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

Specification

SUMO2 Antibody (C-term) - Product Information

Application	**IF, WB,E**
Primary Accession	P61956
Other Accession	P61959, P61958, P61957, Q2PFW2, Q6LDZ8, Q5ZJM9, P61955
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 (HGNC:11125)

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

Dilution
IF~~1:25
WB~~1:1000

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.

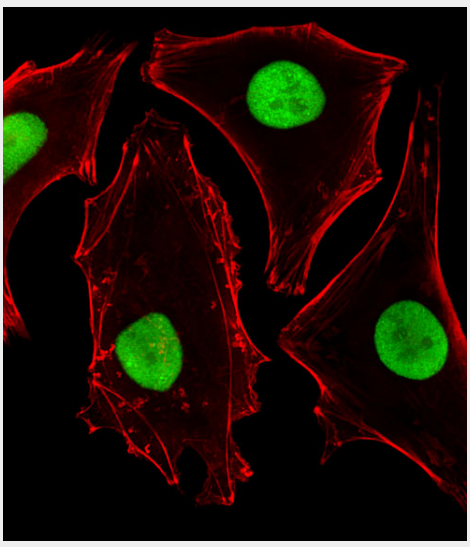
Tissue Location
Broadly expressed..

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 Cytomety
- 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

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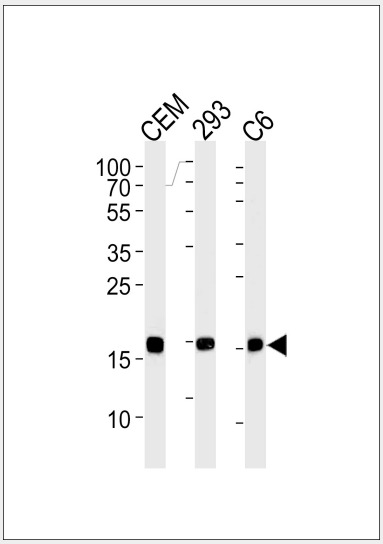
Alexa Fluor® 555 conjugated with Phalloidin (red).



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).