

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SUMO1-Specific Peptidase 1/SEN1 in direct ELISAs.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human SUMO1-Specific Peptidase 1/SEN1 Glu419-Leu644 Accession # Q9P0U3
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

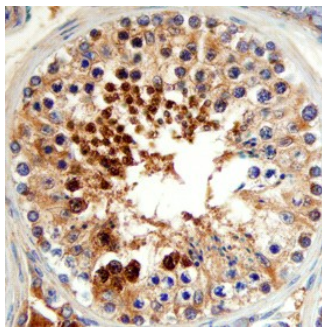
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



SUMO1-Specific Peptidase 1/SEN1 in Human Testis.

SUMO1-Specific Peptidase 1/SEN1 was detected in immersion fixed paraffin-embedded sections of human testis using Sheep Anti-Human SUMO1-Specific Peptidase 1/SEN1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6587) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to late spermatids. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 of 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.