PKAβ Rabbit pAb

CatalogNo: YT3750

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,ELISA

MW
- 53kD (Observed)

Isotype
- IgG

Recommended Dilution Ratios

WB 1:500-1:2000
IHC 1:100-1:300
ELISA 1:20000
IF 1:50-200

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human KAPCB. AA range:291-340
Specificity	PKAβ cat Polyclonal Antibody detects endogenous levels of PKAβ cat protein.

Target Information

Gene name PRKACB

Protein Name cAMP-dependent protein kinase catalytic subunit beta

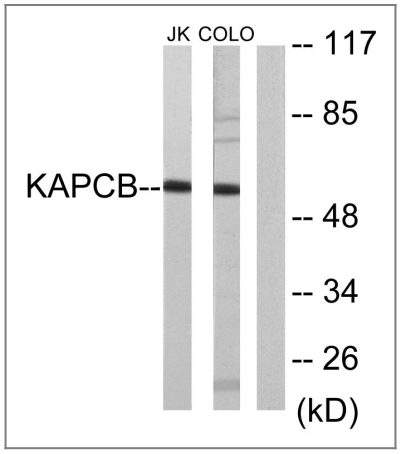
Organism	Gene ID	UniProt ID
Human	5567;	P22694;
Mouse	18749;	P68181;
Rat	293508;	P68182;

Cellular Localization Cytoplasm . Cell membrane . Membrane ; Lipid-anchor . Nucleus . Translocates into the nucleus (monomeric catalytic subunit). The inactive holoenzyme is found in the cytoplasm. .

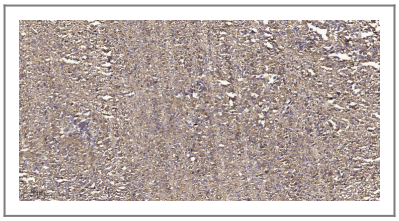
Tissue specificity Isoform 1 is most abundant in the brain, with low level expression in kidney. Isoform 2 is predominantly expressed in thymus, spleen and kidney. Isoform 3 and isoform 4 are only expressed in the brain.

Function 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 epxressed in the brain.,

Validation Data



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

Contact information

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Please scan the QR code to access additional product information:
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