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Product datasheet for RC238784

FMO1 (NM_001282692) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FMO1 (NM_001282692) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FMO1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC238784 representing NM_001282692
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAGGAGAACATGGCCAAGCGAGTTGCCATTGTGGGAGCTGGGGTCAGCGGCCTGGCCTCCATCAAGT
GCTGTCTGGAAGAAGGACTGGAGCCCACCTGCTTTGAGAGGAGCGATGACCTTGGGGGGCTGTGGAGATT
CACCGAACATGTTGAAGAAGGCAGAGCCAGTCTCTACAAGTCTGTGGTTTCCAACAGCTGCAAGGAGATG
TCTTGTTACTCAGACTTTCCATTCCCAGAAGATTATCCAAACTATGTGCCAAATTCTCAATTCCTGGAAT
ATCTCAAAATGTATGCAAACCACTTTGACCTTCTGAAACACATTCAATTCAAGACCAAAGTCTGCAGTGT
AACAAAATGCTCAGATTCTGCTGTCTCTGGCCAATGGGAGGTGGTCACTATGCATGAAGAGAAGCAAGAG
TCAGCCATCTTTGATGCTGTCATGGTCTGCACTGGCTTTCTTACTAATCCTTATTTGCCACTGGATTCCT
TTCCAGGTATTAATGCCTTTAAAGGCCAGTACTTTCATAGCCGGCAATATAAGCATCCAGATATATTTAA
GGACAAGAGAGTCCTTGTGATTGGAATGGGAAATTCTGGCACAGACATTGCTGTGGAGGCCAGCCACCTG
GCGGAAAAGGTGTTCCTCAGCACCACCGGAGGGGGATGGGTGATCAGCCGAATCTTTGACTCGGGCTACC
CATGGGACATGGTGTTCATGACACGCTTTCAGAACATGTTGAGAAATTCCCTCCCAACCCCAATTGTGAC
TTGGTTGATGGAGCGAAAGATAAACAACTGGCTCAATCATGCAAATTACGGCTTAATACCAGAAGACAGG
ACTCAGCTGAAAGAGTTTGTGCTAAATGATGAGCTCCCAGGACGCATCATCACTGGGAAAGTGTTCATCA
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CATCATTGTCTTTGCCACTGGATACACATTTGCTTTCCCCTTCCTTGATGAGTCTGTAGTGAAAGTTGAA
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GCCTCATCAAACCCTTGGGCTCCATGATACCTACAGGAGAAACACAAGCTCGGTGGGCTGTTCGAGTCCT
GAAAGGTGTAAATAAGTTACCACCACCAAGTGTCATGATAGAGGAAATTAATGCAAGGAAAGAAAACAAG
CCCAGTTGGTTTGGCTTGTGCTACTGCAAGGCTTTACAATCAGATTATATCACATACATAGATGAACTCC
TGACCTATATCAATGCAAAACCCAACCTGTTCTCTATGCTCCTAACGGATCCACATCTGGCTCTGACCGT
CTTCTTTGGCCCATGCTCACCATACCAGTTCCGCTTGACTGGCCCAGGAAAATGGGAAGGAGCCAGAAAT
GCCATCATGACCCAGTGGGACCGAACATTCAAGGTCATCAAAGCTCGAGTTGTACAAGAGTCTCCATCTC
CCTTTGAAAGTTTTCTTAAAGTCTTTAGCTTTCTGGCTTTGCTTGTGGCTATTTTTCTGATTTTCCTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

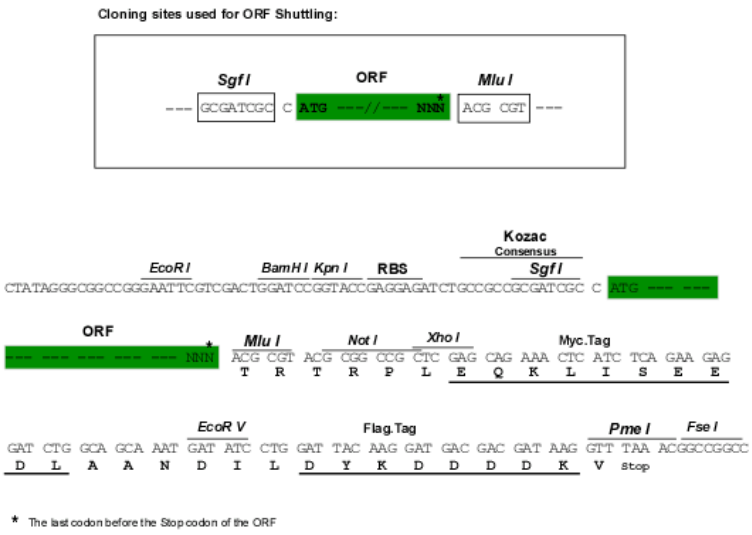
>RC238784 representing NM_001282692
Red=Cloning site Green=Tags(s)

MQENMAKRVAIVGAGVSGLASIKCCLEEGLEPTCFERSDDLGGLWRFTEHVEEGRASLYKSVVSNSCKEM
SCYSDFPFPEDYPNYVPNSQFLEYLKMYANHFDLLKHIQFKTKVCSVTKCSDSAVSGQWEVVTMHEEKQE
SAIFDAVMVCTGFLTNPYLPLDSFPGINAFKGQYFHSRQYKHPDIFKDKRVLVIGMGNSGTDIAVEASHL
AEKVFLSTTGGGWVISRIFDSGYPWDMVFMTRFQNMLRNSLPTPIVTWLMERKINNWLNHANYGLIPEDR
TQLKEFVLNDELPGRIITGKVFIRPSIKEVKENSVIFNNTSKEEPIDIIVFATGYTFAFPFLDESVVKVE
DGQASLYKYIFPAHLQKPTLAIIGLIKPLGSMIPTGETQARWAVRVLKGVNKLPPPSVMIEEINARKENK
PSWFGLCYCKALQSDYITYIDELLTYINAKPNLFSMLLTDPHLALTVFFGPCSPYQFRLTGPGKWEGARN
AIMTQWDRTFKVIKARVVQESPSPFESFLKVFSFLALLVAIFLIFL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001282692

ORF Size: 1608 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:
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_001282692.1, NP_001269621.1

RefSeq Size: 2198 bp

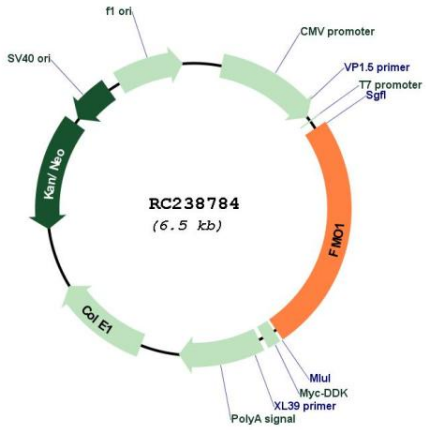
RefSeq ORF: 1611 bp

Locus ID: 2326

UniProt ID: Q01740

Cytogenetics:	1q24.3
Protein Families:	Druggable Genome
Protein Pathways:	Drug metabolism - cytochrome P450
MW:	61.3 kDa
Gene Summary:	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]

Product images:



Circular map for RC238784