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Anti-TPP1 Picoband Antibody

Catalog # ABO12585

Product Information

Application	WB, IHC-P
Primary Accession	O14773
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Tripeptidyl-peptidase 1(TPP1) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	1200
Other Names	Tripeptidyl-peptidase 1, TPP-1, 3.4.14.9, Cell growth-inhibiting gene 1 protein, Lysosomal pepstatin-insensitive protease, LPIC, Tripeptidyl aminopeptidase, Tripeptidyl-peptidase I, TPP-I, TPP1, CLN2
Calculated MW	61248
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Lysosome. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
Tissue Specificity	Detected in all tissues examined with highest levels in heart and placenta and relatively similar levels in other tissues.
Source	Eukaryota
Protein Name	Tripeptidyl-peptidase 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human TPP1 (227-261aa CAQFLEQYFHDSDLAQFMRLFGGNFAHQASVARVV), different from the related mouse sequence by six amino acids, and from the related rat sequence by five amino acids.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

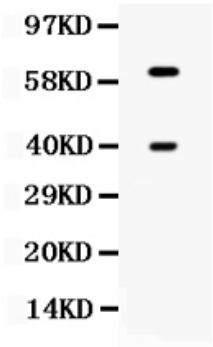
Protein Information

Name	TPP1
Synonyms	CLN2
Function	Lysosomal serine protease with tripeptidyl-peptidase I activity (PubMed:11054422, PubMed:19038966, PubMed:19038967). May act as a non-specific lysosomal peptidase which generates tripeptides from the breakdown products produced by lysosomal proteinases (PubMed:11054422, PubMed:19038966, PubMed:19038967). Requires substrates with an unsubstituted N-terminus (PubMed:19038966).
Cellular Location	Lysosome. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV
Tissue Location	Detected in all tissues examined with highest levels in heart and placenta and relatively similar levels in other tissues

Background

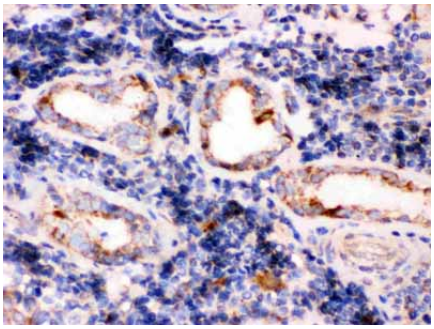
Tripeptidyl-peptidase 1, also known as Lysosomal pepstatin-insensitive protease, is an enzyme that in humans is encoded by the TPP1 gene. This gene encodes a member of the sedolisin family of serine proteases. The protease functions in the lysosome to cleave N-terminal tripeptides from substrates, and has weaker endopeptidase activity. It is synthesized as a catalytically-inactive enzyme which is activated and auto-proteolyzed upon acidification. Mutations in this gene result in late-infantile neuronal ceroid lipofuscinosis, which is associated with the failure to degrade specific neuropeptides and a subunit of ATP synthase in the lysosome.

Images



Western blot analysis of TPP1 expression in HELA whole cell lysates (lane 1). TPP1 at 61KD, 39KD was detected using rabbit anti- TPP1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12585) at0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

TPP1 was detected in paraffin-embedded sections of human lung cancer tissues using rabbit anti- TPP1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12585) at 1 □¼g/mL. The immunohistochemical



section was developed using SABC method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.