

## PRKD1

**Reactivity:** Human Mouse Rat

**Tested applications:** WB

**Recommended Dilution:** WB 1:500 - 1:2000

**Calculated MW:** 105kDa

**Observed MW:** Refer to Figures

**Immunogen:**

A synthetic peptide of human PRKD1

**Storage Buffer:**

Store at -20. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Concentration:**

q

**Synonym:**

PKC-MU;PKCM;PKD;PRKCM;Protein kinase C mu type antibody;Protein kinase D antibody;nPKC-D1 antibody, nPKC-mu antibody;

**Catalog #:** A0101

**Antibody Type:**

Polyclonal Antibody

**Species:** Rabbit

**Gene ID:** 5587

**Isotype:** IgG

**Swiss Prot:** Q15139

**Purity:** Affinity purification

For research use only.

**Background:**

PKC mu is a novel member of the subgroup of atypical protein kinase Cs (PKC). Deduced protein sequence shows strong homology to conserved domains of members of the PKC subfamily. In vitro phorbol ester binding studies and kinase assays with lysates of cells overexpressing PKC mu showed phorbol ester-independent kinase activity, autophosphorylation, and, in normal rat kidney (NRK) cells, predominant phosphorylation of a 30-kDa protein at serine residues. Data suggest a role of PKC mu in signal transduction pathways related to growth control. PKC mu is a cytosolic protein, which upon binding to the trans-Golgi network (TGN) regulates the fission of transport carriers specifically destined to the cell surface. Mutation of serines 744/748 to alanines in the activation loop of intact PKD inhibits its localization to the TGN. Moreover, anti-phospho-PKD antibody, which recognizes only the activated form of PKD, recognizes the TGN-bound PKD. Thus, activation of intact PKD is important for binding to the TGN. Results demonstrate that betagamma subunits of the heterotrimeric G proteins directly activates PKD by interacting with its pleckstrin homology domain.

**To place an order, please [Click HERE](#).**

© 2015 NeoScientific