cyclin B (D-1): sc-166210

BACKGROUND

Drosophila melanogaster is a proven and effective model for studying developmental and cellular processes common to higher eukaryotes. Approximately 13,600 genes have been elucidated from more than 120 megabases of euchromatin, and they are organized among the chromosomes 2, 3, 4, X and Y, with the Y chromosome being predominately heterochromatic. Drosophila genes can be categorized based on the type of protein for which they encode and are represented by six major classifications, which include intracellular signaling proteins, transmembrane proteins, RNA binding proteins, secreted factors, transcription regulators (basic helix-loop-helix, homeodomain containing, zinc finger containing, and chromatin associated) or other functional proteins. Cyclins are a diverse family of proteins whose defining feature is that they bind and activate cyclin dependent kinase (Cdk) family members and influence cell-cycle control. Drosophila cyclin A and B both regulate the cyclin dependent kinase Cdc2, with cyclin A expression peaking in prophase, while cyclin B expression peaks until metaphase.

REFERENCES


SOURCE

cyclin B (D-1) is a mouse monoclonal antibody raised against amino acids 1-300 of cyclin B of Drosophila melanogaster origin.

PRODUCT

Each vial contains 200 µg IgG; kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

cyclin B (D-1) is available conjugated to agaroose (sc-166210 AC), 500 µg/0.25 ml agaroose in 1 ml, for IP; to HRP (sc-166210 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166210 PE), fluorescein (sc-166210 FITC), Alexa Fluor® 488 (sc-166210 AF488), Alexa Fluor® 546 (sc-166210 AF546), Alexa Fluor® 594 (sc-166210 AF594) or Alexa Fluor® 647 (sc-166210 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166210 AF680) or Alexa Fluor® 790 (sc-166210 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.

APPLIEDS

cyclin B (D-1) is recommended for detection of cyclin B of Drosophila melanogaster origin by Western Blotting (starting dilution 1:100, 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).

Molecular Weight of cyclin B: 63 kDa.

Positive Controls: Schneider’s Drosophila Line 2 whole cell lysate: sc-364794.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG κ BP-HRP; sc-516102 or m-IgG κ 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.

2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).


DATA

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SELECT PRODUCT CITATIONS


RESEARCH USE

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

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