

Product datasheet for **SM1436**

PKC alpha (PRKCA) Mouse Monoclonal Antibody [Clone ID: 133]

Product data:

Product Type:	Primary Antibodies
Clone Name:	133
Applications:	IHC, WB
Recommended Dilution:	Western Blot: 1/10-1/500. Immunohistochemistry on Frozen Sections: Neat-1/10.
Reactivity:	Human, Mammalian
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Protein Kinase C alpha (PKC alpha). Spleen cells from immunised mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity:	PKC alpha antibody (Cat#SM1436) recognises the alpha isoform of Protein Kinase C. It recognises the sequence PQFVHPILQSAV at the C terminus of PKCa.
Formulation:	State: Supernatant State: Liquid Tissue Culture Supernatant containing 0.09% Sodium Azide
Conjugation:	Unconjugated
Storage:	Store the antibody 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.
Gene Name:	protein kinase C alpha
Database Link:	Entrez Gene 5578 Human P17252



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Background:

Protein Kinase c alpha (PKC alpha) is an 77 kDa member of the conventional group (cPKCs: sensitive to calcium, diacylglycerol, phosphatidylserine and phorbol esters) of the PKC family of serine/ threonine kinases that are involved in a wide range of physiological processes including mitogenesis, cell survival and transcriptional regulation. PKC alpha is an ubiquitously expressed PKC isozyme that has been implicated in the regulation of a broad range of cellular functions including proliferation, differentiation, development, migration, cell cell adhesion, cell extracellular matrix adhesion, and solute transport. The activation loop threonine (threonine 497 in PKC alpha) of conventional PKCs is phosphorylated by phosphoinositide dependent kinase 1 (PDK1). This phosphorylation is necessary for the autophosphorylation of threonine 638 in the carboxy terminus of PKC alpha, a step that is critical for regulating the rate of PKC alpha dephosphorylation and inactivation.

Synonyms:

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