


Product datasheet

Anti-Sumo 2 + Sumo 3 antibody ab22654

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

Overview

Product name	Anti-Sumo 2 + Sumo 3 antibody
Description	Rabbit polyclonal to Sumo 2 + Sumo 3
Host species	Rabbit
Specificity	<p>This antibody recognizes Human Sumo 2 and Sumo 3.</p> <p>This antibody shows no cross-reactivity with related proteins SUMO1, UCRP, Nedd8, and FAT10 in Western blotting.</p>
Tested applications	Suitable for: ICC/IF, IHC-P, WB
Species reactivity	<p>Reacts with: Human</p> <p>Predicted to work with: Mouse, Rat, Dog, Xenopus laevis, Zebrafish </p>
Immunogen	<p>Synthetic peptide corresponding to Human Sumo 2 + Sumo 3 aa 1-15 (N terminal).</p> <p>Sequence:</p> <p>MSEELPKKEGVKTEND</p>

 [Run BLAST with](#)

 [Run BLAST with](#)

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	<p>Preservative: 0.01% Sodium azide</p> <p>Constituent: PBS</p>
Purification notes	This antibody has been partially purified by salt precipitation.
Clonality	Polyclonal

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab22654 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 1 µg/ml.
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000. Detects a band of approximately 17 kDa (predicted molecular weight: 12 kDa). Dilute to working strength with 50mM sodium phosphate buffer (pH 7.4) containing 1.5% sodium chloride and 1% normal goat serum (if a goat anti-rabbit IgG linker antibody is to be used).

Target

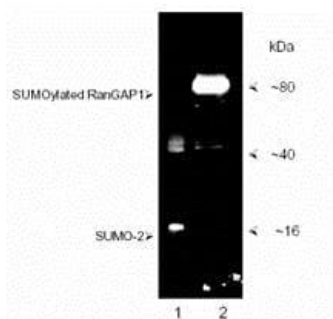
Relevance

SUMO proteins, such as Sumo 2 and Sumo 3, post-translationally modify numerous cellular proteins and affect their metabolism and function. However, unlike ubiquitination, which targets proteins for degradation, sumoylation participates in a number of cellular processes, such as nuclear transport, transcriptional regulation, apoptosis, and protein stability. Sumo 2 and Sumo 3 are highly homologous, hence it is very difficult to produce antibodies which distinguish them.

Cellular localization

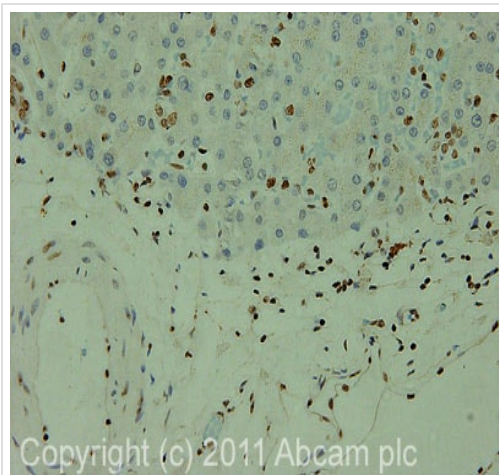
Cytoplasmic (SUMO3) and Nuclear (SUMO2)

Images



Western blot - Anti-Sumo 2 + Sumo 3 antibody
(ab22654)

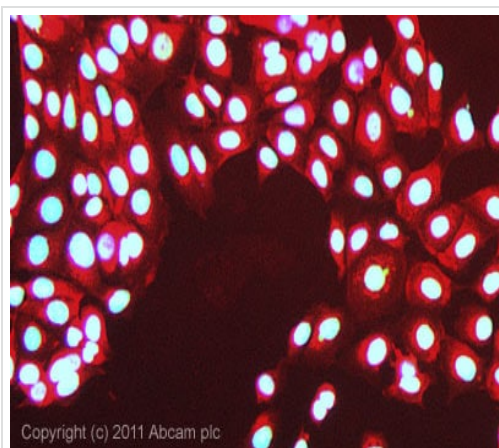
SUMOylation assay utilising His6-tagged SUMO 2, SUMO E1, SUMO E2 and RANGAP1 as substrate in presence (lane 2) and absence (lanes (1) of ATP after SDS-PAGE and blotting to PVDF with subsequent probing with ab22654. SUMOylation assay utilising His6-tagged SUMO 2, SUMO E1, SUMO E2 and RANGAP1 as substrate in presence (lane 2) and absence (lanes (1) of ATP after SDS-PAGE and blotting to PVDF with subsequent probing with ab22654.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sumo 2 + Sumo 3 antibody (ab22654)

IHC image of ab22654 staining in human normal liver formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab22654, 1 µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunocytochemistry/ Immunofluorescence - Anti-Sumo 2 + Sumo 3 antibody (ab22654)

ICC/IF image of ab22654 stained MCF7 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab22654, 1 µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 µM.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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