

Cdc20 (h): 293T Lysate: sc-111973

BACKGROUND

Cyclins, regulatory subunits which associate with kinases, control many of the important steps in cell cycle progression. The Cdc2 protein kinase (p34Cdc2) exhibits protein kinase activity in vitro and exists in a complex with both cyclin B and a protein homologous to p13suc 1. Cdc2 kinase is the active subunit of the M phase promoting factor (MPF) and the M phase-specific Histone H1 kinase. The p34Cdc2/cyclin B complex is required for the G₂ to M transition. An additional cell cycle-dependent protein kinase termed Cdc20 exhibits a high degree of homology with the *S. cerevisiae* proteins Cdc20 and Cdc4. The Cdc20 transcript is readily detectable in a variety of cultured cell lines in growth phase, but disappears when cell growth is chemically arrested. Cdc20 shows kinase activity towards α -casein and myelin basic protein.

REFERENCES

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- Weinstein, J., et al. 1994. A novel mammalian protein, p55 CDC, present in dividing cells, is associated with protein kinase activity and has homology to the *Saccharomyces cerevisiae* cell division cycle proteins Cdc20 and Cdc4. *Mol. Cell. Biol.* 14: 3350-3363.
- Ohtoshi, A. et al. 2000. Human p55 (CDC)/Cdc20 associates with cyclin A and is phosphorylated by the cyclin A-Cdk2 complex. *Biochem. Biophys. Res. Commun.* 268: 530-534.
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CHROMOSOMAL LOCATION

Genetic locus: CDC20 (human) mapping to 1p34.2.

PRODUCT

Cdc20 (h): 293T Lysate represents a lysate of human Cdc20 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Cdc20 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Cdc20 antibodies. Recommended use: 10-20 μ l per lane.

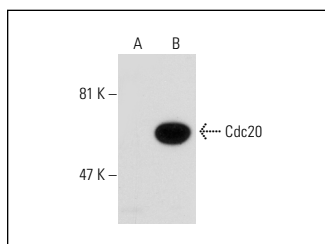
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Cdc20 (AR12): sc-53398 is recommended as a positive control antibody for Western Blot analysis of enhanced human Cdc20 expression in Cdc20 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

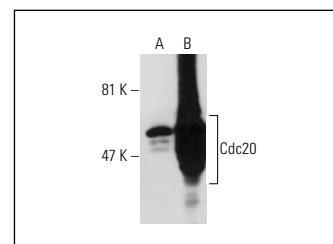
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA



Cdc20 (AR12): sc-53398. Western blot analysis of Cdc20 expression in non-transfected: sc-117752 (A) and human Cdc20 transfected: sc-111973 (B) 293T whole cell lysates.



Cdc20 (E-7): sc-13162. Western blot analysis of Cdc20 expression in non-transfected: sc-117752 (A) and human Cdc20 transfected: sc-111973 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.