

GTDC1 (U-23): sc-133643

BACKGROUND

Glycosyltransferases that mediate the regio- and stereoselective transfer of sugars, such as the fucosyltransferases, determine cell surface-carbohydrate profiles, which is an essential interface for biological recognition processes. GTDC1 (Glycosyltransferase-like domain-containing protein 1), also known as Mat-Xa, is a 458 amino acid protein belonging to the glycosyltransferase 1 family. GTDC1 is ubiquitously expressed, with highest levels found in peripheral blood leukocytes, spleen, lung and testis. There are three isoforms of GTDC1 that are produced as a result of alternative splicing events. The gene encoding GTDC1 maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. An extremely rare recessive genetic disorder, Alström syndrome, is caused by mutations in the ALMS1 gene, which maps to chromosome 2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GTDC1 (human) mapping to 2q22.2; Gtdc1 (mouse) mapping to 2 B.

SOURCE

GTDC1 (U-23) is an affinity purified rabbit polyclonal antibody raised against synthetic GTDC1 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

GTDC1 (U-23) is recommended for detection of GTDC1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GTDC1 siRNA (h): sc-94743, GTDC1 siRNA (m): sc-145821, GTDC1 shRNA Plasmid (h): sc-94743-SH, GTDC1 shRNA Plasmid (m): sc-145821-SH, GTDC1 shRNA (h) Lentiviral Particles: sc-94743-V and GTDC1 shRNA (m) Lentiviral Particles: sc-145821-V.

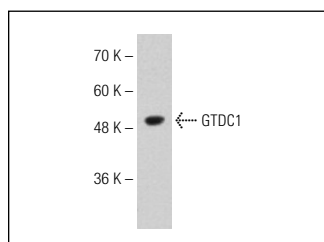
Molecular Weight of GTDC1: 53 kDa.

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 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).

DATA



GTDC1 (U-23): sc-133643. Western blot analysis of GTDC1 expression in Hep G2 whole cell lysate.

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.