



Recombinant Protein Technical Manual
Recombinant Mouse CCNE1/Cyclin-E1 Protein (His &
GST Tag)(Active)
RPES4014

Product Data:

Product SKU: RPES4014

Size: 20µg

Species: Mouse

Expression host: Baculovirus-Insect Cells

Uniprot: AAH62152.1

Protein Information:

Molecular Mass: 74.8 kDa

AP Molecular Mass: 75 kDa

Tag: N-His-GST

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized mouse CCNE1 at 10 µg/ml (100 µl/well) can bind biotinylated human CDK4 , The EC50 of biotinylated human CDK4 is 48.014.0 ng/ml.

Purity: > 90 % as determined by SDS-PAGE

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

Storage: 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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris, 100mM NaCl, 3mM DTT, 0.5mM GSH, 10% gly, pH 8.0

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

Application: Functional ELISA

Synonyms: AW538188;CycE1

Immunogen Information:

Sequence: Met1-Glu408

Background:

Cyclin E1 is a member of the highly conserved cyclin family and belongs to the E-type cyclin that functions as a regulator of S phase entry and progression in mammalian cells. Cyclin E1 serves as regulatory subunits that bind, activate, and provide substrate for its associated cyclin-dependent kinase2 (CDK2), whose activity is essential for cell cycle G1 / S transition. Over expression of this encoding gene has been found in many tumors, which results in chromosome instability and by extension, induce tumorigenesis. This protein was also found to associate with, and be involved in, the phosphorylation of NPAT protein (nuclear protein mapped to the ATM locus), which participates in cell-cycle regulated histone gene expression and plays a critical role in promoting cell-cycle progression in the absence of pRB. In general, cyclin E1, as an activator of phospho-CDK2 (pCDK2), is important for cell cycle progression and is frequently overexpressed in cancer cells.