

# Recombinant E.coli surA protein

Catalog Number: ATGP0664

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

21-428aa

### UniProt No.

P0ABZ6

### NCBI Accession No.

NP\_414595

### Alternative Names

Chaperone surA, PPlase surA, Rotamase surA, Survival protein A

## PRODUCT SPECIFICATION

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### Molecular Weight

47.3 kDa (429aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

### Purity

> 95% by SDS-PAGE

### Biological Activity

Specific activity is > 800nmol/min/mg, and is defined as the amount of enzyme that cleaves 1nmole of suc-AAPF-pNA per minute at 37C in Tris-HCl pH 8.0 using chymotrypsin.

### Tag

His-Tag

### Application

SDS-PAGE, Enzyme Activity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

SurA is a periplasmic peptidyl-prolyl isomerase (PPlase) and chaperone of Escherichia coli and other Gram-negative bacteria. This protein is a major factor in the biogenesis of beta-barrel outer membrane proteins (OMPs) and plays an integral role in cell envelope homeostasis and cell envelope functions. It is essential for the survival

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of E. coli in stationary phase and required for pilus biogenesis. Recombinant E. coli SurA protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

### Amino acid Sequence

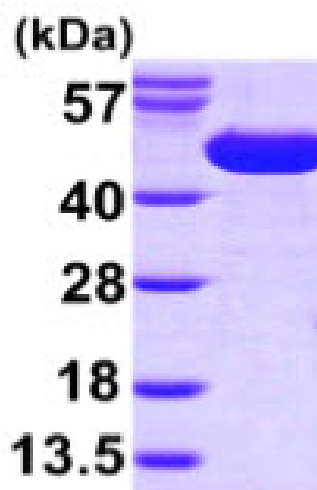
MGSSHHHHHH SGLVPRGSH MAPQVVDKVA AVVNNGVVLE SDVDGLMQSV KLNAAQARQQ LPDDATLRHQ  
IMERLIMDQI ILQMGQKMGV KISDEQLDQA IANIAKQNNM TLDQMRSRLA YDGLNYNTYR NQIRKEMIIS EVRNNEVRRR  
ITILPQEVEV LAQQVGNQND ASTELNLSHI LIPLPENPTS DQVNEAESQA RAIVDQARNG ADFGKLAIAH SADQQALNGG  
QMGWGRIQEL PGIFAQALST AKKGDIVGPI RSGVGFHILK VNDLRGESKN ISVTEVHARH ILLKPSPIMT DEQARVKLEQ  
IAADIKSGKT TFAAAAKEFS QDPGSANQGG DLGWATPDIF DPAFRDALTR LNKGQMSAPV HSSFGWHLIE LLDTRNVDKT  
DAAQKDRAYR MLMNRKFSEE AASWMQEQRA SAYVKILSN

### General References

Virlogeux-Payant I., et al (2009) Microbiology. 155(Pt 5):1613-22  
Kolter R., et al. (1996) J Bacteriol. 178(6):1770-3.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)