Genomics-guided discovery of endophenazines from *Kitasatospora* sp. HKI 714.

Heine D, Martin K, Hertweck C (2014) Genomics-guided discovery of endophenazines from *Kitasatospora* sp. HKI 714. *J Nat Prod* 77(4), 1083-1087.

Abstract

In this study we report on the genomics-guided exploration of the metabolic potential of the newly discovered strain *Kitasatospora* sp. HKI 714. The bioinformatics analysis of the whole genome sequence revealed the presence of a biosynthetic gene cluster presumably responsible for the biosynthesis of formerly unknown endophenazine derivatives. A 200 L cultivation combined with bioactivity-guided isolation techniques revealed four new natural products belonging to the endophenazines and the 5,10-dihydrophenazines. Detailed descriptions of their biological effects, mainly focused on antimicrobial properties against several mycobacteria, are given.

Beteiligte Forschungseinheiten

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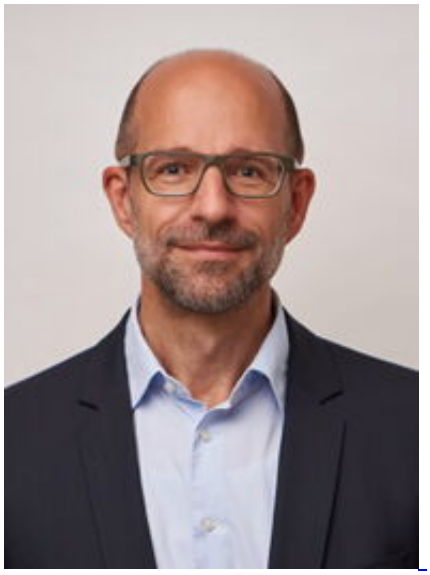
Details



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