SANTA CRUZ BIOTECHNOLOGY, INC.

FIZ1 (A-20): sc-101955



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. FIZ1 (FLT3-interacting zinc finger 1), also known as ZNF798 (zinc finger protein 798), is a 496 amino acid zinc-finger protein that contains eleven C2H2-type zinc fingers. Localized to both the cytoplasm and the nucleus and expressed in a wide variety of tissues, FIZ1 is thought to repress the function of NrI (neural retina leucine zipper) in photoreceptors, possibly regulating the expression of rod-specific genes. Additionally, FIZ1 interacts with the receptor-related tyrosine kinase Flt-3/Flk-2 and, via this interaction, may be involved in the regulation of lymphoid and hematopoietc cells.

REFERENCES

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- 2. Wolf, I. and Rohrschneider, L.R. 1999. Fiz1, a novel zinc finger protein interacting with the receptor tyrosine kinase Flt3. J. Biol. Chem. 274: 21478-21484.
- 3. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609133. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 4. Mitton, K.P., et al. 2003. Interaction of retinal bZIP transcription factor NRL with Flt3-interacting zinc-finger protein Fiz1: possible role of Fiz1 as a transcriptional repressor. Hum. Mol. Genet. 12: 365-373.
- 5. Yee, K.W., et al. 2004. Synergistic effect of SU11248 with cytarabine or daunorubicin on FLT3 ITD-positive leukemic cells. Blood. 104: 4202-4209.
- 6. Pittler, S.J., et al. 2004. Functional analysis of the rod photoreceptor cGMP phosphodiesterase α -subunit gene promoter: Nrl and Crx are required for full transcriptional activity. J. Biol. Chem. 279: 19800-19807.
- 7. Graham, D.R., et al. 2005. Leukemia inhibitory factor blocks expression of Crx and Nrl transcription factors to inhibit photoreceptor differentiation. Invest. Ophthalmol. Vis. Sci. 46: 2601-2610.
- 8. Mali, R.S., et al. 2007. FIZ1 is expressed during photoreceptor maturation, and synergizes with NRL and CRX at rod-specific promoters in vitro. Exp. Eye Res. 84: 349-360.

CHROMOSOMAL LOCATION

Genetic locus: FIZ1 (human) mapping to 19g13.42.

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.

SOURCE

FIZ1 (A-20) is a purified rabbit polyclonal antibody raised against FIZ1 of human origin.

PRODUCT

Each vial contains 100 µg lgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

FIZ1 (A-20) is recommended for detection of FIZ1 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)], 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 FIZ1 siRNA (h): sc-97908, FIZ1 shRNA Plasmid (h): sc-97908-SH and FIZ1 shRNA (h) Lentiviral Particles: sc-97908-V.

Molecular Weight of FIZ1: 60 kDa.

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 antirabbit 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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA





FIZ1 (A-20): sc-101955. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining.

FIZ1 (A-20): sc-101955. Western blot analysis of FIZ1 expression in fetal kidney tissue extract

RESEARCH USE

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