

**ITPKA Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8166a****Specification**

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**ITPKA Antibody (N-term) - Product Information**

|                   |                           |
|-------------------|---------------------------|
| Application       | WB,E                      |
| Primary Accession | <a href="#">P23677</a>    |
| Other Accession   | <a href="#">NP_002211</a> |
| Reactivity        | Human                     |
| Host              | Rabbit                    |
| Clonality         | Polyclonal                |
| Isotype           | Rabbit IgG                |
| Calculated MW     | 51009                     |
| Antigen Region    | 1-30                      |

**ITPKA Antibody (N-term) - Additional Information****Gene ID** 3706**Other Names**

Inositol-trisphosphate 3-kinase A, Inositol 1, 5-trisphosphate 3-kinase A, IP3 3-kinase A, IP3K A, InsP 3-kinase A, ITPKA

**Target/Specificity**

This ITPKA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human ITPKA.

**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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**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**

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

**ITPKA Antibody (N-term) - Protein Information****Name** ITPKA ([HGNC:6178](#))

**Function** Catalyzes the phosphorylation of 1D-myo-inositol 1,4,5- trisphosphate (InsP3) into 1D-myo-inositol 1,3,4,5-tetrakisphosphate and participates to the regulation of calcium homeostasis.

**Cellular Location**

Cytoplasm, cytoskeleton

**Tissue Location**

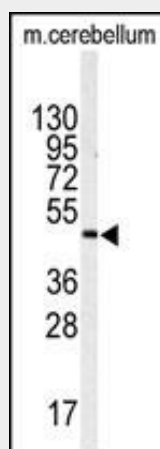
Expressed in brain..

### ITPKA Antibody (N-term) - 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](#)

### ITPKA Antibody (N-term) - Images



Western blot analysis of anti-ITPKA Antibody (N-term) (Cat.#AP8166a) in mouse cerebellum tissue lysates (35ug/lane). ITPKA (arrow) was detected using the purified Pab.

### ITPKA Antibody (N-term) - Background

ITPKA regulates inositol phosphate metabolism by phosphorylation of second messenger inositol 1,4,5-trisphosphate to Ins(1,3,4,5)P4. The activity of the inositol 1,4,5-trisphosphate 3-kinase is responsible for regulating the levels of a large number of inositol polyphosphates that are important in cellular signaling. Both calcium/calmodulin and protein phosphorylation mechanisms control its activity. It is also a substrate for the cyclic AMP-dependent protein kinase, calcium/calmodulin-dependent protein kinase II, and protein kinase C in vitro. ITPKA and ITPKB are 68% identical in the C-terminus region.

### ITPKA Antibody (N-term) - References

Gonzalez, B., et al., Mol. Cell 15(5):689-701 (2004).  
Mishra, J., et al., Biophys. J. 83(3):1298-1316 (2002).  
Schell, M.J., et al., J. Biol. Chem. 276(40):37537-37546 (2001).  
Communi, D., et al., EMBO J. 16(8):1943-1952 (1997).  
Woodring, P.J., et al., J. Biol. Chem. 272(48):30447-30454 (1997).