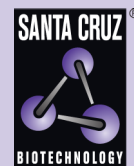


cyclin A (BF683): sc-239



The Power to Question

BACKGROUND

The critical role that the family of regulatory proteins known as cyclins play in eukaryotic cell cycle regulation is well established. The best-characterized cyclin complex is the mitotic cyclin B/Cdc2 p34 kinase, the active component of maturing promoting factor. Cyclin A accumulates prior to cyclin B in the cell cycle, appears to be involved in control of S phase and has been shown to associate with cyclin-dependent kinase-2 (Cdk2). In addition, cyclin A has been implicated in cell transformation and is found in complexes with E1A, transcription factors DRTF1 and E2F and retinoblastoma protein, p110. A second form of cyclin A, named cyclin A1 because of its high sequence homology to *Xenopus* cyclin A1, is most highly expressed in germ cells. It has been proposed that cyclin A1 can associate with Cdk2, p39 and Cdc2 p34.

CHROMOSOMAL LOCATION

Genetic locus: CCNA2 (human) mapping to 4q27; Ccna2 (mouse) mapping to 3 B.

SOURCE

cyclin A (BF683) is a mouse monoclonal antibody raised against recombinant full-length cyclin A of human origin.

PRODUCT

Each vial contains 200 µg IgE 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-239 X, 200 µg/0.1 ml.

cyclin A (BF683) is available conjugated to agarose (sc-239 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; and to phycoerythrin (sc-239 PE), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

cyclin A (BF683) is recommended for detection of cyclin A 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), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for cyclin A siRNA (h): sc-29282, cyclin A siRNA (m): sc-29283, cyclin A shRNA Plasmid (h): sc-29282-SH, cyclin A shRNA Plasmid (m): sc-29283-SH, cyclin A shRNA (h) Lentiviral Particles: sc-29282-V and cyclin A shRNA (m) Lentiviral Particles: sc-29283-V.

cyclin A (BF683) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of cyclin A: 54 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, MCF7 whole cell lysate: sc-2206 or A-431 whole cell lysate: sc-2201.

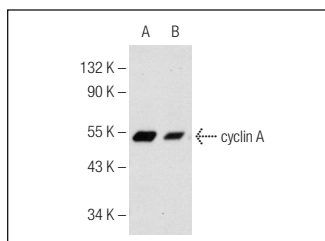
STORAGE

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

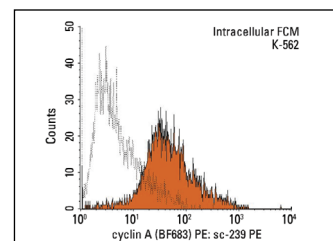
RESEARCH USE

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

DATA



cyclin A (BF683): sc-239. Western blot analysis of cyclin A expression in untreated (A) and Flurbiprofen (sc-202158) treated (B) Caco-2 whole cell lysates. Note down regulation of cyclin A expression in lane B.



cyclin A (BF683) PE: sc-239 PE. Intracellular FCM analysis of fixed and permeabilized K-562 cells. Black line histogram represents the isotype control, normal mouse IgE.

SELECT PRODUCT CITATIONS

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- Liu, Z., et al. 2013. CASZ1 inhibits cell cycle progression in neuroblastoma by restoring pRb activity. *Cell Cycle* 12: 2210-2218.
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CONJUGATES

See **cyclin A (B-8): sc-271682** for cyclin A antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.