ZNF365 (O-25): sc-102211



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. ZNF365 (zinc finger protein 365) is a 407 amino acid protein with its expression restricted to brain, lung, liver, placenta, kidney and pancreas. Overexpression of ZNF365 causes abnormal mitosis and mutant ZNF365 lacking a C-terminus disrupts γ Tubulin localization to the nucleus. Alternative splicing results in at least four different isoforms of ZNF365, designated ZNF365A-D. A mutation in the gene encoding ZNF365 disrupts the expression of ZNF365D (also known as Talanin) and is involved in susceptibilty to uric acid nephrolithiasis, a multifactorial urinary tract stone disease that is influenced by genetics and environmental factors.

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.
- 2. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
- 3. 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.
- 4. Ombra, M.N., et al. 2001. Identification of a new candidate locus for uric acid nephrolithiasis. Am. J. Hum. Genet. 68: 1119-1129.
- 5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 605990. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Gianfrancesco, F., et al. 2003. Identification of a novel gene and a common variant associated with uric acid nephrolithiasis in a Sardinian genetic isolate. Am. J. Hum. Genet. 72: 1479-1491.
- Gianfrancesco, F., et al. 2004. Emergence of Talanin protein associated with human uric acid nephrolithiasis in the *Hominidae* lineage. Gene 339: 131-138.
- 8. Gianfrancesco, F., et al. 2005. Multifactorial disorder: molecular and evolutionary insights of uric acid nephrolithiasis. Minerva Med. 96: 409-416.

CHROMOSOMAL LOCATION

Genetic locus: ZNF365 (human) mapping to 10q21.2; Zfp365 (mouse) mapping to 10 B5.1.

STORAGE

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

PROTOCOLS

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

SOURCE

ZNF365 (0-25) is a purified rabbit polyclonal antibody raised against ZNF365 of human origin.

PRODUCT

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

APPLICATIONS

ZNF365 (0-25) is recommended for detection of ZNF365 of mouse, rat and 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 ZNF365 siRNA (h): sc-90549, ZNF365 siRNA (m): sc-155700, ZNF365 shRNA Plasmid (h): sc-90549-SH, ZNF365 shRNA Plasmid (m): sc-155700-SH, ZNF365 shRNA (h) Lentiviral Particles: sc-90549-V and ZNF365 shRNA (m) Lentiviral Particles: sc-155700-V.

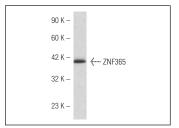
Molecular Weight of ZNF365: 47 kDa.

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



ZNF365 (0-25): sc-102211. Western blot analysis of ZNF365 expression in Hep G2 whole cell lysate.

RESEARCH USE

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