

Anti-KIF3A Picoband Antibody

Catalog # ABO12340

Specification

Anti-KIF3A Picoband Antibody - Product Information

Application WB
Primary Accession O9Y496
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

Description

Rabbit IgG polyclonal antibody for Kinesin-like protein KIF3A(KIF3A) detection. Tested with WB in Human; Mouse; Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-KIF3A Picoband Antibody - Additional Information

Gene ID 11127

Other Names

Kinesin-like protein KIF3A, Microtubule plus end-directed kinesin motor 3A, KIF3A, KIF3

Calculated MW

Kinesin-like protein KIF3A; Microtubule plus end-directed kinesin motor 3A; KIF3A; KIF3; KDa

Application Details

Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

br>

Subcellular Localization

80041 MW

Tissue Specificity

Microtubule-based anterograde translocator for membranous organelles. Plus end-directed microtubule sliding activity in vitro. Plays a role in primary cilia formation (By similarity). .

Source

Cytoplasm, cytoskeleton. Cell projection, cilium.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human KIF3A recombinant protein (Position: D485-Q699). Human KIF3A shares 97.7% amino acid (aa) sequence identity with mouse KIF3A.

Purification



Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities Kinesin-like protein KIF3A

Anti-KIF3A Picoband Antibody - 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.

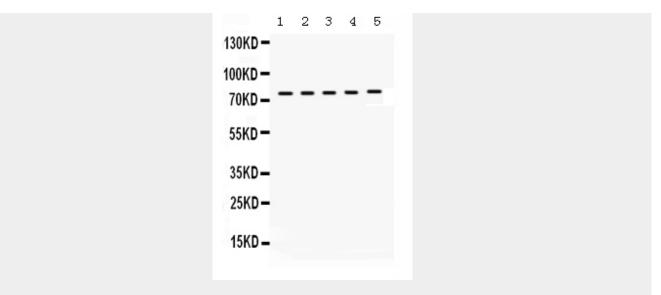
Anti-KIF3A Picoband Antibody - Protocols

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

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

Anti-KIF3A Picoband Antibody - Images





Anti- KIF3A Picoband antibody, ABO12340, Western blottingAll lanes: Anti KIF3A (ABO12340) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Rat Testis Tissue Lysate at 50ugLane 3: Mouse Brain Tissue Lysate at 50ugLane 4: Mouse Testis Tissue Lysate at 50ugLane 5: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 80KDObserved bind size: 80KD

Anti-KIF3A Picoband Antibody - Background

Kinesin-like protein KIF3A is a protein that in humans is encoded by the KIF3A gene. KIF3A is one subunit of the heterotrimeric motor protein, kinesin-2, that was initially isolated from sea urchin egg/embryo cytosol using microtubule affinity purification. This motor consists of two kinesin-related subunits (called KIF3A and KIF3B or 3C in vertebrates) and an associated protein (KAP3), and it transports protein complexes, nucleic acids and organelles towards the plus" ends of microtubule tracks within cells. Work done in a broad range of eukaryotic cells has revealed that heterotrimeric kinesin-2 is the primary motor protein driving the intra-flagellar transport of tubulins and other axonemal building blocks from the base of the ciliary/flagellar axoneme to their site of assembly at the distal tips. This process is required for cilium assembly/maintenance and cilium-based signalling which play key roles in various cell and developmental processes. For example