

Product datasheet for **TP720874**

CDK4 (NM_000075) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human cyclin-dependent kinase 4 (CDK4)
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MASMTGGQQM GRGSMATSR Y EPVAEIGVGA YGTVYKARDP HSGHFVALKS VRVPNGGGGG GGLPISTVRE VALLRRLEAF EHPNVRLMD VCATSRTDRE IKVTLVFEHV DQDLRTYLDK APPPGPLAET IKDLMRQFLR GLDFLHNCI VHRDLKPENI LVTSGGTVKL ADFGLARIYS YQMALTPVW TLWYRAPEVL LQSTYATPVD MWSVGCIFAE MFRRKPLFCG NSEAD
Tag:	N-His
Predicted MW:	37.2 kDa
Purity:	>95% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	Lyophilized from a 0.2 um filtered solution of PBS, pH 7.4.
Endotoxin:	Endotoxin level is < 0.1 ng/μg of protein (< 1 EU/μg)
Storage:	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Stability:	Stable for at least 3 months from date of receipt under proper storage and handling conditions.
RefSeq:	NP_000066
Locus ID:	1019
UniProt ID:	P11802 , A0A024RBB6
RefSeq Size:	2020
Cytogenetics:	12q14.1
RefSeq ORF:	909
Synonyms:	CMM3; PSK-J3



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Summary:

The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein is highly similar to the gene products of *S. cerevisiae* cdc28 and *S. pombe* cdc2. It is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of this kinase is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16(INK4a). This kinase was shown to be responsible for the phosphorylation of retinoblastoma gene product (Rb). Mutations in this gene as well as in its related proteins including D-type cyclins, p16(INK4a) and Rb were all found to be associated with tumorigenesis of a variety of cancers. Multiple polyadenylation sites of this gene have been reported. [provided by RefSeq, Jul 2008]

Protein Families:

Druggable Genome, Protein Kinase

Protein Pathways:

Bladder cancer, Cell cycle, Chronic myeloid leukemia, Glioma, Melanoma, Non-small cell lung cancer, p53 signaling pathway, Pancreatic cancer, Pathways in cancer, Small cell lung cancer, T cell receptor signaling pathway, Tight junction