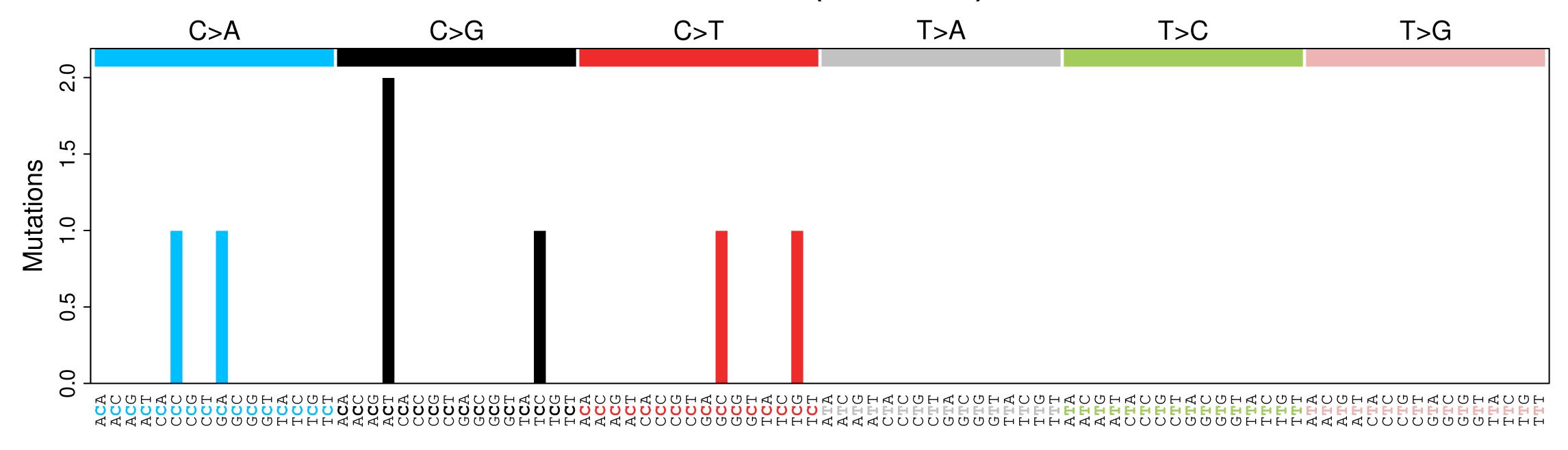
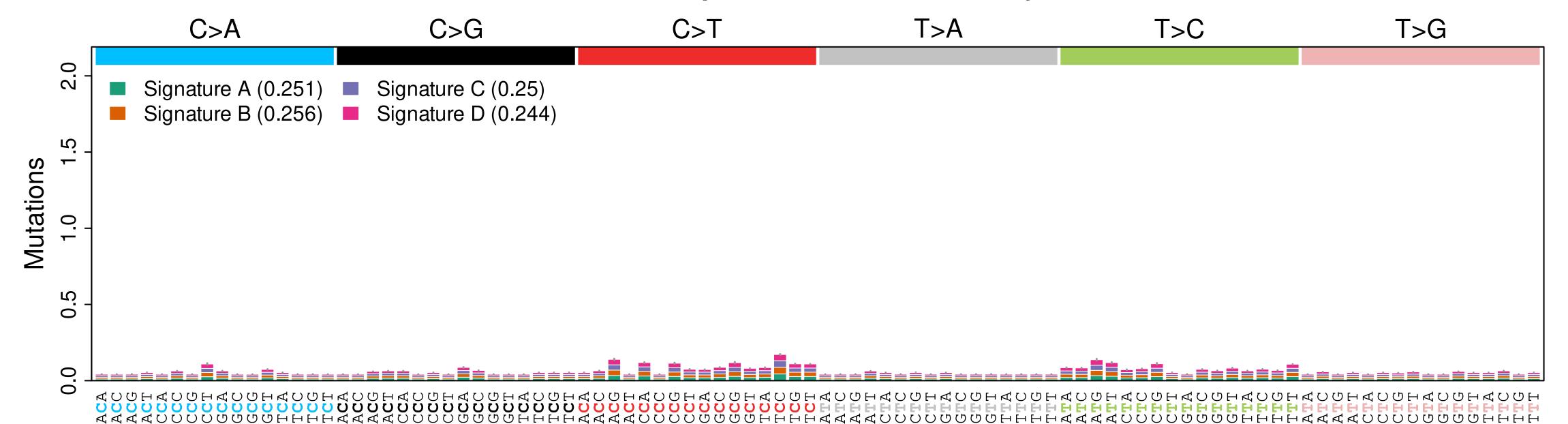
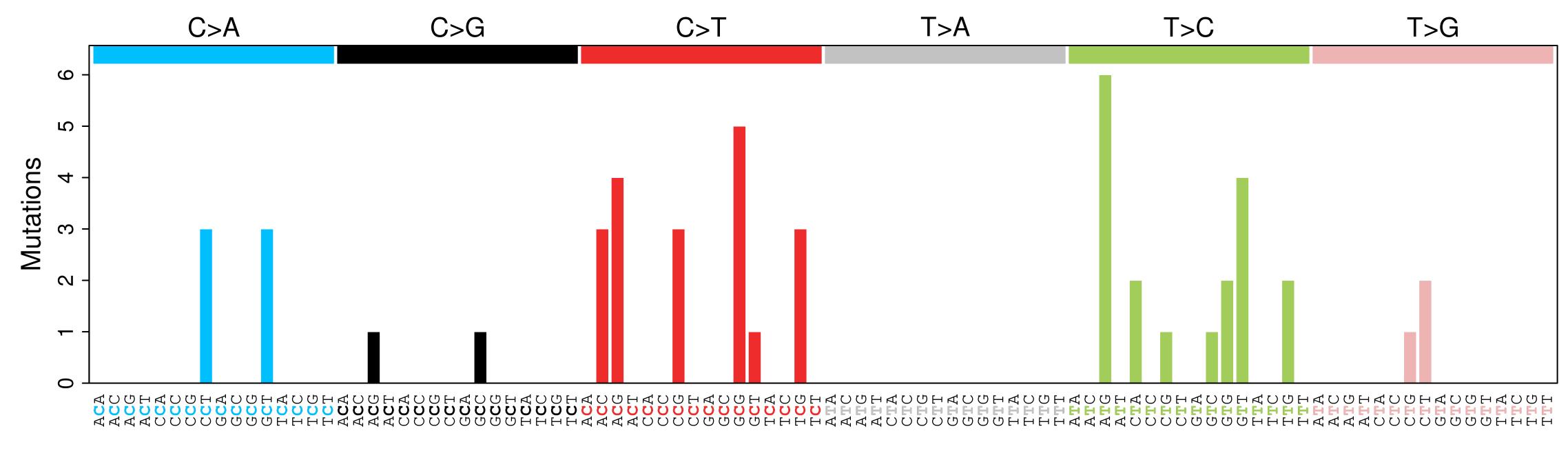
CATD0621a (7 mutations)



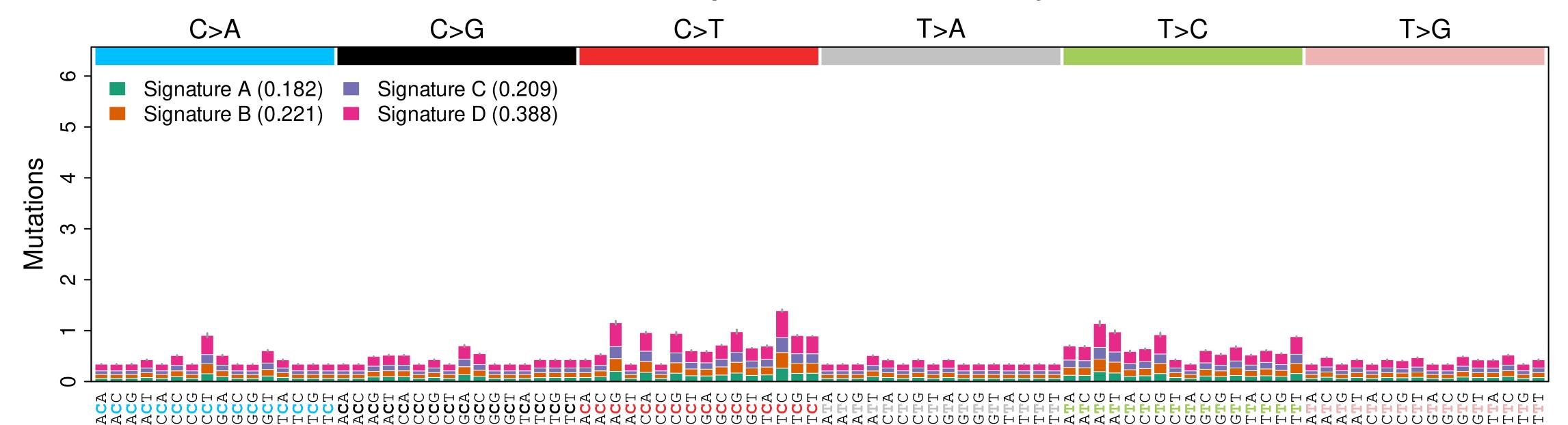
Reconstructed spectrum (cosine similarity = 0.252)



CATD0463a (48 mutations)

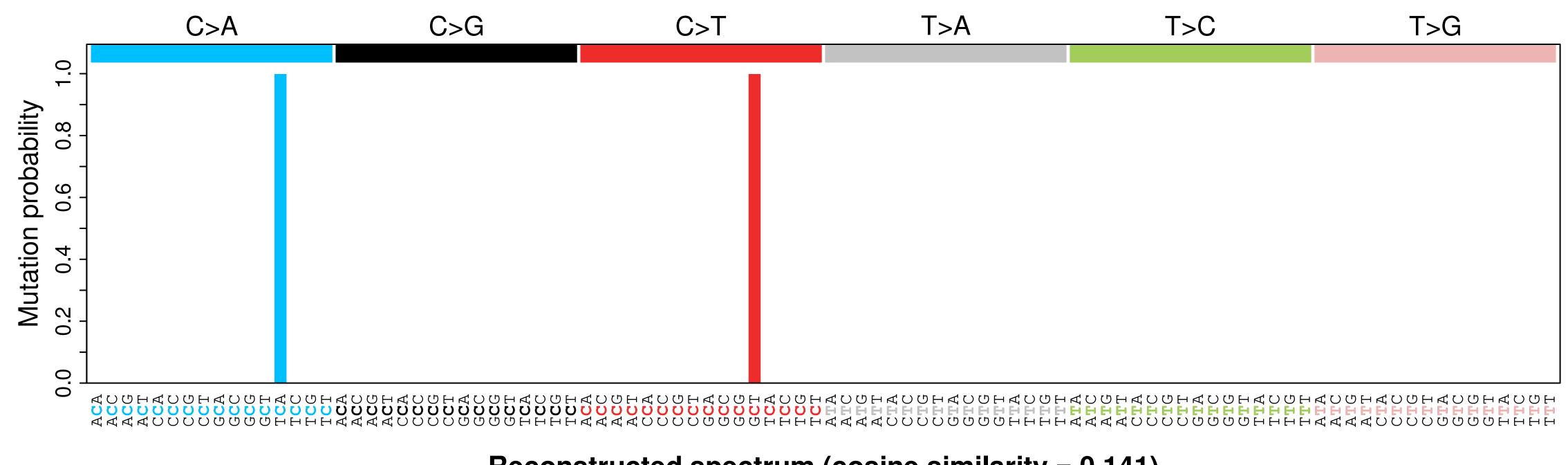


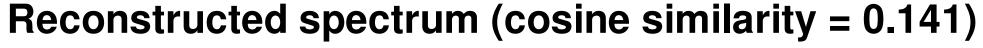
Reconstructed spectrum (cosine similarity = 0.56)

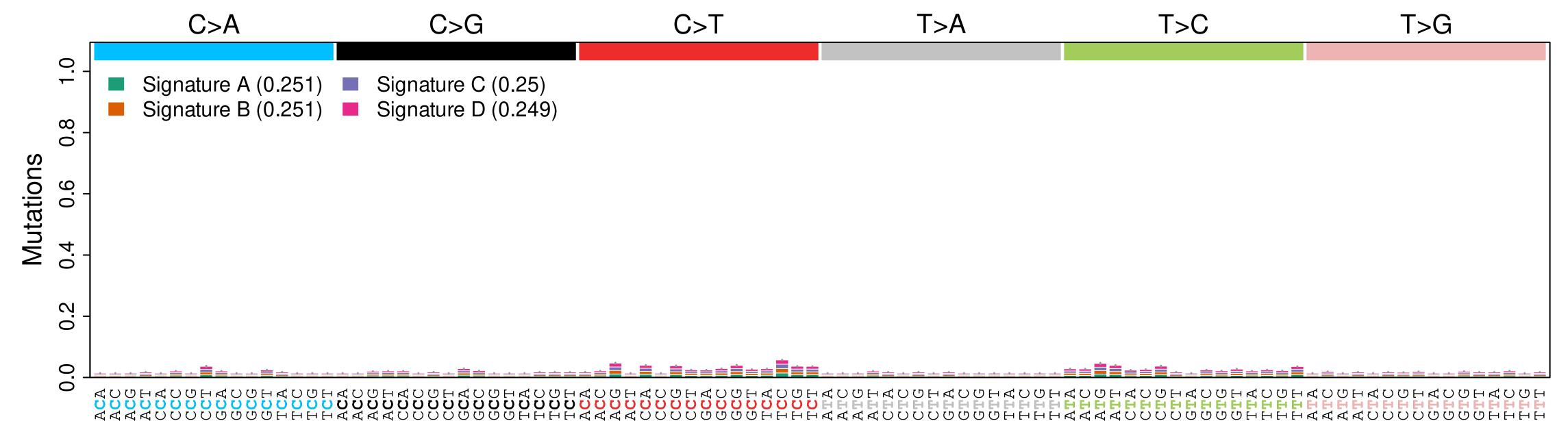


CATD0453a (4 mutations) T>G C>A C>G C>T T>A T>C 2.0 5 Mutations 0.5 0.0 **Reconstructed spectrum (cosine similarity = 0.282)** T>C T>G C>A C>G T>A C>T 2.0 Signature A (0.252) Signature C (0.25) Signature B (0.248) Signature D (0.249) 5 Mutations 2 0

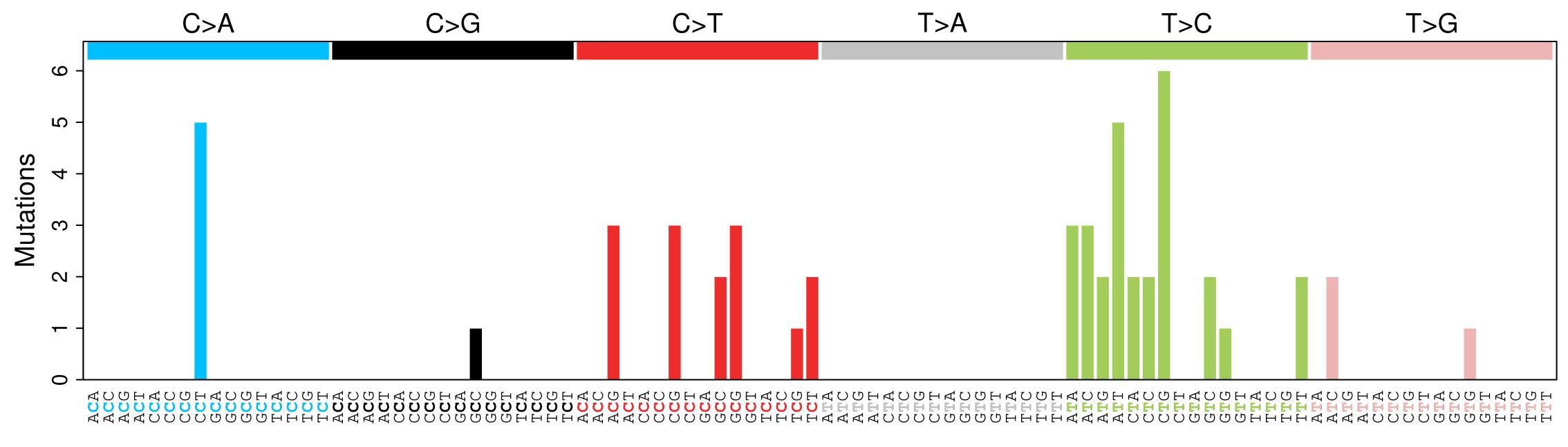




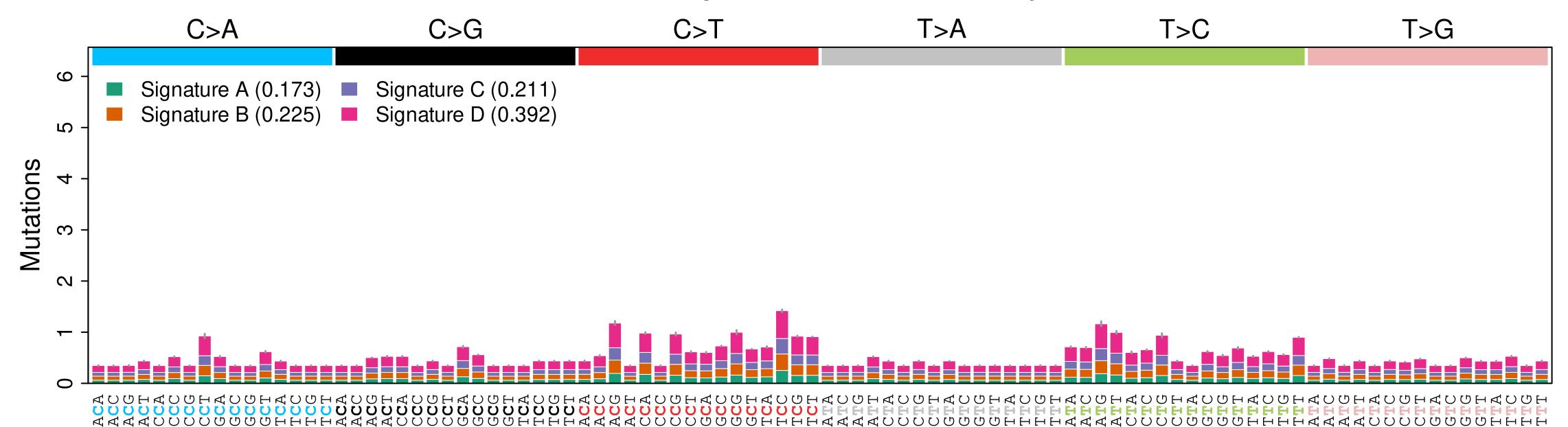




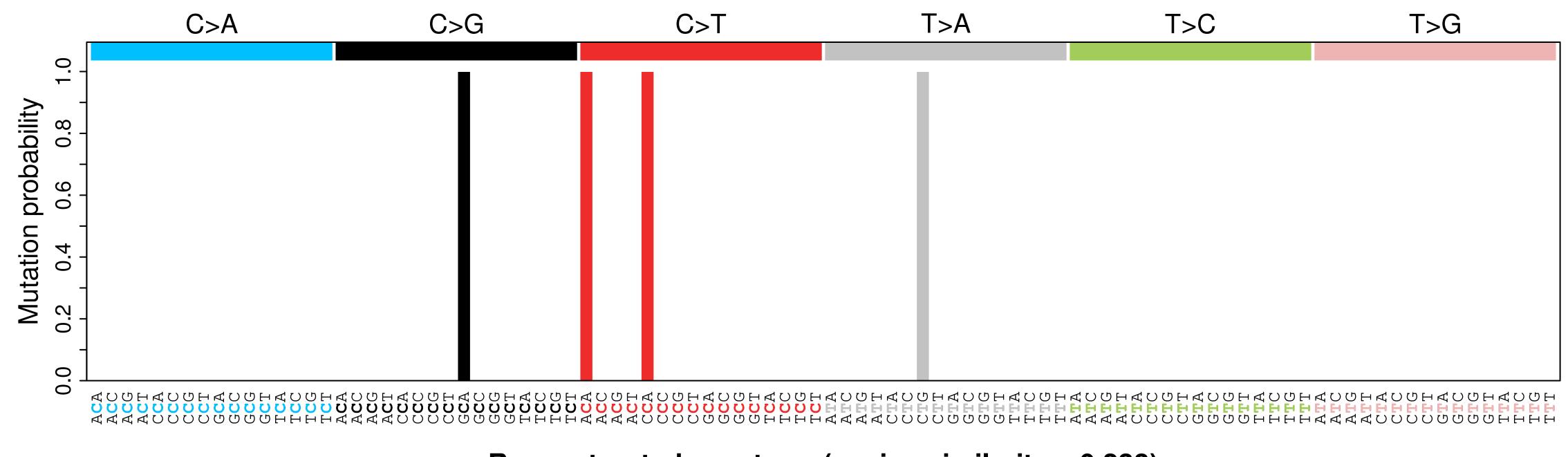
CATD0465a (51 mutations)



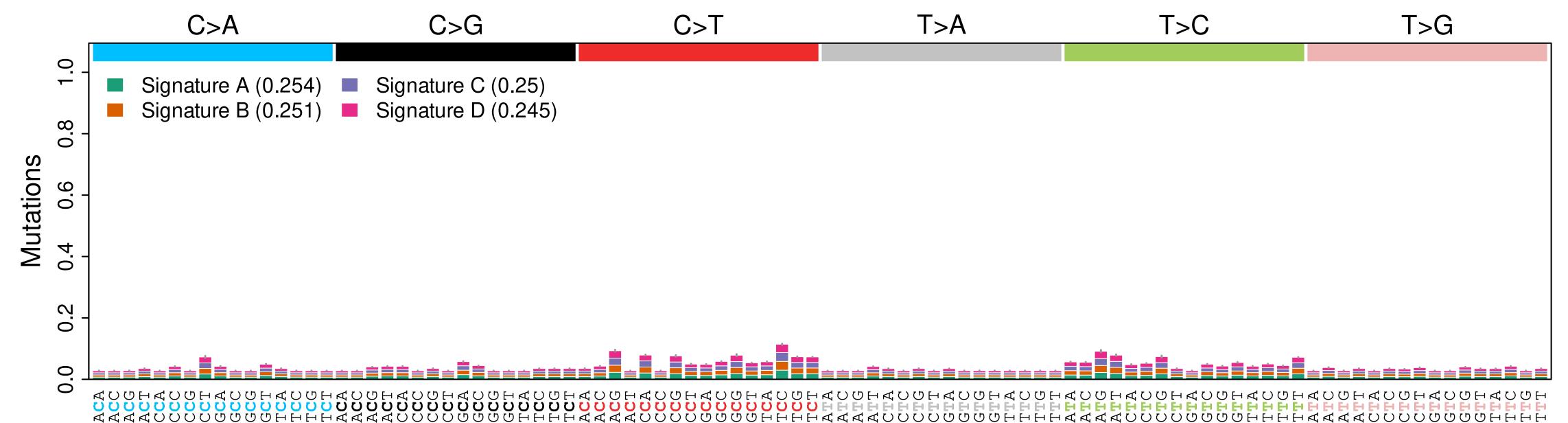
Reconstructed spectrum (cosine similarity = 0.606)



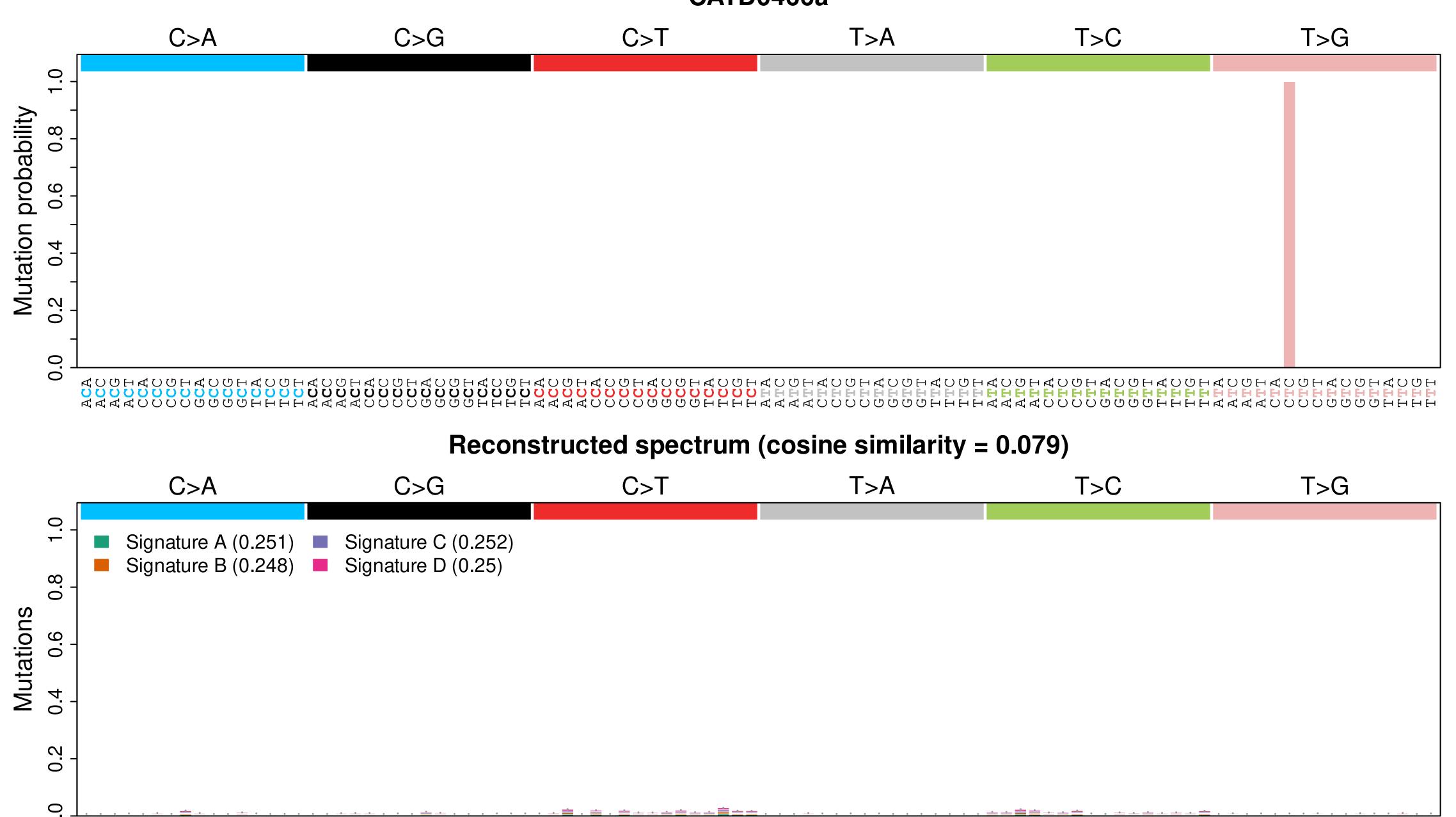
CATD0458a



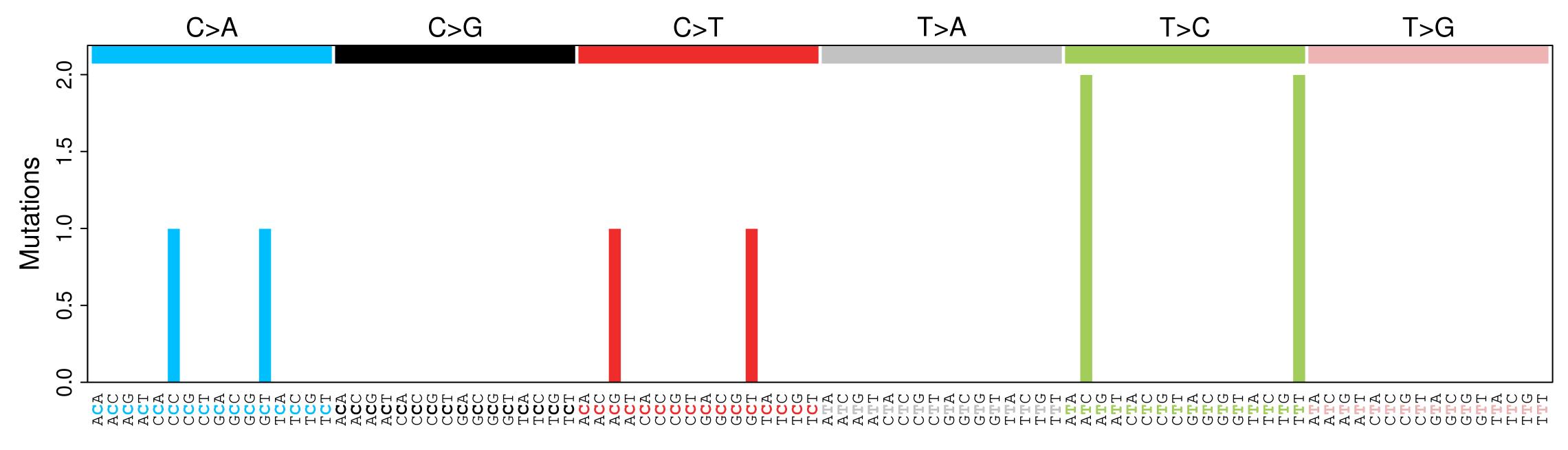
Reconstructed spectrum (cosine similarity = 0.233)



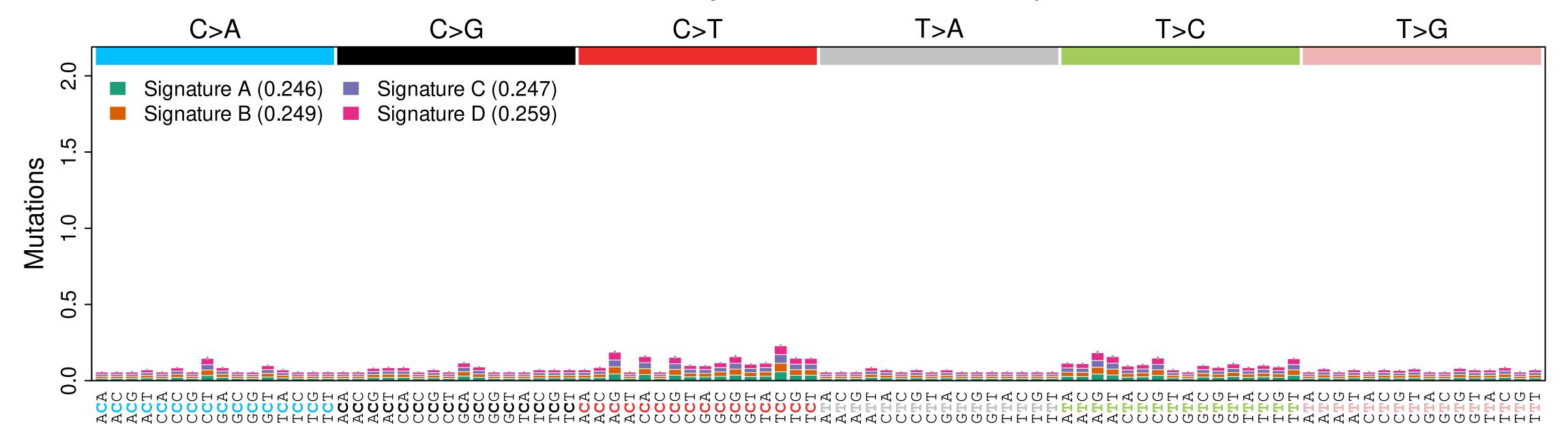




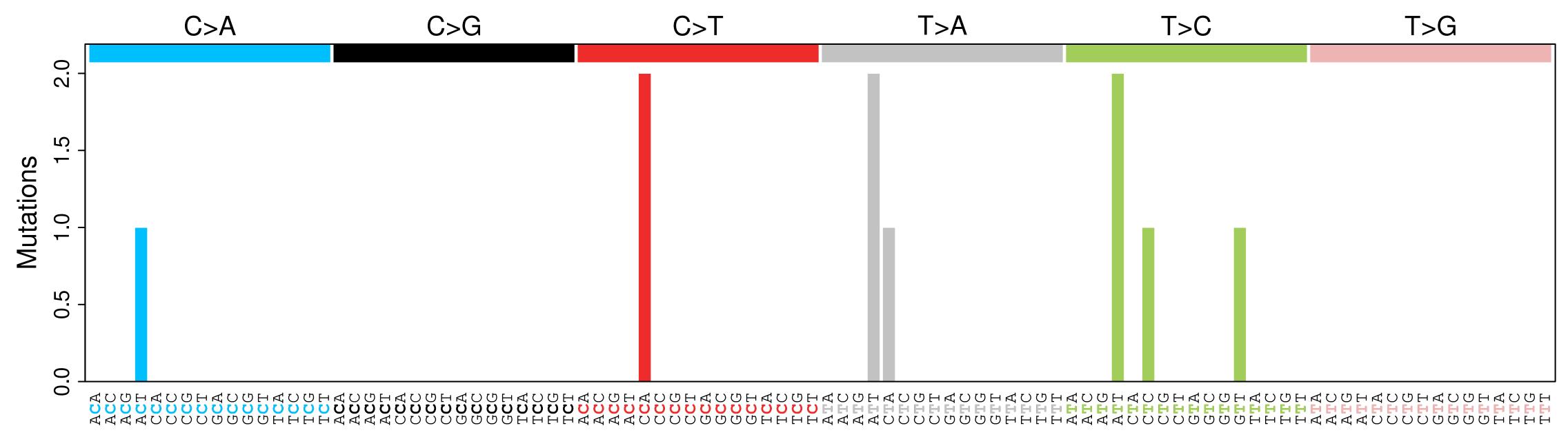
CATD0454a (8 mutations)



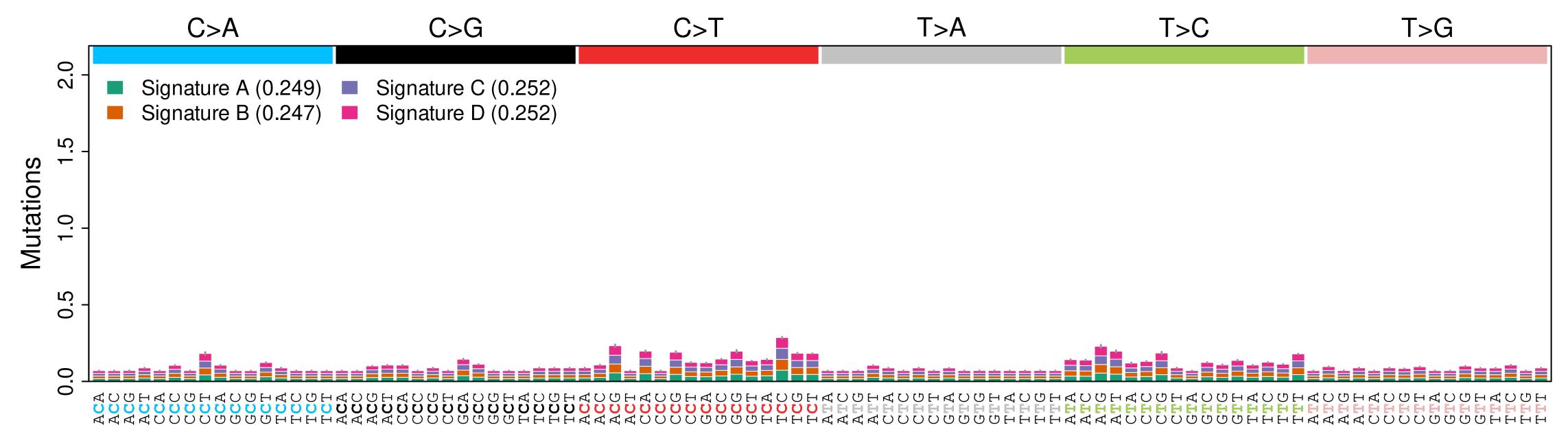
Reconstructed spectrum (cosine similarity = 0.32)



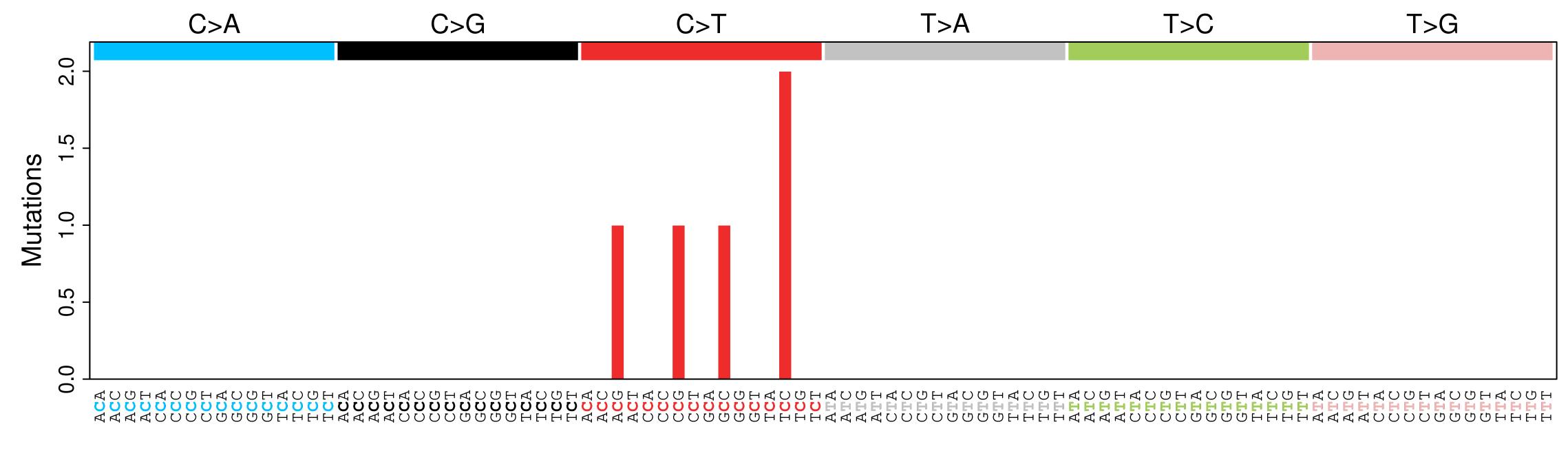
CATD0446a (10 mutations)



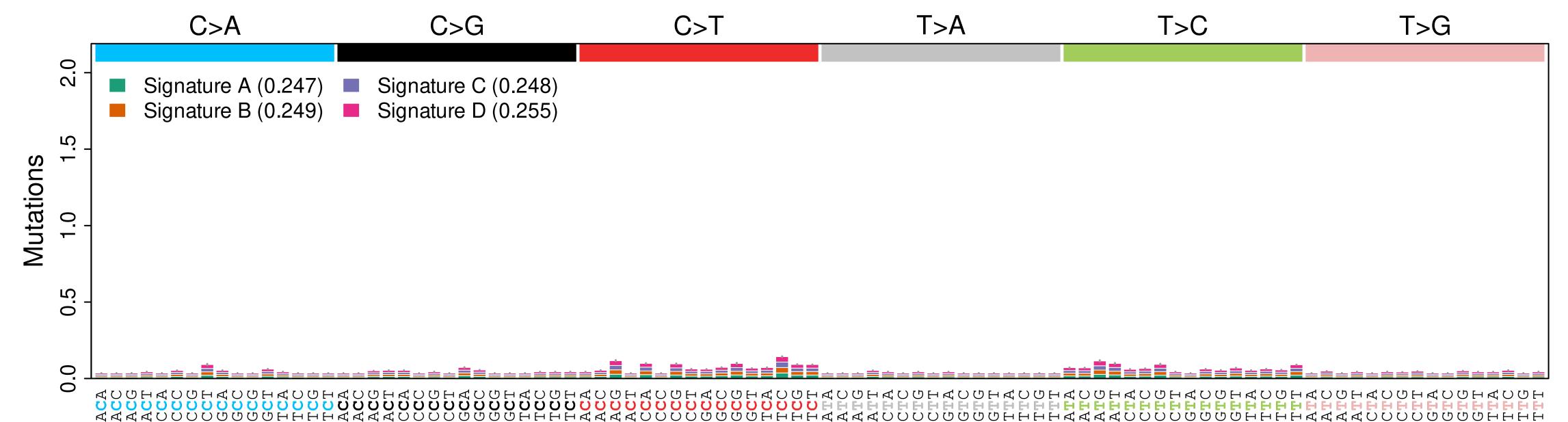
Reconstructed spectrum (cosine similarity = 0.324)



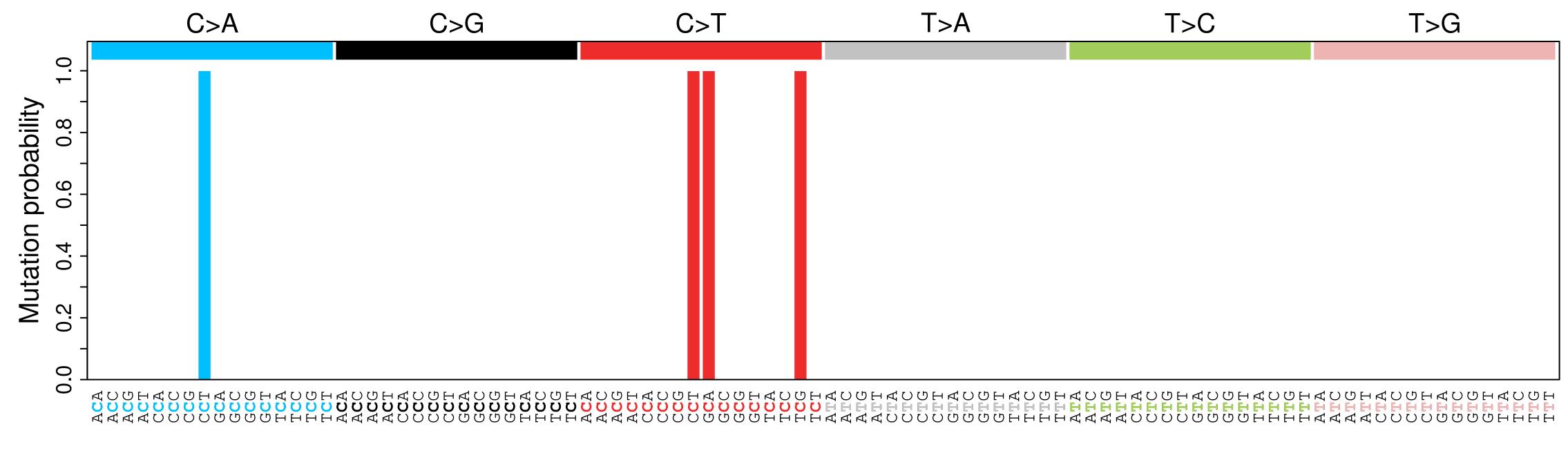
CATD0451a (5 mutations)



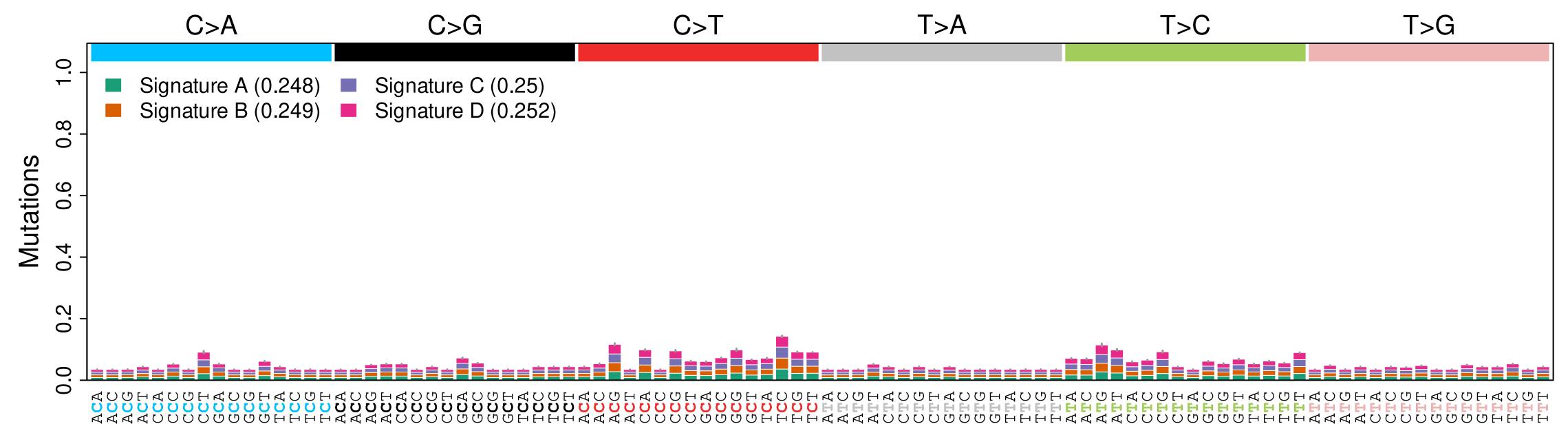
Reconstructed spectrum (cosine similarity = 0.388)



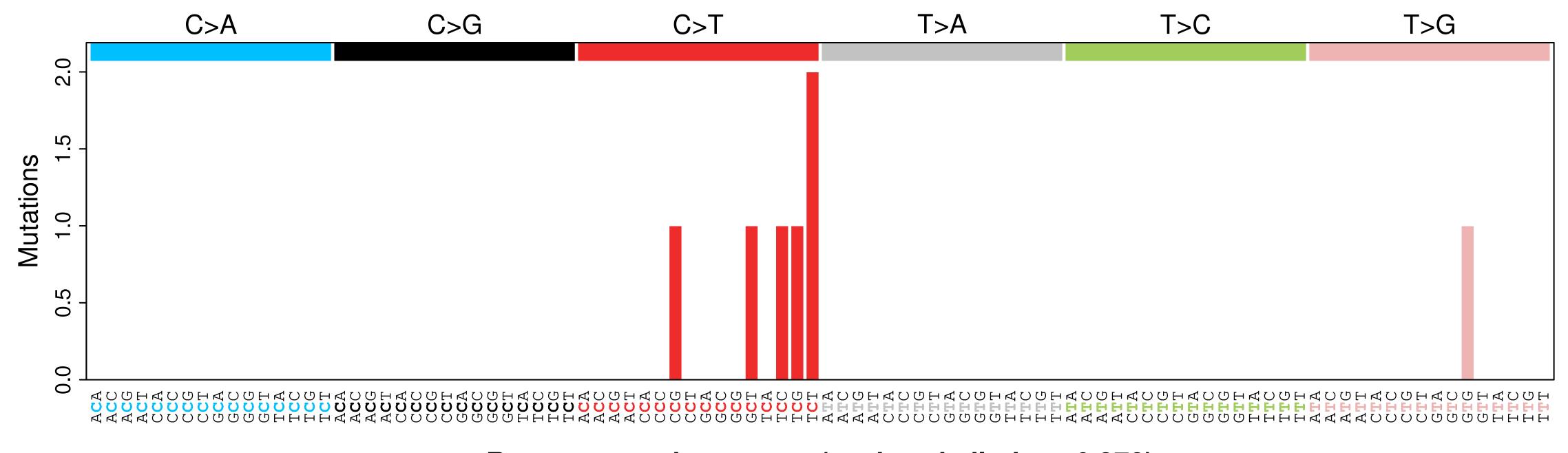
CATD0455a



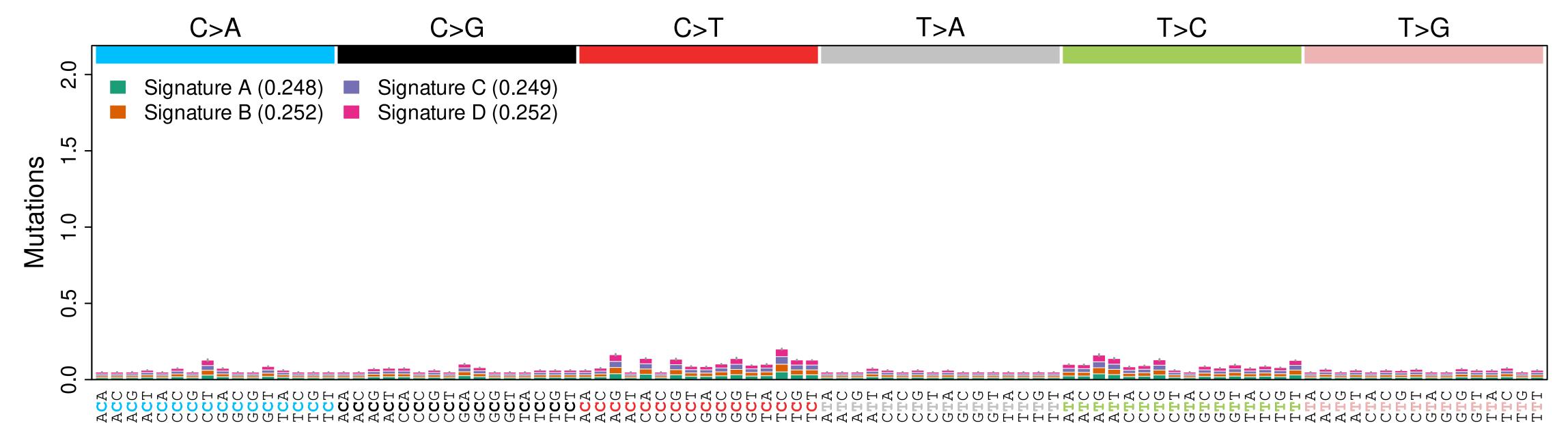
Reconstructed spectrum (cosine similarity = 0.275)



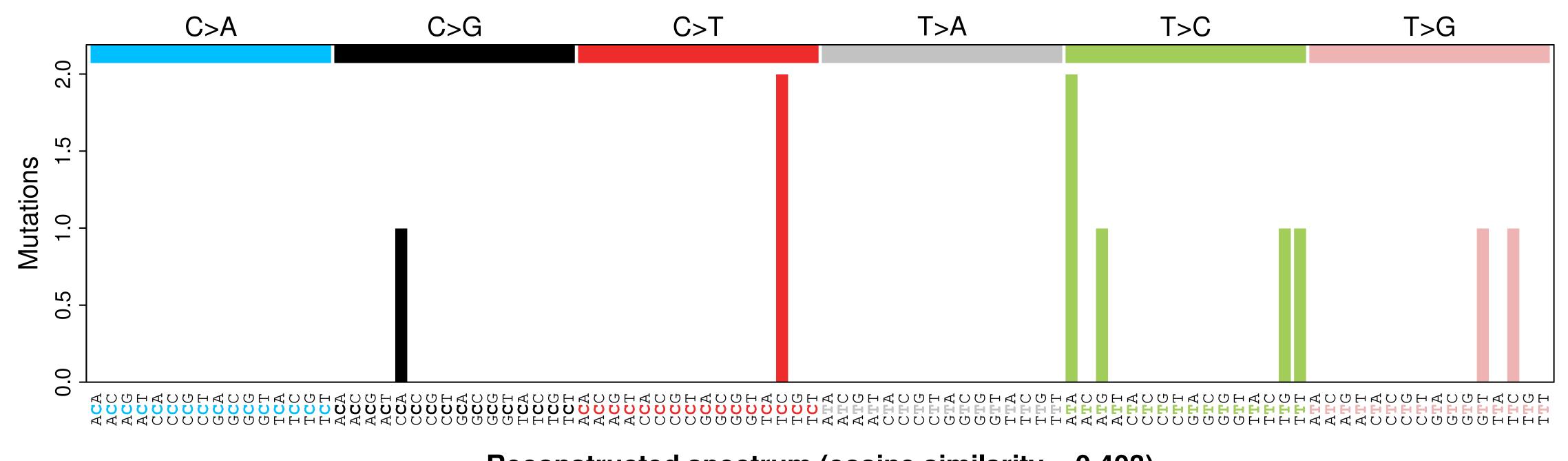
CATD0457a (7 mutations)



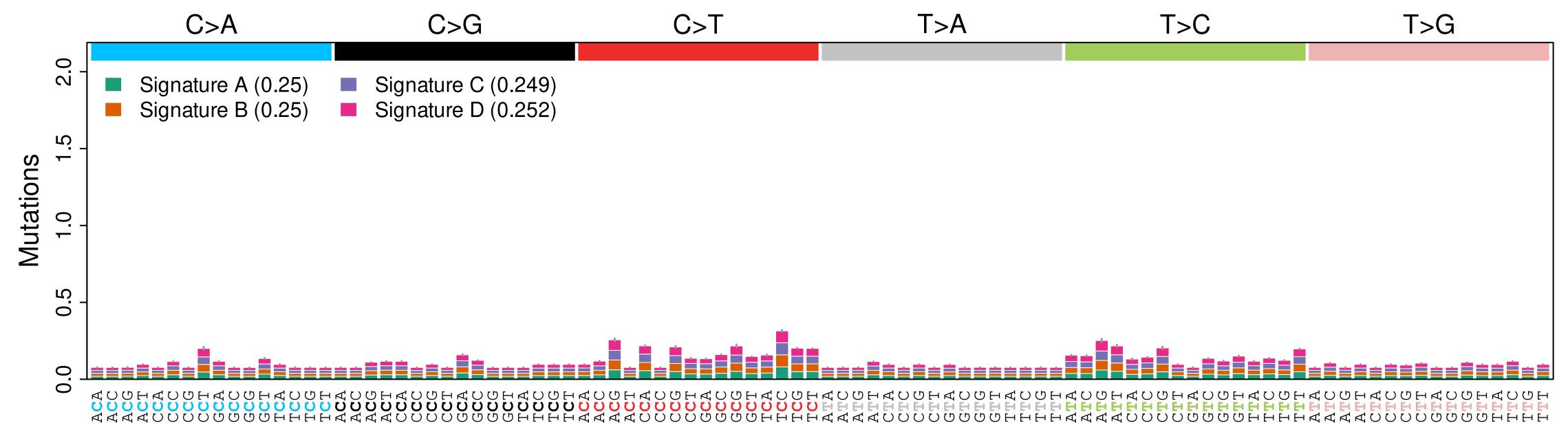
Reconstructed spectrum (cosine similarity = 0.378)



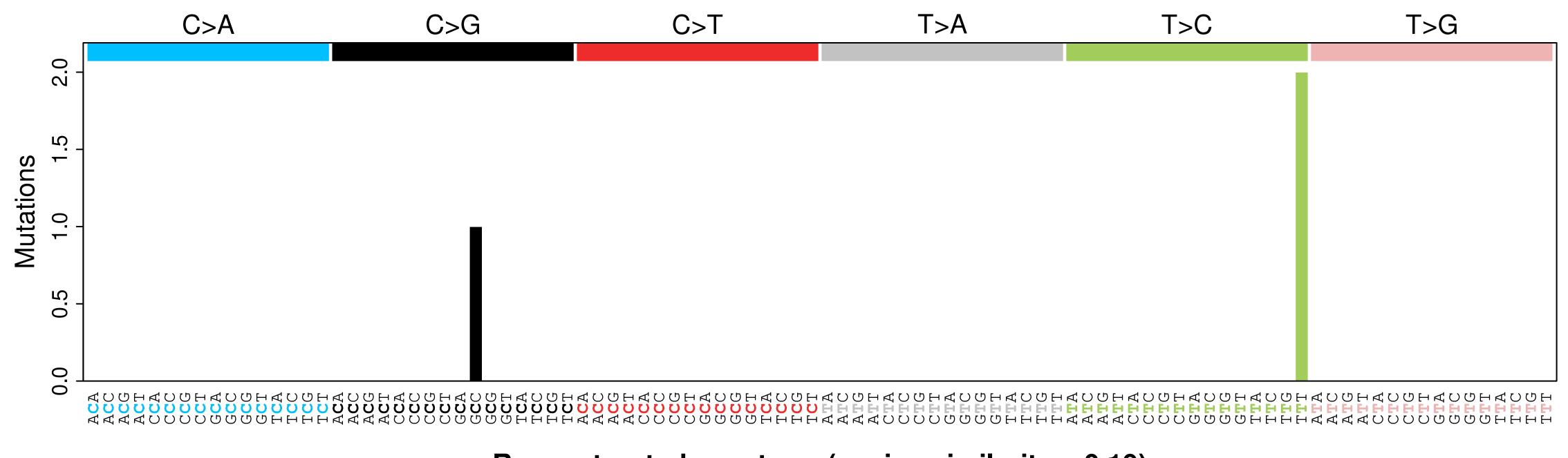
CATD0452a (10 mutations)



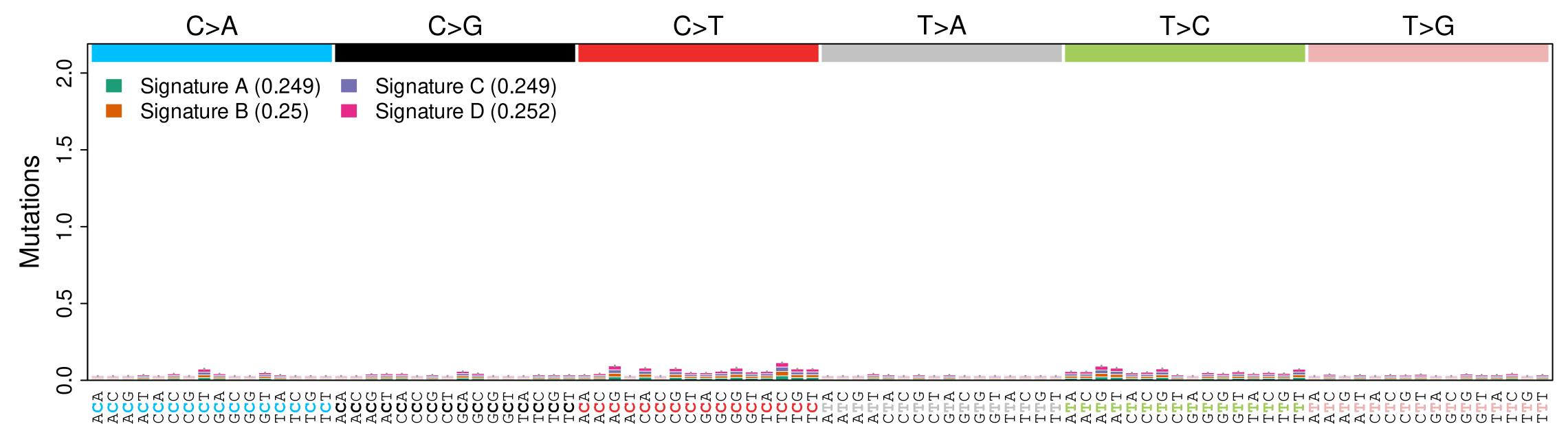
Reconstructed spectrum (cosine similarity = 0.403)



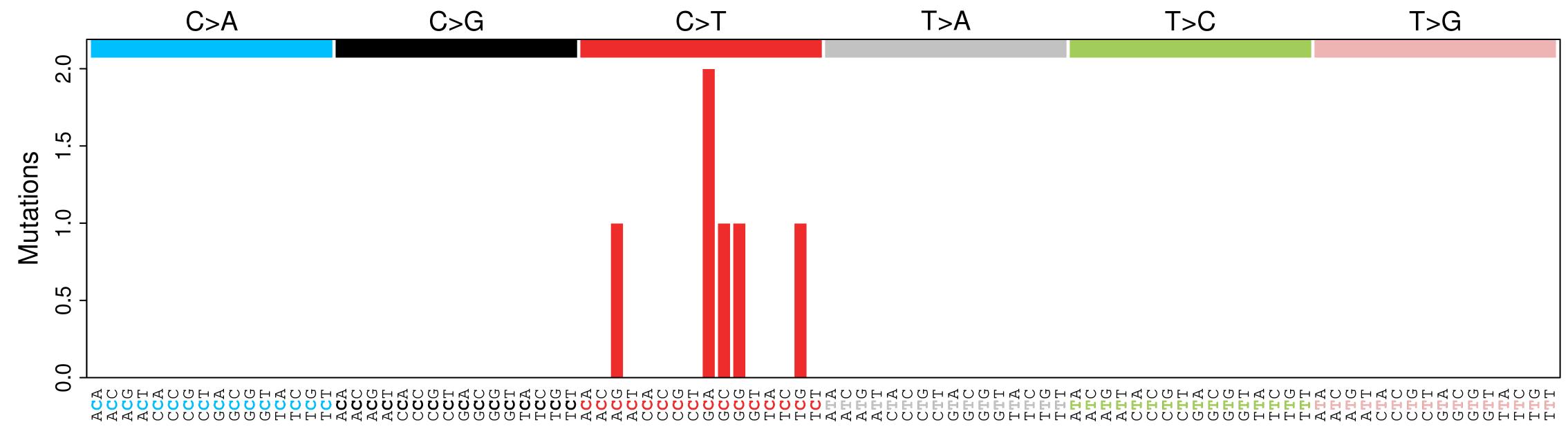
CATD0447a (3 mutations)



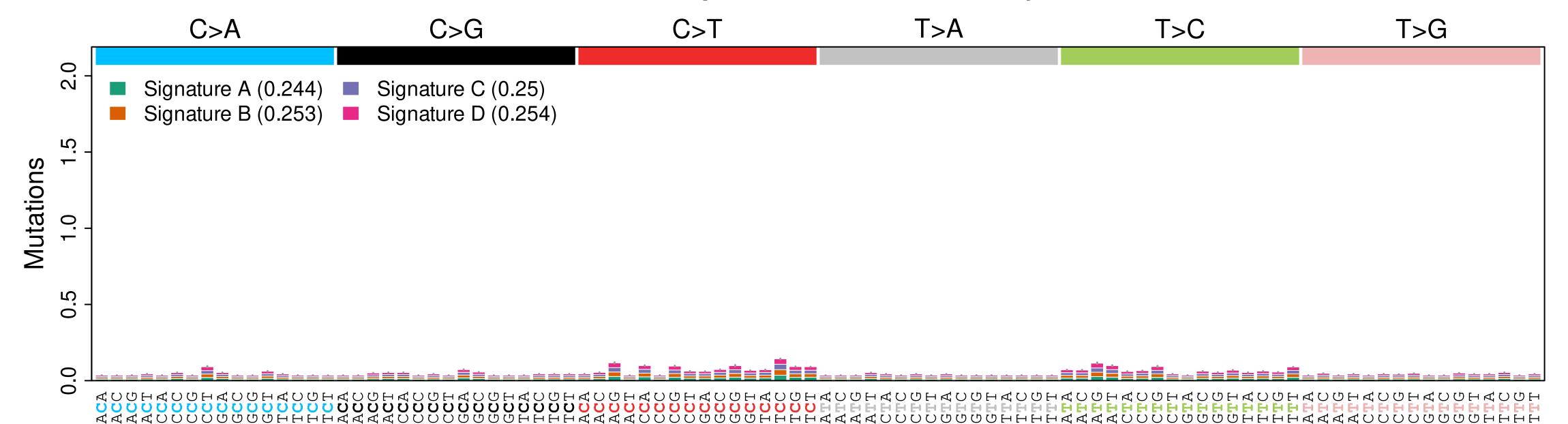
Reconstructed spectrum (cosine similarity = 0.19)



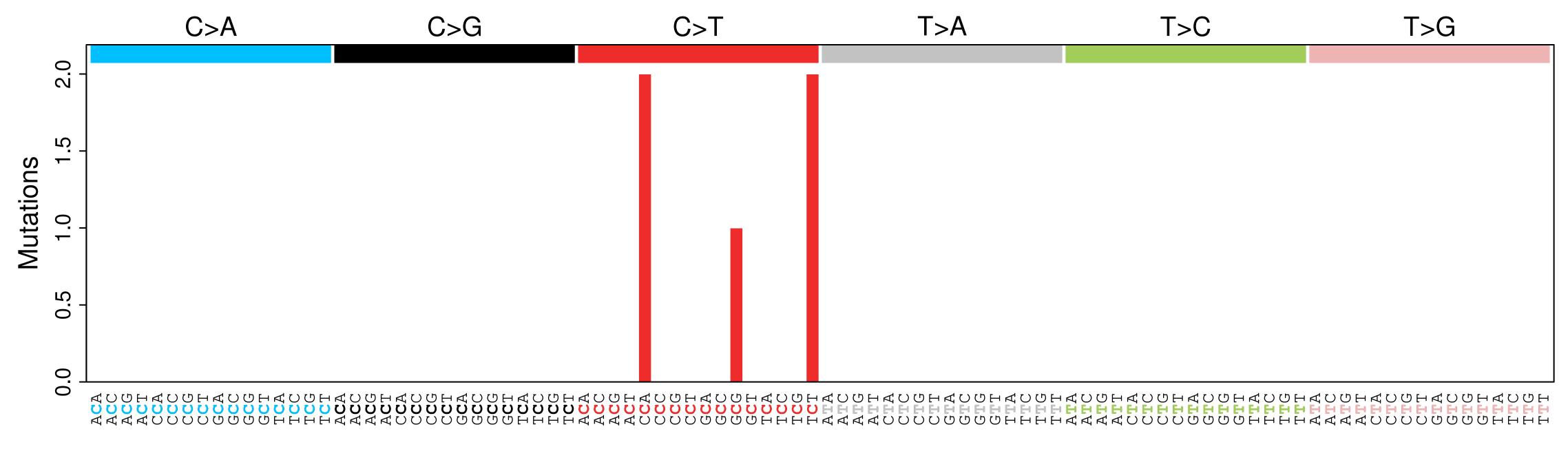
CATD0449a (6 mutations)



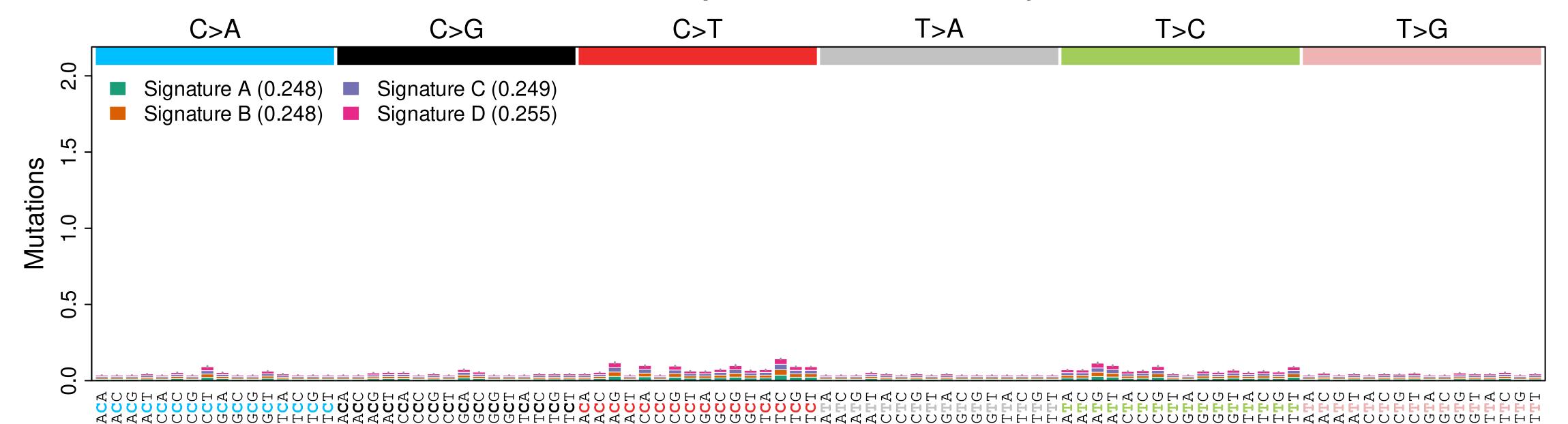
Reconstructed spectrum (cosine similarity = 0.319)



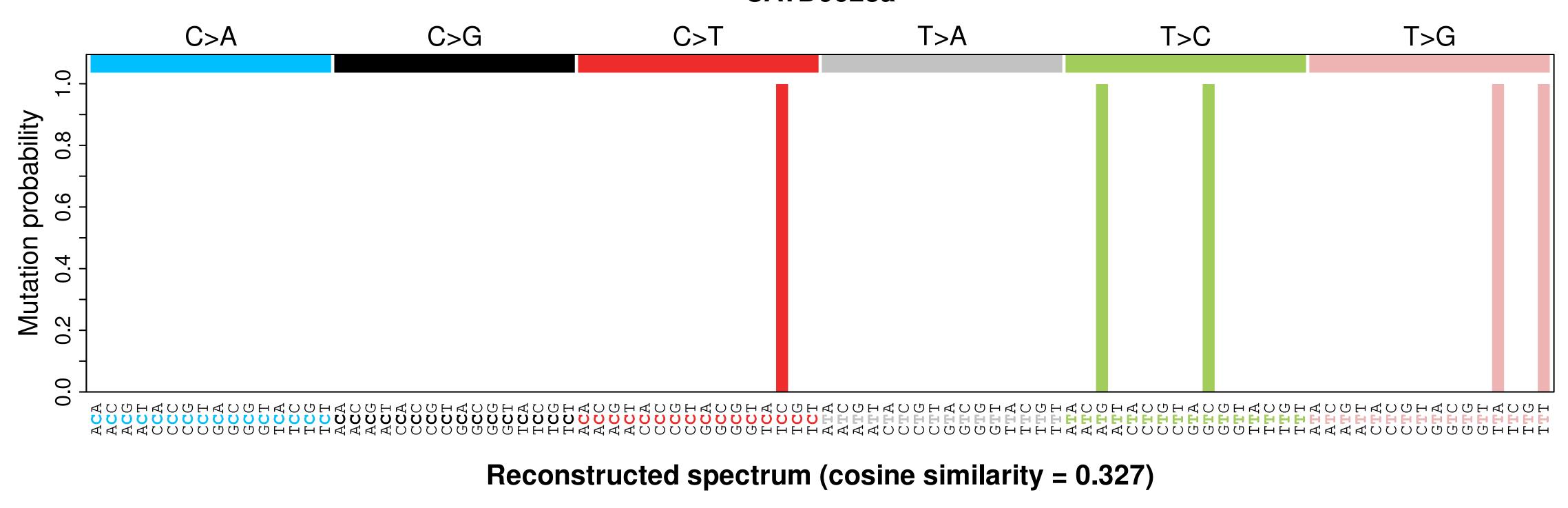
CATD0617a (5 mutations)

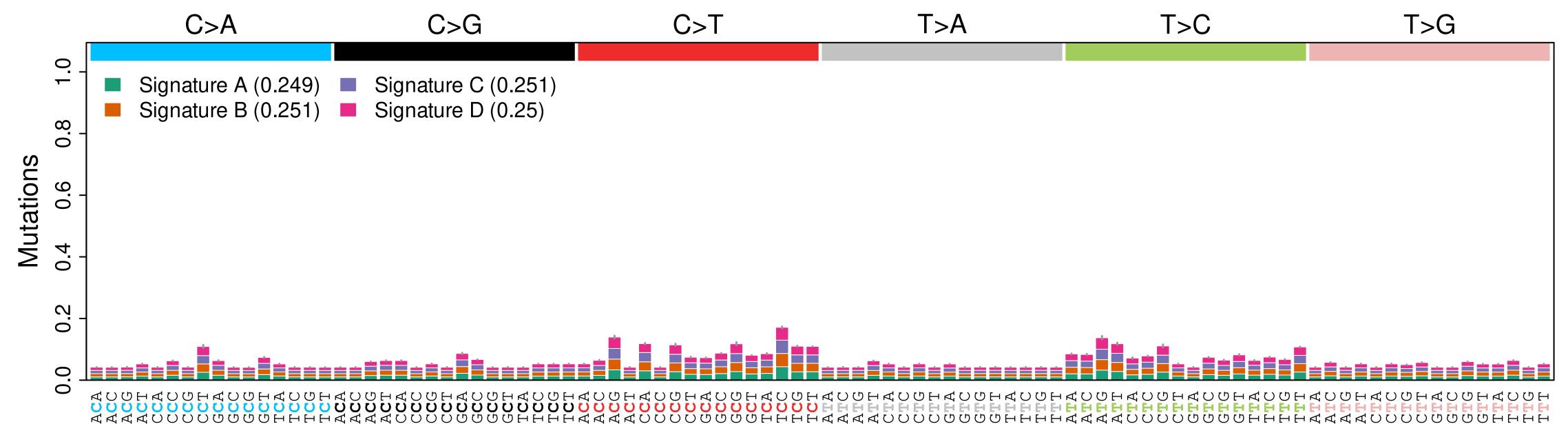


Reconstructed spectrum (cosine similarity = 0.287)

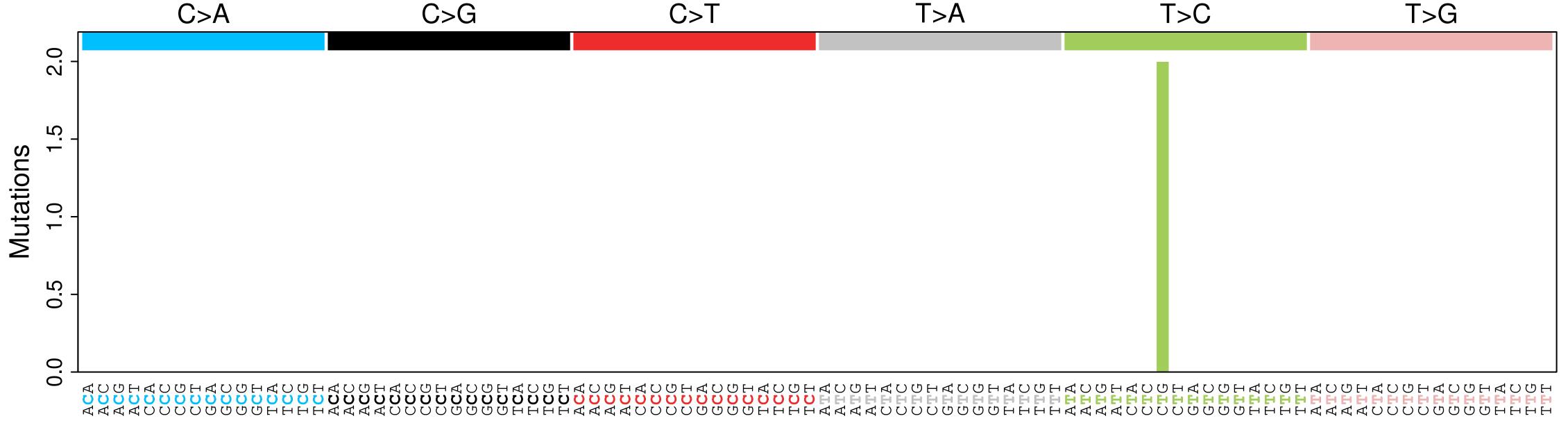


CATD0623a

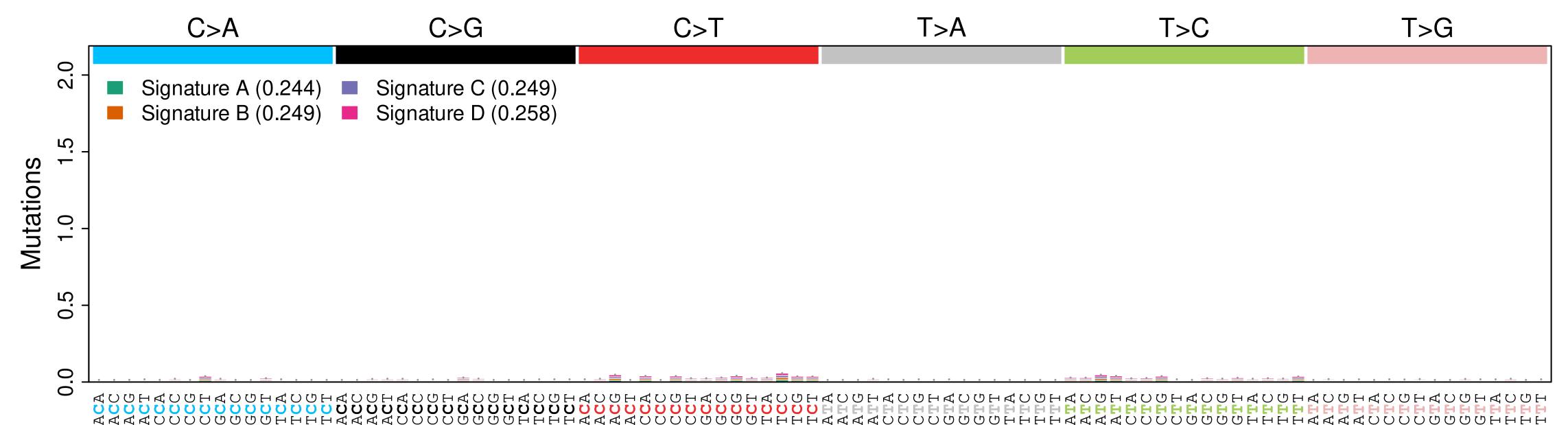




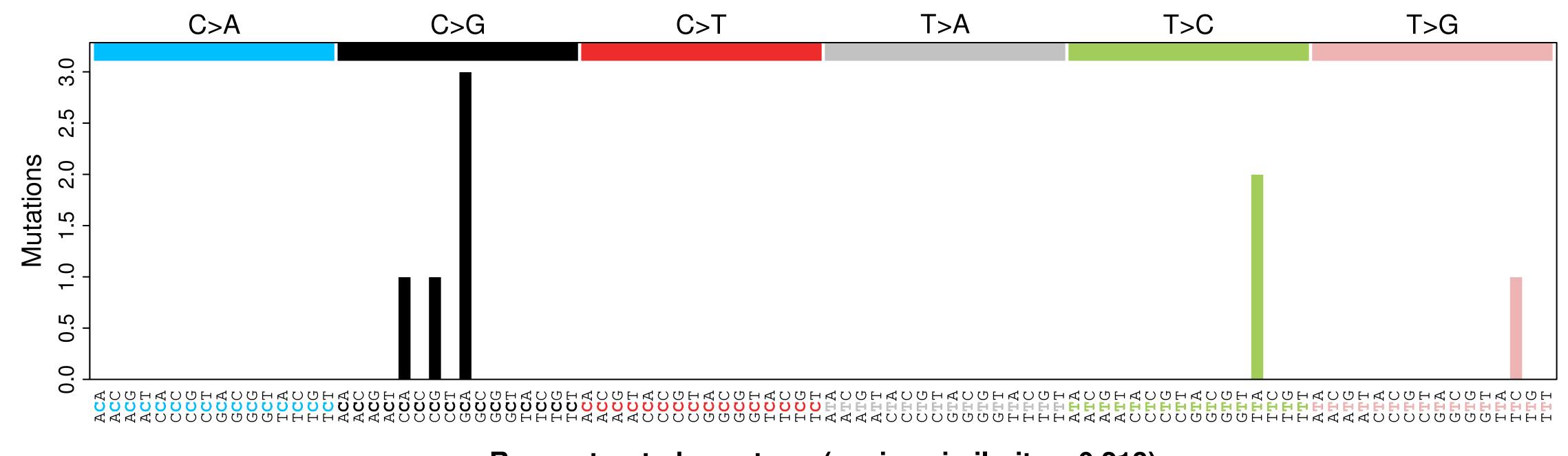
CATD0456a (2 mutations) C>A C>G C>T T>A



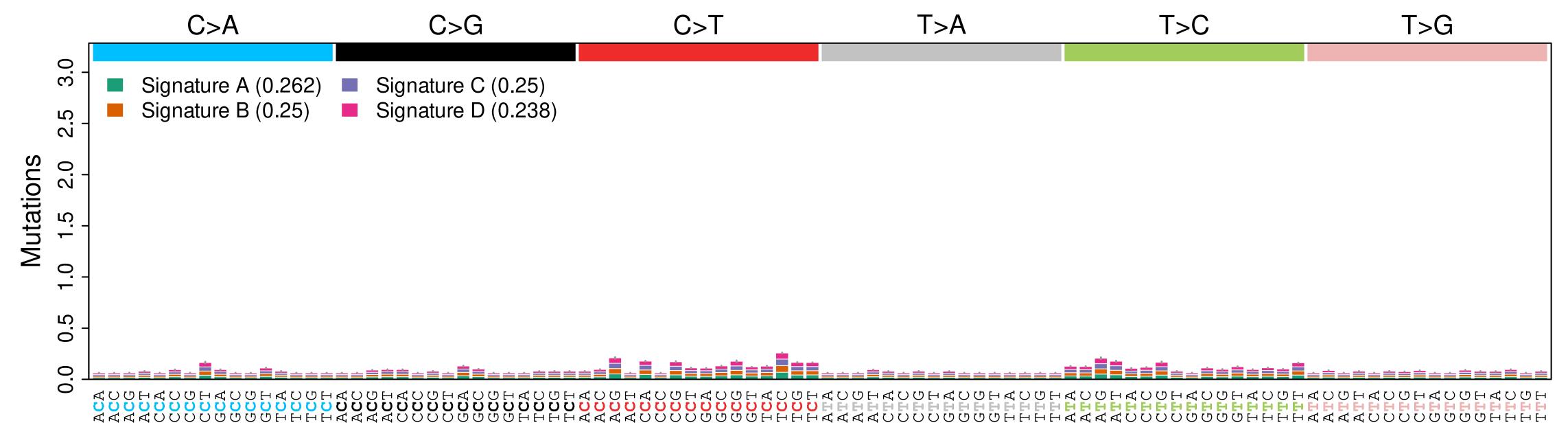
Reconstructed spectrum (cosine similarity = 0.167)



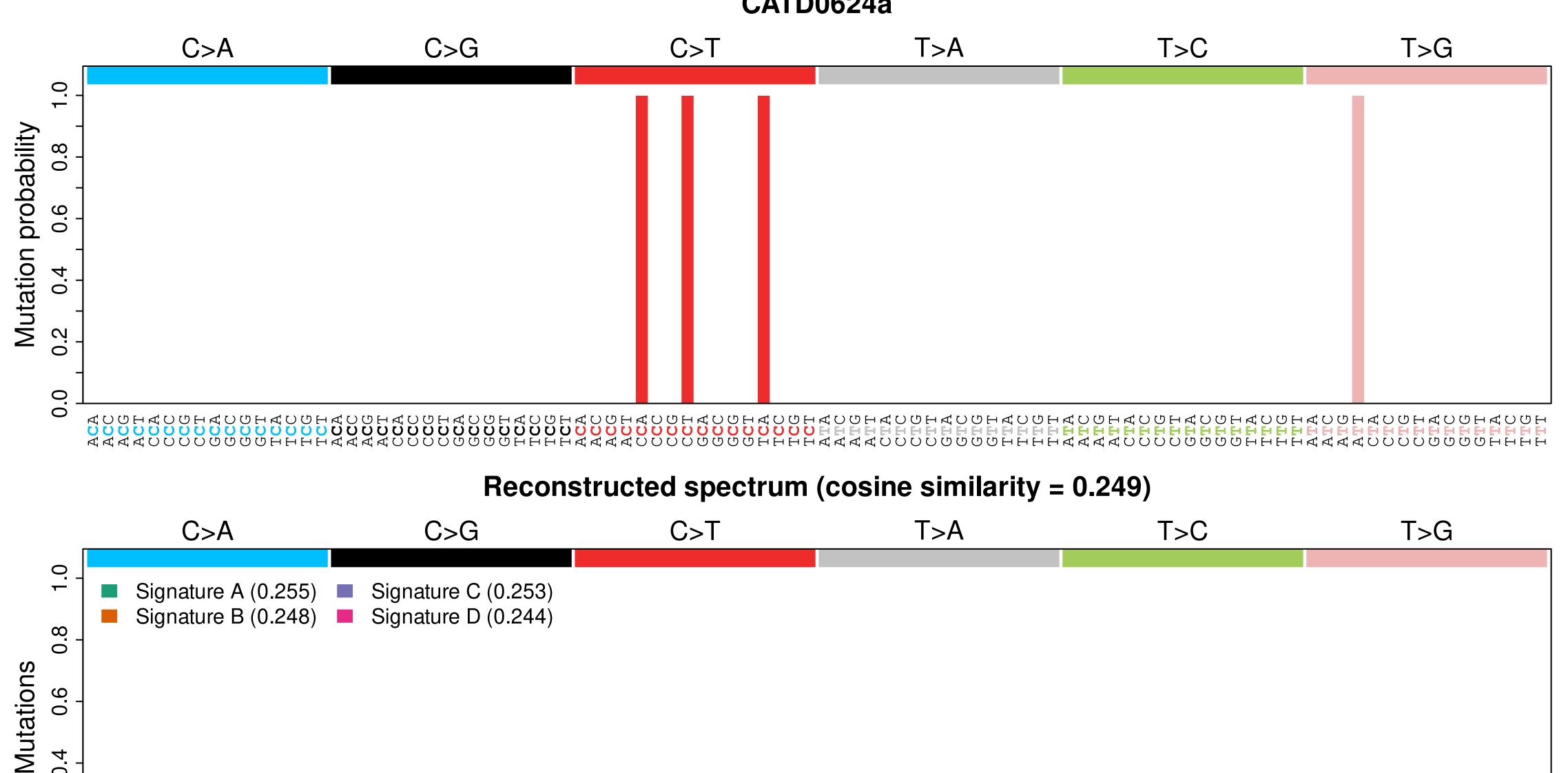
CATD0618a (8 mutations)



Reconstructed spectrum (cosine similarity = 0.213)



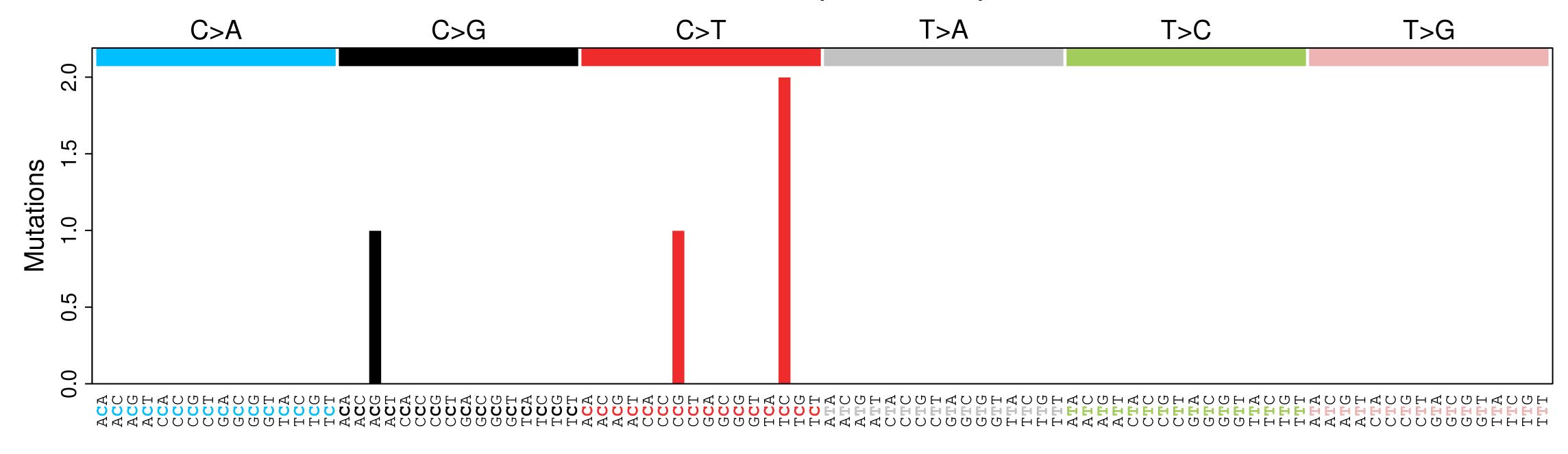
CATD0624a



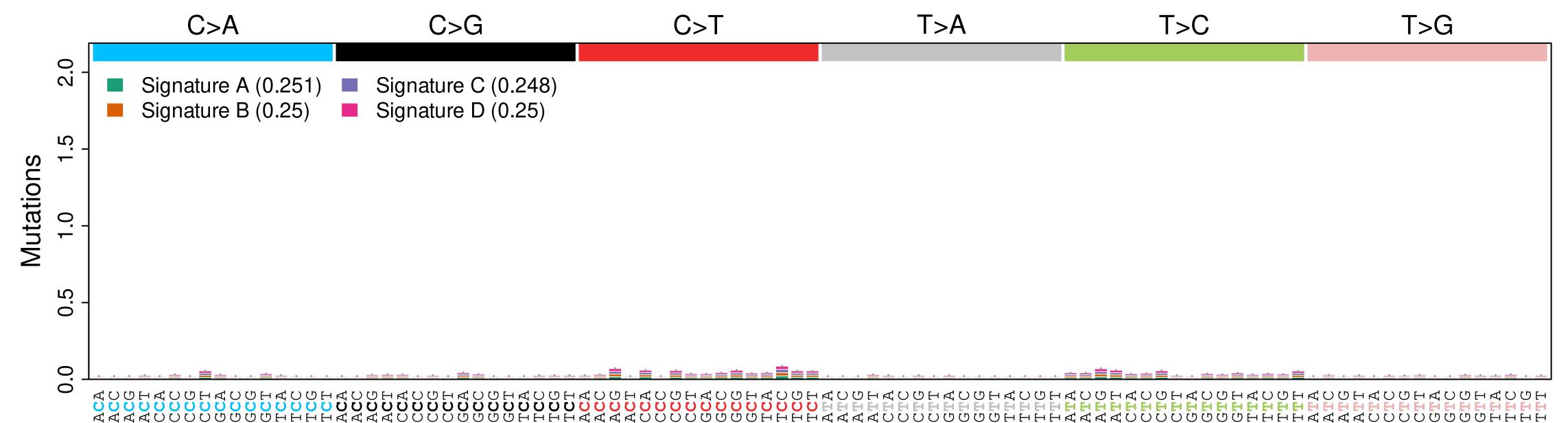
 \mathcal{O} 0

CATD0460a (6 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 = 0.335) T>C T>G C>A C>G T>A C>T 2.0 Signature A (0.254) Signature C (0.251) Signature D (0.246) Signature B (0.25) 5 Mutations 2 0

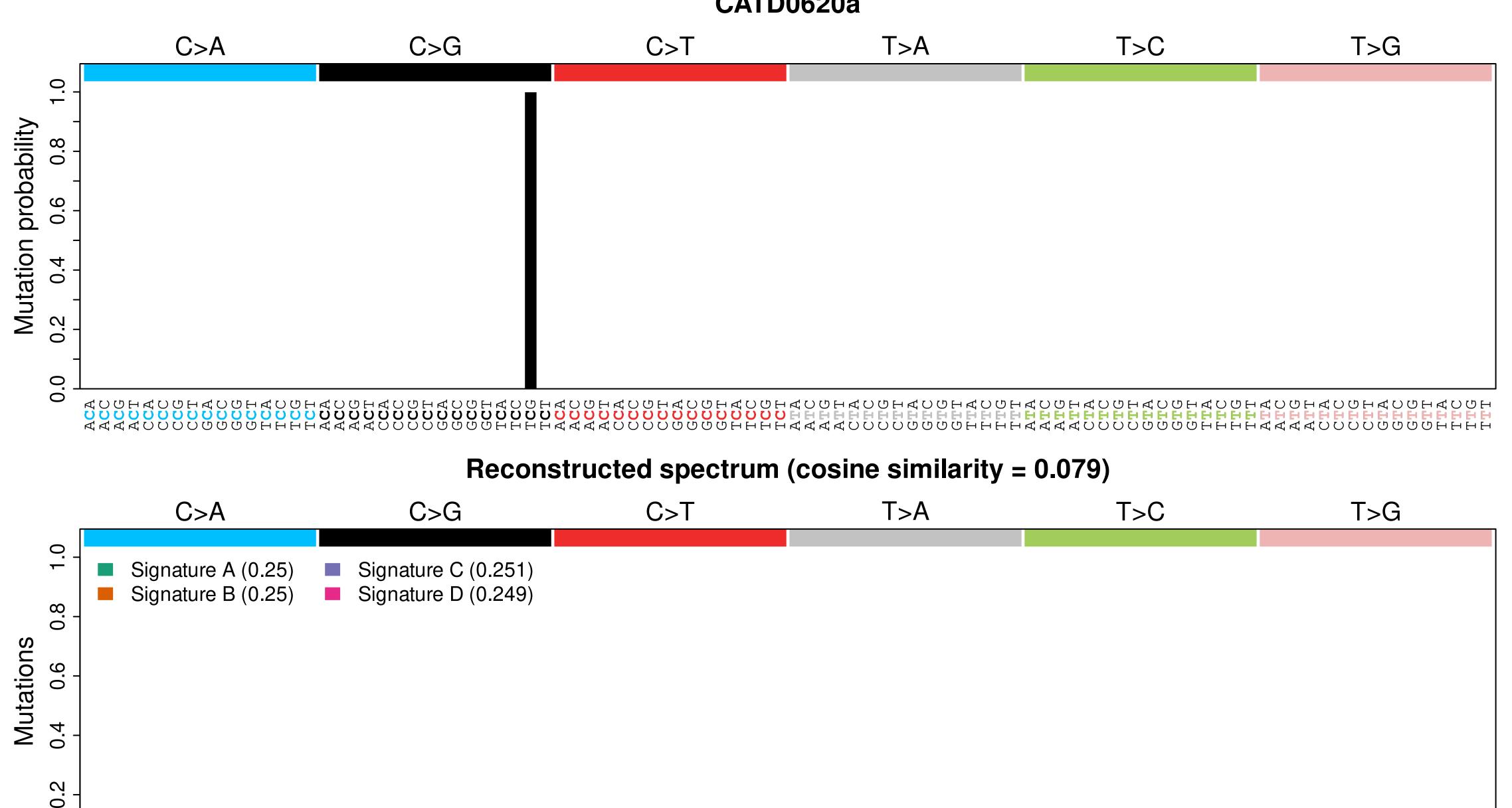
CATD0448a (4 mutations)



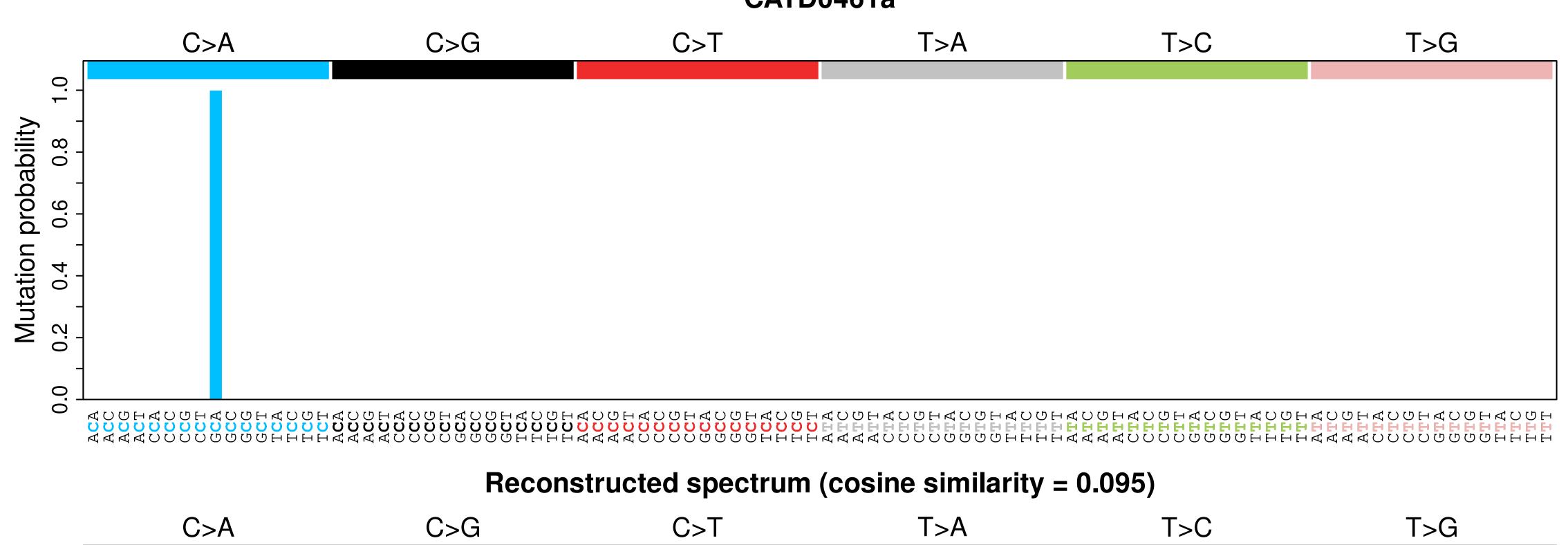
Reconstructed spectrum (cosine similarity = 0.317)

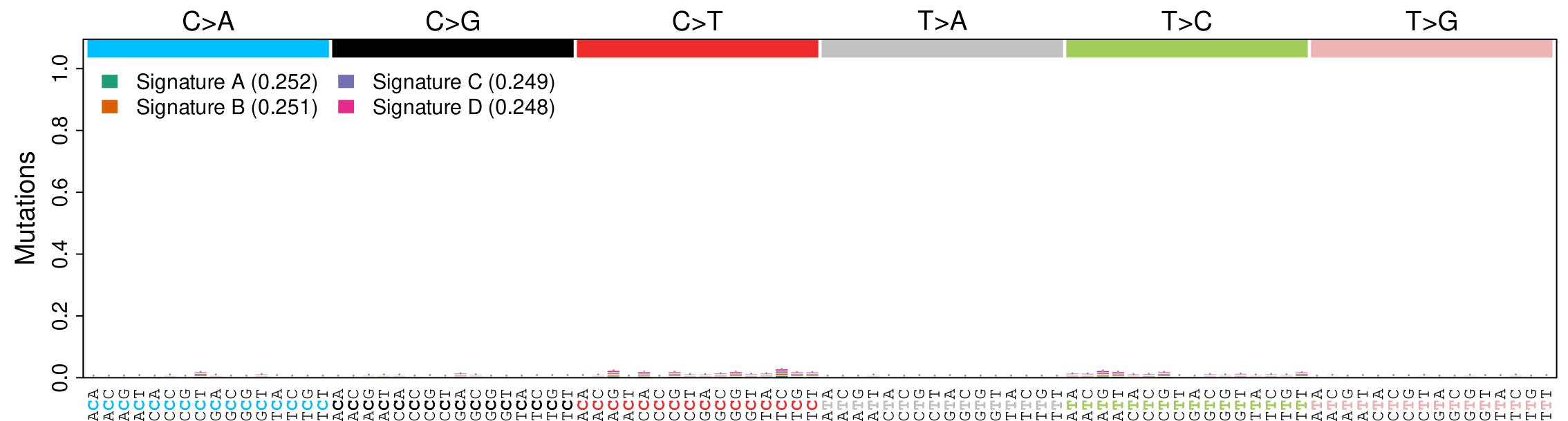




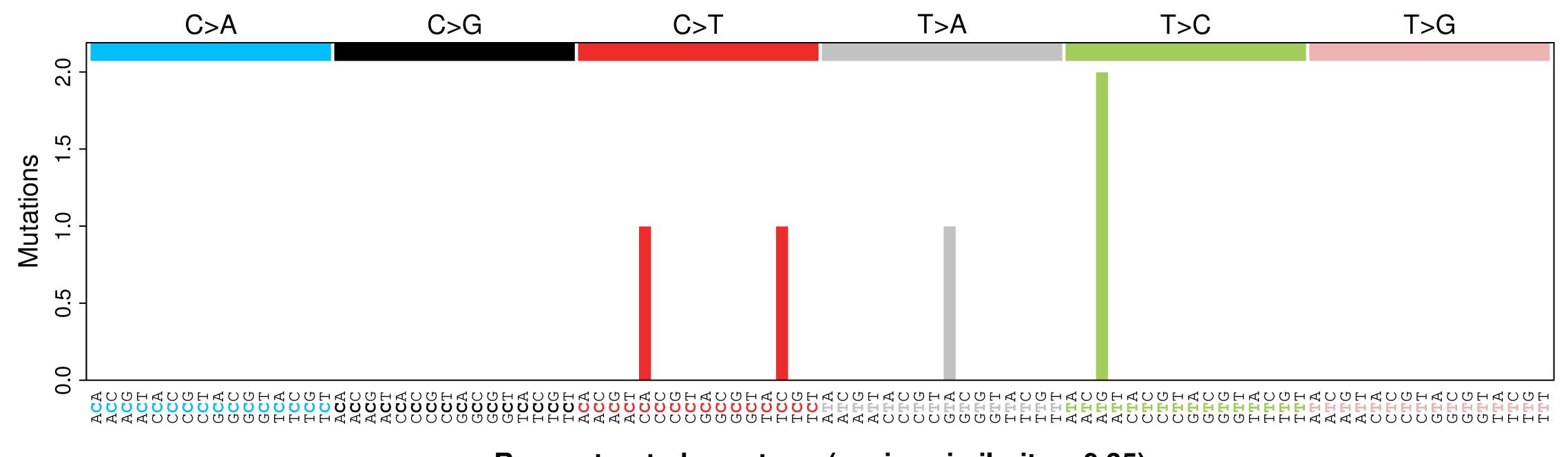




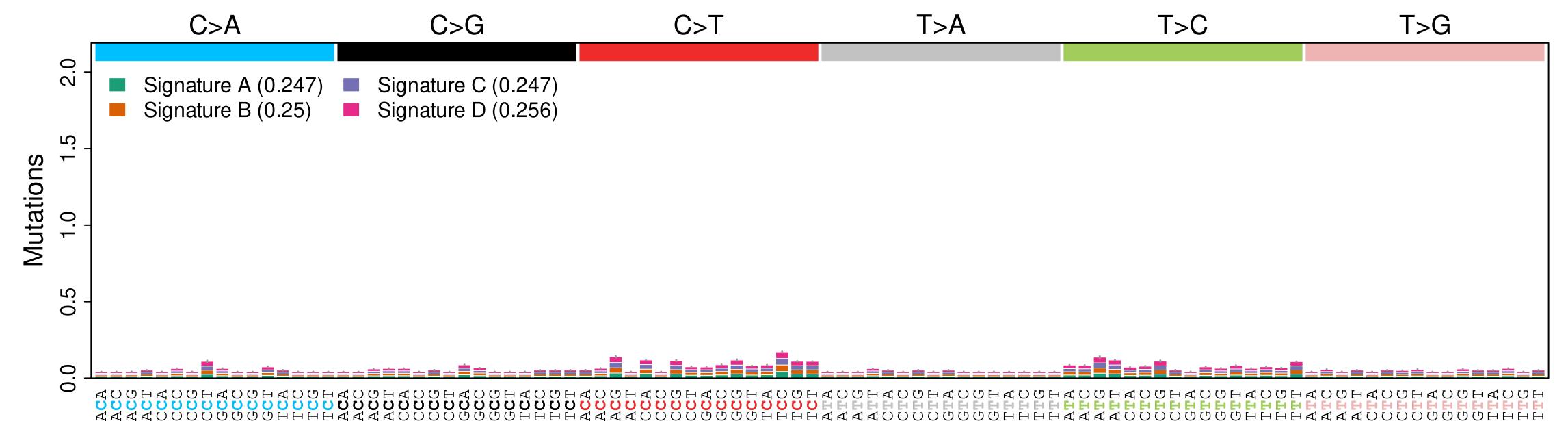




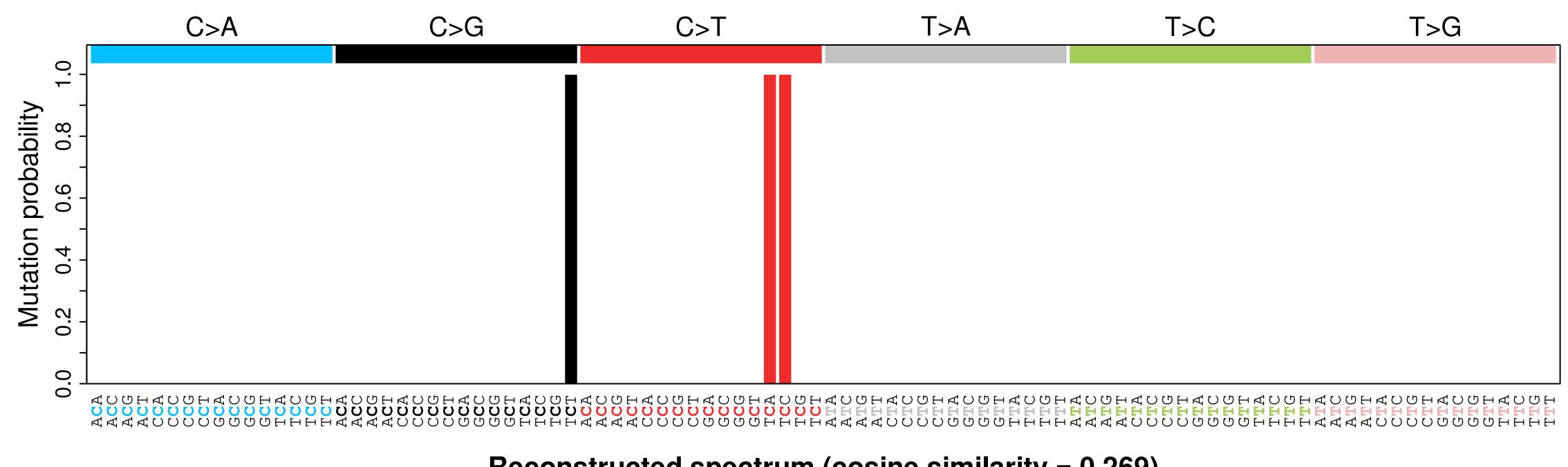
CATD0625a (5 mutations)

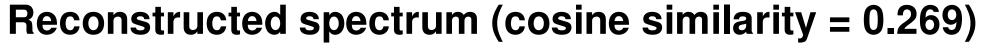


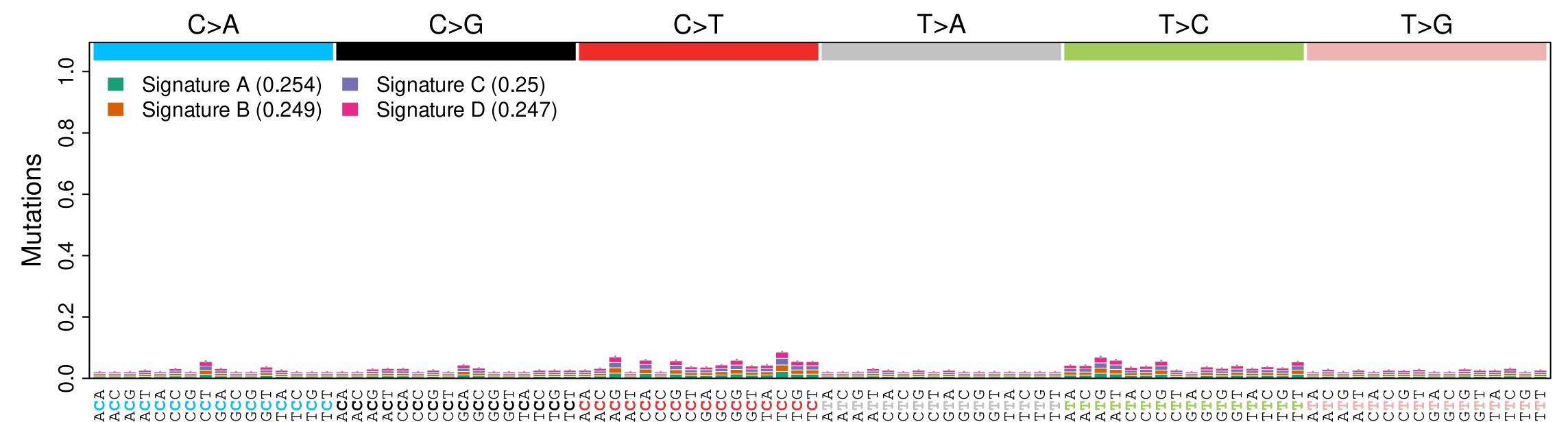
Reconstructed spectrum (cosine similarity = 0.35)



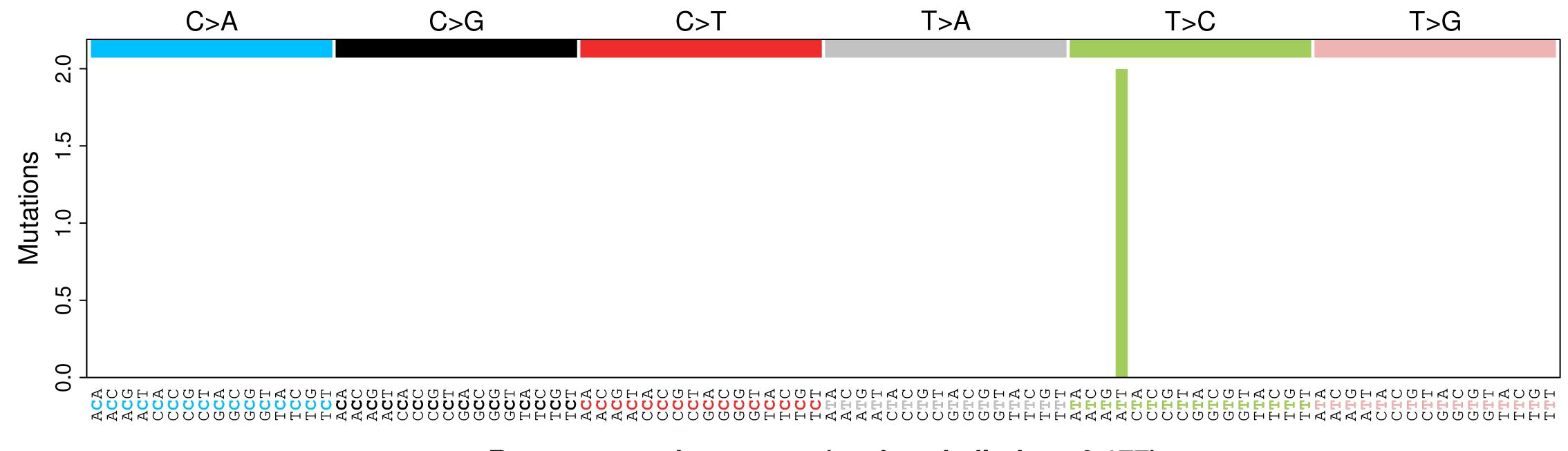








CATD0613a (2 mutations)



Reconstructed spectrum (cosine similarity = 0.177)

