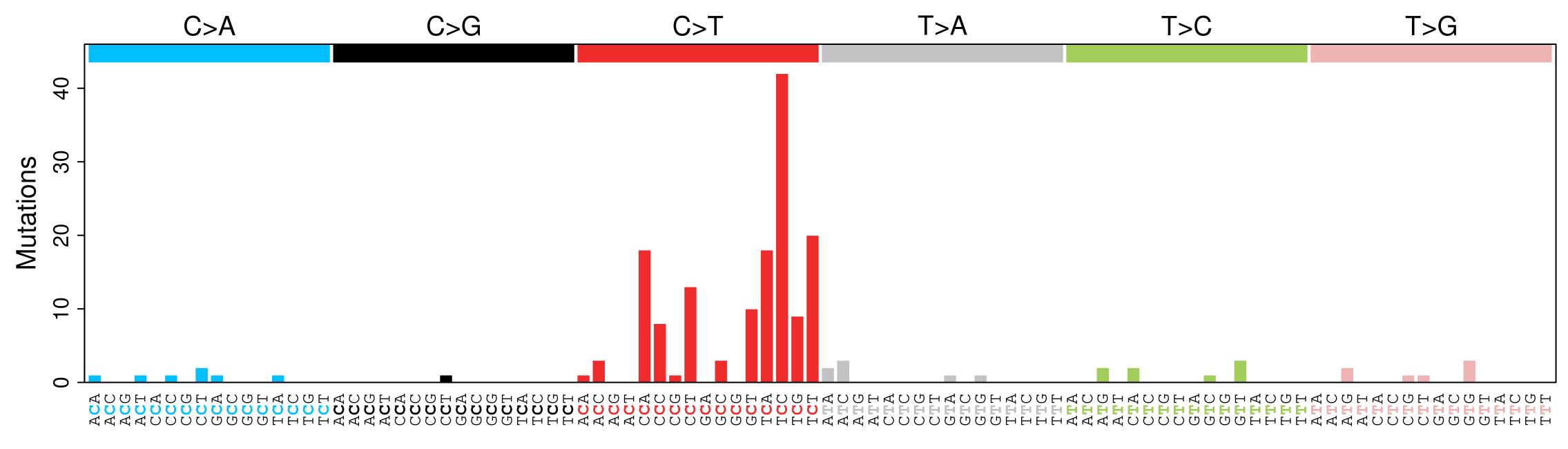
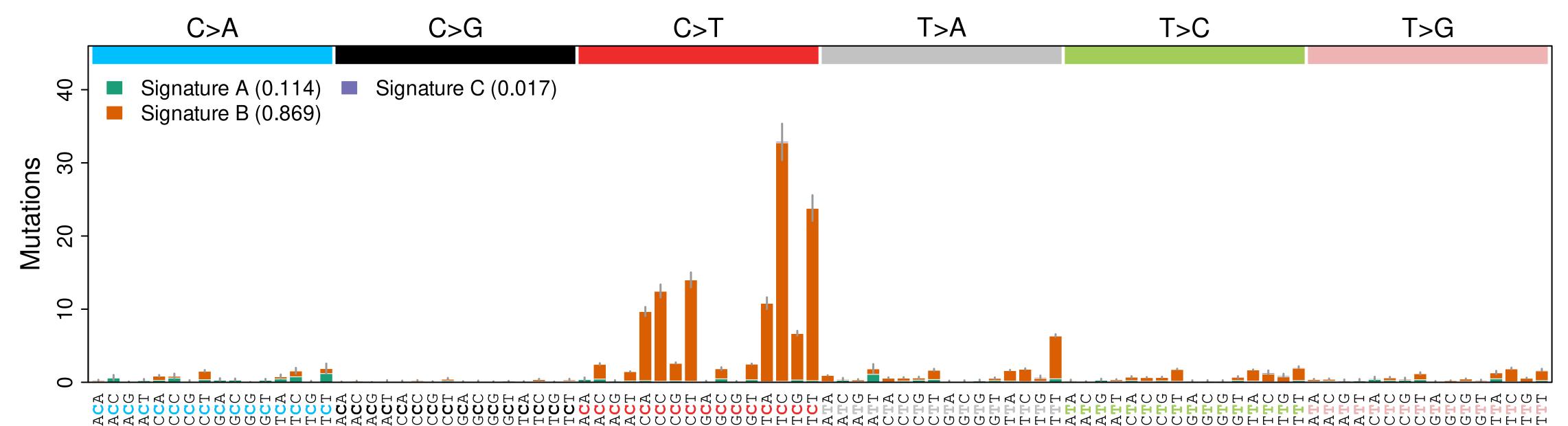
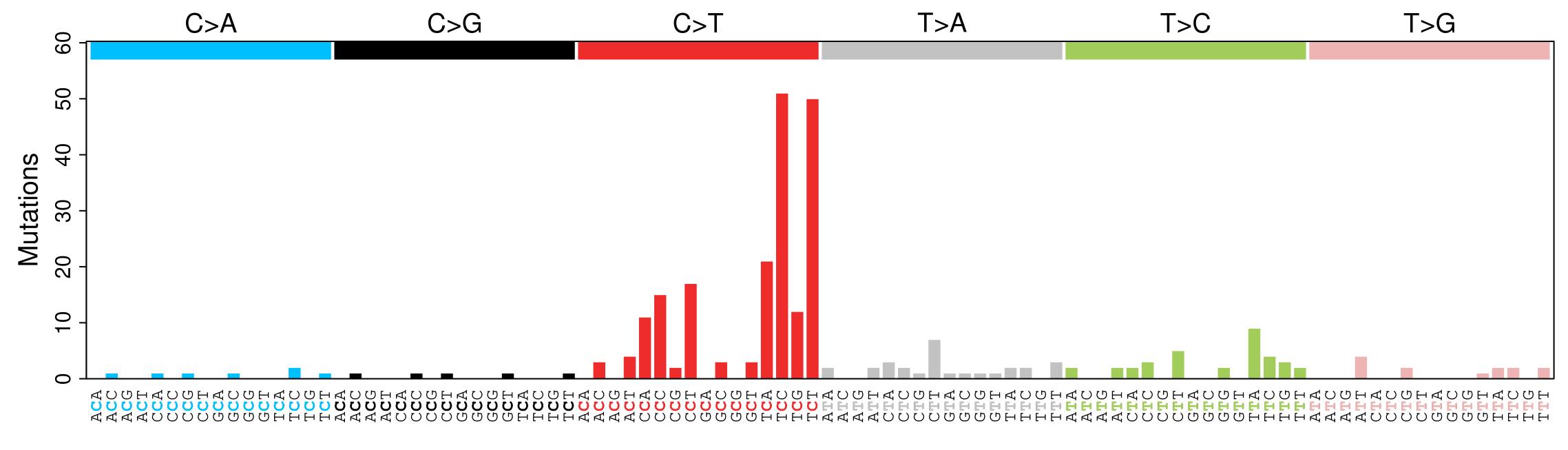
#### CATD269a (176 mutations)

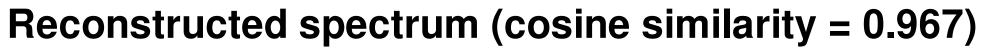


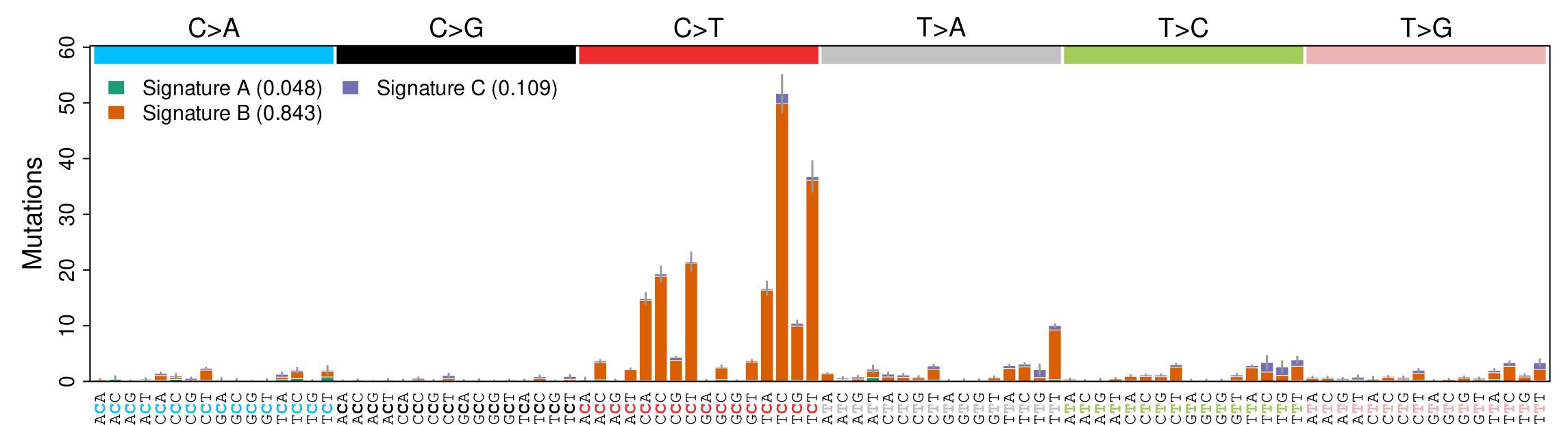
## Reconstructed spectrum (cosine similarity = 0.938)



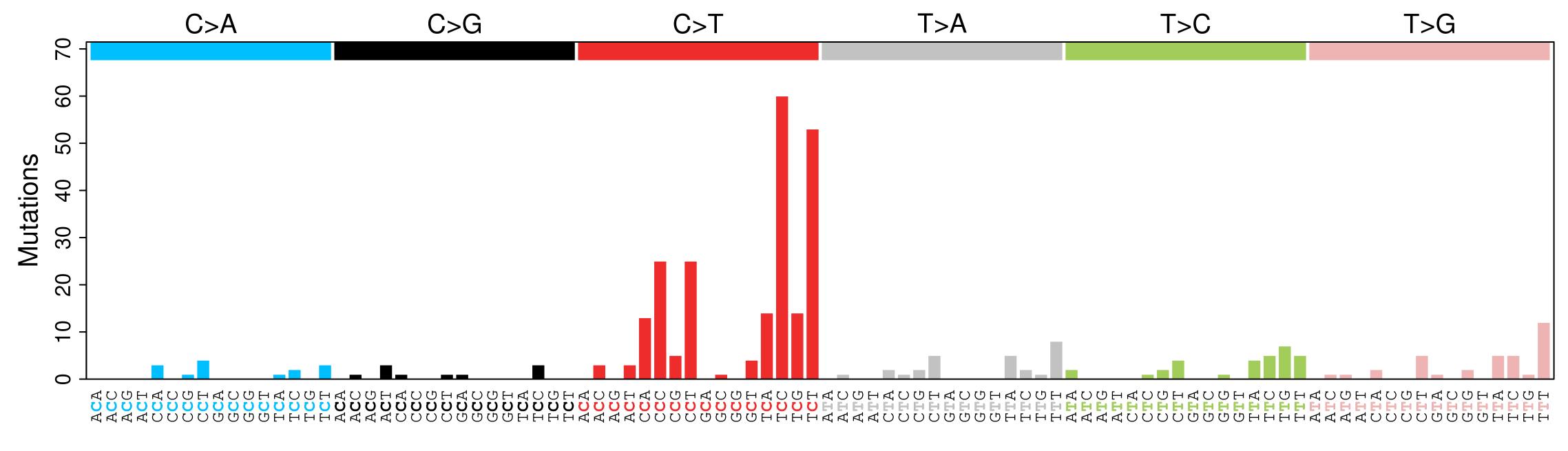
#### CATD256a (279 mutations)



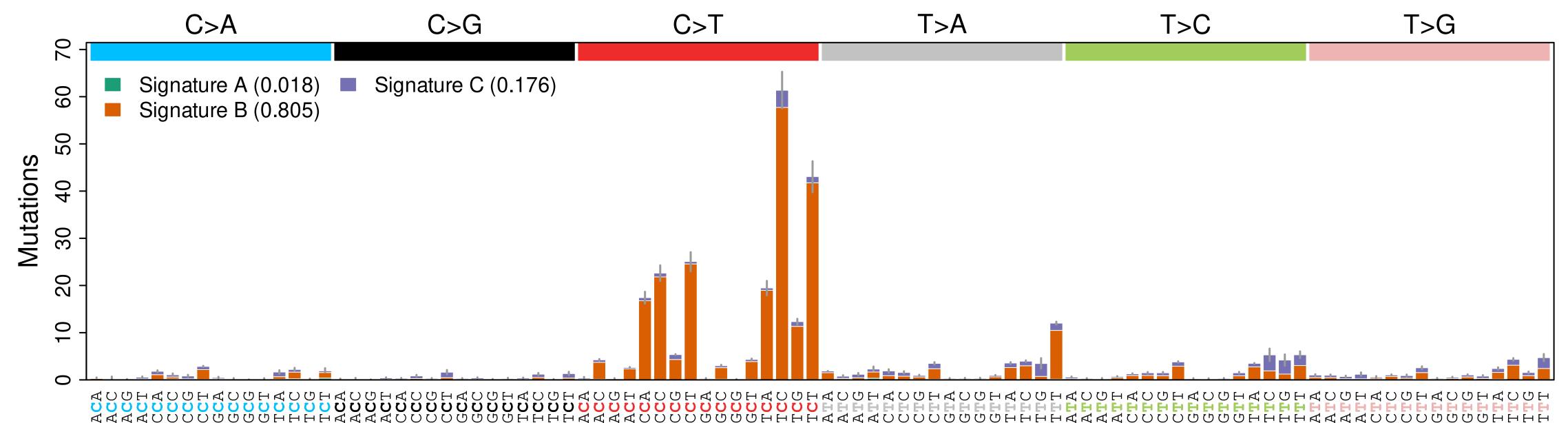




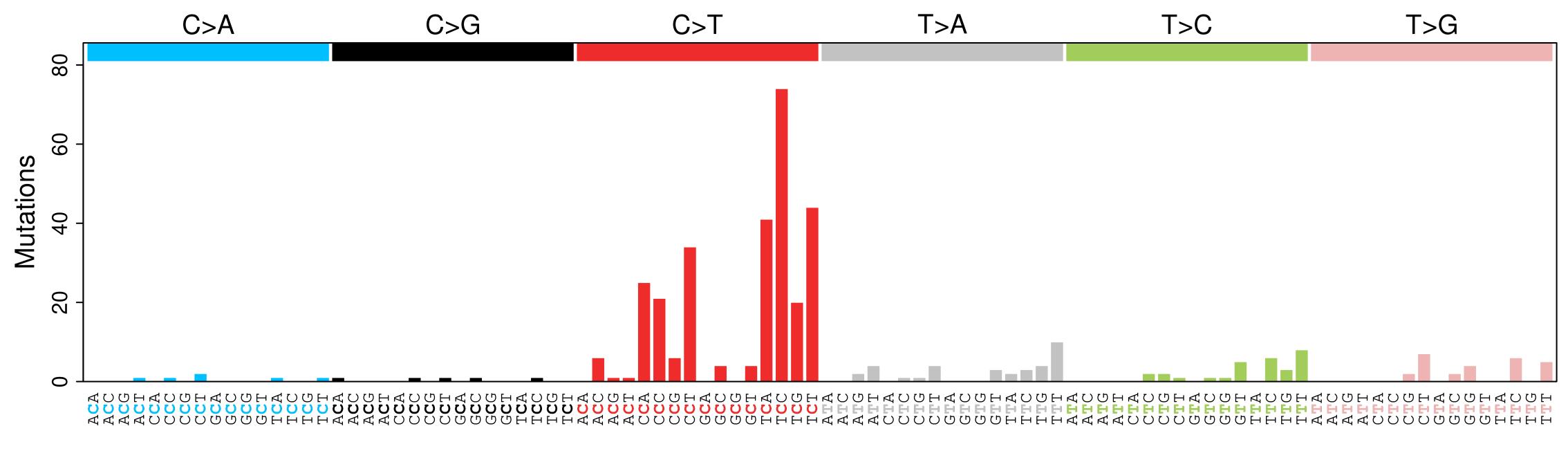
#### CATD251a (337 mutations)



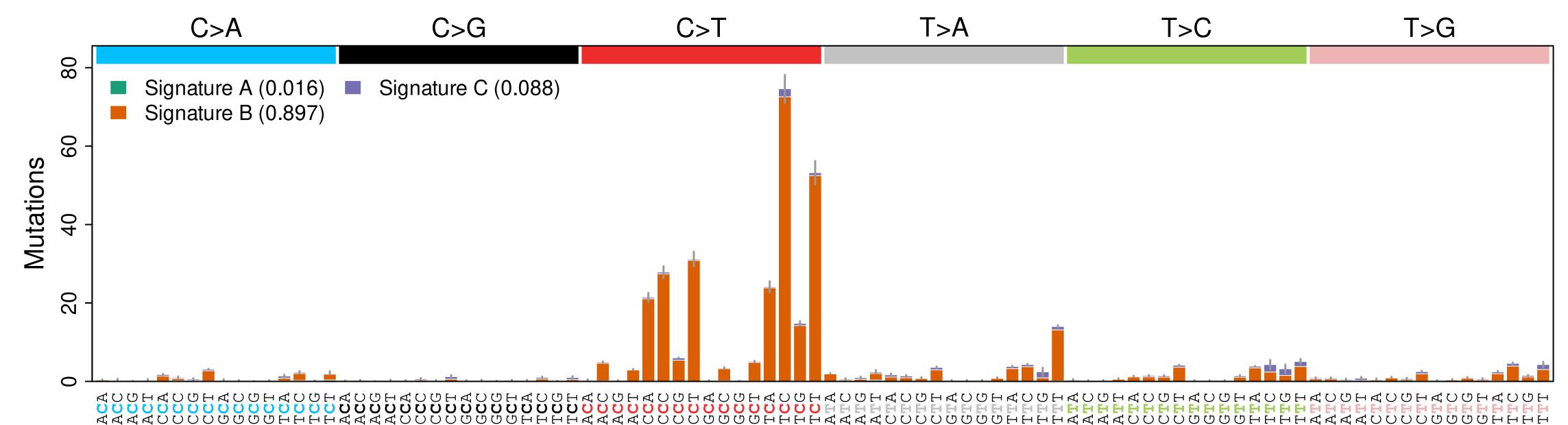
## Reconstructed spectrum (cosine similarity = 0.982)



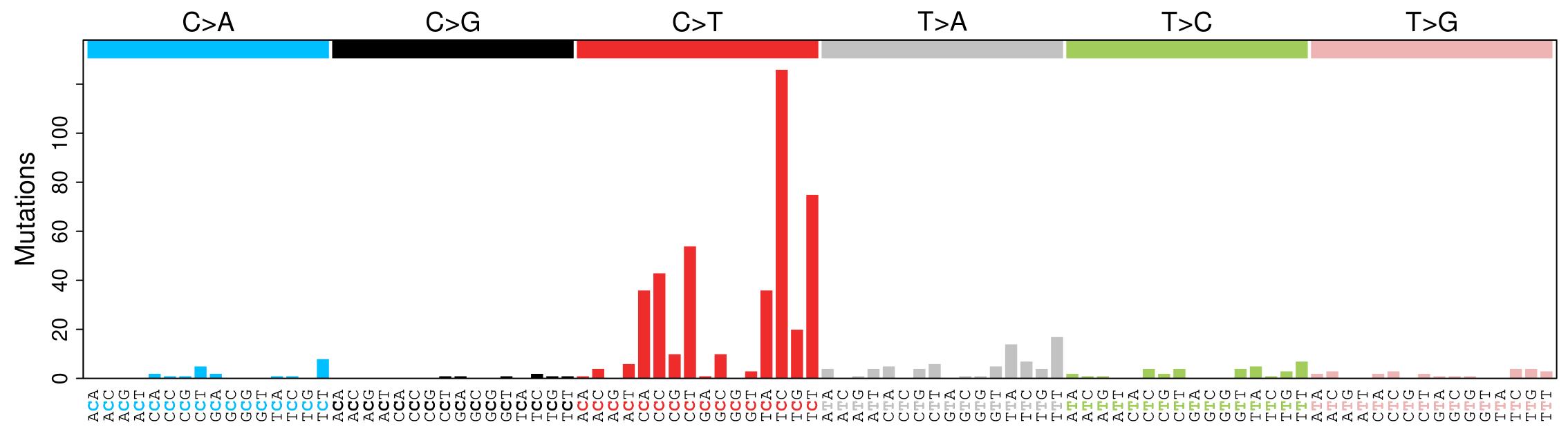
#### CATD0132a (381 mutations)



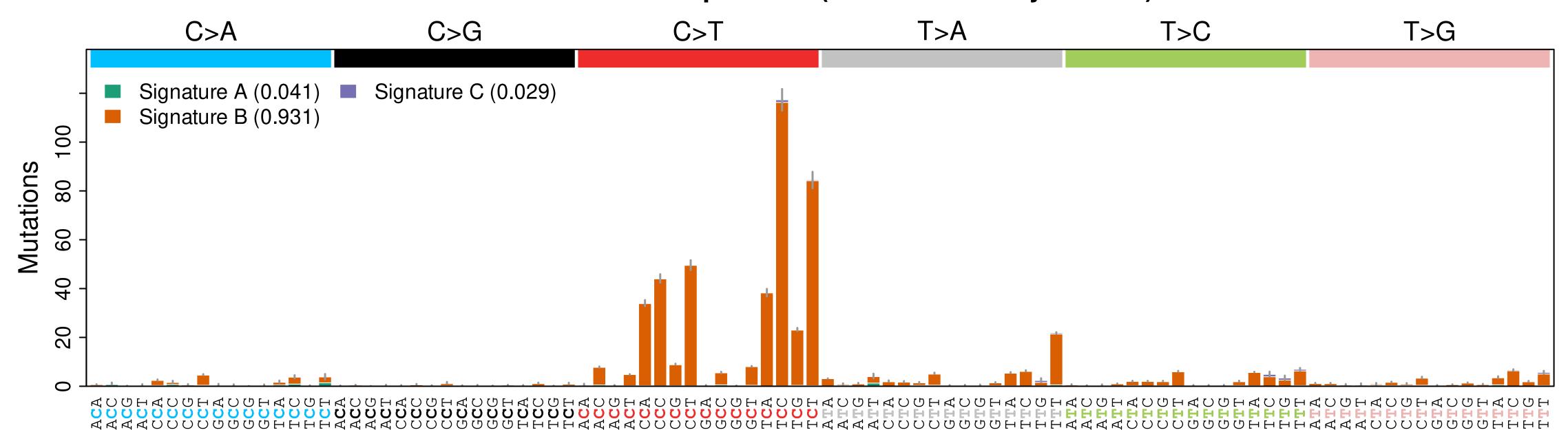
## Reconstructed spectrum (cosine similarity = 0.974)



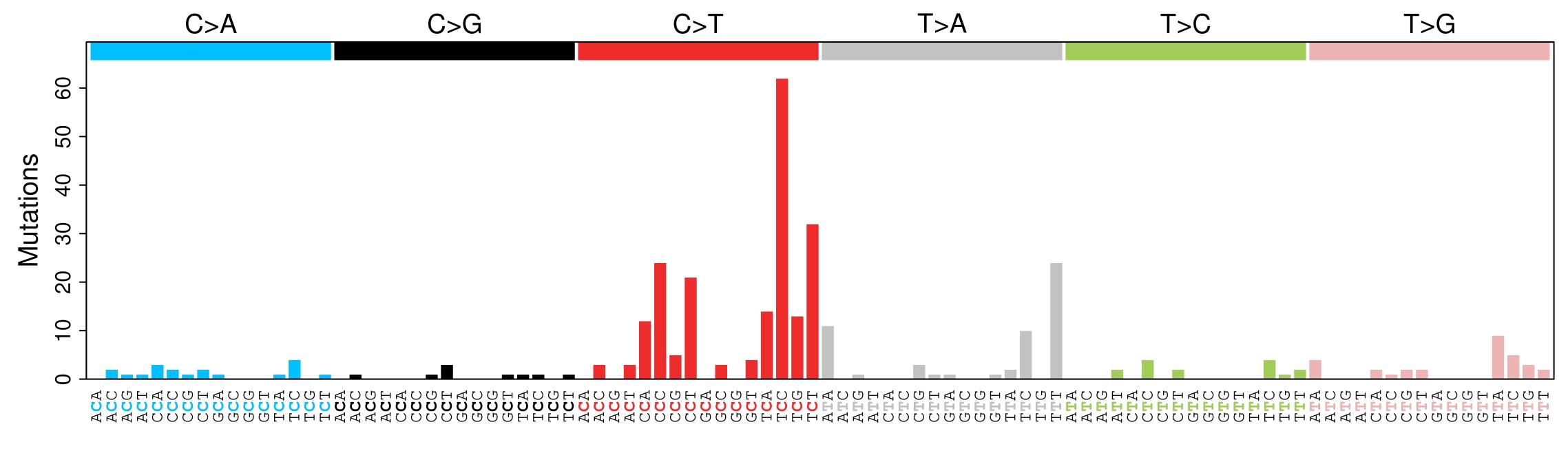
#### CATD0119a (586 mutations)



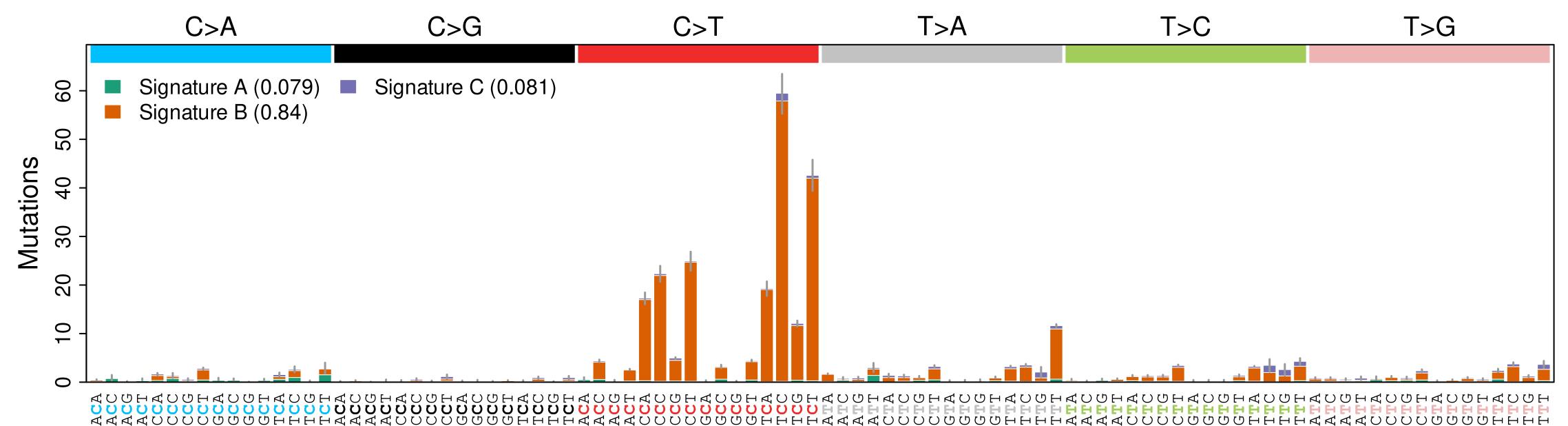
## Reconstructed spectrum (cosine similarity = 0.992)



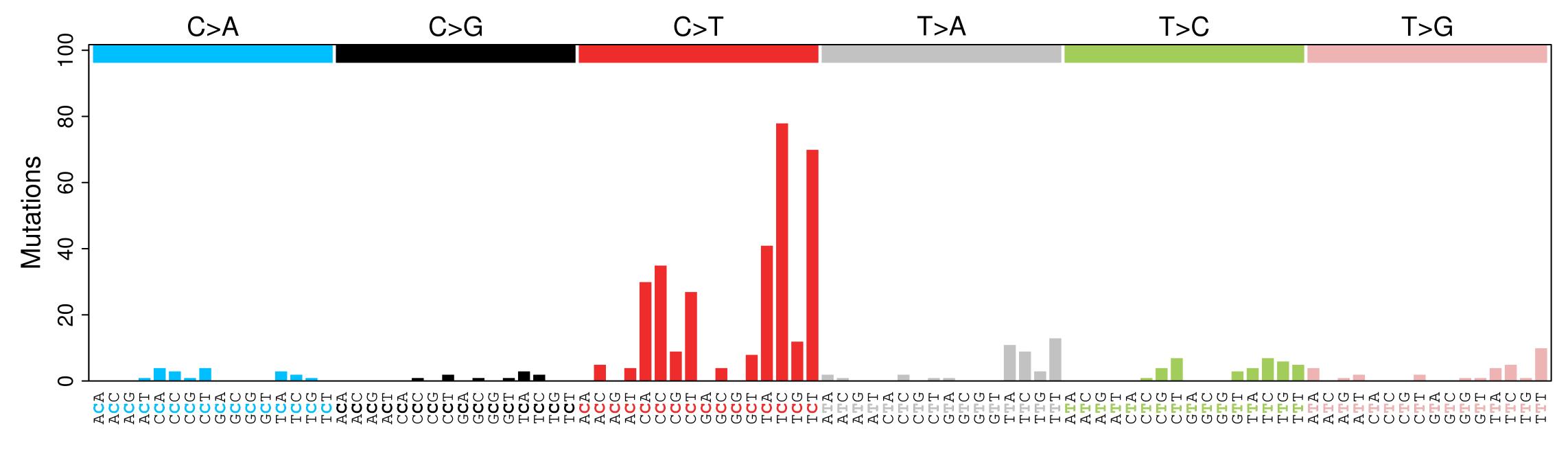
#### CATD262a (323 mutations)



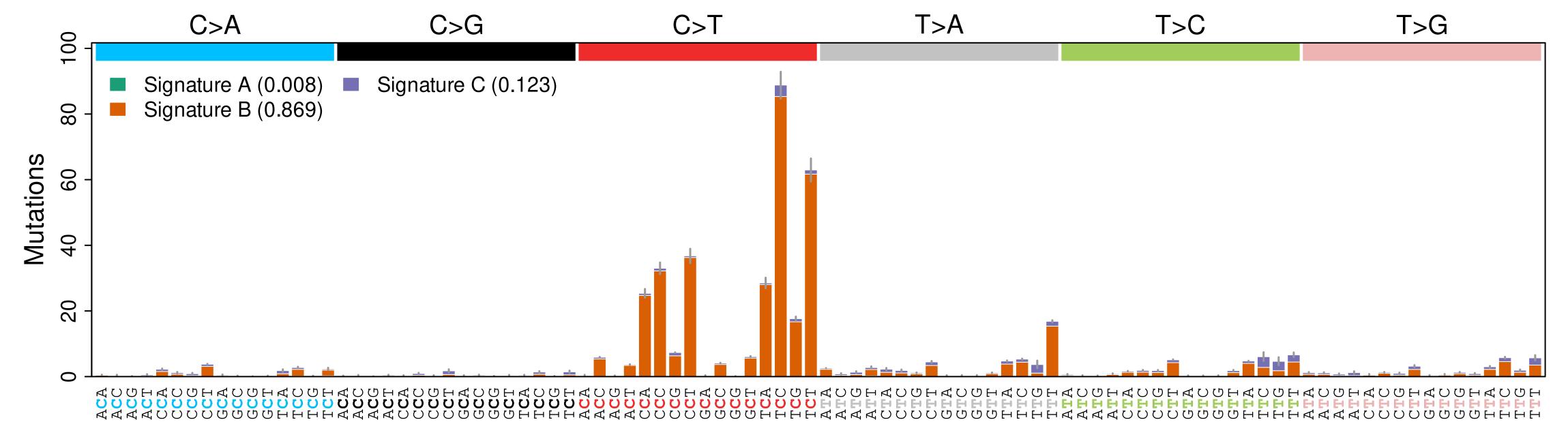
## Reconstructed spectrum (cosine similarity = 0.959)



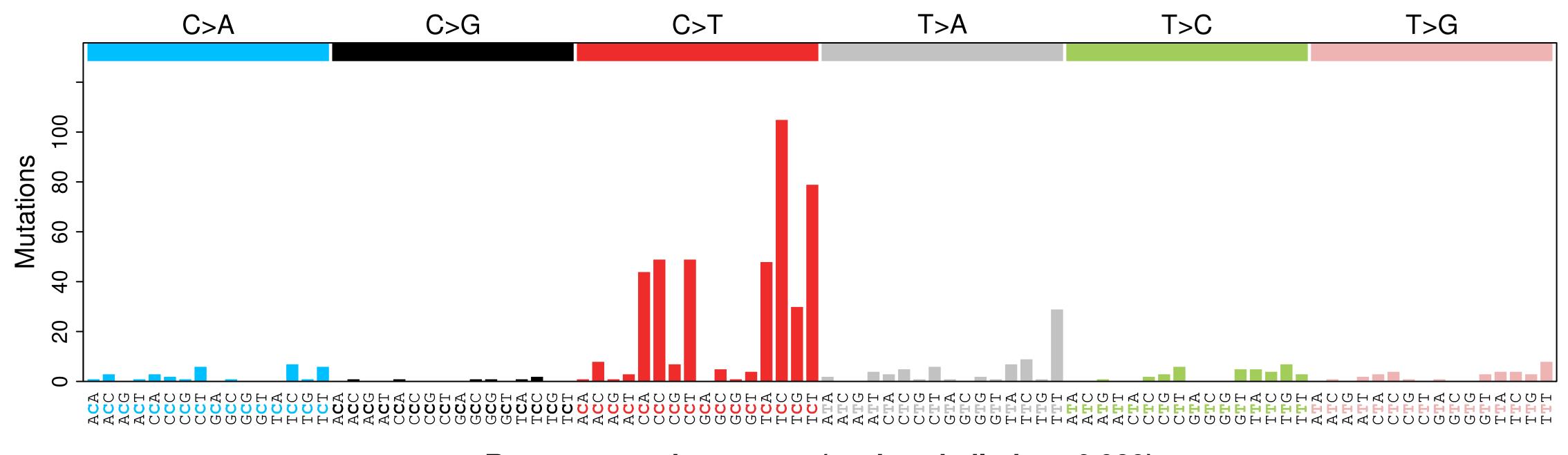
#### CATD248a (463 mutations)



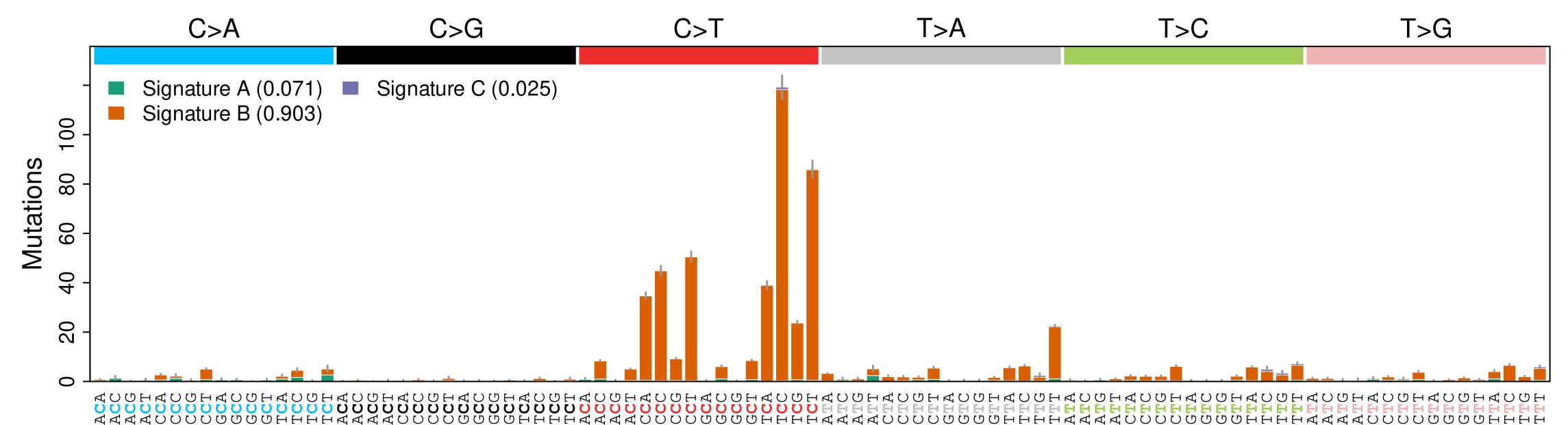
## Reconstructed spectrum (cosine similarity = 0.98)



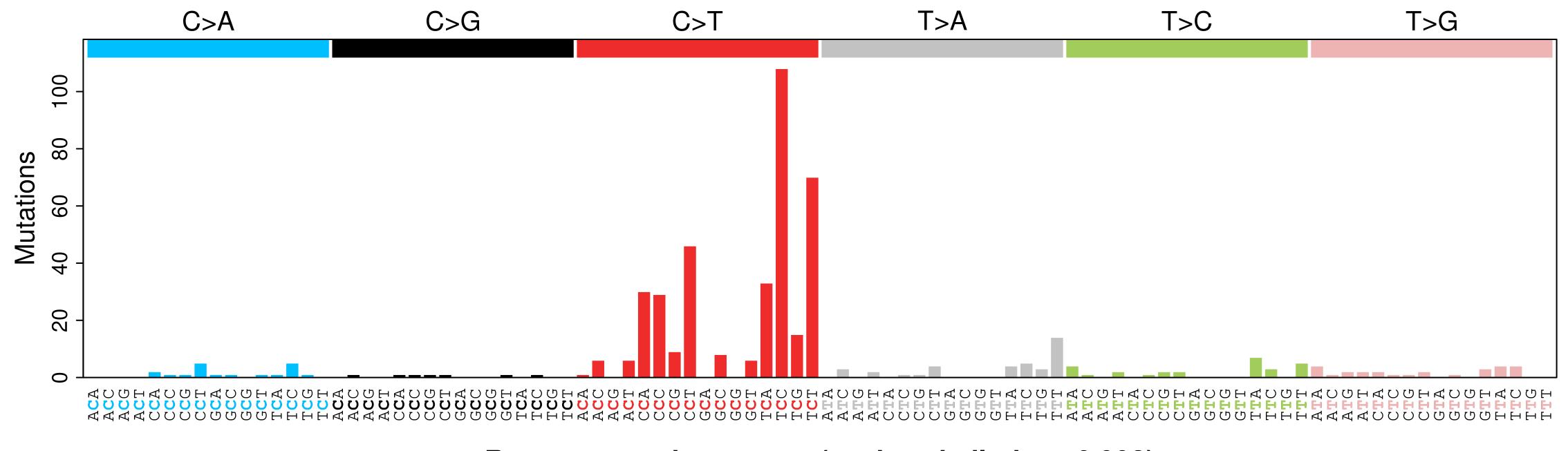
#### CATD0122a (614 mutations)



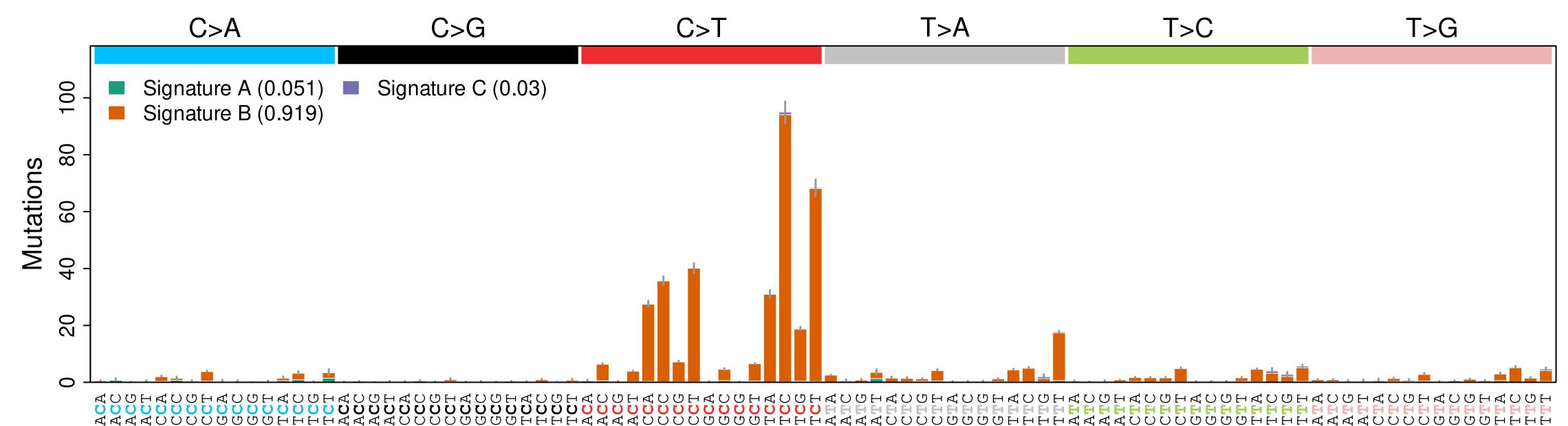
## Reconstructed spectrum (cosine similarity = 0.989)



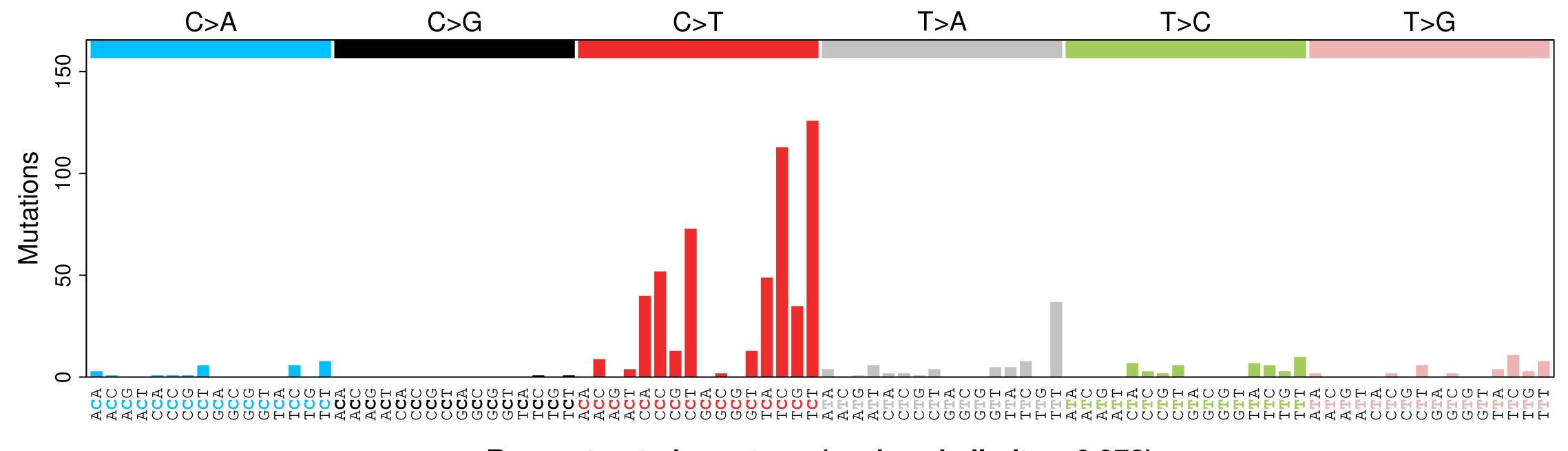
#### CATD252a (484 mutations)



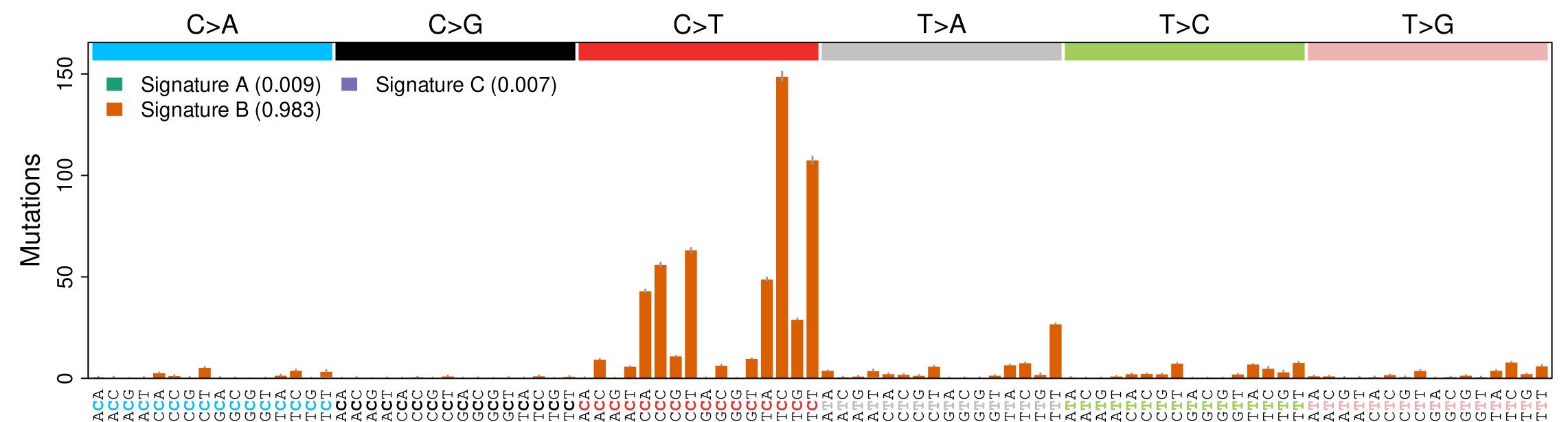
## Reconstructed spectrum (cosine similarity = 0.992)



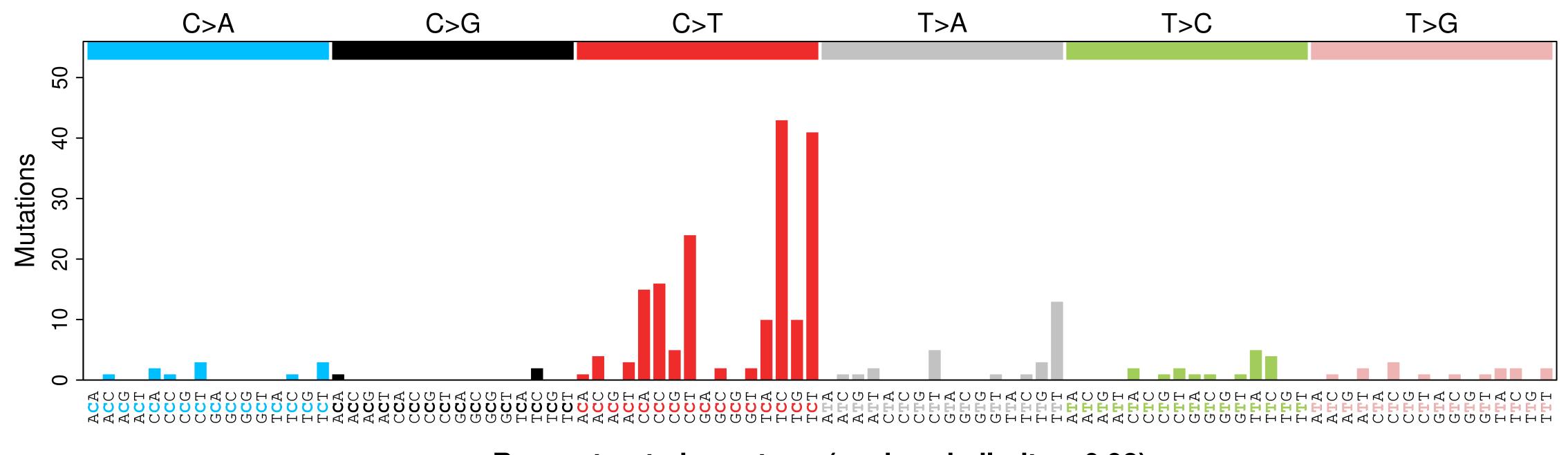
#### CATD268a (715 mutations)



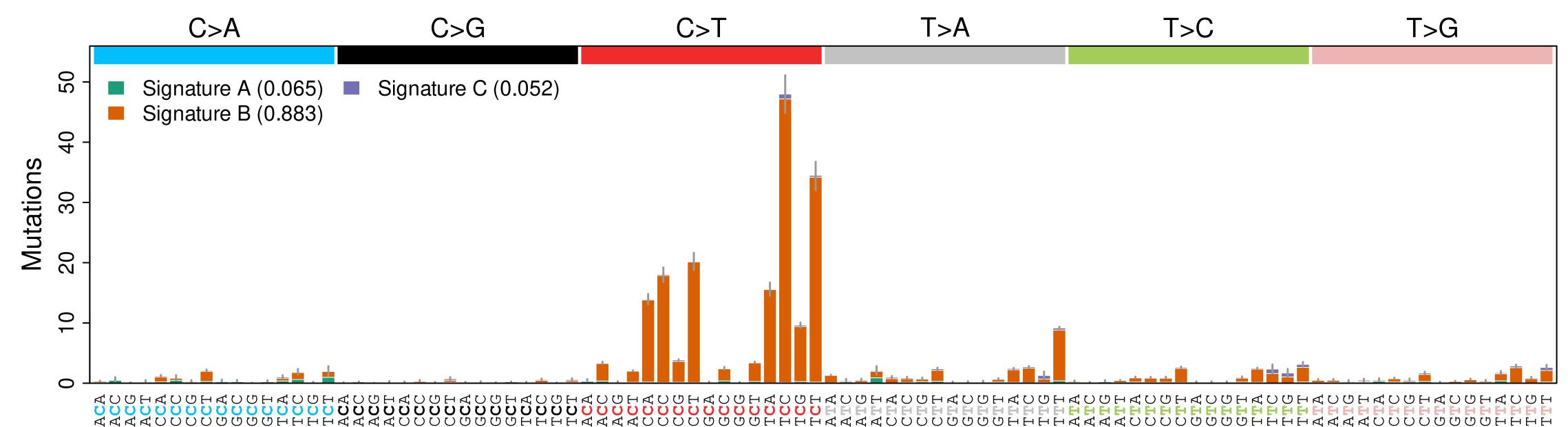
## Reconstructed spectrum (cosine similarity = 0.978)



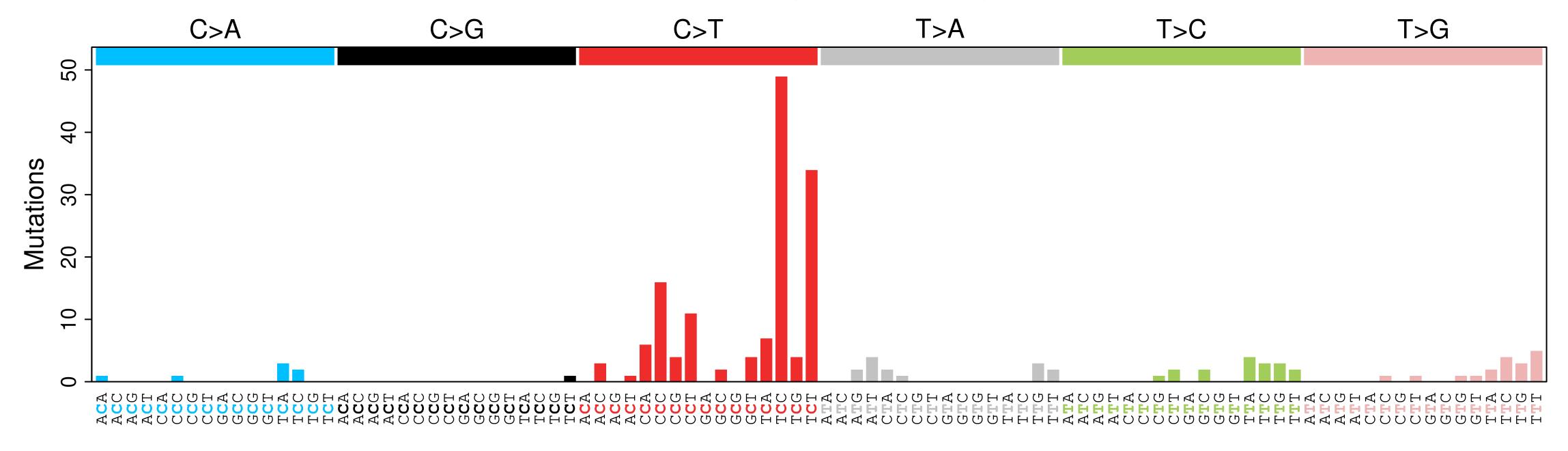
#### CATD187a (249 mutations)



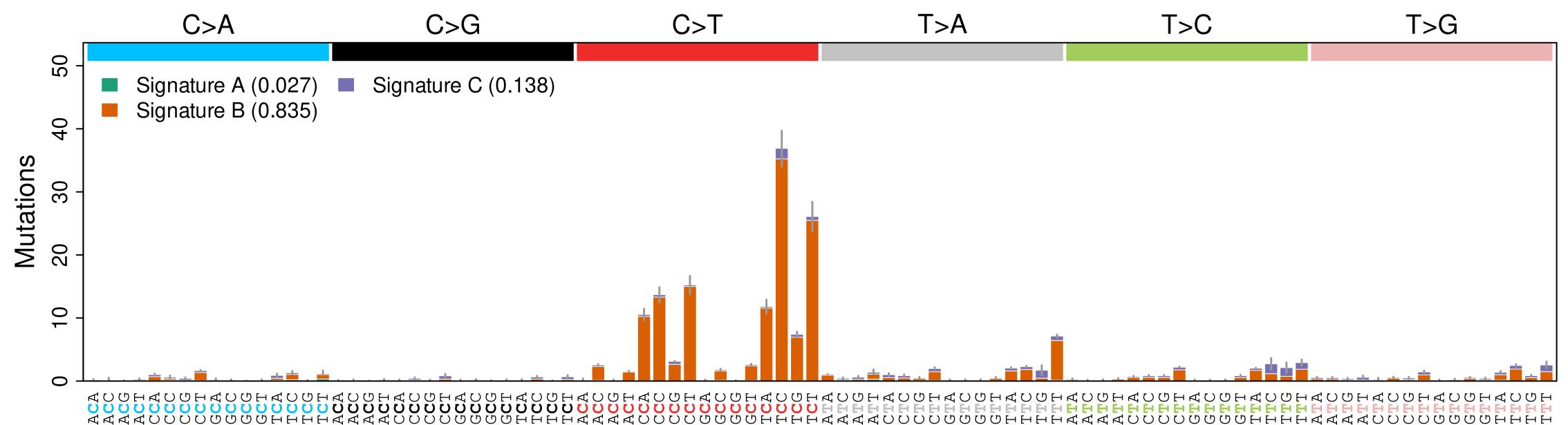
## Reconstructed spectrum (cosine similarity = 0.98)



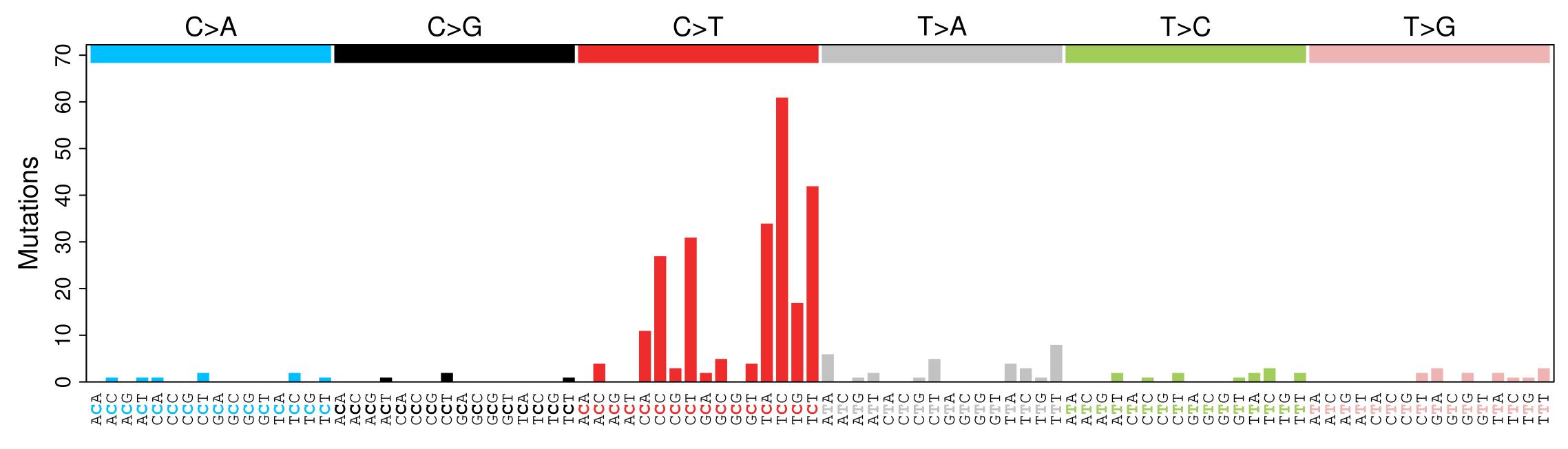
#### CATD245a (198 mutations)



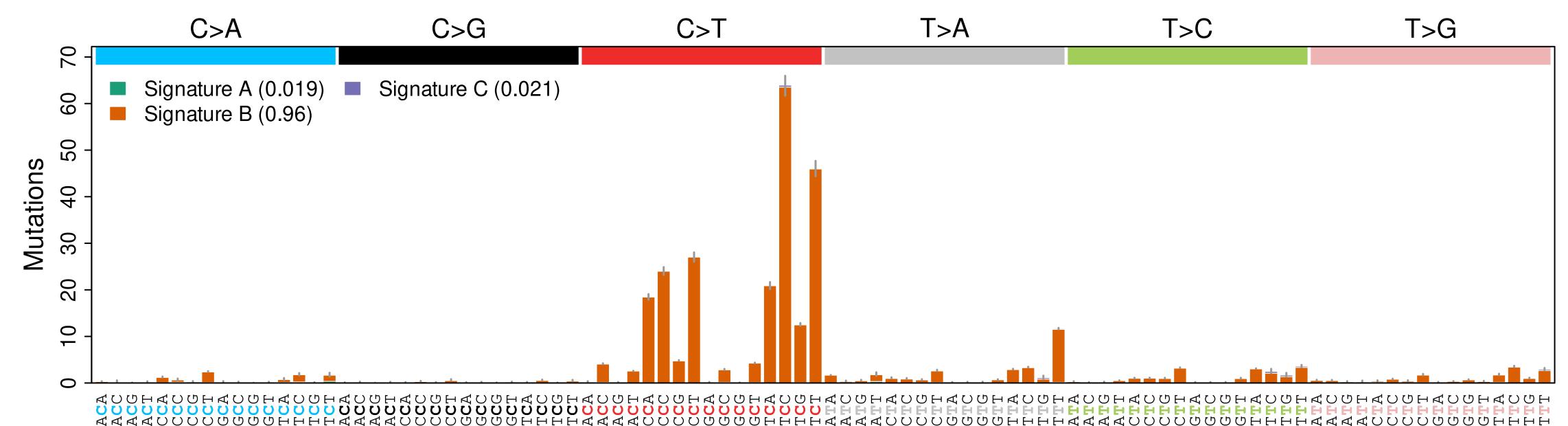
## Reconstructed spectrum (cosine similarity = 0.963)



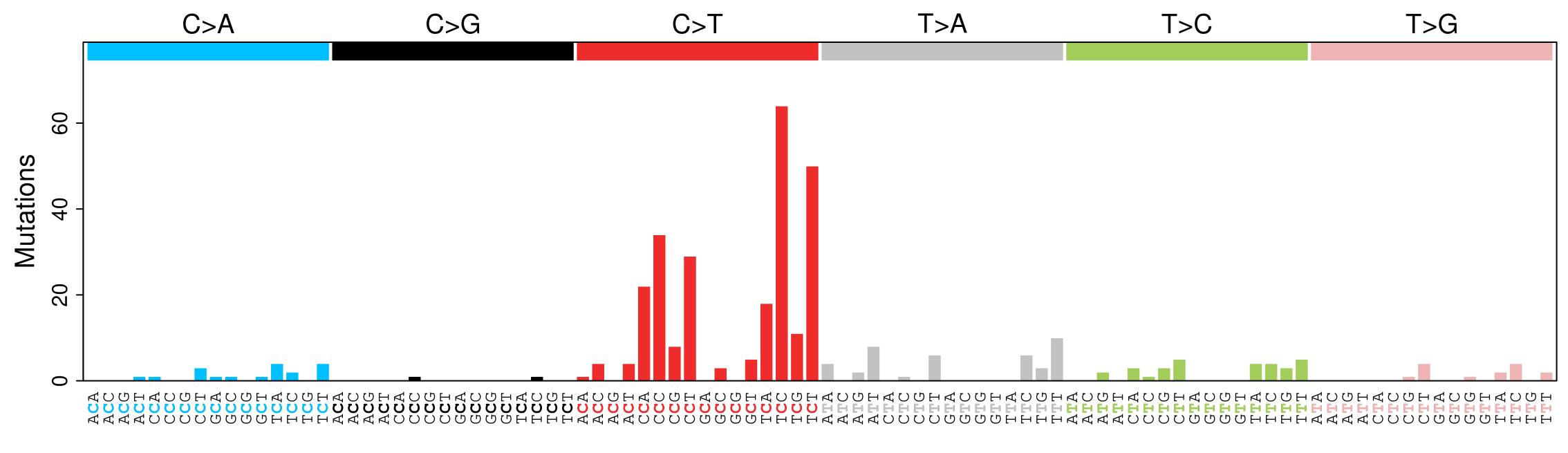
#### CATD0123a (311 mutations)



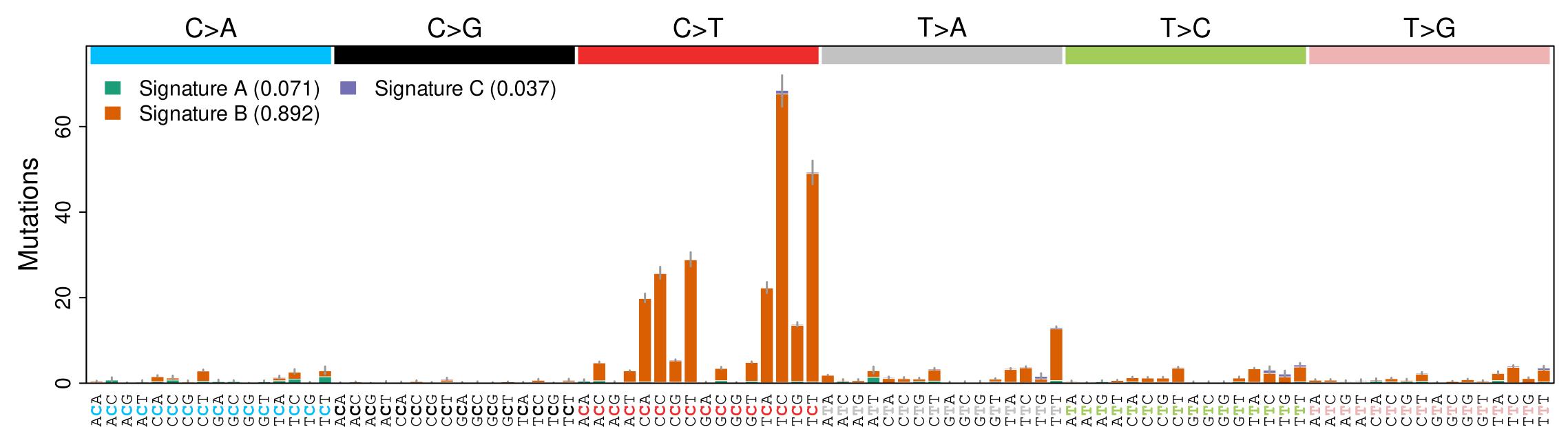
## Reconstructed spectrum (cosine similarity = 0.978)



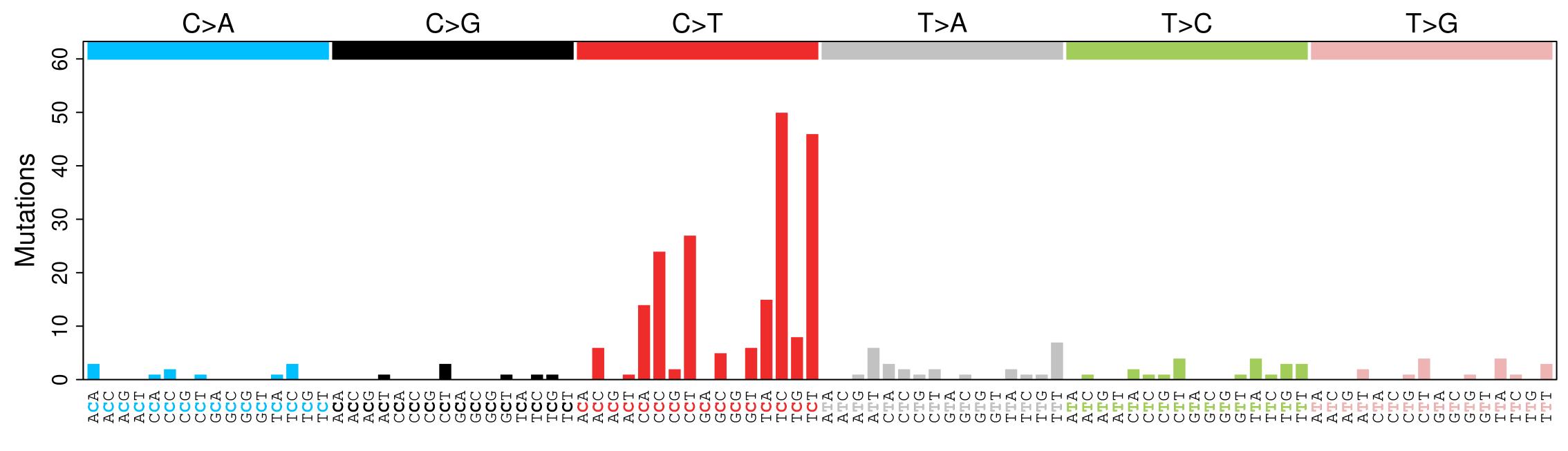
#### CATD255a (357 mutations)

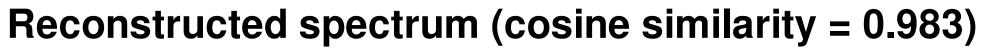


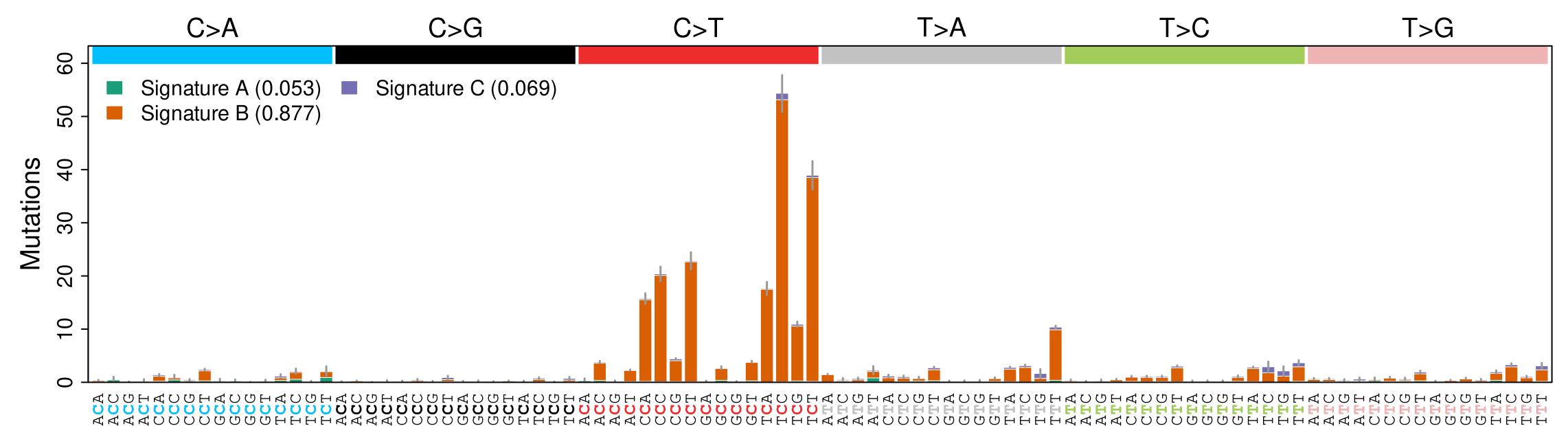
## Reconstructed spectrum (cosine similarity = 0.988)



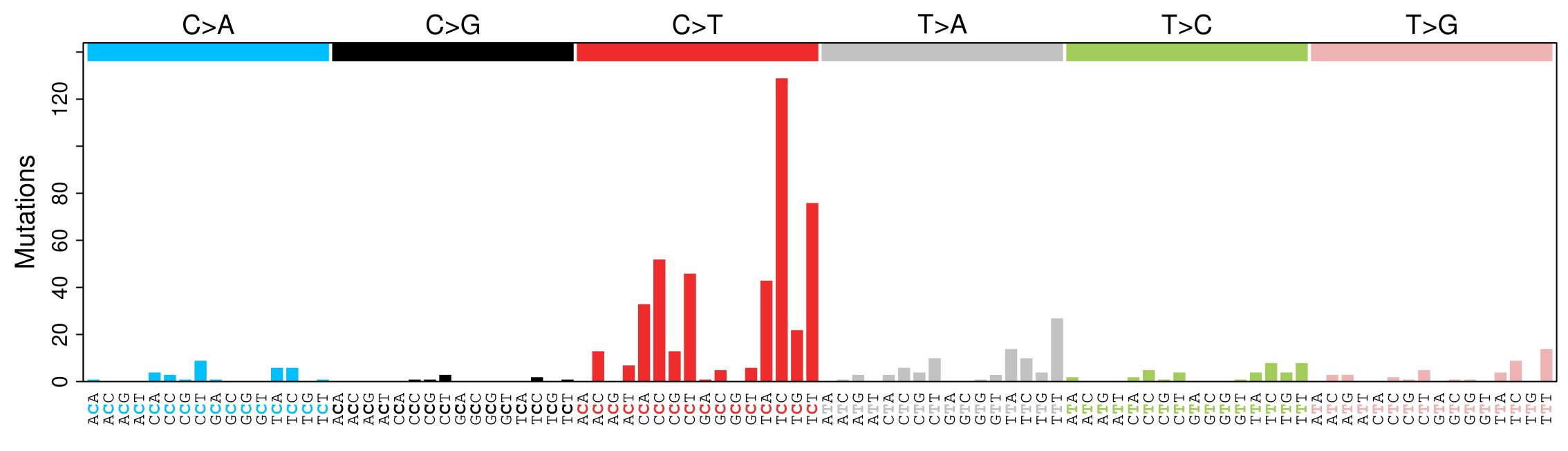
#### CATD244a (286 mutations)



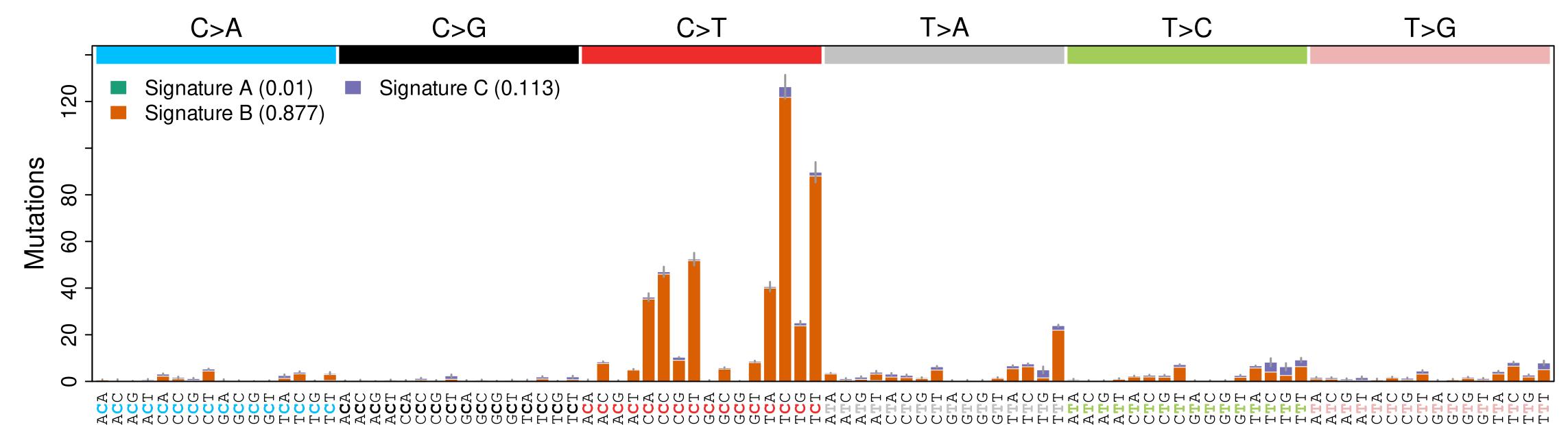




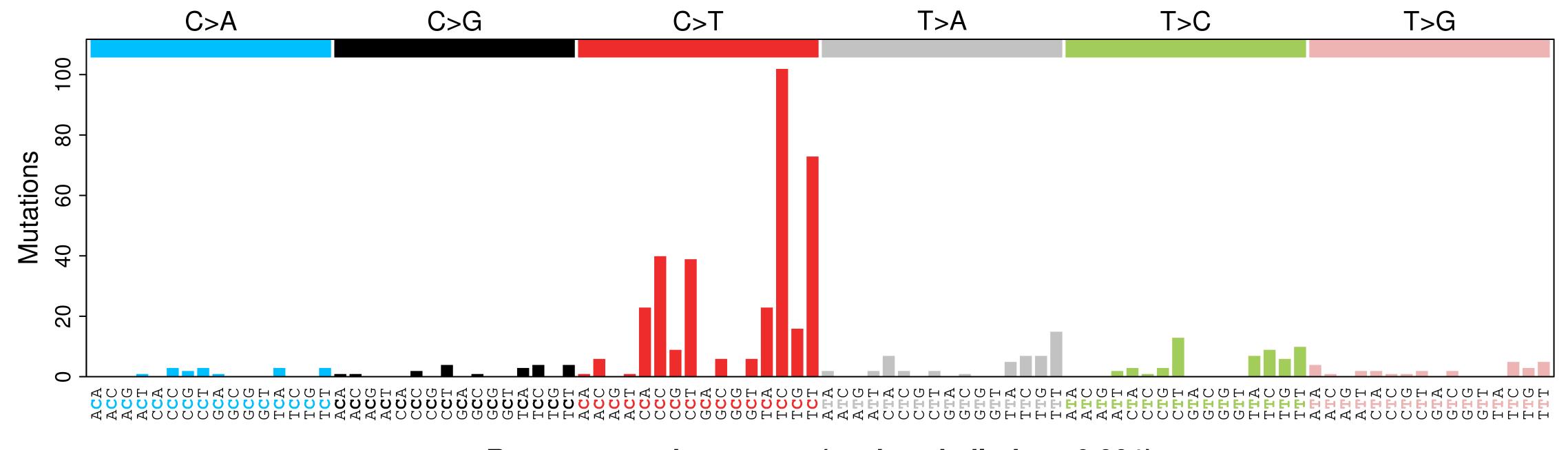
#### CATD0120a (654 mutations)



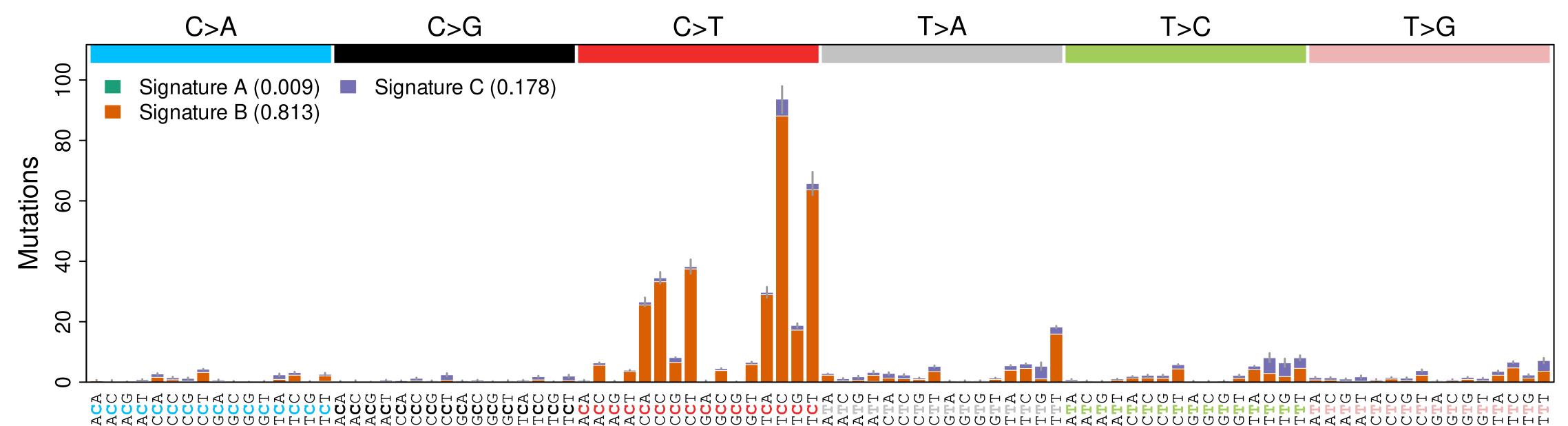
## Reconstructed spectrum (cosine similarity = 0.991)



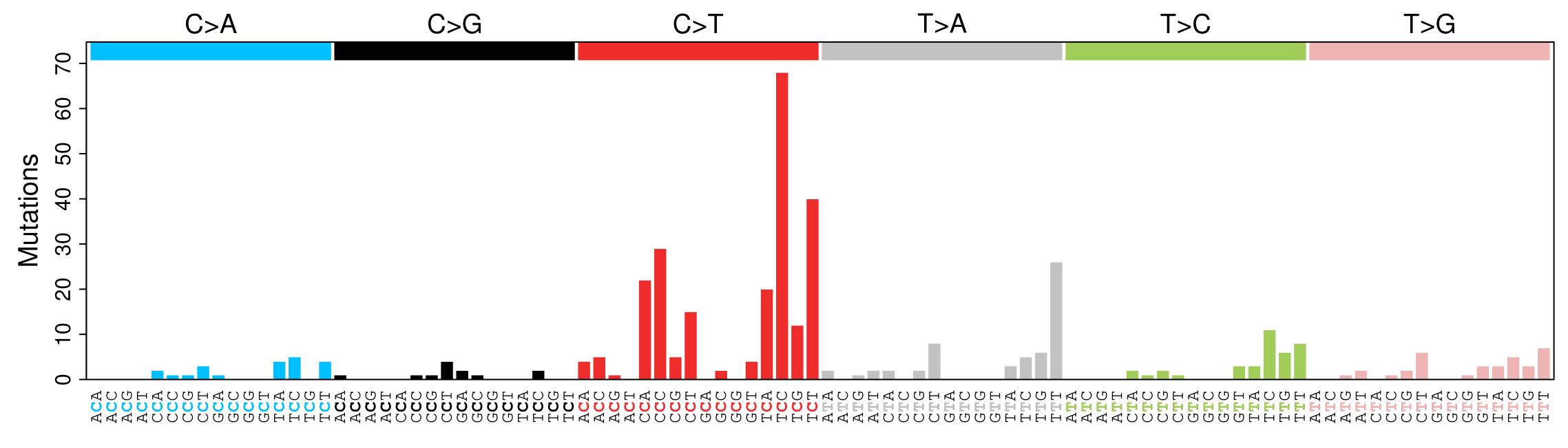
#### CATD247a (513 mutations)



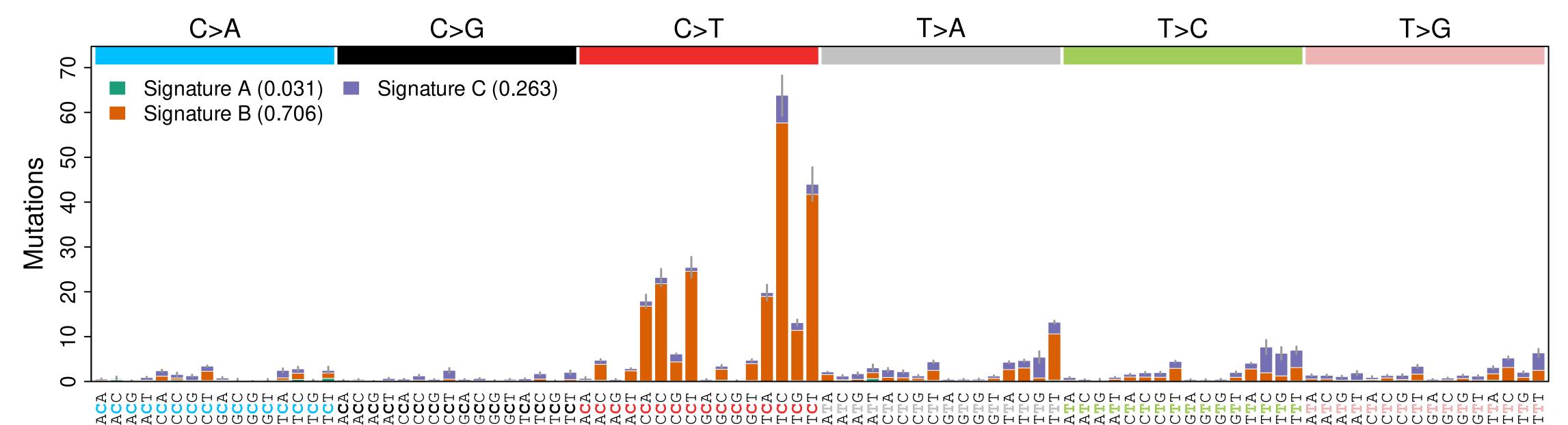
# Reconstructed spectrum (cosine similarity = 0.991)



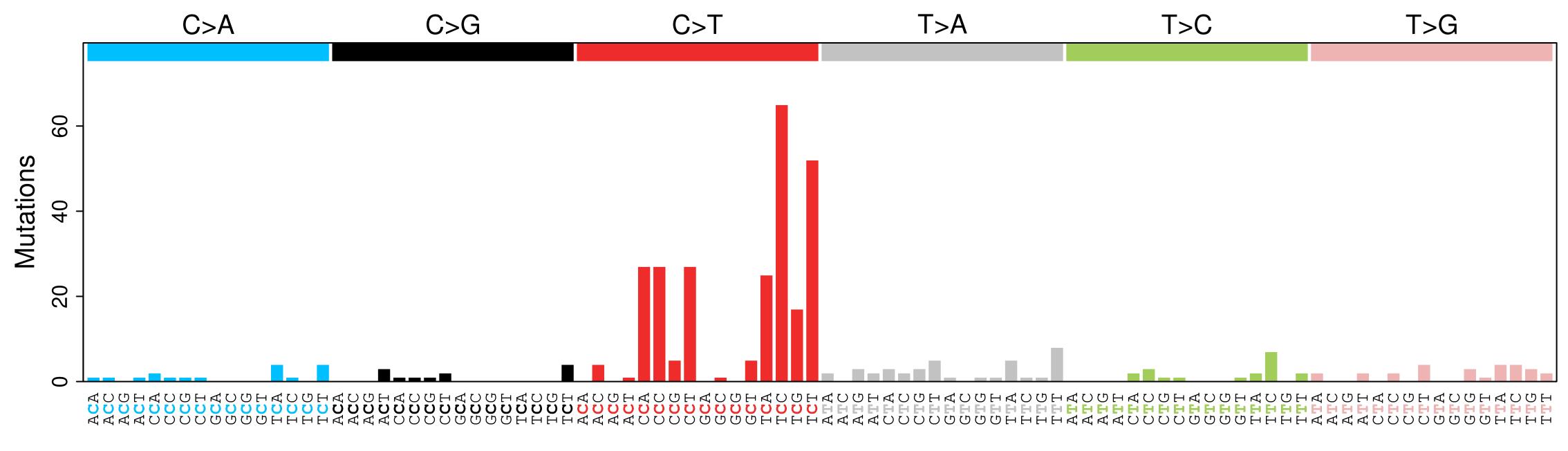
#### CATD260a (388 mutations)



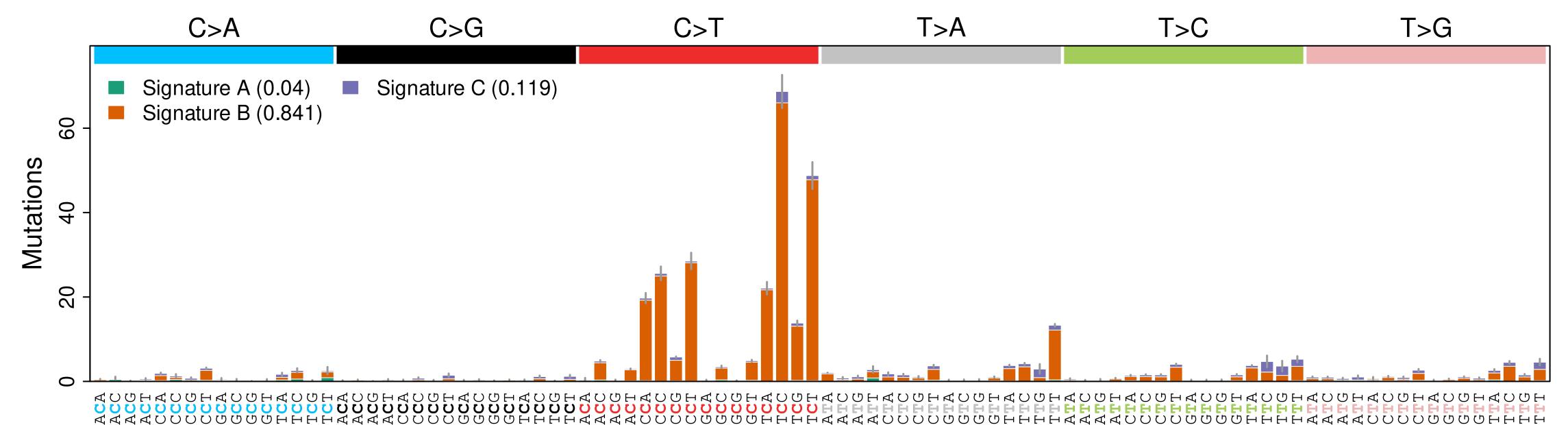
## **Reconstructed spectrum (cosine similarity = 0.975)**



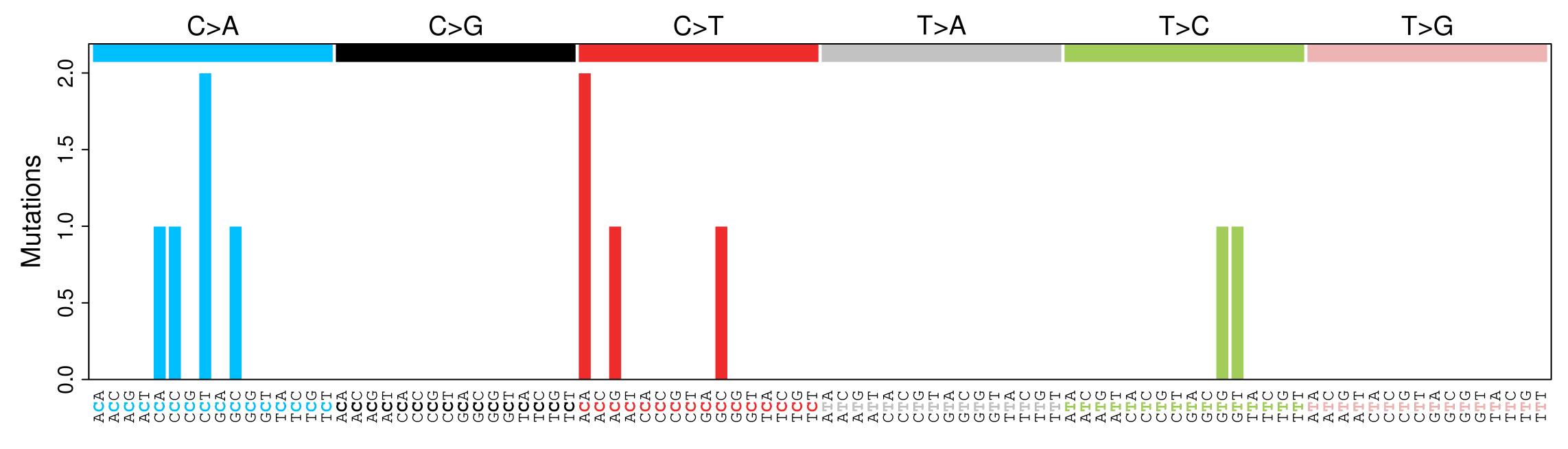
#### CATD246a (369 mutations)



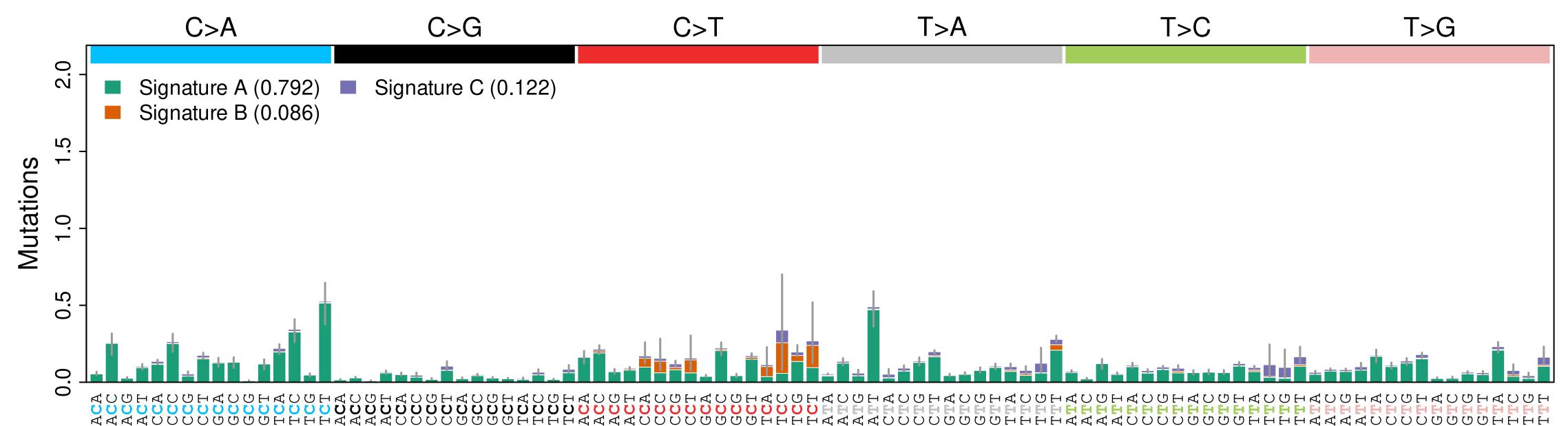
## **Reconstructed spectrum (cosine similarity = 0.987)**



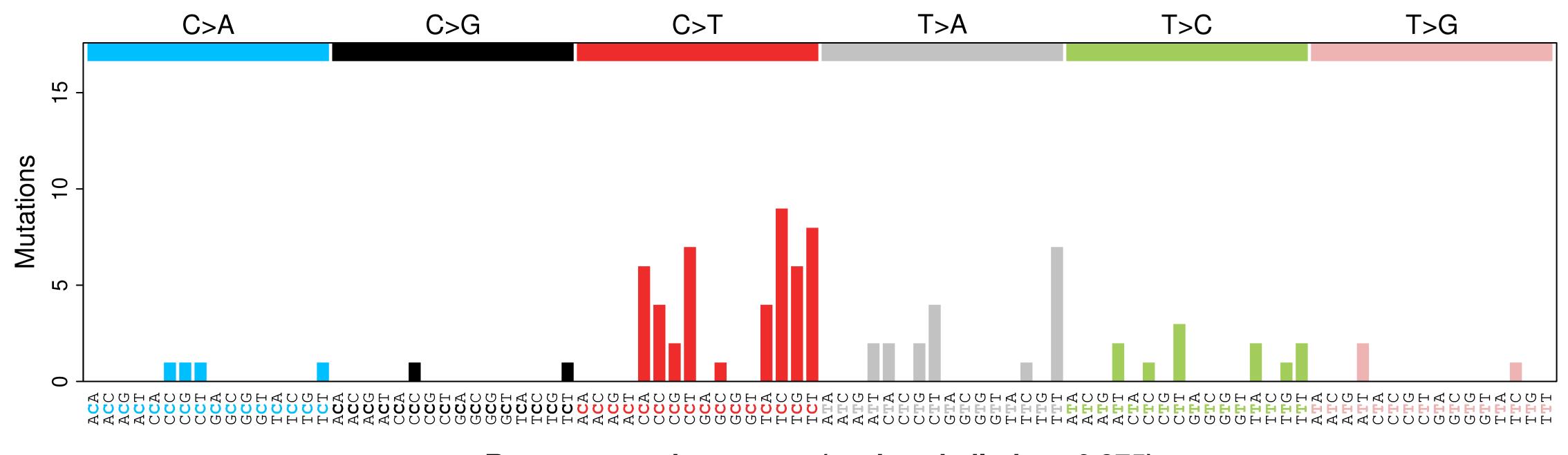
### CATD279a (11 mutations)



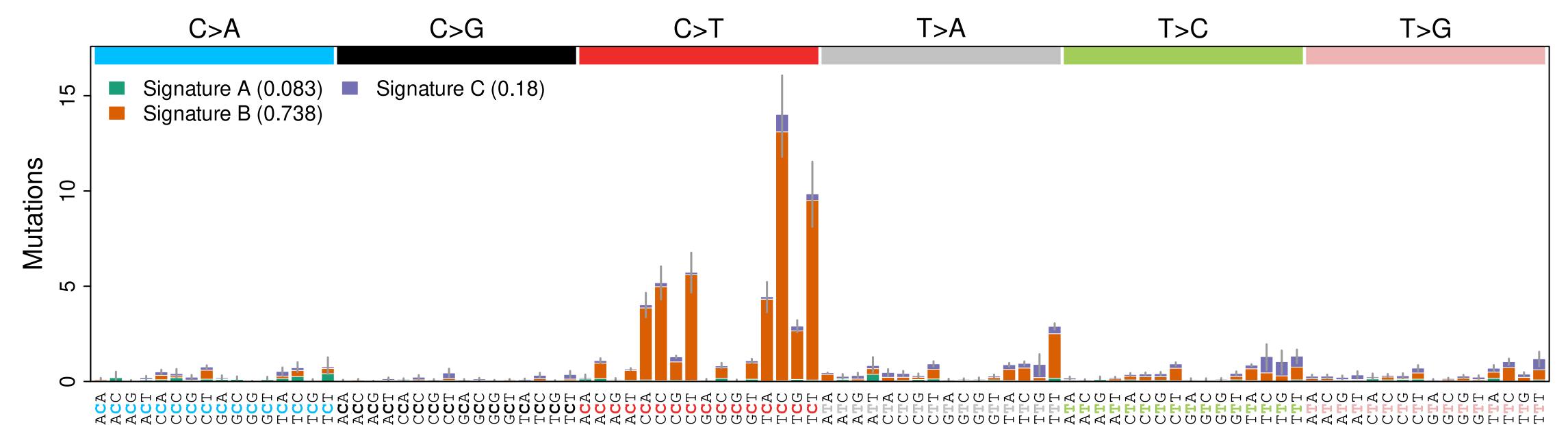
# Reconstructed spectrum (cosine similarity = 0.305)



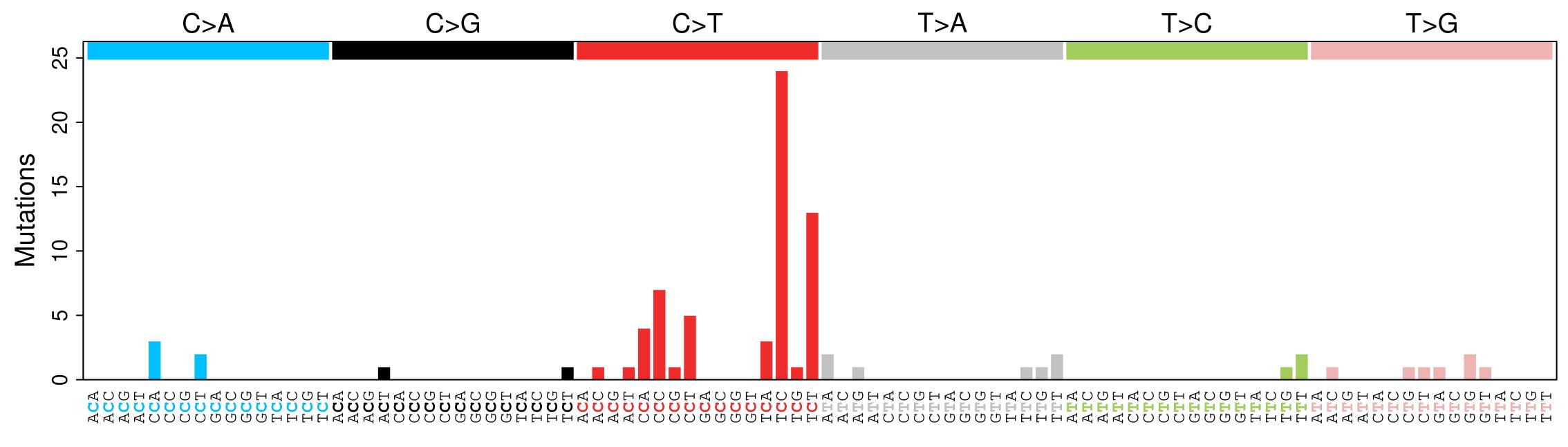
#### CATD261a (85 mutations)



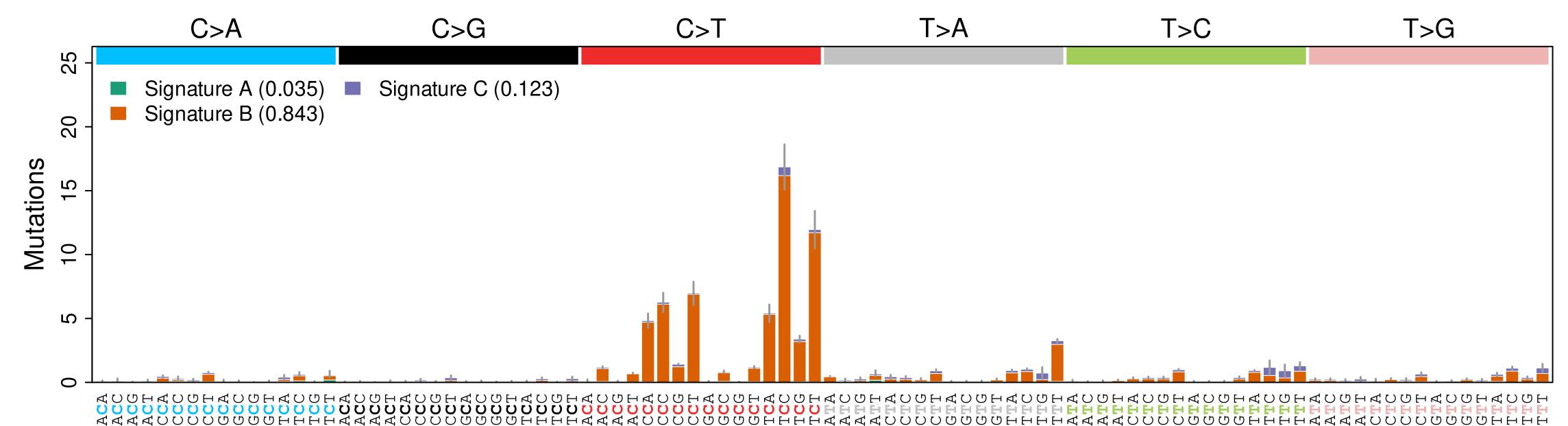




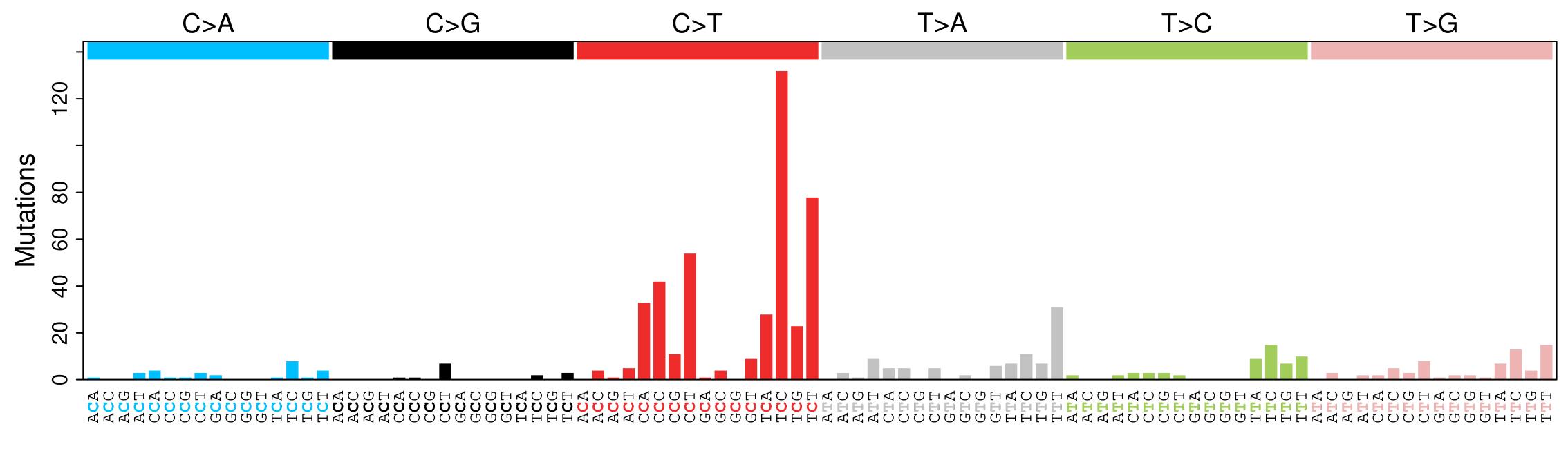
#### CATD280a (84 mutations)

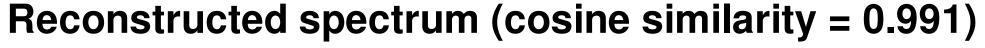


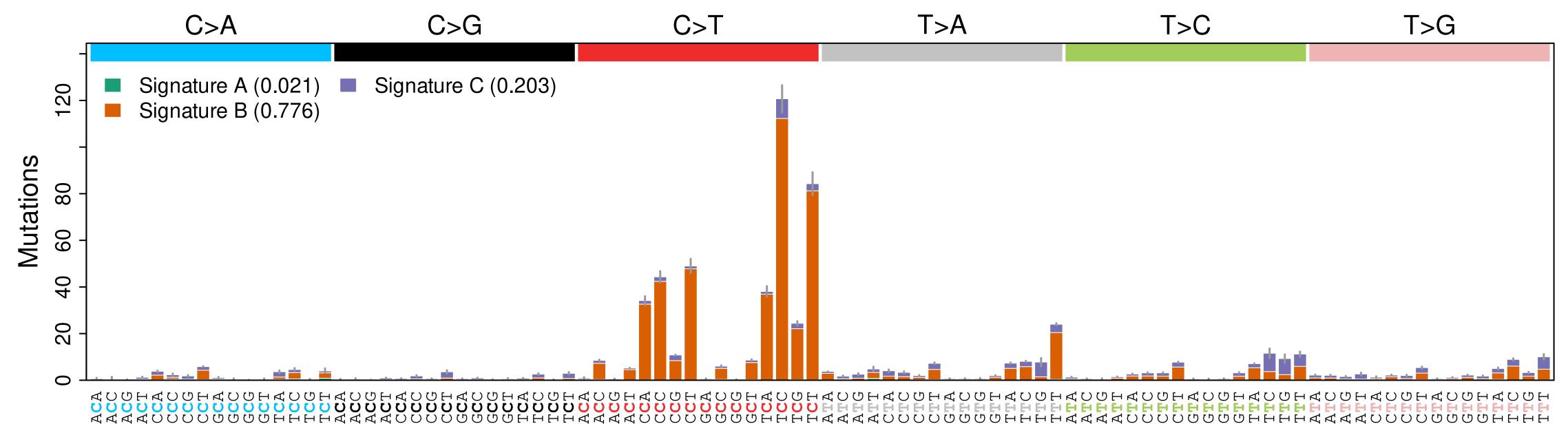


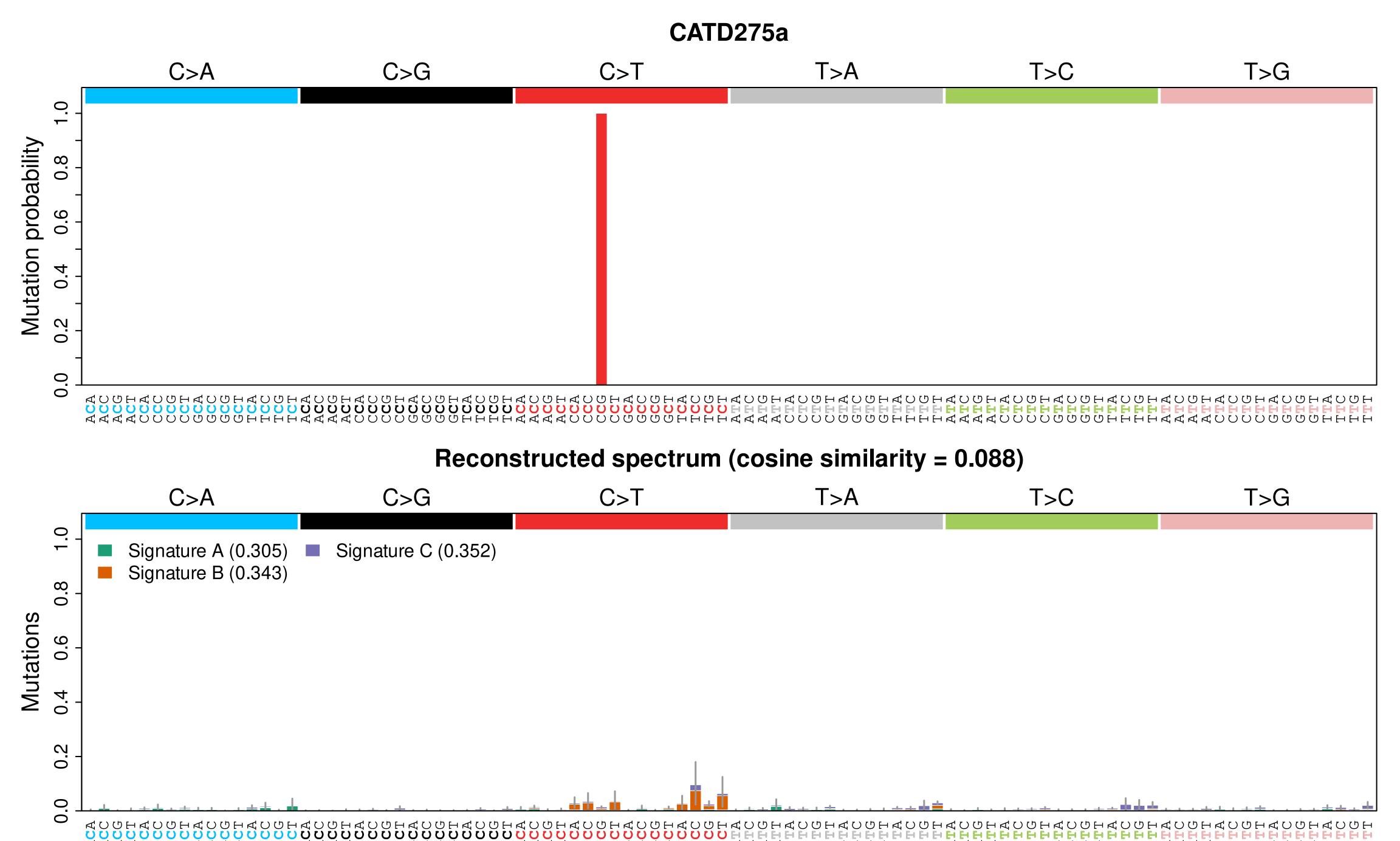


#### CATD272a (684 mutations)

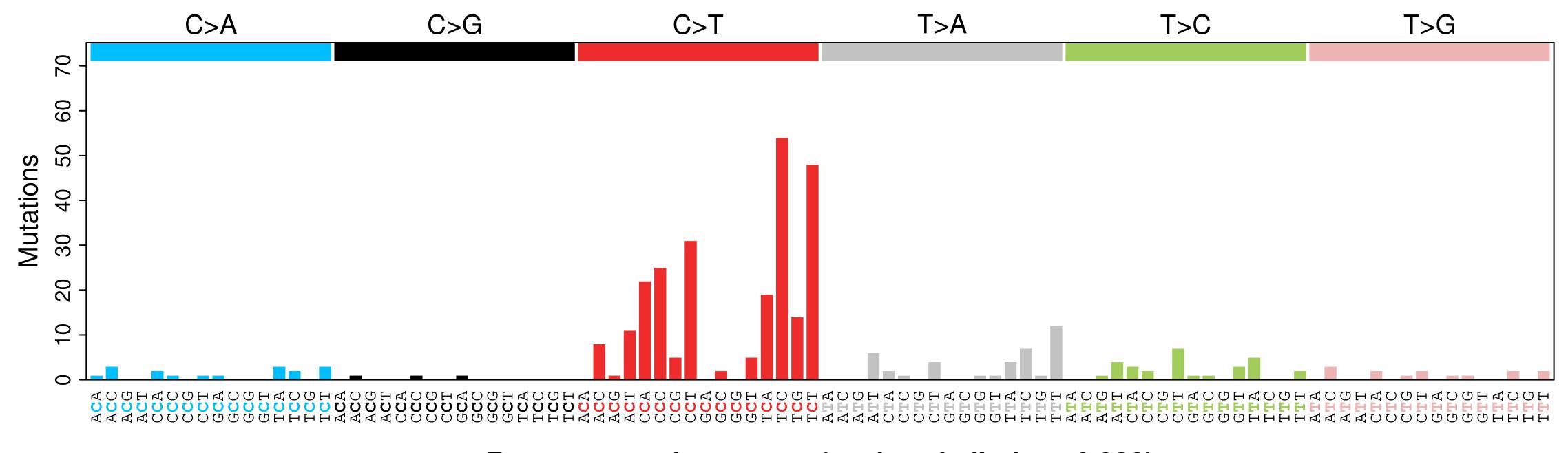




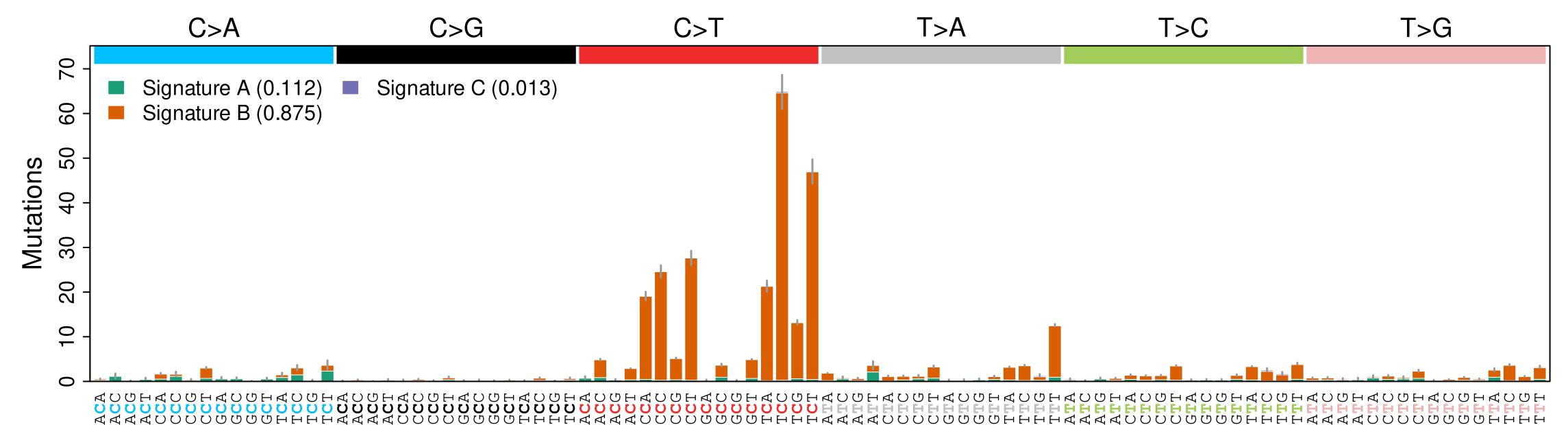




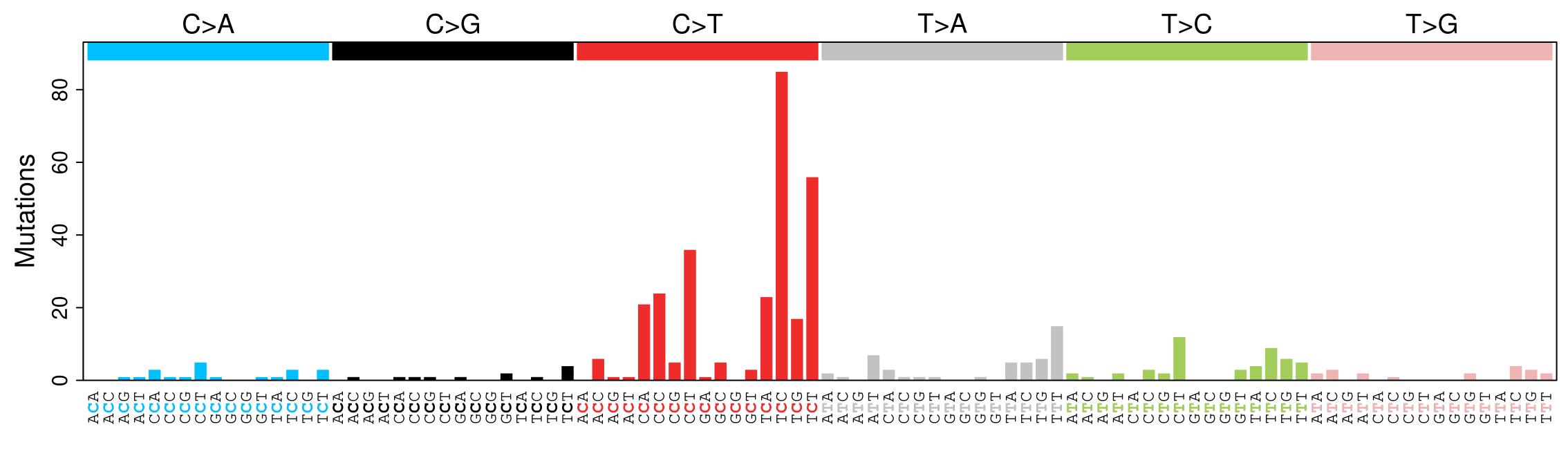
#### CATD276a (347 mutations)



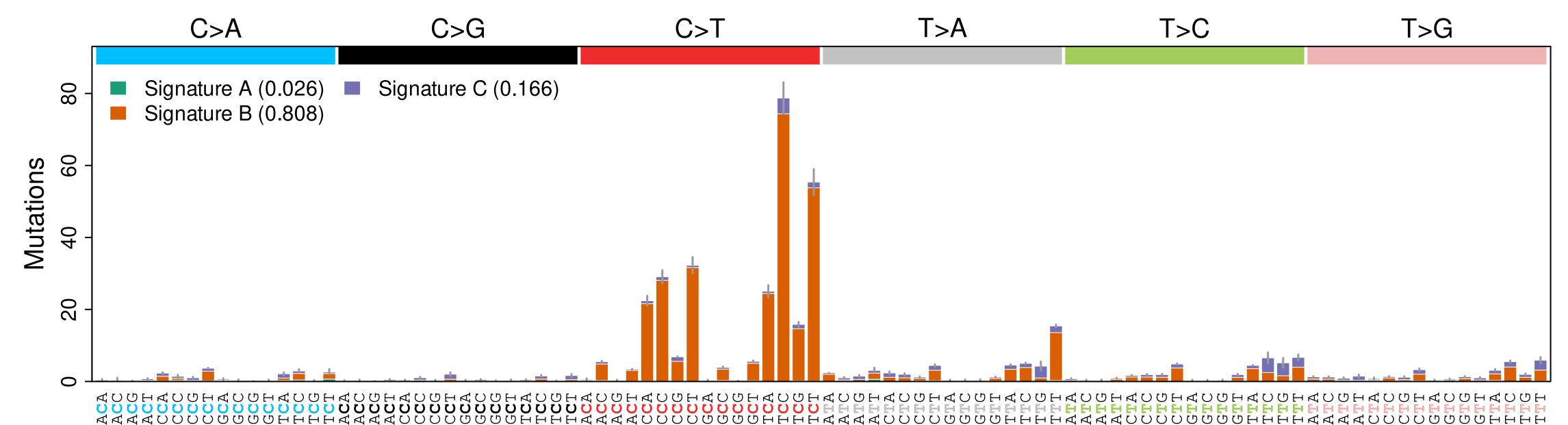
## **Reconstructed spectrum (cosine similarity = 0.982)**



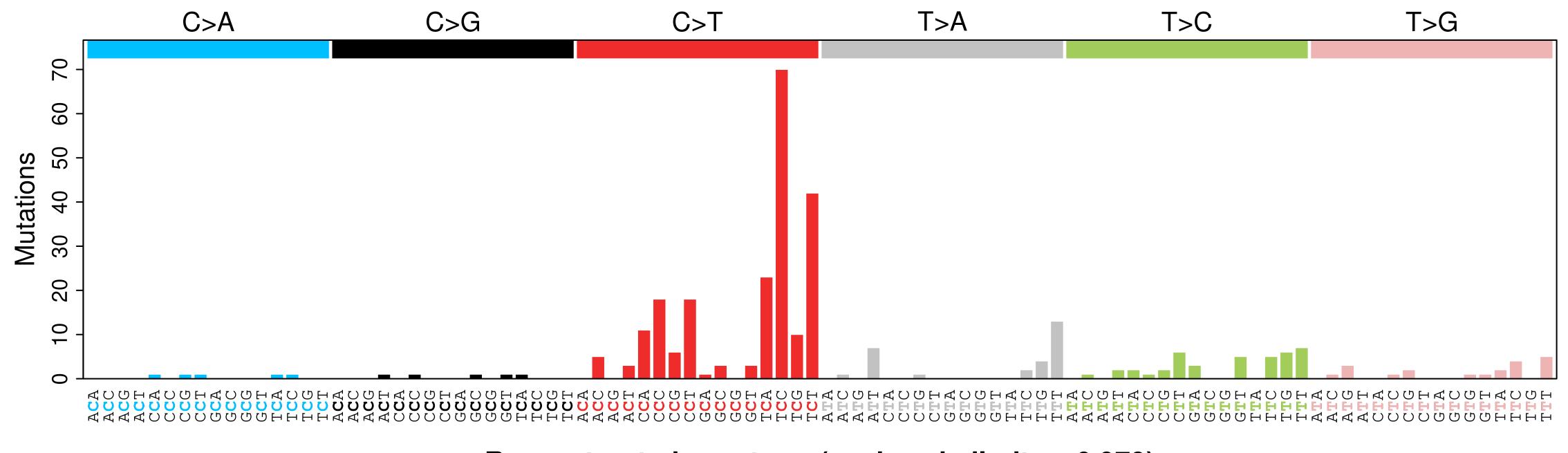
#### CATD0128a (433 mutations)



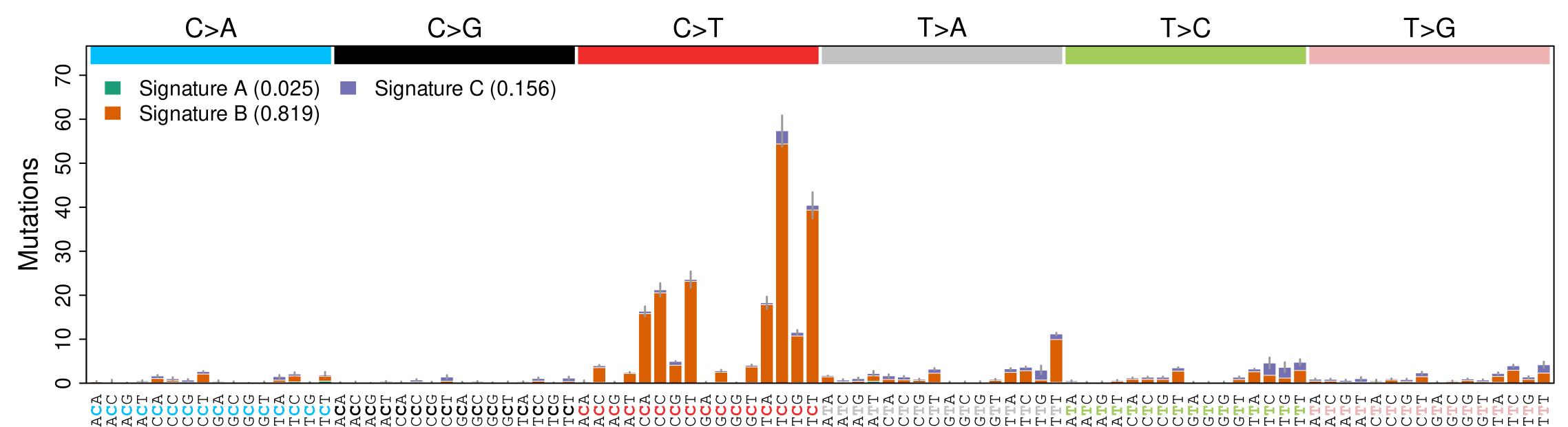
## **Reconstructed spectrum (cosine similarity = 0.991)**



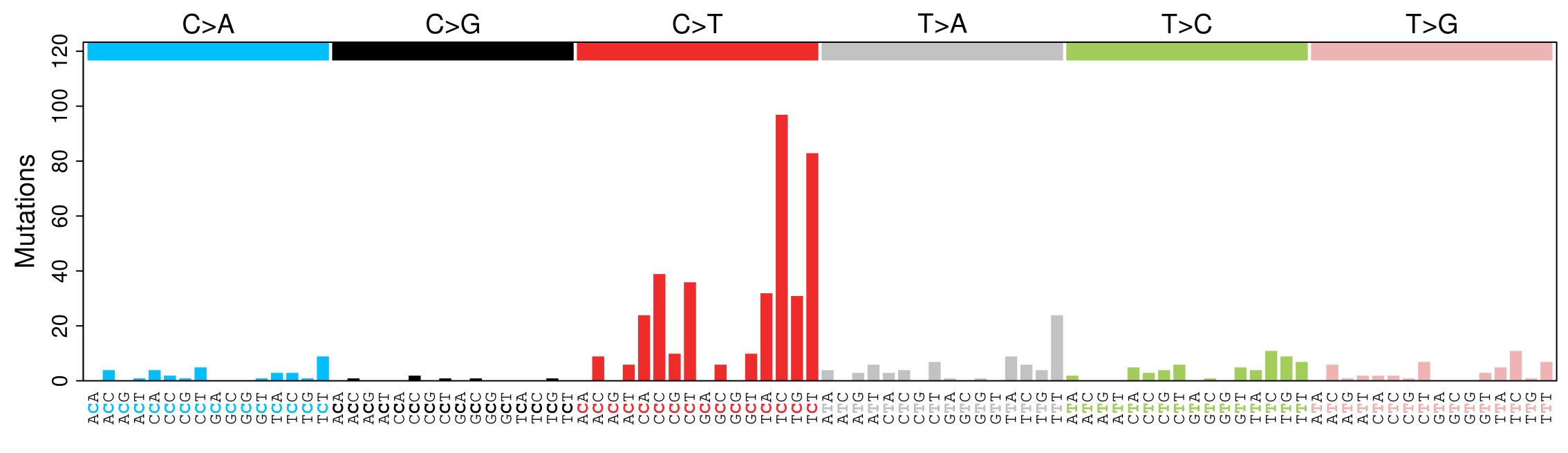
#### CATD273a (311 mutations)

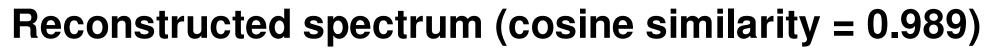


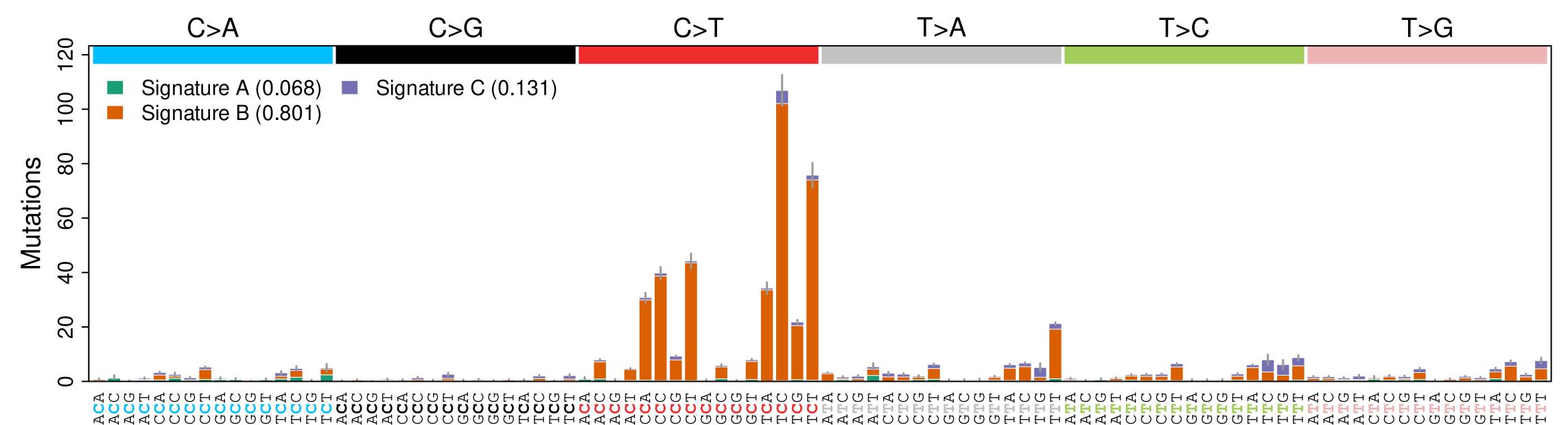
## Reconstructed spectrum (cosine similarity = 0.979)



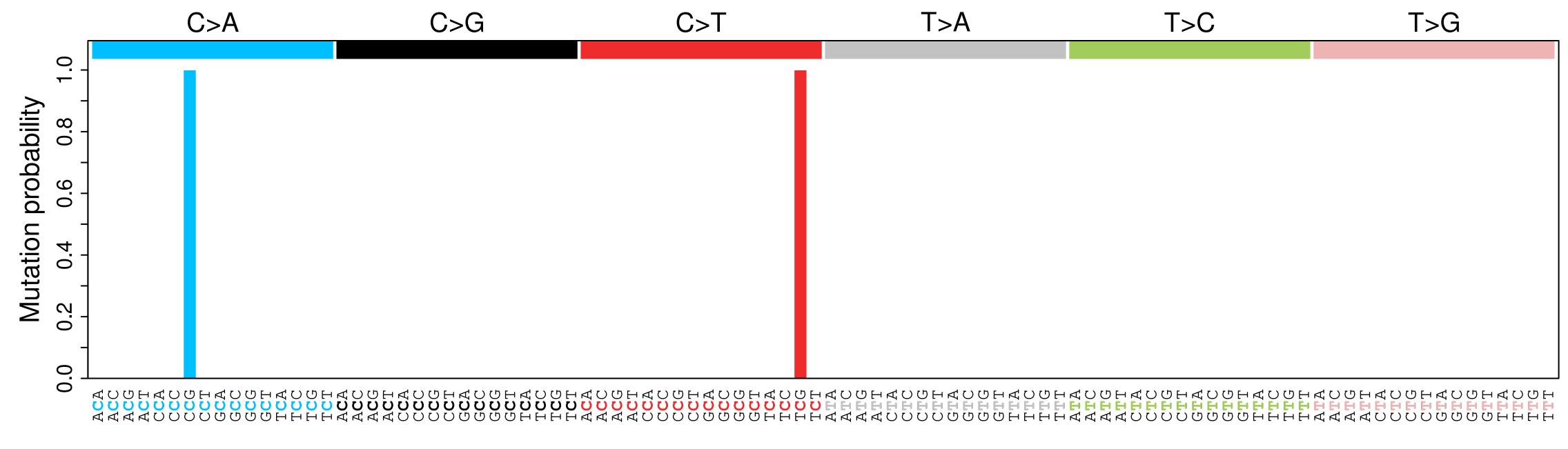
#### CATD253a (600 mutations)

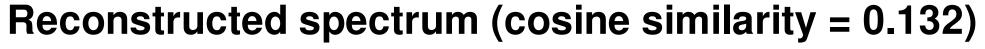


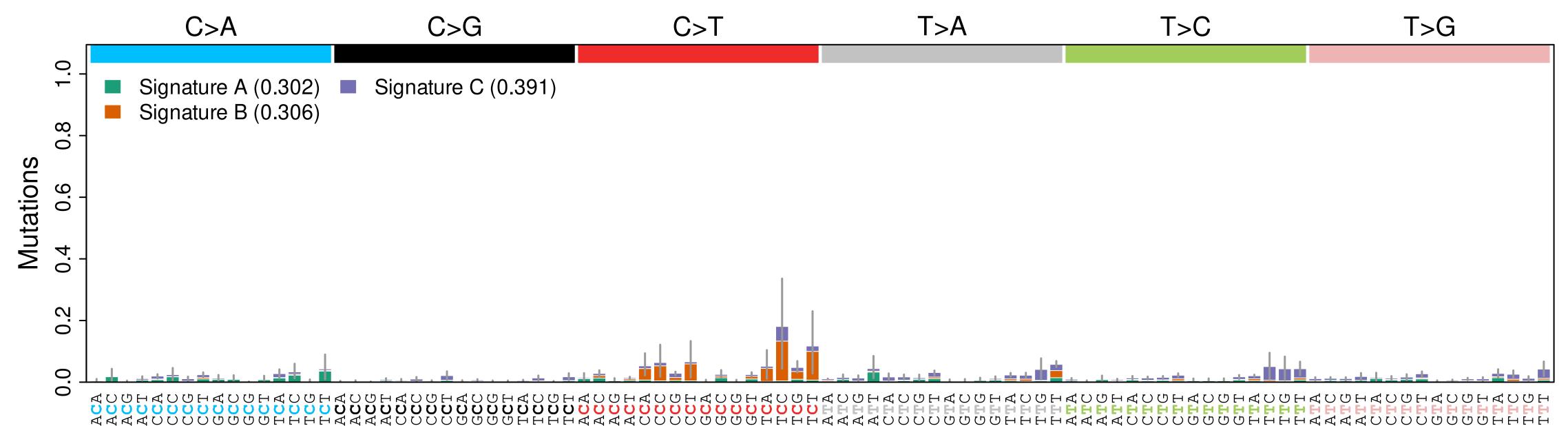




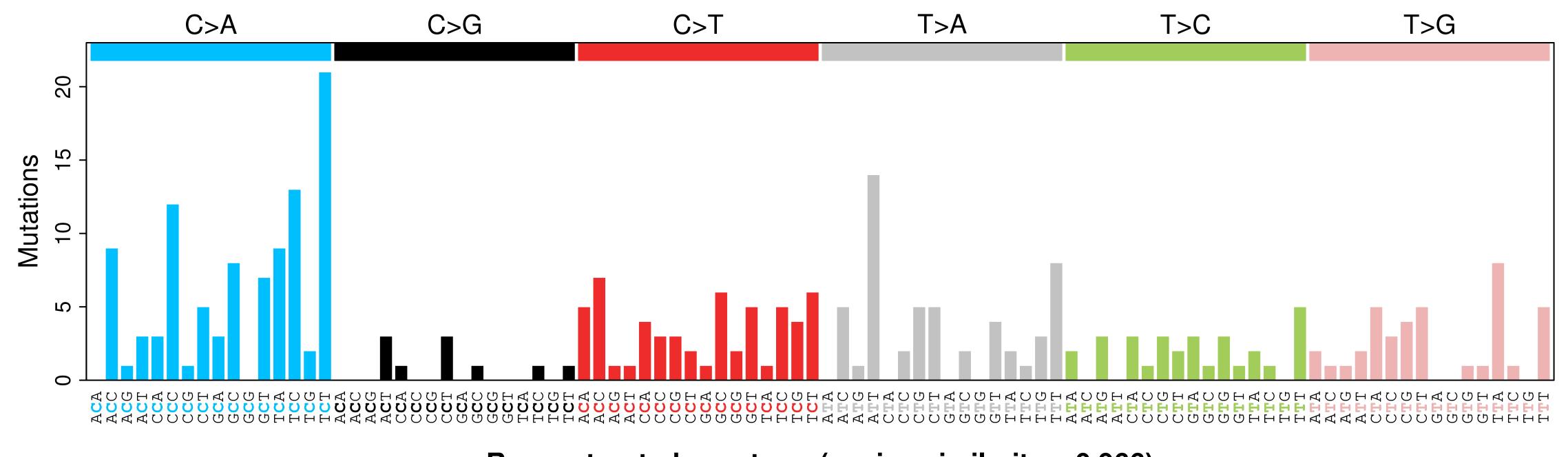




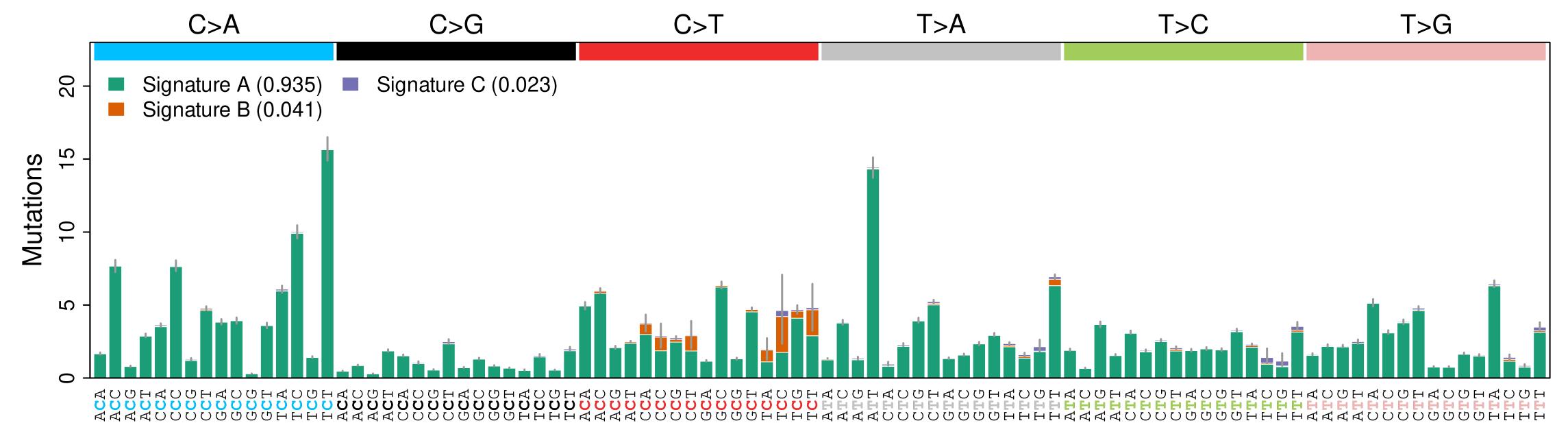




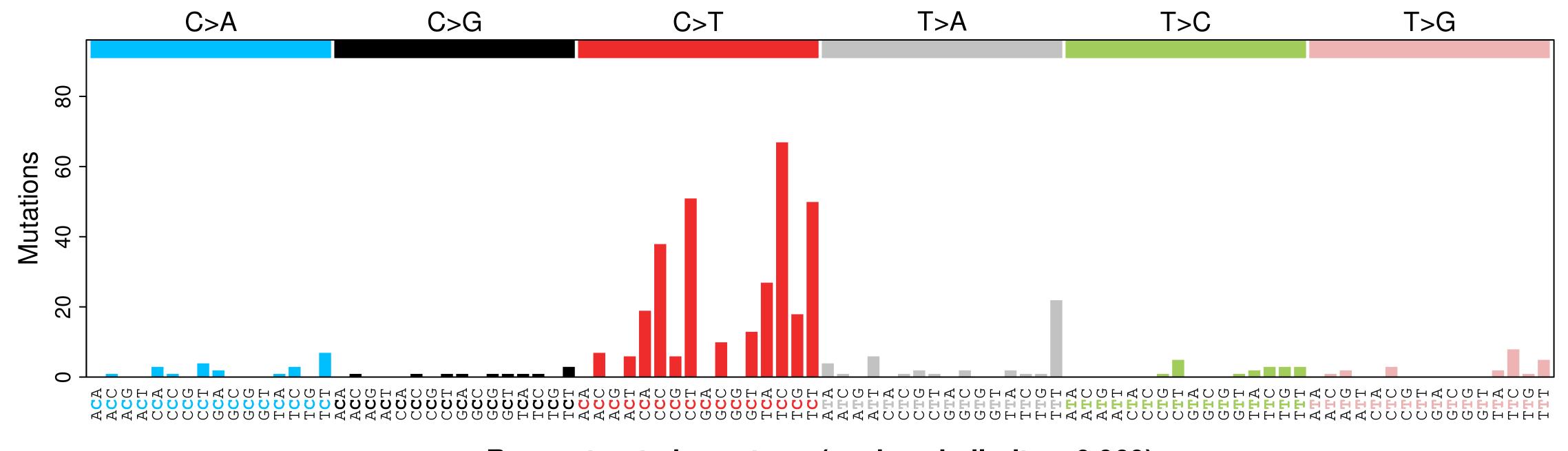
#### CATD186a (284 mutations)



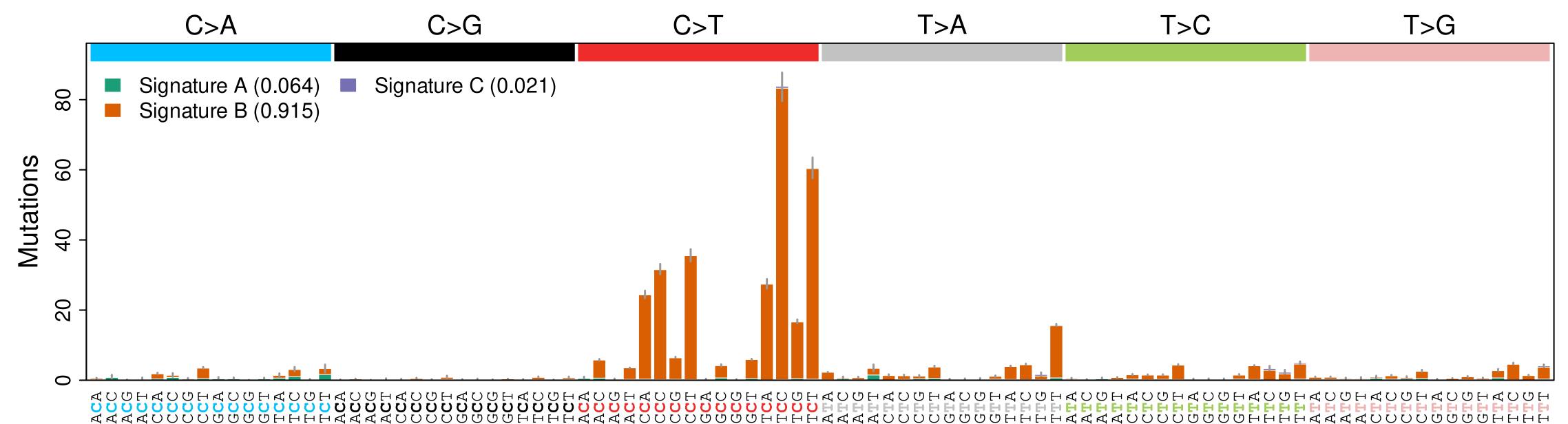
## Reconstructed spectrum (cosine similarity = 0.966)



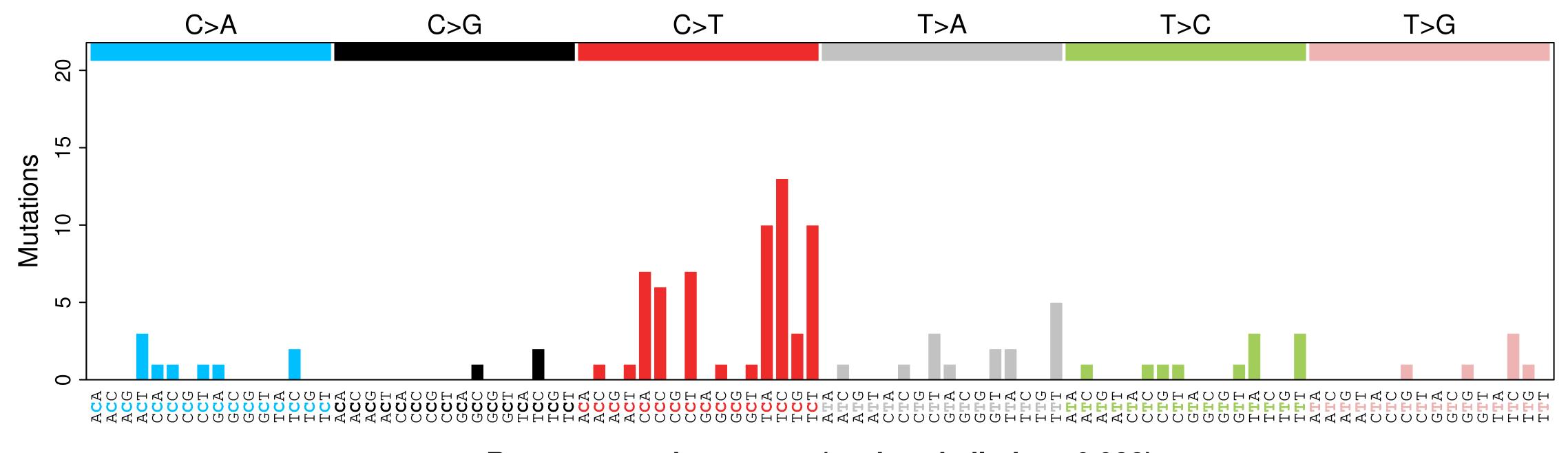
#### CATD0632c (428 mutations)



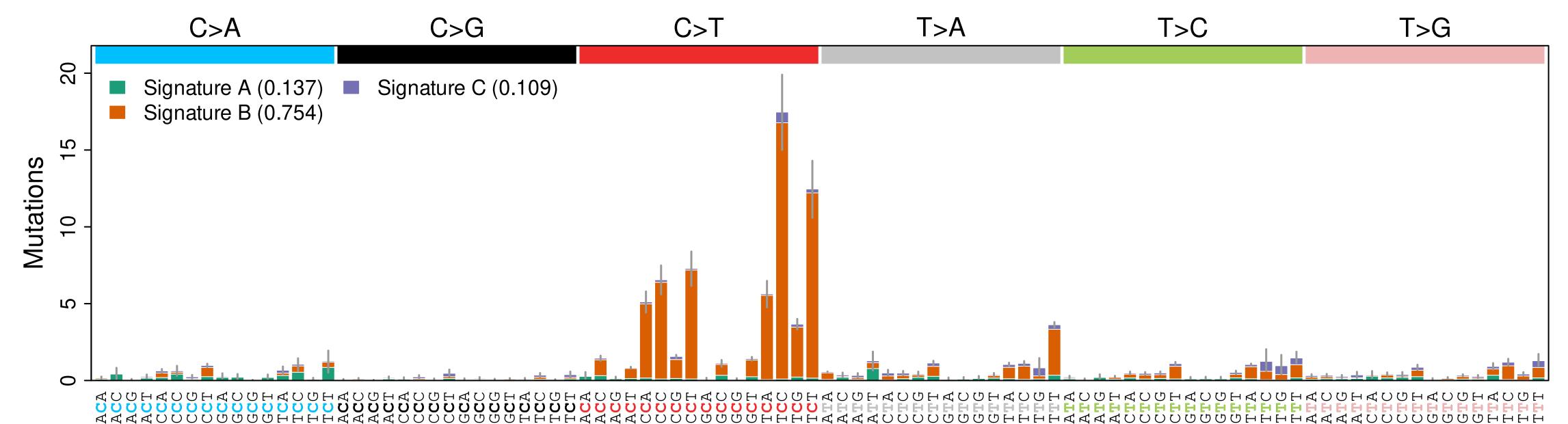
## Reconstructed spectrum (cosine similarity = 0.969)



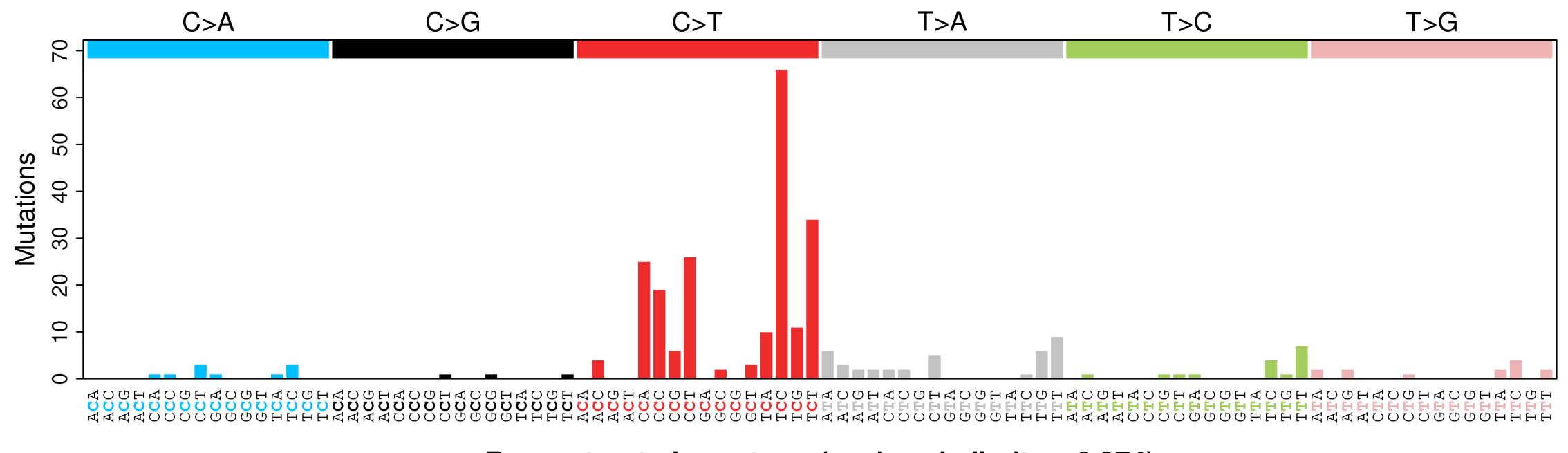
#### CATD0126a (104 mutations)



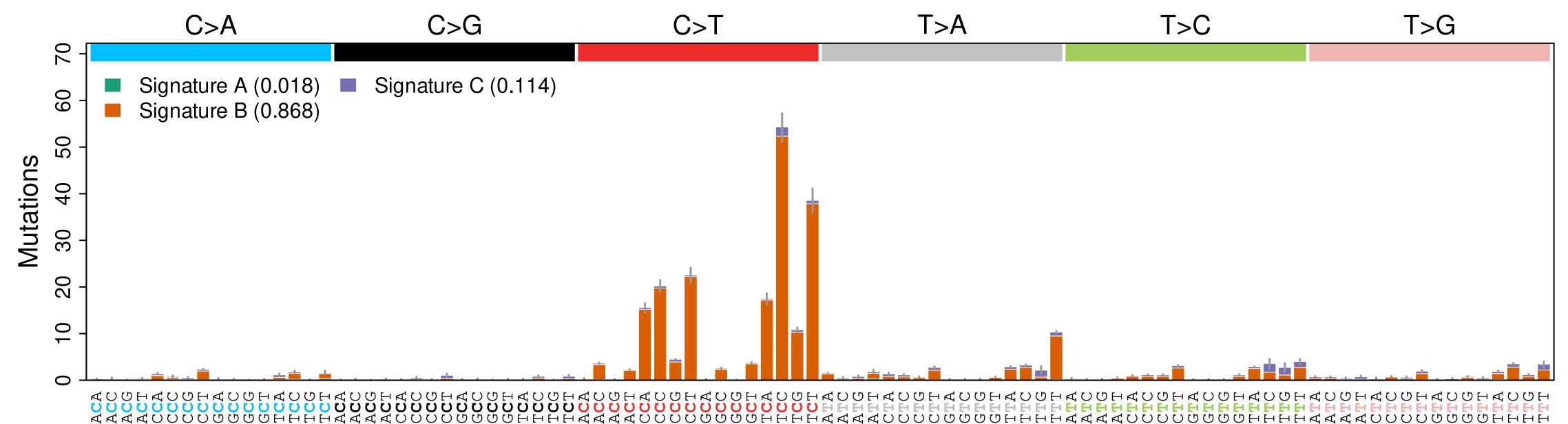
## Reconstructed spectrum (cosine similarity = 0.922)



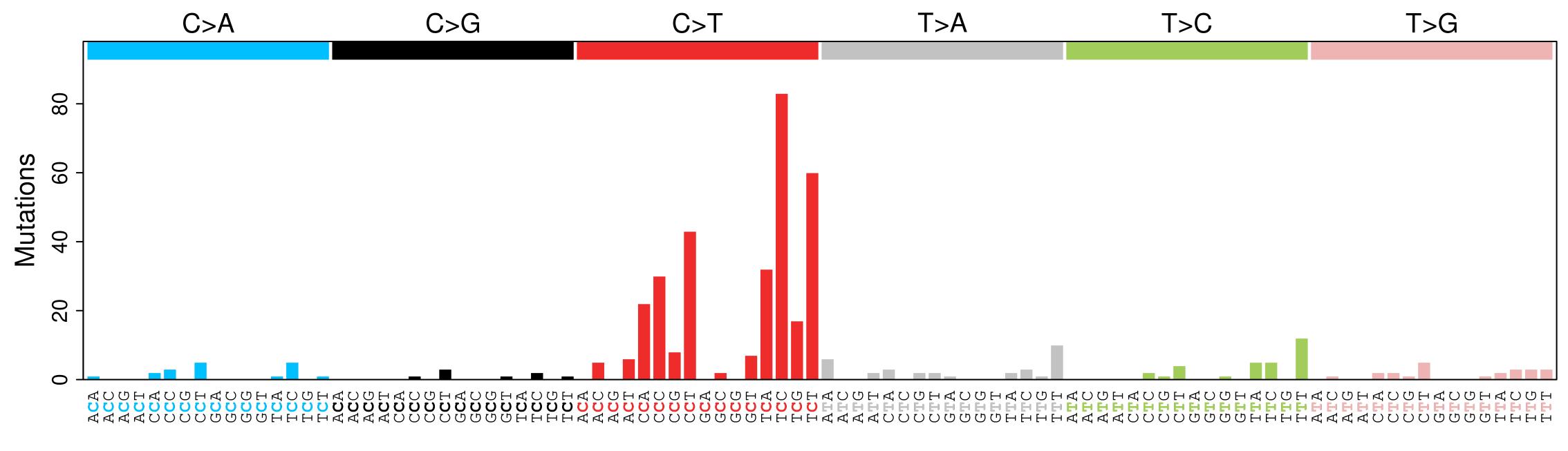
#### CATD274a (286 mutations)



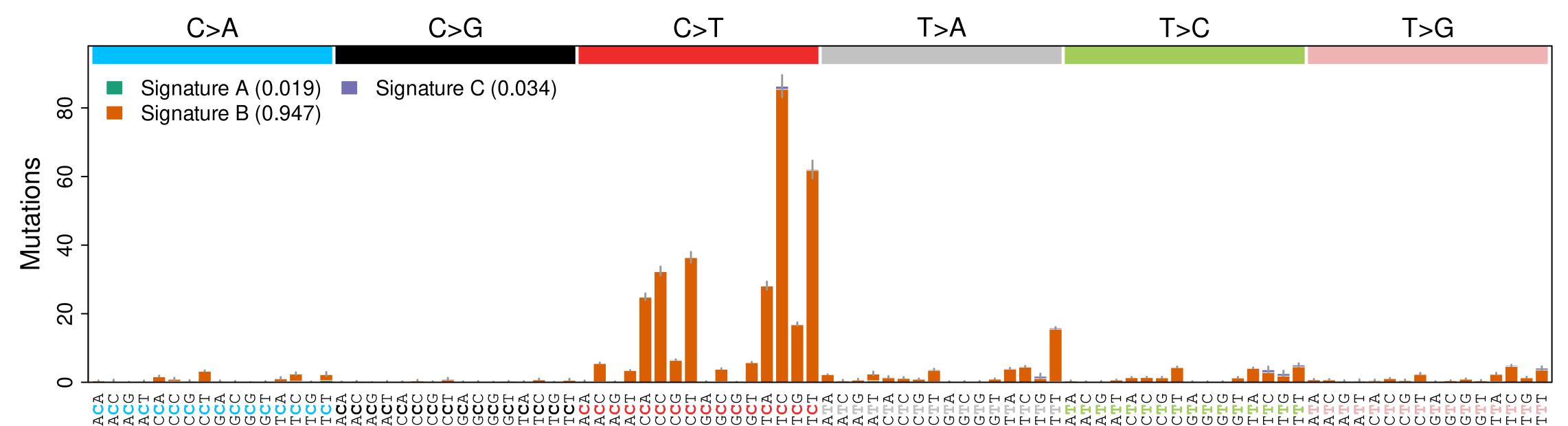
## Reconstructed spectrum (cosine similarity = 0.974)



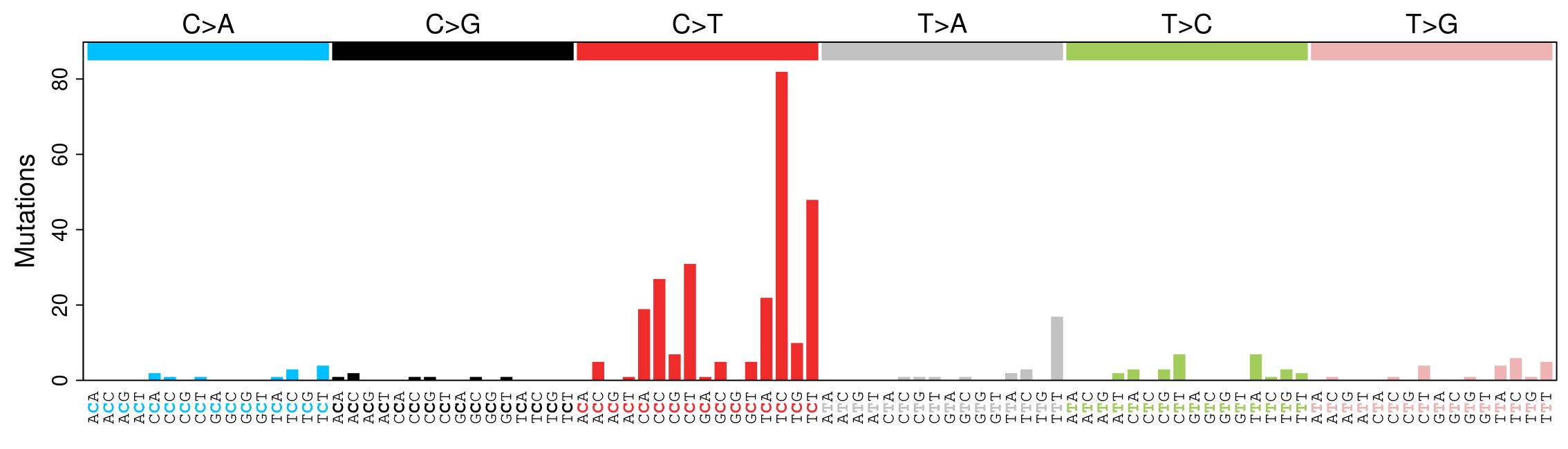
#### CATD278a (426 mutations)



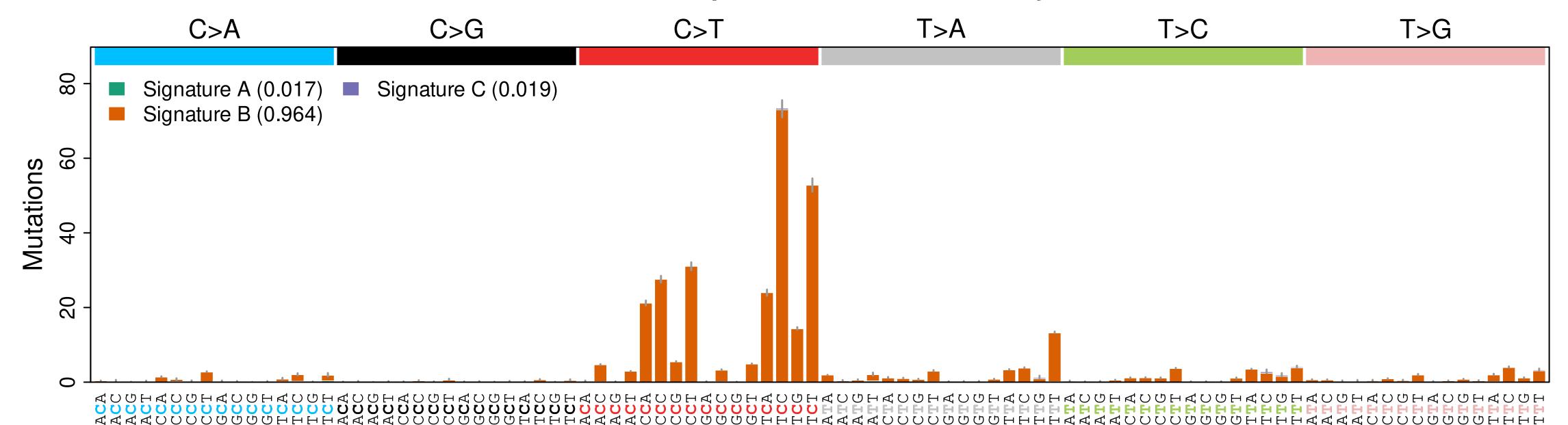




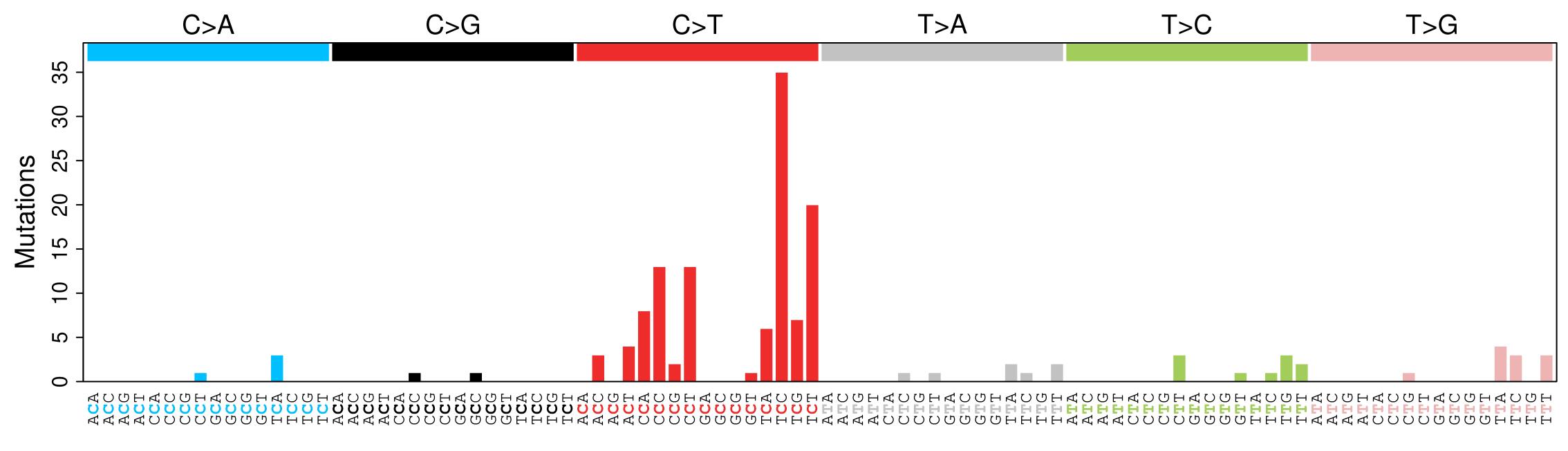
#### CATD243a (359 mutations)



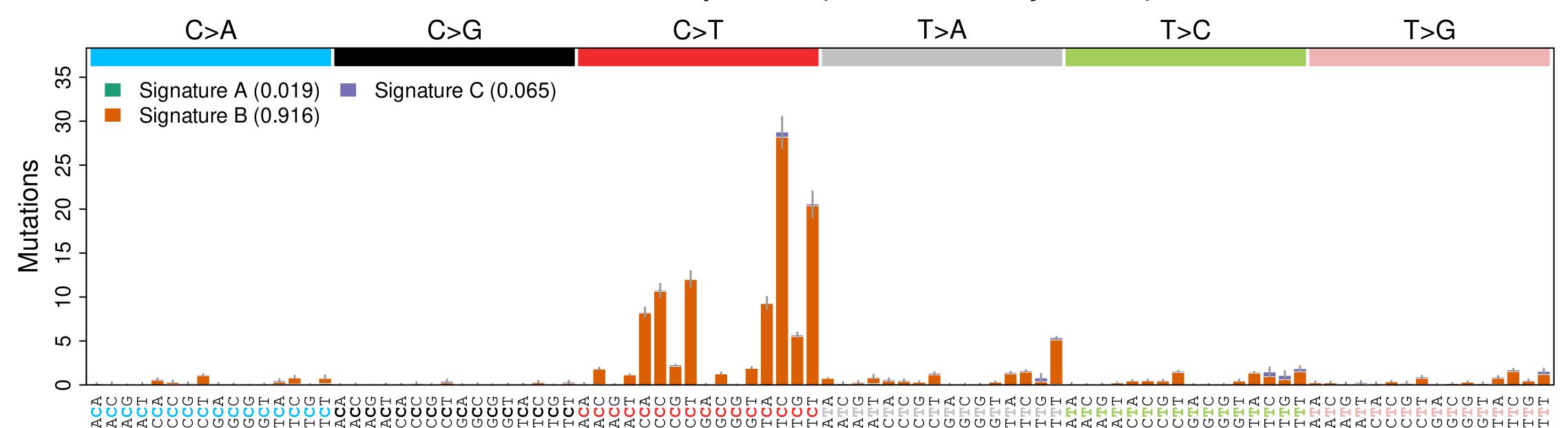
### Reconstructed spectrum (cosine similarity = 0.99)



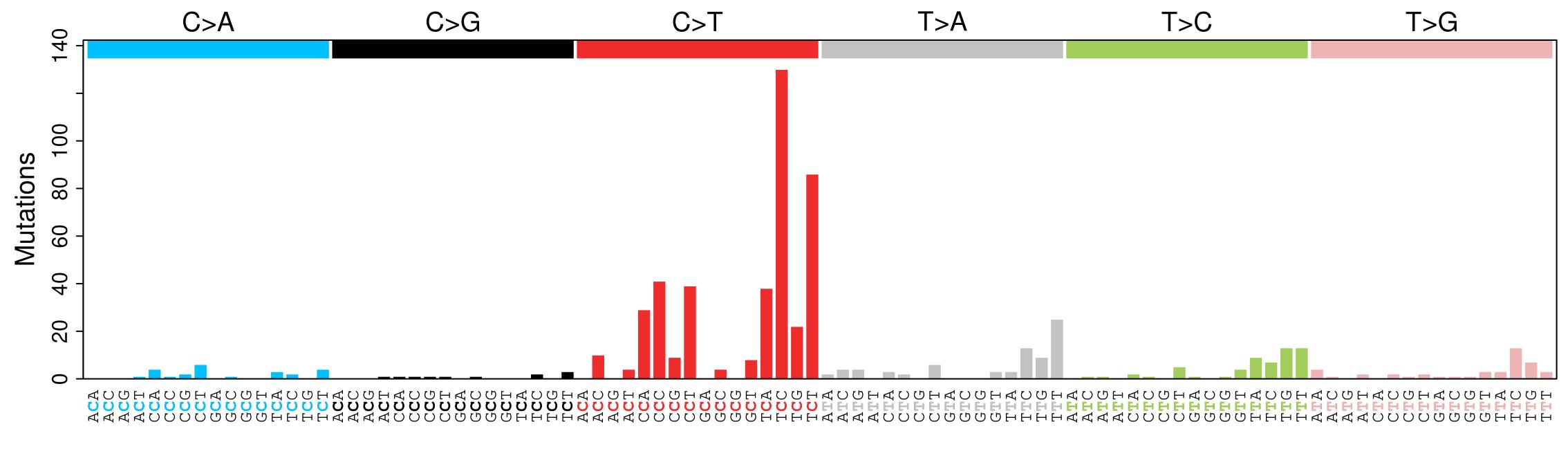
#### CATD265a (146 mutations)



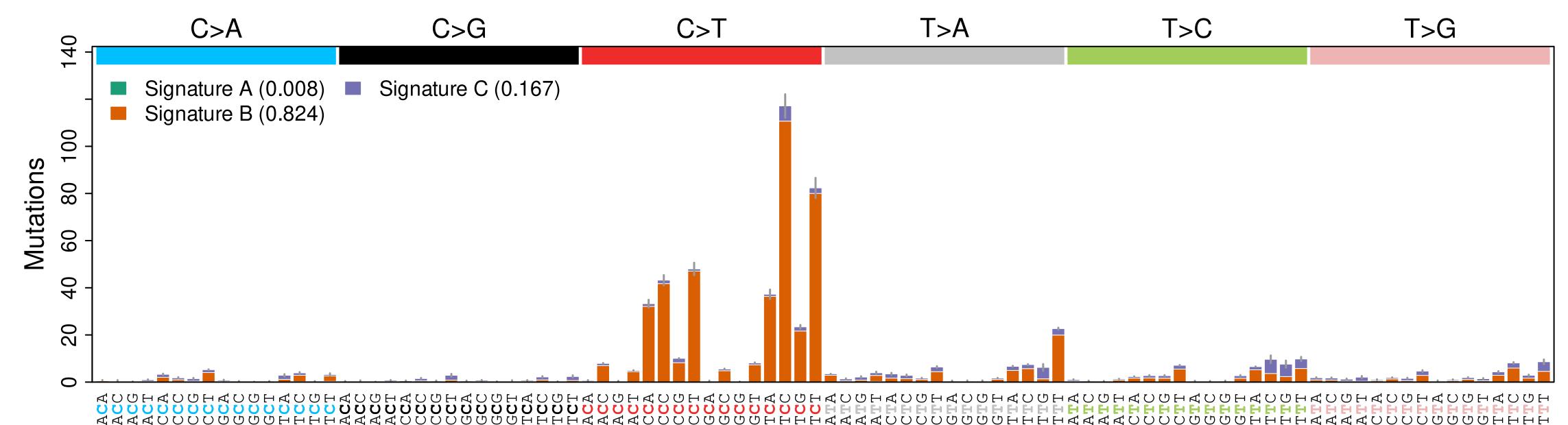




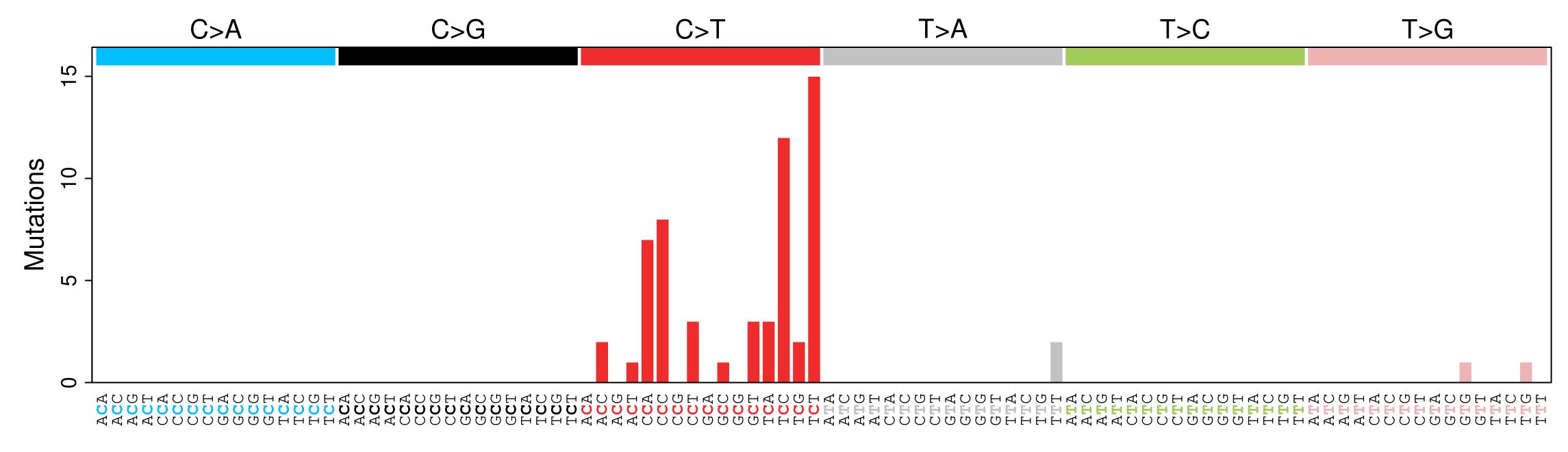
#### CATD264a (631 mutations)



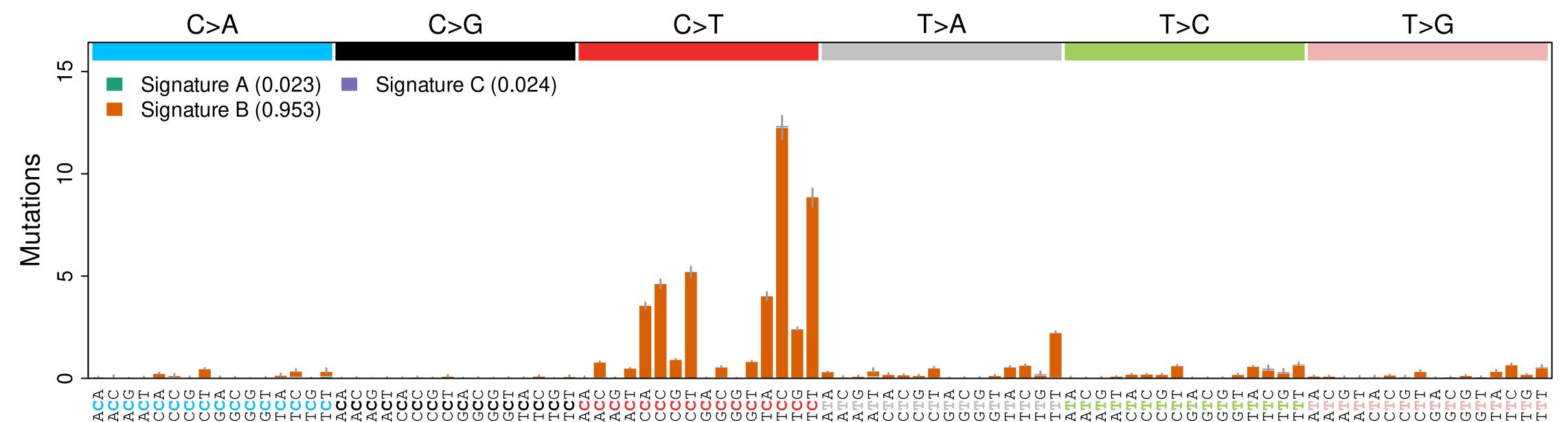




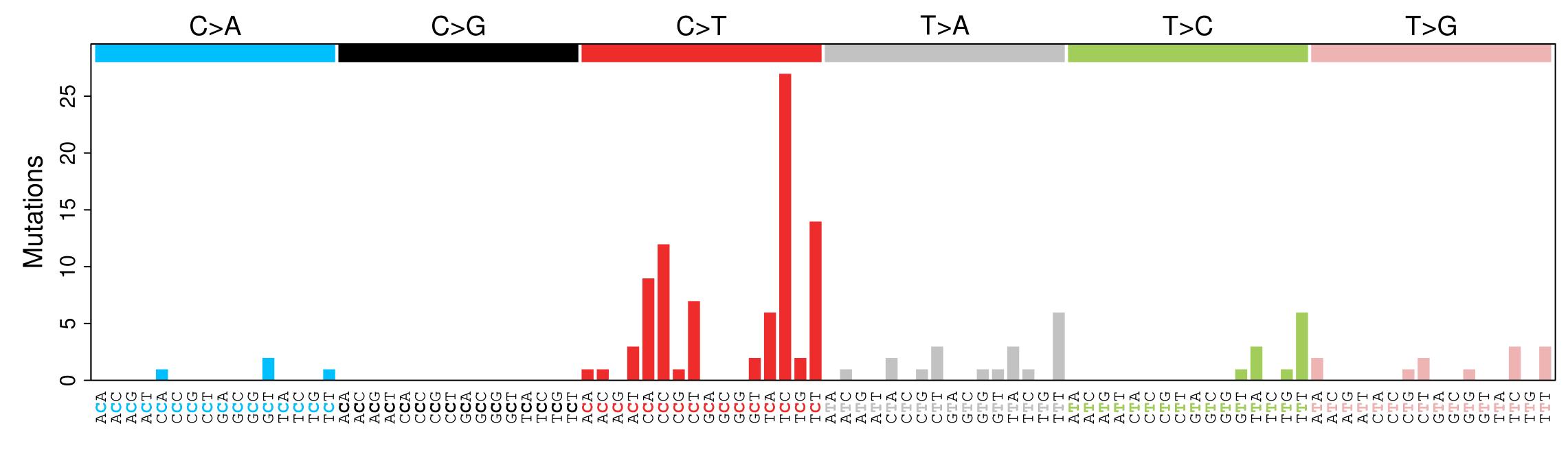
#### CATD0135a (61 mutations)



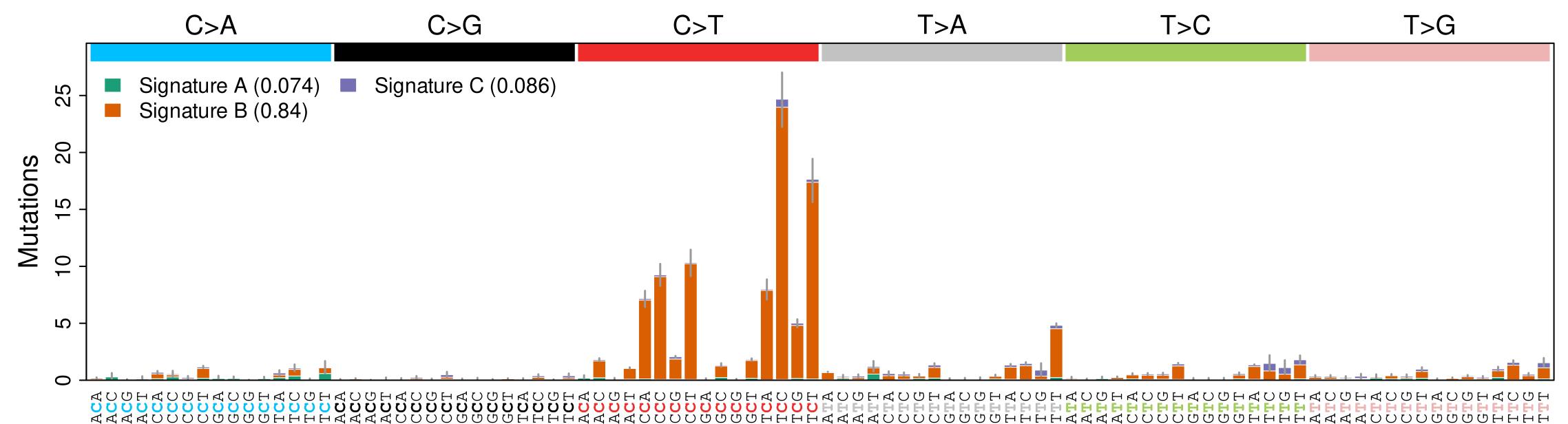
# Reconstructed spectrum (cosine similarity = 0.931)



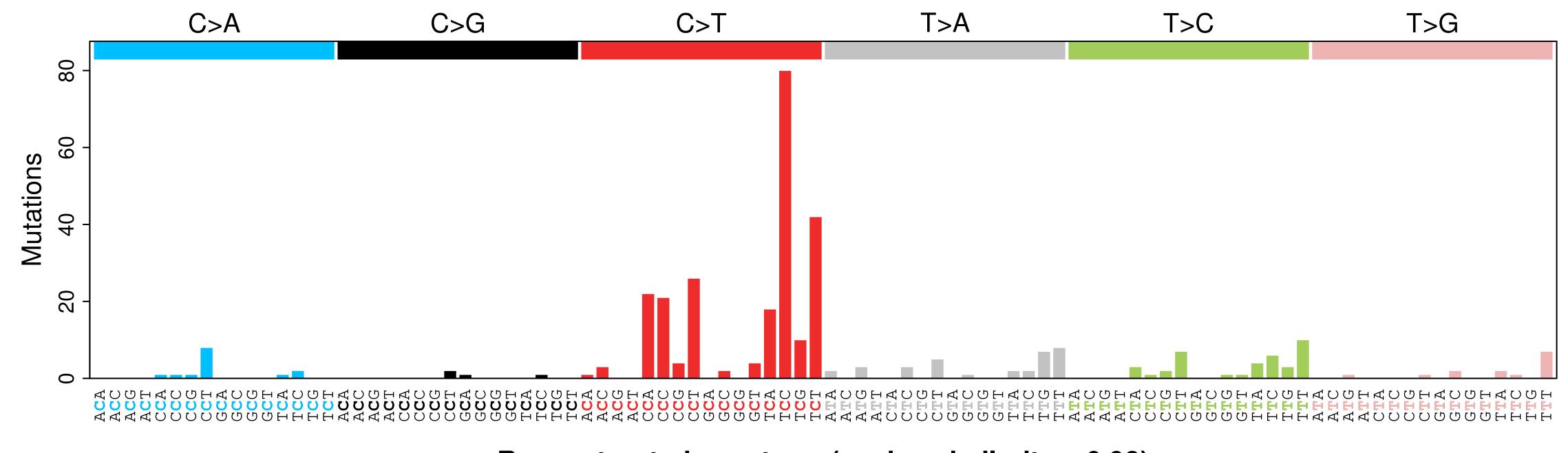
#### CATD282a (131 mutations)



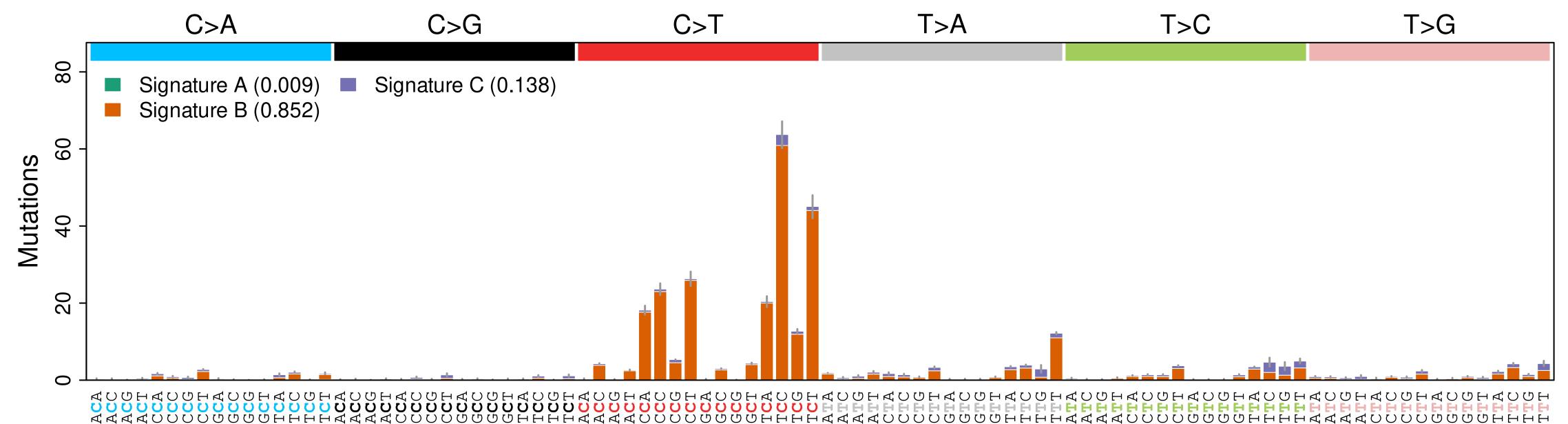
## Reconstructed spectrum (cosine similarity = 0.956)



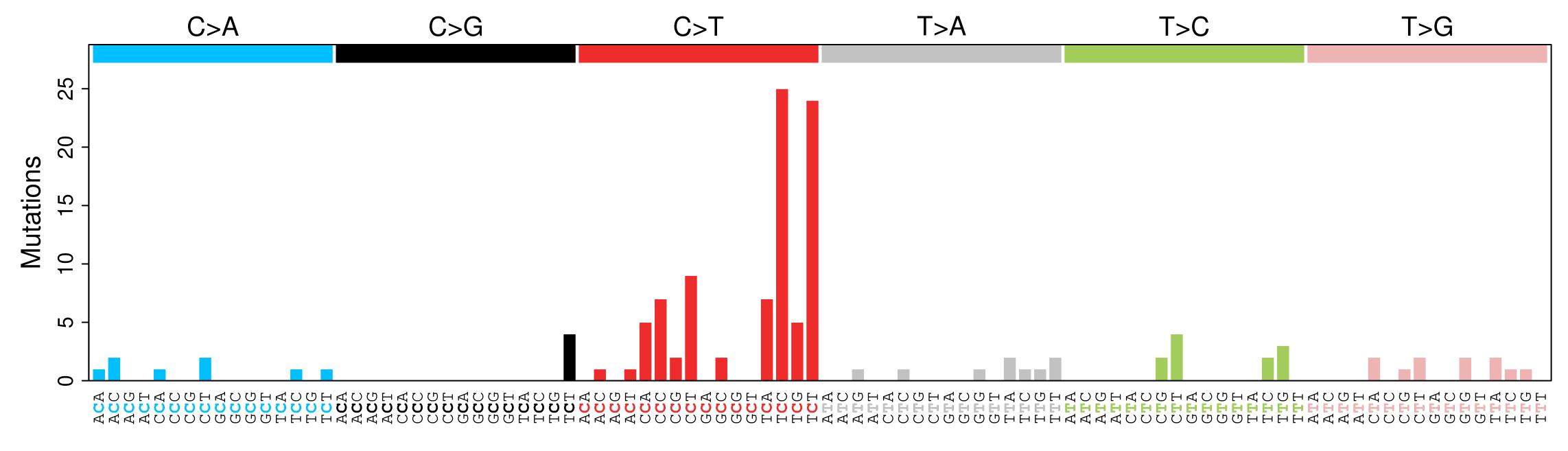
#### CATD250a (336 mutations)



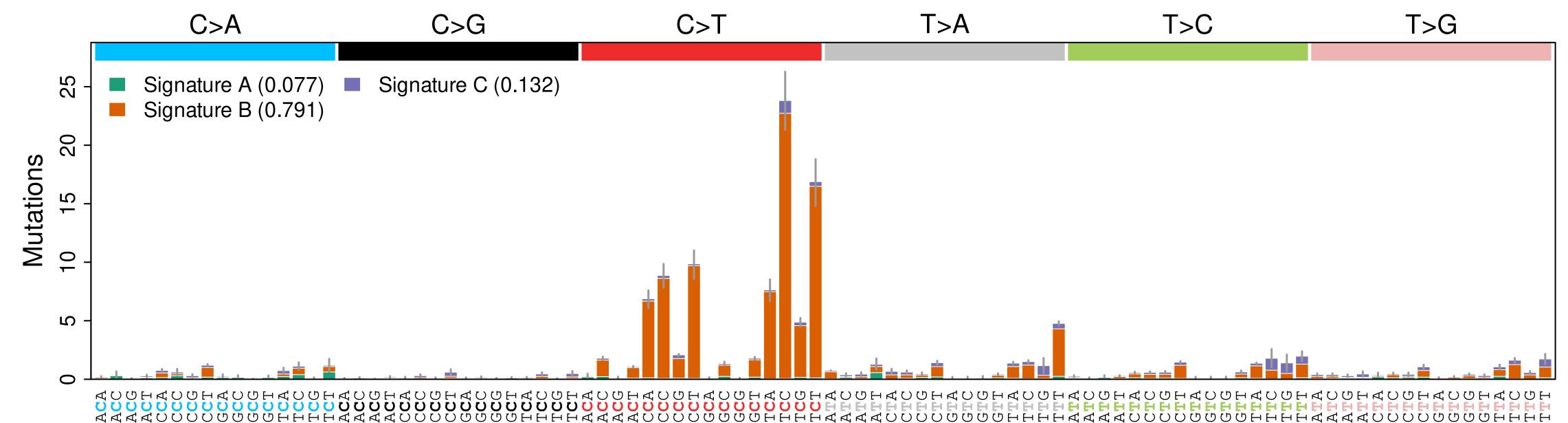
# Reconstructed spectrum (cosine similarity = 0.98)



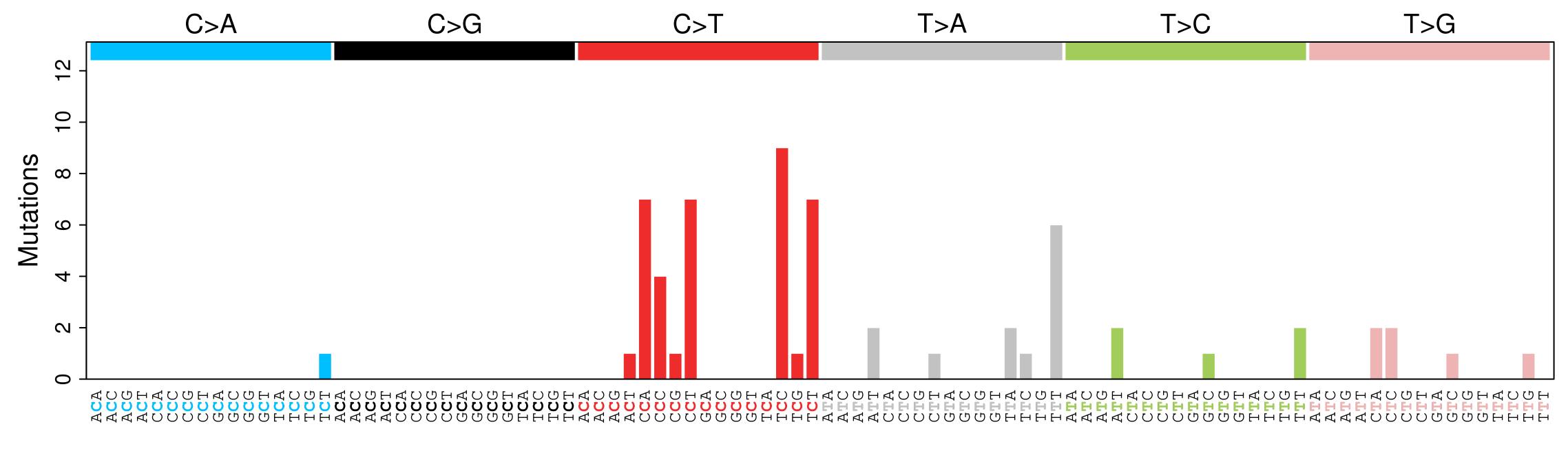
#### CATD263a (131 mutations)



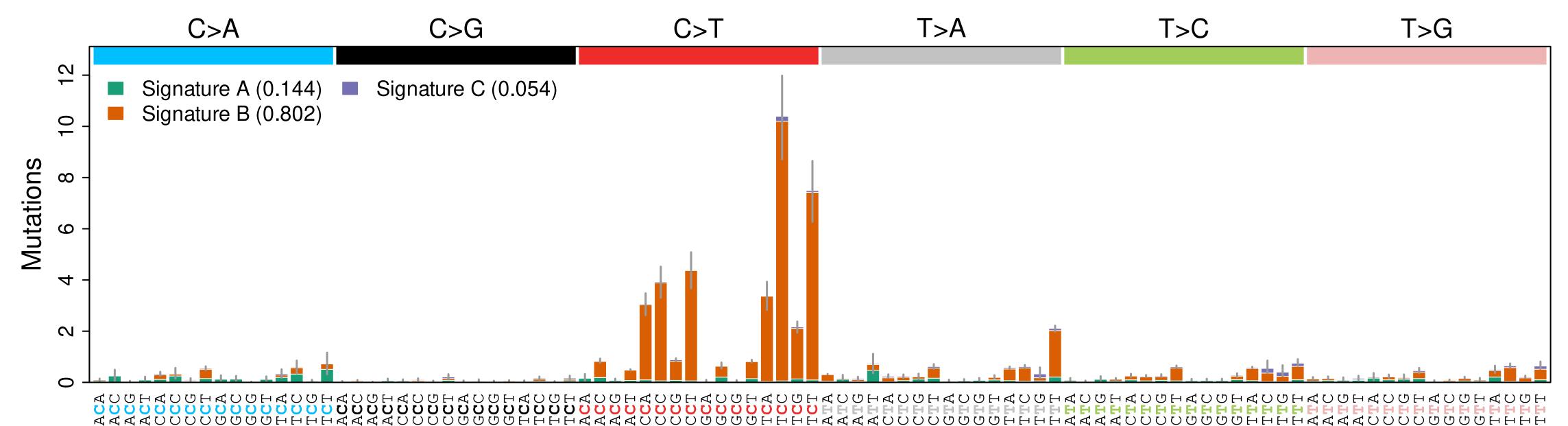
## Reconstructed spectrum (cosine similarity = 0.959)



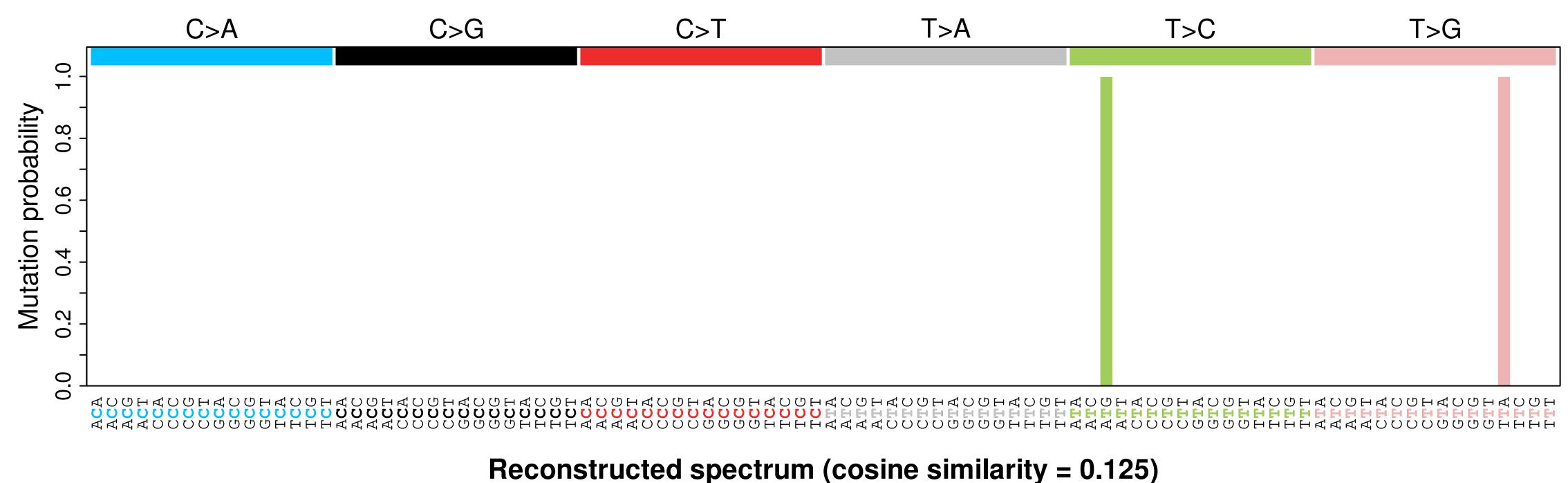
### CATD254a (61 mutations)

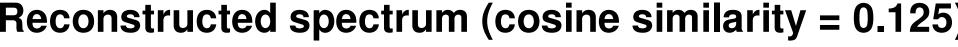


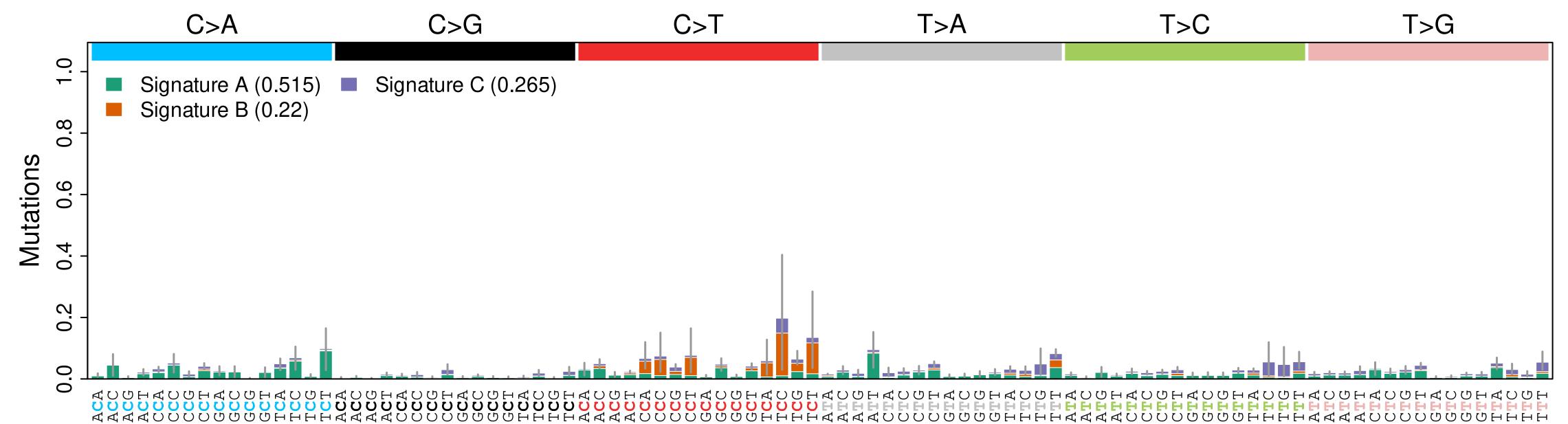




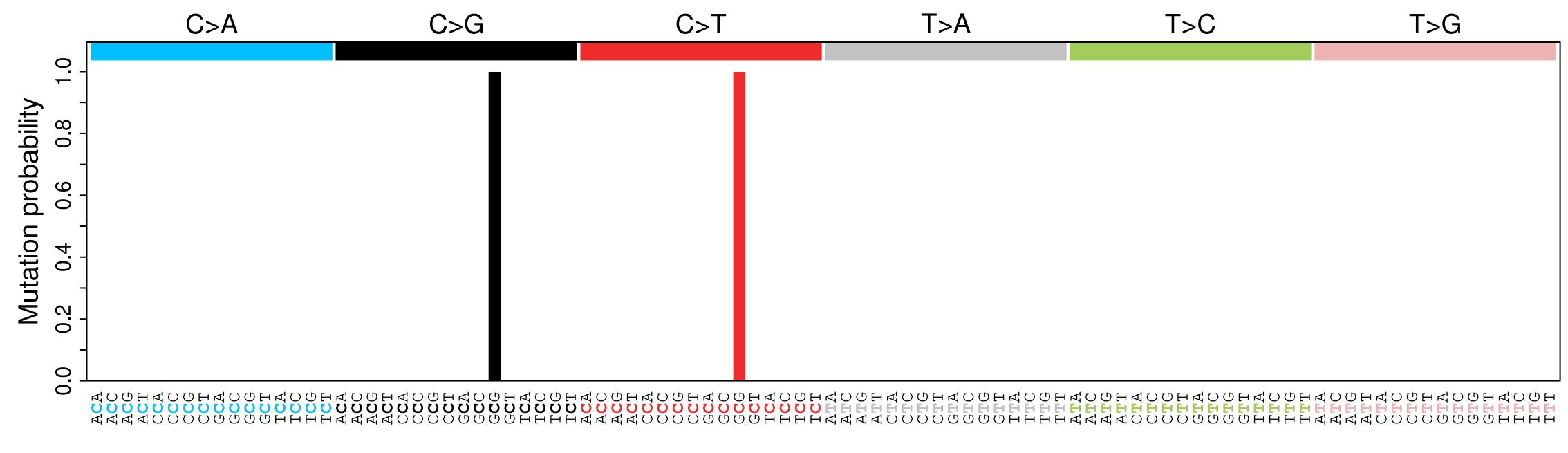
#### CATD0124a

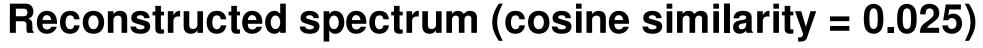


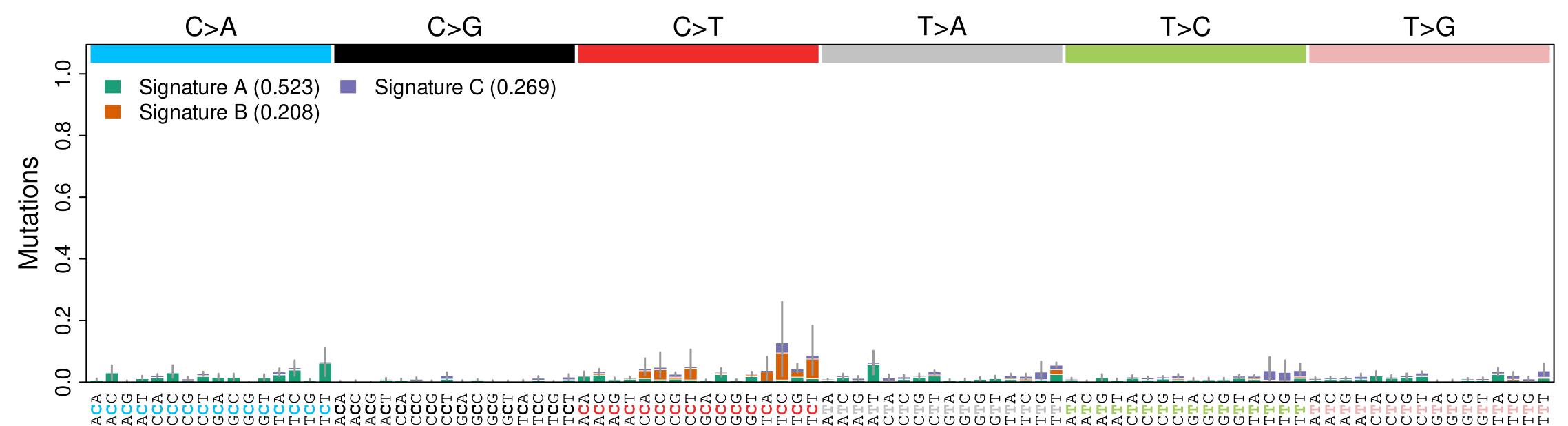




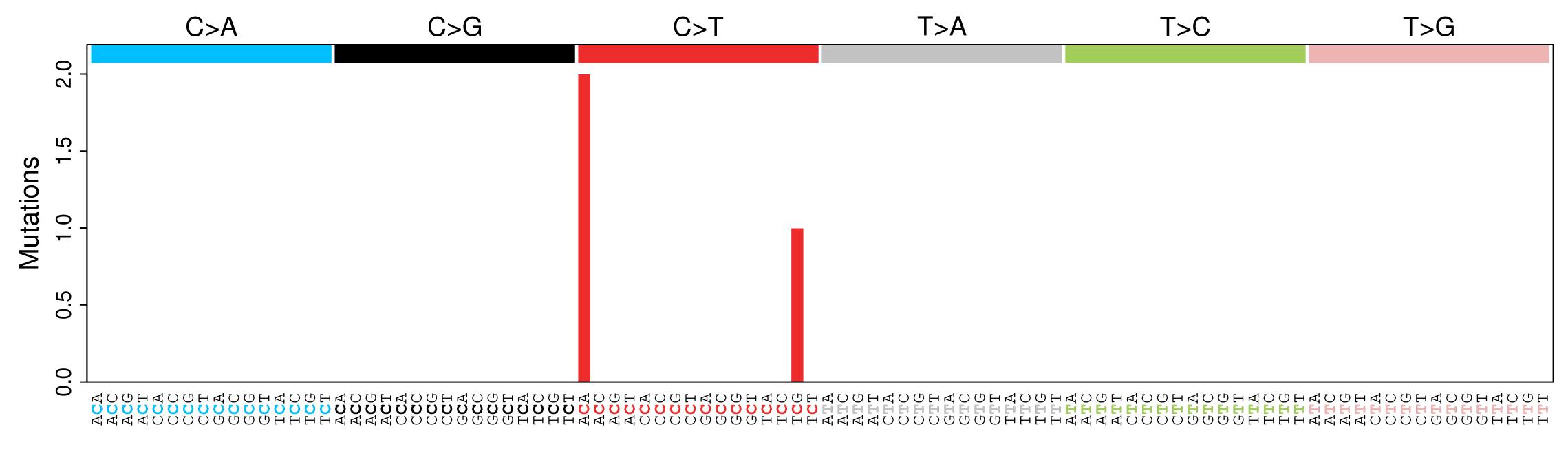
#### CATD0129a



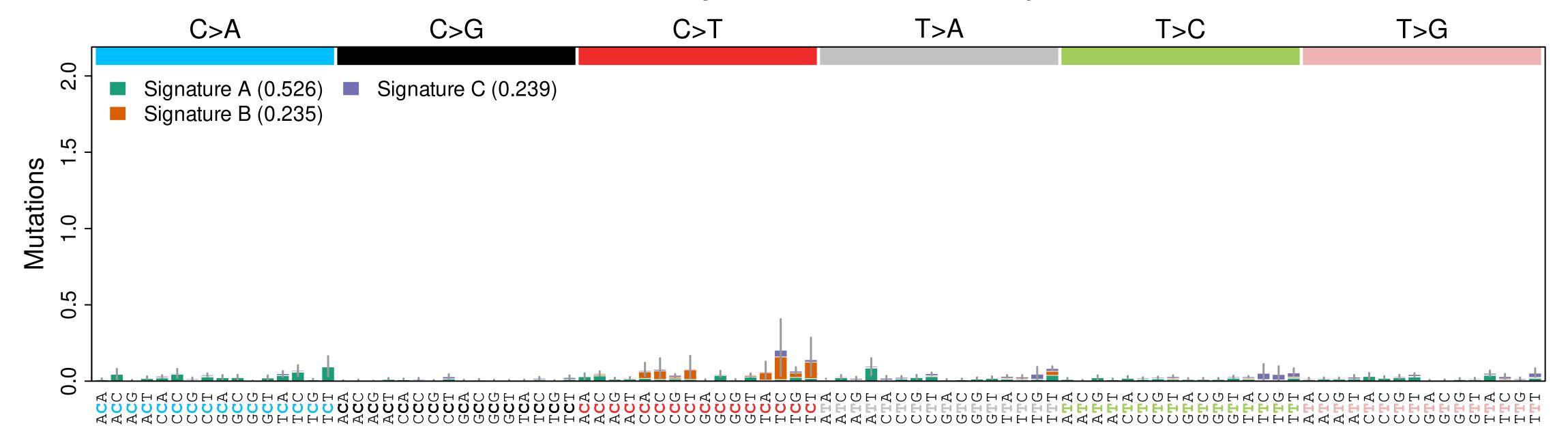




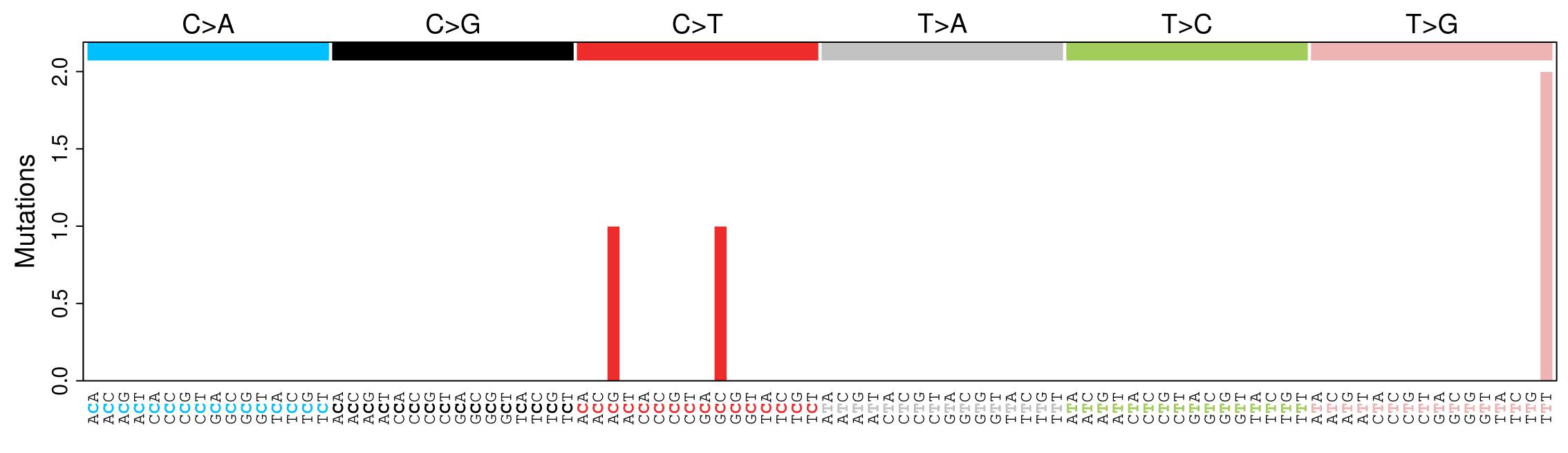
### CATD0130a (3 mutations)

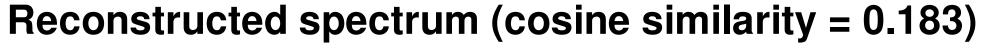


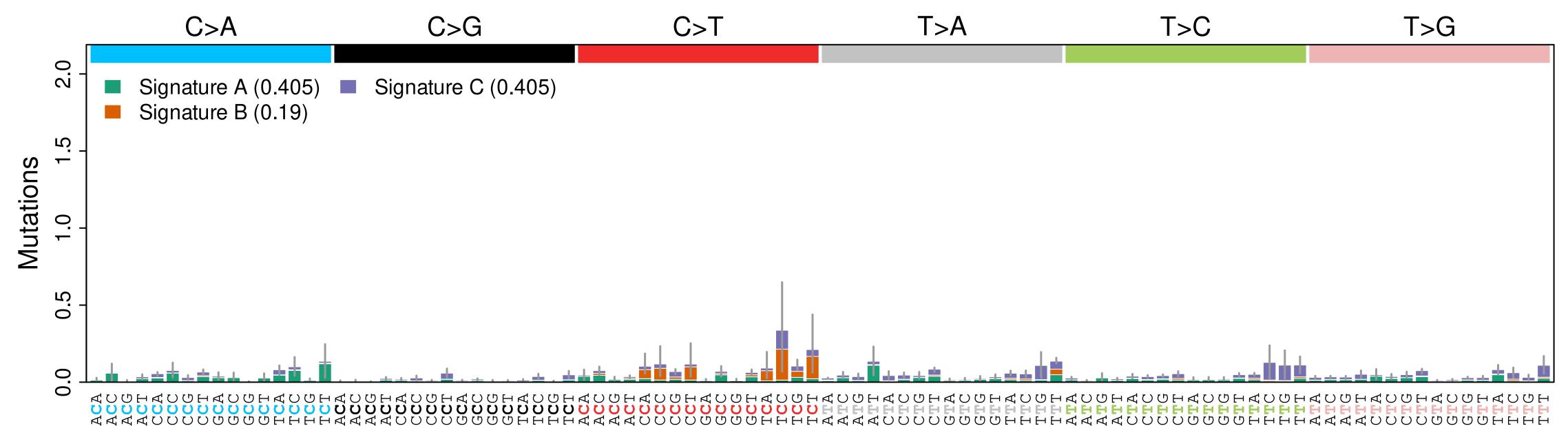
### Reconstructed spectrum (cosine similarity = 0.138)



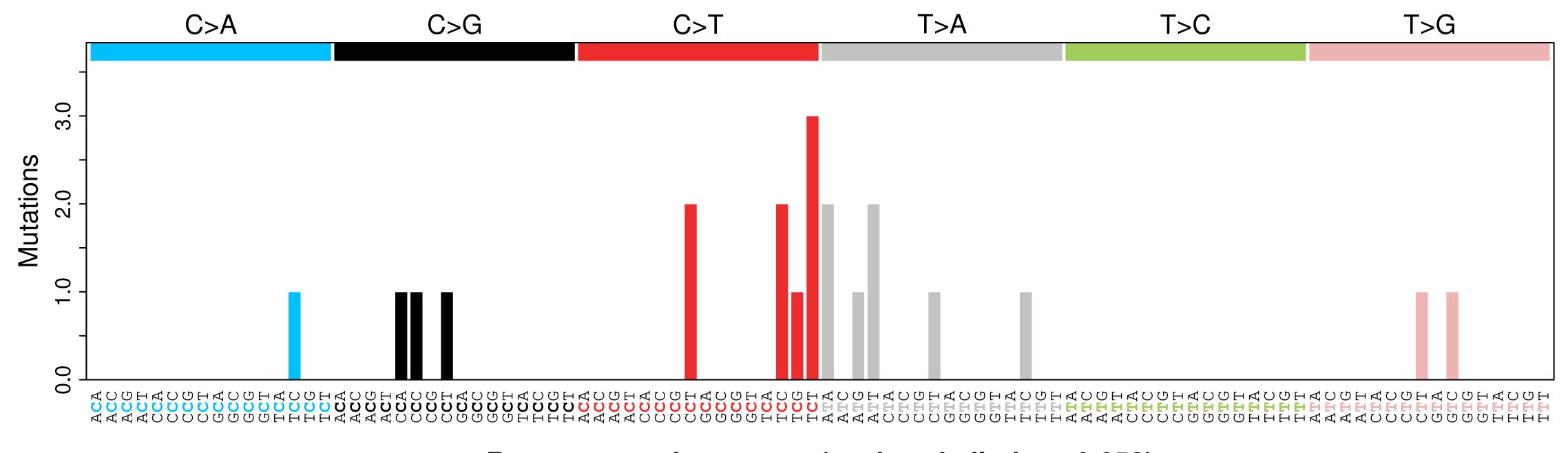
# CATD0140a (4 mutations)



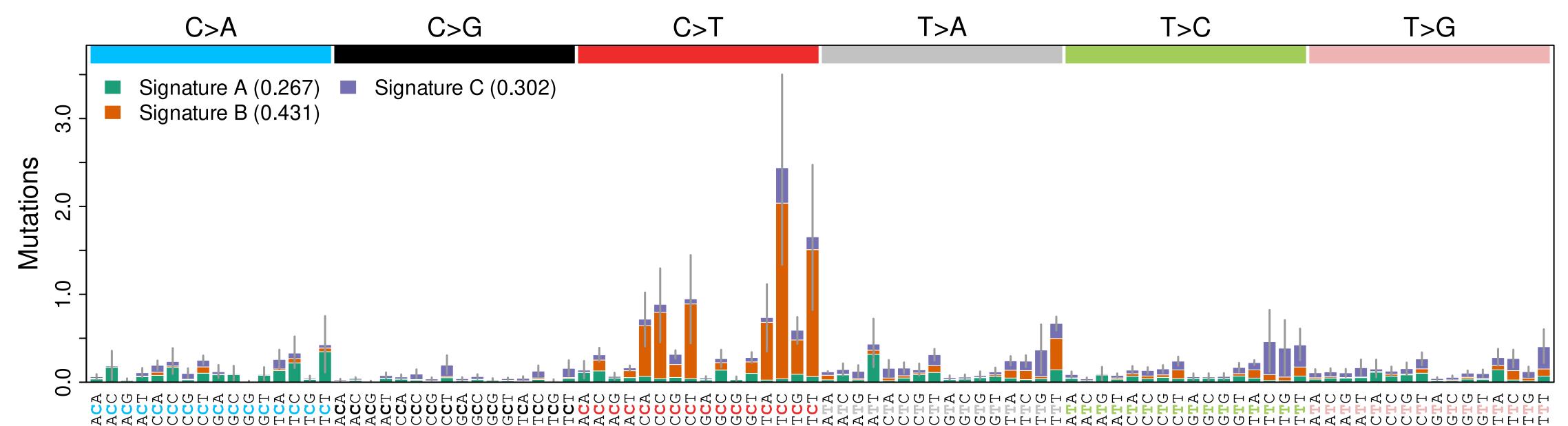




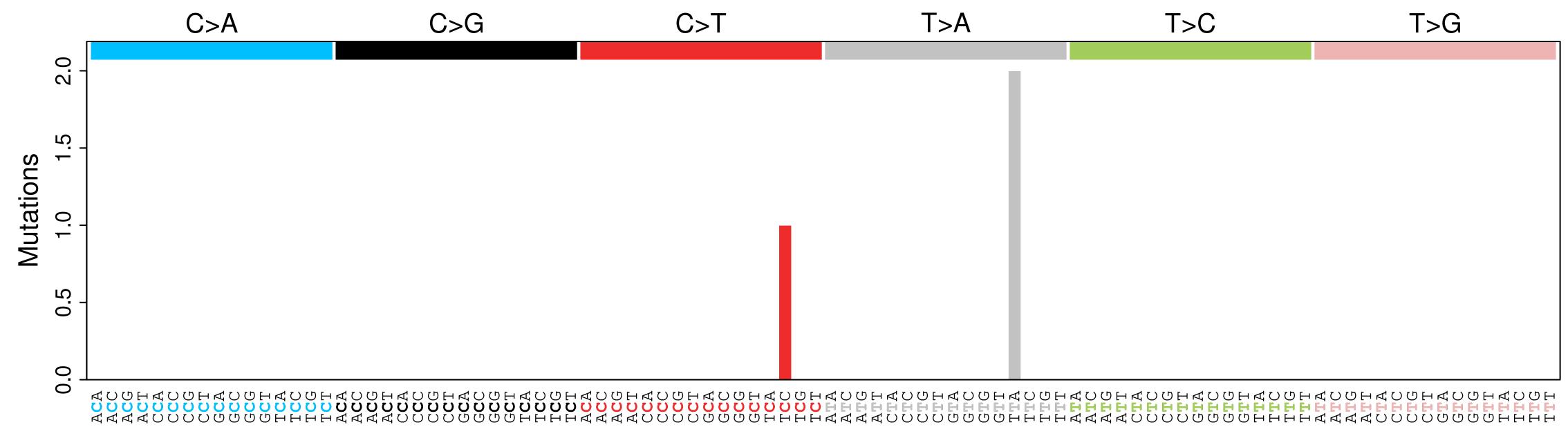
#### CATD0131a (21 mutations)



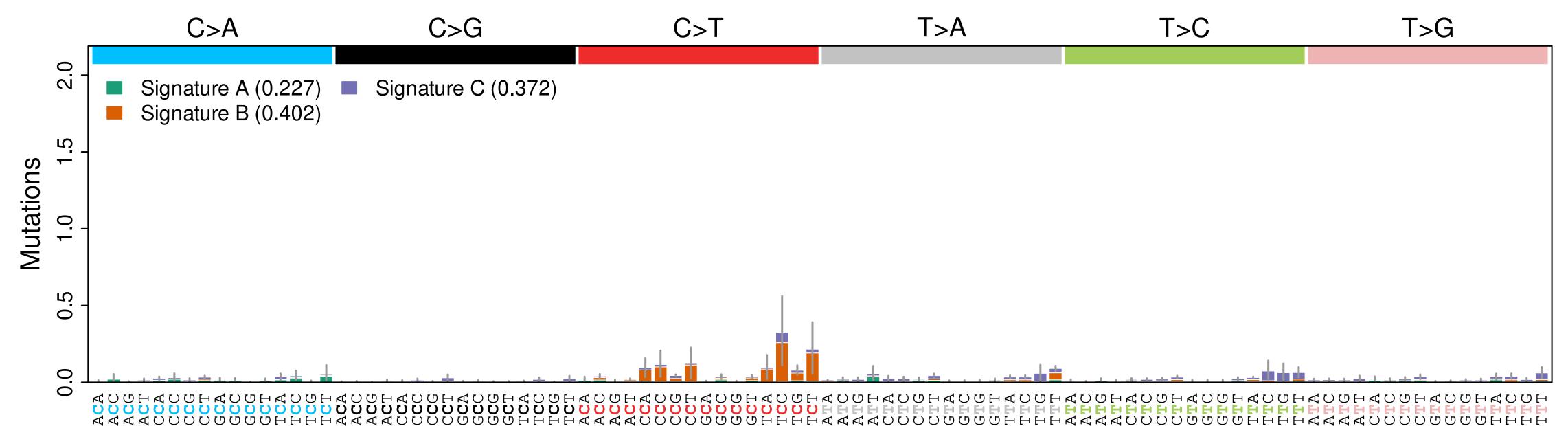
## Reconstructed spectrum (cosine similarity = 0.652)



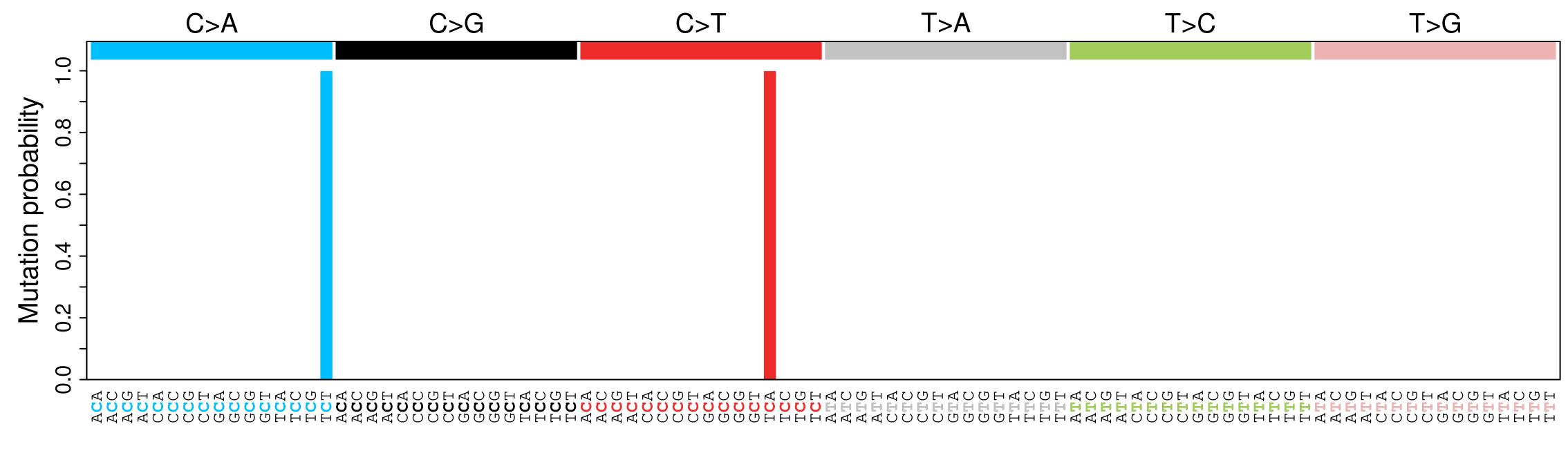
## CATD0125a (3 mutations)

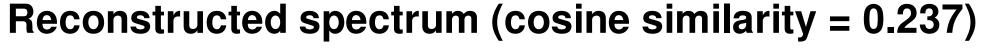


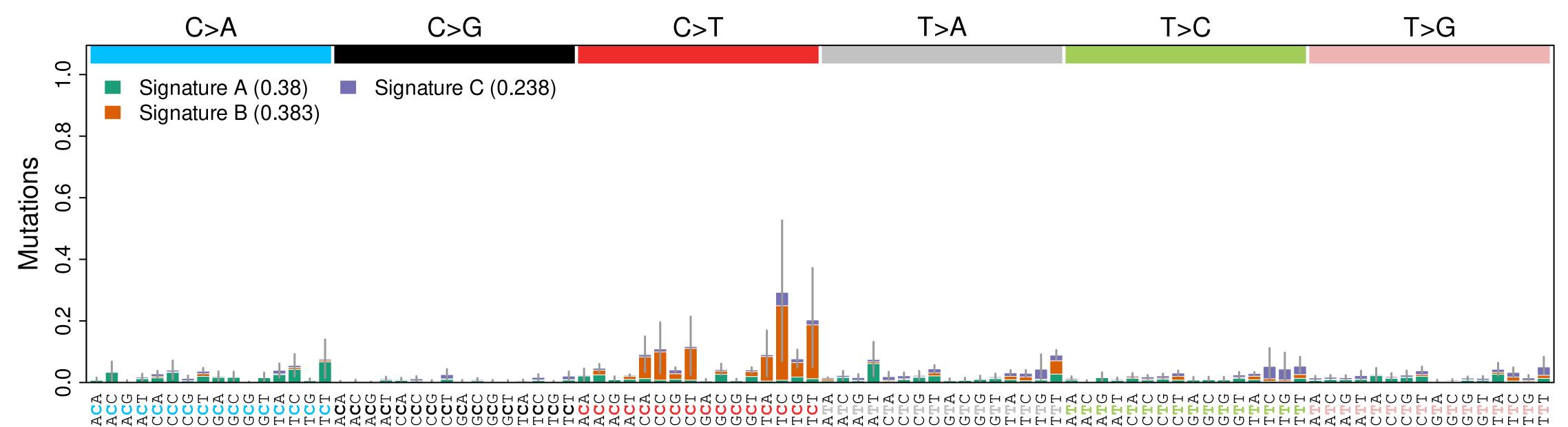
## Reconstructed spectrum (cosine similarity = 0.337)



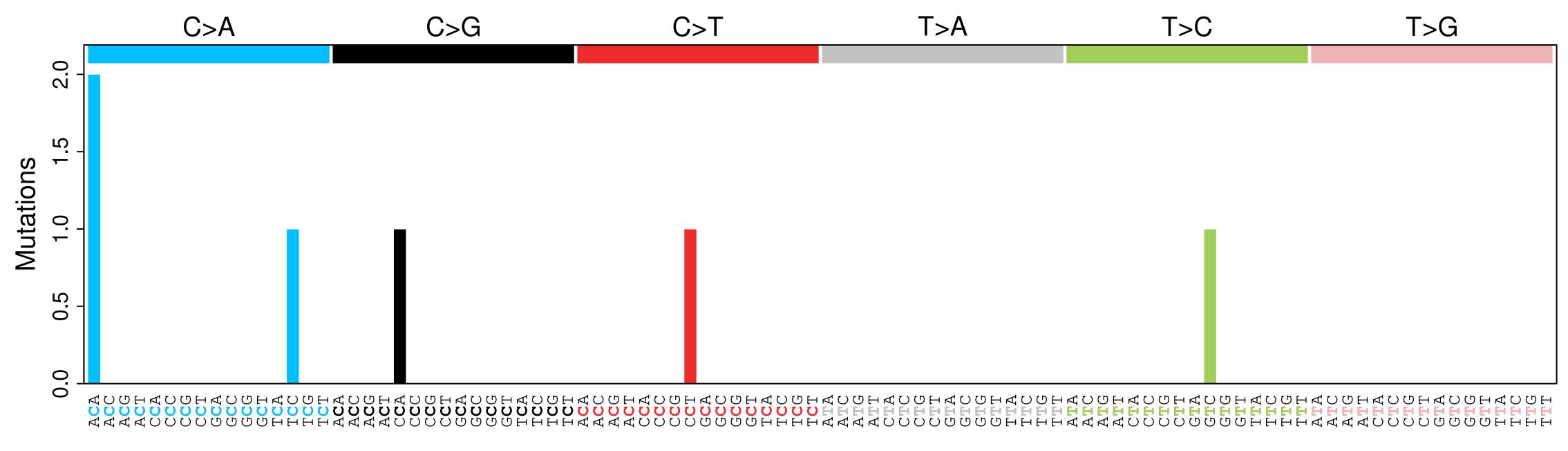
#### CATD0134a



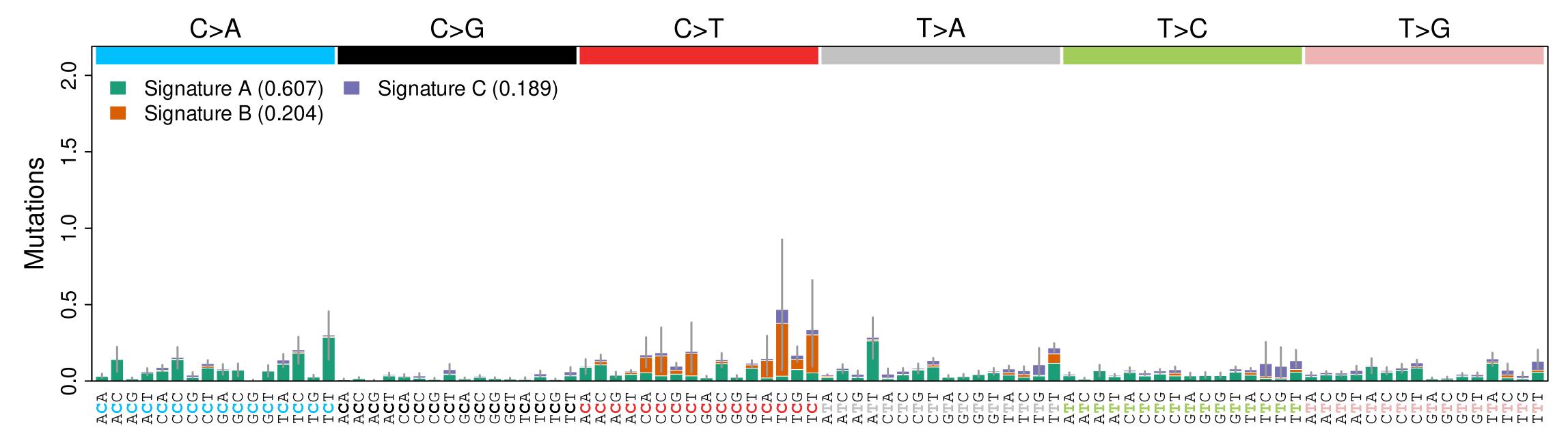




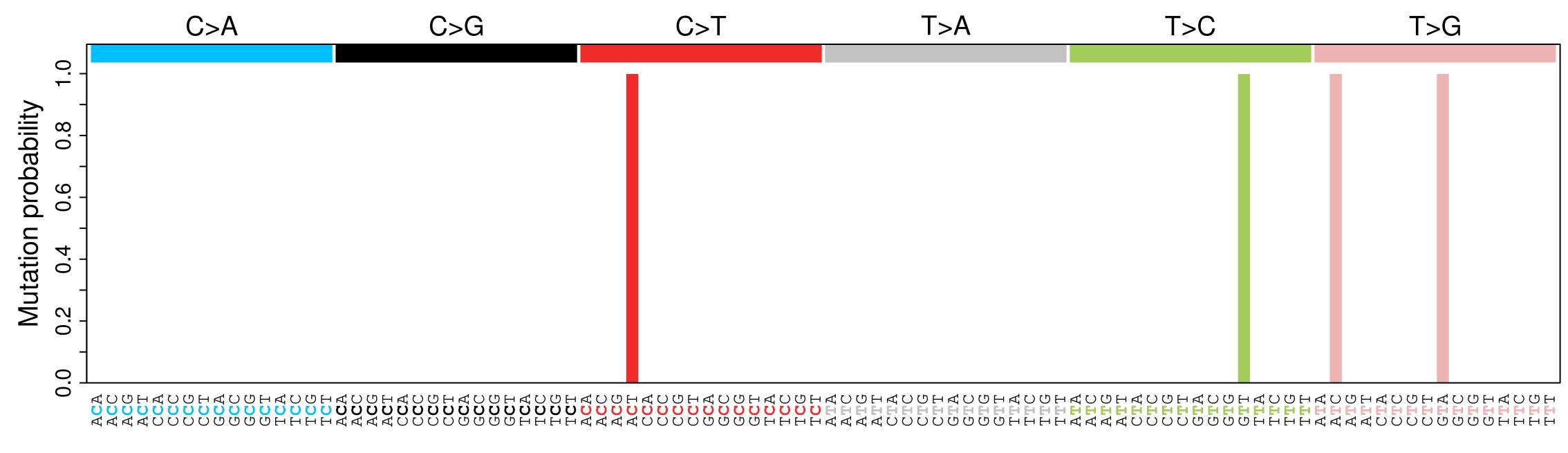
### CATD258a (6 mutations)

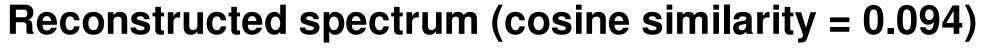


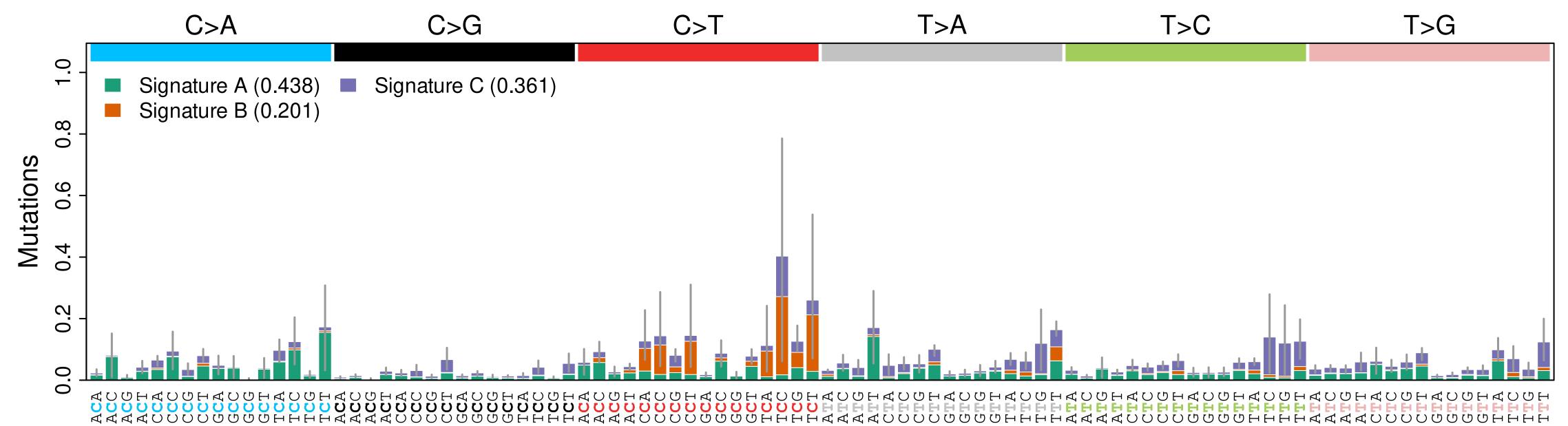
## Reconstructed spectrum (cosine similarity = 0.175)



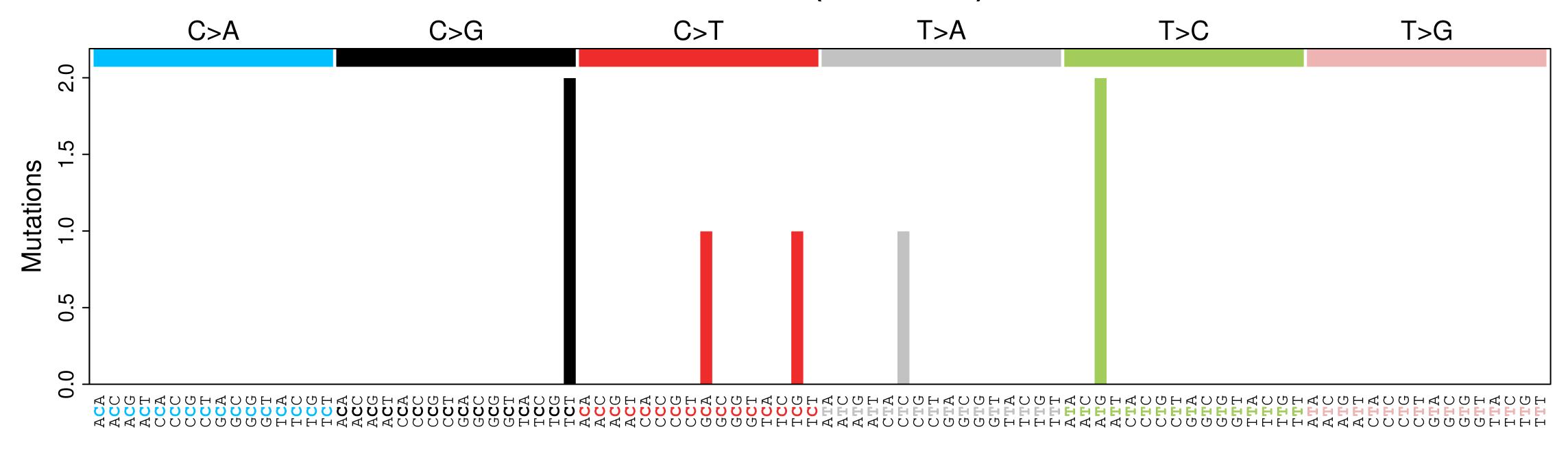
#### CATD257a

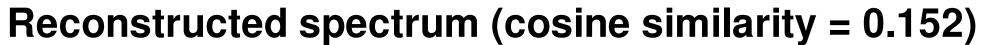


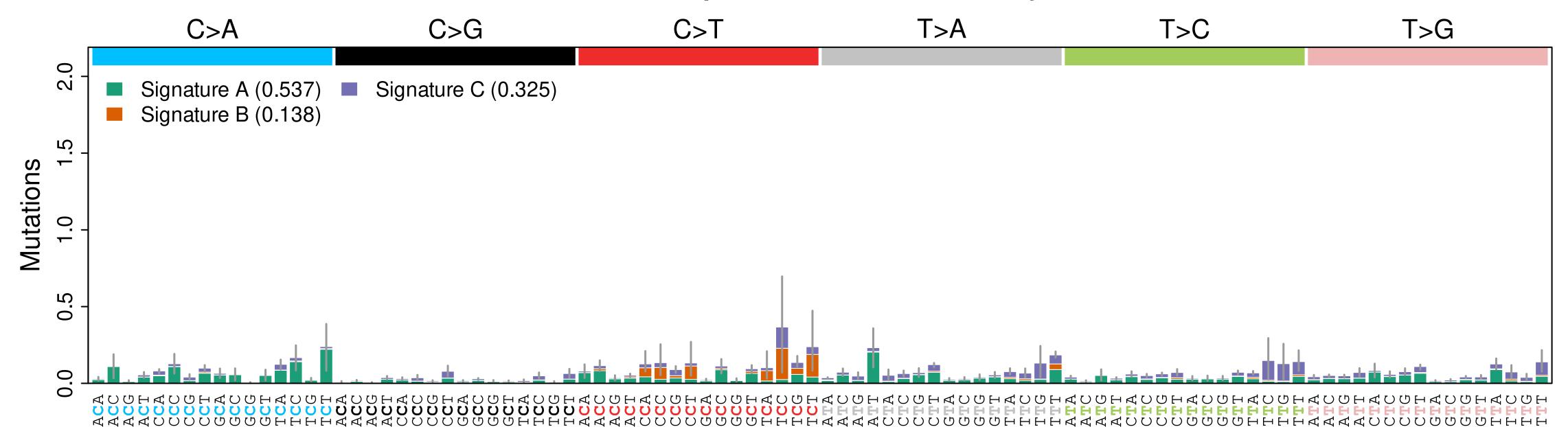




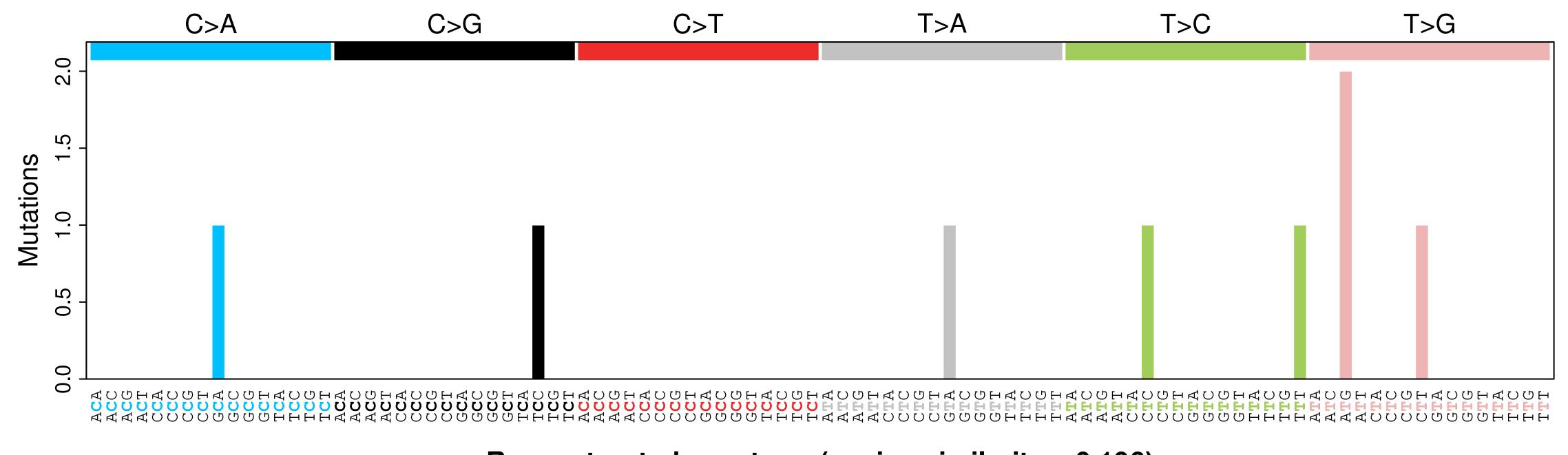
#### CATD0139a (7 mutations)



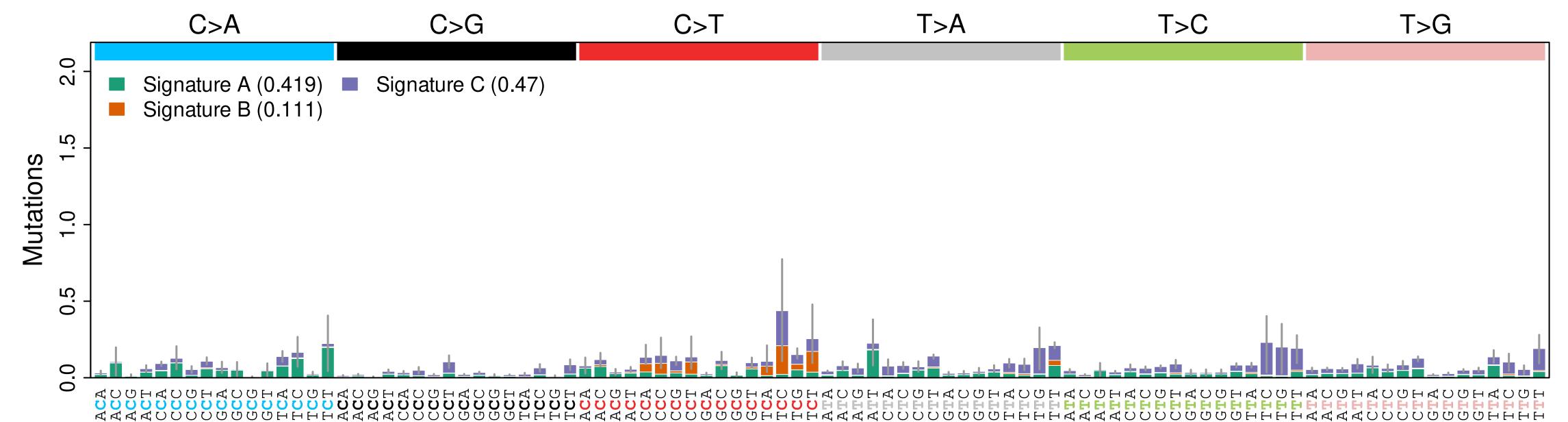




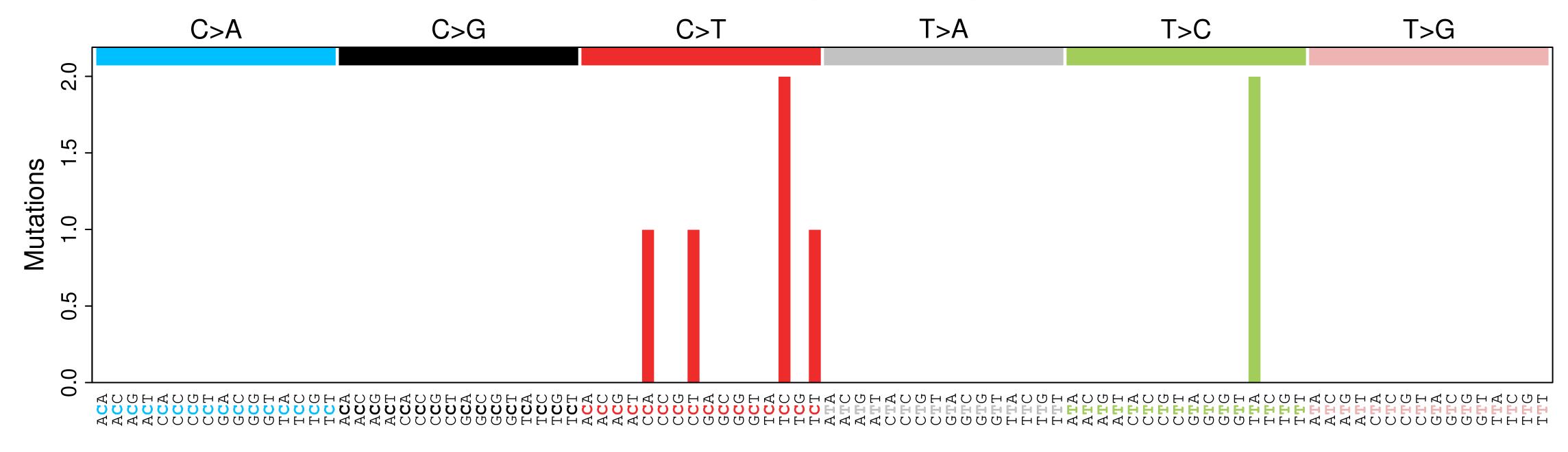
### CATD0137a (8 mutations)



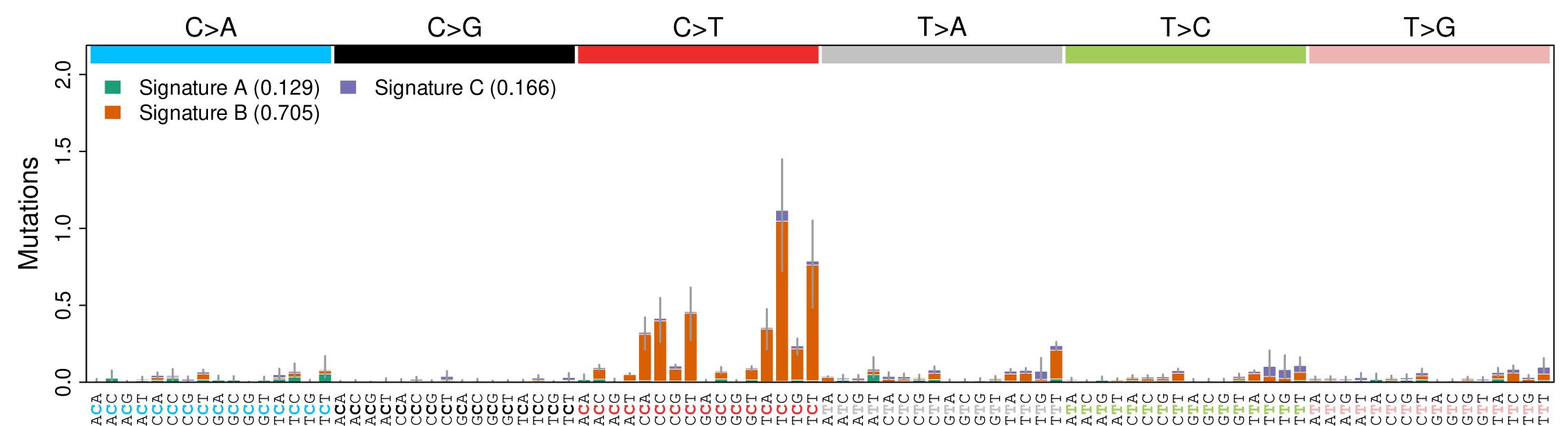




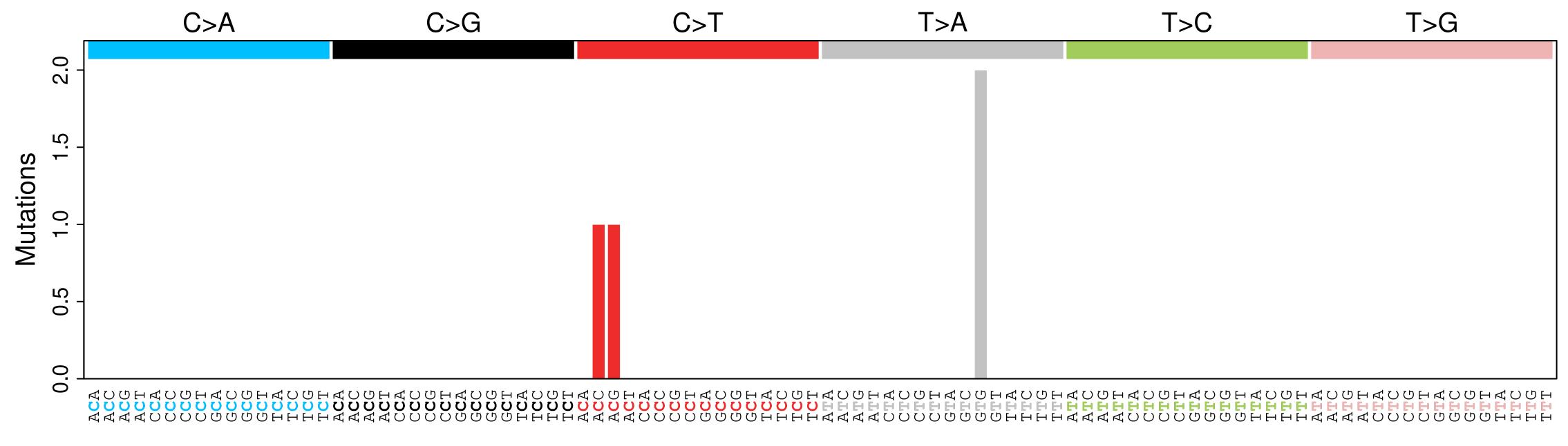
### CATD249a (7 mutations)



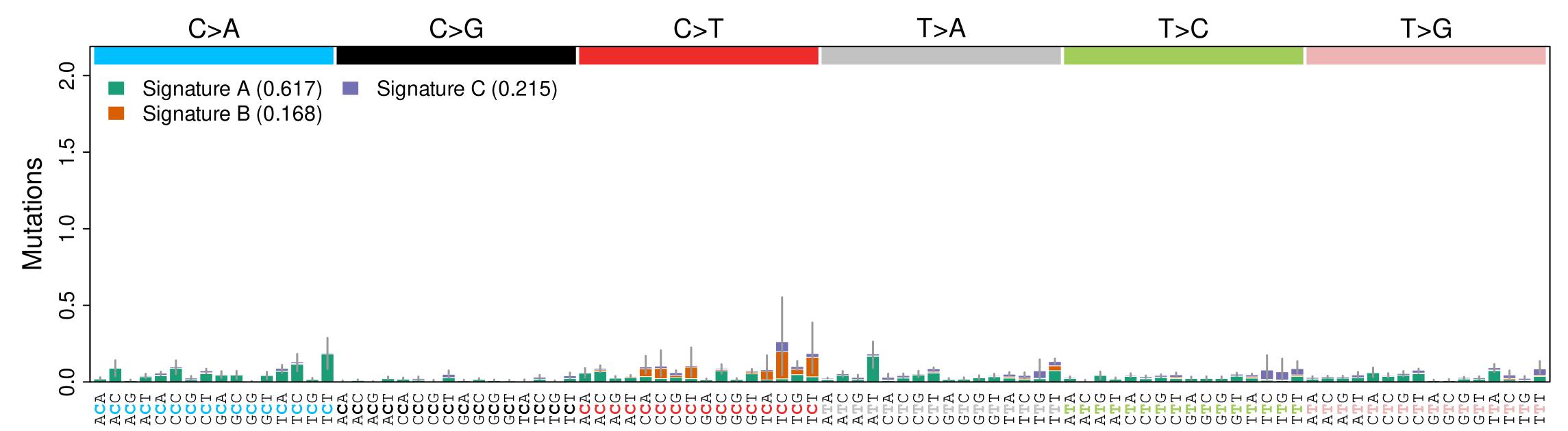
# Reconstructed spectrum (cosine similarity = 0.714)



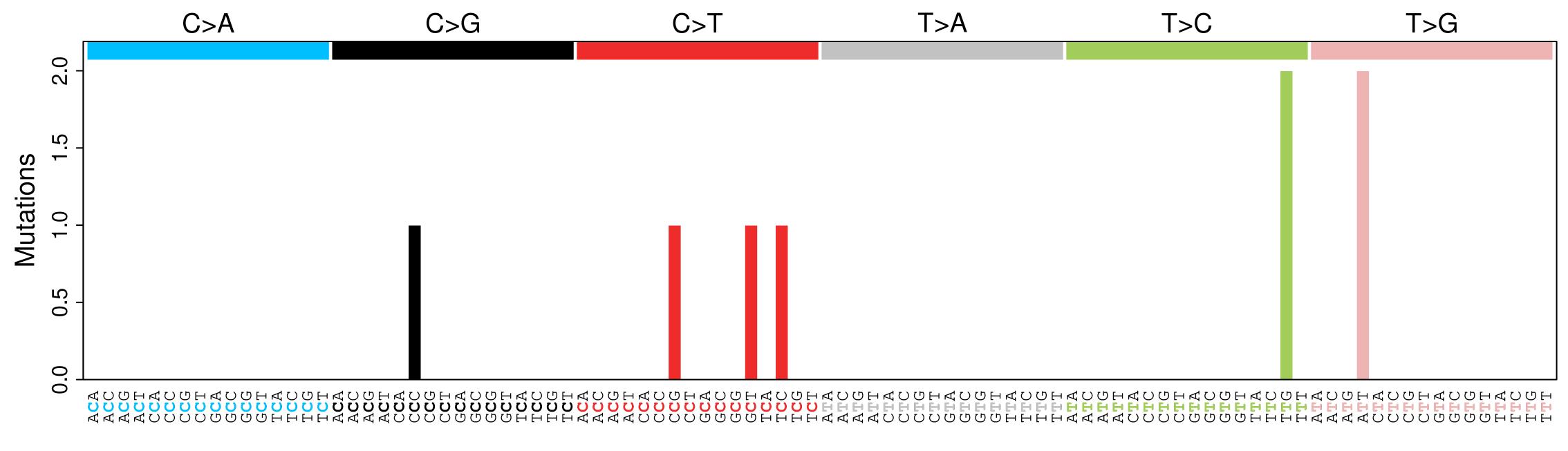
## CATD271a (4 mutations)

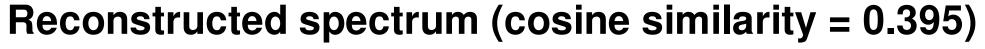


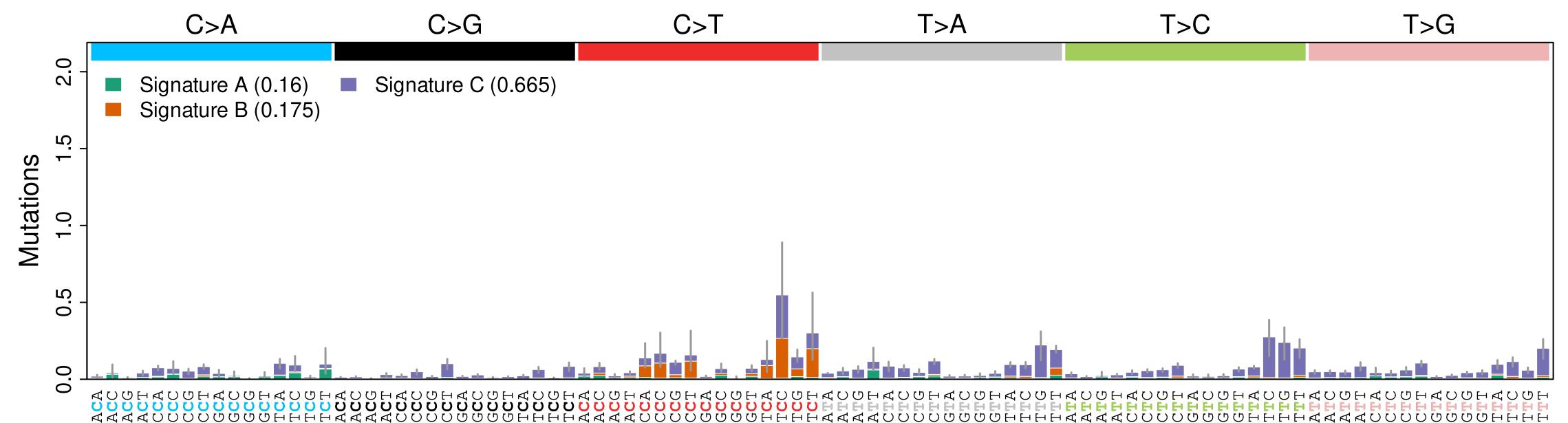
## Reconstructed spectrum (cosine similarity = 0.108)



#### CATD259a (8 mutations)







### CATD0127a (5 mutations)

