

## SGTA (6A4): sc-130557



The Power to Question

## BACKGROUND

SGTA (small glutamine-rich tetratricopeptide repeat (TPR)-containing protein A or  $\alpha$ ), also known as SGT, hSGT or UBP (Vpu-binding protein), is a ubiquitously expressed protein that contains three TPR protein-protein interaction repeats. SGTA is believed to function as a component of the androgen receptor (AR)-chaperone-co-chaperone complex, acting as a co-chaperone involved in androgen signaling. More specifically, SGTA binds to the hinge region of the AR functions to retain the AR in the cytoplasm, thereby inhibiting androgen signaling. In addition, SGTA functions as a co-chaperone for HSP 90 and HSP 70, two proteins known to participate in apoptosis. On the basis of its role in apoptosis and androgen signaling, SGTA is a potential candidate for PCOS (polycystic ovary syndrome), a disorder characterized by androgen excess, obesity and menstrual disturbances. SGTA also interacts with the nonstructural parvovirus protein NS1 and the HIV-1 proteins Vpu and G $\alpha$   $\gamma$ .

## CHROMOSOMAL LOCATION

Genetic locus: SGTA (human) mapping to 19p13.3; Sgta (mouse) mapping to 10 C1.

## SOURCE

SGTA (6A4) is a mouse monoclonal antibody raised against recombinant SGTA of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG $_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SGTA (6A4) is available conjugated to agarose (sc-130557 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-130557 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-130557 PE), fluorescein (sc-130557 FITC), Alexa Fluor<sup>®</sup> 488 (sc-130557 AF488), Alexa Fluor<sup>®</sup> 546 (sc-130557 AF546), Alexa Fluor<sup>®</sup> 594 (sc-130557 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-130557 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-130557 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-130557 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

SGTA (6A4) is recommended for detection of SGTA of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 SGTA siRNA (h): sc-97627, SGTA siRNA (m): sc-153427, SGTA shRNA Plasmid (h): sc-97627-SH, SGTA shRNA Plasmid (m): sc-153427-SH, SGTA shRNA (h) Lentiviral Particles: sc-97627-V and SGTA shRNA (m) Lentiviral Particles: sc-153427-V.

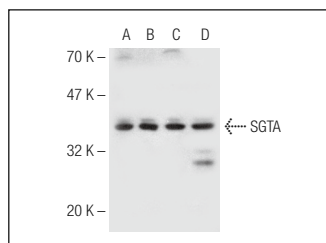
Molecular Weight of SGTA: 35 kDa.

Positive Controls: SGTA (m): 293T Lysate: sc-123527, HeLa whole cell lysate: sc-2200 or CCRF-CEM cell lysate: sc-2225.

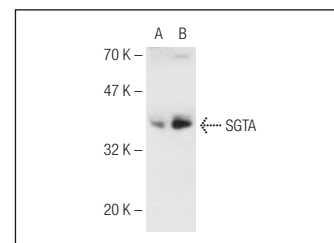
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  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.

## DATA



SGTA (6A4): sc-130557. Western blot analysis of SGTA expression in HeLa (A), K-562 (B), CCRF-CEM (C) and SH-SY5Y (D) whole cell lysates.



SGTA (6A4): sc-130557. Western blot analysis of SGTA expression in non-transfected: sc-117752 (A) and mouse SGTA transfected: sc-123527 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

- Lu, C., et al. 2014. Expression of SGTA correlates with prognosis and tumor cell proliferation in human hepatocellular carcinoma. *Pathol. Oncol. Res.* 20: 51-60.
- Wang, Y., et al. 2014. Expression of small glutamine-rich TPR-containing protein A (SGTA) in non-Hodgkin's lymphomas promotes tumor proliferation and reverses cell adhesion-mediated drug resistance (CAM-DR). *Leuk. Res.* 38: 955-963.
- Yao, G., et al. 2014. Polycystin-1 regulates actin cytoskeleton organization and directional cell migration through a novel PC1-Paccin 2-N-Wasp complex. *Hum. Mol. Genet.* 23: 2769-2779.
- Roboti, P., et al. 2022. Mitochondrial antiviral-signalling protein is a client of the BAG6 protein quality control complex. *J. Cell Sci.* 135: jcs259596.

## 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](http://www.scbt.com) for detailed protocols and support products.