Chondroitin sulfate biosynthesis

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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


Reactome database release: 72

This document contains 1 pathway and 9 reactions (see Table of Contents)
Chondroitin sulfate (CS) glycosaminoglycan consists of N-acetylgalactosamine (GalNAc) residues alternating in glycosidic linkages with glucuronic acid (GlcA). GalNAc residues are sulfated to varying degrees on 4- and/or 6- positions. The steps below describe the biosynthesis of a simple CS molecule (Pavao et al. 2006, Silbert & Sugumaran 2002).

**Literature references**


**Editions**

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The addition of GalNAc to the terminal glucuronate residue forms chondroitin

Location: Chondroitin sulfate biosynthesis

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