

## Product datasheet for RC204545

### CYC1 (NM\_001916) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CYC1 (NM_001916) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CYC1
Synonyms:	MC3DN6; UQCR4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204545 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGCGGCAGCTGCGGCTTCGCTTCGCGGGGTAGTGTGGGCCCGCGGGGCGGGGCTCCCGGGCGCGC  
GTGCCCGGGTCTGCTGTGCAGCGCGGGCCCGGGCAGCTCCCGCTACGGACACCTCAGGCAGTGGCCTT  
GTCGTGAAGTCTGGCCTTCCCGAGGCCGAAAGTGATGCTGTCAGCGCTGGGCATGCTGGCGCAGGG  
GGTGGGGGCTGGCCGTGGCTCTGCATTGGCTGTGAGTGCCAGTGACCTGGAGCTGCACCCCCCAGCT  
ATCCGTGGTCTCACCGTGGCCTCCTCTCTCTTGGACCACACCAGCATCCGGAGGGTTCCAGGTATA  
TAAGCAGGTGTGCGCCTCCTGCCACAGCATGGACTTCGTGGCCTACCGCCACCTGGTGGCGTGTGCTAC  
ACGGAGGATGAAGCTAAGGAGCTGGCTGCGGAGGTGGAGGTTCAAGACGGCCCAATGAAGATGGGGAGA  
TGTTTATGCGGCCAGGAAGCTGTTGACTATTTCCAAAACCATACCCCAACAGTGAGGCTGCTCGAGC  
TGCCAACAACGGAGCATTGCCCCCTGACCTCAGCTACATCGTGCGAGCTAGGCATGGTGGTGGAGACTAC  
GTCTTCTCCCTGCTCACGGGCTACTGCGAGCCACCCACGGGGTGTCACTGCGGGAAGGTCTCTACTTCA  
ACCCCTACTTTCTGGCCAGGCCATTGCCATGGCCCCCTCCCATCTACACAGATGTCTTAGAGTTGACGA  
TGGACCCAGCTACCATGTCCCAGATAGCCAAGGATGTGTGCACCTTCTGCGCTGGGCATCTGAGCCA  
GAGCAGCACCATCGAAAACGCATGGGGCTCAAGATGTTGATGATGATGGCTCTGCTGGTGGCCCTGGTCT  
ACACCATAAAGCGGCACAAGTGGTCAGTCTGAAGAGTCGGAAGCTGGCATATCGGCCGCCCAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC204545 protein sequence  
 Red=Cloning site Green=Tags(s)

MAAAAASLRGVVLGPRGAGLPGARARGLLCSARPGQLPLRTPQAVALLSSKSGLSRGRKVMLSALGMLAAG  
 GAGLAVALHSASDLELHPPSYYPWSHRGLLSSLDHTSIRRGFQYKQVCASCHSMDFVAYRHLVGVCY  
 TEDEAKELAAEVEVQDGNEDGEMFMRPGKLFDYFPKYPNSEAARAANNALPPDLSYIVRARHGGEDY  
 VFSLLTGycePPTGVSLREGLYFNPFYFGQAIAMAPPIYTDVLEFDGTPATMSQIAKDVCTFLRWASEP  
 EHDHRKRMGLKMLMMALLVPLVYTIKRHKWSVLKSRKLAYRPPK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6010\\_d11.zip](https://cdn.origene.com/chromatograms/mk6010_d11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001916

**ORF Size:** 975 bp

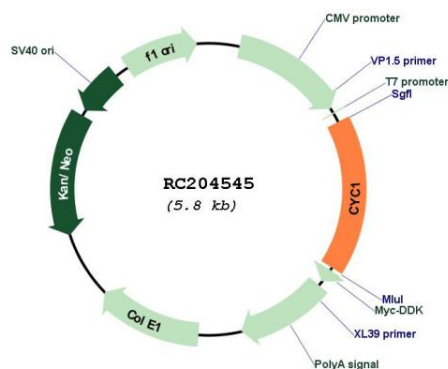
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

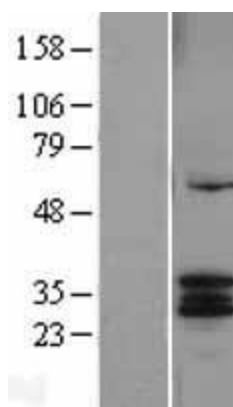
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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>	<u>NM_001916.2, NP_001907.2</u>
<b>RefSeq Size:</b>	1251 bp
<b>RefSeq ORF:</b>	978 bp
<b>Locus ID:</b>	1537
<b>UniProt ID:</b>	<u>P08574</u>
<b>Cytogenetics:</b>	8q24.3
<b>Domains:</b>	Cytochrome_C1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Alzheimer's disease, Cardiac muscle contraction, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
<b>MW:</b>	35.4 kDa
<b>Gene Summary:</b>	This gene encodes a subunit of the cytochrome bc1 complex, which plays an important role in the mitochondrial respiratory chain by transferring electrons from the Rieske iron-sulfur protein to cytochrome c. Mutations in this gene may cause mitochondrial complex III deficiency, nuclear type 6. [provided by RefSeq, Dec 2013]

## Product images:



Circular map for RC204545



Western blot validation of overexpression lysate (Cat# [LY400709]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204545 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).