

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects endogenous human and mouse proteins modified with SUMO1 in Western blots. In Western blots, less than 5% cross-reactivity with recombinant human (rh) SUMO2 and rhSUMO3 and less than 1% cross-reactivity with rhSUMO4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human SUMO1 Ser2-Val101 Accession # P63165
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Small Ubiquitin-like Modifiers (SUMOs) are a family of small, related proteins that can be enzymatically attached to a target protein by a post-translational modification process termed sumoylation. Unlike ubiquitination, which targets proteins for degradation, sumoylation participates in a number of cellular processes, such as nuclear transport, transcriptional regulation, apoptosis, and protein stability. All SUMO proteins share the conserved ubiquitin domain and the C-terminal diglycine cleavage/attachment site. Human SUMO1, also known as Sentrin, UBL1, and SMT3C, is synthesized as a 101 amino acid (aa) propeptide that contains a four aa C-terminal prosegment. Following prosegment cleavage, the C-terminal glycine is enzymatically attached to a lysine on a target protein. Human SUMO1 shares 100% sequence identity to SUMO1 from mouse. SUMO1 is the most unique of the four identified SUMO proteins and shares only 44%, 47%, and 41% sequence identity to SUMO2, SUMO3, and SUMO4, respectively.

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