

Supplementary material

Efficient synthesis of (*R*)-(+)-perillyl alcohol from (*R*)-(+)-limonene using engineered *Escherichia coli* whole-cell biocatalyst

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Table S1. Primers employed for plasmids construction.

Primers	Sequences(5'-3')
pET28a(+)- <i>cymA</i> -F	TAGGTTCCGATTTAGTGCTTTACGGCACCTCGA
pET28a(+)- <i>cymA</i> -R	CAGTCACGTTAGCGATAGCGGAGTGTATAC
pRSFDuet-1- <i>cymA</i> -F	TCATCACCACAGCCAGGATCCGATGTGGGAGTACATCAA ATATTACTTTG
pRSFDuet-1- <i>cymA</i> -R	ACCTGCAGGCGCGCCGAGCTCTTAGCTATTACGGCCATC GGTG
<i>cymA</i> -5	TAAGACGTCCCCGGGTTATAATAATAC
pACYCDuet-2- <i>cymA</i> -F	CACCACAGCCAGGATCCGATGTGGGAGT
pACYCDuet-2- <i>cymA</i> -R	GACCTGCAGGCGCGCCGAGCTCTTAGCTATTACGGCC
pACYCDuet-2-lac- <i>alkL</i> -F	TAATAAGGAGATATAACCATGAGCTTTAGCAACTATAAAG TGATTG
pACYCDuet-2-lac- <i>alkL</i> -R	ACCTGCAGGCGCGCCGAGCTCTTAAAACACATAGCTCGC GCC
pACYCDuet-2-trc- <i>alkL</i> -F	ATAAGGAGGAATAAACCATGAGCTTTAGCAACTATAAA GTGATTG
pACYCDuet-2-trc- <i>alkL</i> -R	TTCTTTACCAGACTCGAGCTCTTAAAACACATAGCTCGC GCC
pACYCDuet-2- <i>alkL</i> -F	TAATAAGGAGATATAACCATGAGCTTTAGCAACTATAAAG TGATTG
pACYCDuet-2- <i>alkL</i> -R	ACCTGCAGGCGCGCCGAGCTCTTAAAACACATAGCTCGC GCC
pRSFDuet-1- <i>cymA</i> - <i>fdh</i> -F	CCGATGGCCGTAATAGCTAAAAAAGGAGATATAACCATG AAGATCGTT

pRSFDuet-1- <i>cymA-fdh</i> -R	ACCTGCAGGCGCGCCGAGCTCTTATTTCTTATCGTGTTTA CCGTAAGC
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Table S2 Specific hydroxylation activity of whole cells of three strains different copy numbers

Strains	Copy numbers	Specific activity (U g _{CDW} ⁻¹)
strain 01	10	2.56±0.16
strain 02	40	2.89±0.22
strain 03	100	3.81±0.24

