

# Product Information

## MemDX™ Membrane Protein Human B4GALT6 (Beta-1,4-galactosyltransferase 6) Full

### Length

Cat. No.: **MPC2827K**

This product is for research use only and is not intended for diagnostic use.

This product is a made-to-order Human B4GALT6 membrane protein expressed in HEK293. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

### Product Specifications

#### Host Species

Human

#### Target Protein

B4GALT6

#### Protein Length

Full length

#### Protein Class

Transferase

#### TMD

1

#### Sequence

MSVLRRMMRVSNRSLLAFFFFSLSSSCLYFIYVAPGIANITYLFMVQARG  
IMLRENVKTIGHMIRLYTNKNSTLNGTDYPEGNNSDYLVQTTTYLPENF  
TYSPLYPCPEKLPYMRGFLNVNVSEVSFDEIHQLFSKDLIEPGGHWPRK  
DCKPRWKVAVLIPFRNRHEHLPIFFLHLIPMLQKQRLEFAFYVIEQTGTQ  
PFNRAMLFNVGFKEAMKDSVWDCVIFHDVDHLPENDRNYYGCGEMPRHFA  
AKLDKYMILPYKEFFGGVSGLTVEQFRKINGFPNAFWGEGEDDDLWNR  
VHYAGYNVTRPEGDLGKYKSIPHHHRGEVQFLGRYKLLRYSKERQYIDGL  
NNLIYRPKILVDRLYTNISVNLMPELAPIEDY

### Product Description

#### Expression Systems

HEK293

#### Tag

Based on specific requirements

#### Protein Format

Detergent or based on specific requirements (Detergent, Liposome, Nanodisc, Polymer, VLP)

**Form**

Liquid

**Storage**

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -72°C or lower. Avoid freeze/thaw cycles.

**Target****Target Protein**

B4GALT6

**Full Name**

Beta-1,4-galactosyltransferase 6

**Introduction**

This gene is one of seven beta-1,4-galactosyltransferase (beta4GalT) genes in human. They encode type II membrane-bound glycoproteins that appear to have exclusive specificity for the donor substrate UDP-galactose; all transfer galactose in a beta1,4 linkage to similar acceptor sugars: GlcNAc, Glc, and Xyl. Each beta4GalT has a distinct function in the biosynthesis of different glycoconjugates and saccharide structures. As type II membrane proteins, they have an N-terminal hydrophobic signal sequence that directs the protein to the Golgi apparatus and which then remains uncleaved to function as a transmembrane anchor. This gene produces multiple protein isoforms - some of which are predicted to lack the N-terminal hydrophobic signal sequence and transmembrane domain. By sequence similarity, the beta4GalTs form four groups: beta4GalT1 and beta4GalT2, beta4GalT3 and beta4GalT4, beta4GalT5 and beta4GalT6, and beta4GalT7. The canonical enzyme encoded by this gene is a lactosylceramide synthase important for glycolipid biosynthesis.

**Alternative Names**

B4GALT6; B4Gal-T6; beta4Gal-T6; UDP-Gal:beta-GlcNAc beta-1,4-galactosyltransferase 6; UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 6; UDP-Gal:glucosylceramide beta-1,4-galactosyltransferase; UDP-galactose:beta-N-acetylglucosamine beta-1,4-galactosyltransferase 6; beta-1,4-GalTase 6; beta4GalT-VI; glucosylceramide beta-1,4-galactosyltransferase; lacCer synthase; lactosylceramide synthase; Beta-1,4-galactosyltransferase 6

**Gene ID**

[9331](#)

**UniProt ID**

[Q9UBX8](#)