

KLC4 (B-8): sc-376702

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. KLC4 (kinesin light chain 4), also known as KNSL8, is a 619 amino acid member of the kinesin light chain family. Existing as a component of an oligomeric structure composed of heavy and light chains, KLC4 functions as a microtubule-associated protein that produces mechanical force and is thought to play a role in organelle transport. Multiple isoforms of KLC4 exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KLC4 (human) mapping to 6p21.1; Klc4 (mouse) mapping to 17 C.

SOURCE

KLC4 (B-8) is a mouse monoclonal antibody raised against amino acids 487-540 mapping near the C-terminus of KLC4 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 IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

KLC4 (B-8) is available conjugated to agarose (sc-376702 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376702 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376702 PE), fluorescein (sc-376702 FITC), Alexa Fluor® 488 (sc-376702 AF488), Alexa Fluor® 546 (sc-376702 AF546), Alexa Fluor® 594 (sc-376702 AF594) or Alexa Fluor® 647 (sc-376702 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376702 AF680) or Alexa Fluor® 790 (sc-376702 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

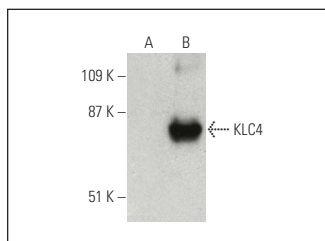
KLC4 (B-8) is recommended for detection of KLC4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), 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 KLC4 siRNA (h): sc-95336, KLC4 siRNA (m): sc-146494, KLC4 shRNA Plasmid (h): sc-95336-SH, KLC4 shRNA Plasmid (m): sc-146494-SH, KLC4 shRNA (h) Lentiviral Particles: sc-95336-V and KLC4 shRNA (m) Lentiviral Particles: sc-146494-V.

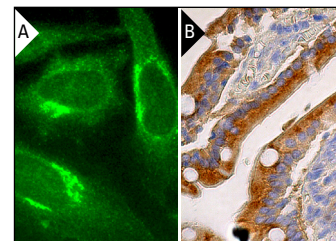
Molecular Weight of KLC4: 69 kDa.

Positive Controls: KLC4 (h5): 293T Lysate: sc-177433.

DATA



KLC4 (B-8) HRP: sc-376702 HRP. Direct western blot analysis of KLC4 expression in non-transfected: sc-117752 (A) and human KLC4 transfected: sc-177433 (B) 293T whole cell lysates.



KLC4 (B-8): sc-376702. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells (B).

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.