

PPP2R1A Antibody(C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19717b

Specification

PPP2R1A Antibody(C-term) - Product Information

Application WB,E
Primary Accession P30153

Other Accession <u>P54612</u>, <u>Q76MZ3</u>, <u>Q32PI5</u>, <u>NP 055040.2</u>

Reactivity Human

Predicted Bovine, Mouse, Pig

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 65309
Antigen Region 454-481

PPP2R1A Antibody(C-term) - Additional Information

Gene ID 5518

Other Names

Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform, Medium tumor antigen-associated 61 kDa protein, PP2A subunit A isoform PR65-alpha, PP2A subunit A isoform R1-alpha, PP2R1A

Target/Specificity

This PPP2R1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 454-481 amino acids from the C-terminal region of human PPP2R1A.

Dilution

WB~~1:1000

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

PPP2R1A Antibody(C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PPP2R1A Antibody(C-term) - Protein Information

Name PPP2R1A (HGNC:9302)



Function The PR65 subunit of protein phosphatase 2A serves as a scaffolding molecule to coordinate the assembly of the catalytic subunit and a variable regulatory B subunit. Upon interaction with GNA12 promotes dephosphorylation of microtubule associated protein TAU/MAPT (PubMed:15525651). Required for proper chromosome segregation and for centromeric localization of SGO1 in mitosis (PubMed:16580887). Together with RACK1 adapter, mediates dephosphorylation of AKT1 at 'Ser-473', preventing AKT1 activation and AKT-mTOR signaling pathway (By similarity). Dephosphorylation of AKT1 is essential for regulatory T-cells (Treg) homeostasis and stability (By similarity). Part of the striatin-interacting phosphatase and kinase (STRIPAK) complexes. STRIPAK complexes have critical roles in protein (de)phosphorylation and are regulators of multiple signaling pathways including Hippo, MAPK, nuclear receptor and cytoskeleton remodeling. Different types of STRIPAK complexes are involved in a variety of biological processes such as cell growth, differentiation, apoptosis, metabolism and immune regulation (PubMed:18782753, PubMed:33633399). Regulates the recruitment of the SKA complex to kinetochores (PubMed:28982702).

Cellular Location

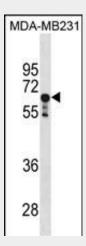
Cytoplasm {ECO:0000250|UniProtKB:Q32PI5}. Nucleus. Chromosome, centromere. Lateral cell membrane. Cell projection, dendrite. Note=Centromeric localization requires the presence of BUB1.

PPP2R1A 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

PPP2R1A Antibody(C-term) - Images



PPP2R1A Antibody (C-term) (Cat. #AP19717b) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the PPP2R1A antibody detected the PPP2R1A protein (arrow).

PPP2R1A Antibody(C-term) - Background



This gene encodes a constant regulatory subunit of protein phosphatase 2. Protein phosphatase 2 is one of the four major Ser/Thr phosphatases, and it is implicated in the negative control of cell growth and division. It consists of a common heteromeric core enzyme, which is composed of a catalytic subunit and a constant regulatory subunit, that associates with a variety of regulatory subunits. The constant regulatory subunit A serves as a scaffolding molecule to coordinate the assembly of the catalytic subunit and a variable regulatory B subunit. This gene encodes an alpha isoform of the constant regulatory subunit A. Alternatively spliced transcript variants have been described. [provided by RefSeq].

PPP2R1A Antibody(C-term) - References

Jones, S., et al. Science 330(6001):228-231(2010) Schmitz, M.H., et al. Nat. Cell Biol. 12(9):886-893(2010) Heikkinen, P.T., et al. J. Biol. Chem. 285(6):3740-3749(2010) Dupont, W.D., et al. Cancer 116(1):8-19(2010) Wang, Q., et al. Neoplasia 11(10):1012-1021(2009)