Human SUMO1-Specific Peptidase 1/ SENP1 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF6587

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SUMO1-Specific Peptidase 1/SENP1 in direct ELISAs.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human SUMO1-Specific Peptidase 1/SENP1 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 either lyophilized or as a 0.2 μm filtered solution in PBS.

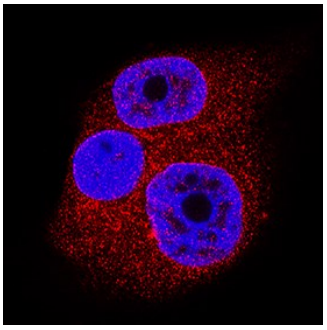
APPLICATIONS

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
Immunocytochemistry	1-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

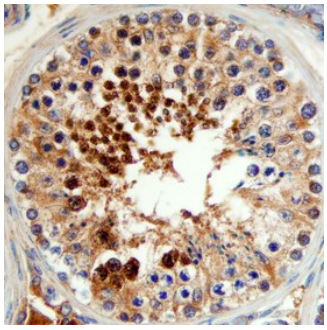
DATA

Immunocytochemistry



SUMO-Specific Peptidase 1/SENP1 in T47D Human Cell Line. SUMO-Specific Peptidase 1/SENP1 was detected in immersion fixed T47D human breast cancer cell line using Sheep Anti-Human SUMO-Specific Peptidase 1/SENP1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6587) at 5 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

Immunohistochemistry



SUMO1-Specific Peptidase 1/SENP1 in Human Testis. SUMO1-Specific Peptidase 1/SENP1 was detected in immersion fixed paraffin-embedded sections of human testis using Sheep Anti-Human SUMO1-Specific Peptidase 1/SENP1 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.** • 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

SENP1 (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 SUMOlyated 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.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449