

**Anti-ITPK1 Rabbit Monoclonal Antibody**  
**Catalog # ABO16414****Specification**

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**Anti-ITPK1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q13572</a>
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-ITPK1 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human.

**Anti-ITPK1 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 3705

**Other Names**

Inositol-tetrakisphosphate 1-kinase, 2.7.1.134, Inositol 1, 3, 4-trisphosphate 5/6-kinase, Inositol-triphosphate 5/6-kinase, Ins(1, 3, 4)P(3) 5/6-kinase, 2.7.1.159, ITPK1 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=6177](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=6177))  
HGNC:6177

**Calculated MW**

42 kDa KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human ITPK1

**Purification**

Affinity-chromatography

Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-ITPK1 Rabbit Monoclonal Antibody - 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](http://www.uniprot.org/citations/11909533)), PubMed:[12925536](http://www.uniprot.org/citations/12925536)), PubMed:[17616525](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/17616525)).

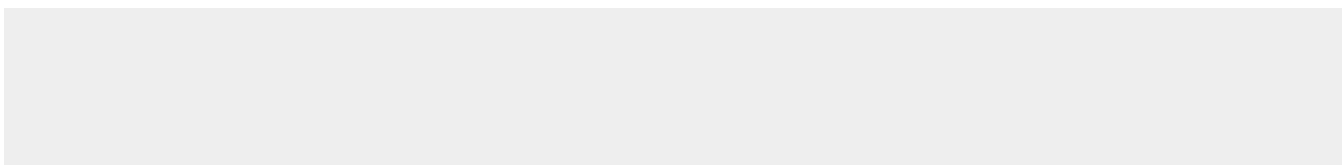
**Tissue Location**

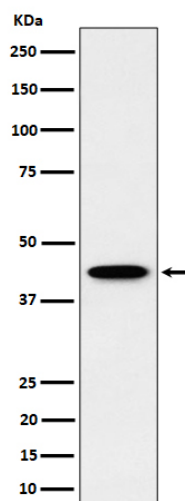
Expressed in brain > heart > skeletal muscle = kidney = pancreas = liver = placenta > lung. In brain, it is expressed in cerebellum, cerebral cortex, medulla, spinal cord, occipital lobe, frontal lobe, temporal lobe and putamen.

**Anti-ITPK1 Rabbit Monoclonal 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](#)

**Anti-ITPK1 Rabbit Monoclonal Antibody - Images**



Western blot analysis of ITPK1 expression in HepG2 cell lysate.