

ATG2A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP13648c

Product Information

Application	WB, E
Primary Accession	Q2TAZ0
Other Accession	NP_055919.2
Reactivity	Human
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33276
Calculated MW	212860
Antigen Region	702-731

Additional Information

Gene ID	23130
Other Names	Autophagy-related protein 2 homolog A, ATG2A, KIAA0404
Target/Specificity	This ATG2A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 702-731 amino acids from the Central region of human ATG2A.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	ATG2A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ATG2A {ECO:0000303 PubMed:21887408, ECO:0000312 HGNC:HGNC:29028}
Function	Lipid transfer protein involved in autophagosome assembly (PubMed: 28561066 , PubMed: 30952800 , PubMed: 31271352). Tethers the edge

of the isolation membrane (IM) to the endoplasmic reticulum (ER) and mediates direct lipid transfer from ER to IM for IM expansion (PubMed:[30952800](#), PubMed:[31271352](#)). Binds to the ER exit site (ERES), which is the membrane source for autophagosome formation, and extracts phospholipids from the membrane source and transfers them to ATG9 (ATG9A or ATG9B) to the IM for membrane expansion (PubMed:[30952800](#), PubMed:[31271352](#)). Lipid transfer activity is enhanced by WIPI1 and WDR45/WIPI4, which promote ATG2A-association with phosphatidylinositol 3-monophosphate (PI3P)-containing membranes (PubMed:[31271352](#)). Also regulates lipid droplets morphology and distribution within the cell (PubMed:[22219374](#), PubMed:[28561066](#)).

Cellular Location

Preautophagosomal structure membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:Q96BY7}. Lipid droplet {ECO:0000250|UniProtKB:Q96BY7}. Endoplasmic reticulum membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:P53855}. Note=Localizes to endoplasmic reticulum-autophagosome contact sites.

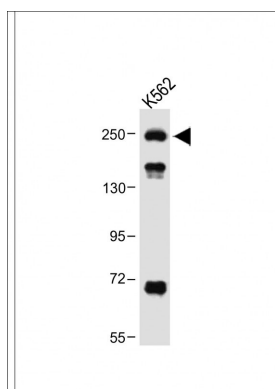
Background

The function of this protein remains unknown.

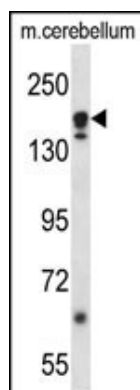
References

Rose, J. Phd, et al. Mol. Med. (2010) In press :
Guru, S.C., et al. Genome Res. 7(7):725-735(1997)

Images



Anti-ATG2A Antibody (Center) at 1:1000 dilution + K562 whole cell lysates/ proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 213 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



ATG2A Antibody (Center) (Cat. #AP13648c) western blot analysis in mouse cerebellum tissue lysates (35ug/lane). This demonstrates the ATG2A antibody detected the ATG2A protein (arrow).