

PPP1R16B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17590c

Specification

PPP1R16B Antibody (Center) - Product Information

Application WB,E
Primary Accession Q96T49

Other Accession <u>Q8VHQ3</u>, <u>Q95N27</u>, <u>NP 001166206.1</u>

Reactivity Human

Predicted Bovine, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 63551
Antigen Region 372-399

PPP1R16B Antibody (Center) - 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

Target/Specificity

This PPP1R16B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 372-399 amino acids from the Central region of human PPP1R16B.

Dilution

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 purified through a protein A column, followed by peptide affinity purification.

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

PPP1R16B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PPP1R16B Antibody (Center) - 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: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

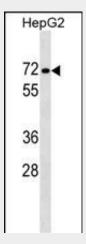
Cell membrane. Cell membrane; Lipid-anchor. Nucleus. Cell projection. Note=Colocalizes with RPSA/LAMR1 in the cell membrane (PubMed:16263087). Localizes to the perinuclear region (By similarity). Colocalizes with PTEN at the tip of EC projections (PubMed:25007873). {ECO:0000250|UniProtKB:Q95N27, ECO:0000269|PubMed:16263087,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

PPP1R16B Antibody (Center) - Protocols

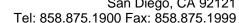
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

PPP1R16B Antibody (Center) - Images



PPP1R16B Antibody (Center) (Cat. #AP17590c) western blot analysis in HepG2 cell line lysates





(35ug/lane). This demonstrates the PPP1R16B antibody detected the PPP1R16B protein (arrow).

PPP1R16B Antibody (Center) - Background

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

PPP1R16B Antibody (Center) - 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)

PPP1R16B Antibody (Center) - Citations

- The role of LR-TIMAP/PP1c complex in the occurrence and development of no-reflow.
- PKC mediated phosphorylation of TIMAP regulates PP1c activity and endothelial barrier function.
- Regulation of merlin by protein phosphatase 1-TIMAP and EBP50 in endothelial cells.
- TIMAP-protein phosphatase 1-complex controls endothelin-1 production via ECE-1 dephosphorylation.