


Product datasheet

Anti-Sumo 2 + Sumo 3 antibody [EPR4602] ab109005

Recombinant RabMAb

★★★★★ **3 Abreviews** **11 References** [6 Images](#)

Overview

Product name	Anti-Sumo 2 + Sumo 3 antibody [EPR4602]
Description	Rabbit monoclonal [EPR4602] to Sumo 2 + Sumo 3
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF Unsuitable for: Flow Cyt or IP
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HeLa, Jurkat, 293T, SW480 and HL60 cell lysates; Human colonic and hepatocellular carcinoma tissues.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR4602

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab109005 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
WB	★★★★★ (2)	1/1000 - 1/10000. Predicted molecular weight: 11 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Heat up to 98 °C, below boiling, and then let cool for 10-20 min.
ICC/IF	★★★★★ (1)	1/400.

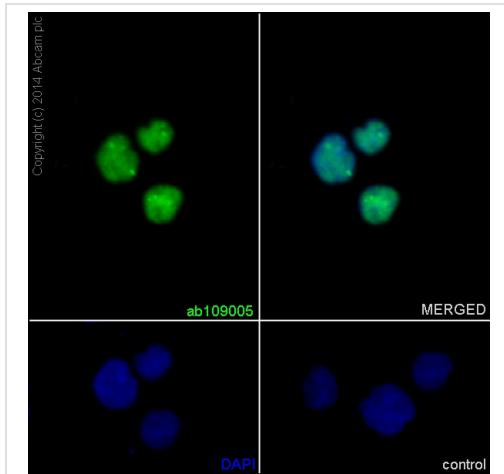
Application notes Is unsuitable for Flow Cyt or IP.

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)

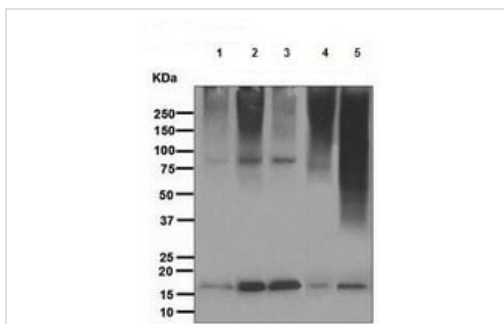
Images



Immunocytochemistry/ Immunofluorescence - Anti-Sumo 2 + Sumo 3 antibody [EPR4602] (ab109005)

Immunocytochemistry/Immunofluorescence analysis of SW480 (human colorectal adenocarcinoma) cells labelling Sumo 2+3 (green) with purified ab109005 at 1/400. Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. Nuclei were stained blue with DAPI.

Secondary Only Control: PBS was used instead of the primary antibody as the negative control.



Western blot - Anti-Sumo 2 + Sumo 3 antibody [EPR4602] (ab109005)

All lanes : Anti-Sumo 2 + Sumo 3 antibody [EPR4602] (ab109005) at 1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : Jurkat cell lysate

Lane 3 : 293T (Human embryonic kidney epithelial cell) cell lysate

Lane 4 : SW480 cell lysate

Lane 5 : HL60 cell lysate

Lysates/proteins at 10 µg per lane.

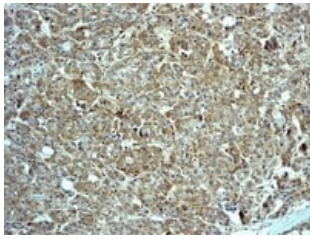
Predicted band size: 11 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sumo 2 + Sumo 3 antibody [EPR4602] (ab109005)

ab109005 at 1/100 dilution, staining Sumo 2+3 in Human colon by Immunohistochemistry, Paraffin-embedded tissue.

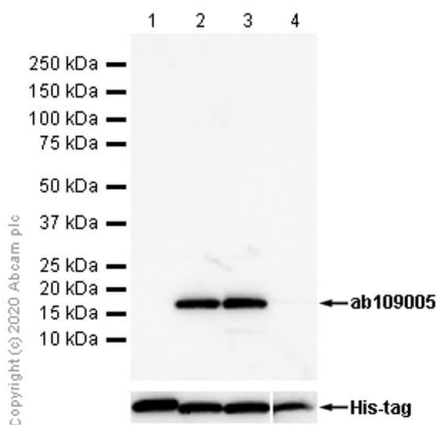
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sumo 2 + Sumo 3 antibody [EPR4602] (ab109005)

ab109005 at 1/100 dilution, staining Sumo 2+3 in Human hepatocellular carcinoma by Immunohistochemistry, Paraffin-embedded tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Sumo 2 + Sumo 3 antibody [EPR4602] (ab109005)

All lanes : Anti-Sumo 2 + Sumo 3 antibody [EPR4602] (ab109005) at 1/1000 dilution

Lane 1 : Recombinant Human Sumo 1 protein ([ab140417](#)) at 0.01 µg

Lane 2 : Recombinant Human Sumo 2 protein ([ab140420](#)) at 0.01 µg

Lane 3 : Recombinant Human Sumo 3 protein ([ab140414](#)) at 0.01 µg

Lane 4 : Recombinant Human Sumo 4 protein ([ab157025](#)) at 0.1 µg

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Developed using the ECL technique.

Predicted band size: 11 kDa

Observed band size: 16 kDa

Exposure time: 20 seconds

Blocking buffer: 5% NFDM/TBST

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 2 + Sumo 3 antibody [EPR4602]
(ab109005)

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