

Generation of novel landomycins M and O through targeted gene disruption.

Luzhetskyy A, Zhu L, Gibson M, Fedoryshyn M, Dürr C, Hofmann C, Hoffmeister D, Ostash B, Mattingly C, Adams V, Fedorenko V, Rohr J, Bechthold A (2005) Generation of novel landomycins M and O through targeted gene disruption. *Chembiochem* 6, 675-678.

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Abstract

Two genes from *Streptomyces cyanogenus* S136 that encode the reductase LanZ4 and the hydroxylase LanZ5, which are involved in landomycin A biosynthesis, were characterized by targeted gene inactivation. Analyses of the corresponding mutants as well as complementation experiments have allowed us to show that LanZ4 and LanZ5 are responsible for the unique C-11-hydroxylation that occurs during landomycin biosynthesis. Compounds accumulated by the lanZ4/Z5 mutants are the previously described landomycin F and the new landomycins M and O.

Beteiligte Forschungseinheiten

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