# p35 (N-20): sc-821



The Power to Question

# **BACKGROUND**

Cyclin dependent kinase-5 (Cdk5), a key regulator of cell cycle progression, was originally isolated on the basis of its structural homology to Cdc2, a well-characterized regulator of cell cycle progression. Although Cdk5 is expressed at the highest level in the brain of adult mice, intermediate levels in testis and low or undetectable levels in all other tissues, brain is the only tissue from which Cdk5 can be isolated as an active kinase. These findings may be explained by the cloning and characterization of a Cdk5 regulatory subunit, designated p35. p35 displays a neuronal cell-specific pattern of expression, physically associates with Cdk5 and activates Cdk5 enzymatic activity. p35 is also expressed in many tissues in a truncated form, designated p25.

# **CHROMOSOMAL LOCATION**

Genetic locus: CDK5R1 (human) mapping to 17q11.2; Cdk5r1 (mouse) mapping to 11 B5.

# **SOURCE**

p35 (N-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of p35 of human origin.

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-821 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

p35 (N-20) is recommended for detection of p35 precursor 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p35 (N-20) is also recommended for detection of p35 precursor in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for p35 siRNA (h): sc-36153, p35 siRNA (m): sc-36154, p35 shRNA Plasmid (h): sc-36153-SH, p35 shRNA Plasmid (m): sc-36154-SH, p35 shRNA (h) Lentiviral Particles: sc-36153-V and p35 shRNA (m) Lentiviral Particles: sc-36154-V.

Molecular Weight of p35: 35 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 nuclear extract: sc-2122 or p35 (h): 293T Lysate: sc-113375.

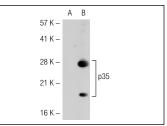
# **STORAGE**

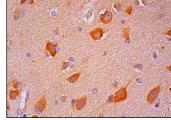
Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

### DATA





p35 (N-20): sc-821. Western blot analysis of p35 expression in non-transfected: sc-117752 (**A**) and human p35 transfected: sc-113375 (**B**) 293T whole cell livestes

p35 (N-20): sc-821. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing cytoplasmic staining of neuronal cells

# **SELECT PRODUCT CITATIONS**

- 1. Nikolic, M., et al. 1998. The p35/Cdk5 kinase is a neuron-specific Rac effector that inhibits Pak1 activity. Nature 395: 194-198.
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- 5. Utreras, E., et al. 2009. Cyclin-dependent kinase 5 activator p35 over-expression and amyloid  $\beta$  synergism increase apoptosis in cultured neuronal cells. Neuroscience 161: 978-987.
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Try **p35 (4G11): sc-293184**, our highly recommended monoclonal alternative to p35 (N-20).