

B4GALT6 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10697B**Specification**

B4GALT6 Antibody (C-term) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	O9UBX8
Other Accession	O9WVK5 , NP_004766.2
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	44914
Antigen Region	319-346

B4GALT6 Antibody (C-term) - Additional Information**Gene ID** 9331**Other Names**

Beta-1, 4-galactosyltransferase 6, Beta-1, 4-GalTase 6, Beta4Gal-T6, b4Gal-T6, 241-, UDP-Gal:beta-GlcNAc beta-1, 4-galactosyltransferase 6, UDP-galactose:beta-N-acetylglucosamine beta-1, 4-galactosyltransferase 6, Glucosylceramide beta-1, 4-galactosyltransferase, Lactosylceramide synthase, LacCer synthase, UDP-Gal:glucosylceramide beta-1, 4-galactosyltransferase, B4GALT6

Target/Specificity

This B4GALT6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 319-346 amino acids from the C-terminal region of human B4GALT6.

Dilution

WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format

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.

Storage

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.

Precautions

B4GALT6 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

B4GALT6 Antibody (C-term) - Protein Information

Name B4GALT6 ([HGNC:929](#))

Function Catalyzes the synthesis of lactosylceramide (LacCer) via the transfer of galactose from UDP-galactose to glucosylceramide (GlcCer) (PubMed:[3099851](#), PubMed:[1551920](#), 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).

Cellular Location

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

Tissue Location

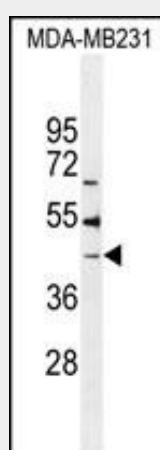
High expression in brain and adrenal gland, lower in liver, lung, colon and peripheral white blood cells

B4GALT6 Antibody (C-term) - Protocols

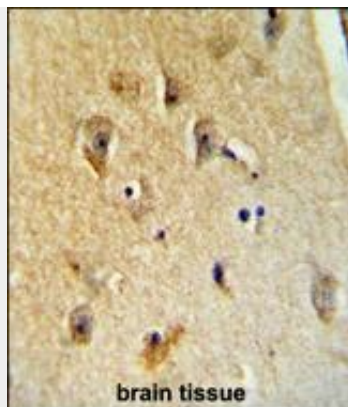
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

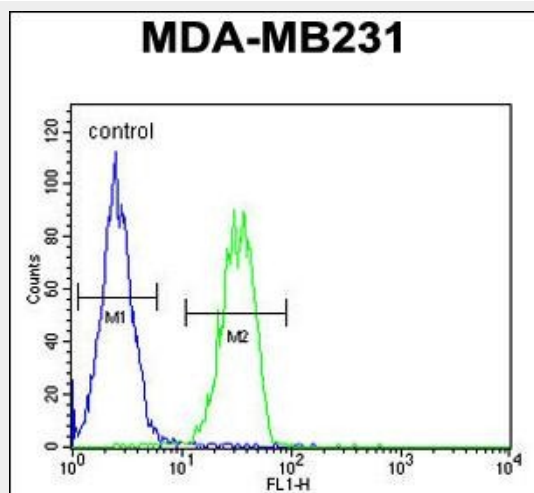
B4GALT6 Antibody (C-term) - Images



B4GALT6 Antibody (C-term) (Cat. #AP10697b) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the B4GALT6 antibody detected the B4GALT6 protein (arrow).



B4GALT6 Antibody (C-term) (Cat. #AP10697b) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the B4GALT6 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



B4GALT6 Antibody (C-term) (Cat. #AP10697b) flow cytometric analysis of MDA-MB231 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

B4GALT6 Antibody (C-term) - 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 enzyme encoded by this gene is a lactosylceramide synthase important for glycolipid biosynthesis.

B4GALT6 Antibody (C-term) - References

Landers, J.E., et al. Proc. Natl. Acad. Sci. U.S.A. 106(22):9004-9009(2009) Gevaert, K., et al. Nat. Biotechnol. 21(5):566-569(2003) Fan, Y., et al. DNA Seq. 13(1):1-8(2002) Amado, M., et al. Biochim. Biophys. Acta 1473(1):35-53(1999) Takizawa, M., et al. Biochim. Biophys. Acta 1438(2):301-304(1999)