

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

MGKKVAIIGAGVGLASIRSCLEEGLEPTCFEKSNDIGGLWKFSDHAEGRASIYKSVFSNSSKEMMCFP
DFPFPPDDFPNFMHNSKIQEYIIAFAKEKNLLKYIQFKTFVSSVNKHPDFATTGQWDVTTERDGKKESAVF
DAVMVCSGHVYPNLPKESFPGLNHFKGKCFHSRDYKEPGVFNGKRVLVVGLGNSGCDIATELSRTAEQV
MISSRSGSWVMSRVWDNGYPWDMLLVTRFGFLKNNLPTAISDWLYVKQMNARFKHENYGLMPLNGVLRK
EPVFNDELPASILCGIVSVKPNVKEFTETSAIFEDGTIFEGIDCVIFATGYSFAYPFLDESIIKSRNNEI
ILFKGVFPPLLEKSTIAIGFVQSLGAAIPTVQLQSRWAAQVIKGTCFLPSMEDMMNDINEKMEKKRWF
GKSETIQTDYIVYMDELSSFIGAKPNIPWLTDPLKAMEVYFGPCSPYQFRLVPGQWPGARNAILTQW
DRSLKPMQTRVVGRQLQKPCFFFHWLKLFAIPILLIAVFLVLT

Product Description

Expression Systems

HEK293T

Tag

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](#)