

Product datasheet for **RC221889**

Cytochrome b5 (CYB5A) (NM_001914) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cytochrome b5 (CYB5A) (NM_001914) 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 Sequence: >RC221889 representing NM_001914
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGCAGAGCAGTCGGACGAGGCCGTGAAGTACTACACCCTAGAGGAGATTCAGAAGCACAAACCACAGCA
AGAGCACCTGGCTGATCCTGCACCACAAGGTGTACGATTTGACCAAATTTCTGGAAGAGCATCCTGGTGG
GGAAGAAGTTTTAAGGGAACAAGCTGGAGGTGACGCTACTGAGAACTTTGAGGATGTCGGGCACTCTACA
GATGCCAGGAAATGTCCAAAACATTCATCATTGGGGAGTCCATCCAGATGACAGACCAAAGTTAAACA
AGCCTCCGGAACCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221889 representing NM_001914
Red=Cloning site Green=Tags(s)

MAEQSDEAVKYYTLEEIQKHNHNSKSTWLILHKKVYDLTKFLEEHPGGEEVLRQAGGDATENFEDVGHST
DAREMSKTFIIGELHPDDRPKLNKPEP

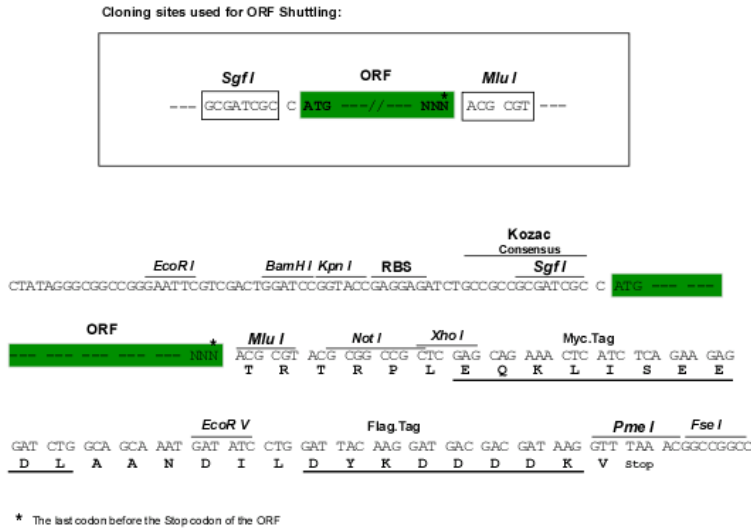
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

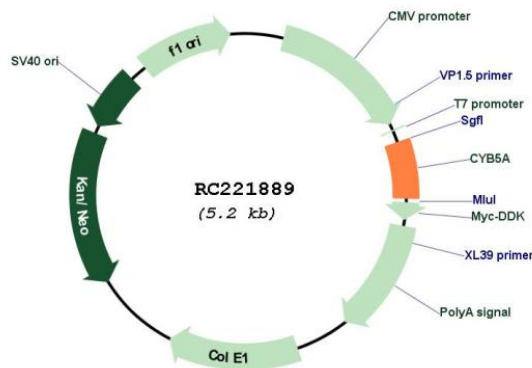


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001914

ORF Size: 294 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:	<ol style="list-style-type: none">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_001914.4</u>
RefSeq Size:	874 bp
RefSeq ORF:	297 bp
Locus ID:	1528
UniProt ID:	<u>P00167</u>
Cytogenetics:	18q22.3
Domains:	heme_1
Protein Families:	Transmembrane
MW:	11.3 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]