

WIPI2 Antibody (C-Terminus, clone 2A2)
Mouse Monoclonal Antibody
Catalog # ALS17227**Specification**

WIPI2 Antibody (C-Terminus, clone 2A2) - Product Information

Application	IHC-P
Primary Accession	O9Y4P8
Other Accession	26100
Reactivity	Human, Mouse, Rat, Hamster, Guinea Pig
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	49408

WIPI2 Antibody (C-Terminus, clone 2A2) - Additional Information

Gene ID 26100

Other Names

WIPI2, ATG18B, Atg21, DKFZP434J154, WIPI-2, WIPI49-like protein 2, CGI-50

Target/Specificity

Recognizes WIPI2, a mammalian ortholog of Atg18. WIPI2 is recruited to early autophagosomal structures and is required for their maturation into mature autophagosomes.

Reconstitution & Storage

PBS, 0.09% sodium azide. +4°C or -20°C, Avoid repeated freezing and thawing.

Precautions

WIPI2 Antibody (C-Terminus, clone 2A2) is for research use only and not for use in diagnostic or therapeutic procedures.

WIPI2 Antibody (C-Terminus, clone 2A2) - 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: <http://www.uniprot.org/citations/20505359> target="_blank">20505359, PubMed: <http://www.uniprot.org/citations/28561066> target="_blank">28561066). Involved in an early step of the formation of preautophagosomal structures (PubMed: <http://www.uniprot.org/citations/20505359> target="_blank">20505359, PubMed: <http://www.uniprot.org/citations/28561066> target="_blank">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: <http://www.uniprot.org/citations/28561066>)

target="_blank">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

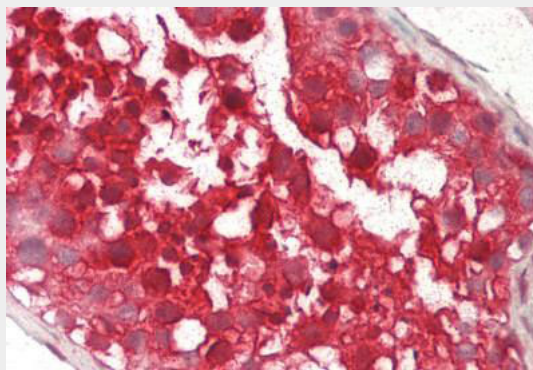
Ubiquitously expressed (at protein level). Highly expressed in heart, skeletal muscle and pancreas. Expression is down- regulated in pancreatic and in kidney tumors

WIPI2 Antibody (C-Terminus, clone 2A2) - Protocols

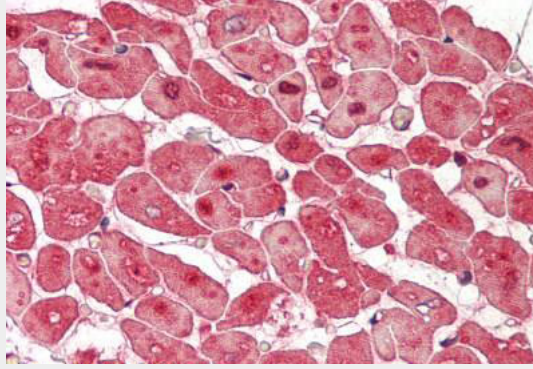
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

WIPI2 Antibody (C-Terminus, clone 2A2) - Images



Human Testis: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Heart: Formalin-Fixed, Paraffin-Embedded (FFPE)

WIPI2 Antibody (C-Terminus, clone 2A2) - Background

Early component of the autophagy machinery being involved in formation of preautophagosomal structures and their maturation into mature phagosomes in response to phosphatidylinositol 3-phosphate (PtdIns3P). May bind PtdIns3P.

WIPI2 Antibody (C-Terminus, clone 2A2) - References

- Proikas-Cezanne T., et al. *Oncogene* 23:9314-9325(2004).
- Lai C.-H., et al. *Genome Res.* 10:703-713(2000).
- Wiemann S., et al. *Genome Res.* 11:422-435(2001).
- Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
- Ota T., et al. *Nat. Genet.* 36:40-45(2004).