

**SUMO2 Antibody (C-term)**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM2225b****Specification**

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**SUMO2 Antibody (C-term) - Product Information**

Application	IF, WB,E
Primary Accession	<a href="#">P61956</a>
Other Accession	<a href="#">P61959</a> , <a href="#">P61958</a> , <a href="#">P61957</a> , <a href="#">Q2PFW2</a> , <a href="#">Q6LDZ8</a> , <a href="#">Q5ZJM9</a> , <a href="#">P61955</a>
Reactivity	Human, Rat
Predicted	Bovine, Chicken, Hamster, Monkey, Mouse, Pig
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	10871

**SUMO2 Antibody (C-term) - Additional Information****Gene ID** 6613**Other Names**

Small ubiquitin-related modifier 2, SUMO-2, HSMT3, SMT3 homolog 2  
{ECO:0000312|HGNC:HGNC:11125}, SUMO-3, Sentrin-2, Ubiquitin-like protein SMT3B, Smt3B, SUMO2 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=11125" target="\_blank">HGNC:11125</a>)

**Target/Specificity**

Purified His-tagged SUMO2 protein was used to produced this monoclonal antibody.

**Dilution**

IF~~1:25

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

SUMO2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**SUMO2 Antibody (C-term) - Protein Information**

**Name** SUMO2 ([HGNC:11125](#))

**Function** Ubiquitin-like protein that can be covalently attached to proteins as a monomer or as a lysine-linked polymer. Covalent attachment via an isopeptide bond to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by an E3 ligase such as PIAS1-4, RANBP2, CBX4 or ZNF451 (PubMed:[26524494](#)). This post-translational modification on lysine residues of proteins plays a crucial role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Polymeric SUMO2 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins (PubMed:[18408734](#), PubMed:[18538659](#), PubMed:[21965678](#), PubMed:[9556629](#)). Plays a role in the regulation of sumoylation status of SETX (PubMed:[24105744](#)).

**Cellular Location**

Nucleus. Nucleus, PML body.

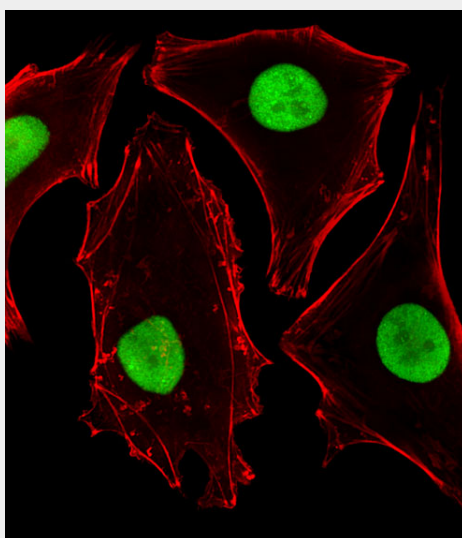
**Tissue Location**

Broadly expressed..

**SUMO2 Antibody (C-term) - Protocols**

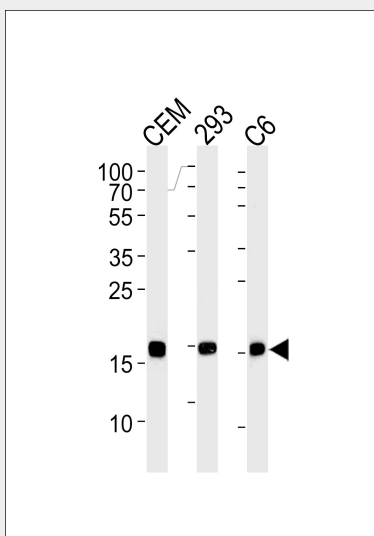
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**SUMO2 Antibody (C-term) - Images**

Fluorescent image of HeLa cells stained with SUMO2 Antibody (C-term)(Cat#AM2225B). AM2225B was diluted at 1:25 dilution. An Alexa Fluor® 488-conjugated goat anti-mouse IgG at 1:400

dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



SUMO2 Antibody (C-term)(Cat. #AM2225b) western blot analysis in CEM,293,rat C6 cell line lysates (35µg/lane).This demonstrates the SUMO2 antibody detected the SUMO2 protein (arrow).

#### **SUMO2 Antibody (C-term) - Background**

Ubiquitin-like protein that can be covalently attached to proteins as a monomer or as a lysine-linked polymer. Covalent attachment via an isopeptide bond to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by an E3 ligase such as PIAS1-4, RANBP2 or CBX4. This post-translational modification on lysine residues of proteins plays a crucial role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Polymeric SUMO2 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins.

#### **SUMO2 Antibody (C-term) - References**

- Reverter D., et al. Structure 12:1519-1531(2004).
- Xu Z., et al. Biochem. J. 386:325-330(2005).
- Mannen H., et al. Biochem. Biophys. Res. Commun. 222:178-180(1996).
- Lapenta V., et al. Genomics 40:362-367(1997).
- Ota T., et al. Nat. Genet. 36:40-45(2004).