

# Pyran formation by an atypical CYP-mediated four-electron oxygenation-cyclization cascade in an engineered aureothin pathway.

Richter M, Busch B, Ishida K, Moore BS, Hertweck C (2012) Pyran formation by an atypical CYP-mediated four-electron oxygenation-cyclization cascade in an engineered aureothin pathway. *Chembiochem* 13(15), 2196-2199.

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## Abstract

Small changes, big effect: A new aureothin derivative, aureopyran, which features an unusual pyran backbone, was generated by simply altering the enzymatic methylation topology. The  $\alpha$ -pyrone ring hampers the correct placement of the polyketide backbone in the multifunctional cytochrome P450 monooxygenase AurH. Instead of a tetrahydrofuran ring, an oxo intermediate is formed that readily undergoes a rare electrocyclization reaction.

## Beteiligte Forschungseinheiten

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