

## Product datasheet for TP301156

### CDK4 (NM\_000075) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human cyclin-dependent kinase 4 (CDK4), 20 µg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >RC201156 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MATSRYPVAEIGVGAYGTVYKARDPHSGHFVALKSVRVPNGGGGGGGLPISTVREVALLRLEAFEHPN  
VRLMDVCATSRTDREIKVTLVFEHVDQDLRTYLDKAPPPGLPAETIKDLMRQFLRGLDFLHANCIVHRD  
LKPENILVTSGGTVKLADFLARIYSYQMALTPVWTLWYRAPEVLLQSTYATPVDMWSVGCIFAEMFRR  
KPLFCGNSEADQLGKIFDLIGLPPEDDWPRDVS LPRGAFPPRPRPVQSVPEMEESGAQLLLEMLTFNP  
HKRISAFRALQHSYLHKDEGNPE

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK

**Predicted MW:** 33.5 kDa

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

**Storage:** Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** [NP\\_000066](#)

**Locus ID:** 1019



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UniProt ID: [P11802](#)

RefSeq Size: 2020

Cytogenetics: 12q14.1

RefSeq ORF: 909

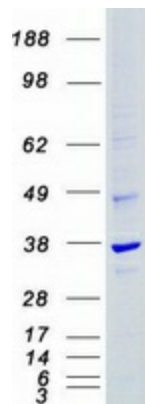
Synonyms: CMM3; PSK-J3

**Summary:** The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein is highly similar to the gene products of *S. cerevisiae* cdc28 and *S. pombe* cdc2. It is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of this kinase is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16(INK4a). This kinase was shown to be responsible for the phosphorylation of retinoblastoma gene product (Rb). Mutations in this gene as well as in its related proteins including D-type cyclins, p16(INK4a) and Rb were all found to be associated with tumorigenesis of a variety of cancers. Multiple polyadenylation sites of this gene have been reported. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Bladder cancer, Cell cycle, Chronic myeloid leukemia, Glioma, Melanoma, Non-small cell lung cancer, p53 signaling pathway, Pancreatic cancer, Pathways in cancer, Small cell lung cancer, T cell receptor signaling pathway, Tight junction

### Product images:



Coomassie blue staining of purified CDK4 protein (Cat# TP301156). The protein was produced from HEK293T cells transfected with CDK4 cDNA clone (Cat# [RC201156]) using MegaTran 2.0 (Cat# [TT210002]).