



**Supplementary Figure 5.** Pearson's correlations of four factors; Number of Genes represented in each chromosome (designated as “*Genes*”), Number of TFs annotated on each chromosome (designated as “*TFs*”), the Ratio of number of TFs over the number of genes on each chromosome (designated as “*TFs/Genes*”) and mean expression value of all genes on a respective chromosome (designated as “*Expr*”). Values within the heat-maps indicate the Pearson's  $\rho$  value. In particular  $\rho$  and  $p$  values are as follows: (A) no significant  $\rho$  found, (B) TFs vs. TF/Genes  $\rho=0.97$ ,  $p=0.024$ , (C) TFs vs. Genes  $\rho=0.97$ ,  $p=0.02$ , (D) TF/Genes vs. Genes  $\rho=0.97$ ,  $p=0.02$ , (E) TF/Genes vs. TFs  $\rho=0.97$ ,  $p=0.03$ , (F) TF/Genes vs. TFs  $\rho=0.94$ ,  $p=0.05$ , (G) TF/Genes vs. TFs  $\rho=0.99$ ,  $p=0.005$ , (H) TF/Genes vs. TFs  $\rho=0.99$ ,  $p=0.001$ , (I) TF/Genes vs. TFs  $\rho=0.93$ ,  $p=0.06$ , (J) TF/Genes vs. TFs  $\rho=0.94$ ,  $p=0.05$ , (K) TF/Genes vs. TFs  $\rho=0.99$ ,  $p<0.01$ , (L) no significant  $\rho$  found, (M) TF/Genes vs. TFs  $\rho=0.99$ ,  $p<0.01$ , (N) TF/Genes vs. TFs  $\rho=0.97$ ,  $p=0.02$ , (O) TF/Genes vs. TFs  $\rho=0.99$ ,  $p=0.002$ , (P) TF/Genes vs. TFs  $\rho=0.96$ ,  $p=0.03$ , (Q) no significant  $\rho$  found, (R) TF/Genes vs. TFs  $\rho=0.96$ ,  $p=0.03$ , (S) TF/Genes vs. TFs  $\rho=0.96$ ,  $p=0.005$ , (T) TF/Genes vs. TFs  $\rho=0.99$ ,  $p=0.003$ , (U) TF/Genes vs. TFs  $\rho=0.99$ ,  $p=0.004$ , (V) TF/Genes vs. TFs  $\rho=0.96$ ,  $p=0.03$ , (W) TFs vs. Genes  $\rho=0.99$ ,  $p=0.002$ , TF/Genes vs. Genes  $\rho=0.99$ ,  $p=0.005$  and TF/Genes vs. TFs  $\rho=0.99$ ,  $p=0.005$ .