

## SUMO-2/3 Antibody

Mouse Monoclonal Antibody [Clone SM23/496]

Catalog No	Format	Size
6613-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
6613-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
6613-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

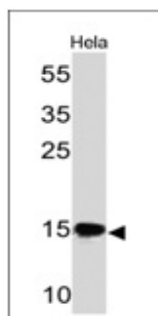
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling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

### Product Details

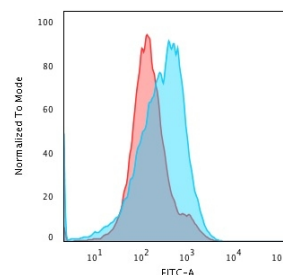
<b>Clone</b>	SM23/496
<b>Gene Name</b>	SUMO2
<b>Immunogen</b>	Recombinant human SUMO2 protein
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG1 / Kappa
<b>Mol. Weight of Antigen</b>	11-13kDa
<b>Cellular Localization</b>	Nucleus, PML body
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	HeLa cells. Breast carcinoma., HePG2, MCF-7

\*Optimal dilution for a specific application should be determined.

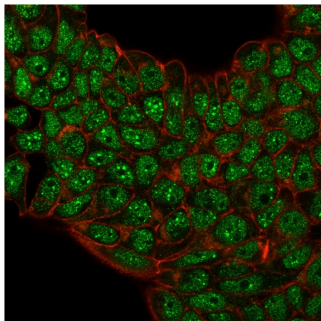
### Product Images for SUMO-2/3 Antibody



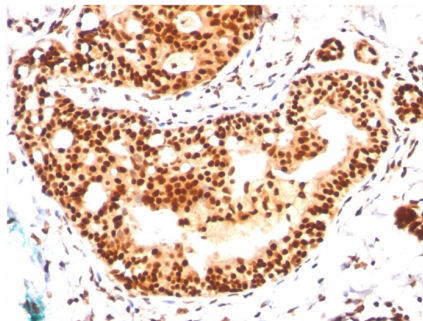
Western Blot of HeLa cell lysate using SUMO-2/3 Mouse Monoclonal Antibody (SM23/496)



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).



Immunofluorescence staining of paraformaldehyde-fixed MCF-7 cells with SUMO-2/3 Mouse Monoclonal Antibody (SM23/496) followed by goat anti-Mouse IgG-CF488 (Green). Membrane are labeled with Phalloidin (Red).



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

### Specificity & Comments

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 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.

### 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.