

SYT (S-15): sc-32521

BACKGROUND

The transcriptional coactivator SYT (synovial translocation protein) contains a conserved amino terminal SNH domain and a carboxy terminal QPGY domain, which is a functioning transcriptional activating sequence. Synovial sarcoma translocation (SSX) proteins, including SSX1-5, are transcriptional repressors that contain a repressor domain in their carboxy termini. SSX proteins are localized to the nucleus and expressed in testis and several types of cancers and, therefore, they are classified as C/T (cancer/testis) antigens. The t(x;18) translocation results in the fusion of the amino terminus of SYT to the carboxy terminus of either SSX1 or SSX2; both fusions result in the production of transcriptional activators. SYT-SSX chimeras are detected in most synovial sarcomas. Synovial sarcomas are responsible for up to 10% of soft tissue sarcomas and are histologically characterized as either biphasic or monophasic. Genetic analysis indicates that biphasic synovial sarcomas contain SYT-SSX1 fusions, whereas SYT-SSX2 fusions are found in monophasic synovial sarcomas, providing additional distinguishing characterization of these subtypes.

REFERENCES

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- Crew, A.J., et al. 1995. Fusion of SYT to two genes, SSX1 and SSX2, encoding proteins with homology to the Krüppel-associated box in human synovial sarcoma. *EMBO J.* 14: 2333-2340.
- dos Santos, N.R., et al. 1997. Nuclear localization of SYT, SSX and the synovial sarcoma-associated SYT-SSX fusion proteins. *Hum. Mol. Genet.* 6: 1549-1558.
- Gure, A.O., et al. 1997. SSX: a multigene family with several members transcribed in normal testis and human cancer. *Int. J. Cancer* 72: 965-971.
- Tureci, O., et al. 1998. Expression of SSX genes in human tumors. *Int. J. Cancer* 77: 19-23.
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CHROMOSOMAL LOCATION

Genetic locus: SS18 (human) mapping to 18q11.2; Ss18 (mouse) mapping to 18 A1.

SOURCE

SYT (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SYT of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-32521 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-32521 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SYT (S-15) is recommended for detection of SYT of mouse, rat 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)], 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).

SYT (S-15) is also recommended for detection of SYT in additional species, including equine and canine.

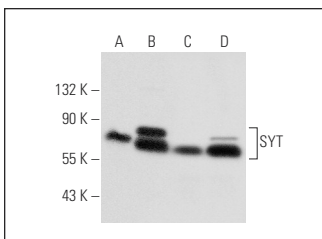
Suitable for use as control antibody for SYT siRNA (h): sc-38449, SYT siRNA (m): sc-38450, SYT shRNA Plasmid (h): sc-38449-SH, SYT shRNA Plasmid (m): sc-38450-SH, SYT shRNA (h) Lentiviral Particles: sc-38449-V and SYT shRNA (m) Lentiviral Particles: sc-38450-V.

SYT (S-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SYT: 54 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, K-562 whole cell lysate: sc-2203 or Jurkat whole cell lysate: sc-2204.

DATA



SYT (S-15): sc-32521. Western blot analysis of SYT expression in DT40 (A), IMR-32 (B), Jurkat (C) and K-562 (D) 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 or our catalog for detailed protocols and support products.



Try **SYT (D-3): sc-390615** or **SYT (C-3): sc-390266**, our highly recommended monoclonal alternatives to SYT (S-15).