

### Summary

Production Name	cAMP Protein Kinase Catalytic Subunit Rabbit Polyclonal Antibody	
Description	Primary antibody	
Host	Rabbit	
Application	WB,IHC-F,IHC-P,ICC/IF,ELISA	
Reactivity	Human, Mouse, Rat	

#### Performance

Conjugation	Unconjugated	
Modification	Unmodified	
lsotype	IgG	
Clonality	Polyclonal Antibody	
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% BSA and 0.02% sodium azide, pH 7.3.	
Purification	Affinity Purified	

### Immunogen

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	

# Application

Dilution Ratio	WB: 1/500-1/1000 IHC: 1/50-1/100 IF: 1/50-1/200 ELISA: 1/10000
Molecular Weight	Calculated MW: 40 kDa; Observed MW: 40 kDa



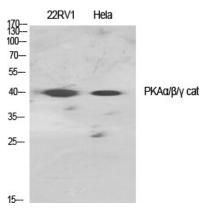
#### Background

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**

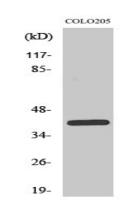
Signal Transduction

## 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 PKA $\alpha/\beta/\gamma$  cat antibody.

#### Note

For research use only.