

Product datasheet for **RG213502**

Cytochrome P450 2E1 (CYP2E1) (NM_000773) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cytochrome P450 2E1 (CYP2E1) (NM_000773) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cytochrome P450 2E1
Synonyms:	CPE1; CYP2E; P450-J; P450C2E
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG213502 representing NM_000773
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGGATCGCC

ATGCTGCGCCTCGGAGTCACCGTGGCCCTGCTGGTGTGGGCGGCCTTCTCTGCTGGTGTCCATGTGGA
 GGCAGGTGCACAGCAGCTGGAATCTGCCCCAGGCCCTTCCCGCTTCCCATCATCGGGAACCTCTTCCA
 GTTGAATTGAAGAATATTTCCCAAGTCCTTACCCGGTTGGCCAGCGCTTCGGGCCGGTGTTCACGCTG
 TACGTGGGCTCGCAGCGCATGGTGGTATGCACGGCTACAAGCGGTGAAGGAAGCGCTGCTGGACTACA
 AGGACGAGTTCTCGGGCAGAGGCGACCTCCCCGCTTCCATGCGCACAGGGACAGGGGAATCATTTTTAA
 TAATGGACCTACCTGGAAGGACATCCGGCGTTTTCCCTGACCACCCTCCGGAATATGGGATGGGGAAA
 CAGGGCAATGAGAGCCGGATCCAGAGGGAGGCCACTTCTGCTGGAAGCACTCAGGAAGACCCAAGGCC
 AGCCTTTCGACCCACCTTCTCATCGGCTGCGGCCCTGCAACGTCATAGCCGACATCCTTCCGCAA
 GCATTTTGACTACAATGATGAGAAGTTTCTAAGGCTGATGATTTGTTTAAATGAGAACTCCACCTACTC
 AGCACTCCCTGGCTCCAGCTTTACAATAATTTTCCAGCTTCTACACTACTTGCCTGGAAGCCACAGAA
 AAGTCATAAAAAATGTGGCTGAAGTAAAAGAGTATGTGTCTGAAAGGGTGAAGGAGCACCATCAATCTCT
 GGACCCAACTGTCCCGGGACCTCACCAGTGCCTGCTCGTGGAAATGGAGAAGGAAAAGCACAGTGCA
 GAGCGCTGTACACAATGGACGGTATCACCAGTACTGTGGCCGACCTGTTCTTTGCGGGGACAGAGACCA
 CCAGCACAACTCTGAGATATGGGCTCCTGATTCTCATGAAATACCCTGAGATCGAAGAGAAGCTCCATGA
 AGAAATGACAGGGTATTGGGCAAGCCGAATCCCTGCCATCAAGGATAGGCAAGAGATGCCCTACATG
 GATGCTGTGGTGCATGAGATTACGGGTTTATCACCCTCGTGCCTCCAACCTGCCCATGAAGCAACCC
 GAGACACCAATTTTCAAGGATACCTCATCCCCAAGGGCACAGTGTAGTCCAACTCTGGACTGTGTTT
 GTATGACAACCAAGAATTTCTGATCCAGAAAAGTTTAAGCCAGAACACTTCTGAATGAAAATGGAAAAG
 TTCAAGTACAGTACTATTTCAAGCCATTTTCCACAGGAAAACGAGTGTGTGCTGGAGAAGCCTGGCTC
 GCATGGAGTTGTTTCTTTGTTGTGTGCCATTTTGCAGCATTTTAAATTTGAAGCCTCTCGTTGACCCAAA
 GGATATCGACCTCAGCCCTATACATATTGGGTTTGGCTGTATCCACCACGTTACAACTCTGTGTCATT
 CCCCCTCA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG213502 representing NM_000773
 Red=Cloning site Green=Tags(s)

MSALGVTVALLVWAAFLLLVSMWRQVHSSWNLPPGPFPLPIIGNLFQLELKNIPKSFTRLAQRFGPVFTL
 YVGSQRMVVMHGYKAVKEALLDYKDEFSGRGDLPAFHHRDRGIIFNNGPTWKDIRRSLTTLRNYGMGK
 QGNESRIQREAHFLLEALRKTQGPFDPFLIGCAPCNVIADILFRKHFYNDKFLRLMYLFNENFHLL
 STPWLQLYNNFPSFLHYLPGSHRKVIKNVAEVKEYVYSERVEKHHQSLDPNCPDLDCLL VEMEKEKHS
 ERLYTMDGITVTVDLFFAGTETTSTTLRYGLLILMKYPEIEEKLHEEIDRVIGPSRIPAIDRQEMPYM
 DAVVHEIQRFITLVPSNLPHEATRDTIFRGLIPKGTVVVPTLDSVL YDNQEPDPEKFKPEHFLNENK
 FKYSDFKPFSTGKRV CAGEGLARMEFLLLCAILQHFNLKPLVDPKDIDLSPHIGFGCIPPRYKLCVI
 PRS

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_000773

ORF Size: 1479 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_000773.4](#)

RefSeq Size: 1667 bp

RefSeq ORF: 1482 bp

Locus ID: 1571

UniProt ID: [P05181](#)

Cytogenetics: 10q26.3

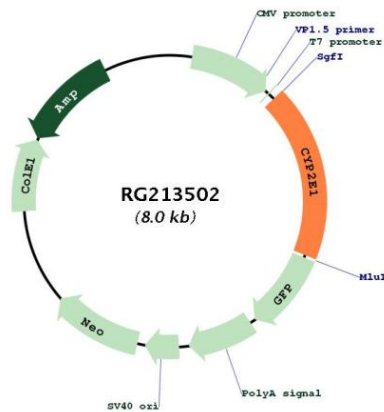
Domains: p450

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

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 and is induced by ethanol, the diabetic state, and starvation. The enzyme metabolizes both endogenous substrates, such as ethanol, acetone, and acetal, as well as exogenous substrates including benzene, carbon tetrachloride, ethylene glycol, and nitrosamines which are premutagens found in cigarette smoke. Due to its many substrates, this enzyme may be involved in such varied processes as gluconeogenesis, hepatic cirrhosis, diabetes, and cancer. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG213502