

## Recombinant Human B3GALNT1 cell lysate

Cat. No. B3GALNT1-2108HCL Lot. No. (See product label)

### SPECIFICATION

**Species**

Human

**Description**

This gene is a member of the beta-1,3-galactosyltransferase (beta3GalT) gene family. This family encodes type II membrane-bound glycoproteins with diverse enzymatic functions using different donor substrates (UDP-galactose and UDP-N-acetylglucosamine) and different acceptor sugars (N-acetylglucosamine, galactose, N-acetylgalactosamine). The beta3GalT genes are distantly related to the Drosophila Brainiac gene and have the protein coding sequence contained in a single exon. The beta3GalT proteins also contain conserved sequences not found in the beta4GalT or alpha3GalT proteins. The carbohydrate chains synthesized by these enzymes are designated as type 1, whereas beta4GalT enzymes synthesize type 2 carbohydrate chains. The ratio of type 1:type 2 chains changes during embryogenesis. By sequence similarity, the beta3GalT genes fall into at least two groups: beta3GalT4 and 4 other beta3GalT genes (beta3GalT1-3, beta3GalT5). The encoded protein of this gene does not use N-acetylglucosamine as an acceptor sugar at all. Multiple transcript variants that are alternatively spliced in the 5' UTR have been described; they all encode the same protein.

**Size**

100 ul

**Storage Buffer**

1X Sample Buffer (50 mM Tris-HCl, 2% SDS, 10% glycerol, 300 mM 2-mercaptoethanol, 0.01% Bromophenol blue)

**Applications**

Western Blot;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

## GENE INFORMATION

**Gene Name** [B3GALNT1 beta-1,3-N-acetylgalactosaminyltransferase 1 \(globoside blood group\) \[ Homo sapiens \]](#)

**Official Symbol** [B3GALNT1](#)

**Synonyms** [B3GALNT1](#); [beta-1,3-N-acetylgalactosaminyltransferase 1 \(globoside blood group\)](#); [B3GALT3](#), [UDP Gal:betaGlcNAc beta 1,3 galactosyltransferase, polypeptide 3 \(Globoside blood group\)](#) , [UDP GalNAc:betaGlcNAc beta 1,3 galactosaminyltransferase, polypeptide 1 \(Globoside blood group\)](#); [UDP-GalNAc:beta-1,3-N-acetylgalactosaminyltransferase 1](#); [beta3Gal T3](#); [galT3](#); [GLOB](#); [globoside synthase](#); [P antigen synthase](#); [P1](#); [b3Gal-T3](#); [brainiac1](#); [beta3GalT3](#); [beta-3-Gx-T3](#); [beta-1,3-GalNAc-T1](#); [beta-1,3-GalTase 3](#); [P blood group globoside](#); [beta-1,3-galactosyltransferase 3](#); [globotriaosylceramide 3-beta-N-acetylgalactosaminyltransferase](#); [galactosylgalactosylglucosylceramide beta-D-acetylgalactosaminyltransferase](#); [UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 3 \(Globoside blood group\)](#); [UDP-N-acetylgalactosamine:globotriaosylceramide beta-1,3-N-acetylgalactosaminyltransferase](#); [UDP-GalNAc:betaGlcNAc beta-1,3-galactosaminyltransferase, polypeptide 1 \(Globoside blood group\)](#); [P](#); [GLCT3](#); [Gb4Cer](#); [B3GALT3](#); [beta3Gal-T3](#);

**Gene ID** [8706](#)

**mRNA Refseq** [NM\\_001038628](#)

**Protein Refseq** [NP\\_001033717](#)

**MIM** [603094](#)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>UniProt ID</b>	<a href="#">O75752</a>
<b>Chromosome Location</b>	3q25
<b>Pathway</b>	Glycosphingolipid biosynthesis - globo series, organism-specific biosystem; Glycosphingolipid biosynthesis - globo series, conserved biosystem; Glycosphingolipid biosynthesis, globo-series, LacCer =>Gb4Cer, organism-specific biosystem; Glycosphingolipid biosynthesis, globo-series, LacCer => Gb4Cer, conserved biosystem; Metabolic pathways, organism-specific biosystem;
<b>Function</b>	UDP-galactose:beta-N-acetylglucosamine beta-1,3-galactosyltransferase activity; galactosylgalactosylglucosylceramide beta-D-acetylgalactosaminyltransferase activity; galactosyltransferase activity; transferase activity, transferring glycosyl groups;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA