

## **Product datasheet for RC230960**

### OriGene Technologies, Inc.

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# Cytochrome b5 (CYB5A) (NM\_001190807) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Cytochrome b5 (CYB5A) (NM\_001190807) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: CYB5A

Synonyms: CYB5; MCB5; METAG

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC230960 representing NM\_001190807
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

TCGCCTATACATGGCAGAGGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC230960 representing NM\_001190807

Red=Cloning site Green=Tags(s)

MAEQSDEAVKYYTLEEIQKHNHSKSTWLILHHKVYDLTKFLEEHPGGEEVLREQAGGDATENFEDVGHST

DAREMSKTFIIGELHPETLITTIDSSSSWWTNWVIPAISAVAVALMYRLYMAED

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

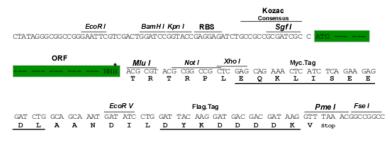
**Restriction Sites:** Sgfl-Mlul





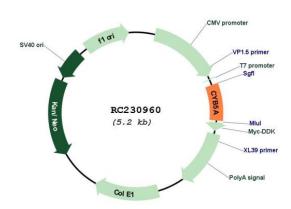
#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

#### Plasmid Map:



**ACCN:** NM\_001190807

ORF Size: 372 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



#### Cytochrome b5 (CYB5A) (NM\_001190807) Human Tagged ORF Clone - RC230960

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:** <u>NM 001190807.3</u>

 RefSeq Size:
 820 bp

 RefSeq ORF:
 375 bp

 Locus ID:
 1528

 UniProt ID:
 P00167

 Cytogenetics:
 18q22.3

**Protein Families:** Transmembrane

**MW:** 14.2 kDa

**Gene Summary:** The protein encoded by this gene is a membrane-bound cytochrome that reduces ferric

hemoglobin (methemoglobin) to ferrous hemoglobin, which is required for stearyl-CoA-

desaturase activity. Defects in this gene are a cause of type IV hereditary

methemoglobinemia. Three transcript variants encoding different isoforms have been found

for this gene. [provided by RefSeq, Jun 2010]