



**Supplemental Fig S10. (A)** The distribution of correlation of gene pairs with csGGIs and overall background in compartment A. **(B)** The proportion of intra-chromosomal gene pairs with STRING PPI at different  $C_{TG}$  distances in compartment A. The proportion refers to number of gene pairs with PPIs at fixed  $C_{TG}$  distance /number of all gene pairs at fixed  $C_{TG}$  distance. The background refers to number of gene pairs with PPIs/number of all gene pairs at all  $C_{TG}$  distance.