

FMO3 (D-9): sc-514882

BACKGROUND

The flavin containing monooxygenase family consists of five gene products, FMO1-5, that are major enzymatic oxidants involved in the metabolism of various therapeutics. Located in the liver, FMO3 is a hepatic microsomal enzyme that oxygenates soft nucleophiles such as secondary and tertiary amines. Through its N-oxygenase capabilities, FMO3 acts on a variety of xenobiotics to catalyze oxidative digestion. Defects in the FMO3 gene are the primary cause of trimethylaminuria (TMAuria), an inborn error of metabolism associated with a fishy body odor emitting from sweat, urine and breath. Genetic mutations in FMO3 lead to the N-oxidation of amino-trimethylamine derived from food products, thus producing the malodor associated with TMAuria.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FMO3 (human) mapping to 1q24.3.

SOURCE

FMO3 (D-9) is a mouse monoclonal antibody raised against amino acids 388-427 mapping within an internal region of FMO3 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FMO3 (D-9) is recommended for detection of FMO3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FMO3 siRNA (h): sc-72256, FMO3 shRNA Plasmid (h): sc-72256-SH and FMO3 shRNA (h) Lentiviral Particles: sc-72256-V.

Molecular Weight of FMO3: 58 kDa.

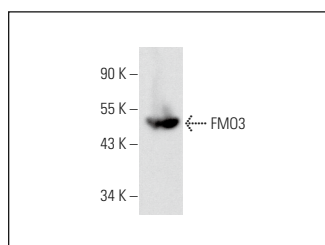
Positive Controls: human liver extract: sc-363766.

RECOMMENDED SUPPORT REAGENTS

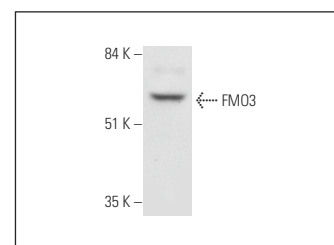
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.
- 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



FMO3 (D-9): sc-514882. Western blot analysis of FMO3 expression in human liver tissue extract.



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STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.