

## **Anti-TPP1 Picoband Antibody**

**Catalog # ABO12585** 

# **Specification**

# **Anti-TPP1 Picoband Antibody - Product Information**

Application WB, IHC-P
Primary Accession O14773
Host 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.

## **Anti-TPP1 Picoband Antibody - 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 MW KDa

## **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, By Heat<br/>br>Western blot, 0.1-0.5  $\mu$ g/ml, Human<br/>br>

# **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.

## **Protein Name**

Tripeptidyl-peptidase 1

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

### **Immunogen**





Tel: 858.875.1900 Fax: 858.875.1999

A synthetic peptide corresponding to a sequence in the middle region of human TPP1 (227-261aa CAOFLEOYFHDSDLAOFMRLFGGNFAHOASVARVV), 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.

# **Anti-TPP1 Picoband Antibody - Protein Information**

Name TPP1

**Synonyms CLN2** 

### **Function**

Lysosomal serine protease with tripeptidyl-peptidase I activity (PubMed: <a href="http://www.uniprot.org/citations/11054422" target=" blank">11054422</a>, PubMed:<a href="http://www.uniprot.org/citations/19038966" target="\_blank">19038966</a>, PubMed:<a href="http://www.uniprot.org/citations/19038967" target="\_blank">19038967</a>). May act as a non-specific lysosomal peptidase which generates tripeptides from the breakdown products produced by lysosomal proteinases (PubMed:<a href="http://www.uniprot.org/citations/11054422" target=" blank">11054422</a>, PubMed:<a href="http://www.uniprot.org/citations/19038966" target="blank">19038966</a>, PubMed:<a href="http://www.uniprot.org/citations/19038967" target=" blank">19038967</a>). Requires substrates with an unsubstituted N-terminus (PubMed:<a href="http://www.uniprot.org/citations/19038966" target=" blank">19038966</a>).

### **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

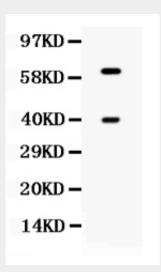
## **Anti-TPP1 Picoband Antibody - Protocols**

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

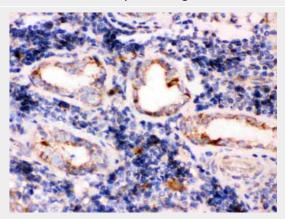
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



# **Anti-TPP1 Picoband Antibody - 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) at 0.5 ??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  $1 \, \hat{l} \, \frac{1}{4} \, g/mL$ . The immunohistochemical section was developed using SABC method .

## **Anti-TPP1 Picoband Antibody - 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.