

Product datasheet for RC202378

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: Myc-DDK
Symbol: Cytochrome b5
Synonyms: CYB5; MCB5; METAG
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC202378 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCAGAGCAGTCGGACGAGGCCGTGAAGTACTACACCCTAGAGGAGATTCAGAAGCACAAACCACAGCA
 AGAGCACCTGGCTGATCCTGCACCACAAGGTGTACGATTTGACCAAAATTTCTGGAAGAGCATCCTGGTGG
 GGAAGAAGTTTTAAGGGAACAAGCTGGAGGTGACGCTACTGAGAATTTGAGGATGTCGGGCACTCTACA
 GATGCCAGGAAATGTCCAAAACATTCATCATTGGGGAGCTCCATCCAGATGACAGACCAAAGTTAAACA
 AGCCTCCGAAACTCTTATCACTACTATTGATTCTAGTCCAGTTGGTGGACCAACTGGGTGATCCCTGC
 CATCTCTGCAGTGGCCGTCGCTTGTATCGCCTATACATGGCAGAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202378 protein sequence
 Red=Cloning site Green=Tags(s)
 MAEQSDEAVKYYTLEEIQKHNHSKSTWLILHHKVYDLTKFLEEHPGGEEVLRQAGGDATENFEDVGHST
 DAREMSKTFIIGELHPDRPKLNKPPETLITIDSSSSWWTNWNWIPASAVAVALMYRLYMAED

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6012_d10.zip

Restriction Sites: SgfI-MluI



[View online »](#)

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.

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

RefSeq: [NM_148923.4](#)

RefSeq Size: 850 bp

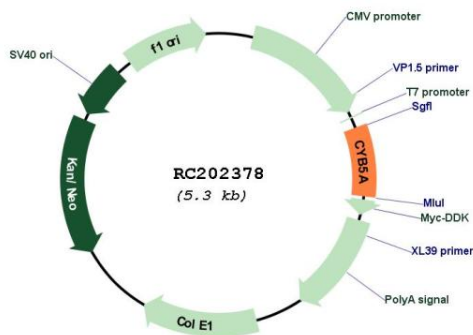
RefSeq ORF: 405 bp

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

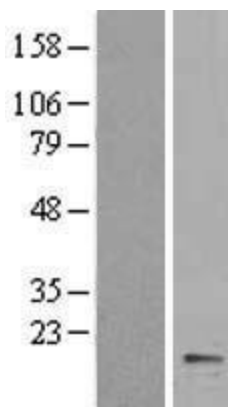
Protein Families: Transmembrane
MW: 15.3 kDa

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]

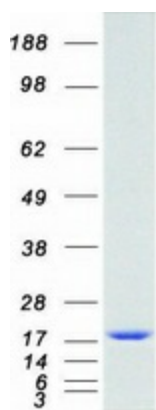
Product images:



Circular map for RC202378



Western blot validation of overexpression lysate (Cat# [LY403451]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202378 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CYB5A protein (Cat# [TP302378]). The protein was produced from HEK293T cells transfected with CYB5A cDNA clone (Cat# RC202378) using MegaTran 2.0 (Cat# [TT210002]).