

cyclin E (C-19): sc-198

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.

CHROMOSOMAL LOCATION

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

SOURCE

cyclin E (C-19) is available as either rabbit (sc-198) or goat (sc-198-G) polyclonal affinity purified antibody raised against a peptide mapping at the C-terminus of cyclin E 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-198 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

cyclin E (C-19) is recommended for detection of cyclin E of 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), immunohistochemistry (including paraffin-embedded sections) (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 cyclin E siRNA (h): sc-29288, cyclin E shRNA Plasmid (h): sc-29288-SH and cyclin E shRNA (h) Lentiviral Particles: sc-29288-V.

Molecular Weight of cyclin E: 53 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, Jurkat nuclear extract: sc-2132 or cyclin E (h2): 293T Lysate: sc-170464.

STORAGE

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

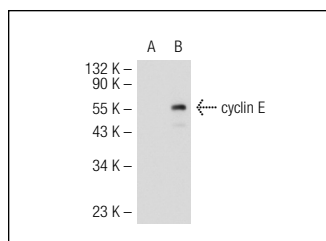
PROTOCOLS

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

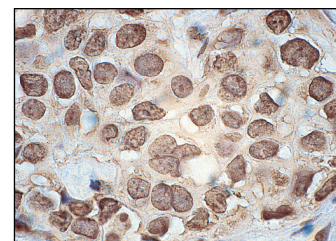
RESEARCH USE

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

DATA



cyclin E (C-19)-G: sc-198-G. 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.



cyclin E (C-19): sc-198. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing nuclear staining.

SELECT PRODUCT CITATIONS

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- Saddic, L.A., et al. 2011. Functional interactions between retinoblastoma and c-MYC in a mouse model of hepatocellular carcinoma. *PLoS ONE* 6: e19758.
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