

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Mouse                                                                                                                                                                                                                                                                 |
| <b>Specificity</b>        | Detects endogenous human and mouse proteins modified with SUMO2, 3, or 4 in Western blots. Because of the high level of sequence homology, this antibody has equivalent reactivity to SUMO2, SUMO3, and SUMO4 based in Western blots with recombinant SUMO prot             |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human SUMO2<br>Ala2-Tyr95<br>Accession # P61956                                                                                                                                                                                         |
| <b>Conjugate</b>          | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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 SUMO2, also known as Sentrin2 and SMT3B is synthesized as a 95 amino acid (aa), 11 kDa propeptide that contains a two aa C-terminal prosegment, and an 18 aa N-terminal protein interacting region (aa 33-50). Following prosegment cleavage, the C-terminal glycine is enzymatically attached to a lysine on a target protein. Human SUMO2 shares 100% sequence identity to SUMO-2 from mouse. SUMO2 also has very high sequence homology to SUMO3 and SUMO4, 86 % and 85%, respectively. SUMO2 shares only 44% sequence identity to SUMO1.

#### PRODUCT SPECIFIC NOTICES

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