



CDK5 Mouse mAb(3D1)

Catalog No	YP-Ab-04774
Isotype	IgG
Reactivity	Human; Mouse;Rat
Applications	IHC;WB
Gene Name	CDK5 CDKN5
Protein Name	CDK5
Immunogen	Synthesized peptide derived from human CDK5
Specificity	This antibody detects endogenous levels of CDK5 at Human, Mouse,Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.04% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	IHC-p1:50-200 ,WB 1:1000-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Cyclin-dependent kinase 5 (EC 2.7.11.22) (Cell division protein kinase 5) (Serine/threonine-protein kinase PSSALRE) (Tau protein kinase II catalytic subunit) (TPKII catalytic subunit)
Observed Band	33kD
Cell Pathway	[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 CTNNA1 in the cell-cell contacts and plasma membrane of undifferentiated and differentiated neuroblastoma cells. Reversibly attach
Tissue Specificity	[Isoform 1]: Ubiquitously expressed (PubMed:17009320, PubMed:19693690). Accumulates in cortical neurons (at protein level) (PubMed:17009320). ; [Isoform 2]: Expressed in the testis, skeletal muscle, colon, bone marrow and ovary.
Function	



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.

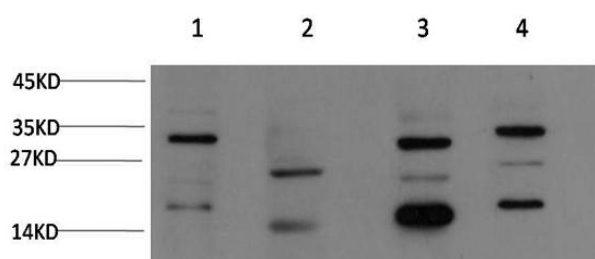
matters needing attention

Avoid repeated freezing and thawing!

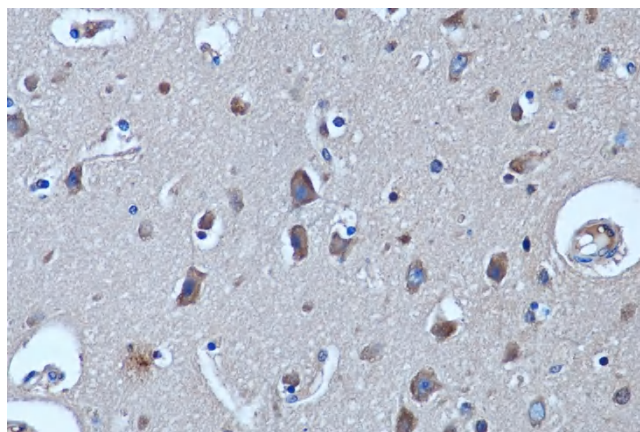
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

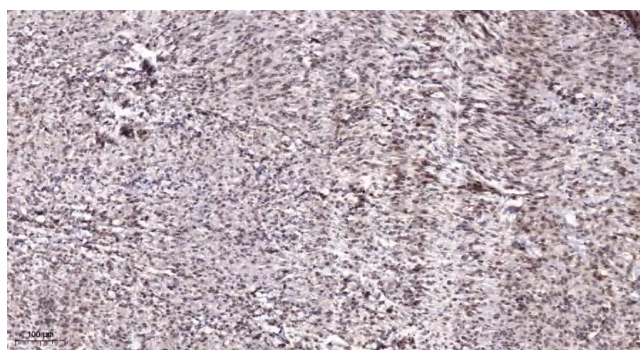
Products Images



Western blot analysis of 1)Hela Cell, 2)Jurkat Cell, 3)Mouse Brain Tissue, 4)Rat Brain Tissue Lysate using Mouse mAb diluted at 1:2,000.



Western blot analysis of 1)Hela Cell, 2)Jurkat Cell, 3)Mouse Brain Tissue, 4)Rat Brain Tissue Lysate using Mouse mAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded human Colon cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 45min).