

Active Recombinant Human CDK5 & CDK5R1 protein, GST-tagged

Cat. No. CDK5/CDK5R1-256H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human CDK5 and human p35 were co-expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
Species	Human
Source	Insect Cells
Description	CDK5 is a member of the Cyclin-Dependent Kinase family that is most abundant in the mammalian brain. Active form of CDK5, which has also been called neuronal cdc2-like kinase, is a heterodimer of CDK5 and a 25 kDa protein which is derived proteolytically from a 35 kDa brain and neuron-specific protein and is essential for the kinase activity of CDK5. CDK5 has emerged as a crucial regulator of neuronal migration in the developing central nervous system. CDK5 phosphorylates a diverse list of substrates, implicating it in the regulation of a range of cellular processes - from adhesion and motility, to synaptic plasticity and drug addiction.
Form	50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Bio-activity	180 nmol/min/mg
Purity	>85%
Applications	Kinase Assay, Western Blot

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Stability	1 yr at -70 centigrade from date shipment
Storage	Store product at -70 centigrade. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Concentration	0.1 µg/µl

GENE INFORMATION

Gene Name	CDK5 cyclin-dependent kinase 5 [Homo sapiens]
Official Symbol	CDK5
Synonyms	CDK5; cyclin-dependent kinase 5; PSSALRE; TPKII catalytic subunit; protein kinase CDK5 splicing; cell division protein kinase 5; serine/threonine-protein kinase PSSALRE; tau protein kinase II catalytic subunit;
Gene ID	1020
mRNA Refseq	NM_004935
Protein Refseq	NP_004926
MIM	123831
UniProt ID	Q00535
Chromosome Location	7q36

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Pathway

Alzheimers disease, organism-specific biosystem; Alzheimers disease, conserved biosystem; Axon guidance, organism-specific biosystem; Axon guidance, conserved biosystem; Axon guidance, organism-specific biosystem; CRMPs in Sema3A signaling, organism-specific biosystem; Cocaine addiction, organism-specific biosystem;

Function

ATP binding; ErbB-2 class receptor binding; ErbB-3 class receptor binding; acetylcholine receptor activator activity; cyclin-dependent protein kinase activity; kinase activity; nucleotide binding; p53 binding; protein binding; protein kinase activity; protein serine/threonine kinase activity; protein serine/threonine kinase activity; protein serine/threonine kinase activity; tau-protein kinase activity;

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