

Withanolide-based steroids from the cultured soft coral *Sinularia brassica*

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Abstract

Twelve new withanolides, *sinubrasolide* A–L (**1**–**12**), were isolated from a cultured soft coral *Sinularia brassica*. The structures of **1**–**12** were established by detailed spectroscopic analysis, including extensive examination of 1D NMR spectroscopic data and 2D NMR (¹H–¹H COSY, HMQC, HMBC and NOESY) correlations. These compounds were found to be the withanolide-type steroids which were rarely discovered in marine environment. The structure of **1** was further confirmed by a single-crystal X-ray diffraction analysis. Furthermore, the cytotoxicity of compounds **1**, **3**, and **9** against a limited panel of cancer lines was also determined.

