

**INPP4A Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP10183b****Specification**

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**INPP4A Antibody (C-term) Blocking peptide - Product Information**

Primary Accession [Q96PE3](#)  
Other Accession [NP\\_001127697.1](#), [NP\\_001127696.1](#),  
[NP\\_004018.1](#), [NP\\_001557.1](#)

**INPP4A Antibody (C-term) Blocking peptide - Additional Information**

**Gene ID** 3631

**Other Names**

Type I inositol 3, 4-bisphosphate 4-phosphatase, Inositol polyphosphate 4-phosphatase type I, INPP4A

**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.

**INPP4A Antibody (C-term) Blocking peptide - Protein Information**

**Name** INPP4A

**Function**

Catalyzes the hydrolysis of the 4-position phosphate of phosphatidylinositol 3,4-bisphosphate (PtdIns(3,4)P<sub>2</sub>) (PubMed:<a href="http://www.uniprot.org/citations/20463662" target="\_blank">20463662</a>, PubMed:<a href="http://www.uniprot.org/citations/15716355" target="\_blank">15716355</a>). Catalyzes also inositol 1,3,4-trisphosphate and inositol 1,4-bisphosphate (By similarity). Antagonizes the PI3K-AKT/PKB signaling pathway by dephosphorylating phosphoinositides and thereby modulating cell cycle progression and cell survival (PubMed:<a href="http://www.uniprot.org/citations/30071275" target="\_blank">30071275</a>) (By similarity). May protect neurons from excitotoxic cell death by regulating the synaptic localization of cell surface N-methyl-D- aspartate-type glutamate receptors (NMDARs) and NMDAR-mediated excitatory postsynaptic current (By similarity).

**Cellular Location**

Early endosome membrane. Recycling endosome membrane. Cell membrane. Nucleus Cytoplasm. Postsynaptic density {ECO:0000250|UniProtKB:Q9EPW0}. Note=Translocates to the plasma membrane upon EGF stimulation (PubMed:15716355). Shuttles between the cytoplasm and the

nucleus, depending on the cell cycle stage, with highest amounts detected in the nucleus during the G0/G1phase (PubMed:30071275).

**Tissue Location**

Isoform 1 is expressed in the platelets, MEG-01 megakaryocytes and Jurkat T-cells. Isoform 2 is expressed in the brain

**INPP4A Antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**INPP4A Antibody (C-term) Blocking peptide - Images****INPP4A Antibody (C-term) Blocking peptide - Background**

This gene encodes an  $Mg^{++}$  independent enzyme that hydrolyzes the 4-position phosphate from the inositol ring of phosphatidylinositol 3,4-bisphosphate, inositol 1,3,4-trisphosphate, and inositol 3,4-bisphosphate. Multiple transcript variants encoding distinct isoforms have been described.

**INPP4A Antibody (C-term) Blocking peptide - References**

Sasaki, J., et al. Nature 465(7297):497-501(2010) Rogers, A.J., et al. Am. J. Respir. Crit. Care Med. 179(12):1084-1090(2009) Kobayashi, S., et al. DNA Res. 15(4):253-265(2008) Sharma, M., et al. Am. J. Respir. Crit. Care Med. 177(7):712-719(2008) Hillier, L.W., et al. Nature 434(7034):724-731(2005)