


Anti-PKC beta 1 + PKC beta 2 (phospho T500) antibody ab5817

★★★★★ [2 Abreviews](#) [3 References](#) [画像数 1](#)

製品の概要

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| 製品名 | Anti-PKC beta 1 + PKC beta 2 (phospho T500) antibody |
| 製品の詳細 | Rabbit polyclonal to PKC beta 1 + PKC beta 2 (phospho T500) |
| 由来種 | Rabbit |
| 特異性 | This antibody cross-reacts with PKC alpha [pT497] (88% homologous) and partially cross-reacts with PKC gamma [pT514] (63% homologous) and epsilon [pT566] (75% homologous), 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 交差が予測される動物種: Mouse  |
| 免疫原 | Synthetic peptide corresponding to PKC beta 1 + PKC beta 2 (phospho T500). |
| 特記事項 | <p>Protein Kinase C beta (PKC beta) is an 80 kDa member of the conventional group (cPKCs: sensitive to diacylglycerol, phosphatidylserine and phorbol esters) of the PKC family of serine/threonine kinases that are involved in a wide range of physiological processes including mitogenesis, cell survival, transcriptional regulation and tumor promotion. PKC beta has been implicated in diabetes and carcinogenesis. PKC beta isoforms 1 & 2 are phosphorylated on three sites, threonine 500 in the activation loop, beta 1 threonine 642 (beta 2 641) in the turn loop and beta 1 serine 661 (beta 2 660) in the hydrophobic loop. Phosphorylation of PKC beta 1 & 2 on threonine 500 by PDK1 is a prerequisite for its autophosphorylation and catalytic competence.</p> <p>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.</p> <p>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</p> |

製品の特性

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| 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 |

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| | cycles. |
| バッファー | pH: 7.30 Preservative: 0.05% Sodium azide Constituents: PBS, 50% Glycerol, 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. The final product is generated by affinity chromatography using a PKC beta-derived peptide that is phosphorylated at threonine 500. |
| 一次抗体 備考 | Protein Kinase C beta (PKC beta) is an 80 kDa member of the conventional group (cPKCs: sensitive to diacylglycerol, phosphatidylserine and phorbol esters) of the PKC family of serine/threonine kinases that are involved in a wide range of physiological processes including mitogenesis, cell survival, transcriptional regulation and tumor promotion. PKC beta has been implicated in diabetes and carcinogenesis. PKC beta isoforms 1 & 2 are phosphorylated on three sites, threonine 500 in the activation loop, beta 1 threonine 642 (beta 2 641) in the turn loop and beta 1 serine 661 (beta 2 660) in the hydrophobic loop. Phosphorylation of PKC beta 1 & 2 on threonine 500 by PDK1 is a prerequisite for its autophosphorylation and catalytic competence. |
| ポリ/モノ | ポリクローナル |
| アイソタイプ | IgG |

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab5817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確認ください。

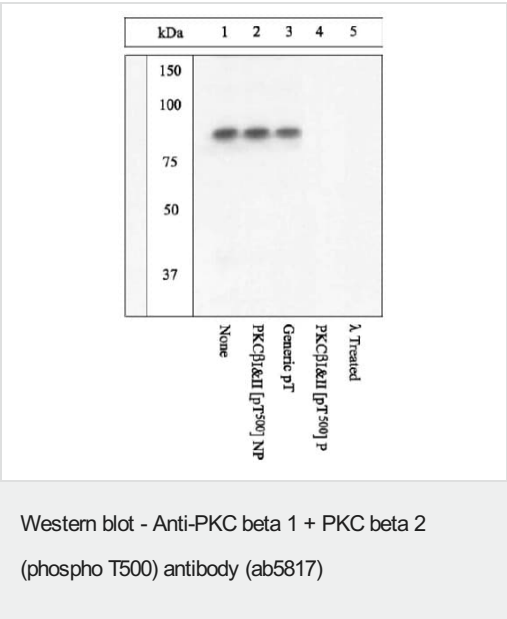
| アプリケーション | Abreviews | 特記事項 |
|----------|-----------|---|
| WB | ★★★★★ (1) | 1/1000. Detects a band of approximately 80 kDa. |

ターゲット情報

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| 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 survival. 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. |

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| | Contains 1 C2 domain. |
| | Contains 2 phorbol-ester/DAG-type zinc fingers. |
| | Contains 1 protein kinase domain. |
| 翻訳後修飾 | <p>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.</p> <p>Autophosphorylation on other sites i.e. in the N-terminal and hinge regions have no effect on enzyme activity.</p> |
| 細胞内局在 | Cytoplasm. Nucleus. Membrane. |

画像



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 phosphatase (5), blocked with a 5% BSA-TBST buffer for one hour at room temperature, and incubated with ab5817 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 SuperSignal™ method. The data show that only the peptide corresponding to PKC beta 1 & 2 [pT500] 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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