

Product datasheet for **RC238406**

FMO1 (NM_001282694) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FMO1 (NM_001282694) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FMO1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RC238406 representing NM_001282694
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCAAGCAGTTGCCATTGTGGGAGCTGGGGTTCAGCGCCTGGCCTCCATCAAGTGTCTGTGGAAG
 AAGGACTGGAGCCACCTGCTTTGAGAGGAGCGATGACCTTGGGGGCTGTGGAGATTCACCACCAAAGT
 CTGCAGTGTAAACAAAATGCTCAGATTCTGCTGTCTCTGGCCAATGGGAGGTGGTCACTATGCATGAAGAG
 AAGCAAGAGTCAGCCATCTTTGATGCTGTCTGACTGGCTTTCTACTAATCCTTATTTGCCAC
 TGGATTCTTTCCAGGTATTAATGCCTTAAAGGCCAGTACTTTCATAGCCGGCAATATAAGCATCCAGA
 TATATTTAAGGACAAGAGAGTCTTGTGATTGGAATGGGAAATTCGGCACAGACATTGCTGTGGAGGCC
 AGCCACCTGGCGAAAAGGTGTTCTCAGCACCACCGGAGGGGATGGGTGATCAGCCGAATCTTTGACT
 CGGGCTACCCATGGGACATGGTGTTCATGACACGCTTTCAGAACATGTTGAGAAATCCCTCCCAACCC
 AATTGTGACTTGGTTGATGGAGCGAAAGATAAACAACTGGCTCAATCATGCAAATACGGCTTAATACCA
 GAAGACAGGACTCAGCTGAAAGAGTTTGTGCTAAATGATGAGCTCCAGGACGCATCACTACTGGGAAAG
 TGTTTCATCAGCCAAGCATAAAAGAGGTAAGGAAAACCTGTGCATATTTAAACAATACTCAAAGGAAGA
 GCCTATTGACATCATTGTCTTTGCCACTGGATACACATTTGCTTTCCCTTCCTTGATGAGTCTGTAGTG
 AAAGTTGAAGATGGCCAGGCCTCACTGTACAAGTATATCTCCCTGCACATCTGCAAAAGCCAACCTGG
 CCATTATTGGCCTCATCAAACCTTTGGGCTCCATGATACCTACAGGAGAAAACACAAGCTCGGTGGGCTGT
 TCGAGTCTGAAAGGTGTAATAAGTTACCACCACCAAGTGTATGATAGAGGAAATTAATGCAAGGAAA
 GAAAACAAGCCCAGTTGGTTTGGCTTGTCTACTGCAAGGCTTTACAATCAGATTATATCACATACATAG
 ATGAACTCCTGACCTATATCAATGCAAAACCCAACTGTTCTATGCTCCTAACGGATCCACATCTGGC
 TCTGACCGTCTTCTTTGGCCATGCTCACCATACCAAGTTCGGCTTACTGAGTGGCCAGGAAAATGGGAAGGA
 GCCAGAAATGCCATCATGACCCAGTGGGACCGAACATTCAAGGTATCAAGCTCGAGTTGTACAAGAGT
 CTCCATCTCCCTTGAAGTTTTCTTAAAGTCTTAGCTTTCTGGCTTTGCTTGTGGCTATTTTTCTGAT
 TTTCTA

ACGGTACGGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238406 representing NM_001282694
 Red=Cloning site Green=Tags(s)

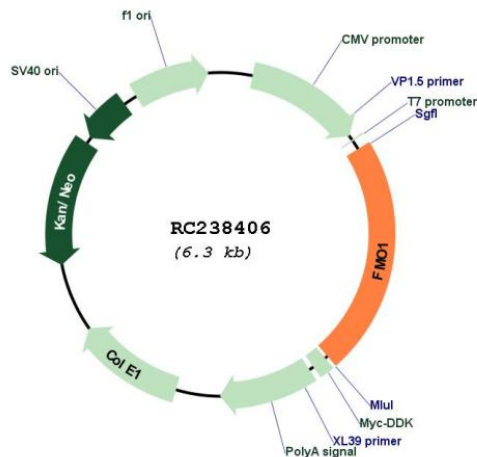
MAKRVAIVGAGVSGLASIKCCLEEGLEPTCFERSDDLGGWRFTTKVCSVTKCSDSAVSQWEVVTMHEE
 KQESAIIFDAVMVCTGFLTNPYLPDLSFPGINAFKQYFHSRQYKHPDIFKDKRVLVIGMNSGTDIAVEA
 SHLAEKVFLSTTGGWVISRIFDSGYPWDMVFMTRFQNMRLNSLPTPIVTWLMERKINNWLNHANYGLIP
 EDRTQLKEFVLNDELPGRIITGKVFIRPSIKEVKENSIVFNNTSKEEPIIIVFATGYTFAFPFLDES
 VVKVEDGQASLYKYIFPAHLQKPTLAIIGLIKPLGSMIPTGETQARWAVRVLKGVNKLPPPSVMIEEINARK
 ENKPSWFLCYCKALQSDYITYIDELLTYINAKPNLFSMLLTDPHLALTVFFGPCSPYQFRLTGPCKWEG
 ARNAIMTQWDRFTFKVIKARVVQESPPFESFLKVFSLALLVAIFLIFL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001282694

ORF Size: 1407 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_001282694.1 , NP_001269623.1
RefSeq Size:	2003 bp
RefSeq ORF:	1410 bp
Locus ID:	2326
UniProt ID:	Q01740
Cytogenetics:	1q24.3
Protein Families:	Druggable Genome
Protein Pathways:	Drug metabolism - cytochrome P450
MW:	53.3 kDa
Gene Summary:	<p>Metabolic N-oxidation of the diet-derived amino-trimethylamine (TMA) is mediated by flavin-containing monooxygenase and is subject to an inherited FMO3 polymorphism in man resulting in a small subpopulation with reduced TMA N-oxidation capacity resulting in fish odor syndrome Trimethylaminuria. Three forms of the enzyme, FMO1 found in fetal liver, FMO2 found in adult liver, and FMO3 are encoded by genes clustered in the 1q23-q25 region. Flavin-containing monooxygenases are NADPH-dependent flavoenzymes that catalyzes the oxidation of soft nucleophilic heteroatom centers in drugs, pesticides, and xenobiotics. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2013]</p>