

TPP1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17047a

Specification

TPP1 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O14773</u> <u>O60HH1</u>, <u>NP_000382.3</u> Human Monkey Rabbit Polyclonal Rabbit IgG 61248 6-34

TPP1 Antibody (N-term) - Additional Information

Gene ID 1200

Other Names Tripeptidyl-peptidase 1, TPP-1, Cell growth-inhibiting gene 1 protein, Lysosomal pepstatin-insensitive protease, LPIC, Tripeptidyl aminopeptidase, Tripeptidyl-peptidase I, TPP-I, TPP1, CLN2

Target/Specificity

This TPP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 6-34 amino acids from the N-terminal region of human TPP1.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TPP1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TPP1 Antibody (N-term) - Protein Information



Name TPP1

Synonyms CLN2

Function Lysosomal serine protease with tripeptidyl-peptidase I activity (PubMed:<u>11054422</u>, PubMed:<u>19038966</u>, PubMed:<u>19038967</u>). May act as a non-specific lysosomal peptidase which generates tripeptides from the breakdown products produced by lysosomal proteinases (PubMed:<u>11054422</u>, PubMed:<u>19038966</u>, PubMed:<u>19038967</u>). Requires substrates with an unsubstituted N-terminus (PubMed:<u>19038966</u>).

Cellular Location

Lysosome. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

Tissue Location

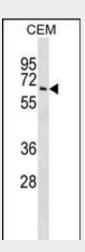
Detected in all tissues examined with highest levels in heart and placenta and relatively similar levels in other tissues

TPP1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TPP1 Antibody (N-term) - Images



TPP1 Antibody (N-term) (Cat. #AP17047a) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the TPP1 antibody detected the TPP1 protein (arrow).

TPP1 Antibody (N-term) - Background

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.

TPP1 Antibody (N-term) - References

Souweidane, M.M., et al. J Neurosurg Pediatr 6(2):115-122(2010) Walus, M., et al. Hum. Mutat. 31(6):710-721(2010) Latrick, C.M., et al. EMBO J. 29(5):924-933(2010) Kuizon, S., et al. PLoS ONE 5 (8), E11929 (2010) : Goldberg-Stern, H., et al. Pediatr. Neurol. 41(4):297-300(2009)