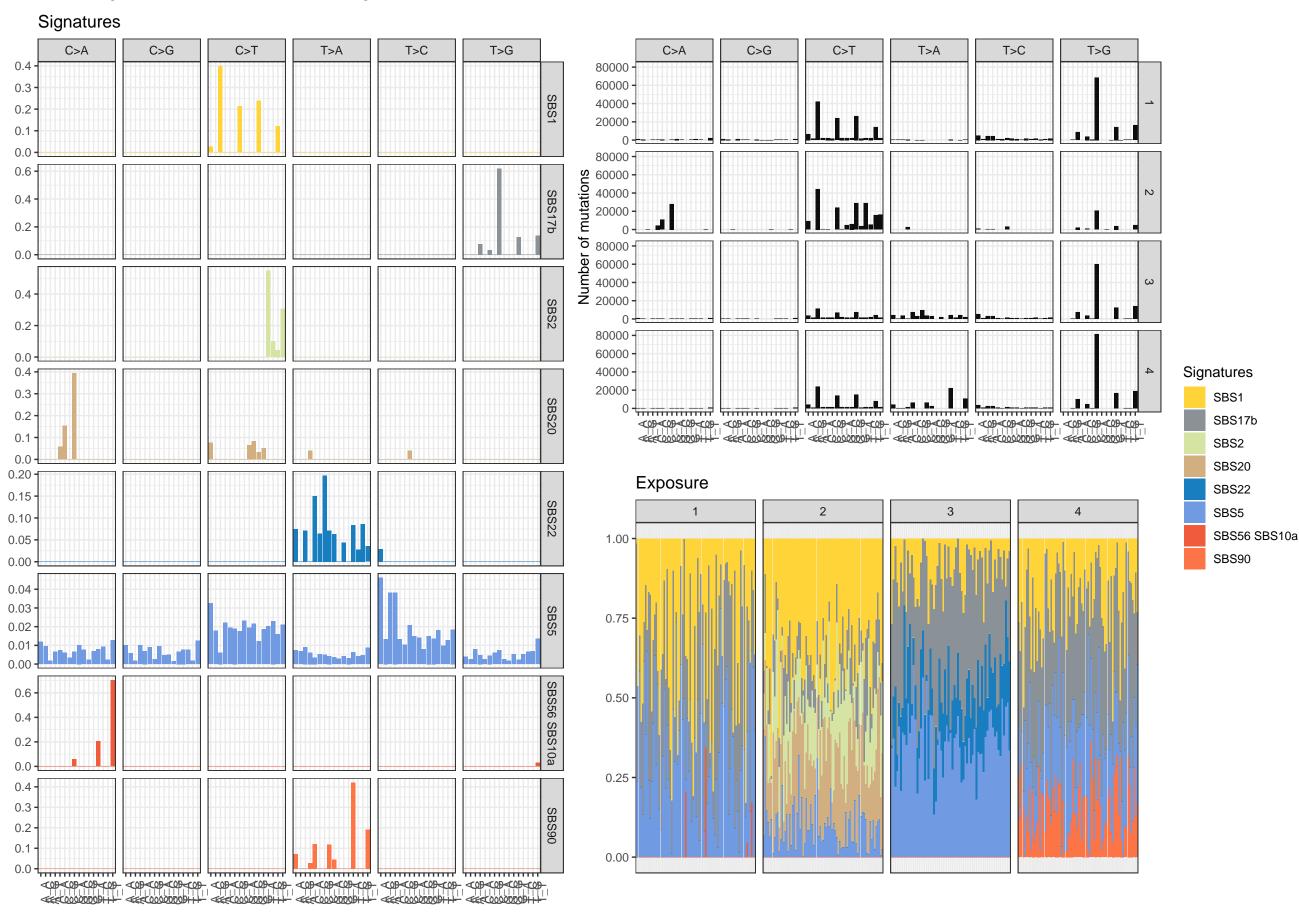
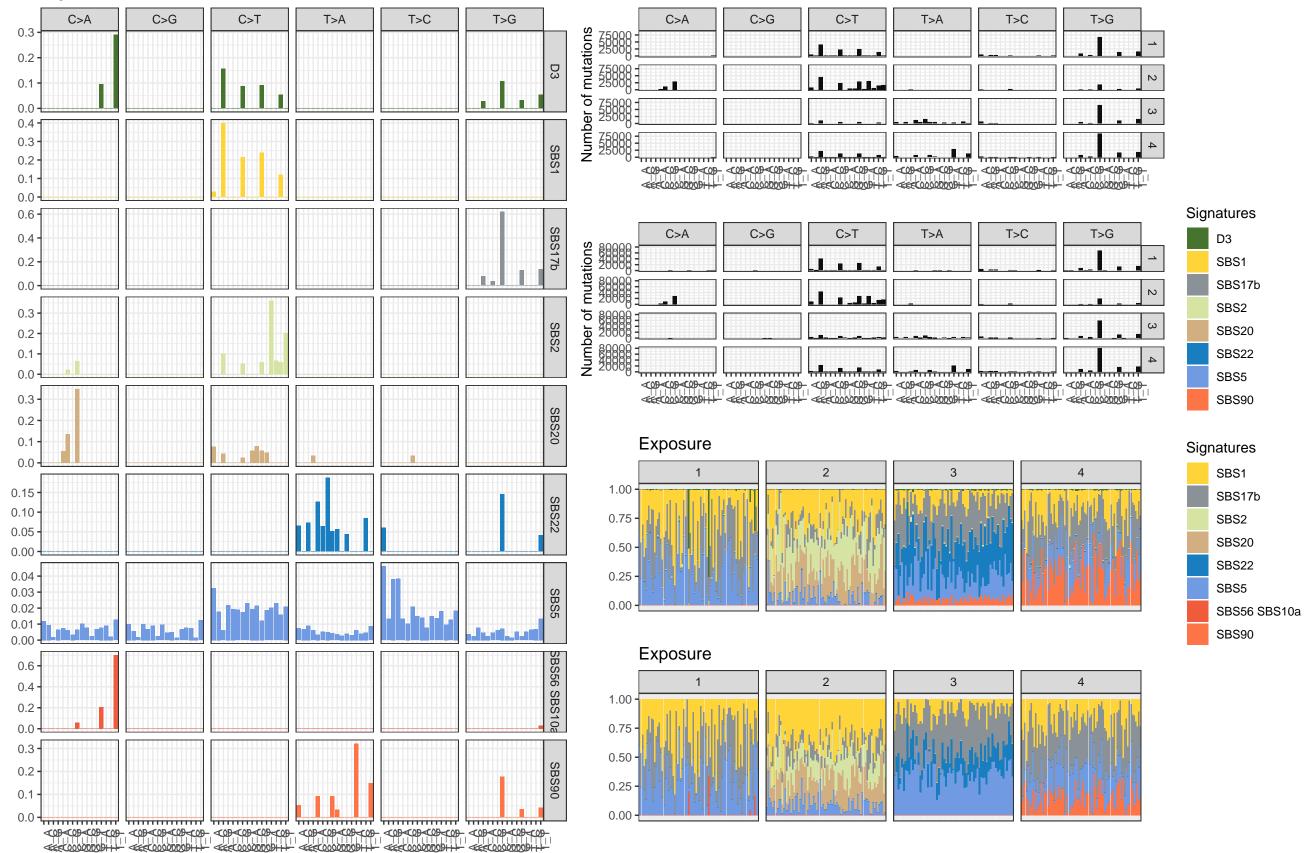
SIMUL: Rare sigs SBS56 SBS10a – Common sigs SBS2, SBS20, SBS22, SBS90

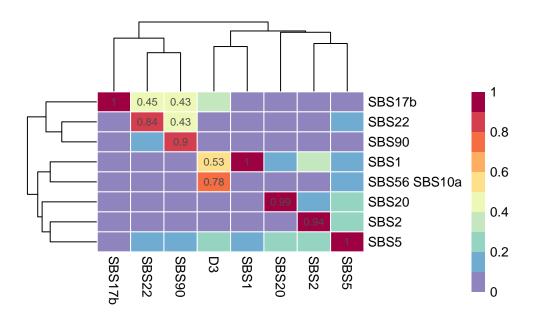


FIT: Rare sigs SBS56 SBS10a – Common sigs SBS2, SBS20, SBS22, SBS90 Missing sigs SBS56 SBS10a – Added sigs D3

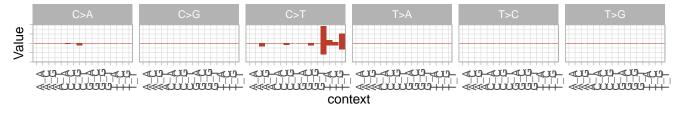




FIT: Rare sigs SBS56 SBS10a – Common sigs SBS2, SBS20, SBS22, SBS90 Missing sigs SBS56 SBS10a – Added sigs D3

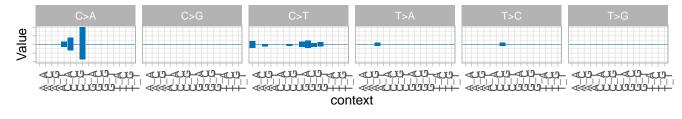


SBS2 vs SBS2 cosine similarity $\theta = 0.9428139$



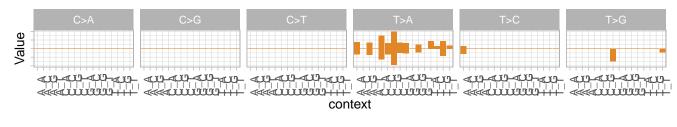
Signature SBS2

SBS20 vs SBS20 cosine similarity $\theta = 0.9895739$



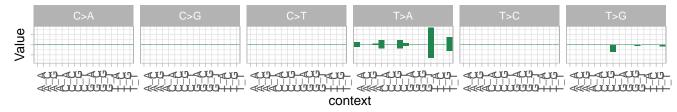
Signature SBS20

SBS22 vs SBS22 cosine similarity $\theta = 0.8388329$



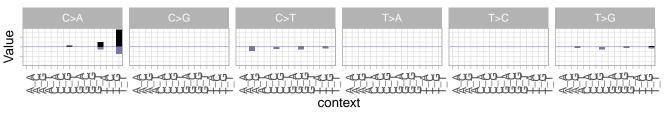
Signature SBS22

SBS90 vs SBS90 cosine similarity θ = 0.8976282



Signature SBS90

D3 vs SBS56 SBS10a cosine similarity $\theta = 0.7838702$

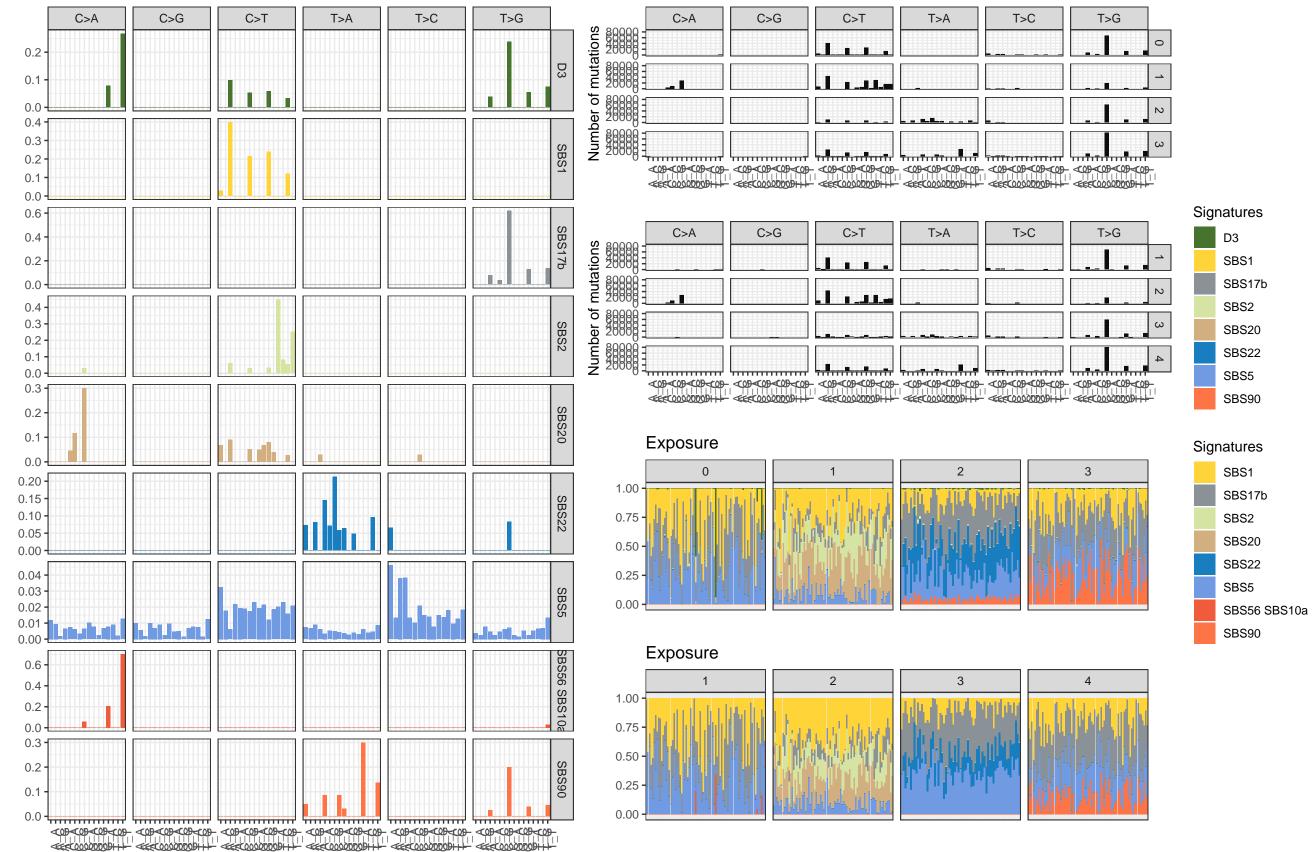


Signature ■ SBS56 SBS10a ■ D3

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

Missing sigs SBS56 SBS10a - Added sigs D3

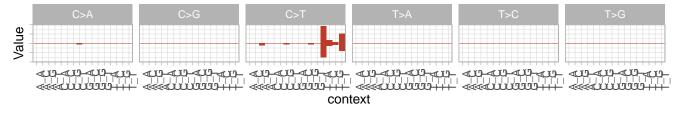
Signatures



HIER FIT: Rare sigs SBS56 SBS10a – Common sigs SBS2, SBS20, SBS22, SBS90 Missing sigs SBS56 SBS10a – Added sigs D3

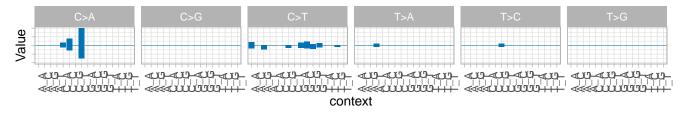


SBS2 vs SBS2 cosine similarity $\theta = 0.9866594$



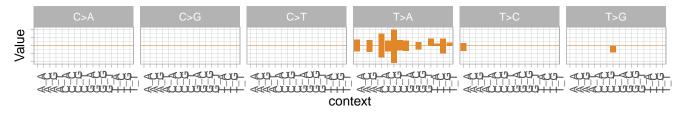
Signature SBS2

SBS20 vs SBS20 cosine similarity $\theta = 0.9446821$



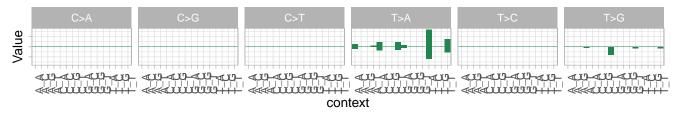
Signature SBS20

SBS22 vs SBS22 cosine similarity $\theta = 0.9183194$



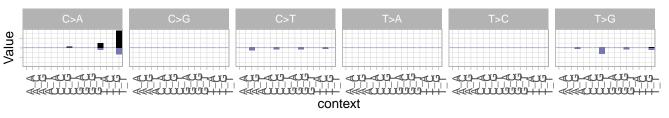
Signature SBS22

SBS90 vs SBS90 cosine similarity $\theta = 0.8598102$



Signature SBS90

D3 vs SBS56 SBS10a cosine similarity $\theta = 0.6976126$



Signature ■ SBS56 SBS10a ■ D3