A New Cytotoxic Brominated Acetylenic Hydrocarbon from the Marine Sponge *Haliclona* sp. with a Selective Effect against Human Breast Cancer

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Three acetylenic brominated derivatives were isolated from a Red Sea sponge, *Haliclona* sp. One of them, 18-bromooctadeca-9(*E*),17(*E*)-dien-7,15-diynoic acid (**3**), is a known metabolite, and the other two are new compounds, (1*E*,5*E*,12*E*,19*E*)-1,22-dibromodocosa-1,5,12,19-tetraen-3,14,21-triyne (**1**) and methyl 18-bromooctadeca-9(*E*),17(*E*)-dien-7,15-diynoate (**2**) which was isolated for the first time as a natural metabolite. Structures of all compounds were determined based on extensive spectroscopic measurements [1D (^{1}H, ^{13}C and DEPT) and 2D (HSQC, HMBC and NOESY) NMR, MS, UV, and IR]. All compounds, except **3**, were evaluated for their cytotoxicity employing four cancer cell lines, *i.e.* MCF-7 (human breast cancer), HepG2 (human hepatocellular carcinoma), WI-38 (skin carcinoma), and *Vero* (African green monkey kidney). Compounds **1** and **2** had potent selective anti-tumour activity towards MCF-7 cells with IC_{50} values of 32.5 and 50.8 μM, respectively.

Key words: Marine Sponge *Haliclona* sp., Acetylenic, Brominated Fatty Acid