



Caffeic acid production from glucose using metabolically engineered *Escherichia coli*

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Supporting Information

Caffeic acid production from glucose using metabolically engineered *Escherichia coli*.

Supplementary Table S1. Primers used in this study.

Primer Name	Sequence
pZS-RgTAL_Fw	GAGGAGAAAGGTACCATGGCACCGCGTCCG
pZS-RgTAL_Rv	TAATGGTCATCTAGTATTTCTCCTCTTTAATCTCTAGATTATGCCAGC ATCTT
pZS-SeC3H_Fw	GCTGGCATAATCTAGAGATTAAAGAGGAGAAATACTAGATGACCAT TACCAGT
pZS-SeC3H_Rv	GGAATTCGATATCAAGCTTTTATGTACCCGGATTAATCA
pTrc-RgTAL_Fw	CCGAGCTCGAGATCTATGGCACCGCGTCC
pTrc-SeC3H_Rv	CAGCCAAGCTTCGAATTCTTATGTACCCGGATTAATCA
pHLA-RgTAL_Fw	CTTCTGGAAAAAGGAGATCTATGGCACCGCGTCCGACCAG
pHLA-SeC3H_Rv	AAACAGCCAAGCTTCTCGAGTTATGTACCCGGATTAATCA
pS-PaHpaB_Fw	TTAAAGAGGAGAAAGGTACCATGAAGCCGGAAGAT
pS-PaHpaB_Rv	GGAATTCGATATCAAGCTTTTACTGACGAATACG
pS-PaHpaC_Fw	GAGGAGAAAGGTACCATGAGCCAGCTGGAA
pS-PaHpaC_Rv	AGGAATTCGATATCAAGCTTTTATGCTGCACGACG
pS-aroG ^{fbr} _Fw	TTAAAGAGGAGAAAGGTACCATGAATTATCAGAACGACGA
pS-aroG ^{fbr} _Rv	AGGAATTCGATATCAAGCTTTTACCCGCGACGCGCTTTTA
pS-ktA_Fw	GAGGAGAAAGGTACCATGTCCTCACGTAAAGAGCT
pS-ktA_Rv	GGAATTCGATATCAAGCTTTTACAGCAGTTCTTTTGCTT
del_trpE.CHECK_ Fw	GTACTGAAAGGTTGGTGGCGCACTTCCTG
del_trpE.CHECK_ Rv	GACTGCGGAACAGAATCAAGGACTACACC

del_pykA.CHECK_ Fw	TGGTTTCTCGACTTGCACAGCTGACC
del_pykA.CHECK_ Rv	GCGGCGGATGAATGAAGAAGTCG
del_pykF.CHECK_ Fw	ATGAAAAAGACCAAAATTGTTTGCACCATC
del_pykF.CHECK_ Rv	TTACAGGACGTGAACAGATGCGGTG
del_pheA.N20_Fw	TTTGAGCAATTCATTGAAAGGTTTTAGAGCTAGAAATAGCAAGTTA AAATAAGGCTAGTCC
del_pheA.N20_Rv	CTTTCAATGAATTGCTCAAACTCGTATTATACCTAGGACTGAGCTA GCTGTCAAG
del_pheA.UP_Fw	GGTGCTTTTTTTGAATTCCTTCGGGCGCGTTTT
del_pheA.UP_Rv	CCGTATTGATGGTGGACTAGTTAATTAATCTTTCCAGCAAA
del_pheA.DOWN_ Fw	GGAAAGATTAATTAAGTAGTCCACCATCAATACGGTCTACAG
del_pheA.DOWN_ Rv	CAGGGTAATAGATCTAAGCTTTGAATCGGGCGTGATT
del_pheA.CHECK_ Fw	GTAGTCCTTTATATTGAGTGTATCGCCAA
del_pheA.CHECK_ Rv	CAGATAGAACATCTCTTCCCATGGAT
del_pheA.pSAKins ert_Fw	CGATTTGCTGGAAAGATTAATTAAGTAGTAAATTTATCAAAAAGAG TGTTGACTTG
del_pheA.pSAKins ert_Rv	CTGTAGACCGTATTGATGGTGGACTAGTACCCTAGGGTCTAGGG

The codon optimized sequences

RgTAL

ATGGCACCGCGTCCGACCAGCCAGAGCCAGGCACGTACCTGTCCGACCACACAGGTTACC
CAGGTTGATATTGTTGAAAAAATGCTGGCAGCACCGACCGATAGCACCTGGAAGTGGATG
GTTATAGCCTGAATCTGGGTGATGTTGTTAGCGCAGCACGTAAAGGTCGTCCGGTTCGTGT
TAAAGATAGTGATGAAATTCGCAGCAAAATCGACAAAAGCGTTGAATTTCTGCGTAGCCAG
CTGAGCATGAGCGTTTATGGTGTTACCACCGGTTTTGGTGGTAGCGCAGATACCCGTACCG
AAGATGCAATTAGCCTGCAGAAAGCACTGCTGGAACATCAGCTGTGTGGTGTTCTGCCGA
GCAGCTTTGATAGCTTTCGTTTAGGTCGTGGTCTGGAAAATAGCCTGCCGCTGGAAGTTGT
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TATGCTGAGCCTGCTGAGTCAGAGCCTGACCGCAATGACCGTTGAAGCCATGGTTGGTCAT
GCAGGTAGCTTTCATCCGTTTCTGCACGATGTTACCCGTCCGCATCCGACACAGATTGAAG
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CCGCAGTGGCTGGGTCTCTGGTTAGCGATCTGATTCATGCACATGCAGTTCTGACCATTG
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ACATGTTTCAGCCTGCCGAAATGGCAAATCAGGCAGTTAATCACTGGCACTGATTAGCGCA
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TGCTGCAGGCCATTGATCTGCGTGCAATTGAATTTGAGTTCAAGAAACAGTTTGGTCCGGC

AATTGTTAGCCTGATTGATCAGCATTTTGGTAGCGCCATGACCGGTAGCAATCTGCGTGATG
AGCTGGTTGAAAAAGTGAATAAAACCCTGGCCAAACGTCTGGAACAGACCAATAGCTATG
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GAGCAGCACCAGCCTGTCACTGGCAGCCGTTAATGCATGGAAAGTTGCAGCGGCAGAAAG
CGCAATTTCACTGACCCGTCAGGTTTCGTGAAACCTTTTGGAGCGCAGCAAGCACCAGCAG
TCCGGCACTGAGCTATCTGTCACCGCGTACACAGATTCTGTATGCATTTGTTTCGTGAAGAAC
TGGGTGTTAAAGCACGTCGTGGTGATGTTTTTCTGGGTAAACAAGAAGTTACCATTGGTAG
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ATGCTGGCATAA

C3H

ATGACCATTACCAGTCCGGCACCGGCAGGTCGTCTGAATAATGTTTCGTCCGATGACCGGTG
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A

HpaBC

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