

## β-1,4-Gal-T3 Polyclonal Antibody

Catalog No: YT5009

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

**Target :**  $\beta$ -1,4-Gal-T3

**Fields:** >>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: B4GALT3

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

Human Gene Id: 8703

**Human Swiss Prot** 

No:

Mouse Gene ld: 57370

**Mouse Swiss Prot** 

Q91YY2

O60512

No:

**Rat Gene Id:** 494342

Rat Swiss Prot No: Q6P768

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

B4GALT3. AA range:271-320

**Specificity:** β-1,4-Gal-T3 Polyclonal Antibody detects endogenous levels of β-1,4-Gal-T3

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. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200

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

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 49kD

N-Glycan biosynthesis; Keratan sulfate biosynthesis; Glycosphingolipid **Cell Pathway:** 

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 glycoconiugates 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

beta4GalT2, beta4GalT3 and beta4GalT4, beta4GalT5 and beta4GalT6, and beta4GalT7. This gene encodes an enzyme that may be mainly involved in the

sequence similarity, the beta4GalTs form four groups: beta4GalT1 and

synthesis of the first N-acetyllactosamine unit of poly-N-acet

**Function:** 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.,online

information:Beta-1,4-galactosyltransferase 3,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: Found in various tissues. Highest expression in placenta,

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

Subcellular Location:

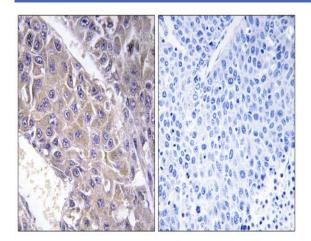
Golgi apparatus, Golgi stack membrane; Single-pass type II membrane protein.

Trans cisternae of Golgi stack.

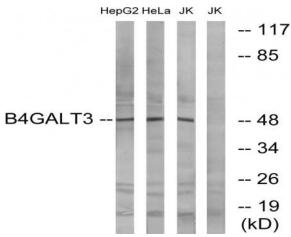
Found in various tissues. Highest expression in placenta, prostate, testis, ovary, **Expression:** 

intestine and muscle, and in fetal brain.

## **Products Images**



Immunohistochemistry analysis of paraffin-embedded human liver carcinoma tissue, using B4GALT3 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Jurkat, HeLa, and HepG2 cells, using B4GALT3 Antibody. The lane on the right is blocked with the synthesized peptide.