

Recombinant Human FMO5, His-tagged

Cat. No. FMO5-12946H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human FMO5 protein, fused to His-tag, was expressed in E.coli and purified by Ni-sepharose.
Species	Human
Source	E.coli
ProteinLength	34-285a.a.
Description	Metabolic N-oxidation of the diet-derived amino-trimethylamine (TMA) is mediated by flavin-containing monooxygenase and is subject to an inherited FMO3 polymorphism in man resulting in a small subpopulation with reduced TMA N-oxidation capacity resulting in fish odor syndrome Trimethylaminuria. Three forms of the enzyme, FMO1 found in fetal liver, FMO2 found in adult liver, and FMO3 are encoded by genes clustered in the 1q23-q25 region. Flavin-containing monooxygenases are NADPH-dependent flavoenzymes that catalyzes the oxidation of soft nucleophilic heteroatom centers in drugs, pesticides, and xenobiotics. Alternative splicing results in multiple transcript variants.
Storage	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
Storage Buffer	1M PBS (58mM Na ₂ HPO ₄ , 17mM NaH ₂ PO ₄ , 68mM NaCl, pH8.) added with 300mM Imidazole and 0.7% Sarcosyl, 15%glycerol.

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GENE INFORMATION

Gene Name	FMO5 flavin containing monooxygenase 5 [Homo sapiens]
Official Symbol	FMO5
Synonyms	FMO5; flavin containing monooxygenase 5; dimethylaniline monooxygenase [N-oxide-forming] 5; FMO 5; dimethylaniline oxidase 5; hepatic flavin-containing monooxygenase 5;
Gene ID	2330
mRNA Refseq	NM_001144829
Protein Refseq	NP_001138301
MIM	603957
UniProt ID	P49326
Chromosome Location	1q21.1
Pathway	Drug metabolism - cytochrome P450, organism-specific biosystem; Drug metabolism - cytochrome P450, conserved biosystem;
Function	N,N-dimethylaniline monooxygenase activity; N,N-dimethylaniline monooxygenase activity; NADP binding; flavin adenine dinucleotide binding; monooxygenase activity;

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