

FMO3 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6901a**Specification**

FMO3 Antibody (N-term) - Product Information

| | |
|-------------------|------------------------|
| Application | FC, IHC-P, WB,E |
| Primary Accession | P31513 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 60033 |
| Antigen Region | 30-56 |

FMO3 Antibody (N-term) - Additional Information**Gene ID** 2328**Other Names**

Dimethylaniline monooxygenase [N-oxide-forming] 3, Dimethylaniline oxidase 3, FMO II, FMO form 2, Hepatic flavin-containing monooxygenase 3, FMO 3, Trimethylamine monooxygenase, FMO3

Target/Specificity

This FMO3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 30-56 amino acids from the N-terminal region of human FMO3.

Dilution

FC~~1:10~50

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

FMO3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

FMO3 Antibody (N-term) - Protein Information**Name** FMO3

Function Essential hepatic enzyme that catalyzes the oxygenation of a wide variety of nitrogen- and sulfur-containing compounds including drugs as well as dietary compounds (PubMed:[10759686](#), PubMed:[30381441](#), PubMed:[32156684](#)). Plays an important role in the metabolism of trimethylamine (TMA), via the production of trimethylamine N-oxide (TMAO) metabolite (PubMed:[9776311](#)). TMA is generated by the action of gut microbiota using dietary precursors such as choline, choline containing compounds, betaine or L-carnitine. By regulating TMAO concentration, FMO3 directly impacts both platelet responsiveness and rate of thrombus formation (PubMed:[29981269](#)).

Cellular Location

Microsome membrane {ECO:0000250|UniProtKB:P32417}; Single-pass membrane protein.
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P32417}; Single-pass membrane protein

Tissue Location

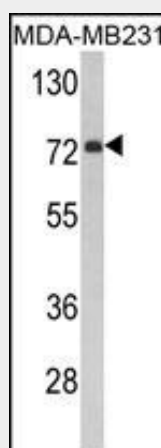
Liver.

FMO3 Antibody (N-term) - Protocols

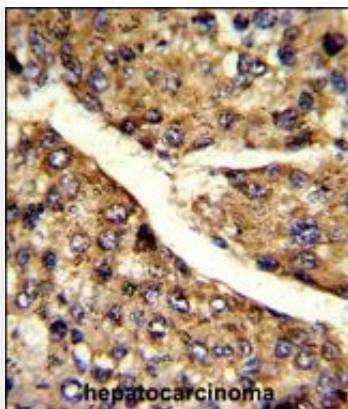
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

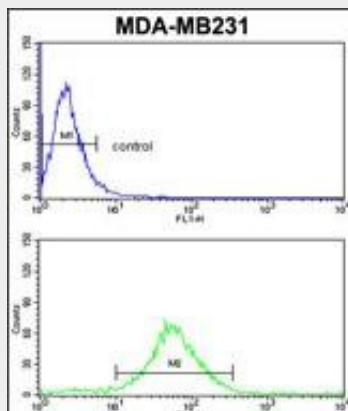
FMO3 Antibody (N-term) - Images



Western blot analysis of FMO3 Antibody (N-term) (Cat. #AP6901a) in MDA-MB231 cell line lysates (35ug/lane). FMO3 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with FMO3 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



FMO3 Antibody (N-term) (Cat. #AP6901a) flow cytometric analysis of MDA-MB231 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

FMO3 Antibody (N-term) - Background

FMO3 is involved in the oxidative metabolism of a variety of xenobiotics such as drugs and pesticides. It N-oxygenates primary aliphatic alkylamines as well as secondary and tertiary amines. It plays an important role in the metabolism of trimethylamine (TMA), via the production of TMA N-oxide (TMAO). Is also able to perform S-oxidation when acting on sulfide compounds.

FMO3 Antibody (N-term) - References

Allerston, C.K., et.al., Mol. Genet. Metab. 98 (1-2), 198-202 (2009)