

Product datasheet for PH306506

OriGene Technologies, Inc.

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FMO3 (NM_006894) Human Mass Spec Standard

Product data:

Product Type: Mass Spec Standards

Description: FMO3 MS Standard C13 and N15-labeled recombinant protein (NP_008825)

Species:HumanExpression Host:HEK293

Expression cDNA Clone

RC206506

or AA Sequence:

Predicted MW: 59.9 kDa

Protein Sequence: >RC206506 representing NM_006894

Red=Cloning site Green=Tags(s)

MGKKVAIIGAGVSGLASIRSCLEEGLEPTCFEKSNDIGGLWKFSDHAEEGRASIYKSVFSNSSKEMMCFP DFPFDDFPNFMHNSKIQEYIIAFAKEKNLLKYIQFKTFVSSVNKHPDFATTGQWDVTTERDGKKESAVF DAVMVCSGHHVYPNLPKESFPGLNHFKGKCFHSRDYKEPGVFNGKRVLVVGLGNSGCDIATELSRTAEQV MISSRSGSWVMSRVWDNGYPWDMLLVTRFGTFLKNNLPTAISDWLYMKQMNARFKHENYGLMPLNGVLRK EPVFNDELPASILCGIVSVKPNVKEFTETSAIFEDGTIFEGIDCVIFATGYSFAYPFLDESIIKSRNNEI ILFKGVFPPLLEKSTIAVIGFVQSLGAAIPTVDLQSRWAAQVIKGTCTLPSMEDMMNDINEKMEKKRKWF GKSETIQTDYIVYMDELSSFIGAKPNIPWLFLTDPKLAMEVYFGPCSPYQFRLVGPGQWPGARNAILTQW

DRSLKPMQTRVVGRLQKPCFFFHWLKLFAIPILLIAVFLVLT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

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

Concentration: >0.05 μg/μL as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

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

Storage: Store at -80°C. Avoid repeated freeze-thaw cycles.

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 008825

RefSeq Size: 2053 RefSeq ORF: 1596



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Synonyms: dJ127D3.1; FMOII; TMAU

Locus ID: 2328

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

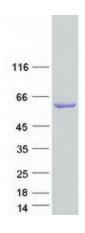
Cytogenetics: 1q24.3

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# [TP306506]). The protein was produced from HEK293T cells transfected with FMO3 cDNA clone (Cat# [RC206506]) using MegaTran 2.0 (Cat# [TT210002]).