

KLC3 (m): 293T Lysate: sc-127046

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. KLC3 (kinesin light chain 3), also known as KLC2 or KLC2L, is a 504 amino acid protein that contains five TPR repeats and belongs to the kinesin light chain family. Existing as a component of an oligomeric composed of heavy and light chains, KLC3 functions as a microtubule-associated protein that produces mechanical force and is thought to play a role in organelle transport. Multiple isoforms of KLC3 exist due to alternative splicing events.

REFERENCES

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8. DeBoer, S.R., et al. 2008. Conventional kinesin holoenzymes are composed of heavy and light chain homodimers. *Biochemistry* 47: 4535-4543.
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CHROMOSOMAL LOCATION

Genetic locus: Klc3 (mouse) mapping to 7 A3.

PRODUCT

KLC3 (m): 293T Lysate represents a lysate of mouse KLC3 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

KLC3 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive KLC3 antibodies. Recommended use: 10-20 µl per lane.

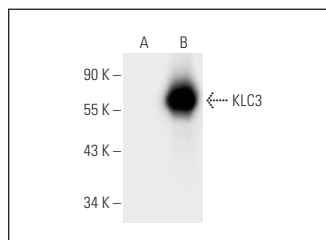
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

KLC3 (F-6): sc-398492 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse KLC3 expression in KLC3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

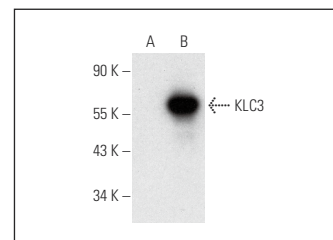
RECOMMENDED SUPPORT REAGENTS

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



KLC3 (F-6): sc-398492. Western blot analysis of KLC3 expression in non-transfected: sc-117752 (A) and mouse KLC3 transfected: sc-127046 (B) 293T whole cell lysates.



KLC3 (E-7): sc-398332. Western blot analysis of KLC3 expression in non-transfected: sc-117752 (A) and mouse KLC3 transfected: sc-127046 (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.