

## PKA IIβ reg Polyclonal Antibody

Catalog No: YT3745

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: PKA IIβ reg

**Fields:** >>Insulin signaling pathway

Gene Name: PRKAR2B

Protein Name: cAMP-dependent protein kinase type II-beta regulatory subunit

**Human Gene Id:** 5577

**Human Swiss Prot** 

P31323

No:

Mouse Gene ld: 19088

**Mouse Swiss Prot** 

P31324

No:

Rat Gene ld: 24679

Rat Swiss Prot No: P12369

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

PKA-R2 beta. AA range:79-128

Specificity: PKA IIβ reg Polyclonal Antibody detects endogenous levels of PKA IIβ reg

protein.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

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**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 46kD

Cell Pathway: Apoptosis\_Inhibition; Apoptosis\_Mitochondrial; Apoptosis\_Overview; Insulin\_Rec

eptor;

**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

**Function:** 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.,

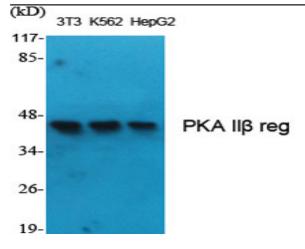
Subcellular Cytoplasm . Cell membrane . Colocalizes with PJA2 in the cytoplasm and at the cell membrane.

**Expression:** Four types of regulatory chains are found: I-alpha, I-beta, II-alpha, and II-beta.

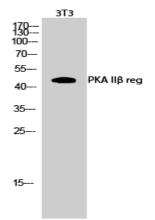
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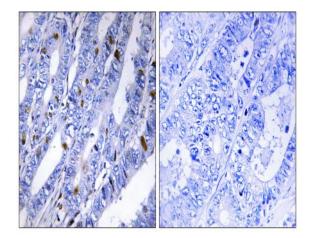
## **Products Images**



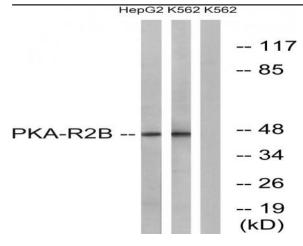
Western Blot analysis of various cells using PKA II $\beta$  reg Polyclonal Antibody



Western Blot analysis of 3T3 cells using PKA II $\!\beta$  reg Polyclonal Antibody



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.



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.