

Datasheet for ABIN7198217

Thimet Oligopeptidase 1 Protein (THOP1) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	50 µg
Target:	Thimet Oligopeptidase 1 (THOP1)
Origin:	Mouse
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Thimet Oligopeptidase 1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse THOP1 Protein (His Tag)(Active)
Sequence:	Lys 2-Cys 687
Characteristics:	A DNA sequence encoding the mouse THOP1 (NP_073144.3) (Lys 2-Cys 687) was fused with a polyhistidine tag at the N-terminus.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to cleave a fluorogenic peptide substrate, (7-methoxycoumarin-4-yl)acetyl-Pro-Leu-Gly-Pro-D-Lys(2,4-dinitrophenyl)-OH or Mca-PLGPK(Dnp)-OH. The specific activity is > 100 pmoles/min/µg.

Target Details

Target:	Thimet Oligopeptidase 1 (THOP1)
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Target Details

Alternative Name: THOP1 ([THOP1 Products](#))

Background: THOP1, also known as Thimet oligopeptidase 1, Thimet oligopeptidase, EC 3.4.24.15, or EP24.15, is a zinc(II) endopeptidase implicated in the processing of numerous physiological peptides. As an intracellular enzyme, highly expressed in the brain, kidneys and neuroendocrine tissue, THOP1 has been proposed to metabolize peptides within cells, thereby affecting antigen presentation and G protein-coupled receptor signal transduction. Its substrates is gonadotrophin-releasing hormone (GnRH), an important hypothalamic hormone that regulates the synthesis and release of oestradiol and facilitates female sexual behaviour. THOP1 against toxic effects of Abeta in the early stages of Alzheimer disease (AD) pathology, and suggest that the observed increase in THOP1 expression might be part of a compensatory defense mechanism of the brain against an increased Abeta load.

Synonym: A131655,A1327041,EP24.15

Molecular Weight: 80.1 kDa

NCBI Accession: [NP_073144](#)

Application Details

Restrictions: For Research Use only

Handling

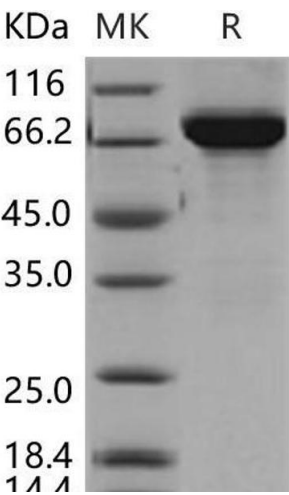
Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 7.4, 10 % glycerol

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.



Western Blotting

Image 1.