

## Product datasheet for **AP06563PU-S**

### PKC alpha (PRKCA) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections:</b> 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 600-650 of Human PKC $\alpha$ .
Specificity:	This antibody detects endogenous levels of PKC alpha protein. (region surrounding Gly633)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 15 mM sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 80 kDa
Gene Name:	protein kinase C alpha
Database Link:	<a href="#">Entrez Gene 18750 Mouse</a> <a href="#">Entrez Gene 24680 Rat</a> <a href="#">Entrez Gene 5578 Human P17252</a>



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**Background:**

Members of the protein kinase C (PKC) family play a key regulatory role in a variety of cellular functions including cell growth and differentiation, gene expression, hormone secretion and membrane function. PKCs were originally identified as serine/threonine protein kinases whose activity was dependent on calcium and phospholipids. Diacylglycerols (DAG) and tumor promoting phorbol esters bind to and activate PKC. PKCs can be subdivided into at least two major classes including conventional (c) PKC isoforms (alpha, beta1, beta2 and gamma) and novel (n) PKC isoforms (delta, epsilon, zeta, eta and theta). Patterns of expression for each PKC isoform differ among tissues and PKC family members exhibit clear differences in their cofactor dependencies. For instance, the kinase activities of nPKC delta and epsilon are independent of Ca<sup>2+</sup>. On the other hand, nPKC delta and epsilon, as well as all of the cPKC members, possess phorbol ester-binding activities and kinase activities.

**Synonyms:**

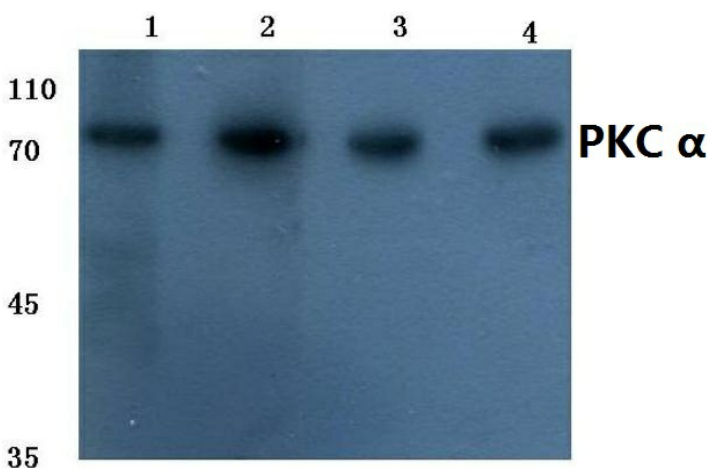
Protein kinase C alpha type, PKC-alpha, PKC alpha, PKC-A, PKCA, PRKACA

**Protein Families:**

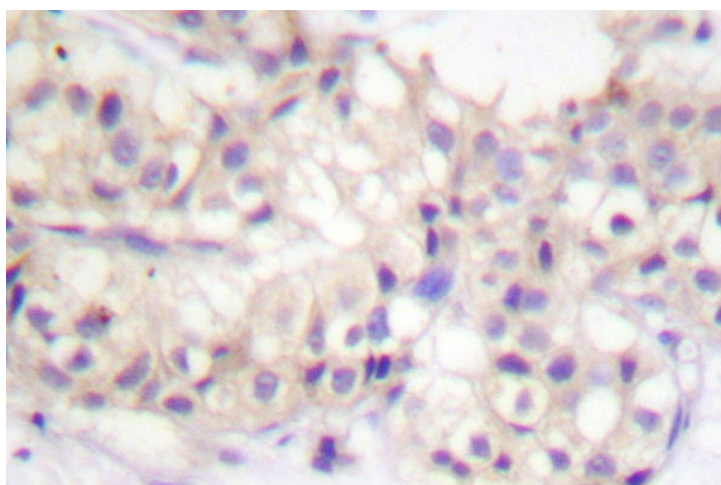
Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

**Protein Pathways:**

Calcium signaling pathway, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, Leukocyte transendothelial migration, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Natural killer cell mediated cytotoxicity, Non-small cell lung cancer, Pathogenic Escherichia coli infection, Pathways in cancer, Phosphatidylinositol signaling system, Tight junction, Vascular smooth muscle contraction, VEGF signaling pathway, Vibrio cholerae infection, Wnt signaling pathway

**Product images:**

Western blot (WB) analysis of PKC alpha antibody at 1/500 dilution. Lane 1: MCF-7 whole cell lysate; Lane 2: Mouse liver tissue lysate; Lane 3: PC12 whole cell lysate; Lane 4: NIH-3T3 whole cell lysate.



Immunohistochemistry (IHC) analyzes of PKC alpha antibody in paraffin-embedded human breast