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# SULT4A1 (h2): 293T Lysate: sc-129887

## 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. SULT4A1 (sulfotransferase family 4A, member 1), whose alternative names include brain sulfotransferase-like protein, nervous system sulfotransferase, NST, SULTX3, hBR-STL-1, BRSTL1, BR-STL-1, MGC40032 and DJ388M5.3, is a 284 amino acid protein showing cytoplasmic localization. As a member of the sulfotransferase one family, SULT4A1 plays a role in elimination of xenobiotics, activation of procarcinogens and regulation of hormones. SULT4A1 is highly expressed in cerebral cortex and frontal lobe, with lower expression in cerebellum, temporal and occipital lobes. Two SULT4A1 isoforms exist to alternative splicing events. The gene encoding SULT4A1 maps to human chromosome 22q13.31, a region which has been implicated in predisposition to schizophrenia.

## REFERENCES

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- Lewis, A.G. and Minchin, R.F. 2009. Lack of exonic sulfotransferase 4A1 mutations in controls and schizophrenia cases. *Psychiatr. Genet.* 19: 53-55.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## CHROMOSOMAL LOCATION

Genetic locus: SULT4A1 (human) mapping to 22q13.31.

## PRODUCT

SULT4A1 (h2): 293T Lysate represents a lysate of human SULT4A1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

SULT4A1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive SULT4A1 antibodies. Recommended use: 10-20 µl per lane.

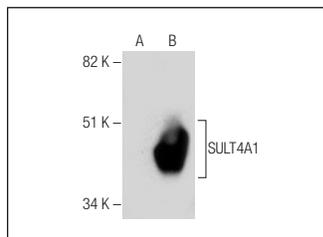
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ULT4A1 (B-3): sc-374545 is recommended as a positive control antibody for Western Blot analysis of enhanced human SULT4A1 expression in SULT4A1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

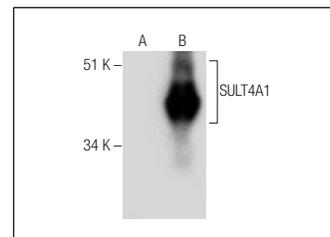
## RECOMMENDED SUPPORT REAGENTS

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.

## DATA



SULT4A1 (B-3): sc-374545. Western blot analysis of SULT4A1 expression in non-transfected: sc-117752 (A) and human SULT4A1 transfected: sc-129887 (B) 293T whole cell lysates.



SULT4A1 (H-4): sc-376728. Western blot analysis of SULT4A1 expression in non-transfected: sc-117752 (A) and human SULT4A1 transfected: sc-129887 (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.