

Bioactive

Full-Length

PRKCB2 (Human) Recombinant Protein

Catalog # P6543 Size 5 ug

Applications

Result of activity analysis

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Specification	
Product Description	Human PRKCB2 (NP_002729.2, 1 a.a 673 a.a.) full length recombinant protein with GST-tag at N-t erminal using baculovirus expression system.
Host	Viruses
Form	Liquid
Preparation Method	Baculovirus expression system.
Purification	Glutathione sepharose chromatography.
Purity	0.84
Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorecen ce-labeled substrate, Mg (or Mn)/ATP, and Ca/Lipid Activator. Substrate: PKC peptide, ATP: 100 u M.
Quality Control Testing	The purity was assessed by SDS-PAGE/CBB staining.
Storage Buffer	50 mM Tris-HCl, 150 mM NaCl, 0.05% Brij35, 1 mM DTT, 10% glycerol, pH7.5
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 — PRKCB	
Entrez GeneID	<u>5579</u>
Protein Accession#	NP_002729.2
Gene Name	PRKCB
Gene Alias	MGC41878, PKC-beta, PKCB, PRKCB1, PRKCB2
Gene Description	protein kinase C, beta
Omim ID	176970
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be a ctivated 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 family members also serve as major receptors for phorbol esters, a class of tumor promoter s. Each member of the PKC family has a specific expression profile and is believed to play a distinct role in cells. The protein encoded by this gene is one of the PKC family members. This protein kinase has been reported to be involved in many different cellular functions, such as B cell activation, apoptosis induction, endothelial cell proliferation, and intestinal sugar absorption. Studies in mice also suggest that this kinase may also regulate neuronal functions and correlate fear-induced conflict behavior after stress. Alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq
Other Designations	protein kinase C, beta 1 polypeptide

Pathway

- B cell receptor signaling pathway
- Calcium signaling pathway
- Chemokine signaling pathway



- ErbB signaling pathway
- Fc epsilon RI signaling pathway
- Fc gamma R-mediated phagocytosis
- Focal adhesion
- Gap junction
- Glioma
- GnRH signaling pathway
- 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
- <u>Vibrio cholerae infection</u>
- Wnt signaling pathway

Disease

- Albuminuria
- Autistic Disorder
- Cardiovascular Diseases



- Diabetes Mellitus
- <u>Diabetic Angiopathies</u>
- <u>Diabetic Nephropathies</u>
- Diabetic Retinopathy
- Disease Progression
- Edema
- Epilepsies
- Genetic Predisposition to Disease
- Kidney Failure
- Liver Cirrhosis
- Proteinuria
- Syndrome
- Tobacco Use Disorder