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# ATLA2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9367c

## Product Information

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|---|---|
| **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

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| **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

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

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|---|---|
| | 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). |

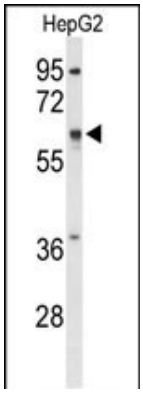
## Background

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.

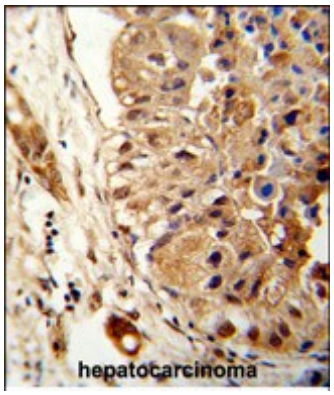
## References


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)

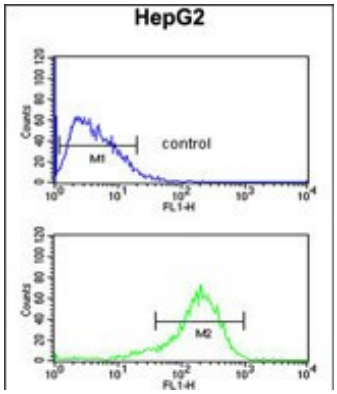

## Images




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'.