



# Recombinant Human Dimethylaniline monooxygenase [N-oxide-forming] 5 (FMO5)

<b>Product Code</b>	CSB-MP008751HU
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P49326
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	<p>MTKKRIAVIG GGVSLSSIK CCVEEGLEPV CFERTDDIGG LWRWFQENPEE            GRASIYKSVI INTSKEMMCF SDYPIPDHYP NFMHNAQVLE YFRMYAKEFD            LLKYIRFKTT VCSVKKQPDF ATSGQWEVVT ESEGKKEMNV FDGVMVCTGH            HTNAHLPLES FPGIEKFKGQ YFHSRDYKNP EGFTGKRVII IGINSGGDL            AVEISQTAKQ VFLSTRRGAW ILNRVGDYGY PADVLFSSRL THFIWKICGQ            SLANKYLEKK INQRFDHEMF GLKPKHRALS QHPTLNDDL NRIISGLVKV            KGNVKEFTET AAIFEDGSRE DDIDAVIFAT GYSFDFPFLE DSVKVVKNKI            SLYKKVFPPN LERPTLAIIG LIQPLGAIMP ISELQGRWAT QVFKGLKTLP            SQSEMMAEIS KAQEEIDKRY VESQRHTIQG DYIDTMEELA DLVGVRPNLL            SLAFTDPKLA LHLLLG PCTP IHYRVQGP GK WDGARKAILT TDDRIRKPLM            TRVVERSSSM TSTMTIGKFM LALAFFAIII A YF</p>
<b>Source</b>	Mammalian cell
<b>Target Names</b>	FMO5
<b>Protein Names</b>	Recommended name: Dimethylaniline monooxygenase [N-oxide-forming] 5 EC= 1.14.13.8 Alternative name(s): Dimethylaniline oxidase 5 Hepatic flavin-containing monooxygenase 5 Short name= FMO 5
<b>Expression Region</b>	1-533
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full length protein
<b>Target Details</b>	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.



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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.