HNF-1α (2): sc-135939

**BACKGROUND**

HNF-1α (HNF-1α), HNF-3 (HNF-3α, HNF-3β, and HNF-3γ), HNF-4α, HNF-4β, and HNF-6 compose, in part, a homoeoprotein 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-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; and HNF-4γ is expressed in each of these tissues except liver. HNF-6 has been shown to bind to the promoter of HNF-3β, 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: HNF1A (human) mapping to 12q24.31; Hnf1a (mouse) mapping to 5f.

**SOURCE**

HNF-1α (2) is a mouse monoclonal antibody raised against amino acids 70-269 of HNF-1α of mouse origin.

**PRODUCT**

Each vial contains 200 μg IgG1 in 1.0 ml of PBS with ≤ 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

HNF-1α (2) is recommended for detection of HNF-1α 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)) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for HNF-1α siRNA (h): sc-35567, HNF-1α siRNA (m): sc-35568, HNF-1α shRNA Plasmid (h): sc-35567SH, HNF-1α shRNA Plasmid (m): sc-35568SH, HNF-1α shRNA (h) Lentiviral Particles: sc-35567-V and HNF-1α shRNA (m) Lentiviral Particles: sc-35568-V.

Molecular Weight of HNF-1α: 79 kDa.

Positive Controls: Caco-2 cell lysate: sc-2262, Hep G2 cell lysate: sc-2227 or c4 whole cell lysate: sc-364186.

**DATA**

See HNF-1α (F-7): sc-393925 for HNF-1α antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4° C, **DO 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.