



Cdk5 (phospho Tyr15) rabbit pAb

Cat No.:ES4438

For research use only

Overview

Product Name	Cdk5 (phospho Tyr15) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat;Monkey
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human CDK5 around the phosphorylation site of Tyr15. AA range:1-50
Specificity	Phospho-Cdk5 (Y15) Polyclonal Antibody detects endogenous levels of Cdk5 protein only when phosphorylated at Y15.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Cyclin-dependent kinase 5
Gene Name	CDK5
Cellular localization	[Isoform 1]: Cytoplasm . Nucleus . Cell membrane ; Peripheral membrane protein. Perikaryon. Cell projection, lamellipodium . Cell projection, growth cone . Cell junction, synapse, postsynaptic density . Cell junction, synapse . In axonal growth cone with extension to the peripheral lamellipodia (By similarity). Under neurotoxic stress and neuronal injury conditions, CDK5R (p35) is cleaved by calpain to generate CDK5R1 (p25) in response to increased intracellular calcium. The elevated level of p25, when in complex with CDK5, leads to its subcellular misallocation as well as its hyperactivation. Colocalizes with CTNND2 in the cell body of neuronal cells, and with CTNNB1 in the cell-cell contacts and plasma membrane of undifferentiated





Purification

and differentiated neuroblastoma cells. Reversibly attach

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Clonality

Polyclonal

Concentration

1 mg/ml

Observed band

33kD

Human Gene ID

1020

Human Swiss-Prot Number

Q00535

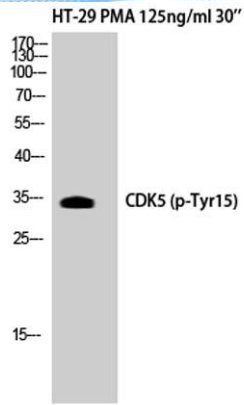
Alternative Names

CDK5; CDKN5; Cyclin-dependent kinase 5; Cell division protein kinase 5; Serine/threonine-protein kinase PSSALRE; Tau protein kinase II catalytic subunit; TPKII catalytic subunit

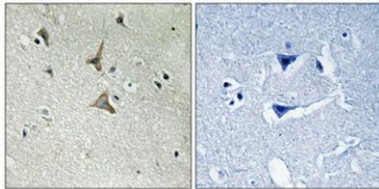
Background

cyclin dependent kinase 5(CDK5) Homo sapiens
This gene encodes a proline-directed serine/threonine kinase that is a member of the cyclin-dependent kinase family of proteins. Unlike other members of the family, the protein encoded by this gene does not directly control cell cycle regulation. Instead the protein, which is predominantly expressed at high levels in mammalian postmitotic central nervous system neurons, functions in diverse processes such as synaptic plasticity and neuronal migration through phosphorylation of proteins required for cytoskeletal organization, endocytosis and exocytosis, and apoptosis. In humans, an allelic variant of the gene that results in undetectable levels of the protein has been associated with lethal autosomal recessive lissencephaly-7. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2015],

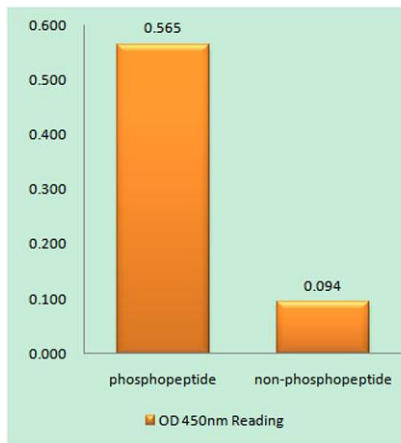




Western Blot analysis of HT29+PMA cells using Phospho-Cdk5 (Y15) Polyclonal Antibody

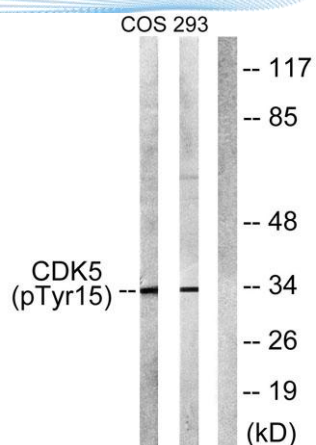


Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CDK5 (Phospho-Tyr15) Antibody





Western blot analysis of lysates from COS7 cells treated with EGF 200ng/ml 30' and 293 cells treated with H₂O₂ 100u, 15mins, using CDK5 (Phospho-Tyr15) Antibody. The lane on the right is blocked with the phospho peptide.

