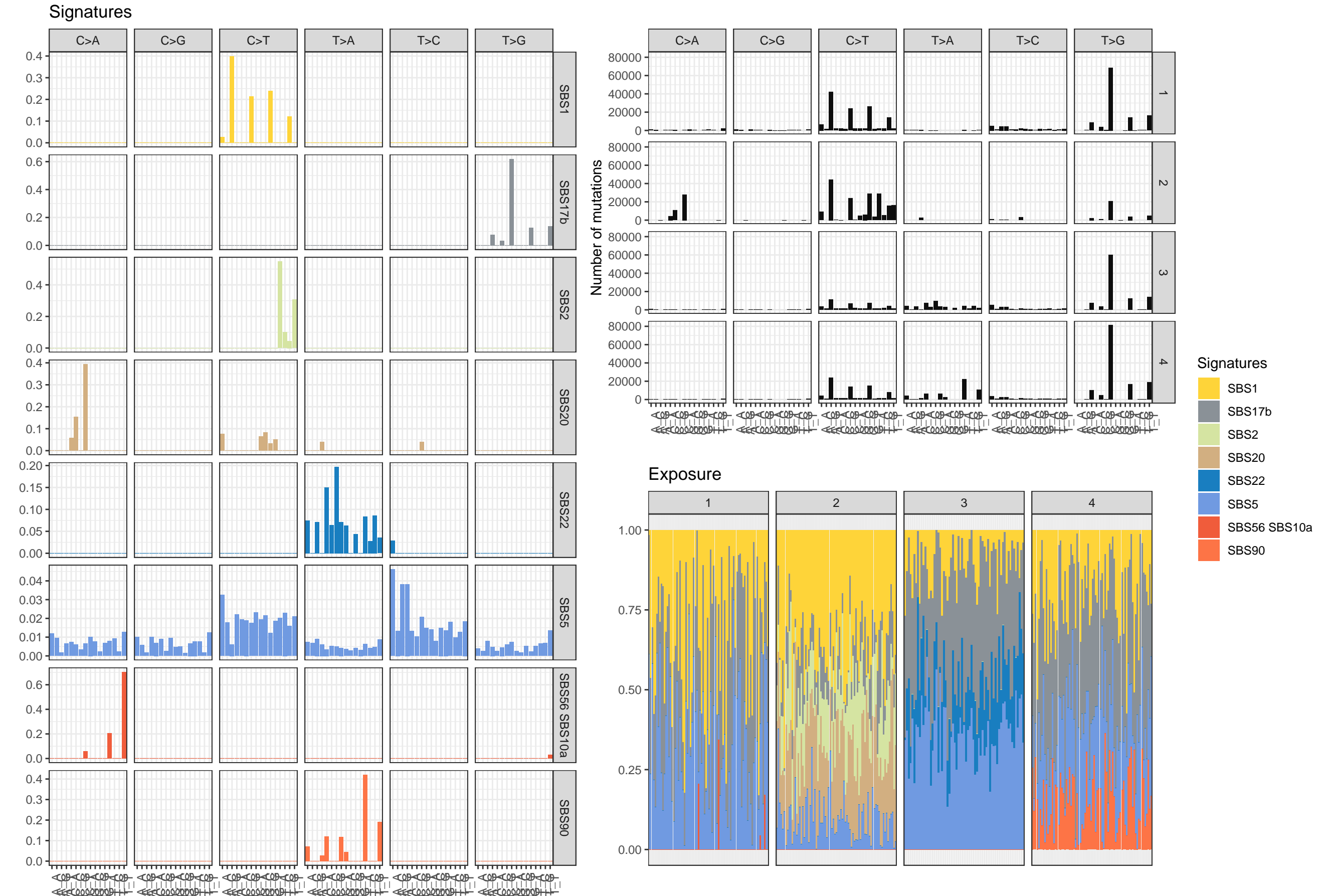
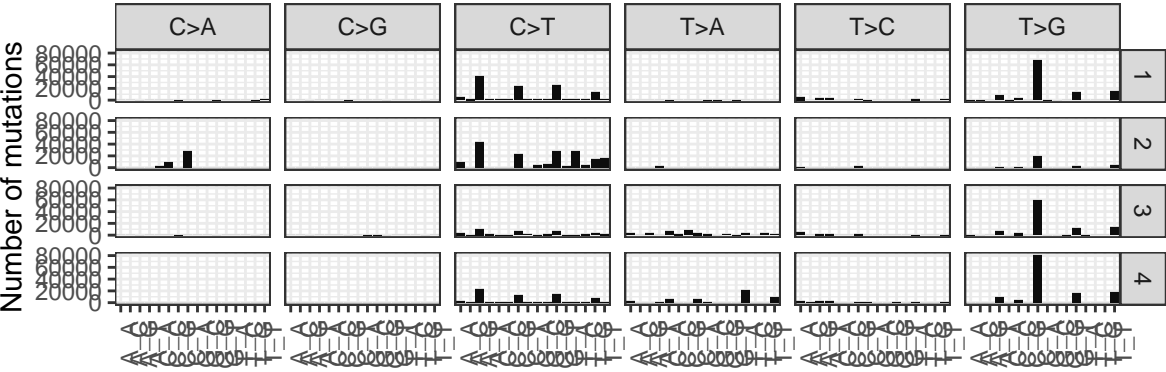
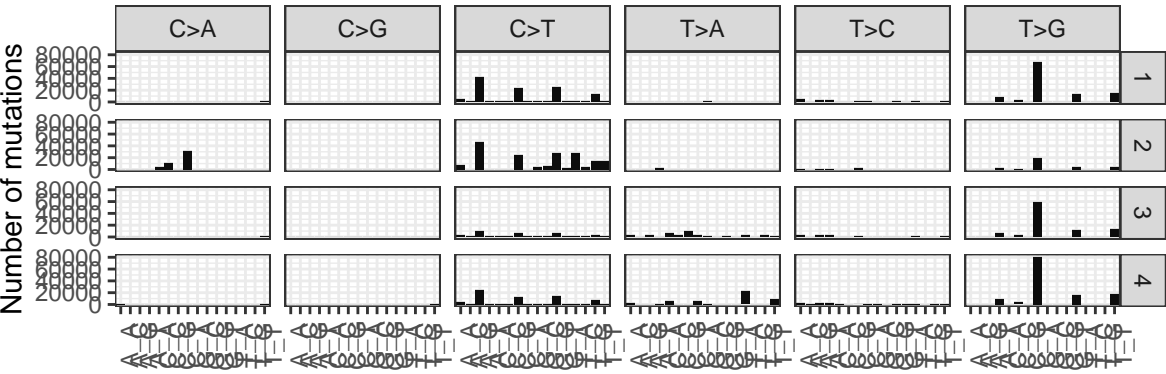
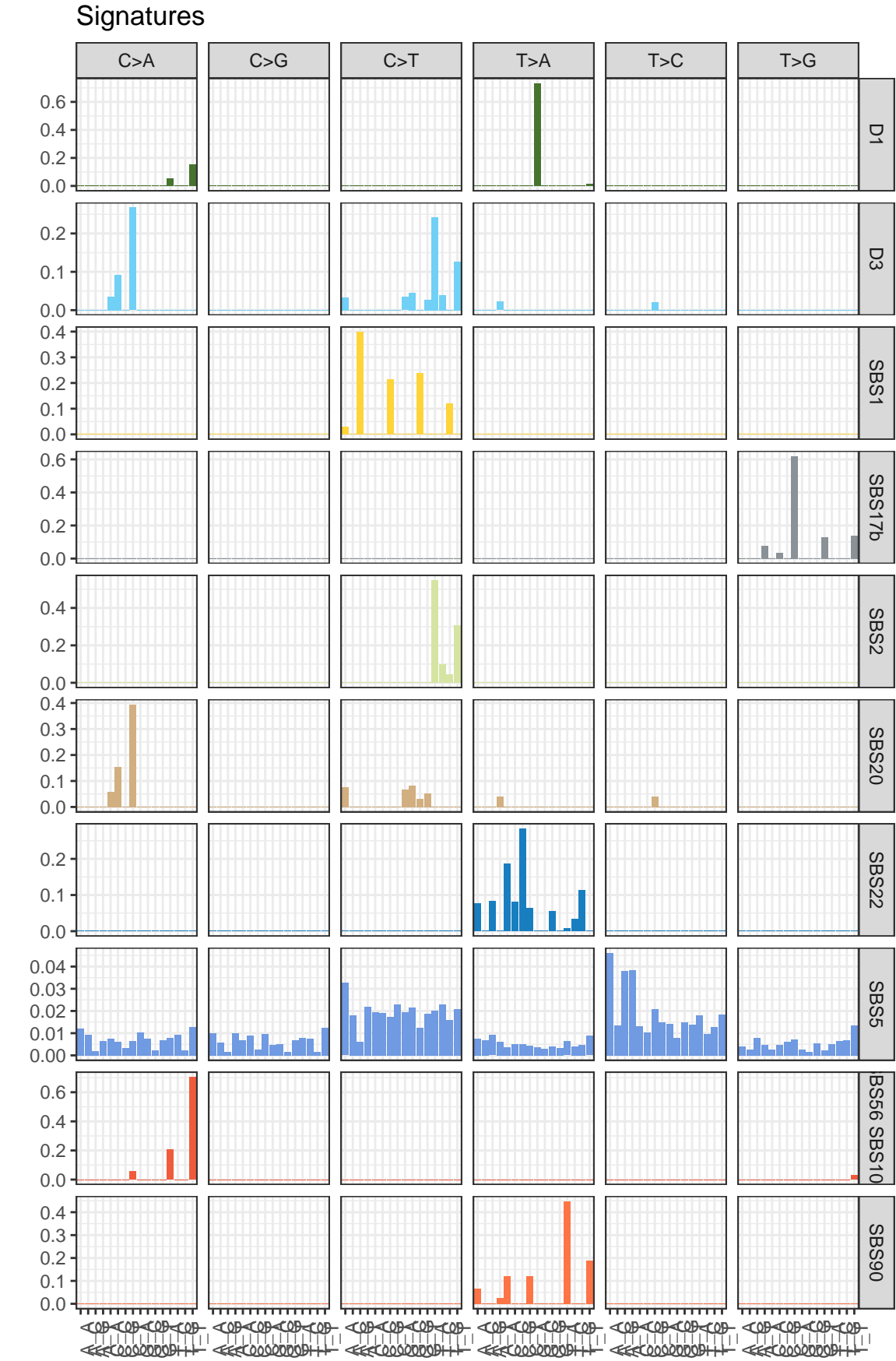


SIMUL: Rare sigs SBS56 SBS10a – Common sigs SBS2, SBS20, SBS22, SBS90

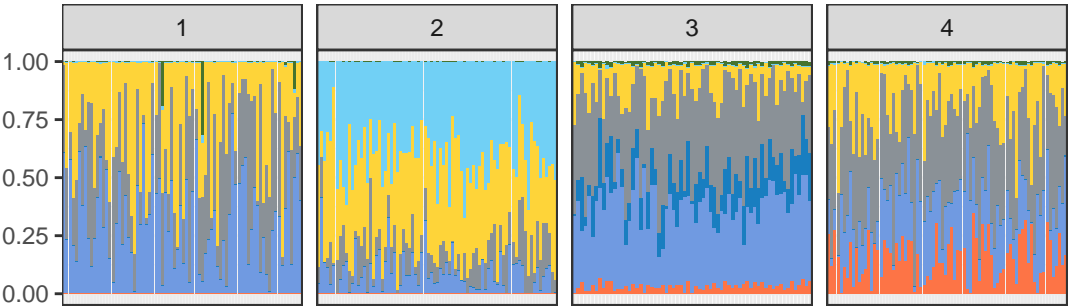


FIT: Rare sigs SBS56 SBS10a – Common sigs SBS2, SBS20, SBS22, SBS90

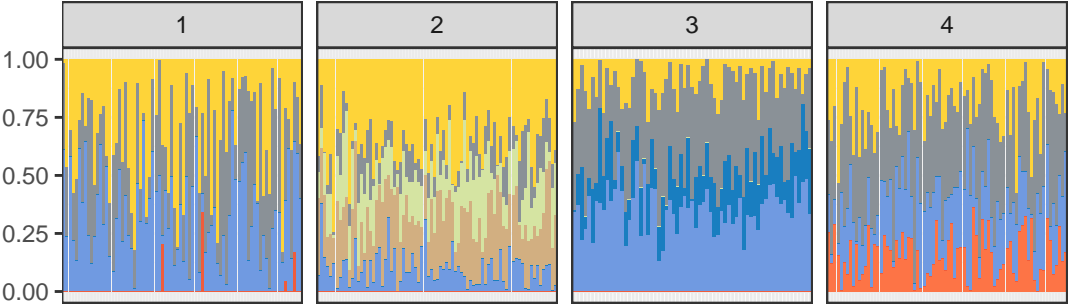
Missing sigs SBS20, SBS2, SBS56 SBS10a – Added sigs D1, D3



Exposure



Exposure

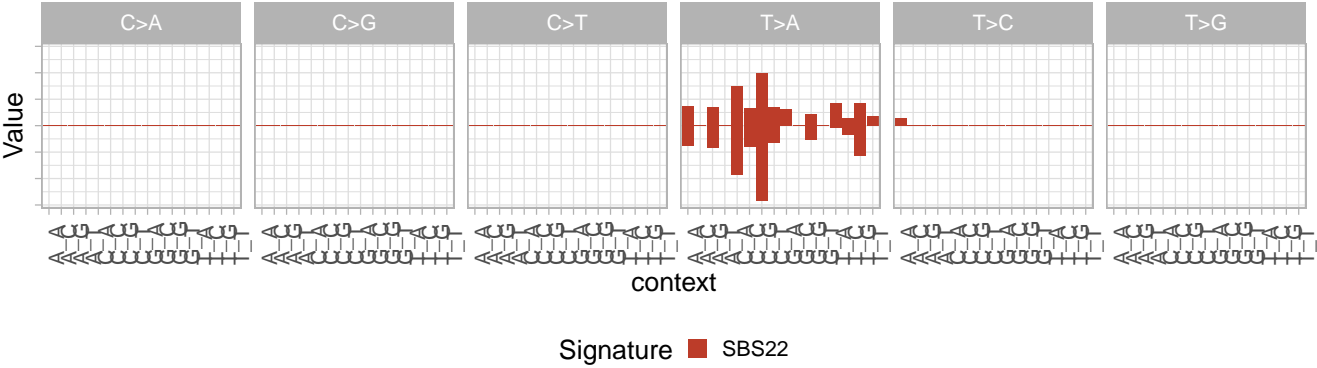


FIT: Rare sigs SBS56 SBS10a – Common sigs SBS2, SBS20, SBS22, SBS90

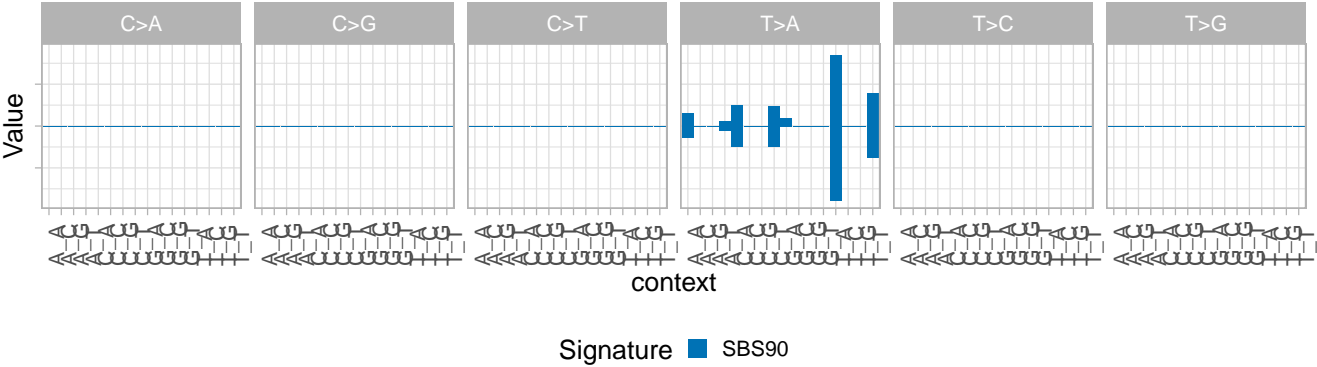
Missing sigs SBS20, SBS2, SBS56 SBS10a – Added sigs D1, D3



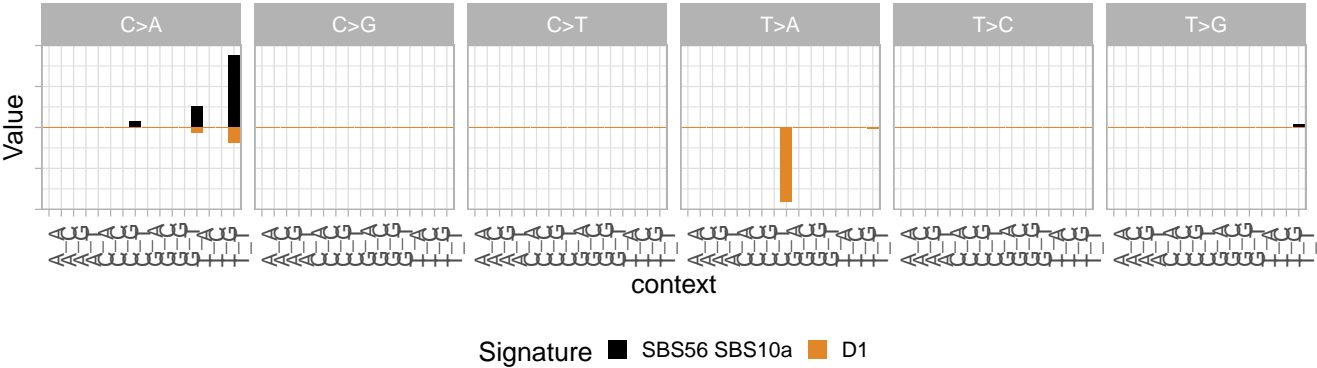
SBS22 vs SBS22 cosine similarity  $\theta = 0.9332118$



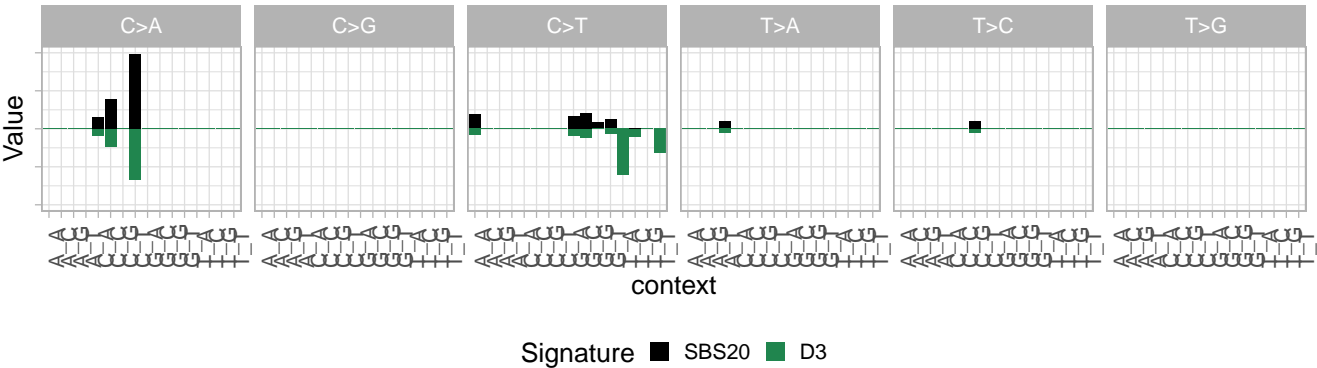
SBS90 vs SBS90 cosine similarity  $\theta = 0.9952165$



D1 vs SBS56 SBS10a cosine similarity  $\theta = 0.2159437$

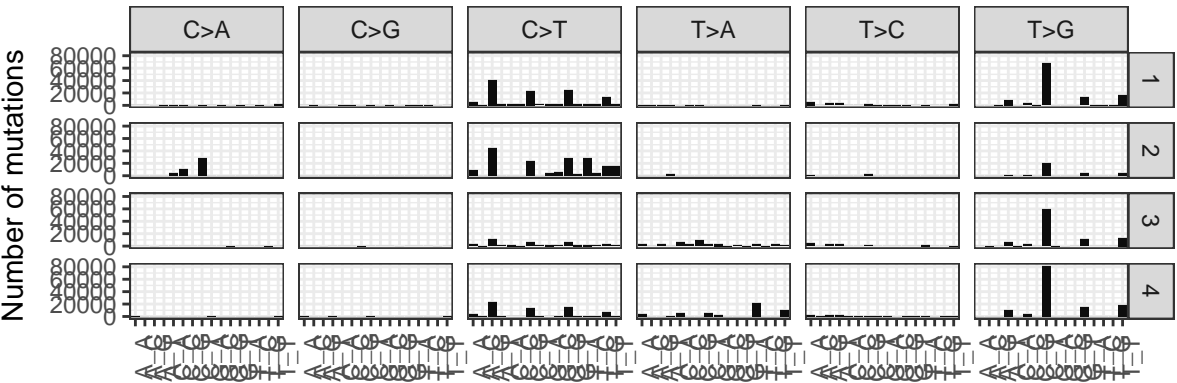
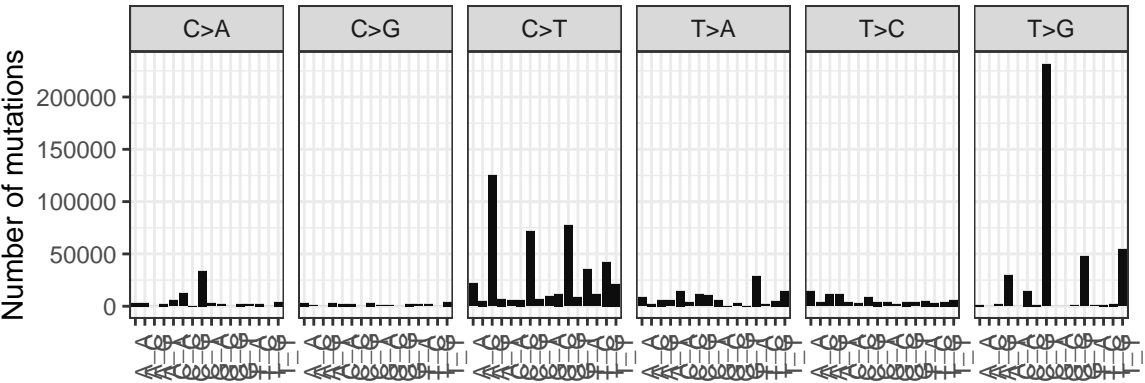
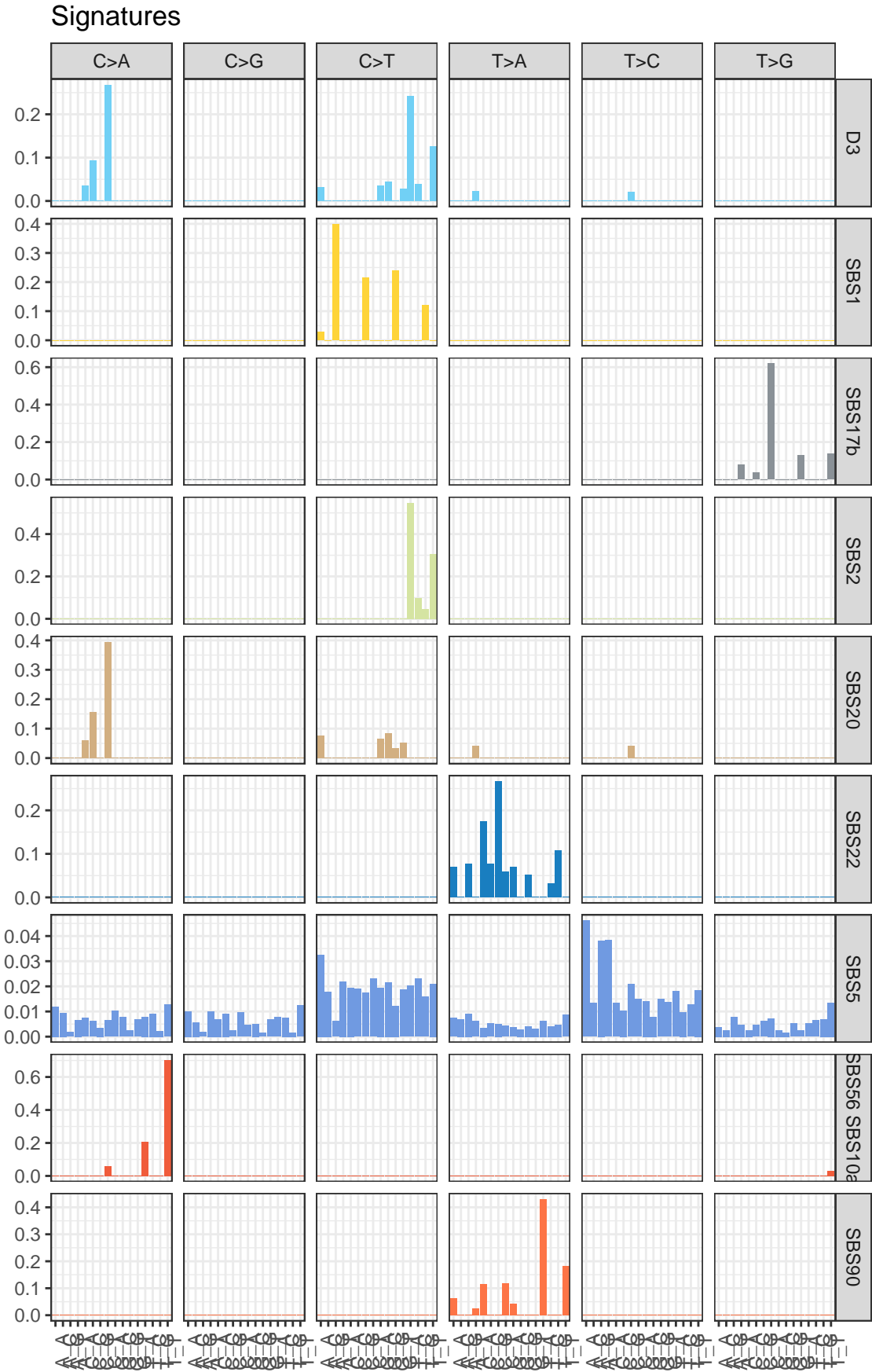


D3 vs SBS20 cosine similarity  $\theta = 0.7254036$

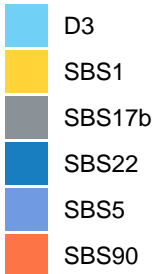


HIER FIT: Rare sigs SBS56 SBS10a – Common sigs SBS2, SBS20, SBS22, SBS90

Missing sigs SBS20, SBS2, SBS56 SBS10a – Added sigs D3



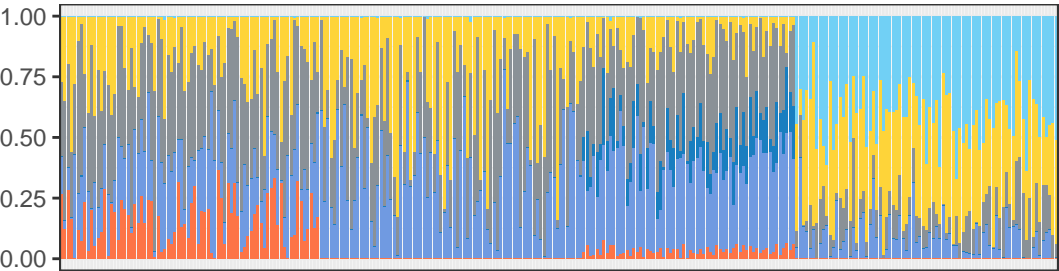
Signatures



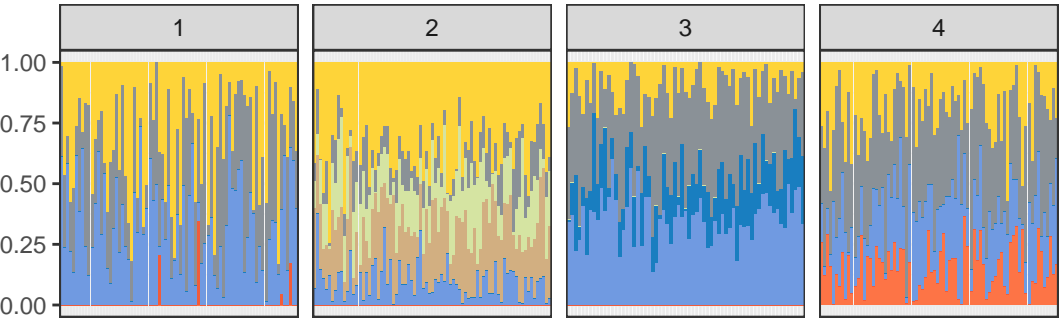
Signatures



Exposure

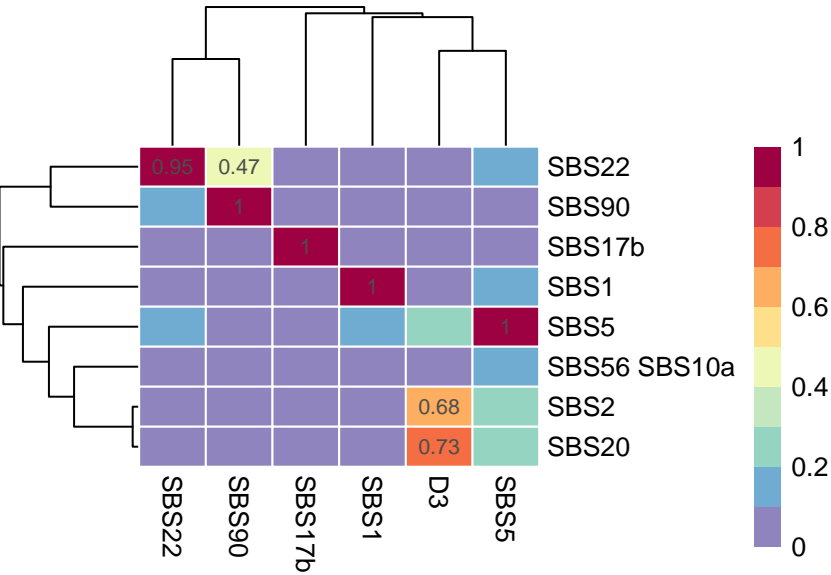


Exposure

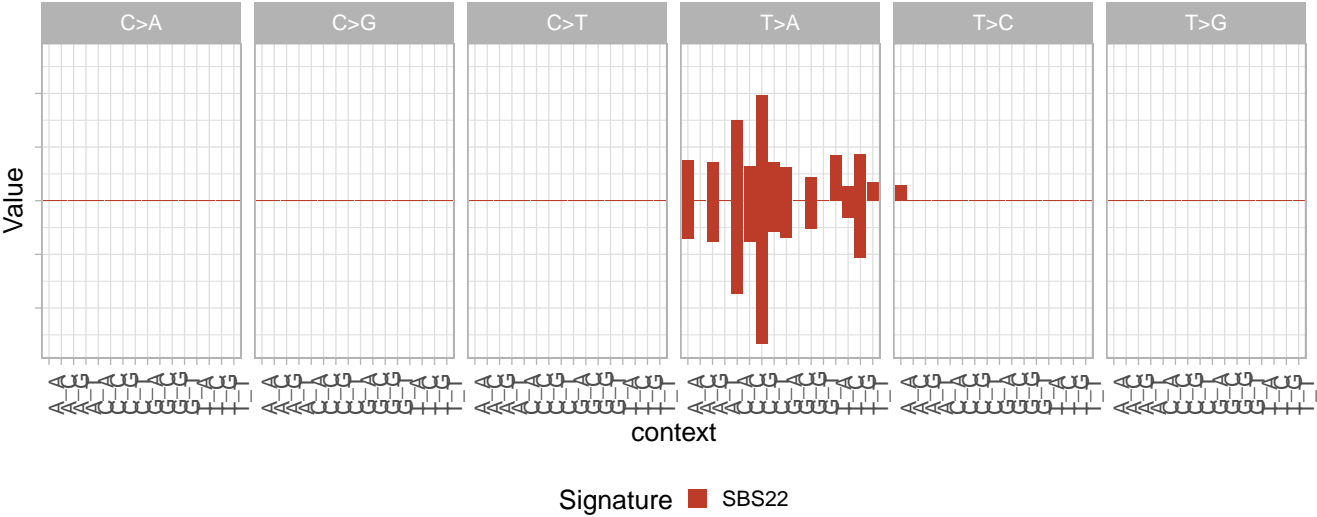


HIER FIT: Rare sigs SBS56 SBS10a – Common sigs SBS2, SBS20, SBS22, SBS90

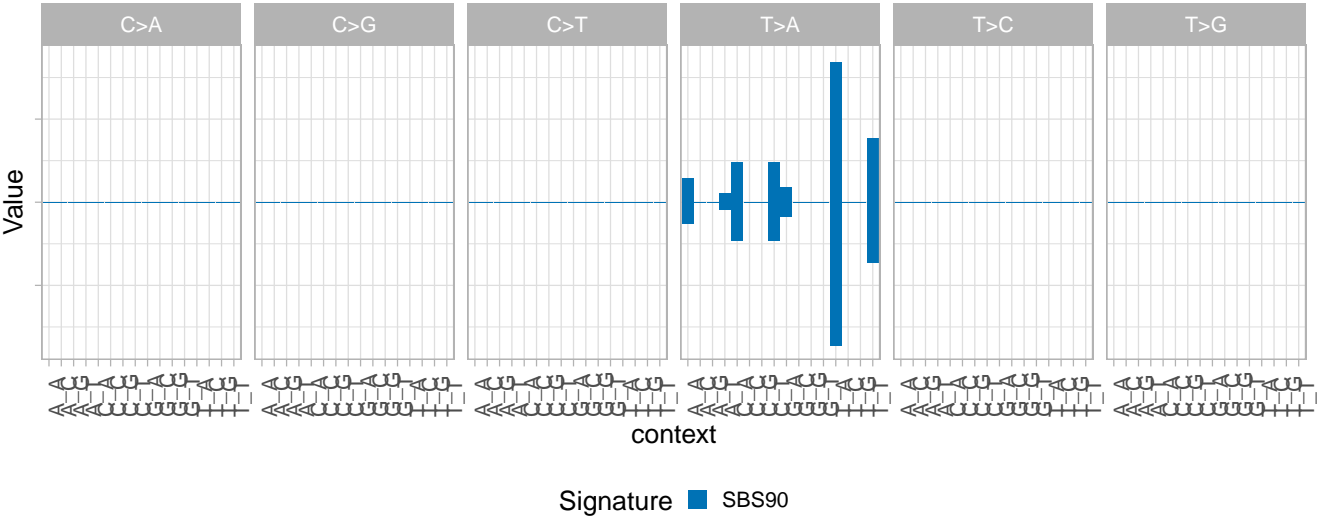
Missing sigs SBS20, SBS2, SBS56 SBS10a – Added sigs D3



SBS22 vs SBS22 cosine similarity  $\theta = 0.9485117$



SBS90 vs SBS90 cosine similarity  $\theta = 0.9993865$



D3 vs SBS20 cosine similarity  $\theta = 0.7253491$

