

PKD/PKC μ Antibody

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, FC-FP	H M Mk	Endogenous	115	Rabbit	#Q15139	5587

Product Usage Information**Application**

Western Blotting
Flow Cytometry (Fixed/Permeabilized)

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

PKD/PKC μ Antibody detects endogenous levels of total PKD1/PKC μ protein. This antibody may also react with isoform PKD2, in some species.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser916 of mouse PKD. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Activation of PKC is one of the earliest events in a cascade leading to a variety of cellular responses, such as secretion, gene expression, proliferation, and muscle contraction (1,2). Protein kinase D (PKD), also called PKC μ , is a serine/threonine kinase whose activation is dependent on the phosphorylation of two activation loop sites, Ser744 and Ser748, via a PKC-dependent signaling pathway (3-5). In addition to the two activation loop sites, the carboxy-terminal Ser916 has been identified as an autophosphorylation site for PKD/PKC μ . Phosphorylation at Ser916 correlates with PKD/PKC μ catalytic activity (6).

Background References

1. Nishizuka, Y. (1984) *Nature* 308, 693-698.
2. Keranen, L.M. (1995) *Curr. Biol.* 5, 1394-1403.
3. Valverde, A.M. et al. (1994) *Proc. Natl. Acad. Sci.* 91, 8572-8576.
4. Johannes, F.J. et al. (1994) *J. Biol. Chem.* 269, 6140-6148.
5. Iglesias, T. et al. (1998) *J. Biol. Chem.* 273, 27662-27667.
6. Matthews, S.A. et al. (1999) *J. Biol. Chem.* 274, 26543-26549.
7. Wood, C.D. et al. (2005) *J Biol Chem* 280, 6245-51.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: Human **M:** Mouse **Mk:** Monkey

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