

Full-Length

CDK4 (Human) Recombinant Protein

Catalog # P9606

Size 2 x 10 ug

Specification

Product Description	Human CDK4 (P11802, 1 a.a. - 303 a.a.) full recombinant protein with His tag at N-terminus expressed in <i>Escherichia coli</i> .
Sequence	MGSSHHHHHSSGLVPRGSHMGSMATSRYPVAEIGVGAYGTVYKARDPHSGHFVALKSVRVP NGGGGGGGLPISTVREVALLRLEAFEHPNVVRLMDVCATSRDREIKVTLVFEHVDQDLRTYLD KAPPPGLPAETIKDLMRQFLRGLDFLHANCVHRDLKPENILVTSGGTVKLADFGGLARIYSYQMALT PVVVTLYRAPEVLLQSTYATPVDMWVSGCIFAEMFRRKPLFCGNSEADQLGKIFDLGLPPEDD WPRDVSLPRGAFPPRGRPVQSVVPEMEESGAQLLLEMLTFNPHKRISAFRALQHSYLHKDEGN PE
Host	<i>Escherichia coli</i>
Theoretical MW (kDa)	38
Form	Liquid
Preparation Method	<i>Escherichia coli</i> expression system
Purity	> 95.0% by SDS-PAGE
Recommend Usage	Biological Activity SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	In 10mM Bis-Tris Propane pH9.0 (50% Glycerol)
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- SDS-PAGE

Gene Info — CDK4

Entrez GeneID [1019](#)

Protein Accession# [P11802](#)

Gene Name CDK4

Gene Alias CMM3, MGC14458, PSK-J3

Gene Description cyclin-dependent kinase 4

Omim ID [123829 609048](#)

Gene Ontology [Hyperlink](#)

Gene 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]

Other Designations cell division kinase 4|melanoma cutaneous malignant, 3

Pathway

- [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](#)

Disease

- [Adenocarcinoma](#)
- [Birth Weight](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Head and Neck Neoplasms](#)
- [Kidney Failure](#)
- [Leukemia](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Mouth Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)

- [Neoplasms](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Precancerous Conditions](#)
- [Pulmonary Disease](#)
- [Retinoblastoma](#)
- [Skin Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Uveal Neoplasms](#)
- [Werner syndrome](#)