

CdcA7L (C-13): sc-160224

BACKGROUND

Cell cycle events are regulated by the sequential activation and deactivation of cyclin dependent kinases (Cdks) and by the proteolysis of cyclins. The cell division control (Cdc) genes are required at various points in the cell cycle. CdcA7L (cell division cycle-associated 7-like protein), also known as JPO2, R1 and RAM2, is a 454 amino acid protein that suppresses transcription of monoamine oxidase A (MAOA) gene by binding to the promoter, leading to inhibition of apoptosis. CdcA7L also plays an oncogenic role in assisting the full transforming effect of c-Myc in medulloblastoma cells and, although ubiquitously expressed in normal tissue, is correspondingly found to be over-expressed in medulloblastomas. CdcA7L likely acts downstream of p38 and Bcl-2, but upstream of caspase-3, cyclin D1 and E2F-1 in apoptotic signaling pathways. There are two isoforms of CdcA7L that are produced as a result of alternative splicing events.

REFERENCES

- Huang, A., et al. 2005. Identification of a novel c-Myc protein interactor, JPO2, with transforming activity in medulloblastoma cells. *Cancer Res.* 65: 5607-5619.
- Chen, K., et al. 2005. R1, a novel repressor of the human monoamine oxidase A. *J. Biol. Chem.* 280: 11552-11559.
- Ou, X.M., et al. 2006. Glucocorticoid and androgen activation of monoamine oxidase A is regulated differently by R1 and Sp1. *J. Biol. Chem.* 281: 21512-21525.
- Maertens, G.N., et al. 2006. Transcriptional co-activator p75 binds and tethers the Myc-interacting protein JPO2 to chromatin. *J. Cell Sci.* 119: 2563-2571.
- Ou, X.M., et al. 2006. Monoamine oxidase A and repressor R1 are involved in apoptotic signaling pathway. *Proc. Natl. Acad. Sci. USA* 103: 10923-10928.

CHROMOSOMAL LOCATION

Genetic locus: CDCA7L (human) mapping to 7p15.3; Cdca7l (mouse) mapping to 12 F2.

SOURCE

CdcA7L (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CdcA7L 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-160224 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

CdcA7L (C-13) is recommended for detection of CdcA7L 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); non cross-reactive with other CdcA family members.

CdcA7L (C-13) is also recommended for detection of CdcA7L in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CdcA7L siRNA (h): sc-89743, CdcA7L siRNA (m): sc-142220, CdcA7L shRNA Plasmid (h): sc-89743-SH, CdcA7L shRNA Plasmid (m): sc-142220-SH, CdcA7L shRNA (h) Lentiviral Particles: sc-89743-V and CdcA7L shRNA (m) Lentiviral Particles: sc-142220-V.

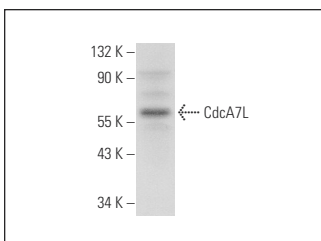
Molecular Weight of CdcA7L: 52 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

DATA



CdcA7L (C-13): sc-160224. Western blot analysis of CdcA7L expression in Hep G2 whole cell lysate.

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.