Recombinant Human PRKACB

Cat. No. PRKACB-30210TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length PKA beta (catalytic subunit) protein (Human), was expressed by baculovirus in Sf9 insect cells using a N-terminal tag, MW 65kDa.
Species	Human
Description	cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its effects by activating the cAMP-dependent protein kinase, which transduces the signal through phosphorylation of different target proteins. The inactive kinase holoenzyme is a tetramer composed of two regulatory and 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. Four different regulatory subunits and three catalytic subunits have been identified in humans. The protein encoded by this gene is a member of the Ser/Thr protein kinase family and is a catalytic subunit of cAMP-dependent protein kinase. Several alternatively spliced transcript variants encoding distinct isoforms have been observed.
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.
Form	Liquid
Purity	>90% by SDS-PAGE

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Storage buffer	Preservative: NoneConstituents: 25% Glycerol, 50mM Tris HCl, 150mM Sodium chloride, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA, 0.1mM PMSF, pH 7.5
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequence Similarities	Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. cAMP subfamily.Contains 1 AGC-kinase C-terminal domain.Contains 1 protein kinase domain.
Full Length	Full L.

GENE INFORMATION

Gene Name	PRKACB protein kinase, cAMP-dependent, catalytic, beta [Homo sapiens]
Official Symbol	PRKACB
Synonyms	PRKACB; protein kinase, cAMP-dependent, catalytic, beta; cAMP-dependent protein kinase catalytic subunit beta; PKACb;
Gene ID	5567
mRNA Refseq	NM_002731
Protein Refseq	NP_002722
MIM	176892
Uniprot ID	P22694

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Chromosome Location	1p36.1
Pathway	AMPK signaling, organism-specific biosystem; Activation of NMDA receptor upon glutamate binding and postsynaptic events, organism-specific biosystem; Adaptive Immune System, organism-specific biosystem; Amoebiasis, organism-specific biosystem; Amoebiasis, conserved biosystem;
Function	ATP binding; cAMP-dependent protein kinase activity; magnesium ion binding; nucleotide binding; protein serine/threonine kinase activity;

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