

SPG3A Antibody (monoclonal) (M03)**Mouse monoclonal antibody raised against a partial recombinant SPG3A.****Catalog # AT4019a****Specification**

SPG3A Antibody (monoclonal) (M03) - Product Information

Application	WB, E
Primary Accession	Q8WXF7
Other Accession	NM_015915
Reactivity	Human, Rat
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 Kappa
Calculated MW	63544

SPG3A Antibody (monoclonal) (M03) - 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

E~~N/A

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) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

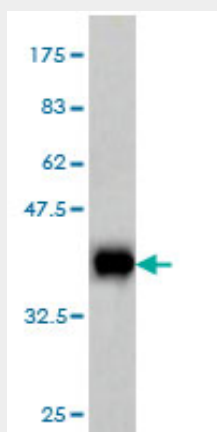
SPG3A Antibody (monoclonal) (M03) - Protocols

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

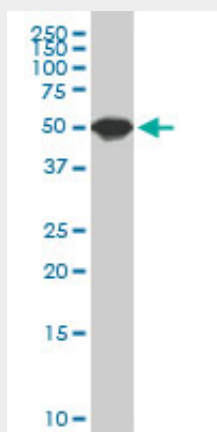
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

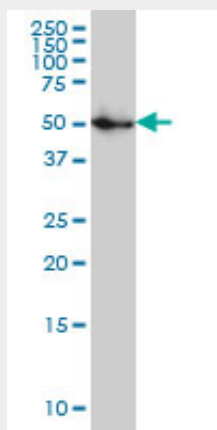
SPG3A Antibody (monoclonal) (M03) - Images



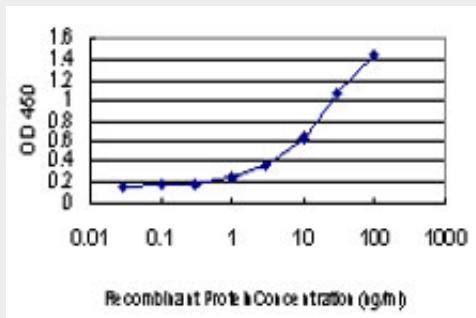
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 kDa) .



SPG3A monoclonal antibody (M03), clone 1B9. Western Blot analysis of SPG3A expression in PC-12 ((Cat # AT4019a)



SPG3A monoclonal antibody (M03), clone 1B9 Western Blot analysis of SPG3A expression in IMR-32 (Cat # AT4019a)



Detection limit for recombinant GST tagged SPG3A is approximately 1ng/ml as a capture antibody.

SPG3A Antibody (monoclonal) (M03) - 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 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) (M03) - 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.