

GANC (A-14): sc-160350

BACKGROUND

A key enzyme in glycogen degradation and metabolism, GANC (glucosidase, alpha; neutral C) is a 914 amino acid protein with α -glucosidase activity that belongs to the glycosyl hydrolase 31 family and hydrolyzes non-reducing, terminal 1,4-linked α -D-glucose residues and releases α -D-glucose. The gene encoding GANC maps to human chromosome 15q15.1, a region associated with susceptibility to non-Insulin-dependent (type 2) diabetes mellitus, a disease characterized by high blood glucose levels. Human chromosome 15 houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

REFERENCES

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2. Martiniuk, F., Hirschhorn, R. and Smith, M. 1980. Assignment of the gene for human neutral α -glucosidase C to chromosome 15. *Cytogenet. Cell Genet.* 27: 168-175.
3. Cox, N.J., Frigge, M., Nicolae, D.L., Concannon, P., Hanis, C.L., Bell, G.I. and Kong, A. 1999. Loci on chromosomes 2 (NIDDM1) and 15 interact to increase susceptibility to diabetes in Mexican Americans. *Nat. Genet.* 21: 213-215.
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CHROMOSOMAL LOCATION

Genetic locus: GANC (human) mapping to 15q15.1; Ganc (mouse) mapping to 2 E5.

SOURCE

GANC (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GANC 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.

PROTOCOLS

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

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-160350 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GANC (A-14) is recommended for detection of GANC 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).

GANC (A-14) is also recommended for detection of GANC in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for GANC siRNA (h): sc-90048, GANC siRNA (m): sc-145324, GANC shRNA Plasmid (h): sc-90048-SH, GANC shRNA Plasmid (m): sc-145324-SH, GANC shRNA (h) Lentiviral Particles: sc-90048-V and GANC shRNA (m) Lentiviral Particles: sc-145324-V.

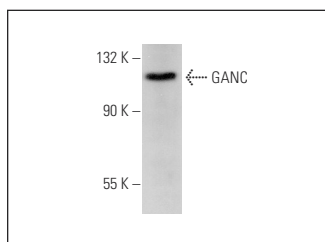
Molecular Weight of GANC: 104 kDa.

Positive Controls: Hep G2 Cell Lysate: sc-2227.

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



GANC (A-14): sc-160350. Western blot analysis of GANC expression in Hep G2 whole cell lysate.

RESEARCH USE

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