

## Recombinant Rat Cdk5 Protein, His&SUMO-tagged

**Cat. No.** Cdk5-727R    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Rat Cdk5 Protein (Asp92-Gln273) with His&SUMO tag was expressed in E. coli.
<b>Species</b>	Rat
<b>Source</b>	E.coli
<b>ProteinLength</b>	Asp92-Gln273
<b>Description</b>	Enables several functions, including ephrin receptor binding activity; protein kinase activity; and voltage-gated calcium channel activity involved in positive regulation of presynaptic cytosolic calcium levels. Involved in several processes, including cellular response to amyloid-beta; positive regulation of apoptotic process; and protein phosphorylation. Acts upstream of or within protein phosphorylation. Located in several cellular components, including growth cone; neuronal cell body; and postsynaptic density. Part of protein kinase 5 complex. Is active in several cellular components, including Schaffer collateral - CA1 synapse; glutamatergic synapse; and neuromuscular junction. Colocalizes with microtubule. Used to study brain ischemia; mental depression; and trigeminal neuralgia. Biomarker of Alzheimer's disease; transient cerebral ischemia; and vascular dementia. Human ortholog(s) of this gene implicated in Alzheimer's disease and lissencephaly 7 with cerebellar hypoplasia. Orthologous to human CDK5 (cyclin dependent kinase 5).
<b>Form</b>	Freeze-dried powder

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<b>Molecular Mass</b>	Predicted Molecular Mass: 27.12 kDa; Accurate Molecular Mass: 27 kDa
<b>Purity</b>	> 90%
<b>Applications</b>	Positive Control; Immunogen; SDS-PAGE; WB.
<b>Stability</b>	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
<b>Storage</b>	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
<b>Storage Buffer</b>	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
<b>Reconstitution</b>	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## GENE INFORMATION

<b>Gene Name</b>	Cdk5 cyclin-dependent kinase 5 [ <i>Rattus norvegicus</i> (Norway rat) ]
<b>Official Symbol</b>	Cdk5
<b>Synonyms</b>	CDK5; cyclin-dependent kinase 5; TPKII catalytic subunit; cell division protein kinase 5; serine/threonine-protein kinase PSSALRE; tau protein kinase II catalytic subunit;
<b>Gene ID</b>	140908

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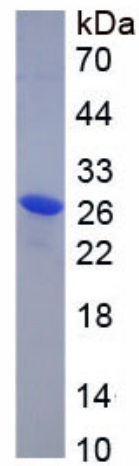
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mRNA Refseq [NM\\_080885](#)

Protein Refseq [NP\\_543161](#)

UniProt ID [Q03114](#)



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