# Recombinant Human CDK5&p25 Kinase

## Catalog No.: RP03314LQ



## Sequence Information

| Species | Gene ID |
|---|---|
| Human | 1020&8851 |

| Swiss Prot | Tags |
|---|---|
| Q00535&Q15078 | N-GST (CDK5) & N-His-Flag (p25) |

**Synonyms**

CDK5; CDKN5; PSSALRE; Cyclin-dependent kinase 5; p25; CDK5R1; CDK5R; NCK5A; Cyclin-dependent kinase 5 activator 1

## Product Information

| Source | Purification |
|---|---|
| Baculovirus-Insect Cells | ≥ 90 % as determined by SDS-PAGE;≥ 90 % as determined by HPLC. |

| Calculated MW | Observed MW |
|---|---|
| 58.9 kDa/27.4 kDa | 50-60 kDa/25-30 kDa |

**Endotoxin**

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

**Formulation**

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

**Reconstitution**

Please use running water to thaw it quickly.

## Background

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.

## Basic Information

**Description**

Recombinant Human CDK5&p25 Protein is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Met1-Pro292 (CDK5) & Ala99-Arg307 (p25)) of Human CDK5&CDK5R1 (Accession #Q00535&Q15078) fused with a N-GST (CDK5) & N-His-Flag (p25) tag.

**Activity**

The activity of CDK5/p25 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.

**Shipping**

Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

**Storage**

Store at -70℃

**Operational Notes**

For your safety and health, please wear a lab coat and disposable gloves for handling.

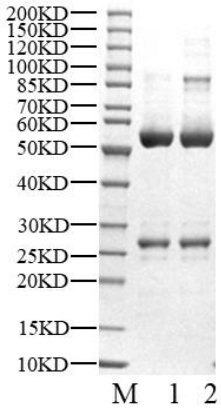
**Contact**

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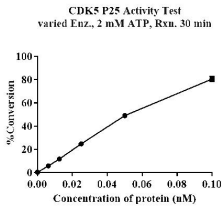


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## Validation Data




Recombinant Human CDK5&p25 Kinase was determined by SDS-PAGE under reducing (R) and non-reducing (NR) conditions.




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