ZNF659 (D-22): sc-134207



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. 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. As a member of the krueppel C_2H_2 -type zinc-finger protein family, ZNF659 (zinc finger protein 659), also known as ZNF385D (zinc finger protein 385D), is a 395 amino acid nuclear protein that contains 3 C_2H_2 matrin-type zinc fingers, which are domains that are typically found in RNA binding proteins. The gene encoding ZNF659 maps to human chromosome 3, which is made up of about 214 million bases encoding over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

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.
- 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.
- Müller, S., Stanyon, R., Finelli, P., Archidiacono, N. and Wienberg, J. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. Proc. Natl. Acad. Sci. USA 97: 206-211.
- 5. Braga, E.A., Kashuba, V.I., Maliukova, A.V., Loginov, V.I., Senchenko, V.N., Bazov, I.V., Kiselev, L.L. and Zabarovski, E.R. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. Mol. Biol. 37: 194-211.
- Edelstein, L.C. and Collins, T. 2005. The SCAN domain family of zinc finger transcription factors. Gene 359: 1-17.
- Hanson, R.L., Bogardus, C., Duggan, D., Kobes, S., Knowlton, M., Infante, A.M., Marovich, L., Benitez, D., Baier, L.J. and Knowler, W.C. 2007. A search for variants associated with young-onset type 2 diabetes in American Indians in a 100K genotyping array. Diabetes 56: 3045-3052.
- 8. Liu, J. and Stormo, G.D. 2008. Context-dependent DNA recognition code for C₂H₂ zinc-finger transcription factors. Bioinformatics 24: 1850-1857.
- Ruiz-Herrera, A. and Robinson, T.J. 2008. Evolutionary plasticity and cancer breakpoints in human chromosome 3. Bioessays 30: 1126-1137.

CHROMOSOMAL LOCATION

Genetic locus: ZNF385D (human) mapping to 3p24.3.

STORAGE

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

SOURCE

ZNF659 (D-22) is an affinity purified rabbit polyclonal antibody raised against synthetic ZNF659 peptide of human origin.

PRODUCT

Each vial contains 50 μg lgG in 500 μl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

ZNF659 (D-22) is recommended for detection of ZNF659 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZNF659 siRNA (h): sc-78336, ZNF659 shRNA Plasmid (h): sc-78336-SH and ZNF659 shRNA (h) Lentiviral Particles: sc-78336-V.

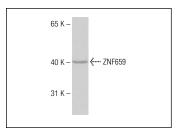
Molecular Weight of ZNF659: 42 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



ZNF659 (D-22): sc-134207. Western blot analysis of ZNF659 expression in MCF7 whole cell lysate.

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.