SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF365 (E-14): sc-132533



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 susceptibility to uric acid nephrolithiasis, a multifactorial urinary tract stone disease that is influenced by genetics and environmental factors.

REFERENCES

- 1. 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., Forabosco, P., Casula, S., Angius, A., Maestrale, G., Petretto, E., Casu, G., Colussi, G., Usai, E., Melis, P. and Pirastu, M. 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/
- 6. Gianfrancesco, F., Esposito, T., Ombra, M.N., Forabosco, P., Maninchedda, G., Fattorini, M., Casula, S., Vaccargiu, S., Casu, G., Cardia, F., Deiana, I., Melis, P., Falchi, M. and Pirastu, M. 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.
- 7. Gianfrancesco, F., Esposito, T., Casu, G., Maninchedda, G., Roberto, R. and Pirastu, M. 2004. Emergence of Talanin protein associated with human uric acid nephrolithiasis in the Hominidae lineage. Gene 339: 131-138.
- 8. Gianfrancesco, F. and Esposito, T. 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.

RESEARCH USE

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

SOURCE

ZNF365 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF365 of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132533 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZNF365 (E-14) is recommended for detection of ZNF365 isoforms 1, 2, 3 and 5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with ZNF365 isoforms 4 or 6.

ZNF365 (E-14) is also recommended for detection of ZNF365 isoforms 1, 2, 3 and 5 in additional species, including equine and canine.

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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

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.