

FMO2 (L-12): sc-83827

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. FMO2 (flavin containing monooxygenase 2 (non-functional)), also known as FMO1B1, dimethylaniline monooxygenase [N-oxide-forming] 2 or pulmonary flavin-containing monooxygenase 2, is a 535 amino acid protein that is expressed in lung and localizes to microsomal and endoplasmic reticulum membranes. A member of the FMO family, FMO2 catalyzes S-oxidation of methimazole and N-oxidation of various primary alkylamines into their oximes. The gene encoding FMO2 maps to human chromosome 1, forming a cluster with the genes for FMO1, FMO3 and FMO4.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FMO2 (human) mapping to 1q24.3; Fmo2 (mouse) mapping to 1 H2.1.

SOURCE

FMO2 (L-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FMO2 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-83827 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FMO2 (L-12) is recommended for detection of FMO2 of mouse, rat and 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); non cross-reactive with other FMO family members.

FMO2 (L-12) is also recommended for detection of FMO2 in additional species, including canine and porcine.

Suitable for use as control antibody for FMO2 siRNA (h): sc-75043, FMO2 siRNA (m): sc-75044, FMO2 shRNA Plasmid (h): sc-75043-SH, FMO2 shRNA Plasmid (m): sc-75044-SH, FMO2 shRNA (h) Lentiviral Particles: sc-75043-V and FMO2 shRNA (m) Lentiviral Particles: sc-75044-V.

Molecular Weight of FMO2: 61 kDa.

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.

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.