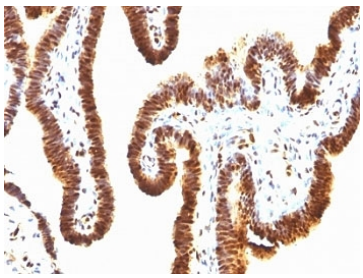
Anti-SUMO-1 Antibody [clone SPM571] (V9095)

Catalog No.	Formulation	Size
V9095-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V9095-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V9095SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V9095IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SPM571
Purity	Protein G affinity chromatography
UniProt	P63165
Localization	Predominantly nuclear with some cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This anti-SUMO-1 antibody is available for research use only.



IHC: Formalin-fixed, paraffin-embedded human ovarian carcinoma stained with anti-SUMO-1 antibody (clone SPM571).

Description

This mAb is specific to SUMO-1 and shows no cross-reaction with either SUMO2 or SUMO3. The small ubiquitin-related modifier (SUMO) proteins, which include SUMO1, SUMO2 and SUMO3, belong to the ubiquitin-like protein family. Like ubiquitin, the SUMO proteins are synthesized is 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 SUMO1 protein localizes to the nuclear membrane.

Application Notes

The optimal dilution of the anti-SUMO-1 antibody for each application should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human protein was used as the immunogen for this anti-SUMO-1 antibody.

Storage

Store the anti-SUMO-1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).