



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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## FMO4 (h2): 293T Lysate: sc-173525

### 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

1. Dolphin, C.T., et al. 1992. Cloning, primary sequence and chromosomal localization of human FMO2, a new member of the flavin-containing mono-oxygenase family. *Biochem. J.* 287: 261-267.
2. Lawton, M.P., et al. 1994. A nomenclature for the mammalian flavin-containing monooxygenase gene family based on amino acid sequence identities. *Arch. Biochem. Biophys.* 308: 254-257.
3. Phillips, I.R., et al. 1995. The molecular biology of the Flavin-containing monooxygenases of man. *Chem. Biol. Interact.* 96: 17-32.
4. Furnes, B., et al. 2003. Identification of novel variants of the flavin-containing monooxygenase gene family in African Americans. *Drug Metab. Dispos.* 31: 187-193.
5. Cashman, J.R. 2008. Role of flavin-containing monooxygenase in drug development. *Expert Opin. Drug Metab. Toxicol.* 4: 1507-1521.
6. Henderson, M.C., et al. 2008. Metabolism of the anti-tuberculosis drug ethionamide by mouse and human FMO1, FMO2 and FMO3 and mouse and human lung microsomes. *Toxicol. Appl. Pharmacol.* 233: 420-427.
7. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 136131. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
8. Zhang, J., et al. 2009. Hepatic flavin-containing monooxygenase gene regulation in different mouse inflammation models. *Drug Metab. Dispos.* 37: 462-468.
9. Novick, R.M., et al. 2009. Differential localization of flavin-containing monooxygenase (FMO) isoforms 1, 3, and 4 in rat liver and kidney and evidence for expression of FMO4 in mouse, rat, and human liver and kidney microsomes. *J. Pharmacol. Exp. Ther.* 329: 1148-1155.

### CHROMOSOMAL LOCATION

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

### PRODUCT

FMO4 (h2): 293T Lysate represents a lysate of human FMO4 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

### APPLICATIONS

FMO4 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive FMO4 antibodies.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

### STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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](http://www.scbt.com) for detailed protocols and support products.