abcam

Product datasheet

Anti-SPG3A/ATL1 antibody ab196573

1 Image

Overview

Product name	Anti-SPG3A/ATL1 antibody
Description	Rabbit polyclonal to SPG3A/ATL1
Host species	Rabbit
Specificity	ab196573 detects endogenous level of total SPG3A/ATL1 protein.
Tested applications	**Suitable for:** IHC-P, WB, ICC/IF
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Rat
Immunogen	Recombinant fragment corresponding to Human SPG3A/ATL1 (N terminal). Database link: Q8WXF7
Positive control	WB: SH-SYSY, LOVO, H460, 293T, U87 and U251 cell lysates and mouse brain tissues lysate. ICC/IF: A549 cells.
General notes	This product was previously labelled as SPG3A

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol, 0.87% Sodium chloride PBS is without Mg^{2+} and Ca^{2+}.
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab196573** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/50 - 1/200.
WB		1/500 - 1/2000. Predicted molecular weight: 64 kDa.
ICC/IF		1/50 - 1/200.

Target

Function
GTPase tethering membranes through formation of trans-homooligomer and mediating homotypic fusion of endoplasmic reticulum membranes. Functions in endoplasmic reticulum tubular network biogenesis. May also regulate Golgi biogenesis. May regulate axonal development.

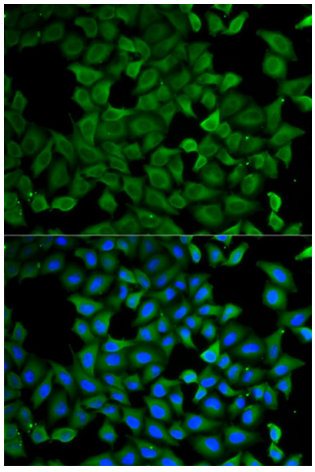
Tissue specificity
Expressed predominantly in the adult and fetal central nervous system. Measurable expression in all tissues examined, although expression in adult brain is at least 50-fold higher than in other tissues. Detected predominantly in pyramidal neurons in the cerebral cortex and the hippocampus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

Involvement in disease
Defects in ATL1 are the cause of spastic paraplegia autosomal dominant type 3 (SPG3) [MIM:182600]; also known as Strumpell-Lorrain syndrome. Spastic paraplegia is a degenerative spinal cord disorder characterized by a slow, gradual, progressive weakness and spasticity of the lower limbs.

Sequence similarities
Belongs to the GBP family. Atlastin subfamily.

Cellular localization
Endoplasmic reticulum membrane. Golgi apparatus membrane. Cell projection > axon.

Images



Immunocytochemistry/Immunofluorescence analysis of A549 cells labelling SPG3A/ATL1 with ab196573. DAPI (blue) was used as for nuclear staining.

Immunocytochemistry/ Immunofluorescence - Anti-SPG3A/ATL1 antibody (ab196573)

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