

## Product datasheet for **RG205272**

### PKC eta (PRKCH) (NM\_006255) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PKC eta (PRKCH) (NM_006255) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PKC eta
Synonyms:	nPKC-eta; PKC-L; PKCL; PRKCL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG205272 representing NM\_006255  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGTCGCTCTGGCACCATGAAGTTCAATGGCTATTTGAGGGTCCGCATCGGTGAGGCAGTGGGGCTGCAGC  
 CCACCCGCTGGTCCCTGCGCCACTCGCTTTCAAGAAGGGCCACCAGCTGCTGGACCCCTATCTGACGGT  
 GAGCGTGGACCAGGTGCGCGTGGGCCAGACCAGCACCAAGCAGAAGACCAACAAACCCACGTACAACGAG  
 GAGTTTTGCGCTAACGTACCGACGCGGCCACCTCGAGTTGGCCGTCTTCCACGAGACGCCCTGGGCT  
 ACGACCACTTCGTGGCAACTGCACCCTGCAGTTCAGGAGCTGCTGCGCAGCACCGGCCCTCGGACAC  
 CTTGAGGGTTGGGTGGATCTCGAGCCAGAGGGGAAAGTATTCGTGGTAATAACCCTTACCGGGAGTTTC  
 ACTGAAGTACTCTCCAGAGAGACCGGATCTTCAAACATTTTACCAGGAAGCGCCAAAGGGCTATGCGAA  
 GCGGAGTCCACCAGATCAATGGACACAAGTTCATGGCCACGTATCTGAGGCAGCCCACCTACTGCTCTCA  
 CTGACGGGAGTTTATCTGGGAGTGTGGGAAACAGGGTTATCAGTGCCAAGTGTGCACCTGTGTGCTC  
 CATAAACGCTGCCATCATCTAATTGTTACAGCCTGACTTGCCAAAACAATTAACAAAGTGGATTCAA  
 AGATTGCAGAACAGAGGTTCCGGATCAACATCCCACACAAGTTCAGCATCCACAACCTACAAAAGTGCCAAC  
 ATTCTGCGACTACTGTGGCTCACTGCTCTGGGGAATAATGCGACAAGGACTTCAGTGAAAAATGTAAA  
 ATGAATGTGCATATTCGATGTCAAGCGAACGTGGCCCTAACTGTGGGGTAAATGCGGTGGAACCTGGCA  
 AGACCCCTGGCAGGGATGGGTCTCCAACCCGAAATATTTCTCAAACCTCGAAACTCGTTTCCAGATCGAC  
 CCTAAGACGACAGGAAAGGAGAGCAGCAAAGAAGGAAATGGGATTGGGGTAAATCTTCCAACCGACTT  
 GGTATCGACAACTTTGTGTTTATCCGAGTGTGGGAAAGGGGAGTTTGGGAAGGTGATGCTTGAAGAG  
 TAAAAGAAACAGGAGACCTCTATGCTGTGAAGGTGCTGAAGAAGGACGTGATTCTGCAGGATGATGATGT  
 GGAATGCACCATGACCGAGAAAAGGATCCTGTCTCTGGCCGCAATCACCCCTTCCCTCACTCAGTTGTTT  
 TGCTGCTTTCAGACCCCGATCGTCTGTTTTTGTGATGGAGTTTGTGAATGGGGTGACTTGATGTTCC  
 ACATTCAGAAGTCTCGTCTTTTGTGATGAAGCACGAGCTCGCTTCTATGCTGCAGAAATCATTTGCGTCT  
 CATGTTCTCCATGATAAAGGAATCATCTATAGAGATCTGAAACTGGACAATGTCCTGTTGGACCACGAG  
 GGTCACTGTAACCTGGCAGACTTCGGAATGTGCAAGGAGGGGATTTGCAATGGTGTACCACGGCCACAT  
 TCTGTGGCAGCCAGACTATATCGCTCCAGAGATCCTCCAGGAAATGCTGTACGGCCTGCAGTAGACTG  
 GTGGGCAATGGGCGTGTGCTCTATGAGATGCTCTGTGGTACGCGCCTTTTGGGCAGAGAATGAAGAT  
 GACCTCTTTGAGGCCATACTGAATGATGAGGTGGTCTACCCTACCTGGCTCCATGAAGATGCCACAGGGA  
 TCCTAAAATCTTTCATGACCAAGAACCACCATGCGCTTGGGCAGCCTGACTCAGGAGGGCAGCACGC  
 CATCTTGAGACATCCTTTTTTAAAGAAATCGACTGGGCCAGCTGAACCATCGCCAAAATAGAACCCT  
 TTCAGACCCAGAAATCAAATCCCAGAGAAGATGTCAGTAATTTTACCCTGACTTATAAAGGAAGAGCCAG  
 TTTAACTCCAATTGATGAGGGACATCTTCCAATGATTAACCAGGATGAGTTTAAAACTTTTCTATGT  
 GTCTCCAGAATTGCAACCA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG205272 representing NM\_006255  
 Red=Cloning site Green=Tags(s)

MSSGTMKFNGYLVRVIGEAVGLQPTRWSLRHSLFKKGHQLLDPYLTVSVDQVRVGGTSTKQKTNKPTYNE  
 EFCANVTDGGHLELAVFHETPLGYDHFVANCTLQFQELLRTTGASDTFEGWVDLEPEGKVFVVITLTGSF  
 TEATLQRDRIFKHFTKRQRAMRRRVHQINGHKFMATYLRQPTYCSHCREFIWGVFGKQGYQCQVCTCVV  
 HKRCHHLIVTACTCQNNINKVDSKIAEQRFGINIPHKFSIHNYKVPTFCDHCGSLLWGIHQGLQCKICK  
 MNVHIRCQANVAPNCGVNAVELAKTLAGMGLQPGNISPTSKLVSRSTLRRQKESKEGNGIGVNSSNRL  
 GIDNFEFIRVLGKGSFGKVMARVKETGDLYAVKVLKDVILQDDDVECTMTEKRILSLARNHPFLTQLF  
 CCFQTPDRLFFVMEFVNGDLMFHIQKSRRFDEARARFYAAEIIISALMFLHDKGIIYRDLKLDNVLLDHE  
 GHCKLADFGMCKEGICNGVTTATFCGTPDYIAPEILQEMLYGPVDWAMGVLLYEMLCGHAPFEAENED  
 DLFEAILNDEVVYPTWLHEDATGILKSFMTKNPTMRLGSLTQGGEHAILRHPFFKEIDWAQLNHRQIEPP  
 FRPRIKSREDSNFDPDFIKEEPVLTPIDEGHLPMINQDEFNRNFSYVSPQLQP

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM\_006255

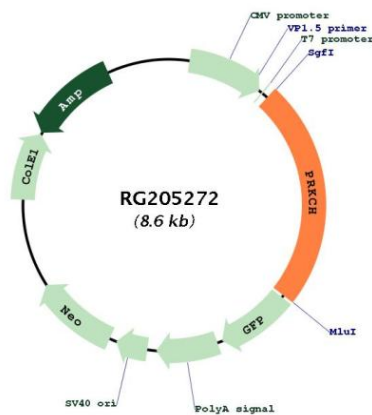
ORF Size: 2049 bp

<b>OTI Disclaimer:</b>	<p>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:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_006255.2</a>
<b>RefSeq Size:</b>	3522 bp
<b>RefSeq ORF:</b>	2052 bp
<b>Locus ID:</b>	5583
<b>UniProt ID:</b>	<a href="#">P24723</a>
<b>Cytogenetics:</b>	14q23.1
<b>Domains:</b>	C2, pkinase, S_TK_X, TyrKc, DAG_PE-bind, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Tight junction, Vascular smooth muscle contraction

**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 in cells. The protein encoded by this gene is one of the PKC family members. It is a calcium-independent and phospholipids-dependent protein kinase. It is predominantly expressed in epithelial tissues and has been shown to reside specifically in the cell nucleus. This protein kinase can regulate keratinocyte differentiation by activating the MAP kinase MAPK13 (p38delta)-activated protein kinase cascade that targets CCAAT/enhancer-binding protein alpha (CEBPA). It is also found to mediate the transcription activation of the transglutaminase 1 (TGM1) gene. Mutations in this gene are associated with susceptibility to cerebral infarction. [provided by RefSeq, Sep 2015]

**Product images:**



Circular map for RG205272