

**PKAcB, Active recombinant protein**  
**PKA, cAMP-dependent protein kinase catalytic subunit alpha**  
**Catalog # PBV11319r**

## Specification

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### PKAcB, Active recombinant protein - Product info

Primary Accession	<a href="#">P22694</a>
Concentration	<b>0.1</b>
Calculated MW	<b>65.0 kDa KDa</b>

### PKAcB, Active recombinant protein - Additional Info

Gene ID	<b>5567</b>
Gene Symbol	<b>PRKACB</b>
<b>Other Names</b>	
PKA, cAMP-dependent protein kinase catalytic subunit alpha	

Source	<b>Baculovirus (Sf9 insect cells)</b>
Assay&Purity	<b>SDS-PAGE; ≥90%</b>
Assay2&Purity2	<b>HPLC;</b>
Recombinant	<b>Yes</b>
<b>Format</b>	
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](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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

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- $\alpha$ , RI- $\beta$ , RII- $\alpha$ , and RII- $\beta$ . 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- $\beta$  of PKA (PKAc $\beta$ ) is a member of the Ser/Thr protein kinase family and is a catalytic subunit C- $\beta$  of AMPK. Berube et al. assigned the PKAc $\beta$  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).