

**PPP2R1A Antibody(C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP19717b**

**Specification**

---

**PPP2R1A Antibody(C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P30153</a>
Other Accession	<a href="#">P54612</a> , <a href="#">Q76MZ3</a> , <a href="#">Q32PI5</a> , <a href="#">NP_055040.2</a>
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, PPP2R1A

**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

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**

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 (PubMed:[15525651](#), PubMed:[16580887](#), PubMed:[33243860](#), PubMed:[33633399](#), PubMed:[34004147](#), PubMed:[8694763](#)). 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 (PubMed:[18782753](#), PubMed:[33633399](#)). STRIPAK complexes have critical roles in protein (de)phosphorylation and are regulators of multiple signaling pathways including Hippo, MAPK, nuclear receptor and cytoskeleton remodeling (PubMed:[18782753](#), PubMed:[33633399](#)). 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](#)). Key mediator of a quality checkpoint during transcription elongation as part of the Integrator-PP2A (INTAC) complex (PubMed:[33243860](#), PubMed:[34004147](#)). The INTAC complex drives premature transcription termination of transcripts that are unfavorably configured for transcriptional elongation: within the INTAC complex, acts as a scaffolding subunit for PPP2CA, which catalyzes dephosphorylation of the C-terminal domain (CTD) of Pol II subunit POLR2A/RPB1 and SUPT5H/SPT5, thereby preventing transcriptional elongation (PubMed:[33243860](#), PubMed:[34004147](#)). Regulates the recruitment of the SKA complex to kinetochores (PubMed:[28982702](#)).

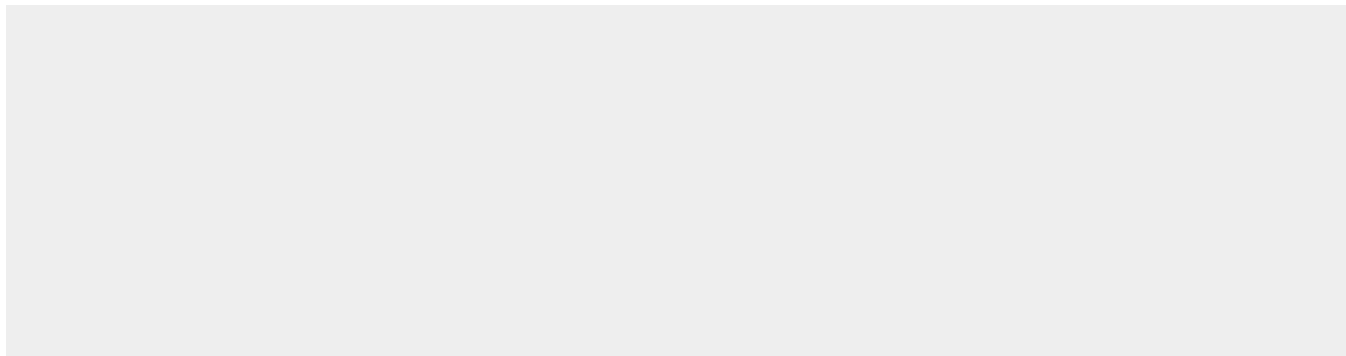
**Cellular Location**

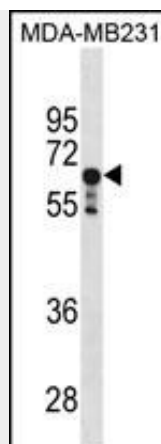
Cytoplasm {ECO:0000250|UniProtKB:Q32PI5}. Nucleus. Chromosome. Chromosome, centromere. Lateral cell membrane. Cell projection, dendrite. Note=Centromeric localization requires the presence of BUB1 (PubMed:16580887). Recruited to chromatin and transcription pause-release checkpoint via its association with the Integrator complex (PubMed:34004147, PubMed:33243860)

**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 Cytometry](#)
- [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)