

ZNF354C (N-19): sc-249527

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. ZNF354C (zinc finger protein 354C), also known as KID3, is a 554 amino acid protein that localizes to the nucleus and contains 1 KRAB domain and 11 C₂H₂-type zinc fingers. Expressed in kidney and skeletal muscle, as well as in the developing brain, ZNF354C interacts with RUNX2 and functions as a transcriptional repressor that suppresses the osteogenic effects of RUNX2. ZNF354C is therefore thought to play a role in osteoblastic differentiation.

REFERENCES

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3. Kaczynski, J., et al. 2003. Sp1- and Krüppel-like transcription factors. *Genome Biol.* 4: 206.
4. Gao, L., et al. 2004. Cloning and characterization of a novel human zinc finger gene, hKid3, from a C₂H₂-ZNF enriched human embryonic cDNA library. *Biochem. Biophys. Res. Commun.* 325: 1145-1152.
5. Ganss, B. and Jheon, A. 2004. Zinc finger transcription factors in skeletal development. *Crit. Rev. Oral Biol. Med.* 15: 282-297.
6. Brayer, K.J., et al. 2008. The protein-binding potential of C₂H₂ zinc finger domains. *Cell Biochem. Biophys.* 51: 9-19.
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CHROMOSOMAL LOCATION

Genetic locus: ZNF354C (human) mapping to 5q35.3.

SOURCE

ZNF354C (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ZNF354C of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-249527 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

ZNF354C (N-19) is recommended for detection of ZNF354C of 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 ZNF354A or ZNF354B.

Suitable for use as control antibody for ZNF354C siRNA (h): sc-91599, ZNF354C shRNA Plasmid (h): sc-91599-SH and ZNF354C shRNA (h) Lentiviral Particles: sc-91599-V.

Molecular Weight of ZNF354C: 65 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.

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.