

## Product datasheet for RC221952

### PCB (PC) (NM\_001040716) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PCB (PC) (NM_001040716) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCB
Synonyms:	PCB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221952 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RC221952 protein sequence  
 Red=Cloning site Green=Tags(s)

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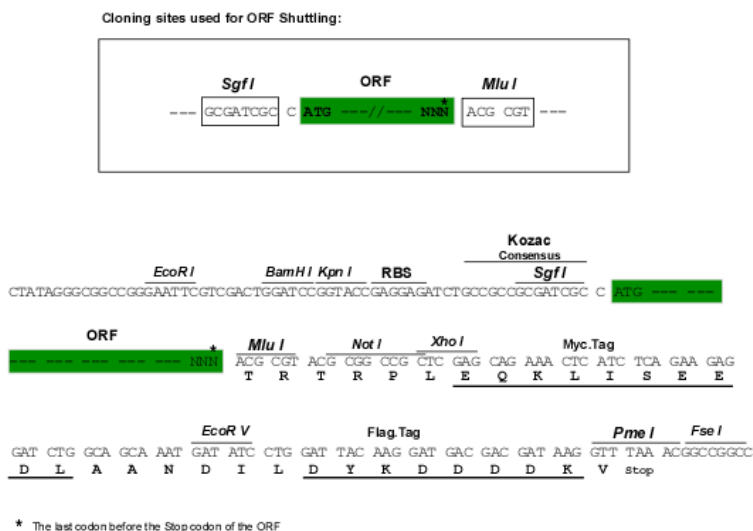
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6168\\_g10.zip](https://cdn.origene.com/chromatograms/mk6168_g10.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

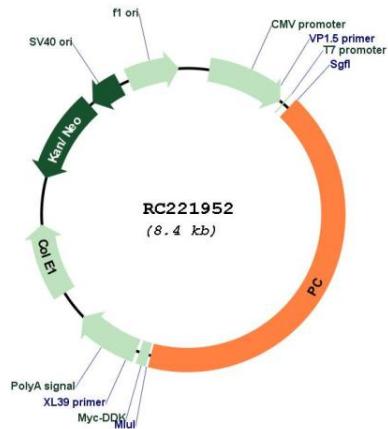


ACCN: NM\_001040716

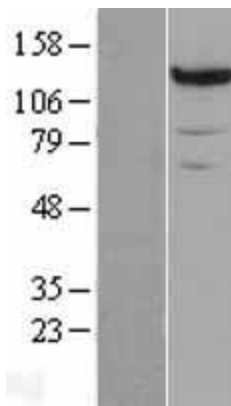
ORF Size: 3534 bp

<b>OTI Disclaimer:</b>	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>
<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_001040716.2</a>
<b>RefSeq Size:</b>	4192 bp
<b>RefSeq ORF:</b>	3537 bp
<b>Locus ID:</b>	5091
<b>UniProt ID:</b>	<a href="#">P11498</a>
<b>Cytogenetics:</b>	11q13.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Citrate cycle (TCA cycle), Metabolic pathways, Pyruvate metabolism
<b>MW:</b>	129.6 kDa
<b>Gene Summary:</b>	This gene encodes pyruvate carboxylase, which requires biotin and ATP to catalyse the carboxylation of pyruvate to oxaloacetate. The active enzyme is a homotetramer arranged in a tetrahedron which is located exclusively in the mitochondrial matrix. Pyruvate carboxylase is involved in gluconeogenesis, lipogenesis, insulin secretion and synthesis of the neurotransmitter glutamate. Mutations in this gene have been associated with pyruvate carboxylase deficiency. Alternatively spliced transcript variants with different 5' UTRs, but encoding the same protein, have been found for this gene. [provided by RefSeq, Jul 2008]

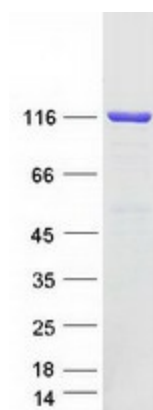
Product images:



Circular map for RC221952



Western blot validation of overexpression lysate (Cat# [LY420837]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221952 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PC protein (Cat# [TP321952]). The protein was produced from HEK293T cells transfected with PC cDNA clone (Cat# RC221952) using MegaTran 2.0 (Cat# [TT210002]).