

## 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 MGSSHHHHHHSSGLVPRGSHMENFQKVEKIGEGTYGVVYKARNKLTGEVVALKKIRLDTETEGVPST

**AIREISLLKELNHPNIVK** 

LLDVIHTENKLYLVFEFLHQDLKKFMDASALTGIPLPLIKSYLFQLLQGLAFCHSHRVLHRDLKPQNLLIN

**TEGAIKLADFGLARAF** 

GVPVRTYTHEVVTLWYRAPEILLGCKYYSTAVDIWSLGCIFAEMVTRRALFPGDSEIDQLFRIFRTLGTP

**DEVVWPGVTSMPDYK** 

PSFPKWARQDFSKVVPPLDEDGRSLLSQMLHYDPNKRISAKAALAHPFFQDVTKPVPHLRL

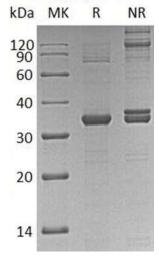
**Background** 

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 phage 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 Try14 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** 



MK: Marker

R: Sample in reducing conditions

NR: Sample in non-reducing conditions

