

## Recombinant Human B3GNT5, His-tagged

**Cat. No.** B3GNT5-10106H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                           |
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| <b>Product Overview</b> | Recombinant Human B3GNT5 protein, fused to His-tag, was expressed in E.coli and purified by Ni-sepharose.                                                                                                                                                                                                                                                                 |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                    |
| <b>ProteinLength</b>    | C-term-343a.a.                                                                                                                                                                                                                                                                                                                                                            |
| <b>Description</b>      | This gene encodes a member of the beta-1,3-N-acetylglucosaminyltransferase family. This enzyme is a type II membrane protein. It exhibits strong activity to transfer GlcNAc to glycolipid substrates and is identified as the most likely candidate for lactotriaosyl ceramide synthase. This enzyme is essential for the expression of Lewis X epitopes on glycolipids. |
| <b>Storage</b>          | The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.                                                                                                                                                                                                                                                                                 |
| <b>Storage Buffer</b>   | 1M PBS (58mM Na <sub>2</sub> HPO <sub>4</sub> , 17mM NaH <sub>2</sub> PO <sub>4</sub> , 68mM NaCl, pH8. ) added with 300mM Imidazole and 0.7% Sarcosyl, 15%glycerol.                                                                                                                                                                                                      |

### GENE INFORMATION

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| <b>Gene Name</b> | B3GNT5 UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 5 [ Homo sapiens ] |
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|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Official Symbol</b>     | B3GNT5                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Synonyms</b>            | B3GNT5; UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 5; B3GN T5; beta3Gn T5; BGnT-5; lc3 synthase; beta-1,3-Gn-T5; lc(3)Cer synthase; lactotriaosylceramide synthase; beta-1,3-N-acetylglucosaminyltransferase 5; beta-1,3-N-acetylglucosaminyltransferase bGnT-5; beta 1,3 N-acetylglucosaminyltransferase Lc3 synthase; B3GN-T5; beta3Gn-T5;                                                          |
| <b>Gene ID</b>             | <a href="#">84002</a>                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>mRNA Refseq</b>         | <a href="#">NM_032047</a>                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Protein Refseq</b>      | <a href="#">NP_114436</a>                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>UniProt ID</b>          | <a href="#">Q9BYG0</a>                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Chromosome Location</b> | 3q28                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Pathway</b>             | Glycosphingolipid biosynthesis - lacto and neolacto series, organism-specific biosystem; Glycosphingolipid biosynthesis - lacto and neolacto series, conserved biosystem; Glycosphingolipid biosynthesis, lacto-series, LacCer => Lc4Cer, organism-specific biosystem; Glycosphingolipid biosynthesis, lacto-series, LacCer => Lc4Cer, conserved biosystem; Glycosphingolipid biosynthesis, neolacto-series, LacCer => |
| <b>Function</b>            | beta-galactosyl-N-acetylglucosaminylgalactosylglucosyl-ceramide beta-1,3-acetylglucosaminyltransferase activity; galactosyltransferase activity; lipopolysaccharide N-acetylglucosaminyltransferase activity; transferase activity, transferring glycosyl group                                                                                                                                                        |