

HNF-1 β (H-85): sc-22840

BACKGROUND

HNF-1 (α and β), HNF-3 (α , β and γ), HNF-4 (α and γ), and HNF-6 compose, in part, a homeoprotein family designated the hepatocyte nuclear factor family. The various HNF-1 isoforms regulate transcription of genes in liver and 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; and 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 transcriptional activator for at least 22 other hepatocyte-enriched genes, including cytochrome P450 2C13 and α -1 antitrypsin.

CHROMOSOMAL LOCATION

Genetic locus: HNF1B (human) mapping to 17q12; Hnf1b (mouse) mapping to 11 C.

SOURCE

HNF-1 β (H-85) is a rabbit polyclonal antibody raised against amino acids 6-90 of HNF-1 β of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-22840 X, 200 μ g/0.1 ml.

APPLICATIONS

HNF-1 β (H-85) is recommended for detection of HNF-1 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-1 β (H-85) is also recommended for detection of HNF-1 β in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HNF-1 β siRNA (h): sc-37928, HNF-1 β siRNA (m): sc-37929, HNF-1 β shRNA Plasmid (h): sc-37928-SH, HNF-1 β shRNA Plasmid (m): sc-37929-SH, HNF-1 β shRNA (h) Lentiviral Particles: sc-37928-V and HNF-1 β shRNA (m) Lentiviral Particles: sc-37929-V.

HNF-1 β (H-85) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

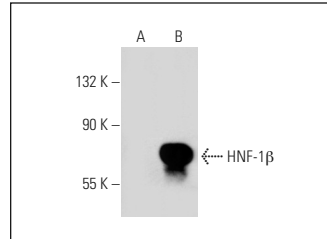
Molecular Weight of HNF-1 β : 61 kDa.

Positive Controls: HNF-1 β (h): 293T Lysate: sc-113415, Hep G2 nuclear extract: sc-364819 or human skin extract: sc-363777.

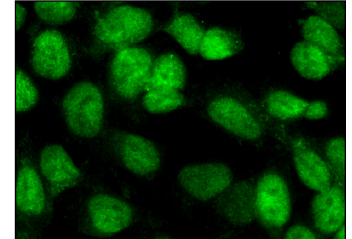
STORAGE

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

DATA



HNF-1 β (H-85): sc-22840. Western blot analysis of HNF-1 β expression in non-transfected: sc-117752 (A) and human HNF-1 β transfected: sc-113415 (B) 293T whole cell lysates.



HNF-1 β (H-85): sc-22840. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

SELECT PRODUCT CITATIONS

- Dyer, K.D. and Rosenberg, H.F. 2005. The mouse RNase 4 and RNase 5/ang 1 locus utilizes dual promoters for tissue-specific expression. *Nucleic Acids Res.* 33: 1077-1086.
- Tchorz, J.S., et al. 2009. Notch2 signaling promotes biliary epithelial cell fate specification and tubulogenesis during bile duct development in mice. *Hepatology* 50: 871-879.
- Ott, C.J., et al. 2009. A complex intronic enhancer regulates expression of the CFTR gene by direct interaction with the promoter. *J. Cell. Mol. Med.* 13: 680-692.
- Gong, Y., et al. 2009. HNF-1 β regulates transcription of the PKD modifier gene Kif12. *J. Am. Soc. Nephrol.* 20: 41-47.
- Surendran, K., et al. 2010. Reduced Notch signaling leads to renal cysts and papillary microadenomas. *J. Am. Soc. Nephrol.* 21: 819-832.
- Heliot, C., et al. 2013. HNF1B controls proximal-intermediate nephron segment identity in vertebrates by regulating Notch signalling components and *lrx1/2*. *Development* 140: 873-885.
- Afelik, S., et al. 2015. Wnt7b is required for epithelial progenitor growth and operates during epithelial-to-mesenchymal signaling in pancreatic development. *Dev. Biol.* 399: 204-217.

RESEARCH USE

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


 MONOS
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Try **HNF-1 β (94.8): sc-130407**, our highly recommended monoclonal alternative to HNF-1 β (H-85).