

PI4K2A Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP16933b**Specification**

PI4K2A Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9BTU6](#)**PI4K2A Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 55361**Other Names**

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

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 (C-term) 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 (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

PI4K2A Antibody (C-term) Blocking Peptide - Images**PI4K2A Antibody (C-term) Blocking Peptide - Background**

Phosphatidylinositolpolyphosphates (PtdInsPs) are centrally involved in many biologic processes, ranging from cell growth and organization of the actin cytoskeleton to endo- and exocytosis. PI4KII phosphorylates PtdIns at the D-4 position, an essential step in the biosynthesis of PtdInsPs (Barylko et al., 2001 [PubMed 11244087]).

PI4K2A Antibody (C-term) Blocking Peptide - References

Li, J., et al. Oncogene 29(17):2550-2559(2010) Qin, Y., et al. J. Biol. Chem. 284(34):22544-22548(2009) Salazar, G., et al. J. Biol. Chem. 284(3):1790-1802(2009) Craige, B., et al. Mol. Biol. Cell 19(4):1415-1426(2008) Olsen, J.V., et al. Cell 127(3):635-648(2006)