

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human SUMO1-Specific Peptidase 1/SEN1 in direct ELISAs.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human SUMO1-Specific Peptidase 1/SEN1 Glu419-Leu644 Accession # Q9P0U3
<b>Conjugate</b>	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
<b>Formulation</b>	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.

<b>Immunocytochemistry</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### BACKGROUND

SEN1 (Sentrin/SUMO-specific protease) is a member of the SENP family of proteases. Sentrin/SUMO-specific proteases (SENPs) are a group of cysteine-type peptidases that catalyze two essential functions in the SUMO pathways: processing of full-length SUMOs to their mature forms and deconjugation of SUMOs from SUMOylated proteins. The seven mammalian SENPs share a conserved C-terminal catalytic domain while the N-terminal domains have no significant similarity. Human SENP-1 has broad specificity for the three mammalian SUMOs. It is found in the cytoplasm and nucleus depending on cell type, and is expressed in testis, thymus, pancreas, spleen, liver, ovary and small intestine. It is thought that localization of SENP-1 is vital for the regulation for SUMOylation status of target proteins. The small ubiquitin-like modifier (SUMO) is a member of ubiquitin-like protein family. SUMO modification of the target proteins is a reversible process that regulates many cellular processes including transcription regulation, nuclear localization, centromere segregation and signal transduction. The recombinant human SENP-1 (immunogen) includes the catalytic domain, which has been shown to be sufficient for SENP-1 activity and substrate specificity.

#### PRODUCT SPECIFIC NOTICES

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