

ITPK1 Rabbit mAb
Catalog # AP75636**Specification****ITPK1 Rabbit mAb - Product Information**

Application	WB
Primary Accession	Q13572
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	45621

ITPK1 Rabbit mAb - Additional Information**Gene ID** 3705**Other Names**
ITPK1**Dilution**
WB~~1/500-1/1000**Format**
Liquid**ITPK1 Rabbit mAb - Protein Information****Name** ITPK1 ([HGNC:6177](#))**Function**

Kinase that can phosphorylate various inositol polyphosphate such as Ins(3,4,5,6)P4 or Ins(1,3,4)P3 (PubMed: [11042108](http://www.uniprot.org/citations/11042108), PubMed: [8662638](http://www.uniprot.org/citations/8662638)). Phosphorylates Ins(3,4,5,6)P4 at position 1 to form Ins(1,3,4,5,6)P5 (PubMed: [11042108](http://www.uniprot.org/citations/11042108)). This reaction is thought to have regulatory importance, since Ins(3,4,5,6)P4 is an inhibitor of plasma membrane Ca(2+)-activated Cl(-) channels, while Ins(1,3,4,5,6)P5 is not. Also phosphorylates Ins(1,3,4)P3 on O-5 and O-6 to form Ins(1,3,4,6)P4, an essential molecule in the hexakisphosphate (InsP6) pathway (PubMed: [11042108](http://www.uniprot.org/citations/11042108), PubMed: [8662638](http://www.uniprot.org/citations/8662638)). Also acts as an inositol polyphosphate phosphatase that dephosphorylates Ins(1,3,4,5)P4 and Ins(1,3,4,6)P4 to Ins(1,3,4)P3, and Ins(1,3,4,5,6)P5 to Ins(3,4,5,6)P4 (PubMed: [11909533](http://www.uniprot.org/citations/11909533), PubMed: [17616525](http://www.uniprot.org/citations/17616525)). May also act as an isomerase that interconverts the inositol tetrakisphosphate isomers Ins(1,3,4,5)P4 and Ins(1,3,4,6)P4 in the presence of ADP and magnesium (PubMed: [11909533](http://www.uniprot.org/citations/11909533)). Probably

acts as the rate-limiting enzyme of the InsP6 pathway. Modifies TNF-alpha-induced apoptosis by interfering with the activation of TNFRSF1A-associated death domain (PubMed:11909533, PubMed:12925536, PubMed:17616525). Plays an important role in MLKL-mediated necroptosis. Produces highly phosphorylated inositol phosphates such as inositolhexakisphosphate (InsP6) which bind to MLKL mediating the release of an N-terminal auto-inhibitory region leading to its activation. Essential for activated phospho-MLKL to oligomerize and localize to the cell membrane during necroptosis (PubMed:17616525).

Tissue Location

Expressed in brain > heart > skeletal muscle = kidney = pancreas = liver = placenta > lung. In brain, it is expressed in cerebellum, cerebral cortex, medulla, spinal cord, occipital lobe, frontal lobe, temporal lobe and putamen.

ITPK1 Rabbit mAb - 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](#)

ITPK1 Rabbit mAb - Images

