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KLC2 (h3): 293T Lysate: sc-172729

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. KLC2 (kinesin light chain 2) is a 622 amino acid protein that contains 6 TPR repeats and belongs to the kinesin light chain family. Existing in an oligomeric complex composed of two light and two heavy chain kinesin proteins, KLC2 plays a role in coupling organelle transport with ATPase activity. The gene encoding KLC2 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome.

REFERENCES

1. Rahman, A., Friedman, D.S. and Goldstein, L.S. 1998. Two kinesin light chain genes in mice. Identification and characterization of the encoded proteins. *J. Biol. Chem.* 273: 15395-15403.
2. Rahman, A., Kamal, A., Roberts, E.A. and Goldstein, L.S. 1999. Defective kinesin heavy chain behavior in mouse kinesin light chain mutants. *J. Cell Biol.* 146: 1277-1288.
3. Bowman, A.B., Kamal, A., Ritchings, B.W., Philp, A.V., McGrail, M., Gindhart, J.G. and Goldstein, L.S. 2000. Kinesin-dependent axonal transport is mediated by the sunday driver (SYD) protein. *Cell* 103: 583-594.
4. DeBoer, S.R., You, Y., Szodorai, A., Kaminska, A., Pigino, G., Nwabuisi, E., Wang, B., Estrada-Hernandez, T., Kins, S., Brady, S.T. and Morfini, G. 2008. Conventional kinesin holoenzymes are composed of heavy and light chain homodimers. *Biochemistry* 47: 4535-4543.
5. Takazawa, K., Noguchi, T., Hosooka, T., Yoshioka, T., Tobimatsu, K. and Kasuga, M. 2008. Insulin-induced GLUT4 movements in C2C12 myoblasts: evidence against a role of conventional kinesin motor proteins. *Kobe J. Med. Sci.* 54: E14-E22.
6. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 611729. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Dhakal, B.K. and Mulvey, M.A. 2009. Uropathogenic *Escherichia coli* invades host cells via an HDAC6-modulated microtubule-dependent pathway. *J. Biol. Chem.* 284: 446-454.

CHROMOSOMAL LOCATION

Genetic locus: KLC2 (human) mapping to 11q13.2.

PRODUCT

KLC2 (h3): 293T Lysate represents a lysate of human KLC2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

KLC2 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive KLC2 antibodies. Recommended use: 10-20 µl per lane.

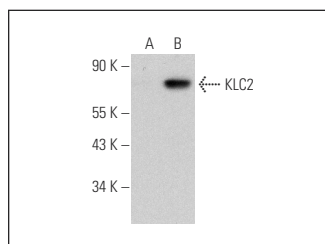
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

KLC2 (F-11): sc-515506 is recommended as a positive control antibody for Western Blot analysis of enhanced human KLC2 expression in KLC2 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-IgGκ BP-HRP: sc-516102 or m-IgGκ 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



KLC2 (F-11): sc-515506. Western blot analysis of KLC2 expression in non-transfected: sc-117752 (A) and human KLC2 transfected: sc-172729 (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.