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Diagnostik & molekulare Diagnostik



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- Expressversand

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# HNF-3 $\alpha$ (h2): 293T Lysate: sc-128813

## 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 hepatocyte 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; 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.

## REFERENCES

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- Plumb-Rudewicz, N., et al. 2004. Transcription factor HNF-6/OC-1 inhibits the stimulation of the HNF-3 $\alpha$ /Foxa1 gene by TGF- $\beta$  in mouse liver. *Hepatology* 40:1266-1274.

## CHROMOSOMAL LOCATION

Genetic locus: FOXA1 (human) mapping to 14q21.1.

## RESEARCH USE

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

## PRODUCT

HNF-3 $\alpha$  (h2): 293T Lysate represents a lysate of human HNF-3 $\alpha$  transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

HNF-3 $\alpha$  (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive HNF-3 $\alpha$  antibodies. Recommended use: 10-20  $\mu$ l per lane.

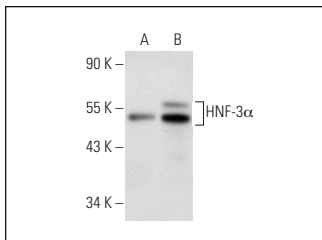
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

HNF-3 $\alpha$  (Q-6): sc-101058 is recommended as a positive control antibody for Western Blot analysis of enhanced human HNF-3 $\alpha$  expression in HNF-3 $\alpha$  transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



HNF-3 $\alpha$  (Q-6): sc-101058. Western blot analysis of HNF-3 $\alpha$  expression in non-transfected: sc-117752 (A) and human HNF-3 $\alpha$  transfected: sc-128813 (B) 293T whole cell lysates.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.