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Kinesin 5A (Kif5A) Antibody (C-term) Blocking peptide

Synthetic peptide
Catalog # BP6349b

Specification

Kinesin 5A (Kif5A) Antibody (C-term) Blocking peptide - Product Information

Primary Accession Q12840

Kinesin 5A (Kif5A) Antibody (C-term) Blocking peptide - Additional Information

Gene ID 3798

Other Names
Kinesin heavy chain isoform 5A, Kinesin heavy chain neuron-specific 1, Neuronal kinesin heavy chain, NKHC, KIF5A, NKHC1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6349b was selected from the C-term region of human Kif5A. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Kinesin 5A (Kif5A) Antibody (C-term) Blocking peptide - Protein Information

Name KIF5A

Kinesin 5A (Kif5A) Antibody (C-term) Blocking peptide - Background

Kif5A is a member of the kinesin family of proteins. Members of this family are part of a multisubunit complex that functions as a microtubule motor in intracellular organelle transport. Mutations in this protein cause autosomal dominant spastic paraplegia 10.

Kinesin 5A (Kif5A) Antibody (C-term) Blocking peptide - References

Fichera, M., et al., Neurology 63(6):1108-1110 (2004).Reid, E., et al., Am. J. Hum. Genet. 71(5):1189-1194 (2002).Kanai, Y., et al., J. Neurosci. 20(17):6374-6384 (2000).Reid, E., et al., Am. J. Hum. Genet. 65(3):757-763 (1999).Rahman, A., et al., J. Cell Biol. 146(6):1277-1288 (1999).

Synonyms NKHC1

Function
Microtubule-dependent motor required for slow axonal transport of neurofilament proteins (NFH, NFM and NFL). Can induce formation of neurite-like membrane protrusions in non-neuronal cells in a ZFYVE27-dependent manner. The ZFYVE27-KIF5A complex contributes to the vesicular transport of VAPA, VAPB, SURF4, RAB11A, RAB11B and RTN3 proteins in neurons. Required for anterograde axonal transportation of MAPK8IP3/JIP3 which is essential for MAPK8IP3/JIP3 function in axon elongation.

Cellular Location
Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q6QLM7}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q6QLM7}. Perikaryon {ECO:0000250|UniProtKB:Q6QLM7}. Note=Concentrated in the cell body of the neurons, particularly in the perinuclear region {ECO:0000250|UniProtKB:Q6QLM7}

Tissue Location
Distributed throughout the CNS but is highly enriched in subsets of neurons

Kinesin 5A (Kif5A) Antibody (C-term) Blocking peptide - Protocols

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

- Blocking Peptides