



Rabbit Anti-KIF1B antibody

SL11033R

Product Name:	KIF1B
Chinese Name:	驱动蛋白家族成员1B抗体
Alias:	Charcot Marie Tooth neuropathy 2A; CMT 2; CMT 2A; CMT 2A1; CMT2 A; CMT2 A1; CMT2; CMT2A 1; CMT2A; CMT2A1; D4M11e; HMSN II; HMSNII; HMSNII, hereditary motor sensory neuropathy II; KIF 1B; KIF1 B; KIF1B p130; KIF1B p204; KIF1Bp130; KIF1Bp204; kinesin family member 1B; Kinesin like protein KIF1B; Klp; KIF1B HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	204kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human KIF1B:13-120/1816
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	KIF1B, or kinesin-like protein (Klp) functions as a motor for mitochondrial transport, and has a microtubule plus end-directed motility. The KIF1B beta isoform is abundant in brain, while the alpha isoform is abundant in skeletal muscle. Mutations in the KIF1B

gene are the cause of Charcot-Marie-Tooth disease type 2A1, which is a primary peripheral axon neuropathy. The KIF1B beta isoform is down-regulated in sporadic amyotrophic lateral sclerosis (ALS).

Function:

Motor for anterograde transport of mitochondria. Has a microtubule plus end-directed motility. Isoform 2 is required for induction of neuronal apoptosis.

Subunit:

Interacts (via C-terminus end of the kinesin-motor domain) with CHP1; the interaction occurs in a calcium-dependent manner (By similarity). Interacts with KBP.

Subcellular Location:

Cytoplasmic vesicle (By similarity). Cytoplasm, cytoskeleton (By similarity). Mitochondrion. Note=Colocalizes with synaptophysin at synaptic cytoplasmic transport vesicles in the neurites of hippocampal neurons (By similarity).

Tissue Specificity:

Isoform 3 is abundant in the skeletal muscle. It is also expressed in fetal brain, lung and kidney, and adult heart, placenta, testis, ovary and small intestine. Isoform 2 is abundant in the brain and also expressed in fetal heart, lung, liver and kidney, and adult skeletal muscle, placenta, liver, kidney, heart, spleen, thymus, prostate, testis, ovary, small intestine, colon and pancreas.

DISEASE:

Defects in KIF1B are the cause of Charcot-Marie-Tooth disease type 2A1 (CMT2A1) [MIM:118210]. CMT2A1 is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathy or CMT1, and primary peripheral axonal neuropathy or CMT2. Neuropathies of the CMT2 group are characterized by signs of axonal regeneration in the absence of obvious myelin alterations, normal or slightly reduced nerve conduction velocities, and progressive distal muscle weakness and atrophy.

Defects in KIF1B are the cause of susceptibility to neuroblastoma type 1 (NBLST1) [MIM:256700]. A common neoplasm of early childhood arising from embryonic cells that form the primitive neural crest and give rise to the adrenal medulla and the sympathetic nervous system.

Defects in KIF1B are a cause of susceptibility to pheochromocytoma (PCC) [MIM:171300]. A catecholamine-producing tumor of chromaffin tissue of the adrenal medulla or sympathetic paraganglia. The cardinal symptom, reflecting the increased secretion of epinephrine and norepinephrine, is hypertension, which may be persistent or intermittent.

Similarity:

Belongs to the kinesin-like protein family. Unc-104 subfamily.

Contains 1 FHA domain.
Contains 1 kinesin-motor domain.
Contains 1 PH domain.

SWISS:
O60333

Gene ID:
23095

Database links:

[Entrez Gene: 23095](#)Human

[Entrez Gene: 16561](#)Mouse

[Entrez Gene: 117548](#)Rat

[Omim: 605995](#)Human

[SwissProt: O60333](#)Human

[SwissProt: Q60575](#)Mouse

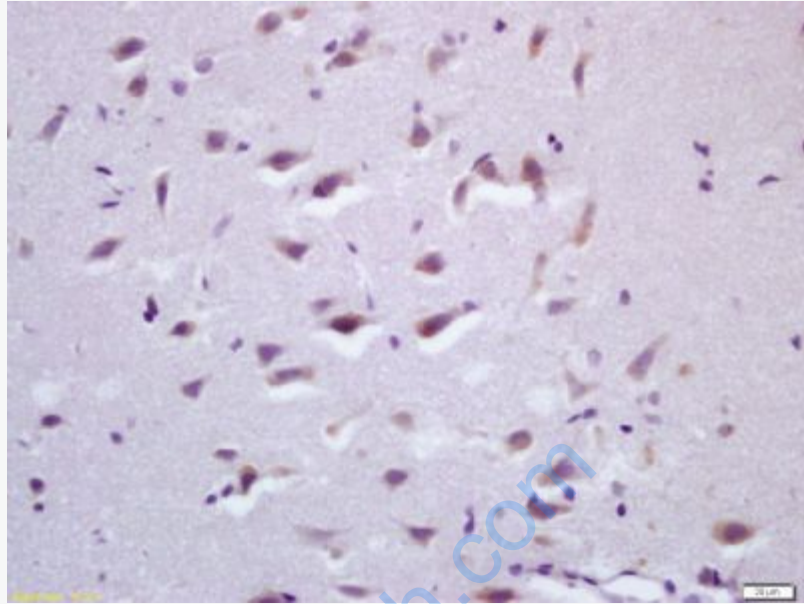
[SwissProt: O88658](#)Rat

[Unigene: 97858](#)Human

[Unigene: 402393](#)Mouse

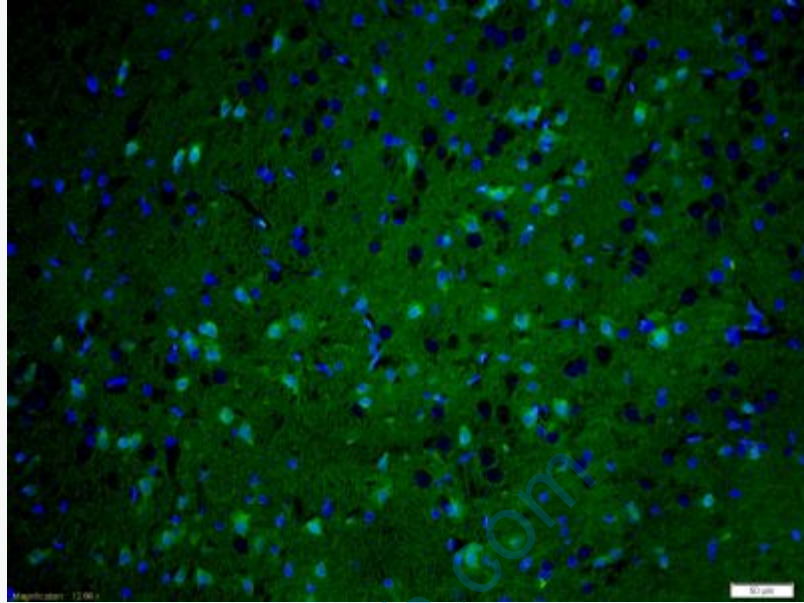
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-KIF1B Polyclonal Antibody, Unconjugated(SL11033R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-KIF1B Polyclonal Antibody, FITC conjugated(SL11033R) 1:200,
at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to
stain the cell nuclei