

Product datasheet for RC206506L4V

OriGene Technologies, Inc.

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FMO3 (NM_006894) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: FMO3 (NM_006894) Human Tagged ORF Clone Lentiviral Particle

Symbol: FMO3

Synonyms: dJ127D3.1; FMOII; TMAU

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_006894 **ORF Size:** 1596 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC206506).

OTI Disclaimer:

Sequence:

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.

RefSeg: NM 006894.4

RefSeq Size: 2053 bp
RefSeq ORF: 1599 bp
Locus ID: 2328
UniProt ID: P31513
Cytogenetics: 1q24.3
Domains: FMO-like

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Protein Families: Druggable Genome, Transmembrane





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Protein Pathways: Drug metabolism - cytochrome P450

MW: 59.9 kDa

Gene Summary: Flavin-containing monooxygenases (FMO) are an important class of drug-metabolizing

trimethylamine N-oxide.[provided by RefSeq, Jan 2016]

enzymes that catalyze the NADPH-dependent oxygenation of various nitrogen-,sulfur-, and phosphorous-containing xenobiotics such as therapeutic drugs, dietary compounds, pesticides, and other foreign compounds. The human FMO gene family is composed of 5 genes and multiple pseudogenes. FMO members have distinct developmental- and tissue-specific expression patterns. The expression of this FMO3 gene, the major FMO expressed in adult liver, can vary up to 20-fold between individuals. This inter-individual variation in FMO3 expression levels is likely to have significant effects on the rate at which xenobiotics are metabolised and, therefore, is of considerable interest to the pharmaceutical industry. This transmembrane protein localizes to the endoplasmic reticulum of many tissues. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms. Mutations in this gene cause the disorder trimethylaminuria (TMAu) which is characterized by the accumulation and excretion of unmetabolized trimethylamine and a distinctive body odor. In healthy individuals, trimethylamine is primarily converted to the non odorous