



Rabbit Anti-KIF1A antibody

SL11350R

Product Name:	KIF1A
Chinese Name:	微管驱动蛋白家族成员1A抗体
Alias:	ATSV; Axonal transporter of synaptic vesicles; C2orf20; hUnc 104; hUnc-104; hunc104; Kif1a; KIF1A related protein; KIF1A_HUMAN; kinesin like protein; kinesin like protein KIF1A; Kinesin-like protein KIF1A; Microtubule based motor; Microtubule based motor KIF1A; Microtubule-based motor KIF1A; Unc 104 and KIF1A related protein; Unc 104; Unc-104- and KIF1A-related protein.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Sheep,
Applications:	ELISA=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:	191kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human KIF1A:1-100/1690
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:	The kinesins constitute a large family of microtubule-dependent motor proteins, which are responsible for the distribution of numerous organelles, vesicles and macromolecular complexes throughout the cell. Individual kinesin members play crucial roles in cell

division, intracellular transport and membrane trafficking events including endocytosis and transcytosis. KIF1C is a member of the KIF1/Unc104 family of kinesin-like proteins, which are involved in the transport of mitochondria or synaptic vesicles in axons. The human KIF1A gene encodes a neuron-specific motor protein that delivers synaptic vesicle precursors to nerve terminals. KIF1A is a monomeric, globular molecule and has rapid anterograde motor activity (1.2 microns/s). KIF1A-mediated axonal transport plays a critical role in viability, maintenance and function of neurons, particularly mature neurons. KIF1A is associated with organelles that contain synaptic vesicle proteins such as synaptotagmin, synaptophysin and Rab 3A.

Function:

Motor for anterograde axonal transport of synaptic vesicle precursors.

Subunit:

Monomer. Interacts with PPFIA1 and PPFIA4 (By similarity).

Subcellular Location:

Cytoplasm, cytoskeleton. Note=Expressed in distal regions of neurites.

Tissue Specificity:

Expressed in neurons.

DISEASE:

Spastic paraplegia 30, autosomal recessive (SPG30) [MIM:610357]: A form of spastic paraplegia, a neurodegenerative disorder characterized by a slow, gradual, progressive weakness and spasticity of the lower limbs. Rate of progression and the severity of symptoms are quite variable. Initial symptoms may include difficulty with balance, weakness and stiffness in the legs, muscle spasms, and dragging the toes when walking. In some forms of the disorder, bladder symptoms (such as incontinence) may appear, or the weakness and stiffness may spread to other parts of the body. SPG30 is characterized by onset in the first or second decades of unsteady spastic gait and hyperreflexia of the lower limbs. Note=The disease is caused by mutations affecting the gene represented in this entry.

Hereditary sensory neuropathy 2C (HSN2C) [MIM:614213]: A neurodegenerative disorder characterized by onset in the first decade of progressive distal sensory loss leading to ulceration and amputation of the fingers and toes. Affected individuals also develop distal muscle weakness, primarily affecting the lower limbs. Note=The disease is caused by mutations affecting the gene represented in this entry.

Mental retardation, autosomal dominant 9 (MRD9) [MIM:614255]: A disorder characterized by significantly below average general intellectual functioning associated with impairments in adaptive behavior and manifested during the developmental period. Note=The disease is caused by mutations affecting the gene represented in this entry.

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:
Q12756

Gene ID:
547

Database links:

[Entrez Gene: 547](#)Human

[SwissProt: Q12756](#)Human

[SwissProt: P33173](#)Mouse

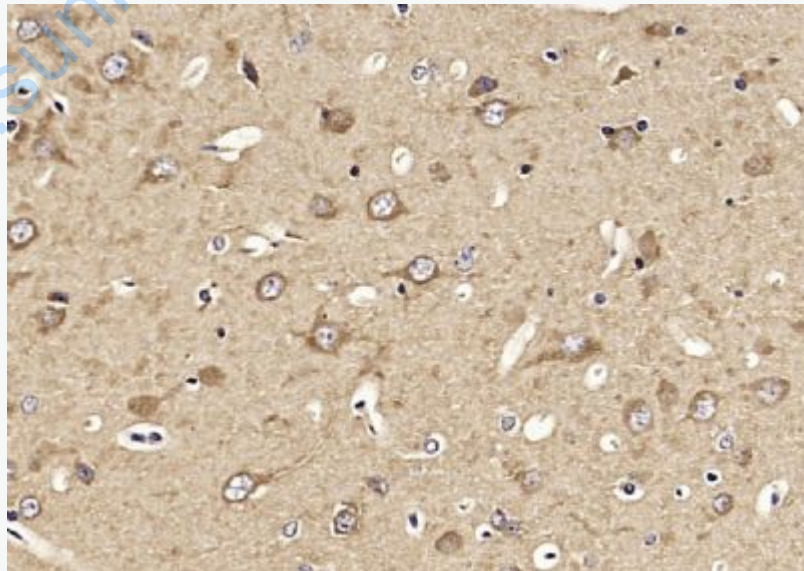
[Unigene: 516802](#)Human

[Unigene: 276408](#)Mouse

Important Note:

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

Picture:



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by microwave in sodium citrate buffer (pH6.0) ; Block endogenous peroxidase by 3%

hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min;
Antibody incubation with (KIF1A) Polyclonal Antibody, Unconjugated (SL11350R)
at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody
(labeled with HRP)and DAB staining.

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