

KIF5 (IN) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat KIF5 (IN)

Instruction Manual

Catalog Number	PK-AB718-4291
Synonyms	KIF5 Antibody: Kinesin heavy chain isoform 5, neuronal kinesin heavy chain, NKHC
Description	The kinesin superfamily proteins (KIFs) are microtubule-dependent motors that slide along microtubules and transport cellular organelles and mRNA to different parts of the cell. In neurons, KIF5 performs this role in an anterograde fashion from the neuronal cell body to axonal or dendritic terminals. KIF5 was initially differentiated from the ubiquitously expressed kinesin as being highly enriched in subsets of neurons and selectively concentrated in the cell body. KIF5 has at least three known isoforms; this antibody recognizes all three. Mutations in one of the isoforms of KIF5 (KIF5A) are thought to be involved in hereditary spastic paraplegias.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	KIF5 antibody was raised in rabbits against a 20 amino acid peptide from near the center of human KIF5.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C 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.
Applications	E, WB, ICC, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. KIF5 antibody can be used for detection of KIF5 by Western blot at 0.5 - 1 µg/mL. Antibody can also be used for immunocytochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.
Images	Available upon request.
References	Hirokawa N. mRNA transport in dendrites: RNA granules, motors and tracks. J. Neurosci. 2006; 26:7139-42. Niclas J, Navone F, Hom-Booher N, et al. Cloning and localization of a conventional KIF5 motor expressed exclusively in neurons. Neuron 1994; 12:1059-72. Fichera M, Lo Giudice M, Falco M, et al. Evidence of kinesin heavy chain (KIF5A) involvement in pure hereditary spastic paraplegia. Neurology 2004; 63:1108-10.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4291P; KIF5 Peptide Cat.No. PK-AB718-1204; K562 Cell Lysate

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