10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PI4K2A Antibody (N-term D2) Blocking Peptide

Synthetic peptide
Catalog # BP7575d

Specification

PI4K2A Antibody (N-term D2) Blocking Peptide - Product Information

Primary Accession Q9BTU6

PI4K2A Antibody (N-term D2) Blocking Peptide - Additional Information

Gene ID 55361

Other Names
Phosphatidylinositol 4-kinase type 2-alpha, Phosphatidylinositol 4-kinase type II-alpha, PI4K2A

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7575d was selected from the N-term region of human PI4K2A . 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.

PI4K2A Antibody (N-term D2) Blocking Peptide - Protein Information

Name PI4K2A

Function
Membrane-bound phosphatidylinositol-4 kinase (PI4-kinase) that catalyzes the phosphorylation of phosphatidylinositol (PI) to phosphatidylinositol 4-phosphate (PI4P), a lipid that plays important roles in endocytosis, Golgi function, protein sorting and membrane trafficking and is required for prolonged survival of neurons. Besides, phosphorylation of phosphatidylinositol (PI) to phosphatidylinositol 4- phosphate (PI4P) is the first committed step in the generation of phosphatidylinositol 4,5-bisphosphate (PIP2), a precursor of the second messenger inositol 1,4,5-trisphosphate (InsP3).

Cellular Location
Golgi apparatus, trans-Golgi network membrane; Lipid-anchor. Membrane raft. Cell projection, dendrite {ECO:0000250|UniProtKB:Q2TBE6}. Presynaptic cell membrane {ECO:0000250|UniProtKB:Q2TBE6}. Synapse, synaptosome {ECO:0000250|UniProtKB:Q2TBE6}.

Mitochondrion {ECO:0000250|UniProtKB:Q2TBE6}. Endosome. Cytoplasmic vesicle. Membrane; Lipid-anchor. Cell membrane. Perikaryon {ECO:0000250|UniProtKB:Q2TBE6}. Cell projection, neuron projection {ECO:0000250|UniProtKB:Q2TBE6}. Note=Found in subdomains of the plasma membrane termed non-caveolar membrane rafts. Transported from neuronal cell body to neuron projections and neurite tips in a BLOC-1- and AP-3- complexes-dependent manner. {ECO:0000250|UniProtKB:Q2TBE6}

Tissue Location
Widely expressed. Highest expression is observed in kidney, brain, heart, skeletal muscle, and placenta and lowest expression is observed in colon, thymus, and small intestine

PI4K2A Antibody (N-term D2) Blocking Peptide - Protocols

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

- Blocking Peptides

PI4K2A Antibody (N-term D2) Blocking Peptide - Images

PI4K2A Antibody (N-term D2) Blocking Peptide - Background

PI4K2A, together with PI4K2B and the type III PI4Ks (PIK4CA and PIK4CB) contributes to the overall PI4-kinase activity of the cell. The phosphorylation of phosphatidylinositol (PI) to PI4P is the first committed step in the generation of phosphatidylinositol 4,5-bisphosphate (PIP2), a precursor of the second messenger inositol 1,4,5-trisphosphate (InsP3).

PI4K2A Antibody (N-term D2) Blocking Peptide - References

Minogue,S., J. Biol. Chem. 276 (20), 16635-16640 (2001)Deloukas P., Nature 429:375-381(2004).