# Recombinant human PKA C beta/PRKACB protein

Catalog Number: ATGP2666

## PRODUCT INFORMATION

**Expression system**
E.coli

**Domain**
1-398aa

**UniProt No.**
P22694

**NCBI Accession No.**
NP_891993

**Alternative Names**
Protein kinase cAMP-activated catalytic subunit beta, Protein kinase, cAMP-dependent, Beta catalytic subunit, PKACb

## PRODUCT SPECIFICATION

**Molecular Weight**
48.6 kDa (421aa)

**Concentration**
1mg/ml (determined by Bradford assay)

**Formulation**
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

**Purity**
> 80% by SDS-PAGE

**Tag**
His-Tag

**Application**
SDS-PAGE, Denatured

**Storage Condition**
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

**Description**
PRKACB is a member of the Ser/Thr protein kinase family and is a catalytic subunit of cAMP-dependent protein kinase. 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

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four cAMP and two free monomeric catalytic subunits. Four different regulatory subunits and three catalytic subunits have been identified in humans. Recombinant human PRKACB protein, fused to His-tag at N-terminus, was expressed in E. coli.

**Amino acid Sequence**

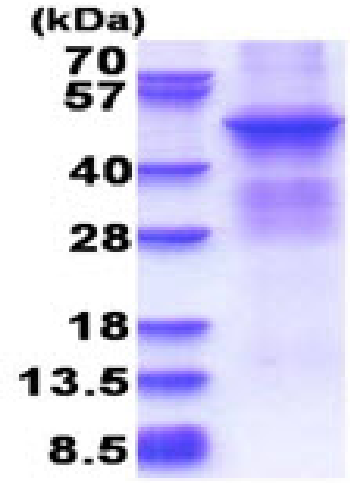
MGSSHHHHHH SSGLVPRGSH MGSMAAYREP PCNQYTGTTT ALQKLEGFAS RLFHRHSKGT AHDQKTALEN DSLHFSEHTA LWDRSMKEFL AKAKEDFLKK WENPTQNNAG LEDFERKKTL GTGSFGRVML VKHKATEQYY AMKILDKQKV VKLKQIEHTL NEKRILQAVN FPFLVRLEYA FKDNSNLYMV MEYVPGGEMF SHLRRIGRFS EPHARFYAAQ IVLTFEYLHS LDLIYRDLKP ENLLIDHQGY IQVTDFGFAK RVKGRTWTLC GTPEYLAPEI ILSKGYNKAV DWWALGVLIY EMAAGYPPFF ADQPIQIYEK IVSGKVRFPS HFSSDLKDLL RNLLQVDLTK RFGNLKNGVS DIKTHKWFAT TDWIAIYQRK VEAPFIPKFR GSGDTSNFDD YEEEDIRVSI TEKCAKEFGE F

**General References**

Wu K.-J., et al. (2002) Oncogene. 21:7872-7882
Lignitto L., et al. (2011) Nat. Cell Biol. 13:412-422

## DATA

**SDS-PAGE**




15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.