antibodies

Datasheet for ABIN349635 anti-SAE1 antibody (pSer185)

Image



Overview

Quantity:	100 µg
Target:	SAE1
Binding Specificity:	pSer185
Reactivity:	Human, Mouse, Rat, Cow, Dog
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SAE1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA
Product Details	
Immunogen:	This purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region surrounding S185 of the human SUMO Activating Enzyme E1 protein. Immunogen Type: Peptide
lsotype:	lgG
Specificity:	This purified antibody is directed against human SUMO Activating Enzyme E1 protein. The product was purified from monospecific antiserum by affinity chromatography. This antibody is specific for human SAE1 protein phosphorylated at S185. A BLAST analysis using the sequence of the immunizing peptide 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.

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Product Details	
Cross-Reactivity:	Sheep (Ovine), Mouse (Murine), Rat (Rattus), Dog (Canine)
Characteristics:	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.
Purification:	affinity purified
Sterility:	Sterile filtered

Target Details

Target:	SAE1
Alternative Name:	SAE1 (SAE1 Products)
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
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	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: SUMO E1 activating enzyme Ubiquitin-like 1 activating enzyme E1A UBLE1A AOS1
	SAE1 SUA1
Gene ID:	10055
NCBI Accession:	NP_005491

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Target Details	
UniProt:	Q9UBE0
Application Details	
Application Notes:	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 phosphorylated SAE1 protein by western blotting in the appropriate cell lysate or extract. This phospho-specific antibody reacts with human SAE1 pS185 and shows minimal reactivity by ELISA against the non-phosphorylated form of the immunizing peptide.
Comment:	Gene Name: SAE1
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
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. Expiration date is three (3) months from date of opening.
Expiry Date:	3 months

Images



pSAE1

Tubulin

Western Blotting

Image 1. Western blot using Rabbit anti-SAE1 pS185 antibody shows detection of phosphorylated 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 dephos-phorylation 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 diluted to 1:1,000 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, Houstin, TX