

Product datasheet for **SC319225**

PKC zeta (PRKCZ) (NM_002744) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PKC zeta (PRKCZ) (NM_002744) Human Untagged Clone
Tag:	Tag Free
Symbol:	PKC zeta
Synonyms:	PKC-ZETA; PKC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_002744.3
 GCCCCGCGCGCCCGGAGTTCCGCGGAGTTGACCGGGTCCGGCGCGTCCGGTCTGAGCG
 CTGCTTCCGCGTTCCGCGCGGCCCCACCTGGAGCCCCCGCCCGCCATGGCCGGAG
 CTCCCGGGGCGCAGCGCTGACGGCGGGGGGAGCGCGCATGCCAGCAGGACCGGCC
 CCAAGATGGAAGGGAGCGGCGGCGCGTCCGCCTCAAGGCGCATTACGGGGGGACATCT
 TCATCACCAGCGTGGACGCCACCGCTCACCTCAAGTGGGTGGACAGCGAAGGTGACC
 TGTGTCGTCTGCACCAGCAGCACCCGCTCACCTCAAGTGGGTGGACAGCGAAGGTGACC
 CTTGCACGGTGTCTCCAGATGGAGCTGGAAGAGGCTTTCCGCCTGGCCCGTCAGTGCA
 GGGATGAAGGCCTCATCATTTTCCCGAGCACCCCTGAGCAGCCTGGCCTGCCAT
 GTCCGGGAGAAGACAAATCTATCTACCGCGGGGAGCCAGAAGATGGAGGAAGCTGTACC
 GTGCCAACGGCCACCTTCCAAGCCAAGCGCTTAACAGGAGAGCGTACTGCGGTCACT
 GCAGCGAGAGGATATGGGCCTCGCGAGGCAAGGCTACAGGTGCATCAACTGCAAAGTGC
 TGGTCCATAAGCGCTGCCACGGCCTCGTCCGCTGACCTGCAGGAAGCATATGGATTCTG
 TCATGCCTTCCAAGAGCCTCCAGTAGACGACAAGAACGAGGACCGGACCTTCCCTCCG
 AGGAGACAGATGGAATTGCTTACATTTCTCATCCGGAAGCATGACAGCATTAAAGACG
 ACTCGGAGGACCTTAAGCCAGTTATCGATGGGATGGATGGAATCAAAATCTCTCAGGGGC
 TTGGGCTGCAGGACTTTGACCTAATCAGAGTCATCGGGCGGGGAGCTACGCCAAGGTTC
 TCCTGGTGCGGTTGAAGAAGAATGACCAAATTTACGCCATGAAAGTGGTGAAGAAAGAGC
 TGGTGCATGATGACGAGGATATTGACTGGGTACAGACAGAGAAGCACGTGTTTGGAGCAGG
 CATCCAGCAACCCCTTCTGGTCCGATTACACTCCTGCTTCCAGACGACAAGTCCGTTGT
 TCCTGGTCATTGAGTACGTCAACGGCGGGGACCTGATGTTCCACATGCAGAGGCAGAGGA
 AGCTCCCTGAGGAGCACGCCAGTTCTACGCGGCGGAGATCTGCATCGCCCTCAACTTCC
 TGCACGAGAGGGGATCATCTACAGGGACCTGAAGTGGACAACGTCCTCCTGGATGCGG
 ACGGGCACATCAAGCTCACAGACTACGGCATGTGCAAGGAAGGCCTGGGCCTGGTGACA
 CAACGAGCACTTTCTGCGGAACCCGAATTACATCGCCCCGAAATCCTGCGGGGAGAGG
 AGTACGGGTTAGCGTGGACTGGTGGGCGCTGGGAGTCTCATGTTTGGATGATGGCCG
 GGCGCTCCCCGTTGACATCATCACGACAACCCGACATGAACACAGAGGACTACCTTT
 TCCAAGTGATCCTGGAGAAGCCATCCGGATCCCCGGTTCTGTCCGTCAAAGCCTCCC
 ATGTTTTAAAAGGATTTTTAAATAAGGACCCAAAGAGAGGCTCGGCTGCCGGCCACAGA
 CTGGATTTTCTGACATCAAGTCCCACGCTTCTCCGAGCATAGACTGGGACTTGCTGG
 AGAAGAAGCAGGCGCTCCCTCCATTCCAGCCACAGATCACAGACGACTACGGTCTGGACA
 ACTTTGACACACAGTTACCAGCGAGCCGTGCAGCTGACCCAGACGATGAGGATGCCA
 TAAAGAGGATCGACCAGTCAGAGTTCGAAGGCTTTGAGTATATCAACCCATTATTGCTGT
 CCACCGAGGAGTCGGTGTGAGGCCGCGTGCCTCTGTGCTGGACACGCGTGATTGACCC
 TTTAACTGTATCCTTAACCACCGCATAATGCATGCCAGGCTGGGCACGGCTCCGAGGGCGG
 CCAGGGACAGACGCTTGCGCCGAGACCGCAGAGGGAAGCGTCAGCGGGCGCTGCTGGGAG
 CAGAACAGTCCCTCACACCTGGGCCCGGGCAGGCCAGCTTCGTGCTGGAGGAAGTGTCTG
 CTGTTCTGCGTGCGGCGGATCCGCGGGGACCTGCCAGGGGGCTGTATGCGGTTTC
 CAAGGTGCACATTTTCCACGAAACAGAACTCGATGCACTGACCTGCTCCGCCAGGAAAG
 TGAGCGTGTAGCGTCTGAGGAATAAAATGTTCCGATGAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire
ACCN: NM_002744

OTI Disclaimer:	<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 custsupport@origene.com 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. More info</p>
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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:	NM_002744.3 , NP_002735.3
RefSeq Size:	2326 bp
RefSeq ORF:	1779 bp
Locus ID:	5590
UniProt ID:	Q05513
Cytogenetics:	1p36.33
Domains:	PB1, pkinase, S_TK_X, TyrKc, DAG_PE-bind, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Chemokine signaling pathway, Endocytosis, Insulin signaling pathway, Tight junction, Type II diabetes mellitus

Gene Summary:

Protein kinase C (PKC) zeta is a member of the PKC family of serine/threonine kinases which are involved in a variety of cellular processes such as proliferation, differentiation and secretion. Unlike the classical PKC isoenzymes which are calcium-dependent, PKC zeta exhibits a kinase activity which is independent of calcium and diacylglycerol but not of phosphatidylserine. Furthermore, it is insensitive to typical PKC inhibitors and cannot be activated by phorbol ester. Unlike the classical PKC isoenzymes, it has only a single zinc finger module. These structural and biochemical properties indicate that the zeta subspecies is related to, but distinct from other isoenzymes of PKC. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (1) encodes the longest isoform (1).