

SULT6B1 (B-4): sc-398770



The Power to Question

BACKGROUND

SULT6B1 (sulfotransferase family, cytosolic, 6B, member 1), also known as ST6B1 (sulfotransferase 6B1) or thyroxine sulfotransferase, is a 303 amino acid cytoplasmic protein that is specifically expressed in kidney and testis. SULT6B1 belongs to the sulfotransferase 1 family and exists as two alternatively spliced isoforms. Involved in the metabolism of thyroxine, SULT6B1 has specific sulfotransferase activity towards thyroxine. The gene that encodes SULT6B1 contains 28,779 bases and maps to human chromosome 2p22.2. With 237 million bases encoding over 1,400 genes, chromosome 2 is the second largest human chromosome. A number of genetic diseases are linked to genes on chromosome 2, including the rare and morbid skin disease, Harlequin ichthyosis, the lipid metabolic disorder, sitosterolemia, and the extremely rare recessive genetic disorder, Alström syndrome.

REFERENCES

1. Patel, S.B., et al. 1998. Mapping a gene involved in regulating dietary cholesterol absorption. The sitosterolemia locus is found at chromosome 2p21. *J. Clin. Invest.* 102: 1041-1044.
2. Zumsteg, U., et al. 2000. Alström syndrome: confirmation of linkage to chromosome 2p12-13 and phenotypic heterogeneity in three affected sibs. *J. Med. Genet.* 37: E8.
3. Shulenin, S., et al. 2001. An ATP-binding cassette gene (ABCG5) from the ABCG (white) gene subfamily maps to human chromosome 2p21 in the region of the sitosterolemia locus. *Cytogenet. Cell Genet.* 92: 204-208.

CHROMOSOMAL LOCATION

Genetic locus: SULT6B1 (human) mapping to 2p22.2; Sult6b1 (mouse) mapping to 17 E3.

SOURCE

SULT6B1 (B-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 89-106 within an internal region of SULT6B1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SULT6B1 (B-4) is available conjugated to agarose (sc-398770 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398770 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398770 PE), fluorescein (sc-398770 FITC), Alexa Fluor® 488 (sc-398770 AF488), Alexa Fluor® 546 (sc-398770 AF546), Alexa Fluor® 594 (sc-398770 AF594) or Alexa Fluor® 647 (sc-398770 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398770 AF680) or Alexa Fluor® 790 (sc-398770 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398770 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

SULT6B1 (B-4) is recommended for detection of SULT6B1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SULT6B1 siRNA (h): sc-94552, SULT6B1 siRNA (m): sc-153929, SULT6B1 shRNA Plasmid (h): sc-94552-SH, SULT6B1 shRNA Plasmid (m): sc-153929-SH, SULT6B1 shRNA (h) Lentiviral Particles: sc-94552-V and SULT6B1 shRNA (m) Lentiviral Particles: sc-153929-V.

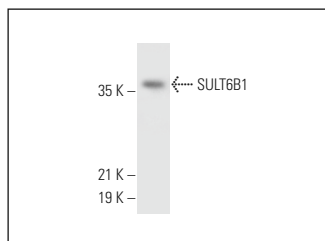
Molecular Weight of SULT6B1 isoforms: 35/23 kDa.

Positive Controls: human liver extract: sc-363766.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



SULT6B1 (B-4): sc-398770. Western blot analysis of SULT6B1 expression in human liver tissue extract.

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 for detailed protocols and support products.