SANTA CRUZ BIOTECHNOLOGY, INC.

ZNF622 (3I4): sc-100980

SANTA CRUZ BIOTECHNOLOGY

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. ZNF622 (zinc-finger protein 622), also known as ZPR9 (zinc-finger-like protein 9), is a 477 amino acid protein that localizes to both the nucleus and the cytoplasm. Expressed in liver, spleen, lung, kidney and brain, ZNF622 is thought to activate the bound transcription factor B-Myb and, through this activation, may play a role in embryonic development. ZNF622 contains two U1-type zinc fingers and exists as either a homodimer or a heterodimer that can be phosphorylated by MELK (maternal embryonic leucine zipper kinase). Overexpression of ZNF266 may be associated with liver metastases, carcinomatoses and colorectal carcinomas.

REFERENCES

1. Thiesen, H.J. 1990. Multiple genes encoding zinc-finger domains are expressed in human T cells. New Biol. 2: 363-374.
2. Huebner, K., et al. 1991. Twenty-seven non-overlapping zinc-finger cDNAs from human T cells map to nine different chromosomes with apparent clustering. Am. J. Hum. Genet. 48: 726-740.
3. Seong, H.A., et al. 2002. Phosphorylation of a novel zinc-finger-like protein, ZPR9, by murine protein serine/threonine kinase 38 (MPK38). Biochem. J. 361: 597-604.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608694. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Seong, H.A., et al. 2003. Enhancement of B-Myb transcriptional activity by ZPR9, a novel zinc-finger protein. J. Biol. Chem. 278: 9655-9662.
6. Kleivi, K., et al. 2007. Gene expression profiles of primary colorectal carcinomas, liver metastases, and carcinomatoses. Mol. Cancer 6: 2.

CHROMOSOMAL LOCATION

Genetic locus: ZNF622 (human) mapping to 5p15.1; Zfp622 (mouse) mapping to 15 B1.

SOURCE

ZNF622 (3I4) is a mouse monoclonal antibody raised against recombinant ZNF622 of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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 for detailed protocols and support products.

APPLICATIONS

ZNF622 (3I4) is recommended for detection of ZNF622 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 ZNF622 siRNA (h): sc-91718, ZNF622 siRNA (m): sc-155766, ZNF622 shRNA Plasmid (h): sc-91718-SH, ZNF622 shRNA Plasmid (m): sc-155766-SH, ZNF622 shRNA (h) Lentiviral Particles: sc-91718-V and ZNF622 shRNA (m) Lentiviral Particles: sc-155766-V.

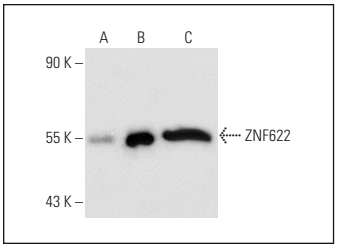
Molecular Weight of ZNF622: 52 kDa.

Positive Controls: ZNF622 (m): 293T Lysate: sc-124806, HeLa nuclear extract: sc-2120 or HeLa whole cell lysate: sc-2200.

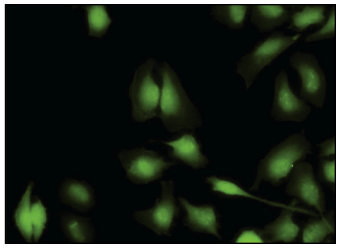
RECOMMENDED SUPPORT REAGENTS

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 A/G PLUS-Agarose: sc-2003 (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



ZNF622 (3I4): sc-100980. Western blot analysis of ZNF622 expression in non-transfected 293T: sc-117752 (**A**), mouse ZNF622 transfected 293T: sc-124806 (**B**) and HeLa (**C**) whole cell lysates.



ZNF622 (3I4): sc-100980. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Wandrey, F., et al. 2015. The NF45/NF90 heterodimer contributes to the biogenesis of 60S ribosomal subunits and influences nucleolar morphology. Mol. Cell. Biol. 35: 3491-3503.

RESEARCH USE

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