

HNF-3 γ (N-19): sc-5361

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

SOURCE

HNF-3 γ (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of HNF-3 γ 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-5361 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-5361 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HNF-3 γ (N-19) is recommended for detection of HNF-3 γ 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 γ (N-19) is also recommended for detection of HNF-3 γ in additional species, including canine, bovine and porcine.

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

HNF-3 γ (N-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

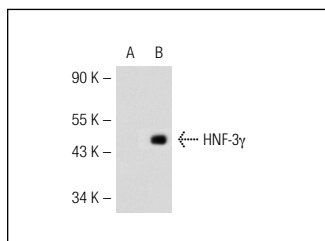
Molecular Weight of HNF-3 γ : 45 kDa.

Positive Controls: HNF-3 γ (m): 293T Lysate: sc-126959, HNF-3 γ (h): 293 Lysate: sc-111854 or Hep G2 cell lysate: sc-2227.

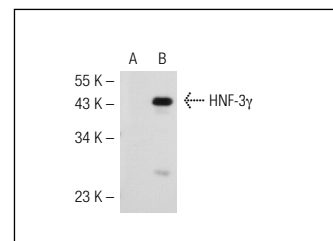
STORAGE

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

DATA



HNF-3 γ (N-19): sc-5361. Western blot analysis of HNF-3 γ expression in non-transfected: sc-117752 (A) and mouse HNF-3 γ transfected: sc-126959 (B) 293T whole cell lysates.



HNF-3 γ (N-19): sc-5361. Western blot analysis of HNF-3 γ expression in non-transfected: sc-110760 (A) and human HNF-3 γ transfected: sc-111854 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Ceelie, H., et al. 2003. Functional characterization of transcription factor binding sites for HNF-1 α , HNF-3 β (FOXA2), HNF-4 α , Sp1 and Sp3 in the human prothrombin gene enhancer. *J. Thromb. Haemost.* 1: 1688-1698.
2. Gao, N., et al. 2003. The role of hepatocyte nuclear factor-3 α (forkhead box A1) and androgen receptor in transcriptional regulation of prostatic genes. *Mol. Endocrinol.* 17: 1484-1507.
3. Mirosevich, J., et al. 2006. Expression and role of Foxa proteins in prostate cancer. *Prostate* 66: 1013-1028.
4. Chen, G., et al. 2009. SPDEF is required for mouse pulmonary goblet cell differentiation and regulates a network of genes associated with mucus production. *J. Clin. Invest.* 119: 2914-2924.
5. Eleswarapu, S., et al. 2009. Growth hormone-activated STAT5 may indirectly stimulate IGF-I gene transcription through HNF-3 γ . *Mol. Endocrinol.* 23: 2026-2037.
6. Riffel, A.K., et al. 2009. Regulation of the CYP3A4 and CYP3A7 promoters by members of the nuclear factor I transcription factor family. *Mol. Pharmacol.* 76: 1104-1114.
7. Chen, G., et al. 2010. Foxa2 programs Th2 cell-mediated innate immunity in the developing lung. *J. Immunol.* 184: 6133-6141.

RESEARCH USE

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


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Try **HNF-3 γ (A-2): sc-74424** or **HNF-3 γ (D-4): sc-166703**, our highly recommended monoclonal alternatives to HNF-3 γ (N-19).