

KIF1B (L-20): sc-18739

BACKGROUND

93KIF1B is a member of the KIF1/Unc104 family of kinesin-like proteins that are involved in the transport of mitochondria or synaptic vesicles in axons. KIF1B is an amino-terminal-type motor protein that is ubiquitously expressed, with the most abundant levels in differentiated nerve cells. The human KIF1B gene maps to chromosome 1p36.22. Defects in axonal transport due to mutations at the KIF1B gene can underlie the human peripheral neuropathy phenotype. The mouse KIF1B gene generates an alternatively spliced transcript, which produces two isoforms.

CHROMOSOMAL LOCATION

Genetic locus: KIF1B (human) mapping to 1p36.22; Kif1b (mouse) mapping to 4 E2.

SOURCE

KIF1B (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KIF1B of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-18739 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

KIF1B (L-20) is recommended for detection of KIF1B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

KIF1B (L-20) is also recommended for detection of KIF1B in additional species, including equine and porcine.

Suitable for use as control antibody for KIF1B siRNA (h): sc-35749, KIF1B siRNA (m): sc-35750, KIF1B shRNA Plasmid (h): sc-35749-SH, KIF1B shRNA Plasmid (m): sc-35750-SH, KIF1B shRNA (h) Lentiviral Particles: sc-35749-V and KIF1B shRNA (m) Lentiviral Particles: sc-35750-V.

Molecular Weight of KIF1B isoform 1: 204 kDa.

Molecular Weight of KIF1B isoform 2α: 199 kDa.

Molecular Weight of KIF1B isoform 3β: 130 kDa.

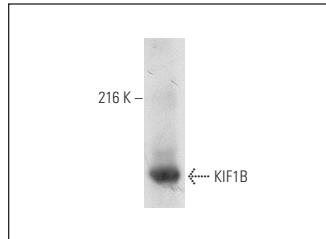
Molecular Weight of KIF1B isoform 4: 205 kDa.

Positive Controls: JAR cell lysate: sc-2276, IMR-32 cell lysate: sc-2409 or HeLa whole cell lysate: sc-2200.

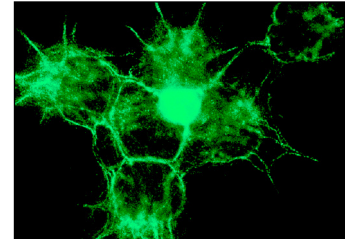
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



KIF1B (L-20): sc-18739. Western blot analysis of KIF1B expression in IMR-32 whole cell lysate.



KIF1B (L-20): sc-18739. Immunofluorescence staining of methanol-fixed JAR cells showing membrane and cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Simonin, Y., et al. 2007. Axonal involvement in the Wlds neuroprotective effect: analysis of pure motoneurons in a mouse model protected from motor neuron disease at a pre-symptomatic age. *J. Neurochem.* 101: 530-542.
- Schlisio, S., et al. 2008. The Kinesin KIF1Bb acts downstream from EglN3 to induce apoptosis and is a potential 1p36 tumor suppressor. *Genes Dev.* 22: 884-893.
- Melo, T.Q., et al. 2013. Rotenone-dependent changes of anterograde motor protein expression and mitochondrial mobility in brain areas related to neurodegenerative diseases. *Cell. Mol. Neurobiol.* 33: 327-335.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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Try **KIF1B (E-12): sc-376246**, our highly recommended monoclonal alternative to KIF1B (L-20).