## For Research Use Only

## KIF5A Recombinant antibody

Catalog Number:84013-5-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

84013-5-RR BC146670 GeneID (NCBI): Size:

100ul, Concentration: 400 ug/ml by Nanodrop: **UNIPROT ID:** Q12840 Rabbit Full Name:

Isotype: kinesin family member 5A

IgG Calculated MW: Immunogen Catalog Number: 1032 aa, 117 kDa AG15518 Observed MW:

118-120 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, FC (Intra), ELISA

Species Specificity:

human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

**Purification Method:** Protein A purfication

CloneNo.: 241124H5

Recommended Dilutions: WB 1:1000-1:8000 IHC 1:50-1:500

**Positive Controls:** 

WB: SH-SY5Y cells, U-87-MG cells, mouse brain tissue,

rat brain tissue

IHC: mouse brain tissue,

## **Background Information**

Kinesin superfamily proteins (KIFs) are microtubule-based molecular motors essential for the intracellular transport of various cargos, including organelles, proteins, and RNAs. KIF5A is expressed exclusively in neurons and transports neuronal cargoes into axons and dendrites. KIF5A mutations have been associated with Charcot-Marie-Tooth Type 2, an axonal peripheral neuropathy characterized by progressive loss of peripheral sensation and muscle wasting.

Storage

Store at -20°C. Stable for one year after shipment.

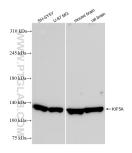
Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

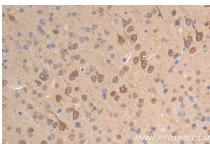
## Selected Validation Data



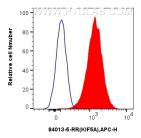
SH-SY5Y cells were subjected to SDS PAGE followed by western blot with 84013-5-RR (KIF5A antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



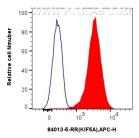
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 84013-5-RR (KIF5A antibody) at dilution of 1:100 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



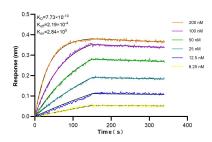
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 84013-5-RR (KIF5A antibody) at dilution of 1:100 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 SH-SY5Y cells were intracellularly stained with 0.25 ug KIF5A Recombinant antibody (84013-5-RR, Clone:241124H5) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



1x10^6 K562 were intracellularly stained with 0.25 ug KIF5A Recombinant antibody (84013-5-RR, Clone:241124H5) and APC-Conjugated Goat Anti-Rabbit 1gG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 84013-5-RR against Human KIF5A were performed. The affinity constant is 0.773 nM.