

FMO4 (T-14): sc-104258

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 50% sequence similarity with FMO1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FMO4 (human) mapping to 1q24.3.

SOURCE

FMO4 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FMO4 of human 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-104258 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FMO4 (T-14) is recommended for detection of FMO4 of human 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).

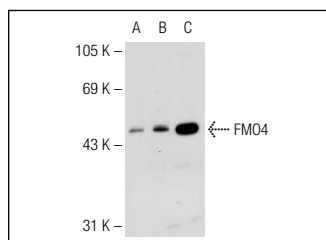
FMO4 (T-14) is also recommended for detection of FMO4 in additional species, including equine and porcine.

Suitable for use as control antibody for FMO4 siRNA (h): sc-78814, FMO4 shRNA Plasmid (h): sc-78814-SH and FMO4 shRNA (h) Lentiviral Particles: sc-78814-V.

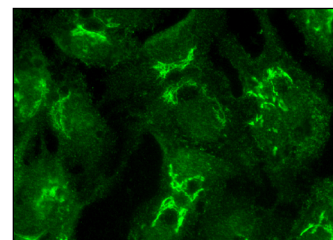
Molecular Weight of FMO4: 63 kDa.

Positive Controls: FMO4 (h2): 293T Lysate: sc-173525 or Hep G2 cell lysate: sc-2227.

DATA



FMO4 (T-14): sc-104258. Western blot analysis of FMO4 expression in non-transfected 293T: sc-117752 (A), human FMO4 transfected 293T: sc-173525 (B) and Hep G2 (C) whole cell lysates.



FMO4 (T-14): sc-104258. Immunofluorescence staining of formalin-fixed Hep G2 cells showing endoplasmic reticulum localization.

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 or our catalog for detailed protocols and support products.