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## Datasheet for ABIN7319357 CDK2 Protein (His tag)

### Overview

Quantity:	50 µg
Target:	CDK2
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CDK2 protein is labelled with His tag.

### Product Details

Purpose:	Recombinant Human CDK2 Protein (E.coli, His Tag)
Sequence:	Met 1-Leu298
Characteristics:	Recombinant Human Cyclin-Dependent Kinase 2 is produced by our E.coli expression system and the target gene encoding Met1-Leu298 is expressed with a 6His tag at the N-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

### Target Details

Target:	CDK2
Alternative Name:	CDK2 ( <a href="#">CDK2 Products</a> )
Background:	Background: Cyclin-dependent kinase 2 (CDK2) belongs to the cyclin-dependent kinase of Ser/Thr protein kinase. CDK2 acts as a catalytic subunit of the cyclin dependent kinase complex, whose activity is restricted to the G1-S phase of the cell cycle, it is essential for the

## Target Details

G1/S transition. The kinase activity of CDK2 can be regulated by the association with a cyclin subunit, its phosphorylation state and CDK inhibitors. The activation of the CDK2/cyclin complex requires the phosphorylation of Thr160 and the dephosphorylation of Tyr14 and Tyr15. The inhibition of CDK2-cyclin complex can also be attributed to association with p27Kip1 and p21Waf1/Cip1. The activation of CDK2 has been shown to be necessary for apoptosis of quiescent cells, such as neurons, thymocytes and endothelial cells.

Synonym: Cyclin-Dependent Kinase 2, Cell Division Protein Kinase 2, p33 Protein Kinase, CDK2, CDKN2

Molecular Weight: 36.1 kDa

NCBI Accession: [NP\\_001789](#)

Pathways: [PI3K-Akt Signaling](#), [Cell Division Cycle](#), [Mitotic G1-G1/S Phases](#), [DNA Replication](#), [M Phase](#), [Synthesis of DNA](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Frozen, Liquid

Buffer: Supplied as a 0.2 µm filtered solution of 20 mM TrisHCl, 200 mM NaCl, 1 mM DTT, 40 % Glycerol, pH 8.0.

Storage: -20 °C

Storage Comment: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.