

THOP1 Protein, Human (His)

Cat. No.:	HY-P71359
Synonyms:	Thimet Oligopeptidase; Endopeptidase 24.15; MP78; THOP1
Species:	Human
Source:	E. coli
Accession:	P52888 (K2-C689)
Gene ID:	7064
Molecular Weight:	80-85 kDa

PROPERTIES

AA Sequence

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K P P A A C A G D M   A D A A S P C S V V   N D L R W D L S A Q   Q I E E R T R E L I
E Q T K R V Y D Q V   G T Q E F E D V S Y   E S T L K A L A D V   E V T Y T V Q R N I
L D F P Q H V S P S   K D I R T A S T E A   D K K L S E F D V E   M S M R E D V Y Q R
I V W L Q E K V Q K   D S L R P E A A R Y   L E R L I K L G R R   N G L H L P R E T Q
E N I K R I K K K L   S L L C I D F N K N   L N E D T T F L P F   T L Q E L G G L P E
D F L N S L E K M E   D G K L K V T L K Y   P H Y F P L L K K C   H V P E T R R K V E
E A F N C R C K E E   N C A I L K E L V T   L R A Q K S R L L G   F H T H A D Y V L E
M N M A K T S Q T V   A T F L D E L A Q K   L K P L G E Q E R A   V I L E L K R A E C
E R R G L P F D G R   I R A W D M R Y Y M   N Q V E E T R Y C V   D Q N L L K E Y F P
V Q V V T H G L L G   I Y Q E L L G L A F   H H E E G A S A W H   E D V R L Y T A R D
A A S G E V V G K F   Y L D L Y P R E G K   Y G H A A C F G L Q   P G C L R Q D G S R
Q I A I A A M V A N   F T K P T A D A P S   L L Q H D E V E T Y   F H E F G H V M H Q
L C S Q A E F A M F   S G T H V E R D F V   E A P S Q M L E N W   V W E Q E P L L R M
S R H Y R T G S A V   P R E L L E K L I E   S R Q A N T G L F N   L R Q I V L A K V D
Q A L H T Q T D A D   P A E E Y A R L C Q   E I L G V P A T P G   T N M P A T F G H L
A G G Y D A Q Y Y G   Y L W S E V Y S M D   M F H T R F K Q E G   V L N S K V G M D Y
R S C I L R P G G S   E D A S A M L R R F   L G R D P K Q D A F   L L S K G L Q V G G
C E P E P Q V C
  
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Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Solution.
Formulation	Supplied as a 0.2 µm filtered solution of 20 mM Tris-HCl, 500 mM NaCl, 50% Glycerol, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	N/A
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.

Shipping

Shipping with dry ice.

DESCRIPTION**Background**

THOP1 Protein plays a crucial role in the metabolism of neuropeptides with a length of fewer than 20 amino acid residues, participating specifically in cytoplasmic peptide degradation. Its enzymatic activity extends to the degradation of the amyloid-beta precursor protein, generating fragments associated with amyloidogenesis. Additionally, THOP1 serves as a regulatory component in the cannabinoid signaling pathway, where it facilitates the degradation of hemopressin, an antagonist peptide targeting the cannabinoid receptor CNR1. The diverse functions of THOP1 underscore its involvement in intricate cellular processes, ranging from neuropeptide metabolism to the modulation of key signaling pathways.

Caution: Product has not been fully validated for medical applications. For research use only.

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