

FMO4 (Q-14): sc-104256

BACKGROUND

The flavin-containing monooxygenase (FMO) family consists of five gene products, FMO1-5, that are major enzymatic oxidants involved in the metabolism of various therapeutics. Amino-trimethylamine (TMA), a diet-derived chemical from eggs, fish and legumes, is metabolized by FMOs. A polymorphism in genes encoding FMOs leads to a reduced TMA amino-oxidation capacity, leading to the excretion of relatively large amounts of TMA in urine, sweat and breath. This condition is known as trimethylaminuria, also known as fish-odor syndrome because individuals with this polymorphism exhibit a fishy body odor due to the free, unmetabolized amine. Located in the liver, FMO4 (flavin-containing monooxygenase 4), also known as Dimethylaniline monooxygenase and originally termed FMO2, is a 558 amino acid endoplasmic reticular protein that shares about fifty-percent sequence similarity with FMO1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: *Fmo4* (mouse) mapping to 1 H2.1.

SOURCE

FMO4 (Q-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FMO4 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104256 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FMO4 (Q-14) is recommended for detection of FMO4 of mouse and rat origin by Western Blotting (starting dilution 1:200, 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 FMO4 siRNA (m): sc-105365, FMO4 shRNA Plasmid (m): sc-105365-SH and FMO4 shRNA (m) Lentiviral Particles: sc-105365-V.

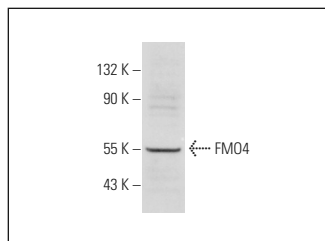
Molecular Weight of FMO4: 63 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



FMO4 (Q-14): sc-104256. Western blot analysis of FMO4 expression in NIH/3T3 whole cell lysate.

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.