

ProQinase™ CDK5

cyclin dependent kinase 5

Recombinant Human Active Protein Kinase

HGNC Symbol: CDK5

Synonyms: PSSALRE

Product No.: 0356-0000-1

Lot: 001.1

Description: Human CDK5, amino acids M₁-P₂₉₂ (as in [NCBI/Protein](#) entry NP_004926.1), N-terminal GST-HIS₆ fusion protein with a Thrombin cleavage site, expressed in Sf9 insect cells

Product identity: CDK5, Lot 001.1, was confirmed as CDK5 by Western Blotting, using a CDK5 specific antibody

Theoretical MW_{Fusion Protein}: 62,841 Da

Expression host: Sf9 insect cells

Purification: GST-Affinity Chromatography

Activation: This kinase was not activated by special procedures

Storage buffer: 50 mM TRIS-HCl pH 8.0, 100 mM NaCl, 5 mM DTT, 4 mM reduced glutathione, 20 % glycerol

Storage temperature: -80°C

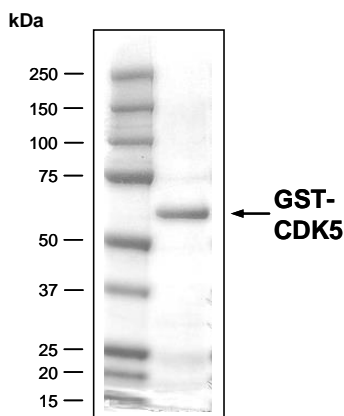
For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10µl are not advisable. Avoid repeated freeze-thaw cycles!

Protein concentration: 0.94 µg/µl

(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

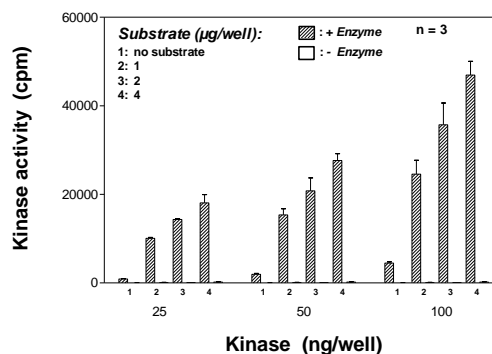
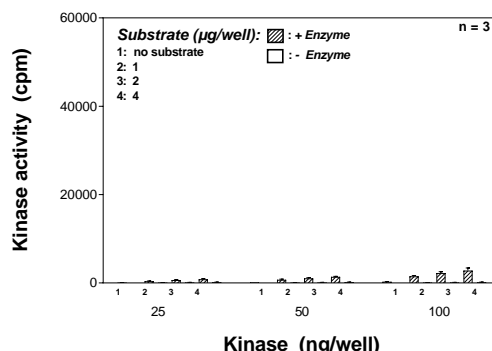
CDK5 Lot 001.1:

Coomassie stain



2.0 µg GST-CDK5

Kinase activity CDK5 vs CDK5/p35 complexes



Final assay concentrations:

- 60 mM HEPES-NaOH, pH 7.5
- 3 mM MgCl₂
- 3 mM MnCl₂
- 3 µM Na-orthovanadate
- 1.2 mM DTT
- 50 µg / ml PEG_{20,000}
- 1 µM ATP (798,000 cpm ³³P-γ-ATP)
- Substrate (variable): RB-CTF
- Recombinant CDK5 or CDK5/p35 (variable)

Assay: ³³PanQinase® Assay

Recombinant Proteins

CDK5

Product No.: 0356-0000-1

GST-CDK5 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPOID	KYLKSSKYIA	WPLQGWAQATF	GGGDHPPKSD	PMGHHHHHGG	RRRASVAAGI	240
241	LVPRGSPGLD	GIYARPMQKY	EKLEKIGEGT	YGTVFKAKNR	ETHEIVALKR	VRLDDDDEGV	300
301	PSSALREICL	LKELKHKIV	RLHDLVHSDK	KLTLVFEFCD	QDLKKYFDSC	NGDLDPEIVK	360
361	SFLFQLLKGL	GFCHSRNVLH	RDLKPQNLLI	NRNGELKLAD	FGLARAFGIP	VRCYSAEVVT	420
421	LWYRPPDVLF	GAKLYSTSID	MWSAGCIFAE	LANAGRPLFP	GNDVDDQLKR	IFRLLGTPTE	480
481	EQWPSMTKLP	DYKPYMPYPA	TTSLVNVVVK	LNATGRDLLQ	NLLKCNPVQR	ISAEALQHP	540
541	YFSDFCPP						600

1-218: GST **Red**: HIS6-tag **Pink**: Thrombin cleavage site **blue**: CDK5

CDK5 wt ¹ Amino Acid Sequence							
1	MQKYEKLEKI	GEGTYGTVFK	AKNRETHEIV	ALKRVRLDDD	DEGVPSSALR	EICLLKELKH	60
61	KNIVRLHDVL	HSDKKLTLVF	EFCQDLKKY	FDSCNGDLDP	EIVKSFLFQL	LKGLGFCHSR	120
121	NVLHRDLKPQ	NLLINRNGEL	KLADFGLARA	FGIPVRCYSA	EVVTLWYRPP	DVLFGAKLYS	180
181	TSIDMWSAGC	IFAEANAGR	PLFPGNDVDD	QLKRIFRLLG	TPTEEQWPSM	TKLPDYKPYP	240
241	MYPATTSLVN	VVPKLNATGR	DLLQNLKCN	PVQRISAEAA	LQHPYFSDFC	PP	300

blue: CDK5 sequence expressed in recombinant protein

¹[NCBI/Protein](https://www.ncbi.nlm.nih.gov/protein/NP_004926.1) accession number NP_004926.1

Recombinant Proteins