

**TPT1 Antibody**  
Catalog # ASC11604**Specification****TPT1 Antibody - Product Information**

Application	WB, IHC-P, IF, E
Primary Accession	<a href="#">P13693</a>
Other Accession	<a href="#">NP_003286</a> , <a href="#">4507669</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 19 kDa
Application Notes	TPT1 antibody can be used for detection of TPT1 by Western blot at 0.5 - 1 µg/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 (PubMed:<a href="http://www.uniprot.org/citations/12167714" target="\_blank">12167714</a>, PubMed:<a href="http://www.uniprot.org/citations/15162379" target="\_blank">15162379</a>, PubMed:<a href="http://www.uniprot.org/citations/15958728" target="\_blank">15958728</a>). Acts as a negative regulator of TSC22D1-mediated apoptosis, via interaction with and destabilization of TSC22D1 protein (PubMed:<a href="http://www.uniprot.org/citations/18325344" target="\_blank">18325344</a>).

**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

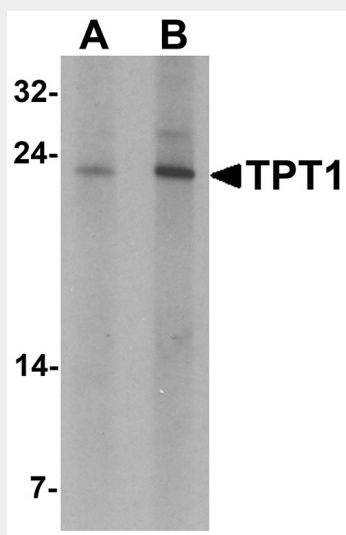
and prostate

### TPT1 Antibody - Protocols

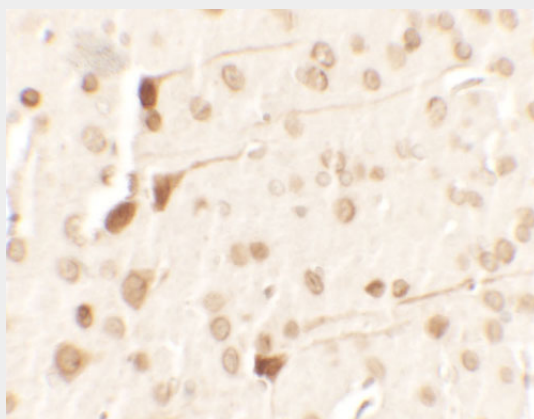
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

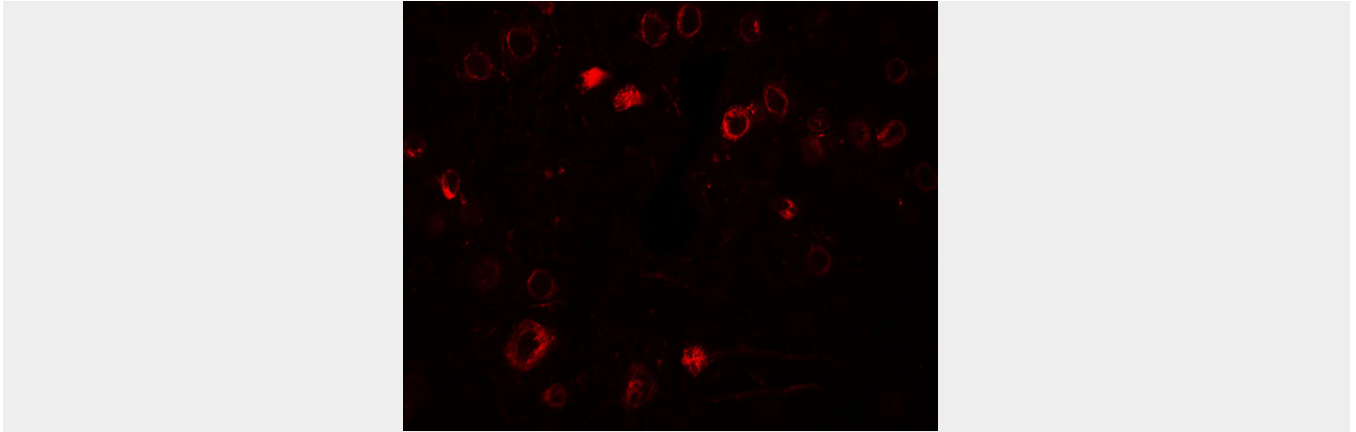
### TPT1 Antibody - Images



Western blot analysis of TPT1 in human brain tissue lysate with TPT1 antibody at (A) 0.5 and (B) 1  $\mu\text{g/mL}$ .



Immunohistochemistry of TPT1 in rat brain tissue with TPT1 antibody at 2.5  $\mu\text{g/ml}$ .



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.