10320 Camino Santa Fe, Suite G
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IPMK Antibody (aa311-360)
Rabbit Polyclonal Antibody
Catalog # ALS16712

Specification

IPMK Antibody (aa311-360) - Product Information

Application	**IHC, WB**
Primary Accession	Q8NFU5
Other Accession	253430
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**47222**

IPMK Antibody (aa311-360) - Additional Information

Gene ID 253430

Other Names
IPMK, IMPK

Target/Specificity
IPMK Antibody detects endogenous levels of total IPMK protein.

Reconstitution & Storage
PBS (without Mg2+, Ca2+), pH 7.4, 150 mM sodium chloride, 0.02% sodium azide, 50% glycerol. Store at -20°C for up to one year.

Precautions
IPMK Antibody (aa311-360) is for research use only and not for use in diagnostic or therapeutic procedures.

IPMK Antibody (aa311-360) - 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:<a

href="http://www.uniprot.org/citations/12027805" target="_blank">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: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.

Volume
50 µl

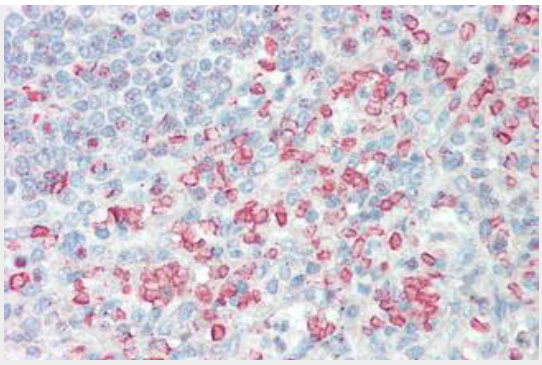
IPMK Antibody (aa311-360) - Protocols

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

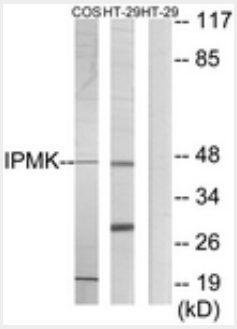
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IPMK Antibody (aa311-360) - Images

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Anti-IPMK antibody IHC staining of human spleen.



Western blot of extracts from HT-29/COS7 cells, using IPMK Antibody.

IPMK Antibody (aa311-360) - Background

Inositol phosphate kinase with a broad substrate specificity. 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 (aa311-360) - References

Nalaskowski M.M.,et al.Biochem. J. 366:549-556(2002).
Chang S.-C.,et al.J. Biol. Chem. 277:43836-43843(2002).
Daub H.,et al.Mol. Cell 31:438-448(2008).
Oppermann F.S.,et al.Mol. Cell. Proteomics 8:1751-1764(2009).