

Dynein IC2, cytosolic (h2): 293 Lysate: sc-112239

BACKGROUND

Dyneins are multi-subunit, high molecular weight ATPases that interact with microtubules to generate force by converting the chemical energy of ATP into the mechanical energy of movement. Cytoplasmic or axonemal Dynein heavy, intermediate, light and light-intermediate chains are all components of minus end-directed motors; the complex that transports cellular cargos towards the central region of the cell. Axonemal Dynein motors contain one to three non-identical heavy chains and cause a sliding of microtubules in the axonemes of cilia and flagella in a mechanism necessary for cilia to beat and propel the cell. Cytoplasmic Dynein is an approximately 12 subunit complex of two heavy chains, two intermediate chains to anchor Dynein to its cargo, four smaller intermediate chains and several light chains. It performs functions necessary for cell survival such as organelle transport and centrosome assembly. The carboxy-terminus of Dynein is important for microtubule-dependent motility and is highly conserved, while the amino-terminal regions are more variable. Several proteins regulate Dynein activity, including Dynactin, LIS1 and nudel (nudE-like).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DNCL2 (human) mapping to 2q31.1.

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.

PRODUCT

Dynein IC2, cytosolic (h2): 293 Lysate represents a lysate of human Dynein IC2, cytosolic transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Dynein IC2, cytosolic (h2): 293 Lysate is suitable as a Western Blotting positive control for human reactive Dynein IC2, cytosolic antibodies. Recommended use: 10-20 µl per lane.

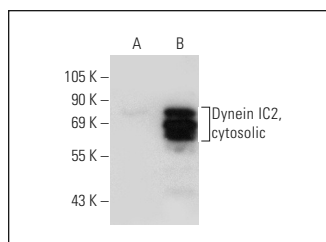
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

Dynein IC1/2, cytosolic (E-9): sc-166130 is recommended as a positive control antibody for Western Blot analysis of enhanced human Dynein IC2, cytosolic expression in Dynein IC2, cytosolic transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

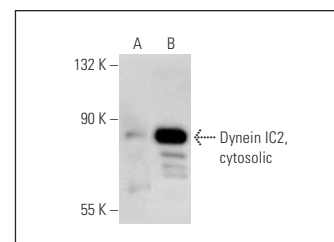
RECOMMENDED SUPPORT REAGENTS

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



Dynein IC1/2, cytosolic (E-9): sc-166130. Western blot analysis of Dynein IC2, cytosolic expression in non-transfected: sc-110760 (A) and human Dynein IC2, cytosolic transfected: sc-112239 (B) 293 whole cell lysates.



Dynein IC1/2, cytosolic (C-2): sc-136971. Western blot analysis of Dynein IC2, cytosolic expression in non-transfected: sc-110760 (A) and human Dynein IC2, cytosolic transfected: sc-112239 (B) 293 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.