

Product Name: PKA II β reg Rabbit Polyclonal Antibody
Catalog #: APRab16181



Summary

Production Name	PKA II β reg Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	PRKAR2B
Alternative Names	PRKAR2B; cAMP-dependent protein kinase type II-beta regulatory subunit
Gene ID	5577.0
SwissProt ID	P31323.The antiserum was produced against synthesized peptide derived from human PKA-R2 beta. AA range:79-128

Application

Dilution Ratio	WB 1:500-1:2000, IHC-P 1:100-1:300, ELISA 1:10000, IF-P/IF-F/ICC/IF 1:50-200
Molecular Weight	46kDa

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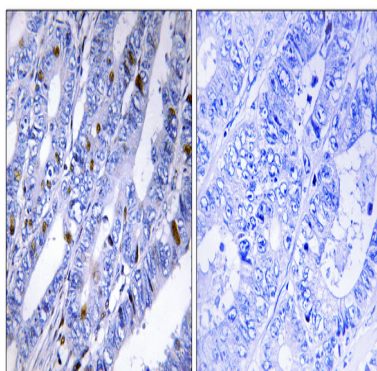
Background

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 activation 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 and in others inducible.

Research Area

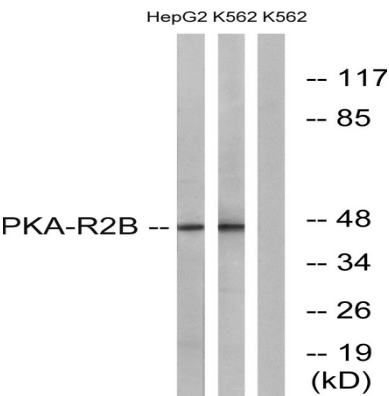
Apoptosis_Inhibition; Apoptosis_Mitochondrial; Apoptosis_Overview; Insulin_Receptor;

Image Data

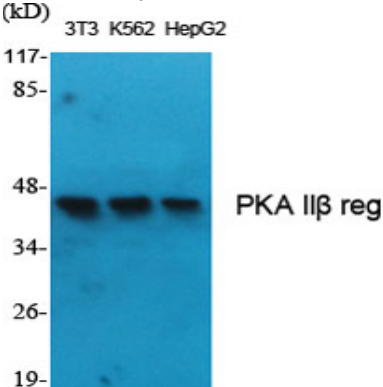


Immunohistochemistry analysis of paraffin-embedded human colon carcinoma tissue, using PKA-R2 beta Antibody. The picture on the right is blocked with the synthesized peptide.

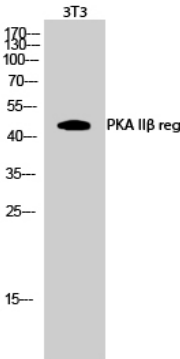
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Western blot analysis of lysates from K562 and HepG2 cells, using PKA-R2 beta Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using PKA II β reg Polyclonal Antibody



Western Blot analysis of 3T3 cells using PKA II β reg Polyclonal Antibody

Note

For research use only.