

## Product datasheet for **RC214057**

### **FMO5 (NM\_001461) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	FMO5 (NM_001461) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FMO5
Synonyms:	hBVMO1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RG214057 representing NM\_001461  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGACTAAGAAAAGAATTGCTGTGATTGGGGGAGGAGTGAGCGGGCTCTCTCCATCAAGTCTGCGTAG  
AAGAAGGCTTGGAACTGTCTGCTTTGAAAGGACTGATGACATCGGAGGGCTCTGGAGGTTCCAGGAAAA  
TCCTGAAGAAGGAAGGGCCAGTATTTACAAATCAGTGATCATCAATACTTCTAAAGAGATGATGTCTTC  
AGTGACTATCCAATCCCAGATCATTATCCCAACTTCATGCATAATGCCAGGTCCTGGAGTATTTTCAGGA  
TGTATGCCAAAGAATTTGACCTTCTAAAGTATATTCGATTTAAGACCACTGTGTGCAAGTGTGAAGAAGCA  
GCCTGATTTTGCCTTCCAGGCAATGGGAAGTGGTCACTGAATCTGAAGGAAAAAGGAGATGAATGTC  
TTTGATGGAGTCATGGTTTGCCTGAGCCATCACACCAATGCTCATCTACCTCTGGAAAGCTTCCCTGGAA  
TTGAGAAGTTCAAAGGGCAGTACTTCCACAGTCGAGACTATAAGAACCCAGAGGGATTCACTGGAAAGAG  
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GTTTTCTCAGCACCAGGAGAGGGGCTTGATCCGTAATCGTGTAGGGGACTACGGATATCTGCTGATG  
TGTTGTTCTCTTCTCGACTTACACATTTATATGGAAGATCTGTGGCCAATCATTAGCAAACAAATATTT  
GGAAAAAAGATAAACCAAAGGTTTGACCATGAAATGTTTGGCCTGAAGCCTAAACACAGAGCTCTGAGT  
CAGCATCCAACCTTAAATGATGACCTGCCAAATCGTATCATTCTGGCTTGGTGAAGTGAAGGAAATG  
TGAAGGAATTCACGGAGACAGCTGCCATTTGAGGATGGCTCCAGGGAGGATGACATTGATGCTGTTAT  
CTTTGCCACAGGCTATAGCTTTGACTTTCCRTTCTGGAAGATCCGTCAAAGTGGTCAAAAACAAGATA  
TCCCTGTATAAAAAGTCTTCCCTCCTAACCTGGAAAGGCAACTCTTGAATCATAGGCTTGATTCAGC  
CCTTAGGAGCCATTATGCCATTTTCAGAGCTCCAAGACGCTGGGCCACTCAGGATTTAAAGGCTAAA  
GACATTGCCCTCACAGAGTGAAATGATGGCAGAAATATCTAAAGCTCAAGAGGAAATTGACAAAAGGTAT  
GTGGAGAGCCAACGCCATACCATTACAGGAGACTACATAGATACCATGGAAGAGCTTGCTGATTTGGTGG  
GGGTGAGGCCAATCTGCTGTCTCTGGCCTTCACTGACCCCAAGCTGGCATTACACTTATTACTGGGACC  
CTGCACTCCAATCCACTATCGTGTACAGGGCCCTGGAAAGTGGGATGGGGCTCGAAAAGCTATCCTCACC  
ACAGATGATCGCATCAGGAAGCCTCTGATGACAAGAGTAGTTGAAAGGAGTAGTTCTATGACTTCAACAA  
TGACAATAGGCAAGTTTATGCTAGCTCTTGCTTCTTTGCTATAATTATAGCTTACTTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

## Chromatograms:

[https://cdn.origene.com/chromatograms/mk6107\\_b02.zip](https://cdn.origene.com/chromatograms/mk6107_b02.zip)

## Restriction Sites:

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001461

**ORF Size:** 1599 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\\_001461.4](#)

**RefSeq Size:** 2326 bp

**RefSeq ORF:** 1602 bp

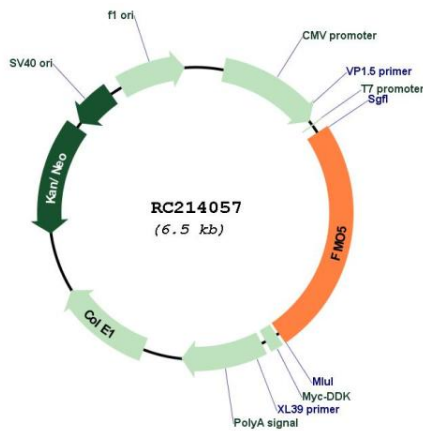
**Locus ID:** 2330

**UniProt ID:** [P49326](#)

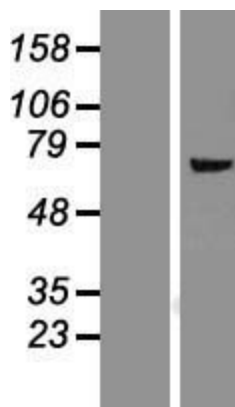
**Cytogenetics:** 1q21.1

<b>Domains:</b>	FMO-like
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Drug metabolism - cytochrome P450
<b>MW:</b>	60 kDa
<b>Gene Summary:</b>	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]

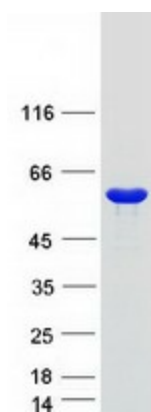
### Product images:



Circular map for RC214057



Western blot validation of overexpression lysate (Cat# [LY419912]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214057 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FMO5 protein (Cat# [TP314057]). The protein was produced from HEK293T cells transfected with FMO5 cDNA clone (Cat# RC214057) using MegaTran 2.0 (Cat# [TT210002]).