

ZNF71 (N-16): sc-82454

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. ZNF71 (zinc-finger protein 71), also known as EZFIT (endothelial zinc-finger protein induced by tumor necrosis factor alpha), is a 489 amino acid nuclear protein that is thought to play a role in transcriptional regulation. A member of the Krüppel C₂H₂-type zinc-finger protein family, ZNF71 contains thirteen C₂H₂-type zinc fingers and is expressed at highest levels in placenta, with slightly lower levels found in uterus, prostate, brain, peripheral blood leukocytes, testis, heart, pancreas and muscle.

REFERENCES

1. Bray, P., Lichter, P., Thiesen, H.J., Ward, D.C. and Dawid, I.B. 1991. Characterization and mapping of human genes encoding zinc-finger proteins. *Proc. Natl. Acad. Sci. USA* 88: 9563-9567.
2. Aubry, M., Marineau, C., Zhang, F.R., Zahed, L., Figlewicz, D., Delattre, O., Thomas, G., de Jong, P.J., Julien, J.P. and Rouleau, G.A. 1992. Cloning of six new genes with zinc-finger motifs mapping to short and long arms of human acrocentric chromosome 22 (p and q11.2). *Genomics* 13: 641-648.
3. Lichter, P., Bray, P., Ried, T., Dawid, I.B. and Ward, D.C. 1992. Clustering of C₂-H₂ zinc finger motif sequences within telomeric and fragile site regions of human chromosomes. *Genomics* 13: 999-1007.
4. Online Mendelian Inheritance in Man, OMIM™. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 194545: World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Matakai, C., Murakami, T., Umetani, M., Wada, Y., Ishii, M., Tsutsumi, S., Aburatani, H., Hamakubo, T. and Kodama, T. 2000. A novel zinc-finger protein mRNA in human umbilical vein endothelial cells is profoundly induced by tumor necrosis factor α . *J. Atheroscler. Thromb.* 7: 97-103.
6. Urrutia, R. 2003. KRAB-containing zinc-finger repressor proteins. *Genome Biol.* 4: 231.
7. Huntley, S., Baggott, D.M., Hamilton, A.T., Tran-Gyamfi, M., Yang, S., Kim, J., Gordon, L., Branscomb, E. and Stubbs, L. 2006. A comprehensive catalog of human KRAB-associated zinc-finger genes: insights into the evolutionary history of a large family of transcriptional repressors. *Genome Res.* 16: 669-677.
8. Filion, G.J., Zhenilo, S., Salozhin, S., Yamada, D., Prokhortchouk, E. and Defossez, P.A. 2006. A family of human zinc-finger proteins that bind methylated DNA and repress transcription. *Mol. Cell. Biol.* 26: 169-181.
9. Tian, C.Y., Zhang, L.Q. and He, F.C. 2006. Progress in the study of KRAB zinc-finger protein. *Yi Chuan.* 28: 1451-1456.

STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: ZNF71 (human) mapping to 19q13.4.

SOURCE

ZNF71 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ZNF71 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-82454 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-82454 X, 200 μ g/0.1 ml.

APPLICATIONS

ZNF71 (N-16) is recommended for detection of ZNF71 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).

Suitable for use as control antibody for ZNF71 siRNA (h): sc-77001, ZNF71 shRNA Plasmid (h): sc-77001-SH and ZNF71 shRNA (h) Lentiviral Particles: sc-77001-V.

ZNF71 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZNF71: 55 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) 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.