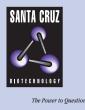
# ZNF441 (I-17): sc-102222



#### **BACKGROUND**

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain several Krüppeltype DNA binding domains that are frequently observed to be involved in sequence-specific DNA binding. ZNF441 is a 626 amino acid transcriptional regulator belonging to the Krüppel  $C_2H_2$ -type zinc-finger protein family. ZNF441 localizes to the nucleus and contains  $19\ C_2H_2$ -type zinc fingers. ZNF441 is encoded by a gene located on chromosome 19, which contains a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. Chromosome19 is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte lg-like receptors, a number of ICAMs, the CEACAM and PSG family, and FcR. Key genes for eye color and hair color also map to chromosome 19.

## **REFERENCES**

- Payre, F. and Vincent, A. 1988. Finger proteins and DNA-specific recognition: distinct patterns of conserved amino acids suggest different evolutionary modes. FEBS Lett. 234: 245-250.
- Berg, J.M. 1988. Proposed structure for the zinc-binding domains from transcription factor IIIA and related proteins. Proc. Natl. Acad. Sci. USA 85: 99-102.
- 3. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
- Rosenfeld, R. and Margalit, H. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. J. Biomol. Struct. Dyn. 11: 557-570.
- Abrink, M., Aveskogh, M. and Hellman, L. 1995. Isolation of cDNA clones for 42 different Krüppel-related zinc finger proteins expressed in the human monoblast cell line U-937. DNA Cell Biol. 14: 125-136.
- 6. Walter, L. and Günther, E. 2000. Physical mapping and evolution of the centromeric class I gene-containing region of the rat MHC. Immunogenetics. 51: 829-837.
- 7. Durand, S., Abadie, P., Angeletti, S. and Genti-Raimondi, S. 2003. Identification of multiple differentially expressed messenger RNAs in normal and pathological trophoblast. Placenta. 24: 209-218.
- 8. Brayer, K.J., Kulshreshtha, S. and Segal, D.J. 2008. The protein-binding potential of C<sub>2</sub>H<sub>2</sub> zinc finger domains. Cell Biochem. Biophys. 51: 9-19.
- 9. Liu, J. and Stormo, G.D. 2008. Context-dependent DNA recognition code for C<sub>2</sub>H<sub>2</sub> zinc-finger transcription factors. Bioinformatics 24: 1850-1857.

## **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.

## **CHROMOSOMAL LOCATION**

Genetic locus: ZNF441 (human) mapping to 19p13.2.

## **SOURCE**

ZNF441 (I-17) is a purified rabbit polyclonal antibody raised against ZNF441 of human origin.

#### **PRODUCT**

Each vial contains 50  $\mu g$  lgG in 500  $\mu l$  PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

#### **APPLICATIONS**

ZNF441 (I-17) is recommended for detection of ZNF441 of 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZNF441 siRNA (h): sc-97827, ZNF441 shRNA Plasmid (h): sc-97827-SH and ZNF441 shRNA (h) Lentiviral Particles: sc-97827-V.

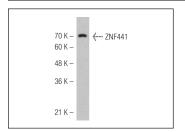
Molecular Weight of ZNF441: 72 kDa.

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

## **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



ZNF441 (I-17): sc-102222. Western blot analysis of ZNF441 expression in Hep G2 whole cell lysate.

## **PROTOCOLS**

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