

SigPhylo

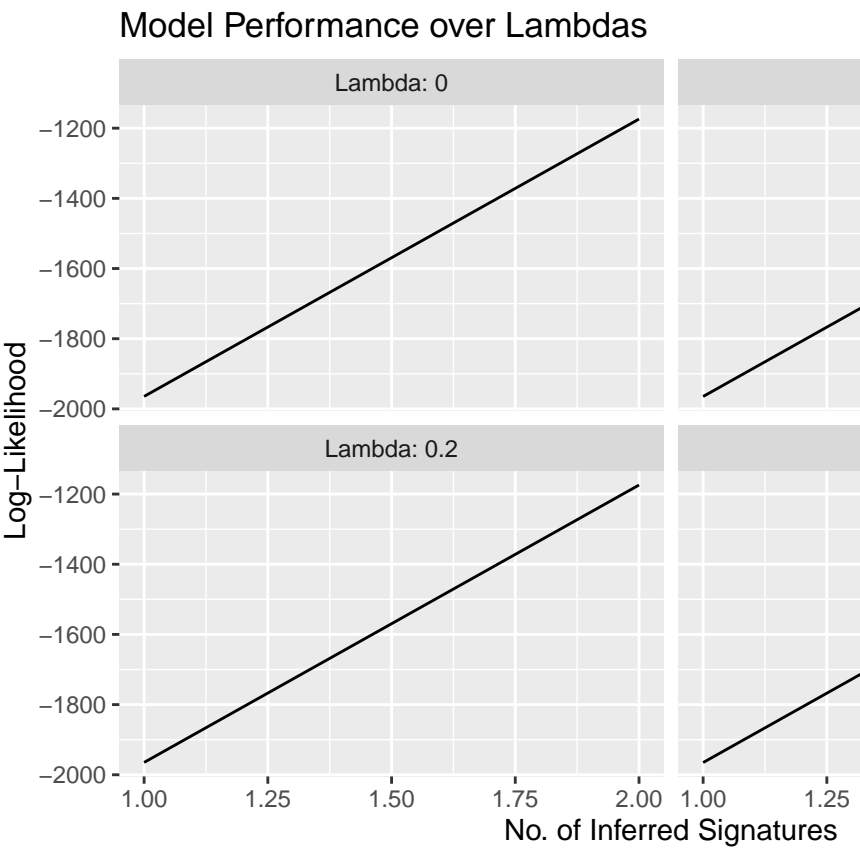
Azad Sadr

2/10/2022

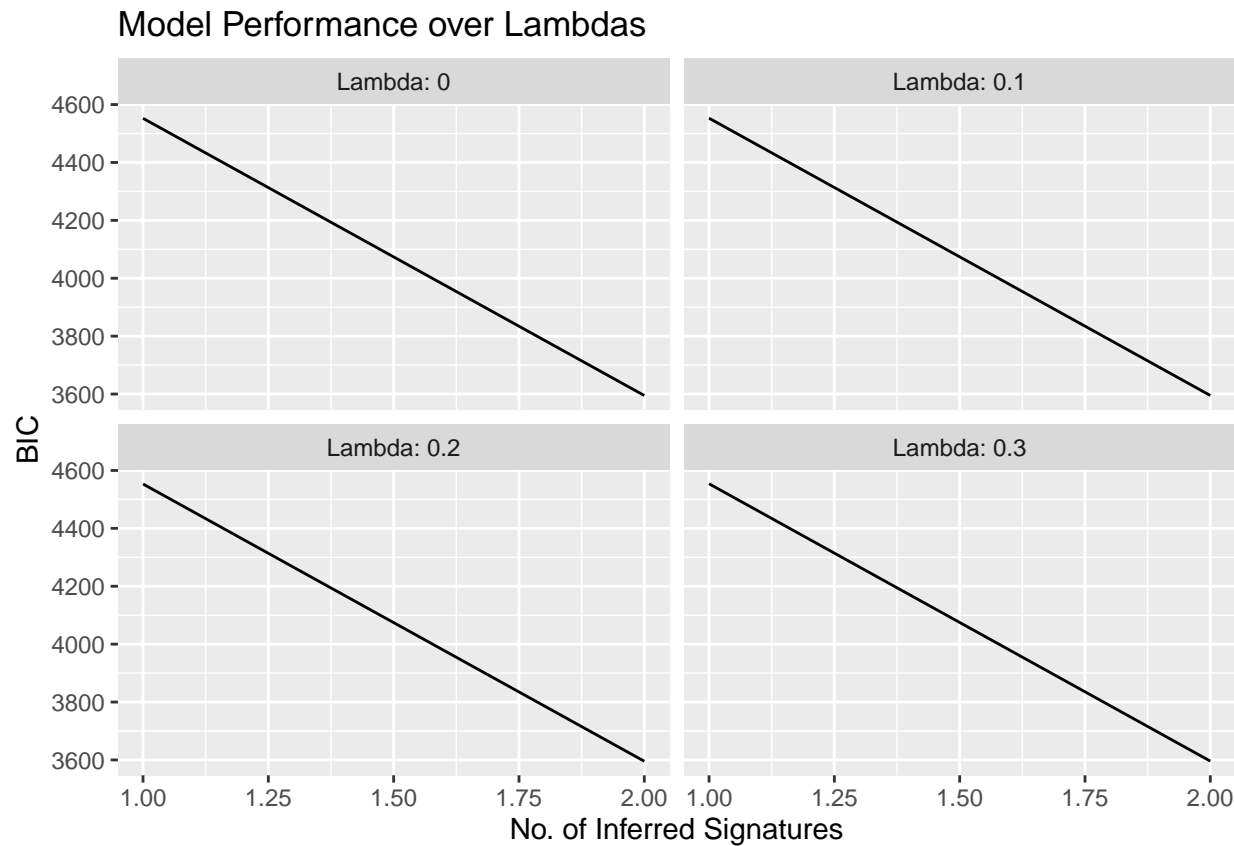
Load data

```
## # A tibble: 8 x 10
##   K_Denovo Lambda Log_Like   BIC Log_Likes   BICs      Cosine Alpha Beta  M_R
##   <dbl>   <dbl>   <dbl> <dbl> <list>      <list>      <list> <list> <lis> <lis>
## 1     1     0   -1964. 4553. <dbl [4]> <dbl [4]> <dbl> <df> <df> <df>
## 2     1   0.1  -1965. 4553. <dbl [4]> <dbl [4]> <dbl> <df> <df> <df>
## 3     1   0.2  -1965. 4553. <dbl [4]> <dbl [4]> <dbl> <df> <df> <df>
## 4     1   0.3  -1965. 4554. <dbl [3]> <dbl [3]> <dbl> <df> <df> <df>
## 5     2     0  -1174. 3595. <dbl [9]> <dbl [9]> <dbl> <df> <df> <df>
## 6     2   0.1  -1174. 3595. <dbl [23]> <dbl [23]> <dbl> <df> <df> <df>
## 7     2   0.2  -1174. 3596. <dbl [20]> <dbl [20]> <dbl> <df> <df> <df>
## 8     2   0.3  -1174. 3596. <dbl [23]> <dbl [23]> <dbl> <df> <df> <df>
```

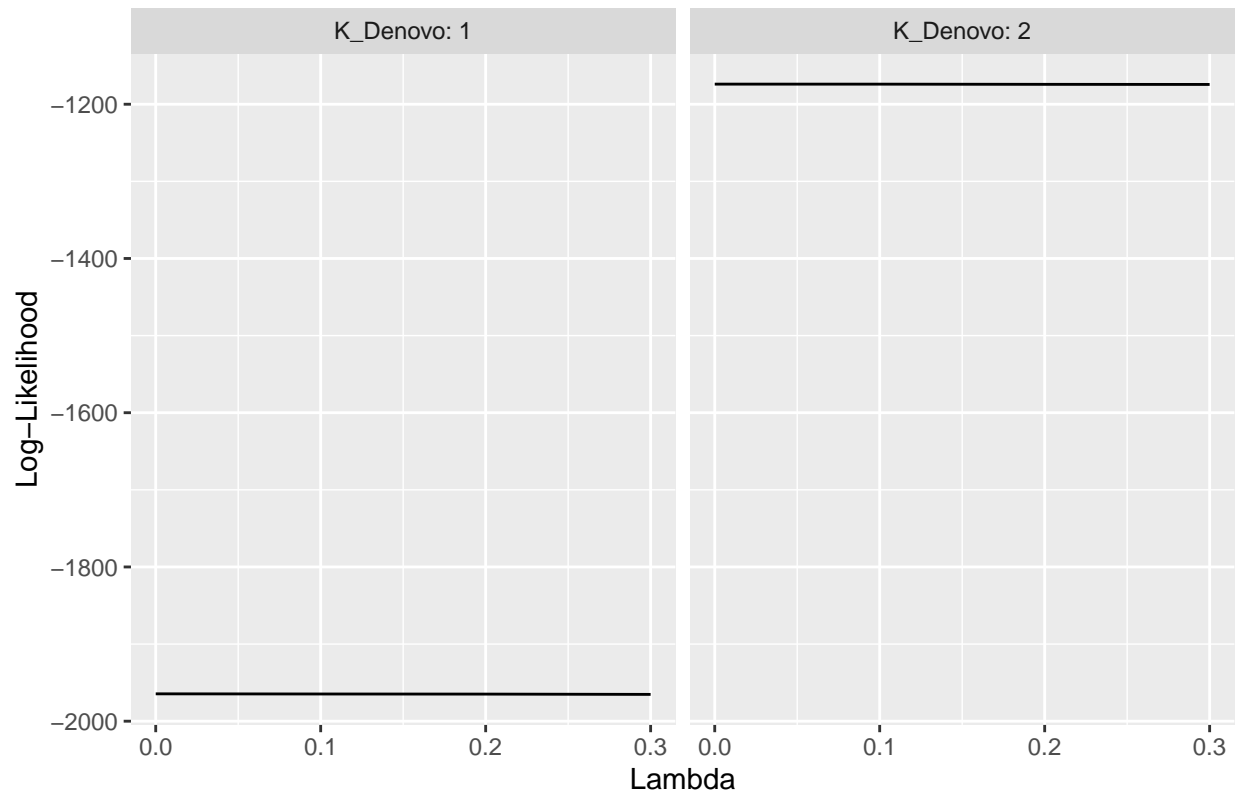
Overall insights on :



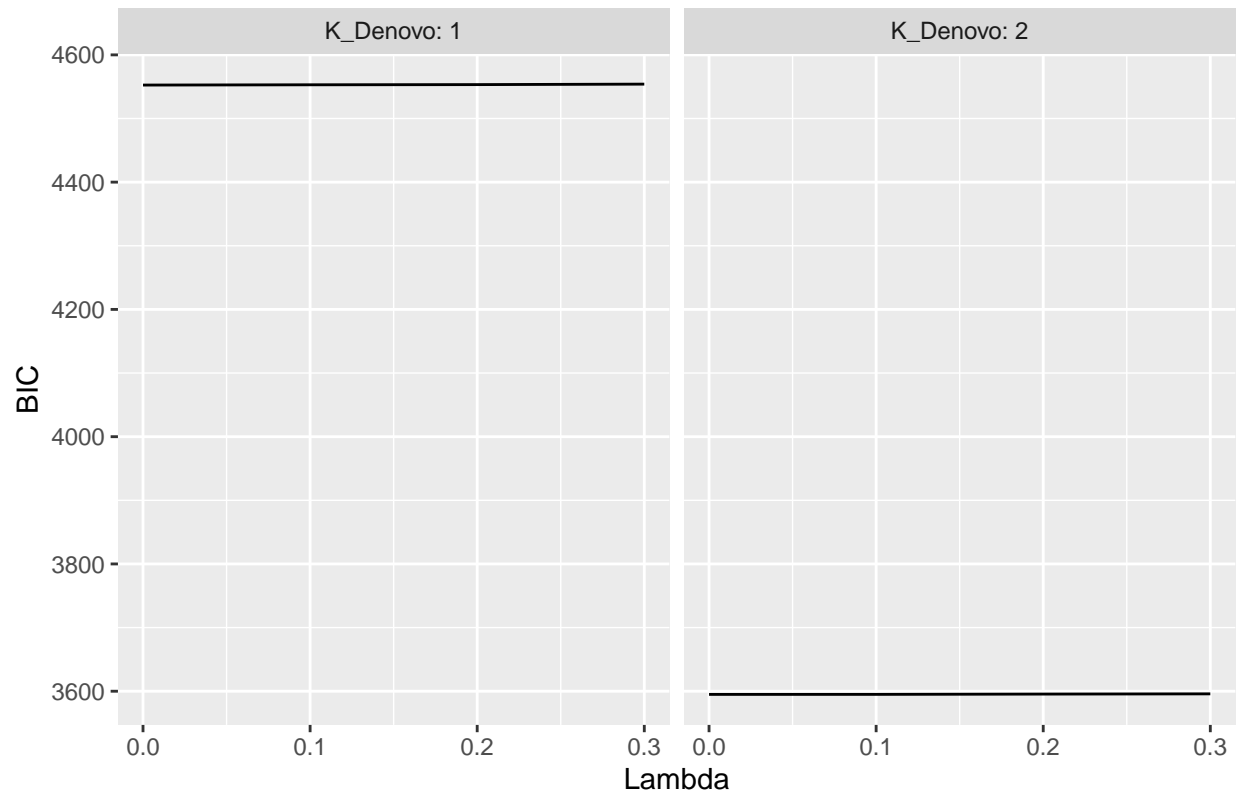
k, λ , log-likelihood, BIC & Constructed Phylogeny

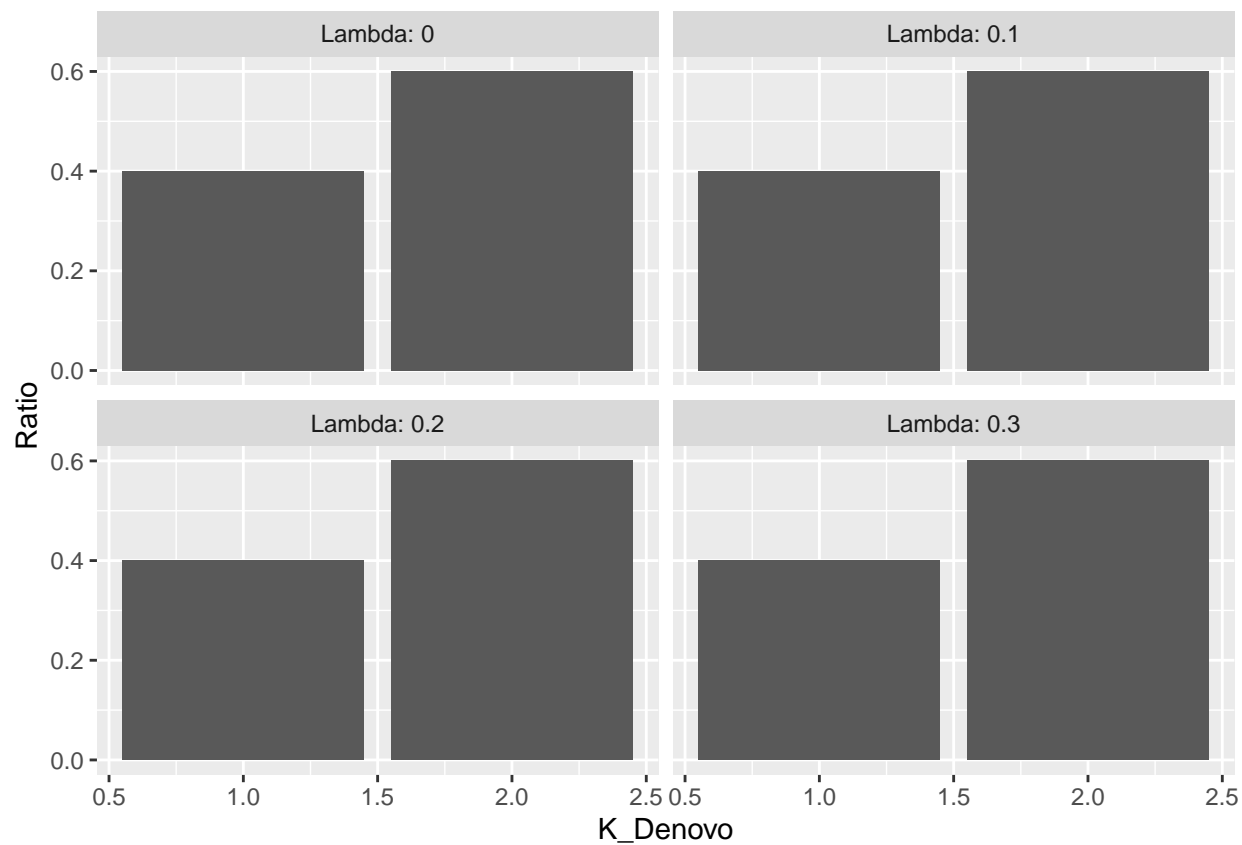


Model Performance over K



Model Performance over K





Best Run info (log-likelihood)

[1] "Best K_Denovo : 2"

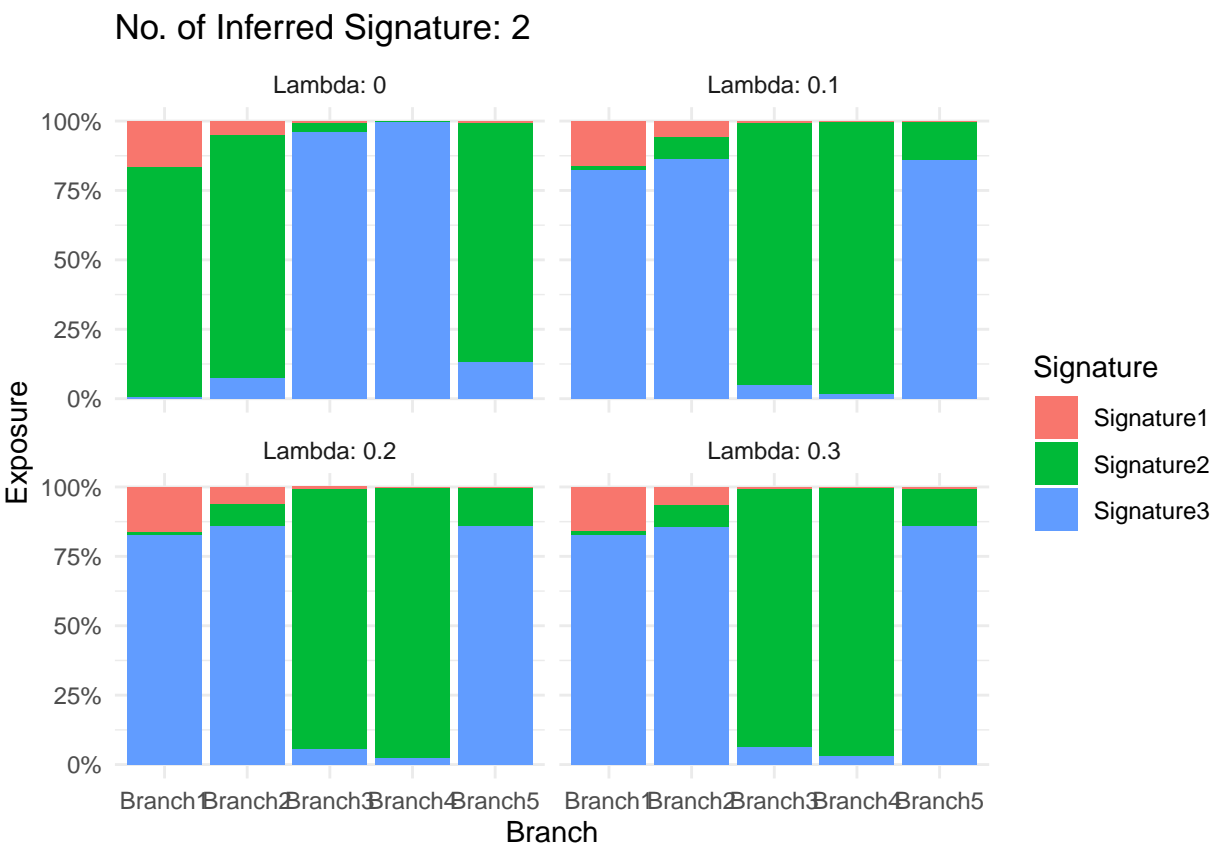
[1] "Best Lambda : 0"

Best Run info (BIC)

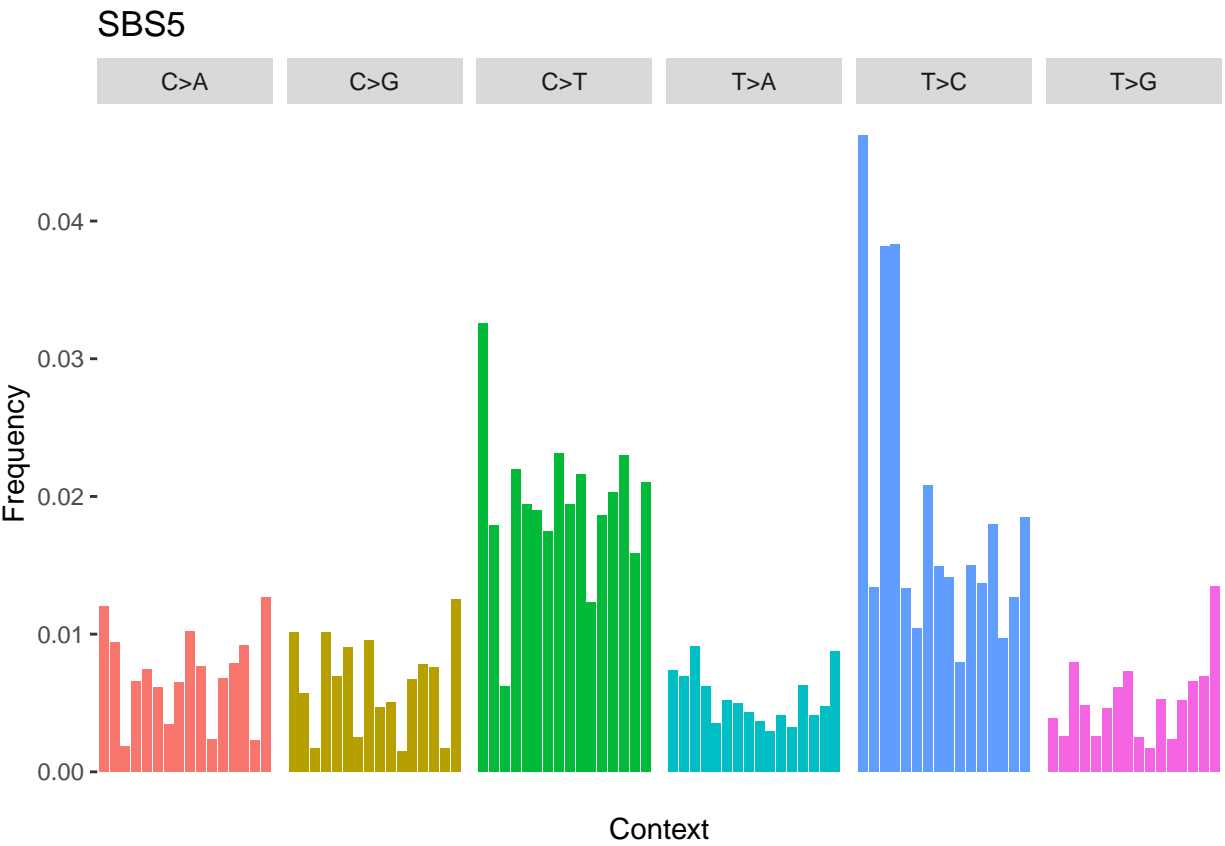
[1] "Best K_Denovo : 2"

[1] "Best Lambda : 0"

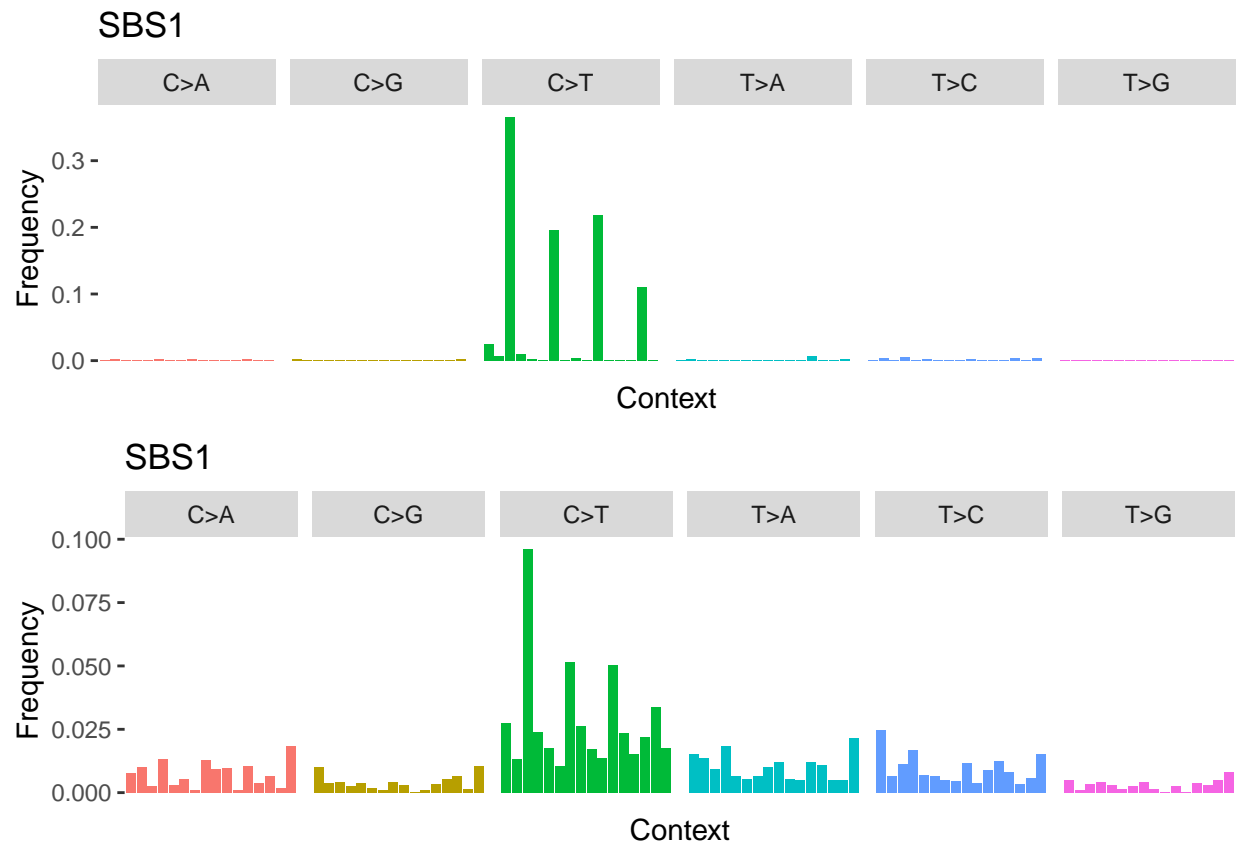
Visualize Alpha for Best BIC



Visualize Fixed Beta



Visualize Inferred vs. Expected SBS1 Signature



Visualize Inferred vs. Expected Unknown Signature

