Datasheet for ABIN711746

anti-PKC theta antibody (pThr538)

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Overview

Quantity:	100 µL
Target:	PKC theta (PRKCQ)
Binding Specificity:	pThr538
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PKC theta antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human PRKCQ around the phosphorylation site of Thr538
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Predicted Reactivity:	Rat,Dog
Purification:	Purified by Protein A.

Target Details

Target:	PKC theta (PRKCQ)

Target Details

Alternative Name:	PRKCQ (PRKCQ Products)
Background:	Synonyms: PRKCT, nPKC-theta, Protein kinase C theta type, PRKCQ Background: Calcium-independent, phospholipid- and diacylglycerol (DAG)-dependent serine/threonine-protein kinase that mediates non-redundant functions in T-cell receptor (TCR) signaling, including T-cells activation, proliferation, differentiation and survival, by mediating activation of multiple transcription factors such as NF-kappa-B, JUN, NFATC1 and NFATC2. In TCR-CD3/CD28-co-stimulated T-cells, is required for the activation of NF-kappa-B and JUN, which in turn are essential for IL2 production, and participates to the calcium-dependent NFATC1 and NFATC2 transactivation. Mediates the activation of the canonical NF-kappa-B pathway (NFKB1) by direct phosphorylation of CARD11 on several serine residues, inducing CARD11 association with lipid rafts and recruitment of the BCL10-MALT1 complex, which then activates IKK complex, resulting in nuclear translocation and activation of NFKB1. May also play an indirect role in activation of the non-canonical NF-kappa-B (NFKB2) pathway. In the signaling pathway leading to JUN activation, acts by phosphorylating the mediator STK39/SPAK and may not act through MAP kinases signaling. Plays a critical role in TCR/CD28-induced NFATC1 and NFATC2 transactivation by participating in the regulation of reduced inositol 1,4,5-trisphosphate generation and intracellular calcium mobilization. After costimulation of T-cells through CD28 can phosphorylate CBLB and is required for the ubiquitination and subsequent degradation of CBLB, which is a prerequisite for the activation of TCR. During T-cells differentiation, plays an important role in the development of T-helper 2 (Th2) cells following immune and inflammatory responses, and, in the development of inflammatory autoimmune diseases, is necessary for the activation of IL17-producing Th17 cells. May play a minor role in Th1 response.
Gene ID:	5588
UniProt:	Q04759
Pathways:	TCR Signaling, Fc-epsilon Receptor Signaling Pathway, Myometrial Relaxation and Contraction, Regulation of G-Protein Coupled Receptor Protein Signaling, Thromboxane A2 Receptor Signaling

Application Details

Application Notes:	WB 1:300-5000 ELISA 1:500-1000 IHC-P 1:200-400 IHC-F 1:100-500

Application Details

	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200

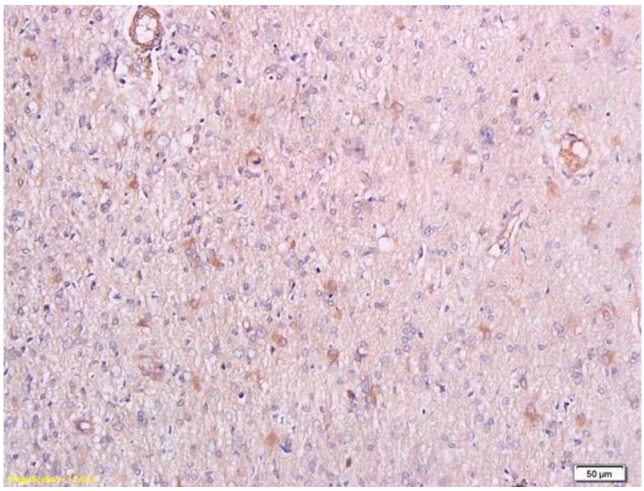
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

Product cited in:	van Rees, Lago, Cox, Tomasik, Rustogi, Weigelt, Ozcan, Cooper, Drexhage, Leweke, Bahn: " Evidence of microglial activation following exposure to serum from first-onset drug-naïve schizophrenia patients." in: **Brain, behavior, and immunity**, Vol. 67, pp. 364-373, (2018) (PubMed).



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded human endometrial carcinoma labeled with Anti-phospho-PRKCQ(Thr538) Polyclonal Antibody, Unconjugated (ABIN711746) at 1:200 followed by conjugation to the secondary antibody