Recombinant Protein Technical Manual

Recombinant Human MGAT5/GGNT5 Protein (His Tag)(Active)

RPES3280

Product Data:

Product SKU: RPES3280

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_002401.1

Protein Information:

Molecular Mass:	65 kDa
AP Molecular Mass:	60-65 kDa
Tag:	C-His
Bio-activity:	Measured by its ability to transfer N-Acetyl-α-D-glucosamine from UDP-N-Acetyl-α-D-glucosamine to a biantennary N-linked core pentasaccharide in a CD39L3 coupled assay. The specific activity is >10pmoles/min/µg
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	GNT-V;GNT-VA

Immunogen Information:

Sequence: Leu 189-Leu 741

Background:

Alpha,6-mannosylglycoprotein 6-beta-N-acetylglucosaminyltransferase A, also known as Alpha-mannoside beta,6-N-acetylglucosaminyl-transferase, Mannoside acetylglucosaminyltransferase 5, N-acetylglucosaminyl-transferase V, MGAT5 and GGNT5, is a single-pass type I I membrane protein which belongs to the glycosyltransferase 18 family. MGAT5 / GGNT5 catalyzes the addition of N-acetylglucosamine in beta 1-6 linkage to the alpha-linked mannose of biantennary N-linked oligosaccharides. It is one of the most important enzymes involved in the regulation of the biosynthesis of glycoprotein oligosaccharides. The central nervous system (CNS) is rich in glycoconjugates, located on cell surface and in extracellular matrix. MGAT5 / GGNT5 modification of complex-type N-glycans on CNS glycoproteins is involved in the regulation of depression-like behavior. Inhibitors of MGAT5 / GGNT5 might be useful in the treatment of malignancies by targeting their dependency on focal adhesion signaling for growth and metastasis.