

Rabbit Anti-phospho-PKA R2 (Ser99) antibody

SL4022R

Product Name:	phospho-PKA R2 (Ser99)
Chinese Name:	$$ 磷酸化蛋白激酶A受体2 $lpha$ 亚基抗体 \mathbf{A}
Alias:	 PKA R2 (phospho-Ser96); phospho-PKA R2 (Ser96); phospho-PKA R2 (Ser99); KAP2; KAP2_HUMAN; MGC3606; PKR 2; PKR2; PRKA R2; PRKAR 2; PRKAR2; PRKAR2A; Protein kinase A RII alpha subunit; Protein kinase cAMP dependent regulatory type II alpha; cAMP dependent protein kinase regulatory subunit alpha 2; cAMP dependent protein kinase regulatory subunit RII alpha; cAMP dependent protein kinase type II alpha regulatory chain; cAMP dependent protein kinase type II alpha regulatory subunit; phospho-PKA R2 (Ser98)(human).
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	45kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from mouse PKA R2 around the phosphorylation site of Ser96:RV(p-S)VC
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 癈 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癈. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 癈.
PubMed:	PubMed
	The second messenger cyclic AMP (cAMP) mediates diverse cellular responses to external signals such as proliferation, ion transport, regulation of metabolism and gene transcription by activation of the cAMP-dependent protein kinase (cAPK or PKA). Activation of PKA occurs when cAMP binds to the two regulatory subunits of the tetrameric PKA holoenzyme, resulting in release of active catalytic subunits. Activation of transcription upon elevation of cAMP levels results from translocation of PKA to the nucleus, where it phosphorylates the transcription factor cAMP response element binding protein (CREB) on Serine 133, which in turn leads to TFIIB binding to TATA- box-binding protein TBP1, thus linking phospho-CREB to the Pol II transcription initiation complex. Mouse Serine 96 (designated Ser 99 in human) is a phosphorylation site on the PKA II?regulatory subunit.
	Function: Regulatory subunit of the cAMP-dependent protein kinases involved in cAMP signaling in cells. Type II regulatory chains mediate membrane association by binding to anchoring proteins, including the MAP2 kinase.
Product Detail:	Subunit: The inactive form of the enzyme is composed of two regulatory chains and two catalytic chains. Activation by cAMP produces two active catalytic monomers and a regulatory dimer that binds four cAMP molecules. Interacts with AKAP4 and CBFA2T3. Interacts with the phosphorylated form of PJA2.
	Subcellular Location: Cytoplasm. Cell membrane. Note=Co-localizes with PJA2 in the cytoplasm and the cell membrane.
	Tissue Specificity: Four types of regulatory chains are found: I-alpha, I-beta, II-alpha, and II-beta. Their expression varies among tissues and is in some cases constitutive and in others inducible.
	Post-translational modifications: Phosphorylated by the activated catalytic chain.
	Similarity: Belongs to the cAMP-dependent kinase regulatory chain family.
	SWISS: P13861
	Gene ID: 5576

Database links:
Entrez Gene: 5576Human
Entrez Gene: 19087 Mouse
Entrez Gene: 29699Rat
<u>Omim: 176910</u> Human
<u>SwissProt: P13861</u> Human
SwissProt: P12367Mouse
SwissProt: P12368Rat
Unigene: 631923Human
Unigene: 731573Human
Unigene: 253102Mouse
Unigene: 486392Mouse
Unigene: 9742Rat
Important Note:
This product as supplied is intended for research use only, not for use in human,
therapeutic or diagnostic applications.
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