

**DATASHEET**

**ITPK1 Rabbit Polyclonal Antibody**

CAT. NO. APA10590

**KEY FEATURES**

Target	ITPK1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Bovine, Chicken, Pig	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

**BACKGROUND**

Kinase that can phosphorylate various inositol polyphosphate such as Ins(3,4,5,6)P4 or Ins(1,3,4)P3 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 dephosphorylates 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 .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:100
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to ITPK1
Specificity	Recognizes endogenous levels of ITPK1 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ITPK1. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 45 kD; Observed: 45; 35 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	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
Gene Symbol	ITPK1
Entrez Gene	3705(Human); 217837(Mouse)
SwissProt	Q13572(Human); Q8BYN3(Mouse)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

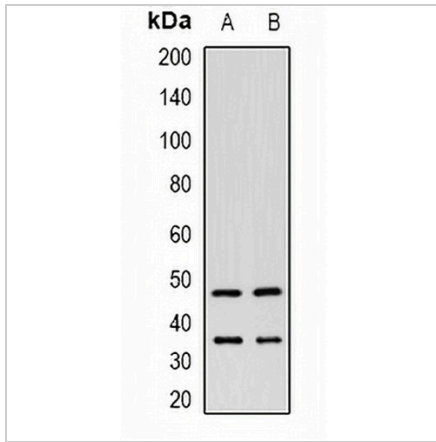
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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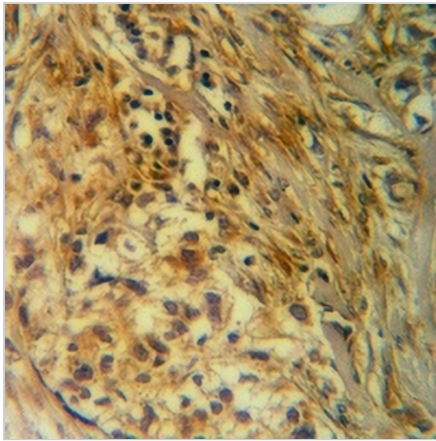
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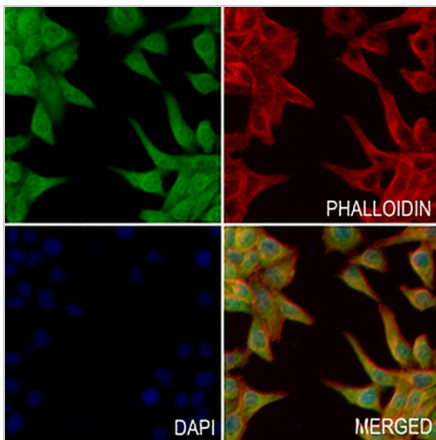
**DATA**



Western blot analysis of ITPK1 expression in HeLa (A), HepG2 (B) whole cell lysates. (Predicted band size: 45 kD; Observed band size: 45; 35 kD)



Immunohistochemical analysis of ITPK1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of ITPK1 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.