

# STI1 (D-6): sc-390203

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

STI1 (D-6) is a mouse monoclonal antibody raised against amino acids 203-453 mapping near the C-terminus of STI1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STI1 (D-6) is available conjugated to agarose (sc-390203 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390203 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390203 PE), fluorescein (sc-390203 FITC), Alexa Fluor<sup>®</sup> 488 (sc-390203 AF488), Alexa Fluor<sup>®</sup> 546 (sc-390203 AF546), Alexa Fluor<sup>®</sup> 594 (sc-390203 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-390203 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-390203 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-390203 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## STORAGE

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

## APPLICATIONS

STI1 (D-6) is recommended for detection of STI1 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), immunohistochemistry (including paraffin-embedded sections) (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 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.

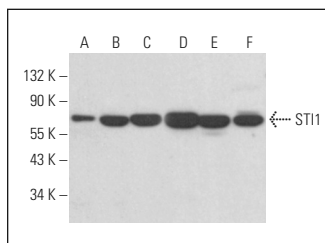
Molecular Weight of STI1: 63 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, CCRF-CEM cell lysate: sc-2225 or BYDP whole cell lysate: sc-364368.

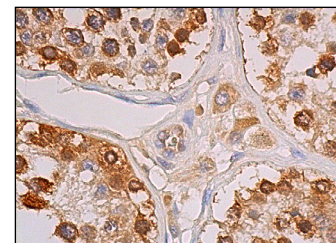
## RECOMMENDED SUPPORT REAGENTS

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<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



STI1 (D-6): sc-390203. Western blot analysis of STI1 expression in MOLT-4 (A), CCRF-CEM (B), ALL-SIL (C), BYDP (D), C6 (E) and 3T3-L1 (F) whole cell lysates.



STI1 (D-6): sc-390203. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear and cytoplasmic staining of cells in seminiferous ducts and cytoplasmic staining of Leydig cells.

## SELECT PRODUCT CITATIONS

- Serlidaki, D., et al. 2020. Functional diversity between HSP70 paralogs due to variable interactions with specific co-chaperones. *J. Biol. Chem.* 295: 7301-7316.
- Di Luca, A., et al. 2022. Label-free quantitative proteomics and stress responses in pigs-the case of short or long road transportation. *PLoS ONE* 17: e0277950.

## 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.

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