

KIF3A Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57966

Product Information

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

Primary Accession <u>Q9Y496</u>

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 80041
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human KIF3A

Isotype IgG

Purity affinity purified by Protein A

Buffer SUBCELLULAR LOCATION

SUBCELLULAR LUCATION

SIMILARITY

Cytoplasm, cytoskeleton (Probable). Cell projection, cilium (By similarity). Belongs to the kinesin-like protein family. Kinesin II subfamily. Contains 1 kinesin-motor domain.

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBUNIT Belongs to the kinesin-like protein family. Kinesin II subfamily. Contains 1

kinesin-motor domain.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions The kinesins constitute a large family of microtubule-dependent motor

proteins which are responsible for the distribution of numerous organelles, vesicles and macromolecular complexes throughout the cell. Individual kinesin members play crucial roles in cell division, intracellular transport and

membrane trafficking events including endocytosis and transcytosis. Members of the heterotrimeric kinesin II family of microtubule associated motors generally contain two different motor subunits from the KIF3 family, which includes KIF3A, B and C. KIF3 isoforms mediate anterograde transport of membrane bound organelles in neurons and melanosomes, transport between the endoplasmic reticulum and the Golgi, and transport of protein complexes within cilia and flagella required for their morphogenesis. KIF3A may influence neurogenesis at the level of embryonic cellular events, where the asymmetry of the genetic control circuit controlling left-right (L-R) axis determination is defined. Loss of KIF3A function in mice photoreceptors causes apoptotic cell death, suggesting that kinesin II mediated transport is

required for proper cell fate.

Additional Information

Gene ID 11127

Other Names Kinesin-like protein KIF3A, Microtubule plus end-directed kinesin motor 3A,

KIF3A, KIF3

Dilution IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500

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 KIF3A

Synonyms KIF3

Function Microtubule-based anterograde translocator for membranous organelles.

Plus end-directed microtubule sliding activity in vitro. Plays a role in primary cilia formation. Plays a role in centriole cohesion and subdistal appendage

organization and function. Regulates the formation of the subdistal

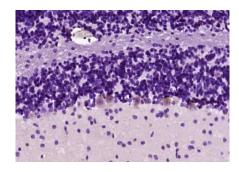
appendage via recruitment of DCTN1 to the centriole. Also required for ciliary basal feet formation and microtubule anchoring to mother centriole.

Cellular Location Cytoplasm, cytoskeleton. Cell projection, cilium

{ECO:0000250|UniProtKB:P28741}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Note=Localizes to the subdistal

appendage region of the centriole.

Images



Paraformaldehyde-fixed, paraffin embedded (mouse cerebellum tissue); 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 (KIF3A) Polyclonal Antibody, Unconjugated (AP57966) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.