



Recombinant Rat Protein kinase C gamma type (Prkcg)

Product Code	CSB-EP018705RA-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P63319
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	>85% (SDS-PAGE)
Sequence	MAGLGPGGGD SEGGPRPLFC RKGALRQKVV HEVKSHKFTA RFFKQPTFCS HCTDFIWGIG KQGLQCQVCS FVVHRRCHEF VTFECPGAGK GPQTDDPRNK HKFRLHSYSS PTFCDHCGSL LYGLVHQGMK CSCCEMNVHR RCVRSVPSLC GVDHTERRGR LQLEIRAPTS DEIHITVGEA RNLIPMDPNG LSDPYVKLKL IPDPRNLTKQ KTKTVKATLN PVWNETFVFN LKPGDVERRL SVEVWDWDRT SRNDFMGAMS FGVSELLKAP VDGWYKLLNQ EEEGYYNVPV ADADNCSLLQ KFEACNYPLE LYERVRMGPS SSIPIPSPPS PTDSKRCFFG ASPGRLHISD FSFLMVLGKG SFGKVMLAER RGSDELYAIK ILKKDVIVQD DDVDCTLVEK RVLALGGRGP GGRPHFLTQL HSTFQTPDRL YFVMEYVTGG DLMYHIQQLG KFKEPAAAFY AAIEAIGLFF LHNQGIYRD LKLDNVMLDA EGHKITDFG MCKENVFPGS TTRTFCGTPD YIAPEIIAYQ PYGKSVDWWS FGVLLYEMLA GQPPFDGEDE EELFQAIMEQ TVTYPKSLSR EAVAICKGFL TKHPGKRLGS GPDGEPTIRA HGFFRWIDWE RLERLEIAPP FRPRPCGRSG ENFDKFFTRA APALTPDRL VLASIDQADF QGFTYVNPFD VHPDARSPTS PVPVPVM
Source	E.coli
Target Names	Prkcg
Protein Names	Recommended name: Protein kinase C gamma type Short name= PKC-gamma EC= 2.7.11.13
Expression Region	1-697
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 protein
Target Details	Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and 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 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 distinct roles in cells. This protein is one of the PKC family members. This protein kinase is expressed solely in the brain and spinal cord and its localization is restricted to neurons. It has been demonstrated that several neuronal functions,



including long term potentiation (LTP) and long term depression (LTD), specifically require this kinase. Knockout studies in mice also suggest that this kinase may be involved in neuropathic pain development. Defects in this protein have been associated with neurodegenerative disorder spinocerebellar ataxia-14 (SCA14).

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.