SANTA CRUZ BIOTECHNOLOGY, INC.

α/β-centractin (P-18): sc-54757

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 a subunit of the Dynactin complex that exists in multiple isoforms. The α isoform, also known as Actin-related protein 1 homolog A (Arp1) and previously referred to as centractin, is the most abundant isoform in the Dynactin complex. The β 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 (important for the arrangement of other complex proteins) is composed of 9-11 subunits of α/β-centractin.

REFERENCES

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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: ACTR1A (human) mapping to 10q24.32, ACTR1B (human) mapping to 2q11.2; Actr1a (mouse) mapping to 19 C3, Actr1b (mouse) mapping to 1 B.

SOURCE

α/β-centractin (P-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of α-centractin of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-54757 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and CHIP applications, sc-54757 X, 200 µg/0.1 ml.

APPLICATIONS

α/β-centractin (P-18) is recommended for detection of α-centractin and β-centractin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 (P-18) is also recommended for detection of α-centractin and β-centractin in additional species, including equine, canine, bovine, porcine and avian.

α/β-centractin (P-18) X TransCruz antibody is recommended for Gel Supershift and CHIP applications.

Molecular Weight of α-centractin: 43 kDa.

Molecular Weight of β-centractin: 42 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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