**BACKGROUND**

Growth arrest specific proteins, including Gas1, Gas6 and Gas7, are activated in quiescent cells. Gas7 plays a role in neurite differentiation in cultured mouse cerebellar neurons and PC-12 cells, which makes it a potential therapeutic target to promote 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 11B3.

**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 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Gas7 (H-9) is available conjugated to agarose (sc-365385 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365385 HRP), 200 µg/ml, for WB, IHC and ELISA; to either phycoerythrin (sc-365385 PE), fluorescein (sc-365385 FITC), Alexa Fluor® 488 (sc-365385 AF488), Alexa Fluor® 546 (sc-365385 AF546), Alexa Fluor® 594 (sc-365385 AF594) or Alexa Fluor® 647 (sc-365385 AF647), 200 µg/ml, for WB (RGB), IF, IHC and FCM; and to either Alexa Fluor® 680 (sc-365385 AF680) or Alexa Fluor® 790 (sc-365385 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365385 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**RESEARCH USE**

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

**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), 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 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 isoform a: 38 kDa.

Molecular Weight of Gas7 isoform b: 48 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, EOC 20 whole cell lysate: sc-364187 or PC-12 cell lysate: sc-2250.

**RECOMMENDED SUPPORT REAGENTS**

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

1) Western Blotting: use m-IgGk BP-HRP: sc-516102 or m-IgGk BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:100000), 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).


**DATA**

**STORAGE**

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.