

Cdk8 (C-19): sc-1521

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 cell cycle by binding to cyclin-Cdk complexes and modulating their activity. Several Cdk proteins have been identified, including Cdk2-Cdk8, PCTAIRE-1-3, PITALRE and PITSLRE. Large complexes containing Cdk8, cyclin C and the large subunit of RNA polymerase II have been identified. Cdk8 is thought to regulate RNA polymerase II function in conjunction with cyclin C. Cdk8 has been demonstrated to function as a transcriptional activator when fused to the DNA binding domain of GAL4.

CHROMOSOMAL LOCATION

Genetic locus: CDK8 (human) mapping to 13q12.13; Cdk8 (mouse) mapping to 5 G3.

SOURCE

Cdk8 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Cdk8 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Cdk8 (C-19) is available conjugated to agarose (sc-1521 AC), 500 µg/0.25 ml agarose in 1 ml, for IP.

Blocking peptide available for competition studies, sc-1521 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Cdk8 (C-19) is recommended for detection of Cdk8 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Cdk8 (C-19) is also recommended for detection of Cdk8 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Cdk8 siRNA (h): sc-29267, Cdk8 siRNA (m): sc-35049, Cdk8 shRNA Plasmid (h): sc-29267-SH, Cdk8 shRNA Plasmid (m): sc-35049-SH, Cdk8 shRNA (h) Lentiviral Particles: sc-29267-V and Cdk8 shRNA (m) Lentiviral Particles: sc-35049-V.

Molecular Weight of Cdk8: 53 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, Jurkat nuclear extract: sc-2132 or HeLa nuclear extract: sc-2120.

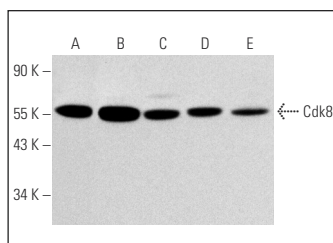
STORAGE

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

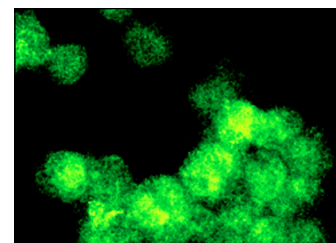
RESEARCH USE

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

DATA



Cdk8 (C-19): sc-1521. Western blot analysis of Cdk8 expression in K-562 (A), Jurkat (B), HeLa (C), NIH/3T3 (D) and KNRK (E) nuclear extracts.



Cdk8 (C-19): sc-1521. Immunofluorescence staining of methanol-fixed Jurkat cells showing nuclear localization.

SELECT PRODUCT CITATIONS

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- Lai, F., et al. 2013. Activating RNAs associate with Mediator to enhance chromatin architecture and transcription. *Nature* 494: 497-501.

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