

## **ATLA2 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9367c

## **Specification**

## ATLA2 Antibody (Center) - Product Information

Application FC, IHC-P, WB,E

Primary Accession <u>Q8NHH9</u>

Other Accession <u>Q6PA06</u>, <u>Q95LN3</u>

Reactivity Human

Predicted Monkey, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 297-326

## ATLA2 Antibody (Center) - 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**

FC~~1:10~50 IHC-P~~1:50~100 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  $2-8^{\circ}$ C for up to 2 weeks. For long term storage store at  $-20^{\circ}$ 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.

### ATLA2 Antibody (Center) - 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**

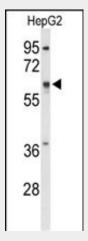
Expressed in peripheral tissues (at protein level).

### **ATLA2 Antibody (Center) - Protocols**

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

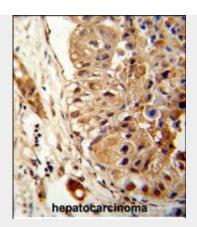
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## ATLA2 Antibody (Center) - Images

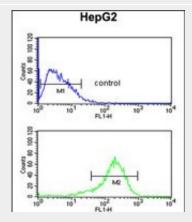


Western blot analysis of ATLA2 Antibody (Center) (Cat. #AP9367c) in HepG2 cell line lysates (35ug/lane). ATLA2 (arrow) was detected using the purified Pab.





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.

## ATLA2 Antibody (Center) - 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.

# **ATLA2 Antibody (Center) - 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)