



# Recombinant Rat cAMP-dependent protein kinase catalytic subunit alpha (Prkaca)

<b>Product Code</b>	CSB-EP018688RA-B
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P27791
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	GNAAAARKK SEQESVKEFL AKAKEDFLKK WEDPSQNTAQ LDHFDRIKTL GTGSFGRVML VKHKESGNHY AMKILDKQKV VKLKQIEHTL NEKRILQAVN FPFLVKLEFS FKDNSNLYMV MEYVPGGEMF SHLRRIGRFS EPHARFYAAQ IVLTFEYLHS LDLIYRDLKP ENLLIDQQGY IQVTDFGFAK RVKGRWTWLC GTPEYLAPEI ILSKGYNKAV DWWALGVLIY EMAAGYPPFF ADQPIQIYEK IVSGKVRFPS HFSSDLKDLL RNLLQVDLTK RFGNLKNGVN DIKNHKWFAT TDWIAIYQRK VEAPFIPKFK GPGDTSNFDD YEEEEIRVSI NEKCGKEFTE F
<b>Source</b>	E.coli
<b>Target Names</b>	Prkaca
<b>Protein Names</b>	Recommended name: cAMP-dependent protein kinase catalytic subunit alpha Short name= PKA C-alpha EC= 2.7.11.11
<b>Expression Region</b>	2-351
<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>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its effects by activating the cAMP-dependent protein kinase, which transduces the signal through phosphorylation of different target proteins. The inactive kinase holoenzyme is a tetramer composed of two regulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. Four different regulatory subunits and three catalytic subunits have been identified in humans. This protein is a member of the Ser/Thr protein kinase family and is a catalytic subunit of cAMP-dependent protein kinase. Alternatively spliced transcript variants encoding distinct isoforms have been observed.
<b>Reconstitution</b>	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.