

P-171**Bromotyrosine-Derived Alkaloids from the Sponge *Acanthodendrilla* SP**

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Bioassay-guided fractionation of the CH₂Cl₂/MeOH extract of the Thai marine sponge *Acanthodendrilla* sp. resulted in the isolation of six bromotyrosine-derived alkaloids; arothionin (**1**), homoarothionin (**2**), 2-hydroxy-3,5-dibromo,4-methoxyphenylacetamide (**3**), 2,4-cyclohexadiene-1-acetamide-3,5-dibromo-1,6-dihydroxy-4-methoxy (**4**), 11-oxoarothionin (**5**), and 11,19-dideoxyfistularin (**6**). The structures of the isolated compounds were identified on the basis of detailed spectroscopic analysis. The compounds were tested for the acetylcholinesterase-inhibiting activity, and **3** showed the best acetylcholinesterase-inhibiting activity (92.0% at 0.1 mg/mL).

Keywords: *Acanthodendrilla* sp.; bromotyrosine-derived alkaloids; acetylcholinesterase-inhibiting activity.
