

Product datasheet for AR09602PU-N

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surA (21-428, His-tag) Escherichia coli Protein

Product data:

Product Type: Recombinant Proteins

Description: surA (21-428, His-tag) e. coli recombinant protein, 0.1 mg

Species: Escherichia coli

Expression Host: E. coli

Expression cDNA Clone

MGSSHHHHHH SSGLVPRGSH MAPQVVDKVA AVVNNGVVLE SDVDGLMQSV KLNAAQARQQ or AA Sequence: LPDDATLRHQ IMERLIMDQI ILQMGQKMGV KISDEQLDQA IANIAKQNNM TLDQMRSRLA

YDGLNYNTYR NQIRKEMIIS EVRNNEVRRR ITILPQEVES 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

Tag: His-tag

Predicted MW: 47.3 kDa

Concentration: lot specific

>95% by SDS - PAGE **Purity:**

Buffer: Presentation State: Purified

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl Buffer (pH 8.0) containing 10% Glycerol

Specific: > 450 nmoles/min/mg, defined as the amount of enzyme that cleaves **Bioactivity:**

1 umole of suc-AAPF-pNA per minute at 25°C in Tris-HCl pH 8.0 using chymotrypsin

Liquid purified protein Preparation: **Applications:** Protocol: **Activity Assay**

1. Prepare 170 ul assay buffer into a suitable container and pre-chill on ice before use:

The final concentrations are 200 mM Tris-HCl, pH 8.0, and 20nM chymotrypsin.

2. Add 10 ul of recombinant surA protein with 1 ug in assay buffer.

3. Mix by inversion and equilibrate to 1°C and monitor the A405nm until the value is constant

using a spectrophotometer.

4. Add 20 ul pre-chilled 5 mM suc-AAFP-pNA. (Substrate was dissolved in TFE that contained

460mM LiCl to a concentration of 3 mM)

5. Record the increase in A405 nm for 30 minutes at 25°C.





Protein Description: Recombinant E.coli SurA protein, fused to His-tag at N-terminus, was expressed in E.coli and

purified by using conventional chromatography.

Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Summary: 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 of E.coli in stationary phase and $\,$

required for pilus biogenesis.

Product images:

