**BACKGROUND**

Dynactin is a multisubunit complex and a required cofactor for most, if not all, of the cellular processes powered by the microtubule-based motor cytoplasmic Dynein. Dynactin contains a short Actin-related protein 1 (Arp1) filament with capZ at the barbed end and p62 at the pointed end. The p62 subunit is an integral component of 20 S Dynactin with a highly conserved cysteine-rich motif that interacts directly with Arp1. Dynactin p62 has a punctate cytoplasmic distribution as well as centrosomal distribution typical of Dynactin. In addition, Dynactin p62 is distributed in the nucleus at very high expression levels. Due to the structural composition of Dynactin, the p62 subunit is implicated in Arp1 pointed-end binding and in linking Dynein and Dynactin to the cortical cytoskeleton.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: DCTN4 (human) mapping to 5q33.1; Dctn4 (mouse) mapping to 18D3.

**SOURCE**

Dynactin p62 (H-12) is a mouse monoclonal antibody raised against amino acids 161-460 of Dynactin p62 of human origin.

**PRODUCT**

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

**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.

**APPLICATIONS**

Dynactin p62 (H-12) is recommended for detection of Dynactin p62 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 1:50-1:1500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Positive Controls: Sol8 cell lysate: sc-2249, EOC 20 whole cell lysate: sc-364187 or K-562 whole cell lysate: sc-2203.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), 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 G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2050 or ABC: sc-2017 mouse IgG Staining Systems.

**DATA**

**PROTocols**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.