



# Recombinant Human Cyclin-dependent kinase 4 (CDK4)

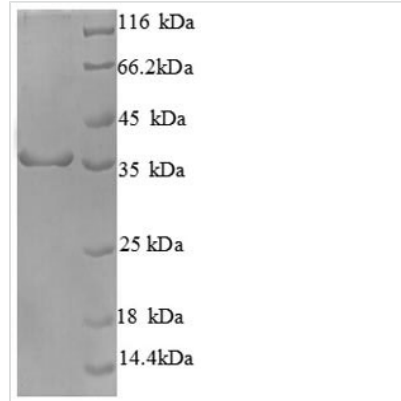
<b>Product Code</b>	CSB-EP005065HU
<b>Relevance</b>	<p>Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G1/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complexes and the subsequent transcription of E2F target genes which are responsible for the progression through the G1 phase. Hypophosphorylates RB1 in early G1 phase. Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals. Also phosphorylates SMAD3 in a cell-cycle-dependent manner and represses its transcriptional activity. Component of the ternary complex, cyclin D/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex.</p>
<b>Abbreviation</b>	Recombinant Human CDK4 protein
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	P11802
<b>Alias</b>	Cell division protein kinase 4PSK-J3
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	≥ 90% as determined by SDS-PAGE.
<b>Sequence</b>	<p>ATSRYEPVAEIGVGAYGTVYKARDPHSGHFVALKSVRVPNGGGGGGGLPIST  VREALLRRLEAFEHPNVVRLMDVCATSRTDREIKVTLVFEHVDQDLRTYLDK  APPPGLPAETIKDLMRQFLRGLDFLHANCIVHRDLKPENILVTSGGTVKLADFG  LARIYSYQMALTPVVTLWYRAPEVLLQSTYATPVDMWSVGCIFAEMFRRKPL  FCGNSEADQLGKIFDLIGLPPEDDWPRDVS LPRGAFPPRGPRPVQSVVPEME  ESGAQLLLEMLTFNPHKRISAFRALQHSYLHKDEGNPE</p>
<b>Research Area</b>	Cell Cycle
<b>Source</b>	E.coli
<b>Target Names</b>	CDK4
<b>Expression Region</b>	2-303aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal 6xHis-tagged

**Mol. Weight**

37.6kDa

**Protein Length**

Full Length of Mature Protein

**Image**

(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

**Shelf Life**

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