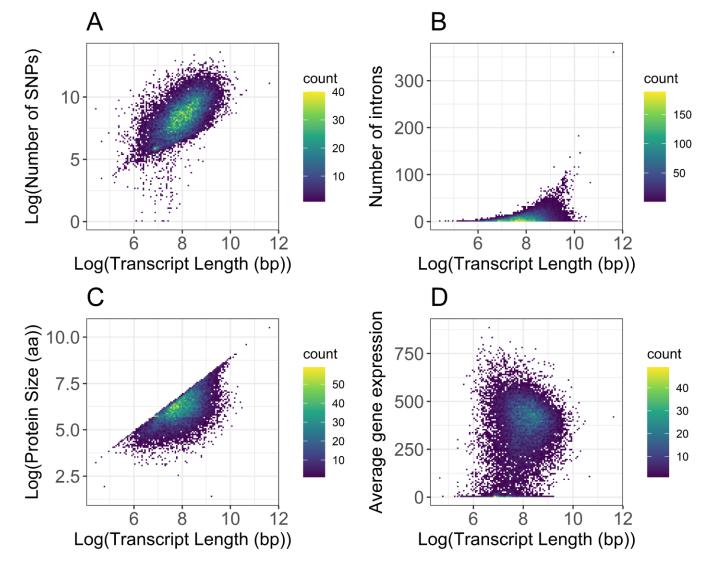


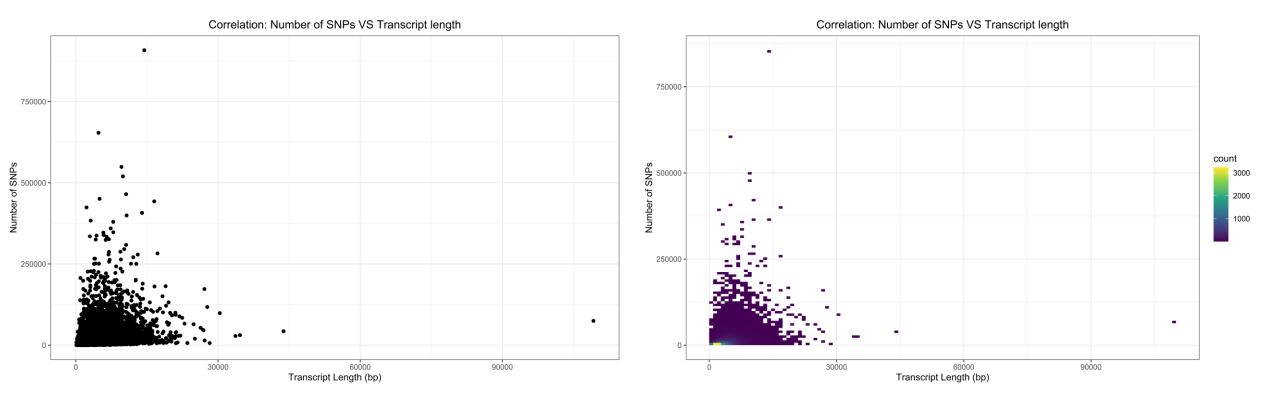
# **Supplementary Figure 4A.**

Correlation between the Number of SNPs per gene and Gene Length and 2D density plot. Gene Length the Number of SNPs was obtained using the biomart.



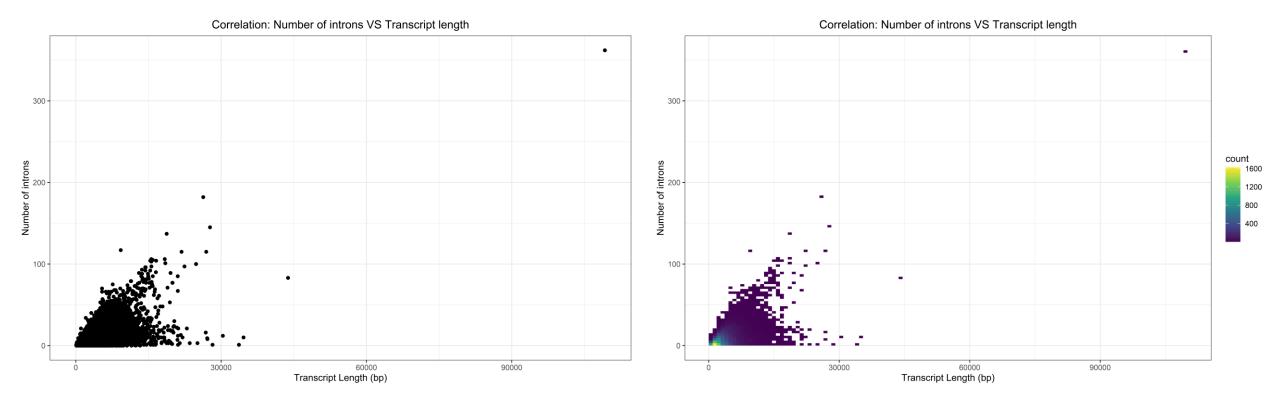
#### **Supplementary Figure 4B.**

2D density plot of the correlation analysis between Transcript Length (bp) and several other gene characteristics present in Fig 4. A: Correlation with the log transformed number of SNPs; B: Correlation with the log transformed number of introns; C: Correlation with the log transformed protein size; D: Correlation with the log transformed average gene expression.



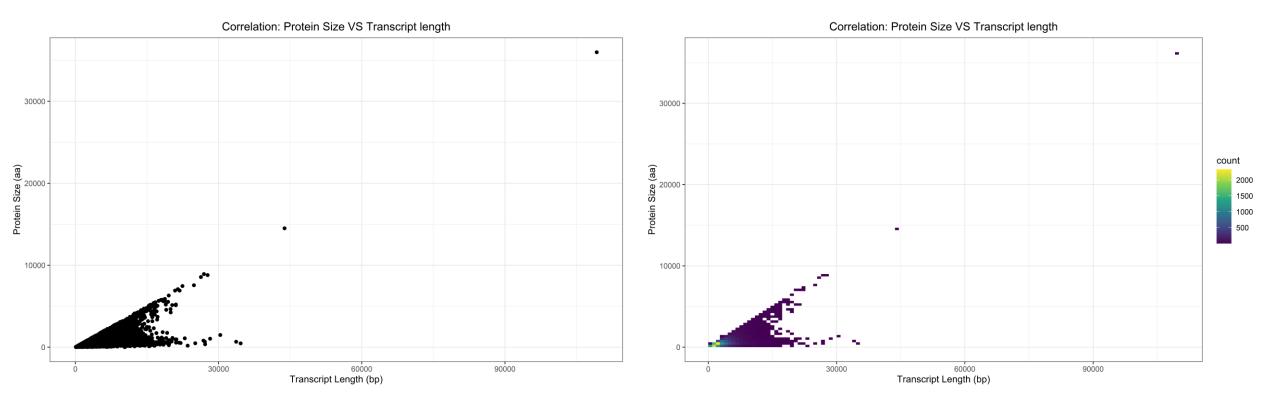
# **Supplementary Figure 4C.**

Correlation between the Number of SNPs and Transcript Length and 2D density plot. Number of SNPs and Transcript Length were obtained using biomart.



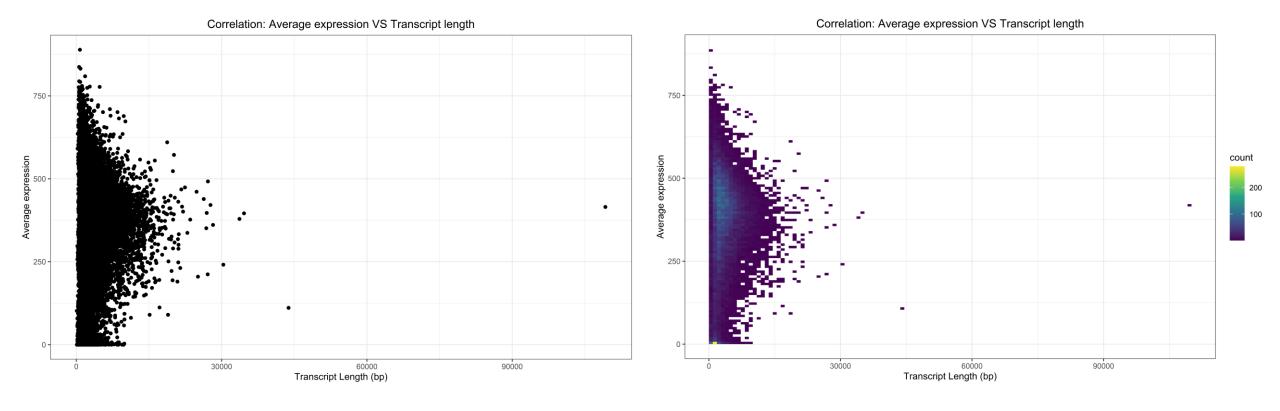
# **Supplementary Figure 4D.**

Correlation between the number of introns and Transcript Length and 2D density plot. Number of introns and Transcript Length were obtained using biomart.



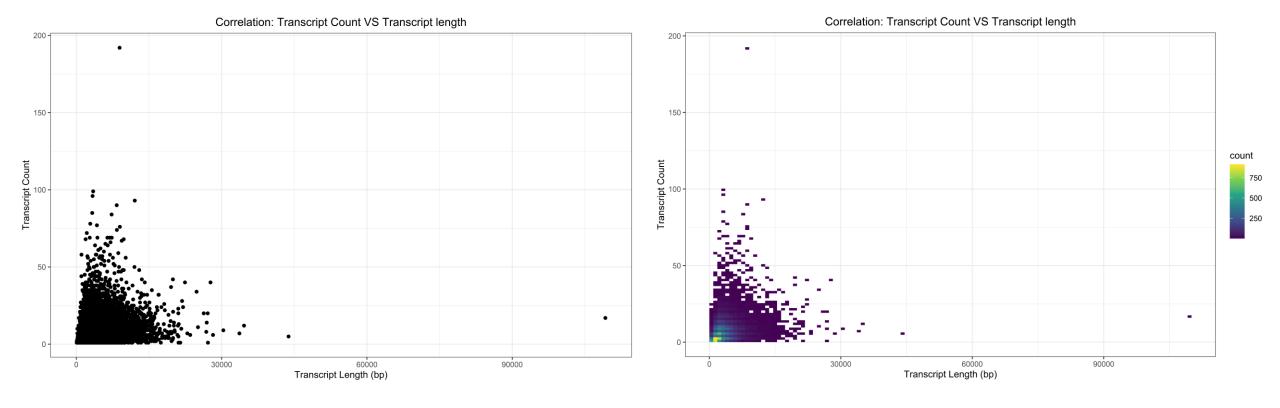
# **Supplementary Figure 4E.**

Correlation between Protein size and Transcript Length and 2D density plot. Protein size and Transcript Length were obtained using biomart.



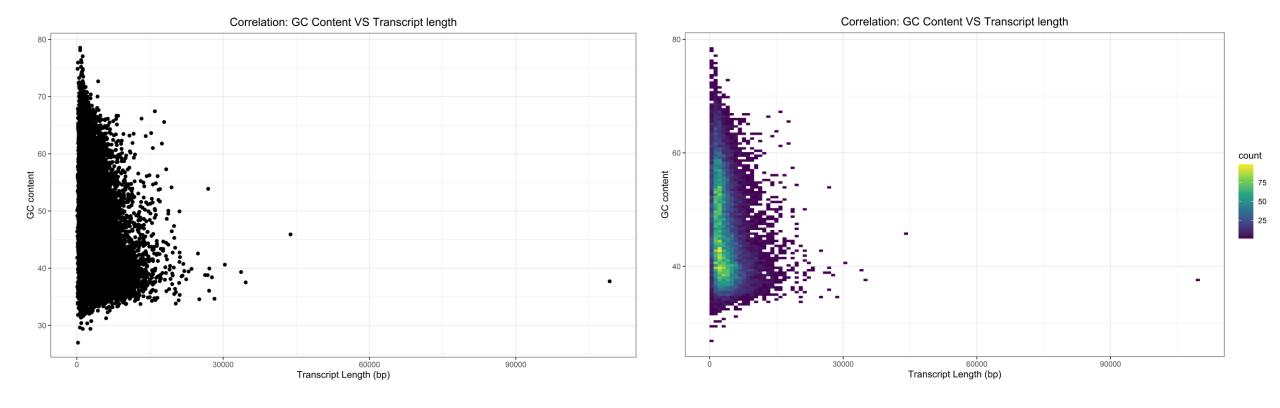
#### **Supplementary Figure 4F.**

Correlation between the Average Gene Expression and Transcript Length and 2D density plot. Average Gene Expression was obtained from the UCSC Genome browser and Transcript Length was obtained using biomart.



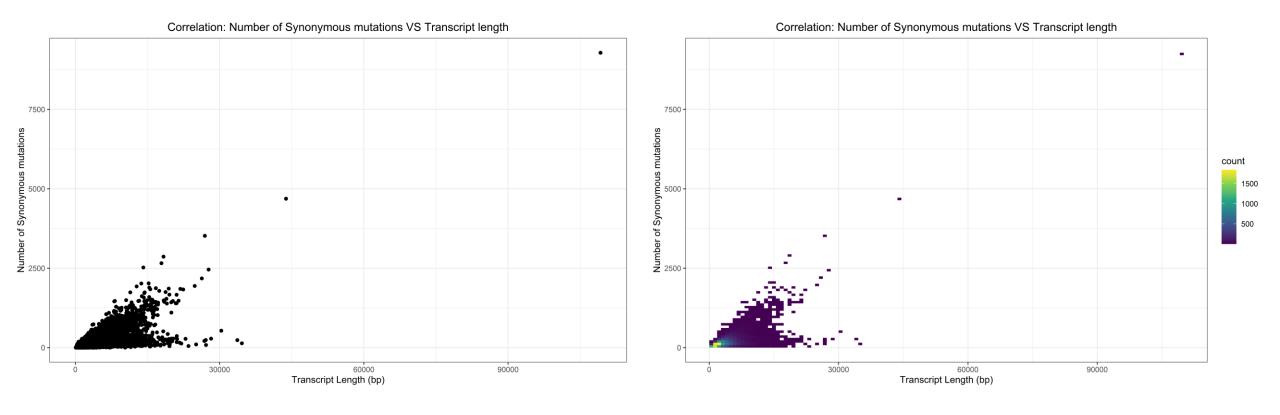
# **Supplementary Figure 4G.**

Correlation between Transcript count and Transcript Length (bp) (Kendall test, tau = 0.22, p-value < 2.20E-16) and 2D density plot. Transcript count and Transcript Length for each transcript were obtained using biomart.



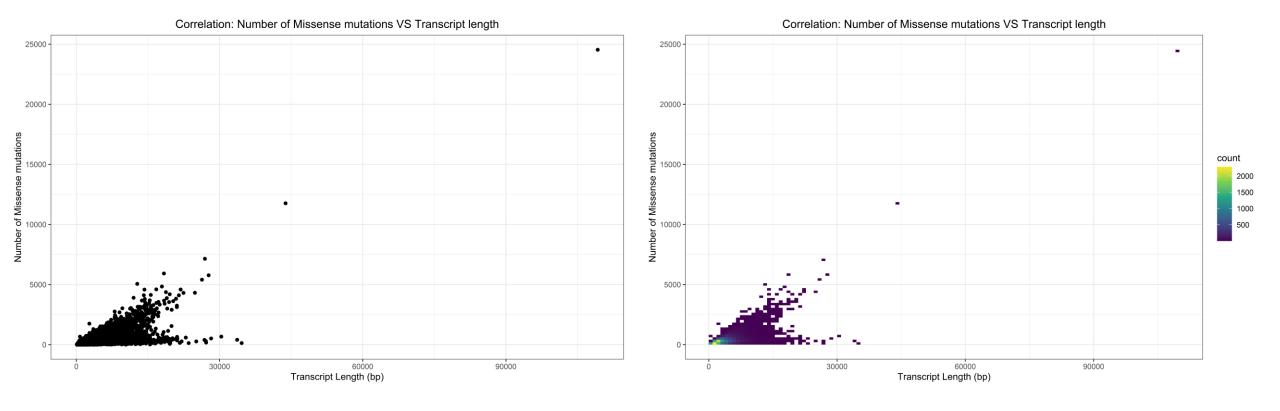
# Supplementary Figure 4H.

Correlation between the GC Content and Transcript Length (bp) (Kendall test, tau = -0.19, p-value < 2.20E-16) and 2D density plot. GC Content and Transcript Length were obtained using biomart.



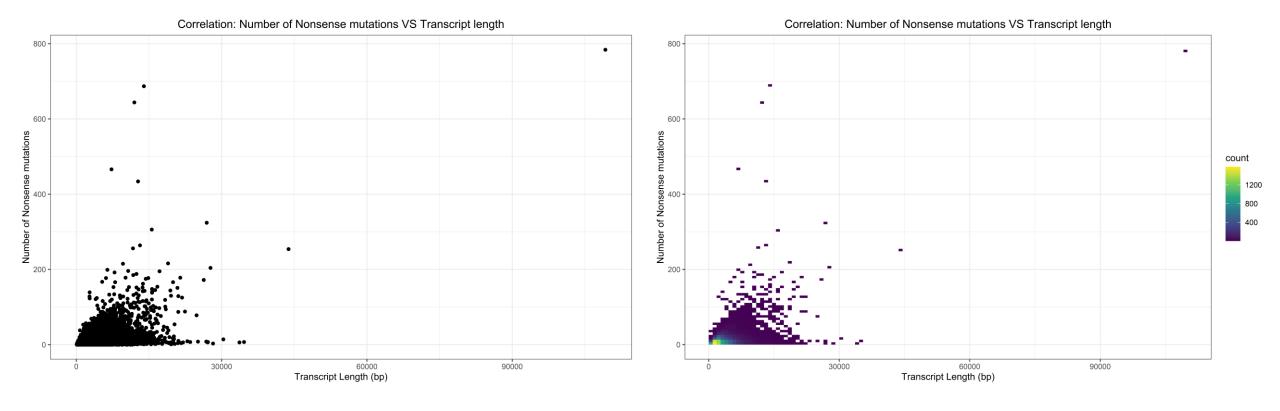
#### **Supplementary Figure 4I.**

Correlation between synonymous mutations and Transcript Length (bp) (Kendall test, tau = 0.44, p-value < 2.20E-16) and 2D density plot. The number of synonymous mutations and Transcript Length were obtained using biomart.



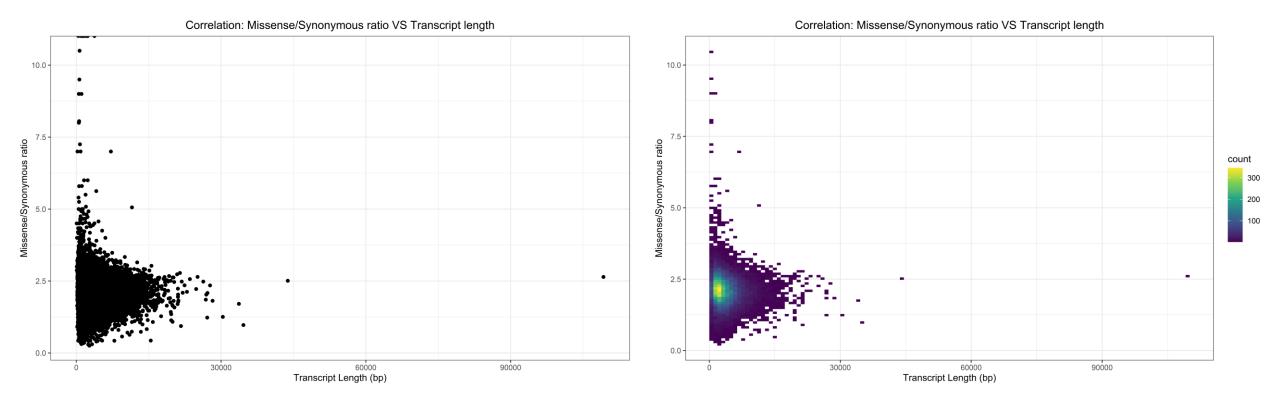
#### Supplementary Figure 4J.

Correlation between missense mutations and Transcript Length (bp) (Kendall test, tau = 0.42, p-value < 2.20E-16) and 2D density plot. The number of missense mutations and Transcript Length were obtained using biomart.



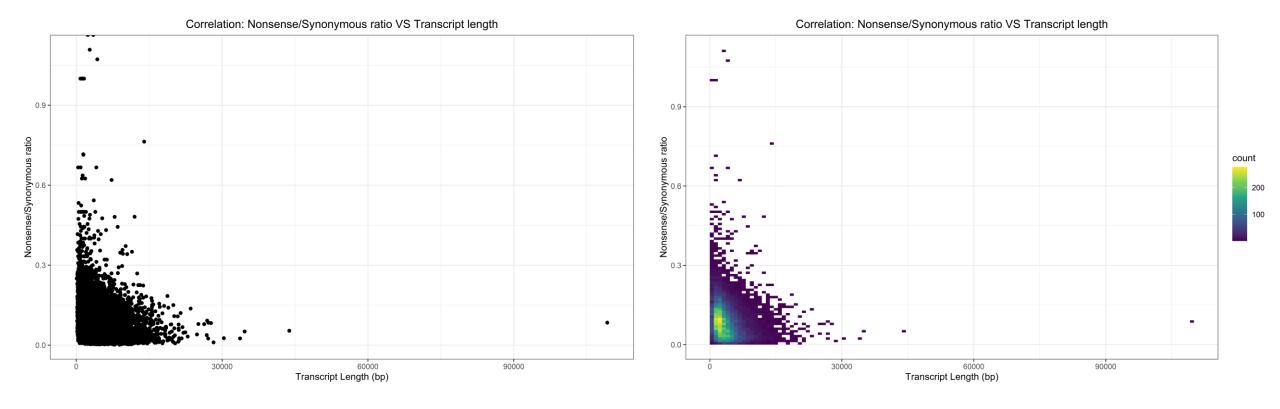
### **Supplementary Figure 4K.**

Correlation between nonsense mutations and Transcript Length (bp) (Kendall test, tau = 0.21, p-value < 2.20E-16) and 2D density plot. The number of nonsense mutations and Transcript Length were obtained using biomart.



#### **Supplementary Figure 4L.**

Correlation between the missense/synonymous ratio of mutations and Transcript Length (bp) (Kendall test, tau = -0.07, p-value < 2.20E-16) and 2D density plot. The number of missense and synonymous mutations and Transcript Length were obtained using biomart.



#### **Supplementary Figure 4M.**

Correlation between the nonsense/synonymous ratio of mutations and Transcript Length (bp) (Kendall test, tau = -0.19, p-value < 2.20E-16) and 2D density plot. The number of nonsense and synonymous mutations and Transcript Length were obtained using biomart.