

SUMO-1 Antibody

Mouse Monoclonal Antibody [Clone SM1/495]

Catalog No	Format	Size
7341-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
7341-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
7341-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

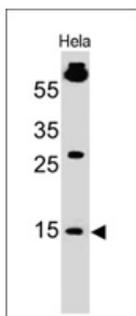
Applications	Tested Dilution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

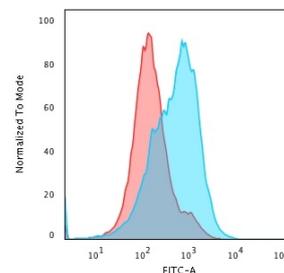
Clone	SM1/495
Gene Name	SUMO1
Immunogen	Recombinant human SUMO1 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	11.5kDa (Monomer); 90kDa (Heteromer)
Cellular Localization	Cell membrane, Cytoplasm, Nucleus, Nucleus membrane, Nucleus speckle, PML body
Species Reactivity	Human, Rat
Positive Control	Breast carcinoma.

*Optimal dilution for a specific application should be determined.

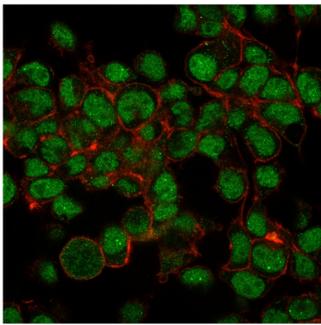
Product Images for SUMO-1 Antibody



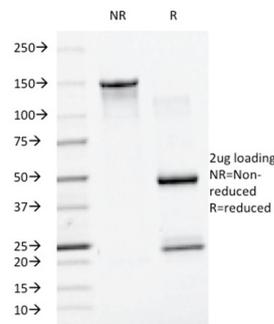
Western Blot of HeLa cell lysate using SUMO1 Mouse Monoclonal Antibody (SM1/495)



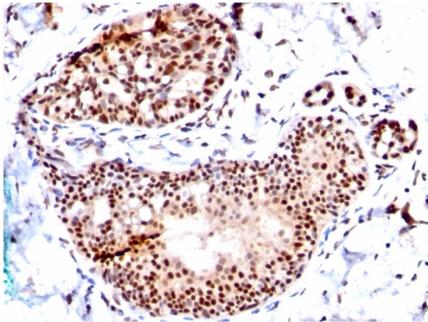
Flow Cytometric Analysis of paraformaldehyde-fixed HepG2 cells using SUMO-1 Mouse Monoclonal Antibody (SM1/495) followed by goat anti- Mouse- IgG-CF488 (Blue); Isotype Control (Red).



Paraformaldehyde-fixed HepG2 cells stained with SUMO-1 Mouse Monoclonal Antibody (SM1/495) followed by goat anti-Mouse IgG-CF488 (Green). Cell membranes are stained with Phalloidin (red).



SDS-PAGE Analysis of Purified SUMO-1 Mouse Monoclonal Antibody (SM1/495). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with SUMO-1 Mouse Monoclonal Antibody (SM1/495)

Specificity & Comments

This MAb is specific to SUMO-1 and shows no cross-reaction with either SUMO-2 or SUMO-3. The small ubiquitin-related modifier (SUMO) proteins, which include SUMO-1, SUMO-2 and SUMO-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 protein localizes to the nuclear membrane.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

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.

Research Areas

Cardiovascular, Cytokine Signaling, Immunology, Infectious Disease, Nuclear Marker, Transcription Factors