

# Recombinant human SUMO E1/SAE1 protein

Catalog Number: ATGP0610

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-346aa

### UniProt No.

Q9UBE0

### NCBI Accession No.

NP\_005491.1

### Alternative Names

SUMO1 activating enzyme subunit 1, SUMO-activating enzyme subunit 1, Ubiquitin-like 1-activating enzyme E1A, activator Of sumo 1, AOS1, SUA1, UBLE1A

## PRODUCT SPECIFICATION

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### Molecular Weight

42.2 kDa (378aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol

### Purity

> 90% by SDS-PAGE

### Tag

His-T7-Tag

### Application

SDS-PAGE

### 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

SAE1, also known as AOS1, belongs to the ubiquitin-activating E1 family of proteins and plays an important role in the first step of the uBL1 conjugation pathway. Proteins conjugated to ub are marked for progressive degradation by the 26S Proteasome. SAE1, which is a dimeric enzyme, functions as a uBL1 E1 ligase mediating the ATP-dependent activation of uBL1. This protein can bind with uBLE1A and uBLE1B to form a heterodimer which can bind uBL1. Recombinant human SAE1 protein, fused to His-T7-tag at N-terminus, was expressed in E.

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coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

<MHHHHHMAS MTGGQQMGRD LYDDDDKDRW GS>MVEKEEAG GGISEEEAAQ YDRQIRLWGL EAQKRLRASR  
VLLVGLKGLG AEIAKNLILA GVKGLTMLDH EQVTPEDPGA QFLIRTGSVG RNRAEASLER AQNLNPMVDV KVDTEIEKK  
PESFFTQFDA VCLTCCSRDV IVKVDQICHK NSIKFFTGDV FGYHGYTFAN LGEHEFVEEK TKVAKVSQGV EDGPDTKRAK  
LDSSETTMVK KVVVFCPVKE ALEVDWSSEK AKAALKRTTS DYFLLQVLLK FRTDKGRDPS SDTYEEDSEL LLQIRNDVLD  
SLGISPDLLP EDFVRYCFSE MAPVCAVVG ILAQEIVKAL SQRDPPHNNF FFFDGMKGNG IVECLGPK

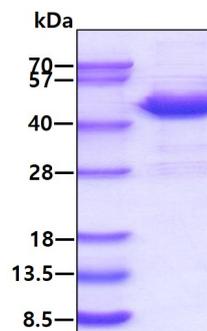
## General References

Boggio R., et al. (2007) J Biol Chem. 282(21):15376-82.

Jones MC., et al. (2006) Proc Natl Acad Sci U S A. 103(44):16272-7.

## DATA

### SDS-PAGE



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