

# ZMAT4 (N-13): sc-98222



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. 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<sub>2</sub>H<sub>2</sub> 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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- 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 (N-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of ZMAT4 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-98222 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

ZMAT4 (N-13) 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), 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).

ZMAT4 (N-13) is also recommended for detection of ZMAT4 in additional species, including equine, canine, bovine and porcine.

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.

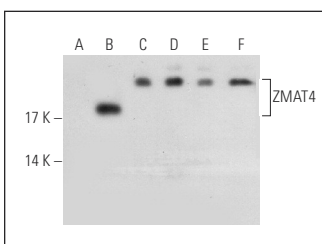
Molecular Weight of ZMAT4: 26 kDa.

Positive Controls: ZMAT4 (h): 293T Lysate: sc-113870, HeLa nuclear extract: sc-2120 or Jurkat nuclear extract: sc-2132.

## 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 anti-rabbit 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.

## DATA



ZMAT4 (N-13): sc-98222. Western blot analysis of ZMAT4 expression in non-transfected: sc-117752 (A) and human ZMAT4 transfected: sc-113870 (B) 293T whole cell lysates and HeLa (C), Jurkat (D), A549 (E) and MCF7 (F) nuclear extracts.

## RESEARCH USE

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