

GMF- γ (D-14): sc-168015

BACKGROUND

GMF- γ (glia maturation factor, γ), also known as GMFG, is a 142 amino acid protein that belongs to the GMF subfamily of the larger Actin-binding protein ADF family. GMF- γ is expressed predominantly in lung, heart and placenta. GMF- γ is considered a candidate regulatory growth factor protein, mediating both paracrine and autocrine cell-cell interactions. GMF- γ is phosphorylated at N-terminal serine, and its phosphorylation is enhanced by coexpression of dominant active Rac 1 and Cdc42. GMF- γ expression is significantly increased in a cardiac ischemia/reperfusion model where inflammation and angiogenesis take place actively. As a regulator of Actin-based cellular functions, GMF- γ may provide a novel approach to modulate the pathophysiology of cardiovascular diseases. GMF- γ is primarily found in proliferative and differentiative organs.

REFERENCES

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3. Asai, K. 2001. Review of the research of glia maturation factor and cloning of human and rat glia maturation factor- γ (GMFG) cDNA. *Nihon Shinkei Seishin Yakurigaku Zasshi* 21: 15-20.
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5. Hotta, N., Aoyama, M., Inagaki, M., Ishihara, M., Miura, Y., Tada, T. and Asai, K. 2005. Expression of glia maturation factor β after cryogenic brain injury. *Brain Res. Mol. Brain Res.* 133: 71-77.
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CHROMOSOMAL LOCATION

Genetic locus: GMFG (human) mapping to 19q13.2; Gmfg (mouse) mapping to 7 A3.

SOURCE

GMF- γ (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GMF- γ of mouse origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-168015 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

GMF- γ (D-14) is recommended for detection of GMF- γ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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); may cross-reactive with NupL2 of mouse and rat origin.

Suitable for use as control antibody for GMF- γ siRNA (h): sc-97348, GMF- γ siRNA (m): sc-155900, GMF- γ shRNA Plasmid (h): sc-97348-SH, GMF- γ shRNA Plasmid (m): sc-155900-SH, GMF- γ shRNA (h) Lentiviral Particles: sc-97348-V and GMF- γ shRNA (m) Lentiviral Particles: sc-155900-V.

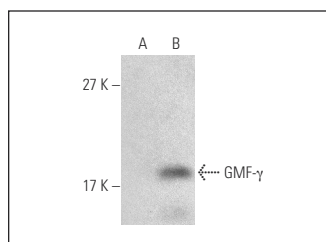
Molecular Weight of GMF- γ : 17 kDa.

Positive Controls: GMF- γ (h): 293T Lysate: sc-115009.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GMF- γ (D-14): sc-168015. Western blot analysis of GMF- γ expression in non-transfected: sc-117752 (A) and human GMF- γ transfected: sc-115009 (B) 293T whole cell lysates.

RESEARCH USE

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