



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

SENp8 (m): 293T Lysate: sc-123457

BACKGROUND

SUMO (small ubiquitin-related modifier), a member of the ubiquitin-like protein family, regulates diverse cellular functions of a variety of target proteins, including transcription, DNA repair, nucleocytoplasmic trafficking and chromosome segregation. SUMO precursor proteins undergo cleavage of the residues after the "GG" region by SUMO-specific proteases in maturation. This cleavage of the precursor is a prerequisite for subsequent sumoylation. The sentrin-specific (or SUMO-specific) protease (SENp) proteins belong to the peptidase C48 family and include SENp1-3 and SENp5-8. SENp1, SENp2 and SENp3 degrade UBL1 and SMT3H2 conjugates and subsequently release the monomers from sumoylated substrates. HIPK2 is a desumoylation target for SENp1 which shuttles between the cytoplasm and the nucleus. Mutation analyses reveal that SENp1 contains the nuclear export sequence (NES) within the extreme carboxyl-terminal region, and SENp1 is exported to the cytoplasm in a NES-dependent manner. SENp2 has been implicated as a downregulator of CTNNB1 levels and may therefore be a modulator of the Wnt pathway. SUMO protease SENp3 reverses the sumoylation of MEF2 to augment its transcriptional and myogenic activities. SENp5 localizes to the nucleolus and preferentially processes SUMO-3. It is thought to play a role in mitosis and/or cytokinesis. SENp6 localizes to the cytoplasm and releases SUMO-1. Expression of SENp6 is higher in reproductive organs, indicating that it may mediate processes related to reproduction. SENp8 is involved in the release of sentrins.

REFERENCES

- Gong, L., et al. 2000. Differential regulation of sentrinized proteins by a novel sentrin-specific protease. *J. Biol. Chem.* 275: 3355-3359.
- Kim, K.I., et al. 2000. A new SUMO-1-specific protease, SUSP1, that is highly expressed in reproductive organs. *J. Biol. Chem.* 275: 14102-14106.
- Cheng, J., et al. 2004. SENp1 enhances androgen receptor-dependent transcription through desumoylation of histone deacetylase 1. *Mol. Cell. Biol.* 24: 6021-6028.
- Reverter, D., et al. 2004. A basis for SUMO protease specificity provided by analysis of human SENp2 and a SENp2-SUMO complex. *Structure* 12: 1519-1531.
- Kim, Y.H., et al. 2005. Desumoylation of homeodomain-interacting protein kinase 2 (HIPK2) through the cytoplasmic-nuclear shuttling of the SUMO-specific protease SENp1. *FEBS Lett.* 579: 6272-6278.
- Xu, Z., et al. 2005. Mapping residues of SUMO precursors essential in differential maturation by SUMO-specific protease, SENp1. *Biochem. J.* 386: 325-330.
- Gong, L. and Yeh, ET. 2006. Characterization of a family of nucleolar SUMO-specific proteases with preference for SUMO-2 or SUMO-3. *J. Biol. Chem.* 281: 15869-15877.
- Di Bacco, A., et al. 2006. The SUMO-specific protease SENp5 is required for cell division. *Mol. Cell Biol.* 26: 4489-4498.
- Shen, L.N., et al. 2006. The structure of SENp1-between SUMO paralogues during processing. *Biochem. J.* 397: 279-288.

CHROMOSOMAL LOCATION

Genetic locus: *Senp8* (mouse) mapping to 9 B.

PRODUCT

SENp8 (m): 293T Lysate represents a lysate of mouse SENp8 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

SENp8 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SENp8 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.