

# Gas7 (H-9): sc-365385

## BACKGROUND

Growth arrest specific proteins, including Gas1, Gas6 and Gas7, 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.

## 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 IgG<sub>1</sub> 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(P) 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(P) 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).

## 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.

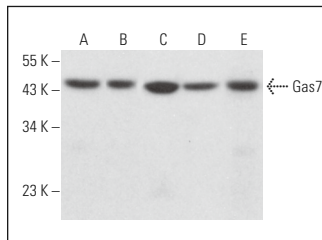
Molecular Weight of Gas7 isoform a/b: 38/48 kDa.

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

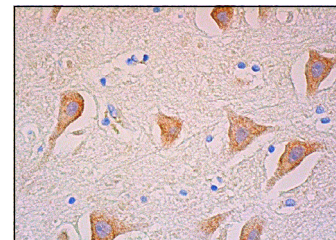
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-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



Gas7 (H-9): sc-365385. Western blot analysis of Gas7 expression in PC-12 (A), EOC 20 (B), IMR-32 (C) and T98G (D) whole cell lysates and mouse postnatal brain tissue extract (E).



Gas7 (H-9): sc-365385. Immunoperoxidase staining of formalin fixed, paraffin-embedded human hippocampus tissue showing cytoplasmic staining of neuronal cells.

## SELECT PRODUCT CITATIONS

1. Khanal, P., et al. 2023. Gas7 is a novel dendritic spine initiation factor. *eNeuro* 10: ENEURO.0344-22.2023.

## 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](http://www.scbt.com) for detailed protocols and support products.

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