

Bioactive

Full-Length

PRKCG (Human) Recombinant Protein

Catalog # P6544

Size 5 ug

Applications

Result of activity analysis

Result of activity analysis



Specification

Product Description	Human PRKCG (NP_002730.1, 1 a.a. - 697 a.a.) full length recombinant protein with GST-tag at N-terminal using baculovirus expression system.
Host	Viruses
Form	Liquid
Preparation Method	Baculovirus expression system.
Purification	Glutathione sepharose chromatography.
Purity	0.7
Activity	The activity was measured by off-chip mobility shift assay (MSA). The enzyme was incubated with fluorescence-labeled substrate, Mg (or Mn)/ATP, and Ca/Lipid Activator. The phosphorylated and unphosphorylated substrates were separated and detected by MSA device. Substrate: PKC peptide, ATP: 100 uM.
Quality Control Testing	The purity was assessed by SDS-PAGE/CBB staining.
Storage Buffer	50 mM Tris-HCl, 150 mM NaCl, 0.1% CHAPS, 1 mM DTT, 10% glycerol, pH 7.5
Storage Instruction	Stored at -80°C. Aliquot to avoid repeated freezing and thawing.

Note	Result of activity analysis
	Result of activity analysis

Applications

- Functional Study

Gene Info — PRKCG

Entrez GeneID	5582
Protein Accession#	NP_002730.1
Gene Name	PRKCG
Gene Alias	MGC57564, PKC-gamma, PKCC, PKCG, SCA14
Gene Description	protein kinase C, gamma
Omim ID	176980 605361
Gene Ontology	Hyperlink

Gene Summary	<p>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. The protein encoded by this gene 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). [provided by RefSeq]</p>
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Other Designations	-
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Pathway

- [Calcium signaling pathway](#)
- [ErbB signaling pathway](#)

- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [Gap junction](#)
- [Glioma](#)
- [Leukocyte transendothelial migration](#)
- [Long-term depression](#)
- [Long-term potentiation](#)
- [MAPK signaling pathway](#)
- [Melanogenesis](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Non-small cell lung cancer](#)
- [Pathways in cancer](#)
- [Phosphatidylinositol signaling system](#)
- [Tight junction](#)
- [Vascular smooth muscle contraction](#)
- [VEGF signaling pathway](#)
- [Vibrio cholerae infection](#)
- [Wnt signaling pathway](#)

Disease

- [Antisocial Personality Disorder](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Cardiovascular Diseases](#)
- [Conduct Disorder](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)

- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Inhibition \(Psychology\)](#)
- [Liver Cirrhosis](#)
- [Spinocerebellar ataxia](#)
- [Spinocerebellar Ataxias](#)
- [Substance-Related Disorders](#)