

## KIF16B (E-13): sc-50991

### BACKGROUND

The Kinesins constitute a large family of microtubule-dependent motor proteins which are responsible for the distribution of numerous organelles, vesicles and macromolecular complexes throughout the cell. Individual Kinesin members play crucial roles in cell division, intracellular transport and membrane trafficking events, including endocytosis and transcytosis. KIF16B (kinesin family member 16B), also known as SNX23 (Sorting nexin-23) or C20orf23, is a 1,317 amino acid protein that contains one FHA domain, one kinesin-motor domain and one PX domain and belongs to the Kinesin-like protein family. Present in early endosomes at the end of microtubules, KIF16B is thought to function as a microtubule-dependent motor protein that may regulate the motility of early endosomes, thereby mediating the balance between endosomal recycling and degradation. Five isoforms of KIF16B are expressed due to alternative splicing events.

### REFERENCES

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- Katoh, M. and Katoh, M. 2003. Identification and characterization of human LL5A gene and mouse Ll5a gene in silico. *Int. J. Oncol.* 23: 1477-1483.
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- Heydorn, A., et al. 2004. A library of 7TM receptor C-terminal tails. Interactions with the proposed post-endocytic sorting proteins ERM-binding phosphoprotein 50 (EBP50), N-ethylmaleimide-sensitive factor (NSF), sorting nexin 1 (SNX1), and G protein-coupled receptor-associated sorting protein (GASP). *J. Biol. Chem.* 279: 54291-54303.
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### CHROMOSOMAL LOCATION

Genetic locus: KIF16B (human) mapping to 20p12.1; Kif16b (mouse) mapping to 2G3.

### SOURCE

KIF16B (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KIF16B of human origin.

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50991 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

KIF16B (E-13) is recommended for detection of KIF16B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

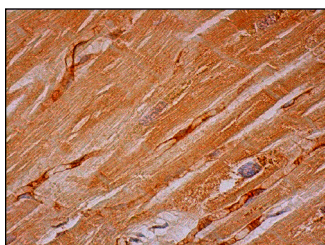
Suitable for use as control antibody for KIF16B siRNA (h): sc-61591, KIF16B siRNA (m): sc-61592, KIF16B shRNA Plasmid (h): sc-61591-SH, KIF16B shRNA Plasmid (m): sc-61592-SH, KIF16B shRNA (h) Lentiviral Particles: sc-61591-V and KIF16B shRNA (m) Lentiviral Particles: sc-61592-V.

Molecular Weight of KIF16B: 152 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

### DATA



KIF16B (E-13): sc-50991. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes and cytoplasmic and membrane staining of endothelial cells.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.