# SANTA CRUZ BIOTECHNOLOGY, INC.

# HNF-3γ (N-14): sc-34622



#### BACKGROUND

HNF-1 ( $\alpha$  and  $\beta$ ), HNF-3 ( $\alpha$ ,  $\beta$  and  $\gamma$ ), HNF-4 ( $\alpha$  and  $\gamma$ ), 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 $\alpha$ , HNF-3 $\beta$  and HNF-3 $\gamma$  regulate the transcription of numerous hepatocyte genes in adult liver. HNF-3 $\alpha$  and HNF-3 $\beta$  have also been shown to be involved in gastrulation events such as body axis formation. HNF-4 $\alpha$  and HNF-4 $\gamma$  have been shown to be important for early embryo development. HNF-4 $\alpha$  is expressed in liver, kidney, pancreas, small intestine, testis and colon; and HNF-4 $\gamma$  is expressed in each of these tissues except liver. HNF-6 has been shown to bind to the promoter of HNF-3 $\beta$ , 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  $\alpha$ -1 antitrypsin.

# REFERENCES

- Bach, I. and Yaniv, M. 1993. More potent transcriptional activators or a transdominant inhibitor of the HNF-1 homeoprotein family are generated by alternative RNA processing. EMBO J. 12: 4229-4242.
- Kaestner, K.H., Hiemisch, H., Luckow, B. and Schutz, G. 1994. The HNF-3 gene family of transcription factors in mice: gene structure, cDNA sequence, and mRNA distribution. Genomics 20: 377-385.
- Drewes, T., Senkel, S., Holewa, B. and Ryffel, G.U. 1996. Human HNF-4 isoforms are encoded by distinct and differentially expressed genes. Mol. Cell. Biol. 16: 925-931.
- Samadani, U. and Costa, R.H. 1996. The transcriptional activator HNF-6 regulates liver gene expression. Mol. Cell. Biol. 16: 6273-6284.

### CHROMOSOMAL LOCATION

Genetic locus: FOXA3 (human) mapping to 19q13.32; Foxa3 (mouse) mapping to 7 A3.

### SOURCE

HNF- $3\gamma$  (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of HNF- $3\gamma$  of human origin.

#### PRODUCT

Each vial contains 200  $\mu$ g 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-34622 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-34622 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

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

#### **APPLICATIONS**

HNF- $3\gamma$  (N-14) is recommended for detection of HNF- $3\gamma$  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).

HNF-3 $\gamma$  (N-14) is also recommended for detection of HNF-3 $\gamma$  in additional species, including canine, bovine and porcine.

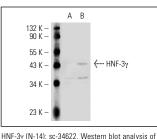
Suitable for use as control antibody for HNF-3 $\gamma$  siRNA (h): sc-35571, HNF-3 $\gamma$  siRNA (m): sc-35572, HNF-3 $\gamma$  shRNA Plasmid (h): sc-35571-SH, HNF-3 $\gamma$  shRNA Plasmid (m): sc-35572-SH, HNF-3 $\gamma$  shRNA (h) Lentiviral Particles: sc-35571-V and HNF-3 $\gamma$  shRNA (m) Lentiviral Particles: sc-35572-V.

HNF-3 $\gamma$  (N-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of HNF-3<sub>Y</sub>: 45 kDa.

Positive Controls: mouse embryo extract: sc-364239, HeLa whole cell lysate: sc-2200 or HNF-3 $\gamma$  (h): 293 Lysate: sc-111854.

#### DATA



HNF-39 (N-14), SC-34022, Western blot analysis of HNF-39 expression in non-transfected: sc-110760 (**A**) and human HNF-39 transfected: sc-111854 (**B**) 293 whole cell lysates.

# **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.

# MONOS Satisfation Guaranteed

Try HNF-3γ (A-2): sc-74424 or HNF-3γ (D-4): sc-166703, our highly recommended monoclonal alternatives to HNF-3γ (N-14).