Datasheet for ABIN6940601

anti-SUMO2 antibody

4 Images

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Overview

Quantity:	100 µg
Target:	SUMO2
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SUMO2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Flow Cytometry (FACS), Staining Methods (StM)

Product Details

Immunogen:	Recombinant human SUMO2 protein
Clone:	SM23-496
Isotype:	IgG1 kappa
Specificity:	This MAb reacts with both SUMO-2 and SUMO-3. The small ubiquitin-related modifier (SUMO) proteins, which include SUMO-1, 2 and 3, belong to the ubiquitin-like protein family. Like ubiquitin, the SUMO proteins are synthesized as precursor proteins that undergo processing before conjugation to target proteins. Also, both utilize the E1, E2 and E3 cascade enzymes for conjugation. However, SUMO and ubiquitin differ with respect to targeting. Ubiquitination predominantly targets proteins for degradation, whereas sumoylation targets proteins to a variety of cellular processing, including nuclear transport, transcriptional regulation, apoptosis and protein stability. The unconjugated SUMO-1, 2 and 3 proteins localize to the nuclear membrane, nuclear bodies and cytoplasm, respectively. SUMO-1 utilizes Ubc9 for conjugation

Product Details

	to several target proteins, which include MDM2, p53, PML and RanGap1. SUMO-2 and 3 contribute to a greater percentage of protein modification than does SUMO-1. In addition, SUMO-3 regulates beta-Amyloid generation and may be critical in the onset or progression of Alzheimer's disease.
Cross-Reactivity (Details):	Predicted to show a broad species reactivity.
Purification:	Purified by Protein A/G

Target Details

Target:	SUMO2
Alternative Name:	SUMO2 & SUMO3 (SUMO2 Products)
Molecular Weight:	11-13kDa
Gene ID:	6613, 6612
UniProt:	P61956, P55854
Pathways:	Methionine Biosynthetic Process

Application Details

Application Notes:	Positive Control: MCF-7, HepG2, HeLa cells. Breast carcinoma. Known Application: Flow Cytometry (1-2 µg/million cells), Immunofluorescence (1-2 µg/mL), Western Blot (1-2 µg/mL), Immunohistochemistry (Formalin-fixed) (1-2 µg/mL for 30 minutes at RT)(Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes)Optimal dilution for a specific application should be determined.
Restrictions:	For Research Use only

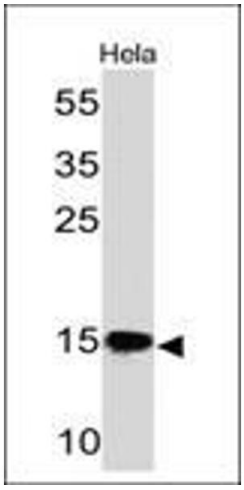
Handling

Concentration:	200 µg/mL
Buffer:	10 mM PBS with 0.05 % BSA & 0.05 % azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

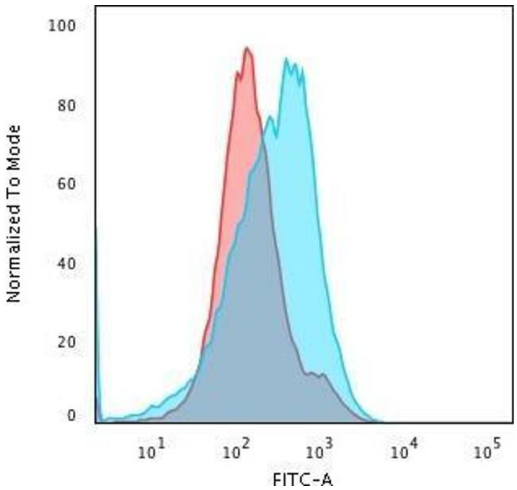
Storage:	4 °C,-80 °C
Storage Comment:	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.
Expiry Date:	24 months

Images



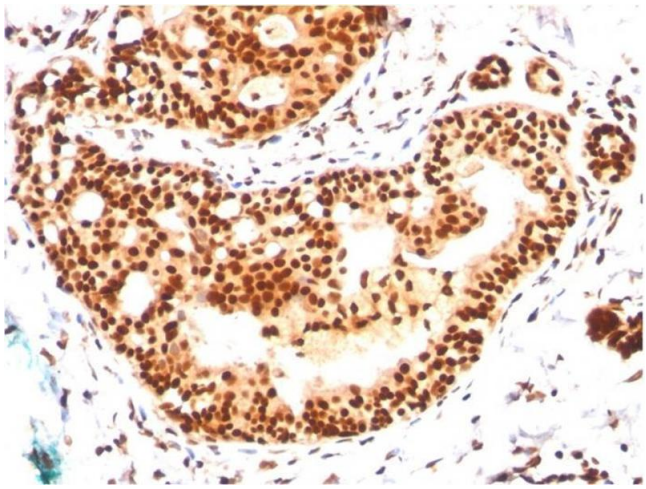
Western Blotting

Image 1. Western Blot of HeLa cell lysate using SUMO-2/3 Mouse Monoclonal Antibody (SM23/496)



Flow Cytometry

Image 2. Flow Cytometric Analysis of paraformaldehyde-fixed HepG2 cells using SUMO-2/3 Mouse Monoclonal Antibody (SM23/496) followed by goat anti- Mouse- IgG-CF488 (Blue); Isotype Control (Red).



Immunohistochemistry

Image 3. Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with SUMO-2/3 Mouse Monoclonal Antibody (SM23/496)

Please check the product details page for more images. Overall 4 images are available for ABIN6940601.