megsin (T-16): sc-79569



The Power to Overtion

BACKGROUND

Megsin, also designated SerpinB7 and TP55, is a 380 amino acid cytoplasmic protein that is predominantly expressed in mesangial cells, which play an important role in maintaining glomerular structure and function. As a member of the serpin family, megsin is a serine protesase inhibitor which potentially inactivate MMP-2, MMP-9 and plasmin, proteins that are notably responsible for degradation of extracellular matrix. Overexpression of megsin results in an increase in number of mesangial cells and therefore a progressive mesangial matrix expansion, which is accompanied by immune complex deposition. This finding suggests that megsin significantly influences the role of mesangial cells in renal structure and is likely implicated in a variety of nephropathies.

REFERENCES

- Miyata, T., et al. 2002. Overexpression of the serpin megsin induces progressive mesangial cell proliferation and expansion. J. Clin. Invest. 109: 585-593.
- Xia, Y.F., et al. 2006. A family-based association study of megsin A23167G polymorphism with susceptibility and progression of IgA nephropathy in a Chinese population. Clin. Nephrol. 65: 153-159.
- Inagi, R., et al. 2006. A severe diabetic nephropathy model with early development of nodule-like lesions induced by megsin overexpression in RAGE/iNOS transgenic mice. Diabetes 55: 356-366.
- 4. Xia, Y., et al. 2006. Association of megsin 2093C-2180T haplotype at the 3' untranslated region with disease severity and progression of IgA nephropathy. Nephrol. Dial. Transplant. 21: 1570-1574.
- 5. Miyata, T., et al. 2007. Megsin gene: its genomic analysis, pathobiological functions, and therapeutic perspectives. Curr. Genomics 8: 203-208.
- 6. Lim, C.S., et al. 2008. Megsin 2093T-2180C haplotype at the 3' untranslated region is associated with poor renal survival in Korean IgA nephropathy patients. Clin. Nephrol. 70: 101-109.
- 7. Maixnerová, D., et al. 2008. The influence of two megsin polymorphisms on the progression of IgA nephropathy. Folia Biol. 54: 40-45.

CHROMOSOMAL LOCATION

Genetic locus: Serpinb7 (mouse) mapping to 1 E2.1.

SOURCE

megsin (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of megsin of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-79569 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

megsin (T-16) is recommended for detection of megsin of mouse and rat 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 megsin siRNA (m): sc-75769, megsin shRNA Plasmid (m): sc-75769-SH and megsin shRNA (m) Lentiviral Particles: sc-75769-V.

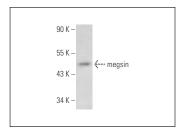
Molecular Weight of megsin: 43 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

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



megsin (T-16): sc-79569. Western blot analysis of megsin expression in NIH/3T3 whole cell lysate.

STORAGE

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



Try **megsin (H-10):** sc-515694, our highly recommended monoclonal alternative to megsin (T-16).

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