abcam

Product datasheet

Anti-PKC eta (phospho T655) antibody ab5798

3 References 1 Image

Overview

Product name Anti-PKC eta (phospho T655) antibody

Description Rabbit polyclonal to PKC eta (phospho T655)

Host species Rabbit

Specificity This antibody does not cross-react with any other PKC isoforms tested.

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide corresponding to PKC eta (phospho T655).

Positive control Jurkat cells treated with PMA, a phorbol ester.

General notes

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

Properties

Form Liquid

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

cycles.

Storage buffer pH: 7.30

Preservative: 0.05% Sodium azide Constituents: PBS, 0.1% BSA

Purity Immunogen affinity purified

Purification notes 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 eta. The final product is generated by affinity chromatography using a PKC eta-derived peptide that is

phosphorylated at threonine 655.

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Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab5798 in the following tested applications.

The C1 domain, containing the phorbol ester/DAG-type region 1 (C1A) and 2 (C1B), is the

diacylglycerol sensor and the C2 domain is a non-calcium binding domain.

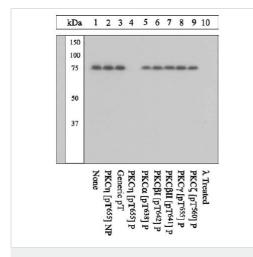
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 0.35 - 1 $\mu g/ml$. Detects a band of approximately 80 kDa.

Target		
Function	This is calcium-independent, phospholipid-dependent, serine- and threonine-specific enzyme. PKC is activated by diacylglycerol which in turn phosphorylates a range of cellular proteins. PKC also serves as the receptor for phorbol esters, a class of tumor promoters.	
Tissue specificity	Most abundant in lung, less in heart and skin.	
Involvement in disease	Defects in PRKCH may be a cause of susceptibility to ischemic stroke (ISCHSTR) [MIM:601367]; also known as cerebrovascular accident or cerebral infarction. A stroke is an acute neurologic event leading to death of neural tissue of the brain and resulting in loss of motor, sensory and/or cognitive function. Ischemic strokes, resulting from vascular occlusion, is considered to be a highly complex disease consisting of a group of heterogeneous disorders with multiple genetic and environmental risk factors.	
Sequence similarities	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.	

Images

Domain



Western blot - Anti-PKC eta (phospho T655) antibody (ab5798)

Peptide Competition and Phosphatase Treatment Lysates prepared from Jurkat cells stimulated with PMA were resolved by SDS-PAGE on a 10% polyacrylamide gel and transferred to PVDF. Membranes were either left untreated (1-9) or treated with lambda phosphatase (10), blocked with a 5% BSA-TBST buffer overnight at 4°C, and incubated with 0.50 µg/mL ab5798 antibody for two hours at room temperature in a 3% BSA-TBST buffer, following prior incubation with: no peptide (1, 10), the non phosphopeptide corresponding to the immunogen (2), a generic phosphothreonine containing peptide (3), the phosphopeptide immunogen (4), or, the phosphopeptide corresponding to the immunogen from other PKC isoforms (5-9). After washing, membranes were incubated with goat (ab')2 anti-rabbit IgG HRP-conjugate and bands were detected using the Pierce SuperSignalTM method. The data show that the peptide corresponding to PKC eta [pT655] blocks the antibody signal. The antibody signal was not blocked by the peptides corresponding to PKC isoforms alpha [pT638], beta 1 [pT642], beta 1 [pT641], gamma [pT655] and zeta [pT560], thereby demonstrating the specificity of the antibody. The data also show that phosphatase stripping eliminates the signal, verifying that the antibody is phospho-specific.

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