

产品名称: ITPK1 Rabbit Polyclonal Antibody
产品货号: APRab12799



产品概述 (Summary)

产品名称 (Production Name)	ITPK1 Rabbit Polyclonal Antibody
描述 (Description)	Rabbit polyclonal Antibody
宿主 (Host)	Rabbit
应用 (Application)	WB,IHC,ELISA
种属反应性 (Reactivity)	Human,Mouse

产品性能 (Performance)

偶联物 (Conjugation)	Unconjugated
修饰 (Modification)	Unmodified
同种型 (Isotype)	IgG
克隆 (Clonality)	Polyclonal
形式 (Form)	Liquid
存放说明 (Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液 (Buffer)	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
纯化方式 (Purification)	Affinity purification

免疫原信息 (Immunogen)

基因名 (Gene Name)	ITPK1
别名 (Alternative Names)	ITPK1; Inositol-tetrakisphosphate 1-kinase; Inositol 1; 3,4-trisphosphate 5/6-kinase; Inositol-triphosphate 5/6-kinase; Ins(1,3,4)P(3) 5/6-kinase
基因 ID (Gene ID)	3705.0
蛋白 ID (SwissProt ID)	Q13572.The antiserum was produced against synthesized peptide derived from human ITPK1. AA range:81-130

产品应用 (Application)

稀释比 (Dilution Ratio)	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
蛋白分子量 (Molecular Weight)	50kDa

产品名称: ITPK1 Rabbit Polyclonal Antibody
产品货号: APRab12799



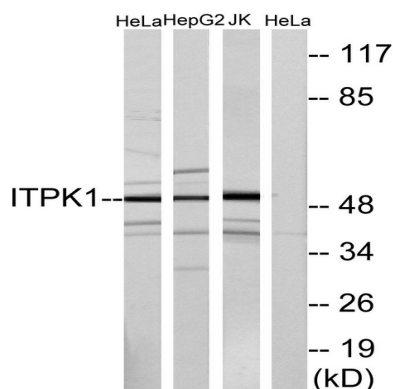
研究背景 (Background)

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],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+)-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. Also acts as an inositol polyphosphate phosphatase that dephosphorylate 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. May also act as an isomerase that interconverts the inositol tetraphosphate isomers Ins(1,3,4,5)P4 and Ins(1,3,4,6)P4 in the presence of ADP and magnesium. 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.,similarity:Belongs to the ITPK1 family.,similarity:Contains 1 ATP-grasp domain.,subunit:Monomer. Interacts with CSN1.,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.,

研究领域 (Research Area)

Inositol phosphate metabolism;Phosphatidylinositol signaling system;

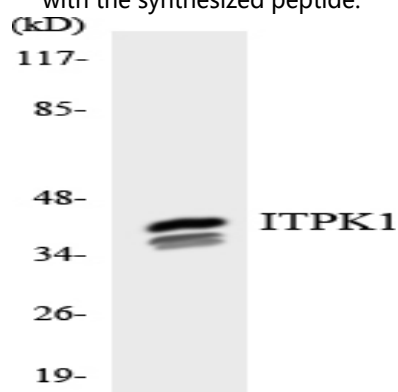
图片 (Image Data)



产品名称: ITPK1 Rabbit Polyclonal Antibody
产品货号: APRab12799



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.

注意事项 (Note)

For research use only .