

A

Level 0 cloning vectors pCE3-derived backbone, Amp^R

pCE3-Pgpd-TrpC

Level 1 cloning vectors pCE3-derived backbone, Amp^R

pCE3-Pgpd-TrpC

B

Level 0 cloning vectors pCE3-derived backbone, Amp^R

pCE3-PGlsdhB-TGlsdhB

Level 1 cloning vectors pCE3-derived backbone, Amp^R

pCE3-PGlsdhB-TGlsdhB

C

Level 0 cloning vectors pCE3-derived backbone, Amp^R

pCE3-PGltrpC-TGltrpC

Level 1 cloning vectors pCE3-derived backbone, Amp^R

pCE3-PGltrpC-TGltrpC

D

Level 1 cloning vectors pCE3-derived backbone, Amp^R

pCE3-RepA

pCE3-Kana

pCE3-MsdhB

pCE3-PgDS

pCE3-PgPPDS

pCE3-ATR1

pCE3-UGTPg1

pCE3-GILaeA

pCE3-MsdhB

Supplementary Figure S4. Construction of expression vectors for CK biosynthesis. (A-C) construction of Level 1 vector for CK via Golden Gate cloning; (D) construction of a multi-gene expression vector for CK biosynthesis