

Recombinant Human CDK4 Protein (Met1-Glu303), His tagged

Cat. No. CDK4-1073H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human CDK4 (Met1-Glu303) fused with His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Met1-Glu303
Description	CDK4 is a member of the Ser/Thr protein kinase family. It 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 protein kinase complex that is important for cell cycle G1 phase progression. The activity of CDK4 is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16 (INK4a). CDK4 was shown to be responsible for the phosphorylation of retinoblastoma gene product. CDK4 is the ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G (1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complexes and the subsequent transcription of E2F target genes which are responsible for the progression through the G (1) phase. Hypophosphorylates RB1 in early G (1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals. CDK4 has been shown to be mutated in some types of cancer, whilst a chromosomal rearrangement can lead to Cdk6 overexpression in lymphoma, leukemia and

 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

	melanoma.
Form	Lyophilized powder/frozen liquid
Molecular Mass	34.57 kDa
Purity	>90% as determined by SDS-PAGE.
Notes	For research use only.
Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 centigrade for one week. Store at -20 to -80 centigrade for twelve months from the date of receipt.
Storage Buffer	Supplied as solution form in PBS pH 7.5 or lyophilized from PBS pH 7.5.
Reconstitution	Reconstitute in sterile water for a stock solution.
Shipping	They are shipped out with dry ice/blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name	CDK4 cyclin-dependent kinase 4 [Homo sapiens (human)]
Official Symbol	CDK4
Synonyms	CDK4; cyclin-dependent kinase 4; PSK J3; cell division protein kinase 4; CMM3; PSK-J3; MGC14458;
Gene ID	1019

 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

mRNA Refseq	NM_000075
Protein Refseq	NP_000066
MIM	123829
UniProt ID	P11802

 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