

ZNFX1 (E-18): sc-86059

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. ZNFX1 (NFX1-type zinc finger-containing protein 1) is a 1,918 amino acid nuclear protein that is widely expressed and contains six NF-X1-type zinc fingers, which are presumed to function as zinc binding domains. The gene encoding ZNFX1 maps to human chromosome 20, which contains nearly 63 million bases that encode over 600 genes, some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome. There are two isoforms of ZNFX1 that are produced as a result of alternative splicing events.

REFERENCES

1. Payre, F. and Vincent, A. 1988. Finger proteins and DNA-specific recognition: distinct patterns of conserved amino acids suggest different evolutionary modes. *FEBS Lett.* 234: 245-250.
2. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. *New Biol.* 2: 363-374.
3. Rosenfeld, R. and Margalit, H. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. *J. Biomol. Struct. Dyn.* 11: 557-570.
4. Deloukas, P., Matthews, L.H., Ashurst, J., Burton, J., Gilbert, J.G., Jones, M., Stavrides, G., Almeida, J.P., Babbage, A.K., Bagguley, C.L., Bailey, J., Barlow, K.F., Bates, K.N., Beard, L.M., Beare, D.M., Beasley, O.P., Bird, C.P., Blakey, S.E., Bridgeman, A.M., Brown, A.J., Buck, D., Burrill, W., et. al. J. 2001. The DNA sequence and comparative analysis of human chromosome 20. *Nature* 414: 865-871.
5. Edelstein, L.C. and Collins, T. 2005. The SCAN domain family of zinc finger transcription factors. *Gene* 359: 1-17.
6. Ville, D., Kaminska, A., Bahi-Buisson, N., Biraben, A., Plouin, P., Telvi, L., Dulac, O. and Chiron, C. 2006. Early pattern of epilepsy in the ring chromosome 20 syndrome. *Epilepsia* 47: 543-549.
7. Lundwall, A. 2007. A locus on chromosome 20 encompassing genes that are highly expressed in the epididymis. *Asian J. Androl.* 9: 540-544.
8. Fan, B.J., Wang, D.Y., Tham, C.C., Lam, D.S. and Pang, C.P. 2008. Gene expression profiles of human trabecular meshwork cells induced by triamcinolone and dexamethasone. *Invest. Ophthalmol. Vis. Sci.* 49: 1886-1897.
9. Liu, J. and Stormo, G.D. 2008. Context-dependent DNA recognition code for C₂H₂ zinc-finger transcription factors. *Bioinformatics* 2: 1850-1857.

CHROMOSOMAL LOCATION

Genetic locus: ZNFX1 (human) mapping to 20q13.13; Znf1 (mouse) mapping to 2 H3.

RESEARCH USE

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

SOURCE

ZNFX1 (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNFX1 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-86059 P, (100 µg 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-86059 X, 100 µg/0.1 ml.

APPLICATIONS

ZNFX1 (E-18) is recommended for detection of ZNFX1 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).

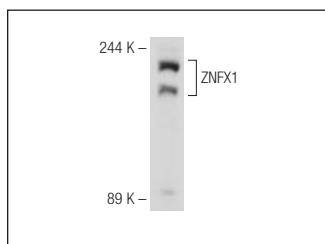
Suitable for use as control antibody for ZNFX1 siRNA (h): sc-77009, ZNFX1 siRNA (m): sc-155808, ZNFX1 shRNA Plasmid (h): sc-77009-SH, ZNFX1 shRNA Plasmid (m): sc-155808-SH, ZNFX1 shRNA (h) Lentiviral Particles: sc-77009-V and ZNFX1 shRNA (m) Lentiviral Particles: sc-155808-V.

ZNFX1 (E-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZNFX1: 220 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

DATA



ZNFX1 (E-18): sc-86059. Western blot analysis of ZNFX1 expression in K-562 whole cell lysate.

STORAGE

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

PROTOCOLS

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