

β-1,4-Gal-T6 (V-16)-R: sc-22293-R

BACKGROUND

β-1,4-galactosyltransferases (β-1,4-Gal-T) are type II membrane-bound glycoproteins that are substrate-specific and function to transfer galactose in a β-1,4 linkage to an acceptor sugar. There are seven members of the β-1,4-Gal-T family, all of which are directed to the Golgi apparatus through a hydrophobic sequence at the N-terminus. β-1,4-Gal-T6, also known as B4GALT6, is a 382 amino acid single-pass type II membrane protein that localizes to the Golgi apparatus and belongs to the β-1,4-galactosyltransferase family. Expressed at high levels in adrenal gland and brain and present at lower levels in lung, liver and colon, β-1,4-Gal-T6 uses magnesium or zinc to catalyze the UDP-dependent biosynthesis of glycosphingolipids. The gene encoding β-1,4-Gal-T6 maps to human chromosome 18, which houses over 300 protein-coding genes and contains nearly 76 million bases.

REFERENCES

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3. Amado, M., Almeida, R., Schwientek, T. and Clausen, H. 1999. Identification and characterization of large galactosyltransferase gene families: galactosyltransferases for all functions. *Biochim. Biophys. Acta* 1473: 35-53.
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CHROMOSOMAL LOCATION

Genetic locus: B4GALT6 (human) mapping to 18q12.1; B4galt6 (mouse) mapping to 18 A2.

SOURCE

β-1,4-Gal-T6 (V-16)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of β-1,4-Gal-T6 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-22293 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

β-1,4-Gal-T6 (V-16)-R is recommended for detection of β-1,4-Gal-T6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

β-1,4-Gal-T6 (V-16)-R is also recommended for detection of β-1,4-Gal-T6 in additional species, including equine, canine, bovine and porcine.

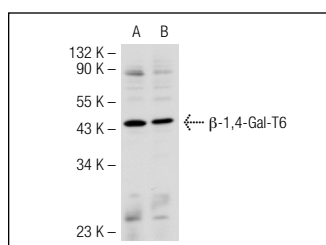
Suitable for use as control antibody for β-1,4-Gal-T6 siRNA (h): sc-72406, β-1,4-Gal-T6 siRNA (m): sc-108226, β-1,4-Gal-T6 shRNA Plasmid (h): sc-72406-SH, β-1,4-Gal-T6 shRNA Plasmid (m): sc-108226-SH, β-1,4-Gal-T6 shRNA (h) Lentiviral Particles: sc-72406-V and β-1,4-Gal-T6 shRNA (m) Lentiviral Particles: sc-108226-V.

Positive Controls: mouse brain extract: sc-2253 or rat brain extract: sc-2392.

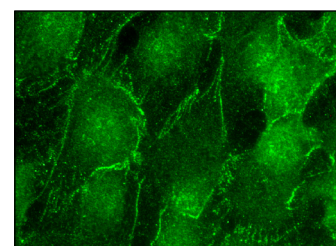
RECOMMENDED SECONDARY REAGENTS

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) 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.

DATA



β-1,4-Gal-T6 (V-16)-R: sc-22293-R. Western blot analysis of β-1,4-Gal-T6 expression in mouse brain (A) and rat brain (B) tissue extracts.



β-1,4-Gal-T6 (V-16)-R: sc-22293-R. Immunofluorescence staining of formalin-fixed HepG2 cells showing membrane localization.

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.