

KIF13B Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54845

Specification

KIF13B Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>O9NOT8</u>

Reactivity Rat, Pig, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 203 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human KIF13B

Epitope Specificity 351-450/1826

Isotype
Purity
affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm; cytoskeleton.

SIMILARITY 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

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

 $< span class = "dilution_WB">WB~~1:1000< br \>< span class = "dilution_IHC-P">IHC-P~~N/A< br \>< span class = "dilution_IHC-F">IHC-F~~N/A< br \>< span class = "dilution_IF">IF~~1:50~200< br \>< span class = "dilution_ICC">ICC~~N/A< br \>< span class = "dilution_E">E~~N/A< span$

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.

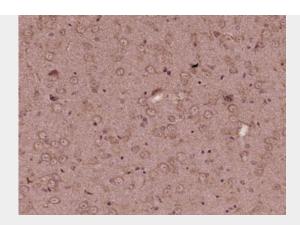
KIF13B Polyclonal Antibody - Protocols

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

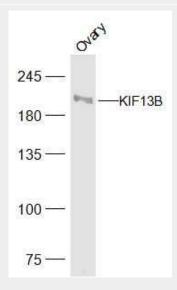
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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) instructions and DAB staining.



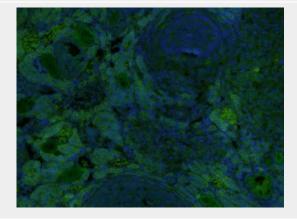
Sample:

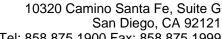
Ovary (Rat) Lysate at 40 ug

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







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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.