

Product datasheet for **RG202378**

Cytochrome b5 (CYB5A) (NM_148923) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cytochrome b5 (CYB5A) (NM_148923) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: Cytochrome b5
Synonyms: CYB5; MCB5; METAG
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG202378 representing NM_148923
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCAGAGCAGTCGGACGAGGCCGTGAAGTACTACACCCTAGAGGAGATTCAGAAGCACAAACCACAGCA
 AGAGCACCTGGCTGATCCTGCACCACAAGGTGTACGATTTGACCAAAATTTCTGGAAGAGCATCCTGGTGG
 GGAAGAAGTTTTAAGGGAACAAGCTGGAGGTGACGCTACTGAGAATTTGAGGATGTCGGGCACTCTACA
 GATGCCAGGAAATGTCCAAAACATTCATCATTGGGGAGCTCCATCCAGATGACAGACCAAAGTTAAACA
 AGCCTCCGAAACTTTATCACTACTATTGATTCTAGTCCAGTTGGTGGACCAACTGGGTGATCCCTGC
 CATCTCTGCAGTGCCCGTCGCCTTGATGTATCGCCTATACATGGCAGAGGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG202378 representing NM_148923
 Red=Cloning site Green=Tags(s)
 MAEQSDEAVKYYTLEEIQKHNHNSKSTWILHKKVYDLTKFLEEHPGGEEVLRQAGGDATENFEDVGHST
 DAREMSKTFIIGELHPDDRPLNKPPELITTTIDSSSSWWTNWVIPAISAVAVALMYRLYMAED

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_148923

ORF Size: 402 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.

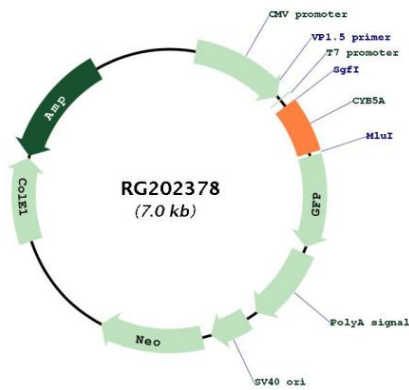
RefSeq: [NM_148923.4](#)

RefSeq Size: 820 bp

RefSeq ORF: 405 bp

Locus ID: 1528
UniProt ID: [P00167](#)
Cytogenetics: 18q22.3
Protein Families: Transmembrane
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]

Product images:



Circular map for RG202378