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KIF13B Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54845

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9NQT8
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	202789
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KIF13B
Epitope Specificity	351-450/1826
Isotype	IgG
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.

Additional Information

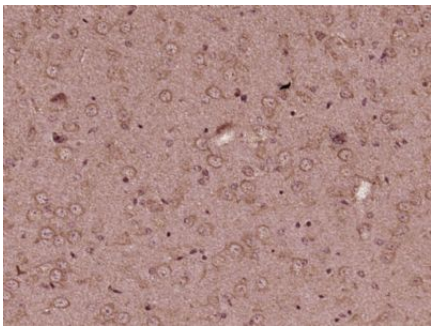
Gene ID	23303

Other Names	Kinesin-like protein KIF13B, Kinesin-like protein GAKIN, KIF13B, GAKIN, KIAA0639
Target/Specificity	Ubiquitous.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:200-800,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 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.

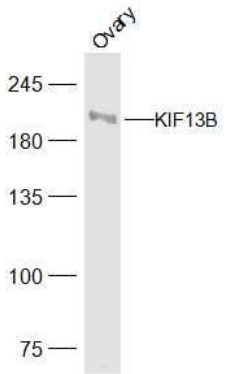
Protein Information

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.

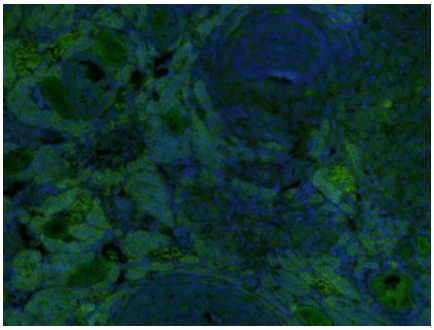
Images



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 (AP54845) 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 (AP54845) 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 (AP54845) 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.