# Human B3GNT6 Protein (aa 44-384, His Tag)

Catalog Number: 13951-H07B



## **General Information**

### Gene Name Synonym:

B3Gn-T6; beta-1,3-Gn-T6; beta3Gn-T6; BGnT-6

### **Protein Construction:**

A DNA sequence encoding the human B3GNT6 (Gln44-Ser384) was fused with a polyhistide tag at the N-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

**QC** Testing

Purity: > 90 % as determined by SDS-PAGE

**Endotoxin:** 

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: His

### **Molecular Mass:**

The recombinant human B3GNT6 consists of 357 amino acids and has a calculated molecular mass of 40 kDa. The recombinant protein migrates as an approximately 47 kDa band in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 8.0, 10% gly

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

# **Usage Guide**

### Storage:

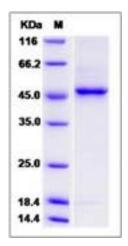
Store it under sterile conditions at -20  $^\circ\!\mathrm{C}$  to -80  $^\circ\!\mathrm{C}$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



# **Protein Description**

B3GNT6 belongs to the glycosyltransferase 31 family. B3GNT6 play s an important role in the synthesis of mucin-type O-glycans in digestive organs. It catalyzes the transfer of GlcNAc from UDP-GlcNAc to GalNAcalpha1-Ser/Thr (Tn antigen) to form the core 3 structure (GlcNAcbeta1-3GalNAcalpha1-Ser/Thr). Core 3 structure exists in O-glycan which is an important precursor in the biosynthesis of mucin-type glycoproteins. Loss of core 3 could lead to the production of secreted mucins, then bacteria would be inefficiently cleared from the system, and chronic inflammation would be developed, which eventually would result in development of cancer. B3GNT6 gene is a tumor suppressor gene.

#### References

1.Hennet T, et al. (1998) Genomic cloning and expression of three murine UDP-galactose: beta-N-acetylglucosamine beta1,3-galactosyltransferase genes. J Biol Chem. 273(1):58-65. 2.Kolbinger F, et al. (1998) Cloning of a human UDP-galactose:2-acetamido-2-deoxy-D-glucose 3beta-galactosyltransferase catalyzing the formation of type 1 chains. J Biol Chem. 273(1): 433-40. 3.Henrissat B, et al. (1997) A classification of nucleotide-diphospho-sugar glycosyltransferases based on amino acid sequence similarities. Biochem J. 326:929-39.

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