

TPT1 Antibody

Catalog # ASC11604

Specification

TPT1 Antibody - Product Information

Application WB, IHC, IF Primary Accession P13693 Other Accession NP 003286, 4507669

Reactivity Human, Mouse,

Rat

Host Rabbit Clonality **Polyclonal**

Isotype **I**g**G**

Calculated MW Predicted: 19 kDa

KDa

Application Notes TPT1 antibody

> can be used for detection of TPT1 by Western blot at $0.5 - 1 \mu g/mL$.

TPT1 Antibody - Additional Information

Gene ID 7178

Target/Specificity

TPT1;

Reconstitution & Storage

TPT1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

TPT1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TPT1 Antibody - Protein Information

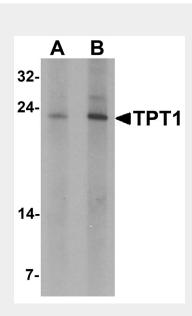
Name TPT1

Function

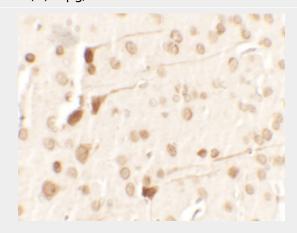
Involved in calcium binding and microtubule stabilization.

Cellular Location

Cytoplasm.



Western blot analysis of TPT1 in human brain tissue lysate with TPT1 antibody at (A) 0.5 and (B) 1 µg/mL.



Immunohistochemistry of TPT1 in rat brain tissue with TPT1 antibody at 2.5 µg/ml.



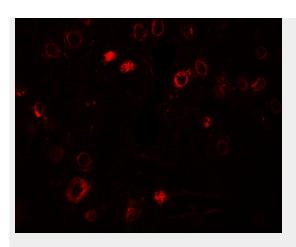
Tissue Location

Found in several healthy and tumoral cells including erythrocytes, hepatocytes, macrophages, platelets, keratinocytes, erythroleukemia cells, gliomas, melanomas, hepatoblastomas, and lymphomas. It cannot be detected in kidney and renal cell carcinoma (RCC). Expressed in placenta and prostate

TPT1 Antibody - Protocols

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

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



Immunofluorescence of TPT1 in rat brain tissue with TPT1 antibody at 20 µg/ml.

TPT1 Antibody - Background

TPT1 Antibody: TPT1 (translationally controlled tumor protein 1) is a 23 kDa member of the TCTP family of calcium binding proteins. TPT1 is localized in the cytoplasm and widely expressed and serves as a transcriptional activator, calcium transporter, histamine inducer and antiapoptotic caspase 3 inhibitor. TPT1 is a cytokine-like molecule that causes the release of histamine, IL-4 and IL-13 from basophils as well as the secretion of IL-8 and a calcium response in eosinophils. TPT1 plays a pivotal role in allergic diseases and due to its wide distribution in brain, is thought to be involved in neurodegenerative disorders, such as Alzheimer's disease and Down syndrome.

TPT1 Antibody - References

MacDonald SM, Rafnar T, Langdon J, et al. Molecular identification of an IgE-dependent histamine-releasing factor. Science 1995; 269:688-90.

MacDonald SM. Human recombinant histamine-releasing factor. Int. Arch. Allergy Immunol. 1997; 113:187-9.

Sanchez JC, Schaller D, Ravier F, et al. Translationally controlled tumor protein: a protein identified in several nontumoral cells including erythrocytes. Electrophoresis 1997; 18:150-5.

Kuna P and Kaplan AP. Relationship of histamine-releasing factors and histamine-releasing inhibitory factors to chemokine group of cytokine. Allergy Asthma Proc. 1996: 17:5-11.