

B4GALT5 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP5365b

Specification

B4GALT5 Blocking Peptide (C-term) - Product Information

Primary Accession [O43286](#)
Other Accession [O9JMK0](#), [NP_004767.1](#)

B4GALT5 Blocking Peptide (C-term) - Additional Information

Gene ID 9334

Other Names

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

Target/Specificity

The synthetic peptide sequence is selected from aa 339-350 of HUMAN B4GALT5

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

B4GALT5 Blocking Peptide (C-term) - Protein Information

Name B4GALT5 ([HGNC:928](#))

Function

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.

B4GALT5 Blocking Peptide (C-term) - Protocols

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

- [Blocking Peptides](#)

B4GALT5 Blocking Peptide (C-term) - Images**B4GALT5 Blocking Peptide (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 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].

B4GALT5 Blocking Peptide (C-term) - References

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Amado, M., et al. Biochim. Biophys. Acta 1473(1):35-53(1999)
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