

GMF- β (C-17): sc-46999

BACKGROUND

Glia maturation factor β (GMF- β) belongs to the GMF subfamily of the larger actin-binding protein ADF family. This protein, which is phosphorylated following phorbol ester stimulation, is important for the nervous system. It causes brain cell differentiation, stimulates neural regeneration and inhibits tumor cell proliferation. Overexpression of GMF in astrocytes has been shown to enhance brain-derived neurotrophic factor (BDNF) production. GMF expression is increased by exercise, and the protein is crucial for exercise-induction of BDNF. Through BDNF production, GMF appears to play a role in neuroprotection. In thymoma, T cell development is maintained by GMF- β being produced by the tumor cells.

CHROMOSOMAL LOCATION

Genetic locus: GMFB (human) mapping to 14q22.2; Gmfb (mouse) mapping to 14 C1.

SOURCE

GMF- β (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of GMF- β of human origin.

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-46999 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

GMF- β (C-17) is recommended for detection of GMF- β 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-react with GMFG.

GMF- β (C-17) is also recommended for detection of GMF- β in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for GMF- β siRNA (h): sc-60707, GMF- β siRNA (m): sc-60708, GMF- β shRNA Plasmid (h): sc-60707-SH, GMF- β shRNA Plasmid (m): sc-60708-SH, GMF- β shRNA (h) Lentiviral Particles: sc-60707-V and GMF- β shRNA (m) Lentiviral Particles: sc-60708-V.

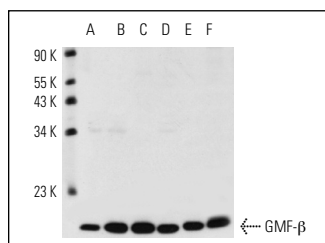
Molecular Weight of GMF- β : 17 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, U-87 MG cell lysate: sc-2411 or GMF- β (m): 293T Lysate: sc-120543.

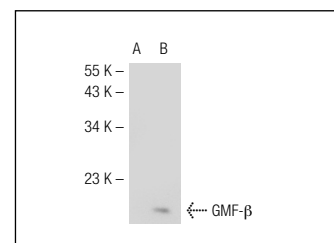
RECOMMENDED SECONDARY REAGENTS

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- β (C-17): sc-46999. Western blot analysis of GMF- β expression in T98G (A), U-87 MG (B), C6 (C), IMR-32 (D) and EOC 20 (E) whole cell lysates and mouse brain tissue extract (F).



GMF- β (C-17): sc-46999. Western blot analysis of GMF- β expression in non-transfected: sc-117752 (A) and mouse GMF- β transfected: sc-120543 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Coope, A., et al. 2008. AdipoR1 mediates the anorexigenic and Insulin/leptin-like actions of adiponectin in the hypothalamus. *FEBS Lett.* 582: 1471-1476.
- Yu, Y., et al. 2009. Evaluation of blastomere biopsy using a mouse model indicates the potential high risk of neurodegenerative disorders in the offspring. *Mol. Cell. Proteomics* 8: 1490-1500.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **GMF- β (SP-61): sc-134347**, our highly recommended monoclonal alternative to GMF- β (C-17).