

Product datasheet

Recombinant *E. coli* surA protein ab99241

1 Image

Description

<b>Product name</b>	Recombinant <i>E. coli</i> surA protein
<b>Biological activity</b>	<p>Specific activity is &gt; 450 nmoles/min/mg, and is defined as the amount of enzyme that cleaves 1 µmole of suc-AAFP-pNA per minute at 25°C in Tris-Hcl pH8.0 using chymotrypsin.</p> <p><b>Activity Assay</b></p> <p>Prepare 170 µl 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.</p> <p>Add 10 µl of recombinant surA protein with 1 µg in assay buffer.</p> <p>Mix by inversion and equilibrate to 1°C and monitor the A405nm until the value is constant using a spectrophotometer.</p> <p>Add 20 µl pre-chilled 5mM suc-AAFP-pNA. (Substrate was dissolved in TFE that contained 460mM LiCl to a concentration of 3 mM)</p> <p>Record the increase in A405 nm for 30 minutes at 25°C.</p> <p>Specific activity is &gt; 450 nmoles/min/mg, and is defined as the amount of enzyme that cleaves 1 µmole of suc-AAFP-pNA per minute at 25°C in Tris-Hcl pH8.0 using chymotrypsin.</p> <p><b>Activity Assay</b></p> <p>Prepare 170 µl 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.</p> <p>Add 10 µl of recombinant surA protein with 1 µg in assay buffer.</p> <p>Mix by inversion and equilibrate to 1°C and monitor the A405nm until the value is constant using a spectrophotometer.</p> <p>Add 20 µl pre-chilled 5mM suc-AAFP-pNA. (Substrate was dissolved in TFE that contained 460mM LiCl to a concentration of 3 mM)</p> <p>Record the increase in A405 nm for 30 minutes at 25°C.</p>
<b>Purity</b>	<p>&gt; 95 % SDS-PAGE.</p> <p>ab99241 is purified using conventional chromatography techniques.</p>
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<a href="#">P0ABZ6</a>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Escherichia coli
<b>Sequence</b>	<p><b>MGSSHHHHHH SSGLVPRGSH M</b> APQVVDKVA            AVVNNGVVLE SDVDGLMQSV KLNAAQARQQ</p>

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 HSSFGWHLE  
LLDTRNVDKT DAAQKDRAYR MLMNRKFSEE  
AASWMQEQRASAYVKILSN

<b>Predicted molecular weight</b>	47 kDa
<b>Amino acids</b>	21 to 428
<b>Tags</b>	His tag N-Terminus

## Specifications

---

Our [Abpromise guarantee](#) covers the use of **ab99241** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	SDS-PAGE Mass Spectrometry Functional Studies
<b>Mass spectrometry</b>	MALDI-TOF
<b>Form</b>	Liquid

## Preparation and Storage

---

<b>Stability and Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. pH: 8.00 Constituents: 0.316% Tris HCl, 10% Glycerol (glycerin, glycerine) This product is an active protein and may elicit a biological response in vivo, handle with caution.
------------------------------	--

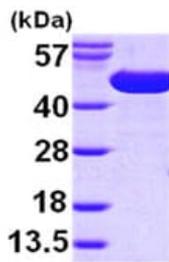
## General Info

---

<b>Relevance</b>	surA is a chaperone involved in the correct folding and assembly of outer membrane proteins, such as ompA, ompF and lamB. It recognizes specific patterns of aromatic residues and the orientation of their side chains, which are found more frequently in integral outer membrane proteins. surA may act in both early periplasmic and late outer membrane-associated steps of protein maturation and is essential for the survival of E.coli in stationary phase.
<b>Cellular localization</b>	Periplasm. Note: Is capable of associating with the outer membrane.

## Images

---



15% SDS-PAGE showing ab99241 at approximately 47.3kDa (3µg).

SDS-PAGE - Recombinant *E. coli* surA protein (ab99241)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors