

## Product datasheet for **RC209724**

### Cytochrome C (CYCS) (NM\_018947) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cytochrome C (CYCS) (NM_018947) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cytochrome C
Synonyms:	CYC; HCS; THC4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<p>&gt;RC209724 ORF sequence</p> <p>Red=Cloning site Blue=ORF Green=Tags(s)</p> <p>TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC</p> <p>ATGGGTGATGTTGAGAAAGGCAAGAAGATTTTTATTATGAAGTGTCCAGTGCCACACCGTTGAAAAGGAGGGCAAGCACAGACTGGGCCAAATCTCCATGGTCTCTTTGGGCGGAAGATAGGTCAGGCCCTGGATACCTTTACACAGCCGCAATAAAGACAAAGGCATCATCTGGGGAGAGGATACACTGATGGAGTATTTGGAGAATCCCAAGAAGTACATCCCTGGAACAAAATGATCTTTGTCGGCATTAGAAGAAGGAAGAAAGGGCAGACTTAATAGCTTATCTCAAAAAGCTACTAATGAG</p> <p>ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA</p>
Protein Sequence:	<p>&gt;RC209724 protein sequence</p> <p>Red=Cloning site Green=Tags(s)</p> <p>MGDVEKGKKIFIMKCSQCHTVEKGGKHKTGPNLHGLFGRKIGQAPGYSYTAANKNKGIIWGEDTLMEYLENPKKYIPGTMIFVGIKKKEERADLIAYLKATNE</p> <p>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</p>
Chromatograms:	<a href="https://cdn.origene.com/chromatograms/mk6142_g01.zip">https://cdn.origene.com/chromatograms/mk6142_g01.zip</a>
Restriction Sites:	SgfI-MluI


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## Cloning Scheme:



ACCN: NM\_018947

ORF Size: 315 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

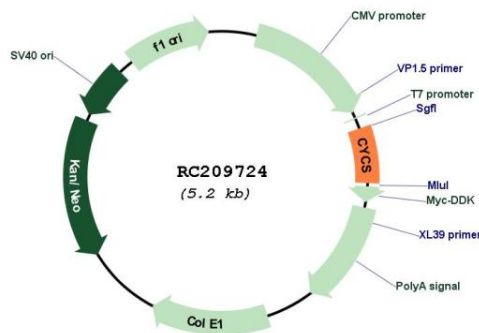
RefSeq: [NM\\_018947.6](#)

RefSeq Size: 5544 bp

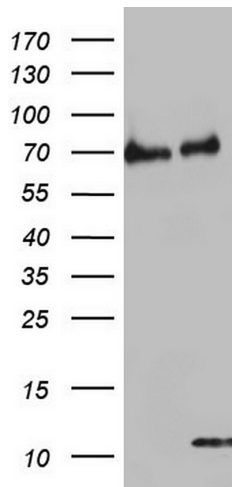
RefSeq ORF: 318 bp

Locus ID:	54205
UniProt ID:	<a href="#">P99999</a>
Cytogenetics:	7p15.3
Domains:	cytochrome_c
Protein Families:	Druggable Genome
Protein Pathways:	Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Apoptosis, Colorectal cancer, Huntington's disease, p53 signaling pathway, Parkinson's disease, Pathways in cancer, Small cell lung cancer, Viral myocarditis
MW:	11.8 kDa
Gene Summary:	This gene encodes a small heme protein that functions as a central component of the electron transport chain in mitochondria. The encoded protein associates with the inner membrane of the mitochondrion where it accepts electrons from cytochrome b and transfers them to the cytochrome oxidase complex. This protein is also involved in initiation of apoptosis. Mutations in this gene are associated with autosomal dominant nonsyndromic thrombocytopenia. Numerous processed pseudogenes of this gene are found throughout the human genome.[provided by RefSeq, Jul 2010]

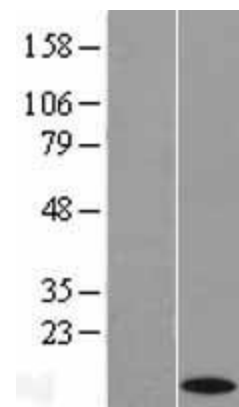
## Product images:



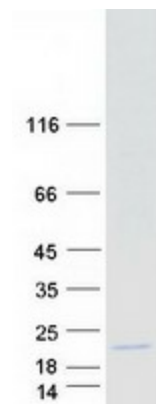
Circular map for RC209724



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CYCS (Cat# RC209724, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CYCS (Cat# [TA803645]). Positive lysates [LY402715] (100ug) and [LC402715] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402715]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209724 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CYCS protein (Cat# [TP309724]). The protein was produced from HEK293T cells transfected with CYCS cDNA clone (Cat# RC209724) using MegaTran 2.0 (Cat# [TT210002]).