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TPT1 Antibody

Catalog # ASC11604

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	P13693
Other Accession	NP_003286, 4507669
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	19595
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TPT1 antibody can be used for detection of TPT1 by Western blot at 0.5 - 1 g/mL.

Additional Information

Gene ID	7178
Other Names	Translationally-controlled tumor protein, TCTP, Fortilin, Histamine-releasing factor, HRF, p23, TPT1
Target/Specificity	TPT1;
Reconstitution & Storage	TPT1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	TPT1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TPT1
Function	Involved in calcium binding and microtubule stabilization (PubMed:12167714, PubMed:15162379, PubMed:15958728). Acts as a negative regulator of TSC22D1-mediated apoptosis, via interaction with and destabilization of TSC22D1 protein (PubMed:18325344).
Cellular Location	Cytoplasm.
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

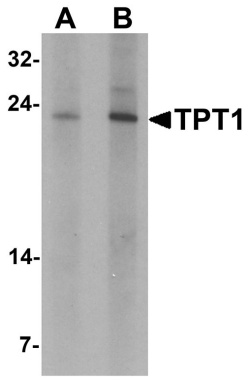
Background

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.

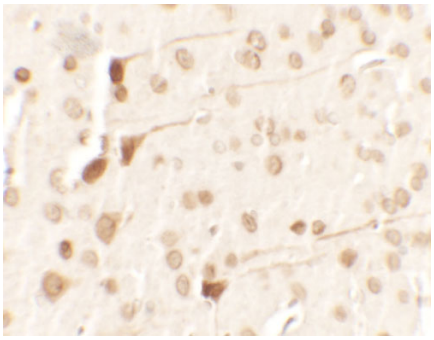
References

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.

Images

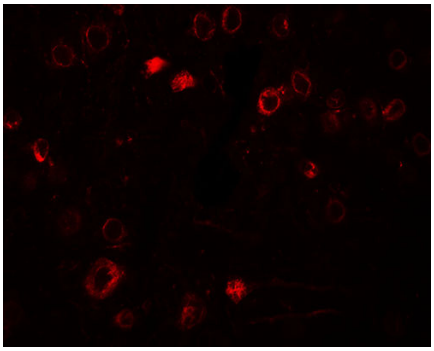


Western blot analysis of TPT1 in human brain tissue lysate with TPT1 antibody at (A) 0.5 and (B) 1 µg/mL.



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

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



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