Closthioamide: an unprecedented polythioamide antibiotic from the strictly anaerobic bacterium Clostridium cellulolyticum.

Lincke T, Behnken S, Ishida K, Roth M, Hertweck C (2010) Closthioamide: an unprecedented polythioamide antibiotic from the strictly anaerobic bacterium Clostridium cellulolyticum. *Angew Chem Int Ed Engl* 49(11), 2011-2013.

Details

PubMed

Abstract

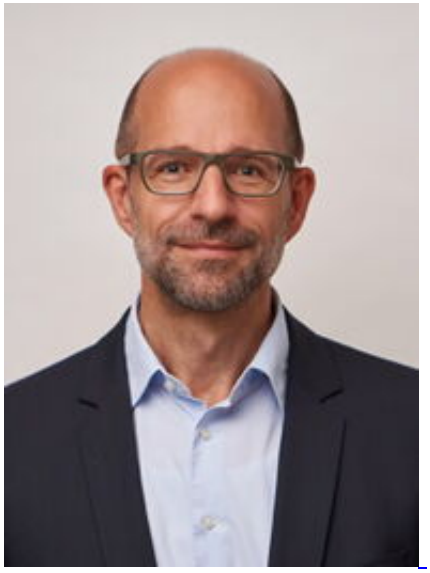
Choose sulfur in an oxygen-free world: Closthioamide (1) was isolated from the anaerobe*Clostridium cellulolyticum* (see SEM image) after the induction of its biosynthesis with an aqueous soil extract. An unprecedented type of symmetrical natural product in which all building blocks are connected through thioamide linkages, 1 is active against multiresistant staphylococci. It is the only known secondary metabolite from a strictly anaerobic bacterium.

Involved units

Biomolecular Chemistry Christian Hertweck Read more

Bio Pilot Plant Miriam Agler-Rosenbaum Read more

Leibniz-HKI-Authors



Christian Hertweck

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Mie Ishida-Ito

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Martin Roth

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Identifier

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