

Description of Additional Supplementary Files

Supplementary Data 1

Gene Targets and Gene Sequences Used to Design the Synthetic CRISPR Interference gRNA Array.

Supplementary Data 2

Identification of essential genes in *P. putida* KT2440 using barcoded transposon mutagenesis (RB-TnSeq).

Supplementary Data 3

Additional gene targeting sets for growth coupled production of two additional target molecules using glucose as the starting carbon source in *P. putida*.

Supplementary Data 4

Specific reactions and customized codes used in this study.