sEH (A-5): sc-166961

**BACKGROUND**

Epoxide hydrolase (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. Soluble EH (sEH) is a ubiquitous mammalian enzyme for which liver and kidney are reported to have the highest activity. Microsomal EH (mEH) exhibits a broad substrate specificity, while the soluble EH (sEH) is an enzyme with a “complementary” substrate specificity to mEH. sEH is expressed in 3T3 and HeLa cells. SEH is encoded by the EPHX2 gene, which maps to chromosome 8p21.2.

**CHROMOSOMAL LOCATION**

Genetic locus: EPHX2 (human) mapping to 8p21.2; Ephx2 (mouse) mapping to 14 D1.

**SOURCE**

sEH (A-5) is a mouse monoclonal antibody raised against amino acids 340-554 mapping at the C-terminus of sEH of human origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

sEH (A-5) is available conjugated to agarose (sc-166961 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166961 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166961 PE), fluorescein (sc-166961 FITC), Alexa Fluor® 488 (sc-166961 AF488), Alexa Fluor® 546 (sc-166961 AF546), Alexa Fluor® 594 (sc-166961 AF594) or Alexa Fluor® 647 (sc-166961 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166961 AF680) or Alexa Fluor® 790 (sc-166961 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

sEH (A-5) is recommended for detection of sEH of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for sEH siRNA (h): sc-44090, sEH siRNA (m): sc-44392, sEH shRNA Plasmid (h): sc-44090-SH, sEH shRNA Plasmid (m): sc-44392-SH, sEH shRNA (h) Lentiviral Particles: sc-44090-V and sEH shRNA (m) Lentiviral Particles: sc-44392-V.

Molecular Weight of sEH: 62 kDa.

Positive Controls: mouse liver extract: sc-2256 or sEH (m): 293T Lysate: sc-123431.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

sEH (A-5): sc-166961. Western blot analysis of sEH expression in non-transfected: sc-117752 (A) and mouse sEH transfected: sc-123431 (B) 293T whole cell lysates.

sEH (A-5): sc-166961. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

**SELECT PRODUCT CITATIONS**


**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.