Addition of GlcNAc to position 5 by MGAT5

Dall'Olio, GM., Gagneux, P., Jassal, B.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references

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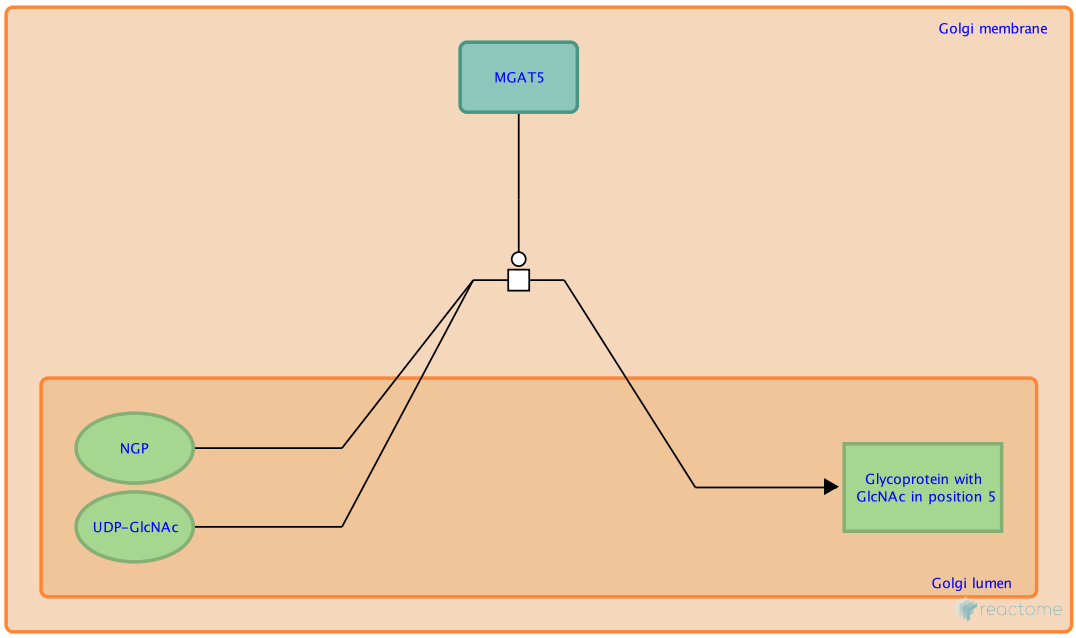
Stable identifier: R-HSA-975916

Type: transition

Compartments: Golgi membrane, Golgi lumen



N-acetylglucosaminyltransferase (GnT)-V catalyzes the addition of GlcNAc beta 1,4 on the GlcNAc beta1,2 Man,alpha1,6 arm of complex type N-Glycans (Park C et al, 1999; Granowski M et al, 2000; Wang L et al, 2007). The activity of MGAT5 competes with MGAT3 (Pinho SS et al, 2009) and is associated with gastric cancer (Tian H et al, 2008) and multiple sclerosis (Brynedal B et al, 2010).

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Editions

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