

**Mouse Kif5A-1 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP6349a****Specification**

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**Mouse Kif5A-1 Antibody (C-term) Blocking Peptide - Product Information**

Primary Accession [P33175](#)  
Other Accession [Q6PDY7](#)

**Mouse Kif5A-1 Antibody (C-term) Blocking Peptide - Additional Information**

**Gene ID** 16572

**Other Names**

Kinesin heavy chain isoform 5A, Kinesin heavy chain neuron-specific 1, Neuronal kinesin heavy chain, NKHC, Kif5a, Kiaa4086, Kif5, Nkhc1

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP6349a](/product/products/AP6349a) was selected from the C-term region of human Mouse Kif5A-1. 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.

**Mouse Kif5A-1 Antibody (C-term) Blocking Peptide - Protein Information**

**Name** Kif5a

**Synonyms** Kiaa4086, Kif5, Nkhc1

**Function**

Microtubule-dependent motor required for slow axonal transport of neurofilament proteins (NFH, NFM and NFL) (PubMed: [12682084](http://www.uniprot.org/citations/12682084)). 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 (PubMed: [21976701](http://www.uniprot.org/citations/21976701)). Required for anterograde axonal transportation of MAPK8IP3/JIP3 which is essential for MAPK8IP3/JIP3 function in axon elongation (By similarity).

**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}

**Mouse Kif5A-1 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**Mouse Kif5A-1 Antibody (C-term) Blocking Peptide - Images****Mouse Kif5A-1 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.

**Mouse Kif5A-1 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).