p35 (h): 293 Lysate: sc-113375



BACKGROUND

Cyclin dependent kinase-5 (Cdk5), a key regulator of cell cycle progression, was originally isolated on the basis of its structural homology to Cdc2, a well-characterized regulator of cell cycle progression. Although Cdk5 is expressed at the highest level in the brain of adult mice, intermediate levels in testis and low or undetectable levels in all other tissues, brain is the only tissue from which Cdk5 can be isolated as an active kinase. These findings may be explained by the cloning and characterization of a Cdk5 regulatory subunit, designated p35. p35 displays a neuronal cell-specific pattern of expression, physically associates with Cdk5 and activates Cdk5 enzymatic activity. p35 is also expressed in many tissues in a truncated form, designated p25.

REFERENCES

- Murray, A.W. and Kirschner, M.W. 1989. Dominoes and clocks: the union of two views of the cell cycle. Science 246: 614-621.
- Nurse, P. 1990. Universal control mechanism regulating onset of M-phase. Nature 344: 503-508.
- Pines, J. and Hunter, T. 1990. Cdc2 p34: the S and M kinase? New Biol. 2: 389-401.
- 4. Draetta, G. 1990. Cell cycle control in eukaryotes: molecular mechanisms of Cdc2 activation. Trends Biochem. Sci. 15: 378-383.
- 5. Meyerson, M., Enders, G.H., Wu, C.L., Su, L.K., Gorka, C., Nelson, C., Harlow, E. and Tsai, L.H. 1992. A family of human Cdc2-related protein kinases. EMBO J. 11: 2909-2917.
- 6. Tsai, L.H., Delalle, I., Caviness, V.S., Jr, Chae, T. and Harlow, E. 1994. p35 is a neural-specific regulatory subunit of cyclin-dependent kinase 5. Nature 371: 419-423.
- Lew, J., Huang, Q.Q., Qi, Z., Winkfein, R.J., Aebersold, R., Hunt, T. and Wang, J.H. 1994. A brain-specific activator of cyclin-dependent kinase 5. Nature 371: 423-426.

CHROMOSOMAL LOCATION

Genetic locus: CDK5R1 (human) mapping to 17q11.2.

PRODUCT

p35 (h): 293 Lysate represents a lysate of human p35 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

p35 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive p35 antibodies. Recommended use: $10-20 \mu l$ per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com