

## 56 KDa type-specific antigen Protein, *Orientia tsutsugamushi* (Cell-Free, His)

<b>Cat. No.:</b>	HY-P702193
<b>Synonyms:</b>	56 kDa type-specific antigen; 56 kDa scrub typhus antigen; STA56; TSS56
<b>Species:</b>	Others
<b>Source:</b>	E. coli Cell-free
<b>Accession:</b>	P37917 (I23-F521)
<b>Gene ID:</b>	/
<b>Molecular Weight:</b>	57 kDa

### PROPERTIES

#### AA Sequence

I E F D E N S L E C	G P Y A K V G I V G	G V L S G V E S A R	L D P A D S E G K K
H L P L I K G M P F	G V T L A A G M T I	T P G V R A E I S A	M Y L M N V K A E V
E L G K M G S D A N	T G T T A D A S A G	V I R K H K K L T P	P Q P N I M P I S I
A D R D I A V D I P	N A A G Q G N V D V	R A A A R I A W L K	N Y A G I D Y Y V P
D S N N P Q G R V V	N P V L L N I P Q G	N P N P A G G G G R	A A P A A F D I L D
H A Q W R D V V V G	I T A L S N A N K P	N V S A V K I L S D	K I S Q I Y A D I K
P F A N V A S V Q I	S E T P L P D S A S	V D Q I Q N K V Q E	L N K V L E D V R E
S F D G F I L N A F	A Q P V R L N F Q I	P Q V V Q G Q G Q Q	P Q A A A T A Q E A
A A A A A I R A L N	D G E N N G I I Q L	Y K D L Y K L Q R N	V A L K K S M K Q L
G D E L G V D Q G Q	E G G C S K D K K Q	S D T T A E E S K K	E G K K G K E I E F
D L H M A V G Q V K	L Y A D L F T I D S	F S V Y A G I G A G	L A Y T H G K I D G
K D I K A H T G M V	G S L A L G V A A N	V A D G V Y M D V D	A G Y L Y S F S K I
E E K Y Q M N A F V	A S A G I R Y N F		

#### Appearance

Lyophilized powder.

#### Formulation

Lyophilized from a 0.22 µm filtered solution of Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

#### Endotoxin Level

<1 EU/µg, determined by LAL method.

#### Reconstitution

It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH<sub>2</sub>O. For long term storage it is recommended to add 5-50% of glycerol (final concentration). Our default final concentration of glycerol is 50%. Customers could use it as reference.

#### Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

#### Shipping

Room temperature in continental US; may vary elsewhere.

## DESCRIPTION

### Background

The 56 KDA type-specific antigen Protein appears to serve dual roles as a crucial adherent factor for rickettsial adsorption to the host-cell surface and a determinant of virulence in individual rickettsial strains. Its significance lies in being the major outer membrane protein, suggesting a central position in the interaction between the pathogen and host cells. As an adherent factor, the protein likely plays a pivotal role in the initial stages of infection by facilitating the binding of rickettsial particles to host cells. Additionally, its role in determining the virulence of specific rickettsial strains underscores its potential impact on the pathogenicity and infectious outcomes associated with these bacterial agents. Elucidating the precise mechanisms by which the 56 KDA type-specific antigen contributes to rickettsial adherence and virulence could enhance our understanding of host-pathogen interactions and provide insights for developing targeted therapeutic strategies.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA