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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
E~~Use at an assay dependent concentration.

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 glycero-3-phospho-1D- myo-inositol 4,5-bisphosphate to glycero-3-phospho-1D-myo-inositol 3,4,5-trisphosphate (PubMed:28882892, PubMed:30420721). 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.

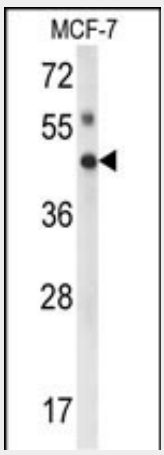
Tissue Location
Ubiquitous, with the highest expression in skeletal muscle, liver, placenta, lung, peripheral blood leukocytes, kidney, spleen and colon.

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 Cytomety
- 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.

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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)