

Gas2 (L-14): sc-101241

BACKGROUND

Gas2 is a 313 amino acid protein that is encoded by the gene GAS2. Gas2 is thought to play a role in apoptosis by acting as a cell death substrate for caspases. Gas2, a component of the microfilament system, is cleaved by a caspase (caspase-3 and caspase-7) at Asparagine 278 during apoptosis. The cleaved form resulting from this dramatically induces the rearrangement of the Actin cytoskeleton and causes potent changes in the shape of the affected cells. Gas2 is believed to also be involved in the membrane ruffling process. During the G₀-G₁ transition phase Gas2 can be found phosphorylated on its serine residues. Gas2 is a cytoskeleton and peripheral membrane protein that co-localizes with Actin fibers at the cell border and along the stress fibers in growth-arrested fibroblasts. Gas2 is mainly membrane-associated but when hyperphosphorylated it will accumulate at membrane ruffles. Gas2 is specifically expressed at growth arrest and is ubiquitously expressed with highest levels found in liver, lung and kidney. There is no evidence, however, of Gas2 expression in spleen.

CHROMOSOMAL LOCATION

Genetic locus: GAS2 (human) mapping to 11p14.3; Gas2 (mouse) mapping to 7 B5.

SOURCE

Gas2 (L-14) is a mouse monoclonal antibody raised against recombinant Gas2 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain 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

Gas2 (L-14) is recommended for detection of Gas2 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), immunohistochemistry (including paraffin-embedded sections) (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 Gas2 siRNA (h): sc-62368, Gas2 siRNA (m): sc-62369, Gas2 shRNA Plasmid (h): sc-62368-SH, Gas2 shRNA Plasmid (m): sc-62369-SH, Gas2 shRNA (h) Lentiviral Particles: sc-62368-V and Gas2 shRNA (m) Lentiviral Particles: sc-62369-V.

Molecular Weight (predicted) of Gas2: 35 kDa.

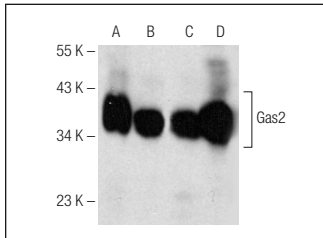
Molecular Weight (observed) of Gas2: 30-37 kDa.

Positive Controls: Gas2 (m): 293T Lysate: sc-126891, NIH/3T3 whole cell lysate: sc-2210 or Hep G2 cell lysate: sc-2227.

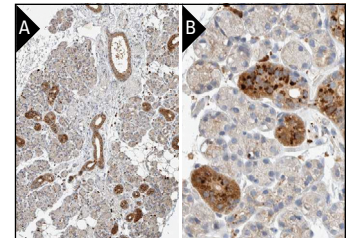
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

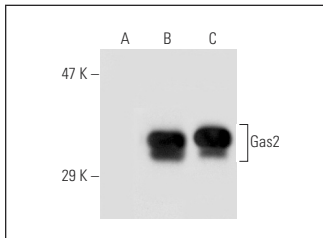
DATA



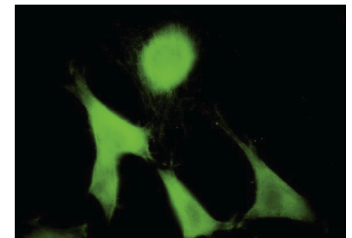
Gas2 (L-14): sc-101241. Western blot analysis of Gas2 expression in serum starved and serum treated NIH/3T3 (A), UV treated NIH/3T3 (B) and Hep G2 (C) whole cell lysates and rat liver tissue extracts (D)



Gas2 (L-14): sc-101241. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland showing cytoplasmic staining of glandular cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.



Gas2 (L-14): sc-101241. Western blot analysis of Gas2 expression in non-transfected 293T: sc-117752 (A), mouse Gas2 transfected 293T: sc-126891 (B) and NIH/3T3 (C) whole cell lysates.



Gas2 (L-14): sc-101241. Immunofluorescence staining of paraformaldehyde-fixed NIH/3T3 cells showing cytoplasmic localization.

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.