

Cks2 (3B3): sc-81833

BACKGROUND

The Cdc2 p34-cyclin B complex plays a critical role in the cell cycle by regulating the G₂ to M phase transition. Also referred to as M phase promoting factor or MPF, this complex is a required component of the cell cycle machinery and is necessary for cell entry into mitosis. In *Saccharomyces cerevisiae*, this complex is known as Cdc28 and is associated with two proteins whose human homologs are called Cks1 and Cks2. Cks2 (cyclin-dependent kinases regulatory subunit 2) is a 79 amino acid protein that binds to the catalytic subunit of cyclin-dependent kinases, such as those in the Cdc2 p34-cyclin B complex. An essential component of this cyclin/cyclin-dependent kinase complex, Cks2 contributes to cell cycle control and is able to form a homohexamer that can bind up to six subunits. Without proper activity of Cks2, the first metaphase/anaphase transition of meiosis can not occur.

REFERENCES

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- Rother, K., Dengl, M., Lorenz, J., Tschöp, K., Kirschner, R., Mössner, J. and England, K. 2007. Gene expression of cyclin-dependent kinase subunit Cks2 is repressed by the tumor suppressor p53 but not by the related proteins p63 or p73. *FEBS Lett.* 581: 1166-1172.

CHROMOSOMAL LOCATION

Genetic locus: CKS2 (human) mapping to 9q22.2; Cks2 (mouse) mapping to 13 A5.

SOURCE

Cks2 (3B3) is a mouse monoclonal antibody raised against recombinant Cks2 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Cks2 (3B3) is recommended for detection of Cks2 of mouse, rat and human origin by 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).

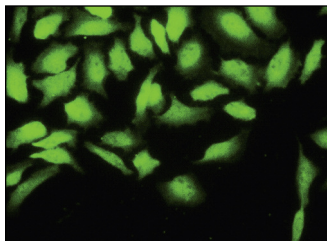
Suitable for use as control antibody for Cks2 siRNA (h): sc-37568, Cks2 siRNA (m): sc-37569, Cks2 shRNA Plasmid (h): sc-37568-SH, Cks2 shRNA Plasmid (m): sc-37569-SH, Cks2 shRNA (h) Lentiviral Particles: sc-37568-V and Cks2 shRNA (m) Lentiviral Particles: sc-37569-V.

Molecular Weight of Cks2: 10 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) 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



Cks2 (3B3): sc-81833 Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Mehta, R.I., Tsymbalyuk, N., Ivanova, S., Stokum, J.A., Woo, K., Gerzanich, V. and Simard, J.M. 2017. α-Endosulfine (ARPP-19e) expression in a rat model of stroke. *J. Neuropathol. Exp. Neurol.* 76: 898-907.

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 for detailed protocols and support products.