SANTA CRUZ BIOTECHNOLOGY, INC.

D-type cyclin [HHV8-encoded] (94B): sc-53271

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

The proliferation of eukaryotic cells is controlled at specific points in the cell cycle, particularly at the G_1 to S and the G_2 to M transitions. It is well established that the Cdc2 p34-cyclin B protein kinase plays a critical role in the G_2 to M transition, while cyclin A associates with Cdk2 p33 and functions in S phase. Considerable effort directed towards the identification of G_1 cyclins has led to the isolation of cyclin D, cyclin C and cyclin E. Of these, cyclin D corresponds to a putative human oncogene, designated PRAD1, which maps at the site of the Bcl-1 rearrangement in certain lymphomas and leukemias. Two additional human type D cyclins, as well as their mouse homologs, have been identified. Evidence has established that members of the cyclin D family function to regulate phosphorylation of the retinoblastoma gene product, thereby activating E2F transcription factors.

REFERENCES

1. Draetta, G. 1990. Cell cycle control in eukaryotes: molecular mechanisms of Cdc2 activation. Trends Biol. Sci. 15: 378-383.
2. Xiong, Y., et al. 1991. Human D-type cyclin. Cell 65: 691-699.
3. Xiong, Y., et al. 1992. Molecular cloning and chromosomal mapping of CCND genes encoding human D-type cyclins. Genomics 13: 575-584.
4. Kiyokawa, H., et al. 1992. Cloning of a D-type cyclin from murine erythroleukemia cells. Proc. Natl. Acad. Sci. USA 89: 2444-2447.
5. Won, K., et al. 1992. Growth-regulated expression of D-type cyclin genes in human diploid fibroblasts. Proc. Natl. Acad. Sci. USA 89: 9910-9914.
6. Motokura, T., et al. 1992. Cloning and characterization of human cyclin D3, a cDNA closely related in sequence to the PRAD1/cyclin D1 proto-oncogene. J. Biol. Chem. 267: 20412-20415.

SOURCE

D-type cyclin [HHV8-encoded] (94B) is a rat monoclonal antibody raised against recombinant HHV8-encoded D-type cyclin (vcyc).

PRODUCT

Each vial contains 200 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

D-type cyclin [HHV8-encoded] (94B) is available conjugated to agarose (sc-53271 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53271 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53271 PE), fluorescein (sc-53271 FITC), Alexa Fluor® 488 (sc-53271 AF488), Alexa Fluor® 546 (sc-53271 AF546), Alexa Fluor® 594 (sc-53271 AF594) or Alexa Fluor® 647 (sc-53271 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53271 AF680) or Alexa Fluor® 790 (sc-53271 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

D-type cyclin [HHV8-encoded] (94B) is recommended for detection of HHV8-encoded D-type cylin (vcyc) of HHV-8 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Dmc1 siRNA (h): sc-37392, Dmc1 shRNA Plasmid (h): sc-37392-SH and Dmc1 shRNA (h) Lentiviral Particles: sc-37392-V.

Molecular Weight of D-type cyclin: 37/31 kDa.

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.