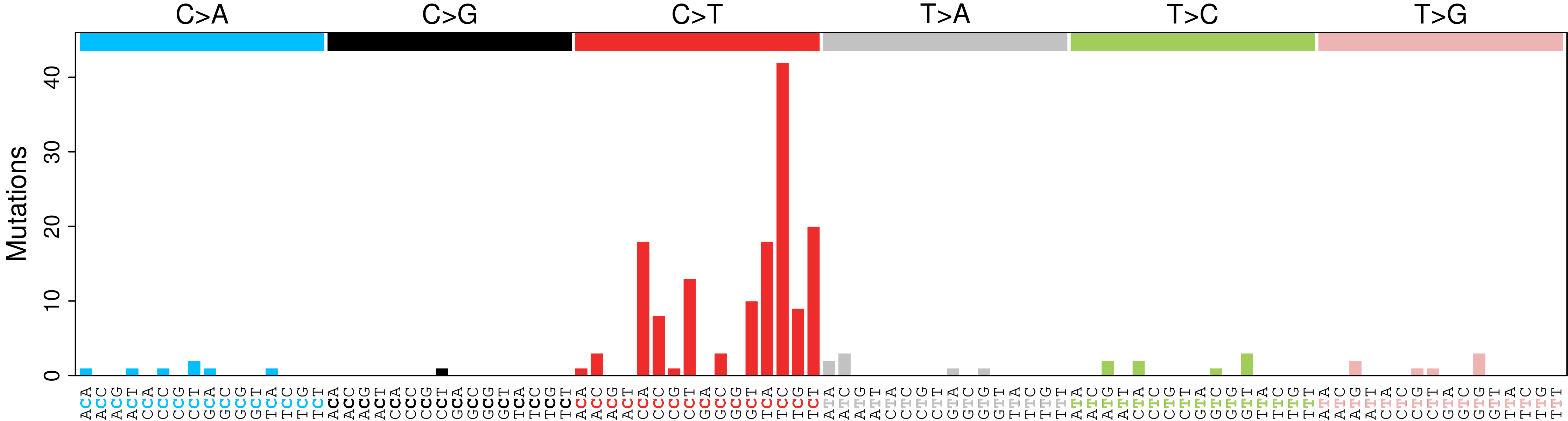
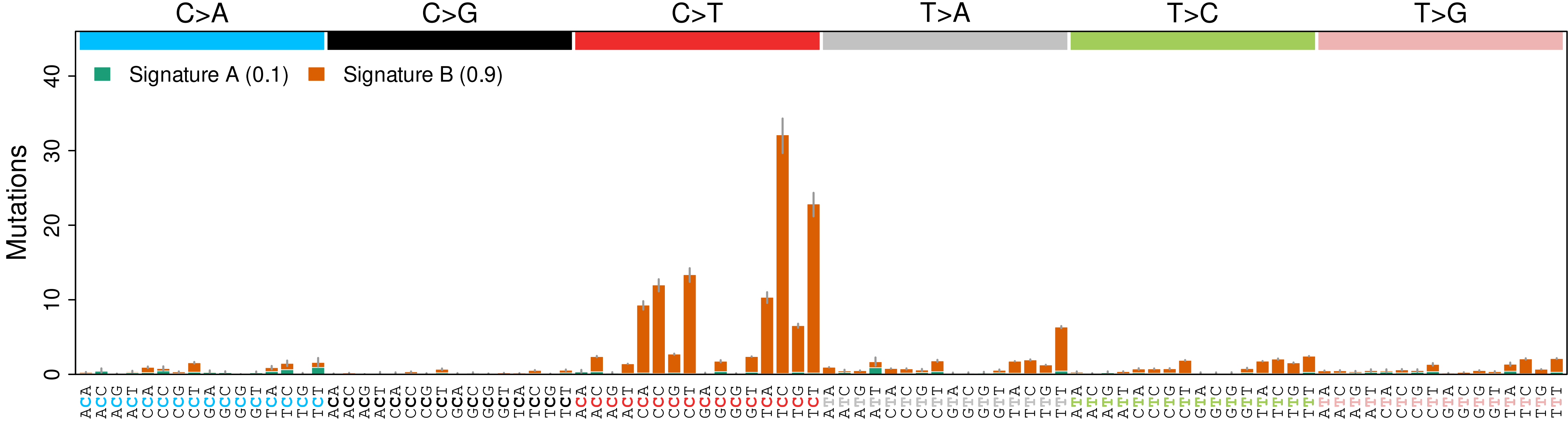


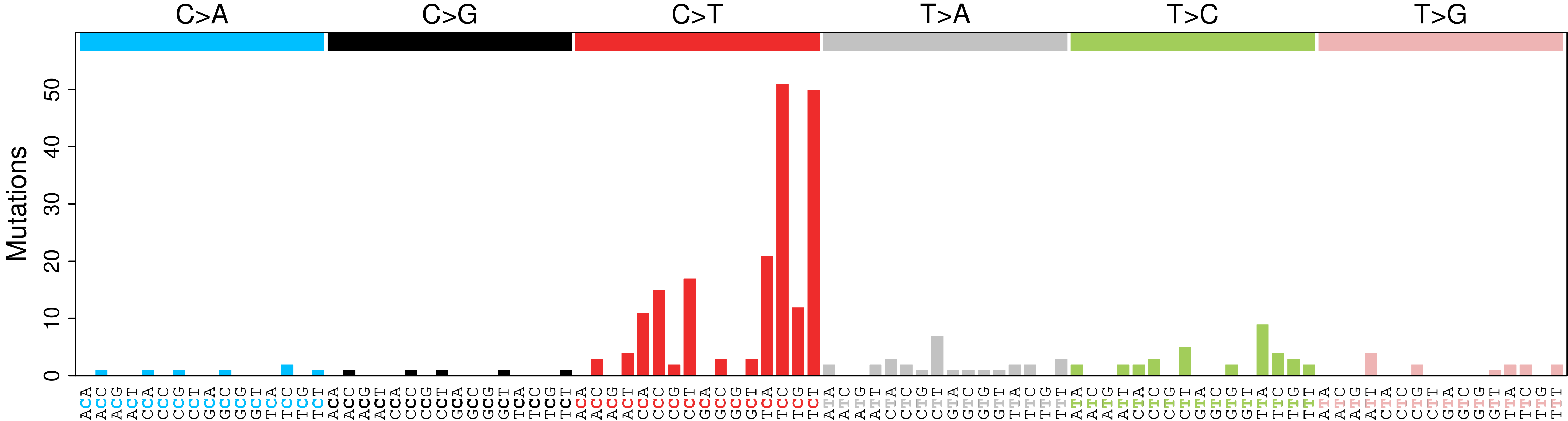
CATD269a (176 mutations)



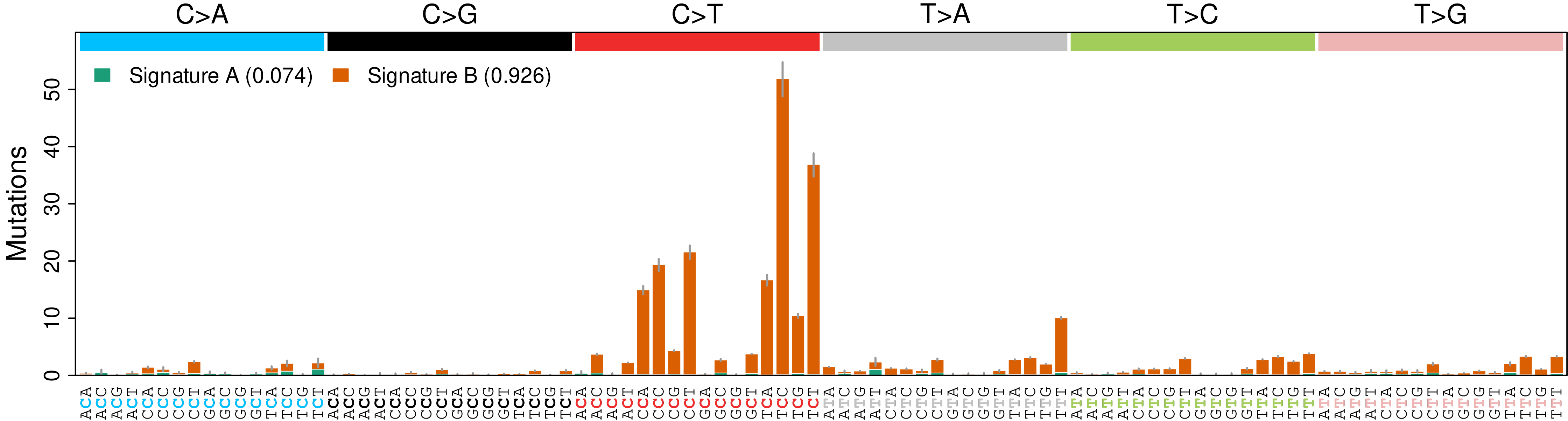
Reconstructed spectrum (cosine similarity = 0.935)



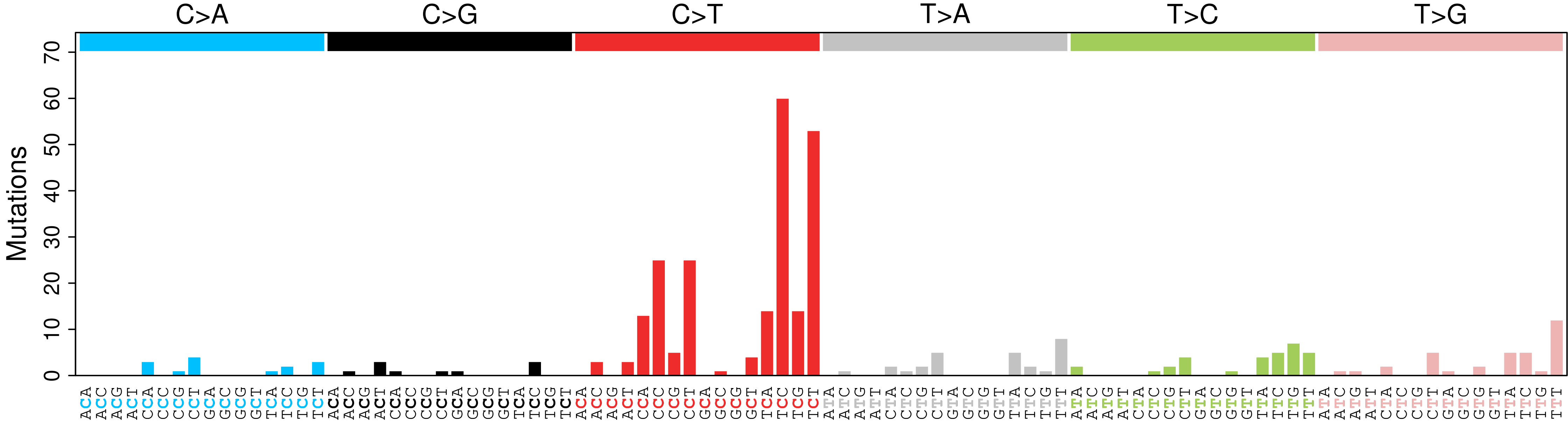
CATD256a (279 mutations)



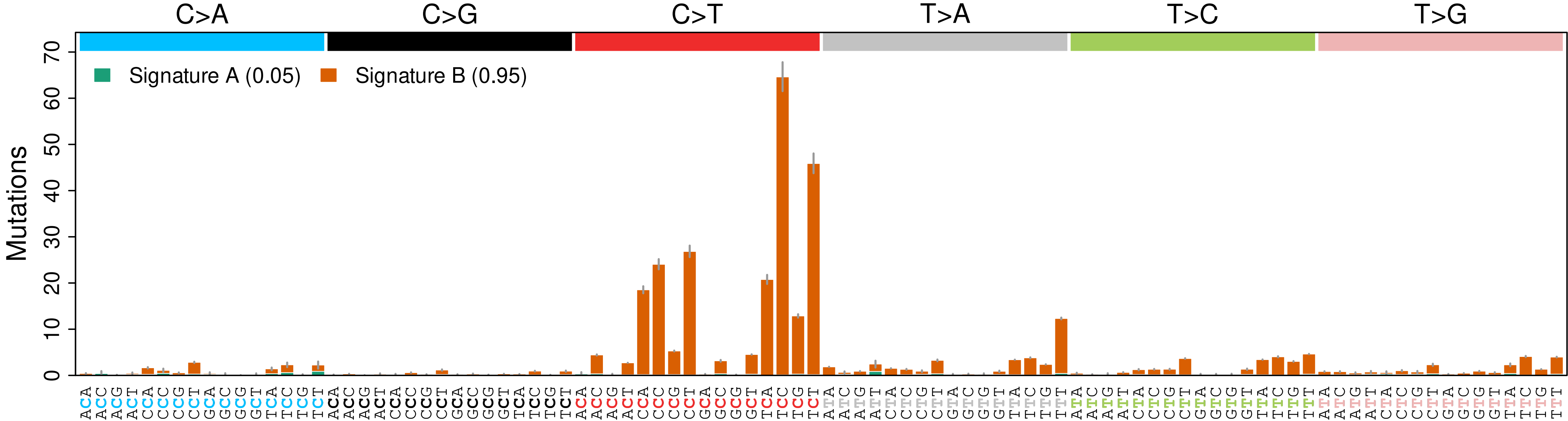
Reconstructed spectrum (cosine similarity = 0.967)



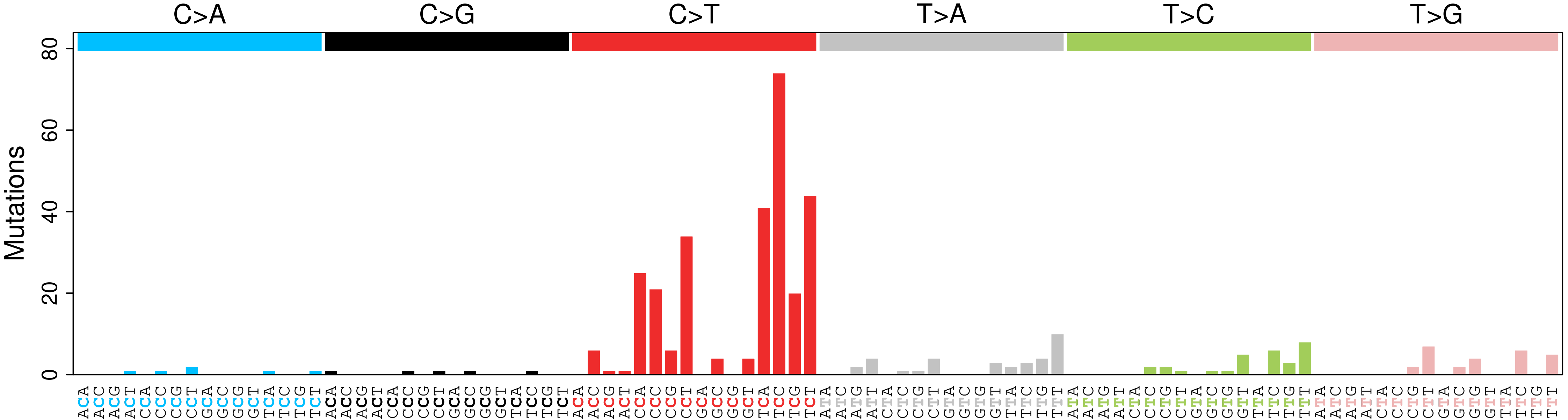
CATD251a (337 mutations)



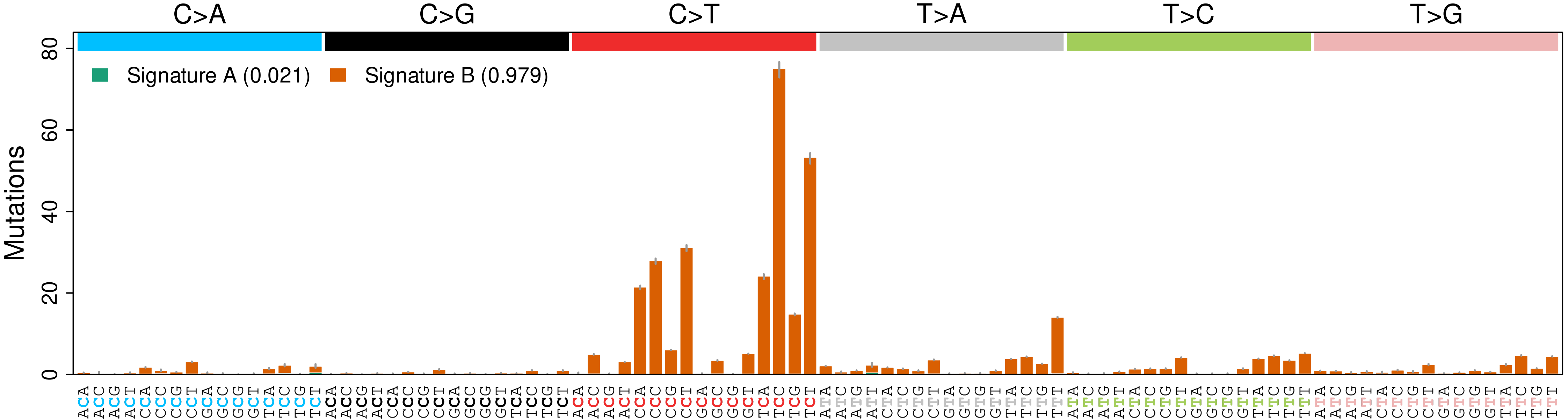
Reconstructed spectrum (cosine similarity = 0.981)



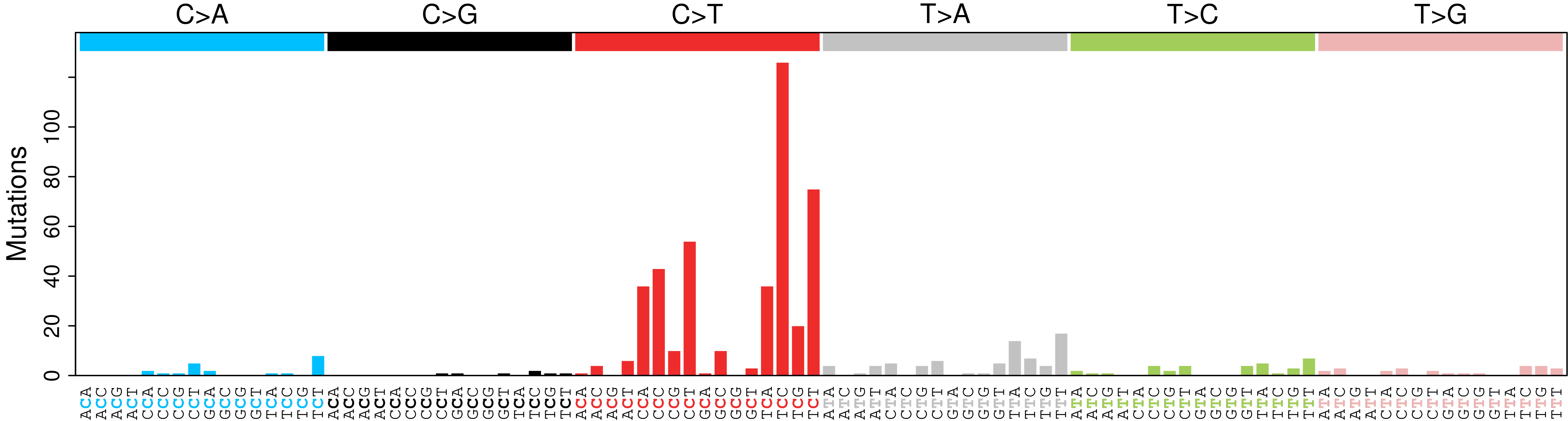
CATD0132a (381 mutations)



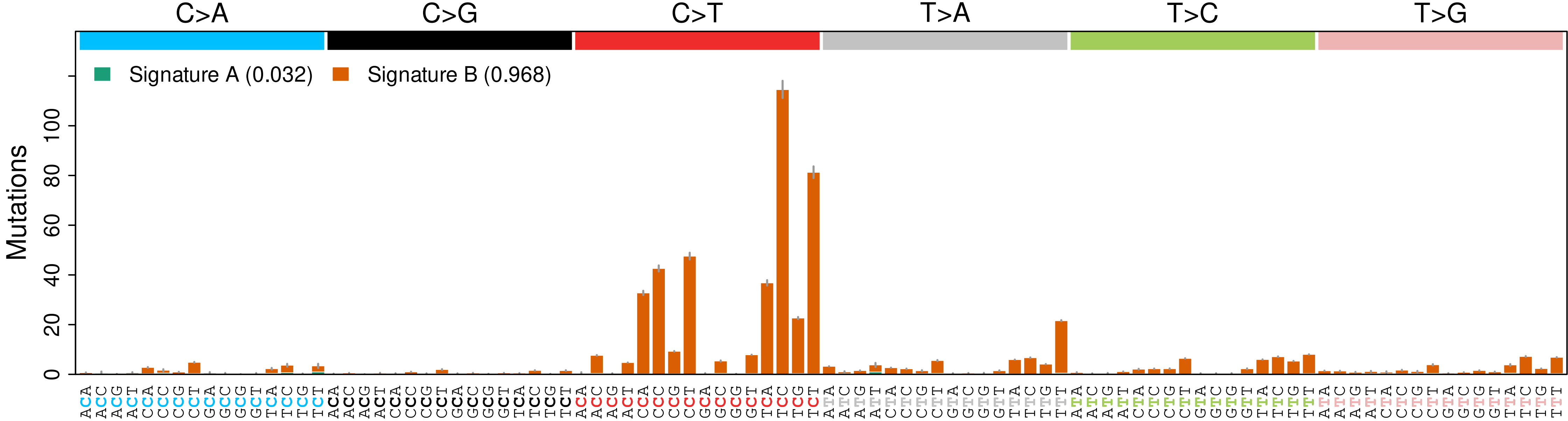
Reconstructed spectrum (cosine similarity = 0.974)



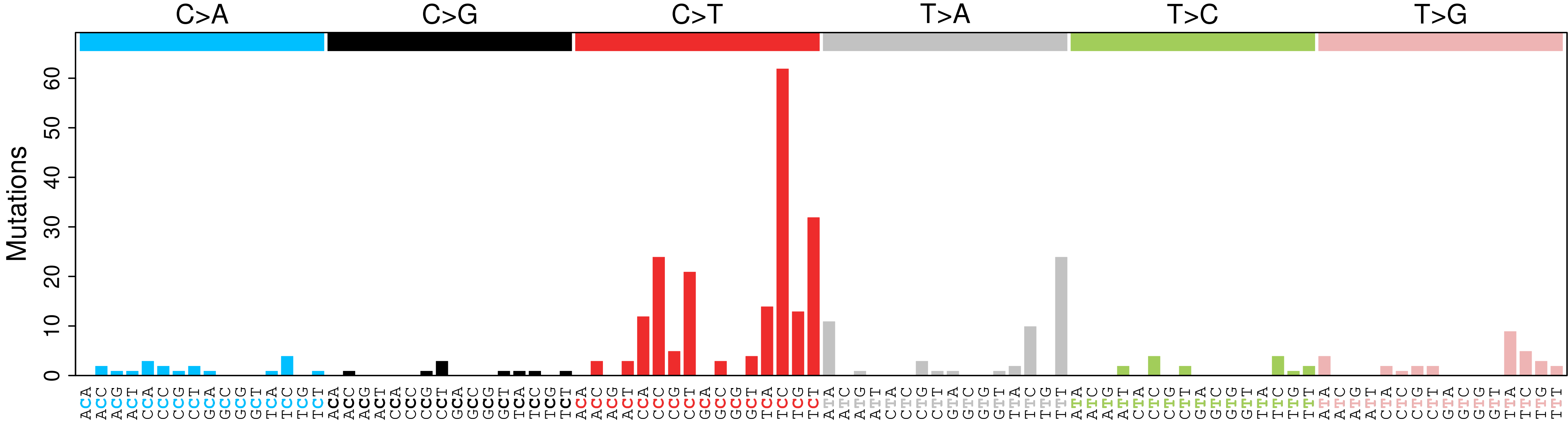
CATD0119a (586 mutations)



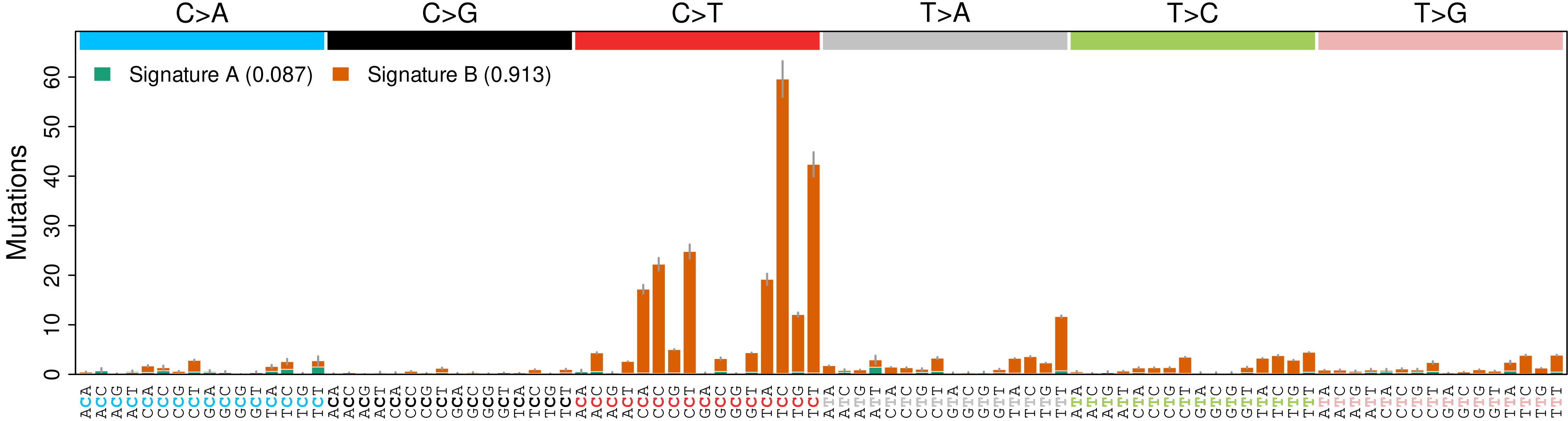
Reconstructed spectrum (cosine similarity = 0.991)



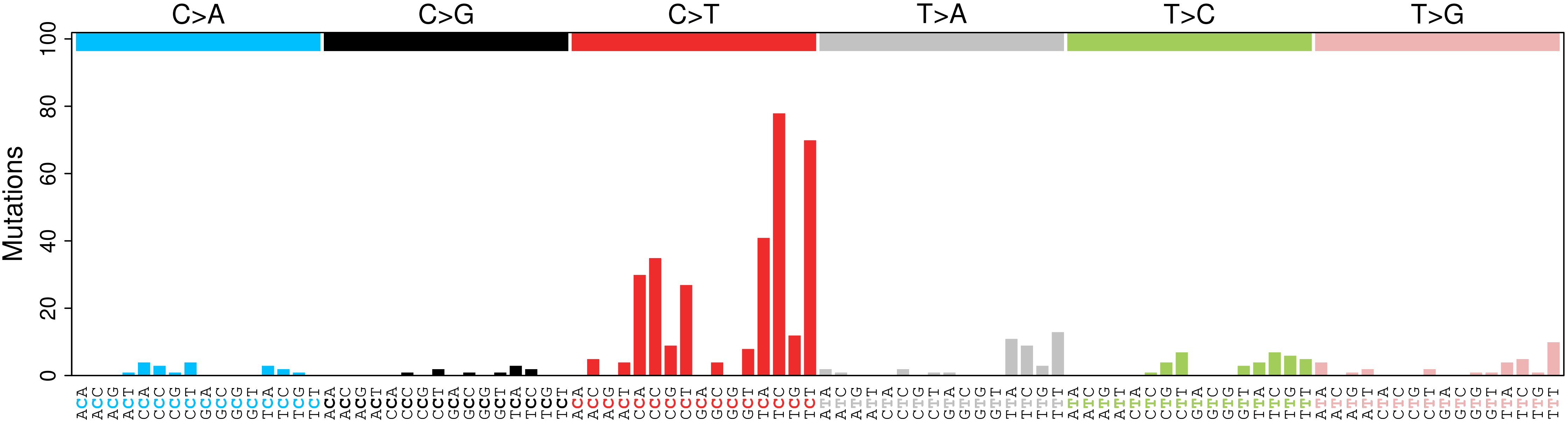
CATD262a (323 mutations)



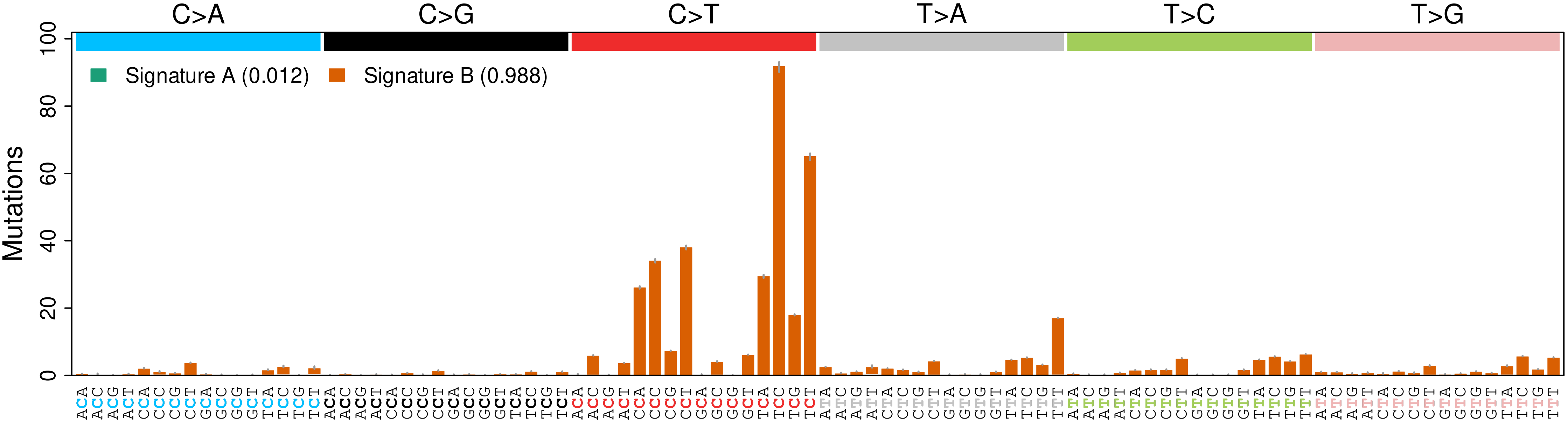
Reconstructed spectrum (cosine similarity = 0.959)



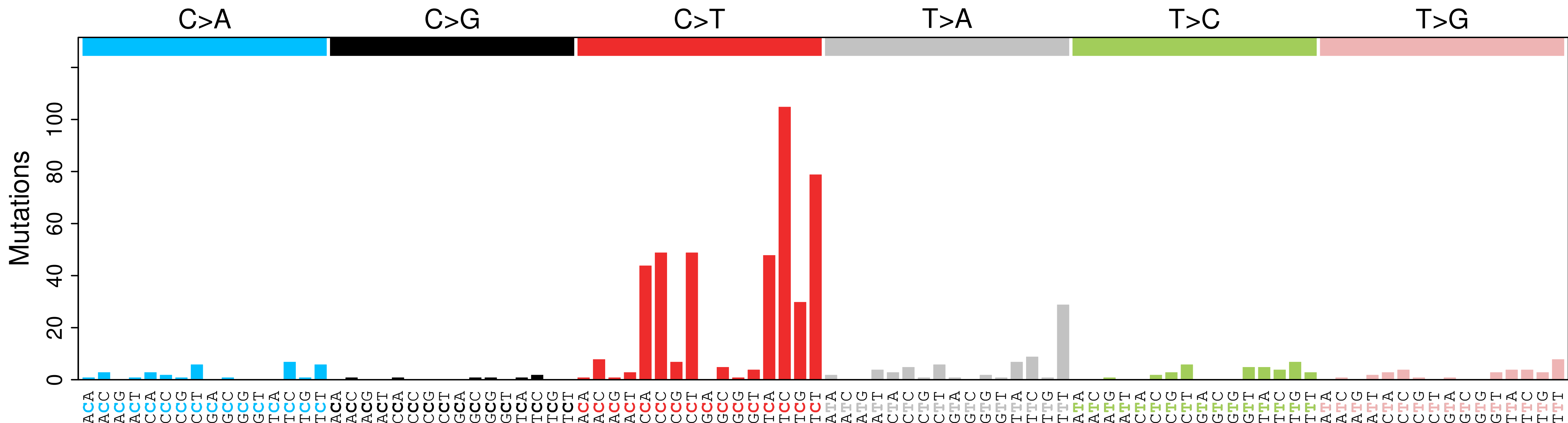
CATD248a (463 mutations)



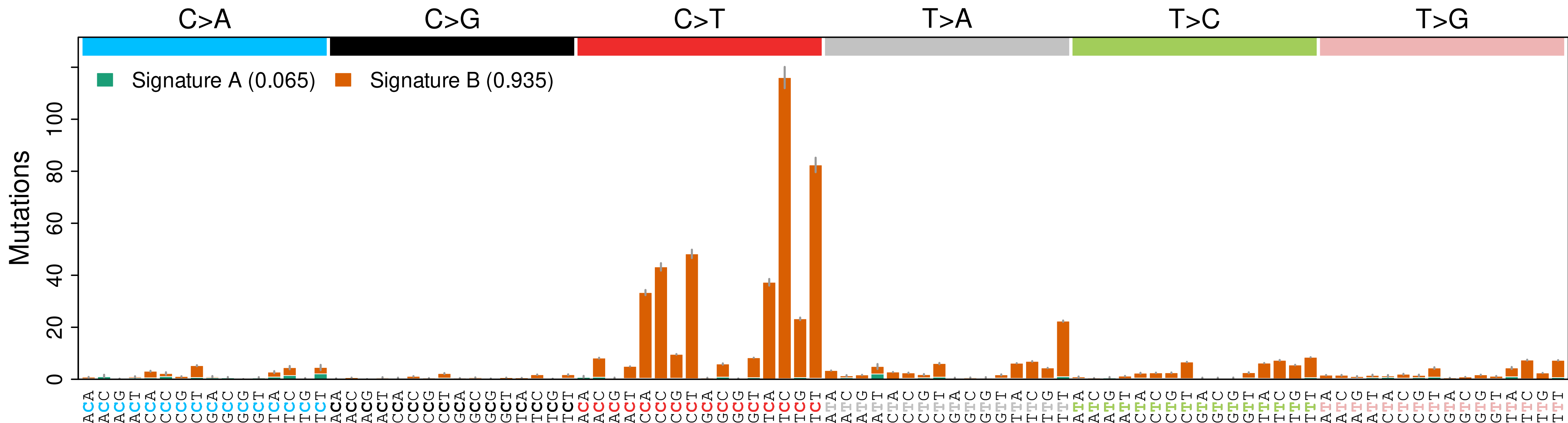
Reconstructed spectrum (cosine similarity = 0.98)



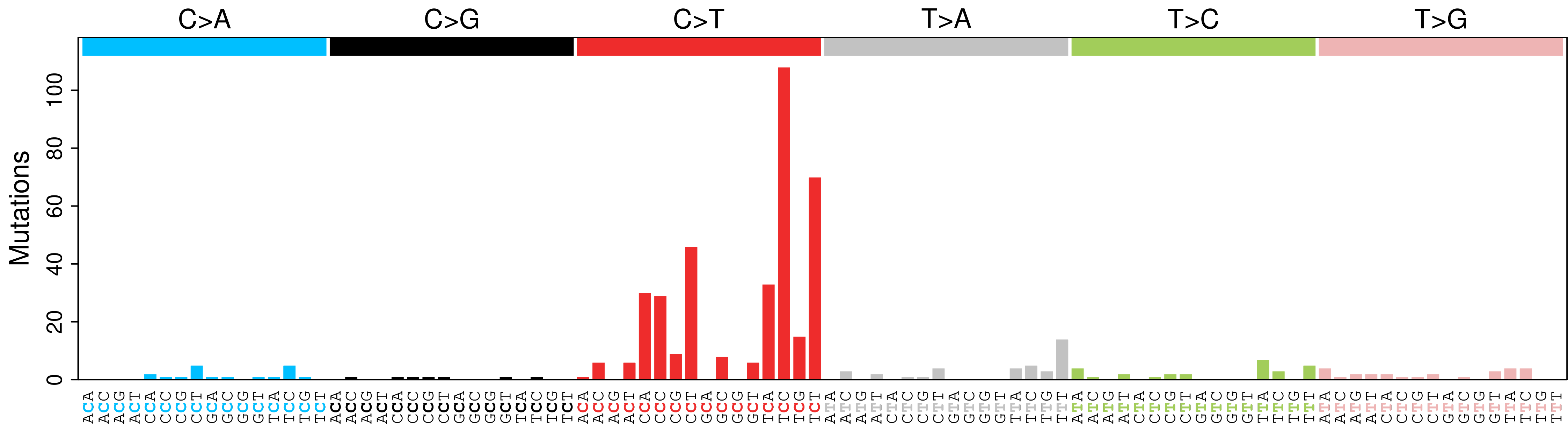
CATD0122a (614 mutations)



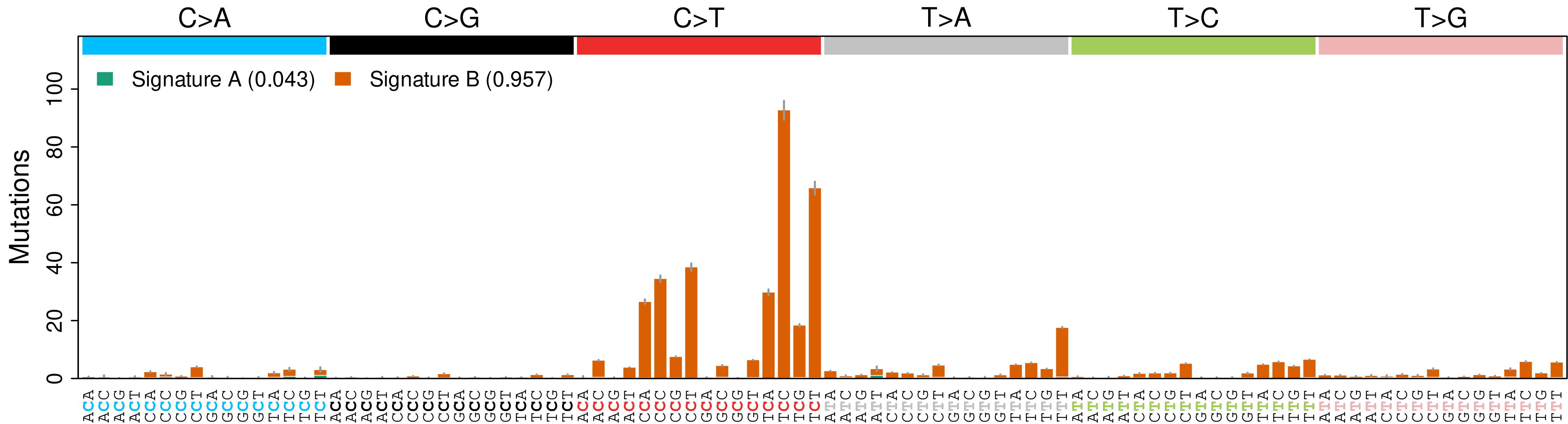
Reconstructed spectrum (cosine similarity = 0.988)



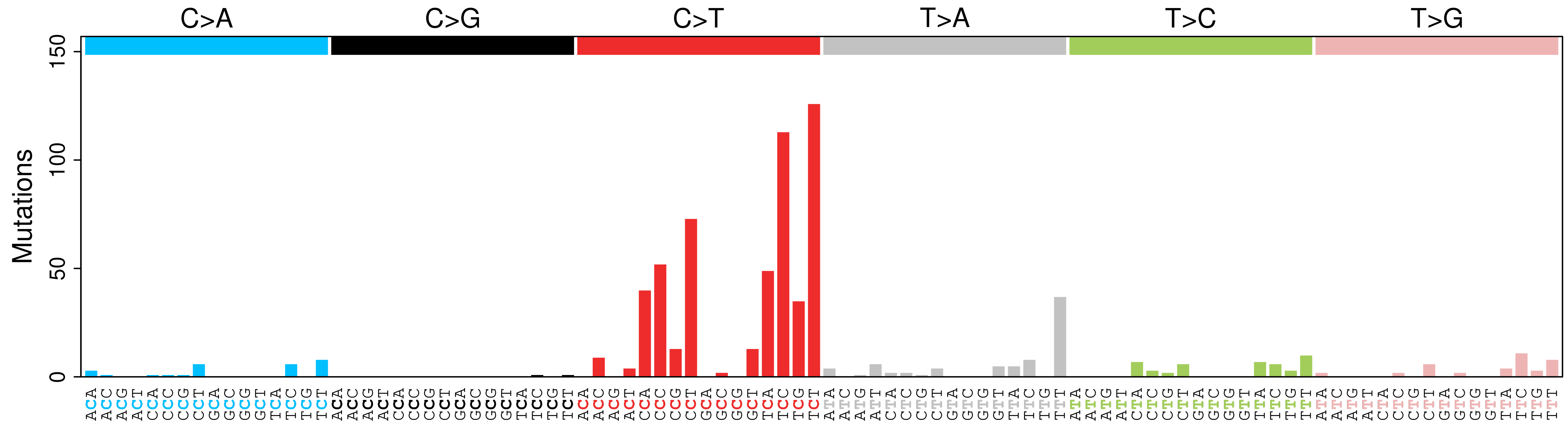
CATD252a (484 mutations)



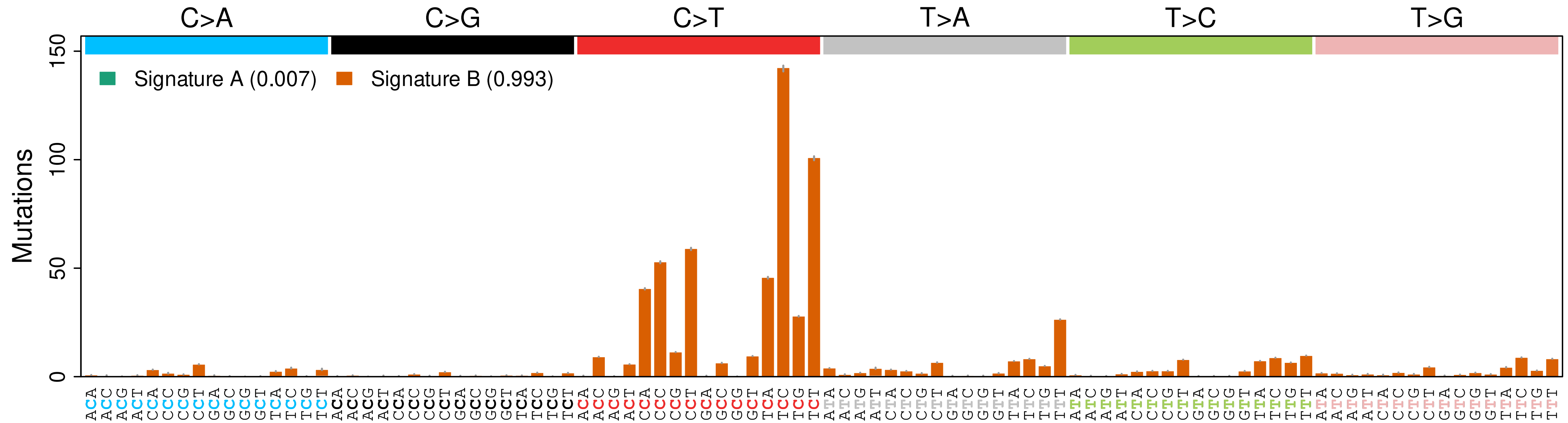
Reconstructed spectrum (cosine similarity = 0.991)



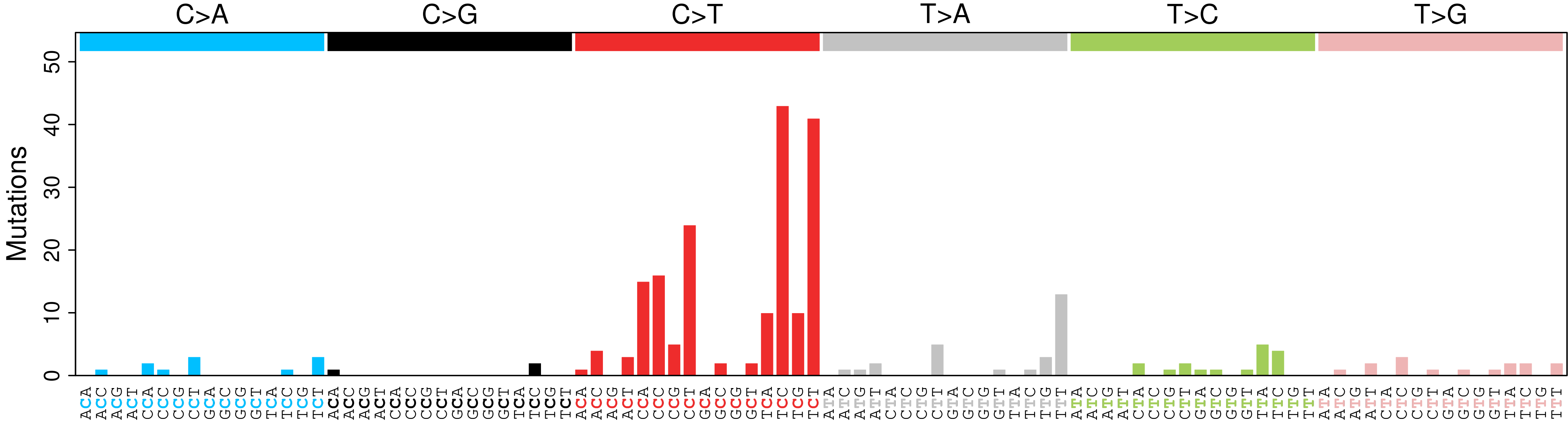
CATD268a (715 mutations)



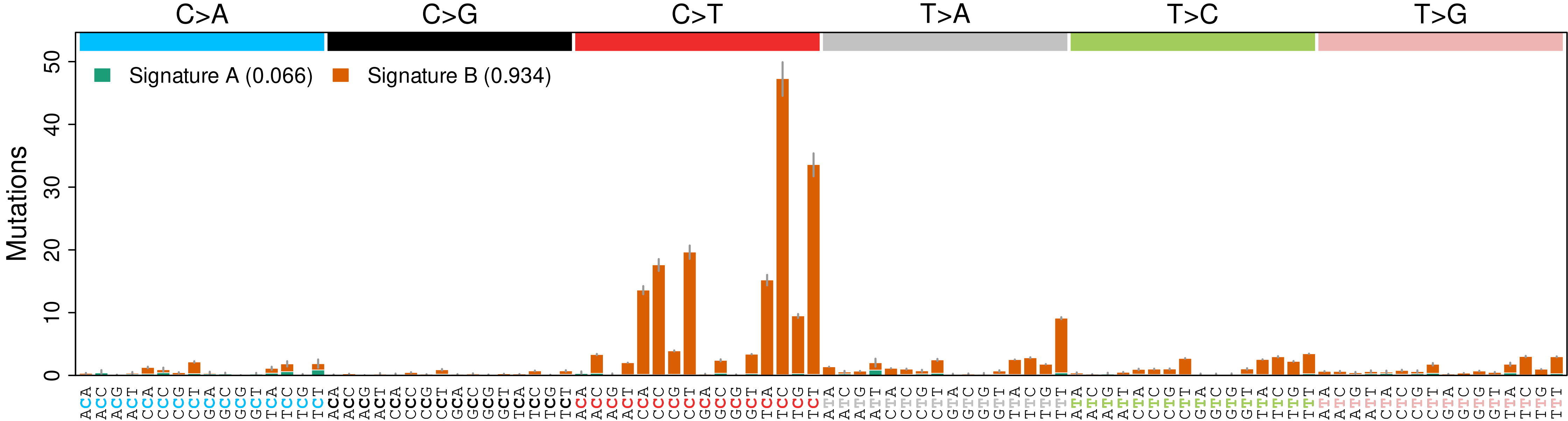
Reconstructed spectrum (cosine similarity = 0.976)



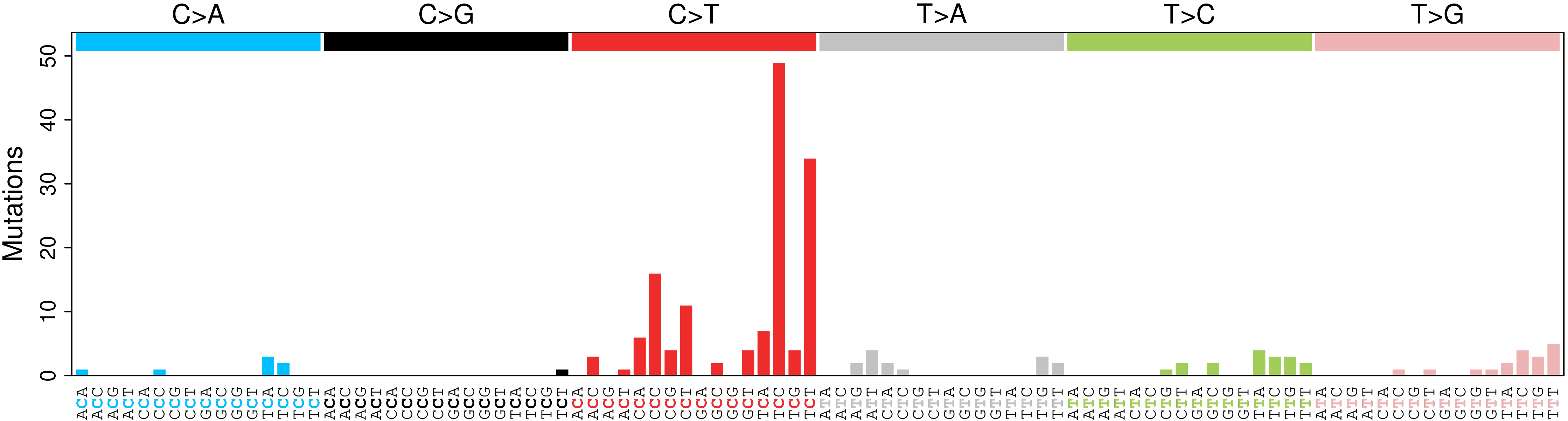
CATD187a (249 mutations)



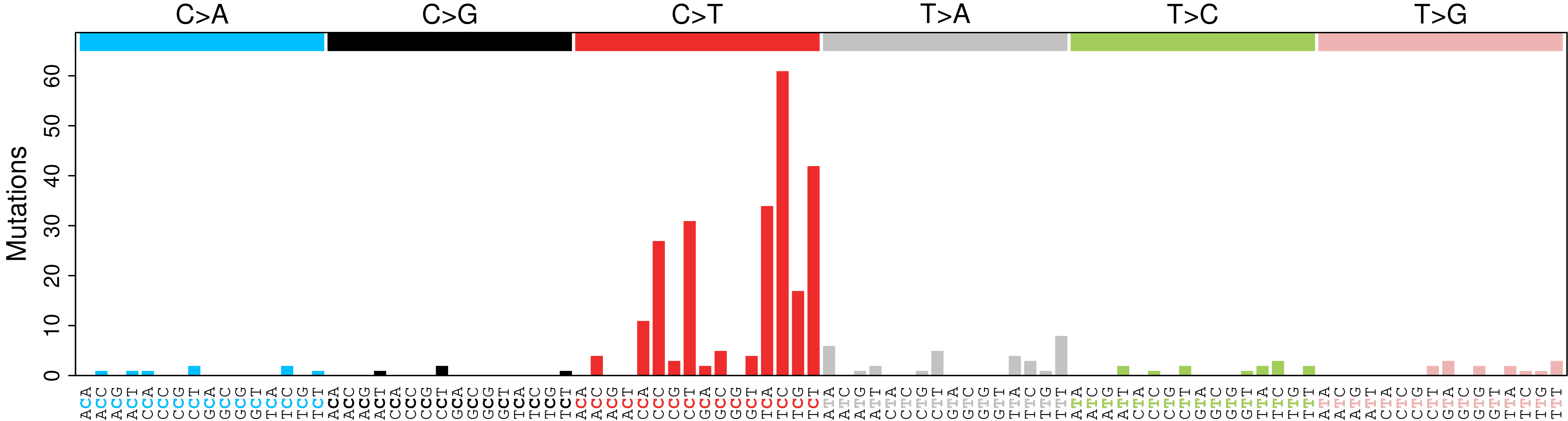
Reconstructed spectrum (cosine similarity = 0.979)



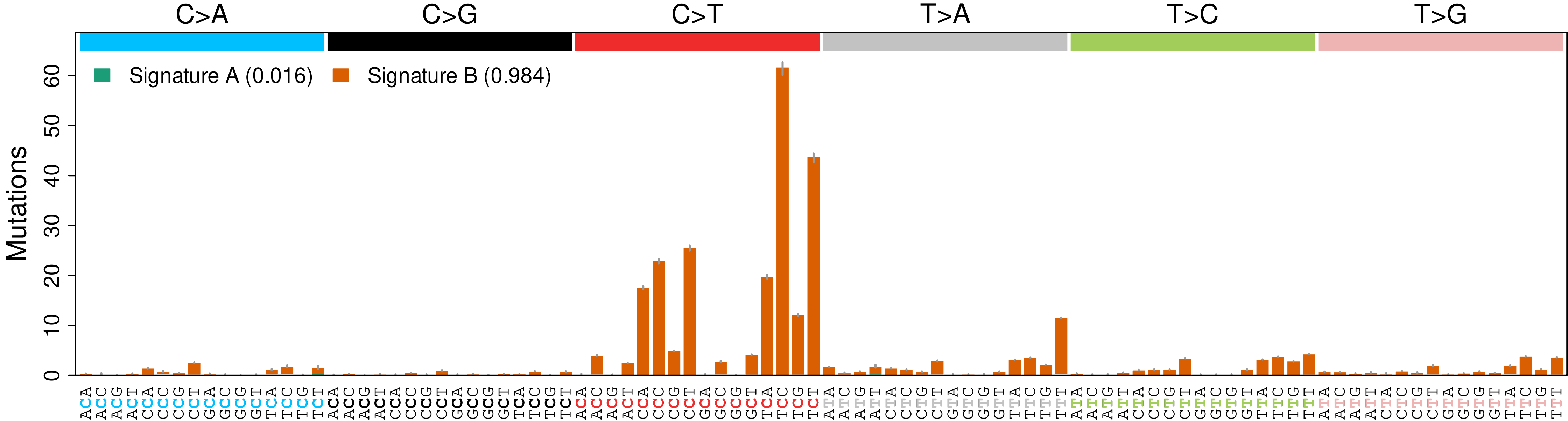
CATD245a (198 mutations)



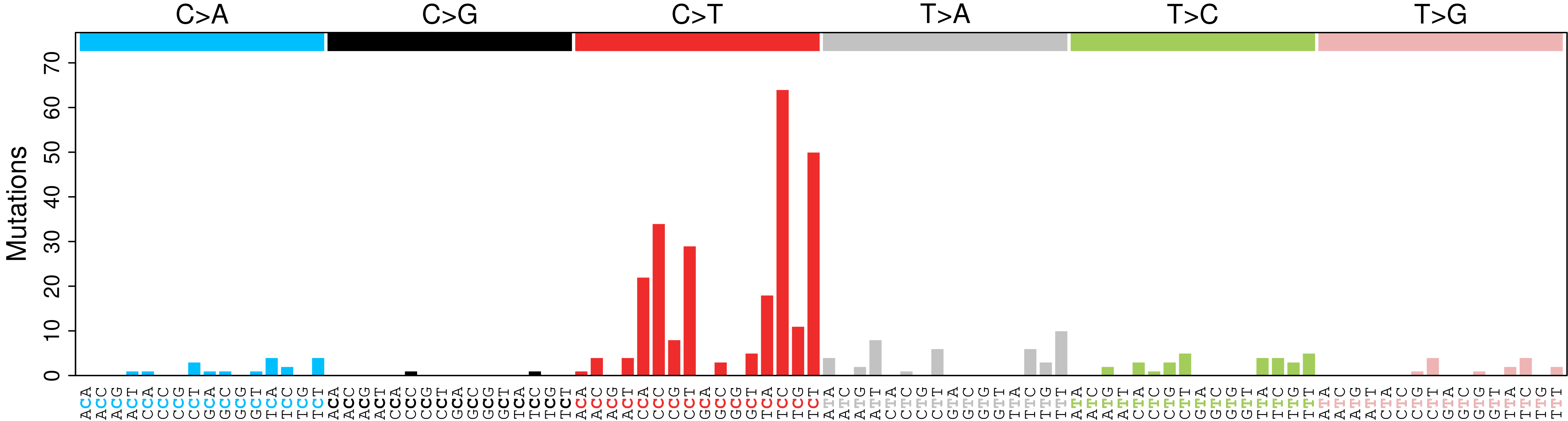
CATD0123a (311 mutations)



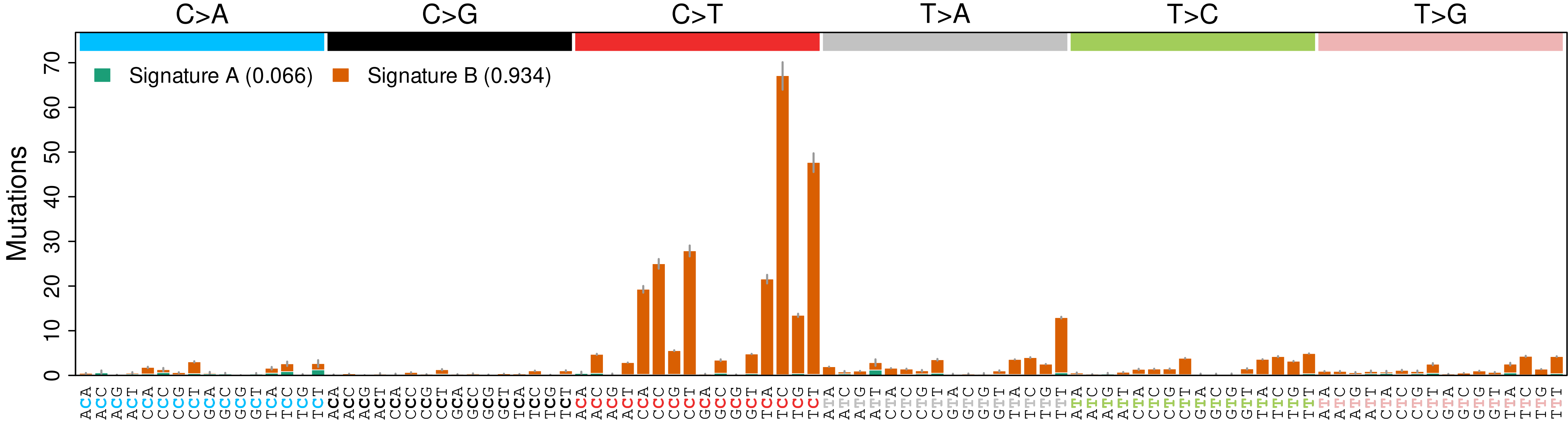
Reconstructed spectrum (cosine similarity = 0.976)



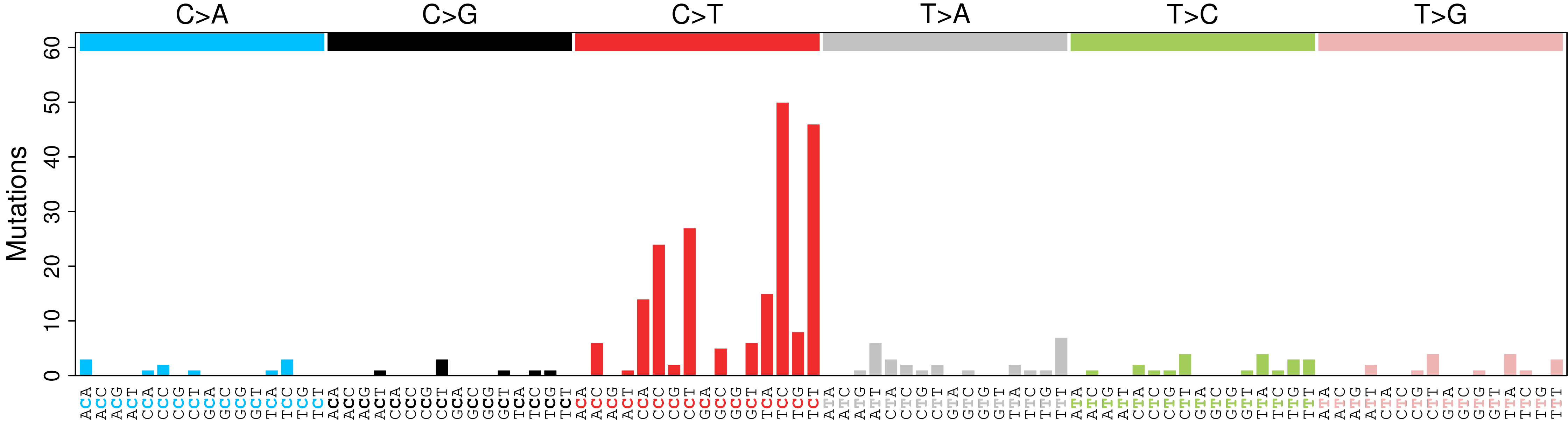
CATD255a (357 mutations)



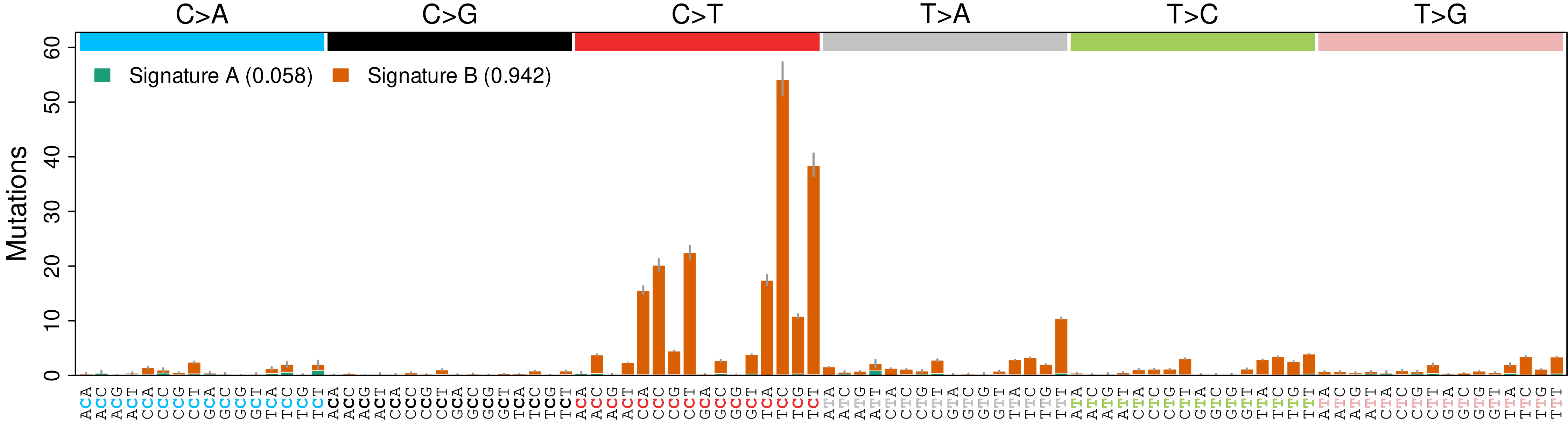
Reconstructed spectrum (cosine similarity = 0.988)



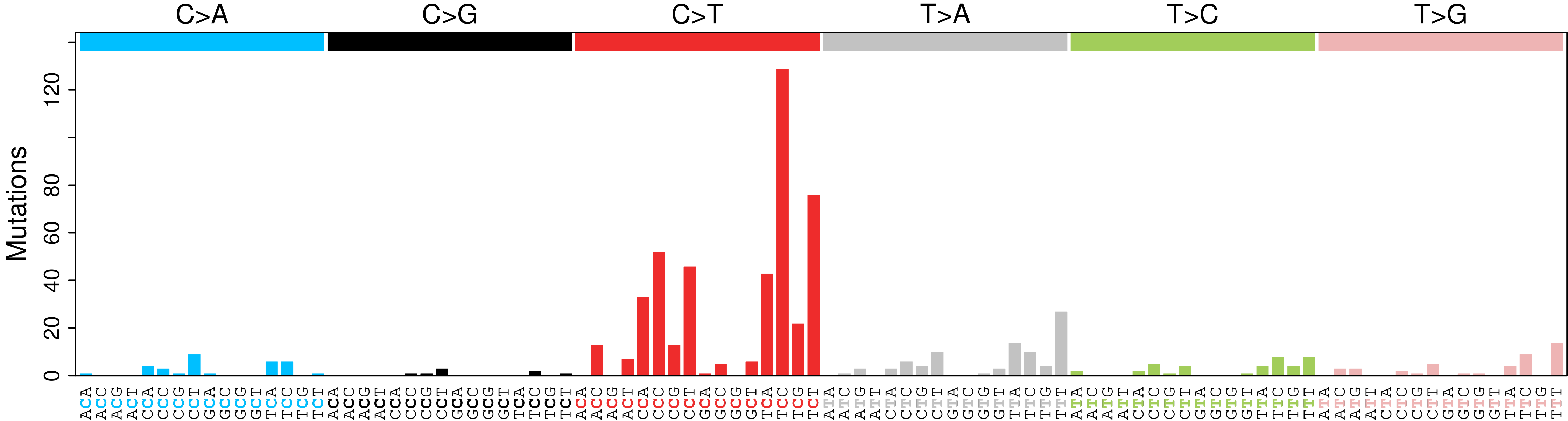
CATD244a (286 mutations)



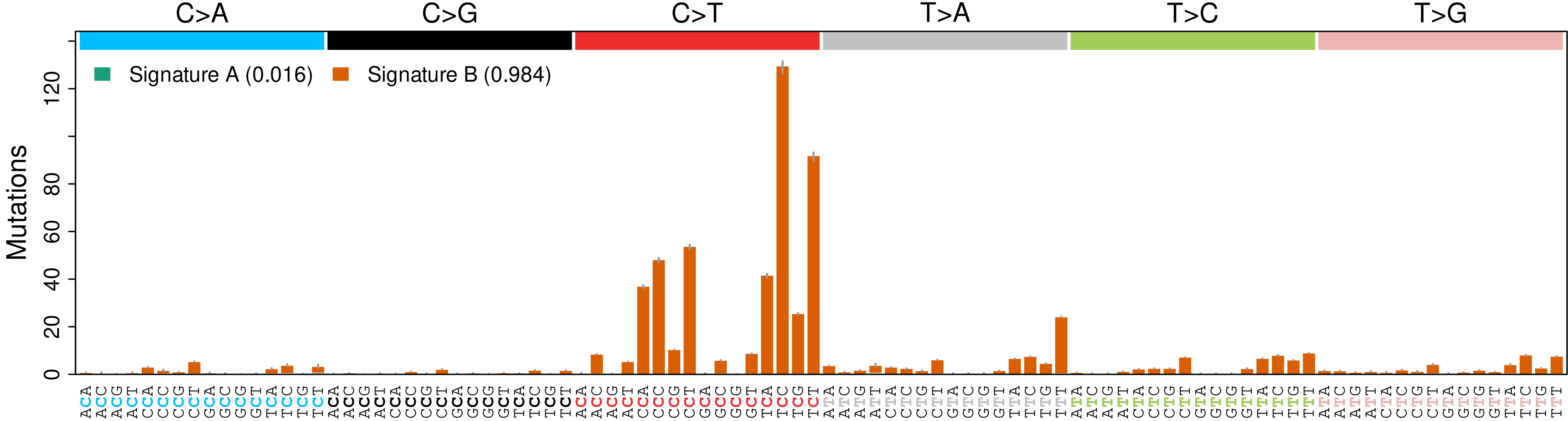
Reconstructed spectrum (cosine similarity = 0.982)



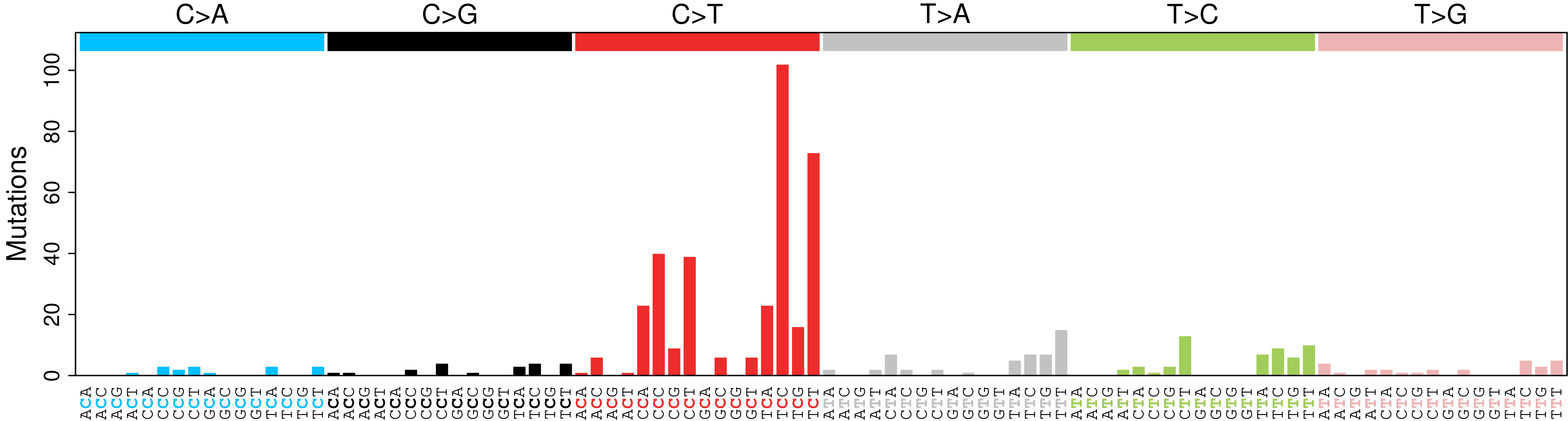
CATD0120a (654 mutations)



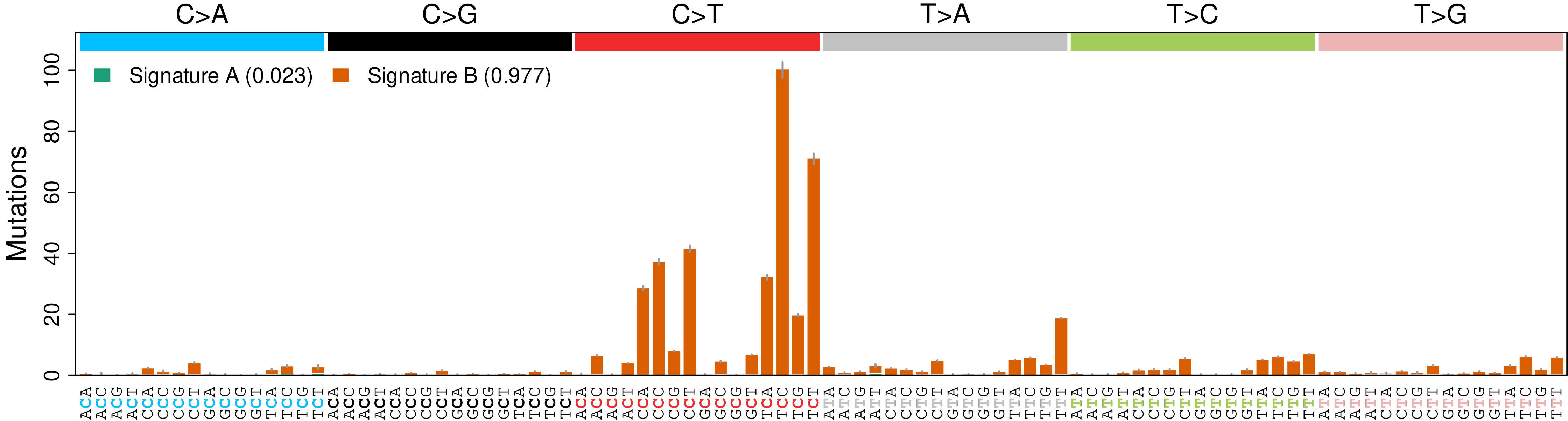
Reconstructed spectrum (cosine similarity = 0.991)



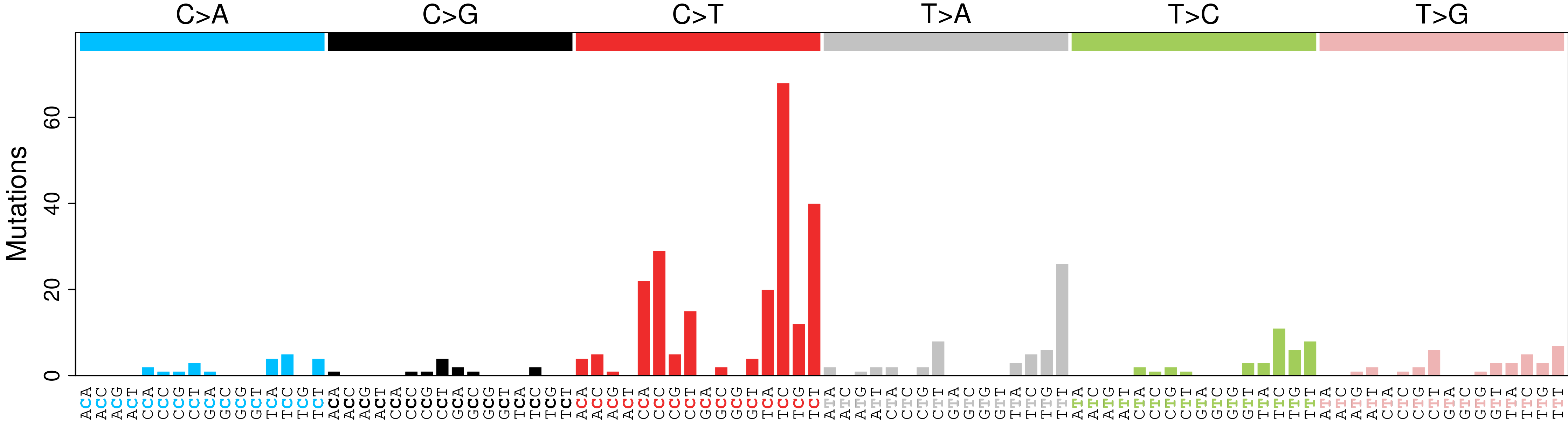
CATD247a (513 mutations)



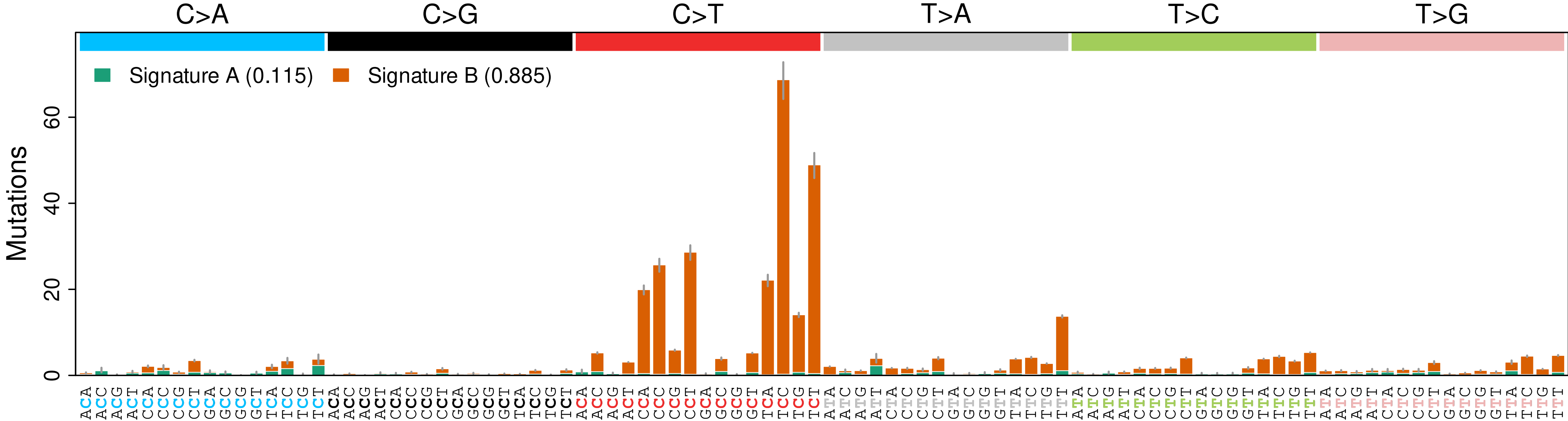
Reconstructed spectrum (cosine similarity = 0.991)



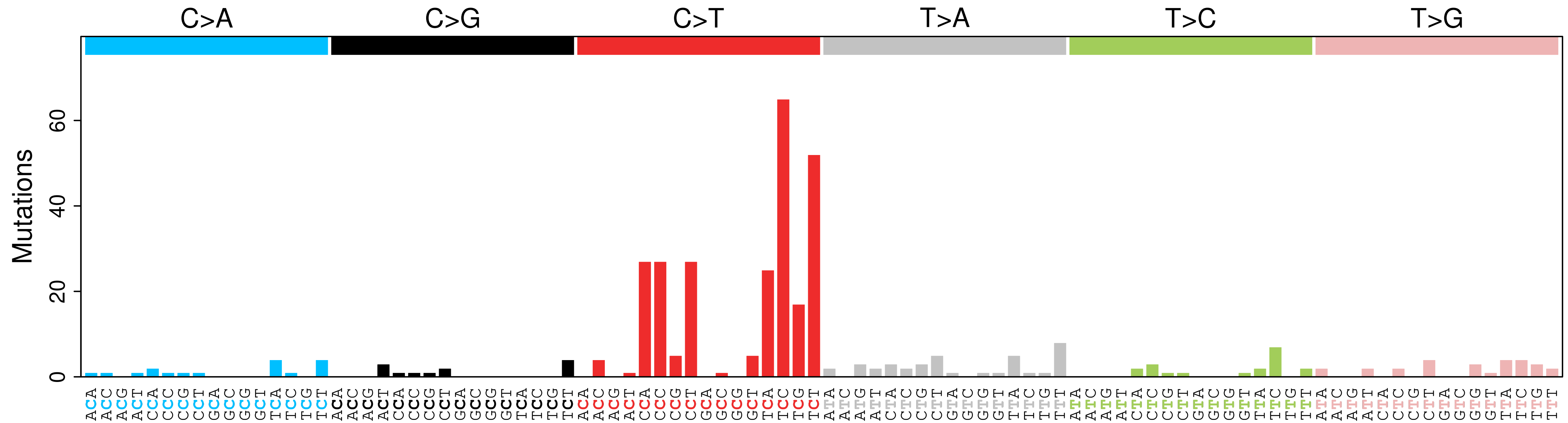
CATD260a (388 mutations)



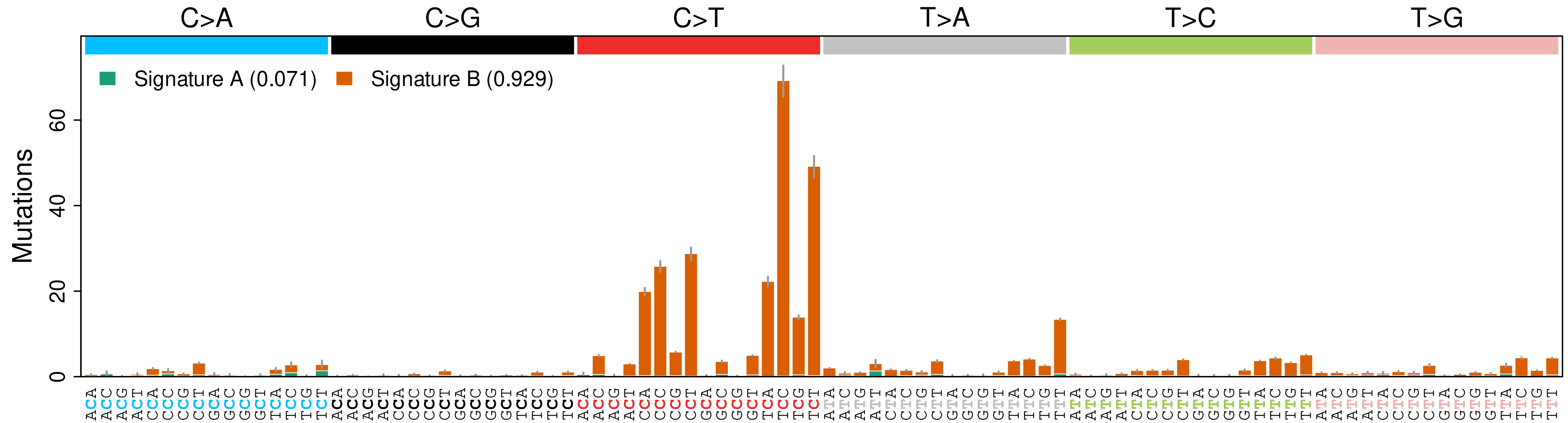
Reconstructed spectrum (cosine similarity = 0.969)



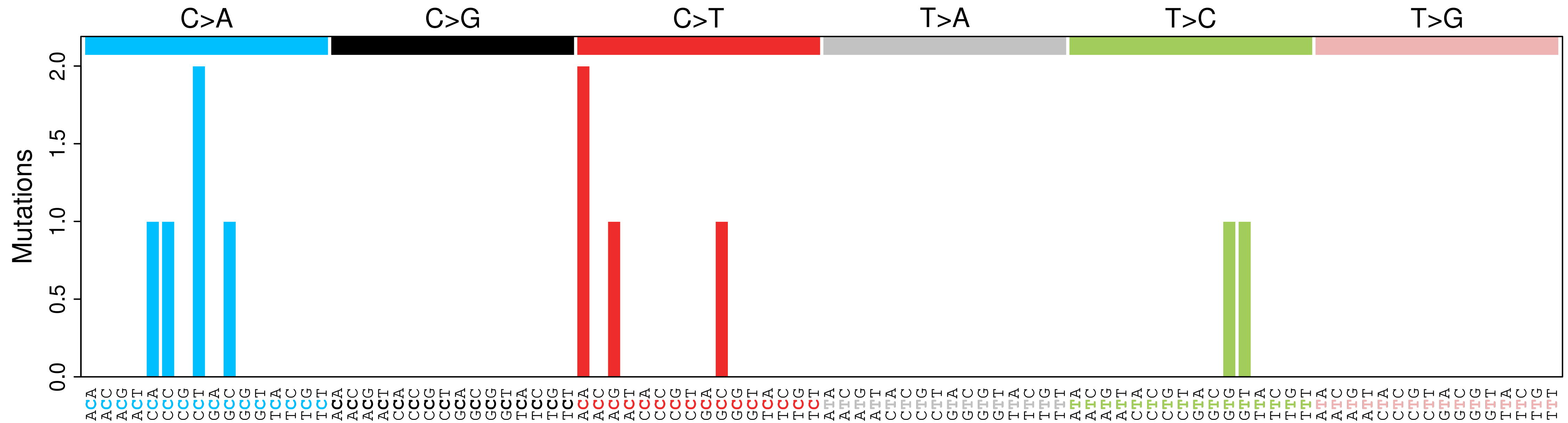
CATD246a (369 mutations)



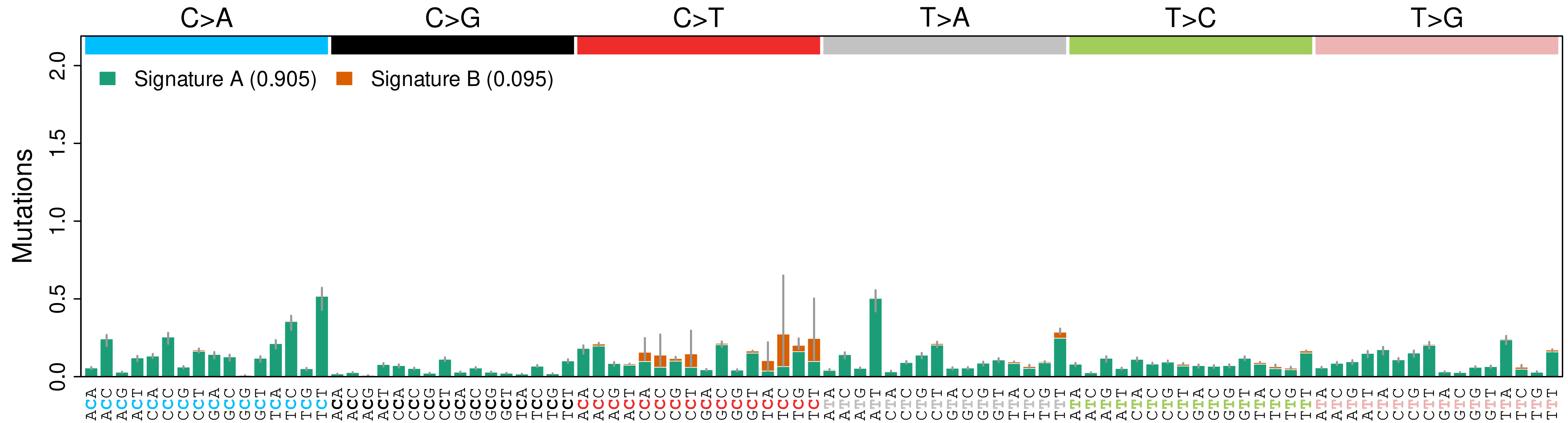
Reconstructed spectrum (cosine similarity = 0.987)



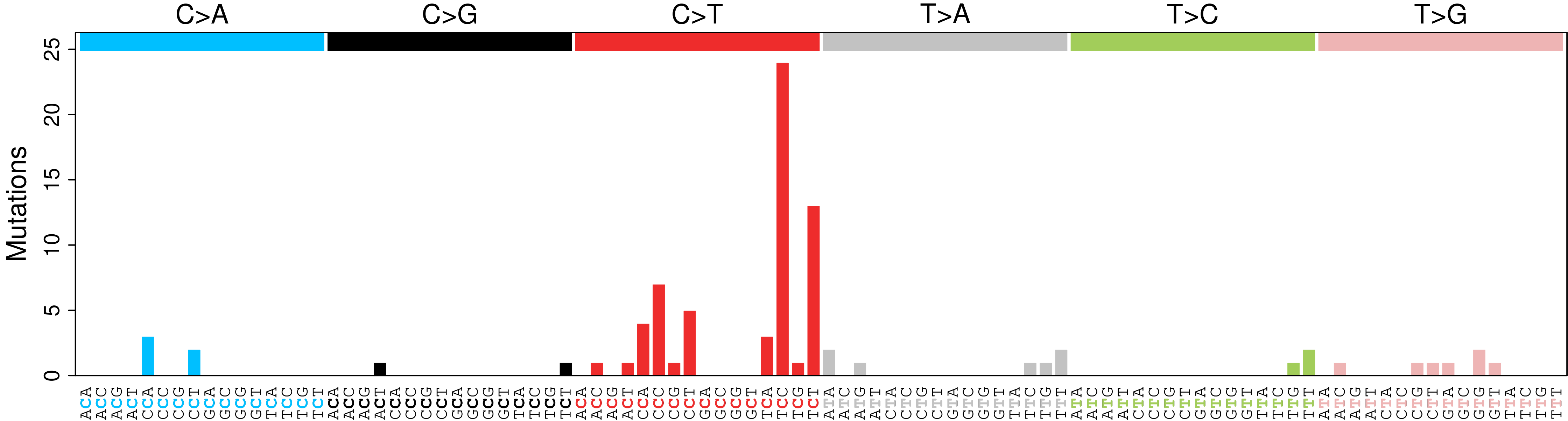
CATD279a (11 mutations)



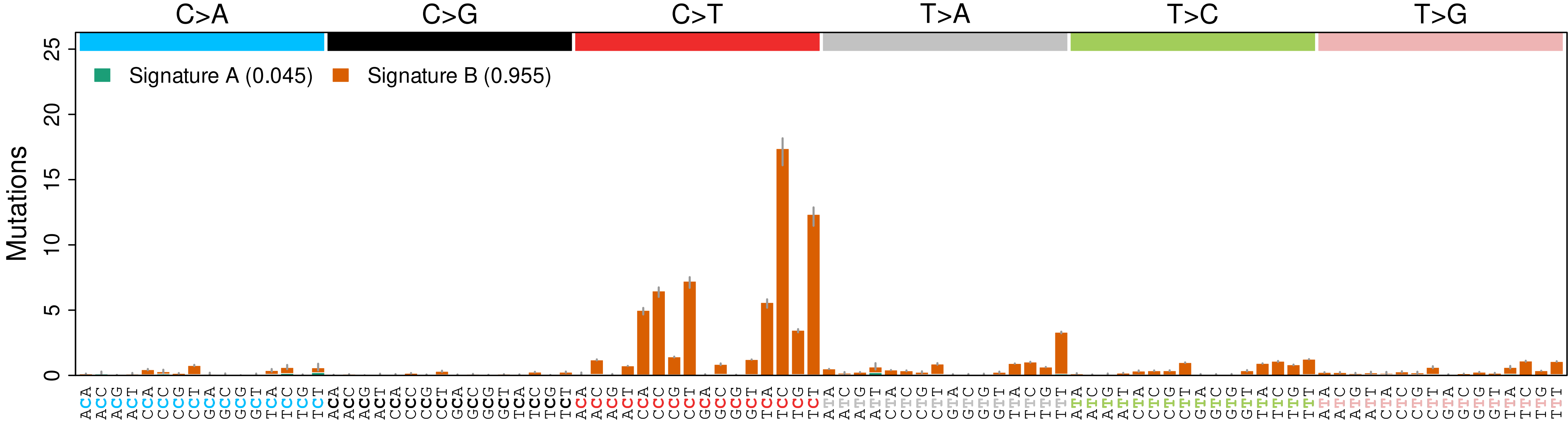
Reconstructed spectrum (cosine similarity = 0.31)



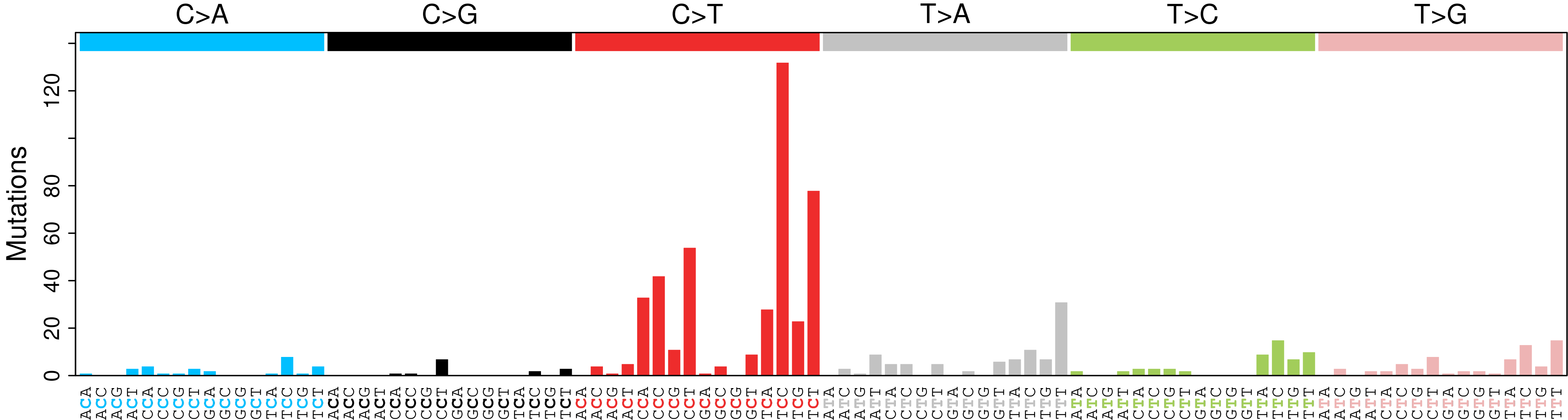
CATD280a (84 mutations)



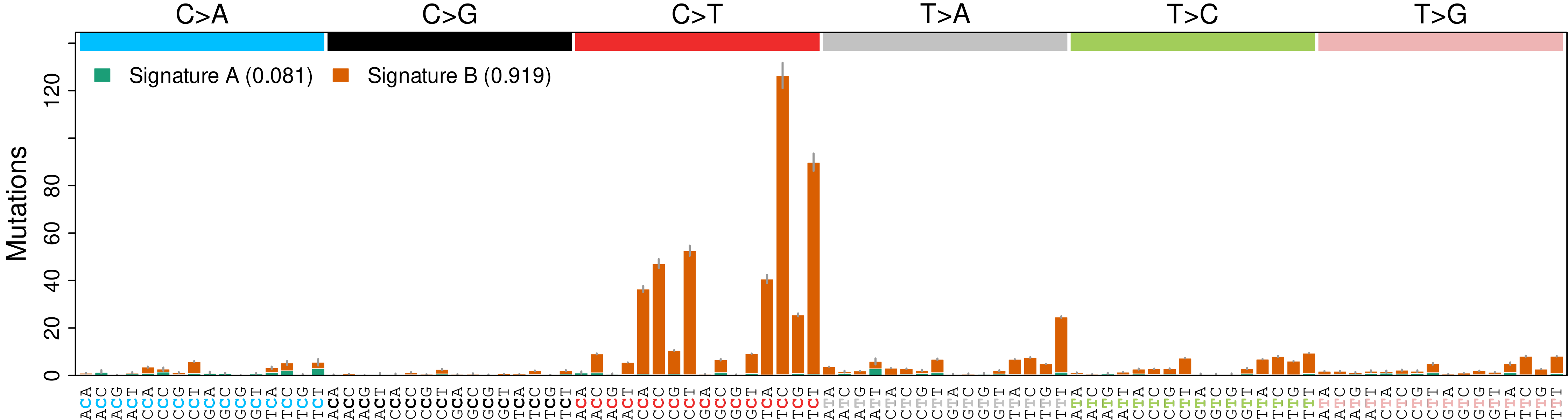
Reconstructed spectrum (cosine similarity = 0.949)



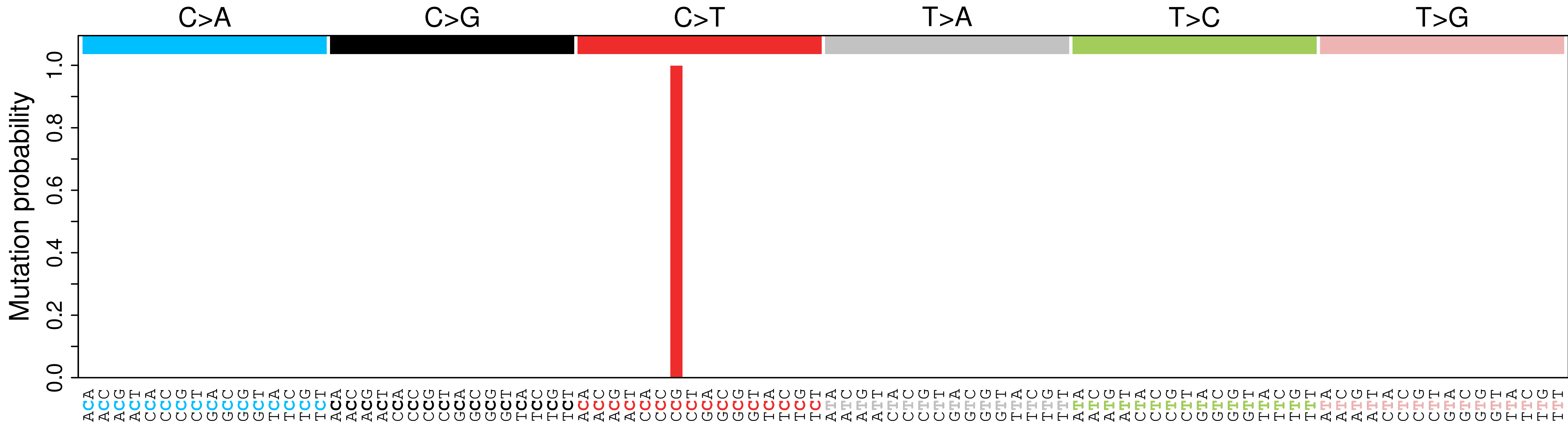
CATD272a (684 mutations)



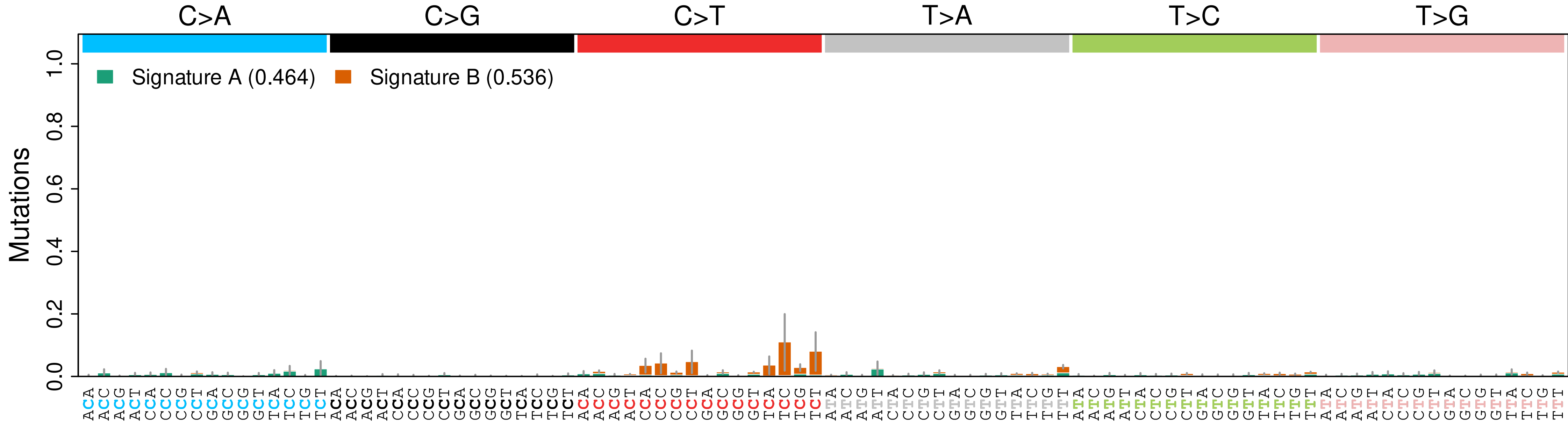
Reconstructed spectrum (cosine similarity = 0.989)



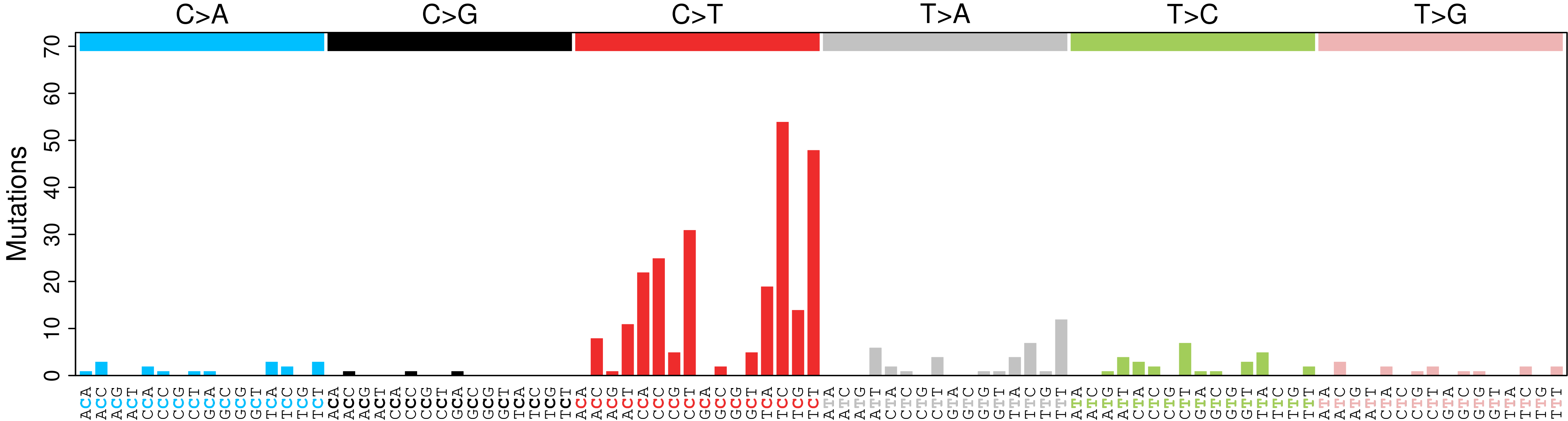
CATD275a



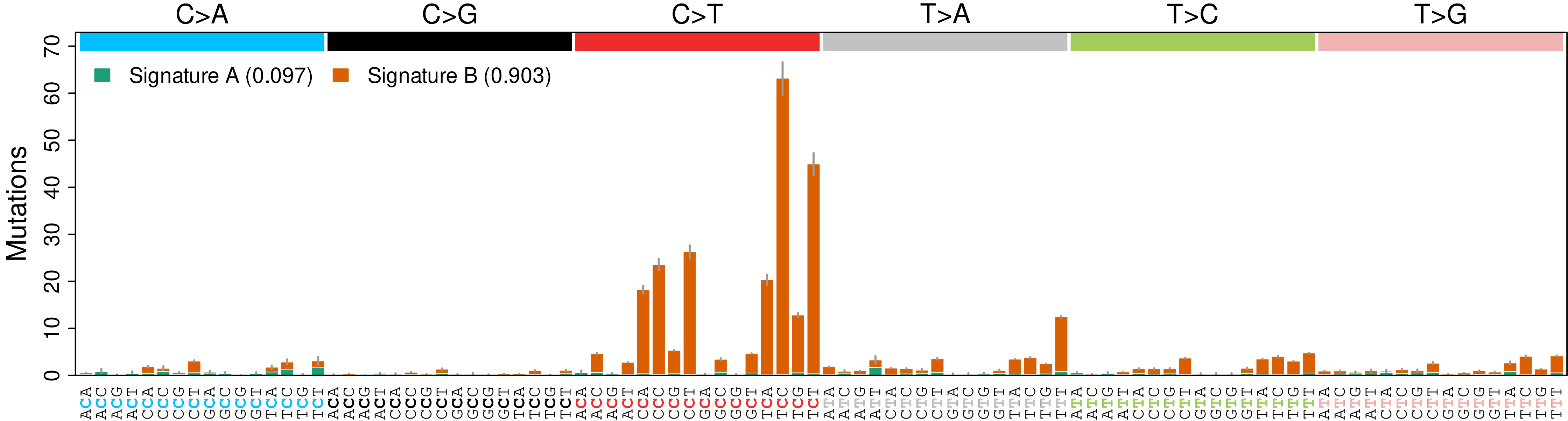
Reconstructed spectrum (cosine similarity = 0.072)



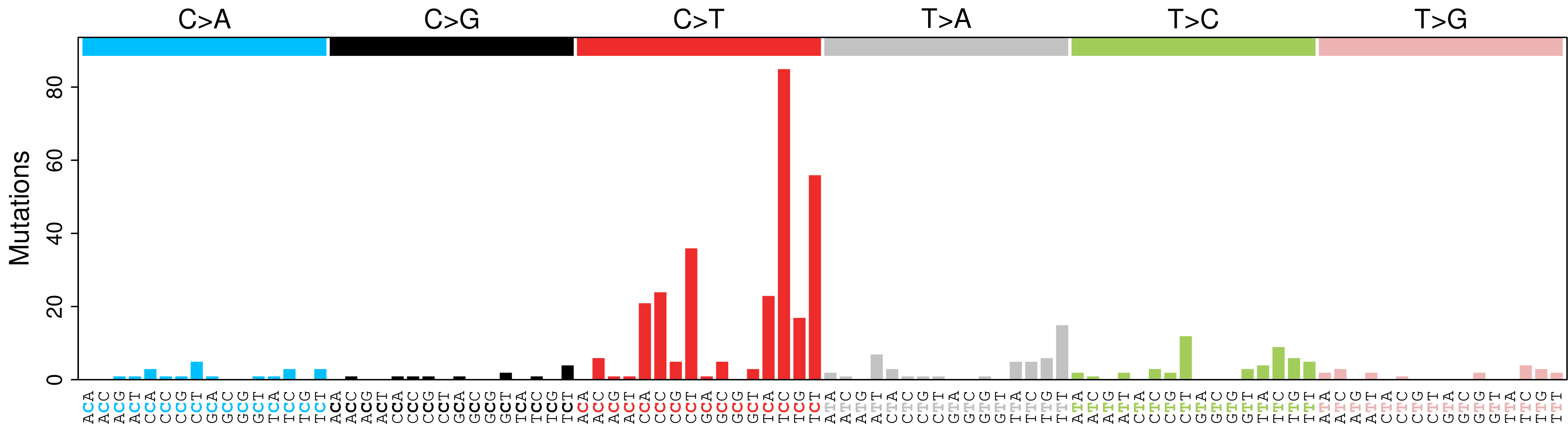
CATD276a (347 mutations)



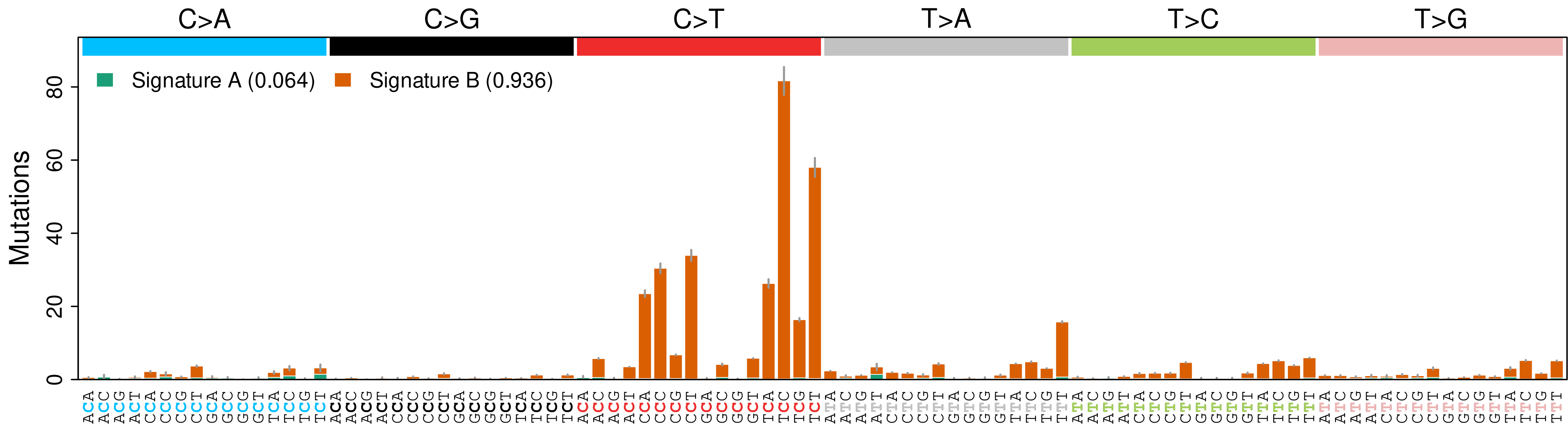
Reconstructed spectrum (cosine similarity = 0.979)



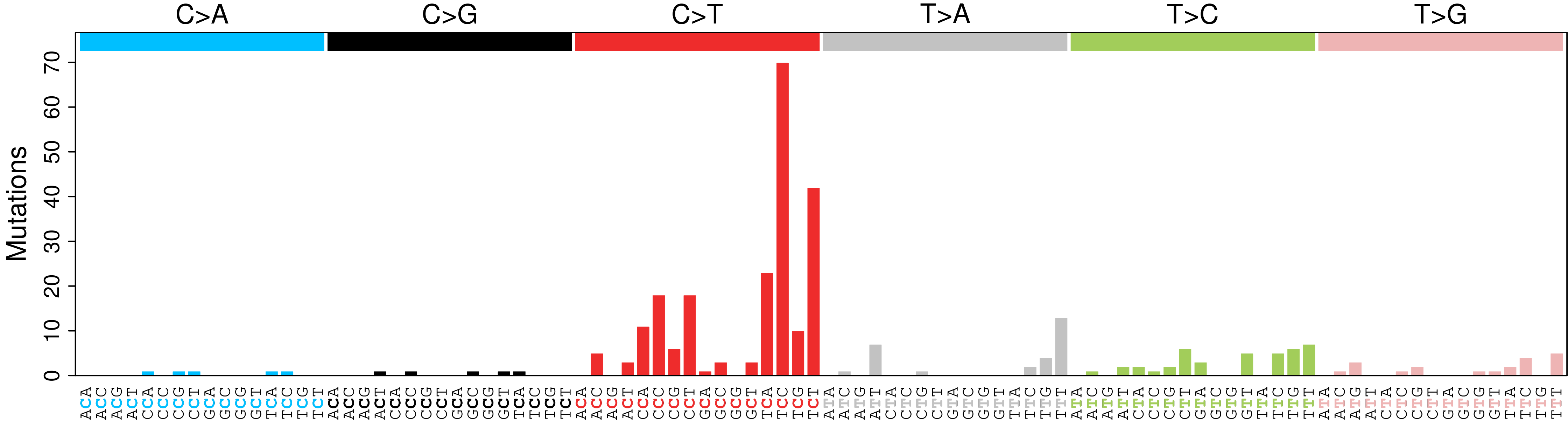
CATD0128a (433 mutations)



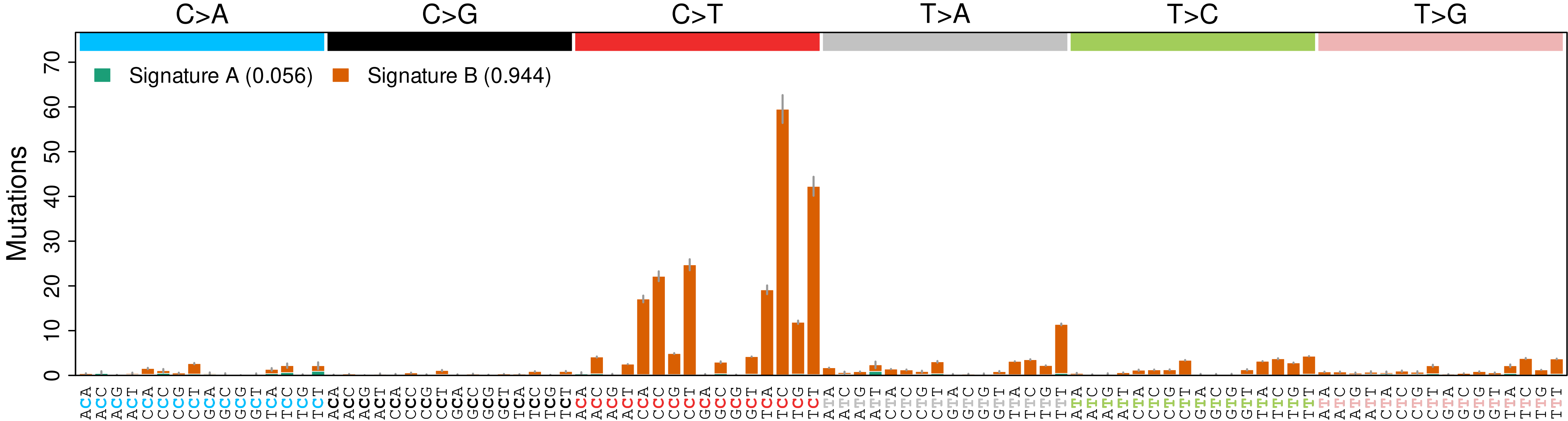
Reconstructed spectrum (cosine similarity = 0.99)



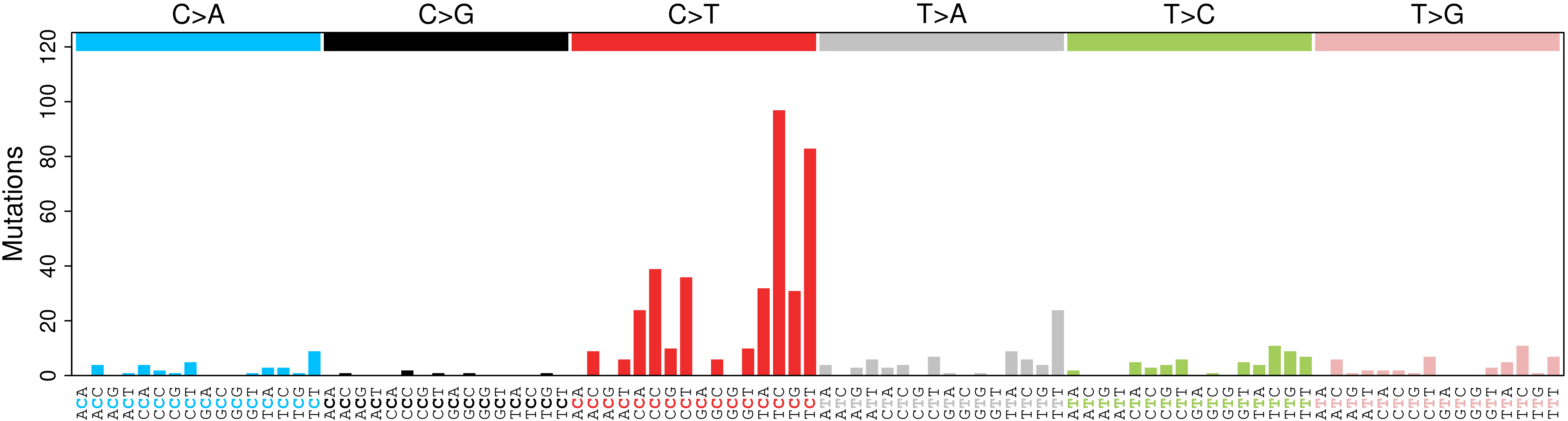
CATD273a (311 mutations)



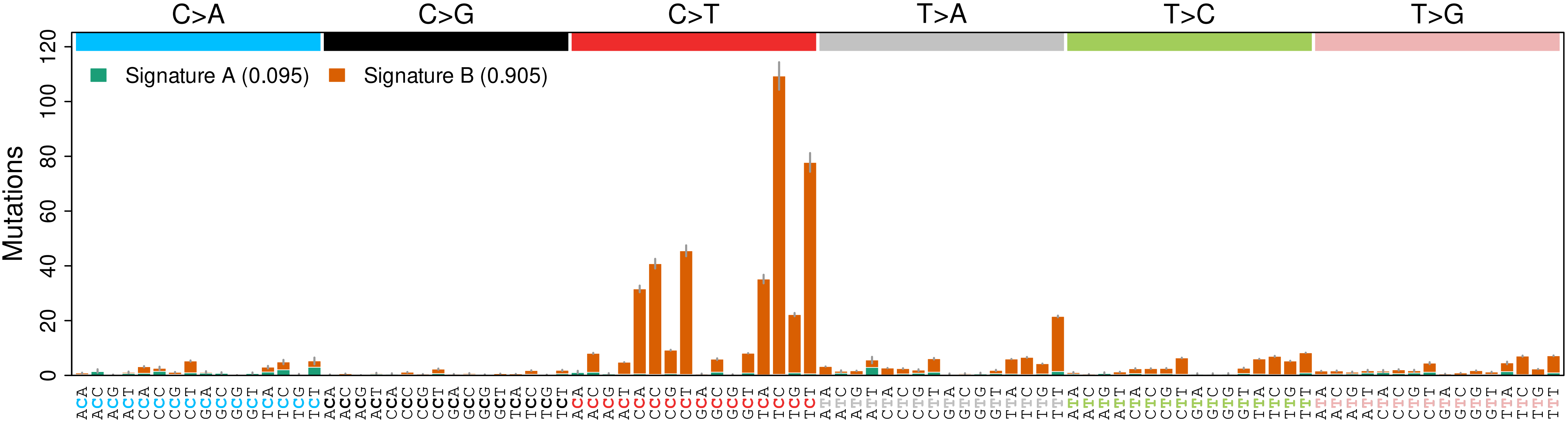
Reconstructed spectrum (cosine similarity = 0.978)

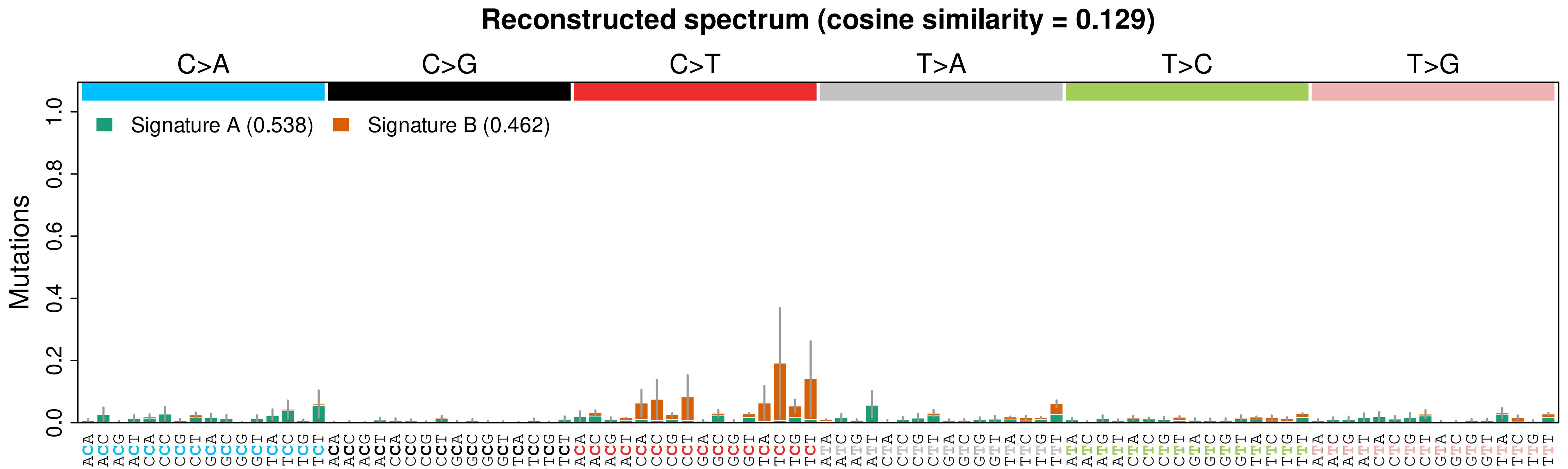
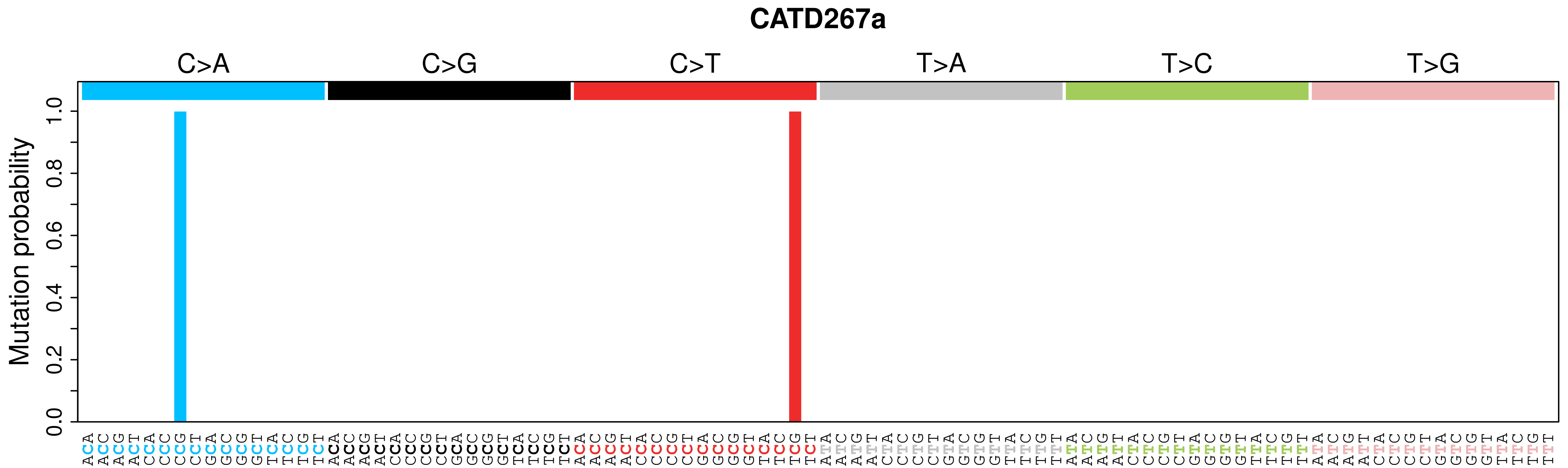


CATD253a (600 mutations)

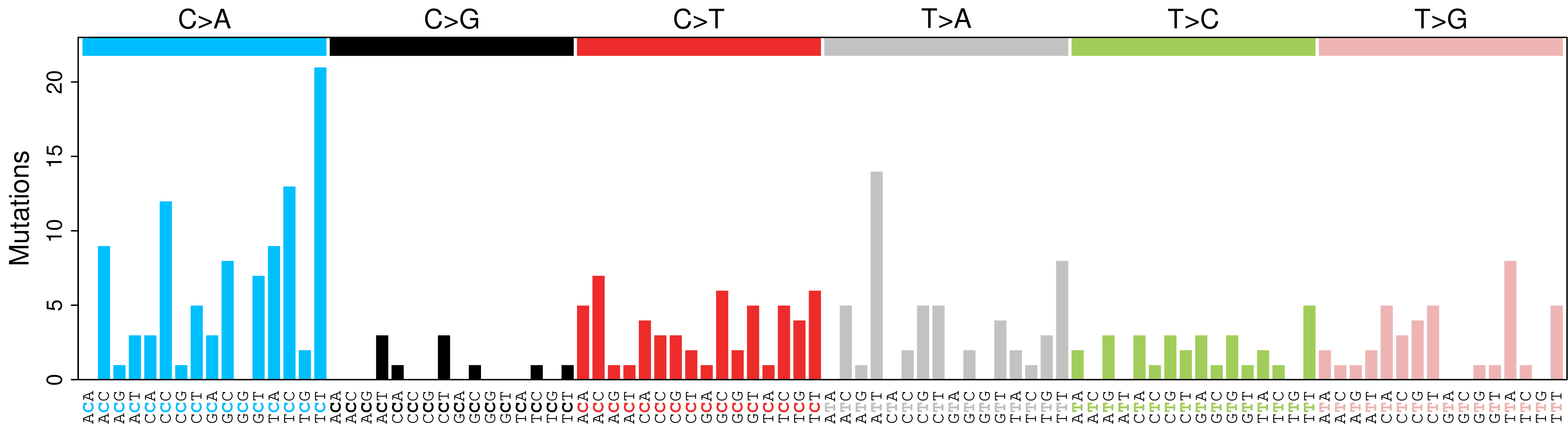


Reconstructed spectrum (cosine similarity = 0.989)

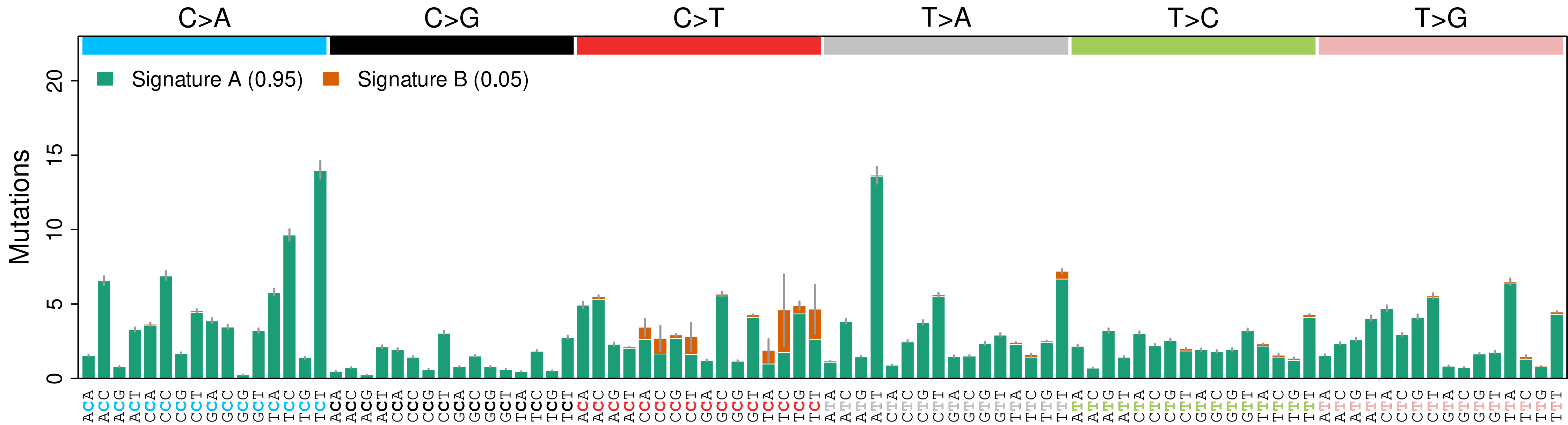




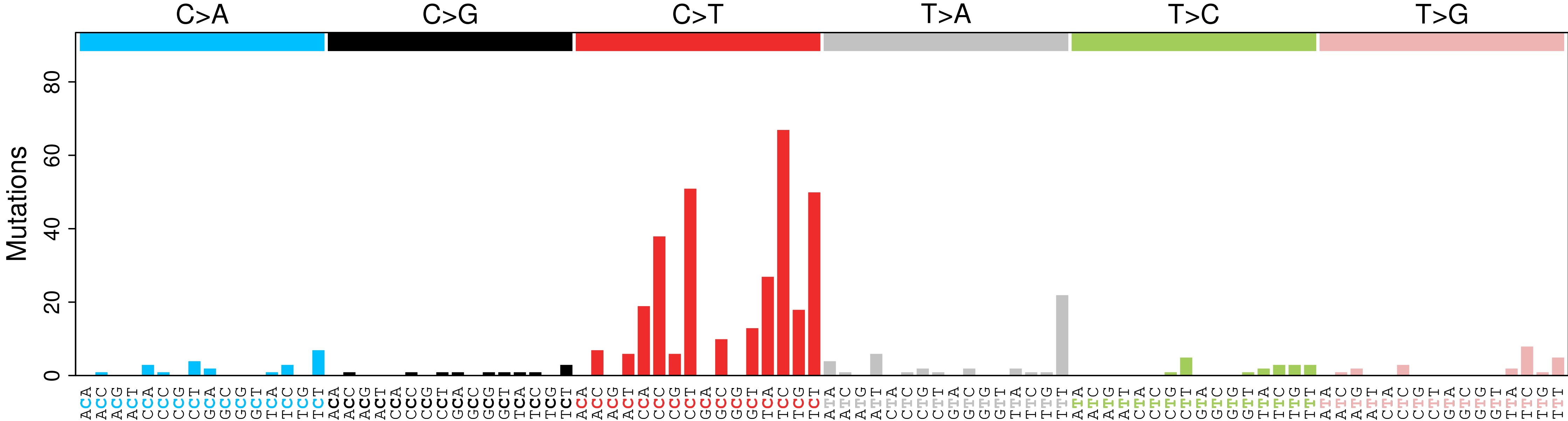
CATD186a (284 mutations)



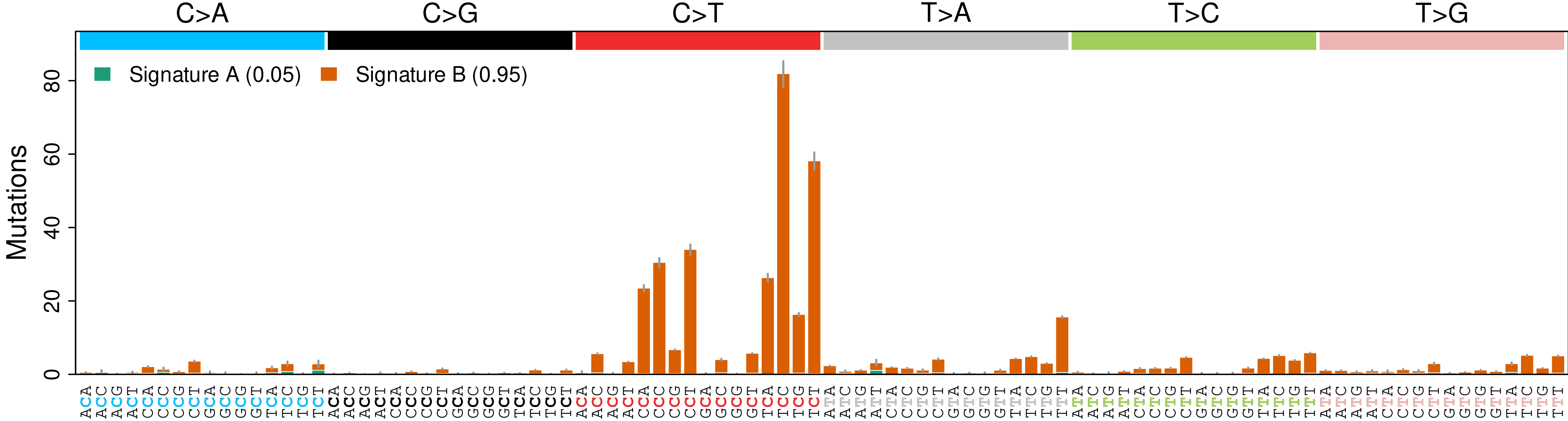
Reconstructed spectrum (cosine similarity = 0.954)



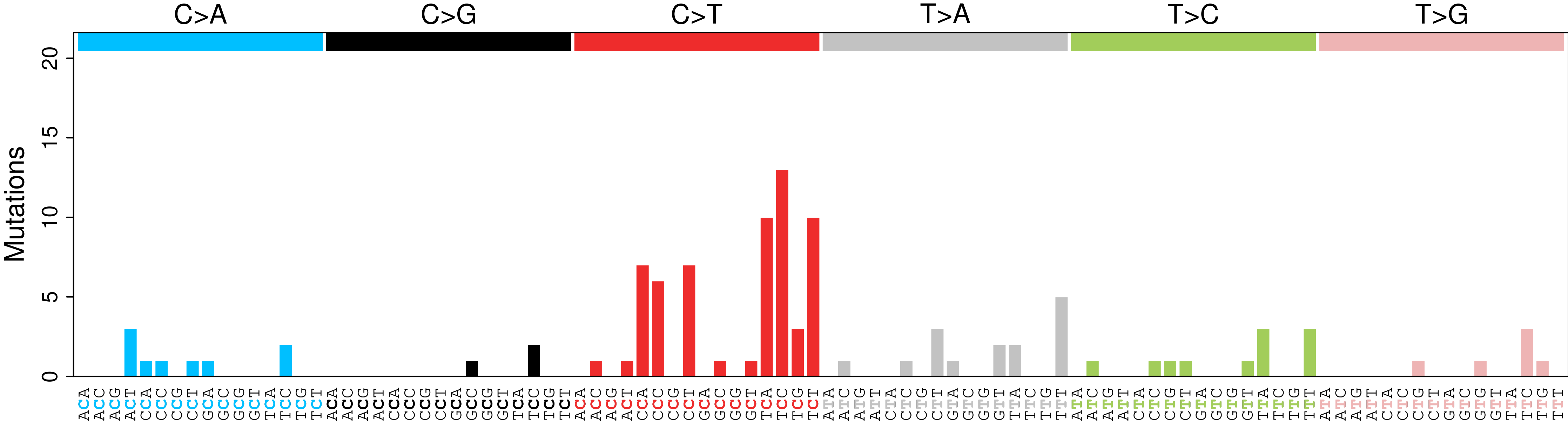
CATD0632c (428 mutations)



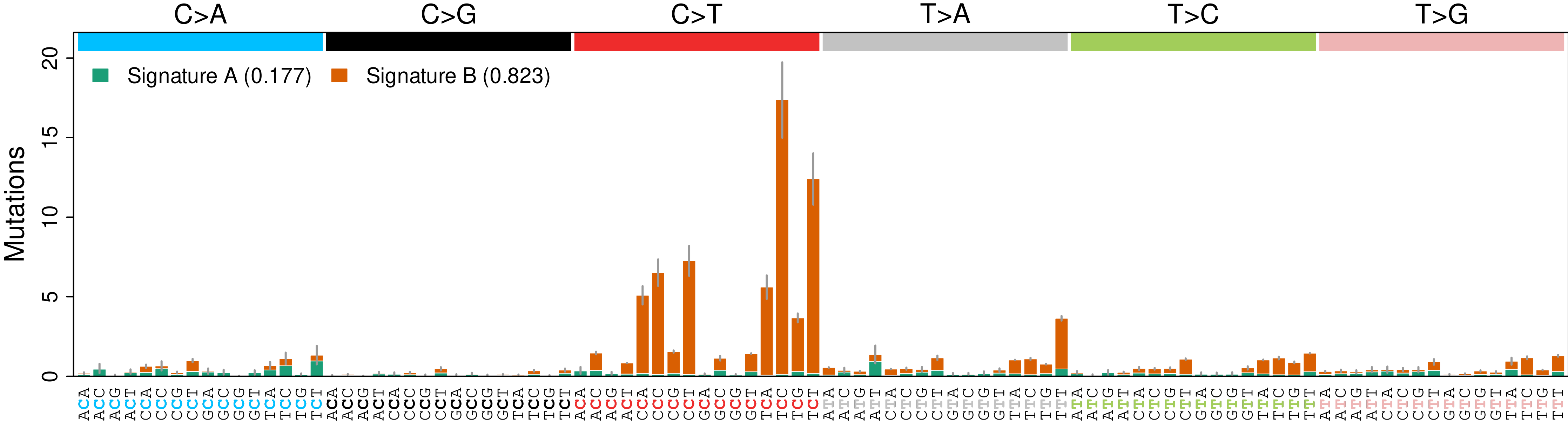
Reconstructed spectrum (cosine similarity = 0.967)



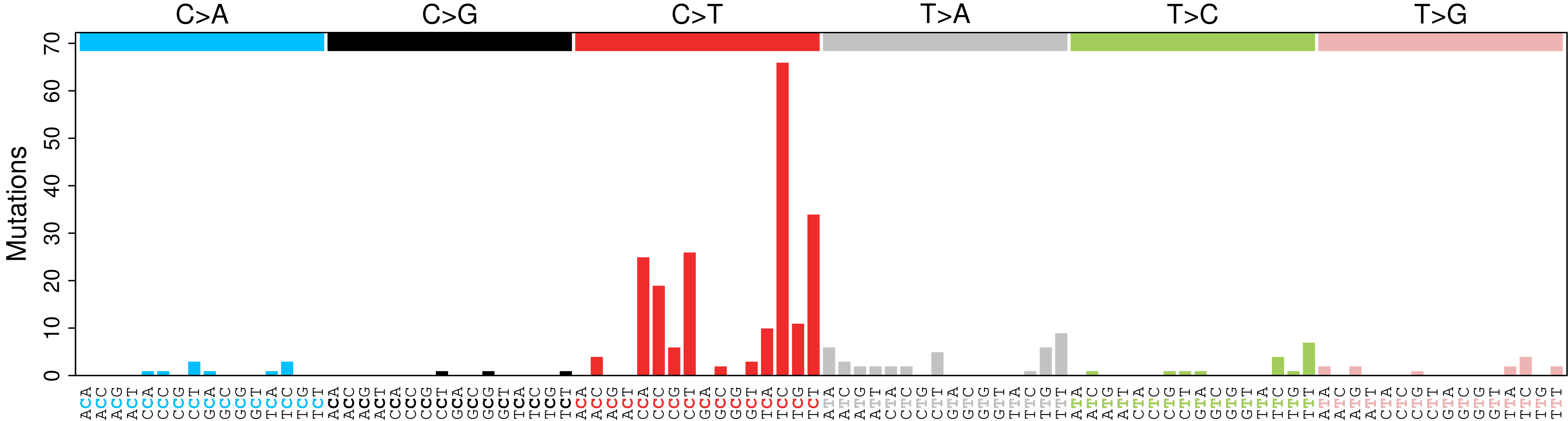
CATD0126a (104 mutations)



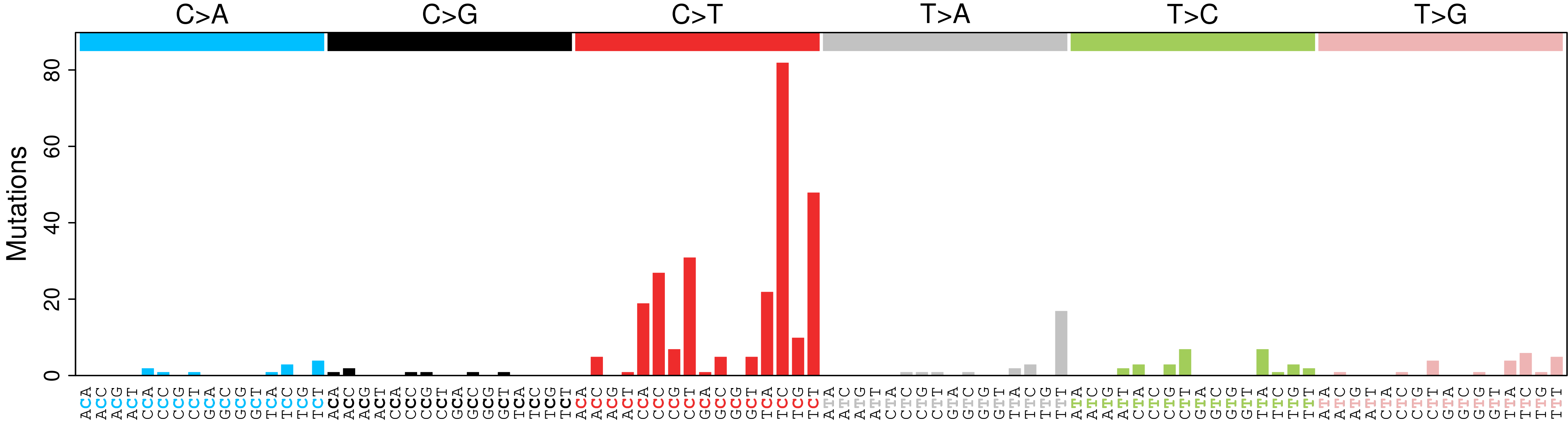
Reconstructed spectrum (cosine similarity = 0.922)



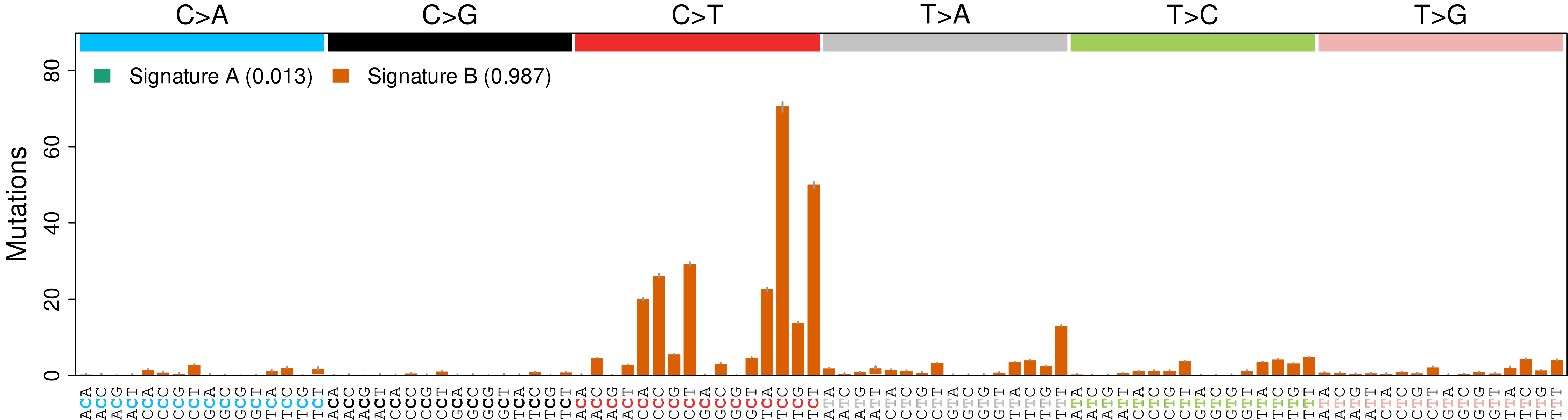
CATD274a (286 mutations)



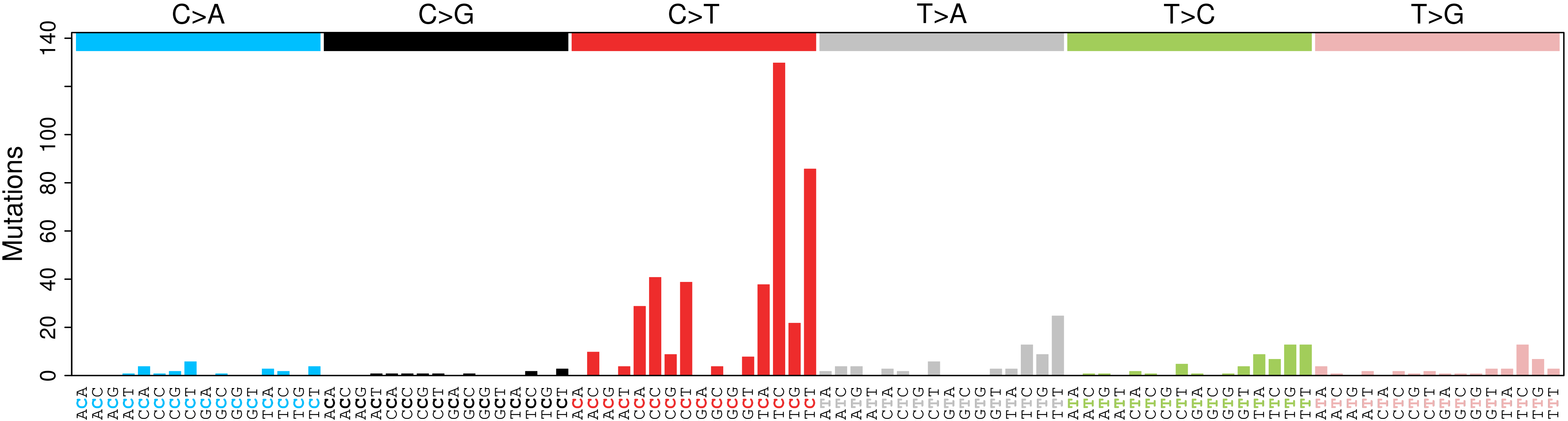
CATD243a (359 mutations)



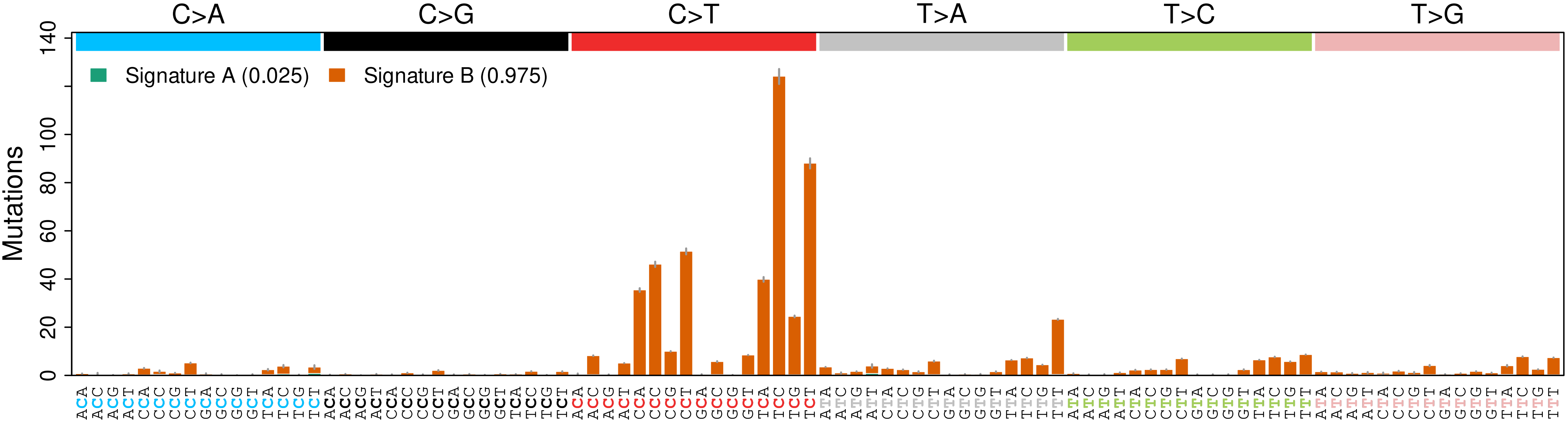
Reconstructed spectrum (cosine similarity = 0.99)



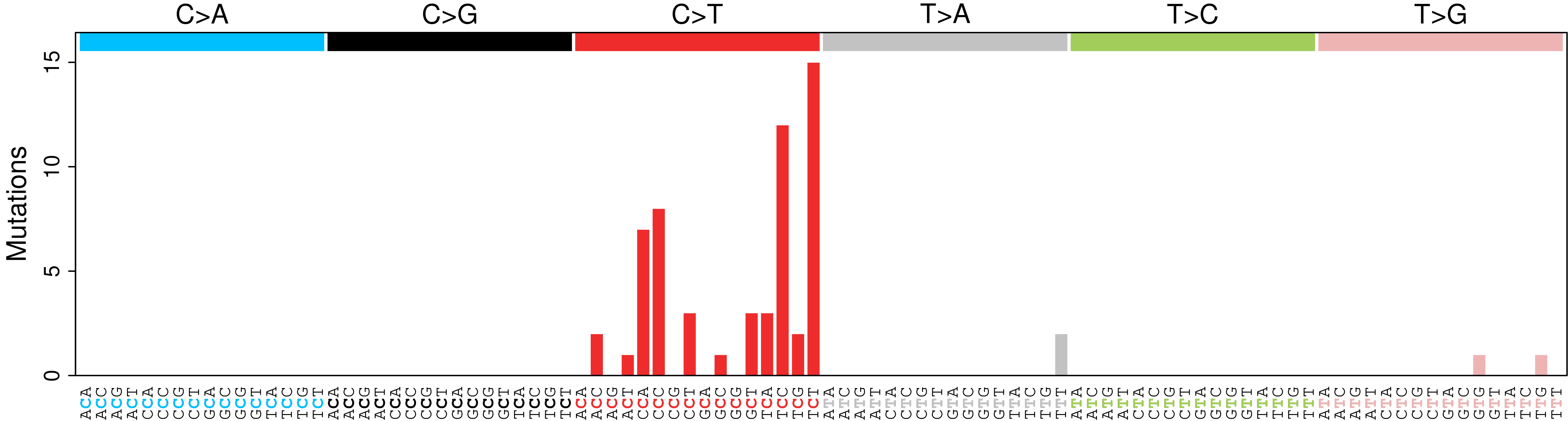
CATD264a (631 mutations)



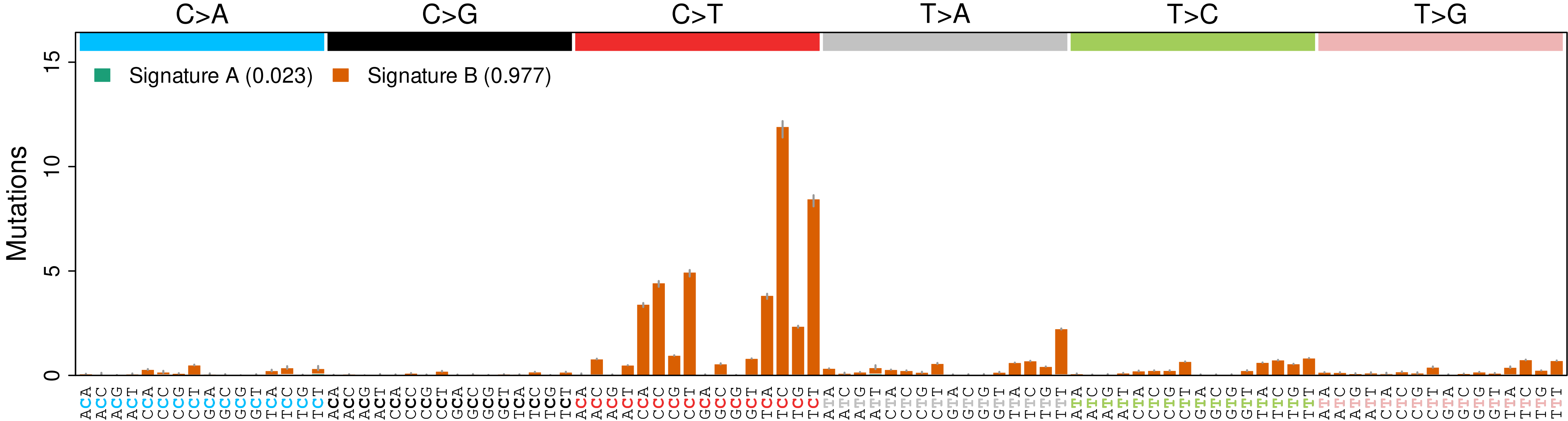
Reconstructed spectrum (cosine similarity = 0.991)



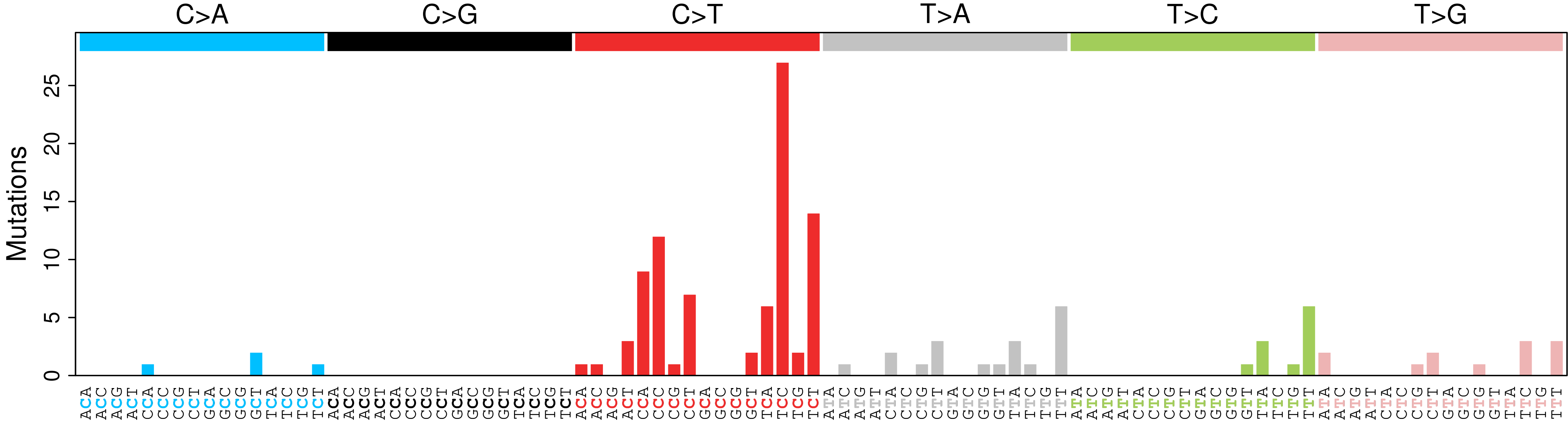
CATD0135a (61 mutations)



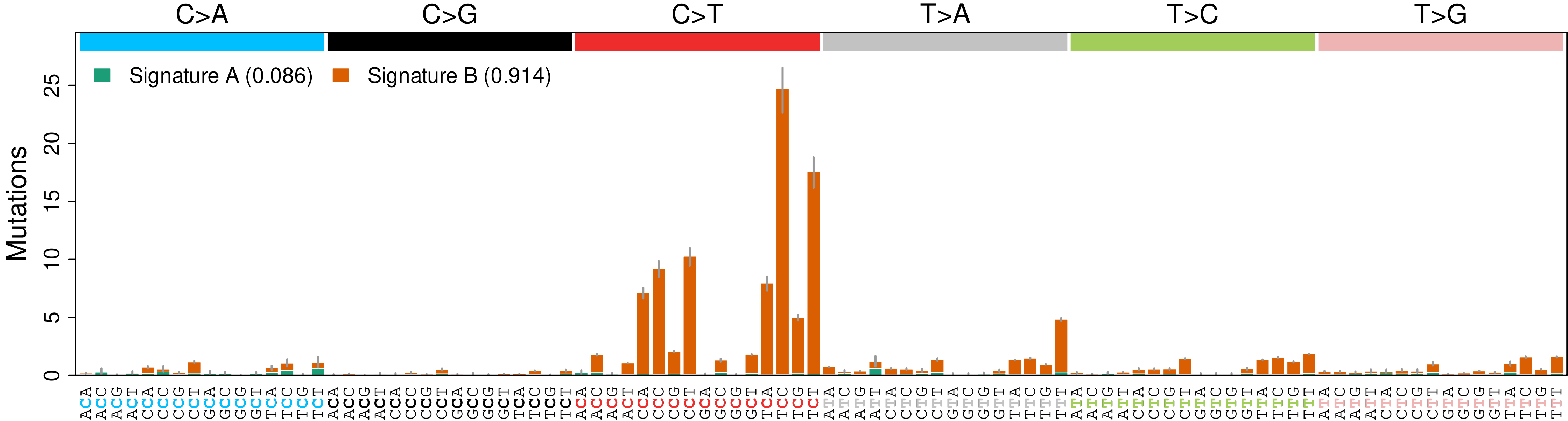
Reconstructed spectrum (cosine similarity = 0.927)



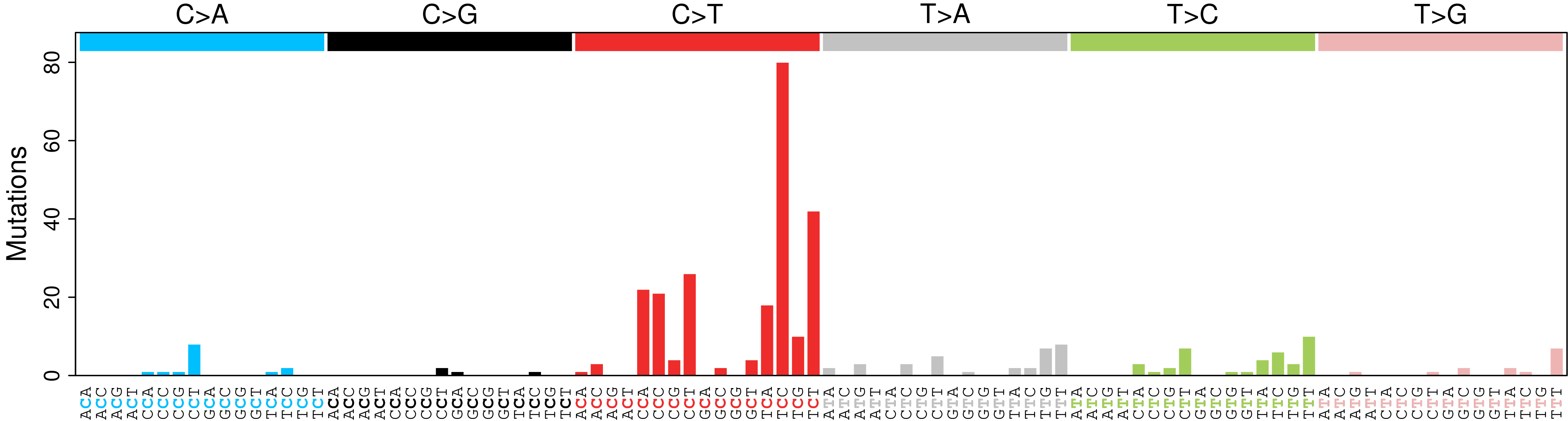
CATD282a (131 mutations)



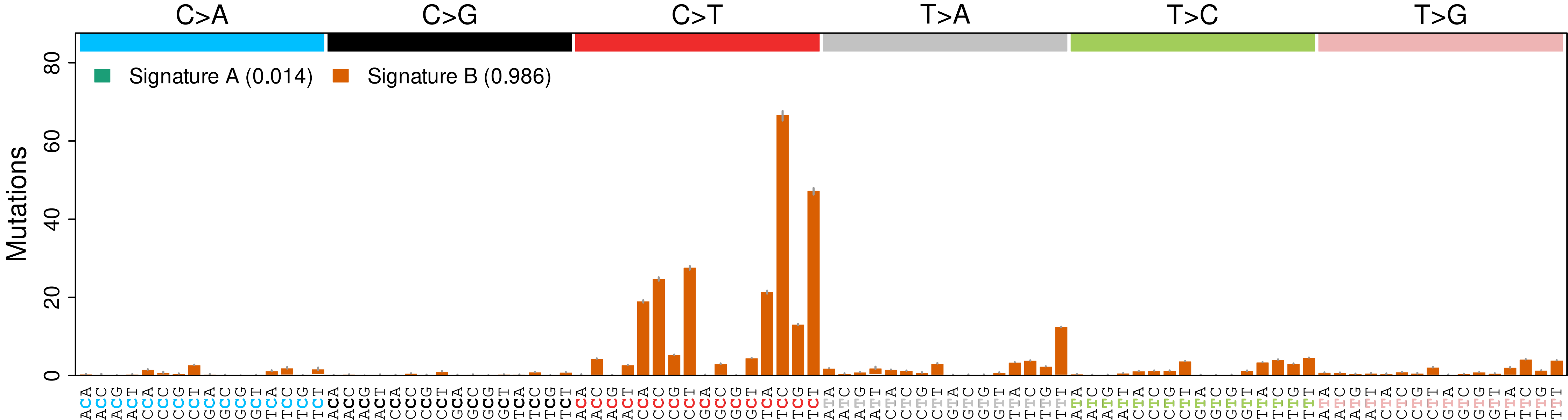
Reconstructed spectrum (cosine similarity = 0.957)



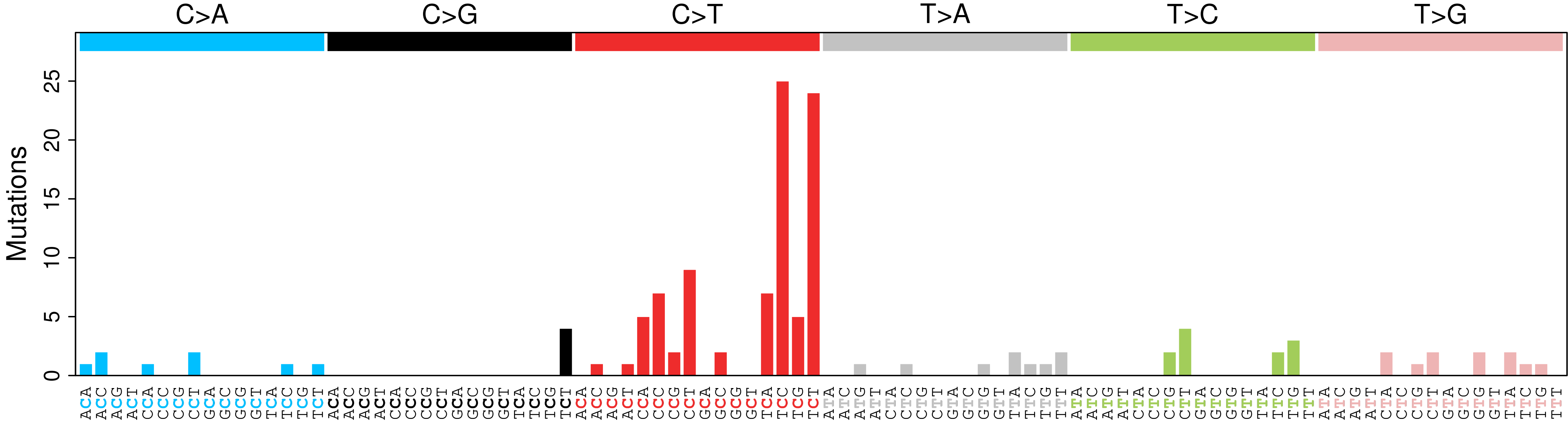
CATD250a (336 mutations)



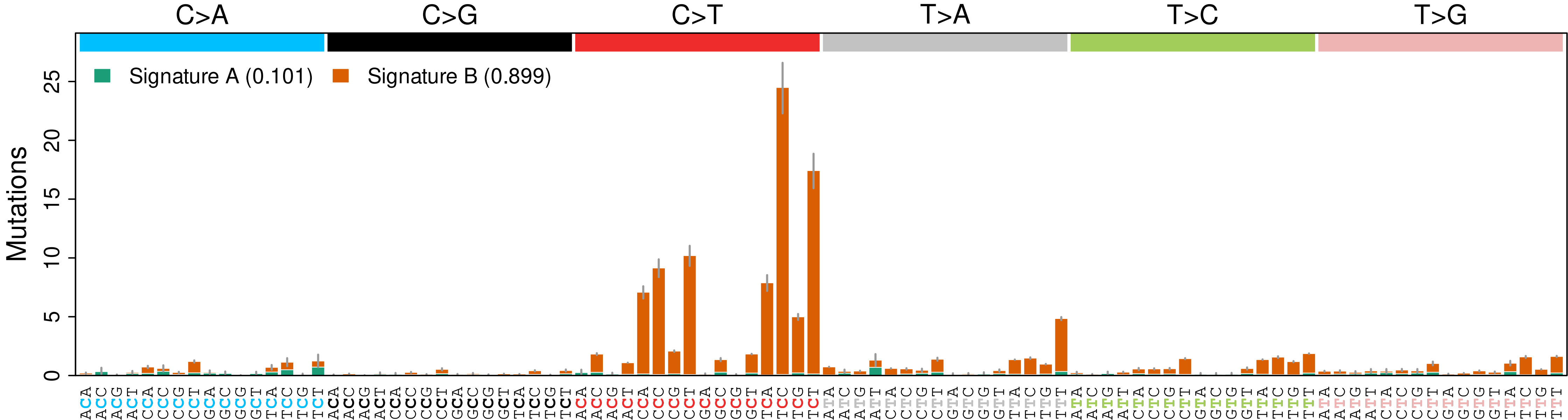
Reconstructed spectrum (cosine similarity = 0.98)



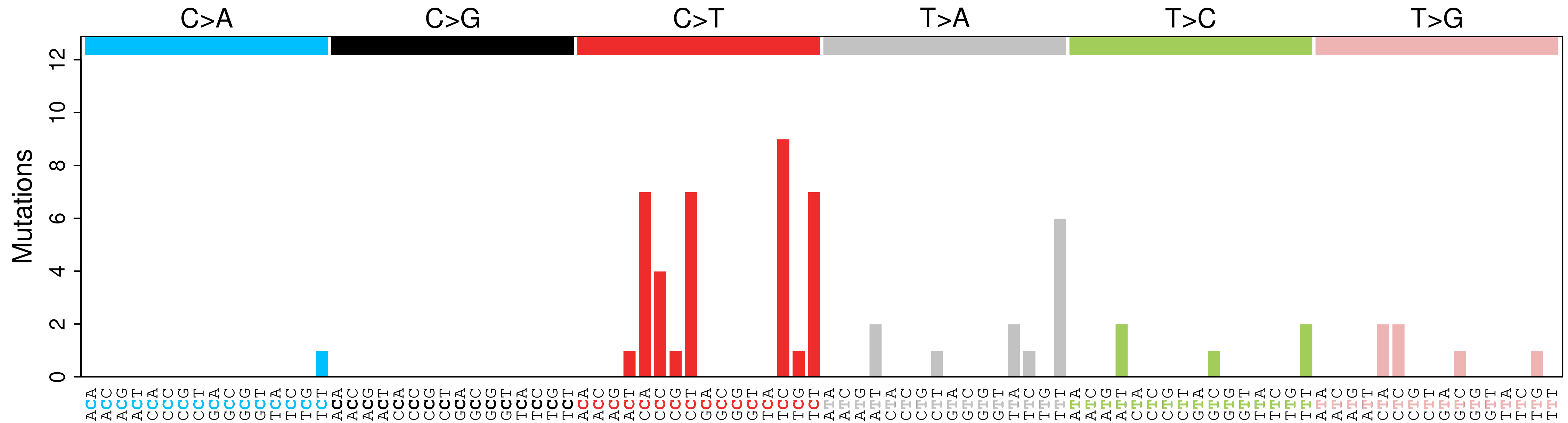
CATD263a (131 mutations)



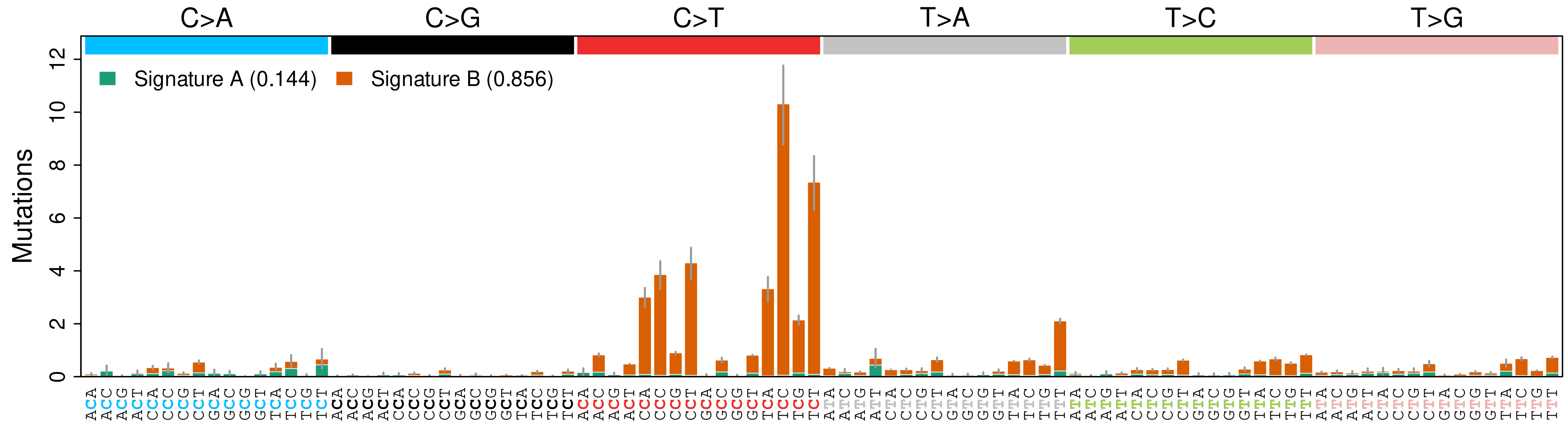
Reconstructed spectrum (cosine similarity = 0.96)



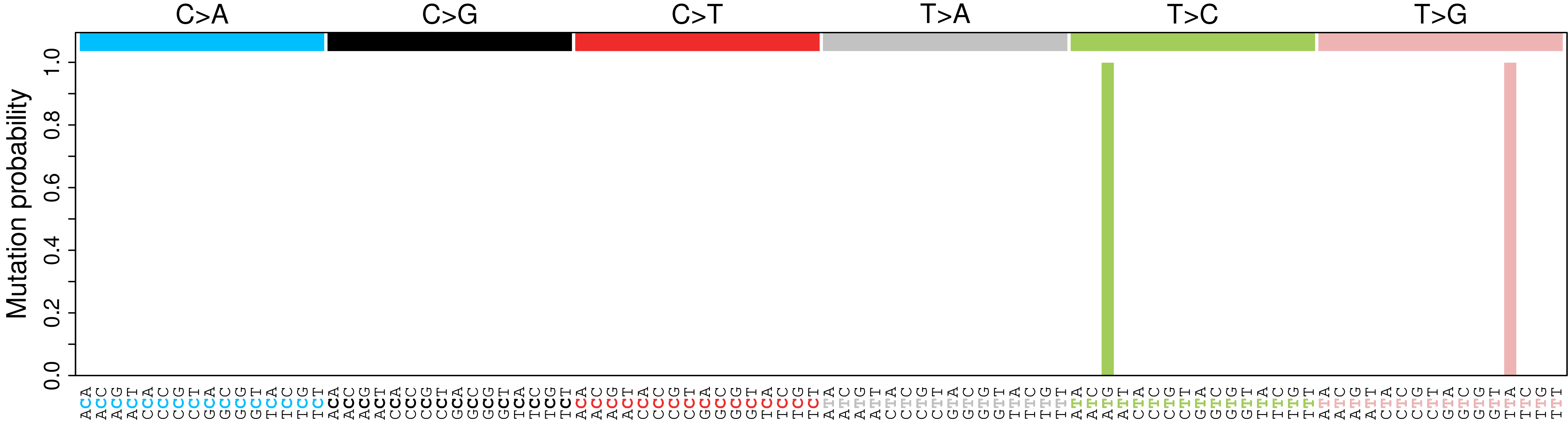
CATD254a (61 mutations)



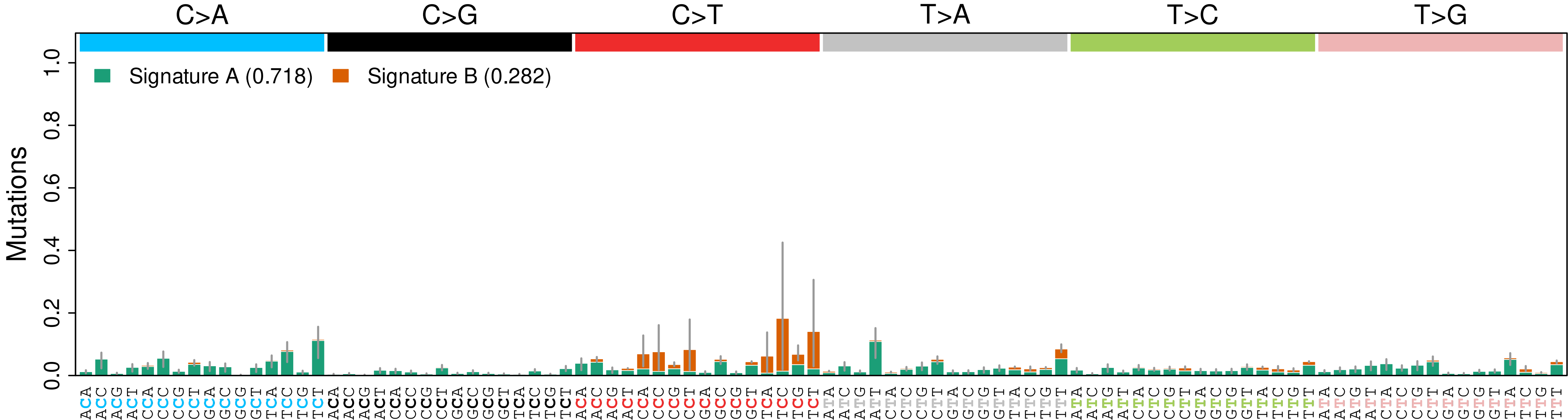
Reconstructed spectrum (cosine similarity = 0.867)



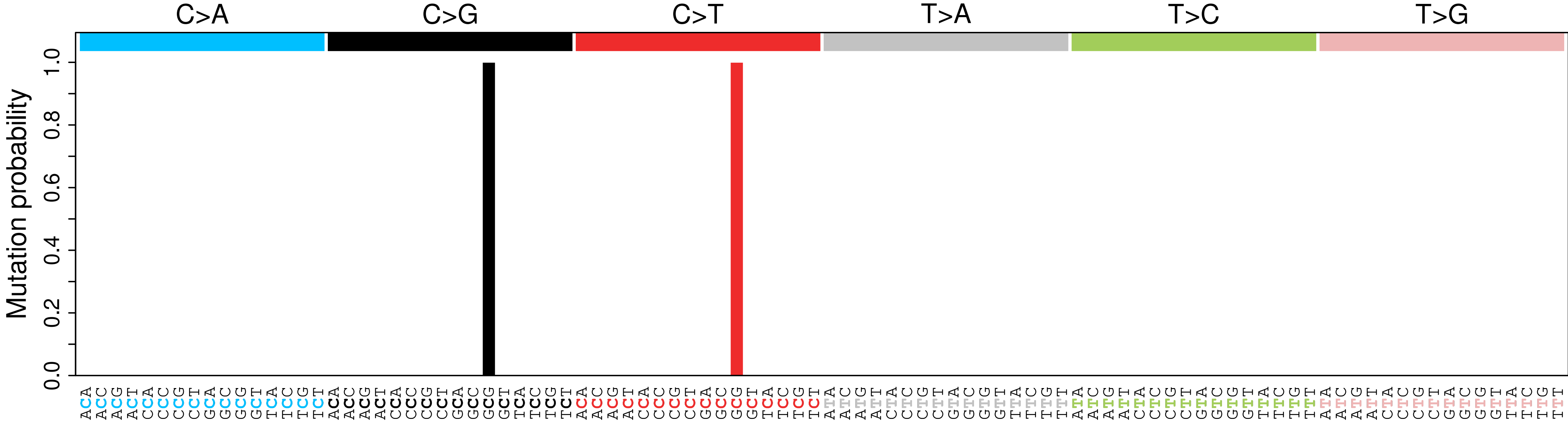
CATD0124a



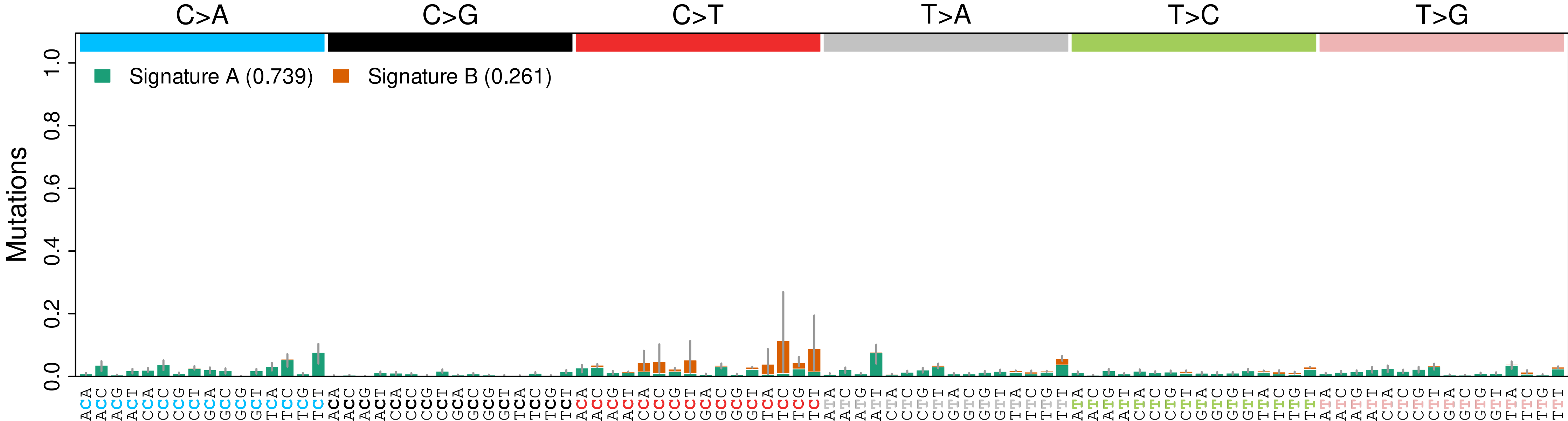
Reconstructed spectrum (cosine similarity = 0.137)



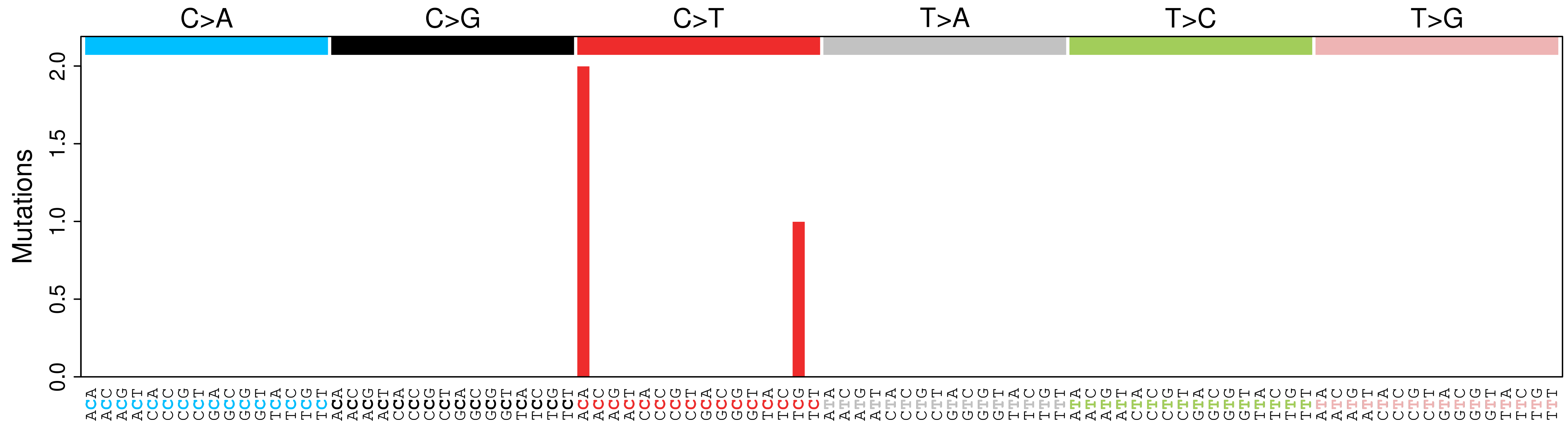
CATD0129a



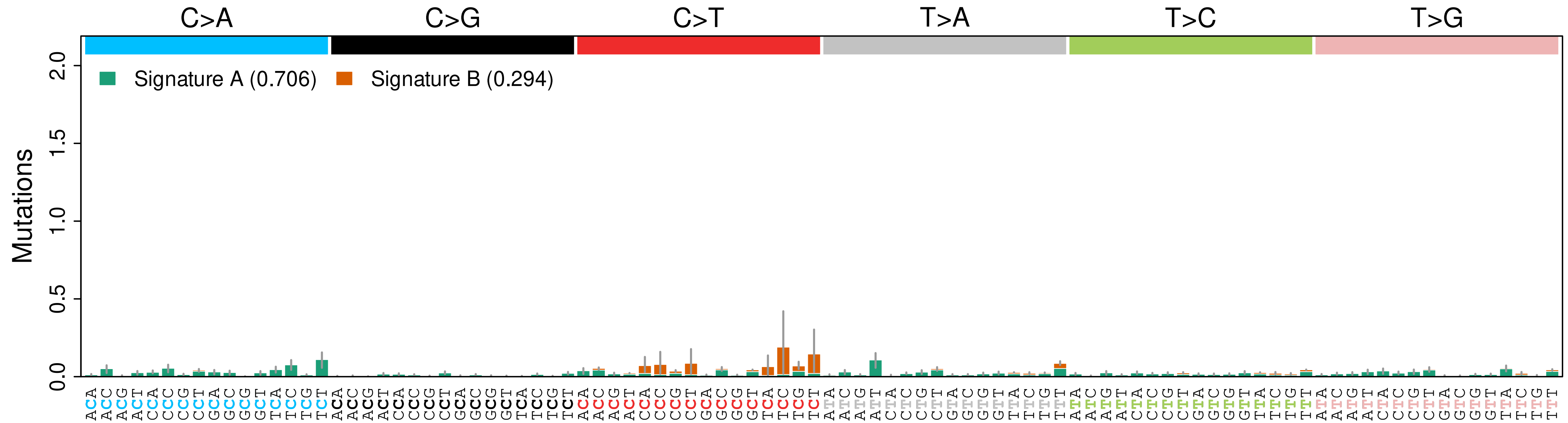
Reconstructed spectrum (cosine similarity = 0.028)



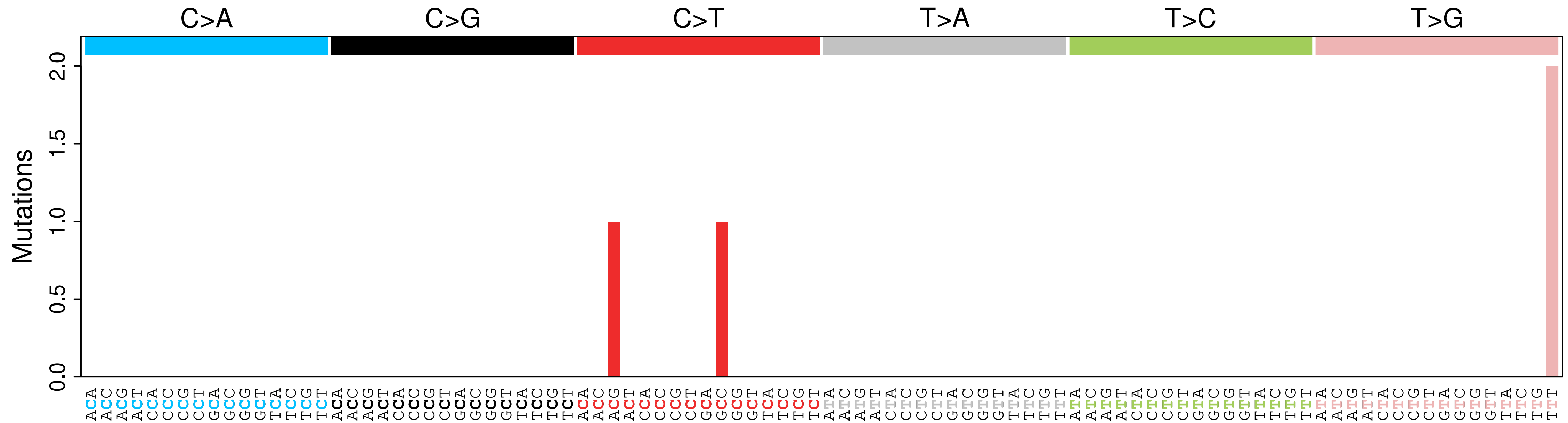
CATD0130a (3 mutations)



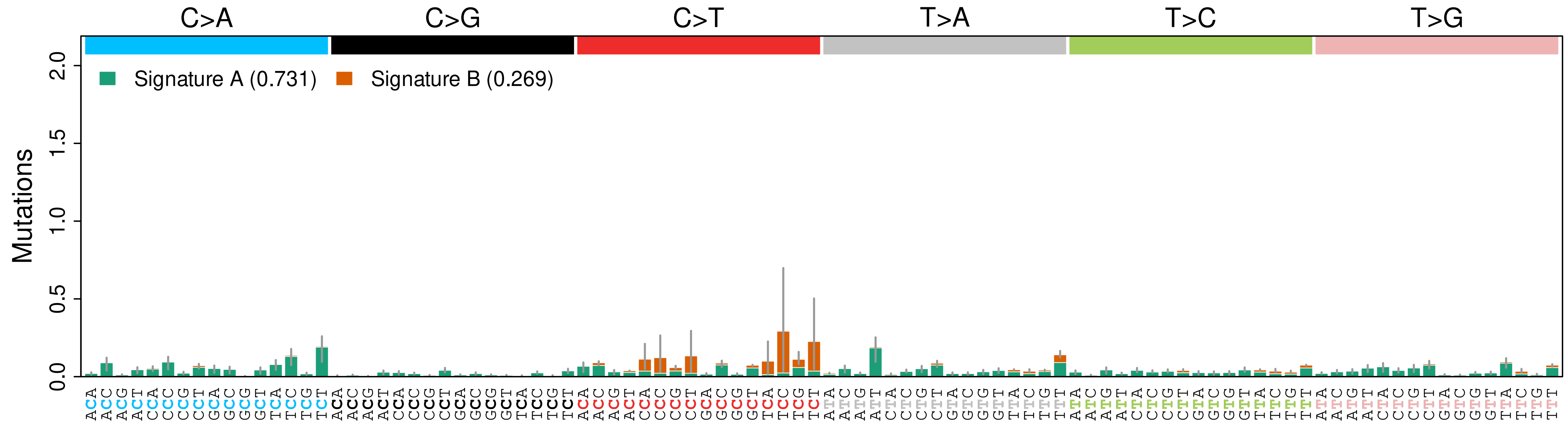
Reconstructed spectrum (cosine similarity = 0.153)



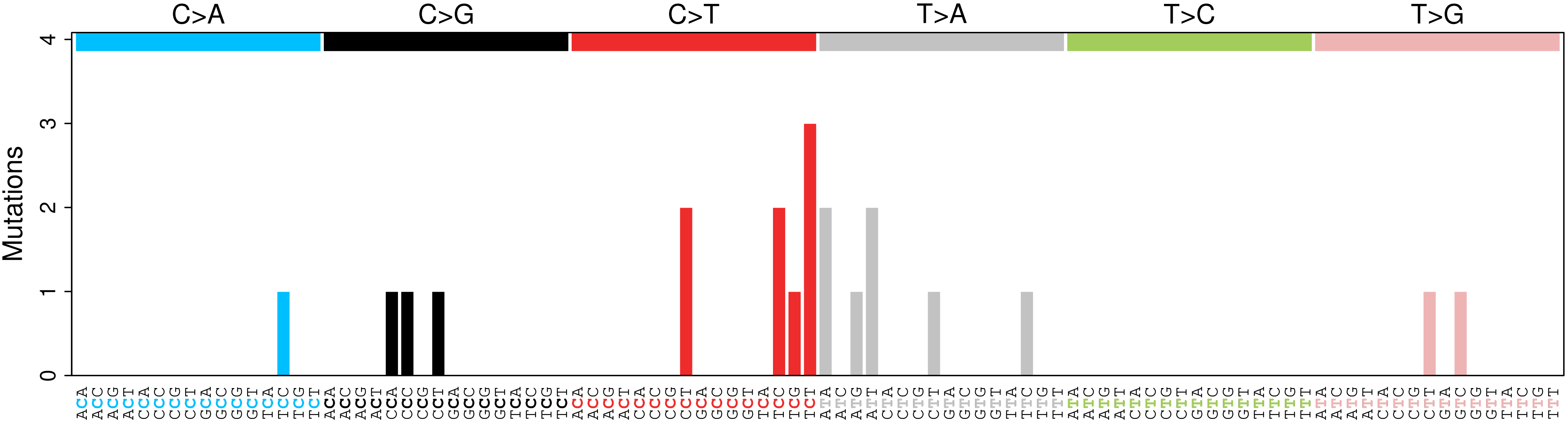
CATD0140a (4 mutations)



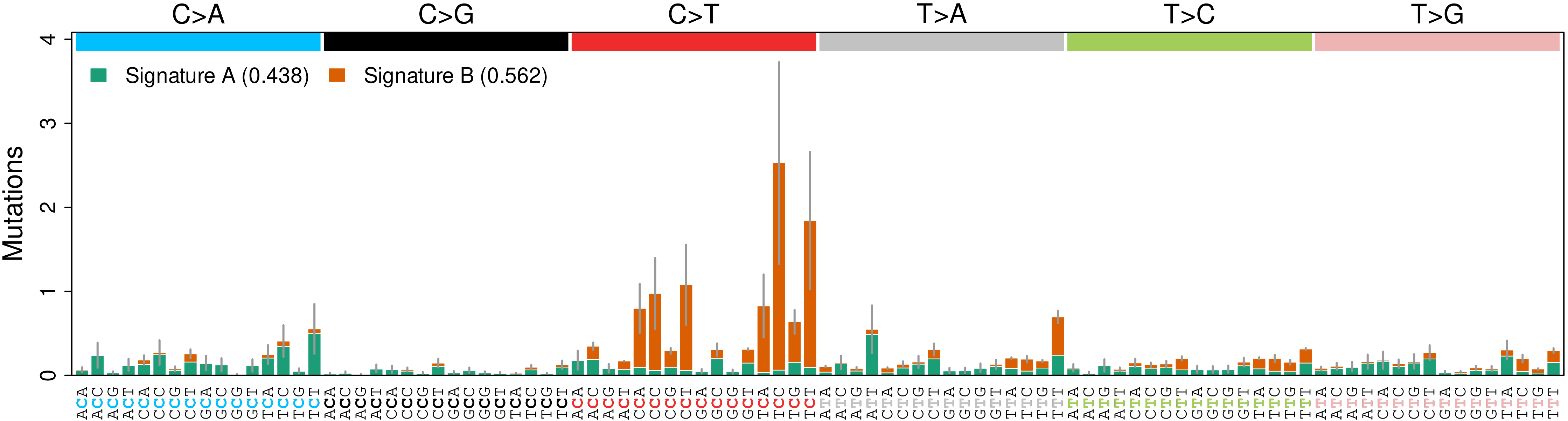
Reconstructed spectrum (cosine similarity = 0.156)



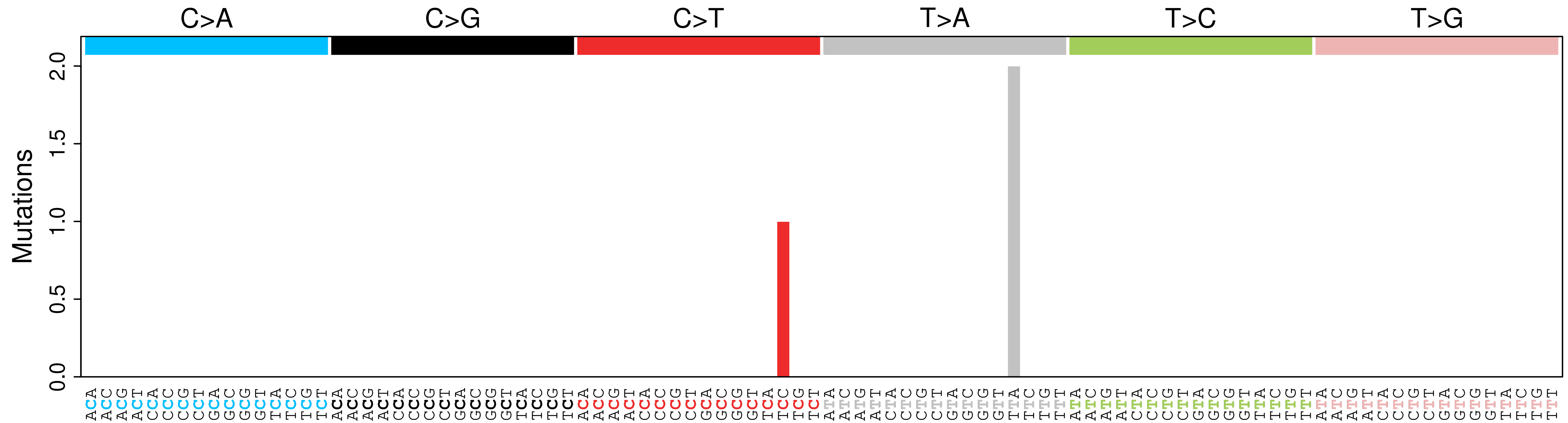
CATD0131a (21 mutations)



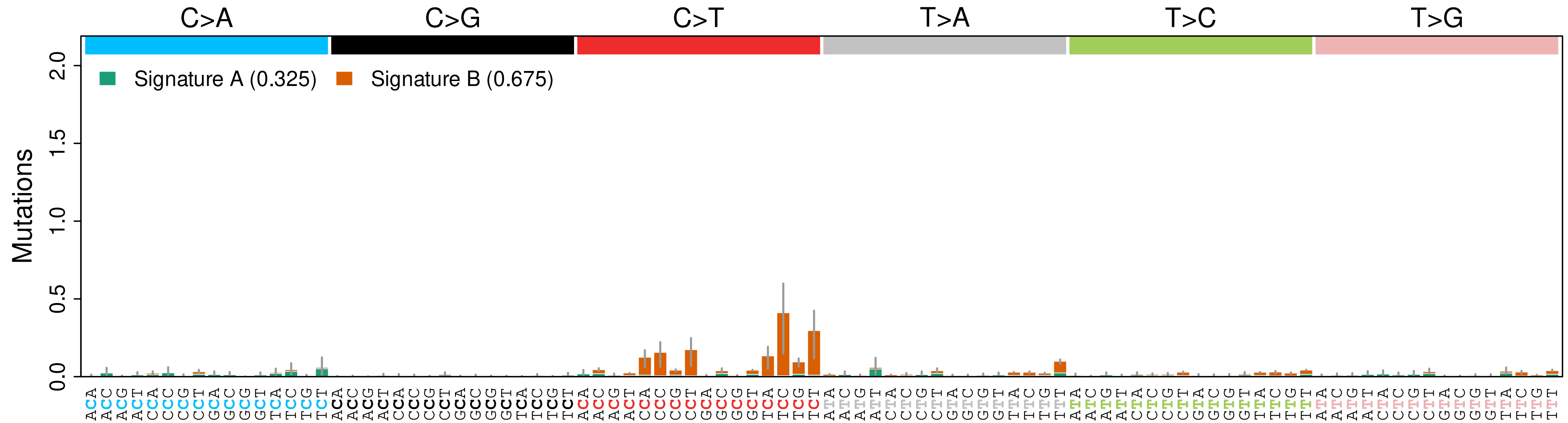
Reconstructed spectrum (cosine similarity = 0.669)



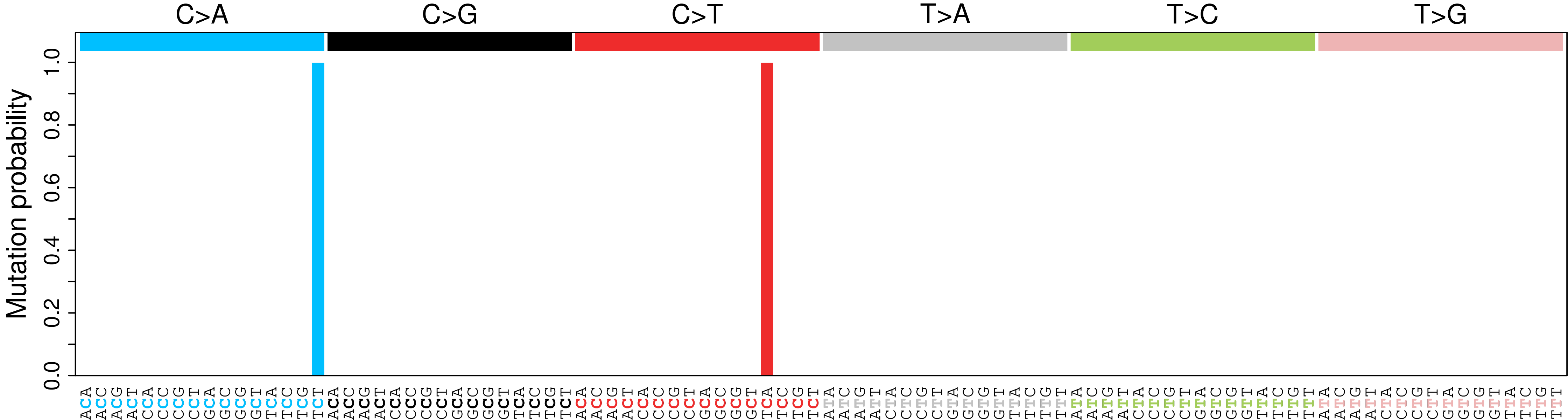
CATD0125a (3 mutations)



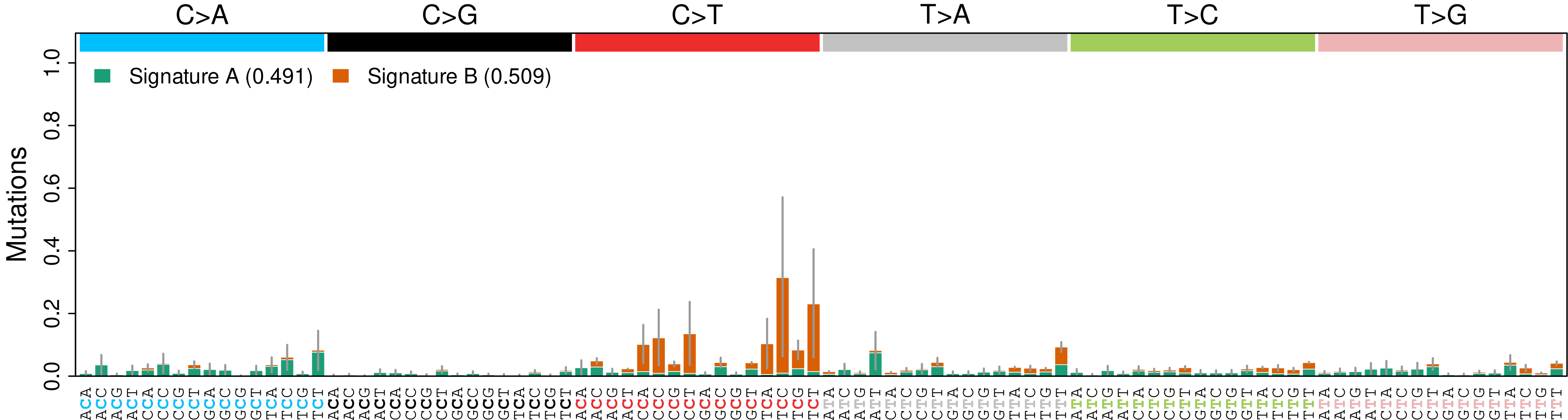
Reconstructed spectrum (cosine similarity = 0.329)



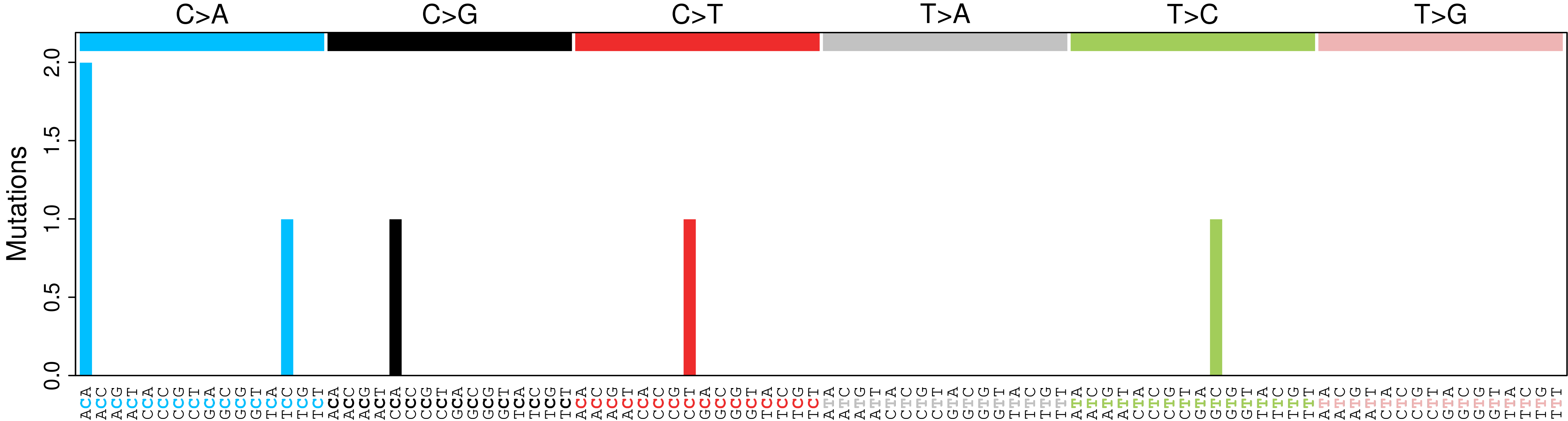
CATD0134a



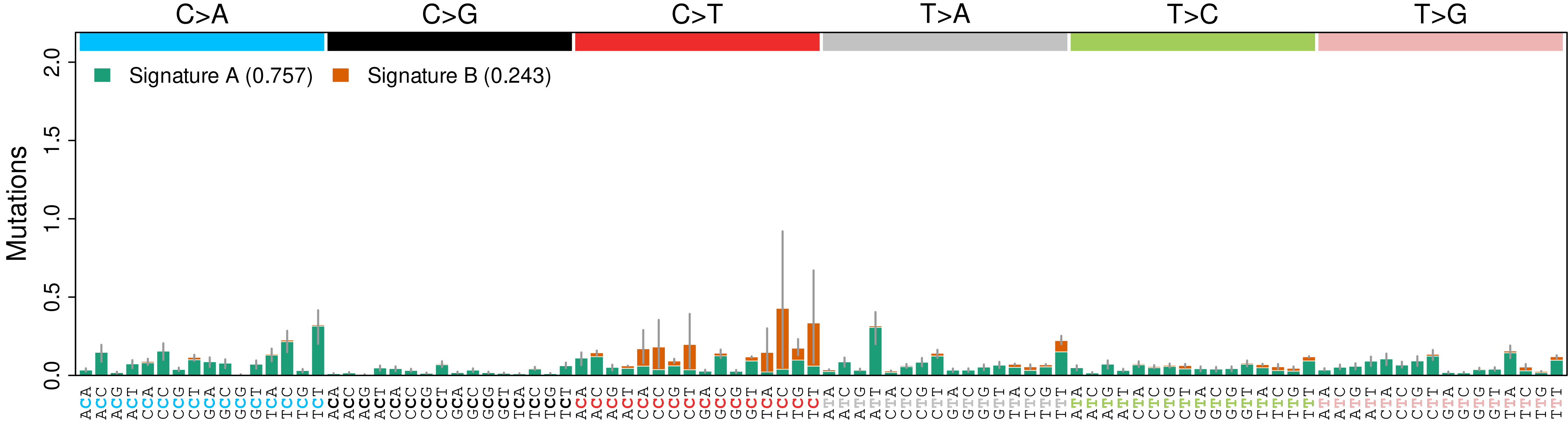
Reconstructed spectrum (cosine similarity = 0.248)



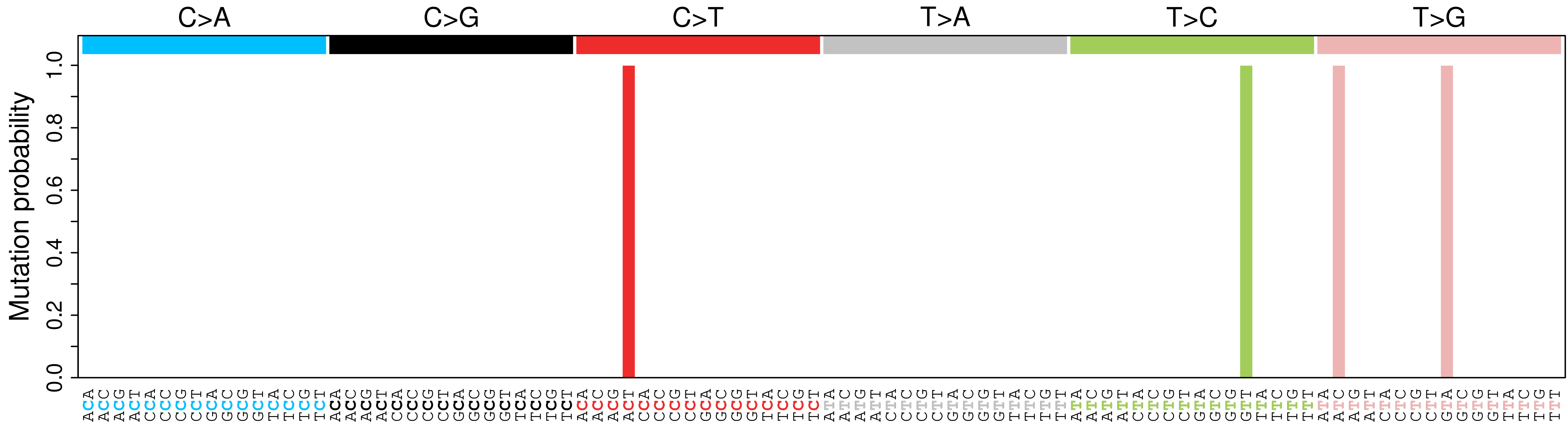
CATD258a (6 mutations)



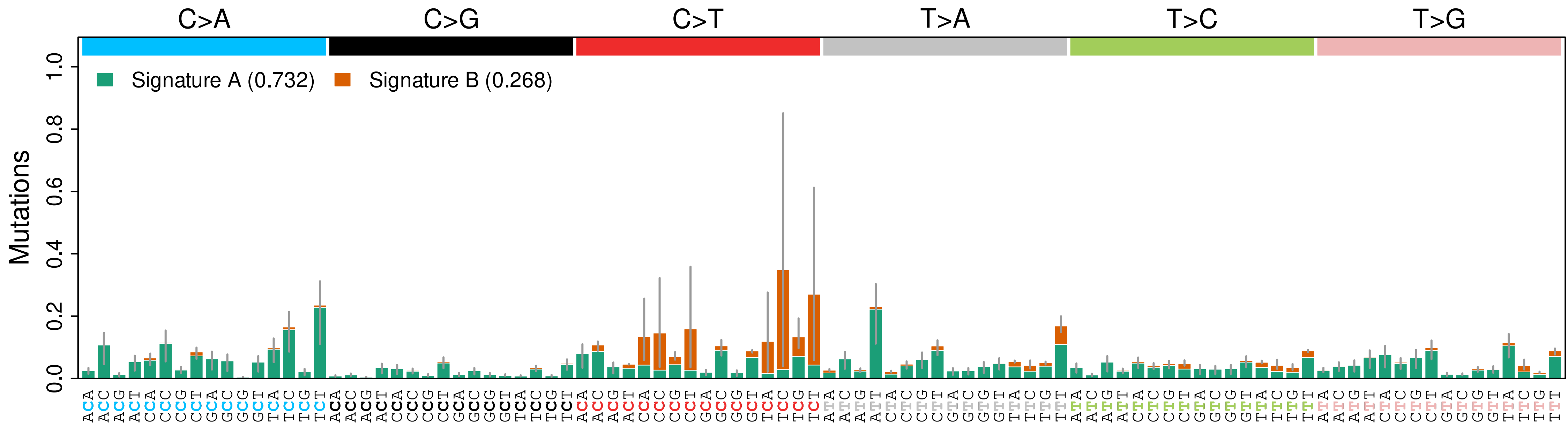
Reconstructed spectrum (cosine similarity = 0.187)



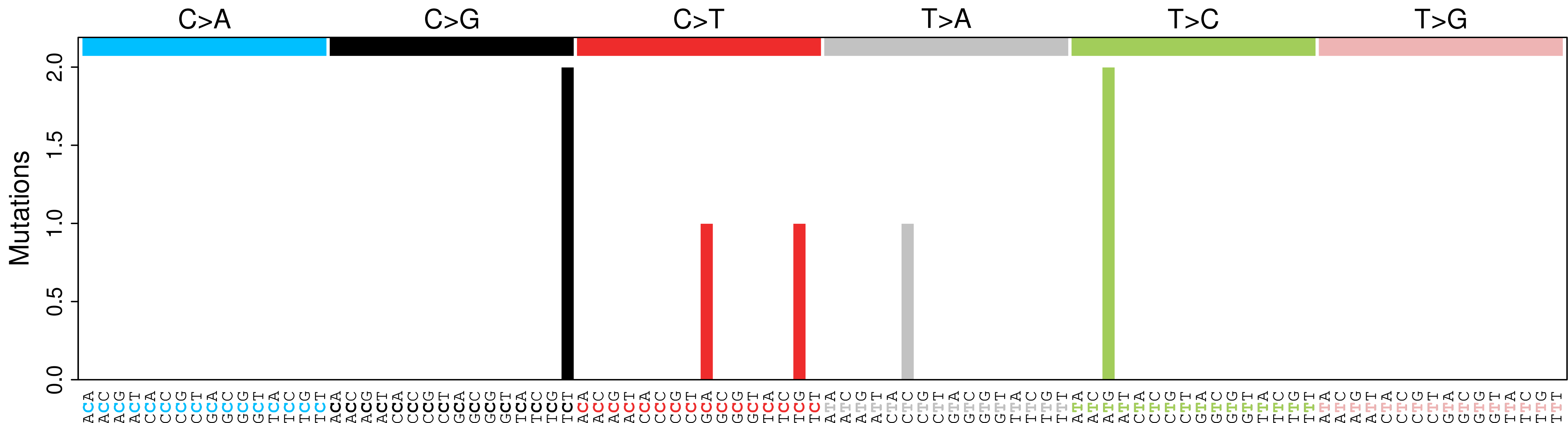
CATD257a



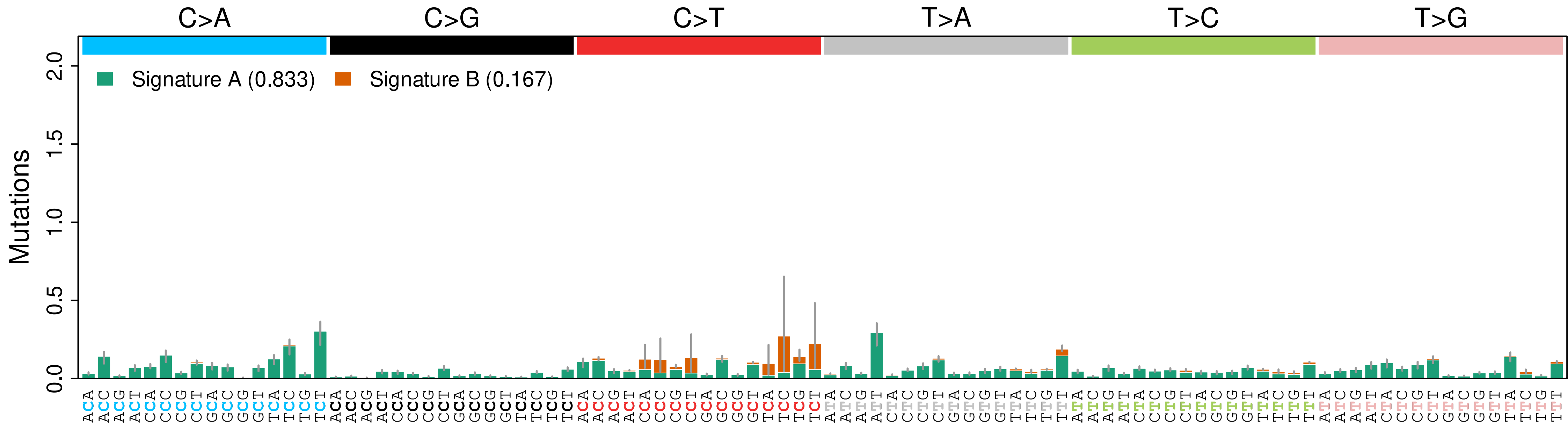
Reconstructed spectrum (cosine similarity = 0.095)



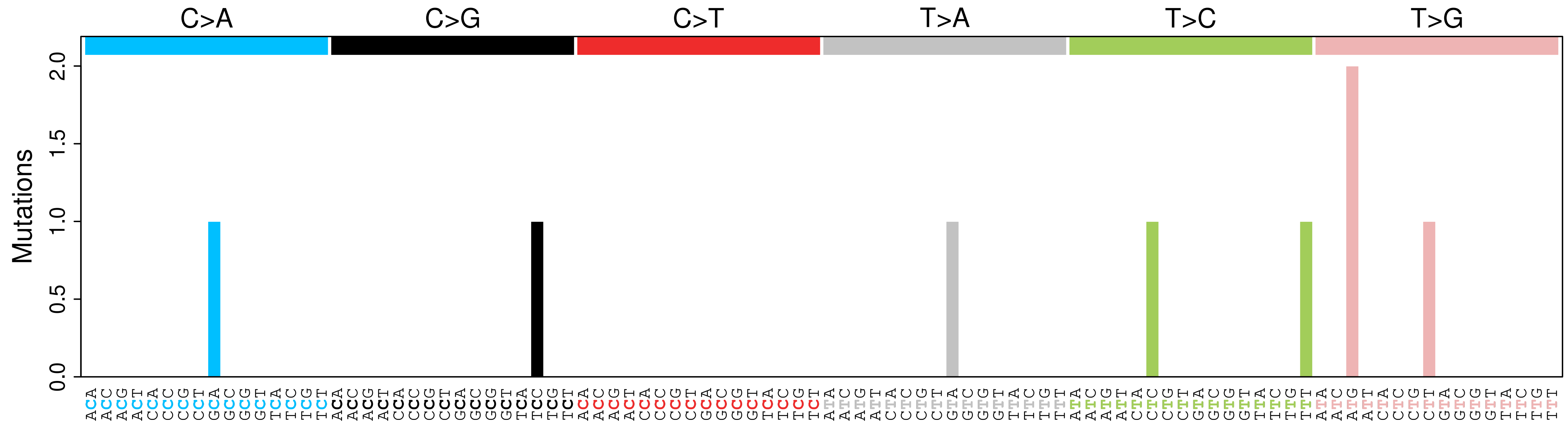
CATD0139a (7 mutations)



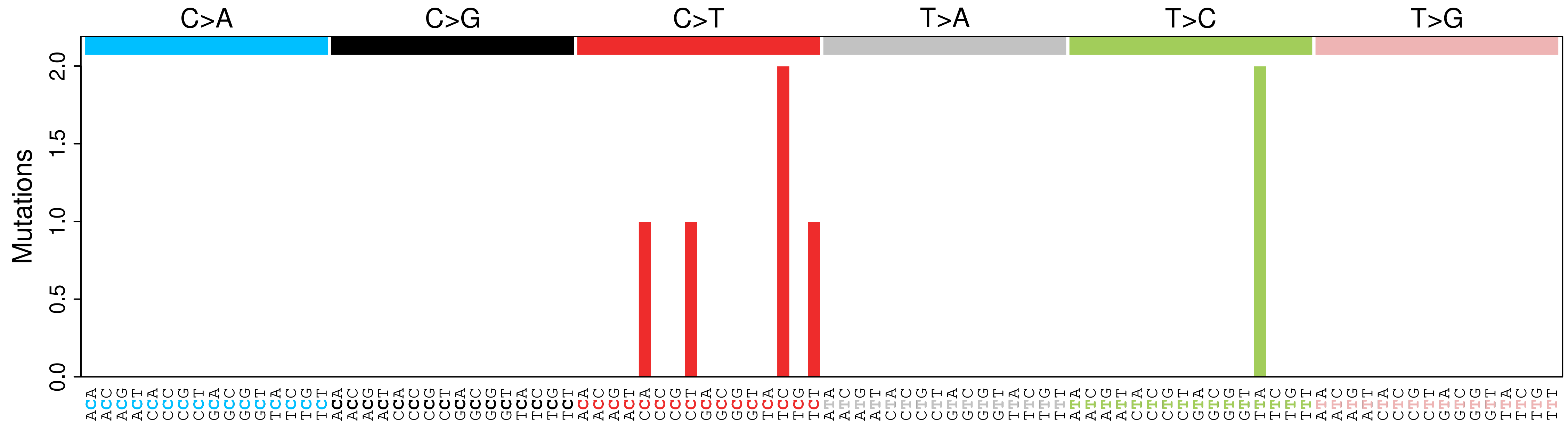
Reconstructed spectrum (cosine similarity = 0.159)



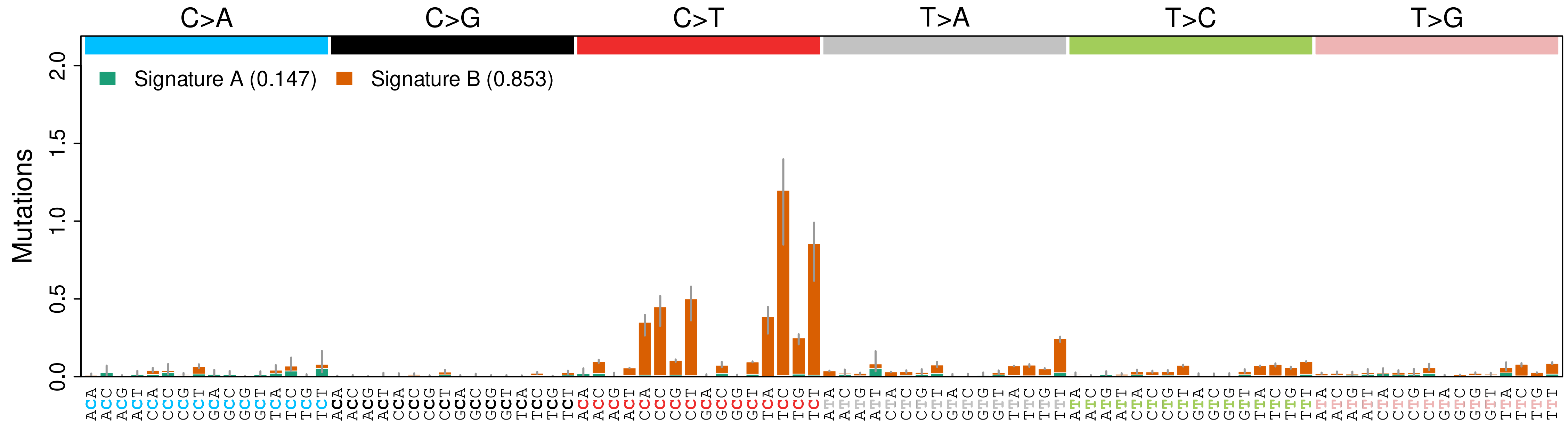
CATD0137a (8 mutations)



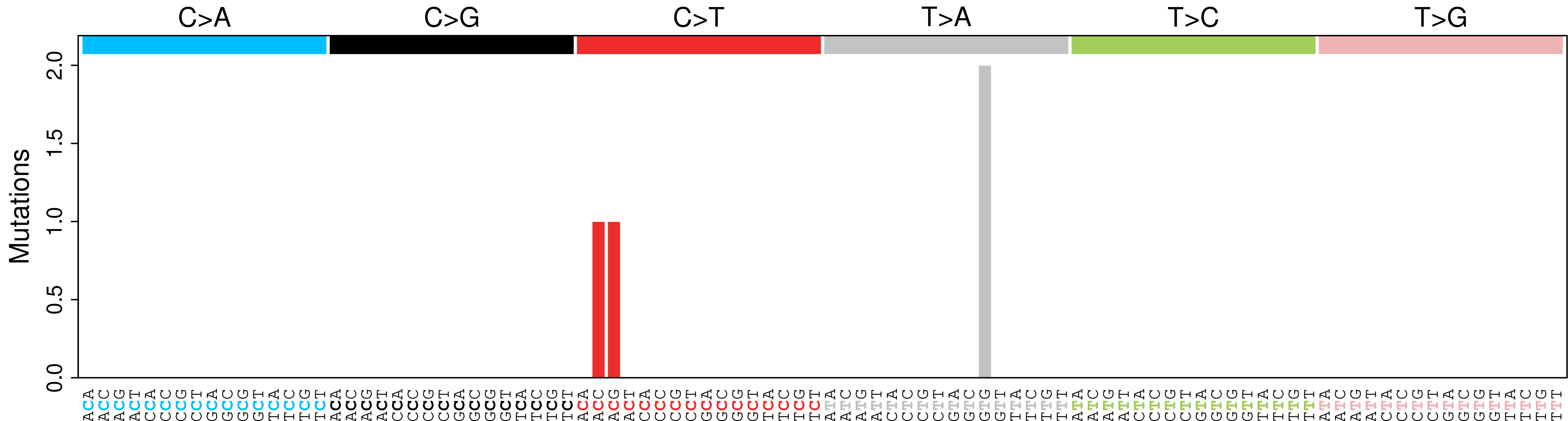
CATD249a (7 mutations)



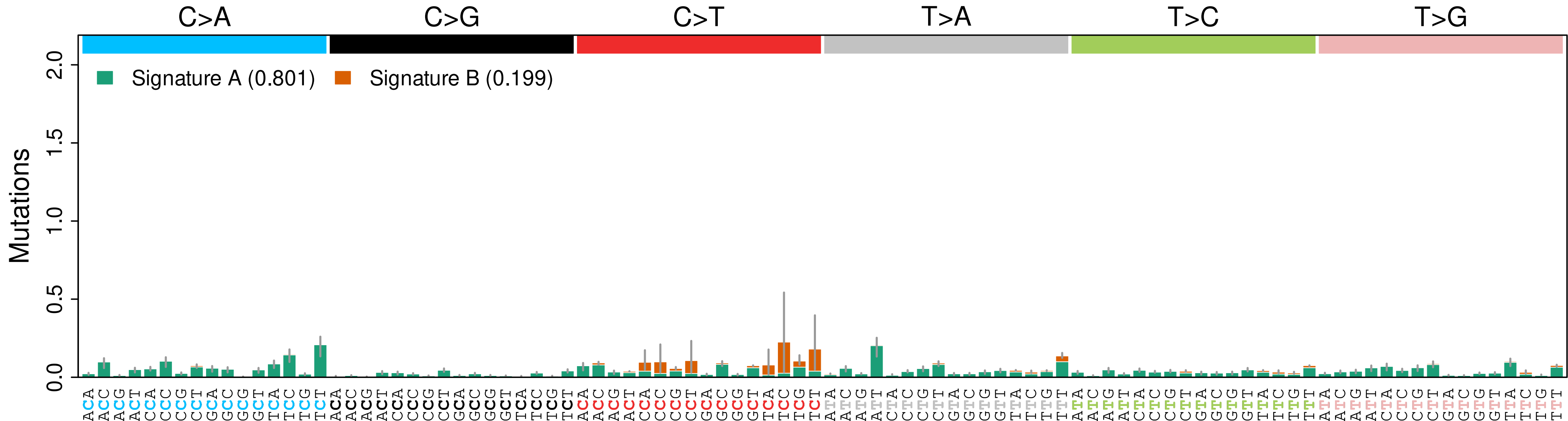
Reconstructed spectrum (cosine similarity = 0.718)



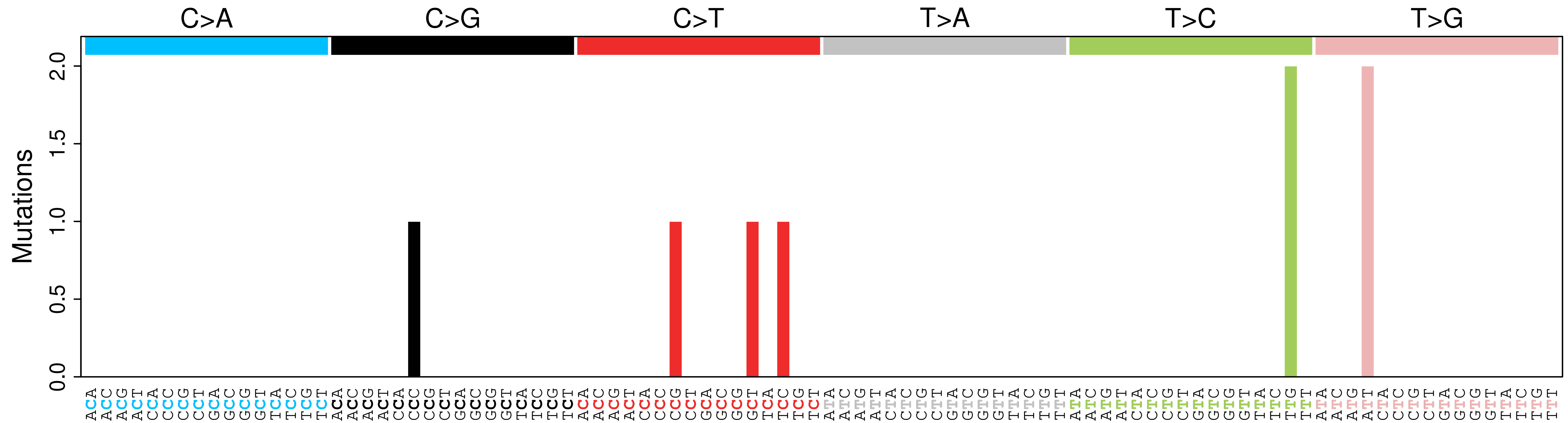
CATD271a (4 mutations)



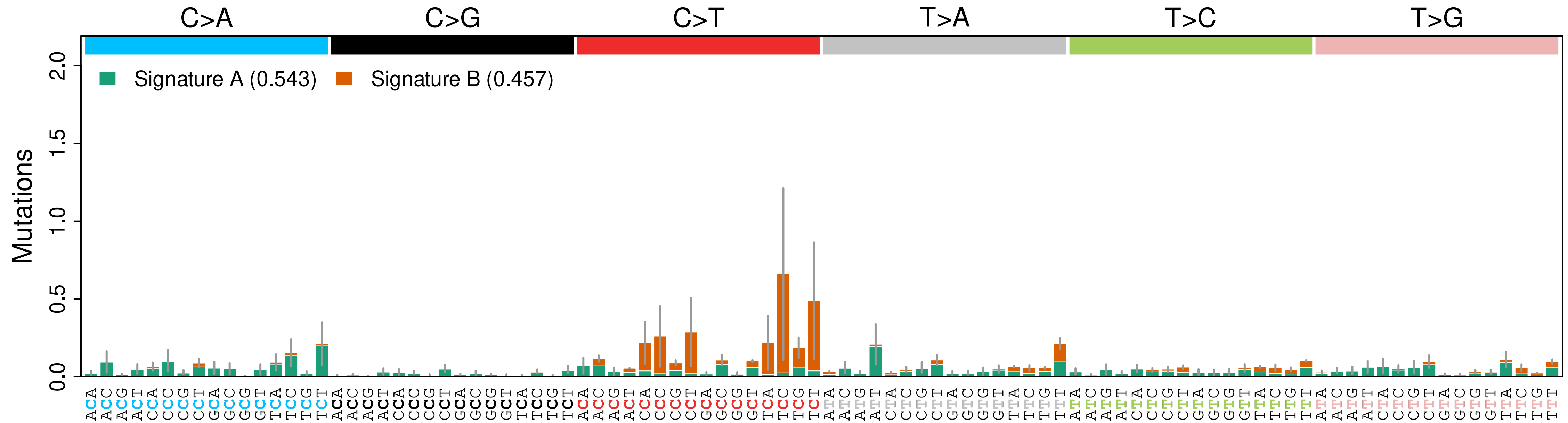
Reconstructed spectrum (cosine similarity = 0.12)



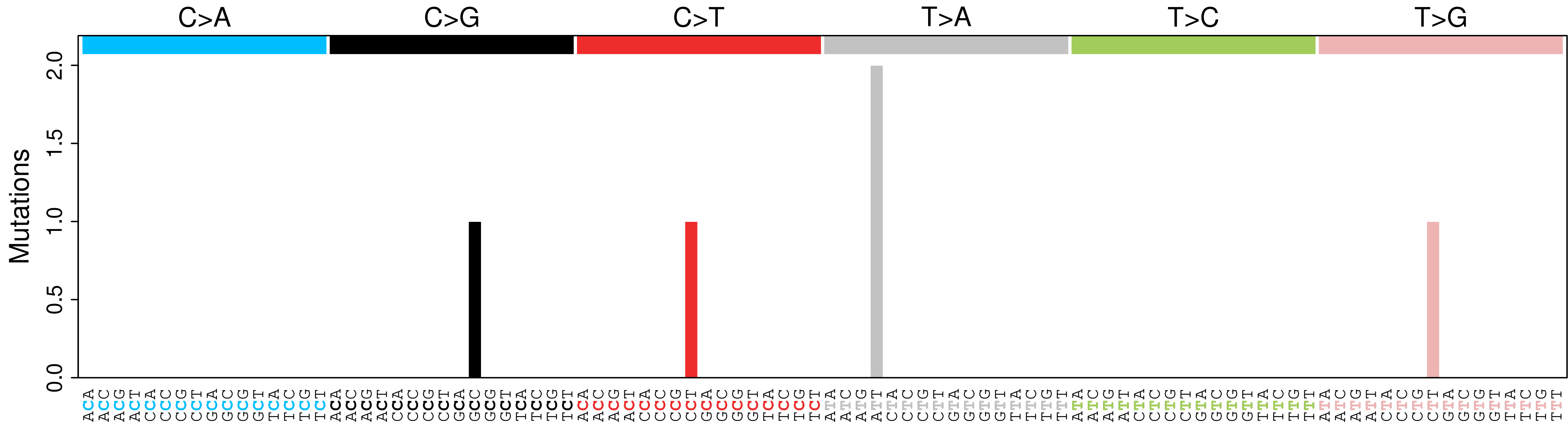
CATD259a (8 mutations)



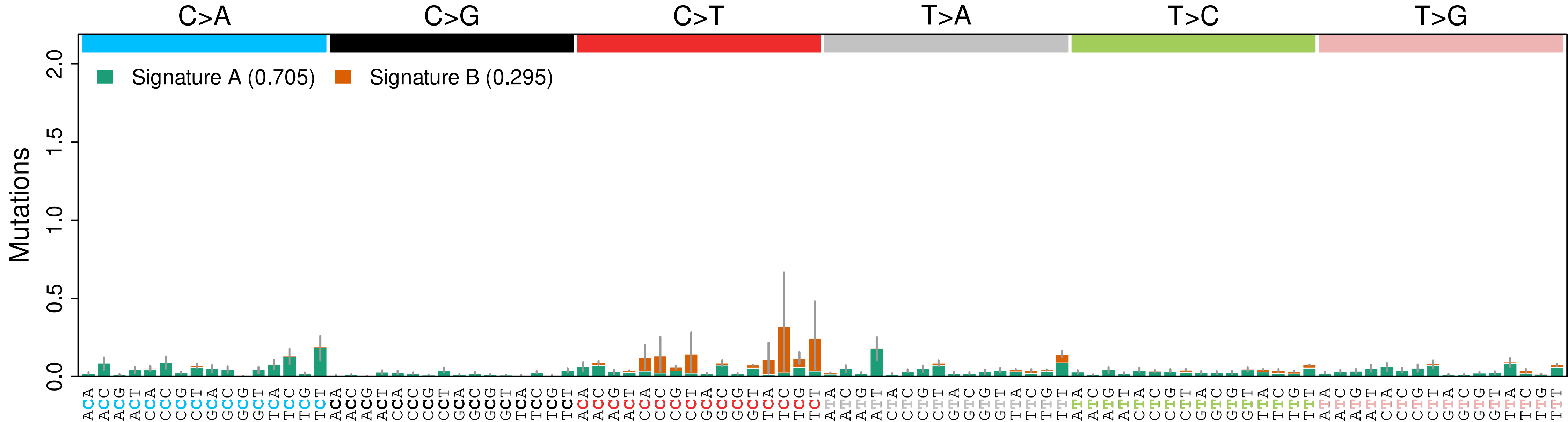
Reconstructed spectrum (cosine similarity = 0.27)



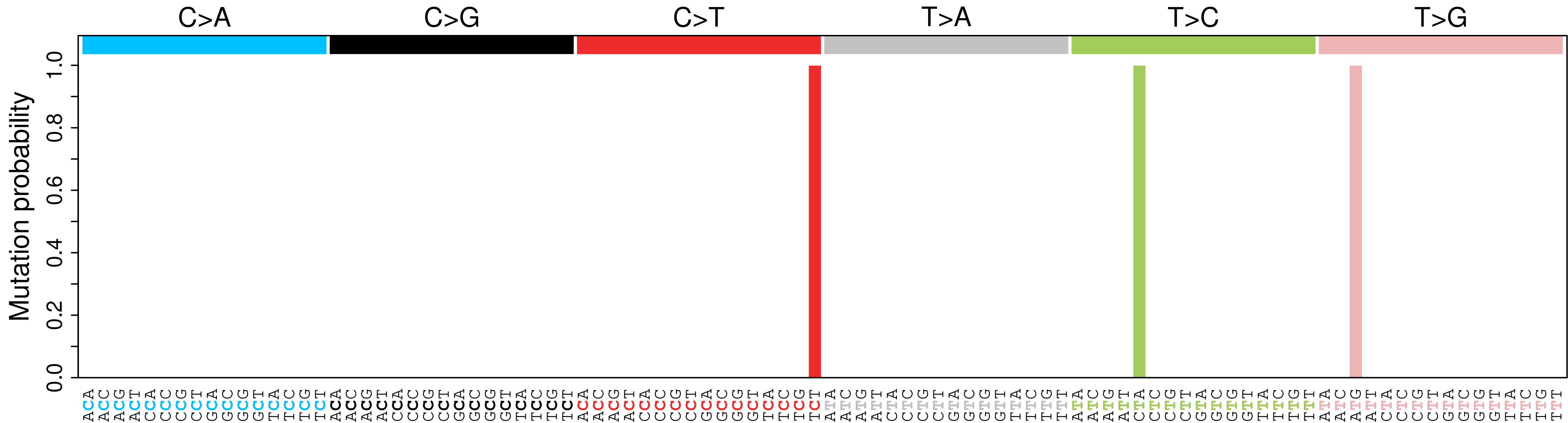
CATD0127a (5 mutations)



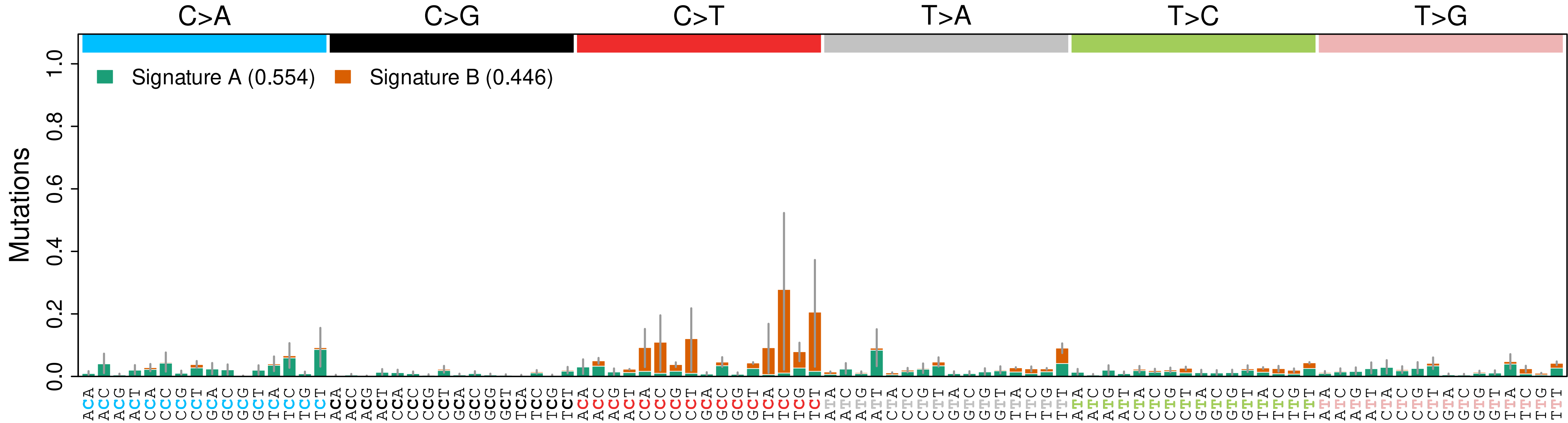
Reconstructed spectrum (cosine similarity = 0.326)



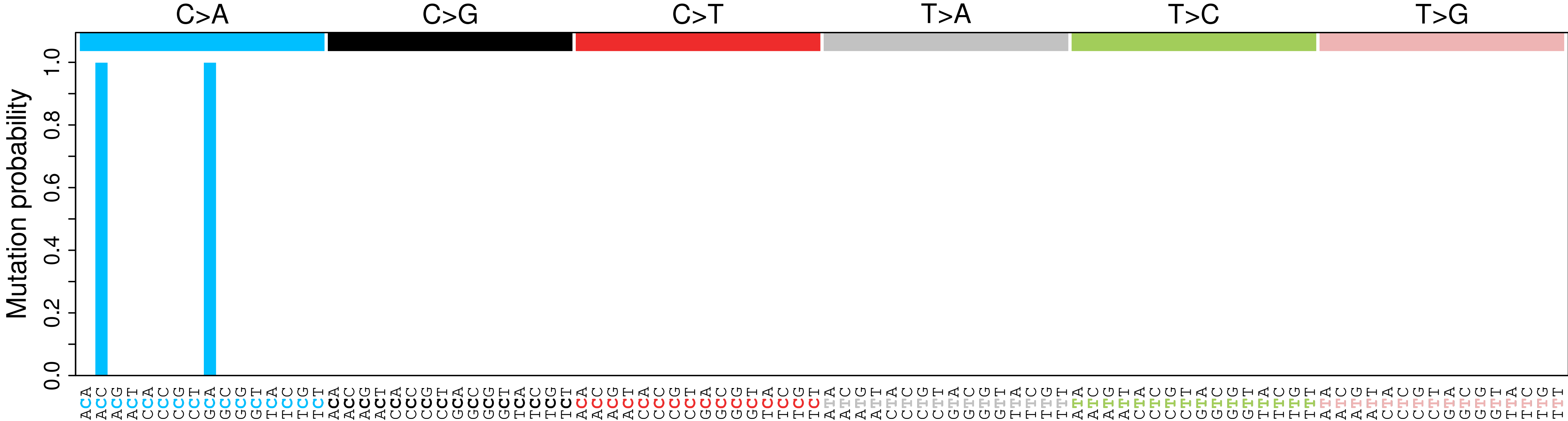
CATD277a



Reconstructed spectrum (cosine similarity = 0.287)



CATD281a



Reconstructed spectrum (cosine similarity = 0.148)

