

β-1,4-Gal-T2 Polyclonal Antibody

Catalog No: YT5008

Reactivity: Human; Mouse

Applications: IHC;IF;ELISA

Target : β -1,4-Gal-T2

Fields: >>Galactose metabolism;>>N-Glycan biosynthesis;>>Various types of N-glycan

biosynthesis;>>Other types of O-glycan biosynthesis;>>Mannose type O-glycan

biosynthesis;>>Glycosaminoglycan biosynthesis - keratan

sulfate;>>Glycosphingolipid biosynthesis - lacto and neolacto series;>>Metabolic

pathways

Gene Name: B4GALT2

Protein Name: Beta-1,4-galactosyltransferase 2

O60909

Q9Z2Y2

Human Gene Id: 8704

Human Swiss Prot

No:

Mouse Gene ld: 53418

Mouse Swiss Prot

No:

Immunogen : Synthesized peptide derived from the C-terminal region of human β -1,4-Gal-T2.

Specificity: β -1,4-Gal-T2 Polyclonal Antibody detects endogenous levels of β -1,4-Gal-T2

protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

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chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 42kD

Cell Pathway: Galactose metabolism;N-Glycan biosynthesis;Keratan sulfate

biosynthesis; Glycosphingolipid biosynthesis;

Background: This gene is one of seven beta-1,4-galactosyltransferase (beta4GalT) genes.

They encode type II membrane-bound glycoproteins that appear to have exclusive specificity for the donor substrate UDP-galactose; all transfer galactose in a beta1,4 linkage to similar acceptor sugars: GlcNAc, Glc, and Xyl. Each beta4GalT has a distinct function in the biosynthesis of different glycoconjugates and saccharide structures. As type II membrane proteins, they have an N-terminal hydrophobic signal sequence that directs the protein to the Golgi apparatus and which then remains uncleaved to function as a transmembrane anchor. By sequence similarity, the beta4GalTs form four groups: beta4GalT1 and beta4GalT2, beta4GalT3 and beta4GalT4, beta4GalT5 and beta4GalT6, and beta4GalT7. The enzyme encoded by this gene synthesizes N-acetyllactosamine

in glycolipids and glycoproteins. Its substrate specificity i

Function: catalytic activity:UDP-galactose + D-glucose = UDP + lactose.,catalytic

activity:UDP-galactose + N-acetyl-beta-D-glucosaminylglycopeptide = UDP + beta-D-galactosyl-(1->4)-N-acetyl-beta-D-glucosaminylglycopeptide.,catalytic

activity:UDP-galactose + N-acetyl-D-glucosamine = UDP + N-

acetyllactosamine.,cofactor:Manganese.,function:Responsible for the synthesis of complex-type N-linked oligosaccharides in many glycoproteins as well as the

carbohydrate moieties of glycolipids. Can produce lactose.,online

information:Beta-1,4-galactosyltransferase 2,online information:GlycoGene database,pathway:Protein modification; protein glycosylation.,similarity:Belongs to the glycosyltransferase 7 family.,subcellular location:Trans cisternae of Golgi stack.,tissue specificity:Weakly expressed in various tissues. Highest expression

in prostate, testis, ovary, intestine, muscle, and in fetal brain.,

Subcellular Location:

Golgi apparatus, Golgi stack membrane; Single-pass type II membrane protein.

Trans cisternae of Golgi stack.

Expression: Weakly expressed in various tissues. Highest expression in prostate, testis,

ovary, intestine, muscle, and in fetal brain.

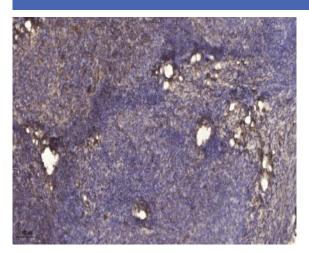
Sort: 24847

Host: Rabbit

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Modifications: Unmodified

Products Images



Immunohistochemical analysis of paraffin-embedded human cervical carcinoma. 1, Antibody was diluted at $1:200(4^{\circ}$ overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).