

Anti-Phospho-PKC zeta (T560) PRKCZ Rabbit Monoclonal Antibody
Catalog # ABO13183

Specification

Anti-Phospho-PKC zeta (T560) PRKCZ Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC
Primary Accession	Q05513
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-Phospho-PKC zeta (T560) PRKCZ Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat.

Anti-Phospho-PKC zeta (T560) PRKCZ Rabbit Monoclonal Antibody - Additional Information

Gene ID 5590

Other Names

Protein kinase C zeta type, 2.7.11.13, nPKC-zeta, PRKCZ, PKC2

Calculated MW

67660 MW KDa

Application Details

WB 1:1000-1:2000
IHC 1:50-1:200

Subcellular Localization

Cytoplasm. Endosome. Cell junction. In the retina, localizes in the terminals of the rod bipolar cells. Associates with endosomes. Presence of KRIT1, CDH5 and RAP1B is required for its localization to the cell junction. Colocalizes with VAMP2 and WDFY2 in intracellular vesicles..

Tissue Specificity

Expressed in brain, and to a lesser extent in lung, kidney and testis.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human PKC zeta

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term

storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-Phospho-PKC zeta (T560) PRKCZ Rabbit Monoclonal Antibody - Protein Information

Name PRKCZ

Synonyms PKC2

Function

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'. Phosphorylates VAMP2 in vitro (PubMed:17313651). Phosphorylates and activates LRRK1, which phosphorylates RAB proteins involved in intracellular trafficking (PubMed:36040231).

Cellular Location

Cytoplasm. Endosome Cell junction. Membrane {ECO:0000250|UniProtKB:P09217}; Peripheral membrane protein. Note=In the retina, localizes in the terminals of the rod bipolar cells (By similarity). Associates with endosomes (PubMed:9566925). Presence of KRIT1, CDH5 and RAP1B is required for its localization to the cell junction (PubMed:7597083). Colocalizes with VAMP2 and WDFY2 in intracellular vesicles (PubMed:17313651) Transiently translocates to the membrane of CA1 hippocampal cells in response to the induction of long term potentiation (By similarity) {ECO:0000250|UniProtKB:P09217, ECO:0000269|PubMed:17313651, ECO:0000269|PubMed:7597083, ECO:0000269|PubMed:9566925}

Tissue Location

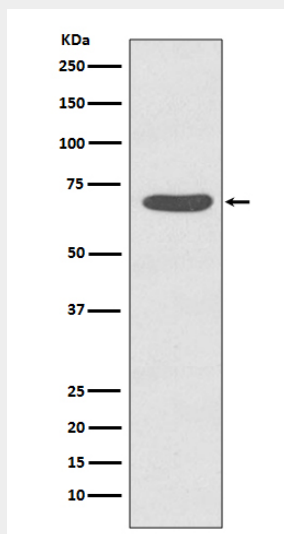
Expressed in brain, and to a lesser extent in lung, kidney and testis

Anti-Phospho-PKC zeta (T560) PRKCZ Rabbit Monoclonal Antibody - Protocols

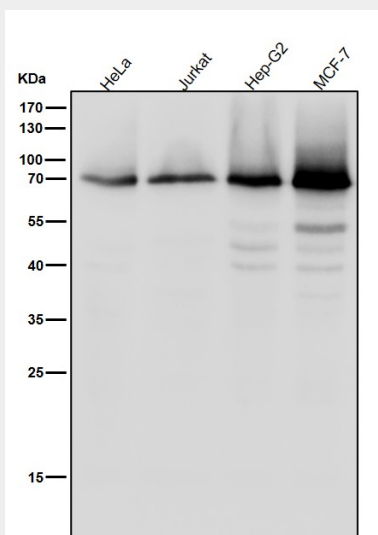
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

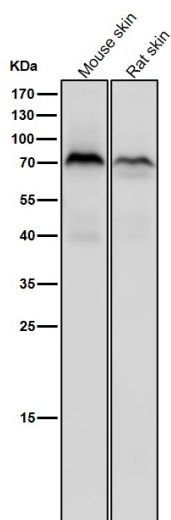
Anti-Phospho-PKC zeta (T560) PRKCZ Rabbit Monoclonal Antibody - Images



Western blot analysis of Phospho-PKC zeta (T560) expression in HeLa cell treated with Calyculin A lysate.



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.