SANTA CRUZ BIOTECHNOLOGY, INC.

ZKSCAN2 (N-17): sc-244744

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. A member of the Krüppel C_2H_2-type zinc-finger protein family, ZKSCAN1 (zinc finger with KRAB and SCAN domains 1), also known as KOX18, ZNF36, PHZ-37 or ZNF139, is a 563 amino acid nuclear protein that may be involved in the regulation of transcription. ZKSCAN1 contains six C_2H_2-type zinc fingers, one KRAB domain and one SCAN box domain. Many KRAB domain containing proteins have been shown to function as transcription repressors, suggesting a possible function of ZKSCAN1. The gene encoding ZKSCAN1 maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to Osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

1. Bellefroid, E.J., et al. 1991. The evolutionarily conserved Krüppel-associated box domain defines a subfamily of eukaryotic multifingered proteins. Proc. Natl. Acad. Sci. USA 88: 3608-3612.
2. Constantinou-Deltas, C.D., et al. 1992. The identification and characterization of KRAB-domain-containing zinc finger proteins. Genomics 12: 581-589.
3. Margolin, J.F., et al. 1994. Krüppel-associated boxes are potent transcriptional repression domains. Proc. Natl. Acad. Sci. USA 91: 4509-4513.
4. Witzgall, R., et al. 1994. The Krüppel-associated box-A (KRAB-A) domain of zinc finger proteins mediates transcriptional repression. Proc. Natl. Acad. Sci. USA 91: 4514-4518.
5. Nagase, T., et al. 1999. Prediction of the coding sequences of unidentified human genes. XIII. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 6: 63-70.

CHROMOSOMAL LOCATION

Genetic locus: ZKSCAN2 (human) mapping to 16p12.1.

SOURCE

ZKSCAN2 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ZKSCAN2 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-244744 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

ZKSCAN2 (N-17) is recommended for detection of ZKSCAN2 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)], 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 other ZKSCAN family members.

ZKSCAN2 (N-17) is also recommended for detection of ZKSCAN2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ZKSCAN2 siRNA (h): sc-93274, ZKSCAN2 shRNA Plasmid (h): sc-93274-SH and ZKSCAN2 shRNA (h) Lentiviral Particles: sc-93274-V.

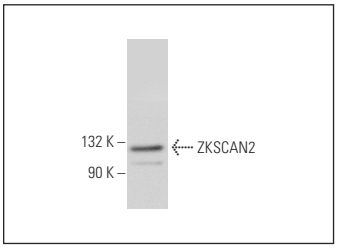
Molecular Weight of ZKSCAN2 isoforms 1/2: 111/58 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ZKSCAN2 (N-17): sc-244744. Western blot analysis of ZKSCAN2 expression in Jurkat whole cell lysate.

RESEARCH USE

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

MONOS Satisfaction Guaranteed

Try **ZKSCAN2 (F-8): sc-514383**, our highly recommended monoclonal alternative to ZKSCAN2 (N-17).