

## Product datasheet for **SC118455**

### PKC iota (PRKCI) (NM\_002740) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PKC iota (PRKCI) (NM_002740) Human Untagged Clone
Tag:	Tag Free
Symbol:	PKC iota
Synonyms:	DXS1179E; nPKC-iota; PKCI
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene ORF sequence for NM_002740 edited
GCGGCTGTAGAGCGCGCGCCCTACGGGCAGTGGGAGGAGCCGCGCGTTCGGCTGCT
CCGCGCAGGCGACCCCTTGGGTCGGCGCTGCGGGCGAGGTGGCAGGTAGGTGGCGGACG
GCCGCGTTTCTCCGGCAAGCGCAGGCGGGGAGTCCCCACGGCGCCGAAGCGCCCCC
CGCACCCCGGCTCCAGCGTTGAGGCGGGGAGTGAGGAGATGCCGACCCAGAGGGACA
CCAGCACCATGTCCACACGGTCGACGGCGGCGCAGCGGGGACCATTCCACCAGGTCC
GGGTGAAAGCCTACTACCGCGGGGATATCATGATAACACATTTTGAACCTTCCATCTCT
TTGAGGGCCTTTGCAATGAGGTTTCGAGACATGTGTTCTTTTGACAACGAACAGCTTCA
CCATGAAATGGATAGATGAGGAAGGAGACCCGTGTACAGTATCATCTCAGTTGGAGTTAG
AAGAAGCCTTTAGACTTTATGAGCTAAACAAGGATTCTGAACTCTTGATTCATGTGTTCC
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GTCATCCTCAAACAGGATTTGCTGATATTCAGGGACACCCGTTCTTCCGAAATGTTGATT
GGGATATGATGGAGCAAAAACAGGTGGTACCTCCCTTTAAACCAATATTTCTGGGGAAT
TTGGTTTGGACAACCTTGTATTCTCAGTTTACTAATGAACCTGTCCAGCTCACTCCAGATG
ACGATGACATTGTGAGGAAGATTGATCAGTCTGAATTTGAAGTTTTGAGTATATCAATC
CTCTTTTGATGTCTGCAGAAGAAATGTGTCTGATCCTCATTTTTCAACCATGTATTCTACT
CATGTTGCCATTTAATGCATGGATAAACTTGCTGCAAGCTGGATACAATTAACCATTTT
ATATTTGCCACCTACAAAAAACACCCAATATCTTCTCTGTAGACTATATGAATCAATT
ATTACATCTGTTTTACTATGAAAAAAAATTAATACTACTAGCTTCCAGACAATCATGTC
AAAAATTTAGTTGAACTGGTTTTTCAGTTTTTAAAGGCCTACAGATGAGTAATGAAGTTA
TCTTTTTGTGTTTTAAAAAAAAAAAAAAAAAAAA
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_002740 unedited NGTCAAAATTTGTATACGACTCCTATAGGGCGGCCGCAATTCGCACGAGGGCGGCTGTA GAGGGCGCGGCCTACGGGCAGTGGGAGGAGCCGCGGTTCCGGCTGCTCCGGCGAGG CGACCCTTGGGTGCGGCTGCGGGCAGGTGGGCAGGTAGGTGGGCGGACGGCCGCGGTT CTCCGGCAAGCGCAGGCGGCGGAGTCCCCACGGCGCCGAAGCGCCCCCGCACCCCC GGCTCCACGCTTGAGGCGGGGAGTGAGGAGATGCCGACCCAGAGGGACAGCAGCACCA TGTCCCACACGGTCCGAGGCGGCGGACGCGGGGACCATTCCCACCAGTCCGGGTGAAAG CCTACTACCGGGGATATCATGATAACACATTTTGAACCTTCCATCTCCTTTGAGGGCC TTTGCAATGAGGTTTCGAGACATGTGTTCTTTTGACAACGAACAGCTCTTACCATGAAAT GGATAGATGAGGAAGGAGACCCGTGTACAGTATCATCTCAGTTGGAGTTAGAAGAAGCCT TTAGACTTTATGAGCTAAACAAGGATTCTGAACTCTTGATTATGTGTTCCCTTGTGTAC CAGAACGTCTGGGATGCCTTGTCCAGGAGAAGATAAATCCATCTACCGTAGAGGTGCAC GCCGCTGGAGAAAGCTNTATTGTCCAATGGCCACACTTTCCAAGCCAAGCGTTTCAACA GCGTGTCTACTGTGCCATCTGCACAGACCGAATATGGGGACTTGACGCCAGGATATAA GTGCATCAACTGCAAACCTTTGGTTCATAAAGAGTGCCATANACTCGTCACAATTGATGT GGGCGGCATTCTTTGCCACAGAACCAGTGATGCCATGGATCAGTCTNCATGCATTCTGAC ATGCCAGACC
<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_002740 unedited CCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTAAACAAAAAGAACTTC ATTACTCATCTGTAGGCCTTTAAAAACTGAAAAACCAGTTCACTAAATTTTGACATGA TTGTCTGGAAGCTAGTAGTATTAATTTTTTTTTCATAGTAAAACAGATGAATAATTGAT TCATATAGTCTACAAGAGAAGATATTGGGTGTTTTTTGTAGGTGGCAATATAAAATGG TTAATTGTATCCAGGCTTGCAGCAAGTTTATCCATGCATTAATGGCAACATGAGTAGAA TACATGGTTGAAAAATGAGGATCAGACACATTCTCTGCAGACATCAAAAGAGGATTGAT ATACTCAAACCTTCAAATTCAGACTGATCAATCTTCTCACAATGTCATCGTCACTGG AGTGAGCTGGACAGGTTCAATAGTAAACTGAGAATCAAAGTTGTCCAAACCAAATCCCC AGAAATATTTGGTTTAAAGGGAGGTACCACCTGTTTTTGTCTCCATCATATCCCAATCAAC ATTTTCGGAAGAACGGGTGTCCTGAATATCAGCAAATCCTGTTTGAGGATGACAACCCAA TCGTTCTTAGGGTCTTATTAAGAAAACTCTCAGAACAATTCAGCTTTTACAGACAG AGAACGTGGTATCGCAATTTGTTTTTCCAAAATAACTTGGAAGAGATAATCCTCTGTGTT CTGGTCAGGGTTATNCGAGCTCCCAACATATAAATGGAGACCTTCTGATCATCTCAAC ATGAGCACTNCAGAGCCACAGTCACACTGAAACCCATATCTCTCTTAAATTCAGAGC ATGATTTAGAGTCACAGAAGTGCTGGNTGATCTCTGGCGTAATCTCCTACCATGCGTAT CAGGAGTTATGTGGCTCANATCAGATACATGTCAGTTAA
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_002740
<b>Insert Size:</b>	2300 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	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.
<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_002740.4</a> , <a href="#">NP_002731.3</a>
<b>RefSeq Size:</b>	4878 bp
<b>RefSeq ORF:</b>	1764 bp
<b>Locus ID:</b>	5584
<b>UniProt ID:</b>	<a href="#">P41743</a>
<b>Cytogenetics:</b>	3q26.2
<b>Domains:</b>	PB1, pkinase, S_TK_X, TyrKc, DAG_PE-bind, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Endocytosis, Insulin signaling pathway, Tight junction
<b>Gene Summary:</b>	<p>This gene encodes a member of the protein kinase C (PKC) family of serine/threonine protein kinases. The PKC family comprises at least eight members, which are differentially expressed and are involved in a wide variety of cellular processes. This protein kinase is calcium-independent and phospholipid-dependent. It is not activated by phorbol esters or diacylglycerol. This kinase can be recruited to vesicle tubular clusters (VTCs) by direct interaction with the small GTPase RAB2, where this kinase phosphorylates glyceraldehyde-3-phosphate dehydrogenase (GAPD/GAPDH) and plays a role in microtubule dynamics in the early secretory pathway. This kinase is found to be necessary for BCL-ABL-mediated resistance to drug-induced apoptosis and therefore protects leukemia cells against drug-induced apoptosis. There is a single exon pseudogene mapped on chromosome X. [provided by RefSeq, Jul 2008]</p>