

Datasheet for ABIN964924

anti-SAE1 antibody (Internal Region)



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1 Image

Overview

Quantity:	100 µg
Target:	SAE1
Binding Specificity:	Internal Region
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA

Product Details

Purpose:	SAE1 Antibody
Immunogen:	Immunogen: This purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human SUMO Activating Enzyme E1 protein. Immunogen Type: Conjugated Peptide
Isotype:	IgG
Cross-Reactivity (Details):	This purified antibody is directed against human SUMO Activating Enzyme E1 protein.
Characteristics:	Synonyms: rabbit anti-SAE1 antibody, rabbit anti-SUMO activating enzyme subunit 1 antibody, Ubiquitin-like 1 activating enzyme E1A, UBLE1A, AOS1, SAE1, SUA1, SAE-1
Purification:	The product was purified from monospecific antiserum by affinity chromatography.
Sterility:	Sterile filtered

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) with SAE2 (also known as UBA2) forms 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) 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 ~37 kDa in size corresponding to SAE1 protein by western blotting in the appropriate cell lysate or extract. Western Blot Dilution: 2 µg/mL ELISA Dilution: 1:5,000 - 1:20,000 Other: User Optimized
Restrictions:	For Research Use only

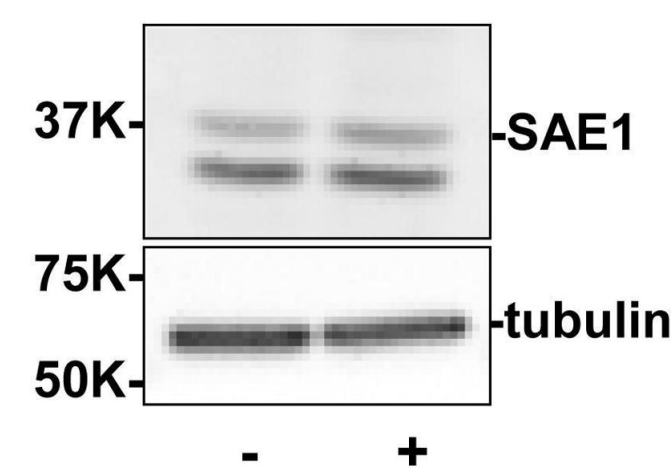
Handling

Format:	Liquid
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide

Handling

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 -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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. Western blot using Rabbit anti-SAE1 antibody shows detection of SAE1. Left lane contains 20 µg human HeLa whole cell protein. Right lane (+) contains 20 µg human HeLa whole cell protein from cells pre-treated with phosphatase inhibitor cocktail to prevent dephosphorylation of the target. Proteins were separated on a 10% SDS-PAGE and transferred onto nitrocellulose. After blocking with 5% milk-TBST 1 hr at room temperature, the membrane was probed with the primary antibody, Anti-SAE1, diluted to 2 µg/mL at room temperature for 3 hr followed by washes and reaction with HRP-conjugated secondary and ECL imaging. Personal communication, Xin-Hua Feng, Baylor College of Medicine, Houston, TX.