

IPMK Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8995c

Specification

IPMK Antibody (Center) - Product Information

Application	WB,E
Primary Accession	Q8NFU5
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	300-329

IPMK Antibody (Center) - Additional Information

Gene ID 253430

Other Names

Inositol polyphosphate multikinase, Inositol 1, 6-tetrakisphosphate 5-kinase, IPMK, IMPK

Target/Specificity

This IPMK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 300-329 amino acids from the Central region of human IPMK.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

IPMK Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

IPMK Antibody (Center) - Protein Information

Name IPMK

Synonyms IMPK {ECO:0000303|PubMed:29883610}

Function Inositol phosphate kinase with a broad substrate specificity (PubMed:[12027805](#), PubMed:[12223481](#), PubMed:[28882892](#), PubMed:[30420721](#), PubMed:[30624931](#)). Phosphorylates

inositol 1,4,5-trisphosphate (Ins(1,4,5)P₃) first to inositol 1,3,4,5-tetrakisphosphate and then to inositol 1,3,4,5,6-pentakisphosphate (Ins(1,3,4,5,6)P₅) (PubMed:[12027805](#), PubMed:[12223481](#), PubMed:[28882892](#), PubMed:[30624931](#)). Phosphorylates inositol 1,3,4,6-tetrakisphosphate (Ins(1,3,4,6)P₄) (PubMed:[12223481](#)). Phosphorylates inositol 1,4,5,6-tetrakisphosphate (Ins(1,4,5,6)P₄) (By similarity). Phosphorylates glycerol-3-phospho-1D- myo-inositol 4,5-bisphosphate to glycerol-3-phospho-1D-myo-inositol 3,4,5-trisphosphate (PubMed:[30420721](#), PubMed:[28882892](#)). Plays an important role in MLKL-mediated necroptosis via its role in the biosynthesis of inositol pentakisphosphate (InsP₅) and inositol hexakisphosphate (InsP₆). Binding of these highly phosphorylated inositol phosphates to MLKL mediates the release of an N-terminal auto- inhibitory region, leading to activation of the kinase. Essential for activated phospho-MLKL to oligomerize and localize to the cell membrane during necroptosis (PubMed:[29883610](#)). Required for normal embryonic development, probably via its role in the biosynthesis of inositol 1,3,4,5,6-pentakisphosphate (Ins(1,3,4,5,6)P₅) and inositol hexakisphosphate (InsP₆) (By similarity).

Cellular Location

Nucleus.

Tissue Location

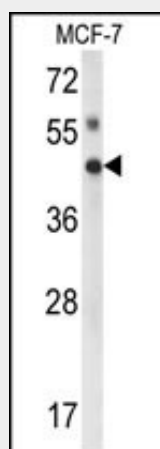
Ubiquitous, with the highest expression in skeletal muscle, liver, placenta, lung, peripheral blood leukocytes, kidney, spleen and colon.

IPMK Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

IPMK Antibody (Center) - Images



Western blot analysis of IPMK Antibody (Center) (Cat. #AP8995c) in MCF-7 cell line lysates (35ug/lane). IPMK (arrow) was detected using the purified Pab.

IPMK Antibody (Center) - Background

IPMK is inositol phosphate kinase with a broad substrate specificity. It has a preference for inositol-1,4,5-trisphosphate (Ins(1,4,5)P₃) and inositol 1,3,4,6-tetrakisphosphate (Ins(1,3,4,6)P₄).

IPMK Antibody (Center) - References

Chang, S.C., et.al., J. Biol. Chem. 277 (46), 43836-43843 (2002)
Nalaskowski, M.M., et.al., Biochem. J. 366 (PT 2), 549-556 (2002)