

## Product datasheet for **RG238544**

### Cytochrome P450 3A5 (CYP3A5) (NM\_001291830) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cytochrome P450 3A5 (CYP3A5) (NM_001291830) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CYP3A5
Synonyms:	CP35; CYP11A5; P450PCN3; PCN3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG238544 representing NM\_001291830.  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGCAATTACTGATGTTGGAGTTGCTGTTATTATTTATCGTATATGGGACCCGTACACATGGACTTTTT
AAGAGACTGGGAATTCAGGGCCACACCTCTGCCTTTGTTGGGAAATGTTTTGCCTATCGTCAGGGT
CTCTGGAAATTTGACACAGAGTGTATAAAAAGTATGGAAAAATGTGGGAAACGTATGAAGGTCAACTC
CCTGTGCTGGCCATCACAGATCCCGACGTGATCAGAACAGTGCTAGTGAAGAATGTTATTCTGTCTTC
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TGGAAGAGAATACGGTCAATTGCTGTCTCCAACCTTACCAGCGGAAAACTCAAGGAGATGTTCCCATC
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TTGAAAGACATCTTTGGGCCTACAGCATGGATGTGATTACTGGCACATCATTGGAGTGAACATCGAC
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CCATTATTTCTCAATAAATACTCTTTCCATTCCTTACCCAGTTTTTTGAAGCATTAAATGTCTCTCTG
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AAACAAAAGCACCAGACTAGATTTCTTCAGCTGATGATTGACTCCAGAATTCGAAAGAAAAGTGAAGTCC
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ACCAGCAGTGTCTTTCCCTTCACTTTATGAACTGGCCACTCACCTGATGTCCAGCAGAAAAGTCAA
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AGCATAGATCCTTACATATACACACCCTTTGAACTGGACCCAGAAAAGTGCATTGGCATGAGGTTTGTCT
CTCATGAACATGAACTTGTCTAATCAGAGTCTTTCAGAACTTCTCCTTCAAACCTTGAAGAAACA
CAGATCCCTTGAATAGACACGCAAGGACTTCTCAACCAGAAAAACCATTGTTCTAAAGTGGAT
TCAAGAGATGGAACCCTAAGTGGAGAA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence:

>Peptide sequence encoded by RG238544  
 Blue=ORF Red=Cloning site Green=Tag(s)

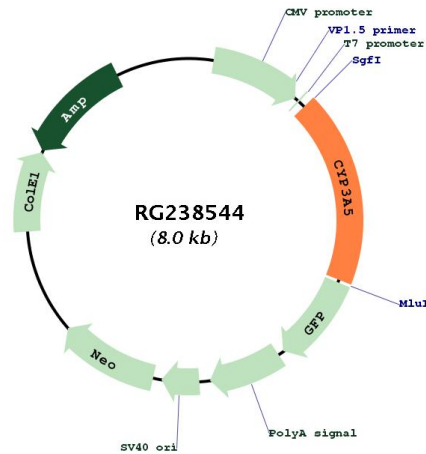
```
MQLLMLELLLLFIVYGTRTHGLFKRLGIPGPTPLPLLGNVLSYRQGLWKFDETECYKKGKMWGTYEQQL
PVLAITDPDVIRTVLVKECYSVFTNRRSLGPVGFMSAISLAEDEEWKRIRSLLSPTFTSGLKEMFPI
IAQYGDVLRNLRREAEGKPVTLKIDIFGAYSMDVITGTSFGVNIIDSLNPDQPFVESTKFLKFGFLD
PLFLSIIILFPFLTPVFEALNVSLFPKDTINFLSKSVNRMKKSRLNDKQKHRLDFLQLMIDSQNSKETES
HKALSDLELAAQSIIFIFAGYETTSSVLSFTLYELATHPDVQQLQKEIDAVLPNKAPPTYDAVVQMEY
LDMVVNETLRLFPVAIRLERTCKKDVEINGVFIKGSMMVVIPTYALHHPKYWTEPEEFRPERFSKKKD
SIDPYIYTPFGTGRNCIGMRFALMNMKLALIRVLQNFSPKPKETQIPLKLDLQGLQPEKPIVLKVD
SRDGTLSGE
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
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Restriction Sites:

Sgfl-Mlul



Plasmid Map:



ACCN: NM\_001291830

ORF Size: 1476 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\\_001291830.2](#)

RefSeq Size:	2015 bp
RefSeq ORF:	1479 bp
Locus ID:	1577
Cytogenetics:	7q22.1
Protein Families:	Druggable Genome, P450, Transmembrane
Protein Pathways:	Drug metabolism - cytochrome P450, Drug metabolism - other enzymes, Linoleic acid metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Retinol metabolism
MW:	56.5 kDa
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. The encoded protein metabolizes drugs as well as the steroid hormones testosterone and progesterone. This gene is part of a cluster of cytochrome P450 genes on chromosome 7q21.1. Two pseudogenes of this gene have been identified within this cluster on chromosome 7. Expression of this gene is widely variable among populations, and a single nucleotide polymorphism that affects transcript splicing has been associated with susceptibility to hypertension. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014]</p>