

Product datasheet for **RG210231**

CYP2C18 (NM_000772) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP2C18 (NM_000772) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CYP2C18
Synonyms:	CPCI; CYP2C; CYP2C17; P450-6B/29C; P450IIC17
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RG210231 representing NM_000772
Red=Cloning site Blue=ORF Green=Tags(s)

```
TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC
```

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ATGGATCCAGCTGTGGCTCTGGTCTGTCTCTCTCCTGTTTGTTTCTCCTTTCACTCTGGAGGCAGAGCT  
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TAAGGACATGAGCAAATCCTTAACCAATTTCTCAAAAGTCTATGGCCCTGTGTTACTGTGTATTTTGGC  
CTGAAGCCATTGTGGTGTTCATGGATATGAAGCAGTGAAGGAGGCCCTGATTGATCATGGAGAGGAGT  
TTTCTGGAAGAGGAAGTTTTCCAGTGGCTGAAAAAGTTAACAAAGGACTTGGAAATCCTTTTCAGCAATGG  
AAAGAGATGGAAGGAGATCCGGCGTTTCTGCCTCATGACTCTGCGGAATTTGGGATGGGAAGAGGAGC  
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CCATGGATCCAGTCTGCAATAATTTCCCTGCTCTCATCGATTATCTCCAGGAAGTCATAATAAATAAG  
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TGACAAAAGAATCCCAACCCAGAGATGTTTACCCCTGGCCACTTCTGGATAAGAGTGGCAACTTTAAG  
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AGCTGTTTTTATTCTGACCACCATTTTGCAGAACTTTAACCTGAAATCTCAGGTTGACCCAAAGGATAT  
TGACATCACCCCCATTGCCAATGCATTTGGTCTGTGCCACCTTGTACCAGCTCTGCTTCATCCTGTC
```

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG210231 representing NM_000772
Red=Cloning site Green=Tags(s)

```
MDPAVALVLCLSCLFLLSLWRQSSGRGRLPSGPTPLPIIGNILQLDVKDMKSLTNFSKVYGPVFTVYFG  
LKPIVVLHGVEAVKEALIDHGEEFSGRGSFPAEKVNKGLGILFSNGKRWKEIRRFCLMTRLNFMGMKRS  
IEDRVQEEARCLVEELRKTNASPCDPTFILGCAPCNVICSVIFHDFRDYKQRFNLNMEKFENLRILSS  
PWIQVCNNFPALIDYLPESHNKIAENFAYIKSYVLERIKEHQESLDMNSARDFIDCFLIKMEQEKHNQQS  
EFTVESLIATVDMFGAGTETTSTTLRYGLLLLLKYPEVTAKVQEEIECVVGRNRSPCMQDRSHMPYTD  
VVHEIQRYIDLPTNLPHAVTCDVKFKNYLIPKGTIITSLTSVLHNDKEFPNPEMFDPGHFLDKSGNFK  
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```

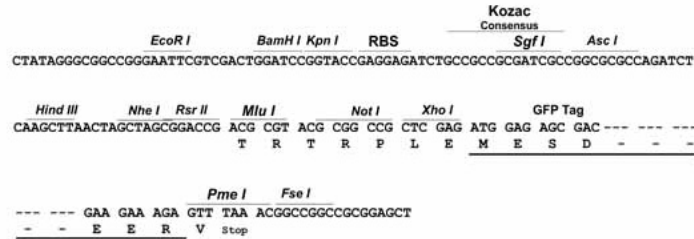
TRTRPLE - GFP Tag - V

Restriction Sites:

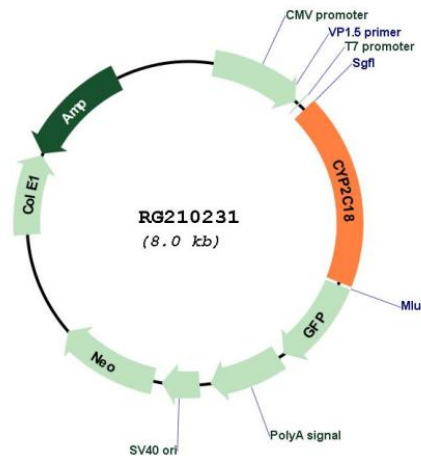
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_000772
 ORF Size: 1470 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_000772.3](#)

RefSeq Size: 1995 bp

RefSeq ORF: 1473 bp

Locus ID: 1562

UniProt ID: [P33260](#)

Cytogenetics: 10q23.33

Domains: p450

Protein Families: Druggable Genome, P450

Protein Pathways: Arachidonic acid metabolism, Drug metabolism - cytochrome P450, Linoleic acid metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Retinol metabolism

Gene Summary:

This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum but its specific substrate has not yet been determined. The gene is located within a cluster of cytochrome P450 genes on chromosome 10q24. An additional gene, CYP2C17, was once thought to exist; however, CYP2C17 is now considered an artefact based on a chimera of CYP2C18 and CYP2C19. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]