

## PKC α (phospho Tyr658) Polyclonal Antibody

Catalog No: YP0339

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC

Target: PKC α

**Fields:** >>EGFR tyrosine kinase inhibitor resistance;>>MAPK signaling

pathway;>>ErbB signaling pathway;>>Ras signaling pathway;>>Rap1 signaling

pathway;>>Calcium signaling pathway;>>HIF-1 signaling

pathway;>>Phosphatidylinositol signaling system;>>Sphingolipid signaling

pathway;>>Phospholipase D signaling pathway;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>Adrenergic signaling in cardiomyocytes;>>Vascular smooth muscle contraction;>>Wnt signaling

pathway;>>Axon guidance;>>VEGF signaling pathway;>>Focal adhesion;>>Gap junction;>>Neutrophil extracellular trap formation;>>Natural killer cell mediated

cytotoxicity;>>Fc epsilon RI signaling pathway;>>Fc gamma R-mediated phagocytosis;>>Leukocyte transendothelial migration;>>Circadian entrainment;>>Long-term potentiation;>>Retrograde endocannabinoid signaling;>>Glutamatergic synapse;>>Cholinergic synapse;>>Serotonergic synapse;>>GABAergic synapse;>>Dopaminergic synapse;>>Long-term

depression;>>Inflammatory mediator regulation of TRP channe

Gene Name: PRKCA

**Protein Name:** Protein kinase C alpha type

P20444

Human Gene Id: 5578

**Human Swiss Prot** P17252

No:

Mouse Gene Id: 18750

**Mouse Swiss Prot** 

No:

Rat Swiss Prot No: P05696

Immunogen: The antiserum was produced against synthesized peptide derived from human

PKC alpha around the phosphorylation site of Tyr657. AA range:623-672



Specificity: Phospho-PKC α (Y657) Polyclonal Antibody detects endogenous levels of PKC

a protein only when phosphorylated at Y657.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source :** Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500-2000;IHC 1:50-300

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 80kD

**Cell Pathway:** Regulation\_Microtubule; Regulation of Actin Dynamics; Stem cell pathway;

Insulin Receptor; ErbB/HER; MAPK ERK Growth; MAPK G Protein; WNT; WNT-

T CELL;β-Catenin; B Cell Receptor; PI3K/Akt; mTOR; AMPK

**Background:** 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, Jul 2

**Function :** catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Binds 3

calcium ions per subunit. The ions are bound to the C2 domain.,function: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.,function:This is a calcium-activated, phospholipid-dependent, serine-and threonine-specific enzyme. May play a role in cell motility by phosphorylating CSPG4.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to

the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC

subfamily., similarity: Contains 1 AGC-kinase C-terminal

domain., similarity: Contains 1 C2 domain., similarity: Contains 1 protein kinase

domain., similarity: Contains 2 phorbol-ester/DAG-type zinc

fingers., subunit: Interacts with ADAP1/CENTA1, CSPG4 and PRKCABP. Binds to

2/3



**SDPR** 

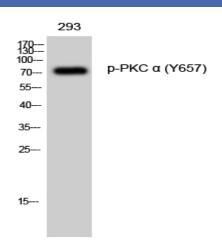
Subcellular Location:

Cytoplasm . Cell membrane ; Peripheral membrane protein . Mitochondrion

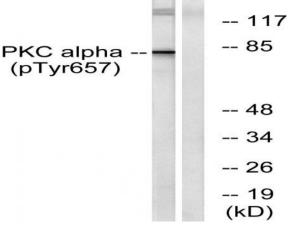
membrane; Peripheral membrane protein. Nucleus.

**Expression:** Blood, Brain, Epithelium, Lung, Platelet,

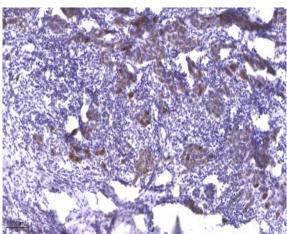
## **Products Images**



Western Blot analysis of 293 cells using Phospho-PKC  $\alpha$  (Y657) Polyclonal Antibody diluted at 1:1000



Western blot analysis of lysates from COLO205 cells, using PKC alpha (Phospho-Tyr657) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human Breast cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).