The Investigation on Siderophore-like Anti-microbial Organic Compounds from Marine-derived Fungus *Aspergillus* sp.

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Abstract

The genus *Aspergillus* is famous due to generating a series of bioactive substances. To search novel anti-microbial secondary metabolites from marine environment we found one marine-derived fungus was isolated from a sponge, *Haliclona*, collected from Donga Atoll, Taiwan in May 2014. Fungus was cultured in laboratory and was extracted by ethyl acetate.

Primary antimicrobial activity assays indicated the ethyl acetate extract of HBr could inhibit one bacterial and one fungal pathogen, *Acinetobacter baumannii* and *Candida albicans*. Based on sephadex LH-20 and RP-HPLC isolation and purification, we isolated two asterric acid type compounds (**1** and **2**) from Hbr-F-9. The structures of these compounds were elucidated by 1D and 2D NMR and MS data as well as comparison with the literature data. Compound **1** has positive activity against *Acinetobacter baumannii* and also has siderophore (iron-chelating) effect.