



**Figure S2: Comparison of fine-grained versus coarse-grained ChIP-seq signals.** For the coarse-grained resolution, ChIP-seq signals were averaged over the entire Hi-C bin (10000 bp resolution). For the fine-grained resolution, ChIP-seq signals were first averaged over 1000 bp bins and then fed into two embedding linear layers followed by ReLU. The output of these embedding layers was then used to feature annotate each node. (a) For the classification task, the fine-grained resolution ChIP-seq data performs slightly worse than or comparable to that of the coarse-grained resolution ChIP-seq data as measured by AUROC. (b) For the regression task, the fine-grained resolution ChIP-seq data produces performance worse than or comparable to the coarse-grained resolution ChIP-seq data as measured by PCC.