

Recombinant Human CDK5&p25 Protein

Catalog No.: RP03314LQ **Recombinant**

Sequence Information

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

Tags

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% by SDS-PAGE and HPLC

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

Endotoxin

< 1.0 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.

Contact

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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.

Bio-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.

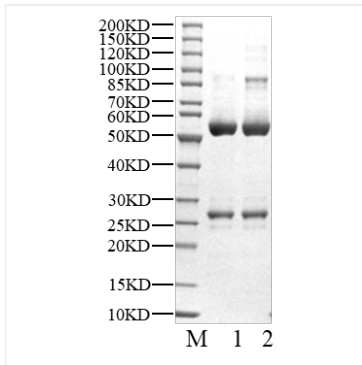
Storage

Store at -70°C. This product is stable at ≤ -70°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.

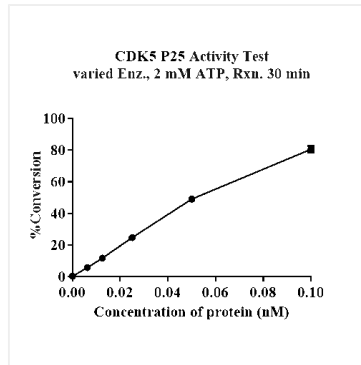
Aliquots below 10 μL are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles.

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Validation Data



Recombinant Human CDK5&p25 Protein was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



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