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## 36-1688: Monoclonal Antibody to SUMO-2(Clone: SUMO2/1199)

Clonality: Monoclonal
Clone Name: SUMO2/1199
Application: FACS,IF,IHC
Reactivity: Human, Rat
Gene: SUMO3
Gene ID: 6612
Uniprot ID: P55854

Alternative Name: SUMO3,SMT3A,SMT3H1
Isotype: Mouse IgG1, kappa

Immunogen Information: Recombinant human SUMO2 protein

Purified

## **Description**

Format:

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**

Amount:  $100 \mu g$ 

**Purification:** Affinity Chromatography

**Content:** 100 μg in 500 μl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly

toxic.

**Storage condition :** Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid

repeated freeze and thaw cycles.

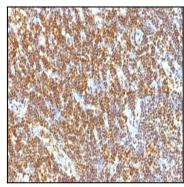
## **Application Note**

Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); 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&degC followed by cooling at RT for 20 minutes);

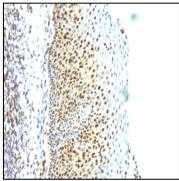


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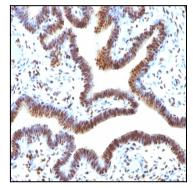
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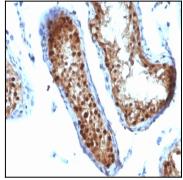
Formalin-fixed, paraffin-embedded human Tonsil stained with SUMO-2 Monoclonal Antibody (SUMO2/1199)



Formalin-fixed, paraffin-embedded human Tonsil stained with SUMO-2 Monoclonal Antibody (SUMO2/1199)



Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with SUMO-2 Monoclonal Antibody (SUMO2/1199)

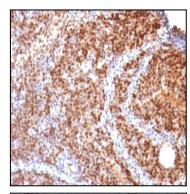


Formalin-fixed, paraffin-embedded human Testicular Carcinoma stained with SUMO-2 Monoclonal Antibody (SUMO2/1199)

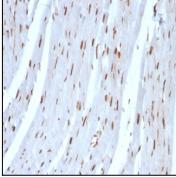


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Formalin-fixed, paraffin-embedded Rat Ovary stained with SUMO-2 Monoclonal Antibody (SUMO2/1199)  $\,$ 



Formalin-fixed, paraffin-embedded Rat Heart stained with SUMO-2 Monoclonal Antibody (SUMO2/1199)