



Ingenines A and B, two new alkaloids from the Indonesian sponge *Acanthostrongylophora ingens*

Sabrin RM Ibrahim, Gamal A Mohamed, Mohamed F Zayed and Hanaa M Sayed

Abstract:

As a continuation of the work on EtOAc fraction of the Indonesian sponge *Acanthostrongylophora ingens*, 2 new alkaloids: one pyrimidine- β -carboline alkaloid named ingenine A (2) and one pyrimidine- β -carboline alkaloid named ingenine B (3), along with annomontine (1) were isolated. Their structures were unambiguously established on the basis of NMR spectroscopy (^1H , ^{13}C , ^1H - ^1H COSY, HMQC, and HMBC) and mass spectral data. This is the first report of isolation pyrimidine- β -carboline alkaloid from natural source. Compounds 1 and 3 showed pronounced cytotoxicity against the murine lymphoma L5178Y cancer cell line with ED₅₀ 7.8 and 9.1 $\mu\text{g}/\text{mL}$ respectively, while compound 2 showed weak activity.

Keywords:

Acanthostrongylophora ingens - pyrimidine- β -carboline - pyrimidine- β -carboline - ingenine - cytotoxic activity

Published In:

Drug Research, DOI: 10.1055/s-0034-1384577 , Vol. 65, No. 7 , pp. 361-365