

# Product Information

## **MemDX™ Membrane Protein Human FMO3 (Flavin containing dimethylaniline monooxygenase 3) for Antibody Discovery**

Cat. No.: **MP1068J**

This product is for research use only and is not intended for diagnostic use.

This product is a 59.9 kDa Human FMO3 membrane protein expressed in HEK293T. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

### Product Specifications

#### Host Species

Human

#### Target Protein

FMO3

#### Protein Length

Full-length

#### Protein Class

Druggable Genome, Transmembrane

#### Molecular Weight

59.9 kDa

#### TMD

1

#### Sequence

MGKKVAIIGAGVSGLASIRSCLEEGLEPTCFEKSNDIGGLWKFS DHAE EGRASIYKSVFSNSSKEMMCFP  
DFPFPDDFPNFMHNSKIQEYIIAFAKEKNLLKYIQFKTFVSSVNKHPDFATTGQWDVTTERDGKKESAVF  
DAVMVCSGHHVYPNLPKESFPGLNHFKGKCFHSRDYKEPGVFNGKRVLVVGLGNSGCDIATELSRTAEQV  
MISSRSGSWVMSRVWDNGYPWDMLLVTRFGTFLKNNLPTAISDWLYVKQMNARFKHENYGLMPLNGVLRK  
EPVFNDELPASILCGIVSVKPNVKEFTETSAIFEDGTIFEGIDCVIFATGYSFAYPFLDESIKSRNNEI  
ILFKGVFPPLLEKSTIAVIGFVQSLGAAIPTVDLQSRWAAQVIKGTCTLPSMEDMMNDINEKMEKKRKWF  
GKSETIQTDYIVYMDELSSFIGAKPNIPWLFLTDPKLAMEVYFGPCSPYQFRLVGPQWPGARNAILTQW  
DRSLKPMQTRVVGRLQKPCFFHFWLKLFAIPILLIAVFLVLT

### Product Description

#### Expression Systems

HEK293T

#### Tag

C-Myc/DDK

**Form**

Liquid

**Purification**

Anti-DDK affinity column followed by conventional chromatography steps

**Purity**

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

**Buffer**

25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol

**Storage**

Store at +4°C for up to one week or several months at -80°C

**Target****Target Protein**

FMO3

**Full Name**

Flavin containing dimethylaniline monooxygenase 3

**Introduction**

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.

**Alternative Names**

TMAU; FMOII; dJ127D3.1

**Gene ID**

[2328](#)

**UniProt ID**

[P31513](#)