

## **ATL3 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4715c

## **Specification**

## **ATL3 Antibody (Center) - Product Information**

Application WB,E
Primary Accession Q6DD88
Other Accession Q0ZHH6

Reactivity Human, Hamster, Mouse

Predicted Rat
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 60542
Antigen Region 217-245

# ATL3 Antibody (Center) - Additional Information

Gene ID 25923

### **Other Names**

Atlastin-3, 365-, ATL3

## Target/Specificity

This ATL3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 217-245 amino acids from the Central region of human ATL3.

## **Dilution**

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°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

ATL3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# ATL3 Antibody (Center) - Protein Information

Name ATL3 (HGNC:24526)



Tel: 858.875.1900 Fax: 858.875.1999

Function Atlastin-3 (ATL3) 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: <u>19665976</u>, PubMed: <u>24459106</u>, PubMed: <u>27619977</u>, PubMed: <u>37102997</u>). Two atlastin-3 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 to endoplasmic reticulum tubules and accumulates in punctuate structures corresponding to 3-way junctions, which represent crossing-points at which the tubules build a polygonal network.

#### **Tissue Location**

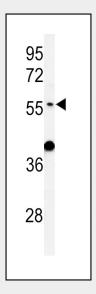
Expressed in the central nervous system and in dorsal root ganglia neurons. Expressed in peripheral tissues (at protein level).

### ATL3 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## ATL3 Antibody (Center) - Images



Western blot analysis of ATL3 Antibody (Center) (Cat. #AP4715c) in mouse liver tissue lysates (35ug/lane). ATL3 (arrow) was detected using the purified Pab.



Western blot analysis of ATL3 Antibody (Center) (Cat. #AP4715c) in CHO cell line lysates (35ug/lane). ATL3 (arrow) was detected using the purified Pab.

# ATL3 Antibody (Center) - Background

ATL3 is GTPase tethering membranes through formation of trans-homooligomer and mediating homotypic fusion of endoplasmic reticulum membranes. ATL3 is function in endoplasmic reticulum tubular network biogenesis.

# **ATL3 Antibody (Center) - References**

Hu, J., et al. Cell 138(3):549-561(2009) Rismanchi, N., et al. Hum. Mol. Genet. 17(11):1591-1604(2008)