

SATL1 (E-8): sc-398793

BACKGROUND

SATL1 (spermine N(1)-acetyltransferase-like protein 1) is a 508 amino acid protein that contains one N-acetyltransferase domain, and belongs to the acetyltransferase family. Existing as two alternatively spliced isoforms, the SATL1 gene is conserved in chimpanzee, canine, bovine, mouse and rat, and maps to human chromosome Xq21.1. Chromosome X consists of about 153 million base pairs and nearly 1,000 genes. The combination of an X and Y chromosome lead to normal male development while two copies of X lead to normal female development. There are a number of conditions related to an unusual number and combination of sex chromosomes being inherited. More than one copy of the X chromosome with a Y chromosome causes Klinefelter's syndrome. A single copy of X alone leads to Turner's syndrome. More than two copies of the X chromosome, in the absence of a Y chromosome, is known as triple X syndrome. Color blindness, hemophilia and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently as males carry a single X chromosome.

REFERENCES

1. Bernardino-Sgherri, J., et al. 2002. Overall DNA methylation and chromatin structure of normal and abnormal X chromosomes. *Cytogenet. Genome Res.* 99: 85-91.
2. Deeb, S.S. 2005. The molecular basis of variation in human color vision. *Clin. Genet.* 67: 369-377.
3. Ross, M.T., et al. 2005. The DNA sequence of the human X chromosome. *Nature* 434: 325-337.

CHROMOSOMAL LOCATION

Genetic locus: SATL1 (human) mapping to Xq21.1; Satl1 (mouse) mapping to X E1.

SOURCE

SATL1 (E-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 163-191 within an internal region of SATL1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SATL1 (E-8) is available conjugated to agarose (sc-398793 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398793 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398793 PE), fluorescein (sc-398793 FITC), Alexa Fluor® 488 (sc-398793 AF488), Alexa Fluor® 546 (sc-398793 AF546), Alexa Fluor® 594 (sc-398793 AF594) or Alexa Fluor® 647 (sc-398793 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398793 AF680) or Alexa Fluor® 790 (sc-398793 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398793 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

SATL1 (E-8) is recommended for detection of SATL1 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 SATL1 siRNA (h): sc-106534, SATL1 siRNA (m): sc-153231, SATL1 shRNA Plasmid (h): sc-106534-SH, SATL1 shRNA Plasmid (m): sc-153231-SH, SATL1 shRNA (h) Lentiviral Particles: sc-106534-V and SATL1 shRNA (m) Lentiviral Particles: sc-153231-V.

Molecular Weight of SATL1 isoforms 1/2: 56/49 kDa.

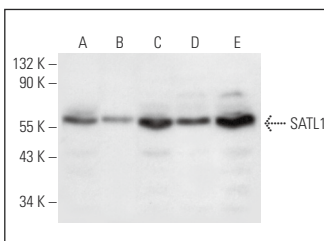
Positive Controls: A-431 whole cell lysate: sc-2201, Hep G2 cell lysate: sc-2227 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SUPPORT REAGENTS

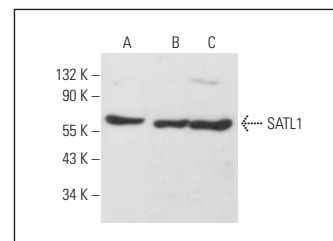
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (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



SATL1 (E-8): sc-398793. Western blot analysis of SATL1 expression in Hep G2 (A), A-431 (B), Jurkat (C), HeLa (D) and K-562 (E) whole cell lysates.



SATL1 (E-8): sc-398793. Western blot analysis of SATL1 expression in RT-4 (A), KNRK (B) and NIH/3T3 (C) whole cell lysates.

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.