



PKA II α reg Polyclonal Antibody

Catalog No	YP-Ab-14923
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	PRKAR2A
Immunogen	The antiserum was produced against synthesized peptide derived from human KAP2. AA range:41-90
Specificity	PKA II α reg Polyclonal Antibody detects endogenous levels of PKA II α reg protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PKR2;PRKAR2;PKA II α reg;PRKAR2A;cAMP-dependent protein kinase type II-alpha regulatory subunit
Observed Band	45kD
Calculated Molecular Weight	45kD
Cell Pathway	Cytoplasm . Cell membrane . Colocalizes 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.
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. Interacts with AKAP4 and CBFA2T3.,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.,

Background

protein kinase cAMP-dependent type II regulatory subunit alpha(PRKAR2A) Homo sapiens 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. It may interact with various A-kinase anchoring proteins and determine the subcellular localization of cAMP-dependent protein kinase. This subunit has b

matters needing attention

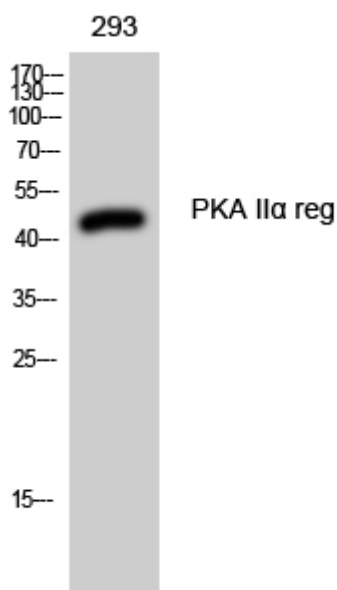
Avoid repeated freezing and thawing!

Usage suggestions

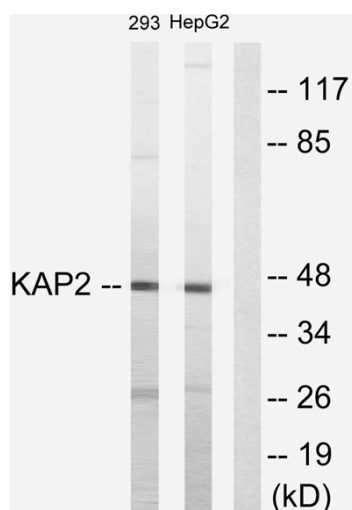
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



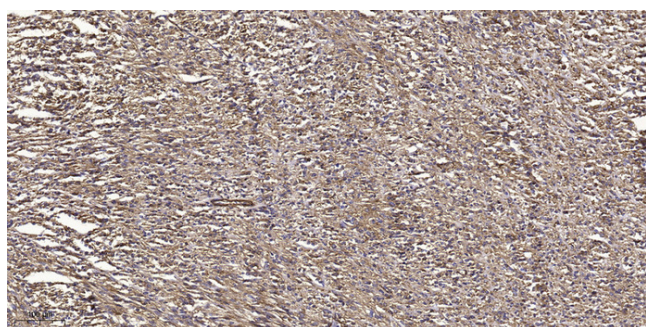
Products Images



Western Blot analysis of 293 cells using PKA II α reg Polyclonal Antibody



Western blot analysis of lysates from 293 and HepG2 cells, using KAP2 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human small intestinal carcinoma tissue. 1, primary Antibody was diluted at 1:200 (4° overnight). 2, Sodium citrate pH 6.0 was used for antigen retrieval (>98° C, 20 min). 3, Secondary antibody was diluted at 1:200