SANTA CRUZ BIOTECHNOLOGY, INC.

GS2-like (N-18): sc-50248

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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5. Gao, J. and Simon, M. 2005. Identification of a novel keratinocyte retinyl ester hydrolase as a transacylase and lipase. J. Invest. Dermatol. 124: 1259-1266.
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CHROMOSOMAL LOCATION

Genetic locus: PNPLA5 (human) mapping to 22q13.31.

STORAGE

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

SOURCE

GS2-like (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GS2-like 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.

Blocking peptide available for competition studies, sc-50248 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GS2-like (N-18) is recommended for detection of GS2-like of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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-like (N-18) is also recommended for detection of GS2-like in additional species, including equine and canine.

Suitable for use as control antibody for GS2-like siRNA (h): sc-60771, GS2-like shRNA Plasmid (h): sc-60771-SH and GS2-like shRNA (h) Lentiviral Particles: sc-60771-V.

Molecular Weight of GS2-like: 48/35 kDa.

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) 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.

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.