

β-1,3-Gal-T1 Polyclonal Antibody

Catalog No: YT5002

Reactivity: Human; Mouse

Applications: WB;ELISA

Target : β -1,3-Gal-T1

Fields: >>Glycosphingolipid biosynthesis - lacto and neolacto series;>>Metabolic

pathways

Gene Name: B3GALT1

Protein Name: Beta-1,3-galactosyltransferase 1

Q9Y5Z6

O54904

Human Gene Id: 8708

Human Swiss Prot

No:

Mouse Gene Id: 26877

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

B3GALT1. AA range:61-110

Specificity: β-1,3-Gal-T1 Polyclonal Antibody detects endogenous levels of β-1,3-Gal-T1

protein.

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

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.

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

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

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

Observed Band: 36kD

Cell Pathway: Glycosphingolipid biosynthesis;

Background: This gene is a member of the beta-1,3-galactosyltransferase (beta3GalT) gene

family. This family encodes type II membrane-bound glycoproteins with diverse enzymatic functions using different donor substrates (UDP-galactose and UDP-N-

acetylglucosamine) and different acceptor sugars (N-acetylglucosamine,

galactose, N-acetylgalactosamine). The beta3GalT genes are distantly related to the Drosophila Brainiac gene and have the protein coding sequence contained in a single exon. The beta3GalT proteins also contain conserved sequences not found in the beta4GalT or alpha3GalT proteins. The carbohydrate chains synthesized by these enzymes are designated as type 1, whereas beta4GalT enzymes synthesize type 2 carbohydrate chains. The ratio of type 1:type 2 chains changes during embryogenesis. By sequence similarity, the beta3GalT genes fall

into at least two groups: beta3GalT4 and 4 other beta3

Function: cofactor:Manganese.,function:Beta-1,3-galactosyltransferase that transfers

galactose from UDP-galactose to substrates with a terminal beta-N-

acetylglucosamine (beta-GlcNAc) residue. Involved in the biosynthesis of the carbohydrate moieties of glycolipids and glycoproteins. Inactive towards

substrates with terminal alpha-N-acetylglucosamine (alpha-GlcNAc) or alpha-N-

acetylgalactosamine (alpha-GalNAc) residues.,online

information:Beta-1,3-galactosyltransferase 1,online information:GlycoGene database,pathway:Protein modification; protein glycosylation.,similarity:Belongs to the glycosyltransferase 31 family.,tissue specificity:Detected in brain and colon

mucosa and to a lesser extent in colon adenocarcinoma cells.,

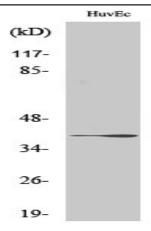
Subcellular Location:

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

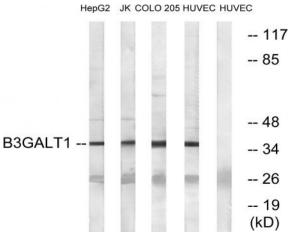
Expression: Detected in brain and colon mucosa and to a lesser extent in colon

adenocarcinoma cells.

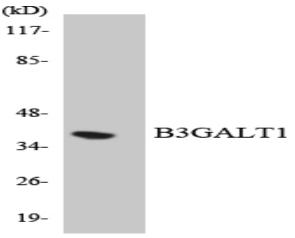
Products Images



Western Blot analysis of various cells using β -1,3-Gal-T1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of lysates from HUVEC, COLO, Jurkat, and HepG2 cells, using B3GALT1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HUVECcells using B3GALT1 antibody.