SANTA CRUZ BIOTECHNOLOGY, INC.

CDK5RAP3 (H-300): sc-134627



BACKGROUND

CDK5RAP3 (cyclin dependent kinase 5 regulatory subunit-associated protein 3), also designated C53 or IC53, may be involved in neuronal differentiation, cell proliferation and DNA repair. The role CDK5RAP3 plays in neuronal differentiation may be attributed to its interaction with the Cdk5 activator protein called p35. p35 physically associates with Cdk5 to activate enzymatic activity. Cdk5 activity increases significantly during neuronal differentiation. Upon transfection, CDK5RAP3 is capable of increasing the rate of cell proliferation, suggesting that it may play a role in tumorigenesis. CDK5RAP3 is a regulatory component of the G_2/M DNA damage checkpoint in response to genotoxic stress. CDK5RAP3 is expressed in brain, heart, placenta, liver, skeletal muscle, lung, kidney and pancreas, and is overexpressed in tumor tissue. Three named isoforms exist for CDK5RAP3 as a result of alternative splicing events. CDK5RAP3 contains two leucine zipper motifs, putative phosphorylation and potential N-myristoylation sites.

CHROMOSOMAL LOCATION

Genetic locus: CDK5RAP3 (human) mapping to 17q21.32; Cdk5rap3 (mouse) mapping to 11 D.

SOURCE

CDK5RAP3 (H-300) is a rabbit polyclonal antibody raised against amino acids 207-506 mapping at the C-terminus of CDK5RAP3 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.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

CDK5RAP3 (H-300) is recommended for detection of CDK5RAP3 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).

CDK5RAP3 (H-300) is also recommended for detection of CDK5RAP3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for CDK5RAP3 siRNA (h): sc-93759, CDK5RAP3 siRNA (m): sc-142227, CDK5RAP3 shRNA Plasmid (h): sc-93759-SH, CDK5RAP3 shRNA Plasmid (m): sc-142227-SH, CDK5RAP3 shRNA (h) Lentiviral Particles: sc-93759-V and CDK5RAP3 shRNA (m) Lentiviral Particles: sc-142227-V.

Molecular Weight of CDK5RAP3: 57 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or HeLa whole cell lysate: sc-2200.

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.

DATA



CDK5RAP3 (H-300): sc-134627. Western blot analysis of CDK5RAP3 expression in A-431 (A) and HeLa (B) whole cell lysates.

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.

MONOS Satisfation Guaranteed

Try CDK5RAP3 (E-7): sc-271776 or CDK5RAP3 (B-11): sc-271671, our highly recommended monoclonal alternatives to CDK5RAP3 (H-300).