

STI1 (N-18): sc-27962

BACKGROUND

Stress-induced-phosphoprotein 1 (STI1) functions as a co-chaperone for HSP70 and HSP90 during heat shock response. STI1 exists as either a monomer or a dimer, and this conformational flexibility facilitates its function in organizing HSP70/HSP90. HSP90 acts as an ATPase, and requires the recruitment of client proteins and proper conformation to function. STI1 acts as a "scaffold" for client protein recruitment to the relaxed, ADP-bound conformation of HSP90, thus suppressing ATP turnover during the loading phase and allowing proper function.

REFERENCES

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- van der Spuy, J., et al. 2001. The cochaperone murine stress-inducible protein 1: overexpression, purification, and characterization. *Protein Expr. Purif.* 21: 462-469.
- Siligardi, G., et al. 2002. Regulation of HSP90 ATPase activity by the co-chaperone Cdc37p/p50Cdc37. *J. Biol. Chem.* 277: 20151-20159.
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- Zanata, S.M., et al. 2002. Stress-inducible protein 1 is a cell surface ligand for cellular prion that triggers neuroprotection. *EMBO J.* 21: 3307-3316.
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- Wegele, H., et al. 2003. Sti1 is a novel activator of the Ssa proteins. *J. Biol. Chem.* 278: 25970-25976.

CHROMOSOMAL LOCATION

Genetic locus: STIP1 (human) mapping to 11q13.1; Stip1 (mouse) mapping to 19 A.

SOURCE

STI1 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of STI1 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.

Blocking peptide available for competition studies, sc-515648 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

STI1 (N-18) is recommended for detection of STI1 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).

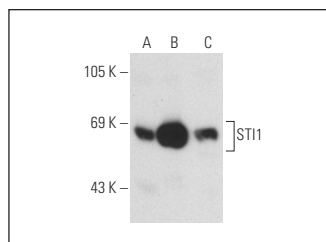
STI1 (N-18) is also recommended for detection of STI1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for STI1 siRNA (h): sc-106905, STI1 siRNA (m): sc-153893, STI1 shRNA Plasmid (h): sc-106905-SH, STI1 shRNA Plasmid (m): sc-153893-SH, STI1 shRNA (h) Lentiviral Particles: sc-106905-V and STI1 shRNA (m) Lentiviral Particles: sc-153893-V.

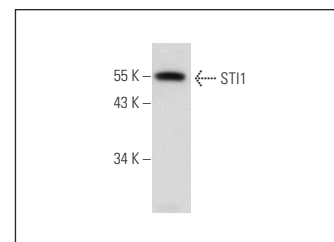
Molecular Weight of STI1: 63 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, STI1 (m): 293T Lysate: sc-123820 or NIH/3T3 whole cell lysate: sc-2210.

DATA



STI1 (N-18): sc-27962. Western blot analysis of STI1 expression in non-transfected 293T: sc-117752 (A), mouse STI1 transfected 293T: sc-123820 (B) and NIH/3T3 (C) whole cell lysates.



STI1 (N-18): sc-27962. Western blot analysis of STI1 expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

- Li, X., et al. 2014. Quantitative profiling of the rat heart myoblast secretome reveals differential responses to hypoxia and re-oxygenation stress. *J. Proteomics* 98: 138-149.

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.

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Try **STI1 (D-6): sc-390203** or **STI1 (E-10): sc-390225**, our highly recommended monoclonal alternatives to STI1 (N-18).