

PPP1R16B Antibody (Center) Blocking Peptide Synthetic peptide

Catalog # BP17590c

Specification

PPP1R16B Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>Q96T49</u>

PPP1R16B Antibody (Center) Blocking Peptide - Additional Information

Gene ID 26051

Other Names

Protein phosphatase 1 regulatory inhibitor subunit 16B, Ankyrin repeat domain-containing protein 4, CAAX box protein TIMAP, TGF-beta-inhibited membrane-associated protein, hTIMAP, PPP1R16B, ANKRD4, KIAA0823

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.

PPP1R16B Antibody (Center) Blocking Peptide - Protein Information

Name PPP1R16B

Synonyms ANKRD4, KIAA0823

Function

Regulator of protein phosphatase 1 (PP1) that acts as a positive regulator of pulmonary endothelial cell (EC) barrier function (PubMed:18586956). Involved in the regulation of the PI3K/AKT signaling pathway, angiogenesis and endothelial cell proliferation (PubMed:25007873). Regulates angiogenesis and endothelial cell proliferation through the control of ECE1 dephosphorylation, trafficking and activity (By similarity). Protects the endothelial barrier from lipopolysaccharide (LPS)-induced vascular leakage (By similarity). Involved in the regulation of endothelial cell filopodia extension (By similarity). May be a downstream target for TGF-beta1 signaling cascade in endothelial cells (PubMed:<a href="http://www.uniprot.org/citations/16263087"

target="_blank">16263087, PubMed:18586956). Involved in PKA-mediated moesin dephosphorylation which is important in EC barrier protection against thrombin stimulation (PubMed:18586956). Promotes the



interaction of PPP1CA with RPSA/LAMR1 and in turn facilitates the dephosphorylation of RPSA/LAMR1 (PubMed:16263087). Involved in the dephosphorylation of EEF1A1 (PubMed:26497934).

Cellular Location Cell membrane. Cell membrane; Lipid-anchor. Nucleus. Cell projection. Note=Colocalizes with RPSA/LAMR1 in the cell membrane (PubMed:16263087). Localizes to the perinuclear region (By similarity). Colocalizes with PTEN at the tip of EC projections (PubMed:25007873). {ECO:0000250|UniProtKB:Q95N27, ECO:0000269|PubMed:16263087, ECO:0000269|PubMed:25007873}

PPP1R16B Antibody (Center) Blocking Peptide - Protocols

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

Blocking Peptides

PPP1R16B Antibody (Center) Blocking Peptide - Images

PPP1R16B Antibody (Center) Blocking Peptide - Background

The protein encoded by this gene is membrane-associated and contains five ankyrin repeats, a proteinphosphatase-1-interacting domain, and a carboxy-terminal CAAX boxdomain. Synthesis of the encoded protein is inhibited bytransforming growth factor beta-1. The protein may bind to themembrane through its CAAX box domain and may act as a signalingmolecule through interaction with protein phosphatase-1. Alternatively spliced transcript variants encoding differentisoforms have been identified in this gene.

PPP1R16B Antibody (Center) Blocking Peptide - References

Csortos, C., et al. Am. J. Physiol. Lung Cell Mol. Physiol. 295 (3), L440-L450 (2008) :Kim, K., et al. Biochem. Biophys. Res. Commun. 338(3):1327-1334(2005)Homma, K., et al. J. Mol. Biol. 343(5):1207-1220(2004)Cao, W., et al. Am. J. Physiol., Cell Physiol. 283 (1), C327-C337 (2002) :Deloukas, P., et al. Nature 414(6866):865-871(2001)