

Product datasheet for **RG237099**

CYB5R2 (NM_001302826) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CYB5R2 (NM_001302826) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: CYB5R2
Synonyms: B5R.2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG237099 representing NM_001302826.
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGAATCCAGGAGGAGAGCCAATCACCTTACAGGACCTGAAGCCAAGTACCCGCTGCCCTTGATT
GAGAAAGAGAAAATCAGCCACAACCCGGAGTTCCGCTTTGGACTGCCTTCGCCGGACCATGTCTTA
GGGCTTCTGTAGGTAATATGTCCAGCTTTGGCAAAAATCGATAATGAATTGGTGGTCAGGGCTTAC
ACCCCTGTCTCCAGTGATGATGACAGAGGCTTTGTGGACCTAATTATAAAGATCTACTTCAAAAATGTA
CACCCCAATATCCTGAAGGTGGGAAGATGACTCAGTATTTGGAGAACATGAAAATCGGGGAGACCATC
TTTTTTTCGAGGGCAAGGGGACGCTTGTTTTACCATGGGCCAGGGAATCTTGAATCAGACCAGACCAG
ACGAGTGAGCCTAAAAAACACTGGCCGATCACCTGGGAATGATTGCTGGGGGCACAGGCATCACACCC
ATGTTGCAGCTCATTGCCACATACCAAGGACCCAGTGACAGGACCAGGATGTCCCTCATCTTTGCC
AACCAGGTCAGTTCCTGC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG237099
Blue=ORF Red=Cloning site Green=Tag(s)

```
MNSRRREPITLQDPEAKYPLPLIEKEKISHNTRFRFGLPSPDHVLGLPVGNYVQLLAKIDNELVVRAY
TPVSSDDDRGFVDLIIKIYFKNVHPQYPEGKMTQYLENMKIGETIFFRGRGRLFYHGPNLGIKIRPDQ
TSEPKTLADHLGMIAGGTGTPMLQLIRHITKDPDRTRMSLIFANQVSSC
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSPGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLSRDGGYSSVVDSHMHFKSAIHP SILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites: Sgfl-MluI

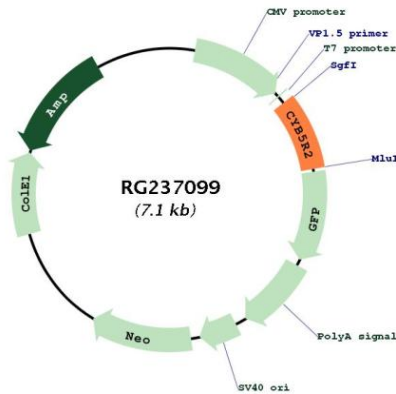


Cloning Scheme:


- ACCN:** NM_001302826
- ORF Size:** 3308 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).
- RefSeq:** [NM_001302826.1](#), [NP_001289755.1](#)
- RefSeq Size:** 1713 bp
- RefSeq ORF:** 831 bp
- Locus ID:** 51700
- UniProt ID:** [Q6BCY4](#)
- Cytogenetics:** 11p15.4
- Protein Families:** Druggable Genome
- MW:** 21.5 kDa

Gene Summary:

The protein encoded by this gene belongs to the flavoprotein pyridine nucleotide cytochrome reductase family of proteins. Cytochrome b-type NAD(P)H oxidoreductases are implicated in many processes including cholesterol biosynthesis, fatty acid desaturation and elongation, and respiratory burst in neutrophils and macrophages. Cytochrome b5 reductases have soluble and membrane-bound forms that are the product of alternative splicing. In animal cells, the membrane-bound form binds to the endoplasmic reticulum, where it is a member of a fatty acid desaturation complex. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2014]

Product images:


Circular map for RG237099