

**PKA $\beta$  cat Polyclonal Antibody**

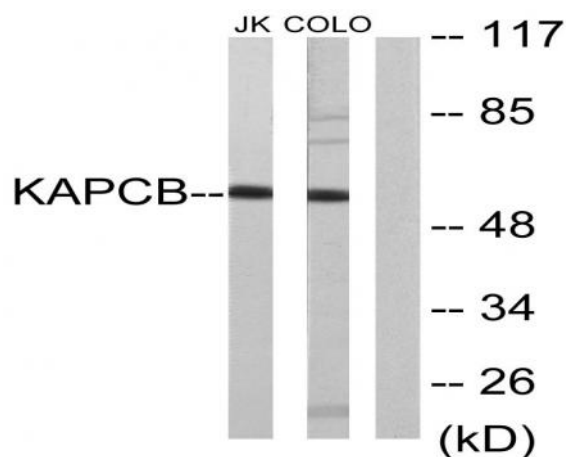
<b>Catalog No :</b>	YT3750
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	PKA $\beta$ cat
<b>Fields :</b>	>>Endocrine resistance;>>MAPK signaling pathway;>>Ras signaling pathway;>>Calcium signaling pathway;>>cAMP signaling pathway;>>Chemokine signaling pathway;>>Oocyte meiosis;>>Autophagy - animal;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Adrenergic signaling in cardiomyocytes;>>Vascular smooth muscle contraction;>>Wnt signaling pathway;>>Hedgehog signaling pathway;>>Apelin signaling pathway;>>Tight junction;>>Gap junction;>>Platelet activation;>>Circadian entrainment;>>Thermogenesis;>>Long-term potentiation;>>Retrograde endocannabinoid signaling;>>Glutamatergic synapse;>>Cholinergic synapse;>>Serotonergic synapse;>>GABAergic synapse;>>Dopaminergic synapse;>>Olfactory transduction;>>Taste transduction;>>Inflammatory mediator regulation of TRP channels;>>Insulin signaling pathway;>>Insulin secretion;>>GnRH signaling pathway;>>Ovarian steroidogenesis;>>Progesterone-mediated oocyte maturation;>>Estrogen signaling pathway;>>Melanogenesis;>>Thyroid hormo
<b>Gene Name :</b>	PRKACB
<b>Protein Name :</b>	cAMP-dependent protein kinase catalytic subunit beta
<b>Human Gene Id :</b>	5567
<b>Human Swiss Prot No :</b>	P22694
<b>Mouse Gene Id :</b>	18749
<b>Mouse Swiss Prot No :</b>	P68181
<b>Rat Gene Id :</b>	293508
<b>Rat Swiss Prot No :</b>	P68182

<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human KAPCB. AA range:291-340
<b>Specificity :</b>	PKA $\beta$ cat Polyclonal Antibody detects endogenous levels of PKA $\beta$ cat protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	53kD
<b>Cell Pathway :</b>	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;L
<b>Background :</b>	The protein encoded by this gene is a member of the serine/threonine protein kinase family. The encoded protein is a catalytic subunit of cAMP (cyclic AMP)-dependent protein kinase, which mediates signalling through cAMP. cAMP signaling is important to a number of processes, including cell proliferation and differentiation. Multiple alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2014],
<b>Function :</b>	catalytic activity:ATP + a protein = ADP + a phosphoprotein.;cofactor:Magnesium.;enzyme regulation:Activated by cAMP.;function:Mediates cAMP-dependent signaling triggered by receptor binding to GPCRs. PKA activation regulates diverse cellular processes such as cell proliferation, the cell cycle, differentiation and regulation of microtubule dynamics, chromatin condensation and decondensation, nuclear envelope disassembly and reassembly, as well as regulation of intracellular transport mechanisms and ion flux.;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
<b>Subcellular</b>	Cytoplasm . Cell membrane . Membrane ; Lipid-anchor . Nucleus . Translocates

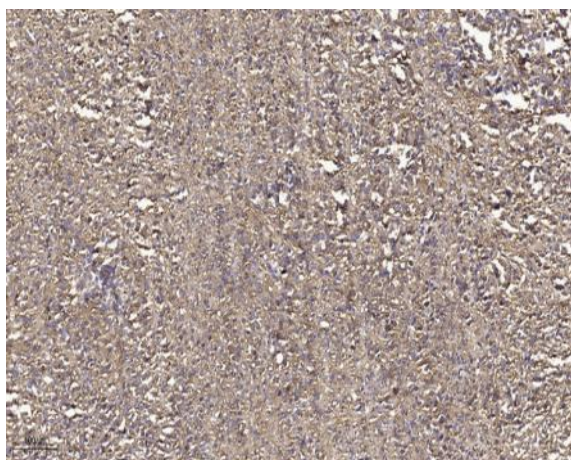
**Location :** into the nucleus (monomeric catalytic subunit). The inactive holoenzyme is found in the cytoplasm. .

**Expression :** Isoform 1 is most abundant in the brain, with low level expression in kidney. Isoform 2 is predominantly expressed in thymus, spleen and kidney. Isoform 3 and isoform 4 are only expressed in the brain.

## Products Images



Western blot analysis of lysates from Jurkat and COLO205 cells, using KAPCB 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, 20min). 3, Secondary antibody was diluted at 1:200