

GALT (h): 293 Lysate: sc-112246

BACKGROUND

GALT (galactose-1-phosphate uridylyltransferase) is a 379 amino acid member of the galactose-1-phosphate uridylyltransferase type 1 family of proteins. GALT exists as a homodimer and is believed to play a role in galactose metabolism. More specifically, GALT is responsible for catalyzing the reaction of UDP-glucose with α -D-galactose 1-phosphate to produce α -D-glucose 1-phosphate and UDP-galactose. This is the second step of the Leloir pathway of galactose metabolism. The products of this reaction will either enter the glycolytic pathway to yield energy (α -D-glucose 1-phosphate) or be used as a galactosyl donor in the synthesis of glycoproteins and glycolipids (UDP-galactose). Mutations in the gene encoding GALT can lead to galactosemia, a disorder (occurring from the inability to metabolize galactose) that is characterized by cataracts, mental retardation and jaundice. In newborns, galactosemia can be fatal if lactose is not removed from the diet.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GALT (human) mapping to 9p13.3.

PRODUCT

GALT (h): 293 Lysate represents a lysate of human GALT transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

GALT (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive GALT antibodies. Recommended use: 10-20 μ l per lane.

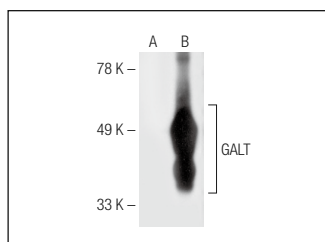
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

GALT (G-1): sc-365577 is recommended as a positive control antibody for Western Blot analysis of enhanced human GALT expression in GALT transfected 293 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-IgG κ BP-HRP: sc-516102 or m-IgG κ 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



GALT (G-1): sc-365577. Western blot analysis of GALT expression in non-transfected: sc-110760 (A) and human GALT transfected: sc-112246 (B) 293 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.