

# Product datasheet for RC210910L4

#### OriGene Technologies, Inc.

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## PKC theta (PRKCQ) (NM\_006257) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type: Expression Plasmids** 

**Product Name:** PKC theta (PRKCQ) (NM\_006257) Human Tagged Lenti ORF Clone

Tag:

Symbol: PKC theta

nPKC-theta; PRKCT Synonyms:

**Mammalian Cell** 

Selection:

Vector:

pLenti-C-mGFP-P2A-Puro (PS100093)

Puromycin

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC210910).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

ACCN: NM\_006257

**ORF Size:** 2118 bp





**OTI Disclaimer:** 

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customport@origene.com">customport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.

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 variants is recommended prior to use. <u>More info</u>

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

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 006257.2</u>

 RefSeq Size:
 3273 bp

 RefSeq ORF:
 2121 bp

 Locus ID:
 5588

 UniProt ID:
 Q04759

Cytogenetics:

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

10p15.1

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

**Protein Pathways:** Adipocytokine signaling pathway, T cell receptor signaling pathway, Tight junction, Vascular

smooth muscle contraction

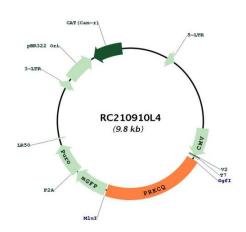
**MW:** 81.7 kDa



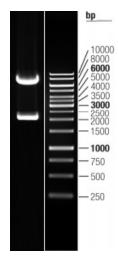
#### **Gene Summary:**

Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the 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 family members 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 a distinct role. The protein encoded by this gene is one of the PKC family members. It is a calcium-independent and phospholipid-dependent protein kinase. This kinase is important for T-cell activation. It is required for the activation of the transcription factors NF-kappaB and AP-1, and may link the T cell receptor (TCR) signaling complex to the activation of the transcription factors. [provided by RefSeq, Jul 2008]

### **Product images:**



Circular map for RC210910L4



Double digestion of RC210910L4 using Sgfl and Mlul