

Mouse PKCalpha Monoclonal Antibody | anti-PKCalpha antibody

PKCalpha (Central region) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71684	Mouse	Human, Rat, Mouse	Immunohistochemistry, Immunocytochemistry, Immunoprecipitation, ELISA, Western Blot

PRODUCT SYNONYMS

PKCalpha; Monoclonal Antibody; PKCalpha (Central region) Antibody; PKCalpha (Central region); anti-PKCalpha antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Rat, Mouse
Clonality	Monoclonal
Isotype	IgG2b
Clone Number	M237
Specificity	This antibody detects an 82kDa* protein corresponding to the molecular mass of PKCalpha on SDS-PAGE immunoblots of neonatal rat brain and adult mouse brain lysates.
Purity/Purification	Protein A chromatography
Form/Format	Mouse monoclonal antibody purified with protein A chromatography is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-PKCalpha antibody	IHC (Immunohistochemistry), ICC (Immunocytochemistry), IP (Immunoprecipitation), ELISA, WB (Western Blot)
Immunogen	Clone (M237) was generated from a recombinant human PKCalpha that included amino acids residues in the central region. This region is highly conserved in rat and mouse PKCalpha, and has homology to conserved regions in PKCbeta.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



IHC (Immunohistochemistry)

Formalin fixed, citric acid treated paraffin sections of adult mouse brain. Sections were probed with anti-PKCalpha (PM2371) then anti-mouse:HRP before detection using DAB. (Image provided by Carl Hobbs and Dr. Pat Doherty at Wolfson Centre for Age-Related Diseases, King's College London).



WB (Western Blot)

Western blot analysis of immunoprecipitates from neonatal rat brain lysate using anti-PKCalpha antibody. Control and alkaline phosphatase treated precipitates were probed with anti-PKCalpha (Central region) or anti-phospho-PKCalpha (Ser-657/Tyr-658). The latter shows no detection of PKCalpha after phosphatase treatment.

ADDITIONAL INFORMATION

Related Product Information for anti-PKCalpha antibody	The Protein Kinase C (PKC) family of homologous serine/threonine protein kinases is involved in a number of processes such as growth, differentiation, and cytokine secretion. At least eleven isozymes have been described. PKC consists of a single polypeptide chain containing four conserved regions (C) and five variable regions (V). The N-terminal half interacts with PKC activators Ca2+, phospholipid, diacylglycerol, or phorbol ester, while the C-terminal half contains the catalytic domain. The conventional PKC subfamily (alpha, beta1, betall, and gamma) is regulated by both Ca2+ and diacylglycerol. The PKC pathway represents a major signal transduction system that is activated following ligand-stimulation of transmembrane receptors by hormones, neurotransmitters and growth factors. The phosphorylation of multiple sites in conventional PKCs regulates their activity. In mast cells, FceRI stimulation leads to phosphorylation of tyrosine 658 and 662 of PKCalpha and PKCbetal respectively. This phosphorylation requires autophosphorylation of serine 657 and 661 in these respective kinases.
References	Kawakami et al. (2003) PNAS. USA 100:9470-9475. Thiels, E. et al. (2000) J Neurosci. 20(19):7199. Nishizuka, Y. (1988) Nature 334:661.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506067
NCBI GeneID	5578
NCBI Accession #	NP_002728.1
NCBI GenBank Nucleotide #	NM_002737.2
UniProt Accession #	P17252; Q15137; Q32M72; Q96RE4; B5BU22
Molecular Weight	76,750 Da
NCBI Official Full Name	protein kinase C alpha type
NCBI Official Synonym Full Names	protein kinase C, alpha
NCBI Official Symbol	PRKCA
NCBI Official Synonym Symbols	AAG6; PKCA; PRKACA; PKC-alpha
NCBI Protein Information	protein kinase C alpha type; PKC-A; aging-associated gene 6
UniProt Protein Name	Protein kinase C alpha type
UniProt Gene Name	PRKCA
UniProt Synonym Gene Names	PKCA; PRKACA; PKC-A; PKC-alpha
UniProt Entry Name	KPCA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.