

## Product datasheet for RC208502L2V

## OriGene Technologies, Inc.

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## PKC gamma (PRKCG) (NM 002739) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: PKC gamma (PRKCG) (NM 002739) Human Tagged ORF Clone Lentiviral Particle

Symbol: PKC gamma

Synonyms: PKC-gamma; PKCC; PKCG; PKCgamma; PKCI(3); SCA14

**Mammalian Cell** 

Selection:

None

**Vector:** pLenti-C-mGFP (PS100071)

Tag: mGFP

**ACCN:** NM\_002739 **ORF Size:** 2091 bp

**ORF Nucleotide** 

OTI Disclaimer:

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Sequence:

The ORF insert of this clone is exactly the same as(RC208502).

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This

clone is substantially in agreement with the reference, but a complete review of all prevailing

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

variants is recommended prior to use. More info

**RefSeg:** NM 002739.3

 RefSeq Size:
 3143 bp

 RefSeq ORF:
 2094 bp

 Locus ID:
 5582

 UniProt ID:
 P05129

 Cytogenetics:
 19q13.42

**Domains:** C2, pkinase, S\_TK\_X, TyrKc, DAG\_PE-bind, S\_TKc

**Protein Families:** Druggable Genome, Protein Kinase





**Protein Pathways:** 

Calcium signaling pathway, ErbB signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Gap junction, Glioma, Leukocyte transendothelial migration, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Natural killer cell mediated cytotoxicity, Non-small cell lung cancer, Pathways in cancer, Phosphatidylinositol signaling system, Tight junction, Vascular smooth muscle contraction, VEGF signaling pathway, Vibrio cholerae infection, Wnt signaling pathway

MW:

78.4 kDa

**Gene Summary:** 

Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play distinct roles in cells. The protein encoded by this gene is one of the PKC family members. This protein kinase is expressed solely in the brain and spinal cord and its localization is restricted to neurons. It has been demonstrated that several neuronal functions, including long term potentiation (LTP) and long term depression (LTD), specifically require this kinase. Knockout studies in mice also suggest that this kinase may be involved in neuropathic pain development. Defects in this protein have been associated with neurodegenerative disorder spinocerebellar ataxia-14 (SCA14). Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2015]