SANTA CRUZ BIOTECHNOLOGY, INC.

prefoldin 6 (C-15): sc-19847

BACKGROUND

Molecular chaperones are proteins that assist in the correct folding of other proteins in the crowded molecular environment that exists in living cells. Within this class of proteins, a key role is played by chaperonins, multisubunit toroidal (i.e., doughnut-shaped) assemblies that undergo major ATP-dependent conformational changes as part of the mechanism of facilitated folding. Prefoldin is a heterohexameric chaperone protein which has the ability to capture unfolded actin and six prefoldin polypeptides, prefoldin 1-6, have been identified. Prefoldin 1 is a 122-amino acid protein that binds specifically to cytosolic chaperonin (c-cpn) and transfers target proteins to it. Prefoldin 3 (VBP1 or VHL binding protein-1) forms complexes with VHL and is translocated from perinuclear granules to the nucleus or cytoplasm. Prefoldin 4 is a possible transcription factor and prefoldin 5 is a c-myc binding protein. The genes which encode prefoldin 1, prefoldin 3, prefoldin 4 and prefoldin 5 map to human chromosome 5, Xq28, 7 and 12, respectively.

REFERENCES

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2. LocusLink Report (LocusID: 300133). http://www.ncbi.nlm.nih.gov/LocusLink/
3. International Radiation Hybrid Mapping Consortium. (GenemapID:SHGC-31943) http://www.ncbi.nlm.nih.gov/genemap/
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5. International Radiation Hybrid Mapping Consortium. (GenemapID:WI-20399) http://www.ncbi.nlm.nih.gov/genemap/
6. Tsuchiya, H., Iseda, T. and Hino, O. 1996. Identification of a novel protein (VBP-1) binding to the von Hippel-Lindau (VHL) tumor suppressor gene product. Cancer Res. 56: 2881-2885.
7. Brinke, A., Green, P.M. and Giannelli, F. 1997. Characterization of the gene (VBP1) and transcript for the von Hippel-Lindau binding protein and isolation of the highly conserved murine homologue. Genomics 45: 105-112.
8. Vainberg, I.E., Lewis, S.A., Rommelaere, H., Ampe, C., Vandekerckhove, J., Klein, H.L. and Cowan, N.J. 1998. Prefoldin, a chaperone that delivers unfolded proteins to cytosolic chaperonin. Cell 93: 863-873.

CHROMOSOMAL LOCATION

Genetic locus: PFDN6 (human) mapping to 6p21.32; H2-Ke2 (mouse) mapping to 17 B1.

SOURCE

prefoldin 6 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of prefoldin 6 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-19847 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

prefoldin 6 (C-15) is recommended for detection of prefoldin 6 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).

Suitable for use as control antibody for prefoldin 6 siRNA (h): sc-40878, prefoldin 6 siRNA (m): sc-40879, prefoldin 6 shRNA Plasmid (h): sc-40878-SH, prefoldin 6 shRNA Plasmid (m): sc-40879-SH, prefoldin 6 shRNA (h) Lentiviral Particles: sc-40878-V and prefoldin 6 shRNA (m) Lentiviral Particles: sc-40879-V.

Molecular Weight of prefoldin 6: 13 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.

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