



Recombinant Rat Cyclin-dependent kinase 4 (Cdk4)

Product Code	CSB-EP005065RA
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P35426
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	≥85% (SDS-PAGE)
Sequence	ATTRYEPVA EIGVGAYGTV YKARDPHSGH FVALKSVRVP NGGAAGGGLP VSTVREVALL RRLEAFEHPN VVRLMDVCAT SRTDRDIKVT LVFEHIDQDL RTYLDKAPPP GLPVETIKDL MRQFLSGLDF LHANCIVHRD LKPENILVTS NGTVKLADFG LARIYSYQMA LTPVVVTLWY RAPEVLLQST YATPVDMWSV GCIFAEMFRR KPLFCGNSEA DQLGKIFDLI GLPPEDDWPR EVSLPRGAFS PRGPRPVQSV VPMEESGAQ LLEMLTFNP LKRISAFRAL QHSYLHKEES DPE
Source	E.coli
Target Names	Cdk4
Protein Names	Recommended name: Cyclin-dependent kinase 4 EC= 2.7.11.22 Alternative name(s): Cell division protein kinase 4 PSK-J3
Expression Region	2-303
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	This protein is a member of the Ser/Thr protein kinase family. This protein is highly similar to the gene products of <i>S. cerevisiae</i> cdc28 and <i>S. pombe</i> 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.
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

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.