

**SAC2 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP4732a****Specification**

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**SAC2 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [Q9Y2H2](#)**SAC2 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 22876**Other Names**

Phosphatidylinositol phosphatase SAC2, 313-, Inositol polyphosphate 5-phosphatase F, Sac domain-containing inositol phosphatase 2, Sac domain-containing phosphoinositide 5-phosphatase 2, hSAC2, INPP5F, KIAA0966, SAC2

**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.

**SAC2 Antibody (N-term) Blocking Peptide - Protein Information****Name** INPP5F ([HGNC:17054](#))**Synonyms** KIAA0966, SAC2**Function**

Inositol 4-phosphatase which mainly acts on phosphatidylinositol 4-phosphate. May be functionally linked to OCRL, which converts phosphatidylinositol 4,5-bisphosphate to phosphatidylinositol, for a sequential dephosphorylation of phosphatidylinositol 4,5-bisphosphate at the 5 and 4 position of inositol, thus playing an important role in the endocytic recycling (PubMed:<a href="http://www.uniprot.org/citations/25869669" target="\_blank">25869669</a>). Regulator of TF:TFRC and integrins recycling pathway, is also involved in cell migration mechanisms (PubMed:<a href="http://www.uniprot.org/citations/25869669" target="\_blank">25869669</a>). Modulates AKT/GSK3B pathway by decreasing AKT and GSK3B phosphorylation (PubMed:<a href="http://www.uniprot.org/citations/17322895" target="\_blank">17322895</a>). Negatively regulates STAT3 signaling pathway through inhibition of STAT3 phosphorylation and translocation to the nucleus (PubMed:<a href="http://www.uniprot.org/citations/25476455" target="\_blank">25476455</a>). Functionally important modulator of cardiac myocyte size and of the cardiac response to stress (By similarity). May play a role as negative regulator of axon regeneration after central nervous system injuries (By similarity).

**Cellular Location**

Membrane, clathrin-coated pit. Early endosome. Recycling endosome. Note=Also found on macropinosomes {ECO:0000250|UniProtKB:Q8CDA1}

**Tissue Location**

Ubiquitous (PubMed:11274189). Highly expressed in brain (PubMed:26203138).

**SAC2 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**SAC2 Antibody (N-term) Blocking Peptide - Images****SAC2 Antibody (N-term) Blocking Peptide - Background**

SAC2 is an inositol 1,4,5-trisphosphate (InsP3) 5-phosphatase and contains a Sac domain. The activity of this protein is specific for phosphatidylinositol 4,5-bisphosphate and phosphatidylinositol 3,4,5-trisphosphate. Alternatively spliced transcript variants have been observed, but most of them are not thought to be protein-coding.

**SAC2 Antibody (N-term) Blocking Peptide - References**

Zhu, W., et al. Circ. Res. 105(12):1240-1247(2009)Thole, J.M., et al. Plant Cell 20(2):381-395(2008)Grupe, A., et al. Am. J. Hum. Genet. 78(1):78-88(2006)