abcam

Product datasheet

Anti-PKC beta 1 (phospho T642) antibody ab5782

2 References 1 图像

概述

产品名称	Anti-PKC beta 1 (phospho T642)抗体
描述	兔多克隆抗体to PKC beta 1 (phospho T642)
宿主	Rabbit
特异性	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.
经测试应用	**适用于:** WB
种属反应性	**与反应:** Human
免疫原	Synthetic peptide corresponding to PKC beta 1 (phospho T642).
阳性对照	K562 cells treated with PMA, a phorbol ester.
常规说明	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

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	pH: 7.30 Preservative: 0.05% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.1% BSA
纯度	Immunogen affinity purified
纯化说明	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.

克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab5782于以下的经测试应用**

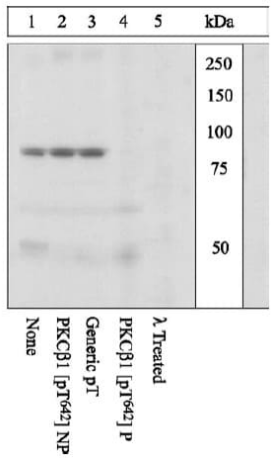
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/1000. Detects a band of approximately 80 kDa.

靶标

功能	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.
序列相似性	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.
翻译后修饰	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.
细胞定位	Cytoplasm. Nucleus. Membrane.

图片



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 anti-rabbit IgG 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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