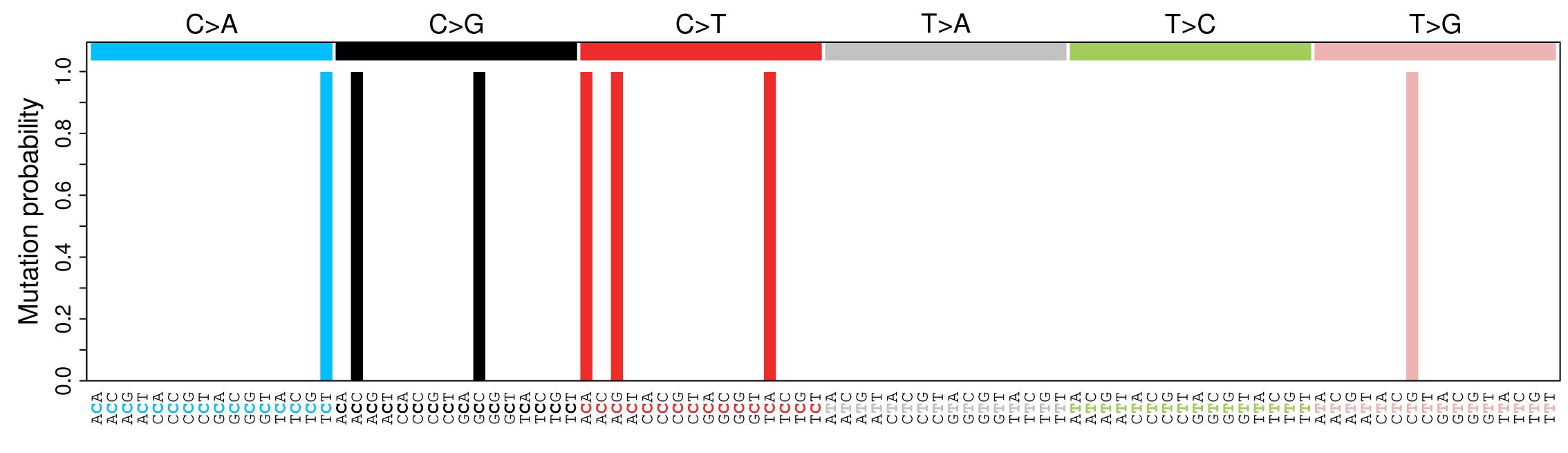
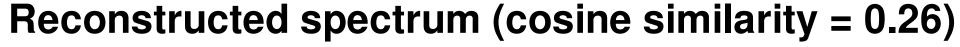
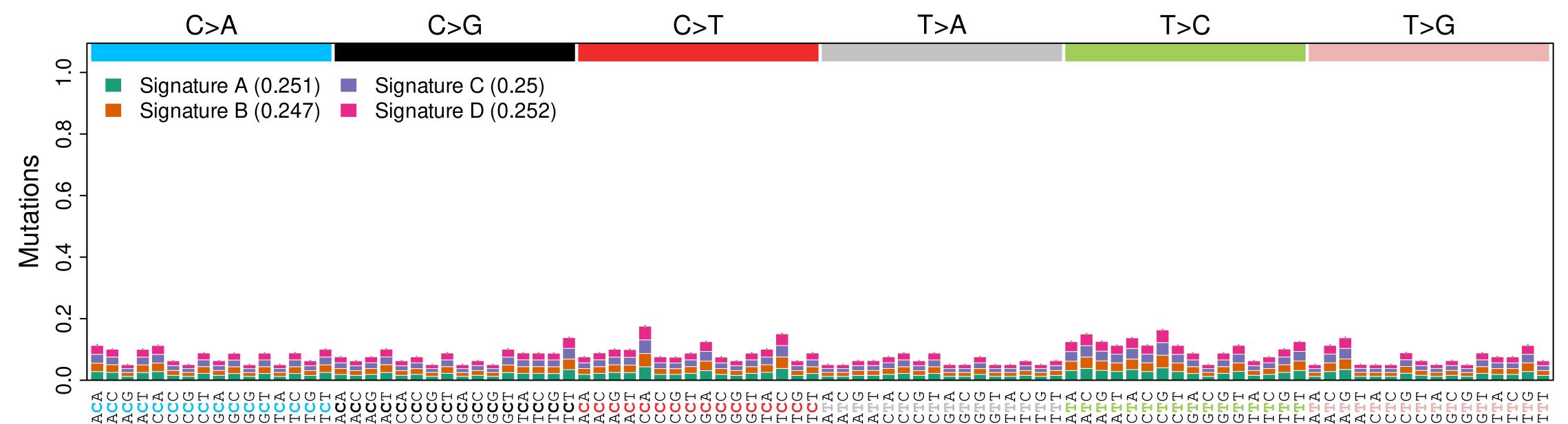
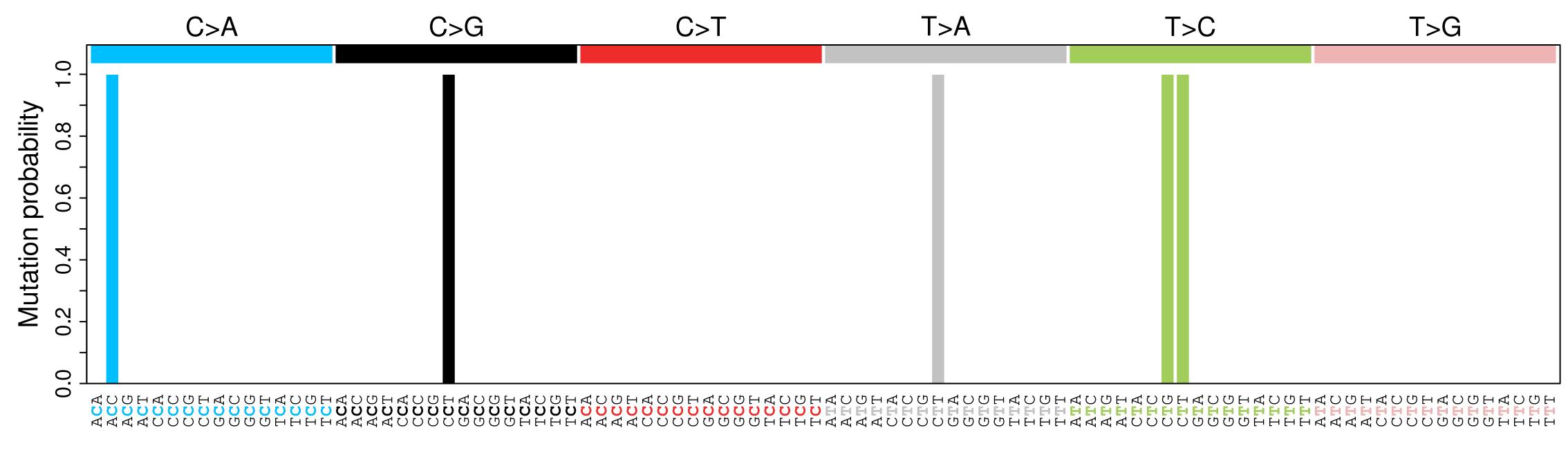
CATD0414a

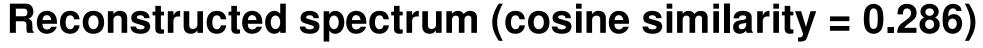


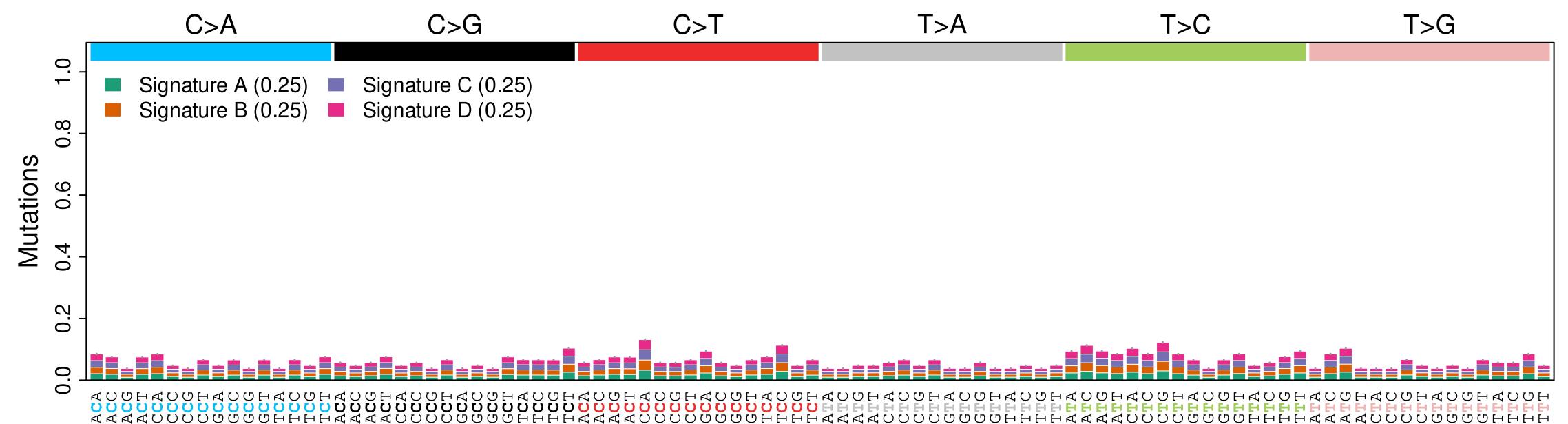




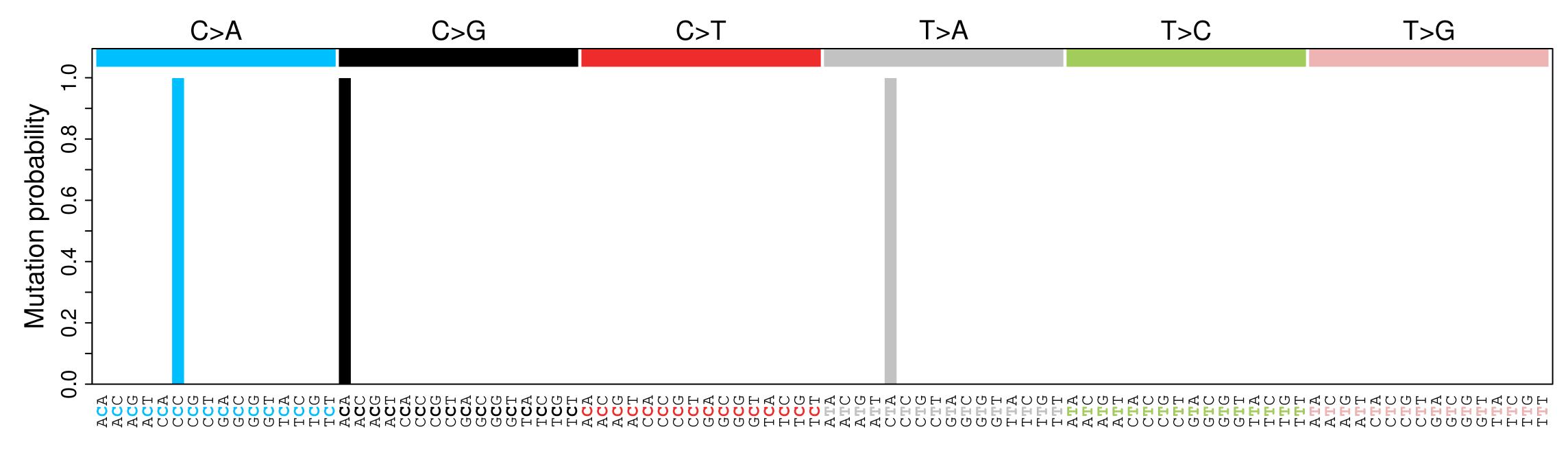
CATD0105a



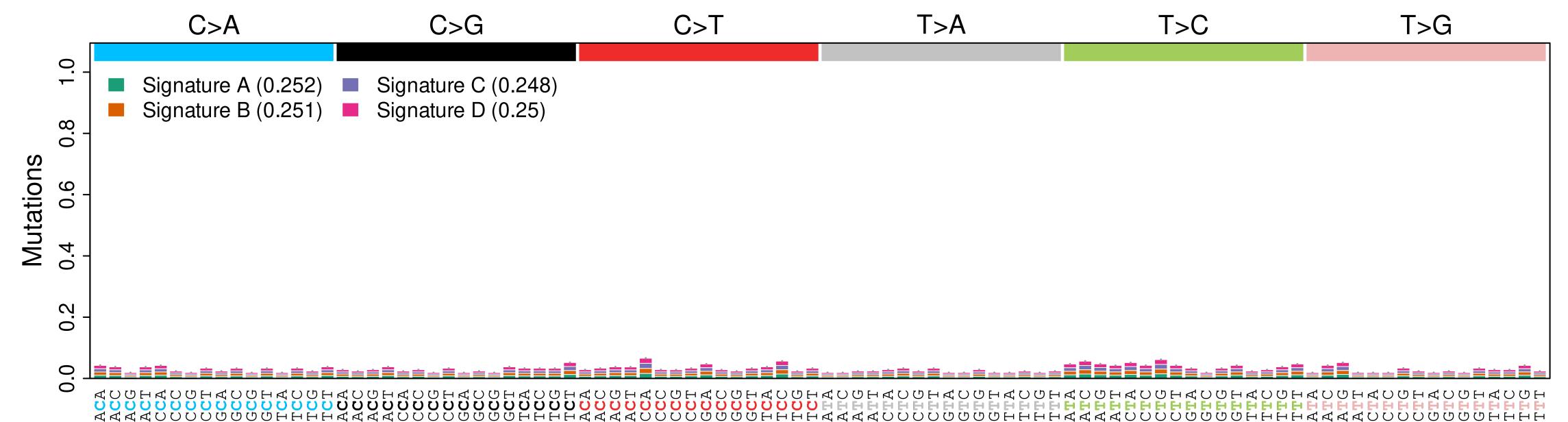






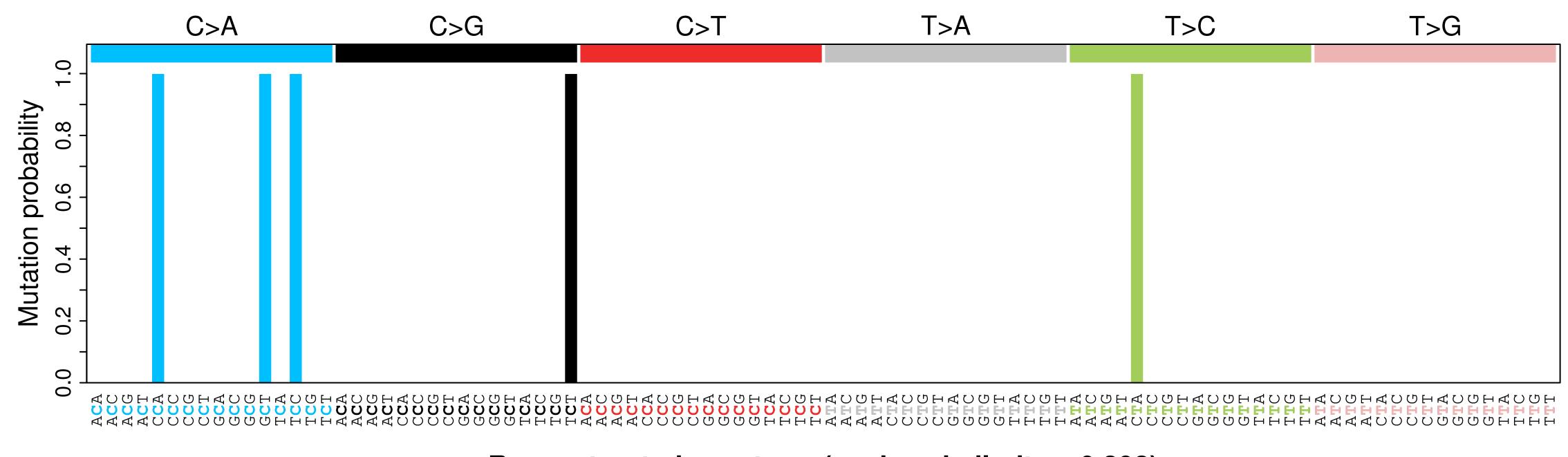


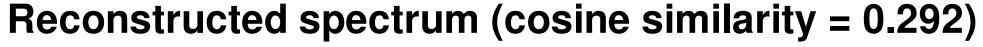
Reconstructed spectrum (cosine similarity = 0.143)

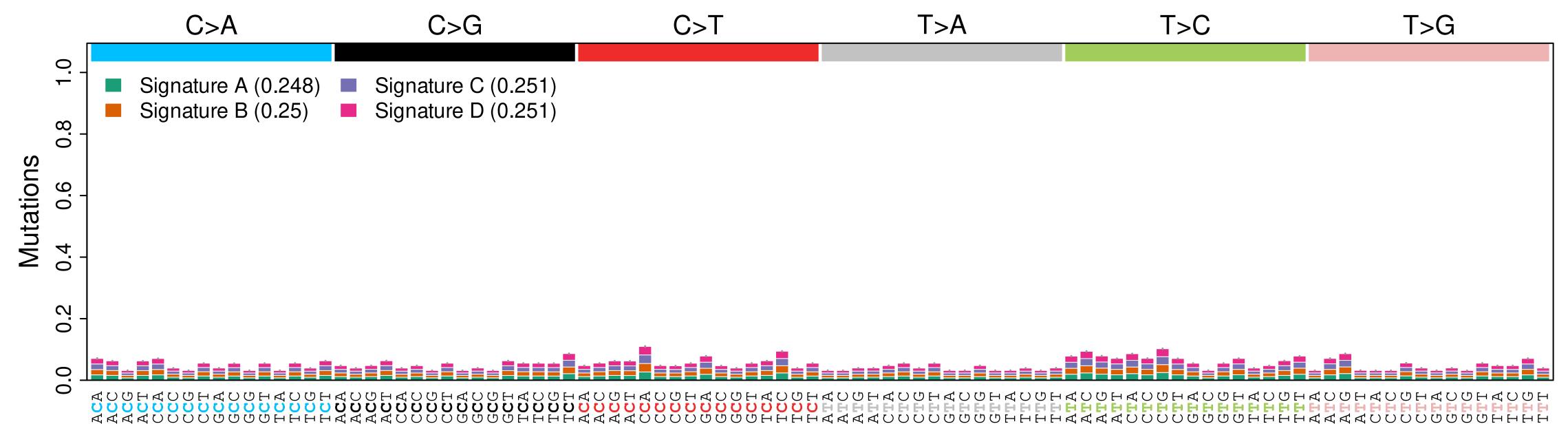


CATD0090a (7 mutations) T>G C>A C>G C>T T>A T>C 2.0 5 Mutations 0.5 0.0 **Reconstructed spectrum (cosine similarity = 0.264)** T>C T>G C>A C>G T>A C>T 2.0 Signature A (0.252) Signature C (0.251) Signature B (0.249) Signature D (0.247) 5 Mutations 2 0

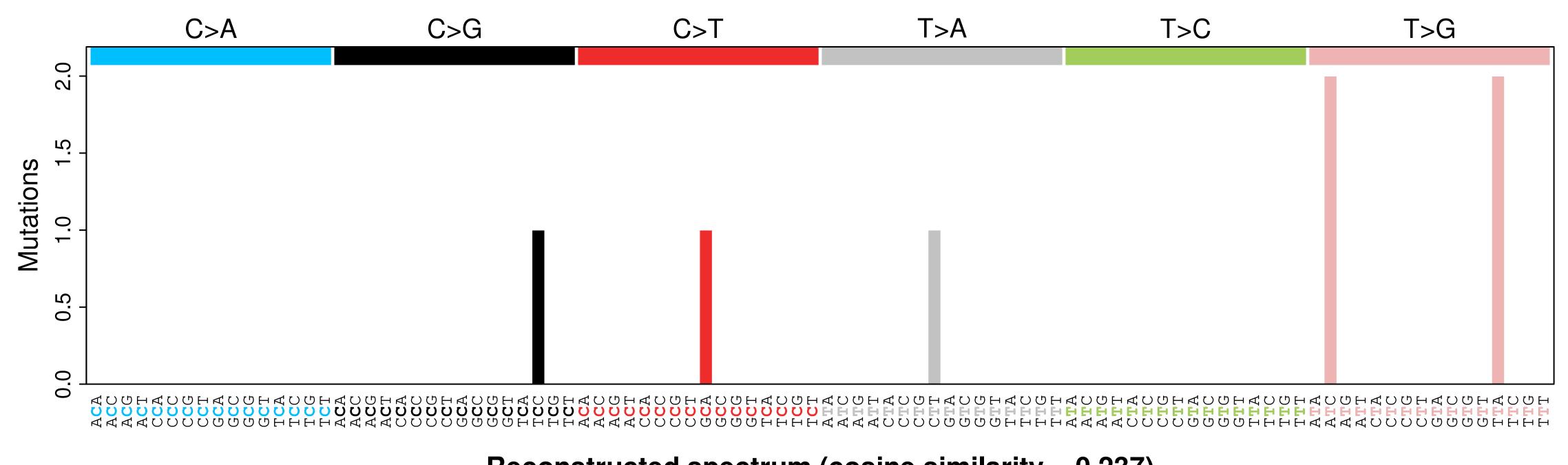
CATD0088a



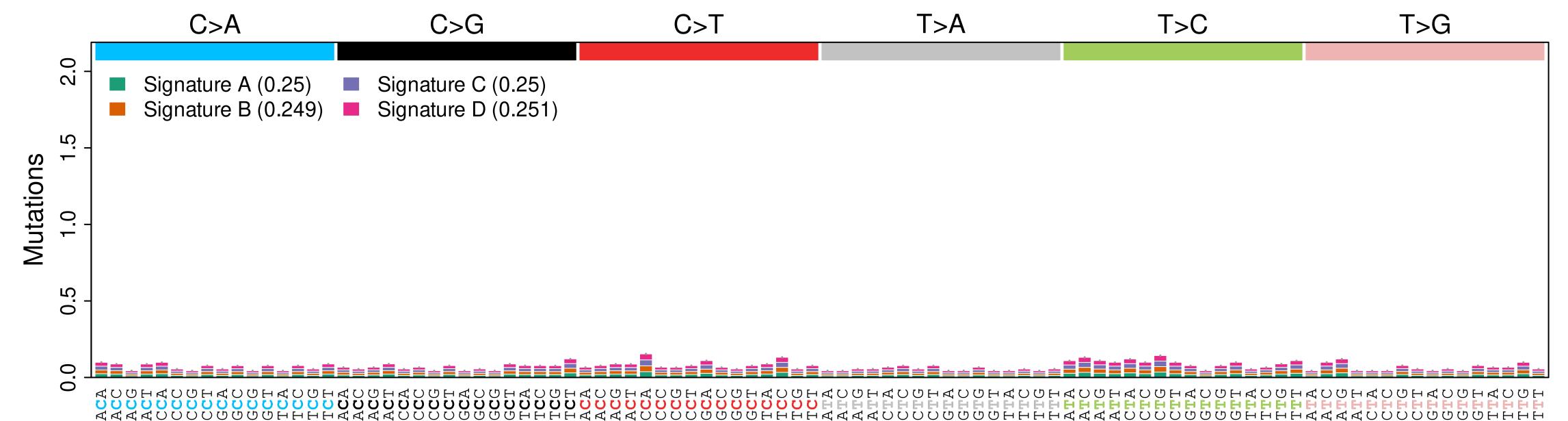




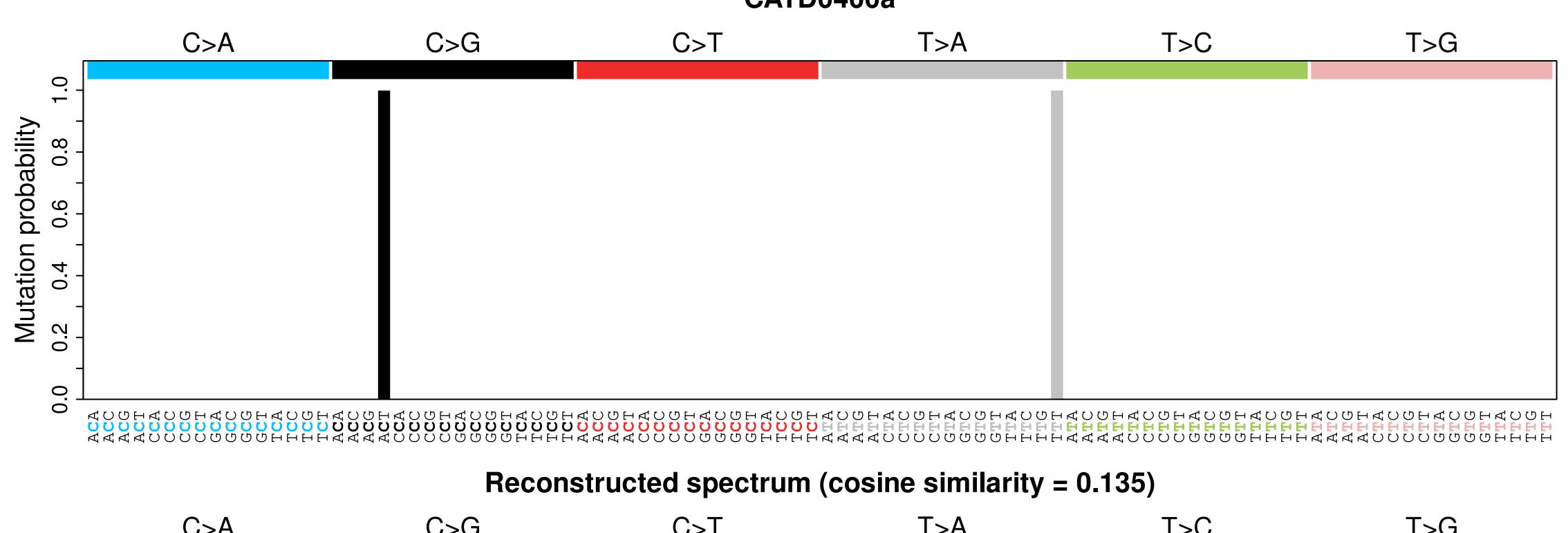
CATD0102a (7 mutations)

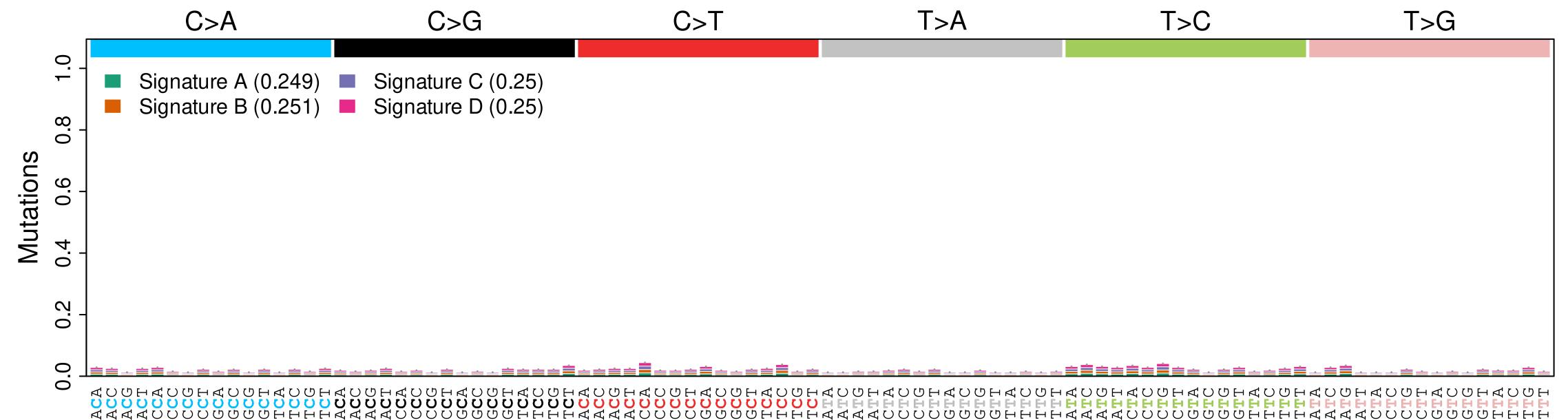


Reconstructed spectrum (cosine similarity = 0.237)

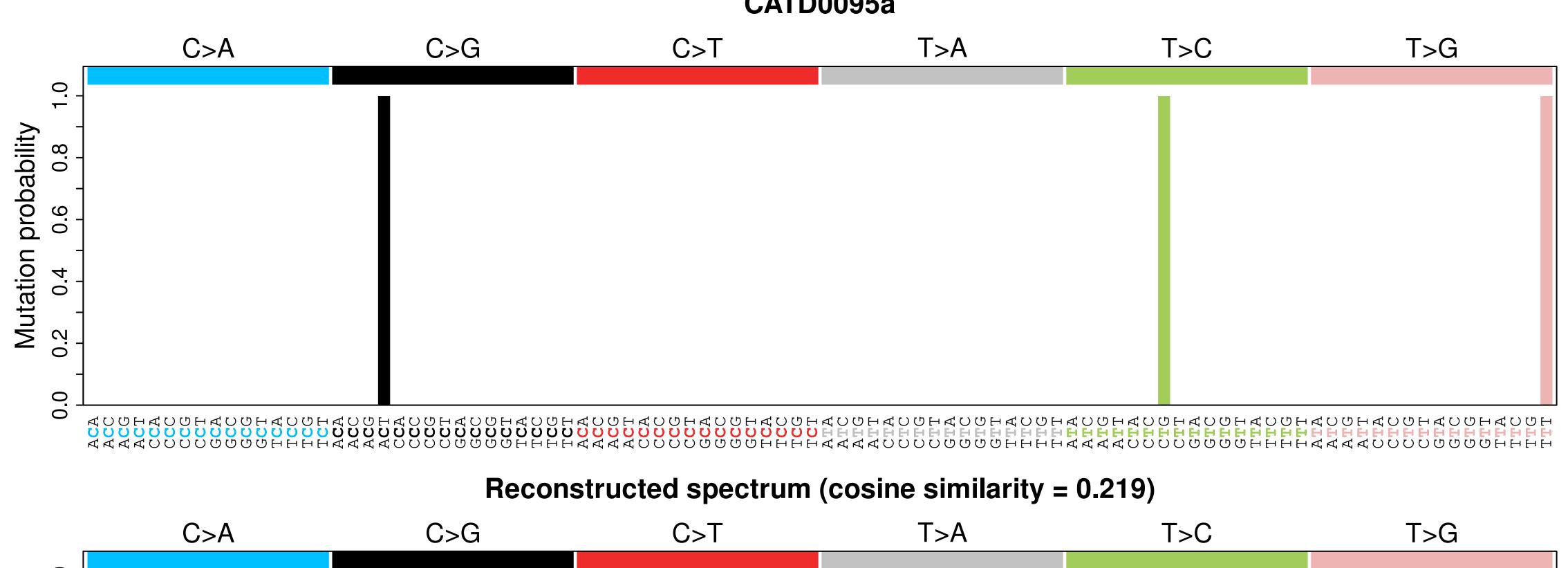


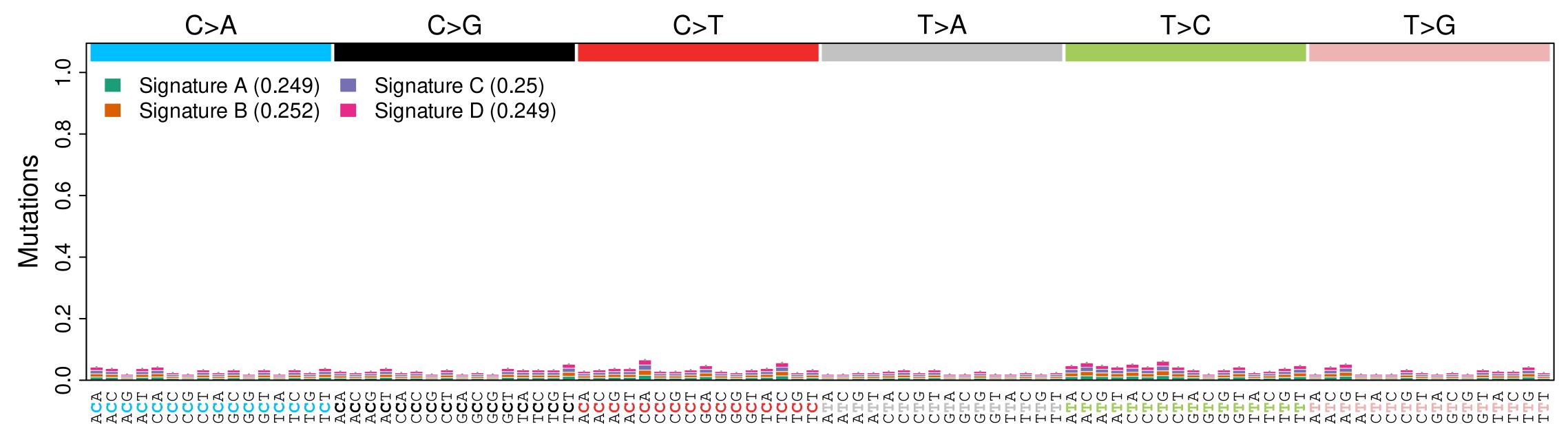




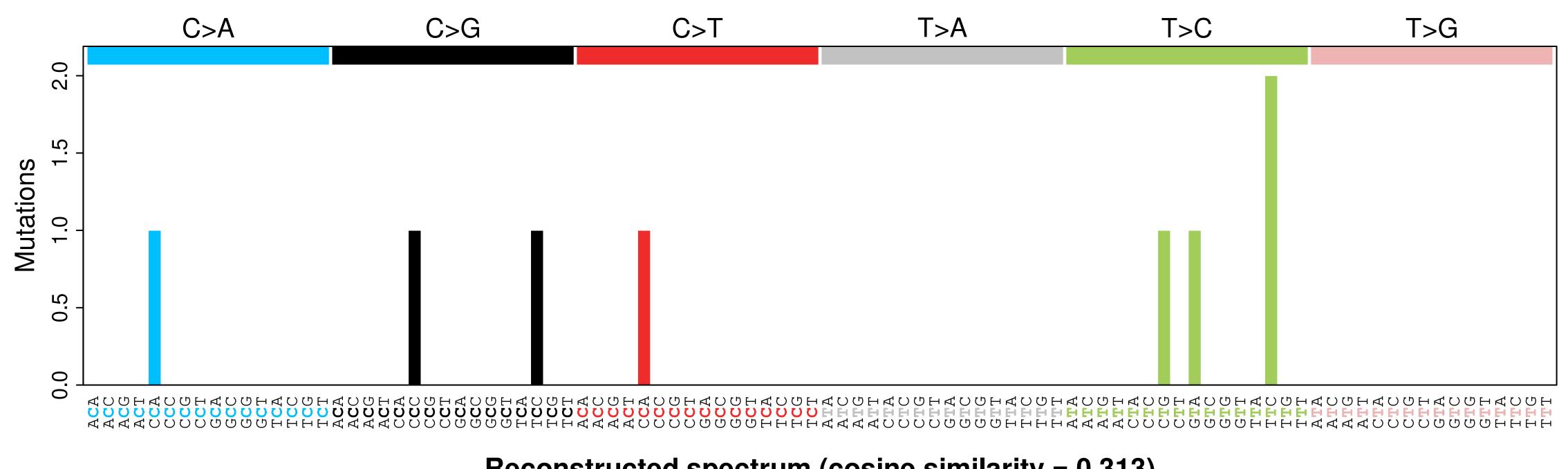




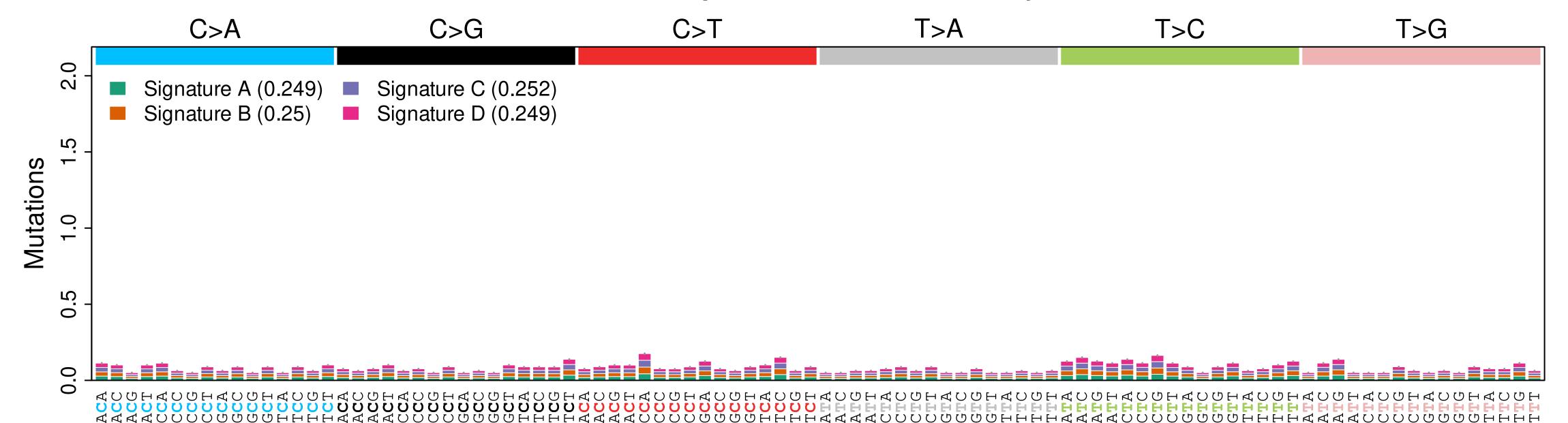




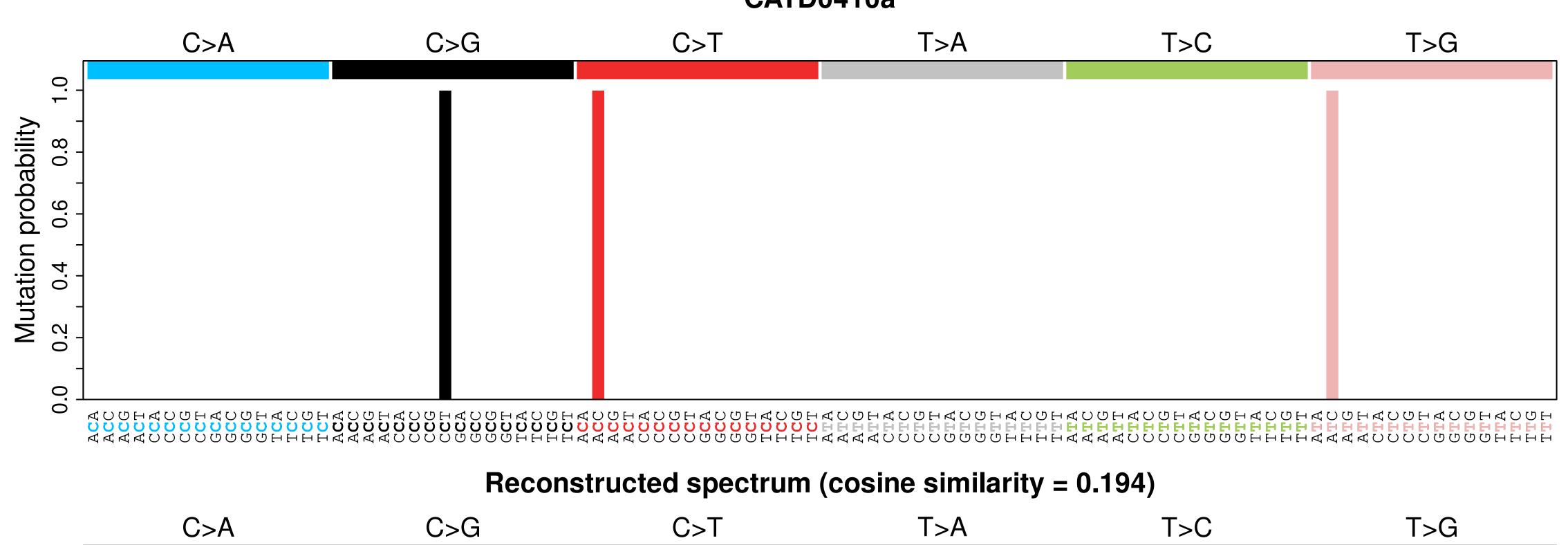
CATD0087a (8 mutations)

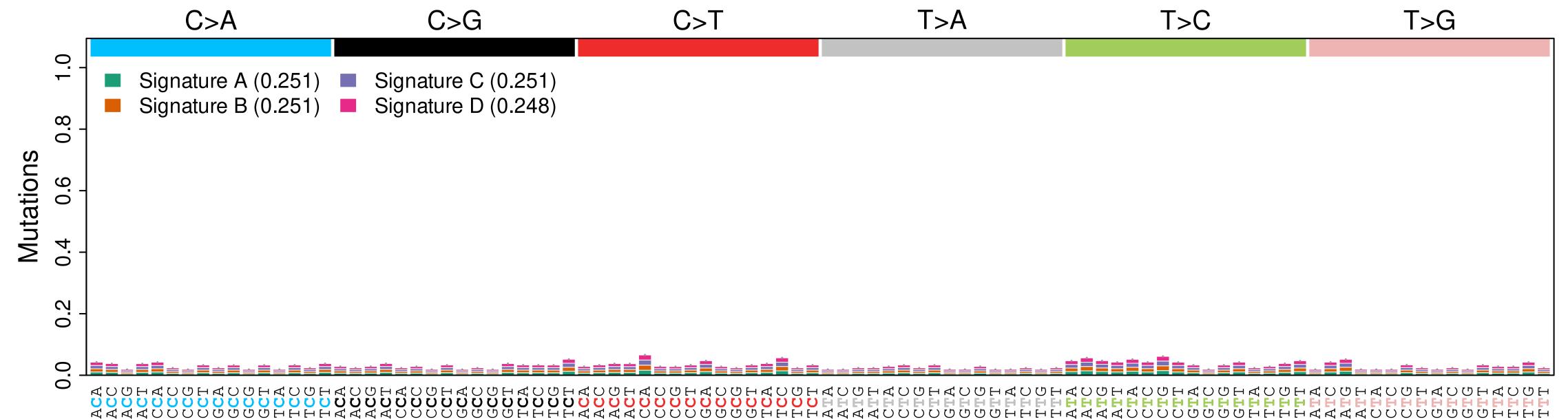


Reconstructed spectrum (cosine similarity = 0.313)

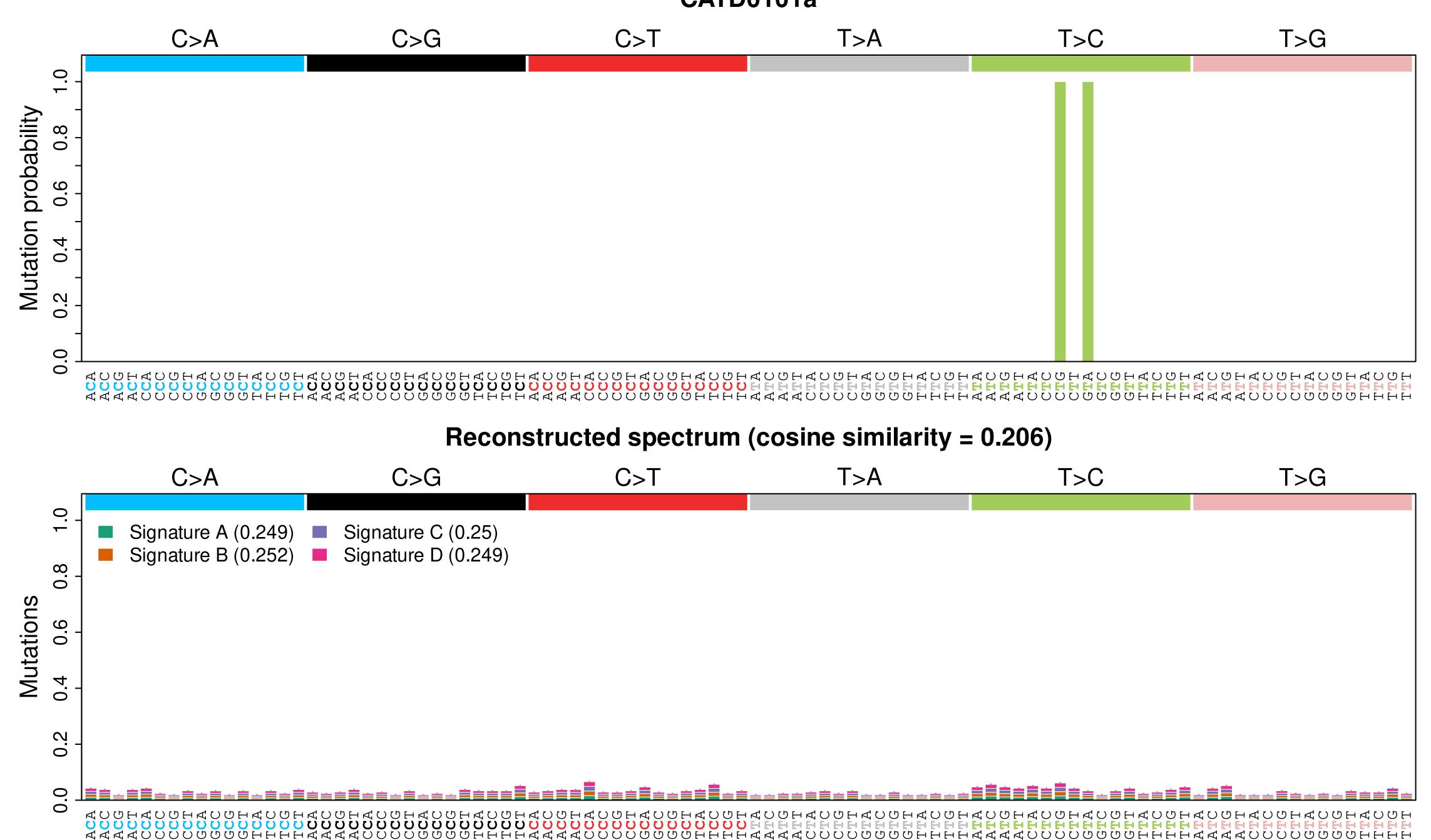






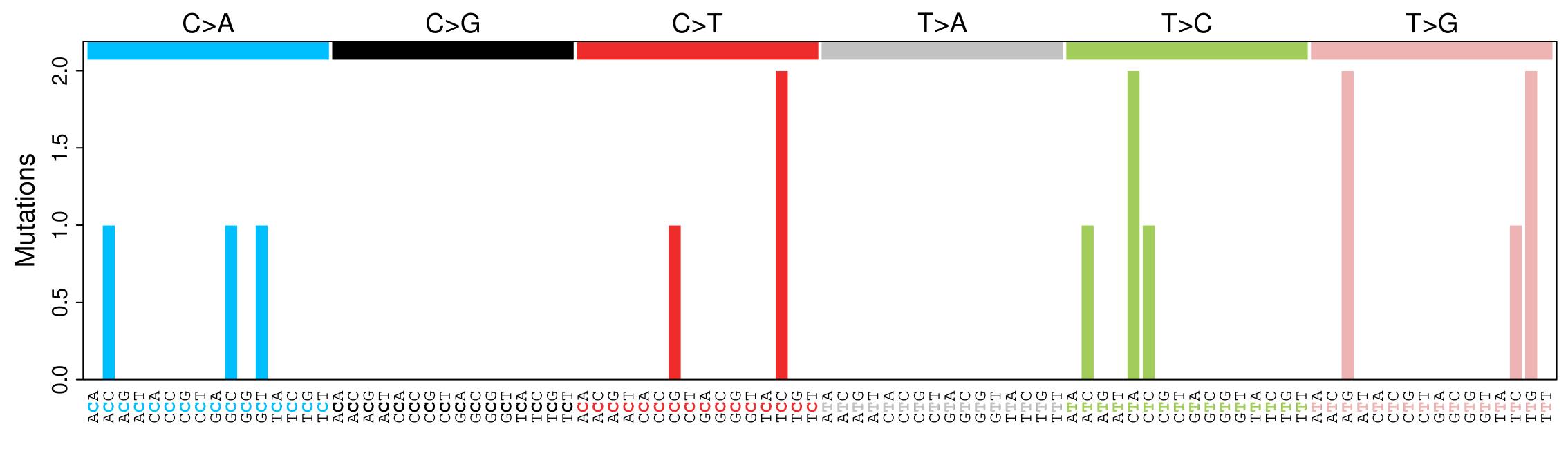


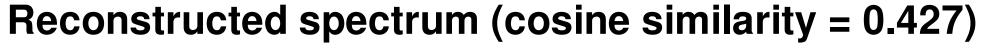


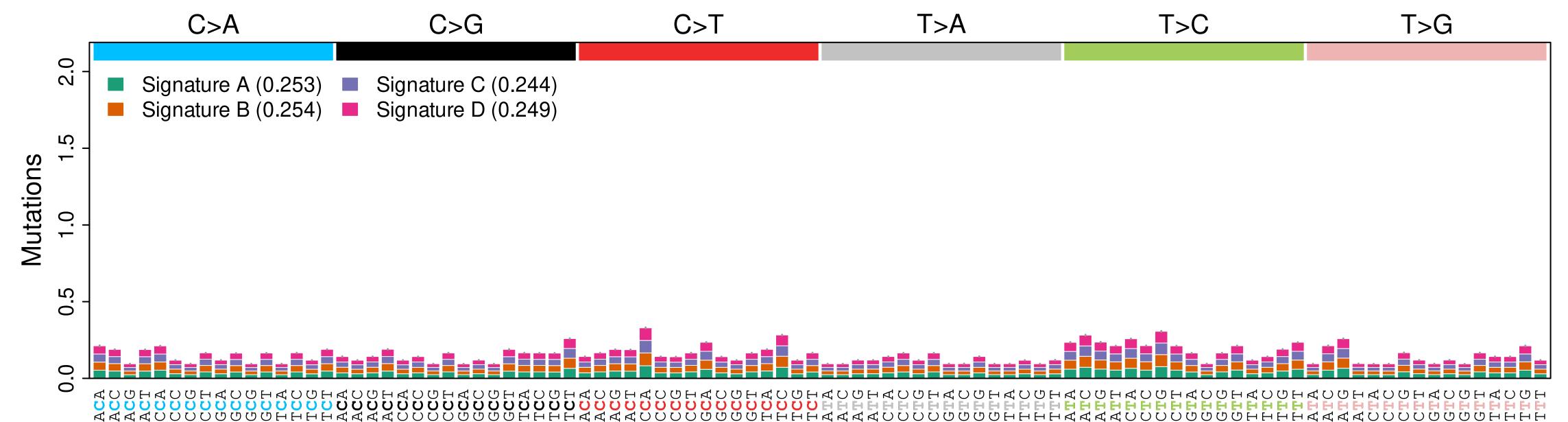


CATD0100a (4 mutations) T>G C>A C>G C>T T>A T>C 2.0 5 Mutations 0.5 0.0 **Reconstructed spectrum (cosine similarity = 0.214)** T>C T>G C>A C>G T>A C>T 2.0 Signature A (0.251) Signature C (0.251) Signature B (0.249) Signature D (0.249) 5 Mutations 2 0

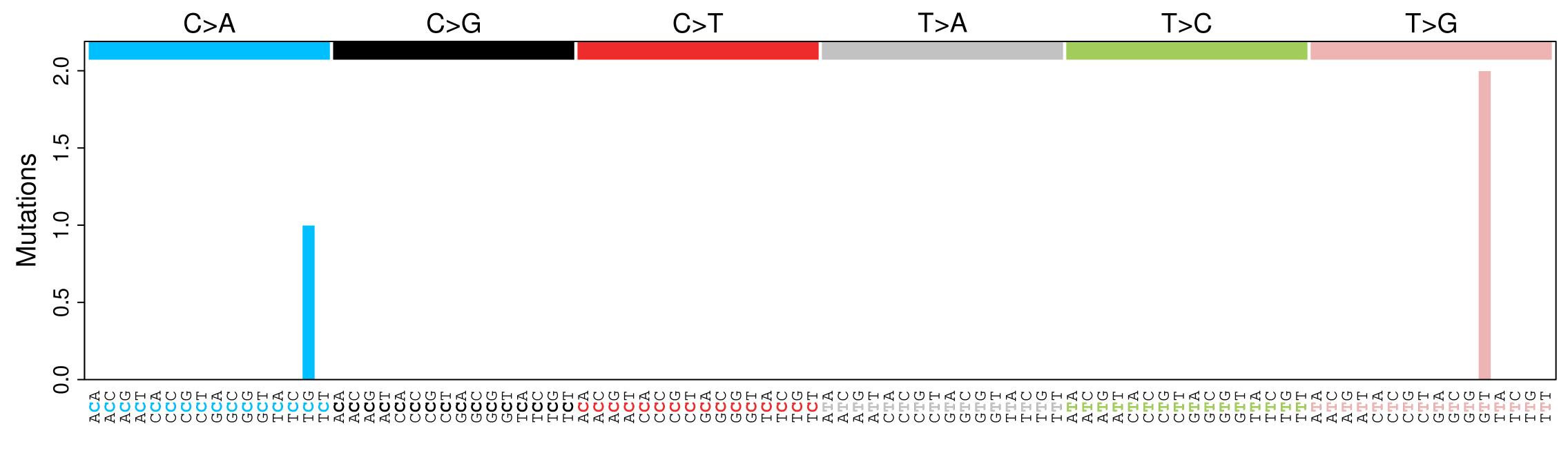
CATD0118a (15 mutations)



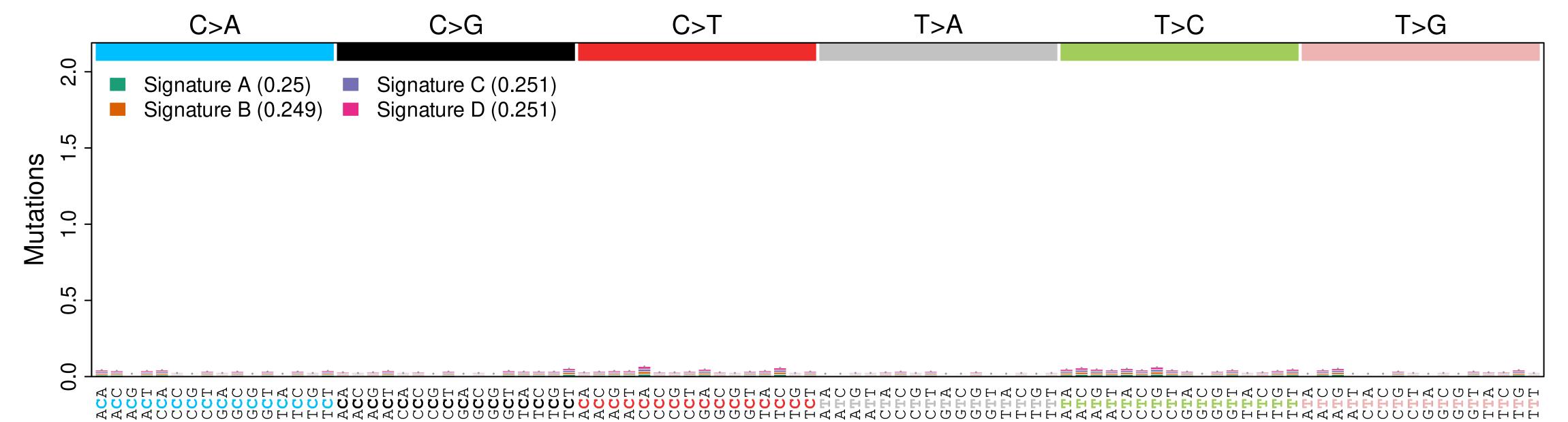




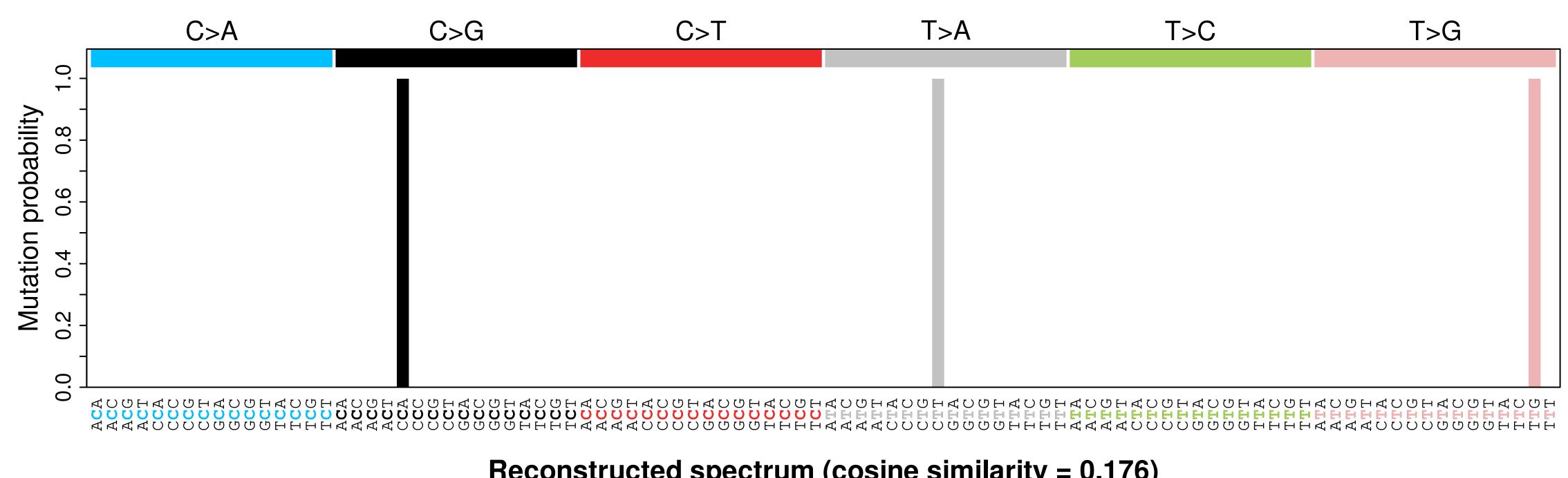
CATD0108a (3 mutations)

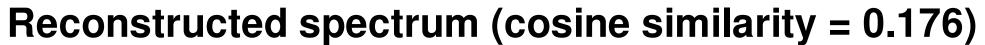


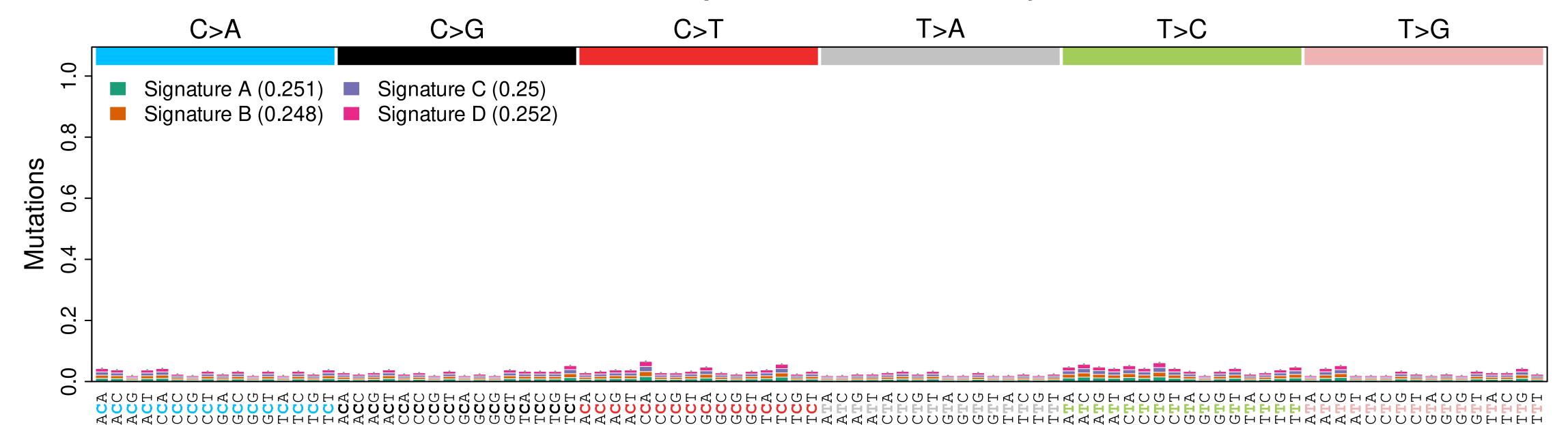
Reconstructed spectrum (cosine similarity = 0.124)



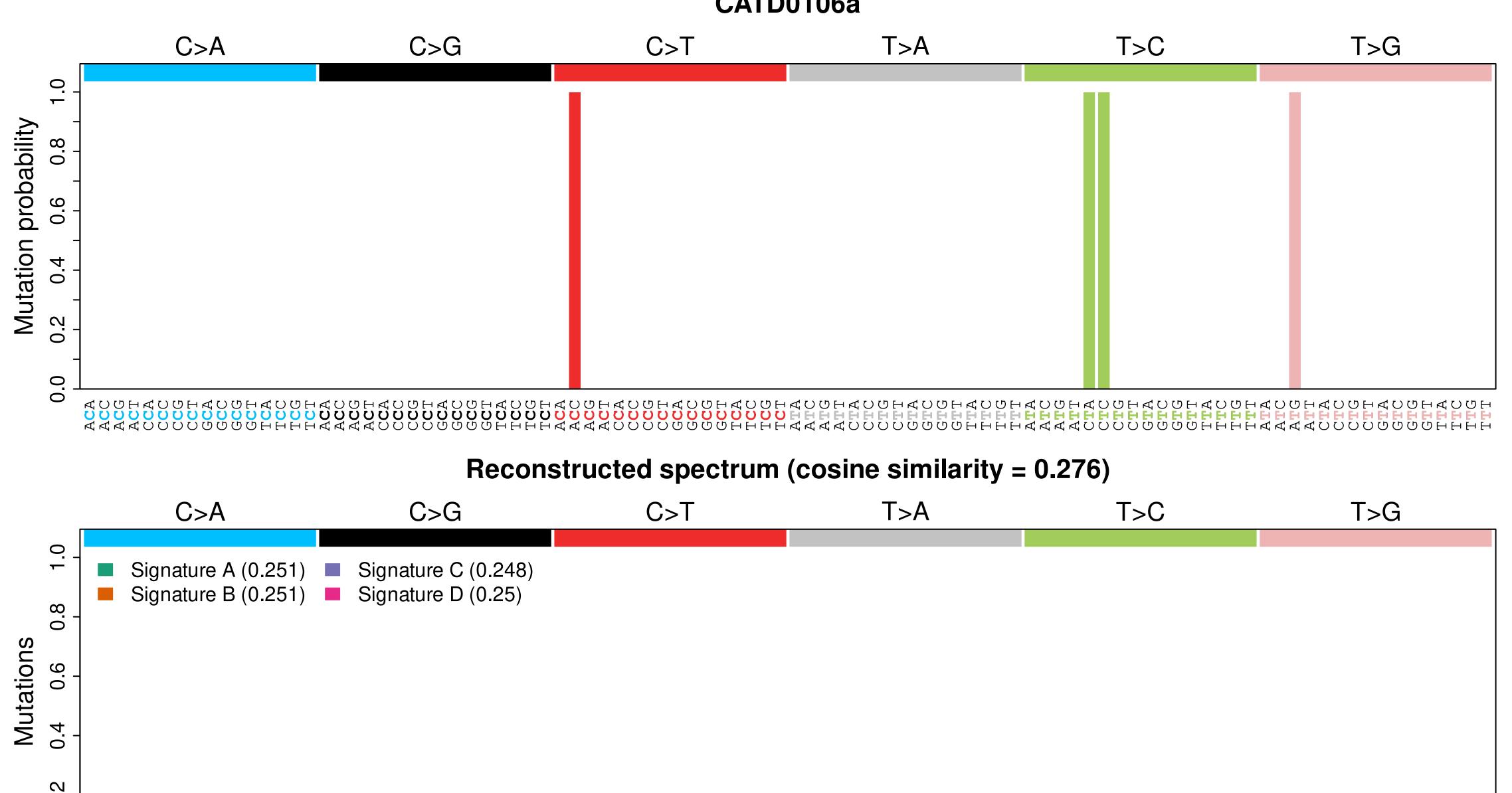




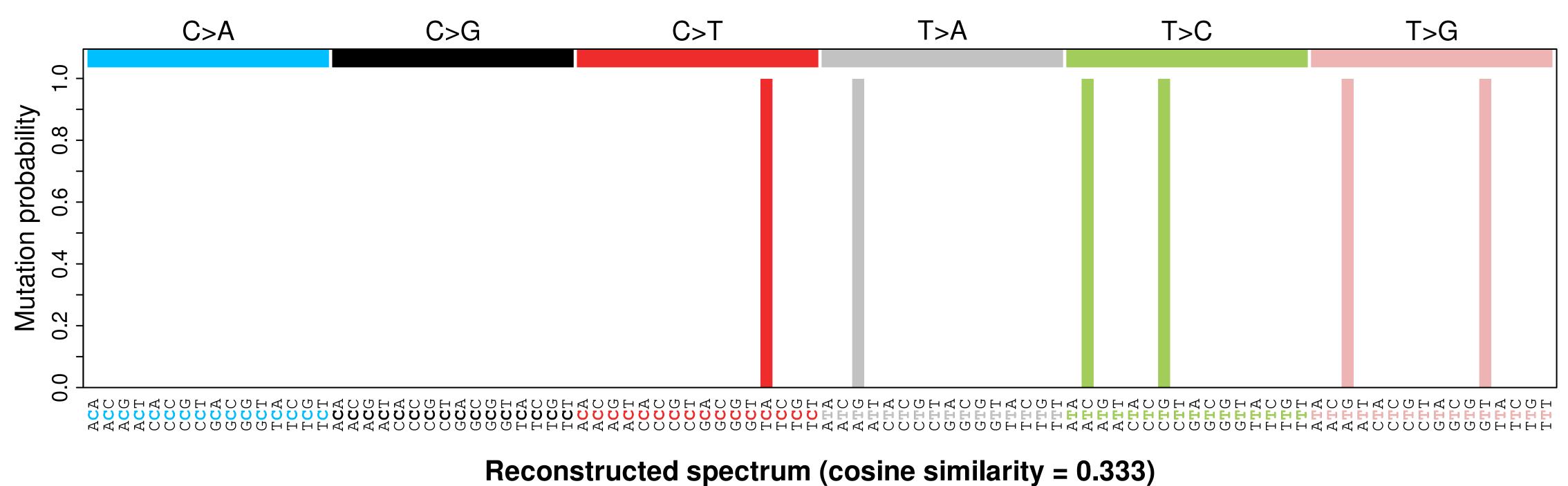


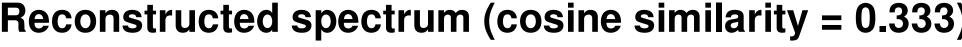


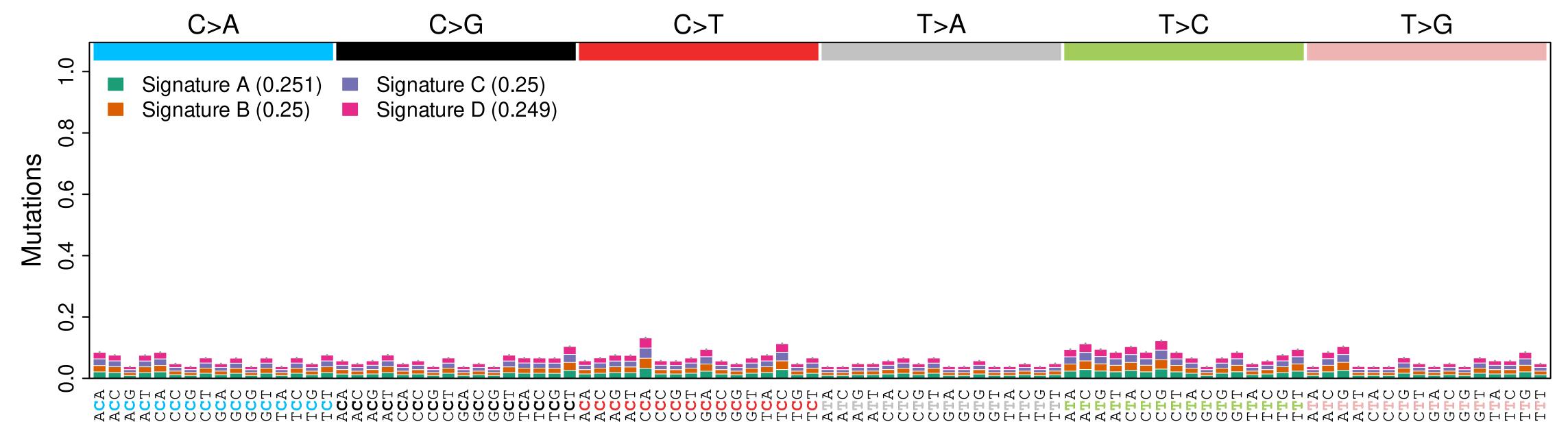
CATD0106a



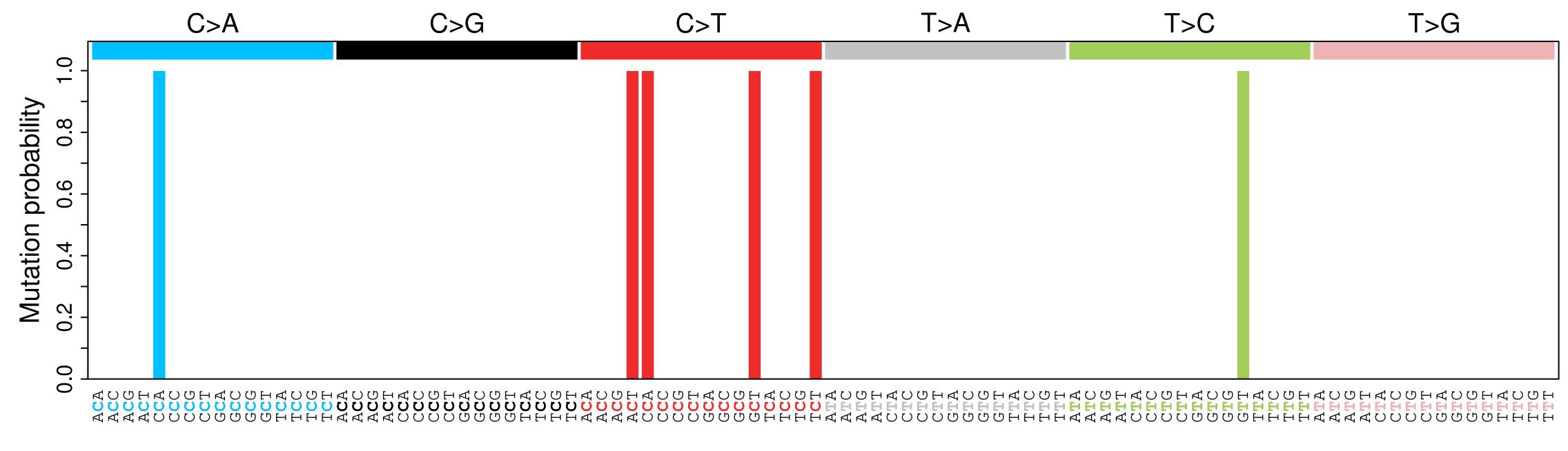
CATD0107a



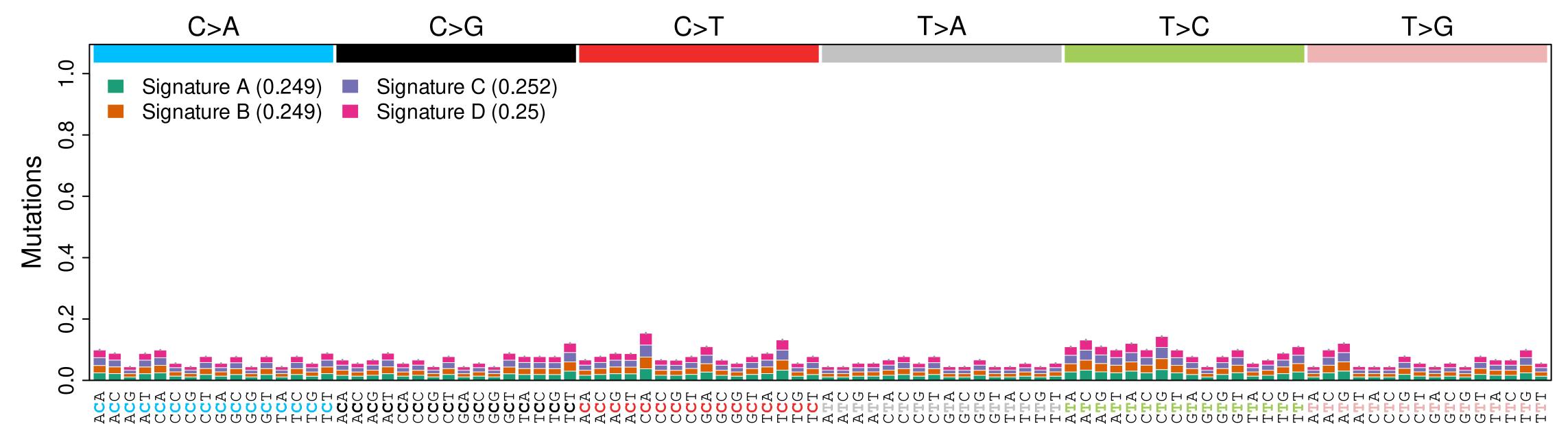




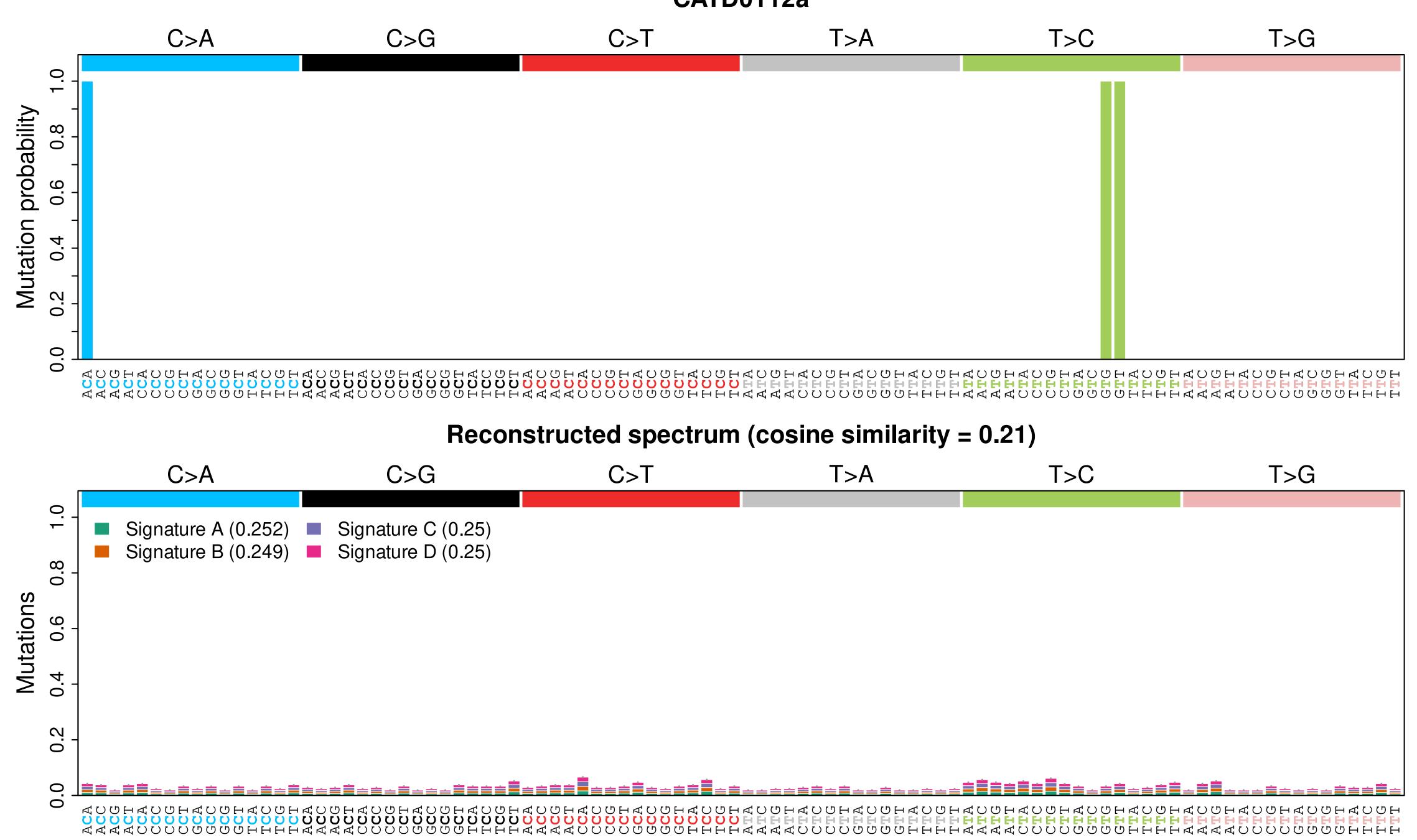
CATD0097a



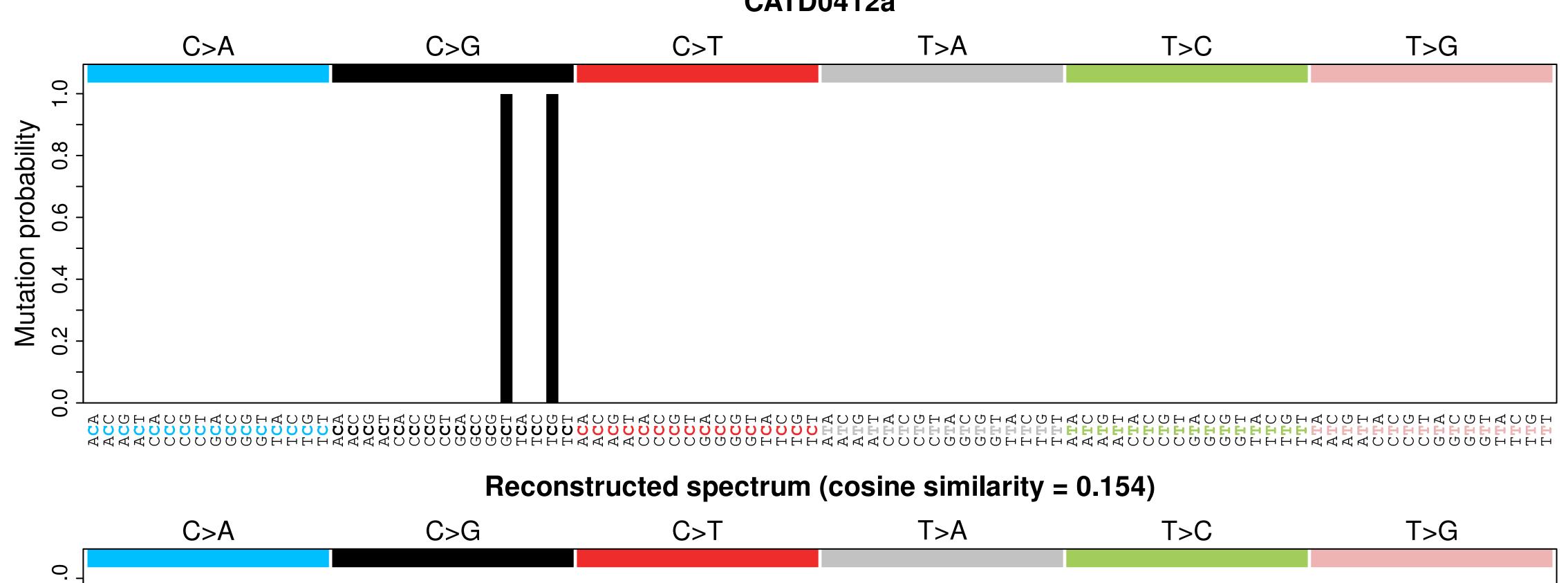
Reconstructed spectrum (cosine similarity = 0.32)

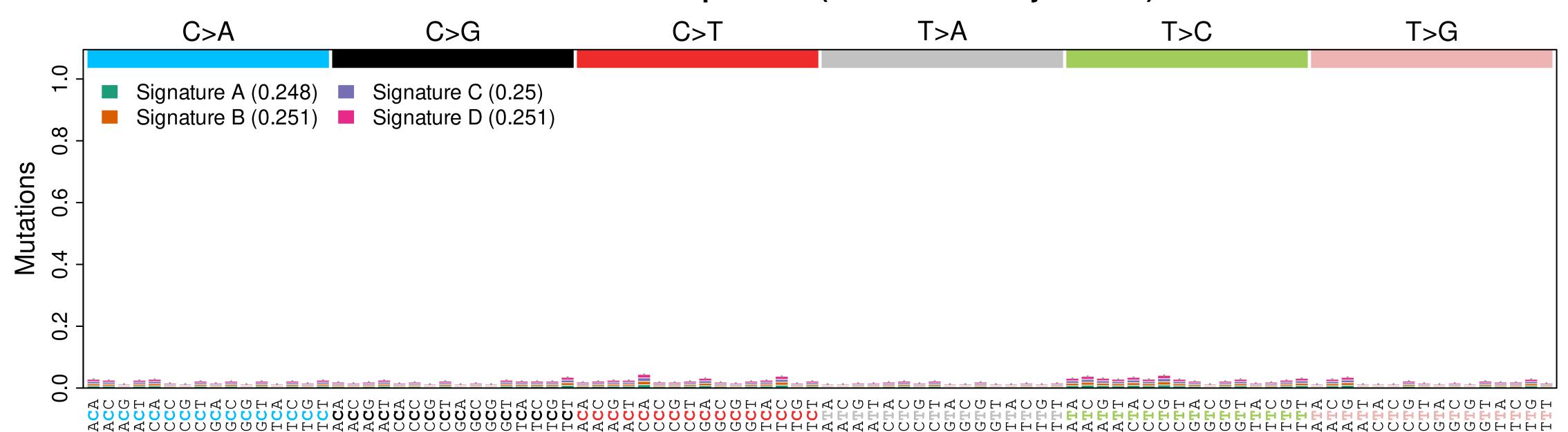




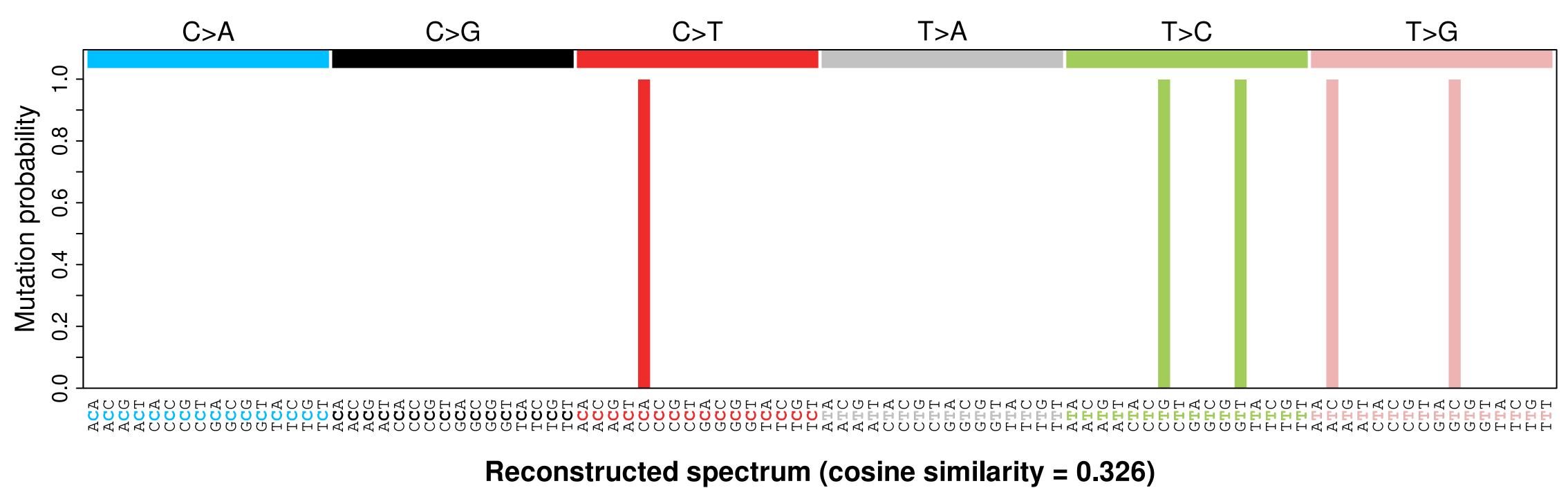


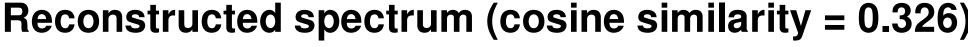


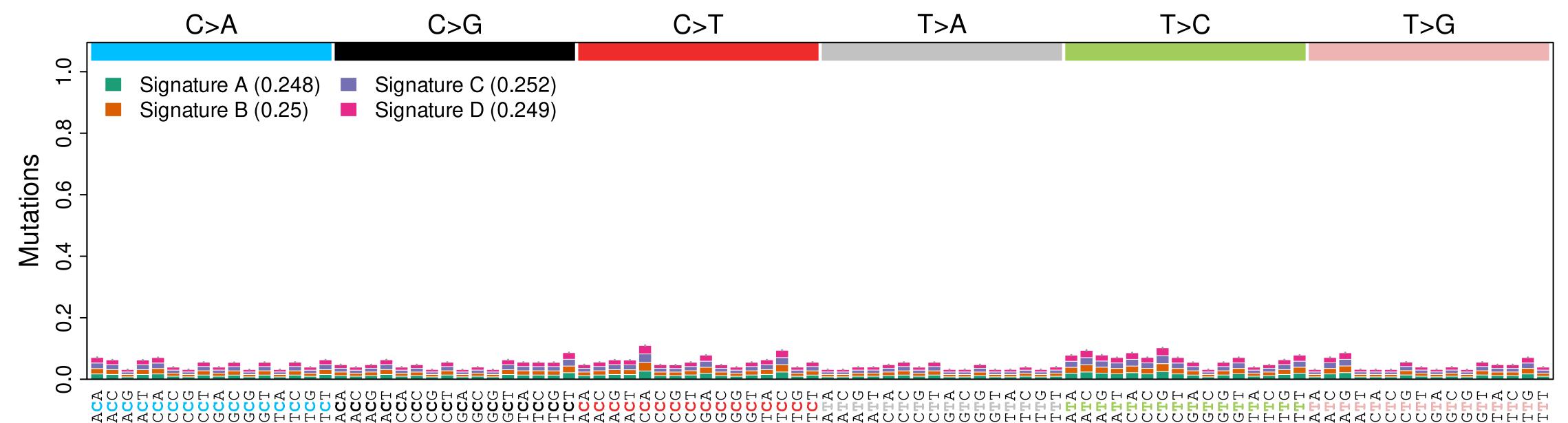




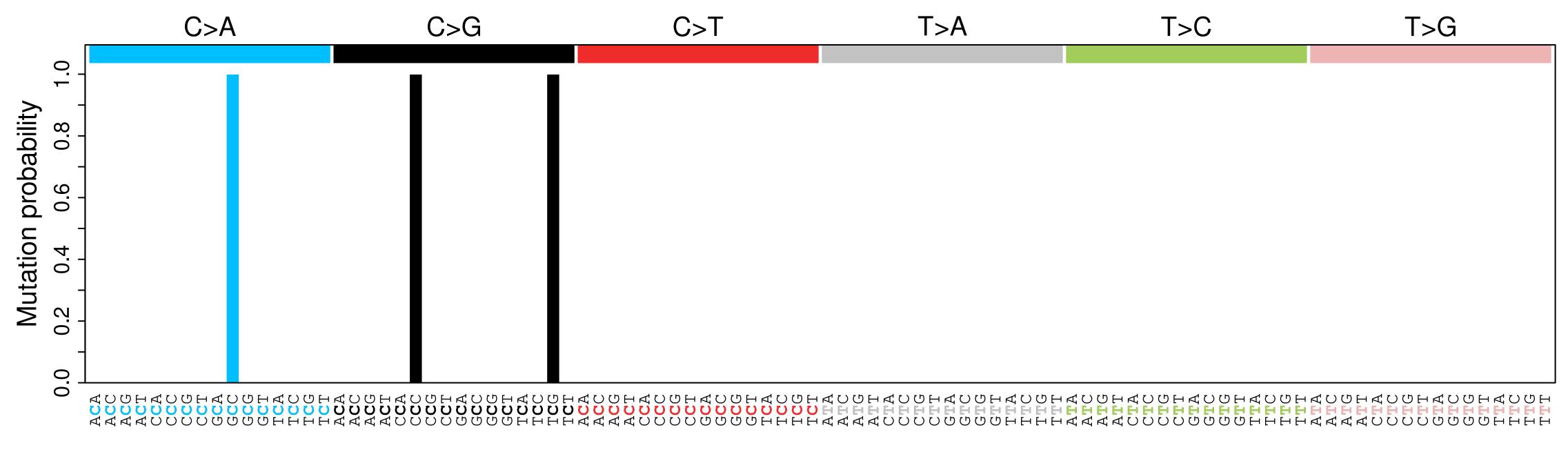
CATD0110a



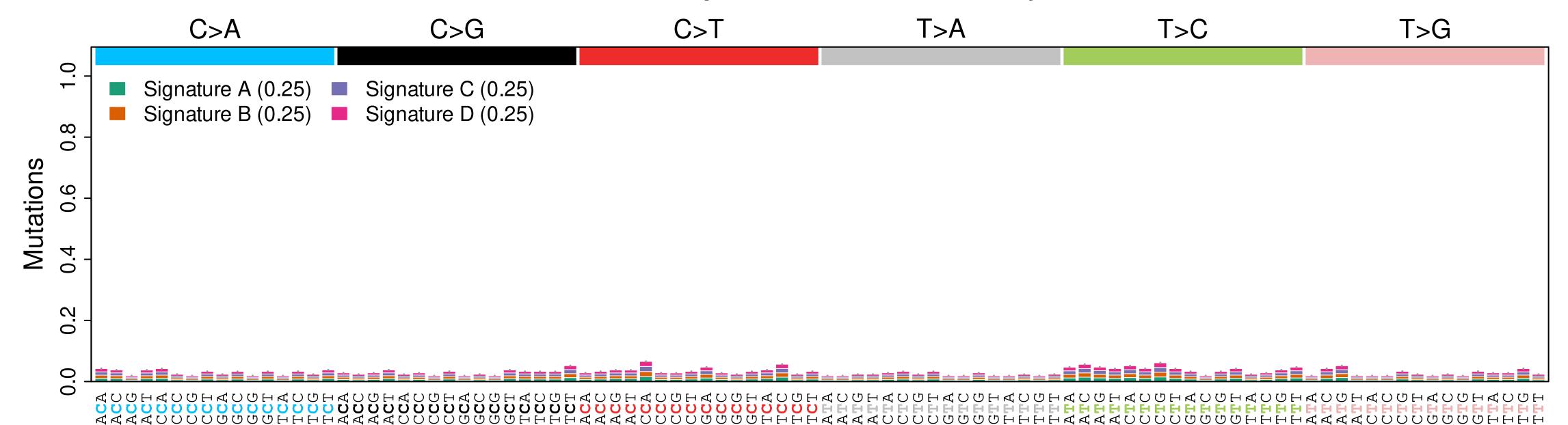




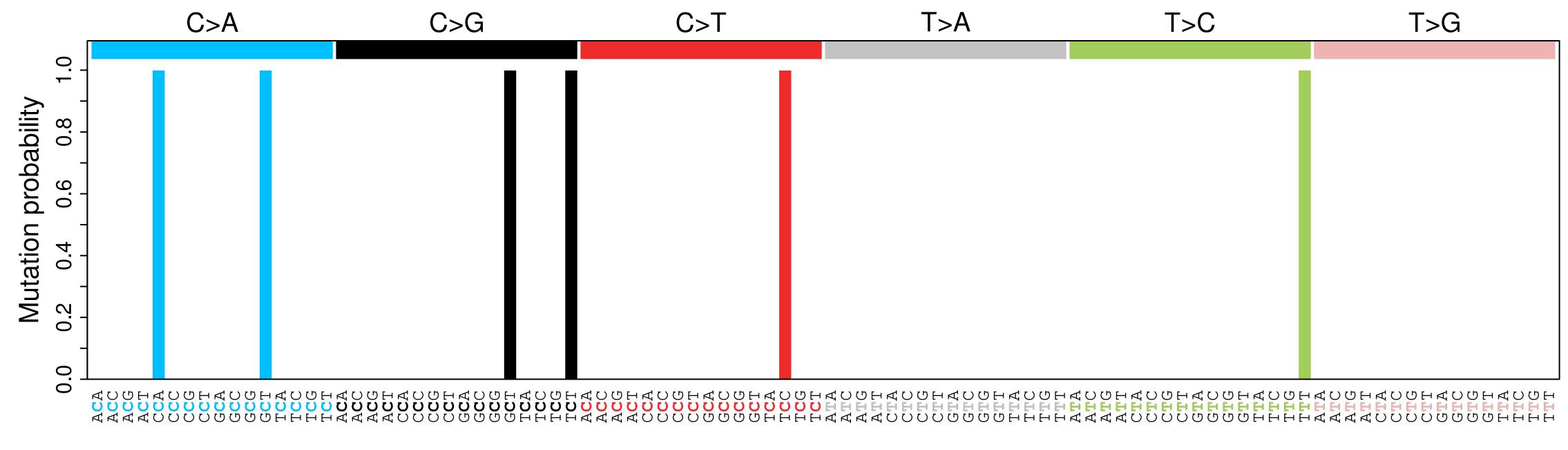




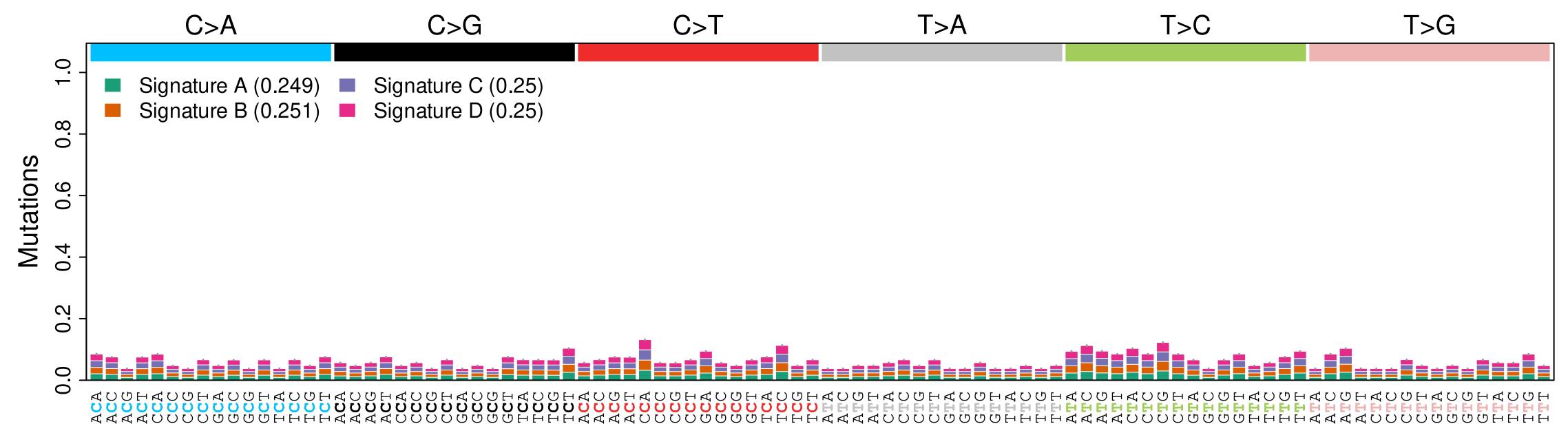
Reconstructed spectrum (cosine similarity = 0.168)



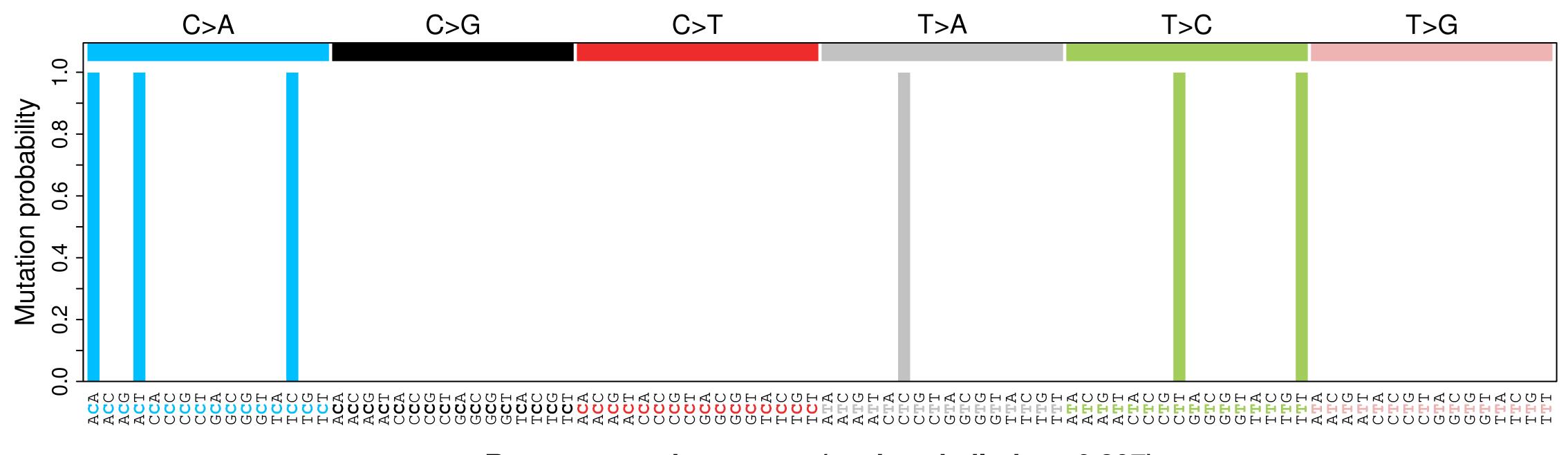
CATD0084a

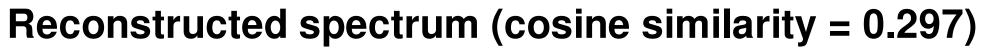


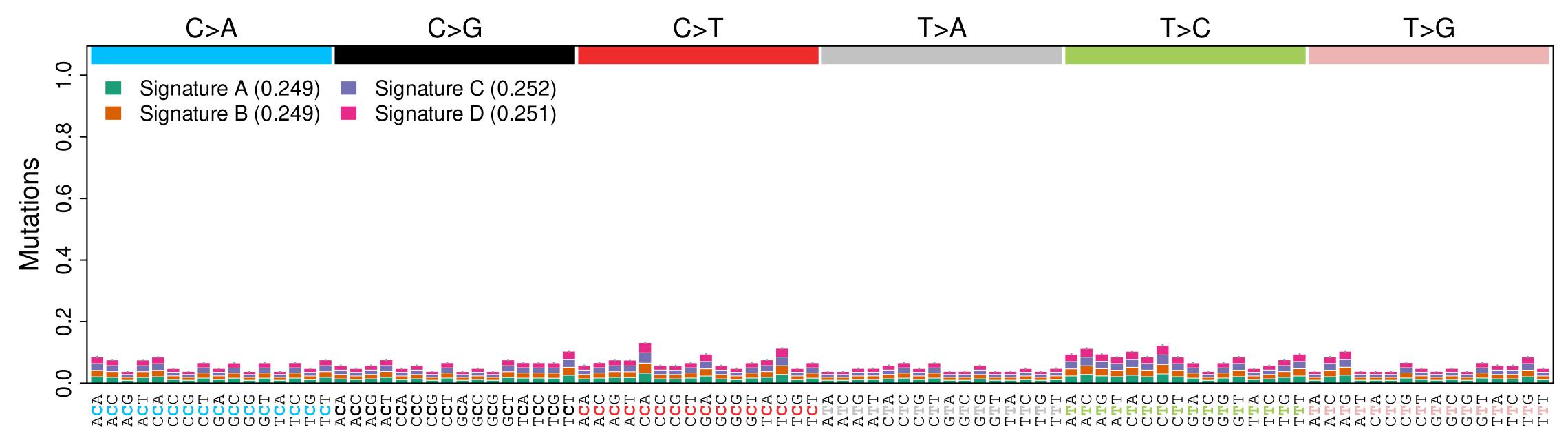
Reconstructed spectrum (cosine similarity = 0.338)



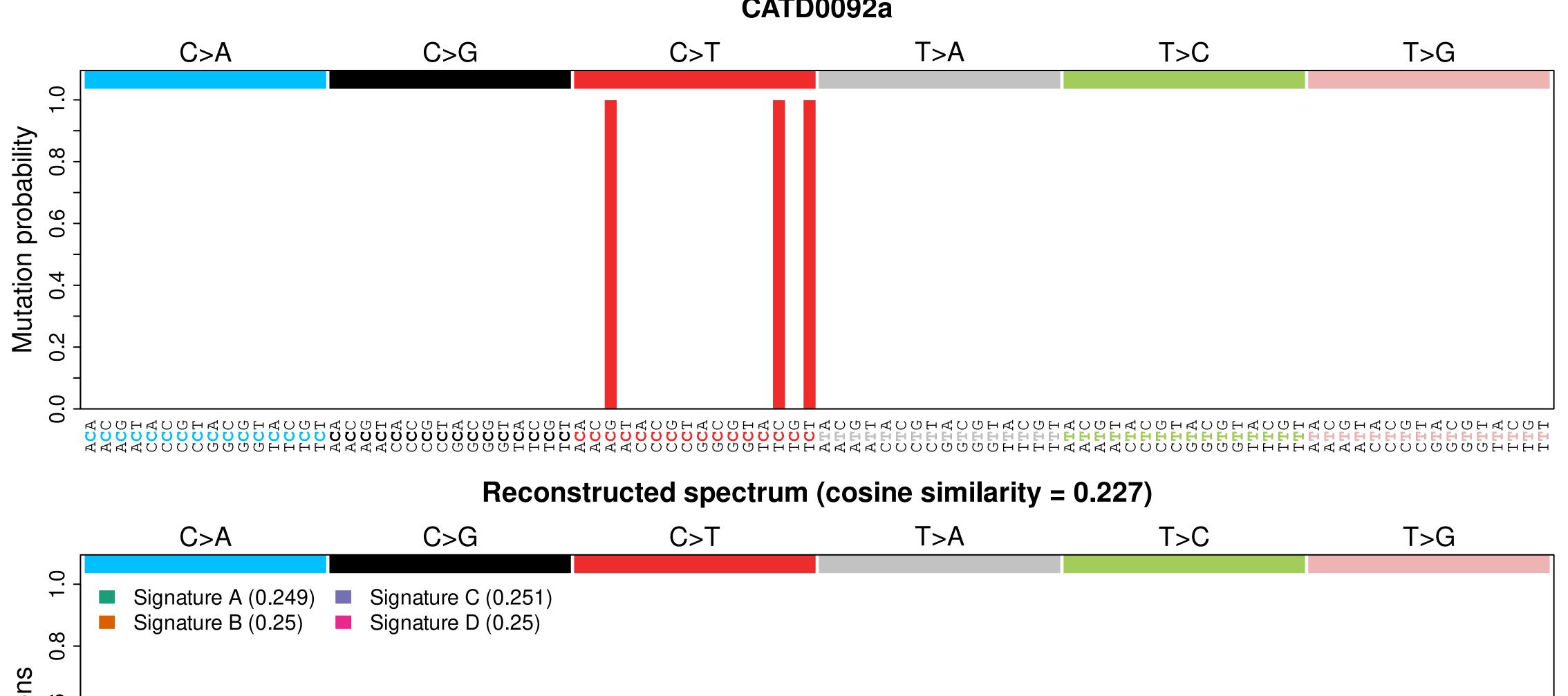
CATD0081a

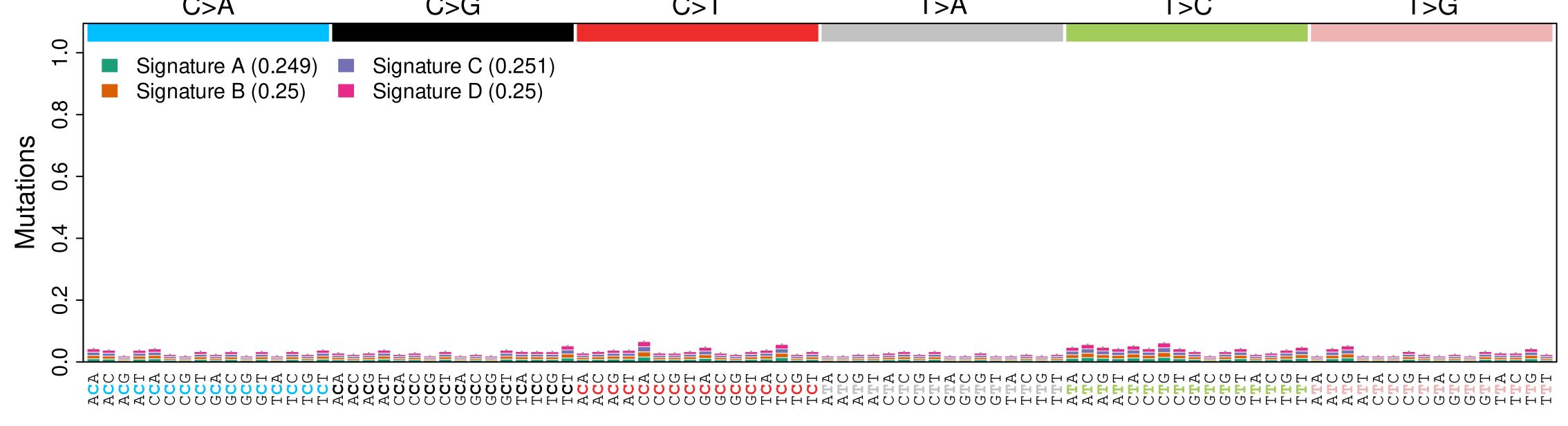




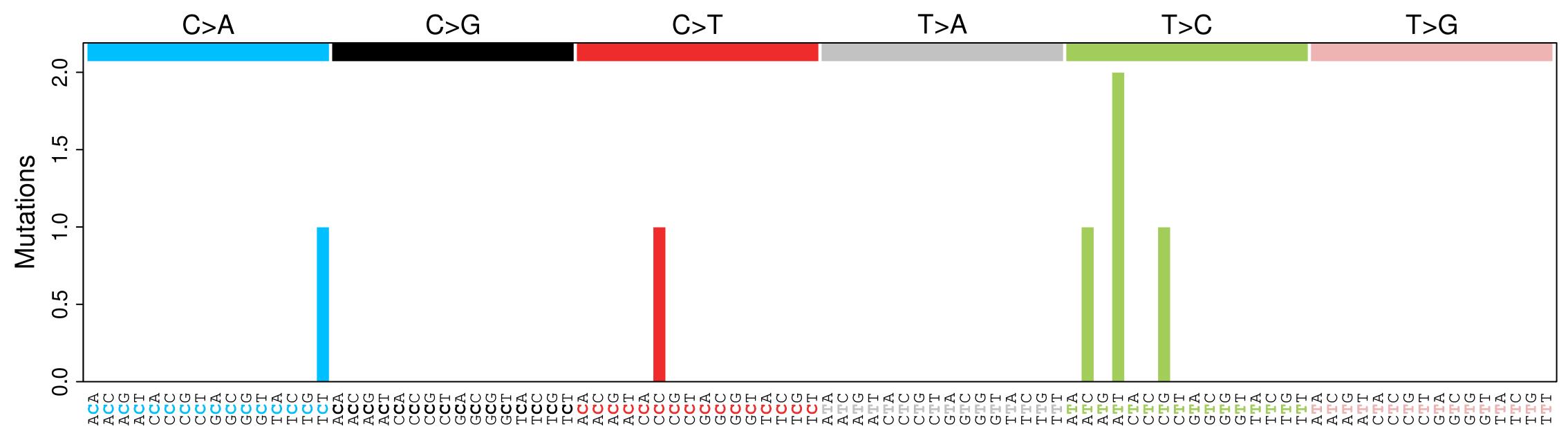




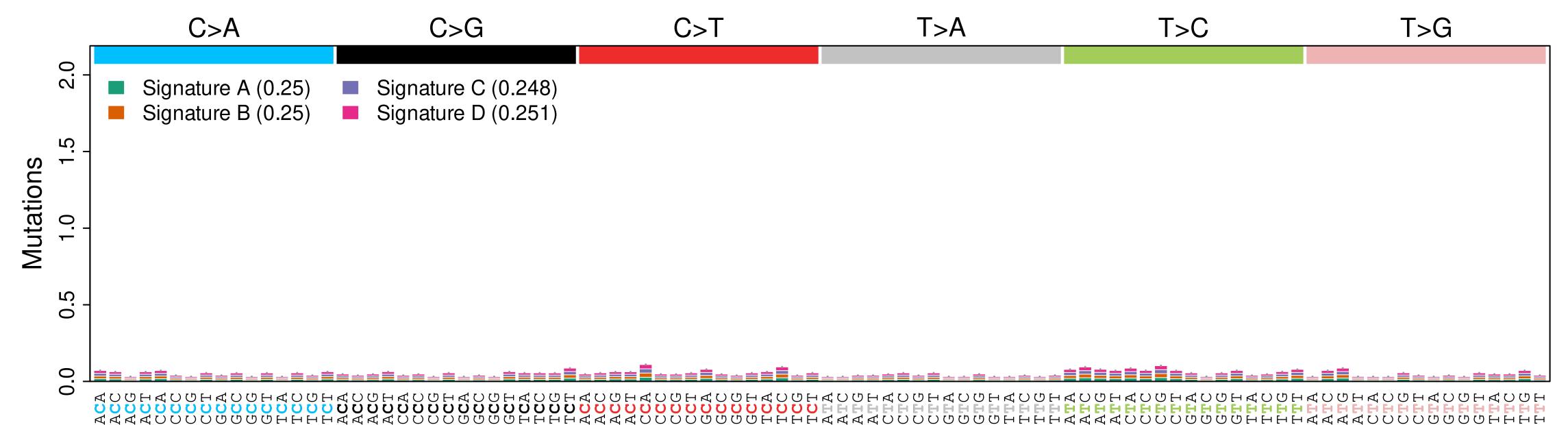




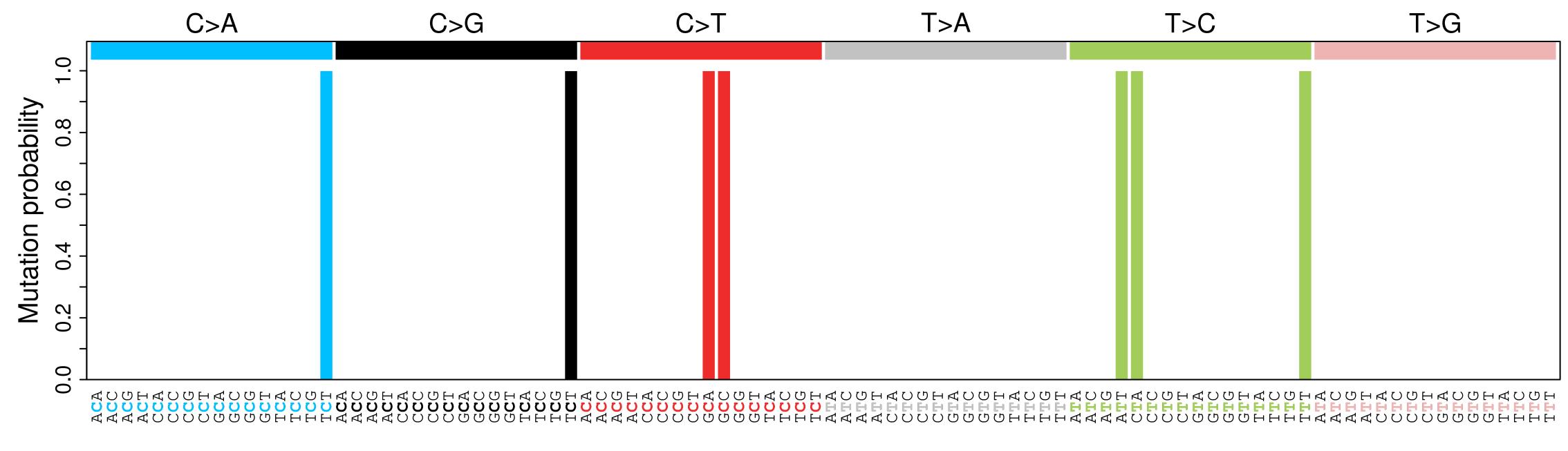
CATD0111a (6 mutations) C>A C>G C>T T>A



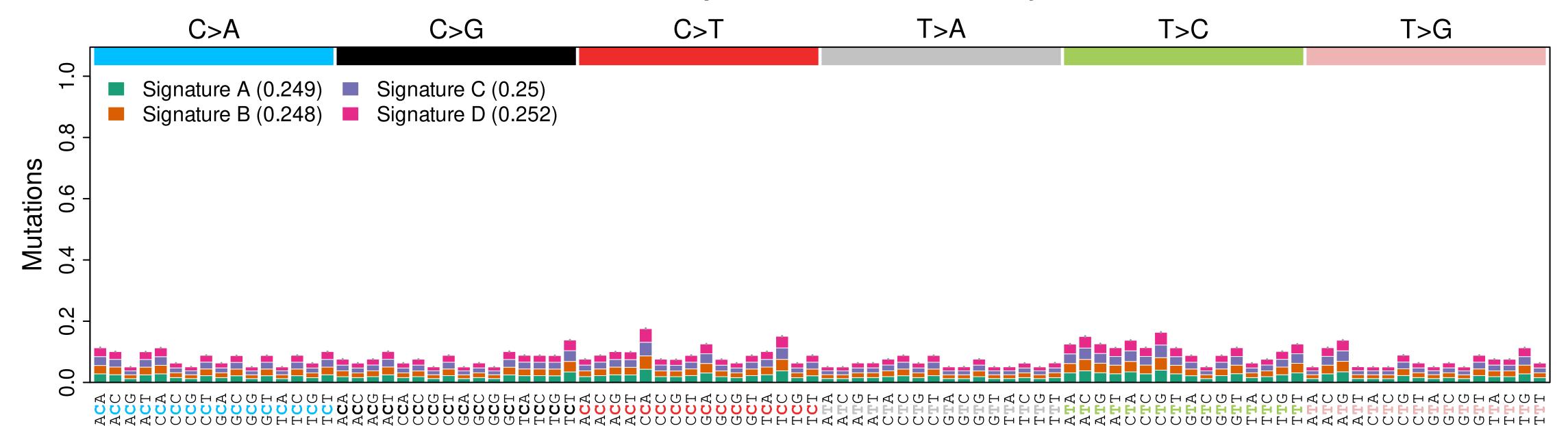
Reconstructed spectrum (cosine similarity = 0.293)



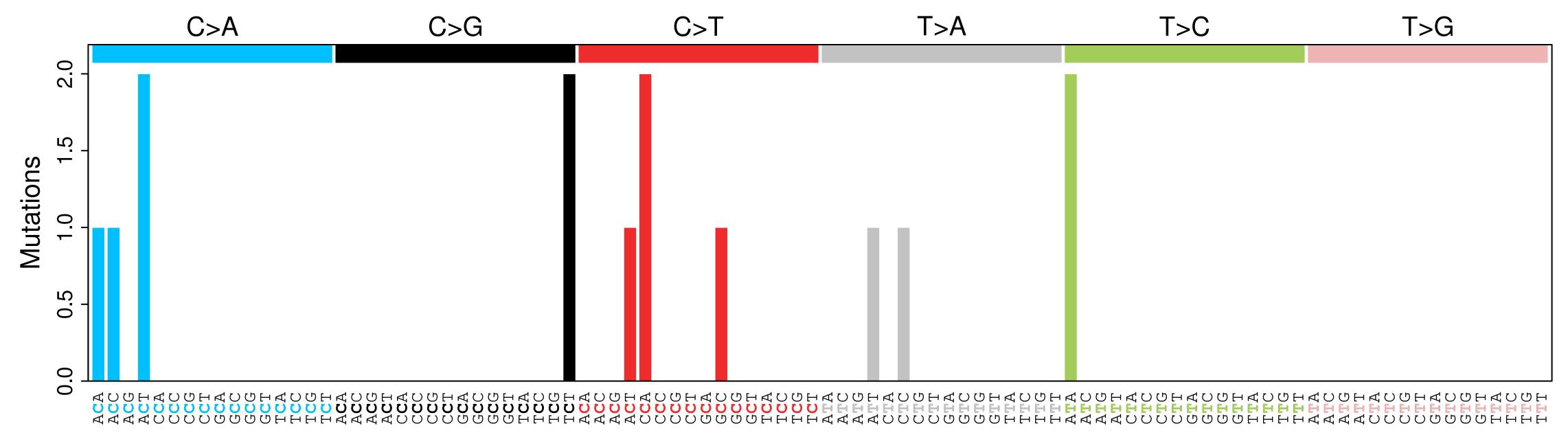
CATD0114a



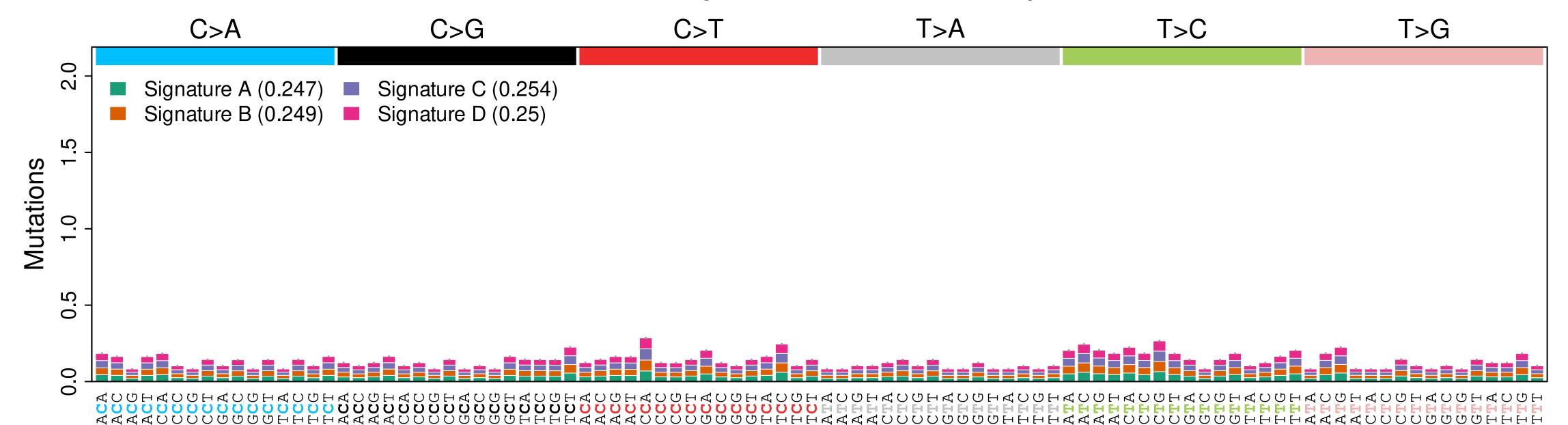




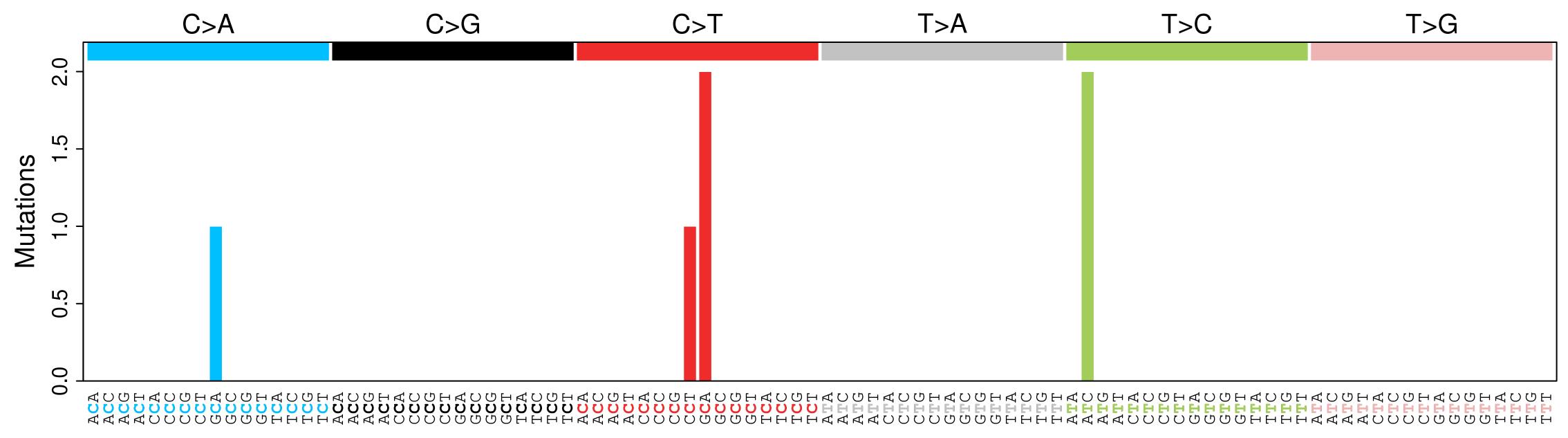
CATD0103a (14 mutations)



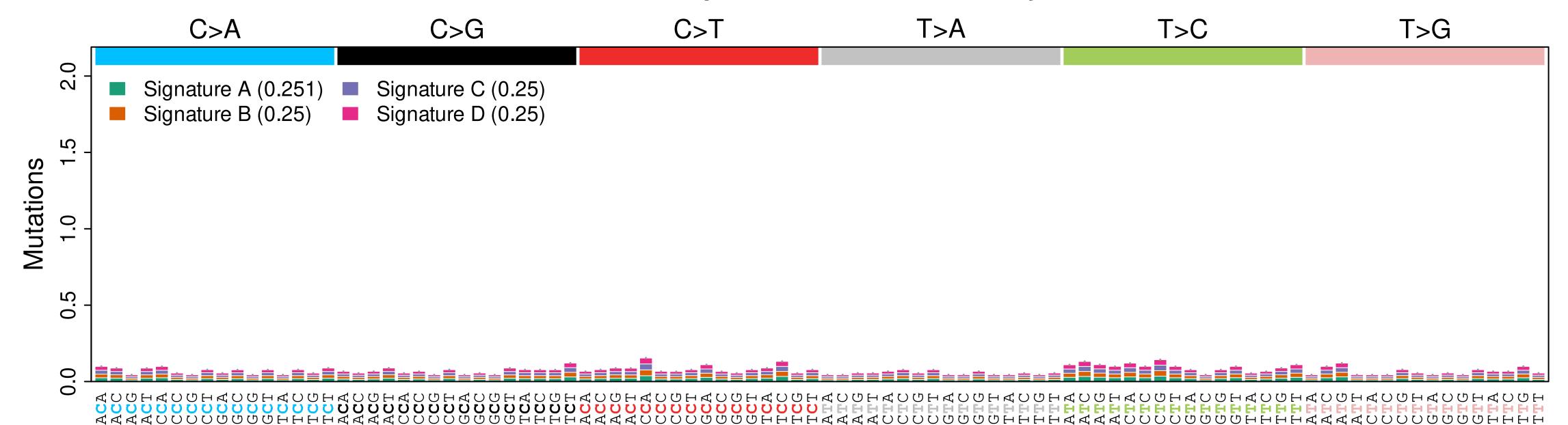
Reconstructed spectrum (cosine similarity = 0.399)



CATD0099a (6 mutations)

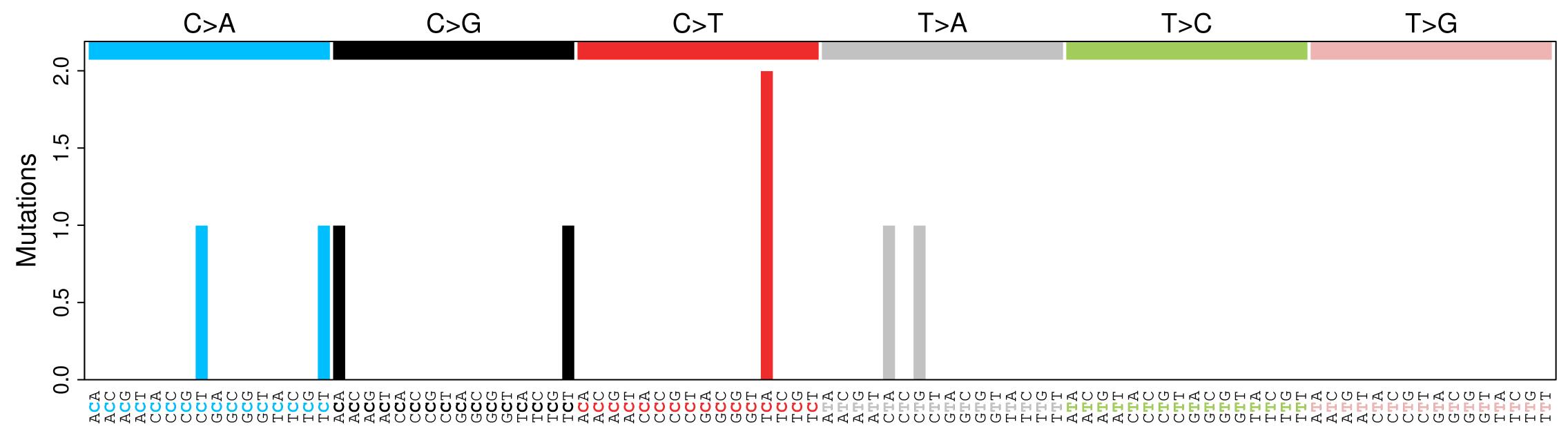


Reconstructed spectrum (cosine similarity = 0.257)

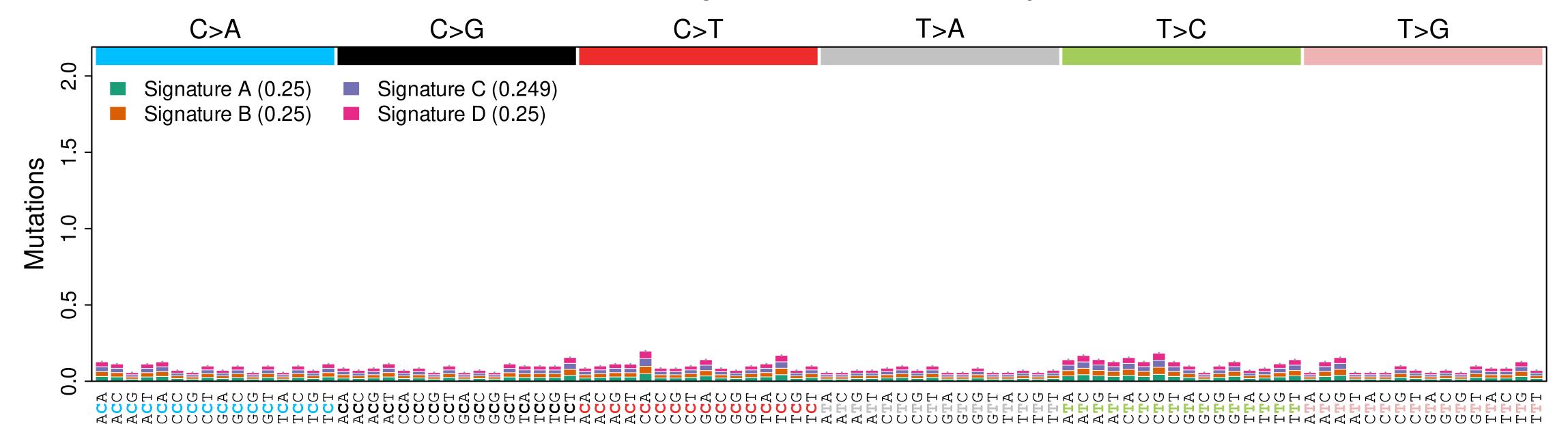


CATD0091a (5 mutations) T>G C>A C>G C>T T>A T>C 2.0 5 Mutations 1.0 0.0 **Reconstructed spectrum (cosine similarity = 0.258)** T>C T>G C>A C>G T>A C>T 2.0 Signature A (0.251) Signature C (0.25) Signature B (0.249) Signature D (0.25) 5 Mutations 2 0

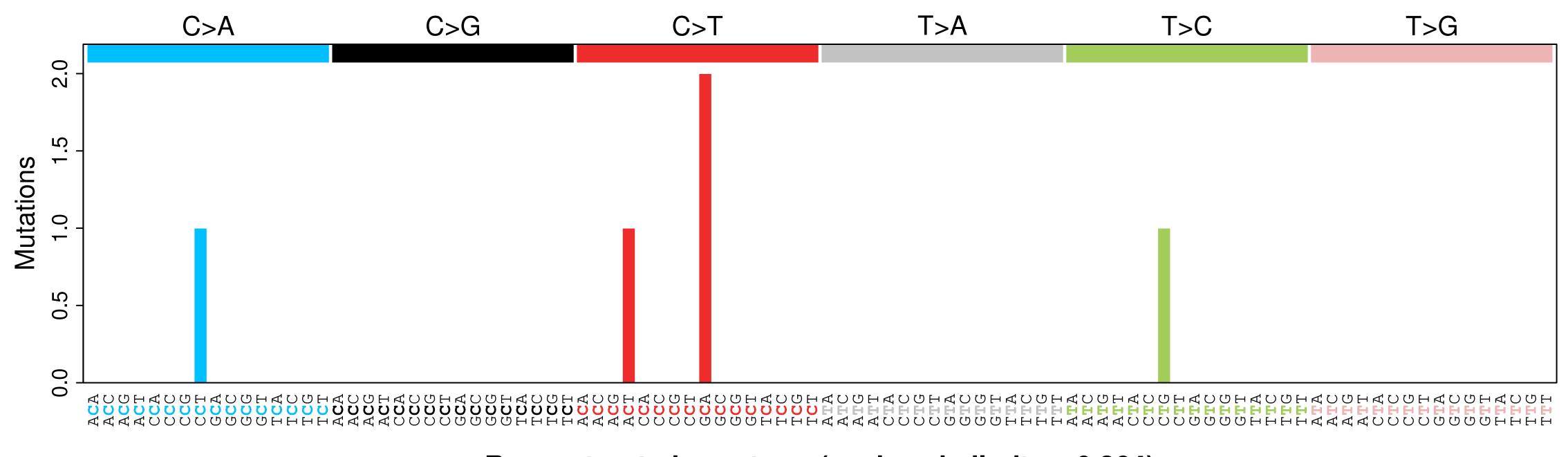
CATD0086a (8 mutations)



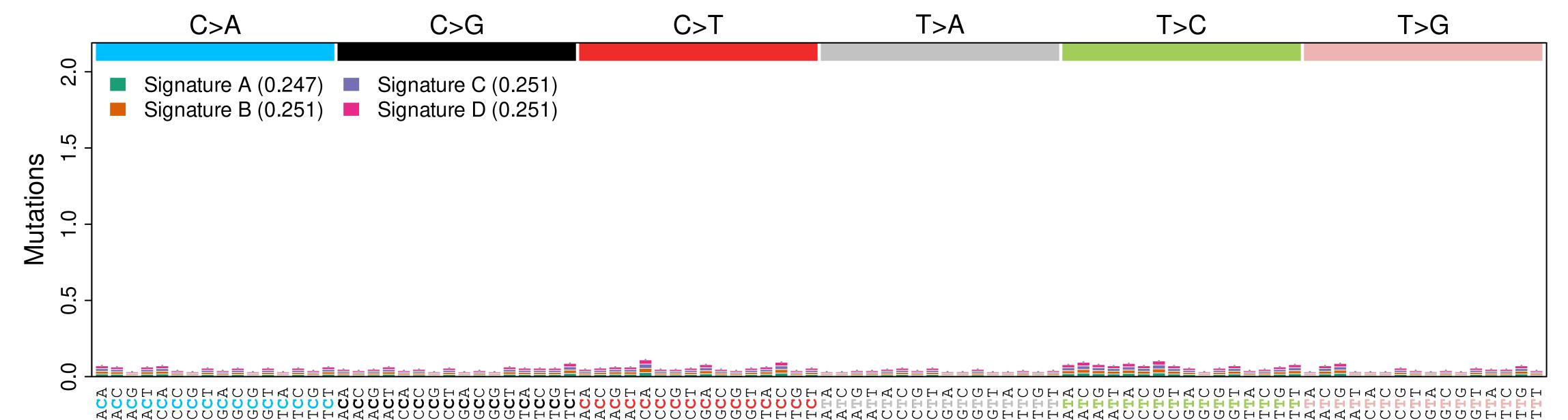
Reconstructed spectrum (cosine similarity = 0.272)



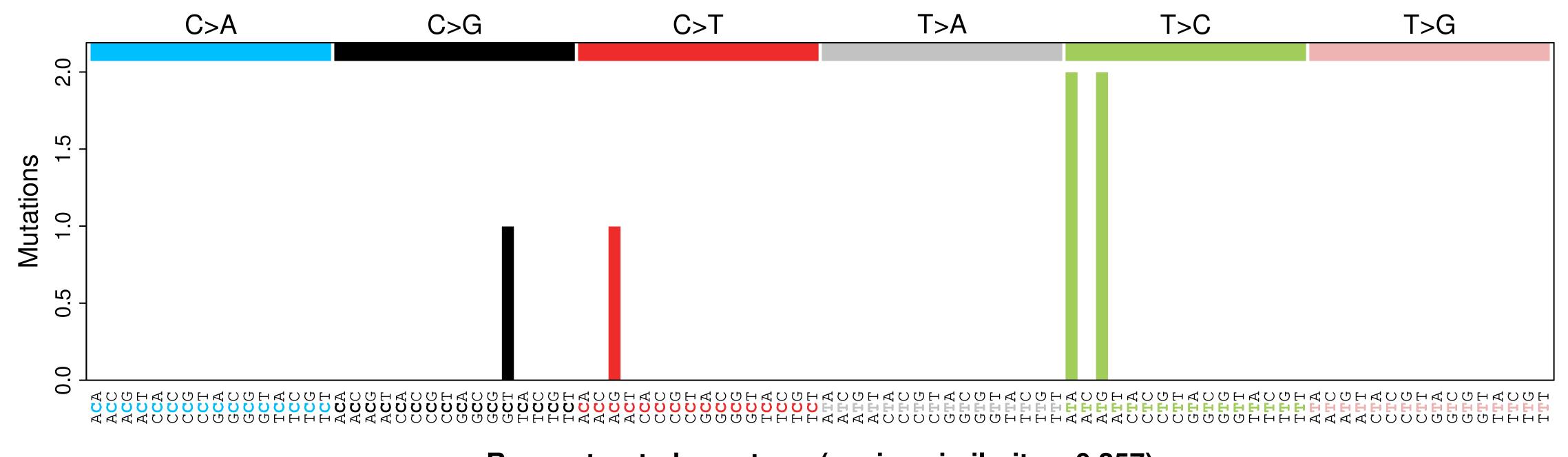
CATD0405a (5 mutations)



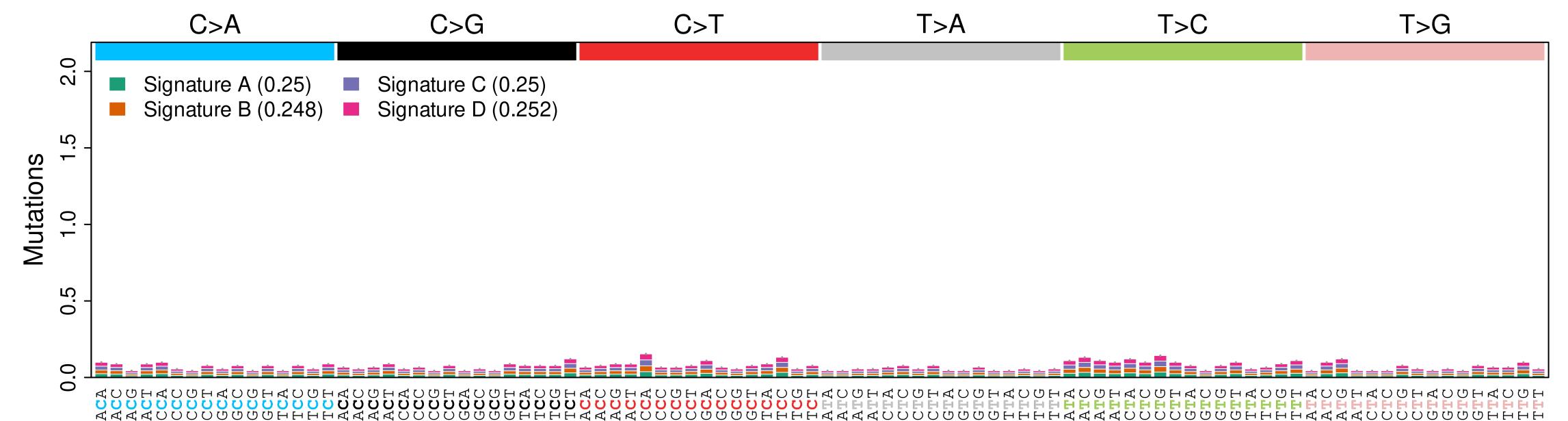
Reconstructed spectrum (cosine similarity = 0.264)



CATD188a (6 mutations)

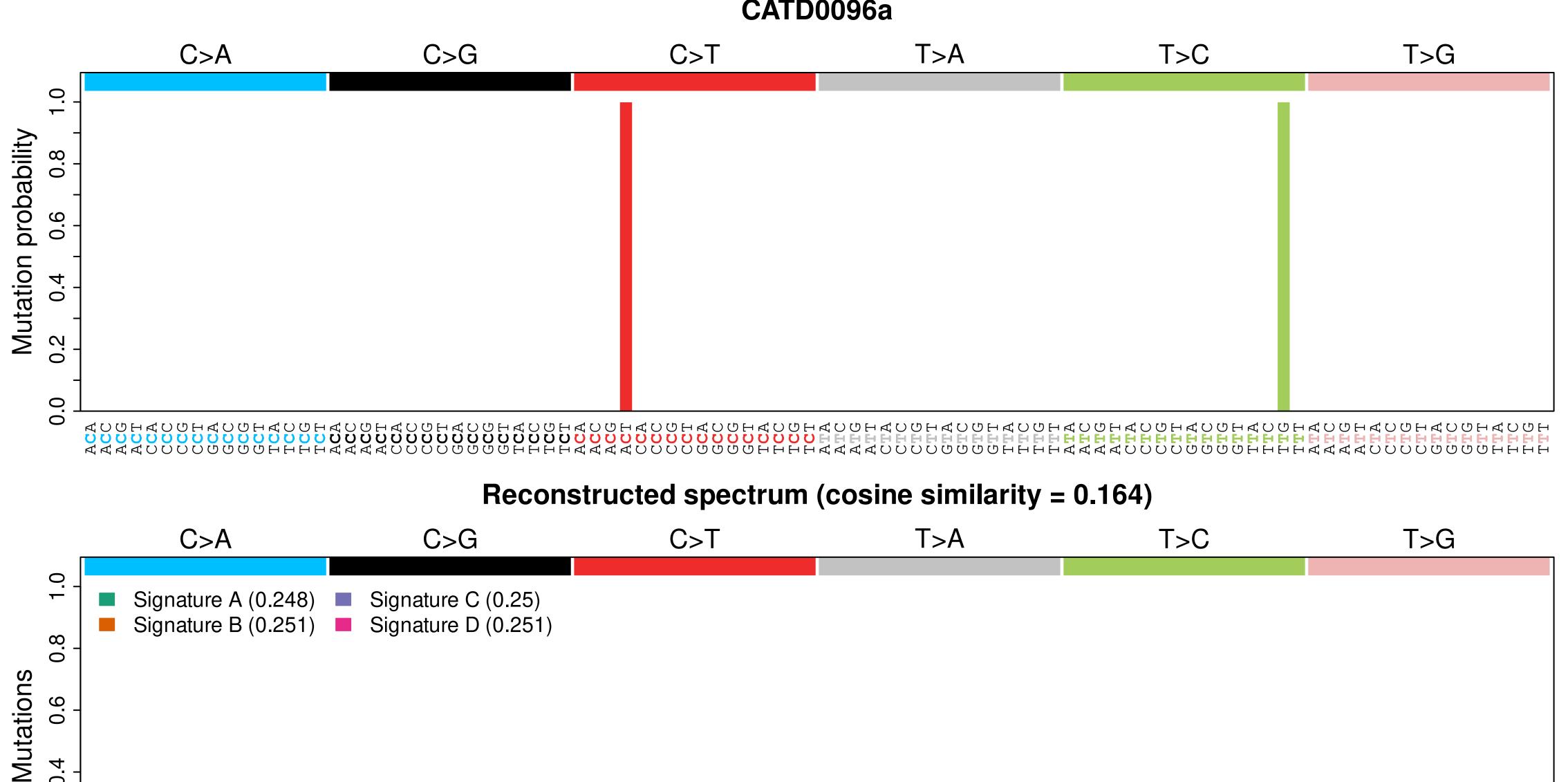


Reconstructed spectrum (cosine similarity = 0.257)



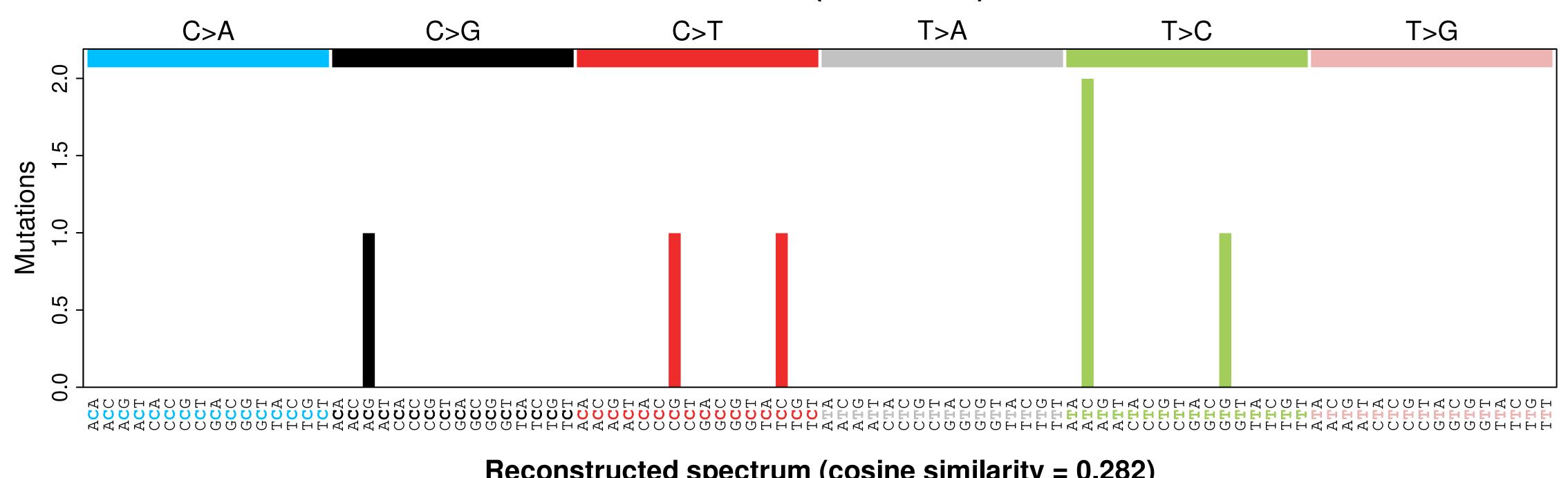
CATD0401a (7 mutations) T>G C>A C>G C>T T>A T>C 3.0 2.5 Mutations 2.0 1.5 0.5 0 **Reconstructed spectrum (cosine similarity = 0.274)** T>A T>C T>G C>A C>G C>T 3.0 Signature A (0.251) Signature C (0.245) Signature B (0.251) Signature D (0.252) 5 S Mutations 2.0 1.5 5 0

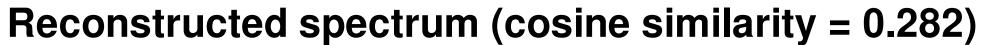


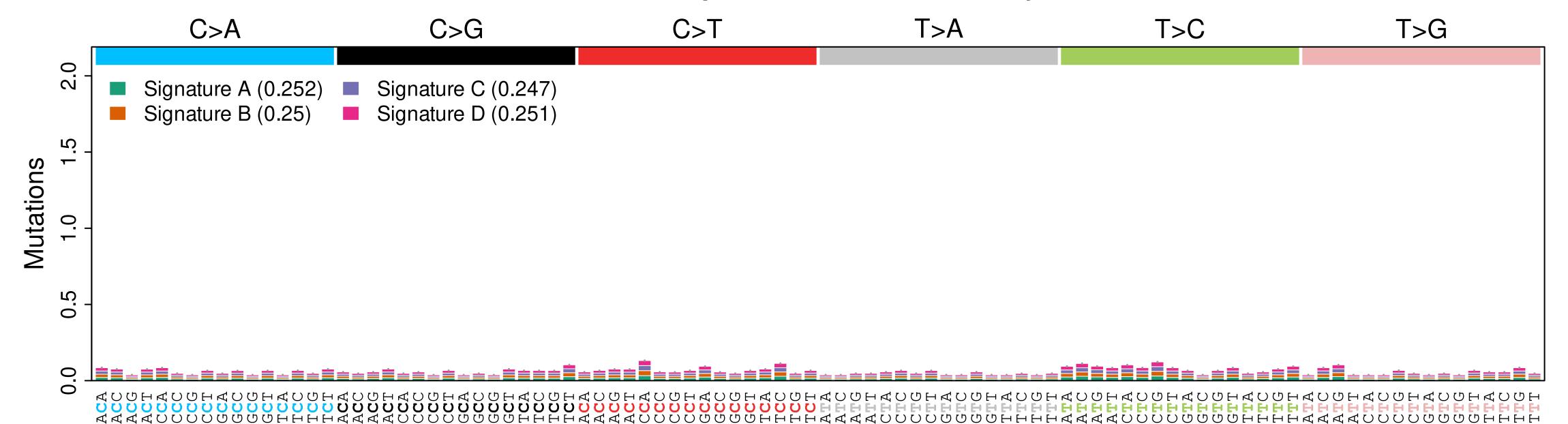


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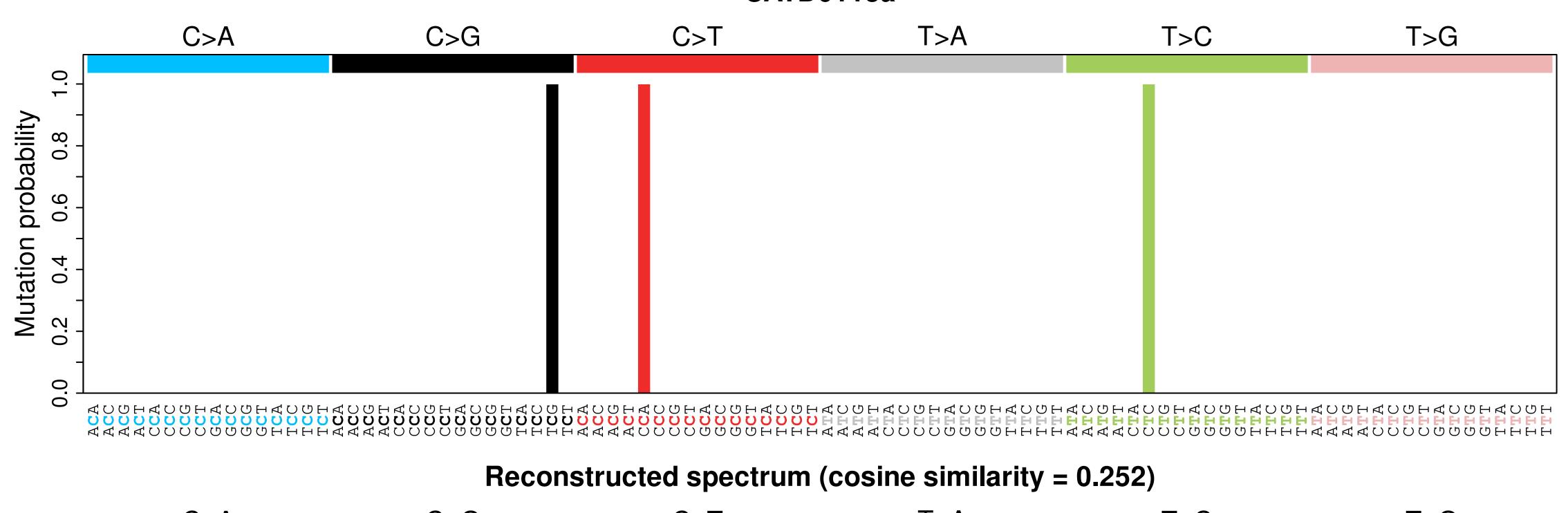
CATD0411a (6 mutations)

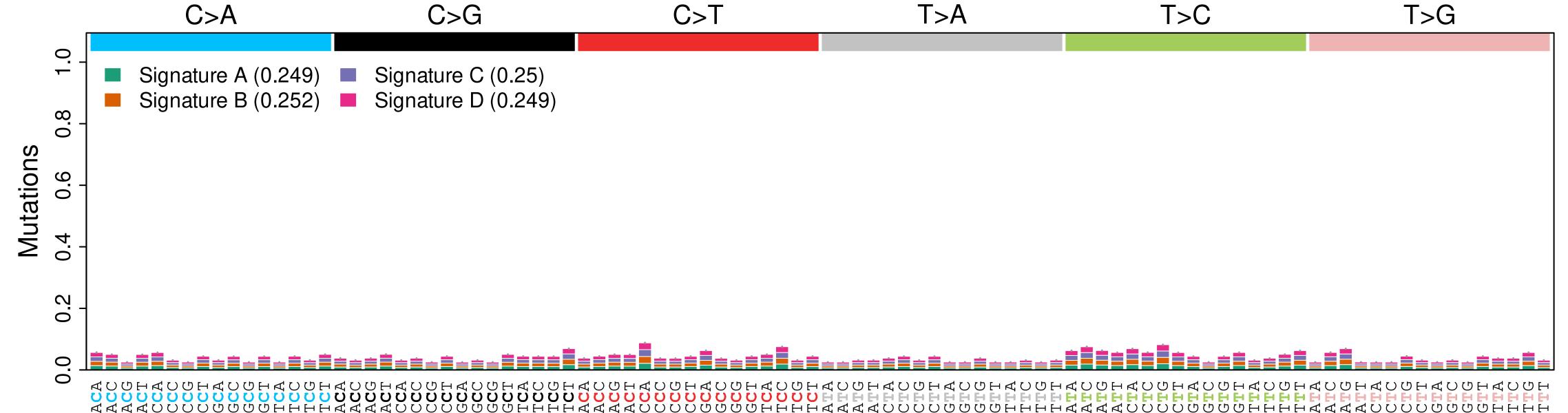






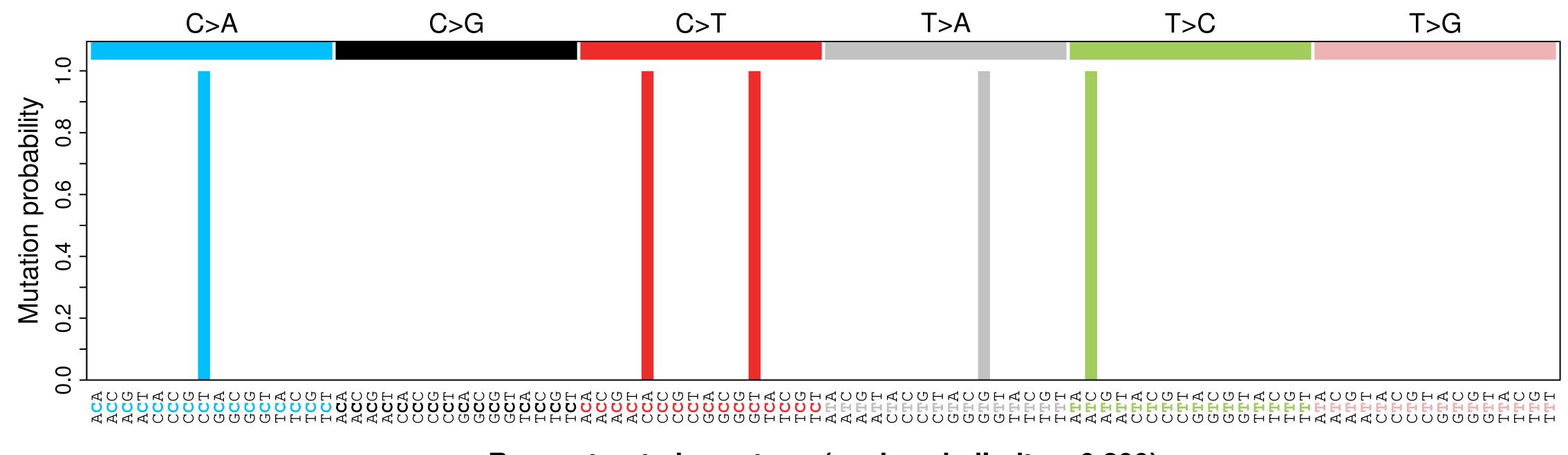
CATD0113a



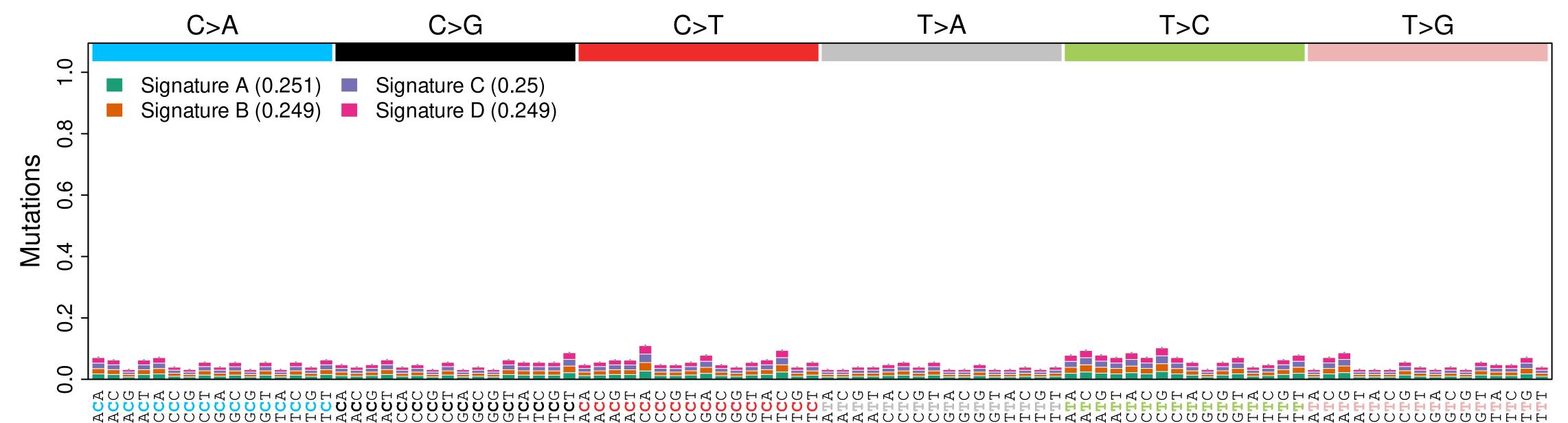


CATD0403a (4 mutations) T>G C>A C>G C>T T>A T>C 2.0 5 Mutations 0.5 0.0 Reconstructed spectrum (cosine similarity = 0.208) T>C T>G C>A C>G T>A C>T 2.0 Signature A (0.253) Signature C (0.248) ■ Signature D (0.249) Signature B (0.25) 5 Mutations 5 0

CATD0085a

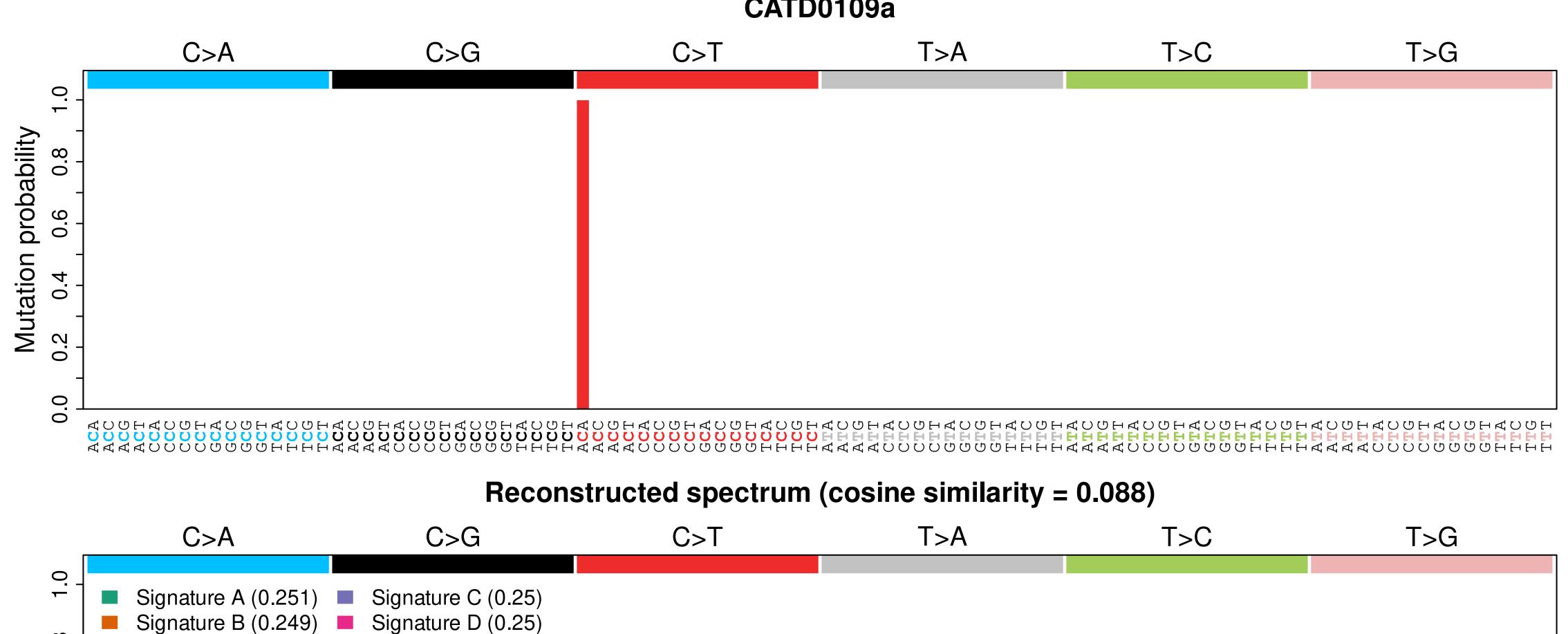


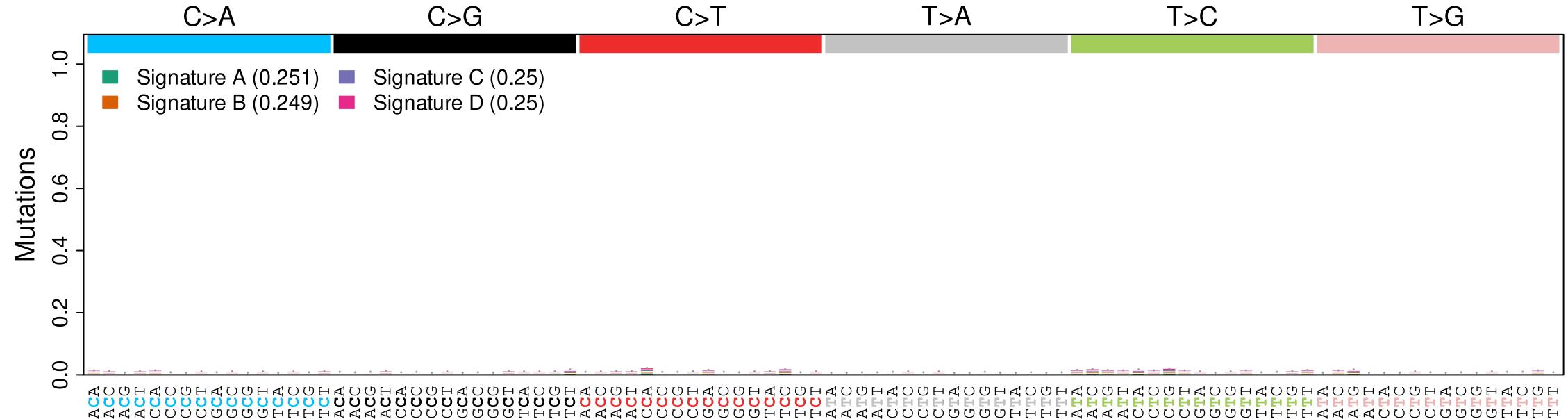
Reconstructed spectrum (cosine similarity = 0.299)



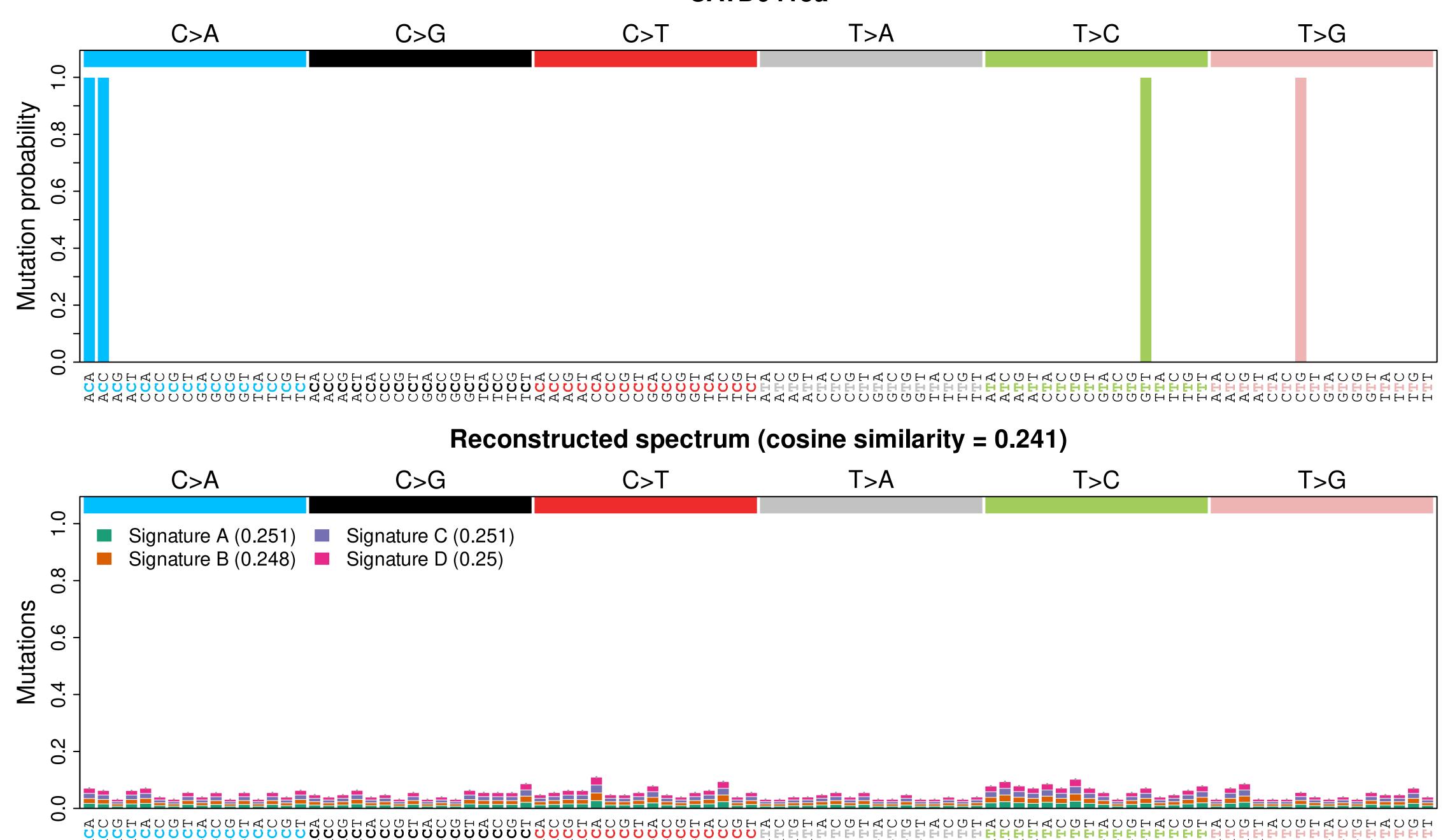
CATD190a (4 mutations) T>G C>A C>G C>T T>A T>C 2.0 5 Mutations 0.5 0.0 **Reconstructed spectrum (cosine similarity = 0.254)** T>C T>G C>A C>G T>A C>T 2.0 Signature A (0.25) Signature C (0.251) Signature B (0.247) Signature D (0.252) 5 Mutations 2 0



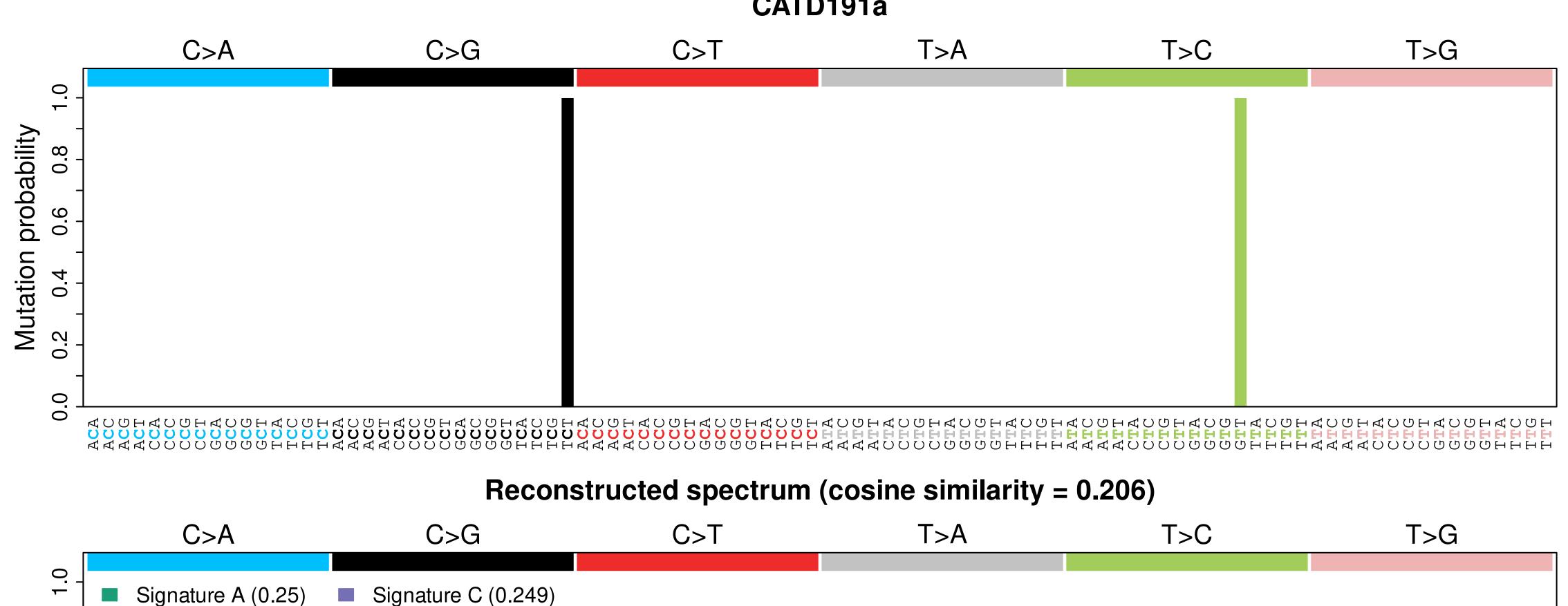


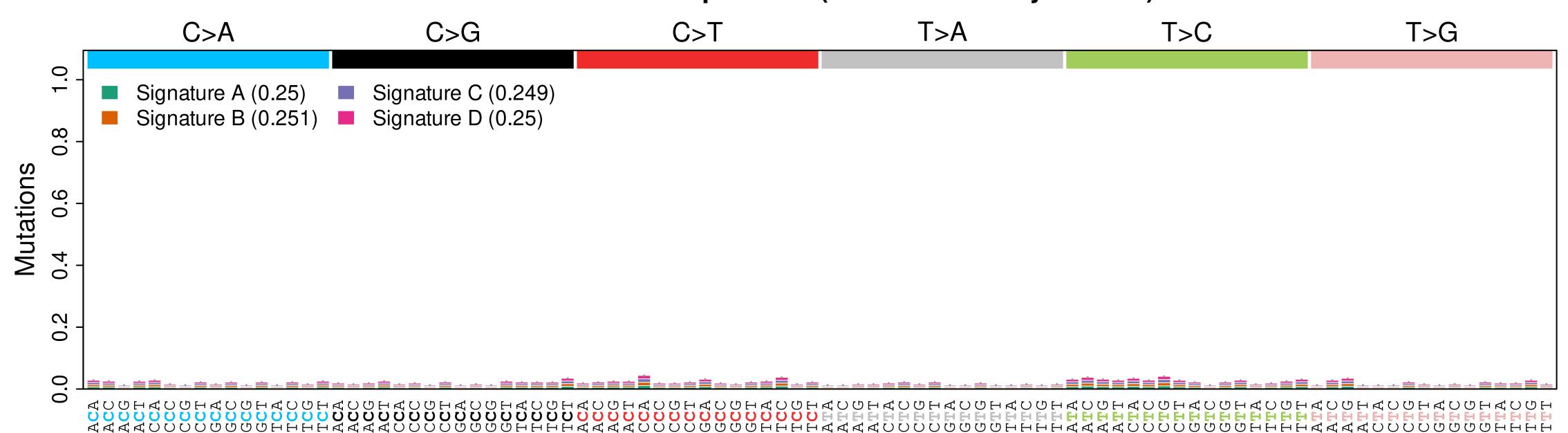


CATD0415a

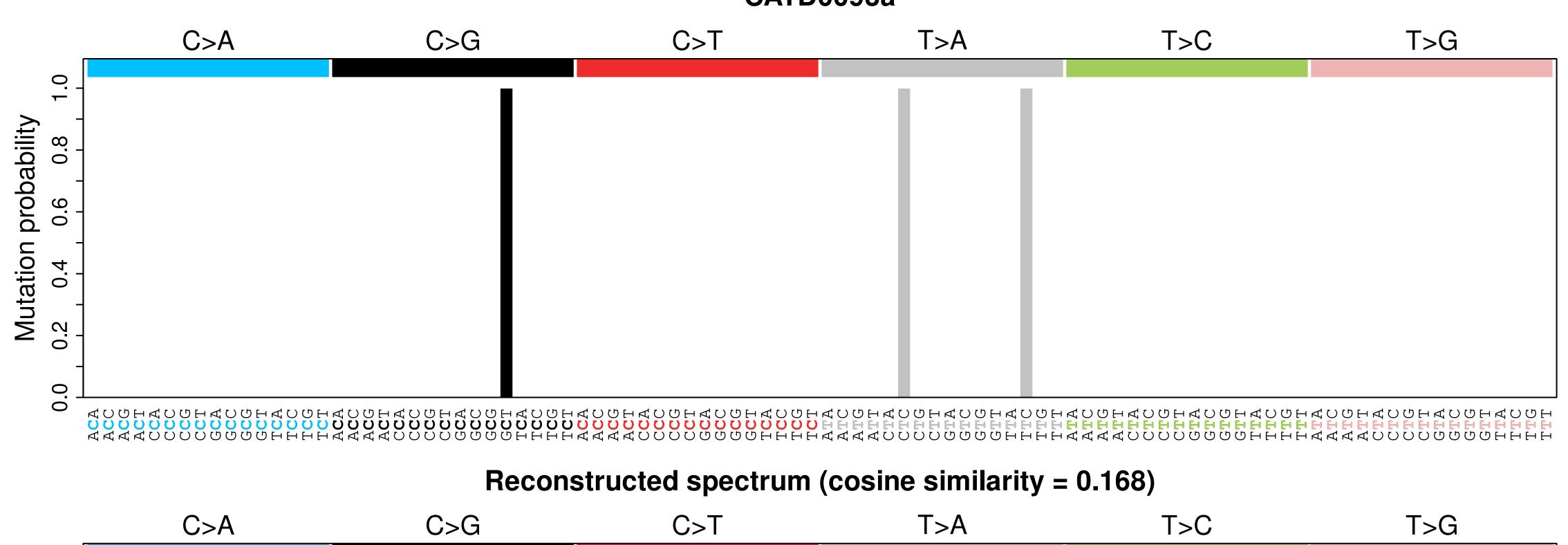


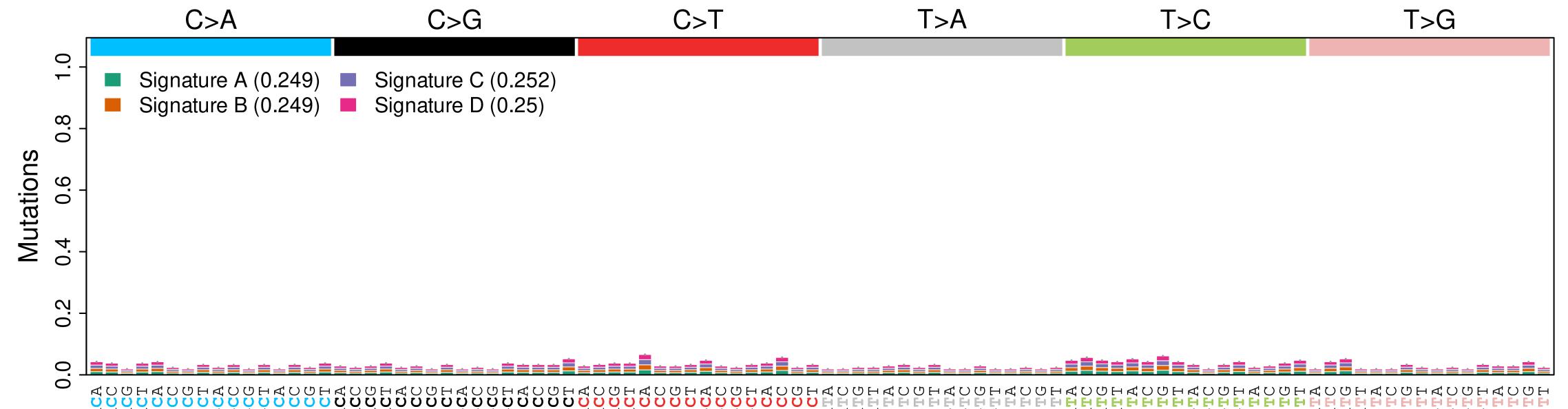




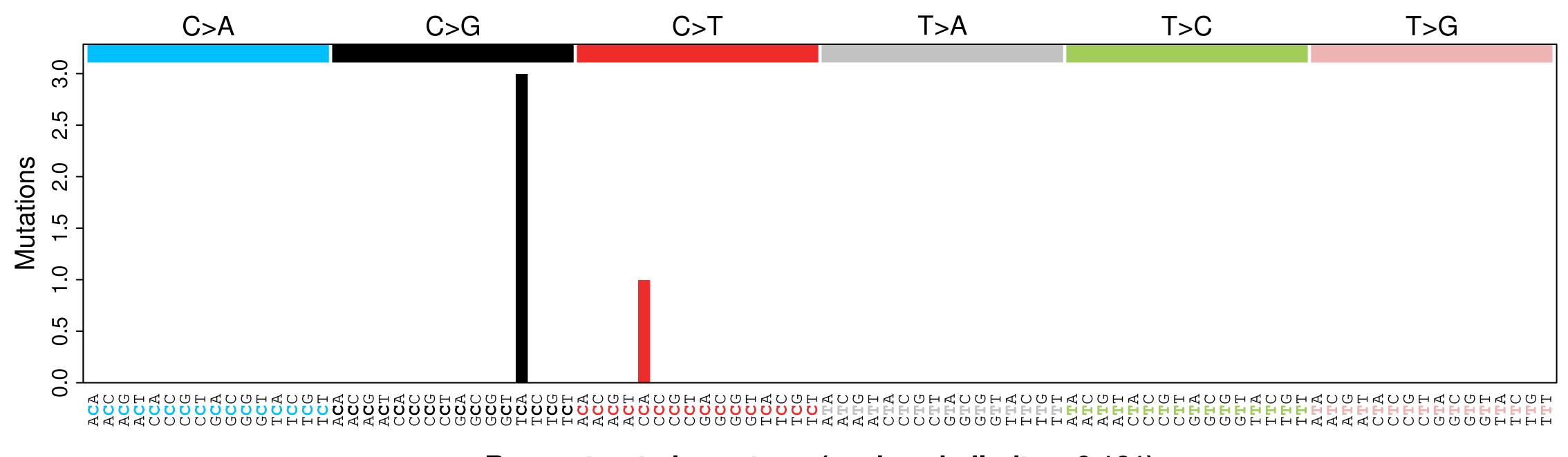


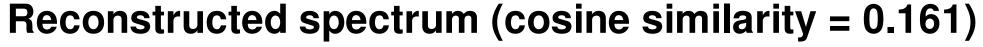


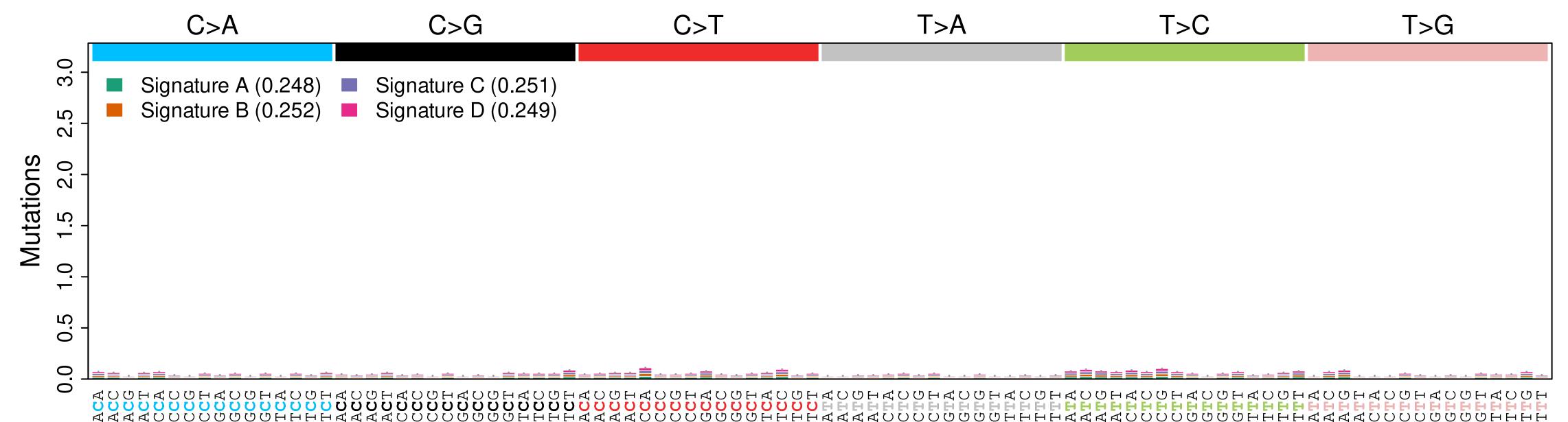




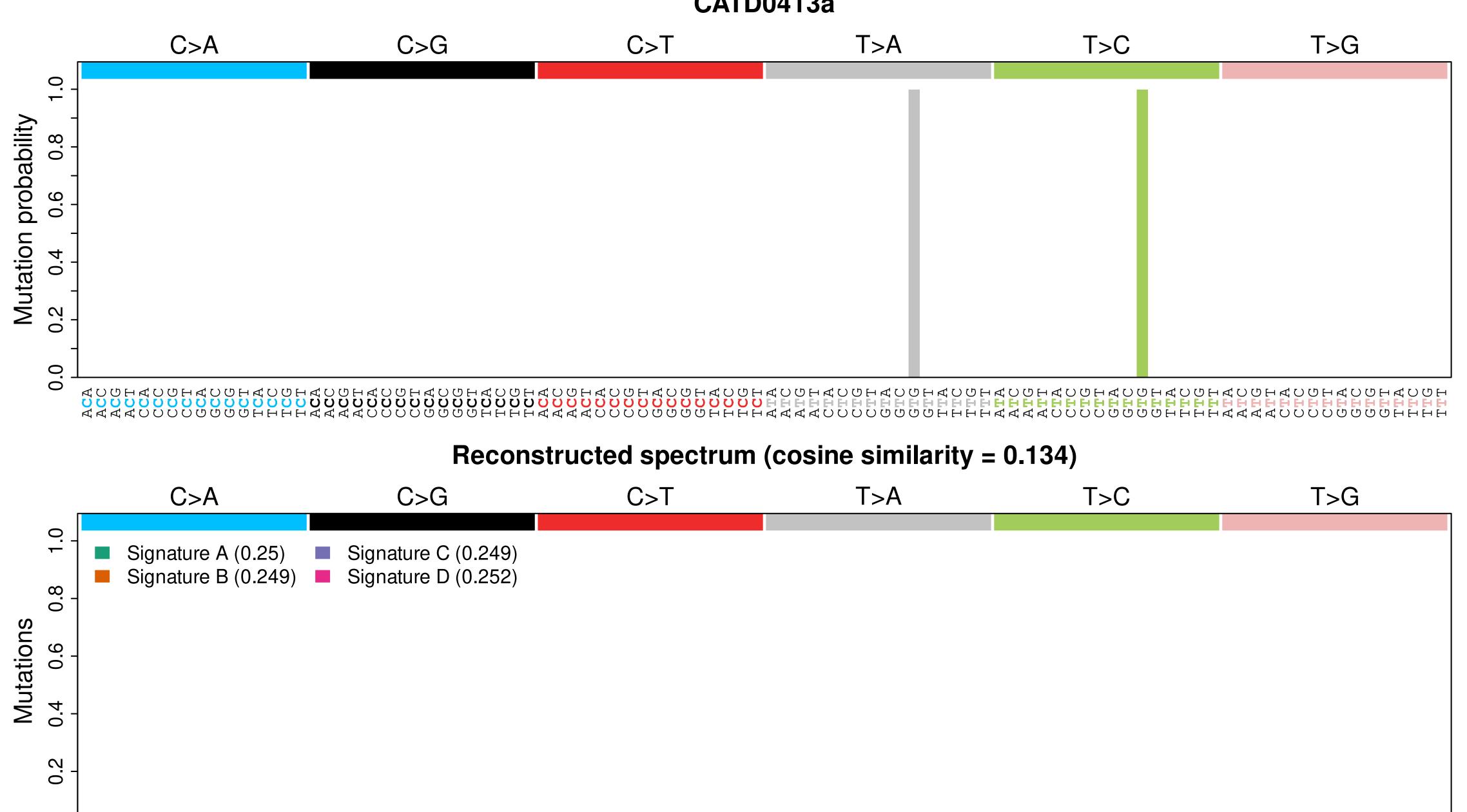
CATD0407a (4 mutations)



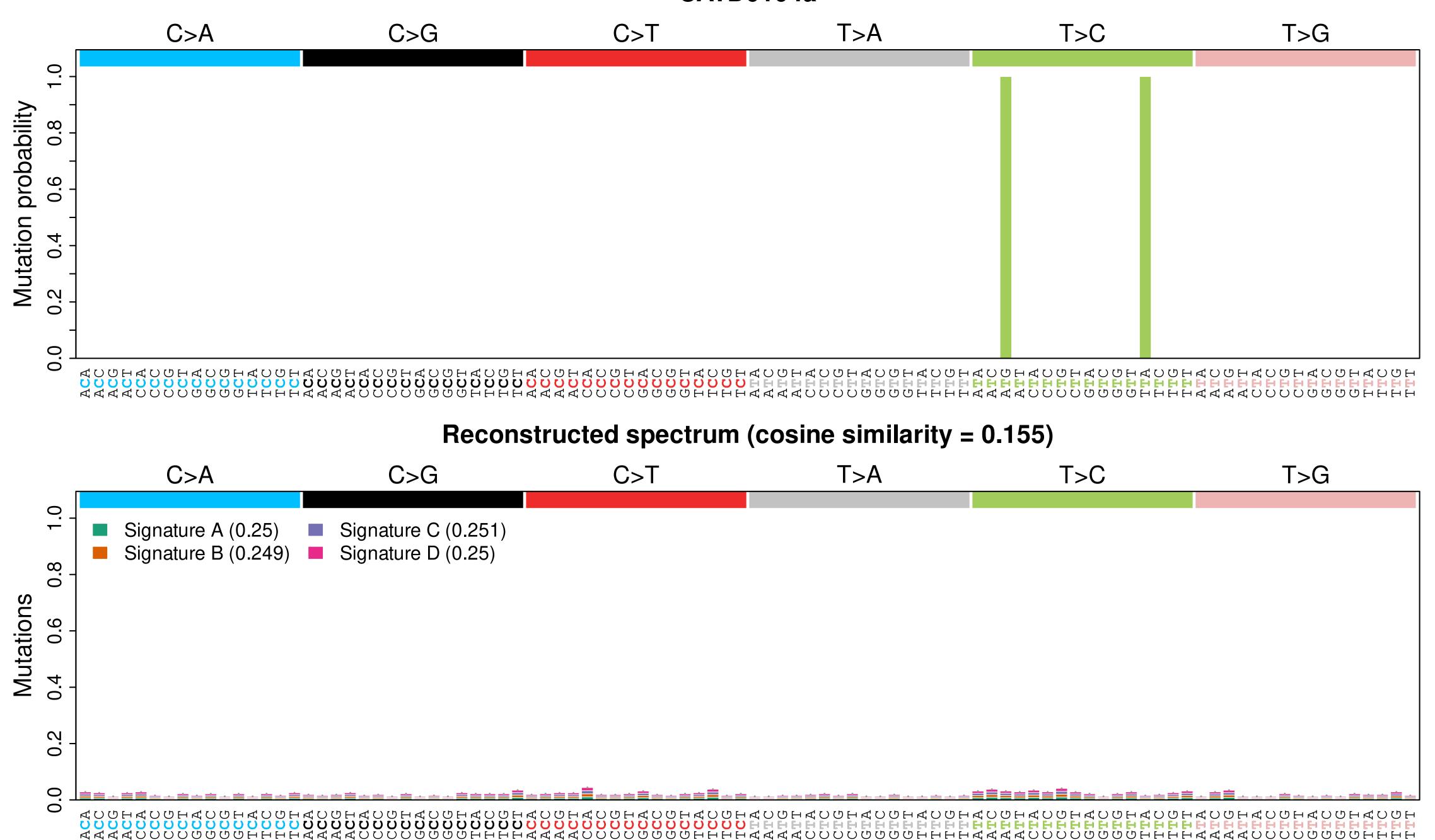




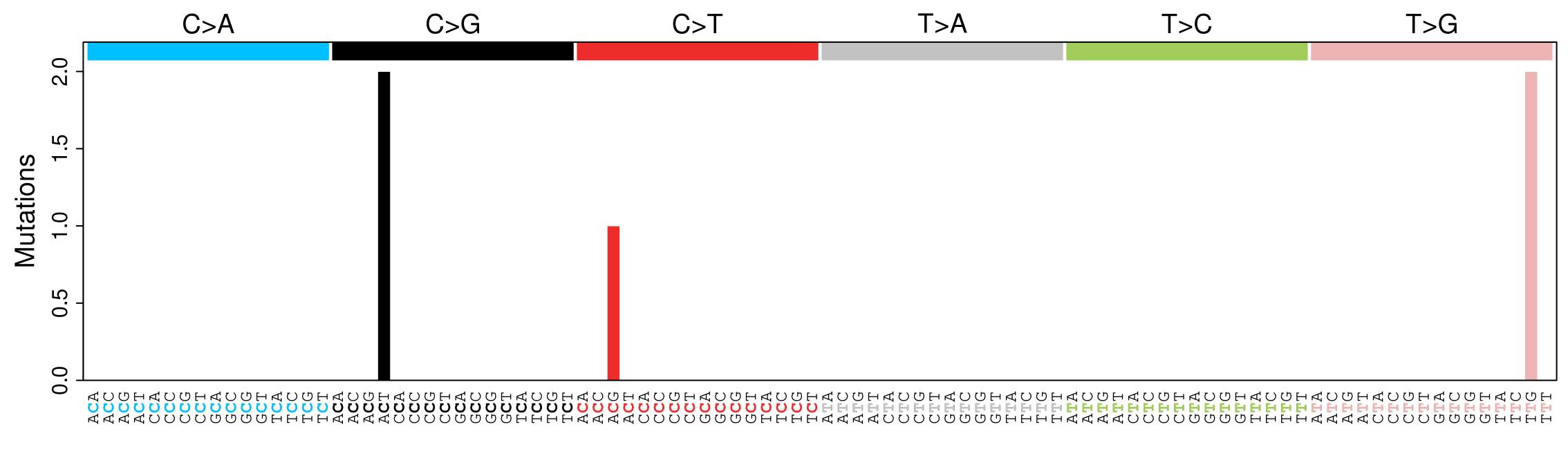




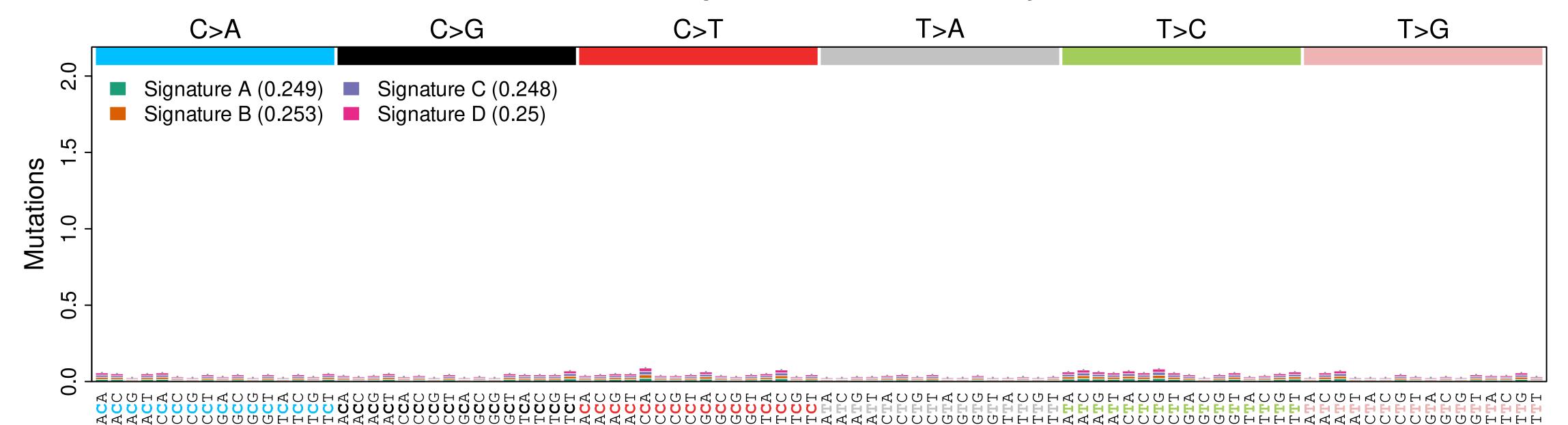




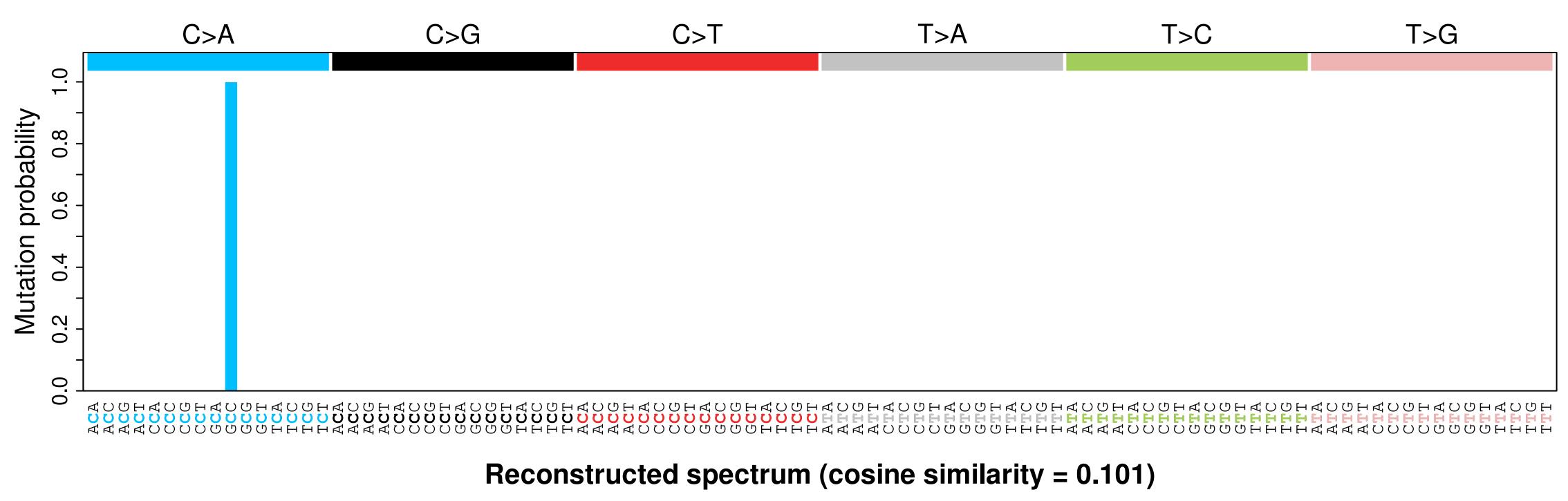
CATD0409a (5 mutations)

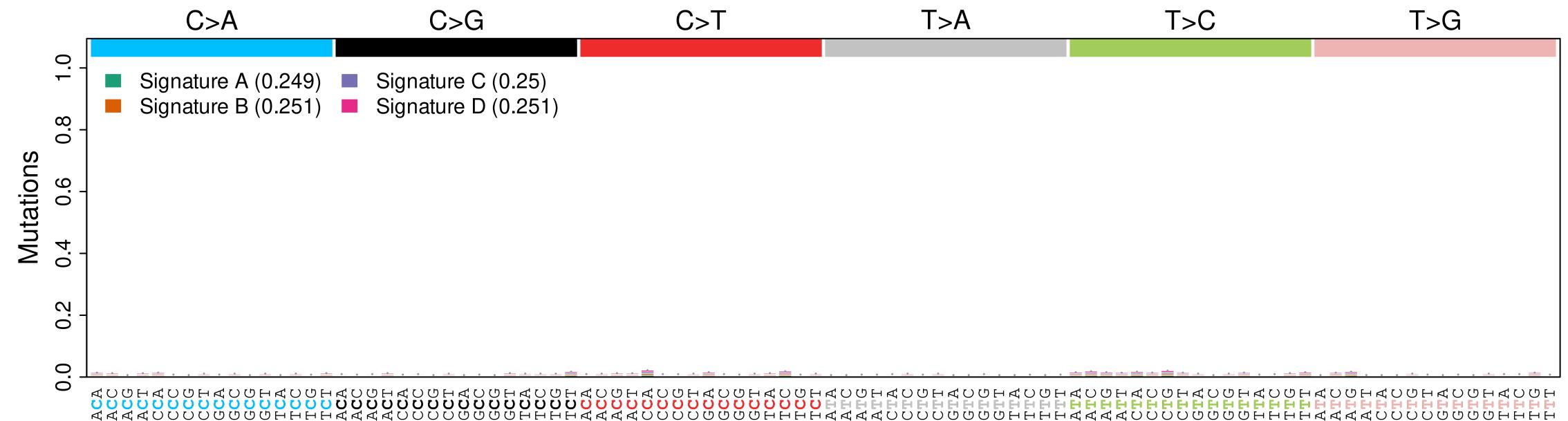


Reconstructed spectrum (cosine similarity = 0.204)

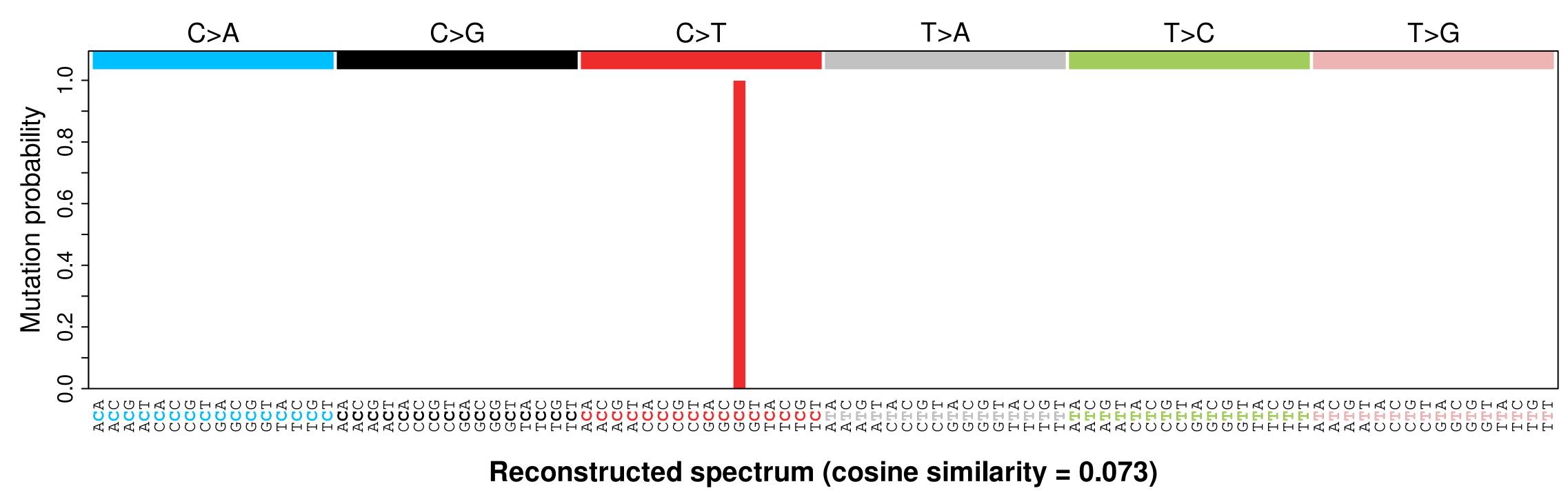


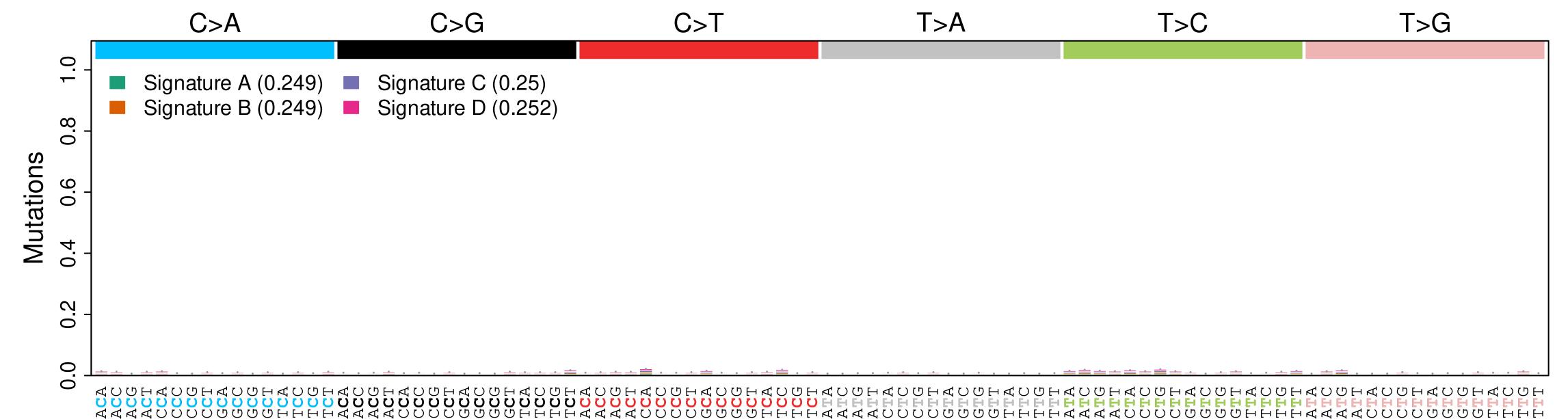








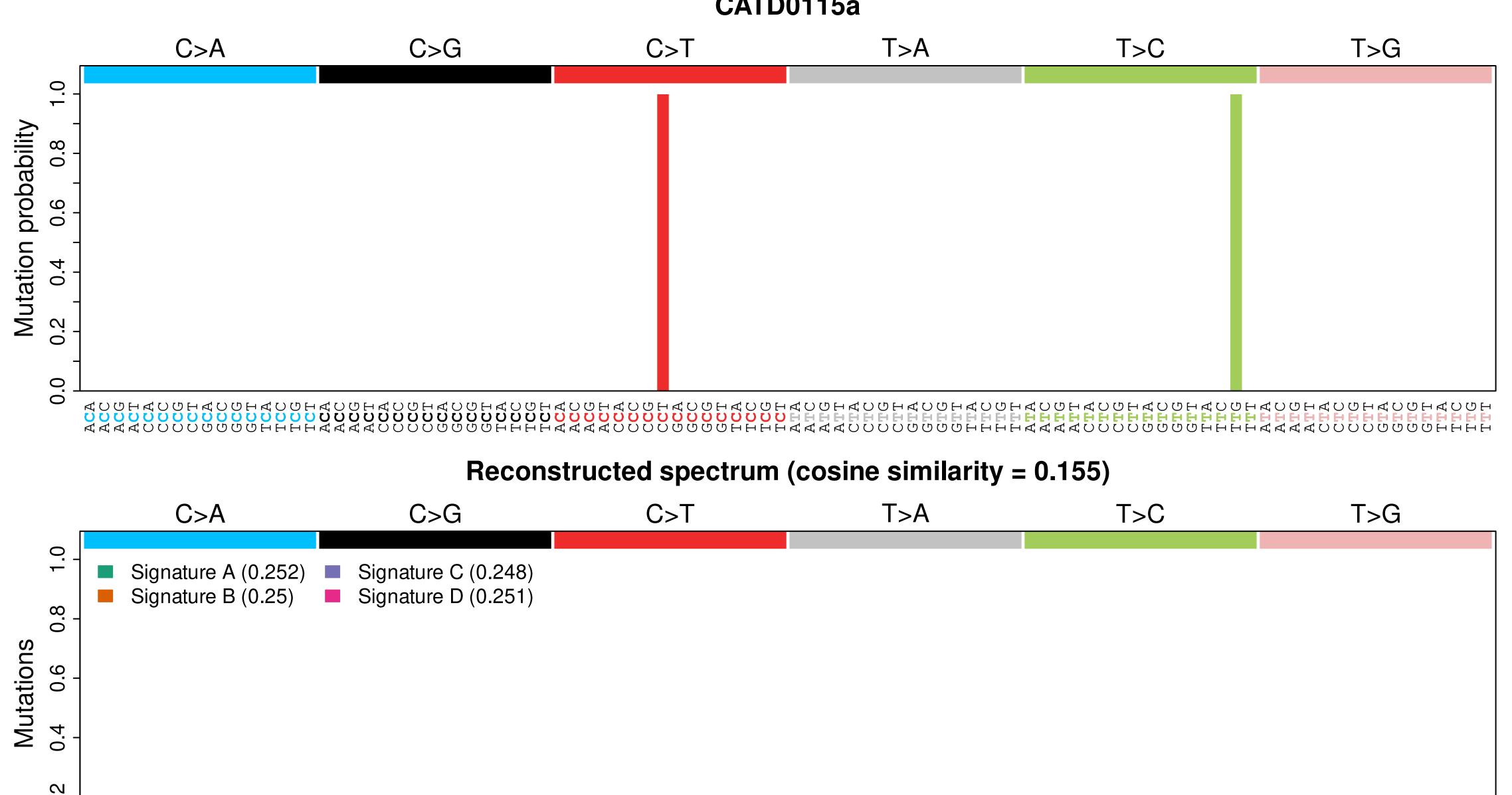




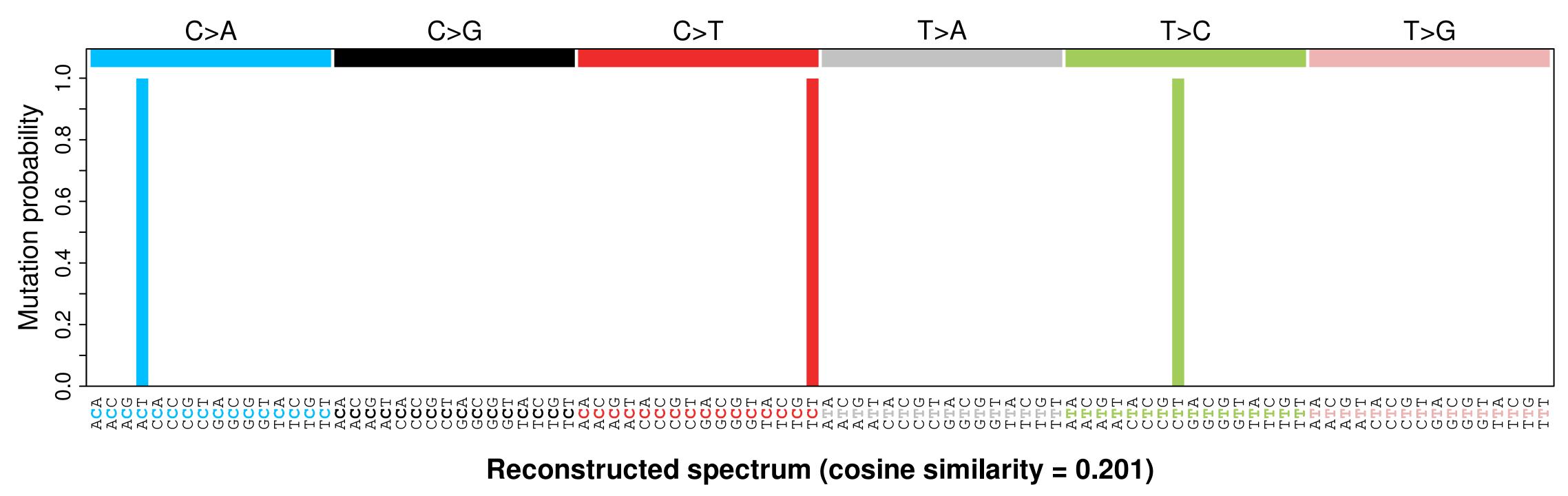
CATD0089a (3 mutations) T>G C>A C>G C>T T>A T>C 2.0 5 Mutations 0.5 0.0 **Reconstructed spectrum (cosine similarity = 0.195)** T>C T>G C>A C>G T>A C>T 2.0 Signature A (0.251) Signature C (0.25) Signature B (0.249) Signature D (0.25) 5 Mutations

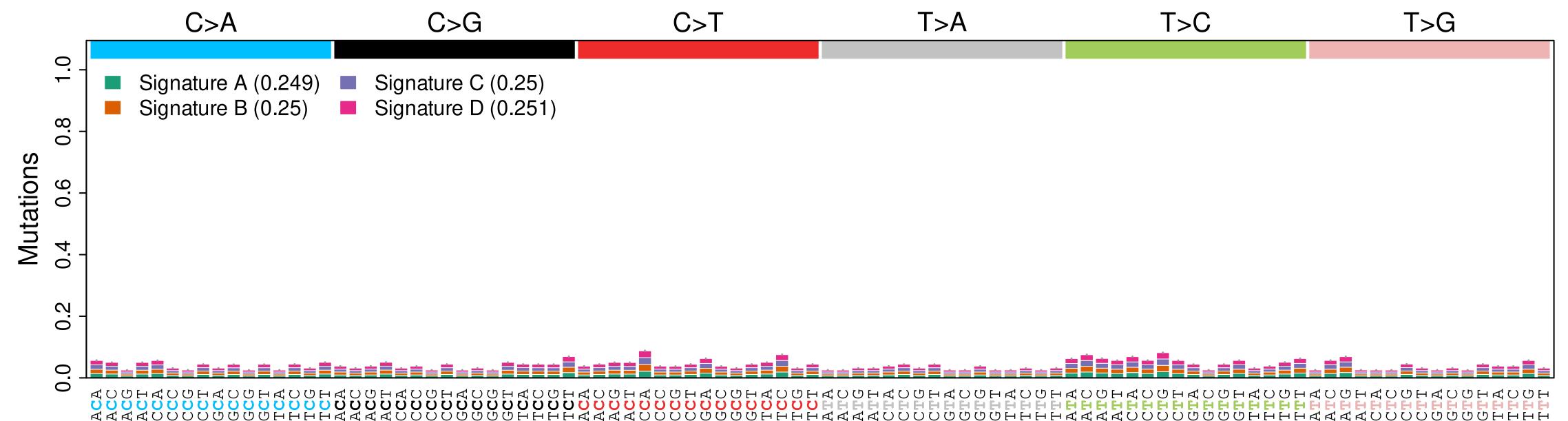
0.5



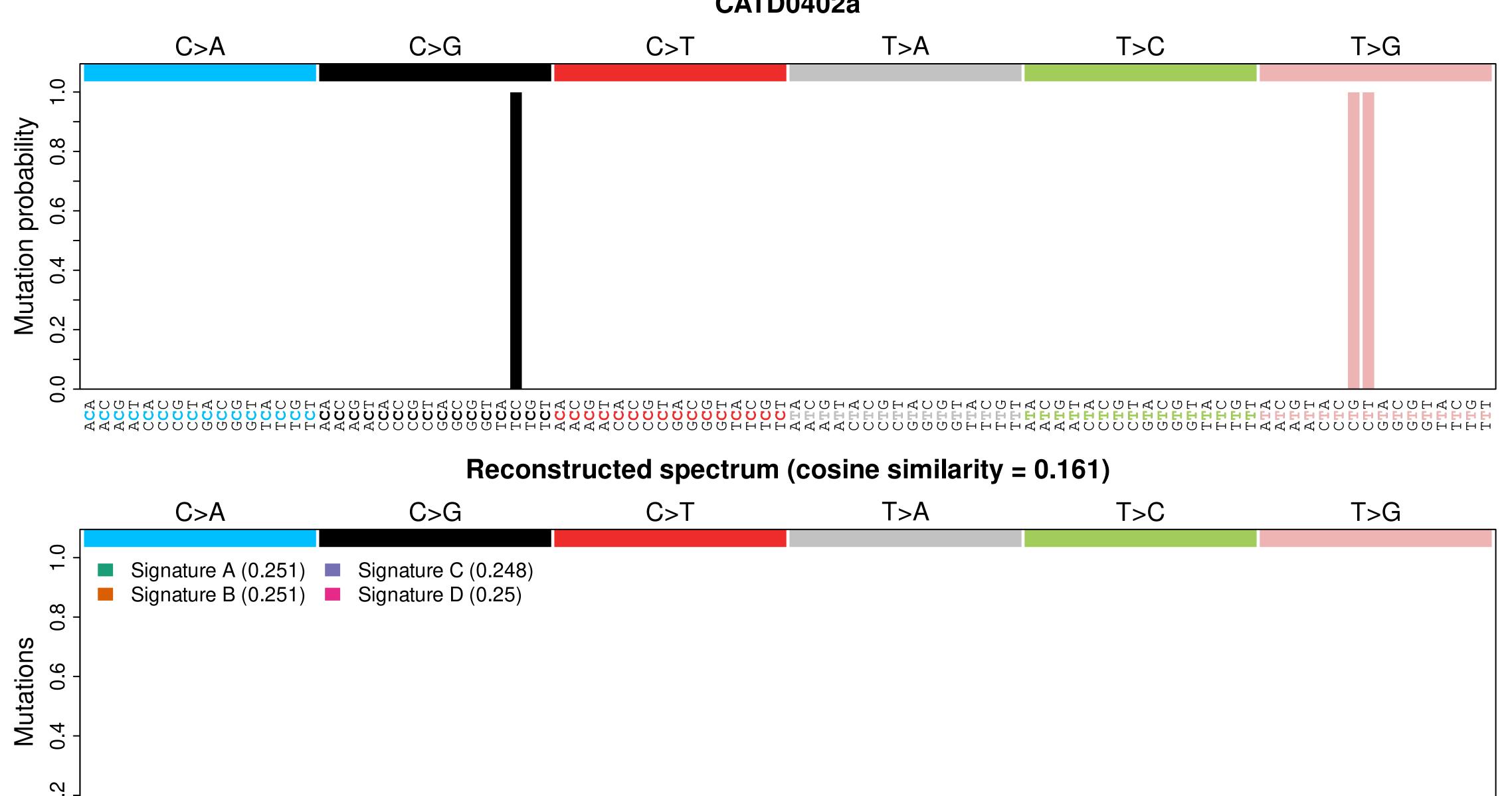




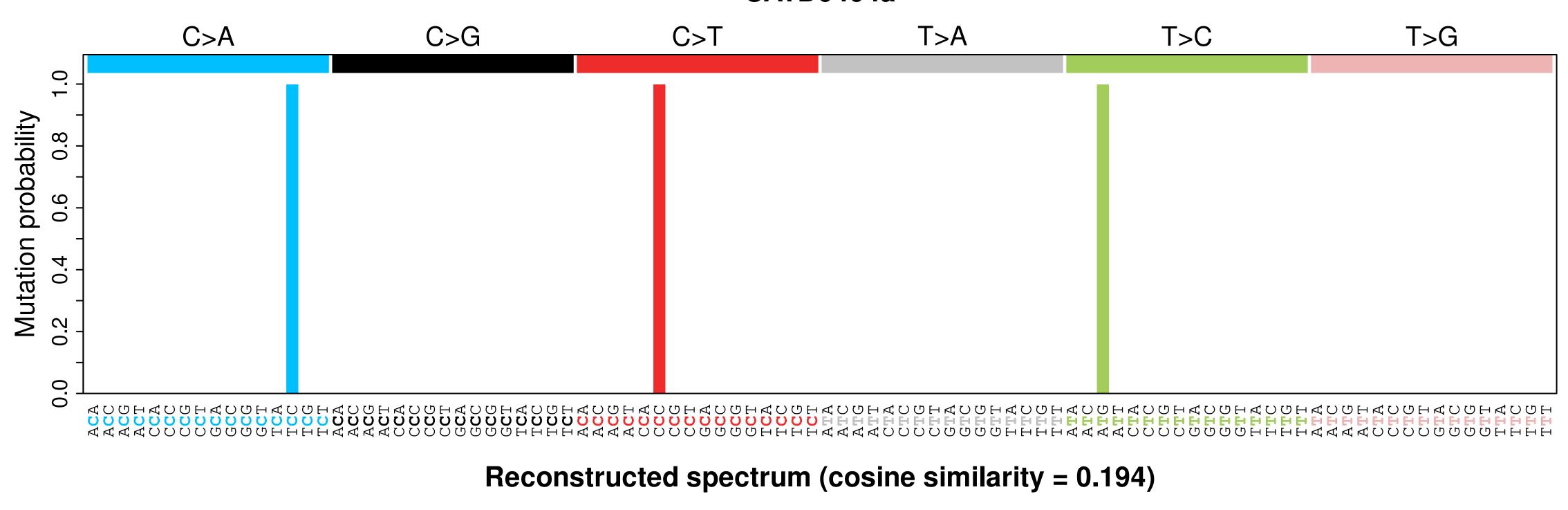


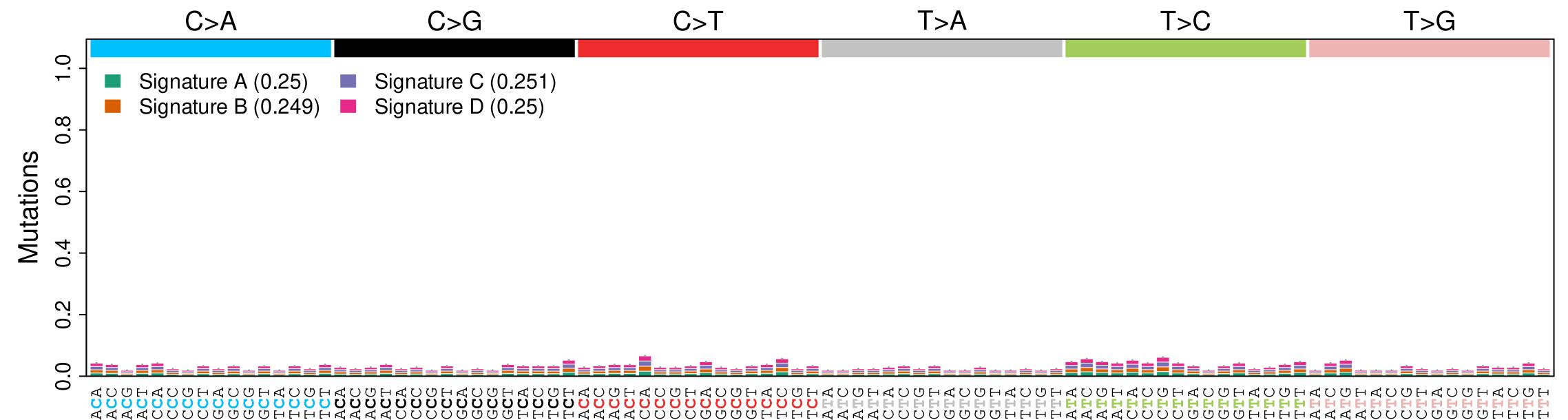












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