



ITPK1 Polyclonal Antibody

Catalog No	YP-Ab-14798
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;ELISA;IHC
Gene Name	ITPK1
Immunogen	The antiserum was produced against synthesized peptide derived from human ITPK1. AA range:81-130
Specificity	ITPK1 Polyclonal Antibody detects endogenous levels of ITPK1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000;IHC-p 1:50-300; ELISA 2000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Ins(1;3;4)P(3) 5/6 kinase;ITPK1;ITRPK1;Inositol-tetrakisphosphate 1-kinase; Inositol 1;4-trisphosphate 5/6-kinase;Inositol-triphosphate 5/6-kinase;4)P(3) 5/6-kinase
Observed Band	50kD
Calculated Molecular Weight	50kD
Cell Pathway	intracellular,cytosol,apical plasma membrane,
Tissue Specificity	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.
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+} -

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 tetraphosphate, 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],

matters needing attention

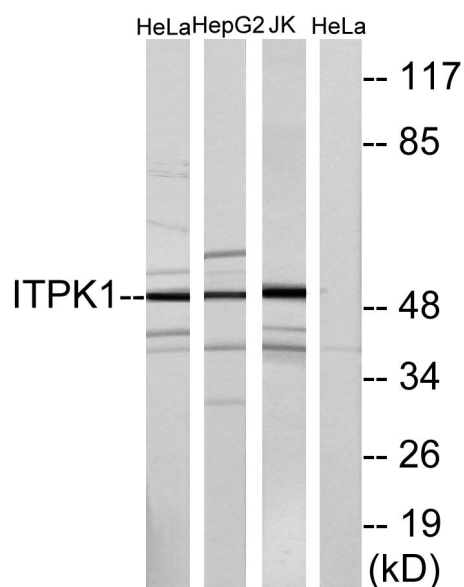
Avoid repeated freezing and thawing!

Usage suggestions

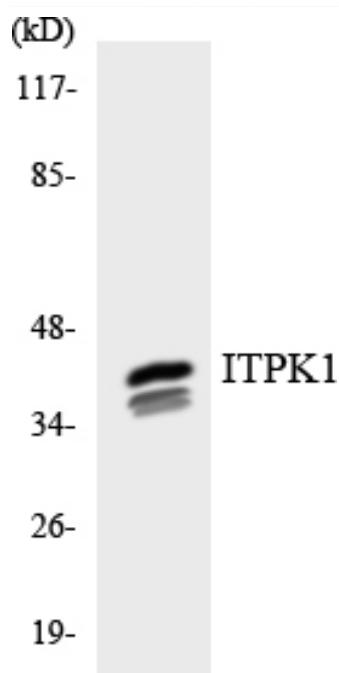
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



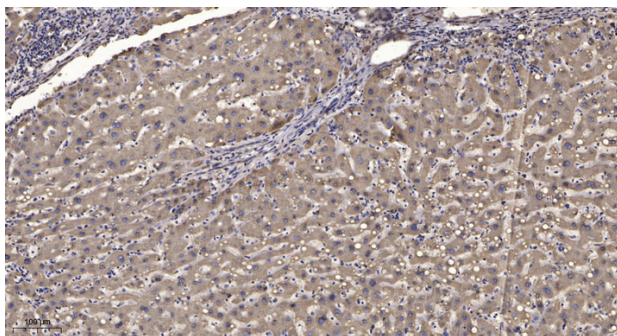
Products Images



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, pH 9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200 (room temperature, 45 min).