

# CDK5RAP2 (N-15): sc-82804

## BACKGROUND

Cyclin dependent kinase 5 (Cdk5) is a key regulator of cell cycle progression in neuronal differentiation that physically associates with and is activated by the neuron-specific protein p35. CDK5RAP1 (CDK5 regulatory subunit-associated protein 1) specifically inhibits Cdk5 activation by p35 through formation of a dimer that inhibits kinase activity. CDK5RAP2, also known as Centrosome-associated protein 215, is a 1893 amino acid centrosomal protein that regulates activity of CDK5 through complex formation with CDK5RAP1. Expressed in placenta, liver, pancreas, heart, skeletal muscle, lung, brain and kidney, CDK5RAP2 associates with centrosomes throughout the cell cycle. Mutations in the gene encoding CDK5RAP2 results in primary microcephaly autosomal recessive type 3, which is characterized by markedly reduced head size, brain weight and significant neurological deficits. There are four isoforms of CDK5RAP2 that are produced as a result of alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: CDK5RAP2 (human) mapping to 9q33.2; Cdk5rap2 (mouse) mapping to 4 C2.

## SOURCE

CDK5RAP2 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CDK5RAP2 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-82804 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-82804 X, 200  $\mu$ g/0.1 ml.

## APPLICATIONS

CDK5RAP2 (N-15) is recommended for detection of CDK5RAP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

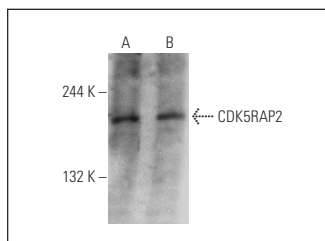
Suitable for use as control antibody for CDK5RAP2 siRNA (h): sc-72847, CDK5RAP2 siRNA (m): sc-72848, CDK5RAP2 shRNA Plasmid (h): sc-72847-SH, CDK5RAP2 shRNA Plasmid (m): sc-72848-SH, CDK5RAP2 shRNA (h) Lentiviral Particles: sc-72847-V and CDK5RAP2 shRNA (m) Lentiviral Particles: sc-72848-V.

CDK5RAP2 (N-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of CDK5RAP2: 215 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or SK-MEL-28 cell lysate: sc-2236.

## DATA



CDK5RAP2 (N-15): sc-82804. Western blot analysis of CDK5RAP2 expression in HeLa (A) and SK-MEL-28 (B) whole cell lysates.

## STORAGE

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