PRKCA Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	Prkca, Polyclonal Antibody
Full Product Name	Prkca, NT (Prkca, Pkca, Protein kinase C alpha type) (MaxLight 405)
Product Gene Name	anti-Prkca antibody
Product Synonym Names	Prkca; Pkca; Protein kinase C alpha type
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with MaxLight405.
Purity/Purification	Purified by Protein A Affinity Chromatography.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: MaxLight405 conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	76,852 Da
3D Structure	ModBase 3D Structure for P20444
Immunogen	Mouse Prkca antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of Mouse Prkca.
Conjugate	MaxLight405
Note	Preservative Free
Product Categories/Family for anti-Prkca antibody	Antibodies; Protein Kinases
Applications Tested/Suitable for anti-Prkca antibody	Flow Cytometry (FC/FACS), FLISA, Immunohistochemistry (IHC), Western Blot (WB)
Application Notes for anti-Prkca antibody	FC/FACS: 1:10-50 FLISA: 1:1,000 IHC: 1:10-50 WB: 1:100-500 Applications are based on unconjugated antibody.
Related Product Information for anti-Prkca antibody	This is a calcium-activated, phospholipid-dependent, serine-and threonine-specific enzyme. May play a role in cell motility by phosphorylating CSPG4 (By similarity). PKC is activated by diacylglycerol which in turn phosphorylates a range of cellular proteins. PKC also serves as the receptor for phorbol esters, a class of tumor promoters.
Product References and Citations for anti-Prkca antibody	Yang, L., et al. Biochem. Biophys. Res. Commun. 400(1):16-20(2010). Jin, K., et al. J. Neurosci. 30(36):11902-11916(2010). Peng, H., et al. Pflugers Arch. 460(4):791-802(2010). Wu, M., et al. Dev. Cell 19(1):114-125(2010). Debata, P.R., et al. Biochem. Biophys. Res. Commun. 397(3):401-406(2010).
Other Notes	Small volumes of anti-Prkca antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

Searchable Terms for Prkca purchase	MBS6337308 is an antibody targeting Prkca. Also known as Prkca, NT (Prkca, Pkca, Protein kinase C alpha type) (MaxLight 405). Reactive in Human, Mouse. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for Prkca. It may not necessarily be applicable to this product.

NCBI GI #	164663791
NCBI GeneID	18750
NCBI Accession #	NP_035231.2
UniProt Primary Accession #	P20444
UniProt Related Accession #	P20444
GenBank Nucleotide #	NM_011101.3
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	Pkca; AI875142
UniProt Protein Name	Protein kinase C alpha type
Protein Family	Protein kinase
UniProt Gene Name	Prkca
UniProt Synonym Gene Names	Pkca; PKC-A; PKC-alpha
UniProt Entry Name	KPCA_MOUSE
NCBI Protein Information	protein kinase C alpha type

UniProt Comments for Prkca	PKCA: an AGC kinase of the PKC family. A classical PKC downstream of many mitogenic and receptors. Classical PKCs are calcium-dependent enzymes that are activated by phosphatidylserine, diacylglycerol and phorbol esters. Contains a pseudo-substrate autoinhibitory domain that binds to the catalytic domain preventing its activation in the absence of cofactors or activators. Protein type: Kinase, protein; Protein kinase, AGC; Oncoprotein; Protein kinase, Ser/Thr (non-receptor); EC 2.7.11.13; AGC group; PKC family; Alpha subfamily Cellular Component: apical part of cell; axon; cell soma; cytoplasm; cytosol; dendrite; endoplasmic reticulum; lipid raft; membrane; mitochondrion; neuron projection; nucleus; perinuclear region of cytoplasm; photoreceptor outer segment; plasma membrane; protein complex Molecular Function: ATP binding; calcium-dependent protein kinase C activity; enzyme binding; kinase activity; metal ion binding; nucleotide binding; protein binding; protein kinase activity; protein kinase C activity; protein serine/threonine kinase activity; transferase activity; zinc ion binding Biological Process: angiogenesis; apoptosis; cell adhesion; cellular calcium ion homeostasis; central nervous system neuron axonogenesis; chondrocyte differentiation; inactivation of MAPK activity; induction of positive chemotaxis; learning and/or memory; negative regulation of cell proliferation; negative regulation of glucose import; negative regulation of heart contraction; negative regulation of insulin receptor signaling pathway; negative regulation of protein amino acid phosphorylation; negative regulation of protein kinase activity; negative regulation of translation; neutrophil chemotaxis; peptidyl-serine phosphorylation; peptidyl-threonine phosphorylation; phosphorylation; positive regulation of angiogenesis; positive regulation of blood vessel endothelial cell migration; positive regulation of cell adhesion; positive regulation of cell migration; positive regulation of endothelial cell proliferation; positive regulation of exocytosis; positive regulation of inflammatory response; positive regulation of lipopolysaccharide-mediated signaling pathway; positive regulation of macrophage differentiation; positive regulation of mitotic cell cycle; positive regulation of protein amino acid phosphorylation; positive regulation of smooth muscle cell proliferation; positive regulation of synaptogenesis; protein amino acid autophosphorylation; protein amino acid phosphorylation; regulation of muscle contraction; regulation of peptidyl-tyrosine phosphorylation; regulation of receptor-mediated endocytosis; regulation of the force of heart contraction; response to estradiol stimulus; response to ethanol; response to reactive oxygen species
Research Articles on Prkca	**1.** A dynamic PKC phosphorylation/de-phosphorylation cycle of Munc18-1 drives short-term enhancement of transmitter release during post-tetanic potentiation.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-antibody/prkca/6337308