

Datasheet for 200-401-913**SAE1 Antibody****Overview**

Description:	Anti-SUMO Activating Enzyme E1 (RABBIT) Antibody - 200-401-913
Item No.:	200-401-913
Size:	500 µg
Applications:	WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

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 N-terminal 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:	rabbit anti-Sumo Activating Enzyme E1 Antibody, rabbit anti-SAE1 Antibody, SUMO-activating enzyme subunit 1 antibody, Ubiquitin-like 1-activating enzyme E1A antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	SAE1
Reactivity:	Human

Immunogen Type:	Recombinant Protein
Immunogen:	Anti-SUMO Activating Enzyme E1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a recombinant protein produced by baculoviral expression in insect cells (Sf9, Spodoptera frugiperda) corresponding to full length Human SUMO Activating Enzyme E1.
Purity/Specificity:	This purified antibody is directed against human SUMO Activating Enzyme E1 protein. The product was purified from monospecific antiserum by Protein A chromatography. A BLAST analysis was used to suggest that this antibody would react with SUMO Activating Enzyme E1 protein from human (100%) bovine, dog, chimpanzee (96%), mouse (93%), and rat (92%) based on a high degree of sequence homology. Cross reactivity against this protein from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9UBE0 • NCBI - 42559897 • GeneID - 10055

Application Details

Tested Applications:	WB
Application Note:	This purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~60 kDa in size corresponding to SAE1 by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:20,000
IF:	User Optimized
WB:	1:500 - 1:2,000

Formulation

Physical State:	Lyophilized
Concentration:	5.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	100 µL

Reconstitution Buffer: Restore with deionized water (or equivalent)

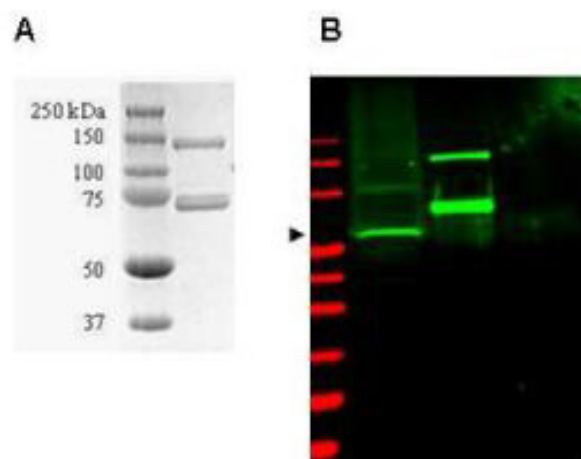
Shipping & Handling

Shipping Condition: Ambient

Storage Condition: Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

(Panel A) Coomassie-stained SDS-PAGE and (Panel B) western blotting of anti-SUMO Activating Enzyme (SAE1) antibody. (Panel A) Lane 1: MW Markers. Lane 2: GST-SAE1 recombinant protein [50ng]. (Panel B) Lane 1: MW Markers [red, 700 nm channel]. Lane 2: HeLa WC lysate [35µg]. Lane 3: purified recombinant GST-SAE1 [50ng]. Lane 4: purified GST [300ng]. Primary Antibody: anti-SUMO Activating Enzyme (SAE1) at 1:2000 overnight at 4°C. Secondary Antibody: 1:10,000 dilution of IRDye™800 conjugated Gt-a-Rabbit IgG [H&L] MX Hu (611-132-122) for 45 min at room temperature. Results: The recombinant protein (with tag) ~60 kDa band present [green, 800nm channel]. IRDye™800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results. SDS-PAGE image courtesy of Proteome Resources, Englewood, CO, <http://www.proteomeresources.com>.

Disclaimer

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