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B3GALT5 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP11135a

Specification

B3GALT5 Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q9Y2C3

B3GALT5 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 10317

Other Names
Beta-1, 3-galactosyltransferase 5, Beta-1, 3-GalTase 5, Beta3Gal-T5, Beta3GalT5, b3Gal-T5, 241-, Beta-3-Gx-T5, UDP-Gal:beta-GlcNAc beta-1, 3-galactosyltransferase 5, UDP-galactose:beta-N-acetylglucosamine beta-1, 3-galactosyltransferase 5, B3GALT5

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.

B3GALT5 Antibody (N-term) Blocking peptide - Protein Information

Name B3GALT5 (HGNC:920)

Function
Catalyzes the transfer of Gal to GlcNAc-based acceptors with a preference for the core3 O-linked glycan GlcNAc(beta1,3)GalNAc structure. Can use glycolipid LC3Cer as an efficient acceptor.

Cellular Location
Golgi apparatus membrane; Single- pass type II membrane protein

Tissue Location
Expressed in stomach, jejunum, colon, pancreas, small intestine, testis and gastrointestinal and pancreatic cancer cell lines. Hardly detected in lung, liver, adrenal gland and peripheral blood leukocytes.

B3GALT5 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

B3GALT5 Antibody (N-term) Blocking peptide - Images

B3GALT5 Antibody (N-term) Blocking peptide - Background

This gene is a member of thebeta-1,3-galactosyltransferase (beta3GalT) gene family. This familyencodes type II membrane-bound glycoproteins with diverse enzymaticfunctions using different donor substrates (UDP-galactose andUDP-N-acetylglucosamine) and different acceptor sugars(N-acetylglucosamine, galactose, N-acetylgalactosamine). Thebeta3GalT genes are distantly related to the Drosophila Brainiacgene and have the protein coding sequence contained in a singleexon. The beta3GalT proteins also contain conserved sequences notfound in the beta4GalT or alpha3GalT proteins. The carbohydratechains synthesized by these enzymes are designated as type 1,whereas beta4GalT enzymes synthesize type 2 carbohydrate chains.The ratio of type 1:type 2 chains changes during embryogenesis. Bysequence similarity, the beta3GalT genes fall into at least twogroups: beta3GalT4 and 4 other beta3GalT genes (beta3GalT1-3,beta3GalT5). This gene encodes the most probable candidate forsynthesis of the type 1 Lewis antigens which are frequently foundto be elevated in gastrointestinal and pancreatic cancers. Theencoded protein is inactive with N-linked glycoproteins andfunctions in mucin glycosylation. Five transcript variants havebeen described which differ in the 5' UTR. All transcript variantsencode an identical protein.

B3GALT5 Antibody (N-term) Blocking peptide - References

Hamshere, M.L., et al. Br J Psychiatry 195(1):23-29(2009)Lin, C.H., et al. Glycobiology 19(4):418-427(2009)Seko, A., et al. Tumour Biol. 30(1):43-50(2009)Mare, L., et al. J. Biol. Chem. 282(1):49-57(2007)Hu, Y.H., et al. BMC Genomics 7, 155 (2006) :