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Goat Anti-Kinesin 1 / UKHC Antibody
Peptide-affinity purified goat antibody
Catalog # AF1590a

Specification

Goat Anti-Kinesin 1 / UKHC Antibody - Product Information

Application	**WB, IF, Pep-ELISA**
Primary Accession	P33176
Other Accession	NP_004512, 3799
Reactivity	**Human, Dog**
Predicted	**Mouse, Rat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**109685**

Goat Anti-Kinesin 1 / UKHC Antibody - Additional Information

Gene ID 3799

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

Dilution
WB~~1:1000
IF~~1:50~200
Pep-ELISA~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Kinesin 1 / UKHC Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Kinesin 1 / UKHC 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).

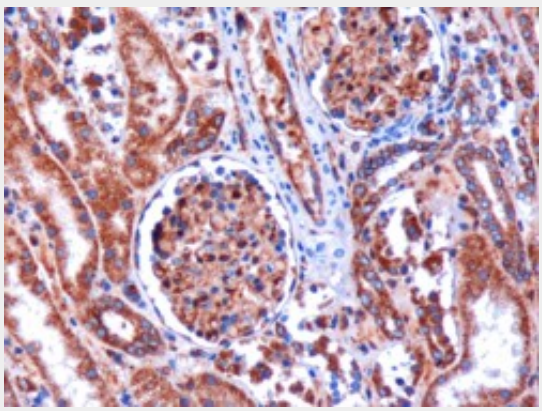
Cellular Location
Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q2PQA9}. Cytolytic granule membrane. Lysosome membrane; Peripheral membrane protein; Cytoplasmic side Note=Uniformly distributed between soma and neurites in hippocampal neurons. {ECO:0000250|UniProtKB:Q2PQA9}

Goat Anti-Kinesin 1 / UKHC 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

Goat Anti-Kinesin 1 / UKHC Antibody - Images



AF1590a (1 µg/ml) staining of paraffin embedded Human Kidney. Microwaved antigen retrieval with Tris/EDTA buffer pH9, HRP-staining. Please note this data was obtained with a previous batch.

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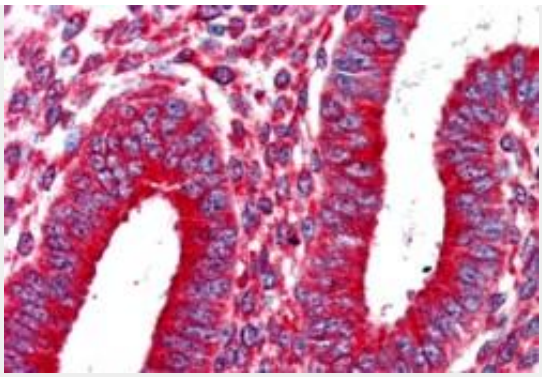

AF1590a (2.5 µg/ml) staining of paraffin embedded Human Uterus. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. Please note this data was obtained with a previous batch.

EB05492 (0.03µg/ml) staining of lysates of cell line HeLa (35µg protein in RIPA buffer). Detected by chemiluminescence.

Goat Anti-Kinesin 1 / UKHC Antibody - References

Microtubule-associated protein-like binding of the kinesin-1 tail to microtubules. Seeger MA, et al. J Biol Chem, 2010 Mar 12. PMID 20071331.
Kinesin-1 plays a role in transport of SNAP-25 to the plasma membrane. Morton AM, et al. Biochem Biophys Res Commun, 2010 Jan 1. PMID 19913510.
Role of kinesin light chain-2 of kinesin-1 in the traffic of Na,K-ATPase-containing vesicles in alveolar epithelial cells. Trejo HE, et al. FASEB J, 2010 Feb. PMID 19773350.
Kif5b is an essential forward trafficking motor for the Kv1.5 cardiac potassium channel. Zadeh AD, et al. J Physiol, 2009 Oct 1. PMID 19675065.
Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.