

**SAC2 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP4732a**

**Specification**

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**SAC2 Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9Y2H2</a>
Other Accession	<a href="#">Q8CDA1</a>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	128407
Antigen Region	133-161

**SAC2 Antibody (N-term) - 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

**Target/Specificity**

This SAC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 133-161 amino acids from the N-terminal region of human SAC2.

**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**

SAC2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**SAC2 Antibody (N-term) - 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:[25869669](#)). Regulator of TF:TFRC and integrins recycling pathway, is also involved in cell migration mechanisms (PubMed:[25869669](#)). Modulates AKT/GSK3B pathway by decreasing AKT and GSK3B phosphorylation (PubMed:[17322895](#)). Negatively regulates STAT3 signaling pathway through inhibition of STAT3 phosphorylation and translocation to the nucleus (PubMed:[25476455](#)). 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}

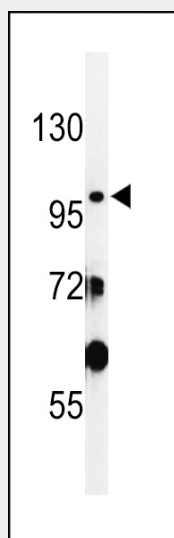
**Tissue Location**

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

**SAC2 Antibody (N-term) - 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](#)

**SAC2 Antibody (N-term) - Images**

Western blot analysis of SAC2 Antibody (N-term) (Cat. #AP4732a) in WiDr cell line lysates

(35ug/lane). SAC2 (arrow) was detected using the purified Pab.

#### **SAC2 Antibody (N-term) - 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) - 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)