B4GAT1:GYLTL1B transfers Xyl from UDP-Xyl to GlcA-Xyl-GlcA

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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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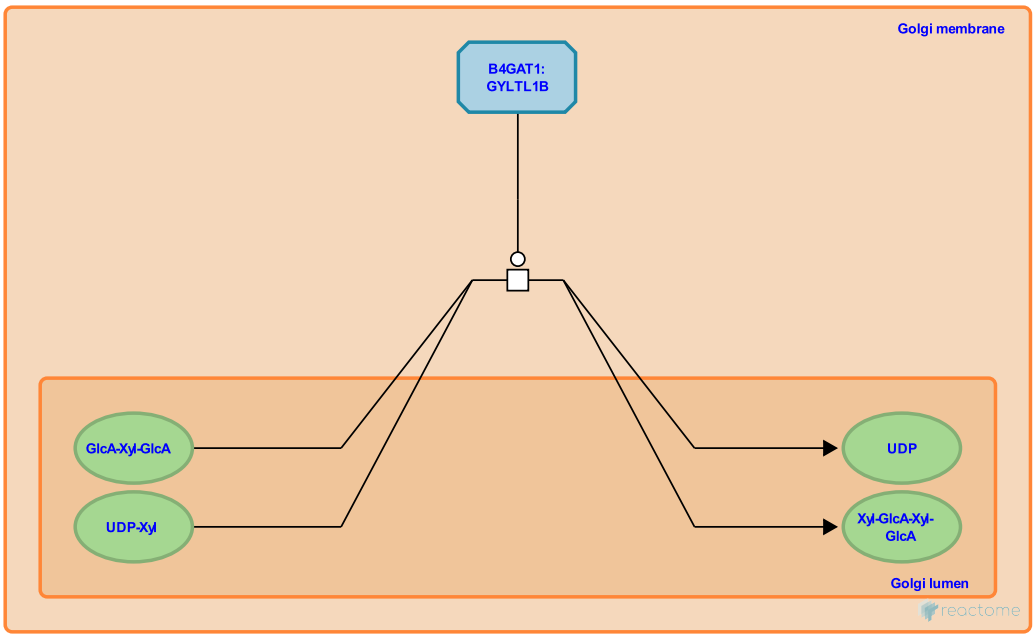
Stable identifier: R-HSA-5617138

Type: transition

Compartments: Golgi lumen, Golgi membrane



Glycosyltransferase-like protein LARGE2 (GYLTL1B; MIM:609709) is a bifunctional glycosyltransferase with both xylosyltransferase and beta-1,3-glucuronyltransferase activities involved in the biosynthesis of a phosphorylated O-mannosyl trisaccharide (N-acetylgalactosamine-beta-3-N-acetylglucosamine-beta-4-(phosphate-6-)mannose), a structure present in alpha-dystroglycan (DAG1) which plays a key role in skeletal muscle function and regeneration (Inamori et al. 2012, Inamori et al. 2013, Wells 2013). LARGE2 belongs to the CAZy glycosyltransferase families GT8 and GT49.

Literature references

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Editions

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