

CdkL4 (X-18): sc-81840

BACKGROUND

Cell cycle progression is controlled in part by a family of cyclin proteins and cyclin dependent kinases (Cdks). Cdk proteins work in concert with the cyclins to phosphorylate key substrates involved in each phase of cell cycle progression. Another family of proteins, Cdk inhibitors, also plays a role in regulating the cell cycle by binding to cyclin-Cdk complexes and modulating their activity. Cdks are considered potential targets for anti-cancer therapy due to their involvement with cell cycle regulation. Cdks are also involved in the regulation of transcription and mRNA processing. CdkL4 (cyclin-dependent kinase-like 4) is a 315 amino acid protein that belongs to the CMGC Ser/Thr protein kinase family and may be involved in cell cycle regulation.

REFERENCES

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4. MacLachlan, T.K., Sang, N. and Giordano, A. 1995. Cyclins, cyclin-dependent kinases and cdk inhibitors: implications in cell cycle control and cancer. *Crit. Rev. Eukaryot. Gene Expr.* 5: 127-156.
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7. Liu, J. and Kipreos, E.T. 2000. Evolution of cyclin-dependent kinases (CDKs) and CDK-activating kinases (CAKs): differential conservation of CAKs in yeast and metazoa. *Mol. Biol. Evol.* 17: 1061-1074.
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9. Corellou, F., Brownlee, C., Kloareg, B. and Bouget, F.Y. 2001. Cell cycle-dependent control of polarised development by a cyclin-dependent kinase-like protein in the *Fucus* zygote. *Development* 128: 4383-4392.

CHROMOSOMAL LOCATION

Genetic locus: CDKL4 (human) mapping to 2p22.1.

SOURCE

CdkL4 (X-18) is a mouse monoclonal antibody raised against recombinant CdkL4 of human origin.

PRODUCT

Each vial contains 50 μ g IgG₁ kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CdkL4 (X-18) is recommended for detection of CdkL4 of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

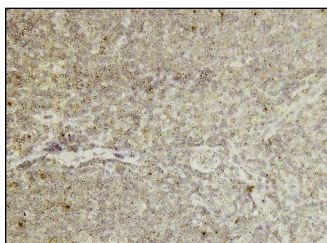
Suitable for use as control antibody for CdkL4 siRNA (h): sc-94766, CdkL4 shRNA Plasmid (h): sc-94766-SH and CdkL4 shRNA (h) Lentiviral Particles: sc-94766-V.

Molecular Weight of CdkL4: 36 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



CdkL4 (X-18): sc-81840. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human tonsil tissue showing cytoplasmic localization.

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.

PROTOCOLS

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