

Kinesin Heavy Chain / KIF5B Antibody (clone KN-03)
Mouse Monoclonal Antibody
Catalog # ALS13468**Specification**

Kinesin Heavy Chain / KIF5B Antibody (clone KN-03) - Product Information

| | |
|-------------------|------------------------|
| Application | IHC |
| Primary Accession | P33176 |
| Reactivity | Human, Mouse, Rat, Pig |
| Host | Mouse |
| Clonality | Monoclonal |
| Calculated MW | 110kDa KDa |

Kinesin Heavy Chain / KIF5B Antibody (clone KN-03) - Additional Information**Gene ID** 3799**Other Names**

Kinesin-1 heavy chain, Conventional kinesin heavy chain, Ubiquitous kinesin heavy chain, UKHC, KIF5B, KNS, KNS1

Target/Specificity

Recognizes heavy chain of conventional kinesin associated with vesicles and with lower affinity with denatured molecule. It stains Western blots of kinesin-enriched preparations. Epitope mapping (by limited proteolysis of partially purified porcine k ...

Reconstitution & Storage

Store at 4°C. Do not freeze.

Precautions

Kinesin Heavy Chain / KIF5B Antibody (clone KN-03) is for research use only and not for use in diagnostic or therapeutic procedures.

Kinesin Heavy Chain / KIF5B Antibody (clone KN-03) - 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

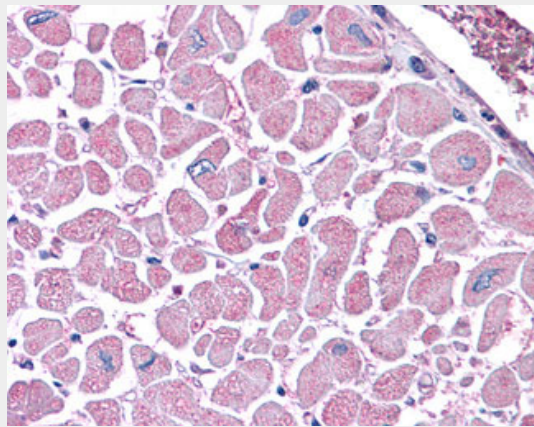
Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q2PQA9}. Cytolytic granule membrane. Lysosome membrane; Peripheral membrane protein; Cytoplasmic side Note=Uniformly distributed between soma and neurites in hippocampal neurons. {ECO:0000250|UniProtKB:Q2PQA9}

Kinesin Heavy Chain / KIF5B Antibody (clone KN-03) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Kinesin Heavy Chain / KIF5B Antibody (clone KN-03) - Images



Anti-KIF5B antibody IHC of human heart.

Kinesin Heavy Chain / KIF5B Antibody (clone KN-03) - Background

Microtubule-dependent motor required for normal distribution of mitochondria and lysosomes.

Kinesin Heavy Chain / KIF5B Antibody (clone KN-03) - References

Navone F., et al. J. Cell Biol. 117:1263-1275(1992).
Deloukas P., et al. Nature 429:375-381(2004).
Su Q., et al. Nat. Cell Biol. 6:941-953(2004).
Boucrot E., et al. Science 308:1174-1178(2005).
Olsen J.V., et al. Cell 127:635-648(2006).