abcam

Product datasheet

Anti-PKC beta 2 antibody [Y125] - BSA and Azide free ab239798

יעלאעבע RabMAb

画像数8

製品の概要

製品名 Anti-PKC beta 2 antibody [Y125] - BSA and Azide free

製品の詳細 Rabbit monoclonal [Y125] to PKC beta 2 - BSA and Azide free

Rabbit

This antibody recognises PKC beta 2, it does not cross react with human PKC beta 1.

Immunogen's homology with PKC alpha is 77.8%. Cross-reactivity with PKC alpha has not been

tested.

適用あり: Flow Cyt (Intra), ICC/IF, IHC-P, WB

交差種: Mouse, Rat, Human, Recombinant fragment

交差が予測される動物種: Cow, Pig 4

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ab239798 reacts with an epitope located in the region near the C terminus of PKC beta 2.

WB: K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate unboiled,

Mouse brain lysate unboiled, Rat brain lysate unboiled, Active GST-tagged human PKC beta 2 full length protein. IHC-P: human gastric carcinoma, mouse cerebrum, rat cerebrum. ICC/IF: HeLa (Human cervix adenocarcinoma epithelial cell) Flow cyto(intra): K-562 (Human chronic

myelogenous leukemia lymphoblast) cells.

ab239798 is the carrier-free version of ab32026.

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

由来種

特異性

アプリケーション

種交差性

エピトープ

ポジティブ・コントロール

特記事項

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 Y125 アイソタイプ IgG

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ab239798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
Flow Cyt (Intra)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 77 kDa (predicted molecular weight: 77 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

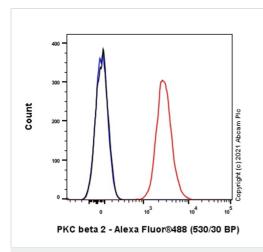
Phosphorylation on Thr-500 within the activation loop renders it competent to autophosphorylate. Subsequent autophosphorylation of Thr-642 maintains catalytic competence, and autophosphorylation on Ser-661 appears to release the kinase into the cytosol. Autophosphorylation on other sites i.e. in the N-terminal and hinge regions have no effect on

細胞内局在

Cytoplasm. Nucleus. Membrane.

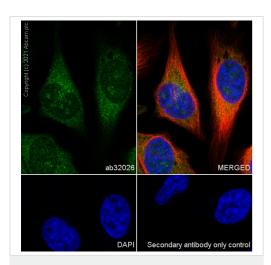
enzyme activity.

画像



Flow Cytometry (Intracellular) - Anti-PKC beta 2 antibody [Y125] - BSA and Azide free (ab239798) This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32026).

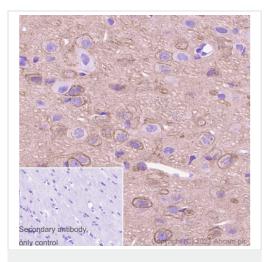
Intracellular Flow Cytometry analysis of K-562 (Human chronic myelogenous leukemia lymphoblast) cells labeling PKC beta 2 with purified ab32026 at 1/20 dilution (5 ug/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit lgG (Alexa Fluor® 488, ab150081) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal lgG (Black) was used as a isotype control. Cell without incubation with primary antibody and secondary antibody (Blue) were used as unlabeled control.



Immunocytochemistry/ Immunofluorescence - Anti-PKC beta 2 antibody [Y125] - BSA and Azide free (ab239798)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32026).

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling PKC beta 2 using <u>ab32026</u>. The cells were fixed with 4% paraformaldehyde then permeabilized with 0.1% Triton X-100. The cells were then incubated with <u>ab32026</u> at 1:50 dilution followed by a further incubation with a Goat anti rabbit IgG (Alexa Fluor® 488, <u>ab150077</u>) at 2 μg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI. Cells were counterstained using <u>ab195889</u> Antialpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1:200 dilution (shown in red). Secondary antibody only control: PBS instead of the primary antibody.



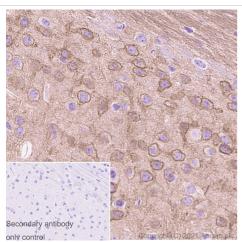
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PKC beta 2 antibody
[Y125] - BSA and Azide free (ab239798)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32026).

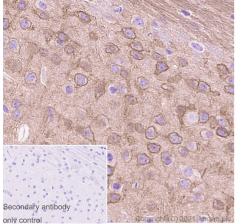
Immunohistochemical analysis of Paraffin-embedded sections rat cerebrum tissue labelling PKC beta 2 with ab32026 at 1/1000 dilution, followed by a ready to use secondary Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Staining on rat cerebrum tissue is observed. Counter stained with Haematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0).

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



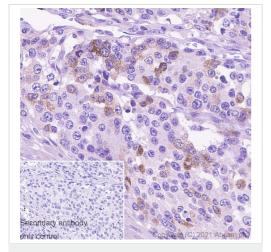
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PKC beta 2 antibody [Y125] - BSA and Azide free (ab239798)



BOND® RX instrument.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and

sodium azide (ab32026).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PKC beta 2 antibody [Y125] - BSA and Azide free (ab239798)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32026).

Immunohistochemical analysis of Paraffin-embedded sections mouse cerebrum tissue labelling PKC beta 2 with ab32026 at 1/1000 dilution, followed by a ready to use secondary Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Staining on mouse cerebrum tissue is observed. Counter stained with Haematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0).

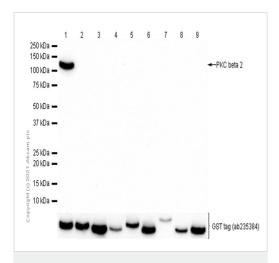
The immunostaining was performed on a Leica Biosystems

Immunohistochemical analysis of Paraffin-embedded sections human gastric carcinoma tissue labelling PKC beta 2 with ab32026 at 1/300 dilution, followed by a ready to use secondary Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Staining on human gastric carcinoma tissue is observed. Counter stained with Haematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0).

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Western blot - Anti-PKC beta 2 antibody [Y125] - BSA and Azide free (ab239798)

All lanes : Anti-PKC beta 2 antibody [Y125] (<u>ab32026</u>) at 1/1000 dilution

Lane 1 : Recombinant human PKC beta 2 protein (ab60841)

Lane 2: Recombinant human PKC beta 1 protein (ab60840)

Lane 3: Recombinant human PKC delta protein (ab60844)

Lane 4: Recombinant human PKC eta protein (ab60849)

Lane 5: Recombinant human PKC epsilon protein (ab60847)

Lane 6 : Recombinant human PKC theta/PRKCQ protein

(<u>ab56641</u>)

Lane 7: Recombinant human PKC mu/PKD protein (ab60873)

Lane 8 : Recombinant human PKC alpha protein (Active)

(ab55672)

Lane 9: Recombinant human PKC gamma protein (ab60842)

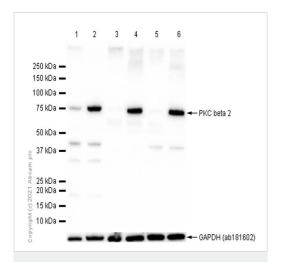
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 77 kDa **Observed band size:** 100 kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32026).

Blocking and diluting buffer and concentration: 5% NFDM/TBST. **ab235384** was used to detect GST tag.



Western blot - Anti-PKC beta 2 antibody [Y125] - BSA and Azide free (ab239798)

All lanes : Anti-PKC beta 2 antibody [Y125] (<u>ab32026</u>) at 1/1000 dilution

Lane 1 : K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate boiled

Lane 2: K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate unboiled

Lane 3 : Mouse brain lysate boiled

Lane 4 : Mouse brain lysate unboiled

Lane 5 : Rat brain lysate boiled

Lane 6 : Rat brain lysate unboiled

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

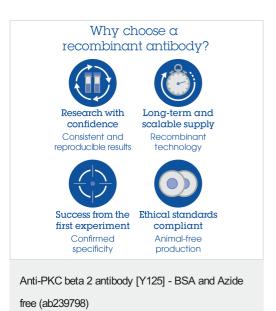
Predicted band size: 77 kDa **Observed band size:** 77 kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32026).

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

ab181602 was used as GAPDH loading control.

We recommend not to boil samples when loading lysate.



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