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PIP5K2G Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP8043a

Specification

PIP5K2G Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q8TBX8

PIP5K2G Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 79837

Other Names
Phosphatidylinositol 5-phosphate 4-kinase type-2 gamma, Phosphatidylinositol 5-phosphate 4-kinase type II gamma, PI(5)P 4-kinase type II gamma, PIP4KII-gamma, PIP4K2C, PIP5K2C

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8043a was selected from the C-term region of human PIP5K2G . 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.

PIP5K2G Antibody (C-term) Blocking Peptide - Protein Information

Name PIP4K2C (HGNC:23786)

Synonyms PIP5K2C

Function
Phosphatidylinositol 5-phosphate 4-kinase with low enzymatic activity. May be a GTP sensor, has higher GTP-dependent kinase activity than ATP-dependent kinase activity. PIP4Ks negatively regulate insulin signaling through a catalytic-independent mechanism. They interact with PIP5Ks and suppress PIP5K-mediated PtdIns(4,5)P2 synthesis and insulin- dependent conversion to PtdIns(3,4,5)P3 (PubMed:31091439).

Cellular Location
Endoplasmic reticulum {ECO:0000250|UniProtKB:O88370}. Cytoplasm

{ECO:0000250|UniProtKB:O88370}

PIP5K2G Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

PIP5K2G Antibody (C-term) Blocking Peptide - Images

PIP5K2G Antibody (C-term) Blocking Peptide - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains.

PIP5K2G Antibody (C-term) Blocking Peptide - References

Blume-Jensen P, et al. Nature 2001. 411: 355.Cantrell D, J. Cell Sci. 2001. 114: 1439.Jhiang S Oncogene 2000. 19: 5590.Manning G, et al. Science 2002. 298: 1912.Moller, D, et al. Am. J. Physiol. 1994. 266: C351-C359.Robertson, S. et al. Trends Genet. 2000. 16: 368.Robinson D, et al. Oncogene 2000. 19: 5548.Van der Ven, P, et al. Hum. Molec. Genet. 1993. 2: 1889.Vanhaesebroeck, B, et al. Biochem. J. 2000. 346: 561.Van Weering D, et al. Recent Results Cancer Res. 1998. 154: 271.