SANTA CRUZ BIOTECHNOLOGY, INC.

Glycogenin-2 (h2): 293T Lysate: sc-176507

BACKGROUND

Glycogenin-2, also known as GYG2 or GN2, is a 501 amino acid protein that belongs to the glycogenin family and exists as six alternatively spliced isoforms, designated α, β, γ, δ, ε and ζ. Preferentially expressed in heart, pancreas and liver, Glycogenin-2 functions as a homodimer that uses divalent metal ions as cofactors to catalyze self-glucosylation, thereby producing an oligosaccharide primer that serves as a substrate for glycogen synthase and is thought to regulate glycogen accumulation within the cell. The gene encoding Glycogenin-2 maps to human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes. In conjunction with chromosome Y, chromosome X is responsible for sex determination. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia and Duchenne muscular dystrophy.

REFERENCES

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5. Online Mendelian Inheritance in Man, OMIM™. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 300198. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
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7. Zhai, L., Schroeder, J., Skurat, A.V. and Roach, P.J. 2001. Do rodents have a gene encoding Glycogenin-2, the liver isoform of the self-glucosylating initiator of glycogen synthesis? IUBMB Life 51: 87-91.
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CHROMOSOMAL LOCATION

Genetic locus: GYG2 (human) mapping to Xp22.33.

PRODUCT

Glycogenin-2 (h2): 293T Lysate represents a lysate of human Glycogenin-2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Glycogenin-2 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Glycogenin-2 antibodies.

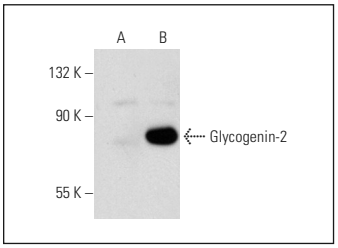
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Glycogenin-2 (3L10): sc-134346 is recommended as a positive control antibody for Western Blot analysis of enhanced human Glycogenin-2 expression in Glycogenin-2 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-IgGκ BP-HRP: sc-516102 or m-IgGκ 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



Glycogenin-2 (3L10): sc-134346. Western blot analysis of Glycogenin-2 expression in non-transfected: sc-117752 (**A**) and human Glycogenin-2 transfected: sc-176507 (**B**) 293T whole cell lysates.

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.