



ITPK1 Monoclonal Antibody

Catalog No	YP-mAb-14798
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	ITPK1
Immunogen	The antiserum was produced against synthesized peptide derived from human ITPK1. AA range:81-130
Specificity	ITPK1 Monoclonal Antibody detects endogenous levels of ITPK1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
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

