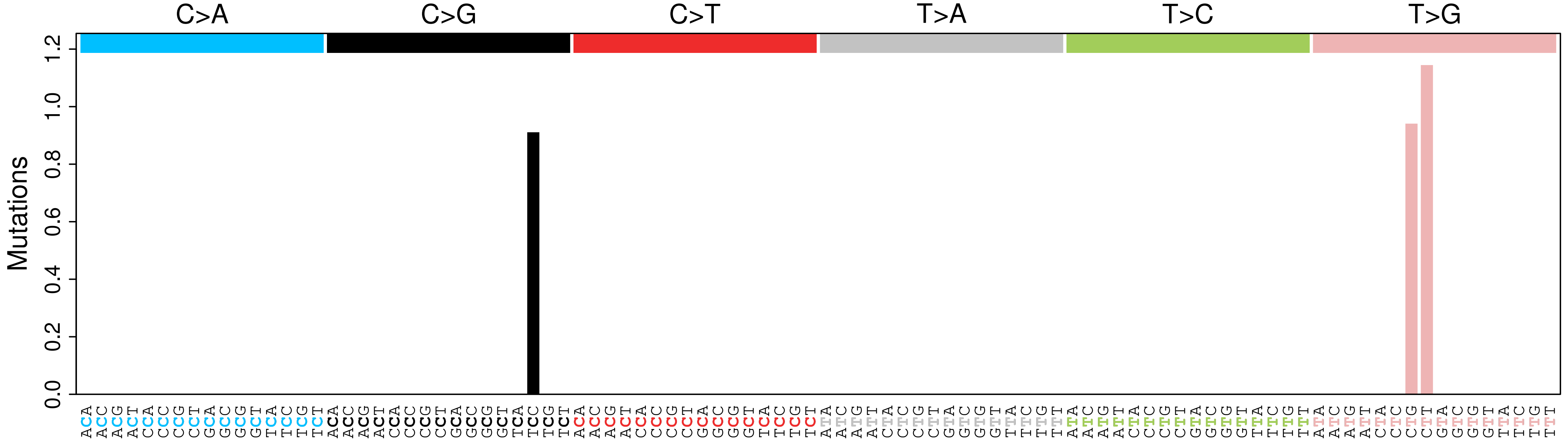
## CATD0115a (2 mutations)



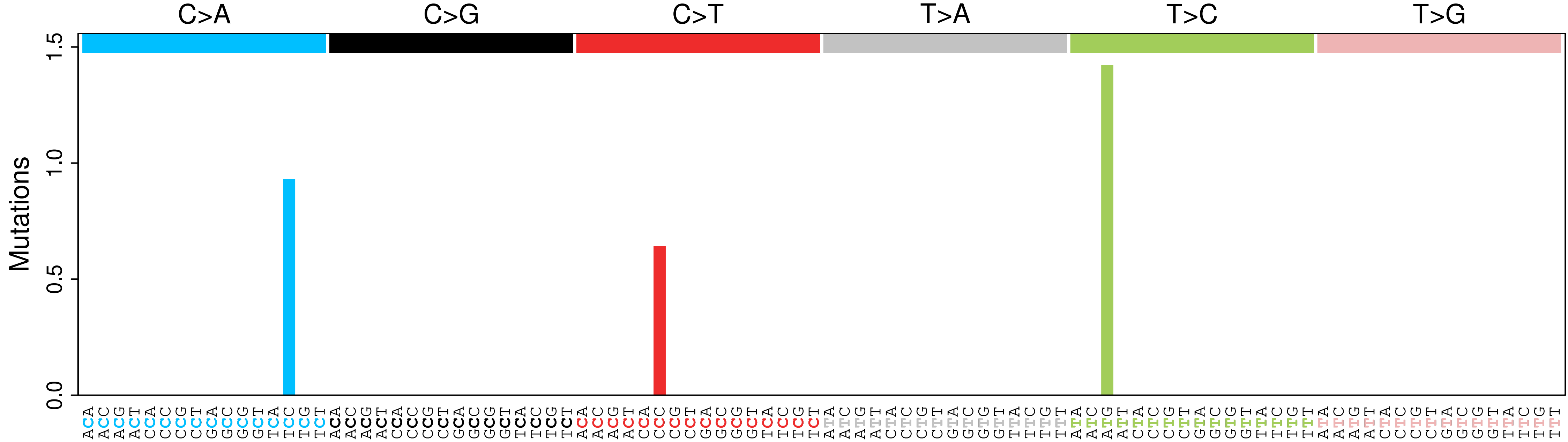
## CATD0098a (4 mutations)



# CATD0402a (3 mutations)



CATD0404a (3 mutations)



## CATD0408a (4 mutations)

