# SANTA CRUZ BIOTECHNOLOGY, INC.

# ZMAT4 (L-14): sc-98221



### 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. Zinc finger matrin-type protein 4 (ZMAT4) is a 229 amino acid protein that contains 4 matrin-type zinc fingers. The matrin-type zinc finger, which is very similar in structure to the classical DNA-binding  $C_2H_2$  zinc finger, was first identified in the protein matrin-3. It has also been identified in several spliceosome RNA-binding proteins, suggesting a role in pre-mRNA binding. ZMAT4 is localized to the nucleus, and two isoforms of this protein exist as a result of alternative splicing events.

#### REFERENCES

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- Rossi, F., Forné, T., Antoine, E., Tazi, J., Brunel, C. and Cathala, G. 1996. Involvement of U1 small nuclear ribonucleoproteins (snRNP) in 5' splice site-U1 snRNP interaction. J. Biol. Chem. 271: 23985-23991.
- Matsushima, Y., Matsumura, K. and Kitagawa, Y. 1997. Zinc finger-like motif conserved in a family of RNA binding proteins. Biosci. Biotechnol. Biochem. 61: 905-906.
- Hibino, Y. 2000. Functional arrangement of genomic DNA and structure of nuclear matrix. Yakugaku Zasshi 120: 520-533.
- Durand, S., Abadie, P., Angeletti, S. and Genti-Raimondi, S. 2003. Identification of multiple differentially expressed messenger RNAs in normal and pathological trophoblast. Placenta 24: 209-218.
- Liu, J. and Stormo, G.D. 2008. Context-dependent DNA recognition code for C<sub>2</sub>H<sub>2</sub> zinc-finger transcription factors. Bioinformatics 24:1850-1857

### CHROMOSOMAL LOCATION

Genetic locus: ZMAT4 (human) mapping to 8p11.21; Zmat4 (mouse) mapping to 8 A2.

# SOURCE

ZMAT4 (L-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ZMAT4 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-98221 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 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.

#### **APPLICATIONS**

ZMAT4 (L-14) is recommended for detection of ZMAT4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

ZMAT4 (L-14) is also recommended for detection of ZMAT4 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for ZMAT4 siRNA (h): sc-77490, ZMAT4 siRNA (m): sc-155629, ZMAT4 shRNA Plasmid (h): sc-77490-SH, ZMAT4 shRNA Plasmid (m): sc-155629-SH, ZMAT4 shRNA (h) Lentiviral Particles: sc-77490-V and ZMAT4 shRNA (m) Lentiviral Particles: sc-155629-V.

Molecular Weight of ZMAT4: 26 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: 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<sup>™</sup> Mounting Medium: sc-24941.

## **RESEARCH USE**

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