

# **B4GALT2 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58011

# **Specification**

# **B4GALT2 Polyclonal Antibody - Product Information**

Application Primary Accession

Reactivity Host Clonality Calculated MW Physical State

Immunogen

**Epitope Specificity** 

Isotype **Purity** 

affinity purified by Protein A

Rat, Pig, Dog, Bovine

WB, IHC-P, IHC-F, IF, ICC, E

Rabbit Polyclonal 42 KDa Liquid

KLH conjugated synthetic peptide derived

from human B4GALT2

201-300/372

IqG

**Buffer** 

SUBCELLULAR LOCATION

**SIMILARITY** 

Important Note

0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

**Golgi apparatus** 

Belongs to the glycosyltransferase 7

amily.

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-acetyllactosamine 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]

### **B4GALT2 Polyclonal Antibody - 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,



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Beta-N-acetylglucosaminylglycopeptide beta-1, 4-galactosyltransferase, 2.4.1.38, Lactose synthase A protein, 2.4.1.22, N-acetyllactosamine 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 (<a href="http://www.genenames.org/cgi-bin/gene symbol report?hgnc id=925" target=" blank">HGNC:925</a>)

# Target/Specificity

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

### **Dilution**

<span class ="dilution WB">WB~~1:1000/>class ="dilution IHC-P">IHC-P~~N/A</span><br \><span class ="dilution IHC-F">IHC-F~~N/A</span><br \><span class ="dilution IF">IF~~1:50~200</span><br \><span class ="dilution ICC">ICC~~N/A</span><br \><span class ="dilution E">E~~N/A</span>

### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

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.

# **B4GALT2 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/9405390" target=" blank">9405390</a>). Can produce lactose (PubMed:<a href="http://www.uniprot.org/citations/9405390" target="\_blank">9405390</a>).

### **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.

# **B4GALT2 Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

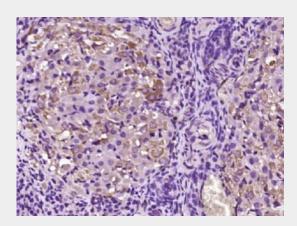




• <u>Immunoprecipitation</u>

- Flow Cytomety
- Cell Culture

# **B4GALT2 Polyclonal Antibody - 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 (bs-23826R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.