

Product datasheet

Anti-PKC theta/PRKCQ (phospho S676) antibody ab47774

★★★★★ [1 Abreviews](#) [2 References](#) [2 Images](#)

Overview

Product name	Anti-PKC theta/PRKCQ (phospho S676) antibody
Description	Rabbit polyclonal to PKC theta/PRKCQ (phospho S676)
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to Human PKC theta/PRKCQ aa 600-700 (C terminal) (phospho S676). Database link: Q04759
Positive control	IHC-P: Human breast carcinoma. WB: JK cell extract treated with 200nM PMA for 30mins.
General notes	<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>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride
Purity	Immunogen affinity purified
Purification notes	The antibody was affinity purified from rabbit antiserum by affinity chromatography using epitope specific phosphopeptide. The antibody against non phosphopeptide was removed by chromatography using non phosphopeptide corresponding to the phosphorylation site.
Clonality	Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab47774 in the following tested applications.

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

Application	Abreviews	Notes
WB	★★★★★ (1)	1/500 - 1/1000. Detects a band of approximately 82 kDa (predicted molecular weight: 82 kDa).
IHC-P		Use at an assay dependent concentration.

Target

Function

This is a calcium-independent, phospholipid-dependent, serine- and threonine-specific enzyme. Essential for T-cell receptor (TCR)-mediated T-cell activation, but is dispensable during TCR-dependent thymocyte development. Links the TCR signaling complex to the activation of NF-kappa-B in mature T lymphocytes. Required for interleukin-2 (IL2) production. 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

Skeletal muscle, megakaryoblastic cells and platelets.

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.

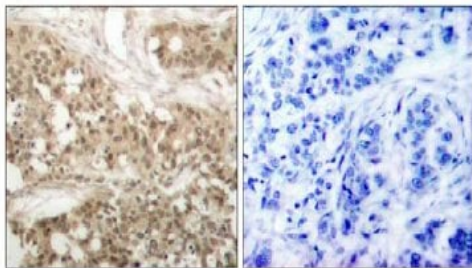
Domain

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.

Post-translational modifications

Autophosphorylation at Thr-219 is required for targeting to the TCR and cellular function of PKC upon antigen receptor ligation.

Images



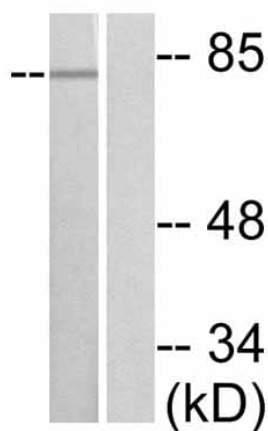
P-Peptide

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKC theta/PRKCQ (phospho S676) antibody (ab47774)

This image shows human breast carcinoma stained with ab47774 at 1/50 dilution. Right hand image shows tissue treated with the immunogenic phosphopeptide, whereas the left hand image is untreated.



Western blot - Anti-PKC theta/PRKCQ (phospho S676) antibody (ab47774)

All lanes : Anti-PKC theta/PRKCQ (phospho S676) antibody (ab47774) at 1/500 dilution

Lane 1 : JK cell extract treated with 200nM PMA for 30mins. No peptide.

Lane 2 : JK cell extract, untreated. No peptide.

Predicted band size: 82 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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