KY33[pKPY514] from

Cell-Specific Proteomic Analysis in Caenorhabditis elegans

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KY33: The arginine-, lysine- and phenylalanine-auxotrophic strain of *E. coli* KY33 was made in-house using the red recombinase gene knockout method described by Datsenko and Wanner (Datsenko, K.A. & Wanner, B.L. *Proc. Natl. Acad. Sci. USA* **97**, 6640–6645 (2000)) to eliminate the gene *argA* from the *E. coli* strain KY14. The lysine- and phenylalanine-auxotrophic strain of *E. coli* KY14 was made in-house using the red recombinase gene knockout method to eliminate the gene *pheA* from the *E. coli* strain KY2. The lysine-auxotrophic strain of KY2 was made in-house using the red recombinase gene knockout method described by Datsenko and Wanner to eliminate the gene *lysA* from the *E. coli* strain TYJV2 (Van Deventer, J.A., Yuet, K.P., Yoo, T.H. & Tirrell, D.A. *ChemBioChem* **15**, 1777–1781 (2014)).

pKPY513: The genes encoding wild-type *E. coli* PheRS were isolated by genomic DNA extraction (DNeasy Blood & Tissue Kit, Qiagen) from *E. coli* DH10B (Life Technologies) and PCR amplification (PfuUltra II Fusion HS DNA Polymerase, Agilent Technologies). The purified fragments were ligated into pQE-80L-Kan (Qiagen) to generate pKPY513.

pKPY514: pKPY513 was subjected to site-directed mutagenesis (PfuUltra II Fusion HS DNA Polymerase, Agilent Technologies; DpnI, New England Biolabs) to generate the Thr251Gly mutation.
atagattgtcgcacctgattgccgacattatcgcgagcccatttatacccatataaat
cagcatccatgttggaatattaatcgcggcctagagcaagacgtttctccctttgtaatatgg
cctcataacaccctttgtattactgtttatatgtaagcagacagttttatgtttcatgacca
tgacattaacctataaaatatggtcatcagcagccctttcgtttccac;
pheS (Thr251Gly);

ttcagatgacagacctctgctgtagctgccgccaagaagcgcctgccgctgtagttgcatcgtgtt
atcacaagcgaagcagcaggttacctgccgagccgcagctgtgaaacgcagctgcaggtgctggtgc
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ttcagatgacagacctctgctgtagctgccgccaagaagcgcctgccgctgtagttgcatcgtgtt

pheST Intercistronic Region;

ggcaggaatatgatt;

pheT;

cttcagatcctctgcgctgtagttgcatcgtgtt
ttcagatgacagacctctgctgtagctgccgccaagaagcgcctgccgctgtagttgcatcgtgtt

cttcagatcctctgcgctgtagttgcatcgtgtt