

HNF-6 (B-1): sc-376308

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-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 transcriptional activator for at least 22 other hepatocyte-enriched genes, including cytochrome P450 2C13 and α -1 antitrypsin.

CHROMOSOMAL LOCATION

Genetic locus: ONECUT1 (human) mapping to 15q21.3; Onecut1 (mouse) mapping to 9 D.

SOURCE

HNF-6 (B-1) is a mouse monoclonal antibody raised against amino acids 11-110 of HNF-6 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain 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-376308 X, 200 μ g/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-6 (B-1) is recommended for detection of HNF-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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-6 (B-1) is also recommended for detection of HNF-6 in additional species, including canine.

Suitable for use as control antibody for HNF-6 siRNA (h): sc-37936, HNF-6 siRNA (m): sc-37937, HNF-6 shRNA Plasmid (h): sc-37936-SH, HNF-6 shRNA Plasmid (m): sc-37937-SH, HNF-6 shRNA (h) Lentiviral Particles: sc-37936-V and HNF-6 shRNA (m) Lentiviral Particles: sc-37937-V.

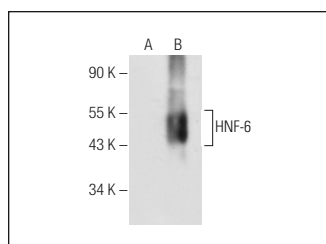
HNF-6 (B-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Positive Controls: HNF-6 (m): 293T Lysate: sc-120850 or Hep G2 nuclear extract: sc-364819.

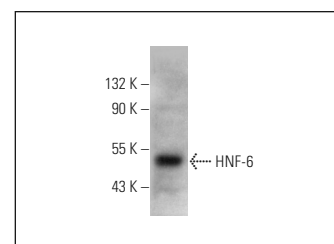
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



HNF-6 (B-1): sc-376308. Western blot analysis of HNF-6 expression in non-transfected: sc-117752 (A) and mouse HNF-6 transfected: sc-120850 (B) 293T whole cell lysates.



HNF-6 (B-1): sc-376308. Western blot analysis of HNF-6 expression in Hep G2 nuclear extract.

SELECT PRODUCT CITATIONS

1. Patoori, S., et al. 2020. *Cis*-regulatory analysis of Onecut1 expression in fate-restricted retinal progenitor cells. *Neural Dev.* 15: 5.
2. Schick, E., et al. 2021. Early *cis*-regulatory events in the formation of retinal horizontal cells. *Dev. Biol.* 476: 88-100.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.