

IPMK Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP8995c**Specification**

IPMK Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q8NFU5](#)**IPMK Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 253430**Other Names**

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8995c](/products/AP8995c) was selected from the Center region of human IPMK. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

IPMK Antibody (Center) Blocking Peptide - Protein Information**Name** IPMK**Synonyms** IMPK {ECO:0000303|PubMed:29883610}**Function**

Inositol phosphate kinase with a broad substrate specificity (PubMed:[12027805](http://www.uniprot.org/citations/12027805), PubMed:[12223481](http://www.uniprot.org/citations/12223481), PubMed:[28882892](http://www.uniprot.org/citations/28882892), PubMed:[30420721](http://www.uniprot.org/citations/30420721), PubMed:[30624931](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/12027805), PubMed:[12223481](http://www.uniprot.org/citations/12223481), PubMed:[12223481](http://www.uniprot.org/citations/12223481)).

[28882892](http://www.uniprot.org/citations/28882892), PubMed: [30624931](http://www.uniprot.org/citations/30624931)). Phosphorylates inositol 1,3,4,6-tetrakisphosphate (Ins(1,3,4,6)P4) (PubMed: [12223481](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/30420721), PubMed: [28882892](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

IPMK Antibody (Center) Blocking Peptide - Images

IPMK Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)