

## ITPK1 Polyclonal Antibody

<b>Catalog No :</b>	YT2416
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB;ELISA;IHC
<b>Target :</b>	ITPK1
<b>Fields :</b>	>>Inositol phosphate metabolism;>>Metabolic pathways;>>Phosphatidylinositol signaling system
<b>Gene Name :</b>	ITPK1
<b>Protein Name :</b>	Inositol-tetrakisphosphate 1-kinase
<b>Human Gene Id :</b>	3705
<b>Human Swiss Prot No :</b>	Q13572
<b>Mouse Gene Id :</b>	217837
<b>Mouse Swiss Prot No :</b>	Q8BYN3
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human ITPK1. AA range:81-130
<b>Specificity :</b>	ITPK1 Polyclonal Antibody detects endogenous levels of ITPK1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml

**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 50kD

**Cell Pathway :** Inositol phosphate metabolism;Phosphatidylinositol signaling system;

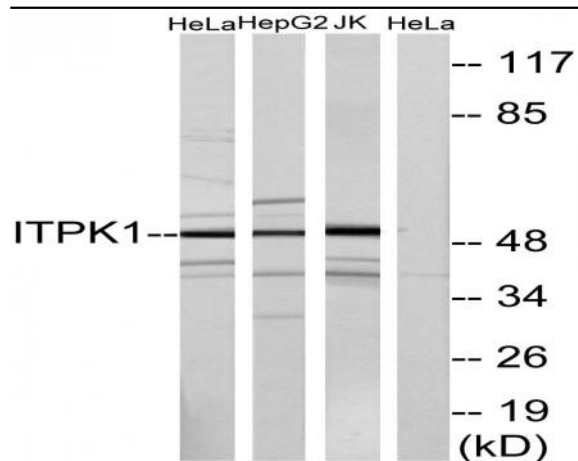
**Background :** This gene encodes an enzyme that belongs to the inositol 1,3,4-trisphosphate 5/6-kinase family. This enzyme regulates the synthesis of inositol tetrakisphosphate, and downstream products, inositol pentakisphosphate and inositol hexakisphosphate. Inositol metabolism plays a role in the development of the neural tube. Disruptions in this gene are thought to be associated with neural tube defects. A pseudogene of this gene has been identified on chromosome X. [provided by RefSeq, Jul 2016],

**Function :** catalytic activity:ATP + 1D-myo-inositol 1,3,4-trisphosphate = ADP + 1D-myo-inositol 1,3,4,5-tetrakisphosphate.,catalytic activity:ATP + 1D-myo-inositol 1,3,4-trisphosphate = ADP + 1D-myo-inositol 1,3,4,6-tetrakisphosphate.,catalytic activity:ATP + 1D-myo-inositol 3,4,5,6-tetrakisphosphate = ADP + 1D-myo-inositol 1,3,4,5,6-pentakisphosphate.,caution:PubMed:11533064 detected some protein kinase activity and ability to phosphorylate transcription factors c-jun/JUN and ATF2. However, PubMed:15762844 showed that it does not have protein kinase activity.,cofactor:Binds 2 magnesium ions per subunit.,function:Kinase that can phosphorylate various inositol polyphosphate such as Ins(3,4,5,6)P4 or Ins(1,3,4)P3. Phosphorylates Ins(3,4,5,6)P4 at position 1 to form Ins(1,3,4,5,6)P5. This reaction is thought to have regulatory importance, since Ins(3,4,5,6)P4 is an inhibitor of plasma membrane Ca(2+)-

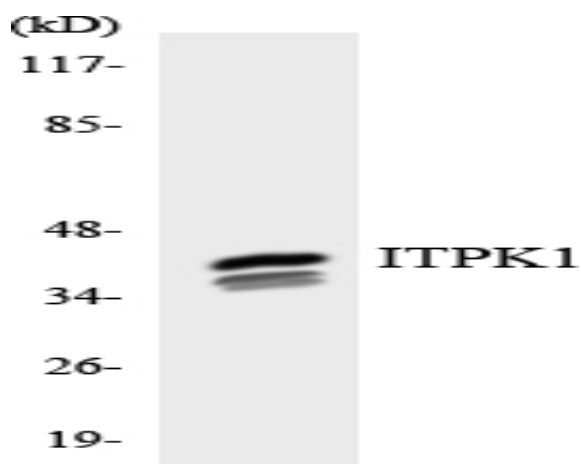
**Subcellular Location :** intracellular,cytosol,apical plasma membrane,

**Expression :** 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.

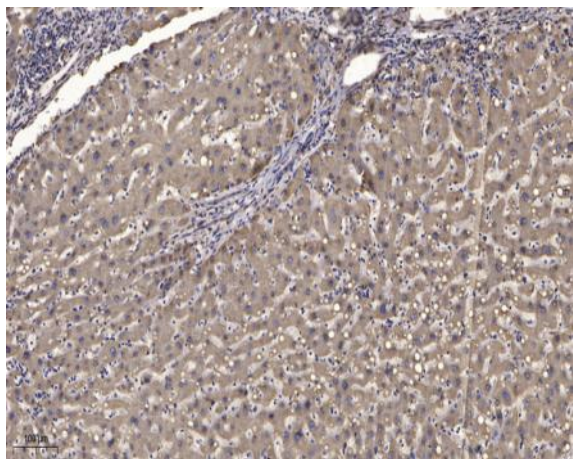
## Products Images



Western blot analysis of lysates from HeLa, HepG2, and Jurkat cells, using ITPK1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HepG2 cells using ITPK1 antibody.



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).