



Figure S9: Three methods of causal inference were evaluated and compared against the baseline correlation test method ( $P_0$ ): Findr's new test ( $P$ ), traditional causal inference test in Findr ( $P_T$ ), and CIT ( $C$ ). AUROC and AUPR metrics are measured for three inference tasks. MiRNA compares miRNA target predictions based on Geuvadis miRNA and mRNA expression levels against groundtruths from miRLAB. SiRNA and TF-binding compares gene-gene interaction predictions based on Geuvadis gene expression levels against groundtruths from siRNA silencing and TF-binding measurements respectively. ENCODE compares the same gene-gene interaction predictions against TF-binding networks derived from ENCODE data. Dashed lines indicate expected performances from random predictions.