

GZF1 (X-21): sc-134181

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, GZF1 (GDNF-inducible zinc finger protein 1), also known as NF336 (zinc finger protein 336) or ZBTB23 (zinc finger and BTB domain-containing protein 23), is a 711 amino acid nuclear protein that contains one BTB (POZ) domain and 10 C₂H₂-type zinc fingers. GZF1 functions as a transcription repressor and binds the GZF1 responsive element (GRE). Expressed highly in liver, kidney, brain and muscle, GZF1 is upregulated in response to glial cell line-derived neurotrophic factor (GDNF) stimulation. Knockdown of GZF1 mRNA impairs ureteric bud branching in mouse, suggesting that GZF1 may be necessary for renal branching morphogenesis. GZF1 exists as two alternatively spliced isoforms.

REFERENCES

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3. Towers, P.R., et al. 1998. Glial cell line-derived neurotrophic factor stimulates ureteric bud outgrowth and enhances survival of ureteric bud cells *in vitro*. *Exp. Nephrol.* 6: 337-351.
4. Sariola, H., et al. 1999. GDNF and its receptors in the regulation of the ureteric branching. *Int. J. Dev. Biol.* 43: 413-418.
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6. Morinaga, T., et al. 2005. GDNF-inducible zinc finger protein 1 is a sequence-specific transcriptional repressor that binds to the HOXA10 gene regulatory region. *Nucleic Acids Res.* 33: 4191-4201.
7. Costantini, F., et al. 2006. GDNF/Ret signaling and the development of the kidney. *Bioessays* 28: 117-127.
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CHROMOSOMAL LOCATION

Genetic locus: GZF1 (human) mapping to 20p11.21; Gzf1 (mouse) mapping to 2 G3.

SOURCE

GZF1 (X-21) is an affinity purified rabbit polyclonal antibody raised against synthetic GZF1 peptide of human origin.

PRODUCT

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

APPLICATIONS

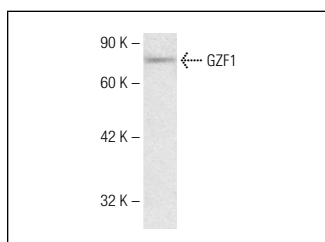
GZF1 (X-21) is recommended for detection of GZF1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 GZF1 siRNA (h): sc-76979, GZF1 siRNA (m): sc-155691, GZF1 shRNA Plasmid (h): sc-76979-SH, GZF1 shRNA Plasmid (m): sc-155691-SH, GZF1 shRNA (h) Lentiviral Particles: sc-76979-V and GZF1 shRNA (m) Lentiviral Particles: sc-155691-V.

Molecular Weight of GZF1: 80 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

DATA



GZF1 (X-21): sc-134181. Western blot analysis of GZF1 expression in Hep G2 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.

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.