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KIF3C (h2): 293T Lysate: sc-115585

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. Members of the heterotrimeric kinesin II family of microtubule associated motors generally contain two different motor subunits from the KIF3 family, which includes KIF3A, B and C. KIF3 isoforms mediate anterograde transport of membrane bound organelles in neurons and melanosomes, transport between the endoplasmic reticulum and the Golgi, and transport of protein complexes within cilia and flagella required for their morphogenesis. The human KIF3C gene maps to chromosome 2p23 and encodes a 793 amino acid protein that is highly expressed in neural tissues such as brain, spinal cord and retina. The selective expression of KIF3C protein in the nervous system during embryonic development and its upregulation during neuroblastoma differentiation suggests a role for this motor during maturation of neuronal cells.

REFERENCES

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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: KIF3C (human) mapping to 2p23.3.

PRODUCT

KIF3C (h2): 293T Lysate represents a lysate of human KIF3C transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

KIF3C (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive KIF3C antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

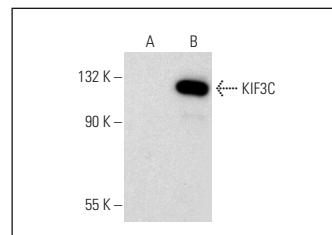
KIF3C (B-10): sc-393778 is recommended as a positive control antibody for Western Blot analysis of enhanced human KIF3C expression in KIF3C transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG_κ BP-HRP: sc-516102 or m-IgG_κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



KIF3C (B-10): sc-393778. Western blot analysis of KIF3C expression in non-transfected: sc-117752 (A) and human KIF3C transfected: sc-115585 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.