

## Product datasheet

# Recombinant Human PKA beta (catalytic subunit) protein (denatured) ab180275

[1 Image](#)

### Description

<b>Product name</b>	Recombinant Human PKA beta (catalytic subunit) protein (denatured)	
<b>Purity</b>	> 80 % SDS-PAGE.	
<b>Expression system</b>	Escherichia coli	
<b>Accession</b>	<u><b>P22694-2</b></u>	
<b>Protein length</b>	Full length protein	
<b>Animal free</b>	No	
<b>Nature</b>	Recombinant	
<b>Species</b>	Human	
<b>Sequence</b>	MGSSHHHHHHSSGLVPRGSHMGSMMAAYREPPCNQYGT TTALQKLEGFAS RLFHRHSGKTAHDQKTALENDSLHFSEHTALWDRSMKEF LAKAKEDFLKK WENPTQNNAGLEDFERKKTLGTGSFGRVMLVKHKATEQY YAMKILDKQKV VKLKQIEHTLNEKRILQAVNFPFLVRLEYAFKDNSNLYMVM EYVPGGEMF SHLRRIGRFSEPHARFYAAQIVLTFEYLHSLDLIYRDLKPEN LLIDHQGY IQVTDFGFAKRVKGRWTWLCGTPEYLAPEIILSKGYNKAVD WWALGVLIY EMAAGYPPFFADQPIQIYEKIVSGKVRFP SHFSSDLKDLLR NLLQVDLTK RFGNLKNGVSDIKTHKWFATTDWIAIYQRKVEAPFIPKFRG SGDTSNFDD YEEEDIRVSITEKCAKEFGEF	
<b>Predicted molecular weight</b>	49 kDa including tags	
<b>Amino acids</b>	1 to 398	
<b>Tags</b>	His tag N-Terminus	
<b>Additional sequence information</b>	NP_891993.	
<b>Description</b>	Recombinant Human PKA beta (catalytic subunit) protein	

## Specifications

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Our **Abpromise guarantee** covers the use of **ab180275** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** SDS-PAGE

**Form** Liquid

## Preparation and Storage

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**Stability and Storage** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.32% Tris HCl, 2.4% Urea, 10% Glycerol (glycerin, glycerine)

## General Info

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**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.

**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.

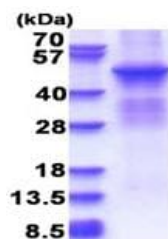
**Sequence similarities** Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. cAMP subfamily. Contains 1 AGC-kinase C-terminal domain. Contains 1 protein kinase domain.

**Post-translational modifications** Asn-3 is partially deaminated to Asp giving rise to 2 major isoelectric variants, called CB and CA respectively.

**Cellular localization** Cytoplasm. Nucleus. Translocates into the nucleus (monomeric catalytic subunit) (By similarity). The inactive holoenzyme is found in the cytoplasm.

## Images

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15% SDS-PAGE analysis of ab180275 (3µg).

SDS-PAGE - Recombinant Human PKA beta  
(catalytic subunit) protein (denatured) (ab180275)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### **Our Abpromise to you: Quality guaranteed and expert technical support**

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- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

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