

Product datasheet for TP721112M

OriGene Technologies, Inc.

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B4GALT3 (NM 003779) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Human UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase,

polypeptide 3 (B4GALT3), transcript variant 2

Species: Human Expression Host: HEK293

Expression cDNA Clone

or AA Sequence:

Arg32-His393

Tag: C-His

Predicted MW: 41.5 kDa

Purity: >95% as determined by SDS-PAGE and Coomassie blue staining

Buffer: Provided lyophilized from a 0.2 μm filtered solution of 20 mM Tris-HCl, 150 mM NaCl

Endotoxin: Endotoxin level is < 0.1 ng/μg of protein (< 1 EU/μg)

Storage: Store at -80°C.

Stability: Stable for at least 3 months from date of receipt under proper storage and handling

conditions.

RefSeq: NP 003770

Locus ID: 8703

UniProt ID: <u>060512</u>, <u>A8K5Z0</u>, <u>A0A384NY44</u>

RefSeq Size: 2417 Cytogenetics: 1q23.3 RefSeq ORF: 1179

Synonyms: beta4Gal-T3





Summary:

This gene is one of seven beta-1,4-galactosyltransferase (beta4GalT) genes. 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. By sequence similarity, the beta4GalTs form four groups: beta4GalT1 and beta4GalT2, beta4GalT3 and beta4GalT4, beta4GalT5 and beta4GalT6, and beta4GalT7. This gene encodes an enzyme that may be mainly involved in the synthesis of the first N-acetyllactosamine unit of poly-N-acetyllactosamine chains. Multiple alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Dec 2010]

Protein Families: Transmembrane

Protein Pathways: Glycosphingolipid biosynthesis - lacto and neolacto series, Keratan sulfate biosynthesis,

Metabolic pathways, N-Glycan biosynthesis