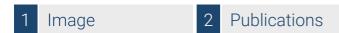


Datasheet for ABIN968924 anti-PKC theta antibody (pThr538)



150 µg



Overview

Quantity:

του μα
PKC theta (PRKCQ)
pThr538
Human
Mouse
Monoclonal
This PKC theta antibody is un-conjugated
Western Blotting (WB), Immunohistochemistry (Formalin-fixed Sections) (IHC (f))
Phosphorylated Human PKCtheta Peptide
Phosphorylated Human PKCtheta Peptide 19-PKC
19-PKC

Target Details

Target:	PKC theta (PRKCQ)
Alternative Name:	PKC theta (PRKCQ Products)
Background:	The Protein Kinase C (PKC) family of homologous serine/threonine protein kinases is involved
	in a number of processes such as growth, differentiation, and cytokine secretion. Three
	categories exist, conventional PKC (cPKC), novel PKC (nPKC), and atypical PKC (aPKC). These
	proteins are products of multiple genes and alternative splicing and have different modes of
	activation. For example, cPKC's members (alpha, betal, betall, and gamma) are calcium
	activated, phospholipid-dependent serine/threonine specific enzymes which can also be
	activated by phorbol esters. However, the novel PKC (nPKC) subfamily members (delta,
	epsilon, pi, and theta isoforms) and the atypical PKC (PKC) subfamily members (zeta , $\acute{\text{l}}$, and
	lambda isoforms) are Ca[2+] independent. The aPKC members are unique in that their activity
	is independent of diacylglycerols and phorbol esters. The PKC pathway represents a major
	signal transduction system that is activated following ligand-stimulation of transmembrane
	receptors by hormones, neurotransmitters and growth factors. PKCtheta transcripts are
	expressed in most tissues with the highest levels being found in hematopoietic tissues and cell
	lines, including T cells and thymocytes. PKCtheta RNA is readily detectable in skeletal muscle,
	lung, and brain. However, PKCtheta expression is not detected in several human carcinoma cel
	lines. Abundant expression of this PKC isozyme in hematopoietic cells suggests that it may
	have a role in growth and differentiation processes of these cells.
	The 9/PKC monoclonal antibody recognizes the phosphorylated threonine 538 (pT538) of
	human PKCtheta.
Molecular Weight:	79 kDa
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	
Comment:	Related Products: ABIN967738
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Concentration:	250 μg/mL

Handling

Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20°C.
Publications	

Product cited in:

Soderling: "Protein kinases. Regulation by autoinhibitory domains." in: **The Journal of biological chemistry**, Vol. 265, Issue 4, pp. 1823-6, (1990) (PubMed).

Nishizuka: "The molecular heterogeneity of protein kinase C and its implications for cellular regulation." in: **Nature**, Vol. 334, Issue 6184, pp. 661-5, (1988) (PubMed).

Images

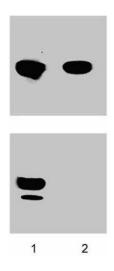


Image 1. Jurkat cells were treated with Anti-CD3 and were then either left untreated (lane 1) or treated (lane 2) with 200 U/ml of lambda phosphatase for 1 hr at 37°C. The top panel was probed with PKCtheta (ABIN967738) and the bottom panel was probed with PKCtheta (pT538).