

Recombinant Human CDK2

Catalog No: C211

Description	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.
Source	E.coli
Alternative name	Cyclin-Dependent Kinase 2; Cell Division Protein Kinase 2; p33 Protein Kinase; CDK2; CDKN2
Accession No.	P24941
Formulation	Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 200mM NaCl, 1mM DTT, 40% Glycerol, pH 8.0.
Quality Control	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/µg (1 IEU/µg).
Shipping	The product is shipped on dry ice/polar packs. Upon receipt, store it immediately at the temperature listed below.
Storage	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.

Amino Acid Sequence

MGSSHHHHHSSGLVPRGSHMENFQKVEKIGEGTYGVVYKARNKLTGEVVALKKIRLDTETEGVPST
AIREISLLKELNHPNIVK
LLDVIHTENKLYLVFEFLHQDLKKFMDASALTGIPLPLIKSYLFQLLQGLAFCHSHRVLHRDLKPQNLLIN
TEGAIKLADFGLARAF
GVPVRTYTHEVVTWYRAPEILLGCKYYSTAVDIWSLGCIFAEMVTRRALFPGDSEIDQLFRIFRTLGT
DEVVWPGVTSMPDYK
PSFPKWARQDFSKVVPPLDEDGRSLLSQMLHYDPNKRISAKAALAHPPFQDVTKPVPHLRL

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 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 Thr14 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.

SDS-Page

