



β-1,4-Gal-T3 Polyclonal Antibody

Catalog No	YP-Ab-04293
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	B4GALT3
Protein Name	Beta-1,4-galactosyltransferase 3
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	B4GALT3; Beta-1; 4-galactosyltransferase 3; Beta-1,4-GalTase 3; Beta4Gal-T3; b4Gal-T3; UDP-Gal:beta-GlcNAc beta-1,4-galactosyltransferase 3; UDP-galactose:beta-N-acetylglucosamine beta-1,4-galactosyltransferase 3
Observed Band	49kD
Cell Pathway	Golgi apparatus, Golgi stack membrane; Single-pass type II membrane protein. 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.
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-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

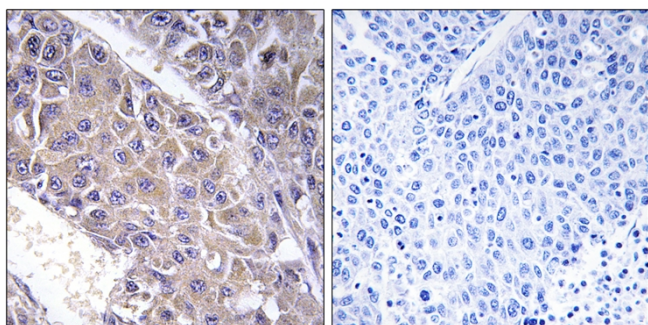
matters needing attention

Avoid repeated freezing and thawing!

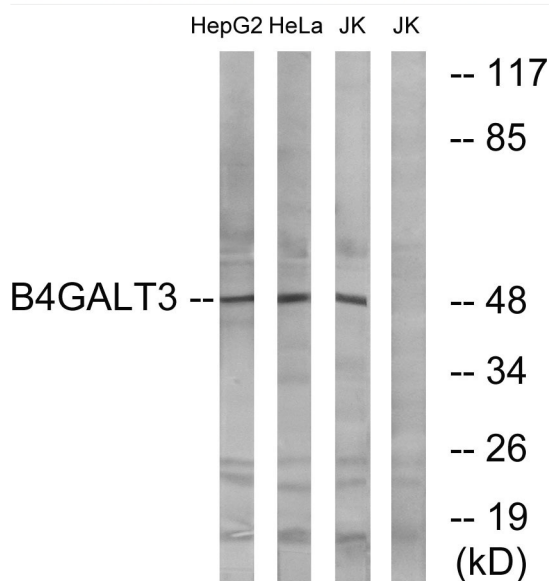
Usage suggestions

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.