

Product datasheet

Recombinant human PKA beta (catalytic subunit) protein ab60837

[6 Images](#)

Description

Product name	Recombinant human PKA beta (catalytic subunit) protein
Purity	> 90 % SDS-PAGE. Purity: >90% as determined by densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	65 kDa including tags
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab60837** in the following tested applications.

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

Applications	Functional Studies SDS-PAGE Western blot
Form	Liquid
Additional notes	<u>ab204856</u> (CREB peptide) can be utilized as a substrate for assessing kinase activity

Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292% EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.
------------------------------	--

General Info

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.

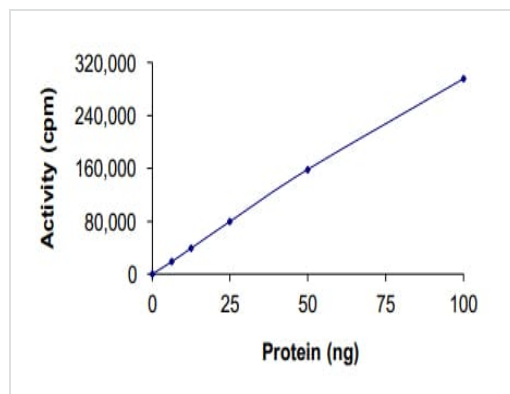
Post-translational modifications

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

Cellular localization

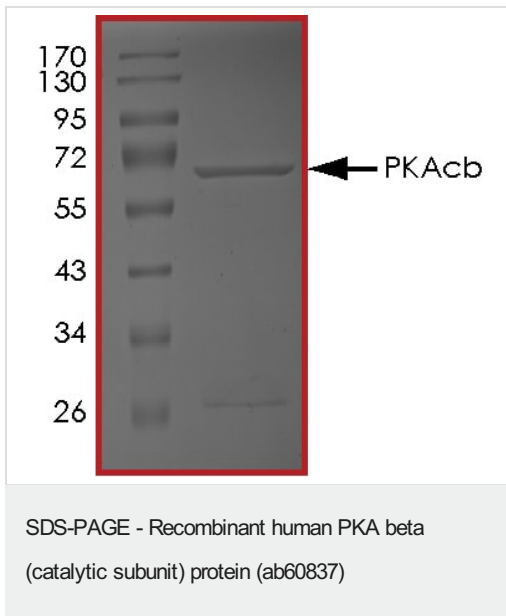
Cytoplasm. Nucleus. Translocates into the nucleus (monomeric catalytic subunit) (By similarity). The inactive holoenzyme is found in the cytoplasm.

Images

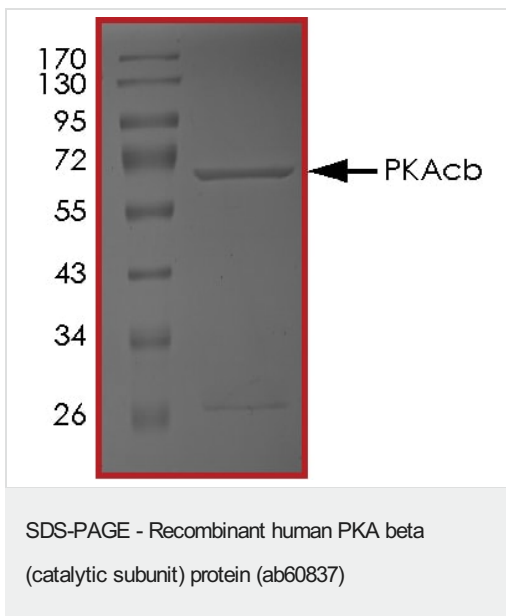


The specific activity of PKA beta (catalytic subunit) (ab60837) was determined to be 430 nmol/min/mg as per activity assay protocol

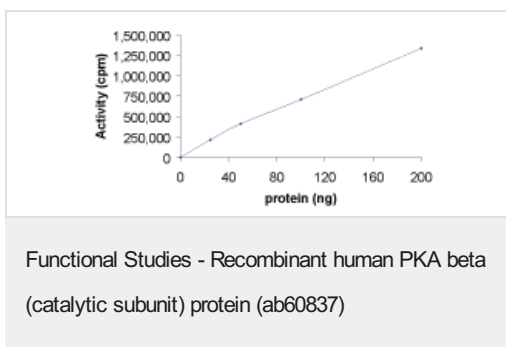
Functional Studies - Recombinant human PKA beta
(catalytic subunit) protein (ab60837)



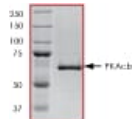
SDS PAGE analysis of ab60837



SDS PAGE analysis of ab60837



Sample Kinase Activity Plot.



ab60837 on SDS-PAGE, MW ~65 kDa.

SDS-PAGE - Recombinant human PKA beta
(catalytic subunit) protein (ab60837)



Western blot - Recombinant human PKA beta
(catalytic subunit) protein (ab60837)

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

- 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.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors