

## Product datasheet for **RG217261**

### CYB5R2 (NM\_016229) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** CYB5R2 (NM\_016229) 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:** >RG217261 representing NM\_016229  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAACTCCAGGAGGAGAGCCAATCACCTTACAGGACCCTGAAGCCAAGTACCCGCTGCCCTTGATTG  
 AGAAAGAGAAAATCAGCCACAACACCCGGAGGTTCCGCTTTGGACTGCCTTCGCCGACCATGTCTTAGG  
 GCTTCCTGTAGGTAAGTATGTCCAGCTCTGGCAAAAATCGATAATGAATTGGTGGTCAGGGCTTACACC  
 CCTGTCTCCAGTGATGACAGAGGCTTTGTGGACCTAATTATAAAGATCTACTCAAAAATGTACACC  
 CCCAATATCCTGAAGGTGGGAAGATGACTCAGTATTTGGAGAACATGAAAATCGGGGAGACCATCTTTT  
 TCGAGGGCCAAGGGGACGCTTGTTTACCATGGGCCAGGGAATCTTGAATCAGACCAGACCAGACGAGT  
 GAGCCTAAAAAACACTGGCCGATCACCTGGGAATGATTGCTGGGGGCACAGGCATCACCCCATGTTGC  
 AGCTCATTGCCACATACCAAGGACCCAGTGACAGGACCAGGATGTCCCTCATCTTGGCAACCAGGT  
 CAGTTCCTGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG217261 representing NM\_016229  
 Red=Cloning site Green=Tags(s)

MNSRRREPITLQDPEAKYPLPLIEKEKISHNTRFRFGLPSPDHVGLPVGNYVQLLAKIDNELVVRAYT  
 PVSSDDDRGFVDLIIKIYFKNVHPQYPEGGKMTQYLENMKIGETIFFRGPGRGLFYHGPGNLGIRPDQTS  
 EPKKTLDHLGMIAGGTGTPMLQLIRHITKDPDRTRMSLIFANQVSSC

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



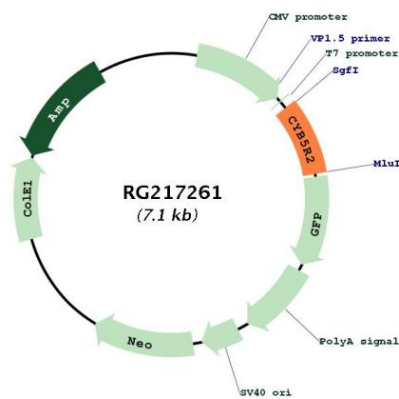
[View online »](#)

**Cloning Scheme:**


- ACCN:** NM\_016229
- ORF Size:** 570 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\\_016229.2](#), [NP\\_057313.2](#)
- RefSeq Size:** 1341 bp
- RefSeq ORF:** 831 bp
- Locus ID:** 51700
- UniProt ID:** [Q6BCY4](#)
- Cytogenetics:** 11p15.4

Domains:	NAD_binding_1, FAD_binding_6
Protein Families:	Druggable Genome
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 RG217261