



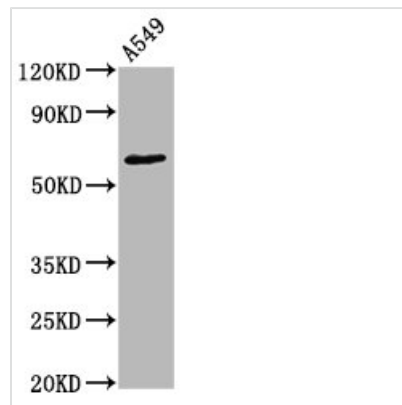
Phospho-PRKCZ (T560) Antibody

Product Code	CSB-RA018710A560pHUU
Abbreviation	Protein kinase C zeta type
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q05513
Immunogen	A synthesized peptide derived from Human Phospho-PRKCZ (T560)
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:5000
Relevance	<p>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).</p>
Form	Liquid
Conjugate	Non-conjugated



Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Protein kinase C zeta type, nPKC-zeta, PRKCZ, PKC2
Immunogen Species	Homo sapiens (Human)
Research Area	Signal Transduction
Gene Names	PRKCZ
Accession NO.	1B10

Image



Western Blot

Positive WB detected in A549 whole cell lysate
 All lanes Phospho-PRKCZ antibody at 1.55µg/ml
 Secondary
 Goat polyclonal to rabbit IgG at 1/50000 dilution
 Predicted band size: 68 KDa
 Observed band size: 68 KDa

Description

The coding sequence for the phospho-PRKCZ (T560) monoclonal antibody (isolated by immunizing animals with the human pT560-PRKCZ) was cloned into the plasmids and then transfected into cell lines for in vitro expression. The product underwent affinity-chromatography-mediated purification to get the phospho-PRKCZ (T560) recombinant monoclonal antibody. This anti-pT560-PRKCZ antibody is a rabbit IgG. It is suitable for the detection of human PRKCZ phosphorylated at Thr 560 residue. And it can be used in ELISA and WB applications.

PRKCZ is an atypical protein kinase C isoform that regulates a variety of signaling events, including cell proliferation, cell survival, and cell motility, all of which are critical for cancer formation and progression. PRKCZ is involved in a number of signaling pathways, including the activation of the ERK/MAPK cascade, the p70 ribosomal S6 kinase signaling cascade, the transcription factor NF- κ B, and cell polarity regulation. Kelly K. Y. Seto et al. discovered that PRKCZ is a promising regulatory component of the IGF1R and ITGB3 pathways, implying that it could be important in ovarian tumorigenesis.