

### 36-1686: Monoclonal Antibody to SUMO-2/3(Clone : SM23/496)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	SM23/496
<b>Application :</b>	FACS,IF,WB,IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	SUMO2
<b>Gene ID :</b>	6613
<b>Uniprot ID :</b>	P61956
<b>Format :</b>	Purified
<b>Alternative Name :</b>	SUMO2,SMT3B,SMT3H2
<b>Isotype :</b>	Mouse IgG1, kappa

#### Description

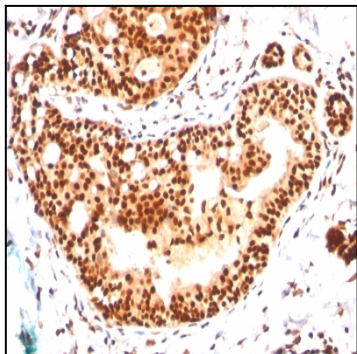
This MAb reacts with both SUMO-2 and SUMO-3. The small ubiquitin-related modifier (SUMO) proteins, which include SUMO-1, 2 and 3, belong to the ubiquitin-like protein family. Like ubiquitin, the SUMO proteins are synthesized as precursor proteins that undergo processing before conjugation to target proteins. 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 and unlike SUMO-1, they can form polymeric chains. In addition, SUMO-3 regulates beta-Amyloid generation and may be critical in the onset or progression of Alzheimer's disease.

#### Product Info

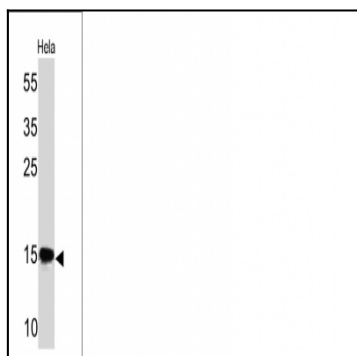
<b>Amount :</b>	100 µg
<b>Purification :</b>	Affinity Chromatography
<b>Content :</b>	100 µg in 500 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
<b>Storage condition :</b>	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

#### Application Note

Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); Western Blot (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes 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);



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



Western Blot of HeLa Cell Lysate using SUMO-2 Monoclonal Antibody (SM23/496)