SANTA CRUZ BIOTECHNOLOGY, INC.

ZKSCAN2 (E-17): sc-244746



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. A member of the Krüppel C_2H_2 -type zinc-finger protein family, ZKSCAN2, also known as ZNF694, is a 967 amino acid nuclear protein containing six C_2H_2 -type zinc fingers, one KRAB A domain and one SCAN box domain. Like many other KRAB A box-containing proteins, ZKSCAN2 is suggested to function as a transcriptional repressor. As a result of alternative splicing, two transcripts of ZKSCAN2 exist. The gene encoding ZKSCAN2 maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

- Baraitser, M., Preece, M.A. 1983. The Rubinstein-Taybi syndrome: occurrence in two sets of identical twins. Clin. Genet. 23: 318-320.
- Breuning, M.H., Dauwerse, H.G., Fugazza, G., Saris, J.J., Spruit, L., Wijnen, H., Tommerup, N., van der Hagen, C.B., Imaizumi, K., Kuroki, Y., van den Boogaard, M.J., de Pater, J.M., Mariman, E.C., Hamel, B.C., Himmelbauer, H., Frischauf, A.M., Stallings, R., Beverstock, G.C., van Ommen and G.J., Hennekam, R.C. 1993. Rubinstein-Taybi syndrome caused by submicroscopic deletions within 16p13.3. Am. J. Hum. Genet. 52: 249-254.
- 3 Ota, T., et al. 2004. Complete sequencing and characterization of 21,243 full-length human cDNAs. Nat. Genet. 36: 40-45.
- Bechtel, S., Rosenfelder, H., Duda, A., Schmidt, C.P., Ernst, U., Wellenreuther, R., Mehrle, A., Schuster, C., Bahr, A., Blöcker, H., Heubner, D., Hoerlein, A., Michel, G., Wedler, H., Köhrer, K., Ottenwälder, B., Poustka, A., Wiemann, S. and Schupp, I. 2007. The full-ORF clone resource of the German cDNA Consortium. BMC Genomics. 8: 399.
- 5. Martin, J., et al. 2004. The sequence and analysis of duplication-rich human chromosome 16. Nature 432: 988-994.
- 6. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Genome Res. 14: 2121-2127.
- 7. Dephoure, N., Zhou, C., Villen, J., Beausoleil, S.A., Bakalarski, C.E., Elledge, S.J. and Gygi, S.P. 2008. A quantitative atlas of mitotic phosphorylation. Proc. Natl. Acad. Sci. USA 105: 10762-10767.

CHROMOSOMAL LOCATION

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

STORAGE

Store at 4° C, **D0 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.

SOURCE

ZKSCAN2 (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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-244746 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZKSCAN2 (E-17) is recommended for detection of ZKSCAN2 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 other ZKSCAN family members.

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: 111/58 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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.