

## Product datasheet for AP02655PU-S

## PKC mu (PRKD1) Rabbit Polyclonal Antibody

## **Product data:**

**Product Type:** Primary Antibodies

Applications: IF, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunofluorescence: 1/100-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** The antiserum was produced against synthesized non-phosphopeptide derived from human

PKD/PKCµ around the phosphorylation site of serine 738 (E-K-Sp-F-R).

**Specificity:** This antibody detects endogenous levels of total PKD/PKCµ protein.

Formulation: PBS (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol.

State: Aff - Purified

State: Liquid purified Ig fraction.

**Concentration:** lot specific

**Purification:** Immunoaffinity Chromatography using epitope-specific immunogen.

Conjugation: Unconjugated

**Storage:** Store the antibody (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: One year from despatch.

**Gene Name:** protein kinase D1

**Database Link:** Entrez Gene 5587 Human

Q15139



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Background:

Protein Kinase C mu, is a ~140 kDa member of the novel group (nPKCs: sensitive to diacylglycerol, phosphatidylserine, and phorbol esters) of the PKC family of serine/threonine kinases that are involved in a wide range of physiological processes including mitogenesis, cell survival, metastasis and transcriptional regulation. PKC mu (also known as Protein Kinase D or PKD) is implicated in the regulation of multiple cellular processes including Golgi organization and membrane transport in epithelial cells. PKC mu is phosphorylated on serine 742 (serine 748 for the mouse sequence) in the activation loop in a PKC-dependent pathway, mainly by PKC eta and PKC epsilon. This is critical for its catalytic activity, substrate phosphorylation and role in activating the ERK1 MAP Kinase signaling cascade.

Synonyms:

Protein kinase D, PKC D1, PKD, PKD1, PRKCM, nPKC-D1, nPKC-mu, PKC mu, Protein kinase C mu type

## **Product images:**

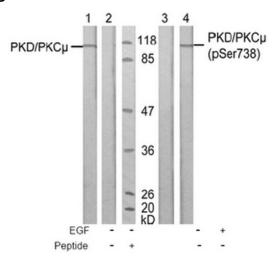


Figure 1. Western blot analysis of extract from A431 cells, untreated or treated with EGF (200 ng/ml, 10 min), using PKD/PKCu antibody (Lane 1 and 2) and PKD/PKCu (phospho-Ser738) antibody (Lane 3 and 4).

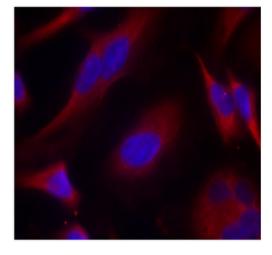


Figure 2. Immunofluorescence staining of methanol-fixed HeLa cells using PKD/PKCµ antibody (Red).