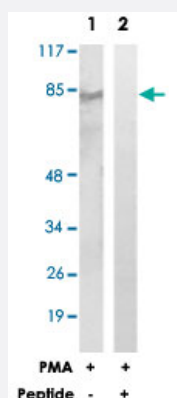


PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ polyclonal antibody

Catalog # PAB18281

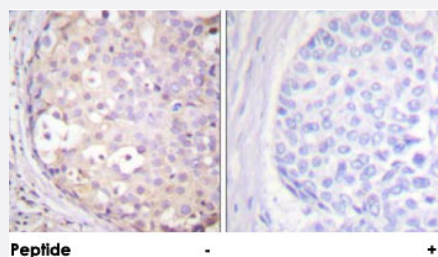
Size 100 ug

Applications



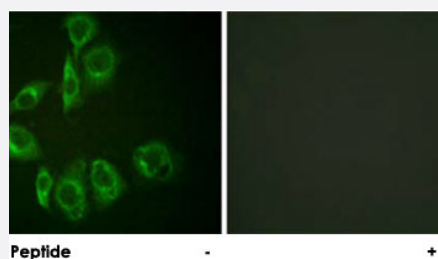
Western Blot (Cell lysate)

Western blot analysis of extracts from NIH/3T3 cells, treated with PMA (250 ng/mL, 15 mins), using PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ polyclonal antibody (Cat # PAB18281). Peptide "+" means "peptide blocking".



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ polyclonal antibody (Cat # PAB18281). Peptide "+" means "peptide blocking".



Immunofluorescence

Immunofluorescence analysis of HUVEC cells, using PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ polyclonal antibody (Cat # PAB18281). Peptide "+" means "peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ.
Immunogen	A synthetic peptide corresponding to residues surrounding T497 of human PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ.
Form	Liquid
Purification	Affinity purification
Concentration	1 mg/mL
Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) Immunofluorescence (1:500-1:1000) ELISA (1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of extracts from NIH/3T3 cells, treated with PMA (250 ng/mL, 15 mins), using PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ polyclonal antibody (Cat # PAB18281).
Peptide "+" means "peptide blocking".

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ polyclonal antibody (Cat # PAB18281).
Peptide "+" means "peptide blocking".

- Immunofluorescence

Immunofluorescence analysis of HUVEC cells, using PRKCA/PRKCB/PRKCD/PRKCE/PRKCG/PRKCH/PRKCQ/PRKCZ polyclonal antibody (Cat # PAB18281).
Peptide "+" means "peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PRKCA

Entrez GeneID [5578](#)

Gene Name PRKCA

Gene Alias AAG6, MGC129900, MGC129901, PKC-alpha, PKCA, PRKACA

Gene Description protein kinase C, alpha

Omim ID [176960](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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. The protein encoded by this gene 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. [provided by RefSeq]

Other Designations aging-associated gene 6|protein kinase C alpha type

Gene Info — PRKCB

Entrez GeneID [5579](#)

Gene Name PRKCB

Gene Alias MGC41878, PKC-beta, PKCB, PRKCB1, PRKCB2

Gene Description protein kinase C, beta

Omim ID [176970](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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 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. 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

Gene Info — PRKCD

Entrez GeneID

[5580](#)

Gene Name

PRKCD

Gene Alias

MAY1, MGC49908, PKCD, nPKC-delta

Gene Description

protein kinase C, delta

Omim ID

[176977](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

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 distinct roles in cells. The protein encoded by this gene is one of the PKC family members. Studies both in human and mice demonstrate that this kinase is involved in B cell signaling and in the regulation of growth, apoptosis, and differentiation of a variety of cell types. Alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq]

Other Designations

protein kinase C delta VIII

Gene Info — PRKCE

Entrez GeneID

[5581](#)

Gene Name

PRKCE

Gene Alias

MGC125656, MGC125657, PKCE, nPKC-epsilon

Gene Description	protein kinase C, epsilon
Omim ID	176975
Gene Ontology	Hyperlink
Gene Summary	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. The protein encoded by this gene is one of the PKC family members. This kinase has been shown to be involved in many different cellular functions, such as neuron channel activation, apoptosis, cardioprotection from ischemia, heat shock response, as well as insulin exocytosis. Knockout studies in mice suggest that this kinase is important for lipopolysaccharide (LPS)-mediated signaling in activated macrophages and may also play a role in controlling anxiety-like behavior. [provided by RefSeq]
Other Designations	-

Gene Info — PRKCG

Entrez GeneID	5582
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	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]
Other Designations	-

Gene Info — PRKCH

Entrez GeneID [5583](#)

Gene Name PRKCH

Gene Alias MGC26269, MGC5363, PKC-L, PKCL, PRKCL, nPKC-eta

Gene Description protein kinase C, eta

Omim ID [601367 605437](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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. The protein encoded by this gene is one of the PKC family members. It is a calcium-independent and phospholipids-dependent protein kinase. It is predominantly expressed in epithelial tissues and has been shown to reside specifically in the cell nucleus. This protein kinase can regulate keratinocyte differentiation by activating the MAP kinase MAPK13 (p38delta)-activated protein kinase cascade that targets CCAAT/enhancer-binding protein alpha (CEBPA). It is also found to mediate the transcription activation of the transglutaminase 1 (TGM1) gene. [provided by RefSeq]

Other Designations protein kinase C eta type

Gene Info — PRKCQ

Entrez GeneID [5588](#)

Gene Name PRKCQ

Gene Alias MGC126514, MGC141919, PRKCT, nPKC-theta

Gene Description protein kinase C, theta

Omim ID [600448](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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. The protein encoded by this gene is one of the PKC family members. It is a calcium-independent and phospholipid-dependent protein kinase. This kinase is important for T-cell activation. It is required for the activation of the transcription factors NF-kappaB and AP-1, and may link the T cell receptor (TCR) signaling complex to the activation of the transcription factors. [provided by RefSeq]

Other Designations

OTTHUMP00000019053|OTTHUMP00000043364|OTTHUMP00000043365

Gene Info — PRKCZ

Entrez GeneID

[5590](#)

Gene Name

PRKCZ

Gene Alias

PKC-ZETA, PKC2

Gene Description

protein kinase C, zeta

Omim ID

[176982](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

Protein kinase C (PKC) zeta is a member of the PKC family of serine/threonine kinases which are involved in a variety of cellular processes such as proliferation, differentiation and secretion. Unlike the classical PKC isoenzymes which are calcium-dependent, PKC zeta exhibits a kinase activity which is independent of calcium and diacylglycerol but not of phosphatidylserine. Furthermore, it is insensitive to typical PKC inhibitors and cannot be activated by phorbol ester. Unlike the classical PKC isoenzymes, it has only a single zinc finger module. These structural and biochemical properties indicate that the zeta subspecies is related to, but distinct from other isoenzymes of PKC. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq]

Other Designations

OTTHUMP00000001368|OTTHUMP00000044160

Publication Reference

- [Proteomics analysis of protein kinases by target class-selective prefractionation and tandem mass spectrometry.](#)

Wissing J, Jansch L, Nimtz M, Dieterich G, Hornberger R, Kéri G, Wehland J, Daub H.

Molecular & Cellular Proteomics 2007 Mar; 6(3):537.

- [Large-scale characterization of HeLa cell nuclear phosphoproteins.](#)

Beausoleil SA, Jedrychowski M, Schwartz D, Elias JE, Villen J, Li J, Cohn MA, Cantley LC, Gygi SP.
PNAS 2004 Aug; 101(33):12130.

- [Exploring proteomes and analyzing protein processing by mass spectrometric identification of sorted N-terminal peptides.](#)

Gevaert K, Goethals M, Martens L, Van Damme J, Staes A, Thomas GR, Vandekerckhove J.
Nature Biotechnology 2003 Mar; 21(5):566.

Pathway

- [Adipocytokine signaling pathway](#)
- [B cell receptor signaling pathway](#)
- [Calcium signaling pathway](#)
- [Calcium signaling pathway](#)
- [Calcium signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Endocytosis](#)
- [ErbB signaling pathway](#)
- [ErbB signaling pathway](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Fc gamma R-mediated phagocytosis](#)

- [Fc gamma R-mediated phagocytosis](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [Focal adhesion](#)
- [Focal adhesion](#)
- [Gap junction](#)
- [Gap junction](#)
- [Gap junction](#)
- [Glioma](#)
- [Glioma](#)
- [Glioma](#)
- [GnRH signaling pathway](#)
- [GnRH signaling pathway](#)
- [GnRH signaling pathway](#)
- [Insulin signaling pathway](#)
- [Leukocyte transendothelial migration](#)
- [Leukocyte transendothelial migration](#)
- [Leukocyte transendothelial migration](#)
- [Long-term depression](#)
- [Long-term depression](#)
- [Long-term depression](#)
- [Long-term potentiation](#)
- [Long-term potentiation](#)
- [Long-term potentiation](#)
- [MAPK signaling pathway](#)

- [MAPK signaling pathway](#)
- [MAPK signaling pathway](#)
- [Melanogenesis](#)
- [Melanogenesis](#)
- [Melanogenesis](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Non-small cell lung cancer](#)
- [Non-small cell lung cancer](#)
- [Pathogenic Escherichia coli infection - EHEC](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Phosphatidylinositol signaling system](#)
- [Phosphatidylinositol signaling system](#)
- [Phosphatidylinositol signaling system](#)
- [T cell receptor signaling pathway](#)
- [Tight junction](#)
- [Tight junction](#)
- [Tight junction](#)
- [Tight junction](#)
- [Tight junction](#)
- [Tight junction](#)

- [Tight junction](#)
- [Tight junction](#)
- [Type II diabetes mellitus](#)
- [Type II diabetes mellitus](#)
- [Type II diabetes mellitus](#)
- [Vascular smooth muscle contraction](#)
- [Vascular smooth muscle contraction](#)
- [Vascular smooth muscle contraction](#)
- [Vascular smooth muscle contraction](#)
- [Vascular smooth muscle contraction](#)
- [Vascular smooth muscle contraction](#)
- [Vascular smooth muscle contraction](#)
- [VEGF signaling pathway](#)
- [VEGF signaling pathway](#)
- [VEGF signaling pathway](#)
- [Vibrio cholerae infection](#)
- [Vibrio cholerae infection](#)
- [Vibrio cholerae infection](#)
- [Wnt signaling pathway](#)
- [Wnt signaling pathway](#)
- [Wnt signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Albuminuria](#)
- [Alzheimer Disease](#)

- [Antisocial Personality Disorder](#)
- [Arthritis](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Autistic Disorder](#)
- [Brain Infarction](#)
- [Brain Ischemia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Cerebral Hemorrhage](#)
- [Cerebral Hemorrhage](#)
- [Conduct Disorder](#)
- [Depressive Disorder](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)

- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Diabetic Angiopathies](#)
- [Diabetic Nephropathies](#)
- [Diabetic Retinopathy](#)
- [Disease Models](#)
- [Disease Progression](#)
- [Disease Progression](#)
- [Edema](#)
- [Edema](#)
- [Edema](#)
- [Edema](#)
- [Edema](#)
- [Epilepsies](#)
- [Esophageal Neoplasms](#)
- [Gastritis](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Helicobacter Infections](#)
- [Hypertension](#)

- [Hypertension](#)
- [Inflammation](#)
- [Inflammation](#)
- [Inhibition \(Psychology\)](#)
- [Intracranial Hemorrhages](#)
- [Kidney Failure](#)
- [Kidney Failure](#)
- [Liver Cirrhosis](#)
- [Liver Cirrhosis](#)
- [Liver Cirrhosis](#)
- [Mental Disorders](#)
- [Multiple Sclerosis](#)
- [Narcolepsy](#)
- [Narcolepsy](#)
- [Narcolepsy](#)
- [Obesity](#)
- [Pancreatic Neoplasms](#)
- [Premature Birth](#)
- [Prostatic Neoplasms](#)
- [Proteinuria](#)
- [Schizophrenia](#)
- [Spinocerebellar ataxia](#)
- [Spinocerebellar Ataxias](#)
- [Stomach Neoplasms](#)
- [Stroke](#)
- [Stroke](#)

- [Subarachnoid Hemorrhage](#)
- [Substance-Related Disorders](#)
- [Syndrome](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Vaginosis](#)
- [Wegener Granulomatosis](#)