

**ITPKA Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8166b****Specification**

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**ITPKA Antibody (C-term) Blocking Peptide - Product Information**

Primary Accession [P23677](#)  
Other Accession [NP\\_002211](#)

**ITPKA Antibody (C-term) Blocking Peptide - 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**

The synthetic peptide sequence used to generate the antibody [AP8166b](/product/products/AP8166b) was selected from the C-term region of human ITPKA . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ITPKA Antibody (C-term) Blocking Peptide - 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 (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

## **ITPKA Antibody (C-term) Blocking Peptide - Images**

## **ITPKA Antibody (C-term) Blocking Peptide - Background**

ITPKA regulates inositol phosphate metabolism by phosphorylation of second messenger inositol 1,4,5-trisphosphate to Ins(1,3,4,5)P<sub>4</sub>. 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 (C-term) Blocking Peptide - 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).