

Product Information

MemDX™ Membrane Protein Human B3GALT1 (Beta-1,3-galactosyltransferase 1) Full

Length

Cat. No.: **MPC4623K**

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

This product is a made-to-order Human B3GALT1 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

B3GALT1

Protein Length

Full length

Protein Class

Transferase

TMD

1

Sequence

MASKVSCLYVLTVCWASALWYLSITRPTSSYTGSKPFSHLTVARKNFTF
GNIRTRPINPHSFEFLINEPNKCEKNIPFLVILISTTHKEFDARQAIRET
WGDENNFKGIKIATLFLGKNADPVLNQMVEQESQIFHDIIVEDFIDSYH
NLTLKTLMGMRWVATFCSKAKYVMKTDSDIFVNMDNLIYKLLKPSTKPRR
RYFTGYVINGGPIRDVRSKWYMPRDLYPDSNYPPFCSGTGYIFSADVAEL
IYKTSLHTRLHLEDVYVGLCLRKLGIHPFQNSGFNHWKMAYSLCRYRRV
ITVHQISPEEMHRIWNDMSSKKHLRC

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**

B3GALT1

Full Name

Beta-1,3-galactosyltransferase 1

Introduction

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). This gene is expressed exclusively in the brain. The encoded protein shows strict donor substrate specificity for UDP-galactose.

Alternative Names

B3GALT1; beta3Gal-T1; UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 1; UDP-galactose:beta-N-acetyl-glucosamine-beta-1,3-galactosyltransferase 1; beta-1,3-GalTase 1; beta3GalT1; Beta-1,3-galactosyltransferase 1

Gene ID

[8708](#)

UniProt ID

[Q9Y5Z6](#)