

**WIPI2 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP9559b****Specification**

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**WIPI2 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q9Y4P8</a>
Other Accession	<a href="#">Q6AY57</a> , <a href="#">Q80W47</a> , <a href="#">Q5ZHN3</a>
Reactivity	Human, Mouse
Predicted	Chicken, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	49408
Antigen Region	426-454

**WIPI2 Antibody (C-term) - Additional Information****Gene ID** 26100**Other Names**

WD repeat domain phosphoinositide-interacting protein 2, WIPI-2, WIPI49-like protein 2, WIPI2

**Target/Specificity**

This WIPI2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 426-454 amino acids from the C-terminal region of human WIPI2.

**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**

WIPI2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**WIPI2 Antibody (C-term) - Protein Information****Name** WIPI2 ([HGNC:32225](#))

**Function** Component of the autophagy machinery that controls the major intracellular degradation process by which cytoplasmic materials are packaged into autophagosomes and delivered to lysosomes for degradation (PubMed:[20505359](#), PubMed:[28561066](#)). Involved in an early step of the formation of preautophagosomal structures (PubMed:[20505359](#), PubMed:[28561066](#)). Binds and is activated by phosphatidylinositol 3- phosphate (PtdIns3P) forming on membranes of the endoplasmic reticulum upon activation of the upstream ULK1 and PI3 kinases (PubMed:[28561066](#)). Mediates ER-isolation membranes contacts by interacting with the ULK1:RB1CC1 complex and PtdIns3P (PubMed:[28890335](#)). Once activated, WIPI2 recruits at phagophore assembly sites the ATG12-ATG5-ATG16L1 complex that directly controls the elongation of the nascent autophagosomal membrane (PubMed:[20505359](#), PubMed:[28561066](#)).

#### Cellular Location

Preautophagosomal structure membrane; Peripheral membrane protein; Cytoplasmic side. Note=Localizes to omegasomes membranes which are endoplasmic reticulum connected structures at the origin of preautophagosomal structures. Enriched at preautophagosomal structure membranes in response to PtdIns3P.

#### Tissue Location

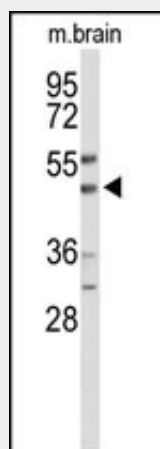
Ubiquitously expressed (at protein level). Highly expressed in heart, skeletal muscle and pancreas. Expression is down- regulated in pancreatic and in kidney tumors

### WIPI2 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](#)

### WIPI2 Antibody (C-term) - Images



Western blot analysis of WIPI2 Antibody (C-term) (Cat. #AP9559b) in mouse brain tissue lysates (35ug/lane). WIPI2 (arrow) was detected using the purified Pab.

### WIPI2 Antibody (C-term) - Background

WD40 repeat proteins are key components of many essential biologic functions. They regulate the assembly of multiprotein complexes by presenting a beta-propeller platform for simultaneous and reversible protein-protein interactions. Members of the WIPI subfamily of WD40 repeat proteins, such as WIPI2, have a 7-bladed propeller structure and contain a conserved motif for interaction with phospholipids (Proikas-Cezanne et al., 2004 [PubMed 15602573]).

#### **WIPI2 Antibody (C-term) - References**

Proikas-Cezanne, T., et al. Oncogene 23(58):9314-9325(2004)

Simpson, J.C., et al. EMBO Rep. 1(3):287-292(2000)

#### **WIPI2 Antibody (C-term) - Citations**

- [Automated Detection of Autophagy Response Using Single Cell-Based Microscopy Assays.](#)
- [WIPI3 and WIPI4  \$\beta\$ -propellers are scaffolds for LKB1-AMPK-TSC signalling circuits in the control of autophagy.](#)