

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SUMO3 in direct ELISAs.
Source	Recombinant Monoclonal Rat IgG _{2A} Clone # 401513R
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human SUMO3 Met1-Phe103 Accession # P55854
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.

Immunocytochemistry 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 SUMO3, also known as SMT3A, is synthesized as a 103 amino acid (aa), 11.5 kDa propeptide that contains an 11 aa C-terminal prosegment. Following prosegment cleavage, the C-terminal glycine is enzymatically attached to a lysine on a target protein. Human SUMO3 shares 83% sequence identity with SUMO3 from mouse. SUMO3 also has very high sequence homology to SUMO2 and SUMO4, 87 % and 75%, respectively. SUMO3 shares only 47% sequence identity to SUMO1.

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