abcam

Product datasheet

Anti-PKC beta 1 (phospho T642) antibody ab5782

2 References 画像数 1

製品の概要

製品名 Anti-PKC beta 1 (phospho T642) antibody

製品の詳細 Rabbit polyclonal to PKC beta 1 (phospho T642)

由来種 Rabbit

特異性 This antibody does not react with PKC beta 2 [pT641], alpha [pT638], nu [pT655], epsilon

[pT710], iota [pT555], eta [pT655], or zeta [pT560] as determined by peptide competition

experiments.

 アプリケーション
 適用あり: WB

 種交差性
 交差種: Human

免疫原 Synthetic peptide corresponding to PKC beta 1 (phospho T642).

ポジティブ・コントロール K562 cells treated with PMA, a phorbol ester.

特記事項

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

バッファー pH: 7.30

Preservative: 0.05% Sodium azide

Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.1% BSA

精製度 Immunogen affinity purified

特記事項(精製) The antibody has been negatively preadsorbed using a non-phosphopeptide corresponding to the

site of phosphorylation to remove antibody that is reactive with non-phosphorylated PKC beta 1. The final product is generated by affinity chromatography using a PKC beta 1-derived peptide

that is phosphorylated at threonine 642.

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ポリ/モノ ポリクローナル

アイソタイプ lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab5782の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/1000. Detects a band of approximately 80 kDa.

ターゲット情報

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 BCR-induced 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.

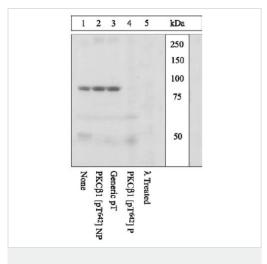
Autophosphorylation on other sites i.e. in the N-terminal and hinge regions have no effect on

enzyme activity.

細胞内局在

Cytoplasm. Nucleus. Membrane.

画像



Western blot - Anti-PKC beta 1 (phospho T642) antibody (ab5782)

Peptide Competition and Phosphatase Treatment: Lysates prepared from K562 cells stimulated with PMA were resolved by SDS-PAGE on a 10% polyacrylamide gel and transferred to PVDF. Membranes were either left untreated (1-4) or treated with lambda (ë) phosphatase (5), blocked with a 5% BSA-TBST buffer for one hour at room temperature, and incubated with ab5782 antibody for two hours at room temperature in a 3% BSA TBST buffer, following prior incubation with: no peptide (1, 5), the non phosphopeptide corresponding to the immunogen (2), a generic phosphothreonine-containing peptide (3), or, the phosphopeptide immunogen (4). After washing, membranes were incubated with goat F(ab' 2 antirabbit lgG HRP conjugate and bands were detected using the Pierce SuperSignalTM method.

The data show that only the peptide corresponding to PKC beta I [pT642] blocks the antibody signal. The data also show that phosphatase stripping eliminates the signal, verifying that the antibody is phospho-specific.

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