cyclin E (HE111): sc-248

**BACKGROUND**

Cyclins were first identified in invertebrates as proteins that oscillate dramatically throughout 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; Ccne1 (mouse) mapping to 7 B2.

**SOURCE**

cyclin E (HE111) is a mouse monoclonal antibody raised against recombinant cyclin E of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 lambda light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-248 X, 200 µg/0.1 ml.

Cyclin E (HE111) is available conjugated to agarose (sc-248 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-248 HRP), 200 µg/ml, for WB, IHC/P and ELISA; to either phycocerythrin (sc-248 PE), fluorescein (sc-248 FITC), Alexa Fluor® 488 (sc-248 AF488), Alexa Fluor® 546 (sc-248 AF546), Alexa Fluor® 594 (sc-248 AF594) or Alexa Fluor® 647 (sc-248 AF647), 200 µg/ml, for WB (RGB), IF, IHC/P and FCM; and to either Alexa Fluor® 680 (sc-248 AF680) or Alexa Fluor® 790 (sc-248 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, cyclin E (HE111) is available conjugated to TRITC (sc-248 TRITC, 200 µg/ml), for IF, IHC/P and FCM.

**APPLICATIONS**

cyclin E (HE111) is recommended for detection of cyclin E 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for cyclin E siRNA (h): sc-29288, cyclin E siRNA (m): sc-29289, cyclin E shRNA Plasmid (h): sc-29288-SH, cyclin E shRNA Plasmid (m): sc-29289-SH, cyclin E shRNA (h) Lentiviral Particles: sc-29288-V and cyclin E shRNA (m) Lentiviral Particles: sc-29289-V.

cyclin E (HE111) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of cyclin E: 53 kDa.

**STORAGE**

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

**DATA**

cyclin E (HE111): sc-248. Western blot analysis of cyclin E expression in JAR (A), KNRK (B), MEG-01 (C), NIH 3T3 (D) and Jurkat (E) whole cell lysates. Detection reagent used: m-IgG, BP-HRP (Cruz Marker): sc-516132-CM.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

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