SANTA CRUZ BIOTECHNOLOGY, INC.

SULT1E1 (H-40): sc-292049

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The soluble sulfotransferases contribute to the elimination of xenobiotics, the activation of procarcinogens and the regulation of hormones by catalyzing the sulfate conjugation of these substances. Members of the three groups comprising this superfamily (namely SULT1, SULT2 and SULT3) show selectivity to certain substrate compounds. SULT1 sulfotransferases exhibit N-sulfating activities of carcinogenic heterocyclic amines, and are selective toward phenols, whereas SULT2 enzymes prefer hydroxysteroids and SULT3 family members are selective for N-substituted aryl and alicyclic compounds. SULT1E1, also known as STE, is a 294 amino acid member of the SULT1 family. Localized to the cytoplasm and expressed in intestine, liver and kidney, SULT1E1 exists as a homodimer that is thought to control estrogen receptor (ER) levels by sulfurylating free estradiol. Defects in the gene encoding SULT1E1 are associated with an increased risk for endometrial cancer, suggesting a role for SULT1E1 in tumorigenesis.

CHROMOSOMAL LOCATION

Genetic locus: SULT1E1 (human) mapping to 4q13.3; Sult1e1 (mouse) mapping to 5 E1.

SOURCE

SULT1E1 (H-40) is a rabbit polyclonal antibody raised against amino acids 54-93 mapping within an internal region of SULT1E1 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

SULT1E1 (H-40) is recommended for detection of SULT1E1 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); may cross-react with other SULT family members.

SULT1E1 (H-40) is also recommended for detection of SULT1E1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for SULT1E1 siRNA (h): sc-88903, SULT1E1 siRNA (m): sc-153924, SULT1E1 shRNA Plasmid (h): sc-88903-SH, SULT1E1 shRNA Plasmid (m): sc-153924-SH, SULT1E1 shRNA (h) Lentiviral Particles: sc-88903-V and SULT1E1 shRNA (m) Lentiviral Particles: sc-153924-V.

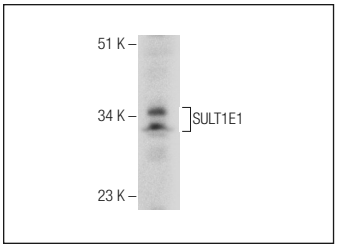
Molecular Weight of SULT1E1: 35 kDa.

Positive Controls: human liver extract: sc-363766.

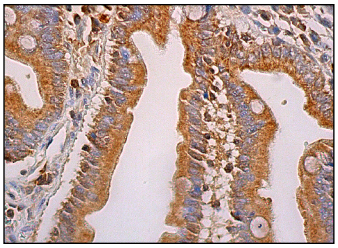
RECOMMENDED SECONDARY REAGENTS

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



SULT1E1 (H-40): sc-292049. Western blot analysis of SULT1E1 expression in human liver tissue extract.



SULT1E1 (H-40): sc-292049. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Naville, D., et al. 2015. Metabolic outcome of female mice exposed to a mixture of low-dose pollutants in a diet-induced obesity model. PLoS ONE 10: e0124015.

STORAGE

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

PROTOCOLS

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