

Product datasheet for **RC238544**

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:	Myc-DDK
Symbol:	CYP3A5
Synonyms:	CP35; CYP11A5; P450PCN3; PCN3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RC238544 representing NM_001291830
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGCAATTACTGATGTTGGAGTTGCTGTTATTATTATCGTATATGGGACCCGTACACATGGACTTTTTA
 AGAGACTGGGAATTCAGGGCCACACCTCGCCTTGTGGGAAATGTTTTGTCCTATCGTCAGGGTCT
 CTGGAAATTTGACACAGAGTGCTATAAAAAAGTATGAAAAAATGTGGGGAACGTATGAAGGTCAACTCCCT
 GTGCTGGCCATCACAGATCCCGACGTGATCAGAACAGTGCTAGTAAAAGAATGTTATTCTGTCTTCACAA
 ATCGAAGGTCTTTAGGCCAGTGGGATTTATGAAAAGTGCCATCTCTTTAGCTGAGGATGAAGAATGGAA
 GAGAATACGGTCATTGCTGTCTCAACCTTCACCAGCGGAAAACCAAGGAGATGTTCCCATCATTGCC
 CAGTATGGAGATGATTGGTGAGAACTTGAGGCGGGAAGCAGAGAAAGGCAAGCCTGTCACCTTGAAG
 ACATCTTTGGGGCTACAGCATGGATGTGATTACTGGCACATCTTTGGAGTGAACATCGACTCTCTCAA
 CAATCCACAAGACCCCTTTGTGGAGAGCACTAAGAAGTTCCTAAAATTTGTTTTCTTAGATCCATTATTT
 CTCTCAATAATACTCTTTCCATTCTTACCCAGTTTTTGAAGCATTAAATGTCTCTCTGTTTCCAAAAG
 ATACCATAAATTTTTAAGTAAATCTGTAACAGAATGAAGAAAAGTCGCCTCAACGACAAAACAAAAGCA
 CCGACTAGATTTCTTCAGCTGATGATTGACTCCAGAAATTCGAAAGAACTGAGTCCCACAAAAGCTCTG
 TCTGATCTGGAGCTCGCAGCCAGTCAATAATCTTCATTTTTGCTGGCTATGAAACCACCAGCAGTGTC
 TTTCTTCACTTTATATGAACTGGCCACTACCCTGATGTCCAGCAGAACTGCAAAAAGGAGATTGATGC
 AGTTTTGCCCAATAAGGCACCACCTACCTATGATGCCGTGGTACAGATGGAGTACCTTGACATGGTGGT
 AATGAAACTCAGATTATCCCAGTTGCTATTAGACTTGAGAGGACTTGCAAGAAAGATGTTGAAATCA
 ATGGGGTATTCATCCCAAAGGTTCAATGGTGGTATTCCAACCTATGCTCTTCCACATGACCCAAAGTA
 CTGGACAGAGCCTGAGGAGTTCGCCCTGAAAGTTTTCAGTAAGAAGAAGGACAGCATAGATCCTTACATA
 TACACACCCTTTGAACTGGACCAGAAAATGCATTGGCATGAGGTTTGCTCTCATGAACATGAAACTTG
 CTCTAATCAGAGTCTTCCAGAACTTCTCTTCAAACCTTGTAAAGAAAACAGATCCCCTTGAATTAGA
 CACGCAAGGACTTCTTCAACCAGAAAACCCATTGTTCTAAAGGTGGATTCAAGAGATGGAACCCTAAGT
 GGAGAA

ACCGGTACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238544 representing NM_001291830
 Red=Cloning site Green=Tags(s)

MQLLMLELLLLFIVYGRTHGLFKRLGIPGPTPLPLLGNVLSYRQGLWKFDETECYKYGKMWGTYEQLP
 VLAITDPDVIRTVLVKECYSVFTNRRSLGPVGFMKSAISLAEDEEWKRIRSLSPFTTSGKLEMFPIIA
 QYGDVLRNLRREAEGKPVTLKIDIFGAYSMDVITGTSFGVNIIDSLNNPQDPFVESTKKFLKFGFLDPLF
 LSIILFPFLTPVFEALNVSLFPKDTINFLSKSVNRMKKSRLNDKQKHLDFLQLMIDSQNSKETESHKAL
 SDLELAAQSIIFIFAGYETTSSVLSFTLYELATHPDVQQKLQKEIDAVLPNKAPPTYDAVVMQMEYLDVV
 NETLRLFPVAIRLERTCKDVEINGVFIIPKGSVVIIPTYALHHDPKYWTEPEEFRPERFSKKKDSIDPYI
 YTPFGTGRNCIGMRFALMNMKLALIRVLQNFSPKPKETQIPLKLDTQGLLQPEKPIVLKVDSRDGTL
 SGE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

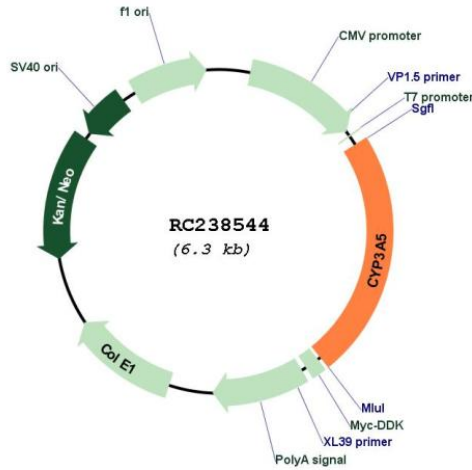
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

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).

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_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>