

# ZMAT1 (E-14): sc-132893

## 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 matrix-type protein 1 (ZMAT1) is a 638 amino acid protein that contains 3 matrix-type zinc fingers. The matrix-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 matrix-3. It has also been identified in several spliceosome RNA-binding proteins, suggesting a role in pre-mRNA binding. ZMAT1 is localized to the nucleus, and alternative splicing events produce two isoforms of this protein.

## 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: ZMAT1 (human) mapping to Xq22.1.

## SOURCE

ZMAT1 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZMAT1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132893 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-132893 X, 200 µg/0.1 ml.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

ZMAT1 (E-14) is recommended for detection of ZMAT1 isoforms 1 and 2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with family members ZMAT2 or ZMAT4.

Suitable for use as control antibody for ZMAT1 siRNA (h): sc-91107, ZMAT1 shRNA Plasmid (h): sc-91107-SH and ZMAT1 shRNA (h) Lentiviral Particles: sc-91107-V.

ZMAT1 (E-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

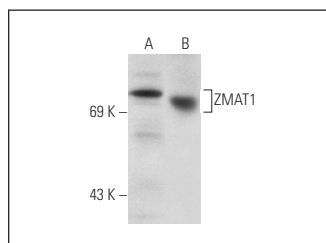
Molecular Weight of ZMAT1: 75 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or IMR-32 nuclear extract: sc-2148.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



ZMAT1 (E-14): sc-132893. Western blot analysis of ZMAT1 expression in HeLa (A) and IMR-32 (B) nuclear extracts.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.