

Product name:	ITPK1 Rabbit Monoclonal Antibody
Cat number:	MABN85720
Conjugate:	Unconjugated
Size:	100µL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	A synthetic peptide of human ITPK1
Reactivity:	Human
Applications:	WB 1:500-1:1000, IP 1:10-1:20
Molecular Weight:	Calculated MW: 46 kDa; Observed MW: 46 kDa
Purification:	Affinity Purification
Form:	Liquid
Buffer:	Purified antibody in TBS with 0.05% sodium azide, 0.05% BSA and 50% glycerol.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
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-α-induced apoptosis by interfering with the activation of TNFRSF1A-associated death domain.