

Datasheet for ABIN7165715
anti-PKC zeta antibody (AA 494-575)



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1 Image

Overview

Quantity:	100 µg
Target:	PKC zeta (PRKCZ)
Binding Specificity:	AA 494-575
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PKC zeta antibody is un-conjugated
Application:	ELISA, Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Protein kinase C zeta type protein (494-575AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	PKC zeta (PRKCZ)
Alternative Name:	PRKCZ (PRKCZ Products)
Background:	Background: Calcium- and diacylglycerol-independent serine/threonine-protein kinase that functions in phosphatidylinositol 3-kinase (PI3K) pathway and mitogen-activated protein (MAP)

kinase cascade, and is involved in NF-kappa-B activation, mitogenic signaling, cell proliferation, cell polarity, inflammatory response and maintenance of long-term potentiation (LTP). Upon lipopolysaccharide (LPS) treatment in macrophages, or following mitogenic stimuli, functions downstream of PI3K to activate MAP2K1/MEK1-MAPK1/ERK2 signaling cascade independently of RAF1 activation. Required for insulin-dependent activation of AKT3, but may function as an adapter rather than a direct activator. Upon insulin treatment may act as a downstream effector of PI3K and contribute to the activation of translocation of the glucose transporter SLC2A4/GLUT4 and subsequent glucose transport in adipocytes. In EGF-induced cells, binds and activates MAP2K5/MEK5-MAPK7/ERK5 independently of its kinase activity and can activate JUN promoter through MEF2C. Through binding with SQSTM1/p62, functions in interleukin-1 signaling and activation of NF-kappa-B with the specific adapters RIPK1 and TRAF6. Participates in TNF-dependent transactivation of NF-kappa-B by phosphorylating and activating IKBKB kinase, which in turn leads to the degradation of NF-kappa-B inhibitors. In migrating astrocytes, forms a cytoplasmic complex with PARD6A and is recruited by CDC42 to function in the establishment of cell polarity along with the microtubule motor and dynein. In association with FEZ1, stimulates neuronal differentiation in PC12 cells. In the inflammatory response, is required for the T-helper 2 (Th2) differentiation process, including interleukin production, efficient activation of JAK1 and the subsequent phosphorylation and nuclear translocation of STAT6. May be involved in development of allergic airway inflammation (asthma), a process dependent on Th2 immune response. In the NF-kappa-B-mediated inflammatory response, can relieve SETD6-dependent repression of NF-kappa-B target genes by phosphorylating the RELA subunit at 'Ser-311'. Necessary and sufficient for LTP maintenance in hippocampal CA1 pyramidal cells. In vein endothelial cells treated with the oxidant peroxynitrite, phosphorylates STK11 leading to nuclear export of STK11, subsequent inhibition of PI3K/Akt signaling, and increased apoptosis. Phosphorylates VAMP2 in vitro (PubMed:17313651).

Aliases: 14-3-3-zeta isoform antibody, A1098070 antibody, aPKCzeta antibody, C80388 antibody, EC 2.7.11.13 antibody, KPCZ_HUMAN antibody, nPKC zeta antibody, nPKC-zeta antibody, OTTHUMP00000001368 antibody, OTTHUMP00000044160 antibody, PKC 2 antibody, PKC ZETA antibody, PKC2 antibody, PkcZ antibody, PKCZETA antibody, PKM-zeta, included antibody, PRKCZ antibody, Protein kinase C zeta antibody, Protein kinase C zeta form antibody, Protein kinase C zeta type antibody, r14-3-3 antibody, R74924 antibody, zetaPKC antibody

UniProt: [Q05513](#)

Pathways: [NF-kappaB Signaling](#), [RTK Signaling](#), [Myometrial Relaxation and Contraction](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Synaptic](#)

Target Details

Membrane, Production of Molecular Mediator of Immune Response, CXCR4-mediated Signaling Events, Thromboxane A2 Receptor Signaling

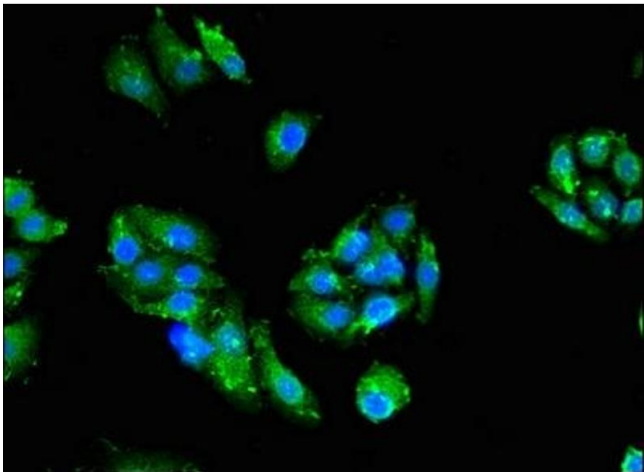
Application Details

Application Notes:	Recommended dilution: IF:1:50-1:200,
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunofluorescence

Image 1. Immunofluorescent analysis of HepG2 cells using ABIN7165715 at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)