

Product datasheet for **RG213495**

CYP4F3 (NM_000896) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	CYP4F3
Synonyms:	CPF3; CYP4F; CYP4F3; LTB4H
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG213495 representing NM_000896
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCCACAGCTGAGCCTGCTCGCTGGGCCTTTGGCCAATGGCAGCATCCCCGTGGCTGCTCCTGCTGC
 TGGTTGGGGCTCCTGGCTCCTGGCCCGCATCCTGGCCTGGACCTATACCTTCTATGACAACTGCTGCCG
 CCTCCGGTGTTCCTCCGAACCCCCGAAACGGAATTGGTTCTTGGGTGACCTGGGCTGATTACAGCTCG
 GAGGAAGGTCTCTATACACACAAAGCCTGGCATGCACCTTCGGTGATATGTGCTGCTGGTGGGTGGGGC
 CCTGGCAGCAATCGTCGCATCTTCCACCCACCTACATCAAGCCTGTGCTCTTTGCTCCAGCTGCCAT
 TGTACCAAGGACAAGGTCTTCTACAGCTTCTGAAGCCCTGGCTGGGGATGGGCTCCTGCTGAGTGCT
 GGTGAAAAGTGGAGCCGCCACCGTCGGATGCTGACGCCTGCCTTCCATTCAACATCCTGAAGCCCTATA
 TGAAGATTTCAATGAGAGTGTGAACATCATGCATGCCAAGTGGCAGCTCCTGGCCTCAGAGGGTAGTGC
 CCGTCTGGACATGTTTGGACATCAGCCTCATGACCTTGGACAGTCTACAGAAATGTGCTTTCAGCTTT
 GACAGCCATTGCCAGGAGAAGCCAGTGAATATATTGCCGCCATCTTGGAGCTCAGTGCCCTTGTGACAA
 AAAGACACCAGCAGATCCTCCTGTACATAGACTTCTGTATTATCTCACCCCTGATGGGCAGCGTTTCCG
 CAGGGCTGCCGCTGGTGCACGACTTACAGATGCCGTATCCAGGAGCGCGCCGACCCCTCCCTAGC
 CAGGGTGTGATGACTTCTCAAGCCAAGGCCAAATCCAAGACTTGGACTTCATTGATGTACTCCTGC
 TGAGCAAGGATGAAGATGGGAAGAAGTTGTCGATGAGGACATAAGAGCAGAAGCTGACACCTTTATGTT
 TGAGGGCCATGACACCACAGCCAGTGGTCTCTCCTGGGTCTGTACACCTTGCAAAGCACCCAGAATAC
 CAGGAGCGCTGTGGCAGGAGGTGAAGAGCTTCTGAAGGACCGTGAGCCTAAAGAGATTGAATGGGACG
 ACCTGGCCAGCTGCCCTTCTGACCATGTGCATTAAGGAGAGCCTGAGGCTGCATCCCCAGTCCCTGC
 CGTCTCTCGCTGCTGCACCAAGACATTGTGCTCCAGACGGCCGGGTATCCCCAAAGGCATTATCTGC
 CTCATCAGTGTGTTTGAACCCATCACAACCCAGCCGTGTGGCCGACCCCTGAGGTCTATGACCCCTTTC
 GCTTTGACCCAAAGAACATCAAGGAGAGGTACCTCTGGCTTTTATCCCTTCTCAGCAGGGCCAGGAA
 CTGCATCGGCAGGCGTTCGCGATGGCGGAGATGAAGTGGTCTGGGGCTCAGCTGCTGCGCTTCCGC
 GTCCTGCCTGACCACACCGAGCCCGCAGGAAGCCGAGCTGGTCTGCGCGCAGAGGCGGACTTTGGC
 TGCGGGTGGAGCCCTGAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG213495 representing NM_000896
 Red=Cloning site Green=Tags(s)

MPQLSLSSLGLWPMAASPWLLLLLVGASWLLARILAWTYTFYDNCCRLRCFPQPPKRNWFLGHLGLIHSS
 EEGLLYTQSLACTFGDMCCWWVGPWHAIIVRIFHPTYIKPVLFAAAIIVPKDKVFYSFLKPWLGDGLLSA
 GEKWSRHRRLTPAFHFNILKPYMKIFNESVNIHAKWQLLASEGSARLDMFEHISLMTLDLQKCVFSF
 DSHCQEKPEYIAAILELSALVTKRHQIILLYIDFLYYLTPDGQRFRRACRLVHDFDAVIQERRRLPS
 QGVDDFLQAKAKSKTLDFIDVLLLSKDEDGKKLSDEDIRAEADTFMFEHDTTASGLSWVLYHLAKHPEY
 QERCQEVQELLKDREPKEIEWDDLAQLPFLTMCIKESLRHPPVPAVSRCTQDIVLPDGRVIPKGIIC
 LISVFGTHHNPVWPDPVEYDPRFRDPKNIKERSPLAFIPFSAGPRNCIGQAFAMAEMKVVLGLTLLRFR
 VLPDHTEPRRKPELVLAEGGLWLRVEPLS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000896

ORF Size: 1560 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

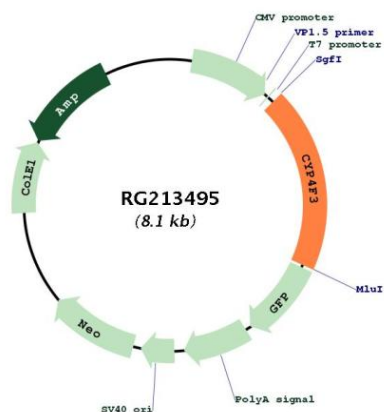
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_000896.3</u>
RefSeq Size:	5050 bp
RefSeq ORF:	1563 bp
Locus ID:	4051
UniProt ID:	<u>Q08477</u>
Cytogenetics:	19p13.12
Domains:	p450
Protein Families:	Druggable Genome, P450, Transmembrane
Protein Pathways:	Arachidonic acid metabolism, Metabolic pathways
Gene Summary:	This gene, CYP4F3, 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. The enzyme starts the process of inactivating and degrading leukotriene B4, a potent mediator of inflammation. This gene is part of a cluster of cytochrome P450 genes on chromosome 19. Another member of this family, CYP4F8, is approximately 18 kb away. Several transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Apr 2019]

Product images:



Circular map for RG213495