

Disruption of aromatase and partial reductase abolish the production of Sch 47554 and Sch 47555 from *Streptomyces* sp. SCC-2136 .

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Abstracts

Angucyclinone polyketides falls in polyketide type II and represents a unique structural architecture. Sch47555 and Sch47554 are anti-fungal angucyclinone isolated from *Streptomyces* SCC-2136. The gene-cluster of Sch47555 and Sch47554 contains the minimal PKS and other post-modification enzymes. For further functional proof of the gene cluster, aromatase and partial reductase genes have been disrupted and the products have been isolated. The mutant strain could not produce the product and also could not show the antifungal activity indicating that the genes disrupted are involved in the biosynthesis of Sch47555 and Sch47554. On the other hand, the wild produces the target angucyclinone and shows the antifungal activity.

Key words : Sch47555 and Sch47554, Angucyclinone, Aromatase, Minimal PKS,