Product Name: PKAα/β cat Rabbit Polyclonal Antibody
Catalog #: APRab16185

Summary

Production Name	PKAα/β cat Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,
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% BSA and 0.02% New type preservative N.
Purification	Affinity purification

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
SwissProt ID	P17612/P22694.The antiserum was produced against synthesized peptide derived from human KAPC A/B. AA range:1-50

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.
Molecular Weight	38kD

Product Name: PKAα/β cat Rabbit Polyclonal Antibody
Catalog #: APRab16185

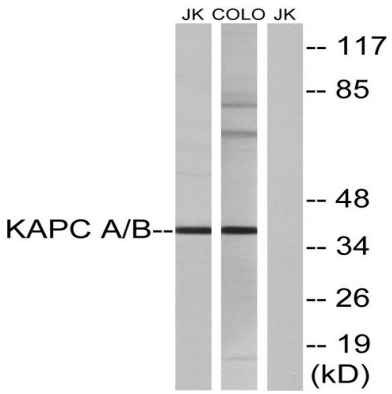
Background

This gene 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. Alterncatalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Activated by cAMP.,function:Phosphorylates a large number of substrates in the cytoplasm and the nucleus.,PTM:Asn-3 is partially deaminated to Asp giving rise to 2 major isoelectric variants, called CB and CA respectively.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. cAMP subfamily.,similarity:Contains 1 AGC-kinase C-terminal domain.,similarity:Contains 1 protein kinase domain.,subcellular location:Translocates into the nucleus (monomeric catalytic subunit) (By similarity). The inactive holoenzyme is found in the cytoplasm.,subunit:A number of inactive tetrameric holoenzymes are produced by the combination of homo- or heterodimers of the different regulatory subunits associated with 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.,tissue specificity:Isoform 2 is sperm specific.,

Research Area

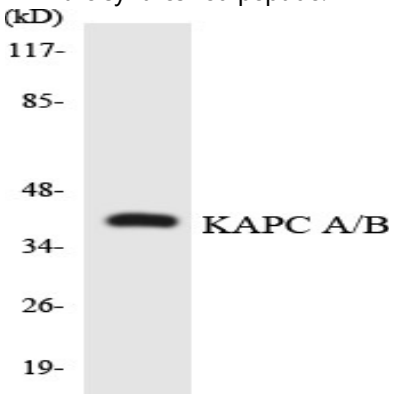
MAPK_ERK_Growth;MAPK_G_Protein;Calcium;Chemokine;Oocyte meiosis;Apoptosis_Inhibition;Apoptosis_Mitochondrial;Apoptosis_Overview;Vascular smooth muscle contraction;WNT;WNT-T CELLHedgehog;Gap junction;Long-term potentiation;Olfactory transduction;Taste transduction;Insulin_Receptor;GnRH;Progesterone-mediated oocyte maturation;Melanogenesis;Prion diseases;Vibrio cholerae infection;Dilated cardiomyopathy;

Image Data

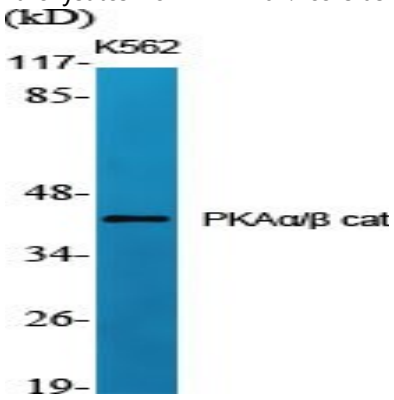


Western blot analysis of lysates from COLO and Jurkat cells, using KAPC A/B Antibody. The lane on the right is blocked with

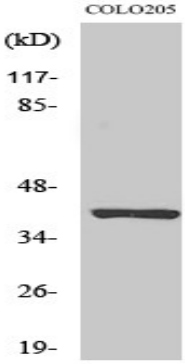
the synthesized peptide.



Western blot analysis of the lysates from RAW264.7cells using KAPC A/B antibody.



Western Blot analysis of various cells using PKAα/β cat Polyclonal Antibody diluted at 1： 1000



Western Blot analysis of Jurkat cells using PKAα/β cat Polyclonal Antibody diluted at 1： 1000

Note

For research use only.