

C1GALT1 (H-300): sc-98433

BACKGROUND

C1GALT1 (core 1 synthase, glycoprotein-N-acetylgalactosamine 3- β -galactosyltransferase, 1), also known as T-synthase, is a single-pass type II membrane protein that is involved in various protein modification pathways. Widely expressed and present at high amounts in heart, kidney, liver and placenta, C1GALT1 functions to generate the core of 1 β -3-galactosyltransferase, an enzyme that transfers galactose from UDP-Gal to Gal-NAC- α -1-O-phenyl and is a precursor for many glycoproteins. C1GALT1 binds magnesium as a cofactor and also participates in development of kidney homeostasis, as well as angiogenesis and thrombopoiesis. Defects in the gene encoding C1GALT1 are associated with IgA nephropathy (IgAN), a condition characterized by accumulation of the IgA antibody in the glomerulus, leading to immune-mediated renal disease. Two isoforms of C1GALT1 exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: C1GALT1 (human) mapping to 7p22.1.

SOURCE

C1GALT1 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of C1GALT1 of human origin.

PRODUCT

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

APPLICATIONS

C1GALT1 (H-300) is recommended for detection of C1GALT1 of 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).

C1GALT1 (H-300) is also recommended for detection of C1GALT1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for C1GALT1 siRNA (h): sc-72690, C1GALT1 shRNA Plasmid (h): sc-72690-SH and C1GALT1 shRNA (h) Lentiviral Particles: sc-72690-V.

Molecular Weight of C1GALT1: 42 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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.



Try **C1GALT1 (F-31): sc-100745**, our highly recommended monoclonal alternative to C1GALT1 (H-300).