CDK2AP1 (H-57): sc-134526



The Power to Question

BACKGROUND

CDK2AP1 (also designated p12 and DOC-1) is a growth suppressor that binds to and inhibits DNA pol $\alpha/\text{primase}.$ 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 (H-57) is a rabbit polyclonal antibody raised against amino acids 20-76 mapping within an internal region of CDK2AP1 of human origin.

PRODUCT

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

APPLICATIONS

CDK2AP1 (H-57) is recommended for detection of CDK2AP1 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).

CDK2AP1 (H-57) is also recommended for detection of CDK2AP1 in additional species, including canine, bovine, porcine and avian.

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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 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 (H-57).

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