

GLT25D1 (L-15): sc-161655

BACKGROUND

GLT25D1 (glycosyltransferase 25 domain containing 1), also known as hydroxylysine galactosyltransferase 1 or procollagen galactosyltransferase 1, is a 622 amino acid protein that localizes to the lumen of the endoplasmic reticulum. Ubiquitously expressed with higher levels in placenta, heart, lung and spleen, GLT25D1 is a member of the glycosyltransferase 25 family. The β -galactosyltransferase activity of GLT25D1 allows the transfer of β -galactose to hydroxylysine residues of collagen. GLT25D1 is considered an important target for investigating the biological significance of collagen glycosylation and the importance of posttranslational modification in the etiology of connective tissue disorders. The gene encoding GLT25D1 is located on human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

REFERENCES

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5. Moodie, S.J., Norman, P.J., King, A.L., Fraser, J.S., Curtis, D., Ellis, H.J., Vaughan, R.W. and Ciclitira, P.J. 2002. Analysis of candidate genes on chromosome 19 in coeliac disease: an association study of the KIR and ILIR gene clusters. *Eur. J. Immunogenet.* 29: 287-291.

CHROMOSOMAL LOCATION

Genetic locus: GLT25D1 (human) mapping to 19p13.11; Glt25d1 (mouse) mapping to 8 B3.3.

SOURCE

GLT25D1 (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GLT25D1 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.

Blocking peptide available for competition studies, sc-161655 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GLT25D1 (L-15) is recommended for detection of GLT25D1 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); non cross-reactive with GLT25D6.

GLT25D1 (L-15) is also recommended for detection of GLT25D1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GLT25D1 siRNA (h): sc-97633, GLT25D1 siRNA (m): sc-145433, GLT25D1 shRNA Plasmid (h): sc-97633-SH, GLT25D1 shRNA Plasmid (m): sc-145433-SH, GLT25D1 shRNA (h) Lentiviral Particles: sc-97633-V and GLT25D1 shRNA (m) Lentiviral Particles: sc-145433-V.

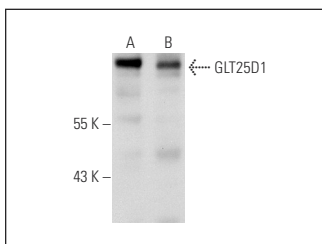
Molecular Weight of GLT25D1: 72 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, rat heart extract: sc-2393 or WI-38 whole cell lysate: sc-364260.

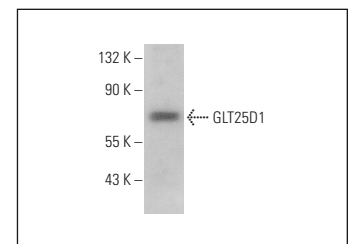
RECOMMENDED SECONDARY REAGENTS

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



GLT25D1 (L-15): sc-161655. Western blot analysis of GLT25D1 expression in HeLa (A) and WI 38 (B) whole cell lysates.



GLT25D1 (L-15): sc-161655. Western blot analysis of GLT25D1 expression in rat heart tissue extract.

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.