Mts1 (X9-7): sc-100784

BACKGROUND

The Mts1 gene encodes a small acidic Ca\(^{2+}\)-binding protein, Mts1 (also designated S100A4, calvasculin or metastasin). Mts1 belongs to the S100 family of small Ca\(^{2+}\)-binding proteins and is expressed in a cell-specific manner. Mts1 protein is involved in tumor progression and metastasis, and also has a significant stimulatory effect on angiogenesis. The level of Mts1 protein in serum increases with aging, suggesting that Mts1 may play a role in the induction of tumor progression via stimulation of angiogenesis. In addition, Mts1 cooperates with p53 in apoptosis induction by binding to the C-terminal regulatory domain of p53 to inhibit the DNA binding activity of p53. The ability of Mts1 to enhance p53-dependent apoptosis may accelerate the loss of p53 function in tumors. Thus, Mts1 can contribute to the development of a more aggressive phenotype during tumor progression.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: S100A4 (human) mapping to 1q21.3; S100a4 (mouse) mapping to 3 F1.

SOURCE

Mts1 (X9-7) is a mouse monoclonal antibody raised against recombinant Mts1 of human origin.

PRODUCT

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

APPLICATIONS

Mts1 (X9-7) is recommended for detection of Mts1 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 1:100-1:3000).

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG BP-HRP: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz\textsuperscript{®} Hard-set Mounting Medium: sc-24941 or UltraCruz\textsuperscript{®} Mounting Medium: sc-359850.

DATA

![Western blot analysis of Mts1 expression in human Mts1 transfected (A) and non-transfected (B) 293T whole cell lysates.](Image)

Mts1 (X9-7): sc-100784 Western blot analysis of Mts1 expression in human Mts1 transfected (A) and non-transfected (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS


STORAGE

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

RESEARCH USE

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