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, meggin is a serine protease inhibitor which potentially inactivates MMP-2, MMP-9 and plasmin, proteins that are notably responsible for degradation of extracellular matrix. Overexpression of meggin 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 meggin significantly influences the role of mesangial cells in renal structure and is likely implicated in a variety of nephropathies.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: SERPINB7 (human) mapping to 18q21.33; Serpinb7 (mouse) mapping to 1 E2.1.

SOURCE

meggin (H-10) is a mouse monoclonal antibody raised against amino acids 32-165 mapping near the N-term of meggin of human origin.

PRODUCT

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

APPLICATIONS

meggin (H-10) is recommended for detection of meggin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 meggin siRNA (h): sc-75768, meggin siRNA (m): sc-75769, meggin shRNA Plasmid (h): sc-75768-SH, meggin shRNA Plasmid (m): sc-75769-SH, meggin shRNA (h) Lentiviral Particles: sc-75768-V and meggin shRNA (m) Lentiviral Particles: sc-75769-V.

Molecular Weight of meggin: 43 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, NRK whole cell lysate: sc-364197 or human keratinocyte whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

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

DATA

meggin (H-10): sc-515694. Western blot analysis of meggin expression in NIH/3T3 (A), NRK (B) and human keratinocyte (C) whole cell lysates.

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.