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KD-Validated Anti-Kinesin family member 5B Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1383

Specification

KD-Validated Anti-Kinesin family member 5B Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P33176
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 110 kDa , observed, 120 kD KDa**
Gene Name	**KIF5B**
Aliases	**KIF5B; Kinesin Family Member 5B; UKHC; KNS; Ubiquitous Kinesin Heavy Chain; KNS1; Conventional Kinesin Heavy Chain; Kinesin-1 Heavy Chain; Epididymis Secretory Protein Li 61; Kinesin 1 (110-120kD); Kinesin Heavy Chain; HEL-S-61; KINH**
Immunogen	**A synthesized peptide derived from human KIF5B**

KD-Validated Anti-Kinesin family member 5B Rabbit Monoclonal Antibody - Additional Information

Gene ID	**3799**

Other Names
Kinesin-1 heavy chain, Conventional kinesin heavy chain, Ubiquitous kinesin heavy chain, UKHC, KIF5B (HGNC:6324), KNS, KNS1

KD-Validated Anti-Kinesin family member 5B Rabbit Monoclonal Antibody - Protein Information

Name KIF5B (HGNC:6324)

Synonyms KNS, KNS1

Function
Microtubule-dependent motor required for normal distribution of mitochondria and lysosomes. Can induce formation of neurite-like membrane protrusions in non-neuronal cells in a ZFYVE27-dependent manner (By similarity). Regulates centrosome and nuclear positioning during mitotic entry. During the G2 phase of the cell cycle in a BICD2- dependent manner, antagonizes dynein function and drives the separation of nuclei and centrosomes (PubMed:20386726). Required for

anterograde axonal transportation of MAPK8IP3/JIP3 which is essential for MAPK8IP3/JIP3 function in axon elongation (By similarity). Through binding with PLEKHM2 and ARL8B, directs lysosome movement toward microtubule plus ends (Probable). Involved in NK cell-mediated cytotoxicity. Drives the polarization of cytolytic granules and microtubule-organizing centers (MTOCs) toward the immune synapse between effector NK lymphocytes and target cells (PubMed:24088571).

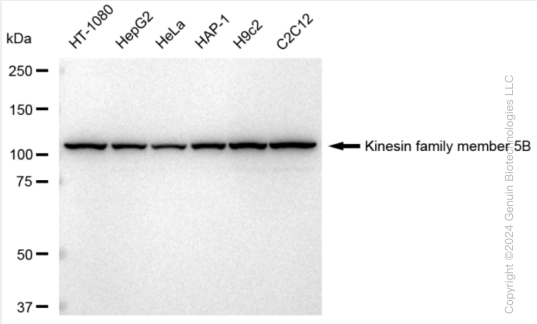
Cellular Location
Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q2PQA9}. Cytolytic granule membrane. Lysosome membrane; Peripheral membrane protein; Cytoplasmic side Note=Uniformly distributed between soma and neurites in hippocampal neurons. {ECO:0000250|UniProtKB:Q2PQA9}

KD-Validated Anti-Kinesin family member 5B Rabbit Monoclonal Antibody - Protocols

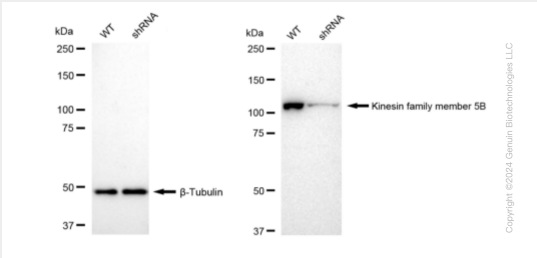
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Kinesin family member 5B Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Kinesin family member 5B antibody (Cat#AGI1383). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Kinesin family member 5B antibody (Cat#AGI1383, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Kinesin family member 5B antibody (Cat#AGI1383). Kinesin family member 5B expression in wild type (WT) and Kinesin family member 5B shRNA knockdown (KD) 293T cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was

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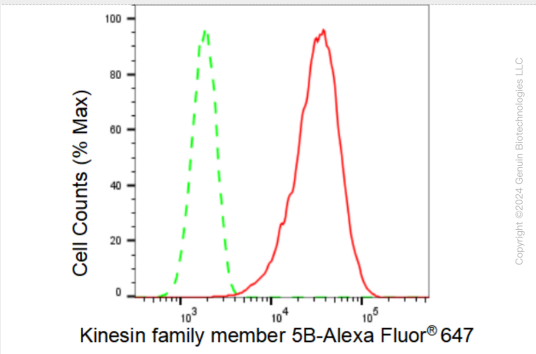
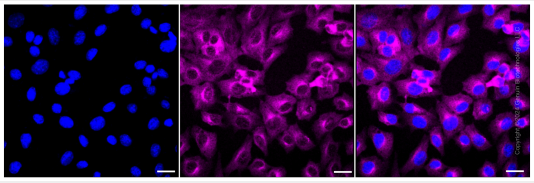
incubated with anti-Kinesin family member 5B antibody (Cat#AGI1383, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Kinesin family member 5B expression in C2C12 cells using Kinesin family member 5B antibody (Cat#AGI1383, 1:2,000). Green, isotype control; red, Kinesin family member 5B.



Immunocytochemical staining of C2C12 cells with Kinesin family member 5B antibody (Cat#AGI1383, 1:1,000). Nuclei were stained blue with DAPI; Kinesin family member 5B was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.