HNF-3β (H-150): sc-20692



The Power to Question

BACKGROUND

HNF-1 (α and β), HNF-3 (α , β and γ), HNF-4 (α and γ) and HNF-6 compose, in part, a homoeprotein family designated the hepatocyte nuclear factor family. The various HNF-1 isoforms regulate transcription of genes in the liver as well as in other tissues such as kidney, small intestine and thymus. HNF-3 α , HNF-3 β and HNF-3 γ regulate the transcription of numerous hepatocyte genes in adult liver. HNF-3 α and HNF-3 β have also been shown to be involved in gastrulation events such as body axis formation. HNF-4 α and HNF-4 γ have been shown to be important for early embryo development. HNF-4 α is expressed in liver, kidney, pancreas, small intestine, testis and colon; HNF-4 γ is expressed in each of these tissues except liver. HNF-6 has been shown to bind to the promoter of HNF-3 β , which indicates a potential role of HNF-6 in gut endoderm epithelial cell differentiation. Evidence suggests that HNF-6 may also be a transriptional activator for at least 22 other hepatocyte-enriched genes, including cytochrome P450 2C13 and α -1 antitrypsin.

CHROMOSOMAL LOCATION

Genetic locus: FOXA2 (human) mapping to 20p11.21; Foxa2 (mouse) mapping to 2 G3.

SOURCE

HNF-3 β (H-150) is a rabbit polyclonal antibody raised against amino acids 261-370 mapping within an internal region of HNF-3 β of human origin.

PRODUCT

Each vial contains 200 μg lgG 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-20692 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

HNF-3 β (H-150) is recommended for detection of HNF-3 β of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

HNF-3 β (H-150) is also recommended for detection of HNF-3 β in additional species, including canine and porcine.

Suitable for use as control antibody for HNF-3 β siRNA (h): sc-35569, HNF-3 β siRNA (m): sc-35570, HNF-3 β shRNA Plasmid (h): sc-35569-SH, HNF-3 β shRNA Plasmid (m): sc-35570-SH, HNF-3 β shRNA (h) Lentiviral Particles: sc-35569-V and HNF-3 β shRNA (m) Lentiviral Particles: sc-35570-V.

HNF-3 β (H-150) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

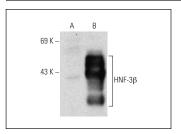
Molecular Weight of HNF-3β: 54 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or HNF-3 β (h): 293T Lysate: sc-176240.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



HNF-3β (H-150): sc-20692. Western blot analysis of HNF-3β expression in non-transfected: sc-117752 (A) and human HNF-3β transfected: sc-176240 (B) 293T whole cell Ivsates.

SELECT PRODUCT CITATIONS

- Tai, B.C., et al. 2010. The use of a polyelectrolyte fibrous scaffold to deliver differentiated hMSCs to the liver. Biomaterials 31: 48-57.
- Auer, S., et al. 2012. Potential role of upstream stimulatory factor 1 gene variant in familial combined hyperlipidemia and related disorders. Arterioscler. Thromb. Vasc. Biol. 32: 1535-1544.

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 or our catalog for detailed protocols and support products.



Try HNF-3 β (H-4): sc-374376 or HNF-3 β (A-12): sc-374375, our highly recommended monoclonal alternatives to HNF-3 β (H-150). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see HNF-3 β (H-4): sc-374376.