

ATL3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP4715c

Product Information

Application	WB, E
Primary Accession	Q6DD88
Other Accession	Q0ZHH6
Reactivity	Human, Hamster, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB25696
Calculated MW	60542
Antigen Region	217-245

Additional Information

Gene ID	25923
Other Names	Atlantin-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.

Protein Information

Name	ATL3 (HGNC:24526)
Function	Atlantin-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:[19665976](#), PubMed:[24459106](#), PubMed:[27619977](#), PubMed:[37102997](#)). 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).

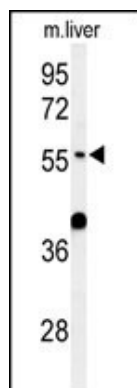
Background

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.

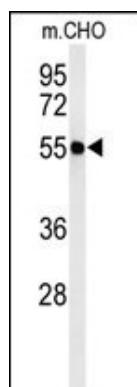
References

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

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.

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