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PIP5K2B Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8042b

Specification

PIP5K2B Antibody (C-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	P78356
Other Accession	NP_003550
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**286-317**

PIP5K2B Antibody (C-term) - 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
This PIP5K2B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 286-317 amino acids from the C-terminal region of human PIP5K2B.

Dilution
IHC-P~~1:50~100
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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
PIP5K2B Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PIP5K2B Antibody (C-term) - Protein Information

Name PIP4K2B (HGNC:8998)

Synonyms PIP5K2B

Function Participates in the biosynthesis of phosphatidylinositol 4,5- bisphosphate (PubMed:26774281, PubMed:9038203). 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

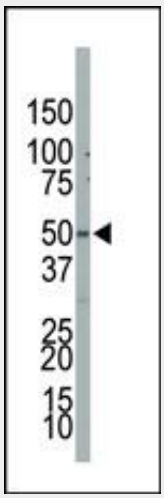
Tissue Location
Highly expressed in brain, heart, pancreas, skeletal muscle and kidney. Detected at lower levels in placenta, lung and liver.

PIP5K2B Antibody (C-term) - 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

PIP5K2B Antibody (C-term) - Images



The anti-PIP5K2B Pab (Cat. #AP8042b) is used in Western blot to detect PIP5K2B in NCI-H460 cell lysate.

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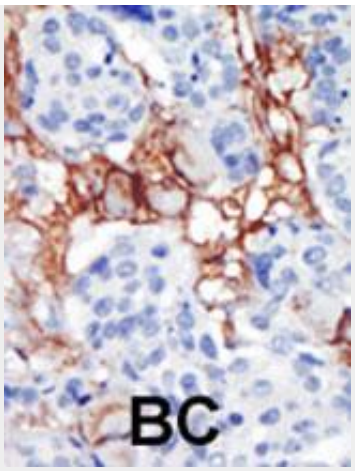

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

PIP5K2B Antibody (C-term) - 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) - 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).

PIP5K2B Antibody (C-term) - Citations

- Light-induced tyrosine phosphorylation of rod outer segment membrane proteins regulate the translocation, membrane binding and activation of type II Î± phosphatidylinositol-5-phosphate 4-kinase.
- Regulation of extranuclear PtdIns5P production by phosphatidylinositol phosphate 4-kinase 2alpha.