



Anti-FMO3 polyclonal antibody (CPBT-53857RH)

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

PRODUCT INFORMATION

Product Overview	Rabbit Polyclonal antibody to Human FMO3.
Antigen Description	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 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.
Specificity	Liver.
Immunogen	Synthetic peptide derived from Human FMO3
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Immunogen affinity purified

Conjugate	Unconjugated
Applications	WB, ELISA
Sequence Similarities	Belongs to the FMO family.
Cellular Localization	Microsome membrane. Endoplasmic reticulum membrane.
Format	Lyophilised:Reconstitute in 50 µl of distilled water. Final antibody concentration is 1 mg/ml.
Size	50 µg
Buffer	Preservative: NoneConstituents: 2% Sucrose, PBS
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

GENE INFORMATION

Gene Name	FMO3 flavin containing monooxygenase 3 [Homo sapiens]
Official Symbol	FMO3
Synonyms	FMO3; flavin containing monooxygenase 3; dimethylaniline monooxygenase [N-oxide-forming] 3; Dimethylaniline monooxygenase [N oxide forming] 3; Dimethylaniline monooxygenase [N-oxide-forming] 3; Dimethylaniline monooxygenase 3; Dimethylaniline oxidase 3; dJ127D3.1; Flavin containing monooxygenase 3; FMO 3; FMO form 2; FMO II; FMO3; FMO3_HUMAN; FMOII; Hepatic flavin containing monooxygenase 3; Hepatic flavin-containing monooxygenase 3; MGC34400; FMO 3; FMO II; FMO form 2; dimethylaniline oxidase 3; hepatic flavin-containing monooxygenase 3; hepatic flavin-containing monooxygenase-3; TMAU; FMOII; dJ127D3.1;
Entrez Gene ID	2328
Protein Refseq	NP_001002294
UniProt ID	A0A024R8Z4
Chromosome Location	1q24.3
Pathway	Biological oxidations, organism-specific biosystem; Drug metabolism - cytochrome P450, organism-specific biosystem; Drug metabolism - cytochrome P450, conserved biosystem; FMO oxidizes nucleophiles, organism-specific biosystem; Metabolism, organism-specific biosystem; Nicotine metabolism, organism-specific biosystem; Phase 1 - Functionalization of compounds,

organism-specific biosystem; nicotine degradation II, conserved biosystem;

Function

NADP binding; amino acid binding; flavin adenine dinucleotide binding; flavin-containing monooxygenase activity; monooxygenase activity;
