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Mouse Prkce Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14630a

Specification

Mouse Prkce Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	P16054
Other Accession	P09216, P10830, Q02156, NP_035234.1
Reactivity	**Mouse**
Predicted	**Human, Rabbit, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**83561**
Antigen Region	**123-150**

Mouse Prkce Antibody (N-term) - Additional Information

Gene ID 18754

Other Names
Protein kinase C epsilon type, nPKC-epsilon, Prkce, Pkce, Pkcea

Target/Specificity
This Mouse Prkce antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 123-150 amino acids from the N-terminal region of mouse Prkce.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Mouse Prkce Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Prkce Antibody (N-term) - Protein Information

Name Prkce

Synonyms Pkce, Pkcea

Function Calcium-independent, phospholipid- and diacylglycerol (DAG)- dependent serine/threonine-protein kinase that plays essential roles in the regulation of multiple cellular processes linked to cytoskeletal proteins, such as cell adhesion, motility, migration and cell cycle, functions in neuron growth and ion channel regulation, and is involved in immune response, cancer cell invasion and regulation of apoptosis. Mediates cell adhesion to the extracellular matrix via integrin- dependent signaling, by mediating angiotensin-2-induced activation of integrin beta-1 (ITGB1) in cardiac fibroblasts. Phosphorylates MARCKS, which phosphorylates and activates PTK2/FAK, leading to the spread of cardiomyocytes. Involved in the control of the directional transport of ITGB1 in mesenchymal cells by phosphorylating vimentin (VIM), an intermediate filament (IF) protein. In epithelial cells, associates with and phosphorylates keratin-8 (KRT8), which induces targeting of desmoplakin at desmosomes and regulates cell-cell contact. Phosphorylates IQGAP1, which binds to CDC42, mediating epithelial cell- cell detachment prior to migration. During cytokinesis, forms a complex with YWHAB, which is crucial for daughter cell separation, and facilitates abscission by a mechanism which may implicate the regulation of RHOA. In cardiac myocytes, regulates myofilament function and excitation coupling at the Z-lines, where it is indirectly associated with F-actin via interaction with COPB1. During endothelin- induced cardiomyocyte hypertrophy, mediates activation of PTK2/FAK, which is critical for cardiomyocyte survival and regulation of sarcomere length. Plays a role in the pathogenesis of dilated cardiomyopathy via persistent phosphorylation of troponin I (TNNI3). Involved in nerve growth factor (NFG)-induced neurite outgrowth and neuron morphological change independently of its kinase activity, by inhibition of RHOA pathway, activation of CDC42 and cytoskeletal rearrangement. May be involved in presynaptic facilitation by mediating phorbol ester-induced synaptic potentiation. Phosphorylates gamma- aminobutyric acid receptor subunit gamma-2 (GABRG2), which reduces the response of GABA receptors to ethanol and benzodiazepines and may mediate acute tolerance to the intoxicating effects of ethanol. Upon PMA treatment, phosphorylates the capsaicin- and heat-activated cation channel TRPV1, which is required for bradykinin-induced sensitization of the heat response in nociceptive neurons. Is able to form a complex with PDLIM5 and N-type calcium channel, and may enhance channel activities and potentiates fast synaptic transmission by phosphorylating the pore-forming alpha subunit CACNA1B (CaV2.2). Downstream of TLR4, plays an important role in the lipopolysaccharide (LPS)-induced immune response by phosphorylating and activating TICAM2/TRAM, which in turn activates the transcription factor IRF3 and subsequent cytokines production. In differentiating erythroid progenitors, is regulated by EPO and controls the protection against the TNFSF10/TRAIL-mediated apoptosis, via BCL2. May be involved in the regulation of the insulin-induced phosphorylation and activation of AKT1. Phosphorylates NLRP5/MATER and may thereby modulate AKT pathway activation in cumulus cells (By similarity).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:Q02156}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q02156}. Cell membrane {ECO:0000250|UniProtKB:Q02156}. Cytoplasm, perinuclear region. Nucleus Note=Translocated to plasma membrane in epithelial cells stimulated by HGF (By similarity). Associated with the Golgi at the perinuclear site in pre-passage fibroblasts (PubMed:17611075). In passaging cells, translocated to the cell periphery (PubMed:17611075). Translocated to the nucleus in PMA-treated cells (PubMed:17611075) {ECO:0000250|UniProtKB:Q02156, ECO:0000269|PubMed:17611075}

Mouse Prkce Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

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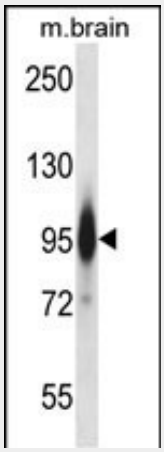
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Prkce Antibody (N-term) - Images



Mouse Prkce Antibody (N-term) (Cat. #AP14630a) western blot analysis in mouse brain tissue lysates (35ug/lane).This demonstrates the Prkce antibody detected the Prkce protein (arrow).

Mouse Prkce Antibody (N-term) - Background

This is calcium-independent, phospholipid-dependent, serine-and threonine-specific enzyme. PKC is activated by diacylglycerol which in turn phosphorylates a range of cellular proteins. PKC also serves as the receptor for phorbol esters, a class of tumor promoters.

Mouse Prkce Antibody (N-term) - References

Chou, W.H., et al. J. Neurosci. 30(42):13955-13965(2010)
Roh, D.H., et al. Neurosci. Lett. 477(2):95-99(2010)
Batarseh, A., et al. Biochemistry 49(23):4766-4778(2010)
Fenton, R.A., et al. Am. J. Physiol. Heart Circ. Physiol. 298 (6), H1671-H1678 (2010) :
Gan, L., et al. Mol. Immunol. 47(6):1278-1282(2010)