

Product datasheet for **RG226524**

FMO5 (NM_001144829) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FMO5 (NM_001144829) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FMO5
Synonyms:	hBVMO1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG226524 representing NM_001144829
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACTAAGAAAAGAATTGCTGTGATTGGGGGAGGAGTGAGCGGGCTCTCTCCATCAAGTGCTGCGTAG
 AAGAAGGCTTGGAACTGTCTGCTTTGAAAGGACTGATGACATCGGAGGGCTCTGGAGGTTCCAGGAAAA
 TCCTGAAGAAGGAAGGGCCAGTATTTACAAATCAGTGATCATCAATACTTCTAAAGAGATGATGTCTTC
 AGTGACTATCCAATCCCAGATCATTATCCCAACTTCATGCATAATGCCAGGTCCTGGAGTATTTACGGA
 TGTATGCCAAAGAATTTGACCTTCTAAAGTATATTCGATTTAAGACCACTGTGTGCACTGTGAAGAAGCA
 GCCTGATTTTGCCTTCCAGGCAATGGGAAGTGGTCACTGAATCTGAAGGGAAAAAGGAGATGAATGTC
 TTTGATGGAGTCATGGTTTGCCTGCGCCATCACACCAATGCTCATCTACCTCTGGAAAGCTTCCCTGGAA
 TTGAGAAGTTCAAAGGGCAGTACTTCCACAGTCGAGACTATAAGAACCCAGAGGGATTCACTGGAAGAG
 AGTCATTATAATTGGCATTGGGAATTCTGGAGGGGATCTGGCTGTAGAGATTAGCCAAACAGCCAAGCAG
 GTTTTCCTCAGCACCAGGAGAGGGGCTTGATCCGAATCGTGTAGGGGACTACGGATATCTGCTGATG
 TGGTTCTCTTCTCGACTTACACATTTATATGGAAGATCTGTGGCCAATCATTAGCAAACAAATATTT
 GGAAAAAAGATAAACCAAAGGTTTGACCATGAAATGTTTGGCCTGAAGCCTAAACACAGAGCTCTGAGT
 CAGCATCCAACCTTAAATGATGACCTGCCAAATCGTATCATTTCTGGCTTGGTGAAGTGAAGGAAATG
 TGAAGGAATTCACGGAGACAGCTGCCATATTTGAGGATGGCTCCAGGGAGGATGACATTGATGCTGTTAT
 CTTTGGCACAGGCTATAGCTTTGACTTTCCGTTTCTGGAAGATCCGTCAAAGTGGTCAAAAACAAGATA
 TCCCTGTATAAAAAGGTCTTCCCTCCTAACCTGGAAAGGCCAACTCTTGAATCATAGGCTTGATTCAGC
 CCTTAGGAGCCATTATGCCATTTCCAGAGCTCCAAGACGCTGGGCCACTCAGGATTTTAAAGTCTAAA
 GACATTGCCCTCACAGAGTGAAATGATGGCAGAAATATCTAAAGCTCAAGAGGAAATTGACAAAAGTCTA
 ACCATGAGAAAAACATCAGACAAACCAAGTTGAAGAATATTCTACAAATACCTGACTACCTCAAAACTG
 TCAAGATCATCAACAAAGAAAGTCTGAGAAATTGTCCCGAATAAAGGGCCCTAAGGAGACA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG226524 representing NM_001144829
 Red=Cloning site Green=Tags(s)

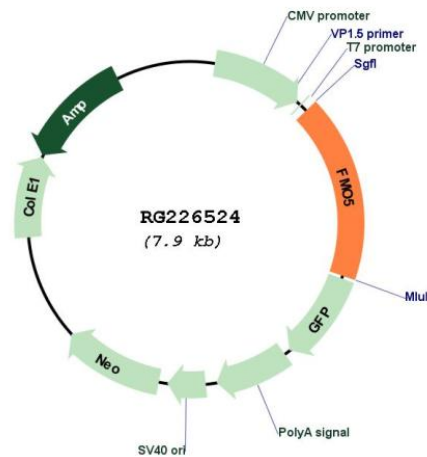
MTKKRIAVIGGGVSGLSSIKCCVEEGLEPVCFERTDDIGGLWRFQENPEEGRASIYKSVIINTSKEMMFC
 SDYPIPDHYPNFMHNAQVLEYFRMYAKEFDLLKYIRFKTTVCSVKKQPDFATSGQWEVVTSEGGKEMNV
 FDGVMVCTGHHTNAHLPLESPGIEKFKGQYFHSRDYKNPEGFTGKRVI IIGIGNSGGDLAVEISQTAKQ
 VFLSTRRGAWILNRVGDYGYPADVLFSSRLTHFIWKICGQSLANKYLEKKINQRFDHEMFLKPKHRALS
 QHPTLNDDLPNRIISGLVKVKGNVKEFTETAIFEDGSREDDIDAVIFATGYSFDFPFLEDSVKVVKNKI
 SLYKKVFPNLERPTLAIIGLIQPLGAIMPISELQGRWATQVFKGLKTLPSQSEMMAEISKAQEEIDKSL
 TMRKTSDKPKLKNILQIPDYLKTVKIINKESLRNCPGIKPKET

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001144829

ORF Size: 1392 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_001144829.1</u> , <u>NP_001138301.1</u>
RefSeq Size:	2014 bp
RefSeq ORF:	1395 bp
Locus ID:	2330
UniProt ID:	<u>P49326</u>
Cytogenetics:	1q21.1
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Drug metabolism - cytochrome P450
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. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2009]