

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: **Co-occurrence of multiple TFs revealed by ChIP-seq.** Genes were co-bound by at least two transcription factors are shown with the statistical significance of the co-occurrence (co-binding) of multiple TFs on the same promoter of the gene.

File Name: Supplementary Data 2

Description: **Co-occurrence of differentially expressed genes observed in multiple TFs mutant revealed by RNA-seq.** Genes were co-regulated by at least two transcription factors are shown with the statistical significance of co-occurrence of differential gene expression observed in multiple mutant TFs.

File Name: Supplementary Data 3

Description: **Genes functionally co-regulated by multiple TFs (PAGnet) based on ChIP-seq and RNA-seq.** Genes functionally co-regulated (intersection of Supplementary Data 1 and Supplementary Data 2) by at least two transcription factors are shown with the statistical significance.

File Name: Supplementary Data 4

Description: **Function enrichment of regulons in PAGnet.** Hypergeometric tests ($P < 0.05$) were performed for each regulon, which is based on functional gene sets from PseudoCAP including Gene Ontology and KEGG databases.

File Name: Supplementary Data 5

Description: **Bacterial strains, plasmids, and primers used in this study.**