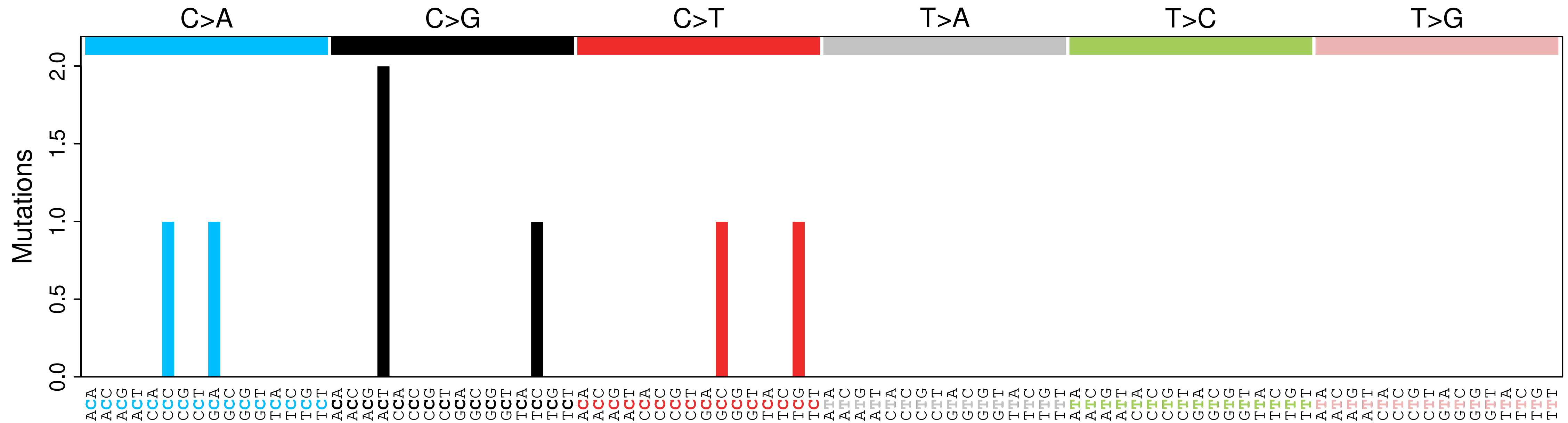
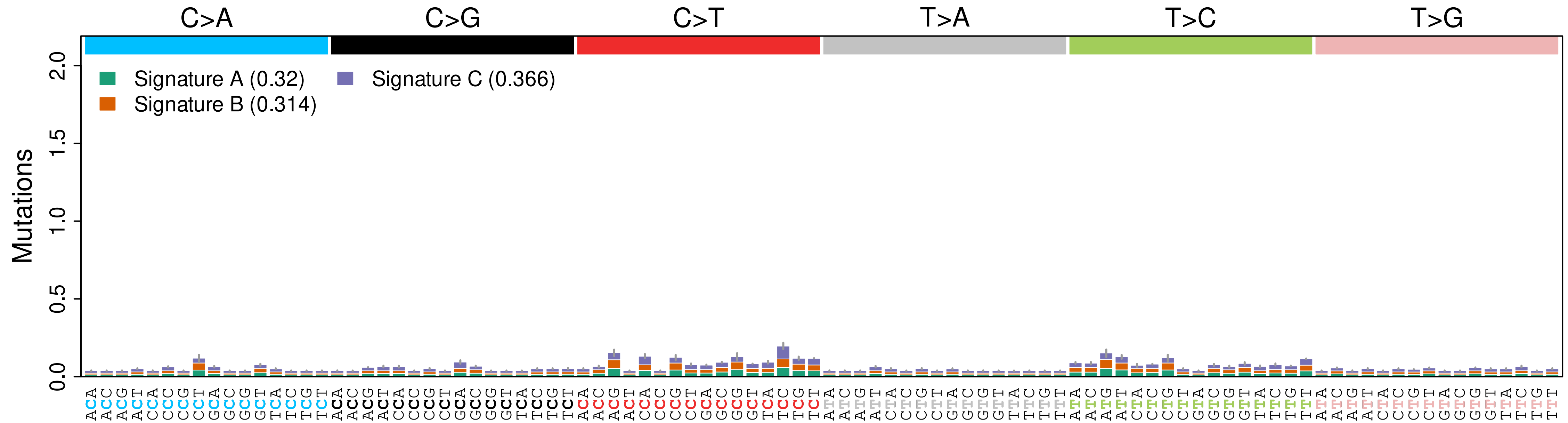


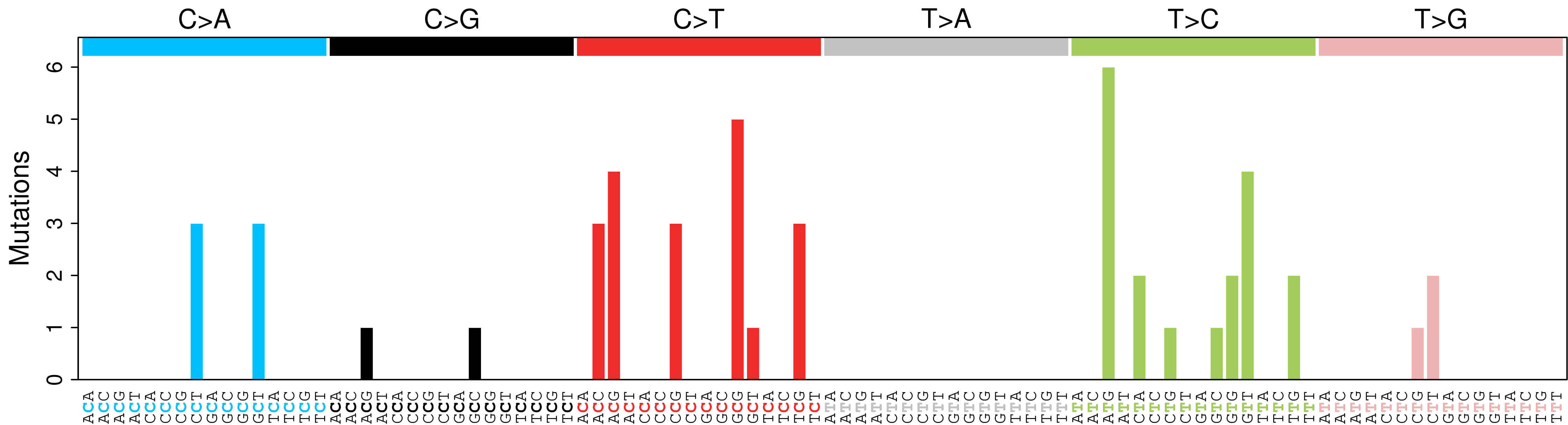
### CATD0621a (7 mutations)



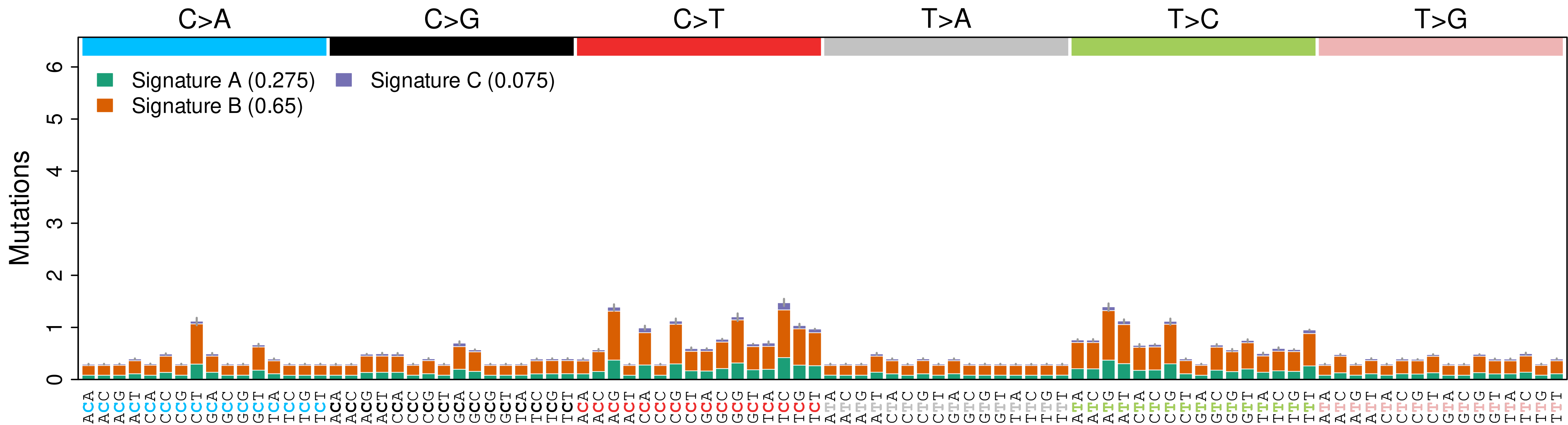
### Reconstructed spectrum (cosine similarity = 0.25)



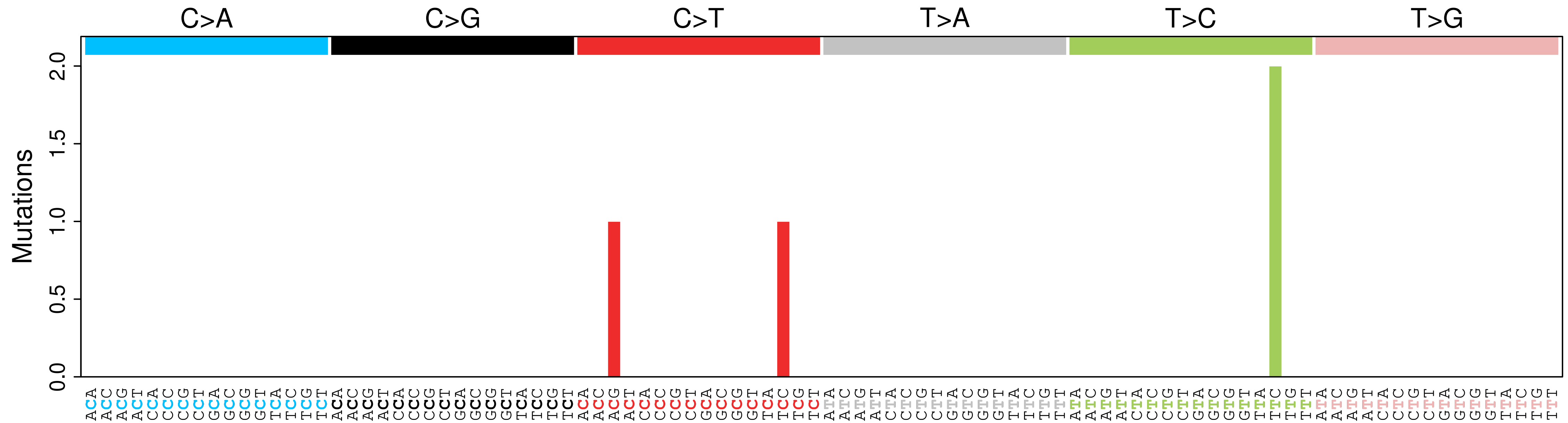
CATD0463a (48 mutations)



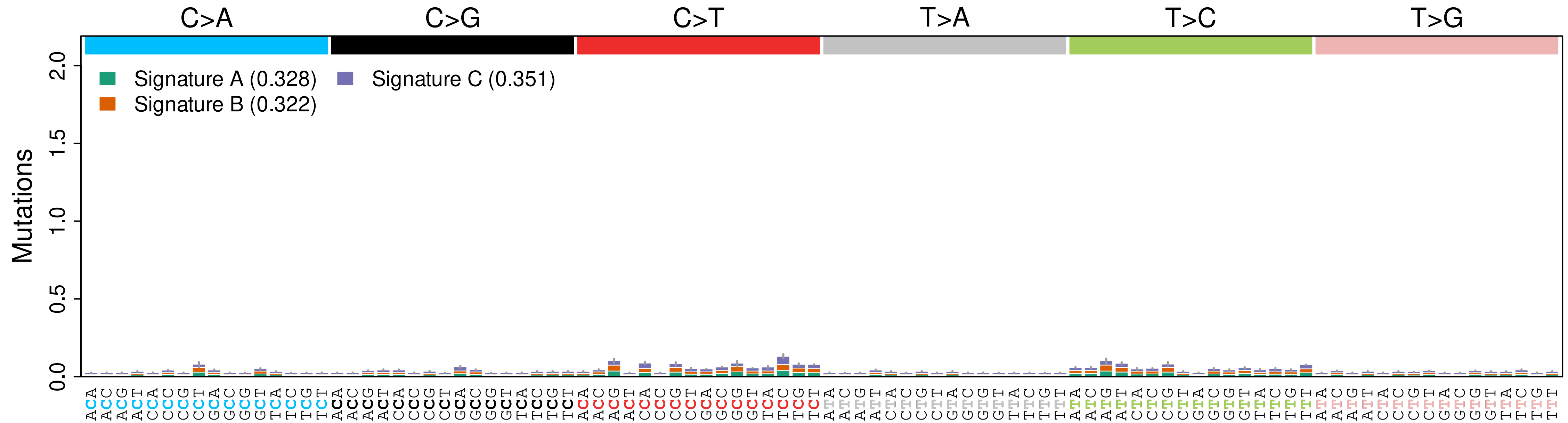
Reconstructed spectrum (cosine similarity = 0.62)



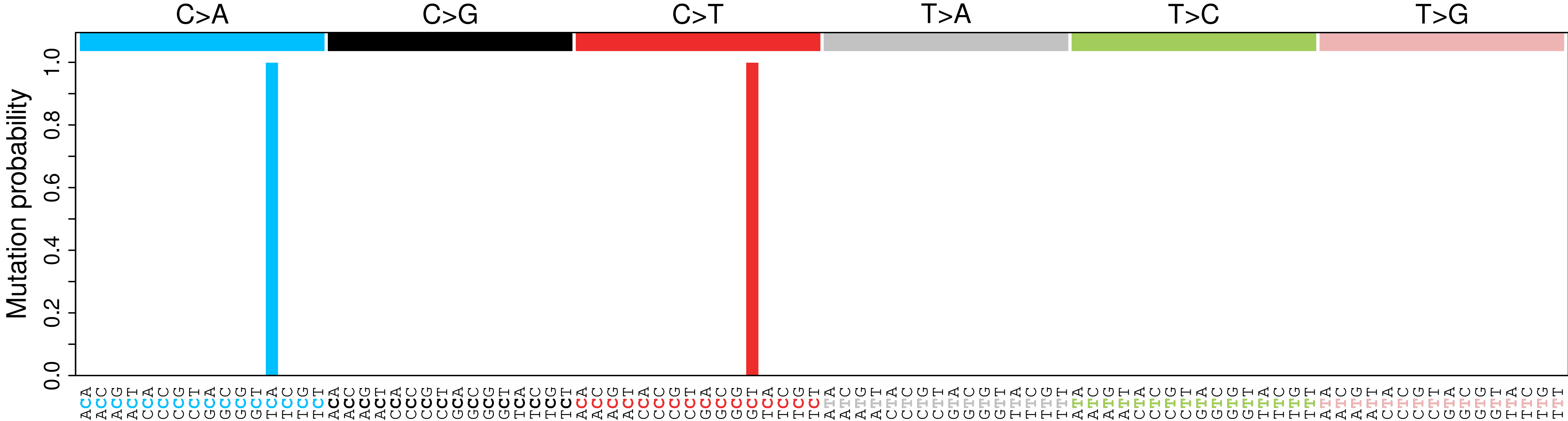
### CATD0453a (4 mutations)



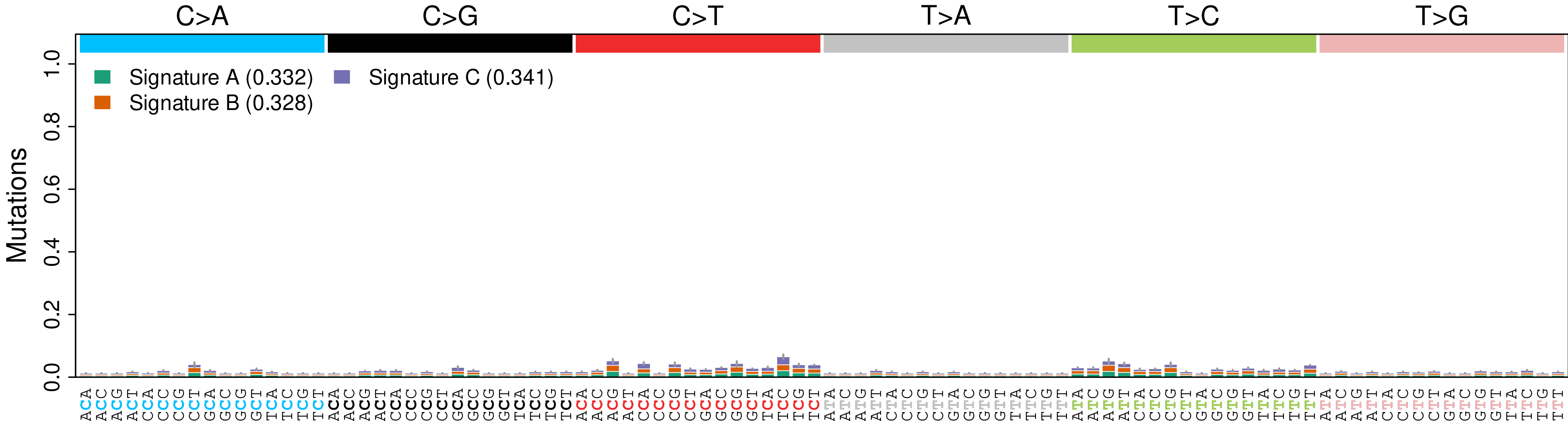
### Reconstructed spectrum (cosine similarity = 0.3)



CATD0450a

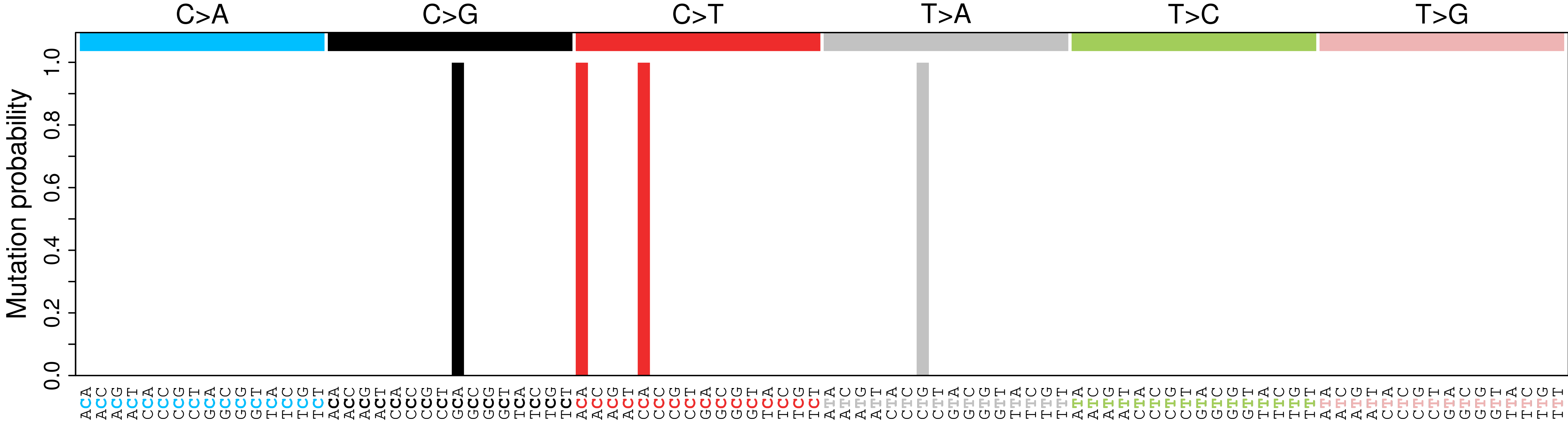


Reconstructed spectrum (cosine similarity = 0.137)

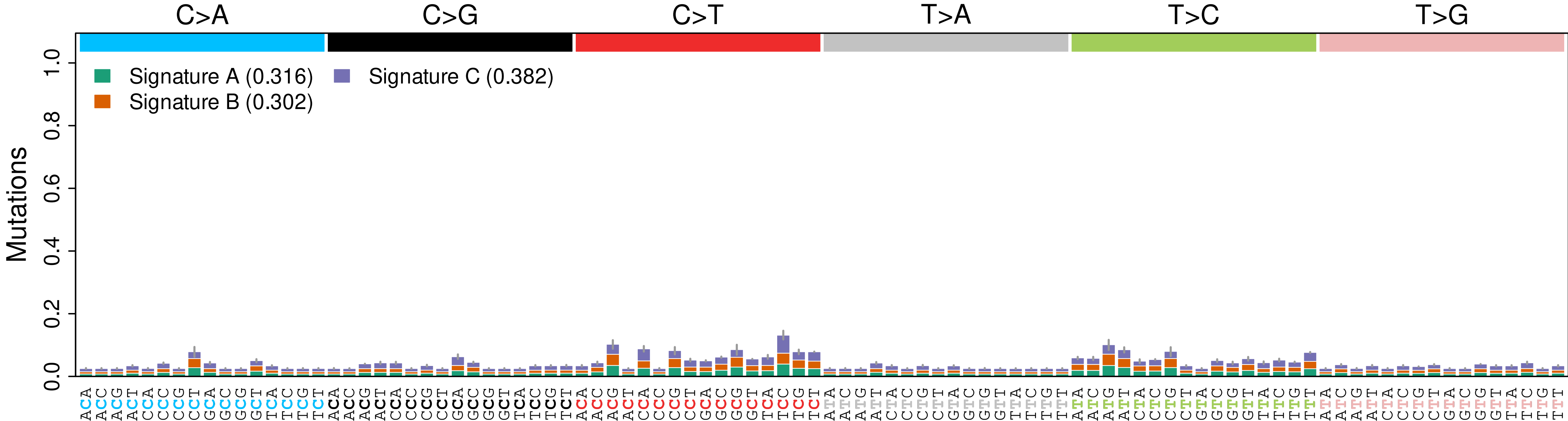




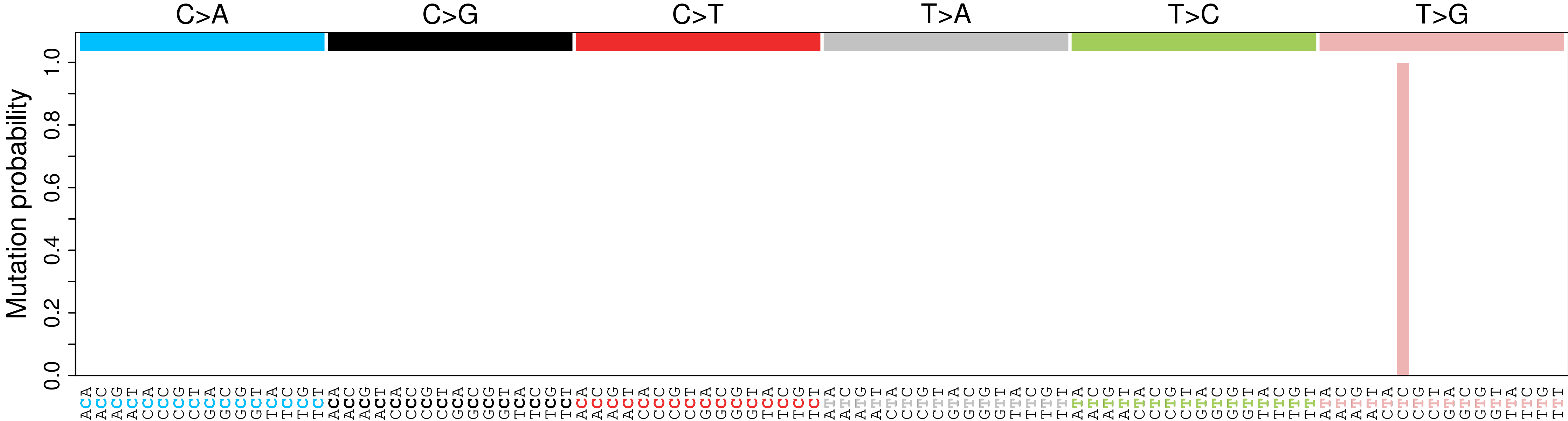
CATD0458a



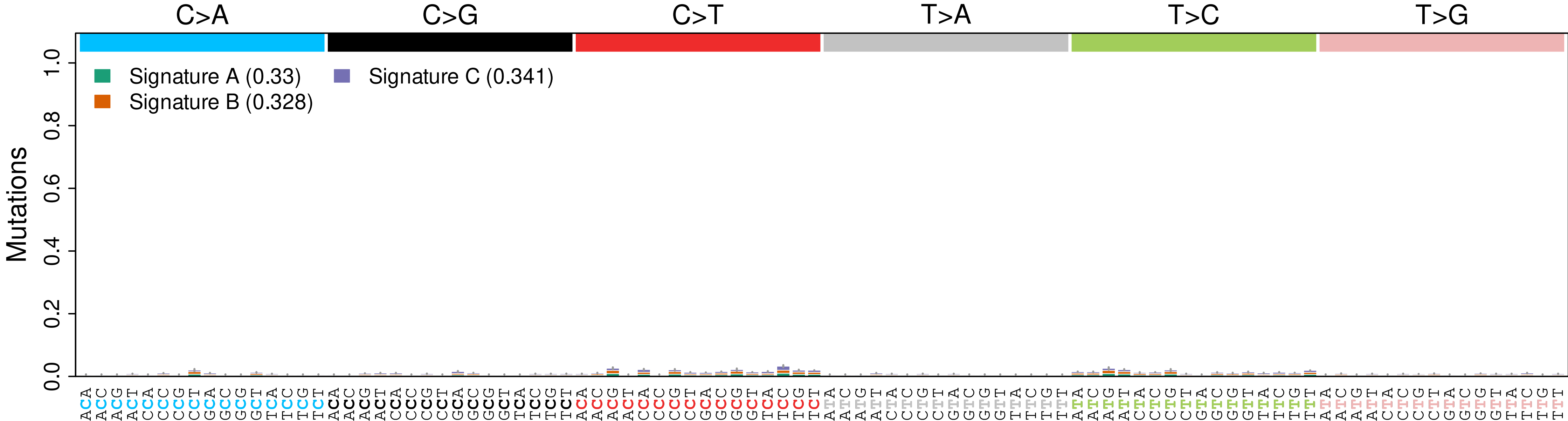
Reconstructed spectrum (cosine similarity = 0.238)



CATD0466a

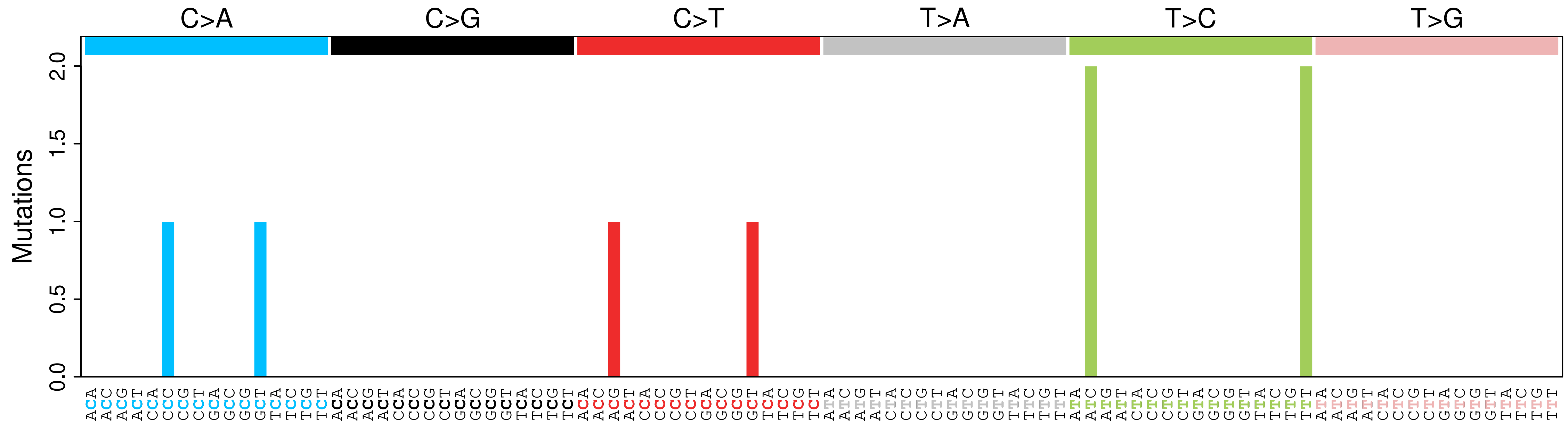


Reconstructed spectrum (cosine similarity = 0.073)





### CATD0454a (8 mutations)



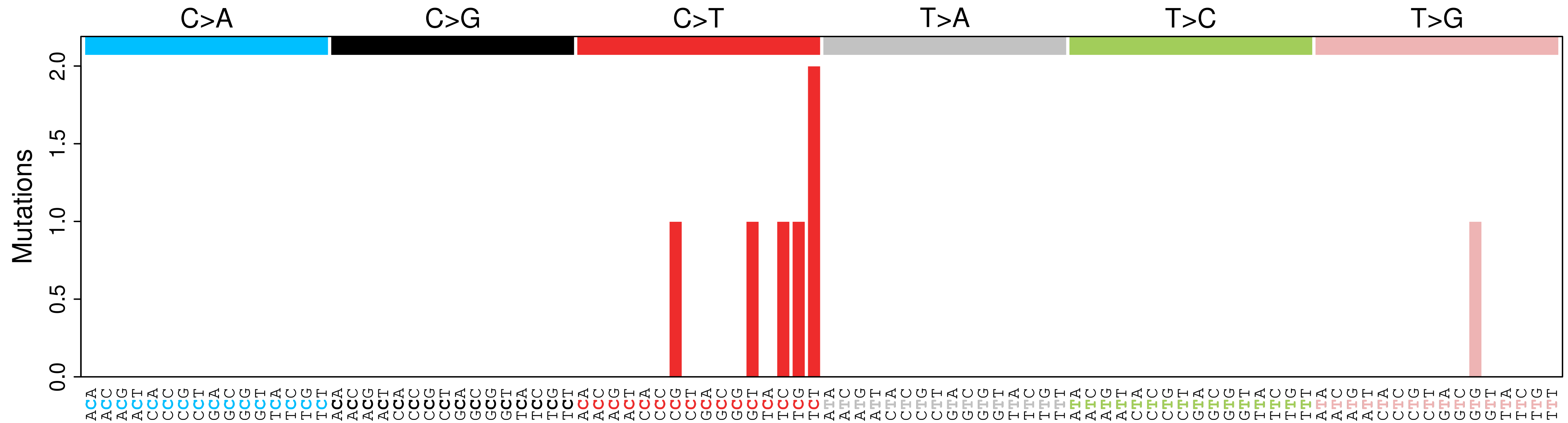




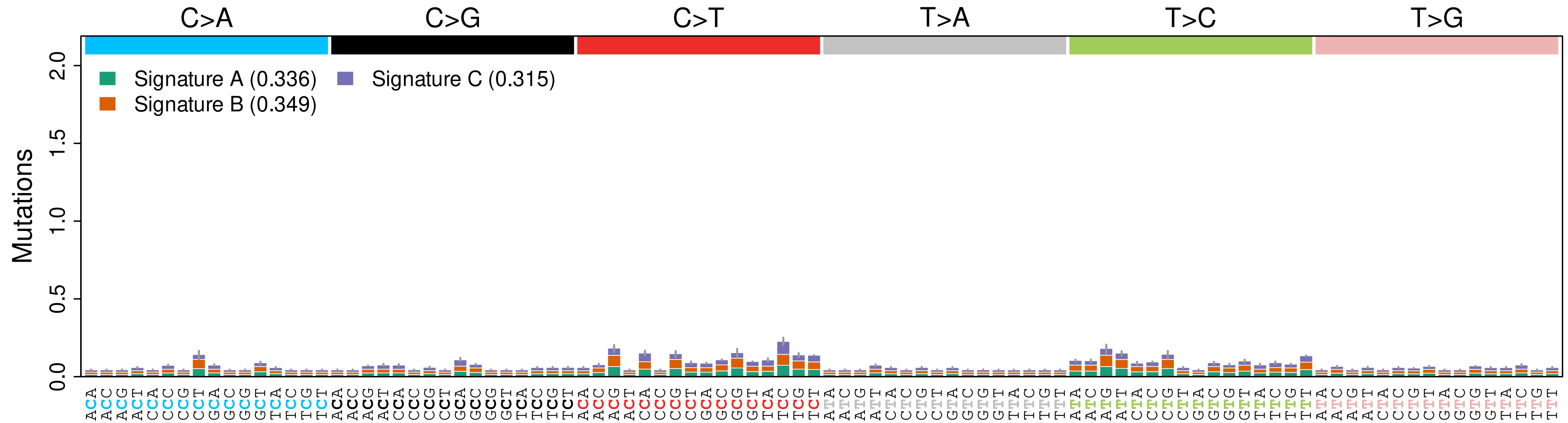




### CATD0457a (7 mutations)

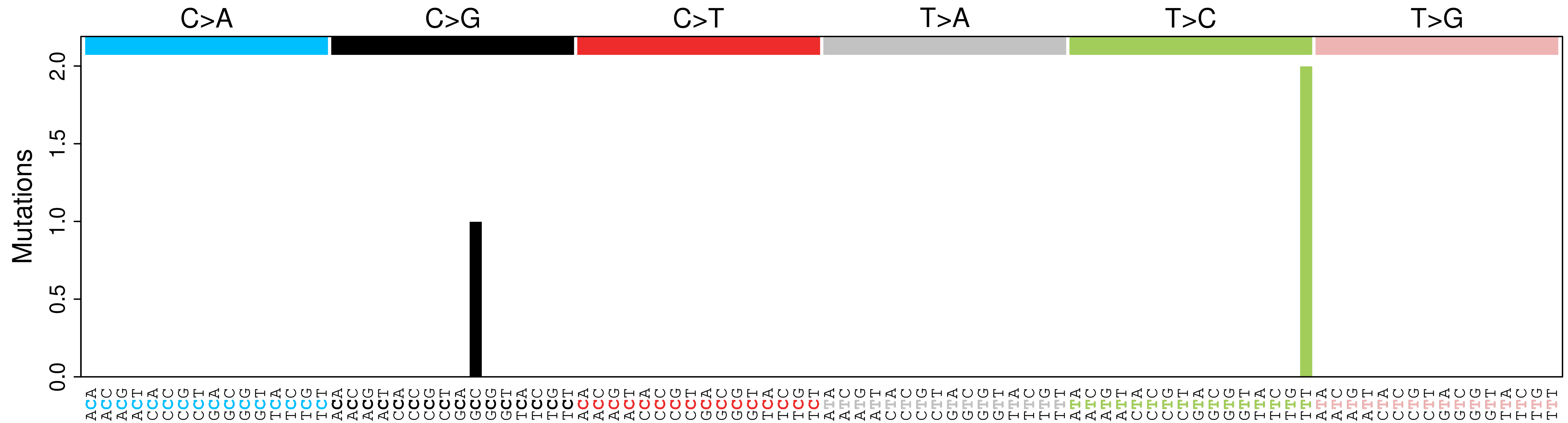


### Reconstructed spectrum (cosine similarity = 0.395)

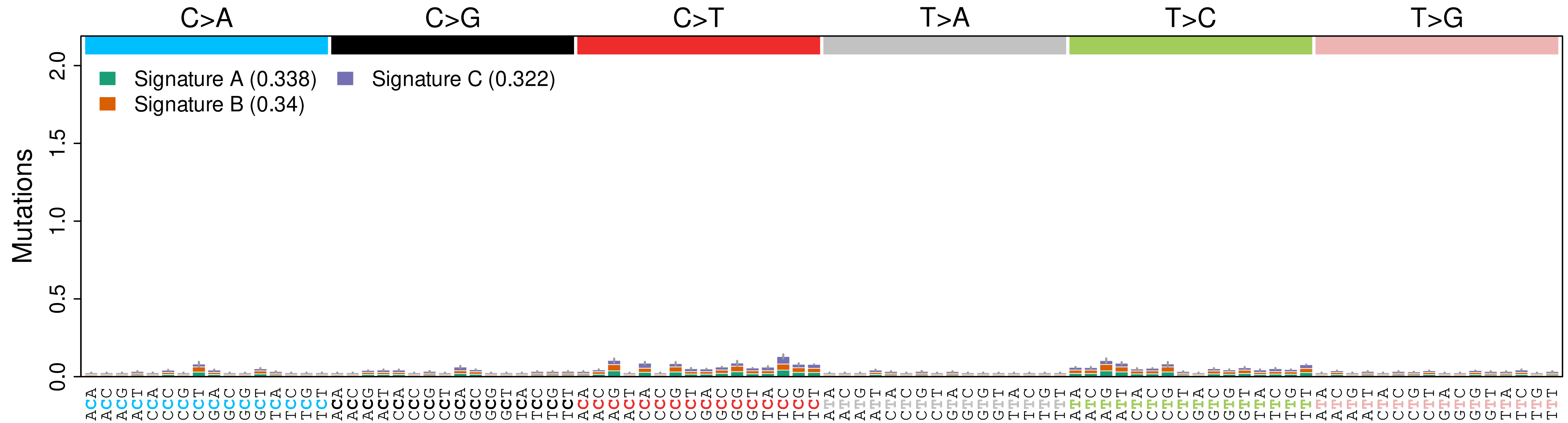




### CATD0447a (3 mutations)



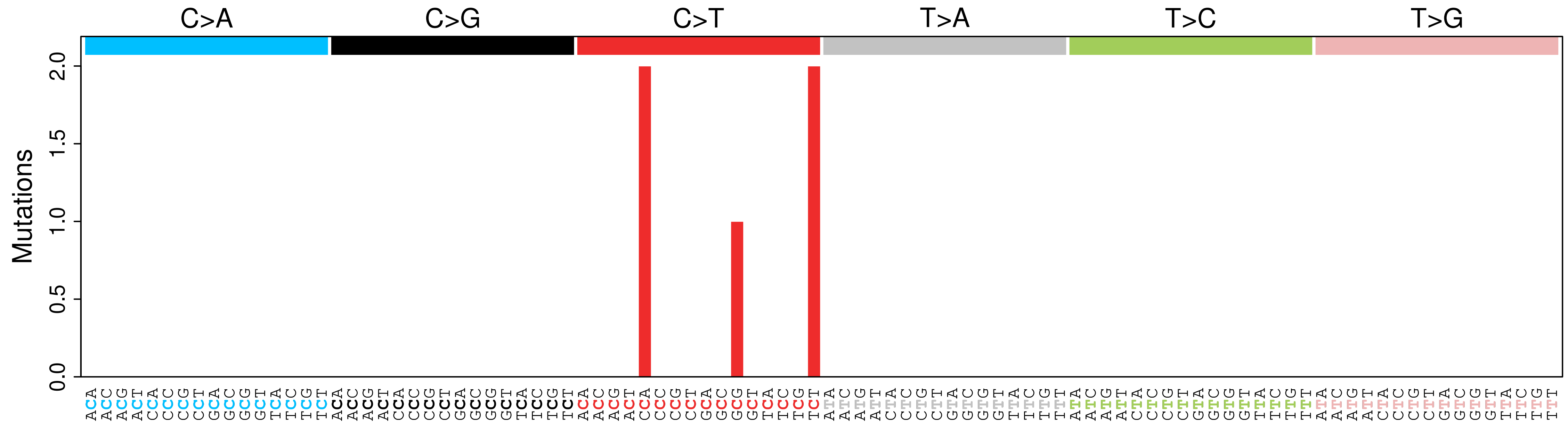
### Reconstructed spectrum (cosine similarity = 0.193)



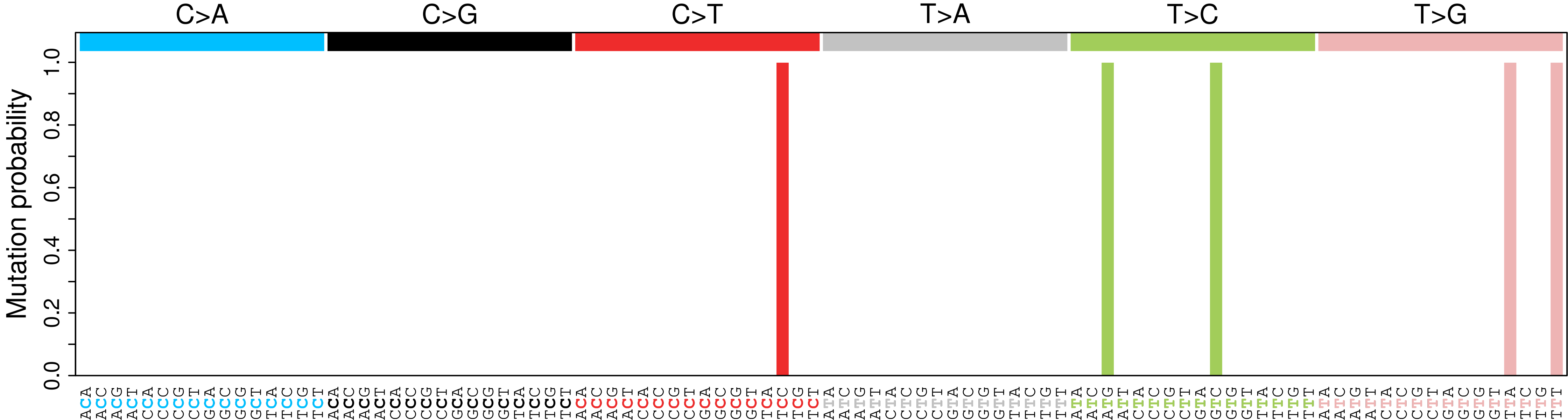




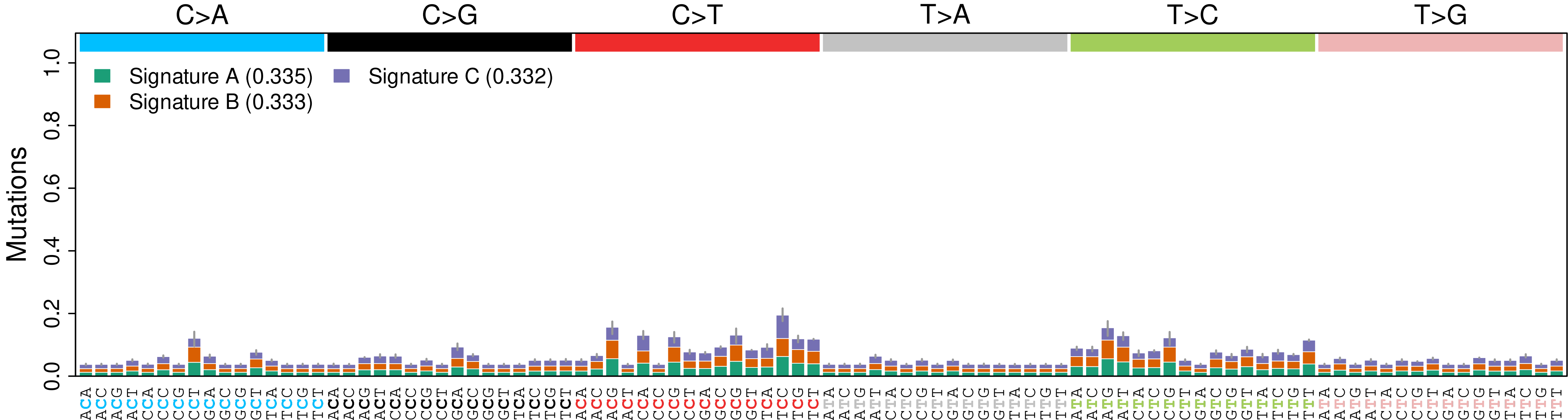
### CATD0617a (5 mutations)



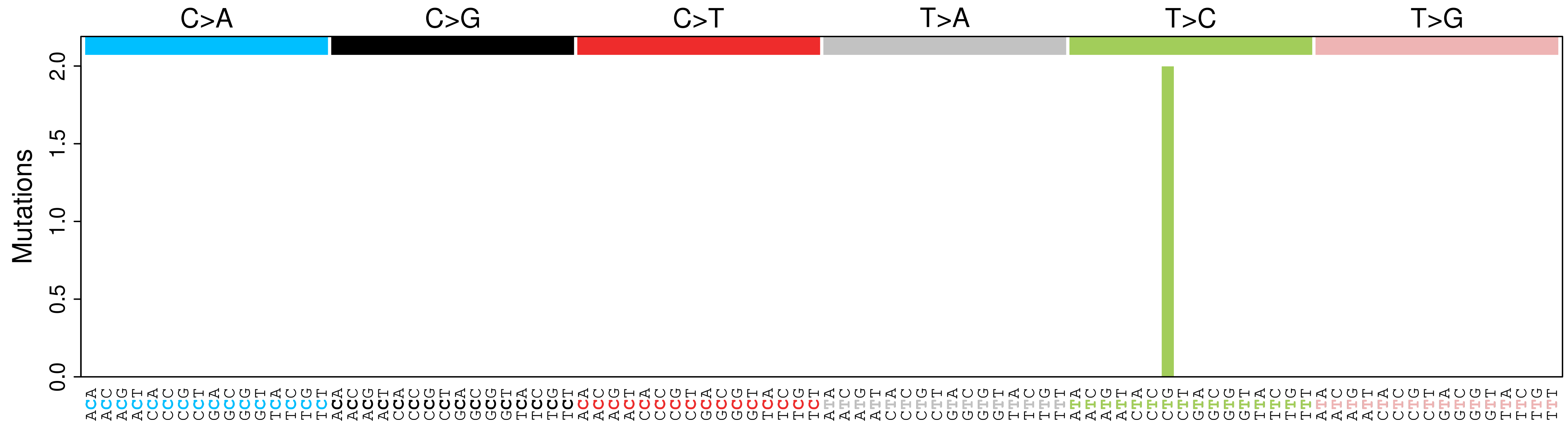
CATD0623a



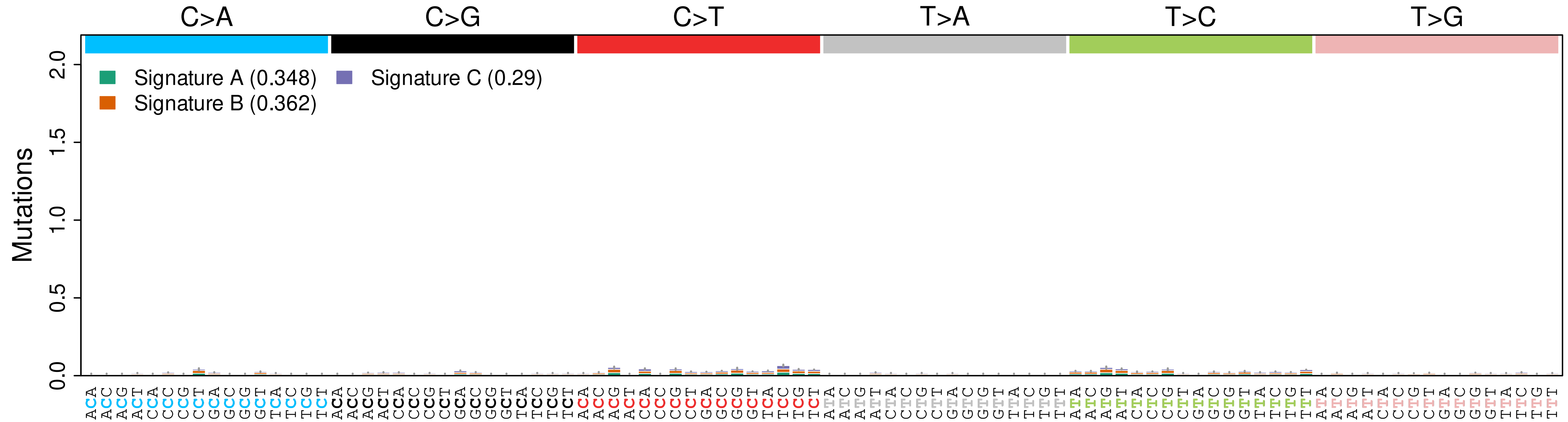
Reconstructed spectrum (cosine similarity = 0.341)



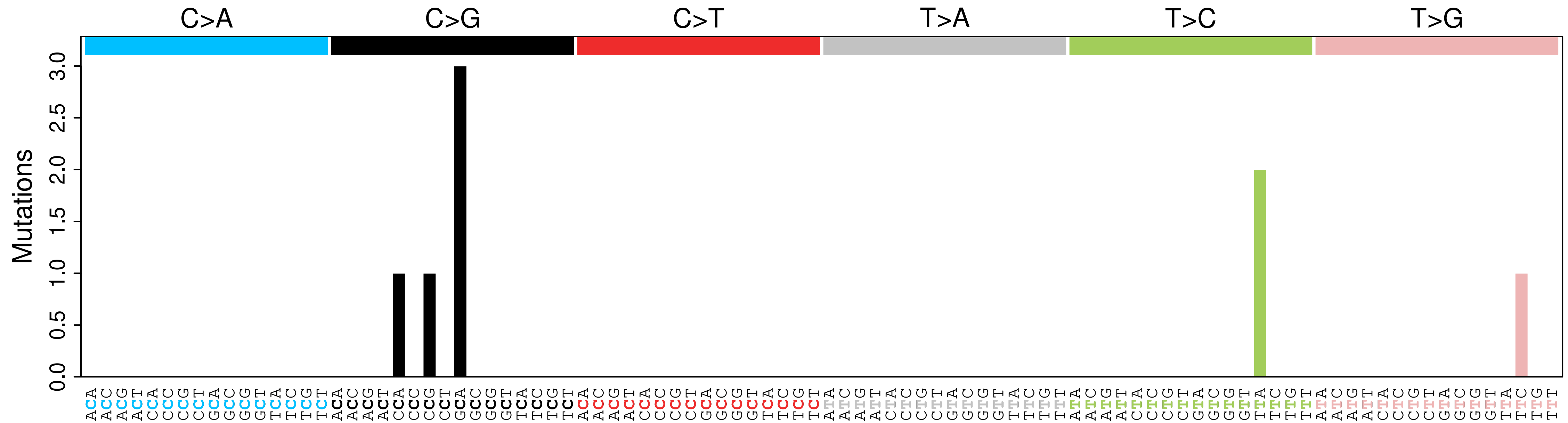
### CATD0456a (2 mutations)



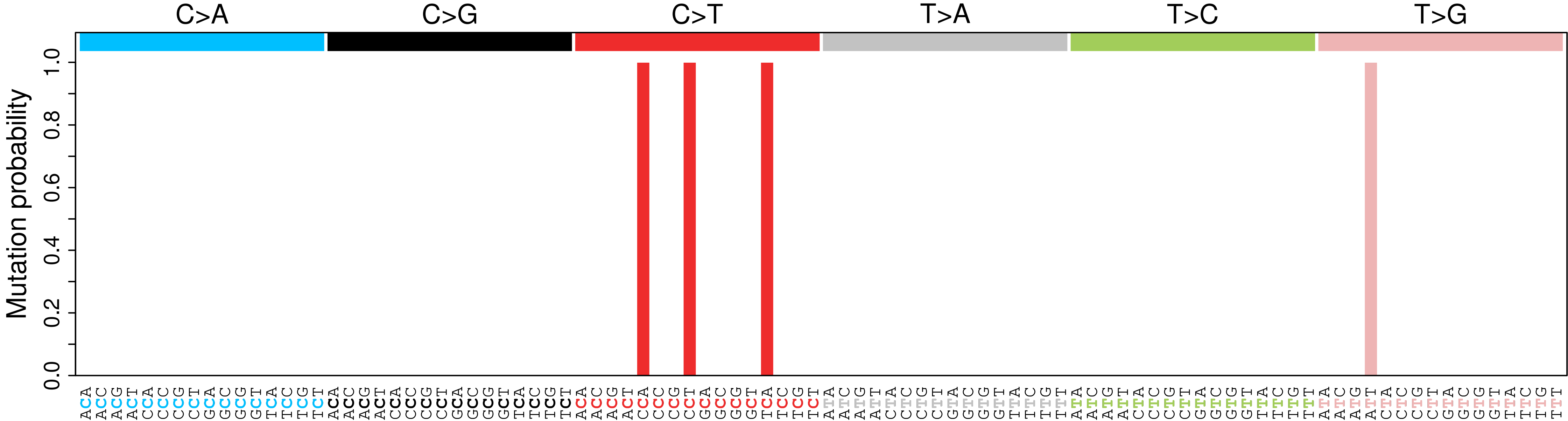
### Reconstructed spectrum (cosine similarity = 0.18)



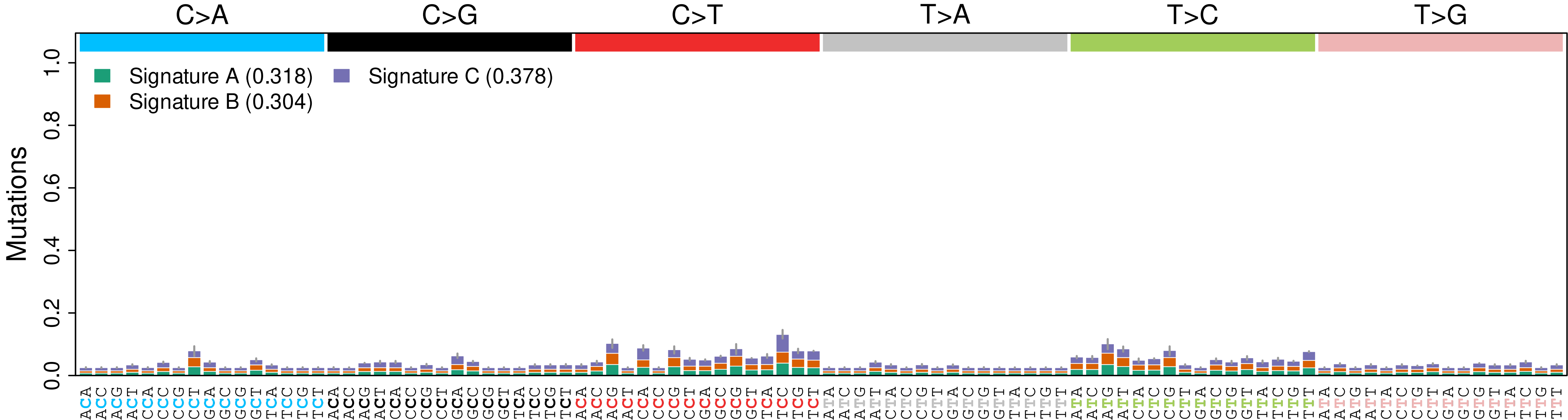
### CATD0618a (8 mutations)



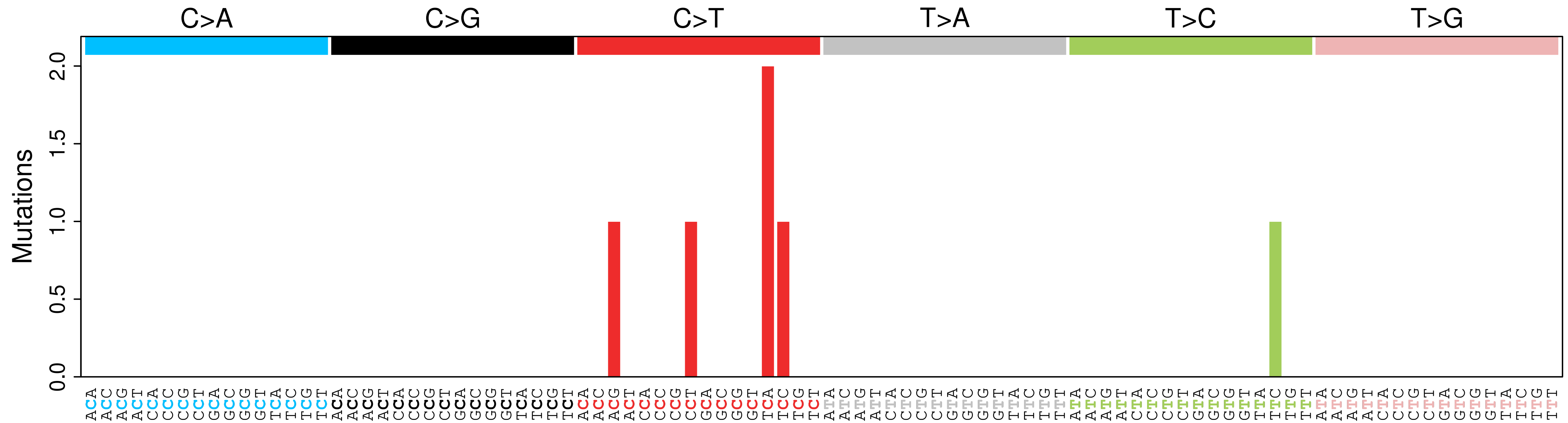
CATD0624a



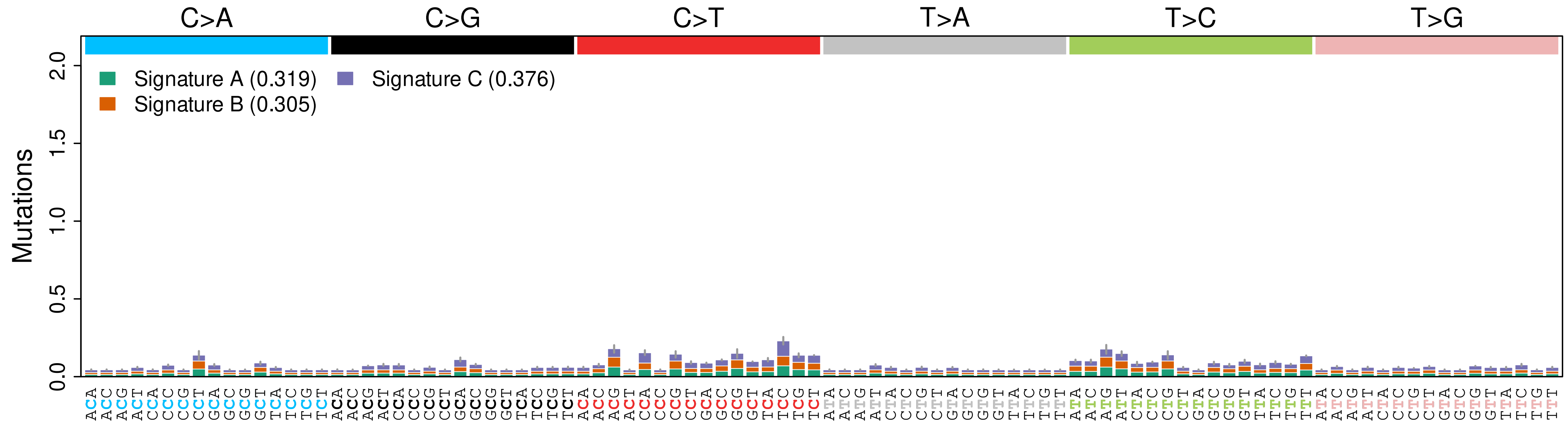
Reconstructed spectrum (cosine similarity = 0.257)



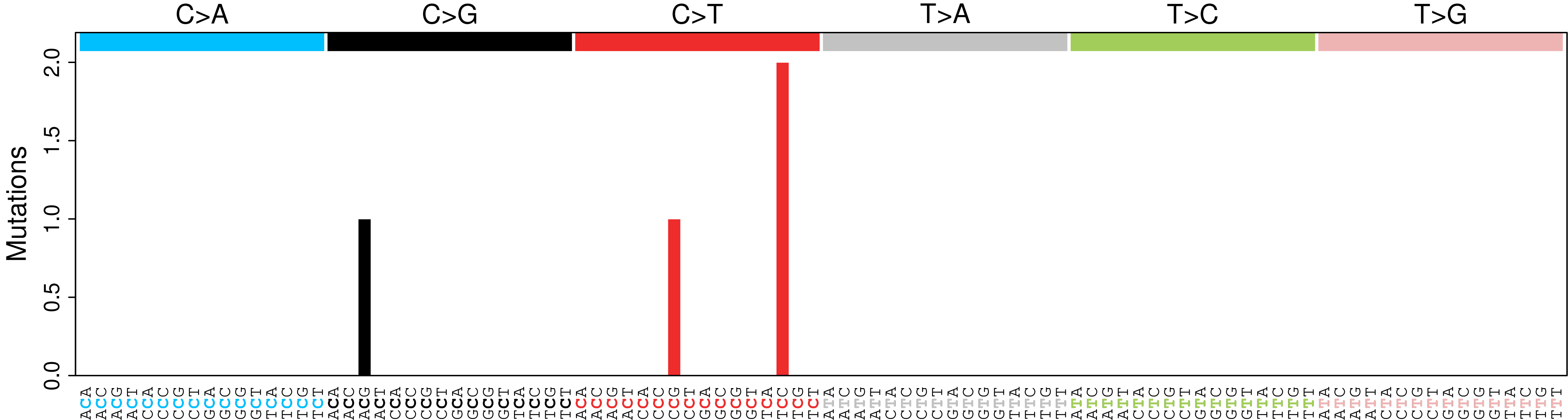
### CATD0460a (6 mutations)



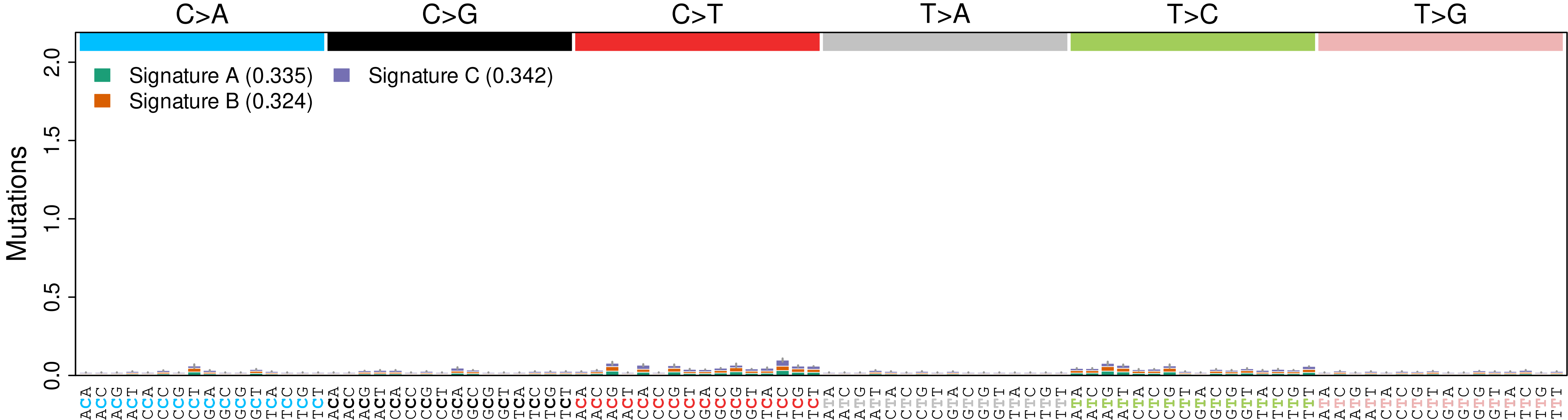
### Reconstructed spectrum (cosine similarity = 0.356)



CATD0448a (4 mutations)



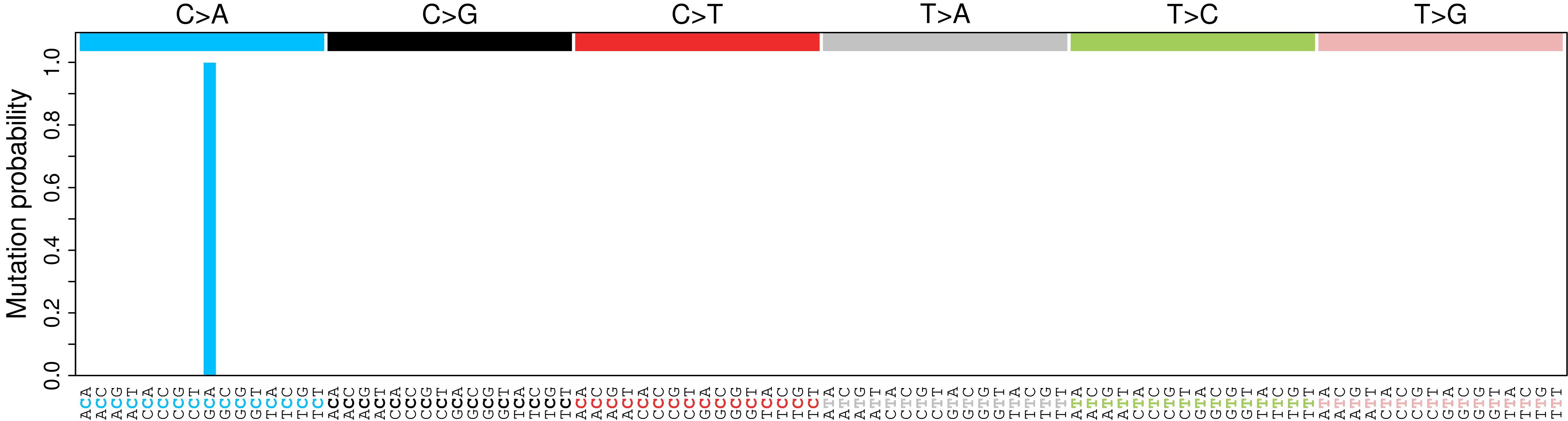
Reconstructed spectrum (cosine similarity = 0.341)



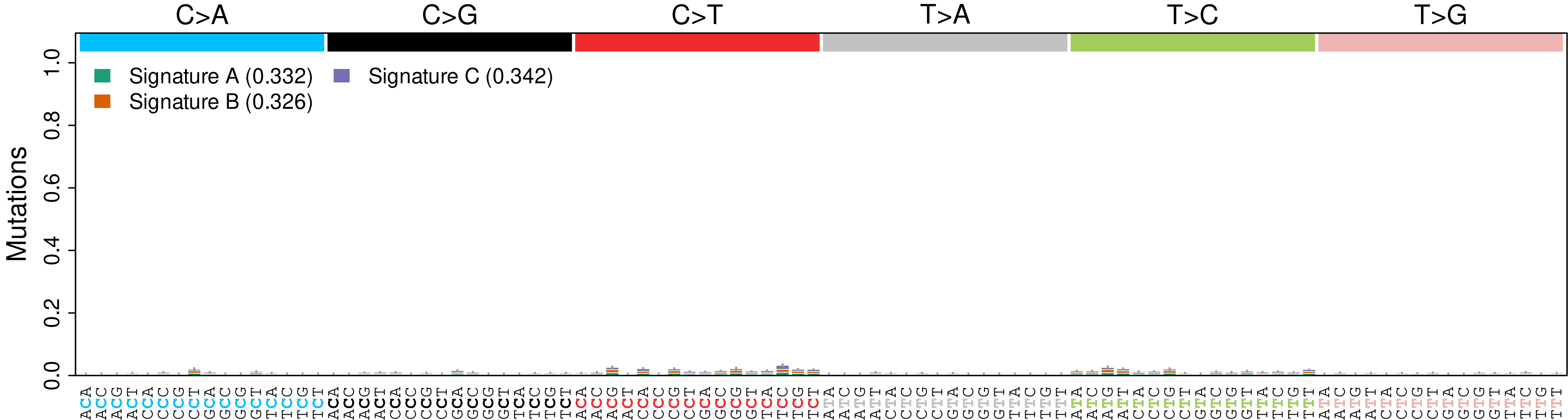




CATD0461a

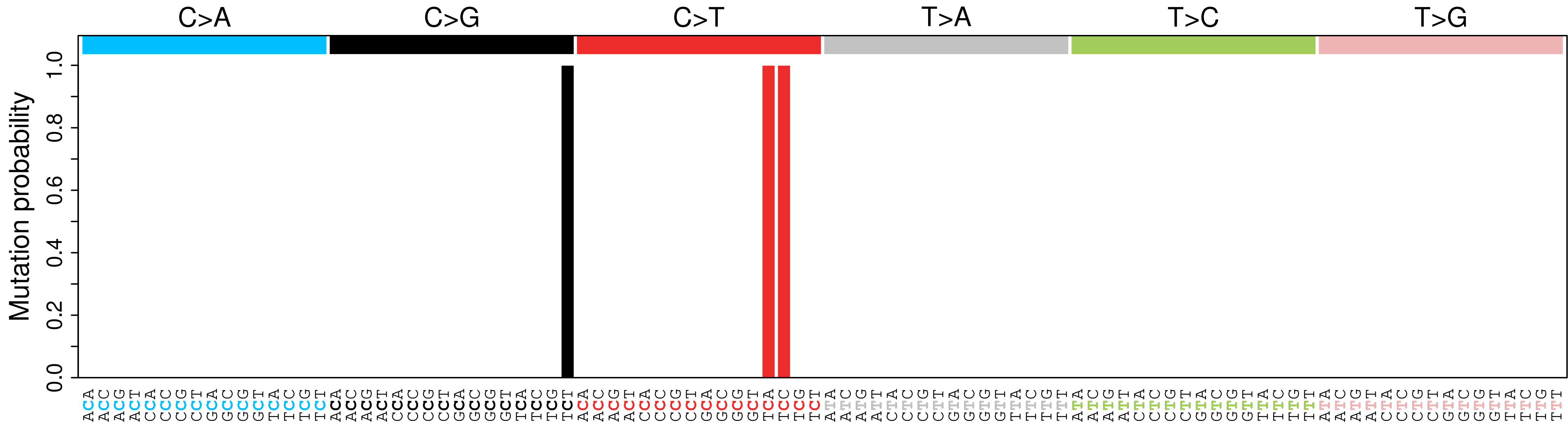


Reconstructed spectrum (cosine similarity = 0.092)

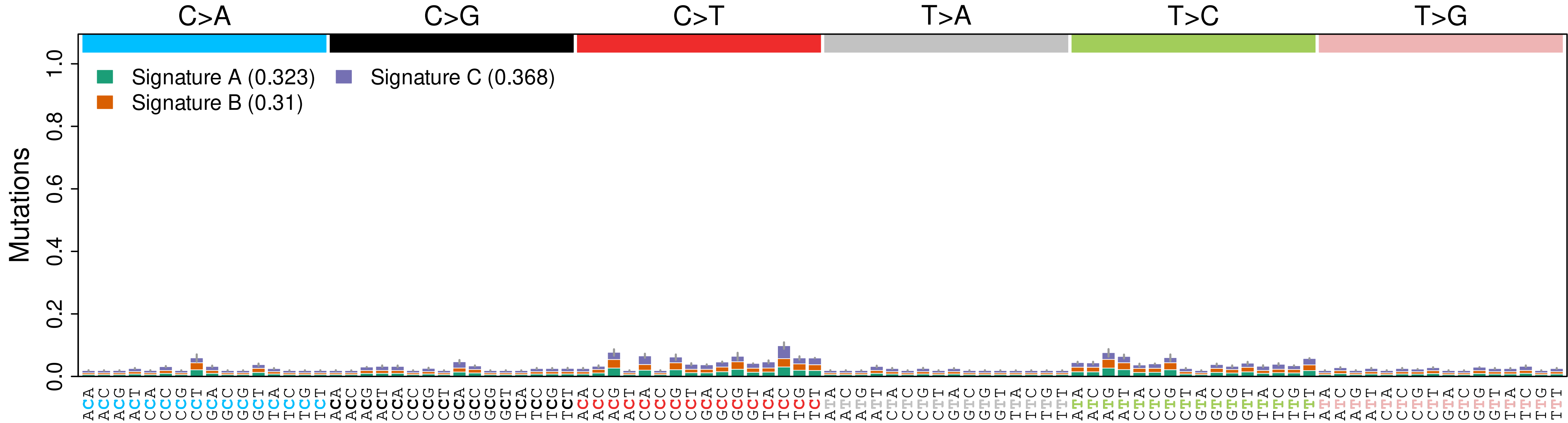




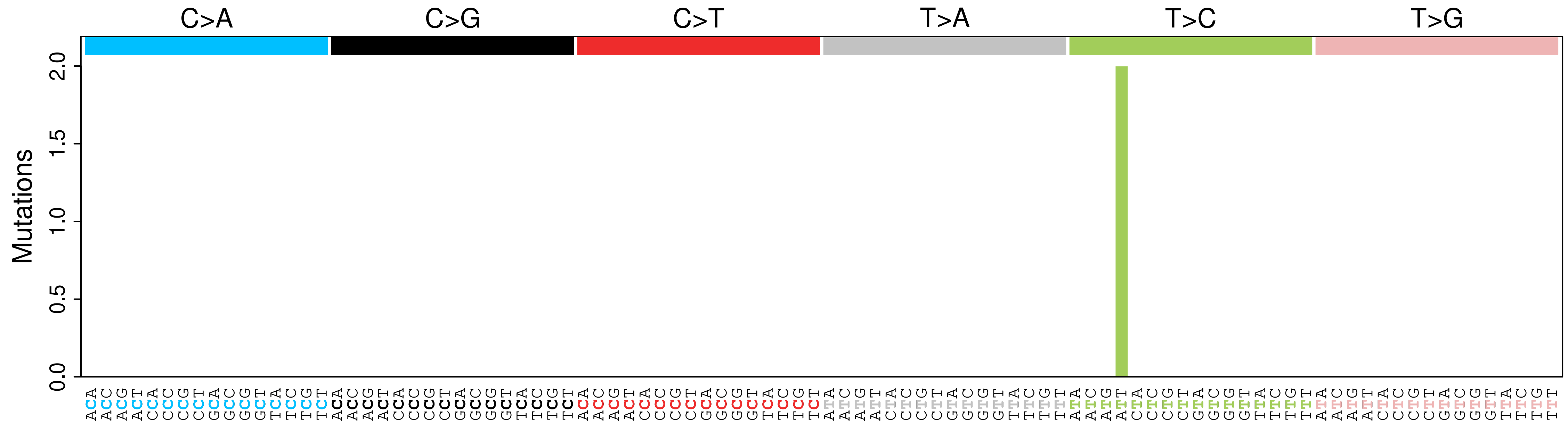
CATD0619a



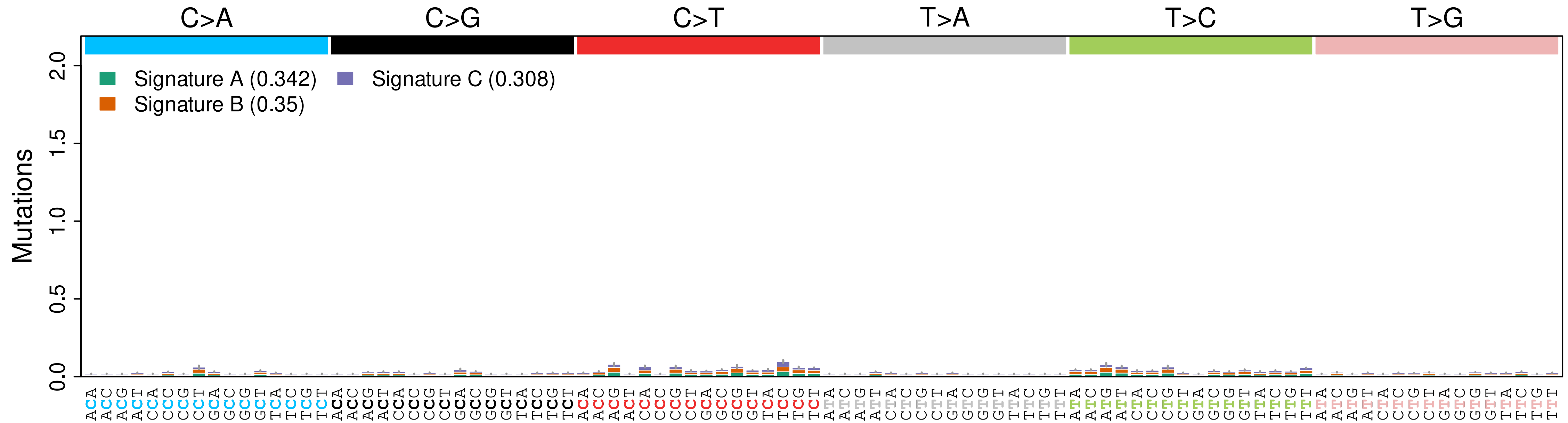
Reconstructed spectrum (cosine similarity = 0.285)



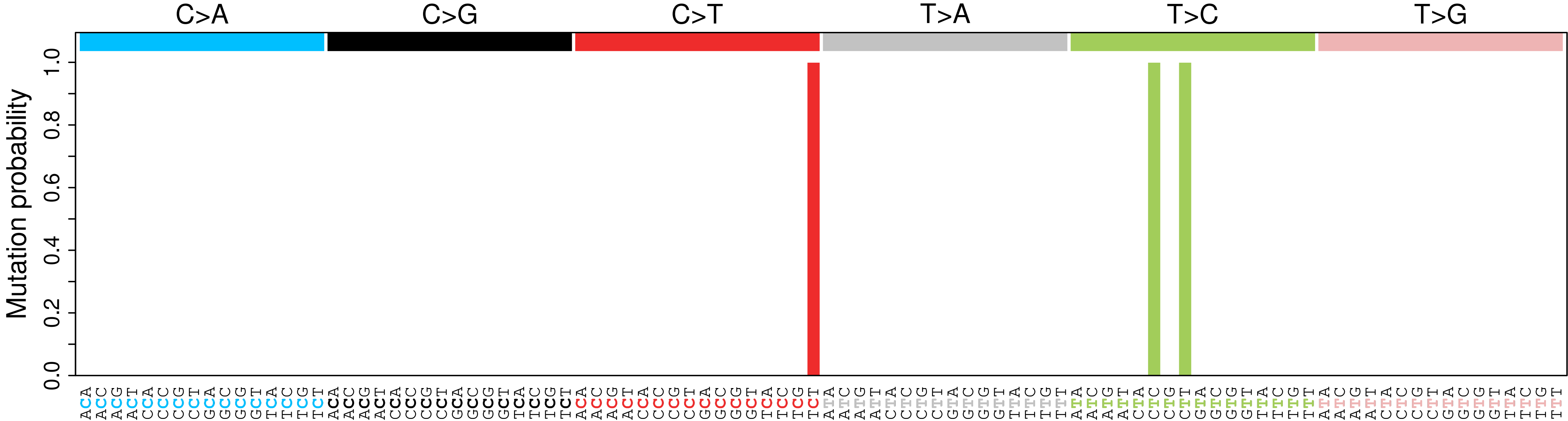
### CATD0613a (2 mutations)



### Reconstructed spectrum (cosine similarity = 0.188)



CATD0464a



Reconstructed spectrum (cosine similarity = 0.208)

