

Recombinant Rat Cdk5 Protein, His&SUMO-tagged

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

SPECIFICATION

Product Overview	Recombinant Rat Cdk5 Protein (Asp92-Gln273) with His&SUMO tag was expressed in E. coli.
Species	Rat
Source	E.coli
ProteinLength	Asp92-Gln273
Description	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).
Form	Freeze-dried powder

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Molecular Mass	Predicted Molecular Mass: 27.12 kDa; Accurate Molecular Mass: 27 kDa
Purity	> 90%
Applications	Positive Control; Immunogen; SDS-PAGE; WB.
Stability	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.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
Storage Buffer	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

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

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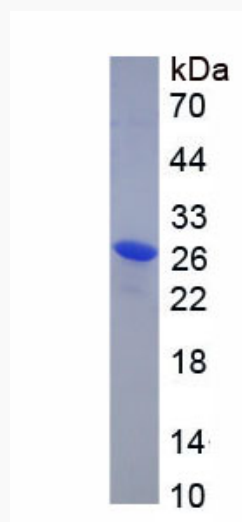
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mRNA Refseq [NM_080885](#)

Protein Refseq [NP_543161](#)

UniProt ID [Q03114](#)



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