

### ATL1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16799b

### Specification

## ATL1 Antibody (C-term) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Antigen Region WB,E <u>Q8WXF7</u> <u>Q6PST4</u>, <u>Q8BH66</u>, <u>Q60HD2</u>, <u>Q58D72</u>, <u>NP\_001121185.1</u>, <u>NP\_056999.2</u> Human Bovine, Monkey, Mouse, Rat Rabbit Polyclonal Rabbit IgG 477-504

### ATL1 Antibody (C-term) - Additional Information

Gene ID 51062

**Other Names** 

Atlastin-1, 365-, Brain-specific GTP-binding protein, GTP-binding protein 3, GBP-3, hGBP3, Guanine nucleotide-binding protein 3, Spastic paraplegia 3 protein A, ATL1, GBP3, SPG3A

#### Target/Specificity

This ATL1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 477-504 amino acids from the C-terminal region of human ATL1.

Dilution WB~~1:1000

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

ATL1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### ATL1 Antibody (C-term) - Protein Information

Name ATL1



Synonyms GBP3, SPG3A

**Function** GTPase tethering membranes through formation of trans- homooligomers and mediating homotypic fusion of endoplasmic reticulum membranes. Functions in endoplasmic reticulum tubular network biogenesis (PubMed:<u>27619977</u>). May also regulate Golgi biogenesis. May regulate axonal development.

### **Cellular Location**

Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:Q6PST4}. Note=Localizes to endoplasmic reticulum tubular network (PubMed:27619977)

### **Tissue Location**

Expressed predominantly in the adult and fetal central nervous system. Measurable expression in all tissues examined, although expression in adult brain is at least 50-fold higher than in other tissues. Detected predominantly in pyramidal neurons in the cerebral cortex and the hippocampus of the brain. Expressed in upper and lower motor neurons (at protein level)

# ATL1 Antibody (C-term) - Protocols

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

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

## ATL1 Antibody (C-term) - Images



ATL1 Antibody (C-term) (Cat. #AP16799b) western blot analysis in NCI-H292 cell line lysates (35ug/lane).This demonstrates the ATL1 antibody detected the ATL1 protein (arrow).

# ATL1 Antibody (C-term) - Background

The protein encoded by this gene is a GTPase and a Golgi body transmembrane protein. The encoded protein can form a



homotetramer and has been shown to interact with spastin and with mitogen-activated protein kinase kinase kinase kinase 4. This protein may be involved in axonal maintenance as evidenced by the fact that defects in this gene are a cause of spastic paraplegia type 3. Three transcript variants encoding two different isoforms have been found for this gene.

## ATL1 Antibody (C-term) - References

Cirulli, E.T., et al. Eur. J. Hum. Genet. 18(7):815-820(2010) Park, S.H., et al. J. Clin. Invest. 120(4):1097-1110(2010) Yoshida, T., et al. Int. J. Mol. Med. 25(4):649-656(2010) de Leva, M.F., et al. J. Neurol. 257(3):328-331(2010) Oguri, M., et al. Am. J. Hypertens. 23(1):70-77(2010)