SANTA CRUZ BIOTECHNOLOGY, INC.

CHP1 (B-11): sc-390898

BACKGROUND

Human CHP1 and the *C. elegans* homolog Chp are CHORD domain-containing proteins that are largely related, and their corresponding genes are evolutionarily conserved among various eukaryotic organisms. The unique CHORD domain is characterized as 60 amino acids in length, and contains 6 highly conserved cysteine residues, 2 histidine residues and a distinct Zn^{2+}-binding domain. CHP1 and the other metazoan orthologs have tandem CHORD domains that are located at both the N- and C- termini. These proteins are implicated in germline development and embryogenesis as mutations affecting the CHORD domain of the nematode protein Chp result in semisterility and embryonic lethality.

REFERENCES

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3. Doe, C.L., Wang, G., Chow, C., Fricker, M.D., Singh, P.B. and Mellor, E.J. 1998. The fission yeast chromo domain encoding gene CHP1^{+} is required for chromosome segregation and shows a genetic interaction with α-tubulin. Nucleic Acids Res. 26: 4222-4229.
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5. Shirasu, K., Lahaye, T., Tan, M.W., Zhou, F., Azevedo, C. and Schulze-Lefert, P. 1999. A novel class of eukaryotic zinc-binding proteins is required for disease resistance signaling in barley and development in *C. elegans*. Cell 99: 355-366.

CHROMOSOMAL LOCATION

Genetic locus: CHORDC1 (human) mapping to 11q14.3; Chordc1 (mouse) mapping to 9 A2.

SOURCE

CHP1 (B-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 41-340 within an internal region of CHP1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} 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-390898 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

CHP1 (B-11) is recommended for detection of CHP1 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 CHP1 siRNA (h): sc-106753, CHP1 siRNA (m): sc-142331, CHP1 shRNA Plasmid (h): sc-106753-SH, CHP1 shRNA Plasmid (m): sc-142331-SH, CHP1 shRNA (h) Lentiviral Particles: sc-106753-V and CHP1 shRNA (m) Lentiviral Particles: sc-142331-V.

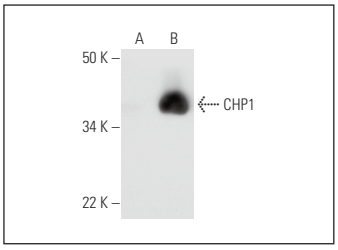
Molecular Weight of CHP1: 37 kDa.

Positive Controls: CHP1 (m): 293T Lysate: sc-119247.

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. 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



CHP1 (B-11): sc-390898. Western blot analysis of CHP1 expression in non-transfected: sc-117752 (**A**) and mouse CHP1 transfected: sc-119247 (**B**) 293T whole cell lysates.

STORAGE

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

PROTOCOLS

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