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

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

HNF-3γ (D-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-40 at the N-terminus of HNF-3γ of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 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-166703 X, 200 µg/0.1 ml.

**STORAGE**

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

**APPLICATIONS**

HNF-3γ (D-4) is recommended for detection of HNF-3γ of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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-3γ (D-4) is also recommended for detection of HNF-3γ in additional species, including canine, bovine and porcine.

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

HNF-3γ (D-4) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

**Molecular Weight of HNF-3γ**: 45 kDa.

**Positive Controls**: HNF-3γ (h): 293 Lysate: sc-111854, Hep G2 cell lysate: sc-2227 or mouse embryo extract.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

HNF-3γ (D-4): Western blot analysis of HNF-3γ expression in non-transfected: sc-110760 (A) and human HNF-3γ transfected: sc-111854 (B) 293 whole cell lysates.

**RESEARCH USE**

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