

GP-39 (M-43): sc-98954

BACKGROUND

Human cartilage glycoprotein 39 (GP-39), also known as YKL-40, is a glycoprotein secreted by articular chondrocytes, synoviocytes and macrophages. Serum and synovial fluid GP-39 levels are elevated in inflammatory diseases and correlate with the degree of joint destruction in rheumatoid arthritis. GP-39 is expressed in articular chondrocytes and synovial cells, as well as in liver, but is undetectable in muscle tissues, lung, pancreas, mononuclear cells and fibroblasts. GP-39 is a candidate autoantigen in rheumatoid arthritis and is important in the capacity of cells to respond to and cope with changes in their environment.

REFERENCES

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- Tsuji, T., et al. 2002. Analysis of chondrex (YKL-40, HC GP-39) in the cerebrospinal fluid of patients with spine disease. *Spine* 27: 732-735.
- Steenbakkers, P.G., et al. 2003. Localization of MHC class II/human cartilage glycoprotein-39 complexes in synovia of rheumatoid arthritis patients using complex-specific monoclonal antibodies. *J. Immunol.* 170: 5719-5727.
- Shostak, K., et al. 2003. HC GP-39 gene is upregulated in glioblastomas. *Cancer Lett.* 198: 203-210.

CHROMOSOMAL LOCATION

Genetic locus: Chi311 (mouse) mapping to 1 E4.

SOURCE

GP-39 (M-43) is a rabbit polyclonal antibody raised against amino acids 136-178 mapping within an internal region of GP-39 of mouse origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

GP-39 (M-43) is recommended for detection of GP-39 of mouse and, to a lesser extent, 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 GP-39 siRNA (m): sc-44581, GP-39 shRNA Plasmid (m): sc-44581-SH and GP-39 shRNA (m) Lentiviral Particles: sc-44581-V.

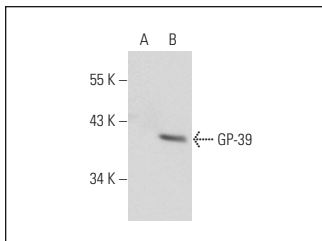
Molecular Weight of GP-39: 39 kDa.

Positive Controls: GP-39 (m): 293T Lysate: sc-120569 or mouse liver extract: sc-2256.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GP-39 (M-43): sc-98954. Western blot analysis of GP-39 expression in non-transfected: sc-117752 (A) and mouse GP-39 transfected: sc-120569 (B) 293T whole cell lysates.

RESEARCH USE

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

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Try **GP-39 (E-11): sc-376910** or **GP-39 (D-6): sc-376941**, our highly recommended monoclonal alternatives to GP-39 (M-43).