

## Product datasheet for **RC200604**

### Cytochrome b5 Outer Mitochondrial Membrane (CYB5B) (NM\_030579) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cytochrome b5 Outer Mitochondrial Membrane (CYB5B) (NM_030579) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cytochrome b5 Outer Mitochondrial Membrane
Synonyms:	CYB5-M; CYPB5M; OMB5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200604 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGGCGACTGCGGAAGCTAGCGGCAGCGATGGAAAGGGCAGGAAGTCGAGACCTCAGTCACCTATTACCGGTTGGAGGAGGTGGCAAAGCGCAACTCCTTGAAGGAAGTGTGGCTTGTGATCCATGGGCGAGTCTACGATGTCACCCGCTTCCTCAACGAGCACCTGGAGGAGAAGAGGTTCTGCTGGAACAAGCTGGTGTAGATGCAAGTGAAAGCTTTGAAGATGTAGGACACTCTTCTGATGCCAGAGAAATGCTAAAGCAGTACTACATTGGTGATATCCATCCGAGTGACCTTAAACCTGAAAGTGGTAGCAAGACCCTTCAAAAAATGATACATGCAAAAGTTGCTGGGCATATTGGATTTTACCATCATAGGCGCTGTTCTCTTAGGTTTCTGTACCGCTACTACACATCGGAAAGCAAATCCTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC200604 protein sequence Red=Cloning site Green=Tags(s)
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MATAEASGSDGKGQEVETSVTYRLEEVAKRNSLKELWLVIHGRVYDVTRFLNEHPGGEEVLLAQAGVDA  
SESFEDVGHSSDAREMLKQYYIGDIHPSDLKPESGSKDPSKNDTCKSCWAYWILPIIGAVLLGFLYRYT  
SESKSS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV



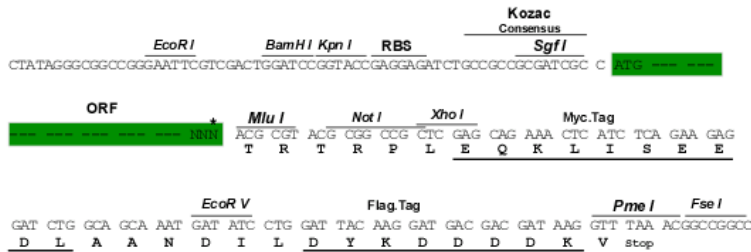
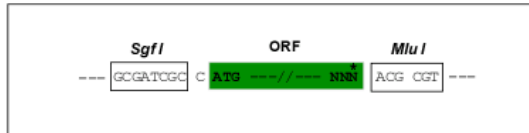
[View online »](#)

Chromatograms: [https://cdn.origene.com/chromatograms/mk6052\\_g06.zip](https://cdn.origene.com/chromatograms/mk6052_g06.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\_030579

ORF Size: 438 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\\_030579.1](#), [NP\\_085056.1](#)

**RefSeq Size:** 4286 bp

**RefSeq ORF:** 453 bp

**Locus ID:** 80777

**UniProt ID:** [O43169](#)

**Cytogenetics:** 16q22.1

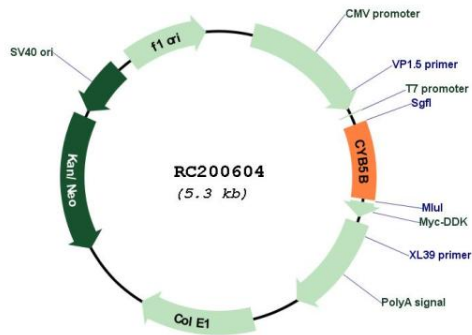
**Domains:** heme\_1

**Protein Families:** Transmembrane

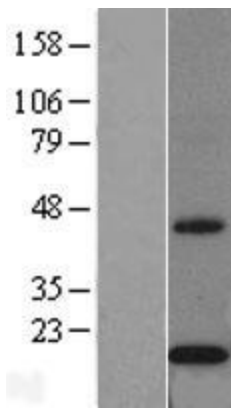
**MW:** 16.3 kDa

**Gene Summary:** Cytochrome b5 is a membrane-bound hemoprotein functioning as an electron carrier for several membrane-bound oxygenases.[UniProtKB/Swiss-Prot Function]

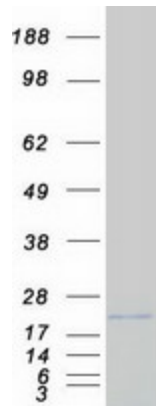
**Product images:**



Circular map for RC200604



Western blot validation of overexpression lysate (Cat# [LY410783]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200604 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CYB5B protein (Cat# [TP300604]). The protein was produced from HEK293T cells transfected with CYB5B cDNA clone (Cat# RC200604) using MegaTran 2.0 (Cat# [TT210002]).