

### SPG3A Antibody (monoclonal) (M10)

Mouse monoclonal antibody raised against a partial recombinant SPG3A. Catalog # AT4020a

#### Specification

# SPG3A Antibody (monoclonal) (M10) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB <u>Q8WXF7</u> <u>NM\_015915</u> Human, Rat mouse Monoclonal IgG1 Kappa 63544

# SPG3A Antibody (monoclonal) (M10) - 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** SPG3A (NP\_056999, 1 a.a. ~ 100 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000

**Format** Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

SPG3A Antibody (monoclonal) (M10) is for research use only and not for use in diagnostic or therapeutic procedures.

#### SPG3A Antibody (monoclonal) (M10) - Protocols

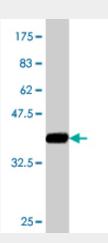
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot

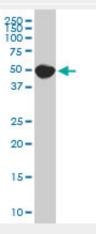


- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

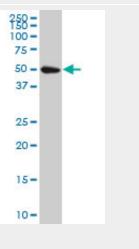
SPG3A Antibody (monoclonal) (M10) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa).



SPG3A monoclonal antibody (M10), clone 1B11. Western Blot analysis of SPG3A expression in PC-12 ( (Cat # AT4020a )





SPG3A monoclonal antibody (M10), clone 1B11. Western Blot analysis of SPG3A expression in IMR-32 ( (Cat # AT4020a )

# SPG3A Antibody (monoclonal) (M10) - 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.

### SPG3A Antibody (monoclonal) (M10) - References

Hereditary spastic paraplegia proteins REEP1, spastin, and atlastin-1 coordinate microtubule interactions with the tubular ER network. Park SH, et al. J Clin Invest, 2010 Apr 1. PMID 20200447.Association of genetic variants with hemorrhagic stroke in Japanese individuals. Yoshida T, et al. Int J Mol Med, 2010 Apr. PMID 20198315.Common genetic variation and performance on standardized cognitive tests. Cirulli ET, et al. Eur J Hum Genet, 2010 Jul. PMID 20125193.Assessment of a polymorphism of SDK1 with hypertension in Japanese Individuals. Oguri M, et al. Am J Hypertens, 2010 Jan. PMID 19851296.Complex phenotype in an Italian family with a novel mutation in SPG3A. de Leva MF, et al. J Neurol, 2010 Mar. PMID 19768483.