**BACKGROUND**

The dynactin complex is a macromolecular complex that consists of 10-11 distinct subunits. This complex is critical for the function of dynein, a molecular motor protein. Dynactin plays a role in ER to Golgi transport, spindle formation, chromosome movement, axon guidance, nuclear positioning and the centripetal movement of lysosomes and endosomes. Centractin is the most abundant isoform in the dynactin complex. The isoform, also known as Actin-related protein 1 homolog B, shares 90% identity with the α isoform. The two isoforms, α and β, are expressed at a ratio of 15:1 respectively. The backbone filament structure of the dynactin complex is composed of 9-11 subunits of α/β-centractin.

**REFERENCES**


**CHROMOSOMAL LOCATION**


**SOURCE**

α/β-centractin (A-7) is a mouse monoclonal antibody raised against amino acids 77-376 mapping at the C-terminus of α-centractin of human origin.

**PRODUCT**

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

α/β-centractin (A-7) is available conjugated to agarose (sc-376010 AC), 500 µg/0.25 agarose in 1 ml, for IP; to HRP (sc-376010 HRP), 200 µg/ml, for WB, IHCP and ELISA; to either phycoerythrin (sc-376010 PE), fluorescein (sc-376010 FITC), Alexa Fluor® 488 (sc-376010 AF488), Alexa Fluor® 546 (sc-376010 AF546), Alexa Fluor® 594 (sc-376010 AF594) or Alexa Fluor® 647 (sc-376010 AF647), 200 µg/ml, for WB (RGB), IF, IHCP and FCM; and to either Alexa Fluor® 680 (sc-376010 AF680) or Alexa Fluor® 790 (sc-376010 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

α/β-centractin (A-7) is recommended for detection of α-centractin and β-centractin 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).

α/β-centractin (A-7) is also recommended for detection of α-centractin and β-centractin in additional species, including equine, canine, bovine and porcine.

Molecular Weight of α-centractin: 43 kDa.
Molecular Weight of β-centractin: 42 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224, KNRK whole cell lysate: sc-2214 or Neuro-2A whole cell lysate: sc-364185.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG® HRP: sc-516102 or m-IgG® 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG® BP-FITC: sc-516140 or m-IgG® 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**

**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.

**PROTOCOLS**

See our website at www.scbt.com for detailed protocols and support products.