Cervimycin A-D: a polyketide glycoside complex from a cave bacterium can defeat vancomycin resistance.

Herold K, Gollmick FA, Groth I, Roth M, Menzel KD, Möllmann U, Gräfe U, Hertweck C (2005) Cervimycin A-D: a polyketide glycoside complex from a cave bacterium can defeat vancomycin resistance. *Chemistry* 11(19), 5523-5530.

Details

Abstract

Cervimycins A-D are novel polyketide glycosides with significant activity against multi-drug-resistant staphylococci and vancomycin-resistant enterococci. They are produced by a strain of Streptomyces tendae, isolated from an ancient cave. The structures of the cervimycins were determined by performing extensive NMR and chemical degradation studies. All cervimycins have a common tetracyclic polyketide core that is substituted with unusual di- and tetrasaccharide chains, composed exclusively of trideoxysugars; however, they differ in the acetyl and carbamoyl ring substituent and in the highly unusual terminal methylmalonyl and dimethylmalonyl residues.

Involved units

Biomolecular Chemistry Christian Hertweck Read more

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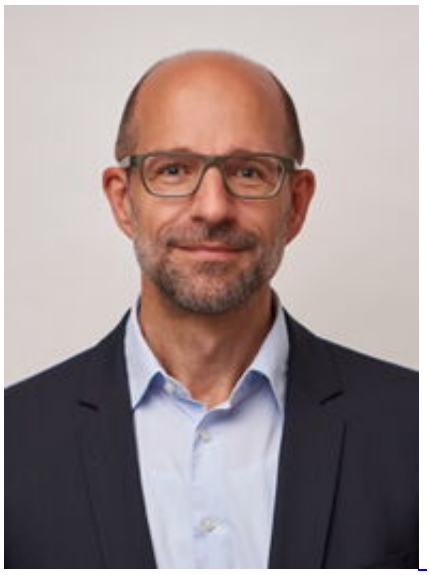
Leibniz-HKI-Authors



Christian Hertweck

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Martin Roth

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Identifier

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