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Product datasheet for AP09135PU-N

SAE1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	**ELISA:** 1/5,000-1/20,000. **Western Blot:** 1/500 1/2,000. **Immunofluorescence.** **Immunohistochemistry on Paraffin Sections.**
Reactivity:	Bovine, Canine, Chimpanzee, Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein produced by baculoviral expression in insect cells (Sf9, Spodoptera frugiperda) corresponding to full length Human SUMO Activating Enzyme E1 fused with GST
Specificity:	This antibody is directed against SUMO Activating Enzyme E1 protein.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 containing 0.01% (w/v) Sodium Azide State: Purified State: Lyophilized purified IgG fraction Stabilizer: None
Reconstitution Method:	Restore with 0.1 ml of deionized water or equivalent.
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Prior to reconstitution store at 2-8°C. Following reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	SUMO1 activating enzyme subunit 1

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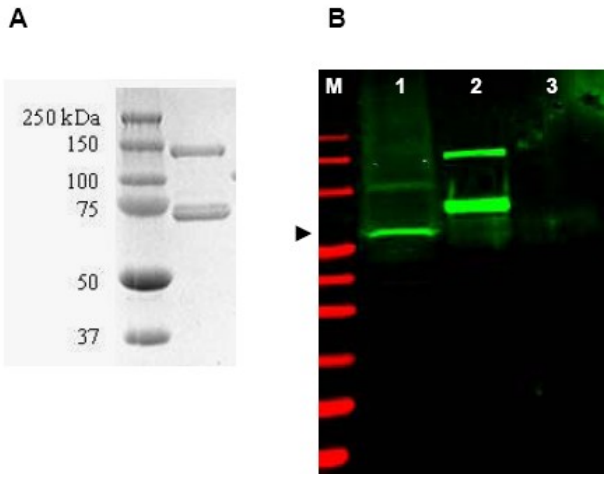
Database Link: Entrez Gene 10055 Human
Q9UBE0

Background: SUMO E1 activating enzyme (also called Ubiquitin-like 1 activating enzyme E1A, UBLE1A, AOS1, SAE1, and SUA1) is a heterodimeric (SAE1/SAE2) enzyme that activates the ubiquitin-like SUMO proteins (SUMO stands for Small Ubiquitin-like MOdifier.) The SAE1 (SUMO Activating Enzyme 1, also called Aos1) subunit resembles the Nterminal half of yeast UBA1; the SAE2 (also called Uba2) subunit corresponds to the C-terminal part of yeast UBA1 and contains the active site cysteine. In the SUMO activation step, SAE1/SAE2 uses ATP to adenylate the C-terminal glycine of SUMO-1 (the first of the three different mammalian SUMO proteins) then forms a high-energy thioester bond between the C-terminal glycine and the active site cysteine in SAE2 (Uba2). In the conjugation step, the SUMO moiety is transferred from SAE1/SAE2 to the active site cysteine (Cys 93) of the SUMO conjugating enzyme (SUMO E2, Ubc9) forming a SUMO-E2 thioester complex.

Synonyms: SUA1, UBLE1A

Product images:



Coomassie-stained SDS-PAGE of GST-SAE1 recombinant protein (Panel A) and western blotting (Panel B) of HeLa WC lysate (lane 1) and purified recombinant GST-SAE1 (lane 2) are presented to show specificity of purified anti-SUMO Activating Enzyme (SAE1) antibody. The recombinant protein (with tag) ~60 kDa band present in 35 ug lysate (green, 800 nm channel) is indicated by the arrowhead. Lane 2 contains 50 ng of purified recombinant GST-SAE1 and lane 3 contains 300 ng of purified GST. Proteins were separated on a 4-20% Tris-Glycine gel by SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:2,000. Incubation was overnight at 4°C followed by washes and reaction with a 1:10,000 dilution of IRDye (TM)800 conjugated Gt-a-Rabbit IgG [H&L] MXHu for 45 min at room temperature. Molecular weight markers are shown for both the coomassie-stained gel and the western blot (lane M, red, 700 nm channel). IRDye (TM)800 fluorescence image was captured using the Odyssey (R) Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.