PRKCA recombinant antibody

Phospho-PRKCA (T638) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA235582	**Rabbit**	**Human**	**Immunofluorescence, Western Blot, ELISA**

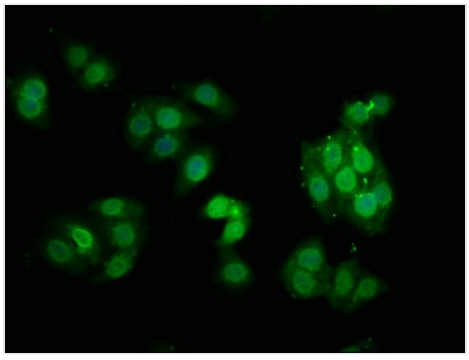
PRODUCT SYNONYMS

PRKCA; Monoclonal Recombinant Antibody; Phospho-PRKCA (T638) Antibody; Protein kinase C alpha type; PKC-A; PKC-alpha; PKCA; PRKACA; PRKCA recombinant antibody

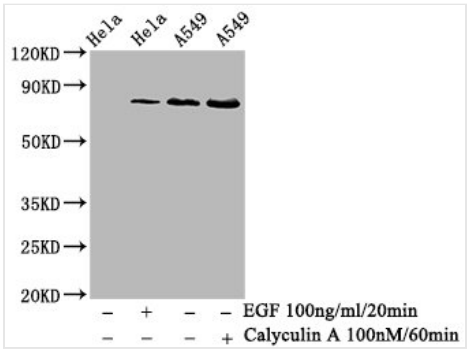
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG
Purity/Purification	Affinity-Chromatography
Form/Format	Liquid; In phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Sequence Length	672
Applicable Applications for PRKCA recombinant antibody	IF (Immunofluorescence), WB (Western Blot), ELISA
Immunogen Species	Human
Immunogen	A synthesized peptide derived from human Phospho-PRKCA (T638)
Conjugate	Non-Conjugated
Preparation and Storage	Upon receipt, store at-20 degree C or-80 degree C. Avoid repeated freeze.

IMAGES



IF (Immunofluorescence)
Immunofluorescence staining of HepG2 cells with CSB-RA018699A638phHU at 1:100,counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4 degree C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG (H+L).



WB (Western Blot)
Western BlotPositive WB detected in?Hela whole cell lysate,A549 whole cell lysate(treated with Calyculin A or EGF)All lanes?Phospho-PRKCA antibody at 0.68ug/mlSecondaryGoat polyclonal to rabbit IgG at 1/50000 dilutionPredicted band size: 80 KDaObserved band size: 80 KDa

ADDITIONAL INFORMATION

Related Product Information for PRKCA recombinant antibody	Calcium-activated, phospholipid-and diacylglycerol (DAG)-dependent serine/threonine-protein kinase that is involved in positive and negative regulation of cell proliferation, apoptosis, differentiation, migration and adhesion, tumorigenesis, cardiac hypertrophy, angiogenesis, platelet function and inflammation, by directly phosphorylating targets such as RAF1, BCL2, CSPG4, TNNT2/CTNT, or activating signaling cascade involving MAPK1/3 (ERK1/2) and RAP1GAP. Involved in cell proliferation and cell growth arrest by positive and negative regulation of the cell cycle. Can promote cell growth by phosphorylating and activating RAF1, which mediates the activation of the MAPK/ERK signaling cascade, and/or by up-regulating CDKN1A, which facilitates active cyclin-dependent kinase (CDK) complex formation in glioma cells. In intestinal cells stimulated by the phorbol ester PMA, can trigger a cell cycle arrest program which is associated with the accumulation of the hyper-phosphorylated growth-suppressive form of RB1 and induction of the CDK inhibitors CDKN1A and CDKN1B. Exhibits anti-apoptotic function in glioma cells and protects them from apoptosis by suppressing the p53/TP53-mediated activation of IGFBP3, and in leukemia cells mediates anti-apoptotic action by phosphorylating BCL2. During macrophage differentiation induced by macrophage colony-stimulating factor (CSF1), is translocated to the nucleus and is associated with macrophage development. After wounding, translocates from focal contacts to lamellipodia and participates in the modulation of desmosomal adhesion. Plays a role in cell motility by phosphorylating CSPG4, which induces association of CSPG4 with extensive lamellipodia at the cell periphery and polarization of the cell accompanied by increases in cell motility. During chemokine-induced CD4(+) T cell migration, phosphorylates CDC42-guanine exchange factor DOCK8 resulting in its dissociation from LRCH1 and the activation of GTPase CDC42 (PubMed:28028151). Is highly expressed in a number of cancer cells where it can act as a tumor promoter and is implicated in malignant phenotypes of several tumors such as gliomas and breast cancers. Negatively regulates myocardial contractility and positively regulates angiogenesis, platelet aggregation and thrombus formation in arteries. Mediates hypertrophic growth of neonatal cardiomyocytes, in part through a MAPK1/3 (ERK1/2)-dependent signaling pathway, and upon PMA treatment, is required to induce cardiomyocyte hypertrophy up to heart failure and death, by increasing protein synthesis, protein-DNA ratio and cell surface area. Regulates cardiomyocyte function by phosphorylating cardiac troponin T (TNNT2/CTNT), which induces significant reduction in actomyosin ATPase activity, myofilament calcium sensitivity and myocardial contractility. In angiogenesis, is required for full endothelial cell migration, adhesion to vitronectin (VTN), and vascular endothelial growth factor A (VEGFA)-dependent regulation of kinase activation and vascular tube formation. Involved in the stabilization of VEGFA mRNA at post-transcriptional level and mediates VEGFA-induced cell proliferation. In the regulation of calcium-induced platelet aggregation, mediates signals from the CD36/GP4 receptor for granule release, and activates the integrin heterodimer ITGA2B-ITGB3 through the RAP1GAP pathway for adhesion. During response to lipopolysaccharides (LPS), may regulate selective LPS-induced macrophage functions involved in host defense and inflammation. But in some inflammatory responses, may negatively regulate NF-kappa-B-induced genes, through IL1A-dependent induction of NF-kappa-B inhibitor alpha (NFKBIA/IKBA). Upon stimulation with 12-O-tetradecanoylphorbol-13-acetate (TPA), phosphorylates EIF4G1, which modulates EIF4G1 binding to MKNK1 and may be involved in the regulation of EIF4E phosphorylation. Phosphorylates KIT, leading to inhibition of KIT activity. Phosphorylates ATF2 which promotes cooperation between ATF2 and JUN, activating transcription.
Product Categories/Family for PRKCA recombinant antibody	Recombinant Antibody; Signal Transduction

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; PKCI+/-; PKCalpha; PKC-alpha

NCBI Protein Information	protein kinase C alpha type
UniProt Protein Name	Protein kinase C alpha type
UniProt Gene Name	**PRKCA**
UniProt Synonym Gene Names	PKCA; PRKACA; PKC-A; PKC-alpha

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: https://www.aaabiotech.com/monoclonal/prkca-recombinant-antibody-immunofluorescence-western-blot-elisa/235582