

# Anti-PKC $\alpha$ (Central region) Antibody

Catalog # AN1904

## Product Information

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<b>Application</b>	WB, IHC, ICC, IP
<b>Primary Accession</b>	<a href="#">P17252</a>
<b>Host</b>	Mouse
<b>Clonality</b>	Mouse Monoclonal
<b>Isotype</b>	IgG2b
<b>Clone Names</b>	M237
<b>Calculated MW</b>	76750

## Additional Information

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<b>Gene ID</b>	5578
<b>Other Names</b>	PKC alpha
<b>Dilution</b>	WB~~1:1000 IHC~~1:100~500 ICC~~N/A IP~~N/A
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	Anti-PKC $\alpha$ (Central region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
<b>Shipping</b>	Blue Ice

## Background

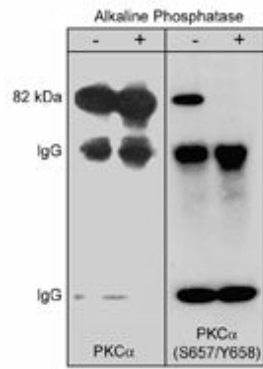
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The Protein Kinase C (PKC) family of homologous serine/threonine protein kinases is involved in a number of processes such as growth, differentiation, and cytokine secretion. At least eleven isozymes have been described. PKC consists of a single polypeptide chain containing four conserved regions (C) and five variable regions (V). The N-terminal half interacts with PKC activators Ca<sup>2+</sup>, phospholipid, diacylglycerol, or phorbol ester, while the C-terminal half contains the catalytic domain. The conventional PKC subfamily ( $\alpha$ ,  $\beta$ 1,  $\beta$ II, and  $\gamma$ ) is regulated by both Ca<sup>2+</sup> and diacylglycerol. The PKC pathway represents a major signal transduction system that is activated following ligand-stimulation of transmembrane receptors by hormones, neurotransmitters and growth factors. The phosphorylation of multiple sites in conventional PKCs regulates their activity. In mast cells, Fc $\epsilon$ RI stimulation leads to phosphorylation of tyrosine 658 and 662 of PKC $\alpha$  and PKC $\beta$ I respectively. This phosphorylation requires autophosphorylation of serine 657 and 661 in these respective kinases.

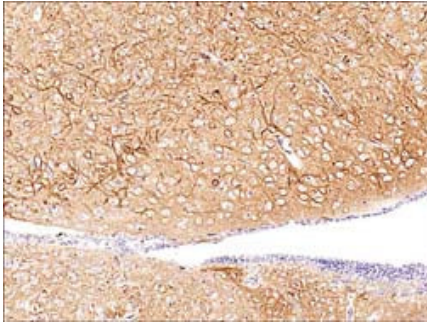
## Images

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Western blot analysis of immunoprecipitates from neonatal rat brain lysate using anti-PKC $\alpha$  antibody. Control and alkaline phosphatase treated precipitates



were probed with anti-PKC $\alpha$  (Central region) or anti-phospho-PKC $\alpha$  (Ser-657/Tyr-658). The latter shows no detection of PKC $\alpha$  after phosphatase treatment.



Formalin fixed, citric acid treated paraffin sections of adult mouse brain. Sections were probed with anti-PKC $\alpha$  (AN1904) then anti-mouse:HRP before detection using DAB. (Image provided by Carl Hobbs and Dr. Pat Doherty at Wolfson Centre for Age-Related Diseases, King's College London).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.