

Bioactive

Full-Length

CDK6/CCND1 (Human) Recombinant Protein

Catalog # P6479

Size 5 ug

Applications

Result of activity analysis

Result of activity analysis



Specification

Product Description	Human CDK6/CCND1 (NP_001250.1/NP_444284.1) full length recombinant protein with GST-tag at N-terminal using baculovirus expression system.
Host	Viruses
Form	Liquid
Preparation Method	Baculovirus expression system.
Purification	Glutathione sepharose chromatography.
Purity	0.91
Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescein-labeled substrate and Mg (or Mn)/ATP. Substrate: DYRKtide-F, ATP: 100 uM.
Quality Control Testing	The purity was assessed by SDS-PAGE/CBB staining.
Storage Buffer	50 mM Tris-HCl, 150 mM NaCl, 0.05% Brij35, 1 mM DTT, 10% glycerol, pH7.5
Storage Instruction	Stored at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Result of activity analysis
Result of activity analysis

Applications

- Functional Study

Gene Info — CCND1

Entrez GeneID [595](#)

Protein Accession# [NP_001250.1;NP_444284.1](#)

Gene Name CCND1

Gene Alias BCL1, D11S287E, PRAD1, U21B31

Gene Description cyclin D1

Omim ID [151400](#) [168461](#) [193300](#) [254500](#)

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 throughout 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 tumor suppressor protein Rb and the expression of this gene is regulated positively by Rb. Mutations, amplification and overexpression of this gene, which alters cell cycle progression, are observed frequently in a variety of tumors and may contribute to tumorigenesis. [provided by RefSeq]

Other Designations B-cell CLL/lymphoma 1|G1/S-specific cyclin D1

Gene Info — CDK6

Entrez GeneID [1021](#)

Protein Accession# [NP_001250.1;NP_444284.1](#)

Gene Name CDK6

Gene Alias MGC59692, PLSTIRE, STQTL11

Gene Description	cyclin-dependent kinase 6
Omim ID	603368
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the cyclin-dependent protein kinase (CDK) family. CDK family members are highly similar to the gene products of <i>Saccharomyces cerevisiae</i> cdc28, and <i>Schizosaccharomyces pombe</i> cdc2, and are known to be important regulators of cell cycle progression. This kinase is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression and G1/S transition. The activity of this kinase first appears in mid-G1 phase, which is controlled by the regulatory subunits including D-type cyclins and members of INK4 family of CDK inhibitors. This kinase, as well as CDK4, has been shown to phosphorylate , and thus regulate the activity of, tumor suppressor protein Rb. [provided by RefSeq
Other Designations	cell division protein kinase 6

Pathway

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

- [Non-small cell lung cancer](#)
- [p53 signaling pathway](#)
- [p53 signaling pathway](#)
- [Pancreatic cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Small cell lung cancer](#)
- [Small cell lung cancer](#)
- [Thyroid cancer](#)
- [Wnt signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Arthritis](#)
- [Ataxia telangiectasia](#)
- [Autoimmune Diseases](#)
- [Barrett Esophagus](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Breast Neoplasms](#)

- [Carcinoma](#)
- [Carcinoma](#)
- [Carcinoma in Situ](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Chromosome Aberrations](#)
- [Chronic Disease](#)
- [Colitis](#)
- [Colon cancer](#)
- [Colorectal Neoplasms](#)
- [Crohn Disease](#)
- [Crohn Disease](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Fetal Diseases](#)
- [Gastritis](#)
- [Gastroesophageal Reflux](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)

- [Genomic Instability](#)
- [Glioma](#)
- [Growth Disorders](#)
- [Head and Neck Neoplasms](#)
- [Head and Neck Neoplasms](#)
- [Helicobacter Infections](#)
- [Hematologic Diseases](#)
- [Hemophilia A](#)
- [Hepatoblastoma](#)
- [Hodgkin Disease](#)
- [Hyperparathyroidism](#)
- [Hypopharyngeal Neoplasms](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Insulin Resistance](#)
- [Intestinal Neoplasms](#)
- [Kidney Failure](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Laryngeal Diseases](#)
- [Laryngeal Neoplasms](#)
- [Leiomyoma](#)
- [Leukemia](#)
- [Leukoplakia](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)

- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Mouth Neoplasms](#)
- [Mouth Neoplasms](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neoplasms](#)
- [Neuroma](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Oropharyngeal Neoplasms](#)
- [Ovarian cancer](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Papillomavirus Infections](#)
- [Peptic Ulcer](#)
- [Pituitary Neoplasms](#)
- [Precancerous Conditions](#)
- [Precancerous Conditions](#)

- [Prolactinoma](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Rectal Neoplasms](#)
- [Recurrence](#)
- [Recurrence](#)
- [Retinoblastoma](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Thyroid Neoplasms](#)
- [Translocation](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Wegener Granulomatosis](#)
- [Werner syndrome](#)