

Recombinant Human CDK5R1

Cat. No. CDK5R1-669H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CDK5R1 is produced in <i>Escherichia coli</i> BL21.
Species	Human
Source	E.coli
Description	Cyclin-dependent kinase 5 activator 1 is an enzyme that in humans is encoded by the CDK5R1 gene. The protein encoded by this gene (p35) is a neuron-specific activator of cyclin-dependent kinase 5 (CDK5); the activation of CDK5 is required for proper development of the central nervous system. The p35 form of this protein 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. The p25 form accumulates in the brain neurons of patients with Alzheimer's disease.
Unit Definition	One unit will phosphorylate 1.0 picomole of the peptide substrate histone H19-18 per minute at 30 °C at pH 7.4.
Physical Form	Supplied as a solution in PBS pH 7.4, 1 mM EDTA, 1mM DTT and 1 mg/ml BSA.
Storage	-70°C. Shipped in dry ice.

GENE INFORMATION

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Gene Name	CDK5R1 cyclin-dependent kinase 5, regulatory subunit 1 (p35) [Homo sapiens]
Synonyms	CDK5R1; cyclin-dependent kinase 5, regulatory subunit 1 (p35); CDK5 activator 1; TPKII regulatory subunit; cyclin-dependent kinase 5 activator 1; cyclin-dependent kinase 5 regulatory subunit 1; neuronal CDK5 activator; regulatory partner for CDK5 kinase; tau protein kinase II 23kDa subunit; p23; p25; p35; CDK5R; NCK5A; CDK5P35; MGC33831; p35nck5a
Gene ID	8851
mRNA Refseq	NM_003885
Protein Refseq	NP_003876
MIM	603460
UniProt ID	Q15078
Chromosome Location	17q11.2
Pathway	Alzheimer"s disease; Axon guidance
Function	cadherin binding; calcium ion binding; cyclin-dependent protein kinase 5 activator activity; cyclin-dependent protein kinase activity; protein binding; protein kinase activity; protein serine/threonine kinase activator activity

PDB rendering based
on 1h4l.

