

B4GALT2 Rabbit pAb

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Catalog # AP58011

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O60909
Reactivity	Rat
Predicted	Pig, Dog, Human, Mouse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41972
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human B4GALT2
Epitope Specificity	201-300/372
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Golgi apparatus
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. The enzyme encoded by this gene synthesizes N-acetylglucosamine in glycolipids and glycoproteins. Its substrate specificity is affected by alpha-lactalbumin but it is not expressed in lactating mammary tissue. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jul 2011]

Additional Information

Gene ID	8704
Other Names	Beta-1, 4-galactosyltransferase 2, Beta-1, 4-GalTase 2, Beta4Gal-T2, b4Gal-T2, 2.4.1.-, Beta-N-acetylglucosaminyl-glycolipid beta-1, 4-galactosyltransferase, Beta-N-acetylglucosaminylglycopeptide beta-1, 4-galactosyltransferase, 2.4.1.38, Lactose synthase A protein, 2.4.1.22, N-acetylglucosamine synthase, 2.4.1.90, Nal synthase, UDP-Gal:beta-GlcNAc beta-1, 4-galactosyltransferase 2,

UDP-galactose:beta-N-acetylglucosamine beta-1, 4-galactosyltransferase 2, B4GALT2 ([HGNC:925](#))

Dilution

IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name

B4GALT2 ([HGNC:925](#))

Function

Responsible for the synthesis of complex-type N-linked oligosaccharides in many glycoproteins as well as the carbohydrate moieties of glycolipids (PubMed:[9405390](#)). Can produce lactose (PubMed:[9405390](#)).

Cellular Location

Golgi apparatus, Golgi stack membrane; Single- pass type II membrane protein. Note=Trans cisternae of Golgi stack

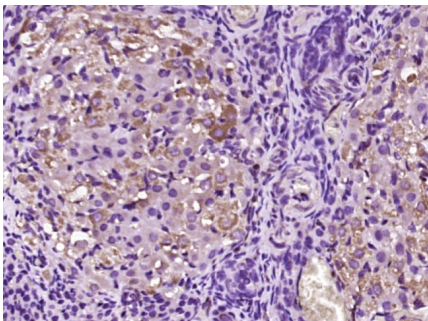
Tissue Location

Weakly expressed in various tissues. Highest expression in prostate, testis, ovary, intestine, muscle, and in fetal brain.

Background

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Images



Paraformaldehyde-fixed, paraffin embedded (Rat ovary); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (B4GALT2) Polyclonal Antibody, Unconjugated (AP58011) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.