bioengineering

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Article

Preparation and Characterization of Hydroxylated Recombinant Collagen by Incorporating Proline and Hydroxyproline in Proline-Deficient *Escherichia coli*

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Table S1. Strains and plasmids used in this study.

Strains/plasmids	Genotype or relevant	Source/Ref
Strain		
E. coli DH5α	Plasmid cloning	Vazyme Biotech Co., Ltd (Nan Jing)
E. coli BL21 (DE3)	Protein expression	Vazyme Biotech Co., Ltd (Nan Jing)
E. coli MG1655	Protein expression	Vazyme Biotech Co., Ltd (Nan Jing)
Plasmid		
pET28a	T7 promotor	
pCas9	Cas9	
pTargetF	synthetic DNA construct	
pBAD33	AraC promotor	
pET28a-rhCol	rhCol; pBR322 ori;	This study
pTargetF-*proC*	sgRNA-*proC*	This study
pTargetF-*ompT*	sgRNA-*ompT*	This study
pTargetF-*lon*	sgRNA-*lon*	This study
pBAD33-T7RNAP	T7RNAP	This study

Table S2. Primers used in this study.

primer	sequences
KZ-T7RNAP-F	cggggatcctctagagtcgacATGAACACGATTAACATCGCTA
KZ-T7RNAP-R	atccgccaaaacagccaagcttTTACGCGAACGCGAAGTC
sgRNA-F	cctaggtataatactagtAATTTATACGCCTGGGCGCGgttttagagctagaaatagc
sgRNA-R	ACTAGTATTATACCTAGGACTGAGC
proC-up-F	agggtaccatatgggaattcGCTATCTGGTCCGCCG
proC-up-R	TGCCTCACTCCTGCCGTGAA
proC-dn-F	TTCACGGCAGGAGTGAGGCATGACTTTCGCCGGACGTCAG
proC-dn-R	ccgccaaaacagccaagcttCCGCGACGGCATGACG
ompT-sgRNA-F	cctaggtataatactagtCAGTAACCCCGGAACCTGGAgttttagagctagaaatagc
ompT-up-F	agggtaccatatgggaattcAACGGATAAGACGGGCATA
ompT-up-R	AAAAGTTCTCCATTCAATCGTT
ompT-dn-F	CGATTGAATGGAGAACTTTTGAACGCCAACTAAAATTTCC
ompT-dn-R	ccgccaaaacagccaagcttGTTTAATAAAAAAAAGATTAAGGGA
lon-sgRNA-F	cctaggtataatactagtCATACGGACATATTTACGCCgttttagagctagaaatagc
lon-up-F	agggtaccatatgggaattcTTGCAGCCGTGCGTAAG
lon-up-R	TGACCTCGCGCAAAATG
lon-dn-F	GTGCATTTTGCGCGAGGTCAAGAGCTCTCTCTTAGTTTAATTTCC
lon-dn-R	ccgccaaaacagccaagcttGATAAAGTGATTTCCCACCG
YZ-pBA-S	gcgttaaacccgccacca
YZ-pBA-A	cctttcgttttatttgat
proC-up1000-S	GGCGGTCATTTTGCTGTG
proC-dn700-A	GCGGGTCTGGTGTTGAT
ompT-up700-S	GATTGTCACAGAGTGTCGTATGC
ompT-dn700-A	GCTTGTTTTTTCTCTGTTTGAAG
lon-up1000-S	GTTTCAGCTCACGTGCGTAC
lon-dn1000-A	GGTGAAGACGTTGAAAACATC