

# SF-1 (E-18): sc-10976

## 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.

## REFERENCES

- Li, M., et al. 1998. Cloning and characterization of a novel human hepatocyte transcription factor, hB1F, which binds and activates enhancer II of hepatitis B virus. *J. Biol. Chem.* 273: 29022-29031.
- Falender, A.E., et al. 2003. Differential expression of steroidogenic factor-1 and FTF/LRH-1 in the rodent ovary. *Endocrinology* 144: 3598-3610.

## CHROMOSOMAL LOCATION

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

## SOURCE

SF-1 (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SF-1 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-10976 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-10976 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SF-1 (E-18) is recommended for detection of SF-1 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).

SF-1 (E-18) is also recommended for detection of SF-1 in additional species, including equine, canine, bovine and porcine.

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 (E-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

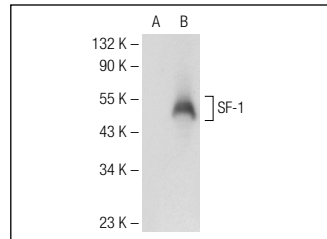
Molecular Weight of SF-1: 53 kDa.

Positive Controls: SF-1 (h): 293T Lysate: sc-158953 or Hep G2 cell lysate: sc-2227.

## 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 (E-18): sc-10976. Western blot analysis of SF-1 expression in non-transfected: sc-117752 (A) and human SF-1 transfected: sc-158953 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

- LaVoie, H.A., et al. 2004. Concerted regulation of the porcine steroidogenic acute regulatory protein gene promoter activity by follicle-stimulating hormone and Insulin-like growth factor I in granulosa cells involves GATA-4 and CCAAT/enhancer binding protein β. *Endocrinology* 145: 3122-3134.
- Jin, X., et al. 2005. Stem cell factor modulates the expression of steroidogenesis related proteins and FSHR during ovarian follicular development. *Front. Biosci.* 10: 1573-1580.
- Jin, X., et al. 2005. Signal transduction of stem cell factor in promoting early follicle development. *Mol. Cell. Endocrinol.* 229: 3-10.
- Morales, A., et al. 2006. Expression of steroidogenic factors 1 and 2 in normal human pancreas. *J. Steroid Biochem. Mol. Biol.* 98: 254-258.
- Chuang, Y.S., et al. 2011. Promyelocytic leukemia protein in retinoic acid-induced chromatin remodeling of Oct4 gene promoter. *Stem Cells* 29: 660-669.

## 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) or our catalog for detailed protocols and support products.



Try **SF-1 (A-1): sc-393592** or **SF-1 (G-12): sc-398202**, our highly recommended monoclonal alternatives to SF-1 (E-18).