

ZHX2 (U-21): sc-134166

BACKGROUND

Zinc-fingers and homeobox (ZHX) proteins are transcription factors that interact with the activation domain of the A subunit of nuclear factor- κ B (NF- κ B). ZHX1-3 are ubiquitously expressed proteins expressed in various tissues. They act as transcriptional repressors and localize to the nucleus. The ZHX proteins contain two Cys(2)-His(2)-type zinc-finger motifs and five homeodomains (HDs). These domains allow the ZHX proteins to form homodimers, but they can also form heterodimers with each other. However, this dimerization is not required for repressor activity. Hypermethylation-mediated silencing of ZHX2 is an epigenetic event involved in hepatocellular carcinoma (HCC).

REFERENCES

1. Yamada, K., et al. 1999. Human ZHX1: cloning, chromosomal location, and interaction with transcription factor NF- κ B. *Biochem. Biophys. Res. Commun.* 261: 614-621.
2. Hirano, S., et al. 2002. Rat zinc-fingers and homeob protein, forms a homodimer. *Gene* 290: 107-114.
3. Yamada, K., et al. 2002. Functional analysis and the molecular dissection of zinc-fingers and homeoboxes 1 (ZHX1). *Biochem. Biophys. Res. Commun.* 297: 368-374.
4. Shou, Z., et al. 2003. Genomic structure and analysis of and homeoboxes 1 (ZHX1) gene. *Gene* 302: 83-94.
5. Yamada, K., et al. 2003. Analysis of zinc-fingers and homeoboxes (ZHX)-1-interacting proteins: molecular cloning and characterization of a member of the ZHX family, ZHX3. *Biochem. J.* 373: 167-178.
6. Kawata, H., et al. 2003. Zinc-fingers and homeoboxes (ZHX) 2, a novel member of the ZHX family, functions as a transcriptional repressor. *Biochem. J.* 373: 747-757.
7. Kawata, H., et al. 2003. The mouse zinc-fingers and homeoboxes (ZHX) family; ZHX2 forms a heterodimer with ZHX3. *Gene* 323: 133-140.
8. Lv, Z., et al. 2006. Promoter hypermethylation of a novel gene, ZHX2, in hepatocellular carcinoma. *Am. J. Clin. Pathol.* 125: 740-746.

CHROMOSOMAL LOCATION

Genetic locus: *Zhx2* (mouse) mapping to 15 D1.

SOURCE

ZHX2 (U-21) is a Protein A purified rabbit polyclonal antibody raised against synthetic ZHX2 peptide of mouse origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

APPLICATIONS

ZHX2 (U-21) is recommended for detection of ZHX2 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZHX2 siRNA (m): sc-63246, ZHX2 shRNA Plasmid (m): sc-63246-SH and ZHX2 shRNA (m) Lentiviral Particles: sc-63246-V.

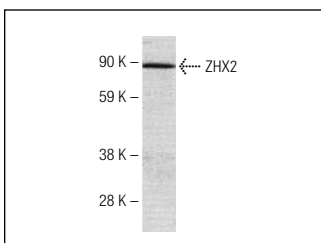
Molecular Weight of ZHX2: 100 kDa.

Positive Controls: SP2/0 whole cell lysate: sc-364795.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



ZHX2 (U-21): sc-134166. Western blot analysis of ZHX2 expression in SP2/0 whole cell lysate.

RESEARCH USE

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

PROTOCOLS

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