

Recombinant Human SAE1, His-tagged

Cat. No. SAE1-29262TH Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant fragment, corresponding to amino acids 18-346 of Human SAE1 with N terminal His tag; 329 amino acids, Predicted Mwt 37kDa.
Species	Human
Source	E.coli
ProteinLength	18-346 a.a.
Description	Posttranslational modification of proteins by the addition of the small protein SUMO (see SUMO1; MIM 601912), or sumoylation, regulates protein structure and intracellular localization. SAE1 and UBA2 (MIM 613295) form a heterodimer that functions as a SUMO-activating enzyme for the sumoylation of proteins (Okuma et al.
Conjugation	HIS
Tissue specificity	Expression level increases during S phase and drops in G2 phase (at protein level).
Form	Lyophilised:Reconstitute with 135 µl aqua dest.
Storage buffer	Preservative: NoneConstituents: 0.5% Trehalose, 6M Urea, 100mM Sodium phosphate, 10mM Sodium chloride, pH 4.5
Storage	Shipped at 4°C. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.

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Sequences of amino acids

QYDRQIRLWGLEAQKRLRASRVLLVGLKGLGAEIAKNLIL AGVKGLTMLDHEQVTPE
 DPGAQFLIRTGSVGRNRAEAS LERAQNLNPMVDVKVDTEDIEKKPESFFTQFDAVC
 LTCCS RDVIVKVDQICHKNSIKFFTGDVFGYHGYTFANLGEHE FVEEKTKVAKVSQ
 GVEDGPDTKRAKLDSSSETTMVKKKV VFCPVKEALEVDWSSEKAKAALKRTTSDYFL
 LQVLLKFRT DKGRDPSSDTYEEDSELLLQIRNDVLDLGLISPDLLPE DFVRYCFSEM
 APVCAVVGILAQEIVKALSQRDPPHNNFFFFDGMKGNNGIVECLGPK

Sequence Similarities

Belongs to the ubiquitin-activating E1 family.

GENE INFORMATION

Gene Name [SAE1 SUMO1 activating enzyme subunit 1 \[Homo sapiens \]](#)

Official Symbol [SAE1](#)

Synonyms SAE1; SUMO1 activating enzyme subunit 1; SUMO-activating enzyme subunit 1; activator Of sumo 1; AOS1; FLJ3091; Sua1;

Gene ID [10055](#)

mRNA Refseq [NM_001145713](#)

Protein Refseq [NP_001139185](#)

MIM [613294](#)

Uniprot ID [Q9UBE0](#)

Chromosome Location 19q13.32

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Pathway

Adaptive Immune System, organism-specific biosystem; Antigen processing: Ubiquitination & Proteasome degradation, organism-specific biosystem; Class I MHC mediated antigen processing & presentation, organism-specific biosystem;

Function

ATP-dependent protein binding; contributes_to SUMO activating enzyme activity; enzyme activator activity; ligase activity; nucleotide binding;

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