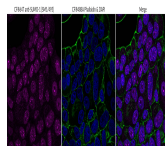


## SUMO 1 Monoclonal Mouse Antibody (SM1/495)



### Product Description

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. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

### Product attributes

Antibody number	#0495
Antibody reactivity (target)	SUMO 1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	SM1/495
Isotype	IgG1, kappa
Molecular weight	11.5 kDa (Monomer); 90 kDa (Heteromer)
Synonyms	GAP-modifying protein 1; GMP1; OFC10; PIC1; SENP2; Sentrin 1; Small ubiquitin-related modifier 1; SMT3; SMT3 suppressor of mit two 3 homolog 1; SMT3C; SMT3H3; Ubiquitin homology domain protein PIC1; Ubiquitin Like 1; Ubiquitin like protein UBL1
Human gene symbol	SUMO1
Entrez gene ID	7341
SwissProt	P63165
Unigene	596171
Immunogen	Recombinant human SUMO1 protein
Verified antibody applications	Flow (intracellular) (verified), IF (verified), IHC (FFPE) (verified), WB (verified)
Antibody target cellular localization	Nucleus & cytoplasm
Species reactivity	Human, Rat
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL. Immunohistology formalin-fixed 0.5-1 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Western blotting 0.5-1 ug/mL. Predicted to show broad species reactivity. Optimal dilution for a specific application should be determined by user
Positive control	Breast carcinoma
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Sumoylation

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF®488A	490/515	488	GFP, FITC
BNC68	CF®568	562/583	532, 561	RFP, TRITC
BNC94	CF®594	593/614	561	Texas Red®
BNC40	CF®640R	642/662	633-640	Cy®5
BNC47	CF®647	650/665	633-640	Cy®5
BNCB	Biotin	N/A	N/A	N/A
BNUB	Purified	N/A	N/A	N/A
BNUM	Purified, BSA-free	N/A	N/A	N/A

### Dye Features

[CF®405S Features](#)
[CF®488A Features](#)
[CF®568 Features](#)
[CF®594 Features](#)
[CF®640R Features](#)
[CF®647 Features](#)

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