SANTA CRUZ BIOTECHNOLOGY, INC.

GS2 (H-115): sc-98462

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The adiponutrin family consists of Adiponutrin (ADPN), GS1, GS2, GS2-like, PNPLA1 and adipocyte triglyceride lipase (ATGL), also designated Desnutrin. ADPN, ATGL and GS2 display lipase activity, which is dependent upon the presence of an activated serine residue. GS2, also designated DXS1283E or patatin-like phospholipase domain containing 4 (PNPLA4), is expressed in all tissues that have been examined, including brain, heart, lung, muscle, liver, placenta, spleen, pancreas and kidney. It is also highly expressed in adipose tissue and may contribute to lipolysis in human adipose tissue. GS2-like, also designated patatin-like phospholipase domain containing 5 (PNPLA5), is expressed and regulated similarly to ADPN, although the levels of GS2-like mRNA are lower than ADPN. Overexpression of GS2, GS2-like and ATGL lowers intracellular triglyceride levels. GS2-like and ADPN are strongly induced in the liver of Ob/Ob mice.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PNPLA4 (human) mapping to Xp22.31.

SOURCE

GS2 (H-115) is a rabbit polyclonal antibody raised against amino acids 46-160 mapping within an internal region of GS2 of human origin.

PRODUCT

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

APPLICATIONS

GS2 (H-115) is recommended for detection of GS2 of human 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).

GS2 (H-115) is also recommended for detection of GS2 in additional species, including equine and canine.

Suitable for use as control antibody for GS2 siRNA (h): sc-60770, GS2 shRNA Plasmid (h): sc-60770-SH and GS2 shRNA (h) Lentiviral Particles: sc-60770-V.

Molecular Weight of GS2: 28 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, JAR cell lysate: sc-2276 or HISM cell lysate: sc-2229.

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.

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 or our catalog for detailed protocols and support products.

MONOS Satisfaction Guaranteed

Try **GS2 (E-8): sc-393988** or **GS2 (D-1): sc-393944**, our highly recommended monoclonal alternatives to GS2 (H-115).