**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, megisin is a serine protease inhibitor which potentially inactivate MMP-2, MMP-9 and plasmin, proteins that are notably responsible for degradation of extracellular matrix. Overexpression of megisin 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 megisin 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**

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

**PRODUCT**

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

megsin (H-10) is available conjugated to agarose (sc-515694 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515694 HRP), 200 µg/ml, for WB, HCIP and ELISA; to either phycoerythrin (sc-515694 PE), fluorescein (sc-515694 FITC), Alexa Fluor® 488 (sc-515694 AF488), Alexa Fluor® 546 (sc-515694 AF546), Alexa Fluor® 594 (sc-515694 AF594) or Alexa Fluor® 647 (sc-515694 AF647), 200 µg/ml, for WB (RGB), IF, HCIP and FCM; and to either Alexa Fluor® 680 (sc-515694 AF680) or Alexa Fluor® 790 (sc-515694 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

megsin (H-10) is recommended for detection of megisin 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 megisin siRNA (h): sc-75768, megisin siRNA (m): sc-75769, megisin shRNA Plasmid (h): sc-75768-SH, megisin shRNA Plasmid (m): sc-75769-SH, megisin shRNA (h) Lentiviral Particles: sc-75768-V and megisin shRNA (m) Lentiviral Particles: sc-75769-V.

Molecular Weight of megisin: 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**

megsin (H-10): sc-515694. Western blot analysis of megisin 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.