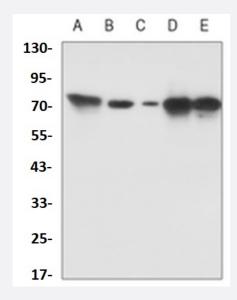


RecomAb™

# PRKCB recombinant monoclonal antibody

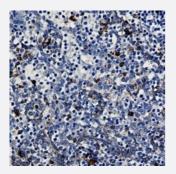
Catalog # RAB02622 Size 100 uL

# **Applications**



## Western Blot

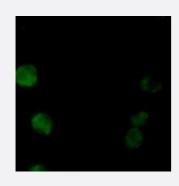
Western blot analysis of Hela (A), A549 (B), U2OS (C), U87MG (D), rat brain (E) whole cell lysates with PRKCB recombinant monoclonal antibody (Cat # RAB02622).



# Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Immunohistochemical analysis of human tonsil formalin fixed paraffin embedded tissue section using PRKCB recombinant monoclonal antibody (Cat # RAB02622). The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.133). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.





## Immunofluorescence

Immunofluorescent analysis of K562 cells with PRKCB recombinant monoclonal antibody (Cat # RAB02622). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.

Specification	
Product Description	Rabbit recombinant monoclonal antibody raised against human PRKCB.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthesized peptide derived from human PRKCB.
Theoretical MW (kDa)	76
Reactivity	Human, Rat
Specificity	Recognizes endogenous levels of PKC beta protein.
Form	Liquid
Purification	Immunogen affinity chromatography
Isotype	lgG
Recommend Usage	Immunocytochemistry (1:50-1:100) Immunofluorescence (1:50-1:100) Immunohistochemistry (1:50-1:100) Immunoprecipitation (1:10-1:50) Western Blot (1:500-1:1000)
Storage Buffer	In 50mM Tris-Glycine, pH 7.4 (0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA)
Storage Instruction	Store at 4°C short term.  Aliquot and store at -20°C long term.  Avoid freeze-thaw cycles.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.



# **Applications**

#### Western Blot

Western blot analysis of Hela (A), A549 (B), U2OS (C), U87MG (D), rat brain (E) whole cell lysates with PRKCB recombinant monoclonal antibody (Cat # RAB02622).

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- Immunocytochemistry
- Immunofluorescence

Immunofluorescent analysis of K562 cells with PRKCB recombinant monoclonal antibody (Cat # RAB02622). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.

Immunoprecipitation

Gene Info — PRKCB	
Entrez GeneID	<u>5579</u>
Protein Accession#	P05771
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>



## **Product Information**

#### **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 m ice 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
- Vibrio cholerae infection
- Wnt signaling pathway

## Disease

- Albuminuria
- Autistic Disorder
- Cardiovascular Diseases
- Diabetes Mellitus
- Diabetic Angiopathies
- Diabetic Nephropathies
- Diabetic Retinopathy
- Disease Progression
- Edema
- Epilepsies
- Genetic Predisposition to Disease
- Kidney Failure
- Liver Cirrhosis
- Proteinuria
- Syndrome
- Tobacco Use Disorder