

## β-1,3-Gal-T4 Polyclonal Antibody

Catalog No: YT5004

**Reactivity:** Human; Rat; Mouse;

**Applications:** WB;ELISA

**Target:**  $\beta$ -1,3-Gal-T4

**Fields:** >>Glycosphingolipid biosynthesis - ganglio series;>>Metabolic pathways

Gene Name: B3GALT4

**Protein Name:** Beta-1,3-galactosyltransferase 4

Human Gene Id: 8705

**Human Swiss Prot** 

O96024

Q9Z0F0

No:

Mouse Swiss Prot

No:

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

B3GALT4. AA range:181-230

**Specificity:** β-1,3-Gal-T4 Polyclonal Antibody detects endogenous levels of β-1,3-Gal-T4

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: 1:10000. 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)

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Observed Band: 42kD

**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:** 

catalytic activity:UDP-galactose + N-acetyl-D-galactosaminyl-(N-acetylneuraminyl)-D-galactosyl-(1->4)-beta-D-glucosyl-N-acylsphingosine = UDP + D-galactosyl-(1->3)-beta-N-acetyl-D-galactosaminyl-(N-acetylneuraminyl)-D-galactosyl-D-glucosyl-N-acylsphingosine.,function:Involved in GM1/GD1B/GA1 ganglioside biosynthesis.,online information:Beta-1,3-galactosyltransferase 4,online information:GlycoGene database,pathway:Protein modification; protein glycosylation.,similarity:Belongs to the glycosyltransferase 31 family.,tissue specificity:Highly expressed in heart, skeletal muscle and pancreas and, to a lesser extent, in brain, placenta, kidney, liver and lung.,

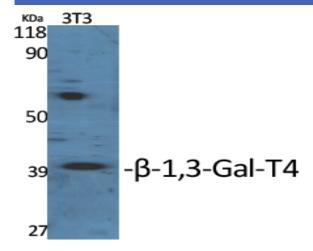
Subcellular Location:

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

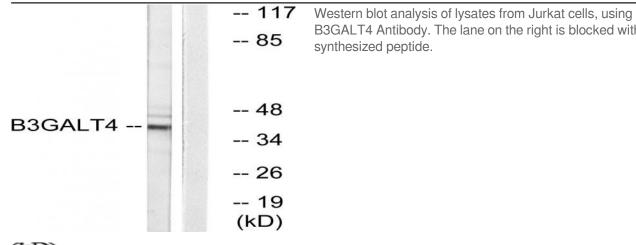
**Expression:** 

Highly expressed in heart, skeletal muscle and pancreas and, to a lesser extent, in brain, placenta, kidney, liver and lung.

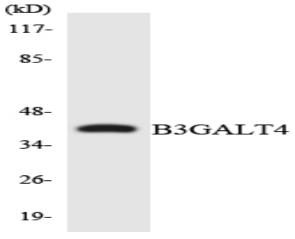
## **Products Images**



Western Blot analysis of various cells using  $\beta$ -1,3-Gal-T4 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000







Western blot analysis of the lysates from 293 cells using B3GALT4 antibody.