

#### PPP2R1A Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP1943a

### **Specification**

# PPP2R1A Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P30153
Other Accession O96DH3

# PPP2R1A Antibody (N-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP1943a>AP1943a</a> was selected from the N-term region of human PPP2R1A. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### **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.

# PPP2R1A Antibody (N-term) Blocking Peptide - Protein Information

# Name PPP2R1A

# **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:<a href="http://www.uniprot.org/citations/15525651" target="\_blank">15525651</a>). Required for proper chromosome segregation and for centromeric localization of SGO1 in mitosis (PubMed:<a href="http://www.uniprot.org/citations/16580887" target="\_blank">16580887</a>). 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).



### **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 (N-term) Blocking Peptide - Protocols

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

# • Blocking Peptides

PPP2R1A Antibody (N-term) Blocking Peptide - Images

# PPP2R1A Antibody (N-term) Blocking Peptide - Background

PPP2R1A is 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.

# PPP2R1A Antibody (N-term) Blocking Peptide - References

Suzuki, K., et al., Int. J. Oncol. 23(5):1263-1268 (2003). Elder, R.T., et al., Virology 287(2):359-370 (2001). Ruteshouser, E.C., et al., Oncogene 20(16):2050-2054 (2001). Hrimech, M., et al., EMBO J. 19(15):3956-3967 (2000). Zolnierowicz, S., Biochem. Pharmacol. 60(8):1225-1235 (2000).