



# PKA II $\beta$ reg (phospho Ser113) Polyclonal Antibody

<b>Catalog No</b>	BYab-14379
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat;Monkey
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	PRKAR2B
<b>Protein Name</b>	cAMP-dependent protein kinase type II-beta regulatory subunit
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PKA-R2 beta around the phosphorylation site of Ser113. AA range:79-128
<b>Specificity</b>	Phospho-PKA II $\beta$ reg (S113) Polyclonal Antibody detects endogenous levels of PKA II $\beta$ reg protein only when phosphorylated at S113.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	PRKAR2B; cAMP-dependent protein kinase type II-beta regulatory subunit
<b>Observed Band</b>	46kD
<b>Cell Pathway</b>	Cytoplasm . Cell membrane . Colocalizes with PJA2 in the cytoplasm and at the cell membrane.
<b>Tissue Specificity</b>	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.
<b>Function</b>	function:Type II regulatory chains mediate membrane association by binding to anchoring proteins, including the MAP2 kinase.,PTM:Phosphorylated by the activated catalytic chain.,similarity:Belongs to the cAMP-dependent kinase regulatory chain family.,similarity:Contains 2 cyclic nucleotide-binding domains.,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.,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

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## Background

cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its effects by activating the cAMP-dependent protein kinase, which transduces the signal through phosphorylation of different target proteins. The inactive kinase holoenzyme is a tetramer composed of two regulatory and 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. Four different regulatory subunits and three catalytic subunits have been identified in humans. The protein encoded by this gene is one of the regulatory subunits. This subunit can be phosphorylated by the activated catalytic subunit. This subunit has been shown to interact with and suppress the transcriptional activity of the cAMP responsive element binding protein 1 (CREB1) in activ

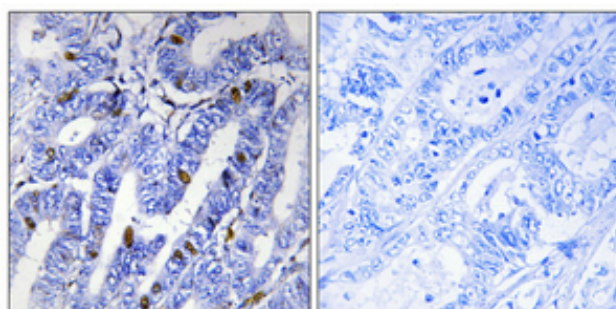
## matters needing attention

Avoid repeated freezing and thawing!

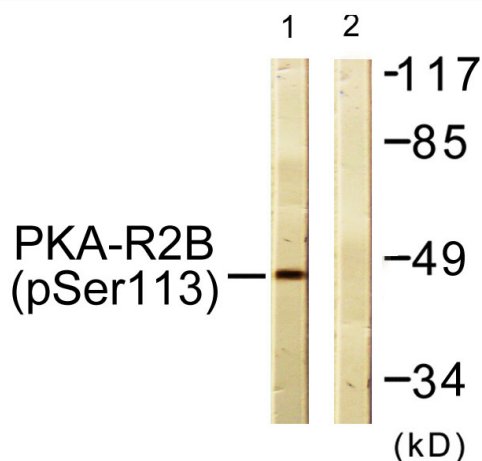
## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Immunohistochemical analysis of paraffin-embedded Human colon cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.



Western blot analysis of lysates from COS7 cells treated with PMA 125ng/ml 30', using PKA-R2 beta (Phospho-Ser113) Antibody. The lane on the right is blocked with the phospho peptide.

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