

ZKSCAN1 (D-19): sc-244741

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 C₂H₂-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 C₂H₂-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

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3. Margolin, J.F., Friedman, J.R., Meyer, W.K., Vissing, H., Thiesen, H.J. and Rauscher, F.J. 1994. Krüppel-associated boxes are potent transcriptional repression domains. *Proc. Natl. Acad. Sci. USA* 91: 4509-4513.
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5. Nagase, T., Ishikawa, K., Suyama, M., Kikuno, R., Hirose, M., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N. and Ohara, O. 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: ZKSCAN1 (human) mapping to 7q22.1; Zkscan1 (mouse) mapping to 5 G2.

SOURCE

ZKSCAN1 (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZKSCAN1 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-244741 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZKSCAN1 (D-19) is recommended for detection of ZKSCAN1 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)], 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.

ZKSCAN1 (D-19) is also recommended for detection of ZKSCAN1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZKSCAN1 siRNA (h): sc-89776, ZKSCAN1 siRNA (m): sc-155623, ZKSCAN1 shRNA Plasmid (h): sc-89776-SH, ZKSCAN1 shRNA Plasmid (m): sc-155623-SH, ZKSCAN1 shRNA (h) Lentiviral Particles: sc-89776-V and ZKSCAN1 shRNA (m) Lentiviral Particles: sc-155623-V.

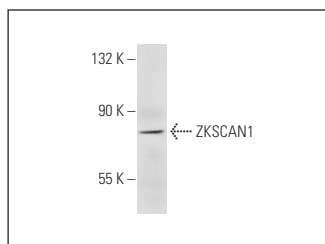
Molecular Weight of ZKSCAN1: 97 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

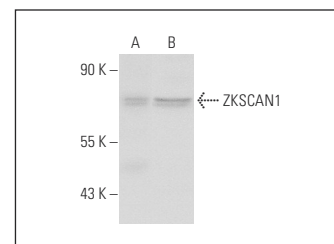
RECOMMENDED SECONDARY REAGENTS

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



ZKSCAN1 (D-19): sc-244741. Western blot analysis of ZKSCAN1 expression in K-562 whole cell lysate.



ZKSCAN1 (D-19): sc-244741. Western blot analysis of ZKSCAN1 expression in HeLa nuclear extract (A) and Jurkat whole cell lysate (B).

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.