

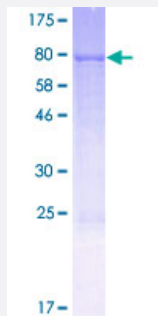
Full-Length

FMO3 (Human) Recombinant Protein (P01)

Catalog # H00002328-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human FMO3 full-length ORF (AAH32016.1, 1 a.a. - 532 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MGKKVAIIGAGVSGLASIRSCLEEGLEPTCFEKSNDIGGLWKFSDHAEGRASIMKSVFSNSSKEM
MCFPDFFPDFFPNFMHNSKIQEYIIAFAKEKNLLKYQFKTFVSSVNKHPDFATTGQWDVTTERD
GKKESAVFDAMVCSGHHVYPNLPKESFPGLNHFKGKCFHSRDYKEPGVFNGKRVLVVGLGNS
GCDIATELSRTAEQVMISSRSGSWVMSRVWDNGYPWDMLLVTRFGTFLKNNLPTAISDWLYMKQ
MNARFKHENYGLMPLNGVLRKEPVFNDELPASILCGMSVKPNVKEFTTETSAIFEDGTIFEGIDCVIF
ATGYSFAYPFLDESIKSRNNEIILFKGVFPPLLEKSTIAVIGFVQSLGAAIPTVDLQSRWAAQVIKGTCT
TLPSMEDMMNDINEKMEKKRKWFGKSETIQTDYVYMDELSSFIGAKPNIPWLFLTDPKLAMEVYF
GPCSPYQFRLVGPGQWPGARNAILTQWDRSLKPMQTRVVGRLQKPCFFHWWLKLFAIPILLIAVFL
VLT

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

86.5

Interspecies Antigen Sequence

Mouse (79); Rat (81)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — FMO3

Entrez GeneID	2328
GeneBank Accession#	BC032016.1
Protein Accession#	AAH32016.1
Gene Name	FMO3
Gene Alias	FMOII, MGC34400, TMAU, dJ127D3.1
Gene Description	flavin containing monooxygenase 3
Omim ID	136132 602079
Gene Ontology	Hyperlink

Gene 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 metabolized 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 the same protein. 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

Other Designations

Flavin-containing monooxygenase-3|OTTHUMP00000033540

Pathway

- [Drug metabolism - cytochrome P450](#)

Disease

- [Adenoma](#)
- [Adenomatous Polyposis Coli](#)
- [Adenomatous Polyps](#)
- [Brain Neoplasms](#)
- [Cardiovascular Diseases](#)
- [Colon cancer](#)
- [Colorectal Neoplasms](#)
- [Ductus Arteriosus](#)
- [Genetic Predisposition to Disease](#)
- [Hearing Loss](#)
- [Hypertension](#)
- [Infant](#)

- [Kidney Failure](#)
- [Metabolism](#)
- [Obesity](#)
- [Ovarian Failure](#)
- [Polycystic Ovary Syndrome](#)
- [Puberty](#)
- [Schizophrenia](#)
- [Sudden Infant Death](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)