abcam

Product datasheet

Recombinant human PKC beta 1 protein ab60840

2 References 画像数 6

製品の詳細

製品名 Recombinant human PKC beta 1 protein

生理活性 Specific Activity: 283 nmol/min/mg

精製度 > 90 % Densitometry.

Purity: >90% as determined by densitometry. Affinity purified.

発現系 Baculovirus infected Sf9 cells

タンパク質長 Full length protein

Animal free No

由来 Recombinant

生物種 Human

タグ GST tag N-Terminus

特性

Our **Abpromise guarantee** covers the use of **ab60840** in the following tested applications.

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

アプリケーション Functional Studies

SDS-PAGE Western blot

製品の状態 Liquid

備考 <u>ab204875</u> (PKC epsilon peptide) can be utilized as a substrate for assessing kinase activity

前処理および保存

保存方法および安定性 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.

1

機能

Calcium-activated and phospholipid-dependent serine/threonine-protein kinase involved in various processes such as regulation of the B-cell receptor (BCR) signalosome, apoptosis and transcription regulation. Plays a key role in B-cell activation and function by regulating BCRinduced NF-kappa-B activation and B-cell suvival. Required for recruitment and activation of the IKK kinase to lipid rafts and mediates phosphorylation of CARD11/CARMA1 at 'Ser-559', 'Ser-644' and 'Ser-652', leading to activate the NF-kappa-B signaling. Involved in apoptosis following oxidative damage: in case of oxidative conditions, specifically phosphorylates 'Ser-36' of isoform p66Shc of SHC1, leading to mitochondrial accumulation of p66Shc, where p66Shc acts as a reactive oxygen species producer. Acts as a coactivator of androgen receptor (ANDR)dependent transcription, by being recruited to ANDR target genes and specifically mediating phosphorylation of 'Thr-6' of histone H3 (H3T6ph), a specific tag for epigenetic transcriptional activation that prevents demethylation of histone H3 'Lys-4' (H3K4me) by LSD1/KDM1A. Also involved in triglyceride homeostasis. Serves as the receptor for phorbol esters, a class of tumor promoters.

配列類似性

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily.

Contains 1 AGC-kinase C-terminal domain.

Contains 1 C2 domain.

Contains 2 phorbol-ester/DAG-type zinc fingers.

Contains 1 protein kinase domain.

翻訳後修飾

Phosphorylation on Thr-500 within the activation loop renders it competent to autophosphorylate. Subsequent autophosphorylation of Thr-642 maintains catalytic competence, and

autophosphorylation on Ser-661 appears to release the kinase into the cytosol.

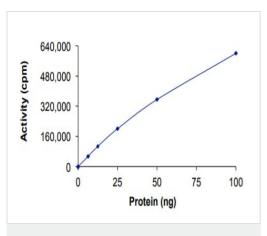
Autophosphorylation on other sites i.e. in the N-terminal and hinge regions have no effect on

enzyme activity.

細胞内局在

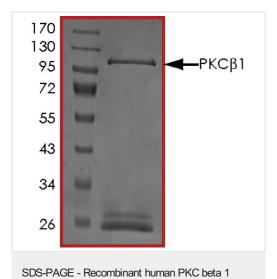
Cytoplasm. Nucleus. Membrane.

画像



Functional Studies - Recombinant human PKC beta 1 protein (ab60840)

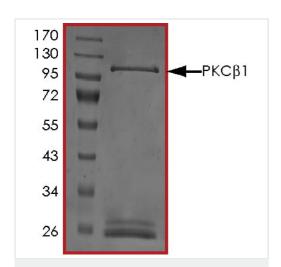
The specific activity of PKC beta 1 (ab60840) was determined to be 325 nmol/min/mg as per activity assay protocol



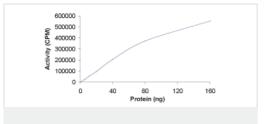
protein (ab60840)

protein (ab60840)

SDS PAGE analysis of ab60840



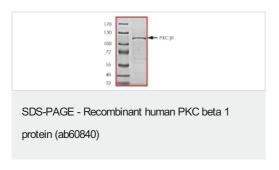
SDS PAGE analysis of ab60840



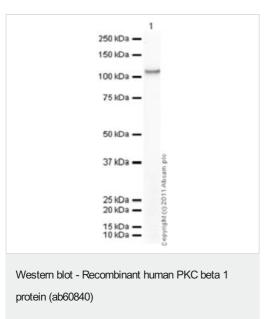
SDS-PAGE - Recombinant human PKC beta 1

Sample Kinase Activity Plot.

Functional Studies - Recombinant human PKC beta 1 protein (ab60840)



ab60840 on SDS-PAGE, MW ~102 kDa.



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.co.jp/abpromise or contact our technical team.

Terms and conditions

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