

### KIF13B Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54845

### **Specification**

# **KIF13B Polyclonal Antibody - Product Information**

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype <b>Purity</b> affinity purified by Protein A	WB, IHC-P, IHC-F, IF, ICC, E <u>O9NOT8</u> Rat, Pig, Bovine Rabbit Polyclonal 203 KDa Liquid KLH conjugated synthetic peptide derived from human KIF13B 351-450/1826 IgG
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION SIMILARITY	Cytoplasm; cytoskeleton. Belongs to the kinesin-like protein family. Contains 1 CAP-Gly domain. Contains 1 FHA domain. Contains 1 kinesin-motor domain.
SUBUNIT	Binds to DLG1 and DLG4. Interacts (when phosphorylated at Ser-1381 and Ser-1410) with 14-3-3.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	

### **Background Descriptions**

KIF13B is also known as Kinesin-like protein GAKIN or GAKIN and is a 1,826 amino acid protein that is widely expressed in tissues, with highest expression in brain and kidney. KIF13B is localized to the cytoplasm, as well as to the cytoskeleton, and is thought to be a microtubule-dependent motor protein which is able to bind to a variety of proteins in order to traffic them to various locations throughout the cell. KIF13B belongs to the kinesin-like protein family and possesses three domains typical of the kinesin-like protein family, namely an N-terminal motor domain with an ATP-binding motif, an FHA domain which is known to bind diverse cargos and a large stalk domain involved in protein-protein binding. Additionally, KIF13B has a microtubule-interacting sequence which is known as the CAP-Gly domain at its C-terminus. The CAP-Gly domain is highly conserved domain among eukaryotes, and in humans, defects in the CAP-Gly domain are implicated in many diseases affecting the trafficking of vesicles, neuromuscular junctions and lysosome proliferation.

# KIF13B Polyclonal Antibody - Additional Information



Gene ID 23303

**Other Names** Kinesin-like protein KIF13B, Kinesin-like protein GAKIN, KIF13B, GAKIN, KIAA0639

Target/Specificity Ubiquitous.

Dilution

<span class ="dilution\_WB">WB~~1:1000</span><br \><span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution E">E~~N/A</span>

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

# **KIF13B Polyclonal Antibody - Protein Information**

Name KIF13B

Synonyms GAKIN, KIAA0639

Function

Involved in reorganization of the cortical cytoskeleton. Regulates axon formation by promoting the formation of extra axons. May be functionally important for the intracellular trafficking of MAGUKs and associated protein complexes.

**Cellular Location** 

Cytoplasm, cytoskeleton. Cell projection, axon. Note=accumulates at the distal part of the microtubules in the tips of axons, but not of dendrites

Tissue Location Ubiquitous.

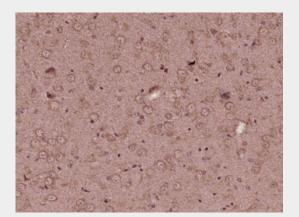
# **KIF13B Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

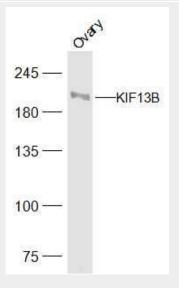
- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KIF13B Polyclonal Antibody - Images





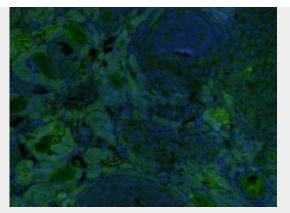
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (KIF13B) Polyclonal Antibody, Unconjugated (bs-12387R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Sample:

Ovary (Rat) Lysate at 40 ug Primary: Anti-KIF13B (bs-12387R) at 1/500 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 203 kD Observed band size: 203 kD





Paraformaldehyde-fixed, paraffin embedded (Mouse ovary); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (KIF13B) Polyclonal Antibody, Unconjugated (bs-12387R) at 1:400 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (bs-0295G-AF488) for 90 minutes, and DAPI for nuclei staining.