

Product Name: cAMP Protein Kinase Catalytic Subunit Rabbit Polyclonal Antibody
Catalog #: APRab00544

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% sodium azide, pH 7.3.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:1000,IHC 1:50-1:100,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight	Calculated MW: 40 kDa; Observed MW: 40 kDa

Antigen Information

Gene Name	PRKACA/PRKACB
Alternative Names	PRKACA; PKACA; cAMP-dependent protein kinase catalytic subunit alpha; PKA C-alpha; PRKACB; cAMP-dependent protein kinase catalytic subunit beta; PKA C-beta
Gene ID	5566/5567/5568
SwissProt ID	P17612/P22694/P22612
Immunogen	The antiserum was produced against synthesized peptide derived from human PKA alpha/beta CAT. AA range:166-215

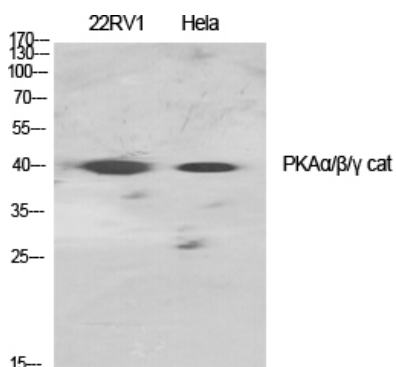
Background

PRKACA (protein kinase cAMP-activated catalytic subunit alpha) encodes one of the catalytic subunits of protein kinase A, which exists as a tetrameric holoenzyme with two regulatory subunits and two catalytic subunits, in its inactive form. 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. cAMP-dependent phosphorylation of proteins by protein kinase A is important to many cellular processes, including differentiation, proliferation, and apoptosis. Constitutive activation of this gene caused either by somatic mutations, or genomic duplications of regions that include this gene, have been associated with hyperplasias and adenomas of the adrenal cortex and are linked to corticotropin-independent Cushing's syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms. Tissue-specific isoforms that differ at the N-terminus have been described, and these isoforms may differ in the post-translational modifications that occur at the N-terminus of some isoforms.

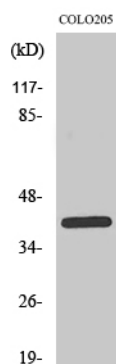
Research Area

Signal Transduction

Image Data



Western blot analysis of cAMP Protein Kinase Catalytic Subunit in various lysates using cAMP Protein Kinase Catalytic Subunit antibody.



Western blot analysis of cAMP Protein Kinase Catalytic Subunit in COLO205 lysates using PKAα/β/γ cat antibody.