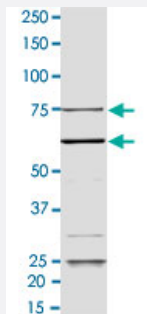


Bioactive

CDC2/CCNA2 (Human) Recombinant Protein

Catalog # P4639 Size 100 ug

Applications



Result of activity analysis

Result of activity analysis

Specification

Product Description	Human CDC2 (NM_001786, 1 a.a. - 297 a.a.) and CCNA2 (NM_001237, 1 a.a. - 432 a.a.) Recombinant protein with GST tag expressed in Sf9 cells.
Host	insect
Theoretical MW (kDa)	CDC2: 63.882 , CCNA2
Form	Liquid
Preparation Method	Insect cell (Sf9) expression system
Purification	GST affinity chromatography
Concentration	0.126 ug/uL

Activity	8 pmol/ug x min
Quality Control Testing	2 ug/lane SDS-PAGE Stained with Coomassie Blue
Storage Buffer	In 50 mM Hepes, 100 mM NaCl, pH 7.5. (5 mM DTT, 15 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 — CCNA2

Entrez GeneID	890
Protein Accession#	NM_001786 (Gene ID : 983);NM_001237 (Gene ID : 890)
Gene Name	CCNA2
Gene Alias	CCN1, CCNA
Gene Description	cyclin A2
Omim ID	123835
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. In contrast to cyclin A 1, which is present only in germ cells, this cyclin is expressed in all tissues tested. This cyclin binds and activates CDC2 or CDK2 kinases, and thus promotes both cell cycle G1/S and G2/M transitions. [provided by RefSeq]
Other Designations	cyclin A

Gene Info — CDC2

Entrez GeneID [983](#)

Protein Accession# [NM_001786 \(Gene ID : 983\);NM_001237 \(Gene ID : 890\)](#)

Gene Name CDC2

Gene Alias CDC28A, CDK1, DKFZp686L20222, MGC111195

Gene Description cell division cycle 2, G1 to S and G2 to M

Omim ID [116940](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein is a catalytic subunit of the highly conserved protein kinase complex known as M-phase promoting factor (MPF), which is essential for G1/S and G2/M phase transitions of eukaryotic cell cycle. Mitotic cyclins stably associate with this protein and function as regulatory subunits. The kinase activity of this protein is controlled by cyclin accumulation and destruction through the cell cycle. The phosphorylation and dephosphorylation of this protein also play important regulatory roles in cell cycle control. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

Other Designations

OTTHUMP00000019660|cell cycle controller CDC2|cell division control protein 2 homolog|cell division cycle 2 protein|cyclin-dependent kinase 1|p34 protein kinase

Pathway

- [Cell cycle](#)
- [Cell cycle](#)
- [Gap junction](#)
- [p53 signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Breast cancer](#)

- [Breast Neoplasms](#)
- [Dementia](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Kidney Failure](#)
- [Lung Neoplasms](#)
- [Lung Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Pulmonary Disease](#)
- [Pulmonary Disease](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)