Datasheet for ABIN129533

anti-SAE1 antibody

1 Image

Go to Product page

Overview

Quantity:	500 µg
Target:	SAE1
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA, Fluorescence Microscopy (FM)

Product Details

Purpose:	SAE1 Antibody
Immunogen:	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. Immunogen Type: Recombinant Protein
Isotype:	IgG
Cross-Reactivity (Details):	This purified antibody is directed against human SUMO Activating Enzyme E1 protein.
Characteristics:	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
Purification:	The product was purified from monospecific antiserum by Protein A chromatography.

Target Details

Target:	SAE1
Alternative Name:	SAE1 (SAE1 Products)
Background:	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.
Gene ID:	10055, 42559897
UniProt:	Q9UBE0

Application Details

Application Notes:	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. Western Blot Dilution: 1:500 - 1:2,000 ELISA Dilution: 1:5,000 - 1:20,000 IF Microscopy Dilution: User Optimized Other: User Optimized
Restrictions:	For Research Use only

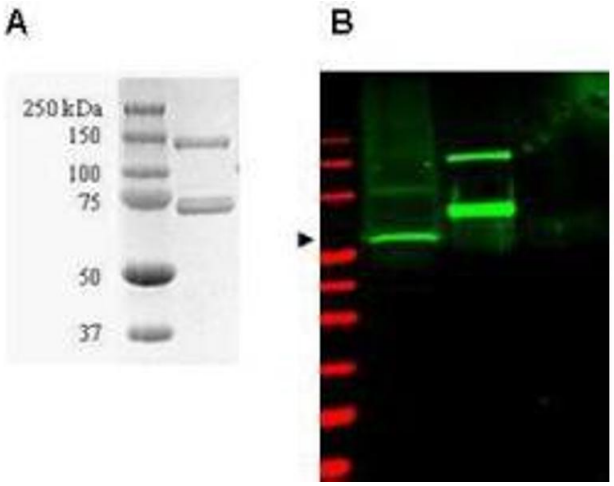
Handling

Format:	Lyophilized
Reconstitution:	Reconstitution Volume: 100 µL Reconstitution Buffer: Restore with deionized water (or equivalent)
Concentration:	5.0 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Handling

	Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	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.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Coommassie-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 µg 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 of800 conjugated Gt-a-Rabbit IgG [H&L] MXHu for 45 min at room temperature. Molecular weight markers are shown for both the Coommassie-stained gel and the western blot (lane M, red, 700 nm channel).800 fluorescence image was captured

using the 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.