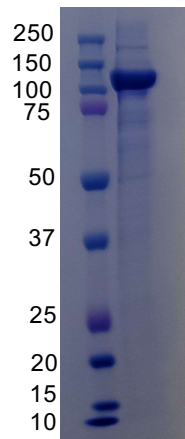


Product Name	Alpha-1,6-mannosylglycoprotein 6-beta-N-acetylglucosaminyltransferase A (MGAT5)
Catalog Number	#0038
Alternate Names	Alpha-mannoside beta-1,6-N-acetylglucosaminyltransferase V GlcNAc-T V (GNT-V) Mannoside acetylglucosaminyltransferase 5 N-acetylglucosaminyl-transferase V
Substrate Specificity	Catalyzes the addition of N-acetylglucosamine (GlcNAc) in beta 1-6 linkage to the alpha-linked mannose of biantennary N-linked oligosaccharides. Catalyzes an important step in the biosynthesis of branched, complex-type N-glycans, such as those found on EGFR, TGFR (TGF-beta receptor) and CDH2.
References	PubMed:10395745, PubMed:22614033, PubMed:30140003
Expression Host	HEK293
Species of expressed protein	Human
Gene ID	4249
Protein RefSeq	NP_002401.1
Uniprot	Q09328
Region Expressed	AA 31-741
Expressed Protein Sequence	HFTIQQRTQPESSSMLREQILDLSKRYIKALAEENRNVDGPYAGVMTAYDLKKTAVLLDNI LQRIGKLESKVDNLVNGTGTNSTNSTTAVPSLVALEKINVADIINGAQEKCVLPMDGYPHC EGKIKWMKDMWRSDPCYADYGVGDSTCSFFIYLSEVENWCPHLPWRAKNPYEEADHNSL AEIRTDFNILYSMMKKHEEFRWMRLRIRRMADAWIQAIKSLAEKQNLKRRKKVVLVHLGLL TKESGFKIAETAFSGGPLGELVQWSDLITSLYLLGHDIRISASLAEKIMKKVVGNRSGCPTV GDRIVELIYIDIVGLAQFKKTLGPSWVHYQCMLRVLDSFGTEPEFNHANYAQSKGHKTPWGK WNLNPQQFYTMFPHTPDNSFLGFVVEQHLNSSDIHHINEIKRQNSLVYGVKVSFVWKNKKIY LDIIHTYMEVHATVYGSSTKNIPSYVKNHGILSGRDLQFLLRETKLFVGLGFPYEGPAPLEAIA NGCAFLNPKFNPPKSSKNTDFFIGKPTLRELTSQHPYAEVFIGRPHVWTVDLNNQEEVEDAV KAILNQKIEPYMPYEFTCEGMLQRINAFIEKQDFCHGQVMWPPLSALQVKLAEPGQSCQVC QESQLICEPSFFQHLNKDKDMLKYKVTCSSELAKDILVPSFDPKNKHCVFQGDLLLFSCAG AHPRHQRVCPCRDFIKGQVALCKDCL
Tag(s)	N-terminal 6xHis, GFP
Specific Activity	
Purity (%)	>95%, by SDS-PAGE as visualized by Coomassie Blue Staining
Formulation	Supplied as a 0.2µm filtered solution in 20mM HEPES pH 7.0 and 100mM NaCl buffer, with 10% Glycerol and 0.05 % NaN ₃ as preservative.
Concentration	1 mg/ml
SDS-Page Size	~115 kDa

SDS-PAGE image



Activity	Measured by the ability to transfer the sugar from UDP-GlcNAc and generate UDP
Assay Buffer	100mM HEPES, pH 7.4, 1mg/ml BSA, 2mM MnCl ₂
Donor Substrate	UDP-GlcNAc
Acceptor Substate	GlcNAcb1,2Mana1,6(GlcNAcb1,2Mana1,3)Manb1,4GlcNAcb1,4GlcNAcb1Asn
Coupling Enzyme	UDP-Glo™ Glycosyltransferase Assay (Promega)
Detection Kit	Follow protocol for "Generating a Standard Curve for UMP" in the UDP-Glo™
Specific Actifity calc	Specific Activity (umol/min/mg)= UDP released*(umol) / [Incubation time (min) x amount of enzyme (mg)], Specific Activity was calculated using the standard curve plotted in GraphPad Prism 6 (GraphPad Software)
Shipping conditions	This product is shipped as 0.2µm filtered product on dry ice. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage cond 6 months	6 months if stored at -80C. Avoid repeated freeze thaws.