SANTA CRUZ BIOTECHNOLOGY, INC.

mEH (H-300): sc-22748

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Epoxide hydrolases (EHs) are biotransformation enzymes that catalyze the hydrolysis of arene and aliphatic epoxides to less reactive and more water soluble dihydrodiols by the trans addition of water. The enzymatic hydration is essentially irreversible and produces mainly metabolites of lower reactivity that can be conjugated and excreted, and, therefore, are generally regarded as detoxifying. Microsomal EH (mEH) is one of many enzymes involved in the metabolism of endogenous and exogenous toxicants such as tobacco-derived carcinogens. mEH exhibits a broad substrate specificity, while the soluble EH (sEH) is an enzyme with a "complementary" substrate specificity to mEH. The mEH protein is encoded by the EPHX1 gene, which maps to chromosome 1q42.12. Polymorphism of the EPHX1 gene is a risk factor for ovarian cancer and hepatocellular carcinoma.

CHROMOSOMAL LOCATION

Genetic locus: EPHX1 (human) mapping to 1q42.12; Ephx1 (mouse) mapping to 1 H4.

SOURCE

mEH (H-300) is a rabbit polyclonal antibody raised against amino acids 156-455 mapping at the C-terminus of mEH 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.

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.

APPLICATIONS

mEH (H-300) is recommended for detection of mEH 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).

mEH (H-300) is also recommended for detection of mEH in additional species, including porcine.

Suitable for use as control antibody for mEH siRNA (h): sc-40539, mEH siRNA (m): sc-40540, mEH shRNA Plasmid (h): sc-40539-SH, mEH shRNA Plasmid (m): sc-40540-SH, mEH shRNA (h) Lentiviral Particles: sc-40539-V and mEH shRNA (m) Lentiviral Particles: sc-40540-V.

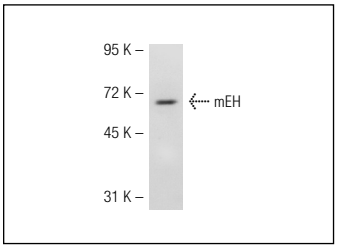
Molecular Weight of mEH: 50 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or WI 38 whole cell lysate: sc-364260.

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



mEH (H-300): sc-22748. Western blot analysis of mEH expression in Hep G2 whole cell lysate.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products

MONOS Satisfaction Guaranteed

Try **mEH (17): sc-135984**, our highly recommended monoclonal alternative to mEH (H-300).