

Product datasheet for **RC205379**

PKC iota (PRKCI) (NM_002740) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PKC iota (PRKCI) (NM_002740) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PKC iota
Synonyms:	DXS1179E; nPKC-iota; PKCI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC205379 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCCCACACGGTCGCAGGCGGGCAGCGGGGACCATTCCACCAGGTCGGGTGAAAGCCTACTACC
 GCGGGGATATCATGATAACACATTTTGAACCTTCCATCTCCTTTGAGGGCCTTTCGAATGAGGTTGAGA
 CATGTGTTCTTTTACAACGAACAGCTCTTACCATGAAATGGATAGATGAGGAAGGAGACCCGTGTACA
 GTATCATCTCAGTTGGAGTTAGAAGAAGCCTTTAGACTTTATGAGCTAAACAAGGATTCTGAACTTTGA
 TTCATGTGTTCCCTTGTGTACCAGAAGCTCCTGGGATGCCTTGTCCAGGAGAAGATAAATCCATCTACCG
 TAGAGGTGCACGCCGCTGGAGAAAGCTTTATTGTGCAATGGCCACACTTCCAAGCCAAGCGTTTCAAC
 AGGCGTGTCTACTGTCCATCTGCACAGACCGAATATGGGGACTTGGACGCCAAGGATATAAGTGCATCA
 ACTGCAAACCTCTGGTTCATAAGAAGTGCATAAACTCGTCACAATTGAATGTGGGCGGCATTCTTTGCC
 ACAGGAACCAGTGATGCCATGGATCAGTCATCCATGCATTCTGACCATGCACAGACAGTAATCCATAT
 AATCCTTCAAGTCATGAGAGTTGGATCAAGTTGGTGAAGAAAAAGAGGCAATGAACACCAGGGAAAGTG
 GCAAAGCTTCATCCAGTCTAGGTCTTCCAGGATTTGATTTGCTCCGGGTAAAGGAAGAGGAAAGTTATGC
 CAAAGTACTGTTGGTTCGATTAACAAAAACAGATCGTATTTATGCAATGAAAGTTGTGAAAAAGAGCTT
 GTTAATGATGATGAGGATATTGATTGGGTACAGACAGAGAAGCATGTGTTTGAGCAGGCATCCAATCATC
 CTTTCTTGTGGGCTGCATTCTTGCTTTCAGACAGAAAGCAGATTGTTCTTTGTTATAGAGTATGTA
 TGGAGGAGACCTAATGTTTCATATGCAGCGACAAAGAAACTTCTGAAGAACATGCCAGATTTACTCT
 GCAGAAATCAGTCTAGCATTAAATATCTTCATGAGCGAGGATAATTTATAGAGATTTGAAACTGGACA
 ATGTATTACTGGACTCTGAAGGCCACATTAACCTCACTGACTACGGCATGTGTAAGGAAGGATTACGGCC
 AGGAGATACAACCAGCACTTTCTGTGGTACTCTAATTACATTGCTCCTGAAATTTAAGAGGAGAAGAT
 TATGGTTTCAGTGTGACTGGTGGGCTCTTGGAGTGTCTATGTTTGGATGATGGCAGGAAGGTCTCCAT
 TTGATATTGTTGGGAGCTCCGATAACCCTGACCAGAACACAGAGGATTATCTCTTCCAAGTTATTTTGA
 AAAACAAATTCGCATACCACGTTCTATGTCTGTAAGAGCTGCAAGTGTCTGAAGAGTTTCTTAATAAG
 GACCCTAAGGAACGATTGGGTTGTCTTCTCAACAGGATTTGCTGATATTCAGGGACACCCGTTCTTCC
 GAAATGTTGATTGGGATATGATGGAGCAAAAACAGGTGGTACCTCCCTTTAAACCAATATTTCTGGGGA
 ATTTGGTTTGGACAACCTTTGATTCTCAGTTTACTAATGAACGTGTCCAGCTCACTCCAGATGACGATGAC
 ATTTGTGAGGAAGATTGATCAGTCTGAATTTGAAGTTTTGGATATCAATCCTCTTTTGTGCTGCAG
 AAGAATGTGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205379 protein sequence
 Red=Cloning site Green=Tags(s)

MSHTVAGGGSGDHSQVRVKAYYRGDIMITHFEPISFEGLCNEVRDMCSFDNEQLFTMKWIDEEGDPCT
 VSSQLELEEAFRLYELNKDSELLIHVFPCVPERPGMPCGEDKSIYRRGARRWRKLYCANGHTFQAKRFN
 RRAHCAICTDRIWGLGRQGYKCINCKLLVHKKCHKLVTEICGRHSLPQEPVMPMDQSSMHSDDHAQTVIPY
 NPSSHESLDQVGEKEAMNTRESGKASSSLGLQDFLLRVIGRGSYAKVLLVRLKKTDRITYAMKVVKKEL
 VNDDDEDIDWVQTEKHVFEQASNHPFLVGLHSCFQTESRLLFFVIEYVNGGDLMFHMQRQRKLPPEEHARFYS
 AEISLALNYLHERGIYRDLKLDNVLLDSEGHKLDYGMCKEGLRPGDTTSTFCGTPNYIAPEILRGED
 YGFSVDWWALGVLMFEMMAGRSPFDIVGSSDNPQNTEDYLFQVILEKQIRIPRSMVKAASVLSKFLNK
 DPKERLGLCPQTGFADIQHPFFRNVDWDMMEQKQVVPFPKPNISGEFGLDNFDSQFTNERVQLTPDDDD
 IVRKIDQSEFEGFEYINPLLSAEECV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6028_f06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002740

ORF Size: 1761 bp

OTI Disclaimer: 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](#)

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: [NM_002740.3](#)

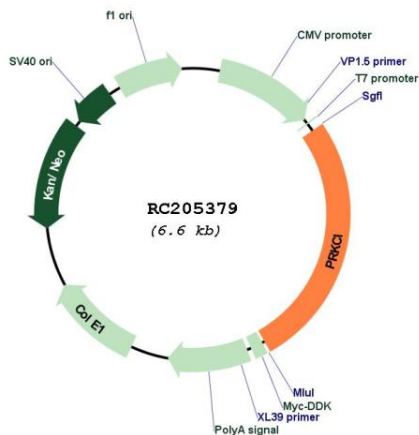
RefSeq Size: 4884 bp

RefSeq ORF: 1791 bp

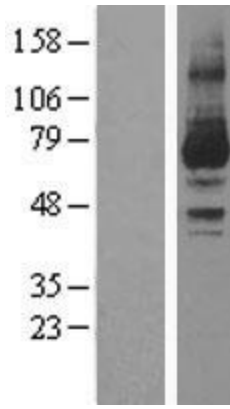
Locus ID: 5584

UniProt ID:	P41743
Cytogenetics:	3q26.2
Domains:	PB1, pkinase, S_TK_X, TyrKc, DAG_PE-bind, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Endocytosis, Insulin signaling pathway, Tight junction
MW:	67.3 kDa
Gene Summary:	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]

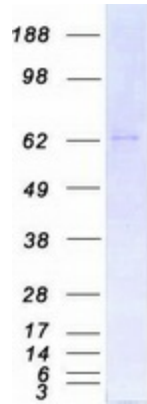
Product images:



Circular map for RC205379



Western blot validation of overexpression lysate (Cat# [LY400965]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205379 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PRKCI protein (Cat# [TP305379]). The protein was produced from HEK293T cells transfected with PRKCI cDNA clone (Cat# RC205379) using MegaTran 2.0 (Cat# [TT210002]).