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SPG11 Antibody
Catalog # ASC10847

Specification

SPG11 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q96JI7
Other Accession	AAI53880, 158253417
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**SPG11 antibody can be used for detection of SPG11 by Western blot at 0.5 - 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL.**

SPG11 Antibody - Additional Information

Gene ID	**80208**

Target/Specificity
SPG11;

Reconstitution & Storage
SPG11 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
SPG11 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SPG11 Antibody - Protein Information

Name SPG11

Synonyms KIAA1840

Function
May play a role in neurite plasticity by maintaining cytoskeleton stability and regulating synaptic vesicle transport.

Cellular Location
Cytoplasm, cytosol. Nucleus. Cell projection, axon. Cell projection, dendrite. Note=Mainly cytoplasmic

Tissue Location
Expressed in all structures of brain, with a high expression in cerebellum. Expressed in cortical

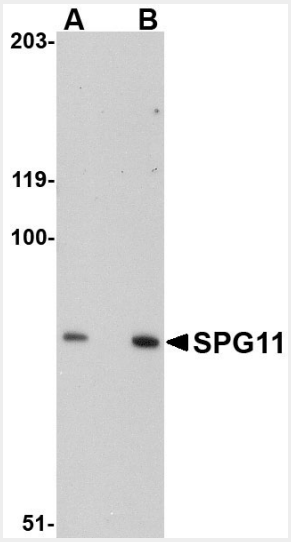
projection neurons

SPG11 Antibody - Protocols

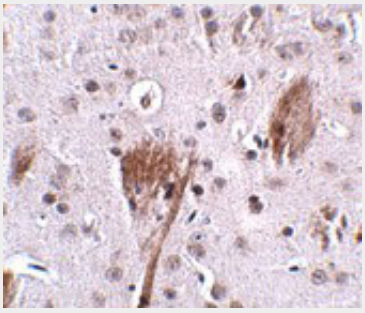
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SPG11 Antibody - Images



Western blot analysis of SPG11 in mouse heart tissue lysate with SPG11 antibody at (A) 0.5 and (B) 1 µg/mL.



Immunohistochemistry of SPG11 in mouse brain tissue with SPG11 antibody at 2.5 µg/mL.

SPG11 Antibody - Background

SPG11 Antibody: Hereditary spastic paraplegias (HSPs) are genetically and phenotypically heterogeneous disorders. Spastic paraplegia with thinning of the corpus callosum (ARHSP-TCC) is a relatively frequent form of complicated hereditary spastic paraplegia (cHSP) in which mental

retardation and muscle stiffness at onset are followed by slowly progressive paraparesis and cognitive deterioration. Mutations of the SPG11 gene encoding the spatacsin protein have been identified as a major cause of HSP-TCC. Spatacsin is a potential transmembrane protein that is phosphorylated upon DNA damage. It is expressed in all structures of the brain, with a high expression in the cerebellum. SPG11 mutations may occur more frequently in familial than sporadic forms of cHSP without TCC. Kjellin syndrome is found to be associated with mutations in not only the SPG15 gene but also SPG11 gene. Recent studies show Parkinsonism may initiate SPG11-linked HSP TCC and that SPG11 may cause juvenile Parkinsonism.

SPG11 Antibody - References

Stevanin G, Azzedine H, Denora P, et al. Mutations in SPG11, encoding spatacsin, are a major cause of spastic paraplegia with thin corpus callosum. Nature Gen.2007; 39:366-372.
Paisan-Ruiz C, Dogu O, Yilmaz A, et al. SPG11 mutations are common in familial cases of complicated hereditary spastic paraplegia. Neurology2008; 70:1384-9.
Crimella C, Arnoldi A, Crippa F, et al. Point mutations and a large intragenic deletion in SPG11 in complicated spastic paraplegia without thin corpus callosum. J. Med. Genet.2009; 46:345-51.
Orlén H, Melberg A, Raininko R, et al. SPG11 mutations cause Kjellin syndrome, a hereditary spastic paraplegia with thin corpus callosum and central retinal degeneration. Am. J. Med. Genet. B Neuropsychiatr. Genet.2009; epub.