

Structure and Biosynthetic Assembly of Gulmirecins, Macrolide Antibiotics from the Predatory Bacterium *Pyxidicoccus fallax*.

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Abstract

The gulmirecins constitute a new class of glycosylated macrolides that were isolated from the predatory bacterium *Pyxidicoccus fallax* HKI 727. Their structures were solved by a combination of NMR spectroscopic experiments and chemical derivatization. Analysis of the annotated gulmirecin gene cluster complemented the configurational assignment and provided insights into the stereochemical course of the biosynthetic assembly. The gulmirecins exhibit strong activity against staphylococci, including methicillin-resistant *Staphylococcus aureus*, but no cytotoxic effects on human cells.

Involved units

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