



# β-1,4-Gal-T3 Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| <b>Catalog No</b>                  | YP-Ab-04293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Gene Name</b>                   | B4GALT3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human B4GALT3. AA range:271-320                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Specificity</b>                 | β-1,4-Gal-T3 Polyclonal Antibody detects endogenous levels of β-1,4-Gal-T3 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>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Dilution</b>                    | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Synonyms</b>                    | b4Gal T3;b4Gal-T3;Beta 1;4 GalTase 3;Beta-1;4-galactosyltransferase 3;4;β-1;4-Gal-T3;B4GALT3;4-GalTase 3;Beta4Gal-T3;UDP-Gal:beta-GlcNAc beta-1;UDP-galactose:beta-N-acetylglucosamine beta-1                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Observed Band</b>               | 49kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Calculated Molecular Weight</b> | 49kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Cell Pathway</b>                | Golgi apparatus, Golgi stack membrane; Single-pass type II membrane protein. Trans cisternae of Golgi stack.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Tissue Specificity</b>          | Found in various tissues. Highest expression in placenta, prostate, testis, ovary, intestine and muscle, and in fetal brain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Function</b>                    | 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-acetylglucosamine.,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.,

### 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. This gene encodes an enzyme that may be mainly involved in the synthesis of the first N-acetyllactosamine unit of poly-N-acet

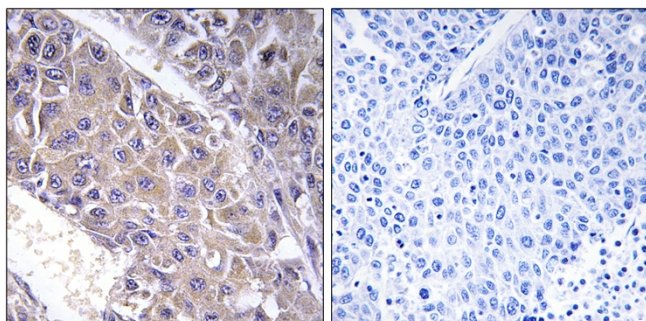
### matters needing attention

Avoid repeated freezing and thawing!

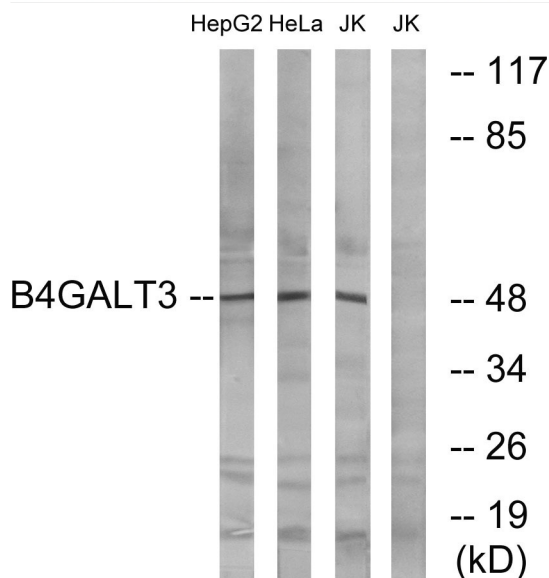
### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## 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.