ZNF436 (H-18): sc-102220



The Power to Question

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 a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. ZNF436 is a 470 amino acid protein belonging to the Krüppel C_2H_2 -type zinc finger family. ZNF436 may act as a negative regulator in gene transcription mediated by the MAPK signaling pathways. ZNF436 localizes to the nucleus and contains $12\ C_2H_2$ -type zinc fingers and a KRAB domain. ZNF436 is expressed in fetal brain, heart, liver, spleen, bladder, lung, skin, skeletal muscle, stomach and pancreas.

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.
- Li, Y., Du, X., Li, F., Deng, Y., Yang, Z., Wang, Y., Pen, Z., Wang, Z., Yuan, W., Zhu, C. and Wu, X. 2006. A novel zinc-finger protein ZNF436 suppresses transcriptional activities of AP-1 and SRE. Mol. Biol. Rep. 33: 287-294.
- Tian, C.Y., Zhang, L.Q. and He, F.C. 2006. Progress in the study of KRAB zinc finger protein. Yi Chuan 28: 1451-1456.
- 8. Yang, L., Hamilton, S.R., Sood, A., Kuwai, T., Ellis, L., Sanguino, A., Lopez-Berestein, G. and Boyd, D.D. 2008. The previously undescribed ZKSCAN3 (ZNF306) is a novel "driver" of colorectal cancer progression. Cancer Res. 68: 4321-4330.
- Liu, J. and Stormo, G.D. 2008. Context-dependent DNA recognition code for C₂H₂ zinc-finger transcription factors. Bioinformatics 24: 1850-1857.

CHROMOSOMAL LOCATION

Genetic locus: ZNF436 (human) mapping to 1p36.12.

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.

SOURCE

ZNF436 (H-18) is a purified rabbit polyclonal antibody raised against ZNF436 of human origin.

PRODUCT

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

APPLICATIONS

ZNF436 (H-18) is recommended for detection of ZNF436 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 ZNF436 siRNA (h): sc-78856, ZNF436 shRNA Plasmid (h): sc-78856-SH and ZNF436 shRNA (h) Lentiviral Particles: sc-78856-V.

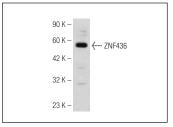
Molecular Weight of ZNF436: 54 kDa.

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



ZNF436 (H-18): sc-102220. Western blot analysis of ZNF436 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.