



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) 

Thimet oligopeptidase (D-11): sc-515659

BACKGROUND

Thimet oligopeptidase, also designated soluble metallo-endopeptidase, is a cytoplasmic protein belonging to the peptidase M3 family. The gene for the protein maps against chromosome 19q13.3. Thimet oligopeptidase can degrade the β -Amyloid precursor protein and generate amyloidogenic fragments. It is important in cytoplasmic peptide degradation and involved in metabolism of neuropeptides that are less than 20 amino acids in length. Thimet oligopeptidase is highly expressed in testis but can also be detected in liver, lung and kidney.

REFERENCES

1. Sigman, J.A., et al. 2005. Flexibility in substrate recognition by thimet oligopeptidase as revealed by denaturation studies. *Biochem. J.* 388: 255-261.
2. Ray, K., et al. 2004. Crystal structure of human thimet oligopeptidase provides insight into substrate recognition, regulation, and localization. *J. Biol. Chem.* 279: 20480-20489.
3. Saric, T., et al. 2004. Pathway for degradation of peptides generated by proteasomes: a key role for thimet oligopeptidase and other metallopeptidases. *J. Biol. Chem.* 279: 46723-46732.
4. York, I.A. et al. 2003. The cytosolic endopeptidase, thimet oligopeptidase, destroys antigenic peptides and limits the extent of MHC class I antigen presentation. *Immunity* 18: 429-440.
5. McCool, S., et al. 2000. Expression of the thimet oligopeptidase gene is regulated by positively and negatively acting elements. *DNA Cell Biol.* 19: 729-738.
6. Edbauer, D., et al. 2002. Insulin-degrading enzyme rapidly removes the beta-amyloid precursor protein intracellular domain (AICD). *J. Biol. Chem.* 277: 13389-13393.
7. Oliveira, V., et al. 2002. Temperature and salts effects on the peptidase activities of the recombinant metallooligopeptidases neurolysin and thimet oligopeptidase. *Eur. J. Biochem.* 269: 4326-4334.

CHROMOSOMAL LOCATION

Genetic locus: Thop1 (mouse) mapping to 10 C1.

SOURCE

Thimet oligopeptidase (D-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 390-409 within an internal region of Thimet oligopeptidase of rat origin.

PRODUCT

Each vial contains 200 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-515659 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Thimet oligopeptidase (D-11) is recommended for detection of Thimet oligopeptidase of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Thimet oligopeptidase siRNA (m): sc-72153, Thimet oligopeptidase shRNA Plasmid (m): sc-72153-SH and Thimet oligopeptidase shRNA (m) Lentiviral Particles: sc-72153-V.

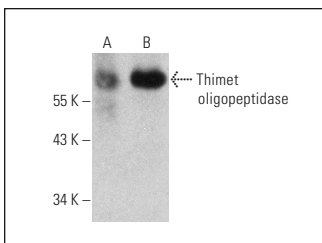
Molecular Weight of Thimet oligopeptidase: 74 kDa.

Positive Controls: mouse cerebellum extract: sc-2403 or rat uterus extract: sc-364812.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Thimet oligopeptidase (D-11): sc-515659. Western blot analysis of Thimet oligopeptidase expression in mouse cerebellum (A) and rat uterus (B) tissue extracts.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.