**BACKGROUND**

Growth arrest specific proteins, including Gas 1, Gas 6 and Gas 7, are activated in quiescent cells. Gas 7 plays a role in neurite differentiation in cultured mouse cerebellar neurons and PC-12 cells, which makes it a potential therapeutic target to promote the re-establishment of neuronal connections in the injured or disease brain. The gene encoding human Gas7 maps to chromosome 17p13.1, which can translocate with MLL to form MLL-GAS7 fusion products. The Gas7 protein is expressed as three isoforms, a, b, and c, which are differentially expressed in all brain subregions.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: GAS7 (human) mapping to 17p13.1; Gas7 (mouse) mapping to 11 B3.

**SOURCE**

Gas7 (H-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 71-97 near the N-terminus of Gas7 isoform b of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Gas7 (H-9) is recommended for detection of Gas7 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 Gas7 siRNA (h): sc-45345, Gas7 siRNA (m): sc-45346, Gas7 shRNA Plasmid (h): sc-45345-SH, Gas7 shRNA Plasmid (m): sc-45346-SH, Gas7 shRNA (h) Lentiviral Particles: sc-45345-V and Gas7 shRNA (m) Lentiviral Particles: sc-45346-V.

Molecular Weight of Gas7: 38 kDa.

Positive Controls: mouse brain extract: sc-2253, mouse cerebellum extract: sc-2403 or PC-12 cell lysate: sc-2250.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-205 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2033 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-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-278 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

**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 or our catalog for detailed protocols and support products.