

FMO1 (m): 293T Lysate: sc-120299

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. FMO1, also known as dimethylaniline oxidase 1 or dimethylaniline monooxygenase (N-oxide-forming) 1, is a 532 amino acid protein localized to the microsome and endoplasmic reticulum membranes. In human fetuses, the FMO1 gene is expressed in the liver, but shortly after birth, expression is switched off. However, the gene continues to be expressed in adult kidney and, to a lesser extent, in intestine. In all other mammals, the FMO1 gene continues to be expressed in liver after birth. Functionally, FMO1 is involved in the oxidative metabolism of a variety of xenobiotics, such as drugs and pesticides, primarily by catalyzing the N-oxygenation of secondary and tertiary amines. The gene encoding FMO1 is located on chromosome 1q24.3.

REFERENCES

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7. Hernandez, D., et al. 2009. Deletion of the mouse FMO1 gene results in enhanced pharmacological behavioural responses to imipramine. *Pharmacogenet. Genomics* 19: 289-299.
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CHROMOSOMAL LOCATION

Genetic locus: Fmo1 (mouse) mapping to 1 H2.1.

PRODUCT

FMO1 (m): 293T Lysate represents a lysate of mouse FMO1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

FMO1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive FMO1 antibodies. Recommended use: 10-20 µl per lane.

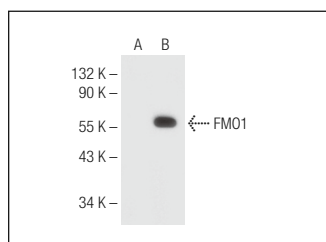
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FMO1 (H-10): sc-376924 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse FMO1 expression in FMO1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



FMO1 (H-10): sc-376924. Western blot analysis of FMO1 expression in non-transfected: sc-117752 (A) and mouse FMO1 transfected: sc-120299 (B) 293T whole cell lysates.

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 for detailed protocols and support products.