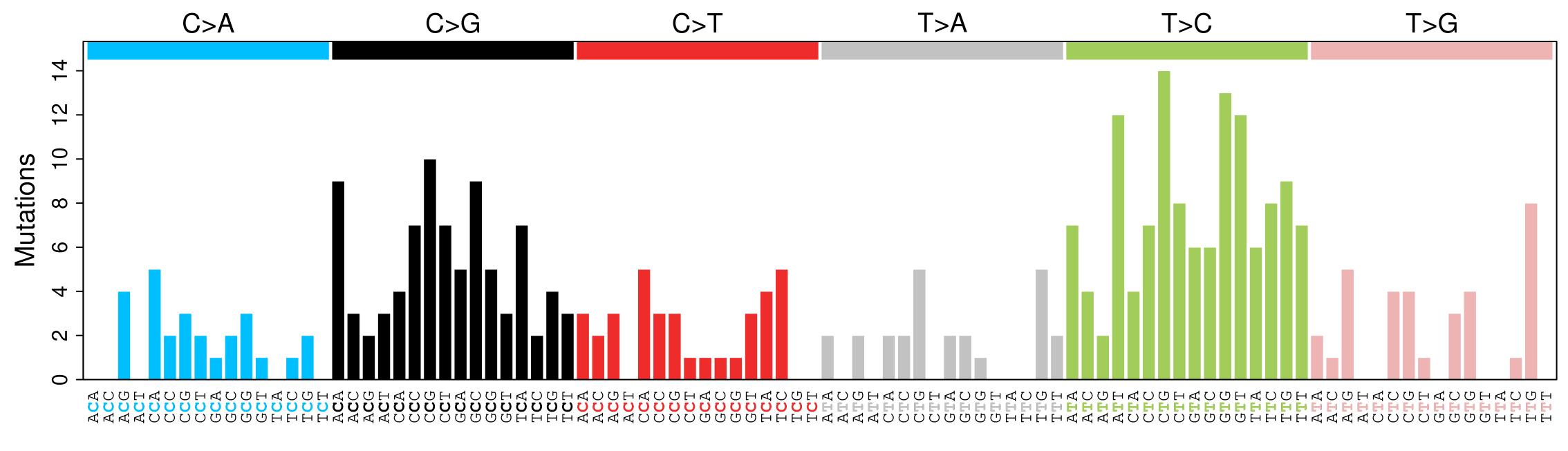
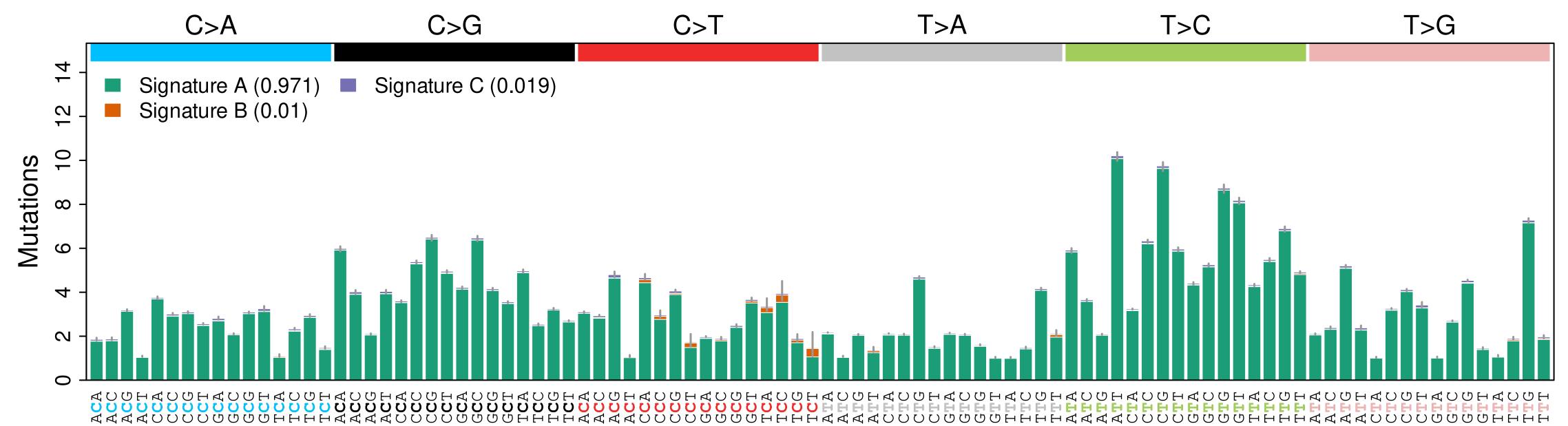
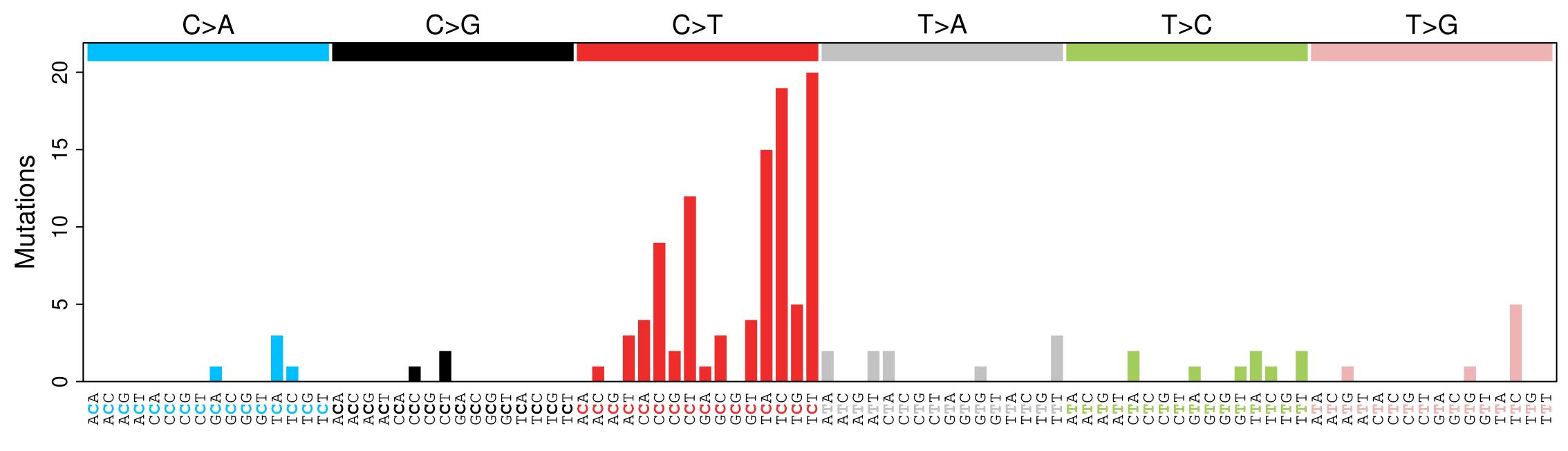
CATD292a (327 mutations)



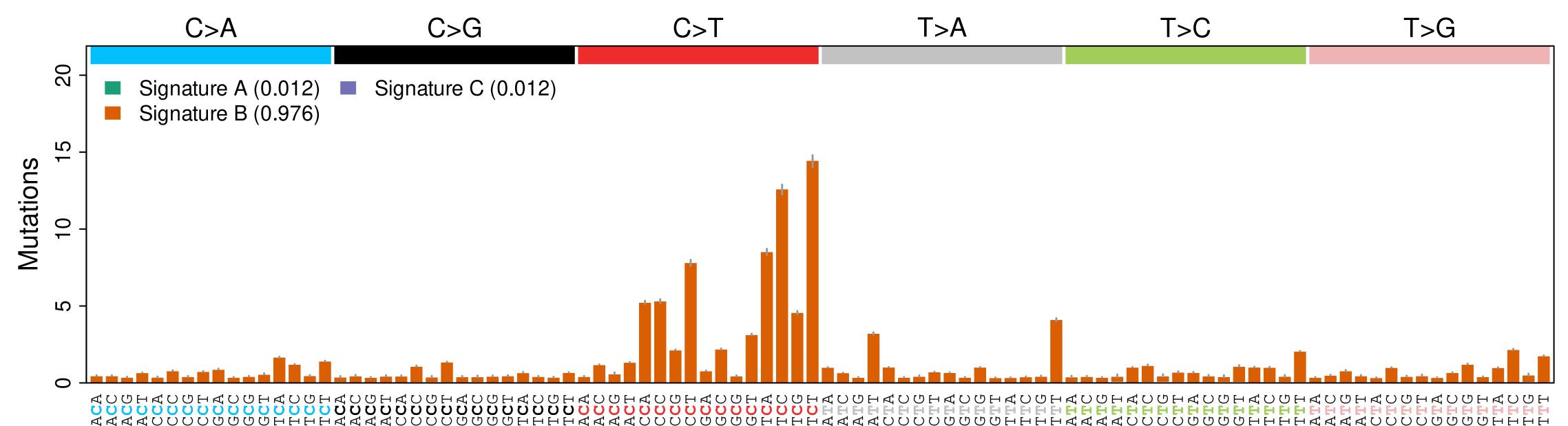
Reconstructed spectrum (cosine similarity = 0.958)



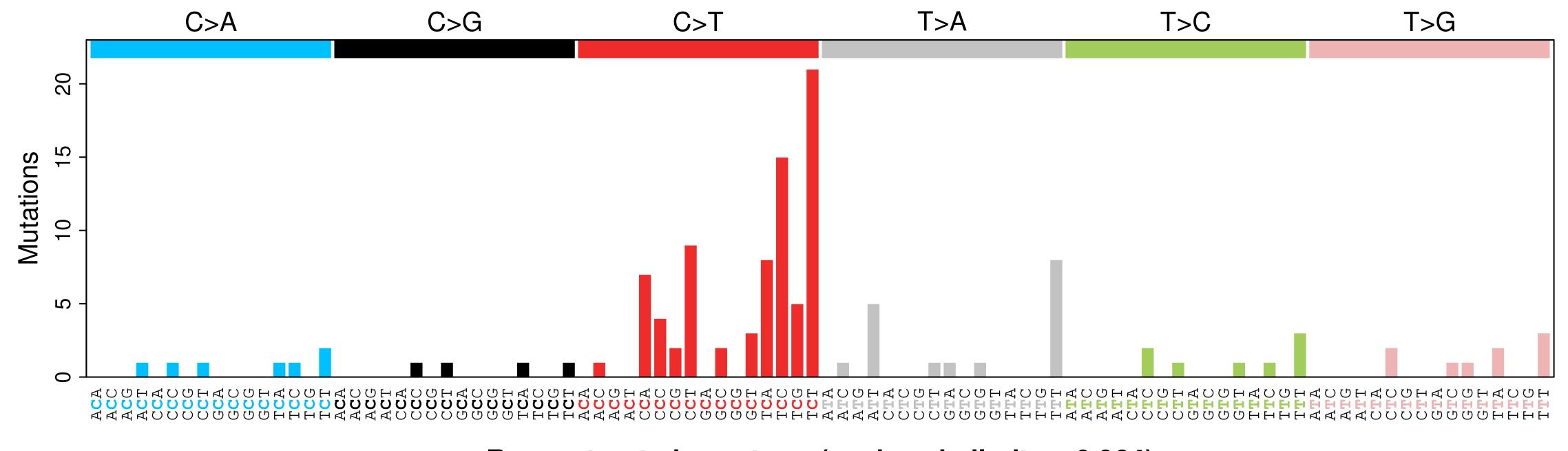
CATD0653a (132 mutations)



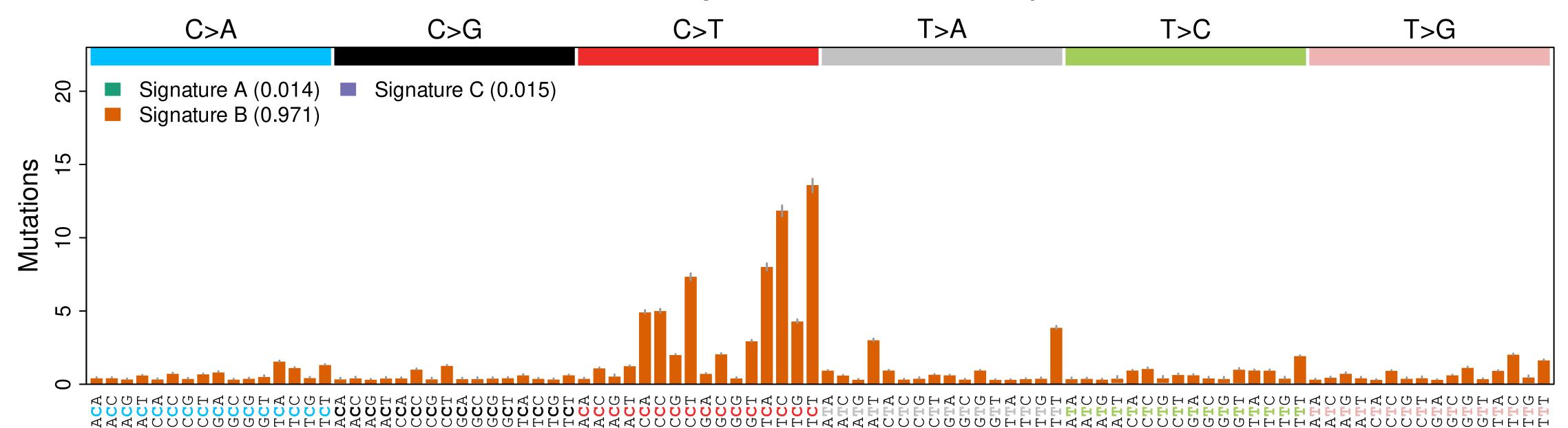
Reconstructed spectrum (cosine similarity = 0.964)



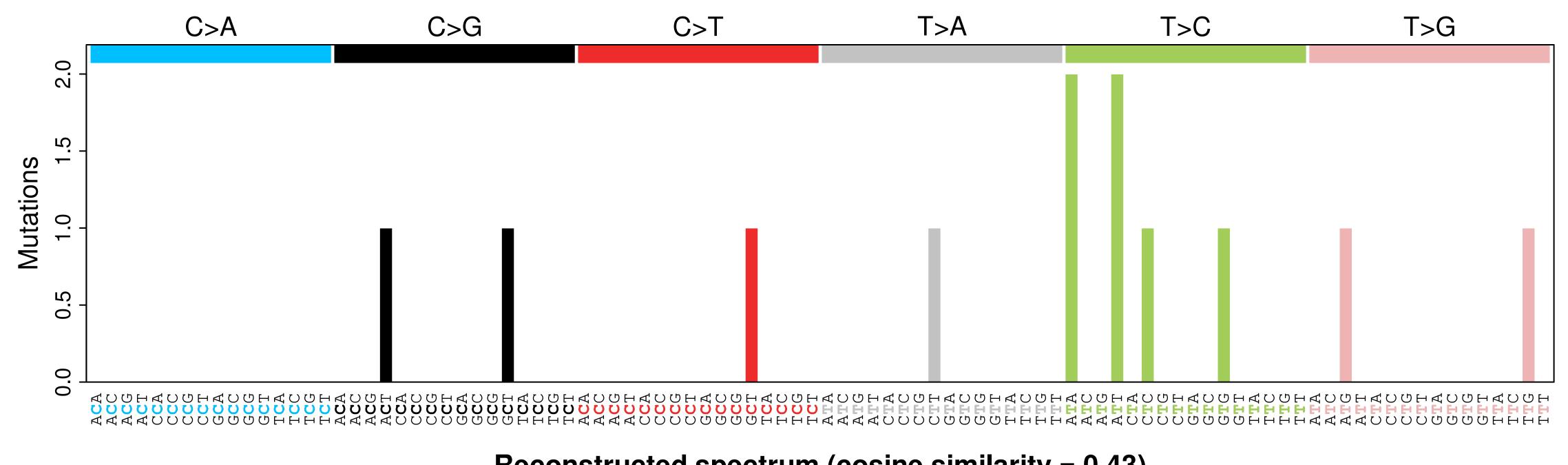
CATD294a (122 mutations)

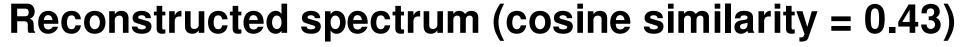


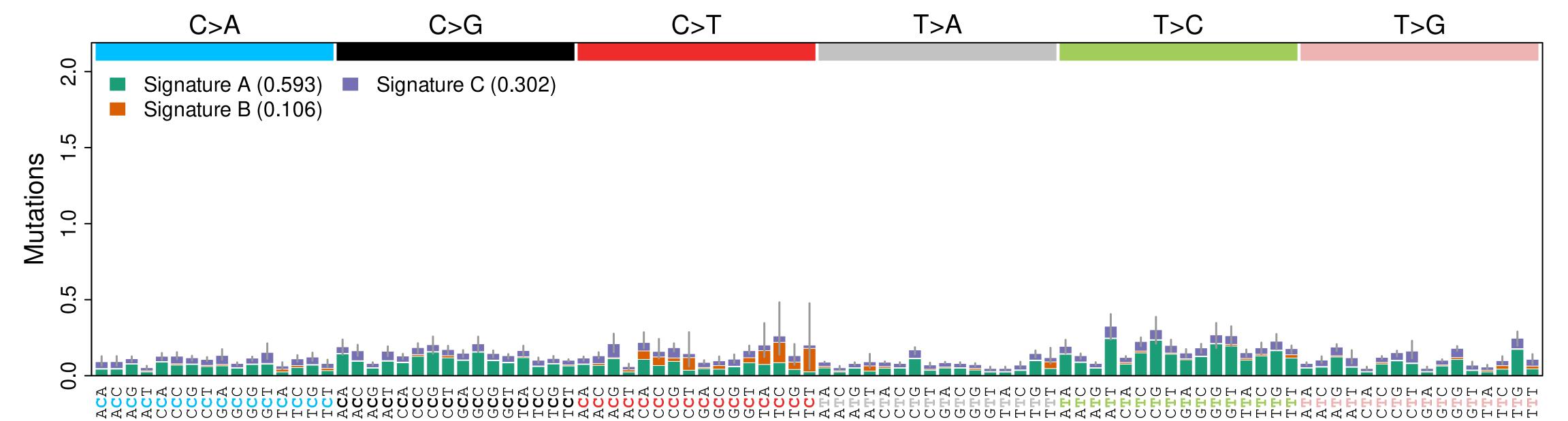
Reconstructed spectrum (cosine similarity = 0.964)



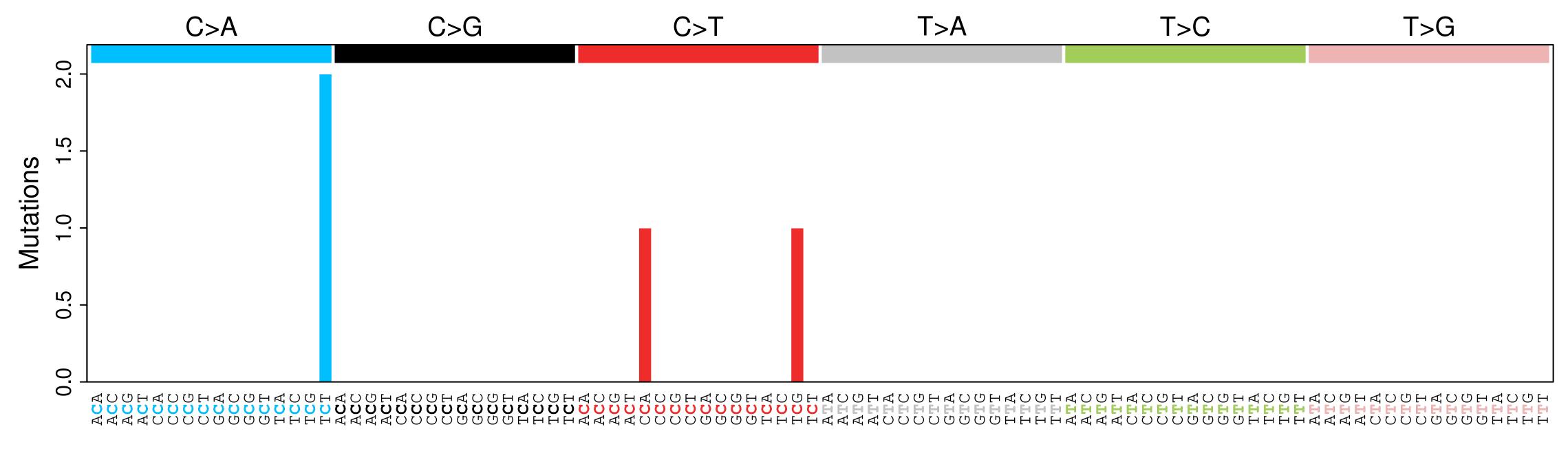
CATD283a (12 mutations)



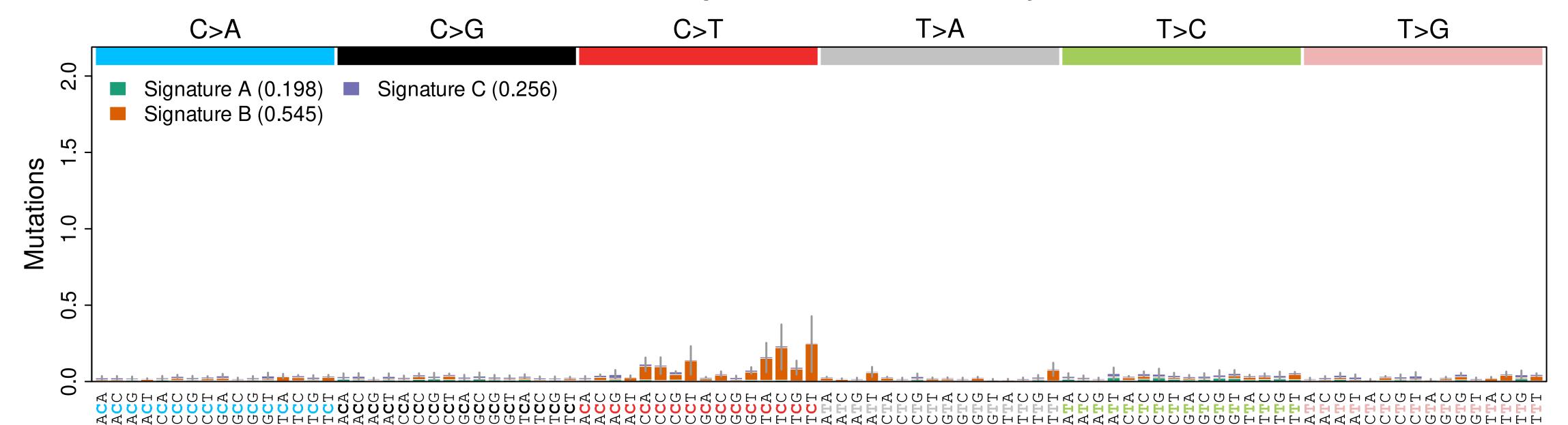




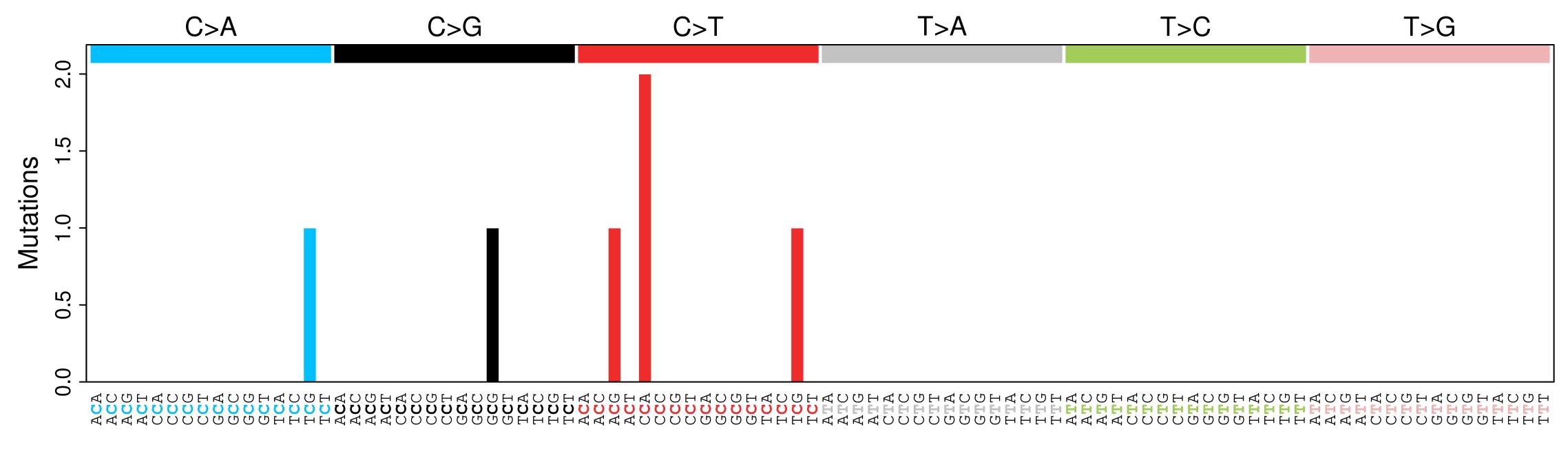
CATD0645a (4 mutations)



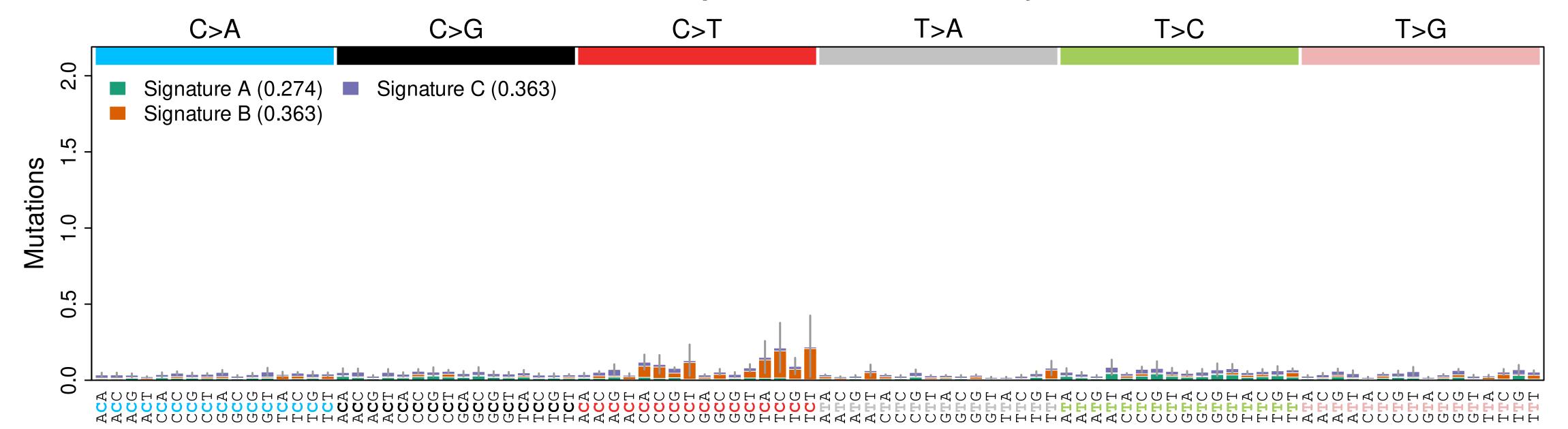
Reconstructed spectrum (cosine similarity = 0.205)



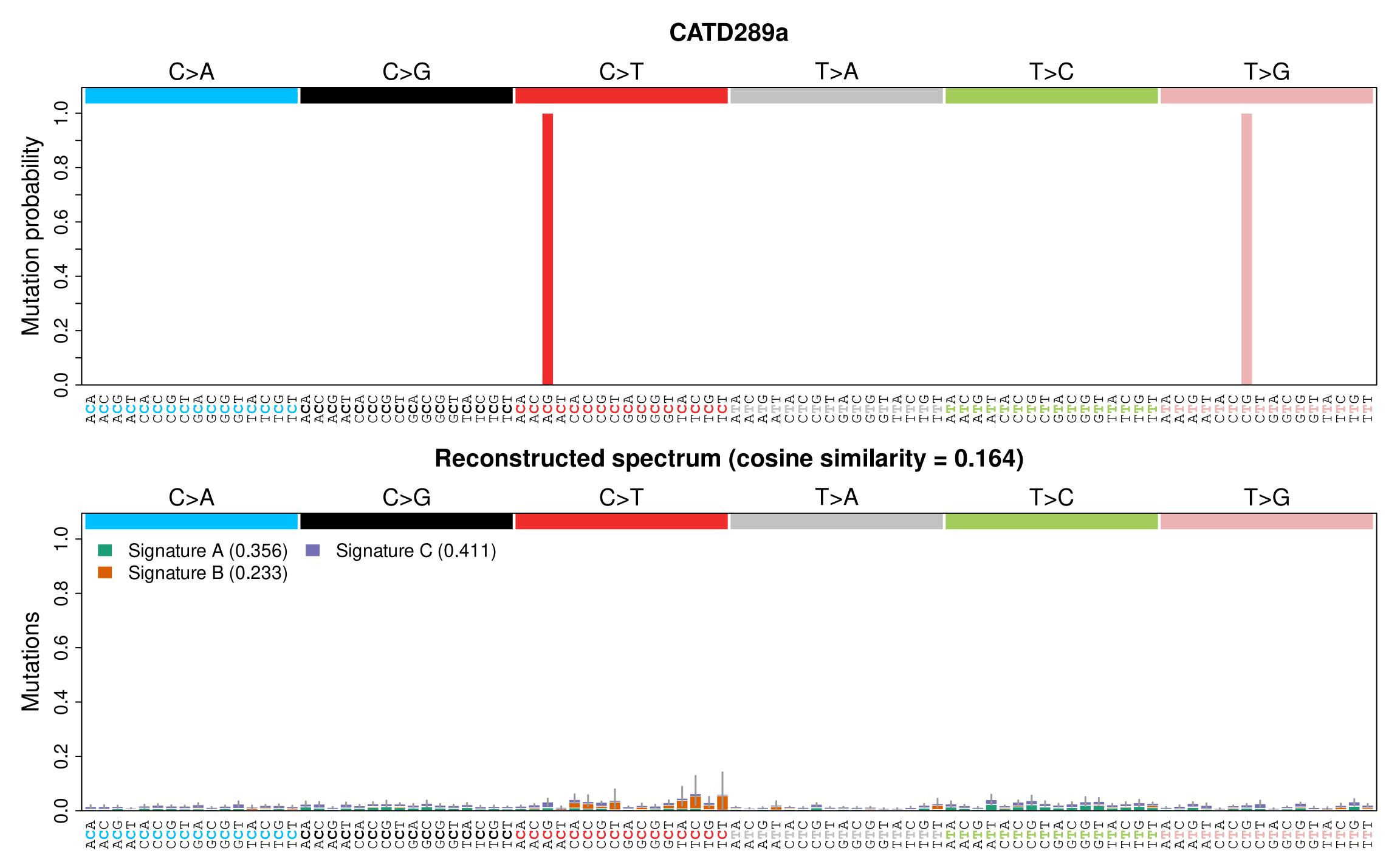
CATD0670a (6 mutations)



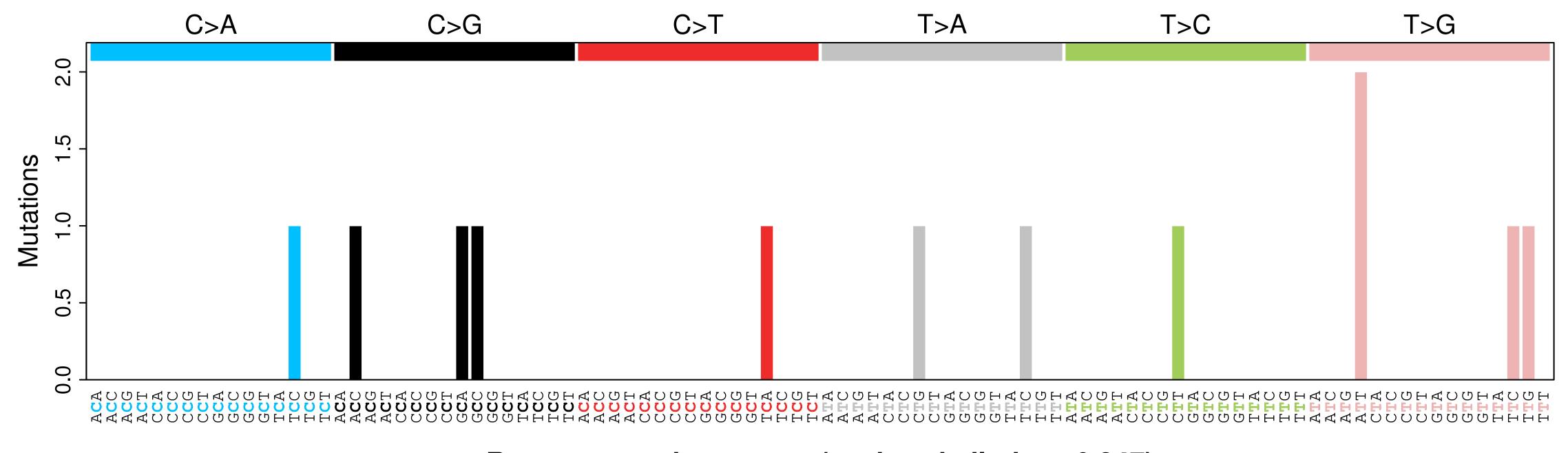
Reconstructed spectrum (cosine similarity = 0.282)

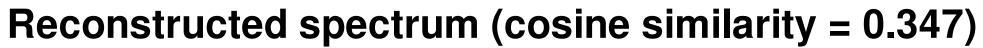


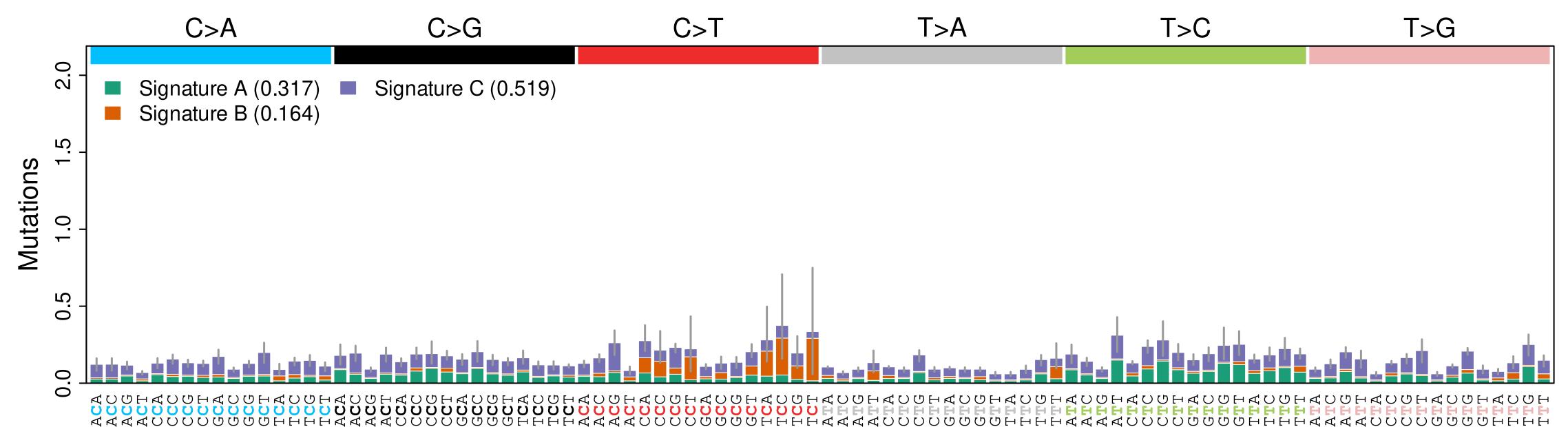
CATD0650a (4 mutations) T>G C>A C>G C>T T>A T>C 2.0 5 Mutations 0.5 0.0 **Reconstructed spectrum (cosine similarity = 0.174)** C>A C>G T>A T>C T>G C>T 2.0 Signature A (0.367) Signature C (0.422) Signature B (0.211) 5 Mutations 2 0



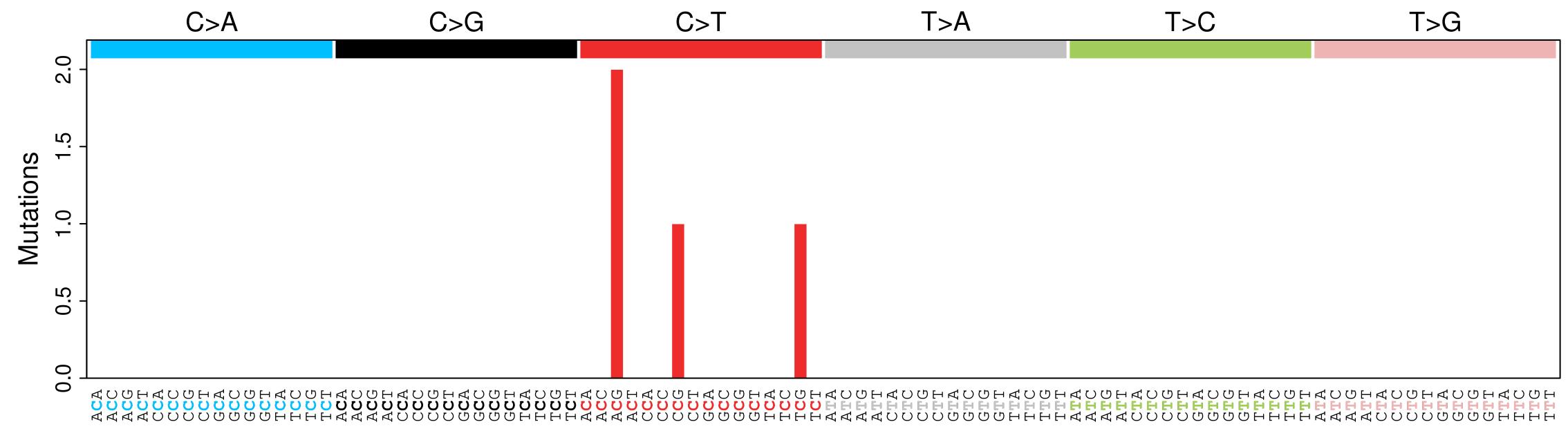
CATD0144a (12 mutations)



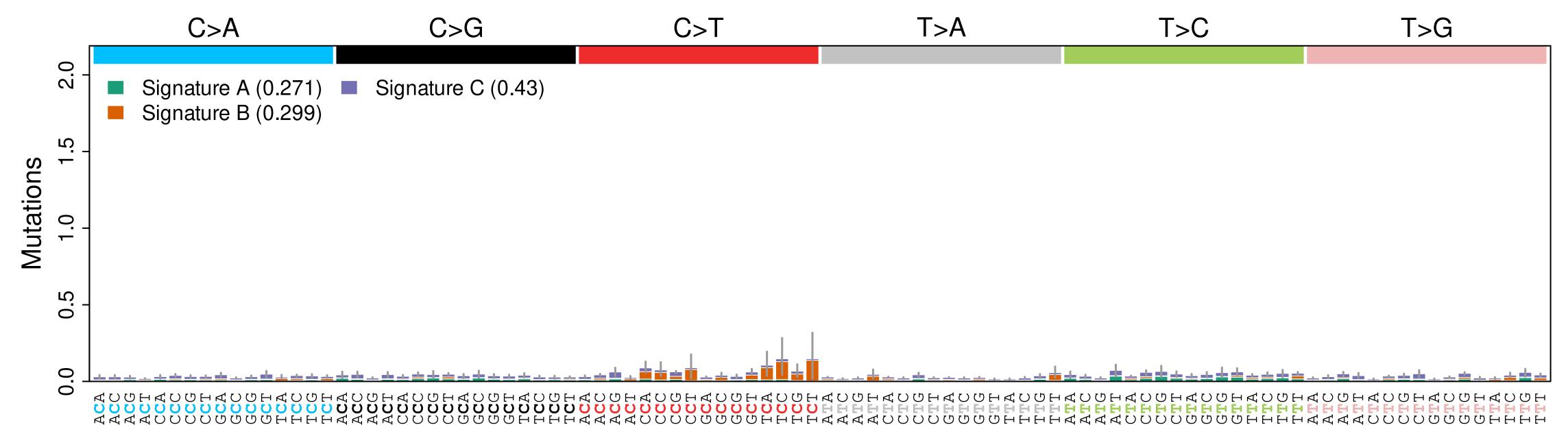




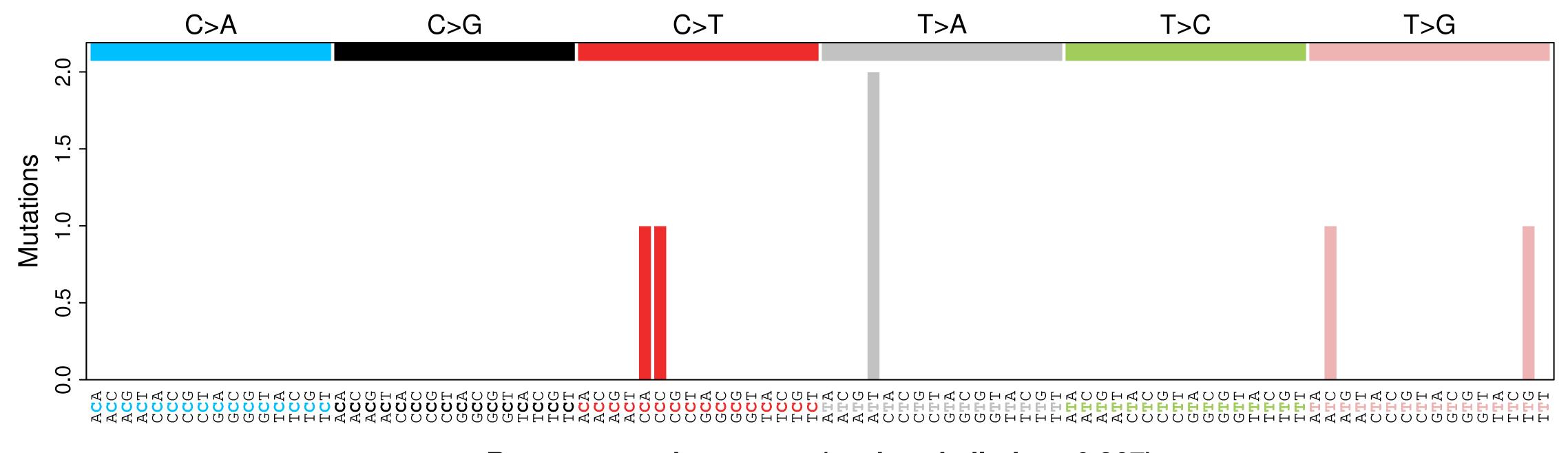
CATD293a (4 mutations) C>A C>G C>T T>A



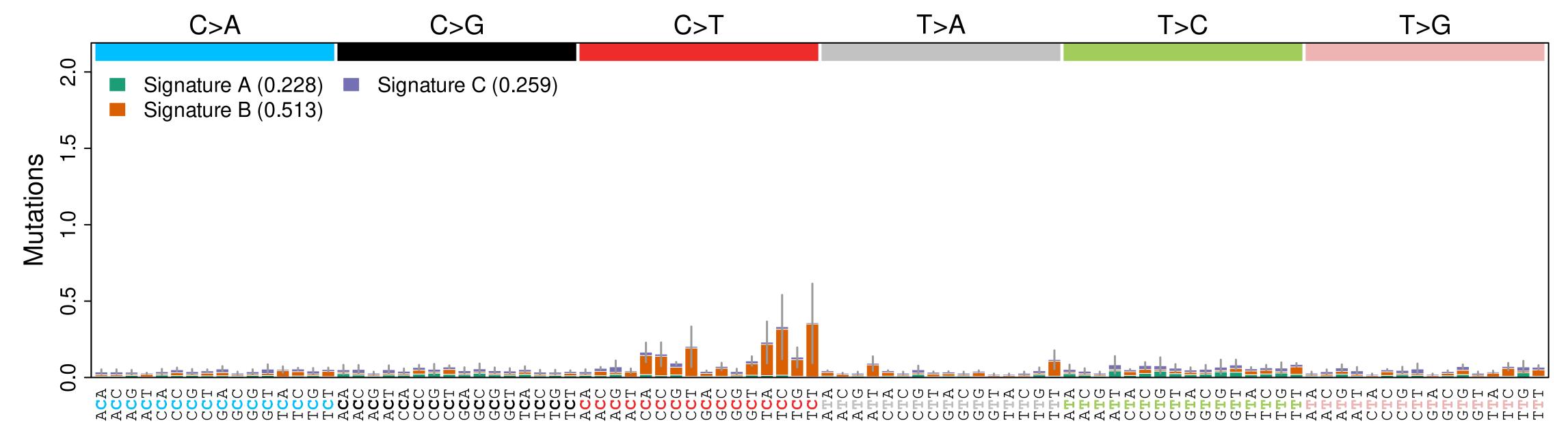
Reconstructed spectrum (cosine similarity = 0.221)



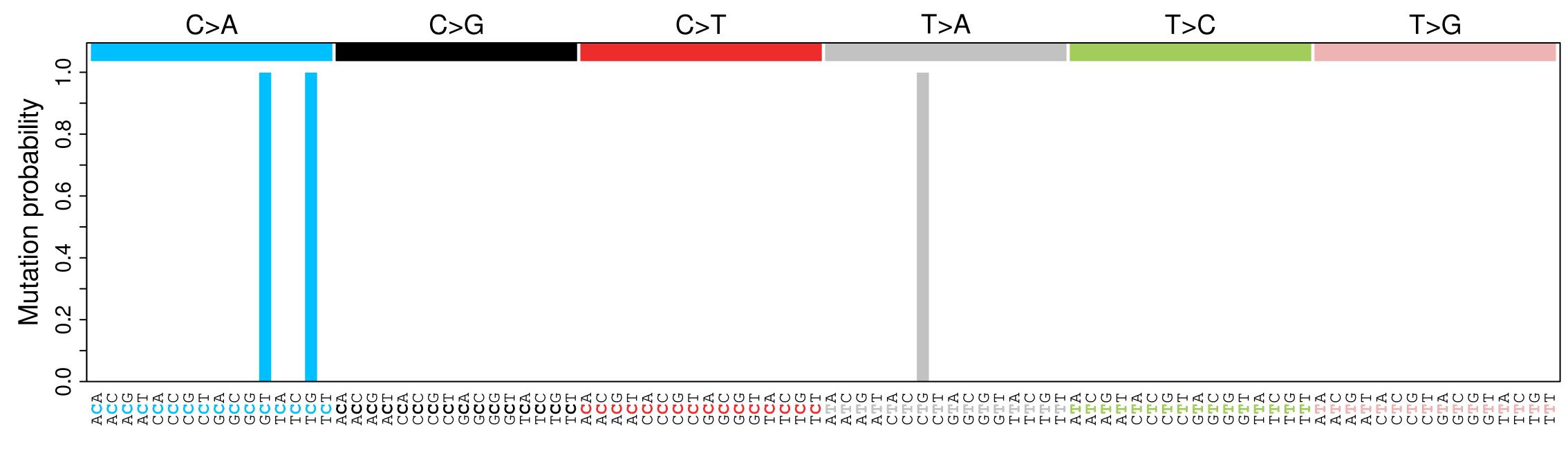
CATD0668a (6 mutations)



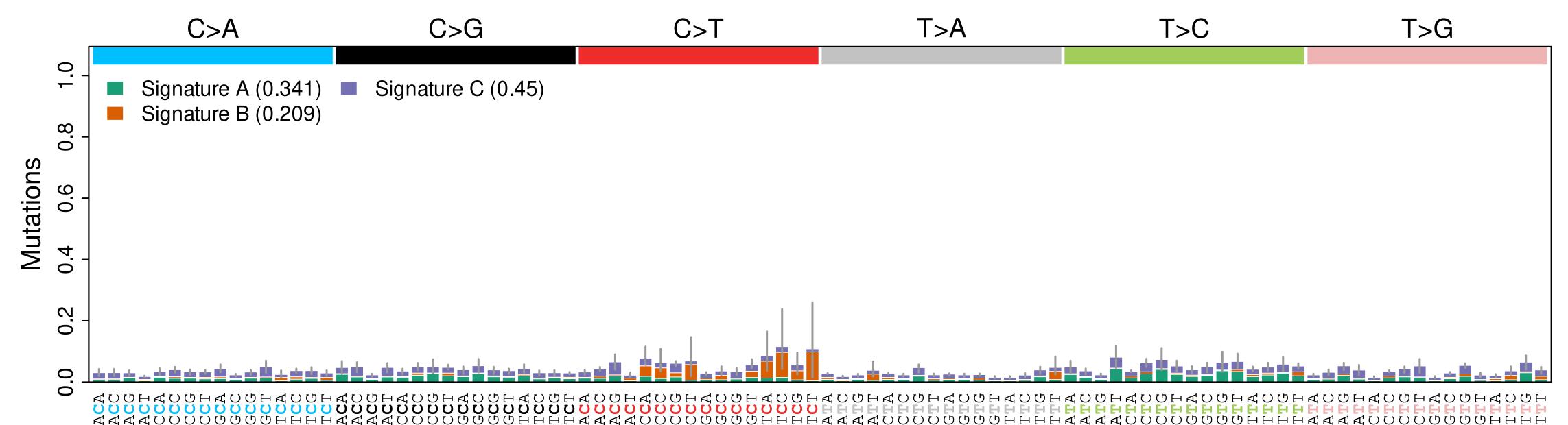
Reconstructed spectrum (cosine similarity = 0.267)



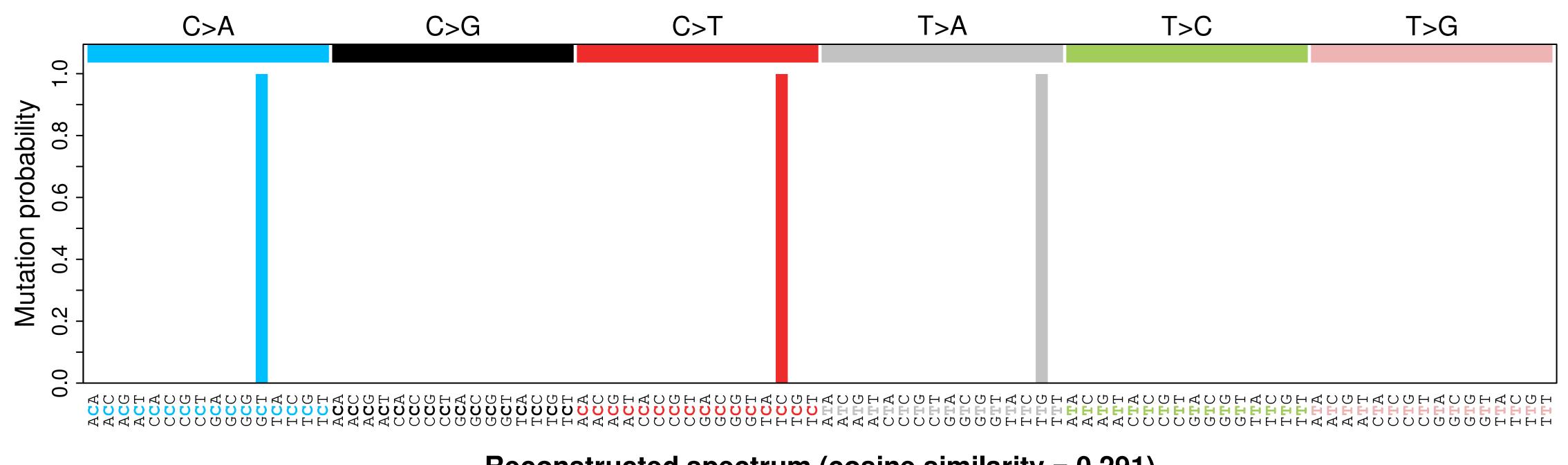


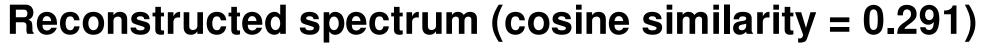


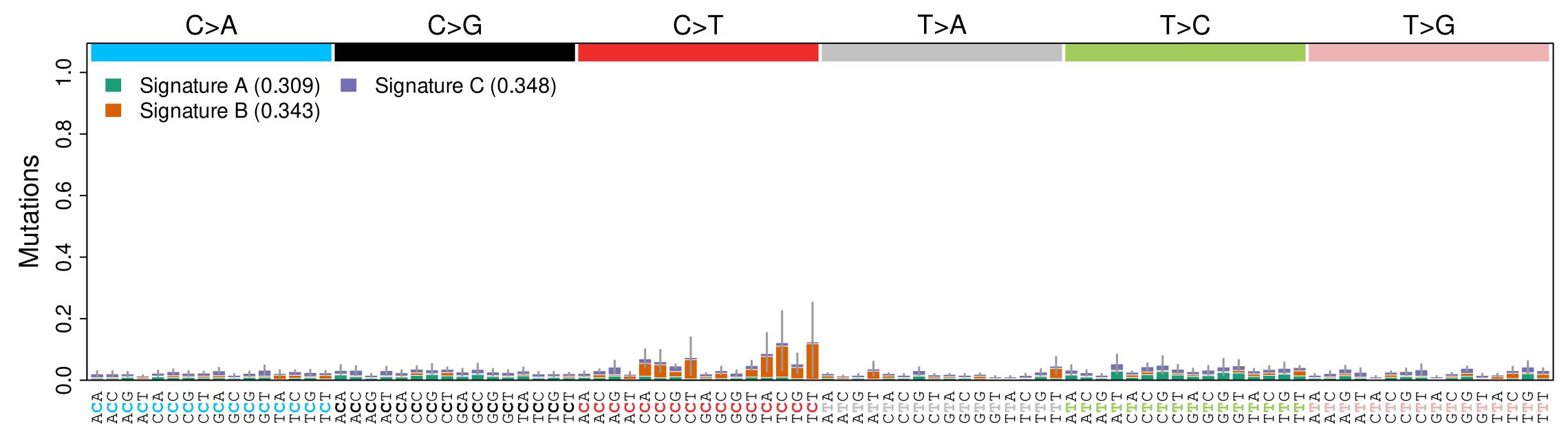




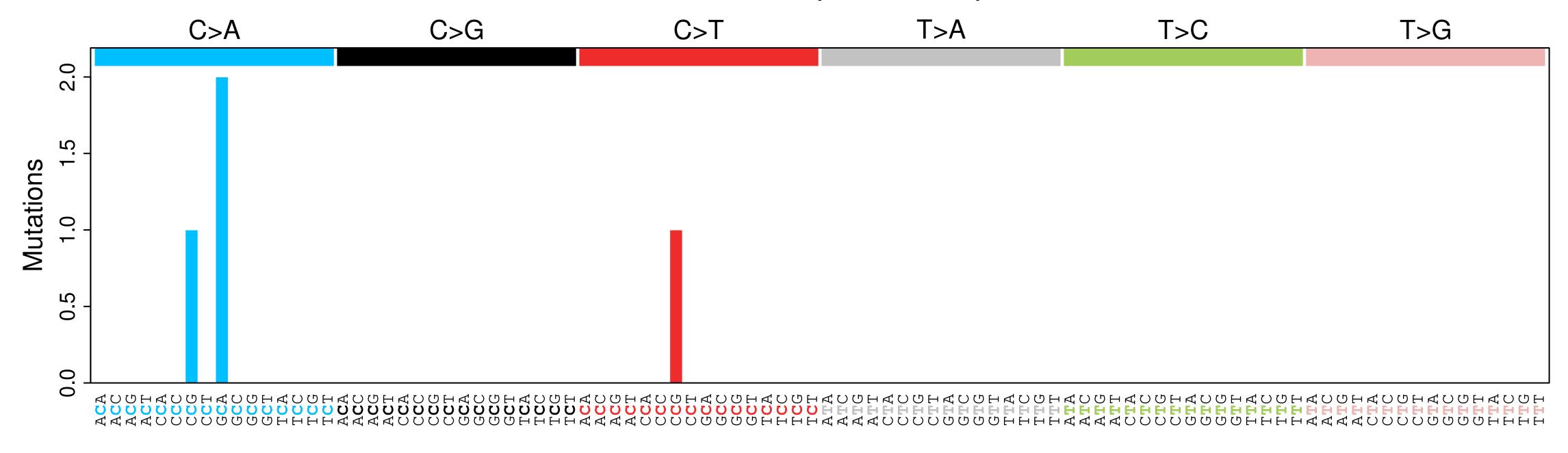




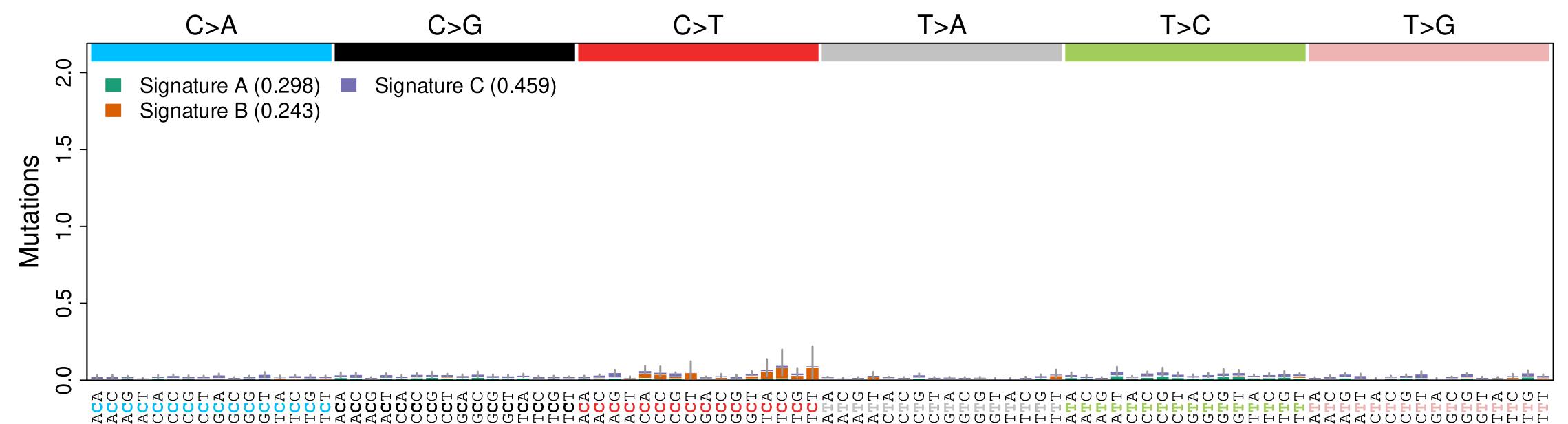




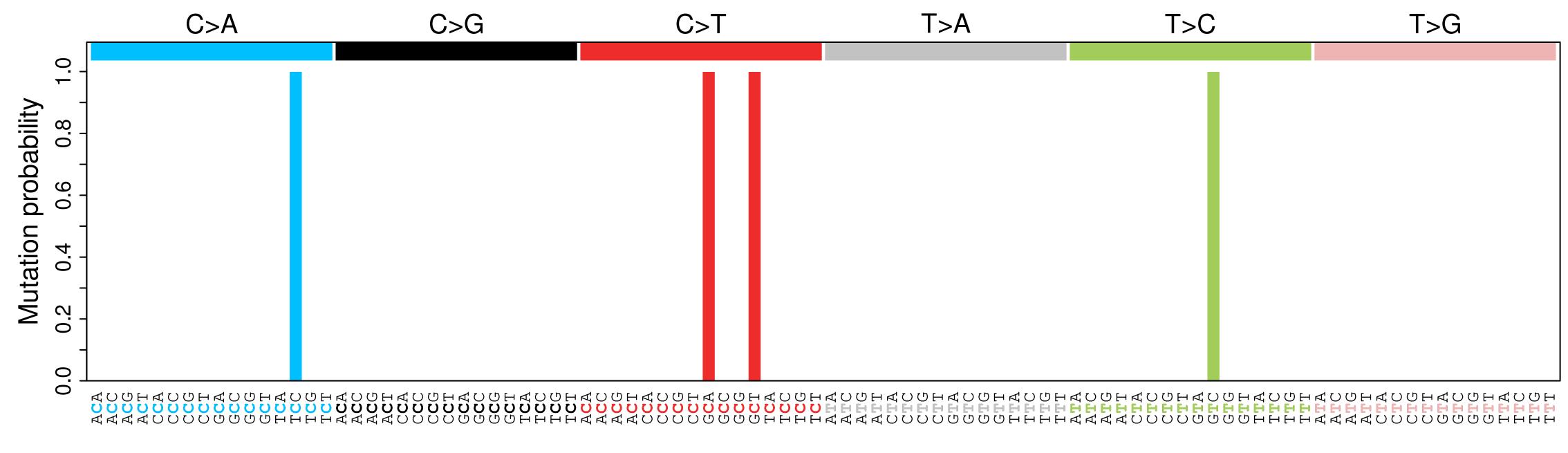
CATD0143a (4 mutations)

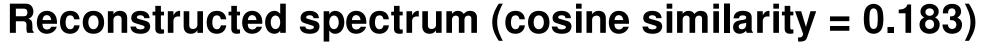


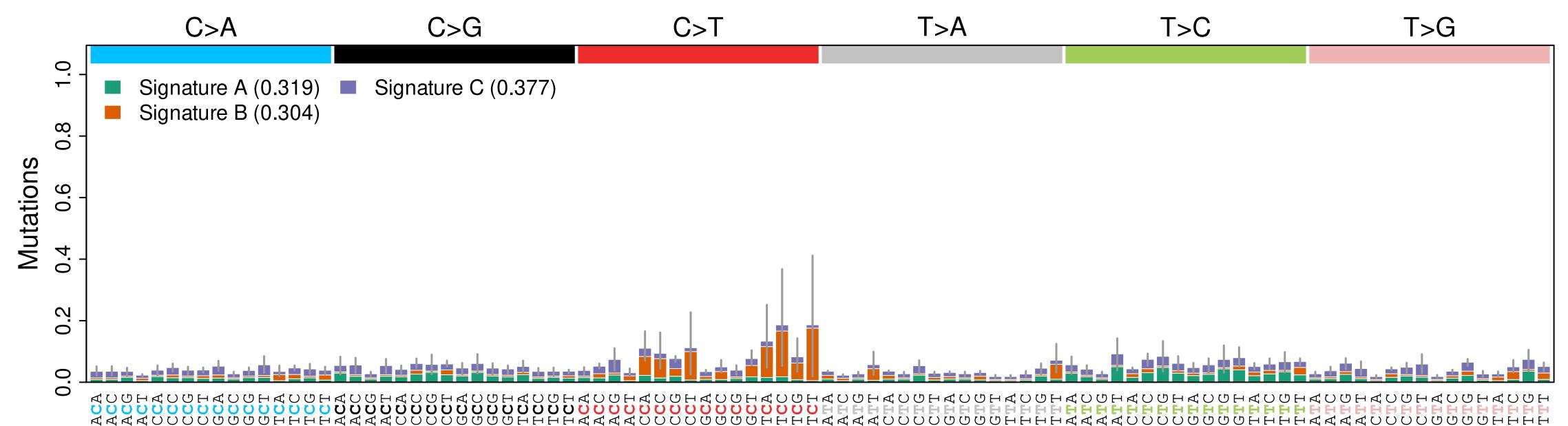
Reconstructed spectrum (cosine similarity = 0.165)



CATD0632a



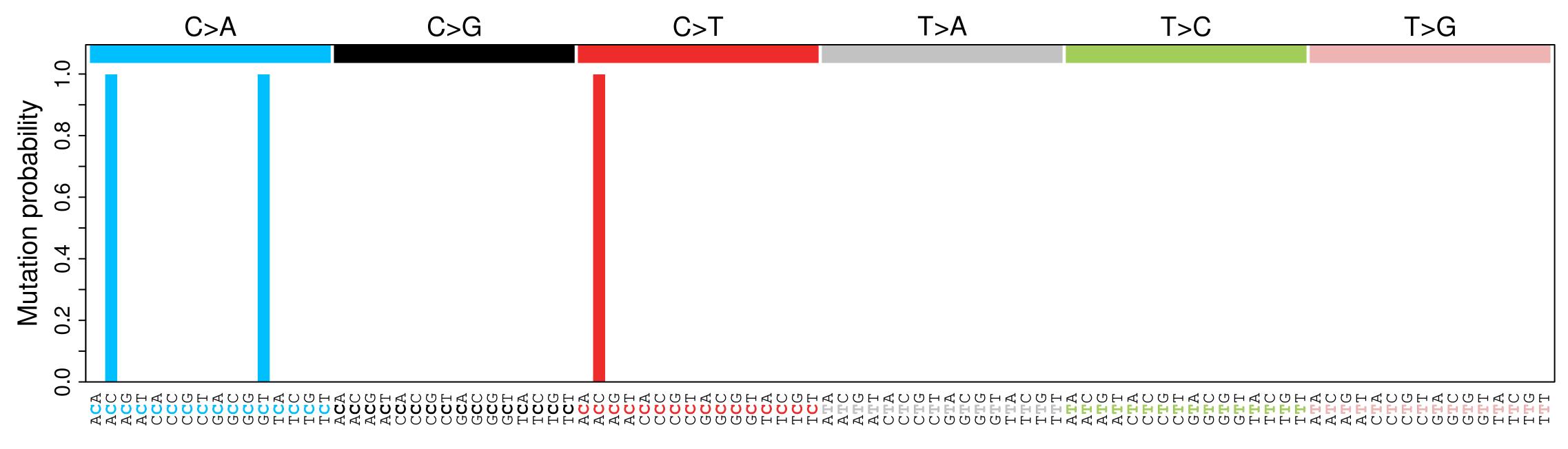




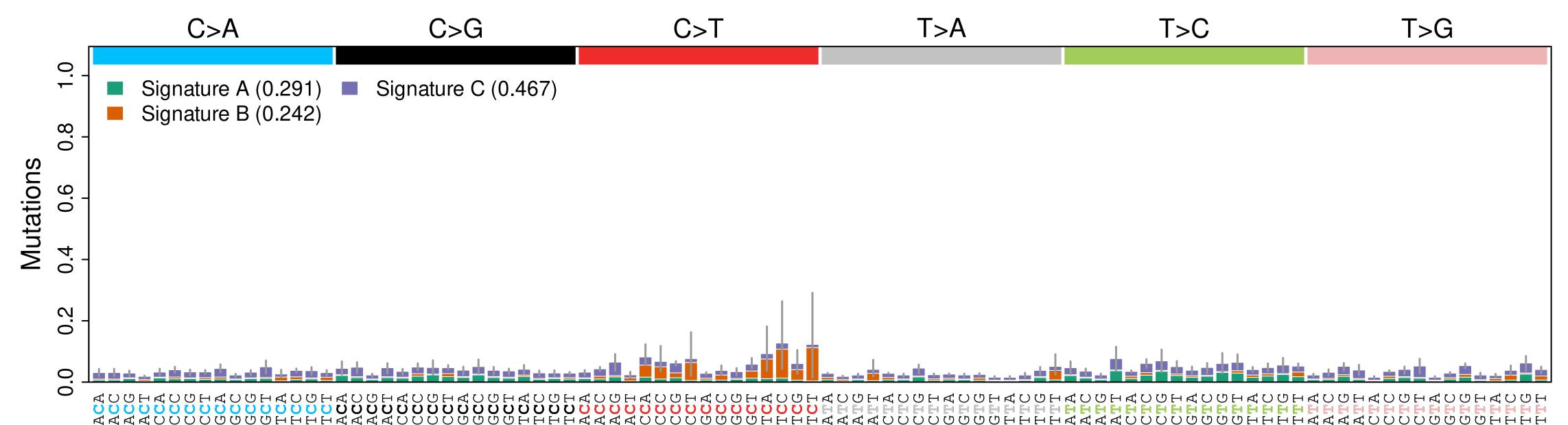
CATD0633a (3 mutations) T>G C>A C>G C>T T>A T>C 2.0 1.5 Mutations 0.0 Reconstructed spectrum (cosine similarity = 0.094) C>A C>G T>A T>C T>G C>T 2.0 Signature A (0.293) Signature C (0.467) Signature B (0.239) 5 Mutations 5 0

0

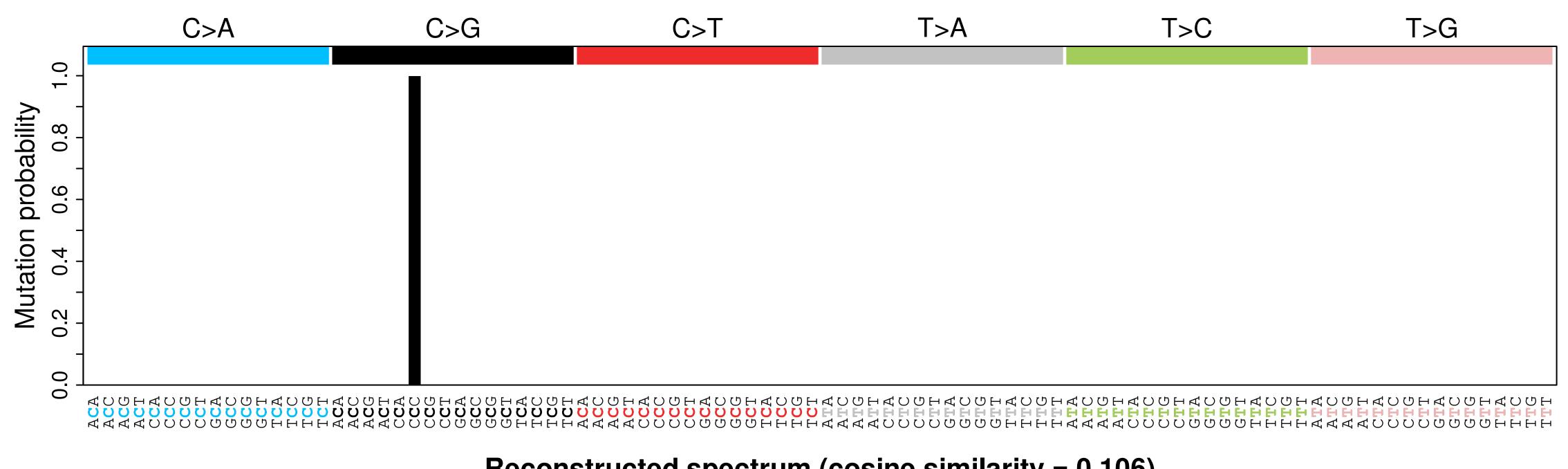
CATD0157a



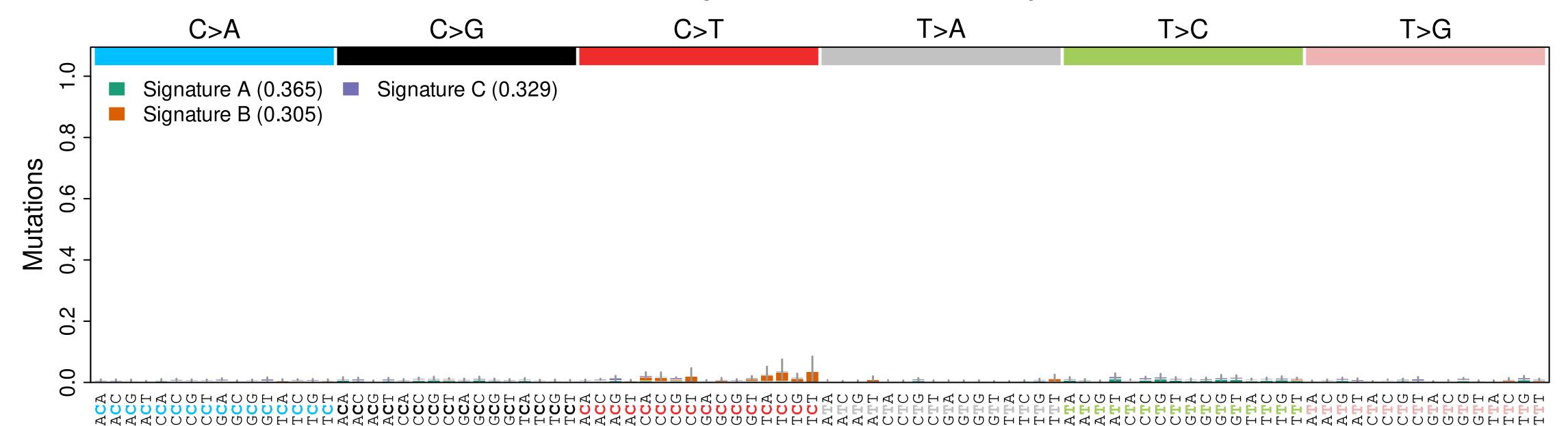




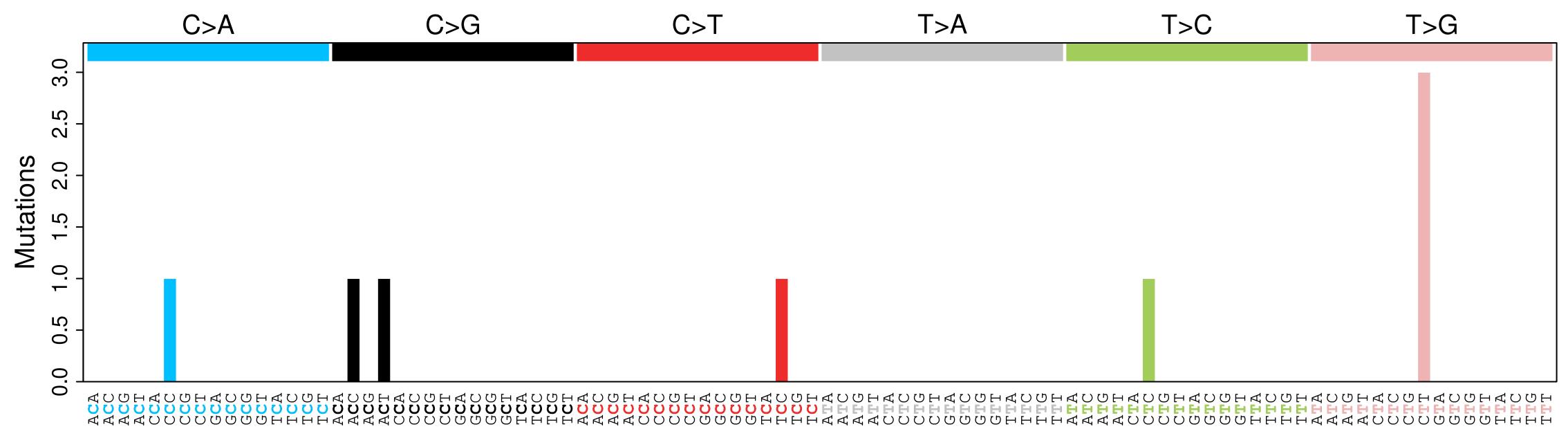




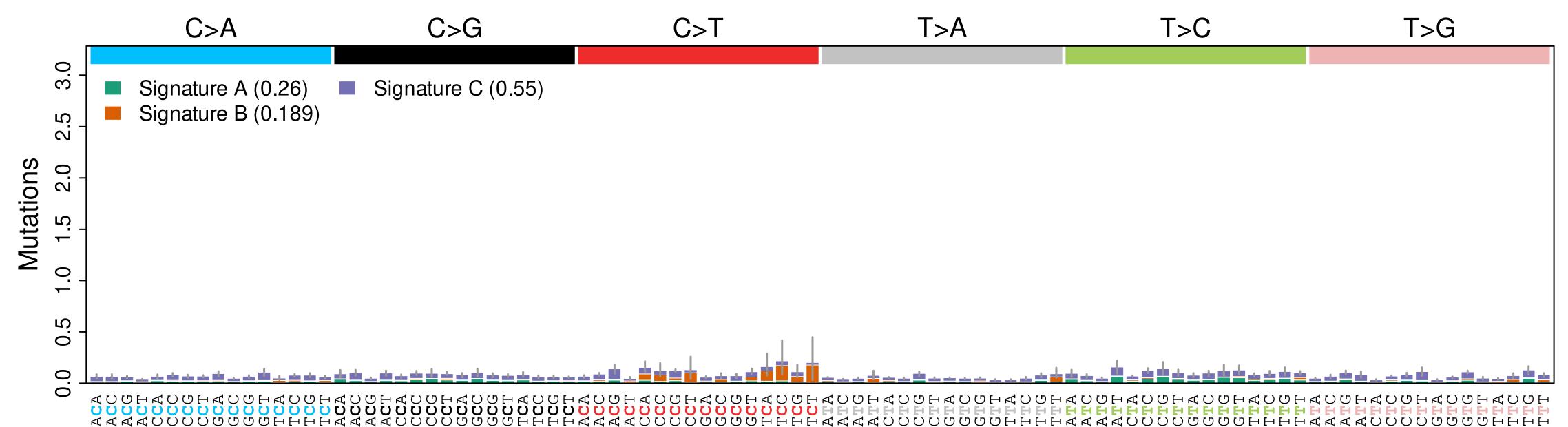




CATD0145a (8 mutations) C>A C>G C>T T>A

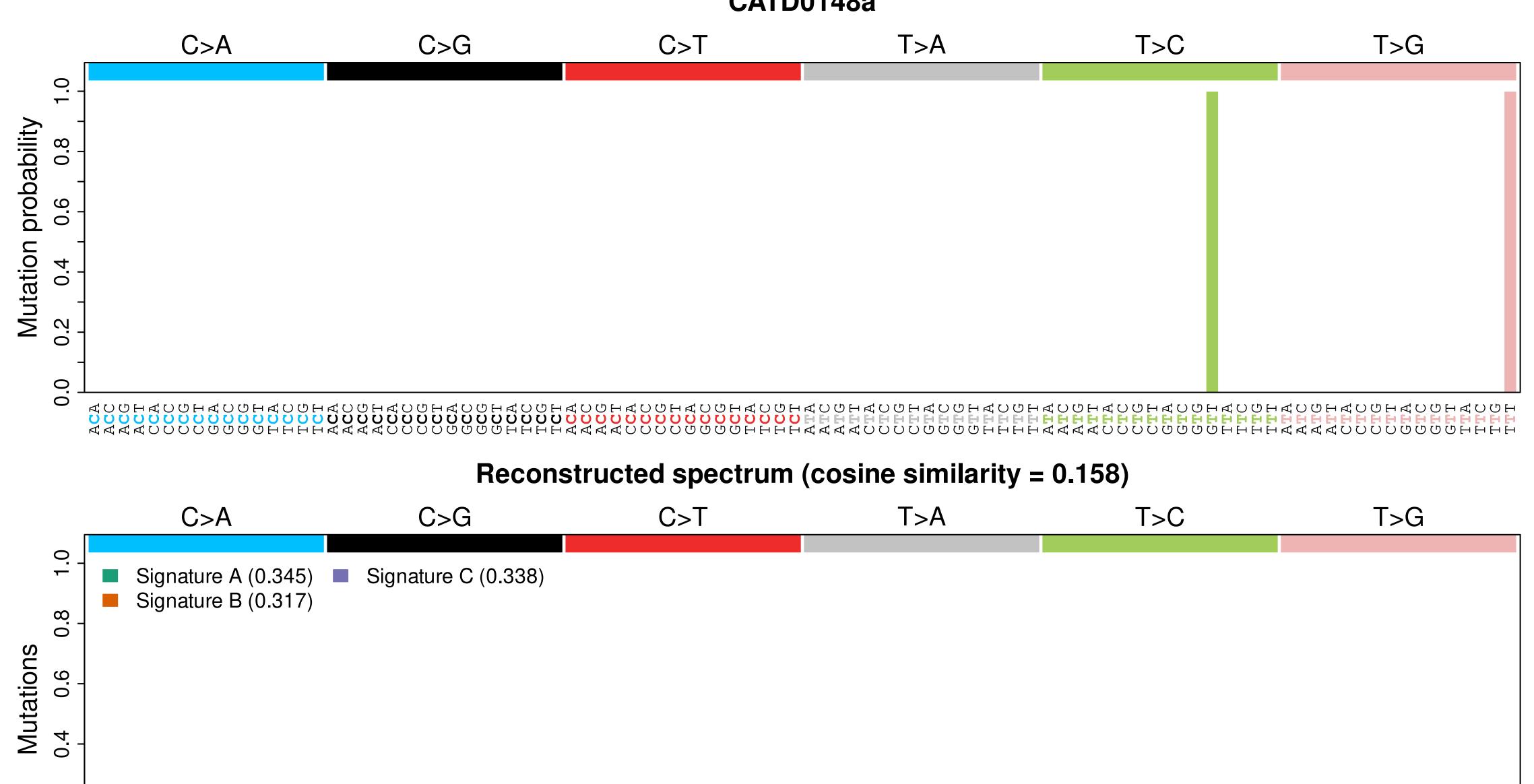


Reconstructed spectrum (cosine similarity = 0.292)



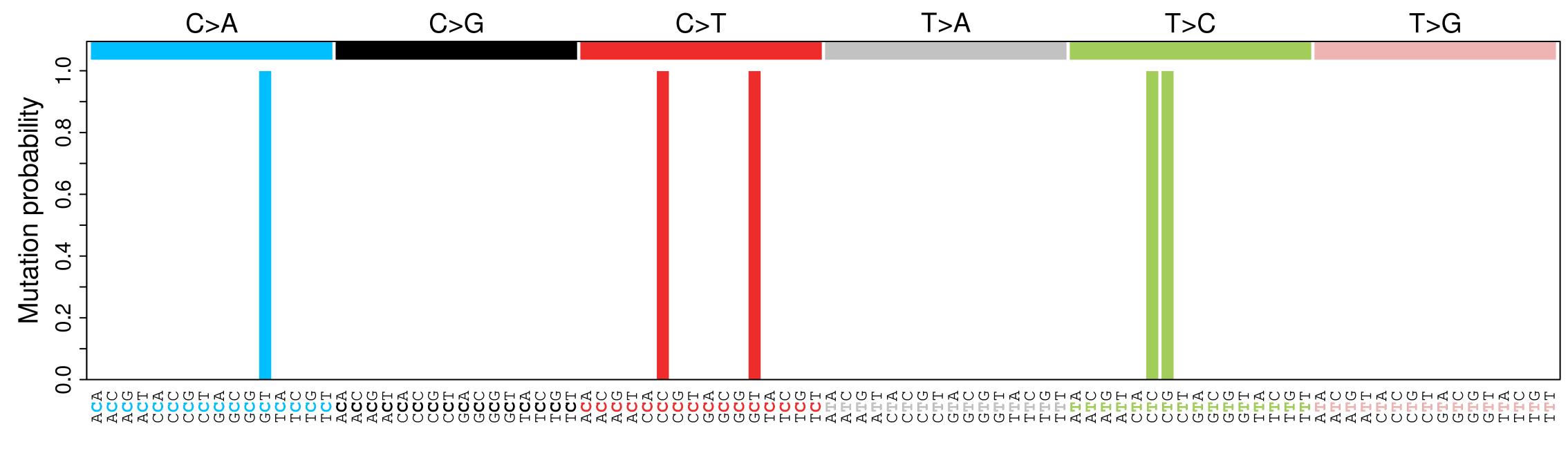
CATD0159a (6 mutations) T>G C>A C>G C>T T>A T>C 3.0 2.5 Mutations 2.0 1.5 0.5 0 **Reconstructed spectrum (cosine similarity = 0.265)** C>A C>G T>A T>C T>G C>T 3.0 Signature A (0.462) Signature C (0.404) Signature B (0.135) 5 S Mutations 2.0 1.5 0 5 0 0



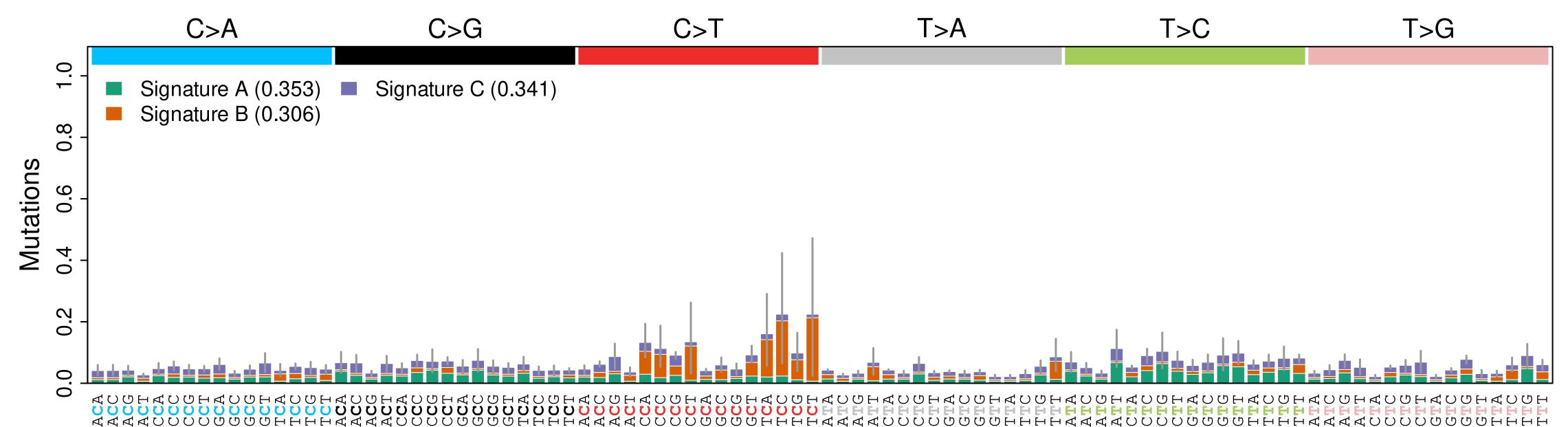


 \mathcal{O} 0

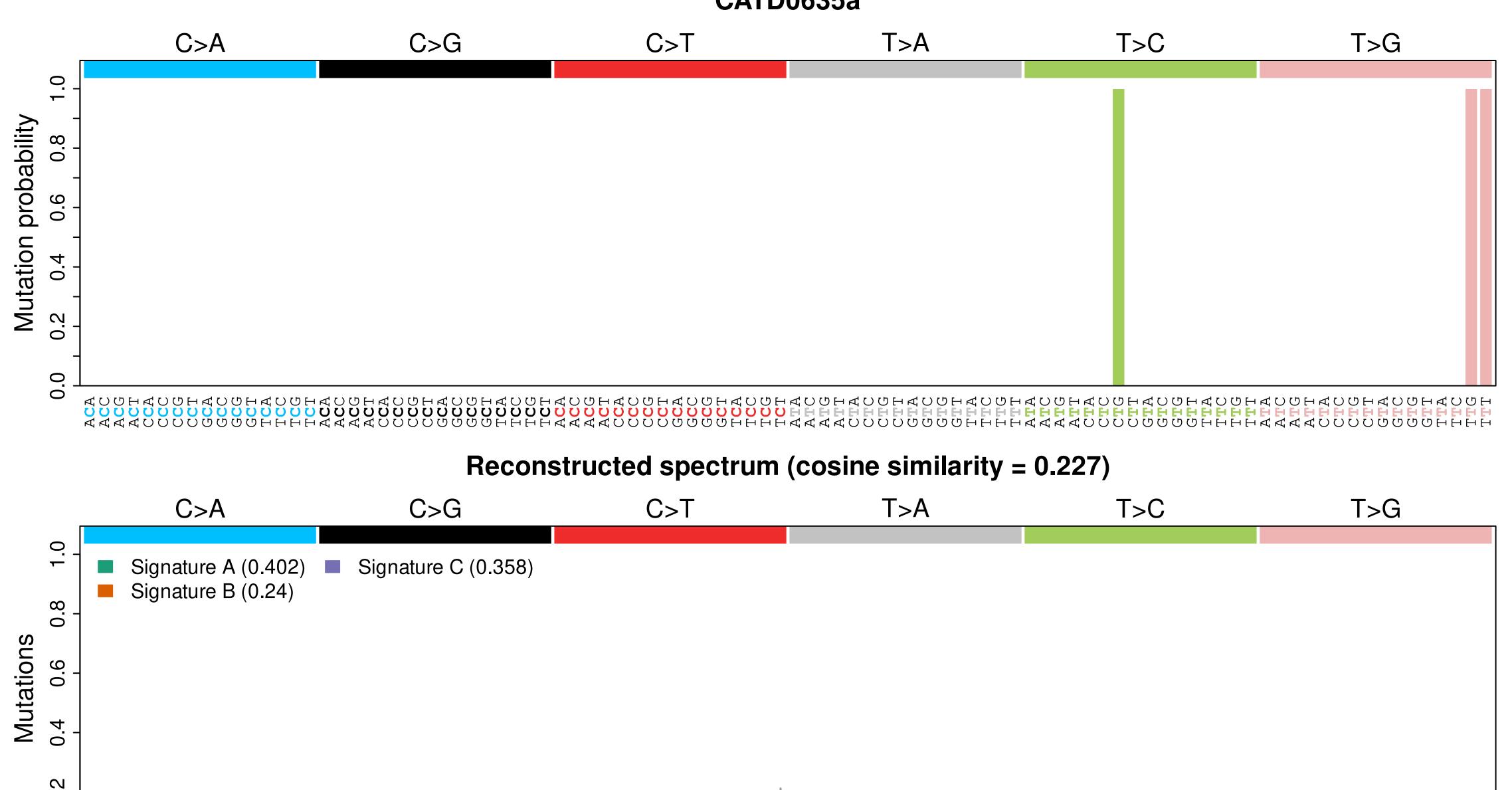
CATD0153a







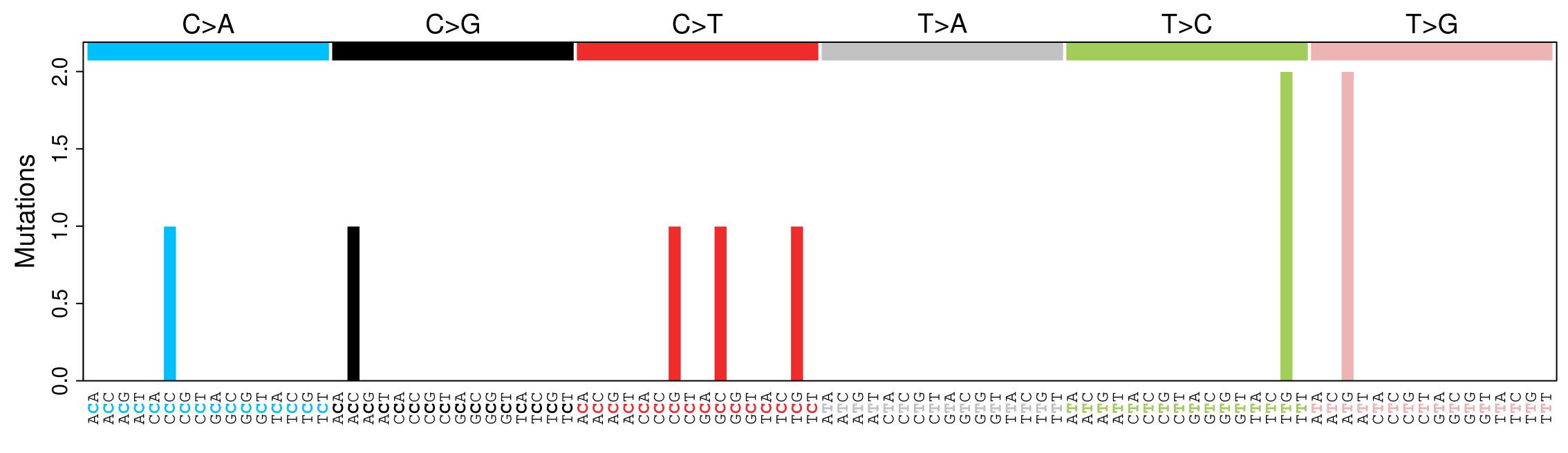




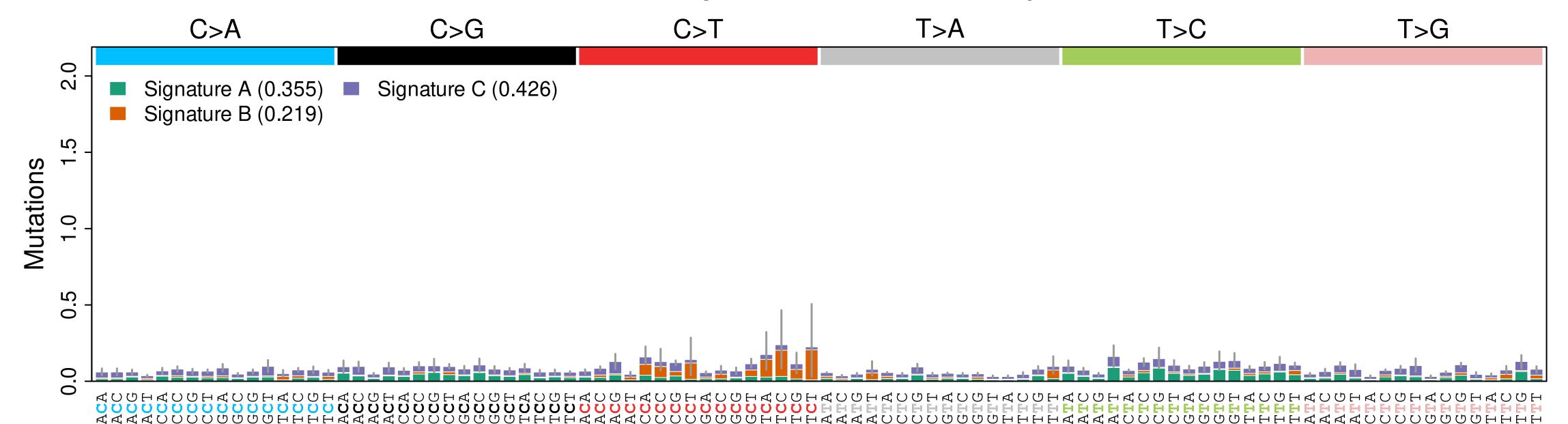
CATD0646a T>C T>G C>A C>G C>T T>A 1.0 Mutation probability 0.8 9.0 0.4 0.2 0.0 **Reconstructed spectrum (cosine similarity = 0.11)** C>A C>G T>A T>C T>G C>T 1.0 Signature A (0.341) Signature C (0.35) Signature B (0.309) 0.8 Mutations 9.0 \mathcal{O} 0

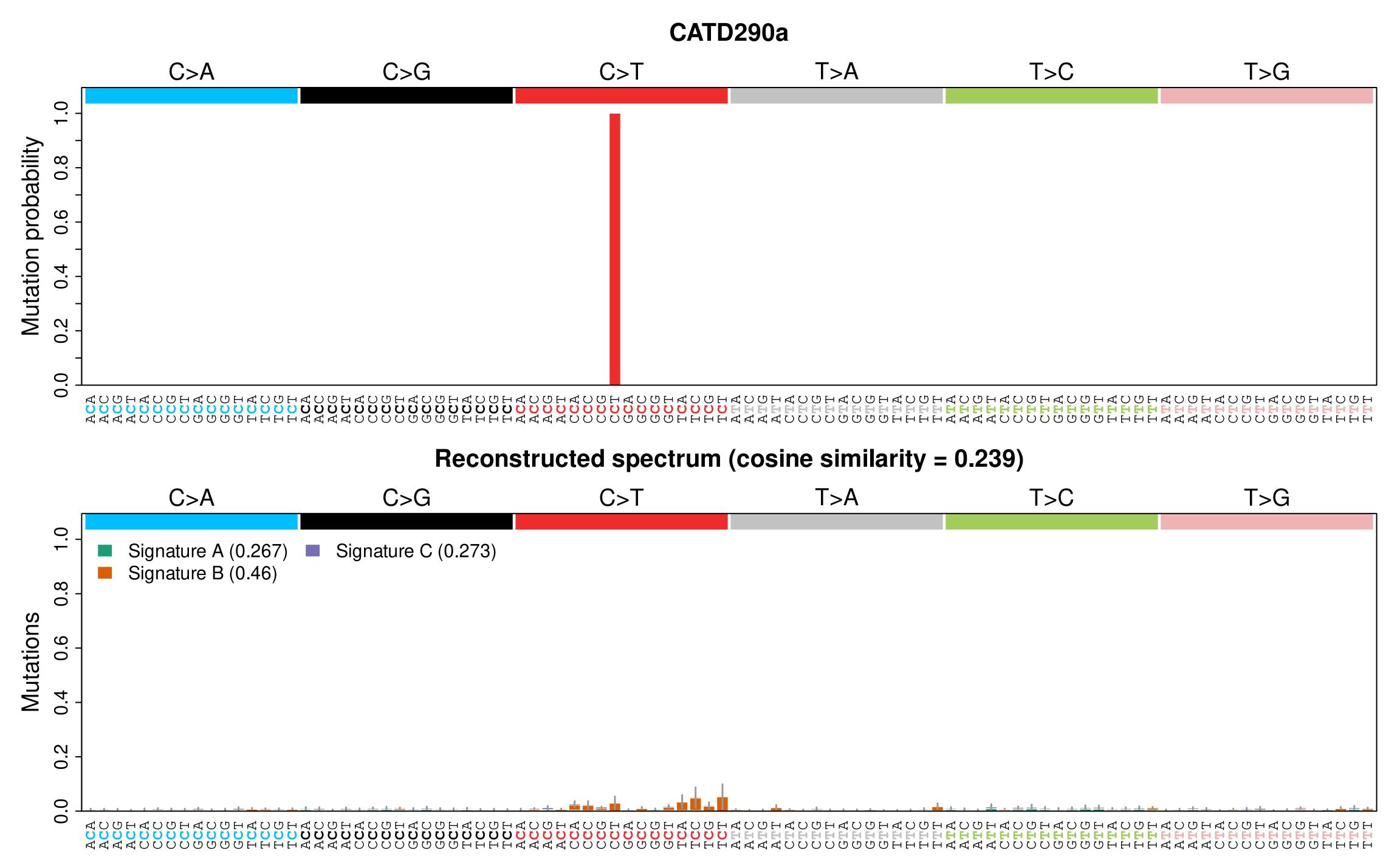
0.0

CATD295a (9 mutations)

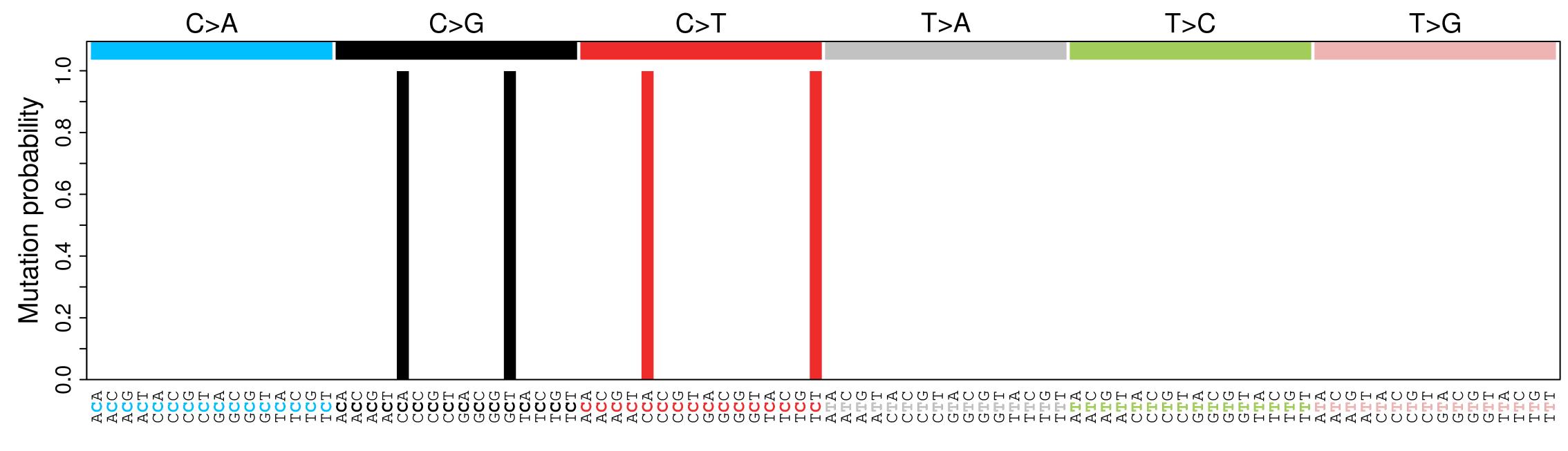


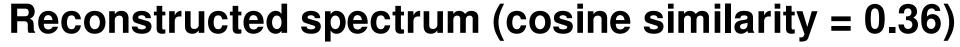


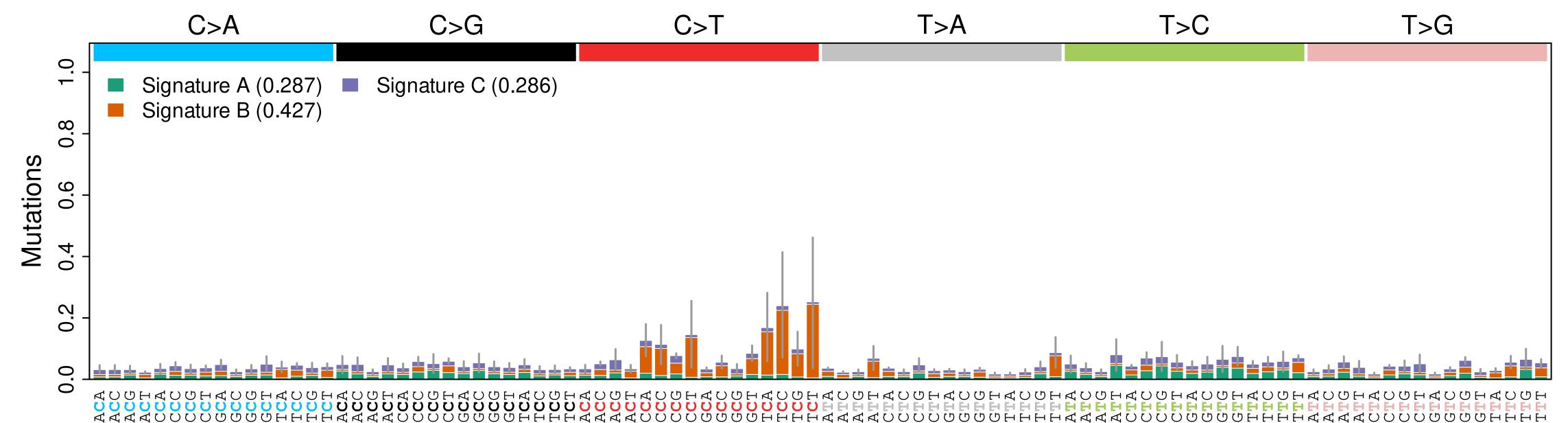




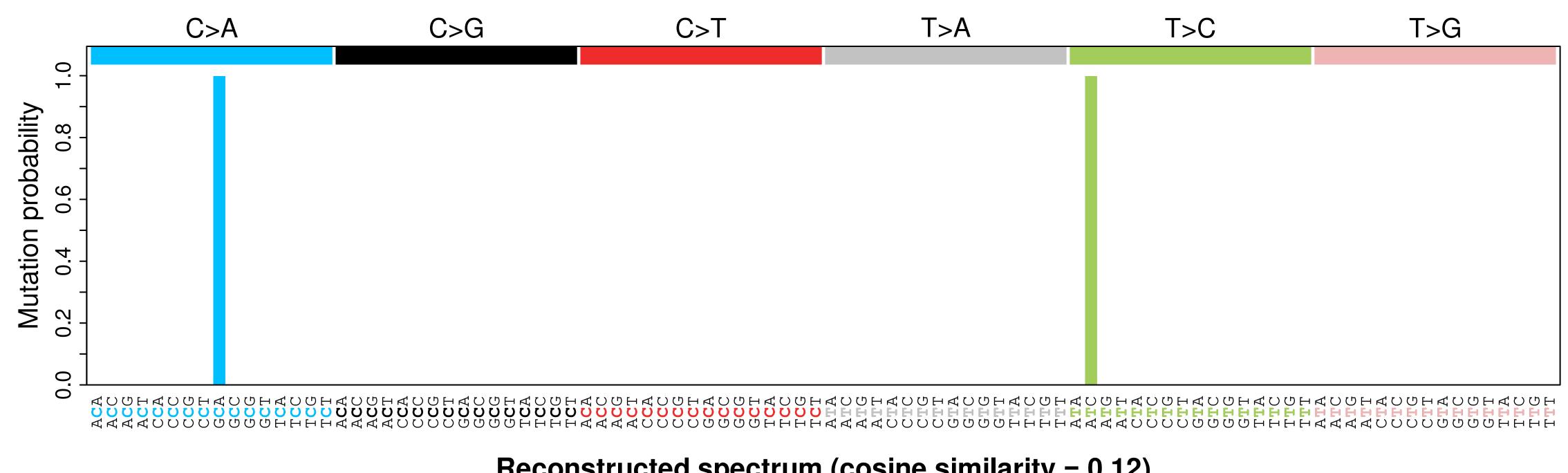
CATD0142a

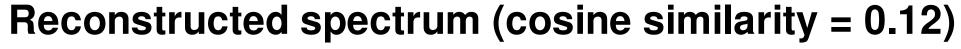


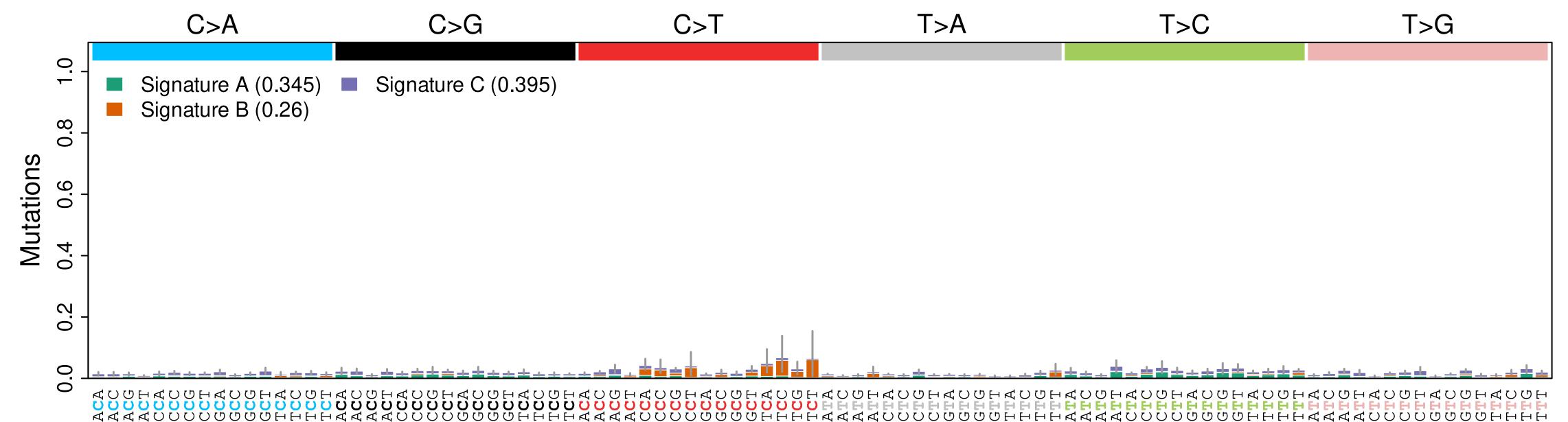




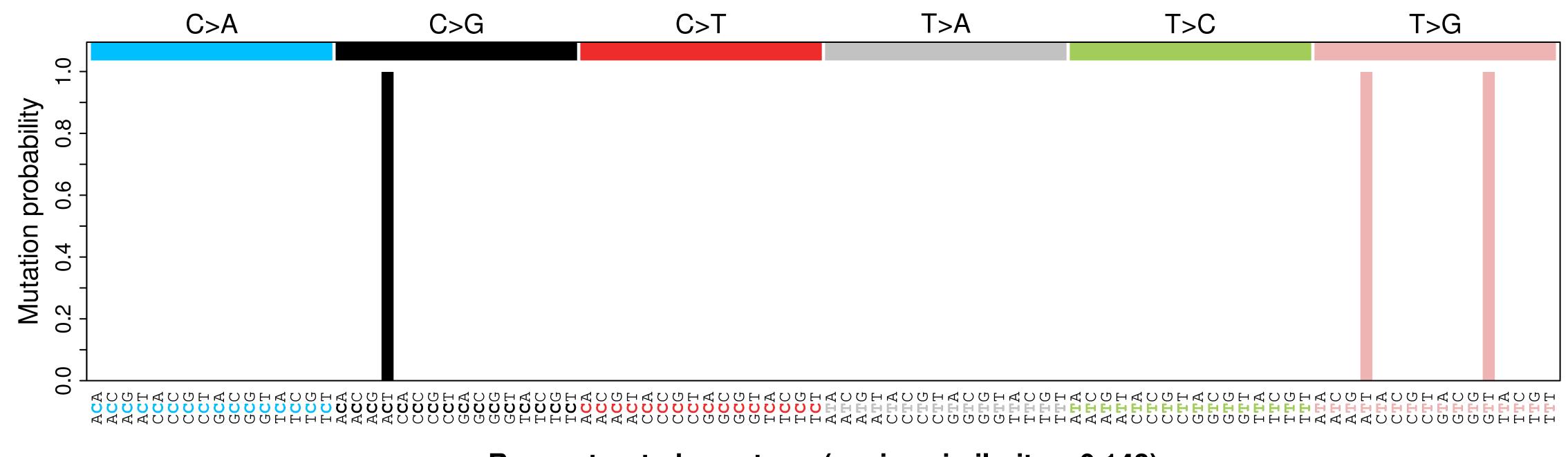


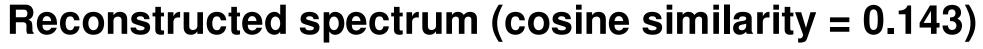


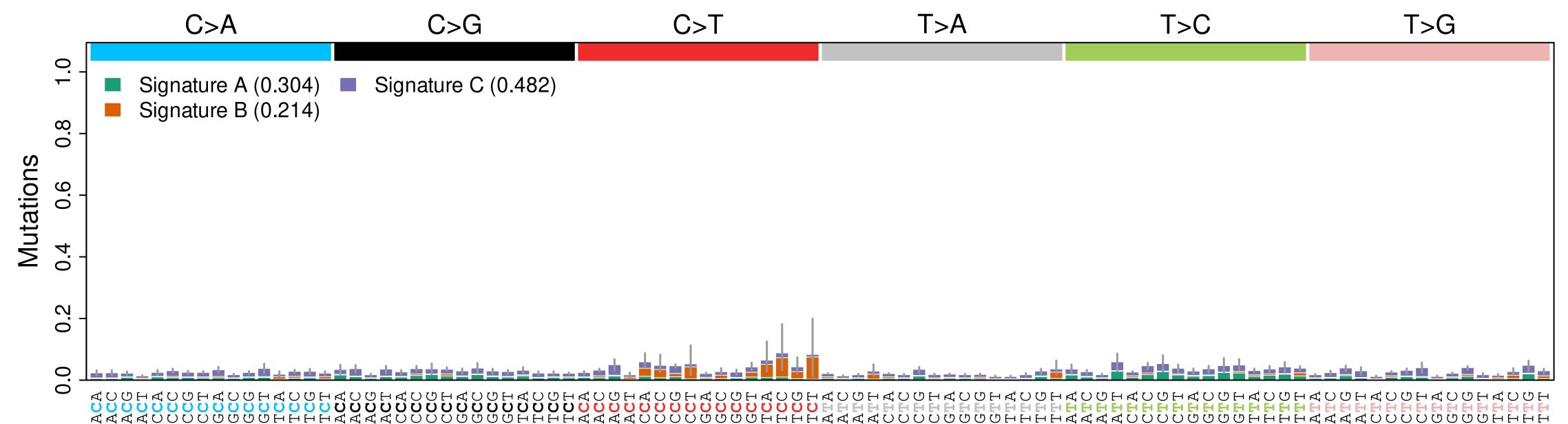




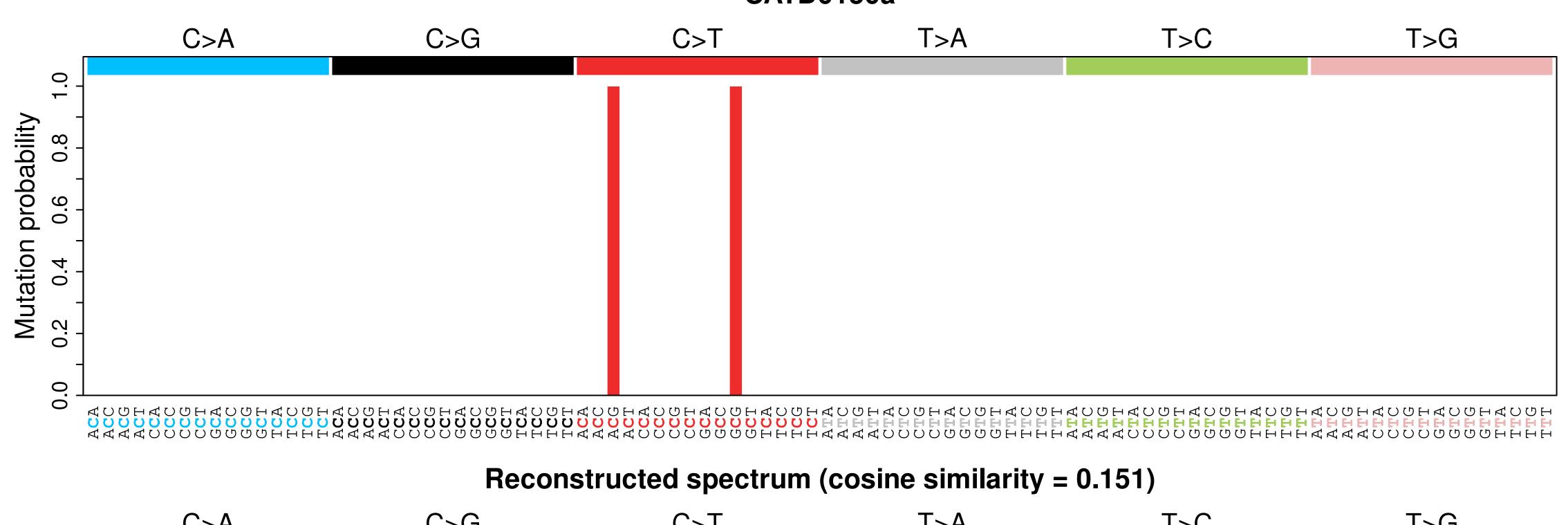


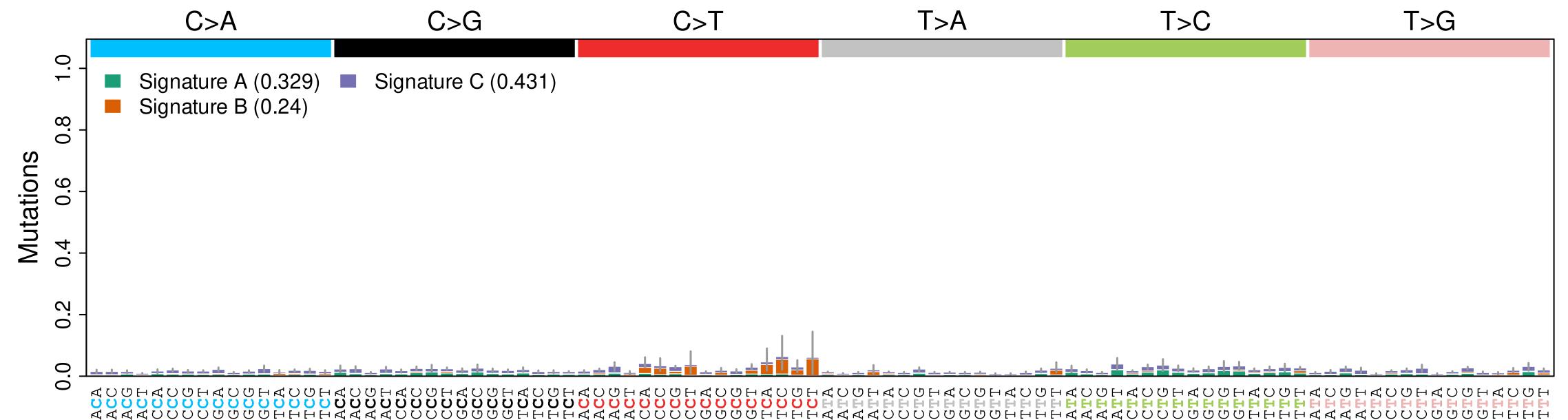




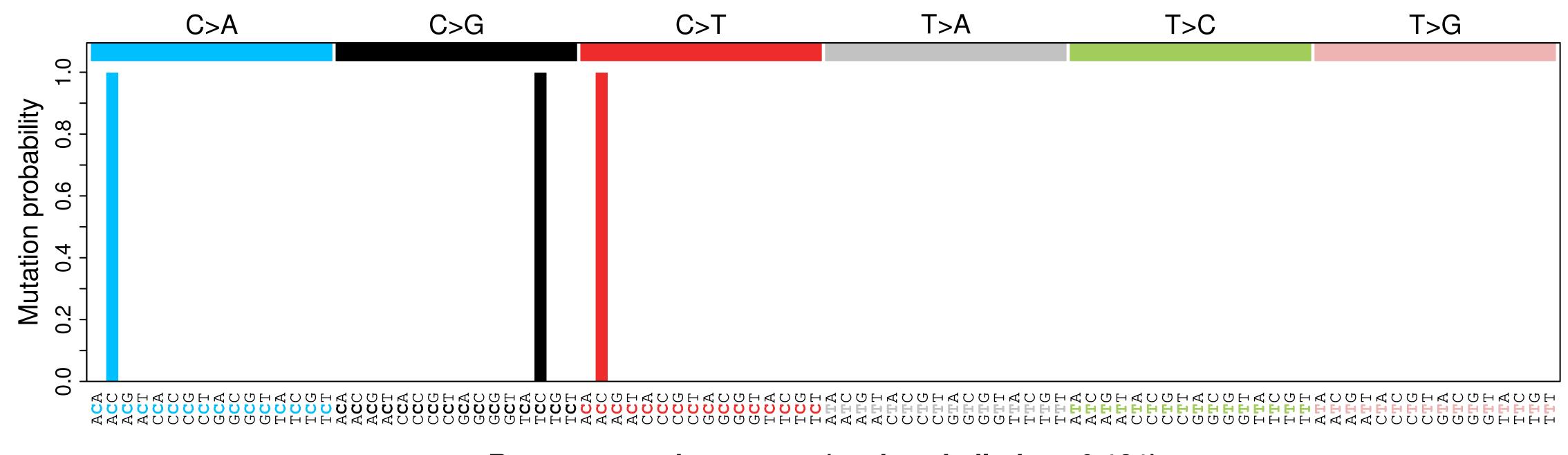


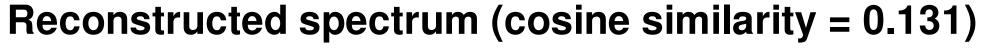


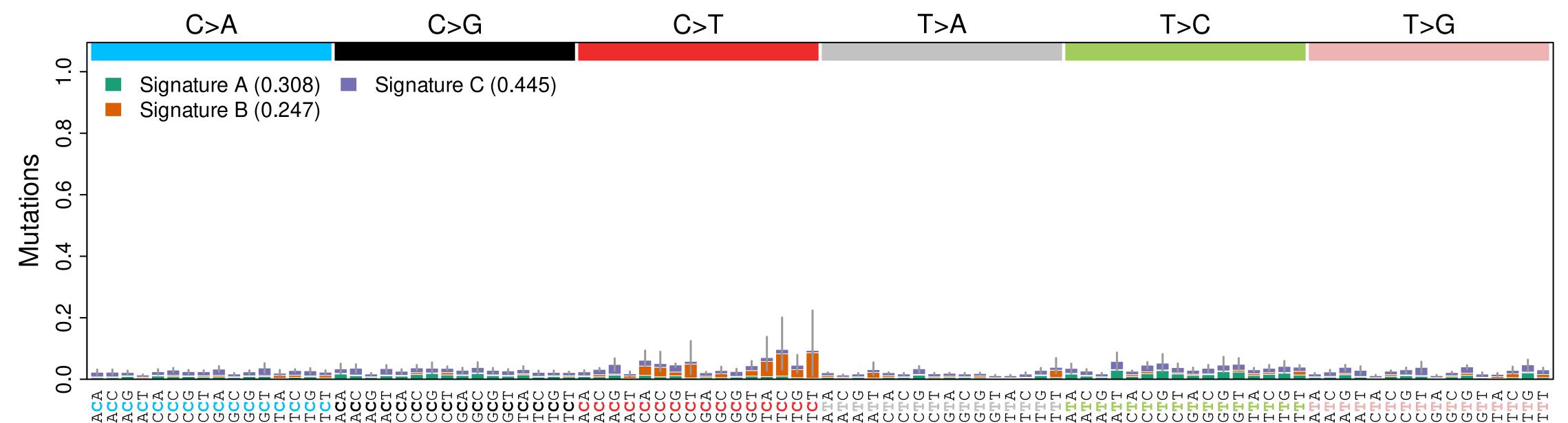




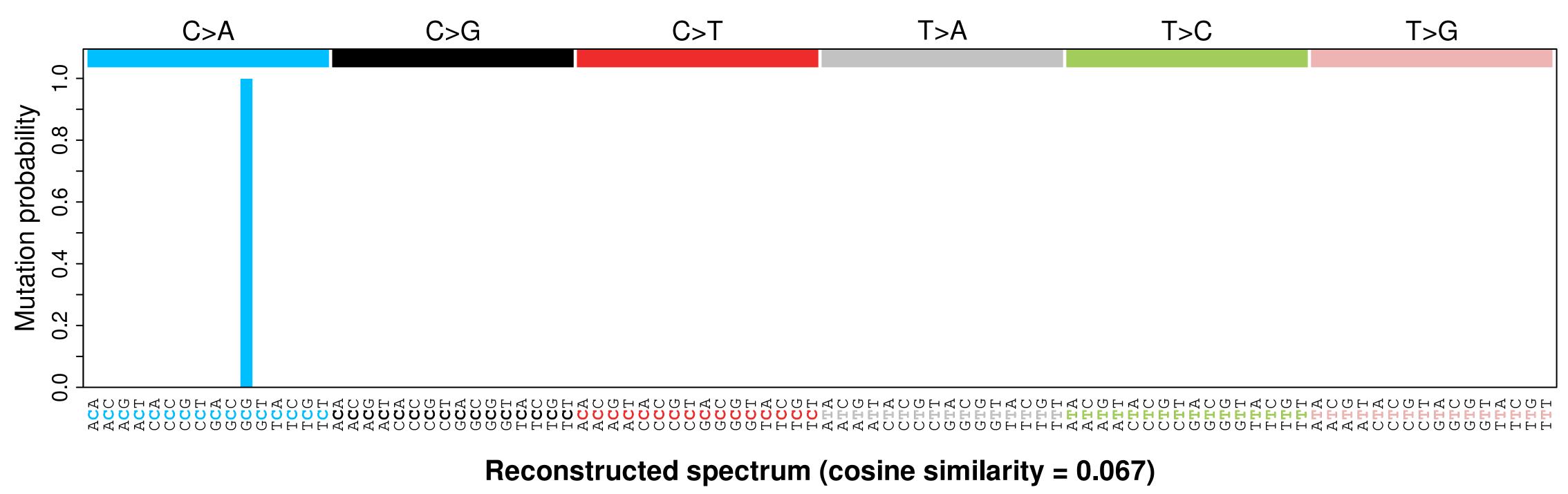
CATD0156a

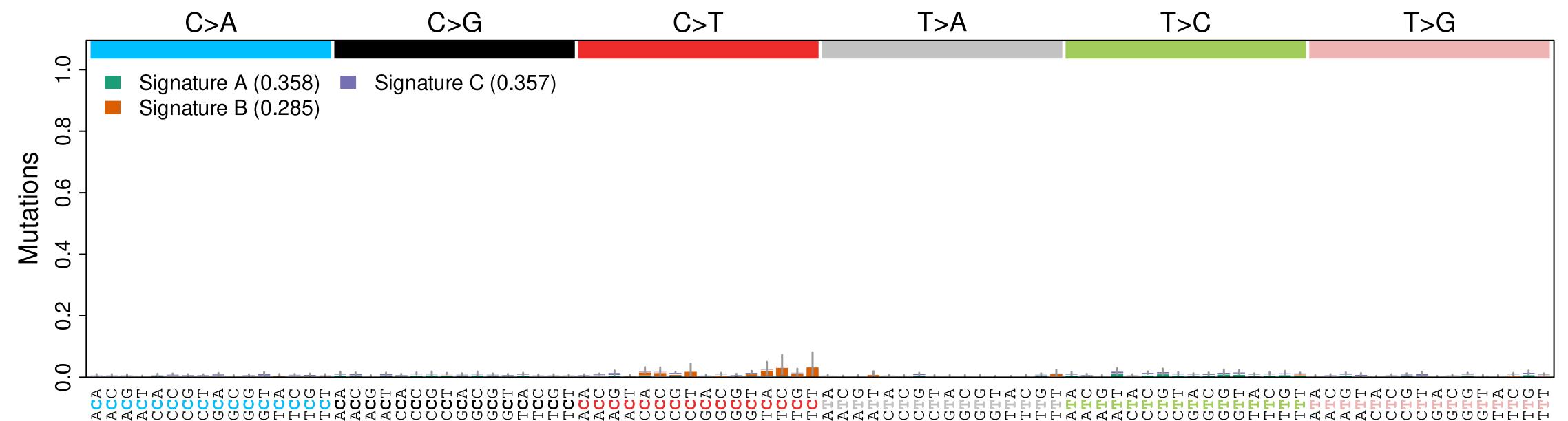












CATD0651a C>G T>C T>G C>A C>T T>A 1.0 Mutation probability 0.8 9.0 0.4 0.2 0.0 Reconstructed spectrum (cosine similarity = 0.087) C>A T>G C>G T>A T>C C>T 1.0 Signature A (0.298) Signature C (0.343) Signature B (0.36) 0.8 9.0

