

ZNF659 (C-11): sc-514040

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 Krüppel C₂H₂-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 three C₂H₂ matrix-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., et al. 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., et al. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. *J. Biomol. Struct. Dyn.* 11: 557-570.
4. Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. *Proc. Natl. Acad. Sci. USA* 97: 206-211.
5. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
6. Edelstein, L.C., et al. 2005. The SCAN domain family of zinc finger transcription factors. *Gene* 359: 1-17.
7. Hanson, R.L., et al. 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., et al. 2008. Context-dependent DNA recognition code for C₂H₂ zinc-finger transcription factors. *Bioinformatics* 24: 1850-1857.

CHROMOSOMAL LOCATION

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

SOURCE

ZNF659 (C-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 178-202 within an internal region of ZNF659 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514040 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

ZNF659 (C-11) is recommended for detection of ZNF659 of human origin by Western Blotting (starting dilution 1:100, 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 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.

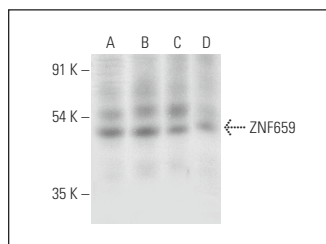
Positive Controls: MCF7 whole cell lysate: sc-2206, HL-60 whole cell lysate: sc-2209 or MCF7 nuclear extract: sc-2149.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ZNF659 (C-11): sc-514040. Western blot analysis of ZNF659 expression in HL-60 (A) and MCF7 (B) whole cell lysates and MCF7 (C) and HeLa (D) nuclear extracts.

RESEARCH USE

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