

Product datasheet for TP312376M

OriGene Technologies, Inc.

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FMO3 (NM_001002294) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human flavin containing monooxygenase 3 (FMO3), transcript variant 2,

100 µg

Species: Human
Expression Host: HEK293T

Expression cDNA

>RC212376 representing NM_001002294

Clone or AA Sequence:

Red=Cloning site Green=Tags(s)

MGKKVAIIGAGVSGLASIRSCLEEGLEPTCFEKSNDIGGLWKFSDHAEEGRASIYKSVFSNSSKEMMCFP DFPFPDDFPNFMHNSKIQEYIIAFAKEKNLLKYIQFKTFVSSVNKHPDFATTGQWDVTTERDGKKESAVF DAVMVCSGHHVYPNLPKESFPGLNHFKGKCFHSRDYKEPGVFNGKRVLVVGLGNSGCDIATELSRTAEQV MISSRSGSWVMSRVWDNGYPWDMLLVTRFGTFLKNNLPTAISDWLYVKQMNARFKHENYGLMPLNGVLRK

EPVFNDELPASILCGIVSVKPNVKEFTETSAIFEDGTIFEGIDCVIFATGYSFAYPFLDESIIKSRNNEI

ILFKGVFPPLLEKSTIAVIGFVQSLGAAIPTVDLQSRWAAQVIKGTCTLPSMEDMMNDINEKMEKKRKWFGKSETIQTDYIVYMDELSSFIGAKPNIPWLFLTDPKLAMEVYFGPCSPYQFRLVGPGQWPGARNAILTQW

DRSLKPMQTRVVGRLQKPCFFFHWLKLFAIPILLIAVFLVLT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 59.9 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.





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Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 001002294

Locus ID: 2328

UniProt ID: <u>P31513</u>, <u>A0A024R8Z4</u>, <u>Q53FW5</u>

RefSeq Size: 2070 Cytogenetics: 1q24.3 RefSeq ORF: 1596

Synonyms: dJ127D3.1; FMOII; TMAU

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

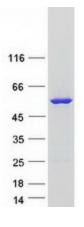
that catalyze the NADPH-dependent oxygenation of various nitrogen-, sulfur-, and phosphorous-containing xenobiotics such as therapeutic drugs, dietary compounds, pesticides, and other foreign compounds. The human FMO gene family is composed of 5 genes and multiple pseudogenes. FMO members have distinct 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 trimethylamine N-oxide.[provided by

RefSeq, Jan 2016]

Protein Families: Druggable Genome, Transmembrane
Protein Pathways: Drug metabolism - cytochrome P450

Product images:



Coomassie blue staining of purified FMO3 protein (Cat# [TP312376]). The protein was produced from HEK293T cells transfected with FMO3 cDNA clone (Cat# [RC212376]) using MegaTran 2.0 (Cat# [TT210002]).