

# B4GALT5 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP5365b

## Product Information

---

<b>Application</b>	WB, FC, E
<b>Primary Accession</b>	<a href="#">O43286</a>
<b>Other Accession</b>	<a href="#">Q9JMK0</a> , <a href="#">NP_004767.1</a>
<b>Reactivity</b>	Human, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB25986
<b>Calculated MW</b>	45119
<b>Antigen Region</b>	324-350

## Additional Information

---

<b>Gene ID</b>	9334
<b>Other Names</b>	Beta-1, 4-galactosyltransferase 5, Beta-1, 4-GalTase 5, Beta4Gal-T5, b4Gal-T5, 241-, Beta-1, 4-GalT II, UDP-Gal:beta-GlcNAc beta-1, 4-galactosyltransferase 5, UDP-galactose:beta-N-acetylglucosamine beta-1, 4-galactosyltransferase 5, B4GALT5
<b>Target/Specificity</b>	This B4GALT5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 324-350 amino acids from the C-terminal region of human B4GALT5.
<b>Dilution</b>	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	B4GALT5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

---

<b>Name</b>	B4GALT5 ( <a href="#">HGNC:928</a> )
<b>Function</b>	Catalyzes the synthesis of lactosylceramide (LacCer) via the transfer of

galactose from UDP-galactose to glucosylceramide (GlcCer) (PubMed:[24498430](#)). LacCer is the starting point in the biosynthesis of all gangliosides (membrane-bound glycosphingolipids) which play pivotal roles in the CNS including neuronal maturation and axonal and myelin formation (By similarity). Plays a role in the glycosylation of BMPR1A and regulation of its protein stability (By similarity). Essential for extraembryonic development during early embryogenesis (By similarity).

#### Cellular Location

Golgi apparatus, Golgi stack membrane {ECO:0000250|UniProtKB:P15291}; Single-pass type II membrane protein Golgi apparatus {ECO:0000250|UniProtKB:A0A1S6M251}. Note=Trans cisternae of Golgi stack. {ECO:0000250|UniProtKB:P15291}

#### Tissue Location

Ubiquitously expressed.

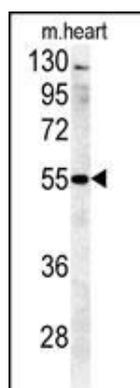
## Background

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. The function of the enzyme encoded by this gene is not clear. This gene was previously designated as B4GALT4 but was renamed to B4GALT5. In the literature it is also referred to as beta4GalT2. [provided by RefSeq].

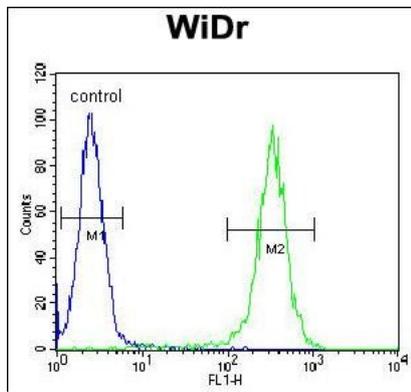
## References

- Kitayama, K., et al. *J. Biol. Chem.* 282(41):30085-30096(2007)  
Sato, T., et al. *J. Biol. Chem.* 282(38):27702-27712(2007)  
Jiang, J., et al. *J. Biol. Chem.* 281(14):9482-9489(2006)  
Sato, T., et al. *J. Biol. Chem.* 279(38):39574-39583(2004)  
Xu, S., et al. *J. Exp. Clin. Cancer Res.* 21(3):409-414(2002)  
Deloukas, P., et al. *Nature* 414(6866):865-871(2001)  
Amado, M., et al. *Biochim. Biophys. Acta* 1473(1):35-53(1999)  
Lo, N.W., et al. *Glycobiology* 8(5):517-526(1998)  
Sato, T., et al. *Biochem. Biophys. Res. Commun.* 244(3):637-641(1998)  
Sato, T., et al. *Proc. Natl. Acad. Sci. U.S.A.* 95(2):472-477(1998)

## Images



B4GALT5 Antibody (C-term)(Cat. #AP5365b) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the B4GALT5 antibody detected B4GALT5 protein (arrow).



B4GALT5 Antibody (C-term) (Cat. #AP5365b) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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