

CDK2AP1 (N-19): sc-48131

BACKGROUND

CDK2AP1 (also designated p12 and DOC-1) is a growth suppressor that binds to and inhibits DNA pol α /primase. When bound, CDK2AP1 affects the initiation step, but not the elongation phase, of replication. CDK2AP1 also binds to cyclin-dependent kinase 2 (Cdk2) and targets it for proteolysis. CDK2AP1 promotes cell cycle arrest by regulating the S phase of the cycle, and may trigger apoptosis. The growth factor TGF β 1 transcriptionally-induces CDK2AP1 expression, which, in turn, mediates the growth inhibitory activity of TGF β 1 by modulating Cdk2 activities and pRB phosphorylation. Due to its ability to trigger apoptosis, CDK2AP1 may be a good candidate for a tumor suppressor in oral cancer.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CDK2AP1 (human) mapping to 12q24.31; Cdk2ap1 (mouse) mapping to 5 F.

SOURCE

CDK2AP1 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CDK2AP1 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-48131 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CDK2AP1 (N-19) is recommended for detection of CDK2AP1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

CDK2AP1 (N-19) is also recommended for detection of CDK2AP1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for CDK2AP1 siRNA (h): sc-60343, CDK2AP1 siRNA (m): sc-60344, CDK2AP1 shRNA Plasmid (h): sc-60343-SH, CDK2AP1 shRNA Plasmid (m): sc-60344-SH, CDK2AP1 shRNA (h) Lentiviral Particles: sc-60343-V and CDK2AP1 shRNA (m) Lentiviral Particles: sc-60344-V.

Molecular Weight of CDK2AP1: 12 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.



Try **CDK2AP1 (H-4): sc-390283** or **CDK2AP1 (A-9): sc-515036**, our highly recommended monoclonal alternatives to CDK2AP1 (N-19).