## **Description of Additional Supplementary Data Files**

File Name: Supplementary Data 1.

Description: TF library.

File Name: Supplementary Data 2.

Description: Promoters analyzed in the study.

File Name: Supplementary Data 3. Description: Statistics in PPTP-seq.

File Name: Supplementary Data 4.

Description: KEGG and GO enrichment analysis. DAVID server was used to perform KEGG and GO enrichment analysis. Raw p values are calculated by one-sided Fisher's Exact test. Benjamini

and Hochberg (2000) method is used to adjust p values.

File Name: Supplementary Data 5.

Description: TF perturbation-response network.

File Name: Supplementary Data 6.

Description: Response with binding evidence.

File Name: Supplementary Data 7.

Description: Regulatory responses for known regulatory interactions.

File Name: Supplementary Data 8.

Description: Primers. Index sequences used in NGS are highlighted in red.

File Name: Supplementary Data 9. Description: sgRNA guide sequences.

File Name: Supplementary Data 10.

Description: Plasmids.

File Name: Supplementary Data 11.

Description: E. coli strains.