

Product name:	PKA β cat Rabbit Polyclonal Antibody
Cat number:	ABN16187
Conjugate:	Unconjugated
Size:	100 μ L
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human KAPCB. AA range:291-340
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	53kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

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