

cyclin E (h2): 293T Lysate: sc-170464

BACKGROUND

Cyclins were first identified in invertebrates as proteins that oscillate dramatically through the cell cycle. These proteins have been well conserved through evolution and play a critical role in regulation of cell division. Cyclin E, along with the three cyclin D proteins and cyclin C, has been shown to represent a putative G₁ cyclin on the basis of its cyclic pattern of mRNA expression, with maximal levels being detected near the G₁/S boundary. Cyclin E has been found to be associated with the transcription factor E2F in a temporally regulated manner. The cyclin E/E2F complex is detected primarily during the G₁ phase of the cell cycle and decreases as cells enter S phase. E2F is known to be a critical transcription factor for expression of several S phase specific proteins.

REFERENCES

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2. Swenson, K.I., Farrell, K.M. and Ruderman, J.V. 1986. The clam embryo protein cyclin A induces entry into M phase and the resumption of meiosis in *Xenopus* oocytes. *Cell* 47: 861-870.
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7. Lees, E., Faha, B., Dulic, V., Reed, S.I. and Harlow, E. 1992. Cyclin E/Cdk2 and cyclin A/Cdk2 kinases associate with p107 and E2F in a temporally distinct manner. *Genes Dev.* 6: 1874-1885.

CHROMOSOMAL LOCATION

Genetic locus: CCNE1 (human) mapping to 19q12.

PRODUCT

cyclin E (h2): 293T Lysate represents a lysate of human cyclin E transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

PROTOCOLS

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

APPLICATIONS

cyclin E (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive cyclin E antibodies. Recommended use: 10-20 µl per lane.

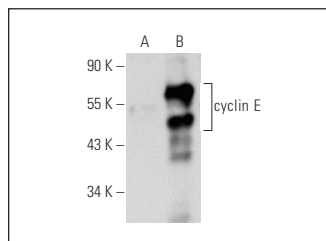
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

cyclin E (HE12): sc-247 is recommended as a positive control antibody for Western Blot analysis of enhanced human cyclin E expression in cyclin E 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-IgGκ BP-HRP: sc-516102 or m-IgGκ 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



cyclin E (HE12): sc-247. Western blot analysis of cyclin E expression in non-transfected: sc-117752 (A) and human cyclin E transfected: sc-170464 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.