

Product datasheet for **RG224082**

CYP4A22 (NM_001010969) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP4A22 (NM_001010969) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CYP4A22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG224082 representing NM_001010969
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGTGTCTCTGCTCTGAGCCCCAGCAGACGCCTGGGTGGTGTCTCCGGATCCTCCAAGTGACCTCCC
 TGCTCATTCTGCTTCTGCTGCTGATCAAGGCAGCTCAGCTCTACCTGCATAGGCAGTGGCTGCTCAAAGC
 CCTCCAGCAGTCCCGTGCCCTCCCTCCCACTGGCTCTTCGGGCACATCCAGGAGTTCCAACACGACCAG
 GAGCTACAACGGATTAGGAACGGGTGAAGACATCCCAAGTGCCTGTCTTATTGGATATGGGAGGCA
 AAGTTCGTGTCCAGCTCTATGACCCTGACTATATGAAGGTGATTCTGGGAGATCAGACCCGAAATCCCA
 TGGATCTACAAATTCCTGGCTCCACGGATTGGGTACGGCTTGTCTCTGTTGAATGGGCAGACATGGTTC
 CAGCATCGACGGATGCTGACCCAGCCTCCACAATGACATCCTGAAGCCATACGTGGGGCTCATGGCAG
 ACTCTGTACGAGTGTGTTGACAAATGGGAAGAGCTCCTTGCCAGGATCCCCTCTGGAGGTCTTTCA
 GCAGTCTCCTTGATGACCCTGGACACCATCATGAAGAGTGCCTTCAGCCATCAGGGCAGCATCCAGGTG
 GACAGGAATTCTAGTCCCTACATCCAGGCCATTAGTGACCTGAACAGCCTGGTTTTTTGCTGTATAGGGA
 ATGCCTTTTCATGAGAATGACACCATCTACAGCCTGACCTCTGCTGGCCGCTGGACACACCCGCGCTGCCA
 GCTGGCCCATCAGCACACAGACCAAGTATCCAAGTGGGAAGGCTCAACTACAGAAGGAGGGGGAGCTG
 GAGAAGATCAAGAGGAAGAGGCACTTGGATTTTCTGGACATCCTCCTCTTGGCCAAAATGGAGAATGGGA
 GCATCTTGTGAGACAAGGACCTCCGTGCTGAGGTGGACACGTTTATGTTGAGGGCCACGACACCACAGC
 CAGTGGGATCTCCTGGATCCTCTATGCTCTGGCCACACACCCCAAGCATCAGGAGAGGTGCCGGGAGGAG
 ATCCATGGCTCCTGGGTGATGGAGCCTCCATCACCTGGAACACCTGGACCAGATGCCCTACACACCA
 TGTGCATTAAGGAGGCACTGAGGCTCTACCCACCGGTGCCAGGCATTGGAAGAGAGCTCAGCACTCCCGT
 CACCTTCCCTGATGGGCGCTCCTTGCCCAAAGGTATCATGGTCCCTCTCCATTTATGGCCTTACCAC
 AACCCAAAAGTGTGGCCAACTAGAGGTGTTGACCCTTCCCGTTTTGACCGGTTCTGCTCAACACA
 GCCACGCTTCTGCCCTTCTCAGGAGGATCAAGGAAGTGCATCGGGAAACAATTTGCCATGAACCAGCT
 GAAGGTGGCCAGGGCCCTGACCCTGCTCCGCTTTGAGCTGCTGCCTGATCCCACCAGGATCCCCATCCCC
 ATGGCACGACTTGTGTTGAAATCCAAAATGGAATCCACCTGCGTCTCAGGAGGCTCCCTAACCTTGTG
 AAGACAAGGACCAGCTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG224082 representing NM_001010969
 Red=Cloning site Green=Tags(s)

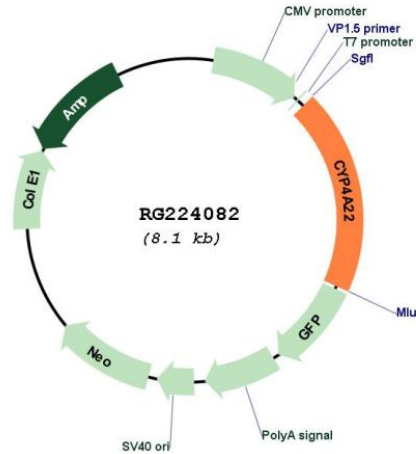
MSVSVLSPSRRLGGVSGILQVTSLLILLILLIKAAQLYLRQWLLKALQQFPCPPSHWLFGHIQEFQHDQ
 ELQRIQERVKTFPSACPYWIWGGKVRVQLYDPDYMKVILGRSDPKSHGSYKFLAPRIGYLLLLNGQTFW
 QHRRMLTPAFHNDILKPYVGLMADSVRVMLDKWEELLGQDSPLEVFQHVSLMTLDTIMKSAFESHQGSIQV
 DRNSQSYIQAISDLNSLVFCCMRNAFHENDTIYSLTSAGRWTHRACQLAQHTDQVIQLRKAQLQKEGEL
 EKIKRKRHLDFLDILLAKMENGSIKDLRAEVDTFMFEGHDTTASGISWILYALATHPKHQERCEE
 IHGLLGDGASITWNHLDQMPYTTMCIKEALRLYPPVPGIGRELSTPVTFPDGRSLPKGIMVLLSIYGLHH
 NPKVWPNLEVFDPSPRFAPGSAQHSFAFLPFSGSRNCIGKQFAMNQLKVARALTLRFELLPPDTRIPIP
 MARLVLKSKNGIHLRLRRLPNPCEDKDQL

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Plasmid Map:



ACCN: NM_001010969

ORF Size: 1557 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:	<u>NM_001010969.4</u>
RefSeq Size:	1668 bp
RefSeq ORF:	1560 bp
Locus ID:	284541
UniProt ID:	<u>Q5TCH4</u>
Cytogenetics:	1p33
Protein Families:	P450, Transmembrane
Protein Pathways:	Arachidonic acid metabolism, Fatty acid metabolism, Metabolic pathways, PPAR signaling pathway, Retinol metabolism, Vascular smooth muscle contraction
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 gene is part of a cluster of cytochrome P450 genes on chromosome 1p33. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Apr 2015]