

Product datasheet for **RG230829**

Cytochrome P450 2C8 (CYP2C8) (NM_001198853) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cytochrome P450 2C8 (CYP2C8) (NM_001198853) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CYP2C8
Synonyms:	CPC8; CYP2C8DM; CYPIIC8; MP-12/MP-20
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG230829 representing NM_001198853
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAACCTTTTGTGGTCTGGTCTGTGTCTCTCTTTTATGCTTCTCTTTTCACTCTGGAGACAGAGCT
 GTAGGAGAAGGAAGCTCCCTCCTGGCCCCACTCCTCTTCTATTATTGGAAATATGCTACAGATAGATGT
 TAAGGACATCTGCAAAATCTTCCACCAATTTCTCAAAGTCTATGGTCTGTGTTACCGGTATTTTGGC
 ATGAATCCCATAGTGGTGTTCATGGATATGAGTCAGTGAAGGAAGCCCTGATTGATAATGGAGAGGAGT
 TTTCTGGAAGAGGCAATCCCAATATCTCAAAGAATTACTAAAGGACTTGGAAATCATTTCCAGCAATGG
 AAAGAGATGGAAGGAGATCCGGCGTTTCTCCCTCACACCTTGCAGGAATTTGGGATGGGGAAGAGGAGC
 ATTGAGGACCGTGTCAAGAGGAAGCTCACTGCCTTGTGGAGGAGTTGAGAAAAACCAAGGCTTCACCT
 GTGATCCCACTTTCATCCTGGGCTGTGCTCCCTGCAATGTGATCTGCTCCGTTGTTTTCCAGAAACGATT
 TGATTATAAAGATCAGAATTTTCTCACCTGATGAAAAGATTCAATGAAAACCTCAGGATTCTGAACTCC
 CCATGGATCCAGTCTGCAATAATTTCCCTCTACTCATTGATTGTTTCCAGGAACCTCACAAACAAAGTGC
 TAAAAATGTTGCTCTTACACGAAGTTACATTAGGGAGAAAGTAAAAGAACCAAGCATCACTGGATGT
 TAACAATCCTCGGGACTTTATCGATTGCTTCTGATCAAATGGAGCAGGAAAAGGACAACCAAAAGTCA
 GAATTCATATTGAAAACCTGGTTGGCACTGTAGCTGATCTATTTGTTGCTGGAACAGAGACAACAAGCA
 CCACTCTGAGATATGGACTCCTGCTCCTGCTGAAGCACCAGAGGTACAGCTAAAGTCCAGGAAGAGAT
 TGATCATGTAATTGGCAGACACAGGAGCCCTGCATGCAGGATAGGAGCCACATGCCTTACACTGATGCT
 GTAGTGCACGAGATCCAGAGATACAGTGACCTTGTCCCCACCGGTGTGCCCATGCAGTGACCCTGATA
 CTAAGTTCAGAACTACCTCATCCCCAAGGGCACCAACATAATGGCATTACTGACTCCGTGCTACATGA
 TGACAAAAGAATTCCTAATCCAAATATCTTTGACCTGGCCACTTCTAGATAAGAATGGCAACTTTAAG
 AAAAGTGACTACTTATGCCTTTCTCAGCAGGAAAACGAATTTGTGCAGGAGAAGGACTTCCCCGCATGG
 AGCTATTTTTATTCTAACCACAATTTTACAGAACTTTAACCTGAAATCTGTTGATGATTTAAAGAACCT
 CAATACTACTGCAGTTACCAAAGGGATTGTTTCTCTGCCACCCTCATACCAGATCTGCTTCATCCCTGTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG230829 representing NM_001198853
 Red=Cloning site Green=Tags(s)

MEPFVVLVLCFSMLLFSLWRQSCRRLPPGPTPLPIIGNMLQIDVKDICKSFTNFSKVYGPVFTVYFG
 MNPIVVFHGYESVKEALIDNGEEFSGRGNPISQRITKGLGISSNGKRWKEIRRFSLTTLRNFNGMKRS
 IEDRVQEEAHCLVEELRKTAKSPCDPTFILGCAPCNVICSVVVFQKRFDYKDQNFLTMKRFNENFRILNS
 PWIQVCNNFPLLIDCFPGTHNKVLKNVALTRSYIREKVKEHQASLDVNNPRDFIDCFLIKMEQEKDNQKS
 EFNIEENLVGTVDLFDVAGTETTSTLRYGLLLLLKHPEVTAQVQEEIDHVIQRHRSQPCMDRSHMPYTD
 VVHEIQRYSDLVPTGVPHAVTTDTKFRNYLIPKGTTIMALLTSVLHDDKEFPNPNIFDPGHFLDKNGNFK
 KSDYFMPFSAGKRICAGEGLARMELFLFTTILQFNLSVDDLKLNLTAVTKGIVSLPPSYQICFIPV

TRTRPLE – GFP Tag – V

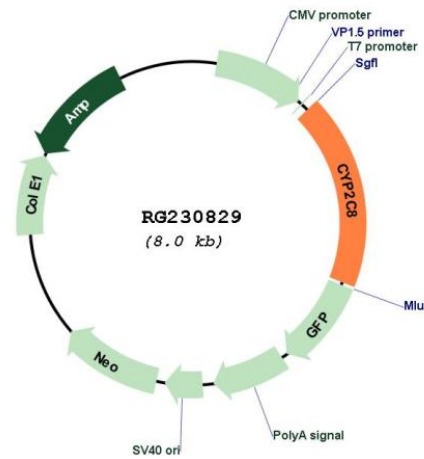
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001198853

ORF Size: 1260 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:	<ol style="list-style-type: none">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_001198853.1 , NP_001185782.1
RefSeq Size:	1962 bp
RefSeq ORF:	1263 bp
Locus ID:	1558
UniProt ID:	P10632
Cytogenetics:	10q23.33
Protein Families:	Druggable Genome, P450, Transmembrane
Protein Pathways:	Arachidonic acid metabolism, Drug metabolism - cytochrome P450, Linoleic acid metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Retinol metabolism
Gene Summary:	<p>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 and its expression is induced by phenobarbital. The enzyme is known to metabolize many xenobiotics, including the anticonvulsive drug mephenytoin, benzo(a)pyrene, 7-ethoxycoumarin, and the anti-cancer drug taxol. This gene is located within a cluster of cytochrome P450 genes on chromosome 10q24. Several transcript variants encoding a few different isoforms have been found for this gene. [provided by RefSeq, Nov 2010]</p>