

For Research Use Only

# KIF5A Recombinant antibody, PBS Only (Capture)

Catalog Number: 84013-4-PBS



## Basic Information

<b>Catalog Number:</b> 84013-4-PBS	<b>GenBank Accession Number:</b> BC146670	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 3798	<b>CloneNo.:</b> 241124H1
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q12840	
<b>Isotype:</b> IgG	<b>Full Name:</b> kinesin family member 5A	
<b>Immunogen Catalog Number:</b> AG15518	<b>Calculated MW:</b> 1032 aa, 117 kDa	
	<b>Observed MW:</b> 118-120 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, FC (Intra), Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## Product Information

84013-4-PBS targets KIF5A as part of a matched antibody pair:

MP00967-1: 84013-4-PBS capture and 84013-3-PBS detection (validated in Cytometric bead array)

MP00967-2: 84013-4-PBS capture and 84013-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

Kinesin superfamily proteins (KIFs) are microtubule-based molecular motors essential for the intracellular transport of various cargos, including organelles, proteins, and RNAs. KIF 5A is expressed exclusively in neurons and transports neuronal cargoes into axons and dendrites. KIF 5A 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

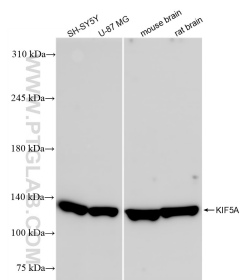
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

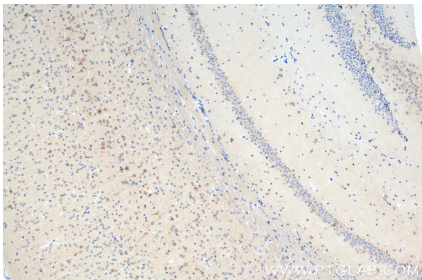
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

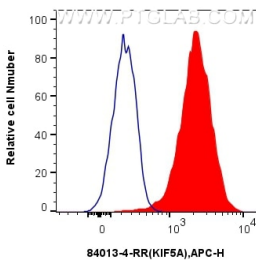
Selected Validation Data



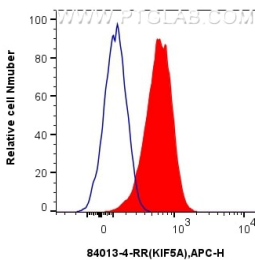
rat brain tissue were subjected to SDS PAGE followed by western blot with 84013-4-RR (KIF5A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84013-4-PBS in a different storage buffer formulation.



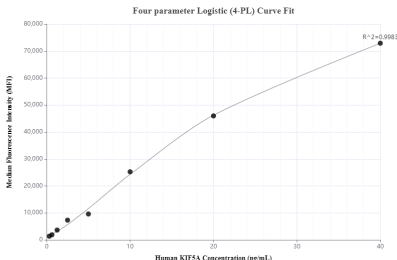
Immunofluorescent analysis of (4% PFA) fixed PC-12 cells using KIF5A antibody (84013-4-RR, Clone: 241124H1 ) at dilution of 1:250 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84013-4-PBS in a different storage buffer formulation.



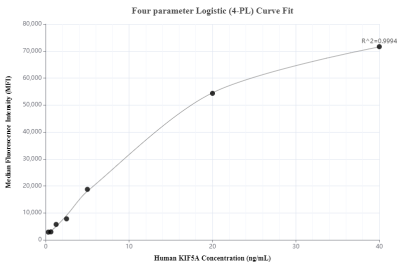
1x10<sup>6</sup> K-562 cells were intracellularly stained with 0.25 ug KIF5A Recombinant antibody (84013-4-RR, Clone:241124H1) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 84013-4-PBS in a different storage buffer formulation.



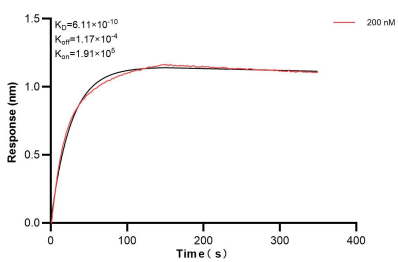
1x10<sup>6</sup> SH-SY5Y cells were intracellularly stained with 0.25 ug KIF5A Recombinant antibody (84013-4-RR, Clone:241124H1) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 84013-4-PBS in a different storage buffer formulation.



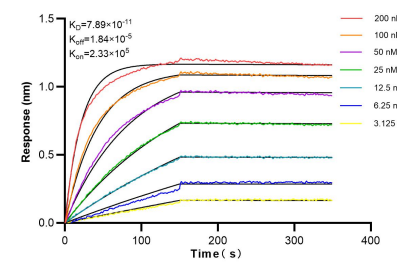
Cytometric bead array standard curve of MP00967-1, KIF5A Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84013-4-PBS. Detection antibody: 84013-3-PBS. Standard: Ag15518. Range: 0.313-40 ng/mL.



Cytometric bead array standard curve of MP00967-2, KIF5A Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84013-4-PBS. Detection antibody: 84013-1-PBS. Standard: Ag15518. Range: 0.313-40 ng/mL.



Biolayer interferometry (BLI) kinetic assay of 84013-4-PBS against Human KIF5A was performed. The affinity constant is 0.611 nM.



Biolayer interferometry (BLI) kinetic assays of 84013-4-RR against Human KIF5A were performed. The affinity constant is 78.9 pM.