



# Recombinant Rat Protein kinase C alpha type (Prkca)

<b>Product Code</b>	CSB-MP018699RA
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P05696
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	ADVYPANDS TASQDVANRF ARKGALRQKN VHEVKDHFKEI ARFFKQPTFC SHCTDFIWGF GKQGFQCQVC CFVVHKRCHE FVTFSCPGAD KGPDTDDPRS KHKFKIHTYG SPTFCDHCGS LLYGLIHQGM KCDTCDMNVH KQCVINVPSL CGMDHTEKRG RIYLKAEVTD EKLHVTVRDA KNLIPMDPNG LSDPYVKLKL IPDPKNESKQ KTKTIRSTLN PQWNESFTFK LKPSDKDRRL SVEIWDWDRT TRNDFMGSL S FGVSELMKMP ASGWYKLLNQ EEEGEYYNVPI PEGDEEGNVE LRQKFEKAKL GPAGNKVISP SEDRKQPSNN LDRVKLDFN FLMVLGKGSF GKVMLADRKG TEELYAIKIL KKDVIQDDD VECTMVEKRV LALLDKPPFL TQLHSCFQTV DRLYFVMEYV NGGDLMYHIQ QVGKFKEPQA VFYAAEISIG LFFLHKGRII YRDLKLDNVM LDSEGHKIA DFGMCKEHMM DGVTTTRTFCG TPDYIAPEII AYQPYGKSVD WWAYGVLLYE MLAGQPPFDG EDEDELFSI MEHNVSYPKS LSKEAVSICK GLMTKHPAKR LGCGPEGERD VREHAFFRRI DWEKLENREI QPPFKPKVCG KGAENFDKFF TRGQPVLTPP DQLVIANIDQ SDFEGFSYVN PQFVHPILQS AV
<b>Source</b>	Mammalian cell
<b>Target Names</b>	Prkca
<b>Protein Names</b>	Recommended name: Protein kinase C alpha type Short name= PKC-A Short name= PKC-alpha EC= 2.7.11.13
<b>Expression Region</b>	2-672
<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>	Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play a distinct role in cells. This protein is one of the PKC family members. This kinase has been reported to play roles in many different cellular processes, such as cell adhesion, cell transformation, cell cycle



checkpoint, and cell volume control. Knockout studies in mice suggest that this kinase may be a fundamental regulator of cardiac contractility and Ca(2+) handling in myocytes.

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**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.

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**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.