



**Figure S23. Comparison of steady-state versus time-lagged treatment of time-series data.** The gene expression matrix includes a small fraction of time-series samples (15 out of 254). Using the time-lag parameter  $\tau$  (30 minutes) from (Ciofani et al. 2012), we compared performance between TRNs built with and without time-lag (mLASSO-StARS with the Th17 ATAC prior, moderate prior reinforcement (bias = .5), and either TFA = TF mRNA or prior-based TFA. Precision-recall of the **(A)** KO+ChIP and **(B)** KO G.S.'s did not change between time-lagged and steady-state models.