

**$\beta$ -1,3-Gal-T1 Polyclonal Antibody**

<b>Catalog No :</b>	YT5002
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	$\beta$ -1,3-Gal-T1
<b>Fields :</b>	>>Glycosphingolipid biosynthesis - lacto and neolacto series;>>Metabolic pathways
<b>Gene Name :</b>	B3GALT1
<b>Protein Name :</b>	Beta-1,3-galactosyltransferase 1
<b>Human Gene Id :</b>	8708
<b>Human Swiss Prot No :</b>	Q9Y5Z6
<b>Mouse Gene Id :</b>	26877
<b>Mouse Swiss Prot No :</b>	O54904
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human B3GALT1. AA range:61-110
<b>Specificity :</b>	$\beta$ -1,3-Gal-T1 Polyclonal Antibody detects endogenous levels of $\beta$ -1,3-Gal-T1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Concentration :** 1 mg/ml

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

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**Observed Band :** 36kD

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**Cell Pathway :** Glycosphingolipid biosynthesis;

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**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

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**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.,

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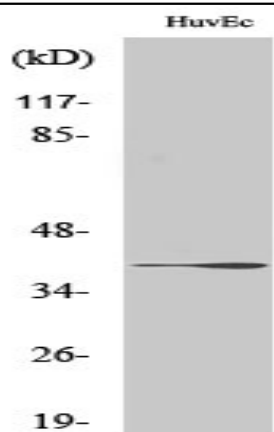
**Subcellular Location :** Golgi apparatus membrane ; Single-pass type II membrane protein .

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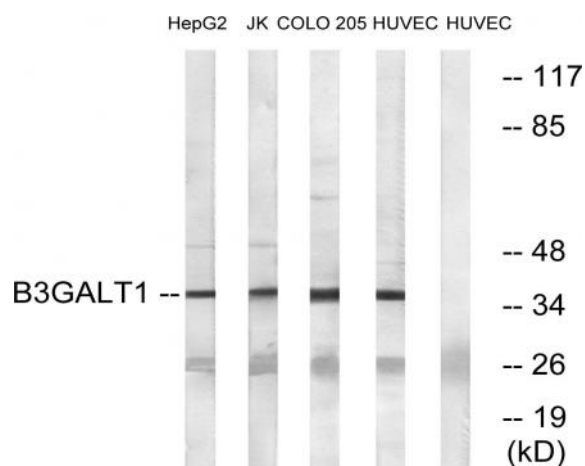
**Expression :** Detected in brain and colon mucosa and to a lesser extent in colon adenocarcinoma cells.

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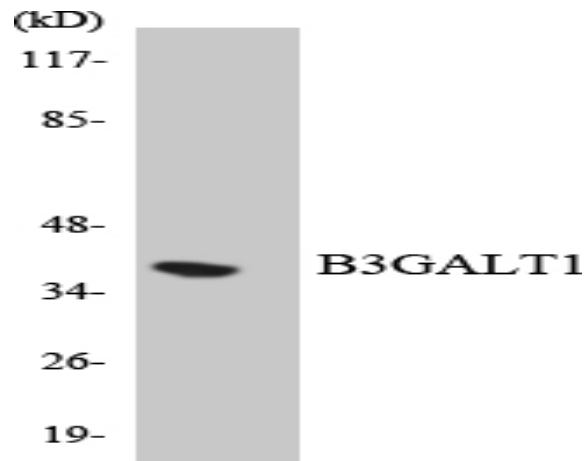
## Products Images



Western Blot analysis of various cells using  $\beta$ -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.