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Anti-B3GNT8 Picoband Antibody

Catalog # ABO12372

Specification

Anti-B3GNT8 Picoband Antibody - 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.

Anti-B3GNT8 Picoband Antibody - 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 MW KDa

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. .

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.**

Anti-B3GNT8 Picoband Antibody - Protein Information

Name B3GNT8 {ECO:0000312|EMBL:BAD86525.1}

Function
Beta-1,3-N-acetylglucosaminyltransferase that plays a role 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

Anti-B3GNT8 Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-B3GNT8 Picoband Antibody - Images

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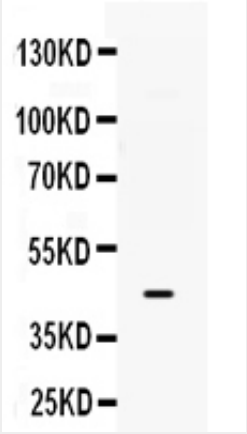
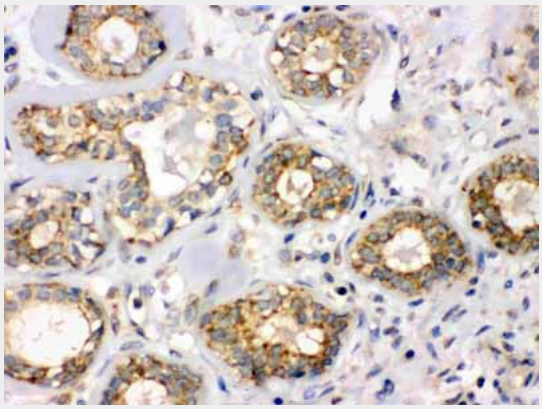


Anti- B3GNT8 Picoband antibody, ABO12372, Western blottingAll lanes: Anti B3GNT8 (ABO12372) at 0.5ug/mlWB: HELA Whole Cell Lysate at 40ugPredicted bind size: 43KDObserved bind size: 43KD



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

Anti-B3GNT8 Picoband Antibody - 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.