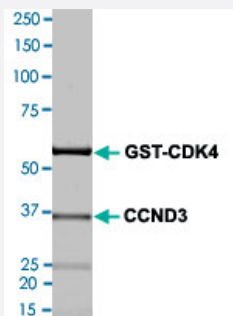


Bioactive

CDK4/CCND3 (Human) Recombinant Protein

Catalog # P4658 Size 100 ug

Applications



Result of activity analysis

Result of activity analysis

Specification

Product Description	Human CDK4 (NM_000075, 4 a.a. - 303 a.a.) and CCND3 (NM_001760, 1 a.a. - 292 a.a.) Recombinant protein with His tag expressed in Sf9 cells.
Host	insect
Theoretical MW (kDa)	CDK4: 59.700 , CCND3
Form	Liquid
Preparation Method	Insect cell (Sf9) expression system
Purification	One-step affinity purification using GSH-agarose
Concentration	0.337 ug/uL

Activity	75 pmol/ug x min
Quality Control Testing	2 ug/lane SDS-PAGE Stained with Coomassie Blue
Storage Buffer	In 50 mM Tris-HCl, 100 mM NaCl, pH 8.0. (5 mM DTT, 4 mM reduced glutathione, 20% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — CCND3

Entrez GeneID	896
Protein Accession#	NM_000075 (Gene ID : 1019);NM_001760 (Gene ID : 896)
Gene Name	CCND3
Gene Alias	-
Gene Description	cyclin D3
Omim ID	123834
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin forms a complex with and functions as a regulatory subunit of CDK4 or CDK6, whose activity is required for cell cycle G1/S transition. This protein has been shown to interact with and be involved in the phosphorylation of tumor suppressor protein Rb. The CDK4 activity associated with this cyclin was reported to be necessary for cell cycle progression through G2 phase into mitosis after UV radiation. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]
Other Designations	D3-type cyclin G1/S-specific cyclin D3 OTTHUMP00000016390

Gene Info — CDK4

Entrez GeneID [1019](#)

Protein Accession# [NM_000075 \(Gene ID : 1019\);NM_001760 \(Gene ID : 896\)](#)

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 sub unit 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](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Focal adhesion](#)
- [Glioma](#)
- [Jak-STAT signaling pathway](#)
- [Melanoma](#)
- [Non-small cell lung cancer](#)

- [p53 signaling pathway](#)
- [p53 signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Small cell lung cancer](#)
- [T cell receptor signaling pathway](#)
- [Tight junction](#)
- [Wnt signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Birth Weight](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Breast Neoplasms](#)
- [Cardiovascular Diseases](#)
- [Cerebral Amyloid Angiopathy](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)

- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Head and Neck Neoplasms](#)
- [Kidney Failure](#)
- [Kidney Failure](#)
- [Leukemia](#)
- [Lung Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Mouth Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neuroblastoma](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Precancerous Conditions](#)
- [Pulmonary Disease](#)

- [Pulmonary Disease](#)
- [Retinoblastoma](#)
- [Skin Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Uveal Neoplasms](#)
- [Werner syndrome](#)
- [Werner syndrome](#)