

**Catalog No.: RP03315LQ** **Recombinant**

Species	Gene ID	Swiss Prot
Human	1020&8851	Q00535&Q15078

N-GST (CDK5) & N-His-Flag (p35)

CDK5; CDKN5; PSSALRE; Cyclin-dependent kinase 5; p35; CDK5R1; CDK5R; NCK5A; Cyclin-dependent kinase 5 activator 1

<b>Source</b>	<b>Purification</b>
Baculovirus-Insect Cells	≥ 90 % as determined by SDS-PAGE; ≥ 90 % as determined by HPLC.

Calculated MW	Observed MW
60.3 kDa/36.7 kDa	50-60 kDa/30-40 kDa

< 1 EU/μg of the protein by LAL method.

Supplied as a 0.22 µm filtered solution in 50 mM HEPES, 200 mM NaCl, 5% glycerol, 1 mM DTT. (pH 7.5). Contact us for customized product form or formulation.

Please use running water to thaw it quickly.

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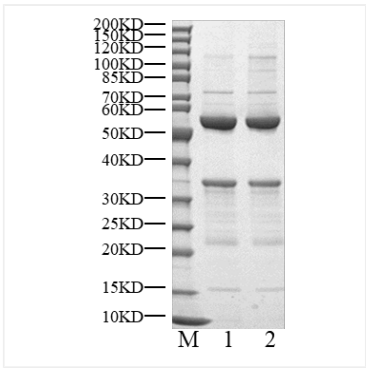
CDK5 belongs to the cyclin-dependent kinase family and is a proline-directed serine/threonine kinase, which was first identified as a CDK family member due to its similar structure to CDC2/CDK1 in humans. Even though CDK5 has a similar structure to other cyclin-dependent kinases, its activators are highly specific (CDK5R1 and CDK5R2). CDK5R1 encoded by the gene (p35) is a neuron-specific activator of CDK5. The p35 form is proteolytically cleaved by calpain, generating a p25 form. The cleavage of p35 into p25 results in relocalization of the protein from the cell periphery to nuclear and perinuclear regions. p25 deregulates CDK5 activity by prolonging its activation and changing its cellular location.

Recombinant Human CDK5&p35 Protein is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Met1-Pro292 (CDK5) & Gly2-Arg307 (p35)) of Human CDK5&CDK5R1 (Accession #Q00535&Q15078) fused with a N-GST (CDK5) & N-His-Flag (p35) tag.

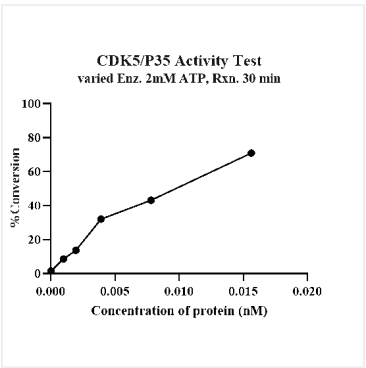
The activity of CDK5/p35 is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

Store at -70°C. This product is stable at  $\leq -70^{\circ}\text{C}$  for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Aliquots below 10  $\mu\text{L}$  are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

# Validation Data



Recombinant Human CDK5&p35 Kinase was determined by SDS-PAGE under reducing (R) and non-reducing (NR) conditions.



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