

# HNF-3 $\gamma$ (K-15): sc-5360

## BACKGROUND

HNF-1 ( $\alpha$  and  $\beta$ ), HNF-3 ( $\alpha$ ,  $\beta$  and  $\gamma$ ), HNF-4 ( $\alpha$  and  $\gamma$ ), 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 $\alpha$ , HNF-3 $\beta$  and HNF-3 $\gamma$  regulate the transcription of numerous hepa-tocyte 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 transcriptional activator for at least 22 other hepatocyte-enriched genes, including cytochrome P450 2C13 and  $\alpha$ -1 antitrypsin.

## CHROMOSOMAL LOCATION

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

## SOURCE

HNF-3 $\gamma$  (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of HNF-3 $\gamma$  of human origin.

## PRODUCT

Each vial contains 200  $\mu$ 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-5360 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-5360 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

HNF-3 $\gamma$  (K-15) 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), 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).

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 $\gamma$  (K-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

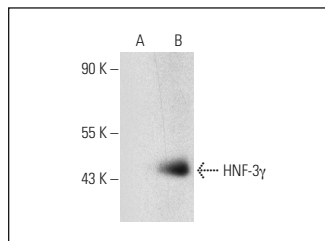
Molecular Weight of HNF-3 $\gamma$ : 45 kDa.

Positive Controls: HNF-3 $\gamma$  (h): 293 Lysate: sc-111854, mouse embryo extract: sc-364239 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 $\gamma$  (K-15): sc-5360. Western blot analysis of HNF-3 $\gamma$  expression in non-transfected: sc-110760 (A) and human HNF-3 $\gamma$  transfected: sc-111854 (B) 293 whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Bischof, L.J., et al. 2001. Characterization of the mouse islet-specific glucose-6-phosphatase catalytic subunit-related protein gene promoter by *in situ* footprinting: correlation with fusion gene expression in the islet-derived  $\beta$ TC-3 and hamster Insulinoma tumor cell lines. *Diabetes* 50: 502-514.
2. Kirmizis, A., et al. 2003. Identification of the polycomb group protein SU(Z)12 as a potential molecular target for human cancer therapy. *Mol. Cancer Ther.* 2: 113-121.
3. Schjerven, H., et al. 2003. Hepatocyte NF-1 and Stat6 cooperate with additional DNA-binding factors to activate transcription of the human polymeric Ig receptor gene in response to IL-4. *J. Immunol.* 170: 6048-6056.
4. Kajiyama, Y., et al. 2006. Characterization of distant enhancers and promoters in the albumin- $\alpha$ -fetoprotein locus during active and silenced expression. *J. Biol. Chem.* 281: 30122-30131.
5. Hoogenkamp, M., et al. 2007. Hepatocyte-specific interplay of transcription factors at the far-upstream enhancer of the carbamoylphosphate synthetase gene upon glucocorticoid induction. *FEBS J.* 274: 37-45.
6. Lehner, F., et al. 2010. Mapping of liver-enriched transcription factors in the human intestine. *World J. Gastroenterol.* 16: 3919-3927.

## RESEARCH USE

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



Try HNF-3 $\gamma$  (A-2): sc-74424 or HNF-3 $\gamma$  (D-4): sc-166703, our highly recommended monoclonal alternatives to HNF-3 $\gamma$  (K-15).