

ATLA2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9367c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q8NHH9
Other Accession	Q6PA06 , Q95LN3
Reactivity	Human
Predicted	Mouse, Monkey, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24820
Calculated MW	66229
Antigen Region	297-326

Additional Information

Gene ID	64225
Other Names	Atlastin-2, 365-, ADP-ribosylation factor-like protein 6-interacting protein 2, ARL-6-interacting protein 2, Aip-2, ATL2, ARL6IP2
Target/Specificity	This ATLA2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 297-326 amino acids from the Central region of human ATLA2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	ATLA2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ATL2 {ECO:0000303 PubMed:14506257, ECO:0000312 HGNC:HGNC:24047}
Function	Atlastin-2 (ATL2) is a membrane-anchored GTPase that mediates the

GTP-dependent fusion of endoplasmic reticulum (ER) membranes, maintaining the continuous ER network. It facilitates the formation of three-way junctions where ER tubules intersect (PubMed:[18270207](#), PubMed:[19665976](#), PubMed:[22065636](#), PubMed:[27619977](#), PubMed:[34817557](#)). Two atlastin-2 on neighboring ER tubules bind GTP and form loose homodimers through the GB1/RHD3-type G domains and 3HB regions. Upon GTP hydrolysis, the 3HB regions tighten, pulling the membranes together to drive their fusion. After fusion, the homodimer disassembles upon release of inorganic phosphate (Pi). Subsequently, GDP dissociates, resetting the monomers to a conformation ready for a new fusion cycle (By similarity).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein.
Note=Localizes at endoplasmic reticulum (ER) three-way tubular junctions (PubMed:27619977)

Tissue Location

Expressed in peripheral tissues (at protein level).

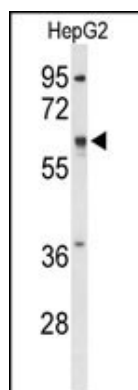
Background

ATLA2 is GTPase tethering membranes through formation of trans-homooligomer and mediating homotypic fusion of endoplasmic reticulum membranes. This protein play a role in endoplasmic reticulum tubular network biogenesis.

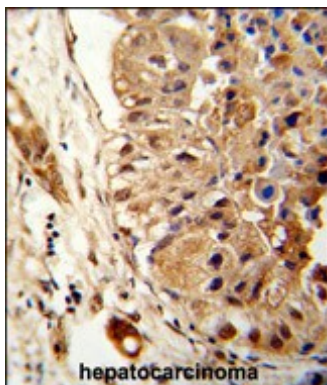
References

Hu,J. Cell 138 (3), 549-561 (2009)
Rismanchi,N. Hum. Mol. Genet. 17 (11), 1591-1604 (2008)
Abel,A. Neurogenetics 5 (4), 239-243 (2004)

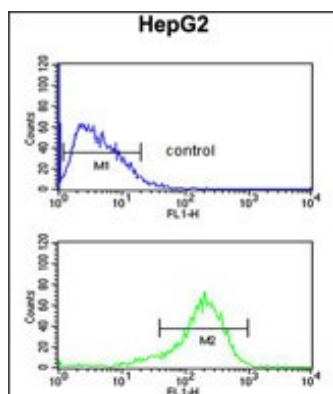
Images



Western blot analysis of ATLA2 Antibody (Center) (Cat. #AP9367c) in HepG2 cell line lysates (35ug/lane). ATLA2 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with ATLA2 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



ATLA2 Antibody (Center) (Cat. #AP9367c) flow cytometric analysis of HepG2 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.