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.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: Gmfb (mouse) mapping to 14 C1.

PRODUCT

GMF-β (m): 293T Lysate represents a lysate of mouse GMF-β transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

GMF-β (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive GMF-β antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

GMF-β (SP-61): sc-134347 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse GMF-β expression in GMF-β transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA

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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.