Recombinant Mouse THOP1 Protein (His Tag)

Catalog Number: PKSM040464

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

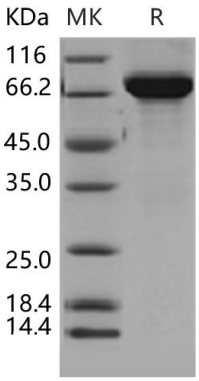
Description

Species	Mouse
Source	Baculovirus-Insect Cells-derived Mouse THOP1 protein Lys 2-Cys 687, with an N-terminal His
Calculated MW	80.1 kDa
Observed MW	75 kDa
Accession	NP_073144.3
Bio-activity	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.

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

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.

Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web:www.elabscience.com
Email:techsupport@elabscience.com