

# SULT1A1 (Z-21): sc-130883

## 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. SULT1A1 (sulfotransferase family, cytosolic, 1A, phenol-preferring, member 1), also known as STP or STP1, is a 295 amino acid protein that localizes to the cytoplasm and belongs to the sulfotransferase family. Functioning as a homodimer that is expressed in brain, liver, skin and lung tissue, SULT1A1 catalyzes the sulfate conjugation of catecholamines, phenolic drugs and neurotransmitters and, via this catalytic activity, plays a role in the elimination of a variety of compounds from the body. Additionally, SULT1A1 may be involved in the activation of carcinogenic N-hydroxyarylamines, indicating a possible role in carcinogenesis.

## REFERENCES

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## STORAGE

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

## CHROMOSOMAL LOCATION

Genetic locus: SULT1A1 (human) mapping to 16p11.2; Sult1a1 (mouse) mapping to 7 F3.

## SOURCE

SULT1A1 (Z-21) is a purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SULT1A1 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

SULT1A1 (Z-21) is recommended for detection of SULT1A1 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).

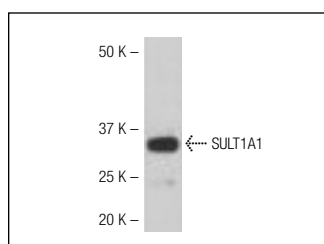
Suitable for use as control antibody for SULT1A1 siRNA (h): sc-106578, SULT1A1 siRNA (m): sc-155969, SULT1A1 shRNA Plasmid (h): sc-106578-SH, SULT1A1 shRNA Plasmid (m): sc-155969-SH, SULT1A1 shRNA (h) Lentiviral Particles: sc-106578-V and SULT1A1 shRNA (m) Lentiviral Particles: sc-155969-V.

Molecular Weight of SULT1A1: 34 kDa.

## 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



SULT1A1 (Z-21): sc-130883. Western blot analysis of SULT1A1 expression in mouse kidney tissue extract.

## RESEARCH USE

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