SANTA CRUZ BIOTECHNOLOGY, INC.

cyclin E2 (N-20): sc-9566

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cyclin E, along with the three cyclin D proteins and cyclin C, has been shown to represent a putative G_1 cyclin on the basis of its cyclic pattern of mRNA expression, with maximal levels being detected near the G_1/S boundary. cyclin E has been found to be associated with the transcription factor E2F in a temporally regulated manner. Cyclin E2 is a cyclin E-related protein that specifically interacts with Cdk2 and Cdk3 and with p27 and p21. Cyclin E2 expression peaks at the G_1/S phase transition of the cell cycle, in parallel with cyclin E. Whereas cyclin E1 is expressed in most proliferating normal and tumor cells, cyclin E2 levels are low or undetectable in nontransformed cells, and are elevated in tumor-derived cells.

CHROMOSOMAL LOCATION

Genetic locus: CCNE2 (human) mapping to 8q22.1; Ccne2 (mouse) mapping to 4 A1.

SOURCE

cyclin E2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of cyclin E2 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-9566 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

cyclin E2 (N-20) is recommended for detection of cyclin E2 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).

cyclin E2 (N-20) is also recommended for detection of cyclin E2 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for cyclin E2 siRNA (h): sc-37594, cyclin E2 siRNA (m): sc-37595, cyclin E2 shRNA Plasmid (h): sc-37594-SH, cyclin E2 shRNA Plasmid (m): sc-37595-SH, cyclin E2 shRNA (h) Lentiviral Particles: sc-37594-V and cyclin E2 shRNA (m) Lentiviral Particles: sc-37595-V.

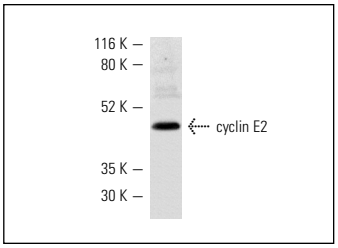
Molecular Weight of cyclin E2: 45 kDa.

Positive Controls: mouse testis extract: sc-2405, HeLa whole cell lysate: sc-2200 or Jurkat nuclear extract: sc-2132.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



cyclin E2 (N-20): sc-9566. Western blot analysis of cyclin E2 expression in mouse testis extract.

SELECT PRODUCT CITATIONS

1. Kang, H., et al. 2004. Brg-1 controls the activity of the retinoblastoma protein via regulation of $p21^{CIP1/WAF1/SDI}$. Mol. Cell. Biol. 24: 1188-1199.
2. Gurzov, E.N., et al. 2006. Cyclin E1 knockdown induces apoptosis in cancer cells. Neurol. Res. 28: 493-499.
3. Xiang, B., et al. 2006. Using three-dimensional acinar structures for molecular and cell biological assays. Meth. Enzymol. 406: 692-701.
4. Kuo, S.H., et al. 2012. Expression of BCL10 in cervical cancer has a role in the regulation of cell growth through the activation of NFκB-dependent cyclin D1 signaling. Gynecol. Oncol. 126: 245-251.

PROTOCOLS

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