

## Anti-ITPK1 Rabbit Monoclonal Antibody

### Introduction

Kinase that can phosphorylate various inositol polyphosphate such as Ins(3,4,5,6)P<sub>4</sub> or Ins(1,3,4)P<sub>3</sub>. Phosphorylates Ins(3,4,5,6)P<sub>4</sub> at position 1 to form Ins(1,3,4,5,6)P<sub>5</sub>. This reaction is thought to have regulatory importance, since Ins(3,4,5,6)P<sub>4</sub> is an inhibitor of plasma membrane Ca<sup>2+</sup>-activated Cl<sup>-</sup> channels, while Ins(1,3,4,5,6)P<sub>5</sub> is not. Also phosphorylates Ins(1,3,4)P<sub>3</sub> on O-5 and O-6 to form Ins(1,3,4,6)P<sub>4</sub>, an essential molecule in the hexakisphosphate (InsP<sub>6</sub>) pathway. Also acts as an inositol polyphosphate phosphatase that dephosphorylate Ins(1,3,4,5)P<sub>4</sub> and Ins(1,3,4,6)P<sub>4</sub> to Ins(1,3,4)P<sub>3</sub>, and Ins(1,3,4,5,6)P<sub>5</sub> to Ins(3,4,5,6)P<sub>4</sub>. May also act as an isomerase that interconverts the inositol tetrakisphosphate isomers Ins(1,3,4,5)P<sub>4</sub> and Ins(1,3,4,6)P<sub>4</sub> in the presence of ADP and magnesium. Probably acts as the rate-limiting enzyme of the InsP<sub>6</sub> pathway. Modifies TNF- $\alpha$ -induced apoptosis by interfering with the activation of TNFRSF1A-associated death domain.

### Product parameters

Alternative Names	ITRPK1
Gene ID	3705
Gene Name	ITPK1
SwissProt ID	Q13572
Host	Rabbit
Reactivity	Human
Molecular Weight	Calculated MW: 46 kDa; Observed MW: 46 kDa
Conjugation	Unconjugated
Ex	-
Em	-
Modification	Unmodified
Clonality	IgG
Isotype	Monoclonal Antibody
Clonality No.	AP-20B8B1
Form	Liquid
Concentration	See label
Carrier	Carrier Not Free
Immunogen	A synthetic peptide of human ITPK1

Purification	Affinity Purified
Buffer System	50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA.
Application	WB, IP
Dilution Ratio	WB: 1/500-1/1000 IP: 1/20
Research Field	Signal Transduction
Product Categories	Primary antibody
Shipping	Blue ice
Storage	-20°C
Expiration Date	12 months
Note	Please avoid freeze-thaw cycles.

## Protocol

Configure the product according to the application range and recommended dilution ratio.

**\*Note:** The primary antibody dilution buffer options: WB - Primary Antibody Dilution Buffer (Cat. #: K1200, Not for HRP/AP conjugated antibodies), Immunostaining - Immunol Staining Primary Antibody Dilution Solution (Cat. #: K4655).

## Note

1. This product is for scientific research use only.





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