Recombinant Protein Technical Manual

Recombinant Human CDK2 Protein (E. coli, His Tag)

RPES3637

Product Data:

Product SKU: RPES3637

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: NP_001789.2

Protein Information:

Molecular Mass: 36.1 kDa

AP Molecular Mass: 34 kDa

Tag: N-6His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

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

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.

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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Cyclin-Dependent Kinase 2; Cell Division Protein Kinase 2; p33 Protein Kinase; CDK2; CDKN2

Immunogen Information:

Sequence: Met 1-Leu298

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.