

Bioactive Cembranoids from the Soft Coral Genus *Sinularia* sp. in Borneo

ABSTRACT

Soft corals are known to be prolific producers of a wide spectrum of biologically active cembranoids. One new cembranoid, sinularolide F (2), along with three known compounds, cembranolide(1),(E,E,E)-6,10,14-trimethyl-3-methylene-cis-3 α ,4,5,8,9,12,13,15 α -octahydrocyclo tetradeca [β]furan-2(3H)-one (3), and denticulatolide (4), were isolated from the Bornean soft coral *Sinularia* sp. Compounds 2 and 4 showed potential anti-inflammatory activities against lipopolysaccharide-stimulated RAW 264.7 with IC₅₀ values less than 6.25 μ g/mL and anticancer activity against HL60 cell lines. The compounds' mechanisms of action were investigated via the Western blot evaluation of their protein markers. These activities could be attributed to the presence of tertiary methyl at C-8 and the compounds' 3D configurations.