

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

**Specification**

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**Goat Anti-Kinesin 1 / UKHC Antibody - Product Information**

Application	IHC, WB
Primary Accession	<a href="#">P33176</a>
Other Accession	<a href="#">NP_004512</a> , <a href="#">3799</a>
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

**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:<a href="http://www.uniprot.org/citations/20386726" target="\_blank">20386726</a>). 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:<a href="http://www.uniprot.org/citations/24088571" target="\_blank">24088571</a>).

#### Cellular Location

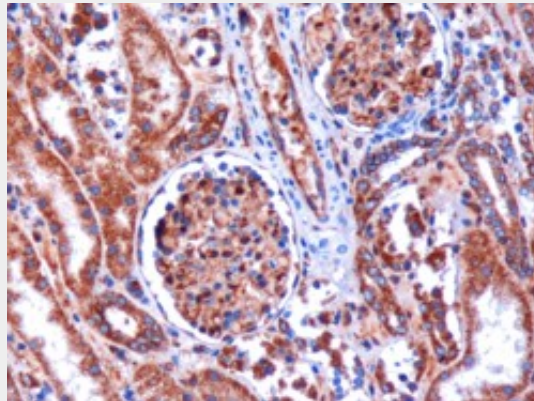
Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q2PQA9}. Cytolytic granule membrane. Lysosome membrane; Peripheral membrane protein; Cytoplasmic side Note=Uniformly distributed between soma and neurites in hippocampal neurons. {ECO:0000250|UniProtKB:Q2PQA9}

### Goat Anti-Kinesin 1 / UKHC Antibody - Protocols

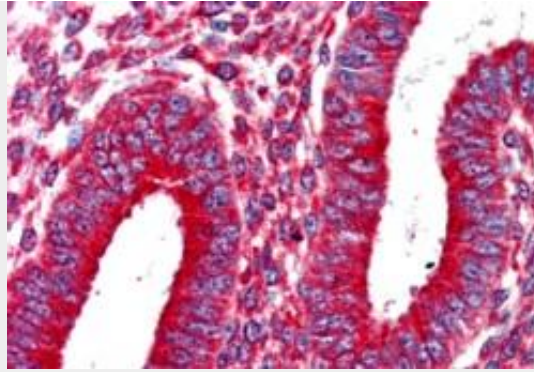
Provided below are standard protocols that you may find useful for product applications.

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



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.