

Dynactin 1 (h2): 293 Lysate: sc-177152

BACKGROUND

Dynactin, a multisubunit complex, is a cytoplasmic Dynein-interacting protein that functions as the "receptor" for the Dynein microtubule motor. Dynactin/Dynein binding may be required for most, if not all, cytoplasmic Dynein-driven activities and is thought to contribute to the functional diversity of Dynein. Enriched in neurons, Dynactin also binds to microtubules and has been shown to function in diverse processes, including organelle transport, formation of the mitotic spindle and cytokinesis. Dynactin subunits include p22, p50, p62, p150 (also designated Glued) and ARP-1. The p135 splice variant is neuron specific and, unlike p150, does not bind microtubules.

REFERENCES

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4. Holleran, E.A., et al. 1998. The role of the dynactin complex in intracellular motility. *Int. Rev. Cytol.* 182: 69-109.
5. Karki, S., et al. 1998. Characterization of the p22 subunit of dynactin reveals the localization of cytoplasmic dynein and dynactin to the midbody of dividing cells. *J. Cell Biol.* 142: 1023-1034.
6. Berrueta, L., et al. 1999. The APC-associated protein EB1 associates with components of the dynactin complex and cytoplasmic dynein intermediate chain. *Curr. Biol.* 9: 425-428.
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8. Kraemer, J., et al. 1999. Cytoplasmic dynein and dynactin as likely candidates for microtubule-dependent apical targeting of pancreatic zymogen granules. *Eur. J. Cell Biol.* 78: 265-277.
9. Huang, C.Y., et al. 1999. M phase phosphorylation of cytoplasmic dynein intermediate chain and p150^{Glued}. *J. Biol. Chem.* 274: 14262-14269.

CHROMOSOMAL LOCATION

Genetic locus: DCTN1 (human) mapping to 2p13.1.

PRODUCT

Dynactin 1 (h2): 293 Lysate represents a lysate of human Dynactin 1 transfected 293 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

Dynactin 1 (h2): 293 Lysate is suitable as a Western Blotting positive control for human reactive Dynactin 1 antibodies. Recommended use: 10-20 µl per lane.

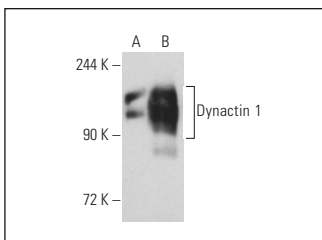
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

Dynactin p150 (12): sc-135890 is recommended as a positive control antibody for Western Blot analysis of enhanced human Dynactin 1 expression in Dynactin 1 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



Dynactin p150 (12): sc-135890. Western blot analysis of Dynactin 1 expression in non-transfected: sc-110760 (A) and human Dynactin 1 transfected: sc-177152 (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.