

Product Name: ITPK1 Rabbit Monoclonal Antibody**Catalog #: AMRe85720**

For research use only.

Summary

Description	Recombinant rabbit monoclonal antibody
Host	Rabbit
Application	WB,IP
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Concentration	
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in TBS with 0.05% sodium azide, 0.05% protective protein and 50% glycerol.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:1000, IP 1:10-1:20
Molecular Weight	Calculated MW: 46 kDa; Observed MW: 46 kDa

Antigen Information

Gene Name	ITPK1
Alternative Names	ITRPK1
Gene ID	3705.0
SwissProt ID	Q13572
Immunogen	A synthetic peptide of human ITPK1

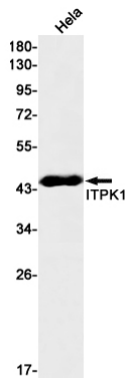
Background

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 Ca²⁺-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 tetrakisphosphate 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.

Research Area

Image Data



Western blot analysis of ITPK1 in HeLa lysates using ITPK1 antibody.