

N-Acetylglucosaminyltransferase V (MGAT5)

Product Information

Cat#	DIA-775
Descriptions	N-Acetylglucosaminyltransferase V (MGAT5), referred to as GnT-V, catalyzes β -1,6 GlcNAc branching on the α -1,6 mannose arm of N-glycans, enhances N-glycan complexity, and is closely associated with tumor invasion, metastasis and cancer progression.
Applications	N-Acetylglucosaminyltransferase V (MGAT5) is widely used in β 1,6 branched N-glycan detection kits and tumor invasion assay reagent development.
CAS No.	24-1-15512
Enzyme Commission Number	EC 2.4.1.155
Enzyme Source	Trichoplusia ni, High Five (baculovirus)-derived human N-Acetylglucosaminyltrans.
Reaction	$\text{N4-}\{\beta\text{-D-GlcNAc- (1-}\rightarrow\text{2)-}\}[\beta\text{-D-GlcNAc- (1-}\rightarrow\text{4)}]\text{-}\alpha\text{-D-Man- (1-}\rightarrow\text{3)-}\}[\beta\text{-D-GlcNAc- (1-}\rightarrow\text{2)-}\alpha\text{-D-Man- (1-}\rightarrow\text{6)}]\text{-}\beta\text{-D-Man- (1-}\rightarrow\text{4)-}\beta\text{-D-GlcNAc- (1-}\rightarrow\text{4)-}\beta\text{-D-GlcNAc}\}\text{-L-asparaginyI-[protein]} + \text{UDP-N-acetyl-}\alpha\text{-D-glucosamine} = \text{H}^+ +$ $\text{N4-}\{\beta\text{-D-GlcNAc- (1-}\rightarrow\text{2)-}\}[\beta\text{-D-GlcNAc- (1-}\rightarrow\text{4)}]\text{-}\alpha\text{-D-Man- (1-}\rightarrow\text{3)-}\}[\beta\text{-D-GlcNAc- (1-}\rightarrow\text{2)-}\}[\beta\text{-D-GlcNAc- (1-}\rightarrow\text{6)}]\text{-}\alpha\text{-D-Man- (1-}\rightarrow\text{6)}]\text{-}\beta\text{-D-Man- (1-}\rightarrow\text{4)-}\beta\text{-D-GlcNAc- (1-}\rightarrow\text{4)-}\beta\text{-D-GlcNAc}\}\text{-L-asparaginyI-[protein]} + \text{UDP}$
Activity Definition	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.