Catalog No. LF-PA0175

POLYCLONAL ANTIBODY

Anti- PKC α (Protein kinase C alpha)

Background : Protein kinase C (PKC) is a family of serine-threonine kinases that regulate a broad spectrum of cellular functions. The family is composed of nine genes that express structurally related phospholipid-dependent kinases with distinct means of regulation and tissue distribution. Based on their structures and sensitivities to Ca2+ and diacylglycerol (DAG), they have been classified into conventional PKCs (α, β, and γ), novel PKCs (δ, ε, η, and θ), and atypical PKCs (ζ and λ/ι). Mammalian PKC alpha consists of 672 amino acids and is distributed in all tissues, in contrast to other PKC isotypes whose expression is restricted in the particular tissues. PKC alpha is activated by a variety of stimuli originating from receptor activation, cell contact and physical stresses. Kinase activity of PKC alpha is regulated by phosphorylation of three conserved residues in its kinase domain: the activation-loop site Thr-497, the autophosphorylation site Thr-638, and the hydrophobic C-terminal site Ser-657. In some types of cells, PKC alpha is implicated in cell growth, in contrast, it may play a role in cell cycle arrest and differentiation in other types of cells. The responses are modulated by dynamic interactions with cell-type specific factors.

Immunogen : Synthetic peptide

Host : Rabbit

Type : Purified

Isotype : IgG

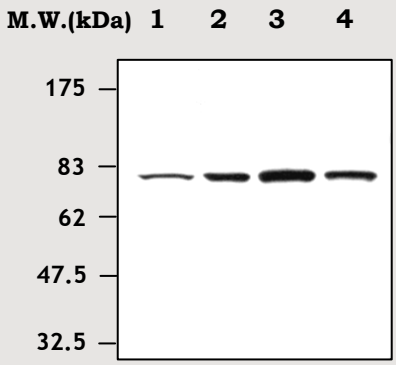
Size : 100 µℓ

Compositon : Hepes with 0.15 M NaCl, 0.01% BSA, 0.03% sodium azide, and 50% glycerol

Storage : Store for 1 year at –20℃ from date of shipment.

Species cross reactivity

Human	Mouse	Rat
+	+	+



Immunoblot Analysis
Lane 1 : HeLa cell lysate (– 30 ug)
Lane 2 : NIH 3T3 cell lysate
Lane 3 : Mouse brain lysate
Lane 4 : Rat brain lysate

Positive control : Mouse brain (HeLa)

Applications :
Western Blotting(1:2,000)

Background Reference :
1) Nakashima, S., 2002, J Biochem (Tokyo). 132:669-675
Saito N. and Shirai Y., 2002, J Biochem (Tokyo). 132:683-687
Hansra, G. et al., 1999, Biochem. J. 342:337-344

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