

prefoldin 5 (S-20): sc-19843

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. 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. Prefoldin 5 (c-Myc-binding protein Mm-1, Myc modulator 1 or MM-1) is a c-Myc binding protein.

CHROMOSOMAL LOCATION

Genetic locus: PFDN5 (human) mapping to 12q13.13; Pfdn5 (mouse) mapping to 15 F3.

SOURCE

prefoldin 5 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of prefoldin 5 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-19843 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

prefoldin 5 (S-20) is recommended for detection of prefoldin 5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

prefoldin 5 (S-20) is also recommended for detection of prefoldin 5 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for prefoldin 5 siRNA (h): sc-40876, prefoldin 5 siRNA (m): sc-40877, prefoldin 5 shRNA Plasmid (h): sc-40876-SH, prefoldin 5 shRNA Plasmid (m): sc-40877-SH, prefoldin 5 shRNA (h) Lentiviral Particles: sc-40876-V and prefoldin 5 shRNA (m) Lentiviral Particles: sc-40877-V.

Molecular Weight (predicted) of prefoldin 5: 17 kDa.

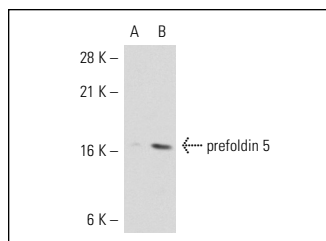
Molecular Weight (observed) of prefoldin 5: 15/21 kDa.

Positive Controls: prefoldin 5 (h): 293 Lysate: sc-110511 or NIH/3T3 nuclear extract: sc-2138.

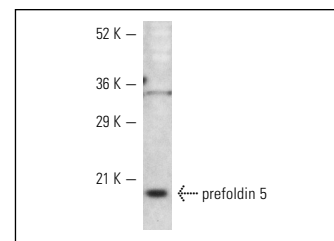
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



prefoldin 5 (S-20): sc-19843. Western blot analysis of prefoldin 5 expression in non-transfected: sc-110760 (A) and human prefoldin 5 transfected: sc-110511 (B) 293 whole cell lysates.



prefoldin 5 (S-20): sc-19843. Western blot analysis of prefoldin 5 expression in NIH/3T3 nuclear extract.

SELECT PRODUCT CITATIONS

- Mousnier, A., et al. 2007. von Hippel Lindau binding protein 1-mediated degradation of integrase affects HIV-1 gene expression at a postintegration step. *Proc. Natl. Acad. Sci. USA* 104: 13615-13620.
- Narita, R., et al. 2012. Rabring7 degrades c-Myc through complex formation with MM-1. *PLoS ONE* 7: e41891.

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.



Try **prefoldin 5 (G-2): sc-271346** or **prefoldin 5 (B-11): sc-271150**, our highly recommended monoclonal alternatives to prefoldin 5 (S-20).