SANTA CRUZ BIOTECHNOLOGY, INC.

HNF-4α (H-171): sc-8987



BACKGROUND

HNF-1 (α and β), HNF-3 (α , β and γ), HNF-4 (α and γ) 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 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 transriptional activator for at least 22 other hepatocyte-enriched genes, including cytochrome P450 2C13 and α -1 antitrypsin.

CHROMOSOMAL LOCATION

Genetic locus: HNF4A (human) mapping to 20q13.12, HNF4G (human) mapping to 8q21.11; Hnf4a (mouse) mapping to 2 H3, Hnf4g (mouse) mapping to 3 A1.

SOURCE

HNF-4 (H-171) is a rabbit polyclonal antibody raised against amino acids 295-465 of HNF-4 of human origin.

PRODUCT

Each vial contains 200 μg lgG 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-8987 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

HNF-4 α (H-171) is recommended for detection of HNF-4 α , and, to a lesser extent, HNF-4 γ 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-4 α (H-171) is also recommended for detection of HNF-4 α and, to a lesser extent, HNF-4 γ in additional species, including equine, canine, bovine and porcine.

HNF-4 α (H-171) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of full-length HNF-4 α : 54 kDa.

Molecular Weight of truncated HNF-4 α N-terminal: 40 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

DATA





staining of methanol-fixed Hep G2 cells showing

nuclear localization.

HNF-4 (H-171): sc-8987. Western blot analysis of HNF-4 expression in Hep G2 whole cell lysate.

SELECT PRODUCT CITATIONS

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- 10. Wang, S.H., et al. 2012. Estrogen receptor α represses transcription of HBV genes via interaction with hepatocyte nuclear factor 4α . Gastroenterology 142: 989-998.