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: 79

This document contains 1 pathway and 5 reactions (see Table of Contents)
Dimycocersyl phthiocerol biosynthesis

Stable identifier: R-MTU-9635470

The survival of Mtb, depends on its ability to invade the host, replicate, and transmit infection. At its initial peripheral infection Mtb infects macrophages, and part of the immune evasion is accomplished by using cell-surface-associated phthiocerol dimycoceroserate (PDIM) (Siegrist M S & Bertozzi C R, 2013). In nature, fatty acids must be activated before they can be assimilated into various metabolic pathways. The universal mechanism of n-fatty acid activation involves conversion of fatty acids by a family of omnipresent fatty acyl-CoA ligases (FACLs). The biosynthesis of PDIM, an alternate mechanism of fatty acid activation, catalyzed by fatty acyl-AMP ligases (FAALs) was established in Mtb (Arora P, 2008).

Literature references


Editions

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<td>2019-02-13</td>
<td>Authored, Edited Pardo, AM., Koile, I.</td>
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<td>Reviewed Stephan, R.</td>
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FadD26, FadD28 transfer adenylyl group to a LCFA

Location: Dimycocersyl phthiocerol biosynthesis

Stable identifier: R-MTU-9635480