

Cdk10 (N-17): sc-51268

BACKGROUND

Cell cycle progression is controlled, in part, by a family of cyclin dependent kinases (Cdks) that work to phosphorylate key substrates involved in each phase of cell cycle progression. Cdks are the catalytic subunits of serine/threonine protein kinases, a large family of proteins that act as regulators of the eukaryotic cell cycle. Several Cdk family members have been identified, including Cdc2 p34, Cdk2-10, PITSLRE, PCTAIRE-1-3, KKIAMRE, KKIALRE, CDKN3 and NKIAMRE. Cdk10, also called PISLRE, is a Cdc2-related kinase whose gene has been shown to encode two isoforms, each having a different function within the cell cycle. Although the two isoforms share nearly identical amino acid sequences, they differ at the C- and N- terminals. One Cdk isoform interacts with the transcription factor Ets-2, thereby modulating its transactivation activity, while the other is thought to have a role at the G₂/M transition. Cdk10 mRNA has been shown to have the highest expression in lung, liver and kidney tissue, with gene upregulation implicated in cases of non-Hodgkin's follicular lymphoma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CDK10 (human) mapping to 16q24; Cdk10 (mouse) mapping to 8 E1.

STORAGE

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

SOURCE

Cdk10 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Cdk10 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-51268 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

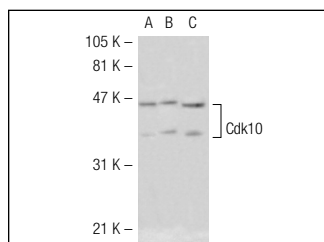
Cdk10 (N-17) is recommended for detection of Cdk10 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Cdk10 (N-17) is also recommended for detection of Cdk10 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Cdk10 siRNA (h): sc-72226 and Cdk10 siRNA (m): sc-72227.

Molecular Weight of Cdk10: 38.5 kDa.

DATA



Cdk10 (N-17): sc-51268. Western blot analysis of Cdk10 expression in non-transfected 293T: sc-117752 (A), human Cdk10 transfected 293T: sc-115149 (B) and Jurkat (C) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.