

Anti-B3GNT8 Picoband Antibody

Catalog # ABO12372

Product Information

Application	WB, IHC-P
Primary Accession	Q7Z7M8
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 8(B3GNT8) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	374907
Other Names	UDP-GlcNAc:betaGal beta-1, 3-N-acetylglucosaminyltransferase 8, BGnT-8, Beta-1, 3-Gn-T8, Beta-1, 3-N-acetylglucosaminyltransferase 8, Beta3Gn-T8, 2.4.1.-, B3GNT8 {ECO:0000312 EMBL:BAD86525.1}
Calculated MW	43396
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Golgi apparatus membrane ; Single-pass type II membrane protein .
Tissue Specificity	Highly expressed in small intestine, pancreas, spleen, bone marrow, lung, throat, and ileum, and weakly in fetal brain, cerebellum, heart, liver, tongue, breast, uteri, and testis. Not detected in colon. Differentially expressed in human tumor cell lines. .
Source	Eukaryota
Protein Name	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 8
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human B3GNT8 (360-397aa ADRTADHCAFRNLLLVRPLGPQASIRLWKQLQDPRLQC), different from the related mouse sequence by sixteen amino acids.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.

Protein Information

Name	B3GNT8 (HGNC:24139)
Function	Beta-1,3-N-acetylglucosaminyltransferase that functions in the elongation of specific branch structures of multiantennary N- glycans. Has strong activity towards tetraantennary N-glycans and 2,6 triantennary glycans.
Cellular Location	Golgi apparatus membrane {ECO:0000250 UniProtKB:Q9NY97}; Single-pass type II membrane protein {ECO:0000250 UniProtKB:Q9NY97}
Tissue Location	Highly expressed in small intestine, pancreas, spleen, bone marrow, lung, throat, and ileum, and weakly in fetal brain, cerebellum, heart, liver, tongue, breast, uteri, and testis. Not detected in colon. Differentially expressed in human tumor cell lines

Background

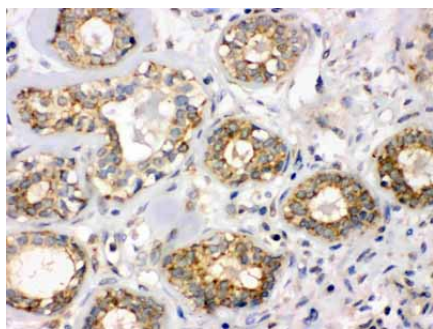
B3GNT8 is a galactosyltransferase involved in the synthesis of poly-N-acetyllactosamine (polyLacNAc), a linear chain of repeating LacNAc units made up of galactose (Gal) and N-acetylglucosamine (GlcNAc) with the structure (Gal-beta-1-4-GlcNAc-beta-1-3)_n. By genomic sequence analysis, the B3GNT8 gene is mapped to chromosome 19q13.2. It was showed that a soluble form of B3GNT8 overexpressed by transfected HEK293 cells selectively transferred GlcNAc from UDP-GlcNAc to the nonreducing terminus of Gal-beta-1-4-GlcNAc-alpha-p-nitrophenyl phosphate and to lactoside-alpha-benzoyl. It did not utilize keratan sulfates or polylactosamine oligosaccharide as substrate. B3GNT8 activity required Mn(2+) and showed less efficiency with Co(2+). The pH optimum was between 7 and 7.5. B3GNT8 also transferred GlcNAc onto alpha-1-acid glycoprotein and ovomucoid, which possess tetraantennary complex type and pentaantennary complex type N-glycans. With a tetraantennary N-glycan substrate, B3GNT8 appeared to prefer the beta-1-2 branch over the beta-1-6 branch. When overexpressed in HCT15 human colon cancer cells, B3GNT8 increased cell surface expression of both polyLacNAc and beta-1-6-branched N-glycans.

Images



Anti- B3GNT8 Picoband antibody, ABO12372, Western blotting
All lanes: Anti B3GNT8 (ABO12372) at 0.5ug/ml
WB: HELA Whole Cell Lysate at 40ug
Predicted bind size: 43KD
Observed bind size: 43KD

Anti- B3GNT8 Picoband antibody, ABO12372, IHC(P)
IHC(P): Human Mammary Cancer Tissue



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