

Product datasheet for **RC205203**

CYB5R4 (NM_016230) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYB5R4 (NM_016230) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CYB5R4
Synonyms:	cb5/cb5R; dj676j13.1; NCB5OR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC205203 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTGAACGTCCTTCCAGTCTTCCGGCCCCAGGTCGCAGCAGCGTGTGCGCTCCGGGGGGCGTA
 GCAAGGTACCTTTAAACAGGGCAGAAGCCTTATGGATTGGATTGACTGACAAAAGTGGAAAGGATCT
 AACGGGATTAAGAGCAGGTTAATTGAAGTAAGTGAAGAAGAACTTAAGAAACACAAACAAAAAGATGAT
 TGTTGGATATGCATAAGAGGTTTCGTTTATAATGTCAGCCCTTATATGGAGTATCATCTGGTGGAGAAG
 ATGAACTAATGAGAGCAGCAGGATCAGATGGTACTGAACCTTTTGGATCAGGTTTCATCGTTGGGTCATTA
 TGAATCCATGCTGAAAGAATGCCTGGTTGGCAGAATGGCCATTAACCTGCTGTTCTGAAAGACTATCGT
 GAGGAGGAAAAGAAAGTCTTAAATGGCATGCTTCCCAAGAGCCAAGTGACAGATACACTTGCCAAAGAAG
 GTCCTAGTTATCCAAGCTATGATTGGTTCCAAACAGACTCTTTAGTCACCATTGCCATATATACTAAACA
 GAAGGATATCAATTTAGACTCAATAATAGTTGATCATCAGAATGATTCCTTTAGAGCAGAAACAATTATT
 AAGGATTGTTTATATCTTATACATATTGGGCTAAGCCATGAGGTTGAGGAAAGATTTTCTGTGCGGGTTG
 TTGAGAGTGTGGGAAAAATAGAGATTGTTCTACAAAAAAGAGAATACTTCTTGGGACTTCTTGGCCA
 TCCCTGAAGAATCATAATTCACCTATTCCAAGGAAAGATACAGGTTTGTACTACAGAAAGTGCCAGTTA
 ATTTCCAAGGAAGATGTTACTCATGATACGAGGCTTTTCTGTTTGTGCTGCCACCAAGCACTCATCTTC
 AAGTGCCATTGGGCAACATGTTTACCTCAAGTACCTATTACAGGTACAGAAATAGTAAAGCCATATAC
 ACCTGTATCTGGTTCTTACTCTCAGAGTTCAAGGAACAGTCTTCCCAACAATAAATACATCTACTTT
 TTGATAAAAACTATCCCACTGGACTCTCACACCAGAGCTTGATCGTCTTCAGATTGGAGATTTTGT
 CTGTAAGCAGTCTGAGGCAATTTTAAATATCCAAGTCCAAGAATTAGAAGATCTCTTTTGTGGC
 AGCTGGAACAGGCTTACACCAATGGTTAAAATACTGAATTATGCTTTGACTGATATACCCAGTCTCAGG
 AAAGTGAAGCTGATGTTCTCAATAAAACAGAAGATGATATAATTTGGAGAAGCCAATTGGAGAATTAG
 CATTAAAGATAAAAGACTGGATGTTGAATTTGTTCTCTCAGCACCTATTTCTGAATGGAATGGCAAACA
 GGGACATATTTACCAGCTCTTCTTTCTGAATTTTAAAAGAAATTTGGACAAATCCAAAGTCTCGTC
 TGCATTTGTGGACCAGTCCATTTACAGAAACAGGAGTAAAGTTGCTGCATGATCTCACTTTTCCAAA
 ATGAGATCCATAGTTTTACAGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205203 protein sequence
 Red=Cloning site Green=Tags(s)

MLNVPSQSFAPRSQQRVASGGRSKVPLKQGRSLMDWIRLTKSGKDLTGLKGRLEIVTEELKHKHKDD
 CWICIRGFVYNVSPYMEYHPGGEDELMRAAGSDGTELFQVHRVWNYESMLKECLVGRMAIKPAVLKDYR
 EEEKVLNGLPKSQVDTLAKGSPSYDFWQDLSLVTIAIYTKQKDLNLSIIVDHQNSFRAETII
 KDCLYLIIHGLSHEVQEDFSVRVVEVSGKIEIVLQKKENTSWDFLGHPLKNHNSLIPRKDTGLYYRKQQL
 ISKEDVTHDTRLFCLMLPSTHLQVPIGQHVYLKLPITGTEIVKPYTPVSGSLLSEFKPVLNNKYIYF
 LIKIYPTGLFTPELDRQLIGDFVSVSSPEGNFKISKFQLEDLFLLAAGTGFTPMVKILNYALTDIPSLR
 KVKLMFNFKTEDDIIWRSQLEKLAFKDKRLDVEFVLSAPISEWNGKQGHISPALLSEFLKRNLDKSKVLV
 CICGPVPFTEQGVRLHDLNFSKNEIHSFTA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6072_h03.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_016230

ORF Size: 1563 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_016230.4](#)

RefSeq Size: 2259 bp

RefSeq ORF: 1566 bp

Locus ID: 51167

UniProt ID: [Q7L1T6](#)

Cytogenetics: 6q14.2

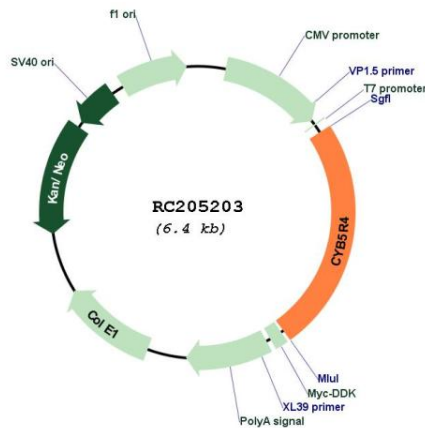
Domains: heme_1, NAD_binding_1, FAD_binding_6, CS

Protein Families: Druggable Genome

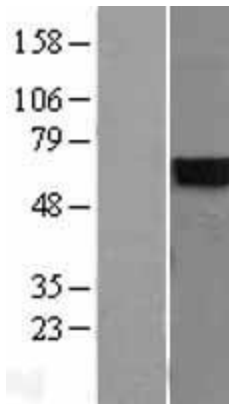
MW: 59.5 kDa

Gene Summary: NCB5OR is a flavohemoprotein that contains functional domains found in both cytochrome b5 (CYB5A; MIM 613218) and CYB5 reductase (CYB5R3; MIM 613213) (Zhu et al., 1999 [PubMed 10611283]).[supplied by OMIM, Jan 2010]

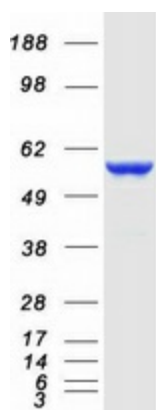
Product images:



Circular map for RC205203



Western blot validation of overexpression lysate (Cat# [LY402521]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205203 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CYB5R4 protein (Cat# [TP305203]). The protein was produced from HEK293T cells transfected with CYB5R4 cDNA clone (Cat# RC205203) using MegaTran 2.0 (Cat# [TT210002]).