

Product datasheet for **RG226537**

FMO5 (NM_001144830) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: FMO5 (NM_001144830) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: FMO5
Synonyms: hBVM01
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG226537 representing NM_001144830
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGACTAAGAAAAGAATTGCTGTGATTGGGGGAGGAGTGAGCGGGCTCTCTCCATCAAGTGTGCGTAG
AAGAAGGCTTGGAACTGTCTGCTTTGAAAGGACTGATGACATCGGAGGGCTCTGGAGTTCCAGGAAAA
TCCTGAAGAAGGAAGGGCCAGTATTTACAATCAGTGATCATCAATACTTCTAAAGAGATGATGTGCTTC
AGTGACTATCCAATCCCAGATCATTATCCCACTTCATGCATAATGCCAGGTCTGGAGTATTTTCAGGA
TGTATGCCAAAGAATTTGACCTTCTAAAGTATATTCGATTTAAGACCACTGTGTGCAGTGTGAAGAAGCA
GCCTGATTTTGCCACTTCAGGCCAATGGGAAGTGGTCACTGAATCTGAAGGAAAAAGGAGATGAATGTC
TTTGATGGAGTCATGGTTTGCACTGGCCATCACACCAATGCTCATCTACCTCTGGAAAGCTTCCCTGGAA
TTGAGAAGTTCAAAGGGCAGTACTTCCACAGTCGAGACTATAAGAACCAGAGGGATTCACTGGAAAGAG
AGTCATTATAATTGGCATTGGGAATTCTGGAGGGGATCTGGCTGTAGAGATTAGCCAAACAGCCAAGCAG
GTTTTCTCAGCACCAGGAGAGGGGCTTGGATCCTGAATCGTGTAGGGGACTACGGATATCTGTGCTGATG
TGTTGTTCTTCTCGACTTACACATTTATATGGAAGATCTGTGGCCAATCATTAGCAAACAAATTTT
GGAAAAAAGATAAACCAAGGTTTGACCATGAAATGTTTGGCCTGAAGCCTAAACACAGGTCTAAAGAC
ATTGCCCTCACAGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG226537 representing NM_001144830
Red=Cloning site Green=Tags(s)

MTKKRIAVIGGGVSLSSIKCCVEEGLEPVCFERTDDIGGLWRFQENPEEGRASIYKSVIINTSKEMMCF
SDYPIPDHYPNFMHNAQVLEYFRMYAKEFDLLKYIRFKTTVCSVKKQPDFATSGQWEVVTESEGKEMNV
FDGVMVCTGHHTNAHLPLESFPGIEKFKGQYFHSRDYKNPEGFTGKRVIIGIGNSGGDLAVEISQTAKQ
VFLSTRRGAWILNRVGDYGYPADVLFSSRLTHFIWKICGQSLANKYLEKKINQRFDHEMFLKPKHRSKD
IALTE

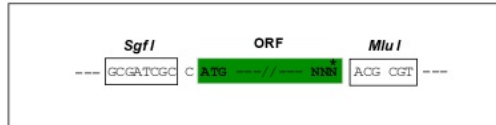
TRTRPLE - GFP Tag - V

Restriction Sites:

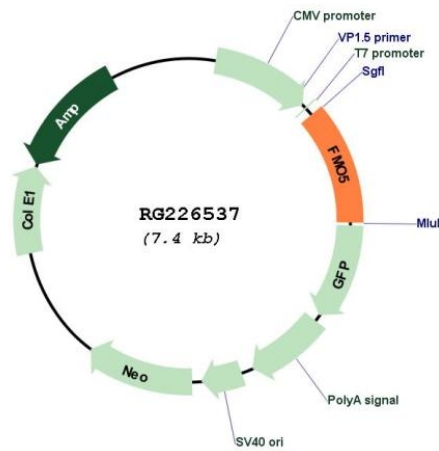
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001144830

ORF Size: 855 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_001144830.2
RefSeq Size:	2499 bp
RefSeq ORF:	858 bp
Locus ID:	2330
UniProt ID:	P49326
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]