

ITPKA Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP8166a**Specification**

ITPKA Antibody (N-term) Blocking Peptide - Product Information

Primary Accession [P23677](#)
Other Accession [NP_002211](#)

ITPKA Antibody (N-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 [AP8166a](/product/products/AP8166a) was selected from the N-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 (N-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 (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ITPKA Antibody (N-term) Blocking Peptide - Images

ITPKA Antibody (N-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)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) 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).