SANTA CRUZ BIOTECHNOLOGY, INC.

NR5A2 (N-16): sc-5993

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The Power to Question

BACKGROUND

NR5A2 (nuclear receptor subfamily 5, group A, member 2, also designated b1-binding factor (B1F or B1F2), CYP7A promoter-binding factor (CPF), feto protein-α1 (AFP) transcription factor (FTF, FTZ-F1 or FTZ-F1β, and liver receptor homolog 1 (LRH-1) is a pre-adipocyte-specific nuclear receptor that regulates expression of aromatase in adipose tissue. NR5A2 belongs to the fushi tarazu factor-1 subfamily of orphan nuclear receptors. NR5A2 transcripts are abundant in the human ovary and testis and are predominantly expressed in tissues of endodermal origin. NR5A2 is a positive transcription factor for ABCG5 and ABCG8 and regulates genes involved in sterol and bile acid secretion from liver and intestine. It induces cell proliferation through the concomitant induction of cyclin D1 and E1, an effect that is potentiated by its interaction with β-catenin.

REFERENCES

1. Luo, Y., et al. 2001. The orphan nuclear receptor LRH-1 potentiates the sterol-mediated induction of the human CETP gene by liver X receptor. J. Biol. Chem. 276: 24767-24773.
2. Clyne, C.D., et al. 2002. Liver receptor homologue-1 (LRH-1) regulates expression of aromatase in preadipocytes. J. Biol. Chem. 277: 20591-20597.
3. Cai, Y.N., et al. 2003. LRH-1/hB1F and HNF1 synergistically up-regulate hepatitis B virus gene transcription and DNA replication. Cell Res. 13: 451-458.
4. Bohan, A., et al. 2003. Tumor necrosis factor α-dependent up-regulation of Lrh-1 and Mrp3(Abcc3) reduces liver injury in obstructive cholestasis. J. Biol. Chem. 278: 36688-36698.
5. Pezzi, V., et al. 2004. Differential expression of steroidogenic factor-1/adrenal 4 binding protein and liver receptor homolog-1 (LRH-1)/fetoprotein transcription factor in the rat testis: LRH-1 as a potential regulator of testicular aromatase expression. Endocrinology 145: 2186-2196.
6. Freeman, L.A., et al. 2004. The orphan nuclear receptor LRH-1 activates the ABCG5/ABCG8 intergenic promoter. J. Lipid Res. 45: 1197-1206.

CHROMOSOMAL LOCATION

Genetic locus: NR5A2 (human) mapping to 1q32.1; Nr5a2 (mouse) mapping to 1 E4.

SOURCE

NR5A2 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of NR5A2 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-5993 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-5993 X, 200 µg/0.1 ml.

APPLICATIONS

NR5A2 (N-16) is recommended for detection of NR5A2 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).

NR5A2 (N-16) is also recommended for detection of NR5A2 in additional species, including bovine.

Suitable for use as control antibody for NR5A2 siRNA (h): sc-37897, NR5A2 siRNA (m): sc-37898, NR5A2 shRNA Plasmid (h): sc-37897-SH, NR5A2 shRNA Plasmid (m): sc-37898-SH, NR5A2 shRNA (h) Lentiviral Particles: sc-37897-V and NR5A2 shRNA (m) Lentiviral Particles: sc-37898-V.

NR5A2 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

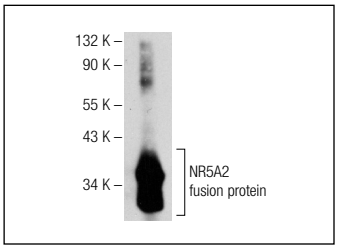
Molecular Weight of NR5A2 isoforms: 61/56/42 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or mouse intestine extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



NR5A2 (N-16): sc-5993. Western blot analysis of human recombinant NR5A2 fusion protein.

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.