

Product datasheet

Anti-PKC theta/PRKCQ antibody [EPR1488Y] ab52494

Recombinant RabMAb

4 Images

Overview	
Product name	Anti-PKC theta/PRKCQ antibody [EPR1488Y]
Description	Rabbit monoclonal [EPR1488Y] to PKC theta/PRKCQ
Host species	Rabbit
Specificity	This antibody was tested with PKC alpha, beta, gamma, delta, zeta, eta, iota recombinant proteins and was found to react with alpha, beta, gamma, delta, eta proteins.
Tested applications	Suitable for: WB Unsuitable for: ICC/IF or IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human PKC theta/PRKCQ. The exact sequence is proprietary.
Positive control	WB: Rat brain lysate, Rat spleen lysate, Mouse C2C12 cell lysate; Jurkat cell lysate.
General notes	 This product is a recombinant monoclonal antibody, which offers several advantages including: High batch-to-batch consistency and reproducibility Improved sensitivity and specificity Long-term security of supply Animal-free production For more information <u>see here</u>. Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb[®] patents</u>.

Properties	
Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR1488Y
lsotype	lgG

Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab52494 in the following tested applications.

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

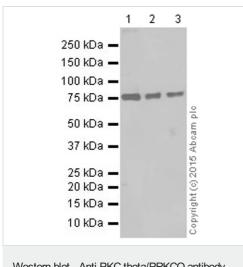
Application	Abreviews	Notes
WB		1/500. Detects a band of approximately 85 kDa (predicted molecular weight: 85 kDa).

Application notes

Is unsuitable for ICC/IF or IHC-P.

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



Western blot - Anti-PKC theta/PRKCQ antibody [EPR1488Y] (ab52494) All lanes : Anti-PKC theta/PRKCQ antibody [EPR1488Y] (ab52494) at 1/1000 dilution (purified)

Lane 1 : Rat brain tissue lysate Lane 2 : Rat spleen tissue lysate Lane 3 : C2C12 whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Anti-rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/20000 dilution

Predicted band size: 85 kDa Observed band size: 78 kDa

Blocking buffer: 5% NFDM/TBST Dilution buffer: 5% NFDM/TBST

1 250 kDa — 150 kDa — 100 kDa — 75 kDa — 37 kDa — 25 kDa — 25 kDa — 15 kDa — 15 kDa — 15 kDa —

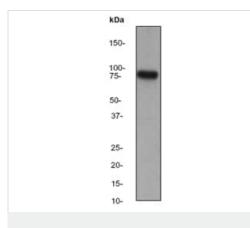
Western blot - Anti-PKC theta/PRKCQ antibody [EPR1488Y] (ab52494) Anti-PKC theta/PRKCQ antibody [EPR1488Y] (ab52494) at 1/1000 dilution (purified) + Jurkat whole cell lysate at 10 μg

Secondary

Anti-rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/20000 dilution

Predicted band size: 85 kDa Observed band size: 78 kDa

Blocking buffer: 5% NFDM/TBST Dilution buffer: 5% NFDM/TBST



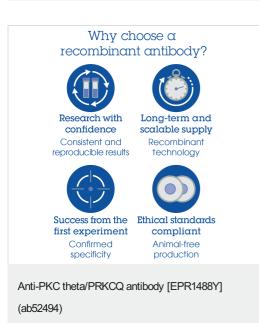
Anti-PKC theta/PRKCQ antibody [EPR1488Y] (ab52494) at 1/500 dilution (unpurified) + Jurkat cell lysate at 10 µg

Secondary

HRP labeled goat anti-rabbit at 1/2000 dilution

Predicted band size: 85 kDa Observed band size: 85 kDa

Western blot - Anti-PKC theta/PRKCQ antibody [EPR1488Y] (ab52494)



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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- · Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <u>https://www.abcam.com/abpromise</u> or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors