SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF641 (V-17): sc-249718

SANTA CRUZ BIOTECHNOLOGY

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. ZNF641 (zinc finger protein 641) is a 438 amino acid protein that acts as a transcriptional activator of SRE and AP-1. Belonging to the Krüppel C_2H_2-type zinc-finger protein family, ZNF630 contains 13 C_2H_2-type zinc fingers and a KRAB domain. ZNF641 localizes to the nucleus and is highly expressed in skeletal muscle, with lower levels of expression in heart, liver and pancreas. Existing as two alternatively spliced isoforms, the gene encoding ZNF641 maps to human chromosome 12q13.11. Chromosome 12 encodes over 1,100 genes, comprises approximately 4.5% of the human genome, and is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

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CHROMOSOMAL LOCATION

Genetic locus: Zfp641 (mouse) mapping to 15 F1.

SOURCE

ZNF641 (V-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF641 of mouse 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-249718 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZNF641 (V-17) is recommended for detection of ZNF641 of mouse and rat 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).

Suitable for use as control antibody for ZNF641 siRNA (m): sc-155770, ZNF641 shRNA Plasmid (m): sc-155770-SH and ZNF641 shRNA (m) Lentiviral Particles: sc-155770-V.

Molecular Weight of ZNF641 isoforms 1/2: 50/43 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.

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.