

# sEH (H-215): sc-25797

## 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 (H-215) is a rabbit polyclonal antibody raised against amino acids 340-554 mapping at the C-terminus of sEH 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

sEH (H-215) is recommended for detection of sEH 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), 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.

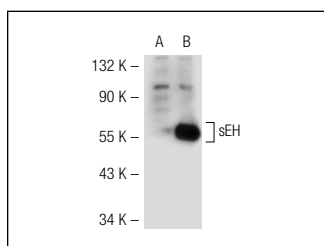
Molecular Weight of sEH: 62 kDa.

Positive Controls: sEH (m): 293T Lysate: sc-123431, mouse liver extract: sc-2256 or HeLa whole cell lysate: sc-2200.

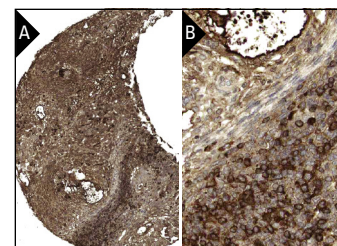
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



sEH (H-215): sc-25797. Western blot analysis of sEH expression in non-transfected: sc-117752 (A) and mouse sEH transfected: sc-123431 (B) 293T whole cell lysates.



sEH (H-215): sc-25797. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis cancer tissue showing cytoplasmic staining of tumor cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

## SELECT PRODUCT CITATIONS

- Mancone, C., et al. 2010. Proteomic analysis reveals a major role for contact inhibition in the terminal differentiation of hepatocytes. *J. Hepatol.* 52: 234-243.
- Goichon, A., et al. 2011. Effects of an enteral glucose supply on protein synthesis, proteolytic pathways, and proteome in human duodenal mucosa. *Am. J. Clin. Nutr.* 94: 784-794.
- Hou, H.H., et al. 2012. N-terminal domain of soluble epoxide hydrolase negatively regulates the VEGF-mediated activation of endothelial nitric oxide synthase. *Cardiovasc. Res.* 93: 120-129.
- Ma, F., et al. 2013. Indapamide lowers blood pressure by increasing production of epoxyeicosatrienoic acids in the kidney. *Mol. Pharmacol.* 84: 286-295.
- Vanella, L., et al. 2013. Effects of ellagic acid on angiogenic factors in prostate cancer cells. *Cancers* 5: 726-738.



Try **sEH (A-5): sc-166961**, our highly recommended monoclonal alternative to sEH (H-215).