**BACKGROUND**

Dynactin is a multisubunit complex that functions as a binding partner 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. Dynactin 6, also known as Protein WS-3, is an evolutionarily conserved component of the pointed-end-binding subcomplex of the Dynactin shoulder complex. This cytoplasmic protein is ubiquitously expressed in all tissues, suggesting that its function is essential for all organs. The pointed-end-binding subcomplex also consists of Dynactin 5, Dynactin p62 and ACTR10. Dynactin 6, along with Dynactin p62 and Dynactin 5, is believed to function in the regulation of Dynactin-membranous cargo interactions.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: DCTN6 (human) mapping to 8p12; Dctn6 (mouse) mapping to 8 A4.

**SOURCE**

Dynactin 6 (A-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 18-45 near the N-terminus of Dynactin 6 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-398678 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

Dynactin 6 (A-2) is recommended for detection of Dynactin 6 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Dynactin 6 siRNA (h): sc-77642, Dynactin 6 siRNA (m): sc-143205, Dynactin 6 shRNA Plasmid (h): sc-77642-SH, Dynactin 6 shRNA Plasmid (m): sc-143205-SH, Dynactin 6 shRNA (h) Lentiviral Particles: sc-77642-V and Dynactin 6 shRNA (m) Lentiviral Particles: sc-143205-V.

Molecular Weight of Dynactin 6: 21 kDa.

Positive Controls: Dynactin 6 (h): 293T Lysate: sc-113306, human liver extract: sc-363766 or HeLa whole cell lysate: sc-2200.

**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, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

Dynactin 6 (A-2): sc-398678. Western blot analysis of Dynactin 6 expression in non-transfected 293T: sc-117752 (A), human Dynactin 6 transfected 293T: sc-113306 (B), HeLa (C), COLO 320DM (D) and T24 (E) whole cell lysates and human liver tissue extract (F).

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.