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Rabbit Anti-PKA gamma/Cy5 Conjugated antibody

SL3964R-Cy5

Product Name	Anti-PKA gamma/Cy5
Chinese Name	Cy5 标记的蛋白激酶 Aγ 抗体
Alias	KAPG; PKA C gamma; PRKACG; Protein kinase cAMP dependent catalytic gamma; Serine (threonine) protein kinase; KAPCG_HUMAN.
Research Area	Tumour Cell biology immunology transcriptional regulatory factor Kinases and Phosphatases
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	(predicted:Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Sheep)
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	40kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human PKA gamma
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** PKA (or cAPK) is a cyclic AMP dependent protein kinase. When activated by the second messenger cAMP, PKA mediates diverse cellular mechanisms, including proliferation, ion transport, regulation of metabolism, plus gene transcription. PKA is comprised of two dimers of two subunits, R (regulatory)

and C (catalytic). Two families of R subunit (RI and RII) and three C subunit isoforms (C alpha, C beta, and C gamma) have been identified each possessing distinct cAMP binding properties and resulting in different phosphorylation states. C subunit is activated through autophosphorylation and direct phosphorylation at Thr197 by PDK-1. Tissue specific expression of C gamma, indicates pressure on C gamma during evolution, acting to modulate it in a functionally specific way. Certain amino acid substitutions make C gamma a distinct member of the cAMP dependent subfamily of protein kinases, and suggest that C gamma may be distinct in its protein substrate specificity or its interaction with the different regulatory subunits.

Function:
Phosphorylates a large number of substrates in the cytoplasm and the nucleus.

Subunit:
A number of inactive tetrameric holoenzymes are produced by the combination of homo- or heterodimers of the different regulatory subunits associated with two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits.

Tissue Specificity:
Testis specific. But important tissues such as brain and ovary have not been analyzed for the content of transcript.

Similarity:
Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. cAMP subfamily.
Contains 1 AGC-kinase C-terminal domain.
Contains 1 protein kinase domain.

Database links:
UniProtKB/Swiss-Prot: P22612.3

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.