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, (1E,5E,12E,19E)-1,22-dibromodocos-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 ( 1H, 13C 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 IC₅₀ values of 32.5 and 50.8 µM, respectively.

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