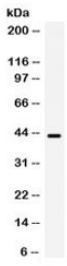
B3GNT8 Antibody (R32273)

Catalog No.	Formulation	Size
R32273	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

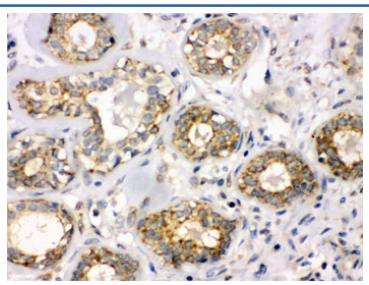
Citations (1)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	Q7Z7M8
Localization	Cytoplasmic
Applications	Western Blot : 0.1-0.5ug/ml IHC (FFPE) : 0.5-1ug/ml
Limitations	This B3GNT8 antibody is available for research use only.



Western blot testing of human HeLa cell lysate with B3GNT8 antibody. Expected/observed molecular weight ~43 kDa.



IHC testing of FFPE human breast cancer tissue with B3GNT8 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.

Description

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.

Application Notes

Optimal dilution of the B3GNT8 antibody should be determined by the researcher.

Immunogen

Amino acids ADRTADHCAFRNLLLVRPLGPQASIRLWKQLQDPRLQC of human B3GNT8 were used as the immunogen for the B3GNT8 antibody.

Storage

After reconstitution, the B3GNT8 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.