

PKAcb, Active recombinant protein

PKA, cAMP-dependent protein kinase catalytic subunit alpha Catalog # PBV11319r

Specification

PKAcb, Active recombinant protein - Product info

Primary Accession P22694
Concentration 0.1

Calculated MW 65.0 kDa KDa

PKAcb, Active recombinant protein - Additional Info

Gene ID 5567
Gene Symbol PRKACB

Other Names

PKA, cAMP-dependent protein kinase catalytic subunit alpha

Source Baculovirus (Sf9 insect cells)

Assay&Purity SDS-PAGE; ≥90%

Assay2&Purity2 HPLC; Recombinant Yes

Format Liquid

Storage

-80°C; Recombinant proteins in storage buffer (50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.25 mM DTT, 0.1 mM EGTA, 0.1 mM EDTA, 0.1 mM PMSF, 25% glycerol).

PKAcb, Active recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

PKAcb, Active recombinant protein - Images

PKAcb, Active recombinant protein - Background

Most of the effects of cAMP are mediated through the phosphorylation of target proteins on serine or threonine residues by the cAMP-dependent protein kinase (PKA). The inactive holoenzyme of AMPK is a tetramer composed of two regulatory and two catalytic subunits. The mammalian catalytic subunit has been shown to consist of three PKA gene products: $C-\alpha$, $C-\beta$, and $C-\gamma$. Two PKA





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isoforms exist, designated types I and II, which differ in their dimeric regulatory subunits, designated RI and RII, respectively. Furthermore, there are at least four different regulatory subunits: RI- α , RI- β , RII- α , and RII- β . The cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. The catalytic subunit C-β of PKA (PKAcb) is a member of the Ser/Thr protein kinase family and is a catalytic subunit C-β of AMPK. Berube et al. assigned the PKAcb to human chromosome 1 by Southern blot analysis of somatic cell hybrids (1) and Simard et al located it to 1p36.1 by in situ hybridization (2).