

SULT1B1 (N-19): sc-130273

BACKGROUND

Sulfation is an essential conjugation reaction that increases the water solubility of many compounds, thereby influencing their renal excretion and also resulting in the formation of active metabolites. SULT1B1 (sulfotransferase family cytosolic 1B member 1), also known as thyroid hormone sulfotransferase, is a 296 amino acid cytoplasmic protein that catalyzes the sulfur conjugation of many neurotransmitters, hormones, xenobiotic compounds and drugs. Specifically, SULT1B1 has the ability to sulfate thyroid hormones, a process that is involved in stimulating the metabolism or inactivation of thyroid hormones. The regulation of thyroid hormones has important physiological impacts, such as maintaining metabolic stability in tissues, regulating the production and activities of enzymes and determining the utilization of substrates, minerals and vitamins. SULT1B1 is highly expressed in liver, colon, spleen, small intestine and peripheral blood lymphocytes, with lower expression in thymus, lung and placenta.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SULT1B1 (human) mapping to 4q13.3; Sult1b1 (mouse) mapping to 5 E1.

SOURCE

SULT1B1 (N-19) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of SULT1B1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SULT1B1 (N-19) is recommended for detection of SULT1B1 of mouse 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SULT1B1 siRNA (h): sc-89149, SULT1B1 siRNA (m): sc-153920, SULT1B1 shRNA Plasmid (h): sc-89149-SH, SULT1B1 shRNA Plasmid (m): sc-153920-SH, SULT1B1 shRNA (h) Lentiviral Particles: sc-89149-V and SULT1B1 shRNA (m) Lentiviral Particles: sc-153920-V.

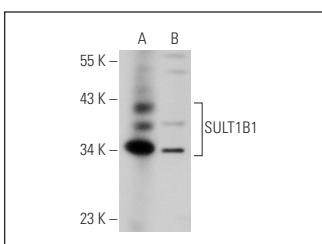
Molecular Weight of SULT1B1: 35 kDa.

Positive Controls: human colon extract: sc-363757 or 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).

DATA



SULT1B1 (N-19): sc-130273. Western blot analysis of SULT1B1 expression in human colon (A) and human liver (B) tissue extracts.

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.