SANTA CRUZ BIOTECHNOLOGY, INC.

GDF-1 (H-54): sc-98854

BACKGROUND

Growth/differentiation factors (GDFs) are members of the TGFβ superfamily. Members of the TGFβ superfamily are involved in embryonic development and adult tissue homeostasis. GDF-1 expression is almost exclusively restricted to the central nervous system, most strongly expressed in the hippcampus and cortex of the brain. The function of GDF-1 is not completely known, however, it may mediate cell differentiation events during embryonic development.

REFERENCES

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8. Karkera, J.D., Lee, J.S., Roessler, E., Banerjee-Basu, S., Ouspenskaia, M.V., Mez, J., Goldmuntz, E., Bowers, P., Towbin, J., Belmont, J.W., Baxevanis, A.D., Schier, A.F. and Muenke, M. 2007. Loss-of-function mutations in growth differentiation factor-1 (GDF-1) are associated with congenital heart defects in humans. Am. J. Hum. Genet. 81: 987-994.
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CHROMOSOMAL LOCATION

Genetic locus: GDF1 (human) mapping to 19p13.11; Gdf1 (mouse) mapping to 8 B3.3.

SOURCE

GDF-1 (H-54) is a rabbit polyclonal antibody raised against amino acids 97-150 mapping within an internal region of GDF-1 of human 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 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GDF-1 (H-54) is recommended for detection of GDF-1 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GDF-1 (H-54) is also recommended for detection of GDF-1 in additional species, including porcine.

Suitable for use as control antibody for GDF-1 siRNA (h): sc-39764, GDF-1 siRNA (m): sc-39765, GDF-1 shRNA Plasmid (h): sc-39764-SH, GDF-1 shRNA Plasmid (m): sc-39765-SH, GDF-1 shRNA (h) Lentiviral Particles: sc-39764-V and GDF-1 shRNA (m) Lentiviral Particles: sc-39765-V.

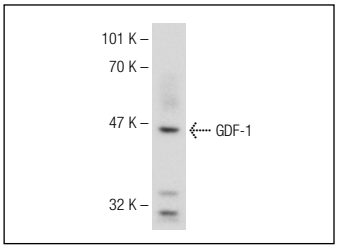
Molecular Weight of GDF-1: 40 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, A-375 cell lysate: sc-3811 or HL-60 whole cell lysate: sc-2209.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GDF-1 (H-54): sc-98854. Western blot analysis of GDF-1 expression in Hep G2 whole cell lysate.

RESEARCH USE

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