Datasheet for ABIN7195313

CDK4 Protein (GST tag)

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Overview

Quantity:	50 µg
Target:	CDK4
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CDK4 protein is labelled with GST tag.

Product Details

Purpose:	Recombinant Human CDK4 Protein (GST Tag)
Sequence:	Met 1-Glu 303
Characteristics:	A DNA sequence encoding the human CDK4 (NP_000066.1) (Met 1-Glu 303) was fused with the GST tag at the N-terminus.
Purity:	> 80 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.

Target Details

Target:	CDK4
Alternative Name:	CDK4 (CDK4 Products)
Background:	Background: CDK4 is a member of the Ser/Thr protein kinase family. It is highly similar to the gene products of S. cerevisiae cdc28 and S. pombe 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

Target Details

	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 mitogenenic 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 melanoma. Synonym: CMM3,PSK-J3
Molecular Weight:	60 kDa
NCBI Accession:	NP_000066
Pathways:	Cell Division Cycle, Mitotic G1-G1/S Phases, Regulation of Cell Size

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 50 mM Tris, 100 mM NaCl, 10 % glycerol, 0.5 mM PMSF, pH 8.0
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.