

Datasheet for 600-401-CE3**KIF5 Antibody****Overview**

Description:	Anti-KIF5 (RABBIT) Antibody - 600-401-CE3
Item No.:	600-401-CE3
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The kinesin superfamily proteins (KIFs) are microtubule-dependent motors that slide along microtubules and transport cellular organelles and mRNA to different parts of the cell. In neurons, KIF5 performs this role in an anterograde fashion from the neuronal cell body to axonal or dendritic terminals. KIF5 was initially differentiated from the ubiquitously expressed kinesin as being highly enriched in subsets of neurons and selectively concentrated in the cell body. KIF5 has at least three known isoforms; this antibody recognizes all three. Mutations in one of the isoforms of KIF5 (KIF5A) are thought to be involved in hereditary spastic paraplegias.
Synonyms:	KIF5 Antibody, NKHC, MY050, SPG10, D12S1889, NKHC1, Kinesin heavy chain isoform 5A, Kinesin heavy chain neuron-specific 1, NKHC
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	KIF5A
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-KIF5 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 20 amino acid synthetic peptide from near the C-terminus of human KIF5.

Purity/Specificity: Anti-KIF5 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with KIF5 from other sources has not been determined.

Relevant Links:

- [UniProtKB - Q12840](#)
- [GeneID - 3798](#)
- [NCBI - Q12840](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-KIF5 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 117 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:5000 - 1:10000

IF: 20 µg/mL

IHC: 5 µg/mL

WB: 0.5-1 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

Stabilizer: None

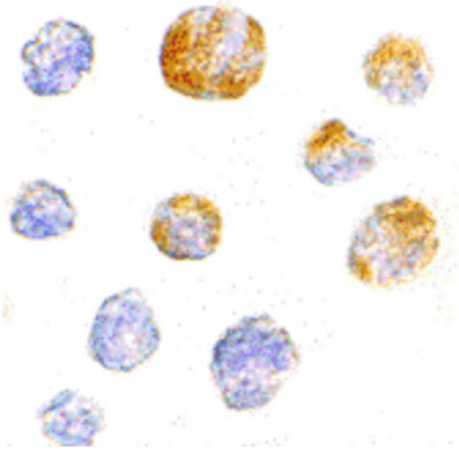
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

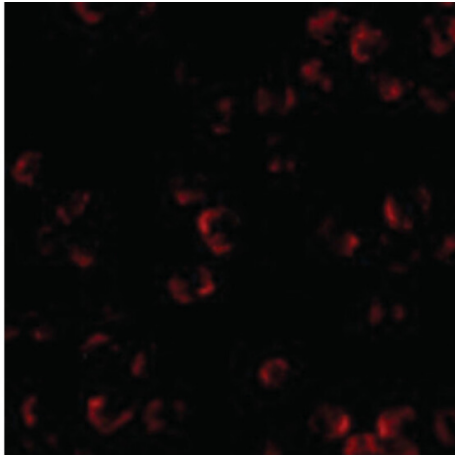
Expiration: Expiration date is one (1) year from date of receipt.

Images



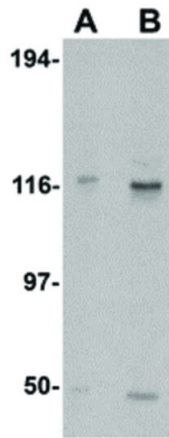
Immunocytochemistry

Immunocytochemistry of KIF5 antibody. Tissue: K562 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: KIF5 antibody at 5 $\mu\text{g}/\text{mL}$ for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: KIF5 is nuclear and cytoplasmic. Staining: KIF5 as a precipitated brown signal with hematoxylin purple counterstain.



Immunofluorescence Microscopy

Immunofluorescence Microscopy of KIF5 antibody. Tissue: K562 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: KIF5 antibody at 20 $\mu\text{g}/\text{mL}$ for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: KIF5 as a red fluorescent signal.

**Western Blot**

Western Blot of KIF5 antibody. Lane A: K562 cell lysate at 0.5 µg/mL. Lane B: K562 cell lysate at 1 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 117.3 kDa, ~117 kDa for KIF5.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.