

Recombinant Human Human CDK2

Cat. No. CDK2-31594TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length Human CDK2 and CCNA1 with an N terminal proprietary tag on both proteins, 58 and 81kDa respectively.
Species	Human
Source	Sf9 Cells
Description	The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein kinase is highly similar to the gene products of <i>S. cerevisiae</i> cdc28, and <i>S. pombe</i> cdc2. It is a catalytic subunit of the cyclin-dependent protein kinase complex, whose activity is restricted to the G1-S phase, and essential for cell cycle G1/S phase transition. This protein associates with and regulated by the regulatory subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A) and p27Kip1 (CDKN1B). Its activity is also regulated by its protein phosphorylation. Two alternatively spliced variants and multiple transcription initiation sites of this gene have been reported.
Biological activity	The Specific activity of CDK2-31594TH was determined to be 83 nmol/min/mg.
Form	Liquid
Purity	by SDS-PAGE
Storage buffer	Preservative: None Constituents: 25% Glycerol, 50mM Tris HCl, 150mM Sodium chloride, 10mM Glutathione, 0.25mM DTT, 0.1mM EDTA, 0.1mM PMSF, pH 7.5

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
----------------	---

Full Length	Full L.
--------------------	---------

GENE INFORMATION

Gene Name	CDK2 cyclin-dependent kinase 2 [Homo sapiens]
------------------	---

Official Symbol	CDK2
------------------------	------

Synonyms	CDK2; cyclin-dependent kinase 2;
-----------------	----------------------------------

Gene ID	1017
----------------	------

mRNA Refseq	NM_001798
--------------------	-----------

Protein Refseq	NP_001789
-----------------------	-----------

MIM	116953
------------	--------

Uniprot ID	P24941
-------------------	--------

Chromosome Location	12q13
----------------------------	-------

Pathway	APC/C-mediated degradation of cell cycle proteins, organism-specific biosystem; Activation of ATR in response to replication stress, organism-specific biosystem; Activation of the pre-replicative complex, organism-specific biosystem; B Cell Receptor Signaling Pathway, organism-specific biosystem; BARD1 signaling events, organism-specific biosystem;
----------------	--

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



Function

ATP binding; cyclin binding; cyclin-dependent protein kinase activity; cyclin-dependent protein kinase activity; contributes_to histone kinase activity;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA