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PIP5K2B Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP8042b

Specification

PIP5K2B Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	P78356
Other Accession	NP_003550

PIP5K2B Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 8396

Other Names
Phosphatidylinositol 5-phosphate 4-kinase type-2 beta, 1-phosphatidylinositol 5-phosphate 4-kinase 2-beta, Diphosphoinositide kinase 2-beta, Phosphatidylinositol 5-phosphate 4-kinase type II beta, PI(5)P 4-kinase type II beta, PIP4KII-beta, PtdIns(5)P-4-kinase isoform 2-beta, PIP4K2B, PIP5K2B

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8042b was selected from the C-term region of human PIP5K2B . 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.

PIP5K2B Antibody (C-term) Blocking Peptide - Protein Information

Name PIP4K2B (HGNC:8998)

Synonyms PIP5K2B

Function
Participates in the biosynthesis of phosphatidylinositol 4,5- bisphosphate (PubMed:9038203, PubMed:26774281). Preferentially utilizes GTP, rather than ATP, for PI(5)P phosphorylation and its activity reflects changes in direct proportion to the physiological GTP concentration (PubMed:26774281). Its

GTP-sensing activity is critical for metabolic adaptation (PubMed:26774281). 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 membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein. Nucleus. Cytoplasm Note=Associated with the plasma membrane and the endoplasmic reticulum

Tissue Location
Highly expressed in brain, heart, pancreas, skeletal muscle and kidney. Detected at lower levels in placenta, lung and liver.

PIP5K2B Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

PIP5K2B Antibody (C-term) Blocking Peptide - Images

PIP5K2B Antibody (C-term) Blocking Peptide - Background

PIP5K2B catalyzes the phosphorylation of phosphatidylinositol-4-phosphate on the fifth hydroxyl of the myo-inositol ring to form phosphatidylinositol-4,5-bisphosphate. It is a member of the phosphatidylinositol-4-phosphate 5-kinase family. The encoded protein sequence does not show similarity to other kinases, but the protein does exhibit kinase activity. Additionally, the encoded protein interacts with p55 TNF receptor.

PIP5K2B Antibody (C-term) Blocking Peptide - References

Rao, V.D., et al., Cell 94(6):829-839 (1998).Castellino, A.M., et al., J. Biol. Chem. 272(9):5861-5870 (1997).