

Cdc16 (H-300): sc-5615

BACKGROUND

Cell cycle events are regulated by the sequential activation and deactivation of cyclin dependent kinases (Cdks) and by the proteolysis of cyclins. The cell division cycle (Cdc) genes are required at various points in the cell cycle. Cdc25A, Cdc25B and Cdc25C protein tyrosine phosphatases function as mitotic activators by dephosphorylating Cdc2 p34 on regulatory tyrosine residues. Cdc6 is the human homolog of *Saccharomyces cerevisiae* Cdc6, which is involved in the initiation of DNA replication. Cdc37 appears to facilitate Cdk4/cyclin D1 complex formation and has been shown to form a stable complex with HSP 90. Cdc34, Cdc27 and Cdc16 function as ubiquitin-conjugating enzymes. Cdc34 is thought to be the structural and functional homolog of *Saccharomyces cerevisiae* Cdc34, which is essential for the G₁/S phase transition. Cdc16 and Cdc27 are components of the APC (anaphase-promoting complex), which ubiquitinates cyclin B, resulting in cyclin B/Cdk complex degradation.

CHROMOSOMAL LOCATION

Genetic locus: CDC16 (human) mapping to 13q34; Cdc16 (mouse) mapping to 8 A1.1.

SOURCE

Cdc16 (H-300) is a rabbit polyclonal antibody raised against amino acids 270-620 mapping at the C-terminus of Cdc16 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.

STORAGE

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

APPLICATIONS

Cdc16 (H-300) is recommended for detection of Cdc16 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).

Cdc16 (H-300) is also recommended for detection of Cdc16 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Cdc16 siRNA (h): sc-35035, Cdc16 siRNA (m): sc-35036, Cdc16 shRNA Plasmid (h): sc-35035-SH, Cdc16 shRNA Plasmid (m): sc-35036-SH, Cdc16 shRNA (h) Lentiviral Particles: sc-35035-V and Cdc16 shRNA (m) Lentiviral Particles: sc-35036-V.

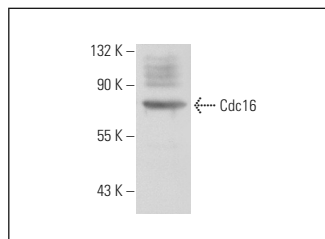
Molecular Weight of Cdc16: 77 kDa.

Positive Controls: HuT 78 whole cell lysate: sc-2208, HeLa whole cell lysate: sc-2200 or NIH/3T3 whole cell lysate: sc-2210.

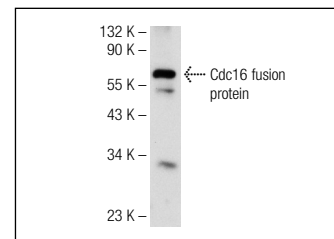
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Cdc16 (H-300): sc-5615. Western blot analysis of Cdc16 expression in HeLa whole cell lysate.



Cdc16 (H-300): sc-5615. Western blot analysis of human recombinant Cdc16 fusion protein.

SELECT PRODUCT CITATIONS

- Schwickart, M., et al. 2004. Swm1/Apc13 is an evolutionarily conserved subunit of the anaphase-promoting complex stabilizing the association of Cdc16 and Cdc27. *Mol. Cell. Biol.* 24: 3562-3576.
- Park, K.H., et al. 2005. Downregulation of the anaphase-promoting complex (APC)7 in invasive ductal carcinomas of the breast and its clinicopathologic relationships. *Breast Cancer Res.* 7: R238-R247.

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.

MONOS
Satisfaction
Guaranteed

Try **Cdc16 (D-1): sc-376091** or **Cdc16 (E-4): sc-365636**, our highly recommended monoclonal alternatives to Cdc16 (H-300).