# *De novo* synthesis of a D-galacturonic acid thioglycoside as key to the total synthesis of a glycosphingolipid from *Sphingomonas yanoikuyae*.

Stallforth P, Adibekian A, Seeberger PH (2008) *De novo* synthesis of a D-galacturonic acid thioglycoside as key to the total synthesis of a glycosphingolipid from *Sphingomonas yanoikuyae*. *Org Lett* 10(8), 1573-1576.



**Abstract**

A concise synthesis of a differentially protected D-galacturonic acid (D-GalA) thioglycoside and the construction of a potent immunomodulating glycosphingolipid are described. The key steps of the synthesis are an Evans aldol reaction between a C4 aldehyde and a PMB-protected glycolyloxazolidinone as well as a tandem-PMB-deprotection/cyclization to thioglycosides. The key glycosylation step is optimized by varying the anomeric leaving group, the activating agent, and the solvent system.

## Involved units

Paleobiotechnology Pierre Stallforth Read more

## Leibniz-HKI-Authors

**Pierre Stallforth**

Details

**Identifier**

**doi:** 10.1021/ol800227b

**PMID:** 18363404