

# SF-1 (A-1): sc-393592

## BACKGROUND

Steroidogenic factor-1 (SF-1), also known as NR5A1, regulates multiple genes involved in the adrenal and gonadal development and in the biosynthesis of a variety of hormones, including adrenal and gonadal steroids, anti-Mullerian hormone (AMH), and gonadotropins. SF-1 belongs to the fushi tarazu factor-1 (FTZ-F1) subfamily of orphan nuclear receptors. In the adult ovary, SF-1 localizes to theca/interstitial cells.

## CHROMOSOMAL LOCATION

Genetic locus: NR5A1 (human) mapping to 9q33.3; Nr5a1 (mouse) mapping to 2 B.

## SOURCE

SF-1 (A-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 228-263 within an internal region of SF-1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain 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-393592 X, 200 µg/0.1 ml.

SF-1 (A-1) is available conjugated to agarose (sc-393592 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393592 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393592 PE), fluorescein (sc-393592 FITC), Alexa Fluor<sup>®</sup> 488 (sc-393592 AF488), Alexa Fluor<sup>®</sup> 546 (sc-393592 AF546), Alexa Fluor<sup>®</sup> 594 (sc-393592 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-393592 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-393592 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-393592 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393592 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

SF-1 (A-1) is recommended for detection of SF-1 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 SF-1 siRNA (h): sc-37901, SF-1 siRNA (m): sc-37902, SF-1 shRNA Plasmid (h): sc-37901-SH, SF-1 shRNA Plasmid (m): sc-37902-SH, SF-1 shRNA (h) Lentiviral Particles: sc-37901-V and SF-1 shRNA (m) Lentiviral Particles: sc-37902-V.

SF-1 (A-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

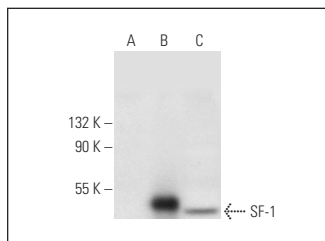
Molecular Weight of SF-1: 53 kDa.

Positive Controls: SF-1 (h): 293T Lysate: sc-158953.

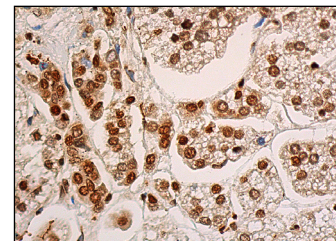
## STORAGE

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

## DATA



SF-1 (A-1): sc-393592. Western blot analysis of SF-1 expression in non-transfected 293T: sc-117752 (A), human SF-1 transfected 293T: sc-158953 (B) and Hep G2 (C) whole cell lysates.



SF-1 (A-1): sc-393592. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing nuclear staining of glandular cells.

## SELECT PRODUCT CITATIONS

- Wang, X.J., et al. 2016. Dibutyl phthalate inhibits the effects of follicle-stimulating hormone on rat granulosa cells through down-regulation of follicle-stimulating hormone receptor. *Biol. Reprod.* 94: 144.
- Joshi, D., et al. 2017. Decreased expression of orexin 1 receptor in adult mice testes during alloxan-induced diabetes mellitus perturbs testicular steroidogenesis and glucose homeostasis. *Biochem. Biophys. Res. Commun.* 490: 1346-1354.
- Joshi, D. and Singh, S.K. 2018. The neuropeptide orexin A-sarch for its possible role in regulation of steroidogenesis in adult mice testes. *Andrology* 6: 465-477.
- Hadjidemetriou, I., et al. 2019. DLK1/PREF1 marks a novel cell population in the human adrenal cortex. *J. Steroid Biochem. Mol. Biol.* 193: 105422.
- Taniguchi-Ponciano, K., et al. 2020. Transcriptome and methylome analysis reveals three cellular origins of pituitary tumors. *Sci. Rep.* 10: 19373.
- Patel, S.K. and Singh, S.K. 2020. Pyroglutamylated Rfamamide peptide 43: a putative modulator of testicular steroidogenesis. *Andrology* 8: 1815-1823.
- Taniguchi-Ponciano, K., et al. 2020. Proteomic and transcriptomic analysis identify spliceosome as a significant component of the molecular machinery in the pituitary tumors derived from POU1F1- and NR5A1-cell lineages. *Genes* 11: 1422.
- Paul, T., et al. 2022. Adrenal tropism of SARS-CoV-2 and adrenal findings in a post-mortem case series of patients with severe fatal COVID-19. *Nat. Commun.* 13: 1589.
- Li, Y., et al. 2022. Development of the human fetal testis: morphology and expression of cellular differentiation markers. *Differentiation*. E-published.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

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