



Product datasheet

Anti-Sumo 3 antibody [1H9L17] ab203570

Recombinant

[3 References](#) [6 Images](#)

Overview

Product name	Anti-Sumo 3 antibody [1H9L17]
Description	Rabbit monoclonal [1H9L17] to Sumo 3
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, Flow Cyt, IHC-P, WB
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide corresponding to Human Sumo 3 aa 50 to the C-terminus. Database link: P55854
	 Run BLAST with  Run BLAST with
Positive control	WB: Mouse oesophagus, skin, skeletal muscle lysates; Human cell line lysates Jurkat and U2OS cells; IHC: Human colon carcinoma tissue; ICC/IF: U2OS, MCF7 cell lines Flow Cyt: Jurkat cells

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.09% Sodium azide Constituent: 99% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	1H9L17
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab203570 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 4 - 6 µg/ml.
Flow Cyt		Use at an assay dependent concentration. Use at 0.5-1 µg/test
IHC-P		Use a concentration of 4 - 6 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		Use a concentration of 2 - 3 µg/ml. Predicted molecular weight: 11 kDa.

Target

Function

Ubiquitin-like protein which can be covalently attached to target lysines either as a monomer or as a lysine-linked polymer. Does not seem to be involved in protein degradation and may function as an antagonist of ubiquitin in the degradation process. Plays a role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Covalent attachment to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by an E3 ligase such as PIAS1-4, RANBP2 or CBX4.

Tissue specificity

Expressed predominantly in liver.

Sequence similarities

Belongs to the ubiquitin family. SUMO subfamily.
Contains 1 ubiquitin-like domain.

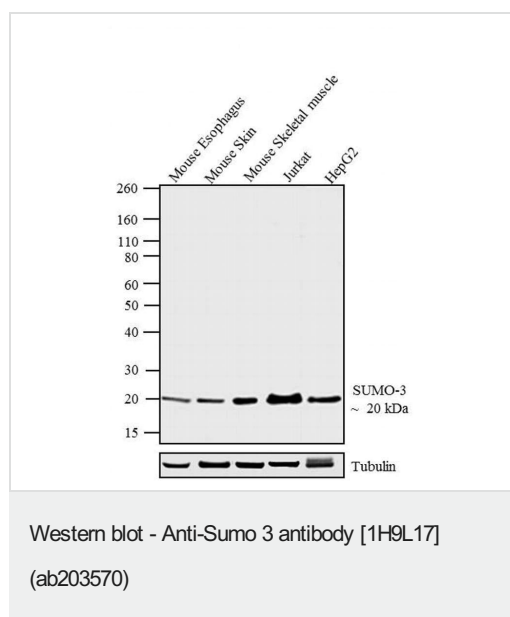
Post-translational modifications

Polymeric chains can be formed through Lys-11 cross-linking.
Cleavage of precursor form by SENP1, SENP2 or SENP5 is necessary for function.

Cellular localization

Cytoplasm.

Images



All lanes : Anti-Sumo 3 antibody [1H9L17] (ab203570) at 0.1 µg/ml

Lane 1 : Mouse Esophagus

Lane 2 : Mouse skin

Lane 3 : Mouse Skeletal muscle

Lane 4 : Jurkat

Lane 5 : Hep G2

Lysates/proteins at 20 µg per lane.

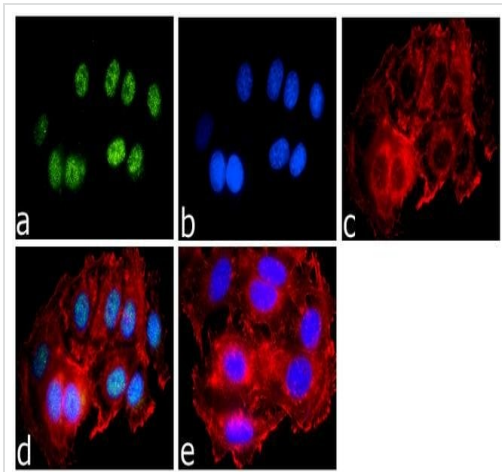
Secondary

All lanes : Goat anti-Rabbit IgG - HRP Secondary Antibody at 0.02 µg/ml

Predicted band size: 11 kDa

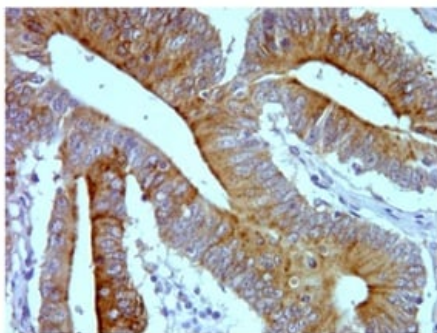
Western blot analysis of SUMO-3 expression in Mouse Esophagus, Mouse Skin, Mouse Skeletal muscle, and human cell lines Jurkat and HepG2. Used Novex® NuPAGE®4-12 % Bis-Tris gel, XCell SureLock™ Electrophoresis System, Novex® Sharp Pre-Stained Protein Standard, and iBlot® Dry Blotting System. Proteins were transferred to a nitrocellulose membrane and blocked with 5 % skim milk for 1 hour at room temperature.

SUMO-3 was detected at ~ 20 kDa using ab203570 in 5 % skim milk at 4°C overnight on a rocking platform. Chemiluminescent detection was performed using Pierce™ ECL Western blotting Substrate.



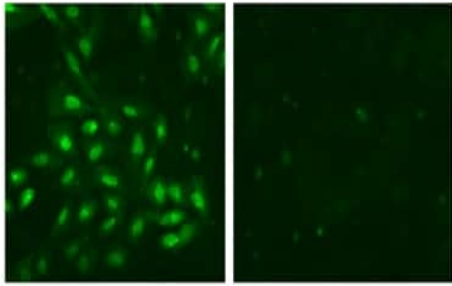
Immunocytochemistry/ Immunofluorescence - Anti-Sumo 3 antibody [1H9L17] (ab203570)

Immunofluorescence analysis of 70% confluent log phase MCF7 cell labelled for SMT3/ SUMO3 using **ab207570** at 1µg/mL. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with ab203570 in 1% BSA and incubated for 3 hours at room temperature and then labeled with secondary antibody for 45 minutes at room temperature (Panel A: green). Nuclei (Panel B: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI. F-actin (Panel C: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin(1/300). Panel D is a merged image showing Nuclear localization. Panel E is a no primary antibody control. The images were captured at 60X magnification.



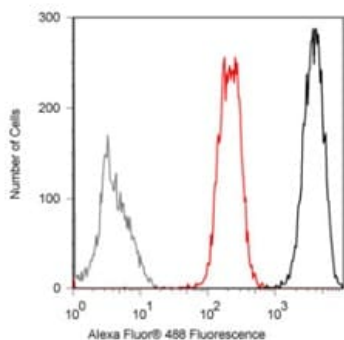
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sumo 3 antibody [1H9L17] (ab203570)

Immunohistochemical analysis of formalin fixed, paraffin embedded Human colon carcinoma tissue labeling Sumo 3 using ab203570 at 5 µg/mL, followed by DAB detection.



Immunocytochemistry/ Immunofluorescence - Anti-Sumo 3 antibody [1H9L17] (ab203570)

Immunofluorescent analysis of U2OS cells labeling Sumo 3 using ab203570 at 5 µg/mL (left image). Right image: sample with immunogenic phosphopeptide. Alexa Fluor® 488 Goat anti-Rabbit at 1/1000 dilution was used as secondary antibody.



Flow Cytometry - Anti-Sumo 3 antibody [1H9L17] (ab203570)

Flow cytometric analysis of fixed and permeabilized Jurkat cells labeling Sumo 3 using ab203570 at 0.5 µg/test (Black) followed by secondary detection with Alexa Fluor® 488 Goat anti-Rabbit. Cells incubated without primary antibody (grey) for control. Preincubation with immunizing peptide decreased the staining (red).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Sumo 3 antibody [1H9L17] (ab203570)

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